# REGULAR MEETING* <br> BOARD OF ADJUSTMENT <br> EILEEN DONDERO FOLEY COUNCIL CHAMBERS MUNICIPAL COMPLEX, 1 JUNKINS AVENUE PORTSMOUTH, NEW HAMPSHIRE 

Members of the public also have the option to join the meeting over Zoom (See below for more details)*

## AGENDA

## I. APPROVAL OF MINUTES

A) Approval of the minutes of the meetings of June 15, and June 22, 2021.

## II. OLD BUSINESS

A) Appeal of Duncan MacCallum (Attorney for the Appellants) of the April 15, 2021 decision of the Planning Board for property located at 105 Bartlett Street which granted the following: a) a wetlands conditional use permit under Section 10.1017 of the Zoning Ordinance; b) a parking conditional use permit under Section 10.1112 of the Ordinance; c) site plan review approval; and d) approval of lot line revision. Said properties are shown on Assessor Map 157 Lot 1 and Lot 2 and Assessor Map 164 Lot 1 and 4-2 and lie within the Character District 4-W (CD4-W) and Character District 4-L1 (CD4-L1) Districts.
B) Petition of William H. and Barbara Ann Southworth, Owners, for property located at 39 Pickering Street whereas relief is needed from the Zoning Ordinance to replace existing $8^{\prime} \times 8^{\prime}$ shed with a $10^{\prime} \times 12$ shed which requires the following: 1) Variances from Section 10.521 to allow a) a 2' rear yard where 10 ' is required; b) a 2' right side yard where 10 ' is required; and c) $40.5 \%$ building coverage where $30 \%$ is the maximum allowed. 2) A Variance from Section 10.321 to allow a nonconforming building or structure to be extended, reconstructed or enlarged without conforming to the requirements of the Ordinance. Said property is shown on Assessor Map 102 Lot 5 and lies within the General Residence B (GRB) District.
C) Request of Bucephalus LLC, Owners, for the property located at $\mathbf{6 5 0}$ Maplewood Avenue whereas relief is needed from the Zoning Ordinance to change of use to allow motorcycle sales which requires the following: 1) A Special Exception from Section 10.440 , Use \#11.10 to allow the sales, renting or leasing of motorcycles where the use is permitted by Special Exception. 2) A Variance from Section 10.592 .20 to allow the
proposed use to be located adjacent to a Residential district where 200 feet is required. 3) A Variance from Section 10.843.21 to allow areas for parking, outdoor storage and outdoor display of vehicles or equipment to be setback less than 40 feet from the street right-of-way where 40 feet is required. Said property is shown on Assessor Map 220 Lot 88 and lies within the Business (B) District.
D) Request of The Elizabeth B. Larsen Trust of 2012, Owner, for the property located at 668 Middle Street whereas relief is needed from the Zoning Ordinance to subdivide lot into three lots which requires the following: 1) A Variance from Section 10.521 to allow 114 ' and 100 ' of frontage on a private way where 100 ' of frontage on a formally accepted street or other road approved by the Planning Board and constructed to City subdivision standards. 2) A Variance from Section 10.521 to allow 69.83' of frontage on Middle Street where 100 feet is required. 3) A Variance from Section 10.512 to allow construction of a structure on a lot with access to a private right of way. Said property is shown on Assessor Map 147 Lot 18 and lies within the General Residence A (GRA) District.
E) Request of Cate Street Development LLC, Owner, for the property located at $\mathbf{4 2 8}$ US Route 1 Bypass whereas relief is needed from the Zoning Ordinance to replace two existing free-standing signs with new signs for mixed-use development which requires the following: 1) A Variance from Section 10.1251.20 to allow a 388.5 square foot sign where 100 square feet is the maximum allowed. 2) A Variance from Section 10.1251.20 to allow a 60 square foot secondary sign where 40 square feet is the maximum allowed. Said property is shown on Assessor Map 172 Lot 1 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District.
F) Request of Wentworth Corner LLC, Owners, for the property located at 960 Sagamore Avenue whereas relief is needed from the Zoning Ordinance to demolish existing structures and construct an 8 unit residential building which requires the following: 1) A Variance from Section 10.521 to allow a lot area per dwelling unit of 5,360 square feet where 7,500 square feet is required. 2) A Variance from Section 10.1114 .31 to allow two driveways on a lot where one driveway is permitted. Said property is shown on Assessor Map 201 Lot 2 and lies within the Mixed Residential Business (MRB) District.
G) Request of Stephen G. Bucklin LLC, Owners, for the property located at $\mathbf{3 2 2}$ Islington Street whereas relief is needed from the Zoning Ordinance to request to amend variances that were granted to move an existing carriage house to a new foundation and add a onestory connector to the existing house by removing the stipulation that required a signed letter of approval from the property's rear neighbor. Said property is shown on Assessor Map 145 Lot 3 and lies within the Character District 4-L2 (CD4-L2) District.

## III. PUBLIC HEARINGS - NEW BUSINESS

## IV. OTHER BUSINESS

## V. ADJOURNMENT

*Members of the public also have the option to join this meeting over Zoom, a unique meeting ID and password will be provided once you register. To register, click on the link below or copy and paste this into your web browser:
https://zoom.us/webinar/register/WN_xGmovg4HRAqpwNYuOvN2Bg

TO: Zoning Board of Adjustment
FROM: Peter Stith, AICP, Planning Department
DATE: July 13, 2021
RE: Zoning Board of Adjustment July 20, 2021 Meeting

## OLD BUSINESS

1. 105 Bartlett Street - Appeal
2. 39 Pickering Street
3. 650 Maplewood Avenue
4. 668 Middle Street
5. 428 US Route 1 Bypass
6. 960 Sagamore Avenue
7. 322 Islington Street

## OLD BUSINESS

1. 

Appeal of Duncan MacCallum (Attorney for the Appellants) of the April 15, 2021 decision of the Planning Board for property located at 105 Bartlett Street which granted the following: a) a wetlands conditional use permit under Section 10.1017 of the Zoning Ordinance; b) a parking conditional use permit under Section 10.1112 of the Ordinance; c) site plan review approval; and d) approval of lot line revision. Said properties are shown on Assessor Map 157 Lot 1 and Lot 2 and Assessor Map 164 Lot 1 and 4-2 and lie within the Character District 4-W (CD4-W) and Character District 4-L1 (CD4-L1) Districts.

Please see attached documents related to this matter that include the appellant's argument, response from applicant's attorney, procedural memo from the legal department, most recent submittal by the applicant to the Planning Board, and supplemental documents from the appellant's attorney.
2.

Petition of William H. and Barbara Ann Southworth, Owners, for property located at 39 Pickering Street whereas relief is needed from the Zoning Ordinance to replace existing 8' $\times 8$ 8' shed with a 10 ' $\times 12$ ' shed which requires the following: 1) Variances from Section 10.521 to allow a) a 2' rear yard where 10 ' is required; b) a 2 ' right side yard where 10 ' is required; and c) $40.5 \%$ building coverage where $30 \%$ is the maximum allowed. 2) A Variance from Section 10.321 to allow a nonconforming building or structure to be extended, reconstructed or enlarged without conforming to the requirements of the Ordinance. Said property is shown on Assessor Map 102 Lot 5 and lies within the General Residence B (GRB) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed | $\begin{aligned} & \text { Permitted / } \\ & \hline \text { Required } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Land Use: | Single family | Replace existing shed | Primarily residential uses |  |
| Lot area (sq. ft.): | 2,476 | 2,476 | 5,000 | min. |
| Lot Area per Dwelling Unit (sq. ft.): | 2,476 | 2,476 | 5,000 | min. |
| Street Frontage (ft.): | 46 | 46 | 80 | min. |
| Lot depth (ft.): | 55 | 55 | 60 | min. |
| Front Yard (ft.): | 0 | 0 | 5 | min. |
| Right Yard (ft.): | 2 | 2 | 10 | min. |
| Left Yard (ft.): | 40 | 38 | 10 | min. |
| Rear Yard (ft.): | 2 | 2 | 25/10 (shed) | min. |
| Height (ft.): | 8 | 10 | 35 | max. |
| Building Coverage (\%): | 39 | 40.5 | 30 | max. |
| Open Space Coverage (\%): | >25 | >25 | 25 | min. |
| Parking | 2 | 2 | 2 |  |
| Estimated Age of Structure: | 1999 | Variance request(s) shown in red. |  |  |

## Other Permits/Approvals Required

Historic District Commisison

## Neighborhood Context



## Previous Board of Adjustment Actions

March 26, 1985 - The Board granted the following variances:

- The construction of a two story addition at the rear of an existing home with a right yard of 18 ' where 20 ' is required

The increase in the extent of a nonconforming use of a residential structure or land where no increase in the extent of a nonconforming use of a residential structure of land is allowed.

September 15, 1992 - The Board granted the following variance:

- The construction of a one story 7' by 16' three story porch at the rear of the house with a) a 3'right yard where 10 ' is required; and 2) a lot coverage of $35.6 \%$ where maximum $20 \%$ is allowed.

July 18, 1995 - The Board granted the following variance:

- The construction of a 6' by 7' shed: a) creating 3' right side and 2' rear yard where $10^{\prime}$ is minimum required; and b0 a building cover of $37.6 \%$ where the maximum allowed is $20 \%$.
July 15, 1997 - The Board granted the following variance:
- The construction of a one story 6' by 8' addition to the left rear of an existing building with a $20^{\prime} 5$ " rear yard where $25^{\prime}$ is the minimum required; and , a variance to allow structural changes to a nonconforming structure by the demolition of a 5 ' by 24 ' portion of the existing structure resulting in $36.1 \%$ coverage where the existing is $37 \%$ and the maximum allowed is $30 \%$.

April 20, 1999 - The board granted a request to amend the previously approved application

May 18, 1999 and reconvened on May 25, 1999 - The board granted the following variance:

- $\quad$ Article III, Section 10-302(A) to allow the reconstruction of a single family dwelling in exactly the same size and location.


## Planning Department Comments

The applicant is proposing to replace the exsiting shed with a slightly larger $10 \times 12$ shed, maintaining the existing side and rear setbacks and the new square footage of the shed will be located towards the interior of the lot. The resulting coverage will be increase to $40.5 \%$ from the existing $39 \%$. The applicant postponed in June to reconsider the location of the shed, however they are moving forward with the proposal as originally advertised.

## Review Criteria

This application must meet all five of the statutory tests for a variance (see Section 10.233 of the Zoning Ordinance):

1. Granting the variance would not be contrary to the public interest.

Planning Department Comments 2. Granting the variance would observe the spirit of the Ordinance.
3. Granting the variance would do substantial justice.
4. Granting the variance would not diminish the values of surrounding properties.
5. The "unnecessary hardship" test:
(a)The property has special conditions that distinguish it from other properties in the area.

## AND

(b) Owing to these special conditions, a fair and substantial relationship does not exist between the general public purposes of the Ordinance provision and the specific application of that provision to the property; and the proposed use is a reasonable one. OR
Owing to these special conditions, the property cannot be reasonably used in strict conformance with the Ordinance, and a variance is therefore necessary to enable a reasonable use of it.
3.

Petition of Bucephalus LLC, Owners, for the property located at $\mathbf{6 5 0}$ Maplewood Avenue whereas relief is needed from the Zoning Ordinance for a change of use to allow motorcycle sales which requires the following: 1) A Special Exception from Section 10.440, Use \#11.10 to allow the sales, renting or leasing of motorcycles where the use is permitted by Special Exception. 2) A Variance from Section 10.592.20 to allow the proposed use to be located adjacent to a Residential district where 200 feet is required. 3) A Variance from Section 10.843 .21 to allow areas for parking, outdoor storage and outdoor display of vehicles or equipment to be setback less than 40 feet from the street right-of-way where 40 feet is required. Said property is shown on Assessor Map 220 Lot 88 and lies within the Business (B) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed | $\begin{aligned} & \text { Permitted / } \\ & \text { Required } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Land Use: | business | Motorcycle sales, renting or leasing | Primarily business uses |  |
| Lot area (sq. ft.): | 74,923 | 74,923 | 20,000 | min. |
| Use Setback from Right of Way (ft.) | <40 | <40 | 40 | min. |
| Use setback from Residential District (ft.): | 0 | 0 | 200 | min. |
| Lot depth (ft.): | >80 | >80 | 80 | min. |
| Front Yard (ft.): | 37 | 37 | 20 | min. |
| Right Yard (ft.): | 15 | 15 | 15 | min. |
| Left Yard (ft.): | 62 | 62 | 15 | min. |
| Rear Yard (ft.): | 150 | 150 | 15 | min. |
| Height (ft.): | <50 | <50 | 50 | max. |
| Building Coverage (\%): | 10 | 10 | 35 | max. |
| Open Space Coverage (\%): | >15 | >15 | 15 | min. |
| Parking | 28 | 28 | <20 |  |
| Estimated Age of Structure: | 1970 | Variance/Special Exception request(s) shown in red. |  |  |

## Other Permits/Approvals Required

None.

## Neighborhood Context



## Previous Board of Adjustment Actions

No prior BOA history found.

## Planning Department Comments

The applicant is proposing to relocate their business from Cate Street to the subject property which is located in the Business district where the use is permitted by Special Exception. No exterior changes or additions are proposed to the existing structure. The property is adjacent to a residential district, which requires relief from Section 10.592 .20 to allow the use to be less than 200 feet from a residential district. The use has additional standards in the Ordinance under Section 10.843.21 that requires parking areas to be located forty feet away from a right of way at a minimum.

## Review Criteria

This application must meet all five of the statutory tests for a variance (see Section 10.233 of the Zoning Ordinance):

1. Granting the variance would not be contrary to the public interest.

Planning Department Comments 2. Granting the variance would observe the spirit of the Ordinance.
3. Granting the variance would do substantial justice.
4. Granting the variance would not diminish the values of surrounding properties.
5. The "unnecessary hardship" test:
(a)The property has special conditions that distinguish it from other properties in the area.

## AND

(b) Owing to these special conditions, a fair and substantial relationship does not exist between the general public purposes of the Ordinance provision and the specific application of that provision to the property; and the proposed use is a reasonable one. OR
Owing to these special conditions, the property cannot be reasonably used in strict conformance with the Ordinance, and a variance is therefore necessary to enable a reasonable use of it.

The application must meet all of the standards for a special exception (see Section 10.232 of the Zoning Ordinance).

1. Standards as provided by this Ordinance for the particular use permitted by special exception;
2. No hazard to the public or adjacent property on account of potential fire, explosion or release of toxic materials;
3. No detriment to property values in the vicinity or change in the essential characteristics of any area including residential neighborhoods or business and industrial districts on account of the location or scale of buildings and other structures, parking areas, accessways, odor, smoke, gas, dust, or other pollutant, noise, glare, heat, vibration, or unsightly outdoor storage of equipment, vehicles or other materials;
4. No creation of a traffic safety hazard or a substantial increase in the level of traffic congestion in the vicinity;
5. No excessive demand on municipal services, including, but not limited to, water, sewer, waste disposal, police and fire protection and schools; and
6. No significant increase of stormwater runoff onto adjacent property or streets.
7. 

Petition of The Elizabeth B. Larsen Trust of 2012, Owner, for the property located at 668 Middle Street whereas relief is needed from the Zoning Ordinance to subdivide lot into three lots which requires the following: 1) A Variance from Section 10.521 to allow 114 'and 100' of frontage on a private way where 100' of frontage on a formally accepted street or other road approved by the Planning Board and constructed to City subdivision standards is required. 2) A Variance from Section 10.521 to allow 69.83' of frontage on Middle Street where 100 feet is required. 3) A Variance from Section 10.512 to allow construction of a structure on a lot with access to a private right of way. Said property is shown on Assessor Map 147 Lot 18 and lies within the General Residence A (GRA) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed |  |  | Permitted / Required |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Land Use: | Multi-family | Subdivide into 3 lots Lot 1 Lot 2 Lot 3 |  |  | Primarily residential uses |  |
| Lot area (sq. ft.): | 81,050 | 18,646 | 18,756 | 43,644 | 7,500 | min. |
| Lot Area per Dwelling Unit (sq. ft.): | 20,262 | 18,646 | 18,756 | 14,548 | 7,500 | min. |
| Street Frontage (ft.): | 69.83 | 114 | 100 | 69 | 100 | min. |
| Lot depth (ft.): | >70 | $>70$ | >70 | >70 | 70 | min. |
| Front Yard (ft.): | >15 | $>15$ | $>15$ | >15 | 15 | min. |
| Right Yard (ft.): | 10/2 | $>10$ | $>10$ | 10/2 | 10 | min. |
| Left Yard (ft.): | >10 | >10 | >10 | >10 | 10 | min. |
| Rear Yard (ft.): | $>20$ | $>20$ | >20 | >20 | 20 | min. |
| Height (ft.): | <35 | <35 | <35 | <35 | 35 | max. |
| Building Coverage (\%): | <25 | <25 | <25 | <25 | 25 | max. |
| Open Space Coverage (\%): | >30 | >30 | >30 | >30 | 30 | min. |
| Parking | 7 | ok | ok | 7 | 6 (for existing units) |  |
| Estimated Age of Structure: | 1892/1900 | Variance request(s) shown in red. |  |  |  |  |

## Other Permits/Approvals Required

TAC and Planning Board - Subdivision

## Neighborhood Context



## Previous Board of Adjustment Actions

April 27, 2004 - The Board granted the following variances:

- Article III, Section 10-301(A)(2) to allow conversion of the existing freestanding carriage house with new additions into a dwelling unit in a district where all dwellings are to be located in the same building; and
- Article III, Section 10-302(A) and Section10-401(A)(2)(c) to allow a 22' by 22' one story attached garage with a 4' right side yard where 10 ' is required.
- Article III, Section 10-302(A) to allow a chimney on the right side of the carriage house to be converted to a single family dwelling with a 2 ' right side yard where 10 ' is required.


## Planning Department Comments

The applicant is proposing to subdivide the existing lot containing four dwelling units within 2 structures into 3 lots, with the existing structures remaining on the lot fronting on Middle Street. The two new lots will front on Chevrolet Avenue, which is not a public street, but a private way. The portion of Chevrolet Avenue that meets Cass Street is public, but the rest of it is private, therefore does not count as frontage per the Ordinance. Section 10.512 states that every structure erected on a lot must have access to a public street or an approved private street. Since the applicant hasn't been able to confirm that Chevrolet Ave is an approved private street and even though the City has easement rights to use it, it is not a public street. Staff agrees with the applicant that a variance is needed from this section in order to make the lot buildable.

The applicant references an approval for a similar subdivision on the adjacent parcel to the north that was approved in 2010, with variances granted in August of 2008. The variances included frontage relief on Middle Street to allow the new lots off of Chevrolet to have access off a right-of-way. The letter of decision is below.


## PLANNING DEPARTMENT

August 29, 2008

Catherine M. Whelan
660 Middle Street
Portsmouth, NH 03801

## Re: Property at 660 Middle Street

Assessor Plan 147, Lot 19
Dear Applicant:
The Board of Adjustment at its reconvened meeting of August 26, 2008 completed its consideration of your application wherein a Variance from Article III, Section 10-302(A) was requested to subdivide one lot into three lots with: a) proposed lot 1 to have $70^{\prime} \pm$ of street frontage on Middle Street where $100^{\prime}$ is the minimum required, and b) to allow proposed lots 2 \& 3 to have access off a right-of-way.

After consideration, the Board voted to grant the petition as presented and advertised with the following stipulations:

- That the Planning Board be requested to specify a $20^{\prime}$ ' buffer along the property line to the north for the protection of existing trees and root systems.
- That, as presented, there will be only one curb cut for lots 2 and 3.

The petition was granted for the following reasons:

- Creating three large lots out of one will not change the character of the neighborhood or affect the public interest.
- The front property line for lot 1 predates zoning and there is no way to reconfigure the lot to achieve the required frontage.

Portsmouth, New Hampshire 03801 Fax (603) 427-1593

Catherine Whelan - Page Two
August 29, 2008

- The spirit of the ordinance is to control overdevelopment off a dirt path, but the paved right of way to lots 2 and 3 has functioned, and been maintained, as a street and can support two houses with a common driveway.
- There is no benefit to the public in denying the variance that would outweigh the hardship on the property owner.
- Property values will not diminish and the project has the support of the immediate abutters.

Prior to the issuance of a building permit, the Building Inspector will need to review and approve construction drawings/sketches. Contact the Inspector at 603-6107243 between the hours of 8:00-10:00 a.m. Applicants should note that approvals may also be required from other Committees and/or Boards prior to the issuance of a Building Permit.

The minutes and tape recording of the meeting may be reviewed in the Planning Department.

> Very truly yours,


Charles A. LeBlanc, Chairman
Board of Adjustment
mek
c: Richard A. Hopley, Building Inspector
Bernard W. Pelech, Esq.
Planning Board

## Review Criteria

This application must meet all five of the statutory tests for a variance (see Section 10.233 of the Zoning Ordinance):

1. Granting the variance would not be contrary to the public interest.

Planning Department Comments 2. Granting the variance would observe the spirit of the Ordinance.
3. Granting the variance would do substantial justice.
4. Granting the variance would not diminish the values of surrounding properties.
5. The "unnecessary hardship" test:
(a)The property has special conditions that distinguish it from other properties in the area.

## AND

(b) Owing to these special conditions, a fair and substantial relationship does not exist between the general public purposes of the Ordinance provision and the specific application of that provision to the property; and the proposed use is a reasonable one. OR
Owing to these special conditions, the property cannot be reasonably used in strict conformance with the Ordinance, and a variance is therefore necessary to enable a reasonable use of it.
5.

Petition of Cate Street Development LLC, Owner, for the property located at 428 US Route 1 Bypass whereas relief is needed from the Zoning Ordinance to replace two existing free-standing signs with new signs for a mixed-use development which requires the following: 1) A Variance from Section 10.1251.20 to allow a 388.5 square foot sign where 100 square feet is the maximum allowed. 2) A Variance from Section 10.1251.20 to allow a 60 square foot secondary sign where 40 square feet is the maximum allowed. Said property is shown on Assessor Map 172 Lot 1 and lies within the Gateway Neighborhood Mixed Use Corridor (G1) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed | $\begin{aligned} & \text { Permitted / } \\ & \hline \text { Required } \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Land Use: | Mixed use/Sign District 5 | New signage | Primarily mixed uses |
| Freestanding Sign area (sq. ft.): |  | 388.5 | 100 max. |
| Secondary freestanding sign (sq ft .): |  | 60 | 40 max. |
| Sign Height(ft.): |  | 14'6" main sign/ 12' secondary | 20 main sign/ max. <br> 12 secondary sign |
| Lighting Illumination Type: |  | external | external, internal, direct illumination |
|  |  | Variance request(s) shown in red. |  |

## Other Permits/Approvals Required

None.

## Neighborhood Context



## Previous Board of Adjustment Actions

September 10, 1985 - The Board granted the following special exception with stipulations:

- Article II, Section 10-207(8) to allow heavy equipment and heavy vehicle distribution and sales in the southerly half of an existing one-story structure.
- Stipulations:
- A $\$ 15,000$ bond be posted to ensure that the parking are be paved and lined in accordance with the plan filed with the Planning Department; and
- No parking be allowed beyond the parking spaces as delineated on the plan in front of the W.T.A. Bingo building and the Route 1 ByPass.

August 22, 1989 - The Board denied the following variance:

- Article IX Section 10-906 to allow the erection of a 4' by $13^{\prime}$ free-standing sign with 0 ' setback for the front property line in a zone where free-standing signs shall have a minimum of 35 ' front setback
- Rehearing request was considered and denied at September 12, 1989 Board meeting.

October 3, 1989 - The Board granted the following variance:

- Article III, Section 10-302 to allow the construction of a $16^{\prime}$ by 22' canopy $30^{\prime}$ from the left of the lot line where 50 ' is required

November 14, 1989 - The Boards granted the following variance:

- Article IX, Section 10-906 to permit the erection of a 52 s.f. free standing sign with an 8 ' front yard where a 35 ' front yard is required.

April 19, 1994 - The Board granted the following variances:

- Article II, Section 10-207 to convert 1920 s.f. of space formerly occupied by a catering service to Bingo Hall usage for a total of 8,870 s.f. for the bingo hall; and
- Article IV, Section 10-401(5) to allow the expansion of a nonconforming use of a structure where no increase in the extent of a nonconforming use of a structure may be made without Board approval.

April 18, 1995 - The Board granted the following special exception and stipulation:

- Article II, Section 10-207(11) for the erection of a $40^{\prime}$ by $120^{\prime}$ tent to the rear of the building for three days, May3, 1995 to May 5, 1995 for the purpose of a fundraising event for hunger relief where temporary structures may be allowed by special exception provided a bond is posted to insure their removal.
- Stipulation
- $\$ 100.00$ bond be posted to the City to ensure the removal of the tent.

July 18, 1995 - The Board granted the following variance:

- Article IV, Section 10-401(5) to allow a two story 40'50' addition to an existing Function/Bingo Hall where no expansion on a nonconforming use is allowed.

July 21, 2015 - The Board granted the following variance:

- Section 10.440 to allow a dog daycare and boarding facility in a district where this use is not permitted.


## Planning Department Comments

The applicant is proposing to add new signange for the mixed use development that is currently under construction. Two freestanding signs are proposed on the Route 1 By pass. Because the site has more than one driveway, a second free-standing sign is allowed, but is restricted to an area of 40 square feet and 12 feet in height. The applicant is proposing a 60 square foot sign, 12 feet in height for this sign. The main sign will exceed the 100 square foot requirement, with a proposed sign area of 388.5 square feet and a height of 14.5 where 20 feet is the maximum allowed. All sign illumination types are permited in sign district 5 . The application indicates the signs will be externally lit.

## Review Criteria

This application must meet all five of the statutory tests for a variance (see Section 10.233 of the Zoning Ordinance):

1. Granting the variance would not be contrary to the public interest.

Planning Department Comments 2. Granting the variance would observe the spirit of the Ordinance.
3. Granting the variance would do substantial justice.
4. Granting the variance would not diminish the values of surrounding properties.
5. The "unnecessary hardship" test:
(a)The property has special conditions that distinguish it from other properties in the area.

AND
(b) Owing to these special conditions, a fair and substantial relationship does not exist between the general public purposes of the Ordinance provision and the specific application of that provision to the property; and the proposed use is a reasonable one. OR
Owing to these special conditions, the property cannot be reasonably used in strict conformance with the Ordinance, and a variance is therefore necessary to enable a reasonable use of it.
6.

Petition of Wentworth Corner LLC, Owners, for the property located at 960 Sagamore Avenue whereas relief is needed from the Zoning Ordinance to demolish existing structures and construct an 8 unit residential building which requires the following: 1) A Variance from Section 10.521 to allow a lot area per dwelling unit of 5,360 square feet where 7,500 square feet is required. 2) A Variance from Section 10.1114.31 to allow two driveways on a lot where one driveway is permitted. Said property is shown on Assessor Map 201 Lot 2 and lies within the Mixed Residential Business (MRB) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed | Permitted / <br> Required |  |
| :---: | :---: | :---: | :---: | :---: |
| Land Use: | Restaurant | Constrcut 8-unit dwelling | Primarily business/ residential uses |  |
| Lot area (sq. ft.): | 42,930 | 42,930 | 7,500 | min. |
| Lot Area per Dwelling Unit (sq. ft.): | NA | 5,360 | 7,500 | min. |
| Street Frontage (ft.): | 194 | 194 | 100 | min. |
| Lot depth (ft.): | 212 | 212 | 80 | min. |
| Front Yard (ft.): | 17 | 18 | 5 | min. |
| Secondary Front Yard (ft.): | >5 | >5 | 10 | min. |
| Right Yard (ft.): | 21 | 11 | 10 | min. |
| Rear Yard (ft.): | 107 | 105 | 15 | min. |
| Height (ft.): | 22 | <40 | 40 | max. |
| Building Coverage (\%): | 11 | 20 | 40 | max. |
| Open Space Coverage (\%): | 45 | 57.5 | 25 | min. |
| Parking | 15 | 25 | 11 |  |
| Estimated Age of Structure: | 1970 | Variance request(s) shown in red. |  |  |

## Other Permits/Approvals Required

TAC, Planning Board and Conservation Commission

## Neighborhood Context



## Previous Board of Adjustment Actions

August 16, 2011 - The Board granted the following special exception:

- Use \#7.20 (personal services) under Section 10.440


## Planning Department Comments

The applicant is proposing to demolish the existing structures and construct an 8 unit dwelling which will require a variance for lot area per dwelling unit. Five units are permitted by right per the lot size. The redevelopment of the property will have two driveways, where only one is allowed per lot, thus the need for a request for a variance. The project will need to go through site review with the TAC and the Planning Board and will need to get a wetlands CUP because there is some work and encroachment into the buffer area. On October 2, 1995 the City Council took action to treat Sagamore Grove as a public way and all of the property owners along Sagamore Grove signed off on an Acknowledgement and Release document that was recorded in the Registry of Deeds (see below page from the document).


## Review Criteria

This application must meet all five of the statutory tests for a variance (see Section 10.233 of the Zoning Ordinance):

1. Granting the variance would not be contrary to the public interest.

Planning Department Comments 2. Granting the variance would observe the spirit of the Ordinance.
3. Granting the variance would do substantial justice.
4. Granting the variance would not diminish the values of surrounding properties.
5. The "unnecessary hardship" test:
(a)The property has special conditions that distinguish it from other properties in the area.

AND
(b) Owing to these special conditions, a fair and substantial relationship does not exist between the general public purposes of the Ordinance provision and the specific application of that provision to the property; and the proposed use is a reasonable one. OR
Owing to these special conditions, the property cannot be reasonably used in strict conformance with the Ordinance, and a variance is therefore necessary to enable a reasonable use of it.
7.

Petition of Stephen G. Bucklin LLC, Owners, for the property located at 322 Islington Street whereas relief is needed from the Zoning Ordinance to request to amend variances that were granted to move an existing carriage house to a new foundation and add a one-story connector to the existing house by removing the stipulation that required a signed letter of approval from the property's rear neighbor.
Said property is shown on Assessor Map 145 Lot 3 and lies within the Character District 4-L2 (CD4-L2) District.

## Existing \& Proposed Conditions

|  | Existing | Proposed | $\frac{\text { Permitted } /}{\text { Required }}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Land Use: | Single family | Replace existing shed | Primarily residential uses |  |
| Lot area (sq. ft.): | 2,476 | 2,476 | 5,000 | min. |
| Lot Area per Dwelling Unit (sq. ft.): | 2,476 | 2,476 | 5,000 | min. |
| Street Frontage (ft.): | 46 | 46 | 80 | min. |
| Lot depth (ft.): | 55 | 55 | 60 | min. |
| Front Yard (ft.): | 0 | 0 | 5 | min. |
| Right Yard (ft.): | 2 | 2 | 10 | min. |
| Left Yard (ft.): | 40 | 38 | 10 | min. |
| Rear Yard (ft.): | 2 | 2 | 25/10 (shed) | min. |
| Height (ft.): | 8 | 10 | 35 | max. |
| Building Coverage (\%): | 39 | 40.5 | 30 | max. |
| Open Space Coverage (\%): | >25 | >25 | 25 | min. |
| Parking | 2 | 2 | 2 |  |
| Estimated Age of Structure: | 1999 | Variances granted in 2019. |  |  |

## Other Permits/Approvals Required

Historic District Commisison

## Neighborhood Context



## Previous Board of Adjustment Actions

February 26, 2019 - The Board approved the following variances:

- From Section 10.5A41.10A to allow a 1' rear yard where 5 ' is required and to allow a 2' left side yard where 5' is required.
- From Section 10.321 to allow a nonconforming building or structure to be expanded, reconstructed or enlarged without conforming to the requirements of the Ordinance.
With the following stipulations:
- A signed letter of approval from the property's rear neighbor (Virginia Swift, 217 Cabot Street) is to be submitted. The letter should contain Structural Details and Methods, certified by a licensed structural engineer describing how the proposed new foundation of the Carriage House at 322 Islington Street will be constructed in a manner so as not to cause any damage or detriment to the existing stone foundation at 217 Cabot Street.
- Included as part of this document will be a Site Plan of the area between the (2) structures showing grading, drainage and the nature of materials used.

January 19, 2021 - The Board granted a one year exstenion of the above variances to expire on February 26, 2022.

## Planning Department Comments

The applicant is requesting the Board remove the first stipulation that was part of the approval in 2019, shown in the history above, due to the inability to get sign off on the project from the neighbor. The applicant's representative has submitted a request to postpone to the August meeting as they are working with the abutter on the stipulation.

ZONING BOARD OF ADJUSTMENT OF THE CITY OF PORTSMOUTH

In re Application of Clipper Traders, LLC, Portsmouth Lumber and Hardware, LLC, and Iron Horse Properties, LLC, regarding the property located at 105 Bartlett Street, and known familiarly as

The North Mill Pond Project

> APPEAL OF DECISION OF
> PORTSMOUTH PLANNING BOARD

Pursuant to RSA 676:5, III, James A. Hewitt, Elizabeth E. Hewitt, James A Beal, Mary Beth Brady, Mark Brighton, Lenore Weiss Bronson, Nancy Brown, William R. Castle, Lawrence J. Cataldo, Ramona Charland, Lucinda Clarke, Fintan ("Finn") Connell, Marjorie P. Crean, Ilara Donarum, Joseph R. Famularo, Jr., Philippe Favet, Tammy J. Gewehr, Abigail Gindele, Charlotte Gindele, Julia Gindele, Linda Griebsch, Catherine L. ("Kate") Harris, Roy W. Helsel, John E. Howard, Nancy B. Howard, Elizabeth Jefferson, Cate Jones, Robert McElwain, Mary Lou McElwain, Sally Lurie Minkow, Edward Rice, April Weeks, Michael Wierbonics, and Lili Wierbonics (collectively referred-to hereinafter as "the appellants"), all of whom are citizens, residents and/or property owners in the City of Portsmouth, hereby appeal the April 15, 2021 decision of the Portsmouth Planning Board, in which said

Board (a) granted a wetlands conditional use permit to the ownerdevelopers, Clipper Traders, LIC, Portsmouth Lumber and Hardware, LLC, and Iron Horse Properties, LLC, for the above-referenced lot of property located at 105 Bartlett Street, purportedly granting such permit pursuant to Section 10.1017 of the Portsmouth Zoning Ordinance; (b) granted a parking conditional use permit for said property, purportedly pursuant to Section 10.1112 of said Ordinance; (c) approved site plan review of said property; and (d) approved various lot line revisions.

As grounds for their appeal, the appellants state that the Planning Board misconstrued, misinterpreted and/or misapplied a number of provisions of the Portsmouth Zoning Ordinance and, in some cases, failed to observe those provisions altogether. Additionally, the Planning Board's above-described actions were in direct conflict with two prior decisions of this Zoning Board of Adjustment, which on January 22, 2020 denied two requests by the applicants for variances which would have (i) allowed them to erect buildings or other structures blocking the Dover Street view corridor, and (ii) allowed them to erect buildings more than $50^{\prime}$ in height.

## STANDARD OF REVIEW OF PLANNING BOARD DECISIONS

The legal standard for review of the Planning Board decisions by the Zoning Board of Adjustment is de novo. Ouellette $v$. Town of Kingston, 157 N.H. 604, 608-12, 956 A. 2d 286, 290-93
(2008); 15 Peter J. Loughlin, New Hampshire Practice: Land Use Planning \& Zoning $\$ 33.02 \mathrm{n} .10$ (4th ed. 2010 \& Supp. 2020). This Zoning Board of Adjustment is required to consider the applicants' petitions anew, and the $Z B A$ is not required to give any deference to any of the findings and conclusions reached by the Planning Board. Id. In fact, this Board (viz., the $Z B A$ ) may substitute its own judgment in toto for that of the Planning Board, if it is so inclined. Id.

## GROUNDS FOR APPEAL

The appellants assign the following, specific grounds for their appeal, consisting of ways in which the Planning Board misconstrued, misinterpreted, misapplied, or, in some instances, altogether failed to observe and follow the provisions of the Portsmouth Zoning Ordinance:
I. Section 10.5A41.10B of the Zoning Ordinance provides that in the CD4-W district, the maximum allowable building length is 200 feet, unless a conditional use permit is issued. On the site plan approved by the Planning Board in its April 15, 2021 decision, Building $C$ is 250 feet in length and Building $C$ is 227 feet in length, and the owner-applicants neither applied for nor obtained a conditional use permit with respect to same. Therefore, the site plan which the Planning Board approved was in violation of said provision of the Ordinance.
II. The Planning Board improperly granted the ownerdevelopers a conditional use permit allowing them to block the

Dover Street view corridor. Section 10.5A42.40 of the Zoning Ordinance provides for the preservation of view corridors to the North Mill Pond area. It states:

All new buildings or structures located within $400^{\prime}$ of the North Mill Pond shall be located in such a way as to maintain existing public views with a terminal vista of the North Mill Pond from the intersecting streets of Dover Street, Cabot Street, Cornwall Street and Langdon Street. Except for existing obstructions, the public view corridor shall be maintained for a minimum width of the existing public right-of-way of the nearest intersecting street as listed above.
(Emphasis in original.) Under the site plan for 105 Bartlett Street which was approved by the Planning Board in its April 15, 2021 meeting, the Dover Street view corridor is undisputably blocked by the elevated terrace and landscaping between Buildings $A$ and $B$, in direct violation of the above-quoted Section 10.5A42.40. A wall is to be built between those buildings, the top of which will be about $6^{\prime}$ or $7^{\prime}$ above original grade for 17.5' above sea level), obstructing the view corridor; and, though unclear from the plan, it is possible that portions of Buildings $A$ and $B$ themselves may obstruct that corridor, also. Therefore, the site plan and subdivision plan were approved in a manner which is in direct violation of the requirements of the Zoning Ordinance.
III. Further, not only were the site plan and subdivision plan approved in violation of the terms of the Ordinance in that respect, but they were also approved in contravention of a prior
decision issued by this Zoning Board of Adjustment a year ago. At that time, the owner-developers applied for a variance seeking precisely the same relief which the Planning Board implicitly granted them by approving the site plan: they asked for a variance from the requirements of Section 10.5 A 42.40 of the Ordinance in order to allow them to block the Dover Street view corridor. On January 22, 2020 this Zoning Board of Adjustment denied their request for that variance, doing so by a $6-0$ vote. Thus, the Planning Board's action in approving the site plan and subdivision plan was both contrary to the Zoning Ordinance and contrary to this Zoning Board of Adjustment's own prior ruling.
IV. The Planning Board also erred in granting a wetlands conditional use permit, as the project does not meet the requirements set forth in the wetlands section of the Zoning Ordinance, Section 10.1017.50. Where wetlands are at issue, Section 10.1017.50 requires that the development meet all of the following criteria:
(1) The land is reasonably suited to the use, activity or alteration.
(2) There is no alternative location outside the wetland buffer that is feasible and reasonable for the proposed use, activity or alteration.
(3) There will be no adverse impact on the wetland functional values of the site or surrounding properties;
(4) Alteration of the natural vegetative state or managed woodland will occur only to

$$
\begin{aligned}
& \text { the extent necessary to achieve construction } \\
& \text { goals; and }
\end{aligned}
$$

(5) The proposal is the alternative with the least adverse impact to areas and environments under the jurisdiction of this Section.
(6) Any area within the vegetated buffer strip will be returned to a natural state to the extent feasible.
(Emphasis in original.) Of these six criteria, it is only necessary to consider \#2 and \#5, for in the final hearing before the Planning Board the developers' representatives admitted that it was both possible and feasible to erect residential buildings outside the wetland buffer and that there were other alternatives which would have had less impact upon the site in question. Although in the appellants' view the developers' plan fails to meet several of the other criteria as well, this concession by itself demonstrates that the Planning Board's decision was wrong and that the plan violates the requirements of the above-quoted section of the Ordinance, $\$ 10.1017 .50$. There is plainly "[an] alternative location outside the wetland buffer that is feasible and reasonable for the proposed use," \$ 10.1017.50(2), and it is clear that the developers' present plan is not the alternative "with the least adverse impact to areas and environments under the jurisdiction of this Section." Ordinance $\$ 10.1017 .50(5)$ (emphasis added). The owner-developers admitted as much during the April 15, 2021 hearing before the Planning Board.

A sketch of one such alternative, using the developers' own site plan as a template, is appended hereto as Attachment $A$ as an example. This sketch shows how three buildings could be erected outside the $100^{\prime}$ wetland buffer at a location that is both "feasible and reasonable for the proposed use," and moreover this alternative would plainly have "[less] adverse impact to areas and environments under the jurisdiction of" the wetlands ordinance, Viz., the North Mill Pond. Portsmouth Zoning Ordinance $\S 10.1017 .50(2),-(5)$. Further, Attachment $A$ is merely one example. As another approach, it would also be feasible for the developers to simply make their buildings smaller, similarly avoiding encroachment into the $100^{\prime}$ wetlands buffer. In any event, Attachment $A$ would also provide the developers with ample means of making a handsome return on their investment, even if there are other plans that would have been more profitable.

The only explanation that the owner-developers have ever offered as to why they cannot adopt and implement a plan which would observe the $100^{\prime}$ wetlands buffer and would be less intrusive to the environment is that any alternative plan which they might be able to devise would be less profitable to them than the one which they have proposed. However, relative lack of profitability, or the fact that a given alternative plan does not represent the "highest and best use" which might have been made of the property if no restrictions had existed, is no excuse for flouting the requirements of Portsmouth wetlands ordinance and
the wetlands laws in general. The wetlands ordinance specifically provides that economic considerations alone are not sufficient reason for granting a conditional use permit. Zoning Ordinance $\$ 10.1017 .44$. By approving the developers' plan on the basis of that rationale, the Planning Board committed clear error.
V. For substantially the same reasons as those given above, the Planning Board erred in voting to grant a conditional use permit for shared parking pursuant to Section 10.1112. There were less intrusive designs that could have been utilized for the project which would have avoided encroachment into the 100 wetlands buffer.
VI. The Planning Board's decision of April 15, 2021 is also infected by a procedural infirmity. Under the City of Portsmouth's scheme for review of site plans and subdivision plans when wetlands issues are implicated, the developer's plan is first to be referred to the Conservation Commission for review and for a report back to the Planning Board concerning the impact of the project on the wetlands and the environment. The Conservation Commission must make a favorable recommendation of the project to the Planning Board before that latter can proceed further. Though the Conservation Commission at its February 10, 2021 meeting voted to approve the developers' plan and recommend it to the Planning Board in the most general terms, the Conserservation Comission never reviewed, considered, or made spe-
cific findings concerning the six criteria delineated in Section 10.1017.50, quoted above.
VII. Through architectural sleight-of-hand, the ownerdevelopers are also attempting to circumvent this Zoning Board of Adjustment's January 22, 2020 decision denying them a variance to exceed the five-story, 50' height limit imposed by Sections $10.5 A 43.31$ and 10.5A46.10 of the zoning Ordinance. In its decision of January 22, 2020, this Zoning Board of Adjustment denied, by a unanimous 6-0 vote, the owner-developers' request for a variance to allow them to exceed the $50^{\prime}$ height limit and to erect one of their proposed buildings to a height of 60 '. Under the current iteration of their plan, they propose to artificially raise the ground level of the building in question by importing fill and depositing it underneath the foundation, raising the first floor of the building by about 7 ' to 81 , and spuriously calling the bottom of the raised first floor the new "ground level". The fill will encompass a so-called "underground garage," and in practical effect it will add an additional story to the building. As a result, the top of the new building will be about $57^{\prime}$ or $58^{\prime}$ above the actual ground level, in violation of both the $50^{\prime}$ height iimit imposed by the above-referenced sections of the Zoning Ordinance and also in violation of this Zoning Board of Adjustment's decision of January 22, 2020, denying the owner-developers' request for a variance from the 50' height limit.
VIII. The project was the product of unlawful "spot zoning". As the developers themselves explained in their presentations to both the Conservation Commission and the Planning Board, they persuaded the City Council to re-zone three adjoining lots and to redraw the lot lines specifically for their benefit, so that the project in question could go forward. The new zoning district for three new zoning districts, depending upon how one chooses to view them) were tailor-made for their plans, and the result is a massive project which clashes with the character of the adjoining neighborhood: three massive, four- and five-story structures (when taking into account the so-called "underground" parking garages) set beside a predominantly residential neighborhood composed of one- and two-story houses and small industrial buildings, blocking the neighbors' view of the North Mill Pond. Because the subdivision plan and site plan are the products of spot zoning, they must be disapproved.
IX. The provisions of Portsmouth's zoning ordinance pertaining to conditional use permits are invalid on their face, in that, as drafted, they are not authorized by the enabling statute, RSA 674:21. That statute allows a conditional use permit as part of "innovative" land use controls, RSA 674:21, II, and provides examples thereof, RSA 674:21, I. Those examples are:
(a) Timing incentives.
(b) Phased development.
(c) Intensity and use incentive.
(d) Transfer of density and development rights.
(e) Planned unit development.
(f) Cluster development.
(g) Impact zoning.
(h) Performance standards.
(i) Flexible and discretionary zoning.
(j) Environmental characteristics zoning.
(k) Inclusionary zoning.
(I) Accessory dwelling unit standards.
(m) Impact fees.
(n) Village plan alternative subdivision.

RSA 674:21, I.
None of these innovations had anything to do with the conditional use permits that were issued to the owner-developers in this case. Nor, more importantly, do they have anything to do with the conditional use provisions of the zoning ordinance itself. The conditional use permits provided-for in Portsmouth's wetlands ordinance are not innovative; on the contrary, they purport to allow the Planning Board to award the functional equivalent of a simple special exception for encroachment into the $100^{\prime}$ wetlands buffer. Furthermore, in this instance the Planning Board applied the ordinance in an unsophisticated, non-innovative manner by focusing exclusively on perceived benefits of the project while ignoring its insult to the wetlands buffer. Contrary to the letter and spirit of the statute, the conditional use
permits granted to the developers in this case were nothing more than plain vanilla special exceptions.

CONCLUSION
For all of the foregoing reasons, the Zoning Board of Adjustment should overrule the findings of the planning Board, should vacate the latter's decision of April 15, 2021, should direct that the applicants' site plan and subdivision plan be disapproved, and should rescind the conditional use permits which have been granted to the applicants.


## CERTIFICATE OF SERVICE

The undersigned, Duncan J. MacCallum, Attorney for Appellants in the within proceeding, hereby certifies that on this 14 th day of May, 2021, a true and correct copy of the foregoing Appeal of Decision of Portsmouth Planning Board was served upon the applicants by forwarding same by first class mail, postage prepaid, to the following counsel of record:

Robert A. Previti, Esquire Stebbins, Lazos \& Van Der Beken, LLC 889 Elm Street, 6th Floor Manchester, New Hampshire 03101


## ATTACHMENT A



## THE STATE OF NEW HAMPSHIRE

## ZONING BOARD OF ADJUSTMENT <br> OF THE CITY OF PORTSMOUTH

## In re Application of Clipper Traders, LLC, Portsmouth Lumber and Hardware, LLC, and Iron Horse Properties, LLC regarding the property located at 105 Bartlett Street and known familiarly at, the "North Mill Pond Project." <br> INTERVENOR'S MOTION TO DISMISS AND MERITS RESPONSE TO APPELLANTS' APPEAL OF DECISION OF THE PORTSMOUTH PLANNING BOARD

Iron Horse Properties, LLC ${ }^{1}$ ("Iron Horse"), by and through its attorneys, Sheehan Phinney Bass \& Green, intervenes in the above-captioned matter and submits this Motion to Dismiss and Merits Response to Appellants' ${ }^{2}$ Appeal of Decision of the Portsmouth Planning Board.

At its regularly scheduled meeting that commenced on April 15, 2021, with written decision dated April 20, 2021, the Portsmouth Planning Board ("Planning Board") granted site plan approval for Iron Horse's residential development of 105 Bartlett Street (the "Proposed Development"). Specifically, the Planning Board granted Iron Horse's Wetland Conditional Use Permit as presented and its Conditional Use Permit for shared parking with stipulations. The Planning Board also approved Iron Horse's Site Plan and Lot Line Revision, both with stipulations.

On May 17, 2021, Appellants filed a nine-count appeal with the Portsmouth Zoning Board of Adjustment ("ZBA"), challenging all four Planning Board approvals. Seven of Appellants' nine counts are subject to summary disposition. Appellants waived counts I, III,

[^0]VIII, and IX by not raising the claims before the Planning Board or otherwise preserving those issues for appeal during the April 15, 2021 meeting. The ZBA also lacks subject matter jurisdiction to hear counts IV, V, and VI because the claims involve the Planning Board's grant of conditional use permits for innovative land use controls pursuant to RSA 674:21. Those counts should have been appealed to the New Hampshire Superior Court. See RSA 676:5, III. The ZBA additionally lacks subject matter jurisdiction over count VIII and count IX, which seek to invalidate the duly enacted ordinances of the City of Portsmouth ("the City" or "Portsmouth"). Those counts are procedurally infirm and should be dismissed accordingly.

The remaining counts on appeal (counts II and VII) are meritless. Count II alleges that the Proposed Development violates the North Mill Pond View Corridors Ordinance (section 10.5A42.40) because it includes a terrace that ostensibly blocks the Dover Street view corridor. Appellants' allegation is unfounded. The proposed terrace sits between three and a half and thirteen and a half feet below Dover Street-depending on where one is standing on Dover Street-and could not block any supposed view. Count VII alleges that the proposed building heights exceed the 50 -foot control through "architectural sleight-of-hand." This also is unfounded. Measured from the grade plane to the top of the proposed buildings-per the protocol set forth in Portsmouth's Zoning Ordinance-the tallest building is 50 feet. See §§ $10.5 \mathrm{~A} 43.30,10.1530$. Finally, to the extent not dismissed on procedural grounds, count I incorrectly alleges that two of the proposed buildings exceed the 200-foot "building block length" limit for the CD4-W zone. In actuality, the longest building block length is 185 feet. None of counts I, II or VII withstands scrutiny, and the Planning Board's site plan approval therefore should be affirmed. ${ }^{3}$

[^1]
# I. MOTION TO DISMISS COUNTS I (BUILDING BLOCK LENGTH), III (VIEW CORRIDOR), IV (WETLANDS CUP), V (SHARED PARKING CUP), VI (WETLANDS CUP), VIII (SPOT ZONING), AND IX (INVALIDATION OF PORTSMOUTH'S INNOVATIVE LAND USE CONTROL ORDINANCES) 

## A. The ZBA Lacks Jurisdiction Over Counts I, III, VIII, and IX of Appellants' Appeal Because the Issues Were Not Presented to the Planning Board.

"Zoning boards of adjustment are created by statute, see RSA 673:1, IV (Supp. 2013), and have only those powers that are expressly conferred upon them by statute or are necessarily implied by those statutory grants." Dembiec v. Town of Holderness, 167 N.H. 130, 134 (2014). One such statutory grant involves appellate jurisdiction related to administrative zoning determinations: "[p]ursuant to RSA 674:33, a zoning board has the power to: (1) '[h]ear and decide appeals if it is alleged there is error in any order, requirement, decision, or determination made by an administrative official in the enforcement of any zoning ordinance,' and 'reverse or affirm, wholly or in part, or ... modify the order, requirement, decision, or determination appealed from and ... make such order or decision as ought to be made and, to that end, shall have all the powers of the administrative official from whom the appeal is taken ...." Id. at 135; RSA 676:5, I. "If, in the exercise of subdivision or site plan review, the planning board makes any decision or determination which is based upon the terms of the zoning ordinance, or upon any construction, interpretation, or application of the zoning ordinance, which would be appealable to the board of adjustment if it had been made by the administrative officer, then such decision may be appealed to the board of adjustment under this section ...." RSA 676:5, III. ${ }^{4}$

[^2]The ZBA's authority as an appellate body is limited to the statutory grants referenced above. For example, the ZBA does not possess "general equitable jurisdiction." Dembiec, 167 N.H. at 135. Rather, the ZBA may "grant equitable relief from a zoning ordinance only when the statutory prerequisites for an equitable waiver, a variance, or a special exception are satisfied." Id. (citing RSA 674:33, :33-a). Similar to the lack of grant of general equitable jurisdiction, there is no statutory authority for the ZBA to consider issues and arguments that were not presented to the Planning Board, when the ZBA exercises its appellate jurisdiction over a Planning Board's determination regarding the zoning ordinance rendered while exercising its statutory obligation regarding site plan review. Nor is the ability to consider issues that were not presented to the Planning Board inherent in the ZBA's appellate function. ${ }^{5}$ Consequently, the ZBA lacks appellate jurisdiction over issues and arguments that were not presented to the Planning Board during its site plan review. See Sklar Realty v. Town of Merrimack, 125 N.H. 321, 328 (1984) ("parties may not have judicial review of matters not raised at the earliest possible time"); see also Cogswell Farm Condo Ass'n v. Tower Group, Inc., 167 N.H. 245, 253 (2015) (issues deemed waived when not "raised at the earliest possible time"); Blagbrough Family Realty Trust v. Town of Wilton, 153 N.H. 234, 238-39 (2006).

The principle that issues must be presented to the local land use board to afford it an opportunity to correct its alleged error is well-established. See Robinson v. Town of Hudson, 154 N.H. 563, 567-68 (2006); Blagbrough Family Realty Trust, 153 N.H. at 238-39; Dziama v. City of Portsmouth, 140 N.H. 542, 545 (1995). This preservation requirement includes decisions of the Planning Board. Cherry v. Town of Hampton Falls, 150 N.H. 720, 725 (2004). While the

[^3]ZBA "may hear appeals de novo, based on the broad powers granted to it by statute[,]" Ouellette v. Town of Kingston, 157 N.H. 604, 610 (2008), that means only that the ZBA "decides the matter anew, neither restricted nor deferring to decisions" made by the Planning Board. Id. at 609. In other words, de novo refers to the legal standard by which the ZBA should consider issues properly before it. Id. at 610 ("Interpreting language nearly identical to RSA 674:33, the majority of courts hold that the proper standard of review is de novo."). Neither Ouellette nor any other New Hampshire Supreme Court decision examined in counsel's research holds that the de novo standard for a ZBA appeal eliminates the well-established preservation requirement.

None of the following counts in Appellants' appeal were raised during the Planning Board's site plan review: count I (building length requires conditional use permit); count III (site plan and subdivision plan approved in contravention of prior ZBA decision on variance application regarding Dover Street view Corridor); count VIII (project is a product of unlawful "spot zoning"); and count IX (conditional use permit provisions in the City's zoning ordinance are facially invalid). Because counts I, III, VIII, and IX were not presented to the Planning Board, they are not properly before the ZBA. The issues are waived and not preserved for appeal to the ZBA, and therefore, are not within the ZBA's subject matter jurisdiction.

## B. The ZBA Lacks Jurisdiction Over Counts IV, V, and VI of the Appeal Because Planning Board Decisions Regarding Innovative Land Use Controls Adopted Pursuant to RSA 674:21 Must Be Appealed to the New Hampshire Superior Court.

Counts IV, V, and VI of Appellants' appeal challenge the Planning Board's approval of a Wetlands Conditional Use Permit and a Conditional Use Permit involving shared parking. Pursuant to RSA 674:21, conditional use permits are innovative land use controls. The ZBA lacks jurisdiction over counts IV, V, and VI because the Planning Board's decision on an
innovative land use control, including a conditional use permit, is appealable only to the New Hampshire Superior Court. RSA 676:5, III.

As noted above, "[z]oning boards of adjustment are created by statute, see RSA 673:1,
IV, and have only those powers that are expressly conferred upon them by statute or are
necessarily implied by those statutory grants." Dembiec, 167 N.H. at 134. RSA 676:5, III states:
If, in the exercise of subdivision or site plan review, the planning board makes any decision or determination which is based upon the terms of the zoning ordinance, or upon any construction, interpretation, or application of the zoning ordinance, which would be appealable to the board of adjustment if it had been made by the administrative officer, then such decision may be appealed to the board of adjustment under this section; provided, however, that if the zoning ordinance contains an innovative land use control adopted pursuant to RSA 674:21 which delegates administration, including the granting of conditional or special use permits, to the planning board, then the planning board's decision made pursuant to that delegation cannot be appealed to the board of adjustment, but may be appealed to the superior court as provided by RSA 677:15.
$I d$. (emphasis supplied). The statute plainly provides that many planning board decisions made while exercising that board's subdivision or site plan review responsibility that involve the interpretation or construction of the municipality's zoning ordinance are appealable to the ZBA. $I d$. The statute is equally plain, however, that when the zoning ordinance delegates to the municipality's planning board the administration of an innovative land use control, including the granting of a conditional use permit, the planning board's decision cannot be appealed to the ZBA. Id. Jurisdiction over an appeal of the planning board's decision instead is vested solely in the superior court. ${ }^{6}$ Id.

In counts IV and VI, Appellants challenge the merits and procedural soundness of the conditional use permit granted to Iron Horse under the City's Wetlands Protection ordinance. The merits of the decision were sound, as was the procedure. Section 10.1010 of the Zoning

[^4]Ordinance addresses wetlands protection. Section 10.1017 provides the process for obtaining a conditional use permit while protecting wetlands. Section 10.1017.10 of the Zoning Ordinance states that " $[t]$ he Planning Board is authorized to grant a conditional use permit for any use not specifically permitted in Section 10.1016.10, subject to the procedures and findings set forth herein. Section 10.1017.40 provides that "[t]he Planning Board shall grant a conditional use permit provided that it finds that all other restrictions in this Ordinance are met and that proposed development meets all the criteria set forth in section 10.1017 .50 or 10.1017.60, as applicable."

In count V, Appellants challenge the Planning Board's approval of Iron Horse's conditional use permit for shared parking. Here, too, the merits and procedure were sound. Section 10.1110 of the zoning ordinance addresses off-street parking. Pursuant to Section 10.1112.14, "[t]he Planning Board may grant a conditional use permit to allow a building or use to provide less than the minimum number of off-street parking spaces required by Section 10.1112.30, Section 10.1112 .61 or Section 10.1115 .20 , as applicable, or to exceed the maximum number of off-street parking spaces allowed by Section 10.1115.21." Section 10.1112.62, which specifically addresses "Shared Parking on Separate Lots," empowers the Planning Board to "grant a conditional use permit to allow a reduction in the number of required off-street parking spaces for uses on separate lots, whether in common or separate ownership, subject to [certain conditions]."

The Wetlands Protection and Off-Street Parking sections of the zoning ordinance are innovative land use controls adopted pursuant to RSA 674:21, and the plain language of each delegates administration, including the approval of conditional use permits, to the Planning Board. See RSA 676:5, III. The conditional use permits provide for innovative land use controls by balancing various planning objectives with a goal of not unduly constraining development.

See Peter Laughlin, New Hampshire Practice Series Land Use Planning and Zoning, Vol. 15, § 15.07 (2020); RSA 674:21. The Wetlands Ordinance permits development within a waterfront area but only so long as it meets certain objectives, such as, removing impervious surfaces where feasible (Portsmouth Zoning Ordinance 10.1017.24), demonstrating that the proposed site alteration is the alternative with the least adverse impact to areas and environments within the City's jurisdiction (id. at 10.1017.24), and providing for a wetland enhancement plan as applicable (id. at 10.1017.25). Likewise, the Off-Street Parking ordinance allows a development to use less than the minimum of off-street parking prescribed if, as here, shared parking is provided for on a separate lot, among other controls. Id. at 10.1112.142, 10.1112.62. Both ordinances involve adjudication of a conditional use permit by the Planning Board, which may occur if the innovative land use control ordinances have been adopted pursuant to RSA 674:21. See Loughlin, § 15.07 ("These innovative land use controls present one of the few instances where the planning board is authorized to issue some type of a 'special use permit,' as opposed to the zoning board of adjustment which traditionally administers zoning ordinances.").

While neither section of the zoning ordinance expressly references RSA 674:21, there can be no dispute that they were adopted pursuant to that enabling statute. The nature and objectives of the sections are consistent with the non-exhaustive list of innovative land use controls set forth in RSA 674:21, I(a)-(n). Moreover, RSA 674:21 is the only statute that authorizes planning boards to issue conditional or special use permits, like sections 10.1017.10, 10.1112.14, and 10.1112.62. Because Portsmouth has created zoning ordinances whereby the Planning Board has jurisdiction to grant or deny conditional use permits, those ordinances must have been adopted pursuant to RSA 674:21. See Simonsen v. the Town of Derry, 145 N.H. 382,

386-87 (2000) (RSA 674:21 deemed sole authority for imposition of innovative land use control, impact fees).

Accordingly, counts IV, V, VI of Appellants' appeal must be dismissed for lack of subject matter jurisdiction. Pursuant to RSA 676:5, III, Appellants were required to appeal those claims to the superior court because they involve innovative land use controls promulgated under RSA 674:21 and because the ordinances at issue delegate administration to the Planning Board.

## C. The ZBA Lacks Jurisdiction Over Count VIII, Appellants' Untimely "Spot Zoning" Challenge.

In count VIII, Appellants challenge an alleged "spot-zoning" of the Iron Horse property. Appeal, p. 8. While Iron Horse denies the perfunctory allegation, the claim is not properly before the ZBA and even if it were, it would be untimely.

On August 20, 2018, the City Council voted to rezone the Iron Horse property and to make additional changes to the CD4-W district. See City Council, August 20, 2018 Action Sheet. Those changes comprise the substance of Appellants' spot zoning claim. Pursuant to RSA 677:2, Appellants had thirty days from the City Council decision dated August 20, 2018 to request a rehearing on the alleged spot zoning. However, because the decision was made by City Council as the "local legislative body," the request for a rehearing could only be made to City Council. Id. ("Within 30 days after any order or decision ... of the local legislative body ... in regard to its zoning, the selectmen, any party to the action or proceedings, or any person directly affected thereby may apply for a rehearing in respect to any matter determined in the action or proceeding, or covered or included in the order, specifying in the motion for rehearing the ground therefor; and ... the local legislative body, may grant such rehearing if in its opinion good reason therefor is stated in the motion."); see RSA 672:8 (defining "local legislative body" to include "city council"). Then, after a rehearing, if Appellants still believed they were
aggrieved, they could have filed an appeal with the superior court. See RSA 677:4. In fact, the ZBA need look no further than the City's own history to discover the proper jurisdictional tree for a spot zoning challenge: a hearing before the City Council, rehearing or reconsideration before the City Council, and appeal to the superior court. See Portsmouth Advocates, Inc. v. City of Portsmouth, 133 N.H. 876, 877-78 (1991).

There is no statutory authority for the ZBA to review the City Council's decision on zoning. See RSA 674:33 and RSA 676:5. "Zoning boards of adjustment are created by statute, see RSA 673:1, IV (Supp. 2013), and have only those powers that are expressly conferred upon them by statute or are necessarily implied by those statutory grants." Dembiec, 167 N.H. at 134. Because the ZBA lacks statutory authority to review the City Council's decision on rezoning, the ZBA should dismiss Count VIII of the Appeal for lack of subject matter jurisdiction.

Even if the spot zoning question were properly before the ZBA, the appeal would be untimely. Pursuant to RSA 676:5, I and Article IV, § 1 of the ZBA's Rules and Regulations, Appellants had 30-days from the August 20, 2018 decision to file an appeal. That window closed on September 19, 2018. Appellants instead waited until Iron Horse received final site plan approval-a year and a half later and at significant expense to Iron Horse-to challenge the rezoning. The claim is waived. Accordingly, the ZBA lacks subject matter jurisdiction over Count VIII and even if the Board had jurisdiction, the spot zoning challenge is time-barred.

## D. The ZBA Lacks Jurisdiction Over Appellants' Request to Invalidate Portsmouth's Innovative Land Use Control Ordinances, and Therefore, Count IX Should Be Dismissed.

Count IX asks the ZBA to "invalidate" Portsmouth's Innovative Land Use Control Ordinances. Respectfully, the ZBA lacks authority to grant the relief being requested.

Invalidating a duly enacted ordinance is not within the ZBA's purview. As previously established, ZBAs only have the power conferred upon them by statute. Dembiec, 167 N.H. at
134. In this instance, the plain language of RSA 674:33 does not authorize the ZBA to grant the relief Appellants seek. Additionally, innovative land use controls are adopted in accordance with RSA 675:1, II. See RSA 674:21, III. Pursuant to RSA 675:1, II, innovative land use controls "shall be adopted in accordance with the procedures required under RSA 675:2-5." RSA 675:2 places the responsibility for the enactment or amendment of a city zoning ordinance in the control of the local legislative body, here, the City Council, or the voters. Because RSA 675:2 bestows specific authority upon the local legislative body, invalidating an ordinance also cannot be impliedly identified as a power conferred upon the ZBA. Nor does RSA 674:33 vest the ZBA with equitable power. Dembiec, 167 N.H. at 135 ("The plain language of the pertinent statutes does not confer general equitable jurisdiction upon a zoning board"). Put simply, there is no well of authority from which the ZBA could draw the authority to invalidate the City's ordinances and grant the relief Appellants request. The ZBA should dismiss count IX for lack of subject matter jurisdiction.

## II. MERITS RESPONSE TO COUNTS I (BUILDING BLOCK LENGTH), II (DOVER STREET VIEW CORRIDOR), III (DOVER STREET VIEW CORRIDOR), AND VII (BUILDING HEIGHT)

## A. Appellants' Challenge to the Building Block Length in Count I of the Appeal Is Factually Inaccurate and Should Therefore Be Denied.

In addition to being subject to dismissal on procedural grounds, count I of the appeal is also substantively infirm. Appellants correctly observe that Section 10.5A41.10B of the Portsmouth Zoning Ordinance limits building block lengths in the CD4-W zone to 200 feet. Id. Appellants then proceed to allege that Building C is 250 feet in length and another building, which Appellants also identify as Building C, is 227 feet in length. Appeal, p. 3. Appellants' stated figures are incorrect.

Building block length is measured along the "street, public way, or public greenway." See Portsmouth Zoning Ordinance § 10.1530A, Figure 10.5A41.10B. As depicted in the submitted site plan (plat C-102.2), the longest building block length is on Building B, which is situated along the newly designated public greenway. The longest building façade facing the greenway on Building B is 185 feet-fifteen feet shorter than the maximum limit. Iron Horse worked closely with the Planning Board to ensure that all the proposed buildings complied with the prescribed building block length under the Ordinance. Because none of the building block lengths exceed 200 feet, in the event that count I is not dismissed for failure to raise the issue with the Planning Board, see § IA above, the ZBA should deny count I and affirm the Planning Board's decision.

## B. Count II Incorrectly Alleges That the Proposed Development Blocks the Dover Street View Corridor.

Contrary to Appellants' allegations, the Dover Street View Corridor is not blocked by an "elevated terrace" between Building A and Building B in the Proposed Development. Appeal, p. 4. Appellants have not alleged how the terrace would block the public view, presumably because the terrace does not, and could not, block the public view. Iron Horse carefully designed the buildings and their configuration to preserve the Dover Street view corridor. The proposed terrace, after accounting for the regraded site, will be 17.5 feet above sea level. At its lowest point (the intersection with McDonough Street), Dover Street is 21 feet above sea level, and at its highest point (the intersection with Islington Street), Dover Street is 31 feet above sea level.

By its plain terms, the North Mill Pond View Corridors Ordinance is intended to preserve the public view of the terminal vista of North Mill Pond. See Portsmouth Zoning Ordinance, 10.54.42.40. Even at its lowest point, Dover Street is still three and a half feet above the proposed terrace. The proposed terrace could not obstruct the view from Dover Street of the
terminal vista of North Mill Pond. Any person standing at the intersection of Dover Street and McDonough Street could look over the terrace, that is three and a half feet below, and see the end of North Mill Pond.

Appellants grievance appears to be that the approved site plan allows for a structureeven a downgradient terrace-to be built within the view corridor. But the North Mill Pond View Corridors Ordinance does not sweep so broadly. The Ordinance provides only that, "all new buildings or structures located with $400^{\prime}$ of the North Mill Pond shall be located in such a way as to maintain existing public views with the terminal vista of the North Mill Pond from . Dover Street." Portsmouth Zoning Ordinance § 10.5A42.40 (emphasis supplied). As demonstrated above, the proposed terrace, while located within the view corridor, satisfies the ordinance because it does not obstruct or even diminish the view from Dover Street to the terminal end of North Mill Pond. Additionally, the proposed terrace is neither a building nor a structure and thus the ordinance is inapplicable. The terrace is clearly not a building, as it does not provide shelter (see id. 10.1530 (defining building)), and because the wall on its southeastern border is shorter than 4 feet, it does not qualify as a "structure" (id. (defining "structure" as including "fences" that are over 4 feet in height)).

Finally, the North Mill Pond Views Corridor Ordinance prohibits development that obstructs the "existing" public view only. Respectfully, the Dover Street view towards North Mill Pond is non-existent. As presently configured, the Dover Street view is occluded by overgrown foliage on property owned by B\&M Railroad. There is no view to speak of from Dover Street and certainly not one that is within Iron Horse's control. The picture below depicts the Dover Street view, as shown on Bing maps, from the intersection of Islington Street:


The view worsens as one approaches the McDonough Street intersection. The proposed terrace could not violate the zoning ordinance because there is no existing view from Dover Street and given the overgrowth, there likely has not been a view for some time.

Additionally, the Dover Street view Corridor is already partially obstructed by the Roundhouse Building. See Site Plan Submission, plat C-101, Existing Conditions. That building will be demolished as part of the development, which if the foliage is cleared, will actually improve the view from Dover Street.

Based on the foregoing, the ZBA should deny count II of the appeal and affirm the decision of the Planning Board to permit the terrace between Building A and Building B in the Proposed Development.

## C. Contrary to Appellants' claim in count III, Iron Horse Never Requested a Variance to "Block" to Dover Street View Corridor and the ZBA Never Presided Over That Issue.

In January 2020, Iron Horse sought a variance to "realign the Dover Street view corridor 90 degrees from McDonough Street from the existing oblique angle intersection, still maintaining a width equal to that of the Right of Way." January 2, 2020 Variance Request, p. 10. In other words, Iron Horse sought to shift the view corridor 90 degrees west from the terminal intersection of Dover Street and McDonough Street. The goal of the variance was to preserve the view corridor while easing restraints on development given the irregular configuration of the property and the desire to avoid encroaching on the wetlands buffer. The Zoning Board denied that request, and Iron Horse abided by the ZBA's decision. As depicted in the approved site plan, the Dover Street view corridor runs interrupted from the Dover Street, Islington Street intersection to the northwestern banks of North Mill Pond.

To say that Iron Horse sought to "block the Dover Street view corridor" through the requested variance or that the Planning Board's site plan approval was "contrary to this Zoning Board of Adjustment's own prior ruling"-as Appellants have alleged-is to display a worrisome capacity for disinformation. Count III of the appeal should be denied.

## D. Appellants Misapply the Building Height Ordinance in Count VII of the Appeal.

Appellants open count VII by arguing that the Planning Board deviated from the ZBA's prior denial of a variance to Iron Horse regarding building height. They additionally accuse Iron Horse of "architectural sleight-of-hand" by raising the property grade as an end-run around the

ZBA's decision. Appeal, p. 9. Once again, Appellants have misconstrued what transpired at the January 22, 2020 ZBA meeting.

In January 2020, Iron Horse sought a variance to permit a 60 -foot height on portions of Building B and Building C where only a 50-foot height is allowed by Section 10.5A.43.30 and Map 10.5A21.B. See January 2, 2020 Variance Request. The ZBA denied the request. However, those statements standing alone are misleading. Those statements fail to explain the critical distinction that, at that point in the planning process, Iron Horse already had committed to regrading the property to raise the ground floor of the proposed buildings to reduce surface parking by creating parking lots under the proposed buildings and to raise the proposed buildings above the floodplain for climate change planning. ${ }^{7}$ Iron Horse made this plan clear to the ZBA in its January 2, 2020 submission: "Notably, Iron Horse has also graded the first floor of Buildings $\mathrm{A}, \mathrm{B}$, and C to raise the elevation of all occupied levels of the building to provide additional flood protection." Id., p. 8. Notwithstanding the proposed regrading, Iron Horse nevertheless sought a variance from the allowed building height in the CD4-W zone to gain an extra story and to achieve certain density objectives.

Many developments in the City, most recently the one at 145 Brewery Lane, involved regrading the property to raise the grade plane evaluation; it is a common practice. Contrary to Appellants' revisionist history in count VII, Iron Horse did not regrade the property as part of some "architectural sleight-of-hand" intended to end-run around the ZBA's denial of a variance. Iron Horse had committed to regrading the property regardless of whether the ZBA approved the variance to increase the allowable building height. Indeed, in December 2019, prior to the

[^5]variance request, Iron Horse had submitted a proposed site plan to the Planning Board showing that the grade of the property would be raised by approximately seven feet for the proposed development. See Exhibit A, Dec. 17, 2019 Grading, Drainage, and Erosion Control Plan and Grade Plane. Later, as part of its review, the Conservation Commission celebrated the fact that Iron Horse would be making the site resilient to climate change by regrading it and raising the grade plane elevation. See Memo from Conservation Commission Meeting, Feb. 10, 2021, p. 2. Looking at the record, it is evident that Iron Horse proposed regrading the site before it applied for a variance and for reasons completely unrelated to building height.

Iron Horse has abided by the January 22, 2020 decision of the ZBA, as none of the proposed buildings exceed a height of 50 feet. As applicable here, building height is measured from the grade plane to the top of the proposed building. See Portsmouth Zoning Ordinance, § 10.1530. The Grade Plane Exhibit demonstrates that Building A and Building B sit at a grade plane evaluation of 16.39 feet and Building C is at a grade plane elevation of 13.28 feet. See Exhibit B, Grade Plane Exhibit. Pursuant to the City's Ordinance, this means that Building A and Building B cannot exceed a building elevation of 66.39 feet and Building C cannot exceed a building elevation of 63.28 feet. As demonstrated in the Grade Plane Exhibit, none of the proposed buildings exceed the height limits. The Proposed Development therefore complies with the building height ordinance. Consequently, the ZBA should reject count VII and affirm the Planning Board's site plan approval.

WHEREFORE, Intervenor Iron Horse Properties, LLC respectfully requests that the Portsmouth Zoning Board of Adjustment:
A. Dismiss counts I, III, IV, V, VI, VII, and VIII of Appellants' appeal of the Planning Board decisions dated April 20, 2021;
B. Deny counts II and VII of Appellants' appeal of the Planning Board decisions
dated April 20, 2021; and
C. Affirm the Planning Board's decisions dated April 20, 2021.

Respectfully submitted,

Iron Horse Properties, LLC

By its counsel,

By_/s/ Michael D. Ramsdell
Michael D. Ramsdell (Bar No. 2096)
Brian J. Bouchard (Bar No. No. 20913)
Sheehan Phinney Bass \& Green, P.A.
1000 Elm Street, P.O. Box 3701
Manchester, NH 03105-3701
(603)627-8117; (603) 627-8118
mramsdell@sheehan.com
bbouchard@sheehan.com

## CERTIFICATE OF SERVICE

On June 4, 2021, this Motion to Dismiss and Merits Response to Appellants’ Appeal of Decision of the Portsmouth Planning Board was forwarded via email to City Attorney Robert P. Sullivan and Duncan J. MacCallum, Esq.

By: _/s/ Michael D. Ramsdell

Michael D. Ramsdell

# BILL SOUTHWORTH 

May 20, 2021

Board of Adjustments
City of Portsmouth, New Hampshire

At our home on 39 Pickering, the existing shed, is rotted and starting to collapse. We want to replace it with a $10^{\prime} \times 12^{\prime}$ shed to be constructed as a manufactured frame and erected on a concrete slab. The shed will be the same orientation and setback as the existing shed and will be painted to match the house. It will have increased pitch to match the pitch of surrounding roof lines.

I've tried to address section 10.233 of the Zoning Ordinance below:

### 10.233.22 The spirit of the Ordinance will be observed;

We propose using Post Woodworking of Danville, NH for the factory manufactured shed. They will also install the shed on the concrete slab.

We will need separate contractors for the minimal site preparation, demolition of the existing shed, and installation of a haunched monolithic concrete slab with steel rebar reinforced spread footing for the posts. This will replace the current non-pressure treated wood floor sitting on the ground.

The existing shed has walls at the same height as the two fences next to it at the property line. Only a small part of the roof is visible from adjacent property. The proposed shed will be the same wall height but $2^{\prime}$ taller ( $12^{\prime}$ ) at the peak due to the increased size and roof pitch.

Sheds in several neighboring properties are on the property line so, although nonconforming, a structure this close to the property line is in keeping with the character of the South End. The existing shed is 2' from the rear property line and 2 ' from the right side property line. It sits $14^{\prime}$ diagonally from our kitchen, which juts out from the main house, and 16 ' from our dining room. This is really the only location that works for the structure. There will be no decrease in the setback with the new shed, and the
impervious surface will be increased by approximately 32 square feet over the 1999 reconstructed house plus shed, which cover 964 sq. ft., $38.9 \%$ of the property area. With the replacement shed this will increase to 996 sq. ft., $40.2 \%$ of the property area, 2476 sq. ft.

Building height from the ground will have no increase in wall height which will reduce the height since the existing shed is raised by about a foot. We propose that the overall height at the peak of the roof be about 2' higher so that the pitch can match the surrounding buildings. This can be seen in the attached photos.

The new shed will also match the siding and roof material of our house and of neighboring buildings. To this extent, we believe that the new shed will actually be closer in design than the original to the spirit of the neighborhood.

### 10.233.21 The variance will not be contrary to the public interest;

The proposed shed will cover the footprint of the old shed. It will be minimally visible from two adjacent properties and not at all from the street. It is not a dwelling unit and will put no extra burden on public systems such as water/sewage of gas lines. We believe that the structure will enhance the appearance and value of our property and thereby increase the value of neighboring properties. Therefore, we believe it to be in the public interest.

### 10.233.23 Substantial justice will be done;

If the variance is granted we can identify no harm to the public or to surrounding neighbors. However, if denied, we will suffer as we will be forced to continue to store our 220 lb . snow blower, pressure washer, lawnmower, generator and smoker outside on raised blocks under a tarp as we are forced to do now. Our house has no basement access except down steep stairs from our living room. We've considered a hoist of some sort but the stairway is also too narrow for the snowblower.

### 10.233.24 The values of surrounding properties will not be diminished; and

This is addressed in the 10.233 .21 comments. We believe that the replacement structure will enhance property values of our property and the neighborhood.

### 10.233.25 Literal enforcement of the provisions would result in an unnecessary hardship.

We currently store large tools outdoors as we do not have basement access nor do we have a sufficiently large shed or a garage. Most of the houses in the neighborhood have either a garage, shed or cellar bulkhead. Most of the South End was built in a very ad hoc fashion before any of the existing ordinances. There's very little of the consistencies of modern planned layout. However, that's part of the charm of the neighborhood. Our lot is particularly small, even in comparison to surrounding lots, although there's plenty of room to park two cars outdoors in the driveway and there's room for a garden and patio. The shed enlargement is a reasonable and improved use of the property.

The enlargement of the shed will allow for storage and a garden workshop. We also want insulated construction since the snowblower and other power tools are battery operated and need to be kept charged and since a portable generator needs to be kept warm to work properly. The new shed will also provide for storage of plants that we want bring in from freezing in the winter.

Please advise us as to any issues with the concept and permitting before we proceed with vendor qualification and selection. Also, please let us know whether you need engineering drawings or can use standard construction plans from the frame builder.

Thanks for your consideration.
Sincerely yours,

[^6]

## 39 PICKERING ST

| Location | 39 PICKERING ST | Mblu | $0102 / 0005 / 0000 / /$ |
| ---: | :--- | ---: | :--- |
| Acct\# | 32883 | Owner | SOUTHWORTH WILLIAM H |
| PBN |  |  |  |
| Appraisal $\$ 763,200$ | Assessment | $\$ 763,200$ |  |
|  |  |  |  |
| PID | 32883 |  |  |

Building Count 1

## Current Value

| Appraisal |  |  |  |
| :---: | :---: | :---: | :---: |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$395,600 | \$367,600 | \$763,200 |
| Assessment |  |  |  |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$395,600 | \$367,600 | \$763,200 |

## Owner of Record

| Owner | SOUTHWORTH WILLIAM H | Sale Price | $\$ 575,000$ |
| :--- | :--- | :--- | :--- |
| Co-Owner | SOUTHWORTH BARBARA ANN | Certificate |  |
| Address | 39 PICKERING ST | Book \& Page | $4958 / 2812$ |
|  | PORTSMOUTH, NH 03801 | Sale Date | 10/24/2008 |
|  |  | Instrument | 00 |

## Ownership History

| Ownership History |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Owner | Sale Price | Certificate | Book \& Page | Instrument | Sale Date |
| SOUTHWORTH WILLIAM H | \$575,000 |  | 4958/2812 | 00 | 10/24/2008 |

## Building Information

## Building 1 : Section 1

| Year Built: | 1999 |
| :--- | :--- |
| Living Area: | 1,620 |
| Replacement Cost: | $\$ 470,970$ |
| Building Percent Good: | 84 |

Replacement Cost
Less Depreciation: \$395,600

| Building Attributes |  |
| :---: | :---: |
| Field | Description |
| Style | Colonial |
| Model | Residential |
| Grade: | A |
| Stories: | 2 |
| Occupancy | 1 |
| Exterior Wall 1 | Wood Shingle |
| Exterior Wall 2 | Clapboard |
| Roof Structure: | Gable/Hip |
| Roof Cover | Asph/F Gls/Cmp |
| Interior Wall 1 | Drywall/Sheet |
| Interior Wall 2 |  |
| Interior Flr 1 | Carpet |
| Interior Flr 2 | Ceram Clay Til |
| Heat Fuel | Gas |
| Heat Type: | Hot Water |
| AC Type: | Central |
| Total Bedrooms: | 3 Bedrooms |
| Total Bthrms: | 3 |
| Total Half Baths: | 0 |
| Total Xtra Fixtrs: | 0 |
| Total Rooms: | 7 |
| Bath Style: | Above Avg Qual |
| Kitchen Style: | Above Avg Qual |
| Kitchen Gr | A |
| WB Fireplaces | 1 |
| Extra Openings | 0 |
| Metal Fireplaces | 0 |
| Extra Openings 2 | 0 |
| Bsmt Garage |  |

## Building Photo


(http://images.vgsi.com/photos2/PortsmouthNHPhotos/^00\01\66\71.jpg)

## Building Layout


(ParcelSketch.ashx?pid=32883\&bid=32883)

| Building Sub-Areas (sq ft) |  |  | Legend |  |
| :--- | :--- | ---: | ---: | :---: |
| Code | Description | Gross <br> Area | Living <br> Area |  |
| BAS | First Floor | 852 | 852 |  |
| FUS | Upper Story, Finished | 768 | 768 |  |
| FOP | Porch, Open | 24 | 0 |  |
| UBM | Basement, Unfinished | 852 | 0 |  |
|  |  | 2,496 | 1,620 |  |

## Extra Features

## Extra Features

| Land Use |  |  | Land Line Valuation |  |
| :--- | :--- | :--- | :--- | :--- |
| Use Code | 1012 |  | Size (Acres) | 0.06 |
| Description SFR WATERINFL GRB Frontage |  |  |  |  |
| Zone Depth   <br> Neighborhood 101 Assessed Value $\$ 367,600$ <br> Alt Land Appr No Appraised Value $\$ 367,600$ <br> Category    |  |  |  |  |

## Outbuildings

|  | Outbuildings | Legend |
| :--- | :--- | :--- |
|  | No Data for Outbuildings |  |

## Valuation History

| Appraisal |  |  |  |
| :---: | :---: | :---: | :---: |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$395,600 | \$367,600 | \$763,200 |
| 2019 | \$395,600 | \$367,600 | \$763,200 |
| 2018 | \$360,000 | \$306,700 | \$666,700 |


| Assessment |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: |
|  | Valuation Year | Improvements | Land |  |  |  |  |  |
| 2020 |  | $\$ 395,600$ | $\$ 367,600$ | Total |  |  |  |  |
| 2019 |  | $\$ 395,600$ | $\$ 367,600$ |  |  |  |  |  |
| 2018 | $\$ 360,000$ | $\$ 306,700$ | $\$ 763,200$ |  |  |  |  |  |

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# APPLICATION OF MOTORBIKES PLUS, LLC <br> 650 MAPLEWOOD AVENUE <br> Map 220, Lot 88 

APPLICANT'S NARRATIVE

## A. The Project.

The Applicant, Motorbikes Plus, LLC, is under contract to acquire the property located at 650 Maplewood Avenue, 1.72 acre lot and the site of an approximately 7325 square feet warehouse facility currently housing the Rexall Electrical industrial/warehouse/retail and office use. The property is at the northeastern corner of Maplewood Avenue and Emery Street. According to City tax records, the existing building dates to 1970. The Applicant seeks to relocate its existing retail sales operation from 3 Cate Street, where it has operated since 2001, to this location. The Applicant will be making minimal exterior changes to the building and property, beyond usual and customary changes to signage and landscaping.

The property is an irregularly shaped lot and the building is oriented such that it is parallel to Emery Street and at sharp angle to Maplewood. In the immediate vicinity are a bus depot, commercial uses on the Rte. 1 By-Pass, an electrical transformer station, the Oddfellows lodge, and residential uses. One abutter has been approved for a place of religious assembly. The proposal is not incompatible with these uses.

The proposed sale of motorcycles does not produce excessive noise, and the property is not in any event a "quiet" site given its proximity to the By-Pass, I-95 and the nearby commercial uses. The Applicant will, at most, store only limited product or equipment outdoors overnight and is open to the public during normal business hours ( $9 \mathrm{am}-5 \mathrm{pm}$ ) from Tuesday through Friday, and from 9am to 3pm on Saturdays. The business is closed Sundays and Mondays.

The products applicant offers for sale are primarily specialized, and, as such, the business does not generate an excessive amount of retail traffic.

The property is in the Business (B) zoning district, the purpose of which is " $[t]$ o provide for a mix of retail, commercial and residential uses in areas of the City where a mix of such uses is desirable." §10.410.

Motor vehicle sales are permitted in the B zone by special exception. §10.440.11.10. It should be noted, however, that the applicant's business is very different than what is typically considered "motor vehicle" related. Sales and repair of motorcycles are only a portion of its business. Most items fall into other categories, like helmets, apparel, parts, accessories and even bicycles. The majority of the use would be permitted on the property.

Because this site abuts residential districts to the west and the south and across Maplewood Avenue, relief from $\S 10.592 .20$ is required as the proposed use, ${ }^{1}$ motor vehicle sales, is within 200 feet of such residential districts.

The applicant does not plan to make any significant changes to the exterior of the building and intends to retain and utilize the parking areas as they currently exist. The current parking is in places within forty feet of the Maplewood Avenue and Emery Street rights of way. Accordingly, for this use, relief from $\S 10.843 .21$ is also necessary ${ }^{2}$.

## B. The Special Exception.

The Applicant believes the proposal easily meets the criteria for the necessary special exception. Those criteria are set forth in the ordinance at $\S 10.232 .20$.

First, the use proposed here, "motor vehicle sales," is permitted within this district by special exception, see $\S 10.440$ Table of Uses, no. 11.10. §10.232.10.

Second, the proposed use will pose no hazard to the public or adjacent properties on account of potential fire, explosion or release of toxic materials. §10.232.22. No explosives, toxic materials or unusual accelerants will be stored on site. Any motor vehicle fluids will be disposed of properly by the Applicant privately in accordance with accepted practices. This has never presented any issue for the Applicant at its Cate Street location.

Third, there will be no detriment to property values in the vicinity or change in the essential characteristics of any area including residential neighborhoods or business and industrial districts on account of the location or scale of buildings and other structures, parking areas, accessways, odor, smoke, gas, dust, or other pollutant, noise, glare, heat, vibration, or unsightly outdoor storage of equipment, vehicles or other materials. $\S 10.232 .23$. Commercial use has existed on this site for at least fifty years. There will be, at most, limited overnight outside storage of product or equipment on site. The existing use by Rexall includes permanent outdoor storage of equipment and supplies (which will be discontinued by the applicant), which has had no discernible effect on property values in the vicinity. Ambient noise from the traffic on the By-Pass and I-95 mitigates any minor noise impact this use will produce.

The building already exists and no new construction or site disturbance is contemplated.
Fourth, there will be no creation of a traffic safety hazard or a substantial increase in the level of traffic congestion in the vicinity. $\S 10.232 .23$. The existing use is comprised of industrial/warehouse/retail and office use. The applicant's operation is geared towards a

[^7]specialized clientele and does not generate significant traffic. The property currently has 28 designated/marked parking spots, which is more than sufficient for this proposed use. The Cate Street operation, for example, has only 11 spaces.

Fifth, there will be no excessive demand on municipal services, including, but not limited to, water, sewer, waste disposal, police and fire protection and schools. §10.232.24. None of these services will be implicated by this proposal.

Finally, the project will result in no significant increase of stormwater runoff onto adjacent property or streets. $\S 10.232 .25$. There will be no change to the existing building footprint or impervious surfaces.

## C. The Variances.

The Applicant submits that the proposal meets the criteria for granting the requested variances.

Granting the requested variance will not be contrary to the spirit and intent of the ordinance nor will it be contrary to the public interest. The "public interest" and "spirit and intent" requirements are considered together pursuant to Malachy Glen Associates v. Chichester, 152 NH 102 (2007). The test for whether or not granting a variance would be contrary to the public interest or contrary to the spirit and intent of the ordinance is whether or not the variance being granted would substantially alter the characteristics of the neighborhood or threaten the health, safety and welfare of the public.

The proposed use fits in well with the mix of commercial, religious and other assembly and residential uses characteristic of this neighborhood. The existing structure and lot will not be altered in any material way. The health, safety and welfare of the public will not be threatened in any fashion if the proposed use is within 200 feet of the abutting residential zones or if the forty foot parking setback is not maintained.

Substantial justice would be done by granting the variance. Whether or not substantial justice will be done by granting a variance requires the Board to conduct a balancing test. If the hardship upon the owner/applicant outweighs any benefit to the general public in denying the variance, then substantial justice would be done by granting the variance. It is substantially just to allow a property owner the reasonable use of his or her property.

In this case, there is no benefit to the public in denying the variances that is not outweighed by the hardship upon the owner. The required 200 foot separation cannot be maintained without moving the building and substantially altering the parking areas. The forty foot parking/motor vehicle storage setback requirement is unnecessary to protect any abutting properties. The properties across Emery Street consist of a PSNH facility and an entirely commercial facility. At least one of the residential properties across Maplewood Avenue is oriented away from this property, and Maplewood itself provides a natural separation from other properties.

Accordingly, the loss to the applicant clearly outweighs any gain to the public if the applicant were required to conform to the ordinance.

The values of surrounding properties will not be diminished by granting the variance. The proposal will modernize and update a very modest commercial building and will spruce up the site. Deliveries and the noise associated with them will likely decrease. The abutting residential zone to the west is separated from the proposed use by heavy vegetation and a six foot privacy fence. The residential zone to the south is separated from the use by a utility corridor and heavy vegetation. The residential zone to the north is separated from the use by Maplewood Avenue. The values of surrounding properties will not be negatively affected in any way.

There are special conditions associated with the property which prevent the proper enjoyment of the property under the strict terms of the zoning ordinance and thus constitute unnecessary hardship. The property is an irregularly shaped corner lot with an existing built environment that is very easily adapted to the proposed use for the sale of motorcycles. The existing building is sited so that it is parallel to Emery Street but at an odd angle to Maplewood. Compliance with the ordinance would require, at a minimum, the relocation of the building on the property and the substantial removal and re-configuration of the parking. Pulling the parking area to 40 feet from the rights of way would impede the safe flow of traffic through the site given its irregular shape and the orientation of the building on the site.

The use is a reasonable use. The proposal is permitted by special exception in this zone and is not inconsistent with the intent of the Business zone or the existing mix of commercial, religious and general assembly and residential uses in the area.

There is no fair and substantial relationship between the purpose of the ordinance as it is applied to this particular property. All of the variance relief here requested is driven by the applicant's desire to reuse the property as it is currently configured. The purpose of the 200 foot from residential zones is to assure residential uses are adequately protected from the potentially deleterious effect of having a busy and very highly visible motor vehicle showroom in close proximity. The purpose of the forty foot parking setback from the public right of way is to blunt the adverse aesthetic affect a large automobile parking lot is presumed to have on the motoring public. None of these purposes are frustrated by this proposal for this site given that heavy vegetation, a privacy fence, a utility corridor and Maplewood Avenue all separate the proposed use from the abutting residential zones. As noted above, compliance with these requirements would mean moving the building and re-configuring the parking lot, which is an unnecessary hardship in this circumstance.

Accordingly, the relief requested here would not in any way frustrate the purpose of the ordinance and there is no fair and substantial relationship between the purpose of these requirements and their application to this property.

## D. Conclusion.

For the foregoing reasons, the applicant respectfully requests the Board grant the special exception and variances as requested and advertised.

Respectfully submitted,

Dated: May 25, 2021

## By: lal John K. Bosen

John K. Bosen, Esquire


## 









# Hoefle, Phoenix, Gormley do Roberts, pllc <br> ATTORNEYS AT LAW 

127 Parrott Avenue, P.O. Box 4480 | Portsmouth, NH, 03802-4480
Telephone: 603.436.0666 | Facsimile: 603.431.0879 | www.hpgrlaw.com

May 26, 2021

## HAND DELIVERED

Peter Stith, Principal Planner
Kimberli Kienia, Administrative Assistant
Portsmouth Zoning Board of Adjustment
City Hall
1 Junkins Avenue
Portsmouth, NH 03801
Re: Tuck Realty Corp.-Applicant
Project Location: 668 Middle Street
Tax Map 147/Lot 18
GRA Zone
Dear Mr. Stith, Ms. Kienia \& Zoning Board Members:
On behalf Tuck Realty Corp., we are pleased to submit the following documents in support of a request for zoning relief:

- Portsmouth Land Use Application LU-21-23 uploaded today.
- 05/26/21 - Memorandum and Exhibits in support of zoning relief (original and eleven (11) copies).

Very truly yours,

R. Timothy Phoenix

Kevin Baum
RTP/msw
Encl.
cc: Michael Garrepy-Tuck Realty Corp.
Jones and Beach Engineers
Art Form Architecture, Inc.

## MEMORANDUM

TO: Portsmouth Zoning Board of Adjustment ("ZBA")
FROM: R. Timothy Phoenix, Esquire
Kevin M. Baum, Esquire
DATE: May 26, 2021
RE: Tuck Realty Corp. - Applicant
Project Location: 668 Middle Street
Tax Map 147/Lot 18
GRA Zone
Dear Chairman Rheaume and Zoning Board Members:
On behalf of Tuck Realty Corp. ("Tuck" or "Applicant"), we are pleased to submit this memorandum and attached exhibits in support of Zoning Relief to be considered by the Zoning Board of Adjustment ("ZBA") at its June 15, 2021 meeting.

## I. Exhibits

A. Plan Set - by Jones \& Beach Engineers, Inc.

1. Existing Conditions Plan (Sheet C1)
2. ZBA Plan (Sheet A1)
B. Subdivision Plan for 660 Middle Street - approved December 6, 2010.
C. Site Photographs.
D. Tax Assessors Card.
E. City GIS Map - identifying nearby zoning districts and surrounding area.
F. Tax Map 147.

## II. Property/Project

The subject property (the "Property") is located at 668 Middle Street with frontage on both Middle Street and Chevrolet Avenue. Exhibit A; C. The Property is currently developed with two residential buildings, an approximately 3,840 square foot (living space), three-family residence to the front of the lot, closest to Middle Street, and an approximately 1,920 square foot (living space), single family carriage house toward the middle of the lot. Id. The Property is located in the GRA Zoning District, with the front portion containing the three-family residence, also within the Historic District. The lot, at $\pm 81,050$ square feet, is significantly larger than most others in the nearby area. Exhibit C (aerial photograph).

Tuck proposes to subdivide the Property into three lots, consistent with the similar layout approved by the ZBA and Planning Board in 2010. Exhibit A.2; Exhibit B. Proposed Lot 3 will be approximately 43,644 square feet. Id. It will include the two existing residential buildings and retain access from Middle Street. Id. There will be no structural change to either of the
existing buildings, other than modest repairs or similar cosmetic upgrades. The number of dwelling units in each existing building will remain unchanged. Thus, the resulting lot will meet all density and other dimensional requirements of the Portsmouth Zoning Ordinance ("PZO"), with the exception of portions of the rear carriage house building and side stairs of the front residence, which are partially within the right side setback. Id. However, these conditions predate the relevant provisions of the PZO, and are, therefore, grandfathered. Residential use, which will continue on the lot, is permitted by right in the GRA Zone.

The rear portion of the lot will be subdivided into two lots, each with frontage on Chevrolet Avenue. Id. Proposed Lot 1 will be approximately 18,646 square feet and proposed Lot 2 approximately 18,756 square feet. Id. The proposed lots comply with all dimensional requirements of the PZO. No buildings are currently proposed for either Lot 1 or Lot 2 and Tuck's expectation and intent is that any future residential structures will be constructed in compliance with PZO requirements. The existing structure on Lot 2 will be removed. Id.

Despite its prominence and longstanding presence, Chevrolet Avenue is a private right of way and not a City street. Accordingly, relief is needed to allow frontage and for the future construction of a structure on a private right of way. Given the nature of Chevrolet Avenue and for the other reasons discussed below, this proposed limited subdivision meets the statutory variance criteria and the following relief should be granted.

## III. Relief Required

1. $\mathrm{PZO} \S 10.521$ - to allow for $114^{\prime}$ and $100^{\prime}$ of frontage on a private right of way, where $100^{\prime}$ of frontage on a formally accepted street or other road approved by the Planning Board and constructed to City subdivision specifications.
2. $\mathrm{PZO} \S 10.521$ - to allow $69.83^{\prime}$ of frontage on Middle Street where $100^{\prime}$ is required. ${ }^{1}$
3. $\mathrm{PZO} \S 10.512$ - to allow construction of a structure on a lot with access to a private right of way.
[^8]
## IV. Variance Requirements

1. The variances will not be contrary to the public interest.
2. The spirit of the ordinance is observed.

The first step in the ZBA's analysis is to determine whether granting a variance is not contrary to the public interest and is consistent with the spirit and intent of the ordinance, considered together pursuant to Malachy Glen Associates, Inc. v. Town of Chichester, 155 N.H.
102 (2007) and its progeny. Upon examination, it must be determined whether granting a variance "would unduly and to a marked degree conflict with the ordinance such that it violates the ordinance's basic zoning objectives." Id. "Mere conflict with the zoning ordinance is not enough." Id.

The Portsmouth Zoning Ordinance was enacted for the general purpose of promoting the health, safety, and welfare in accordance with the Master Plan by regulating:

1. The use of land, buildings and structures for business, industrial, residential and other purposes - no changes are proposed to the existing residential buildings. The newly created rear lots will comply with all dimensional and use requirements of the PZO while allowing access from Chevrolet Avenue.
2. The intensity of land use, including lot sizes, building coverage, building height and bulk, yards and open space - lot sizes, building coverage, building height and bulk, yards and open space requirements are all met; the proposal is consistent with the surrounding area and creates a natural transition to the nearby Frank Jones Brew Yard/Brewery Lane Apartments development across Chevrolet Avenue.
3. The design of facilities for vehicular access, circulation, parking and loading - the Property has access from both Chevrolet Avenue and Middle Street; sufficient parking areas and driveways are maintained on the lots and will be more fully vetted during Planning Board review. Exhibit A. 2
4. The impacts on properties of outdoor lighting, noise, vibration, stormwater runoff and flooding - these purposes are not undermined and will be fully vetted during Planning Board review; the proposal will result in continued residential use of the Property in compliance with PZO open space and building coverage requirements.
5. The preservation and enhancement of the visual environment - the historic existing structures will be maintained on Lot 2; the proposal provides a transition to the mixed use area across Chevrolet Avenue. Id.
6. The preservation of historic districts, and buildings and structures of historic or architectural interest - the proposal maintains the existing historic structures. Id.;

## Exhibit C.

7. The protection of natural resources, including groundwater, surface water, wetlands, wildlife habitat, and air quality - all building coverage and open space requirements are met (Exhibit A.2); the project will be fully vetted during Planning Board review.

In considering whether variances "in a marked degree conflict with the ordinance such that they violate the ordinance's basic zoning objectives." Malachy Glen, supra, also held:

One way to ascertain whether granting the variance would violate basic zoning objectives is to examine whether it would alter the essential character of the locality.... . Another approach to [determine] whether granting the variance violates basic zoning objectives is to examine whether granting the variance would threaten the public health, safety or welfare. (emphasis added)

The proposal maintains the existing historic structures on the Property while allowing additional residential lots within the large, rear portion of the parcel closest to the CD4-W and GRC Zones and Brewery Lane commercial area. The resulting lot sizes comply with existing zoning within the GRA, while allowing frontage on Chevrolet creates a transition to the adjacent mixed use West End commercial area. Exhibit A.2. Lot 3 will remain virtually unchanged both with respect to the existing historic structures and its longstanding frontage on Middle Street. The proposed layout largely mirrors that approved for the neighboring property ( 660 Middle) in 2010. Exhibit B. Accordingly, the Project will neither "alter the essential character of the locality nor threaten the public health, safety or welfare."

## 3. Granting the variance will not diminish surrounding property values.

As noted, the existing residences will be preserved and the view of the Property from and frontage to Middle Street (and the Historic District) will remain essentially unchanged. The rear portion of the Property, will eventually be developed with compliant residences with access to Chevrolet, thereby creating a transition to the West End commercial area and avoiding additional traffic onto Middle Street. There will be little to no noticeable effect to surrounding residential properties and the commercial/mixed use area to the rear will be enhanced by the inclusion of walkable residential lots. The layout is consistent with the previously approved neighboring parcel, creating similarly sized lots along Chevrolet Avenue. Thus, if anything, granting the variances will improve the surrounding property values.

## 4. Denial of the variances results in an unnecessary hardship.

a. Special conditions distinguish the property/project from others in the area.

The Property is significantly larger than all of the nearby residential lots. It abuts or is near multiple different zoning districts, containing a mix of commercial/residential uses, with most of the surrounding residential lots having lesser lot area and more density than Tuck's
proposal. Additionally, the property has frontage on two longstanding heavily traveled roadways, with relief needed only due to Chevrolet Avenue's non-public status. These factors combine to create special conditions that distinguish the Property from others in the area.
b. No fair and substantial relationship exists between the general public purposes of the ordinance and its specific application in this instance.

Frontage requirements are put into place to ensure that lots to be developed have available access to public streets and adequate space to safely drive to and from the property. This requirement is effectively met in this instance. Proposed Lots 1 and 2 will have 114 and 100 feet of frontage, respectively, on Chevrolet Avenue. This fully meets the frontage length requirement, meeting safety goals. Relief is only required because Chevrolet is not a City street. Chevrolet Avenue has long existed and provided adequate access to the Brewery Lane commercial area and surrounding feeder streets. In fact, portions of the road are public, just not the area immediately adjacent to the Property. Accordingly, Lots 1 and 2 will have adequate frontage to ensure safe access to and from the proposed lots.

Likewise, the frontage for Lot 3 will not change nor will the driveway from the existing historic structures to Middle Street. While a gate on Chevrolet Avenue exists, Middle Street has been the primary, if not the sole, access to and from the residences for years without any know incident. Moreover, the $\pm 69.83$ feet of frontage, while less than the required 100 feet, is consistent with that of other properties in the area. Exhibit A; Exhibit F. Accordingly, the purposes of the 100 foot public street frontage requirement are either met or consistent with surrounding properties, and therefore, so there is no reason to strictly apply these provisions of the PZO in this instance.
c. The proposed use is reasonable.

If the use is permitted, it is deemed reasonable. Vigeant v. Hudson, 151 N.H. 747 (2005). The proposal maintains residential uses on the Property, which are permitted in the GRA Zone. Accordingly, the use is reasonable.

## 5. Substantial justice will be done by granting the variance.

If "there is no benefit to the public that would outweigh the hardship to the applicant" this factor is satisfied. Harborside Associates, L.P. v. Parade Residence Hotel, L.L.C, 162 N.H. 508 (2011). That is, "any loss to the [applicant] that is not outweighed by a gain to the general public is an injustice." Malachy Glen, supra at 109.
"The right to use and enjoy one's property is a fundamental right protected by both the State and Federal Constitutions." N.H. CONST. pt. I, arts. 2, 12; U.S. CONST. amends. V, XIV; Town of Chesterfield v. Brooks, 126 N.H. 64 (1985) at 68. Part I, Article 12 of the New Hampshire Constitution provides in part that "no part of a man's property shall be taken from him, or applied to public uses, without his own consent, or that of the representative body of the people." Thus, our State Constitutional protections limit the police power of the State and its municipalities in their regulation of the use of property. L. Grossman \& Sons, Inc. v. Town of Gilford, 118 N.H. 480, 482 (1978). "Property" in the constitutional sense has been interpreted to mean not the tangible property itself, but rather the right to possess, use, enjoy and dispose of it. Burrows v. City of Keene, 121 N.H. 590, 597 (1981). (emphasis added).

The Supreme Court has held that zoning ordinances must be reasonable, not arbitrary and must rest upon some ground of difference having fair and substantial relation to the object of the regulation. Simplex Technologies, Inc. v. Town of Newington, 145 N.H. 727, 731 (2001); Chesterfield at 69 . To "determine whether an ordinance is arbitrary and unreasonable, the injury or loss to the landowner must be balanced against the gain to the public." Metzger v. Town of Brentwood, 117 N.H. 497, 501 (1977). In other words, [w]hen the restriction as applied to a particular piece of land is unnecessary to accomplish a legitimate public purpose or the gain to the public is slight but the harm to the citizen and his [or her] property is great, the exercise of the police power becomes arbitrary and unreasonable and this court will afford relief under the constitution of this state. Id. at 503.

The proposal allows Tuck to make better use of a large lot, with the addition of new residential lots on the rear of the currently undeveloped portion of the Property. The proposal maintains the existing historic structures to the front of the Property while creating additional appropriately sized residential lots compliant with the dimensional requirements of the PZO and consistent with other properties in the area. Thus, there is no benefit to the public from denying the requested variances. In contrast, Tuck will suffer great harm as it would be unable to reasonably utilize the large undeveloped rear portion of the lot and existing Chevrolet Avenue frontage. Accordingly, there is no benefit to the public the public that would outweigh the hardship to the applicant if the variances are denied.

Tuck Realty Corp. - 668 Middle Street

## V. Conclusion

For all of the reasons stated, the Applicant respectfully request that the Portsmouth Zoning Board of Adjustment grant the requested variances.

Respectfully submitted,
Tuck Realty Corp.


By: R. Timothy Phoenix
Kevin M. Baum

EXHIBIT A



## EXHIBIT B



Exhibit C
Site Photographs


Aerial View of Property


Aerial View of Property showing surrounding uses and densities


View of the Property from Middle Street (east)


View of existing buildings from Middle Street


View of Three-Family Residence from Middle Street (southeast)

Exhibit C
Site Photographs


View of Carraige House (Single Family Residence) from front (east)


View of Carraige House (Single Family Residence) from rear (west)


View from Property from the rear (northwest)


View from Property from the northwest


View from Property from Chevrolet Avenue (northwest)

## 668 MIDDLE ST

| Location | 668 MIDDLE ST | Mblu | 0147/0018/0000/ / |
| :---: | :---: | :---: | :---: |
| Acct\# | 34521 | Owner | LARSEN ELIZABETH B TRUST OF 2012 |
| PBN |  | Assessment | \$2,207,100 |
| Appraisal | \$2,207,100 | PID | 34521 |
| Building Count | 2 |  |  |

## Current Value

| Appraisal |  |  |  |
| :---: | :---: | :---: | :---: |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$1,808,600 | \$398,500 | \$2,207,100 |
| Assessment |  |  |  |
| Valuation Year | Improvements | Land | Total |
| 2020 | \$1,808,600 | \$398,500 | \$2,207,100 |

## Owner of Record

Owner LARSEN ELIZABETH B TRUST OF 2012
Co-Owner LARSEN ELIZABETH B TRUSTEE
Address 668 MIDDLE ST
PORTSMOUTH, NH 03801

Sale Price $\quad \$ 0$
Certificate
Book \& Page 5390/2799
Sale Date 12/20/2012
Instrument

## Ownership History

| Ownership History |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Owner | Sale Price | Certificate | Book \& Page | Instrument | Sale Date |
| LARSEN ELIZABETH B TRUST OF 2012 | \$0 |  | 5390/2799 |  | 12/20/2012 |
| LARSEN ELIZABETH B | \$0 |  | 3980/0209 |  | 01/21/2003 |

Building Information

Building 1 : Section 1

Year Built:
Living Area:

Replacement Cost:
Building Percent Good:
Replacement Cost
Less Depreciation:
\$1,079,000

| Building Attributes |  |
| :---: | :---: |
| Field | Description |
| Style: | 3 Unit |
| Occupancy | 3 |
| Exterior Wall 2 |  |
| Interior Wall 2 |  |
| Interior Flr 2 | Ceram Clay Til |
| Model | Residential |
| Grade: | X- |
| Stories: | 2 |
| Exterior Wall 1 | Clapboard |
| Roof Structure: | Gable/Hip |
| WB Fireplaces | 1 |
| Extra Openings | 3 |
| Roof Cover | Slate |
| Interior Wall 1 | Plastered |
| Extra Openings | 0 |
| Bsmt Garage |  |
| Interior Flr 1 | Hardwood |
| Heat Fuel | Gas |
| Heat Type: | Hot Water |
| AC Type: | None |
| Total Bedrooms: | 4 Bedrooms |
| Total Bthrms: | 4 |
| Total Half Baths: | 0 |
| Total Xtra Fixtrs: | 2 |
| Total Rooms: | 14 |
| Bath Style: | Avg Quality |
| Kitchen Style: | Avg Quality |
| Kitchen Gr | B |
| Metal Fireplaces | 0 |


(ParcelSketch.ashx?pid=34521\&bid=34521)

| Building Sub-Areas (sq ft) |  |  | Legend |
| :--- | :--- | ---: | ---: |
| Code | Description | Gross <br> Area | Living <br> Area |
| BAS | First Floor | 1,802 | 1,802 |
| FUS | Upper Story, Finished | 1,642 | 1,642 |
| FAT | Attic | 1,582 | 396 |


| FOP | Porch, Open | 338 | 0 |
| :--- | :--- | ---: | ---: |
| UBM | Basement, Unfinished | 1,802 | 0 |
| WDK | Deck, Wood | 202 | 0 |
|  |  | 7,368 | 3,840 |

## Building 2 : Section 1

| Year Built: | 1900 |
| :--- | :--- |
| Living Area: | 1,920 |
| Replacement Cost: | $\$ 785,802$ |
| Building Percent Good: <br> Replacement Cost <br> Less Depreciation: | $\$ 9$ |
|  | $\$ 699,400$ |

Building Attributes: Bldg 2 of 2

| Field | Description |
| :---: | :---: |
| Style: | 3 Unit |
| Occupancy | 3 |
| Exterior Wall 2 |  |
| Interior Wall 2 |  |
| Interior Flr 2 | Ceram Clay Til |
| Model | Residential |
| Grade: | A |
| Stories: | 2 |
| Exterior Wall 1 | Clapboard |
| Roof Structure: | Gable/Hip |
| WB Fireplaces | 1 |
| Extra Openings | 0 |
| Roof Cover | Asph/F Gls/Cmp |
| Interior Wall 1 | Plastered |
| Extra Openings | 0 |
| Bsmt Garage |  |
| Interior Flr 1 | Hardwood |
| Heat Fuel | Gas |
| Heat Type: | Hot Water |
| AC Type: | None |
| Total Bedrooms: | 3 Bedrooms |
| Total Bthrms: | 4 |
| Total Half Baths: | 0 |
| Total Xtra Fixtrs: | 1 |
| Total Rooms: | 8 |
| Bath Style: | Avg Quality |
| Kitchen Style: | Avg Quality |
| Kitchen Gr | B |

Building Photo

(http://images.vgsi.com/photos2/PortsmouthNHPhotos//000100193154.JPG)
Building Layout

(ParcelSketch.ashx?pid=34521\&bid=40101)

| Building Sub-Areas (sq ft) |  |  | Legend |
| :--- | :--- | :---: | :---: |
| Code | Description | Gross <br> Area | Living <br> Area |
| BAS | First Floor | 960 | 960 |


| FUS | Upper Story, Finished | 960 | 960 |
| :--- | :--- | ---: | ---: |
| FEP | Porch, Enclosed | 114 | 0 |
| FGR | Garage, Attached | 506 | 0 |
| FSP | Porch, Screened | 432 | 0 |
| UBM | Basement, Unfinished | 960 | 0 |
| WDK | Deck, Wood | 96 | 0 |
|  |  | 4,028 | 1,920 |

## Extra Features

| Extra Features Legend |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Code | Description | Size | Value | Bldg \# |
| FBLA | FINISHED BSMNT | 480.00 S.F. | \$20,500 | 2 |

Land

| Land Use |  | Land Line Valuation |  |
| :--- | :--- | :--- | :--- |
| Use Code | 1050 |  |  |
| Description | THREE FAM | Size (Acres) | 1.85 |
| Zone | GRA | Frontage |  |
| Neighborhood | 104 | Depth |  |
| Alt Land Appr No Assessed Value $\$ 398,500$ <br> Category  Appraised Value $\$ 398,500$ |  |  |  |

Outbuildings

| Outbuildings |  |  |  |  |  | Legend |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Code | Description | Sub Code | Sub Description | Size | Value | Bldg \# |
| BRN9 | BARN |  |  | 432.00 S.F. | \$9,700 | 1 |

## Valuation History

| Appraisal |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: |
| Valuation Year | Improvements | Land |  |  |  |  |  |  |
| 2020 |  | $\$ 1,808,600$ | $\$ 398,500$ |  |  |  |  |  |
| 2019 | $\$ 1,808,100$ | $\$ 398,500$ |  |  |  |  |  |  |
| 2018 | $\$ 1,643,600$ | $\$ 2,206,600$ |  |  |  |  |  |  |


| Assessment |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :---: | :---: | :---: |
|  | Valuation Year | Improvements | Land |  |  |  |  |
| 2020 |  | $\$ 1,808,600$ | $\$ 398,500$ | Total |  |  |  |
| 2019 | $\$ 1,808,100$ | $\$ 398,500$ | $\$ 2,207,100$ |  |  |  |  |
| 2018 | $\$ 1,643,600$ | $\$ 346,000$ | $\$ 2,206,600$ |  |  |  |  |

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Zoning
${ }^{\text {Residential Districts }}$



$\square$ GAMH Garden Apastmentumobile Home Park


City of Portsmouth

EXHIBIT F


## APPLICATION OF CATE STREET DEVELOPMENT, LLC 428 US Route One By-Pass ("West End Yards"), Portsmouth, Tax Map 172, Lot 001

## APPLICANT'S NARRATIVE

## I. THE PROPERTY:

The applicant, Cate Street Development, LLC, is in the finishing stages of the substantial redevelopment of a large tract of land between the Route 1 By-Pass and Cate Street, known as the West End Yards, a 250 unit apartment development located in the Gateway Corridor, Mixed Residential District. The development also includes 44,000 square feet of retail and office space. In addition, the development included a land swap for the creation of a new public road, significant improvements to Hodgson Brook and a public dog park. Construction of a new City roadway to divert traffic from Bartlett Street to the By-Pass has been a goal of the City for over 20 years. The applicant worked closely with the City to make this a reality.

The West End Yards development consists of three buildings on an approximately nine acres. The development covers a large, relatively narrow area that moves east away from the By-Pass, and surrounds the U-Haul facility on the By-Pass to the south of Cate Street. The property actually has two points of access from the By-Pass. Due to these factors, and given the multiple uses on the site, which is encouraged in this zone, effective signage is very important to the success of the development.

The property is within the G-1 Gateway Corridor District and Sign District 5. The applicant proposes to replace the existing Frank Jones Function Center sign with the Main Entry "West End Yards" sign depicted on Sheet 1.0 and 1.1. This will be on the northern side of Cate Street at the By-Pass at the signalized intersection.

The project name and branding, including monument signs, wayfinding signs and interior and exterior building signage have been thoughtfully designed to pay homage to the site's industrial and railroad-related past. The design of the main entrance sign includes a perimeter of transparent decorative steel framing consistent with this design program. The inclusion of these design elements pushes the sign area to 388.5 square feet, where 100 square feet is the maximum allowed. Accordingly, relief from Section 10.1251 .20 is required.

The applicant also proposes to replace the existing "Happy Summer" sign with a freestanding Commercial Building Entry sign for tenant placards, which is depicted on Sheet 2.0 and 2.1. This site has access from both the By-Pass and Cate Street. A site with multiple driveways may have more than one freestanding sign (section 10.1243), however, the secondary signs must comply with the requirements of Section 10.1243 and 10.1251.30. The proposed sign is approximately 60 square feet ${ }^{1}$, and therefore, because

[^9]it is on the By-Pass, it exceeds the maximum 40 square feet permitted and relief from section 10.1251 .30 is required.

The applicant proposes replacing the signs in their current, conforming locations, which exceed 10 feet from the By-Pass.

## II. CRITERIA:

The applicant believes the within Application meets the criteria necessary for the Board to grant the requested variances.

Granting the requested variance will not be contrary to the spirit and intent of the ordinance nor will it be contrary to the public interest. The "public interest" and "spirit and intent" requirements are considered together pursuant to Malachy Glen Associates v. Chichester, 152 NH 102 (2007). The test for whether or not granting a variance would be contrary to the public interest or contrary to the spirit and intent of the ordinance is whether or not the variance being granted would substantially alter the characteristics of the neighborhood or threaten the health, safety and welfare of the public.

In this case, were the variances to be granted, there would be no change in the essential characteristics of the neighborhood, nor would any public health, safety or welfare be threatened. This property has been home to a constellation of retail and commercial enterprises for over twenty five years and is within the Gateway zone where the uses here approved are permitted by right. It is bounded on both sides by existing retail and commercial operations.

The health, safety and welfare of the public will not be threatened, nor will the essential characteristics of the neighborhood change in any way by virtue of the size of the signs here proposed. In fact, the competing signage at the U-Haul facility arguably cuts in favor of more prominent signage for this site to properly direct visitors to the location. There is a fully signalized intersection at the main entry, which is the last point at which southbound traffic on the By Pass may make a left turn onto the property without making a U-turn further south. Accordingly, prominent signage is appropriate for this location.

Substantial justice would be done by granting the variance. Whether or not substantial justice will be done by granting a variance requires the Board to conduct a balancing test. If the hardship upon the owner/applicant outweighs any benefit to the general public in denying the variance, then substantial justice would be done by granting the variance. It is substantially just to allow a property owner the reasonable use of his or her property. Here, there are significant challenges to the site that make enhanced visibility necessary and desirable. The lot is large and significant development is set
back far away from the By-Pass, and obscured from the right of way by the U-Haul facility. Prominent signage is necessary in order to secure and maintain effective and reasonable sight lines. The signs are tastefully designed and in no way promote the visual clutter the City's sign ordinance is meant to protect against.

It would be an injustice to the applicant to deny the variances here requested.
The values of surrounding properties will not be diminished by granting the variance. The surrounding properties and those in the vicinity will not be negatively affected in any way by this relief. The proposed signs will enhance the visibility of this complex site, which will decrease potential negative impacts on neighboring properties. Directing motorists off the By-Pass to this site requires more prominent signage than the ordinance contemplates.

There are special conditions associated with the property which prevent the proper enjoyment of the property under the strict terms of the zoning ordinance and thus constitute unnecessary hardship. The property for which relief is sought is unique. It is a large, irregularly shaped lot with frontage in two separate places on the By-Pass and on Cate Street. It completely surrounds and is partially obscured by the UHaul facility, which is a very visually busy site. The property is bounded on the north and south by existing commercial uses. There is a fully signalized intersection at the main entry, which is the last point at which southbound traffic on the By Pass may make a left turn onto the property without making a U-turn further south. Accordingly, prominent signage is appropriate for this location.

These are special conditions of the property which counsel for more prominent signage in order to secure and maintain effective and reasonable sight lines.

The use is a reasonable use. The uses proposed are permitted within this district and are compatible with the surrounding retail and commercial enterprises and residential uses.

There is no fair and substantial relationship between the purpose of the ordinance as it is applied to this particular property. The purpose of the sign ordinance is to maintain and enhance the character of the city's commercial districts and to protect the public from hazardous and distracting displays. Section 10.1211. Neither of the proposed new signs do anything to distract from the character of this district and there is nothing hazardous or distracting about them. There is no fair and substantial relationship between these purposes and this property.

## III. Conclusion.

For the foregoing reasons, the applicant respectfully requests the Board grant the variances as requested and advertised.

Respectfully submitted,

Dated: May 26, 2021
By: Zahn K, Basen
John K. Bosen, Esquire









## (DOUBLE FACED - SAME BOTH SIDES)








## KATZ DEVELOPMENT CORPORATION APPLICATION FOR VARIANCES

## I. INTRODUCTION

The property subject to this application is located at 960 Sagamore Road in Portsmouth, New Hampshire and is depicted on the Portsmouth City Tax Maps as Map 201, Lot 2 (the "Lot"). The Lot was formerly occupied by the popular Golden Egg restaurant as well as a retail store and a second-floor apartment. The Lot is comprised of almost 1 acre with $+/-42,882 \mathrm{sq} . \mathrm{ft}$. of land and is located in the MRB (Mixed Residential Business) zone (See attached relevant portion of the City of Portsmouth Tax Map). The Lot contains significant impervious surfaces, given the existing building configuration and existing pavement. Currently, much of the parking for customers along the façade of the building is within the City right-of-way, and requires customers to leave the property by backing out into Sagamore Avenue, with overflow parallel parking on the southbound side of Sagamore Avenue and in the rear along Sagamore Grove. The Lot currently lacks any significant drainage mitigation features, and maintains unenclosed dumpsters and debris within the back portion of the parcel. (See attached photos of existing conditions.)

The Lot abuts Sagamore Grove, which is located within the boundary of the Lot, but which is classified by the City as a public way, maintained by the City pursuant to its agreement with certain property owners within the area. The Lot itself is unique as the rear portion of the Lot is encumbered by a 100 ' wetland buffer. The current structure and uses encroach upon this buffer. This encroachment will be reduced by the proposed project, as only a small portion of the corner of the proposed structure and parking to the rear of the building will be located within the buffer, to the extent a conditional use permit is granted by the Planning Board during the site plan approval process. Additionally, the Lot is unique as it is a corner lot and it is located between a concentration of existing single-family residential uses on the rear side of the lot, and commercial uses on the front and side portion of the Lot along Sagamore Avenue. The Lot sits across from the Seacoast Mental Health Services facility as well as the Freedom Boat Club.

This proposed project would be comprised of eight (8) units in one (1) building, and would essentially be a smaller version of the award-winning Westerly project located on Lafayette Road. The MRB zone permits one (1) multi-unit per $7,500 \mathrm{sq}$. ft. The Applicant proposes 8 units, where the zoning would permit 5.7 units [ $42,930 \mathrm{sq}$. ft. / 7,500 sq. ft.]. In addition, in order to accommodate covered first level parking with an entrance on the side of the proposed building and parking in the rear of the building, the Applicant will need to locate two (2) driveways, where only one (1) is permitted given that Sagamore Grove is a public way. The project will remove the existing building, parking within the right-of-way, eradicate existing dumpsters and rodents, and provide stormwater treatment where none currently exists. The project will have a trash/recycling room in the garage and no exterior dumpsters.

## II. THE APPLICANT

The Applicant, Katz Development Corporation ("Katz Development"), is a Portsmouthbased development company that is currently under contract with the owner of the Lot to purchase the Lot. Eric Katz, principal of Katz Development successfully constructed the award-winning Westerly project located on Lafayette Avenue. ${ }^{1}$ In addition, Mr. Katz also developed the successful Middle Hill project located on the Route 1 Bypass.

## III. THE PROJECT

Katz Development is proposing to develop one (1) three-story, 8-unit residential building on the Lot (see attached Conceptual Plan, Architectural Renderings and Floor Plans). The first floor will consist of heated and enclosed covered parking. Levels two and three will each contain four single-floor, 2-bedroom units of approximately $1,800 \mathrm{sq}$. ft . The units will be sold on a condominium basis. They are intended to be designed to attract empty nesters and older purchasers that are looking to down-size and remain within the city of Portsmouth.

Katz Development intends to remove any access to the Lot along Sagamore Avenue, thus reducing the parking encroachment within the roadway. By eliminating the access to the Lot along Sagamore Avenue, the safety of those utilizing the Lot, and those travelling along Sagamore Avenue will be greatly enhanced. Along with first level covered parking and more orderly parking within the lot, the traffic flow into the Lot will be enhanced, as will the aesthetic quality of the Lot appearance. The use proposed will reduce traffic to the Lot and will not result in any increase traffic hazard to the general area. (See traffic analysis report of Vanasse \& Associates, Inc. (the "Vanasse Report" attached hereto ${ }^{2}$.) As a result of providing covered parking, the impervious surface of the Lot will decrease, resulting in an increase in open space from approximately $45.4 \%$ to $57.5 \%$, or an additional open space of approximately $5,194.53 \mathrm{sq}$. ft . The project will also reduce impervious surfaces in the wetland buffer from +/- $780 \mathrm{sq} . \mathrm{ft}$. to $+/-710 \mathrm{sq}$. ft.

As mentioned above, Katz Development believes the design features of The Westerly, which will be utilized within this project, which also includes covered parking, will attract purchasers that are either empty nesters or senior. These units may be especially attractive to the market given the location of the Downtown, as well as the proximity to the Wentworth Country Club.

The relief requested within this application is necessary in order to promote a transition of uses between single-family residential uses and commercial uses, while providing for reasonable

[^10]additional residential development along Sagamore Avenue, while having little impact upon the existing neighborhood. Additionally, the City's Draft Report on Housing prepared for the 2015 Master Plan Update states that the share of City households with persons over the age of 65 has grown significantly over the past decade. Statewide, there also has been significant growth in residents over age 55.

Katz Development intends to market these units to persons who are looking to downsize, are without children, and who are active in the community. Currently, there are few options for seniors presently living in the City who wish to stay in the City while downsizing from their existing homes. This project will attract a market demographic not serviced by existing or proposed projects. The impact on adjacent properties is less adverse than the impact of the existing use considering the existing traffic, the lack of buffer from Sagamore Avenue, parking within Sagamore Avenue and due to lack of significant drainage treatment.

As indicated in the Stanhope Group Appraisal Report on Property Values (the "Stanhope Report") (see attached) the value of the surrounding properties will not be adversely affected, and the density proposed would create a positive influence on surrounding properties if this residential use is permitted. Also, as indicated in the Vanasse Report, the traffic comparison between the existing use and the proposed use shows a significant decrease in trip generation from the Lot (188 fewer vehicle trips on an average weekday, with 10 fewer vehicle trips expected during the weekday morning peak hour, and 12 fewer vehicle trips expected during the weekday evening peak hour). Additionally, the Vanasse Report predicts a "significant reduction in traffic," concluding the project will be less impactful on the transportation infrastructure when compared to existing uses and will result in no material increases in motorist delays or vehicle queuing over existing conditions.

Finally, since a restaurant use is no longer permitted within the MRB district, redeveloping the Lot as proposed will result in the elimination of a non-conforming use.

## IV. REQUEST OF THE APPLICANT

After careful consideration of the zoning ordinance and in consultation with the Planning staff, Katz Development understands that in order to proceed it requires the following relief from the Portsmouth Zoning Ordinance.

## Eight (8) Multi-Family Dwellings.

Katz Development seeks a variance in accordance with Article 5, Section 10.521 of the Portsmouth Zoning Ordinance to allow 8 multi-family dwelling units where 5.7 would be permitted [42,882 sq. ft. / 7,500 sq. ft.].

## Two (2) Driveway Entrances.

Katz Development seeks a variance in accordance with Article 11, Section 10.1114.31 of the Portsmouth Zoning Ordinance to allow 2 driveways where 1 is permitted according to the standards for "General Accessway and Driveway Design" in the Site Plan Review Regulations.

## V. VARIANCE REQUESTS

## A. The granting of the requested variance relief will not result in the diminution in value of surrounding properties.

As is described above and as is established by the Stanhope Report, the granting of the use variance sought in the alternative will not result in the diminution in value of surrounding properties. Further, the granting of the use variance will not result in diminution in value based on the following:

1) Fundamentally, the proposed permitted residential use as opposed to the nonconforming commercial restaurant use is more congruent with the existing residential uses of the adjacent properties along Sagamore Grove; and
2) The project will be constructed and configured in a way that eliminates parking along Sagamore Avenue and overflow parking on or in Sagamore Grove and decreases impervious surfaces; and
3) As set forth in the Vanasse Report, the project will result in a significantly reduction of traffic flow, with no material increase in traffic; and
4) The project will result in greater protection as to ground water runoff by virtue of improved drainage systems; and
5) The project will provide covered parking along the side with orderly parking within the rear of the building, as opposed to the front and side.

## B. Granting the variance will not be contrary to the public interest.

In Chester Rod \& Gun Club, Inc. v. Town of Chester, 152 N.H. 577, 581 (2005), the Supreme Court held that to be contrary to the public interest or injurious to public rights of others, the variance must unduly, and in a marked degree, conflict with the ordinance such that it violates the ordinance's basic zoning objectives. The Court went on to note that to determine whether a variance would violate the basic zoning objectives, it was appropriate to examine whether the granting of the variance would alter the essential character of the locality or threaten the public health, safety or welfare.

The relief requested within this application is necessary in order to promote a transition of uses between single-family residential uses located on Sagamore Grove and the existing commercial uses, while providing for removal of parking associated with the Lot along Sagamore Avenue, resulting in a significant increase in safety not only for those visiting the Lot, but for motorists along Sagamore Avenue, while having no negative impact upon the existing neighborhood.

Additionally, the variances would not alter the essential character of the locality or threaten public health, safety or welfare and would translate to a significantly more aesthetically appealing use than that which currently exists. Given the residential zoning of the property and the residential character of the immediate neighborhood, granting the variances will not alter the essential character of the locality.

## C. The spirit of the ordinance is observed.

Considered in conjunction with the uniqueness of parcel, and the fact that the proposed use would be substantially increase the safety of the use of the property, while utilizing a reasonable footprint that would include covered first floor parking, the spirit of the ordinance is observed. Additionally, the proposed building creates a visual and audible buffer to Sagamore Avenue.

## D. The granting of the requested relief will do substantial justice.

In Malachy Glen Associates v. Town of Chester, 155 N.H. 102, 109 (2002), the New Hampshire Supreme Court held that "the only guiding rule [in determining whether the requirement for substantial justice is satisfied] is that any loss to the individual that is not outweighed by a gain to the general public is an injustice." The Court also noted that it would look at whether a proposed development was consistent with the area's present use. The grant of the variances would result in substantial justice as it would allow the Applicant's property to be utilized in a fashion that would match the streetscapes within Sagamore Avenue, but is a residential way. If the requested relief is denied, the loss suffered by Katz Development substantially outweighs any gain to the public by denying the variance, as there is no detriment to the public in granting this variance. See Stanhope Report; Vanasse Report and foregoing.

## E. Literal enforcement of the provisions of the Ordinance would result in an unnecessary hardship.

Under New Hampshire law and Portsmouth Zoning, an unnecessary hardship exists when, owing to special conditions of the property that distinguish it from other property, no fair and substantial relationship exists between the public purposes of the ordinance provisions and the specific application of those provisions to the property and the proposed use is a reasonable one.

Several special conditions of the property distinguish it from other properties in the area. The property is a corner lot, located within the middle of commercial and residential uses. Additionally, the Lot is significantly encumbered by the 100 ' wetland setback and contains the public way known as Sagamore Grove. Given these special conditions, variances are required. Had the road not been considered public, but rather private, the variance would not be necessary. Further, a multifamily use at the site proposed is ideally suited for the property since it is large enough to support the number of units proposed which will provide a buffer to the residential uses from the existing commercial uses. As mentioned above, the proposed uses will significantly improve all aspects of traffic to and from the site. Given the size and location of the property with direct access and frontage on Sagamore Avenue which will be removed, and given the placement and scale of the building relative to the abutters and relative to the size of the lot, no fair and substantial relationship exists between the ordinance provision from which relief is sought and the
application of those provisions to the Lot. Due to the forgoing reasons, denial of the variances would result in an unnecessary hardship, as the general public purposes of the ordinance will be preserved, and, as such, there is no fair and substantial relationship between the public purposes of the ordinance and the application of the two restrictions.

All of the new features referenced hereinabove will also result in more sophisticated drainage and water runoff, and a dramatic increase in safety for the Lot by eliminating the parking and access point along Sagamore Avenue, which all serve to promote the health, welfare and safety of the general public, all consistent with the general intend and provisions of the zoning ordinance.

Given all of the above, and given the surrounding circumstances and special conditions of the lot, it is respectfully submitted that the proposed number of units and number of driveways is reasonable, particularly in light of the many upgrades to the lot as identified herein.

## VI. CONCLUSION.

For all of the reasons set forth above and based upon the professional opinions and findings contained within the White Report and the Vanasse Report, Katz Development respectfully requests that the relief request herein be granted.


## View from Sagamore Avenue - Westside



## View from Sagamore Grove - Northside



## VIEW OF BACKYARD - Northside



## VIEW OF EAST BACKYARD - EASTSIDE



## View of Rear of Existing Building - Northside



View of Side Yard - Southside











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## MEMORANDUM

TO: Katz Development Corporation c/o Mr. Eric S. Katz<br>273 Corporate Drive, Suite 150<br>Portsmouth, NH 03801

DATE:
May 25, 2021

SUBJECT: Traffic Impact Study
Proposed Multifamily Residential Development - 960 Sagamore Avenue (NH Route 1A) Portsmouth, New Hampshire

Vanasse \& Associates, Inc. (VAI) has conducted a Traffic Impact Study (TIS) in order to determine the potential impacts on the transportation infrastructure associated with the proposed age-targeted multifamily residential development to be located at 960 Sagamore Avenue (NH Route 1A) in Portsmouth, New Hampshire (hereafter referred to as the "Project"). This study evaluates the following specific areas as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; and identifies and analyzes existing traffic conditions and future traffic conditions, both with and without the Project along Sagamore Grove and at the following specific intersections: NH Route 1A at Sagamore Grove; Sagamore Grove at the west Project site driveway; and Sagamore Grove at the east Project site driveway.

Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the Institute of Transportation Engineers (ITE), ${ }^{1}$ the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way volume over the operational day of the Project), with 4 vehicle trips expected during the weekday morning peak hour and 6 vehicle trips expected during the weekday evening peak hour;
2. In comparison to the existing uses that occupy the site, the Project is expected to generate approximately 188 fewer vehicle trips on an average weekday, with 10 fewer vehicle trips expected during the weekday morning peak hour, and 12 fewer vehicle trips expected during the weekday evening peak hour;
3. Given the significant reduction in traffic that is predicted as a result of the Project, the Project will be less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site;

[^11]4. A review of motorist delays and vehicle queuing at the NH Route 1A/Sagamore Grove intersection indicates that the Project will not result in a significant increase in motorist delays or vehicle queuing, with Project-related impacts defined as an increase in average motorist delay of less than 1.0 seconds with no predicted increase in vehicle queuing; and
5. Lines of sight at the Project site driveway intersections were found to meet, exceed or could be made to meet or exceed the recommended minimum distances for safe operation.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with the implementation of the recommendations defined herein.

The following details our assessment of the Project.

## PROJECT DESCRIPTION

The Project will entail the construction of an 8 -unit multifamily residential development to be located at 960 Sagamore Avenue (NH Route 1A) in Portsmouth, New Hampshire. The Project site encompasses approximately $0.98 \pm$ acres of land that is bounded by Sagamore Grove to the north; areas of open and wooded space to the south and east; and NH Route 1A to the west. The Project site currently contains a mixed-use building that includes a residential unit, $1,420 \pm$ square feet ( sf ) of retail space and $1,230 \mathrm{sf}$ of restaurant space. The existing building and associated appurtenances will be removed to accommodate the Project. Access to the Project site will be provided by way of two new driveways that will intersect the south side of Sagamore Grove approximately 75 feet and 175 feet east of NH Route 1A, respectively. The existing driveway that currently serves the Project site along NH Route 1A will be closed in conjunction with the Project resulting in an overall improvement in safety through the elimination of a conflict point for vehicles, pedestrians and bicyclists along NH Route 1A.


Imagery © 2021 Google

On-site parking will be provided for up to 25 vehicles, or a parking ratio of 3.12 spaces per unit, consisting of 7 exterior parking spaces and 18 parking spaces to be located in a garage beneath the residential building. This parking ratio ( 3.12 parking spaces per unit) exceeds the requirements of Section 10.1112.30, Off-Street Parking Requirements, of the City of Portsmouth Zoning Ordinance. ${ }^{2}$

## EXISTING CONDITIONS

A comprehensive field inventory of existing conditions within the study area was conducted in May 2021. This inventory included the collection of traffic volume data and vehicle travel speed measurements, as well as a review of existing pedestrian and bicycle accommodations, public transportation services, and motor vehicle crash data. The following summarizes existing conditions within the study area.

## Roadways

## NH Route 1A

NH Route 1A is a two-lane minor arterial roadway (Tier 5, Class IV) under the jurisdiction of the City of Portsmouth that traverses the study area in a general north-south alignment. In the vicinity of the Project site, NH Route 1A provides two $11 \pm$ foot wide travel lanes separated by a double-yellow centerline with $6 \pm$ foot wide marked shoulders provided. The posted speed limit along NH Route 1 A within the study area is 30 miles per hour ( mph ); prevailing travel speeds measured in May 2021 were found to be $35 \mathrm{mph} .{ }^{3}$ Illumination is provided by way of streetlights mounted on wood poles. Land use along NH Route 1A within the study area consists of the Project site, commercial properties, areas of open and wooded space, and the Sagamore Creek.

## Sagamore Grove

Sagamore Grove is a two-lane local road (Tier 5, Class V) under the jurisdiction of the City of Portsmouth that traverses the study area in a general east-west direction for a distance of approximately 475 feet east of NH Route 1A. In the vicinity of the Project site, Sagamore Grove provides a $21 \pm$ foot wide traveledway with no marked centerline or shoulders provided. A posted speed limit is not provided along Sagamore Grove and, as such, the statutory speed limit is $30 \mathrm{mph} .{ }^{4}$ Illumination is provided by way of streetlights mounted on wood poles. Land use along Sagamore Grove within the study area consists of the Project site, residential properties and areas of open and wooded space.

## Intersection

## NH Route 1A at Sagamore Grove

Sagamore Grove intersects NH Route 1A from the east to form a three-way intersection under STOP-sign control. The NH Route 1A approaches consist of a single $11 \pm$ foot wide general-purpose travel lane with $6 \pm$ foot wide marked shoulders. The Sagamore Grove approach provides a single general-purpose lane that

[^12]is under STOP-sign control with a marked STOP-line provided. A sidewalk is provided along the west side of NH Route 1A and illumination is provided by way of streetlights mounted on wood poles. Land use in the vicinity of the intersection consists of residential properties, Seacoast Mental Health Center, Freedom Boat Club and areas of open and wooded space.

## Existing Traffic Volumes

In order to determine existing traffic-volume demands and flow patterns within the study area, automatic traffic recorder (ATR) counts, manual turning movement counts (TMCs) and vehicle classification counts were completed in May 2021. The ATR counts were conducted on NH Route 1A in the vicinity of the Project site on May $12^{\text {th }}$ through May $13^{\text {th }}, 2021$ (Wednesday through Thursday, inclusive) in order to record weekday traffic conditions over an extended period, with weekday morning (7:00 to 9:00 AM) and evening (4:00 to 6:00 PM) peak period manual TMCs performed at the intersection of NH Route 1A at Sagamore Grove on May 12, 2021 (Wednesday). These time periods were selected for analysis purposes as they are representative of the peak traffic-volume hours for both the Project and the adjacent roadway network.

In order to evaluate the potential for seasonal fluctuation of traffic volumes within the study area, 2019 peak-hour and average daily traffic count data were reviewed for NHDOT count station No. 02345001 , which is located on Route 1, north of North Road in North Hampton. Based on a review of this data, it was determined that traffic volumes for the month of May are approximately 7.2 percent below peak-month conditions and, therefore, the raw traffic count data that forms the basis of this assessment was adjusted upward accordingly (by 7.2 percent) to represent peak-month conditions in accordance with NHDOT standards.

In order to account for the impact on traffic volumes and trip patterns resulting from the COVID-19 pandemic, traffic-volume data collected at NH DOT Continuous Count Station No. 02345001 in May 2021 was compared to May 2019 traffic volumes that were collected at the same location. The 2019 traffic volumes were expanded to 2021 by applying a background traffic growth rate of 1.0 percent per year in order to allow for a comparison of the data. Based on this comparison, the May 2021 traffic volumes that were collected as a part of this assessment were adjusted upward by an additional 15.1 percent.

Based on a review of the adjusted (as defined above) traffic count data, NH Route 1A in the vicinity of the Project site accommodates approximately 9,790 vehicles per day on an average weekday under peak-month conditions (two-way, 24-hour volume), with approximately 689 vehicles per hour ( vph ) during the weekday morning peak hour (8:00 to 9:00 AM) and 852 vph during the weekday evening peak hour (4:30 to 5:30 PM).

## Pedestrian and Bicycle Facilities

Sidewalks are currently provided along the west side of NH Route 1A. Formal bicycle facilities were not identified within the immediate study area; however, both NH Route 1A and Sagamore Grove provide sufficient width to accommodate bicycle travel in a shared traveled-way configuration (i.e., bicyclists and motor vehicles sharing the traveled-way). ${ }^{5}$ Signs indicating that bicycles may use the full travel lane are provided along Route 1A.

[^13]

WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)


## Public Transportation Services

Regularly scheduled fixed-route bus service is provided within the City of Portsmouth by way of the Cooperative Alliance for Seacoast Transportation (COAST); however, these services are not directly accessible at the Project site. In addition to fixed-route bus services, COAST operates paratransit services for eligible persons who cannot use fixed-route transit all or some of the time due to a physical, cognitive, or mental disability in compliance with the Americans with Disabilities Act (ADA). COAST and the City of Portsmouth also provide transportation services for eligible seniors, including free transportation to the Seacoast Mental Health Center.

## Motor Vehicle Crash Data

Motor vehicle crash information for the intersection of NH Route 1A at Sagamore Grove has been requested from the Portsmouth Police Department in order to examine motor vehicle crash trends occurring at this location. This data will be summarized in a supplemental memorandum as soon as it is received.

## FUTURE CONDITIONS

Traffic volumes in the study area were projected to the years 2022 and 2032, which reflect the anticipated opening-year of the Project and a ten-year planning horizon from opening-year, respectively, consistent with NHDOT TIS guidelines. The future condition traffic-volume projections incorporate identified specific development projects by others, as well as general background traffic growth as a result of development external to the study area and presently unforeseen projects. Anticipated Project-generated traffic volumes superimposed upon the 2022 and 2032 No-Build traffic volumes reflect the Build conditions with the Project.

## Future Traffic Growth

Future traffic growth is a function of the expected land development in the immediate area and the surrounding region. Several methods can be used to estimate this growth. A procedure frequently employed estimates an annual percentage increase in traffic growth and applies that percentage to all traffic volumes under study. The drawback to such a procedure is that some turning volumes may actually grow at either a higher or a lower rate at particular intersections.

An alternative procedure identifies the location and type of planned development, estimates the traffic to be generated, and assigns it to the area roadway network. This procedure produces a more realistic estimate of growth for local traffic; however, potential population growth and development external to the study area would not be accounted for in the resulting traffic projections.

To provide a conservative analysis framework, both procedures were used, the salient components of which are described below.

## Specific Development by Others

The City of Portsmouth has been contacted in order to determine if there were any projects planned within the study area that would have an impact on future traffic volumes at the study intersections. Based on these discussions, no projects were identified at this time that are expected to result in an increase in traffic that would exceed the general background traffic growth rate (discussion follows). A small (11-unit) multifamily residential development to be located at 1169 Sagamore Avenue is in the initial planning stages; however, formal plans have not been submitted to the City at this time.

## General Background Traffic Growth

A review of historic traffic growth information compiled by NHDOT for the City of Portsmouth, and the Towns of New Castle and Rye was undertaken in order to determine general traffic growth trends. This data indicates that traffic volumes have fluctuated over the 10-year period between 2009 and 2019, with an average traffic growth rate of 0.54 percent. In order to provide a prudent planning condition for the Project, a slightly higher 1.0 percent per year compounded annual background traffic growth rate was used in order to account for future traffic growth and presently unforeseen development within the study area.

## Roadway Improvement Projects

The City of Portsmouth and NHDOT were contacted in order to determine if there were any planned roadway improvement projects expected to be completed within the study area. Based on these discussions, no roadway improvement projects aside from routine maintenance activities were identified to be planned within the study area at this time.

## No-Build Traffic Volumes

The 2022 and 2032 No-Build peak-month peak-hour traffic volumes were developed by applying the 1.0 percent per year compounded annual background traffic growth rate to the 2021 Existing peak-month peak-hour traffic volumes. The resulting 2022 No-Build weekday morning and evening peak-month peakhour traffic volumes are shown on Figure 2, with the corresponding 2032 No-Build peak-month peak-hour traffic volumes shown on Figure 3.

## PROJECT-GENERATED TRAFFIC

Design year (2022 and 2032) Build traffic volumes for the study area roadways were determined by estimating Project-generated traffic volumes and assigning those volumes on the study roadways. The following sections describe the methodology used to develop the anticipated traffic characteristics of the Project.

As proposed, the Project will entail the construction of an 8 -unit multifamily residential community. In order to develop the traffic characteristics of the Project, trip-generation statistics published by the ITE ${ }^{6}$ for a similar land use as that proposed were used. ITE Land Use Code (LUC) 220, Multifamily Housing (Low-Rise), was used to develop the traffic characteristics of the Project, the results of which are summarized in Table 1.

[^14]

WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)


Not To Scale
Vanasse \& Associates inc

Figure 2

Peak-Hour Traffic Volumes


WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)


Table 1
TRIP-GENERATION SUMMARY

|  | Vehicle Trips |  |  |
| :--- | :---: | :---: | :---: |
|  | Entering Period | Exiting | Total |
| Average Weekday: | 10 | 10 | 20 |
| Weekday Morning Peak Hour: | 1 | 3 | 4 |
| Weekday Evening Peak Hour: | 4 | 2 | 6 |

${ }^{\text {a }}$ Based on ITE LUC 220, Multifamily Housing (Low-Rise), 8 dwelling units.

## Project-Generated Traffic Volume Summary

As can be seen in Table 1, the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way, 24 -hour volume, or 10 vehicles entering and 10 exiting), with 4 vehicle trips ( 1 vehicle entering and 3 exiting) expected during the weekday morning peak hour and 6 vehicle trips ( 4 vehicles entering and 2 exiting) expected during the weekday evening peak hour.

Table 2 compares the traffic volumes associated with the Project to those of the existing uses that currently occupy the Project site and that will be removed.

Table 2
TRAFFIC VOLUME COMPARISON

|  | Vehicle Trips |  |  |
| :---: | :---: | :---: | :---: |
| Time Period/Direction | (A) <br> Proposed Residential Development ${ }^{\text {a }}$ | (B) <br> Existing Uses ${ }^{\text {b }}$ | $(\mathrm{C}=\mathrm{A}-\mathrm{B})$ <br> Difference |
| Average Weekday Daily: | 20 | 208 | -188 |
| Weekday Morning Peak Hour: | 4 | 14 | -10 |
| Weekday Evening Peak Hour: | 6 | 18 | -12 |

[^15]
## Traffic-Volume Comparison

As can be seen in Table 2, in comparison to the existing uses that occupy the Project site and that will be removed to accommodate the Project, the Project is expected to generate approximately 188 fewer vehicle trips on an average weekday (a 90 percent reduction), with 10 fewer vehicle trips expected during the weekday morning peak hour (a 71 percent reduction, and 12 fewer vehicle trips expected during the weekday evening peak-hour (a 67 percent reduction).

Based on this comparative analysis, it is clear that the Project will be significantly less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site.

## Trip Distribution and Assignment

The directional distribution of generated trips to and from the Project site was determined based on a review of existing traffic patterns within the study area during the peak periods. The general trip distribution for the Project is shown on Figure 4. The additional traffic expected to be generated by the Project was assigned on the study area roadway network as shown on Figure 5.

## Build Traffic Volumes

The 2022 Opening-Year and 2032 Build condition traffic-volumes were developed by adding Project-generated traffic to the corresponding 2022 and 2032 No-Build peak-month peak-hour traffic-volumes. The resulting 2022 Opening-Year Build condition weekday morning and evening peakmonth peak-hour traffic volumes are graphically depicted on Figure 6, with the corresponding 2032 Build condition peak-month peak-hour traffic volumes depicted on Figure 7.

## TRAFFIC OPERATIONS ANALYSIS

In order to assess the potential impact of the Project on the roadway network, a detailed traffic operations analysis (motorist delays, vehicle queuing and level-of-service) was performed at the study area intersections. Capacity analyses provide an indication of how well transportation facilities serve the traffic demands placed upon them, with vehicle queue analyses providing a secondary measure of the operational characteristics of an intersection or section of roadway under study.

In brief, six levels of service are defined for each type of facility. They are given letter designations ranging from A to F, with level-of-service (LOS) "A" representing the best operating conditions and LOS "F" representing congested or constrained operations. An LOS of " $E$ " is representative of a transportation facility that is operating at its design capacity with an LOS of "D" generally defined as the limit of "acceptable" traffic operations. Since the level-of-service of a traffic facility is a function of the flows placed upon it, such a facility may operate at a wide range of levels of service depending on the time of day, day of week, or period of the year. The Synchro ${ }^{\circledR}$ intersection capacity analysis software, which is based on the analysis methodologies and procedures presented in the 2010 Highway Capacity Manual $(\mathrm{HCM})^{7}$ for unsignalized intersections, was used to complete the level-of-service and vehicle queue analyses.

[^16]
## Legend:

XX Entering Trips
(XX) Exiting Trips

(48\%) SAGAMORE $\leftarrow(33 \%)$ GROVE


SITE

- 48\%

Legend:
XX Entering Trips
(XX) Exiting Trips
(iA)


WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)



WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)


Figure 6


WEEKDAY EVENING PEAK HOUR (4:30-5:30 PM)


## Analysis Results

The results of the intersection capacity and vehicle queue analyses for the study intersections are summarized in Table 3, with the detailed analysis results presented in the Appendix.

## NH Route 1A at Sagamore Grove

Under 2021 Existing, 2022 No-Build and 2022 Opening Year Build peak-month conditions, the critical movements at this unsignalized intersection (all movements from Sagamore Grove) were shown to operate at LOS B during both the weekday morning and evening peak hours. Project-related impacts over 2022 No-Build conditions were defined as an increase in average motorist delay of less than 1.0 seconds with vehicle queuing continuing to be negligible.

Under 2032 No-Build and 2032 Build peak-month conditions, the critical movements were shown to operate at LOS B during the weekday morning peak-hour and at LOS C during the weekday evening peakhour. Project-related impacts over 2032 No-Build conditions were defined as an increase in average motorist delay of less than 1.0 seconds with vehicle queuing shown to be negligible.

## Sagamore Grove at the Project site driveways

All movements at the Project site driveway intersections with Sagamore Grove were shown to operate at LOS A with negligible vehicle queuing under all analysis conditions.

Table 3
UNSIGNALIZED INTERSECTION LEVEL-OF-SERVICE AND VEHICLE QUEUE SUMMARY

| Unsignalized Intersection/ Peak Hour/Movement | 2021 Existing |  |  |  | 2022 No-Build |  |  |  | 2022 Opening Year |  |  |  | 2032 No-Build |  |  |  | 2032 Build |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\underline{\text { Demand }{ }^{\text {a }}}$ | $\underline{\text { Delay }{ }^{\text {b }}}$ | LOS $^{\text {e }}$ |  | $\underline{\text { Demand }}$ | Delay | $\underline{L O S}$ | $\begin{gathered} \text { Queue } \\ 95^{51} \\ \hline \end{gathered}$ | $\underline{\text { Demand }}$ | Delay | $\underline{\text { LOS }}$ | $\begin{gathered} \text { Queue } \\ \hline 95^{\text {th }} \\ \hline \end{gathered}$ | $\underline{\text { Demand }}$ | $\underline{\text { Delay }}$ | LOS | $\begin{array}{r} \text { Queue } \\ 95^{\mathrm{h}} \\ \hline \end{array}$ | $\underline{\text { Demand }}$ | Delay | LOS | $\begin{array}{r} \text { Queue } \\ 95^{51} \\ \hline \end{array}$ |
| NH Route 1A at Sagamore Grove Weekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove WB LT/RT | 4 | 12.0 | B | 0 | 4 | 12.0 | B | 0 | 7 | 12.0 | B | 0 | 4 | 12.6 | B | 0 | 7 | 12.6 | B | 0 |
| NH Route 1A NB TH/RT | 315 | 0.0 | A | 0 | 318 | 0.0 | A | 0 | 318 | 0.0 | A | 0 | 351 | 0.0 | A | 0 | 351 | 0.0 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove WB LT/RT | 3 | 13.9 | B | 0 | , | 14.0 | B | 0 | 5 | 14.0 | B | 0 | 3 | 15.0 | C | 0 | 5 | 15.0 | C | 0 |
| NH Route 1A NB TH/RT | 356 | 0.0 | A | 0 | 360 | 0.0 | A | 0 | 362 | 0.0 | A | 0 | 397 | 0.0 | A | 0 | 399 | 0.0 | A | 0 |
| NH Route 1A SB LT/TH | 408 | 0.0 | A | 0 | 412 | 0.0 | A | 0 | 414 | 0.1 | A | 0 | 455 | 0.0 | A | 0 | 457 | 0.1 | A | 0 |
| Sagamore Grove at the West Project Site Driveway Weekday Morning. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove EB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | ${ }_{5}$ | 0.0 | A | 0 | -- | -- | -- | - | ${ }_{5}$ | 0.0 | A | 0 |
| Sagamore Grove WB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 5 | 0.0 | A | 0 | -- | - | -- | -- | 5 | 0.0 | A | 0 |
| Site Driveway NB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 2 | 8.6 | A | 0 | -- | -- | -- | -- | 2 | 8.6 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove EB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 7 | 0.0 | A | 0 | -- | -- | -- | -- | 7 | 0.0 | A | 0 |
| Sagamore Grove WB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 4 | ${ }_{8}^{0.0}$ | A | ${ }_{0}$ | -- | -- | -- | -- | 4 | ${ }_{8}^{0.0}$ | A | ${ }_{0}$ |
| Site Driveway NB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 8.6 | A | 0 | -- | -- | -- | -- | 1 | 8.6 | A | 0 |
| Sagamore Grove at the East Project Site DrivewayWeekday Morning: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove EB TH/RT | -- | -- | -- | -- | -- | -- | - | -- | 1 | 0.0 | A | 0 | -- | -- | -- | -- | 1 | 0.0 | A | 0 |
| Sagamore Grove WB LT/TH | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 0.0 | A | 0 | -- | -- | -- | -- | 4 | 0.0 | A | 0 |
| Weekday Evening: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Sagamore Grove EB TH/RT | -- | -- | -- | -- | -- | -- | -- | -- | 4 | 0.0 | A | 0 | $\cdots$ | -- | -- | -- | 4 | 0.0 | A | 0 |
| Sagamore Grove WB LT/TH Site Driveway NB LT/RT | -- | -- | -- | -- | -- | -- | -- | -- | 1 | 0.0 8.6 | ${ }_{\text {A }}^{\text {A }}$ | 0 | -- | -- | -- | -- | 3 1 | 0.0 8.6 | ${ }_{\text {A }}^{\text {A }}$ | 0 |

2Demand in vehicles per hour.
${ }^{\text {b }}$ Average control del
ctevel-of-Service.
doueue- length in vehicle.
$\mathrm{SB}=$ southbound; $\mathrm{EB}=$ eastbound; $\mathrm{WB}=$ westbound; $\mathrm{LT}=$ left-turning movements; $\mathrm{TH}=$ through movements; $\mathrm{RT}=$ right-turning movements.

## SIGHT DISTANCE ASSESSMENT

Sight distance measurements were performed at the Project site driveway intersections with Sagamore Grove in accordance with American Association of State Highway and Transportation Officials (AASHTO) ${ }^{8}$ requirements. Both stopping sight distance (SSD) and intersection sight distance (ISD) measurements were performed. In brief, SSD is the distance required by a vehicle traveling at the design speed of a roadway, on wet pavement, to stop prior to striking an object in its travel path. ISD or corner sight distance (CSD) is the sight distance required by a driver entering or crossing an intersecting roadway to perceive an on-coming vehicle and safely complete a turning or crossing maneuver with oncoming traffic. In accordance with AASHTO standards, if the measured ISD is at least equal to the required SSD value for the appropriate design speed, the intersection can operate in a safe manner. Table 4 presents the measured SSD and ISD at the subject intersections.

Table 4
SIGHT DISTANCE MEASUREMENTS ${ }^{\text {a }}$

| Intersection/Sight Distance Measurement | Feet |  |  |
| :---: | :---: | :---: | :---: |
|  | Required <br> Minimum (SSD) | $\begin{gathered} \text { Desirable } \\ (\text { ISD })^{\mathbf{b}} \\ \hline \end{gathered}$ | Measured |
| Sagamore Grove at the West Project Site Driveway |  |  |  |
| Stopping Sight Distance: |  |  |  |
| Sagamore Grove approaching from the east | 155 | -- | 177 |
| Sagamore Grove approaching from the west | 80 | -- | $80^{\text {c }}$ |
| Intersection Sight Distance: |  |  |  |
| Looking to the east from the Project Site Driveway | 155 | 280 | 111/201 ${ }^{\text {d }}$ |
| Looking to the west from the Project Site Driveway | 80 | 145 | $80^{\text {c }}$ |
| Sagamore Grove at the East Project Site Driveway |  |  |  |
| Stopping Sight Distance: |  |  |  |
| Sagamore Grove approaching from the east | 155 | -- | 315 |
| Sagamore Grove approaching from the west | 155 | -- | $176^{\text {c }}$ |
| Intersection Sight Distance: |  |  |  |
| Looking to the east from the Project Site Driveway | 155 | 280 | 111/189 ${ }^{\text {d }}$ |
| Looking to the west from the Project Site Driveway | 155 | 240 | $176{ }^{\text {c }}$ |

${ }^{\text {a }}$ Recommended minimum values obtained from A Policy on Geometric Design of Highways and Streets, $7{ }^{\text {th }}$ Edition; American Association of State Highway and Transportation Officials (AASHTO); 2018; and based on a 15 mph speed approaching the west Project site driveway from the east and a 25 mph approach speed for all other approaches.
${ }^{\text {b }}$ Values shown are the intersection sight distance for a vehicle turning right or left exiting a roadway under STOP control such that motorists approaching the intersection on the major street should not need to adjust their travel speed to less than 70 percent of their initial approach speed.
${ }^{\text {c }}$ Clear line of sight is provided to/from NH Route 1A.
${ }^{\mathrm{d}}$ With the selective trimming/removal of vegetation.
As can be seen in Table 3, with the selective trimming or removal of vegetation located within the site triangle areas of the Project site driveways, the available lines of sight to and from the Project site driveways meet or exceed the recommended minimum sight distances to function in a safe (SSD) manner based on a 25 mph approach speed and with consideration to the reduced speed of vehicles transitioning to/from NH Route 1A.

[^17]
## SUMMARY

VAI has completed a detailed assessment of the potential impacts on the transportation infrastructure associated with the proposed multifamily residential development to be located at 960 Sagamore Grove in Portsmouth, New Hampshire (hereafter referred to as the "Project"). The following specific areas have been evaluated as they relate to the Project: i) access requirements; ii) potential off-site improvements; and iii) safety considerations; under existing and future conditions, both with and without the Project. Based on this assessment, we have concluded the following with respect to the Project:

1. Using trip-generation statistics published by the ITE, ${ }^{9}$ the Project is expected to generate approximately 20 vehicle trips on an average weekday (two-way volume over the operational day of the Project), with 4 vehicle trips expected during the weekday morning peak hour and 6 vehicle trips expected during the weekday evening peak hour;
2. In comparison to the existing uses that occupy the site, the Project is expected to generate approximately 188 fewer vehicle trips on an average weekday, with 10 fewer vehicle trips expected during the weekday morning peak hour, and 12 fewer vehicle trips expected during the weekday evening peak hour;
3. Given the significant reduction in traffic that is predicted as a result of the Project, the Project will be less impactful on the transportation infrastructure when compared to the existing uses that occupy the Project site;
4. A review of motorist delays and vehicle queuing at the NH Route 1A/Sagamore Grove intersection indicates that the Project will not result in a significant increase in motorist delays or vehicle queuing, with Project-related impacts defined as an increase in average motorist delay of less than 1.0 seconds with no predicted increase in vehicle queuing; and
5. Lines of sight at the Project site driveway intersections were found to meet, exceed or could be made to meet or exceed the recommended minimum distances for safe operation.

In consideration of the above, we have concluded that the Project can be accommodated within the confines of the existing transportation infrastructure in a safe and efficient manner with the implementation of the recommendations that follow.

## RECOMMENDATIONS

## Project Access

Access to the Project site will be provided by way of two new driveways that will intersect the south side of Sagamore Grove approximately 75 feet and 175 feet east of NH Route 1A, respectively. The existing driveway that currently serves the Project site along NH Route 1A will be closed in conjunction with the Project resulting in an overall improvement in safety through the elimination of a conflict point for vehicles, pedestrians and bicyclists along NH Route 1A. The following recommendations are offered with respect to the design and operation of the Project site access and internal circulation:

[^18]$>$ The Project site driveways should be a minimum of 22 feet in width and designed to accommodate the turning and maneuvering requirements of the largest anticipated responding emergency vehicle as defined by the Portsmouth Fire Department.
> Vehicles exiting the Project site should be under stop control.
$>$ Drive aisles behind perpendicular parking should be 23 -feet wide in order to accommodate parking maneuvers.
$>$ All signs and pavement markings to be installed within the Project site should conform to the applicable standards of the Manual on Uniform Traffic Control Devices (MUTCD). ${ }^{10}$
> Signs and landscaping to be installed as a part of the Project within the intersection sight triangle areas of the Project site driveways should be designed and maintained so as not to restrict lines of sight.
> Existing vegetation located along the south side of Sagamore Grove within the sight triangle areas of the Project site driveways should be selectively trimmed or removed and maintained.
> Snow windrows within sight triangle areas of the Project site driveways should be promptly removed where such accumulations would impede sight lines.
> Bicycle parking should be provided at an appropriate location within the Project site.
With the implementation of the above recommendations, safe and efficient access can be provided to the Project site and the Project can be accommodated within the confines of the existing transportation infrastructure.
cc: File

[^19]
## ATTACHMENTS

PROJECT SITE PLAN<br>AUTOMATIC TRAFFIC RECORDER COUNT DATA<br>MANUAL TURNING MOVEMENT COUNT DATA<br>SEASONAL ADJUSTMENT DATA<br>COVID-19 ADJUSTMENT DATA<br>VEHICLE TRAVEL SPEED DATA<br>GENERAL BACKGROUND TRAFFIC GROWTH<br>TRIP-GENERATION CALCULATIONS<br>CAPACITY ANALYSIS WORKSHEETS

PROJECT SITE PLAN


Accurate Counts
978-664-2565
Location: Route 1A
89920001
Location : South of Sagamore Grove


Location : Route 1A
89920001
Location : South of Sagamore Grove

| City/State: Portsmouth, NH |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5/13/2021 | NB, |  | Hour Totals |  | SB, |  | Hour Totals |  | Combined Totals |  |
| Time | Morning | Afternoon | Morning | Afternon | Morning | Afternoon | Morning | Afternoon | Morning | Afternoon |
| 12:00 | 1 | 62 |  |  | 1 | 70 |  |  |  |  |
| 12:15 | 0 | 43 |  |  | 1 | 93 |  |  |  |  |
| 12:30 | 1 | 72 |  |  | 6 | 97 |  |  |  |  |
| 12:45 | 1 | 74 | 3 | 251 | 1 | 92 | 9 | 352 | 12 | 603 |
| 1:00 | 1 | 73 |  |  | 1 | 103 |  |  |  |  |
| 1:15 | 1 | 56 |  |  | 0 | 88 |  |  |  |  |
| 1:30 | 0 | 74 |  |  | 1 | 48 |  |  |  |  |
| 1:45 | 0 | 60 | 2 | 263 | 0 | 63 | 2 | 302 | 4 | 565 |
| 2:00 | 0 | 80 |  |  | 0 | 85 |  |  |  |  |
| 2:15 | 1 | 104 |  |  | 3 | 113 |  |  |  |  |
| 2:30 | 0 | 85 |  |  | 0 | 88 |  |  |  |  |
| 2:45 | 1 | 76 | 2 | 345 | 1 | 88 | 4 | 374 | 6 | 719 |
| 3:00 | 0 | 89 |  |  | 2 | 70 |  |  |  |  |
| 3:15 | 1 | 65 |  |  | 1 | 110 |  |  |  |  |
| 3:30 | 0 | 82 |  |  | 0 | 116 |  |  |  |  |
| 3:45 | 2 | 79 | 3 | 315 | 1 | 86 | 4 | 382 | 7 | 697 |
| 4:00 | 2 | 83 |  |  | 0 | 97 |  |  |  |  |
| 4:15 | 2 | 83 |  |  | 1 | 98 |  |  |  |  |
| 4:30 | 5 | 61 |  |  | 4 | 83 |  |  |  |  |
| 4:45 | 4 | 60 | 13 | 287 | 1 | 129 | 6 | 407 | 19 | 694 |
| 5:00 | 3 | 78 |  |  | 4 | 105 |  |  |  |  |
| 5:15 | 3 | 89 |  |  | 4 | 82 |  |  |  |  |
| 5:30 | 9 | 73 |  |  | 3 | 125 |  |  |  |  |
| 5:45 | 7 | 63 | 22 | 303 | 4 | 111 | 15 | 423 | 37 | 726 |
| 6:00 | 7 | 70 |  |  | 9 | 100 |  |  |  |  |
| 6:15 | 14 | 57 |  |  | 10 | 93 |  |  |  |  |
| 6:30 | 11 | 43 |  |  | 24 | 58 |  |  |  |  |
| 6:45 | 26 | 59 | 58 | 229 | 41 | 52 | 84 | 303 | 142 | 532 |
| 7:00 | 34 | 52 |  |  | 36 | 70 |  |  |  |  |
| 7:15 | 32 | 47 |  |  | 57 | 59 |  |  |  |  |
| 7:30 | 49 | 55 |  |  | 63 | 46 |  |  |  |  |
| 7:45 | 75 | 45 | 190 | 199 | 66 | 42 | 222 | 217 | 412 | 416 |
| 8:00 | 92 | 34 |  |  | 70 | 52 |  |  |  |  |
| 8:15 | 70 | 38 |  |  | 71 | 41 |  |  |  |  |
| 8:30 | 42 | 32 |  |  | 82 | 38 |  |  |  |  |
| 8:45 | 51 | 29 | 255 | 133 | 79 | 34 | 302 | 165 | 557 | 298 |
| 9:00 | 52 | 27 |  |  | 52 | 23 |  |  |  |  |
| 9:15 | 50 | 20 |  |  | 46 | 16 |  |  |  |  |
| 9:30 | 64 | 10 |  |  | 57 | 19 |  |  |  |  |
| 9:45 | 51 | 20 | 217 | 77 | 80 | 21 | 235 | 79 | 452 | 156 |
| 10:00 | 40 | 16 |  |  | 67 | 11 |  |  |  |  |
| 10:15 | 65 | 8 |  |  | 71 | 13 |  |  |  |  |
| 10:30 | 54 | 7 |  |  | 72 | 13 |  |  |  |  |
| 10:45 | 54 | 4 | 213 | 35 | 62 | 5 | 272 | 42 | 485 | 77 |
| 11:00 | 74 | 3 |  |  | 70 | 2 |  |  |  |  |
| 11:15 | 68 | 3 |  |  | 86 | 7 |  |  |  |  |
| 11:30 | 78 | 5 |  |  | 85 | 9 |  |  |  |  |
| 11:45 | 62 | 3 | 282 | 14 | 93 | 4 | 334 | 22 | 616 | 36 |
| Total | 1260 | 2451 |  |  | $1489$ | 3068 |  |  | 2749 | 5519 |
| Percent | 34.0\% | 66.0\% |  |  | $32.7 \%$ | 67.3\% |  |  | $33.2 \%$ | $66.8 \%$ |
| Grand Total | 2483 | 4652 |  |  | 2941 | 5794 |  |  | 5424 | 10446 |
| Percent | 34.8\% | 65.2\% |  |  | 33.7\% | 66.3\% |  |  | 34.2\% | 65.8\% |
| ADT |  | ADT: 7,935 |  | ADT: 7,935 |  |  |  |  |  |  |


| 5/10/2021 | Monday |  |  | Tuesday |  |  | Wednesday |  | Thursday |  | Friday |  |  | Saturday |  |  | Sunday |  |  | Week Average |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time | NB, |  | SB, | NB, |  | SB, | NB, | SB, | NB, | SB, | NB, |  | SB, | NB, |  | SB, | NB, |  | SB, | NB, | SB, |
| 12:00 AM |  | * | * |  | * | * | 7 | 5 | 3 | 9 |  | * |  |  | * | * |  | * | * | 5 | 7 |
| 1:00 |  | * | * |  | * | * | 4 | 6 | 2 | 2 |  | * |  |  | * | * |  | * | * | 3 | 4 |
| 2:00 |  | * | * |  | * | * | 1 | 2 | 2 | 4 |  | * |  |  | * | * |  | * | * | 2 | 3 |
| 3:00 |  | * | * |  | * | * | 0 | 4 | 3 | 4 |  | * |  |  | * | * |  | * | * | 2 | 4 |
| 4:00 |  | * | * |  | * | * | 12 | 4 | 13 | 6 |  | * |  |  | * | * |  | * | * | 12 | 5 |
| 5:00 |  | * | * |  | * | * | 29 | 15 | 22 | 15 |  | * |  |  | * | * |  | * | * | 26 | 15 |
| 6:00 |  | * | * |  | * | * | 60 | 82 | 58 | 84 |  | * |  |  | * | * |  | * | * | 59 | 83 |
| 7:00 |  | * | * |  | * | * | 156 | 193 | 190 | 222 |  | * |  |  | * | * |  | * | * | 173 | 208 |
| 8:00 |  | * | * |  | * | * | 253 | 305 | 255 | 302 |  | * |  |  | * | * |  | * | * | 254 | 304 |
| 9:00 |  | * | * |  | * | * | 228 | 225 | 217 | 235 |  | * |  |  | * | * |  | * | * | 222 | 230 |
| 10:00 |  | * | * |  | * | * | 224 | 276 | 213 | 272 |  | * |  |  | * | * |  | * | * | 218 | 274 |
| 11:00 |  | * | * |  | * | * | 249 | 335 | 282 | 334 |  | * |  |  | * | * |  | * | * | 266 | 334 |
| 12:00 PM |  | * | * |  | * | * | 281 | 300 | 251 | 352 |  | * |  |  | * | * |  | * | * | 266 | 326 |
| 1:00 |  | * | * |  | * | * | 284 | 308 | 263 | 302 |  | * |  |  | * | * |  | * | * | 274 | 305 |
| 2:00 |  | * | * |  | * | * | 287 | 304 | 345 | 374 |  | * |  |  | * | * |  | * | * | 316 | 339 |
| 3:00 |  | * | * |  | * | * | 297 | 392 | 315 | 382 |  | * |  |  | * | * |  | * | * | 306 | 387 |
| 4:00 |  | * | * |  | * | * | 280 | 368 | 287 | 407 |  | * |  |  | * | * |  | * | * | 284 | 388 |
| 5:00 |  | * | * |  | * | * | 265 | 355 | 303 | 423 |  | * |  |  | * | * |  | * | * | 284 | 389 |
| 6:00 |  | * | * |  | * | * | 199 | 251 | 229 | 303 |  | * |  |  | * | * |  | * | * | 214 | 277 |
| 7:00 |  | * | * |  | * | * | 146 | 174 | 199 | 217 |  | * |  |  | * | * |  | * | * | 172 | 196 |
| 8:00 |  | * | * |  | * | * | 81 | 164 | 133 | 165 |  | * |  |  | * | * |  | * | * | 107 | 164 |
| 9:00 |  | * | * |  | * | * | 43 | 69 | 77 | 79 |  | * |  |  | * | * |  | * | * | 60 | 74 |
| 10:00 |  | * | * |  | * | * | 23 | 28 | 35 | 42 |  | * |  |  | * | * |  | * | * | 29 | 35 |
| 11:00 |  | * | * |  | * | * | 15 | 13 | 14 | 22 |  | * |  |  | * | * |  | * | * | 14 | 18 |
| Total |  | 0 | 0 |  | 0 | 0 | 3424 | 4178 | 3711 | 4557 |  | 0 |  |  | 0 | 0 |  | 0 | 0 | 3568 | 4369 |
| Day |  | 0 |  |  | 0 |  | 7602 |  | 8268 |  | 0 |  |  | 0 |  |  | 0 |  |  | 7937 |  |
| AM Peak |  |  |  |  |  |  | 8:00 | 11:00 | 11:00 | 11:00 |  |  |  |  |  |  |  |  |  | 11:00 | 11:00 |
| Volume |  |  |  |  |  |  | 253 | 335 | 282 | 334 |  |  |  |  |  |  |  |  |  | 266 | 334 |
| PM Peak |  |  |  |  |  |  | 3:00 | 3:00 | 2:00 | 5:00 |  |  |  |  |  |  |  |  |  | 2:00 | 5:00 |
| Volume |  |  |  |  |  |  | 297 | 392 | 345 | 423 |  |  |  |  |  |  |  |  |  | 316 | 389 |
| Comb Total | 0 |  |  | 0 |  |  | 7602 |  | 8268 |  | 0 |  |  | 0 |  |  | 0 |  |  | 7937 |  |
| ADT | ADT: 7,935 |  |  | AADT: 7,935 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

MANUAL TURNING MOVEMENT DATA

## Accurate Counts

## 978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 1

Groups Printed- Cars - Trucks

| Groups Printed- Cars - Trucks |  |  |  |  |  |  | Int. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Route 1A From North |  | Sagamore Grove From East |  | Route 1A From South |  |  |
| Start Time | Left | Thru | Left | Right | Thru | Right |  |
| 07:00 AM | 0 | 31 | 0 | 0 | 24 | 0 | 55 |
| 07:15 AM | 1 | 38 | 0 | 1 | 31 | 0 | 71 |
| 07:30 AM | 1 | 45 | 2 | 0 | 41 | 0 | 89 |
| 07:45 AM | 0 | 57 | 0 | 0 | 57 | 0 | 114 |
| Total | 2 | 171 | 2 | 1 | 153 | 0 | 329 |
| 08:00 AM | 0 | 63 | 0 | 0 | 71 | 0 | 134 |
| 08:15 AM | 1 | 61 | 0 | 1 | 72 | 0 | 135 |
| 08:30 AM | 0 | 55 | 1 | 0 | 49 | 0 | 105 |
| 08:45 AM | 0 | 65 | 1 | 1 | 63 | 0 | 130 |
| Total | 1 | 244 | 2 | 2 | 255 | 0 | 504 |
| Grand Total | 3 | 415 | 4 | 3 | 408 | 0 | 833 |
| Apprch \% | 0.7 | 99.3 | 57.1 | 42.9 | 100 | 0 |  |
| Total \% | 0.4 | 49.8 | 0.5 | 0.4 | 49 | 0 |  |
| Cars | 3 | 406 | 4 | 3 | 404 | 0 | 820 |
| \% Cars | 100 | 97.8 | 100 | 100 | 99 | 0 | 98.4 |
| Trucks | 0 | 9 | 0 | 0 | 4 | 0 | 13 |
| \% Trucks | 0 | 2.2 | 0 | 0 | 1 | 0 | 1.6 |


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inter | Begi | 8:00 |  |  |  |  |  |  |  |  |
| 08:00 AM | 0 | 63 | 63 | 0 | 0 | 0 | 71 | 0 | 71 | 134 |
| 08:15 AM | 1 | 61 | 62 | 0 | 1 | 1 | 72 | 0 | 72 | 135 |
| 08:30 AM | 0 | 55 | 55 | 1 | 0 | 1 | 49 | 0 | 49 | 105 |
| 08:45 AM | 0 | 65 | 65 | 1 | 1 | 2 | 63 | 0 | 63 | 130 |
| Total Volume | 1 | 244 | 245 | 2 | 2 | 4 | 255 | 0 | 255 | 504 |
| \% App. Total | 0.4 | 99.6 |  | 50 | 50 |  | 100 | 0 |  |  |
| PHF | . 250 | . 938 | . 942 | . 500 | . 500 | . 500 | . 885 | . 000 | . 885 | . 933 |
| Cars | 1 | 238 | 239 | 2 | 2 | 4 | 253 | 0 | 253 | 496 |
| \% Cars | 100 | 97.5 | 97.6 | 100 | 100 | 100 | 99.2 | 0 | 99.2 | 98.4 |
| Trucks | 0 | 6 | 6 | 0 | 0 | 0 | 2 | 0 | 2 | 8 |
| \% Trucks | 0 | 2.5 | 2.4 | 0 | 0 | 0 | 0.8 | 0 | 0.8 | 1.6 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 2


Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 08:00 AM |  |  | 08:00 AM |  |  | 08:00 AM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 63 | 63 | 0 | 0 | 0 | 71 | 0 | 71 |
| +15 mins. | 1 | 61 | 62 | 0 | 1 | 1 | 72 | 0 | 72 |
| +30 mins. | 0 | 55 | 55 | 1 | 0 | 1 | 49 | 0 | 49 |
| +45 mins. | 0 | 65 | 65 | 1 | 1 | 2 | 63 | 0 | 63 |
| Total Volume | 1 | 244 | 245 | 2 | 2 | 4 | 255 | 0 | 255 |
| \% App. Total | 0.4 | 99.6 |  | 50 | 50 |  | 100 | 0 |  |
| PHF | . 250 | . 938 | . 942 | . 500 | . 500 | . 500 | . 885 | . 000 | . 885 |
| Cars | 1 | 238 | 239 | 2 | 2 | 4 | 253 | 0 | 253 |
| \% Cars | 100 | 97.5 | 97.6 | 100 | 100 | 100 | 99.2 | 0 | 99.2 |
| Trucks | 0 | 6 | 6 | 0 | 0 | 0 | 2 | 0 | 2 |
| \% Trucks | 0 | 2.5 | 2.4 | 0 | 0 | 0 | 0.8 | 0 | 0.8 |

# Accurate Counts 

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 3


## Accurate Counts

## 978-664-2565

N/S Street: Route 1A
E/W Street: Sagamore Grove
City/State : Portsmouth, NH

File Name : 89920001
Site Code : 89920001
City/State : Portsmouth, NH
Start Date : 5/12/2021
Weather : Cloudy
Page No : 4


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inter | Beg | 0:00 |  |  |  |  |  |  |  |  |
| 08:00 AM | 0 | 62 | 62 | 0 | 0 | 0 | 71 | 0 | 71 | 133 |
| 08:15 AM | 1 | 57 | 58 | 0 | 1 | 1 | 72 | 0 | 72 | 131 |
| 08:30 AM | 0 | 54 | 54 | 1 | 0 | 1 | 48 | 0 | 48 | 103 |
| 08:45 AM | 0 | 65 | 65 | 1 | 1 | 2 | 62 | 0 | 62 | 129 |
| Total Volume | 1 | 238 | 239 | 2 | 2 | 4 | 253 | 0 | 253 | 496 |
| \% App. Total | 0.4 | 99.6 |  | 50 | 50 |  | 100 | 0 |  |  |
| PHF | . 250 | . 915 | . 919 | . 500 | . 500 | . 500 | . 878 | . 000 | . 878 | . 932 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 5

|  | Peak Hour Data <br> Peak Hour Begins at 08:00 AM <br> Cars <br> Route 1A |  |
| :---: | :---: | :---: |

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 08:00 AM |  |  | 08:00 AM |  |  | 08:00 AM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 62 | 62 | 0 | 0 | 0 | 71 | 0 | 71 |
| +15 mins. | 1 | 57 | 58 | 0 | 1 | 1 | 72 | 0 | 72 |
| +30 mins. | 0 | 54 | 54 | 1 | 0 | 1 | 48 | 0 | 48 |
| +45 mins. | 0 | 65 | 65 | 1 | 1 | 2 | 62 | 0 | 62 |
| Total Volume | 1 | 238 | 239 | 2 | 2 | 4 | 253 | 0 | 253 |
| \% App. Total | 0.4 | 99.6 |  | 50 | 50 |  | 100 | 0 |  |
| PHF | . 250 | . 915 | . 919 | . 500 | . 500 | . 500 | . 878 | . 000 | . 878 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 6


## Accurate Counts

## 978-664-2565

N/S Street: Route 1A
E/W Street: Sagamore Grove
City/State : Portsmouth, NH

File Name : 89920001
Site Code : 89920001
City/State : Portsmouth, NH
Start Date : 5/12/2021
Weather : Cloudy
Page No : 7


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inter | Begi | 7:45 |  |  |  |  |  |  |  |  |
| 07:45 AM | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| 08:00 AM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 08:15 AM | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 08:30 AM | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| Total Volume | 0 | 8 | 8 | 0 | 0 | 0 | 1 | 0 | 1 | 9 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |
| PHF | . 000 | . 500 | . 500 | . 000 | . 000 | . 000 | . 250 | . 000 | . 250 | . 563 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 8

|  | Peak Hour Data <br> Peak Hour Begins at 07:45 AM <br> Trucks <br> Route 1A |  |
| :---: | :---: | :---: |

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +0 mins. | $07: 45$ AM | 0 | 2 |  | $07: 00$ AM |  | $07: 00$ AM |
| +15 mins. | 0 | 1 | 2 | 0 | 0 | 0 | 0 |
| +30 mins. | 0 | 4 | 1 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 1 | 4 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 8 | 1 | 0 | 0 | 0 | 0 |
| \% App. Total | 0 | 100 | 8 | 0 | 0 | 0 | 0 |
| PHF | .000 | .500 | .500 | .00 | .00 | 0 | 0 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 9


## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code: 89920001
Start Date : 5/12/2021
Page No : 10

Groups Printed- Bikes Peds

|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Peds | Left | Right | Peds | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 07:15 AM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 07:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 6 | 6 |
| 07:45 AM | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 4 | 4 |
| Total | 0 | 5 | 0 | 0 | 0 | 0 | 7 | 0 | 0 | 0 | 12 | 12 |
| 08:00 AM | 0 | 1 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 1 | 3 | 4 |
| 08:15 AM | 0 | 1 | 0 | 0 | 0 | 0 |  | 0 | 0 | 0 | 4 | 4 |
| 08:30 AM | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 2 |
| 08:45 AM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 |
| Total | 0 | 3 | 0 | 0 | 0 | 1 | 7 | 0 | 0 | 1 | 10 | 11 |
| Grand Total | 0 | 8 | 0 | 0 | 0 | 1 | 14 | 0 | 0 | 1 | 22 | 23 |
| Apprch \% | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |  |  |
| Total \% | 0 | 36.4 |  | 0 | 0 |  | 63.6 | 0 |  | 4.3 | 95.7 |  |


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inte | Beg | 7:30 |  |  |  |  |  |  |  |  |
| 07:30 AM | 0 | 1 | 1 | 0 | 0 | 0 | 5 | 0 | 5 | 6 |
| 07:45 AM | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 2 | 4 |
| 08:00 AM | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 2 | 3 |
| 08:15 AM | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 4 |
| Total Volume | 0 | 5 | 5 | 0 | 0 | 0 | 12 | 0 | 12 | 17 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |
| PHF | . 000 | . 625 | . 625 | . 000 | . 000 | . 000 | . 600 | . 000 | . 600 | 708 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 11

|  | Peak Hour Data <br> Peak Hour Begins at 07:30 AM <br> Bikes Peds |  |
| :---: | :---: | :---: |

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 07:15 AM |  |  | 07:00 AM |  |  | 07:30 AM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 2 | 2 | 0 | 0 | 0 | 5 | 0 | 5 |
| +15 mins. | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 0 | 2 |
| +30 mins. | 0 | 2 | 2 | 0 | 0 | 0 | 2 | 0 | 2 |
| +45 mins. | 0 | 1 | 1 | 0 | 0 | 0 | 3 | 0 | 3 |
| Total Volume | 0 | 6 | 6 | 0 | 0 | 0 | 12 | 0 | 12 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |
| PHF | . 000 | . 750 | . 750 | . 000 | . 000 | . 000 | . 600 | . 000 | . 600 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 12


## Accurate Counts

## 978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 1

Groups Printed- Cars - Trucks

| Groups Printed- Cars - Trucks |  |  |  |  |  |  | Int. Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Route 1A From North |  | Sagamore Grove From East |  | Route 1A From South |  |  |
| Start Time | Left | Thru | Left | Right | Thru | Right |  |
| 04:00 PM | 0 | 63 | 0 | 0 | 82 | 0 | 145 |
| 04:15 PM | 0 | 76 | 0 | 0 | 61 | 0 | 137 |
| 04:30 PM | 0 | 77 | 0 | 0 | 73 | 0 | 150 |
| 04:45 PM | 0 | 90 | 0 | 0 | 70 | 0 | 160 |
| Total | 0 | 306 | 0 | 0 | 286 | 0 | 592 |
| 05:00 PM | 2 | 81 | 1 | 1 | 69 | 0 | 154 |
| 05:15 PM | 0 | 81 | 1 | 0 | 76 | 1 | 159 |
| 05:30 PM | 1 | 81 | 0 | 1 | 66 | 0 | 149 |
| 05:45 PM | 0 | 61 | 1 | 0 | 73 | 0 | 135 |
| Total | 3 | 304 | 3 | 2 | 284 | 1 | 597 |
| Grand Total | 3 | 610 | 3 | 2 | 570 | 1 | 1189 |
| Apprch \% | 0.5 | 99.5 | 60 | 40 | 99.8 | 0.2 |  |
| Total \% | 0.3 | 51.3 | 0.3 | 0.2 | 47.9 | 0.1 |  |
| Cars | 3 | 606 | 3 | 2 | 568 | 1 | 1183 |
| \% Cars | 100 | 99.3 | 100 | 100 | 99.6 | 100 | 99.5 |
| Trucks | 0 | 4 | 0 | 0 | 2 | 0 | 6 |
| \% Trucks | 0 | 0.7 | 0 | 0 | 0.4 | 0 | 0.5 |


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inter | Beg | 4:30 |  |  |  |  |  |  |  |  |
| 04:30 PM | 0 | 77 | 77 | 0 | 0 | 0 | 73 | 0 | 73 | 150 |
| 04:45 PM | 0 | 90 | 90 | 0 | 0 | 0 | 70 | 0 | 70 | 160 |
| 05:00 PM | 2 | 81 | 83 | 1 | 1 | 2 | 69 | 0 | 69 | 154 |
| 05:15 PM | 0 | 81 | 81 | 1 | 0 | 1 | 76 | 1 | 77 | 159 |
| Total Volume | 2 | 329 | 331 | 2 | 1 | 3 | 288 | 1 | 289 | 623 |
| \% App. Total | 0.6 | 99.4 |  | 66.7 | 33.3 |  | 99.7 | 0.3 |  |  |
| PHF | . 250 | . 914 | . 919 | . 500 | . 250 | . 375 | . 947 | . 250 | 938 | . 973 |
| Cars | 2 | 326 | 328 | 2 | 1 | 3 | 287 | 1 | 288 | 619 |
| \% Cars | 100 | 99.1 | 99.1 | 100 | 100 | 100 | 99.7 | 100 | 99.7 | 99.4 |
| Trucks | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 4 |
| \% Trucks | 0 | 0.9 | 0.9 | 0 | 0 | 0 | 0.3 | 0 | 0.3 | 0.6 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 2


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 04:45 PM |  |  | 05:00 PM |  |  | 04:30 PM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 90 | 90 | 1 | 1 | 2 | 73 | 0 | 73 |
| +15 mins. | 2 | 81 | 83 | 1 | 0 | 1 | 70 | 0 | 70 |
| +30 mins. | 0 | 81 | 81 | 0 | 1 | 1 | 69 | 0 | 69 |
| +45 mins. | 1 | 81 | 82 | 1 | 0 | 1 | 76 | 1 | 77 |
| Total Volume | 3 | 333 | 336 | 3 | 2 | 5 | 288 | 1 | 289 |
| \% App. Total | 0.9 | 99.1 |  | 60 | 40 |  | 99.7 | 0.3 |  |
| PHF | . 375 | . 925 | . 933 | . 750 | . 500 | . 625 | . 947 | . 250 | . 938 |
| Cars | 3 | 330 | 333 | 3 | 2 | 5 | 287 | 1 | 288 |
| \% Cars | 100 | 99.1 | 99.1 | 100 | 100 | 100 | 99.7 | 100 | 99.7 |
| Trucks | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 1 |
| \% Trucks | 0 | 0.9 | 0.9 | 0 | 0 | 0 | 0.3 | 0 | 0.3 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 3


## Accurate Counts

## 978-664-2565

N/S Street: Route 1A
E/W Street: Sagamore Grove
City/State : Portsmouth, NH

File Name : 89920001
Site Code : 89920001
City/State : Portsmouth, NH
Start Date : 5/12/2021
Weather : Cloudy
Page No : 4


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inter | Beg | 4:30 P |  |  |  |  |  |  |  |  |
| 04:30 PM | 0 | 77 | 77 | 0 | 0 | 0 | 73 | 0 | 73 | 150 |
| 04:45 PM | 0 | 87 | 87 | 0 | 0 | 0 | 70 | 0 | 70 | 157 |
| 05:00 PM | 2 | 81 | 83 | 1 | 1 | 2 | 69 | 0 | 69 | 154 |
| 05:15 PM | 0 | 81 | 81 | 1 | 0 | 1 | 75 | 1 | 76 | 158 |
| Total Volume | 2 | 326 | 328 | 2 | 1 | 3 | 287 | 1 | 288 | 619 |
| \% App. Total | 0.6 | 99.4 |  | 66.7 | 33.3 |  | 99.7 | 0.3 |  |  |
| PHF | . 250 | . 937 | . 943 | . 500 | . 250 | . 375 | . 957 | . 250 | . 947 | . 979 |

## Accurate Counts

978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 5


Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 04:45 PM |  |  | 05:00 PM |  |  | 04:30 PM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 87 | 87 | 1 | 1 | 2 | 73 | 0 | 73 |
| +15 mins. | 2 | 81 | 83 | 1 | 0 | 1 | 70 | 0 | 70 |
| +30 mins. | 0 | 81 | 81 | 0 | 1 | 1 | 69 | 0 | 69 |
| +45 mins. | 1 | 81 | 82 | 1 | 0 | 1 | 75 | 1 | 76 |
| Total Volume | 3 | 330 | 333 | 3 | 2 | 5 | 287 | 1 | 288 |
| \% App. Total | 0.9 | 99.1 |  | 60 | 40 |  | 99.7 | 0.3 |  |
| PHF | . 375 | . 948 | . 957 | 750 | . 500 | . 625 | . 957 | . 250 | . 947 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 6


## Accurate Counts

## 978-664-2565

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 7


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| 04:00 PM | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| 04:15 PM | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 04:30 PM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 04:45 PM | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total Volume | 0 | 4 | 4 | 0 | 0 | 0 | 1 | 0 | 1 | 5 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |
| PHF | . 000 | . 333 | . 333 | . 000 | . 000 | . 000 | . 250 | . 000 | . 250 | 417 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 8

|  | Peak Hour Data <br> Peak Hour Begins at 04:00 PM <br> Trucks <br> Route 1A |  |
| :---: | :---: | :---: |

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  |  |  |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| +0 mins. | 04:00 PM | 0 | 0 |  | $04: 00$ PM |  | 0 | 0 |
| +15 mins. | 0 | 1 | 0 | 0 | 0 | 0 | $\mathbf{1}$ | 0 |
| +30 mins. | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| +45 mins. | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Volume | 0 | 4 | 3 | 0 | 0 | 0 | 0 | 0 |
| $\%$ App. Total | 0 | 100 | 4 | 0 | 0 | 0 | 1 | 0 |
| PHF | .000 | .333 | .333 | .000 | .000 | .000 | .250 | 0 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 9


## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 10

Groups Printed- Bikes Peds

|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | Peds | Left | Right | Peds | Thru | Right | Peds | Exclu. Total | Inclu. Total | Int. Total |
| 04:00 PM | 0 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 5 | 5 |
| 04:15 PM | 0 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 5 | 5 |
| 04:30 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| 04:45 PM | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 |
| Total | 0 | 9 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 14 | 14 |
| 05:00 PM | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 3 | 3 |
| 05:15 PM | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 4 | 5 | 9 |
| 05:30 PM | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 4 | 4 |
| 05:45 PM | 0 | 3 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 5 | 5 |
| Total | 0 | 11 | 0 | 0 | 0 | 0 | 6 | 0 | 4 | 4 | 17 | 21 |
| Grand Total | 0 | 20 | 0 | 0 | 0 | 0 | 11 | 0 | 4 | 4 | 31 | 35 |
| Apprch \% | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |  |  |
| Total \% | 0 | 64.5 |  | 0 | 0 |  | 35.5 | 0 |  | 11.4 | 88.6 |  |


|  | Route 1A From North |  |  | Sagamore Grove From East |  |  | Route 1A From South |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Left | Thru | App. Total | Left | Right | App. Total | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Inte | Beg | 5:00 |  |  |  |  |  |  |  |  |
| 05:00 PM | 0 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 3 |
| 05:15 PM | 0 | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 2 | 5 |
| 05:30 PM | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 1 | 4 |
| 05:45 PM | 0 | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 2 | 5 |
| Total Volume | 0 | 11 | 11 | 0 | 0 | 0 | 6 | 0 | 6 | 17 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |  |
| PHF | . 000 | . 917 | . 917 | . 000 | . 000 | . 000 | . 750 | . 000 | 750 | 850 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001
Start Date : 5/12/2021
Page No : 11

|  | Peak Hour Data <br> Peak Hour Begins at 05:00 PM <br> Bikes Peds <br> Route 1A |  |
| :---: | :---: | :---: |

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

|  | 05:00 PM |  |  | 04:00 PM |  |  | 05:00 PM |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| +0 mins. | 0 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 |
| +15 mins. | 0 | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 2 |
| +30 mins. | 0 | 3 | 3 | 0 | 0 | 0 | 1 | 0 | 1 |
| +45 mins. | 0 | 3 | 3 | 0 | 0 | 0 | 2 | 0 | 2 |
| Total Volume | 0 | 11 | 11 | 0 | 0 | 0 | 6 | 0 | 6 |
| \% App. Total | 0 | 100 |  | 0 | 0 |  | 100 | 0 |  |
| PHF | . 000 | . 917 | . 917 | . 000 | . 000 | . 000 | . 750 | . 000 | . 750 |

## Accurate Counts

N/S Street : Route 1A
E/W Street : Sagamore Grove
City/State : Portsmouth, NH
Weather : Cloudy

File Name : 89920001
Site Code : 89920001 Start Date : 5/12/2021
Page No : 12

|  | Route 1A <br> In - Peak Hour: 05:00 PM <br> Peak Hour Data <br> Bikes Peds <br> In - Peak Hour: 05:00 PM Route 1A |  |
| :---: | :---: | :---: |

# New Hampshire DOT <br> 02345001: Monthly Hourly Volume for May 2019 

| Location ID: | 02345001 |
| :--- | :--- |
| County: | ROCKINGHAM |
| Functional Class | 3 |
| Location: | Lafayette Rd |


|  | 0:00 | 1:00 | 2:00 | 3:00 | 4:00 | 5:00 | 6:00 | 7:00 | 8:00 | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 | 23:00 | total | QC Status |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 37 | 25 | 12 | 48 | 73 | 246 | 604 | 1162 | 1282 | 1033 | 1097 | 1216 | 1261 | 1153 | 1215 | 1336 | 1360 | 1383 | 993 | 632 | 428 | 263 | 150 | 90 | 17099 | Accepted |
| 2 | 40 | 24 | 14 | 36 | 76 | 244 | 607 | 1115 | 1279 | 991 | 1070 | 1172 | 1168 | 1173 | 1217 | 1394 | 1405 | 1361 | 932 | 611 | 467 | 244 | 166 | 95 | 16901 | Accepted |
| 3 | 52 | 29 | 17 | 39 | 73 | 266 | 601 | 1178 | 1290 | 1157 | 1189 | 1258 | 1409 | 1317 | 1428 | 1435 | 1327 | 1423 | 936 | 659 | 465 | 359 | 222 | 139 | 18268 | Accepted |
| 4 | 82 | 41 | 27 | 29 | 37 | 124 | 257 | 565 | 767 | 939 | 1160 | 1340 | 1342 | 1371 | 1332 | 1237 | 1190 | 1048 | 817 | 654 | 474 | 342 | 248 | 178 | 15601 | Accepted |
| 5 | 86 | 51 | 32 | 24 | 28 | 82 | 160 | 362 | 614 | 684 | 1020 | 1161 | 1187 | 1117 | 1131 | 1000 | 926 | 799 | 655 | 445 | 317 | 154 | 148 | 69 | 12252 | Accepted |
| 6 | 36 | 23 | 19 | 21 | 62 | 267 | 611 | 1088 | 1263 | 981 | 984 | 1140 | 1216 | 1168 | 1229 | 1410 | 1474 | 1434 | 931 | 585 | 414 | 234 | 116 | 67 | 16773 | Accepted |
| 7 | 42 | 30 | 23 | 36 | 73 | 276 | 610 | 1164 | 1339 | 1040 | 1016 | 1129 | 1240 | 1177 | 1282 | 1383 | 1458 | 1398 | 925 | 522 | 357 | 240 | 116 | 59 | 16935 | Accepted |
| 8 | 39 | 20 | 29 | 39 | 75 | 266 | 632 | 1289 | 1354 | 1100 | 1095 | 1258 | 1320 | 1290 | 1331 | 1402 | 1412 | 1463 | 1066 | 640 | 501 | 312 | 141 | 85 | 18159 | Accepted |
| 9 | 42 | 22 | 19 | 36 | 74 | 278 | 632 | 1179 | 1333 | 1078 | 1138 | 1253 | 1266 | 1285 | 1277 | 1502 | 1422 | 1449 | 964 | 636 | 469 | 264 | 137 | 101 | 17856 | Accepted |
| 10 | 61 | 32 | 18 | 34 | 72 | 251 | 585 | 1079 | 1327 | 1155 | 1182 | 1305 | 1447 | 1331 | 1355 | 1478 | 1454 | 1386 | 934 | 626 | 564 | 356 | 245 | 135 | 18412 | Accepted |
| 11 | 74 | 43 | 23 | 31 | 44 | 127 | 285 | 600 | 842 | 1072 | 1230 | 1365 | 1331 | 1385 | 1384 | 1339 | 1255 | 1119 | 916 | 746 | 582 | 337 | 230 | 166 | 16526 | Accepted |
| 12 | 102 | 58 | 27 | 17 | 19 | 68 | 185 | 366 | 651 | 784 | 1025 | 1036 | 1198 | 1178 | 1141 | 1084 | 951 | 757 | 658 | 493 | 343 | 190 | 124 | 88 | 12543 | Accepted |
| 13 | 30 | 16 | 17 | 33 | 84 | 258 | 653 | 1122 | 1275 | 1036 | 1116 | 1276 | 1242 | 1151 | 1282 | 1366 | 1451 | 1418 | 938 | 573 | 345 | 225 | 112 | 60 | 17079 | Accepted |
| 14 | 34 | 19 | 22 | 45 | 80 | 260 | 582 | 1143 | 1362 | 1014 | 1065 | 1248 | 1269 | 1221 | 1276 | 1405 | 1372 | 1415 | 968 | 539 | 364 | 263 | 130 | 78 | 17174 | Accepted |
| 15 | 55 | 27 | 20 | 43 | 73 | 254 | 635 | 1176 | 1314 | 1092 | 1183 | 1206 | 1336 | 1269 | 1262 | 1491 | 1499 | 1376 | 967 | 580 | 491 | 286 | 131 | 100 | 17866 | Accepted |
| 16 | 42 | 27 | 15 | 42 | 89 | 267 | 615 | 1178 | 1365 | 1091 | 1097 | 1309 | 1379 | 1231 | 1379 | 1468 | 1557 | 1528 | 951 | 663 | 535 | 301 | 174 | 123 | 18426 | Accepted |
| 17 | 69 | 65 | 80 | 67 | 123 | 255 | 607 | 1134 | 1221 | 1088 | 1117 | 1364 | 1397 | 1277 | 1396 | 1476 | 1481 | 1403 | 1034 | 747 | 634 | 420 | 250 | 138 | 18843 | Accepted |
| 18 | 84 | 43 | 24 | 34 | 47 | 124 | 265 | 591 | 835 | 1136 | 1277 | 1386 | 1464 | 1363 | 1304 | 1283 | 1132 | 1046 | 902 | 690 | 539 | 339 | 266 | 154 | 16328 | Accepted |
| 19 | 84 | 49 | 26 | 20 | 33 | 97 | 305 | 443 | 665 | 783 | 1153 | 1265 | 1259 | 1135 | 1163 | 1122 | 1056 | 797 | 730 | 613 | 321 | 196 | 121 | 75 | 13511 | Accepted |
| 20 | 64 | 26 | 27 | 39 | 86 | 247 | 625 | 1228 | 1306 | 1056 | 1100 | 1211 | 1261 | 1202 | 1273 | 1477 | 1457 | 1388 | 890 | 646 | 394 | 271 | 134 | 105 | 17513 | Accepted |
| 21 | 71 | 57 | 44 | 51 | 88 | 285 | 653 | 1177 | 1450 | 1115 | 1149 | 1254 | 1326 | 1371 | 1313 | 1478 | 1503 | 1495 | 940 | 654 | 457 | 272 | 143 | 86 | 18432 | Accepted |
| 22 | 67 | 49 | 54 | 89 | 119 | 282 | 628 | 1163 | 1326 | 1108 | 1079 | 1195 | 1347 | 1355 | 1282 | 1439 | 1531 | 1474 | 1015 | 660 | 430 | 272 | 126 | 105 | 18195 | Accepted |
| 23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| May Average | 16913 |
| ---: | ---: |
| Peak Month (Aug) | 18127 |
| Seasonal Adjustment | 1.072 |

COVID-19 ADJUSTMENT DATA

2019 Average Count Data - Sta. 02345001

May ADT: 16,913

Growth Rate: $1.0 \% /$ Year
$16,913 \times\left(1.010^{2}\right)=17,253$
2021 Average Count Data - Sta. 02345001
May ADT: 14,995

## COVID Adjustment

$$
\frac{17,253}{14,995}=1.151
$$

# New Hampshire DOT <br> 02345001: Monthly Hourly Volume for May 2021 



VEHICLE TRAVEL SPEED DATA

Location: Route 1A
Location: South of Sagamore Grove
City/State: Portsmouth, NH
Direction: NB,


Location : Route 1A
89920001
Location : South of Sagamore Grove
City/State: Portsmouth, NH
Direction: NB,


Location : Route 1A
Location : South of Sagamore Grove
City/State: Portsmouth, NH
Direction: SB,

| 5/12/2021 Time | $\begin{aligned} & 0-3 \\ & \mathrm{MPH} \end{aligned}$ | $\begin{aligned} & >3-6 \\ & \mathrm{MPH} \end{aligned}$ | $\begin{gathered} >6-9 \\ \mathrm{MPH} \end{gathered}$ | $\begin{gathered} >9-12 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >12- \\ 15 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} \hline>15- \\ 18 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >18- \\ 21 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} \hline>21- \\ 24 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >24- \\ 27 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >27- \\ 30 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >30- \\ 33 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >33- \\ 36 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >36- \\ 39 \\ \text { MPH } \end{gathered}$ | $\begin{aligned} & >39 \\ & \text { MPH } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 5 |
| 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 2 | 0 | 6 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 4 |
| 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 4 |
| 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 3 | 4 | 4 | 1 | 15 |
| 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 21 | 28 | 7 | 10 | 5 | 82 |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 30 | 47 | 56 | 29 | 18 | 3 | 193 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 1 | 8 | 21 | 57 | 68 | 80 | 44 | 22 | 4 | 305 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 9 | 46 | 59 | 57 | 28 | 15 | 5 | 225 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 16 | 51 | 61 | 71 | 43 | 25 | 6 | 276 |
| 11:00 | 0 | 0 | 0 | 0 | 1 | 2 | 9 | 37 | 58 | 68 | 88 | 44 | 23 | 5 | 335 |
| 12:00 PM | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 15 | 36 | 81 | 76 | 52 | 30 | 6 | 300 |
| 1:00 | 0 | 0 | 1 | 1 | 9 | 11 | 12 | 22 | 43 | 73 | 68 | 39 | 26 | 3 | 308 |
| 2:00 | 0 | 0 | 0 | 0 | 2 | 3 | 14 | 13 | 63 | 58 | 73 | 46 | 23 | 9 | 304 |
| 3:00 | 0 | 0 | 1 | 4 | 6 | 6 | 15 | 17 | 65 | 103 | 104 | 39 | 28 | 4 | 392 |
| 4:00 | 0 | 0 | 2 | 1 | 1 | 1 | 9 | 20 | 72 | 80 | 116 | 42 | 22 | 2 | 368 |
| 5:00 | 0 | 0 | 0 | 0 | 2 | 0 | 6 | 19 | 44 | 100 | 105 | 41 | 27 | 11 | 355 |
| 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 14 | 40 | 53 | 55 | 44 | 21 | 9 | 251 |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 22 | 32 | 51 | 29 | 22 | 7 | 174 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 35 | 37 | 48 | 19 | 6 | 5 | 164 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 8 | 7 | 28 | 14 | 9 | 1 | 69 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 7 | 10 | 2 | 28 |
| 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 5 | 1 | 2 | 0 | 13 |
| Total | 0 | 0 | 4 | 6 | 21 | 30 | 101 | 238 | 682 | 963 | 1123 | 576 | 345 | 89 | 4178 |
| Percentile |  |  |  | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
| Speed |  |  |  | 24.8 | 30.3 | 34.7 | 36.6 |  |  |  |  |  |  |  |  |
| Mean Speed (Average) |  |  |  | 32.2 |  |  |  |  |  |  |  |  |  |  |  |
| 10 MPH Pace Speed |  |  |  | 24-33 |  |  |  |  |  |  |  |  |  |  |  |
| Number in Pace |  |  |  | 2949 |  |  |  |  |  |  |  |  |  |  |  |
| Percent in Pace |  |  |  | 70.6\% |  |  |  |  |  |  |  |  |  |  |  |
| Number > 30 MPH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Percent > 30 MPH |  |  |  | 51.1\% |  |  |  |  |  |  |  |  |  |  |  |

Location : Route 1A
Location : South of Sagamore Grove
City/State: Portsmouth, NH
Direction: SB,

| $5 / 13 / 2021$ Time | $\begin{aligned} & 0-3 \\ & \mathrm{MPH} \end{aligned}$ | $\begin{gathered} >3-6 \\ \mathrm{MPH} \end{gathered}$ | $\begin{gathered} >6-9 \\ \mathrm{MPH} \end{gathered}$ | $\begin{gathered} >9-12 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >12- \\ 15 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >15- \\ 18 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >18- \\ 21 \\ M P H \end{gathered}$ | $\begin{gathered} >21- \\ 24 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} \hline>24- \\ 27 \\ \text { MPH } \\ \hline \end{gathered}$ | $\begin{gathered} >27- \\ 30 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >30- \\ 33 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >33- \\ 36 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >36- \\ 39 \\ \text { MPH } \end{gathered}$ | $\begin{aligned} & >39 \\ & \text { MPH } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 2 | 0 | 0 | 9 |
| 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 1 | 4 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 4 |
| 4:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 3 | 6 |
| 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 1 | 4 | 3 | 2 | 15 |
| 6:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 9 | 13 | 26 | 20 | 9 | 3 | 84 |
| 7:00 | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 22 | 34 | 49 | 54 | 28 | 18 | 9 | 222 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 12 | 57 | 80 | 89 | 40 | 18 | 2 | 302 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 6 | 40 | 67 | 66 | 34 | 15 | 6 | 235 |
| 10:00 | 0 | 0 | 0 | 0 | 1 | 8 | 12 | 28 | 41 | 56 | 63 | 33 | 23 | 7 | 272 |
| 11:00 | 0 | 0 | 0 | 0 | 3 | 1 | 11 | 23 | 58 | 91 | 79 | 42 | 24 | 2 | 334 |
| 12:00 PM | 0 | 0 | 0 | 0 | 1 | 2 | 16 | 28 | 66 | 85 | 107 | 24 | 19 | 4 | 352 |
| 1:00 | 0 | 0 | 0 | 3 | 4 | 3 | 15 | 34 | 66 | 59 | 68 | 36 | 13 | 1 | 302 |
| 2:00 | 0 | 0 | 2 | 2 | 3 | 2 | 15 | 24 | 50 | 102 | 99 | 46 | 21 | 8 | 374 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 23 | 66 | 102 | 109 | 51 | 22 | 6 | 382 |
| 4:00 | 0 | 0 | 0 | 0 | 2 | 2 | 17 | 22 | 66 | 94 | 132 | 44 | 24 | 4 | 407 |
| 5:00 | 0 | 0 | 0 | 2 | 2 | 7 | 10 | 30 | 75 | 122 | 91 | 45 | 28 | 11 | 423 |
| 6:00 | 0 | 0 | 0 | 0 | 3 | 4 | 11 | 21 | 68 | 65 | 74 | 31 | 23 | 3 | 303 |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 13 | 20 | 60 | 62 | 32 | 21 | 3 | 217 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 10 | 30 | 36 | 54 | 23 | 7 | 2 | 165 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 8 | 15 | 32 | 16 | 4 | 0 | 79 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 7 | 2 | 10 | 7 | 9 | 3 | 42 |
| 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 4 | 5 | 5 | 4 | 1 | 22 |
| Total | 0 | 0 | 2 | 9 | 19 | 31 | 135 | 303 | 768 | 1111 | 1227 | 565 | 305 | 82 | 4557 |
|  |  |  | rcentile | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
|  |  |  | Speed | 24.8 | 29.7 | 34.1 | 36.6 |  |  |  |  |  |  |  |  |
|  | Mea | Speed | Average) | 31.5 |  |  |  |  |  |  |  |  |  |  |  |
|  | $10$ | MPH Pac | e Speed | 24-33 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Number | in Pace | 3286 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Percen | in Pace | 72.1\% |  |  |  |  |  |  |  |  |  |  |  |
|  |  | umber > | 30 MPH | 2179 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ercent > | 30 MPH | 47.8\% |  |  |  |  |  |  |  |  |  |  |  |
| Grand Total | 0 | 0 | 6 | 15 | 40 | 61 | 236 | 541 | 1450 | 2074 | 2350 | 1141 | 650 | 171 | 8735 |
| Stats |  |  | ercentile | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
|  |  |  | Speed | $24.8$ | 29.7 | 34.7 | 36.6 |  |  |  |  |  |  |  |  |
|  | Mean | Speed | Average) | 31.8 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | MPH Pac | e Speed | 24-33 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Numbe | in Pace | 6234 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Percen | in Pace | 71.4\% |  |  |  |  |  |  |  |  |  |  |  |
|  |  | umber > | $30 \text { MPH }$ | 4312 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ercent > | 30 MPH | 49.4\% |  |  |  |  |  |  |  |  |  |  |  |

Location : Route 1A
Location : South of Sagamore Grove
City/State: Portsmouth, NH
Direction: Combined

| $5 / 12 / 2021$ Time | $\begin{aligned} & 0-3 \\ & \mathrm{MPH} \end{aligned}$ | $\begin{gathered} >3-6 \\ \text { MPH } \end{gathered}$ | $\begin{aligned} & >6-9 \\ & \text { MPH } \end{aligned}$ | $\begin{gathered} >9-12 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >12 \\ 15 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >15- \\ 18 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >18 \\ 21 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >21- \\ 24 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >24- \\ 27 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >27- \\ 30 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >30- \\ 33 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >33- \\ 36 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >36- \\ 39 \\ \text { MPH } \end{gathered}$ | $\begin{aligned} & >39 \\ & \text { MPH } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 9 | 0 | 1 | 0 | 12 |
| 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 3 | 2 | 0 | 10 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 3 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 4 |
| 4:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 3 | 4 | 3 | 0 | 16 |
| 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 7 | 12 | 11 | 6 | 1 | 44 |
| 6:00 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 3 | 16 | 32 | 45 | 17 | 18 | 9 | 142 |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 14 | 45 | 84 | 103 | 64 | 32 | 4 | 349 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 1 | 10 | 24 | 72 | 126 | 166 | 100 | 49 | 10 | 558 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 12 | 72 | 115 | 117 | 81 | 38 | 9 | 453 |
| 10:00 | 0 | 0 | 0 | 0 | 1 | 2 | 7 | 27 | 75 | 116 | 143 | 74 | 48 | 7 | 500 |
| 11:00 | 0 | 0 | 0 | 0 | 1 | 4 | 13 | 46 | 91 | 120 | 171 | 90 | 40 | 8 | 584 |
| 12:00 PM | 0 | 0 | 0 | 0 | 1 | 2 | 6 | 24 | 64 | 148 | 169 | 102 | 54 | 11 | 581 |
| 1:00 | 0 | 0 | 1 | 2 | 9 | 11 | 17 | 32 | 84 | 147 | 156 | 79 | 45 | 9 | 592 |
| 2:00 | 0 | 0 | 0 | 0 | 2 | 3 | 16 | 22 | 109 | 130 | 159 | 100 | 38 | 12 | 591 |
| 3:00 | 0 | 0 | 1 | 4 | 7 | 7 | 17 | 33 | 109 | 184 | 203 | 75 | 40 | 9 | 689 |
| 4:00 | 0 | 0 | 2 | 1 | 1 | 1 | 10 | 29 | 101 | 156 | 198 | 100 | 45 | 4 | 648 |
| 5:00 | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 29 | 77 | 166 | 193 | 94 | 39 | 12 | 620 |
| 6:00 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 23 | 65 | 92 | 117 | 79 | 43 | 16 | 450 |
| 7:00 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 12 | 39 | 73 | 97 | 51 | 34 | 9 | 320 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 14 | 43 | 57 | 71 | 42 | 11 | 5 | 245 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 16 | 15 | 41 | 21 | 16 | 1 | 112 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 4 | 7 | 11 | 10 | 14 | 3 | 51 |
| 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 | 8 | 8 | 3 | 4 | 1 | 28 |
| Total | 0 | 0 | 4 | 8 | 25 | 34 | 137 | 351 | 1093 | 1794 | 2194 | 1201 | 620 | 141 | 7602 |
| Percentile |  |  |  | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
| Speed |  |  |  | 26 | 30.3 | 34.7 | 36.6 |  |  |  |  |  |  |  |  |
| Mean Speed (Average) |  |  |  | 32.3 |  |  |  |  |  |  |  |  |  |  |  |
| 10 MPH Pace Speed |  |  |  | 26-35 |  |  |  |  |  |  |  |  |  |  |  |
| Number in Pace |  |  |  | 5550 |  |  |  |  |  |  |  |  |  |  |  |
| Percent in Pace |  |  |  | 73.0\% |  |  |  |  |  |  |  |  |  |  |  |
| Number > 30 MPH |  |  |  | 4156 |  |  |  |  |  |  |  |  |  |  |  |
| Percent > 30 MPH |  |  |  | 54.7\% |  |  |  |  |  |  |  |  |  |  |  |

Location : Route 1A
89920001
Location : South of Sagamore Grove
City/State: Portsmouth, NH
Direction: Combined

| 5/13/2021 <br> Time | $\begin{aligned} & 0-3 \\ & \mathrm{MPH} \end{aligned}$ | $\begin{gathered} >3-6 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >6-9 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >9-12 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >12- \\ 15 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >15- \\ 18 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >18- \\ 21 \\ M P H \end{gathered}$ | $\begin{gathered} >21- \\ 24 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >24- \\ 27 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >27- \\ 30 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >30- \\ 33 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >33- \\ 36 \\ \text { MPH } \end{gathered}$ | $\begin{gathered} >36- \\ 39 \\ \text { MPH } \end{gathered}$ | $\begin{aligned} & >39 \\ & \text { MPH } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12:00 AM | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 5 | 3 | 3 | 0 | 0 | 12 |
| 1:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 4 |
| 2:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 1 | 6 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 1 | 1 | 0 | 7 |
| 4:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 6 | 1 | 4 | 2 | 5 | 19 |
| 5:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 7 | 6 | 5 | 9 | 5 | 3 | 37 |
| 6:00 | 0 | 0 | 1 | 0 | 0 | 1 | 4 | 2 | 12 | 34 | 32 | 31 | 19 | 6 | 142 |
| 7:00 | 0 | 0 | 0 | 1 | 0 | 0 | 7 | 25 | 49 | 83 | 117 | 81 | 35 | 14 | 412 |
| 8:00 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 16 | 73 | 121 | 166 | 107 | 57 | 12 | 557 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 9 | 62 | 117 | 144 | 70 | 35 | 12 | 452 |
| 10:00 | 0 | 0 | 0 | 0 | 1 | 10 | 15 | 37 | 63 | 111 | 133 | 64 | 41 | 10 | 485 |
| 11:00 | 0 | 0 | 0 | 0 | 3 | 1 | 14 | 29 | 93 | 174 | 171 | 80 | 47 | 4 | 616 |
| 12:00 PM | 0 | 0 | 0 | 0 | 1 | 2 | 18 | 42 | 93 | 144 | 189 | 68 | 38 | 8 | 603 |
| 1:00 | 0 | 0 | 0 | 3 | 4 | 3 | 18 | 42 | 96 | 118 | 155 | 84 | 32 | 10 | 565 |
| 2:00 | 0 | 0 | 2 | 2 | 3 | 2 | 15 | 29 | 89 | 180 | 216 | 110 | 53 | 18 | 719 |
| 3:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 30 | 104 | 178 | 211 | 110 | 49 | 12 | 697 |
| 4:00 | 0 | 0 | 0 | 0 | 2 | 2 | 17 | 26 | 98 | 155 | 233 | 98 | 53 | 10 | 694 |
| 5:00 | 0 | 0 | 0 | 2 | 2 | 9 | 12 | 45 | 96 | 192 | 187 | 103 | 59 | 19 | 726 |
| 6:00 | 0 | 0 | 1 | 0 | 3 | 4 | 11 | 29 | 95 | 109 | 133 | 90 | 47 | 10 | 532 |
| 7:00 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 17 | 35 | 108 | 130 | 74 | 39 | 6 | 416 |
| 8:00 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 13 | 51 | 68 | 93 | 44 | 19 | 5 | 298 |
| 9:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 5 | 25 | 44 | 50 | 21 | 8 | 0 | 156 |
| 10:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 4 | 14 | 7 | 20 | 14 | 12 | 5 | 77 |
| 11:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 6 | 13 | 8 | 4 | 1 | 36 |
| Total | 0 | 0 | 4 | 10 | 19 | 37 | 155 | 402 | 1163 | 1969 | 2405 | 1276 | 655 | 173 | 8268 |
|  |  |  | ercentile | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
|  |  |  | Speed | 25.4 | 30.3 | 34.7 | 36.6 |  |  |  |  |  |  |  |  |
|  | Mea | Speed ( | verage) | 32.5 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | MPH Pac | Speed | $26-35$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Number | in Pace | $6034$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Percen | in Pace | 73.0\% |  |  |  |  |  |  |  |  |  |  |  |
|  |  | umber > | 30 MPH | 4509 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ercent > | 30 MPH | 54.5\% |  |  |  |  |  |  |  |  |  |  |  |
| Grand Total | 0 | 0 | 8 | 18 | 44 | 71 | 292 | 753 | 2256 | 3763 | 4599 | 2477 | 1275 | 314 | 15870 |
| Stats |  |  | ercentile | 15th | 50th | 85th | 95th |  |  |  |  |  |  |  |  |
|  |  |  | Speed | 25.4 | 30.3 | 34.7 | 36.6 |  |  |  |  |  |  |  |  |
|  | Mea | Speed | Average) | $32.4$ |  |  |  |  |  |  |  |  |  |  |  |
|  |  | ИPH Pac | e Speed | 26-35 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Numbe | in Pace | 11584 |  |  |  |  |  |  |  |  |  |  |  |
|  |  | Percen | in Pace | 73.0\% |  |  |  |  |  |  |  |  |  |  |  |
|  |  | umber > | $30 \text { MPH }$ | $8665$ |  |  |  |  |  |  |  |  |  |  |  |
|  | Percent > 30 MPH |  |  | 54.6\% |  |  |  |  |  |  |  |  |  |  |  |

## General Background Traffic Growth - Daily Traffic Volumes

| CITY/TOWN | ROUTE/STREET | LOCATION | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | Annual <br> Growth Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Portsmouth | Lafayette Road | South of South Street | 12,000 |  |  | 13,000 |  |  | 12,000 | 12,240 | 12,485 | 11,179 | 11,313 | -1.25\% |
| New Castle | Wentworth Road | At Rye Town Line |  | 4,200 |  |  | 4,000 | 4,088 | 4,211 | 3,551 | 3,803 | 3,879 | 3,167 | -2.68\% |
| Portsmouth | South Street | East of US Route 1 | 5,800 |  |  | 8,800 |  |  | 7,600 | 7,752 | 7,907 | 7,366 | 7,454 | 0.46\% |
| Portsmouth | Middle Street | South of Mendum Avenue |  | 10,000 |  |  | 7,900 | 8,074 | 8,316 | 9,628 | 9,821 | 10,017 | 8,793 | 1.75\% |
| Portsmouth | Middle Street | East of US Route 1 | 6,200 |  |  | 6,800 |  |  | 7,200 | 7,344 | 7,491 | 6,686 | 6,766 | -0.10\% |
| Portsmouth | Newcastle Avenue | At New Castle Town Line | 3,400 |  |  | 2,900 |  |  | 2,900 | 2,958 | 3,017 | 3,163 | 3,201 | 0.86\% |
| Portsmouth | Richards Avenue | South of US Route 1 | 1,800 |  |  | 1,300 |  |  | 1,400 | 1,428 | 1,457 | 1,700 | 1,720 | 2.60\% |
| Portsmouth | Newcastle Avenue | East of South Street | 1,400 |  |  | 1,400 |  |  | 1,400 | 1,428 | 1,457 | 1,486 | 1,374 | 0.15\% |
| Portsmouth | Marcy Street | At Mill Pond Bridge |  |  |  | 2,900 |  | 6,000 | 6,180 | 6,304 | 5,291 | 5,397 | 5,462 | 4.18\% |
| Portsmouth | Sagamore Avenue | At Sagamore Creek |  | 8,100 |  |  | 6,500 | 6,643 | 6,842 | 7,520 | 7,670 | 7,823 | 7,086 | 1.14\% |
| Portsmouth | Cass Street | West of US Route 1 |  | 2,700 |  |  | 2,400 | 2,453 | 2,527 | 2,953 | 3,012 | 3,072 | 2,557 | 2.02\% |
| Portsmouth | Junkins Avenue | North of Lincoln Avenue |  | 3,900 |  |  | 3,300 | 3,373 | 3,474 | 2,962 | 3,021 | 3,081 | 2,766 | -3.07\% |
| Portsmouth | South Street | West of Monroe Street | 4,700 |  | 4,700 |  |  | 4,600 | 4,738 | 4,833 | 4,066 | 4,147 | 4,197 | -1.73\% |
| Portsmouth | Elwyn Road | At Rye Town Line |  | 7,800 |  |  |  | 7,400 | 7,790 | 10,317 | 10,523 | 10,733 | 8,408 | 4.28\% |
| Rye | Wentworth Road | At Portsmouth City Line |  | 5,200 |  |  | 4,900 | 5,008 | 5,158 | 5,767 | 5,882 | 6,000 | 4,937 | 1.38\% |
| Rye | Brackett Road | South of NH Route 1A |  | 2,100 |  |  | 1,400 | 1,431 | 1,474 | 1,804 | 1,840 | 1,877 | 1,469 | 1.08\% |
| Rye | Sagamore Road | South of Berry Brook Lane |  | 4,400 |  |  | 4,700 | 4,803 | 4,947 | 4,394 | 4,482 | 4,572 | 3,840 | -1.87\% |

## Multifamily Housing (Low-Rise)

(220)

Vehicle Trip Ends vs: Dwelling Units<br>On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 29
Avg. Num. of Dwelling Units: 168
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 7.32 | $4.45-10.97$ | 1.31 |

Data Plot and Equation


## Multifamily Housing (Low-Rise)

## Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

## Setting/Location: General Urban/Suburban

Number of Studies: 42
Avg. Num. of Dwelling Units: 199
Directional Distribution: $23 \%$ entering, $77 \%$ exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.46 | $0.18-0.74$ | 0.12 |

## Data Plot and Equation



## Multifamily Housing (Low-Rise)

## Vehicle Trip Ends vs: Dwelling Units

On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

## Setting/Location: General Urban/Suburban

Number of Studies: 50
Avg. Num. of Dwelling Units: 187
Directional Distribution: 63\% entering, 37\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.56 | $0.18-1.25$ | 0.16 |

## Data Plot and Equation



## Single-Family Detached Housing <br> (210)

Vehicle Trip Ends vs: Dwelling Units<br>On a: Weekday

## Setting/Location: General Urban/Suburban <br> Number of Studies: 159

Avg. Num. of Dwelling Units: 264
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 9.44 | $4.81-19.39$ | 2.10 |

Data Plot and Equation


## Single-Family Detached Housing <br> (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

## Setting/Location: General Urban/Suburban

Number of Studies: 173
Avg. Num. of Dwelling Units: 219
Directional Distribution: 25\% entering, $75 \%$ exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.74 | $0.33-2.27$ | 0.27 |

## Data Plot and Equation



## Single-Family Detached Housing <br> (210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

## Setting/Location: General Urban/Suburban

Number of Studies: 190
Avg. Num. of Dwelling Units: 242
Directional Distribution: 63\% entering, 37\% exiting
Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.99 | $0.44-2.98$ | 0.31 |

## Data Plot and Equation



## Shopping Center <br> (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 147
Avg. 1000 Sq. Ft. GLA: 453
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 37.75 | $7.42-207.98$ | 16.41 |

## Data Plot and Equation



## Shopping Center <br> (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 84
Avg. 1000 Sq. Ft. GLA: 351
Directional Distribution: 62\% entering, 38\% exiting
Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 0.94 | $0.18-23.74$ | 0.87 |

## Data Plot and Equation



## Shopping Center <br> (820)

Vehicle Trip Ends vs: 1000 Sq. Ft. GLA
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

## Setting/Location: General Urban/Suburban

Number of Studies: 261
Avg. 1000 Sq. Ft. GLA: 327
Directional Distribution: 48\% entering, $52 \%$ exiting
Vehicle Trip Generation per 1000 Sq. Ft. GLA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 3.81 | $0.74-18.69$ | 2.04 |

## Data Plot and Equation



# High-Turnover (Sit-Down) Restaurant 

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

## Setting/Location: General Urban/Suburban

Number of Studies: 50
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 50\% entering, 50\% exiting
Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 112.18 | $13.04-742.41$ | 72.51 |

## Data Plot and Equation



## High-Turnover (Sit-Down) Restaurant

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 39
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 55\% entering, 45\% exiting
Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 9.94 | $0.76-102.39$ | 11.33 |

Data Plot and Equation


## High-Turnover (Sit-Down) Restaurant

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 107
Avg. 1000 Sq. Ft. GFA: 6
Directional Distribution: 62\% entering, 38\% exiting
Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
| :---: | :---: | :---: |
| 9.77 | $0.92-62.00$ | 7.37 |

Data Plot and Equation


## CAPACITY ANALYSIS WORKSHEETS

NH Route 1A at Sagamore Grove
Sagamore Grove at the West Project Site Driveway
Sagamore Grove at the East Project Site Driveway

2021 Existing Weekday Morning Peak Hour

## 1: NH Route 1A \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | 6 |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 2 | 315 | 0 | 1 | 301 |
| Future Vol, veh/h | 2 | 2 | 315 | 0 | 1 | 301 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 50 | 50 | 89 | 89 | 94 | 94 |
| Heavy Vehicles, \% | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 4 | 4 | 354 | 0 | 1 | 320 |



2021 Existing Weekday Evening Peak Hour

## 1: NH Route 1A \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | F |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 1 | 355 | 1 | 2 | 406 |
| Future Vol, veh/h | 2 | 1 | 355 | 1 | 2 | 406 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 38 | 38 | 94 | 94 | 92 | 92 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 5 | 3 | 378 | 1 | 2 | 441 |



2022 No Build Weekday Morning Peak Hour

## 1: NH Route 1A \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | r |  | F |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 2 | 318 | 0 | 1 | 304 |
| Future Vol, veh/h | 2 | 2 | 318 | 0 | 1 | 304 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 50 | 50 | 89 | 89 | 94 | 94 |
| Heavy Vehicles, \% | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 4 | 4 | 357 | 0 | 1 | 323 |



2022 No Build Weekday Evening Peak Hour

## 1: NH Route 1A \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | r |  | $\uparrow$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 1 | 359 | 1 | 2 | 410 |
| Future Vol, veh/h | 2 | 1 | 359 | 1 | 2 | 410 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 38 | 38 | 94 | 94 | 92 | 92 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 5 | 3 | 382 | 1 | 2 | 446 |


| Major/Minor | Minor1 |  | Major1 |  | Major2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 833 | 383 | 0 | 0 | 383 | 0 |
| Stage 1 | 383 | - | - | - | - | - |
| Stage 2 | 450 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 341 | 669 | - | - | 1187 | - |
| Stage 1 | 694 | - | - | - | - | - |
| Stage 2 | 647 | - | - | - | - | - |
| Platoon blocked, \% |  |  | - | - |  | - |
| Mov Cap-1 Maneuver | 340 | 669 | - | - | 1187 | - |
| Mov Cap-2 Maneuver | 340 | - | - | - | - | - |
| Stage 1 | 694 | - | - | - | - | - |
| Stage 2 | 646 | - | - | - | - | - |
|  |  |  |  |  |  |  |
| Approach | WB |  | NB |  | SB |  |
| HCM Control Delay, s | 14 |  | 0 |  | 0 |  |
| HCM LOS | B |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBT | NBRWBLn1 |  | SBL | SBT |
| Capacity (veh/h) |  | - | - | 407 | 1187 | - |
| HCM Lane V/C Ratio |  | - | - | 0.019 | 0.002 | - |
| HCM Control Delay (s) |  | - | - | 14 | 8 | 0 |
| HCM Lane LOS |  | - | - | B | A | A |
| HCM 95th \%tile Q(veh) |  | - | - | 0.1 | 0 | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.3 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | $\uparrow$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 3 | 4 | 318 | 0 | 2 | 304 |
| Future Vol, veh/h | 3 | 4 | 318 | 0 | 2 | 304 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 50 | 50 | 89 | 89 | 94 | 94 |
| Heavy Vehicles, \% | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 6 | 8 | 357 | 0 | 2 | 323 |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.3 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | $\uparrow$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 3 | 2 | 359 | 3 | 4 | 410 |
| Future Vol, veh/h | 3 | 2 | 359 | 3 | 4 | 410 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 38 | 38 | 94 | 94 | 92 | 92 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 8 | 5 | 382 | 3 | 4 | 446 |


| Major/Minor | Minor1 |  | Major1 |  | Major2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 838 | 384 | 0 | 0 | 385 | 0 |
| Stage 1 | 384 | - | - | - | - | - |
| Stage 2 | 454 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 339 | 668 | - | - | 1185 | - |
| Stage 1 | 693 | - | - | - | - | - |
| Stage 2 | 644 | - | - | - | - | - |
| Platoon blocked, \% |  |  | - | - |  | - |
| Mov Cap-1 Maneuver | 338 | 668 | - | - | 1185 | - |
| Mov Cap-2 Maneuver | 338 | - | - | - | - | - |
| Stage 1 | 693 | - | - | - | - | - |
| Stage 2 | 641 | - | - | - | - | - |
|  |  |  |  |  |  |  |
| Approach | WB |  | NB |  | SB |  |
| HCM Control Delay, s | 13.8 |  | 0 |  | 0.1 |  |
| HCM LOS | B |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBT | NBRW | BLn1 | SBL |  |
| Capacity (veh/h) |  | - | - | 421 | 1185 | - |
| HCM Lane V/C Ratio |  | - | - | 0.031 | 0.004 | - |
| HCM Control Delay (s) |  | - | - | 13.8 | 8 | 0 |
| HCM Lane LOS |  | - | - | B | A | A |
| HCM 95th \%tile Q(veh) |  | - | - | 0.1 | 0 | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | F |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 2 | 351 | 0 | 1 | 336 |
| Future Vol, veh/h | 2 | 2 | 351 | 0 | 1 | 336 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 50 | 50 | 89 | 89 | 94 | 94 |
| Heavy Vehicles, \% | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 4 | 4 | 394 | 0 | 1 | 357 |


| Major/Minor M | Minor1 |  | Major1 |  | Major2 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Conflicting Flow All | 753 | 394 | 0 | 0 | 394 | 0 |
| Stage 1 | 394 | - | - | - | - | - |
| Stage 2 | 359 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 380 | 659 | - | - | 1176 | - |
| Stage 1 | 686 | - | - | - | - | - |
| Stage 2 | 711 | - | - | - | - | - |
| Platoon blocked, \% |  |  | - | - |  | - |
| Mov Cap-1 Maneuver | 380 | 659 | - | - | 1176 | - |
| Mov Cap-2 Maneuver | 380 | - | - | - | - | - |
| Stage 1 | 686 | - | - | - | - | - |
| Stage 2 | 710 | - | - | - | - | - |
|  |  |  |  |  |  |  |
| Approach | WB |  | NB |  | SB |  |
| HCM Control Delay, s | 12.6 |  | 0 |  | 0 |  |
| HCM LOS | B |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Minor Lane/Major Mvmt |  | NBT | NBRV | VBLn1 | SBL |  |
| Capacity (veh/h) |  | - |  | 482 | 1176 | - |
| HCM Lane V/C Ratio |  | - | - | 0.017 | 0.001 | - |
| HCM Control Delay (s) |  | - | - | 12.6 | 8.1 | 0 |
| HCM Lane LOS |  | - | - | B | A | A |
| HCM 95th \%tile Q(veh) |  | - | - | 0.1 | 0 | - |


| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.1 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | $\uparrow$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 2 | 1 | 396 | 1 | 2 | 453 |
| Future Vol, veh/h | 2 | 1 | 396 | 1 | 2 | 453 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 38 | 38 | 94 | 94 | 92 | 92 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 5 | 3 | 421 | 1 | 2 | 492 |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.2 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | $\mathbf{F}$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 3 | 4 | 351 | 0 | 2 | 336 |
| Future Vol, veh/h | 3 | 4 | 351 | 0 | 2 | 336 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 50 | 50 | 89 | 89 | 94 | 94 |
| Heavy Vehicles, \% | 0 | 0 | 1 | 0 | 0 | 2 |
| Mvmt Flow | 6 | 8 | 394 | 0 | 2 | 357 |



| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.3 |  |  |  |  |  |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | Mr |  | $\uparrow$ |  |  | $\uparrow$ |
| Traffic Vol, veh/h | 3 | 2 | 396 | 3 | 4 | 453 |
| Future Vol, veh/h | 3 | 2 | 396 | 3 | 4 | 453 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, \# | 0 | - | 0 | - | - | 0 |
| Grade, \% | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 38 | 38 | 94 | 94 | 92 | 92 |
| Heavy Vehicles, \% | 0 | 0 | 0 | 0 | 0 | 1 |
| Mvmt Flow | 8 | 5 | 421 | 3 | 4 | 492 |



Sagamore Grove at the West Project Site Driveway

2022 Build Weekday Morning Peak Hour

## 2: West Project Site Driveway \& Sagamore Grove



| Major/Minor | Major1 | Major2 |  | Minor1 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Conflicting Flow All | 0 | 0 | 2 | 0 | 8 | 2 |
| $\quad$ Stage 1 | - | - | - | - | 2 | - |
| $\quad$ Stage 2 | - | - | - | - | 6 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | -2.218 | -3.518 | 3.318 |  |  |
| Pot Cap-1 Maneuver | - | - | 1620 | - | 1013 | 1082 |
| $\quad$ Stage 1 | - | - | - | - | 1021 | - |
| Stage 2 | - | - | - | - | 1017 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 1620 | - | 1013 | 1082 |
| Mov Cap-2 Maneuver | - | - | - | - | 1013 | - |
| Stage 1 | - | - | - | - | 1021 | - |
| Stage 2 | - | - | - | - | 1017 | - |


| Approach | EB | WB | NB |
| :--- | ---: | ---: | ---: |
| HCM Control Delay, s | 0 | 0 | 8.6 |
| HCM LOS |  |  | A |


| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Capacity (veh/h) | 1013 | - | - | 1620 | - |
| HCM Lane V/C Ratio | 0.002 | - | - | - | - |
| HCM Control Delay (s) | 8.6 | - | - | 0 | - |
| HCM Lane LOS | A | - | - | A | - |
| HCM 95th \%tile Q(veh) | 0 | - | - | 0 | - |

2022 Build Weekday Evening Peak Hour
2: West Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.7 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | $\uparrow$ | M |  |
| Traffic Vol, veh/h | 4 | 3 | 0 | 4 | 1 | 0 |
| Future Vol, veh/h | 4 | 3 | 0 | 4 | 1 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |
| Mvmt Flow | 4 | 3 | 0 | 4 | 1 | 0 |



2032 Build Weekday Morning Peak Hour
2: West Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.9 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | A | Mr |  |
| Traffic Vol, veh/h | 1 | 1 | 0 | 5 | 2 | 0 |
| Future Vol, veh/h | 1 | 1 | 0 | 5 | 2 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |
| Mvmt Flow | 1 | 1 | 0 | 6 | 2 | 0 |



2032 Build Weekday Evening Peak Hour
2: West Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 0.7 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | $\uparrow$ | M |  |
| Traffic Vol, veh/h | 4 | 3 | 0 | 4 | 1 | 0 |
| Future Vol, veh/h | 4 | 3 | 0 | 4 | 1 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |
| Mvmt Flow | 4 | 3 | 0 | 4 | 1 | 0 |



2022 Build Weekday Morning Peak Hour

## 3: East Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 1.4 |  |  |  |  |  |  |
| Movement E | EBT | EBR | WBL | WBT | NBL |  |  |
| Lane Configurations | $\dagger$ |  |  | $\uparrow$ | * |  |  |
| Traffic Vol, veh/h | 1 | 0 | 0 | 4 | 1 | 0 |  |
| Future Vol, veh/h | 1 | 0 | 0 | 4 | 1 | 0 |  |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Sign Control Fr | Free | Free | Free | Free | Stop | Stop |  |
| RT Channelized | - | None | - | None | - | None |  |
| Storage Length | - | - | - | - | 0 | - |  |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |  |
| Grade, \% | 0 | - | - | 0 | 0 | - |  |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |  |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |  |
| Mvmt Flow | 1 | 0 | 0 | 4 | 1 | 0 |  |


| Major/Minor | Major1 | Major2 |  |  | Minor1 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Conflicting Flow All | 0 | 0 | 1 | 0 | 5 | 1 |  |
| $\quad$ Stage 1 | - | - | - | - | 1 | - |  |
| Stage 2 | - | - | - | - | 4 | - |  |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |  |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |  |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |  |
| Follow-up Hdwy | - | -2.218 | - | 3.518 | 3.318 |  |  |
| Pot Cap-1 Maneuver | - | - | 1622 | - | 1017 | 1084 |  |
| Stage 1 | - | - | - | - | 1022 | - |  |
| Stage 2 | - | - | - | - | 1019 | - |  |
| Platoon blocked, \% | - | - |  | - |  |  |  |
| Mov Cap-1 Maneuver | - | - | 1622 | - | 1017 | 1084 |  |
| Mov Cap-2 Maneuver | - | - | - | - | 1017 | - |  |
| Stage 1 | - | - | - | - | 1022 | - |  |
| Stage 2 | - | - | - | - | 1019 | - |  |


| Approach | EB | WB | NB |  |
| :--- | ---: | ---: | ---: | ---: |
| HCM Control Delay, s | 0 | 0 | 8.5 |  |
| HCM LOS |  |  |  |  |
|  |  |  | A |  |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL |
| Capacity (veh/h) | 1017 | - | - | 1622 |
| HCM Lane V/C Ratio | 0.001 | - | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 0 |
| HCM Lane LOS | A | - | - | - |
| HCM 95th \%tile Q(veh) | 0 | - | - | 0 |

## 3: East Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.1 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | $\uparrow$ | Mr |  |
| Traffic Vol, veh/h | 3 | 1 | 0 | 3 | 1 | 0 |
| Future Vol, veh/h | 3 | 1 | 0 | 3 | 1 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |
| Mvmt Flow | 3 | 1 | 0 | 3 | 1 | 0 |



## 3: East Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Int Delay, s/veh | 1.4 |  |  |  |  |  |  |
| Movement E | EBT | EBR | WBL | WBT | NBL |  |  |
| Lane Configurations | $\dagger$ |  |  | $\uparrow$ | * |  |  |
| Traffic Vol, veh/h | 1 | 0 | 0 | 4 | 1 | 0 |  |
| Future Vol, veh/h | 1 | 0 | 0 | 4 | 1 | 0 |  |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Sign Control Fr | Free | Free | Free | Free | Stop | Stop |  |
| RT Channelized | - | None | - | None | - | None |  |
| Storage Length | - | - | - | - | 0 | - |  |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |  |
| Grade, \% | 0 | - | - | 0 | 0 | - |  |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |  |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |  |
| Mvmt Flow | 1 | 0 | 0 | 4 | 1 | 0 |  |


| Major/Minor | Major1 | Major2 |  | Minor1 |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Conflicting Flow All | 0 | 0 | 1 | 0 | 5 | 1 |
| $\quad$ Stage 1 | - | - | - | - | 1 | - |
| $\quad$ Stage 2 | - | - | - | - | 4 | - |
| Critical Hdwy | - | - | 4.12 | - | 6.42 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.42 | - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.42 | - |
| Follow-up Hdwy | - | -2.218 | -3.518 | 3.318 |  |  |
| Pot Cap-1 Maneuver | - | - | 1622 | - | 1017 | 1084 |
| $\quad$ Stage 1 | - | - | - | - | 1022 | - |
| Stage 2 | - | - | - | - | 1019 | - |
| Platoon blocked, \% | - | - |  | - |  |  |
| Mov Cap-1 Maneuver | - | - | 1622 | - | 1017 | 1084 |
| Mov Cap-2 Maneuver | - | - | - | - | 1017 | - |
| Stage 1 | - | - | - | - | 1022 | - |
| Stage 2 | - | - | - | - | 1019 | - |


| Approach | EB | WB | NB |  |
| :--- | ---: | ---: | ---: | ---: |
| HCM Control Delay, s | 0 | 0 | 8.5 |  |
| HCM LOS |  |  |  |  |
|  |  |  | A |  |
| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL |
| Capacity (veh/h) | 1017 | - | - | 1622 |
| HCM Lane V/C Ratio | 0.001 | - | - | - |
| HCM Control Delay (s) | 8.5 | - | - | 0 |
| HCM Lane LOS | A | - | - | - |
| HCM 95th \%tile Q(veh) | 0 | - | - | 0 |

## 3: East Project Site Driveway \& Sagamore Grove

| Intersection |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Int Delay, s/veh | 1.1 |  |  |  |  |  |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | $\uparrow$ |  |  | $\uparrow$ | Mr |  |
| Traffic Vol, veh/h | 3 | 1 | 0 | 3 | 1 | 0 |
| Future Vol, veh/h | 3 | 1 | 0 | 3 | 1 | 0 |
| Conflicting Peds, \#/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, \# | 0 | - | - | 0 | 0 | - |
| Grade, \% | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, \% | 0 | 2 | 2 | 0 | 2 | 2 |
| Mvmt Flow | 3 | 1 | 0 | 3 | 1 | 0 |



# (AI) <br> THE STANHOPE GROUP LLC <br> Appraisers and Consultants 

Certified General Appraisers Peter E. Stanhope* G. Andrew Clear* John Madden*** Julia Morris

Certified Residential Appraisers
Laurie Larocque
Ann Norman-Sydow
Jeffrey Wood
Victoria Stanhope
David Michaud
Debora West
Josane Cumandala

## Licensed Appraisers

Peter Bride**

Associates
Eric Duca

May 11, 2021

Bruton \& Berube, PLLC<br>Francis X. Bruton, Esquire<br>601 Central Avenue<br>Dover, NH 03820

RE: Value influence study based of the redevelopment of Map 201, Lots 2, 9, and 10 Sagamore Avenue, Portsmouth, NH

Dear Attorney Bruton:
Per your request, I have developed an opinion on the probability of any diminution in value to neighborhood real estate from the redevelopment of the above referenced real estate by your client, Katz Development Corporation. More specifically, will the approval of eight residential units with two driveways where five units with one driveway are allowed diminish exposed property values?

The redevelopment would first result in the removal of an existing frame structure utilized as a restaurant, retail store and, residential use. The demolished structure is proposed to be replaced with a residential structure with up to eight (8) units, underground parking accessed by two driveways, and upgraded landscaping. The zone permits multi-unit residential structures on a $7,500 \mathrm{sq} \mathrm{ft}$ to 1 unit ratio. The ratio applied to the subject site supports 5.8 units and a single driveway by right.

The neighborhood is populated with a mix of non-residential and residential improvements, including high value condominiums and modest affordable single family dwelling units.

Diminution in value to real estate results from exposure to an externality. The principle of externalities is defined in Appraisal Institute text as:

1. The principle of externalities states that economies outside a property have a positive effect on its value while diseconomies outside a property have a negative effect on its value.
2. Real estate is affected by externalities more than any other economic good, service, or commodity, because it is physically immobile.
3. Externalities may refer to the use of properties located near the subject property.

Manmade environmental forces influence real estate by what populates the nature and desirability of immediate and surrounding property. The measure is often presented in the effect of the three S's: what can be Seen, what Sounds can be heard, and what permeates the air or can be Smelled.

There is no market evidence that the proposed number of units has been demonstrated in the market to diminish the value of either residential or commercial real estate exposed to similar development in the metro Portsmouth market. Realtor and appraiser interviews confirmed that the density of the proposed redevelopment could be a positive influence on exposed real estate.

It should be noted that the existing improvement has high traffic, noise and odor emission from restaurant use and has driveway access from multiple points off Sagamore (Route 1A) and Sagamore Grove.

The removal of the restaurant use and the reduction in driveway access represents an improvement in exposure to an externality and brings the driveway access into greater conformity with zoning.

A study of real estate transactions throughout Portsmouth core area failed to identify any pattern of adverse influence on the presence of limited number unit condominium properties on single family or retail commercial exposed properties.

Realtor interviews confirmed these findings with one unrelated observation that adequate parking for the higher density condominium developments was essential in the downtown area.

Appraiser interviews also had similar observations supported by ongoing research. Exposed real estate was not penalized by exposure to low density condominium developments.

Few instances were identified where a property had two driveway access points. The one most relevant was a Hanover Street lot with less than a . 10 of an acre, 63 feet of frontage, a three (3) unit improvement and two driveway access points. Neighborhood sales data showed no inconsistency in sales prices of nonexposed sales. The data was limited but two driveways failed to identify any potential of negative influences. Two driveway existence was posed to Realtors and appraisers, none could even site an instance when it was a factor.

My research included comparison of the current intensity of use and it's number of access points with market sales exposed to like situations similar to the proposed redevelopment use of the site, as well as Realtor and appraiser interviews. I identified no evidence the proposed redevelopment will have any measurable diminution of value influence on any exposed real estate.

In accordance with the Uniform Standards of Professional Appraisal Practice (USPAP) the conclusion reported herein are not a real estate appraisal (USPAP Standard 1) or a real estate appraisal report (USPAP Standard 2). This work product constituted appraiser consulting. I have complied in its preparation with the USPAP Ethics, Competency and Jurisdictional Exception rules.

You, Francis X. Bruton, Esquire, on behalf of Katz Development Corporation are my client.
The intended users of this work product are you, your client, and the Zoning Board of Adjustment of the City of Portsmouth, NH.

500 MARKET STREET, NOBLES ISLAND UNIT 1C, PORTSMOUTH, NH 03801-3456 (603) 431-4141 FAX: (603) 431-4179 NORTH MAST PROFESSIONAL BUILDING, GOFFSTOWN, NH 03045-0233 (603) 497-4141 FAX: (877) 748-7789

The intended use of this work product is to present documentation with an application for redevelopment of the subject site to the Portsmouth Zoning Board of Adjustment.

These findings relate to the proposed redevelopment on fair market value of exposed real estate. Fair market value is defined as follows:

According to the Financial Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) and the subsequent issuance of the regulatory agencies' final rules, "Market Value" is defined as follows.

The most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:
a. Buyer and seller are typically motivated;
b. Both parties are well informed or well advised and each acting in what they consider their own best interest;
c. A reasonable time is allowed for exposure in the open market;
d. Payment is made in terms of cash in US dollars or in financial arrangements comparable thereto, and;
e. The price represents the normal consideration for the property sold unaffected by special creative financing or sales concessions granted by anyone associated with the sale.

These findings and conclusions are as of May 11, 2021.
Probability of Value Change: The estimated market value of the property exposed in this report is estimated as of the aforementioned date. Constantly changing economic, social, political, and physical conditions have varying effects upon real property values. Even after the passage of a relatively short period of time, property values may change substantially and require a new study.

It is my concluded opinion that as of May 11,2021, the proposed redevelopment as outlined in the application to do same will not result in diminution to any exposed real estate.

Respectfully,


Peter E. Stanhope
Chief Appraiser, NHCG-31
Enclosures: Photos
Certification
Curriculum Vitae
NH Certification

## CERTIFICATION

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct.
- The reported analyses, opinions, and conclusions are my personal, impartial, and unbiased professional analyses, opinions, and conclusions.
- I have no (or the specified) present or prospective interest in the property that is the subject of this report and no (or the specified) personal interest with respect to the parties involved.
- I have performed no (or the specified) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the threeyear period immediately preceding the agreement to perform this assignment.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.
- My compensation for completing this assignment is not contingent upon the development or reporting of a predetermined conclusion that favors the cause of the client, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of these conclusions.
- I have made a personal inspection of the property that is the subject of this report.
- No one provided significant assistance to the person signing this certification.


## Qthermfur

Peter E. Stanhope<br>Chief Appraiser, NHCG-31

View of commercial use adjacent to subject

$1^{\text {st }}$ driveway access to rear of site


Front view of existing improvements


14 parking spaces access directly off Sagamore Ave.



Driveway access to rear of site off Sagamore Ave.


Yellow single value residence with view of rear of site

$2^{\text {nd }}$ driveway access to rear of site opposite yellow residence


View South of Sagamore Ave.


View of commercial building on opposite side of Sagamore Ave.


View North of Sagamore Ave.


# Peter E. Stanhope, Certified General Appraiser <br> (NHCG-31 and MECG-647) 

## EDUCATION:

American Institute of Real Estate Appraisers 1980-1984
University of New Hampshire
1960-1964

## EXPERIENCE:

The Stanhope Group - Chief Appraiser 1967 - Present

Appraisal of complex residential, industrial and commercial real estate throughout northern New England for corporations, government agencies, financial institutions, law firms, and private individuals.

## RELATED EXPERIENCE:

Adjunct Faculty, University of New Hampshire 1981-1999
Adjunct Faculty, Real Estate Center, University of Maine 1983-1990

## ADDITIONAL EXPERIENCE:

National Business Institute
Foreclosure: Appraisal Review, Webinar Speaker
Appraisals in Estate Planning and Administration, Webinar Speaker
Maine Public Television
Format development and moderator of a six hour television special on residential and income property valuation
New Hampshire Commercial Investment Board of Realtors
Program presenter for "A Look at the Rate Value Relationship"
New Hampshire Bar Association
Program presenter for "The Appraisal In Tax Abatement", "Introduction and Overview of Divorce Litigation", and
"Use of Experts in Divorce Litigation"
New Hampshire Trial Lawyers Association
Program presenter for the Annual Family Law Forum
Expert Witness (Testimony Before):
State of New Hampshire
Circuit Courts and Superior Courts
Board of Taxation and Land Appeal
Various municipal planning and zoning boards
State of Maine - York and Cumberland Superior Courts
U.S. Bankruptcy Court - Manchester, NH; Rutland, VT and Portland, ME
U.S. District Court - Concord, NH; Boston, MA, Worcester, MA

## DESIGNATIONS, CERTIFICATIONS \& AFFILIATIONS:

Appraisal Institute
Practicing Affiliate Member
National Association of Realtors, Appraisal Section
General Accredited Member
State of New Hampshire
Certified General Real Estate Appraiser
Licensed Real Estate Broker
State of Maine
Certified General Real Estate Appraiser

## OFFICERSHIPS, COMMITTEES \& ACTIVITIES:

New Hampshire Mortgage Banker's Association
Former Board of Directors Member
New Hampshire Commercial and Industrial Realtors
Former Board of Directors Member
New Hampshire Housing Finance Authority
Former Reverse Elderly Equity Loan Study Committee Member
Former Single Family Committee Member
State of NH Constitution Convention Elected Delegate
National Association of Realtors
National Appraisal Committee Appraisal Section, Former NH Delegate
City of Portsmouth Economic Development Loan Program
Former Loan Review Board Member
Strafford County Regional Planning Commission Former Member
Town of Goffstown
School Board former member and chairman
Municipal Budget Committee former member
Zoning Board of Adjustments former alternate member
Town of Durham
Town Council former member
Historic District Commission former member and chairman
Oyster River Advisory Committee
NH Rivers Management and Protection Program former member

## City of Portsmouth

David Rheaume- Chairman - Zoning BOA
Portsmouth, NH 03801


May 26, 2021

Dear Mr. Rheaume,

I would like to request an amendment for the variance LU 19-11 which we received to restore our 1885 carriage house. The variance currently has a stipulation that our neighbor, Ginny Swift, provide a signed letter of approval for the proposed renovation. I am requesting an amendment that removes the stipulation that she consents to this project. I have provided her a set of construction plans that include a structural approval from Ross Engineering which should be enough to support this project.

I spoke to Ginny a few weeks ago and she clearly stated that due to a recent health issue and the fact that she has put her house on the market, she is unwilling to support this project.

Please consider this request in the upcoming June meeting as we have already invested a considerable amount of time and money on this restoration project.

Sincerely,

Stephen Bucklin
Sherri Beall


[^0]:    ${ }^{1}$ The Planning Board's decision of April 20, 2021 presently under review was directed to Iron Horse Properties, LLC only and the Site Plan Application appurtenant to this dispute was submitted by Iron Horse Properties, LLC. It is unclear why Appellants have included Clipper Traders, LLC, Portsmouth Lumber and Hardware, LLC, and Iron Horse Properties, LLC in the caption.
    ${ }^{2}$ Iron Horse adopts the same definition of "Appellants" used in the appeal, consistent with the June 2, 2021 withdrawals of Sally Lurie Minkow and Tammy J. Gewehr.

[^1]:    ${ }^{3}$ Iron Horse has filed an appeal of two conditions set forth in the Planning Board's final site plan with the Housing Appeals Boards and reserves all rights with respect to that appeal.

[^2]:    ${ }^{4}$ The second part of RSA 676:5, III, "... provided, however, that if the zoning ordinance contains an innovative land use control adopted pursuant to RSA 674:21 which delegates administration, including the granting of conditional or special use permits, to the planning board, then the planning board's decision made pursuant to that delegation cannot be appealed to the board of adjustment, but may be appealed to the superior court as provided by RSA 677:15[,]" is discussed in section IB below.

[^3]:    ${ }^{5}$ It is not, for example, like the inherent authority to reconsider motions to deny a rehearing within the 30day limit for appeal to the superior court. See 74 Cox Street, LLC v. City of Nashua, 156 N.H. 228, 231 (2007).

[^4]:    ${ }^{6}$ Claims may also be filed with the recently created Housing Appeals Board panel under RSA 679.

[^5]:    ${ }^{7}$ Portsmouth's Master Plan requires the City and developers to incorporate climate change impacts (including rising sea levels) into development planning efforts and to make infrastructure changes accordingly. See Portsmouth 2025 Master Plan, § 5.5.

[^6]:    Bill Southworth

[^7]:    1 "Use" is defined in the ordinance to include "[a]ny purpose for which a lot, building or other structure or a tract of land may be designated, arranged, intended, maintained or occupied; or any activity, occupation, business or operation carried on or intended to be carried on in a building or other structure or on a tract of land." This would presumably include the parking areas, which the applicant does not intend to alter at this time.
    ${ }^{2}$ The applicant has not commissioned an as-built survey of the lot, so the exact location of the parking areas from the rights of way is not known, but it is assumed relief is necessary.

[^8]:    ${ }^{1}$ Lot 3's frontage on Middle Street is long existing and will not be modified by this proposed subdivision. Thus, Tuck believes it to be grandfather with no relief necessary. However, Tuck has included this requested variance out of an abundance of caution and upon discussions with City Planning Staff in the event the ZBA deems in necessary.

[^9]:    ${ }^{1}$ The applicant proposes installing a 12 foot tall sign, otherwise all dimensions are as shown on Sheet 2.0 and 2.1, which will be supplemented subsequent to this submission.

[^10]:    ${ }^{1}$ Eric Katz, principal of the Applicant, was honored as the Gold Winner at the 2020 National PRISM award for best attached home under $1,800 \mathrm{sq}$. ft. (See article: https://www.seacoastonline.com/story/business/2021/02/11/portsmouth-builders-win-national-goldaward/6719598002/).
    ${ }^{2}$ The entire Vanasse Report is submitted herein for the purposes of completeness. The full Report, and data therein, will be utilized during technical review by the City Department Heads, however, it is respectfully submitted that the salient issues related to this application are summarized within the first two pages of the Report.

[^11]:    ${ }^{1}$ Trip Generation, $10^{\text {th }}$ Edition; Institute of Transportation Engineers; Washington, DC; 2017.

[^12]:    ${ }^{2}$ The Zoning Ordinance requires a minimum of 0.5 spaces per dwelling units of less than $500 \mathrm{sf} ; 1.0$ spaces per dwelling units between 500 to 750 sf ; and 1.3 spaces for dwelling units greater than 750 sf.
    ${ }^{3}$ The prevailing travel speed is also known as the $85^{\text {th }}$ percentile vehicle travel speed, or the speed at which 85 percent of the observed vehicles traveled at or below during the observation period.
    ${ }^{4}$ The statutory speed limit for any business or urban residence district is 30 mph as defined in the 2019 New Hampshire Revised Statutes Section 265:60 Basic Rule and Maximum Limits.

[^13]:    $5^{5}$ A minimum combined travel lane and paved shoulder width of 14 -feet is recommended to support bicycle travel in a shared traveled-way condition.

[^14]:    ${ }^{6}$ Ibid 1.

[^15]:    ${ }^{\text {a}}$ Based on ITE LUC 220, Multifamily Housing (Low-Rise), 8 dwelling units.
    ${ }^{\text {b }}$ Based on ITE LUC 210, Single-Family Detached Housing, 1 dwelling unit; LUC 820, Shopping Center, 1,420 sf, and using the average trip rate given the small size of the demised area; and LUC 932, High-Turnover (Sit-Down) Restaurant, 1,230 sf

[^16]:    ${ }^{7}$ Highway Capacity Manual, Transportation Research Board; Washington, DC; 2010.

[^17]:    ${ }^{8}$ A Policy on Geometric Design of Highway and Streets, $7^{\text {th }}$ Edition; AASHTO; Washington D.C.; 2018.

[^18]:    ${ }^{9}$ Ibid 1.

[^19]:    ${ }^{10}$ Manual on Uniform Traffic Control Devices (MUTCD); Federal Highway Administration; Washington, D.C.; 2009.

