

town of Weymouth
Wessagussett Road and Regatta Road
10.27.2017

LEGEND

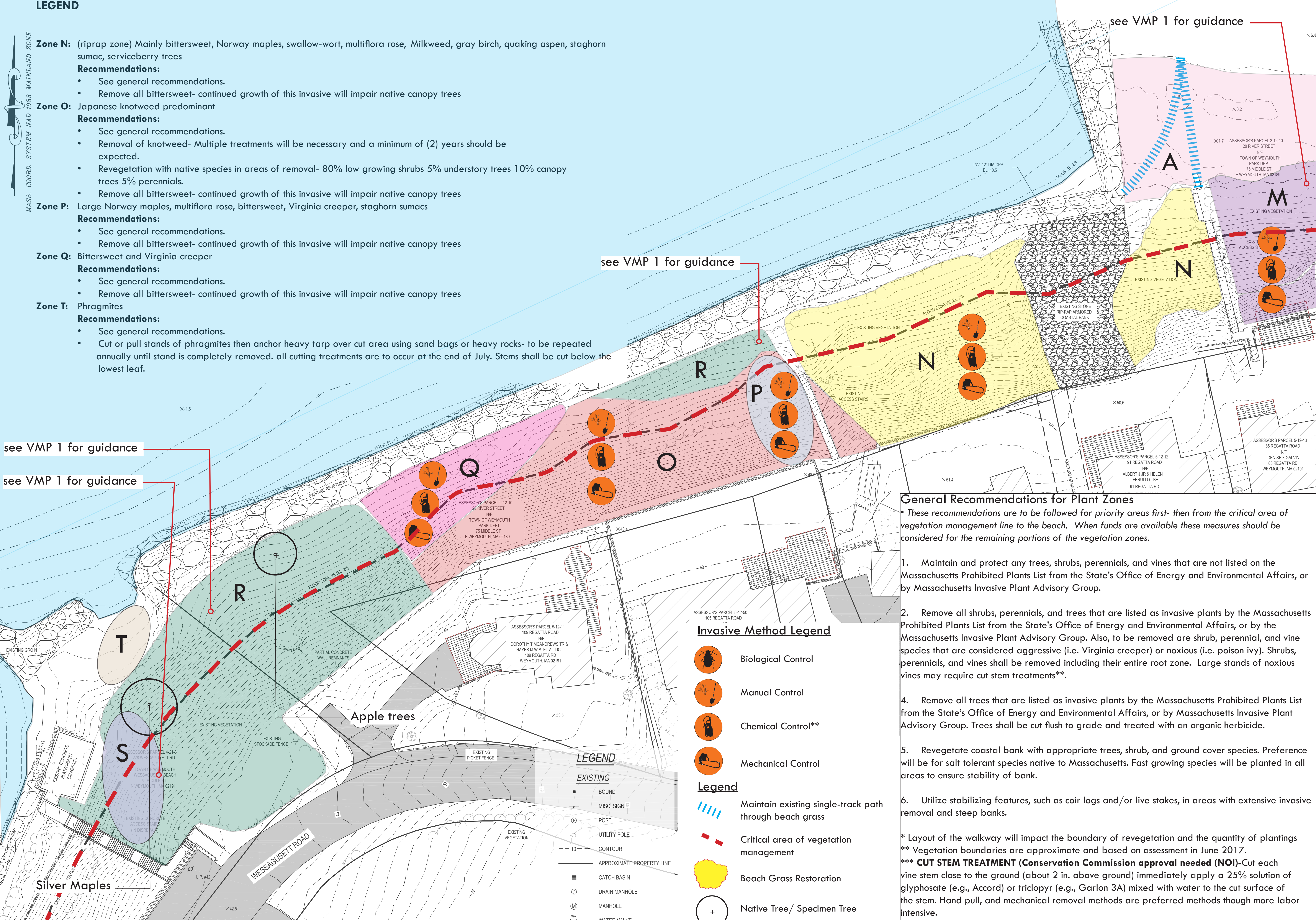
- Zone N:** (riprap zone) Mainly bittersweet, Norway maples, swallow-wort, multiflora rose, Milkweed, gray birch, quaking aspen, staghorn sumac, serviceberry trees
- Recommendations:**
- See general recommendations.
 - Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Zone O:** Japanese knotweed predominant
- Recommendations:**
- See general recommendations.
 - Removal of knotweed- Multiple treatments will be necessary and a minimum of (2) years should be expected.
 - Revegetation with native species in areas of removal- 80% low growing shrubs 5% understory trees 10% canopy trees 5% perennials.
 - Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Zone P:** Large Norway maples, multiflora rose, bittersweet, Virginia creeper, staghorn sumacs
- Recommendations:**
- See general recommendations.
 - Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Zone Q:** Bittersweet and Virginia creeper
- Recommendations:**
- See general recommendations.
 - Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Zone T:** Phragmites
- Recommendations:**
- See general recommendations.
 - Cut or pull stands of phragmites then anchor heavy tarp over cut area using sand bags or heavy rocks- to be repeated annually until stand is completely removed. all cutting treatments are to occur at the end of July. Stems shall be cut below the lowest leaf.

see VMP 1 for guidance

see VMP 1 for guidance

see VMP 1 for guidance

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Invasive Method Legend

- Biological Control
- Manual Control
- Chemical Control**
- Mechanical Control

Legend

- Maintain existing single-track path through beach grass
- Critical area of vegetation management
- Beach Grass Restoration
- Native Tree/ Specimen Tree

General Recommendations for Plant Zones

These recommendations are to be followed for priority areas first- then from the critical area of vegetation management line to the beach. When funds are available these measures should be considered for the remaining portions of the vegetation zones.

1. Maintain and protect any trees, shrubs, perennials, and vines that are not listed on the Massachusetts Prohibited Plants List from the State's Office of Energy and Environmental Affairs, or by Massachusetts Invasive Plant Advisory Group.
2. Remove all shrubs, perennials, and trees that are listed as invasive plants by the Massachusetts Prohibited Plants List from the State's Office of Energy and Environmental Affairs, or by the Massachusetts Invasive Plant Advisory Group. Also, to be removed are shrub, perennial, and vine species that are considered aggressive (i.e. Virginia creeper) or noxious (i.e. poison ivy). Shrubs, perennials, and vines shall be removed including their entire root zone. Large stands of noxious vines may require cut stem treatments**.
4. Remove all trees that are listed as invasive plants by the Massachusetts Prohibited Plants List from the State's Office of Energy and Environmental Affairs, or by Massachusetts Invasive Plant Advisory Group. Trees shall be cut flush to grade and treated with an organic herbicide.
5. Revegetate coastal bank with appropriate trees, shrub, and ground cover species. Preference will be for salt tolerant species native to Massachusetts. Fast growing species will be planted in all areas to ensure stability of bank.
6. Utilize stabilizing features, such as coir logs and/or live stakes, in areas with extensive invasive removal and steep banks.

* Layout of the walkway will impact the boundary of revegetation and the quantity of plantings
** Vegetation boundaries are approximate and based on assessment in June 2017.
*** **CUT STEM TREATMENT (Conservation Commission approval needed (NOI))**-Cut each vine stem close to the ground (about 2 in. above ground) immediately apply a 25% solution of glyphosate (e.g., Accord) or triclopyr (e.g., Garlon 3A) mixed with water to the cut surface of the stem. Hand pull, and mechanical removal methods are preferred methods though more labor intensive.

Vegetation Management Plan-2

LEGEND
Zone A: American beachgrass
Recommendations:

- See general recommendations.
- Replant beach grass as necessary (3) culms per hole- spacing 18" x 18" @ 8" deep or 1,350 culms per 1000 square feet

Zone H: Young Norway maples, young tree of heavens, Virginia creeper, multiflora rose, bittersweet, garlic mustard. Lots of dead limbs and tree debris
Recommendations:

- See general recommendations.
- Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Remove and discard all dead limbs and tree debris

Zone I: Dense bittersweet, tree of heaven, multiflora rose, young Norway maples Weeping willow at toe of bank
Recommendations:

- See general recommendations.
- Remove all bittersweet- continued growth of this invasive will impair native canopy trees

Zone J: Dense bittersweet, large Norway maples (9" caliper max. average), tree of heaven Cherry trees, tree at stairs, large cherry milkweed in beach grass
Recommendations:

- See general recommendations.
- Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

PRIORITY AREA

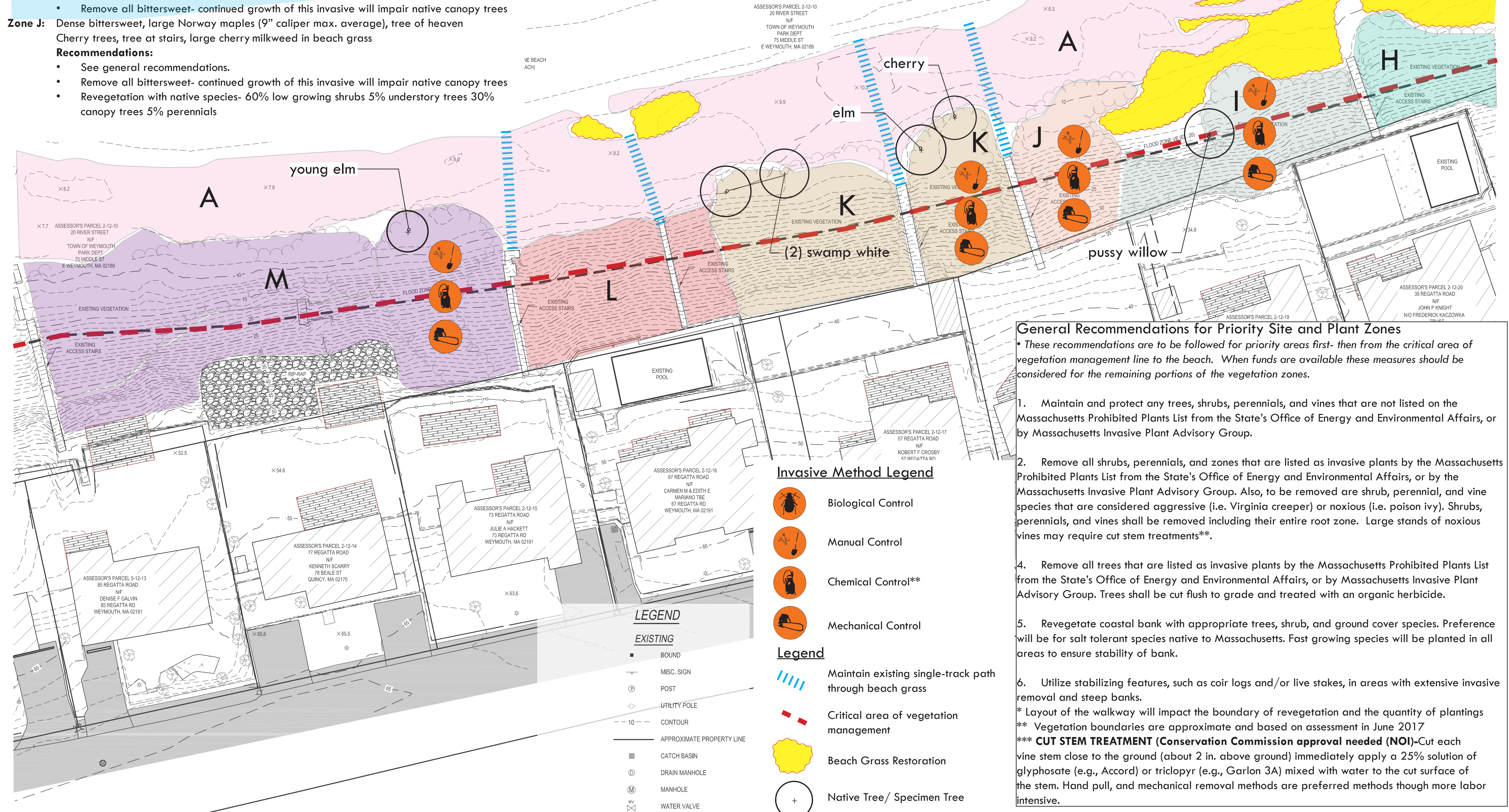
Zone K: Multiflora rose, dense Norway maples & tree of heaven, bittersweet, staghorn sumac, swamp white oak on slope, hackberry, elm at toe of bank
Recommendations:

- See general recommendations.
- Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone L: (Restoration zone at 67 Regatta Road) Staghorn sumac at top of slope Recent (2016) planting of 40 native shrub species- bayberry, sweet pepperbush, shadbush, beach plum plus coastal salt tolerant grass seed mix on the bank, as well as a planting of american beach grass with 2 culms per location at 12 to 8 inches on center

Zone M: Dense canopy: significant Norway maple stand, significant bittersweet, some multiflora rose Young cherries, young elm trees at toe of bank, staghorn sumac
Recommendations:

- See general recommendations.
- Remove all bittersweet- continued growth of this invasive will impair native canopy trees
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials



General Recommendations for Priority Site and Plant Zones

- These recommendations are to be followed for priority areas first- then from the critical area of vegetation management line to the beach. When funds are available these measures should be considered for the remaining portions of the vegetation zones.

- Maintain and protect any trees, shrubs, perennials, and vines that are not listed on the Massachusetts Prohibited Plants List from the State's Office of Energy and Environmental Affairs, or by Massachusetts Invasive Plant Advisory Group.
- Remove all shrubs, perennials, and zones that are listed as invasive plants by the Massachusetts Prohibited Plants List from the State's Office of Energy and Environmental Affairs, or by the Massachusetts Invasive Plant Advisory Group. Also, to be removed are shrub, perennial, and vine species that are considered aggressive (i.e. Virginia creeper) or noxious (i.e. poison ivy). Shrubs, perennials, and vines shall be removed including their entire root zone. Large stands of noxious vines may require cut stem treatments**.
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LEGEND

- EXISTING
- BOUND
- MISC. SIGN
- POST
- UTILITY POLE
- CONTOUR
- APPROXIMATE PROPERTY LINE
- CATCH BASIN
- DRAIN MANHOLE
- MANHOLE
- WATER VALVE

LEGEND

Zone A: American beachgrass

Recommendations:

- See general recommendations.
- Replant beach grass as necessary (3) culms per hole- spacing 18" x 18" @ 8" deep or 1,350 culms per 1000 square feet

Zone B: Dense Norway maple

Recommendations:

- See general recommendations
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone C: Phragmites, Oriental bittersweet, mixed invasive vines and shrubs

Recommendations:

- Removal of Phragmites should be considered- Multiple treatments will be necessary and a minimum of (2) years should be expected
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone D: Norway maples, mixed invasive zones, Tree of Heaven

Recommendations:

- See general recommendations
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone E: Quaking aspen stand, less than 20' tall), Autumn Olive

Recommendations:

- See general recommendations
- Remove autumn olive stand
- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone F: Autumn olive, tree of heaven, multiflora rose, pale swallow-wort, 2 cherry trees at toe of bank

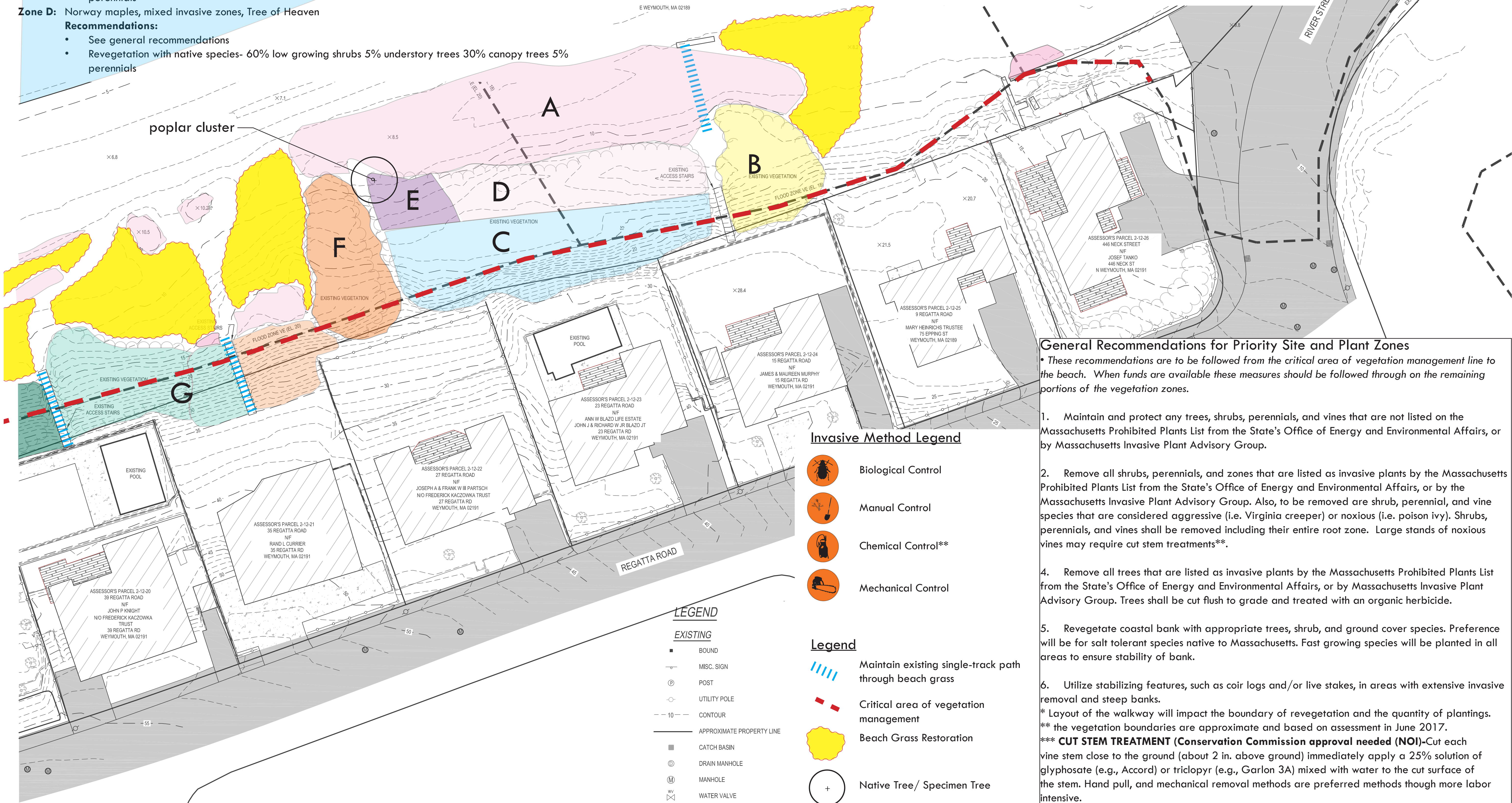
Recommendations:

- See general recommendations
- Remove autumn olive stand
- Remove all instances of Tree of Heaven-see general recommendations for method of removal

- Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials

Zone G: Multiflora rose, young

- Recommendations:**
- See general recommendations
 - Removal of Multiflora rose should be considered- Multiple treatments will be necessary and a minimum of (2) years should be expected. It is best to treat Multiflora stands as early as possible- as large stands become difficult to control
 - Revegetation with native species- 60% low growing shrubs 5% understory trees 30% canopy trees 5% perennials



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