



---

851 Chemung Street  
Horseheads, New York 14845

March 21, 2017

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

**Re: Hunter's Run - Phase IIA  
Horseheads, New York  
Review of Stormwater Management Plan**

Mr. Skebey:

I have completed a review of the following submitted information for the above-referenced project regarding the Stormwater Pollution Prevention Plan and stormwater management system design for that project. This information was submitted by the Applicant's engineer in response to our November 17, 2016 review letter.

- Response letter from LaBella Associates, Dated February 9, 2016, Received February 13, 2017
- Site Plan Drawings for Hunter's Run - Phase IIA, Stamped by a NYS Licensed Professional Engineer, Prepared by LaBella Associates, Revision Dated February 9, 2017, Received on February 13, 2017
- Updated Storm Sewer Sizing Calculations, Prepared by LaBella Associates, Dated February 9, 2016, Received February 13, 2017
- Stormwater Pollution Prevention Plan, Hunters Run - Phase IIA, Prepared by LaBella Associates, Received on February 13, 2017

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.

**HYDROLOGIC & HYDRAULIC MODELING**

1. In regards to the portion of the existing berm of the infiltration basin that appears may be at a lower elevation than that shown in the original approved design, it is requested that a cross-section of the proposed berm improvement be provided that includes the proposed material and compaction requirements.

## STORMWATER CONVEYANCE

1. As noted in previous correspondence, although the infiltration basin is designed to receive the peak 100-year storm flows, a question exists whether the peak 100-year storm flow can be conveyed to this basin. Would flows at rates in excess of the capacity of the proposed storm sewer system be diverted away from the infiltration basin (such as towards Sing Sing Road and/or Hickory Grove Road)? Would flows in excess of the capacity of proposed storm sewer be conveyed overland and reach the basin?
2. Information (such as a table and/or cross-sections) regarding the proposed swales that denotes the bottom width, side slopes, and depth of the various swales is requested to be included on the plans. Also, it appears that some swales shall include a fill berm. Information regarding the fill berms should also be included.
3. It is requested that a stormwater inlet be provided at the northeast of the proposed intersection of Old Stable Road and Sing Sing Road (in lieu of the culvert entrance ST-10E).
4. In regards to the "Catch Basin in Grass or Pavement" Detail on Sheet C-502, the following items are noted.
  - a. A Syracuse Castings frame and grate is specified, although it is understood that Syracuse Castings is no longer in business. An alternate frame and grate should be considered with input from/acceptance of the Town Highway Superintendent.
  - b. As per Note #3 under Storm Sewer Notes on Sheet C-001, the proposed catch basin shall be 30" square. This appears to conflict with the detail that indicates a 24" square basin. The 30" square unit would be preferred.
5. It is requested that concrete aprons be provided around the proposed stormwater inlets. It is requested that the applicant's engineer gain input from the Town of Horseheads Highway Superintendent regarding the proposed aprons and develop an associated construction detail.
6. In regards to the grading of the proposed drainage swales and roadway (as shown on the Grading Plan), there appears to be areas that need to be refined on the Grading Plan, including the following. Proposed spot elevations may be helpful.
  - a. Along Old Stable Road, from ST-10A and ST-10 to Sing Sing Road
  - b. The intersection of Old Stable Road at Sing Sing Road
  - c. The proposed hammerhead
  - d. The back of Lots #33 and #34
  - e. In regards the area along the road near the existing Lot #1, there appears to be a small berm proposed. Could this berm prevent the free draining of a portion of the front yard of Lot #1? Can this berm be constructed without needing to grade onto Lot #1? Is this berm needed?
  - f. A small berm is proposed along the backs of Lots #36 thru #39. Could this berm act to prevent the free draining of portions of the backyards of the adjacent developed lots? Is this berm needed?
7. Easements over the proposed drainage swales (including those located off the roadway right-of-way) should be provided and shown on the plans.

#### SEQUENCE OF CONSTRUCTION & SOIL RESTORATION

1. Note #1 under "Construction Sequence" on Sheet C-401 does not seem to apply.
2. Perimeter controls and inlet protection on existing inlets should be implemented prior to any soil disturbance.
3. The specifics of soil restoration should be detailed on the plans. It is requested that the NYSDEC's document entitled "Deep Ripping and De-compaction, 2008" and/or the Soil Restoration Standard/Specification in the NYS Standards and Specifications for Erosion and Sediment Control (November 2016) be referenced and included in the SWPPP.

#### EROSION & SEDIMENT CONTROL

1. A detail and specifications for the proposed Inlet Protection should be provided on the plans or in the SWPPP.
2. Given the amount of excavation, the use of temporary basins may be beneficial and should be considered.
3. The plans show silt fence at the base of the cut slope within the excavation. This may be problematic for the contractor during construction.
4. There appears to be areas where additional silt fencing (or other temporary controls) would be warranted.

#### MISCELLANEOUS

1. As per the "Typical Roadway Section" on Sheet C3.1, it is indicated that roadside drainage may consist of either concrete gutter/storm sewer system or roadside ditches. The plans should clearly indicate what is proposed to be utilized. A "Typical Roadway Section" should be provided that outlines the proposed roadway section and roadside drainage system. It is requested that the applicant's engineer gain input from the Town of Horseheads Highway Superintendent regarding the proposed roadside drainage system.
2. In regards to the Typical Highway Section on Sheet C-501, the following items are noted.
  - a. Given the amount of fill proposed for the proposed streets, the use of appropriate fill materials and compaction would be critical to ensure settlement does not occur that could damage the proposed pavement or otherwise would negatively impact the proposed streets.  
  
The subgrade requirements should be noted/specified including compaction requirements for the subbase and subgrade material (including compaction specification, degree of compaction, proof-rolling, maximum lift thickness, etc) . Also, the material specification for the subgrade should also be noted.
  - b. The depth, width, and configuration of the proposed roadside swales should be indicated on the detail. The Grading Plan should reflect the design swale depth.
  - c. Is it proposed that the vertical alignment of individual driveways conform to the cross-sectional alignment of the roadside swales? If so, the detail show clearly indicate this.
  - d. The arrows/leads for the notes for the Subbase Course and the Geotextile do not appear to point to the correct portions of the detail.

3. Information regarding the proposed vertical curves should be noted on the street profiles.
4. It is requested that the symbols for property lines, easement lines, existing contours lines, and proposed contour lines be included in the legend on Sheet C-001.
5. At this time, the Town is evaluating alternate frames and covers for the sanitary sewer manholes. It is the hope of the Town to identify a frame and cover that better lends itself to snow plowing operations. In turn, the selected frame and cover would be noted on the sanitary sewer manhole detail.
6. On Detail 10 on Sheet C-502, it is noted that "All utilities shall have a 18" horizontal or vertical separation". This statement is inconsistent with the separation requirements between watermains and sewers noted in the Great Lakes-Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers' Recommended Standards for Water Works.
7. In regards to Lot #31, the proposed easement for the watermain should be extended along the frontage of that lot such to accommodate the future extension of that watermain.

If you have any questions or comments regarding this letter, please do not hesitate to contact me.

Sincerely,



Jimmie Joe Carl, P.E.

Cc: LaBella Associates