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CAPE COD  
COMMISSION

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**DECISION OF THE CAPE COD COMMISSION**

DATE: SEPTEMBER 4, 2014

TO: BRIAN MADDEN, LEC ENVIRONMENTAL CONSULTANTS, INC.  
12 RESNICK ROAD, PLYMOUTH, MA 02360

FROM: CAPE COD COMMISSION

RE: DEVELOPMENT OF REGIONAL IMPACT SCOPING DECISION

PROJECT APPLICANT/  
PROPERTY OWNER: FIDDLER'S GREEN LIMITED PARTNERSHIP  
PO BOX 1129, SAGAMORE BEACH, MA 02562

PROJECT NUMBER: LR14013

PROJECT: BOURNE SOLAR PROJECT, BOURNE, MA

LOCATION: 53 MACARTHUR BOULEVARD, BOURNE, MA

BOOK/PAGE: BOOK 13680 PAGE 274

ASSESSOR'S ID: 25.0-6-0-R

**SUMMARY**

The Cape Cod Commission (Commission), through an authorized Subcommittee, hereby determines that mandatory Development of Regional Impact (DRI) review of the proposed ground-mounted photovoltaic project located at MacArthur Boulevard in Bourne, MA shall be limited to the issue areas of Water Resources, Wetlands, Wildlife and Plant Habitat, Open Space, and Waste Management, and that Fiddler's Green Limited Partnership (Applicant) may proceed with its application for said Limited DRI approval. This decision is rendered pursuant to a vote of a duly authorized Subcommittee (Subcommittee) of the Commission on September 4, 2014.

## **PROJECT DESCRIPTION**

The Applicant is proposing to develop a 25.14-acre site with a 7.85-acre, 2-MW solar field accessed via a 10-foot-wide, 2000-foot-long gravel drive extending from MacArthur Boulevard.

According to the application materials, the proposed solar field will occupy approximately 7.85 acres of the project site and require the disturbance of an additional .48 acre for re-grading. The area of the proposed solar field and its associated disturbance contains forested upland.

The proposed gravel drive will occupy 0.44 acre and require the temporary disturbance of an additional 1.34 acres for re-grading. The area of the proposed gravel drive and its associated disturbance contains degraded conditions from the existing 0.8-acre dirt drive.

The total project disturbance will occupy 9.31 acres, and the total permanent disturbance will occupy 8.38 acres. The overall project site occupies 25.14 acres, with all undisturbed area preserved as open space.

## **PROCEDURAL HISTORY**

The DRI Scoping application was received by the Commission on May 30, 2014. The Applicant submitted additional application materials in June and July 2014. The DRI Scoping application was deemed complete, sufficient to proceed to a public hearing, on July 24, 2014.

The DRI Scoping hearing was opened and substantive testimony taken by a Subcommittee on August 13, 2014 at the Bourne Community Center located at 239 Main Street, Buzzard's Bay, Massachusetts. The Subcommittee consisted of Ernest Virgilio (Chair), John D. Harris, John McCormack, Jr., Harold Mitchell, Andrew Putnam, Royden Richardson, and Michael Blanton (Alternate). The Subcommittee conducted a site visit prior to the hearing. At this hearing, the Subcommittee instructed Commission staff to draft a written DRI Scoping decision for its review, limiting DRI review to the issue areas of Water Resources (Goals WR1, WR2, WR7), Wetlands, Wildlife and Plant Habitat, Open Space, and Waste Management, consistent with the testimony and information received, and staff's recommendations from the staff report. The Subcommittee voted to continue the hearing to September 4, 2014 at the Commission offices located at 3225 Main Street in Barnstable, Massachusetts.

At the continued public hearing on September 4, 2014, the Subcommittee reviewed said draft Scoping decision. On September 4, 2014, the Subcommittee voted to accept and adopt the decision, which approved limiting the scope of DRI review to the issue areas of Water Resources (Goals WR1, WR2, WR7), Wetlands, Wildlife and Plant Habitat, Open Space, and Waste Management.

## RECORD MATERIALS

TABLE 1: MATERIALS SUBMITTED FOR THE RECORD

<b><i>Materials from Cape Cod Commission</i></b>	<b><i>Date Sent</i></b>
Letter to Brian Madden (BM) requesting additional materials	6/17/14
Email from Jeffrey Ribeiro (JR) to BM re: scoping application complete	7/24/14
Letter to BM re: public hearing on 8/13/14	7/24/14
Scoping staff report	7/31/14
Minutes from 8/13/14 public hearing	9/28/14
<b><i>Materials from Applicant</i></b>	<b><i>Date Sent</i></b>
Application Materials from the Applicant	5/30/14
Scoping checklist	6/3/14
Solar Operation and Maintenance Plan	6/19/14
Memorandum re: additional materials requested	8/11/14
Letter from Coreen Moore (CM) to MassDOT re: curb cut, dated 1/29/14	8/11/14
MassWildlife Conservation and Management Permit, dated 7/3/14	8/11/14
<b><i>Materials from Public Agencies/Towns/State/Federal</i></b>	<b><i>Date Sent</i></b>
Letter from Bourne Recreation Authority to JR re: power purchase agreement	7/11/14
Letter from CM re: consistency with local laws/plans	8/13/14
<b><i>Materials to/from Members of the Public</i></b>	<b><i>Date Sent</i></b>

## JURISDICTION

The project qualifies as a Development of Regional Impact (DRI) pursuant to Section 3(e)(iii) of the Commission's *Enabling Regulations* (revised March 2013) as "new construction or development that has a Total Project Area greater than 40,000 square feet."

In accordance with Section 5(a) of the *Enabling Regulations*, "[f]or any project that is a DRI...the proponent may apply to the Commission to limit the scope of the DRI review."

Pursuant to Section 5(e)(v) of the *Enabling Regulations*, "the Subcommittee shall issue a written decision following the Subcommittee's determination of the scope of DRI review."

## FINDINGS

### GENERAL FINDINGS

The Subcommittee hereby finds as follows:

GF1. The Applicant submitted an application to scope DRI review on May 30, 2014; the Scoping application was deemed complete on July 24, 2014.

GF2. As the date of the first public hearing on the proposed project was August 13, 2014, this project was reviewed subject to the 2009 Regional Policy Plan (RPP), as amended in August 2012.

GF3. The Subcommittee considered the Limited DRI Scoping Checklist for new development in its review and deliberations on the scoping application.

GF4. The project consists of: a proposed solar field will occupy approximately 7.85 acres of the project site and require the disturbance of an additional .48 acre for re-grading; the area of the proposed solar field and its associated disturbance contains forested upland; the proposed gravel drive will occupy 0.44 acre and require the temporary disturbance of an additional 1.34 acres for re-grading; the area of the proposed gravel drive and its associated disturbance contains degraded conditions from the existing 0.8-acre dirt drive; the total project disturbance will occupy 9.31 acres; and the total permanent project site will occupy 8.38 acres.

GF5. The proposed project is to be implemented and constructed in accordance with the following plan set titled "Proposed Site Plan Set for Bourne Solar Project" by Bracken Engineering, Inc., and other information and documents referenced herein:

Sheet 1 of 7: *Title Sheet*, dated 5/12/14  
Sheet 2 of 7: *Site Plan*, dated 5/12/14  
Sheet 3 of 7: *Grading & Erosion Control*, dated 5/12/14  
Sheet 4 of 7: *Plan & Profile*, dated 5/12/14  
Sheet 5 of 7: *Plan & Profile*, dated 5/12/14  
Sheet 6 of 7: *Details Sheet*, dated 5/12/14  
Sheet 7 of 7: *Details Sheet*, dated 5/12/14

Sheet 1 of 1: *Curb Cut and Traffic Management Plan*, dated 12/5/12  
MassDOT letter dated December 24, 2013

## LAND USE

LUF1. There is an approved Land Use Vision Map (LUVVM) for the portion of the Town north of the Cape Cod Canal. As the Town has not adopted a LUVVM for the area south of the Canal, MPS LU1.1 (Development Location) does not apply to the proposed project. MPS LU1.2 (Compact Development) does not apply due to the nature of the project, i.e. the proposal does not involve building development.

LUF2. While the proposed project does propose new infrastructure, it proposes to sell energy to the grid for commercial purposes, and therefore complies with MPS LU2.1 (Connections to Existing Infrastructure). As the project is not proposing a telecommunications facility, MPS LU2.2 (Co-location of Telecommunication Facilities) does not apply.

LUF3. As the project is not on or adjacent to agricultural lands, the standards under goal LU3 (Rural Lands) do not apply.

LUF4. The Subcommittee finds that the proposed project does not involve substantial deviation from the Land Use MPS' and would not have significant impacts upon the purposes and values identified by Section One of the Act, and does not require substantive DRI review for the issue area of Land Use, which may be scoped out of DRI review.

## ECONOMIC DEVELOPMENT

EDF1. The proposed project is located in an area of Bourne without an approved LUVM. MPS' ED1.1 and ED1.2 require development to be located within appropriately designated areas on an adopted LUVM. While Bourne has not adopted an LUVM for the project site, the project is located within the Bourne "Solar Photovoltaic System (SPS) Ground Mounted" zoning overlay district. Accordingly, the area including the project site has been comprehensively planned for such use, which is the intent underlying MPS' ED1.1 and ED1.2, and therefore the proposed project does not involve substantial deviation from the MPS' ED1.1 (Location in Economic Centers) and ED1.2 (Industrial and Service Trade Areas).

EDF2. The proposed project is not located on or near agricultural, waterfront or recreational lands. Therefore MPS ED1.4 (Resource-based Economic Areas) does not apply.

EDF3. The proposed project does not involve gaming. Therefore MPS ED2.1 (Gaming) does not apply.

EDF4. The Applicant has shown efforts to secure a power purchase agreement with the Bourne Recreation Authority. Subject to review and approval, and execution, of this agreement, MPS ED4.1 (Demonstrated Need and Public Benefit) shall be met.

EDF5. The Subcommittee finds that the proposed project does not involve substantial deviation from the Economic Development MPS' and would not have significant impacts upon the purposes and values identified by Section One of the Act, and does not require substantive DRI review for the issue area of Economic Development, which may be scoped out of DRI review, contingent upon Commission approval of a signed power purchase agreement between the Applicant and the Bourne Recreation Authority.

## WATER RESOURCES

WRF1. Water Resources Goals WR1 (General Aquifer Protection) and WR7 apply to all new development and therefore apply to the proposed project. Because of the potential solar projects on Cape Cod have to replace existing forest vegetation with grassy vegetation on a bare, sandy-gravel base, thus decreasing the natural renovation of substances associated with atmospheric deposition prior to recharging the aquifer, the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act.

WRF2. The project is located within a Potential Public Water Supply Area, as described on Water Resources Classification Map I, and thus the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act. Therefore, standards under goal WR2 (Drinking Water Quality and Quantity) apply to the project.

WRF3. The project site is not located within marine water recharge areas, freshwater recharge areas, or water quality improvement areas. Therefore standards under goals WR3 (Marine Water Embayments and Estuaries), WR4 (Freshwater Ponds and Lakes), and WR5 (Water Quality Improvement Areas) do not apply.

WRF4. The Subcommittee finds that the proposed project requires substantive DRI review for standards under RPP Water Resources goals WR1, WR2, and WR7. The Subcommittee also finds that the proposed project does not require substantive DRI review for standards under the RPP Water Resources goals WR3, WR4, WR5, and WR6.

#### COASTAL RESOURCES

CRF1. The proposed project is not located along the coast, thus the Coastal Resources issue area does not apply to the project. The Subcommittee finds that the project does not require substantive DRI review for standards under the issue area of Coastal Resources.

#### MARINE RESOURCES

MRF1. The proposed project is not located offshore, thus the Marine Resources issue area does not apply to the project. The Subcommittee finds that the project does not require substantive DRI review under the RPP issue area of Marine Resources.

#### WETLANDS

WETF1. The proposed project does not involve alteration to wetlands, therefore MPS WET1.1 (Wetlands) does not apply.

WETF2. The project proposes site disturbance within the 100-foot buffer zone of the two wetlands located within the project site. Therefore, MPS WET1.2 (Wetland Buffers) applies.

WETF3. The project proposes operation and maintenance of overhead utility lines within the 100-foot buffer zone of the two wetlands located within the project site. Therefore, MPS WET1.3 (Wetlands, Buffers, and Utility Line Installation) applies.

WETF4. The Applicant asserts that no new direct discharges of untreated stormwater will occur onsite. The proposed project does create new stormwater discharge (rain gardens) within the 100-foot buffer zone of the two wetlands located within the project site. Therefore, MPS WET1.4 (Stormwater) applies.

WETF5. Because the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act, the Subcommittee finds that the proposed project requires substantive DRI review under the RPP issue area of Wetlands.

#### WILDLIFE AND PLANT HABITAT

WPHF1. The Applicant has provided a Natural Resources inventory, meeting MPS WPH1.1.

WPHF2. The project involves significant clearing of vegetation and alteration of topography. The project site occurs within an area with designated wildlife and plant habitats, including critical wildlife and plant habitats for rare species, as well as invasive species. Therefore MPS'

WPH1.2 (Clearing and Grading), WPH1.3 (Wildlife and Plant Habitat), WPH1.4 (Rare Species), and WPH1.6 (Invasive Species) apply.

WPHF3. The project site does not include any vernal pools; therefore MPS WPH1.5 does not apply.

WPHF4. Because the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act, the Subcommittee finds that the proposed project requires substantive DRI review under the RPP issue area of Wildlife and Plant Habitat.

#### OPEN SPACE

OSF1. The project proposes new development, and the project site is located within a Cape Cod Significant Natural Resource Protection Area and is directly adjacent to conservation lands to the east (Upper Cape Water Supply Reserve of the Massachusetts Military Reservation) and to the south (Bourne Conservation Trust). Because the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act, the Subcommittee finds that the proposed project requires substantive DRI review under the RPP issue area of Open Space.

#### TRANSPORTATION

TRF1. Considering site traffic will be limited to construction activities and infrequent maintenance activities, sufficient sight distance is available at the proposed site driveway, and access to the site from Route 28 is conditioned by MassDOT per its December 24, 2013 letter to the Applicant, a copy of which was submitted with application materials, the proposed project would not involve substantial deviation from the minimum performance standards of the RPP and would not have significant impacts upon the purposes and values identified by Section One of the Act as related to the issue area of Transportation. The Subcommittee finds that the proposed project does not require substantive DRI review for standards under the issue area of Transportation, which may be scoped out of DRI review.

#### WASTE MANAGEMENT

WMF1. The proposed project is located in a Potential Public Water Supply Area and involves the storage/use of 1200 gallons of coolant (Envirotemp FR3) that contains State-listed hazardous materials. As goal WM1 (Hazardous Materials and Waste) seeks to protect groundwater supplies, standards under this goal apply.

WMF2. The proposed project will create significant amounts of solid waste during the construction phase, particular from tree cutting and grading activities. Therefore, standards under goal WM2 (Solid Waste) apply.

WMF3. Because the project may have significant impacts upon values and purposes set out in Section One of the Cape Cod Commission Act, the Subcommittee finds that the proposed project requires substantive DRI review under the RPP issue area of Waste Management.

## ENERGY

EF1. RPP Energy standards E1.1-1.6 are only applicable to building development; the remaining RPP Energy standards E1.7-1.11 are only applicable to wind energy conversion facilities. Therefore the Subcommittee finds that the Energy MPS' do not apply to the proposed project, and does not require substantive DRI review under the RPP issue area of Energy.

## AFFORDABLE HOUSING

AHF1. The project falls under the 'Other' category for the purpose of the affordable housing mitigation required under MPS AH 3.1. The applicant has provided sufficient documentation in the Operation and Maintenance Plan for Stormwater Facilities & Solar Field Turf/Landscape Maintenance and in the Solar Operation and Maintenance Plan that the ongoing maintenance and operation of the solar array will require fewer than the equivalent of three full-time on-site or contracted employees. In addition, this project involves facilities in which a calculation of building square footage is not feasible or appropriate. Therefore, in accordance with Technical Bulletin #10-001 (Guidelines for Calculation of Mitigation for DRIs in "Other" Category for Minimum Performance Standard AH 3.1), the Subcommittee finds that the project would not involve substantial deviation from the minimum performance standards of the RPP and would not have significant impacts upon the purposes and values identified by Section One of the Act as related to affordable housing. Thus the proposed project does not require substantive DRI review under the RPP issue area of Affordable Housing.

## HISTORIC PRESERVATION/ COMMUNITY CHARACTER

HPCCF1. The proposed project site does not include any historic structures and is not located within or adjacent to any historic districts. A letter from the Massachusetts Historical Commission (MHC), dated July 2, 2012, states that a review of MHC's Inventory of Historic and Archaeological Assets of the Commonwealth identified no inventoried or State Register-listed historic properties in the area of potential impact. As such, the proposed project is consistent with RPP minimum performance standards HPCC1.1 (Historic Structures), HPCC1.2 (Cultural Landscapes), and HPCC1.3 (Archaeological Sites).

HPCCF2. Given the fact that the proposed solar panels extend only 8 feet above grade level and the project has a large and well-vegetated setback from developed areas and the regional roadway, the Subcommittee believes the project is unlikely to pose any visual concerns. The project is consistent with HPCC2.3 (Avoid Adverse Visual Impacts) due to the low height of the structures and the project siting. The Subcommittee finds that there is no need for a Visual Impact Assessment (VIA). RPP standards relating to building design (HPCC2.4 through HPCC2.7) are not applicable to this project because no buildings are proposed. RPP parking and landscaping standards (HPCC2.8 through HPCC2.10) and some project siting standards, namely HPCC2.1 (Strip Development) and HPCC2.2 (Protection of Existing Roadway Character), are not applicable due to the nature of the project.

HPCCF3. The Subcommittee finds that the project would not involve substantial deviation from the minimum performance standards of the RPP and would not have significant impacts upon the purposes and values identified by Section One of the Act. The proposed project does not require substantive DRI review under the issue area of Historic Preservation and Community Character.

## CONCLUSION

Based on the foregoing findings, the Subcommittee, hereby finds and determines that the proposed ground-mounted solar photovoltaic project located at MacArthur Boulevard in Bourne, Massachusetts as outlined in this decision requires further DRI review, which shall be limited to the RPP issue areas of Water Resources (Goals WR1, WR2, WR7), Wetlands, Wildlife and Plant Habitat, Open Space, and Waste Management. This decision is subject to the conditions below.

## CONDITIONS

GC1. This decision shall allow the applicant to file a Limited DRI application and undertake DRI review with the Commission, consistent with this terms and conditions of this decision, within one year from the date of this decision, which time may be extended upon mutual agreement of Commission staff and the Applicant.

GC2. The proposed project shall be implemented and constructed in accordance with the following plan set titled "Proposed Site Plan Set for Bourne Solar Project" by Bracken Engineering, Inc., and other information and documents referenced herein:

Sheet 1 of 7: *Title Sheet*, dated 5/12/14  
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Sheet 7 of 7: *Details Sheet*, dated 5/12/14

Sheet 1 of 1: *Curb Cut and Traffic Management Plan*, dated 12/5/12  
MassDOT letter dated December 24, 2013

GC2. The terms and conditions of this decision shall be incorporated into any substantive Limited DRI decision for the project.

GC3. Prior to issuance of a substantive Limited DRI decision by the Commission, the Applicant shall submit a signed power purchase agreement between the Applicant and the Bourne Recreation Authority, or other qualified municipal entity. Prior to execution, said agreement shall be provided to Commission staff for review and approval.

**SEE NEXT PAGE FOR SIGNATURES**

**SIGNATURES**

Executed this 4<sup>th</sup> day of September 2014.

[Handwritten Signature]  
Signature

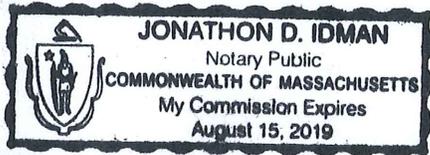
H.W. Mitchell chair  
Print Name and Title

**COMMONWEALTH OF MASSACHUSETTS**

Barnstable, ss 9/4/, 2014

Before me, the undersigned notary public, personally appeared H.W. Mitchell,

in his/her capacity as Subcommittee Chair of the Cape Cod Commission, whose name is signed on the preceding document, and such person acknowledged to me that he/she signed such document voluntarily for its stated purpose. The identity of such person was proved to me through satisfactory evidence of identification, which was [ ] photographic identification with signature issued by a federal or state governmental agency, [ ] oath or affirmation of a credible witness, or [] personal knowledge of the undersigned.



[Handwritten Signature]  
Notary Public  
My Commission Expires:

SEAL