

January 16, 2018

Advantage Plastic Products, Inc.
Non-Residential Site Plan Application
Map 111; Block G1; Lot 61 – 38 Henniker Street

Project Narrative

The subject property, referenced on Tax Map 111 as Lot G1-61, is located entirely within the City of Concord's Industrial Zoning District. The 1.870 acre parcel is currently home to the existing Advantage Plastic Products, Inc. facility consisting of a 12,000 square foot metal & concrete block building, with 912 square foot mezzanine, and all associated site appurtenances. Approximately half of the site consists of impervious surfaces. The remaining land area is undeveloped and consists mainly of grassed areas and woodlands. Access to the site is provided via a single existing curb cut located off Henniker Street. The property is bounded by industrial development to the north, south, and east, and by the Concord Municipal Airport property to the west.

Advantage Plastic Products, Inc. has operated from this facility since the building was constructed in 2008. As mentioned above, the existing structure has a footprint of 12,000 square feet, and contains a mix of manufacturing, warehouse storage, and ancillary office spaces. With the expansion, the property owners hope to move all warehouse storage into the expanded space, allowing them to convert existing warehouse into additional manufacturing floor area. Existing office spaces within the building will remain. Advantage Plastic Products, Inc. employs approximately 25 people, and this is not proposed to change with the expansion.

With the expansion comes provisions for additional parking and improvements to existing access for large delivery vehicles. The traditional loading dock is being replaced with a second at-grade overhead door. At this location, the owners are proposing to utilize a dock lift for loading and unloading shipments. The second overhead door is used primarily for loading and unloading equipment on a much reduced frequency. Plumbing within the expanded space will be from within the existing building, therefore the site plan does not propose any new service connections to the water and sewer systems under Henniker Street. The plan proposes new site lighting mounted on the building. A landscape plan was prepared that adds the requisite number of new trees to the site based on the new parking and access areas. Stormwater management is accommodated both above ground and below ground. Adjacent to the south side of the existing building, the design engineer is proposing a stone drip edge to capture and infiltrate roof water to the extent practicable. In the southwest corner of the parking lot, an above ground stormwater management area is proposed that both treats surface water runoff and mitigates peak rates of runoff toward the City system under Henniker Street. These systems both overflow to the existing systems onsite consisting of a grass lined swale and two above ground ponds.



January 9, 2018

Mr. Richard Woodfin, Chair
Concord City Planning Board
City Hall
41 Green Street
Concord, New Hampshire 03301

**Subject: Waiver Request – Advantage Plastic Products, Inc.
Map 111; Block G1; Lot 61
38 Henniker Street
KNA Project No. 15-0417-1**

Dear Board Members:

Please consider this a formal request for a waiver from Section 22.07 *Storm Water Design Standards for Site Plans With Significant Impact*, of the City of Concord, NH Site Plan Regulations, to allow 3-feet of separation from the bottom of infiltration practice to the estimated seasonal high water table, where 4-feet is required by Sub-Section 2 *Storm Water Recharge*.

Advantage Plastic Products, Inc. is proposing to expand their existing facility with a 10,100-square foot addition and all associated site improvements. Site work will include construction of the proposed warehouse, six (6) additional parking spaces, paved loading areas, circulation improvements, and stormwater management provisions.

Approximately half of the site is currently developed with impervious surfaces. The remaining land area consists of grassed areas and woodlands. Surface water from those impervious surfaces is conveyed toward two detention ponds, located on each side of the entrance driveway, and ultimately discharges into an existing closed system under Henniker Street. The subject project proposes additional measures to mitigate the increased runoff due to the improvements. The new impervious area will be conveyed toward a proposed wet extended detention pond, with sediment forebay for pretreatment, in the southwest corner of the site. A portion of the building addition will drain into an infiltration trench, to meet the City's groundwater recharge requirements, prior to discharging into the wet extended detention pond.

In November of 2017, Keach-Nordstrom Associates, Inc. (KNA) witnessed a machine excavated test pit onsite. The representative from KNA reported the estimated seasonal high water table (ESHWT) at approximately 36" from the top of existing ground. The design engineer was able to accommodate 3-feet of vertical separation from the ESHWT to the bottom of the infiltration trench. This minimum separation complies with the requirements of the New Hampshire Department of Environmental Services (NHDES), but falls short of the requirements of the City of Concord. 3-ft of vertical separation is widely accepted as adequate proper stormwater treatment prior to recharging the ground water table. The goal of the ordinance is to preserve storm water quality and quantity, which the proposed practice achieves.

Pursuant to Section 36.08 *Waivers* the Planning Board shall not approve waivers unless it shall make findings based upon the evidence presented to it in each specific case that:

1. The granting of the waiver will not be detrimental to the public safety, health, or welfare or injurious to other property.

Infiltrating treated stormwater back into the ground water table has long been the goal of the city of Concord Engineering Department. The site plan regulations require new developments to maintain existing recharge rates to preserve ground water levels and stream base flows. The groundwater recharge volume, as calculated in the BMP worksheet provided in the site plan application package, required for this particular site is 441 cf. The proposed infiltration practice was designed to exceed this requirement. Designing the trench pursuant to applicable State regulations administered by the NHDES ensures that granting the waiver will not be detrimental to public health and safety.

2. The conditions upon which the request for a waiver is based are unique to the property for which the waiver is sought and are not applicable generally to other property.

This site condition is unique to the area because although the site is underlain by the sandy soils we are accustomed to seeing in this part of Concord, the machine excavated test pit revealed relatively shallow depth to seasonal high water table. As a result, options for infiltration while maintaining four feet of vertical separation are ruled out. In this case, the design engineer chose to infiltrate only clean roof water rather than surface runoff from the parking lot. The design incorporates steps in to the infiltration trench, allowing the depth of stone in the trench to increase as the existing ground elevation decreased. The site development proposes expansion of an existing building, so grades are essentially fixed by the existing condition. This series of site specific encumbrances are not applicable generally to other development projects and properties.

3. Because of the particular physical surroundings, shape, or topographical conditions of the specific property involved, a particular and unnecessary hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations are carried out.

As stated in the response above, the specific condition of the land requiring a waiver in this case is the elevation of the existing building, which based on the test pit excavated onsite is within approximately 3-feet of the estimated seasonal high water table. As a result, providing four feet of vertical separation for infiltration is not practical. The applicant is proposing reasonable expansion of the existing use, which is not possible without the granting of the waiver requested herein.

4. Specific circumstances relative to the site plan or conditions of the land where a site plan is proposed indicate that the waiver will properly carry out, or not be contrary to, the spirit and intent of these regulations.

The spirit and intent of the ordinance is to preserve stormwater quality and quantity. The infiltration trench was designed to meet the City of Concord's groundwater recharge

requirements, and will provide adequate treatment prior to recharging into the ground pursuant to NHDES Alteration of Terrain requirements.

5. The waivers will not in any manner vary the provisions of the Zoning Ordinance, Master Plan Reports, or Official Map.

The requested waiver from the storm water design standards of the Site Plan Regulations will in no way violate the provisions of the Zoning Ordinance or Master Plan.

I trust the content of this waiver request is in keeping with similar waiver requests entertained by the Planning Board in the past. Should you have any questions or require further information, please do not hesitate to contact this office. We appreciate the Board's consideration of this request.

Respectfully Submitted,



Patrick Colburn, P.E.
Project Manager