

August 9, 2016

Mr. Craig Hughes
Highway Superintendent
Town of Dover
2 Dedham Street
Dover, Massachusetts 02030

Subject: Town of Dover – Dover Landfill, Powisset Street
Solar Development Project – Stormwater Design Review
CEC Project 153-629

Dear Mr. Hughes,

At the request of Tata and Howard, Inc., Civil & Environmental Consultants, Inc. (CEC) has performed a review of a stormwater design report entitled, Stormwater Report, Solar Development Project, Dover Landfill, Powisset Street, Dover Massachusetts, dated July 20, 2016. In our review of the stormwater report, we utilized the design plans entitled, BWC Buckmaster Pond, LLC., Dover Landfill Solar Development Project, Powisset Street, dated July 20, 2016, in order to better understand the project. However, this correspondence does not include a review of the design plans.

Our comments are as follows:

1. Figure 2 -- Development Conditions, Stormwater Drainage Basins, is missing proposed site features such as the gravel access road, solar panel footings, concrete pad, etc. This made it impossible to confirm the designer's assumptions.
2. Figures 1 and 2 should include the flow path used to calculate the time of concentration in order to confirm the designer's assumptions.
3. Page 6: The total drainage area in Table 1 equals 10.6 acres, while the total drainage area in Table 2 equals 10.7 acres.
4. The hydrological soil group for any areas within the limit of the existing final cover should be classified as D, since it is constructed of "Clay and Silt (low-permeability layer)" as noted on page 3. The calculations indicate a hydrological soil group A, which appears to have been taken from the USDA Soil Report located in Appendix A.
5. The calculations use a SCS Type II 24-hour Rainfall Distribution. However, according to Technical Release 55 (TR-55), Figure B-2 Approximate Geographic Boundaries for NRCS (SCS) Rainfall Distributions, Dover, Massachusetts appears to be located in a Type III 24-hour Rainfall Duration boundary.

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6. The drainage calculations use the cover classification, "Woods – Fair". However, according to the USDA if the "*woods are protected from grazing, and litter and brush adequately cover the soil*", a classification of "Woods⁶ – Good" would be more appropriate. Refer to Note 6 of on Table 2-2c of TR-55. This would change the CN from 79 to 77.
7. The drainage calculations use the cover classification, "50%-75% Grass Cover – Fair". This appears to have been taken from USDA Table 2-2a, Runoff Curve Numbers for Urban Areas. It may be more appropriate to use the classification of "Meadows - continuous grass, protected from grazing and generally mowed for hay." taken from Table 2-2c.
8. The Time of Concentration (TC) calculations appear to be high for calculating sheet flow TC. This appears to be due to the use of a 0.4 Manning's Number. According to Table 3-1 (TR-55) Roughness Coefficients for sheet flow, a more appropriate Manning's number would be 0.24 based on the existing ground cover.
9. The drainage calculations did not appear to account for the proposed concrete pad and the concrete solar panel mounts. These structures will create an impervious surface and will affect the weighted curve number for several of the drainage areas.

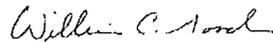
Please feel free to contact me or Bill Goodman with any questions regarding our review.

Very truly yours,

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.



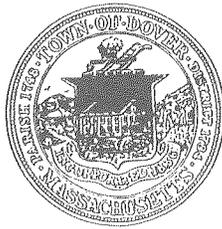
Samuel Forgue, P.E.
Assistant Project Manager



William C. Goodman, P.E.
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TOWN OF DOVER

DAVID W. TIBERI
FIRE INSPECTOR



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FIRE DEPARTMENT

1 WALPOLE STREET
P. O. BOX 303
DOVER, MASSACHUSETTS 02030

August 17, 2016

Mr. Gino Carlucci
Town Planner
Dover Town House
P.O. Box 250
Dover, Massachusetts 02030

Re: Proposed Solar Panel Array-Transfer Station

Dear Gino,

Per our conversation regarding proposed Solar Array to be installed on the former Town of Dover Landfill site. The Town of Dover Fire Department is recommending a gate be installed in the current Transfer Station to access woodlands behind and around Solar Array and Transfer Station. Gate sized to allow entry of all Fire Department vehicles.

At this time, we have no other requests or objections to plan as presented to us.

If you have any questions please feel free to contact me.

Thank You,

A handwritten signature in cursive script that reads "David W. Tiberi".

David W. Tiberi
Fire Inspector
Dover Fire Department
PO Box 303
1 Walpole Street
Dover, Massachusetts 02030

Office: 508-283-5225
Fax: 508-785-8122
E-mail: doverfire@doverma.org

Sue,

I have reviewed the Powissett Street PV solar plans and I have no issues with what is presented. When they apply for a building permit they will supply the engineering I need for anchoring and wind lift per building code.

Other than this I see no issues that require comment.

Walter

RECEIVED
DOVER PLANNING BOARD
2016 JUL 21 P 2:08

Gino Carlucci

From: Peter McGowan <pamcgowan@dovermapd.com>
Sent: Wednesday, July 20, 2016 10:28 AM
To: Gino Carlucci
Subject: Re: Blue Wave solar project

Gino:

I like the idea of restricting their work to M, T, Th, F, but I still think a detail is necessary there. Between the bike and pedestrian traffic, and the commuter and TTOR traffic, its a pretty tough spot to be having traffic in and out of.

I would encourage the no Wednesday caveat, as well as the details when work requires more than one trip in at the start of the day and one trip out at the end. If they plan on trucks or other rigs dropping off, or loading and unloading, that would require a detail.

PM

Peter A McGowan
Chief of Police
FBINA#231
Secretary/Treasurer
New England Chapter



From: Gino Carlucci <townplanner@doverma.org>
Sent: Wednesday, July 20, 2016 10:22:34 AM
To: Peter McGowan
Subject: Blue Wave solar project

Hi Peter,

I know you have an electronic copy of the Blue Wave plans. One feature not shown on the plans is that they have asked Craig for permission to use a corner of the transfer station site as a staging area. Given the curve in the road from the Westwood side and the transfer station traffic when it is open on Wednesdays, it has been suggested that there may be a need for police details at least on Wednesdays or a restriction against moving materials when the transfer station is open. When construction is complete, the panels will be monitored remotely and probably checked in person just once every several weeks or so.

As shown on the plan, Blue Wave will use the existing access drive and extend it further onto the property. The fence enclosure will join with the existing transfer station site to completely enclose the facility. The new fence will have about a 6" opening at the bottom to allow small critters to pass underneath.

Do you have any comments on these or any other features of the plan? The next PB hearing is next Monday, July 25th.
Thanks. -- Gino