



# FLOOD HAZARD AREA INDIVIDUAL PERMIT CANTERBURY DEVELOPMENT ENGINEERING REPORT

FOR CANTERBURY DEVELOPMENT, LLC, ON BLOCK 320, LOT 10.03  
204 Maple Drive Wyckoff Township, Bergen County, New Jersey

Prepared By:

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A handwritten signature in blue ink, appearing to read "Wassim Y. Nader", is positioned above a horizontal line.

Wassim Y. Nader, PE  
NJ License No. 24GE03665000

# CANTERBURY DEVELOPMENT FHA INDIVIDUAL PERMIT FOR CANTERBURY DEVELOPMENT, LLC

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## APPENDICES

Required information is attached to the rear of this report.

## I. INTRODUCTION

Lots 10.03 and 10.04 Block 320 in the Township of Wyckoff have been undeveloped for decades. Aside from the ruins of a previous recreational area, no other man made features exist on the lots. The lots slope downward to the north where a brook (Goffle Brook) flows from west to east through the property. The site is bounded on the west, south and east by single family homes, and to the north by a railroad right of way.

Wetlands exist on site and are associated with the brook and low areas. For the purposes of this application it is assumed that the wetland areas will be classified as exceptional resource value, and will require a 150' wetland transition area. A 50' riparian buffer is assumed along the brook since the brook is classified as FW2-NT. These values reflect the conditions in a previous LOI for the property that was obtained in 2006. Note that a wetlands letter of interpretation is pending with the department for these properties as file number 0270-04-0008.1.

The proposed project is to develop lot 10.03 with a new multifamily development the new development will include 61 residential units in three four story buildings. Parking will be provided at the ground floor of each building to reduce the amount of proposed surface parking and motor vehicle surface. The site will be served by municipal water and sewer. The proposed sanitary sewer line will cross lot 10.04 in an easement and connect to an existing sanitary sewer line that runs in a northerly direction towards the western end of lot 10.04.

The proposed construction of the property will impact wetland, riparian buffer areas, and the flood hazard area. It is for this reason that permit applications are being made to the Department.

Note that the proposed project is classified as a major development under NJAC 7:8. This is because over an acre of disturbance is proposed for construction. Both motor vehicle area and impervious area will be increased on site after construction.

In order to properly and efficiently grade the site a small amount of grading is necessary in the flood hazard area. This displaced volume is being offset by grading on site to provide an equal storage volume as is being displaced by the proposed grading.

## II. FHA INDIVIDUAL PERMIT REQUIREMENTS OVERVIEW/CHECKLIST

The narrative below addresses the requirements and compliance with the relevant/applicable regulations found in N.J.A.C 7:13 in support of the application for a Flood Hazard Area Individual Permit:

Applicable regulations include: 7:13-11.4, 7:13-12.3,

7:13-11.4 Requirements for a regulated activity in a flood fringe:

It is proposed to disturb the flood hazard area in order to create sufficient room on site to provide a fire lane for the site. A retaining wall was not considered in this area due to the construction of a recreational area which includes a pool. The recreation area was provided as part of an application to the Township for the development. The project has been designed so that there is no flood storage displacement in accordance with section 11.4(e) and 11.4(j). Compliance with 11.4(j) is demonstrated in further detail in the next section of this report.

7:13-11.4(e):

Please see the site grading plan for the flood storage calculations for the graded area. Note that the volume of the displacement into the FHA is less than the replacement volume created as indicated on the plan immediately to the west of the proposed displacement.

7:13-11.4(j)

Per Panel 156 & 157 of 332 of the FEMA FIS, Bergen County, NJ (all jurisdictions), the 100-year flood elevation is 288' along the area graded to support the proposed fire lane. The entirety of the limits of disturbance for this project lies at an elevation higher than 288'. Therefore, no flood storage below the 10-yr flood elevation will be displaced as a result of this project. Approximately 2,605 cubic feet of grading has extended into the flood hazard area, and approximately 3,470 cubic feet of excavation (compensating for the fill volume) has been provided immediately to the west. Please see the grading plan for the location of the fill, and the net fill calculations.

7:13-12.3 Requirements for excavation, fill and grading activities:

This section requires the following for excavation fill and grading activities:

1. The overland flow of stormwater is not impeded and floodwaters can freely enter and exit the disturbed area, unless the area is graded to impound water for a stormwater management structure that meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8;

**The proposed grading will not alter existing drainage patterns or impede the overland flow of stormwater. Please refer to the site grading plan.**

2. Any slope of greater than 50 percent (a ratio of two horizontal to one vertical) is stabilized using soil bioengineering, retaining walls, rip-rap or other appropriate slope protection;

**Proposed slope in the graded area will not exceed 3 horizontal to 1 vertical.**

3. The excavation, fill and/or grading does not endanger the integrity of any existing structure; and

**The proposed fill and grading is constructed as part of a proposed fire lane/roadway system and is not near an existing structure.**

4. All excavated material is disposed of lawfully.

**The Applicant Acknowledges this condition.**

Please see the stormwater management calculations included with this submission for further engineering detail.