

FRIARS DRIVE INDUSTRIAL BUILDING

ADDENDUM

SP# 15-22 (AMENDMENT TO SP# 10-21)

STAFF REPORT

January 11, 2023

SITE: 48 Friars Drive; Map 209 Lot 001-000

ZONING: General (G) & Industrial (I): all site work proposed in Industrial Zone.

PURPOSE OF PLAN: Addendum tenant adjustments of previously-approved site plans. Consists of replacing previously-approved truck docks and truck areas with parking and green space and related adjustments, and adding 19,320 SF of office space in a second level fully contained within the previously-approved building envelope. No new pavement is proposed, and no changes are involved outside of the previously-approved paved footprint area.

PLANS UNDER REVIEW:

Site Plan Tenant Addendum, Friars Drive, Parcel 209-001-000 @ Sagamore Industrial Park, Hudson, New Hampshire, 48 Friars Drive, Hudson, NH; prepared by: The Dubay Group, Inc. 136 Harvey Rd. Bldg B101, Londonderry, NH 03053; prepared for: GFI Partners / Lowell Road Property Owner DE, LLC, 133 Pearl Street #300, Boston, MA 02110; consisting of 6 sheets (including proposed building elevations prepared by Eugene T. Sullivan, Inc.), with 1 general note on Sheet 1; dated October 24, 2022; last revised, November 29, 2022.

ATTACHMENTS:

- A. Traffic Analysis Memorandum, prepared by TFM, received November 10, 2022.
- B. Peer Review, prepared by Fuss & O'Neill, received November 15, 2022.
- C. Applicant Response to Town Engineer's Review, prepared by The Dubay Group, received November 16, 2022.
- D. Applicant Response to Peer Review, prepared by The Dubay Group, received November 29, 2022.
- E. Peer Review, prepared by Fuss & O'Neill, received December 21, 2022.
- F. SP# 10-21 Notice of Approval
- G. Department Comments
- H. CAP Fee worksheet

APPLICATION TRACKING:

- December 15, 2021 – Waiver granted from §275-8:C(2) for reduction in parking spaces
- March 23, 2022 – Approval granted for SP# 10-21
- October 28, 2022 – Application received.
- December 14, 2022 – Public hearing deferred.
- January 11, 2023 – Public hearing scheduled.

COMMENTS & RECOMMENDATIONS:

BACKGROUND & OVERVIEW

This application is for minor modifications to the previously approved 504,000 SF warehouse building. A lease with Life is Good, an existing business in Hudson, has been negotiated for 75% of the warehouse building. The company plans to consolidate their four other warehouse locations and their corporate headquarters at this location, including approximately 200 employees. The site plan modifications include removing 38 truck loading docks, adding 70 employee parking spaces, adding 19,320 SF of second story office space within the previously approved building envelope, and adding landscaped areas to the exterior.

While 19,320 SF of mezzanine office space is to be added to the project, the applicant states that only 10-15 “executive” office staff will work specifically in the office space. The rest of the additional office space is designated for uses including a break room, locker rooms, and open office space with work stations for warehouse staff.

The addendum plans are amending existing approved plans. The existing approved plans should be taken into account when determining whether or not plan requirements are complete.

A traffic memorandum has been submitted to address the proposed changes (**Attachment A**). The prior traffic study was based on the ITE Land Use Code 154 for High-Cube Warehouses for both tenants. The updated traffic study shows both: trip generation by ITE Land Use Code 154 and; the actual employee counts and shift schedules of the proposed tenant for 75% of the building, combined with an estimate based on the ITE LUC 154 for the 25% of the building that has not yet been leased. The updated traffic study shows an increase of 2 passenger cars in AM and PM peak and no additional truck trips based on ITE, and a reduction in both cars and trucks during AM and PM peak when using tenant specific data.

PEER REVIEW

The Peer Reviewer, Fuss & O’Neill, provided comments (**Attachment B**) on November 15, 2022 on the plan set dated October 24, 2022 and the Applicant submitted a response (**Attachment D**) on November 29, 2022. The Peer Reviewer provided a second set of comments (**Attachment E**) on December 21, 2022 on the plan set dated November 29, 2022.

While the Peer Review has no further comments, they note items related to the previous review:

- Utility Pole Easement: the Applicant should provide copies of all executed easements, if needed, associated with the off-site improvements to the Town for their records. This relates to the relocation of a utility pole to accommodate the

construction of the right hand turn slip lane off of Lowell Road and is ongoing pursuant to the previous approval (**Attachment F**).

- Drainage Design: the Applicant should review the need for an underdrain to prolong the life of the pavement, drainage system, and building structures. Applicant responded that ongoing construction has found no evidence of groundwater that would initiate additional underdrains.
- Amended Alteration of Terrain permit: the Applicant should provide documentation to the Town that an amended AoT is not required. Applicant has contacted NHDES to acknowledge the addendum. Copies of any documentation should be provided to the Town.

DEPARTMENT COMMENTS

See **Attachment G** for comments from town departments.

1. Engineering: See the attachment for initial review comments from the Engineer. All comments were subsequently addressed to the Town Engineer’s satisfaction. The water utility review remains ongoing pursuant to the previous approval.
2. Fire: The Fire Marshal included the comments made by former Fire Chief Buxton during the previous application review. These were addressed in the previous application and/or are ongoing pursuant to the previous approval.

RECOMMENDATIONS

Staff recommends the application for acceptance unless the Planning Board finds that additional information required to undertake review is necessary. Upon acceptance and the Applicant’s presentation, staff recommends opening public input followed by Planning Board deliberation.

DRAFT MOTIONS

ACCEPT the site plan application:

I move to accept the site plan application for the Site Plan Tenant Addendum, Friars Drive, Parcel 209-001-000 @ Sagamore Industrial Park, 48 Friars Drive; Map 209 Lot 001-000.

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

CONTINUE the public hearing to a date certain:

I move to continue the site plan application for the Site Plan Tenant Addendum, Friars Drive, Parcel 209-001-000 @ Sagamore Industrial Park, 48 Friars Drive; Map 209 Lot 001-000, to date certain, _____, 2023.

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

DEFER the public hearing to a date certain:

I move to defer the site plan application for the Site Plan Tenant Addendum, Friars Drive, Parcel 209-001-000 @ Sagamore Industrial Park, 48 Friars Drive; Map 209 Lot 001-000, to date certain, _____, 2023.

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

APPROVE the site plan application:

I move to approve the site plan for the Site Plan Tenant Addendum, Friars Drive, Parcel 209-001-000 @ Sagamore Industrial Park, Hudson, New Hampshire, 48 Friars Drive, Hudson, NH; prepared by: The Dubai Group, Inc. 136 Harvey Rd. Bldg B101, Londonderry, NH 03053; prepared for: GFI Partners / Lowell Road Property Owner DE, LLC, 133 Pearl Street #300, Boston, MA 02110; consisting of 6 sheets (including proposed building elevations prepared by Eugene T. Sullivan, Inc.), with 1 general note on Sheet 1; dated October 24, 2022; last revised, November 29, 2022; subject to, and revised per, the following stipulations:

1. All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Plan.
2. This approval remains subject to the conditions of approval of SP# 10-21 approved on March 23, 2022.
3. The addition of office space necessitates an additional cost allocation procedure (CAP) amount of \$44,629.20 to the previously assessed amount of \$357,840.00 for a combined total of \$402,469.20 which shall be paid prior to the issuance of a Certificate of Occupancy.
4. Prior to the issuance of a final certificate of occupancy, an L.L.S. Certified “as-built” site plan shall be provided to the Town of Hudson Land Use Division confirming that the development conforms to the Plan approved by the Planning Board.
5. Prior to the Planning Board endorsement of the Plan, it shall be subject to final administrative review by Town Planner and Town Engineer.
6. Prior to application for a building permit, the Applicant shall schedule a pre-construction meeting with the Town Engineer.
7. Construction activities involving the subject lot shall be limited to the hours between 7:00 A.M. and 7:00 P.M. No exterior construction activities shall be allowed on Sundays.
8. Hours of refuse removal shall be exclusive to the hours between 7:00 A.M. and 7:00 P.M., Monday through Friday only.

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

PROJECT NARRATIVE

Date: October 26, 2022
To: Brian Groth, Hudson Town Planner
Hudson Planning Board
From: Hayley Palazola, Project Manager, Lowell Road Property Owner DE, LLC
Subject: Friars Drive Industrial Facility

Site Plan Application

On behalf of the property owner and applicant, Lowell Road Property Owner DE, LLC, our team is pleased to submit the Site Plan Application for minor modifications to previously approved 504,000 SF, warehouse building located on Lot 209-001-000, aka 48 Friars Drive Hudson, NH. On March 30, 2022, the applicant received a Notice of Approval from the Town of Hudson Planning board for the Site Plan that included a proposed 504,000 square foot warehouse building with 104 loading dock doors, 46 trailer slips, and 366 parking spaces. Since the applicant's receipt of approvals, we have negotiated a lease for 75% of the warehouse building. The tenant, Life is Good, an existing business located in Hudson, NH, is a world class lifestyle brand committed to spreading optimism and giving back to their community. The company plans to consolidate their four other warehouse locations and move their corporate headquarters and approximately 200 employees to the Sagamore Industrial Park. We couldn't be more proud to keep Life is Good in the Town of Hudson and feel that they are the perfect tenant to call Friars Drive their new home. To meet the tenant's requirements, we are seeking a minor modification of the previously approved plan that would include the following and are illustrated on the site plan application plan set:

- 1) Removing a total of 38 loading dock door spaces and reducing truck court area.
- 2) Adding 70 employee parking spaces near the tenant's office entrances, additional green strips, and landscaped areas. The new landscaped areas will include 22 new tree plantings and 165 new shrubs in compliance with the Town's landscaping requirements.
- 3) Adding 19,320 SF of second story office space within the previously approved building footprint for a new total building square footage of 523,320 SF.
- 4) Adding landscaped areas and brick pavers to the employee main entrance of the office.

Design Revisions & Analysis

To determine any impacts of the new tenant's requirements, we engaged our engineering team to revisit traffic, drainage, utilities including water and sewer calculations, parking, impervious coverage and building height. The results of the analysis are summarized below and more fully detailed in the site plan application.

Traffic

The applicant's traffic engineer, TF Moran was asked to compare the traffic volumes associated with the previously approved 504,000 square foot warehouse based on ITE LUC 154 in 2021 to the traffic volumes associated with the new tenant that will occupy 397,320 square feet of a slightly larger warehouse facility totaling 523,320 square feet.

In the 2021 Traffic study, the trip generation was based on the ITE Trip Generation Manual 10th edition and the HCW supplement. Trip rates within the current 11th edition remain unchanged for ITE LUC 154. In the 2022 updated trip generation calculations instead of relying on ITE LUC 154 data, the engineer used the real empirical data based on the new tenant's actual employee count and shift schedules. For the remaining 126,000 square feet of available space, ITE LUC 154 was applied. The results of the updated trip generation calculations are more fully detailed in the Traffic Analysis Memorandum dated October 21, 2022. The summary conclusion finds that the proposed shift schedule for Life is Good substantially reduces trip generation during roadway peak hours along Lowell Road for the combined facility in comparison with the trip generation originally approved in 2022. The update also results in a reduction of daily truck trips from 111 truck trips down to 44 daily truck trips. Therefore, we conclude that traffic conditions and mitigation measures in the original 2021 Traffic Report continue to be applicable to the overall facility represented in the traffic memorandum.

Impervious Coverage & Perimeter

No changes are being made to any features around the project perimeter, including edge of pavement, berms, landscaping, fencing, buffers, etc. Within the project development area, there will be no increase in pavement or impervious coverage, and there will be no reduction in landscaping. In fact, the opposite is true, where this site plan modifications reduce impervious coverage and increase landscaping.

Drainage

The minor revisions reduce paved areas at all adjusted locations (25,762 square feet), and the revised design increases landscaped areas. No changes in the drainage design are needed, other than adjusting a few catch basin rims up where warranted. The overall flow patterns are not changed, and all flows are reduced with this modification.

Parking

The revised plan includes eliminating 38 truck loading spaces and adding 70 employee car parking spaces for the new tenant. Although employee parking spaces have been added, we replaced portions of the trucking areas with landscaped areas. All of this is completely contained within the previously-approved parking areas. The parking summary sheet provides the detail, including the required additional landscaping calculations, density and employee support calculations, and net data revision information. Note that the new parking provided meets the minimum 1 space per 600 SF for the overall facility as required, thus no new waivers should be required for the ratio.

Utilities

Sewer

The sewer design is unchanged. The revisions in program space as warranted by the new tenant commitment reduce the pre-permitted sewer flows via a substantial net reduction in the anticipated employees. The sewer flow calculations are outlined on the plans.

Water

Overall water use will be reduced (refer to the Sewer discussion above). Also, the water tank and facilities final MEP engineering design is being completed, and meshes appropriately into the previously-approved site designs.

Building Elevations

The proposed building height remains unchanged from the previously approved plan. The proposed 19,320 square foot second story office will be wholly contained within the previously approved building shell. The revised elevations include additional window and door glass glazing to provide a more welcoming entrance to the office location.

CAP Fees

The increase in office square footage is annotated on the plans and results will increase the CAP fee, assessed when approved and due prior to the issuance of Certificate of Occupancy in accordance with Town procedures.



*Town of Hudson
12 School Street
Hudson, NH 03501*

SITE PLAN APPLICATION

Revised August 1, 2022

The following information must be filed with the Planning Department *at the time of filing a site plan application*:

- (provided) 1. One (1) original completed application with original signatures, and one (1) copy.
- (provided) 2. Three (3) full plan sets (sheet size: 22" x 34").
- (provided) 3. One (1) original copy of the project narrative, and one (1) copy.
- (provided) 4. A list of direct abutters and a list of indirect abutters, and two (2) sets of mailing labels for abutter notifications.
- (provided) 5. All of the above application materials, including plans, shall also be submitted in electronic form as a PDF.
- (provided) 6. All plans shall be folded and all pertinent data shall be attached to the plans with an elastic band or other enclosure.

The following information is required to be filed with the Planning Department *no later than 10:00 A.M., Tuesday ONE WEEK prior to the scheduled Planning meeting. The purpose of these materials is hardcopy distribution to Planning Board members, not review. Any plan revisions that require staff review must be submitted no later than 10:00 A.M., Tuesday TWO WEEKS prior to the scheduled Planning meeting. Depending on the complexity of changes, more time may be required for review. Please contact the Town Planner if you have any questions on this matter.*

- (provided) 1. Submission of fifteen (15) 11" X 17" plan sets, revised if applicable.
- (provided) 2. Submission of two (2) full plan sets (sheet size: 22" x 34"), if revised.
- (provided) 3. All of the above application materials, including plans, shall also be submitted in electronic form as a PDF.

Note: Prior to filing an application, it is recommended to schedule an appointment with the Town Planner.

(coordinated)

SITE PLAN APPLICATION

Date of Application: October 28,2022 Tax Map #: 209 Lot #: 001-000

Site Address: 48 Friars Drive

Name of Project: 48 Friars Drive Industrial Site Plan - Tenant Addendum

Zoning District: Industrial & General General SP#: _____
(For Town Use Only)

Z.B.A. Action: (none for the recently-approved site plan, and none proposed)

PROPERTY OWNER:

Name: Lowell Road Property Owner DE, LLC

Address: 133 Pearl Street, Suite 300

Address: Boston, MA 02110

Telephone # (303)250-3498 (direct)

Email: hpalazola@gfipartners.com
(Hayley Palazola, VP of Development)

PROJECT ENGINEER:

Name: Karl Dubay, The Dubay Group, Inc.

Address: 136 Harvey Rd Bldg B101

Address: Londonderry, NH 03053

Telephone # 603-247-8766 (direct)

Email: karl@thedubaygroup.com

DEVELOPER:

(same as owner)

SURVEYOR:

Joel Connolly, The Dubay Group, Inc.

136 Harvey Rd Bldg B101

Londonderry, NH 03053

603-315-8763 (direct)

joel@thedubaygroup.com

PURPOSE OF PLAN:

Addendum tenant adjustments of previously-approved site plans. Consists of replacing previously-approved truck docks and truck areas with parking and green space and related adjustments, and adding 19,320 SF of office space in a second level fully contained within the previously-approved building envelope. No new pavement is proposed, and no changes are involved outside of the previously-approved paved footprint area.

(For Town Use Only)

Routing Date: _____ Deadline Date: _____ Meeting Date: _____

_____ I have no comments _____ I have comments (attach to form)

_____ Title: _____ Date: _____
(Initials)

Department: _____

Zoning: ___ Engineering: ___ Assessor: ___ Police: ___ Fire: ___ DPW: ___ Consultant: ___

SITE DATA SHEET

PLAN NAME: 48 Friars Drive Industrial Site Plan - Tenant Addendum

PLAN TYPE: SITE PLAN - Tenant Addendum

LEGAL DESCRIPTION: MAP 209 LOT 001-000

DATE: October 28, 2022

Location by Street: 48 Friars Drive

Zoning: Industrial & General (unchanged)

Proposed Land Use: (same as Existing, minor addendum)

Existing Use: Industrial/Commercial (approved & under construction)

Surrounding Land Use(s): Industrial, Commercial, & Residential

Number of Lots Occupied: one single lot

Existing Area Covered by Building: 504,000 SF (approved & under construction)

Existing Buildings to be removed: none

Proposed Area Covered by Building: Same as existing, addendum adds 19,320 KSF in a 2nd level within the existing building shell as previously approved (no increase in height or dimensions)

Open Space Proposed: 66% (includes 23 acres within protective covenant area, unchanged)

Open Space Required: 35% min required (26 acres)

Total Area: S.F.: 3,260,249 +/- Acres: >74 (per previous plans, unchanged)

Area in Wetland: (unchanged-- per previous approved plans)
Area Steep Slopes:

Required Lot Size: 1 Acre (per previous approvals)

Existing Frontage: 468 LF (unchanged) per previous approved plans

Required Frontage: 150 LF (min) per previous approved plans

Building Setbacks:

	<u>Required*</u> (per previous approved plans)	<u>Proposed</u>
Front:	<u>30 FT</u>	<u>431 FT (unchanged)</u>
Side:	<u>15 FT</u>	<u>287 FT (unchanged)</u>
Rear:	<u>15 FT</u>	<u>246 FT (unchanged)</u>

* 200 FT to certain res districts (complies, unchanged)

SITE DATA SHEET

(Continued)

Flood Zone Reference: (no work proposed in flood plain)
Maps 33011C0652E (4/18/2011) & 33011C0656D (9/25/2009)

Width of Driveways: (24 to 32+ per approved plans - unchanged)

Number of Curb Cuts: (retain one per approved plans - no change)

Proposed Parking Spaces: 366 parking spaces were previously approved, replace trucking/loading areas with 70 new parking spaces for a proposed total of 436 parking spaces. Refer to parking Summary Plan Addendum.

Required Parking Spaces: Required spaces = 523,320 sf @ 1:600 = 873

Basis of Required Parking (Use): Basis is typical industry standards for the use. Previously, the required spaces were shown on plans as attainable, however the waiver was granted knowing that these areas would instead be protected natural state via covenant.

Dates/Case #/Description/Stipulations of ZBA, Conservation Commission, NH Wetlands Board Actions: (none for the recently-approved site plan, no wetland permitting required from the recently-approved site plan)
(Attach stipulations on separate sheet)

Waiver Requests

Town Code Reference:

Regulation Description:

275-8:(C)2 Allows a reduction in required parking spaces to those outlined on the plans. This waiver was granted in December 2021. The additional area of proposed office is indeed served by the additional provided parking spaces at the required ratios (see calcs on plans). Thus, the planning board may concur that the previously approved waiver is sufficient.

Refer to previously-granted approvals on file with the Town.

No new waivers for this addendum are known to be required.

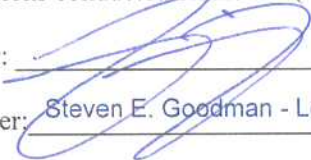
(For Town Use Only)

Data Sheets Checked By: _____ Date: _____

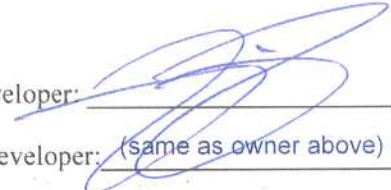
SITE PLAN APPLICATION AUTHORIZATION

I hereby apply for *Site Plan* Review and acknowledge I will comply with all of the Ordinances of the Town of Hudson, New Hampshire State Laws, as well as any stipulations of the Planning Board, in development and construction of this project. I understand that if any of the items listed under the *Site Plan* specifications or application form are incomplete, the application will be considered rejected.

Pursuant to RSA 674:1-IV, the owner(s) by the filing of this application as indicated above, hereby given permission for any member of the Hudson Planning Board, the Town Planner, the Town Engineer, and such agents or employees of the Town or other persons as the Planning Board may authorize, to enter upon the property which is the subject of this application at all reasonable times for the purpose of such examinations, surveys, tests and inspections as may be appropriate. The owner(s) release(s) any claim to or right he/she (they) may now or hereafter possess against any of the above individuals as a result of any examinations, surveys, tests and/or inspections conducted on his/her (their) property in connection with this applications.

Signature of Owner:  _____ Date: October 28, 2022
Print Name of Owner: Steven E. Goodman - Lowell Road Property Owner DE, LLC

- ❖ If other than an individual, indicate name of organization and its principal owner, partners, or corporate officers.

Signature of Developer:  _____ Date: October 28, 2022
Print Name of Developer: (same as owner above)

- ❖ The developer/individual in charge must have control over all project work and be available to the Code Enforcement Officer/Building Inspector during the construction phase of the project. The individual in charge of the project must notify the Code Enforcement Officer/Building Inspector within two (2) working days of any change.

WAIVER REQUEST FORM

Name of Subdivision/Site Plan: _____ (No new waivers are known to be required)

Street Address: _____

I _____ hereby request that the Planning Board waive the requirements of item _____ of the Hudson Land Use Regulations in reference to a plan presented by _____ (name of surveyor and engineer) dated _____ for property tax map(s) _____ and lot(s) _____ in the Town of Hudson, NH.

As the aforementioned applicant, I, herein, acknowledge that this waiver is requested in accordance with the provisions set forth in RSA 674:36, II (n), i.e., without the Planning Board granting said waiver, it would pose an unnecessary hardship upon me (the applicant), and the granting of this waiver would not be contrary to the spirit and intent of the Land Use Regulations.

Hardship reason(s) for granting this waiver (if additional space is needed please attach the appropriate documentation hereto):

Reason(s) for granting this waiver, relative to not being contrary to the spirit and intent of the Land Use Regulations: (if additional space is needed please attach the appropriate documentation hereto):

Signed: _____ (No new waivers are known to be required)
Applicant or Authorized Agent

SCHEDULE OF FEES

A. REVIEW FEES:

<u>1. Site Plan Use</u>	<u>Project Size/Fee</u>	
Multi-Family	\$105.00/unit for 3-50 units \$78.50/unit for each additional unit over 50	\$ <u>(n/a)</u>
Commercial/Semi Public/Civic or Recreational	\$157.00/1,000 sq. ft. for first 100,000 sq.ft. (bldg. area); \$78.50/1,000 sq.ft. thereafter.	\$ <u>(n/a)</u>
Industrial	\$150.00/1,000 sq.ft for first 100,000 sq.ft. (bldg. area); (\$150 × 19.32 ksf = \$78.50/1,000 sq.ft thereafter.	\$ <u>2,898</u>
No Buildings	\$30.00 per 1,000 sq.ft. of proposed developed area	\$ <u>(n/a)</u>

CONSULTANT REVIEW FEE: (Separate Check)

Total(misc re-work)acres @ \$600.00 per acre, or \$1,250.00, whichever is greater. \$ ~~4,250~~ \$2,000

(TBD) *This is an estimate for cost of consultant review. The fee is expected to cover the amount. A complex project may require additional funds. A simple project may result in a refund.*

(TBD) LEGAL FEE:

The applicant shall be charged attorney costs billed to the Town for the Town's attorney review of any application plan set documents.

B. POSTAGE:

<u>25</u>	Direct Abutters Applicant, Professionals, etc. as required by RSA 676:4.1.d @\$4.60 (or Current Certified Mail Rate)	\$ <u>115</u>
<u>27</u>	Indirect Abutters (property owners within 200 feet) @\$0.60 (or Current First Class Rate)	\$ <u>17</u>

C. TAX MAP UPDATING FEE: (FLAT FEE) \$ 275.00

TOTAL \$ ~~4,555~~ \$5,305

SCHEDULE OF FEES

(Continued)

(For Town Use)

AMOUNT RECEIVED: \$ _____	DATE RECEIVED: _____
RECEIPT NO.: _____	RECEIVED BY: _____

NOTE: fees below apply only upon plan approval, not collected at time of application.

D. RECORDING:

*****The applicant shall be responsible for the recording of the approved plan, and all documents as required by an approval, at the Hillsborough County Registry of Deeds (HCRD), located at 19 Temple Street, Nashua, NH 03061. Additional fees associated with recording can be found at HCRD.*** (To be determined)**

E. COST ALLOCATION PROCEDURE AMOUNT CONTRIBUTION AND OTHER IMPACT FEE PAYMENTS:

(To be determined, the addendum change of GSF within the previously-approved building under construction is 19,320 SF)
To be determined by the Planning Board at time of plan approval and shall be paid by the applicant at the time of submittal of the Certificate of Occupancy Permit requests.

*****The applicant shall be responsible for all fees incurred by the town for processing and review of the applicant's application, plan and related materials.*****

**TOWN OF HUDSON
SITE PLAN REVIEW CHECKLIST**

This checklist is intended to help the applicant and staff to ensure application completeness. Please refer to the regulations on the exact language of each requirement.

Key: *Y=Yes P=Pending W=Waiver Request*

Relevant Regulations:

§ 276-11.1 General Plan Requirements

§§ 275-8 – 275-9 Site Plan Requirements

- | | <u>Y</u> | <u>P</u> | <u>W</u> | |
|-----|-------------------------------------|--------------------------|--------------------------|--|
| 1. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A list of the names and addresses of the owner(s) of the property, the applicant(s), and all abutters as indicated in the office of the Town Assessor records not more than five (5) days prior to the day of filing [§ 276-11.1.A.] |
| 2. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Sets of plans and copies as indicated on application. |
| 3. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Scale no smaller than 50 feet to the inch (1" = 50') [§ 276-11.1.B.(2)] |
| 4. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Title block in the lower right-hand corner of the plan, containing: [§ 276-11.1.B.(3)] |
| 5. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Title, including the term "site plan" or "subdivision plan" |
| 6. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The name for whom the plan was prepared |
| 7. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Preparer of the plan |
| 8. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The scale(s) of the plan |
| 9. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Date of the plan |
| 10. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Appropriate revision block |
| 11. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Approval block (2"x6") located on the lower left corner of each sheet, with the required language and signature lines [§ 276-11.1.B.(4) & § 289-27.A] |
| 12. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A space (2"x1.5") adjacent to the approval block containing the required statement [§ 276-11.1.B.(5)] |
| 13. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Owner's printed name and address and signature [§ 276-11.1.B.(6)] |
| 14. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Name and address of all abutting property owners [§ 276-11.1.B.(7)] |
| 15. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A locus plan at one inch equals 1,000 feet (1" = 1,000') [§ 276-11.1.B.(8)] |

Notes

(Continue next page)

**TOWN OF HUDSON
SITE PLAN REVIEW CHECKLIST**

This checklist is intended to help the applicant and staff to ensure application completeness. Please refer to the regulations on the exact language of each requirement.

Key: Y=Yes P=Pending W=Waiver Request

- | <u>Y</u> | <u>P</u> | <u>W</u> | |
|---|--------------------------|--------------------------|--|
| 16. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Boundary of the entire parcel held in single ownership with boundary dimensions and bearings
[§ 276-11.1.B.(9)] |
| 17. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Error of closure shown and certified by a licensed land surveyor |
| 18. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - North point arrow |
| 19. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Zoning classification note of the tract and location of the zoning district boundaries if the property is located in two or more zoning district
[§ 276-11.1.B.(10)] |
| 20. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The location of all buildings within 50 feet of the tract
[§ 276-11.1.B.(15)] |
| 21. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The location of roadways, driveways, travel areas or parking areas within 200 feet of the tract, in accordance with § 276-11.1.B.(16) |
| 22. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Existing topography at two-foot contour intervals of that portion of the tract being proposed for development from a topographic survey and contours on the remainder of the tract from a reliable plan source [§ 276-11.1.B.(17)] |
| 23. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Proposed topography at two-foot contour intervals
[§ 276-11.1.B.(18)] |
| 24. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A note identifying the Tax Map and Lot Number of the tract [§ 276-11.1.B.(19)] |
| 25. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The location of all existing buildings (including size and height), driveways, sidewalks, parking spaces, loading area, open spaces, large trees, open drainage courses, signs, exterior lighting, service areas, easements landscaping and other pertinent items. [§ 276-11.1.B.(20)] |
| 26. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - The location of all proposed construction, buildings, structures, pavement, etc. [§ 276-11.1.B.(21)] |
| 27. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A green area shown between the right-of-way line and any pavement, gravel or structure meeting the required minimum width [§ 276-11.1.B.(22)] |
| 28. <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Note any pertinent highway projects.
[§ 276-11.1.B.(23)] |

Notes

(refers to active approved plans already on file with Town and State)

(refers to active approved plans already on file with Town and State)

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(refers to active approved plans already on file with Town and State)

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**TOWN OF HUDSON
SITE PLAN REVIEW CHECKLIST**

This checklist is intended to help the applicant and staff to ensure application completeness. Please refer to the regulations on the exact language of each requirement.

Key: Y=Yes P=Pending W=Waiver Request NA=Not Applicable (please explain)

<u>Y</u> <u>P</u> <u>W</u> <u>NA</u>		<u>Notes</u>
30. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- The location of all building setback lines as required by Chapter 334, Zoning, and setback lines as required by § 276-11.1.B.(12).	(refers to active approved plans already on file with Town and State)
31. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- The location size and character of all signs or a note* stating "All signs are subject to approval by the Hudson Zoning Administrator prior to installation thereof." [§ 276-11.1.B.(13)] *The discrepancy on the note language is correct – reference to the Planning Board in the regulations is outdated.	(refers to active approved plans already on file with Town and State)
32. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- The location, detail and character of all exterior lighting or a note stating: "There will be no exterior lighting." [§ 276-11.1.B.(14)]	(refers to active approved plans already on file with Town and State)
33. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required open space, including the calculation showing the requirement is met [§ 276-11.1.B.(24)]	
34. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Parking space calculation showing and a statement stating the required parking spaces are provided [§ 275-8.C.(2) & (3)]	
35. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required dimensions for parking space [§ 275-8.C.(4)]	
36. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required dimensions for aisle/access drive [§ 275-8.C.(5)]	
37. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required off-street loading spaces [§ 275-8.C.(6)]	
38. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required landscaping for the parking lot, including calculation shown the planting requirement is met [§ 275-8.C.(7)]	(refers to active approved plans already on file with Town and State)
39. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Required screening for visual separation of incompatible uses [§ 275-8.C.(8)]	(refers to active approved plans already on file with Town and State)
40. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Handicap accessibility provided in accordance with the latest ADA Regulations [§ 275-8.C.(11)]	(refers to active approved plans already on file with Town and State)
41. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Stormwater Management Plan [§ 275-9.A]	(refers to active approved plans already on file with Town and State)
42. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Traffic Study, if required [§ 275-9.B]	(refers to active approved plans already on file with Town and State)
43. <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	- Noise Study, if required [§ 275-9.C]	(refers to active approved plans already on file with Town and State)

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**TOWN OF HUDSON
SITE PLAN REVIEW CHECKLIST**

This checklist is intended to help the applicant and staff to ensure application completeness. Please refer to the regulations on the exact language of each requirement.

Key: *Y=Yes P=Pending W=Waiver Request NA=Not Applicable (please explain)*

- | | <u>Y</u> | <u>P</u> | <u>W</u> | <u>NA</u> | |
|-----|-------------------------------------|--------------------------|--------------------------|--------------------------|---|
| 44. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Fiscal Impact Study, if required [§ 275-9.D] |
| 45. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Utility Study [§ 275-9.E] |
| 46. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Copies of any proposed or existing easements, covenants, deed restrictions or any other similar document pertinent to the Site Plan [§ 275-9.F] |
| 47. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - A copy of all applicable Town, state, county or federal approvals or applications [§ 275-9.G] |
| 48. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | - Environmental Impact Study, if required [§ 275-9.I] |

(End of checklist)

Notes

(refers to active approved plans already on file with Town and State)

(refers to active approved plans already on file with Town and State)

(refers to active approved plans already on file with Town and State)



Civil Engineers
Structural Engineers
Traffic Engineers
Land Surveyors
Landscape Architects
Scientists

TRAFFIC ANALYSIS MEMORANDUM

Date: 10 November 2022
To: Town of Hudson Planning Department
From: Robert Duval, PE
Jen Porter, PE
Project: HCW Warehouse – 2022 Tenant Update
Friars Drive, Hudson
Subject: Traffic Impact Analysis – New Tenant Trip Generation
TFM# 16415.16

INTRODUCTION

This memo compares the traffic volumes associated with a High-Cube Warehouse (HCW) on Friars Drive approved by the Hudson Planning Board in 2021, to the traffic associated with operations of a specific tenant that will occupy a portion of a slightly enlarged facility.

The 2021 approved site plan included 504,000 sf of HCW, with the possibility of multiple tenants within the building. The project was approved with the condition that all tenants would have trip generation characteristics typical to High-Cube Warehouses as defined in ITE Land Use Code (LUC) 154. The definition of this LUC does include some space for light manufacturing and office space within the HCW facility.

That proposed tenant will be consolidating their existing facility in Hudson with three other locations, and moving their combined operations to Friars Drive, where they will occupy 397,320 sf of the facility. The operations are consistent with high-cube warehousing use, including some pick-and-pack and light manufacturing operations, and associated office space. The remaining 126,000 sf of the building will also continue to generate trips per ITE LUC 154, consistent with the original approval. Thus trip generation for the facility is calculated as follows:

- *2021 Approved Trip Generation - LUC 154 rates per ksf)*
HCW (multiple tenants) 504,000 sf
- *2022 Proposed Trip Generation - LUC 154 rates per ksf)*
Tenant #1 397,320 sf
Tenant #2 126,000 sf

Total GSF: 523,320 sf

In the 2021 approved Traffic Study, trip generation was based on LUC 154 rates published by the ITE Trip Generation Manual 10th Edition, and the HCW supplement. Trip rates within the current 11th Edition remain unchanged for LUC 154¹. Tables 1a and 1b below show the results of trip generation based on the 11th edition. Calculations are attached in the Appendix.

¹ However the new definition now clarifies that mezzanine space should not be added to building footprint for trip calculations.

2021 Approved ITE Trip Generation Calculations:

The Table below shows the trip generation rates presented and approved in the original traffic study. Table 1a shows total peak hour trips; Table 1b shows the breakdown of cars and trucks within the typical peak hour traffic stream.

Table 1a
2021 Approved Trips

Land Use	In	Out	Total
504,000 sf HCW Warehouse (LUC 154)			
Weekday AM Peak Hour Adjacent Street	36	14	50
Weekday PM Peak Hour Adjacent Street	16	39	55

Table 1b
2021 Approved Trips – Cars and Trucks

	Cars		Trucks		Total
	In	Out	In	Out	
504,000 sf HCW Warehouse (LUC 154)					
Weekday AM Peak Hour Adjacent Street	31	9	5	5	50
Weekday PM Peak Hour Adjacent Street	14	36	2	3	55

A sample HCW shift schedule was also presented in Appendix E of the approved Traffic Study to provide further details on distribution of total daily trips and cars versus trucks on an hourly basis associated with HCW operations. That shift schedule is reproduced in the appendix to this memo.

2022 Proposed ITE Trip Generation Calculations:

To accommodate the specific needs of Tenant#1, the building footprint has been adjusted and enlarged by about 5% to 523,320 sf. To calculate vehicle trips for the adjusted footprint, the unchanged 11th Edition LUC 154 trip generation rates were used. Tables 2a and 2b show the results below.

Table 2a
2022 Proposed Trips

Land Use	In	Out	Total
523,320 sf HCW Warehouse (LUC 154)			
Weekday AM Peak Hour Adjacent Street	37	15	52
Weekday PM Peak Hour Adjacent Street	24	33	57

Table 2b
2022 Proposed Trips – Cars and Trucks

	Cars		Trucks		Total
	In	Out	In	Out	
523,320 sf HCW Warehouse (LUC 154)					
Weekday AM Peak Hour Adjacent Street	32	10	5	5	52
Weekday PM Peak Hour Adjacent Street	15	37	2	3	57

The increased footprint adds only two new passenger vehicle trips during each of the AM and PM peak hours. The new footprint does not materially change trip generation for trucks.

2022 Tenant-Specific Trip Generation Calculations:

To confirm the trip generation rates applied above are applicable to the known Tenant #1's operations, we have created a tenant-specific shift schedule based on that tenant's known number of employees and off-peak shift schedule (as required by the Planning Board to avoid the am and pm peak hours of the Lowell Road corridor). This schedule is shown in the appendix.

Table 3a below is based on the proposed Tenant#1 shift schedule, Trip generation for Tenant #2 (the remaining available space) is based on LUC 154 rates published by the current ITE manual (unchanged between 10th and 11th editions).

Table 3a and 3b below and on the following page show the 2022 trip generation for the entire facility. Calculations are attached in the Appendix.

Table 3a
2022 Tenant#1 - Specific Trip Generation

Land Use	In	Out	Total
Tenant #1: 397,320 sf HCW Warehouse (employees/shift schedule)			
Weekday AM Peak Hour Adjacent Street	16	0	16
Weekday PM Peak Hour Adjacent Street	0	1	1
Tenant #2: 126,000 sf HCW Warehouse (LUC 154)			
Weekday AM Peak Hour Adjacent Street	9	4	13
Weekday PM Peak Hour Adjacent Street	4	10	14
Total – 523,320 sf HCW Warehouse			
Weekday AM Peak Hour Adjacent Street	25	4	29
Weekday PM Peak Hour Adjacent Street	4	11	15

Table 3b
2022 Tenant#1 - Specific Trip Generation – Cars and Trucks

	Cars		Trucks		Total
	In	Out	In	Out	
Tenant #1: 397,320 sf HCW Warehouse (employees/shift schedule)					
Weekday AM Peak Hour Adjacent Street	15	0	1	0	16
Weekday PM Peak Hour Adjacent Street	0	0	0	1	1
Tenant #2: 126,000 sf HCW Warehouse (LUC 154)					
Weekday AM Peak Hour Adjacent Street	8	2	1	2	13
Weekday PM Peak Hour Adjacent Street	4	9	0	1	14
Total 523,320 sf HCW Warehouse with Tenant#1 specific Trips					
Weekday AM Peak Hour Adjacent Street	23	2	2	2	29
Weekday PM Peak Hour Adjacent Street	4	9	0	2	15

Table 4

Comparison: 2021 Approved v 2022 Proposed Trips

Land Use	In	Out	Total	Trucks*
2021 Approved 504,000 sf HCW Warehouse				
Weekday AM Peak Hour Adjacent Street	36	14	50	10
Weekday PM Peak Hour Adjacent Street	16	39	55	5
Proposed 523,320 sf HCW Warehouse				
Weekday AM Peak Hour Adjacent Street	37	15	52	10
Weekday PM Peak Hour Adjacent Street	24	33	57	5
523,320 sf HCW Warehouse with Tenant#1 specific Trips				
Weekday AM Peak Hour Adjacent Street	25	4	29	4
Weekday PM Peak Hour Adjacent Street	4	11	15	2

*- represents number of Trucks included within "Total" traffic volume in column to left.

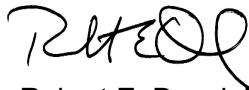
SUMMARY/CONCLUSION

The slightly enlarged facility generates only 2 additional car trips in the am and pm roadway peak hours, and no additional truck trips, based on ITE LUC 154 – High Cube Warehouse.

When the proposed off-peak shift schedule for Tenant#1 is taken into account, the number of trips is substantially reduced during roadway peak hours on Lowell Road for the combined facility, and the number of truck trips within the peak hour is substantially less than the number approved previously by the Planning Board.

We therefore conclude that the conclusions of the original 2021 Traffic Report continue to be applicable to the 523,320 sf facility represented in this Traffic Memorandum.

Respectfully Submitted,
TFMORAN, INC.



Robert E. Duval, PE
 Chief Engineer

Appendix

2022 Updated Trip Generation

- HCW
- Tenant #1 + HCW

2022 Updated Schedules

- Tenant #1
- Tenant #2
- Tenant #1 + #2

2021 Approved Trip Generation

2021 Appendix B Shift Schedule

Proposed Trip Generation - Warehouse

ITE Trip Generation Manual, 11th Edition

Setting/Location: General Urban/Suburban

ITE LUC 154 - High-Cube Transload and Short-Term Storage Warehouse: 523,320 sf Gross Floor Area

Time Period	Rate/Equ		Rate/ Eq Used	Trip Ends	Directional Split		Directional Distribution	
	X	Rate			In	Out	In	Out
Weekday AM Peak Hour Adjacent Street - CARS	523.3	0.08	Rate	42	77%	23%	32	10
Weekday AM Peak Hour Adjacent Street - TRUCKS	523.3	0.02	Rate	10	49%	51%	5	5
Weekday AM Peak Hour Adjacent Street - TOTAL				52			37	15
Weekday PM Peak Hour Adjacent Street - CARS	523.3	0.10	Rate	52	28%	72%	15	37
Weekday PM Peak Hour Adjacent Street - TRUCKS	523.3	0.01	Rate	5	47%	53%	2	3
Weekday PM Peak Hour Adjacent Street - TOTAL				57			17	40
Weekday Daily - CARS	523.3	1.40	Rate	733	50%	50%	367	366
Weekday Daily - TRUCKS	523.3	0.22	Rate	115	50%	50%	58	57
Weekday Daily - TOTAL				848			425	423

Proposed Trip Composition

100% Primary Trips

Proposed Trip Generation - Warehouse [TENANT #1]

Per Tenant employee/truck count and shift schedule

Setting/Location: General Urban/Suburban

Time Period	Rate/Equ		Rate/ Eq Used	Trip Ends	Directional Split		Directional Distribution	
	X	Rate			In	Out	In	Out
Weekday AM Peak Hour Adjacent Street - CARS				15			15	0
Weekday AM Peak Hour Adjacent Street - TRUCKS				1			1	0
Weekday AM Peak Hour Adjacent Street - TOTAL				16			16	0
Weekday PM Peak Hour Adjacent Street - CARS							0	0
Weekday PM Peak Hour Adjacent Street - TRUCKS				1			0	1
Weekday PM Peak Hour Adjacent Street - TOTAL				1			0	1
Weekday Daily - CARS				402			201	201
Weekday Daily - TRUCKS				16			8	8
Weekday Daily - TOTAL				418			209	209

Proposed Trip Generation - Warehouse [TENANT #2]

ITE Trip Generation Manual, 11th Edition

Setting/Location: General Urban/Suburban

ITE LUC 154 - High-Cube Transload and Short-Term Storage Warehouse: 126,000 sf Gross Floor Area

Time Period	Rate/Equ		Rate/ Eq Used	Trip Ends	Directional Split		Directional Distribution	
	X	Rate			In	Out	In	Out
Weekday AM Peak Hour Adjacent Street - CARS	126	0.08	Rate	10	77%	23%	8	2
Weekday AM Peak Hour Adjacent Street - TRUCKS	126	0.02	Rate	3	49%	51%	1	2
Weekday AM Peak Hour Adjacent Street - TOTAL				13			9	4
Weekday PM Peak Hour Adjacent Street - CARS	126	0.10	Rate	13	28%	72%	4	9
Weekday PM Peak Hour Adjacent Street - TRUCKS	126	0.01	Rate	1	47%	53%	0	1
Weekday PM Peak Hour Adjacent Street - TOTAL				14			4	10
Weekday Daily - CARS	126	1.40	Rate	176	50%	50%	88	88
Weekday Daily - TRUCKS	126	0.22	Rate	28	50%	50%	14	14
Weekday Daily - TOTAL				204			102	102

Proposed Trip Generation - Warehouse [TOTAL #1+#2]

Per Tenant employee/truck count and shift schedule

Setting/Location: General Urban/Suburban

ITE Trip Generation Manual, 11th Edition

Time Period	Rate/Equ		Rate/ Eq Used	Trip Ends	Directional Split		Directional Distribution	
	X	Rate			In	Out	In	Out
Weekday AM Peak Hour Adjacent Street - CARS				25			23	2
Weekday AM Peak Hour Adjacent Street - TRUCKS				4			2	2
Weekday AM Peak Hour Adjacent Street - TOTAL				29			25	4
Weekday PM Peak Hour Adjacent Street - CARS				13			4	9
Weekday PM Peak Hour Adjacent Street - TRUCKS				2			0	2
Weekday PM Peak Hour Adjacent Street - TOTAL				15			4	11
Weekday Daily - CARS				578			289	289
Weekday Daily - TRUCKS				44			22	22
Weekday Daily - TOTAL				622			311	311

Proposed Trip Composition

100% Primary Trips

TRIP GENERATION SUMMARY: HUDSON FRIARS ROAD WAREHOUSE BUILDING [TENANT #1]
(397,320 SF Warehouse)

DAILY SHIFT SCHEDULE	216				8		Totals	Trips/hr		
	----- Total Employees -----				<-- Total Trucks -->					
	Employees		Employees		Trucks					
	1st Shift 5:00a - 3:30p		2nd Shift 3:30p - 2:00a		All Shifts 6a - 7p					
	In	Out	In	Out	In	Out	In	Out		
12:00M - 1:00AM							0	0	0	
1:00AM - 2:00AM							0	0	0	
2:00AM - 3:00AM				71			0	71	71	
3:00AM - 4:00AM							0	0	0	
4:00AM - 5:00AM	130						130	0	130	<- AM Peak of Generator
5:00AM - 6:00AM							0	0	0	
6:00AM - 7:00AM						1	1	0	1	
7:00AM - 8:00AM	15					1	16	0	16	<- Roadway Peak*
8:00AM - 9:00AM						1	1	0	1	
9:00AM - 10:00AM						1	1	1	2	
10:00AM - 11:00AM						1	1	1	2	
11:00AM - 12:00N						1	1	1	2	
12:00N - 1:00PM						1	1	1	2	
1:00PM - 2:00PM						1	1	1	2	
2:00PM - 3:00PM							0	1	1	
3:00PM - 4:00PM	130		71				71	131	202	<- PM Peak of Generator
4:00PM - 5:00PM							0	1	1	<- Roadway Peak*
5:00PM - 6:00PM		15					0	15	15	
6:00PM - 7:00PM							0	0	0	
7:00PM - 8:00PM							0	0	0	
8:00PM - 9:00PM							0	0	0	
9:00PM - 10:00PM							0	0	0	
10:00PM - 11:00PM							0	0	0	
11:00PM - 12:00M							0	0	0	
	145	145	71	71	8	8	224	224	448	= Daily Trips

TRIP GENERATION SUMMARY: HUDSON FRIARS ROAD WAREHOUSE BUILDING [TENANT #2]
 (126,000 SF High-Cube Transload and Short-Term Storage Warehouse)

DAILY SHIFT SCHEDULE	88 ----- Total Employees ----->						14 <-- Total Trucks -->		Totals	Trips/hr							
	Office Emp		Office Emp		Office Emp		Warehouse Emp					Warehouse Emp		Warehouse Emp		Trucks	
	1st Shift		2nd Shift		3rd Shift		1st Shift					2nd Shift		3rd Shift		All Shifts	
	7a - 4p/8a - 5p		4p - 12:30a		12:30a - 7a		6a - 2:30p					2:30p - 11p		11p - 6a		6a - 7p	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out			
12:00M - 1:00AM				4	2								2	4	6		
1:00AM - 2:00AM													0	0	0		
2:00AM - 3:00AM													0	0	0		
3:00AM - 4:00AM													0	0	0		
4:00AM - 5:00AM													0	0	0		
5:00AM - 6:00AM								36					36	0	36	<- AM Peak of Generator	
6:00AM - 7:00AM	5										16		5	16	21		
7:00AM - 8:00AM	3				2							1	4	2	6	<- Roadway Peak*	
8:00AM - 9:00AM												1	1	1	2		
9:00AM - 10:00AM												2	2	1	3		
10:00AM - 11:00AM												2	2	2	4		
11:00AM - 12:00N												2	2	2	4		
12:00N - 1:00PM												1	2	2	3		
1:00PM - 2:00PM												1	1	1	2		
2:00PM - 3:00PM							36	22				1	1	23	37	60	<- PM Peak of Generator
3:00PM - 4:00PM				4								1	1	5	1	6	
4:00PM - 5:00PM		5										1	1	1	6	7	<- Roadway Peak*
5:00PM - 6:00PM		3										1	1	1	4	5	
6:00PM - 7:00PM												1		0	1	1	
7:00PM - 8:00PM														0	0	0	
8:00PM - 9:00PM														0	0	0	
9:00PM - 10:00PM														0	0	0	
10:00PM - 11:00PM											16		16	0	16		
11:00PM - 12:00M								22					0	22	22		
	8	8	4	4	2	2	36	36	22	22	16	16	14	14	102	102	204 = Daily Trips

**TRIP GENERATION SUMMARY:
HUDSON FRIARS ROAD WAREHOUSE BUILDING [TENANT: #1+ #2]
(523,320 SF Warehouse Footprint)**

DAILY SHIFT SCHEDULE	304 < Total Employees >		22 <-- Total Trucks -->		Totals		Trips/hr	
	Employees		Trucks		In	Out		
	All Shifts 12a - 11:59p	All Shifts 6a - 7p	In	Out			In	Out
12:00M - 1:00AM	<u>2</u>	4	<u>0</u>	0	2	4	6	
1:00AM - 2:00AM	<u>0</u>	0	<u>0</u>	0	0	0	0	
2:00AM - 3:00AM	<u>0</u>	71	<u>0</u>	0	0	71	71	
3:00AM - 4:00AM	<u>0</u>	0	<u>0</u>	0	0	0	0	
4:00AM - 5:00AM	<u>130</u>	0	<u>0</u>	0	130	0	130	<- AM Peak of Generator
5:00AM - 6:00AM	<u>36</u>	0	<u>0</u>	0	36	0	36	
6:00AM - 7:00AM	<u>5</u>	16	<u>1</u>	0	6	16	22	
7:00AM - 8:00AM	<u>18</u>	2	<u>2</u>	0	20	2	22	<- Roadway Peak*
8:00AM - 9:00AM	<u>0</u>	0	<u>2</u>	1	2	1	3	
9:00AM - 10:00AM	<u>0</u>	0	<u>3</u>	2	3	2	5	
10:00AM - 11:00AM	<u>0</u>	0	<u>3</u>	3	3	3	6	
11:00AM - 12:00N	<u>0</u>	0	<u>3</u>	3	3	3	6	
12:00N - 1:00PM	<u>0</u>	0	<u>2</u>	3	2	3	5	
1:00PM - 2:00PM	<u>0</u>	0	<u>2</u>	2	2	2	4	
2:00PM - 3:00PM	<u>22</u>	36	<u>1</u>	2	23	38	61	
3:00PM - 4:00PM	<u>75</u>	130	<u>1</u>	2	76	132	208	<- PM Peak of Generator
4:00PM - 5:00PM	<u>0</u>	5	<u>1</u>	2	1	7	8	<- Roadway Peak*
5:00PM - 6:00PM	<u>0</u>	18	<u>1</u>	1	1	19	20	
6:00PM - 7:00PM	<u>0</u>	0	<u>0</u>	1	0	1	1	
7:00PM - 8:00PM	<u>0</u>	0	<u>0</u>	0	0	0	0	
8:00PM - 9:00PM	<u>0</u>	0	<u>0</u>	0	0	0	0	
9:00PM - 10:00PM	<u>0</u>	0	<u>0</u>	0	0	0	0	
10:00PM - 11:00PM	<u>16</u>	0	<u>0</u>	0	16	0	16	
11:00PM - 12:00AM	<u>0</u>	22	<u>0</u>	0	0	22	22	
	<u>304</u>	304	<u>22</u>	22	326	326	652	= Daily Trips

5. Trip Generation:

The facility that is proposed in this report conforms to the classification known as “High-Cube Transload/Short-Term Storage Warehouse” Land Use Code (LUC) 154. ITE has issued an updated 2020 supplement to the 10th Edition Trip Generation Manual¹ that includes a separate calculation of car and truck trips for this warehouse use. Calculations from the supplement are included in Appendix A and tabulated in the table below.

A typical LUC 154 HCW operates on a 24-hour/three shift schedule with office and warehouse employees and truck arrivals and departures distributed throughout the day, generally outside of roadway peak hours. Common shift changes occur at 7am, 4pm, and 1230am. Using this shift pattern places arrivals and departures of most employees outside of adjacent roadway peak hours. A generally even distribution of trucking arrivals and departures is commonly anticipated.

Table 1 below presents total trip generation (cars and trucks) from the ITE supplement:

Table 1
Trip Generation – per ITE Supplement

Land Use	In	Out	Total
Proposed 504,000 sf Distribution Warehouse (LUC 154)			
Weekday AM Peak Hour Adjacent Street	36	14	50
Weekday PM Peak Hour Adjacent Street	16	39	55

Although, trucking schedules tend to avoid peak hour traffic, we have carried the distribution of trucks per ITE shown below. Table 2 shows a breakdown of car and truck volume calculations:

Table 2
Trip Generation – Cars vs Trucks

	Cars		Trucks	
	In	Out	In	Out
Weekday AM Peak Hour Adjacent Street	31	9	5	5
Weekday PM Peak Hour Adjacent Street	14	36	2	3

6. Trip Generation vs Parking – Distribution Center:

A typical shift schedule base on the High-Cube Transload and Short-Term Storage Warehouse use shows the need for at least 265 parking spaces. The sample shift schedule is outlined in Appendix B. The current plan shows 362 parking spaces.

7. Holiday Trip Generation:

Although some types of warehouses (e.g. “fulfillment centers” and “parcel hub distribution centers”) show substantially increased holiday traffic, the proposed facility does not show this marked seasonal increase, and the increase of truck traffic during the holiday season is modest.

¹ *Trip Generation Manual*, Institute of Transportation Engineers (ITE), 10th Edition Supplement, February 2020.

Meeting Date: 1/11/23

SP #15-21 - Friars Drive Industrial Facility - Attachment A

Traffic Impact and Access Study
Re: Proposed Distribution Warehouse
Friars Drive, Hudson NH

September 7, 2021

APPENDIX B

TRIP GENERATION SUMMARY: HUDSON FRIARS ROAD DISTRIBUTION BUILDING
 (500,000 SF High-Cube Transload and Short-Term Storage Warehouse)

DAILY SHIFT SCHEDULE	353 ----- Total Employees ----->						56 <-- Total Trucks -->		Totals	Trips/hr	In	Out						
	Office Emp		Office Emp		Office Emp		Warehouse Emp							Warehouse Emp		Warehouse Emp		Trucks
	1st Shift		2nd Shift		3rd Shift		1st Shift							2nd Shift		3rd Shift		All Shifts
	7a - 4p/8a - 5p		4p - 12:30a		12:30a - 7a		6a - 2:30p							2:30p - 11p		11p - 6a		6a - 9p
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out				
12:00M - 1:00AM				8	4								4	8	12			
1:00AM - 2:00AM													0	0	0			
2:00AM - 3:00AM													0	0	0			
3:00AM - 4:00AM													0	0	0			
4:00AM - 5:00AM													0	0	0			
5:00AM - 6:00AM								140					140	0	140 <- AM Peak of Generator			
6:00AM - 7:00AM	<u>10</u>												15	60	75			
7:00AM - 8:00AM	<u>6</u>				4								11	9	20 <- Roadway Peak*			
8:00AM - 9:00AM													5	5	10			
9:00AM - 10:00AM													5	5	10			
10:00AM - 11:00AM													5	5	10			
11:00AM - 12:00N													4	2	6			
12:00N - 1:00PM													5	5	10			
1:00PM - 2:00PM													5	5	10			
2:00PM - 3:00PM								140	125				5	5	130 145 275 <- PM Peak of Generator			
3:00PM - 4:00PM				8									13	5	18			
4:00PM - 5:00PM		10											2	13	15 <- Roadway Peak*			
5:00PM - 6:00PM		6											5	11	16			
6:00PM - 7:00PM														5	5			
7:00PM - 8:00PM													0	0	0			
8:00PM - 9:00PM													0	0	0			
9:00PM - 10:00PM													0	0	0			
10:00PM - 11:00PM													60	0	60			
11:00PM - 12:00M									125				0	125	125			
	<u>16</u>	16	<u>8</u>	8	<u>4</u>	4	<u>140</u>	140	<u>125</u>	125	<u>60</u>	60	<u>56</u>	55	409 408 817 = Daily Trips			

NOTES:

- Assume Two (2) Tenants
- All trucks originate from offsite.
- Truck trailer storage at the site, no fleet parking
- Largest Shift Change overlap is Warehouse 1st to 2nd shift between 2pm-3pm: 125 (in) + 140 (out) = 265
- Lower Truck percentage is typ. due to truck operations scheduled to avoid peak periods.

Hudson Article II Traffic Regulations: Section 317-13 Trucks, commercial vehicles and heavy vehicles

No commercial truck traffic shall be permitted, except by special permit issued by the Town of Hudson, on any road in the Town of Hudson before 6:00 a.m. and after 7:00 p.m., unless otherwise specified under Subsection F, except on Route 111, Route 102, Route 3A and West Road.



November 15, 2022

Mr. Brian Groth
Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
Friars Drive Industrial Facility Amended Site Plan, 48 Friars Drive
Tax Map 209 Lot 1; Acct. #1350-975
Reference No. 20030249.2060

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the submission of the materials received on November 1, 2022, related to an amended site plan for the above-referenced project. 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 the development of a 504,000 square foot footprint (523,320 square feet with interior 2nd story office space) industrial/warehouse building project on a previously undeveloped site. Improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, lighting and other associated site improvements. The proposed building will be serviced by public water and sewer.

The current amended site plan includes revisions to truck loading docks, parking, and landscape areas to accommodate a tenant that will lease 75% of the facility. This project was previously reviewed by Fuss & O'Neill with our most recent letter dated January 19, 2022. Outstanding comments from that letter and their resolution are included below. Comments that had been previously addressed/closed are not included in this letter.

1. Site Plan Review Codes (HR 275)

- a. HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has revised the plan set to add 70 parking spaces for a total of 436 parking spaces. We note that the applicant had previously stated that the maximum employee count would be controlled by the building owner at 241 employees per shift to meet the 366 spaces previously provided. The applicant has noted in the traffic analysis that a total of 289 employees (both tenants, all shifts) are anticipated, so there will be adequate parking available.
- b. HR 275-8.C.(6). The applicant had previously noted that 51 loading spaces are required for the site. We note with the additional square footage, 53 spaces are now required, and the applicant has provided more loading spaces than are required. The applicant should check the total indicated in the addendum table on sheet 2, as the number shown on the plan appears to be 73 or 74, not the 66 noted in the table.

50 Commercial Street
Manchester, NH
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t 603.668.8223
800.286.2469
www.fando.com

California
Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont



Mr. Brian Groth
November 15, 2022
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- c. HR 275-9.C.(11). The applicant has provided twelve handicap spaces for the site which exceeds the nine spaces now required.

2. Administrative Review Codes (HR 276)

- a. HR 276-11.1.B.(6). The owner's signature is not shown on the plan set; however, a location has been shown on the plans for it to be added.
- b. HR 276-11.1.B.(13). The applicant has not included details for any proposed site signage. The applicant has shown a wall sign on the building but no details or dimensions were provided.

3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)

- a. The applicant has not shown any changes to the proposed driveway.

4. Traffic

- a. HR 275-9.B. We have reviewed the trip generation analysis memo prepared by TFMoran (TFM) dated October 21, 2022, for the proposed High-Cube Warehouse (HCW) building at 48 Friars Drive in Hudson, New Hampshire. The analysis includes a comparison of the traffic generated with a High-Cube Warehouse previously approved by the Hudson Planning Board in 2021 with the operations of a specific tenant that will occupy a 75% portion of the slightly enlarged facility. The previously approved site plan included 504,000 square feet of HCW, with the condition that all tenants would have trip generation characteristics typical of the HCW land use code described in the ITE Trip Generation Manual (Land Use Code 154). As part of the new traffic analysis, the proposed tenant for the site will occupy 397,320 square feet of the HCW facility and will generate trips based on empirical data provided by the tenant, while the remaining 126,000 square feet of the building is assumed to generate trips per ITE Land Use Code 154, consistent with the original approval.

The procedures that the TFM report uses are reasonable, with appropriate ITE trip generation information as well as empirical data from the tenant of the proposed HCW building used for the scenario provided. This trip generation information shows that the estimated magnitude of the increase in peak hour traffic volumes related to the updated site development are on the order of 14 trips during the weekday morning peak hour and 15 trips during the weekday evening peak hour. Most of the trips generated by the proposed HCW building are expected to be during off-peak hours, as the tenant of the proposed building has agreed to set their shift schedules to avoid the peak hours of the Lowell Road corridor as stated in the analysis.



Mr. Brian Groth
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However, while the analysis assumes the adjacent roadway peak hour to be between 4:00PM – 5:00PM, 208 trips are expected to be generated around the time of the 3:30PM shift change. According to the most recent counts taken at Count Station 82229073 on Lowell Road in August of 2020, which are available on the NHDOT Transportation Data Management website, the weekday evening peak hour along Lowell Road appears to be between 3:00PM – 4:00 PM for each weekday that counts were taken. We note that these counts were conducted two years ago and were during the height of the pandemic, but if the peak hour put forth by these counts is still accurate, adding 208 trips may have impacts on the adjacent roadway network.

According to the described count data, the difference in vehicles between the 3:00PM – 4:00PM and 4:00PM – 5:00PM hours is also not very large, suggesting that either hour may have similar impacts if adding 208 trips to the network. We suggest verifying this information. If it is agreed that the additional 208 trips to the network may have some impacts on the roadway network, we suggest considering further analysis of the project impacts or adjusting the weekday afternoon shift change timing to be during actual off-peak hours or off-peak hours with noticeably less traffic than the actual peak hour.

We agree that there will be minimal impacts on the adjacent roadway network during the weekday morning peak hour as a result of the HCW development, but we believe the weekday evening peak hour should ultimately be looked at more closely.

5. Utility Design/Conflicts

- a. The applicant has not proposed any changes to the site utility locations or sizes on the amended plan set.
- b. HR 275-9.E. The applicant has included sewer flow calculations for the facility that appear to be from their original NHDES sewer connection permit. The applicant has provided updated sewer flow calculations to the Town of Hudson to correspond to the number of employees for the proposed tenant and the other tenant space. The sewer allocation for this facility will be reviewed and approved by the Town Engineer.
- c. HR 275-9.G. The site will be connected to the municipal sewer system. As required by the Hudson Sewer Use Ordinance, if there is a manufacturing use at the facility the industry must complete an Industrial Pretreatment Permit application. This is not a requirement for site plan approval, but will be required prior to issuance of a certificate of occupancy. The applicant should coordinate with the Town to complete the Sewer Permit Application Screening Questionnaire/Checklist.

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

- a. HR 275-9.A.1 & 290-5 The applicant provided a written reasonable explanation for a reduction of impervious area and an increase in pervious area with this site plan amendment. The applicant should coordinate with the Town if a waiver is required from submitting drainage calculations to meet the Regulations.



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- b. HR 275-9.A.1 & 290-5. The applicant should review the grading on the large new parking area "Landscape Parking Lot C1" in the southwest of the lot shown on the Addendum Grading Plan Sheet 5. The 162.0 contour appears to cross itself and create an "X" to the left of CB-C9. The new parking spaces also appear to be within the 4.0% to 5.0% slope range between the 160 contour and the 161 contour near CB-C9. That slope may lead to car doors opening faster and denting adjacent vehicles.
- c. HR 290-6. The applicant has not included erosion and sediment control information with the amended site plans, including but not limited to: locations of perimeter controls, location of stockpiles, catch basin inlets, loam and seed details, winter stabilization notes, etc. The applicant should ensure all erosion control measures and information detailed in the original site plan drawings are incorporated into the amended site plan during construction.
- d. HR 290-8.A.10.A. The applicant should coordinate with NHDES and provide documentation to the Town showing that an amended AoT permit is not required.

7. Zoning (ZO 334)

- a. No comments at this time.

8. Erosion Control/Wetland Impacts

- a. The Town of Hudson should reserve the right to require any additional erosion control measures as needed.

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

- a. HR 275-8.C.(7). The applicant has met the landscaping requirements for parking lot areas. We note that some lots are single access lanes and therefore exempt, however, the applicant met the requirements in those lots as well.
- b. HR 276-11.1.B.(14). The applicant has not shown any revisions to the proposed site lighting fixture locations on the plans. We note that light poles were not shown on the revised plans to review for any conflicts.

10. State and Local Permits (HR 275-9.G.)

- a. HR 275-9.G. The applicant has not listed required permits and their statuses on the amended plan set.
- b. HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.
- c. Additional local and state permitting may be required, including for the proposed underground propane storage tanks.

11. Other

- a. We note that the amended plans provided do not stand alone as a plan set. The amended plans should be incorporated into the approved plan set for construction, and the applicant should coordinate with the Town for appropriate approval/filing copies. We note that the amended plans do not have legends, north arrows, or details.



Mr. Brian Groth
November 15, 2022
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- b. The applicant should provide a detail for the new brick areas shown on the plan set. We note that a brick detail was no provided on the original plan set.

The following items were outstanding issues from the previous review:

1. Site Plan Review Codes (HR 275)

- h. *New Fuss & O'Neill Comment: HR 275-6.T. The applicant has forwarded concept plans for off-site improvements adjacent to Lowell Road at the Friars Drive intersection. Review of those plans will be performed separately once design drawings have been received from the applicant.*
Former/Current Fuss & O'Neill Comment: The applicant has provided off-site improvements plans for review. Comments are provided below.
- i. **Former/Current Fuss & O'Neill Comment:** HR 275-6.T. The applicant has shown an easement right-of-way for the improvements. We note that the relocated utility pole is outside of that easement. The applicant should review the need for a separate utility easement for the pole and anchor.
- j. *Former Fuss & O'Neill Comment: HR 275-6.T. The applicant should review the need to relocate CB-13 against the proposed curb line. The current layout appears to put the catch basin in the wheel path of vehicles.*
Current Fuss & O'Neill Comment: The applicant as revised the catch basin to be a manhole and added a new catch basin along the cub line. No further Fuss & O'Neill comment.
- k. **Former/Current Fuss & O'Neill Comment:** HR 275-6.T. The applicant did not include the off-site improvements within the site plan set. We note that if it is meant to be a standalone plan then details should be added for the pavement, curb and utility relocations.

The following items required Town evaluation or input from our previous review:

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

- u. *Former Fuss & O'Neill Comment: Engineering Technical Guidelines and Typical Details (ETGTD) Section 930.13. Although this is not a public roadway cut section, due to some areas of significant cut upon the site (in the range of 10'-15'), the applicant should review the need for underdrain to help prolong the life of the pavement, drainage system, and building structures. The applicant should also comment on how this ground water, soon to be surface stormwater, is accounted for within the drainage calculations.*
Current/Former Fuss & O'Neill Comment: The applicant should keep the Town informed with any findings the geotechnical engineer uncovers during their evaluation. The suggestion of the addition of notes/locations of any future underdrains be placed onto the plans with tie-in information into catch basins, is an appropriate approach.



Mr. Brian Groth
November 15, 2022
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Please feel free to call if you have any questions.

Very truly yours,

A handwritten signature in blue ink, appearing to read 'Steve Reichert'.

Steven W. Reichert, P.E.

SWR:

Enclosure

cc: Town of Hudson Engineering Division – File
The Dubay Group – karl@thedubaygroup.com

5. **This application shall be subject to Town of Hudson water consultant review**

Refer to Item #4 above.

6. **Applicant shall comply with the Hudson Engineering construction specifications and standards, including water and sewer.**

Acknowledged, the approved plans include these specification references.

7. **All the above items shall be submitted and approved prior to Engineering recommendation to PB for approval.**

Acknowledged and in process.

8. **Applicant shall provide a detailed comparison / breakdown of staff and trips of the approved site plan and the current one, related to the traffic study**

The approved site plan from 2021 included a 504,000 SF high-cube, short term storage facility, ITE LUC 154. Based on the size of the building, ITE LUC 154 predicts 50 trips in the AM roadway peak hour, and 55 trips in the PM roadway peak hour.

The new site plan includes a 523,320 SF facility, that would generate 52 AM peak hour trips, and 57 trips in the PM roadway peak hour.

In the original study we also looked at total trips across the day, based on typical HCW shift schedules. In that study, a total of 353 employees was spread over three shifts, along with 56 trucks. In the course of a day therefore, 353 employees and 56 trucks entered and exited the site for a total of 818 daily trips (706 cars and 112 trucks).

The revised site plan is based on a 523,320 SF, high-cube, short term storage facility, ITE LUC 154. Utilizing ITE LUC 154 data, the estimated employees for two speculative tenants would be approximately 366 employees over three shifts and 58 trucks in and out of the site. Thus the total estimated daily trips equals 849 trips which includes 733 employee car trips and 116 truck trips.

In the revised site plan, because Tenant A is now known, we can base their daily traffic on an empirical shift schedule provided by the Tenant: Life is Good has 201 warehouse employees over two shifts and approximately 15 office employees that work a traditional office hours work schedule, for a total of 216 employees. Tenant A also expects an average of 8 trucks a day based on their existing warehouse operations throughout the region. Thus, Tenant A will generate 448 trips per day (432 cars and 16 trucks).

Because Tenant B remains unknown at this point, we based traffic volumes for the remaining 126,000 sf on LUC 154, resulting in approximately 88 employees over three shifts, and 14 trucks per day, for a total of 204 daily trips (176 cars and 28 trucks) due to Tenant B. Thus, the total number of employees for the revised site plan (Tenant A plus Tenant B) would be 304 employees, with 22 trucks entering and exiting per day. Since the original approval included a daily total of 353 employees and 56 trucks, the current proposal resents a reduction in both cars and trucks. Please refer to the Traffic Analysis Memorandum dated November 10, 2022 attached hereto for further details.

- a. The applicant has not shown any changes to the proposed driveway. **(No further action required.)**

4. Traffic

- a. HR 275-9.B. We have reviewed the trip generation analysis memo prepared by TFMoran (TFM) dated October 21, 2022, for the proposed High-Cube Warehouse (HCW) building at 48 Friars Drive in Hudson, New Hampshire. The analysis includes a comparison of the traffic generated with a High-Cube Warehouse previously approved by the Hudson Planning Board in 2021 with the operations of a specific tenant that will occupy a 75% portion of the slightly enlarged facility. The previously approved site plan included 504,000 square feet of HCW, with the condition that all tenants would have trip generation characteristics typical of the HCW land use code described in the ITE Trip Generation Manual (Land Use Code 154). As part of the new traffic analysis, the proposed tenant for the site will occupy 397,320 square feet of the HCW facility and will generate trips based on empirical data provided by the tenant, while the remaining 126,000 square feet of the building is assumed to generate trips per ITE Land Use Code 154, consistent with the original approval.

The procedures that the TFM report uses are reasonable, with appropriate ITE trip generation information as well as empirical data from the tenant of the proposed HCW building used for the scenario provided. This trip generation information shows that the estimated magnitude of the increase in peak hour traffic volumes related to the updated site development are on the order of 14 trips during the weekday morning peak hour and 15 trips during the weekday evening peak hour. Most of the trips generated by the proposed HCW building are expected to be during off-peak hours, as the tenant of the proposed building has agreed to set their shift schedules to avoid the peak hours of the Lowell Road corridor as stated in the analysis.

However, while the analysis assumes the adjacent roadway peak hour to be between 4:00PM – 5:00PM, 208 trips are expected to be generated around the time of the 3:30PM shift change. According to the most recent counts taken at Count Station 82229073 on Lowell Road in August of 2020, which are available on the NHDOT Transportation Data Management website, the weekday evening peak hour along Lowell Road appears to be between 3:00PM – 4:00 PM for each weekday that counts were taken. We note that these counts were conducted two years ago and were during the height of the pandemic, but if the peak hour put forth by these counts is still accurate, adding 208 trips may have impacts on the adjacent roadway network.

According to the described count data, the difference in vehicles between the 3:00PM – 4:00PM and 4:00PM – 5:00PM hours is also not very large, suggesting that either hour may have similar impacts if adding 208 trips to the network. We suggest verifying this information. If it is agreed that the additional 208 trips to the network may have some impacts on the roadway network, we suggest considering further analysis of the project impacts or adjusting the weekday afternoon shift change timing to be during actual off-peak hours or off-peak hours with noticeably less traffic than the actual peak hour.

We agree that there will be minimal impacts on the adjacent roadway network during the weekday morning peak hour as a result of the HCW development, but we believe the weekday evening peak hour should ultimately be looked at more closely.

Please refer to the Traffic Engineer’s response memo included with this memo.

5. Utility Design/Conflicts

- a. The applicant has not proposed any changes to the site utility locations or sizes on the amended plan set. **(No further action required.)**
- b. HR 275-9.E. The applicant has included sewer flow calculations for the facility that appear to be from their original NHDES sewer connection permit. The applicant has provided updated sewer flow calculations to the Town of Hudson to correspond to the number of employees for the proposed tenant and the other tenant space. The sewer allocation for this facility will be reviewed and approved by the Town Engineer. **Amended sewer permit calcs and package application were submitted, then approved by the Town Engineer and WWTF, and also reviewed by NHDES. The amended permit is being issued by NHDES now. The flows were reduced and there are no process/manufacturing flows.**
- c. HR 275-9.G. The site will be connected to the municipal sewer system. As required by the Hudson Sewer Use Ordinance, if there is a manufacturing use at the facility the industry must complete an Industrial Pretreatment Permit application. This is not a requirement for site plan approval, but will be required prior to issuance of a certificate of occupancy. The applicant should coordinate with the Town to complete the Sewer Permit Application Screening Questionnaire/Checklist. **There are no proposed process/manufacturing flows.**

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

- a. HR 275-9.A.1 & 290-5 The applicant provided a written reasonable explanation for a reduction of impervious area and an increase in pervious area with this site plan amendment. The applicant should coordinate with the Town if a waiver is required from submitting drainage calculations to meet the Regulations. **(The drainage study and calculations on file and approved still apply, no further action required.)**
- b. HR 275-9.A.1 & 290-5. The applicant should review the grading on the large new parking area "Landscape Parking Lot C1" in the southwest of the lot shown on the Addendum Grading Plan Sheet 5. The 162.0 contour appears to cross itself and create an "X" to the left of CB-C9. The new parking spaces also appear to be within the 4.0% to 5.0% slope range between the 160 contour and the 161 contour near CB-C9. That slope may lead to car doors opening faster and denting adjacent vehicles. **The 162 grade is flanking a mirrored high ridge via "X", we have added a 162.25 clarifying spot shot at the high ridge end south curb. None of the grades exceed 5% which is certainly industry standard for all parking lots, the specific commented area allows for the drainage to wrap around the curb avoiding puddling and retaining the overall panel grading previously approved.**
- c. HR 290-6. The applicant has not included erosion and sediment control information with the amended site plans, including but not limited to: locations of perimeter controls, location of stockpiles, catch basin inlets, loam and seed details, winter stabilization notes, etc. The applicant should ensure all erosion control measures and information detailed in the original site plan drawings are incorporated into the amended site plan during construction. **The construction phase SWPPP Plan and documents are currently active, and via the normal swPPP updates on site will be adjusted to reflect the amendments, which still coincide to the erosion control plans. For example, no catch basins were moved, the amendment reduces pavement, and there are no changes to the flows or perimeter construction or controls. The Town always reserves the right to require EC adjustments during their inspections as well.**

- d. HR 290-8.A.10.A. The applicant should coordinate with NHDES and provide documentation to the Town showing that an amended AoT permit is not required. **We have contacted the AOT reviewer to acknowledge the addendum, which is pending. As these minor revision areas eliminate interior pavement with no changes to the drainage design or perimeter work, the AOT reviewer would normally recognize the improvement with no further action.**
7. Zoning (ZO 334)
 - a. No comments at this time. **(No further action required.)**
8. Erosion Control/Wetland Impacts
 - a. The Town of Hudson should reserve the right to require any additional erosion control measures as needed. **Confirmed, refer to Item #6c as well.**
9. Landscaping (HR 275-8.C.(7) & 276-11.1.B.(20)) and Lighting (HR 276-11.1.B.(14))
 - a. HR 275-8.C.(7). The applicant has met the landscaping requirements for parking lot areas. We note that some lots are single access lanes and therefore exempt, however, the applicant met the requirements in those lots as well. **(No further action required.)**
 - b. HR 276-11.1.B.(14). The applicant has not shown any revisions to the proposed site lighting fixture locations on the plans. We note that light poles were not shown on the revised plans to review for any conflicts. **No site lighting changes are needed and we have copied the pole locations to the plan views.**
10. State and Local Permits (HR 275-9.G.)
 - a. HR 275-9.G. The applicant has not listed required permits and their statuses on the amended plan set. **State sewer permit revision block has been added to the plan. All other permits are in place via the master plan set on record.**
 - b. HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package. **All permit documentation is on file with the Town, a copy of the actual amended sewer permit will be provided (issuance expected imminently), as well as AOT conformance.**
 - c. Additional local and state permitting may be required, including for the proposed underground propane storage tanks. **The project does not use propane, and all permitting is in place relating to the site plan.**
11. Other
 - a. We note that the amended plans provided do not stand alone as a plan set. The amended plans should be incorporated into the approved plan set for construction, and the applicant should coordinate with the Town for appropriate approval/filing copies. We note that the amended plans do not have legends, north arrows, or details. **This addendum plan packet has been carefully coordinated with Town Staff as the most efficient and proper method to document the addendum to the master permit package on file.**

- 11b. The applicant should provide a detail for the new brick areas shown on the plan set. We note that a brick detail was not provided on the original plan set. **The brick paver paver detail has been added.**
1. Site Plan Review Codes (HR 275)
- h. *New Fuss & O'Neill Comment: HR 275-6.T. The applicant has forwarded concept plans for off-site improvements adjacent to Lowell Road at the Friars Drive intersection. Review of those plans will be performed separately once design drawings have been received from the applicant.* Former/Current Fuss & O'Neill Comment: The applicant has provided off-site improvements plans for review. Comments are provided below. **The plans were completed by the traffic engineer and reviewed by the Town Engineer.**
- i. Former/Current Fuss & O'Neill Comment: HR 275-6.T. The applicant has shown an easement right-of-way for the improvements. We note that the relocated utility pole is outside of that easement. The applicant should review the need for a separate utility easement for the pole and anchor. **The developer is finalizing confirmation of the exact pole placements directly from the utility companies, and will coordinate their standard pole easement documents employed for this type of relocation work. The pole relocations were always understood to be part of the slip lane project and to be accommodated as part of the overall development.**
- j. *Former Fuss & O'Neill Comment: HR 275-6.T. The applicant should review the need to relocate CB-13 against the proposed curb line. The current layout appears to put the catch basin in the wheel path of vehicles.* Current Fuss & O'Neill Comment: The applicant as revised the catch basin to be a manhole and added a new catch basin along the curb line. No further Fuss & O'Neill comment. **No further action required.**
- k. Former/Current Fuss & O'Neill Comment: HR 275-6.T. The applicant did not include the off-site improvements within the site plan set. We note that if it is meant to be a standalone plan then details should be added for the pavement, curb and utility relocations. **The traffic engineer's off-site improvements were coordinated with and approved by the Town Engineer as a separate plan set which included the requisite detailing.**
6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)
- u. *Former Fuss & O'Neill Comment: Engineering Technical Guidelines and Typical Details (ETGTD) Section 930.13. Although this is not a public roadway cut section, due to some areas of significant cut upon the site (in the range of 10'-15'), the applicant should review the need for underdrain to help prolong the life of the pavement, drainage system, and building structures. The applicant should also comment on how this ground water, soon to be surface stormwater, is accounted for within the drainage calculations.* Current/Former Fuss & O'Neill Comment: The applicant should keep the Town informed with any findings the geotechnical engineer uncovers during their evaluation. The suggestion of the addition of notes/locations of any future underdrains be placed onto the plans with tie-in information into catch basins, is an appropriate approach. **These have been addressed with the ongoing construction as outlined in the master construction documents. We understand that the overall earthworks in the cut areas are nearing completion, with no evidence of groundwater that would have initiated additional underdrains.**



MEMORANDUM

Date: November 29, 2022
To: Brian Groth, Town Planner
Town of Hudson
From: Bob Duval, PE
Jen Porter, PE
Project: Friars Drive Industrial Facility Amended Site Plan
48 Friars Drive, Hudson NH
Subject: F&O Traffic Review – TFM Response

We have received the Traffic review comments from Fuss & O'Neill dated November 15, 2022 (Item #4) and offer the following response. The pertinent part of the F&O comment is copied below, following our response in bold type:

F&O Comment:

4. Traffic

The procedures that the TFM report uses are reasonable, with appropriate ITE trip generation information as well as empirical data from the tenant of the proposed HCW building used for the scenario provided. This trip generation information shows that the estimated magnitude of the increase in peak hour traffic volumes related to the updated site development are on the order of 14 trips during the weekday morning peak hour and 15 trips during the weekday evening peak hour. Most of the trips generated by the proposed HCW building are expected to be during off-peak hours, as the tenant of the proposed building has agreed to set their shift schedules to avoid the peak hours of the Lowell Road corridor as stated in the analysis.

However, while the analysis assumes the adjacent roadway peak hour to be between 4:00PM – 5:00PM, 208 trips are expected to be generated around the time of the 3:30PM shift change. According to the most recent counts taken at Count Station 82229073 on Lowell Road in August of 2020, which are available on the NHDOT Transportation Data Management website, the weekday evening peak hour along Lowell Road appears to be between 3:00PM – 4:00 PM for each weekday that counts were taken. We note that these counts were conducted two years ago and were during the height of the pandemic, but if the peak hour put forth by these counts is still accurate, adding 208 trips may have impacts on the adjacent roadway network.

According to the described count data, the difference in vehicles between the 3:00PM – 4:00PM and 4:00PM – 5:00PM hours is also not very large, suggesting that either hour may have similar impacts if adding 208 trips to the network. We suggest verifying this information. If it is agreed that the additional 208 trips to the network may have some impacts on the roadway network, we suggest considering further analysis of the project impacts or adjusting the weekday afternoon shift change timing to be during actual off-peak hours or off-peak hours with noticeably less traffic than the actual peak hour.

We agree that there will be minimal impacts on the adjacent roadway network during the weekday morning peak hour as a result of the HCW development, but we believe the weekday evening peak hour should ultimately be looked at more closely.

TFM Response:

It is agreed that the AM peak hour will not be adversely impacted by the Friars Drive project.

In regard to PM peak hour traffic volumes along the Lowell Road corridor, we evaluated the two NHDOT MS2 stations within the study area; one at the southern end on Lowell Road between Flagstone and the bridge, and the other at the northern end between Pelham Road and Fox Hollow Drive.

The two most recent counts at these stations were taken in 2020 and 2017. However we believe the 2020 counts are skewed due to transient Covid effects. We therefore used the pre-Covid (higher) 2017 data, and averaged all counts to determine the appropriate PM corridor peak. The attached MS2 data shows PM peak volumes occur during the 4pm-5pm hour.¹

Comparing the MS2 average peak volumes at 4pm-5pm with the volumes recorded at 3pm-4pm, we find there were 218 fewer vehicles at the south end, and 36 fewer vehicles at the north end in the 3pm-4pm hour. The site trip distribution for the new tenant mix shows 178 new trips to/from the south, and 32 new trips to/from the north. That is, the total volumes at 3pm-4pm - including the proposed shift change - will have slightly fewer total trips than recorded at the actual (4pm-5pm) peak hour.

For the sake of conservatism, we also analyzed the effects of having the full shift-change traffic present during the actual PM roadway peak hour of the corridor per the approved traffic study. The results are shown below in Table 4a & 4b.

While the tables show the additional 208 shift-change trips will have some impacts on the roadway network, these impacts are not significant; there are no drops in overall LOS, overall delay change is a few seconds, and queue lengths are increased by one or two cars over the previously-approved values.

On the basis of these results, we conclude that traffic impacts due to the proposed tenant mix at shift change are minimal, even if that occurs during the actual PM roadway peak hour.

In conclusion, we find that adjusting the PM shift change to off- peak hours does not provide any significant benefit to corridor operations. However, signal timing adjustments at the Executive Drive intersection as recommended in the approved traffic study will provide a benefit to that intersection as well as overall corridor operations.

TFMoran, Inc.
Robert Duval, PE
Chief Engineer

¹ It should also be noted that the Langan "Hudson Logistics" study identified the roadway peak PM hour starting at 4:15pm. Those counts were done in October of 2019, also prior to the pandemic. That study was used as the basis for the approved study for this project, as directed by the Town.

Table 4a 2022 PM Peak Hour
Level of Service Analysis Summary

Location/ Peak Hour	APPROVED				TENANT #1 UPDATE				TENANT #1 UPDATE			
	2022 Build				2022 Build				2022 Build Mit			
Movement	v/c ^a	Del. ^b	LOS ^c	Q ^d	v/c ^a	Del. ^b	LOS ^c	Q ^d	v/c ^a	Del. ^b	LOS ^c	Q ^d

9: Lowell Road (3A) at Pelham Road

PM OVERALL -	0.93	55.1	E	---	0.94	57.3	E	---	---	---
WB L	0.73	102.1	F	184	0.73	102.1	F	184	No Timing Mitigation Recommended	
WB R	0.13	57.2	E	78	0.13	57.2	E	78		
NB TR	1.06	78.6	E	2205	1.08	82.8	F	2245		
SB L	0.53	78.6	E	384	0.53	78.6	E	384		
SB T	0.55	8.2	A	754	0.55	8.3	A	773		

8: Lowell Road (3A) at Fox Hollow Drive/Plaza

PM OVERALL -	0.56	18.0	B	---	0.57	17.8	B	---	---	---
EB LT	0.20	82.8	F	39	0.22	83.4	F	40	No Timing Mitigation Recommended	
EB R	0.02	81.5	F	0	0.02	82.1	F	0		
WB LT	0.55	88.3	F	80	0.59	93.3	F	81		
WB R	0.04	67.3	E	34	0.04	68.6	E	36		
NB L	0.50	88.5	F	70	0.50	88.5	F	70		
NB TTR	0.50	10.8	B	590	0.50	10.2	B	540		
SB L	0.60	89.4	F	124	0.66	96.3	F	134		
SB TR	0.56	10.8	B	810	0.57	10.7	B	791		

10: Lowell Road (3A) at Friars Drive

PM OVERALL	---	0.2	A	---	---	---	---	---
EB R	0.11	16.3	C	10				

7: Lowell Road (3A) at Executive Drive/PMA Drive

PM OVERALL -	0.75	21.1	C	---	0.77	23.4	C	---	---	---
EB LT	0.86	42.6	D	286	0.94	59.0	E	307	Timing Mitigation Recommended	
EB R	0.06	11.9	B	21	0.06	12.7	B	21		
WB LT	0.09	19.7	B	33	0.10	21.0	C	34		
WB R	0.02	19.3	B	0	0.02	20.5	C	0		
NB L	0.49	33.6	C	72	0.58	37.5	D	86		
NB TTR	0.65	16.1	B	282	0.63	15.6	B	282		
SB L	0.71	92.3	F	29	0.68	84.1	F	29		
SB TTR	0.61	18.4	B	228	0.65	19.1	B	260		

^a Volume-to-capacity ratio - ^b Average control delay (sec/veh) - ^c Level of service - ^d 95th percentile queue in feet

Table 4b 2022 PM Peak Hour
Level of Service Analysis Summary

Location/ Peak Hour	APPROVED				TENANT #1 UPDATE				TENANT #1 UPDATE			
	2022 Build				2022 Build				2022 Build Mit			
	v/c ^a	Del. ^b	LOS ^c	Q ^d	v/c ^a	Del. ^b	LOS ^c	Q ^d	v/c ^a	Del. ^b	LOS ^c	Q ^d

6: Lowell Road (3A) at Hampshire Drive/Oblate Drive

PM OVERALL -	0.56	14.8	B	---	0.56	15.0	B	---	---	---
EB LT	0.37	32.7	C	47	0.39	34.5	C	48	No Timing Mitigation Recommended	
EB R	0.08	24.8	C	26	0.08	26.0	C	26		
WB LT	0.22	36.9	D	24	0.23	38.7	D	24		
WB R	0.00	28.6	C	0	0.00	30.2	C	0		
NB L	0.14	32.4	C	33	0.18	33.9	C	38		
NB TTR	0.62	12.3	B	337	0.61	11.9	B	343		
SB L	0.33	40.5	D	16	0.35	42.7	D	16		
SB TTR	0.62	15.0	B	275	0.65	15.4	B	313		

5: Lowell Road (3A) at Flagstone Drive/Wason Road

PM OVERALL -	0.86	35.1	D	---	0.86	35.7	D	---	---	---
EB LT	0.79	67.8	E	188	0.79	67.8	E	188	No Timing Mitigation Recommended	
EB R	0.81	45.3	D	366	0.81	44.9	D	366		
WB L	0.83	64.4	E	344	0.84	66.2	E	344		
WB LT	0.83	63.4	E	343	0.84	65.2	E	343		
WB R	0.02	34.6	C	0	0.02	34.8	C	0		
NB L	0.44	57.9	E	145	0.51	58.7	E	166		
NB TT	0.73	28.0	C	253	0.74	27.5	C	253		
NB RR	0.44	5.2	A	25	0.44	4.9	A	24		
SB L	0.76	80.4	F	123	0.76	80.4	F	123		
SB TTR	0.71	40.8	D	334	0.77	42.7	D	375		

4: Lowell Road (3A) at Sagamore Bridge

PM OVERALL -	1.12	41.0	D	---	1.14	43.5	D	---	---	---
EB LL	1.08	84.0	F	830	1.11	94.9	F	866	No Timing Mitigation Recommended	
EB R	0.90	8.4	A	5	0.90	8.4	A	5		
NB LLL	1.05	73.8	E	523	1.05	73.8	E	523		
NB TT	0.41	14.9	B	227	0.41	15.0	B	231		
SB TT	0.95	64.5	E	348	0.97	67.1	E	360		
SB RR	0.51	0.4	A	48	0.53	0.4	A	86		

^a Volume-to-capacity ratio - ^b Average control delay (sec/veh) - ^c Level of service - ^d 95th percentile queue in feet

Based



December 21, 2022

Mr. Brian Groth
Town Planner
Town of Hudson
12 School Street
Hudson, NH 03051

Re: Town of Hudson Planning Board Review
Friars Drive Industrial Facility Amended Site Plan, 48 Friars Drive
Tax Map 209 Lot 1; Acct. #1350-975
Reference No. 20030249.2060

Dear Mr. Groth:

Fuss & O'Neill (F&O) has reviewed the submission of the materials received on November 30, 2022, related to an amended site plan for the above-referenced project. 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 the development of a 504,000 square foot footprint (523,320 square feet with interior 2nd story office space) industrial/warehouse building project on a previously undeveloped site. Improvements to the site also include the construction of a driveway, parking areas, drainage improvements, landscaping, lighting and other associated site improvements. The proposed building will be serviced by public water and sewer.

The current amended site plan includes revisions to truck loading docks, parking, and landscape areas to accommodate a tenant that will lease 75% of the facility.

1. Site Plan Review Codes (HR 275)

- a. *HR 275-8.C.(2) and Zoning Ordinance (ZO) 334-15.A. The applicant has revised the plan set to add 70 parking spaces for a total of 436 parking spaces. We note that the applicant had previously stated that the maximum employee count would be controlled by the building owner at 241 employees per shift to meet the 366 spaces previously provided. The applicant has noted in the traffic analysis that a total of 289 employees (both tenants, all shifts) are anticipated, so there will be adequate parking available.*
- b. *Former Fuss & O'Neill Comment: HR 275-8.C.(6). The applicant had previously noted that 51 loading spaces are required for the site. We note with the additional square footage, 53 spaces are now required, and the applicant has provided more loading spaces than are required. The applicant should check the total indicated in the addendum table on sheet 2, as the number shown on the plan appears to be 73 or 74, not the 66 noted in the table.*

Current Fuss & O'Neill Comment: The applicant has updated the final loading dock count to 73 on the plans. No further Fuss & O'Neill comment.
- c. *HR 275-9.C.(11). The applicant has provided twelve handicap spaces for the site which exceeds the nine spaces now required.*

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Mr. Brian Groth
 December 21, 2022
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2. Administrative Review Codes (HR 276)

- a. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(6). The owner's signature is not shown on the plan set; however, a location has been shown on the plans for it to be added.*

Current Fuss & O'Neill Comment: The applicant has included the owner's signature on the plan. No further Fuss & O'Neill comment.

- b. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(13). The applicant has not included details for any proposed site signage. The applicant has shown a wall sign on the building but no details or dimensions were provided.*

Current Fuss & O'Neill Comment: The applicant has noted that wall and freestanding signs will be addressed via the Town's sign permit application and review process. No further Fuss & O'Neill comment.

3. Driveway Review Codes (HR 275-8.B. (34)/Chapter 193)

- a. *The applicant has not shown any changes to the proposed driveway.*

4. Traffic

- a. *Former Fuss & O'Neill Comment: HR 275-9.B. We have reviewed the trip generation analysis memo prepared by TFMoran (TFM) dated October 21, 2022, for the proposed High-Cube Warehouse (HCW) building at 48 Friars Drive in Hudson, New Hampshire. The analysis includes a comparison of the traffic generated with a High-Cube Warehouse previously approved by the Hudson Planning Board in 2021 with the operations of a specific tenant that will occupy a 75% portion of the slightly enlarged facility. The previously approved site plan included 504,000 square feet of HCW, with the condition that all tenants would have trip generation characteristics typical of the HCW land use code described in the ITE Trip Generation Manual (Land Use Code 154). As part of the new traffic analysis, the proposed tenant for the site will occupy 397,320 square feet of the HCW facility and will generate trips based on empirical data provided by the tenant, while the remaining 126,000 square feet of the building is assumed to generate trips per ITE Land Use Code 154, consistent with the original approval.*

The procedures that the TFM report uses are reasonable, with appropriate ITE trip generation information as well as empirical data from the tenant of the proposed HCW building used for the scenario provided. This trip generation information shows that the estimated magnitude of the increase in peak hour traffic volumes related to the updated site development are on the order of 14 trips during the weekday morning peak hour and 15 trips during the weekday evening peak hour. Most of the trips generated by the proposed HCW building are expected to be during off-peak hours, as the tenant of the proposed building has agreed to set their shift schedules to avoid the peak hours of the Lowell Road corridor as stated in the analysis.

However, while the analysis assumes the adjacent roadway peak hour to be between 4:00PM – 5:00PM, 208 trips are expected to be generated around the time of the 3:30PM shift change. According to the most recent counts taken at Count Station 82229073 on Lowell Road in August of 2020, which are available on the NHDOT Transportation Data Management website, the weekday evening peak hour along Lowell



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December 21, 2022
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Road appears to be between 3:00PM – 4:00 PM for each weekday that counts were taken. We note that these counts were conducted two years ago and were during the height of the pandemic, but if the peak hour put forth by these counts is still accurate, adding 208 trips may have impacts on the adjacent roadway network.

According to the described count data, the difference in vehicles between the 3:00PM – 4:00PM and 4:00PM – 5:00PM hours is also not very large, suggesting that either hour may have similar impacts if adding 208 trips to the network. We suggest verifying this information. If it is agreed that the additional 208 trips to the network may have some impacts on the roadway network, we suggest considering further analysis of the project impacts or adjusting the weekday afternoon shift change timing to be during actual off-peak hours or off-peak hours with noticeably less traffic than the actual peak hour.

We agree that there will be minimal impacts on the adjacent roadway network during the weekday morning peak hour as a result of the HCW development, but we believe the weekday evening peak hour should ultimately be looked at more closely.

Current Fuss & O'Neill Comment: The applicant has provided a response memorandum from TF Moran that adequately addresses our concerns related to the afternoon peak hour and tenant mix at shift changes, including the conclusion that adjusting the PM shift change to off-peak hours does not provide any significant benefit to corridor operations. No further Fuss & O'Neill comment.

5. Utility Design/Conflicts

- a. *The applicant has not proposed any changes to the site utility locations or sizes on the amended plan set.*
- b. *Former Fuss & O'Neill Comment: HR 275-9.E. The applicant has included sewer flow calculations for the facility that appear to be from their original NHDES sewer connection permit. The applicant has provided updated sewer flow calculations to the Town of Hudson to correspond to the number of employees for the proposed tenant and the other tenant space. The sewer allocation for this facility will be reviewed and approved by the Town Engineer.*

Current Fuss & O'Neill Comment: The applicant has noted that amended sewer permit calculations and application package were submitted to the Town and approved, and also reviewed by the NHDES. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comment: HR 275-9.G. The site will be connected to the municipal sewer system. As required by the Hudson Sewer Use Ordinance, if there is a manufacturing use at the facility the industry must complete an Industrial Pretreatment Permit application. This is not a requirement for site plan approval, but will be required prior to issuance of a certificate of occupancy. The applicant should coordinate with the Town to complete the Sewer Permit Application Screening Questionnaire/ Checklist.*

Current Fuss & O'Neill Comment: The applicant has noted that there are no proposed process/manufacturing flows. Completion of the Sewer Permit Application Screening Questionnaire/Checklist will need to be completed during the site building permitting process. No further Fuss & O'Neill comment.



Mr. Brian Groth
December 21, 2022
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6. Drainage Design/Stormwater Management (HR 275-9.A./Chapter 290)

- a. *Former Fuss & O'Neill Comment: HR 275-9.A.1 & 290-5 The applicant provided a written reasonable explanation for a reduction of impervious area and an increase in pervious area with this site plan amendment. The applicant should coordinate with the Town if a waiver is required from submitting drainage calculations to meet the Regulations.*

Current Fuss & O'Neill Comment: The applicant has noted that the drainage study and calculations on file and approved still apply, and that no further action is required. No further Fuss & O'Neill comment.

- b. *Former Fuss & O'Neill Comment: HR 275-9.A.1 & 290-5. The applicant should review the grading on the large new parking area "Landscape Parking Lot C1" in the southwest of the lot shown on the Addendum Grading Plan Sheet 5. The 162.0 contour appears to cross itself and create an "X" to the left of CB-C9. The new parking spaces also appear to be within the 4.0% to 5.0% slope range between the 160 contour and the 161 contour near CB-C9. That slope may lead to car doors opening faster and denting adjacent vehicles.*

Current Fuss & O'Neill Comment: The applicant has noted that none of the grades exceed 5% which is industry standard maximum for parking lots, and for the specific area in the comment this allows for drainage to wrap around the adjacent curb to avoid puddling and retain the overall panel grading previously approved. No further Fuss & O'Neill comment.

- c. *Former Fuss & O'Neill Comment: HR 290-6. The applicant has not included erosion and sediment control information with the amended site plans, including but not limited to: locations of perimeter controls, location of stockpiles, catch basin inlets, loam and seed details, winter stabilization notes, etc. The applicant should ensure all erosion control measures and information detailed in the original site plan drawings are incorporated into the amended site plan during construction.*

Current Fuss & O'Neill Comment: The applicant has noted that construction phase SWPPP plan and documents are currently active and will be adjusted to reflect any amendments via normal SWPPP updates and coincide with the erosion control plans. No further Fuss & O'Neill comment.

- d. *Former Fuss & O'Neill Comment: HR 290-8.A.10.A. The applicant should coordinate with NHDES and provide documentation to the Town showing that an amended AoT permit is not required.*

Current Fuss & O'Neill Comment: The applicant has noted that they have contacted the NHDES to acknowledge the addendum. Copies of any documentation related to the AoT should be provided to the Town for their records. No further Fuss & O'Neill comment.

7. Zoning (ZO 334)

- a. *No comments at this time.*

8. Erosion Control/Wetland Impacts

- a. *The Town of Hudson should reserve the right to require any additional erosion control measures as needed.*

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

- a. *HR 275-8.C.(7). The applicant has met the landscaping requirements for parking lot areas. We note that some lots are single access lanes and therefore exempt, however, the applicant met the requirements in those lots as well.*



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December 21, 2022
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- b. *Former Fuss & O'Neill Comment: HR 276-11.1.B.(14). The applicant has not shown any revisions to the proposed site lighting fixture locations on the plans. We note that light poles were not shown on the revised plans to review for any conflicts.*
Current Fuss & O'Neill Comment: The applicant has noted that no site lighting changes are needed with the amended site plans and they have copied the pole locations to the plan views. No further Fuss & O'Neill comment.

10. State and Local Permits (HR 275-9.G.)

- a. *Former Fuss & O'Neill Comment: HR 275-9.G. The applicant has not listed required permits and their statuses on the amended plan set.*
Current Fuss & O'Neill Comment: The applicant has added a permit revision block to the plan. No further Fuss & O'Neill comment.
- b. *Former Fuss & O'Neill Comment: HR 275-9.G. The applicant did not provide copies of any applicable Town, State or Federal approvals or permits in the review package.*
Current Fuss & O'Neill Comment: The applicant has noted that all permit documentation is on file with the Town. No further Fuss & O'Neill comment.
- c. *Additional local and state permitting may be required, including for the proposed underground propane storage tanks.*

11. Other

- a. *Former Fuss & O'Neill Comment: We note that the amended plans provided do not stand alone as a plan set. The amended plans should be incorporated into the approved plan set for construction, and the applicant should coordinate with the Town for appropriate approval/filing copies. We note that the amended plans do not have legends, north arrows, or details.*
Current Fuss & O'Neill Comment: The applicant has noted that the amended plans have been coordinated with the Town and are an addendum to the master permit package on file. No further Fuss & O'Neill comment.
- b. *Former Fuss & O'Neill Comment: The applicant should provide a detail for the new brick areas shown on the plan set. We note that a brick detail was no provided on the original plan set.*
Current Fuss & O'Neill Comment: The applicant has added a brick paver detail to the plans. No further Fuss & O'Neill comment.

The following items were outstanding issues from previous reviews:

1. Site Plan Review Codes (HR 275)

- h. *Former Fuss & O'Neill Comments: HR 275-6.T. The applicant has forwarded concept plans for off-site improvements adjacent to Lowell Road at the Friars Drive intersection. Review of those plans will be performed separately once design drawings have been received from the applicant. / The applicant has provided off-site improvements plans for review. Comments are provided below.*
- i. *Former Fuss & O'Neill Comment: HR 275-6.T. The applicant has shown an easement right-of-way for the improvements. We note that the relocated utility pole is outside of that easement. The applicant should*



Mr. Brian Groth
December 21, 2022
Page 6 of 6

review the need for a separate utility easement for the pole and anchor.

Current Fuss & O'Neill Comment: The applicant has noted that they are finalizing confirmation of exact pole placements with the utility companies and will coordinate easement documents for this work. The applicant should provide copies of all executed easements to the Town for their records. No further Fuss & O'Neill comment.

- j. *Former Fuss & O'Neill Comment: HR 275-6.T. The applicant should review the need to relocate CB-13 against the proposed curb line. The current layout appears to put the catch basin in the wheel path of vehicles.*

Current Fuss & O'Neill Comment: The applicant as revised the catch basin to be a manhole and added a new catch basin along the curb line. No further Fuss & O'Neill comment.

- k. *Former Fuss & O'Neill Comment: HR 275-6.T. The applicant did not include the off-site improvements within the site plan set. We note that if it is meant to be a standalone plan then details should be added for the pavement, curb and utility relocations.*

Current Fuss & O'Neill Comment: The applicant has noted that the off-site improvements were coordinated with and approved by the Town Engineer as a separate plan set which included the requisite detailing. No further Fuss & O'Neill comment.

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

- u. *Former Fuss & O'Neill Comments: Engineering Technical Guidelines and Typical Details (ETGTD) Section 930.13. Although this is not a public roadway cut section, due to some areas of significant cut upon the site (in the range of 10'-15'), the applicant should review the need for underdrain to help prolong the life of the pavement, drainage system, and building structures. The applicant should also comment on how this ground water, soon to be surface stormwater, is accounted for within the drainage calculations. / The applicant should keep the Town informed with any findings the geotechnical engineer uncovers during their evaluation. The suggestion of the addition of notes/ locations of any future underdrains be placed onto the plans with tie-in information into catch basins, is an appropriate approach.*

Current Fuss & O'Neill Comment: The applicant has noted that this is being addressed with the ongoing construction, and that no evidence of groundwater that would initiate additional underdrains has been found during earthworks at the site. 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
The Dubay Group – karl@thedubaygroup.com



TOWN OF HUDSON

Planning Board

Timothy Malley, Chairman Marilyn McGrath, Selectmen Liaison



12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6008 · Fax: 603-594-1142

NOTICE OF APPROVAL

March 30, 2022

Owner or Applicant: 5 WAY REALTY TRUST
 PETER HORNE, TRUSTEE
 P.O. BOX 1435
 NOTH HAMPTON, NH 03862

LOWELL ROAD PROPERTY OWNER LLC
STEVEN E. GOODMAN
133 PEARL STREET #300
BOSTON, MA 02110

On Wednesday, March 23, 2022, the Hudson Planning Board heard subject case **SP# 10-21 “Friars Drive Industrial Facility”**.

SUBJECT: PURPOSE OF PLAN: TO PROPOSE A SITE PLAN FOR A 504,000 SQUARE FOOT WAREHOUSE BUILDING.

LOCATION: 161 LOWELL ROAD, MAP 209/LOT 001-000

On October 20, 2021, The Planning Board accepted the site plan application for 161 Lowell Road; Tax Map 209/Lot 001-000.

WAIVERS GRANTED:

- On December 15, 2021, The Planning Board granted a waiver from §275-8:C(2), to allow for a reduction in required parking spaces, 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.

APPROVAL GRANTED:

On March 23, 2022 the Planning Board granted approval for: Site Plan, Friars Drive, Parcel 209-001-000, @ Sagamore Industrial Park, Hudson, New Hampshire; prepared by the Dubai Group, Inc., 136 Harvey Rd, Bldg B101, Londonderry, NH 03053; prepared for owners: GFI Partners / Lowell Road Property Owner, LLC, 133 Pearl Street #300, Boston, MA 02110 & 5 Way Realty Trust (Peter Horne, Trustee) PO Box 1435, N. Hampton, NH 03862; consisting of 97 sheets (including proposed elevations prepared by aF+S), with general notes 1-10 on Sheet 4; dated August 3, 2021, last revised January 11, 2022; subject to, and revised per, the following stipulations:

1. All stipulations of approval shall be incorporated into the Development Agreement, which shall be recorded at the HCRD, together with the Plan and the protective covenants.
2. All improvements shown on the Plan, including notes 1-10 on Sheet 4, shall be completed in their entirety and at the expense of the applicant or the applicant's assigns.
3. Prior to the issuance of a final certificate of occupancy, an LLS Certified "as-built" site plan shall be provided to the Town of Hudson Land Use Division, confirming that the site conforms to the Plan approved by the Planning Board.
4. A cost allocation procedure (CAP) amount of \$357,840.00 shall be paid prior to the issuance of a Certificate of Occupancy.
5. Applicant shall provide in depth detail of the right-turn slip lane that exits Lowell Road onto Friars Drive including soil testing and cross section of the slip lane, which will be subject to final approval by Engineering & Public Works Department. The design and construction of this off-site improvement will be completed at the expense of the applicant or the applicant's assigns. This work shall be completed prior to issuance of a certificate of occupancy.
6. A note shall be added to the plan stating: "There shall be no overnight occupancy of trucks on site. Vehicle idling shall comply with the requirements of Env-A 1100, as amended."
7. The onsite drainage system shall be constructed and maintained in compliance with NHDES requirements for such systems.
8. Prior to the Planning Board endorsement of the Plan, it shall be subject to final administrative review by Town Planner and Town Engineer.
9. Construction activities involving the subject lot shall be limited to the hours between 7:00 A.M. and 7:00 P.M. No exterior construction activities shall be allowed on Sundays.
10. Hours of refuse removal shall be exclusive to the hours between 7:00 A.M. and 7:00 P.M., Monday through Friday only.
11. Between the hours of 7pm and 6am the Applicant agrees to employ electric terminal tractors, also known as yard trucks.
12. All terminal tractors shall be equipped with smart, ambient sensing, multi-frequency back-up alarms.
13. Applicant shall maintain fences on a regular basis.
14. A note shall be added to the plan stating that stumps will not be buried on site and the berm will be made of soil.

Signed: _____ Date: _____
 Brian Groth, Town Planner

cc: The Dubay Group, Inc.

From: Dhima, Elvis
Sent: Friday, November 18, 2022 1:27 PM
To: Hayley Palazola; Groth, Brian
Cc: Dubowik, Brooke; Karl Dubay; Robert Duval; etspe@outlook.com
Subject: RE: Dept Sign Off - 48 Friars Dr. Industrial Site Plan SP# 15-22

Thank you Hayley

Brian, ENG has no further comments

E

Elvis Dhima, P.E.
Town Engineer

12 School Street
Hudson, NH 03051
Phone: (603) 886-6008
Mobile: (603) 318-8286



From: Hayley Palazola <hpalazola@gfipartners.com>
Sent: Friday, November 18, 2022 12:54 PM
To: Groth, Brian <bgroth@hudsonnh.gov>; Dhima, Elvis <edhima@hudsonnh.gov>
Cc: Dubowik, Brooke <bdubowik@hudsonnh.gov>; Karl Dubay <karl@thedubaygroup.com>; Robert Duval <rduval@tfmoran.com>; etspe@outlook.com
Subject: RE: Dept Sign Off - 48 Friars Dr. Industrial Site Plan SP# 15-22

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

Good Afternoon Brian & Elvis,

On behalf of Lowell Road Property Owner DE, LLC, I am attaching the team's response memo to the Town Engineering comments.

Thank you,



Hayley Palazola
Vice President of Development

O: (617) 292-0101
M: (303) 250-3498
hpalazola@gfipartners.com
133 Pearl Street Suite 300
Boston, MA 02110
www.gfipartners.com

From: Dhima, Elvis
Sent: Thursday, November 3, 2022 10:31 AM
To: Dubowik, Brooke; Groth, Brian
Subject: RE: Dept Sign Off - 48 Friars Dr. Industrial Site Plan SP# 15-22

Please see below another comment

8. Applicant shall provide a detailed comparison / breakdown of staff and trips of the approved site plan and the current one, related to the traffic study

Elvis Dhima, P.E.
Town Engineer

12 School Street
Hudson, NH 03051
Phone: (603) 886-6008
Mobile: (603) 318-8286



From: Dhima, Elvis
Sent: Tuesday, November 1, 2022 3:53 PM
To: Dubowik, Brooke <dubowik@hudsonnh.gov>; Groth, Brian <bgroth@hudsonnh.gov>
Subject: RE: Dept Sign Off - 48 Friars Dr. Industrial Site Plan SP# 15-22

Please see below

1. Applicant shall provide a comparison / breakdown of staff of the approved site plan and the current one
2. Applicant shall provide detailed information regarding water demands related to staff
3. Applicant shall provide detailed information regarding sewer demands and revised state permits / full breakdown of square footage and number of employees
4. Applicant shall provide full design of the water system, including fire suppression/storage tank
5. This application shall be subject to Town of Hudson water consultant review
6. Applicant shall comply with the Hudson Engineering construction specifications and standards, including water and sewer.
7. All the above items shall be submitted and approved prior to Engineering recommendation to PB for approval.

Thanks

E

Elvis Dhima, P.E.
Town Engineer

12 School Street
Hudson, NH 03051
Phone: (603) 886-6008
Mobile: (603) 318-8286

SITE PLAN APPLICATION

Date of Application: October 28, 2022 Tax Map #: 209 Lot #: 001-000
 Site Address: 48 Friars Drive
 Name of Project: 48 Friars Drive Industrial Site Plan - Tenant Addendum
 Zoning District: Industrial & General General SP#: 15-22
 (For Town Use Only)
 Z.B.A. Action: (none for the recently-approved site plan, and none proposed)

PROPERTY OWNER:

Name: Lowell Road Property Owner DE, LLC
 Address: 133 Pearl Street, Suite 300
 Address: Boston, MA 02110
 Telephone # (303)250-3498 (direct)
 Email: hpalazola@gfipartners.com
 (Hayley Palazola, VP of Development)

DEVELOPER:

(same as owner)

PROJECT ENGINEER:

Name: Karl Dubay, The Dubay Group, Inc.
 Address: 136 Harvey Rd Bldg B101
 Address: Londonderry, NH 03053
 Telephone # 603-247-8766 (direct)
 Email: karl@thedubaygroup.com

SURVEYOR:

Joel Connolly, The Dubay Group, Inc.
136 Harvey Rd Bldg B101
Londonderry, NH 03053
603-315-8763 (direct)
joel@thedubaygroup.com

PURPOSE OF PLAN:

Addendum tenant adjustments of previously-approved site plans. Consists of replacing previously-approved truck docks and truck areas with parking and green space and related adjustments, and adding 19,320 SF of office space in a second level fully contained within the previously-approved building envelope. No new pavement is proposed, and no changes are involved outside of the previously-approved paved footprint area.

(For Town Use Only)

Routing Date: 11/1/22 Deadline Date: 1/11/22 Meeting Date: TBD

I have no comments I have comments (attach to form)

DRH Title: Fire Marshal Date: 11/16/22
 (Initials)

no additional comments. Previous approval comments

Department: apply

Zoning: Engineering: Assessor: Police: Fire: DPW: Consultant:

SITE PLAN APPLICATION

Date of Application: August 3, 2021 Tax Map #: 209 Lot #: 001-000

Site Address: Friars Drive (161 Lowell Road to be re-assigned)

Name of Project: 5 Way Realty Trust Site Plan

Zoning District: General (G) & Industrial (I) General SP#: 10-21
(For Town Use Only)

Z.B.A. Action: n/a

PROPERTY OWNER:

Name: 5 Way Realty Trust - Peter Horne, Trustee

Address: PO Box 1435

Address: North Hampton, NH, 03862

Telephone # (use authorized developer contact)

Email: (use authorized developer contact)

DEVELOPER:

Lowell Road Property Owner, LLC - Steven E. Goodman

133 Pearl Street #300

Boston, MA, 02110

617-292-0101

sgoodman@gfipartners.com

PROJECT ENGINEER:

Name: The Dubay Group Inc.

Address: 136 Harvey Road Bldg B101

Address: Londonderry, NH, 03053

Telephone # (Direct) 603-247-8766

Email: Karl@thedubaygroup.com

SURVEYOR:

(same)

PURPOSE OF PLAN:

Site Plan for a 504 ksf warehouse building.

(For Town Use Only)

Routing Date: 8/6/21 Deadline Date: 8/20/21 Meeting Date: TBD

 I have no comments I have comments (attach to form)

RMB Title: FIRE CHIEF Date: 9/14/21
(Initials)

Department: _____

Zoning: Engineering: Assessor: Police: Fire: DPW: Consultant:



TOWN OF HUDSON

FIRE DEPARTMENT

39 FERRY STREET, HUDSON, NEW HAMPSHIRE 03051



Emergency 911
Business 603-886-6021
Fax 603-594-1164

Robert M. Buxton
Chief of Department

TO: Brian Groth
Town Planner

FR: Robert M. Buxton 
Fire Chief

DT: September 14, 2021

RE: Friars Drive Parcel 209-001-000

The following is a list of site plan concerns for this project. This review was completed utilizing plans submitted by The Dubai Group dated August 3, 2021.

1. Please provide the markings for fire apparatus access in accordance with **NFPA 1**.
2. The project shall obtain site addressing from the Hudson Fire Department.
3. The common driveway shall have a permanent sign approved by the Hudson Fire Department noting the addresses of the buildings that are accessed from that driveway. These signs shall be approved and installed before issuance of any building permits.
4. Please make sure that the proposed snow storage area shown on the plan does not impede parking or travel paths.
5. The Fire Department will require three copies of the fire hydrant layout for the full site.
 - a. The Fire Department would request that a hydrant be located minimum of 100', with a maximum of 200' away from the buildings to support the fire department connection.
 - b. The Fire Department would further like to see a hydraulic review for the site. The site is proposed with a private supply and fire pump. This review can be handled once a final building permit is submitted. In concept, the proposed plan is reasonable for this facility. Once final fire flow is calculated, the tank, pump and pipe sizing can be finalized.

****The following life safety and fire protection concerns provided are for informational purposes to the applicant and Planning Board for this project. Final determinations on these issues occur after further review of the project.**

- A. The proposed building will require an approved sprinkler system. The Hudson Fire Department upon review of the building plans shall conduct this review. This requirement is in accordance with the **International Building Code (IBC)** and **Hudson Town Code**

(HTC), current revision, Chapter 210, Article VI. Any fire protection system shall be monitored by an approved fire alarm system.

- B. The fire alarm system shall be connected to the Hudson Fire Department's municipal fire alarm system or a substantially equivalent system in accordance with the **Hudson Town Code, Chapter 210**. A site plan detailing the aerial or underground layout to the municipal fire alarm connection must be provided before the utilities are completed for this project.
- C. Any required fire alarm system component must remain accessible and visible at all times.
- D. Due to the size of each of the buildings, the Fire Department will require an emergency communication system review by our radio system vendor. The vendor shall review the need for signal amplification for first responder communication signals to be received and transmitted from inside the building; additionally, a review of transmission from the site to the Town of Hudson radio system will also be required. As outlined in the Building and Fire Code, the AHJ shall determine the acceptable level of coverage for the site. Any improvements identified shall be at the cost of the developer.
- E. A blasting permit will be required for any blasting on the site in accordance with the **Hudson Town Code, Chapter 202**.
- F. Will there be inside or outside storage above the exempt amounts of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in the **International Building Code, Sections 307, 414 or 415**? All Tier II reporting requirements shall be followed each year for all facilities.
- G. All storage either inside or outside of hazardous materials, liquids or chemicals presenting a physical or health hazard as listed in **NFPA 1, Section 20.15.2.2** shall be in accordance with the applicable portions of the following:

- NFPA 13, Standard for the Installation of Sprinkler Systems**
- NFPA 30, Flammable and Combustible Liquids Code**
- NFPA 30B, Code for the Manufacture and Storage of Aerosol Products**
- NFPA 230, Standard for the Fire Protection of Storage**
- NFPA 430, Code for the Storage of Liquid and Solid Oxidizers**
- NFPA 432, Code for the Storage of Organic Peroxide Formulations**
- NFPA 434, Code for the Storage of Pesticides**

cc: Project Engineer
File



TOWN OF HUDSON

Planning Board

Timothy Malley, Chairman



12 School Street · Hudson, New Hampshire 03051 · Tel: 603-886-6008 · Fax: 603-594-1142

CAP FEE WORKSHEET - 2022

Date: 12-1-22 Zone # 1 Map/Lot: 209/001-000

Friars Drive

Project Name: Friars Drive Industrial Building Amendment

Proposed ITE Use #1: 154 High-Cube Transload/Short-Term Storage Warehouse

Proposed Building Area (square footage): 504,000 S.F.

Proposed ITE Use #2: Office Space

Proposed Building Area (square footage): 19,320 S.F.

CAP FEES: (ONE CHECK NEEDED)

1. (Bank 09)

2070-701 Warehouse \$ 357,840.00
(504,000 s.f @ \$0.71 per s.f*)

**per previous approval with 2021 rates*

2. (Bank 09)

2070-701 General Office \$ 44,629.20
(19,320 s.f @ \$2.31 per s.f)

Total CAP Fee \$ 402,469.20

Check should be made payable to the Town of Hudson.

Thank you,

Brian Groth

Town Planner