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SWPPP Amendment #1

Inn at Bellefield

US Route 9
Town of Hyde Park
Dutchess County, New York

January 6, 2021

1.0 PROJECT SUMMARY:

This document is intended to act as an amendment to the original Stormwater Pollution Prevention Plan (SWPPP), entitled "Inn at Bellefield," prepared by The Chazen Companies (Chazen), last revised June 30, 2018. Amendment #1 has been provided to obtain approval for desired design changes to the wastewater treatment plant (WWTP) such as the lab building and the ability to construct the full facility.

Amendment #1 to the SWPPP is summarized as follows:

- Additional impervious area proposed at the WWTP for the lab building and turnaround area. The original SWPPP provided a large gravel area for the WWTP and accommodated some future expansion. Therefore, the amendment only includes a minimal amount of additional impervious area (±350 square feet net) related to an enlarged truck turnaround area and the proposed Belt Press Facility. The proposed Lab Building has also been relocated.
- Bypassed additional "clean," upstream pervious area away from the WWTP bioretention basin and into detention pond 10P. Despite the slight increase in impervious area, the total area bypassed has decreased the WQv requirement for the WWTP pad. See the WQv summary table below for additional information.

This Amendment to the SWPPP and the accompanying amended plans entitled "Bellefield at Historic Hyde Park" have been submitted as a set. These engineering drawings are considered an integral part of the SWPPP. Therefore, this SWPPP is not considered complete without them. References made herein to "the plans" or to a specific "sheet" refer to these drawings.

2.0 EROSION & SEDIMENT CONTROL AND CONSTRUCTION SEQUENCE:

The "Erosion and Sediment Control Plan" in the accompanying drawings identifies the major construction activities that are the subject of this SWPPP addendum. The order (or sequence) in which the major activities are expected to begin is presented on the accompanying drawings, though each activity will not necessarily be completed before the next begins. In addition, these activities could occur in a different order if necessary to

maintain adequate erosion and sediment control. If this is the case, the contractor shall notify the Owner's/Operator's Engineer overseeing the implementation of the SWPPP.

3.0 STORMWATER MANAGEMENT:

Phase 1a stormwater management facilities have capacity for a portion of the runoff associated with the proposed changes. Other stormwater management facilities are being proposed to accommodate all additional requirements. This addendum provides a summary including calculations for existing and proposed stormwater quality and quantity controls associated with the proposed Amendment.

3.1 Water Quality Volume (WQv) and Runoff Reduction Volume (RRv)

The new impervious proposed in Amendment #1 creates an additional WQv and RRv requirements as summarized below.

Table 1: Summary of RR Techniques and Standard SMPs with RRv Capacity

RR Technique or Standard SMP with RRv Capacity	Subcatchment Area	NYSDEC Design Variant	Total Area - Original/ Amended (acres)	Proposed Impervious Area – Original/Amended (acres)	WQv Required – Original/ Amended (CF)	WQv Provided – Original/ Amended (CF)
Bioretention Area #2 at WWTP (with underdrain)	PS-6 & PS-7	F-5	7.028 / **4.399**	1.068 / **1.076**	7,143 / **6,040**	7,410 / **7,410**

3.2 Volume and Peak Rate Control

A comparison of the pre- and post-development watershed conditions was performed for Design Point B, which the WWTP area is tributary to, and storm events evaluated herein. For the design point and design storms, this comparison demonstrates that the peak rate of runoff will not be increased over the pre-development condition. Therefore, the addendum will not have a significant adverse impact on the adjacent or downstream properties or receiving water courses. The following Table summarizes the results of this analysis.

	Pre- vs. Post-Development Discharge Rate (cfs)							
Design Point (DP)	1-year 24-hour storm event		2-year 24-hour storm event		10-year 24-hour storm event		100-year 24-hour storm event	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
DP-A	22	21	38	37	137	126	489	481

No revisions to the detention pond were required as a result of the negligible increase in impervious area. Therefore, channel protection volume remains unchanged and in accordance with the original SWPPP.