SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

# Site Plan Amendment Review Application

to the

# City of Belfast

for

## 22 Belmont Avenue Interconnection to Convenient MD Belfast, Maine

on behalf of

Parkingway Management, LLC
P.O. Box 963
Portland, Maine 04104

May 2023

75 John Roberts Road – Suite 4A, South Portland, ME 04106-6963 • 207-200-2100 • Fax: 207-856-2206

May 8, 2023
220473-01

Bub Fournier, Director, Code & Planning
Jon Boynton, City Planner
City of Belfast, Maine
131 Church Street
Belfast, ME 04915

**22 Belmont Avenue Interconnection with Convenient MD, Belfast**
**Site Plan Amendment Application**

Dear Mr. Fournier, Mr. Boynton and Members of the Planning Board:

On behalf of our client, Parkingway Management LLC. (applicant), we are submitting the enclosed Site Plan amendment application and related materials for changes to the parcel located on Tax Map 5, Lot 12A related to the proposed interconnection with the Convenient MD development on Belmont Avenue/Route 3 in Belfast. A site plan application for the adjacent Convenient MD development located at Tax Map 5, Lot 12B was submitted for review on April 12, 2023. The project site for this amendment is approximately 2.07 acres with 300 feet of frontage and consists mainly of a developed gas station, convenience store, fast food, and associated parking areas with wetlands located on the southeast portion of the property.

The proposed development on Lot 12A will be a driveway interconnection between the Shell Gas Station property and the proposed Convenient MD. The connection will displace four current parking spaces for the Gas Station. The four spaces will be relocated to the Convenient MD parking area on Lot 12B in addition to the total of 30 parking spaces that will be constructed for Convenient MD. A Landscape Plan for Lot 12B has been developed to link the proposed connection with existing landscaping in the associated area. Stormwater for the connection will be managed through grading toward Lot 12B with flow into the onsite wetland area in accordance with existing drainage pattern. Site utilities will remain unchanged for Lot 12A. A Natural Resource Protection Act Tier 1 permit amendment will be submitted to the Maine Department of Environmental Protection for subsequent wetland impacts.

The enclosed Site Plan amendment application has been prepared in accordance with Chapter 90 Site Plans, Chapter 98 Technical Standards, Article VIII Supplementary District Regulations, Division 3 Nonresidential Development Standards – Route 3 Commercial, and an awareness of Section 90-43. Criteria for review by planning board.

The Parkingway Management LLC., development team has recently completed four Convenient MD medical buildings in New England with a recent project completed in Manchester NH. This project will be the 10th project collaboration completed by the development team. The technical team is led by Sebago Technics, Inc. team including the project surveyor, landscape architect, civil engineer, soil scientist, and wetland scientist. The signage designer and manufacturer is Sousa Signs from Manchester, NH. Site lighting design was completed by Swaney Lighting Associate, Inc from Scarborough, ME.

We look forward to discussing this project with the Planning Board at the May 2023 meeting. Please feel free to contact us if additional information is needed. Thank you for your time and consideration relative to this project.

Sincerely,

SEBAGO TECHNICS, INC.

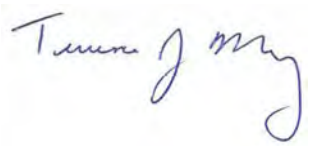
Amy Bell Segal, RLA ASLA
Maine Licensed Landscape Architect
Senior Project Manager

c.c. M.d'Hemecourt

# Table of Contents

# AGENT AUTHORIZATION

| | | | | | |
|---|---|---|---|---|---|
| **APPLICANT/ OWNER** | **Name** | Parkingway Management, LLC | | | |
| **PROPERTY DESCRIPTION** | **Physical Address** | Belmont Avenue/ Route 3<br>Belfast, ME 04915 | | **Map** | 5 |
| | | | | **Lot** | 12A, 12B |
| **APPLICANT'S AGENT INFORMATION** | **Name** | Amy Bell Segal, RLA ASLA | | | |
| | **Phone** | (207) 200-2055 | **Business Name & Mailing Address** | SEBAGO TECHNICS, INC<br>75 John Roberts Road, Suite 4A<br>South Portland, ME 04106 | |
| | | | | | |
| | | | | | |



APPLICANT SIGNATURE DATE 4/28/2023

PLEASE TYPE OR PRINT NAME HERE

Terrence Murray

4/28/23

APPLICANT'S AGENT SIGNATURE DATE

PLEASE TYPE OR PRINT NAME HERE

Amy Bell Segal, RLA ASLA

To Whom It May Concern:

BELFAST RIVER LLC (the "Owner") is the owner of the property located at 22 Belmont Avenue, Belfast, ME (Tax Map 5, Lot 12-A) (the "Property"). The Owner hereby authorizes Parkingway Management, LLC, and its agents and representatives (including, without limitation, any law firm or engineering or architecture firm that the above may designate), to execute, submit and prosecute applications and any applicable materials to the City of Belfast, ME boards, commissions, agencies and the like (including, without limitation, zoning boards, planning boards and the City Council) on behalf of the Owner, for the purpose of obtaining municipal permits and approvals and property rezonings necessary or desired in connection with the creation of a driveway connection from, and traffic access rights of, the adjacent property at 20 Belmont Avenue to connect to and use the driveway on the Property for access to Belmont Avenue as detailed in the proposed site plan in Exhibit A.

BELFAST RIVER LLC

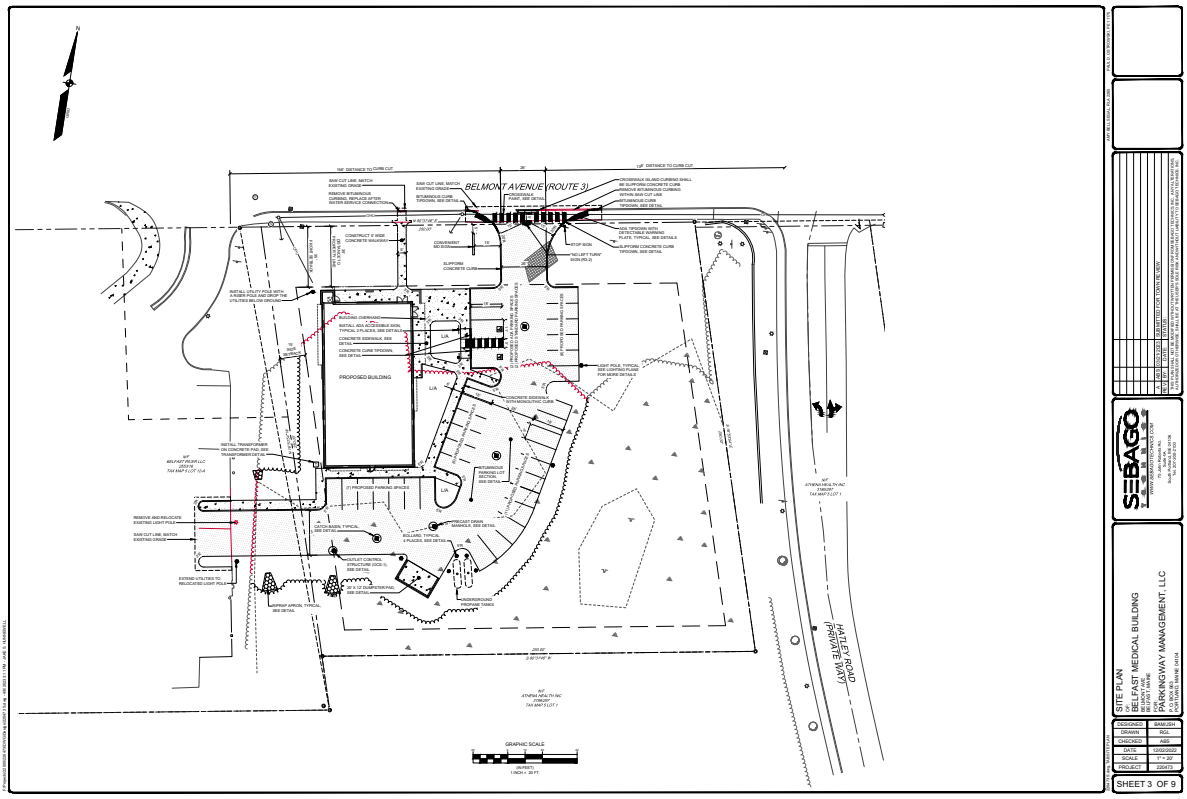
4/11/2023

Date

By: DocuSigned by: Joe Delois 35589656423E4BB...

Name: Joseph Delois, sole manager
Duly authorized

Exhibit A



# Exhibit 1

## Right Title and Interest

**Exhibit 1 - Title, Right or Interest**

Belfast River LLC, the owner of the parcel at 22 Belmont Ave (Map 5 Lot 12-A) has provided Parkingway Management, LLC. with an access easement and agent authority for site plan amendments to allow vehicle passage between the parcel at 22 Belmont Avenue and the parcel at 20 Belmont Avenue. Please see the attached Easement Deed.

# EASEMENT DEED

KNOW ALL BY THESE PRESENTS THAT **BELFAST RIVER, LLC**, a Maine limited liability company with a place of business at 47 Waites Landing Road, Falmouth Maine ("Grantor"), for consideration paid, for itself, its successors and assigns grants to **COLDEST BROOK, LLC**, a Maine limited liability company having a principal place of business at 47 Waites Landing Road in Falmouth, Maine, it successors and assigns ("Grantee"), the perpetual right and easement for the following described purposes across a portion of land of the Grantor, as described in a deed recorded in the Waldo County Registry of Deeds in Book 2553, Page 16 (the "Burdened Parcel"), and being depicted on Exhibit A (the "Easement Area"), benefiting the land of the Grantee bounded and described as set forth in Exhibit B (the "Benefited Parcel"), which easement shall be appurtenant to and run with the adjoining land of Grantee, its successors and assigns.

Access Right of Way: Grantee shall have the perpetual right and easement to pass and repass on foot and with vehicles at any and all times together with the right to enter from time to time within said areas to inspect, install, construct, maintain, repair, rebuild, replace and remove fill, pavement and other facilities and appurtenances intended to facilitate or improve access over the Easement Area, for the benefit of the Benefited Parcel.

Rights of Relocation: Grantee shall have the right to unilaterally relocate the Easement Area, in part or in whole, from time to time, provided that the new location shall not unreasonably burden the Burdened Parcel, and provided that the expense of such relocation shall be borne entirely by Grantee, its successors and assigns.

Reserved Rights / Parking: Grantor, its successors and assigns, shall have the right to make use of the surface of the Easement Area as shall not be inconsistent with the Grantee's use of the Easement Area, but specifically shall place no structures, landscaping or other improvements (including utility transformers) within said Easement Area that prevents or interferes with the Grantee's ability to use the Easement Area for its intended purpose, except for the currently existing raised island, concrete apron and concrete base sign and signage. Grantee acknowledges that the construction and maintenance of improvements necessary shall not be inconsistent with the use of the Burdened Property by the Grantor.

To the extent any currently existing parking spaces on the Burdened parcel are displaced by the improvements constructed by Grantee in the Easement Area, Grantee agrees that Grantor, its successors and assigns, shall have the right to use, in common with the Grantee, an identical number of parking spaces located on the Benefited Parcel. Such parking spaces located on Grantee's land may be identified by Grantee as "shared parking" spaces.

[SIGNATURE PAGE TO FOLLOW]

IN WITNESS WHEREOF, the said Grantor has caused this instrument to be signed and sealed in its company name by Joseph A. Delois, its Manager, thereunto duly authorized, on July 11, 2016.

Signed, Sealed and Delivered
in the Presence of:

BELFAST RIVER, LLC,
a Maine limited liability company

By:
Name: Joseph A. Delois
Title: Manager

STATE OF MAINE
COUNTY OF CUMBERLAND, ss. July 11, 2016

Personally appeared the above named Joseph A. Delois, Manager of said company, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said Belfast River, LLC.

Before me,

Notary Public/Attorney-at-Law
Printed Name:
Nicholas T. Morrill

IN WITNESS WHEREOF, the said Grantee has caused this instrument to be signed and sealed in its company name by Joseph A. Delois, its Manager, thereunto duly authorized, on July 11, 2016.

Signed, Sealed and Delivered
in the Presence of:

COLDEST BROOK,
a Maine limited liability company

By: _____
Name:
Title:

STATE OF MAINE
COUNTY OF CUMBERLAND, ss. July 11, 2016

Personally appeared the above named Joseph A. Delois, Manager of said company, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said Coldest Brook, LLC.

Before me,

_____
~~Notary Public~~/Attorney-at-Law
Printed Name:
Nicholas O. Morrill

LIMITED JOINDER

The undersigned, **CAMDEN NATIONAL BANK**, as owner and holder of a Mortgage, Security Agreement and Financing Statement from BELFAST RIVER, LLC recorded in the Waldo County Registry of Deeds in Book 3853, Page (the "Mortgage") or otherwise of record covering the Burdened Premises located at 22 Belmont Avenue, Belfast, Maine therein (and herein in Exhibit A), hereby confirms its consent and joins with BELFAST RIVER, LLC, in the creation of this Easement Deed in favor of COLDEST BROOK, LLC, its successors and assigns.

IN WITNESS WHEREOF, the said Camden National Bank has caused this instrument to be signed and sealed in its corporate name by Mark Stasium, its SVP, thereunto duly authorized, on July 6, 2016.

Signed, Sealed and Delivered

CAMDEN NATIONAL BANK

By: _____
Name: Mark Stasium
Title: S.V.P.

STATE OF MAINE
COUNTY OF Cumberland, ss. July 6, 2016

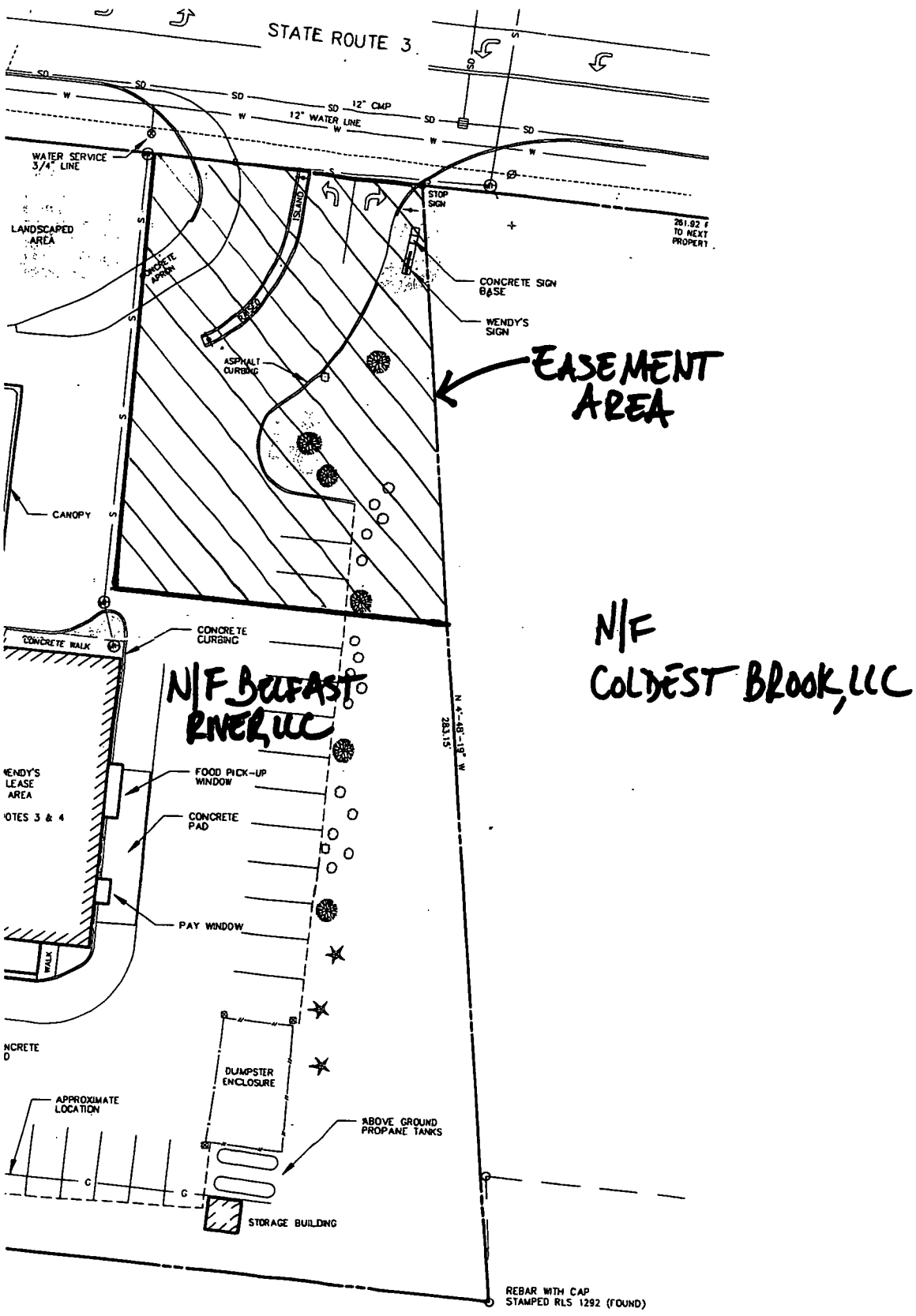
Personally appeared the above named Mark Stasium, SVP of said company, as aforesaid, and acknowledged the foregoing to be his free act and deed in his said capacity and the free act and deed of said CAMDEN NATIONAL BANK.

Before me,

Christine S. Rodgerson
Notary Public/~~Attorney-at-Law~~
Printed Name Christine S. Rodgerson
My Commission expires September 1, 202

SEAL

# EXHIBIT A
[Easement Area]



# EXHIBIT B

[Benefited Parcel]

A certain lot or parcel of land situated on the southerly side of Belmont Avenue in Belfast, County of Waldo and State of Maine, and which said parcel may be further bounded and described as follows:

Beginning at a point which is the northeasterly corner of those premises conveyed from Alfred J. Dutch to Frost and Wilkins, Inc. by deed dated June 28, 1960 and recorded in the Waldo County Registry of Deeds in Book 569, Page 312; thence easterly and in the southerly line of Belmont Avenue two hundred fifty (250) feet to a point; thence southerly in a line parallel to the easterly line of those premises conveyed from A.J. Dutch to Frost and Wilkins, Inc. by deed aforedescribed (said course having been observed in 1960 as being South 0° 25' East) two hundred fifty (250) feet to a point; thence westerly in a line parallel with the southerly bound of Belmont Avenue (being Route 3, so-called) two hundred fifty (250) feet to the easterly line of those premises conveyed from Alfred J. Dutch to Frost and Wilkins, Inc. by deed aforedescribed; thence northerly and in said easterly bound two hundred fifty (250) feet to the point of beginning.

It is meant and intended to describe and convey a two hundred fifty (250) by two hundred fifty (250) foot parcel situated just easterly of and contiguous with the deed to Frost and Wilkins, Inc. recorded in the Waldo Registry of Deeds in Book 579, Page 312.

WALDO SS: RECEIVED

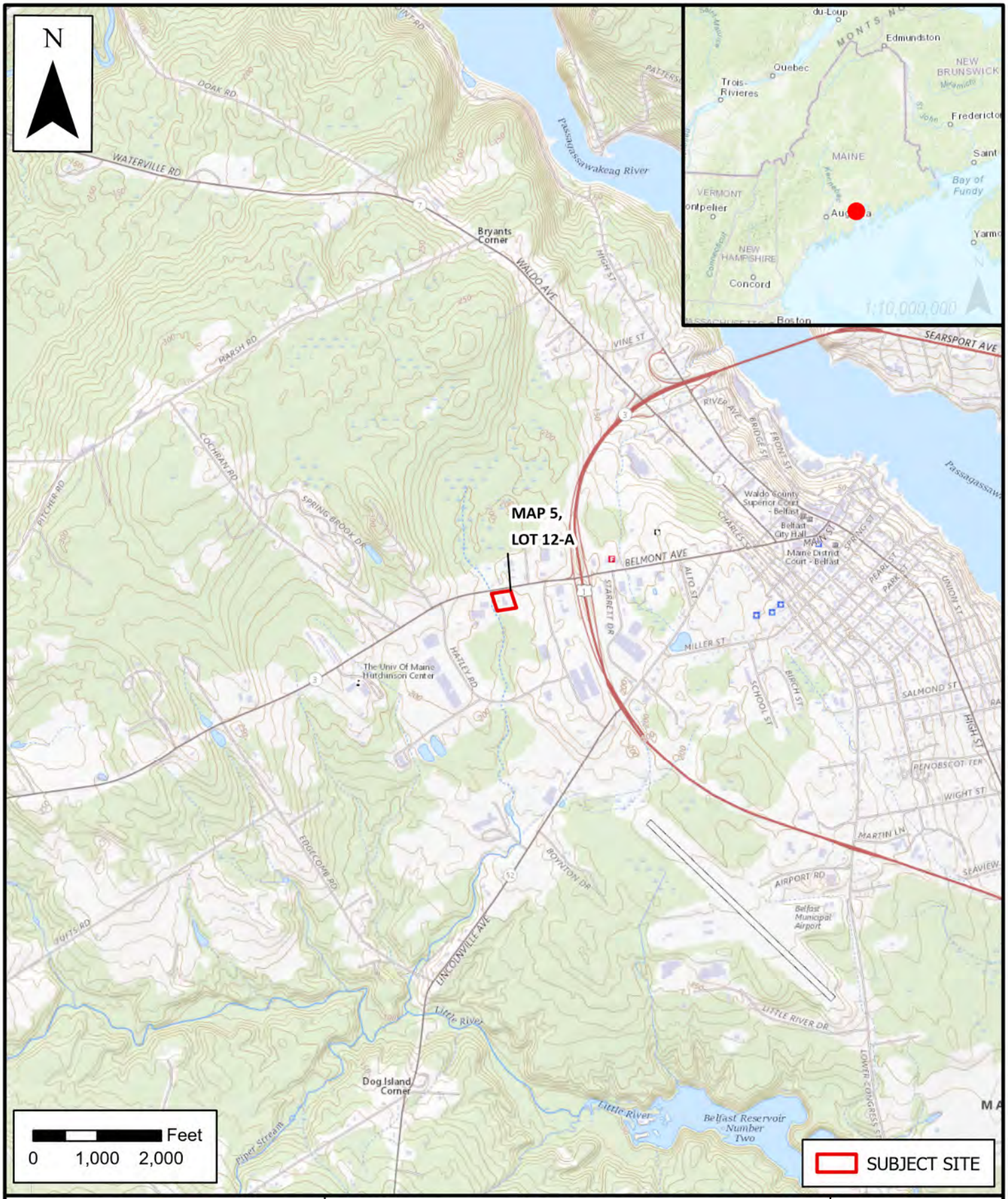
Jul 12,2016
at 02:33P
ATTEST: Stacy L. Grant
REGISTER OF DEEDS

# Exhibit 2

## Location Map

**Exhibit 2 – Location Map**

Please see the enclosed location map which shows the proposed development in relation to existing streets.




SEBAGO TECHNICS

WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd. - Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# LOCATION MAP

HARBORLIGHT ADVISORS

| | |
|---|---|
| SCALE: | 1:24,000 |
| DATE: | 4/21/2023 |

LOCATION:
22 BELMONT AVENUE
BELFAST, ME

INFORMATION:
MAINE GEOLIBRARY
USGS QUADRANGLE

# Exhibit 3

## Financial Capacity

**Exhibit 3 – Financial Capacity**

Please see this Exhibit for proof of financial capacity.

WALDRON H. RAND
& COMPANY, P.C.
*Certified Public Accountants*
Over 100 Years of Service

March 14, 2023

Bub Fournier, Director, Planning and Codes Department
Jon Boynton, City Planner
City of Belfast, Mane
131 Church Street
Belfast, ME 04915

Dear sirs,

I am the longstanding outside CPA for Michael d'Hemecourt, Terrence Murray and Patrick Cleary. I manage the tax returns for all their personal and business endeavors. This real estate development team has executed multiple projects together of similar nature to this specific deal. They have the financial liquidity and technical ability to develop the project in a manner consistent with state and local performance, environmental and technical standards.

Should you have any questions, please feel free to contact me at (781) 449-5825

Sincerely,

Brian Dlugasch, CPA

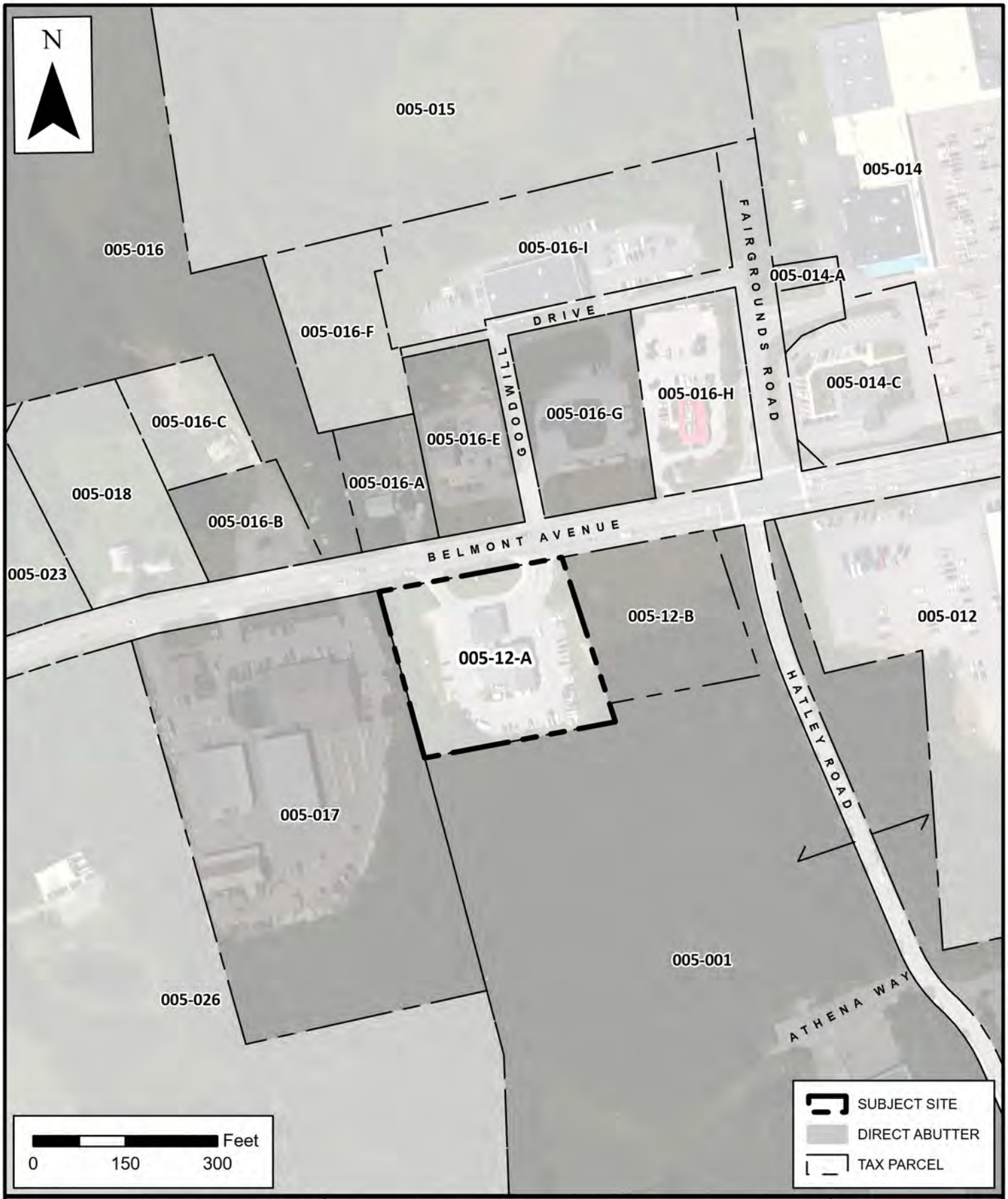
# Exhibit 4

## Abutters

**Exhibit 4 – Abutters**

Please see below for a map and table of the location, ownership, zone and present use of the immediate abutters for the site.

| Map-Lot | Address | Owner | Zone | Use |
|---|---|---|---|---|
| 5-1 | 3 HATLEY ROAD | ATHENAHEALTH, INC. | OFFICE PARK | OFFICE |
| 5-17 | 30 BELMONT AVENUE | HAMMOND LUMBER COMPANY | ROUTE 3 COMMERCIAL | COMMERCIAL HARDWARE STORE |
| 5-12-B | 20 BELMONT AVENUE | PARKINGWAY MANAGEMENT, LLC | ROUTE 3 COMMERCIAL | UNDEVELOPED |
| 5-16 | 27 BELMONT AVENUE | BOYNTON, CHRISTOPHER J. | ROUTE 3 COMMERCIAL | UNDEVELOPED |
| 5-16-A | 25 BELMONT AVENUE | BEYOND THE METER | ROUTE 3 COMMERCIAL | RESIDENTIAL |
| 5-16-E | 23 BELMONT AVENUE | BOUCHARD PROPERTIES, LLC | ROUTE 3 COMMERCIAL | FAST FOOD |
| 5-16-G | 17 BELMONT AVENUE | BLACKSTONE PROPERTIES LLC | ROUTE 3 COMMERCIAL | BANK |

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Tel. 207-200-2100

# TAX PARCEL MAP

## HARBORLIGHT ADVISORS

| | |
|---|---|
| SCALE: | 1:2,500 |
| DATE: | 5/8/2023 |

LOCATION:
22 BELMONT AVENUE
BELFAST. ME

INFORMATION:
MAINE GEOLIBRARY
CITY OF BELFAST, ME

# Exhibit 5

## Utilities

**Exhibit 5 – Utilities**

**Water:**
Water service to Lot 12A will remain unchanged and proposed development is not expected to impact usage.

**Wastewater:**
Existing sewer connection will remain unchanged and proposed development is not expected to impact usage.

**Electrical:**
The existing electrical infrastructure and interconnection will remain unchanged, and the proposed development is not expected to impact usage.

# Exhibit 6

## Traffic

**Exhibit 6 – Traffic**

The proposed connection at the east side of the existing parking lot to the proposed development on Lot 12B will impact site traffic. Impacts on the surrounding roadway network have been analyzed in the Traffic Impact Study conducted by Sebago Technics, Inc. dated March 17, 2023. On-site circulation will remain unchanged. Traffic patterns around the existing building will continue to be one-way on the west, south, and east sides of the building in a counterclockwise direction. The proposed connection with Lot 12B will function as right-in and right-out in accordance with the existing traffic pattern. Please see this Exhibit for the Traffic Impact Study dated March 17, 2023.

SEBAGO TECHNICS

CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

# Traffic Impact Study
# Belfast ConvenientMD
# Belfast, Maine

Applicant:
Parkingway Management, LLC
P.O. Box 963
Portland, Maine 04104

Prepared By:
Sebago Technics, Inc.
75 John Roberts Road, Suite 4A
South Portland, Maine 04106

March 17, 2023

**Traffic Impact Study**

**Belfast ConvenientMD**

**Belfast, Maine**

## Table of Contents



## List of Appendices

## 1.0 Introduction

On behalf of Parkingway Management, LLC, Sebago Technics, Inc. has prepared this Traffic Impact Study (TIS) to evaluate the impact of the proposed Belfast ConvenientMD on the adjacent roadway network. The proposed project is in Belfast, Maine on an undeveloped lot located on the southwest corner of the Belmont Avenue (Route 3) and Hatley Road intersection. The development is to include a 4,997 square foot (SF) medical facility. Construction is anticipated to begin in summer of 2023 with completion and occupancy in late 2023/early 2024.

This study details estimated trip generation of the development, roadway traffic volumes, provides a vehicular capacity analysis, turn lane warrant analysis, and a full safety review, including crash data and sight distance evaluation.

## 2.0 Study Area

Based on the trip generation and assignments, outlined in Section 6 – Trip Generation and Section 7 – Trip Assignment, the study area for analysis purposes includes the proposed site access drive on Belmont Avenue and the intersection of Goodwill Drive and Belmont Avenue.

## 3.0 Existing Conditions

The proposed development is located on the southwest corner of the Belmont Avenue (Route 3) and Hatley Road intersection. The lot is made up of approximately 1.43 acres of land referred to as Map 5 Lot 12-B in Belfast. The site is bordered by Belmont Avenue to the north, Hatley Road to the east, a gas station/coffee shop to the west, and undeveloped land to the south. A location map is included in this study for reference.

Belmont Avenue in the project vicinity is classified as an Urban Other Principal Arterial State Highway. Belmont Avenue has a posted speed limit of 40 MPH in the vicinity of the proposed site drive. The factored AADT as published by the Maine Department of Transportation (MaineDOT) is 9,128 vehicles.

## 4.0 Site Access

Access to the site is proposed via a right-in, right-out only driveway on Belmont Avenue. The proposed driveway is located approximately 160 feet to the east of the existing driveway serving 22 Belmont Avenue and approximately 135 feet west of Hatley Road. A connection will be provided to the existing full movement driveway at 22 Belmont Avenue. Parking for the site would be located on the south and east sides of the site.

# LOCATION MAP




0.65 Miles

1 inch = 0.72 miles

Date: 2/16/2023
Time: 11:47:19 AM

## 5.0 Base Traffic Volumes

Turning movement counts (TMCs) were collected on Tuesday, February 7, 2023 at the following intersections for the AM (7:00 – 9:00 AM) and PM (3:00 – 6:00 PM) peak hour periods:

- Belmont Avenue (Route 3) at Hatley Road and Fairgrounds Road
- Belmont Avenue (Route 3) at Goodwill Drive and Site Access

The TMCs indicate the AM Peak Hour occurring from 7:15 to 8:15 AM and the PM Peak Hour occurring from 3:30 to 4:30 PM.

These counts were then adjusted to account for seasonal variations in traffic volumes. Typical MaineDOT practice is to adjust counts to the 30$^{th}$ Highest Hour using the data published in the MaineDOT Weekly Group Mean Factors report. Belmont Avenue is classified by MaineDOT as Group II+III. Data for this classification from the most recently published 2022 MaineDOT Weekly Group Mean Factors would result in a peak hour adjustment rate of 1.36/0.76 = 1.79 for the collected data. Initial investigation revealed that using this high adjustment factor would result in over-saturated baseline conditions.

To further evaluate if this factor would be appropriate, a previously conducted TMC by MaineDOT on July 19, 2017 for the Hatley Road intersection was obtained to compare the collected count data with this historical count data.

The 2017 summer counts were factored by an annual growth factor of 1.0% to provide a comparison to the collected 2023 counts. This growth factor was selected based on traffic volume data for Belmont Avenue reviewed in the vicinity of the site from the most recent Annual Traffic Count Report by MaineDOT. The location and associated historical Average Annual Daily Traffic (AADT) are summarized in Table 1:

**Table 1 – Average Annual Daily Traffic Data**

| *Location* | *2014 AADT* | *2017 AADT* | *Annual Growth Rate* |
|---|---|---|---|
| **Route 3 W/O Goodwill Drive** | 10,130 | 9,440 | -2.27% |

As demonstrated in Table 1, a negative average annual growth rate was realized on the adjacent roadway system from 2014 to 2017. As such, a growth rate of 1.0% was utilized in order to conservatively project the 2017 volumes to 2023, as well as the collected 2023 volumes to 2024 base no-build conditions.

Once applying this growth factor to the 2017 counts, it was determined that the counts collected in February 2023 were approximately 12% lower than the counts collected in July 2017 factored to 2023. Therefore, for this traffic study the February 2023 counts have been adjusted seasonally by a factor of 1.12.

Background volumes factored to peak summer conditions are shown for the study area in Figure 1. It should be noted that Hatley Road/Fairgrounds Road and Goodwill Drive are not thoroughfares and provide access to businesses, therefore turning movement volumes entering and exiting these roadways were not factored seasonally or yearly.

Additionally, the City of Belfast Director of Planning was contacted to determine what other development in the vicinity of the site was approved, yet unbuilt that should be included in the background volumes. No other projects were identified.

The 2024 no-build volumes, inclusive of the annual growth are shown in Figure 2 for the AM and PM peak hour periods.

## 6.0 Trip Generation

Trip generation was completed utilizing the 11th edition of the Institute of Transportation Engineers (ITE), *Trip Generation Manual.* Land use code (LUC) 720 – Medical-Dental Office Building was utilized on the basis of 4,997 SF of Gross Floor Area (GFA). ITE describes LUC 720 as "a facility that provides diagnoses and outpatient care on a routine basis but is unable to provide prolonged in-house medical and surgical care." Trip generation for the proposed medical office using square footage as the independent variable is outlined in Table 2.

**Table 2 – ITE Trip Generation**
**Land Use Code 720 – Medical-Dental Office Building**
**4,997 Square Feet**

| *Time Period* | *Average Rate per 1,000 SF GFA* | *Trips* | *Entering* | *Exiting* |
|---|---|---|---|---|
| **Weekday** | 36.00 | 180 | 90 (50%) | 90 (50%) |
| **AM Peak Hour – Adjacent Street (7 – 9 AM)** | 3.10 | 16 | 12 (79%) | 4 (21%) |
| **AM Peak Hour – Generator** | 3.74 | 19 | 11 (59%) | 8 (41%) |
| **PM Peak Hour – Adjacent Street (4 – 6 PM)** | 3.93 | 20 | 6 (30%) | 14 (70%) |
| **PM Peak Hour – Generator** | 4.79 | 24 | 10 (40%) | 14 (60%) |

The medical facility is estimated to generate 19 trips and 24 trips during the AM and PM peak hours of the generator, respectively. Given this level of trip generation, a MaineDOT TMP would not be required as project trip generation does not exceed the 100-trip threshold in a peak hour. Additionally, this level of trip generation would not require potential TMP modification to the neighboring 22 Belmont Avenue site.

Based on the trip generation, both peak hours were selected for analysis. The following analysis is performed using 16 trips and 20 trips during the AM and PM peak hour of the adjacent street, respectively.

## 7.0 Trip Assignment

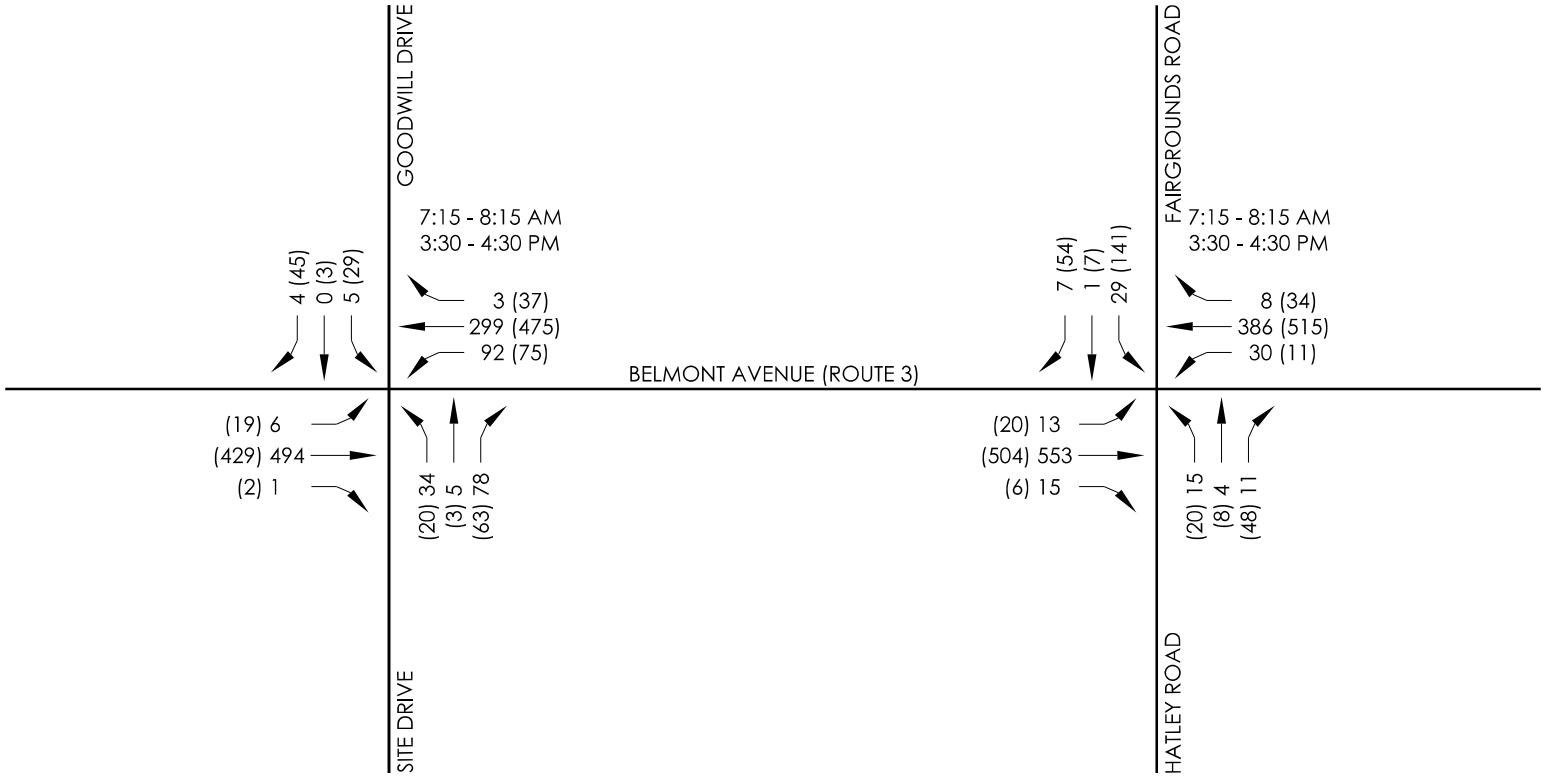
Trip assignments for the project generated trips during the AM and PM peak hour periods of the adjacent street were determined based on existing traffic patterns observed from the turning movement counts. The resulting distributions for primary trips are shown in Table 3.

**Table 3 – Primary Trip Distributions**

| *Location* | *AM Peak Hour Period* | *PM Peak Hour Period* |
|---|---|---|
| **To/From West (Belmont Avenue)** | 45% | 46% |
| **To/From East (Belmont Avenue)** | 55% | 54% |

Traffic entering from the west and exiting to the east was assigned to the right-in, right-out driveway due to the convenience of entry and exit. Traffic entering from the east and exiting to the west would be assumed to use the shared full access driveway from 22 Belmont Avenue.

The trip assignments, reflective of the aforementioned distributions are shown in Figures 3 and 4. The resulting 2024 build volumes, found by adding the 2024 no-build volumes and trip assignments, are shown in Figure 5.




KEY

XX AM PEAK HOUR
(XX) PM PEAK HOUR

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# 2023 BACKGROUND VOLUMES

CONVENIENTMD

SCALE: N.T.S

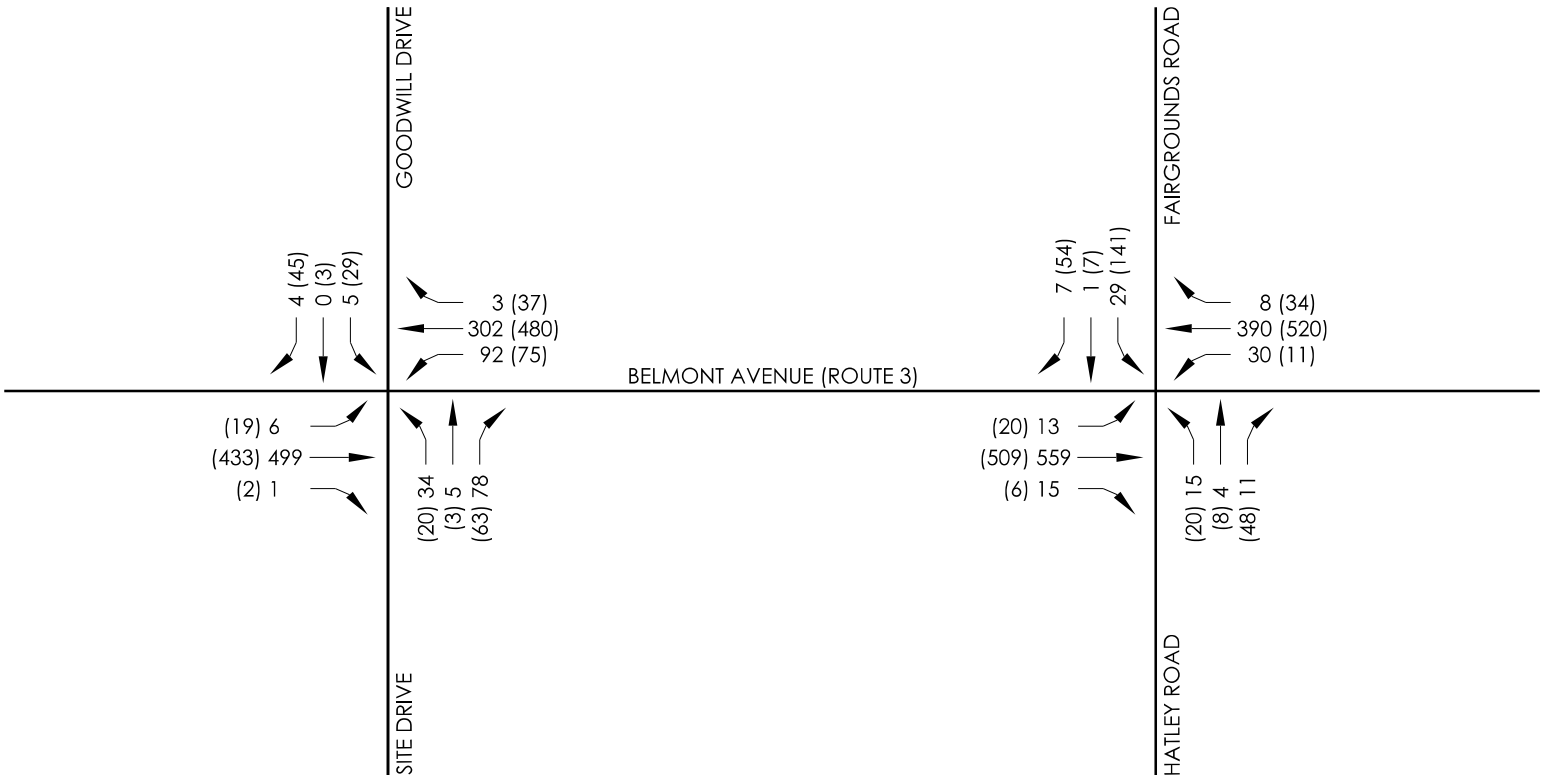
DATE: 03/15/23

LOCATION:
BELMONT AVENUE (ROUTE 3)
BELFAST, MAINE

FOR: PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, ME 04104

FIGURE 1

...\220473_Traffic_Diagrams.dgn




KEY

| | |
|---|---|
| XX | AM PEAK HOUR |
| (XX) | PM PEAK HOUR |

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# 2024 NO-BUILD VOLUMES

CONVENIENTMD

SCALE: N.T.S

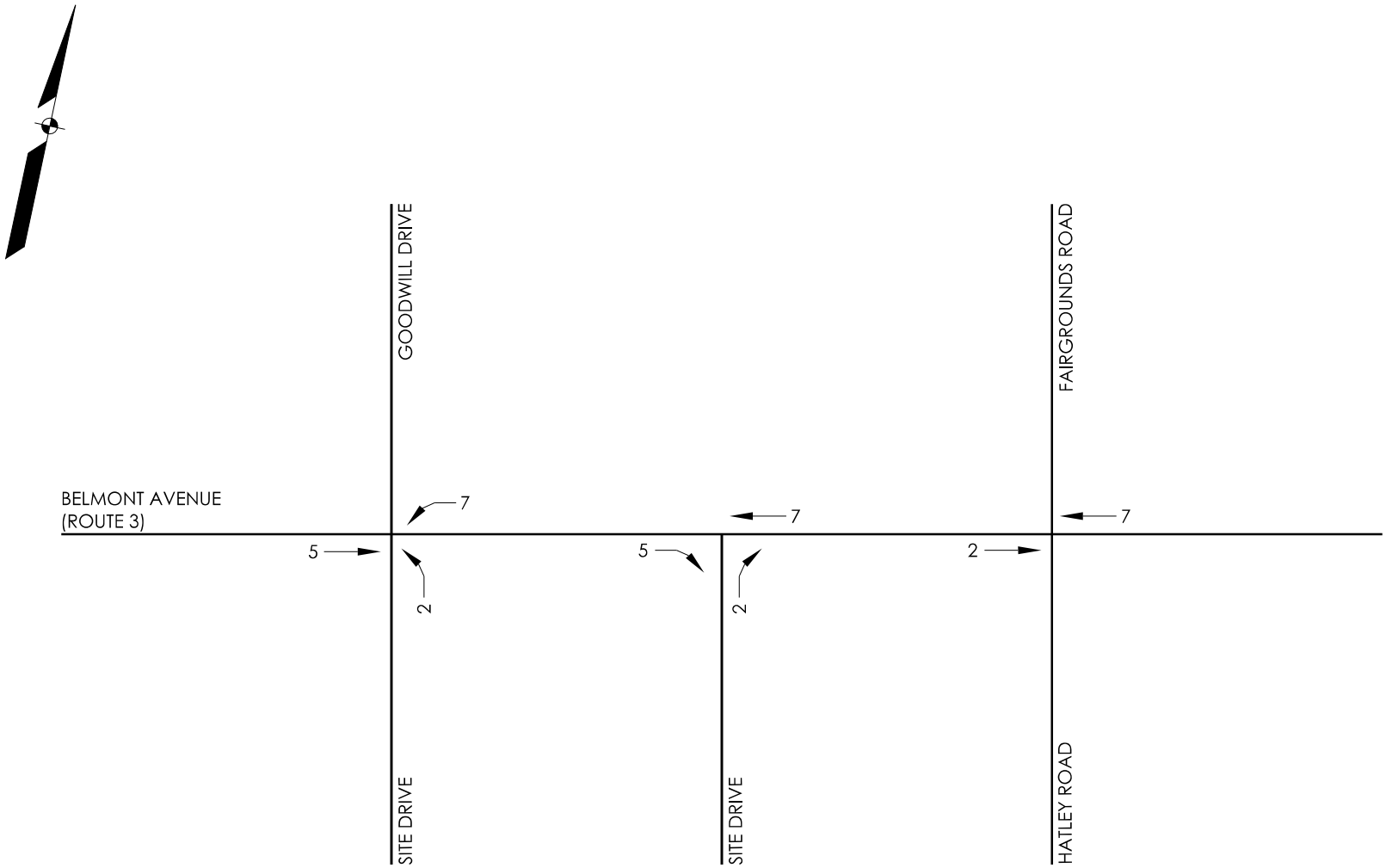
DATE: 03/15/23

LOCATION:
BELMONT AVENUE (ROUTE 3)
BELFAST, MAINE

FOR: PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, ME 04104

FIGURE 2

...\220473_Traffic_Diagrams.dgn




PROJECT TRIP GENERATION

| | TOTAL |
|---|---|
| ENTERING | 12 |
| EXITING | 4 |
| TOTAL | 16 |

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Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# TRIP ASSIGNMENT - AM PEAK HOUR ADJACENT STREET

CONVENIENTMD

SCALE: N.T.S

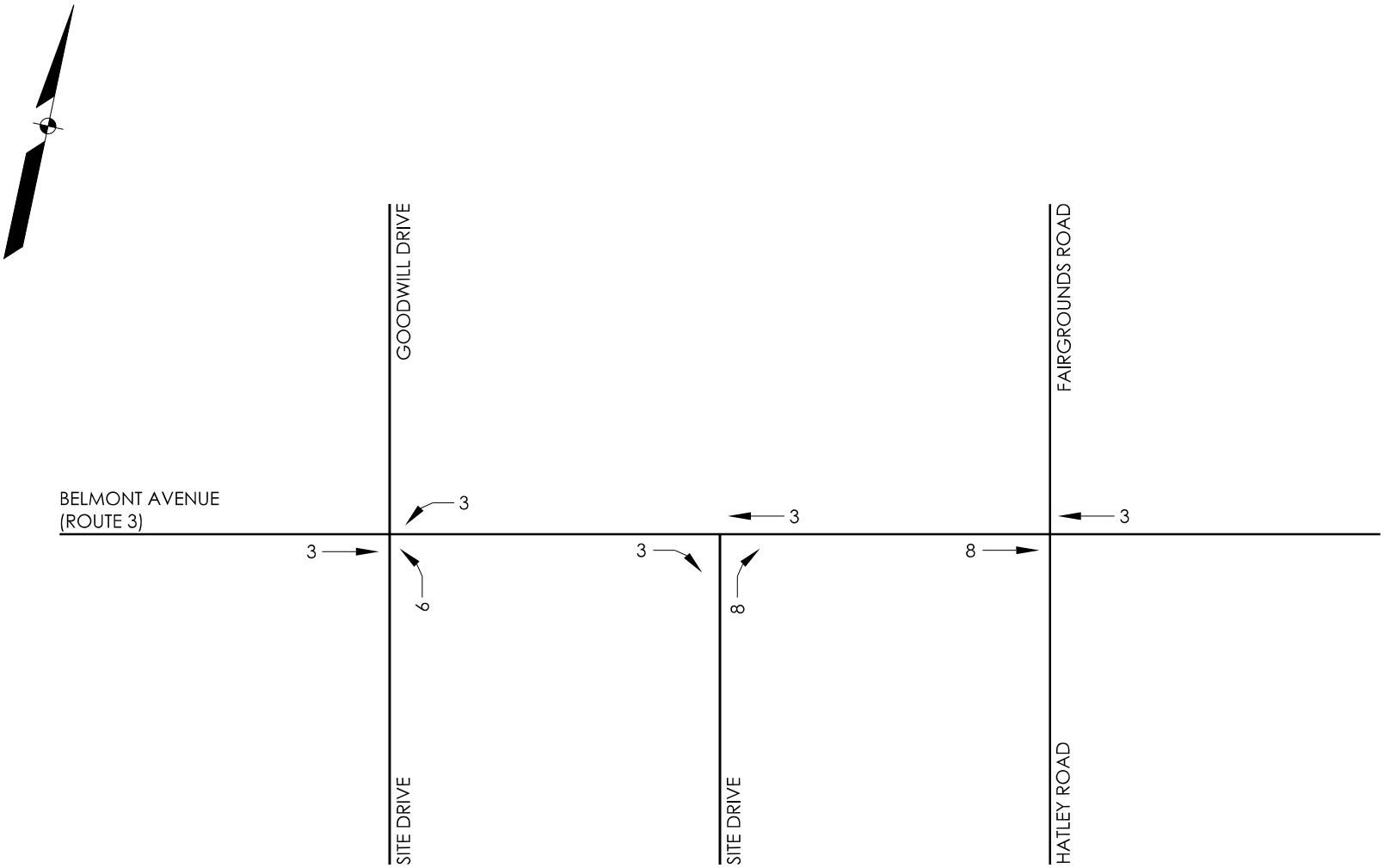
DATE: 03/15/23

LOCATION:
BELMONT AVENUE (ROUTE 3)
BELFAST, MAINE

FOR: PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, ME 04104

FIGURE 3

...\220473_Traffic_Diagrams.dgn




PROJECT TRIP GENERATION

| | TOTAL |
|---|---|
| ENTERING | 6 |
| EXITING | 14 |
| TOTAL | 20 |

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South Portland, ME 04106
Tel. 207-200-2100

# TRIP ASSIGNMENT - PM PEAK HOUR ADJACENT STREET

CONVENIENTMD

SCALE: N.T.S

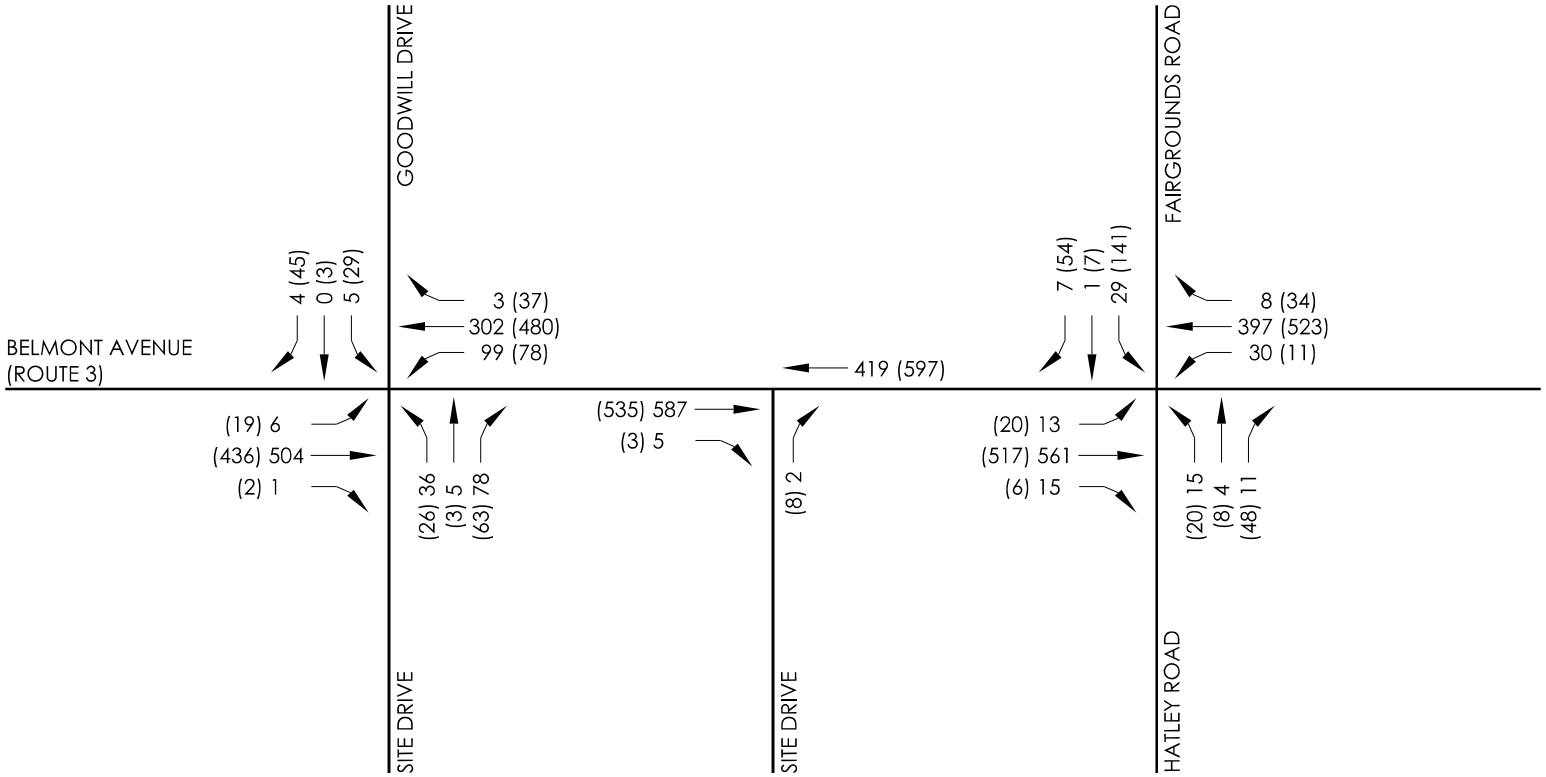
DATE: 03/15/23

LOCATION:
BELMONT AVENUE (ROUTE 3)
BELFAST, MAINE

FOR: PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, ME 04104

FIGURE 4

...\220473_Traffic_Diagrams.dgn




KEY

XX AM PEAK HOUR
(XX) PM PEAK HOUR

SEBAGO TECHNICS
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75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

# 2024 BUILD VOLUMES

CONVENIENTMD

SCALE: N.T.S

DATE: 03/15/23

LOCATION:
BELMONT AVENUE (ROUTE 3)
BELFAST, MAINE

FOR: PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, ME 04104

FIGURE 5

...\220473_Traffic_Diagrams.dgn

## 8.0 Capacity Analysis

An intersection capacity analysis was performed utilizing Synchro/SimTraffic v11 to calculate the control delay, or the average amount of delay that a vehicle experiences as it travels through an intersection or section of roadway. The analysis was completed by applying the average of ten (10) SimTraffic simulation runs, each consisting of a 15-minute seeding interval and a one-hour recording interval.

Level of Service (LOS) is determined by the control delay, in terms of A through F, with A being optimal and F being unacceptable. The LOS and control delay for unsignalized intersections are depicted in the Highway Capacity Manual 6 and shown in Table 4.

**Table 4 – Level of Service from Control Delay**

| *Level of Service (LOS)* | *Unsignalized Control Delay (Sec./Vehicle)* |
|---|---|
| A | ≤10 |
| B | >10-≤15 |
| C | >15-≤25 |
| D | >25-≤35 |
| E | >35-≤50 |
| F | >50 |

Unsignalized Capacity Analysis

Capacity analysis for the unsignalized intersections was completed utilizing the aforementioned methodologies during the AM and PM analysis periods. The signalized intersection of Belmont Avenue and Hatley Road was included in the model in order to accurately depict the queues generated by the signal that potentially block the site driveways. The results for the levels of service for 2024 no-build and build conditions for the proposed site driveways are shown in Tables 5 and 6:

**Table 5 – Level of Service from Control Delay**
**Goodwill Drive and Site Driveway at Belmont Avenue (Route 3)**

| *Movement* | *2024 AM No-Build* Delay (LOS) | *2024 AM Build* Delay (LOS) | *2024 PM No-Build* Delay (LOS) | *2024 PM Build* Delay (LOS) |
|---|---|---|---|---|
| **Belmont Ave EBL** | 2.9 (A) | 2.7 (A) | 3.4 (A) | 4.1 (A) |
| **Belmont Ave WBL** | 5.0 (A) | 5.3 (A) | 4.7 (A) | 4.5 (A) |
| **Site Dr NBL** | 21.1 (C) | 26.5 (D) | 19.8 (C) | 25.7 (D) |
| **Site Dr NBT** | 19.9 (C) | 27.3 (D) | 24.5 (C) | 31.7 (D) |
| **Site Dr NBR** | 13.2 (B) | 16.0 (C) | 8.7 (A) | 11.7 (B) |
| **Goodwill Dr SBL** | 21.9 (C) | 24.7 (C) | 19.3 (C) | 17.3 (C) |
| **Goodwill Dr SBT** | - | - | 19.4 (C) | 17.9 (C) |
| **Goodwill Dr SBR** | 4.9 (A) | 4.6 (A) | 6.4 (A) | 6.2 (A) |

**Table 6 – Level of Service from Control Delay**
**Site Driveway at Belmont Avenue (Route 3)**

| ***Movement*** | ***2024 AM Build*** *Delay (LOS)* | ***2024 PM Build*** *Delay (LOS)* |
|---|---|---|
| **Site Dr NBR** | 10.0 (A) | 11.2 (B) |

As shown in Table 5, all movements at the intersection of Goodwill Drive at Belmont Avenue are anticipated to operate at acceptable levels of service. Traffic turning left and thru from the existing site driveway is expected to worsen from LOS "C" to "D" in both peak hour periods due to an increase in average delay of approximately 6 seconds. As shown in Table 6, traffic exiting the proposed right-out driveway is expected operate at LOS "A" in the AM and "B" in the PM.

Queueing Analysis

Tables 7 and 8 show the calculated 95th Percentile Queues for the study area intersections:

**Table 7 – Queueing Analysis Summary**
**Goodwill Drive and Site Driveway at Belmont Avenue (Route 3)**

| ***Movement*** *(Storage Length)* | ***2024 AM No-Build*** | ***2024 AM Build*** | ***2024 PM No-Build*** | ***2024 PM Build*** |
|---|---|---|---|---|
| **Belmont Ave EB L** (60') | 13' | 12' | 27' | 29' |
| **Belmont Ave WB L** (55') | **57'** | **58'** | 53' | 53' |
| **Site Dr NB LTR** | 88' | 99' | 64' | 77' |
| **Goodwill Dr SB LT** | 30' | 27' | 55' | 52' |
| **Goodwill Dr SB R** (80') | 22' | 24' | 52' | 49' |

**Table 8 – Queueing Analysis Summary**
**Site Driveway at Belmont Avenue (Route 3)**

| ***Movement*** *(Storage Length)* | ***2024 AM No-Build*** | ***2024 AM Build*** | ***2024 PM No-Build*** | ***2024 PM Build*** |
|---|---|---|---|---|
| **Site Dr NB R** | - | 12' | - | 29' |

Calculated 95th Percentile Queue lengths are expected to be similar between the No-Build and Build conditions for all movements. Queues are shown to increase from the site driveway by approximately 10-15 feet, equating to approximately the length of ½ vehicle.

Auxiliary Turn Lane Warrant Analysis

An auxiliary turn lane warrant analysis was completed for the study area intersections using the methodology provided in *NCHRP Report 457 Evaluating Intersection Improvements: An Engineering Study Guide*. Only the right-turn movements were analyzed to determine if turn lanes were warranted approaching the intersections, as there is already an existing left turn lane at the Goodwill Drive intersection. The site drive intersection is proposed as a right-in/right-out.

Utilizing peak hour traffic for the warrant evaluation, 2024 build volumes demonstrate that a right-turn bay is not warranted during either peak hour at both study area intersections. NCHRP 457 worksheets for both scenarios are included in the appendix.

## 9.0 Safety Analysis

Crash data was requested from MaineDOT for the most recent three-year study period from 2019 to 2021 to determine if there are any high crash locations (HCLs) within the study area. Based on the trip generation, the study area for safety analysis purposes would include the site access on Belmont Avenue and the intersection of Goodwill Drive and Belmont Avenue. An intersection or section of roadway is deemed an HCL if two criteria are met: a Critical Rate Factor (CRF) greater than 1.0 and a minimum of eight (8) crashes in a three-year period. The crash data is provided in the Appendix and is summarized in Tables 9 and 10.

**Table 9 – Crash Summary – Intersections**

| *Node* | *Location* | *# Of Crashes* | *CRF* |
|---|---|---|---|
| 71561 | Intersection of Belmont Ave at Goodwill Dr | 1 | 0.29 |
| 64026 | Intersection of Belmont Ave at Fairgrounds Rd and Hatley Rd | 10 | 0.60 |

**Table 10 – Crash Summary – Segments**

| *Link* | *Location* | *# Of Crashes* | *CRF* |
|---|---|---|---|
| 71561 – 64026 | Belmont Ave between Goodwill Dr and Hatley Rd | 0 | 0.00 |

As demonstrated in the previous tables, no high crash locations were identified. As such, no recommendations for improvements are included with this development.

## 10.0 Sight Distance Analysis

A sight distance review was completed from the proposed right-in/right-out driveway location on Belmont Avenue on February 19, 2023 to assure visibility on the site. Sight distance measurements were conducted from a point 10 feet behind the edge of the travel way, considering a height of eye of 3.5 feet and a height of object of 3.5 feet. Table 11 outlines the required minimum sight distance per the City of Belfast's *Code of Ordinances*.

**Table 11 – Belfast Sight Distance Requirements**

| *Posted Speed (MPH)* | *Recommended Sight Distance (Feet)* | *Minimum Sight Distance (Feet)* |
|---|---|---|
| 25 | 250 | 150 |
| 30 | 300 | 200 |
| 35 | 350 | 250 |
| 40 | 400 | 325 |
| 45 | 450 | 400 |
| 50 | 500 | 475 |

The posted speed limit on the segment of Belmont Avenue in vicinity of the proposed site drive is 40 MPH, thus a sight distance of 400 feet is recommended. Sight distance from the proposed right-in/right-out access was measured to be 800 feet looking left as shown in Image 1. Sight distance looking right is not considered as left turns would be prohibited with the existing raised median island. As such, sight distance from the proposed access drive exceeds the recommended minimum.

Image 1: Sight Distance Looking Left

## 11.0 Conclusions and Recommendations

Sebago Technics, Inc. has completed the traffic impact study for the Belfast ConvenientMD development and provides the following conclusions and recommendations:

- The proposed development is calculated to generate a total of 19 trips, and 24 trips during the AM and PM peak hours of the generator, respectively. This level of trip generation does not require a Traffic Movement Permit from MaineDOT as project trip generation does not surpass the 100-trip threshold.

- There were no high crash locations in the study area. As such, no recommendations for improvements are included with this development.

- Sightlines from the proposed right-in/right-out only access exceeds the recommended minimum. It is important to note that no landscaping, signage, or other features shall be located within the sight triangle of the proposed driveway.

- A review of capacity analysis at the study area intersections demonstrated that the Site Drive intersections have capacity to accept the additional trips from the medical building. Therefore, the development would not be expected to have an adverse impact on the surrounding roadway system.

- Auxiliary turn lane warrant analysis was completed for a right-turn lane on Belmont Avenue at the intersection of Goodwill Drive and the right-in/right-out site access. Under 2024 build conditions, neither turn lane was warranted during AM and PM peak hour conditions.

## A. Turning Movement Count Data

# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
Page No : 1

Groups Printed- Cars - Trucks

| | Fairgrounds Rd From North | | | Route 3 From East | | | Hatley Rd From South | | | Route 3 From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 5 | 0 | 3 | 7 | 51 | 0 | 1 | 0 | 3 | 1 | 98 | 5 | 174 |
| 07:15 AM | 4 | 0 | 0 | 6 | 83 | 0 | 6 | 0 | 2 | 3 | 115 | 7 | 226 |
| 07:30 AM | 10 | 1 | 3 | 7 | 107 | 3 | 6 | 3 | 3 | 1 | 133 | 5 | 282 |
| 07:45 AM | 4 | 0 | 2 | 9 | 84 | 2 | 0 | 0 | 1 | 3 | 139 | 3 | 247 |
| Total | 23 | 1 | 8 | 29 | 325 | 5 | 13 | 3 | 9 | 8 | 485 | 20 | 929 |
| | | | | | | | | | | | | | |
| 08:00 AM | 11 | 0 | 2 | 8 | 71 | 3 | 3 | 1 | 5 | 6 | 107 | 0 | 217 |
| 08:15 AM | 13 | 0 | 4 | 4 | 80 | 4 | 5 | 0 | 4 | 3 | 98 | 5 | 220 |
| 08:30 AM | 19 | 0 | 8 | 8 | 88 | 5 | 4 | 2 | 1 | 10 | 95 | 2 | 242 |
| 08:45 AM | 13 | 2 | 4 | 6 | 89 | 11 | 3 | 2 | 4 | 4 | 99 | 2 | 239 |
| Total | 56 | 2 | 18 | 26 | 328 | 23 | 15 | 5 | 14 | 23 | 399 | 9 | 918 |
| | | | | | | | | | | | | | |
| Grand Total | 79 | 3 | 26 | 55 | 653 | 28 | 28 | 8 | 23 | 31 | 884 | 29 | 1847 |
| Apprch % | 73.1 | 2.8 | 24.1 | 7.5 | 88.7 | 3.8 | 47.5 | 13.6 | 39 | 3.3 | 93.6 | 3.1 | |
| Total % | 4.3 | 0.2 | 1.4 | 3 | 35.4 | 1.5 | 1.5 | 0.4 | 1.2 | 1.7 | 47.9 | 1.6 | |
| Cars | 77 | 3 | 25 | 54 | 616 | 28 | 28 | 8 | 23 | 29 | 841 | 28 | 1760 |
| % Cars | 97.5 | 100 | 96.2 | 98.2 | 94.3 | 100 | 100 | 100 | 100 | 93.5 | 95.1 | 96.6 | 95.3 |
| Trucks | 2 | 0 | 1 | 1 | 37 | 0 | 0 | 0 | 0 | 2 | 43 | 1 | 87 |
| % Trucks | 2.5 | 0 | 3.8 | 1.8 | 5.7 | 0 | 0 | 0 | 0 | 6.5 | 4.9 | 3.4 | 4.7 |

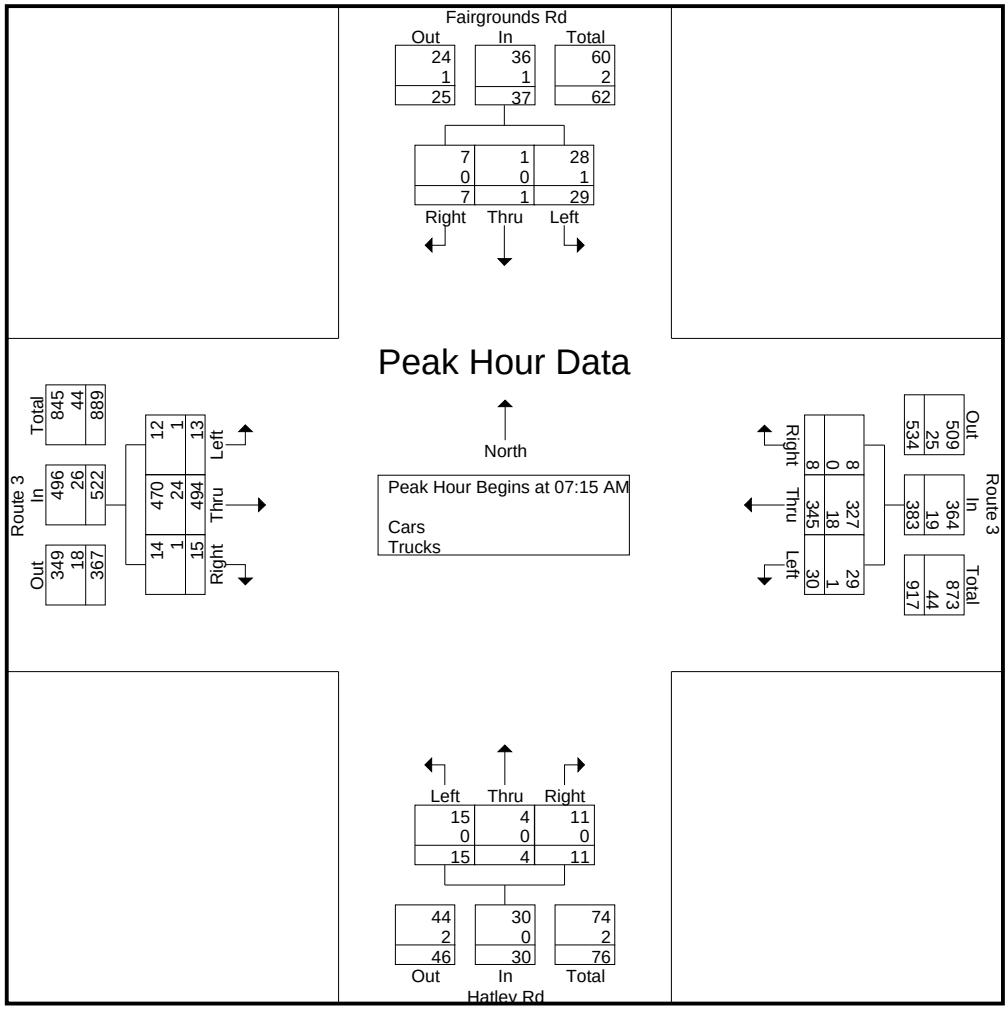
| | Fairgrounds Rd From North | | | | Route 3 From East | | | | Hatley Rd From South | | | | Route 3 From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | 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 Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 4 | 0 | 0 | 4 | 6 | 83 | 0 | 89 | **6** | 0 | 2 | 8 | 3 | 115 | **7** | 125 | 226 |
| 07:30 AM | 10 | **1** | **3** | **14** | 7 | **107** | **3** | **117** | 6 | **3** | 3 | **12** | 1 | 133 | 5 | 139 | **282** |
| 07:45 AM | 4 | 0 | 2 | 6 | **9** | 84 | 2 | 95 | 0 | 0 | 1 | 1 | 3 | **139** | 3 | **145** | 247 |
| 08:00 AM | **11** | 0 | 2 | 13 | 8 | 71 | 3 | 82 | 3 | 1 | **5** | 9 | **6** | 107 | 0 | 113 | 217 |
| Total Volume | 29 | 1 | 7 | 37 | 30 | 345 | 8 | 383 | 15 | 4 | 11 | 30 | 13 | 494 | 15 | 522 | 972 |
| % App. Total | 78.4 | 2.7 | 18.9 | | 7.8 | 90.1 | 2.1 | | 50 | 13.3 | 36.7 | | 2.5 | 94.6 | 2.9 | | |
| PHF | .659 | .250 | .583 | .661 | .833 | .806 | .667 | .818 | .625 | .333 | .550 | .625 | .542 | .888 | .536 | .900 | .862 |
| Cars | 28 | 1 | 7 | 36 | 29 | 327 | 8 | 364 | 15 | 4 | 11 | 30 | 12 | 470 | 14 | 496 | 926 |
| % Cars | 96.6 | 100 | 100 | 97.3 | 96.7 | 94.8 | 100 | 95.0 | 100 | 100 | 100 | 100 | 92.3 | 95.1 | 93.3 | 95.0 | 95.3 |
| Trucks | 1 | 0 | 0 | 1 | 1 | 18 | 0 | 19 | 0 | 0 | 0 | 0 | 1 | 24 | 1 | 26 | 46 |
| % Trucks | 3.4 | 0 | 0 | 2.7 | 3.3 | 5.2 | 0 | 5.0 | 0 | 0 | 0 | 0 | 7.7 | 4.9 | 6.7 | 5.0 | 4.7 |

# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
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:

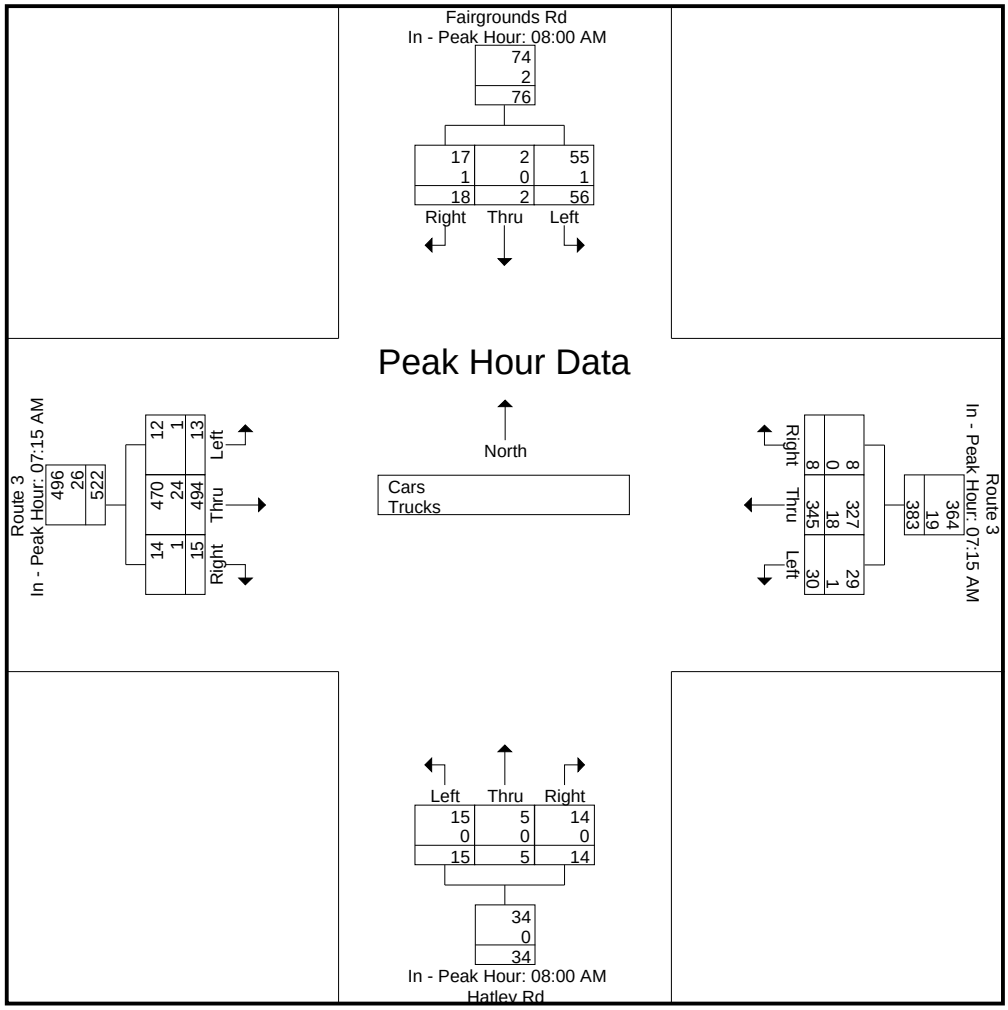
| | 08:00 AM | | | | 07:15 AM | | | | 08:00 AM | | | | 07:15 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 11 | 0 | 2 | 13 | 6 | 83 | 0 | 89 | 3 | 1 | **5** | **9** | 3 | 115 | **7** | 125 |
| +15 mins. | 13 | 0 | 4 | 17 | 7 | **107** | **3** | **117** | **5** | 0 | 4 | 9 | 1 | 133 | 5 | 139 |
| +30 mins. | **19** | 0 | **8** | **27** | **9** | 84 | 2 | 95 | 4 | **2** | 1 | 7 | 3 | **139** | 3 | **145** |
| +45 mins. | 13 | **2** | 4 | 19 | 8 | 71 | 3 | 82 | 3 | 2 | 4 | 9 | **6** | 107 | 0 | 113 |
| Total Volume | 56 | 2 | 18 | 76 | 30 | 345 | 8 | 383 | 15 | 5 | 14 | 34 | 13 | 494 | 15 | 522 |
| % App. Total | 73.7 | 2.6 | 23.7 | | 7.8 | 90.1 | 2.1 | | 44.1 | 14.7 | 41.2 | | 2.5 | 94.6 | 2.9 | |
| PHF | .737 | .250 | .563 | .704 | .833 | .806 | .667 | .818 | .750 | .625 | .700 | .944 | .542 | .888 | .536 | .900 |
| Cars | 55 | 2 | 17 | 74 | 29 | 327 | 8 | 364 | 15 | 5 | 14 | 34 | 12 | 470 | 14 | 496 |
| % Cars | 98.2 | 100 | 94.4 | 97.4 | 96.7 | 94.8 | 100 | 95 | 100 | 100 | 100 | 100 | 92.3 | 95.1 | 93.3 | 95 |
| Trucks | 1 | 0 | 1 | 2 | 1 | 18 | 0 | 19 | 0 | 0 | 0 | 0 | 1 | 24 | 1 | 26 |
| % Trucks | 1.8 | 0 | 5.6 | 2.6 | 3.3 | 5.2 | 0 | 5 | 0 | 0 | 0 | 0 | 7.7 | 4.9 | 6.7 | 5 |

# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
Page No : 1

Groups Printed- Cars - Trucks

| | Fairgrounds Rd From North | | | Route 3 From East | | | Hatley Rd From South | | | Route 3 From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 03:00 PM | 27 | 1 | 10 | 5 | 98 | 9 | 5 | 2 | 6 | 4 | 82 | 0 | 249 |
| 03:15 PM | 32 | 1 | 14 | 2 | 106 | 5 | 2 | 2 | 6 | 4 | 64 | 1 | 239 |
| 03:30 PM | 43 | 2 | 15 | 2 | 118 | 9 | 7 | 5 | 17 | 5 | 103 | 3 | 329 |
| 03:45 PM | 32 | 3 | 12 | 2 | 99 | 9 | 3 | 2 | 9 | 8 | 114 | 1 | 294 |
| Total | 134 | 7 | 51 | 11 | 421 | 32 | 17 | 11 | 38 | 21 | 363 | 5 | 1111 |
| | | | | | | | | | | | | | |
| 04:00 PM | 43 | 0 | 17 | 6 | 126 | 9 | 7 | 0 | 10 | 3 | 107 | 1 | 329 |
| 04:15 PM | 23 | 2 | 10 | 1 | 117 | 7 | 3 | 1 | 12 | 4 | 126 | 1 | 307 |
| 04:30 PM | 21 | 1 | 11 | 2 | 127 | 4 | 7 | 2 | 4 | 6 | 96 | 1 | 282 |
| 04:45 PM | 28 | 1 | 7 | 0 | 109 | 3 | 6 | 0 | 9 | 1 | 90 | 3 | 257 |
| Total | 115 | 4 | 45 | 9 | 479 | 23 | 23 | 3 | 35 | 14 | 419 | 6 | 1175 |
| | | | | | | | | | | | | | |
| 05:00 PM | 19 | 0 | 3 | 1 | 114 | 2 | 2 | 0 | 10 | 1 | 97 | 3 | 252 |
| 05:15 PM | 20 | 0 | 4 | 0 | 90 | 5 | 3 | 3 | 16 | 1 | 94 | 3 | 239 |
| 05:30 PM | 16 | 1 | 4 | 3 | 68 | 3 | 0 | 0 | 5 | 0 | 80 | 1 | 181 |
| 05:45 PM | 15 | 0 | 0 | 0 | 75 | 2 | 5 | 0 | 4 | 0 | 84 | 0 | 185 |
| Total | 70 | 1 | 11 | 4 | 347 | 12 | 10 | 3 | 35 | 2 | 355 | 7 | 857 |
| | | | | | | | | | | | | | |
| Grand Total | 319 | 12 | 107 | 24 | 1247 | 67 | 50 | 17 | 108 | 37 | 1137 | 18 | 3143 |
| Apprch % | 72.8 | 2.7 | 24.4 | 1.8 | 93.2 | 5 | 28.6 | 9.7 | 61.7 | 3.1 | 95.4 | 1.5 | |
| Total % | 10.1 | 0.4 | 3.4 | 0.8 | 39.7 | 2.1 | 1.6 | 0.5 | 3.4 | 1.2 | 36.2 | 0.6 | |
| Cars | 319 | 12 | 106 | 24 | 1226 | 67 | 50 | 17 | 108 | 37 | 1108 | 18 | 3092 |
| % Cars | 100 | 100 | 99.1 | 100 | 98.3 | 100 | 100 | 100 | 100 | 100 | 97.4 | 100 | 98.4 |
| Trucks | 0 | 0 | 1 | 0 | 21 | 0 | 0 | 0 | 0 | 0 | 29 | 0 | 51 |
| % Trucks | 0 | 0 | 0.9 | 0 | 1.7 | 0 | 0 | 0 | 0 | 0 | 2.6 | 0 | 1.6 |

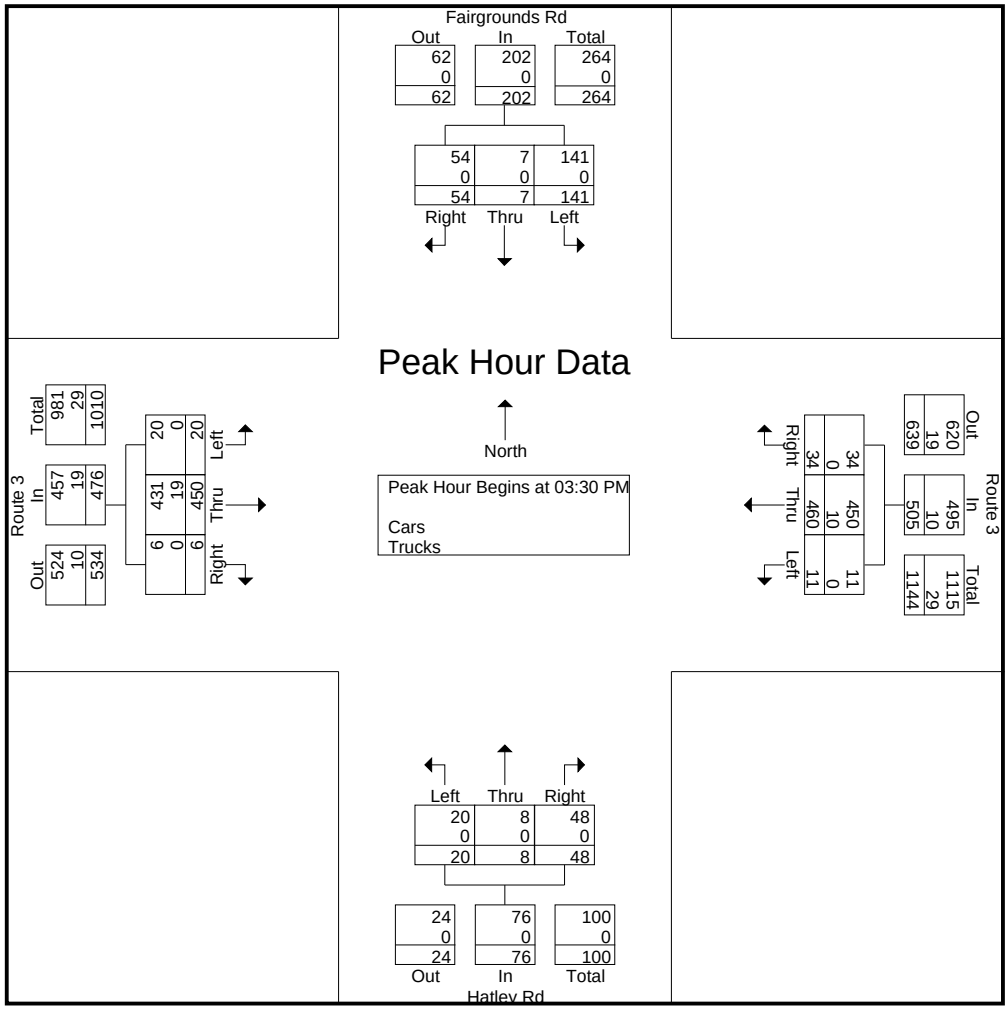
| | Fairgrounds Rd From North | | | | Route 3 From East | | | | Hatley Rd From South | | | | Route 3 From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 03:30 PM | | | | | | | | | | | | | | | | | |
| 03:30 PM | **43** | 2 | 15 | **60** | 2 | 118 | **9** | 129 | **7** | **5** | **17** | **29** | 5 | 103 | **3** | 111 | **329** |
| 03:45 PM | 32 | **3** | 12 | 47 | 2 | 99 | 9 | 110 | 3 | 2 | 9 | 14 | **8** | 114 | 1 | 123 | 294 |
| 04:00 PM | 43 | 0 | **17** | 60 | **6** | **126** | 9 | **141** | 7 | 0 | 10 | 17 | 3 | 107 | 1 | 111 | 329 |
| 04:15 PM | 23 | 2 | 10 | 35 | 1 | 117 | 7 | 125 | 3 | 1 | 12 | 16 | 4 | **126** | 1 | **131** | 307 |
| Total Volume | 141 | 7 | 54 | 202 | 11 | 460 | 34 | 505 | 20 | 8 | 48 | 76 | 20 | 450 | 6 | 476 | 1259 |
| % App. Total | 69.8 | 3.5 | 26.7 | | 2.2 | 91.1 | 6.7 | | 26.3 | 10.5 | 63.2 | | 4.2 | 94.5 | 1.3 | | |
| PHF | .820 | .583 | .794 | .842 | .458 | .913 | .944 | .895 | .714 | .400 | .706 | .655 | .625 | .893 | .500 | .908 | .957 |
| Cars | 141 | 7 | 54 | 202 | 11 | 450 | 34 | 495 | 20 | 8 | 48 | 76 | 20 | 431 | 6 | 457 | 1230 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 97.8 | 100 | 98.0 | 100 | 100 | 100 | 100 | 100 | 95.8 | 100 | 96.0 | 97.7 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 10 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 | 29 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 2.2 | 0 | 2.0 | 0 | 0 | 0 | 0 | 0 | 4.2 | 0 | 4.0 | 2.3 |

# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
Page No : 2




Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

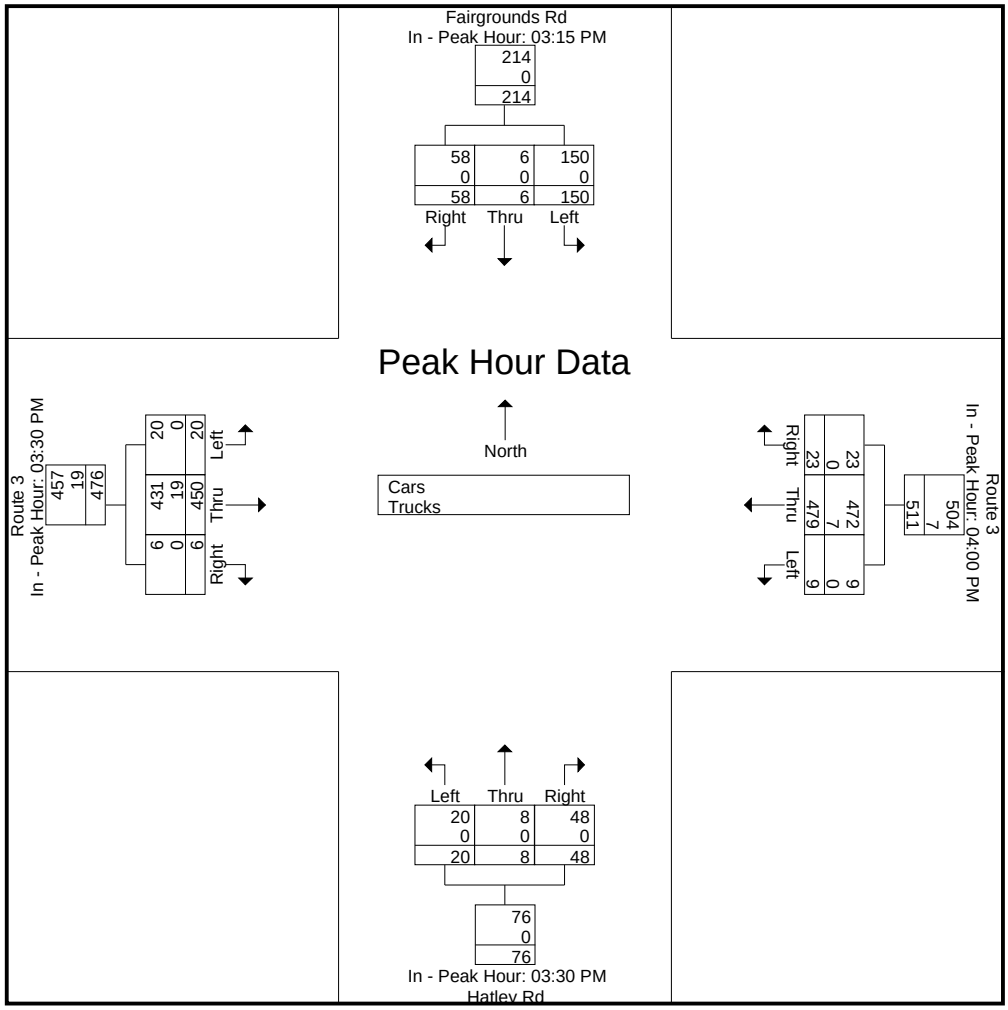
| | 03:15 PM | | | | 04:00 PM | | | | 03:30 PM | | | | 03:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 32 | 1 | 14 | 47 | **6** | 126 | **9** | **141** | **7** | **5** | **17** | **29** | 5 | 103 | **3** | 111 |
| +15 mins. | **43** | 2 | 15 | **60** | 1 | 117 | 7 | 125 | 3 | 2 | 9 | 14 | **8** | 114 | 1 | 123 |
| +30 mins. | 32 | **3** | 12 | 47 | 2 | **127** | 4 | 133 | 7 | 0 | 10 | 17 | 3 | 107 | 1 | 111 |
| +45 mins. | 43 | 0 | **17** | 60 | 0 | 109 | 3 | 112 | 3 | 1 | 12 | 16 | 4 | **126** | 1 | **131** |
| Total Volume | 150 | 6 | 58 | 214 | 9 | 479 | 23 | 511 | 20 | 8 | 48 | 76 | 20 | 450 | 6 | 476 |
| % App. Total | 70.1 | 2.8 | 27.1 | | 1.8 | 93.7 | 4.5 | | 26.3 | 10.5 | 63.2 | | 4.2 | 94.5 | 1.3 | |
| PHF | .872 | .500 | .853 | .892 | .375 | .943 | .639 | .906 | .714 | .400 | .706 | .655 | .625 | .893 | .500 | .908 |
| Cars | 150 | 6 | 58 | 214 | 9 | 472 | 23 | 504 | 20 | 8 | 48 | 76 | 20 | 431 | 6 | 457 |
| % Cars | 100 | 100 | 100 | 100 | 100 | 98.5 | 100 | 98.6 | 100 | 100 | 100 | 100 | 100 | 95.8 | 100 | 96 |
| Trucks | 0 | 0 | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 0 | 0 | 0 | 19 | 0 | 19 |
| % Trucks | 0 | 0 | 0 | 0 | 0 | 1.5 | 0 | 1.4 | 0 | 0 | 0 | 0 | 0 | 4.2 | 0 | 4 |

# Accurate Counts

978-664-2565

N/S Street : Fairgrounds Rd / Hatley Rd
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730001
Site Code : 04730001
Start Date : 2/7/2023
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
Page No : 1

Groups Printed- Cars - Trucks

| | Goodwill Dr From North | | | Route 3 From East | | | Dunkin' Access From South | | | Route 3 From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 07:00 AM | 0 | 0 | 2 | 9 | 46 | 0 | 4 | 0 | 18 | 2 | 86 | 0 | 167 |
| 07:15 AM | 0 | 0 | 0 | 20 | 66 | 0 | 8 | 0 | 12 | 1 | 115 | 1 | 223 |
| 07:30 AM | 0 | 0 | 1 | 29 | 84 | 1 | 10 | 1 | 22 | 1 | 116 | 0 | 265 |
| 07:45 AM | 1 | 0 | 1 | 29 | 58 | 0 | 6 | 3 | 30 | 1 | 112 | 0 | 241 |
| Total | 1 | 0 | 4 | 87 | 254 | 1 | 28 | 4 | 82 | 5 | 429 | 1 | 896 |
| | | | | | | | | | | | | | |
| 08:00 AM | 4 | 0 | 2 | 14 | 59 | 2 | 10 | 1 | 14 | 3 | 98 | 0 | 207 |
| 08:15 AM | 1 | 1 | 3 | 23 | 63 | 1 | 7 | 0 | 28 | 6 | 75 | 0 | 208 |
| 08:30 AM | 1 | 0 | 4 | 19 | 73 | 2 | 4 | 1 | 19 | 3 | 89 | 0 | 215 |
| 08:45 AM | 6 | 0 | 3 | 19 | 75 | 0 | 6 | 2 | 21 | 5 | 77 | 1 | 215 |
| Total | 12 | 1 | 12 | 75 | 270 | 5 | 27 | 4 | 82 | 17 | 339 | 1 | 845 |
| | | | | | | | | | | | | | |
| Grand Total | 13 | 1 | 16 | 162 | 524 | 6 | 55 | 8 | 164 | 22 | 768 | 2 | 1741 |
| Apprch % | 43.3 | 3.3 | 53.3 | 23.4 | 75.7 | 0.9 | 24.2 | 3.5 | 72.2 | 2.8 | 97 | 0.3 | |
| Total % | 0.7 | 0.1 | 0.9 | 9.3 | 30.1 | 0.3 | 3.2 | 0.5 | 9.4 | 1.3 | 44.1 | 0.1 | |
| Cars | 12 | 1 | 16 | 162 | 488 | 5 | 55 | 8 | 161 | 22 | 724 | 2 | 1656 |
| % Cars | 92.3 | 100 | 100 | 100 | 93.1 | 83.3 | 100 | 100 | 98.2 | 100 | 94.3 | 100 | 95.1 |
| Trucks | 1 | 0 | 0 | 0 | 36 | 1 | 0 | 0 | 3 | 0 | 44 | 0 | 85 |
| % Trucks | 7.7 | 0 | 0 | 0 | 6.9 | 16.7 | 0 | 0 | 1.8 | 0 | 5.7 | 0 | 4.9 |

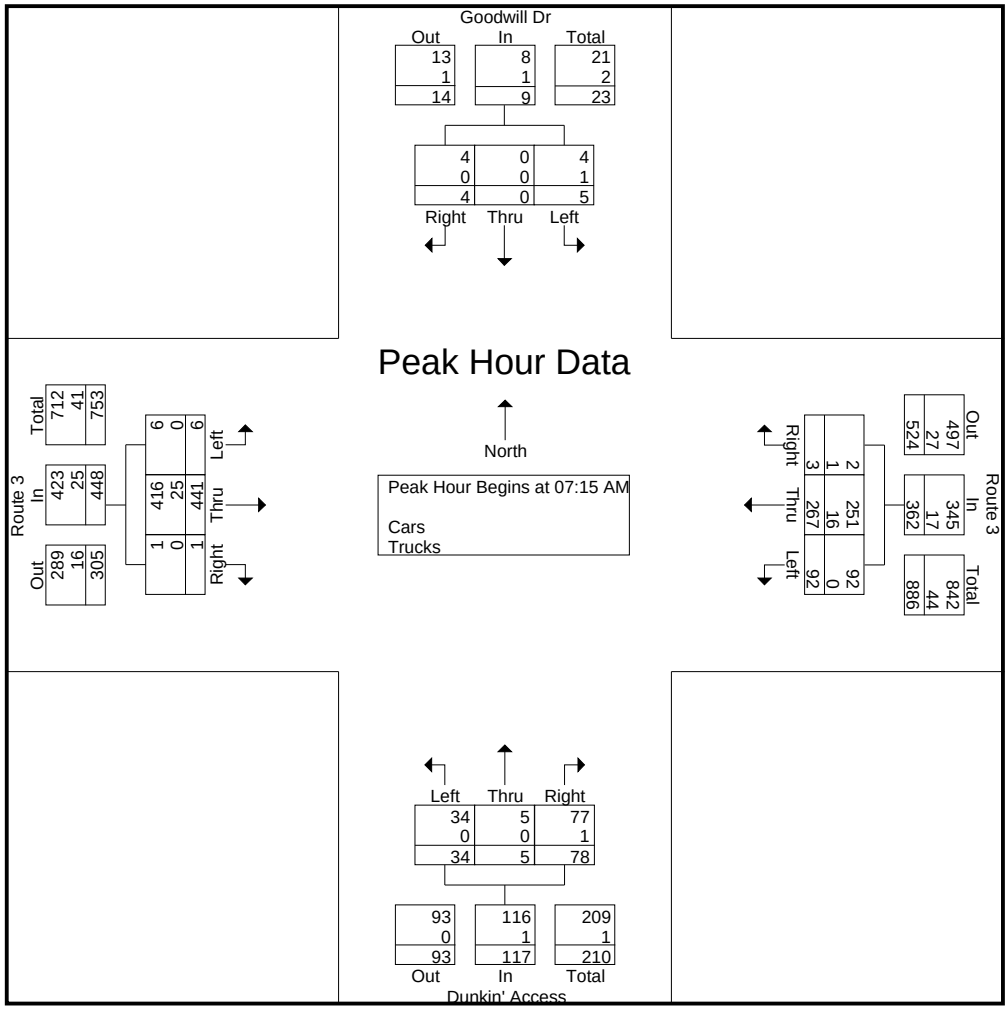
| | Goodwill Dr From North | | | | Route 3 From East | | | | Dunkin' Access From South | | | | Route 3 From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | 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 Intersection Begins at 07:15 AM | | | | | | | | | | | | | | | | | |
| 07:15 AM | 0 | 0 | 0 | 0 | 20 | 66 | 0 | 86 | 8 | 0 | 12 | 20 | 1 | 115 | **1** | **117** | 223 |
| 07:30 AM | 0 | 0 | 1 | 1 | **29** | **84** | 1 | **114** | **10** | 1 | 22 | 33 | 1 | **116** | 0 | 117 | **265** |
| 07:45 AM | 1 | 0 | 1 | 2 | 29 | 58 | 0 | 87 | 6 | **3** | **30** | **39** | 1 | 112 | 0 | 113 | 241 |
| 08:00 AM | **4** | 0 | **2** | **6** | 14 | 59 | **2** | 75 | 10 | 1 | 14 | 25 | **3** | 98 | 0 | 101 | 207 |
| Total Volume | 5 | 0 | 4 | 9 | 92 | 267 | 3 | 362 | 34 | 5 | 78 | 117 | 6 | 441 | 1 | 448 | 936 |
| % App. Total | 55.6 | 0 | 44.4 | | 25.4 | 73.8 | 0.8 | | 29.1 | 4.3 | 66.7 | | 1.3 | 98.4 | 0.2 | | |
| PHF | .313 | .000 | .500 | .375 | .793 | .795 | .375 | .794 | .850 | .417 | .650 | .750 | .500 | .950 | .250 | .957 | .883 |
| Cars | 4 | 0 | 4 | 8 | 92 | 251 | 2 | 345 | 34 | 5 | 77 | 116 | 6 | 416 | 1 | 423 | 892 |
| % Cars | 80.0 | 0 | 100 | 88.9 | 100 | 94.0 | 66.7 | 95.3 | 100 | 100 | 98.7 | 99.1 | 100 | 94.3 | 100 | 94.4 | 95.3 |
| Trucks | 1 | 0 | 0 | 1 | 0 | 16 | 1 | 17 | 0 | 0 | 1 | 1 | 0 | 25 | 0 | 25 | 44 |
| % Trucks | 20.0 | 0 | 0 | 11.1 | 0 | 6.0 | 33.3 | 4.7 | 0 | 0 | 1.3 | 0.9 | 0 | 5.7 | 0 | 5.6 | 4.7 |

# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
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:

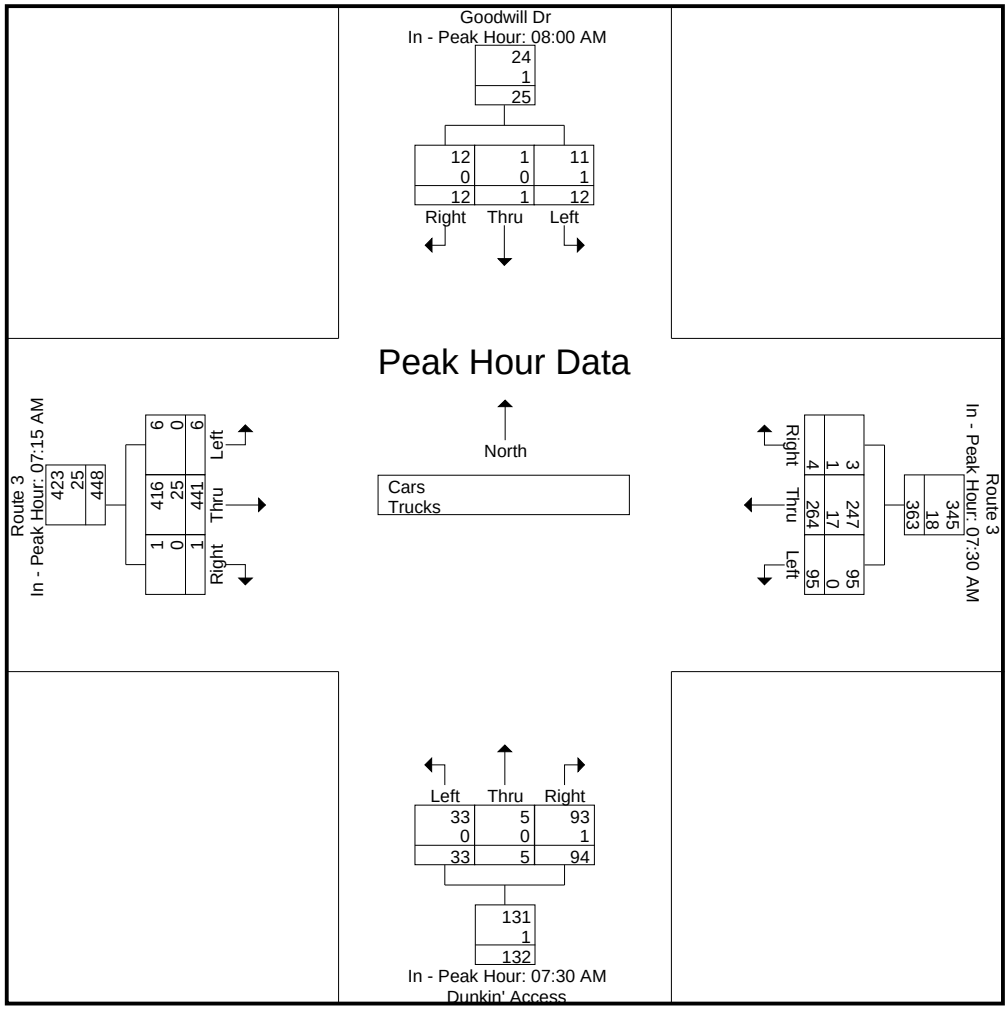
| | 08:00 AM | | | | 07:30 AM | | | | 07:30 AM | | | | 07:15 AM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 4 | 0 | 2 | 6 | **29** | **84** | 1 | **114** | **10** | 1 | 22 | 33 | 1 | 115 | **1** | **117** |
| +15 mins. | 1 | **1** | 3 | 5 | 29 | 58 | 0 | 87 | 6 | **3** | **30** | **39** | 1 | **116** | 0 | 117 |
| +30 mins. | 1 | 0 | **4** | 5 | 14 | 59 | **2** | 75 | 10 | 1 | 14 | 25 | 1 | 112 | 0 | 113 |
| +45 mins. | **6** | 0 | 3 | **9** | 23 | 63 | 1 | 87 | 7 | 0 | 28 | 35 | **3** | 98 | 0 | 101 |
| Total Volume | 12 | 1 | 12 | 25 | 95 | 264 | 4 | 363 | 33 | 5 | 94 | 132 | 6 | 441 | 1 | 448 |
| % App. Total | 48 | 4 | 48 | | 26.2 | 72.7 | 1.1 | | 25 | 3.8 | 71.2 | | 1.3 | 98.4 | 0.2 | |
| PHF | .500 | .250 | .750 | .694 | .819 | .786 | .500 | .796 | .825 | .417 | .783 | .846 | .500 | .950 | .250 | .957 |
| Cars | 11 | 1 | 12 | 24 | 95 | 247 | 3 | 345 | 33 | 5 | 93 | 131 | 6 | 416 | 1 | 423 |
| % Cars | 91.7 | 100 | 100 | 96 | 100 | 93.6 | 75 | 95 | 100 | 100 | 98.9 | 99.2 | 100 | 94.3 | 100 | 94.4 |
| Trucks | 1 | 0 | 0 | 1 | 0 | 17 | 1 | 18 | 0 | 0 | 1 | 1 | 0 | 25 | 0 | 25 |
| % Trucks | 8.3 | 0 | 0 | 4 | 0 | 6.4 | 25 | 5 | 0 | 0 | 1.1 | 0.8 | 0 | 5.7 | 0 | 5.6 |

# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
Page No : 3



# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
Page No : 1

Groups Printed- Cars - Trucks

| | Goodwill Dr From North | | | Route 3 From East | | | Dunkin' Access From South | | | Route 3 From West | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Left | Thru | Right | Int. Total |
| 03:00 PM | 6 | 1 | 5 | 10 | 95 | 8 | 7 | 0 | 12 | 4 | 68 | 0 | 216 |
| 03:15 PM | 9 | 1 | 10 | 15 | 95 | 7 | 2 | 2 | 11 | 2 | 52 | 1 | 207 |
| 03:30 PM | 6 | 0 | 13 | 18 | 112 | 11 | 5 | 0 | 16 | 6 | 86 | 0 | 273 |
| 03:45 PM | 8 | 1 | 7 | 14 | 92 | 8 | 4 | 3 | 20 | 3 | 94 | 1 | 255 |
| Total | 29 | 3 | 35 | 57 | 394 | 34 | 18 | 5 | 59 | 15 | 300 | 2 | 951 |
| | | | | | | | | | | | | | |
| 04:00 PM | 10 | 1 | 11 | 25 | 114 | 7 | 2 | 0 | 7 | 7 | 95 | 1 | 280 |
| 04:15 PM | 5 | 1 | 14 | 18 | 106 | 11 | 9 | 0 | 20 | 3 | 108 | 0 | 295 |
| 04:30 PM | 5 | 0 | 12 | 9 | 128 | 7 | 3 | 0 | 16 | 3 | 82 | 0 | 265 |
| 04:45 PM | 5 | 0 | 8 | 13 | 95 | 13 | 1 | 0 | 7 | 5 | 82 | 1 | 230 |
| Total | 25 | 2 | 45 | 65 | 443 | 38 | 15 | 0 | 50 | 18 | 367 | 2 | 1070 |
| | | | | | | | | | | | | | |
| 05:00 PM | 5 | 2 | 6 | 11 | 93 | 15 | 3 | 3 | 15 | 5 | 82 | 3 | 243 |
| 05:15 PM | 7 | 0 | 8 | 15 | 75 | 6 | 3 | 0 | 13 | 1 | 78 | 0 | 206 |
| 05:30 PM | 9 | 0 | 2 | 11 | 51 | 9 | 3 | 0 | 7 | 0 | 62 | 0 | 154 |
| 05:45 PM | 6 | 4 | 1 | 11 | 65 | 4 | 2 | 1 | 15 | 2 | 66 | 0 | 177 |
| Total | 27 | 6 | 17 | 48 | 284 | 34 | 11 | 4 | 50 | 8 | 288 | 3 | 780 |
| | | | | | | | | | | | | | |
| Grand Total | 81 | 11 | 97 | 170 | 1121 | 106 | 44 | 9 | 159 | 41 | 955 | 7 | 2801 |
| Apprch % | 42.9 | 5.8 | 51.3 | 12.2 | 80.2 | 7.6 | 20.8 | 4.2 | 75 | 4.1 | 95.2 | 0.7 | |
| Total % | 2.9 | 0.4 | 3.5 | 6.1 | 40 | 3.8 | 1.6 | 0.3 | 5.7 | 1.5 | 34.1 | 0.2 | |
| Cars | 81 | 11 | 97 | 168 | 1102 | 106 | 44 | 9 | 157 | 41 | 928 | 7 | 2751 |
| % Cars | 100 | 100 | 100 | 98.8 | 98.3 | 100 | 100 | 100 | 98.7 | 100 | 97.2 | 100 | 98.2 |
| Trucks | 0 | 0 | 0 | 2 | 19 | 0 | 0 | 0 | 2 | 0 | 27 | 0 | 50 |
| % Trucks | 0 | 0 | 0 | 1.2 | 1.7 | 0 | 0 | 0 | 1.3 | 0 | 2.8 | 0 | 1.8 |

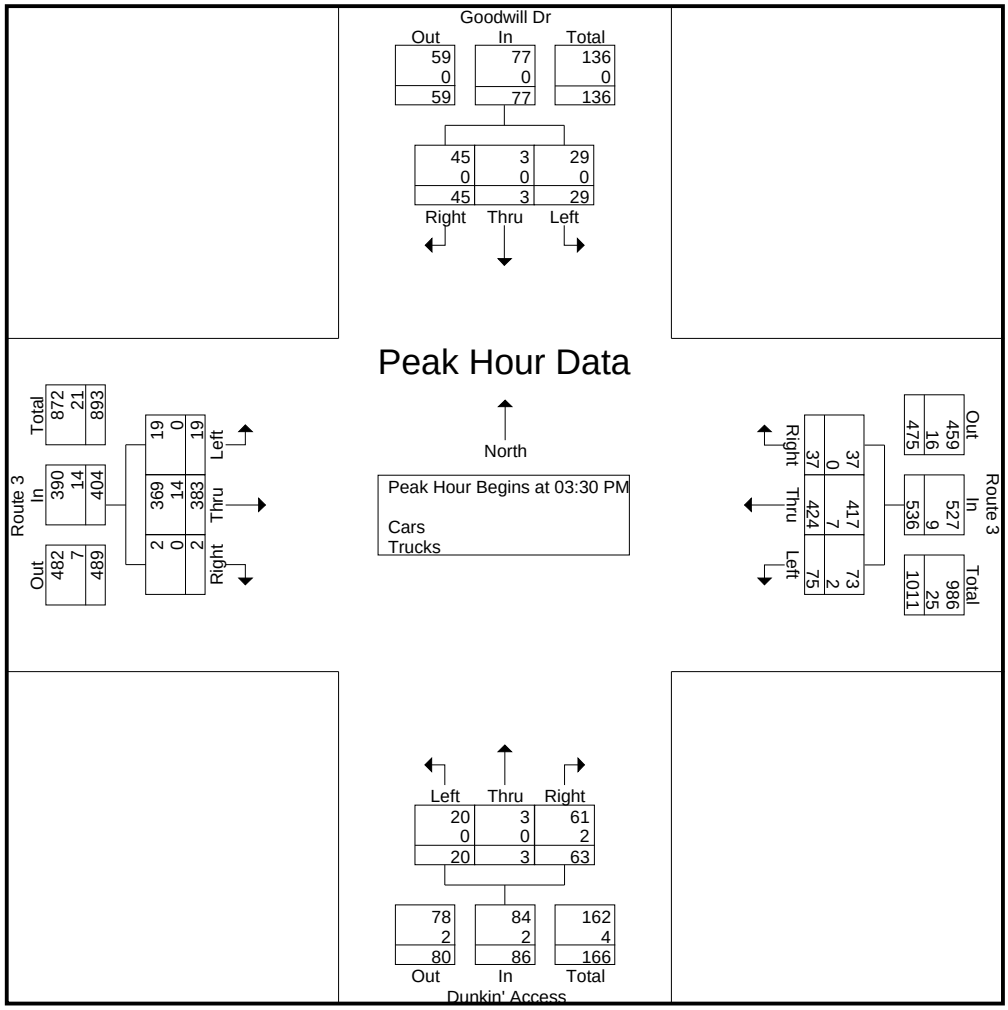
| | Goodwill Dr From North | | | | Route 3 From East | | | | Dunkin' Access From South | | | | Route 3 From West | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Start Time | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Left | Thru | Right | App. Total | Int. Total |
| Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1 | | | | | | | | | | | | | | | | | |
| Peak Hour for Entire Intersection Begins at 03:30 PM | | | | | | | | | | | | | | | | | |
| 03:30 PM | 6 | 0 | 13 | 19 | 18 | 112 | **11** | 141 | 5 | 0 | 16 | 21 | 6 | 86 | 0 | 92 | 273 |
| 03:45 PM | 8 | **1** | 7 | 16 | 14 | 92 | 8 | 114 | 4 | **3** | **20** | 27 | 3 | 94 | **1** | 98 | 255 |
| 04:00 PM | **10** | 1 | 11 | **22** | **25** | **114** | 7 | **146** | 2 | 0 | 7 | 9 | **7** | 95 | 1 | 103 | 280 |
| 04:15 PM | 5 | 1 | **14** | 20 | 18 | 106 | 11 | 135 | **9** | 0 | 20 | **29** | 3 | **108** | 0 | **111** | **295** |
| Total Volume | 29 | 3 | 45 | 77 | 75 | 424 | 37 | 536 | 20 | 3 | 63 | 86 | 19 | 383 | 2 | 404 | 1103 |
| % App. Total | 37.7 | 3.9 | 58.4 | | 14 | 79.1 | 6.9 | | 23.3 | 3.5 | 73.3 | | 4.7 | 94.8 | 0.5 | | |
| PHF | .725 | .750 | .804 | .875 | .750 | .930 | .841 | .918 | .556 | .250 | .788 | .741 | .679 | .887 | .500 | .910 | .935 |
| Cars | 29 | 3 | 45 | 77 | 73 | 417 | 37 | 527 | 20 | 3 | 61 | 84 | 19 | 369 | 2 | 390 | 1078 |
| % Cars | 100 | 100 | 100 | 100 | 97.3 | 98.3 | 100 | 98.3 | 100 | 100 | 96.8 | 97.7 | 100 | 96.3 | 100 | 96.5 | 97.7 |
| Trucks | 0 | 0 | 0 | 0 | 2 | 7 | 0 | 9 | 0 | 0 | 2 | 2 | 0 | 14 | 0 | 14 | 25 |
| % Trucks | 0 | 0 | 0 | 0 | 2.7 | 1.7 | 0 | 1.7 | 0 | 0 | 3.2 | 2.3 | 0 | 3.7 | 0 | 3.5 | 2.3 |

# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
Page No : 2




Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

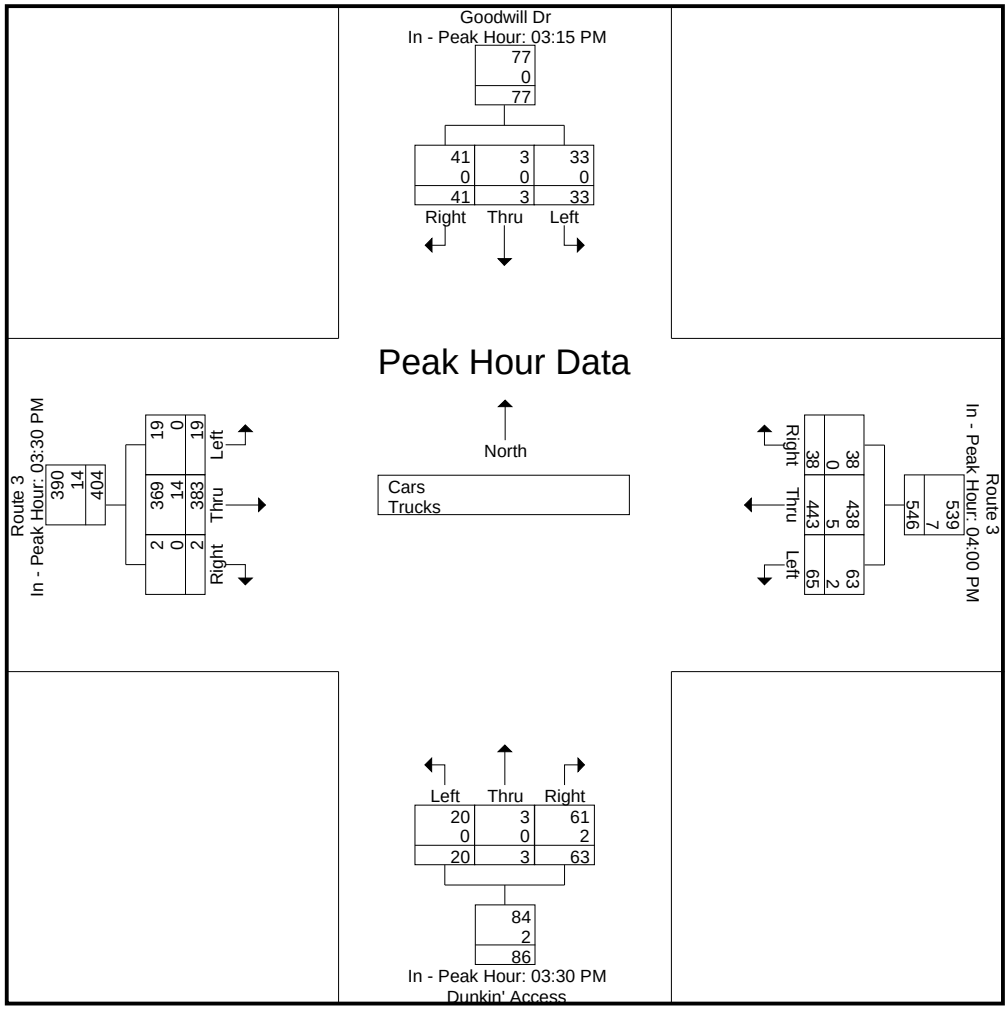
| | 03:15 PM | | | | 04:00 PM | | | | 03:30 PM | | | | 03:30 PM | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| +0 mins. | 9 | **1** | 10 | 20 | **25** | 114 | 7 | **146** | 5 | 0 | 16 | 21 | 6 | 86 | 0 | 92 |
| +15 mins. | 6 | 0 | **13** | 19 | 18 | 106 | 11 | 135 | 4 | **3** | **20** | 27 | 3 | 94 | **1** | 98 |
| +30 mins. | 8 | 1 | 7 | 16 | 9 | **128** | 7 | 144 | 2 | 0 | 7 | 9 | **7** | 95 | 1 | 103 |
| +45 mins. | **10** | 1 | 11 | **22** | 13 | 95 | **13** | 121 | **9** | 0 | 20 | **29** | 3 | **108** | 0 | **111** |
| Total Volume | 33 | 3 | 41 | 77 | 65 | 443 | 38 | 546 | 20 | 3 | 63 | 86 | 19 | 383 | 2 | 404 |
| % App. Total | 42.9 | 3.9 | 53.2 | | 11.9 | 81.1 | 7 | | 23.3 | 3.5 | 73.3 | | 4.7 | 94.8 | 0.5 | |
| PHF | .825 | .750 | .788 | .875 | .650 | .865 | .731 | .935 | .556 | .250 | .788 | .741 | .679 | .887 | .500 | .910 |
| Cars | 33 | 3 | 41 | 77 | 63 | 438 | 38 | 539 | 20 | 3 | 61 | 84 | 19 | 369 | 2 | 390 |
| % Cars | 100 | 100 | 100 | 100 | 96.9 | 98.9 | 100 | 98.7 | 100 | 100 | 96.8 | 97.7 | 100 | 96.3 | 100 | 96.5 |
| Trucks | 0 | 0 | 0 | 0 | 2 | 5 | 0 | 7 | 0 | 0 | 2 | 2 | 0 | 14 | 0 | 14 |
| % Trucks | 0 | 0 | 0 | 0 | 3.1 | 1.1 | 0 | 1.3 | 0 | 0 | 3.2 | 2.3 | 0 | 3.7 | 0 | 3.5 |

# Accurate Counts

978-664-2565

N/S Street : Goodwill Dr / Dunkin' Access
E/W Street : Route 3
City/State : Belfast, ME
Weather : Clear

File Name : 04730002
Site Code : 04730002
Start Date : 2/7/2023
Page No : 3



# Cover

## MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017

**Study Name**

FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD

**Study Description**

FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD, 19/07/2017 turning movement

**Date of Survey**

Wednesday, July 19, 2017

**Time Period**

06:00 - 18:00

**Comments**

-

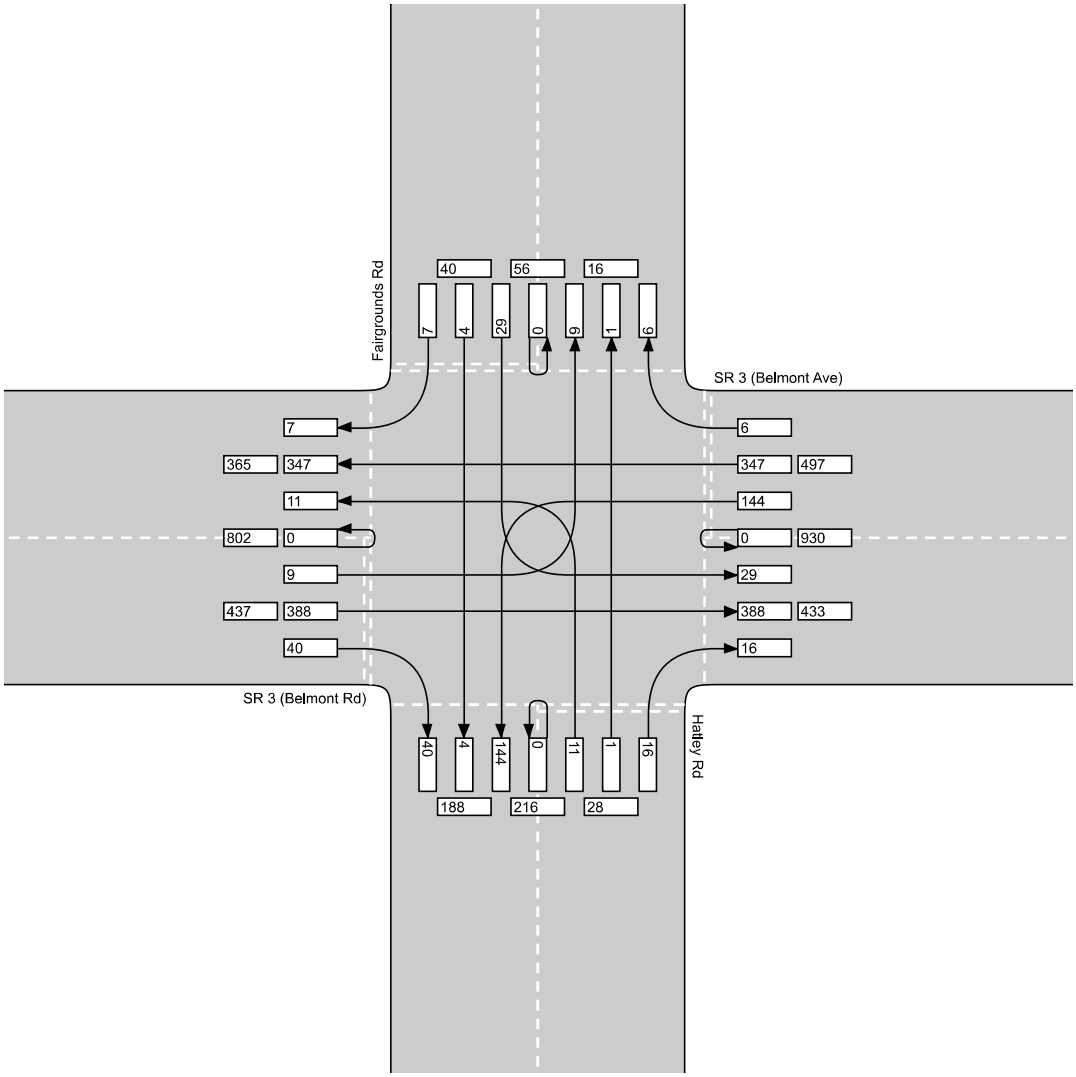
**Location**


**Classes**

MCl
Car
LGV
Bus
SUT
Semis
Bicycle (Not included in totals)

## Diagram

**MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017**




**Time Period:**

- ○ All times
- ○ AM Peak Hour:11:00 - 12:00
- ○ PM Peak Hour:16:00 - 17:00
- ○ Overall Peak Hour:16:00 - 17:00
- ◉ Custom: 07:15 - 08:15

**Traffic Bins:**

- ☑ MCI
- ☑ Car
- ☑ LGV
- ☑ Bus
- ☑ SUT
- ☑ Semis
- ☐ Bicycle

**Crossing Bins:**

- ☐ Bicycle
- ☐ Ped

Traffic total: 1002

# Total Flow

## MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017

| Traffic | | | | | | | | | | Crossing | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | MCI | Car | LGV | Bus | SUT | Semis | Bicycle | Total | | Period | Bicycle | Ped | Total |
| 06:00 | 0 | 40 | 28 | 0 | 3 | 2 | 1 | 73 | | 06:00 | 0 | 0 | 0 |
| 06:15 | 4 | 91 | 30 | 0 | 5 | 3 | 1 | 133 | | 06:15 | 1 | 1 | 2 |
| 06:30 | 1 | 113 | 48 | 0 | 5 | 3 | 0 | 170 | | 06:30 | 0 | 0 | 0 |
| 06:45 | 2 | 146 | 56 | 0 | 11 | 2 | 0 | 217 | | 06:45 | 0 | 0 | 0 |
| 07:00 | 1 | 116 | 44 | 0 | 6 | 2 | 0 | 169 | | 07:00 | 0 | 0 | 0 |
| 07:15 | 0 | 183 | 45 | 0 | 5 | 2 | 1 | 235 | | 07:15 | 0 | 0 | 0 |
| 07:30 | 0 | 185 | 44 | 0 | 4 | 8 | 0 | 241 | | 07:30 | 0 | 1 | 1 |
| 07:45 | 0 | 231 | 56 | 1 | 8 | 6 | 0 | 302 | | 07:45 | 0 | 0 | 0 |
| 08:00 | 0 | 159 | 53 | 1 | 9 | 2 | 0 | 224 | | 08:00 | 0 | 0 | 0 |
| 08:15 | 1 | 165 | 42 | 0 | 8 | 3 | 0 | 219 | | 08:15 | 0 | 2 | 2 |
| 08:30 | 0 | 174 | 45 | 0 | 9 | 5 | 1 | 233 | | 08:30 | 0 | 0 | 0 |
| 08:45 | 4 | 220 | 44 | 0 | 4 | 7 | 0 | 279 | | 08:45 | 0 | 0 | 0 |
| 09:00 | 2 | 191 | 51 | 2 | 5 | 16 | 0 | 267 | | 09:00 | 0 | 1 | 1 |
| 09:15 | 3 | 157 | 49 | 0 | 7 | 3 | 0 | 219 | | 09:15 | 0 | 2 | 2 |
| 09:30 | 0 | 179 | 50 | 0 | 9 | 9 | 1 | 247 | | 09:30 | 1 | 0 | 1 |
| 09:45 | 1 | 180 | 52 | 2 | 7 | 4 | 0 | 246 | | 09:45 | 0 | 1 | 1 |
| 10:00 | 6 | 181 | 57 | 1 | 10 | 6 | 0 | 261 | | 10:00 | 0 | 0 | 0 |
| 10:15 | 1 | 211 | 54 | 1 | 9 | 9 | 0 | 285 | | 10:15 | 0 | 0 | 0 |
| 10:30 | 3 | 211 | 41 | 0 | 10 | 6 | 0 | 271 | | 10:30 | 0 | 0 | 0 |
| 10:45 | 0 | 206 | 43 | 0 | 10 | 6 | 1 | 265 | | 10:45 | 0 | 1 | 1 |
| 11:00 | 3 | 199 | 59 | 2 | 11 | 2 | 0 | 276 | | 11:00 | 0 | 0 | 0 |
| 11:15 | 2 | 204 | 48 | 1 | 7 | 8 | 0 | 270 | | 11:15 | 0 | 1 | 1 |
| 11:30 | 3 | 231 | 39 | 0 | 13 | 6 | 0 | 292 | | 11:30 | 0 | 0 | 0 |
| 11:45 | 0 | 239 | 48 | 2 | 14 | 2 | 0 | 305 | | 11:45 | 0 | 0 | 0 |
| 12:00 | 2 | 280 | 66 | 3 | 6 | 4 | 0 | 361 | | 12:00 | 0 | 1 | 1 |
| 12:15 | 0 | 291 | 51 | 1 | 8 | 3 | 0 | 354 | | 12:15 | 0 | 1 | 1 |
| 12:30 | 3 | 253 | 54 | 1 | 8 | 8 | 0 | 327 | | 12:30 | 0 | 1 | 1 |
| 12:45 | 1 | 277 | 59 | 1 | 12 | 9 | 0 | 359 | | 12:45 | 0 | 0 | 0 |
| 13:00 | 1 | 247 | 63 | 1 | 11 | 8 | 0 | 331 | | 13:00 | 0 | 1 | 1 |
| 13:15 | 0 | 258 | 47 | 0 | 5 | 6 | 1 | 316 | | 13:15 | 0 | 0 | 0 |
| 13:30 | 2 | 226 | 48 | 0 | 8 | 8 | 0 | 292 | | 13:30 | 0 | 0 | 0 |
| 13:45 | 2 | 255 | 48 | 1 | 13 | 4 | 0 | 323 | | 13:45 | 0 | 1 | 1 |
| 14:00 | 3 | 232 | 60 | 2 | 10 | 3 | 0 | 310 | | 14:00 | 0 | 1 | 1 |
| 14:15 | 2 | 215 | 53 | 1 | 5 | 8 | 1 | 284 | | 14:15 | 0 | 0 | 0 |
| 14:30 | 6 | 271 | 55 | 2 | 13 | 3 | 0 | 350 | | 14:30 | 0 | 1 | 1 |
| 14:45 | 2 | 211 | 69 | 0 | 9 | 5 | 1 | 296 | | 14:45 | 0 | 0 | 0 |
| 15:00 | 1 | 244 | 54 | 1 | 5 | 8 | 0 | 313 | | 15:00 | 0 | 0 | 0 |
| 15:15 | 0 | 283 | 35 | 0 | 9 | 5 | 0 | 332 | | 15:15 | 0 | 0 | 0 |
| 15:30 | 0 | 300 | 65 | 0 | 7 | 7 | 2 | 379 | | 15:30 | 0 | 0 | 0 |
| 15:45 | 2 | 274 | 60 | 0 | 5 | 5 | 0 | 346 | | 15:45 | 0 | 0 | 0 |
| 16:00 | **5** | **298** | **73** | **0** | **1** | **3** | **0** | **380** | | 16:00 | **0** | **2** | **2** |
| 16:15 | **3** | **285** | **72** | **1** | **8** | **1** | **0** | **370** | | 16:15 | **0** | **0** | **0** |
| 16:30 | **2** | **319** | **68** | **1** | **6** | **3** | **2** | **399** | | 16:30 | **0** | **2** | **2** |
| 16:45 | **2** | **321** | **59** | **0** | **4** | **2** | **0** | **388** | | 16:45 | **0** | **0** | **0** |
| 17:00 | 2 | 301 | 54 | 2 | 3 | 1 | 0 | 363 | | 17:00 | 0 | 0 | 0 |
| 17:15 | 1 | 267 | 66 | 2 | 4 | 2 | 0 | 342 | | 17:15 | 0 | 0 | 0 |
| 17:30 | 3 | 215 | 49 | 1 | 6 | 2 | 0 | 276 | | 17:30 | 0 | 0 | 0 |
| 17:45 | 0 | 191 | 32 | 0 | 5 | 1 | 0 | 229 | | 17:45 | 0 | 0 | 0 |
| Total | 82 | 10526 | 2486 | 34 | 360 | 231 | 13 | 13719 | | Total | 2 | 21 | 23 |
| % of Total | 0.6% | 76.7% | 18.1% | 0.2% | 2.6% | 1.7% | - | 100% | | % of Total | 8.7% | 91.3% | 100% |

# Cover

## MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017

**Study Name**

FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD

**Study Description**

FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD, 19/07/2017 turning movement

**Date of Survey**

Wednesday, July 19, 2017

**Time Period**

06:00 - 18:00

**Comments**

-

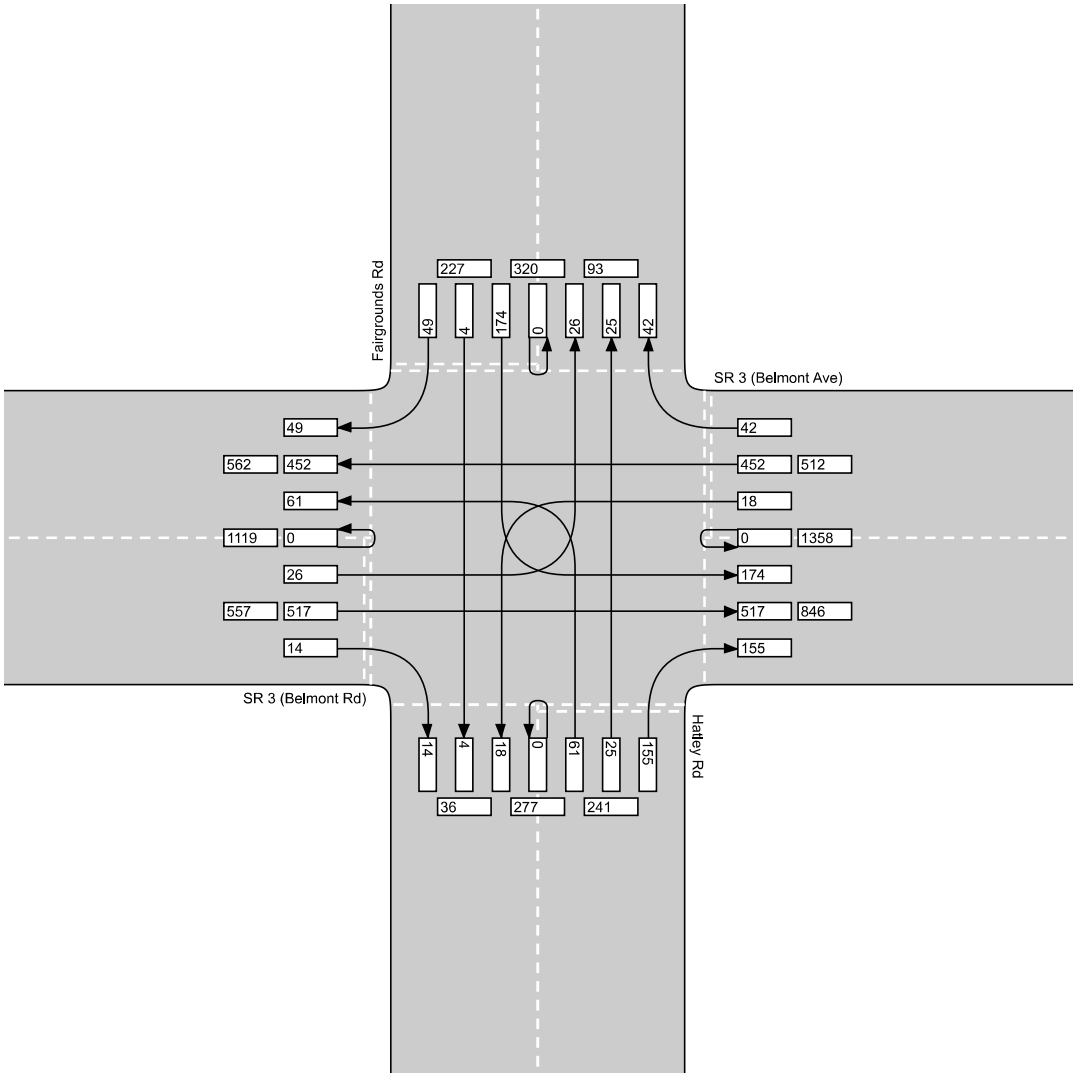
**Location**


**Classes**

MCl
Car
LGV
Bus
SUT
Semis
Bicycle (Not included in totals)

## Diagram

**MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017**




**Time Period:**

- ○ All times
- ○ AM Peak Hour:11:00 - 12:00
- ○ PM Peak Hour:16:00 - 17:00
- ○ Overall Peak Hour:16:00 - 17:00
- ◉ Custom: 16:00 - 17:00

**Traffic Bins:**

- ☑ MCI
- ☑ Car
- ☑ LGV
- ☑ Bus
- ☑ SUT
- ☑ Semis
- ☐ Bicycle

**Crossing Bins:**

- ☐ Bicycle
- ☐ Ped

Traffic total: 1537

# Total Flow

## MAINE_DOT_TM - 000027010113 - FAIRGROUNDS RD, SR 3 (BELMONT AVE), HATLEY RD - Wednesday, July 19, 2017

| Traffic | | | | | | | | | | Crossing | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Period | MCI | Car | LGV | Bus | SUT | Semis | Bicycle | Total | | Period | Bicycle | Ped | Total |
| 06:00 | 0 | 40 | 28 | 0 | 3 | 2 | 1 | 73 | | 06:00 | 0 | 0 | 0 |
| 06:15 | 4 | 91 | 30 | 0 | 5 | 3 | 1 | 133 | | 06:15 | 1 | 1 | 2 |
| 06:30 | 1 | 113 | 48 | 0 | 5 | 3 | 0 | 170 | | 06:30 | 0 | 0 | 0 |
| 06:45 | 2 | 146 | 56 | 0 | 11 | 2 | 0 | 217 | | 06:45 | 0 | 0 | 0 |
| 07:00 | 1 | 116 | 44 | 0 | 6 | 2 | 0 | 169 | | 07:00 | 0 | 0 | 0 |
| 07:15 | 0 | 183 | 45 | 0 | 5 | 2 | 1 | 235 | | 07:15 | 0 | 0 | 0 |
| 07:30 | 0 | 185 | 44 | 0 | 4 | 8 | 0 | 241 | | 07:30 | 0 | 1 | 1 |
| 07:45 | 0 | 231 | 56 | 1 | 8 | 6 | 0 | 302 | | 07:45 | 0 | 0 | 0 |
| 08:00 | 0 | 159 | 53 | 1 | 9 | 2 | 0 | 224 | | 08:00 | 0 | 0 | 0 |
| 08:15 | 1 | 165 | 42 | 0 | 8 | 3 | 0 | 219 | | 08:15 | 0 | 2 | 2 |
| 08:30 | 0 | 174 | 45 | 0 | 9 | 5 | 1 | 233 | | 08:30 | 0 | 0 | 0 |
| 08:45 | 4 | 220 | 44 | 0 | 4 | 7 | 0 | 279 | | 08:45 | 0 | 0 | 0 |
| 09:00 | 2 | 191 | 51 | 2 | 5 | 16 | 0 | 267 | | 09:00 | 0 | 1 | 1 |
| 09:15 | 3 | 157 | 49 | 0 | 7 | 3 | 0 | 219 | | 09:15 | 0 | 2 | 2 |
| 09:30 | 0 | 179 | 50 | 0 | 9 | 9 | 1 | 247 | | 09:30 | 1 | 0 | 1 |
| 09:45 | 1 | 180 | 52 | 2 | 7 | 4 | 0 | 246 | | 09:45 | 0 | 1 | 1 |
| 10:00 | 6 | 181 | 57 | 1 | 10 | 6 | 0 | 261 | | 10:00 | 0 | 0 | 0 |
| 10:15 | 1 | 211 | 54 | 1 | 9 | 9 | 0 | 285 | | 10:15 | 0 | 0 | 0 |
| 10:30 | 3 | 211 | 41 | 0 | 10 | 6 | 0 | 271 | | 10:30 | 0 | 0 | 0 |
| 10:45 | 0 | 206 | 43 | 0 | 10 | 6 | 1 | 265 | | 10:45 | 0 | 1 | 1 |
| 11:00 | 3 | 199 | 59 | 2 | 11 | 2 | 0 | 276 | | 11:00 | 0 | 0 | 0 |
| 11:15 | 2 | 204 | 48 | 1 | 7 | 8 | 0 | 270 | | 11:15 | 0 | 1 | 1 |
| 11:30 | 3 | 231 | 39 | 0 | 13 | 6 | 0 | 292 | | 11:30 | 0 | 0 | 0 |
| 11:45 | 0 | 239 | 48 | 2 | 14 | 2 | 0 | 305 | | 11:45 | 0 | 0 | 0 |
| 12:00 | 2 | 280 | 66 | 3 | 6 | 4 | 0 | 361 | | 12:00 | 0 | 1 | 1 |
| 12:15 | 0 | 291 | 51 | 1 | 8 | 3 | 0 | 354 | | 12:15 | 0 | 1 | 1 |
| 12:30 | 3 | 253 | 54 | 1 | 8 | 8 | 0 | 327 | | 12:30 | 0 | 1 | 1 |
| 12:45 | 1 | 277 | 59 | 1 | 12 | 9 | 0 | 359 | | 12:45 | 0 | 0 | 0 |
| 13:00 | 1 | 247 | 63 | 1 | 11 | 8 | 0 | 331 | | 13:00 | 0 | 1 | 1 |
| 13:15 | 0 | 258 | 47 | 0 | 5 | 6 | 1 | 316 | | 13:15 | 0 | 0 | 0 |
| 13:30 | 2 | 226 | 48 | 0 | 8 | 8 | 0 | 292 | | 13:30 | 0 | 0 | 0 |
| 13:45 | 2 | 255 | 48 | 1 | 13 | 4 | 0 | 323 | | 13:45 | 0 | 1 | 1 |
| 14:00 | 3 | 232 | 60 | 2 | 10 | 3 | 0 | 310 | | 14:00 | 0 | 1 | 1 |
| 14:15 | 2 | 215 | 53 | 1 | 5 | 8 | 1 | 284 | | 14:15 | 0 | 0 | 0 |
| 14:30 | 6 | 271 | 55 | 2 | 13 | 3 | 0 | 350 | | 14:30 | 0 | 1 | 1 |
| 14:45 | 2 | 211 | 69 | 0 | 9 | 5 | 1 | 296 | | 14:45 | 0 | 0 | 0 |
| 15:00 | 1 | 244 | 54 | 1 | 5 | 8 | 0 | 313 | | 15:00 | 0 | 0 | 0 |
| 15:15 | 0 | 283 | 35 | 0 | 9 | 5 | 0 | 332 | | 15:15 | 0 | 0 | 0 |
| 15:30 | 0 | 300 | 65 | 0 | 7 | 7 | 2 | 379 | | 15:30 | 0 | 0 | 0 |
| 15:45 | 2 | 274 | 60 | 0 | 5 | 5 | 0 | 346 | | 15:45 | 0 | 0 | 0 |
| 16:00 | **5** | **298** | **73** | **0** | **1** | **3** | **0** | **380** | | 16:00 | **0** | **2** | **2** |
| 16:15 | **3** | **285** | **72** | **1** | **8** | **1** | **0** | **370** | | 16:15 | **0** | **0** | **0** |
| 16:30 | **2** | **319** | **68** | **1** | **6** | **3** | **2** | **399** | | 16:30 | **0** | **2** | **2** |
| 16:45 | **2** | **321** | **59** | **0** | **4** | **2** | **0** | **388** | | 16:45 | **0** | **0** | **0** |
| 17:00 | 2 | 301 | 54 | 2 | 3 | 1 | 0 | 363 | | 17:00 | 0 | 0 | 0 |
| 17:15 | 1 | 267 | 66 | 2 | 4 | 2 | 0 | 342 | | 17:15 | 0 | 0 | 0 |
| 17:30 | 3 | 215 | 49 | 1 | 6 | 2 | 0 | 276 | | 17:30 | 0 | 0 | 0 |
| 17:45 | 0 | 191 | 32 | 0 | 5 | 1 | 0 | 229 | | 17:45 | 0 | 0 | 0 |
| Total | 82 | 10526 | 2486 | 34 | 360 | 231 | 13 | 13719 | | Total | 2 | 21 | 23 |
| % of Total | 0.6% | 76.7% | 18.1% | 0.2% | 2.6% | 1.7% | - | 100% | | % of Total | 8.7% | 91.3% | 100% |

## B. MaineDOT Crash Data

Maine Department Of Transportation - Office of Safety, Crash Records Section

# Crash Summary Report

## Report Selections and Input Parameters

REPORT SELECTIONS

☑ **Crash Summary I** ☐ **Section Detail** ☑ **Crash Summary II** ☐ **1320 Public** ☐ **1320 Private** ☐ **1320 Summary**

REPORT DESCRIPTION

Belfast
Rte. 3 from Goodwill Dr. to Fairgrounds Rd.

REPORT PARAMETERS

Year 2019, Start Month 1 through Year 2021 End Month: 12

| | | | | | |
|---|---|---|---|---|---|
| Route: **0003X** | Start Node: **71561** | Start Offset: **0** | ☐ **Exclude First Node** |
| | End Node: **64026** | End Offset: **0** | ☐ **Exclude Last Node** |
| Route: **0003W** | Start Node: **64026** | Start Offset: **0** | ☑ **Exclude First Node** |
| | End Node: **71561** | End Offset: **0** | ☑ **Exclude Last Node** |

# Crash Summary I

**Nodes**

| Node | Route - MP | Node Description | U/R | Total Crashes | Injury Crashes K | A | B | C | PD | Percent Injury | Annual M Ent-Veh | Crash Rate | Critical Rate | CRF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71561 | 0003X - 45.87 | Non Int BELMONT AV | 2 | 1 | 0 | 0 | 0 | 0 | 1 | 0.0 | 3.332 | 0.10 | 0.35 | 0.29 |
| | | | | | | | | | | | | Statewide Crash Rate: | 0.12 | |
| 64026 | 0003X - 45.94 | Int of BELMONT AV ENT TO ATHENAHEALTH FAIRGROUN | 9 | 10 | 0 | 0 | 1 | 2 | 7 | 30.0 | 4.728 | 0.70 | 1.17 | 0.60 |
| | | | | | | | | | | | | Statewide Crash Rate: | 0.65 | |
| **Study Years:** | 3.00 | **NODE TOTALS:** | | 11 | 0 | 0 | 1 | 2 | 8 | 27.3 | 8.060 | 0.45 | 0.75 | 0.60 |

# Crash Summary I

**Sections**

| Start Node | End Node | Element | Offset Begin - End | Route - MP | Section Length | U/R | Total Crashes | Injury Crashes K | A | B | C | PD | Percent Injury | Annual HMVM | Crash Rate | Critical Rate | CRF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 71561 | 64026 | 4047853 | 0 - 0.07 | 0003X - 45.87 | 0.07 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.00117 | 0.00 | 637.52 | 0.00 |
| Non Int BELMONT AV | | | | ST RTE 3 | | | | | | | | | | | Statewide Crash Rate: 186.18 | | |
| 64026 | 71561 | 4047878 | 0 - 0.07 | 0003W - 3.73 | 0.07 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.00117 | 0.00 | 637.52 | 0.00 |
| Int of BELMONT AV | ENT TO ATHENAHEALTH FAIRGROUNDS RD | | | ST RTE 3W | | | | | | | | | | | Statewide Crash Rate: 186.18 | | |
| **Study Years:** | 3.00 | | | **Section Totals:** | 0.14 | | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.00233 | 0.00 | 534.92 | 0.00 |
| | | | | **Grand Totals:** | 0.14 | | 11 | 0 | 0 | 1 | 2 | 8 | 27.3 | 0.00233 | 1572.19 | 714.23 | 2.20 |

## C. SimTraffic Reports

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBR | All |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Denied Del/Veh (s) | 3.4 | 0.4 | 0.3 | 0.1 | 0.0 | 0.0 | 0.5 | 1.7 | 1.1 | 0.1 | 3.9 | 0.4 |
| Total Del/Veh (s) | 2.9 | 1.3 | 0.6 | 5.0 | 0.5 | 0.1 | 21.1 | 19.9 | 13.2 | 21.9 | 4.9 | 3.1 |

## 6: Site Drive & Belmont Avenue Performance by movement

| Movement | EBT | WBT | All |
|---|---|---|---|
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 |
| Total Del/Veh (s) | 1.2 | 1.1 | 1.1 |

## Intersection: 3: Site Drive/Goodwill Drive & Belmont Avenue

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | L | TR | LTR | LT | R |
| Maximum Queue (ft) | 26 | 66 | 15 | 115 | 59 | 31 |
| Average Queue (ft) | 2 | 27 | 0 | 37 | 6 | 5 |
| 95th Queue (ft) | 13 | 57 | 8 | 88 | 30 | 22 |
| Link Distance (ft) | | | 113 | 119 | 277 | |
| Upstream Blk Time (%) | | | | 2 | | |
| Queuing Penalty (veh) | | | | 0 | | |
| Storage Bay Dist (ft) | 60 | 55 | | | | 80 |
| Storage Blk Time (%) | | 1 | 0 | | 0 | |
| Queuing Penalty (veh) | | 3 | 0 | | 0 | |

## Intersection: 6: Site Drive & Belmont Avenue

| Movement | EB | WB |
|---|---|---|
| Directions Served | TR | T |
| Maximum Queue (ft) | 58 | 5 |
| Average Queue (ft) | 3 | 0 |
| 95th Queue (ft) | 31 | 5 |
| Link Distance (ft) | 113 | 111 |
| Upstream Blk Time (%) | 0 | |
| Queuing Penalty (veh) | 1 | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Zone Summary

Zone wide Queuing Penalty: 4

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBR | All |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Denied Del/Veh (s) | 3.5 | 0.4 | 0.9 | 0.1 | 0.0 | 0.0 | 5.4 | 8.2 | 5.5 | 0.1 | 4.2 | 0.9 |
| Total Del/Veh (s) | 2.7 | 1.4 | 0.9 | 5.3 | 0.6 | 0.1 | 26.5 | 27.3 | 16.0 | 24.7 | 4.6 | 3.7 |

## 6: Site Drive & Belmont Avenue Performance by movement

| Movement | EBT | EBR | WBT | NBR | All |
|---|---|---|---|---|---|
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total Del/Veh (s) | 1.3 | 0.2 | 1.1 | 10.0 | 1.2 |

## Intersection: 3: Site Drive/Goodwill Drive & Belmont Avenue

| Movement | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|
| Directions Served | L | L | TR | LTR | LT | R |
| Maximum Queue (ft) | 23 | 73 | 23 | 121 | 49 | 31 |
| Average Queue (ft) | 2 | 28 | 1 | 42 | 5 | 5 |
| 95th Queue (ft) | 12 | 58 | 16 | 99 | 27 | 24 |
| Link Distance (ft) | | | 113 | 119 | 277 | |
| Upstream Blk Time (%) | | 0 | 0 | 4 | | |
| Queuing Penalty (veh) | | 0 | 0 | 0 | | |
| Storage Bay Dist (ft) | 60 | 55 | | | | 80 |
| Storage Blk Time (%) | | 1 | 0 | | 0 | |
| Queuing Penalty (veh) | | 4 | 0 | | 0 | |

## Intersection: 6: Site Drive & Belmont Avenue

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | T | R |
| Maximum Queue (ft) | 48 | 11 | 24 |
| Average Queue (ft) | 3 | 0 | 1 |
| 95th Queue (ft) | 28 | 8 | 12 |
| Link Distance (ft) | 113 | 111 | 99 |
| Upstream Blk Time (%) | 0 | | |
| Queuing Penalty (veh) | 0 | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Zone Summary

Zone wide Queuing Penalty: 4

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Denied Del/Veh (s) | 3.4 | 0.4 | 0.3 | 0.3 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.3 | 0.3 | 4.0 |
| Total Del/Veh (s) | 3.4 | 1.4 | 0.1 | 4.7 | 1.2 | 0.2 | 19.8 | 24.5 | 8.7 | 19.3 | 19.4 | 6.4 |

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | All |
|---|---|
| Denied Del/Veh (s) | 0.4 |
| Total Del/Veh (s) | 2.9 |

## 6: Site Drive & Belmont Avenue Performance by movement

| Movement | EBT | WBT | All |
|---|---|---|---|
| Denied Del/Veh (s) | 0.0 | 0.1 | 0.0 |
| Total Del/Veh (s) | 1.6 | 2.0 | 1.8 |

## Intersection: 3: Site Drive/Goodwill Drive & Belmont Avenue

| Movement | EB | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | L | TR | L | TR | LTR | LT | R |
| Maximum Queue (ft) | 34 | 3 | 64 | 30 | 91 | 66 | 57 |
| Average Queue (ft) | 7 | 0 | 23 | 2 | 27 | 23 | 25 |
| 95th Queue (ft) | 27 | 3 | 53 | 21 | 64 | 55 | 52 |
| Link Distance (ft) | | 664 | | 113 | 119 | 277 | |
| Upstream Blk Time (%) | | | | 0 | 0 | | |
| Queuing Penalty (veh) | | | | 0 | 0 | | |
| Storage Bay Dist (ft) | 60 | | 55 | | | | 80 |
| Storage Blk Time (%) | 0 | | 1 | 0 | | 0 | 0 |
| Queuing Penalty (veh) | 0 | | 4 | 0 | | 0 | 0 |

## Intersection: 6: Site Drive & Belmont Avenue

| Movement | EB | WB |
|---|---|---|
| Directions Served | TR | T |
| Maximum Queue (ft) | 69 | 36 |
| Average Queue (ft) | 5 | 2 |
| 95th Queue (ft) | 35 | 20 |
| Link Distance (ft) | 113 | 111 |
| Upstream Blk Time (%) | 0 | |
| Queuing Penalty (veh) | 0 | |
| Storage Bay Dist (ft) | | |
| Storage Blk Time (%) | | |
| Queuing Penalty (veh) | | |

## Zone Summary

Zone wide Queuing Penalty: 4

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Denied Del/Veh (s) | 3.3 | 0.4 | 0.6 | 0.2 | 0.0 | 0.0 | 0.4 | 0.2 | 0.5 | 0.2 | 0.2 | 4.0 |
| Total Del/Veh (s) | 4.1 | 1.5 | 0.7 | 4.5 | 1.2 | 0.2 | 25.7 | 31.7 | 11.7 | 17.3 | 17.9 | 6.2 |

## 3: Site Drive/Goodwill Drive & Belmont Avenue Performance by movement

| Movement | All |
|---|---|
| Denied Del/Veh (s) | 0.4 |
| Total Del/Veh (s) | 3.1 |

## 6: Site Drive & Belmont Avenue Performance by movement

| Movement | EBT | EBR | WBT | NBR | All |
|---|---|---|---|---|---|
| Denied Del/Veh (s) | 0.0 | 0.0 | 0.1 | 0.1 | 0.0 |
| Total Del/Veh (s) | 1.6 | 0.3 | 2.0 | 11.2 | 1.9 |

## Intersection: 3: Site Drive/Goodwill Drive & Belmont Avenue

| Movement | EB | EB | WB | WB | NB | SB | SB |
|---|---|---|---|---|---|---|---|
| Directions Served | L | TR | L | TR | LTR | LT | R |
| Maximum Queue (ft) | 36 | 2 | 65 | 8 | 117 | 61 | 50 |
| Average Queue (ft) | 8 | 0 | 23 | 0 | 31 | 23 | 25 |
| 95th Queue (ft) | 29 | 2 | 53 | 6 | 77 | 52 | 49 |
| Link Distance (ft) | | 664 | | 113 | 119 | 277 | |
| Upstream Blk Time (%) | | | | | 1 | | |
| Queuing Penalty (veh) | | | | | 0 | | |
| Storage Bay Dist (ft) | 60 | | 55 | | | | 80 |
| Storage Blk Time (%) | 0 | | 1 | 0 | | 0 | 0 |
| Queuing Penalty (veh) | 0 | | 3 | 0 | | 0 | 0 |

## Intersection: 6: Site Drive & Belmont Avenue

| Movement | EB | WB | NB |
|---|---|---|---|
| Directions Served | TR | T | R |
| Maximum Queue (ft) | 73 | 28 | 36 |
| Average Queue (ft) | 6 | 1 | 7 |
| 95th Queue (ft) | 36 | 13 | 29 |
| Link Distance (ft) | 113 | 111 | 99 |
| Upstream Blk Time (%) | 0 | | |
| Queuing Penalty (veh) | 0 | | |
| Storage Bay Dist (ft) | | | |
| Storage Blk Time (%) | | | |
| Queuing Penalty (veh) | | | |

## Zone Summary

Zone wide Queuing Penalty: 3

## D. NCHRP Report 457

**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

INPUT

| Roadway geometry: | 2-lane roadway |
|---|---|

| Variable | Value |
|---|---|
| Major-road speed, mph: | 40 |
| Major-road volume (one direction), veh/h: | 511 |
| Right-turn volume, veh/h: | 1 |

OUTPUT

| Variable | Value |
|---|---|
| Limiting right-turn volume, veh/h: | 83 |
| **Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:** | |
| **Do NOT add right-turn bay.** | |

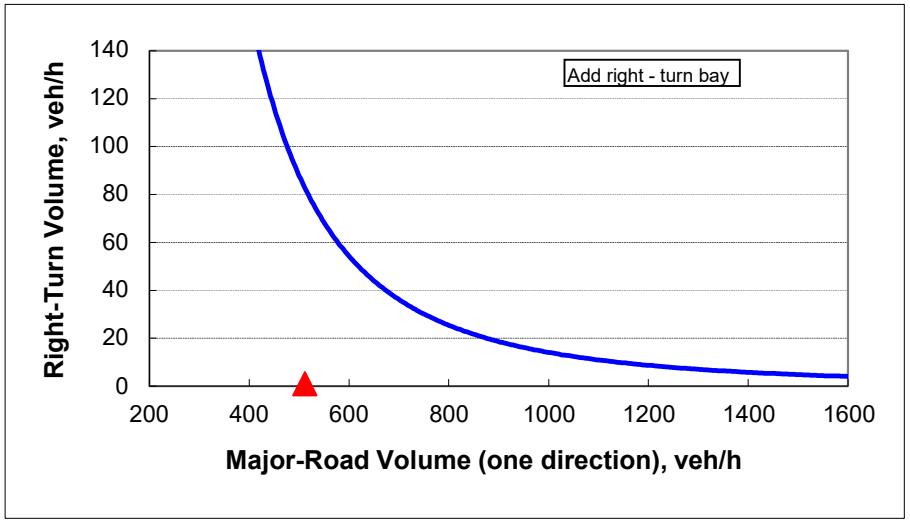


**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

INPUT

| Roadway geometry: | 2-lane roadway |
|---|---|

| Variable | Value |
|---|---|
| Major-road speed, mph: | 40 |
| Major-road volume (one direction), veh/h: | 457 |
| Right-turn volume, veh/h: | 2 |

OUTPUT

| Variable | Value |
|---|---|
| Limiting right-turn volume, veh/h: | 111 |
| **Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:** | |
| **Do NOT add right-turn bay.** | |

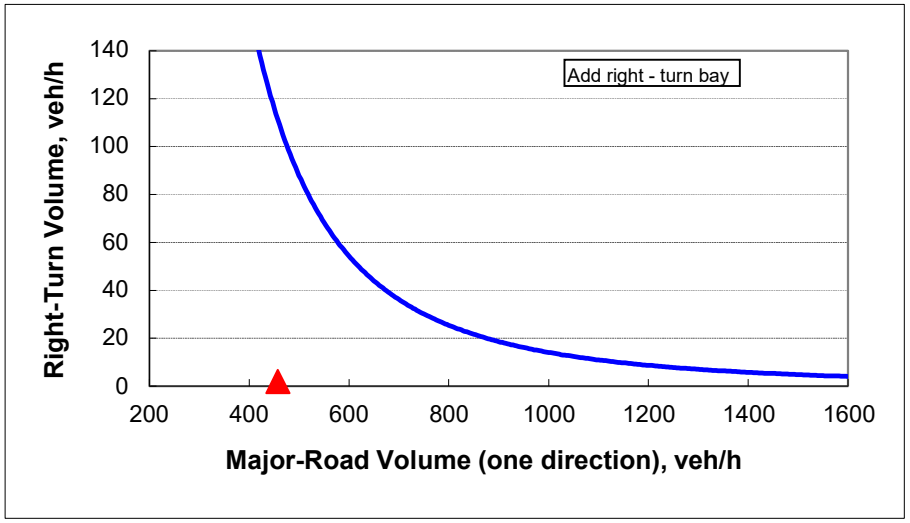


**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

INPUT

| Roadway geometry: | 2-lane roadway |
|---|---|

| Variable | Value |
|---|---|
| Major-road speed, mph: | 40 |
| Major-road volume (one direction), veh/h: | 592 |
| Right-turn volume, veh/h: | 5 |

OUTPUT

| Variable | Value |
|---|---|
| Limiting right-turn volume, veh/h: | 56 |
| **Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:** | |
| **Do NOT add right-turn bay.** | |

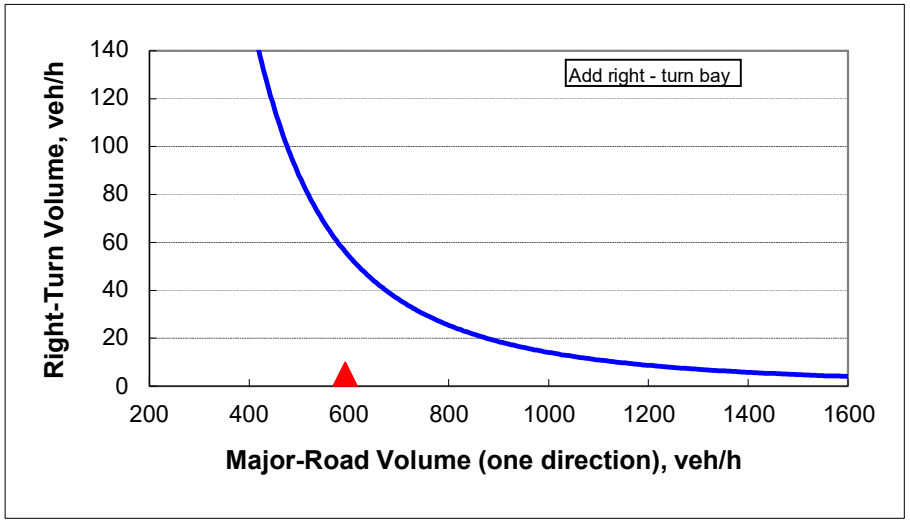


**Figure 2 - 6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.**

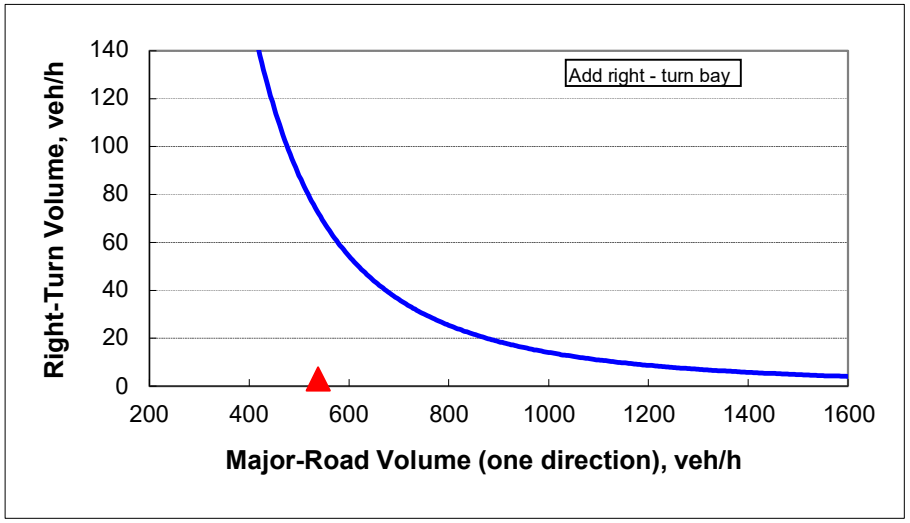
INPUT

| Roadway geometry: | 2-lane roadway |
|---|---|

| Variable | Value |
|---|---|
| Major-road speed, mph: | 40 |
| Major-road volume (one direction), veh/h: | 538 |
| Right-turn volume, veh/h: | 3 |

OUTPUT

| Variable | Value |
|---|---|
| Limiting right-turn volume, veh/h: | 72 |
| **Guidance for determining the need for a major-road right-turn bay for a 2-lane roadway:** | |
| **Do NOT add right-turn bay.** | |



# Exhibit 7

## Natural Resources

**Exhibit 7 – Natural Resources**

## Flooding

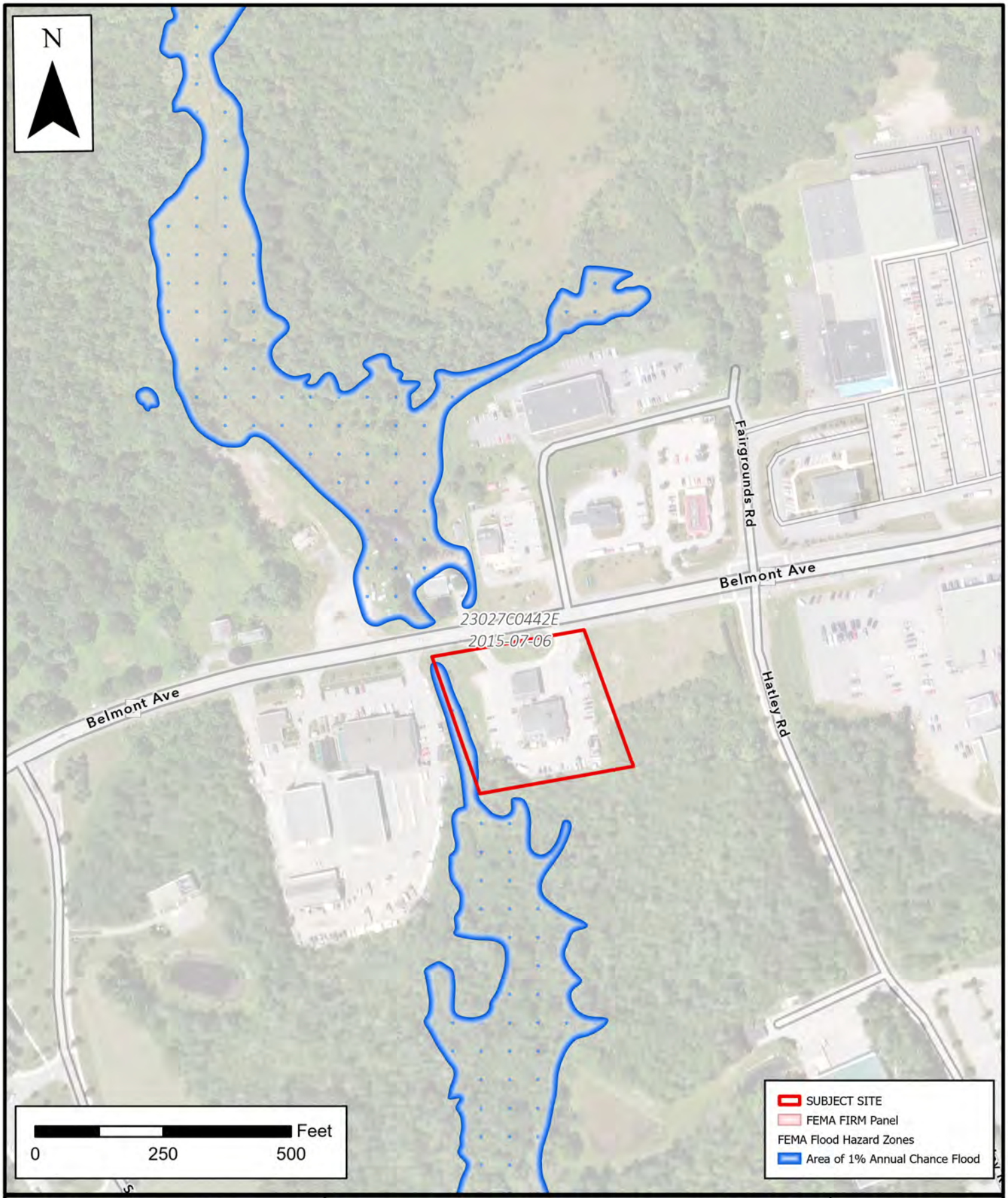
The Flood Insurance Rate Map (FIRM) for the City of Belfast (Community Panel 23027C0442E, dated July 6, 2015) identifies the development area to be in Zone X, an area determined to be outside the 500-year flood. Please see the attached flood map.

## Soils

A Class 'D' Medium Intensity Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service has also been attached. The soils were identified as Peru, Swanville, and Udorthents-Urban land series, with Hydrologic Soils Group C/D, C/D, and unknown respectively. The soils within the HSG C/D were assumed to be D due to the closeness of the groundwater table to the surface as evident by the wetlands on-site. The Udorthents-Urban land series is unknown due to the presence of historical fill, and was assumed to be within HSG C. Please see the attached soil map.

## Wetlands

Wetlands were observed by Cole Peters, PWS, of Sebago Technics on September 26, 2022. The prepared report encompasses the delineation for wetlands on lot 12A as well as for the neighboring lot 12B, where the proposed development is centralized. Please see the attached Wetland Delineation Report and Natural Resources Map.

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South Portland, ME 04106
Tel. 207-200-2100

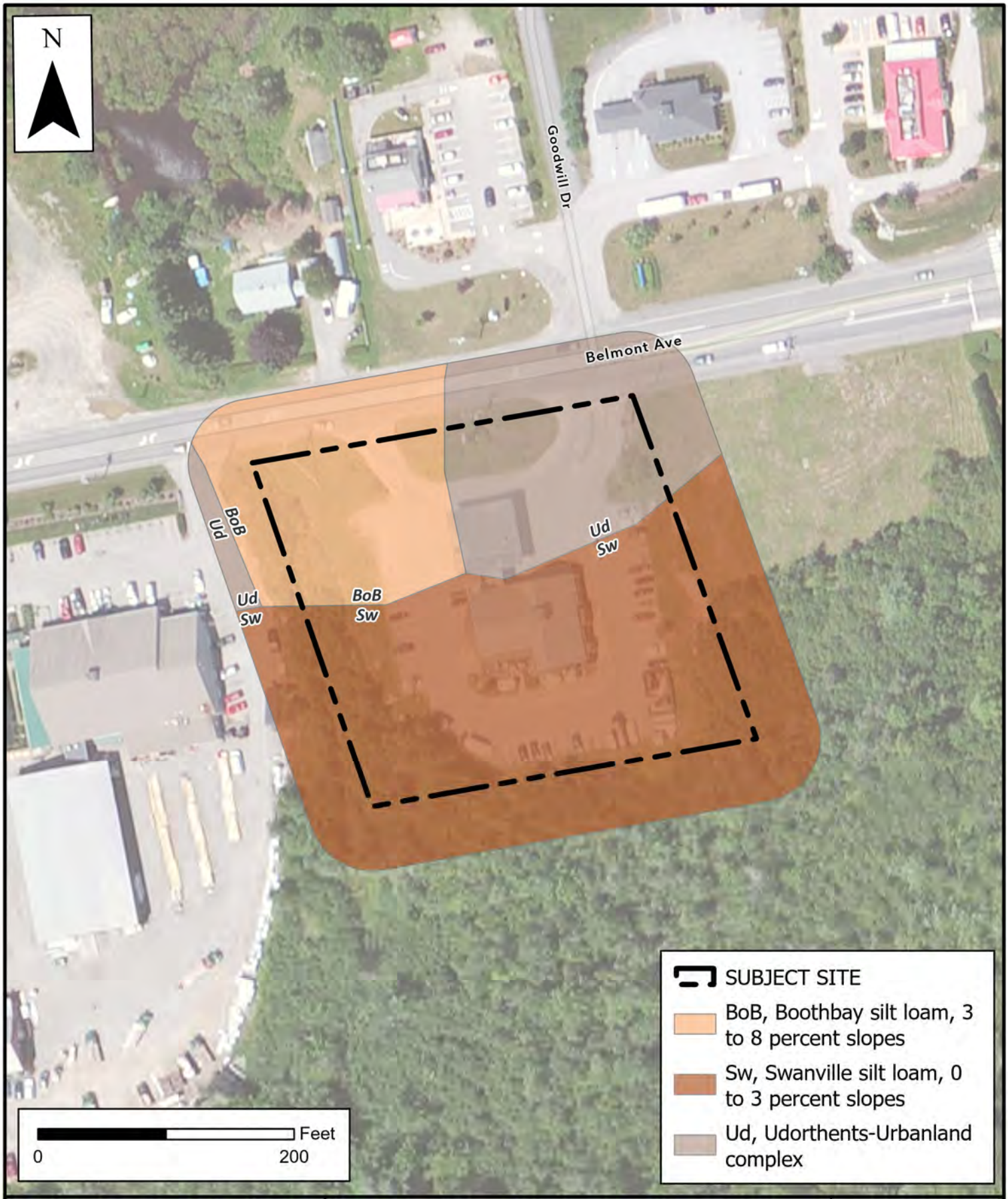
# FEMA NATIONAL FLOOD HAZARDS

## HARBORLIGHT ADVISORS

| | |
|---|---|
| SCALE: | 1:3,000 |
| DATE: | 4/21/2023 |

LOCATION:
22 BELMONT AVENUE
BELFAST, MAINE

INFORMATION:
MAINE GEOLIBRARY
FEMA NFHL (DEC 2021)

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# NCRS SOIL SURVEY MAP

## HARBORLIGHT ADVISORS

| | |
|---|---|
| SCALE: | 1:1,200 |
| DATE: | 4/21/2023 |

LOCATION:
22 BELMONT AVENUE
BELFAST, ME

INFORMATION: MAINE GEOLIBRARY
USDA NRCS SOIL SURVEY 2020
ESRI WORLD IMAGERY

# Wetland Delineation Report

**To:** **Amy Bell Segal, Project Manager**

**From:** **Cole Peters, PWS**

**Date:** **October 17, 2022**

**Project:** **220473- Belmont Avenue, Belfast**

Wetland boundaries have been delineated on the approximately 1.43-acre parcel (the "Site"), located at the intersection of Belmont Avenue and Hatley Road in Belfast. The undeveloped Site is identified as Lot 12-B on Tax Map 5. The position of the wetland boundaries is depicted on the attached map (Figure 1) of the Site for consideration during preparation of potential development plans for the property.

The Federal Emergency Management Agency (FEMA) has prepared Flood Insurance Rate Maps (FIRM) for this part of Lewiston (Community Panel Number 23027C0442E, effective date 7/6/2015). No part of the Site occurs in a FEMA designated 100-year floodplain (Zone A). The City of Belfast Zoning Map (July 2008) identifies the area including the Site as Route 3 Commercial District (Rt-3) and no part of the Site is designated as being subject to the City's Shoreland Zoning Ordinance.

**Wetland Delineation**:

Wetland boundaries at the Site were delineated on September 26, 2022 with sequentially numbered pink flagging located with a sub-meter accuracy global position system (GPS) unit. Characteristics of wetlands delineated at the Site are described below.

Evidence indicative of wetland from three parameters – vegetation, soils and hydrology – was used to identify and delineate the wetlands in accordance with the 1987 *US Army Corps of Engineers Wetland Delineation Manual* and the subsequent *Regional Supplement to the US Army Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region* (January 2012). With the exception of unusual or atypical situations, evidence of wetland must be exhibited by all three parameters for an area or position to be designated as wetland.

The freshwater wetland community on the Site is dominated by trees and shrubs that include: red maple (*Acer rubrum*), grey birch (*Betula populifolia*), speckled alder (*Alnus incana*), winterberry holly (*Ilex verticillata*), glossy buckthorn (*Frangula alnus*), willow (*Salix* spp.), and meadowsweet (*Spiraea latifolia*). In open areas and the herbaceous understory are: New York aster (*Synphyitruchum novi-belgi*), reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), sensitive fern (*Onoclea sensibilis*), and purple loosestrife (*Lythrum salicaria*). All of

these plants are identified as "Obligate" (OBL), "Facultative Wetland" (FACW) or "Facultative" (FAC) indicators of wetland by the 2016, *State of Maine National Wetland Plant List* prepared by the US Army Corps of Engineers and are therefore hydrophytes.

Dominant vegetation found throughout upland areas of the Site consists of: white pine (*Pinus strobus*), black cherry (*Prunus serotina*), quaking aspen (*Populus tremuloides*), crab apple (*Malus prunifolia*), multi-flora rose (*Rosa multiflora*), tatarian honesuckle (*Lonicera tatarica*), Russian olive (*Elaeagnus angustifolia*), wild strawberry (*Fragaria virginiana*), lamb's ears (*Stachys byzantia*), yarrow (*Achillea millefolium*), and vetch (*Securigera varia*). All of these plants are classified as "Facultative Upland" (FACU) or are not indicative of wetland, and when occurring in predominance, are indicative of upland.

The medium intensity soil survey prepared by the USDA Natural Resource Conservation Service (NRCS) indicates soils of the Swanville silt loam (Sw) series occur beneath wetland areas at the Site. The series is poorly drained (PD) and classified by the NRCS as a hydric soil. Soils were also examined directly with a hand auger. At sampling locations in areas dominated by hydrophytes, below an upper 8-inch-thick dark brown (10YR3/3) silt loam horizon, as much as six (6) inches of an olive gray (5Y5/2) silt loam occurs throughout which approximately 10% is light olive brown (2.5Y5/4) redox concentrations. These characteristics are representative of hydric soil indicator criteria F3: Depleted Matrix.

Hydrology is considered to be the "*driving force*" of wetlands (Mitch and Gosselink, 1986) and inherently is responsible for the adaptation of certain vegetation (hydrophytes) and the development of specific soil characteristics (hydric) indicative of wetlands. At the time of the survey, evidence of wetland hydrology observed at the Site included: sediment deposits, water-stained leaves and drainage patterns indicative of wetlands.

The National Wetland Inventory (NWI) makes use of *Classification of Wetlands and Deepwater Habitats of the United States* (Cowardin et. al, 1979) to differentiate types of wetlands. With this system, freshwater wetlands are classified based on dominant plant type as: Palustrine Forested (**PFO**), Palustrine Scrub-Shrub (**PSS**), Palustrine Emergent (**PEM**), Palustrine Open Water (**POW**), or Palustrine Unconsolidated Bottom (**PUB**). Wetlands classified by this system as PFO or PSS are more commonly known of as swamps whereas PEM typically represent marshes or meadows. POW and PUB generally lack vegetation and correspond to pond.

Wetland covers southern part of the Site and is represented by a palustrine deciduous a scrub shrub (PSS1) community (Photo 1) with a small upland island in the southeast corner (Photo 2).

**Vernal Pools:**

Vernal pools (**VP**s) are defined by the Maine Department of Environmental Protection (MDEP) as: "*a natural, temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet or outlet and no viable populations of predatory fish*" (Chapter 335 §9).

"Significant vernal pools" (**SVP**s) are recognized by the presence of fairy shrimp (*Eubrandhipus* spp.), or more than 40 wood frog (*Rana sylvatica*) egg masses or at least 10 blue spotted salamander (*Ambystoma laterale*) or 20 spotted salamander (*A. maculatum*) egg masses. VPs documented to be used by state-listed rare, endangered or threatened species such as Blanding's turtles (*Emydoidea blanddingii*), spotted turtles (*Clemmys guttata*), ringed boghaunter dragonflies (*Williamsoni linterni*), Eastern ribbon snakes (*Thamnophis sauritus*), wood turtles (*Clemmys insculpta*), four-toed salamanders (*Hemidactylium scutalum*), swamp darner dragonflies (*Epiaeschna heros*), and comet darner dragonflies (*Anax longipes*), are also considered to be SVPs (Ch 335 §9B 1-4).

Under the provisions of Section 404 of the federal Clean Water Act, the US Army Corps of Engineers (USACE) regulates activities in "*waters of the United States"* including VPs, which are defined by the USACE New England District in the State of Maine General Permit (GP, reissued on October 14, 2020). The NED definition, while very similar to MDEP's, does not reference "natural" and does not recognize or differentiate SVPs based on number of indicator species egg masses. Instead, the GP definition states: "*VPs are depressional wetland basins that typically go dry in most years and may contain inlets or outlets, typically of intermittent flow. Vernal pools range in both size and depth depending on landscape position and parent material(s). In most years, VPs support one or more of the following obligate species: wood frog (Rana sylvatica), spotted salamander (Ambystoma maculatum), blue spotted salamander (A. laterale) fairy shrimp (Eubrandhipus* spp.). *However, they should preclude sustainable populations of predatory fish."*

West of Penobscot Bay and south from Fryberg to Augusta, the Maine Department of Inland Fisheries and Wildlife (MDIFW) recommends evidence of VP indicator species egg masses be observed on separate dates during periods established for wood frogs (April 10$^{th}$ to April 25$^{th}$) and spotted salamanders (April 20$^{th}$ to May 10$^{th}$). Critical Terrestrial Habitat within 250 feet around an SVP is referred to as *Significant Vernal Pool Habitat* (**SVPH** Ch 335 §9A (7)) and is a form of significant wildlife habitat (38 MRSA §480-B (10)). Potential vernal pools (**PVP**s) can be identified outside (before/after) the recommended survey period, and are not necessarily indicative of regulatory jurisdiction but suggest follow up spring surveys may be warranted. Evidence of ponded water, including water-stained leaves, that could suggest a PVP was not observed during the wetland delineation.

**Regulatory Assessment:**

Activities in and adjacent to wetlands at the Site are regulated by the MDEP under the provisions of the Natural Resources Protection Act (NRPA) and associated Permit by Rule (Chapter 305), Wetland and Waterbodies Protection (Chapter 310) and Significant Wildlife Habitat (Chapter 335) Rules. Certain characteristics are relevant to whether a wetland is regulated as a "freshwater wetland of special significance" (Ch 310 §4A 1-8). Wetlands at the Site:

- do not contain a "critically imperiled (S1)" (Ch 310 §3F) or an "imperiled (S2)" (Ch 310 §3L) community as defined by the Natural Areas Program;
- do not contain significant wildlife habitat (38 MRSA §480-B (10) mapped by MDIFW;
- are not located within 250 feet of a "coastal wetland" (38 MRSA §480-B (2));
- are not located within 250 feet of a "great pond" (38 MRSA §465-A);
- do not contain more than 20,000 square feet of open water or aquatic or emergent marsh vegetation;
- do not occur in a 100-year floodplain mapped by the Federal Emergency Management Agency (FEMA) (38 MRSA §480-B(2-D));
- are not a "peatland" (Ch 310 §3P); and
- do not occur within 25 feet of the channel of a "river, stream or brook" (38 MRSA §480-B (9)).

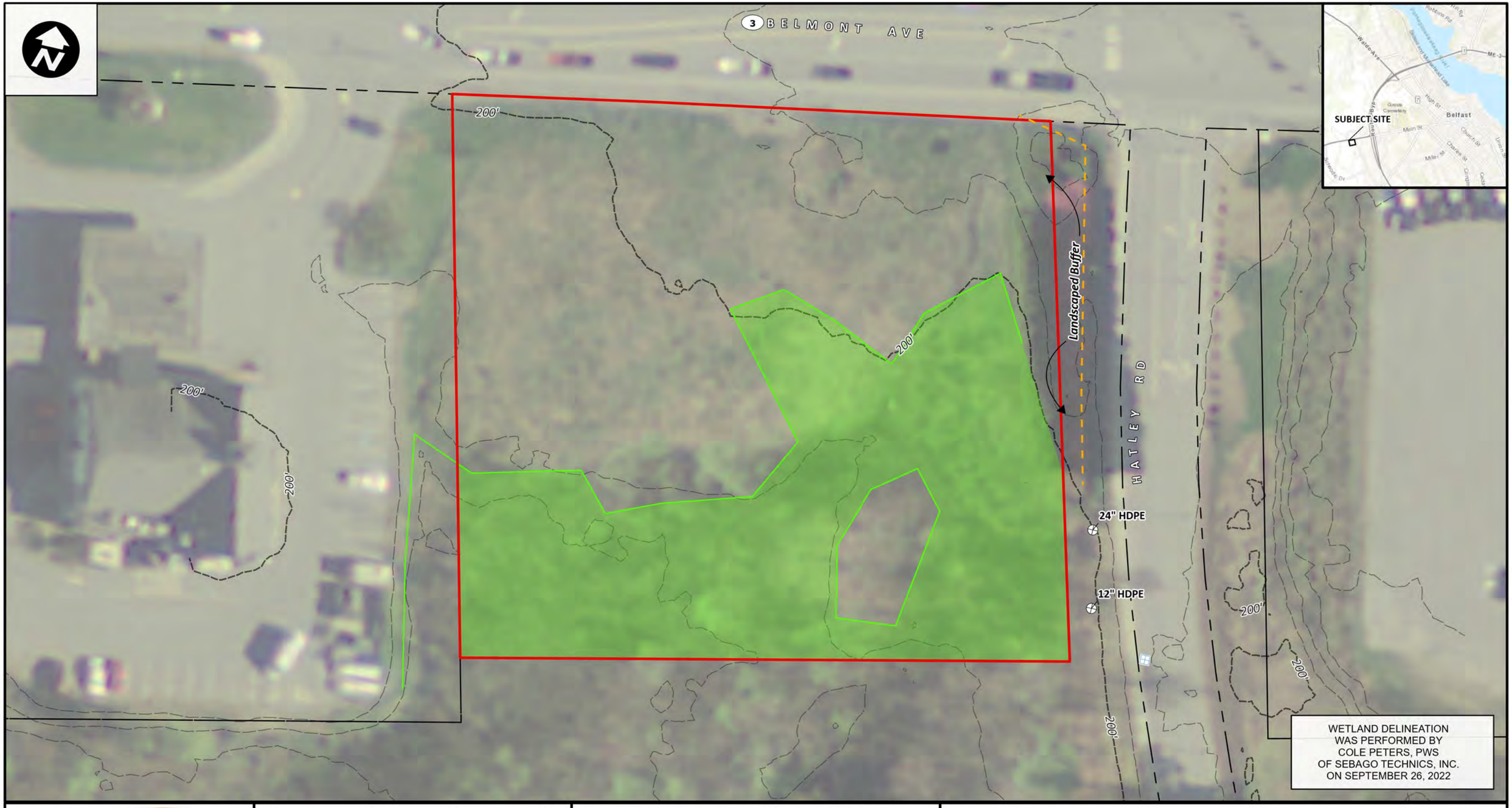
Therefore, barring any presence of significant vernal pools, wetlands at the Site are not "wetlands of special significance" (WOSS- Ch 310 §4A (1-8)).

Activities requiring alteration of less than 4,300 sq ft wetland at the Site would be a "minor alteration" and would not require a NRPA permit (38 M.R.S.A. §480 Q (17)). In excess of this but less than 15,000 sq ft would require a Tier 1 permit and a Tier 2 permit would be necessary for impacts between 15,000 sq ft and an acre (43,560 square feet). Excluding specific activities authorized by Permit by Rule (PBR - Chapter 305) provisions of the NRPA, activities exceeding one acre would require a Tier 3 permit.

Wetlands at the Site are also regulated by the USACE as "*waters of the United States*" under the provisions of Section 404 of the Clean Water Act. To authorize minimal-impact activities in wetlands, including placement of fill, the Corps makes use of a General Permit (GP) for the State of Maine. Such impacts to wetlands are broken down into two permit categories under the GP based on the following area thresholds: Category 1 – less than 15,000 square feet and Category 2 – 15,000 square feet to three acres. Activities eligible for Category 1 activities can be authorized with a Self-Verification Notification (SVN) Form submitted to the Corps. Category 2 activities are reviewed in conjunction with the US Fish and Wildlife Service, and the US Environmental Protection Agency and as appropriate the National Marine Fisheries Services, and require an application and written approval from the USACE.

**Photograph 1:** Northwestward view of the PSS1 wetland in the foreground with upland along Belmont Avenue (upper right) throughout upper center.


**Photograph 2:** Southeasterly view of a small upland island in the southeast corner of the Site.

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0 40 80 120

Feet

1" = 40' when printed at 11 x 17

# FIGURE 1: WETLAND MAP

## TAX MAP 05, LOT 12-B

INFORMATION: MAINE GEOLIBRARY
2011 USGS LIDAR
2015 ORTHOREGIONAL IMAGERY

THIS IS NOT A BOUNDARY SURVEY.
WETLAND FEATURES WERE DELINEATED
USING GPS TECHNOLOGY CAPABLE OF SUB-METER ACCURACY.

LOCATION:
0 BELMONT AVE
BELFAST, MAINE

DATE: 10/4/2022
PROJECT NUMBER: 220473

Natural Resources, 220473.aprx

- Catch Basin
- Culvert Opening
- Stone Wall
- Area of Interest (AOI)
- Tax Parcel
- Delineated Wetland Boundary
- Wetlands within AOI
- 2' Contour
- 10' Contour

Map Projection : NAD 1983 StatePlane Maine West FIPS 1802 Feet


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0 40 80 120

Feet

1" = 40' when printed at 11 x 17

# FIGURE 1: NATURAL RESOURCES MAP

TAX MAP 5, LOT 12-A

INFORMATION: MAINE GEOLIBRARY
2021 LIDAR
2018 GOOGLE EARTH IMAGERY

THIS IS NOT A BOUNDARY SURVEY.
WETLAND AND VERNAL POOL FEATURES WERE DELINEATED USING GPS TECHNOLOGY CAPABLE OF SUB-METER ACCURACY.

LOCATION:
22 BELMONT AVENUE
BELFAST, ME

DATE: 4/28/2023

PROJECT NUMBER: 220473-01

220473-01.aprx

- Subject Site
- Adjusted Tax Parcel
- 2' Contour
- 10' Contour
- Delineated Wetland Boundary
- Wetland Area

Map Projection : NAD 1983 StatePlane Maine East FIPS 1801 Feet

# Exhibit 8

## Fire Protection

**Exhibit 8 – Fire Protection**

The proposed project has been designed to be in compliance with the Town fire codes.

# Exhibit 9

## Lighting

**Exhibit 9 – Site Lighting**

No lighting additions are proposed for the site on Lot 12A. One existing light in the eastern portion of the parking area where the proposed access drive is located will be relocated approximately 25 feet south to accommodate development.

# Exhibit 10

## Stormwater Management

**Exhibit 10 – Stormwater Management**

Stormwater impacts from the proposed addition of impervious area on the eastern edge of the parcel will be graded for drainage toward the eastern boundary and directed into existing wetland area as identified on the Stormwater Narrative and Report created for Lot 12B. Please see the attached Stormwater Narrative and Report.

**Stormwater Narrative**
**Belfast Medical Building**
**Belfast, Maine**

The proposed project involves the construction of an urgent care medical building. The parcel is identified as Lot 12B on the City of Belfast Tax Map 5 and has an overall area of approximately 1.43 acres. The project will disturb approximately 0.8 acres with the development proposed to be located in the northwestern corner of the parcel. The northern half of the parcel was cleared and approximately 6,121 S.F. of wetlands were filled in the past, while the southern half of the site is undeveloped scrub-shrub wetlands. Slopes on-site are gentle in the previously cleared area, ranging from 0% to 3%, and steepening up to 10% to 20% in the approach to the wetlands, and then flattening to 0% to 3% again within the wetlands. Soil mapping available through the National Resources Conservation Service (NRCS) indicates that the existing soils on-site are of Hydrologic Soil Group C/D and portions of A in the previously filled area. A landscaped wall runs from north to south along the site's eastern boundary. Between the wall and Hatley Road there is a swale that conveys runoff south to the wetland complex. Stormwater runoff from the site generally drains from north to south, collecting into various natural swales before entering the wetland complex. The site is tributary to the Little River watershed which flows southeast into the Belfast Reservoirs and then discharges into the Atlantic Ocean. Little River is not listed by the Maine Department of Environmental Protection as an Urban Impaired Stream.

The proposed site improvements for the medical building will result in 22,780 square feet of new impervious area and approximately 32,000 square feet of new developed area. The proposed development will require a Natural Resource Protection Act (NRPA) permit through the Maine Department of Environmental Protection (MDEP) as the project results in the additional filling of approximately 8,790 S.F. of wetlands totaling 14,911 S.F. of total wetland fill. However, the proposed project will disturb less than one acre of land area; therefore, this project is not subject to MDEP stormwater standards. The proposed grading has been designed to drain stormwater runoff away from the proposed building to then collect in a series of catch basins before entering a Stormtech Chamber system. The chamber system detains stormwater runoff to match the pre-development peak flow rates by gradually discharging it into the wetland complex.

Per the Belfast City ordinances, the peak discharges for the developed site cannot exceed the peak discharge for the undeveloped site for the two- and twenty-five-year storms. One point of analysis (POA-1) was chosen for analyzing the peak runoff rates in the existing and proposed conditions. POA-1 is located in the southwestern corner of the site within the wetland complex. The following table presents the results of the peak runoff calculations at the analysis points for the existing and proposed conditions.

| Peak Runoff Rate Summary Table | | | |
|---|---|---|---|
| **Analysis Point** | **Storm Event** | **Existing Conditions (cfs)** | **Proposed Conditions (cfs)** |
| POA-1 | 2-year | 1.4 | 1.4 |
| | 25-year | 4.3 | 4.2 |

The HydroCAD Data output sheets from this analysis are appended to this report in **Appendix 1**, along with the Stormwater Management Plans in **Appendix 2**. The model predicts that the peak runoff rates in the proposed condition are equal to existing condition runoff rates for the 2-, and 25-year storm events with the implementation of the proposed stormwater management practice.

Areas of disturbance have been minimized to the greatest extent practicable. Erosion and sedimentation measures have been outlined in the attached plan set that emphasizes the installation of sedimentation barriers and vegetation to minimize potential erosion from development activities during and after construction. The erosion and sedimentation control measures outlined in the design plans include the locations of the erosion control provisions (i.e., silt fence) along with notes and construction details for reference during construction. With the incorporation of these measures, no significant impacts to off-site drainage related to erosion are anticipated due to the proposed project.

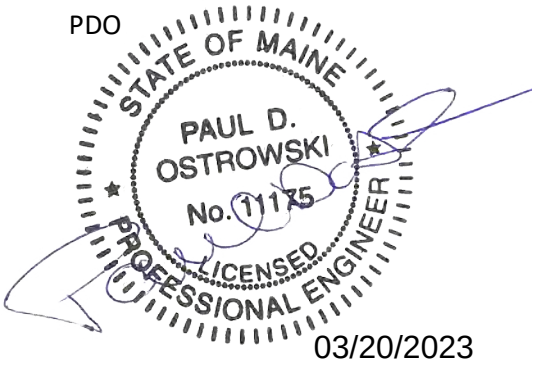
Sincerely,
SEBAGO TECHNICS, INC.

Jake S. Hunnewell, E.I.
Civil Engineer

JSH

Paul D. Ostrowski, P.E.
Senior Project Engineer

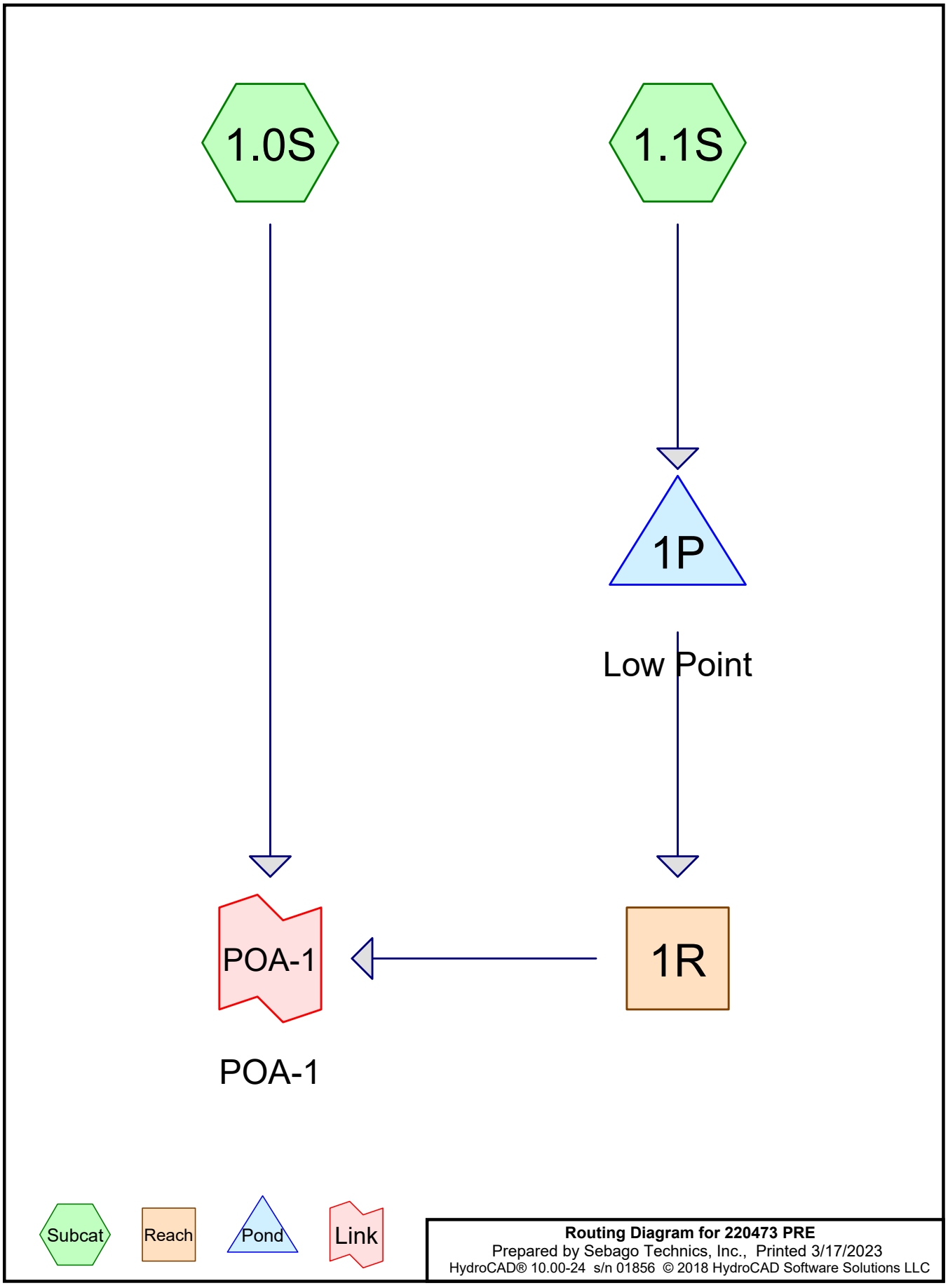
PDO




03/20/2023

# Appendix 1A

## Existing Conditions
## HydroCAD Summary




**Routing Diagram for 220473 PRE**
Prepared by Sebago Technics, Inc., Printed 3/17/2023

## Area Listing (selected nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 8,520 | 39 | >75% Grass cover, Good, HSG A (1.0S) |
| 17,870 | 80 | >75% Grass cover, Good, HSG D (1.0S, 1.1S) |
| 12,110 | 98 | Impervious Area (1.0S) |
| 300 | 30 | Woods, Good, HSG A (1.0S) |
| 43,515 | 77 | Woods, Good, HSG D (1.0S, 1.1S) |
| **82,315** | **77** | **TOTAL AREA** |

## Summary for Subcatchment 1.0S:

Runoff = 3.1 cfs @ 12.24 hrs, Volume= 13,721 cf, Depth= 2.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 12,110 | 98 | Impervious Area |
| | 300 | 30 | Woods, Good, HSG A |
| | 31,745 | 77 | Woods, Good, HSG D |
| | 8,520 | 39 | >75% Grass cover, Good, HSG A |
| | 8,280 | 80 | >75% Grass cover, Good, HSG D |
| | 60,955 | 76 | Weighted Average |
| | 48,845 | | 80.13% Pervious Area |
| | 12,110 | | 19.87% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 11.7 | 84 | 0.0260 | 0.12 | | **Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 2.90" |
| 1.3 | 92 | 0.0270 | 1.15 | | **Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps |
| 4.8 | 194 | 0.0180 | 0.67 | | **Shallow Concentrated Flow, C-D** Woodland Kv= 5.0 fps |
| 17.8 | 370 | Total | | | |

## Summary for Subcatchment 1.1S:

Runoff = 1.7 cfs @ 12.09 hrs, Volume= 5,130 cf, Depth= 2.88"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| Area (sf) | CN | Description |
|---|---|---|
| 11,770 | 77 | Woods, Good, HSG D |
| 9,590 | 80 | >75% Grass cover, Good, HSG D |
| 21,360 | 78 | Weighted Average |
| 21,360 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 30 | 0.1030 | 0.17 | | **Sheet Flow, A to B** Grass: Dense n= 0.240 P2= 2.90" |
| 0.7 | 70 | 0.0500 | 1.57 | | **Shallow Concentrated Flow, B-C** Short Grass Pasture Kv= 7.0 fps |
| 1.6 | 84 | 0.0297 | 0.86 | | **Shallow Concentrated Flow, C to D** Woodland Kv= 5.0 fps |
| 0.7 | | | | | **Direct Entry,** |
| 6.0 | 184 | Total | | | |

## Summary for Reach 1R:

Inflow Area = 21,360 sf, 0.00% Impervious, Inflow Depth = 2.84" for 25-YR event
Inflow = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf
Outflow = 1.3 cfs @ 12.17 hrs, Volume= 5,052 cf, Atten= 20%, Lag= 3.9 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.40 fps, Min. Travel Time= 7.5 min
Avg. Velocity = 0.11 fps, Avg. Travel Time= 27.2 min

Peak Storage= 570 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.12'
Bank-Full Depth= 0.50' Flow Area= 22.5 sf, Capacity= 19.9 cfs

20.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 70.00'
Length= 180.0' Slope= 0.0161 '/'
Inlet Invert= 197.19', Outlet Invert= 194.30'

‡

## Summary for Pond 1P: Low Point

Inflow Area = 21,360 sf, 0.00% Impervious, Inflow Depth = 2.88" for 25-YR event
Inflow = 1.7 cfs @ 12.09 hrs, Volume= 5,130 cf
Outflow = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf, Atten= 3%, Lag= 1.1 min
Primary = 1.6 cfs @ 12.11 hrs, Volume= 5,052 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs
Peak Elev= 197.47' @ 12.11 hrs Surf.Area= 657 sf Storage= 221 cf

Plug-Flow detention time= 16.1 min calculated for 5,052 cf (98% of inflow)
Center-of-Mass det. time= 6.9 min ( 832.3 - 825.4 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 196.65' | 717 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 196.65 | 2 | 0 | 0 |
| 197.00 | 162 | 29 | 29 |
| 198.00 | 1,215 | 689 | 717 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 197.19' | **5.0' long x 5.0' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50<br>Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88 |

**Primary OutFlow** Max=1.6 cfs @ 12.11 hrs HW=197.47' TW=197.30' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 1.6 cfs @ 1.14 fps)

## Summary for Link POA-1: POA-1

Inflow Area = 82,315 sf, 14.71% Impervious, Inflow Depth = 2.74" for 25-YR event
Inflow = 4.3 cfs @ 12.23 hrs, Volume= 18,773 cf
Primary = 4.3 cfs @ 12.23 hrs, Volume= 18,773 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-50.00 hrs, dt= 0.01 hrs

Time span=0.00-50.00 hrs, dt=0.01 hrs, 5001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.0S:** Runoff Area=60,955 sf 19.87% Impervious Runoff Depth=0.95"
Flow Length=370' Tc=17.8 min CN=76 Runoff=1.0 cfs 4,817 cf

**Subcatchment1.1S:** Runoff Area=21,360 sf 0.00% Impervious Runoff Depth=1.06"
Flow Length=184' Tc=6.0 min CN=78 Runoff=0.6 cfs 1,884 cf

**Reach 1R:** Avg. Flow Depth=0.06' Max Vel=0.27 fps Inflow=0.6 cfs 1,805 cf
n=0.100 L=180.0' S=0.0161 '/' Capacity=19.9 cfs Outflow=0.4 cfs 1,805 cf

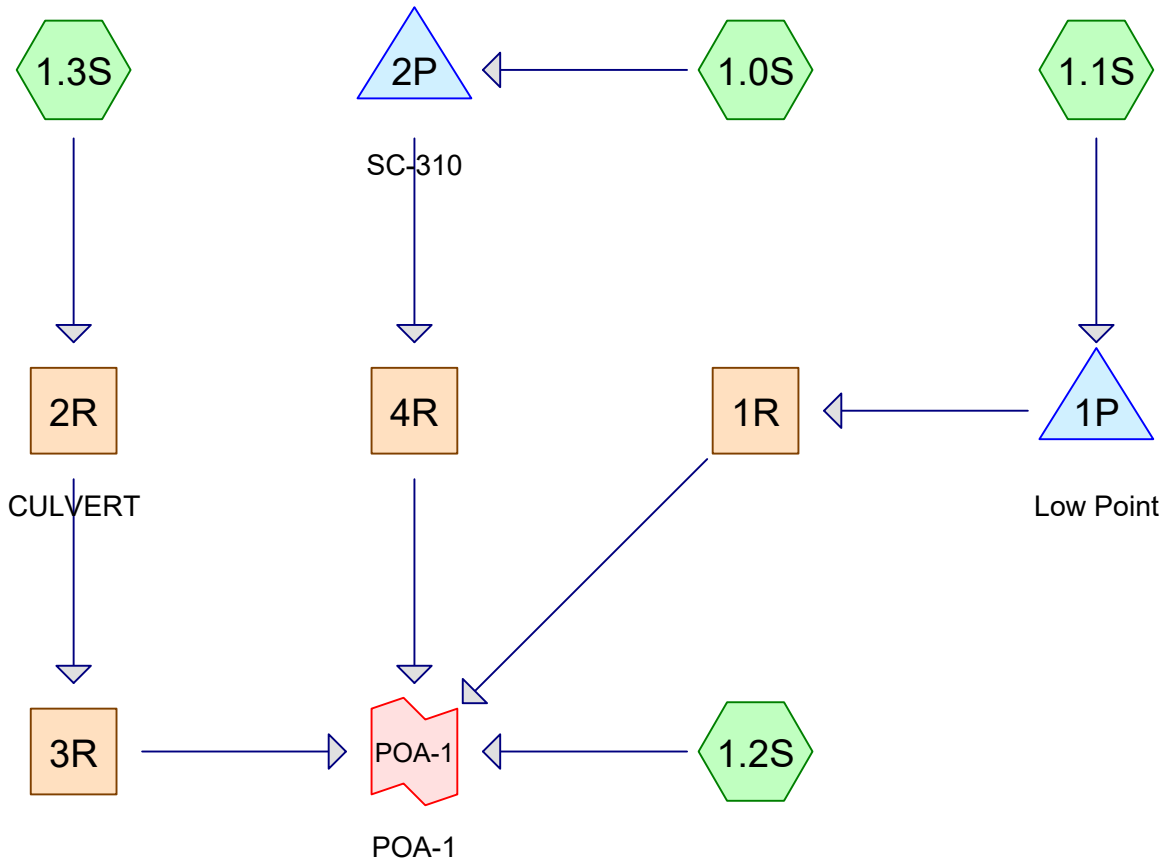
**Pond 1P: Low Point** Peak Elev=197.33' Storage=139 cf Inflow=0.6 cfs 1,884 cf
Outflow=0.6 cfs 1,805 cf

**Link POA-1: POA-1** Inflow=1.4 cfs 6,622 cf
Primary=1.4 cfs 6,622 cf

**Total Runoff Area = 82,315 sf Runoff Volume = 6,700 cf Average Runoff Depth = 0.98"**
**85.29% Pervious = 70,205 sf 14.71% Impervious = 12,110 sf**

# Appendix 1B

## Proposed Conditions
## HydroCAD Summary




Subcat Reach Pond Link

**Routing Diagram for 220473 POST**
Prepared by Sebago Technics, Inc., Printed 3/17/2023

## Area Listing (selected nodes)

| Area (sq-ft) | CN | Description (subcatchment-numbers) |
|---|---|---|
| 8,380 | 39 | >75% Grass cover, Good, HSG A (1.3S) |
| 16,075 | 80 | >75% Grass cover, Good, HSG D (1.0S, 1.1S, 1.2S, 1.3S) |
| 13,940 | 98 | IMPERVIOUS (1.2S, 1.3S) |
| 20,950 | 98 | Impervious Area (1.0S) |
| 125 | 30 | Woods, Good, HSG A (1.3S) |
| 22,845 | 77 | Woods, Good, HSG D (1.1S, 1.2S, 1.3S) |
| **82,315** | **83** | **TOTAL AREA** |

## Summary for Subcatchment 1.0S:

Runoff = 2.7 cfs @ 12.08 hrs, Volume= 9,108 cf, Depth= 4.73"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| | Area (sf) | CN | Description |
|---|---|---|---|
| * | 20,950 | 98 | Impervious Area |
| | 2,150 | 80 | >75% Grass cover, Good, HSG D |
| | 23,100 | 96 | Weighted Average |
| | 2,150 | | 9.31% Pervious Area |
| | 20,950 | | 90.69% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 6.0 | | | | | **Direct Entry, min** |

## Summary for Subcatchment 1.1S:

Runoff = 1.3 cfs @ 12.09 hrs, Volume= 4,069 cf, Depth= 2.97"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| Area (sf) | CN | Description |
|---|---|---|
| 8,185 | 77 | Woods, Good, HSG D |
| 8,230 | 80 | >75% Grass cover, Good, HSG D |
| 16,415 | 79 | Weighted Average |
| 16,415 | | 100.00% Pervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 3.0 | 30 | 0.1030 | 0.17 | | **Sheet Flow, A to B**<br>Grass: Dense n= 0.240 P2= 2.90" |
| 0.7 | 70 | 0.0500 | 1.57 | | **Shallow Concentrated Flow, B-C**<br>Short Grass Pasture Kv= 7.0 fps |
| 1.6 | 84 | 0.0297 | 0.86 | | **Shallow Concentrated Flow, C to D**<br>Woodland Kv= 5.0 fps |
| 0.7 | | | | | **Direct Entry,** |
| 6.0 | 184 | Total | | | |

## Summary for Subcatchment 1.2S:

Runoff = 1.1 cfs @ 12.40 hrs, Volume= 6,153 cf, Depth= 3.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| | Area (sf) | CN | Description |
|---|---|---|---|
| | 12,505 | 77 | Woods, Good, HSG D |
| * | 5,350 | 98 | IMPERVIOUS |
| | 4,150 | 80 | >75% Grass cover, Good, HSG D |
| | 22,005 | 83 | Weighted Average |
| | 16,655 | | 75.69% Pervious Area |
| | 5,350 | | 24.31% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 25.5 | 77 | 0.0350 | 0.05 | | **Sheet Flow, A-B** Woods: Dense underbrush n= 0.800 P2= 2.90" |
| 3.8 | 138 | 0.0145 | 0.60 | | **Shallow Concentrated Flow, B-C** Woodland Kv= 5.0 fps |
| 29.3 | 215 | Total | | | |

## Summary for Subcatchment 1.3S:

Runoff = 1.0 cfs @ 12.17 hrs, Volume= 3,788 cf, Depth= 2.19"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=5.20"

| | Area (sf) | CN | Description |
|---|---|---|---|
| | 1,545 | 80 | >75% Grass cover, Good, HSG D |
| | 2,155 | 77 | Woods, Good, HSG D |
| * | 8,590 | 98 | IMPERVIOUS |
| | 125 | 30 | Woods, Good, HSG A |
| | 8,380 | 39 | >75% Grass cover, Good, HSG A |
| | 20,795 | 70 | Weighted Average |
| | 12,205 | | 58.69% Pervious Area |
| | 8,590 | | 41.31% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description |
|---|---|---|---|---|---|
| 9.0 | 40 | 0.0115 | 0.07 | | **Sheet Flow, A-B** Grass: Dense n= 0.240 P2= 2.90" |
| 0.0 | 5 | 0.0160 | 2.57 | | **Shallow Concentrated Flow, B-C** Paved Kv= 20.3 fps |
| 1.8 | 129 | 0.0307 | 1.23 | | **Shallow Concentrated Flow, C-D** Short Grass Pasture Kv= 7.0 fps |
| 1.4 | 55 | 0.0182 | 0.67 | | **Shallow Concentrated Flow, D-E** Woodland Kv= 5.0 fps |
| 12.2 | 229 | Total | | | |

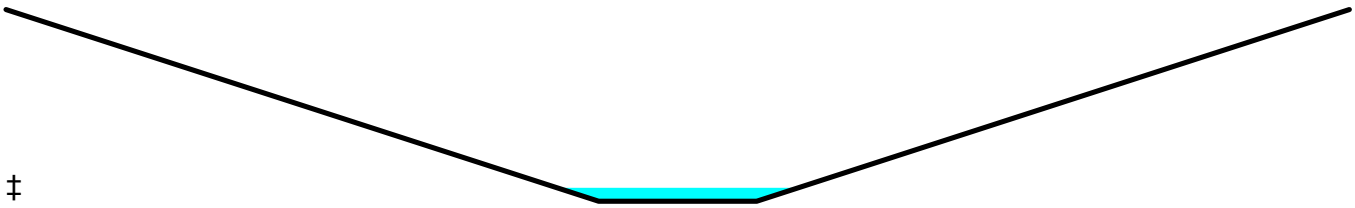
## Summary for Reach 1R:

Inflow Area = 16,415 sf, 0.00% Impervious, Inflow Depth = 2.92" for 25-YR event
Inflow = 1.3 cfs @ 12.10 hrs, Volume= 4,000 cf
Outflow = 1.0 cfs @ 12.17 hrs, Volume= 4,000 cf, Atten= 21%, Lag= 4.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.38 fps, Min. Travel Time= 7.7 min
Avg. Velocity = 0.14 fps, Avg. Travel Time= 21.5 min

Peak Storage= 467 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.11'
Bank-Full Depth= 1.50' Flow Area= 142.5 sf, Capacity= 242.3 cfs

20.00' x 1.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 170.00'
Length= 175.0' Slope= 0.0166 '/'
Inlet Invert= 197.20', Outlet Invert= 194.30'



‡

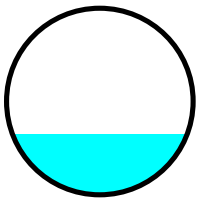
## Summary for Reach 2R: CULVERT

Inflow Area = 20,795 sf, 41.31% Impervious, Inflow Depth = 2.19" for 25-YR event
Inflow = 1.0 cfs @ 12.17 hrs, Volume= 3,788 cf
Outflow = 1.0 cfs @ 12.18 hrs, Volume= 3,788 cf, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.41 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 1.73 fps, Avg. Travel Time= 0.6 min

Peak Storage= 13 cf @ 12.18 hrs
Average Depth at Peak Storage= 0.33'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.3 cfs

12.0" Round Pipe
n= 0.012 Corrugated PP, smooth interior
Length= 57.3' Slope= 0.0122 '/'
Inlet Invert= 196.50', Outlet Invert= 195.80'



## Summary for Reach 3R:

Inflow Area = 20,795 sf, 41.31% Impervious, Inflow Depth = 2.19" for 25-YR event
Inflow = 1.0 cfs @ 12.18 hrs, Volume= 3,788 cf
Outflow = 0.9 cfs @ 12.22 hrs, Volume= 3,788 cf, Atten= 5%, Lag= 2.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.42 fps, Min. Travel Time= 3.3 min
Avg. Velocity = 0.14 fps, Avg. Travel Time= 9.6 min

Peak Storage= 183 cf @ 12.22 hrs
Average Depth at Peak Storage= 0.13'
Bank-Full Depth= 0.50' Flow Area= 17.5 sf, Capacity= 15.5 cfs

10.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 60.00'
Length= 82.0' Slope= 0.0183 '/'
Inlet Invert= 195.80', Outlet Invert= 194.30'

‡

## Summary for Reach 4R:

Inflow Area = 23,100 sf, 90.69% Impervious, Inflow Depth = 4.65" for 25-YR event
Inflow = 1.6 cfs @ 12.18 hrs, Volume= 8,959 cf
Outflow = 1.5 cfs @ 12.23 hrs, Volume= 8,959 cf, Atten= 11%, Lag= 2.7 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.47 fps, Min. Travel Time= 2.9 min
Avg. Velocity = 0.12 fps, Avg. Travel Time= 11.6 min

Peak Storage= 256 cf @ 12.23 hrs
Average Depth at Peak Storage= 0.17'
Bank-Full Depth= 0.50' Flow Area= 17.5 sf, Capacity= 15.4 cfs

10.00' x 0.50' deep channel, n= 0.100 Earth, dense brush, high stage
Side Slope Z-value= 50.0 '/' Top Width= 60.00'
Length= 83.0' Slope= 0.0181 '/'
Inlet Invert= 195.80', Outlet Invert= 194.30'

‡

## Summary for Pond 1P: Low Point

Inflow Area = 16,415 sf, 0.00% Impervious, Inflow Depth = 2.97" for 25-YR event
Inflow = 1.3 cfs @ 12.09 hrs, Volume= 4,069 cf
Outflow = 1.3 cfs @ 12.10 hrs, Volume= 4,000 cf, Atten= 3%, Lag= 1.0 min
Primary = 1.3 cfs @ 12.10 hrs, Volume= 4,000 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 197.44' @ 12.11 hrs Surf.Area= 535 sf Storage= 170 cf

Plug-Flow detention time= 17.0 min calculated for 3,999 cf (98% of inflow)
Center-of-Mass det. time= 6.9 min ( 829.6 - 822.7 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1 | 196.65' | 619 cf | **Custom Stage Data (Prismatic)** Listed below (Recalc) |

| Elevation (feet) | Surf.Area (sq-ft) | Inc.Store (cubic-feet) | Cum.Store (cubic-feet) |
|---|---|---|---|
| 196.65 | 2 | 0 | 0 |
| 197.00 | 135 | 24 | 24 |
| 198.00 | 1,055 | 595 | 619 |

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 197.19' | **5.0' long x 5.0' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50<br>Coef. (English) 2.34 2.50 2.70 2.68 2.68 2.66 2.65 2.65 2.65 2.65 2.67 2.66 2.68 2.70 2.74 2.79 2.88 |

**Primary OutFlow** Max=1.3 cfs @ 12.10 hrs HW=197.43' TW=197.30' (Dynamic Tailwater)
↑—**1=Broad-Crested Rectangular Weir** (Weir Controls 1.3 cfs @ 1.03 fps)

## Summary for Pond 2P: SC-310

Inflow Area = 23,100 sf, 90.69% Impervious, Inflow Depth = 4.73" for 25-YR event
Inflow = 2.7 cfs @ 12.08 hrs, Volume= 9,108 cf
Outflow = 1.6 cfs @ 12.18 hrs, Volume= 8,959 cf, Atten= 38%, Lag= 5.9 min
Primary = 1.6 cfs @ 12.18 hrs, Volume= 8,959 cf

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Peak Elev= 197.88' @ 12.18 hrs Surf.Area= 1,848 sf Storage= 2,012 cf

Plug-Flow detention time= 46.0 min calculated for 8,957 cf (98% of inflow)
Center-of-Mass det. time= 35.6 min ( 797.1 - 761.5 )

| Volume | Invert | Avail.Storage | Storage Description |
|---|---|---|---|
| #1A | 196.00' | 1,312 cf | **34.83'W x 53.04'L x 2.33'H Field A**<br>4,311 cf Overall - 1,032 cf Embedded = 3,279 cf x 40.0% Voids |
| #2A | 196.50' | 1,032 cf | **ADS_StormTech SC-310 +Cap** x 70 Inside #1<br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap |

70 Chambers in 10 Rows

2,344 cf Total Available Storage

Storage Group A created with Chamber Wizard

| Device | Routing | Invert | Outlet Devices |
|---|---|---|---|
| #1 | Primary | 196.20' | **15.0" Round Culvert**<br>L= 14.0' CMP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 196.20' / 195.80' S= 0.0286 '/' Cc= 0.900<br>n= 0.012 Corrugated PP, smooth interior, Flow Area= 1.23 sf |
| #2 | Device 1 | 197.70' | **4.0' long x 0.5' breadth Broad-Crested Rectangular Weir**<br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32 |
| #3 | Device 1 | 196.20' | **6.0" W x 3.0" H Vert. Rectangular Orifice** C= 0.600 |

**Primary OutFlow** Max=1.6 cfs @ 12.18 hrs HW=197.88' TW=195.95' (Dynamic Tailwater)
- **1=Culvert** (Passes 1.6 cfs of 4.8 cfs potential flow)
  - **2=Broad-Crested Rectangular Weir** (Weir Controls 0.9 cfs @ 1.20 fps)
  - **3=Rectangular Orifice** (Orifice Controls 0.8 cfs @ 6.01 fps)

## Summary for Link POA-1: POA-1

Inflow Area = 82,315 sf, 42.39% Impervious, Inflow Depth = 3.34" for 25-YR event
Inflow = 4.2 cfs @ 12.23 hrs, Volume= 22,899 cf
Primary = 4.2 cfs @ 12.23 hrs, Volume= 22,899 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

**Subcatchment1.0S:** Runoff Area=23,100 sf 90.69% Impervious Runoff Depth=2.45"
Tc=6.0 min CN=96 Runoff=1.4 cfs 4,723 cf

**Subcatchment1.1S:** Runoff Area=16,415 sf 0.00% Impervious Runoff Depth=1.12"
Flow Length=184' Tc=6.0 min CN=79 Runoff=0.5 cfs 1,526 cf

**Subcatchment1.2S:** Runoff Area=22,005 sf 24.31% Impervious Runoff Depth=1.37"
Flow Length=215' Tc=29.3 min CN=83 Runoff=0.5 cfs 2,506 cf

**Subcatchment1.3S:** Runoff Area=20,795 sf 41.31% Impervious Runoff Depth=0.66"
Flow Length=229' Tc=12.2 min CN=70 Runoff=0.3 cfs 1,143 cf

**Reach 1R:** Avg. Flow Depth=0.05' Max Vel=0.25 fps Inflow=0.5 cfs 1,457 cf
n=0.100 L=175.0' S=0.0166 '/' Capacity=242.3 cfs Outflow=0.3 cfs 1,457 cf

**Reach 2R: CULVERT** Avg. Flow Depth=0.17' Max Vel=2.98 fps Inflow=0.3 cfs 1,143 cf
12.0" Round Pipe n=0.012 L=57.3' S=0.0122 '/' Capacity=4.3 cfs Outflow=0.3 cfs 1,143 cf

**Reach 3R:** Avg. Flow Depth=0.06' Max Vel=0.28 fps Inflow=0.3 cfs 1,143 cf
n=0.100 L=82.0' S=0.0183 '/' Capacity=15.5 cfs Outflow=0.2 cfs 1,143 cf

**Reach 4R:** Avg. Flow Depth=0.10' Max Vel=0.35 fps Inflow=0.5 cfs 4,574 cf
n=0.100 L=83.0' S=0.0181 '/' Capacity=15.4 cfs Outflow=0.5 cfs 4,574 cf

**Pond 1P: Low Point** Peak Elev=197.32' Storage=112 cf Inflow=0.5 cfs 1,526 cf
Outflow=0.5 cfs 1,457 cf

**Pond 2P: SC-310** Peak Elev=197.07' Storage=1,172 cf Inflow=1.4 cfs 4,723 cf
Outflow=0.5 cfs 4,574 cf

**Link POA-1: POA-1** Inflow=1.4 cfs 9,680 cf
Primary=1.4 cfs 9,680 cf

**Total Runoff Area = 82,315 sf Runoff Volume = 9,898 cf Average Runoff Depth = 1.44"**
**57.61% Pervious = 47,425 sf 42.39% Impervious = 34,890 sf**

# Appendix 2

## Stormwater Plans

N

GRID

## EXISTING CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH (A — — — B)
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## SOIL TABLE

| SYMBOL | NAME | SLOPE | HYDROLOGIC SOIL GROUP |
|---|---|---|---|
| Ud | UDORTHENTS-URBANLAND COMPLEX | 0-3% | A |
| Sw | SWANVILLE | 0-3% | C/D |
| PbB | PERU | 0-8% | C/D |

1.1S

1.0S

1P

1R

POA-1

HSG A
HSG C/D

HSG C/D
HSG C/D

BM-1

GRAPHIC SCALE

20 0 10 20 40

(IN FEET)
1 INCH = 20 FT.

| REV | BY | DATE | STATUS |
|---|---|---|---|
| A | ABS | 03/21/2023 | SUBMITTED FOR TOWN REVIEW |



PAUL D. OSTROWSKI, PE 11175

STATE OF MAINE · PAUL D OSTROWSKI No. 11175 · LICENSED PROFESSIONAL ENGINEER · 03/20/2023

AMY BELL SEGAL, RLA 2265

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd., Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

EXISTING CONDITIONS STORMWATER PLAN

OF:
BELFAST MEDICAL BUILDING
BELMONT AVE
BELFAST, MAINE

FOR:
PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, MAINE 04104

| | |
|---|---|
| DESIGNED | EOR |
| DRAWN | RGL |
| CHECKED | ABS |
| DATE | 12/02/2022 |
| SCALE | 1" = 20' |
| PROJECT | 220473 |

SHEET 1 OF 2

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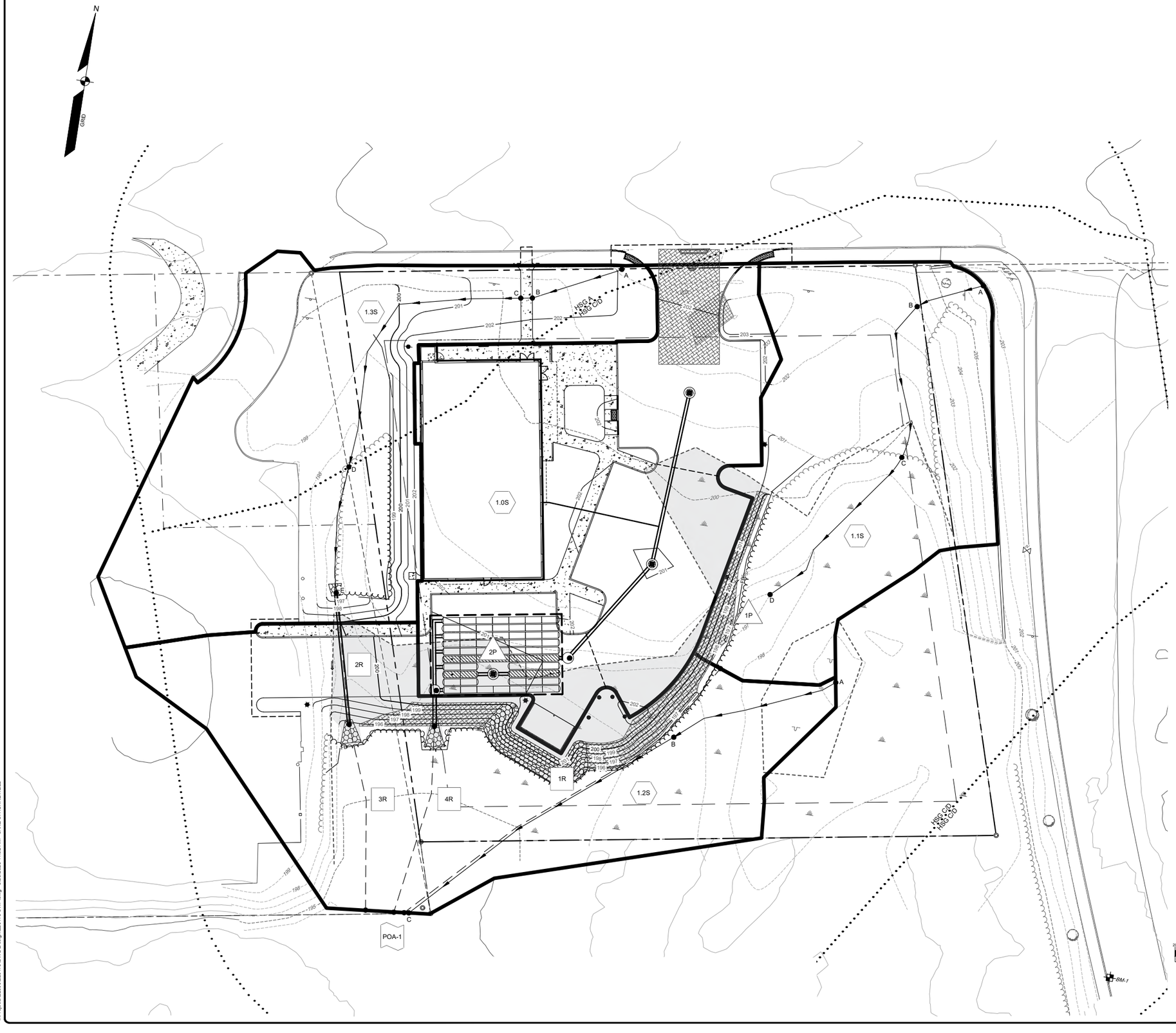
220473 SWP.dwg - TAB EXISTING CONDITIONS STORMWATER PLAN




## PROPOSED CONDITIONS LEGEND

- WATERSHED BOUNDARY
- TIME OF CONCENTRATION (A — B)
- REACH (A — B)
- #### SUBCATCHMENT LABEL
- #### REACH
- #### POINT OF ANALYSIS
- #### STORMWATER TREATMENT/DETENTION POND
- HSG # / HSG # SOILS BOUNDARY

## SOIL TABLE

| SYMBOL | NAME | SLOPE | HYDROLOGIC SOIL GROUP |
|---|---|---|---|
| Ud | UDORTHENTS-URBANLAND COMPLEX | 0-3% | A |
| Sw | SWANVILLE | 0-3% | C/D |
| PbB | PERU | 0-8% | C/D |

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 INCH = 20 FT.

PAUL D. OSTROWSKI, PE 11175
AMY BELL SEGAL, RLA 2265

STATE OF MAINE — PAUL D OSTROWSKI No. 11175 — LICENSED PROFESSIONAL ENGINEER — 03/20/2023

| REV | BY | DATE | STATUS |
|---|---|---|---|
| A | ABS | 03/21/2023 | SUBMITTED FOR TOWN REVIEW |



SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROPOSED CONDITIONS STORMWATER PLAN
OF:
BELFAST MEDICAL BUILDING
BELMONT AVE
BELFAST, MAINE
FOR:
PARKINGWAY MANAGEMENT, LLC
P.O. BOX 963
PORTLAND, MAINE 04104

| | |
|---|---|
| DESIGNED | EOR |
| DRAWN | RGL |
| CHECKED | ABS |
| DATE | 12/02/2022 |
| SCALE | 1" = 20' |
| PROJECT | 220473 |

SHEET 2 OF 2

I:\Projects\2200\220473\DWG\Design\220473 SWP.dwg - 3/20/2023 11:02 AM - JAKE S. HUNNEWELL

220473 SWP.dwg - TAB PROPOSED CONDITIONS

# Exhibit 11

## Standards

(1) Pollution. The proposed development will not result in undue water or air pollution. In making this determination, consideration shall be given to:

a. The elevation of the land above sea level and its relation to the floodplain(compliance with chapter 78, article II).

***Response: The proposed development area is not located in FEMA floodplains. Please see the Flood Map Exhibit in Section 7.***

b. The nature of soils and subsoils and their ability to adequately support waste disposal.

***Response: Please see the Soil Survey Map Exhibit in Section 7.***

c. The slope of the land and its effect on effluents.

***Response: The development layout and stormwater features have been designed to integrate with the terrain of the land to the greatest extent practicable. The proposed grading has been designed to drain stormwater runoff away from the existing building to then flow into the wetland complex. Please see Exhibit 10, Stormwater Management.***

d. The availability of streams for disposal of effluents.

***Response: The development layout and features will allow for the safe detention and controlled release of runoff to match the pre-development peak flow rates for discharge into the wetland complex. Please see Exhibit 10, Stormwater Management.***

e. The applicable state and local health and water resource rules, regulations and codes.

***Response: No water or sewer development is proposed on Lot 12A.***

(2) Sufficient water. The proposed development has sufficient water available for the reasonable foreseeable needs of the development and will not unreasonably affect other existing local drinking water resources.

***Response: Not Applicable.***

(3) Municipal water supply. The proposed development will not cause an unreasonable burden on an existing municipal water supply, if one is to be used.

***Response: Not Applicable.***

(4) Soil erosion and sediment control. The proposed development will not cause unreasonable soil erosion or a reduction in the land's capacity to hold water so that a dangerous or unhealthy condition results. The criteria in Maine Erosion and Sediment Control Handbook for Construction, Best Management Practices, prepared by Cumberland County SWCD and the state department of environmental protection, 1991, shall be followed.

***Response: The project design will not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that dangerous or unhealthy conditions may result. Areas of disturbance have been minimized to the greatest extent practicable. Erosion and sedimentation measures have been outlined in the attached plan set that emphasizes the installation of sedimentation barriers and vegetation to minimize potential erosion from development activities during and after construction.***

(5) Highway or public road congestion. The proposed development will not cause unreasonable highway or public road congestion or unsafe conditions with respect to the use of the highways or public roads existing or proposed, and, furthermore, the developer has made adequate provision for traffic movement of all types into, out of or within the development area. The board shall consider traffic movement both on-site and off-site. Before issuing a permit, the board shall find that any traffic increase attributable to the proposed development will not result in unreasonable congestion or unsafe conditions on a road in the vicinity of the proposed development. A traffic study may be required.

***Response: The proposed project will not result in unreasonable road congestion or unsafe conditions. Please see Exhibit 6 for a Traffic Memorandum dated March 17, 2023 from Sebago Technics Inc.***

(6) Sewage waste disposal. The proposed development will provide adequate sewage waste disposal in compliance with federal, state and local laws, rules, ordinances and regulations.

***Response: The proposed development would connect to the existing 12-inch main sewer located within Belmont Avenue in accordance with all laws, rules, ordinances, and regulations. Please see the plan set.***

(7) Municipal solid waste and sewage waste disposal. The proposed development will not cause an unreasonable burden on the City's ability to dispose of solid waste and sewage. If municipal services are to be utilized, a letter from the City indicating current capacity and availability of municipal sewer shall be
submitted for the record.

***Response: The proposed development will not affect the project site's current solid waste and sewage disposal.***

(8) Aesthetic, cultural and natural values. The proposed development will not have an undue adverse effect on the scenic or natural beauty of the area, aesthetics, historic sites, archeological sites, significant wildlife habitat identified by the state department of inland fisheries and wildlife or the City as
rare and irreplaceable natural areas or any public rights for physical or visual access to the shoreline.

***Response: No undue adverse effect on scenic or natural beauty areas, aesthetics, historic sites, rare, irreplaceable natural areas, or any public rights for physical or visual access to the shoreline is associated with the project.***

(9) Conformity with City ordinances and plans. The proposed development conforms with the floodplain regulations (chapter 78, article II), the comprehensive plan, the zoning regulations (chapter 102), the shoreland zoning regulations (chapter 82), the subdivision ordinance, and the technical standards (chapter 98).

***Response: The project is in conformance with City ordinances and plans including floodplain regulations, the comprehensive plan, the zoning regulations, the shoreland zoning regulations, and the technical standards.***

(10) Financial and technical capacity. The developer has adequate financial and technical ability to develop the project in a manner consistent with state and local performance, environmental and technical standards.

***Response: The applicants have previous, successful development experience on similar projects, and the financial liquidity and technical ability to develop this project. Please see Exhibit 3, Financial Capacity.***

(11) Surface waters; outstanding river segments. Whenever situated entirely or partially within the watershed of any pond or lake or within 250 feet of any wetland, great pond or river as defined in 38 M.R.S.A. chapter 3, subchapter I, article 2-B, the proposed development will not adversely affect the quality of that body of water or unreasonably affect the shoreline of that body of water.

***Response: Impacts to wetlands were avoided when practicable by positioning site elements to maximize use of upland areas and limiting grading to avoid alternations when possible. The area of wetland alteration generally occurs along the driveway access and parking. Additionally, efforts were made to not fragment the wetland. The proposed impacts are along the edge of the wetland and the remaining wetland will not be disconnected or fragmented by the development.***

(12) Groundwater. The proposed development will not, alone or in conjunction with existing activities, adversely affect the quality or quantity of groundwater or any public or private water source.

***Response: The quality of groundwater is protected by proper installation of stormwater runoff grading. The project is not located over a significant sand or gravel aquifer as identified by Maine Geological Survey.***

(13) Flood areas. If the development or any part of it is located in a flood prone area, based on the Federal Emergency Management Agency's flood boundary and floodway maps and flood insurance rate maps and information presented by the applicant, then the developer shall determine the one-hundred-year flood
elevation and flood hazard boundaries within the development. All structures in the proposed development must be constructed with their lowest floor, including the basement, at least two feet above the one-hundred-year elevation.

***Response: The area of proposed development is not located in FEMA floodplains. Please see the Flood Map Exhibit in Section 7.***

(14) Freshwater wetlands. All mapped freshwater wetlands within the proposed development shall be identified on plans submitted as part of the application.

***Response: All mapped freshwater wetlands on the parcel of the proposed development have been outlined in the attached plan set.***

(15) Rivers or streams. Any river or stream within or abutting the proposed development shall be identified on maps submitted as part of the application. For purposes of this section, the terms "river" and "stream" are defined as provided in section 90-1.

***Response: Not applicable. The proposed development does not contain or abut any river or stream as defined in section 90-1.***

(16) Stormwater. The proposed development will provide for adequate stormwater management.

***Response: The development layout and stormwater features have been designed to integrate with the terrain of the land to the greatest extent practicable and provides for***

***the safe detention and controlled release of runoff to match the pre-development peak flow rates. Please see Exhibit 10, Stormwater Management.***

(17) Access to direct sunlight for abutting property owner for solar energy system. The planning board may, to protect and ensure access to direct sunlight for solar energy systems, prohibit, restrict or control development. The developer shall, on request of the planning board or code enforcement officer, submit
development plans which include either one or a combination of the following:
a. Restrictive covenants.
b. Height restrictions.
c. Increased setback requirements.

***Response: Acknowledged.***

(18) Solid waste management. The proposed development will provide for adequate disposal of solid wastes. All solid waste will be disposed of at a licensed disposal facility having adequate capacity to accept the project's waste.

***Response: Not Applicable.***

(19) Exterior lighting. The proposed development will provide for adequate exterior lighting to provide for the safe use of the development in nighttime hours if such use is contemplated. All exterior lighting will be designed and shielded to avoid undue glare and adverse impact on neighboring properties and rights-of-way.

***Response: The existing exterior lighting on the project site will remain mostly unchanged, and no additional exterior lighting is proposed. One existing parking lot light in the area of the proposed connection will be relocated approximately 25 feet to the south to accommodate development.***

(20) Buffering of adjacent uses. The development will provide for the buffering of adjacent uses where there is a transition from one type of use to another use and for the screening of service and storage areas. The buffer may be provided by distance, landscaping, fencing, changes in grade, and/or a combination of these or other techniques.

***Response: The design protects trees and follows existing terrain where practicable. Existing vegetation will be retained to provide buffering and landscaping will be used where practicable to provide additional buffering. Please see the plan set.***

(21) Noise. The development will control noise levels such that it will not create unreasonable interference with use and enjoyment of neighboring properties.

***Response: The proposed development will not create noise levels such that it would create unreasonable interference with the use and enjoyment of neighboring properties.***

(22) Storage of materials.

a. Exposed nonresidential storage areas, exposed machinery, and areas used for the storage or collection of discarded automobiles, auto parts, metals or other articles of salvage or refuse shall have sufficient setbacks and screening, such as a stockade fence or a dense evergreen hedge, to

provide a visual buffer sufficient to screen the proposed use from abutting residential uses and users of public streets.

***Response: Not applicable. The purposed vehicular and pedestrian connection will not affect existing dumpster and propane storage on the lot.***

b. All dumpsters or similar large collection receptacles for trash or other waste shall be located on level surfaces which are paved or graveled. Where the dumpster or receptacle is located in a yard which abuts a residential or institutional use or a public street, it shall be screened by fencing or landscaping.

***Response: Not Applicable.***

c. Where a potential safety hazard to children is likely to arise, physical screening sufficient to deter small children from entering the premises shall be provided and maintained in good condition.

***Response: Not applicable. The purposed development does not contain exposed potential safety hazards to children.***

(23) Landscaping. The development plan will provide for landscaping that breaks up parking areas, softens the appearance of the development and protects abutting properties from any significant adverse impacts of the development. (See chapter 98 for standards for landscaping parking lots.)

***Response: No additional landscaping is proposed on Lot 12A. Additional landscaping will be provided on Lot 12B in accordance with the buffer yard standards.***

(24) Buffering of residential uses.

a. Any lot within the urban compact line as now existing or as from time to time modified of the community that is used for nonresidential or multifamily residential purposes shall have a landscaped buffer on any property line that abuts a residential use or residentially zoned lot. The width of the buffer may vary depending on the treatment of the area. A buffer with dense planting, fencing, or changes in grade may be as little as five feet in width. A buffer with moderate levels of planting should be 10 feet to 15 feet in width.

b. In all residential settings, the width of the vegetated buffer should be increased to a minimum of 25 feet. Areas adjacent to service, loading, or storage areas should be screened by dense planting, berms, or a combination thereof.

***Response: Not applicable. No residential properties abut the purposed development.***

(25) Location of off-street parking. See chapter 98.

***Response: The proposed development will relocate four parking spaces in the existing lot to the proposed parking area on Lot 12 B. See the plan set.***

(26) Hazardous waste. The applicant shall demonstrate compliance with federal and state laws and regulations when hazardous waste is generated or stored on-site.

***Response: Not Applicable. The proposed developments on Lot 12A are not expected to produce hazardous waste.***

(27) Prevention or control of air pollution. No use shall be allowed which creates a substantial risk of air pollution, whether by dust, chemicals, odor or otherwise, which would pose a significant

risk of harm to local populations within the City or injury to wildlife, vegetation or to property, or harm to use and
enjoyment or surrounding property. It is not the intent of this provision to merely require compliance with state or federal air quality standards, but rather to enforce a standard which may be more encompassing and strict than those state and federal standards as presently constituted.

***Response: The proposed development does not create air pollution which would pose a significant risk of harm to local populations or injury to wildlife, vegetation or to property, or harm to use and enjoyment of surrounding property.***

(28) Protection of public health and safety. The proposed development shall provide for safe and healthful conditions. No proposed use may be approved which creates a substantial risk of causing damage to the public health or welfare.

***Response: The proposed development does not create a substantial risk of damage to the public health or welfare.***

(29) Adequacy of waste disposal. The applicant shall clearly demonstrate to the planning board that all quantities and types of waste generated by the proposed use can be dealt with and disposed of while maintaining safe and healthful conditions.

***Response: Not Applicable.***

(30) Additional standards for development that may substantially affect the environment. Additionally, if the proposed development meets the definition of development that may substantially affect the environment, as defined in 38 M.R.S.A. § 481 et seq., then section 484, Standards for Development, chapter 371, Definition of Terms used in the Site Location of Development Law and Regulations, chapter 372, Policies and procedures, chapter 373, Financial Capacity Standard, chapter 374, Traffic Movement Standard, chapter 375, No Adverse Environmental Effect Standard, chapter 376, Soil Types Standard, and chapter 377, Review of Roads and/or Major Development, and the provisions of section 90-17 shall apply.

***Response: Not Applicable .***

**Sec. 102-1181. Applicability. [Ord. No. 48-2001, 1-23-2001]**

The performance standards in this division shall apply to any and all nonresidential uses that request a use permit for the Route 3 Commercial District under terms of this chapter, subdivision approval under terms of the subdivision ordinance, or a site plan permit under terms of chapter 90. If there is a conflict between the standards identified in the subdivision ordinance, chapter 90, or chapter 98, and these standards, the standards identified in this division shall prevail.

***Response: The applicant is submitting a site plan amendment permit under terms of Chapter 90.***

**Sec. 102-1182. Minimum lot size and lot frontage requirements – Additional standards to dimensional standards identified in section 102-771. [Ord. No. 48-2001, 1-23-2001]**

(a) The minimum lot size of one acre and minimum frontage requirement of 200 feet for a lot with frontage on Route 3/Main Street, Crocker Road, or Lincolnville Avenue (reference section 102-771, dimensional standards for the Route 3 Commercial District, subsections (a) and (b)), shall increase in accordance with the following table to support a use or uses located on a single lot that generate volumes of vehicular traffic per peak hour (vtpph), that meet or exceed the following standards. The volume of traffic shall be determined by the Institute of Transportation Engineers, Transportation and Traffic Engineering Handbook, Volume "_____" and as may be revised from time to time, or by a site specific traffic survey that is conducted by the applicant and reviewed and accepted by the code enforcement officer or Planning Board. […]

***Response: The proposed Convenient MD is estimated to generate 19 trips and 24 trips during the AM and PM peak hours of the generator, respectively. (See Section 6 Traffic Impact Study by Sebago). With that vtpph, this standard requires the minimum lot size to be atleast one acre and minimal frontage to be 200 linear feet. The actual lot size exceeds both standards.***

***Subsection (b) through (e) are not applicable to this application as minimum lot size and frontage requirements are met under subsection (a).***

**Sec. 102-1183. Minimum front setback and buffer yard requirements for nonresidential structures. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

(a) Any new structure or expansion of an existing nonresidential structure that is constructed on or after January 24, 2001, that has frontage on Route 3/Belmont Avenue/Main Street, Crocker Road or Lincolnville Avenue, shall comply with the following minimum front setback requirements for structures, and the following minimum buffer yard requirements: […]

***Response: The proposed development on Lot 12A will not effect existing setback and buffer yard requirements.***

(b) Any new structure or expansion of an existing nonresidential structure that is built after January 24, 2001, that has frontage on street, road or driveway that is not identified in subsection (a) shall comply with the following minimum front setback requirements for structures, and the following minimum buffer yard requirements: […]

***Response: N/A***

(c) All setbacks shall be measured from the property line, and the applicant shall be responsible for verifying that all setback requirements are met. The applicant shall provide a survey to identify property lines and setback requirements, unless the code enforcement officer or Planning Board deems that a survey is not practical or warranted. In such cases, the applicant may use a MDOT or City road layout or right-of-way, a property deed or similar information to determine the minimum amount of setback required.

***Response: An existing conditions exhibit is included with this submission which verifies all setbacks.***

(d) The amount of the buffer yard must be located on property owned or controlled by the owner, and shall not include any land area located within an established rightof-way for determining the amount of buffer yard. Parking spaces are prohibited in the buffer yard area, and roads/driveways shall only be permitted to the extent that such must cross the buffer yard area to access the area proposed for development. The only structures permitted in the buffer yard, when there is no practical alternative as determined by the Planning Board, are utilities, stormwater management control facilities, and essential services.

***Response: The proposed development on Lot 12A will not effect existing setback and buffer yard requirements.***

**Sec. 102-1184. Minimum side setback and buffer yard requirements. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

(a) The minimum side setback for a nonresidential structure that provides a joint access drive to one or more adjacent uses is 15 feet. The minimum side buffer yard requirement for a nonresidential structure that provides a joint access drive to one or more adjacent uses is 10 feet.

***Response: The eastern side setback is greater than 15 feet and is to remain unchanged with the addition of a joint access drive provided to one adjacent use (Convenient MD). The eastern side buffer yard is 25' wide.***

(b) The minimum side setback for a nonresidential structure that does not provide an access to at least one abutting use shall be 25 feet. The minimum side buffer yard requirement for a nonresidential use that does not provide an access to at least one abutting use shall be 15 feet. The Planning Board may choose not to impose this requirement, particularly for

existing structures and uses that do not satisfy this requirement, if it determines that a joint access drive is not practical or does not serve a public purpose.

***Response: The western side setback is greater than 25' and to remain unchanged.***

(c) A nonconforming structure that does not comply with the minimum side setback requirements may expand, provided none of the structure is located closer to the side lot line than the existing structure, and the applicant complies with the performance standards for the Route 3 Commercial District to the greatest extent practical, as determined by the Planning Board.

***Response: N/A***

(d) The amount of the buffer yard must be located on property owned or controlled by the owner, and shall not include any land area located within an established rightof-way for determining the amount of buffer yard. Parking spaces are prohibited in the buffer yard area, and roads/driveways shall only be permitted to the extent that such must cross the buffer yard area to access the area proposed for development. The only structures permitted in the buffer yard, when there is no practical alternative as determined by the Planning Board, are utilities, stormwater management control facilities, and essential services.

***Response: The side buffer yards are wholly located on the applicant's parcel. No parking spaces are located within the side buffer yards. The access lanes for connection to the Convenient MD crosses the eastern side yard buffer.***

**Sec. 102-1185. Minimum rear setback and buffer yard requirements. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

(a) The minimum rear setback and rear buffer yard for a nonresidential structure that does not abut a residential use that existed at the date of application for the nonresidential use, or that abuts only other nonresidential uses or properties located entirely within the Route 3 Commercial District, is 15 feet.

***Response: The rear setback is greater than 15 feet and remains unchanged.***

(b) The minimum rear setback and rear buffer yard for a nonresidential structure that abuts one or more residential uses that existed at the date of application for the nonresidential use, is 40 feet.

***Response: N/A***

(c) A nonconforming structure that does not comply with the minimum rear setback requirement may expand, provided the following requirements are met: none of the structure is located closer to the rear lot line than the existing structure; the expanded structure and use will not adversely impact any existing residential uses, as determined by the Planning Board; and the applicant complies with the performance standards for the

Route 3 Commercial District to the greatest extent practical, as determined by the Planning Board.

***Response: N/A***

(d) The amount of the buffer yard must be located on property owned or controlled by the owner, and shall not include any land area located within an established rightof-way for determining the amount of buffer yard. Parking spaces are prohibited in the buffer yard area, and roads/driveways shall only be permitted to the extent that such must cross the buffer yard area to access the area proposed for development. The only structures permitted in the buffer yard, when there is no practical alternative as determined by the Planning Board, are utilities, stormwater management control facilities, and essential services.

***Response: The rear buffer yard is wholly located on the applicant's parcel. No parking space, utilities or stormwater management control facilities are located within the rear buffer yard.***

**Sec. 102-1186. Minimum buffer yard planting requirements for nonresidential uses. [Ord. No. 48-2001, 1-23-2001]**

(a) The required buffer yards shall be landscaped to present an attractive appearance to the site, particularly the front buffer yard and the entrance, and to provide a vegetative screen for the site from abutting uses, particularly residential uses. All side and rear buffer yards shall be preserved in their natural states, insofar as practical and appropriate, by minimizing tree removal, and by controlling any grade changes so that they are compatible with the general appearance of neighboring developed areas. The applicant shall submit a landscape plan for all buffer yards, preferably prepared by a landscape architect licensed in the State of Maine. The Planning Board may require the submittal of alternative landscape plans if it determines that site conditions warrant consideration of landscaping alternatives. […]

***Response: The existing landscaping on Lot 12A is unchanged as no additional landscaping is proposed on Lot 12A. Additional landscaping will be provided on Lot 12B in accordance with the buffer yard standards. As such, subsections (b) through (d) are not applicable.***

(e) A nonresidential use that obtained a use permit prior to January 24,2001, or that occupies a structure constructed prior to January 24,2001, that proposes to expand the use or structure or change the use, or a nonresidential use that obtained a use permit after January 24,2001 and that occupies a structure constructed prior to January 24,2001, that proposes to expand the use or structure or change the use, that cannot fully satisfy these landscaping requirements for buffer yards (reference sections 102-1183, 102-1184, 102-1185, and 102-1186(a)-(d)) shall satisfy these landscaping of buffer yard requirements to the greatest extent practical. The Planning Board shall determine if an existing use or structure cannot satisfy these landscaping requirements and what constitutes greatest extent practical. The Planning Board may require additional plantings, fencing, larger buffer yards, or similar

measures to compensate for the applicant providing less than the amount of landscaping required.

***Response: The project does not propose to expand or change the use of the existing structures on Lot 12A.***

(f) A new use or nonresidential structure, particularly an industrial structure, that does not fully comply with the structure design guidelines identified in section 102-1187, shall provide a minimum of 1.5 times the amount of front and side buffer yard plantings as required in this section 102-1186.

***Response: N/A***

(g) All landscaping materials planted in the buffer yard shall be well maintained and any plants which die shall be replaced within one growing season. Any mature tree which was used to satisfy the required number of plant units which dies within five years of the issuance of a permit shall be replaced with two canopy or evergreen trees within one growing season of the time the mature tree dies. The CEO or Planning Board shall have the authority, as a condition of permit approval, to require the applicant to provide a schedule and program to maintain all site landscaping.

***Response: Acknowledged***

**Sec. 102-1188. Parking areas – Amount and layout of parking. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

A nonresidential use shall provide an adequate amount of parking for the proposed use; reference chapter 98, article VIII, to determine the minimum amount of parking required. The design and layout of the parking area shall be harmonious to the use, structures and site and, if practical, to abutting uses, structures and sites. The City encourages creativity in the design of all parking areas to enhance how the site functions, to reduce the total amount of area devoted to parking, to reduce the scale and bulk of parking areas, to encourage joint use parking between adjacent sites, and to enhance the appearance of the site, particularly the view of the site from the respective main public road corridor. The design and layout of the parking area shall conform to the following standards:

(1) A use that requires 40 or less parking spaces may locate a maximum of 10 spaces to the front of the building, provided that the following standards are met:

a. The 10 (or less) parking spaces are well oriented in relation to the site;

b. There is a pedestrian walkway that connects these parking spaces to the structure; and

c. There is an appropriately landscaped green strip of no less than four feet located between this parking area and the structure.

All other parking shall be located to the side or rear of the structure. If applicable, this standard also is subject to the requirements of subsection (2).

***Response: The proposed development alters the existing parking by relocating 4 spaces to the proposed parking area on Lot 12B. Section 98-242 Off Street Parking Requirements list parking requirements for convenient stores as one per 200 square feet. In accordance with this requirement, the loss of four existing spaces is offset with the addition of four spaces on Lot 12B to maintain compliance.***

(2) Notwithstanding the provisions of subsection (1), a use that has frontage on either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue, and that requires 40 or less parking spaces, may locate a maximum of 10 spaces in the area between the structure and either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue, regardless of the street or interior access road to which the structure is oriented. All other parking spaces shall be located in an area that is not located between the structure and either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue.

***Response: N/A.***

(3) A use that requires 41 or more parking spaces may locate a maximum of 20% of the parking spaces directly in front of the structure (corners of the main facade) in the area between the street/access drive on which the structure fronts and the structure. Further, a maximum of 20% of the remaining parking spaces may be located between the street/access drive and the structure (beyond the corners of the main facade) and to the side of the structure in the area that would be considered the front yard. A parking layout that locates parking in either of these two areas must satisfy the following standards:

a. The parking spaces shall be well oriented to the site;

b. There shall be a pedestrian access way between the structure and the parking areas;

c. There shall be an appropriately landscaped green strip that is preferably 10 feet but no less than four feet in width located between the structure and the parking area;

d. The use of parking cells to break up the parking areas; and

e. The use of berms, landscaping or similarly acceptable amenities to effectively screen the parking in the area between the structure and either Route 3/ Belmont Avenue/Main Street or Lincolnville Avenue, regardless of the orientation of the building.

All other parking shall be located to the side or rear of the structure. If applicable, this standard also is subject to the requirements of subsection (4).

***Response: N/A.***

(4) Notwithstanding the provisions of subsection (3), a use that has frontage on either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue, and that requires 40 or more parking spaces, may locate a maximum of 20% of the parking spaces in the area between the structure and either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue, regardless of the street or interior access road to which the structure is oriented. All other

parking spaces shall be located in an area that is not located between the structure and either Route 3/Belmont Avenue/Main Street or Lincolnville Avenue.

***Response: N/A.***

(5) Notwithstanding the provisions of subsections (1)-(4), the Planning Board may grant a waiver to these standards to allow a use that has special customer service demands, such as but not limited to a lumber yard, to locate a greater percentage of the parking to the front of the structure, including the area between the structure and Route 3/Belmont Avenue/Main Street or Lincolnville Avenue. The Planning Board must make a finding that the specific needs of this use require that a greater percentage of the parking spaces are located to the front of the structure, and that locating spaces to the front of the building does not cause a concern with internal circulation on the site. The board may require compensatory measures, such as but not limited to additional landscaping, berms, fencing, or similar amenities, as a condition of the waiver. A minimum of 75% of the board must vote in the affirmative to grant the waiver.

***Response: N/A.***

(6) Uses that require a significant amount of parking, more than 75 vehicles, shall use parking cells to assist in managing the visual impact and scale of the parking areas. The Planning Board shall use the following guidelines to implement this provision:

a. Each parking cell should contain no more than 70-100 parking spaces;

b. The maximum length of any parking row should not exceed 225 feet;

c. Landscaping of the parking cells shall comply with requirements of section

102-1189, landscaping requirements for parking areas; and

d. The layout of the parking cells shall be served by well defined internal circulation routes for vehicles and pedestrians.

***Response: N/A.***

(7) All parking spaces shall be paved, unless the CEO or Planning Board authorizes the use of a gravel parking lot for environmental considerations.

***Response: All parking will be paved.***

**Sec. 102-1189. Parking areas – Landscaping requirements. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

Parking lots shall be effectively landscaped with trees and shrubs to reduce the visual impact of glare, headlights, and parking lot lights from the public right-of-way and from adjoining properties, and to present an attractive appearance to the site. The landscaping of all parking lots for a nonresidential use shall satisfy the following standards:

(1) The applicant shall provide an eight-foot-wide landscaped strip planted with canopy trees and low shrubs around the perimeter of all parking areas located to the side or rear of a

structure. A minimum of one canopy tree that is equal to 10 plant units shall be provided per every 40 feet of parking lot perimeter. A minimum of two plant units of shrubs shall be provided for every 10 feet of parking lot perimeter. The vegetated buffer yards required in the front, side or rear setback area may be used to satisfy the landscape requirements for parking lots when the respective parking lot abuts the buffer yards on one or more sides. The guideline for determining plant units is defined in section 102-1186(b) and (c).

***Response: N/A***

(2) The applicant shall provide a continuous landscape strip that is a minimum of eight feet in width between every four rows of parking which contain five or more cars per row. A minimum of one canopy tree equal to 10 plant units shall be provided for each 40 feet of length or fraction thereof of the landscape strip. A minimum of two plant units of shrubs shall be provided for each 10 feet of length of the landscape strip.

***Response: N/A***

(3) The applicant shall provide the following planting islands if the size of the parking area warrants such islands:

a. A planting island that is a minimum of 200 square feet in size shall be provided at each end of all parking rows that contain 12 or more parking spaces.

b. A planting island that is a minimum of 100 square feet in size shall be provided in the interior of any parking row that is greater than 100 feet in length, and for each 100 lineal feet or fraction thereof of length of the parking row.

All planting islands shall include one canopy tree equal to 10 plant units, and other appropriate landscaping material that accentuates the appearance of the planting island.

***Response: N/A***

(4) The Planning Board shall encourage and may require the use of a vegetated landscape berm to lessen the visual impact of parking areas that are located to the front or side of a structure. A landscape berm that is 30 inches or more in height shall be equal to 20 plant units per 100 lineal feet or fraction thereof of berm. A landscape berm that is 15 inches or more in height shall be equal to 10 plant units per 100 lineal feet or fraction thereof of berm.

***Response: No berms are proposed.***

(5) Notwithstanding the above provisions, the applicant may submit and the Planning Board may consider an alternative landscape plan for the siting of landscape areas that provides an equal or greater amount of landscaping required by this division.

***Response: Acknowledged***

**Sec. 102-1190. Curb cuts and site access. [Ord. No. 48-2001, 1-23-2001; Ord. of 1-29-2008(2)]**

The purpose of these standards is to allow the minimum number of curb cuts (points of site access) on a site to enable its safe and efficient use, and to assist in retaining safe and efficient traffic patterns on the City's main road corridors, particularly Route 3/Belmont Avenue/Main Street and Lincolnville Avenue. The Planning Board shall consult with the department of public safety, department of public works, City engineer (if City engineer is involved with review of the project), and MDOT (if required by state standards) in making a decision regarding the location and number of curb cuts.

(1) Safe unobstructed access to and from the site shall occur by providing an adequate number, design and location of access points with respect to sight distances, intersections, traffic generators, all types of vehicles having occasion to enter the site and adjoining properties.

***Response: Existing access points to Route 3 are to remain unchanged.***

(2) All properties in existence on or before January 23, 2001 that have no existing curb cuts or only one existing curb cut shall be restricted to one main (two-way) curb cut onto Route 3/Belmont Avenue/Main Street, Lincolnville Avenue, or Starrett Drive. The Planning Board may grant an exception to this standard for properties that have 500 feet or more of frontage.

***Response: N/A.***

(3) All properties that were developed on or before January 23, 2001 that have two or more existing curb cuts may retain the existing curb cuts to serve the existing development, an expanded development or a change of use, if the Planning Board finds the following:

a. That the existing curb cuts are critical to allow the safe and efficient use of the site;

b. That the applicant has fully examined alternatives that could result in the elimination of one or more of the existing curb cuts, and the board finds that there is no reasonable alternative to retaining the present curb cuts; and

c. That the applicant has fully examined and implemented, when deemed practical by the Planning Board, alternatives that allow the joint use of one or more of the access drives, or that the applicant has provided a means to connect the existing site to one or more of the adjacent sites. If the board does not make a positive finding that the above requirements are met, the applicant shall be required to eliminate one or more of the existing curb cuts to bring the existing nonconforming property into greater conformance with City requirements.

***Response: The existing curb cuts expanded use to include access to the proposed Convenient MD project on Lot 12B is critical to allow the safe and efficient use of the site.***

(4) The Planning Board may allow the use of one or more restricted access right-turn entrance or exit only lanes, provided that the board makes the following findings:

a. The restricted lane will benefit traffic circulation and safety on the main road, Route 3/Belmont Avenue/Main Street, Lincolnville Avenue, Starret Drive or an internal access drive;

b. The restricted lane will benefit internal traffic circulation;

c. The site has 250 feet or more of frontage; and

d. There is adequate separation between the restricted lane and other curb cuts on the site and on other sites in project area.

***Response: N/A.***

(5) The applicant shall provide a minimum separation of 75 feet between all curb cuts, and 150 feet or more of separation is preferred. The Planning Board may waive this requirement for good cause, as demonstrated by the applicant, if no reasonable alternative exists.

***Response: N/A.***

(6) All means of ingress/egress (site access points) onto a public road shall be designed according to the following standards of safe sight distance. The CEO or Planning Board, however, shall not use this section as the sole criterion for rejecting an application unless all possible ingresses/egresses are deemed to be unsafe due to poor sight distances.

| **Posted Speed Limits** | **Minimum** | **Recommended** |
|---|---|---|
| **(in mph)** | **(in feet)** | **(in feet)** |
| 25 | 175 | 250 |
| 30 | 210 | 300 |
| 35 | 245 | 350 |
| 40 | 280 | 400 |
| 45 | 315 | 450 |
| 50 | 350 | 500 |
| 55 | 385 | 550 |

All means of ingress/egress (site access points) onto a private access drive shall satisfy the above standards to the greatest extent practical. The CEO or Planning Board shall be responsible for determining what constitutes to the greatest extent practical.

***Response: No changes are proposed to existing site ingress and egress points.***

(7) The applicant shall provide direct connections and safe street crossings to adjacent land uses and properties, and allow the shared use of these connections, unless the Planning Board deems that one or more of the connections are not appropriate. The direct connection(s) shall involve the construction of the needed access way or the reservation of the right-of-way to an adjacent parcel. If the project involves the reservation of a right-of-way, the Planning Board may require the applicant to escrow funds to construct the connection at a future date.

***Response: A connection is provided to the adjacent Convenient MD.***

(8) An applicant shall identify how bicycle and pedestrian access to the site can occur, and shall examine the amount of bicycle and pedestrian use of the site that may occur. This analysis shall consider the factors such as the following: the extent of bicycle and pedestrian facilities that exist in the area at the time of application; the potential need for such facilities in the area; City or state plans to construct or designate bicycle and pedestrian facilities in the area; and how bicycle and pedestrian use of the area can be achieved. The code enforcement officer or Planning Board shall review this analysis and determine if the applicant must construct improvements to facilitate bicycle or pedestrian access to the site.

***Response: Pedestrian connections are provide between the existing sidewalk and the proposed sidewalk and parking lot on Lot 12B.***

**Sec. 102-1191. Internal circulation. [Ord. No. 48-2001, 1-23-2001]**

An applicant shall provide safe internal circulation within the site for vehicles, pedestrians and bicyclists. The applicant shall comply with the following standards to help satisfy this requirement:

(1) To the maximum extent practical, pedestrians and vehicles shall be separated through the provision of a sidewalk or walkway. Where complete separation of pedestrians and vehicles is not feasible, potential hazards shall be minimized by using landscaping, special paving, striping, signage, and other means to clearly delineate pedestrian areas.

***Response: A 5 foot wide sidewalk is provided for pedestrian safety along the interconnection with Lot 12B.***

(2) The applicant shall provide unobstructed vehicular access to and from a public street for all off-street parking spaces, and shall provide well-defined circulation routes for vehicles, pedestrians and bicycles. Further, all entrances and exits to the site and any parking area shall be located an adequate distance from the public way to eliminate queueing of motor vehicles into the public way.

***Response: Unobstructed vehicle access to a public street is provided. See Traffic Report for a review of the impact to queueing on Route 3.***

(3) Standard traffic control signs and devices shall be used to direct traffic where necessary throughout the site and the parking areas.

***Response: Two wayfinding signs will be placed at the existing entrance on Lot 12A to direct people to Convenient MD on Lot 12B.***

(4) The site layout and design shall anticipate the needs of users and provide continuity between vehicular circulation, parking, pedestrians, and bicycle circulation. Pedestrian drop-off areas shall be provided where needed, particularly for uses that serve children or the elderly.

***Response: No drop-off areas are proposed.***

(5) The site layout and design shall consider how truck circulation will occur throughout the site, and shall ensure that such circulation does not adversely impact vehicular, pedestrian and bicycle safety. All loading and off-loading areas shall occur in locations or at times that do not affect public safety.

***Response: The proposed connection has been located to not affect current truck circulation for the existing dumpsters and propane tanks.***

(6) The applicant, if deemed appropriate by the Planning Board, shall provide amenities, such as bicycle racks, to encourage bicycle use.

***Response: N/A.***

**Sec. 102-1192. Utilities. [Ord. No. 48-2001, 1-23-2001]**

A nonresidential use shall provide adequate utilities and services that comply with requirements of this section.

(1) The use shall have a water supply of adequate quality and quantity. A water supply may be a private well, a central water supply approved by the state department of human services, or a public water supply. An applicant, however, shall be required to connect to the public water supply unless the Planning Board, after consultation with the City water district, determines that the cost of the extension is prohibitive for the use proposed, and that a good quality and quantity private source of water can be provided.

***Response: N/A.***

(2) The use shall have an approved method of sewerage disposal. Private sewage disposal may be used provided the system satisfies City subsurface wastewater disposal ordinance and state requirements. No permanent use may use portable toilets for sewage. Public sewage disposal may be used subject to approval of the City. A nonresidential use located within 750 feet of a public sewer system shall connect to the system unless the Planning Board determines the cost of the extension is prohibitive for the use proposed and a good quality method of private sewage disposal can be provided.

***Response: N/A***.

(3) All electric, telephone, television, and similar service shall be located underground, unless the Planning Board determines the underground service is cost prohibitive, may adversely impact natural resource features on the site, and there are well located existing overhead services to adjacent properties.

***Response: Utilities to the proposed driveway will be located underground.***

(4) All satellite dishes, microwaves, and similar structures used for transmission or reception purposes shall be located to minimize adverse visual impacts. The planning board shall consider that functional requirements for this equipment in rendering a decision regarding the location of such equipment.

***Response: No satellite dishes, microwaves, or similar structures are proposed.***

**Sec. 102-1193. Noise. [Ord. No. 48-2001, 1-23-2001]**

(a) Excessive noise at unreasonable hours shall be required to be muffled so as not to be objectionable due to intermittence, beat, frequency, shrillness or volume (refer to table below). The maximum permissible sound pressure level of any continuous, regular or frequent source of sound produced by any commercial or industrial activity regulated by this division shall be established by the time period and type of land use listed below. Sound pressure levels shall be measured on a sound level meter at all major lot lines of the proposed site, at a height of at least four feet above the ground surface.

| | **Sound Pressure Level Limit** | |
|---|---|---|
| | **7:00 a.m.—9:00 p.m.** | **9:00 p.m.—7:00 a.m.** |
| Commercial activities | 60 db(A) | 55 dB(A) |
| Industrial activities | 70 db(A) | 55 db(A) |

The levels specified above may be exceeded by 10 dbA for a single period, not longer than 15 minutes, in any one day.

Noise shall be measured with a sound level meter meeting the standards of the American National Standards Institute (ANSI S1 4-1961) "American Standard Specification for General Purpose Sound Level Meters". The instrument shall be set to A-weighted response scale and at the meter to the slow response. Measures shall be conducted in accordance with ANSI S1 2-1962 "American Standard Method for the Physical Measurements of Sound", or such standard as may be amended from time to time. The City code enforcement officer, however, may use a portable sound meter available to the City to establish potential noise levels. If the code enforcement officer registers a noise level that is either near to or greater than the above standards, the officer may use these results to require the property owner to conduct a sound level analysis from a licensed engineer that fully complies with the above standards and to present these results to the code enforcement officer for analysis. Further, the planning board may require a noise level study for any use which requests a permit from the City.

***Response: No noise pollution is anticipated.***

(b) No person shall engage in, cause, or permit any person to be engaged in very loud construction activities on a site (active construction area) located within 750 feet of any residential use between the hours of 8:00 p.m. of one day and 7:00 a.m. of the following day. Construction activities shall be subject to the maximum permissible sound level specified for industrial districts for the periods within which construction is to be completed pursuant to any applicable building permit. The following uses and activities shall be exempt from the sound pressure level regulations:

(1) Noises created by construction and maintenance between 7:00 a.m. and 8:00 p.m.

(2) The noises of safety signals, warning devices and emergency pressure relief valves and any other emergency activity.

(3) Traffic noise on existing pubic streets, railways or airports.

***Response: Acknowledged***

**Sec. 102-1194. Dust, fumes, vapors and gases. [Ord. No. 48-2001, 1-23-2001]**

The emission of dust, dirt, fly ash, fumes, vapors and gases which could endanger human health, animals, vegetation, or property, or which could soil or stain persons or property, at any point beyond the lot line of the nonresidential establishment creating that emission shall be prohibited. All such activities also shall comply with applicable federal and state regulations.

***Response: No air pollution is anticipated.***

**Sec. 102-1195. Odor. [Ord. No. 48-2001, 1-23-2001]**

No land use or establishment shall be permitted to produce offensive or harmful odors perceptible beyond their lot lines, whether at ground or habitable elevation.

***Response: No odor pollution is anticipated.***

**Sec. 102-1196. Glare/lighting. [Ord. No. 48-2001, 1-23-2001]**

The purpose of this standard is to focus on the physical effects of lighting, as well as the effect that lighting may have on a surrounding area. Exterior lighting shall be evaluated to ensure that the functional and security needs of the project are met in a way that does not adversely affect the adjacent properties and surrounding area. No nonresidential use shall be permitted to produce a strong, dazzling light or reflection of that light beyond its lot lines onto neighboring properties so as to diminish a person's enjoyment of their property, or onto any City way so as to impair the vision of the driver of any vehicle upon that City way.

The following chart identifies minimum lighting levels for outdoor facilities used at night (Illuminating Engineering Society Lighting Handbook).

| **Area/Activity** | **Footcandle** |
|---|---|
| Around the building | 1.0 |
| Walkways along roadside | 0.9 |
| Pedestrian stairways | 0.3 |
| Loading and unloading platforms | 5.0 |
| (Provided there is a barrier that separates this platform from an abutting residential use) | |
| Parking areas | 1.0 |

Lighting of a nonresidential site shall comply with the following standards:

(1) Background spaces like parking shall be illuminated as unobtrusively as possible to meet the functional needs of safe circulation and/or protecting people and property. Foreground

spaces, such as building entrances and plaza seating areas, shall use local lighting that defines the space without glare.

***Response: Acknowledged.***

(2) Light sources shall be concealed and fully shielded and shall feature sharp cut-off capability so as to minimize up-light, spill-light, glare and unnecessary diffusion on adjacent property.

***Response: Most lighting on Lot 12A will be unchanged. Existing lighting on the site includes 4 parking lot lights and building lighting. One parking lot light in the area of the proposed connection will be relocated approximately 25 feet to the south.***

(3) The style of light standards and fixtures shall be consistent with the style and character of architecture proposed on the site. Poles shall be anodized or otherwise painted to minimize glare from the light source.

***Response: Existing lighting fixtures will remain unchanged.***

(4) Light sources must minimize contrast with the light produced by surrounding uses, and must produce an unobtrusive degree of brightness in both illumination levels and color rendition. Incandescent and high pressure sodium light sources all can provide adequate illumination with low contrast and brightness and are permitted light sources if the light source is consistent with the other standards.

***Response: Acknowledged.***

(5) Light levels measured 20 feet beyond the property line of the development site shall not exceed 0.1 footcandle as a direct result of the on-site lighting.

***Response: Existing light levels will remain unchanged as no additional lighting is proposed.***

(6) Outdoor display lots for vehicle sales and leasing shall comply with the requirements of this section. In addition, display illumination shall be reduced within 30 minutes after closing so that the remaining illumination levels are sufficient for security purposes only.

***Response: N/A***

(7) Upon request of the applicant, the planning board may approve an alternative lighting plan that may be substituted in whole or in part for a plan meeting the standards of this section.

***Response: Acknowledged***

(8) The code enforcement officer may use the above standards to determine if an existing use (a use that existed on or before January 23, 2001) complies with these lighting requirements. If an existing use does not comply, the code enforcement officer and the property owner shall examine feasible alternatives to achieve greater compliance with the requirements of this section. This may include the code enforcement officer preparing a compliance plan that requires the existing use to change existing lighting within a three-year time period of the issuance of a compliance order.

***Response: Acknowledged***

**Sec. 102-1197. Stormwater management. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall be responsible for controlling surface water run-off and detaining it on-site to the greatest extent practical. Further, the applicant shall maintain the natural state of watercourses, swales, floodways or right-of-ways to the greatest extent practical in constructing site improvements. The applicant shall comply with the standards identified in chapter 98 in managing stormwater.

***Response: See Section 10: Stormwater Management Plan***

**Sec. 102-1198. Wetland impact. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall be responsible for identifying all on-site wetlands and avoiding or minimizing adverse impacts, to the greatest extent practical, on both on-site wetland bodies and wetland bodies located on adjacent parcels. At a minimum, the applicant must demonstrate compliance with all provisions of the state Natural Resources Protection Act (NRPA) and chapter 82 of this Code. The planning board, however, shall not use adverse impacts on wetland resources as the sole reason to deny a project. The planning board also has the authority to require an applicant to prepare a functional analysis of wetland values and how a proposed project may affect such wetland values. This analysis also must identify potential methods to avoid, minimize or mitigate the wetland impact.

***Response: See the Wetland Delineation Report included as Exhibit 7 by Cole Peters, PWS, of Sebago Technics on September 26, 2022. A Natural Resource Protection Act Tier 1 Permit amendment application will be submitted to Maine Department of Environmental Protection for 1,455 square feet of wetland impact.***

**Sec. 102-1199. Floodplain impact. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall comply with all requirements of chapter 78, article II, and shall avoid, to the greatest extent practical, creating any adverse impacts on a floodplain resource.

***Response: The Flood Insurance Rate Map (FIRM) for the City of Belfast (Community Panel 23027C0442E, dated July 6, 2015) identifies the project site to be in Zone X, an area determined to be outside the 500-year flood. Please see the attached flood map***.

**Sec. 102-1200. Soils. [Ord. No. 48-2001, 1-23-2001]**

The soils on the site shall be adequate to support the intended purpose. The planning board may require the applicant to provide a high intensity soil survey to assist the board in analyzing soil quality.

***Response: A Class 'D' Medium Intensity Soil Survey published by the United States Department of Agriculture, Natural Resources Conservation Service has also been attached. The soils were identified as Boothbay, Swanville, and Udorthents-Urban land series. Please see the soil map included.***

**Sec. 102-1201. Soil erosion and sedimentation control. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall minimize the erosion of soil and the sedimentation of watercourses and waterbodies to the greatest extent practical by instituting the best management practices identified in chapter 98. Further, the applicant, during project construction, shall maintain all soil erosion and sedimentation control measures that are constructed in good working condition.

***Response: See Exhibit 10: See the grading and utility plan and the erosion and sedimentation control plan and details.***

**Sec. 102-1202. Solid waste collection and disposal. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall provide an acceptable method to collect and dispose of all solid wastes and recyclables generated on the site in a timely manner and in an environmentally friendly way. The applicant also must demonstrate that the method of collecting and disposing of these wastes will not cause an unreasonable burden on the City's ability to process such wastes. Further, the applicant shall screen all refuse and recycling facilities from public view by the construction of a four-sided solid enclosure, and the facilities shall be located to avoid potential adverse impacts on any adjacent residences. The enclosure (fence/wall) must be a minimum of six feet in height.

***Response: N/A***

**Sec. 102-1203. Explosive materials and chemical and fuel storage facilities. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall construct storage facilities for highly flammable or explosive liquids, solids or gases, fuel, chemicals, chemical or industrial wastes, or potentially harmful raw materials that comply with all applicable state and federal requirements. Further, all such facilities shall be located away from residences to the greatest extent practical.

***Response: N/A. No changes are proposed for fuel storage.***

**Sec. 102-1204. Hazardous wastes. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall properly collect, store and dispose of any hazardous wastes that may be generated by use of the site, or that are found during project construction. The applicant shall comply with all applicable state and federal requirements in the collection, storage and disposal

of such wastes and shall inform the City code enforcement officer and City fire chief of the approved method to handle such wastes and any orders that may be issued regarding the handling of such wastes.

***Response: N/A***

**Sec. 102-1205. Construction of off-site improvements. [Ord. No. 48-2001, 1-23-2001]**

The planning board shall require the applicant to construct off-site improvements if the board determines such improvements are specifically required to address a public health, safety or welfare concern caused by the proposed project. Off-site improvements may include but are not limited to improvements to public or private roads, pedestrian and bicycle amenities (e.g. sidewalks) and stormwater facilities. The need and extent of required improvements shall be identified through the planning board's analysis of the following: information included on the applicant's site plan; an impact statement that may be required of an applicant (reference section 102-1206); and/or direction provided in City or state plans.

***Response: Acknowledged***

**Sec. 102-1206. Impact on municipal facilities and services. [Ord. No. 48-2001, 1-23-2001]**

The planning board may require the applicant to participate in municipal infrastructure and/or service system improvements when it is demonstrated the applicant's proposed development will result in an adverse impact or decline in the level of service of any existing municipal or state infrastructure system or service. The planning board is authorized to assess and establish infrastructure or service system improvements the applicant may be required to undertake or pay for to mitigate the amount of negative impact or decline in the level of service. The planning board shall use the following guidelines in making this decision:

(1) Conducting the assessment. In conducting the impact assessment, the planning board shall consider the following:

a. The status of the system and service in the adopted comprehensive plan and capital improvement program relative to any planned improvements and scheduling.

b. The net effect of the proposed development on the capacity of the infrastructure or service system, indicating the percentage share used by the development.

c. A cost estimate for improvement of this infrastructure or service system so as to meet the increased demand, and a breakdown of the applicant's share of that cost.

d. An assessment of public water and sewer system improvements provided or planned by the appropriate agencies.

(2) Improvement responsibilities. When an applicant's share of infrastructure and or service system impact has been established by the planning board, the board shall select the method in which the applicant must participate in the infrastructure and/ or service system improvement. The following two alternatives are available:

a. The applicant must agree to make the necessary infrastructure and/or service system improvements, establish a construction or service schedule, and post a performance guarantee to cover all associated costs. The applicant may recover the improvement costs within 10 years after improvements are made. For the applicant to recover these costs, subsequent developments must realize a benefit by using the infrastructure and/or service system improvement financed by the applicant. Cost reimbursement for the applicant shall be established as subsequent developments go through the City use permit, site plan or subdivision review process. The board shall use the same process in arriving at the appropriate cost share for subsequent development.

b. The City must agree to complete the improvements. The applicant shall pay the required share of the cost to the City at the time of approval of the use permit, which shall be held in a reserve fund until the improvement is completed in accordance with the scheduled capital improvement of the City. If the improvement is not completed within 10 years, the fee plus the accrued interest must be returned to the applicant.

***Response: Acknowledged***

**Sec. 102-1207. Performance guarantees for required improvements. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall post an acceptable performance guarantee with the City to ensure all improvements required as conditions of issuing a Route 3 use permit are constructed. The Planning Board shall determine the type and amount of performance guarantee that is required. A performance guarantee shall be one or more of the following:

(1) The applicant shall post an escrow account or irrevocable letter of credit with the City to pay the estimated cost equal to City expenses to regrade, stabilize, reseed, or revegetate a site disturbed by construction activities if the project is not completed. Escrow funds shall be deposited by construction activities if the project is not completed. Escrow funds shall be deposited in an account established specifically for this project. The guarantee is subject to release by the City upon a written finding from the code enforcement officer or City engineer that all plan requirements have been satisfied and an occupancy permit issued. The City may expend funds from the guarantee upon a written determination from the code enforcement office or City engineer that the project activities, such as site clearing and grading have been started, but no further construction activity has occurred. The City decision to expend funds will only be made sooner than one year after issuance of the building permit if the code enforcement officer or City engineer determines the applicant's failure to restabilize the site will result in significant adverse impacts on the site or surrounding properties.

(2) The applicant shall enter a binding agreement with the City such that a building permit shall not be obtained until all public improvements and plan conditions are satisfied. The code enforcement officer or City engineer shall submit a statement in writing to the City planner certifying that all improvements have been completed. The City planner, upon receipt of such certification, may determine that terms of the binding agreement have been satisfied, and that the guarantee should be released, and a building permit may be granted by the code enforcement officer.

(3) The applicant shall post an escrow account, performance bond, or irrevocable letter of credit with the City equal to 125% of the cost of all required improvements, particularly public improvements. This guarantee shall not be released and no occupancy permit shall be issued until the code enforcement officer or City engineer submits a statement to the City planner certifying that all improvements have been completed. The City planner, upon receipt of such certification, may determine that the terms of the performance guarantee have been satisfied, and that the guarantee should be released, and an occupancy permit may be granted by the code enforcement officer. The City may expend funds from the escrow account, performance bond, or irrevocable letter of credit upon a written declaration from the code enforcement officer or City engineer that the required improvements have not been satisfactorily completed. The City shall provide the applicant a minimum of 15 days of advance notice in writing prior to any City expenditure of the performance guarantee.

***Response: Acknowledged***

**Sec. 102-1208. Determination of project ownership and mechanism to construct and maintain required improvements. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall identify the owner and developer of the project and who will assume responsibility for the construction, operation and maintenance of all required improvements. The Planning Board shall ensure the proposed ownership has the technical and financial resources to successfully complete and maintain all required project improvements. All proposals to establish a condominium form of ownership to manage the project shall require Planning Board review and approval of the condominium documents.

***Response: A letter of financial capacity from Waldron H. Rand & Company, P.C. is included as Exhibit 3.***

**Sec. 102-1209. Handicap accessibility. [Ord. No. 48-2001, 1-23-2001]**

The applicant shall provide site improvements, such as but not limited to adequately sized and located parking and curbing, to ensure handicap accessibility. The applicant shall be responsible for identifying and obtaining needed permits and constructing all facilities needed to satisfy state and federal requirements regarding handicap accessibility.

***Response: Existing accessible parking spaces will remain unchanged.***

**Sec. 102-1210. Specific standards for drive-through windows and service windows (restaurants, banks, drug stores, etc.). [Ord. No. 48-2001, 1-23-2001; Ord. No. 12-2005, 8-3-2004]**

(1) New drive-through windows and service windows. A drive-through or service window that is constructed after January 23, 2001, shall comply with the following standards:

(a) A drive-through window (including the order window, board or area and the pick-up window) and service window shall not be located on the side of the building that faces the main public access road or an internal service road.

(b) A drive-through window (including the order window, board or area and the pick-up window) and service window shall not be located to the front of the building, and shall be located to the side or rear of the building.

(c) The queueing lane for a drive-through window or service window shall be separated from the remainder of the site and the parking area by a raised island that is a minimum of eight feet in width and which is attractively planted to create a visual buffer.

(d) The level of noise generated from a service window or order station shall not cause an adverse impact on any abutting residential property.

(2) Existing drive-through and service windows. An existing drive-through or service window on a structure that was constructed prior to January 23, 2001, shall be exempt from the section 102-1210(1) standards. In addition, notwithstanding the structure setback and bufferyard requirements established in sections 102-1183 (front), 102-1184 (side) and 102-1185 (rear), an existing drive-through or service window may be expanded, provided the drive-through or service window is setback a minimum of 15 feet from any lot line, and provided the applicant complies with the section 102-1186 minimum bufferyard planting requirements to the maximum extent practical, as determined by the Planning Board.

***Response: No changes are proposed for the existing drive through lane and window.***

**Sec. 102-1211. Specific standards for uses that have a canopy associated with a drive-through or service area. [Ord. No. 48-2001, 1-23-2001; Ord. No. 12-2005, 8-3-2004]**

(1) New canopies. A canopy that is constructed after January 23, 2001, shall be located to the side or rear of the main structure, and the canopy shall be incorporated into the design of the main structure, which may include physically connecting the canopy to the main structure. The Planning Board, by a majority vote of 75% of the board, has the authority to waive this standard. An applicant that seeks a waiver shall submit plans for review by the Planning Board that identify options to construct a canopy. At least one of the options must identify a canopy that is located to the side or rear of the main structure.

(2) Existing canopies. Notwithstanding the structure setback and bufferyard requirements established in sections 102-1183 (front), 102-1184 (side) and 102-1185 (rear), an existing canopy on a structure that was constructed prior to January 23, 2001, may be expanded, provided the canopy is setback a minimum of 15 feet from any lot line, and provided the applicant complies with the section 102-1186 minimum bufferyard planting requirements to the maximum extent practical, as determined by the Planning Board.

***Response: No canopy is proposed.***

**Sec. 102-1212. Loading and off-loading areas and operations. [Ord. No. 48-2001, 1-23-2001]**

All loading and off-loading areas and operations shall be located and conducted in such a manner as to protect public safety and to minimize potential adverse impacts on neighboring residences. The following standards shall apply:

(1) The loading facility and area shall be located to the side or rear of the main structure and shall not be visible from a main public access road. Further, the applicant shall discourage public/customer use of the area that is devoted to loading facility operations.

(2) The loading facility shall be screened from any abutting residential uses and the operation of such facilities shall not cause noise, odors, light, or similar adverse impacts on abutting residential uses. The applicant shall install fencing, landscaping, berming or similar improvements, and shall locate the facility an adequate distance from the abutting property line to minimize the amount of potential adverse impacts. Further, the owner shall control the noise and odors generated by trucks that are using the loading facility.

(3) The applicant shall not use any containerized van that is not incorporated into the structure as a method of storing any materials. Further, such vans shall not be kept on a site for a period longer than is necessary to load or unload the containerized van.

***Response: There is no loading facility proposed.***

**Sec. 102-1213. Nonconforming size of use or size of structure. [Ord. No. 48-2001, 1-23-2001]**

Section 102-768(1) of the Route 3 Commercial District establishes that no single retail store (use) and no structure in which a retail store (use) or stores (uses) are located can be greater than 75,000 square feet. Section 102-768(4) of the Route 3 Commercial District also establishes that a shopping center, including mixed use development (service, retail, restaurant, and/or office in the same complex), is a permitted use, provided that no single shopping center structure is greater than 75,000 square feet. The City recognizes that on January 23, 2001, there may be one or more uses or structures that do not conform to the standards of section 102-768(1) or (4). A use or structure that existed on or before January 23, 2001 that does not satisfy one or more of the maximum size standards identified in section 102-768(1) or (4) may expand by a maximum of 25% over the lifetime of the use or the structure. The applicant shall comply, to the greatest extent practical as determined by the planning board, with all other performance standards of this division in constructing the expansion.

***Response: N/A***