



851 Chemung Street
Horseheads, New York 14845

April 21, 2016

Mr. Tom Skebey, Code Enforcement Officer
Town of Horseheads Code Enforcement Department
150 Wygant Road
Horseheads, New York 14845

**Re: Proposed Retail Development - Primax Properties, LLC
658 Main Street, Horseheads, New York
Review of Stormwater Pollution Prevention Plan**

Mr. Skebey:

I have completed a review of the above-referenced project regarding the proposed stormwater management system for that project.

- E-mail from A. Puleo of the NYSDOT to Caryn Mlodzianowski of Bohler Engineering indicating the NYSDOT's acceptance of Bohler's drainage computations for the Primax Properties project in Breesport, NY, Dated March 17, 2016
- Response letter to our December 2, 2015 review letter, Prepared by Bohler Engineering, Dated February 1, 2016, Received February 2, 2016
- Stormwater Pollution Prevention Plan (SWPPP) for Proposed Retail Development, PRIMAX PROPERTIES, LLC, Not stamped by a NYS Licensed Professional Engineer, Prepared by Bohler Engineering, Revision Dated February 1, 2016, Received on December 1, 2015
- Site Development Plans for PRIMAX PROPERTIES, LLC - Location of Site 658 Main Street, Town of Horseheads, Chemung County, NY, Not Stamped by a NYS Licensed Professional Engineer, Prepared by Bohler Engineering, Revision Dated January 27, 2015, Received on February 2, 2016.

My review comments and questions regarding the SWPPP and stormwater management system for the above-referenced project, based upon the submitted information, are as follows.

MISCELLANEOUS COMMENTS

1. *As noted in my previous review letter, a substantial portion of the adjacent Dandy Mini-Mart site to the east drains to the project site. Much of this off-site area is impervious.*
 - *Presently, it appears that this off-site area drains to the west to (and through) Existing Watershed Area 2. Runoff from the Dandy Mini-Mart site flows over a gently sloping lawn area (and perhaps a light depression), which promote infiltration of this off-site runoff.*

- *In the proposed Post-Developed condition, a swale is proposed to divert runoff from the Dandy Mini-Mart site to the north to a proposed drainage ditch along NYS Route 223.*

As such, this proposed diversion of the runoff from the Dandy Mini-Mart site would act to increase and concentrate stormwater flows to the NYSDOT right-of-way. The drainage analysis should consider this, when estimating peak flows to the NYSDOT right-of-way.

With this said, it appears that the NYSDOT made note to this same item in a February 16, 2016 e-mail to the applicant's engineer. Furthermore, as per a March 17, 2016 e-mail to the applicant's engineer, the NYSDOT notes that they are satisfied with the submitted drainage calculations. Copies of these e-mails are attached.

STORMWATER MODELING

1. In regards to the hydrologic modeling of the existing, pre-developed conditions, it appears that the estimated times of concentration values for the pre-developed drainage sub-areas appear to be too low and unrepresentative of the existing conditions.

PROPOSED STORMWATER INFILTRATION BASIN

1. *As noted in my previous comment letter, significant portion of the footprint of the proposed infiltration basin is currently occupied by a house. With that said, how will soils within the footprint of this house be prepared/restored/replaced such to achieve the design infiltration rate. Furthermore, specifics of how the existing house shall be demolished should be outlined. The plans and SWPPP should clearly address this item. It is requested that post-construction infiltration testing be completed.*

Additional details/specifics regarding the proposed demolition of the existing house and driveway should be included. For example, are the building foundation and floor slab proposed to be removed? Is the existing drive (including underlying aggregate and compacted soil) proposed to be removed? To what depth will the soils below the drive and the building slab be restored/decompacted?

2. The proposed infiltration basin, as currently designed, is shallow (less than 8 inches). Given this shallow depth, items such as sediment build-up could have a significant impact. Furthermore, turf growth could also act to consume storage volume over time. The O & M Plan seems to lack detail on this consideration.

STORMWATER CONVEYANCE

1. *As noted in my previous review letter, the existing downstream stormwater conveyance system along the southside of NYS Route 223 and the east side of First Street is meager, ill-defined, and in some locations non-existent. Given that the applicant is proposing the following items, it is recommended that the applicant evaluate/pursue improvements to the downstream stormwater conveyance system. These improvements would include increasing the hydraulic capacity of the downstream conveyance system such to accommodate the peak design stormwater flows. Improvements may include re-establishment of the existing conveyance system. This will most likely involve coordination with the NYSDOT and the Town of Horseheads.*
 - *Runoff from the existing Dandy Mini-Mart site is proposed to be redirected to NYS Route 223*
 - *A significant portion of the proposed parking lot is proposed to drain directly to NYS Route 223*
 - *An overflow from the proposed infiltration basin is directed to NYS Route 223*

In response to this statement, the applicant's engineer indicated that our office, the Town, and NYSDOT are reviewing this item. As discussed, I contacted the local NYSDOT representative regarding the potential of installing/restoring the existing drainage swale along NYS Route 223 that would receive and convey runoff from the proposed development. It was indicated by NYSDOT that an application had already been received from the applicant's engineer and was under review.

It appears that very little design and planning has been completed by the applicant's engineer regarding downstream conveyance improvements. On Sheet 5 of 12, a note has been added that states "+/- 350 LF of Drainage Ditch along Main Street to be Dredged (GC to coordinate with NYSDOT and the Town of Horseheads). A number of questions exist. The nature of the proposed improvements to the downstream conveyance system should be detailed.

- What is the proposed route of the downstream drainage course?
- What conveyance system improvements are needed?
- What are the sizes of the proposed downstream culverts?
- Is a storm sewer needed along First Street to protect an adjacent basement?
- Is the existing storm sewer along First Street of sufficient capacity?
- Would the existing gas lines present conflicts?
- Could any existing wells be subject to pollution from hotspot runoff from the adjacent Dandy Mini-Mart?

If the development of a defined conveyance system is not pursued, consideration should alternatively be given to infiltrating the 100-year runoff volume on-site from the impervious areas of the proposed project.

2. The proposed type of pipe to be used for the storm sewers should be specified. Notes on the Grading Plan call out for PVC pipe. What type of PVC pipe? Will adequate cover exist over the proposed storm sewer?

MISCELLANEOUS

1. The O & M Plan (and agreement) should clearly indicate what measures shall be taken if the proposed stormwater infiltration basin does not drain at least at the design infiltration rate. Furthermore, as per the NYSDEC Stormwater Design Manual, an infiltration basin shall drain within 48 hours after a storm event.

In addition, in regards to the submitted Operation & Maintenance Plan checklist, the following items are noted.

- The checklist is noted as being for an Infiltration Trench.
 - Provisions for the O & M of the stormwater collection system should be included.
 - The O & M Plan and Agreement should note that runoff from hotspot land uses shall not be directed to the proposed infiltration basin.
 - At what point would sediment be removed from the forebay?
2. How specifically will the existing on-site well be decommissioned? Likewise, how will the existing on-site septic system be decommissioned? The specific state and local requirements should be referenced. These should be acceptable to the Chemung County Department of Health.
 3. What is the status of The Chemung County Health Department's review of the water supply system and the wastewater disposal system?

If you have any questions or comments regarding this letter, please do not hesitate to contact me. Furthermore, I would be happy to meet to discuss this project in greater detail.

Sincerely,

A handwritten signature in blue ink that reads "Jimmie Joe Carl". The signature is written in a cursive style with a large initial 'J' and a distinct 'C'.

Jimmie Joe Carl, P.E.

Cc: Bohler Engineering
Al Curran, NYSDOT

Jimmie Joe Carl

From: Puleo, Andrew (DOT) [Andrew.Puleo@dot.ny.gov]
Sent: Thursday, March 17, 2016 1:54 PM
To: Caryn Mlodzianowski
Cc: Curren, Allan J. (DOT)
Subject: D General CTL#52840

Hi Caryn,

Stage 2 – March 8, 2016 Revisions

Dollar General Minor Commercial Driveway, SR223, Town of Horseheads, Chemung County

We have completed our review of the 3-18-16 revisions and require that the following item be re-addressed.

1. The driveway throat needs to be depicted on all plans with a maximum width of 30'. We note that plan sheet 7 of 12 cites this width to be 32.9'. Also, please do submit truck a turning template overlay depicting anticipated movements for this driveway.

We are satisfied with the drainage computations.

Thank you,
A. Puleo
607.324.8517

From: Caryn Mlodzianowski [<mailto:cmlodzianowski@bohlereng.com>]
Sent: Wednesday, March 16, 2016 9:03 AM
To: Puleo, Andrew (DOT)
Cc: Curren, Allan J. (DOT)
Subject: RE: D General CTL#52840

Good morning Andrew,
As discussed, please advise if the plans have been approved and we will send hard copies.

Caryn

From: Puleo, Andrew (DOT)
Sent: Monday, March 07, 2016 10:58 AM

To: 'Caryn Mlodzianowski'
Cc: Curren, Allan J. (DOT)
Subject: RE: D General CTL#52840

Hi Caryn

Re: Stage 2 – February 16, 2016 Response
Dollar General Minor Commercial Driveway, SR223, Town of Horseheads, Chemung County

We have completed our review of your 2-16-16 response and require that the following items be addressed.

1. Per section 2.3A of the permit application the driveway throat needs to be a maximum of 30ft wide.
2. The drainage computations in this submittal were confined to the property area of the proposed development. As such, they did not include any runoff from Dandy Mini-Mart, the property to the east. The majority of the drainage from the Dandy Mini-Mart property currently flows to the southwest and away from NYS Route 223. This proposed project would divert this flow to the north and into the drainage ditch along NYS Route 223. This additional flow must be included in the computations.

Thank you,
A. Puleo
607.324.8517

Jimmie Joe Carl

From: Caryn Mlodzianowski [cmlodzianowski@bohlereng.com]
Sent: Friday, March 25, 2016 3:45 PM
To: jjcarl@stny.rr.com
Cc: tskebey@townofhorseheads.org
Subject: FW: DG CTL# 52840

As discussed - have a great weekend!

From: Puleo, Andrew (DOT) [mailto:Andrew.Puleo@dot.ny.gov]
Sent: Friday, March 25, 2016 3:41 PM
To: Caryn Mlodzianowski <cmlodzianowski@bohlereng.com>
Cc: Curren, Allan J. (DOT) <Allan.Curren@dot.ny.gov>
Subject: DG CTL# 52840

Hi Caryn,

**Re: March 17 2016 Revisions (30' driveway w/truck turning template)
Dollar General Minor Commercial Driveway, SR223, Town of Horseheads, Chemung County**

We have completed our review of your March 17 2016 submittal and have found it acceptable. Please submit Stage 3 including (3) full size PE stamped plans, (4) sets if there is a co-applicant directly to this office.
The insured party must be one of the applicants.

Thank you,
A. Puleo
NYSDOT
107 Broadway
Hornell, NY. 14843

607.324.8517

From: Caryn Mlodzianowski [mailto:cmlodzianowski@bohlereng.com]
Sent: Thursday, March 17, 2016 2:09 PM
To: Puleo, Andrew (DOT)
Cc: Curren, Allan J. (DOT)
Subject: RE: D General CTL#52840
Attached; (3-17-16 Submission)

Thank you, Andrew. Attached is our site plan which shows the truck turn exhibit off to the right, and the Erosion & Control Plan with the updated dimension on the driveway. We will have the contractor send in Stage 3 along with our signed plans.

Regards,

Caryn Mlodzianowski

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