

2016 COMPREHENSIVE MASTER PLAN UPDATE

City of Margate, Atlantic County N.J.



DRAFT A

1/20/17

Submitted:

_____, ____ **2017**

**Statement of Objectives, Principles,
Assumptions,
Policies & Standards**

Land Use Plan Element

Housing Plan Element

Circulation Plan Element

**Community Facilities
Plan Element**

**Open Space & Recreation
Plan Element**

Conservation Plan Element

Economic Plan Element

**Historic Preservation
Plan Element**



RESERVED FOR ADOPTING RESOLUTION



Table of Contents

1	Introduction	1	4.3	Natural Conditions	26
1.1	Objective	1	4.3.1	Topography	26
1.2	Geographical Information	1	4.3.2	Soil Conditions	27
1.3	Prior Master Plans	1	4.3.3	Water Supply and Sewerage	27
1.4	Focus Group Meetings and Public Outreach Efforts.....	2	4.3.4	Drainage	27
1.5	Margate Housing and Population.....	3	4.3.5	Flood Plain Areas	28
2	Definitions	5	4.3.6	Marshes	28
3	Statement of Objectives, Principles, Assumptions, Policies, and Standards	8	4.3.7	Woodlands and Agriculture	28
3.1	General.....	8	4.3.8	Flora and Fauna.....	28
3.2	Land Use Policy.....	10	4.4	Flood Elevations and Sea-level Rise	29
3.3	Housing Policy	13	4.5	Land Use	30
3.4	Circulation Policy	15	4.5.1	City Land Use.....	30
3.5	Community Facilities Policy	17	4.5.1.A	Development History.....	30
3.6	Open Space and Recreation Policy.....	18	4.5.1.B	Commercial Properties and Zoning	30
3.7	Conservation Policy	19	4.5.1.C	Residential Properties and Zoning.....	40
3.8	Economic Policy.....	21	4.5.1.D	Non-Commercial or Residential Zoning.....	55
3.9	Historic Preservation Policy	23	4.5.1.E	Recommended New Zones	56
3.10	Municipal Vision Statement..... Error! Bookmark not defined.		4.5.1.F	General Development Regulations.....	60
4	Land Use Plan Element	25	5	Circulation Plan Element	62
4.1	Requirements	25	5.1	Overview	62
4.2	Prior Master Plan Land Use Element	25	5.2	Parking Considerations	63
			5.3	One-Way Streets.....	65
			6	Community Facilities Plan Element	66
			6.1	Inventory of Facilities.....	66
			6.1.1	Public Access Facilities Owned by the City	66
			6.1.2	Public Works Facilities Owned by the City.....	69



- 6.1.3 Sites Owned by the City73
- 6.1.4 Educational Facilities.....74
- 6.1.5 Local Churches, Synagogues, and Community
Facilities75
- 6.1.6 Senior Housing.....75
- 6.2 Recommendations76**
- 6.2.1 Infrastructure76
- 6.2.2 City of Margate Fire Department78
- 6.2.3 City of Margate Municipal Building78
- 6.2.4 City of Margate Buildings.....78
- 6.2.5 Educational Facilities.....78
- 7 Open Space and Recreation Plan Element.....79**
- 7.1 Recreation and Open Space79
- 7.1.1 Recreation Facilities79
- 7.1.2 Open Space81
- 8 Conservation Plan Element.....82**
- 9 Economic Plan Element83**
- 9.1 General Economic Conditions.....83
- 9.2 Commercial Districts...Error! Bookmark not defined.
- 9.2.1 Central Business District .. **Error! Bookmark not
defined.**
- 9.2.2 Waterfront Special District **Error! Bookmark not
defined.**
- 9.2.3 Central Business District and South **Error!
Bookmark not defined.**
- 10 Historic Preservation Plan Element84**
- 10.1 Historic Resources.....84
- 10.2 Observations and
Recommendations85

11 Works Cited 89



1 INTRODUCTION

1.1 Objective

The City of Margate is in a period of transition. Margate has long been a small, primarily year-round suburban residential community. Development and economic trends since the 1970's, particularly since the year 2000, have led to a precipitous decline in the City's year-round population. From a peak of over 10,000 full time residents around 1970, the City's current population is edging downward toward 6,000 full time residents. This transition to a seasonal population has stressed the City's services, schools, businesses, and religious organizations. The objective of this plan is to review the City's history, document progress towards prior goals and objectives, and develop plans and strategies for how to the City can continue to adapt and thrive in the future.

1.2 Geographical Information

The City of Margate occupies approximately 1.4 square miles of Absecon Island. The City shares Absecon Island with Atlantic City and Ventnor City to the north-east, and the Borough of Longport to the south-west. The City is bordered by water on two sides; Beach Thorofare provides the bay side border to the north-west and the

Atlantic Ocean provides the beach side border to the south-east. The approximate geographic center of Margate City is located at Latitude 39°19'40" and Longitude 74°30'30".

1.3 Prior Master Plans

The last significant work on the City's Master Plan was a Master Plan Revision that was complete in March of 2006. Prior to the 2006 Plan Revisions, the City's Planning Board adopted an updated Master Plan in January of 2004. This 2006 Plan Revision was prepared to address concerns about bulk and mass that arose after adoption of the 2004 Plan. Prior to those efforts, the City prepared the Margate Master Plan in 1985, a 1990 Re-Examination of the Master Plan and Development Regulations, and a Reexamination Report of that Master Plan in 1999. Goals from those prior plans were reviewed and their applicability to the current state of the City considered. Prior planning goals were renewed, revised, and abandoned, where appropriate.

Upon reviewing prior master plan efforts, it became evident that items that were priorities of prior plans are no longer concerns and items that are significant concerns now are not mentioned in prior



planning efforts. This can be expected to some degree when reviewing prior master plan efforts in any community. However, the aftermath of Hurricane Sandy has shifted the discussion and priorities of many coastal communities. The steps that a coastal community such as Margate must take to ensure its long term existence has been taken for granted until recently.

1.4 Focus Group Meetings and Public Outreach Efforts

In an attempt to get input from stakeholders with varying perspectives, six (6) focus group meetings were held with individuals representing the following generalized groups:

1. Restaurant Owners
2. Retail Store Owners
3. Marina District Businesses
4. Local Builder's and Architects
5. Local Realtors and Attorney's
6. Religious Organizations, Schools, and the City's Recreation Department

Attendees of these meetings were invited by the City to provide information about the unique concerns of their businesses,

patrons, clients, parishioners, and students. The individuals invited to each meeting were each in positions that exposed them to many of the City's visitors and residents. The individuals at each meeting were effectively able to represent the interests and concerns of a larger segment of the City's residents, second-home owners, and seasonal visitors.

Each meeting targeted a specific group of people who were expected to have concerns about similar topics. The meetings were organized to facilitate a healthy discussion about concerns that would be especially relevant to each group represented. This approach helped to manage the length and breadth of each meeting, allowing for more in-depth discussion about specific topics relevant to each groups members. The six meetings were held between November 2015 and March 2016.

Attendees of these meetings were invited by the City to provide information about the unique concerns of their businesses, patrons, clients, parishioners, and students. The individuals invited to each meeting were each in positions that exposed them to many of the City's visitors and residents. The individuals at each meeting were effectively able to represent the interests and concerns of a larger segment of the City's residents, second-home owners, and seasonal visitors.



1.5 Margate Housing and Population

According to US Census Bureau (1), in 2010 the City of Margate had an estimated full time resident population of 6,354 persons. Since 1970, the full time resident population in the City has declined almost 40% from a peak population of 10,576. During the same 40-year span, the number of housing units has increased by nearly 40% from 5,143 to 7,114. In 1970, 73% of housing units were occupied by full time residents. As of the 2010 census, only 44% of the housing units were occupied by full time residents. Over 50% of dwelling units in the City are now classified as being for "Occasional or Recreational Use".

The real estate boom of the late-1990's / early-2000's has had a tremendous impact on the City's housing stock. Home values on the island rose significantly during that period and purchasers since that period are primarily wealthier individuals or families in the top few percent of wage earners. The City has evolved from primarily a full-time residential community into a second home community with a seasonal population shift. The City of 6,354 full time residents has a massive influx of summer visitors and part time residents and has an estimated peak summer, weekend population of nearly 32,000 persons (2). This drastic variation in

the population requires that the City seasonally adjusts its workforce and priorities throughout the year to meet the demands of the fluctuating population.

The trend towards a seasonal population in the City is even more noteworthy because the shift has occurred during the same time period that transient housing in the form of hotels and motels was completely eliminated from the City. A 1981 Motel Study prepared by Roger Rubin Associates (3) notes the following:

"In the 1970's decade, not one new motel permit was issued, or requested. In the same decade, over 1,200 multi-family units, mostly of high quality, have been created, by new construction and/or conversion or rehabilitation. In the same decade (and primarily in the 1978-1981 time period) hundreds of motel units have been converted, to year_ round residential use.

Based on the population and housing figure trends from that time period forward, it appears that the majority of the multifamily units converted from hotel and motel units and created as new construction during that time period became seasonal units.



Another factor that has likely influenced the population and housing in the City that does not appear in the 1980 City Master Plan or 1981 Motel Study is the creation of the Garden State Parkway in the 1950's and Atlantic City Expressway in the mid 1960's. As provided by many of the City's most active realtors during one of the Master Plan stakeholder meetings, the vast majority of second home owners in the City have a primary residence in the

Philadelphia metropolitan area. The New York City metropolitan area was provided as second most popular primary residence location. The significant improvement to the access routes to Absecon Island from Philadelphia and New York City during the 1950's and 1960's has inarguably helped to make Margate an attractive second home location for residents from more affluent portions major metropolitan areas.



2 DEFINITIONS

For the purposes of this Comprehensive Master Plan Update, and in addition to any terms defined within the body of this document, the following terms shall have the meaning as set forth in this section. Terms presented as singular or plural, masculine or feminine, or present or past tense shall be construed within the context in which they occur.

- 2.1 “ADA” shall mean the Americans with Disabilities Act (42 U.S.C.A. ~ 12101 et. seq.).
- 2.2 “Board of Commissioners” shall mean the Mayor and Commissioners of the City of Margate. Within the context of the various sections of this document, the terms “City of Margate”, “City” and “Governing Body” shall mean the Board of Commissioners of the City of Margate.
- 2.3 “City” see Margate.
- 2.4 “City Clerk” shall mean the City Clerk of the City of Margate, whose office is assigned to maintain the official files of the municipality.
- 2.5 “City Website” shall mean www.Margate-nj.com.
- 2.6 “CAFRA” shall mean the New Jersey Coastal Area Facilities Review Act and shall be construed herein to include the Coastal Zone Management (“CZM”) Rules N.J.A.C. 7:7-1 and 7:7E-1 et. seq. and other pertinent environmental regulations promulgated by the New Jersey Department of Environmental Protection.
- 2.7 “Coastal Zone” shall mean the New Jersey coastal zone, which is defined as:
- A. The coastal area defined in the Coastal Area Facility Review Act (CAFRA), N.J.S.A. 13:19-1 et seq.;
 - B. Coastal waters, which are any tidal waters of the State and all lands lying thereunder. Coastal waters of the State of New Jersey extend from the mean high water line to the three geographical mile limit of the New Jersey territorial sea, and elsewhere to the interstate boundaries of the States of New York, and Delaware and the Commonwealth of Pennsylvania;
 - C. All lands outside of the coastal area as defined by



CAFRA extending from the mean high water line of a tidal water body to the first paved public road, railroad or surveyable property line existing on September 26, 1980 generally parallel to the waterway, provided that the landward boundary of the upland area shall be no less than 100' and no more than 500' from the mean high water line;

D. All areas containing tidal wetlands; and

E. The Hackensack Meadowlands District as defined by N.J.S.A. 13:17-4.

2.8 "Comprehensive Master Plan Update" see 2016 Comprehensive Master Plan Update.

2.9 "County" shall mean the County of Atlantic, State of New Jersey.

2.10 "FEMA" shall mean the Federal Emergency Management Agency.

2.11 "Governing Body" see Board of Commissioners.

2.12 "Island" shall mean Absecon Island.

2.13 "LEED" shall mean Leadership in Energy & Environmental Design "<http://www.usgbc.org/DisplayPage.aspx?Category>

ID=19.

2.14 "Margate" shall mean the City of Margate, a body corporate and politic, and unless otherwise indicated, shall include its Governing Body, elected officials, officers and staff.

2.15 "Municipal Land Use Law" or "MLUL" shall mean the New Jersey Municipal Land Use Law (N.J.S.A. 40:55D-1 et seq.).

2.16 "NJDCA" shall mean the New Jersey Department of Community Affairs, and shall include all divisions therein and agencies thereof.

2.17 "NJDEP" shall mean the New Jersey Department of Environmental Protection and shall include all divisions therein and agencies thereof, including those responsible for implementation of the Coastal Zone Management Rules, CAFRA and other environmental regulations.

2.18 "NJDOT" shall mean the New Jersey Department of Transportation.

2.19 "Office of Planning Advocacy" ("OPA") shall mean the successor to the New Jersey Office of Smart Growth ("OSG") and the Office of State Planning ("OSP"); operating out of the office of the Secretary of State under the



Lieutenant Governor. As part of its Business Action Center, the OPA is charged with helping to spur economic growth in New Jersey.

- 2.20 "Planning Board" shall mean the combined Planning and Zoning Board of Adjustment of the City of Margate established pursuant to section 23 of the Municipal Land Use Law and exercising the powers of a municipal Zoning Board of Adjustment under the provisions of N.J.S.A. 40:55D 25 c., and operating pursuant to the various regulations of the Land Development Ordinance.
- 2.21 "Publication" shall mean the date printed on the cover of this Comprehensive Master Plan Update, which shall signify the date this document was finalized for submission to the Planning Board.
- 2.22 "State Plan" shall mean the New Jersey State Development and Redevelopment Plan, Adopted March, 2001.

- 2.23 "2004 Master Plan" shall mean the document entitled City of Margate Master Plan prepared by Heyer, Gruel & Associates. Dated January 2004.
- 2.24 "2006 Master Plan Revision" shall mean the document entitled City of Margate Master Plan Revision prepared by Heyer, Gruel & Associates. Dated March 2006.
- 2.25 "2016 Comprehensive Master Plan Update" or "Comprehensive Master Plan Update" shall mean this instant document entitled 2016 Comprehensive Master Plan Update. City of Margate, Atlantic County, N.J., prepared by Remington, Vernick & Walberg Engineers, SOSH Architects, Spectrum Gaming Group and the Levinson Institute of Gaming, Hospitality & Tourism (with date as appearing on the front cover hereof), including all appendices and related documents included herein by reference.



3 STATEMENT OF OBJECTIVES, PRINCIPLES, ASSUMPTIONS, POLICIES, AND STANDARDS

The Municipal Land Use Law requires that municipal Master Plan include a “Statement of Objectives, Principles, Assumptions, Policies and Standards upon which the constituent proposals for the physical, economic and social development of the municipality are based”. (3)

The 1980 Master Plan, 1990 Master Plan Reexamination, 2004 Master Plan, and 2006 Master Plan Reexamination detailed the historical issues and (then) current trends facing the City. This Comprehensive Master Plan Update utilizes these efforts as background, and updates the Statement based on current conditions and policy direction.

In addition to satisfying the statutory requirement for the required Statement, this section will satisfy N.J.S.A. 40:44D-a, b & c as relates to the requirements for a Master Plan Reexamination under the Municipal Land Use Law.

For organizational purposes, issues comprising this Statement shall be classified via the various Master Plan Elements specified in the Municipal Land Use Law (N.J.S.A. 40:55D-28) as applicable to Margate.

A review of the issues facing the City reveals certain themes which overlap into various Subject headings (i.e., Land Use, Circulation, Economic Development, etc.). To eliminate duplication, to the extent possible, this section presents such recurring items as single entries when appropriate but separately where the focus of the entry differs. Accordingly, the following sections must be read as a single Statement.

3.1 General

- A. **Principal:** The Municipal Land Use Law (N.J.S.A. 40:55D-2) grants municipalities the power to control the physical development of the lands within their corporate boundaries and provides fifteen (15) guiding purposes to be achieved by their land use/development regulations.

The City of Margate affirms its commitment to these purposes and adopts same as general guidelines for this Comprehensive Master Plan Update, the Land Development Ordinance, policies and practices for all appropriate municipal agencies in the administration of their duties and responsibilities. Specifically:



1. *Encourage municipal action to guide the appropriate use or development of all lands in this State, in a manner which will promote the public health, safety, morals, and general welfare;*
2. *Secure safety from fire, flood, panic and other natural and man-made disasters;*
3. *Provide adequate light, air and open space;*
4. *Ensure that the development of individual municipalities does not conflict with the development and general welfare of neighboring municipalities, the county and the State as a whole;*
5. *Promote the establishment of appropriate population densities and concentrations that will contribute to the well-being of persons, neighborhoods, communities and regions and preservation of the environment;*
6. *Encourage the appropriate and efficient expenditure of public funds by the coordination of public development with land use policies;*
7. *Provide sufficient space in appropriate locations for a variety of agricultural, residential, recreational,*

commercial and industrial uses and open space, both public and private, according to their respective environmental requirements in order to meet the needs of all New Jersey citizens;

8. *Encourage the location and design of transportation routes which will promote the free flow of traffic while discouraging location of such facilities and routes which result in congestion or blight;*
9. *Promote a desirable visual environment through creative development techniques and good civic design and arrangement;*
10. *Promote the conservation of historic sites and districts, open space, energy resources and valuable natural resources in the State and to prevent urban sprawl and degradation of the environment through improper use of land;*
11. *Encourage planned unit developments which incorporate the best features of design and relate the type, design and layout of residential, commercial, industrial and recreational development to the particular site;*



12. *Encourage senior citizen community housing construction;*
13. *Encourage coordination of the various public and private procedures and activities shaping land development with a view of lessening the cost of such development and to the more efficient use of land;*
14. *Promote utilization of renewable energy resources; and*
15. *Promote the maximum practicable recovery and recycling of recyclable materials from municipal solid waste through the use of planning practices designed to incorporate the State Recycling Plan goals and to complement municipal recycling programs.*

B. Principal: Margate recognizes that the City has undergone a significant transition from a community of primarily a community of full time residents to primarily a second home community.

- i. Objective: Review existing ordinances and codes for applicability to the current

C. Principal: Margate recognizes that significant progress is required in many areas to ensure the sustainability and

continued viability of the community against extreme whether events such as Superstorm Sandy and Climate Change. Margate also recognizes that the severity and frequency of such events is projected to increase over time and that an uncertain amount of sea level is expected (4).

- ii. Objective: Review the vulnerabilities of existing municipal infrastructure and update municipal policies to ensure that the City is taking steps to protect all municipal infrastructure, but especially critical infrastructure from rising sea levels and significant storm events.
- iii. Objective: Review and update municipal policies and regulations to ensure that the City is permitting, promoting, and requiring (where appropriate) measures to protect private development from rising sea levels and significant storm events.

3.2 Land Use Policy

A. Principal: Margate recognizes that development and redevelopment in the City is trending toward larger homes



and that buyers are primarily second homeowners and other non-full time residential uses.

- i. Objective: Continue plan and zone to preserve the character and appeal of existing neighborhoods.
- ii. Objective: Evaluate lot coverage and bulk standards and consider reducing building footprint, overall size, and bulk allowances.
- iii. Objective: Preserve and/or expand to the maximum extent practicable the number of families that are full time residents in the City.
- iv. Objective: Evaluate the zoning boundaries for consistency with the type and character of existing development

B. Principal: Margate recognizes that land development in the City has been driven by residential property values and that the viability of Commercial districts is threatened by financial pressures generated by the residential market. Margate recognizes that sustaining commercial areas is critical to the long term attractiveness of the City as a premier shore community.

- v. Objective: Review and update municipal policies and regulations to ensure that Commercial Districts are contiguous and cohesive to the maximum extent practicable and that the district boundaries are sensible and defensible.
- vi. Objective: Review and update municipal policies and regulations to ensure that Commercial Development regulations permit and promote economically viable development in the City.
- vii. Objective: Develop and implement right-of-way design guidelines to create commercial districts that are distinct and recognizable to the motoring public.
- viii. Objective: Determine appropriate locations and regulations for outdoor product placement, sidewalk sales, and outdoor dining options.

C. Principal: Margate recognizes that waterfront property in the City possesses unique characteristics and value because of its proximity and access to the water. This includes both the Waterfront Special District and the residential areas with water access.



- i. Objective: Adopt development regulations that acknowledge the unique characteristics of waterfront property and adopt development regulations for these properties that addresses the unique characteristics of waterfront property.

D. Principal: Margate recognizes that the Waterfront Special District provides unique value to the City and that the City should continue to pursue revitalization efforts in this location.

- i. Objective: Consider the recommendations of prior studies of the Waterfront Special District portion of Amherst Avenue, adopt a street and promenade configuration to enhance the Waterfront Special District and address parking needs, and evaluate bulkhead replacement along Amherst Avenue.
- ii. Objective: Declare a portion of the District to be in need of redevelopment and partner with a commercial developer to redevelop underutilized existing facilities

- iii. Objective: Identify existing ordinances and regulations that restrict business hours and other activities and consider permitting additional operating hours and additional outdoor activities.
- iv. Objective: Support Bayfront commercial activity by pursuing dredging opportunities to maintain access to boat slips and navigable waters

E. Principal: Margate recognizes that the City has very few large parcels which are appropriate for public, religious, and civic uses in the City. Margate also recognizes that many of the non-public entities which control these properties face uncertain futures and that large parcels of land in the City that they control could be converted to residential housing.

- i. Objective: Identify large lots in the City and ensure that zoning requires continued civic or institutional use.

F. Principal: Margate recognizes that the City lacks transient housing options for short term guests and visitors to the stay in the City overnight. Margate also recognizes that transient visitors support local commercial activity,



particularly food service establishments, more than second homeowners.

- i. Objective: Identify an area in the City that would be appropriate to develop a short term transient housing option.

G. Principal: Margate recognizes that recent development applications have ignored architectural detail in favor of less expensive, often bland, stark and utilitarian façade designs which detract from the aesthetics of the City.

While the Planning Board has seen some success in encouraging developers to design buildings with more variety and interest, their power to compel better design is somewhat limited.

While nominally an aesthetic issue, such architecture impacts the stability of neighborhoods and is recognized by the Municipal Land Use Law as one of the purposes of that act.

- i. Objective: Establish within the Land Use Plan and Land Development Ordinance, as appropriate, specific

Architectural design standards to promote a desirable visual environment and ensure the continued visual integrity of both the commercial and residential sections of the City.

- ii. Objective: Reevaluate building and zoning regulations and revise where appropriate to allow for more architectural creativity.
- iii. Consider

Policies and Standards related to land use in Margate are more fully detailed in the Land Use Plan Element (Section 4) of this Comprehensive Master Plan Update.

3.3 Housing Policy

A. Principal: Margate recognizes the need to provide a diverse housing stock to address the housing needs of all residents



- i. Objective: Consider a residential redevelopment plan to develop market rate residences that are affordable to locally employed individuals and families
- ii. Objective: Develop incentives for full time resident families to encourage existing families to stay in Margate and new families to relocate to Margate
- iii. Objective: Maintain the adopted Land Use Plan and Land Development Ordinance as a rational plan to regulate development patterns and reinforce the integrity of the City's residential neighborhoods and commercial districts.
- iv. Objective: Establish within the Land Use Plan and Land Development Ordinance, as appropriate, specific standards to ensure the continued integrity of the residential sections of the City.
- v. **Principal:** Margate recognizes that the City's population is aging and that the aging population within the City has needs that defer from the needs of the families that used to inhabit the island

- i. Objective: Evaluate the adequacy of Emergency Services during the peak summer season when the City's population swells to many times the number of full time residents
- ii. Objective: Consider zoning for medical offices and other healthcare related facilities to service the aging population

B. Principal: Margate recognizes the need for affordable housing in the City, including housing targeted toward the needs of its employee base.

STILL WORKING ON THIS SECTION. VERY LITTLE INFORMATION AVAILABLE ABOUT COAH STATUS AND CITY'S OBLIGATIONS ARE CURRENTLY INDISCERNIBLE BUT WE WANT TO CAREFULLY WORD THIS SECTION AND THE HOUSING PLAN SECTION TO TRY TO PROTECT THE CITY FROM FUTURE LAWSUITS.

Accordingly, a Housing Plan Element has been prepared and is included but a Fair Share Plan, which typically would be included in a Comprehensive Master Plan Update, has



been deferred until COAH's status has been clarified and the rules and requirements of the program are published.

Policies and Standards related to Housing in Margate will be more fully detailed in the Housing Plan Element (Section 5) of this Comprehensive Master Plan Update.

3.4 Circulation Policy

A. Principal: Margate recognizes that its street system is inadequate to accommodate the vehicular and pedestrian traffic observed in the peak summer season.

- i. Objective: Review the feasibility of increasing the number of one-way paired streets in the City in an effort to reduce congestion on current two-way streets while creating opportunities for additional on street parking on both sides of the street.
- ii. Objective: Consider the options presented in the NJDOT pedestrian circulation study

B. Principal: Margate recognizes that its inventory of parking spaces is inadequate to satisfy the seasonal demand generated during the peak summer season.

- i. Objective: Quantify the number of on street parking spaces that can be created by adopting a one-way street plan
- ii. Objective: Consider the adoption of regulations to permit some beach block parking
- iii. Objective: Evaluate the feasibility of shuttle services to offsite parking locations, such as the City's school parking lots
- iv. Objective: Investigate the feasibility of converting and/or acquiring property for the purpose of constructing surface parking lots and establish a municipal Parking Authority or Parking Utility to operate of the parking lots/structures.
- v. Objective: In order to fund the centralized parking structures referenced above, institute "in-lieu-of" parking fees wherein developers could opt to "buy-down" some



portion of their parking requirement by payment of an established amount which would be dedicated to the construction and/or ongoing operation of such parking facilities.

- vi. Objective: Evaluate driveway regulations to maximize the number of parking spaces, both on individual properties and on-street
- vii. Objective: Evaluate the impact of parking under elevated structures and the impact on the number and dimensions of driveway aprons.

C. Principal: Margate recognizes that the current street network presents a number of conflict locations between pedestrian movements and vehicular movements and that these locations require special attention.

- i. Objective: Evaluate the options presented in the School Travel plan to determine suitable improvement locations in the City.

- ii. Objective: Evaluate the recommendations of the NJDOT assisted Margate-Ventnor Pedestrian Circulation Plan

D. Principal: Margate recognizes that the wayfinding signage in the City is inadequate and can lead to confusion for first time and infrequent visitors.

- i. Objective: Clearly identify business and other special interest districts with unique identifiers that are easily recognizable to the motoring public
- ii. Objective: Improve residential street signage quantity and quality and improve street sign placement locations
- iii. Objective: Clearly identify block numbers within the signage scheme to improve navigation to destinations throughout the City

E. Principal: Margate recognizes that there is a need for a pedestrian connection between the Waterfront Special District, the Central Business District centered at Washington Avenue and Ventnor Avenue, and the beach.



- i. Objective: To create an inviting, walkable connection along Washington Avenue to connect these hubs of commercial activity with each other and the beach.
- ii. Objective: To develop and implement standards to govern development and Right-of-Way improvements along Washington Avenue

- ii. Objective: Evaluate upgrades to the storm drainage system(s) in the City as appropriate. Evaluate tidal flooding problems and maintain, repair and replace stormwater facilities upon deterioration. Inspect bulkheading throughout the City and repair or replace as necessary.
- iii. Objective: Work with private utility providers to insure adequate and appropriate upgrades to the City's infrastructure systems, including, but not limited to, finalizing planned improvements to the water distribution system as relates to fire protection throughout the City

Policies and Standards related to circulation policy in Margate are more fully detailed in the Circulation Plan Element (Section 6) of this Comprehensive Master Plan Update.

3.5 Community Facilities Policy

- A. Principal:** Margate recognizes that its aging utility infrastructure is in general need of repair and will be in need of repair and replacement on an on-going basis in order to maintain the current level of service.
 - i. Objective: Prepare a 6-year capital improvement plan constituent with N.J.S.A. 40:55D-29 & 30 to include subsurface utilities under the control of the City.

- B. Principal:** Margate recognizes Sea-Level Rise and the environmental factors that lead to the formation of policies addressing the problems of rising tide & sea levels.
 - i. Objective: The City needs to plan and design for an increase of the existing sea level elevation over time.



- ii. Objective: Incorporate design considerations into all City design projects that address sea level rise to the maximum extent practicable.

- iii. Objective: Evaluate existing recreation opportunities to ensure that age appropriate recreation opportunities area available to the City's aging population

Policies and Standards related to community facilities in Margate are more fully detailed in the Community Facilities Plan Element (Section 7) of this Comprehensive Master Plan Update.

- iv. Objective: Develop a community design charrette process to obtain public input on new park concepts and recreation opportunities

3.6 Open Space and Recreation Policy

A. Principal: Margate recognizes that active and passive recreation is a critical component of local residential life as well as a potential attraction for visitors.

B. Principal: Margate recognizes that there are significant boundaries to significantly expanding existing parks and recreation facilities

- i. Objective: Evaluate usage of existing facilities and consider converting underutilized facilities into facilities where unmet demand exists
- ii. Objective: Evaluate opportunities for family oriented recreation opportunities, i.e. synthetic ice skating rink, mini-golf, etc.

- i. Objective: Create smaller scale green spaces in residential areas that offer passive recreation or even just a place to sit and rest
- ii. Objective: Expand relationships with non-profits and religious organizations that conduct and promote recreation opportunities

C. Principal: Margate recognizes that there is a large area of land that is currently underutilized in the northwest corner of the City that is generally understood to be unsuitable for development



- i. Objective: Investigate the feasibility of passive recreation by way of an elevated boardwalk or nature trail, providing access to the natural resources in the area

Policies and Standards related to open space and recreation opportunities in Margate are more fully detailed in the Open Space and Recreation Plan Element (Section 8) of this Comprehensive Master Plan Update.

3.7 Conservation Policy

A. Principal: Margate recognizes the need to balance its desire to promote economic development with its need to preserve its environmental resources (principally the bathing beaches, the Atlantic Ocean, the marine tidal marshes and the back bay areas). As a seaside community, Margate recognizes that its economic health is inextricably tied to the health of these resources.

- i. Objective: Maintain beach access and cleanliness

- ii. Objective: Maintain water access and suitable water depths for watercraft use along the bay side of the City
- iii. Objective: Maintain and improve ocean and bay water quality

B. Principal: The Marina's provide ocean and bay access in the City that create recreational and economic opportunities that are unique to shoreline communities. These assets derive significant value from quality of the bay, ocean, and fishery. Therefore, a balance between access and preservation are critical to ensure the long term viability and success of these environmental assets.

- i. Objective: Maximize access to water oriented activities while preserving the quality that makes them desirable
- ii. Objective: Support economic activity and programmatic elements designed to make appropriate use of the City's environmental resources.
- iii. Objective: the City will work to implement the goals of NJ's Coastal Management Program, and work together to protect and enhance the waterfronts, maintain public



access to the beaches, and ensure that zoning policies are in place to retain water dependent and water oriented uses.

C. Principal: Margate recognizes that, as a principal of Smart Growth, well-planned communities reduce land consumption, habitat loss, vehicle miles traveled (“VMT”), toxic emissions and demand for energy and other resources. Accordingly, the City needs to promote every possible means to conserve energy by using energy-efficient technologies, renewable energy resources and passive forms of energy.

- i. Objective: Maximize the use of “Green Power” and energy efficiency for all mechanical building systems for new developments and existing system replacements in the City.
- ii. Objective: Maximize the use of environmentally-friendly, LEED building systems and technologies in all Projects.
- iii. Objective: For Vertical Development, institute a “Lights Out” program for energy efficiency and to reduce the incidence of migratory bird strikes at these buildings.

Such a program, which has been endorsed by the Audubon Society, includes extinguishing or reducing decorative building lighting on upper stories between 11:00 p.m. and daylight.

D. Principal: Climate change and sea level rise is a phenomenon that has been recognized by leading researchers and the State of New Jersey. During the 20th century Sea level rise along the New Jersey Coastline from Sandy Hook to Cape May was reported to be 16 inches. (5) Climate change presents an unprecedented challenge to humanity. New Jersey has adopted the Global Warming Response Act which adopts goals for the reduction of greenhouse gas emissions in New Jersey. Ignoring this problem is catalyst for increased storm event magnification, storm-related flooding, significant property loss, impacts upon coastal eco-systems and may threaten coastal freshwater supplies due to saltwater intrusion. A sea-level rise in line with median projections would threaten the majority of New Jersey’s coastline, not just the City of Margate.

- i. Objective: in order to plan for sea-level rise, the City should recommend the investigation into utilizing



several methods to address rising waters such as; zoning for higher densities, mixed uses, infill development and limits on dwelling size, instituting green building standards & codes and instituting programs to retro-fit existing municipal and privately owned buildings.

- ii. Objective: City should inventory potential sources of greenhouse gas emissions to identify unwise energy consumption associated with municipal and regional agencies.
- iii. Objective: City should investigate LEED sustainable methods to be implemented in all City operations.

Policies and Standards related to Conservation of Natural Resources in Margate are more fully detailed in the Conservation Plan Element (Section 9) of this Comprehensive Master Plan Update.

3.8 Economic Policy

- A. Principal:** Margate recognizes that a balance between the number of commercial properties and residential properties is critical the long term desirable and success of the City
 - i. Objective: Enforce commercial district zoning rules and regulations to maintain or improve the density of commercial areas
 - ii. Objective: Highlight, promote, and improve commercial districts to the maximum extent practicable to encourage commercial activity and maintain viable business locations in the City
- B. Principal:** Margate recognizes that the commercial areas of the City are not distinctly identifiable, especially to the motoring public.
 - i. Objective: Develop and adopt streetscape standards for commercial areas to regulate development activity and guide public efforts to make improvements to the Right-of-Way in commercial areas.
 - ii. Objective: Create unique identifiers and signage for each commercial district that are easily recognizable so



that the motoring public is made aware that they are in a commercial area

C. Principal: Margate recognizes that there is no unifying brand or concept that the City currently utilizes to promote commercial activity in the City

- i. Objective: Consider developing a Margate “brand”, slogan, or saying to be utilized in advertising and press releases that promotes the idea of commercial activity in the City
- ii. Objective: Identify advantages that the City has to offer to non-residents and partner with businesses to target those opportunities. i.e. advertise upscale dining and nightlife to families staying in Ocean City

D. Principal: Margate recognizes that a lack of transient visitors in to the City reduces economic activity in the City

- i. Objective: To increase the number of transient visitors staying in the City by offering temporary accommodations that are currently not available within the City limits.

- ii. Objective: To increase the number of parking spaces available throughout the City to promote day visits by those living within driving distance.
- iii. Objective: To encourage the Business Owners Association and individual businesses to partner with the Margate Bridge Company to offer free or discounted toll fares with purchase of goods or services in the City

E. Principal: Margate recognizes that the seasonal nature of population of the City creates a difficult seasonal business climate in the winter months.

- i. Objective: Offer incentives to businesses to stay open year-round
- ii. Organize shoulder season and winter events during off-peak seasons to promote economic activity during months with reduced resident populations
- iii. Objective: Develop seasonal activities to promote visitation to the City during off-peak months, i.e. Christmas light show, ice skating, etc.



Policies and Standards related to Economic Policy in Margate are more fully detailed in the Economic Plan Element (Section 13.0) of this Comprehensive Master Plan Update.

3.9 Historic Preservation Policy

A. Principal: Margate recognizes that much of its rich history as a seaside resort remains in the form of historic architecture located throughout the municipality. The City recognizes that this historic fabric exists in both traditional and non-traditional architectural design.

Recent development applications have ignored this architecture in favor of less expensive designs which detract from the aesthetics of both the commercial and residential sections of the City.

The continuing challenge facing Margate is to continue to protect its traditional and non-traditional historic architecture in the face of development pressure. As buildings age and land becomes scarce and thus more expensive, development costs rise. Budget conscious developers are

thus forced to look toward (less expensive) clearance as opposed to (more expensive) renovation and adaptive reuse.

- i. Objective: Establish policies designed to protect the City's traditional and non-traditional historic architecture.
- ii. Objective: Strengthen the City's code enforcement efforts to protect and preserve existing historic architecture (as well as all buildings in the City).
- iii. Objective: Establish within the Land Use Plan and Land Development Ordinance, as appropriate, specific Architectural design standards to promote a desirable visual environment and to ensure the continued visual integrity of both the non-historic commercial and residential sections of the City.

B. Principal: Margate recognizes that the Marvin Gardens section of the City provides the City with a nationally recognizable historic area of unique composition

- i. Objective: To protect the historic value of the Marvin Gardens area to the maximum extent practicable.



- ii. Objective: To acknowledge the threat of sea-level rise and high intensity storm events and identify means to both preserve the look and character of the neighborhood, while allowing residents to protect their homes and structures from future storm events.
- iii. Objective: To determine the impact of the new FEMA flood elevations on the Marvin Gardens neighborhood.
- iv. Objective: To evaluate the effectiveness of the existing HD-25 zone and the impact it has had since implementation.

C. Principal: Margate recognizes that the Parkway District is a unique area in the City that offers a combination of green space and historically significant dwellings and structures.

- i. Objective: To protect and preserve the parkway sections landscaping islands and fountains to the maximum extent practicable.
- ii. Objective: To protect and preserve the historically significant homes that border the Parkway corridor to the maximum extent practicable.
- iii. Objective: To incorporate better access to NJ Transit bus stops along the Parkway section while preserving the aesthetic appeal of the district.



4 LAND USE PLAN ELEMENT

4.1 Requirements

The Municipal Land Use Law (5) requires that municipal Master Plan include a Land Use Plan Element, which is defined as an analyses of the relationship between land uses and development patterns in the City both as an independent function and against the Objectives, Principles, Assumptions, Policies and Standards and other Master Plan Elements developed as part of this Master Planning process, with specific attention paid to:

- (a) natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands;
- (b) existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes; and stating the relationship to the existing and any proposed zone plan and zoning ordinance;
- (c) showing the location of any airports and the boundaries of any airport safety zones pursuant to the "Air Safety and Zoning Act of 1983," 6:1-80 et seq.;

- (d) including a statement of the standards of population density and development intensity recommended for the municipality;

In addition to satisfying the salutatory requirement for the minimum components of a Land Use Plan Element, this section will satisfy N.J.S.A. 40:44D-d & e as relates to the requirements for a Master Plan reexamination under the Municipal Land Use Law. For organizational purposes, issues comprising the Land Use Plan shall be classified via the requirements of a Land Use Plan Element as specified under the Municipal Land Use Law, as applicable to the City of Margate.

4.2 Prior Master Plan Land Use Element

The prior Master Plan for the City was adopted in January of 2004. The City of Margate Master Plan - January 2004 (3) contained the following Land Use objectives:

- Preserve and enhance the existing established residential character of Margate.



- Identify potential revisions to zoning to improve the consistency of residential zoning districts with the established pattern of development.
- Ensure that commercial development is integrated well with the character and scale of Margate.
- Create and define a distinct Town Center within the City's overlay area to encourage the sense of community.
- Continue the revitalization of the City's Bayfront District.
- Carefully balance seasonal residential investment demands with the quality of life and neighborhood character enjoyed by the City's year-round residents.

After the implementation of the 2004 Master Plan and implementation of the recommended Zoning and development standards, undesirable development patterns in the City emerged almost immediately. A second effort was undertaken in 2005 and a revision to the Master Plan was adopted in March of 2006. The 2006 Master Plan Revision (4) was undertaken to address excessive height and bulk, particularly on oversized lots. A number of revisions to the City's Zoning Ordinance were proposed and adopted to help maintain the scale and character of development in existing neighborhoods. The City's actions as part of the 2006 Master Plan Revision effort and subsequent ordinance changes has somewhat addressed these issues.

The current Master Plan Update utilizes these efforts as background, and updates the Land Use Plan based on current conditions, policy direction, and with due consideration given to the impacts of Hurricane Sandy and the significant probability of future storms of a similar or larger magnitude.

4.3 Natural Conditions

The Municipal Land Use Law requires that Land Use Plan Elements address "natural conditions, including, but not necessarily limited to, topography, soil conditions, water supply, drainage, flood plain areas, marshes, and woodlands". In addition to the following, an in-depth discussion of natural conditions can be found in the Conservation Plan Element 9.

4.3.1 Topography

As with most barrier island communities, the topography of the City is relatively flat. An updated General Elevation Reference Map dated July 2014 by Remington, Vernick, and Walberg Engineers, depicts the City in NGVD 1929 datum and the vast majority of the City is below elevation 8. NGVD can be converted to NAVD in Margate by subtracting 1.296' from the NGVD elevation. This



means that the majority of the City falls well below elevation 8 in NAVD88 datum.

While the bayside waterfront experiences almost twice daily high tides, the City's beaches and bulkhead serve to protect the built environment from all but the largest of storms on the Ocean side of the island.

4.3.2 Soil Conditions

Soils in the City consist primarily of predominantly sandy soils on the ocean side of the island transitioning to organic silts along the bay side of the island. Along with natural soils are sections of historic fill that was placed over time to raise and level the terrain as development occurred across Absecon Island. Typically the sandy soils on the island are free draining material that provides a desirable foundation for construction. Soils along the bay side of the island are typically not free draining and are undesirable and/or unsuitable to support construction without the use of piles or other means of mechanical stabilization.

As a result of this soils composition, the center and ocean areas of the City are particularly well-suited for development, while the bayside water-edges of the City consist of meadow mat and other

subsurface conditions which require special engineering for development.

4.3.3 Water Supply and Sewerage

The City of Margate Public Works Department is the controlling entity of the City's potable water and sanitary sewer systems. The City has ##### water connections and ##### sewer connections.

The City utilizes 5 potable drinking water wells to extract groundwater from the Atlantic City 800-foot sand of the Kirkwood Formation. Chlorination is the only form of water treatment required.

The City's raw sewerage is sent to the ACUA facility in Atlantic City for treatment. The treated wastewater is discharged into the Atlantic Ocean and solids are disposed of at the ACUA managed landfill on Delilah Road in Egg Harbor Township.

4.3.4 Drainage

Atlantic Avenue exists as a natural ridge through most of the City that divides the drainage areas of the City to the north-west and south-east. Most of the areas north-east of Atlantic Avenue drain towards the bay while the majority of the areas south-east of



Atlantic Avenue drains toward the Ocean. Areas north-west of Atlantic Avenue generally discharge to the bay through ocean outfalls. The majority of the City south-east of Atlantic Avenue drains toward the ocean through openings in the City's oceanfront bulkhead. These street level openings allow for stormwater to be discharged on to the beach and infiltrate into the sand or flow out to the ocean.

4.3.5 Flood Plain Areas

Almost the entire City is in a V or A zone on the Preliminary FEMA Flood Maps (6) In the aftermath of Hurricane Sandy, FEMA has released a series of preliminary flood maps to use as interim guidance when rebuilding or raising structures. All versions of these maps released to this point depict the entire City in some type of flood zone. Small portions of the City are in the X zone, or 500-year flood plain while the majority of the City is in the A or V zone, in what is expected to be the 100-year flood plain. Additional discussion of this topic is located in the Margate Conservation Plan Element, Section 9.

4.3.6 Marshes

As a barrier island community, the City of Margate contains both coastal and freshwater wetlands. The seasonal high water table is

found at or near the topographic surface on most of the island. Many areas along the bay side of the island are constructed in areas that were tidal marshes at one time. There are no "marsh islands" within the municipal boundary of Margate but the existence of marshes across the channel from Absecon Island are critical to storm protection for the island. The Margate Conservation Plan Element, Section 9, and the Natural Resources Inventory.

4.3.7 Woodlands and Agriculture

As a nearly built-out coastal community, the City of Margate has no significant agricultural resources or activity. There is a small, partially wooded area in the City between Fremont Avenue, Burk Avenue, Clermont Avenue, and Fredericksburg Avenue (Ventnor Boundary). The majority of this area is classified as coastal wetlands and is, therefore, encumbered with significant environmental obstacles to development.

4.3.8 Flora and Fauna

Situated on a barrier island in what the State of New Jersey defines as the "Coastal Zone", the City's natural resources consist, in general, of indigenous species that can tolerate the salinity of the ocean and are adapted for life in saturated soil conditions



(Spartina, sea lavender, glasswort, sea myrtle and high tide bush).
Freshwater wetlands include deciduous shrub / scrub wetlands.

4.4 Flood Elevations and Sea-level Rise

The current Flood Insurance Rate Map (345304001C, October 18, 1983) depicts the entire City in some type of flood zone. With the exception of a small wooded area of land in the north east corner of the City which is, somewhat ironically, surrounded on three side by mapped wetlands, the entire city of Margate is also depicted in a mapped flood zone on the recently produced Preliminary Flood Insurance Rate Maps (34001C0453F, May 30, 2014 and 34001C0434F, January 30, 2015). As depicted on both the new and old flood maps, the entire City is vulnerable to coastal flooding events. The existing flood risk is compounded by sea level rise which was observed to increase approximately 16 inches during the 20th Century along the New Jersey Coast from Sandy Hook to Cape May (5).

Historically, the best guidance available to the City for how to determine the proper building elevation requirement has been the Federal Emergency Management Agency or FEMA. Their Flood Insurance Rate Maps, county level Flood Insurance Studies, the

National Flood Insurance Program, and the Community Rating System all provide guidance to determine appropriate structure elevations to protect against flood damage. Given that FEMA is currently in the process of updating all of these pertinent references, the City is left with no concrete guidance at this time. FEMA has release a series of preliminary flood maps and a preliminary Flood Insurance Study but deadlines for finalization have been extended indefinitely. This leave the City in a position where it is attempting to update the development rules and regulations to ensure that development is protected from future storm events without adopted guidance documents.

It is likely that no definitive guidance will be disseminated for numerous years and the City will be left to interpret the issued preliminary materials to the best of its ability. As of the publication of this plan, the CRS program has established temporary guidance for the establishment of first floor elevations. The currently accepted calculation to qualify for Flood Insurance through CRS is the higher of the following:

- a. The use of the Advisory Base Flood Elevations Map elevation for a property plus one foot
- b. The use of the Preliminary Work Map flood elevation plus two feet



This interim guidance has been adopted by the City and should remain in place until subsequent guidance is provided. Following the interim guidance of the CRS program ensures that the City is protecting itself and its residents by preserving eligibility for flood insurance for properties in the City.

The City will need to follow the rulemaking process for the updated flood elevation guidance and react by adopting new rules and regulations once rules have been finalized.

4.5 Land Use

The Municipal Land Use Law requires that Land Use Plan Element address:

“existing and proposed location, extent and intensity of development of land to be used in the future for varying types of residential, commercial, industrial, agricultural, recreational, educational and other public and private purposes; and stating the relationship to the existing and any proposed zone plan and zoning ordinance”.

4.5.1 City Land Use

One of the purposes of Zoning is to provide for the rational arrangement of land uses in such a manner as to promote the

health, safety, morals and general welfare of a community. Zoning lines are to be drawn with reasonable consideration to the character of each district and its peculiar suitability for particular uses and to encourage the most appropriate (future) uses of land.

4.5.1.A Development History

In order to visually represent the development pattern for the City of Margate over time, a **Year Constructed Map** was developed as a part of the Master Plan Reexamination process. The **Year Constructed Map** gives a visual representation of the development of Margate over time. Analysis of the **Year Constructed Map** shows that development prior to 1930 was largely concentrated between Monmouth Avenue and the beach and sporadic development in most locations, with the exception of the densely concentrated development of the Marvin Gardens area. It appears the City’s housing stock expanded rapidly between 1950 and 1959, primarily on smaller lots closer to the bay, to and past Amherst Avenue. From 1960 forward, development continued north-west toward the bay with many of the waterfront homes appearing to have been built in 1980 or later.

4.5.1.B Commercial Properties and Zoning

The City currently utilizes the following commercial zoning district designations:



Zone	Zone Description
CBD	Central Business District
C-1	Commercial District
C-2	Commercial District
WSD	Waterfront Special District

The presence of commercial properties in the City of Margate was documented in the Commercial Property and Commercial Zoning map. The Commercial Property and Commercial Zoning Map was produced as a part of the Master Plan process. The map illustrated that Commercial properties in the City are generally concentrated in four distinct areas as follows:

Area	Location
Central Business District	Ventnor Ave and Washington Ave
Waterfront Special District	Amherst Ave from Coolidge Ave to Benson Ave
Town Center District*	Ventnor Ave to Atlantic Ave, Granville Ave to Douglas Ave
Gateway District*	Ventnor Ave and Jerome Ave

While these commercial areas are still fairly well defined, real estate values and the demand for housing have put significant pressure on existing commercial properties in traditionally

commercial areas. This pressure has somewhat eroded the density of commercial activity as business owners yield to the pressure for more valuable residential development. The 2004 Mater Plan Reexamination recognized and acknowledged the conversion of commercial lots to residential use as a problem for the City. The 2004 Master Plan sought to preserve commercial areas in the City and to integrate commercial development in the City. Despite these efforts, Commercial activity in the City has continued to erode.

Of the commercial zones listed above, two of the current commercial district zones permit ground floor residential. The C-1 and WSD districts both allow for ground floor residential development. Allowing residential as a permitted use in Commercial Zones undermines the effectiveness of the Commercial Zoning at preserving commercial property, density, and activity. In order for commercial zones to be effective, they must be contiguous and cohesive to the maximum extent practicable. Therefore, our recommendation would be to eliminate ground floor residential development in all Commercial zones. Residential uses in Commercial zones should be permitted only as a conditional use with the major condition being the inclusion of a commercial use on a majority the ground floor of the property.



CBD Zone (Central Business District) - Existing

The Central Business District (CBD) Zone was crafted to provide a dense retail commercial core in heavily traveled, high visibility areas of the City. The Central Business District is intended to be an active commercial area with high turnover shops, restaurants, and businesses. The grouping of these businesses into concentrated areas is ideal for creating an active, attractive atmosphere and allowing patrons to visit multiple nearby businesses during one trip.

There are two distinct and separate areas currently zoned as Central Business District in the City. One of the areas is in the south-west portion of the City, centered at the intersection of Washington Avenue and Ventnor Avenue. The other area is in the north-west portion of the City, between Ventnor Avenue and Atlantic Avenue, from Granville Avenue to Douglass Avenue.

Permitted uses in the zone include the following:

- Residential upper stores
- Retail sales
- Retail Services
- Restaurants (non drive-thru)
- Bars

- Business/professional office (provided they are not on the ground floor)
- Banks/financial institutions (drive-thru)
- Banks/financial institutions (non drive-thru)
- Governmental and open space use

Restroom facilities are also a permitted conditional use in the Central Business District zone.

The minimum lot size is 4,000 SF with a minimum lot width of 50' and a maximum 60% principal building lot coverage. The only required setback in the CDB zone is the rear yard, which is required to be a minimum of 5'. The maximum building height is 34 feet above the curb, or 30 feet above the lowest floor, whichever is greater (Except where otherwise required by the construction code, in zones requiring ground floor commercial uses, the lowest floor of any such building shall be located within one foot of grade inside the sidewalk line).

CBD Zone (Central Business District) - Recommendations

The Central Business District Zone boundaries should be adjusted to create a more cohesive and contiguous commercial zone. Establishing effective, defensible boundaries requires



enlargement of the zone in some locations and reduction of the zone in other

MAP of PROPOSED CHANGES

The continued exclusion of ground floor residential in this zone is critical to the survival of the Central Business Districts. Any proposed use variances in this area should receive extra scrutiny given the importance of these zones to the overall health of commercial land use in the City.

Additional height for a full or nearly full residential third floor should be considered in this area. The economic incentive of a two-story residential unit above the permitted ground floor commercial may spur redevelopment of aged and undersized structures in the District. Also, if properly regulated, the additional height creates a greater sense of place in an area that needs to distinguish itself from the rest of the City.

C-1 Zone - Existing

The C-1 Zone was crafted to establish commercial districts adjacent to residential uses, generally as a transition from residential areas to denser commercial uses. The previous Master Plan recommended naming the C-1 zone Neighborhood

Commercial to reflect the compatibility and proximity of the zone to residential uses. This zone is envisioned as having lower turnover businesses that are more compatible with the adjacent residential uses than the denser Central Business District.

There are currently four C-1 Zones clustered in two locations. One area with two C-1 Zones is along Washington Avenue, between Ventnor Avenue and Monmouth Avenue. This area contains a C-1 zone that extends nearly a full City block from Winchester Avenue to Monmouth Avenue and a single parcel zoned C-1 between Ventnor Avenue and Winchester Avenue. The second cluster of C-1 zones is near the intersection of Jerome Avenue and Ventnor Avenue. In this location, there are two small clusters that are zoned C-1, one on a single lot and one across multiple undersized lots. The single lot has a multi-unit building which has been home to a number of restaurants over time and a small multi-unit complex of retail, service, and professional commercial development.

Permitted uses in the zone include the following:

- Residential ground floor
- Residential upper stores
- Retail sales
- Retail Services



- Restaurants (non drive-thru)
- Bars
- Business/professional office (provided they are not on the ground floor)
- Banks/financial institutions (drive-thru)
- Banks/financial institutions (non drive-thru)
- Governmental and open space use

Restroom facilities are also a permitted accessory use in the C-1 Zone.

The minimum lot size is 4,000 SF with a minimum lot width of 50' and a maximum 60% principal building lot coverage. The front setback for the C-1 zone is "The prevailing setback within 200' in the same block or 10' minimum." The rear setback is a minimum of 5' while the side yard setback requirements are 3' each and 10' combined. The maximum building height is 34 feet above the curb, or 30 feet above the lowest floor, whichever is greater (Except where otherwise required by the construction code, in zones requiring ground floor commercial uses, the lowest floor of any such building shall be located within one foot of grade inside the sidewalk line). These setbacks only apply to non-residential projects in the C-1 zone.

Since residential uses are permitted in the zone, the zoning schedule states that residential projects in the C-1 zone shall comply with the MF (multifamily) standards. Mixed-use projects shall comply with the MF density standards and all other applicable standards in the C-1 Zone. This allowance of residential use as a permitted use in the commercial zone totally undermines the commercial zone in these locations. The demand for residential property in the City of Margate is such that almost anywhere residential development is permitted, it will eventually be converted to residential.

C-1 Zone - Recommendations

The original goal of the C-1 zone was to create a commercial district that was adjacent to and compatible with residential uses. The C-1 zone along Washington Avenue contains only one commercial property. This important corridor connects the Central Business District to the Waterfront Special District and is intended to provide commercial property frontage along that connection. The development of this area under the C—1 zoning has been entirely residential.

It is our recommendation that the C-1 zones that exists along Washington Avenue be re-zoned to reflect the special nature of the



connection between the two adjacent commercial districts. This new zone should acknowledge and regulate the residential development that is occurring in that area. Zoning district regulations should include details of a streetscape along Washington Avenue with larger setbacks, additional landscaping, and other beautification requirements. It is unlikely that properties along this corridor will ever convert to commercial development, however, the zone regulations can be designed to create a desirable connection between the two established commercial districts at either end of the zone. This conversion from C-1 to a new **Washington Avenue Pedestrian Corridor** would also include substantial revision to the current zone boundaries to create a more cohesive and contiguous zone.

It is our recommendation that the C-1 zones near the intersection of Jerome Avenue and Ventnor Avenue be significantly expanded and combined. The new zone should include adjacent large parcels that have historically been non-residential use. The existing commercial development currently zoned C-1 is adjacent to several large contiguous parcels that have historically functioned as religious institutions. It is our recommendation that these large parcels and an existing adjacent commercial development at the south west end of the zone be folded into one larger commercial

zone, creating a much more expansive and cohesive zone. **MAP of PROPOSED CHANGES**

The large parcels which have traditionally been held by religious institutions face an uncertain future and their value to the City lies in their unusually large size and desirable location for commercial development. Market forces would undoubtedly dictate that if any of these parcels were to hit the open market they would be subdivided and sold for residential development under the guidelines of their current respective zones. The loss of these large contiguous parcels to residential development would ultimately be a great loss for the City. Aggregating the area of land that is currently amassed at those locations would be impossible in the current real-estate market and so the value of those large contiguous parcels should not be underestimated.

MAP of PROPOSED CHANGES

C-2 Zone - Existing

The C-2 zone was created to promote a commercial business district along one of the City's main transportation corridors, Ventnor Avenue. This zone is intended for professional and medical offices, banks, real estate offices, and similar uses, with or without dedicated on-site parking. This zone is fragmented into



three sections but generally hugs Ventnor Avenue from Coolidge Avenue (the shared municipal boundary with the Borough of Longport) and Jefferson Avenue. The C-2 zone also acts as a transition on Ventnor Avenue from the Central Business District at Jefferson Avenue, to the residential neighborhood in Longport.

Permitted uses in the zone include the following:

- Residential upper stores
- Retail sales
- Retail Services
- Business/professional office (provided they are not on the ground floor)
- Banks/financial institutions (drive-thru)
- Banks/financial institutions (non drive-thru)
- Governmental and open space use

Restroom facilities are also a permitted accessory use in the C-1 Zone.

The minimum lot size is 4,000 SF with a minimum lot width of 50' and a maximum 50% principal building lot coverage. The front setback for the C-1 zone is a 10' minimum. The rear setback is a minimum of 7' while the side yard setback requirements are 5'

each and 12.5' combined. The maximum building height is 34 feet above the curb, or 30 feet above the lowest floor, whichever is greater (Except where otherwise required by the construction code, in zones requiring ground floor commercial uses, the lowest floor of any such building shall be located within one foot of grade inside the sidewalk line). These setbacks only apply to non-residential projects in the C-2 zone.

While ground floor residential is not expressly permitted in the zone, the zoning schedule states that residential projects in the C-2 zone shall comply with the MF (multifamily) standards. Mixed-use projects shall comply with the MF density standards and all other applicable standards in the C-2 Zone. It is unclear if the intent of this language is to address zoning schedule standards in the event of a use variance application or to govern mixed use, ground floor commercial development which is permitted in the zone.

C-2 Zone - Recommendations

The current C-2 zones are all adjacent but segmented by gaps where multi-family development exists. It is our recommendation that these separate zones be combined, uniting the Ventnor Avenue frontage generally from Coolidge Avenue to Jefferson Avenue into one commercial zone. Any future development along



this high traffic corridor should be business focused with strong emphasis on professional, medical, or institutional use. Retail sales in this area should only be permitted as an accessory use to a permitted complimentary business. As an example, a medical equipment supply store or compounding pharmacy would be an appropriate accessory use for permitted medical offices.

MAP of PROPOSED CHANGES

WSD Zone (Waterfront Special District) - Existing

The Waterfront Special District (WSD) Zone was created to help to revitalize the Bayfront area along Amherst Avenue. The previous master plan notes a “renaissance” in this area with the development of new residential units and construction of new restaurants. The Waterfront Special District was designed to promote additional development in this area to complete the revitalization of the bayfront. The WSD is contiguous along Amherst Avenue with the exception of some government owned parcels and extends down Amherst Avenue from the Municipal Boundary with Longport to Benson Avenue.

The water access and significant number of boat slips along this area make this a very unique area for the City. This is only place in the City where there are large commercial marinas with sufficient

amenities to host long term visitors staying on boats. The presence of marinas creates unique business opportunities for businesses and services that cater to the needs of boaters. This area has also become a hot spot for a full range of dining and bar options.

Permitted uses in the zone include the following:

- Residential ground floor
- Residential upper stores
- Retail sales
- Retail Services
- Restaurants (non drive-thru)
- Bars
- Business/professional office (provided they are not on the ground floor)
- Banks/financial institutions (non drive-thru)
- Governmental and open space use
- Water-dependent uses consistent with CAFRA

Restroom facilities and Harbormaster structures are also a permitted accessory use in the WSD Zone.

The minimum lot size is 4,400 SF with a minimum lot width of 50' and a maximum 50% principal building lot coverage. The front



setback for the C-1 zone is “The prevailing setback within 200’ in the same block or 10’ minimum.” The rear setback is a minimum of 10’ while the side yard setback requirements are 8’ each and 20’ combined. The maximum building height is 34 feet above the curb, or 30 feet above the lowest floor, whichever is greater (Except where otherwise required by the construction code, in zones requiring ground floor commercial uses, the lowest floor of any such building shall be located within one foot of grade inside the sidewalk line). These setbacks only apply to non-residential projects in the C-2 zone.

Because of the overwhelming popularity of the marina facilities, restaurants, and bars, parking has become a significant issue in this area. Business growth and success in the area is limited by the capacity of off-street parking and on-street parking in the surrounding area. Having a parking shortage is not unique to this area of Margate but the later operating hours of the local bars and restaurants combined with the seasonal residential nature of the marina facilities and the surrounding residential development has created conflict between business owners and residents.

WSD Zone (Waterfront Special District)- Recommendations

The Waterfront Special District is a special area in the City of Margate, with amenities and water access unique to this approximately 7 block section of Amherst Avenue. Public water access and marinas attract economic activity in the form of support services related to boating and services for boat owners and users. Traveling boaters staying overnight at one of the marinas in the area are largely dependent on the availability of amenities within walking distance. Individuals who have traveled to the area by boat do not generally have access to vehicles so pedestrian access to commercial areas is critical to getting those individuals to patronize local businesses. The success of the marina portion of the waterfront district is somewhat dependent on the pedestrian connections to the nearby CBD. This emphasizes the importance of the **Washington Avenue Pedestrian Corridor** recommended in the C-1 Zone recommendations above.

Similar to the C-1 zone, ground floor residential is a permitted use in the WSD zone. Given the unique resources of this area of the City and the relative abundance of waterfront residential property elsewhere in the City, it would be our recommendation that ground floor residential uses not be permitted in this zone. Any residential use in this zone should be conditioned upon the inclusion of significant commercial development in a mixed-use project.



The expansion of pedestrian friendly amenities in this area is another important step to making the area more attractive to residents and boaters. Arthur W. Ponzio Co. & Associates, Inc. prepared a Technical Memorandum titled Amherst Avenue Business District (7) that was unanimously approved by the Margate City Planning Board in November of 2015. It is the recommendation of this study that the City pursue the implementation of the recommendations of the Ponzio Study as quickly as possible. The proposed conceptual designs of the roadway and proposed pedestrian promenade presented in the Ponzio study will help to more clearly define pedestrian and vehicular movements along the bayfront and will create a more attractive and desirable waterfront.

Recently, the long term viability of businesses in the Waterfront Special District has been challenged by more and more frequent storm events that have inundated this area with flood waters. Businesses in this area have traditionally had street level access with ground floor elevations only slightly above the adjacent sidewalk. According to the General Elevation Reference Map prepared by Remington, Vernick, and Walberg Engineers (8), elevations along the majority of the Waterfront Special District are below elevation 6 feet in NGVD29 datum. Converting to NAVD88 using the conversion factor provided on the Elevation Map

produces an elevation of approximately 4.7 feet or less for the majority of the Waterfront Special District. This low topographic elevation leaves this area vulnerable to coastal storm events.

When looking at the Preliminary FEMA Flood Insurance Study produced for Atlantic County (9), the WSD zone is roughly bisected by transect 33. However, since transect 33 is an ocean side transect, the stillwater elevation height for the WSD area is probably best represented by transect 36. The stillwater elevation at transect 36 for the 10% annual chance event is elevation 5.8 feet. This means that it can be expected that in any given year, there is a 10% chance that the tidal elevation will exceed elevation 5.8. Given that the ground surface elevation is at or below elevation 4.7 feet and that many finished floor elevations are only slightly above the ground surface, each year there is approximately a 10% chance that many of the existing bayfront businesses will get about a foot of water in their buildings.

The anticipated flooding damage caused by that flood depth is significant and, when combined with the anticipated frequency of flooding, is not sustainable. It is therefore our recommendation that the requirement that ground floor commercial uses be located within one foot of grade inside the sidewalk line be eliminated. Requiring business owners to construct or reconstruct their



businesses below the flood elevation for the area, elevation 9 feet NAVD88 (6), is not defensible. While it is desirable to have attractive businesses visible and accessible at street level, this will not be feasible going forward without significantly raising the street level.

Our recommendation is that businesses be allowed to build anywhere from street level to the residential minimum finished floor height requirement. The residential height requirement has varied in the past few years with the issuance of numerous revised Preliminary FEMA flood maps but the first floor elevation in this zone should be held consistent with the residential requirement. One of the positives of this newly permitted elevation is that it may be possible to permit parking under elevated structures, addressing a critical issue within the City. **THIS REQUIRES ADDITIONAL DISCUSSION.**

One of the major limiting factors for the viability of a marina is the availability of slips with sufficient water depth at low tide. The majority of the available boat slips along this area have 3' to 4' of water, or less, available at mean lower low tide. This renders many of the slips undesirable since there will be many times around low tides when boats will either be in the mud or there will be insufficient water depth to safely maneuver a boat into and out of

the marina. Therefore, while not specifically a land use goal, a strong recommendation for the viability of the Waterfront Special District is the dredging of the bay in and around the marinas.

ADDITIONAL DISCUSSION ON THIS ISSUES ELSEWHERE

MAP of PROPOSED CHANGES

4.5.1.C Residential Properties and Zoning

The City currently utilizes the following residential zoning district designations:

Zone	Zone Description
S-60	Single Family Residential - 6,000 SF lots
S-50	Single Family Residential - 5,000 SF lots
S-40	Single Family Residential - 4,000 SF lots
S-30	Single Family Residential - 3,000 SF lots
S-25	Single Family Residential - 2,500 SF lots
S-25HD	Single Family Residential - 2,500 SF lots - Historic District
TF	Two-Family Residential
MF	Multi-Family Residential

Since the City of Margate is almost completely built out, the role of much of the City's residential zoning is to characterize and



document the character of existing neighborhoods. New development in the City is mostly confined to major renovations of existing homes and tear-down/reconstruction of existing homes in developed neighborhoods. Residential zoning in a fully built out area such as Margate can serve to protect the character and quality of the existing neighborhoods. Development of structures that are out of character and scale with the surrounding neighborhood can devalue the entire neighborhood. It is important for the City to find a balance between allowing for the maximization of the value of each individual property, while preserving the value of the neighborhood.

After the completion and implementation of the 2004 Master Plan (3), it became apparent that the revisions adopted in conjunction with the Master Plan effort did not succeed at striking the desired balance between individual property value and neighborhood character. Utilizing the 2004 adopted regulations, numerous tear-down/new home construction projects in the City were constructed out of character and scale of the surrounding neighborhood. The primary problem noted in the 2006 Master Plan revision was the overall mass of new homes, especially on oversized lots. The impact of this undesirable, out of character development was so striking that a Master Plan Revision (4) effort was undertaken and passed 26 months after the adoption of the 2004 Master Plan.

S-60 - Existing

The S-60 zone exists primarily in two markedly different sections of the City. A large section of the "Parkway" section of the City, along Ventnor Avenue from Jerome Avenue to Benson Avenue, is an S-60 zone. The houses are "large and examples of English Tutor, Spanish Colonial, Dutch Colonial and other styles typical of the period houses." (10) The second section of S-60 zone in the City consists mostly of the waterfront homes along Bayshore Drive West, Bayshore Drive, Bayshore Boulevard and Lagoon Drive. Bayshore Lagoon was constructed in the mid 1960's and Bayshore Boulevard was extended to the Ventnor border around 1980 with subsequent residential development occurring in each area. The only commonality between these two areas is the existing lot size.

There is one other area in the City that has a number of lots that are zoned S-60. The only wooded areas remaining in the City, most of which is coastal wetlands, contains a number of privately owned lots. The majority of these lots have no paved access and are understood to be unbuildable.

Permitted uses in the zone include the following:



- Single-family detached dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Tennis courts
- Pool houses/cabanas

The minimum lot size is 6,000 SF with a minimum lot width of 50' and a maximum 30% principal building lot coverage. The front setback for the S-60 zone is "The prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." However, regardless of the average, a minimum setback of 5' is required. The rear setback is 20% of lot depth or 10' whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each
≥ 50 to <60	37% of lot width; minimum 8' each
<50	37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map, which is not symmetrical with the S-60 zone boundary. The maximum height therefore varies between 28 feet and 30 feet above the lowest floor elevation. Additionally, any third-floor living space where the ceiling height is in excess of 5 feet shall be less than 50% of the floor area of the floor immediately below. Dormers are permitted but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch



requirement of 5 on 12, required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

S-60 - Recommendations

The two primary areas of S-60 zone in the City only similar in that they have relatively large lot sizes for the City of Margate. One area of S-60 zoning consists of older homes built in period styles along bridle paths approximately two blocks from the beach. The other major area of S-60 zoning consists of large waterfront homes, most with dock access, built after 1970. There are many areas where significant differences between requirements for waterfront property and non-waterfront property could and should exist. The need for regulations specific to waterfront properties is acknowledged and partially addressed in Schedule B-4, "Additional Standards - Waterfront Single-Family Development".

Our recommendation is to create two distinct and separate zones that address the needs of the waterfront properties separately from the non-waterfront properties. This will allow for the City to more appropriately address the character of each neighborhood. Having two separate zones for these distinct areas will allow for different guidelines to be established for primary home setbacks, decks, pools, and other items that should be treated differently depending

on whether the property is a waterfront home or a home in the middle of a city block.

After creating two separate zones, the zone boundary for the Waterfront section should be modified to remove the few homes that do not have water access. Those homes that do not have water access can be shifted into adjacent zones, as shown on the proposed revised zoning map.

For the S-60 lots that are in the City's only remaining wooded area, the S-60 zone does not appear to have any specific application to this area. It appears that the 6,000 sf minimum lot size was applied to these mostly undersized lots to ensure that the lots were too small to build on without a variance for substandard lot size. It is our recommendation that a more applicable zone be applied to these lots that conveys the understanding that the lots are not considered buildable, rather than listing them as a residential zone with requirements that are not able to be met.

We also recommend that tennis courts be eliminated as a permitted use within the S-60 residential zone. There are currently no private tennis courts in the City and the prospect of the construction of a private court seems unlikely, at best. In the unlikely event that an individual proposes to construct a tennis



court in the S-60 zone, a variance should be required. This will offer neighboring properties the opportunity to be informed about the development and have the opportunity to speak for or against an application at a public meeting.

MAPS of PROPOSED CHANGES

Changes to the height regulations will be addressed in the land development ordinance

S-50 - Existing

There are two large sections and one small section of S-50 zone in the City. All of these sections are in the north-east portion of the City, near the bay. This area was the last section of the City to be developed and was constructed beginning in the late 1970's through the mid 1980's. Both of the larger sections consist of cul-de-sacs and meandering streets that are atypical for the City. All of the S-50 zones are adjacent to the bayfront S-60 zone. These section of S-50 zoning generally consist of larger, contemporary style homes on lots that are larger than average for the City.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Municipal Uses

- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 5,000 SF with a minimum lot width of 50' and a maximum 30% principal building lot coverage. The front setback for the S-50 zone is "The prevailing setback within 200' in



the same block. Eliminate the high and low values before the average is calculated.” However, regardless of the average, a minimum setback of 5’ is required. The rear setback is 20% of lot depth or 10’ whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60’	37% of lot width; minimum 10’ each
≥ 50 to <60	37% of lot width; minimum 8’ each
<50	37% of lot width; minimum 5’ each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map. The S-50 zones are both in Height Zone A, with a maximum building height of 28’ above the first floor elevation. Any third-floor living space where the ceiling height is in excess of 5 feet shall be less than 50% of the floor area of the floor immediately below. Dormers are permitted but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

S-50 - Recommendations

With the exception of the height regulation and changes applicable to all zones, there are no recommended changes for this zone. The shape of the zone changes to pick additional properties that are most appropriate sized for the S-50 zone. Changes to the height regulations will be addressed in the land development ordinance

S-40 - Existing

There are a number of S-40 zones, primarily in two areas of the City of Margate. The vast majority of residential zoning north-west of Amherst Avenue is zoned S-40. This includes a large stretch of waterfront homes and many more inland blocks. There are numerous sections of S-40 surrounding the Parkway S-60 zone. There is also a small section of S-40 between Atlantic Avenue and the beach. This S-40 section consists of irregular street alignments and a cul-de-sac, which is atypical of beach blocks in the City.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses



Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 4,000 SF with a minimum lot width of 50'. The maximum principal building lot coverage varies by lot size. For those lots 5,000 sf or more, a 30% maximum principal building coverage is permitted. For those lots between 3,000 sf and 4,999 sf, the principle building lot coverage may be increased on a sliding scale, enlarging the 30% by multiplying the number of square feet

less than 5,000 by .00005 and converting the result into a percentage. The front setback for the S-40 zone is “The prevailing setback within 200’ in the same block. Eliminate the high and low values before the average is calculated.” However, regardless of the average, a minimum setback of 5’ is required. The rear setback is 20% of lot depth or 10’ whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each
≥ 50 to <60	37% of lot width; minimum 8' each
<50	37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map. Portions of the S-40 zone are in Height Zone, A, B and C. This makes for three possible height regulations within the S-40 zone. Maximum building heights range from 28’ to 30’ above the finished floor elevation with 2.5 habitable floors permitted in each height zone. Dormers are permitted in Height Zone A but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch requirement of 5 on 12,



required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

S-40 - Recommendations

There is a large section of S-40 zone that consists of waterfront homes along the bay. These Bayfront homes generally have water access with bulkheads and docks. This is a very different condition from the majority of the S-40 zone which consists of back to back single family homes in City's traditional block pattern. Again, the need for regulations specific to waterfront properties is acknowledged and partially addressed in Schedule B-4, "Additional Standards - Waterfront Single-Family Development". This difference is also already reflected in the height regulation map. The S-40 bayfront homes are the only S-40 zoned homes in Zone B on the height regulating map. Similar to the S-60 waterfront area, our recommendation is to develop a new zone to address waterfront lots separate from the non-waterfront properties.

In addition to the recommendation of a new zone for waterfront properties and changes applicable to all zones, there are no additional recommendations for this zone. Changes to the height regulations will be addressed in the land development ordinance.

MAP of PROPOSED CHANGES

S-30 - Existing

There are a number of S-30 zones, distributed across the City of Margate. The S-30 zones exist mostly in large pockets, generally south of Amherst Avenue. Two long sections of S-30 zone are beach blocks. Most of the homes in each of the S-30 zones were originally constructed prior to 1950.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers



- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each
≥ 50 to <60	37% of lot width; minimum 8' each
<50	37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The minimum lot size is 3,000 SF with a minimum lot width of 40'. The maximum principal building lot coverage varies by lot size. For those lots 5,000 sf or more, a 30% maximum principal building coverage is permitted. For those lots between 3,000 sf and 4,999 sf, the principle building lot coverage may be increased on a sliding scale, enlarging the 30% by multiplying the number of square feet less than 5,000 by .00005 and converting the result into a percentage. The front setback for the S-30 zone is "The prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." However, regardless of the average, a minimum setback of 5' is required. The rear setback is 20% of lot depth or 10' whichever is greater. The side yard setback requirements vary by frontage as follows:

The maximum building height is dictated by the Residential Height Regulating Map. Portion of the S-30 zone are in Height Zone, A and C. The sections of S-30 that are beach block lots is Height Zone C, while all other S-30 sections are Height Zone A. Maximum building heights range from 28' to 30' above the finished floor elevation with 2.5 habitable floors permitted in both height zones. Dormers are permitted in Height Zone A but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

S-30 - Recommendations

With the exception of the height regulation and changes applicable to all zones, there are no recommended changes for this zone. Changes to the height regulations will be addressed in the land development ordinance.



S-25 - Existing

There are two S-25 zones in the City of Margate. The larger of the S-25 zones encompasses a majority of the area Between Atlantic Avenue and Amherst Avenue from Jerome Avenue to the Ventnor border. This large area also extends beyond those approximate boundaries in multiple locations. The other section of S-25 is a small area between the Central Business District and the S-60 Parkway area. The majority of the homes in the S-25 zones were originally constructed prior to 1950 with many of the homes being originally constructed before 1930.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 2,500 SF with a minimum lot width of 40'. The maximum principal building lot coverage varies by lot size. For those lots 5,000 sf or more, a 30% maximum principal building coverage is permitted. For those lots between 3,000 sf and 4,999 sf, the principle building lot coverage may be increased on a sliding scale, enlarging the 30% by multiplying the number of square feet less than 5,000 by .00005 and converting the result into a percentage. For lots under 3,000 sf, the principle building lot coverage is 40%. The front setback for the S-25 zone is "The prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." However,



regardless of the average, a minimum setback of 5' is required. The rear setback is 20% of lot depth or 10' whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each
≥ 50 to <60	37% of lot width; minimum 8' each
<50	37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map. The S-25 zones are entirely in Height Zone A. This sets the maximum building height at 28' above the finished floor elevation with 2.5 habitable floors permitted. Dormers are permitted but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

S-25 - Recommendations

With the exception of the height regulation and changes applicable to all zones, there are no recommended changes for this zone.

Changes to the height regulations will be addressed in the land development ordinance.

S-25(HD) - Existing

The S-25(HD) zone is the area of the City best known as Marven Gardens. This area derives its name from a combination of "Mar"gate and "Ven"tnor and is nationally recognizable because of its mis-spelled inclusion in the board game Monopoly. Based on analysis of aerial photography, most of the homes in this area were constructed by 1930. Homes were constructed in a broad range of period styles and the area still retains much of its historic look and value. This is the only official historic district in the City of Margate.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship



Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds
- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 2,500 SF with a minimum lot width of 40'. The maximum principal building lot coverage varies by lot size. For those lots 5,000 sf or more, a 30% maximum principal building coverage is permitted. For those lots between 3,000 sf and 4,999 sf, the principle building lot coverage may be increased on a sliding scale, enlarging the 30% by multiplying the number of square feet less than 5,000 by .00005 and converting the result into a percentage. For lots under 3,000 sf, the principle building lot coverage is 40%. The front setback for the S-25 zone is "The

prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." However, regardless of the average, a minimum setback of 5' is required. The rear setback is 20% of lot depth or 10' whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each
≥ 50 to <60	37% of lot width; minimum 8' each
<50	37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map. The S-25 (HD) zone is entirely in Height Zone D. This sets the maximum building height at 25' above the finished floor elevation with two (2) total and two (2) habitable floors permitted. The zoning schedule for the S-25(HD) references requirements for third floor living space but the legend on the Height Regulation Map does not allow for third floor living space, even specifying that habitable attics shall not be permitted. The zoning schedule references a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level but the Height



Regulation Map states that roof pitch requirements shall not apply. There is no maximum density or FAR ratio for the zone.

S-25 (HD) - Recommendations

The S-25 zone is characterized by historic homes of various styles. Most of these homes were constructed with first floors very close to the ground surface with relatively low roof heights for the City. Maintaining the look of buildings that are situated low to the ground while complying with FEMA flood zone requirements moving forward will present a challenge to the City. Drastic elevation of individual homes has the potential to erode the historic character of the neighborhood but leaving the homes at or below the flood elevation could result in far worse consequences when the next hurricane, nor'easter, or super storm hits the area.

The only way to protect these historic homes in the long term is to allow them to elevate. Individual structure elevation must be done in a manner that protects the individual structure but also respects the character of the neighborhood. This will require special attention during the development of revisions to the land development ordinance.

TF - Existing

The TF zone or Two Family zone exists in three locations in the City. The largest area is generally along Harding Avenue and Wilson Avenue from Winchester Avenue to Fremont Avenue. All structures in this zone were originally constructed between 1948 and 1950. It is believed that this area was originally constructed as a post-war development project. It appears that all of the units in this area were constructed as substantially similar models of the one or two model homes in a short period of time. Most units appear to be single family homes from the street side of the structure but there are separate side or rear entrances for each unit.

The second TF zone lies across North Granville Avenue from the William H. Ross School. In this section, there are eight (8) two family dwellings, six (6) of which are substantially similar. Eight (8) units appear in the same location as the existing eight (8) units in the 1930 aerial so it is believed that the 6 remaining substantially similar units were construction prior to 1930.

The third and final section of TF zone in the City is approximately between Ventnor Avenue and Atlantic from Franklin Avenue to Gladstone Avenue. This area is nearly surrounded by Central Business District. The majority of the properties in this area were originally constructed prior to 1930 and nearly all lots were



constructed by 1957. While there a few similar structures in the zone, it does not appear that this area was built as a single project, as the other two areas appear to have been.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Two-family dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations
- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Sheds

- Flagpoles, TV, and radio towers and antennas (excluding satellite dish antennas), ham radio receiving and transmitting antennas
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 3,200 SF with a minimum lot width of 40'. The maximum principal building lot coverage varies by lot size. For those lots 5,000 sf or more, a 30% maximum principal building coverage is permitted. For those lots between 3,000 sf and 4,999 sf, the principle building lot coverage may be increased on a sliding scale, enlarging the 30% by multiplying the number of square feet less than 5,000 by .00005 and converting the result into a percentage. For lots under 3,000 sf, the principle building lot coverage is 40%. The front setback for the S-25 zone is "The prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." However, regardless of the average, a minimum setback of 5' is required. The rear setback is 20% of lot depth or 10' whichever is greater. The side yard setback requirements vary by frontage as follows:

Lot Frontage	Minimum Side Yard
> 60'	37% of lot width; minimum 10' each



≥ 50 to <60 37% of lot width; minimum 8' each
<50 37% of lot width; minimum 5' each

*Regardless of lot width, the maximum combined yard requirements shall not exceed 22 feet

The maximum building height is dictated by the Residential Height Regulating Map. The S-25 zones are entirely in Height Zone A. This sets the maximum building height at 28' above the finished floor elevation with 2.5 habitable floors permitted. Dormers are permitted but must be limited to 15% of the 3rd floor habitable floor area. There is also a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level. There is no maximum density or FAR ratio for the zone.

TF - Recommendations

With the exception of the height regulation and changes applicable to all zones, there are no recommended changes for this zone. Changes to the height regulations will be addressed in the land development ordinance.

MF - Existing

The MF zone or Multifamily zone exists in three locations in the City. The MF zone is the only strictly residential zone south-west of

Decatur Avenue. The MF zones make up the majority of the area from Decatur Avenue to the Longport border, from Monmouth Avenue to the beach. This zone is comprised of many converted hotels and condominiums, mixed with purpose built condo and townhome structures. The structures in the MF zone range in size from an 18 story condominium tower in the beach block to single story, single- and two-family homes. The MF zone is as diverse a residential zone as exists in the City.

Permitted uses in the zone include the following:

- Single-family detached dwellings
- Two-family dwellings
- Multifamily dwellings
- Municipal Uses
- Parks, playgrounds, and other public operated recreation uses

Conditional uses in the zone include the following:

- Schools
- Houses of Worship

Accessory uses in the zone include the following:

- Home occupations



- Swimming pools
- Outdoor showers
- Spas/hot tubs
- Fences/walls
- Greenhouses
- Gazebos/garden houses
- Pool houses/cabanas

The minimum lot size is 4,400 SF with a minimum lot width of 40'. The maximum principal building lot coverage varies by lot size. The maximum principle building coverage in the MF zone is 45%, regardless of lot size. The front setback for the S-25 zone is "The prevailing setback within 200' in the same block. Eliminate the high and low values before the average is calculated." The 5' minimum setback required in all other zones is not enforced in the MF zone. The rear setback requires a minimum 10' landscape buffer within a 20' rear yard area. The minimum side yard setback is 8' or 10' with driveway.

The maximum height appears to be set by the zone schedule at 2 habitable floors over parking of 2.5 habitable floors without parking and 30' above the lowest floor. This permitted height matches the Height regulation map for Height Zone C, which covers most of the MF zone. However, the zoning schedule regulation conflicts in at

least one location with the Height Regulation map where there is a lot zoned MF, but shown in Height Zone A on the Height Regulation map.

There is a minimum roof pitch requirement of 5 on 12, required for roofs above the first floor level. The maximum density for the zone is 1 unit/2,200 square feet of lot area and there is a maximum FAR ratio for the zone of 1.0.

MF - Recommendations

The south west portion of Margate, in which the MF zone is the dominant residential zone, is the most diverse and commercial section of the City. This portion of the City has a much higher density of residential units and commercial activity than anywhere else in the City. The area around the MF zone contains the central business district, the waterfront district, and numerous condominium multi family structures that create an urban environment unique to this area of the City.

ADDITIONAL DISCUSSION ABOUT RECOMMENDATIONS REQUIRED

4.5.1.D Non-Commercial or Residential Zoning



GO - Existing

The GO zone, or Government Owned zone exists in small and large concentrations all over the City. The GO zone represents properties owned by the City, the City's school system, and the Margate Terrace senior citizen community. There are only two restrictions in the GO zone. One is that there is a minimum lot area of 4 acres. There are only 4 parcels in the City that meet this criteria and one of them is zoned Riparian. The three parcels over 4 acres zoned GO are (in descending order by area) the Jerome Avenue Recreating Complex, a contiguous stretch of beach from Cedar Grove Avenue to Adams Avenue, and the Eugene A Tighe middle school complex. The only other requirement in the zone is the maximum height of structures, which is limited to 34' above curb or 30' above lowest floor, whichever is greater.

GO - Recommendations

It is our recommendation that this zone be eliminated and that the GO properties be absorbed into adjacent zones. The City is already exempt from all zoning regulations, as referenced in §175-30 A. (5) which states that "The provisions and restrictions contained in this article shall not apply to or be binding upon the City of Margate." Since the municipality is exempt from all zoning requirements, the zone that a City property is in has no impact on the City's ability to utilize that property.

R - Existing

The R zone, or Riparian zone, overlays riparian areas in the City regulated by The Bureau of Tidelands management under the New Jersey Department of Environmental Protection. The City does not have complete authority to regulate activity in these areas. All development activity in these areas requires a Tidelands Permit. Many Riparian zones have active Tidelands grants, leases, and licenses. Most of the active grants, leases and licenses are adjacent to residential structured along the bay side of the City and the tidelands areas contain residential dock or deck structures.

R - Recommendations

It is our recommendation that this zone remain unchanged. The established purpose for the Riparian zone is still relevant and functional within the City's overall zoning ordinance.

4.5.1.E Recommended New Zones

Institutional Use

The City of Margate has very few large, contiguous parcels. Over 96% of parcels in the City are under 1/4 acre in size. Many of the



remaining larger parcels are either government owned or owned and operated by religious or other non-profit organizations. Religious and non-profit uses on large parcels provide a valuable service to the City that could not be provided through other means. However, these types of institutions have struggled to maintain membership and many are struggling to continue to maintain their large facilities. It is expected that many of these larger religious and non-profit organizations will look to consolidate their locations and divest themselves of some of their more valuable real-estate holdings.

These large properties present unique value to the City. Many civic organizations and businesses require large lots and buildings to efficiently operate their activities. Given the financial pressures of the real estate market, it would be nearly impossible to privately acquire and consolidate many small parcels to form large parcels as they currently exist. In order to preserve the opportunity to host these types of organizations and businesses, the City must preserve these larger parcels to the maximum extent practicable.

Going forward, the value of these large parcels as sub-dividable real estate could become a driving factor in decisions these organizations make. Many large parcels owned by religious institutions and non-profits are currently zoned as residential

property. The combination of the value of residential real-estate in the City and the current zoning will virtually ensure that once the institutions that operate on these oversized properties become financially unsustainable, the existing structures will be demolished and the lots will be subdivided. The conversion of a number of these properties to single family residential development could be detrimental to the City as it will erode the sense of place and community that is currently created by the existence of these facilities.

It is therefore our recommendation that a new Institutional Use zone be created requiring religious, institutional, large scale commercial, recreational, or government use. Large lot sizes should be a fundamental characteristic of the zone and subdivisions should be limited to the maximum extent practicable.

Washington Avenue Pedestrian Corridor

Washington Avenue is an important street within the City of Margate. Like many streets in the City, Washington Avenue connects the beach to the bay. What is unique to Washington Avenue is the number of destinations that it connects. Starting at the beach end, Washington Avenue is one of the bounding streets for the block that contains Lucy the Elephant, the iconic Margate



landmark and historical structure. Lucy also shares the property she occupies with a mini-golf course and L's Cheesesteaks, a casual eatery. Perhaps the larger draw throughout the summer months is Ventura's Greenhouse Bar and Grill, right across the Decatur Avenue street end from Lucy.

Heading toward the Bay, there is a major local bank branch, professional offices, Wawa, and the old City Hall building in just the next block. The majority of this block is in the Central Business District. The next intersection, with Ventnor Avenue, is in the heart of the Central business District. CVS, professional offices and a restaurant begin the next block as the Central Business District extends north on Washington Avenue for approximately half a block. The next block and a half up to Monmouth Avenue contains only one commercial structure, a professional office building. After crossing Monmouth Avenue, Washington Avenue enters the Waterfront Special District, an area with numerous marinas and restaurants.

This 1.5 block stretch between the Waterfront Special District and the Central Business District is currently zoned commercial. This does not reflect the existing pattern of development in the area nor does it represent a reasonably obtainable goal for conversion to commercial uses. While this area is a main corridor between

commercial areas, it does not necessarily need to be commercial. Our recommendation is that a zone addressing the need to develop a pedestrian friendly corridor along Washington Avenue be established. This zone would permit both residential and commercial development but require larger setbacks to accommodate larger sidewalks and other pedestrian friendly amenities.

Beach Zone

The City owns large swaths of beach between the bulkhead line and the Atlantic Ocean high tide line. This area should be designated as a beach zone, allowing for recreation activities that would be appropriate for the beach. While creating a beach zone isn't essential since all beach areas are City owned and therefore exempt from zoning, putting the beach areas into any other zone would not provide a genuine indication of what the intended use of that area is in the zoning ordinance.

Boutique Hotel/Condo? Vertical Development? Overlay

The City of Margate's 1980 Master Plan and 1990 Master Plan Reexamination discuss, at great length, the large volume of hotels and motels in the City and the need to convert a number of them into permanent housing. In 1981, hotels and motels were



eliminated as a permitted use in the City. The plan to convert hotels and motels into condo style units was implemented after adoption of the 1980 Master Plan and was alarmingly successful as the City currently has no remaining hotels or motels. Currently, the only transient housing available to visitors to the City is through private rentals of homes, townhomes, or condominiums.

At the time the elimination of hotels and motels was viewed as a way to stabilize the City’s population, create additional housing units, and create a better sense of pride in the community within the City. To a large extent, the City was very successful at achieving those goals. In the 1990 Reexamination, the policy was deemed to be so successful that it was recommended that the “no hotel policy” be continued. Allowing for a new hotel was viewed as detrimental to the community at the time.

Transient housing was once a staple industry in the City. High turnover rates for hotel and motel guests creates an inherent reliance on local businesses and restaurants. The lack of food storage and preparation options requires these types of visitors to frequent City businesses more frequently than second home owners. Hotel and motel guests tend to spend significantly more money in and around their transient housing location than seasonal residents staying in owner occupied housing. With the conversion

of hotels and motels in the City to condominium units, the local transient visitor population has nearly disappeared from the City.

There are non-traditional short-term rental options available in the City that are accessible through popular rental sites on the internet. While these private rental options are available within the City, many individuals are not accustomed to or comfortable with this type of rental. Additionally, these types of rentals typically require multi-day or week long stays so they do not provide the type of flexibility offered by a hotel.

In attempt to quantify the availability of privately operated transient housing, a September 2016 review of popular owner managed rental unit sites was conducted and the following results were reported:

Company/Website	Approximate # of Units Available
VRBO	40
AirBNB	25
Craigslist South Jersey	10

Development regulations need to be discussed in detail in the zoning ordinance phase



4.5.1.F General Development Regulations

The overall development code regulations are being addressed in a complete, section by section analysis of the City's existing land use ordinance.



5 HOUSING PLAN ELEMENT

A New Jersey Supreme Court Ruling was issued on January 18th that impacts the status of housing rules in the State. We are conducting a thorough review of this decision and will provide a

draft of this section that appropriately reflects the impacts of this decision as soon as possible.



6 CIRCULATION PLAN ELEMENT

The Municipal Land Use Law provides that a municipal Master Plan may include a Circulation Plan Element “showing the location and types of facilities for all modes of transportation required for the efficient movement of people and goods into, about, and through the municipality, taking into account the functional highway classification system of the Federal Highway Administration and the types, locations, conditions and availability of existing and proposed transportation facilities, including air, water, road and rail”.

The City is currently engaged in a joint effort with the New Jersey Department of Transportation, the City of Ventnor, and Urban Engineers to produce a pedestrian circulation plan for the two adjacent communities. The pedestrian circulation plan is analyzing the status of pedestrian circulation routes and options throughout the City and is poised to make recommendations that would have a significant impact on the City’s transportation network. The City has also recently participated in the creation of a school travel plan analyzing transportation routes and options for travel to the City’s schools. Given the breadth and intensity of the ongoing study, and the existence of the school travel plan, it was decided that this Circulation Plan element would focus on only those items which

would not be addressed by those studies. Issues addressed and improvements recommended in those referenced plans are deferred to those plans and not revisited here.

6.1 Overview

The City is entirely on a barrier island with limited access points to and from the island. There is only one direct connection from the City to the mainland. The Downbeach Express (a.k.a Margate Boulevard or Margate Causeway) is privately owned, managed, and maintained by the Margate Bridge Company. This connection consists of 4 separate causeway bridges and is approximately 2.5 miles between the nearest cross streets in Northfield and Margate respectively. There is a toll plaza at the base of the final bridge span entering the City. The exit from the toll structure becomes Jerome Avenue (CR563).

Other major access routes to the City of Margate are along Ventnor Avenue (CR629) through adjacent municipalities that share Absecon Island with the City. Numerous alternatives exist to the east via Atlantic City. From nearest to farthest, US Route 322/40, the Atlantic City Expressway, and US Route 30 all connect



the mainland to Absecon Island through the Cities of Pleasantville and Absecon. The most popular route with local residents from this direction is a combination of Dorsett Avenue Bridge in Ventnor and Wellington\West Avenue which connects to US 322/40. To the west, NJ Route 152 connects the Borough of Longport to the City of Somers Point (via Egg Harbor Township) and has an additional connection to Ocean City in Cape May County via the Ocean Drive Bridge. Leaving the island through Longport, Ventnor Avenue becomes NJ Route 152 at the base of the John F. Kennedy Memorial Bridge in Longport.

Atlantic County has two regional routes in Margate. Ventnor Avenue runs mostly parallel to the City's beach, generally two blocks from the beach. Ventnor Avenue connects to the City of Ventnor to the east and continues into Atlantic City. Ventnor Avenue travels through the Borough of Longport to the west. Jerome Avenue starts at the base of the Margate Bridge, and terminates at the intersection with Ventnor Avenue. Jerome Avenue is four lanes, two in each direction, from the Margate Bridge toll plaza to its terminus at Ventnor Avenue.

The City's local street network is nearly fully developed and consists primarily of North-South (Bay-Ocean), and East-West (Longport-Ventnor) streets. This dense network is made up almost

entirely of municipally controlled minor arterial and local roads. Atlantic Avenue is the largest municipal street and is one of only two streets in the City that consists of four travel lanes with two in each direction (the other being Jerome Avenue CR563).

Given the limited access routes into and out of the City, the limited number of primary transportation routes through the City, and the City's exposure to Hurricane's and Nor'easters, it is very important for the City to be prepared for an evacuation. Appendix F of the City's Emergency Operations Plan (12) details evacuation scenarios and provides forms and guidance for a coordinated evacuation of the City. Any efforts to modify primary transportation routes in or access routes into or out of the City should carefully review the City's evacuation plan to determine if there will be any impacts on the evacuation plan.

6.2 Parking Considerations

Parking is a major issue within the City of Margate. The demand for parking throughout the City in the peak of the summer cannot be overstated. During the public meetings conducted as part of the preparation of this plan, parking or the lack there of in the summer months was the number one recurring issue. There was not a single meeting where the need for additional parking was not



discussed. There are a few alternatives that the City should evaluate to alleviate the current parking shortage:

A. Municipal Parking Lots

The City should consider the construction of additional municipal parking lots. The City currently owns and operates only one parking lot that is open to the public. The lot is located on Washington Avenue approximately mid-block between Ventnor Avenue and Winchester Avenue. Of the 38 spaces in that lot, only 20 are available for public parking. The remaining spaces are leased on an annual basis to local businesses.

The City is uniquely qualified to acquire land and construct parking lots in areas of high demand. A parking lot is not independently economically viable as a business entity but is needed to maintain local businesses. As a way to support local businesses, the City could acquire property and construct parking lot(s) in locations that would be accessible to those businesses. Parking fees could be instituted by the City to support this effort. The City has received data from neighboring municipalities about the expected range of anticipated income from this type of facility so the economic viability of a potential site could be evaluated prior to acquisition and construction.

B. Parking Meters on Atlantic Avenue

The City should consider the installation of seasonal parking meters along Atlantic Avenue and in business districts. While this is potentially a revenue source for the City, the primary purpose of parking meters would be to move some of the longer term parking off of Atlantic Avenue and away from commercial areas.

Commercial areas are typically high turnover areas because stops at local businesses are relatively short in nature. A single parking space at a business like Wawa can service 6 to 10 customers per hour. If a single vehicle is parked in a space for an hour,

C. Beach Block Parking

The City should consider allowing on-street beach block parking, which is currently prohibited. Consideration has been given to this idea a number of times but beach block parking restrictions have remained in place. Numerous opinions have been provided to and by the City for and against this proposal over the years but it is believed that beach block parking should now be seriously considered.

In order to address some resident and public safety concerns, the current recommendation for beach block parking is for alternating each side of the street every other year. Based on an estimate prepared by Remington, Vernick, & Walberg Engineers in 2004,



this would create approximately 176 spaces during years with odd/east side parking, and 199 spaces on years with even/west side parking. This arrangement would create a significant number of parking spaces immediately adjacent to the beach without creating a significant impediment to resident access or emergency personnel. The City could enforce this arrangement by installing signage posts on both sides of the street and relocating the no-parking signage each year.

6.3 One-Way Streets

The City has a number of one-way streets, mostly in pairs or in areas with an alternating pattern, which create a circulation pattern that is popular in urban areas across the country. The City's block pattern streets are very conducive to the alternating one-way street pattern found in many urban locations. Alternating one-way street patterns have a number of advantages over traditional two-way streets.

- A. One-way Street intersections have less potential conflicting movements, simplifying driver interactions
- B. Depending on the street width, one way streets can offer additional on-street parking opportunities
- C. Consistent alternating one way streets provide a predictable pattern that is simple and efficient to navigate

Remington, Vernick, & Walberg Engineers prepared a Traffic Circulation Study in 2003 that contained a map entitled Proposed Directional Change Plan as part of that study that would be the recommended arrangement for the City's roadway network. Given the age of the City's Traffic Circulation Study, a re-examination of the details of that study that impact the proposed one-way street configuration would be appropriate before the adoption of any recommendations of the study.



7 COMMUNITY FACILITIES PLAN ELEMENT

The Municipal Land Use Law provides that a municipal Master Plan may include a Community Facilities Plan Element showing the existing and proposed location and type of educational or cultural facilities, historic sites, libraries, hospitals, firehouses, police stations and other related facilities, including their relation to the surrounding area.¹

The January 2004 Master Plan contained a Community Facilities Plan Element, and did reference certain facilities and objectives regarding the City's facilities and local organizations.

This Community Facilities Plan Element will identify general conditions of the pertinent facilities and will make recommendations for improvements. Based on this review, an analysis of the adequacy of these facilities, in terms of location, size, and scope will be developed.

The City of Margate is a full service municipality. One of

the most outstanding features of the community is the remarkable condition of its community facilities, regardless of age, and the innovative ways in which older facilities have been altered to keep up with the nature and extent of current demands.

7.1 Inventory of Facilities

7.1.1 Public Access Facilities Owned by the City

A. City of Margate Municipal Building (City Hall):

Located at 9001 Winchester Avenue (Block 322, Lot 1), the Municipal Building houses various City Departments and services, including: Office of the Mayor, Commissioners and City Administrator, Office of the City Clerk, Purchasing/Personnel Office, Finance/Revenue Department, Tax Collection Office, Tax Assessor Office, Municipal Court, Planning/Zoning Office, Building Department and the Public Works Department. The building is the former Union Avenue School which was transferred from the Board of Education to the City in 2012 after Super Storm Sandy. The structure has offices throughout the first floor with one meeting room, which was the former schools all purpose room. The second floor is currently vacant. An elevator is located along the main

¹ N.J.S.A. 40:55D-28b(6)



corridor toward the rear of the building providing access to the second floor. Three stairwells also provide access to the second floor, along with a nearby stairwell. The original building was constructed in the early 1950's. Additions and renovations to the school occurred in the early 1980's and late 1990's. Mechanical and electrical upgrades were completed in 2015 on the building which included the installation of new boilers. A new 175 kW diesel emergency generator and a new 275 kW diesel emergency generator were installed in 2015 and two diesel emergency generators. The building has a flat-roof with solar panels. General parking for the building is located on-street, adjacent to the facility. Two playground areas are contained on the property. One playground is located on the west side of the building and the other playground area is located on the north side of the building. The municipal building complex occupies Block 322 and is bounded by Union Avenue, Vendome Avenue Winchester Avenue and Monmouth Avenue.

The Municipal Building is the primary emergency shelter in Margate. The building is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88)². The Municipal Building is the primary emergency shelter in Margate.

B. City of Margate Police Station

Located at 111 North Decatur Avenue (portion of Block 325, Lot 126). The Police Station houses the officers & personnel whose main responsibilities are to protect & serve the needs of the residents of City of Margate. The Margate Police Department patrols the 1.63 square miles of Margate. The police station received major renovations in the mid 1980's. The roof was replaced in the early 2000's, and a new 150 kW diesel emergency generator was installed in 2014. Parking for the general public is located on Decatur Avenue and parking for police department personnel is located on-site and on the public works lot on Block 324.01, Lot 125. The building is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor elevation of the Police Station is 8.56' (NAVD 88).

C. City of Margate Historic Society and Municipal Court

Located at 1 South Washington Avenue on Block 126, Lot 90. The Historic Society and Municipal Court Building was formerly City Hall for Margate City. The building sustained damage during Superstorm Sandy and the municipal departments in the building

² Flood Insurance Rate Map, Map Number 34001C0434F , Revised Preliminary January 30, 2015



moved to the new Municipal Building a 9001 Winchester Avenue. The building was constructed in the early 1900's with additions and renovations completed in the 1970's. The building recently underwent renovations to fix the damage caused by Superstorm Sandy. In addition a portion of the building was converted for use by the Historic Society. The Historic Society and Municipal Court Building is located in the AE Flood Zone with a base flood elevation of 10 (NAVD 88). The lowest finished floor elevation of the Historic Society and Municipal Court Building is 6.68 (NAVD 88).

D. City of Margate Fire Department

Located at 1 South Washington Avenue on Ventnor Avenue between Washington Avenue and Decatur Avenue. The Fire Department provides fire and emergency medical services to the residents and visitors of Margate and is a paid full-time department. The department operates out of two stations, Fire Station No. 1 and Fire Station No. 2. Fire Station No. 1 is located at 1 South Washington Avenue and Fire Station No. 2 is located at 405 North Brunswick Drive.

Fire Station No. 1 was constructed in the early 1900's's with additions and renovations completed in the mid 1970's and in 2013. Parking for Fire Station No. 1 is located on-site. A new

emergency generator was installed in 2004 which serves both Fire Station No. 1 and the Historic Society and Municipal Court portions of the building. Fire House No. 1 is located on Block 126, Lot 90. The building is located in the AE Flood Zone with a base flood elevation of 10 (NAVD 1988). The lowest finished floor elevation of Firehouse No. 1 is 4.64' (NAVD 88).

Fire Station No. 2 was constructed in the late 1970's. Additions and renovations were proposed for the firehouse in 2010. However, the bond ordinance funding the improvements was defeated in a public referendum. Fire House No. 2 is located on Block 602.05, Lot 97. The building is located in the AE Food Zone with a base flood elevation of 8 (NAVD 88). The lowest finished floor elevation of Firehouse No. 2 is 8.34' (NAVD 88).

E. City of Margate Beach Patrol

Located at Decatur Avenue and the Beach. Margate's Beach is 1.6 miles long with lifeguards covering the beaches at Argyle Avenue, Clermont Avenue, Gladstone Avenue, Huntington Avenue, Knight Avenue, Osborne Avenue, Thurlow Avenue Vendome Avenue, Cedar Grove Avenue, Washington Avenue, Jefferson Avenue and Monroe Avenue. The Beach Patrol also maintains Lifeguard "shacks" on the beach at Brunswick Avenue, Huntington Avenue, Knight Avenue and Thurlow Avenue. The Beach Patrol



Headquarters is located in the AE Flood Zone with a base flood elevation of 11 (NAVD 88).

F. **Martin Bloom Community Center**

The Martin Bloom Community Center is located at 101 South Huntington Avenue on Block 8, Lot 2. The center is utilized by seniors for various activities. The Center also has two outdoor shuffleboard courts and two outdoor bocce courts. The Martin Bloom Recreation Center was constructed in the 1960's with additions and renovations, including the installation of an elevator, constructed in 1999. Parking for the Martin Bloom Pavilion is shared with the Margate Public Library on Block 8, Lot 2. The Martin Bloom Pavilion is located in the AE Flood Zone with a base flood elevation of 11 (NAVD 88).

G. **Margate City Public Library:**

The Margate City Library is located at 8100 Atlantic Avenue on Block 8, Lot 1. The Library provides "a wide range of programs and technology services to support lifelong learning throughout the Margate community"³. The Library was constructed in the 1970's with an accessible front entrance constructed in 2015. The Library

is located in the AE Zone with a base flood elevation of 10 (NAVD 88).

7.1.2 **Public Works Facilities Owned by the City**

A. **City of Margate Public Works Department:**

Headquartered in the Municipal Building at 9001 Winchester Avenue, Public Works is responsible for many basic municipal services, including building and fleet maintenance, construction, recreation and park maintenance, recycling programs, sanitation, street maintenance, and water and sewer utilities. The Department has numerous facilities located throughout the City.

B. **Public Works Building:**

The Public Works Building is located at the northeasterly corner of Winchester Avenue and Benson Avenue. The building formerly housed the administrative offices of the Public Works Department. The building has garage space and storage areas. The City's vehicle fueling facility is located at the site. The City recently removed the underground fuel storage tanks at the site and installed temporary above ground fuel storage tanks. The Public Works Building is located on Block 325, Lot 126 which houses other Public Works Department facilities. The Public Works

³ From Margate Public Library Mission Statement



Building is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor elevation of the Public Works Building is 5.13' (NAVD 88).

C. Public Works Storage Building:

The Public Works Storage Building is located on the southeasterly corner of Monmouth Avenue and Benson Avenue. The building has garage space and storage area. The Public Works Storage Building is located on Block 325, Lot 126. The Public Works Storage Building is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 1988). The lowest finished floor elevation of the Public Works Storage Building is 5.82' (NAVD 88).

D. Maintenance Garage:

The Maintenance Garage is located at 208 North Benson Avenue and occupies Block 425, Lot 134, 132 and a portion of Lot 132. A 2,100 square foot addition to the building was constructed in 2005. A new 250 kW diesel emergency generator was installed in 2007. The Maintenance Garage is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor of the Maintenance Garage is 5.91' (NAVD 88).

E. Lifeguard Storage and Mechanical Electrical Shop:

The Lifeguard Storage and Mechanical Electrical Shop Building is located at 203 North Benson Avenue and occupies a portion of Block 424.01, Lot 131. The building is utilized for storage of the City's lifeguard boats and associated equipment as well as a mechanical and electrical repair shop. The Lifeguard Storage Building is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor elevation of the Lifeguard Storage Building is 6.52' (NAVD 88).

F. Public Works Garage:

The Public Works Garage is located on a portion of Block 325, Lot 126 at the southwesterly intersection of Monmouth Avenue and Benson Avenue. The Public Works garage formerly was originally the water storage reservoir for the City. The building is currently utilized for storage. The Public Works Garage is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88).

G. Well No. 5:

Well No. 5 is located at 409 North Gladstone Avenue on Block 707.02, Lot 13. Well No. 5 supplies potable water to the City. The well was constructed in 1958 and has a pumping capacity of 700 gallons per minute (gpm). The well has a 125 kW diesel emergency generator that was installed in 2002. The well was re-



drilled in 2004 and was redeveloped in 2012. Well No. 5 is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88)

H. Well No. 7:

Well No. 7 is located at 210 North Benson Avenue on Block 425, Lot 144. Well No. 7 is utilized as an emergency back-up well by the City. The well was constructed in 1963 and has a pumping capacity of 800 gallons per minute (gpm). Well No. 7 is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88)

I. Well No. 8:

Well No. 8 is located on Amherst Avenue just east of Gladstone Avenue on Block 507.02, Lot 14. Well No. 8 supplies potable water to the City. The well was constructed in 1989 and has a pumping capacity of 708 gallons per minute (gpm). The well has a 150 kW diesel emergency generator that was installed in 1996. The well was last redeveloped in redeveloped in 2013. Well No. 8 is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88). The lowest finished floor elevation of Well No. 8 is 8.68' (NAVD 88)

J. Well No. 9:

Well No. 9 is located on a portion of Block 324.01, Lot 125 between Winchester and Monmouth Avenues. Well No. 9 supplies potable water to the City. The well was constructed in 1992 and

has a pumping capacity of 1,000 gallons per minute (gpm). The well has a 125 kW diesel emergency generator that was installed in 2009. The well was last redeveloped in redeveloped in 2015. Well No. 9 is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor elevation of Well No. 9 is 7.09' (NAVD 88).

K. Well No. 10:

Well No. 10 is located on a portion of Block 424.01, Lot 131 between Amherst and Monmouth Avenues. Well No. 10 supplies potable water to the City. The well was constructed in 1995 and has a pumping capacity of 1,000 gallons per minute (gpm). The well has a 125 kW diesel emergency generator that was installed in 2009. The well was last redeveloped in redeveloped in 2015. Well No. 9 is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor elevation of Well No. 9 is 7.61' (NAVD 88).

L. Well No. 6 Building:

The Well No. 6 Building is located on a portion of Block 324.01, Lot 125. Well No. 6 was capped and is no longer operational. The building houses the electrical distribution equipment for Well No. 9 as well as the chlorination system for the Benson Avenue Water



Tank. The Well No. 6 Building is in the AE Flood Zone with a base flood elevation of 9 (NAVD 88).

M. Benson Avenue Water Tank:

The Benson Avenue Water tank is located on a portion of Block 324.01, Lot 125. The Benson Avenue Water Tank is a 1.0 million gallon waterspheroid tank, approximately 132 feet high, constructed in the 1980's. The interior and exterior of the tank was last painted in 2011. Treatment of water occurs in the tank utilizing sodium hypochlorite that is pumped from the Well No. 6 Building. The Benson Avenue Water tank is in the AE Flood Zone with a base flood elevation of 9 (NAVD 88).

N. Gladstone Avenue Water Tank:

The Gladstone Avenue Water Tank is located in the unimproved right-of -way of Frontenac Avenue adjacent to the northerly line of Amherst Avenue. The Gladstone Avenue Water Tank is a 1.0 million gallon waterspheroid tank, approximately 144' feet high, constructed in 1995. The interior of the tank was last painted in 2014 and the exterior of the tank is scheduled to be painted in 2017. Treatment of water occurs in the tank utilizing sodium hypochlorite that is pumped from the base of the tank. The Gladstone Avenue Water tank is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88).

Washington Avenue Sanitary Sewer Pump Station:

The Washington Avenue Sanitary Sewer Pump Station is located at 1 South Washington Avenue on a portion of Block 126, Lot 90. The pump station pumps sewage via an 8" diameter force main to the existing gravity sewer main at Sumner and Monmouth Avenues. The pump station was constructed in the mid 1970's and upgrades were performed in 2006. As part of the upgrades a new 125 kW diesel emergency generator was installed. The Washington Avenue Sanitary Sewer Pump Station is located in the AE Flood Zone with a base flood elevation of 10 (NAVD 88).

O. Decatur Avenue Sanitary Sewer Pump Station:

The Decatur Avenue Sanitary Sewer Pump Station is located on a portion of Block 325, Lot 126 at the southeasterly corner of Monmouth Avenue and Decatur Avenue. The pump station pumps sewage via a 12" diameter force main to the Amherst Avenue Sanitary Sewer Pump Station. The pump station was constructed in the late 1960's and upgrades were performed in 2007. A new 100 kW diesel emergency generator was installed in 2003. The Decatur Avenue Pump Station is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The lowest finished floor of the pump station building is 8.11 (NAVD 88)



P. Bayshore Drive Sanitary Sewer Pump Station:

The Bayshore Drive Sanitary Sewer Pump Station is located within the right-of way of Bayshore Drive adjacent to Lots 26 and 28 in Block 1200. The pump station contains twin submersible pumps. The pump station was replaced in 2007. The pump station services approximately 26 dwelling units on the cul-de-sac portion of Bayshore Drive. The pump station pumps sewage via a 4" diameter force main approximately 15 feet to an existing gravity sanitary sewer main in Bayshore Drive. The Bayshore Drive Pump Station is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88).

Q. Burk Avenue Sanitary Sewer Pump Station:

The Burk Avenue Sanitary Sewer Pump Station is located on Block 1001, Lot 2 at the northwesterly intersection of Burk Avenue and Fredericksburg Avenue. The pump station pumps sewage via a 12" diameter force main that connects to a 16" diameter force main in Ventnor City which discharges to the Atlantic County Utilities Authority's pump station at Lafayette Avenue in Ventnor City. The pump station was constructed in the early 1960's and was upgrade in 2009. An 80 kW diesel emergency generator serves the pump station. The Burk Avenue Pump Station is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88).

R. Gladstone Avenue Sanitary Sewer Pump Station:

The Gladstone Avenue Pump Station is located on Block 407.01, Lot 27 on Amherst Avenue. The pump station pumps sewage via a 16" diameter force main that discharges to the Atlantic County Utilities Authority pump station at Lafayette Avenue in Ventnor City. The pump station was constructed in 1999. A new 300 kW diesel emergency generator was installed in 2006. The Gladstone Avenue Pump Station is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88).

S. Gladstone Avenue Storm Sewer Pump Station:

The Gladstone Avenue Storm Sewer Pump Station is located in the unimproved right-of-way of Frontenac Avenue approximately 150 feet north of Amherst Avenue. The pump station pumps stormwater to an outfall in Minnie Creek. The pump station was constructed in 2006. The Gladstone Avenue Storm Sewer Pump Station is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88).

7.1.3 Sites Owned by the City

The Public Works Department maintains the following additional facilities that are owned by the City:

A. Recreation Facilities



- i. Sigmund S. Rimm Recreational Complex located on Block 510.05, Lot 10.
- ii. Thomas Markowski Playground located on a portion of Block 8, Lot 2.
- iii. Decatur Avenue Playground located on a portion of Block 325, Lot 126.
- iv. Amherst Avenue Waterfront Park located on Block 526, Lots 4.01 & 4.02 and Block 527, Lots 5.01 & 5.02.
- v. Gladstone Avenue Park located on Block 507.02, Lot 14.
- vi. Lucy Park located on Block 26, Lot 2.
- vii. Library Park located on a portion of Block 8, Lot 2.
- viii. City's Atlantic Ocean Beaches located between the southerly line of the oceanfront bulkhead and the Atlantic Ocean

B. City Parking Lot

- i. Washington Avenue Municipal Parking Lot: The City owns the parking area at 15 North Washington Avenue on Block 226, Lot 9 Block 317.08. This parking area is approximately 12,660 square feet in size and has 38 striped parking spaces. The City leases 18 of the spaces in the lot to local businesses. The remaining spaces are open to the general public.

C. Police Tow Lot:

The Police Tow Lot is located on Block 425, Lots 128, 130 and a portion of Lot 132 on Benson Avenue at the northwesterly intersection of Monmouth Avenue. The Police Tow Lot is utilized for the storage of vehicles that have been towed in the City. The Police Tow Lot was upgraded in 2001 with asphalt paving and a masonry screening wall installed.

7.1.4 Educational Facilities

A. Margate Board of Education

The Margate School District is a community public school district that serves students in kindergarten through eighth grade. The school had an enrollment of 362 students as of October 1, 2016. For grades 9-12, students from Margate attend Atlantic City High School in the City of Atlantic City as part of a sending/receiving relationship with the Atlantic City Public School District. Public school students may also attend the Atlantic County Institute of Technology in Hamilton Township, a public technical school that works on an application/acceptance program.

In New Jersey districts have the option of allowing students to transfer to schools in a neighboring district (called interdistrict choice). Children can also attend charter schools and private



schools. Transportation is provided for students in accordance with the provisions made by the public school district in which each student lives.

A. Eugene A. Tighe Middle School

Eugene A. Tighe Middle School is located at 7804 Amherst Avenue on Block 407.01, Lot 10. This public school houses grades 5-8 and includes an enrollment of approximately 168 children. The original building was constructed in 1956, with an additions and renovations constructed 2000. Parking is provide on-site for staff. The Eugene A. Tighe School is located in the AE Flood Zone with a base flood elevation of 8 (NAVD 88). The elevation of the crawl space is 3.47' (NAVD 88).

B. Eugene A. Tighe Middle School

William H. Ross, III Elementary School is located at 101 North Haverford Avenue on Block 309.01, Lot 1. This public school houses grades K-4 and includes an enrollment of approximately 194 children. The building was constructed in 2000. There is no on-site parking. The William H. Ross, III School is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88). The elevation of the crawl space is 4.28' (NAVD 88).

7.1.5 Local Churches, Synagogues, and Community Facilities

The following churches synagogues and community facilities are located in Margate City:

- i. Beth El Synagogue is located at 500 North Jerome Boulevard.
- ii. Holy Trinity Parish is located at 11 North Kenyon Avenue.
- iii. Jewish Community Center is at 501 North Jerome Boulevard.
- iv. Jewish Family Services of Atlantic & Cape may Counties is located at 607 Jerome Boulevard.
- v. Margate Community Church is located at 8900 Ventnor Avenue.
- vi. Pinchus Kiejdan Chabad House is located at 8223 Fulton Avenue.
- vii. Temple Emeth Shalom is located at 8501 Ventnor Avenue.
- viii. Trinity United Methodist Church is located at 9500 Ventnor Avenue.
- ix. Young Israel of Margate is located at 8401 Ventnor Avenue.

7.1.6 Senior Housing



A. Margate Terrace:

Margate Terrace is an affordable housing apartment community operated by the Margate Terrace Corporation at 610 North Fredericksburg Avenue on Block 901.01, Lot 2. The property is owned by the City of Margate City and leased the property to the Margate Terrace Corporation. The current lease will expire in 2062. The building houses 18 studio and 56 one-bedroom apartment units and provides housing to seniors 62 years and older. Margate Terrace is located in the AE Flood Zone with a base flood elevation of 9 (NAVD 88).

7.2 Recommendations

7.2.1 Infrastructure

The City has an aging infrastructure especially the sanitary sewer system, storm sewer system and water system. A majority of the underground portions of these systems are between forty and 90 years old. The South Jersey Gas Company is in the process of upgrading the natural gas distribution system throughout the City. Due to the large number of service openings in the street as well as the openings for the gas main installations, South Jersey Gas Company has typically milled the existing asphalt and paved the streets with a two inches of asphalt surface between the concrete

gutters. While this work will correct deficiencies in the surface of the paving it will also hide indicators of subsurface utility failures and does not correct slope issues in the street gutters. The City should take a proactive approach regarding the infrastructure within the City. In the past, during road reconstruction projects, the subsurface utilities were evaluated and when deemed to be undersized or damaged were replaced. Moving forward the City should plan for upgrades and replacements to the aging underground infrastructure and provide for a yearly program to replace undersized (less than 8" in diameter) and damaged water mains and services, sanitary sewer mains and services and storm sewer systems.

The City upgraded the bay, lagoon and Minnie Creek storm sewer outfall structures in 1997 with the installation of twenty (20) rubber tide check valves to prevent backflow into the storm sewer system. These check valves are nearing the end of their useful life. Some of the valves have already failed and have had to be replaced. It is recommended that the remainder of the check valves be replaced.

The City was impacted in 2012 by Superstorm Sandy. The storm caused major flooding throughout the low lying areas of the City due to high water levels in Beach Thoroughfare which overtopped the bayfront bulkheads. In order to alleviate future flooding from



back bay flooding, the height of the bayfront bulkhead should be raised to 9.0 (NAVD 88) as required in the City Code. Along the Atlantic Ocean Beach the bulkheads should be raised to elevation 13.0 (NAVD 88) as required in the City Code. The City should provide for a program to elevate the back bay, lagoon and beach bulkheads in areas controlled by the City. In addition the City should investigate installing bulkheads along Minnie Creek.

The City has developed a program of redeveloping their wells. Typically, each well, with the exception of Well No. 7, is redeveloped every 7-10 years. The redevelopment process rehabilitates the wells and removes clogging of the well screens which causes a reduction in capacity of the wells. The City should continue to schedule the redevelopment of each well on a 7-10 year basis, unless abnormal pumping capacity reductions are observed and an earlier redevelopment is required. A review of each well house should be performed in order to determine whether the operating systems are above the base flood elevation with 2.0 feet⁴ of freeboard. Operating systems below the recommended elevation should be raised. Flood barriers should be provided at openings to protect the buildings that are not at the proper elevation.

The City has developed a program for repainting and rehabilitating the existing water tanks. One of the major issues the City faces is the "ocean" atmosphere in Margate. Corrosion of the steel tanks is enhanced by their proximity to the Atlantic Ocean and bays. The City has been recoating their water tanks on an average of six to seven years. It is recommend the City continue to recoat their water tanks in order to prevent serious corrosion issues from occurring. The elevations of the critical operating systems at each tank should be evaluated and raised where necessary. Flood barriers should be provided at openings to protect the tanks that are not at the proper elevation.

As the City has upgraded their sanitary sewerage pump stations within the last twenty years, it is recommended that the operating systems of each station be evaluated to determine the elevation of the system. Systems that are below the base flood elevation + 2.0 feet should be raised. Flood barriers should be provided at openings to protect the buildings that are not at the proper elevation.

⁴ As recommend in ASCE Standard 24-14 - Flood Resistant Design and Construction Table 4-1



7.2.2 City of Margate Fire Department

The Fire Department has expressed concerns regarding the adequacy of their facilities. A previous proposal to upgrade Fire Station No. 2 was deemed too costly by the voters in the City, as evidenced by the vote on the bond referendum in 2012. Since Fire Station No. 2 occupies property that is not located in an AE or V Flood Zone siting a new facility on at the property makes sense from flood hazard mitigation perspective. The City should plan for the construction of new facility at the Fire House No. 2 site that can provide adequate storage for the City's Fire apparatus.

7.2.3 City of Margate Municipal Building

The Municipal Building is currently underutilized with the second floor of the building not being used. The City should consider moving services housed at other sites to the Municipal Building, such as the senior services provided at the Martin Bloom Pavilion. On-site parking should be considered to handle the additional services provided. Flood barriers should be provided at openings to protect the building during flood events. A portion of the

Municipal Building has a crawl space with sump pumps that discharge directly to the streets. The sump pump discharges should be combined and pumped to a "live" storm sewer system

7.2.4 City of Margate Buildings

The operating systems in each of the City's building should be evaluated as to condition and location. Systems that could be impacted by flooding should be raised. Flood barriers should be installed at openings that are not at the proper elevation.

7.2.5 Educational Facilities

Work with the City of Margate Board of Education to address enrollment issues facing the school system. Explore the appropriate adaptive reuse of public/private buildings or redevelopment of lands currently used schools or other purposes if and when said buildings or lands are no longer required by the schools. Explore the need for new/rehabilitated recreational facilities.



8 OPEN SPACE AND RECREATION PLAN ELEMENT

Open space and recreation are a critical aspect of any community. Recreation opportunities and open space contribute to the general well-being and quality of life of local residents. The City of Margate is a nearly fully developed barrier island community with numerous recreation facilities and limited open space to service the community residents. Approximately half of the land area that is reserved for open space and recreation is comprised of the City's beaches.

8.1 Recreation and Open Space

8.1.1 Recreation Facilities

- i. City's Atlantic Ocean Beaches and waters located between the southerly line of the oceanfront bulkhead and the Atlantic Ocean
- ii. Sigmund S. Rimm Recreational Complex located on Block 510.05, Lot 10.
- iii. Thomas Markowski Playground located on a portion of Block 8, Lot 2.
- iv. Decatur Avenue Playground located on a portion of Block 325, Lot 126.

- v. Amherst Avenue Waterfront Park located on Block 526, Lots 4.01 & 4.02 and Block 527, Lots 5.01 & 5.02.
- vi. Gladstone Avenue Park located on Block 507.02, Lot 14.
- vii. Lucy Park located on Block 26, Lot 2.
- viii. Library Park located on a portion of Block 8, Lot 2.

A. City Beaches

When calculated by land area, the City's beaches make up more than half of the recreation space in the City. Arguably some portion of the Atlantic Ocean should also be counted as recreation space for the City given the number of water based activities that occur at and beyond the water's edge. The City's beaches provide access to the ocean and recreation opportunities to a host of different passive and active, land based and water oriented recreation activities. The beaches in the City are a key feature bolstering the desirability of the City as a place to live and visit.

The City currently faces uncertainty about the condition, size, and access to its beaches going forward. The New Jersey Department of Environmental Protection and the Army Corp. of Engineers plan to move forward with a beach replenishment and dune construction



project that will impact the size, shape, and appearance of, and access to the City's beaches.

The City has historically had a bulkhead system in place along the division between the beach and adjacent development that has admirably protected that adjacent development from storm damage. On the ocean side of that bulkhead the City is known for flat beaches, most recently between 50 yards and 120 yards from the bulkhead face to the High Tide Line, that gradually taper into the water. The City's flat beaches provide ample room for recreation opportunities from flying a kite to playing volleyball or soccer in the sand.

The proposed dune construction project is projected to install dunes with a top elevation of 12.75 with a 25' top width and an approximate 93.75' wide base width sloping down from the top with 5 to 1 slopes. The proposed beach elevation is depicted to be at elevation 7.25. The existing street end scupper elevations range from approximately elevation 5 to elevation 8. Pedestrian dune cross overs are proposed to be constructed as part of the project. As of the publication of this study, a drainage solution has not been finalized for addressing stormwater runoff from the City, through of past the dunes, to the ocean.

Once the design of the dune project is finalized, the City will need to evaluate the projects impact to the available recreation space in the City. The dune systems are not intended for recreational use and pedestrian activity on dunes is typically not permitted. Depending on the final configuration, this could result in the loss of a significant amount of open recreation space in the City.

B. Sigmund S. Rimm Recreational Complex

The Sigmund S. Rimm or Jerome Avenue Recreational complex is the second largest active recreation facility in the City. The facility contains two youth playgrounds, six tennis courts, one platform tennis court, two basketball courts, one T-ball field, one softball field, two little league fields, one High School sized baseball field and a building that houses batting cages and supplies. This complex supports a significant majority of the City's outdoor organized recreational sports activities.

Typically a facility with the number of fields present at this location consists of a much larger overall land area. The existing layout of this facility utilizes nearly all available land area for some type of recreation activity. The City should continually investigate the possibility of acquiring adjacent land area to expand the park. The City should also monitor the intensity and frequency of the use of each field type and consider modifying the field configurations of



underutilized fields to accommodate unmet demand for alternate activities.

8.1.2 Open Space

The City has very limited open space. What open space does exist in the City is comprised of a combination of coastal and “freshwater” wetlands. The presence of these wetlands renders this open space undevelopable under current environmental regulations. This status has helped to preserve

- i. Minnie Creek
- ii. North east area of the City generally bounded by Clermont Avenue, Fremont Avenue, Fredericksburg Avenue, and Burk Avenue

Despite the minimal amount of open space in the City, there is a significant amount of open space in the marshes across Beach Thorofare from the City in Egg Harbor Township. The nearby marshlands offers significant contiguous areas of open space that are not incorporated lands of the City but provide protected open space to the City’s residents and habitat for indigenous species and migratory bird species. The adjacent bay and ocean waters

also provide open space and passive and active recreation opportunities in space that is not counted in traditional open space calculations. Activities ranging from birdwatching, kayaking, fishing, swimming, boating, water-skiing, sailing, surfing, and many other water oriented activities are possible because of the bay and ocean waters surrounding Absecon Island.

Given the land value in the City, acquiring additional land for the creation of additional open space will likely be limited to investments in relatively small pieces of land to serve as pocket parks and other types of small facilities primarily intended for passive recreation. The cost of acquiring land in the City is a significant obstacle to the acquisition and dedication of additional lands to open space. Acknowledging the cost of real estate and limiting open space acquisition in the City is consistent with the County’s recreation and open space plan. As is referenced in the City’s previous master plan, the County’s Open Space and Recreation Plan acknowledges that expansion of open space opportunities will likely be limited in coastal communities in the County. (14)



9 CONSERVATION PLAN ELEMENT

**SECTION COMPLETE IN THE FORM OF A SUSTAINABILITY
ELEMENT BUT NOT YET INCORPORATED INTO THE
DOCUMENT FORMAT**

**The Sustainability Element and a Environmental Resource
Inventory have been provided as separate documents for
review as a draft prior to incorporation**



10 ECONOMIC PLAN ELEMENT

This section is pending revisions to draft plan by sub consultant and will be provided as a standalone document for review prior to incorporation into this plan as an element.



11 HISTORIC PRESERVATION PLAN ELEMENT

The City of Margate has developed as a residential community since the mid 1800's. The timing and intensity of development of the City was largely influenced by the development of nearby Atlantic City. The City was part of Egg Harbor Township until 1885 when an independent government was formed and the Borough of South Atlantic City was established. In 1909, the Borough was renamed to the City of Margate, paying homage to the coastal town of Margate England.

11.1 Historic Resources

The City is home to one Site and one Landmark on the National Register of Historic Places.

A. Marven Gardens (Historic Site):

The Marven Gardens residential neighborhood, bounded by Fredericksburg Avenue, Monmouth Avenue, North Brunswick Avenue, and Ventnor Avenue. The name for Marven gardens originates from a combination of the first three letters from "Mar"gate and "Ven"tnor. The homes in this area were constructed through the 1920's and completed in the 1930's. The area was designated as a historic site first by the State Register of Historic

Places on August 9, 1990 and then by the National Register of Historic Places on September 13, 1990.

Street elevations in NAVD88 datum through Marven Gardens range from just above elevation 4 near the intersection of East Drive and Winchester Avenue and to elevation 8 near the intersection of Ventnor Avenue and East Drive. The entire Marven Gardens area is mapped in zone AE8 (EL10) on the October 18, 1983 FEMA Flood Insurance Rate Maps. As of the authoring of this study, the Preliminary Flood Insurance Rate Map for this area (Panel 453 of 457), issued May 30, 2014 was the most current Preliminary FIRM map. On the new maps, the majority of Marven Gardens is depicted in Zone AE (EL 9) with a small portion along Ventnor Avenue located in Zone AE (EL 10).

It is important to note that the datum has changed between the 1983 Flood Maps and the 2014 Preliminary Flood Maps. The 1983 Maps reference NGVD 1929 Datum and the new Preliminary Maps reference NAVD1988 Datum. The conversion factor between these datums varies by location but the Preliminary Flood Insurance Study for Atlantic County dated May 30, 2014 (FIS 34001CV000A) provides a conversion factor of $NGVD = NAVD88 + 1.247$ for all of Atlantic County.



B. Lucy the Elephant (Historic Landmark):

Lucy the Elephant is an elephant shaped structure which was constructed in 1881 by James V. Lafferty, Jr. to attract potential real estate customers to South Atlantic City (as Margate was known at the time). Lucy is approximately 65' tall, 60' long and 18' wide and tips the scale at an estimated 90 tons. Currently located at the corner of Decatur and Atlantic Avenues, Lucy was originally constructed adjacent to South Benson Avenue. After falling into a state of disrepair in the 1960's, Lucy was moved by the Save Lucy Committee in 1970 to her current location.

Lucy has become somewhat of a pop-culture figure, having appeared in numerous movies, television shows, and books. She is even depicted on the City's water tower. The celebrity of Lucy has provided the City of Margate with an easily recognizable symbol with national recognition.

C. Ventnor Avenue Parkway Section:

The parkway section of Ventnor Avenue features bridal paths with large landscape island with well-kept landscaping and ornate fountains. The City's Parkway section is bordered by large houses and a church. The homes in the parkway section include English

Tutor, Spanish Colonial, Dutch Colonial, and other home styles typical of the period houses.

D. Margate Library and Historical Society Alliance:

The city's Historical Society and Library have been strong proponents of the preservation and promoting of the City's history. These two organizations have obtained and archived photographs, historical records, and artifacts of the City's history. The former Historical Society Museum at 7 South Washington Avenue was demolished in spring of 2015 and the Library and Historical Society Alliance has plans to move their collection into the former City Hall at 1 South Washington Avenue once renovations are completed at that facility. The Alliance and their wealth of City history are a valuable resource to the City for assembling and preserving the City's history.

11.2 Observations and Recommendations

The vulnerability to flooding presents a significant challenge to the preservation of historical structures on the island. In addition to preserving structures from deterioration, obsolescence, fire, and other man-made and natural hazards, historical structures must be protected from flood damage. As sea-level rise continues, the risk



of flooding damage from coastal storms to City of Margate will continue to increase.

In order to protect structures that offer historical value, the City needs to allow historical structures to elevate above predicted flood elevations. However, the elevation of existing historical structures is part of the historical value of the structure. It is impossible to raise a structure multiple feet above its current elevation without impacting its historical value. The largest challenge to preserving historical structures will be balancing the elevation needed to protect the structure from flooding with the impact to the design, aesthetic value, and functionality of the structure.

A. Marven Gardens:

The Marven Gardens residential neighborhood presents a number of unique challenges to preservation. The character and style of the neighborhood are the elements that make Marven Gardens the historic neighborhood that it is. This includes relatively large homes of significantly varying styles on relatively small lots that have first floor elevations typically no more than a few steps above the sidewalk elevation. These homes and accessory structures have small or no setbacks and many of the homes share a common driveway with a neighbor.

Given the flood zone and ground surface elevations in this area and the proximity of the historical homes to the ground, homes in this area will need to be raised to be protected to potentially devastating floodwaters. The alternative of requiring these homes to remain at their current elevations will eventually result in the loss of these structures to flood damage from future storms. However, raising homes in this area presents a number of challenges, including preserving the historical integrity of the structures. Special architectural consideration will be required to address the additional vertical surface created between the ground and the bottom of the existing structure. Special attention will also be required for the modification of the building ingress and egress points.

Many of the modifications that will be required could have a dramatic impact on the original architecture as the vertical scale and exterior treatment will be significantly altered to accommodate the raising of the homes. Homes with exposed piles should not be permitted in this area as that would be a significant break from the current style of the neighborhood. Architectural treatments of additional vertical surfaces should be consistent with the materials, colors, and patterns of the existing structures.



Structure entrances the consisted of only a few steps will need to be increased to potentially a dozen or more steps. The horizontal space needed to accommodate these steps will need to encroach on already reduced setbacks. Front and side setbacks will need to be reduced to allow for the installation of additional steps.

Home raising will present a significant number of issues with setbacks and these may also be best addressed through individual project review. The implementation of an architectural control review process should be considered for the elevation of homes in the neighborhood. This would ensure that architectural considerations proposed as part of a house raising would not offend the character of the existing neighborhood.

Given the complexity of the existing development and the proximity of the existing structures, it is likely that the balance between the need for an appropriate setback and the area required for additional stairs will require special attention. The already small setbacks will need to be encroached on even further and what may be appropriate in some situations may not be acceptable in other areas.

Significant revision to the land development ordinance for the HD-25 zone will be required to accommodate house raising while

preserving the historical nature and appearance of the district to the maximum extent practicable.

B. Lucy the Elephant (Historic Landmark):

Lucy was nearly lost almost 50 years ago to neglect and financial pressures. Thankfully, the Save Lucy Committee was formed and found a way to relocate and preserve the historic landmark. In order to continue to preserve Lucy, steps will need to be taken to elevate and anchor her in place. Lucy fared well during Hurricane Sandy but future storms could produce higher stillwater elevations and wave heights.

Lucy should continue to be incorporated into City marketing materials and special events. Her unique nature and recognizability provide the City with a symbol to represent not only Lucy, but the entire City. An idea that was proposed by one of the business owners at one of the many stakeholder meetings held as part of the master plan effort was to connect City destinations such as the business districts to Lucy with painted elephant footprints. This would create pathways for pedestrians to follow that connect destinations in the City, bolster the incorporation of Lucy into more areas of the City, and promote each connected destination.



For Lucy in particular but also for all elements of the City's history, one of the keys to preserving history and historical sites is finding ways to make them attractive and relevant to future generations. Preservation of history relies on a connection to and nostalgia for that history to value and pursue its preservation. Without continued interest and investment from future generations, historical objects

will eventually succumb to time and pressure for new development. This is especially true for the beachfront property that Lucy currently inhabits. Lucy should be incorporated into kids programs to the maximum extent practicable to create a connection with new generations.



12 WORKS CITED

1. **United States Census Bureau.** State and County Quickfacts. *Census.gov*. [Online] US Department of Commerce. [Cited: April 21, 2014.] <http://quickfacts.census.gov/qfd/states/34/3475620.html>.
2. **Center for Government Research & Transportation Matters.** *Demographics Seasonal Projections - SJTPO Region*. 2006.
3. **Roger Rubin Associates.** *A Study of Land Uses in the R-MF-M Zoning District*. City of Margate, NJ : s.n., 1981.
4. **State of New Jersey.** Municipal Land Use Law. *N.J.S.A.* Vol. 40:55.
5. **U.S. Global Change Research Program.** *Global Climate Change Impacts in the United States*. s.l. : Cambridge University Press, 2009. ISBN 978-0-521-14407-0.
6. **Kenneth G. Miller, Robert E. Kopp, James V. Browning, and Benjamin P. Horton.** *Sea-level rise in New Jersey fact sheet*. s.l. : Rutgers University - Department of Earth and Planetary Sciences - Institute of Marine and Coastal Sciences.
7. **Heyer, Gruel, & Associates.** *City of Margate Master Plan - January 2004*. 2004.
8. —. *City of Margate Master Plan Revisions - March 2006*. 2006.
9. **Federal Emergency Management Agency (FEMA).** *Preliminary/Revised Preliminary FIRM Map*. Department of Homeland Security, Federal Emergency Management Agency. 1/30/2015. Panel # 34001C0434F.
10. **Arthur W. Ponzio Co. & Associates, Inc.** *Amherst Avenue Business District - Design Concepts*. 2015. Technical Memorandum.
11. **Remington, Vernick, & Walberg Engineers.** General Elevation Reference Map. April 1995, Updated July 2014.
12. **Federal Emergency Management Agency (FEMA).** *Flood Insurance Study - Atlantic County, New Jersey (Preliminary)*. U.S. Department of Homeland Security. May 30, 2014. p. 122. FIS #34001CV000A.
13. **Tiemann, Frank J.** The Parkway District. *Margate Public Library*. [Online] [Cited: July 12, 2016.] <http://www.margatelibrary.org/community/city-history/cityhistory-places>.
14. **The City of Margate.** *Emergency Operations Plan*. Margate City Office of Emergency Management. January 30, 2014.
15. **Atlantic County Department of Regional Planning and Economic Development.** *OPEN SPACE & RECREATION PLAN*. Atlantic County, NJ : s.n., 2000.
16. **National Hurricane Center.** *Tropical Cyclone Report - Hurricane Sandy*. s.l. : National Hurricane Center, 12 February 2013. p. 157. (AL182012).



17. **State of New Jersey Department of Transportation.** *Straight Line Diagrams.* May 2010.
18. **NJ Department of Community Affairs.** Post Sandy Planning Assistance Grant. *www.NJ.gov.* [Online] [Cited: April 20, 2014.] <http://www.nj.gov/dca/services/lps/pspag.html>.
19. **National Weather Service.** *Hurricane/Post-Tropical Cyclone Sandy.* National Oceanic and Atmospheric Administration. Silver Spring, Maryland : Department of Commerce - United States of America, May 2013. p. 66, Service Assessment.
20. **New Jersey Department of Community Affairs.** Building Permits: Yearly Summary Data. *State of New Jersey Department of Community Affairs.* [Online] 2016. [Cited: 4 16, 2016.] http://www.state.nj.us/dca/divisions/codes/reporter/building_permit_s.html.

TABLE OF CONTENTS

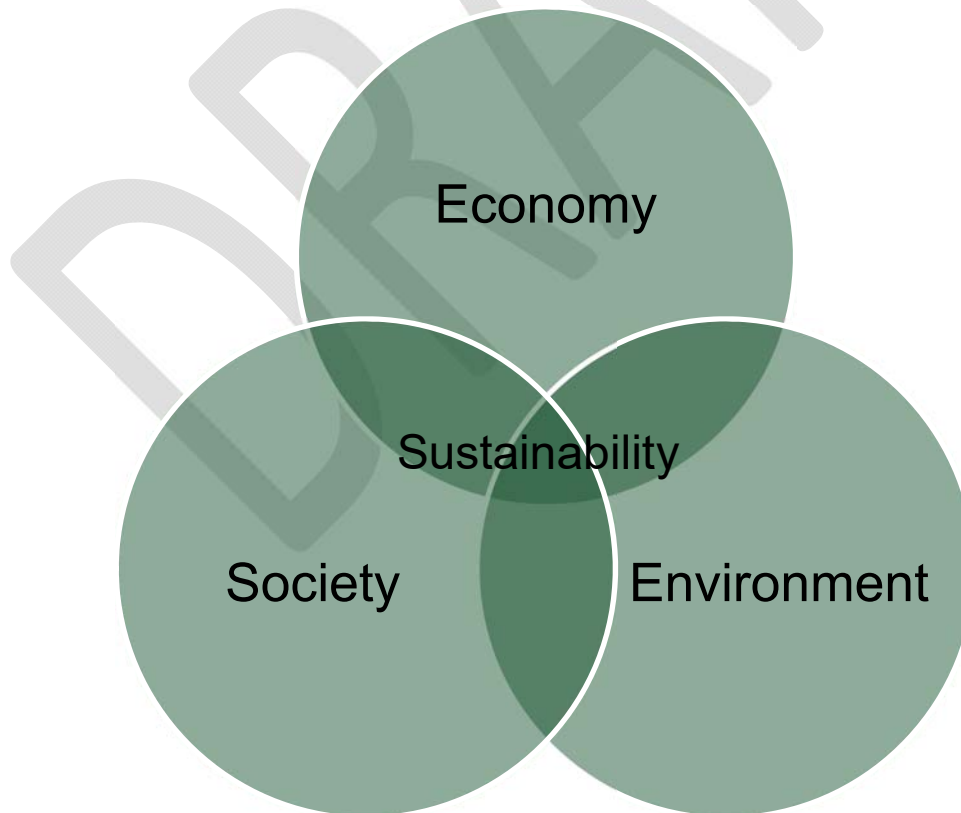
Table of Contents	1
1.0 Introduction	2
2.0 Existing Conditions Analysis/Municipal Carbon Footprint	4
2.1 Building Inventory	4
2.2 Electricity Usage	5
2.3 Natural Gas Usage.....	6
2.4 Vehicle Inventory	7
2.5 Municipal Building Solar Array.....	11
2.6 Municipal Carbon Footprint	11
2.7 Community Carbon Footprint	12
3.0 Current Green Programs in Place	14
3.1 Community Partnership and Outreach	14
3.2 Green Ordinances.....	15
3.3 Emergency Management and Resiliency	15
3.4 Land Use and Transportation.....	16
3.5 Vehicle Fleets	17
3.6 Waste Management and Recycling.....	17
4.0 Implementation – Actions & Recommendations	18
4.1 Community Awareness, Education, and Publicity.....	18
4.2 Continuing Planning, Implementation, and Monitoring.....	19
4.3 Green House Gas Emissions	20
4.1 Transportation.....	22
4.2 Waste Management and Recycling.....	23
4.3 Land Use and Green Building	24

1.0 INTRODUCTION

Sustainability has been defined as development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainability has often been represented by a venn diagram of three overlapping circles – the economy, environment, and society. The rings overlap which implies that each circle influences or affects the others. For a community to achieve sustainability, each of these systems must be healthy and in balance with each other.

Sustainability cuts across all aspects of community life. This document will serve as a foundation and blueprint for incorporating sustainability into local government decision making and to help bring the three components into better balance. Implementing the recommendations in this report will assist Margate in reducing its environmental impact, protect future generations, and provide for healthy residents and economy. However, the municipality cannot do this alone – it will require buy in and commitment from residents and stakeholders (local businesses, community groups, etc.).

FIGURE 1 – THE THREE COMPONENTS OF SUSTAINABLE DEVELOPMENT



A number of events – rising energy costs, concerns about climate change, Superstorm Sandy, concern about toxic chemicals, and others – have helped raise awareness of environmental issues and increased the interest in more sustainable planning. To that end, New Jersey's Municipal Land Use Law¹ was amended to authorize the inclusion of “green buildings and environmental sustainability plan element” in municipal master plans. The sustainability plan

“shall provide for, encourage, and promote the efficient use of natural resources and the installation and usage of renewable energy systems; consider the impact of buildings on the local, regional and global environment; allow ecosystems to function naturally; conserve and reuse water; treat storm water on-site; and optimize climatic conditions through site orientation and design.”

Municipalities also have the authority to adopt laws and regulations to protect public health and welfare, and to promote the general welfare in their communities outside of the planning and zoning powers.

Margate's sustainability plan is based on the following goals:

- Reduce energy consumption and greenhouse gas emissions.
- Encourage the use of renewable energy in homes and businesses.
- Promote the development of green buildings
- Reduce vehicle miles travelled by city employees and local residents.
- Promote water conservation.
- Improve waste management and recycling.

These goals represent Margate's priority sustainability issues and provide general guidance for government decision making in Margate. The goals form the basis for the recommendations made in this report.

The City of Margate, NJ was awarded grant funding from the New Jersey Department of Community Affairs (NJDCA) to develop the sustainability component of their Master Plan. The grants were awarded through the Community Development Block Grant – Disaster Recovery program, which appropriates recovery grants to impacted communities that can demonstrate they lost more than \$1 million in ratables due to Superstorm Sandy and therefore face limited resources.

¹ N.J.S.A. 40:55D-28b(16),

2.0 EXISTING CONDITIONS ANALYSIS/MUNICIPAL CARBON FOOTPRINT

When fuels such as natural gas, gasoline, diesel fuel, or coal are burned they release carbon dioxide and other gases into the air. Greenhouse gases like carbon and methane contain heat-trapping chemicals that contribute to an enhanced greenhouse effect. An increase in concentration in greenhouse gases causes an increase in Earth's surface temperature, a process known as global warming.

A municipal carbon footprint measures the amount of greenhouse gas emissions produced by local government operations over the course of a year. This includes indirect emissions resulting from electricity usage, direct emissions from the usage of natural gas for heating cooling, and direct emissions from vehicle and equipment usage. Developing a municipal carbon footprint can identify the largest emitters and allow a municipality to develop informed priorities and track progress.

2.1 BUILDING INVENTORY

Buildings account for a large portion of primary energy use and greenhouse gas emissions, making it essential to reduce their energy consumption. The major areas of energy consumption in buildings are space heating, ventilation, air conditioning, lighting and operating electric and mechanical devices. Margate's municipal operations are spread across seven different facilities (Table 1). This includes the former Union Avenue School, which the city took over in 2013 to house municipal operations, the public works facilities, as well as the police and fire stations.

TABLE 1: MUNICIPAL BUILDINGS

Name	Type	Address	Area (sq. ft)	Year Built
Union Avenue	Municipal	8103 Winchester Avenue	48,369	1972
Public Works	Public	9001 Winchester Ave	7,019	1968
Building Department	Public	101 North Washington Ave	3,653	2001
Martin Bloom Pavilion	Public	101 S. Huntingdon Ave	3,997	1980
City Hall and Fire House 1	Municipal	1 South Washington Avenue	1,504	1903
Fire House 2	Fire	Fremont Ave and N. Belmont Drive	1,868	1965
Police Department	Police	111 N. Decatur Avenue	6,801	1932

Source: Concord Engineering Group and Dome-Tech (2009)

2.2 ELECTRICITY USAGE

In 2016 Margate used approximately 2.6 million kWh of electricity. This included 950,000 kWh for general operations, 535,000 kWh for street lights, and over 1.1 million kWh for the operation of water and sewer pumps. The electricity usage was calculated based on data from Atlantic City Electric from each of the city's 63 electric accounts over the January to December 2016 period.

Based on an emissions calculator developed by Sustainable New Jersey, we estimate that the city's electricity usage generated 1,550 metric tons of carbon dioxide equivalents. This included 565 metric tons from building and facilities, 319 metric tons from street lights and traffic signals, and over 666 metric tons for the operation of water and sewer pumps.

TABLE 2: MUNICIPAL OPERATIONS

Municipal Operation:Electricity	Total Kwh	Total MWh	CO2e (Metric Tons)
Building & Facilities	949,289	949.3	564.9
Street Lights & Traffic Signals	535,618	535.6	318.8
Water & Wastewater Treatment Facilities	1,119,063	1,119.1	666.0
Electricity Total	2,603,970	2,604.0	1,549.7

Source: Concord Engineering Group and Dome-Tech (2009), Atlantic City Electric (2016)

2.3 NATURAL GAS USAGE

A recently completed energy audit of city buildings found that Margate municipal buildings use approximately 54,600 therms of natural gas per year (Table 4). The natural gas usage data was based on usage estimated included in the energy audits of each building. Most of the natural gas is used for heating purposes and as such the usage is dependent on the weather and can vary from year to year.

TABLE 3: MUNICIPAL BUILDING NATURAL GAS USE

Name	Annual therms
Union Avenue	25,000
Public Works	4,900
Building Department	2,100
Martin Bloom Pavilion	0
City Hall and Fire House 1	17,300
Fire House 2	2,000
Police Department	3,300
Total	54,600

Source: Concord Engineering Group and Dome-Tech (2009)

Based on an emissions calculator developed by Sustainable New Jersey, we estimate that the city’s natural gas usage generates approximately 290 metric tons of carbon dioxide equivalents

(Table x). The largest source is the Union Avenue municipal building followed by the former City Hall/ Fire House 1 building.

TABLE 4: NATURAL GAS CARBON EMISSIONS

Building	Total Therms	CO2 (Metric Tons CO2e)	CH4 (Metric Tons CO2e)	N2O Emissions (Metric Tons)	Total Emissions (Metric Tons CO2e)
Union Avenue	25,000	132.8	0.3	0.1	133.2
Public Works Building	4,900	26.0	0.1	0.0	26.1
Department	2,100	11.2	0.0	0.0	11.2
Martin Bloom Pavilion	0	0.0	0.0	0.0	0.0
City Hall and Fire House 1	17,300	91.9	0.2	0.1	92.1
Fire House 2	2,000	10.6	0.0	0.0	10.7
Police Department	3,300	17.5	0.0	0.0	17.6
Total	54,600	290.0	0.7	0.2	290.8

Source: Margate City (2016)

2.4 VEHICLE INVENTORY

Every municipality manages vehicles that can facilitate the provision of services and allow employees to conduct municipal business. The equipment and vehicles that make up a fleet contribute to greenhouse gases and airborne pollutants. Airborne pollutants can degrade air quality and are linked with serious health conditions like asthma and lung cancer. Performing a fleet inventory allows a municipality to evaluate its current vehicles to better understand where efficiency might be improved. The inventory includes surveying how the vehicle is used, fuel usage and fuel cost.

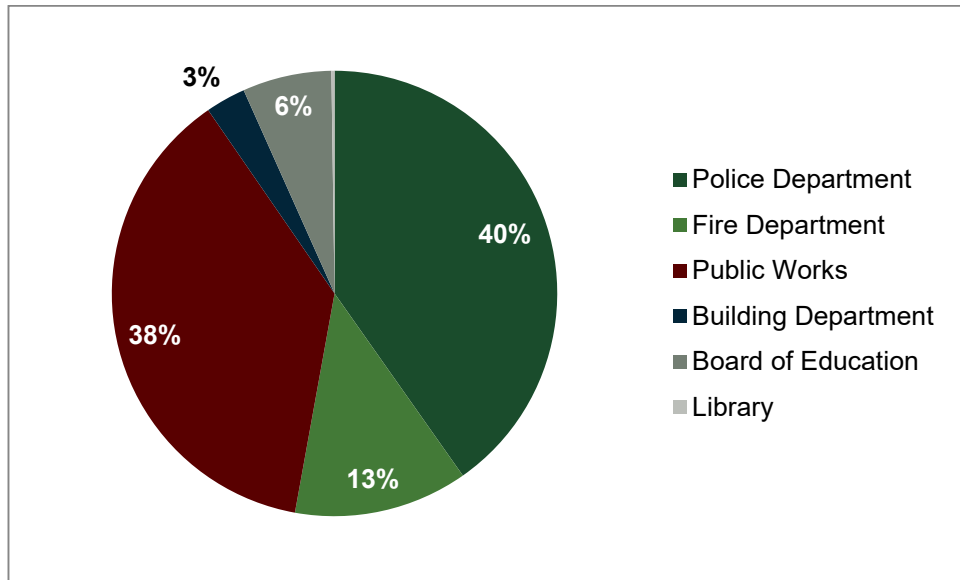
TABLE 5: VEHICLE INVENTORY SUMMARY STATISTICS

Department	Number of Vehicles	Baseline Total VMT	Baseline Gasoline VMT	Baseline Diesel VMT	Baseline Gasoline Fuel Efficiency	Baseline Diesel Fuel Efficiency
Police Department	30	157,179	155,499	1,680	12.0	10.5
Fire Department	17	49,310	16,710	32,600	13.8	9.1
Public Works	38	146,635	60,141	86,494	9.8	7.0
Building Department	3	11,450	11,450	0	20.9	0.0
Board of Education	5	25,231	17,376	7,855	10.3	12.0
Library	1	884	884	0	23.0	0.0
Total	94	390,688	262,059	128,629		

Source: Margate City (2016)

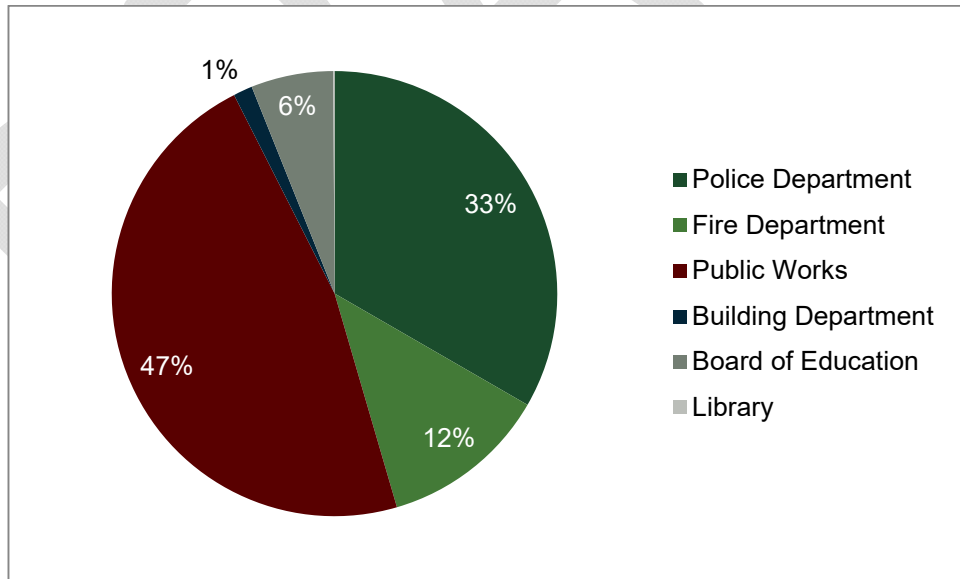
The Police Department and Public Works account for almost 80% of the vehicle miles driven by Margate employees (Figure 2). Almost all of the police VMTs occur in gasoline vehicles, while the VMTs generated by the Public Works department occurs in diesel vehicles. Although the Police Department has a greater share of the VMTs (40% for the police and 38% for Public Works), the Public Works department uses nearly half of the all the fuel used by Margate City vehicles – 47%– followed by the Police Department, which uses 33% and the Fire Department at 12% (Figure 3).

FIGURE 2: DISTRIBUTION OF VEHICLE MILES TRAVELED BY DEPARTMENT



Source: Margate City (2016)

FIGURE 3: DISTRIBUTION OF FUEL USAGE BY DEPARTMENT



Source: Margate City (2016)

In 2014 and 2015, the city purchased an average of 51,600 gallons of gasoline and diesel fuel – 26,000 of gasoline and 25,600 gallons of diesel fuel (Table 6). The gasoline and diesel fuel volumes were calculated based on invoices from the city’s fuel supplier for 2014 and 2015.

TABLE 6: FUEL USAGE FOR 2014 AND 2015

Fuel	2014 Usage	2015 Usage	Average Gallons
Gasoline	27,108.2	24,930.3	26,019.3
Diesel	24,823.1	26,351.0	25,587.1
Total	51,931.3	51,281.3	51,606.3

Source: Margate City (2016)

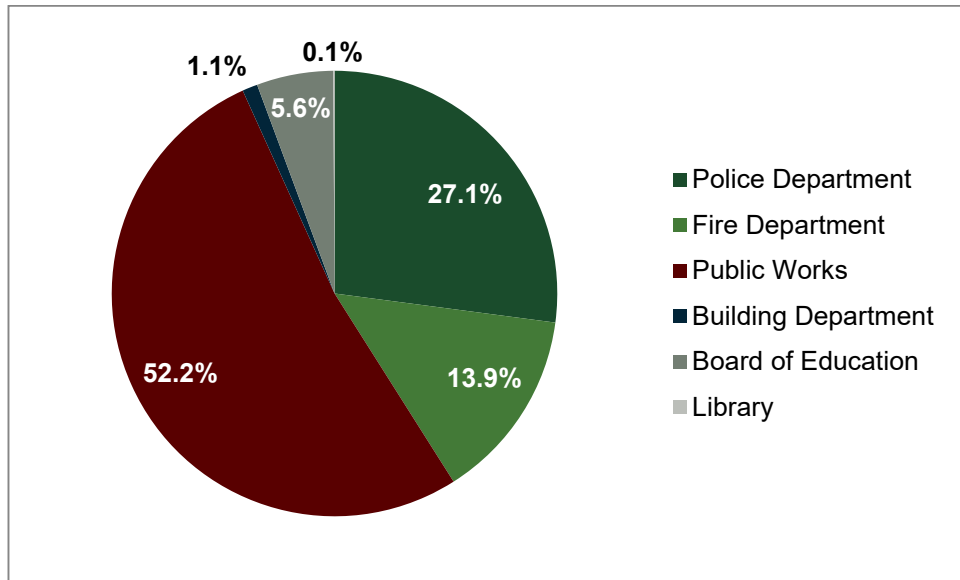
The VMT’s resulting from Margate’s annual operations generates approximately 490 metric tons of carbon dioxide equivalents. 52% of carbon emissions are generated by the Public Works department, followed by the Police Department at 27% and the Fire Department at 14%. The remaining departments generate approximately 7% of Margate’s vehicle-related carbon emissions.

TABLE 7: FUEL USAGE BY DEPARTMENT

Fuel	Police Department	Fire Department	Public Works	Building Department	Board of Education	Library	Total
Gasoline	130.3	12.2	62.0	5.5	17.0	0.4	227.4
Diesel	2.5	56.1	194.1	0.0	10.3	0.0	263.1
Total	132.8	68.3	256.2	5.5	27.3	0.4	490.5

Source: Margate City (2016)

FIGURE 4: DISTRIBUTION OF VEHICLE EMISSIONS BY DEPARTMENT



Source: Margate City (2016)

2.5 MUNICIPAL BUILDING SOLAR ARRAY

The roof of the municipal building at 9001 Winchester Avenue is covered by an approximately 77 kilowatt solar array. Given Margate’s climate and solar conditions, we estimate that the solar array is capable of generating approximately 105,000 kilowatt hours of electricity per year.²

The electricity produced by the solar array will displace electricity generated by more carbon intensive sources, such as coal and natural gas. This, in turn, will reduce the emission of carbon dioxide and carbon dioxide equivalents. Based on an emissions calculator developed by Sustainable New Jersey, we estimate that the electricity generated by the solar array will reduce the emission of carbon dioxide equivalents by 62.5 metric tons.

2.6 MUNICIPAL CARBON FOOTPRINT

The municipal operations of Margate generates approximately 2,270 metric tons of carbon dioxide equivalents, this includes in 290 metric tons from natural gas usage, nearly 1,500 tons indirectly from the electricity used by Margate, and over 490 tons from vehicle emissions (Table 8). The solar panel array located on the roof of the municipal building has the effect of eliminating over 62 metric tons of carbon dioxide equivalent emissions. This results in net municipal carbon footprint of 2,207 metric tons.

² The potential electricity production was calculated using the PVWatts Calculator developed by the National Renewable Energy Lab. See <https://goo.gl/KFs22x> for additional information.

TABLE 8: ESI CARBON EMISSION ESTIMATE

Contributor	Total Emissions (Metric Tons CO₂e)
Natural Gas Use	290.5
Electricity Usage	1,487.2
Vehicle Emissions	492.5
Solar Generation Reduction	-62.5
Total	2,207.6

Source: ESI (2017)

2.7 COMMUNITY CARBON FOOTPRINT

In 2014, the city entered into an agreement with Stockton College to complete both a municipal and community carbon footprint analysis. The municipal analysis included the carbon dioxide equivalent emissions generated by municipal operations. The community impacts included impacts from electricity and natural gas consumption from homes and businesses, emissions from vehicles and the carbon dioxide generated from the household waste.

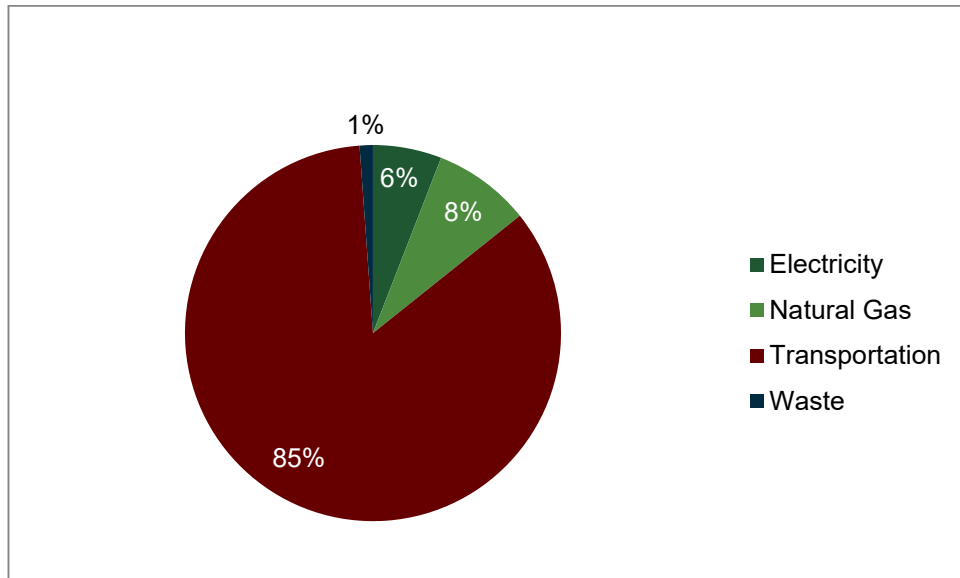
The analysis found that the community generates over 360,000 metric tons of carbon dioxide equivalent emissions. Approximately 85% of the emissions are generated by vehicle emissions, followed by natural gas and electricity (Figure 5).

TABLE 9: COMMUNITY CARBON FOOTPRINT ESTIMATE

Contributor	Total Emissions (Metric Tons CO₂e)
Natural Gas Use	30,075
Electricity Usage	21,275
Vehicle Emissions	304,600
Waste	4,140
Total	360,090

Source: Stockton College (2014)

FIGURE 5: COMMUNITY CARBON FOOTPRINT ESTIMATE



Source: Stockton College (2014)

DRAFT

3.0 CURRENT GREEN PROGRAMS IN PLACE

In an effort to be more “green” and reduce the environmental impact of the City and its residents, and sustain the quality of life on Margate for the long term, the city formed the “Sustainable Margate” committee in 2013. The committee is comprised of both city employees and local volunteers. The main goal of Sustainable Margate is to help coordinate municipal, long term sustainability efforts. The team also works regularly to work toward achieving certification from Sustainable Jersey, a state organization that offers grants based on sustainability standing

Working with Sustainable Margate, the city has implemented various programs in recent years to reach sustainability goals. They have worked on conducting a vehicle fleet inventory, waste and recycling programs, and transportation planning reforms. Since Hurricane Sandy, there has been an increased emphasis on coastal resilience. Margate also has strong community outreach that has engaged the public in local environmental issues. The result of this work has led to Margate receiving a Bronze rating from Sustainable New Jersey in October 2014.³ In 2016, Margate was awarded Blue Star certification by Clean Ocean Action, an organization that works to improve the quality of marine waters off the New Jersey coast.

Margate has undertaken many sustainability efforts to date which have resulted in tangible improvements as well as recognition for Margate as well as its Sustainability team.

3.1 COMMUNITY PARTNERSHIP AND OUTREACH

Both the city and Sustainable Margate have engaged in community outreach to educate and promote public awareness. In July 2014, the green team and the city hosted a forum on sea level rise, climate change, and storm water management. Attracting more than 100 people, the event brought New Jersey’s top experts in the field to inform participants about those environmental issues. The event provided a model to help city residents exchange information on community resilience planning, best practices in storm water management, and state concerns. There was also extensive media coverage which helped support the regional impact of this event.

There are numerous other events that have been held in the city before. In the summer of 2014, Margate School District passed a Safe Routes to School initiative with the aim of reducing traffic, improving road safety and the overall health of residents. This was followed by a Walk to School Wednesday event the following year, which promoted the importance of walking and cycling. Additional public meetings were held to engage the community in a new study about traffic safety, mobility and access.

In 2016, Sustainable Margate planted a native species garden and hosted a series of native species workshops to educate the public on benefits of gardening with native plant species. Sustainable Margate also hosted a number of events in that year focused on educating businesses and public on the use of reusable bags as a replacement for plastic shopping bags.

³ The Sustainable New Jersey certification is only valid for three years, at which time Margate would need to apply for recertification. Margate’s current certification expires in October 2017.

3.2 GREEN ORDINANCES

In June 2014, the Margate City Commissioners adopted the city's first green purchasing policy, also known as Environmentally Preferable Purchasing. The policy will serve as a guide for all future purchasing decisions. The goal of this policy is to encourage and increase the use of environmentally preferable products and services in the City of Margate. By including environmental considerations in purchasing decisions, Margate can promote practices that improve public and worker health, conserve natural resources, and reward environmentally conscious manufacturers, while remaining fiscally responsible.⁴

In May 2016, the Margate City Commissioners adopted a green ground and maintenance policy as part of a comprehensive approach to operate the municipality in an environmentally friendly and resource-efficient manner. The policy will help improve water quality, enhance wildlife habitat, improve public health, and reduce costs.⁵

3.3 EMERGENCY MANAGEMENT AND RESILIENCY

New Jersey's shore is especially vulnerable to sea level rise and flooding. According to the National Weather Service, sea level is rising faster in the state than the global average because of land subsidence (sinking).⁶ The past half century saw a sea level rise rate of .14 inches/year, while predicted future rates are expected to increase 0.5 inches per year. This means that by 2050 sea levels are expected to rise by about 1 foot and 3 feet by 2100 along the Jersey Shore.⁷

Margate is located within a special flood hazard area and is vulnerable to flooding from the Atlantic Ocean and the bay waters known as the Beach Thorofare. Much vulnerability has been identified as a result of Hurricane Sandy. The City experienced extensive damage from Sandy with \$10 million in losses as reported in 2013.⁸ The city was without power for days, and many municipal buildings incurred damages from the storm. The City took ownership of several military surplus vehicles to prepare for future storms.⁹

In 2004, the city published a Master Plan which outlined the need to preserve and enhance Margate's character by protecting its existing residential neighborhoods, providing community facilities and amenities that meet the needs and expectations of Margate residents and targeting reinvestment within the City's commercial districts. It also set goals to address flooding hazards in the city, such as revitalizing the city's bay front district.

⁴ <http://www.margate-nj.com/home/news/margate-going-green>

⁵ http://www.margate-nj.com/sites/margatenj/files/file/81-2016_green_grounds_and_maintenance_policy.pdf

⁶ "As if Atlantic City Didn't Have Enough Problems, Flooding Will Be an Issue," Schwartz, Glenn. 2016.

⁷ "Strategic Recovery Planning Report," 2014.

⁸ See "Strategic Recovery Planning Report," *supra* note 9.

⁹ See "Strategic Recovery Planning Report," *supra* note 9.

In 2014, Margate contracted a consultant to analyze flood risks. It reports that the most pressing issue facing the city and its residents is the need to elevate homes throughout the community. Currently, limited funds are available through Block Grants and the city will continue to pursue these and other funding sources. The Board of Commissioners also adopted an ordinance that gives home owners of storm damaged houses the opportunity to raise their homes to an elevation of 13 feet without a variance request.¹⁰

Another important infrastructure need is to reinforce the protective barriers around the city. Margate is exposed to flooding from both storm events (such as coastal flooding and ponding) and sea level rise. Bayside street elevations are vulnerable to flooding during coastal storms as they are only 5 to 6 feet above sea level. In response, the city has increased bulkhead height requirements.¹¹ Additionally, the state plans to build dunes and widen beaches as part of a beach replenishment project.¹²

Margate has taken the initiative to inform its residents about flooding risks and dangers. Available for download on the city's website, its flood brochure states that Margate is entirely in a special flood hazard zone. It emphasizes the fact that flooding from a hurricane is inevitable. The report outlines various techniques that can be used to reduce the potential of flood damage. Among the recommended techniques include elevating or relocating a structure and taking advantage of levees.¹³

3.4 LAND USE AND TRANSPORTATION

In 2013, the city submitted a resolution to participate in the Complete Streets Initiative, a policy that is focused on improving traffic safety for all users. The policy integrates the needs of all transit users, including pedestrians, cyclists, older citizens, and the mobility challenged. Other components of the initiative involves providing extra bicycle and walking connections around town; reducing traffic congestion; promoting healthy alternatives to driving; reducing reliance on fossil fuels; and incorporating sidewalks, bike lanes, safe crossings and other traffic amenities into the initial design of a project.¹⁴

As part of participating in the Complete Streets Initiative, Margate partnered with Ventnor on the development of bi-municipality biking and pedestrian plan. A draft of the plan was completed in October 2016.¹⁵

¹⁰ See "Strategic Recovery Planning Report," *supra* note 9.

¹¹ See "Strategic Recovery Planning Report," *supra* note 9.

¹² "Contested beach replenishment starting soon in Atlantic County," Spoto, MaryAnn. 2016.

¹³ "Floods Will Occur!", margate-nj.com

¹⁴ "Resolution Establishing and Adopting A City of Margate Complete Streets Policy," 2013.

¹⁵ http://www.ventnorcity.org/pdffiles/VM_Final%20Report_DRAFT%2010-6-16.pdf

3.5 VEHICLE FLEETS

In 2013, Margate completed a fleet inventory as part of its Sustainable Jersey certification. Part of the purpose of the inventory is to reduce the use of fossil fuels by using alternative fuel vehicles and improving fuel efficiency. In 2013, Margate's fleet consisted of 91 vehicle vehicles operated at an annual fuel cost of \$128,507. Nearly 95 percent of vehicles were city owned, with the remaining vehicles being leased.

Since Margate is a seasonal community, vehicle type and usage varies throughout the year and by department. The Fire Department recently received large cargo vehicles for use in storms and emergency evacuations. Public Works has the most vehicles in use, with pick-up trucks, utility trucks and dump trucks making up its most active fleet. The Police Department's vehicles are comprised of mostly SUVs and 4dr Sedans which it uses daily. The Library only has one van it uses daily for transporting material.

3.6 WASTE MANAGEMENT AND RECYCLING

Margate has been proactive in passing legislation that eliminates and reduces waste in the community and environment. The Margate Police Department established a permanent drug safety and disposal program in 2016. This was after a series of special drop off days that were conducted since 2013. The public's overwhelming response of the past events established a need for a permanent drug disposal system. A permanent prescription drop off box is available 24 hours a day, all year round.

Margate is also the first city in Atlantic County to collect rigid plastics from residents. The city amended its recycling ordinance in 2014 to allow residents to place these items on the curb. The Public Works department collects rigid plastic and (along with electronic waste) the first Tuesday of every month. Residents can also drop off recyclable materials on Wednesday afternoons.

The city also passed a new ordinance which requires property owners, managers and agents to transport carpet and foam padding directly a processing facility. Previously, carpet and foam padding was a problem because of the above average construction in low lying areas that were prone to flooding. This effort has saved the city a lot of money in the past 5 years (\$84 per ton) and has also removed a lot of potential waste.

4.0 IMPLEMENTATION – ACTIONS & RECOMMENDATIONS

In communities that are less developed, the sustainability plans tend to focus on land use patterns and development, in addition to changing the behavior of its residents and policy. However, Margate is a more fully developed community – most new construction occurs on land that has already been developed – as such the focus Margate’s sustainability plan should be on helping to change behavior and raise awareness and encouraging retrofitting and increasing interconnectivity.

The sustainability plan is broken down into the following topic areas:

- Community Awareness, Education, and Publicity
- Continuing Planning, Implementation, and Monitoring
- Green House Gas Emissions
- Transportation
- Waste management
- Land Use and Economic Development

For each topic area, the plan develops a matrix of proposed actions. The matrix includes a listing responsible parties and time frame for implementation. The timeframes are defined as follows:

- Short Range – less than one year
- Medium Range – one to five years
- Long Range – six or more years

4.1 COMMUNITY AWARENESS, EDUCATION, AND PUBLICITY

Sustainable Margate has been very successful at raising public awareness of environmental, conservation, and sustainability measures. These efforts should be continued and expanded. In addition, Sustainable Margate should develop a series of handbooks for various constituencies to help educate them on the importance of sustainability and steps that they could take. Examples include, but are not limited to:

- A guide for businesses to help them understand how they can incorporate sustainability into their operations;
- A guide for home builders on green building techniques and technologies;
- A guide for home owners on retrofitting their homes to improve energy efficiency;
- Education materials for children on the importance of sustainability and simple things that they can do
- Resources to help teachers integrate sustainability into lessons.

TABLE 10: AWARENESS RECOMMENDATIONS

Action	Responsibility	Time Frame
Designate Sustainable Margate as the lead entity in promoting community awareness and education and publicizing "green" events and achievements.	Municipality	Short
Sustainable Margate should take full advantage of all available channels, including social media, the city's newsletter and website, and publications to engage with the public.	Sustainable Margate	Short
Add a "green page" to Margate's Website that includes information on the city's green and sustainability initiatives. The page will serve as the homepage for Sustainable Margate.	Municipality and Sustainable Margate	Short
Include a periodically changing "green message" to all government emails and newsletters informing residents of small steps they can take.	Municipality	Short
Create a series of handbooks for different constituencies to educate them on various aspects of sustainability.	Sustainable Margate	Medium
Continue the work that Sustainable Margate has undertaken in engaging and educating the public on environmental and sustainability issues.	Sustainable Margate	Short
Work with the Margate City School District to integrate environmental education into the curricula.	Sustainable Margate and the School District	Medium
Provide tools and calculators (score cards, inventories, audits, home foot print calculators, etc.) on the City's website.	Sustainable Margate	Medium
Ask residents, businesses, and organizations to sign green pledge.	Sustainable Margate	Medium

4.2 CONTINUING PLANNING, IMPLEMENTATION, AND MONITORING

Sustainability planning should be an ongoing process, and not a onetime action. The Sustainable New Jersey Program, of which Margate currently has a bronze rating, requires recertification every three years, compared to New Jersey’s Municipal Land Use Law, which requires that a community’s master plan should be updated every six years.

Margate has adopted the commission form of city government. There are three commission seats, with each commissioner having an area of responsibility. The three areas of responsibility include: public safety, public works, and revenue and finance. Margate’s commissioners should

designate a commissioner whose portfolio will include sustainability. This will help to fully integrate sustainability considerations into government decision making.

TABLE 11: PLANNING RECOMMENDATIONS

Action	Responsibility	Time Frame
Work to complete recertification through Sustainable New Jersey.	Municipality and Sustainable Margate	Short
Designate a commissioner whose portfolio will include sustainability.	Municipality	Medium
Sustainable Margate should provide annual updates to the Board of Commissioners on the status of sustainability issues.	Sustainable Margate	Short

4.3 GREEN HOUSE GAS EMISSIONS

In 2009, the City completed an energy audit of all municipal buildings. The audits identified investments and modifications that could save approximately 230,000 kWh of electricity and nearly 14,800 therms of natural gas. This represents 24 and 27% of the city's electricity and natural gas usage. An energy audit of School District buildings identified over 515,000 kWh of potential electricity savings and annual natural gas savings of approximately 43,000 therms.

It is unclear what recommendations from the audits, if any, have been implemented. Margate City should update the energy audits to identify additional savings. The City should also develop a funding plan to implement the recommendations from the updated audits and also encourage the School District to develop a plan to budget for and pursue funding to implement any recommendations.

The largest user of electricity is the Margate is the Water and Sewer Authority, which is responsible for approximately 43% of the electricity usage by the City. The City should consider an electricity usage audit of the Water and Sewer Authority operations to identify potential energy/cost savings.

LED street lights have the potential to reduce electricity usage by between 50 and 80 percent. Streets lights in Margate currently use approximately 535,000 kWh of electricity. In addition to reduce electricity usage, LED street lights also have lower annual maintenance costs compared to traditional street lights. Margate should budget for and pursue funding to replace traditional street lights with more efficient LED street lights.

TABLE 12: GREENHOUSE GAS RECOMMENDATIONS

Action	Responsibility	Time Frame
Update the energy audits of municipal buildings.	Municipality	Medium
Budget for and pursue additional funding to offset the cost of implementing the recommendations from the updated energy audits.	Municipality	Medium
Budget for and pursue funding to replace all street lights with energy efficient LED-type lights.	Municipality	Medium
Encourage the Margate School Board to implement the recommendations of their energy audit.	Municipality, School District	Long
Encourage residents and businesses to undertake voluntary energy audits.	Sustainable Margate, Residents, Businesses	Long
Educate residents and businesses on the various energy efficiency programs available to help implement retrofit project.	Sustainable Margate	Short
Evaluate the potential of solar and renewable energy projects for other public buildings.	Municipality	Medium
Assess the City's zoning ordinances and amend to remove barriers to development of renewable energy systems in appropriate locations. Encourage owners of large surfaced flat roofs to install solar panels.	Municipality, Businesses	Long
Promote free online calculators that determine the cost of solar installations and the time period for pay back.	Sustainable Margate	Medium
Develop a "Go Solar" kit for residents and business that has a start-to-finish guide on installing solar panels.	Sustainable Margate	Long
Explore the creation of an incentive program (i.e. tax abatements, subsidies, rebates) for residents and businesses to install solar panels.	Municipality, Sustainable Margate	Long
Commit to an additional 20% of municipally-purchased power annually from renewable sources.	Municipality	Short
Encourage the purchase of Energy Star qualified washers, dishwashers, heating and Cooling systems, refrigerators, lighting, and roofing materials. Require Energy Star appliances for municipal uses.	Sustainable Margate, Municipality	Medium

4.1 TRANSPORTATION

To meet greenhouse gas emission reduction goals, Margate will need to ease its reliance on fossil-fueled vehicles. This can be achieved through a variety of strategies, including expanded access to transportation alternatives (such as biking and walking) – as well as cleaner fueling technologies.

According to Sustainable Margate, the city intends to improve the efficiency of its fleet by replacing their vehicles with more efficient ones. This has been an ongoing occurrence, though, as government resources have been pulled to address problems caused by Hurricane Sandy. Plans for improving the fleet have been put on hold until the city can resolve these challenges. However, the Green Team has been working on getting EV public charging stations and switching some vehicles to electric.

The recently completed Ventnor/Margate Bicycle and Transportation plan developed a series of recommendations and projects to improve bicycle and pedestrian safety. Some of the projects are large scale and will require time, while others are easier to implement. Margate should work with Ventnor to vigorously pursue funding for the large-scale investments. There are projects that Margate could undertake in short-term that could increase bicycle use. These include working with business community to identify locations within commercial corridors to provide bicycle parking and to provide bicycle racks at beach entrances.

TABLE 13: TRANSPORTATION RECOMMENDATIONS

Action	Responsibility	Time Frame
Work with Ventnor City to pursue funding to implement recommendations of the recently completed Bicycle & Pedestrian Plan	Municipality	Medium
Improve municipal vehicle fleet efficiency with alternative fuel or high-efficiency vehicles	Municipality	Medium
Provide bicycle parking at beach entrance points	Municipality	Short
Work with the business community to identify locations (within commercial corridors) where bicycle racks are needed to encourage their use	Municipality, Businesses	Short
Explore the feasibility of allowing for dedicated reserved residential parking spaces for electric vehicles.	Municipality	Short

4.2 WASTE MANAGEMENT AND RECYCLING

Margate has already undertaken a number of initiatives designed to reduce the amount of waste generated by residents. Margate was the first city in Atlantic County to amend its recycling ordinance to include the collection of bulky rigid plastic items. Residents and contractors are also required transport all carpet and foam padding to the Atlantic County Processing Facility, rather than disposing of it in a dumpster or the trash. Margate has also developed an e-waste collection program. Margate also runs the Margate City Convenience Center (MCCC) which provides a multitude of recycling services for businesses and residents.

Margate is an affluent shore community that has above average construction and renovation levels, which generates a lot of construction and demolition waste. Margate should adopt best practices for reducing construction and demolition waste, including developing a construction site recycling guide.

Margate can also take steps to reduce the amount of waste generated through daily operations. This includes requiring double-sided printing for all photocopying and printing, encouraging consultants and contractors to do the same, buying only recycled paper products, and encouraging the reuse of scrap paper. The city should also strive to have all forms available online and to be submitted online.

TABLE 14: WASTE MANAGEMENT RECOMMENDATIONS

Action	Responsibility	Time Frame
Track the amount of municipal waste generated and the amount of materials recycled by residents on a daily weekly, monthly basis. Use this information to set citywide waste reduction goals (i.e. reducing waste by X% by a certain date).	Sustainable Margate	Medium
Evaluate the availability of recycling containers on the beach, in commercial corridors and other City maintained spaces and make improvements where necessary.	Municipality	Short
Create a Construction and Demolition Recycling Ordinance to encourage finding alternatives uses for construction and demolition waste.	Municipality	Short
Require all large construction projects (i.e. over \$50,000) to submit a recycling and reuse plan that outlines how the developer will reduce , reuse, and/or recycle waste generated	Municipality	Medium
Develop a construction site recycling guide	Sustainable Margate	Medium
Explore the feasibility of increasing the number of items accepted for disposal at the MCCC (such as motor and vegetable oils).	Municipality	Medium
Explore the feasibility of providing a composting center at the MCCC.	Municipality	Medium
Encourage residents to "cut it and leave it" for grass clippings and allow professional landscapers to do the same under controlled circumstances.	Sustainable Margate	Short
Increase the education programs offered to businesses and residents about the importance of recycling	Sustainable Margate	Short
Encourage home composting of kitchen waste by providing discounted composting bins and how to guides.	Sustainable Margate	Short

4.3 LAND USE AND GREEN BUILDING

The intent of Margate’s sustainability plan is to incorporate green techniques and sustainable features into building designs and construction activities. The plan recommends that Margate initiate the development of a green building ordinance that incorporates sustainable principles,

such as the use of sustainable materials, energy efficiency, stormwater management, water use efficiency, and sustainable construction activities.

TABLE 14: LAND USE AND GREEN BUILDING RECOMMENDATIONS

Action	Responsibility	Time Frame
Regularly Review ordinances and address those that prevent incorporating sustainable design components.	Municipality	Short
Encourage sustainable development by private developers by offering to reduce application review fess and permit for projects registered for LEED certification.	Municipality	Short
Train building inspectors and code officials on green building practices and monitoring. Look for grants and other funding sources to fund their attendance at training or certification programs.	Municipality	Short
Promote the use of water conserving fixtures (low-flow and aeration) for toilets, showerheads, and faucets for new construction and rehabilitation projects.	Sustainable Margate	Short
Pilot a green roof on a municipal building or a school.	Municipality	Long
Develop a list of green contractors	Sustainable Margate	Medium
Explore requiring the use of Low Impact Development (LID) strategies, such as bio retention, rain gardens, rain barrels, filter strips, swales, and vegetated green roofs.	Municipality	Long
Encourage the use of permeable surfaces, such as porous pavement and permeable pavers) where feasible.	Sustainable Margate	Medium
Educate residents on the use of alternative water sources for irrigation systems.	Sustainable Margate	Medium
Encourage residents to replace traditional lawns, with organic, native plant gardens.	Sustainable Margate	Medium

ENVIRONMENTAL RESOURCE INVENTORY
CITY OF MARGATE
ATLANTIC COUNTY, NEW JERSEY

Prepared By
Remington Vernick & Walberg Engineers, Inc.
January 2017

TABLE OF CONTENTS

Section	Page
I. Introduction.....	3
II. Absecon Island.....	3
III. Margate City Overview.....	3-5
IV. Geology.....	5
V. Soils.....	6
VI. Climate.....	7
VII. Hydrology.....	7,8
VIII. Floodprone Areas.....	8
IX. Vegetation.....	8
X. Wildlife.....	9-11
XI. Wetlands.....	12
XII. Tidelands Claimed Areas.....	13
XIII. Historic District.....	13-14
XIV. Open Space.....	15

Tables

Table 1. Key to Soil Symbols Relating to the Soils Map.....	6
Table 2. Threatened and Endangered Species Documented with the City of Margate..	10
Table 3. Threatened and Endangered Species Documented within the Immediate Vicinity of the City of Margate.....	11

Figures

- Figure 1. Absecon Island
- Figure 2. Temperature and Precipitation Charts

Appendices

- Appendix A NJDEP- Natural Heritage Program Database Report
- Appendix B NJDEP- Green Acres Inventory

Maps

- Existing Conditions Aerial Map
- USGS Atlantic City and Ocean City Quadrangles
- Land Use Map
- Geology Map
- Soils Map
- Floodprone Areas Map
- Habitat Areas Map
- Wetlands Map
- Tidelands Map
- Open Space/Historic District Map

**ENVIRONMENTAL RESOURCE INVENTORY
CITY OF MARGATE
ATLANTIC COUNTY, NJ**

I. INTRODUCTION

The City of Margate has received a grant from the New Jersey Department of Environmental Protection, Environmental Services Program to partially fund an environmental resource inventory (ERI) for the City. This particular grant program provides matching grants to municipal environmental commissions in order to inventory the municipality's natural and cultural resources.

This report provides an overview of the natural and cultural resources of the City of Margate, Atlantic County, New Jersey. Natural resources refers to a resource found in nature that is valuable to humans, such as (but not limited to) soil, water, vegetation and wildlife. Cultural resources refers to evidence of past human activity (historic and/or prehistoric), such as (but not limited to) buildings, bridges, old roads, old sewer and/or water systems, structures with unique architecture, prehistoric village sites, historic or prehistoric artifacts, rock inscription, human burial sites, and battlefields.

II. ABSECON ISLAND

The City of Margate is located on Absecon Island, a barrier island, approximately 2.5 miles from the mainland, and directly across a network of salt marsh and waterways from the City of Northfield. The island is comprised of four (4) communities (from south to north): the Borough of Longport, Margate City, Ventnor City, and Atlantic City. The island is bounded to the south by Great Egg Harbor Inlet and to the north by Absecon Inlet, with frontage along the Atlantic Ocean to the east. Absecon Island consists of approximately 8 miles of sandy beaches, and all municipalities, although year-round communities, are popular summer destinations for the residents of New Jersey and the Philadelphia suburbs.

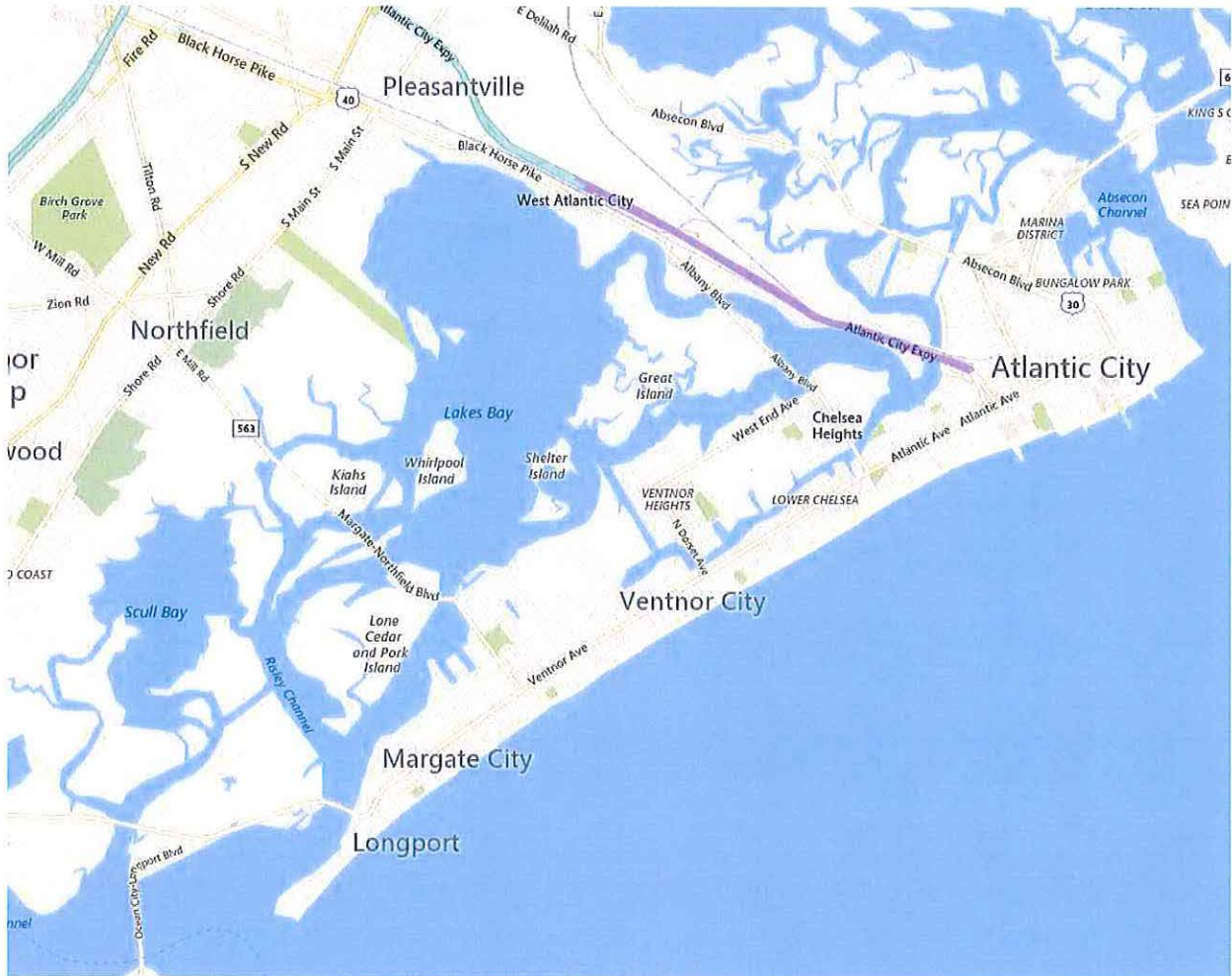
Please see Figure 1. Absecon Island and Its Four Municipalities.

III. MARGATE CITY- OVERVIEW

The Town. Margate is a seaside resort town, located directly on the ocean and the bay. As is typical of most Jersey Shore resort towns, with the exception of the beach, the majority of the City is developed with residential dwellings and commercial, tourism related businesses. There are a few open space/recreational areas such as the Jerome Avenue Recreational Area and Library Park, the beach, and the wetland complexes located in the northerly corner of the City.

For an overall view of the City, please see the aerial map included with this report entitled *Existing Conditions City of Margate Atlantic County, NJ*, and the *USGS Quadrangle City of Margate Atlantic County, NJ*.

Figure 1. Map of Absecon Island depicting Longport, Margate, Ventnor and Atlantic City
(Provided by Bing Maps)



Regulation. Margate's location on a barrier island positions the City within an environmentally sensitive area adjacent to the ocean and the back-bay. The coastal area and its associated wetlands and waterways are highly regulated by both State and federal agencies.

The City is located entirely within the CAFRA Zone as designated by the New Jersey Department of Environmental Protection (NJDEP). CAFRA stands for Coastal Area Facilities Review Act and regulates development within the CAFRA Zone.

Other State permitting that is potentially applicable to projects in Margate would include Waterfront Development, Coastal Wetlands, Tidelands Conveyances, Freshwater Wetlands and/or Flood Hazard Area (formerly Stream Encroachment). In addition, the US Army Corps of Engineers (USACE or Corps) has jurisdiction within tidal wetlands and waters. Any projects located within such areas would require a permit from the Corps as well as the NJDEP.

Existing Land Use. There is very little land in Margate that remains undeveloped and suitable for development. As discussed above, the City is highly developed with residential and commercial properties. Few vacant parcels remain. The northerly corner of the City contains the only large, vacant tracts of land in Margate, and those parcels consist of a stream corridor and/or wetlands.

The majority of new development will consist of the redevelopment/reconstruction of existing developed sites/structures.

Please see the land use coverage map included with this report entitled *Land Use City of Margate Atlantic County, NJ*.

Environment. The New Jersey shoreline is environmentally significant in that it is located along the Atlantic Flyway. The Atlantic Flyway is one of four (4) major North American flyways, or routes, followed by migratory birds when traveling from their particular breeding grounds to wintering grounds. The waterways and salt marsh complexes of the coastal zone, including Margate's back-bay area, serve as part of a migratory stopover for many species. The Edwin B. Forsythe National Wildlife Refuge, located just north of Atlantic City, is considered one of the best known birding locations on the Atlantic Coast by the NJ Audubon Society.

Geography: Geographically, Margate is located on Absecon Island, between Ventnor City (to the north), and the Borough of Longport (to the south). The Atlantic Ocean borders the City to the east, and the bay (consisting of an extensive salt marsh complexes and water areas including the Intercoastal Waterway, Lakes Bay, Skull Bay and Shelter Island Bay) borders the City to the west. Margate is situated east of the Cities of Northfield and Linwood, both located on the mainland.

Margate: City Facts & Figures

- ❖ 1.4 square miles
- ❖ 6,237 residents (2016)
- ❖ 30,000+/- summer population (residents and visitors)
- ❖ 7,114 housing units (2010 Census)
- ❖ population over 65 – 32% (2010 Census)
- ❖ racial mix – 95% white, 3% Hispanic, 2% Asian, Black, American Indian, Native Hawaiian and other Pacific islander
- ❖ cost/pupil – \$29,500 (total costs)
- ❖ average property tax bill - \$7,675 (2015)
- ❖ principle economic activity – tourism

Terrain. As previously discussed, Margate is located on Absecon Island, a barrier island. Barrier islands are flat, low lying islands found between backbays and oceans. Therefore, the terrain of Margate is typical of a barrier island, flat.

IV. GEOLOGY

The geologic landscape of New Jersey is comprised of distinctive landforms, divided into four (4) regions known as physiographic provinces: the Valley and Ridge Province, Highlands Province, Piedmont Province and Coastal Plain Province. Margate City is located within the Coastal Plain Physiographic Province. This province is the largest province in New Jersey, consisting of all of Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Monmouth, Ocean, and Salem Counties, and parts of Mercer and Middlesex Counties. The New Jersey Coastal Plain consists of southeastward dipping, unconsolidated sediments that range in age from Cretaceous to Miocene (90 to 10 million years old).

The bedrock geology of Margate consists of the Cohansey Formation and the Belleplain Member. Each of these formations comprise approximately half of the City. The Cohansey Formation is a water bearing zone that exists beneath almost the entire Coastal Plain. In Margate, it exists under approximately the western half of the City. The Belleplain Member exists under approximately the eastern half of Margate. It is part of the Kirkwood Formation, and is a confining layer consisting mainly of silt and clay.

It should be noted, NJDEP mapping designates a large portion of the City as historic fill. For purposes of the mapping, historic fill is an area of 5 acres or more of non-indigenous material placed on a site in order to raise the topographic elevation. The mapping makes no representation as to the composition of the fill material. The fill was most likely deposited in order to increase the area of developable land within the City.

Please see the map entitled *Geology City of Margate Atlantic County, NJ* for the location of the Cohansey Formation, Belleplain Member and historic fill.

V. SOILS

The soils of Margate consist of three (3) types: Hooksan-Urban land complex, 0-10% slopes, rarely flooded (HoruBr); Psammaquents, sulfidic substratum, 0-3% slopes, frequently flooded (PstAt); and Transquaking mucky peat, 0-1% slopes, very frequently flooded (TrkAv).

The majority of the City consists of Psammaquents, sulfidic substratum, which underlies most of the developed portion of the City. This soil type is reported to be frequently flooded and/or ponded with a depth to the water table of 0. It is associated with flat areas, and is listed as a hydric soil by the USDA- Natural Resources Conservation Service. It should be noted, the location of the historic fill approximately corresponds with this particular soil type. As previously stated, this area was most likely filled in order to create additional developable land within the City.

Hooksan- urban land complex is found from approximately Atlantic Avenue to the ocean, and includes the beach (entire length). This soil type is reported to be rarely flooded with a depth to the water table of 48 to 118 inches. It is typically associated with barrier islands, and is not listed as a hydric soil by the USDA- Natural Resources Conservation Service.

Two (2) areas of Transquaking mucky peat are located in the northerly corner of the City. The first area corresponds to the developed, residential area bounded by Gladstone Avenue, Fulton Avenue, Jerome Avenue and Lagoon Drive, and the high marsh, wetland complex associated with the tributary to Beach Thorofare. The second area corresponds with an undeveloped, wooded area identified as deciduous wooded and shrub/scrub wetlands. This particular soil type is reported to be frequently flooded and/or ponded with a water table at 0. It is associated with tidal marshes, and is listed as a hydric soil by the USDA- Natural Resources Conservation Service.

Please see the map entitled *Soils City of Margate Atlantic County, NJ* for the location of the soil types present throughout the City.

Table 1. Key to soil symbols relating to the Soils Map

Map Symbol	Soil Name	Texture	Drainage Class
HoruBr	Hooksan-Urban land complex, 0-10% slopes, rarely flooded	Fine sand	Excessively Drained
PstAt	Psammaquents, sulfidic substratum, 0-3% slopes, frequently flooded	Sand over organic material	Very Poorly Drained
TrkAv	Transquaking mucky peat, 0-1% slopes, very frequently flooded	Muck	Very Poorly Drained

VI. CLIMATE

The coastal zone tends to have a more temperate climate than the interior areas of the State. Seasonal temperature fluctuations are more gradual and less prone to extremes. In autumn and winter, the coastal areas are warmer than the interior portions of New Jersey. The warmer temperatures are a result of the ocean being warmer than the land surface. In the spring and summer months, breezes off the ocean pull cool air landward, keeping the coastline cooler.

As reported by The Weather Channel, July is traditionally the hottest month in Margate, with an average high temperature of 81°F, and an average low temperature of 70°F. The record high temperature of 101°F was recorded on 7/15/1999, and the record low temperature of 53°F was recorded on 7/1/1988. January is traditionally the coldest month with an average high temperature of 42°F, and an average low temperature of 29°F. The record high temperature of 72°F was recorded on 1/6/2007, and the record low temperature of -3°F was recorded on 1/19/1994. Margate has an average of 111 precipitation days and 206 days of sunshine, both above the national average of 102 days and 205 days respectively.

In regard to precipitation, Margate City receives approximately 44 inches of rain and 17 inches of snow yearly. The national averages are 39 inches of rain and 26 inches of snow yearly. According to The Weather Channel, the wettest month is March.

Please see Figure 2. Temperature and Precipitation Charts for Margate City, New Jersey.

VII. HYDROLOGY

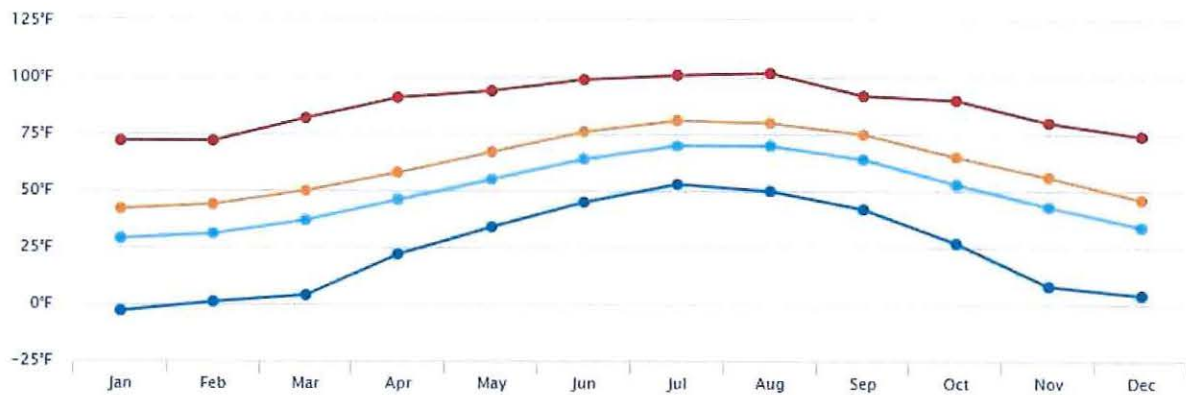
Watersheds. There are two (2) watersheds or drainage basins located within Margate. The westerly side of the City, from approximately Atlantic Avenue to the bay, drains towards the bay and is located in the Great Egg Harbor Bay/Lakes Bay/Skull Bay/Peck Bay sub-watershed (HUC14). The easterly side of the City, from approximately Atlantic Avenue to the ocean, drains towards the beach and is located in the Atlantic Coast (Ventnor to Great Egg) sub-watershed (HUC14).

Watercourses (Streams). One (1) stream is associated with the northerly section of Margate. It is a tidal tributary to Beach Thorofare, and is bounded approximately by Lagoon Drive, N. Gladstone Avenue, Amherst Avenue and N. Exeter Avenue. Saline, high marsh wetlands are mapped in association with the stream. No other streams are located within the City of Margate. It should be noted, the section of stream from the Intercoastal Waterway (Beach Thorofare) to Lagoon Drive is classified as a Category 1 (C1) Water. C1 waters (as defined in the State's Surface Water Quality Standards, NJAC 7:9B) are those waters designated for protection from measureable changes in water quality based on their exceptional ecological, recreational, and/or water supply significance, or exceptional fisheries resources. The protection includes the aesthetic value (color, clarity and scenic setting) and ecological integrity (habitat, water quality and biological functions) of these waters.

Figure 2. Temperature and Precipitation Charts for Margate City, New Jersey (Provided by the Weather Channel)

Monthly Average/Record Temperatures

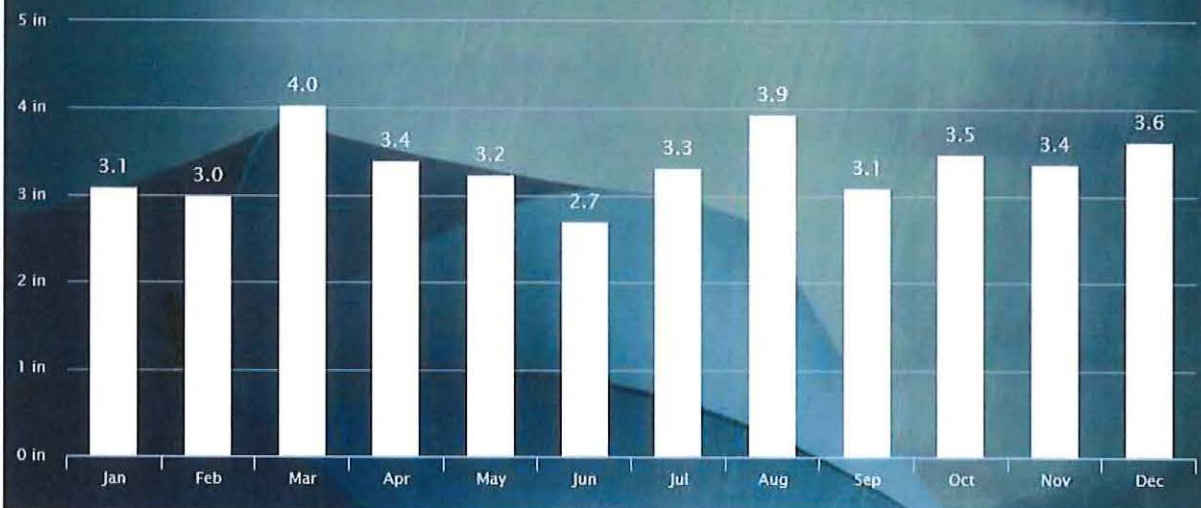
Average High Average Low Record High Record Low



July is on average the WARMEST month.

January is on average the COOLEST month.

Average Precipitation



Aquifers. An aquifer is defined by the US Geological Survey as a water bearing zone that will yield water in a usable quantity to a well or spring. In the Margate area, freshwater from precipitation passes through pervious surface areas and is stored in seven (7) underlying aquifers. Those aquifers are as follows: Cohansey Sand, Rio Grande Water Bearing Zone, Atlantic City 800 Foot Sand, Piney Point Aquifer, Mount Laurel Aquifer, Englishtown Aquifer System, and the Potomac Raritan Magothy (PRM) Aquifer System.

Aquifer recharge areas. Aquifer recharge occurs from freshwater infiltration through pervious, non-tidal areas. Ultimately, the freshwater infiltration into these aquifers is due to precipitation. Due to the developed nature of Margate, the City landscape would not be contributing a significant amount of recharge to the underlying aquifers.

VIII. FLOODPRONE AREAS

Pursuant to Atlantic County, NJ Preliminary FIRM Data prepared by FEMA, the majority of the City of Margate is located within the flood hazard area (100-year floodplain). The remainder of the City is depicted within the 500-year floodplain. Areas along the bay and the ocean are shown within the VE zone, areas of moderate wave action. The flood hazard area elevation associated with the bay is 11 NAVD 1988. Along the Atlantic Ocean, elevations range from 11 to 15 NAVD 1988. Flood elevations within the remainder of the City are within the AE zone, and range from 8 to 11 NAVD 1988. As defined by FEMA, V Zones are subject to high velocity wave action (a 3-foot breaking wave) from the 1% annual chance coastal flood. A Zones are subject to storm surge flooding from the 1% annual chance coastal flood. The E designations included with the V/A Zones indicate that elevations have been determined for those particular areas.

Please see the map entitled *Floodprone Areas City of Margate Atlantic County, NJ*, included with this report.

IX. VEGETATION

The landscape of Margate consists mainly of residential and commercial development with manicured lawns, maintained landscape areas, and tree lined streets. Very little natural area, consisting of native vegetation, is present in the City. However, there are two (2) natural, wetland areas in the City that consist of native vegetation. They are both located in the northerly corner of the City.

The first area consists of a high marsh wetland complex associated with the tributary to Beach Thorofare. It is located within the developed, residential area bounded by Gladstone Avenue, Fulton Avenue, Jerome Avenue and Lagoon Drive. The second area corresponds with an undeveloped, wooded area identified as deciduous wooded and shrub/scrub wetlands. This is an area of vacant land bounded approximately by N. Fredericksburg Avenue, N. Clermont Avenue, Burk Avenue and N. Belmont Drive.

X. WILDLIFE

As previously discussed in Section III above, the New Jersey shoreline is environmentally significant in that it is located along the Atlantic Flyway. The Atlantic Flyway is one of four (4) major North American flyways, or routes, followed by migratory birds when traveling from their particular breeding grounds to wintering grounds. The waterways and salt marsh complexes of the coastal zone, including Margate's back-bay area, serve as part of a migratory stopover for many species. The Edwin B. Forsythe National Wildlife Refuge, located just north of Atlantic City, is considered one of the best known birding locations on the Atlantic Coast by the NJ Audubon Society.

The Audubon Society reports that the salt marsh areas located within the vicinity of Atlantic City (which would include Margate's backbay area) support varieties of waterfowl, wading birds, shorebirds, gulls and terns. Thirty (30) species of geese, swans, and ducks have been documented within the Margate area, as well as forty (40) species of shorebirds and the nesting species Osprey, Bald eagle, Peregrine falcon, Saltmarsh/Seaside sparrow, Least bittern and Chuck-will's-widow. Although various species are present in and around Margate throughout the year, the most spectacular display of species is during the late summer/fall migration.

Threatened and Endangered Species

The NJDEP- Office of Natural Lands Management (ONLM), Natural Heritage Program (NHP) was contacted for information regarding documented threatened and endangered species found throughout and within the immediate vicinity (1/4 mile) of the City of Margate. A Database Report for the City was prepared, and the report identified multiple State and Federal listed species in association with Margate. Most of the identified species are bird species. It should be noted, the report also identifies other animal species tracked by the NJDEP- Division of Fish and Wildlife, Bureau of Endangered and Nongame Species Program. These species are known as Species of Special Concern.

Please see Appendix A for a copy of the NJDEP Natural Heritage Data Base Report (dated February 25, 2016).

Please see the map entitled *Habitat Areas City of Margate Atlantic County, NJ*, included with this report.

The NJDEP- Division of Fish and Wildlife defines Endangered Species, Threatened Species, and Species of Special Concern as follows:

- Endangered Species- a species whose prospects for survival within the State are in immediate danger due to one or several factors, such as loss or degradation of habitat, over-exploitation, predation, competition, disease or environmental pollution, etc. An endangered species likely requires immediate action to avoid extinction within New Jersey.
- Threatened Species- a species that may become endangered if conditions surrounding it begin to or continue to deteriorate. A threatened species is one

that is already vulnerable as a result of, for example, small population size, restricted range, narrow habitat affinities, significant population decline, etc.

- Species of Special Concern- species that warrant special attention because of some evidence of decline, inherent vulnerability to environmental deterioration, or habitat modification that would result in their becoming a threatened species. This category would also be applied to species that meet the foregoing criteria and for which there is little understanding of their current population status in the state.

The NJDEP- ONLM, NHP defines endangered plant species as native New Jersey plant species whose survival in the State or nation is in jeopardy.

Please see Tables 2 and 3. below for lists of threatened and endangered species that are reported to utilize various habitats within, and within the immediate vicinity of, the City of Margate.

Table 2. Threatened and Endangered Species documented within the City of Margate

Common Name	Scientific Name	Feature Type	Federal Status	State Status
Seabeach sandwort	Honckenya peploides var. robusta	Foraging		Endangered
Bald eagle	Haliaeetus leucocephalus	Foraging		Endangered
Black skimmer	Rynchops niger	Foraging		Endangered
Black-crowned night-heron	Nycticorax nycticorax	Foraging		Threatened
Cattle egret	Bubulcus ibis	Foraging		Threatened
Least tern	Sternula antillarum	Foraging		Endangered
Osprey	Pandion haliaetus	Foraging/Nest		Threatened
Yellow-crowned night-heron	Nyctanassa violacea	Foraging		Threatened
Fin whale	Balaenoptera physalus	Live individual sighting	Endangered	Endangered
Humpback whale	Megaptera novaeangliae	Live individual sighting	Endangered	Endangered
North Atlantic right whale	Eubalaena glacialis	Live individual sighting	Endangered	Endangered
Atlantic leatherback	Dermochelys coriacea	Occupied habitat	Endangered	Endangered

Table 3. Threatened and Endangered Species documented within the immediate vicinity (1/4 mile) of the City of Margate

Common Name	Scientific Name	Feature Type	Federal Status	State Status
Seabeach sandwort	Honckenia peploides var. robusta	Foraging		Endangered
Bald eagle	Haliaeetus leucocephalus	Foraging		Endangered
Black skimmer	Rynchops niger	Foraging		Endangered
Black-crowned night-heron	Nycticorax nycticorax	Foraging/Nesting colony		Threatened
Cattle egret	Bubulcus ibis	Foraging		Threatened
Least tern	Sternula antillarum	Foraging		Endangered
Osprey	Pandion haliaetus	Foraging/Nest		Threatened
Yellow-crowned night-heron	Nyctanassa violacea	Foraging/Nesting colony		Threatened
Fin whale	Balaenoptera physalus	Live individual sighting	Endangered	Endangered
Humpback whale	Megaptera novaeangliae	Live individual sighting	Endangered	Endangered
North Atlantic right whale	Eubalaena glacialis	Live individual sighting	Endangered	Endangered
Atlantic leatherback	Dermochelys coriacea	Occupied habitat	Endangered	Endangered

XI. WETLANDS

Wetlands or wetland as defined by the State of New Jersey in its wetland regulations (NJAC 7:7A and NJAC 7:7) is "an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions."

The NJDEP- Division of Land Use Regulation (DLUR) has produced wetland mapping that shows the generalized location of wetlands for the entire state. These maps are for informational purposes only, and are available for viewing and downloading on the State's interactive mapping system NJGeoWeb.

In New Jersey, freshwater wetlands are delineated utilizing the three parameter approach of soils, vegetation and hydrology as outlined in the 1989 Federal Manual for Identifying and Delineating Jurisdictional Wetlands. Prior to any development activities on a site, all wetlands must be field delineated using the three (3) parameter approach. Any impacts to freshwater wetlands or associated transition area (buffers) are regulated by the NJDEP-DLUR. The NJDEP will assign a buffer to all freshwater wetland areas. The buffer will be 0', 50' or 150' and is dependent upon the resource value classification of the wetland.

Coastal wetlands have been mapped by the NJDEP-Bureau of Tidelands Management. These maps are promulgated, and the mapped wetland boundaries are legal boundaries. Tidally influenced wetlands not shown on these maps are regulated pursuant to the freshwater wetland rules. Impacts to coastal wetlands are regulated by both the NJDEP-DLUR and the US Army Corps of Engineers (USACE). The NJDEP-DLUR applies up to a 300 foot buffer adjacent to coastal wetlands. The USACOE does not apply buffers to wetlands, freshwater or tidal.

Both freshwater and coastal wetlands are present within the City of Margate. Coastal wetlands are associated with areas of tidal inundation. A tidal tributary to Beach Thorofare is bounded approximately by Lagoon Drive, N. Gladstone Avenue, Amherst Avenue and N. Exeter Avenue. Saline, high marsh wetlands are mapped in association with this area of Margate, which is located in the northerly section of the City.

Various types of freshwater wetlands are found within the City. Several locations of mapped, vegetated dunes are located along the back beach, and identified as wetlands. In addition, a large area of vacant land bounded approximately by N. Fredericksburg Avenue, N. Clermont Avenue, Burk Avenue and N. Belmont Drive is located in the northerly corner of the City. This vacant area is identified as wetlands by the NJDEP mapping system. Mapped wetlands found in this location are reported as the following: managed wetland in maintained lawn greenspace, deciduous wooded wetlands, mixed shrub/scrub wetlands (deciduous dominant), deciduous shrub/scrub, wetland right of way, and phragmites dominant interior wetlands.

Please see the map entitled *Wetlands City of Margate Atlantic County, NJ*, included with this report.

It should be noted, various State threatened/endangered bird species have been identified in association with Margate. Those species are reported to forage within and within the vicinity of the City. An osprey nest is also reported in association with the City. The coastal wetland corridor, vegetated dune wetlands and wooded/shrubby freshwater wetland described above, are potential habitat for many of the identified species.

XII. TIDELANDS CLAIMED AREAS

The NJDEP- Bureau of Tidelands Management is one of the State agencies that regulates tidal waters, also known as tidelands or riparian lands. These areas include lands currently and formerly below mean high water. Only natural waterways (including man manipulated, natural waters) are regulated. The State of New Jersey claims ownership of these tidally flowed lands. Any construction activities/development taking place within State Claimed area requires a Tidelands Conveyance from the Bureau. A conveyance can take the form of a grant, lease or license. A grant reflects the sale of formerly flowed State claimed tidelands (filled tidelands areas). It should be noted, the State no longer sells currently flowed areas. Leases and licenses reflect the rental of Tidelands Claimed areas. All fees collected in association with the sale and/or rental of tidelands is deposited into a State education fund. The fees are also used to guarantee the bonds sold by local school boards.

The Atlantic Ocean and Beach Thorofare, both tidal waterbodies, border Margate to the east and west respectively. Both are claimed tidelands areas by the State. There is a network of former, tidal creeks that were previously associated with Margate. However, those creeks were filled in association with the development of the City. Those aforementioned former tidal creeks are claimed by the State. The tributary to Beach Thorofare is not depicted as a State Claimed Tidelands area because it is considered a manmade (artificial) feature.

Please see the map entitled *Tidelands City of Margate Atlantic County, NJ*, included with this report.

XIII. HISTORIC DISTRICT

Historic Districts (as identified by NJ-GeoWeb)

There are two (2) historic districts associated with Margate, Marven Gardens (of Monopoly fame) and the Ventnor Parkway Historic district.

- Marven Gardens is a residential section of Margate located along the border with Ventnor. It is bounded by Fredericksburg Avenue, Ventnor Avenue, Brunswick Avenue, and Winchester Avenue. The streets within the neighborhood are Circle Drive, East Drive and West Drive. The homes within this section of the City are circa 1920 and 1930. It is reported that the neighborhood's name was created from a combination of the adjoining cities names- **M**argate and **V**entnor and due to the neighborhood's location on the border of said cities. Marven Gardens'

claim to fame is the fact that it is a property on the board game Monopoly. It is reported that, on the original game boards, Marven was misspelled as Marvin. A correction to the proper spelling was made in 1995 by the manufacturer of the game. Marven Gardens is listed on both the State and National Registers of Historic Places.

- The Ventnor Parkway Historic District consists of North Ventnor Avenue, Ventnor Avenue, South Ventnor Avenue, and extends from Wilson Avenue to Mansfield Avenue. The listing includes the properties that have frontage along the aforementioned streets. The reported period of significance was from 1920 to 1930.

Historic Properties (as identified by NJ-GeoWeb)

- The Individual Properties associated with Marven Gardens
- The individual properties associated with the Ventnor Avenue Historic District.
- Lucy the Elephant- Decatur and Atlantic Avenues
- 8607 Atlantic Avenue
- 8700 Atlantic Avenue (100 S. Osborne Avenue)
- 7504 Atlantic Avenue
- 7906 Atlantic Avenue
- The Margate City Yacht Club- 412 N. Vendrome Avenue
- Community Building- 209 N. Decatur Avenue
- Margate Municipal Building- 1 S. Washington Avenue

Lucy the Elephant is the most recognizable, and one of the most memorable, features of the City of Margate. This structure, a 65 foot tall, 60 foot long, 18 foot wide elephant, originally made of wood and tin, was built by James V. Lafferty in the late 1880's to promote real estate sales of seaside properties. Mr. Lafferty was issued a patent by the US Patent Office giving him the exclusive right to make, use or sell animal shaped buildings for 17 years. Of the three (3) reported elephant structures built by Mr. Lafferty, only Lucy remains. After falling into disrepair in the 1960's, Lucy was slated for demolition. In order to prevent her demise, a group of Margate residents formed a committee to save Lucy. Today Lucy is listed on both the State and National Registers of Historic Places. Her birthday is celebrated on or about July 20th of each year.

Please see the map entitled *OpenSpace/Historic District City of Margate Atlantic County, NJ*, included with this report.

XIV. OPEN SPACE

The City of Margate is largely developed with residential and commercial properties, typical of a seaside resort town. However, there are open space properties associated with the City. The dominant open space areas have been identified, and are associated with the following areas of the City:

- The beach
- The freshwater wetland area located in the northerly corner of the City
- The coastal wetland associated with the tributary to Beach Thorofare, also located within the northerly corner of the City

A listing of the City's open space parcels, by block and lot, and as reported to the NJDEP-Green Acres program, is provided in Appendix B of this document. This list was obtained from the NJDEP- Green Acres Program, Open Space Database, available on the Green Acres web site.

Please see the map entitled *OpenSpace/Historic District City of Margate Atlantic County, NJ*, included with this report.

APPENDIX A

NJDEP-NHP DATABASE REPORT

ENVIRONMENTAL RESOURCE INVENTORY

CITY OF MARGATE

ATLANTIC COUNTY, NJ



State of New Jersey

CHRIS CHRISTIE
Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
State Forestry Services
Mail Code 501-04
ONLM -Natural Heritage Program
P.O. Box 420
Trenton, NJ 08625-0420
Tel. #609-984-1339
Fax. #609-984-1427

BOB MARTIN
Commissioner

KIM GUADAGNO
Lt. Governor

February 25, 2016

Jeanmarie Murphy
Remington & Vernick Engineers
232 Kings Highway East
Haddonfield, NJ 08033

Re: Margate City Environmental Resource Inventory (ERI)
Margate City, Atlantic County

Dear Ms. Murphy:

Thank you for your data request regarding rare species information for the above referenced project site in Margate City, Atlantic County.

Searches of the Natural Heritage Database and the Landscape Project (Version 3.1) are based on a representation of the boundaries of your project site in our Geographic Information System (GIS). We make every effort to accurately transfer your project bounds from the topographic map(s) submitted with the Request for Data into our Geographic Information System. We do not typically verify that your project bounds are accurate, or check them against other sources.

We have checked the Landscape Project habitat mapping and the Biotics Database for occurrences of any rare wildlife species or wildlife habitat on the referenced site. The Natural Heritage Database was searched for occurrences of rare plant species or ecological communities that may be on the project site. Please refer to Table 1 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented on site. A detailed report is provided for each category coded as 'Yes' in Table 1.

We have also checked the Landscape Project habitat mapping and Biotics Database for occurrences of rare wildlife species or wildlife habitat in the immediate vicinity (within ¼ mile) of the referenced site. Additionally, the Natural Heritage Database was checked for occurrences of rare plant species or ecological communities within ¼ mile of the site. Please refer to Table 2 (attached) to determine if any rare plant species, ecological communities, or rare wildlife species or wildlife habitat are documented within the immediate vicinity of the site. Detailed reports are provided for all categories coded as 'Yes' in Table 2. These reports may include species that have also been documented on the project site.

The Natural Heritage Program reviews its data periodically to identify priority sites for natural diversity in the State. Included as priority sites are some of the State's best habitats for rare and endangered species and ecological communities. Please refer to Tables 1 and 2 (attached) to determine if any priority sites are located on or in the vicinity of the site.

A list of rare plant species and ecological communities that have been documented from the county (or counties), referenced above, can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/countylist.html>. If suitable habitat is present at the project site, the species in that list have potential to be present.

Status and rank codes used in the tables and lists are defined in EXPLANATION OF CODES USED IN NATURAL HERITAGE REPORTS, which can be downloaded from http://www.state.nj.us/dep/parksandforests/natural/heritage/nhpcodes_2010.pdf.

If you have questions concerning the wildlife records or wildlife species mentioned in this response, we recommend that you visit the interactive NJ-GeoWeb website at the following URL, <http://www.state.nj.us/dep/gis/geoweb splash.htm> or contact the Division of Fish and Wildlife, Endangered and Nongame Species Program at (609) 292-9400.

NHP File No. 16-3907435-9422

PLEASE SEE 'CAUTIONS AND RESTRICTIONS ON NHP DATA', which can be downloaded from <http://www.state.nj.us/dep/parksandforests/natural/heritage/newcaution2008.pdf>.

Thank you for consulting the Natural Heritage Program. The attached invoice details the payment due for processing this data request. Feel free to contact us again regarding any future data requests.

Sincerely,

A handwritten signature in blue ink, appearing to read 'R. Cartica', with a long horizontal flourish extending to the right.

Robert J. Cartica
Administrator

c: NHP File No. 16-3907435-9422

Table 1: On Site Data Request Search Results (7 Possible Reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Possibly on Project Site Based on Search of Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	No	0 pages included
2. On or In the Immediate Vicinity of the Project Site Based on Search of the Natural Heritage Database: Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
3. Natural Heritage Priority Sites On Site	No	0 pages included
4. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	2 page(s) included
5. Vernal Pool Habitat on the Project Site Based on Search of Landscape Project 3.1	No	0 pages included
6. Rare Wildlife Species or Wildlife Habitat on the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
7. Other Animal Species On the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	Yes	1 page(s) included

**On or In the Immediate Vicinity of the
 Project Site Based on Search of the
 Natural Heritage Database: Rare Plant Species and
 Ecological Communities Currently Recorded in the New
 Jersey Natural Heritage Database**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Honckenya peploides var. robusta	Seabeach Sandwort		E	LP, HL	G5T4	S1	Y - Yes	1912-05-26	Longport, near point.
Total number of records:		1							

**Rare Wildlife Species or Wildlife Habitat on the Project
Site Based on Search of
Landscape Project 3.1 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Black Skimmer	Rynchops niger	Foraging	4	NA	State Endangered	G5	S1B,S1N
	Black-crowned Night-heron	Nycticorax nycticorax	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Caspian Tern	Hydroprogne caspia	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Cattle Egret	Bubulcus ibis	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Common Tern	Sterna hirundo	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Glossy Ibis	Plegadis falcinellus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Least Tern	Sternula antillarum	Foraging	4	NA	State Endangered	G4	S1B,S1N
	Little Blue Heron	Egretta caerulea	Foraging	2	NA	Special Concern	G5	S3B,S3N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B
	Osprey	Pandion haliaetus	Nest	3	NA	State Threatened	G5	S2B
	Snowy Egret	Egretta thula	Foraging	2	NA	Special Concern	G5	S3B,S4N

**Rare Wildlife Species or Wildlife Habitat on the Project
Site Based on Search of
Landscape Project 3.1 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Tricolored Heron	Egretta tricolor	Foraging	2	NA	Special Concern	G5	S3B,S3N
	Yellow-crowned Night-heron	Nyctanassa violacea	Foraging	3	NA	State Threatened	G5	S2B,S2N
<i>Mammalia</i>								
	Fin Whale	Balaenoptera physalus	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G3G4	S1
	Humpback Whale	Megaptera novaeangliae	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G4	S1
	North Atlantic Right Whale	Eubalaena glacialis	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G1	S1
<i>Reptilia</i>								
	Atlantic Leatherback	Dermochelys coriacea	Occupied Habitat	5	Federally Listed Endangered	State Endangered	G2	S1

**Other Animal Species
 On the Project Site Based on
 Additional Species Tracked by
 Endangered and Nongame Species Program**

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Grank	Srank
-----------------	-------------	---------------------------	-------------------------	-------	-------

Vertebrate Animals

Tursiops truncatus	Bottlenose Dolphin			G5	S3
--------------------	--------------------	--	--	----	----

Total number of records: 1

Table 2: Vicinity Data Request Search Results (6 possible reports)

<u>Report Name</u>	<u>Included</u>	<u>Number of Pages</u>
1. Immediate Vicinity of the Project Site Based on Search of Natural Heritage Database Rare Plant Species and Ecological Communities Currently Recorded in the New Jersey Natural Heritage Database	Yes	1 page(s) included
2. Natural Heritage Priority Sites within the Vicinity	No	0 pages included
3. Rare Wildlife Species or Wildlife Habitat Within the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Species Based Patches	Yes	2 page(s) included
4. Vernal Pool Habitat In the Immediate Vicinity of Project Site Based on Search of Landscape Project 3.1	No	0 pages included
5. Rare Wildlife Species or Wildlife Habitat In the Immediate Vicinity of the Project Site Based on Search of Landscape Project 3.1 Stream Habitat File	No	0 pages included
6. Other Animal Species In the Immediate Vicinity of the Project Site Based on Additional Species Tracked by Endangered and Nongame Species Program	Yes	1 page(s) included

Immediate Vicinity of the Project Site
Based on Search of Natural Heritage Database
Rare Plant Species and Ecological Communities Currently Recorded in
the New Jersey Natural Heritage Database

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Regional Status	Grank	Srank	Identified	Last Observed	Location
<i>Vascular Plants</i>									
Honckenya peploides var. robusta	Seabeach Sandwort		E	LP, HL	G5T4	S1	Y - Yes	1912-05-26	Longport, near point.
Plantago maritima var. juncooides	Seaside Plantain			HL	G5T5	S2		1997	Ventnor City tract between the West Canal and the Ventnor - Margate City line, approximately bordered by Buffalo, Wissahickon, Wellington, Swarthmore and Burk Avenues.

Total number of records: 2

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.1 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
<i>Aves</i>								
	Bald Eagle	Haliaeetus leucocephalus	Foraging	4	NA	State Endangered	G5	S1B,S2N
	Black Skimmer	Rynchops niger	Foraging	4	NA	State Endangered	G5	S1B,S1N
	Black-crowned Night-heron	Nycticorax nycticorax	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Black-crowned Night-heron	Nycticorax nycticorax	Nesting Colony	3	NA	State Threatened	G5	S2B,S3N
	Caspian Tern	Hydroprogne caspia	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Cattle Egret	Bubulcus ibis	Foraging	3	NA	State Threatened	G5	S2B,S3N
	Common Tern	Sterna hirundo	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Common Tern	Sterna hirundo	Nesting Colony	2	NA	Special Concern	G5	S3B,S4N
	Glossy Ibis	Plegadis falcinellus	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Glossy Ibis	Plegadis falcinellus	Nesting Colony	2	NA	Special Concern	G5	S3B,S4N
	Great Blue Heron	Ardea herodias	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Least Tern	Sternula antillarum	Foraging	4	NA	State Endangered	G4	S1B,S1N
	Little Blue Heron	Egretta caerulea	Foraging	2	NA	Special Concern	G5	S3B,S3N
	Little Blue Heron	Egretta caerulea	Nesting Colony	2	NA	Special Concern	G5	S3B,S3N
	Osprey	Pandion haliaetus	Foraging	3	NA	State Threatened	G5	S2B
	Osprey	Pandion haliaetus	Nest	3	NA	State Threatened	G5	S2B

**Rare Wildlife Species or Wildlife Habitat Within the
Immediate Vicinity of the Project Site Based on Search of
Landscape Project 3.1 Species Based Patches**

Class	Common Name	Scientific Name	Feature Type	Rank	Federal Protection Status	State Protection Status	Grank	Srank
	Snowy Egret	Egretta thula	Foraging	2	NA	Special Concern	G5	S3B,S4N
	Snowy Egret	Egretta thula	Nesting Colony	2	NA	Special Concern	G5	S3B,S4N
	Tricolored Heron	Egretta tricolor	Foraging	2	NA	Special Concern	G5	S3B,S3N
	Tricolored Heron	Egretta tricolor	Nesting Colony	2	NA	Special Concern	G5	S3B,S3N
	Yellow-crowned Night-heron	Nyctanassa violacea	Foraging	3	NA	State Threatened	G5	S2B,S2N
	Yellow-crowned Night-heron	Nyctanassa violacea	Nesting Colony	3	NA	State Threatened	G5	S2B,S2N
<i>Mammalia</i>								
	Fin Whale	Balaenoptera physalus	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G3G4	S1
	Humpback Whale	Megaptera novaeangliae	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G4	S1
	North Atlantic Right Whale	Eubalaena glacialis	Live Individual Sighting	5	Federally Listed Endangered	State Endangered	G1	S1
<i>Reptilia</i>								
	Atlantic Leatherback	Dermodochelys coriacea	Occupied Habitat	5	Federally Listed Endangered	State Endangered	G2	S1

Other Animal Species
In the Immediate Vicinity of the Project Site Based on
Additional Species Tracked by
Endangered and Nongame Species Program

Scientific Name	Common Name	Federal Protection Status	State Protection Status	Grank	Srank
<i>Vertebrate Animals</i>					
Malaclemys terrapin terrapin	Northern Diamondback Terrapin			G4T4Q	S3
Tursiops truncatus	Bottlenose Dolphin			G5	S3
Total number of records:	2				

APPENDIX B

NJDEP-GREEN ACRES INVENTORY

ENVIRONMENTAL RESOURCE INVENTORY

CITY OF MARGATE

ATLANTIC COUNTY, NJ

[njhome](#) | [citizen](#) | [business](#) | [government](#) | [services A to Z](#) | [departments](#)


 new jersey **dep**
 department of environmental protection


Green Acres Program

[njdep home](#) | [ga home](#)

Open Space Database

Facility Name: If followed by - DIV = parcel was entirely diverted; if followed by - P/DIV = parcel was partially diverted; and if followed by - COMP = parcel was a compensation piece for previous diversion.

Interest: CR: Conservation Restriction; Fee: Fee Simple; Lease: Leased land

Type: M - Municipal; C - County; N - Non Profit

County: ATLANTIC

Municipality: MARGATE CITY

Block	Lot	Facility Name	Interest	Type
1.01	7	PUBLIC BEACH	FEE	M
1.02	7	PUBLIC BEACH	FEE	M
10.02	31	PUBLIC BEACH	FEE	M
10.06	1	PUBLIC BEACH	FEE	M
1007.01	17	VACANT LOT	FEE	M
1007.01	18	MINNIE CREEK WETLANDS	FEE	M
1007.01	19	MINNIE CREEK WETLANDS	FEE	M
1007.01	20	MINNIE CREEK WETLANDS	FEE	M
1007.01	21	MINNIE CREEK WETLANDS	FEE	M
1007.01	22	MINNIE CREEK WETLANDS	FEE	M
1007.01	23	MINNIE CREEK WETLANDS	FEE	M
1007.01	24	MINNIE CREEK WETLANDS	FEE	M
1007.01	29	MINNIE CREEK WETLANDS	FEE	M
1007.01	30	MINNIE CREEK WETLANDS	FEE	M
1007.01	31	MINNIE CREEK WETLANDS	FEE	M
1007.01	32	MINNIE CREEK WETLANDS	FEE	M
1007.01	5	MINNIE CREEK WETLANDS	FEE	M
1007.01	6	MINNIE CREEK WETLANDS	FEE	M
1007.01	7	MINNIE CREEK WETLANDS	FEE	M
1007.01	8	MINNIE CREEK WETLANDS	FEE	M
1007.02	1	MINNIE CREEK WETLANDS	FEE	M
1007.02	2	MINNIE CREEK WETLANDS	FEE	M
1007.02	25	MINNIE CREEK WETLANDS	FEE	M
1007.02	26	MINNIE CREEK WETLANDS	FEE	M
1007.02	27	MINNIE CREEK WETLANDS	FEE	M
1007.02	28	MINNIE CREEK WETLANDS	FEE	M
1007.02	3	MINNIE CREEK WETLANDS	FEE	M
1007.02	4	MINNIE CREEK WETLANDS	FEE	M
1007.02	9	MINNIE CREEK WETLANDS	FEE	M
11.01	15	PUBLIC BEACH	FEE	M
11.02	7	PUBLIC BEACH	FEE	M
14.01	1	PUBLIC BEACH	FEE	M
16	9	PUBLIC BEACH	FEE	M
17	9	PUBLIC BEACH	FEE	M
18	18	PUBLIC BEACH	FEE	M
19.01	1	PUBLIC BEACH	FEE	M

19	9	PUBLIC BEACH	FEE	M
2.01	7	PUBLIC BEACH	FEE	M
2.02	5	PUBLIC BEACH	FEE	M
2.02	7	PUBLIC BEACH	FEE	M
20	9	PUBLIC BEACH	FEE	M
21	9	PUBLIC BEACH	FEE	M
22	9	PUBLIC BEACH	FEE	M
23	11	PUBLIC BEACH	FEE	M
23	9	PUBLIC BEACH	FEE	M
24	4	PUBLIC BEACH	FEE	M
25	4	PUBLIC BEACH	FEE	M
26	2	LUCY PARK	FEE	M
27.01	86	PUBLIC BEACH	FEE	M
27.02	1	PUBLIC BEACH	FEE	M
28.01	66	PUBLIC BEACH	FEE	M
29.01	46	PUBLIC BEACH	FEE	M
29.01	62	PUBLIC BEACH	FEE	M
29.01	64	PUBLIC BEACH	FEE	M
3.01	4	PUBLIC BEACH	FEE	M
3.02	11	PUBLIC BEACH	FEE	M
3.02	5	PUBLIC BEACH	FEE	M
3.03	1	PUBLIC BEACH	FEE	M
30.01	26	PUBLIC BEACH	FEE	M
31.01	21	PUBLIC BEACH	FEE	M
31.03	1	PUBLIC BEACH	FEE	M
32.01	2	PUBLIC BEACH	FEE	M
325	126	PLAYGROUND	FEE	M
4.01	5	PUBLIC BEACH	FEE	M
4.02	7	PUBLIC BEACH	FEE	M
4.03	1	PUBLIC BEACH	FEE	M
5.01	16	PUBLIC BEACH	FEE	M
5.03	1	PUBLIC BEACH	FEE	M
510.01	77	JEROME AVE REC FACILITY	FEE	M
510.02	85.01	JEROME AVE REC FACILITY	FEE	M
510.04	13	JEROME AVE REC FACILITY	FEE	M
510.05	97	JEROME AVE REC FACILITY	FEE	M
512.01	1	JEROME AVE REC FACILITY	FEE	M
526	4.01	WATERFRONT PARK	FEE	M
526	4.02	WATERFRONT PARK	FEE	M
527	5.01	WATERFRONT PARK	FEE	M
527	5.02	WATERFRONT PARK	FEE	M
6.01	7	PUBLIC BEACH	FEE	M
6.02	14	PUBLIC BEACH	FEE	M
6.03	1	PUBLIC BEACH	FEE	M
602.01	29	VACANT LOT	FEE	M
602.01	30	VACANT LOT	FEE	M
602.01	31	VACANT LOT	FEE	M
602.01	32	VACANT LOT	FEE	M
602.01	33	VACANT LOT	FEE	M
602.01	34	VACANT LOT	FEE	M
602.01	35	VACANT LOT	FEE	M
602.01	36	VACANT LOT	FEE	M
602.01	37	VACANT LOT	FEE	M
602.01	38	VACANT LOT	FEE	M
602.01	39	VACANT LOT	FEE	M
602.01	77	VACANT LOT	FEE	M
602.01	78	VACANT LOT	FEE	M
602.01	79	VACANT LOT	FEE	M

602.01	80	VACANT LOT	FEE	M
602.01	81	VACANT LOT	FEE	M
602.01	82	VACANT LOT	FEE	M
602.01	83	VACANT LOT	FEE	M
602.02	40	VACANT LOT	FEE	M
602.02	41	VACANT LOT	FEE	M
602.02	42	VACANT LOT	FEE	M
602.02	43	VACANT LOT	FEE	M
602.02	44	VACANT LOT	FEE	M
602.02	49	VACANT LOT	FEE	M
602.02	50	VACANT LOT	FEE	M
602.02	51	VACANT LOT	FEE	M
602.02	52	VACANT LOT	FEE	M
602.02	53	VACANT LOT	FEE	M
602.02	54	VACANT LOT	FEE	M
602.02	55	VACANT LOT	FEE	M
602.02	56	VACANT LOT	FEE	M
602.02	84	VACANT LOT	FEE	M
602.02	85	VACANT LOT	FEE	M
602.02	86	VACANT LOT	FEE	M
602.02	87	VACANT LOT	FEE	M
602.02	88	VACANT LOT	FEE	M
602.02	89	VACANT LOT	FEE	M
602.02	90	VACANT LOT	FEE	M
602.02	91	VACANT LOT	FEE	M
602.02	92	VACANT LOT	FEE	M
602.02	93	VACANT LOT	FEE	M
602.02	94	VACANT LOT	FEE	M
602.02	95	VACANT LOT	FEE	M
602.02	96	VACANT LOT	FEE	M
602.04	12	VACANT LOT	FEE	M
602.04	13	VACANT LOT	FEE	M
602.04	20	VACANT LOT	FEE	M
602.04	21	VACANT LOT	FEE	M
602.04	22	VACANT LOT	FEE	M
602.04	23	VACANT LOT	FEE	M
602.04	27	VACANT LOT	FEE	M
602.04	64	VACANT LOT	FEE	M
602.04	65	VACANT LOT	FEE	M
602.04	66	VACANT LOT	FEE	M
602.04	67	VACANT LOT	FEE	M
602.04	68	VACANT LOT	FEE	M
602.04	69	VACANT LOT	FEE	M
602.04	70	VACANT LOT	FEE	M
602.04	71	VACANT LOT	FEE	M
602.04	72	VACANT LOT	FEE	M
602.04	73	VACANT LOT	FEE	M
602.04	74	VACANT LOT	FEE	M
602.04	75	VACANT LOT	FEE	M
602.04	76	VACANT LOT	FEE	M
602.05	103	VACANT LOT	FEE	M
602.05	104	VACANT LOT	FEE	M
602.05	105	VACANT LOT	FEE	M
602.05	106	VACANT LOT	FEE	M
602.05	107	VACANT LOT	FEE	M
602.05	109	VACANT LOT	FEE	M
602.05	110	VACANT LOT	FEE	M

602.05	111	VACANT LOT	FEE	M
602.05	112	VACANT LOT	FEE	M
602.05	113	VACANT LOT	FEE	M
602.05	114	VACANT LOT	FEE	M
602.05	97	VACANT LOT	FEE	M
607.01	1	VACANT LOT	FEE	M
607.01	2	VACANT LOT	FEE	M
607.01	4	VACANT LOT	FEE	M
607.02	17	MINNIE CREEK WETLANDS	FEE	M
607.02	18	MINNIE CREEK WETLANDS	FEE	M
607.02	19	MINNIE CREEK WETLANDS	FEE	M
607.02	20	MINNIE CREEK WETLANDS	FEE	M
607.02	21	MINNIE CREEK WETLANDS	FEE	M
607.02	22	MINNIE CREEK WETLANDS	FEE	M
607.02	23	MINNIE CREEK WETLANDS	FEE	M
607.02	24	MINNIE CREEK WETLANDS	FEE	M
607.02	29	MINNIE CREEK WETLANDS	FEE	M
607.02	30	MINNIE CREEK WETLANDS	FEE	M
607.02	31	MINNIE CREEK WETLANDS	FEE	M
607.02	32	MINNIE CREEK WETLANDS	FEE	M
607.02	33.08	VACANT LOT	FEE	M
607.02	5	MINNIE CREEK WETLANDS	FEE	M
607.02	7	MINNIE CREEK WETLANDS	FEE	M
607.02	8	MINNIE CREEK WETLANDS	FEE	M
612.01	1	JEROME AVE REC FACILITY	FEE	M
7.01	14	PUBLIC BEACH	FEE	M
7.02	14	PUBLIC BEACH	FEE	M
7	1	PUBLIC BEACH	FEE	M
707.01	17	MINNIE CREEK WETLANDS	FEE	M
707.01	18	MINNIE CREEK WETLANDS	FEE	M
707.01	19	MINNIE CREEK WETLANDS	FEE	M
707.01	20	MINNIE CREEK WETLANDS	FEE	M
707.01	21	MINNIE CREEK WETLANDS	FEE	M
707.01	22	MINNIE CREEK WETLANDS	FEE	M
707.01	23	MINNIE CREEK WETLANDS	FEE	M
707.01	24	MINNIE CREEK WETLANDS	FEE	M
707.01	29	MINNIE CREEK WETLANDS	FEE	M
707.01	30	MINNIE CREEK WETLANDS	FEE	M
707.01	31	MINNIE CREEK WETLANDS	FEE	M
707.01	32	MINNIE CREEK WETLANDS	FEE	M
707.01	5	MINNIE CREEK WETLANDS	FEE	M
707.01	6	MINNIE CREEK WETLANDS	FEE	M
707.01	7	MINNIE CREEK WETLANDS	FEE	M
707.01	8	MINNIE CREEK WETLANDS	FEE	M
707.02	11	MINNIE CREEK WETLANDS	FEE	M
707.02	13	MINNIE CREEK WETLANDS	FEE	M
8	2	PUBLIC LIBRARY PARK	FEE	M
801.01	10	VACANT LOT	FEE	M
801.01	12	VACANT LOT	FEE	M
801.01	14	VACANT LOT	FEE	M
801.01	16	VACANT LOT	FEE	M
801.01	18	VACANT LOT	FEE	M
801.01	20	VACANT LOT	FEE	M
801.01	22	VACANT LOT	FEE	M
801.01	24	VACANT LOT	FEE	M
801.01	26	VACANT LOT	FEE	M
801.01	28	VACANT LOT	FEE	M
801.01	30.01	VACANT LOT	FEE	M

801.01	30.02	VACANT LOT	FEE	M
801.01	32	VACANT LOT	FEE	M
801.01	34	VACANT LOT	FEE	M
801.01	36	VACANT LOT	FEE	M
801.01	38	VACANT LOT	FEE	M
801.01	43	VACANT LOT	FEE	M
801.01	45	VACANT LOT	FEE	M
801.01	47	VACANT LOT	FEE	M
801.01	49	VACANT LOT	FEE	M
801.01	51	VACANT LOT	FEE	M
801.01	53	VACANT LOT	FEE	M
801.01	55	VACANT LOT	FEE	M
801.01	57	VACANT LOT	FEE	M
801.01	59	VACANT LOT	FEE	M
801.01	6	VACANT LOT	FEE	M
801.01	61	VACANT LOT	FEE	M
801.01	63	VACANT LOT	FEE	M
801.01	65	VACANT LOT	FEE	M
801.01	67.01	VACANT LOT	FEE	M
801.01	67.02	VACANT LOT	FEE	M
801.01	69	VACANT LOT	FEE	M
801.01	71	VACANT LOT	FEE	M
801.01	73	VACANT LOT	FEE	M
801.01	75	VACANT LOT	FEE	M
801.01	8	VACANT LOT	FEE	M
801.02	1	VACANT LOT	FEE	M
801.02	11	VACANT LOT	FEE	M
801.02	13	VACANT LOT	FEE	M
801.02	15	VACANT LOT	FEE	M
801.02	19	VACANT LOT	FEE	M
801.02	21	VACANT LOT	FEE	M
801.02	23	VACANT LOT	FEE	M
801.02	25	VACANT LOT	FEE	M
801.02	27	VACANT LOT	FEE	M
801.02	29	VACANT LOT	FEE	M
801.02	3	VACANT LOT	FEE	M
801.02	31	VACANT LOT	FEE	M
801.02	33	VACANT LOT	FEE	M
801.02	35	VACANT LOT	FEE	M
801.02	37	VACANT LOT	FEE	M
801.02	40	VACANT LOT	FEE	M
801.02	42	VACANT LOT	FEE	M
801.02	44	VACANT LOT	FEE	M
801.02	46	VACANT LOT	FEE	M
801.02	48	VACANT LOT	FEE	M
801.02	5	VACANT LOT	FEE	M
801.02	50	VACANT LOT	FEE	M
801.02	52	VACANT LOT	FEE	M
801.02	54	VACANT LOT	FEE	M
801.02	56	VACANT LOT	FEE	M
801.02	58	VACANT LOT	FEE	M
801.02	62	VACANT LOT	FEE	M
801.02	64	VACANT LOT	FEE	M
801.02	7.01	VACANT LOT	FEE	M
801.02	7.02	VACANT LOT	FEE	M
801.02	70	VACANT LOT	FEE	M
801.02	72	VACANT LOT	FEE	M


801.02	74	VACANT LOT	FEE	M
801.02	76	VACANT LOT	FEE	M
801.02	9	VACANT LOT	FEE	M
802.01	1	VACANT LOT	FEE	M
802.01	15	VACANT LOT	FEE	M
802.01	16	VACANT LOT	FEE	M
802.01	2	VACANT LOT	FEE	M
802.01	3	VACANT LOT	FEE	M
802.01	8	VACANT LOT	FEE	M
802.01	9	VACANT LOT	FEE	M
802.02	1	VACANT LOT	FEE	M
802.02	10	VACANT LOT	FEE	M
802.02	11	VACANT LOT	FEE	M
802.02	12	VACANT LOT	FEE	M
802.02	13	VACANT LOT	FEE	M
802.02	14	VACANT LOT	FEE	M
802.02	15	VACANT LOT	FEE	M
802.02	16	VACANT LOT	FEE	M
802.02	17	VACANT LOT	FEE	M
802.02	18	VACANT LOT	FEE	M
802.02	19	VACANT LOT	FEE	M
802.02	2	VACANT LOT	FEE	M
802.02	20	VACANT LOT	FEE	M
802.02	3	VACANT LOT	FEE	M
802.02	4	VACANT LOT	FEE	M
802.02	5	VACANT LOT	FEE	M
802.02	6	VACANT LOT	FEE	M
802.02	7	VACANT LOT	FEE	M
802.02	8	VACANT LOT	FEE	M
802.02	9	VACANT LOT	FEE	M
803.01	1	VACANT LOT	FEE	M
803.01	10	VACANT LOT	FEE	M
803.01	11	VACANT LOT	FEE	M
803.01	18	VACANT LOT	FEE	M
803.01	19	VACANT LOT	FEE	M
803.01	2	VACANT LOT	FEE	M
803.01	20	VACANT LOT	FEE	M
803.01	3	VACANT LOT	FEE	M
803.01	4	VACANT LOT	FEE	M
803.02	1	VACANT LOT	FEE	M
803.02	10	VACANT LOT	FEE	M
803.02	11	VACANT LOT	FEE	M
803.02	12	VACANT LOT	FEE	M
803.02	13	VACANT LOT	FEE	M
803.02	14	VACANT LOT	FEE	M
803.02	15	VACANT LOT	FEE	M
803.02	16	VACANT LOT	FEE	M
803.02	17	VACANT LOT	FEE	M
803.02	18	VACANT LOT	FEE	M
803.02	19	VACANT LOT	FEE	M
803.02	2	VACANT LOT	FEE	M
803.02	20	VACANT LOT	FEE	M
803.02	3	VACANT LOT	FEE	M
803.02	4	VACANT LOT	FEE	M
803.02	5	VACANT LOT	FEE	M
803.02	6	VACANT LOT	FEE	M
803.02	7	VACANT LOT	FEE	M
803.02	8	VACANT LOT	FEE	M

803.02	9	VACANT LOT	FEE	M
804.01	12	VACANT LOT	FEE	M
807.01	17	MINNIE CREEK WETLANDS	FEE	M
807.01	18	MINNIE CREEK WETLANDS	FEE	M
807.01	19	MINNIE CREEK WETLANDS	FEE	M
807.01	20	MINNIE CREEK WETLANDS	FEE	M
807.01	21	MINNIE CREEK WETLANDS	FEE	M
807.01	22	MINNIE CREEK WETLANDS	FEE	M
807.01	23	MINNIE CREEK WETLANDS	FEE	M
807.01	24	MINNIE CREEK WETLANDS	FEE	M
807.01	29	MINNIE CREEK WETLANDS	FEE	M
807.01	30	MINNIE CREEK WETLANDS	FEE	M
807.01	31	MINNIE CREEK WETLANDS	FEE	M
807.01	32	MINNIE CREEK WETLANDS	FEE	M
807.01	5	MINNIE CREEK WETLANDS	FEE	M
807.01	6	MINNIE CREEK WETLANDS	FEE	M
807.01	7	MINNIE CREEK WETLANDS	FEE	M
807.01	8	MINNIE CREEK WETLANDS	FEE	M
807.02	1	MINNIE CREEK WETLANDS	FEE	M
807.02	2	MINNIE CREEK WETLANDS	FEE	M
9	24	PUBLIC BEACH	FEE	M
901.01	1.01	VACANT LOT	FEE	M
901.01	10	VACANT LOT	FEE	M
901.01	11.01	VACANT LOT	FEE	M
901.01	2.01	VACANT LOT	FEE	M
901.01	6.01	VACANT LOT	FEE	M
901.01	7	VACANT LOT	FEE	M
901.01	8	VACANT LOT	FEE	M
901.01	9	VACANT LOT	FEE	M
902.02	1	VACANT LOT	FEE	M
902.02	10	VACANT LOT	FEE	M
902.02	11	VACANT LOT	FEE	M
902.02	12	VACANT LOT	FEE	M
902.02	13	VACANT LOT	FEE	M
902.02	14.01	VACANT LOT	FEE	M
902.02	15.01	VACANT LOT	FEE	M
902.02	16.01	VACANT LOT	FEE	M
902.02	17.01	VACANT LOT	FEE	M
902.02	18.01	VACANT LOT	FEE	M
902.02	19.01	VACANT LOT	FEE	M
902.02	2	VACANT LOT	FEE	M
902.02	3	VACANT LOT	FEE	M
902.02	4	VACANT LOT	FEE	M
902.02	6	VACANT LOT	FEE	M
902.02	7	VACANT LOT	FEE	M
902.02	8	VACANT LOT	FEE	M
903.01	1	VACANT LOT	FEE	M
903.01	10	VACANT LOT	FEE	M
903.01	11	VACANT LOT	FEE	M
903.01	14	VACANT LOT	FEE	M
903.01	15	VACANT LOT	FEE	M
903.01	16	VACANT LOT	FEE	M
903.01	17	VACANT LOT	FEE	M
903.01	18	VACANT LOT	FEE	M
903.01	19	VACANT LOT	FEE	M
903.01	2	VACANT LOT	FEE	M
903.01	20	VACANT LOT	FEE	M

903.01	3	VACANT LOT	FEE	M
903.01	4	VACANT LOT	FEE	M
903.01	5	VACANT LOT	FEE	M
903.01	6	VACANT LOT	FEE	M
903.01	7	VACANT LOT	FEE	M
903.01	8	VACANT LOT	FEE	M
903.01	9	VACANT LOT	FEE	M
903.02	1	VACANT LOT	FEE	M
903.02	10	VACANT LOT	FEE	M
903.02	11	VACANT LOT	FEE	M
903.02	12	VACANT LOT	FEE	M
903.02	13	VACANT LOT	FEE	M
903.02	14	VACANT LOT	FEE	M
903.02	15	VACANT LOT	FEE	M
903.02	16	VACANT LOT	FEE	M
903.02	17	VACANT LOT	FEE	M
903.02	18	VACANT LOT	FEE	M
903.02	19	VACANT LOT	FEE	M
903.02	2	VACANT LOT	FEE	M
903.02	20	VACANT LOT	FEE	M
903.02	3	VACANT LOT	FEE	M
903.02	8	VACANT LOT	FEE	M
903.02	9	VACANT LOT	FEE	M
904.01	11	VACANT LOT	FEE	M
904.01	13	VACANT LOT	FEE	M
904.01	15	VACANT LOT	FEE	M
904.01	16	VACANT LOT	FEE	M
907.01	17	MINNIE CREEK WETLANDS	FEE	M
907.01	18	MINNIE CREEK WETLANDS	FEE	M
907.01	19	MINNIE CREEK WETLANDS	FEE	M
907.01	20	MINNIE CREEK WETLANDS	FEE	M
907.01	21	MINNIE CREEK WETLANDS	FEE	M
907.01	22	MINNIE CREEK WETLANDS	FEE	M
907.01	23	MINNIE CREEK WETLANDS	FEE	M
907.01	24	MINNIE CREEK WETLANDS	FEE	M
907.01	29	MINNIE CREEK WETLANDS	FEE	M
907.01	30	MINNIE CREEK WETLANDS	FEE	M
907.01	31	MINNIE CREEK WETLANDS	FEE	M
907.01	32	MINNIE CREEK WETLANDS	FEE	M
907.01	5	MINNIE CREEK WETLANDS	FEE	M
907.01	6	MINNIE CREEK WETLANDS	FEE	M
907.01	7	MINNIE CREEK WETLANDS	FEE	M
907.01	8	MINNIE CREEK WETLANDS	FEE	M
907.02	1	MINNIE CREEK WETLANDS	FEE	M

The above information is the Recreation and Open Space Inventory (ROSI) on file with Green Acres. Please note that Green Acres relies on the accuracy of the information provided to us by the Local Unit(s) in maintaining the accuracy of our database. Since it is the responsibility of the Local Unit(s) to ensure compliance with Green Acres rules, it is strongly recommended that you confirm this information with the Local Unit(s).

[back to search](#)

 Some files on this site require adobe acrobat pdf reader to view. [download the free pdf reader](#)

[contact dep](#) | [privacy notice](#) | [legal statement](#) | [accessibility statement](#) 

green acres program: [home](#) | [forms](#) | [links](#) | [site index](#) | [contact us](#)
department: [njdep home](#) | [about dep](#) | [index by topic](#) | [programs/units](#) | [dep online](#)
statewide: [njhome](#) | [citizen](#) | [business](#) | [government](#) | [services A to Z](#) | [departments](#) | [search](#)

Copyright © State of New Jersey, 1996-2016
Department of Environmental Protection
P. O. Box 402
Trenton, NJ 08625-0402