



February 2, 2023

Mr. Eric Arena
Borough of Mendham
Environmental Commission, Open Space, and Shade Tree Committee
2 W. Main Street
Mendham, NJ 07945

**RE: V-FEE MENDHAM APARTMENTS LLC DEVELOPMENT APPLICATION
84-90 MAIN STREET
BLOCK 801, LOT 20
MENDHAM BOROUGH, MORRIS COUNTY
NJDEP FLOOD HAZARD AREA AND FRESHWATER WETLANDS PERMIT APPLICATIONS
DEP FILE NO. 1418-20.0001.1**

Dear Mr. Arena:

As you requested, One Water Consulting LLC (One Water) has reviewed the above-referenced application on behalf of the Borough of Mendham Environmental Commission, Open Space, and Shade Tree (ECOSST) Committee. V-Fee Mendham Apartments, LLC has proposed a multi-family residential development on Block 801, Lot 20 in the Borough of Mendham, Morris County, New Jersey. I understand that NJDEP has received Flood Hazard Area and Freshwater Wetlands permit applications related to the proposed project, and I have prepared this letter to provide comments related to these permit applications.

We have reviewed the following documents to date:

1. Flood Hazard Area Study, Block 801, Lot 20, 84-90 East Main Street, Borough of Mendham, Morris County, New Jersey, by Princeton Hydro, LLC, dated May 2021.
2. NJDEP Flood Hazard Area Control Act Permitting, Proposed Multi-Family Residential Development, Block 801, Lot 20, 84-90 East Main Street, Borough of Mendham, Morris County, New Jersey, by Stonefield Engineering & Design, LLC, dated January 10, 2023.
3. NJDEP Permitting Plans, V-Fee Mendham Apartments LLC, Proposed Multi-Family Residential Development, Block 801, Lot 20, 84-90 East Main Street, Borough of Mendham, Morris County, New Jersey, by Stonefield Engineering & Design, LLC, dated January 10, 2023.
4. Preliminary and Final Site Plans, V-Fee Mendham Apartments LLC, Proposed Multi-Family Residential Development, Block 801, Lot 20, 84-90 East Main Street, Borough of Mendham, Morris County, New Jersey, by Stonefield Engineering & Design, LLC, dated October 20, 2022.
5. Stormwater Management Report, Proposed Multi-Family Residential Development, Block 801, Lot 20, 84-90 East Main Street, Borough of Mendham, Morris County, New Jersey, by Stonefield Engineering & Design, LLC, dated October 20, 2022.
6. NJDEP Freshwater Wetlands Letter of Interpretation: Line Verification, File No.: 1418-20-0001.1 dated October 1, 2020.

7. Comment letter from Ferriero Engineering, Inc. to NJDEP, dated January 23, 2023.

While we have not yet completed our entire review, we wanted to provide you with our preliminary comments related to the NJDEP permit applications.

Flood Hazard Area Issues

1. There are waters on the west and north sides of the property which have not been fully mapped on the permitting plans prepared by Stonefield Engineering and Design (Permitting Plans):
 - Several channels in the northwest corner of the property.
 - A channel downstream of the 12" diameter pipe adjacent to the gravel path in the rear of the site.
 - Two channels along the west boundary of the property (one on the property and one on the neighboring property).
 - A channel downstream of the 36" diameter pipe outfall on the north portion of the property adjacent to the gravel path. Note that this outfall has not been mapped by the Applicant/Engineer.

These features possess a discernible channel and are connected to a regulated water. In addition, these features contained water during a site visit performed by One Water on January 31, 2023 during a period of dry weather. While stormwater pipes connect to these waters, they appear to be naturally occurring features or waters that historically possessed a naturally occurring discernible channel that have been modified. We request that NJDEP review these features in the field to properly determine the extent of regulated waters and riparian zones on the development site. Photographs from our site visit are provided in Attachment A.

2. The Permitting Plans show regulated waters extending onto the property on the northwest corner of the site. These features do exist and are much more extensive than what is shown, as described in Comment 1. However, the 150-foot and 300-foot riparian zones do not take these regulated waters into account. Note that if the riparian zones were drawn based on these regulated waters, the proposed stormwater outfall would be within the 150-foot inner Category One (C1) Riparian Zone.
3. The regulated waters on the property are C1 waters. The proposed discharges from the new development will be conveyed through stormwater outfalls that are within the 300-foot riparian zone. Therefore, the Applicant/Engineer should demonstrate compliance with N.J.A.C. 7:13-11.2(j)4 including reduction of the post-construction load of total suspended solids by 95% of the anticipated load from the development site.
4. There is a 36" diameter pipe stormwater outfall located on the north portion of the property that has not been mapped by the Applicant/Engineer. Stormwater runoff from the development site will be conveyed through this outfall. The outfall was covered with a brush pile, with no conduit outlet protection observed. The outfall should be reconstructed to comply with New Jersey Soil Erosion and Sediment Control Standards. Disturbance related to maintenance and reconstruction of stormwater outfall should be included in the permit application package.

5. A limit of disturbance is shown around a paved pad, gravel play area and shed in the rear of the property. Additional disturbance will be required to the vegetated areas around these structures for access and construction. The limit of disturbance should reflect a reasonable area for purposes of demolition work. There are existing trees in close proximity to these structures. The applicant/engineer should clarify if these trees will remain or be removed.
6. The limit of disturbance is shown to be at the edge of the proposed building in the rear of the property. However, additional disturbance will be required for construction access and to account for the limits of excavation and foundation construction. The limit of disturbance should reflect a reasonable area for purposes of access and construction.
7. The flood hazard area has been delineated using Method 6, based on the Flood Hazard Area Study by Princeton Hydro, LLC dated May 2021. Note that there is no NJDEP Department Delineation or FEMA Delineation of the floodplain in the project area. The flood hazard area is of critical importance to this project due to the multi-family residence nature of the development. We have the following comments related to the Flood Hazard Area Study:
 - a. The NJDEP Flood Hazard Area Technical Manual (FHA TM) provides detailed requirements and procedures for performing Method 6 Calculations. The Flood Hazard Area Study should be revised to follow these NJDEP requirements.
 - b. We have run USGS StreamStats as a point of reference for the total drainage area to the stream at the site. The StreamStats report is provided as Attachment B which shows a drainage area of 173 acres, which is more than double the area of 75 acres presented in the Flood Hazard Area Study.
 - c. The approximate method (Method 5) was analyzed for the site based on a drainage area of 173 acres in Watershed Management Area 8. The resulting flooding depth from Method 5 is 9 feet. However, the Flood Hazard Area Study indicates flooding depths of approximately 1 foot at the cross-sections at the site. This much of a discrepancy is unusual and puts into question the validity of the hydrologic and hydraulic analysis.
 - d. Hydrologic and Hydraulic Analysis must extend at least 500 feet upstream and downstream of the property limits. However, most upstream cross section is just off of the property boundary, and the most downstream cross section runs right through the proposed development. Hydrologic and hydraulic model must be extended to accurately calculate the floodway and floodplain on the site.
 - e. Hydrologic and Hydraulic Analysis must include all downstream structures. For example, there is an existing culvert under the walking path (Patriots Path) just downstream of the model limits. See photograph of existing culvert under Patriots Path in Attachment A. This culvert should be included since it may cause backwater that impacts flood elevations at the project site.
 - f. The cross-section areas identified as “ineffective flow” in Sections 1407 through 1622 actually receives runoff from an outfall off of Dean Road. See photograph of outfall in Attachment A. The contributory watershed to this outfall should be included in the model, with this channel modeled as a separate reach.

- g. A signed and sealed topographic map should be provided (or multiple maps to maintain clarity) showing the following:
 - i. The boundaries of the drainage area
 - ii. The time of concentration flow path within the drainage area, marking each segment of sheet flow, shallow concentrated flow, and open channel flow
 - iii. An overlay of the soils types within the drainage area
- h. A map showing the land use/land cover within the contributory drainage areas should be provided.
- i. A curve number of 98 for open water/wetland areas should be utilized.
- j. The applicant has used the Watershed Lag Method for the time of concentration. However, the Velocity Method is recognized by the NRCS as the best computational method in urbanizing watersheds. As such, the Velocity Method is the Department's preferred method for computing the time of concentration in most cases. The applicant/Engineer should calculate time of concentration using the Velocity Method, including using the McCuen-Spiess limitation.
- k. Computations showing the calculated time of concentration, including each of the sheet flow, shallow concentrated flow, and open channel flow segments should be provided.
- l. Photographs at each cross-section documenting the land cover in the channel, left overbank, and right overbank to support the selection of the Manning's n value in these areas should be provided.
- m. Signed and sealed cross-sections plotted on engineering drawings with all cross-sections drawn looking downstream should be provided with the channel and immediate overbank areas field surveyed.
- n. A topographic plan showing location, orientation, and lateral extent of each cross-section should be provided.
- o. A plan view of the calculated flood hazard limits should be provided.
- p. The limits of the floodway shown in plan view and the left and right encroachment stations shown on each cross-section should be provided.
- q. Five pages of warning messages are included in the output results from HEC-RAS. The Applicant/Engineer must explain why the warning messages do not invalidate the results of the model and document the steps that were taken to resolve the warning messages.

Wetlands Issues

1. The perimeter wooded areas and wetlands around the development site are listed in the NJDEP Landscape Project as habitat for Barred Owl, Veery, Indiana Bat, Bobcat, and Great Blue Heron. The proposed project will result in disturbances to the transition area of these wetlands and associated habitat. NJDEP should ensure protection of this extensive list of threatened and endangered species when reviewing the freshwater wetlands permit application.
2. A limit of disturbance is shown around a paved pad, gravel play area and shed in the rear of the property. Additional disturbance will be required to the vegetated areas around these structures for access and construction. Limit of disturbance should reflect a reasonable area for purposes of demolition work. There are existing trees in close

proximity to these structures. Applicant/engineer should clarify if these trees will remain or be removed.

3. The limit of disturbance is shown to be at the edge of the proposed building in the rear of the property. However, additional disturbance will be required for construction access and to account for the limits of excavation and foundation construction. Limit of disturbance should reflect a reasonable area for purposes of access and construction.
4. The applicant is applying for a Transition Area Waiver in accordance with N.J.A.C. 7:7A-8.1(d). This type of waiver requires the applicant demonstrate that the proposed project will not have substantial impacts on the adjacent wetlands. NJDEP should consider that the applicant is proposing a major development directly adjacent to C1 surface waters, exceptional resource value wetlands and significant threatened and endangered species habitat. It would not seem appropriate for a waiver to the regulations be granted at this site.
5. Unmapped trees are present within the limit of disturbance, including in areas designated to be permitted under a Transition Area Waiver in accordance with N.J.A.C. 7:7A-8.1(d). The applicant should survey all trees within the proposed limit of disturbance.

Highlands Issues

1. The proposed project is a major development located within the Highlands Planning Area. The applicant should obtain a determination from NJDEP regarding whether any permits or approvals are required under the Highlands Act.
2. The applicant is proposing a change in use of the proposed property that may result in additional water or sanitary sewer service requirements. Determination should be made that the proposed project is consistent with the applicable Water Quality Management Plan.

Contaminated Sites Issues

1. The multi-family residential site is proposed on a property that is listed as an active known contaminated site (Caroline Cleaners at Mendham Shopping Center). Applicant should provide information on how the contamination on the site is being addressed, whether the site is suitable for residential use, and how the proposed development will comply with all applicable local, state and federal regulations regarding contamination on residential sites.

Stormwater Issues

1. Ferriero Engineering, Inc. has submitted comments to NJDEP in a letter dated January 23, 2023 focused on the stormwater management design for the proposed development. We agree with the comments and concerns listed in that letter.
2. The new vehicle traffic areas and proposed areas of pavement reconstruction should be treated for water quality in accordance with the stormwater management regulations. In addition, the proposed development discharges to stormwater outfalls that are within the 300-foot riparian zone. Therefore, the Applicant/Engineer should demonstrate compliance with N.J.A.C. 7:13-11.2(j)4 including reduction of the post-construction load of

total suspended solids by 95% of the anticipated load from the development site. This requirement applies regardless of whether or not the site is redeveloped (see NJDEP Stormwater Rule Frequently Asked Questions).

If you have any questions, please do not hesitate to contact me via telephone at 609-462-9383 or via e-mail at JCosgrove@OneWaterNJ.com.

Sincerely,

A handwritten signature in blue ink that reads "James Cosgrove" with a stylized flourish at the end.

James F. Cosgrove, Jr., P.E.
Principal

ATTACHMENT A
SITE PHOTOGRAPHS



Open Space and Trees in Rear Portion of Property



Stream at 12" Diameter Pipe Outfall at Northwest Portion of Property



Stream Located in Northwest Portion of Property



Stream along Western Boundary of Property Adjacent to Development



Stream in Northwest Portion Property Extending Towards Development Area



Stream Located in Northwest Portion of Property



Stream Located on Neighboring Property to the West of the Site



12" Diameter Outfall to the West of the Development Area



Headwall and Stream to the West of the Development Area



Stream to the North of the Development Area



36" Diameter Pipe Outfall Covered in Brush Pile to the North of Development Area



Existing Building with Adjacent Trees



Existing Building and Tree to the East of the Development Area



Rear Portion of Property with Buildings, Open Space and Trees



Culvert under Patriot's Path Downstream of Property



Outfall and Stream off of Dean Road

ATTACHMENT B
USGS STREAMSTATS REPORT

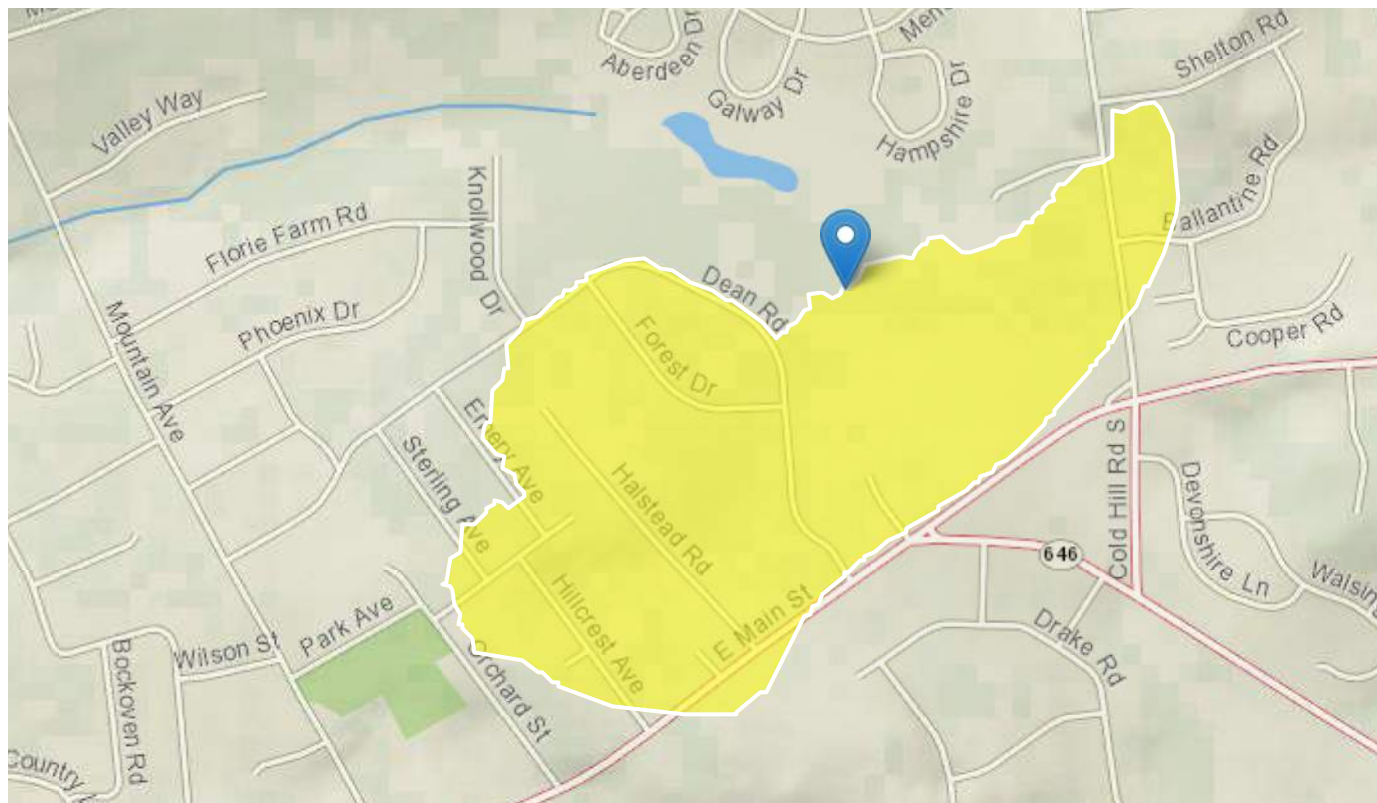
StreamStats Report

Region ID: NJ

Workspace ID: NJ20230202014832148000

Clicked Point (Latitude, Longitude): 40.78509, -74.59130

Time: 2023-02-01 20:48:52 -0500



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➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	115	feet per mi
DRNAREA	Area that drains to a point on a stream	0.27	square miles

Parameter Code	Parameter Description	Value	Unit
POPDENS	Basin Population Density	755	persons per square mile
STORAGE	Percentage of area of storage (lakes ponds reservoirs wetlands)	12.4	percent

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Application Version: 4.12.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1



EcolSciences, Inc.
Environmental Management & Regulatory Compliance

RECEIVED
1/20/23

January 17, 2023

Ms. Robin R. Kline, Clerk
Borough of Mendham
2 West Main Street
Mendham, New Jersey 07945-1213

CERTIFIED MAIL

Re: Application for a Flood Hazard Area Verification and Individual Permit and Freshwater Wetlands General Permit Number 11, Transition Area Waiver-Redevelopment, and Transition Area Waiver pursuant to N.J.A.C. 7:7A-8.1(d)
Block 801, Lot 20
Borough of Mendham
Morris County, New Jersey
File No. 1418-20-0001.1

Dear Ms. Kline:

This letter is to inform you that the V-Fee Realty Investment LLC is applying to the New Jersey Department of Environmental Protection (NJDEP), Division of Land Resource Protection for a Flood Hazard Area Verification and Individual Permit and Freshwater Wetlands General Permit Number 11, Transition Area Waiver-Redevelopment, and Transition Area Waiver pursuant to N.J.A.C. 7:7A-8.1(D) within the above-referenced property. The NJDEP issued a LOI, which classified the wetlands as exceptional resource value (File No. 1418-20-0001.1). The 13.65±-acre site is located at East Main Street east of its intersection with Tempe Wicke Road. The site is primarily occupied by a shopping center and sports complex. The limited undeveloped portions of the site are characterized by successional woodlands and wetlands. An unnamed tributary to the North Branch of the Raritan River is located in the extreme northwest portion of the site. Below please find the legal notice.

This letter is to provide you with legal notification that an application for an authorization under a flood hazard area verification (Method 6) and individual permit and freshwater wetlands general permit 11 and transition area waivers has been submitted to the New Jersey Department of Environmental Protection, Division of Land Resource Protection for the site shown on the enclosed plan. A brief description of the proposed project follows: The applicant proposes redevelop the rear portion of the site to accommodate a multi-family residential building, tenant premium parking, automotive sales and service, and recreational facilities. The redevelopment project will result in disturbances to the transition areas and riparian zones which can be authorized pursuant to a Flood Hazard Area Individual Permit and Freshwater Wetlands General Permit Number 11, Transition Area Waiver-Redevelopment, and Transition Area Waiver pursuant to N.J.A.C. 7:7A-8.1(D). The applicant is also requesting a Flood Hazard Area Verification (Method 6) which will verify the extent of the flood hazard areas and width of the riparian zone within the site.

The complete permit application package can be reviewed at either the municipal clerk's office in the municipality in which the site subject to the application is located, or by appointment at the Department's Trenton Office. The Department of Environmental Protection welcomes comments and any information that you may provide concerning the proposed development and site. Please submit your written comments within 15 calendar days of receiving this letter to:

Ms. Robin R. Kline, Clerk
January 17, 2023
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New Jersey Department of Environmental Protection
Division of Land Resource Protection
P.O. Box 420, Code 501-02A
Trenton, New Jersey 08625
Attention: "Borough of Mendham Supervisor"

Please find enclosed a CD of the application (a hard copy of the application can be provided upon request), which includes the following documentation:

1. A completed Property Owner Certification Form.
2. The NJDEP Public Notice Form and the following:
 - a. Verification that legal notification has been sent to the Borough of Mendham Planning Board, Environmental Commission and Construction Official, the Morris County Planning Board, Morris County Soil Conservation District, and a certified list of property owners within 200 feet of the legal boundary line.
3. A signed and sealed copy of the NJDEP Permitting Plans (Sheets 1 to 6).
4. Annotated color photographs showing the portion of the site that will be disturbed by the proposed activities.
5. Photo Location Map that shows the locations and directions of the photographs.
6. A copy of the Freshwater Wetlands Environmental Report with Site Location Maps, which includes the following:
 - a. A Statement of compliance describing the project and proposed activities as well as a list and description of compliance of all limits and requirements at N.J.A.C. 7:7A-5.7, 7:7A-7.11, 8.1, and 8.3.
 - b. A copy of the current municipal tax map, appropriate portion of the USGS Mendham, New Jersey quadrangle, local street map, and historic resources figure with the site clearly indicated.
7. A copy of the Flood Hazard Area Environmental Report, which includes the following:
 - a. A Statement of compliance describing the project and proposed activities as well as a list and description of compliance of all limits and requirements at N.J.A.C. 7:13-11.1, 11.2, 11.5, and 11.6.
 - b. A copy of the current municipal tax map, appropriate portion of the USGS Mendham, New Jersey quadrangle, local street map, Landscape Project (Version 3.3) habitat mapping, and FEMA mapping with the site clearly indicated.
8. A copy of the Letter of Interpretation-Line Verification (LOI).

Ms. Robin R. Kline, Clerk

January 17, 2023

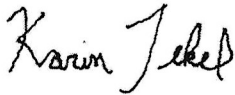
Page 3

9. A signed and sealed copy of the Flood Hazard Area Engineering Compliance Report prepared by Princeton Hydro, LLC.
10. A signed and sealed copy of the NJDEP Flood Hazard Area Control Act Permitting Report prepared by Stonefield Engineering & Design LLC.
11. A signed and sealed copy of the Stormwater Management Report prepared by Stonefield Engineering & Design LLC.
12. A signed and sealed complete set of site plans as prepared by Stonefield Engineering & Design LLC.
13. A copy of the response from the Natural Heritage Program regarding threatened and endangered species.

If you have any questions regarding this notice, please feel free to contact me.

Very truly yours,

EcolSciences, Inc.



Karin Tekel
Assistant Vice President

KT/bms
enclosures

cc: NJDEP Application Support Section
Borough of Mendham Environmental Commission Chairperson w/ Sheets 2 & 5 of NJDEP Permitting Plans
Borough of Mendham Planning Board Chairperson w/ Sheets 2 & 5 of NJDEP Permitting Plans
Borough of Mendham Construction Official w/ Sheets 2 & 5 of NJDEP Permitting Plans
Morris County Planning Board Chairperson w/ Sheets 2 & 5 of NJDEP Permitting Plans
Morris County Soil Conservation District w/ Sheets 2 & 5 of NJDEP Permitting Plans
Mr. Thomas Maoli
Mr. Michael Kovacs