### South Berwick Town Council Meeting June 27, 2023

The Chair reported the following to the Clerk:

Chair Mallory Cook called the meeting to order at 6:00pm. Councilors present included John James, Jeff Minihan, Jessica Cyr, and Melissa Costella.

#### Executive Session

1. On a motion by Mr. James, seconded by Mr. Minihan, it was unanimously voted to enter executive session at 6:01pm, pursuant to 1MRSA §405.6A to conduct interviews with prospective board members.

The regular meeting convened at 6:52pm with the Clerk present. Town Manager Tim Pellerin and Assistant Town Manager Jennifer Janelle were also in attendance.

On a motion by Mr. James, seconded by Mr. Minihan, it was unanimously voted to end the executive session at 6:52pm.

#### Approval of Minutes

1. Public Hearing 05-23-23: On a motion by Mr. James, seconded by Mr. Minihan, it was unanimously voted to adopt the minutes as written.

2. Town Council 05-23-23: On a motion by Mr. Minihan, seconded by Mr. James, it was unanimously voted to adopt the minutes after changing the word "amble" to "ample" in the 4<sup>th</sup> sentence under Reports.

3. Town Council 06-13-23: On a motion by Mrs. Costella, seconded by Mr. Minihan, it was unanimously voted to adopt the minutes as written.

#### **Treasurer's Warrant**

1. On a motion by Mr. James, seconded by Mrs. Costella, it was unanimously voted to sign the warrant dated June 22, 2023, in the amount of \$216,809.92.

#### **Reports & Presentations**

1. Jim Damicis of Camoin Associates presented the Council with the completed Market Analysis. The Analysis is available for viewing on the Town's website.

#### **Public Comment**

None.

#### Unfinished Business

1. On a motion by Mrs. Cook, seconded by Mr. Minihan, it was unanimously voted to authorize the Town Manager to sign the amended Memo of Understanding with Southern Maine Planning & Development Commission. This will provide funding for the completion of phase 3 of the Comprehensive Plan update.

#### New Business

1. On a motion by Mrs. Cook, seconded by Mr. Minihan, it was unanimously voted to hold a public hearing on Tuesday, July 11, 2023 to receive comment on the proposed change to the Zoning Ordinance regarding Municipal Buildings.

2. On a motion by Mrs. Cook, seconded by Mr. James, it was unanimously voted to adopt the Market Analysis Implementation Matrix (as presented).

3. On a motion by Mr. James, seconded by Mrs. Cook, it was unanimously voted to nominate the Emery's Bridge Community Improvement Association for the 2023 Spirit of America Award.

4. On a motion by Mrs. Cook, seconded by Mr. Minihan, it was unanimously voted to re-appoint the following board & committee members with terms to expire June 30, 2026:

Building Committee: Mark Gagnon Conservation Commission: David Ramsay & Laura Eaton Historic District Commission: George Muller Library Advisory Board: Perrin Chick & Mike Siebach Zoning Board of Appeals: John Klossner

The Council also acknowledged the following board members that chose not to be reappointed: Planning Board: Christine Prunier & Zach Nobel Recreation Committee: Lucinda Grieg

Zoning Board of Appeals: Maya Bogh

5. Through the process of having the boilers and oil tanks replaced, it was discovered that the chimney is unsafe and has been leaking 'exhaust'. P. Gagnon will not finalize the boiler installation until the chimney is repaired.

On a motion by Mrs. Cook, seconded by Mrs. Costella, it was unanimously voted to authorize the Town Manager to accept the quote from A Merrie Sweepe Chimney Service in the amount of \$9470 to install 2 flexible stainless-steel flues and repoint the mortar on the exterior of the chimney.

#### Town Manager's Report

-Highway: Working on Park St and Main St. Also patching & fixing small washouts. Starting work on Winding Brook.

-Police: Made 16 arrests, attended 16 accidents, and made 36 traffic stops. Chief Ruger and Officer Sprouse helped on Hike-thru-History Day by cooking hotdogs for kids. The Special Olympics at the high school went very well. Officer Sprouse is now full-time and will be attending training for about 12 weeks before being added to the schedule. New ballistic helmets and trauma packs have been purchased. The new cruisers are on their way.

-Fire: 36 calls; 279 YTD, which is high. MMA has visited the station and reviewed files for compliance paperwork. Two members have graduated from Firefighter 1 & 2 certification programs. Firefighters will be using the Red Barn for training prior to its demolition. All apparatus have passed the annual pump testing with a few minor issues, which will be repaired in house.

-Code: Have issued 13 building permits and 6 plumbing permits, have conducted 216 inspections. Have received 7 applications for the admin asst position; have conducted interviews and offered the position to Madeleine Aubin.

-Planning: Held 1 Board of Appeals hearing. Have 1 business in the preliminary stages and 1 business in final approval.

-Library: Summer reading started June 16; with about 120 sign-ups. Starting new summer hours in July. If the new hours are successful, they may be kept long term.

-Recreation: Adult yoga and Zumba classes are going strong. After school youth programs have wrapped up. Summer camp starts June 27<sup>th</sup>. The Strawberry Run was very successful with more sign-ups than expected. June 21<sup>st</sup> the seniors held a Father's Day lunch with entertainment from the singing trooper. The July 4<sup>th</sup> luncheon will be held on Wednesday, June 28<sup>th</sup>.

-Assessing: Have begun working on updating values. Reviewing eligibility for BETE and other exemptions. Working on map and ownership changes.

-Town Clerk: The school budget election was held on June 13<sup>th</sup> with a very poor turnout. -Transfer Station: Freon, propane tanks and tires have been removed. Still getting a lot of brush. Have hired a new employee, Brian Patterson.

-Economic Development: The Market Analysis is complete. Developing the Downtown Revitalization Plan RFP. Business listings have been migrated to the Executive Pulse software. Phases 1 & 2 of the Comp Plan update are wrapping up.

-Finance/HR: Have met with FEMA; may receive up to a \$105,000 reimbursement. The Health Insurance Premiums Relief Program has ended. Employees will see an increase in their weekly premiums. Working on year end. -Administration: Have held numerous meetings with various people/groups including the food pantry, Port City Architecture, EMS, Water & Sewer Districts, Economic Development Director, and the building committee. Have held several phone conversations with the Towns Attorney. The Facebook page is starting to get a lot of attention. Have been able to finalize agreements with the people living in foreclosed homes.

#### **Councilor Comments**

1. Mr. Minihan:

-Thanked all the board applicants for their time and interest. He also thanked the board members that chose not to be reappointed.

-Attended the annual Southern Maine Planning & Development Commission meeting. He added that there is a wealth of knowledge in the planning and development sectors.

2. Mrs. Costella:

-Wished everyone a happy and safe 4<sup>th</sup>.

3. Mr. Cyr:

-Made note that the kids are loving recreation camp.

-Gave Kudos for another great road race and Strawberry Festival.

4. Mrs. Cook:

-Reminded the other councilors of the employee picnic on July 13th.

-Commented that the council should meet in workshop soon after the public hearing for the new town hall.

-Made note that she and Councilors Minihan will both be attending the next meeting by zoom.

#### Adjournment

On a motion by Mr. James, seconded by Mr. Minihan, it was unanimously voted to adjourn the meeting at 8:30pm.

Attest:

Barbara Bennett, CCM

#### South Berwick Town Council Public Hearing Town Hall June 28, 2023

Chair Mallory Cook opened the hearing at 6:00pm. Councilors present included John James, Jessica Cyr, Jeffrey Minihan, and Melissa Costella. Town Manager Tim Pellerin and Assistant Town Manager Jennifer Janelle were also in attendance.

The purpose of the hearing was to receive public input on the renovation of the existing town hall or building a new town hall.

Mrs. Cook announced that the meeting is being recorded and will be available to view on our YouTube channel.

Mrs. Cook gave an overview of the status of the staff/staff spaces and the building as it stands, and the actions taken to date to correct known issues. She stressed that we just started the process for determining whether we should renovate the existing building or build new, here or at another location. She also emphasized that there will be more opportunities for resident input as the process moves along.

Mrs. Cook also briefly reviewed the report from Port City Architecture.

Mrs. Cook explained that town staff is spending a significant amount of time 'putting out fires' regarding the amount of misinformation that is circulating. She strongly urged residents to only use official means for getting information about the project and avoid the rumor mills. Town staff will post information to the website and Facebook page when it is available.

Mrs. Cook explained the rules of order for the hearing. She also noted that emails will also be reviewed and added to the record. The initial question for tonight's hearing is 'Are you in favor of renovating the existing building or constructing a new building and why?'

-Malcolm Kenney, Agamenticus Rd, stated that he is not in favor of spending anymore money on this building. "This building has had it." He added that meetings should start later for better attendance. He also commented that if the decision is made to build new on town property, don't wait too long to inform the public.

-Richard Tiedemann, Liberty St, suggested that tours of the building be set up so that residents can actually see the spaces and issues for themselves.

-Richard 'Rob' Bernier, Mountain Rd, commented that this building is on a solid foundation and has good bones; it's worth looking at renovating. He added that the numbers provided by Port City are not accurate. He stated that the company he works for would be willing to do a complete assessment and provide more accurate numbers for a renovation.

-Floyd Beavers, Woodland Hills, asked if there were information packets. Mrs. Cook stated that information would be posted to our website and Facebook page.

-Tamre Steinhauer, Hill Dr, suggested that the council consider getting more architects involved. She added that the Port City presentation was not very good. "We should keep our cute little downtown." Consider renovating the existing building with mixed-use spaces.

-Paul Steinhauer, Hill Dr, stated that he is keeping an open mind, but leaning toward renovation. Was not impressed with the Port City presentation and suggested that we need to widen the scope and consult with more architects.

-Robert Leavens, Witchtrot Rd, made note of his construction background and believes the estimates to renovate this building are wrong. He stated that this is where town hall belongs.

-David McDermott, Bennett Lot Rd, stated that town hall should stay where it is. He added that the Port City report seemed negative toward this building; it was done too quickly.

-Mike Lassel, Paul St, stated that a community is defined by its character. This building does have good bones; and old buildings are sustainable. If we were to move, where would we go?

-John Irvine, Woodland Hills, read a letter (dated 6/12/23) signed by a number of residents urging the council to 'protect our village.' The town should look at creative ways to renovate the existing building. Concerns were expressed regarding costs and the social and environmental effects.

-Brad Christo, Oldfields Rd, stated that it would be helpful to have more information and studies. It is disconcerting that the building committee is not involved as it has been with prior municipal projects.

-Abigail Sherwood Kemble, Tamarack Dr, stated that she is in favor of renovating. She added that there should be a comprehensive study of all town owned buildings. This building would be good for mixed use. Keeping this central location may help citizens get more involved in our local government.

-Nancy Wetzel, Bennett Lot Rd, stated she was favor in renovating the existing building.

-Gary Wetzel, Bennett Lot Rd, stated he was in favor of renovating. We value our historic buildings and need to preserve them.

-James Cleary, Back Acres Ln, stated that we should renovate. He added that renovations could be done in stages by prioritizing repairs and spreading out the cost. A list of pros and cons should be developed. We don't need to go with the cheapest option. He added that he believed the problems with this building are being overblown.

-Ken Weston, Spring St, stated that he is an architect for UNH has been involved for numerous projects involving old buildings. Renovating an old building helps preserve our history. We need to be creative with our approach.

-John Rudolph, Oldfields Rd, appreciated the presentation and everyone's comments. Stated that we can all agree this is a special place. We have a complete downtown, which is rare. We should renovate the existing building. We should consider the economic, cultural and social effects of moving.

-Nicole St. Pierre, Great Works Dr, stated that once this building is gone, its gone. We can't afford to lose this treasure.

-Virginia Zavacky, Goodwin St, stated that she was in favor of renovating the existing building. "Would hate to lose the focal point of our community."

-Carrie Portrie, Norton St, stated that she loves the center of town, and we should renovate the existing building to preserve our history. She offered her services with community support workshops and dialogues.

-Stephen Portrie, Norton St, stated that we should renovate the existing building.

-Elita Galvin, Beaver Dam Rd, spoke in favor of renovating the existing building. "You can't put a dollar number on history and character."

There were approximately 55 people present for the hearing.

The hearing was closed at 7:17pm.

Attest:

Barbara Bennett, CCM



### A / P Warrant

South Berwick 7:55 AM

### 06/30/2023 Page 1

<b>-</b>						
Type	Check	Amount	Date	Wrnt	Paye	e
P	46763	184.84	06/26/23	78	1176	TREASURER STATE OF MAINE
Р	46764	17,676.08	06/26/23	78	0132	BUREAU OF MOTOR VEHICLES
R	46765	. 60.48	06/30/23	78	1260	10 BUTLER STREET LLC
R	46766	664.00	06/30/23	78	0478	AAA POLICE SUPPLY
R	46767	230.68	06/30/23	78	0042	ADMIRAL FIRE & SAFETY
R	46768	223.82	06/30/23	78	0054	BAKER & TAYLOR
R	46769	278.10	06/30/23	78	0061	BERWICK ACADEMY
R	46770	264.38	06/30/23	78	0048	Capital One
R	46771	516.34	06/30/23	78	0183	CENTRAL MAINE POWER
R	46772	224.75	06/30/23	78	1158	CINTAS CORP
R	46773	614.18	06/30/23	78	0181	CONSOLIDATED COMMUNICATIONS
R	46774	165.00	06/30/23	78	1261	CYN OIL CORPORATION
R	46775	1.728.00	06/30/23	78	0069	ELIMINATOR INC
R	46776	5.416.50	06/30/23	78	1128	GREAT FAST CRUSHING
R	46777	2.049.78	06/30/23	78	1072	Herc Rentals 187
R	46778	849.82	06/30/23	78	0675	KEY FORD OF YORK
R	46779	291 32	06/30/23	78	0127	MAINE MUNICIPAL ASSOCIATION
R	46780	448.00	06/30/23	78	1160	NORWOOD ASHLEY
R	46781	1 082 37	06/30/23	78	0089	PIKE INDUSTRIES INC
R	46782	241 14	06/30/23	78	0005	PINE STATE FLEVATOR COMPANY
R	46783	22 500 00	06/30/23	78	0484	
R	46784	78 15	06/30/23	78	0232	
R	46785	800.16	06/30/23	78	1729	ROBERT HALE
R	46786	361 17	06/30/23	70	1080	
R	46787	2 142 71	06/30/23	78	1175	
R	46788	95.00	06/30/23	78	0066	YORK COUNTY REGISTRY OF DEEDS
	Total	59,186.77				
		·		Count		
			Checks		26	
			Voids		Ο	
			Volus		Ū	
Melis	sa Costella _			John Jame	28	
Jeff 1	Minihan			Jessica (	Cvr	
				0000104		
Mallo	ry Cook					
Marro	Ly COOK					
				APPROVED	)	
				DATE		

### A / P Warrant

South Berwick-2023 10:36 AM

th Berwie	ck-2023		,				07/06/2023
36 AM			Bank: Kl	ENNEBUNK	- Oper	ating	Page 1
Туре	Check	Amount	Date	Wrnt	Paye	e	
R	46790	138.15	07/06/23	79	0891	2-Way Communications Services, Inc.	
R	46791	664.05	07/06/23	79	0042	ADMIRAL FIRE & SAFETY	
R	46792	152.50	07/06/23	79	0787	ADVANTAGE TRUCK GROUP	
R	46793	524.00	07/06/23	79	0002	ALLIED EQUIPMENT LLC	
R	46794	16,634.87	07/06/23	79	0132	BUREAU OF MOTOR VEHICLES	
R	46795	399.96	07/06/23	79	0062	BUSINESS EQUIPMENT UNLIMITED	
R	46796	342.12	07/06/23	79	0183	CENTRAL MAINE POWER	
R	46797	224.75	07/06/23	79	1158	CINTAS CORP	
R	46798	500.00	07/06/23	79	0023	DEB & DUKE MONOGRAMMERS	
R	46799	242.12	07/06/23	79	0070	DEMCO	
ĸ	46800	88.60	07/06/23	79	0156	DRAKE, NICOLE	
R	40801	921.00	07/06/23	79	0337	GENEST PRECAST	
к р	40002	121.40	07/06/23	79	0030	UOME DEPOT CREDIT SUCC	
R D	40005	121.40	07/06/23	79	0108		
R D	40004	250.00	07/00/23	79	1245		
л р	46806	204.05	07/06/23	79	1005	INGRAM LIDRART SERVICES	
R	46807	176 55	07/06/23	79	0170	MATHE SAD 35	
R	46808	59.96	07/06/23	79	0129	O'RETLLY EIRST CALL	
R	46809	150.00	07/06/23	79	0011	P GAGNON & SONS INC	
R	46810	703 73	07/06/23	79	0089	PIKE INDUSTRIES INC	
R	46811	2,428,65	07/06/23	79	1234	PORT CITY ARCHITECTURE	
R	46812	1.016.87	07/06/23	79	1229	ROBERT HALF	
R	46813	79,137,29	07/06/23	79	0203	SOUTH BERWICK WATER DISTRICT	
R	46814	5,437.31	07/06/23	79	0095	STELLAR NETWORKS	
R	46815	50.00	07/06/23	79	0520	TREASURER, STATE OF MAINE	
R	46816	66.00	07/06/23	79	1262	UNITED STATES TREASURY	
R	46817	1.624.68	07/06/23	79	1089	VILLAGE MOTORS	
R	46818	869.09	07/06/23	79	1175	WELCH OIL, LLC	
R	46819	2,226.43	07/06/23	79	0100	WEX BANK	
	Total	116,529.73					
				Count			
			Check	S	30		
			Voids		0		
Meli	ssa Costella			John Jam	es		
Jeff	Minihan			Jessica	Cyr		
Mallo	ory Cook						
				APPROVE			_
				DATE			
				TOWN MA	NAGER		

### A / P Warrant

South Berwick 10:57 AM

07/06/2023 Page 1

Type	Chock	Amount	Data	Wrot	Davo	
p	46780	165 00	07/06/23	vviiiu ک	1262	
R	46820	298 50	07/06/23	2	0891	2-Way Communications Services Inc
R	46821	676 50	07/06/23	2	0091	ALLIED FOLITPMENT LLC
R	46822	30 765 65	07/06/23	2	0002	ANTHEM BLUE CROSS BLUE SHIELD
R	46823	75.00	07/06/23	2	1223	CI AVETTE DENISE
R	46824	222.00	07/06/23	2	0535	D.M. BURNS SECURITY INC.
R	46825	75.00	07/06/23	2	0699	JANELLE . JENNIFER
R	46826	80.000.00	07/06/23	2	1263	KRT APPRAISAL
R	46827	48,316.50	07/06/23	2	1030	MAINE MUNICIPAL ASSOCIATION
R	46828	400.00	07/06/23	2	0082	MAINE RESOURCE RECOVERY
R	46829	752,849.12	07/06/23	2	0129	MAINE SAD 35
R	46830	75.00	07/06/23	2	1187	MCCABE, JENI
R	46831	100.00	07/06/23	2	0150	NEW ENGLAND STATE POLICE INFORM NETWORK
R	46832	75.00	07/06/23	2	1071	PELLERIN, TIMOTHY
R	46833	75.00	07/06/23	2	0167	REDIMARKER, JAY
R	46834	1,350.00	07/06/23	2	0015	REVIZE LLC
R	46835	1,160.35	07/06/23	2	1117	SHAKER HILL BAKERY AND CATERING
R	46836	1,500.00	07/06/23	2	0013	VJB SERVICES, LLC
R	46837	8,470.00	07/06/23	2	0102	YORK AMBULANCE ASSN INC
	Total	926,648.62				
				Count		
			Check	s	19	
			Voids		0	
Meli	ssa Costella			John Jame	25	
T- 55	Rg 4					
JETT	MIIIIII			Jessica	Syr	
Mall	ory Cook					
					)	
				DATE		, , , , , , , , , , , , , , , , , , ,
				UAIL		
				TOWN MAI	NAGER	



## Town Of South Berwick

### **Planning Department**

180 Main Street, South Berwick, ME 03908 TEL: 207-384-3011 FAX: 207-384-3303 planner@sbmaine.us

To: South Berwick Town Council From: South Berwick Planning Board Date: May 25, 2023

RE: Amendment to Ordinance- Chapter 140 Attachment 1, Table A

The Planning Board received an Ordinance Amendment from Town Staff for an amendment to Chapter 140, Attachment 1, Table A- Add Municipal Buildings. This change will allow municipal buildings across all zones. This change will be necessary when considering future buildings.

In summary, the changes affect the following chapter of the South Berwick Code: Chapter 140 Attachment 1, Table A

The Planning Board held a public hearing on May 3, 2023, with no comments from the public. The Planning Board recommends this Ordinance Change.

Sincerely,

Greg Zinser, Chair

NB 1

DNINOZ

Supp 21, Feb 2022

140 Attachment 1:3

)

### TOWN COUNCIL

### Agenda Information Sheet

Meeting Date: July 11, 2023	NB #2					
Agenda Item: Renewal of liquor license for Engrain						
Staff Recommendation:						
No issues have been reported.						
Town Manager's Recommendation:						
Requested Action:						
Motion & vote to renew the liquor license for En	grain.					
Vote						



#### STATE OF MAINE DEPARTMENT OF ADMINISTRATIVE AND FINANCIAL SERVICES BUREAU OF ALCOHOLIC BEVERAGES AND LOTTERY OPERATIONS DIVISION OF LIQUOR LICENSING AND ENFORCEMENT

### **Application for an On-Premises License**

All Questions Must Be Answered Completely. Please print legibly.

<b>Division Use Only</b>						
License No:						
Class:	By:					
Deposit Date:						
Amt. Deposited	1:					
Payment Type:						
OK with SOS:	Yes 🗆	No 🗆				

#### Section I: Licensee/Applicant(s) Information; Type of License and Status

Legal Business Entity Applicant Name (corporation, LLC):	Business Name (D/B/A):
ThisHe Pig Restaurant INC	DBH Engrain
Individual or Sole Proprietor Applicant Name(s):	Physical Location:
Jennifer Fectrau	279 main St. South Deralde
Individual or Sole Proprietor Applicant Name(s):	Mailing address, if different:
	Same
Mailing address, if different from DBA address:	Email Address:
same as above	Jenrac 2010 gman.com
Telephone # Fax #: Cell 603-205-	Business Telephone # Fax #:
207-704-0624 3328	207-704-0624
Federal Tax Identification Number:	Maine Seller Certificate # or Sales Tax #:
464616897	1167918
Retail Beverage Alcohol Dealers Permit:	Website address:
	www.engrainkitchen.com
	J
1. New license or renewal of existing license? $\Box$ N	Iew         Expected Start date:
R	Lenewal Expiration Date: $8/16/23$
2. The dollar amount of gross income for the licensure perio	d that will end on the expiration date above?
100 000 00	Louis 1
Food: 422, 514, 87 Beer, Wine or Spirits:	4,939.61 Guest Rooms:

3. Please indicate the type of alcoholic beverage to be sold: (check all that apply)

Malt Liquor (beer) Wine

□ Spirits

4.	Indicat	te the type of license app	lying for	: (choose	only one) Buy ru	NIN			
		Restaurant (Class I, II, III, IV)		Class A (Class	A Restaurant/Lounge XI)	2		Class . (Class	A Lounge X)
		Hotel (Class I, II, III, IV)		Hotel - (Class	- Food Optional I-A)			Bed & (Class	Breakfast V)
		□ Golf Course (included optional licenses, please check if apply) □ Auxiliary □ Mobile Cart (Class I, II, III, IV)							
		Tavern (Class IV)			Other:				
		Qualified Caterer			Self-Sponsored Eve	ents (Qua	lified Ca	aterers (	Only)
		<u>Rej</u>	fer to Section	on V for th	he License Fee Schedule	on page 9			
5.	Busine	ess records are located at 19 Main S	the follo	wing ad	dress: Bermick	ME	637(	90	
6.	Is the l	icensee/applicant(s) citiz	zens of th	e United	d States?	9	Yes		No
7.	Is the l	icensee/applicant(s) a re	sident of	the Stat	e of Maine?	Ð	Yes		No
	NOTE: Applicants that are not citizens of the United States are required to file for the license as a <b>business entity</b> .								

.

8. Is licensee/applicant(s) a business entity like a corporation or limited liability company?

Yes D No If Yes, complete Section VI	II at the end of this application
--------------------------------------	-----------------------------------

- 9. For a licensee/applicant who is a business entity as noted in Section I, does any officer, director, member, manager, shareholder or partner have in any way an interest, directly or indirectly, in their capacity in any other business entity which is a holder of a wholesaler license granted by the State of Maine?
  - □ Yes □ No
  - $\Box$  Not applicable licensee/applicant(s) is a sole proprietor

.

10. Is the licensee or applicant for a license receiving, directly or indirectly, any money, credit, thing of value, endorsement of commercial paper, guarantee of credit or financial assistance of any sort from any person or entity within or without the State, if the person or entity is engaged, directly or indirectly, in the manufacture, distribution, wholesale sale, storage or transportation of liquor.

	. /	
Yes	9	No

If yes, please provide details:

11. Do you own or have any interest in any another Maine Liquor License? Yes No retail Pending!

If yes, please list license number, business name, and complete physical location address: (attach additional pages as needed using the same format)

Name of Business	License Number	Complete Physical Address

12. List name, date of birth, place of birth for all applicants including any manager(s) employed by the licensee/applicant. Provide maiden name, if married. (attach additional pages as needed using the same format)

Full Name		DOB	Place of Birth
Jennifer Fecteau		8/17/81	Biddefird ME
Chelsca Goldman		6/20/93	Fredncksburg VA.
Residence address on all the above for pre- Name	vious 5 years Address: 9 Er	nenys Bndy	e Rd S. Berwick
Name Chelsea goldman	Address: 107	Poplar Hill Jebano	Rd n mE 04027
Name chetter goldman	Address:	mayburg	VIrginia Beach
Name	Address:		

13. Will any law enforcement officer directly benefit finar	cially from this license, if issued?
🗆 Yes 🗹 No	
If <b>Yes</b> , provide name of law enforcement officer an	nd department where employed:
l	
14. Has the licensee/applicant(s) ever been convicted of an the United States?	ny violation of the liquor laws in Maine or any State of
If Yes, please provide the following information a format.	and attach additional pages as needed using the same
Name:	Date of Conviction:
Offense:	Location:
Disposition:	
<ul><li>15. Has the licensee/applicant(s) ever been convicted or violations, in Maine or any State of the United States?</li><li>If Yes, please provide the following information a format.</li></ul>	f any violation of any law, other than minor traffic $\Box$ Yes $\Box$ No and attach additional pages as needed using the same
Name:	Date of Conviction:
Offense:	Location:
Disposition:	/ · ·
16. Has the licensee/applicant(s) formerly held a Maine licensee/a	quor license? Yes 🗆 No
17. Does the licensee/applicant(s) own the premises?	🗆 Yes 💢 No
If No, please provide the name and address of the	owner:
Fernysmith 4 Oxford	CT Kenneburk ME 04043

.

- 18. If you are applying for a liquor license for a Hotel or Bed & Breakfast, please provide the number of guest rooms available:  $\lambda/A$
- 19. Please describe in detail the area(s) within the premises to be licensed. This description is in addition to the diagram in Section VI. (Use additional pages as needed)

The area to be licensed is a 40 stat restamant. See attached diapram.

20. What is the distance from the premises to the nearest school, school dormitory, church, chapel or parish house, measured from the main entrance of the premises to the main entrance of the school, school dormitory, church, chapel or parish house by the ordinary course of travel?

Name:	Central	School.
Distance:	.2 mi	les

#### Section II: Signature of Applicant(s)

By signing this application, the licensee/applicant understands that false statements made on this application are punishable by law. Knowingly supplying false information on this application is a Class D Offense under Maine's Criminal Code, punishable by confinement of up to one year, or by monetary fine of up to \$2,000 or by both.

Please sign and date in blue ink.

Dated: 62623

Jennf Jeel

Jennifer Fecteau

Printed Name Duly Authorized Person

Signature of Duly Authorized Person

Printed Name of Duly Authorized Person

#### Section.III: For use by Municipal Officers and County Commissioners only

The undersigned hereby certifies that we have complied with the process outlined in 28-A M.R.S. §653 and approve this on-premises liquor license application.

Dated: \_\_\_\_\_

Who is approving this application?

County Commissioners of \_\_\_\_\_ County

□ Please Note: The Municipal Officers or County Commissioners must confirm that the records of Local Option Votes have been verified that allows this type of establishment to be licensed by the Bureau for the type of alcohol to be sold for the appropriate days of the week. Please check this box to indicate this verification was completed.

Signature of Officials	Printed Name and Title
	1
	· · · · · · · · · · · · · · · · · · ·

#### This Application will Expire 60 Days from the date of Municipal or County Approval unless submitted to the Bureau

Included below is the section of Maine's liquor laws regarding the approval process by the municipalities or the county commissioners. This is provided as a courtesy only and may not reflect the law in effect at the time of application. Please see <u>http://www.mainelegislature.org/legis/statutes/28-A/title28-Asec653.html</u>

§653. Hearings; bureau review; appeal

1. **Hearings.** The municipal officers or, in the case of unincorporated places, the county commissioners of the county in which the unincorporated place is located, may hold a public hearing for the consideration of applications for new onpremises licenses and applications for transfer of location of existing on-premises licenses. The municipal officers or county commissioners may hold a public hearing for the consideration of requests for renewal of licenses, except that when an applicant has held a license for the prior 5 years and a complaint has not been filed against the applicant within that time, the applicant may request a waiver of the hearing.

A. The bureau shall prepare and supply application forms.

**B.** The municipal officers or the county commissioners, as the case may be, shall provide public notice of any hearing held under this section by causing a notice, at the applicant's prepaid expense, stating the name and place of hearing, to appear on at least 3 consecutive days before the date of hearing in a daily newspaper having general circulation in the municipality where the premises are located or one week before the date of the hearing in a weekly newspaper having general circulation in the municipality where the premises are located.

**C.**If the municipal officers or the county commissioners, as the case may be, fail to take final action on an application for a new on-premises license or transfer of the location of an existing on-premises license within 60 days of the filing of an application, the application is deemed approved and ready for action by the bureau. For purposes of this paragraph, the date of filing of the application is the date the application is received by the municipal officers or county commissioners. This paragraph applies to all applications pending before municipal officers or county commissioners as of the effective date of this paragraph as well as all applications filed on or after the effective date of this paragraph. This paragraph applies to an existing on-premises license that has been extended pending renewal. The municipal officers or the county commissioners shall take final action on an on-premises license that has been extended pending renewal within 120 days of the filing of the application.

**D.**If an application is approved by the municipal officers or the county commissioners but the bureau finds, after inspection of the premises and the records of the applicant, that the applicant does not qualify for the class of license applied for, the bureau shall notify the applicant of that fact in writing. The bureau shall give the applicant 30 days to file an amended application for the appropriate class of license, accompanied by any additional license fee, with the municipal officers or county commissioners, as the case may be. If the applicant fails to file an amended application within 30 days, the original application must be denied by the bureau. The bureau shall notify the applicant in writing of its decision to deny the application including the reasons for the denial and the rights of appeal of the applicant.

2. Findings. In granting or denying an application, the municipal officers or the county commissioners shall indicate the reasons for their decision and provide a copy to the applicant. A license may be denied on one or more of the following grounds:

A. Conviction of the applicant of any Class A, Class B or Class C crime;

**B.** Noncompliance of the licensed premises or its use with any local zoning ordinance or other land use ordinance not directly related to liquor control;

**C.**Conditions of record such as waste disposal violations, health or safety violations or repeated parking or traffic violations on or in the vicinity of the licensed premises and caused by persons patronizing or employed by the licensed premises or other such conditions caused by persons patronizing or employed by the licensed premises that unreasonably disturb, interfere with or affect the ability of persons or businesses residing or located in the vicinity of the licensed premises to use their property in a reasonable manner;

**D**.Repeated incidents of record of breaches of the peace, disorderly conduct, vandalism or other violations of law on or in the vicinity of the licensed premises and caused by persons patronizing or employed by the licensed premises;

**D-1.** Failure to obtain, or comply with the provisions of, a permit for music, dancing or entertainment required by a municipality or, in the case of an unincorporated place, the county commissioners;

E.A violation of any provision of this Title;

F. A determination by the municipal officers or county commissioners that the purpose of the application is to circumvent the provisions of section 601; and

G.After September 1, 2010, server training, in a program certified by the bureau and required by local ordinance, has not been completed by individuals who serve alcoholic beverages.

**3. Appeal to bureau.** Any applicant aggrieved by the decision of the municipal officers or county commissioners under this section may appeal to the bureau within 15 days of the receipt of the written decision of the municipal officers or county commissioners. The bureau shall hold a public hearing in the city, town or unincorporated place where the premises are sinuated. In acting on such an appeal, the bureau may consider all licensure requirements and findings referred to in subsection 2.

#### A. Repealed

**B.** If the decision appealed from is an application denial, the bureau may issue the license only if it finds by clear and convincing evidence that the decision was without justifiable cause.

#### 4. Repealed

5. Appeal to District Court. Any person or governmental entity aggrieved by a bureau decision under this section may appeal the decision to the District Court within 30 days of receipt of the written decision of the bureau.

An applicant who files an appeal or who has an appeal pending shall pay the annual license fee the applicant would otherwise pay. Upon resolution of the appeal, if an applicant's license renewal is denied, the bureau shall refund the applicant the prorated amount of the unused license fee.

## Section IV: Terms and Conditions of Licensure as an Establishment that sells liquor for on-premises consumption in Maine

- The licensee/applicant(s) agrees to be bound by and comply with the laws, rules and instructions promulgated by the Bureau.
- The licensee/applicant(s) agrees to maintain accurate records related to an on-premise license as required by the law, rules and instructions promulgated or issued by the Bureau if a license is issued as a result of this application.
  - The licensee/applicant(s) authorizes the Bureau to obtain and examine all books, records and tax returns pertaining to the business, for which this liquor license is requested, and also any books, records and returns during the year in which any liquor license is in effect.
- Any change in the licensee's/applicant's licensed premises as defined in this application must be approved by the Bureau in advance.
- All new applicants must apply to the Alcohol and Tobacco Tax and Trade Bureau (TTB) for its <u>Retail Beverage Alcohol Dealers</u> permit. See the TTB's website at <u>https://www.ttb.gov/nrc/retail-beverage-alcohol-dealers</u> for more information.

#### Section V: Fee Schedule

•

.

**<u>Filing fee required</u>**. In addition to the license fees listed below, a filing fee of \$10.00 must be <u>included</u> with all applications.

**<u>Please note:</u>** For Licensees/Applicants in unorganized territories in Maine, the \$10.00 filing fee must be paid directly to County Treasurer. All applications received by the Bureau from licensees/applicants in unorganized territories must submit proof of payment was made to the County Treasurer together with the application.

Class o	<u>f License Typ</u>	pe of liquor/Establishments included	Fee
Class I	For This class includes Dining Cars; Golf Caterers	the sale of liquor (malt liquor, wine and spirits) Airlines; Civic Auditoriums; Class A Restaurants: Clubs with Courses; Hotels; Indoor Ice-Skating Clubs; Indoor Tennis Club	<ul> <li>\$ 900.00</li> <li>a catering privileges;</li> <li>s; Vessels; Qualified</li> </ul>
Class I	-A For This class includes	the sale of liquor (malt liquor, wine and spirits) sonly hotels that do not serve three meals a day.	\$1,100.00
Class II	I For This class includes Dining Cars; Golf	the Sale of Spirits Only s: Airlines; Civic Auditoriums; Class A Restaurants; Clubs w Courses; Hotels; Indoor Ice-Skating Clubs; Indoor Tennis Club	\$ 550.00 ith catering privileges; s; and Vessels.
Class II	<b>LI</b> For This class include: Dining Cars; Golf Pool Halls; and Be	the Sale of Wine Only s: Airlines; Civic Auditoriums; Class A Restaurants; Clubs w Courses; Hotels; Indoor Ice-Skating Clubs; Indoor Tennis Clubs d and Breakfasts.	\$ 220.00 ith catering privileges; s; Restaurants; Vessels;
Class I	V For This class include: Dining Cars; Golf ( Pool Halls; and Be	<b>the Sale of Malt Liquor Only</b> s: Airlines; Civic Auditoriums; Class A Restaurants; Clubs w Courses; Hotels; Indoor Ice-Skating Clubs; Indoor Tennis Clubs d and Breakfasts.	\$ 220.00 ith catering privileges; ; Restaurants; Taverns;
Class II	<b>Land IV</b> For This class includes Dining Cars; Golf Pool Halls; and Be	the Sale of Malt Liquor and Wine Only s: Airlines; Civic Auditoriums; Class A Restaurants; Clubs w Courses; Hotels; Indoor Ice-Skating Clubs; Indoor Tennis Clubs d and Breakfasts.	\$ 440.00 ith catering privileges; s; Restaurants; Vessels;
Class V	<b>For</b> For This class includes	the sale of liquor (malt liquor, wine and spirits) only a Club without catering privileges.	\$ 495.00
Class X	<b>For</b> This class includes	the sale of liquor (malt liquor, wine and spirits) only a Class A Lounge	\$2,200.00
Class X	<b>U</b> For This class includes	the sale of liquor (malt liquor, wine and spirits) only a Restaurant Lounge	\$1,500.00

#### Section VI Premises Floor Plan

In an effort to clearly define your license premise and the areas that consumption and storage of liquor authorized by your license type is allowed, the Bureau requires all applications to include a diagram of the premise to be licensed.

Diagrams should be submitted on this form and should be as accurate as possible. Be sure to label the following areas: entrances, office area, coolers, storage areas, display cases, shelves, restroom, point of sale area, area for on-premise consumption, dining rooms, event/function rooms, lounges, outside area/decks or any other areas on the premise that you are requesting approval. Attached an additional page as needed to fully describe the premise.



#### Section VII: Required Additional Information for a Licensee/Applicant for an On-Premises Liquor License Who are Legal Business Entities

Questions 1 to 4 of this part of the application must match information in Section I of the application above and match the information on file with the Maine Secretary of State's office. If you have questions regarding your legal entity name or DBA, please call the Secretary of State's office at (207) 624-7752.

All Questions Must Be Answered Completely. Please print legibly.

1.	Exact legal name: Thistle Pig	Restaurant	Inc	
2.	Doing Business As, if any: DBH	Engrain		
3.	Date of filing with Secretary of State:	1/27/14	State in which you are formed:	Maine

- 4. If not a Maine business entity, date on which you were authorized to transact business in the State of Maine: N/A.
- 5. List the name and addresses for previous 5 years, birth dates, titles of officers, directors, managers, members or partners and the percentage ownership any person listed: (attached additional pages as needed)

Name	Address (5 Years)	Date of Birth	Title	Percentage of Ownership
Jennifer Fectaur	9 Emerys Bridge Rd	8/17/81	president	100%
			G.	

(Ownership in non-publicly traded companies must add up to 100%.)

. \*

## TOWN COUNCIL

## Agenda Information Sheet

Meeting Date: July 11, 2023	NB #3		
Subject: Stage House Inn Special Amusem	nent Permit		
Information:			
The Stage House Inn plans to have live music. State and Town Ordinances require any business that serves liquor to also obtain a Special Amusement Permit if they are going to have live music or dancing.			
This permit will expire at the same time as the Stage House Inn's current liquor license, which is October 4 <sup>th</sup> .			
Staff Comments/Recommendation:			
Requested Action:			
Motion to approve the permit for Stage House I	nn.		
Vote:			

#### SPECIAL AMUSEMENT PERMIT APPLICATION

AS DEFINED IN SECTION 201 OF THE TOWN OF SOUTH BERWICK SPECIAL AMUSEMENT ORDINANCE, NO LICENSEE FOR THE SALE OF LIQUOR TO BE CONSUMED ON HIS LICENSED PREMISES SHALL PERMIT, ON HIS LICENSED PREMISES, ANY MUSIC, EXCEPT RADIO OR OTHER MECHANICAL DEVICE, ANY DANCING OR ENTERTAINMENT OF ANY SORT UNLESS THE LICENSEE SHALL HAVE FIRST OBTAINED FROM THE MUNICIPALITY IN WHICH THE LICENSED PREMISES ARE SITUATED A SPECIAL AMUSEMENT PERMIT SIGNED BY AT LEAST A MAJORITY OF THE MUNICPAL OFFICERS.

YOUR APPLICATION FOR A SPECIAL AMUSEMENT PERMIT SHOULD BE FILED ON THIS FORM WITH THE TOWN COUNCIL OR ITS DESIGNATED AGENT. PAYMENT OF A \$35 FEE IS REQUIRED AT THE TIME THE APPLICATION IS FILED. A COPY OF THE SPECIAL AMUSEMENT PERMIT ORDINANCE IS AVAILABLE UPON REQUEST FROM THE SOUTH BERWICK TOWN CLERK.

THE TOWN COUNCIL SHALL, PRIOR TO GRANTING A PERMIT, HOLD A PUBLIC HEARING WITHIN 30 DAYS OF THE DATE YOU FILE YOUR COMPLETED APPLICATION AT WHICH TIME TESTIMONY WILL BE RECEIVED FROM YOU OR YOUR DESIGNATED AGENT AND/OR ANY INTERESTED MEMBER OF THE PUBLIC. FAILURE TO ATTEND THE PUBLIC HEARING MAY RESULT IN A DELAY IN ISSUING THE PERMIT.

* * * * *
Name of Applicant for Permit: GREAT Works Apportes
Address of Applicant: 310 Portland Str. D. Berwich, ME
Telephone # of Applicant: <u>207 384 5283</u>
Name of Business to be Conducted: <u>Smgethuse</u> Inn
Address of Business: 224 Main Str. Po. Bernich, ME
Telephone # of Business: 207 704 0516
Nature of Business: Inn & Restructure
· · ·
Is Business a Corporation, Partnership or Proprietorship? (Circle One)
Type of Entertainment Planned: <u>)wc Music</u>

Has Applicant ever had a license to conduct the Business described herein denied or revoked or has Applicant or any partner or corporate officer ever been convicted of a felony?

If yes, please provide full details on reverse side of this Application.

Current Liquor License #: HOT - 20	120-1265	-4
Signature	Date	6-29-2023
$\searrow$		2

### TOWN COUNCIL

### Agenda Information Sheet

Meeting Date: 7/11/2023	NB #4	
Agenda Item: Sebago Technics Report		
Staff Recommendation:		
Town Manager's Recommendation:		
MEDOT asked Sebago Technics to add an addendum about roundabouts to be able to be approved for Federal funding. MEDOT has reviewed and accepted this report from Sebago Technics.		
Requested Action:		
To make a motion to accept the report with the	addendum as written.	
Vote		

# Route 236 Planning Study South Berwick, Maine



Prepared for:

Town of South Berwick





Final Report April 2023



### Route 236 Planning Study

#### South Berwick, Maine

#### **Table of Contents**

#### Glossary of Terms and Definitions

1.0	Introduction	1
2.0	Purpose and Need	2
	Previous Study Efforts	2
	Public Outreach	3
3.0	Existing Conditions	3
	Traffic Volumes	4
	Safety Review	7
	Intersection Analysis	9
4.0	Summary of Alternatives	. 12
	Intersection Alternatives	.13
	Corridor Considerations	.18
5.0	Recommended Alternative	.21
	Future Volume Analysis	.22
	Environmental Impacts	.24
	Opinion of Cost	.24
6.0	Summary and Conclusions	.25

#### Attachments

**Concept Plans** 

**Technical Appendix** 

Provided Under Alternate Cover



### **Glossary of Terms and Definitions**

<u>Transportation Demand Management (TDM)</u>: the application of strategies or policies to reduce travel demand. TDM strategies aim to provide greater support for alternative transportation options such as transit, rideshare, walking, cycling, etc.

<u>National Highway System (NHS)</u>: includes the Interstate Highway System and other roads important to the nation's economy and mobility.

Average Annual Daily Traffic (AADT): the average daily traffic volume at a given location over 365 days.

<u>Turning Movement Count (TMC)</u>: The collection of data at a location depicting the volumes and directionality of traffic.

<u>High Crash Location (HCL)</u>: defined by MaineDOT as an intersection of segment of roadway that has a greater than expected number of crashes (Critical Rate Factor > 1.0) over a three-year period.

<u>Critical Rate Factor (CRF)</u>: the ratio of the actual crash rate at an intersection or segment of roadway to the statistically calculated critical rate.

Synchro / SimTraffic: The software utilized to model traffic flow simulations.

<u>Level of service (LOS)</u>: the metric utilized to determine the control delay, measured A through F, with A being optimal and F being unacceptable.

<u>Manual on Uniform Traffic Control Devices (MUTCD)</u>: defines the standards used by road managers nationwide to install and maintain traffic control devices on public streets, highways, bikeways, and private roads.

<u>WB-67</u>: A typical semi-trailer truck as defined by the Federal Highway Administration. The WB-67 is 67 feet between the centerline of the front and rearmost axle, plus overhangs for an effective length of 76 feet.

<u>National Cooperative Highway Research Program (NCHRP)</u>: a national research program carried out through the support of the Federal Highway Administration and other partners. The NCHRP develops cooperative research reports that are utilized nationwide for engineering-based decision making.

<u>Access Management:</u> the management of access points to adjacent land parcels along roadways aimed at reducing conflict points. Access management implementations can increase capacity, manage congestion, and reduce crashes.

<u>Road Diet</u>: a technique in transportation to reduce the number of vehicular travel lanes, or the effective roadway width to reallocate space or achieve alterative goals through a roadway corridor.

<u>Two-Way Left-Turn Lane (TWLTL)</u>: a shared center lane exclusive for the use of left-turning traffic in either direction.

<u>Americans with Disabilities Act (ADA)</u>: prohibits discrimination against people with disabilities in this case, in the transportation and public accommodation sector.

<u>Rectangular Rapid Flashing Beacon (RRFB)</u>: a traffic control device that is pedestrian actuated and is intended to increase driver awareness of pedestrians at mid-block or uncontrolled intersections. RRFBs flash with an alternating frequency when activated.



### 1.0 Introduction

The Town of South Berwick, Maine is a York County bedroom community located on the New Hampshire border. Comprised of a historic village centered on Main Street (Route 236/Route 4), businesses, residences, and schools are all located within a half mile radius of the downtown.

The downtown corresponds with an approximate 1,000-foot stretch of roadway where Route 4 and Route 236 coincide as a major thoroughfare. Commuters from neighboring communities utilize Main Street as the primary throughway to access local employment opportunities, contributing to an average daily vehicle count through the corridor of just under 19,500 vehicles per day. This level of traffic provides challenges to the approximate 7,500 residents of South Berwick.

These challenges are not unique and have been documented within the community for several years. There is an extensive list of previous studies that have been undertaken to develop a solution to the ongoing traffic congestion and safety concerns, dating back to the 1980's and most recently by Sebago Technics, Inc. (Sebago) in 2010. Recommendations compiled from that study were not implemented. Therefore, the Town of South Berwick (Town) retained Sebago to reevaluate existing and future traffic considerations along Main Street.

The determined study area is shown in Figure 1 in the Technical Appendix and includes the following intersections with Main Street:

- 1. Dow Highway (Route 236)
- 2. Academy Street
- 3. Paul Street
- 4. Portland Street (Route 4)
- 5. Young Street
- 6. Norton Street



Study Area Figure

Additionally, the access drives for the Central Elementary School were included to understand impacts from the traffic volumes and patterns to and from the school.



### 2.0 Purpose and Need

A kick-off meeting was held with Town Staff on August 8, 2022, to discuss goals for the study and to walk the Main Street corridor. The Town's goals for the traffic study include:

- Review mitigation opportunities for vehicular congestion.
- Provide pedestrian safety and connectivity through the corridor.
- Acknowledge the larger goal of the downtown vitalization, including vehicular and pedestrian access to local businesses.
- Understand the implications of traffic changes on Main Street to nearby local roads and neighborhoods.

It was determined that the study should focus on recommendations for tangible physical improvements, as opposed to Transportation Demand Management (TDM) strategies, as TDM strategies were a significant focus of the 2010 study.

#### **Previous Study Efforts**

Through discussions with the Town, it was determined the previous study would remain as background and basis for the current reevaluation efforts, rather than replacing the study given the amount of time that has passed. Sebago was retained for the previous study in 2008 by the Kittery Area Comprehensive Transportation System (KACTS) and the Town to expand on a 2008 study completed by the Maine Department of Transportation (MaineDOT) for the Route 236 corridor. The MaineDOT study highlighted several safety and capacity issues within the Town that warranted further investigation.

Sebago's efforts included a robust public process with five (5) advisory committee meetings and three (3) public meetings. This process directed the purpose and need: to focus on improving vehicular mobility through access management and increase pedestrian and vehicular safety. The study reviewed several options, including providing for a bypass, intersection reconfigurations, and access management strategies. Recommendations included development of a TDM program aimed at reducing the number of commuters via carpool, increasing van share, reviewing park and ride opportunities, and exploring transit feasibility. A phased implementation plan included the following:

<u>Phase 1</u>: Relocate the Central Elementary School Access from Main Street to a backdoor entrance to Young Street.



Rendering from previous report, showing development of a backdoor entrance to Young Street.



<u>Phase 2</u>: Streetscaping implementations including curb bump outs, sidewalk construction, gateway treatments, and added green space with street trees. Underground infrastructure for future signal installations were to be provided at the Main Street intersections of Portland Street and Dow Highway.

<u>Phase 3</u>: Determine if implementations from TDM strategies had measurable impacts on the corridor. If not, install the traffic signal at the intersection of Main Street and Dow Highway and retain police officer traffic control during the AM peak hour at the intersection of Main Street and Portland Street.

<u>Phase 4</u>: Install the traffic signal at Main Street and Portland Street to replace the longstanding use of police officer traffic control during the AM peak hour period. The total estimate cost for the four phases was \$2.2 million in 2009 construction dollars.

#### **Public Outreach**

Following a meeting with the Town Council to introduce the study efforts on August 23, 2022, a Town Council Meeting was held on October 18, 2022, with public comment.

Sebago solicited feedback on existing concerns and requested input for future considerations, utilizing MaineDOT's *Complete Streets Policy* as a basis to understand corridor priorities. Over 25 members of the public spoke, generating the following consistent themes from the meeting:



Slide from the Public Meeting Presentation outlining options to consider for future implementation.

- Speeding is problematic at times and traffic calming is a high priority.
- Significant amounts of traffic make intersection movements challenging.
- The corridor lacks pedestrian visibility and generally pedestrians do not feel safe.

It was evident that the residents are passionate about the South Berwick community but find that the traffic challenges have negative impacts on the character of the community. There is a strong desire to find solutions that are inviting and compliment the historical nature of the downtown.

#### 3.0 Existing Conditions

MaineDOT classifies roadways in the state by priority ranging from 1 (Maine Turnpike, the Interstate System, and key arterials) to 5 (local roadways). Main Street (Route 236/4), Dow Highway (Route 236), and Portland Street (Route 4) are all Priority 2 State Highways, which means they are high priority, but not on the National Highway System (NHS). Because the roadways are classified as State Highways, the intersections are considered "major" intersections. The remaining roadways within the study area are priority 5, local roads and are considered "minor" intersections with Main Street. All the roadways within the study area have a posted speed limit of 25 miles per hour (MPH).



Main Street from Dow Highway to Norton Street has a singular lane in each direction for northbound and southbound through traffic. In the southbound direction, an exclusive left-turn lane is provided at the intersection of Dow Highway. In the northbound direction an exclusive right-turn lane is provided at the intersection of Portland Street.

Between Academy Street and Portland Street are several access points to local businesses and the Central Elementary School. A two-way left-turn lane is provided to accommodate these movements. Onstreet parking is also provided throughout the corridor and is most densely located between Portland Street and Norton Street.

#### **Traffic Volumes**

A review of historical count data from MaineDOT was completed utilizing MaineDOT's Traffic Database to understand vehicular volume trends within the last



On-street parking in the vicinity of Portland Street.

ten (10) years. Average annual daily traffic (AADT) volumes were reviewed in the study area and are summarized in Table 1.

MaineDOT		Count Year			
Count Station	Location	2013	2016	2019	2022
01206	Route 4 (Main St), SW/O Central St	10,340	9,890	10,600	9,540
01605	Route 4/236 (Main St), S/O Paul St	-	20,210	19,820	19,040
01601	Route 236 (Main St), N/O Route 4 (Portland St)	10,020	-	9,740	9,260
01204	Route 236 (Dow Highway), S/O Route 4 (Main St)	13,760	13,950	-	13,130
01508	Academy St, NW/O Union St	1,840	1,600	-	-
00106	Route 4 (Portland St), SW/O Colcord St	13,020	13,270	13,500	12,080
01802	Norton St, NE/O Route 236 (Main St)	3,070	3,480	2,580	3,140

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

As demonstrated above, the AADT on Main Street increased in the long-term period from 2013 to 2019 and then decreased during the short-term period from 2019 to 2022.

To determine peak hour volumes for analysis purposes, 12-hour turning movement counts (TMCs) were collected on September 14, 2022, from 6:00 AM to 6:00 PM at the study area intersections. The counts, which are included in the Appendix, were completed in September to assure both vehicular



and pedestrian traffic data associated to the **Central Elementary** School was captured. The volumes were factored to the 30<sup>th</sup> highest hour, the volumes utilized for traffic analysis purposes as they represent peak summer conditions. Main Street is classified by the MaineDOT as a Group I – Urban Roadway, resulting in a 3% increase from



observed September volumes to adjusted peak summer conditions. The peak hour volumes are summarized in Figure 2 in the Appendix.

Chart 1 demonstrates that the corridor experiences two distinct peaks between the periods of 7:00 to 9:00 AM and 3:00 to 5:00 PM, as typical of a commuter heavy corridor. The peak hours for the corridor occurred from 7:15 to 8:15 AM and from 4:15 to 5:15 PM. Based on the above graph, overall traffic volumes steadily rise preceding the AM peak hour and decrease following the PM peak hour,



demonstrating that the peaks for the corridor were likely captured within the data collection period.

The 2010 study utilized a 12-hour TMC at the intersection of Main Street and Portland Street from June 1, 2006. To understand

long-term traffic trends for a typical peak summer day, this data was compared to the 2022 volumes in Chart 2. The 12-hour peak summer volume was approximately 14,680 vehicles in 2006 and 17,095 in 2022. In 2006, volumes during the peak hours were approximately 7% and 8% lower than 2022 volumes during the AM and PM peak hour periods, respectively.


### Heavy Vehicles

An important metric for existing conditions analysis and future intersection evaluation is the percentage of heavy vehicles in the overall traffic volumes. The percentages for movements at the two major intersections, collected in the TMCs, are shown in Table 2 and graphically in Figure 3 in the Appendix.

Intersection of Main Street and Portland Street			
Movement	AM Peak Hour	PM Peak Hour	
Main Street Southbound Left	5.5%ª	0.0%	
Main Street Northbound Right	6.5%	2.0%	
Portland Street Westbound Left	7.5%	4.0%	
Portland Street Westbound Right	0.0%	1.0% <sup>b</sup>	
Intersection of Main Street and Dow Highway			
Intersection of Ma	in Street and Dow Highw	ay	
Intersection of Ma Movement	in Street and Dow Highw AM Peak Hour	ay PM Peak Hour	
Intersection of Ma Movement Main Street Southbound Left	in Street and Dow Highw AM Peak Hour 5.5%	ay PM Peak Hour 3.0%	
Intersection of Ma Movement Main Street Southbound Left Main Street Northbound Right	in Street and Dow Highw AM Peak Hour 5.5% 2.5%	ay <u>PM Peak Hour</u> <u>3.0%</u> <u>1.0%</u>	
Intersection of Ma Movement Main Street Southbound Left Main Street Northbound Right Dow Highway Westbound Left	in Street and Dow Highw AM Peak Hour 5.5% 2.5% 4.5%	ay PM Peak Hour 3.0% 1.0% 0.0%	

#### Table 2 – Heavy Vehicle Percentage by Movement

<sup>a</sup> Two trucks of 36 total movements

<sup>b</sup> One truck of 98 total movements

### Pedestrian and Bicycle Volumes

Main Street does not have dedicated bicycle facilities but has consistent pedestrian facilities. Sidewalks are located on both sides of Main Street from Academy Street to Norton Street, varying in width from 5 feet to 10 feet in the vicinity of the businesses at Portland Street. Between Academy Street and Dow Highway, sidewalk is provided along the west side of Main Street.

Crosswalks are located just south of Academy Street, north and south of Portland Street, and just south of Norton Street. Additional mid-block crossing locations occur at the Post Office Access and in the vicinity of the Town Hall and Central Elementary School. Both locations have pedestrian actuated Rectangular Rapid Flashing Beacons (RRFBs).

The TMCs captured both pedestrian and bicycle volumes through the corridor. Near the Central School, 15 bicycles southbound and 16 bicycles northbound on Main Street



RRFB at the Central Elementary School and Town Hall crosswalk.

were observed, accounting for 0.5% of the total volume along Main Street. Pedestrian volumes are summarized in Table 3 and graphically in Figure 4 in the Appendix.

Intersection of Main Street and Dow Highway			
Peak Hour Period	AM Peak Hour	PM Peak Hour	
Vehicular Peak Hour	0	0	
Pedestrian Peak Hour	2 (8:15 – 9:15 AM)	1 (3:00 – 4:00 PM)	
Intersectio	on of Main Street and Acade	emy Street	
Peak Hour Period	AM Peak Hour	PM Peak Hour	
Vehicular Peak Hour	1	7	
Pedestrian Peak Hour	5 (10:00 – 11:00 AM)	8 (3:15 – 4:15 PM)	
Main Street at	<b>Central Elementary School</b>	and Town Hall	
Peak Hour Period	Peak Hour Period AM Peak Hour PM Peak Hour		
Vehicular Peak Hour	10	7	
Pedestrian Peak Hour	12 (7:45 – 8:45 AM)	23 (3:00 – 4:00 PM)	
Intersection of Main Street and Portland Street			
Peak Hour Period	AM Peak Hour	PM Peak Hour	
Vehicular Peak Hour	1	15	
Pedestrian Peak Hour	13 (9:45 – 10:45 AM)	18 (3:15 – 4:15)	

### Table 3 – Pedestrian Volumes Crossing Main Street

### **Safety Review**

MaineDOT compiles crash data for roadways across the state to outline locations that have a higherthan-expected crash rate and potential safety deficiency. The metrics utilized to characterize a high crash location (HCL) include the number of crashes over a three-year period and the critical rate factor (CRF). The critical rate factor is the ratio of the actual crash rate at an intersection or segment of roadway to the statistically calculated critical rate.

An intersection or section of roadway is deemed an HCL if two criteria are met: a CRF greater than 1.0 and a minimum of eight (8) crashes during that three-year period. As such, crash data for the most recent three-year period from 2019 to 2021 was obtained from MaineDOT for the study area. The detailed crash data is included in the Appendix and is summarized in Tables 4 and 5.

Node	Location	# of Crashes (CRF)
63402	Main Street and Dow Highway	10 (1.52)
56697	Main Street and Academy Street	10 (1.63)
57011	Main Street and Paul Street	0 (0.00)
56698	Main Street and Portland Street	13 (2.08)
56012	Main Street and Young Street	0 (0.00)
55799	Main Street and Norton Street	4 (1.11)

#### **Table 4 – Intersection Crash Summary**



Segment / Link	Location	# of Crashes (CRF)
56694 - 63403	Dow Hwy between Vine St and Cumberland Farms	7 (0.38)
63402 - 56697	Main St between Dow Hwy and Academy St	2 (0.35)
56697 - 57011	Main St between Academy St and Paul St	5 (0.68)
57011 - 56698	Main St between Paul St and Portland St	2 (0.69)
56698 - 56012	Main St between Portland St and Young St	5 (1.35)
66042 - 56699	Portland St between Main St and Colcord St	7 (1.64)
56012 - 55799	Main Street between Young Street and Norton Street	0 (0.00)

As demonstrated in the previous tables, there are three (3) high crash locations within the study area: the Main Street intersections of Dow Highway, Academy Street, and Portland Street. The MaineDOT crash diagrams for these locations are included in the Appendix and summarized below. It should be noted that the Main Street links from Academy Street to Paul Street and Portland Street to Young Street were recently high crash locations. The most recent available crash diagrams were also reviewed below.

### Intersection of Main Street and Dow Highway

The intersection of Main Street and Dow Highway had ten (10) crashes and a CRF of 1.52 from 2019 to 2021. Five (5) crashes were angle collisions caused by Dow Highway vehicles failing to yield to a Main Street vehicle. Four (4) crashes were rear-end crashes on the Dow Highway approach. One (1) crash was a single-vehicle roadway departure crash caused by cell phone use. It should be noted that this intersection has been a high crash location every study period from 2012 to 2014 through 2017 to 2019.

### Intersection of Main Street and Academy Street

The intersection of Main Street and Academy Street had ten (10) crashes and a CRF of 1.63 from 2019 to 2021. The ten (10) crashes included seven (7) angle collisions and three (3) rear-ends. Six (6) of the angle collisions were caused when a vehicle turning left from Academy Street failed to yield to traffic on Main Street. It should also be noted that two (2) of the crashes were attributed to vehicular action while a pedestrian was in the Main Street crosswalk. This intersection has been classified as a high crash location since the 2017 to 2019 period.

### Intersection of Main Street and Portland Street

The intersection of Main Street and Portland Street had 13 crashes and a CRF of 2.08 from 2019 to 2021. The crashes include seven (7) rear-ends, five (5) angle collisions, and one (1) sideswipe when a tractor trailer made a wide turn to avoid a parked vehicle. It should be noted that this intersection has been a high crash location since the 2012 to 2014 period.



### Main Street Segment between Academy Street and Paul Street

The segment of Main Street between Academy Street and Paul Street was identified as a previous high crash location from the 2006 to 2008 period to the 2009 to 2011 period and then again from 2014 to 2016 period to the 2017 to 2019 period. Given the extensive crash history, the most recent available crash diagram from 2017 to 2019 was reviewed for crash patterns. The link had nine (9) crashes and a CRF of 1.21. Three (3) crashes were rear-ends, two involving vehicles that stopped for pedestrians in the crosswalks. Three (3) crashes involved parked vehicles, one from a door swing, one due to backing into a parked vehicle, and one attributed to operating under the influence (OUI). The final three (3) crashes were a single vehicle departure from the roadway attributed to an OUI, a single vehicle overturn due to sand on the road, and a failure to yield taking a left from a commercial driveway.

### Main Street Segment between Portland Street and Young Street

Similarly, the Main Street segment between Portland Street and Young Street was a previous high crash location from 2013 to 2015 through the period of 2017 to 2019. As such, the most recent available crash diagram from 2017 to 2019 was reviewed. The link had eight (8) crashes and a CRF of 2.14. One (1) crash was a rear-end involving a vehicle stopped for pedestrians in the crosswalk. The seven (7) additional crashes involved parked vehicles failing to navigate either in or out of a parking space.

### **Intersection Analysis**

### Capacity and Queue Analysis

An existing conditions model of the corridor was built to analyze conditions during the peak hour periods. Capacity analysis was performed utilizing Synchro/SimTraffic v.11 to determine the level of service (LOS) at each study area intersection. LOS is the metric utilized to determine the control delay, measured A through F, with A being optimal and F being unacceptable. The LOS and control delay for unsignalized and signalized intersections are depicted in the Highway Capacity Manual (HCM) 6 and shown in Table 6.

Level of Service (LOS)	Unsignalized Control Delay (Sec./Vehicle)	Signalized Control Delay (Sec./Vehicle)
А	≤10	≤10
В	>10-≤15	>10-≤20
С	>15-≤25	>20-≤35
D	>25-≤35	>35-≤55
E	>35-≤50	>55-≤80
F	>50	>80

### Table 6 – Level of Service from Control Delay



Capacity analysis was completed utilizing the above methodologies during the AM and PM analysis periods for 2022 existing conditions. The results are summarized with the delay in seconds followed by the level of service in Table 7 for the major Main Street intersections of Dow Highway and Portland Street, as well as the minor intersection of Academy Street. The reports for the entire corridor are provided in the Appendix.

Management	Delay in Second	ls/Vehicle (LOS)
wovement	AM Peak Hour	PM Peak Hour
Main Street and Dow Highway	Unsignalized	
Main Street SB Left	23.9 (C)	41.9 (E)
Dow Highway NW Left	(F)	(F)
Dow Highway NW Right	(F)	(F)
Overall Intersection	(F)	(F)
Main Street and Portland Street	Unsignalized	
Main Street SB Left	9.8 (A)	(F)
Portland Street SW Left	(F)	(F)
Portland Street SW Right	(F)	(F)
Overall Intersection	(F)	(F)
Main Street and Academy Street	Unsignalized	
Academy Street WB Left	(F)	(F)
Academy Street WB Right	27.4 (D)	(F)
Main Street NB Left	10.7 (B)	5.3 (A)
Main Street SB Left	6.6 (A)	14.9 (B)

## Table 7 – Level of Service from Control Delay2022 Existing Conditions

As outlined above, it is evident that there are significant capacity constraints through Main Street during both peak hour periods, with the levels of traffic on Main Street significantly impacting movements to and from the major side streets. Both the intersections of Dow Highway and Portland Street are operating overall at LOS "F" during both peak hour periods. Additionally, the following movements through the study area are operating at LOS "E" or worse during either peak hour period:

- Aroma Joe's lefts (AM)
- Central School Driveway lefts and rights (AM)
- Town Hall Driveway lefts (AM and PM)
- Paul Street lefts (AM)
- Young Street lefts and rights (PM)
- Norton Street lefts and rights (PM)



A queue analysis was also completed utilizing Synchro/SimTraffic. The 95<sup>th</sup> percentile queues during the peak hours are summarized in Table 8 with queues that exceed 1,000 feet or exceed the available storage highlighted.

Mourant	Length (Feet)		
wovement	Available Storage AM Peak Hour PM Pe		PM Peak Hour
Main Street and Dow Highway	Unsignalized		-
Main Street SB Left	310	339	304
Dow Highway NW Left	-	1,172	1,169
Dow Highway NW Right	360	551	678
Main Street and Portland Street	Unsignalized		
Main Street NB Right	290	27	51
Main Street SB Left	-	198	437
Portland Street SW Left	-	1,284	1,036
Portland Street SW Right	250	424	310
Main Street and Academy Street	Unsignalized		
Academy Street WB Left	-	217	470
Academy Street WB Right	65	80	115
Main Street SB Left	45	55	43

# Table 8 – 95th Percentile Queue Analysis2022 Existing Conditions

### Signal Warrant Evaluation

Often mitigation efforts for failing levels of service and angle collisions at an unsignalized intersection include review for traffic signalization. The Manual on Uniform Traffic Control Devices (MUTCD) has nine (9) warrants for review to determine the need for a traffic signal. As such, these warrants were reviewed for average day volumes. Because the Town of South Berwick is an isolated community with a population of less than 10,000 people, it is appropriate to apply the 70% reduction factor to the signal warrant analysis for each location.

Warrant 1 – Eight-Hour Vehicular Volume requires that eight (8) of the 12 counted hours exceed the volume thresholds for critical movements. This warrant allows for traffic signalization if one of two conditions are met:

- Condition A Minimum Vehicular Volume: "intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal."
- Condition B Interruption of Continuous Traffic: "intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street."



Sebago reviewed Warrant 1 for the Main Street intersections of Dow Highway, Portland Street, and Academy Street given the failing levels of service and demonstrated crash history. Additionally, Norton Street was reviewed given the volumes, the delay for exiting Norton Street movements, and feedback from the Town and the Public. The warrant charts are provided in the Appendix and summarized in Table 9.

## Table 9 – Traffic Signal Warrant 1 Results2022 Existing Volumes

Location	Major Approach	Minor Approach	Warrant Results
Main Street and Portland Street	Main Street (NB + SB)	Portland Street Lefts	Yes, Condition A
Main Street and Dow Highway	Man Street (NB)	Main Street Lefts (SB)	Yes, Condition A
Main Street and Academy Street	Main Street (NB + SB)	Academy Street Lefts + Rights <sup>1</sup>	No
Main Street and Norton Street	Main Street (NB + SB)	Norton Street Lefts	Yes, Condition A + B <sup>2</sup>

<sup>1</sup> Rights turns are generally subtracted from this volume if there is the ability to by-pass left-turns. Academy Street is wide enough to provide by-pass for approximately 65 feet. However, given the high volume of right-turns they are likely contributing to long queues and delays on this approach and were therefore included.

<sup>2</sup> Meets 7/8 hours for Condition A, volumes are 3% short of meeting all 8 hours.

As outlined in Table 9, both Main Street intersections of Portland Street and Dow Highway meet signal warrants under existing conditions.

Norton Street meets warrants under Condition A + B which is defined in the MUTCD as "the combination of Conditions A and B is intended for application at locations where Condition A is not satisfied, and Condition B is not satisfied and should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems."

Given the results of Warrant 1 for both Norton Street and Academy Street, Warrant 2 – Four-Hour Vehicular Volume was reviewed. Both intersections meet the minimum volumes for the four-hour warrant. It should be noted that Academy Street would not meet these signal warrants if the right-turns were discounted completely from the analysis.

## 4.0 Summary of Alternatives

Based on the results of the existing conditions analysis and feedback from the Town and the Public, Sebago explored several iterations of proposed solutions. The corridor was modeled in Synchro/SimTraffic with over ten iterations of options to determine feasible scenarios to bring to conceptual design level. These options are provided in more detail in the Appendix.



### **Intersection Alternatives**

The intersection alternatives focus on the major Main Street intersections of Dow Highway and Portland Street. Academy Street and Norton Street were considered for intersection implementations but ultimately not pursued conceptually.

Norton Street primarily provides access to residential and small-scale traffic generators, and the traffic patterns observed from the turning movement counts appear to be greater than generated by the uses alone. With residential uses, more traffic generally exits during the AM period and enters during the PM. Norton Street has more exiting traffic consistently throughout the 12-hour count period, with a heavy percentage turning left. It is likely that the imbalance is due to drivers attempting to bypass the long queues for left-turns on Portland Street by navigating to Norton Street. For this reason, Sebago recommends focusing on improvements at Main Street and Portland Street. If the delay for traffic on Portland Street can be minimized, it is likely there would be a reduction in vehicles using Norton Street to avoid the congested intersection.

At Academy Street, alternatives were explored for improvements as this location is a high crash location. Both signalization and roundabout treatment were reviewed as a part of the SimTraffic model. However, adding delay for Main Street movements with either of these options created queue spillback to Dow Highway and ultimately negative impacts to the network. Like Norton Street, the intersection also has a higher volume of right-turns during the PM peak hour that may be bypass longer queues at Dow Highway. The volumes do not signify as obvious of a bypass correlation as Norton Street, but it is possible some percentage of vehicles may relocate after improvements at Dow Highway. For these reasons, Sebago recommends focusing on improvements at Dow Highway and Main Street to understand if overarching corridor improvements have positive results on the intersection.

### Traffic Signals – Alternative 1

Two alternatives for signalization were reviewed for 2022 existing volumes. These volumes include an assumption of approximately 75% of Norton Street cut through traffic relocating, as shown in Figure 5 in the Appendix. It should be noted that no Academy Street traffic was relocated given the less obvious bypass correlation.

The first alternative focused on analysis to signalize both Main Street intersections of Portland Street and Dow Highway, retaining the existing lane uses. The traffic signals were modeled as a coordinated signal system, which is defined as signal timing that synchronizes traffic movements and manages the progression speed where uninterrupted flow is desired along a corridor (in this case Main Street). The capacity results are summarized in Table 10.



Movement	Delay (LOS)		
wovement	AM Peak Hour	PM Peak Hour	
Main Street and Dow Highway	Signalized		
Main Street NB Thru	32.3 (C)	37.2 (D)	
Main Street NB Right	26.0 (C)	36.6 (D)	
Main Street SB Left	17.4 (B)	20.1 (C)	
Main Street SB Thru	2.6 (A)	5.6 (A)	
Dow Highway NW Left	42.0 (D)	53.4 (D)	
Dow Highway NW Right	12.6 (B)	37.8 (D)	
Overall Intersection	17.8 (B)	32.2 (C)	
Main Street and Portland Street	Signo	alized	
Main Street NB Thru	7.0 (A)	7.2 (A)	
Main Street NB Right	1.1 (A)	1.5 (A)	
Main Street SB Left	44.2 (D)	297.7 (F)	
Main Street SB Thru	29.1 (C)	249.5 (F)	
Portland Street SW Left	67.1 (E)	37.2 (D)	
Portland Street SW Right	24.9 (D)	11.8 (B)	
Overall Intersection	29.0 (D)	38.7 (D)	

## Table 10 – Level of Service from Control DelaySignalization with Existing Geometry – 2022 Existing Volumes

The signalization of the two intersections, retaining the existing lane uses demonstrated overall intersection improvements during the AM and PM peak hour periods. At Portland Street, Main Street is failing during the PM peak hour as left-turn traffic is continually blocking through traffic. During the AM period, Portland Street lefts are operating at LOS "E." At Dow Highway, many movements are operating at LOS "D". These results signify that this alternative would provide improvements in the short-term to the majority of the movements, but likely would not provide long-term improvements if traffic volumes continue to increase.

### Traffic Signals – Alternative 2

The second alternative reviewed opportunities to implement additional capacity at the intersection by adding auxiliary turn lanes. The National Cooperative Highway Research Program (NCHRP) *Report 457 – Evaluating Intersection Improvements* was reviewed for lane addition recommendations based on volume thresholds. The following guidance is provided:

- Add an exclusive left-turn lane when lefts exceed 100 vehicles per hour and the opposing and adjacent through movements exceed 450 vehicles per hour.
- Dual left-turn lanes if the volume exceeds 300 vehicles per hour.
- Exclusive right-turn lane when rights exceed 300 vehicles per hour and adjacent through movement exceeds 300 vehicles per hour.



Based on the above guidance, a left-turn lane for southbound Main Street at Portland Street would be recommended as well as dual left-turn lanes southbound at Dow Highway. To accomplish a dual left-turn, an additional receiving lane on Dow Highway would be required to allow for two lanes of left-turning traffic. Additionally, a right-turn lane was added northbound at Dow Highway. Although the right-turn volume does not surpass the thresholds, the addition of a right-turn lane provides improvements for the overall intersection and approach levels of service. The capacity results for this alternative are summarized in Table 11.

	Delay (LOS)		
Movement	AM Peak Hour	PM Peak Hour	
Main Street and Dow Highway	Signalized		
Main Street NB Thru	30.9 (C)	27.1 (C)	
Main Street NB Right	9.6 (A)	9.8 (A)	
Main Street SB Left	19.8 (B)	24.7 (C)	
Main Street SB Thru	24.0 (C)	31.1 (C)	
Dow Highway NW Left	32.0 (C)	35.0 (C)	
Dow Highway NW Right	12.0 (B)	22.8 (C)	
Overall Intersection	20.3 (C)	25.0 (C)	
Main Street and Portland Street	Signalized		
Main Street NB Thru	15.7 (B)	13.1 (B)	
Main Street NB Right	1.9 (A)	3.5 (A)	
Main Street SB Left	26.9 (C)	31.3 (C)	
Main Street SB Thru	20.8 (C)	8.4 (A)	
Portland Street SW Left	28.3 (C)	29.1 (C)	
Portland Street SW Right	6.4 (A)	8.8 (A)	
Overall Intersection	17.0 (B)	12.6 (B)	

## Table 11 – Level of Service from Control DelaySignalization with Proposed Geometry – 2022 Existing Volumes

This alternative provides significant improvement with all movements operating at LOS "C" or better. At the intersection of Main Street and Portland Street, a 150-foot left-turn lane for southbound Main Street improves the operational performance of the intersection from LOS "D" to LOS "B" during both peak periods.

At Main Street and Dow Highway, the overall intersection operations are similar between alternatives. However, this option provides greater capacity improving all movements to LOS "C" or better during both peak hour periods. The addition of the dual left-turn lanes also minimizes the potential for queue spillback to extend to Academy Street. With overall better operations at the intersection, movements are serviced more often, reducing the necessary storage length for the Dow Highway approach from 360 feet to 200 feet.

While these implementations offer solutions to the two major intersections, it should be noted that the other intersections and driveways through the corridor still experience capacity constraints.



### Roundabouts

In addition to signalization, roundabouts were also evaluated as potential intersection solutions. Planning level design criteria for roundabouts was reviewed from the NCHRP 672 Report – *Roundabouts*. To determine the required roundabout size at each intersection the following criteria was noted:

- The threshold for one lane entry is 1,000 vehicles per hour on an approach with 1,000 to 1,300 vehicles potentially warranting two-lane entry.
- The typical inscribed diameter for a single-lane roundabout is 90 to 180 feet. To accommodate large tractor trailer trucks (classified as WB-67 by the Federal Highway Administration) diameters are recommended in the range of 130 to 180 feet.

Given the possible right-of-way constraints with building faces and historical properties, it was assumed a single lane roundabout was likely the most feasible. Based on a review of the volumes, this is marginally feasible, with northbound Main Street at Portland Street requiring a two-lane approach. The analysis of the lane requirements and thresholds is provided in the Appendix and the capacity results are summarized in Table 12.

	Delay (LOS)		
wovement	AM Peak Hour	PM Peak Hour	
Main Street and Dow Highway	Roundabout		
Main St NB Thru	12.8 (B)	57.3 (F)	
Main St NB Right	12.3 (B)	60.3 (F)	
Main St SB Left	7.3 (A)	3.1 (A)	
Main St SB Thru	7.2 (A)	3.2 (A)	
Dow Highway NW Left	4.9 (A)	43.4 (E)	
Dow Highway NW Right	4.8 (A)	41.1 (E)	
Overall Intersection	8.0 (A)	35.2 (E)	
Main Street and Portland Street	Round	labout	
Main St NB Thru	1.2 (A)	2.2 (A)	
Main St NB Right	1.2 (A)	1.3 (A)	
Main St SB Left	13.4 (B)	3.5 (A)	
Main St SB Thru	12.3 (B)	3.6 (A)	
Portland St SW Left	9.7 (A)	6.5 (A)	
Portland St SW Right	9.5 (A)	6.5 (A)	
Overall Intersection	7.2 (A)	3.1 (A)	

# Table 12 – Level of Service from Control DelayRoundabout Analysis – 2022 Existing Volumes



At the intersection of Main Street and Portland Street, the analysis showed significantly improved operations with all movements at LOS "B" or better. Given the results. a Concept Plan, which is attached to this report and included in the Technical Appendix, was developed to determine the feasibility. A single-lane roundabout with a northbound dual entry approach was determined to be feasible with an inscribed diameter of 124 feet. The provided inscribed diameter is less than the 130-



Roundabout concept at the intersection of Main Street and Portland Street.

foot minimum listed previously for planning purposes, as the existing geometry of the intersection approaches allow a lesser diameter while still accommodating WB-67 movements. It should be noted that the northbound approach angle is considered substandard, and the crosswalks would need to be moved further away from the intersection in some instances to accommodate truck movements.



At the intersection of Main Street and Dow Highway, some movements were operating at LOS "E" with the intersection at LOS "F" overall, as also confirmed by the 6<sup>th</sup> edition of HCM's roundabout capacity methodology. Similarly, a Concept Plan for a single-lane roundabout was

Roundabout concept at the intersection of Main Street and Dow Highway.

developed to determine if a multi-lane roundabout was feasible to pursue. The inscribed diameter required for a single lane roundabout would likely require right-of-way impacts. As such, a two-lane roundabout was determined to be infeasible and not pursued further from a capacity of conceptual level.



### **Corridor Considerations**

Additional review of the entire corridor was completed to compile recommendations for access management, pedestrian improvements, parking, and traffic calming. The Concept Plans, which are attached to this report and provided in the Technical Appendix, outline those considerations.

### Access Management

Access management is the strategy of reducing conflict points by means of reducing driveway widths, the number of driveways, and the spacing of driveways. Considerations provided align with the MaineDOT's *Chapter 299 Highway Driveway and Entrance Rules* as follows:

- Reducing parcel driveways to one full movement, or two with one-way flow. Driveways should be between 22 feet and 30 feet for two-way flow.
- Corner clearance should be 100 feet from an unsignalized intersection and 125 feet from a signalized intersection.
- Sharing access points when practical.
- Removing the Main Street access on corner parcels that have access to a side street.

A recommendation of the previous report was to provide access management for the Central Elementary School, which currently has access along Main Street in the area with the highest traffic volumes. A backdoor access to Young Street was proposed via vacant land adjacent to the library. This was not completed, and new development has since occurred on the previously identified land. To revisit this possibility, right-ofway impacts would be required on an undeveloped portion of the parcel referred to as Map 028/Lot 027.

Sebago also reviewed opportunities for connection to Central Street to the south. Upon further investigation, Central Street is a privately owned way. This connection would require right-of-way impacts on an undeveloped portion of the parcel referred to as Map 028/Lot 081.



South Berwick parcel maps showing parcels adjacent to the Central Elementary School that would be impacted to create a backdoor access for the school to either Young Street or Central Street.



### Traffic Calming

A theme that was consistently heard from the public was the need for traffic calming through the corridor. Alternatives were reviewed with a focus on the area between Academy Street and Portland Street. The first alternative aimed to reduce the amount of pavement by means of a "road diet." It was determined that the two-way left turn-lane (TWLTL) should be retained for safety and mobility to provide left-turning traffic a location to wait while completing a left-turn into the numerous properties and side streets. The TWLTL also provides the opportunity for a two-stage exit for vehicles taking a left from the driveways in this area. To provide pavement reduction strategies without removing the TWLTL, a provided alternative removes the on-street parking. The space is reallocated as esplanade that could be utilized for street trees or pedestrian scale lighting.



Alternative to remove on-street parking and reallocate the space to esplanade. The Town could consider landscaping or lighting opportunities within the esplanade.

An option that was discussed with the Town was providing a raised median island along Main Street, replacing the two-way left-turn lane between Academy Street and Portland Street. In reviewing left-turn movements through this section, many of them operate at LOS "E" or LOS "F" due to the high volumes of traffic on Main Street during the peak hours. A raised island would restrict movements to rights in and out only and would also serve as traffic calming. Given the existing Central Elementary School access, it was determined this option should not be pursued.

### Pedestrian Accommodations

The Concept Plans outline sidewalk reconstruction efforts throughout the corridor to accommodate shifting curb lines and upgrades to the Americans with Disabilities Act (ADA) standards. The corridor has existing infrastructure on both sides of Main Street, aside from a short segment on the east side between Dow Highway and Academy Street. It is recommended this section be added to provide additional connectivity from Academy Street to Dow Highway, providing the opportunity for pedestrians to continue south without the need to cross Main Street.



Depending on the alternative outlined in the Concept Plans, crosswalk locations are outlined as follows:

- An existing crosswalk south of Dow Highway is proposed to be retained. This would be a signalized crossing if a signal is installed at this intersection.
- An existing crosswalk south of Academy Street was removed in the Dow Highway signalized condition. Based on the counts, this does not appear to be a highly utilized crosswalk and contributed to a crash history at the intersection. Pedestrians southbound could continue along a newly installed sidewalk and cross via a controlled crosswalk at Dow Highway. Alternatively, pedestrians can continue north and cross via the retained mid-block crosswalk with RRFBs.
- The existing mid-block crosswalk at the Central Elementary School was retained. The RRFBs should be upgraded to current standards. If on-street parking is retained in this area, the Concept Plans show curb extensions to provide greater pedestrian visibility and a shorter crossing distance. It should be noted that curb extensions are also recommended as a traffic calming implementation.
- All crosswalks at Portland Street are retained. These would all be signalized crossings if a signal is installed at this intersection.
- The existing mid-block crossing at the post office was removed. If the proposed access management at the post office is completed and the crosswalk removed, additional accommodations for on-street parking can be completed.
- The existing Norton Street crosswalk was retained to the north of the intersection with proposed curb extensions to provide visibility around the on-street parking and act as traffic calming as vehicles enter the downtown. It is recommended this crosswalk be outfitted with RRFBs.



Conceptual crosswalk option at Norton Street with curb extensions that would provide traffic calming to vehicular traffic entering the downtown.



### **On-Street Parking**

MaineDOT provides design guidance for on-street parking. This guidance outlines parking restrictions within 20 feet of a crosswalk (unless curb extensions are provided), within 25 feet of an intersection, or within 10 feet of a driveway. As such, the Concept Plans demonstrate locations where parking may remain based on this guidance. Additionally, an alternative from Academy Street to Portland Street shows an option to retain the on-street parking through this section as opposed to the previously discussed road diet option.



Conceptual option to retain on-street parking were available from Academy Street to Portland Street.

One opportunity for additional on-street parking is the conversion of Paul Street to one-way only in the easterly direction. Paul Street is located just 80 feet south of where the stop bar would be located if the intersection of Main Street and Portland Street is signalized. Vehicles exiting Paul Street may often be blocked by the queue from the signalized condition and often may choose an alternative route. Additionally, the intersection will be located within MaineDOT's corner clearance recommendation of 125 feet from a signalized intersection. Given the proximity to the downtown businesses, Paul Street may be an opportunity to provide additional downtown parking.

## 5.0 Recommended Alternative

Based on the previous discussions, it is Sebago's professional opinion that the Town should pursue signalization with the implementation of new auxiliary turn lanes at the Main Street intersections of Dow Highway and Portland Street.

Although the roundabout at Main Street and Portland Street works from an operational perspective under 2022 conditions, the single lane roundabout does not provide significant reserve capacity to accommodate future growth in traffic volumes. A two-lane roundabout at either intersection is not feasible due to geometric and space constraints.



Analysis of signalization at both Portland Street and Dow Highway demonstrate available capacity under 2022 conditions. Additionally, signalization provides the greatest flexibility, by means of both retiming the signals as traffic patterns grow and change, and by also coordinating the two signals to optimize platooning traffic through the corridor. It is also important to note that traffic signalization allows the implementation of emergency vehicle pre-emption technology.



Concept Plan to signalize the intersection of Main Street and Portland Street.

With emergency services located in close proximity to Norton Street, this will allow prioritization of emergency vehicles through the corridor.



The signalization of both Portland Street and Dow Highway will also provide pedestrian phases with vehicular traffic stopped, providing more protection than under the free-flowing or roundabout conditions.

Concept Plan to signalize the intersection of Main Street and Dow Highway.

#### **Future Volume Analysis**

The recommended alternative for the intersections was reviewed for future conditions to determine long-term capacity and determine queue lengths for storage lanes. As discussed in Section 3, the corridor saw long-term growth of approximately 0.5% annually. This rate was utilized to project the 2022 volumes to 2042 future conditions. The 2042 volumes are shown in Figure 6 in the Appendix. Based on these volumes, the corridor timings were reevaluated, resulting in the capacity analysis results shown in Table 13 and 95<sup>th</sup> percentile queue results in Table 14.



# Table 13 – Level of Service from Control DelaySignalization with Proposed Geometry – 2042 Future Volumes

Movement	Delay	(LOS)
wovement	AM Peak Hour	PM Peak Hour
Main Street and Dow Highway	Signo	alized
Main Street NB Thru	30.2 (C)	46.0 (D)
Main Street NB Right	9.3 (A)	26.4 (C)
Main Street SB Left	29.7 (C)	31.0 (C)
Main Street SB Thru	34.9 (C)	42.7 (D)
Dow Highway NW Left	30.0 (C)	37.9 (D)
Dow Highway NW Right	15.3 (B)	30.1 (C)
Overall Intersection	25.8 (C)	36.4 (D)
Main Street and Portland Street	Signo	alized
Main Street NB Thru	15.6 (B)	13.3 (B)
Main St NB Right	2.2 (A)	4.0 (A)
Main Street SB Left	34.5 (C)	35.9 (D)
Main Street SB Thru	33.1 (C)	11.1 (B)
Portland Street SW Left	40.1 (D)	31.3 (C)
Portland Street SW Right	15.3 (B)	10.5 (B)
Overall Intersection	24.3 (C)	13.9 (B)

# Table 14 – 95th Percentile Queue AnalysisSignalization with Proposed Geometry – 2042 Future Volumes

Movement		Length (Feet)	
wovement	Available Storage	AM Peak Hour	PM Peak Hour
Main Street and Dow Highway		Signalized	
Main Street NB Thru	-	330	784
Main Street NB Right	200	195	297
Main Street SB Left	320	347	254
Main Street SB Left/Thru	-	356	309
Dow Highway NW Left	150	132	212
Dow Highway NW Right	-	319	492
Main Street and Portland Street		Signalized	-
Main Street NB Thru	-	120	110
Main Street NB Right	290	106	124
Main Street SB Left	150	162	149
Main Street SB Thru	-	410	192
Portland Street SW Left	-	647	322
Portland Street SW Right	175	132	144



### **Environmental Impacts**

As requested at the Public Meeting, before and after emissions were reviewed for the existing conditions and the recommended proposed condition. SimTraffic reports were utilized to obtain the data for fuel consumption and carbon monoxide (CO) emissions and the results are shown for the peak hours in Table 15. SimTraffic utilizes a fuel consumption-based emissions model where the rates for grams of emissions per gallon of fuel consumed are based on research completed by Oak Ridge Nation Labs for the FHWA in 1999. The estimation model for fuel consumption utilizes the total travel distance, total delay, and number of stops for each vehicle within each simulation and is based on research completed by the McTrans Center at the University of Florida in 2010.

Measurement	Existing Peak Hour	Proposed Peak Hour
AM Fuel Use (gal)	78.6	55.4 (-30.8%)
PM Fuel Use (gal)	128.1	59.2 (-68.9%)
AM CO Emissions (g)	19,757	16,809 (-14.9%)
PM CO Emissions (g)	15,534	13,019 (-16.2%)

While the proposed signalization demonstrates an improvement through the corridor, it should be noted that the results in the table above represent only the peak hour of traffic and not an entire day. Typically, a signalized intersection is less environmentally friendly than an unsignalized intersection when the unsignalized intersection is operating at reasonable levels of service. Given the existing conditions model was oversaturated during the peak hours, there is likely an overestimation in the level of improvement between the existing and proposed values.

## **Opinion of Cost**

Planning level construction costs for the recommended intersection improvements have been estimated in 2023 dollars. Both alternatives provided between Academy Street and Portland Street have also been estimated for the Town's consideration. The estimate spreadsheets are included in the Appendix and summarized in Table 16. It should be noted that the estimates provided are construction costs and do not include any preliminary engineering, construction engineering, or right-of-way related costs.

	Alternative	Cost Estimate (2023 Dollars)
Α	Intersection of Main Street and Dow Highway	\$1,200,000.00
В	Intersection of Main Street and Portland Street	\$1,300,000.00
С	Between Academy Street and Portland Street – Option 1	\$625,000.00
D	Between Academy Street and Portland Street – Option 2	\$750,000.00
	Approximate Preliminary Cost (A + B + C)	\$3,125,000.00
	Approximate Preliminary Cost (A + B + D)	\$3,250,000.00



## 6.0 Summary and Conclusions

Sebago Technics has completed an analysis of the Main Street (Route 236) corridor from Dow Highway to Norton Street. Several alternatives for the corridor were reviewed, with primary focus on the Main Street intersections of Portland Street and Dow Highway. Both intersections have long-standing capacity constraints and safety deficiencies and have been previously acknowledged for the need for traffic signalization. Other intersections and access points within the study area are also challenged with capacity constraints due to the volume of traffic that travels daily through the corridor.

Traffic analysis and Concept Plans were completed to determine the most feasible improvements that provide long-term benefit to the corridor. Both traffic signalization and roundabout treatments were evaluated at the two major intersections. Although the roundabout at Main Street and Portland Street works from an operational perspective, a single lane roundabout does not provide significant reserve capacity to accommodate future growth in traffic volumes. A two-lane roundabout at either intersection is not feasible due to geometric and space constraints.

Traffic signalization at these intersections also provides the greatest flexibility, by means of both the ability to retime the signals as traffic patterns grow and change, and by also coordinating the two signals to provide optimization of the platooning traffic through the corridor. It should also be noted that at the intersection of Main Street and Portland Street, signalization allows for the retainage of greater amounts of parking for southbound Main Street in the vicinity of the businesses.

At the intersection of Main Street and Dow Highway, it is recommended to modify the intersection to include a shared left-turn and through lane on the southbound approach, allowing for dual left-turns onto Dow Highway. On the northbound approach, construct a through lane and dedicated right-turn lane with 150 feet of storage. At the intersection of Main Street and Portland Street, it is recommended to retain the northbound through lane and dedicated right-turn lane and construct a through lane and dedicated left-turn lane with approximately 150 feet of storage.

The improvements at these two intersections are likely to provide long-term improvements and have greater impacts to this area of South Berwick, as mitigating the existing long delays for Portland Street and Dow Highway should reduce diverted traffic through the local neighborhoods attempting to bypass long queues. Because of that, it is recommended to allow for traffic volumes to re-balance at the intersections of Norton Street and Academy Street. These intersections were also reviewed for potential improvements as a part of this study, however it is Sebago's opinion that mitigating the existing deficiencies at the two major intersections will have positive impacts on diverted traffic to these intersections.

Throughout the remainder of the corridor, Concept Plans were developed with a focus towards access management and pedestrian connectivity. Between Dow Highway and Portland Street, two alternatives were provided: one that reduces pavement widths by removing parking and reallocating space for an esplanade with lighting and street trees, or a second that retains the on-street parking where available.



From a pedestrian connectivity standpoint, the corridor is well equipped with existing infrastructure on both sides of Main Street, aside from a short segment on the east side between Dow Highway and Academy Street. It is recommended to install a new sidewalk through this area to facilitate additional pedestrian connectivity. The plans are inclusive of this new section and provide planning level costs to reconstruct the existing facilities to upgrade to Americans with Disabilities Act (ADA) standards.

It is recommended to relocate curb lines and reconstruct sidewalk as feasible throughout the study area to seek opportunities for shortened crosswalks, additional pedestrian visibility, and for traffic calming purposes. Additionally, it is recommended to pursue access management opportunities between Academy Street and Portland Street and between Portland Street and Norton Street. Reducing the number and width of the existing access points will aid in reducing conflict points not only between vehicles but also between vehicles and pedestrians.

Finally, the Concept Plans outline the recommended crosswalk locations. It was determined that signalization of the Main Street intersections of Portland Street and Dow Highway was also more advantageous than the roundabout options. With the implementation of the roundabout, the crosswalks had to be pushed further away from the intersection and many of the refuge areas were required to be mountable to accommodate large truck movements. Signalization allows a pedestrian phase to operate with vehicles stopped, as opposed to yielding within the roundabout alterative. At the crosswalks located at unsignalized locations, Rectangular Rapid Flashing Beacons are recommended, assuring that all crosswalks within the study area have additional treatments to provide added visibility for pedestrians.



# Attachments

**Concept Plans** 













CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

# Memorandum

#### 08316-01

To: Denise Clavette, Town of South Berwick Tim Pellerin, Town of South Berwick Jennifer Janelle, Town of South Berwick

Date: May 17, 2023

Subject: Addendum #1, Route 236 Planning Study, South Berwick

This memorandum serves as Addendum #1 to the Route 236 Planning Study, dated April 2023. The addendum provides additional information, as requested by the Maine Department of Transportation (MaineDOT) on May 3, 2023, specifically regarding the intersection option analysis at the intersection of Route 236 (Main Street) and Route 4 (Portland Street).

The Study reviewed opportunities to improve operations and safety at the intersection of Main Street and Portland Street through the use of signalized intersection control or a roundabout. Under 2022 traffic volumes, both the traffic signal and the roundabout had acceptable levels of service. For that reason, both options were reviewed from a feasibility standpoint, including conceptual plan development. Upon review of the concept plan for the roundabout, the following observations were discussed:

- A "compact" single-lane roundabout, with a dual northbound approach appeared to "fit" planimetrically. It was noted that the northbound approach angle did not have enough deflection which resulted in a substandard design. Properly designing approach angles to roundabouts is an important traffic-calming aspect as this slows incoming traffic as it enters the roundabout.
- Two of the three crosswalk locations were able to be provided close to the entry and exit lanes with refuge islands. The third crosswalk on the southbound approach was required to be pushed away approximately 130 feet from the intersection, with the splitter island being entirely mountable for trucks. The 2022 queue analysis demonstrated a 95<sup>th</sup> percentile southbound queue at the roundabout of 267 feet and 106 feet during the AM and PM peak hours, respectively. This analysis demonstrated that there may be times a pedestrian would have to walk between queued vehicles at this location. Providing improved pedestrian accommodations and safety was a priority for the Study.

- To layout the roundabout while minimizing impacts, the sidewalk width needed to be narrowed, resulting in vehicular traffic being closer to the building faces on both the westerly side and the easterly corner. On the easterly corner, the distance from the edge of the travel way to the building face is roughly 7 feet, much closer than what exists today. Additionally, the layout does not provide for much separation between vehicles and pedestrians.
- There are approximately 16 existing parking spaces along the businesses on the westerly side of Main Street. The roundabout option resulted in a complete loss of all 16 parking spaces, while the signalized option was able to retain 9 (eliminating 7 parking spaces). Additionally, more parking was able to be retained on the Portland Street approach with the signalized option. In the 2010 study by Sebago Technics, a signal was also recommended at this location. However, at the time, the removal of parking was enough for the Town to reconsider implementation. Parking continued to be a large topic of conversation during the most recent public outreach efforts. Retaining as much parking as possible was a priority as a part of the Study as it aids in retaining a downtown village feel through the Main Street corridor.

Considering the above, the signalized option also provided the following added benefits:

- Retaining wide sidewalks with possible green space along the business frontages. The Town
  expressed interest in not only improving delays to vehicles on the corridor but also having the
  ability to implement strategies to allow for "beautification" of the corridor allowing for this
  section of Main Street to serve as more of a destination than a bypass through Town. This
  additional green space afforded by the traffic signal option allows for planters, benches,
  banners, and other elements to help serve the Town's long-term interests.
- While both options have potential right-of-way impacts (based on the GIS parcel lines) to the Sarah Orne Jewett House parcel, the signalized option appears to have less impacts to this property. It will be essential to eliminate or minimize the impacts here as this is designated as a historic property.
- Signalization provides improved response time for emergency vehicles through traffic signal emergency preemption technology. This is especially important as emergency vehicles commonly enter this intersection by heading southbound on Main Street as the Fire Station is 1,200 feet from the subject intersection at 71 Norton Street.
- With signalization there is the benefit of retiming the corridor and providing coordination between the signals. As we heard from the Public, and as was reflected in the traffic volumes, cut-through traffic through the local neighborhoods commonly occurs. With these improvements, it is anticipated that traffic will be added and rebalanced to both major intersections. Signalization allows for this rebalancing to be monitored and timings adjusted accordingly.

Based on the above, there were several determining factors outside of the vehicular capacity analysis that drove the recommendation for signalization. It was then determined that the recommended signalized alternative be reviewed for long-term considerations, which was reflected in the 2042 traffic analysis.

The roundabouts were also reviewed from a planning level perspective for 2042 volumes, however, given the discussion items above, and the 2042 operations showing favorable results for the signals, a more in-depth traffic analysis was not considered. The result of the planning level volume review was utilized as the basis for the qualifying statement that *"a single lane roundabout does not provide significant reserve capacity to accommodate future growth in traffic volumes"*.

As requested, additional capacity analysis was completed for discussion purposes between the roundabout and signalized option for Main Street and Portland Street. Table 1 outlines the level of service (LOS) results for the AM and PM periods under future 2042 conditions, based on the methodologies outlined in the Study.

Movement	Adden	dum 1	Recommende	d Alternative
Wovement	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
Main Street and Dow Highway	Signa	lized	Signa	lized
Main Street NB Thru	27.4 (C)	34.3 (C)	30.2 (C)	46.0 (D)
Main Street NB Right	9.4 (A)	13.9 (B)	9.3 (A)	26.4 (C)
Main Street SB Left	15.4 (B)	32.7 (D)	29.7 (C)	31.0 (C)
Main Street SB Thru	18.4 (B)	40.6 (D)	34.9 (C)	42.7 (D)
Dow Highway NW Left	32.9 (C)	41.3 (D)	30.0 (C)	37.9 (D)
Dow Highway NW Right	11.3 (B)	29.0 (C)	15.3 (B)	30.1 (C)
Overall Intersection	17.2 (B)	32.0 (C)	25.8 (C)	36.4 (D)
Main Street and Portland Street	Roundabout (	Unsignalized)	Signa	lized
Main Street NB Thru	2.1 (A)	3.2 (A)	15.6 (B)	13.3 (B)
Main St NB Right	1.5 (A)	1.7 (A)	2.2 (A)	4.0 (A)
Main Street SB Left	29.4 (D)	6.4 (A)	34.5 (C)	35.9 (D)
Main Street SB Thru	25.9 (D)	6.5 (A)	33.1 (C)	11.1 (B)
Portland Street SW Left	17.7 (C)	13.3 (B)	40.1 (D)	31.3 (C)
Portland Street SW Right	17.0 (C)	13.3 (B)	15.3 (B)	10.5 (B)
Overall Intersection	13.9 (B)	5.5 (A)	24.3 (C)	13.9 (B)

## Table 1 – Level of Service from Control Delay2042 Future Volumes

As outlined above, the assumption from MaineDOT was confirmed in that the roundabout alternative retains capacity with 2042 traffic volumes. All movements are anticipated to operate at LOS "D" or better during the AM peak hour and LOS "B" or better during the PM peak hour.

Given the information above, the recommendation of signalization was driven more so on the overall impacts to abutters and alternative modes of travel and less by the vehicular capacity results alone. We agree that the high-level volume review was overly conservative and that the Synchro / SimTraffic review provides a more appropriate representation of true long-term capacity. However, we hope the above supplemental information provides an improved understanding of the ultimate recommendations.

Please let us know if you have any additional questions.

Nicole Conart

Nikki Conant, P.E. Director of Transportation Engineering

Bala

Bradley Lyon, P.E., PTOE Vice President, Transportation Engineering

#### Attachments

SimTraffic Reports

## 3: Main St & Dow Hwy Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWT	NWR	All
Denied Del/Veh (s)	0.6	1.8	0.0	0.1	0.3	0.0	0.1	0.3
Total Del/Veh (s)	27.4	9.4	15.4	18.4	32.9	1.1	11.3	17.2

## 5: Main St & Dunkin'/Academy St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All	
Denied Del/Veh (s)	0.1	85.8	93.0	0.2	0.3	1.0	1.3	0.2	0.0	5.7	
Total Del/Veh (s)	8.4	488.8	355.3	17.5	5.0	5.3	15.2	0.6	0.2	29.3	

## 7: Main St & Central Elem. South/Aroma Joe's Ent. Performance by movement

Movement	EBR	WBL	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.2	0.1	0.0	0.1
Total Del/Veh (s)	19.0	38.8	11.2	1.0	0.6	7.5	1.9	0.4	1.8

## 9: Main St & Central Elem. North/Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	0.3	38.0	93.7	162.4	0.1	0.1	0.2	0.6	2.2
Total Del/Veh (s)	379.7	192.2	260.3	123.7	24.7	1.2	1.4	0.8	9.0

## 11: Main St & Paul St Performance by movement

Movement	WBL	WBR	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0
Total Del/Veh (s)	82.7	18.7	1.5	0.6	1.8	1.9

## 13: Main St & Portland St Performance by movement

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Del/Veh (s)	0.0	0.0	0.0	1.4	0.5	0.6	0.6
Total Del/Veh (s)	2.1	1.5	29.4	25.9	17.7	17.0	13.9

## 15: Young St & Main St Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.8	0.3	5.0	1.0	16.5	6.0	1.1

## 19: Main St & Norton St Performance by movement

Movement	SEL	SET	NWT	NWR	SWL	SWR	All
Denied Del/Veh (s)	11.3	10.5	0.0	0.0	46.4	67.0	13.9
Total Del/Veh (s)	7.8	5.6	0.2	0.1	71.4	56.9	11.5

## 21: Dow Hwy Performance by movement

Movement	SET	NWT	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	2.9	1.1	2.2

## **Total Network Performance**

Denied Del/Veh (s)	10.8	
Total Del/Veh (s)	56.5	

## Intersection: 3: Main St & Dow Hwy

Movement	NB	NB	SB	SB	NW	NW
Directions Served	Т	R	L	LT	L	R
Maximum Queue (ft)	368	225	227	274	165	286
Average Queue (ft)	168	68	143	189	49	124
95th Queue (ft)	296	179	215	256	116	246
Link Distance (ft)	1413		318	318		583
Upstream Blk Time (%)				0		0
Queuing Penalty (veh)				0		1
Storage Bay Dist (ft)		200			150	
Storage Blk Time (%)	5	0			0	4
Queuing Penalty (veh)	8	0			0	4

## Intersection: 5: Main St & Dunkin'/Academy St

Max				ND	00	00
Movement	EB	<b>NNR</b>	WB	NR	SB	SB
Directions Served	R	LT	R	LTR	L	TR
Maximum Queue (ft)	80	690	90	314	65	72
Average Queue (ft)	34	381	45	87	33	11
95th Queue (ft)	64	874	114	263	66	46
Link Distance (ft)	228	711		318	44	44
Upstream Blk Time (%)		29		1	9	0
Queuing Penalty (veh)		0		11	48	2
Storage Bay Dist (ft)			65			
Storage Blk Time (%)		66	5			
Queuing Penalty (veh)		55	3			

## Intersection: 7: Main St & Central Elem. South/Aroma Joe's Ent.

			ND	00	00
Novement	EB	VVB	NB	SB	SB
Directions Served	LTR	LTR	TR	L	TR
Maximum Queue (ft)	72	61	80	38	182
Average Queue (ft)	11	9	10	10	23
95th Queue (ft)	45	38	45	34	123
Link Distance (ft)	247	124	44		169
Upstream Blk Time (%)			1		3
Queuing Penalty (veh)			12		30
Storage Bay Dist (ft)				50	
Storage Blk Time (%)				0	3
Queuing Penalty (veh)				2	1

## Intersection: 9: Main St & Central Elem. North/Driveway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	251	100	72	167	135
Average Queue (ft)	67	45	32	14	16
95th Queue (ft)	231	108	66	92	87
Link Distance (ft)	278	95		169	140
Upstream Blk Time (%)	8	22		1	2
Queuing Penalty (veh)	0	0		11	23
Storage Bay Dist (ft)			50		
Storage Blk Time (%)			9	0	
Queuing Penalty (veh)			69	0	

## Intersection: 11: Main St & Paul St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	55	103	93
Average Queue (ft)	10	19	11
95th Queue (ft)	38	71	60
Link Distance (ft)	488	140	60
Upstream Blk Time (%)		0	2
Queuing Penalty (veh)		0	27
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 13: Main St & Portland St

Movement	NR	NR	SB	C/W
NOVEINEIIL	IND	ND	30	300
Directions Served	Т	R	LT	LR
Maximum Queue (ft)	55	43	362	449
Average Queue (ft)	8	3	184	134
95th Queue (ft)	34	22	371	407
Link Distance (ft)	60	60	358	1001
Upstream Blk Time (%)	0	0	3	1
Queuing Penalty (veh)	0	0	22	0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Movement	SE	NW	NE
Directions Served	TR	LT	LR
Maximum Queue (ft)	48	76	41
Average Queue (ft)	7	10	13
95th Queue (ft)	34	43	38
Link Distance (ft)	13	358	407
Upstream Blk Time (%)	4		
Queuing Penalty (veh)	23		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 19: Main St & Norton St

Movement	SE	NW	SW
Directions Served	LT	TR	LR
Maximum Queue (ft)	164	28	205
Average Queue (ft)	40	2	82
95th Queue (ft)	165	14	255
Link Distance (ft)	232	13	416
Upstream Blk Time (%)	8	0	7
Queuing Penalty (veh)	0	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 21: Dow Hwy

Movement	SE	SE	NW
Directions Served	Т	Т	Т
Maximum Queue (ft)	94	113	16
Average Queue (ft)	32	38	1
95th Queue (ft)	80	98	20
Link Distance (ft)	583	583	959
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Network Summary

Network wide Queuing Penalty: 349
### 3: Main St & Dow Hwy Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWT	NWR	All
Denied Del/Veh (s)	0.8	1.9	0.0	0.0	0.3	0.0	0.2	0.4
Total Del/Veh (s)	34.3	13.9	32.7	40.6	41.3	2.8	29.0	32.0

#### 5: Main St & Dunkin'/Academy St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	89.5	108.4	0.0	0.1	0.5	0.7	0.0	0.0	11.3
Total Del/Veh (s)	9.7	380.5	326.7	8.4	3.7	2.9	30.0	0.4	0.1	36.5

## 7: Main St & Central Elem. South/Aroma Joe's Ent. Performance by movement

Movement	EBL	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	158.8	43.7	27.6	1.0	0.4	16.8	1.4	1.9

#### 9: Main St & Central Elem. North/Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBT	SBR	All	
Denied Del/Veh (s)	34.5	23.1		0.1	0.0	0.2	0.0	0.0	0.0	0.5	
Total Del/Veh (s)	339.6	158.7		59.2	7.6	2.1	0.9	0.8	0.1	4.9	

#### 11: Main St & Paul St Performance by movement

Movement	WBL	WBR	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.1
Total Del/Veh (s)	365.8	80.5	3.4	1.9	1.1	3.3

### 13: Main St & Portland St Performance by movement

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Del/Veh (s)	0.0	0.1	0.0	0.0	0.4	0.4	0.1
Total Del/Veh (s)	3.2	1.7	6.4	6.5	13.3	13.3	5.5

#### 15: Young St & Main St Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.4	0.2	4.0	1.3	11.9	4.6	1.1

#### 19: Main St & Norton St Performance by movement

Movement	SEL	SET	NWT	NWR	SWL	SWR	All
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	6.5	1.2	0.1	0.1	22.0	14.9	2.8

## 21: Dow Hwy Performance by movement

Movement	SET	NWT	All
Denied Del/Veh (s)	0.0	0.6	0.3
Total Del/Veh (s)	2.4	1.6	1.9

## **Total Network Performance**

Denied Del/Veh (s)	9.0	
Total Del/Veh (s)	62.2	

## Intersection: 3: Main St & Dow Hwy

Movement	NB	NB	SB	SB	NW	NW
Directions Served	Т	R	L	LT	L	R
Maximum Queue (ft)	640	225	285	326	175	513
Average Queue (ft)	319	119	164	211	97	271
95th Queue (ft)	588	276	259	300	201	468
Link Distance (ft)	1413		318	318		583
Upstream Blk Time (%)			0	1		1
Queuing Penalty (veh)			1	5		4
Storage Bay Dist (ft)		200			150	
Storage Blk Time (%)	22	0			1	26
Queuing Penalty (veh)	37	1			6	32

## Intersection: 5: Main St & Dunkin'/Academy St

Max				ND	00	00
Movement	EB	<b>NAR</b>	<b>WB</b>	NR	SB	SB
Directions Served	R	LT	R	LTR	L	TR
Maximum Queue (ft)	32	704	90	309	65	58
Average Queue (ft)	8	464	85	58	25	4
95th Queue (ft)	29	882	111	206	60	32
Link Distance (ft)	228	711		318	44	44
Upstream Blk Time (%)		35		0	8	1
Queuing Penalty (veh)		0		5	29	3
Storage Bay Dist (ft)			65			
Storage Blk Time (%)		11	84			
Queuing Penalty (veh)		21	21			

### Intersection: 7: Main St & Central Elem. South/Aroma Joe's Ent.

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	TR	L	TR
Maximum Queue (ft)	43	65	77	35	167
Average Queue (ft)	6	24	20	9	15
95th Queue (ft)	29	57	59	32	91
Link Distance (ft)	247	124	44		169
Upstream Blk Time (%)			1		2
Queuing Penalty (veh)			11		12
Storage Bay Dist (ft)				50	
Storage Blk Time (%)				0	3
Queuing Penalty (veh)				1	1

## Intersection: 9: Main St & Central Elem. North/Driveway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	168	41	50	154	104
Average Queue (ft)	57	7	12	24	7
95th Queue (ft)	166	31	38	104	57
Link Distance (ft)	278	95		169	140
Upstream Blk Time (%)	3	0		0	1
Queuing Penalty (veh)	0	0		4	7
Storage Bay Dist (ft)			50		
Storage Blk Time (%)			0	2	
Queuing Penalty (veh)			1	0	

## Intersection: 11: Main St & Paul St

Movement	WB	NB	SB
Directions Served	LR	TR	LT
Maximum Queue (ft)	72	158	66
Average Queue (ft)	18	55	4
95th Queue (ft)	61	141	40
Link Distance (ft)	488	140	60
Upstream Blk Time (%)		1	1
Queuing Penalty (veh)		8	7
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

### Intersection: 13: Main St & Portland St

Movement	NB	NB	SB	SW
Directions Served	Т	R	LT	LR
Maximum Queue (ft)	89	89	203	315
Average Queue (ft)	48	9	67	105
95th Queue (ft)	84	46	148	236
Link Distance (ft)	60	60	358	1001
Upstream Blk Time (%)	3	0		
Queuing Penalty (veh)	17	2		
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Movement	SE	NW	NE
Directions Served	TR	LT	LR
Maximum Queue (ft)	31	84	48
Average Queue (ft)	3	16	21
95th Queue (ft)	16	59	47
Link Distance (ft)	13	358	407
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	0		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 19: Main St & Norton St

Movement	SE	NW	SW
Directions Served	LT	TR	LR
Maximum Queue (ft)	114	28	156
Average Queue (ft)	30	3	57
95th Queue (ft)	85	15	111
Link Distance (ft)	232	13	416
Upstream Blk Time (%)		0	
Queuing Penalty (veh)		1	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 21: Dow Hwy

Movement	SE	SE	NW
Directions Served	Т	Т	Т
Maximum Queue (ft)	68	74	56
Average Queue (ft)	13	11	4
95th Queue (ft)	49	47	50
Link Distance (ft)	583	583	959
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Network Summary

Network wide Queuing Penalty: 240

## 3: Main St & Dow Hwy Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWT	NWR	All
Denied Del/Veh (s)	0.6	2.0	0.2	0.5	0.2	0.0	0.5	0.5
Total Del/Veh (s)	30.2	9.3	29.7	34.9	30.0	1.5	15.3	25.8

#### 5: Main St & Dunkin'/Academy St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1	300.5	259.9	0.2	0.6	0.5	0.2	0.1	0.0	17.5
Total Del/Veh (s)	14.0	670.9	443.1	21.7	6.7	5.6	16.0	1.4	0.5	34.7

### 7: Main St & Central Elem. South/Aroma Joe's Ent. Performance by movement

Movement	EBR	WBL	WBR	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.1		0.1	0.0	0.0	0.6	0.4	0.0	0.2
Total Del/Veh (s)	20.0	51.1	10.8	1.1	0.5	9.2	3.9	5.3	2.9

#### 9: Main St & Central Elem. North/Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	61.2	50.7	151.8	153.8	0.1	0.1	0.3	0.8	3.0
Total Del/Veh (s)	294.3	203.1	282.2	181.7	25.4	1.2	2.9	2.3	10.4

#### 11: Main St & Paul St Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	70.1	12.6	2.0	0.4	7.1	2.1	2.2

### 13: Main St & Portland St Performance by movement

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Del/Veh (s)	0.2	0.0	0.5	2.6	1.1	3.7	1.2
Total Del/Veh (s)	15.6	2.2	34.5	33.1	40.1	15.3	24.3

#### 15: Young St & Main St Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	1.5	0.2	8.8	2.2	16.9	9.0	2.0

#### 19: Main St & Norton St Performance by movement

Movement	SEL	SET	NWT	NWR	SWL	SWR	All
Denied Del/Veh (s)	7.7	10.4	0.0	0.0	64.0	72.1	14.8
Total Del/Veh (s)	10.2	10.0	0.4	0.1	119.4	114.1	20.1

## 21: Dow Hwy Performance by movement

Movement	SET	NWT	All
Denied Del/Veh (s)	0.0	0.4	0.2
Total Del/Veh (s)	3.6	1.0	2.6

## **Total Network Performance**

Denied Del/Veh (s)	20.8	
Total Del/Veh (s)	78.0	

## Intersection: 3: Main St & Dow Hwy

Movement	NB	NB	SB	SB	NW	NW
Directions Served	Т	R	L	LT	L	R
Maximum Queue (ft)	402	224	344	348	166	406
Average Queue (ft)	190	77	222	256	54	144
95th Queue (ft)	330	195	347	356	132	319
Link Distance (ft)	1413		318	318		583
Upstream Blk Time (%)			4	6		0
Queuing Penalty (veh)			18	30		0
Storage Bay Dist (ft)		200			150	
Storage Blk Time (%)	8	0			0	8
Queuing Penalty (veh)	11	0			1	7

## Intersection: 5: Main St & Dunkin'/Academy St

Movement	EB	WB	WB	NB	SB	SB
Directions Served	R	LT	R	LTR	L	TR
Maximum Queue (ft)	72	721	90	333	74	98
Average Queue (ft)	35	431	38	101	36	25
95th Queue (ft)	64	927	107	299	70	77
Link Distance (ft)	228	711		318	44	44
Upstream Blk Time (%)		40		3	11	5
Queuing Penalty (veh)		0		27	57	26
Storage Bay Dist (ft)			65			
Storage Blk Time (%)		70	5			
Queuing Penalty (veh)		58	3			

### Intersection: 7: Main St & Central Elem. South/Aroma Joe's Ent.

Movement	FR	W/R	NR	SB	SB
Movement		VVD		50	50
Directions Served	LTR	LTR	TR	L	TR
Maximum Queue (ft)	65	64	68	44	214
Average Queue (ft)	11	10	12	11	63
95th Queue (ft)	44	40	47	36	206
Link Distance (ft)	247	124	44		169
Upstream Blk Time (%)			1		6
Queuing Penalty (veh)			11		70
Storage Bay Dist (ft)				50	
Storage Blk Time (%)				0	9
Queuing Penalty (veh)				3	2

## Intersection: 9: Main St & Central Elem. North/Driveway

Movement	EB	WB	NB	NB	SB	
Directions Served	LTR	LTR	L	TR	LTR	
Maximum Queue (ft)	274	100	69	174	159	
Average Queue (ft)	76	43	31	20	41	
95th Queue (ft)	255	104	65	108	146	
Link Distance (ft)	278	85		169	142	
Upstream Blk Time (%)	11	27		1	5	
Queuing Penalty (veh)	0	0		11	53	
Storage Bay Dist (ft)			50			
Storage Blk Time (%)			10	0		
Queuing Penalty (veh)			74	0		

## Intersection: 11: Main St & Paul St

Movement	WB	NB	NB	SB
Directions Served	LR	Т	TR	LT
Maximum Queue (ft)	53	140	114	110
Average Queue (ft)	11	31	12	46
95th Queue (ft)	39	105	59	119
Link Distance (ft)	500	142	142	86
Upstream Blk Time (%)		1	0	6
Queuing Penalty (veh)		3	0	72
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

## Intersection: 13: Main St & Portland St

Movement	NB	NB	SB	SB	SW	SW
Directions Served	Т	R	L	Т	L	R
Maximum Queue (ft)	116	112	174	374	656	233
Average Queue (ft)	76	56	56	248	297	25
95th Queue (ft)	120	106	162	410	647	132
Link Distance (ft)	86	86		346	1002	
Upstream Blk Time (%)	12	1		13	2	
Queuing Penalty (veh)	47	6		76	0	
Storage Bay Dist (ft)			150			175
Storage Blk Time (%)			0	32	23	
Queuing Penalty (veh)			0	14	7	

## Intersection: 15: Young St & Main St

Movement	SE	NW	NE
Directions Served	TR	LT	LR
Maximum Queue (ft)	53	94	49
Average Queue (ft)	13	13	13
95th Queue (ft)	43	55	40
Link Distance (ft)	13	346	400
Upstream Blk Time (%)	13		
Queuing Penalty (veh)	78		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 19: Main St & Norton St

Movement	SE	NW	SW
Directions Served	LT	TR	LR
Maximum Queue (ft)	230	30	295
Average Queue (ft)	75	2	124
95th Queue (ft)	240	13	357
Link Distance (ft)	232	13	416
Upstream Blk Time (%)	12	0	14
Queuing Penalty (veh)	0	0	0
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 21: Dow Hwy

SE	SE	NW
Т	Т	Т
118	128	7
41	48	0
97	112	7
583	583	959
	SE T 118 41 97 583	SE         SE           T         T           118         128           41         48           97         112           583         583

## Network Summary

Network wide Queuing Penalty: 765

## 3: Main St & Dow Hwy Performance by movement

Movement	NBT	NBR	SBL	SBT	NWL	NWT	NWR	All
Denied Del/Veh (s)	0.8	1.9	0.0	0.0	0.4	0.0	0.4	0.5
Total Del/Veh (s)	46.0	26.4	31.0	42.7	37.9	3.9	30.1	36.4

#### 5: Main St & Dunkin'/Academy St Performance by movement

Movement	EBR	WBL	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All	
Denied Del/Veh (s)	0.1	130.7	134.2	0.1	0.1	0.6	0.0	0.0	0.0	13.9	
Total Del/Veh (s)	7.4	454.6	403.7	9.5	5.4	4.5	31.2	0.4	0.2	44.7	

### 7: Main St & Central Elem. South/Aroma Joe's Ent. Performance by movement

Movement	EBL	EBR	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.1	0.0	0.0	0.2	0.0	0.0
Total Del/Veh (s)	110.6	6.8	25.6	1.4	0.6	19.2	1.0	1.9

#### 9: Main St & Central Elem. North/Driveway Performance by movement

Movement	EBL	EBR	WBL	WBR	NBL	NBT	NBR	SBT	SBR	All	
Denied Del/Veh (s)	0.1	0.1	0.1	0.1	0.0	0.2	0.0	0.0	0.0	0.1	
Total Del/Veh (s)	74.9	15.7	116.9	20.8	8.3	2.8	1.6	0.7	0.2	2.6	

#### 11: Main St & Paul St Performance by movement

Movement	WBL	WBR	NBT	NBR	SBL	SBT	All
Denied Del/Veh (s)	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	67.9	19.0	5.8	2.2	18.5	1.1	4.3

### 13: Main St & Portland St Performance by movement

Movement	NBT	NBR	SBL	SBT	SWL	SWR	All
Denied Del/Veh (s)	0.2	0.2	0.1	0.0	0.6	2.7	0.3
Total Del/Veh (s)	13.3	4.0	35.9	11.1	31.3	10.5	13.9

#### 15: Young St & Main St Performance by movement

Movement	SET	SER	NWL	NWT	NEL	NER	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Total Del/Veh (s)	0.4	0.2	4.5	2.0	18.3	5.2	1.6

#### 19: Main St & Norton St Performance by movement

Movement	SEL	SET	NWT	NWR	SWL	SWR	All
Denied Del/Veh (s)	0.4	0.4	0.0	0.0	0.2	0.2	0.2
Total Del/Veh (s)	8.0	1.7	0.3	0.2	21.3	13.1	3.0

## 21: Dow Hwy Performance by movement

Movement	SET NWT	All
Denied Del/Veh (s)	0.0 0.6	0.3
Total Del/Veh (s)	2.3 1.6	1.9

## Total Network Performance

Denied Del/Veh (s)	10.7	
Total Del/Veh (s)	75.9	

## Intersection: 3: Main St & Dow Hwy

Movement	NB	NB	SB	SB	NW	NW
Directions Served	Т	R	L	LT	L	R
Maximum Queue (ft)	833	225	287	331	175	567
Average Queue (ft)	404	140	157	212	102	274
95th Queue (ft)	784	297	254	309	212	492
Link Distance (ft)	1413		318	318		583
Upstream Blk Time (%)			0	1		1
Queuing Penalty (veh)			0	3		4
Storage Bay Dist (ft)		200			150	
Storage Blk Time (%)	30	0			0	26
Queuing Penalty (veh)	53	1			1	32

## Intersection: 5: Main St & Dunkin'/Academy St

Movement	EB	WB	WB	NB	SB	SB
Directions Served	R	LT	R	LTR	L	TR
Maximum Queue (ft)	32	708	90	332	64	44
Average Queue (ft)	9	547	86	107	26	3
95th Queue (ft)	32	936	112	305	61	23
Link Distance (ft)	228	711		318	44	44
Upstream Blk Time (%)		48		1	7	0
Queuing Penalty (veh)		0		16	24	1
Storage Bay Dist (ft)			65			
Storage Blk Time (%)		10	88			
Queuing Penalty (veh)		20	22			

### Intersection: 7: Main St & Central Elem. South/Aroma Joe's Ent.

Movement	FB	WB	NB	SB	SB
Directions Served	LIR	LIR	IR	L	IR
Maximum Queue (ft)	36	62	101	42	126
Average Queue (ft)	4	23	36	9	9
95th Queue (ft)	23	53	97	31	69
Link Distance (ft)	247	124	44		169
Upstream Blk Time (%)			4		1
Queuing Penalty (veh)			49		4
Storage Bay Dist (ft)				50	
Storage Blk Time (%)				0	1
Queuing Penalty (veh)				2	0

## Intersection: 9: Main St & Central Elem. North/Driveway

Movement	EB	WB	NB	NB	SB
Directions Served	LTR	LTR	L	TR	LTR
Maximum Queue (ft)	69	37	56	209	51
Average Queue (ft)	23	8	11	72	2
95th Queue (ft)	54	30	41	203	29
Link Distance (ft)	278	85		169	142
Upstream Blk Time (%)		0		3	0
Queuing Penalty (veh)		0		36	2
Storage Bay Dist (ft)			50		
Storage Blk Time (%)			0	6	
Queuing Penalty (veh)			5	1	

## Intersection: 11: Main St & Paul St

Movement	WB	NB	NB	SB
Directions Served	LR	Т	TR	LT
Maximum Queue (ft)	48	169	159	92
Average Queue (ft)	14	122	71	10
95th Queue (ft)	41	191	154	55
Link Distance (ft)	500	142	142	86
Upstream Blk Time (%)		8	1	1
Queuing Penalty (veh)		53	5	10
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

## Intersection: 13: Main St & Portland St

Movement	NB	NB	SB	SB	SW	SW
Disastiana Camuad	T		00	 		
Directions Served	I	ĸ	L		L	ĸ
Maximum Queue (ft)	121	128	173	268	417	236
Average Queue (ft)	98	91	83	103	181	49
95th Queue (ft)	110	124	149	192	322	144
Link Distance (ft)	86	86		346	1002	
Upstream Blk Time (%)	36	7		0		
Queuing Penalty (veh)	243	48		0		
Storage Bay Dist (ft)			150			175
Storage Blk Time (%)			1	2	12	
Queuing Penalty (veh)			2	3	14	

## Intersection: 15: Young St & Main St

Movement	SE	NW	NE
Directions Served	TR	LT	LR
Maximum Queue (ft)	30	136	59
Average Queue (ft)	3	20	21
95th Queue (ft)	16	85	47
Link Distance (ft)	13	346	400
Upstream Blk Time (%)	0		
Queuing Penalty (veh)	1		
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 19: Main St & Norton St

Movement	SE	NW	SW
Directions Served	LT	TR	LR
Maximum Queue (ft)	172	30	130
Average Queue (ft)	34	3	55
95th Queue (ft)	113	16	100
Link Distance (ft)	232	13	416
Upstream Blk Time (%)	0	0	
Queuing Penalty (veh)	0	1	
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Intersection: 21: Dow Hwy

Movement	SE	SE	NW
Directions Served	Т	Т	Т
Maximum Queue (ft)	67	73	62
Average Queue (ft)	11	10	4
95th Queue (ft)	44	45	40
Link Distance (ft)	583	583	959
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

## Network Summary

Network wide Queuing Penalty: 657

## SOUTH BERWICK MEMORIAL POST 5744, VFW

48 MAIN STREET, SOUTH BERWICK, MAINE 03908

June 27, 2023

Town of South Berwick Town Council 180 Maine St South Berwick, Maine 03908

Mallory Cook (Chair),

On behalf of the South Berwick VFW Memorial Post 5744, I am respectfully making a formal request to have the town South Berwick become a Purple Heart Town. This act would display community support and properly honor our Veterans who are Purple Heart recipients. It is vitally important we recognize those Servicemen and women who were wounded during combat action and displayed their selfless devotion to duty while serving their country. VFW Post 5744 will cover all costs of signage and plaques incurred on roadways. We look forward to your continued support for our Veterans throughout our Community. Enclosed are the general guidance to establish a Purple Heart City or Town and an example proclamation.

Please feel free to contact me with questions or concerns regarding this matter.

Sincerely,

Jeffrey A Chase Commander VFW Post 5744 207-475-5534 Twoyellowdogs11@yahoo.com





## **GUIDELINE TO ESTABLISH A PURPLE HEART** CITY or COUNTY

Here are some tips and suggestions on establishing a Purple Heart City or County. This is just a guide to assist in your efforts, and does not proclaim to be the "End-All" in the procedure.

I use a County Board of Supervisors (BOS) in the below outline, however, you can use the same information for a City Council or Board of Commissioners, etc.

First, find out who on your BOS is the Veteran's contact person. If there is no Supervisor assigned to this, contact the Board Chairperson or County person known to you, and ask for a face-to-face meeting.

Have with you a copy of the example Proclamation (click for two examples), and suggest they can use it as a guide in making their own. Be prepared to explain what your intent is ie, honoring all those who have sacrificed for their country .. those killed or wounded in combat ....

Make sure you advise him/her that it's cost neutral; that it will not cost the County any money ... any incurred cost will be absorbed by your chapter - such as plaques, highway signs, etc. This is an important point, as knowing that there is no cost involved will resolve any fiscal issue that might inhibit action.

You will probably be referred to the County Clerk to work up the Proclamation. Be sure she/he sends you a draft copy for your review and approval - *before it's finalized*. It's important you agree with the verbiage.

Once the Proclamation is firmed up, ask that the BOS presentation be placed on the agenda at least two weeks in advance. This gives you time to contact other Veterans organizations to attend the meeting, and for you to contact the newspaper / radio to publicize the event. Invite as many veterans you can - Ladies, other vets, all your members, etc.

If your BOS meetings are televised, ask the cameraman for copies on DVD - they may charge you, but some may honor our non-profit status and waive any charge. If they won't waive the cost, *pay the money* - it's well worth it to have a DVD of the presentation. If no filming is available, assign someone to video it.

Be prepared to give a short acceptance speech (if given the opportunity). They are honoring Purple Heart veterans, and they should receive recognition for doing so.

If you can, bring enough of your Department coins / pins, etc. to present to all the Supervisors - don't forget the County / City Attorney, Clerk of the Board, Chief Administrative Officer, City Manager etc. Everyone who sits facing the audience should get one.

After the awards, Chapters gater outside and take lot of still pictures - some are submitted to, and were published in, the Purple Heart Magazine, others can feature in the Purple Hat Press.

Please keep your Department and Regional Commander appraised of your progress. As the National Coordinator of the program, I will need legislative confirmation (a copy of the resolution or proclamation) alongwith an address, specifically a zipcode. Once confirmed, I will post it on the National web-site.

It is suggested you send the Proclamation / Resolution to your Department Commander, who will send it to your Regional Commander, who will send it to me (scanned copy in email). It is very important your chain-of-command be kept in the 'loop'.

The above can also be used as an outline for a Purple Heart State, by contacting a State Legislator who would be willing to introduce a Bill or Resolution.

Call or email me anytime if I can be of further assistance. Yours in Patriotism,

# Jim

James Varejcka National Purple Heart Trail Coordinator 450 Conestoga Ave Hickman, NE 68372-9783 Phone: (402) 792-2144 Email: jfvarejcka@windstream.net

## PROCLAMATION Purple Heart City

**Whereas,** the City of Nevada, Missouri and our community have a great admiration and the utmost gratitude for all the men and women who have, and are, selflessly serving their country and this community in the Armed forces; and

**Whereas,** Veterans have paid the high price of freedom by leaving their families and communities and placing themselves in harm's way for the good of all; and,

Whereas, the contributions and sacrifices of the men and women who served the Armed Forces have been vital in maintaining the freedoms and way of life enjoyed by our citizens; and

Whereas, many men and women in uniform have given their lives while serving in the Armed Forces; and

**Whereas**, citizens of our country have received the Purple Heart Medal as a result of being wounded while engaged in combat with an enemy force, construed as a singularly meritorious act of essential service; and

**Whereas**, the City of Nevada seeks to remember and recognize veterans who are recipients of the Purple Heart Medal; and

**Whereas**, I proclaim the City of Nevada, Missouri to be a Purple Heart City, honoring the service and sacrifice of our nation's men and women in uniform, wounded or killed by the enemy while serving to protect our freedoms.

THEREFORE, BE IT ORDAINED BY THE CITY OF NEVADA MISSOURI as follows:

Now, therefore, be it resolved on this 3<sup>rd</sup> day of June, 2014, I, Seth Barrett, Mayor of the City of Nevada supports the City of Nevada becoming a Purple Heart City in recognition of our communities Purple Heart Medal recipients.

Seth Barrett, Mayor

Bev Baker, City Clerk

Lake Graphics 7 Overlook Dr Berwick, ME 03901 kevin@lakegraphics.com 207-370.4232

www.lakegraphics.com



Quote 1201 #1 Purple Heart Road Signs	SALES Kevin Ke kevin@lakegrapt	REP INF nningto hics.cor	O n n	QUOTE D 06/30/2 QUOTE DUE D 07/14/2 QUOTE EXPIRY D 07/30/2 TE	2023 2023 204TE 2023 204TE 2023 RMS 0/50	
ORDERED BY Town of South Berwick	CONTACT INFO Jeff Chase twoyellowdogs11@yaho	oo.com				
# ITEM	QTY	UOM	U.PRICE	TOTAL (EXCL. TAX)	TAXABLE	
<ol> <li>Sign Panel with vinyl graphics         <ul> <li>.080 aluminum with center mount holes and premium vi graphics as per approved proof.</li> <li>Width: 12 Inches</li> <li>Height: 18 Inches</li> <li>Sides: 1</li> </ul> </li> </ol>	4 nyl	Each	\$77.045	\$308.18	Ν	

Invoices & Cancellation of Orders: Lake Graphics (Vendor) prepares your order according to your specifications. Therefore, prior to it's commencement, your order is only cancelable with the Vendor's prior written consent. After commencement of your order (the point at which materials are assembled and work has begun), your order is non-cancelable. The Customer is Solely Responsible for Proofreading Vendor does not assume any responsibility for the correctness of copy. Therefore, you must review and sign a proof prior to our commencement of your order. By signing your proof, you approve of its content and release the Vendor to commence our work. You are solely responsible for the content of the proof once it has been signed. However, if we should make an error in producing the work as proofed, please be assured that we will redo the work as quickly as possible and without charge to you. Vendor's Liability Vendor's total liability is hereby expressly limited to the services indicated on the invoice and Vendor will not be liable for any subsequent damages, consequential damages, or otherwise. All dates promised on this invoice are approximations unless the word "firm" is written and acknowledged by the Vendor.
Terms of Payment: Upon ordering, you must give Vendor a 50% deposit. Your balance will be due upon delivery and/or installation.

Terms of Payment: Upon ordering, you must give Vendor a 50% deposit. Your balance will be due upon delivery and/or installation. Vendor may, at its sole discretion, extend credit terms to you upon approval.C ollection Procedures: Invoices are considered delinquent thirty (30) days from the date that your order is completed. After the thirtieth day, a late charge of \$25.00, together with interest accruing at the rate of 1.5% per annum, or the maximum rate allowable by law is assessed. You shall be liable for all costs related to collection of delinquent invoices, including court costs and attorney's fees. Customer's Acceptance of Work: Customer's acceptance, either personal or through his/her agent(s) and/or employee(s) of the work ordered shall be deemed as full acceptance. This means that by accepting delivery of the work, customer affirms that the work substantially conforms to all expectations. Lost or Substantially Forgotten Work: If customer does not take possession of completed work within thirty (30) days from notification of completion, then the work will be considered lost or forgotten, and vendor will not be responsible for further loss. Customer will be billed and responsible for payment for work that has been completed.

Setup:	\$0
Shipping:	\$0
Subtotal:	\$308.18
Sales Tax (0%):	\$0
Total:	\$308.18

Downpayment (50.0 %)

\$154.09

SIGNATURE:

DATE:

## TOWN COUNCIL

## Agenda Information Sheet

Meeting Date: July 11, 2023	NB #6							
Agenda Item: Appointments to Board of Assessment Review & Zoning Board of Appeals								
Informational:								
BOAR: 4 regular seats terms expire June 30, 2 2 alternate seats terms expire June 30,	024, (2) 2025, & 2026 2025 & 2026							
ZBA: 2 regular seats terms expire June 30, 2025 & 2026 2 alternate seats terms expire June 30, 2024 & 2026								
PLANNING: Appt Zach Nobel as alternate, term expires June 30, 2026								
Town Manager's Recommendation:								
Requested Action:								
Council wishes								
Vote								