Final Environmental Impact Report
Environmental Assessment
Section 4(f) Evaluation (FEIR/EA)

EEA Number 13789

Capital Improvements Plan
Provincetown Municipal Airport

Final

December 17, 2011

Federal Aviation Administration
Massachusetts DOT Aeronautics Division
Provincetown Airport Commission

Date:

FINAL DOCUMENT

Final Environmental Impact Report
Environmental Assessment
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Capital Improvements Plan
Provincetown Municipal Airport
Provincetown, Massachusetts

December 17, 2011

The Environmental Assessment becomes a federal document when evaluated, signed, and dated by the responsible federal official.

Michelle Rainey

Responsible Federal Official

12/12/11

Date

FINAL ENVIRONMENTAL IMPACT REPORT
ENVIRONMENTAL ASSESSMENT
SECTION 4(f) EVALUATION (FEIR/EA)
EEA No. 13789

Capital Improvements Plan
Provincetown Municipal Airport
Provincetown, Massachusetts

Submitted by:
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In conjunction with:
MassDOT Aeronautics
and the
Federal Aviation Administration

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This Environmental Assessment becomes a Federal document when evaluated and signed by the responsible Federal Official.

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
FINDING OF NO SIGNIFICANT IMPACT (FONSI)

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA). I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(c) of NEPA. As a result, FAA will not prepare an EIS for this action.

APPROVED:_____ DATE:_____

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List of Abbreviations

ADG	Airplane Design Group
AIP	Airport Improvement Program
ALP	Airport Layout Plan
ALS	Approach Light System
ALSF-II	High intensity approach lighting system with sequenced flashing lights
AOA	Airport Operations Area
ARC	Airport Reference Code
ARFF	Aircraft Rescue and Firefighting Facilities
ARP	Airport Reference Point
ATSA	Aviation and Transportation Security Act
AWOS	Automated Weather Observing System
BOS	Boston Logan International Airport
BVW	Bordering Vegetated Wetland
CAT I	Category I Instrument Landing System
CAT II	Category II Instrument Landing System
CCC	Cape Cod Commission
CCNS	Cape Cod National Seashore
CCRTA	Cape Cod Regional Transit Authority
CIP	Capital Improvements Project
Db	Decibel
DbA	A-weighted Decibel
DHS	Department of Homeland Security
DME	Distance Measuring Equipment
DNL	Day Night Average Sound Level
DRI	Decision of Regional Impact
EA	Environmental Assessment
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulation
FBO	Fixed Base Operator
FONSI	Finding Of No Significant Impact
GA	General Aviation
GS	Glide Slope
GPS	Global Positioning System
HIRL	High Intensity Runway Lights
IFR	Instrument Flight Rules
INM	Integrated Noise Model
ILS	Instrument Landing System
IVW	Isolated Vegetated Wetland
Leq	Equivalent Sound Level
LES	Localizer Equipment Shelter
LIRL	Low Intensity Runway Lights
LOC	Localizer
LOS	Level of Service
MassDOT	MA Department of Transportation Aeronautics Division (formerly Massachusetts Aeronautical Commission)
MALS	Medium Intensity Approach Light System

MALSF	MALS with sequenced flashing lights
MALSR	MALS with runway alignment indicator lights
MIRL	Medium Intensity Runway Lights
MITL	Medium Intensity Taxiway Lights
MM	Middle Marker
NAVAID	Navigational Aids
NDB	Non-Directional Beacon
NEPA	National Environmental Policy Act
NHESP	Natural Heritage Endangered Species program
NLR	Noise Level Reduction
NPDES	National Pollutant Discharge Elimination System
NPIAS	National Plan of Integrated Airport Systems
NPS	National Park Service
MEPA	Massachusetts Environmental Policy Act
OFA	Object Free Area
PAPI	Precision Approach Path Indicator
PCC	Provincetown Conservation Commission
PVC	Provincetown Municipal Airport
RCO	Remote Control Outlet
REILs	Runway End Identifier Lights
ROD	Record of Decision
ROFA	Runway Object Free Area
RPZ	Runway Protection Zone
RSA	Runway Safety Area
RW	Runway
SIDA	Security Identification Display Area
SUP	Special Use Permit
SWPPP	Storm Water Pollution Prevention Plan
TAF	FAA's Terminal Area Forecast
TDM	Transportation Demand Management
TSA	Transportation Security Administration
TW	Taxiway
VASI	Visual Approach Slope Indicator
VFR	Visual Flight Rules

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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
DRAFT ENVIRONMENTAL IMPACT REPORT/NOTICE OF PROJECT CHANGE

PROJECT NAME	: Provincetown Municipal Airport Capital Improvements Plan
PROJECT MUNICIPALITY	: Provincetown
PROJECT WATERSHED	: Cape Cod
EOEA NUMBER	: 13789
PROJECT PROPONENT	: Provincetown Airport Commission
DATE NOTICED IN MONITOR	: June 11, 2007

As Secretary of Energy and Environmental Affairs, I hereby determine that the Draft Environmental Impact Report (DEIR)/Notice of Project Change (NPC) submitted on the above project **adequately and properly complies** with the Massachusetts Environmental Policy Act (G. L., c. 30, ss. 61-62H) and with its implementing regulations (301 CMR 11.00). I am allowing the proponent to proceed with the reconstruction of the terminal apron and the easterly end of the parallel taxiway within the same footprint prior to the completion of the FEIR.

Project Description

According to the DEIR/NPC, the proposed project, the Capital Improvement Plan (CIP), consists of the following projects: 1) Westerly Taxiway (TW) System Improvements; 2) Relocation of the East End TW; 3) Reconstruction of the Easterly End of the Parallel TW within the same Footprint; 4) Reconstruction of the Terminal Apron within the same Footprint; 5) Installation of Edge Lights and Construction of an Electric Vault; 6) Rehabilitation or Replacement of the Sightseeing Shack; 7) Improvements to the Medium Intensity Approach Light System with Sequenced Flashing Lights (MALSF) Access Road; 8) Construction of Service Access Roads; 9) Installation of a Perimeter Safety/Security Fence; 10) Construction of a Turf Apron; 11) Expansion of the Auto Parking Area; and 12) Expansion of the Terminal Building. The CIP would be completed over a period of five to ten years. The proponent is seeking to comply with Federal Aviation Administration (FAA) safety, security, and design

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standards. These improvements will have minor impacts on the normal runway operations, and there will be no runway expansion and no increase in capacity.

The existing Provincetown Municipal Airport (PMA) contains approximately 13,316 square feet (sf) of airport structures that include a terminal building, aircraft hanger, a snow removal equipment building (SRE), sightseeing shack, a 3,500 foot long runway (Runway 7-25), a taxiway system, aircraft parking, an approach lighting system, navigational aids, and two auto parking areas. It is a public use, commercial service airport with scheduled airline passenger service to and from Logan International Airport, and it enplanes 10,000 or more passengers annually. PMA has a full Instrument Landing System runway approach capability. The PMA is located on 322 acres of federally owned land, which is within the Cape Cod National Seashore (CCNS) and is administered by the National Park Service (NPS). About 4-7 acres of land would be impacted by the project.

This project is subject to a mandatory EIR. The project may require Variances from the Water Quality Certification and the Wetlands Regulations. A Superseding Order of Conditions and a Section 401 Water Quality Certificate may be needed from the Department of Environmental Protection (MassDEP). The project will require review under the Massachusetts Endangered Species Act (MESA) by the Natural Heritage and Endangered Species Program (NHESP) to determine if it will require a Taking Permit and/or a Conservation and Management Permit. It will require a Notice of Intent to be filed with the Provincetown Conservation Commission. The project will need to obtain a Special Use Permit from the NPS. It must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. The project will need a Section 404 Programmatic General Permit from the U.S. Army Corps of Engineers. The project will also come under review as a Development of Regional Impact (DRI) with the Cape Cod Commission (CCC), and is undergoing joint review with the CCC and the MEPA Office. Because an agency of the Commonwealth, the Massachusetts Aeronautics Commission (MAC) is providing a portion of the funding, MEPA jurisdiction extends to all aspects of the project that may have significant environmental impacts.

Changes to the Project

The proponent has included a run-up pad prior to the West Entrance TW as part of the Westerly Taxiway System Improvements. However, this run-up pad was always considered as a component of the project by the proponent. The run-up pad was shown but not discussed in the ENF. The proponent is proposing to construct a turn-around for the FAA vehicles which use the access road to the MALSF approach lights. It has also requested permission to go forward with projects #3) the Reconstruction of the Easterly End of the Parallel TW and #4) the Reconstruction of the Terminal Apron, which will be constructed within their existing footprints. The terminal apron and easterly end of the parallel TW's pavement is over twenty years old and funding may be programmed prior to the completion of the FEIR. I am allowing both of these Replacement Projects to be completed prior to the completion of the FEIR

2

EOEEA #13789 DEIR/NPC Certificate July 18, 2007

Review of the DEIR/NPC

The DEIR provided a detailed project description with a summary/history of the project. It included existing and proposed site plans. The EIR described the existing (2004) and projected level of passengers and flights and airport operations (including general aviation) for the next twenty years (2024). It identified that Phase 1 included the reconstruction of the terminal apron and the easterly end of the parallel TW within their respective footprints.

The DEIR described each local, regional, state, and federal agency action required for the project. The DEIR discussed which of the projects within the CIP are safety improvement projects required by the FAA. However, more discussion is needed in the FEIR to determine which projects are solely to comply with required FAA regulations.

In addition to the Preferred Alternative, the No-Build Alternative, the DEIR summarized the alternatives for each of the CIP projects. The DEIR provided a comparative analysis that showed the differences between the environmental impacts associated with some of the CIP projects. The DEIR clarified some of the differences between FAA safety and design requirements and the recommendations for each project proposed within the CIP.

The proponent has identified that the project may impact the following wetland resource areas: 265,890 sf of permanent and 223,320 sf temporary impacts to Coastal Dune; 2,000 sf of permanent and 44,000 sf of temporary impacts to Bordering Vegetated Wetlands (BVW); and 64,215 sf of permanent and 53,360 sf of temporary impacts to Isolated Land Subject to Flooding (ILSF). Areas of isolated wetland and BVW along the fence alignment will be pruned to maintain an unobstructed area along the fence.

The DEIR addressed the significance of the wetland resources on the project site. There are no nearby public water supplies and wells. The DEIR identified the fencing proposed in tidal creek areas where tidal movements may encumber debris. The proponent has a plan to deal with the blockage of tidal flow material. Bordering vegetated wetlands that have been delineated in the field were surveyed, mapped, and located on the plans. The Provincetown Conservation Commission has accepted the resource area boundaries. The DEIR included a detailed wetlands replication plan for areas to be altered and the proposed wetland replication species, planned construction sequence, and a discussion of the required performance standards and monitoring.

The DEIR provided a summary of the proponent's site habitat assessment. The Natural Heritage Endangered Species Program (NHESP) required a habitat assessment for the Eastern Spadefoot Toad, the Vesper Sparrow, the Eastern Box Turtle, and the Broom Crowberry.

The DEIR evaluated potential drainage impacts on water resources from the project. It included a description of the existing runways' drainage system design in the construction area and identified any proposed changes. Proposed activities, including construction mitigation,

erosion and sedimentation control were evaluated. The DEIR discussed the consistency of the project with the provisions of the National Pollutant Discharge Elimination System (NPDES) General Permit from the U.S. Environmental Protection Agency for stormwater discharges from construction sites. It included discussion of best management practices employed to meet the NPDES requirements, and included a draft Pollution Prevention Plan in Appendix 3.1.

In Appendix 4, the DEIR provided the weekday morning, midday and evening peak hour traffic LOS analysis for the Route 6/Racepoint Road intersection, which included volume to capacity ratios, delays, and queues for the 95th percentile. The DEIR's LOS table included each movement for this intersection. It included a map of the traffic study area.

The DEIR identified the number of parking spaces recommended by the Institute of Traffic Engineers for an airport. The proponent has proposed pervious parking spaces.

The DEIR identified the existing Transportation Demand Management (TDM) measures, such as rental car availability, taxicabs, and bus service to the center of Provincetown.

There are no sidewalks along Race Point Road, and none are proposed. Walking is prohibited on the CCNS Bikeway that is adjacent to the airport.

The DEIR presented existing noise contours at the airport. It stated that estimated projected noise levels and contours for the next ten years (2014) would not increase from the CIP projects.

During the DEIR process, the proponent has consulted with the Massachusetts Historical Commission (MHC) and the Provincetown Historic Preservation Commission.

The DEIR included a visual resource assessment in Section 5. The visual resource assessment examined the visual impacts of the project included in the CIP, especially building expansions and vegetation clearing, on the Cape Cod National Seashore.

The DEIR did not identify any hazardous waste studies and remediation efforts undertaken at the project site by the proponent.

The FEIR should resolve all the remaining issues outlined below, as required by this Certificate. It should include a copy of this Certificate.

Project Description

The FEIR should provide a detailed project description with a summary/history of the project. It should carefully describe all elements of each of the twelve CIP projects. The FEIR should clarify which of the proposed CIP projects are required by FAA regulations vs. suggested by FAA guidelines. It should include existing and proposed site plans. The FEIR should

investigate feasible methods of reducing wetland impacts and the creation of impervious areas. It should summarize the permits required for the project. The FEIR should demonstrate how each of the projects within the CIP is consistent with the applicable performance standards. It should contain sufficient information to allow the permitting agencies to understand the environmental consequences of their official actions related to the project. The FEIR should identify if the CIP is compatible with zoning, regional planning, and Executive Order 385.

The FEIR should describe how the twelve CIP projects would be phased over the anticipated five to ten years. It should detail how these projects or groups of projects would be phased to go forward.

Alternatives Analysis

The FEIR should demonstrate that the alternatives for the expansion of the turf apron, parking lot and the terminal building have been evaluated with the ability to avoid or minimize wetland related impacts. The analysis should clearly present the alternative configurations at the site and identify the advantages and disadvantages of the Preferred Alternative. The FEIR should provide a comparative analysis that clearly shows the differences between the environmental impacts associated with each of the alternatives for the turf apron, parking lot and terminal expansion CIP projects.

Wetlands

The Wetland Section of the FEIR should examine options that avoid impacts to wetland resource areas, their associated buffer zones, riverfront protection areas and 100-year flood plain areas. Wetland figures should identify buffer zones, riverfront areas, and 100-year flood plains. Where it has been demonstrated that impacts are unavoidable, the FEIR should illustrate that the impacts have been minimized, and that the project will be accomplished in a manner that is consistent with the Performance Standards of the Wetlands Regulations (310 CMR 10.00). The FEIR should provide an accurate measurement of the wetland resource areas that will be affected by the project.

The FEIR should provide the information required by DEP when requesting a variance, as outlined in 310 CMR 10.05(b). According to MassDEP, the proposed expanded turf apron, auto parking lot and terminal building appear to be related to forecasted increases in airport capacity, and these non-safety related CIP projects will be required to be designed in conformance to the applicable wetlands regulations. The proponent needs to evaluate practicable alternatives, to explain why the preferred alternative is allowed under the regulations, and to describe the mitigation measures proposed to reduce the impacts. The FEIR should provide evidence of an overriding public interest that is associated with the project as stated in MassDEP's comment letter. The FEIR should include replication locations delineated on plans, elevations, typical cross sections, test pits or soil boring logs, groundwater elevations, the hydrology of areas to be altered and replicated, list of wetland plant species, and the planned

construction sequence. It should outline how the proponent will provide additional wetland replication and restoration areas that are greater than 1:1.

Rare Species

The FEIR should identify if the project will impact any state-listed species. It should explain any proposed monitoring program. The FEIR should describe any habitat enhancements. Since the proposed fencing project will likely have the greatest impact on wildlife habitat migration within the CCNS, the FEIR should specifically identify any potential impact from the proposed fencing project on rare or endangered species. The proponent should explain its proposed documentation procedures for its mowing practices of grasslands and its vegetation management program.

Drainage

The FEIR should address the performance standards of DEP's Stormwater Management Policy. It should demonstrate that the project is consistent with this policy. The proponent should use the DEP Stormwater Management Handbook when addressing this issue.

Traffic

The FEIR should explain why it did not complete a Level-of-Service (LOS) analysis for the Race Point Road/Airport Driveway/Race Point Parking Area intersection. It should provide a traffic distribution map for the project that includes background growth from other proposed developments in the area. The FEIR should examine present and future (2014) build and no-build traffic volumes for the intersections. The proponent should identify the land use Codes (LUC) used and how its trip generation estimates have been generated. In the FEIR, traffic accident problem areas should be identified, and solutions should be proposed. The FEIR should discuss the proponent's coordination efforts with MHD and Provincetown as they address regional and local traffic concerns within this area.

Parking

The FEIR should state how many parking spaces are required by local zoning. It should identify if the proponent will designate parking for shuttle buses, taxicabs, and long-term parking. The FEIR should identify whether the proponent is considering controlling parking through fees or timed restrictions with enforcement.

Transportation Demand Management (TDM)

The FEIR should identify the proponent's TDM measures during peak periods, such as employee ridesharing, an automatic teller machine, shuttle bus service to the hotels and guest houses, rental cars, a shared-car service (such as ZipCar), and taxicab service improvements that

discourage single passenger trips to and from the airport.

Pedestrian Issues

The FEIR should identify the locations of sidewalks within the parking area now. It should show where any proposed sidewalk improvements are proposed.

Construction Issues

The FEIR should include a construction management plan that describes the project's phasing, erosion and sedimentation controls, monitoring, and contingencies. It should describe the amount of fill material required and estimate the number of truck trips per day and the time period involved for the different projects contained in the CIP. The FEIR should describe how the fence would be constructed within wetland areas, and construction staging areas should be identified on plans.

Sustainable Design

This project presents a good opportunity to successfully incorporate cost-effective sustainable design elements and construction practices into the project. These elements can minimize environmental impacts and reduce operating costs. The FEIR should summarize the proponents' efforts to ensure that this project includes Leadership in Energy and Environmental Design (LEED) Certified buildings or the equivalent. Because this project may receive funds from the Massachusetts Aeronautics Commission (MAC), the FEIR should detail how this project will comply with Executive Order No. 484 - Leading by Example – Clean Energy and Efficient Buildings. I strongly encourage the proponent to consider incorporating elements, such as those noted below, into its project design, construction and management:

- water conservation and reuse of wastewater and stormwater;
- renewable energy technologies to meet energy needs;
- optimization of natural day lighting, passive solar gain, and natural cooling;
- energy efficient HVAC and lighting systems, appliances and other equipment, and solar preheating of air;
- building supplies and materials that are non-toxic, made from recycled materials, and made with low embodied energy;
- easily accessible and user-friendly recycling system infrastructure incorporated into the building design;
- development of a solid waste reduction plan;
- development of an annual audit program for energy consumption, waste streams, and use of renewable resources;
- Low Impact Development (LID) principles that reduce stormwater, potable water, wastewater, and wetland impacts and that provide water conservation and the ruse of wastewater and stormwater; and

- LEED Certification.

Mitigation

The FEIR should include a separate chapter on mitigation measures. It should outline the proponent's wetland replication areas as part of its mitigation package.

This chapter on mitigation should include proposed Section 61 Findings for MassDEP, MAC, and NHESP. The proposed Section 61 Findings should contain a clear commitment to mitigation, an estimate of the individual costs of the proposed mitigation and the identification of the parties responsible for implementing the mitigation. A schedule for the implementation of mitigation should also be included.

In the DEIR, the proponent has committed to the following mitigation measures:

- Provide approximately 64,000 sf of isolated wetlands restoration in two areas;
- Restore 1,000 sf of Bordering Vegetated Wetlands;
- Monitor wetlands restoration twice annually for two years by a qualified wetland scientist;
- Restore approximately 32,000 sf of dune habitat in two areas;
- Restore approximately 192,000 sf of Cultural Grassland;
- Undertake an Invasive Species Management Plan using mechanical measures;
- Install bioretention areas for stormwater treatment for impervious surfaces;
- Implement a Habitat Creation and Restoration Plan;
- Implement an Erosion Control Plan;
- Install a ticket gate for validated parking in the parking lot;
- Provide a bicycle rack near the main entrance to the Terminal;
- Install additional parking lot landscaping to screen the area from the CCNS; and
- Implement TDM measures.

These above measures do not include all of the mitigation measures for the fencing, terminal, and parking CIP projects, which are unknown until preferred alternatives are selected by the proponent.

Response to Comments

The FEIR should include copies of all comment letters. It should provide a response to all comments within the scope of this project. I recommend that the response address the question and not just refer to a particular Section of the report as was done in the DEIR. The Response to Comments section should provide clear answers to the questions raised.

EOEEA #13789 DEIR/NPC Certificate July 18, 2007

Circulation

The FEIR should be circulated in compliance with Section 11.16 of the MEPA regulations and copies should also be sent to the list of "comments received" below and to Provincetown officials. A copy of the EIR should be made available for public review at the Provincetown Public Library.

July 18, 2007
DATE

Ian A. Bowles

Comments received:

Division of Marine Fisheries, 7/5/07
Jacobs Edwards and Kelcey (JEK), 7/5/07
Cape Cod Commission, 7/10/07
Association to Preserve Cape Cod (APCC), 7/11/07
DEP/SERO, 7/11/07
Mass Audubon, 7/11/07
National Park Service, 7/12/07
MassWildlife, 7/12/07
Jacobs Edwards and Kelcey, 7/16/07

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IAB/WTG/wtg

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CAPE COD COMMISSION

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FAX (508) 362-3136
E-mail: frontdesk@capecodcommission.org

HEARING NOTICE
CAPE COD COMMISSION & ENVIRONMENTAL REVIEW

The Cape Cod Commission will conduct a public hearing on Wednesday, June 27, 2007 beginning at 6:30 p.m. in the Provincetown Town Hall, Judge Welsh Hearing Room, 260 Commercial Street, Provincetown, MA. This development will be reviewed pursuant to Sections 12(i) and 13(b) of the Cape Cod Commission Act and pursuant to the Massachusetts Environmental Policy Act ("MEPA", G.L. c.30, secs. 61, 62-62H) for joint review by the Commission and State Executive Office of Environmental Affairs, MEPA unit. The purpose of this hearing will be to gather information for the joint Commission Development of Regional Impact (DRI)/MEPA review and to comment on the Notice of Project Change (NPC)/Draft Environmental Impact Report (DEIR) that has been prepared by the proponent. This notice is being published as required by Section 5 of the Cape Cod Commission Act and MEPA regulations.

Project Name: Provincetown Airport Capital Improvements Plan
Project Applicant: Provincetown Airport Commission
Project Location: Race Point Road, Provincetown, MA
Project Description: Proposed safety and facility improvements at Provincetown Municipal Airport including the following: taxiway relocation and reconstruction; reconstruction of the terminal apron; access roads construction and improvements; installation of perimeter fence; and expansion of automobile parking and terminal building, among others.

Anyone wishing to testify orally will be welcome to do so. Written comments may also be submitted at the hearing, or delivered or mailed to the Cape Cod Commission, P.O. Box 226, 3225 Main Street, Barnstable, MA 02630 for receipt on or before the date of the hearing or until the record is closed. The NPC/DEIR and relevant documents may be viewed by calling the Commission office at (508) 362-3828 to schedule an appointment between the hours of 8:30 a.m. and 4:30 p.m. Written comments may also be submitted to MEPA Unit, Secretary, Executive Office of Environmental Affairs, 100 Cambridge Street, Suite 900, Boston, MA 02114. If you need a reasonable accommodation, please let us know by June 21, 2007. Please call for more information and to make your request.