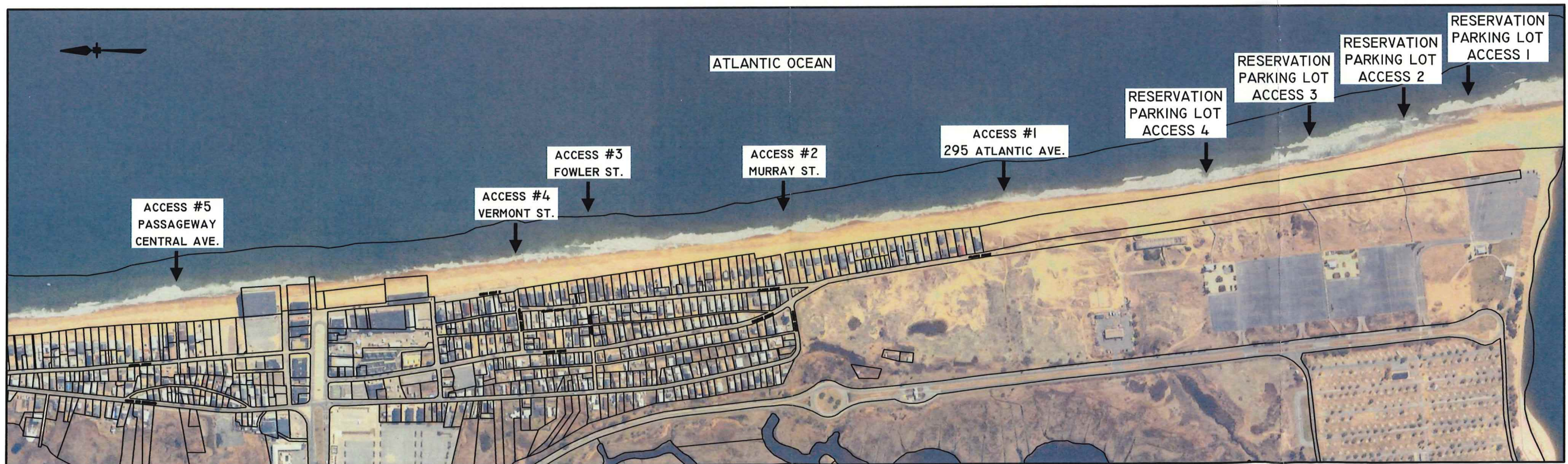
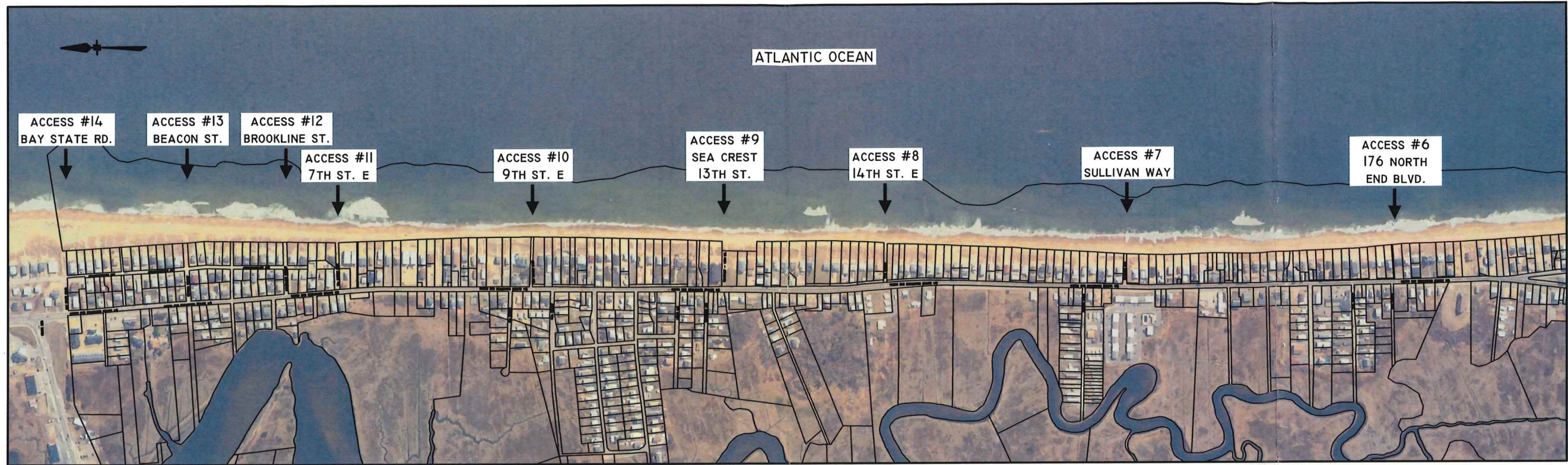


SALISBURY BEACH PUBLIC ACCESS LOCATION PLAN



Salisbury Beach

Public

Access

Points

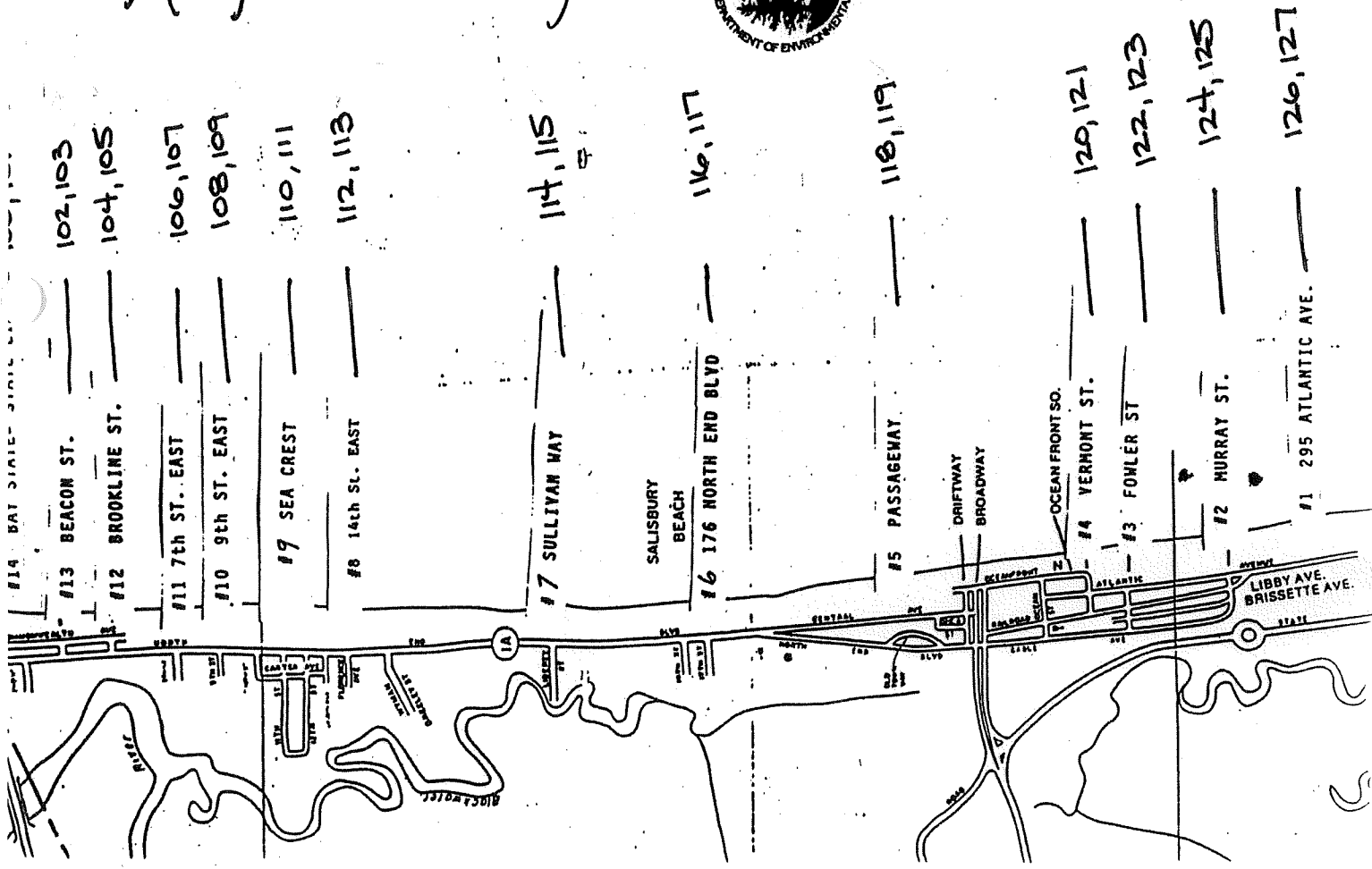
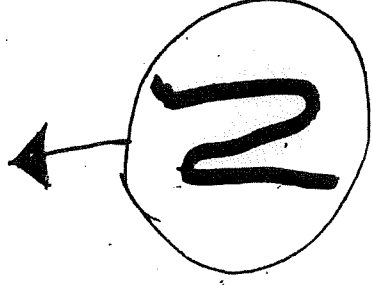
Michael A. Magnifico
Principal Forest and Park Supervisor



Commonwealth of Massachusetts
Department of Environmental Management
Division of Forests and Parks
Salisbury Beach State Reservation

P.O. Box 5303
Salisbury, MA 01952

(508) 462-4481





PHOTOGRAPH 1

Access
Opening No. 14 –
State Line.



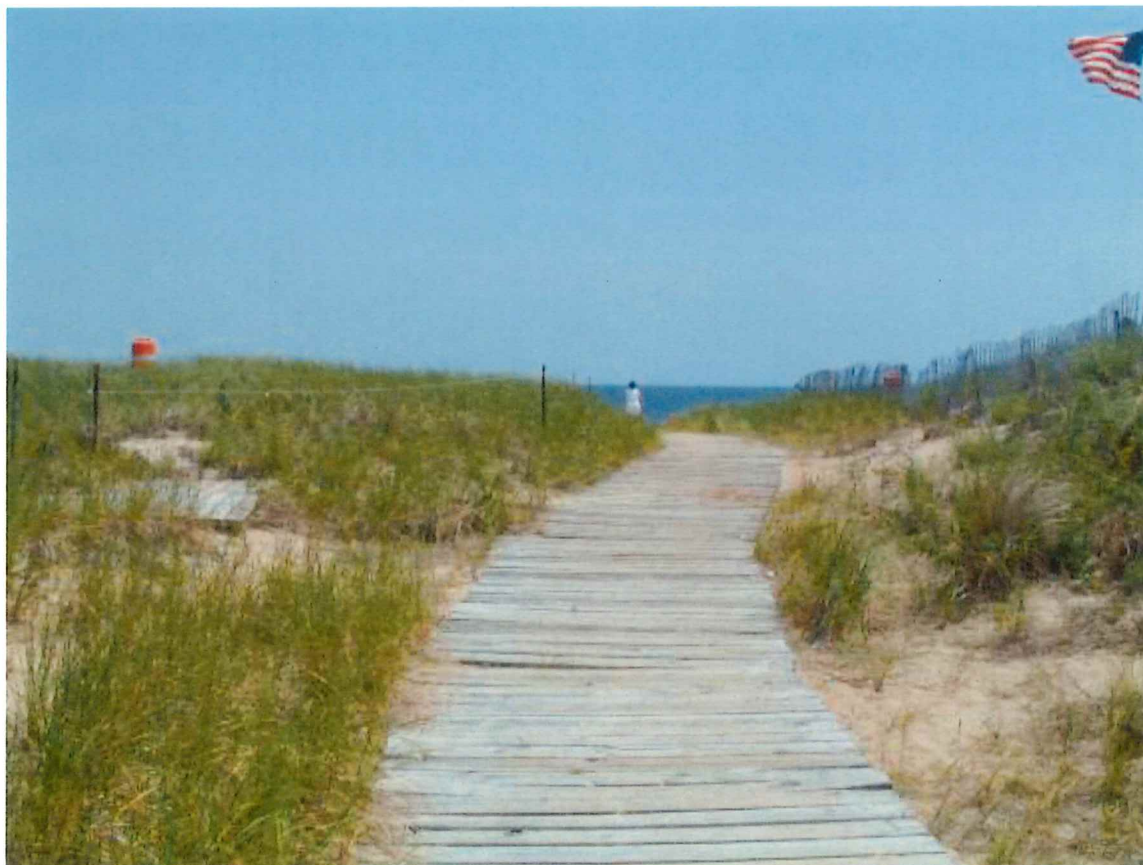
PHOTOGRAPH 2

Access
Opening No. 14 –
State Line – South
side.



PHOTOGRAPH 5

Access
Opening No. 13 –
Beacon Street.



PHOTOGRAPH 6

Access
Opening No. 13 –
Beacon Street.



PHOTOGRAPH 7

Access
Opening No. 13 –
Beacon Street –
South side.



PHOTOGRAPH 8

Access
Opening No. 13 –
Beacon Street –
North side.



PHOTOGRAPH 9

Access
opening No. 12 –
Brookline Street.



PHOTOGRAPH 10

Access
Opening No. 11 –
7th Street East.



PHOTOGRAPH 11

Access
Opening No. 11 –
7th Street East.



PHOTOGRAPH 12

Access
Opening No. 10 –
9th Street East.



PHOTOGRAPH 13

Access
Opening No. 9 –
Seacrest.



PHOTOGRAPH 14

Access
Opening No. 9 –
Seacrest – North
side.



PHOTOGRAPH 15

Access
Opening No. 9 –
Seacrest – South
side.



PHOTOGRAPH 16

Access
Opening No. 8 –
14th Street East.



PHOTOGRAPH 17

Access
Opening No. 8 –
14th Street East –
North side.



PHOTOGRAPH 18

Access
Opening No.8 –
14th Street East –
South side.



PHOTOGRAPH 19

Access
Opening No. 7 –
Sullivan Way.



PHOTOGRAPH 20

Access
Opening No. 7 –
Sullivan Way –
North side.



PHOTOGRAPH 21

Access
Opening No. 7 –
Sullivan Way –
South side.



PHOTOGRAPH 22

Access
Opening No. 7 –
Sullivan Way –
North side.



PHOTOGRAPH 23

Access
Opening No. 7 –
176 North End
Blvd.



PHOTOGRAPH 24

Access
Opening No. 5 –
Passageway
looking West.



PHOTOGRAPH 25

Access
Opening No. 5 –
Passageway.



PHOTOGRAPH 26

Access
Opening No. 4 –
Vermont Street –
Intersection of
Oceanfront and
Vermont.



PHOTOGRAPH 27

Access
Opening No. 3 –
Fowler Street –
North side.



PHOTOGRAPH 28

Access
Opening No. 3 –
Fowler Street –
South side.



PHOTOGRAPH 29

Access
Opening No. 2 –
Murray Street.



PHOTOGRAPH 30

Access
Opening No. 2 –
Murray Street –
South side.



PHOTOGRAPH 31

Access
Opening No. 2 –
Murray Street –
North side.



PHOTOGRAPH 32

Access
Opening No. 1 –
295 Atlantic Ave.

David Vine

From: "David Vine" <dvine@vineassociates.net>
To: "Raul Silva" <raul.silva@state.ma.us>; <joe.halloran@state.ma.us>
Cc: "Christine Player" <cplayer@vineassociates.net>
Sent: Wednesday, June 29, 2005 5:16 PM
Subject: Salisbury

Raul/Joe:

Joe, Jim Marcelles and myself spent some time this afternoon trying to get a handle on the volume of sand and other materials necessary for repairing eroded dunes on the Salisbury beach. We divided the total length of 14,850 lf of beach (adjacent to houses) into 9 reaches, estimating the height of cliff (or scarf) along the length of each reach. We then assumed a 5H:1V slope of sand to be placed adjacent to the cliff, and assumed the existing beach grade to be 20H:1V within the proposed repair area. The 5H:1V was chosen based on a Town project in 1994, and the VAI dune project for the State in 2000, associated with the Frolics demolition.

Based on comparison of photos and general recollection this method indicated approximately 92,000 cy, with a cliff height ranging from 3 to 12 feet (with an average of 5.4 feet) in height. This amount was then compared to some other estimates including a 12 foot height throughout the entire length (336,000 cy) and an 8 foot average height (150,000 cy).

Based on these estimates (to be further confirmed by Jim in the field), we considered what cost would be associated with these magnitudes of sand. Utilizing the per ton costs of the 2000 project, we estimated a cost of \$14/cy trucking and grading, which for an assumed 120,000 cy provided a total cost of sand of \$1,680,000.

To this amount, we assumed snow fencing at one row over the entire length and 2 rows over another 50% of the total 14,850 lf or 22,275 lf. Utilizing the 2000 cost of \$5/lf installed, this component would be \$112,000.

Also considered was the cost for planting. We assumed plants approximately 1 foot on center, over a 30 foot width along the entire length. This translates to 445,500 plants. We really had no indication of the cost for such plantings, and we discussed utilizing a cost of about \$100,000, until further information can be gained.

Utilizing these gross assumptions the project cost would be in the order of \$1.9 million (without additional contingency or administration costs).

Some of the issues with implementing this type of program were discussed. We agreed that the bringing of sand to the beach would require significant trucking, the need for several drop-off points, and traffic would be highly impacted. We discussed the timing of the work regarding plantings, permitting and bidding, and the anticipation that the addition of the fencing alone would probably have significant impact on reducing the sand volume.

We also discussed the potential that coordinating a program of beach nourishment by other means than trucking could significantly reduce the costs. Such means would be to utilize sand from the USACE dredging of the Merrimack River, and possibly establishing a nearshore mining area using pumping of material. Though such methods would require significant coordination and permitting, it was felt that such alternate methods should be considered for any large project of this type.

We are providing this information as a status report on investigations. We will continue to update these investigations as directed, and would recommend that we further discuss these findings before we finalize them as conclusions.

David
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