

CAPE COD COMMISSION

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DATE: June 5, 2003

APPLICANT: Cape Cod Academy
50 Osterville-West Barnstable Road
Osterville, MA 02655

RE: Development of Regional Impact Exemption
Cape Cod Commission Act, Section 12(k)

PROJECT #: EX#03008

PROJECT: Cape Cod Academy Science Center and lot reconfiguration
50 Osterville-West Barnstable Road
Osterville, MA 02655

BOOK/PAGE: Book 4065, Page 25
Book 5109, Page 327

DECISION OF THE CAPE COD COMMISSION

SUMMARY

The Cape Cod Commission (Commission) hereby approves the application of Cape Cod Academy for a Development of Regional Impact (DRI) Exemption pursuant to Section 12k of the Cape Cod Commission Act (Act), c. 716 of the Acts of 1989, as amended, for the proposed Cape Cod Academy Science Center and land swap in Osterville, MA. The decision is rendered pursuant to a vote of the Commission on June 5th, 2003.

PROJECT DESCRIPTION

Cape Cod Academy proposes to construct a new 19,200 square foot Science Center to serve the existing school campus at 50 Osterville-West Barnstable Road in Osterville, as the existing school is currently functioning at constrained levels and the additional space is being sought to ease the burden of the existing school. Each of the three floors (including a basement) measures approximately 4,900 square feet, containing two classroom/laboratories, support space, toilets, and circulation space for a total gross floor area of 19,200 square feet. There is a four-story entrance and circulation atrium containing a Foucault Pendulum. The building will be constructed using a concrete foundation, steel frame and non-combustible materials, and will be provided with an automatic fire suppression system throughout, including a standpipe system in

Decision
Cape Cod Academy Science Center and lot reconfiguration
June 5th, 2003



the two stairwells. Exterior materials will match the existing campus architecture of standing seam roofing, gray stained shiplap siding and wood windows.

Cape Cod Academy also proposes to divide their existing 43.71-acre campus site in order to create a lot which Cape Cod Academy intends to convey to the adjoining property owner who in turn plans to convey to the Academy a different but identical sized parcel of land, resulting in a lot reconfiguration which does not change the size of the current Cape Cod Academy site (refer to attached plans, lots A and B).

PROCEDURAL HISTORY

The applicant submitted an exemption application and a DRI application on March 31, 2003. A duly noticed public hearing was conducted pursuant to Section 5 of the Act by an authorized subcommittee of the Commission on May 22, 2003 at the First District Courthouse in Barnstable, MA. The subcommittee held a public meeting on May 22, 2003 to deliberate on the Project, reviewing it under the 2002 Regional Policy Plan (RPP). At this meeting, the subcommittee voted unanimously to recommend to the full Commission that the applicant be granted the request for a DRI Exemption. The final public hearing was held before the full Commission on June 5, 2003. At this hearing, the Commission voted unanimously to approve the DRI Exemption request.

MATERIALS SUBMITTED FOR THE RECORD

From the Applicant:

1. DRI application form dated March 31, 2003
2. Exemption application dated March 31, 2003
3. List of record owners of property dated March 31, 2003
4. Copies of deeds dated March 31, 2003
5. Certified abutters list dated March 31, 2003
6. Copy of application for Site Plan Review dated March 31, 2003
7. Narrative description of exemption dated March 31, 2003
8. 11" x 17" reduced copy of site plans dated March 31, 2003
9. Full size plans (SU 1.0-4.0) showing site development plans dated February 26, 2003 and received March 31, 2003
10. Plan of Land/Barnstable (Osterville, MA) prepared by Sullivan Engineering, Inc. dated February 4, 2003 and received March 31, 2003
11. Massachusetts Historical Commission Project Notification form and accompanying correspondence dated April 2, 2003
12. Letter from Attorney Michael Ford's office regarding project's compliance with Massachusetts Historical Commission dated April 17, 2003
13. Letter from Robert W. Hall Consulting Engineers, Inc. regarding lighting fixtures dated May 9, 2003
14. Letter from Charles T. Bellingrath regarding lighting fixtures dated May 12, 2003
15. Email from Thomas Evans dated May 27, 2003

From Cape Cod Commission staff:

1. Letter to applicant regarding complete DRI Exemption application

2. Email from Andrea Adams to Tom Evans dated May 27, 2003

The application and notices of public hearings relative thereto, the Commission staff's notes, exhibits and correspondence, the transcript and minutes of meetings and hearings and all written submissions received in the course of our proceedings are incorporated into the record by reference.

TESTIMONY

Note: see minutes in project file for complete public hearing and subcommittee meeting proceedings.

Michael Ford described the project and stated that there would be no regional impacts associated with the proposed science building. He stated that the proposed building, nor the lot reconfiguration between the Academy and an abutter, would result in any significant regional impacts. He also stated that no additional students or staff would result from the proposed Science Center.

Thomas Evans, headmaster of Cape Cod Academy, stated that the Science Center would be of a unique design due to the pendulum that will be incorporated into the design. The pendulum will be very large and be the one of the largest indoor pendulums in existence.

Peter Sullivan, consultant for the applicant also stated that the nitrogen load would increase slightly due to the increase in impervious surface. However, due to the Academy's excess nitrogen loading reductions from a previous review in November 1999, no regional groundwater impacts would result from the Science Center.

Greg Smith, project manager reviewed the staff report. He provided background information for the subcommittee, and stated that the neither the Science Center or lot reconfiguration would not result in any significant regional traffic, natural resource, groundwater, community character or hazardous material impacts.

Andrea Adams stated that while there were not regional impacts associated with the proposed project, she recommended that the Academy officials check with the MA Department of Environmental Protection (DEP) regarding its Very Small Quantity Generator (VSQG) status.

Richard Andres inquired about the 14-lot subdivision that was once proposed on the grounds of the Academy and how that would impact the nitrogen load credit.

Ian Aitchison asked if the Science Center was going to be sprinkled for fire safety.

Tom Evans stated that the Science Center would be sprinkled for safety.

JURISDICTION

The Cape Cod Academy Science Center qualifies as a Development of Regional Impact (DRI) under the Cape Cod Commission Enabling Regulations Governing Review of Developments of

Regional Impact, Chapter A, Section 3(e), Barnstable County Ordinance 90-12, as amended, which requires review of new private education development with a gross floor area greater than 10,000 square feet, and any development which proposes to divide parcel(s) of land totaling more than 30 acres or more in common ownership on or after September 30, 1994 including assembly and recombination of lots.

FINDINGS

The Commission has considered the application of Cape Cod Academy for the proposed Science Center and lot reconfiguration in Osterville, MA, and based on consideration of such application and upon the information presented at the public hearing and submitted for the record, makes the following findings pursuant to Sections 12 and 13 of the Act:

General:

1. The Cape Cod Academy Science Center and lot reconfiguration has been reviewed subject to the 2002 Regional Policy Plan (RPP) and will be constructed in accordance with plans SU 3.0 and SU 4.0 dated 2-26-03. The lot reconfiguration will be conducted according to a Plan of Land prepared by Sullivan Engineering dated February 4, 2003.
2. Cape Cod Academy, located on a 43.71 acre site at 50 Osterville-West Barnstable Road in Osterville, proposes to construct a 19,200 square foot Science Center, and conduct a 35,349 square foot lot reconfiguration with an abutting property owner. The campus currently consists of five buildings totaling 86,000 square feet. The Cape Cod Academy also proposes to divide their existing 43.71-acre campus site in order to effectuate the lot reconfiguration with an abutting property owner.
3. The project is located in a Residential "C" zone in the Town of Barnstable as defined in the town's Local Comprehensive Plan (LCP). The town's LCP has been certified by the Cape Cod Commission.

Transportation:

4. The Cape Cod Academy is fully enrolled and no increase in student enrollment or staff will occur as a result of the proposed Science Center or lot reconfiguration.
5. The Institute of Transportation Engineer *Trip Generation* manual uses number of students as an independent variable in calculating trip generation.
6. As no additional students or staff will result from the addition of the Science Center or lot reconfiguration, no additional traffic would be added to the roadway system as a result of this Project. Therefore, no significant regional impacts to the roadway system will result from this Project.

Community Character:

7. On April 17, 2003 the Commission received written confirmation from the Massachusetts Historical Commission (MHC) indicating that the agency did not have concerns relating to the archaeological significance of the site.

8. According to the site plan, Cape Cod Academy is well set back from both Osterville-West Barnstable Road and abutting residences. The Academy and the proposed Science Center are well screened from public view by an existing vegetative buffer. Given the Science Center's relatively remote location from Osterville-West Barnstable Road, the existence of adequate vegetative buffers, and the confirmation from MHC regarding the Science Center's unlikely impact on significant historic or archaeological resources, the Project does not present regional community character impacts.
9. The Cape Cod Academy proposes to divide its existing 43.71-acre campus site in order to effectuate a lot reconfiguration with an abutting property owner. The plan calls for the Academy to divide and create an identically sized parcel, approximately 35,349 square feet in size, so that both properties, after the reconfiguration, will contain the same square footage. The lot reconfiguration will permit each property owner greater future flexibility and buffering. The proposed lot reconfiguration between the Cape Cod Academy and an abutting property owner will not result in any significant community character regional impacts.
10. The proposed site plan included with the DRI/DRI Exemption application shows exterior lights around and on the new Science Building. On May 9, 2003, the applicant's architect and the site electrical engineer provided additional information to the Commission on the building's proposed exterior lights that shows they are consistent with MPS 6.2.10 of the 2002 RPP, and with Technical Bulletin 95-001. Based on this information, the Commission determined that the proposed new Science Building would not have exterior lighting impacts.

Water Resources:

11. The Cape Cod Academy is located within the watersheds to two regional water resources: 1) North Bay, which is part of the 3-Bay embayment system and 2) a wellhead protection area to Centerville-Osterville-Marstons Mills (COMM) public drinking water supply wells.
12. As part of the November 19, 1999 decision for the Cape Cod Academy's New Lower School, the Cape Cod Academy agreed to rescind the potential development of fifteen adjacent residential parcels. These parcels would have added 234 kg/year of nitrogen load to the North Bay watershed. The applicant opted to use this nitrogen load as an offset against the development of these parcels as an athletic field. This resulted in an excess nitrogen loading reduction of 93 kg/year. This excess was included as a credit in the decision that could be used against any subsequent additions to the Academy. An August 2001 modification increased the nitrogen load credit to 100 kg/year.
13. The existing annual nitrogen loading on the Academy site based on the most recent modification is 297 kg, while the existing nitrogen loading concentration is 3.09 ppm. The addition of the 5,500 square foot Science Center building footprint and 5,000 square feet of associated impervious surface results in an annual nitrogen increase of less than one kilogram.

14. The addition of the proposed Science Center and associated impervious surfaces will result in an increased nitrogen load of approximately one kilogram/year. This current proposal will reduce the Academy's available annual nitrogen loading credit to 99.4 kg.
15. Due to the existing nitrogen loading credit, the proposed addition of both the Science Center and associated impervious surfaces will not represent a regional impact to groundwater resources.

Open Space and Natural Resources:

16. The project site is located in a Significant Natural Resources Area due to the presence of public water supply wellhead protection area. The site is located within the grounds of the existing school buildings and parking area, and will result in the removal of a few trees and shrubs. No wetlands or vernal pools will be impacted. Due to the small size, altered nature, and heavy pedestrian traffic through the site, the preparation of a natural resources inventory was not required. The proposed construction of the Science Center and lot reconfiguration will not impact wetland or wildlife resources of regional significance.

Hazardous Materials:

17. Since the Cape Cod Academy is located in a Wellhead Protection Area to Centerville-Osterville-Marstons Mills public drinking water supply well, MPS 4.3.1.3 was considered during the review of this project. In a Memorandum dated May 5, 2003, the applicant's attorney stated that the manner in which the Academy uses hazardous materials and generates hazardous waste would not change as a result of the new project. Detailed information about the Academy's hazardous materials/waste programs submitted as part of the Commission's 1999 DRI review of the Lower School building was also used during the review of the Science Center. Based on this information, and the Findings below, the Commission found that the new Science Center would not have significant regional impacts.
18. The Academy Headmaster stated at the May 22, 2003 public hearing that the Academy will not use more hazardous materials or generate more hazardous waste than was noted in the Commission's 1999 DRI review of the Lower School, and that the Academy's science curriculum will continue to use "micro-scale" programs that generate very little if any hazardous waste.
19. The Academy is supposed to be a Very Small Quantity Generator (VSQG) of hazardous waste, primarily because of disposal of photochemicals from on-site darkrooms. As part of the DRI Exemption review of the Science Center, the Academy committed to re-confirmation of its VSQG status. The Academy also committed to contacting the Massachusetts Department of Environmental Protection to file for a permanent hazardous waste generator identification number in lieu of the temporary ID number the Academy had been using.
20. The Commission had recommended that the Academy use a private, third party contractor to dispose of fluorescent lights (a hazardous waste in Massachusetts) rather than using the Town of Barnstable's transfer station program. However, at the May 22, 2003 public

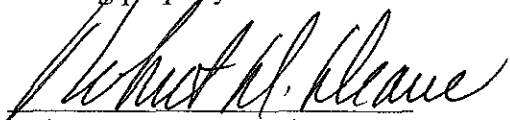
hearing, the Academy's attorney noted the Academy utilizes the Town of Barnstable's transfer station program for disposal of fluorescent lights with the Town's permission.

CONCLUSION

Based on the findings above, the Commission hereby concludes:

As proposed, the location, character, and environmental effects of the proposed development will not result in significant regional impacts on the values and purposes protected by this Act outside the municipality in which the development is located.

The Commission hereby grants Cape Cod Academy a DRI Exemption from the terms and provisions of the Act, pursuant to Section 12(k) of the Act for the proposed construction of a 19,200 square foot Science Center and lot reconfiguration of a 35,349 square foot parcel with an abutting property owner.


Robert D. Deane, Chair

6/5/2003
Date


Commonwealth of Massachusetts

Barnstable, ss.

On this 5th day of June, 2003, before me personally appeared

Robert Deane, to be known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his

free act and deed.


Notary Public

My Commission expires:

