

Winchendon Landfill Site Observation – October 28, 2021

To: Brian Croteau, DPW Director
FROM: Aaron Sabbs, PE, Tighe & Bond
COPY: Tracy Murphy, Director of Planning and Development & Acting Planning Agent
Alex Fagnand, PE, Tighe & Bond
DATE: November 14, 2021

On October 28, 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 and spread by bulldozer in the general area of Section B-B of Sheet C-5 of the Corrective Action Design. Significant material had also been placed in the general area of Section C-C since the previous site visit. Both areas are within the limits designated for initial placement.

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. Rip rap has been delivered to the site and the Operator indicated that they anticipate rebuilding the swale and settling area once the weather allows it.

Erosion control has recently been replaced along the northern, southern, and western edges of the site. There were no noted deficiencies in the erosion control.

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 October, which details the total tonnage and number of loads of material received by the facility. As indicated in Table 1 below, a total of 29,375.34 tons of material was received in October, which results in 552,253.91 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 October was 15,460.71 cubic yards, which results in 290,659.95 cubic yards remaining.

Table 1 - Cumulative Material Received

Month-Year	Material Received (tons)	Material Received (cubic yards)
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
Sep-21	32,160.64	16,926.65
Oct-21	29,375.34	15,460.71
Total	236,246.09	124,340.05
Remaining	552,253.91	290,659.95

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

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

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Photo 1 – Western slope.



Photo 2 – Material delivered to the Site and placed for grading and shaping.



Photo 3 – Temporary stormwater overflow catch basin.



Photo 4 – Stormwater culvert under access road, sediment and standing water in swale.



Photo 5 – Sediment built up in swale between temporary stormwater basin and temporary rip rap settling area.



Photo 6 - Temporary rip rap settling area and swale.



Photo 7 – Material placed and graded in the northern area of the site.



Photo 8 – Representative view of erosion control on the western limits of the Site.



Photo 9 – Repairs and continued erosion in the subgrade slope adjacent to a monitoring well.



Photo 10 – Existing slope and erosion control at the southern limits of the Site.



Photo 11 – Trucks queued for placing of material.

580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 10/01/2021 to 10/31/2021

10/01/2021

Job Name	Loads	Net	Net Tons
5 Washington Street (T20-0270-1-B)	2	81,360	40.68
92 Grand St, Worcester (T21-0032-1-B)	6	417,700	208.85
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	2	127,940	63.97
CHA Truman Apts Cambridge (T20-0312-1-M)	6	254,140	127.07
Feeney Eversrouce Prescott St Worcester (T21-0204-1-B)	2	64,480	32.24
Logan Term E Gen Pad Water Main (T19-0353-3-M)	12	858,280	429.14
Puddingstone (C20-025-1-M)	18	1,233,420	616.71
10/01/2021 Totals	48	3,037,320	1,518.66

10/04/2021

Job Name	Loads	Net	Net Tons
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	130,960	65.48
250 Centre St JP (T21-0136-1-B)	2	137,240	68.62
66 Galen St Watertown MSR soil (T21-0114-1-M)	4	287,620	143.81
87 Union Street, New Haven, CT (T21-0099-1-M)	7	352,280	176.14
AOTC Talcott Ave (T20-0345-1-B)	2	133,800	66.90
CHA Truman Apts Cambridge (T20-0312-1-M)	1	45,060	22.53
Chelmsford SS and CBC (T21-0052-2-M)	22	1,479,200	739.60
Faneuil Library Brighton Topsoil (T21-0227-1-M)	4	187,300	93.65
Logan Term E Gen Pad Water Main (T19-0353-3-M)	12	847,040	423.52
10/04/2021 Totals	56	3,600,500	1,800.25

10/05/2021

Job Name	Loads	Net	Net Tons
Chelmsford SS and CBC (T21-0052-2-M)	31	2,147,100	1,073.55
Holtzer Park 137 Amory St Boston (T20-0260-1-B)	17	1,205,400	602.70
Logan Term E Gen Pad Water Main (T19-0353-3-M)	4	279,700	139.85
Montague to Fairmount Reliability (T21-0272-1-M)	4	186,840	93.42
Southeastern Metals (T21-0281-1-B)	3	216,400	108.20
Waltham CB 167 Lexington St Waltham (T20-0155-1-M)	3	204,400	102.20
10/05/2021 Totals	62	4,239,840	2,119.92

10/06/2021

Job Name	Loads	Net	Net Tons
5 Washington Street (T20-0270-1-B)	1	60,700	30.35
66 Galen St Watertown MSR soil (T21-0114-1-M)	12	799,280	399.64
CHA Truman Apts Cambridge (T20-0312-1-M)	2	96,180	48.09
Chelmsford SS and CBC (T21-0052-2-M)	5	339,040	169.52
Feeney Eversrouce Prescott St Worcester (T21-0204-1-B)	1	32,600	16.30
Holtzer Park 137 Amory St Boston (T20-0260-1-B)	14	971,740	485.87
Montague to Fairmount Reliability (T21-0272-1-M)	1	53,940	26.97
Southeastern Metals (T21-0281-1-B)	1	50,320	25.16
10/06/2021 Totals	37	2,403,800	1,201.90

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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 10/01/2021 to 10/31/2021

10/07/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	4	287,500	143.75
66 Galen St Watertown MSR soil (T21-0114-1-M)	15	980,760	490.38
85 Boston Street (T21-0139-1-B)	8	572,440	286.22
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	1	61,640	30.82
CHA Truman Apts Cambridge (T20-0312-1-M)	2	86,840	43.42
Winchester DPW CB Cleanings (T21-0268-1-M)	10	704,580	352.29
10/07/2021 Totals	40	2,693,760	1,346.88

10/08/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
66 Galen St Watertown MSR soil (T21-0114-1-M)	1	71,380	35.69
CHA Truman Apts Cambridge (T20-0312-1-M)	2	90,420	45.21
Holtzer Park 137 Amory St Boston (T20-0260-1-B)	3	236,380	118.19
Montague to Fairmount Reliability (T21-0272-1-M)	3	138,500	69.25
Worcester SS&CB Disposal (T21-0090-1-M)	17	1,195,180	597.59
10/08/2021 Totals	26	1,731,860	865.93

10/12/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	141,500	70.75
66 Galen St Watertown MSR soil (T21-0114-1-M)	6	386,580	193.29
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	4	282,920	141.46
Billerica Catch Basin Cleanings (T21-0254-1-M)	9	607,460	303.73
Montague to Fairmount Reliability (T21-0272-1-M)	3	119,920	59.96
Worcester SS&CB Disposal (T21-0090-1-M)	22	1,587,420	793.71
10/12/2021 Totals	46	3,125,800	1,562.90

10/13/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	4	282,320	141.16
725-729 Morrissey Blvd, Dorchester (T21-0041-1-B)	2	118,060	59.03
Depot Square II (T21-0138-1-M)	6	426,660	213.33
Lower Basin Police Barracks (C21-007-1-M)	6	303,900	151.95
Worcester SS&CB Disposal (T21-0090-1-M)	22	1,527,520	763.76
10/13/2021 Totals	40	2,658,460	1,329.23

10/14/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	4	262,240	131.12
250 Centre St JP (T21-0136-1-B)	6	418,780	209.39
66 Galen St Watertown MSR soil (T21-0114-1-M)	11	715,620	357.81
85 Boston Street (T21-0139-1-B)	13	934,720	467.36
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	4	285,120	142.56
Residences at 1800 Boylston (T21-0087-1-B)	6	419,260	209.63

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Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 10/01/2021 to 10/31/2021

10/14/2021 Totals	44	3,035,740	1,517.87
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10/15/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	8	577,020	288.51
66 Galen St Watertown MSR soil (T21-0114-1-M)	15	989,960	494.98
761-769 Centre St., Jamaica Plain (T21-0108-1-M)	7	358,520	179.26
85 Boston Street (T21-0139-1-B)	10	689,000	344.50
Depot Square II (T21-0138-1-M)	2	145,540	72.77
Lower Basin Police Barracks (C21-007-1-M)	3	134,900	67.45
10/15/2021 Totals	45	2,894,940	1,447.47

10/18/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	127,560	63.78
250 Centre St JP (T21-0136-1-B)	13	936,140	468.07
99 Washington Street, Melrose (T21-0112-1-M)	13	940,900	470.45
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	2	141,180	70.59
Sira Naturals (T21-0230-1-B)	1	62,560	31.28
10/18/2021 Totals	31	2,208,340	1,104.17

10/19/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	4	273,300	136.65
66 Galen St Watertown MSR soil (T21-0114-1-M)	12	791,060	395.53
85 Boston Street (T21-0139-1-B)	19	1,308,480	654.24
99 Washington Street, Melrose (T21-0112-1-M)	12	838,660	419.33
CHA Truman Apts Cambridge (T20-0312-1-M)	2	83,360	41.68
10/19/2021 Totals	49	3,294,860	1,647.43

10/20/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	131,820	65.91
66 Galen St Watertown BOL Soil (T21-0114-1-B)	16	1,149,760	574.88
99 Washington Street, Melrose (T21-0112-1-M)	12	840,340	420.17
MassDOT District 3 Catch Basin Cleanings (T17-0135-1-M)	27	1,891,840	945.92
10/20/2021 Totals	57	4,013,760	2,006.88

10/21/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
250 Centre St JP (T21-0136-1-B)	20	1,435,100	717.55
Boynton Yards Phase 1B Utilities (C20-016-1-B)	14	1,099,500	549.75
MassDOT District 3 Catch Basin Cleanings (T17-0135-1-M)	4	262,700	131.35
10/21/2021 Totals	38	2,797,300	1,398.65

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Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 10/01/2021 to 10/31/2021

10/22/2021

Job Name	Loads	Net	Net Tons
15 Bennett St, Somerville, MA (T21-0018-1-B)	2	134,060	67.03
250 Centre St JP (T21-0136-1-B)	20	1,443,380	721.69
AOTC Talcott Ave (T20-0345-1-B)	11	771,560	385.78
Triumvirate GE Lynn (T21-0288-1-B)	4	261,280	130.64
10/22/2021 Totals	37	2,610,280	1,305.14

10/25/2021

Job Name	Loads	Net	Net Tons
250 Centre St JP (T21-0136-1-B)	27	2,001,640	1,000.82
66 Galen St Watertown BOL Soil (T21-0114-1-B)	8	499,440	249.72
66 Galen St Watertown MSR soil (T21-0114-1-M)	5	334,260	167.13
85 Boston Street (T21-0139-1-B)	4	250,120	125.06
AOTC Talcott Ave (T20-0345-1-B)	1	59,700	29.85
Arlington DPW Catch Basin Cleanings (T16-1263-1-M)	3	207,540	103.77
Boynton Yards Phase 1B Utilities (C20-016-1-B)	2	138,940	69.47
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	5	379,000	189.50
10/25/2021 Totals	55	3,870,640	1,935.32

10/26/2021

Job Name	Loads	Net	Net Tons
66 Galen St Watertown MSR soil (T21-0114-1-M)	4	282,140	141.07
10/26/2021 Totals	4	282,140	141.07

10/27/2021

Job Name	Loads	Net	Net Tons
85 Boston Street (T21-0139-1-B)	3	191,700	95.85
99 Washington Street, Melrose (T21-0112-1-M)	11	802,720	401.36
Depot Square II (T21-0138-1-M)	4	166,540	83.27
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	9	702,260	351.13
10/27/2021 Totals	27	1,863,220	931.61

10/28/2021

Job Name	Loads	Net	Net Tons
250 Centre St JP (T21-0136-1-B)	20	1,435,180	717.59
5 Washington Street (T20-0270-1-B)	3	179,760	89.88
99 Washington Street, Melrose (T21-0112-1-M)	8	589,020	294.51
Belmont Street Sweepings (T19-0108-1-M)	1	53,200	26.60
Camb Housing Auth Roosevelt Towers (T20-0258-1-B)	6	312,540	156.27
Feeney Eversrouce Prescott St Worcester (T21-0204-1-B)	1	14,260	7.13
GE Lynn 40pile 3 etc (T21-0315-1-B)	7	458,580	229.29
GLX (T18-0354-1-M)	1	42,800	21.40
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	6	437,020	218.51
Residences at 1800 Boylston (T21-0087-1-B)	8	582,600	291.30

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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 10/01/2021 to 10/31/2021

10/28/2021 Totals	61	4,104,960	2,052.48
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10/29/2021

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
5 Washington Street (T20-0270-1-B)	6	348,360	174.18
66 Galen St Watertown MSR soil (T21-0114-1-M)	10	664,580	332.29
99 Washington Street, Melrose (T21-0112-1-M)	12	918,100	459.05
Boynton Yards Phase 1B Utilities (C20-016-1-B)	10	665,500	332.75
Camb Housing Auth Roosevelt Towers (T20-0258-1-B)	1	31,780	15.89
CX Development - EFG Open Space Cistern (T21-0290-1-B)	4	294,400	147.20
GE Lynn 40pile 3 etc (T21-0315-1-B)	4	278,460	139.23
Ragon Inst Cambridge Group I-1 I-2 (T21-0147-1-M)	10	665,460	332.73
Residences at 1800 Boylston (T21-0087-1-B)	6	416,520	208.26
10/29/2021 Totals	63	4,283,160	2,141.58

	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Grand Total	866	58,750,680	29,375.34