

To: Beth Suedmeyer

Date: June 30, 2017

Memorandum

Project #: 12984

From: VHB, Inc.

Re: Bruce Freeman Rail Trail Existing Conditions - Parking

This memorandum presents findings regarding the availability of parking in the vicinity of the Bruce Freeman Rail Trail (BFRT) alignment in Sudbury. VHB conducted parking occupancy counts at three locations owned by the town that might be used for BFRT parking, as well as at the nearby Assabet River Rail Trail. VHB also reviewed the immediate rail trail vicinity to determine whether there are other appropriate locations for designated parking.

This memorandum is organized in four sections. The first section presents a description of the three locations identified by the town and the parking counts at those locations. The second section describes findings regarding other potential locations. The third section presents the parking counts at the Assabet River Rail Trail. The final section presents findings and recommendations.

POTENTIAL TOWN-OWNED PARKING LOCATIONS

Town staff identified three town-owned locations that might be used for parking by trail users. The three locations are:

- 1. Ti-Sales Field,
- 2. Featherland Park, and
- 3. Davis Field.

Parking counts were conducted at the fields during October 2016 and June 2017. The initial counts were conducted the weekend of October 15/16, 2016. The weather both days was particularly warm and pleasant for that time of year. The parking counts are shown in Table 1 (attached). Supplemental counts were conducted on several other days that month (see Table 2). Parking counts in June were conducted on Saturday, June 3rd, Sunday, June 4th, and Saturday, June 10th. The weather on those days was generally sunny and warm.

On the pages that follow are summaries of the recreation facilities, use, parking capacity, and observed parking activity at each of the three locations.

Ti-Sales Fields

The Ti-Sales Fields are located at 36 Hudson Road, on the town-owned Parkinson Parcel adjacent to Ti-Sales. The fields can be used for lacrosse, soccer, and Ultimate Frisbee. The future BFRT runs along the east side of the field. There is a gravel lot providing parking for the fields. It is roughly 2/3 of an acre and could accommodate about 60 cars.

The Ti-Sales fields appear to be the least used of the three recreation areas. In October 2016, the fields were rented Monday, Tuesday, Thursday, and Friday from 3:00pm-5:00pm by the Lincoln-Sudbury (LS) High School Ultimate Frisbee team. On Fridays there was a flag football league from 4:30pm-7:00pm. The activity schedule in the spring includes the same activities as in the fall. It is reserved by LS High School on Mondays, Wednesday, Thursdays and Fridays from 3:00pm to 5:30pm, and by the flag-football group on Sundays from 10:00am to 1:00pm.

Observations were made of the parking at the field on Friday, October 14 while it was being used by the LS Ultimate Frisbee team. Between 4:00pm and 5:30pm there were a maximum of 31 cars parked. This was the only day of the October parking counts on which significant parking activity was observed. Additional parking occupancy counts were conducted on the subsequent two weekends and another weekday afternoon. There were between zero and 6 cars on those other days, and most if not all seemed to be associated with people exercising their dogs.

The parking activity at the June 10th flag football game was observed. It was the day of the "League Championships" and the parking was overcapacity. There were 85 cars, including many parking along the drive leading to the parking area. Of note, the website of the flag football league indicates that they will play games at another location starting the Fall 2017 season.



Featherland Park

Featherland Park has four little league baseball fields and one adult softball field. It is located at 491 Concord Road, at the intersection with Morse Road and near the Nixon School. The site is divided into two areas – Upper Featherland and Lower Featherland. The future BFRT runs along the far west edge of the Lower Featherland fields.

Both Upper and Lower Featherland have paved parking lots. There are 44 parking spaces at Lower Featherland and 113 parking spaces at Upper Featherland. There is also an old tennis court area at Upper Featherland that is available for overflow parking.

During October 2016, Featherland was reserved on Thursday nights for women's softball and on weekends by Sudbury youth baseball. Observations of parking were made on Saturday October 15, Sunday October 16, and Sunday October 23. The only sports activity observed on those days were at Lower Featherland during the morning of Saturday the 15th and during the early afternoon of Sunday the 23rd. There were 21 cars in the lower lot on the Saturday morning and 14 cars on the Sunday afternoon. At other times there were few, if any, cars parked at the Featherland lots.

The June 2017 schedule for the Featherland fields shows that all the fields are reserved for LS Youth Baseball (LSYB) on weekdays after 4:00pm and on Saturdays/Sundays from 8:00am to 10:00pm. Although all the fields are reserved on those days and times, the actual use varies and, according to LSYB schedules, typically 2 or 3 fields are used at once with occasionally four fields in use at the same time. Field use and parking activity was higher in the Spring than in the Fall. The three days of parking counts in June each included counts when three games were played simultaneously. As many as 108 parked cars were observed, leaving about 50 empty spaces not counting the overflow potential of the old tennis court area. In fact, the lower parking lot tended to be overparked, with an extra 10 to 15 cars parked on grassed areas, and thus the actual number of available spaces in the upper lot was at least 60.



Davis Field

The Davis Field recreation facility has two large multipurpose fields. There is a gravel parking lot which can accommodate about 100 cars informally parked (as typically done), or about 120 if the parking was more organized. The parking lot is located about 100 yards from the rail trail and there is a sidewalk along Route 117 between the parking lot and the rail trail.

In addition to the Davis Field parking, there is a small parking area at the rail trail. It is currently used by those walking on the Davis Farm conservation area. The parking lot is a dirt lot that can accommodate four or five cars.

The primary users of the fields are Sudbury Youth Soccer and a model airplane flying club. The flying club uses the fields on Sunday mornings. Sudbury Youth Soccer uses the fields weekday evenings (5:30pm-8:30pm according to the June schedule) and midday (11:30am-3:30pm) on Saturdays and Sundays.

The parking counts showed that Davis Field parking was heavily used on weekend afternoons, both Spring and Fall. As many as 87 cars were observed parked. On Sunday mornings, when the flying club was active, there were few parkers (6 to 13 cars).

The Davis Farm parking was lightly used. There was never more than a single car observed parked there.



OTHER POTENTIAL BFRT PARKING LOCATIONS

VHB reviewed the immediate rail trail vicinity to determine whether there are other locations that might be desirable for rail trail parking. While there did not appear to be other town-owned locations that might be appropriate, there is at least one location that would likely be used by rail trail users if parking were permitted.

The Sudbury Town Square retail property, in the Sudbury town center, is located across the street from the Ti-Sales Field. It is located adjacent to the rail trail and it is common for similarly located retail properties to cater to rail trail users, including accommodating rail trail parking. In fact, one of the designated parking areas for the Assabet River Rail Trail in Hudson is located in a retail plaza parking area.

Parking counts were conducted of the Sudbury Town Square parking whenever weekend counts were conducted of the Ti-Sales Field parking. There are some 140 parking spaces and fewer than 60 were in use during the weekend morning and midday counts.

NEARBY TRAIL PARKING ACTIVITY

To provide some context of typical parking activity at larger bicycle and hiking trails, the parking at the nearby Assabet River Rail Trail in Hudson/Marlborough was observed. In addition, information from a prior transportation study at the Assabet River National Wildlife Refuge in Maynard/Sudbury was reviewed.

Assabet River Rail Trail

Phase I of the ARRT extends about six miles from Hudson to Marlborough. Parking counts recorded at six locations are shown in Table 3 (attached). The ARRT has four designated parking lots, three in Hudson ranging from 15 to 23 spaces, and one in Marlborough that is a 50-space gravel lot near a recreation field. There is also a stretch of isolated on-street parking (Vila do Porto Boulevard) in Hudson that is adjacent to the trail and provides 33 parking spaces, as well as a cul-de-sac (with 8 marked parking spaces) adjacent to the trail and the Boston Scientific campus in Marlborough.

Counts were conducted of the ARRT parking on Saturday October 16, 2016 and Sunday October 17, 2016. Both days were very pleasant fall days, ideal for trail recreation. Between 23 and 37 cars in total were observed parked among the various parking areas during midday of the two weekend days.

A count conducted midday on Saturday June 10, 2017 showed 55 cars parked among the six parking areas. The Vila do Porto Boulevard location activity was substantially higher than in October (17 vs. 7 or fewer), likely because of a "Hudson Community Fest" event nearby. Total ARRT-related parking was likely 40 to 45 cars.

Assabet River National Wildlife Refuge

The Assabet National Wildlife Refuge contains some 15 miles of trails, including almost 4 miles of paved roads where bicycle use is allowed. VHB conducted a transportation study for the U.S. Fish and Wildlife service in 2011/2012. As part of that study, traffic and parking counts were conducted for a week in October 2011. Peak parking on any day during that week was fewer than 60 cars among the five parking areas in the refuge.

FINDINGS AND RECOMMENDATIONS

The future Bruce Freeman Rail Trail segment in Sudbury will add to the existing network of recreation trails in the area. As is typical for such trails, some users will choose to drive to the trail rather than walk or bike to the trail. Counts of parking activity along the Assabet River Rail Trail and at trailheads in the Assabet River National Wildlife Refuge show there was as many as 45 to 60 cars parked at those recreational trails during peak times on busy days.

There is parking at three town-owned recreation field areas adjacent to the future trail—the Ti-Sales Field, Featherland Park, and Davis Field—as well as the Davis Farm conservation area. The recreational fields, and their parking areas, are most heavily used on weekends during the spring and fall. The parking activity counts presented in this memorandum indicate that no one field area could accommodate additional parking for trail users at all times every day, but that there are options for accommodating trail user parking without displacing current field users. The specific findings for each of the locations are as follows.

- The Ti-Sales Field seems to be the location with parking most consistently available for rail trail users. The fields are not often used and, except for the one-time flag football championship day, current parking needs are modest. Moreover, the gravel parking area could easily be expanded to accommodate at least 20 more cars. However, should for some reason more parking be necessary, it seems likely that the nearby Sudbury Town Square would take the opportunity to allow rail trail users to park there and thus enable the retail businesses to market to the rail trail users. Currently there are two restaurants in the plaza that would be positioned well to cater to trail users.
- The Featherland Park parking counts showed there was plenty of parking available during times when three games were underway. Parking demand would be higher on the few days during the year when all fields are in use at the same time; but while that demand could likely come close to filling the marked parking spaces, there is still the potential use of the old tennis courts for additional parking needs.
- The Davis Field parking is consistently used on weekends, but based on the parking counts there is sufficient room to accommodate existing users and a reasonable number of rail trail users even during those peak days. It is also noted that a study of Davis Field use completed in 2014¹ showed an option to pave and expand the parking lot to accommodate 160 cars, and that the expanded capacity was sufficient for field users and rail trail users. Although this may no longer be appropriate, the utilization of the current gravel parking lot could be improved if necessary. Parking in the gravel lot is generally well organized by drivers who are frequent users, but additional cars could be parked if the parking, particularly along the perimeter of the lot, was more formally arranged.
- The Davis Farm conservation area parking lot will undoubtedly attract rail trail users since the parking lot is visible from a high-traffic road and the parking is adjacent to the trail. The small size of the parking area makes high-volume use undesirable so parking time limits may need to be established for the parking area to minimize safety issues and to help ensure parking is available to those walking the Davis Farm property trails.

¹ Community Preservation Committee application "Davis Field Athletic Field Re-Development", 10/14/2014.

TABLE 1BFRT PARKING COUNTS - OCTOBER 15 & 16

	Saturday, October 15, 2016					Sunday, October 16, 2016			
	900-930a	1100-1130a	1200-1230p	100-130p	245p	1100-1130a	1230-100p	245p	
TI-SALES									
Capacity	60	60				60	60		
No. of Cars Parked	0	0				0	1		
Available Spaces	60	60				60	59		
FEATHERLAND (UPPER)									
Capacity	113	113	113	113		113	113		
No. of Cars Parked	0	1	0	0		3	1		
Available Spaces	113	112	113	113		110	112		
FEATHERLAND (LOWER)									
Capacity	44	44	44	44		44	44		
No. of Cars Parked	0	11	9	0		0	0		
Available Spaces	44	33	35	44		44	44		
DAVIS FARM									
Capacity	4	4	4	4	4	4	4	4	
No. of Cars Parked	0	1	0	0	0	0	1	0	
Available Spaces	4	3	4	4	4	4	3	4	
DAVIS FIELD									
Capacity (informal/formal)	100/120	100/120	100/120	100/120	100/120	100/120	100/120	100/120	
No. of Cars Parked	9	13	49	62	81	6	87	79	
Available Spaces	91/111	87/107	51/71	38/58	19/39	94/114	13/33	21/41	

TABLE 2 BFRT PARKING COUNTS - Other October Days

	Friday,	Thursday, October				- · · ·	
	October 14, 2016	20, 2016		ober 22, 2016		v, October 23	
	400-530p	400p	12:45p	330p	1100-1130a	100p	245p
TI-SALES							
Capacity	60	60	60		60	60	
No. of Cars Parked	31	0	2		6	2	
Available Spaces	29	60	58		54	58	
FEATHERLAND (UPPER)							
Capacity			113		113	113	
No. of Cars Parked			0		1	1	
Available Spaces			113		112	112	
FEATHERLAND (LOWER)							
Capacity			44		44	44	
No. of Cars Parked			0		11	0	
Available Spaces			44		33	44	
DAVIS FARM							
Capacity			4	4	4	4	4
No. of Cars Parked			0	1	0	0	0
Available Spaces			4	3	4	4	4
DAVIS FIELD							
Capacity (informal/formal)			100/120	100/120	100/120	100/120	100/120
No. of Cars Parked			73	0	7	87	75
Available Spaces			27/47	100/120	93/113	13/33	25/45

TABLE 3 BFRT PARKING COUNTS - June

	Saturday, June 3, 2017			Sunday, June 4, 2017	Saturday, June 10, 2017	
	1030a	100p	200p	11:00a	12:00p	
TI-SALES						
Capacity	60	60	60	60	60	
No. of Cars Parked	2	0	0	85	0	
Available Spaces	58	60	60	0	60	
FEATHERLAND (UPPER)						
Capacity	113	113	113	113	113	
No. of Cars Parked	18	54	12	15	51	
Available Spaces	95	59	101	98	62	
FEATHERLAND (LOWER)						
Capacity	44	44	44	44	44	
No. of Cars Parked	60	54	8	59	53	
Available Spaces	0	0	36	0	0	
DAVIS FARM						
Capacity	4	4	4	4	4	
No. of Cars Parked	0	0	0	0	0	
Available Spaces	4	4	4	4	4	
DAVIS FIELD						
Capacity (informal/formal)	100/120	100/120	100/120	100/120	100/120	
No. of Cars Parked	12	59	36	11	26	
Available Spaces	88/108	41/61	64/84	89/109	74/94	

TABLE 4 ASSABET RIVER RAIL TRAIL (PHASE I) PARKING COUNTS

	Saturday, Octo	ber 15, 2016	Sunday, October 16, 2016	Saturday, June 10, 2017		
	1000-1030a	1230-100p	1230-100p	1110-1130a		
14 WILKINS ST						
Capacity	23	23	23	23		
No. of Cars Parked	5	5	10	12		
Available Spaces	18	18	13	11		
417 MAIN ST						
Capacity	15	15	15	15		
No. of Cars Parked	2	4	7	10		
Available Spaces	13	11	8	5		
VILA DO PORTO BLVD						
Capacity	33	33	33	33		
No. of Cars Parked	2	1	5	17 *		
Available Spaces	31	32	28	16		
157 WASHINGTON ST						
Capacity	15	15	15	15		
No. of Cars Parked	12	10	9	8		
Available Spaces	3	5	6	7		
SASSEVILLE WAY						
Capacity	8	8	8	8		
No. of Cars Parked	2	1	3	2		
Available Spaces	6	7	5	6		
JEFFERSON ST LOT						
Capacity (informal)	50	50	50	50		
No. of Cars Parked	4	2	3	6		
Available Spaces	46	48	47	44		
TOTAL						
No. of Cars Parked	27	23	37	55		

* Most parking activity likely related to Hudson Feast event taking place one block away.





Parking Lot Parcel

Project Location



Figure 2

Parking Lot Locations Bruce Freeman Rail Trail Sudbury, Massachusetts