

Polpis Bike Path

File No.: 199201570

City and State: Nantucket, MA

General Impacts: 1.47 acres forested, marsh, shrub swamp

Functions and Values Lost: (from EA/SOF)

Floodflow Alteration

Groundwater Discharge

Sediment/Toxicant Removal

Production Export

Wildlife Habitat (aquatic diversity and rare species)

Uniqueness

Year(s) Mitigation Constructed: December 1998

Size and Type of Mitigation as Proposed: 2.74 acres PEM

Proposed Functions and Values of Mitigation:

Recreation

Wildlife Habitat

Mitigation Special Condition(s):

3. The mitigation area shall be constructed to grades as shown on the plan entitled: "Wetland Replacement Area M. Grading Plan". Wetland topsoil shall be placed as required. Planting of vegetation species shall be done in accordance with the plan entitled: "Wetland Replacement Area M. Planting Plan" and the table entitled: Table 3, Planning Specifications, Wetland Replacement Area M, with the exception that no planting is required in Subarea D. (Pondshore Vegetation) down gradient of the elevation representing the normal annual low water level in the nearby mudhole area.

Remarks:

None

Directions:

You will need to take the ferry, a boat, or fly to Nantucket. From the center of Nantucket, take Main Street going west. Take a left onto Sparks. When it splits, bear left onto Polpis.





MITIGATION SITE FIELD DATA FORM

Site Name: Polpis Bike Path - Nantucket **File No.** 199201570
City/Town: Nantucket **State:** MA **Waterbody:** n/a
Monitor(s): K. Wright, K. McKee **Date:** 7-23-02

Was site constructed? yes

Is site wetland? yes

Size of proposed wetland: 2.74 acres

Actual size of wetland: TBD

Landscape position: TBD

Lat/Long Points: 41.29152, 069.99442

Saved GPS Waypoint name: NAN

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use:

Bike path and Polpis road, shrub forest, pond, ditch, gravel road

Is wetland function compromised by surrounding land use?

Some runoff from Polpis Road

Plant health:

Good except for dead "black gum" (*Nyssa sylvatica*) trees

Invasive species:

None

Wildlife use:

Sparrows, deer, (maybe turtles – saw numerous shallow pits about 10 inches wide in the dried mud – turtle nests?)

Plants:

Area D

Eleocharis sp.
Hypericum mutilum (St. John's wort)
Juncus sp. (4-8" tall or so)
Lysimachia sp. (?) (Yellow flower-photo)

Area D1 edge

Clethra alnifolia
Juncus effusus
Myrica pensylvanica (bayberry)
Panicum clandestinum
Poaceae spp. (see photo)
Rubus sp. (blackberry)
Scirpus cyperinus (wool grass)

Area C and B

Eleocharis sp.
Juncus canadensis
Juncus effusus
Juncus militaris (bayonet rush)
Nyssa sylvatica (black gum or sour gum)
Rhynchospora capitallata
Scirpus cyperinus (wool grass)
Sparganium sp.
Typha latifolia

Area B

Scirpus atrovirens (green bulrush)
Sparganium sp.
Typha latifolia

Area A

Bidens sp.
Carex lurida
Carex sp. (ovales)
Juncus effusus
Rhus sp.
Rubus sp.
Solidago sp.
Typha latifolia

Soils Data:

Soils data not collected at this site.

Sketch approximate mitigation site, noting areas and types of wetlands, waters, other features, landscape position, landmarks, etc., and data and photo point(s)

See file.

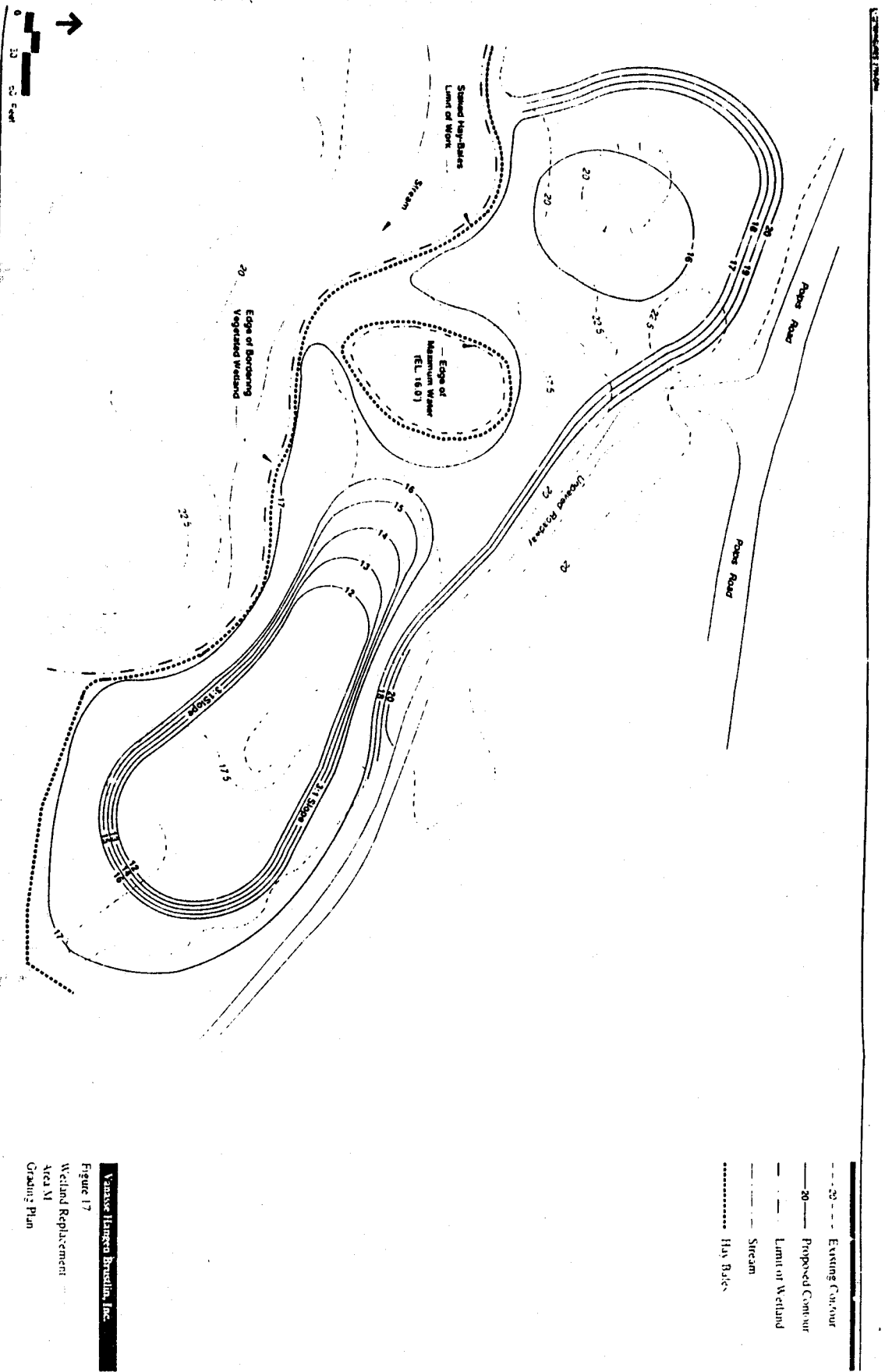
Overall Description of site:

There was no rain for six weeks prior to this site visit. The site is south of Polpis Road and the Polpis Bike Path. It is surrounded by a dirt road and a wooden fence. Area D was bone dry to five inches at which point moist sand was found. Almost no vegetation was supported in this area. Between Area D and C is a pond that is referred to in the planting plan as a mudhole. The site becomes increasingly wet from Area C to Area B. Area C/B contained a 300 square foot ponded area. Area A was dry but supported shrub/scrub wetland vegetation.

A monitoring well was installed in a 21-inch hole in Area D. Slots begin 5 inches below ground and the well sits 10 inches above ground.

Comments, problems, recommendations:

There appear to be design problems with this site based on hydrology and possibly a nutrient-poor soil. Subarea C was supposed to be a shrub wetland but vegetation was more characteristic of a shallow marsh. Subarea B was supposed to be a wet meadow but is much wetter and was dominated by *Sparganium*. Woody species mortality was observed in 1998 but they have not been replaced. Area D was noticeably barren of vegetation. Based on deep deer prints, the area (D/D1) had been muddy earlier in the season.



Vanasse Hangen Brustlin, Inc.
 Figure 17
 Wetland Replacement
 Area M
 Grading Plan

Wetland Function-Value Evaluation Form

Total area of wetland 2.74 ac Human made? yes Is wetland part of a wildlife corridor? likely or a "habitat island"? no

Adjacent land use bike path, scrub, gravel road Distance to nearest roadway or other development 50 feet

Dominant wetland systems present PEM, some PSS Contiguous undeveloped buffer zone present 75%

Is the wetland a separate hydraulic system? yes If not, where does the wetland lie in the drainage basin? n/a

How many tributaries contribute to the wetland? 0 Wildlife & vegetation diversity/abundance (see attached list)

Polpis Bike Path

Wetland I.D. 1992001570

Latitude N41.29152 Longitude W69.99442

Prepared by: RL PM Date 5/14/03













Wetland Impact:

Type _____ Area _____

Evaluation based on:

Office X Field _____

Corps manual wetland delineation
completed? Y _____ N X

Function/Value	Suitability Y N		Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
 Groundwater Recharge/Discharge	X			X	sandy with variable water table
 Floodflow Alteration		X			
 Fish and Shellfish Habitat		X			
 Sediment/Toxicant Retention	X				has potential; portions have dense vegetation
 Nutrient Removal		X			
 Production Export		X			
 Sediment/Shoreline Stabilization		X			
 Wildlife Habitat	X				minimal
 Recreation		X			
 Educational/Scientific Value		X			
 Uniqueness/Heritage		X			
 Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			none known
Other					

Notes:

* Refer to backup list of numbered considerations.

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7/23/02



Looking west and north from near the entrance. Subarea C is in the foreground; subarea B is behind it.



Area D in the foreground; D-1 is in the background



Subarea B in the foreground; subarea A in the background.



Area referred to as the “Mud Hole” on the plan

USGS 342 km E of New York, New York, United States 29 Mar 1995



0 100M

0 100yd

Image courtesy of the U.S. Geological Survey
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