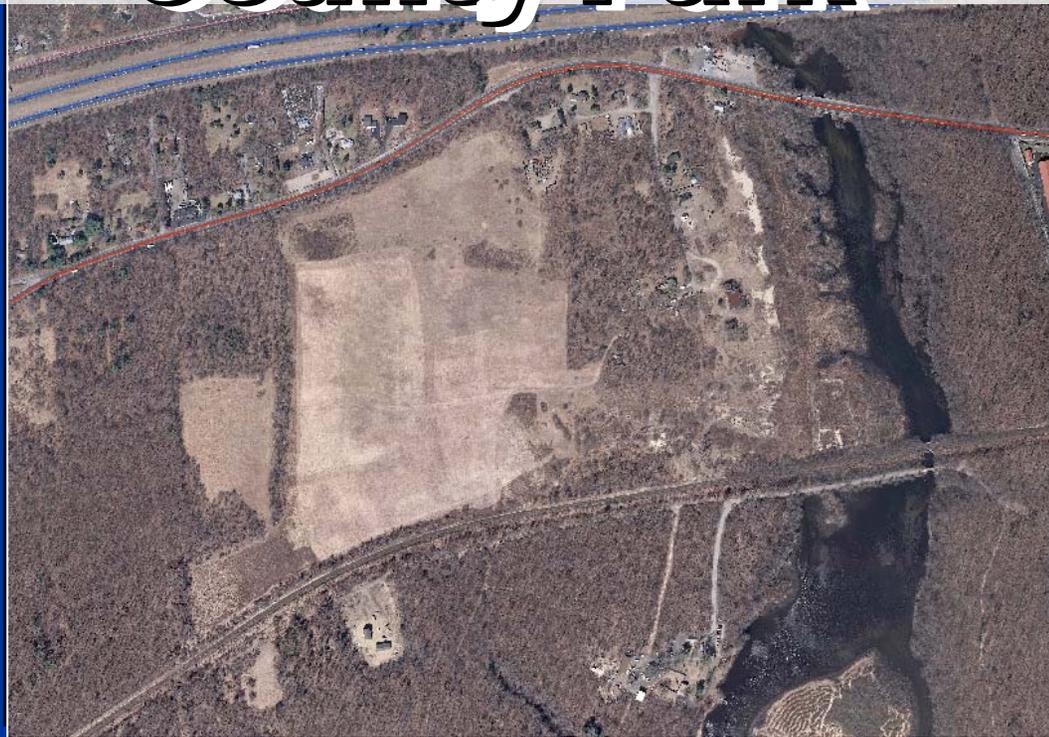
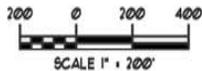
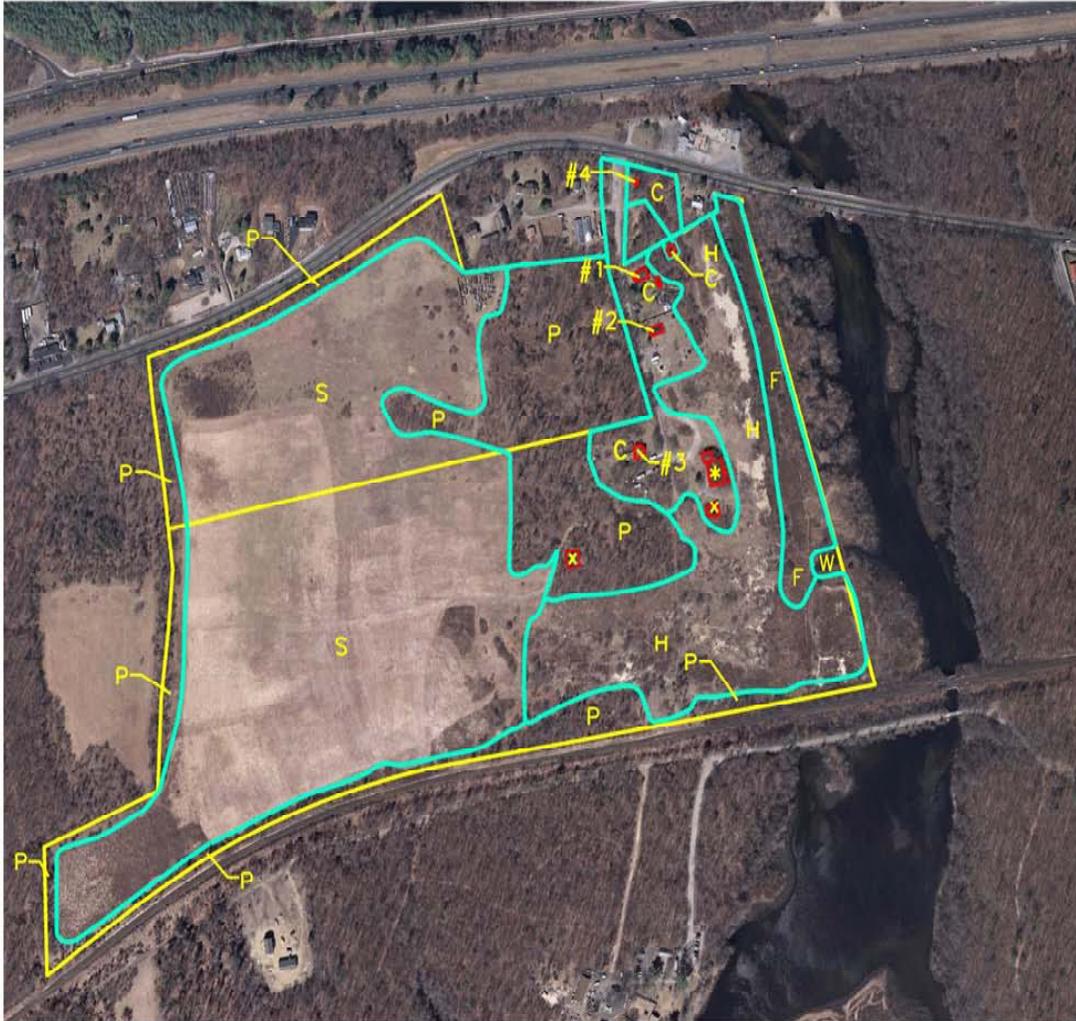


Habitat Restoration Feasibility Study at the Robinson Duck Farm County Park



January 28, 2010



NYSDS 2007 AERIAL PHOTOGRAMMETRY



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 Real Property Taxmap parcel framework used with permission of Suffolk County Real Property Tax Service Agency (R.P.T.S.A.). This rendering is a DRAFT MAP in that 1) the data displayed is an interagency or intra agency work* produced for the purpose of identifying and correcting data. It is not a final agency determination. It is not statistical or factual compilation of data. In some cases correct data has been left out and questionable or inaccurate data has been exaggerated to help identify errors. In short, this is a DRAFT MAP produced in an effort to aid in the correction of data and is not held out as being complete or accurate in any way.

* excerpted from (F.O.I.L.) the provisions of the Freedom of Information Law (Public Officers Law Article 6 Section 84-90) by section 87.2g

GPI
 Greenman-Pedersen, Inc.
 Engineers, Architects, Planners
 Construction Engineers & Inspectors
 200 West Main Street, Babylon, NY 11702
 Tel: (516) 587-0000 Fax: (516) 422-3479

LINE LEGEND
 - PROPERTY LINE
 - HABITAT BOUNDARIES
 - BUILDINGS

FEATURE LEGEND
 C - CULTURAL FEATURES
 F - FRESHWATER WETLAND
 S - SUCCESSIONAL OLD FIELD
 H - HEATHLAND
 P - PITCH PINE-DAK FOREST
 V - TIDAL WETLAND
 * - HISTORICAL STRUCTURE
 * - BUILDING TO BE PARTIALLY DEMOLISHED
 X - BUILDING TO BE DEMOLISHED

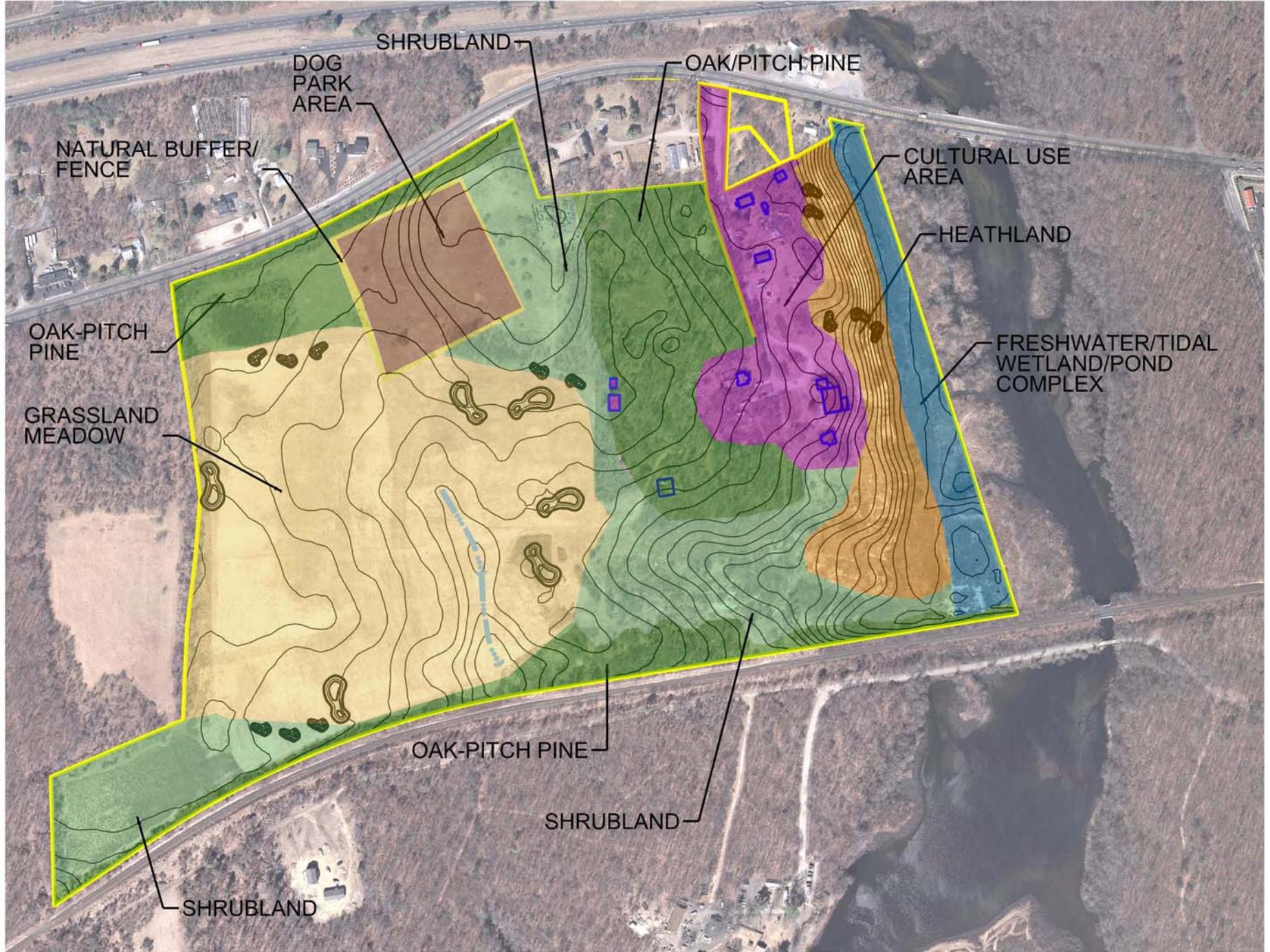
Suffolk County Department of Planning

ROBINSON DUCK FARM COUNTY PARK
 HABITAT RESTORATION
 FEASIBILITY STUDY

Rev.	Date	Revision	By

DRAWING TITLE	
HABITAT MAP	
Date:	Drawn By:
OCT. 12, 2009	KAH
Scale:	Checked By:
AS SHOWN	JRG

Drawing Number: 2009011



SHRUBLAND
DOG PARK AREA

OAK/PITCH PINE

NATURAL BUFFER/
FENCE

CULTURAL USE AREA

OAK-PITCH PINE

HEATHLAND

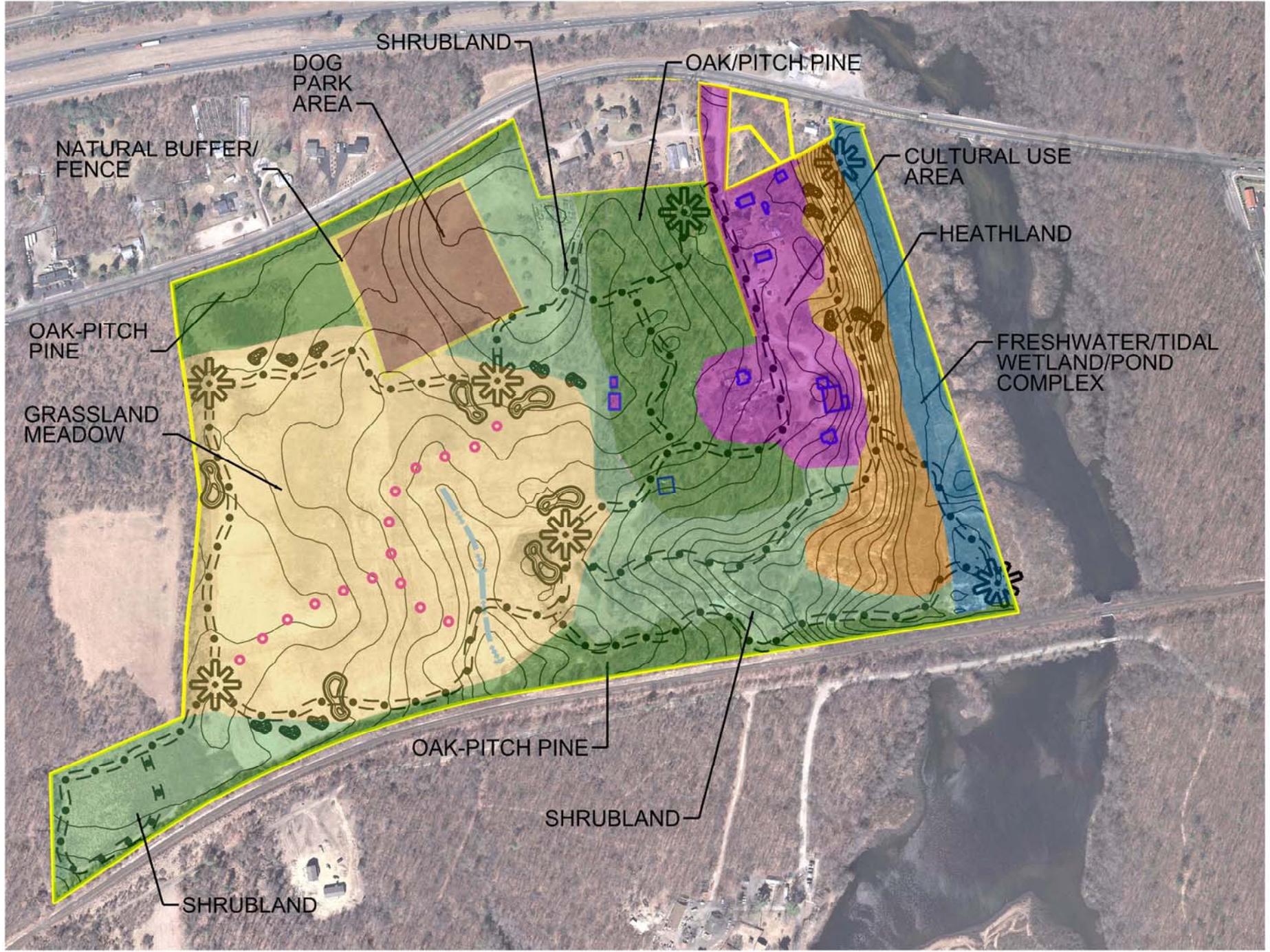
GRASSLAND MEADOW

FRESHWATER/TIDAL WETLAND/POND COMPLEX

OAK-PITCH PINE

SHRUBLAND

SHRUBLAND



SHRUBLAND
DOG PARK AREA

OAK/PITCH PINE

NATURAL BUFFER/
FENCE

CULTURAL USE
AREA

HEATHLAND

OAK-PITCH
PINE

FRESHWATER/TIDAL
WETLAND/POND
COMPLEX

GRASSLAND
MEADOW

OAK-PITCH PINE

SHRUBLAND

SHRUBLAND

Value of diverse habitats

- **Support complex life histories**
- **Feeding sites through time**
- **Protection from predators and storms**
- **Change through the years**
- **Varied experiences for people**

Grassland/Meadow Habitat



Source: http://www.nature.org/wherewework/northamerica/states/newyork/images/art26911_2.jpg







Aphrodite fritillary on milkweed





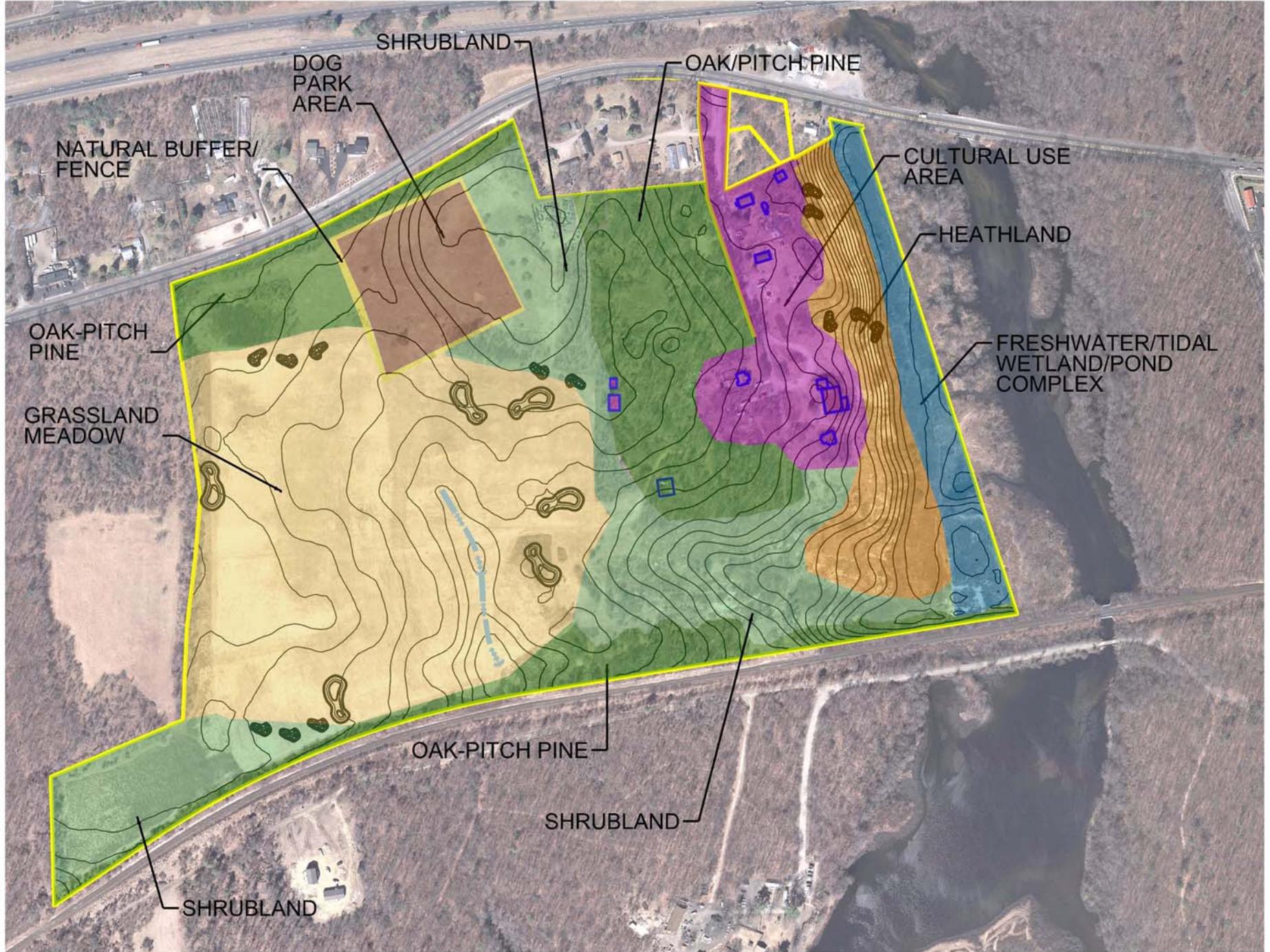
Goldfinch on
thistle

Successional Old Field

Mow, treat with herbicide, burn, and seed old field to remove invasive plants such as mugwort. Possibly remove topsoil containing mugwort rhizomes.

- Add soil amendments to decrease pH and limit nitrogen availability
- Restore native meadow vegetation
- Establish shrublands near eastern edges

NOTE: Addition of microhabitat structure (rock piles, logs) that will increase animal biodiversity is recommended along selected perimeter areas



SHRUBLAND
DOG PARK AREA

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GRASSLAND MEADOW

FRESHWATER/TIDAL WETLAND/POND COMPLEX

OAK-PITCH PINE

SHRUBLAND

SHRUBLAND

Pitch Pine-Oak Forest

Dense, heavy, invasive
vines. Currently
dominated by black
locust and tree-of-
heaven





Oak-Pitch Pine Forest

Source:

<http://media.photobucket.com/image/pine%20barrens/elgecko1989/Pine-Barrens-trail.jpg>

Pitch Pine-Oak Forest

- Remove invasive species (vines, shrubs, herbs, most trees)
- Plant shrubs and canopy trees native to pitch pine-oak forest

Heathland Habitat

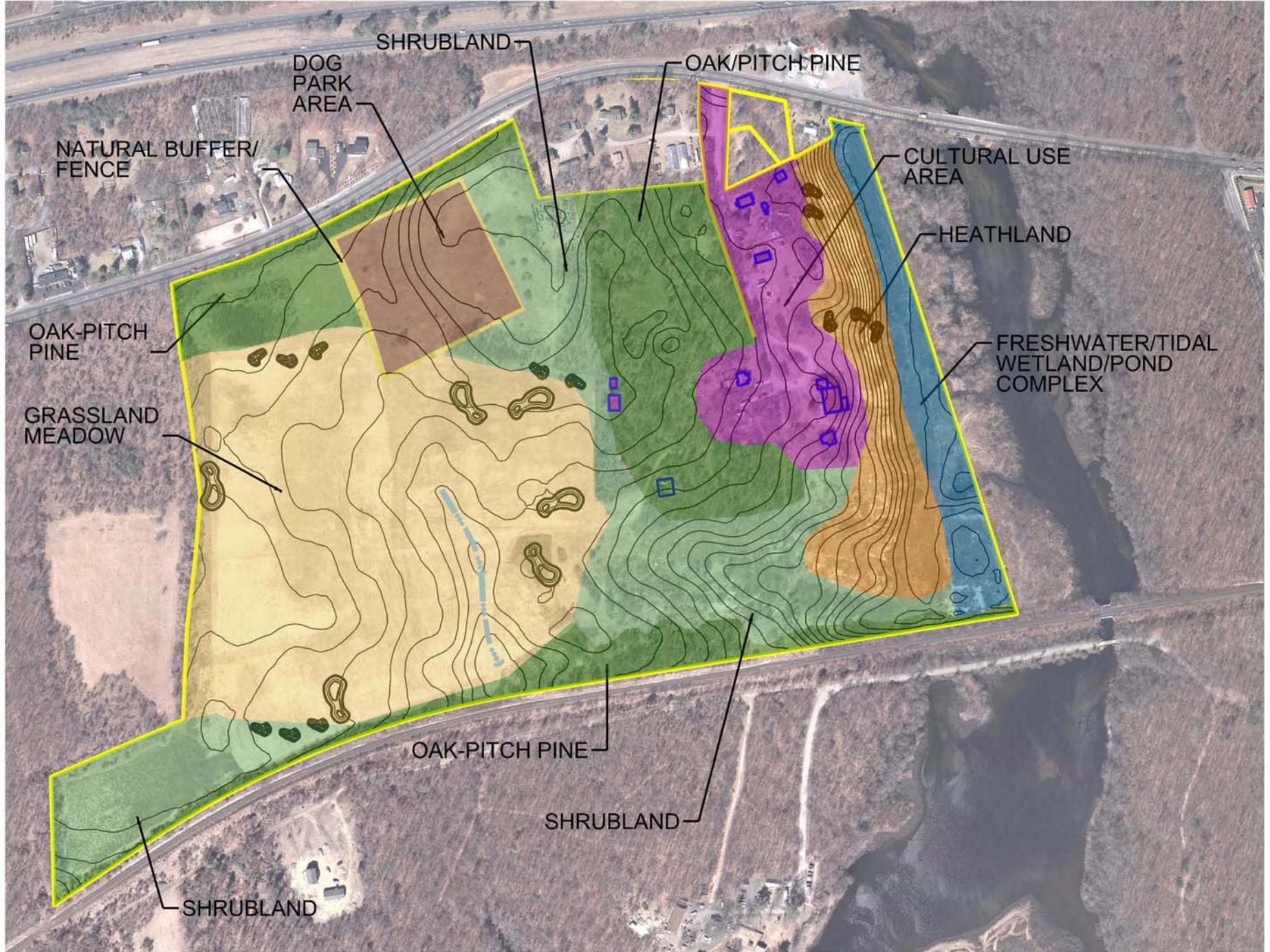




Heathland

Facilitate further establishment of beach heather

- Limit disturbance
- Remove encroaching invasive species
- Plant surrounding areas with native grasses and shrubs



SHRUBLAND
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COMPLEX

OAK-PITCH PINE

SHRUBLAND

SHRUBLAND

Tidal and Freshwater Wetlands

Remove some/all dikes

- Dredge to remove common reed (*Phragmites*) rhizomes
- Cut and treat with herbicide and/or fire
- Restore native vegetation and stabilize banks



Tidal/Freshwater Wetlands

Estuary
restoration after
Phragmites
control at
Wertheim
National Wildlife
Refuge



Source: monitoring photo points 2008

Native vegetation in
early spring under
Phragmites at RDF



Tidal and Freshwater Wetlands

*NOTE: all common reed (*Phragmites*) control and management must be closely coordinated with Federal land management staff due to the shared border by USFWS and Suffolk County along the Carmans River.

Additional Recommendations

- Create on site either a nursery or refuge zone for native plant collection.
- Designate an area on the site near area used for maintenance equipment storage for dead wood and other restoration materials that can serve to create habitat complexity for small mammals, reptiles, amphibians, insects, and other macroinvertebrates.

Ecological Opportunities

- Restore natural heritage of the land
- Restore ecological functions
- Minimize, but not eliminate, management needs and costs
- Improve biodiversity in surrounding areas
- Add ecological resiliency for the future