

Winchendon Landfill Site Observation – February 21, 2022

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: April 6, 2022

On February 21, 2022, 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, 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.

The swale had previously experienced significant sediment buildup and damage from heavy rainfall. The Operator has rebuilt portions of the swale and check dams, including installing additional rip rap to remedy the damage. The swale will require continued maintenance and cleaning, as sediment is still visible within the swale and settling area. The swale and settling area were full of water at the time of the site visit. The check dams had recently been rebuilt to slow the flow of water and capture sediment.

Erosion control was present along the northern, southern, and western edges of the site. There were no noted deficiencies in the erosion control. The eastern slope is not stabilized, and erosion control was not present. Erosion from the slope has left a large buildup of

sediment on the access road and within the swale. The access road is not a permanent feature, and this area will be filled in the future. Erosion from this slope is not in danger of affecting adjacent properties, provided that the settling basin is maintained.

Material Accepted

Tighe & Bond reviewed the attached Net Daily Summary Report received for the month of February, which details the total tonnage and number of loads of material received by the facility. As indicated in Table 1 below, a total of 21,010.31 tons of material was received in February, which results in 435,473.36 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 February was 11,058.06 cubic yards, which results in 229,196.51 cubic yards remaining. This represents about 55% of the total permitted volume 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
Nov-21	30,332.79	15,964.63
Dec-21	37,372.65	19,669.82
Jan-22	28,064.80	14,770.95
Feb-22	21,010.31	11,058.06
Total	353,026.64	185,803.49
Remaining	435,473.36	229,196.51

The DEP permit limits the number of loads received to 64 per day without special Town permission. There were no days in February 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 access road.



Photo 2 – Temporary stormwater overflow catch basin.



Photo 3 – Swale and check dams between temporary stormwater basin and temporary rip rap settling area.



Photo 4 – Swale between temporary stormwater basin and temporary rip rap settling area.



Photo 5 - Temporary rip rap settling area.



Photo 6 - Material placed and graded in the northern area of the site.



Photo 7 – Representative view of erosion control on the western limits of the Site.



Photo 8 – Southwestern slope and erosion control.



Photo 9 – Grading at monitoring well.



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

580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 02/01/2022 to 02/28/2022

02/01/2022

Job Name	Loads	Net	Net Tons
Logan Airport Terminals B-C (T21-0323-1-M)	12	892,020	446.01
02/01/2022 Totals	12	892,020	446.01

02/02/2022

Job Name	Loads	Net	Net Tons
Logan Airport Terminals B-C (T21-0323-1-M)	13	960,800	480.40
Logan Term E Landside water sewer utilit (T19-035:	8	554,520	277.26
New Salem St Culvert Wakefield (T21-0260-1-B)	29	2,161,020	1,080.51
02/02/2022 Totals	50	3,676,340	1,838.17

02/03/2022

Job Name	Loads	Net	Net Tons
CHA Truman Apts Cambridge (T20-0312-1-M)	1	49,480	24.74
Chelmsford Solar Project (T21-0371-1-M)	13	938,200	469.10
GLX (T18-0354-4-M)	15	1,091,360	545.68
Logan Term E Landside water sewer utilit (T19-035:	8	563,940	281.97
Residences at 1800 Boylston (T21-0087-1-B)	8	628,500	314.25
02/03/2022 Totals	45	3,271,480	1,635.74

02/07/2022

Job Name	Loads	Net	Net Tons
Allston Yards - BOL (C21-010-1-B)	8	515,100	257.55
Boynton Yards Phase 1B Utilities (C20-016-1-B)	9	682,500	341.25
CHA Truman Apts Cambridge (T20-0312-1-M)	1	38,620	19.31
Chelmsford Solar Project (T21-0371-1-M)	6	421,560	210.78
GLX (T18-0354-4-M)	6	389,320	194.66
Logan Term E Landside water sewer utilit (T19-035:	6	381,940	190.97
MassPort Terminal B-C Connector (T19-0449-1-M)	18	1,315,600	657.80
02/07/2022 Totals	54	3,744,640	1,872.32

02/08/2022

Job Name	Loads	Net	Net Tons
Boynton Yards Phase 1B Utilities (C20-016-1-B)	18	1,355,380	677.69
Chelmsford Solar Project (T21-0371-1-M)	1	47,780	23.89
Hanover Wellesley drill spoils (T21-0381-1-B)	2	108,460	54.23
Logan Term E Landside water sewer utilit (T19-035:	6	424,260	212.13
MassPort Terminal B-C Connector (T19-0449-1-M)	19	1,432,360	716.18
02/08/2022 Totals	46	3,368,240	1,684.12

02/09/2022

Job Name	Loads	Net	Net Tons
Boston Sci Hanscom Bedford 1000 cuyd (T22-1001-	6	402,640	201.32
Boynton Yards Phase 1B Utilities (C20-016-1-B)	14	1,037,680	518.84
Butler Pond Quincy (T21-0380-1-M)	4	196,960	98.48

580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 02/01/2022 to 02/28/2022

Logan Term E Landside water sewer utilit (T19-035:	12	829,260	414.63
MassPort Terminal B-C Connector (T19-0449-1-M)	20	1,444,120	722.06
Ragon Inst Group II-1 (T21-0147-1-B)	1	71,500	35.75
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02/09/2022 Totals	57	3,982,160	1,991.08

02/10/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Butler Pond Quincy (T21-0380-1-M)	4	231,780	115.89
GLX (T18-0354-4-M)	10	676,160	338.08
Logan Term E Landside water sewer utilit (T19-035:	5	372,640	186.32
Revere Road Excavate (T21-0279-1-M)	23	1,731,000	865.50
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02/10/2022 Totals	42	3,011,580	1,505.79

02/11/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Butler Pond Quincy (T21-0380-1-M)	4	208,300	104.15
Revere Road Excavate (T21-0279-1-M)	10	717,000	358.50
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02/11/2022 Totals	14	925,300	462.65

02/14/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Boynton Yards Phase 1B Utilities (C20-016-1-B)	16	1,140,000	570.00
Butler Pond Quincy (T21-0380-1-M)	4	209,960	104.98
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02/14/2022 Totals	20	1,349,960	674.98

02/15/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
74 Middlesex St, Somerville, MA (T22-1029-1-BS)	4	255,580	127.79
Boynton Yards Phase 1B Utilities (C20-016-1-B)	23	1,596,580	798.29
Butler Pond Quincy (T21-0380-1-M)	4	188,420	94.21
GLX (T18-0354-4-M)	4	254,360	127.18
JQUS 4500 cuyds (T21-0373-1-M)	2	143,820	71.91
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02/15/2022 Totals	37	2,438,760	1,219.38

02/16/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
74 Middlesex St, Somerville, MA (T22-1029-1-BS)	7	496,140	248.07
Boynton Yards Phase 1B Utilities (C20-016-1-B)	20	1,411,060	705.53
Butler Pond Quincy (T21-0380-1-M)	4	193,080	96.54
JQUS 4500 cuyds (T21-0373-1-M)	6	467,780	233.89
Reading Tank Demo (T21-0366-1-B)	5	251,480	125.74
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02/16/2022 Totals	42	2,819,540	1,409.77

02/17/2022

Job Name	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
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580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 02/01/2022 to 02/28/2022

74 Middlesex St, Somerville, MA (T22-1029-1-BS)	10	687,880	343.94
Butler Pond Quincy (T21-0380-1-M)	4	219,560	109.78
JQUS 4500 cuysd (T21-0373-1-M)	4	292,100	146.05
Pete's Tire Barn Athol 350 Cuyd (T22-6008-1-B)	6	282,300	141.15
Ragon Inst Group II-1 (T21-0147-1-B)	4	254,320	127.16
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02/17/2022 Totals	28	1,736,160	868.08

02/18/2022

Job Name	Loads	Net	Net Tons
74 Middlesex St, Somerville, MA (T22-1029-1-BS)	1	76,600	38.30
GLX (T18-0354-1-M)	6	398,060	199.03
JQUS 4500 cuysd (T21-0373-1-M)	6	460,960	230.48
Pete's Tire Barn Athol 350 Cuyd (T22-6008-1-B)	5	245,490	122.75
Ragon Inst Group II-1 (T21-0147-1-B)	4	280,620	140.31
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02/18/2022 Totals	22	1,461,730	730.87

02/22/2022

Job Name	Loads	Net	Net Tons
74 Middlesex St, Somerville, MA (T22-1029-1-BS)	1	83,280	41.64
Boynton Yards Phase 1B Utilities (C20-016-1-B)	22	1,570,880	785.44
GLX (T18-0354-1-M)	3	154,440	77.22
JQUS 4500 cuysd (T21-0373-1-M)	4	250,020	125.01
Ragon Inst Group II-1 (T21-0147-1-B)	4	271,340	135.67
Sediment Traphole Brook Mill Pond Norwoo (T22-1	8	616,920	308.46
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02/22/2022 Totals	42	2,946,880	1,473.44

02/23/2022

Job Name	Loads	Net	Net Tons
Boynton Yards Phase 1B Utilities (C20-016-1-B)	13	956,500	478.25
CHA Truman Apts Cambridge (T20-0312-1-M)	2	89,240	44.62
Ragon Inst Group II-1 (T21-0147-1-B)	6	418,720	209.36
Sediment Traphole Brook Mill Pond Norwoo (T22-1	8	555,880	277.94
West Garage Back Bay tower drill spoils (T20-0313-	1	46,380	23.19
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02/23/2022 Totals	30	2,066,720	1,033.36

02/24/2022

Job Name	Loads	Net	Net Tons
Boynton Yards Phase 1B Utilities (C20-016-1-B)	4	275,220	137.61
CHA Truman Apts Cambridge (T20-0312-1-M)	2	94,700	47.35
Ragon Inst Group II-1 (T21-0147-1-B)	8	588,540	294.27
Sediment Traphole Brook Mill Pond Norwoo (T22-1	4	273,900	136.95
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02/24/2022 Totals	18	1,232,360	616.18

02/28/2022

Job Name	Loads	Net	Net Tons
Boynton Yards Phase 1B Utilities (C20-016-1-B)	22	1,532,180	766.09

580 River Street, LLC

Gross/Tare/Net Daily Summary

Order: by Job Name Type: All
From 02/01/2022 to 02/28/2022

Pawtucket Tunnel (T21-0385-1-M)	24	1,564,560	782.28
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02/28/2022 Totals	46	3,096,740	1,548.37
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	<u>Loads</u>	<u>Net</u>	<u>Net Tons</u>
Grand Total	605	42,020,610	21,010.31