

Engineering Solutions for Land & Structures

October 7, 2021

City of Haverhill Conservation Commission 4 Summer Street, City Hall Room 300 Haverhill, MA 01830

RE: Notice of Intent for Haverhill Solar Project at 139 Amesbury Line Road

MassDEP File #033-1499

Response to Peer Review Comments

Dear Commissioners:

On behalf of the applicant, Solar Smart LLC, Goldsmith, Prest & Ringwall, Inc. (GPR) is in receipt of a second round of comments emailed from Comprehensive Environmental Incorporated (CEI) dated September 28, 2021 for the solar farm project at 139 Amesbury Line Road in Haverhill.

These responses, plans and reports are provided to you as "Revision #3 dated 10/7/21." The nature of the comments are technical, adding functionality to the drainage system and maintenance language, and are not substantial changes to the overall project scope or impact.

GPR provides the following responses to comments for your review and consideration.

Comment #1: Stone Diaphragm:

It looks like the stormwater enters the stone diaphragm through a 12" perforated pipe, fills the stone voids and then flows out the surface, essentially acting as a long level spreader. The design reduces the peak flow at design point AP-1 (driveway entrance) for the 2 and 10 year storm events, which meets Standard 2 requirement. I'm still concerned about the additional stormwater volume at AP-1 and how that may impact adjacent properties. I feel this is something that we should discuss, considering the neighbors' concerns about flooding and high water table in this area.

RESPONSE: In response to a clarifying Zoom call on 9/30/21 with the Conservation Agent, CEI, and the City Engineer, modifications have been made resulting in the reduction of total volumetric flow to AP-1. The changes specifically include the extension of a 12" HDPE discharge from Catch Basin #3 (CB-3) to its level spreader outlet to direct this discharge towards the 24" RCP culvert under

Goldsmith, Prest & Ringwall, Inc.

the Whittier School private driveway, rather than towards the wetland replication area (See Sheet C5.1). Other minor modifications to the outlet control structure of WQS#3 were necessary to achieve an overall balance of total peak flows through the 36" and 24" Whittier School driveway culverts, Analysis Points AP-2A and AP-2B respectively (see Sheet C6.1 for details).

Comment #2: Suggest including cleanouts at either end of the stone diaphragm.

RESPONSE: Cleanouts have been added - See Sheet C6.1.

Comment #3: Referring to previous Comment 18: Long-term O&M should prohibit herbicide, pesticide and fertilizer application in any area of the property. The response from GPR indicates a section was added but I didn't see it.

RESPONSE: The O&M Plan maintenance notes in Section 2 and Section 6 have been updated to prohibit herbicides, pesticides and fertilizers.

Comment #4: Referring to previous Comment 19: Include inspection procedures for accessing maintenance ports of level spreaders and flush if needed.

RESPONSE: The O&M Plan maintenance notes in Section 5 have been updated to include maintenance port and cleanout inspections and maintenance procedures.

Comment #5: Stone size for Stone Diaphragm is on the small side. I would recommend increasing to 1" <u>washed</u> crushed stone.

RESPONSE: The Stone Diaphragm detail on Sheet C6.3 has been modified to specify 1" washed crushed stone.

Please reach out to me at any time with additional comments or questions at (978) 772-1590 or kburchard@gpr-inc.com .

Sincerely,

Kyle Burchard, P.E. Project Manager

Copy to: Theodore Xenakis, Esq., Peter Rundle, Solar Smart LLC, GPR file 181084