

Waterfront West

November 15, 2018

Planning & Regulatory Constraints

Flood Plain

Chapter 91

Resiliency

Sustainability

Open Space & Ways to the Water

Regulatory Constraints

Flood Plain

Chapter 91


Waterfront West

Flood Zone Regulations

LEGEND

Average site El. 8-9 feet

 Present High Water Mark

 VE Zone (El. 14)
- Elevation of lowest structural horizontal member must be at least El. 14, 5-6.5 feet above existing ground surface



Waterfront West

Flood Zone Regulations

LEGEND

Average site El. 8-9 feet

— Present High Water Mark

■ VE Zone (El. 14)
- Elevation of lowest structural horizontal member must be at least El.14, 5-6.5 feet above existing ground surface

■ AE Zone (El. 13)
- First Floor Elevation must be at least El.13, 4-5.5 feet above existing ground surface




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Flood Zone Regulations


LEGEND

Average site El. 8-9 feet

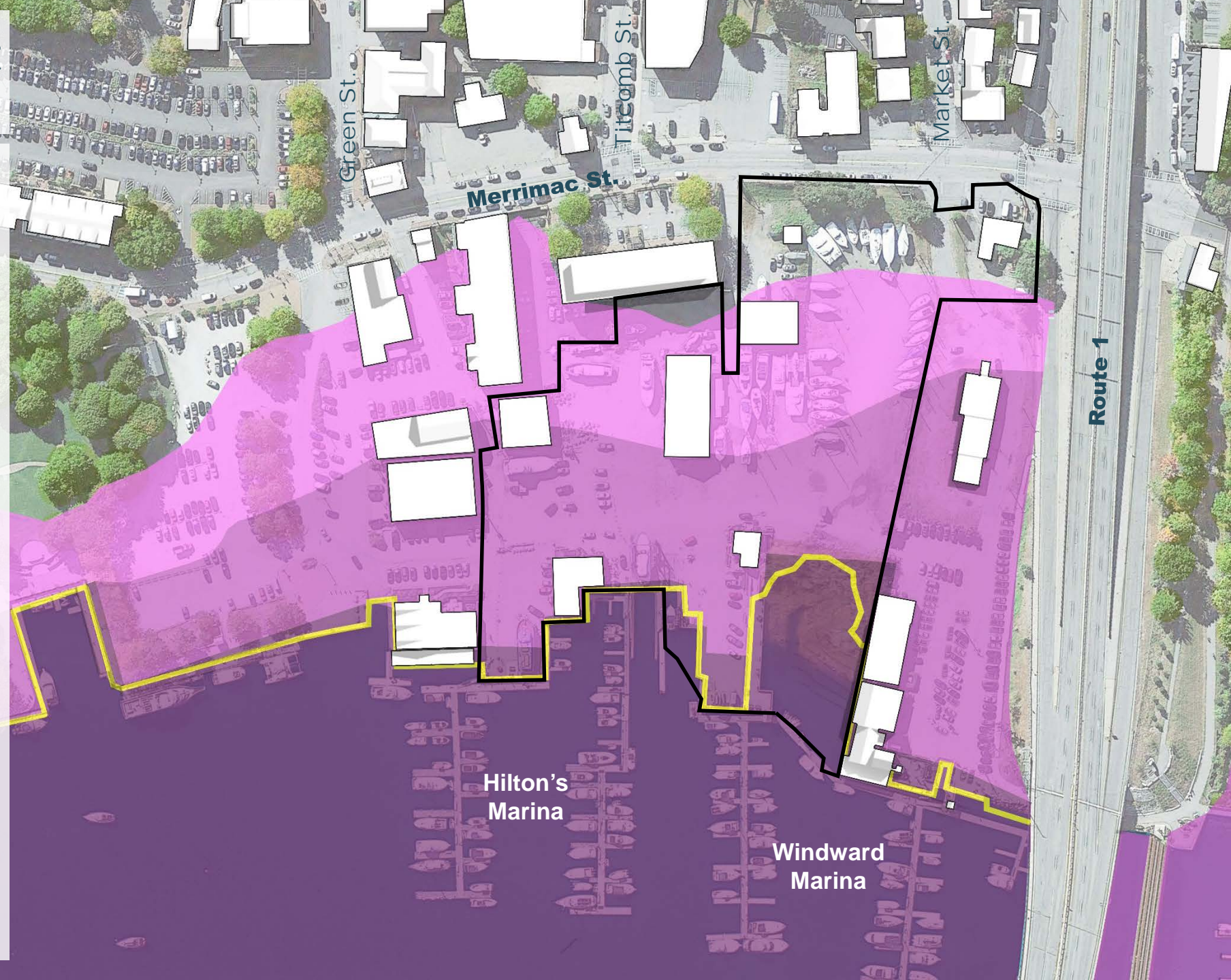
 Present High Water Mark

 VE Zone (El. 14)
- Elevation of lowest structural horizontal member must be at least El.14, 5-6.5 feet above existing ground surface

 AE Zone (El. 13)
- First Floor Elevation must be at least El.13, 4-5.5 feet above existing ground surface

 AE Zone (El. 12)
- First Floor Elevation must be at least El.12, 3-4.5 feet above existing ground surface

*2014 FIRMs Map, Data Provided by Horsley Witten Group



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Chapter 91 Waterfront Regulations

LEGEND



-  Water Dependent Use Zone
- No New or Expanded Non Water Dependent Use Buildings



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Chapter 91 Waterfront Regulations

LEGEND





-  Water Dependent Use Zone
 - No New or Expanded Non Water Dependent Use Buildings
-  100' Mean High Water Setback
 - Ground Level Must be Facility of Public Accommodation which includes / Allows Parking



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Chapter 91 Waterfront Regulations

LEGEND

-  Water Dependent Use Zone
 - No New or Expanded Non Water Dependent Use Buildings
-  100' Mean High Water Setback
 - Ground Level Must be Facility of Public Accommodation which includes / Allows Parking
-  Commonwealth Tidelands
 - No Surface Parking
-  Interim C.91 Walkway
 - License # 14238



Waterfront West

All Constraints

LEGEND

- Present High Water Mark
- VE Zone (El. 14)
- AE Zone (El. 13)
- AE Zone (El. 12)
- Water Dependent Use Zone
- WDUZ Line
- 100' Mean High Water Setback Line
- Commonwealth Tidelands



Waterfront West

Site Constraints

Current site constraints:

- Flood Plain:
 - Current flood plain regulations limit what uses can be located on ground floor
 - Current zoning limits height to 35'
 - Some limited commercial use is allowed starting at 5', however the majority of the first habitable floor needs to be located on average 13' above existing site elevation
 - All mechanical systems to be elevated on site
- Chapter 91:
 - Regulatory constraints encourage open space to be located along the waterfront
 - Current zoning does not allow for C 91 open space to be included in open space calculations for zoning
 - Within 100' of shoreline, all ground floor uses must be facilities of public accommodation
 - Interim walkway, allowed in license #14238, will be relocated and incorporated as a boardwalk located in the public open space

Resiliency & Sustainability

Waterfront West

Resiliency Measures

Current Resiliency Measures:

- All active uses located above flood plain elevations
- No private tenancy or residential areas located along ground floor uses
- Elevated mechanical systems located on rooftops of buildings
- Maintaining existing site elevation to avoid impacting existing abutters & allowing water to flow naturally
- Buildings designed with current best practices for waterfront development (energy-efficient building enclosure, low energy mechanical systems, impact resistant glass windows, etc.)
- Preservation of natural salt marsh to act as natural buffer
- New sanitary and stormwater improvements on site



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Sustainability Measures

Current Sustainability Measures:

- Mixing of uses to contribute to downtown vitality
- Preservation of site with significant amount of open space
- Consistent development pattern, in keeping with the compact, walkable nature of the downtown district
- Close proximity to Rail Trail, future intermodal transit facility
- Working with updated traffic standards to reduce outdated parking requirements
- Bike facilities located on site
- Green Building standards and current best practices being utilized for all building designs
- Energy efficient building design with updated building systems
 - Energy conservation, recycling, water conservation, low energy HVAC systems, high efficiency building envelope
- Holistic site design by one master developer
- On site collection for recycling facilities
- Updated storm water management system on site
- Pedestrian & bicycle focused site circulation
- Redevelopment of an existing undeveloped site

Windward
Marina

Open Space & Ways to the Water

Waterfront West

Open Space

Public Open Space:

- Ways to the Water
- Rail Trail/Harbor walk
- Public Plaza
- Merrimac Street Activation
- Pier Activation
- Marsh Overview



**Central
Waterfront**

Merrimac St.

Ticecomb St.

Market St.

Route 1

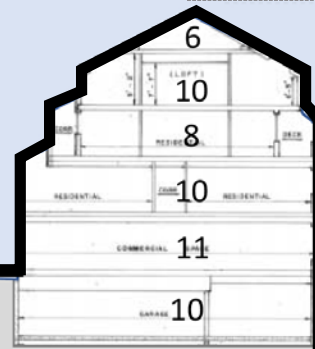
**Hilton's
Marina**

**Windward
Marina**

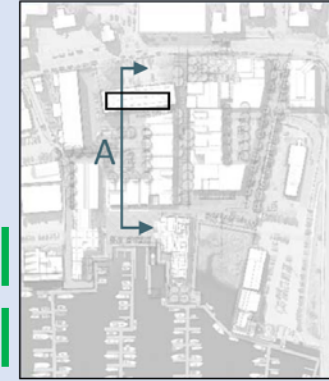
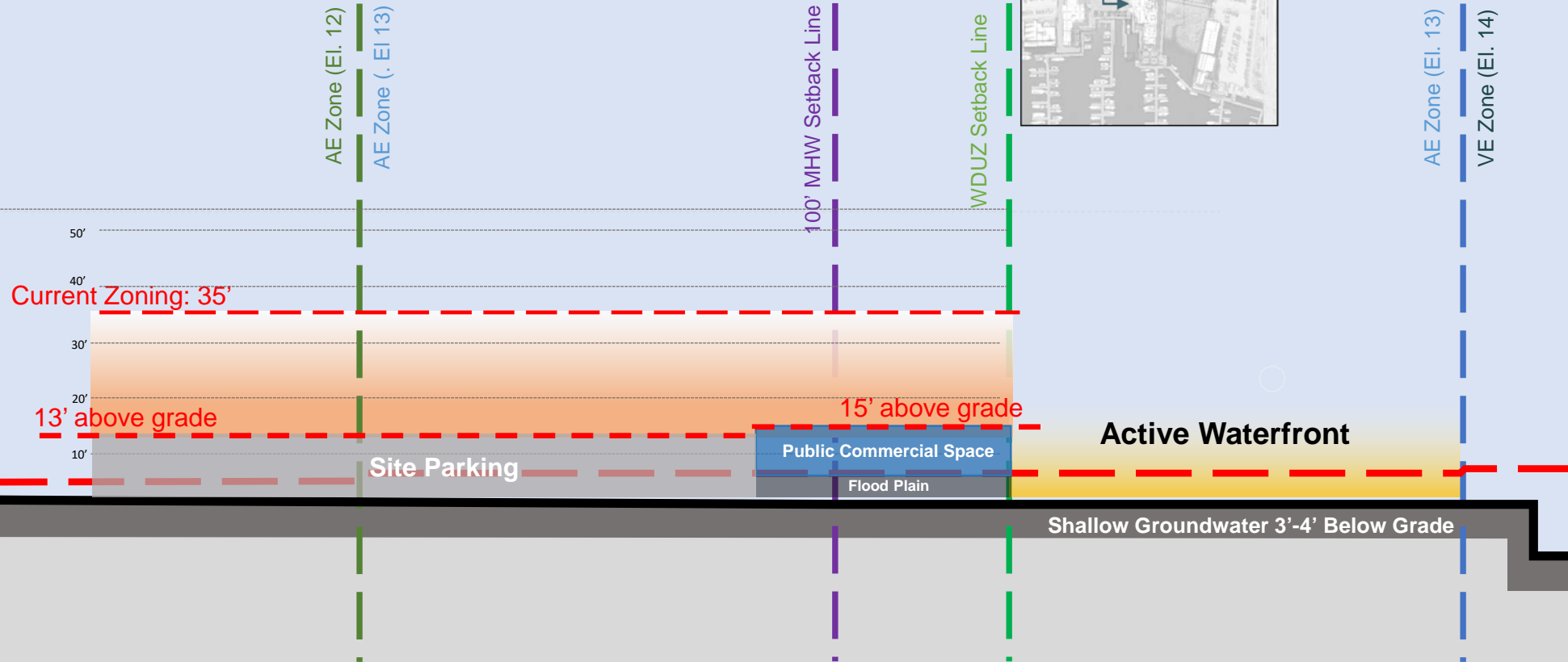
Site Constraints

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Site Constraints- Diagram



Horton's Yard: 55' on water Side



Constraints

1. Flood Plain
2. C. 91 Setbacks
3. Use Restrictions
4. Current Zoning