

Mill Creek

File No.: 199100657

City and State: Chelsea, MA

General Impacts: 0.09 acre tidal emergent

Functions and Values Lost:

Groundwater
Floodflow Alteration

Year(s) Mitigation Constructed: December 1995

Size and Type of Mitigation as Proposed: 1.08 acres tidal emergent

Proposed Functions and Values of Mitigation:

Floodflow Alteration

Mitigation Special Condition(s):

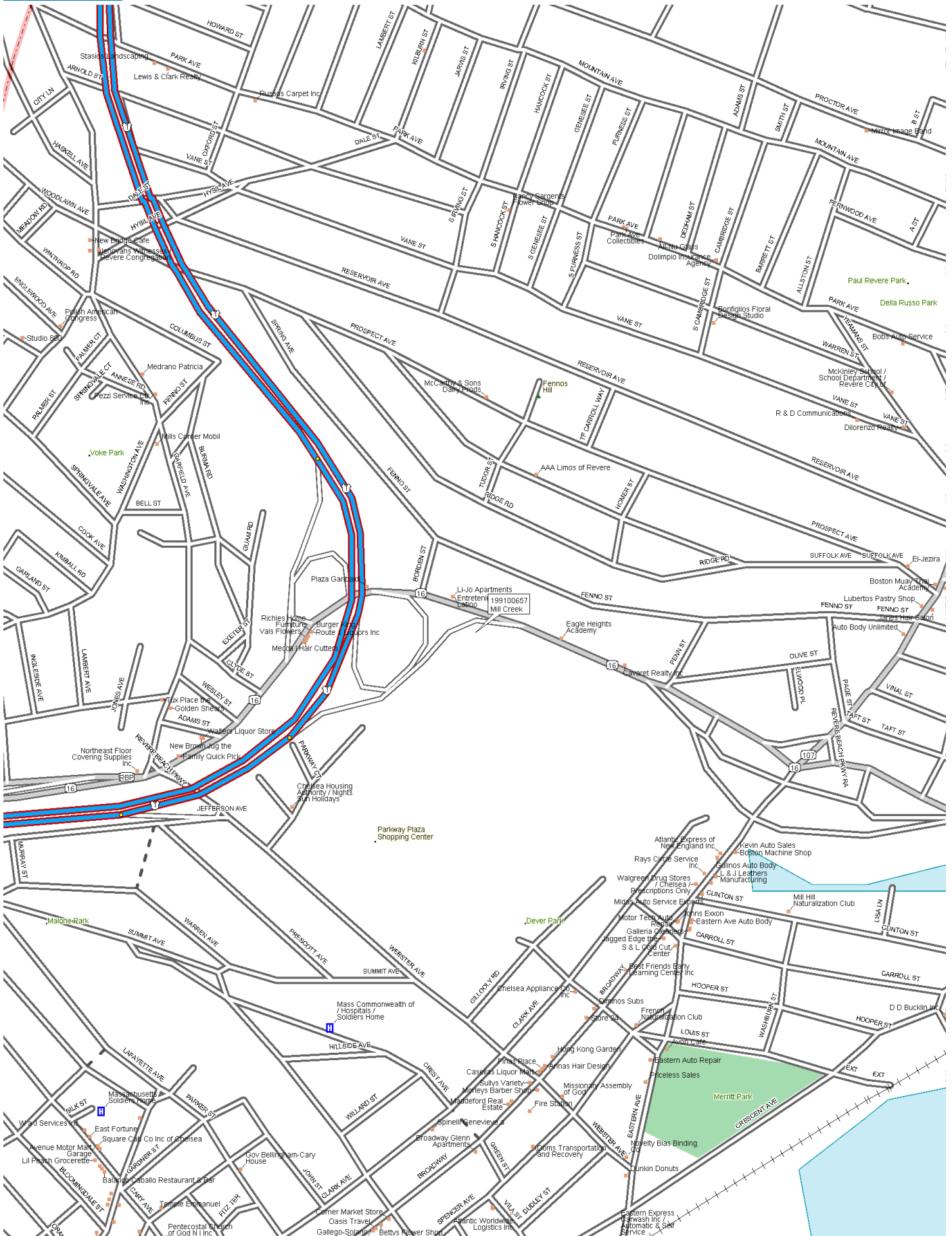
7. Wetland mitigation shall be accomplished in accordance with “Attachment A, Saltmarsh Restoration Plan”. The first season work shall be completed prior to the expiration of this permit. Excavation shall take place before March 15 or after June 15. The site shall be stabilized by erosion control methods. Planting shall be done at appropriate times (fall or spring). The activities shall take place prior to or concurrently with the drainage improvement project.

Remarks:

None

Directions:

Take Route 2 east. Take the unnamed road that says Medford. Turn slight left. Turn slight left onto Alewife Brook Parkway/Route 16. (The mitigation sites can be seen from the clover leaf, but you have to go around in a circle to access them.) Turn right onto Broadway. Enter next rotary, and take the second exit onto Warner Street. Warner Street becomes Harvard Street. Turn slight right onto Mystic Valley Parkway. Mystic Valley Parkway becomes Revere Beach Parkway. Take the Route 107/Broadway ramp towards Revere/Chelsea. Go south into Chelsea, and take a right towards the shopping center and the VA Hospital. Take the next right after the shopping center.





MITIGATION SITE FIELD DATA FORM

Site Name: Mill Creek File No. : 199100657

City/Town: Chelsea State: MA Waterbody: Mill Creek

Monitor(s): Minkin, Ladd, McKee, Wright Date: 6-5-02

Was site constructed? yes

Is site wetland? yes

Size of proposed wetland: 1.08 acres

Actual size of wetland: TBD

Landscape position: along tidal creek

Lat/Long Points: Mill Creek Site 1 - N
42.40474 degrees, W071.02061 degrees

Saved GPS Waypoint name: MILL1

GPS Tracking Log Name: N/A

Perimeter: TBD

Surrounding land use:
Highway/industrial/commercial

Is wetland function compromised by
surrounding land use?
Site contained garbage, remnants of petroleum-
based pollution, and was subject to highway run-
off.

Plant health:
Good

Invasive species:
Phragmites australis at the site's fringe.

Wildlife Use:
Crabs, egret, mussels, Red-winged blackbird,
arthropods, and clams.

Plants:

Phragmites australis (very little)
Spartina alterniflora
Spartina patens
Suaeda linearis (trace)

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:

None.

Comments, problems, recommendations:

A conversation with EPA's Ed Reiner revealed that the Mill Creek site once contained toxic waste whose removal cost millions of dollars. Ed noted that the mitigation was not a success according to the permit because the site was supposed to have a shelf of high marsh and a shelf of low marsh, but the cost of hazardous material removal became so high that the contractor refused to do any more grading.

[The impact area for the highway project has impacted a larger area than was permitted because the project involved the long-term maintenance of a ditch which has not happened. This lack of maintenance is causing the Chelsea Housing Authority marsh off of Lock St. to fill with sand, and is currently subject to a federally funded restoration project. Paul Howard may have more info on this site; if not, Ed Reiner does.]

PROP. PULL BOX
 PROP. 3" CONDUIT C-4 NO. 1/0
 & 1 NO. 4 GND

PROP. SALT MARSH DITCH
 (SEE SHEET 10)

PROP. JACKED
 (SEE SHEET 10)

DITCH INV. 30±

EXIST. (TO R)

R = 10
 L = 10
 T = 5
 Δ = 60

MEET EXIST. CHANNEL

SALT MARSH AREA. SA
 TO BE ES
 SPECIFICA
 SECTION,
 CROSS SEC

PROP SALT MARSH DITCH
 (SEE SHEET 10)

REPLACEMENT AREA-2
 APPROX. 13600 s.f.

PT. "K"
 STA. 14+99.85

STA. 16+39.82 SURVEY B "G" - "H" =
 STA. 60+29.93 CULVERT "B" =

MILL CREEK DRAINAGE
 IMPROVEMENT PROJECT
 MASSACHUSETTS D.P.W.
 CITIES OF REVERE AND
 CHELSEA, MA

REPLACEMENT AREA-2
 SALT MARSH
 STATION 14+50 B.L. "G"

SCALE 1"=40
 DATUM: MSL=0.0
 MLW=2.2
 MHW=4.6
 HTL=5.0
 SHEET 26 OF 28
 DATE: 3-11-92

Wetland Function-Value Evaluation Form

Total area of wetland 1.08 ac Human made? yes Is wetland part of a wildlife corridor? yes or a "habitat island"? no

Adjacent land use urban, pavement Distance to nearest roadway or other development 100 feet

Dominant wetland systems present estuarine emergent Contiguous undeveloped buffer zone present 50%

Is the wetland a separate hydraulic system? no If not, where does the wetland lie in the drainage basin? low

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

Wetland I.D. Mill Creek 199100657

Latitude N42.40474 Longitude W71.02061













Prepared by: Minkin Date 6/5/02

Wetland Impact:
Type Area

Evaluation based on:

Office Field X

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			
 Floodflow Alteration	X		4,6,8,10,13		wetland along tidal channel
 Fish and Shellfish Habitat	X		marine – 1,4,5		crabs, mussels, arthropods, clams
 Sediment/Toxicant Retention	X		1,2,10,14,16		toxic components within wetland soil
 Nutrient Removal	X		3,4,5,8,9,14		high marsh not flooded diurnally
 Production Export	X		2,4,6,10		occasional tidal flushing
 Sediment/Shoreline Stabilization	X		3,4,6,7,15	X	wetland borders Mill Creek
 Wildlife Habitat	X		7,8,11,13,19		egret, red-winged blackbird
 Recreation		X			
 Educational/Scientific Value		X			used for thesis research
 Uniqueness/Heritage		X			
 Visual Quality/Aesthetics		X			
ES Endangered Species Habitat		X			
Other					

Notes:

* Refer to backup list of numbered considerations.

199100657
MHD - Mill Creek
Chelsea, MA
6/5/02



Looking northeast from fill pile on southeast side of site



Typical vegetation



Looking westerly from northeast corner along creek.
Site extends to bridge.



0 100M

0 100yd

Image courtesy of the U.S. Geological Survey
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