



## EXECUTIVE STORMWATER MANAGEMENT STATEMENT

**To:** Township of Cranford Planning Board

**Project:** Hartz Mountain Industries, Inc.  
Proposed Residential Redevelopment Plan  
Tax Block 541, Lot 2  
Township of Cranford, Union County, New Jersey

**Dated:** May 24, 2017

**Reference:** Zoning Plans  
(Prepared by Stonefield Engineering & Design, LLC, dated May 24, 2017)

Hartz Mountain Industries, Inc. is proposing the rezoning of the above reference property in order to construct a multi-family residential development. The subject property is designated as Block 541, Lot 2, commonly known as 750 Walnut Avenue. The site is currently located within the Commercial – 3 District (C-3) and is bounded by a golf course to the south, Walnut Avenue to the east, and the New Jersey Transit Rail Road to the north and west.

The total project area is 30.5 acres and will be divided into two phases. Approximately half of the site consisting of existing offices in the rear will remain operational as Phase 1 is built in the front of the site. The remaining portion of the project will be built during Phase 2. Phase 1 consists of two multi-family residential buildings with 433 total units. Phase 2 will add three additional buildings with 472 units for a total of 905 units for the full build out. The site is currently 65.5% impervious and has two aboveground stormwater management basins to manage stormwater runoff.

This Executive Stormwater Management Statement has been prepared to provide an overall summary of the potential stormwater runoff impacts of the proposed project and discuss measures proposed to conform to the stormwater management requirements set forth by the Township of Cranford, Somerset-Union Soil Conservation District, and the New Jersey Department of Environmental Protection (NJDEP).

### PRE-DEVELOPMENT DRAINAGE CONDITIONS

Under pre-development conditions the site is developed and consists of two office buildings and associated parking. About 30% of the site runoff is collected via catch basins and piped to an existing detention basin located at the northeast portion of Walnut Avenue. This basin discharges directly to an 18" RCP in Walnut Avenue, which is part of the municipal system. The remainder of the site is tributary to the detention basin located at the southern corner of the property. This basin also discharges directly to the municipal system within Walnut Avenue and connects to a 42" RCP. The 42" RCP is not directly connected to the 18" RCP and two separate point of interests are analyzed.

### PROPOSED DRAINAGE CONDITIONS

Under proposed conditions, the site will consist of the residential buildings and associated parking areas. The uncovered portion of the site will drain via sheet flow to proposed catch basins on-site. The proposed buildings will drain via roof leaders to connect to the proposed drainage system. Approximately 30% of stormwater runoff will be tributary to one of two new stormwater management basins, which together will have an increase in volume capacity compared to the existing basin. The remaining 70% portion of the site will be tributary to southerly existing basin which is to remain.



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### **STORMWATER MANAGEMENT ANALYSIS**

The project disturbs more than one acre of land and is therefore defined as a Major Development as indicated in the Township Ordinance. The project is designed to conform to the stormwater management requirements set forth by the Township, Somerset-Union Soil Conservation District, and the NJDEP.

### **WATER QUALITY REQUIREMENTS**

Per NJAC 7:8-5.5, the site is not proposing to add one-quarter acre of impervious surfaces (no new impervious surfaces are added) and therefore water quality is naturally enhanced due to the increase of pervious areas.

### **GROUNDWATER RECHARGE REQUIREMENTS**

As the site is reducing impervious coverage, groundwater recharge is naturally enhanced. Additionally, it is worth noting that the subject property is located within an Urban Planning Area defined by the NJDEP as the Metropolitan Planning Area (PA-I), where per NJAC 7:8-5.4, groundwater recharge requirements do not apply.

### **RUNOFF QUANTITY REQUIREMENTS**

The proposed project will meet stormwater quantity requirements via demonstrating that at no point in time does the post-development hydrograph exceed the pre-development hydrograph. Under proposed conditions, the existing southerly detention basin is to remain, while the northeasterly basin will be replicated in size via two new basins. Compliance with quantity reduction requirements will be achieved due to the overall decrease in impervious coverage and by generally maintaining the existing quantity of runoff tributary to each basin.

### **EXECUTIVE SUMMARY**

As the project meets local and State stormwater management requirements and due to the overall decrease in impervious coverage, no adverse impacts to the municipal drainage system or adjacent properties are anticipated as a result of the project.

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