

COLBEA ENTERPRISES, LLC SITE PLAN

SP# 09-23

STAFF REPORT

May 28, 2025

SITE: 91, 95, 97 Lowell Rd, 7 Atwood Ave, 14 Brenton Ave, Map 198 / Lots 11, 12, 14, 15, 16

ZONING: Business (B)

PURPOSE OF PLAN: To depict the construction of a proposed gas station/convenience store with drive-thru window consisting of 6 dispenser islands for a total of 12 fueling stations, along with a proposed car wash. Associated improvements include but are not limited to: access, grading, storm water management, utilities, lighting, and landscaping.

PLAN UNDER REVIEW:

Gas Station/Convenience Store/Car Wash, Non-Residential Site Plan SP# 09-23, Map 198 / Lots 11, 12, 14, 15, 16, 14 Brenton Ave, 7 Atwood Ave, 91, 95 & 97 Lowell Road, Hudson, NH; prepared by: TF Moran, 170 Commerce Way, Suite 102, Portsmouth, NH 03801; prepared for: Colbea Enterprises, LLC. 695 George Washington Highway, Lincoln, RI 02865; consisting of 34 sheets and general notes 1-19 on Sheet C-01; dated December 13, 2023; last revised December 17, 2024.

ATTACHMENTS:

1. NHDES Alteration of Terrain Permit, dated April 25, 2025 – Attachment “A”.
2. Peer Review Letter 4, prepared by Fuss & O’Neill, dated February 5, 2025 – Attachment “B”.
3. Sound Study Review, prepared by HMMH, dated February 5, 2025 – Attachment “C”
4. Safety Study Review, prepared by Fuss & O’Neill, dated February 7, 2025 – Attachment “D”.
5. Traffic Study Review, prepared by Fuss & O’Neill, dated February 7, 2025 – Attachment “E”.
6. Email Correspondence from F&O – Attachment “F”.

APPLICATION TRACKING:

- December 13, 2023 – Site Plan application received.
- May 24, 2024 – Response letter and revised Site Plan received.
- June 27, 2024 – Variances granted by Zoning Board of Adjustment.
- July 18, 2024 – 2nd Response letter and revised Site Plan received.
- September 6, 2024 – 3rd Response letter and revised Site Plan received.
- September 11, 2024 – Public hearing held & Plan accepted, continued to October 23, 2024.
- October 12, 2024 – Site Walk.
- October 14, 2024 – Planning Board response letter and revised Site Plan received.

- October 23, 2024 – Public hearing held, continued to January 8, 2025.
- January 8, 2025 – Public hearing continued to February 12, 2025.
- February 12, 2025 – Public hearing continued to March 26, 2025.
- March 26, 2025 – Public hearing continued to May 28, 2025.
- May 28, 2025 – Public hearing scheduled.

COMMENTS & RECOMMENDATIONS:

WAIVERS REQUESTED

The applicant has three outstanding waiver requests:

- 1) **275-9.A.(1) – Stormwater runoff rates** – the applicant states that the stormwater management features have been designed to help relieve flooding concerns in the area, and these have been designed in conjunction with Hudson DPW.
- 2) **276-11.1.B. (12). (c) – Residential use buffer** – The applicant states that despite being within the business district, the site is abutted by residential homes on three sides. Due to this, enforcement of the 100' buffer would generate significant hardship in any sort of site development for business uses.
- 3) **276-11.1.B.(25) – Parking or travel in side and rear setbacks** – the applicant states that travel within the side setback is required in order for the site to be laid out in the safest way possible, and that the incursion is minimal being only 5'.

Alteration Of Terrain Permit

NHDES has issued an Alteration of Terrain (AoT) permit for the project, AoT-2824, with a list of 5 project specific conditions. The full permit may be found as Attachment “A.”

Staff Comments

The last hearing of substance on this application was on October 23, 2024. At that meeting, various issues were discussed by the Board including site access, traffic, safety, noise, and internal circulation; comments were received from the public, and it was noted that several peer review comments remained outstanding. Consideration of the Safety Study was deferred to the next meeting since it was not received in time for consideration by the Board. At October 23 meeting, the Board also voted to deny the waiver request to construct a second driveway onto Atwood Avenue, though it was noted that the denial did not preclude a future proposal for a second driveway on another road. **Since the application now proposes two driveways on Lowell Road and still shows one driveway on Atwood, a waiver request for these driveways should be requested, through no such waiver request has been received.**

At the site walk on December 14, 2024, a monitoring well was found on the site, though none are shown on the existing conditions plan. It was suggested that there may be more monitoring wells on the site. The history of the site and the potential for contamination was discussed. **In**

response, the applicants stated that they had an environmental consultant and that a report would be provided to the Board. No such report has been received.

With regard to the site plan itself, staff does not understand how the former garage building on Atwood would be used to provide storage for the proposed market or how that building functions with the rest of the site since no internal connections are proposed. Staff continue to be concerned about the proximity of the proposed carwash exit to the existing childcare facility at the corner of Lowell Road and Atwood.

Fuss & O'Neill completed reviews of the following materials on February 7, 2025. Since that time, no response or revised materials have been received from the applicants and none of the comments have been addressed:

1. Plan revisions/comments per F&O review dated February 5, 2025 (Attachment “B”)
2. Sound Study (Attachment “C”)
3. Safety Analysis (Attachment “D”)
4. Traffic Study (Attachment “E”)

With regard to Sound Study, it needs to be completely revised. Note the Fuss & O'Neill comment that “*The author misunderstood the purpose of such a sound study.*” F&O has also noted the need to reassess the scope of the study area for the traffic study and safety analysis.

Due to the number of outstanding issues and the lack of responsiveness from the applicants in addressing peer review comments coupled with the length of the review process, staff recommend that the Planning Board deny the application without prejudice so that the applicant may reapply when they have sufficiently addressed Planning Board, staff, and peer review comments.

Should the Board wish to continue the application, Staff note that the applicant will need to wave the statutory plan review time period. Further, if the plan is to be continued, it should not be continued to a time certain. Rather, it should be scheduled at such a time as the outstanding issues have been addressed and required responses and materials received.

MOTION TO DENY WITHOUT PREJUDICE:

I move to deny without prejudice the site plan application for Colbea Enterprises, LLC Site Plan - Gas Station/Convenience Store w/Drive-Thru/Car Wash, Non-Residential Site Plan SP# 09-23, Map 198 / Lots 11, 12, 14, 15, 16, 14 Brenton Ave, 7 Atwood Ave, & 91, 95 & 97 Lowell Road, Hudson, New Hampshire, for the reasons set forth in the Staff Report prepared for the May 28, 2025 Public Hearing.

Motion by: _____ Second: _____ Carried/Failed: _____

MOTIONS TO GRANT WAIVERS:

Should the Board elect to continue the application and wishes to consider grating one or more waiver requests, the following draft motions are provided.

I move to grant a waiver from **§275-9.A.(1)**, Final Application Acceptance, to allow for excess drainage beyond prior existing rates, where normally no increase in rates is allowed, based on the Board's discussion, the testimony of the Applicant's representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

I move to grant a waiver from **§276-11.1.B.(12).(c)**, General Plan Requirements, to allow improvements within 100' of a residential property, where normally no improvements would be allowed, based on the Board's discussion, the testimony of the Applicant's representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

I move to grant a waiver from **§276-11.1.B. (25)**, General Plan Requirements, to allow for parking and travel in the side and rear setbacks, where normally no parking or travel would be allowed, based on the Board's discussion, the testimony of the Applicant's representative, and in accordance with the language included in the submitted Waiver Request Form for said waiver.

Motion by: _____ Second: _____ Carried/Failed: _____

MOTION TO CONTINUE:

I move to continue the site plan application for Colbea Enterprises, LLC Site Plan - Gas Station/Convenience Store w/Drive-Thru/Car Wash, Non-Residential Site Plan SP# 09-23, Map 198 / Lots 11, 12, 14, 15, 16, 14 Brenton Ave, 7 Atwood Ave, & 91, 95 & 97 Lowell Road, Hudson, New Hampshire, to date to be determined.

Motion by: _____ Second: _____ Carried/Failed: _____



The State of New Hampshire
Department of Environmental Services

Robert R. Scott, Commissioner



April 25, 2025

Michael Gazdacko
 Colbea Enterprises, LLC
 695 Georg Washington Highway
 Lincoln, RI 02865
 (sent via email to: mgazdacko@seasonscornermarket.com)

Re: Proposed Gas Station, Convenience Store & Car Wash
 91-97 Lowell Road – Hudson
 Tax Map 198, Lots 11, 12, 14, 15 & 16

Permit: AoT-2824

Dear Mr. Gazdacko:

Based upon the plans and application, approved on April 25, 2025, we are hereby issuing RSA 485-A:17 Alteration of Terrain Permit AoT-2824 pursuant to application 240819-151.

The permit is subject to the following conditions:

PROJECT SPECIFIC CONDITIONS:

1. The plans titled *Proposed Gas Station, Convenience Store & Car Wash*, by TFMoran, Inc., dated December 13, 2023, last revision date March 25, 2025, and supporting documentation in the permit file are a part of this approval. The project must be constructed as shown on the approved plans.
2. **This permit expires on April 25, 2030.** No earth moving activities shall occur on the project after this expiration date unless the permit has been extended by the Department. If requesting an extension, the request must be received by the department before the permit expires. The Amendment Request form is available at: <https://www.des.nh.gov/land/land-development>.
3. Pursuant to Env-Wq 1504.17, the Permittee shall comply with wildlife protection notes related to NHB23-3206 that are incorporated into the project plans.
4. Any future phases of development on any of the lots, within 10 years after the terrain alteration activity for this proposed project ends, will require a new Alteration of Terrain permit even if the disturbance is less than 100,000 square feet.
5. This project includes three (3) underground detention systems. **A letter signed by a qualified engineer must be provided to DES** stating that the individual observed any underground detention, infiltration, or filtering systems prior to backfilling, and whether, in his or her professional opinion, the system(s) conform to the approved plans and specifications. Representative photographs of the system prior to being backfilled must be submitted with the letter. Reports should be submitted to Kevin.D.Thatcher@des.nh.gov.

GENERAL CONDITIONS:

1. Activities shall not cause or contribute to any violations of the surface water quality standards established in Administrative Rule Env-Wq 1700.

Alteration of Terrain Permit AoT-2824
Proposed Gas Station, Convenience Store & Car Wash
Tax Map 198, Lots 11, 12, 14, 15 & 16 – Hudson
Page 2 of 2

2. You must submit revised plans for permit amendment prior to any changes in construction details or sequences. You must notify the Department in writing within ten days of a change in ownership.
3. You must notify the Department in writing prior to the start of construction and upon completion of construction. Forms can be submitted electronically at: <https://www.des.nh.gov/land/land-development>. Paper forms are available at that same web page.
4. All stormwater practices shall be inspected and maintained in accordance with Env-Wq 1507.07 and the project Inspection and Maintenance (I&M) Manual. All record keeping required by the I&M Manual shall be maintained by the identified responsible party and be made available to the department upon request. Photographs of the site and BMPs must accompany the I&M submittals.
5. This permit does not relieve the applicant from the obligation to obtain other local, state or federal permits that may be required (e.g., from US EPA, US Army Corps of Engineers, etc.). Projects disturbing over 1 acre may require a federal stormwater permit from EPA. Information regarding this permitting process can be found at: <https://www.epa.gov/npdes/2022-construction-general-permit-cgp>.
6. Upon completion of construction, a written notice signed by the permit holder and a qualified engineer shall be submitted to the Department, in accordance with Env-Wq 1503.21(c)(1), stating that the project was completed in accordance with the approved plans and specifications. If deviations were made, the permit holder shall review the requirements in Env-Wq 1503.21(c)(2).
7. No activity shall occur in wetland areas until a Wetlands Permit is obtained from the Department. Issuance of this permit does not obligate the Department to approve a Wetlands Permit for this project.
8. This project has been screened for potential impact to known occurrences of protected species and exemplary natural communities in the immediate area. Since many areas have never been surveyed, or have not been surveyed in detail, unidentified sensitive species or communities may be present. This permit does not absolve the permittee from due diligence in regard to state, local or federal laws regarding such communities or species. This permit does not authorize in any way the take of threatened or endangered species, as defined by RSA 212-A:2, or of any protected species or exemplary natural communities, as defined in RSA 217-A:3.

Sincerely,



Kevin D. Thatcher, PE, CPESC
Alteration of Terrain Bureau

cc: Hudson Planning Board (bdubowik@hudsonnh.gov)
Christopher Rice, TFMoran, Inc. (crice@tfmoran.com)

February 5, 2025



50 Commercial Street, Suite 2S
Manchester, NH 03101
603.668.8223
www.fando.com

Mr. Jay Minkarah
Acting Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
91-97 Lowell Road Gas Site Plan, Lowell Road
Tax Map 198 Lot 11, 12, 14, 15 & 16; Acct. #1350-061
Reference No. 20030249.234

Dear Mr. Minkarah:

Fuss & O'Neill (F&O) has reviewed the fourth submission of the materials received on December 30, 2024, related to the above-referenced project. Authorization to proceed was received on January 23, 2025. A list of items reviewed is enclosed. The scope of our review is based on the Site Plan Review Codes, Stormwater Codes, Driveway Review Codes, Sewer Use Ordinance 77, Zoning Regulations, and criteria outlined in the CLD Consulting Engineers Proposal approved September 16, 2003, revised September 20, 2004, June 4, 2007, September 3, 2008, and October 2015.

The project consists of consolidating five lots, demolishing most of the existing buildings on those lots, and constructing a gas station with convenience store, drive-thru and car wash. Proposed improvements to the site also include the construction of parking areas, landscaping, drainage, utilities, and other associated site improvements. The site is to be serviced by public water and sewer systems.

Note that review comments that had previously been addressed by the applicant have been removed for brevity/clarity.

The following items have outstanding issues:

1. Site Plan Review Codes (HR 275)

- h. **New Fuss & O'Neill Comment: HR 275-8.C.** The applicant should update the notes on sheet C-03 that still show 54 total parking spaces. With the revisions to the site layout that total is now 49.

2. Administrative Review Codes (HR 276)

- a. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(6). The applicant should add the owner's signature to the plan set for the final approval copy.*

Former/Current Fuss & O'Neill Comment: The applicant has noted that the signature will be added to the final plan.

5. Utility Design/Conflicts

- n. **New Fuss & O'Neill Comment:** The applicant should label all structures on profile PSW02 on sheet C-10B. PSMH-03 in the sewer structure table to the right of the page also appears to be missing.

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- a. *Former Fuss & O'Neill Comment: HR 275-9.A.(5). The plans and drainage report should be stamped by a licensed professional engineer.*

Former/Current Fuss & O'Neill Comment: The applicant has stated that the plans and report will be stamped prior to final submission.

- y. **New Fuss & O'Neill Comment:** HR 290-5.A.11. The applicant should provide information on the intended NHDES approved pre-treatment for Infiltration System 01.

- z. **New Fuss & O'Neill Comment:** HR 290-5.A.11. The applicant should label the JellyFish System Details upon Sheet C-26 to reference the intended installation location JF-34 and JF-54.
- aa. **New Fuss & O'Neill Comment:** HR 290-5.A.12. The applicant should update the I&M manual to remove reference of the Town of Exeter and note Town of Hudson.
- ab. **New Fuss & O'Neill Comment:** HR 290-5.A.12. The applicant should include required maintenance for the StormCeptor Unit (SC-47) in the I&M manual.

9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))

- c. *Former Fuss & O'Neill Comments: HR 276-11.1.B.(14). The applicant has provided a lighting plan. We note that at the north and west sides of the site, the plan shows greater than 0.2 and up to 0.7 footcandles at the lot property lines. Due to the residential uses of these sites, the applicant should review the design to reduce these amounts wherever practical. / The applicant has stated that the plans have been revised to reduce the lighting at the property line. We note that a revised lighting plan was not provided for review therefore the reduction could not be confirmed. / The applicant has revised the lighting to reduce the light levels along the above-mentioned property lines. We note that the only areas where lighting exceeds recommend levels over the property line is the school lot at the corner of Atwood and Lowell Roads and driveway locations.*
Current Fuss & O'Neill Comment: The applicant has continued to revise the plan and reduce light levels along abutting properties. We note that the only light trespass proposed currently is the southwest corner of Lot 13. The maximum light level at the property line is approximately 1 footcandle.
- f. **New Fuss & O'Neill Comment:** Detail sheet C-19 illustrates a "Sidewalk Lighted Bollard Detail" and Sheet C-20 illustrates a "Bollard Light". The applicant should clarify which detail is correct. Neither of these are illustrated upon the Lighting Plan LS-1. The applicant should include all known lighting fixtures upon the lighting plan.

11. Other

- e. **New Fuss & O'Neill Comment:** The applicant should fix the ADA Sign Detail on Sheet C-18 as part of the graphic disappeared.
- f. **New Fuss & O'Neill Comment:** The applicant should review the match lines between sheets C-04 through C-09. They do not appear to match.
- g. **New Fuss & O'Neill Comment:** The applicant should review the leader note for "Electric vehicle charging stalls" on C-04 as it does not point to the stalls.
- h. **New Fuss & O'Neill Comment:** The applicant should coordinate the crosswalk detail on C-18 as does not match the site plan cross walk at driveways.

The following items require Town evaluation or input:

1. Site Plan Review Codes (HR 275)

- c. *Former Fuss & O'Neill Comments: HR 275-6.T. The applicant is proposing off-site improvements that include drainage along Lowell Road to the north of the site and continuing down Birch Street. We recommend that the applicant add notes to the Off-Site Drainage Plan regarding restoration of the areas after installation and provide details such as a trench patch detail. Also the plans are not detailed enough to show the Town's Right-of-Way line. The applicant should confirm and show that all work to be performed is within the Town Right-of-Way. / The applicant has added a note to the plan stating that all work to be performed is within the Town Right-of-Way and added a trench patch detail to the plan set. We note that the Town is currently soliciting consultants for redesigning the intersection of Birch Street and Lowell Road, and that design may impact the proposed off-site improvements shown. The applicant should coordinate with the Town Engineer regarding proposed improvements, or confirm that this coordination has already taken place.*

Current Fuss & O'Neill Comment: The applicant has stated that they are coordinating with the Town Engineer about the off-site improvements and that they will revise the design as necessary based on the improvements to Birch and Lowell Road.

2. Administrative Review Codes (HR 276)

- b. **Former/Current Fuss & O'Neill Comment:** HR 276-11.1.B.(12)(c). The applicant has requested a waiver for the 100-foot setback from a residential use or residential zoning. The applicant has noted that even though the site is zoned business, the property is abutted on three sides by residential uses.

3. Driveway Review Codes (HR 275-6.B/Chapter 193)

- a. *Former Fuss & O'Neill Comments: HR 193.10.E. The applicant has provided a statement in the Traffic Study stating that adequate sight distance is provided for the proposed driveways. The applicant should review the sight distance looking north on Lowell Road from the site driveway as there appears to be some shrubs at the abutting lot that could impact sight distance. / The applicant has confirmed that the shrub is impeding the sight distance as stated. The applicant should work with the Town/abutter to resolve this issue before the site is complete. We note that the Town may want to add this item to the Conditions of Approval or make it a condition of the Certificate of Occupancy.*

Current Fuss & O'Neill Comment: The applicant has stated that they have agreed to work with the Town to ensure the removal of the shrub.

- b. *Former Fuss & O'Neill Comments: HR 193.10.F. We note that the applicant has proposed keeping the existing driveway that accompanies the existing building along Atwood Avenue. We note that this driveway width exceeds the 50 feet allowed by the Regulation and is approximately 100 feet wide. / The applicant has proposed removing pavement to reduce the driveway width to 62 feet which still exceeds maximum width allowed by the Regulation. The applicant should review the need for a waiver for this requirement.*

Current Fuss & O'Neill Comment: The applicant has added the waiver request to the plan.

- c. *Former Fuss & O'Neill Comment: HR 193.10.G. The applicant has proposed two new site driveways and one existing driveway for the site. The applicant has requested a waiver for the additional driveway locations. / The applicant has listed this waiver request on the plan set.*

Current Fuss & O'Neill Comment: This waiver has been removed from the plan. The applicant has proposed two driveways on Lowell Road so a waiver would still be necessary.

6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- d. *Former Fuss & O'Neill Comments: HR 275-9.A.1. The applicant should review with the Town if a waiver is required for the increase in peak runoff and volume at POI-05. / The applicant has stated that they will request a wavier for the increase. We note that the applicant has not noted the waiver request on the plan with the other waivers.*

Current Fuss & O'Neill Comment: The applicant has added the waiver request to the plan set.

The following items are resolved or have no further Fuss & O'Neill input:

2. Administrative Review Codes (HR 276)

- d. *Former Fuss & O'Neill Comments: HR 276-11.1.B.(22). The applicant has kept an existing building that is within the setback and green space along Atwood Avenue. The intent/use for this building is not noted on the plan set. / The applicant has stated that the building will be used as storage, but we were unable to find this note on the plan.*

Current Fuss & O'Neill Comment: The applicant has added a note to the plan stating that the building will be used as storage. No further Fuss & O'Neill comment.

- e. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(25). The applicant has requested a waiver for the travel way five feet within the side setback in front of the car wash building.*

Current Fuss & O'Neill Comment: This waiver is no longer being requested. No further Fuss & Oneill comment.

Mr. Jay Minkarah
February 5, 2025
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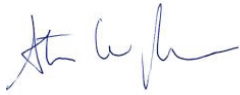
6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- b. *Former Fuss & O'Neill Comments: HR 275. The applicant should have the plans stamped by a wetlands scientist. / The applicant has noted that the plans will be stamped prior to final submission.*

Current Fuss & O'Neill Comment: The applicant has provided plans stamped by a wetlands scientist. No further Fuss & O'Neill comment.

Please feel free to call if you have any questions.

Very truly yours,



Steven W. Reichert, P.E.

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File
TF Moran, Inc. – crice@tfmoran.com

MEMORANDUM

To: Steve Reichert
Fuss & O'Neill

From: Christopher Menge, INCE

Date: February 5, 2025

Subject: Sound Study Reports for Proposed Seasons Corner Market at
91-97 Lowell Road, Hudson, NH

Reference: HMMH Project No. 23-0137A.002

This memorandum provides comments on and requests for additional analysis related to Tg2 Solutions' sound study reports on the subject project dated 26 December 2024 and 21 October 2024.



The author misunderstood the purpose of such a sound study. A primary purpose is to determine if the proposed project will cause violations of the Hudson noise limits at the surrounding noise-sensitive residential properties. At these property lines, Noise Limits 2, 3, 4 and 5 are those most likely to be applicable.

PDF page 10 "Regulatory Setting." The author is incorrect about Noise Limit 2, which does apply to residential properties, at levels of 55 dBA day, 50 night. Further, the author characterizes the limit as ambient background limits, when the ordinance states that they are "continuous sound level limits," based on Leq (1 hr).

The consultant must compute sound levels from vehicular traffic, convenience store HVAC operation, and all sound-generating machinery at the filling station, convenience store, and car wash. The noise emissions from that equipment and those operations must be projected to all nearby residential property lines. At a minimum, these include:

1. 15 Temple St / Brenton Ave
2. 11 Atwood Ave
3. 8, 12, 14 Atwood Ave
4. 9, 10, 11, 12, 13, & 14 Linden St
5. 88 Lowell Rd
6. 89 Lowell Rd

To compute sound levels at the surrounding properties, the consultant must use one of two sound propagation methods. One is simple hemispherical spreading, which produces worst-case sound levels, but any shielding by fencing or buildings would have to be modeled separately. More appropriate is the sound propagation standard ISO 9613-2 (R2024) "Acoustics - Attenuation of sound during propagation outdoors - Part 2: General method of calculation." This standard incorporates octave band analysis and shielding by barriers. It is most conveniently implemented in the Cadna/A or SoundPLAN software, which is normally used by acoustical consultants for projects like this.

The revised noise report should be one complete report with appendices.

The sound level measurements reported along Atwood Avenue are unusually high for such a community. It is not expected that the existing levels at these homes already exceed the Hudson daytime and nighttime sound level limits of 55 and 50 dBA Leq, respectively, for residential areas. It is expected that the residential addresses listed above would experience ambient sound levels in the 40s or low 50s dBA during the mid-day (not near rush hours) and evening, when the proposed car wash could be operating. We would like to have additional existing background measurements conducted in the residential areas along Atwood Avenue, with the microphone set back away from the street at distances similar to those of the homes. One such location could be along Temple St/Brenton Ave, near the 11 Atwood Ave home. Another appropriate location for background sound levels in the nearby community would be in the Linden St cul-de-sac. Measurements should be conducted during quieter times of day and evening that the car wash could be operating.



The revised noise report must include the following:

1. A study area plan view map with current aerial photography as a base showing all the surrounding residential properties, the property line receptor locations where noise predictions were made, and the plan layout of the proposed project overlaid on the aerial photograph base map showing all noise sources that were modeled. All receptor locations will be labeled with identification numbers tied to tables of results.
2. A table showing the predicted A-level and octave band sound levels at each receptor with all equipment operating, including the car wash blowers. This table must show that the sound levels do not represent a pure tone condition at any residential receptors as described in Noise Limit 5 and in the definitions.
3. The study area map must also show the noise measurement locations, with ID numbers tied to the tables.
4. Tables showing the reference noise emission levels in sound power level or sound pressure level at a reference distance for all noise-generating equipment on site that are included in the modeling.
5. A clear description of how the RI car wash sound levels were measured and then used as reference sound levels for the proposed Hudson, NH car wash facility.
6. Tables showing the octave band sound power spectra or sound pressure levels at a reference distance of the car wash equipment.
7. An appendix with the certificates of calibration for the noise meters, microphones, and field calibrators.
8. Finally, while not required, noise consultants will also often include a color noise contour map of the facility's noise emissions. Such maps are readily produced by the software and are useful for communicating facility noise generation to planning departments and interested stakeholders

February 7, 2025



50 Commercial Street, Suite 2S
Manchester, NH 03101
603.668.8223
www.fando.com

Mr. Jay Minkarah
Acting Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
91-97 Lowell Road Gas Site Plan, Lowell Road
Tax Map 198 Lot 11, 12, 14, 15 & 16; Acct. #1350-061
Reference No. 20030249.234

Dear Mr. Minkarah:

Fuss & O'Neill Inc. (F&O) has reviewed the *Safety Analysis* prepared by TFMoran, Inc. (TFM) in a report dated 23 October 2024. The Analysis evaluated the existing crash rates for the intersection of Lowell Road (Route 3A) and Atwood Avenue and the effect of the proposed multi-use development. The analysis expanded on pedestrian and transit accommodations and safety.

Basis of Review

Fuss & O'Neill reviewed the following documents:

- *Safety Analysis*, prepared by TFMoran, Inc. (TFM) and dated 23 October 2024.
- Plans (35 Sheets), titled *Site Development Plans*, prepared by TFM and dated December 13, 2023, with revisions dated December 17, 2024
- *Traffic Impact and Access Study (TIAS)*, prepared by TFM and dated December 12, 2024, with revisions dated December 17, 2024

Proposed Site

The project intends to consolidate five lots along the western side of Lowell Road (Route 3A), the northern side of Atwood Avenue, and southern side of Temple Street. The majority of the existing site is vacant but accommodates one garage and one single family home with access via Atwood Avenue and one garage with access via Temple Street. The consolidated lots would surround an existing multi-use commercial building containing a Day Care Center, located on the northwestern corner of Lowell Road's intersection with Atwood Avenue.

The project would include redevelopment of the site to provide a 5,400 square foot convenience market with drive-thru window (internal coffee shop), 12 fueling stations, and an automatic car wash. An existing garage along Atwood Avenue is intended to be renovated to accommodate storage for the gas station. The single-family home and garage off Temple Street will both be razed.

1. Site Plans revised on December 17, 2024, show the Site is accommodated by two full access driveways on Lowell Road (Route 3A). This is consistent with discussion in the revised Traffic Impact and Access Study. The Safety Analysis discusses one full access driveway on Lowell Road (Route 3A) and one full access driveway on Atwood Avenue. A Site Sketch appended to the Safety Analysis shows the Atwood Avenue driveway as one-way exiting the site, requiring left turns toward Lowell Road (Route 3A). Much of the Safety Assessment discusses impacts to the Atwood Avenue intersection based on traffic from the since removed site driveway onto Atwood Avenue, but other conclusions and recommendations are independent of this previous layout.

Mr. Jay Minkarah
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Safety Review

The Safety Analysis discussed crash history obtained from the Hudson Police Department for crashes occurring between January 1, 2020, and July 25, 2023, for Lowell Road (Route 3A) at Atwood Avenue.

2. While this data was consistent with that presented in the TIAS, it is not clear why the remainder of the study area was omitted as part of the Safety Analysis.
3. If the proposed site is removing the driveway to Atwood Avenue and placing 2 driveway access points to Lowell Road, the Safety Analysis needs to address change of crashes based on these access points and not analyzing Atwood Avenue intersection. Suggest looking into Federal Highway Administration Highway Safety Manual, Crash Modification Factors.

Crash history analysis found four crashes over the 3.5-year period, or about 1.2 crashes per year.

Crash Rates

Crash rates were calculated per Million Entering Vehicles (MEV) and per Million Miles Traveled (MMT) based on Average Annual Daily Traffic (AADT) volumes obtained via Count Station 82229067 on Lowell Road south of Central Road. The Analysis multiplied the AADT by 365 to reflect Average Annual Traffic volumes. Average daily volume for Atwood Avenue was approximated based on peak hour counts from the TIAS.

Based on this exercise, TFM found the following:

<u>Roadway</u>	<u>Average Daily Volume</u>	<u>Average Yearly Volume</u>
Lowell Road	18,815	6,867,475
<u>Atwood Avenue</u>	<u>1,000</u>	<u>365,000</u>
Combined	19,815	7,232,475

The Safety Analysis presents the average crash rate for unsignalized intersections in Massachusetts is 0.57 crashes per Million Entering Vehicles (MEV) and the New Hampshire average crash rate is 3.5 crashes per Million Miles Traveled (MMT). It was noted that a typical intersection is assumed to be about 500 feet in length.

4. TFM should clarify where the 3.5 crashes per MMT average for New Hampshire is documented. A specific source could not be found/verified.

The Safety analysis used these average crash rates to approximate the projected number of crashes based on the projected yearly traffic volumes presented above. This resulted in about 4.1 expected crashes per year assuming the Massachusetts Crash Rate, and about 2.5 expected crashes per year using the New Hampshire crash rate. TFM concluded that the observed 1.2 crashes per year is lower than the two state averages.

5. Fuss & O'Neill found another count station 82229073 located south of Pelham Road which defined a 2023 AADT of about 22,351 vehicles per day. While this location may be more relevant to Atwood Avenue, the lower volume count station evaluated by TFM provides a more conservative analysis.
6. Massachusetts methodologies approximate daily traffic volume by dividing intersection turning movement volumes by a primary roadway's "K-Factor." The K-Factor represents the percentage of daily traffic occurring during the peak hour. Review of the appended turn counts found Atwood Avenue traffic is larger in the AM Peak Hour, but total intersection volume is highest during the PM Peak Hour due to increases in

Lowell Road traffic. Review of the two count stations on Lowell Road suggests the PM Peak Hour's "K-Factor" is about 7.5 - 7.8%. Applying the K-Factor to the peak hour intersection volume projects a daily intersection volume of about 25,333 vehicles per day. Based on the four crashes in 3.5 years, the above exercise results in a calculated intersection crash rate of about 0.12 crashes per MEV for the unadjusted May 2023 traffic conditions, which is lower than the statewide (Massachusetts) average of 0.57 crashes per MEV.

7. The stated methodology for New Hampshire more closely aligns with Massachusetts' methodology for roadway segments. In this case, average daily roadway volume is applied across a given length of roadway and compares that to the number of observed crashes per year. Assuming a length of 0.1 miles and a daily traffic volume of 18,815 vehicles per day (from the count station), the crash rate calculates to about 1.66 crashes per MMT. This is lower than the stated New Hampshire average of 3.5 crashes per MMT. Review of the NHDOT Roads Map suggests Lowell Road (Route 3A) is a Tier 5 Local Road with a functional class of Principal Arterial. Massachusetts' average crash rate for Urban Principal Arterials is 3.05 crashes per MMT which is higher than the calculated 1.66 crashes per MMT.

Proposed Development Trips

The Safety Analysis explored the effect of the proposed redevelopment project on the roadway network by exploring the change in calculated crash rate based on the increase in traffic volume associated with the project. The proposed project was approximated to generate about 3,784 trips per day, which was reduced by 75% to account for Pass-By Trips (trips otherwise traveling along the roadway). This resulted in about 946 new daily trips generated along the roadway. TFM converted the 946 daily trips to annual trips and multiplied the resultant by the respective average crash rates for Massachusetts and New Hampshire. This exercise estimated the proposed trip generation could represent an increase of 0.12 to 0.20 crashes per year at the intersection of Lowell Road and Atwood Avenue.

8. The daily trip generation reported in the Safety Analysis varies slightly from that presented in the Traffic Impact and Access Study.
9. Assuming the existing crash rates calculated in Comments 5 and 6 remain constant, the increase in traffic volume applied at the same rates would result in an increase of about 0.04 to 0.06 crashes per year at the intersection.
10. Site Plans revised December 17, 2024, propose a southern full access driveway approximately opposite County Road. The northern driveway is approximately 60 feet south of a driveway on the opposite side of Lowell Road, currently serving a pizza shop, and about 300 feet south of a signalized intersection at Birch Street. While Lowell Road provides a continuous two-way-left-turn-lane throughout the length of the project's frontage, the proposed driveways would create a condition where motorists must navigate intersections with Atwood Avenue, County Road, and three commercial Driveways in a span of about 400 feet. A more thorough assessment would consider crashes over the course of the roadway segment including all of these closely spaced intersections/driveways. Unfortunately, crash data obtained from Hudson Police (and presented in the TIAS) does not distinguish whether crashes occurred at the southern end of County Road or the northern end of County Road.

The Safety Analysis states that the majority of traffic will utilize the Lowell Road driveway, and traffic associated with Atwood Avenue will be minimal. A discussion was provided regarding signalization and crosswalks at the intersection, both of which were deemed not appropriate. With the revised driveway layout all traffic will use Lowell Road for access and egress, and Atwood Avenue traffic volumes will not increase due to the project. Fuss & O'Neill concurs that Atwood Avenue traffic volumes are unlikely to meet traffic signal warrants.

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11. While it is understood that pedestrian infrastructure is not provided along on either side of Lowell Road within the vicinity of the Site, some crossing demand may be present given the adjacent restaurant land use and nearby softball/baseball fields.

Pedestrian Safety

TFM proposed several improvements to Atwood Avenue to address pedestrian safety including installations of a stop line and stop sign for Atwood Avenue, No Parking signs for Atwood Avenue, a paved shoulder on the north side of Atwood Avenue for pedestrian travel, and 25 mile per hour speed limit signs.

12. While line striping would help demarcate where motorists should position themselves, installation of a stop sign requires right-of-way considerations given the abutting automotive land use.
13. All versions of Site Plans propose a sidewalk along the Site frontage of Lowell Road, with crosswalks across respective driveways, which terminate at the property lines. The Town should consider exploring the installation of continued sidewalk wrapping around Atwood Avenue instead of a striped shoulder.

Bus Stop Activity

The Safety Analysis summarized bus activity along Lowell Road, stopping at the intersection of Atwood Avenue. This includes buses associated with the abutting day care center. The analysis recommends consideration of a dedicated space in the Day Care Center parking area as a bus stop waiting area, as well as installing bus stop signage on the corner of the intersection. Bus Stop Ahead signage was also recommended.

14. Fuss & O'Neill agrees with these recommendations if they can be implemented. The applicant would need to coordinate with the abutting property owners to understand whether these recommendations would be desirable/supportive, since these improvements are within the abutting property and would then be that property owner's responsibility to maintain.

Please feel free to call if you have any questions.

Very truly yours,



Steven W. Reichert, P.E.

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File
TF Moran, Inc. – crice@tfmoran.com

February 7, 2025



50 Commercial Street, Suite 2S
Manchester, NH 03101
603.668.8223
www.fando.com

Mr. Jay Minkarah
Acting Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
91-97 Lowell Road Gas Site Plan, Lowell Road
Tax Map 198 Lot 11, 12, 14, 15 & 16; Acct. #1350-061
Reference No. 20030249.234

Dear Mr. Minkarah:

4. Traffic (HR 275-9.B)

Fuss & O'Neill, Inc. has reviewed the Traffic Impact and Access Study (TIAS) prepared by TFMoran, Inc. (TFM) dated December 12, 2023, with a revision date of December 17, 2024 (Rev1), for the proposed gas station/convenience store development at 157 Lowell Road in Hudson, New Hampshire (Tax Map 198 Lots 11, 12, 14, 15 and 16). The project proposes the development of a 5,400 square foot (sf) convenience store with a drive-thru window, 12 vehicle fueling positions (vfp) and an automatic car wash. Note that the cover of the revised study incorrectly notes this version of the TIAS as Rev2.

With this revised study the site plan has changed access and egress to the site. Prior site design access and egress was provided via one proposed driveway on the west side of Lowell Road just north of its intersection with Atwood Avenue and a secondary driveway provided on Atwood Avenue. The new site plan will have two full access driveways off Lowell Road, and no access to Atwood Avenue. The applicant indicated that the revisions to the previous study were requested by the Hudson Planning Board and were italicized in the current study.

The procedures that the TFM report uses are reasonable, with the appropriate seasonal and covid adjustment factors used to determine base conditions, and proper ITE trip generation rates used for the gas station and convenience store uses. The December 12, 2023, report included trips associated with the convenience store and gas station use for the site. The revised report adds trips associated with the car wash and drive through coffee shop. At the November 2024 Planning Board Meeting the Board requested that trip generations be separately calculated for the drive-thru coffee use. The internal capture for the convenient store, gas station and drive-thru used the ITE 11th Edition internal capture table. The car wash was determined based on data from other Colbea wash sites which we believe is a reasonable method for trip generation for this use.

The growth rate applied in the original TIAS used 1%, however the revised TIAS applied growth rates based on the 2022-2023 Townwide Growth Study prepared by the Nashua Regional Planning Commission for the Town of Hudson, which increased the rate to 2.07% for the AM peak and 1.14% for the PM peak north of Atwood Avenue and 1.13% south of Atwood Avenue.

Other new data provided in this report are additional trips for the No-Build volumes for the Friars Drive Warehouse located at 48 Friars Drive. With all of these changes the impacts to volumes and trips are noted below:

- The site has an increase of 36 new trips in the AM peak and 12 new trips in the PM peak based on the car wash and the drive-thru change.
- Removing the driveway access from Atwood Ave removes 2 trips during AM Peak and 3 trips in the PM Peak.
- The change in the traffic volume on Lowell Road in front of the site driveways is only 6 vehicles.

The analysis properly determines new trips versus pass-by trips generated by the site and applies them to the roadway network using a reasonable distribution. The analysis also properly analyzes current and future years for No-Build and Build conditions.

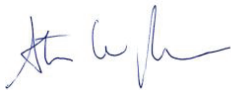
Mr. Jay Minkarah
February 7, 2025
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It is our understanding that the Birch Street intersection was not originally determined to be needed as a part of the study, however the Birch Street intersection is signalized and is within 300 feet of the site driveways. This signalized intersection will provide gaps in the traffic flow along Lowell Road, and without this intersection included in the analysis we cannot be certain queuing of the Lowell Road northbound lane will not be an issue. The volume on Lowell Road for the single northbound lane in the 2034 Build PM peak is 1,186, plus 78 trips out of the two site driveways, which is 1,264 vehicles. This volume is reaching the capacity for a signal lane. It would only take 12 vehicles (300 feet/25 feet for average vehicle) queued up at the Lowell Road/Birch Street northbound stop bar to block trips trying to exit the site driveway northbound onto Lowell Road. The option of leaving the site by way of Atwood Ave to turn left to enter the queue has been removed. Because of this a driver might enter the two-way center turn lane to use it as a stacking opportunity. Further, the Town has started a redesign of the Birch Street intersection with the potential additional connection of Belknap Road from the east into that signalized intersection. Retiming of that signal for the addition of Belknap Road traffic may exacerbate the queuing length along Lowell Road northbound.

We feel that with the removal of Atwood Avenue and potential additional volumes from Belknap Road, it is important to get a fuller picture of the traffic flows and queues on Lowell Road from the signal at Lowell Road and Birch Street. The applicant should discuss this further with the Town Engineer and determine what additional analysis should be provided. At a minimum we recommend providing a connected synchro model from the northern County Road intersection to Pelham Road, and that SimTraffic be used to determine queues, following the NHDOT SimTraffic guidelines.

Please feel free to call if you have any questions.

Very truly yours,



Steven W. Reichert, P.E.

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File
TF Moran, Inc. – crice@tfmoran.com

Dubowik, Brooke

From: Erin Clement <Erin.Clement@fando.com>
Sent: Wednesday, May 21, 2025 11:01 AM
To: Dubowik, Brooke
Cc: Steve Reichert
Subject: RE: Colbea Gas Station - Lowell Road
Attachments: 234 91-97 Lowell Road Gas Station Traffic Review Letter 020725.pdf; 234 91-97 Lowell Road Gas Station Safety Study Review Letter 020725.pdf; 234 91-97 Lowell Road Gas Station Letter4 020525.pdf; 234 91-97 Lowell Road Gas Station Memo4 020525.pdf; HMMH Prelim review 91-97 Lowell Rd Sound Study_2025-02-05.pdf

EXTERNAL: Do not open attachments or click links unless you recognize and trust the sender.

Hi Brooke,

The last items we received were in January and our review letters (attached) was sent out in early February.

Thanks,

Erin Clement
Project Engineer

FUSS & O'NEILL
Solve better. Go further.

(603) 222-3459 | cell: (603) 703-8244
50 Commercial Street Unit 2S | Manchester, NH 03101

CT MA ME NH NY RI VT

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