

## Winchendon Landfill Site Observation – August 27, 2021

**TO:** Brian Croteau, DPW Director  
**FROM:** Aaron Sabbs, PE, Tighe & Bond  
**COPY:** Alison Manugian, Conservation & Planning Agent  
Alex Fagnand, PE, Tighe & Bond  
**DATE:** September 20, 2021

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On August 27, 2021, Aaron Sabbs from Tighe & Bond visited the Winchendon Landfill (hereby referred to as the "Site") to monitor the grading and shaping activities of the Landfill Closure Project. The Site, which is located at 580 River Street, is the former Mabardy Landfill. It is owned and operated by W.L. French Corporation (Operator) as the Winchendon Landfill. As part of the Landfill Closure Project, the Massachusetts Department of Environmental Protection (MassDEP) has permitted the acceptance of up to 415,000 cubic yards of COMM 97-001 material as defined by MassDEP Policy. In accordance with Condition 13 of the Landfill Closure Agreement between the Town and the Operator, the Site was reviewed for compliance with the following documents:

- Corrective Action Design permit approval issued on September 23, 2020 and Corrective Action Design Plans prepared by Langdon Environmental, LLC, dated June 2019 and revised October 2019.
- Initial Operations Plan, by Langdon Environmental, LLC, dated January 2021, revised to include temporary rip rap settling area.

### Landfill Operations

General landfill operations appeared to comply with best practices and the Corrective Action Design. While on site, material was placed in the northern corner of the site, in the general area of Section C-C of Sheet C-5 of the Corrective Action Design, within the limits designated for initial placement. The bulldozer was not in operation the day of the site visits, so new material was dumped in piles to be spread the following day.

During the July site visit, small amounts of construction debris, including brick, rebar, concrete, and plastic sheeting, as well as general household waste were observed in the soils imported to the site. The material imported since the previous site visit does not appear to contain a significant amount of debris or waste.

### Stormwater and Erosion

Stormwater conveyances have been constructed per the Initial Operations Plan as revised to include a temporary rip rap settling area. This plan was submitted to MassDEP under a Major Permit Modification (BWP SQ 11). A swale, including check dams, has been constructed from the temporary stormwater basin to the temporary settling area. Overflow from the temporary stormwater basin runs to the settling area with a PVC culvert running beneath the access road. The swale from the northern section of the site to the temporary stormwater basin has not yet been constructed.

Recent heavy rainfall has caused significant buildup of sediment within the stormwater management systems. The swale and settling area were laden with sediment which had built

up over the top of the rip rap in some locations. In their current condition, the rip rap swale will not effectively slow the velocity of water, and the ability of the temporary settling area to remove suspended solids may be reduced.

Erosion control was present along the northern, southern, and western edges of the site. The recent heavy rainfall has caused sediment to build up along the haybales and wood chip berms. In several locations, the sediment had overtopped the erosion controls.

As noted in the previous report, the sloped subgrade has experienced significant erosion in several areas. The northwest slope exhibited erosion in the area of the monitoring well. Continued erosion at this location could potentially impact the well’s stability.

The Operator maintains a water truck on site for dust control. Water from a basin in the adjacent southerly site has been periodically collected and sprayed on site to reduce dust.

**Material Accepted**

Tighe & Bond reviewed the attached Net Daily Summary Report received for the month of August, which details the total tonnage and number of loads of material received by the facility. As indicated in Table 1 below, a total of 13,708.12 tons of material was received in August, which results in 613,789.89 tons remaining of the total 788,500 tons permitted. Based on a utilization factor of 1.9 tons per cubic yard of soil, the total volume received in August was 7,214.80 cubic yards, which results in 323,047.31 cubic yards remaining.

**Table 1 - Cumulative Material Received**

<u>Month-Year</u>	<u>Material Received (tons)</u>	<u>Material Received (cubic yards)</u>
Before Feb-21	12,764.15	6,717.97
Feb-21	32,224.28	16,960.15
Mar-21	26,702.78	14,054.09
Apr-21	22,376.79	11,777.26
May-21	26,096.58	13,735.04
Jun-21	24,834.48	13,070.78
Jul-21	16,002.93	8,422.59
Aug-21	13,708.12	7,214.80
<b>Total</b>	<b>174,710.11</b>	<b>91,952.69</b>
<b>Remaining</b>	<b>613,789.89</b>	<b>323,047.31</b>

The DEP permit limits the number of loads received to 64 per day without special Town permission. There were no days in August in which the number of loads received was greater than 64.

Enclosed are photographs summarizing the items observed during the site visit.



*Photo 1 – Eastern slope and existing access road.*



*Photo 2 – Material placed to be shaped on the northern section of the site.*





*Photo 3 – Temporary stormwater overflow catch basin.*



*Photo 4 – Stormwater culvert under access road and sediment in swale*





*Photo 5 - Swale between temporary stormwater basin and temporary rip rap settling area.*



*Photo 6 - Check dam and sediment buildup between temporary stormwater basin and temporary rip rap settling area.*





*Photo 7 - Temporary rip rap settling area.*



*Photo 8 - Sediment buildup and damaged erosion control on the western limits of the Site.*





*Photo 9 – Sediment overtopping the erosion control on the western limits of the Site.*



*Photo 10 – Erosion control on the western limits of the Site with sediment buildup.*





*Photo 11 – Erosion in the subgrade slope adjacent to a monitoring well.*



*Photo 12 – Western landfill slope including erosion in the area of the monitoring well.*





*Photo 13 – Erosion in the slope at the southern edge of the landfill.*



# 580 River Street, LLC

## Gross/Tare/Net Daily Summary

Order: by Job Name Type: All  
From 08/01/2021 to 08/31/2021

### 08/02/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Depot Square II (T21-0138-1-M)	4	268,900	134.45
8/2/2021 Totals	4	268,900	134.45

### 08/03/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Depot Square II (T21-0138-1-M)	4	252,640	126.32
08/03/2021 Totals	4	252,640	126.32

### 08/04/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
350 E. Kendall Street, Cambridge (T21-0205-1-M)	6	270,280	135.14
725-729 Morrissey Blvd, Dorchester (T21-0041-1-B)	20	1,491,480	745.74
Belmont Street Sweepings (T19-0108-1-M)	2	100,560	50.28
Depot Square II (T21-0138-1-M)	4	262,840	131.42
Fan Pier Parcel E (T21-0017-1-M)	2	135,980	67.99
08/04/2021 Totals	34	2,261,140	1,130.57

### 08/05/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
20 and 150 Salem Turnpike (T21-0091-1-B)	10	673,420	336.71
Depot Square II (T21-0138-1-M)	2	151,220	75.61
Fan Pier Parcel E (T21-0017-1-M)	4	272,200	136.10
08/05/2021 Totals	16	1,096,840	548.42

### 08/06/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
20 and 150 Salem Turnpike (T21-0091-1-B)	6	420,360	210.18
Fan Pier Parcel E (T21-0017-1-M)	1	61,940	30.97
Franklin St Boston (T21-0150-1-M)	2	120,260	60.13
Waltham CB 167 Lexington St Waltham (T20-0155-1-M)	3	207,440	103.72
08/06/2021 Totals	12	810,000	405.00

### 08/09/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
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Report Date      9/9/2021                      9:30:05 AM



# 580 River Street, LLC

## Gross/Tare/Net Daily Summary

Order: by Job Name Type: All

From 08/01/2021 to 08/31/2021

Franklin St Boston (T21-0150-1-M)	1	70,560	35.28
MOB Phase 2 (T20-0030-3-B)	15	1,088,020	544.01
08/09/2021 Totals	16	1,158,580	579.29

### 08/10/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Cambridge Crossing Parcel U (T21-0117-1-B)	1	70,960	35.48
MOB Phase 2 (T20-0030-3-B)	16	1,199,300	599.65
08/10/2021 Totals	17	1,270,260	635.13

### 08/11/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
AOTC Talcott Ave (T20-0345-1-B)	1	68,560	34.28
Edgell Road Pump Station (T21-0203-1-B)	1	30,560	15.28
Residences at 1800 Boylston (T21-0087-1-B)	2	130,920	65.46
Stow Catch Basin Cleanings (T21-0180-1-M)	1	71,300	35.65
08/11/2021 Totals	5	301,340	150.67

### 08/12/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Dot Block (C21-001-1-B)	4	282,920	141.46
Franklin St Boston (T21-0150-1-M)	1	76,780	38.39
Residences at 1800 Boylston (T21-0087-1-B)	6	430,580	215.29
08/12/2021 Totals	11	790,280	395.14

### 08/13/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Boynton Yards Phase 1B Utilities (C20-016-1-B)	3	167,720	83.86
Franklin St Boston (T21-0150-1-M)	2	130,400	65.20
Residences at 1800 Boylston (T21-0087-1-B)	4	264,160	132.08
08/13/2021 Totals	9	562,280	281.14

### 08/16/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Cambridge Crossing Parcel U (T21-0117-1-B)	1	67,240	33.62
Cunniff School Watertown (C20-014B)	2	95,440	47.72
Spy Pond (T21-0185-1-M)	2	129,460	64.73

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# 580 River Street, LLC

## Gross/Tare/Net Daily Summary

Order: by Job Name Type: All

From 08/01/2021 to 08/31/2021

250 Centre St JP (T21-0136-1-B)	4	293,100	146.55
725-729 Morrissey Blvd, Dorchester (T21-0041-1-B)	6	455,520	227.76
Allston Yards Enabling (T21-0189-1-B)	2	148,340	74.17
Depot Square II (T21-0138-1-M)	12	877,740	438.87
Feeney Eversrouce Prescott St Worcester (T21-0204-1-B)	1	29,540	14.77
Seaport Parcel L5 (T21-0228-1-B)	2	155,280	77.64
08/24/2021 Totals	27	1,959,520	979.76

### 08/25/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
725-729 Morrissey Blvd, Dorchester (T21-0041-1-B)	10	680,020	340.01
Allston Yards Enabling (T21-0189-1-B)	2	136,740	68.37
Depot Square II (T21-0138-1-M)	7	528,760	264.38
Seaport Parcel L5 (T21-0228-1-M)	4	321,360	160.68
Water Tank Stanton Ave Newton (t21-0182-1-M)	13	569,640	284.82
08/25/2021 Totals	36	2,236,520	1,118.26

### 08/26/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	8	574,060	287.03
BMS Devens (R21-014-1-M)	5	118,060	59.03
Depot Square II (T21-0138-1-M)	6	450,780	225.39
Lowell High School (T21-0236-1-B)	3	206,620	103.31
Water Tank Stanton Ave Newton (t21-0182-1-M)	20	836,920	418.46
08/26/2021 Totals	42	2,186,440	1,093.22

### 08/27/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	7	517,100	258.55
BMS Devens (R21-014-1-M)	4	93,940	46.97
Water Tank Stanton Ave Newton (t21-0182-1-M)	29	1,377,100	688.55
08/27/2021 Totals	40	1,988,140	994.07

### 08/30/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	8	543,960	271.98
BMS Devens (R21-014-1-M)	9	231,180	115.59
Water Tank Stanton Ave Newton (t21-0182-1-M)	12	614,840	307.42
08/30/2021 Totals	29	1,389,980	694.99

### 08/31/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	12	839,760	419.88
BMS Devens (R21-014-1-M)	9	246,620	123.31



# 580 River Street, LLC

## Gross/Tare/Net Daily Summary

Order: by Job Name    Type: All

From 08/01/2021 to 08/31/2021

Braintree Catch Basin Cleanings (T21-0154-1-M)	10	684,820	342.41
Feeney Eversrouce Prescott St Worcester (T21-0204-1-B)	2	107,700	53.85
Logan North Service area Build 5 (T21-0242-1-B)	2	87,500	43.75
Lowell High School (C20-023-3-B)	3	201,500	100.75
Residences at 1800 Boylston (T21-0087-1-B)	8	596,740	298.37
08/31/2021 Totals	46	2,764,640	1,382.32

	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
<b>Grand Total</b>	<b>442</b>	<b>27,416,230</b>	<b>13,708.12</b>