From: Michael Tadema-Wielandt <mtw@terradynconsultants.com>

Sent: Wednesday, August 31, 2016 6:33 PM

To: William Haskell; Amanda L. Lessard; Lisa Fisher; Douglas Fortier; Heather

McNally

Cc: jarod robie

Subject: RE: Landing Real Estate - Response to Comments

Attachments: 1607-STORMWATER-REV-2016-08-31.pdf; HydroCAD-POST-REV-2016-08-

31.pdf; C-4.0 GRADING.pdf; C-5.1 UTILITY DETAILS.pdf

Good evening,

Please see our responses below in RED and the attached supporting material. Please let me know if anything else is needed.

Michael E. Tadema-Wielandt, P.E. Terradyn Consultants LLC (207) 632-9010

From: William Haskell [mailto:WHaskell@gorrillpalmer.com]

Sent: Wednesday, August 31, 2016 4:25 PM

To: Amanda L. Lessard <a lessard@windhammaine.us>; Lisa Fisher (Imfisher@windhammaine.us)

< mailto:linemailt

<<u>drfortier@windhammaine.us</u>>; Heather McNally <<u>hmcnally@windhammaine.us</u>>

Cc: jarod robie < <u>jarodrobie@hotmail.com</u>>; Michael Tadema-Wielandt

<mtw@terradynconsultants.com>

Subject: RE: Landing Real Estate - Response to Comments

Hello,

We have reviewed the response to comments and still have concerns with the stormwater, as follows:

• It does not appear that the post-development stormwater is being modeled correctly. Pond P2 is shown connected to SP2 but the model does not include a broad crested weir representing the grassed overflow spillway connection to the study point. We believe this may be underrepresenting the peak flow at SP2. Please review and revise as necessary.

The proposed infiltration basin was designed to retain and infiltrate runoff from the 25-year design storm. The spillway is only activated in larger storms or if the basin becomes clogged and the infiltration rate is reduced. The spillway has no effect on the flow rates at SP2. Pond P2 does not contribute runoff to SP2 in any of the design storm events.

However, the basin has been revised per comment #3 below, so the HydroCAD model has been updated to reflect the revised grading. The spillway outlet has been added to the revised model for clarity, but still has no effect on the results of the analysis.

• We will weigh in on the waiver requests after the stormwater model has been revised.

Noted

• The pond grading still extends into the road right-of-way. The Public Works Director is not available for comment, but it is our position that the pond grading should occur on the lot and not extend into the right-of-way.

The pond grading has been revised so it is entirely within the project site boundary. As a result, the stage-storage characteristics of the pond have changed. Attached are revised Pond Volume Calculations, Post-development HydroCAD model, and drawings C-4.0 and C-5.1. The revised pond continues to retain and infiltrate all runoff from the 25-year design storm. The revisions have no effect on the predicted peak flow rates at any of the Study Points. The analysis and conclusions of the previously submitted Stormwater Management Report remain unchanged.

Thanks,

Will Haskell | Principal



From: Michael Tadema-Wielandt [mailto:mtw@terradynconsultants.com]

Sent: Tuesday, August 30, 2016 2:29 PM

To: Amanda L. Lessard <allessard@windhammaine.us>

Cc: jarod robie < <u>jarodrobie@hotmail.com</u>>; William Haskell < <u>WHaskell@gorrillpalmer.com</u>>

Subject: Landing Real Estate - Response to Comments

Hi Amanda,

Attached is our response to the peer review comments for the Landing Real Estate project, including revised plans.

Hard copies of this will be delivered to you today.

Thanks, Mike

Michael E. Tadema-Wielandt, P.E. Vice President / Civil Engineer

Terradyn Consultants LLC

P.O. Box 339 111 Elderberry Lane New Gloucester, ME 04260