

2019 City of Edmonton Litter Audit Report

The City of Edmonton, AB

Prepared for

The City of Edmonton

Prepared by

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EXECUTIVE SUMMARY

The City of Edmonton contracted AET Group Inc. (AET) to conduct litter audits at 140 pre-selected locations within the public realm across the city. The audits were conducted from August 19th to August 23rd, 2019 with the purpose of assessing the composition and amount of litter present on Edmonton streets.

During the study period AET staff examined large and small litter within the 140 sites across the City of Edmonton. The City has conducted annual litter audits since 2009. However, in 2018 a new approach was adopted to determine the selection of sites. These new sites were selected in 2018 to serve as a new baseline audit and were used again this year. The methodology used in this year's audit was similar with those of previous years. AET visually assessed the litter within these 140 locations and recorded the type, and size of litter.

Key findings from the large litter audits:

- A total of 1,024 items were counted across 140 sites, equaling an average of 7.3 items per site;
- This was an overall decrease in large litter from 2018, where 1,358.5 items were counted, equaling an average of 9.7 items per site;
- A total of 27 sites had zero large litter identified. A total of 23 sites (85.2%) with zero large litter were located on minor roadways and 4 sites (14.8%) with zero large litter were located on major roadways; and,
- The most commonly found item in the large litter audit was No Brand Name Napkins/Serviettes representing 12.40% of all large items audited. Other common materials include Miscellaneous Plastic, at 6.54%, Miscellaneous Paper, at 5.66%, and Straws (full size), at 5.57%.

Key findings from the small litter audits:

- A total of 906 items of small litter were counted across 140 sites, equaling an average of 6.5 items per site;
- This was an overall decrease in small litter from 2018, where 1,232 items were counted, equaling an average of 8.8 items per site;
- A total of 29 sites had zero small litter identified; and,
- The most commonly found small litter item was cigarette butts, accounting for 30.79% of all small litter audited, followed by paper at 23.29%.

1.0 INTRODUCTION

1.1 Background

The City of Edmonton contracted AET Group Inc. (AET) to conduct litter audits at 140 pre-selected locations within the public realm across the city. New sites were selected in 2018, which serve as a new baseline. This year's audit is the first comparative year completed on the 2018 site selection. As discussed in the City's Negotiated Request for Proposal (NRFP), due to substantial increase in population growth, an influx of newcomers and demographic shifts with a rise in urban housing, the sites used for the litter audits from 2009 to 2017 no longer reflect the current realities in Edmonton. An enhanced litter audit analysis is required to better reflect updated littering trends in Edmonton and to support future business and program planning required to positively change poor behaviours and meet the City of Edmonton's Community Standards Bylaw 14600. In addition, the inclusion of litter according to brands for future audits like other large municipalities is needed to better understand the City's populations' behaviours. This will enable the City of Edmonton to work with various City departments and business partners on targeted litter and clean-up programs. It will also allow the City to effectively reach their target demographic and achieve a safe, attractive, clean and sustainable city.¹

The site selection process included 32 locations identified from Capital City Clean Up (CCCU) litter abatement programming, 32 locations identified by Civic Operations as hotspot locations and 76 locations randomly selected from the litter complaints database dating back to 2016 and 2017. These sites can be seen below in Figure 1.1. The audits took place from August 19th through August 23rd, 2019 with the purpose of assessing the composition and amount of litter that was present on Edmonton streets. The type of litter was classified into two size categories: large litter, which is equal to or larger than 25.8 cm², and small litter, which is smaller than 25.8 cm².

The City of Edmonton Public Places Bylaw #14614 Section 4 states that a person shall not leave any garbage litter or other refuse in a public place except in a receptacle designed and intended for such use. The City of Edmonton has waste receptacles throughout the city with receptacles for garbage and recycling. Within the downtown core there are also receptacles for cigarette butts, that are heavily used by residents.

¹ The City of Edmonton, Negotiated Request for Proposal ("NRFP") No. 932566 for Litter Audit – 2018, pg.2a

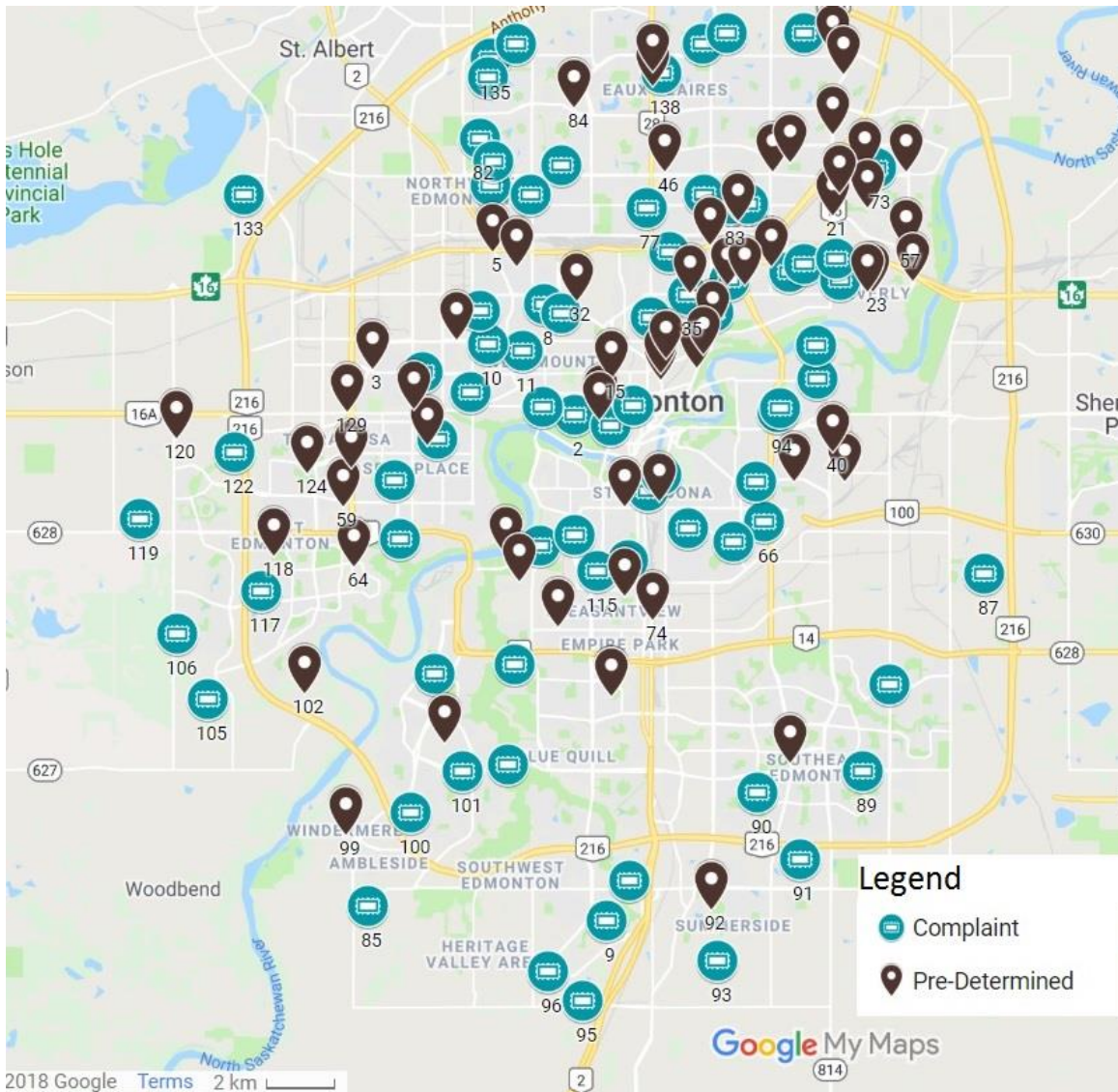


Figure 1.1 Edmonton Litter Audit Site Locations

1.2 Objectives

The litter audits were intended to accomplish the following:

- A detailed analysis of large litter items, that fall within the survey areas;
- A detailed analysis of small litter items that fall within the smaller subsections of the survey areas; and,
- Analysis and reporting of the results.

2.0 METHODOLOGY

2.1 Litter Audit Summary

The litter audit was conducted by surveying 140 pre-selected locations which were determined by the City of Edmonton. There are at least a few sites in each area of the city. The only highway sites included in the 2018 and 2019 audits were located on off-ramp locations on the Yellowhead Trail corridor. The audits were conducted from August 19th through August 23rd, 2019. Two teams of two AET staff were assigned to complete the audits within the one-week time period. AET staff members were responsible for observing accumulated litter and recording data for the classification of large litter, the classification of small litter, and background information for each of the 140 sites. The methodology used in the 2019 litter audit was the same methodology used in previous audits. There are 88 large litter categories and 17 small litter categories. More information about the methodology can be found in Appendix C.

2.2 Survey Data Collection

AET staff completed the Site Surveyor Form provided by the City of Edmonton for each of the assigned 140 sites. The following information was recorded on these forms:

- Date and time
- Audit team
- Size of audit area
- Type and characteristics of adjacent road
- General attributes of the area
- Visual rating of site
- GPS Coordinates

The forms can be found in Appendix D.

GPS coordinates taken with a handheld Garmin GPS unit were also recorded for each site. Data from the Site Surveyor Forms were transferred to an Excel worksheet. Site location details can be found in Appendix A.

2.3 Large Litter Data Collection

After the site was measured and information about the site was recorded, an AET staff member completed the Large Items Count form. After two passes of the site were completed, information about the type of litter present within the study area was recorded. This data was then transferred to an Excel worksheet. In the worksheet, the total amount of large litter at each site was calculated as the average of the two passes. Large litter collection data can be found in Appendix E.

2.4 Small Litter Data Collection

Results from the small litter audits were recorded on the Small Litter Count Sheet by AET staff after the site was measured, and information about the site was recorded. Data from each of the 140 sites was transferred into an Excel worksheet, results of which can be found in Appendix F.

2.5 Additional Trends

In addition to the site survey information, AET made notes on other litter trends at the different litter sites across the city. Additional notes were made on the following:

- Cigarette butt litter at the nearest intersection;
- Whether litter was scattered versus piled;
- Whether there was evidence of litter dumping;
- Details on where litter could be coming from (i.e. congregation spots of smokers near office buildings, heavy foot traffic, etc.);
- Evidence of homelessness;
- Plastic bag count per site; and,
- Loose dog and/or human feces.

All notes can be found in Appendix A: Site Location Details.

3.0 SUMMARY OF AUDIT RESULTS

3.1 Survey Results

During the audits, AET staff collected information about the roads adjacent to the audit sites. As seen in Figure 3.1, 64.29% of the audit locations were on minor city streets, 33.57% of the audit locations were on major city streets and 2.14% of the audit locations were located on a laneway.

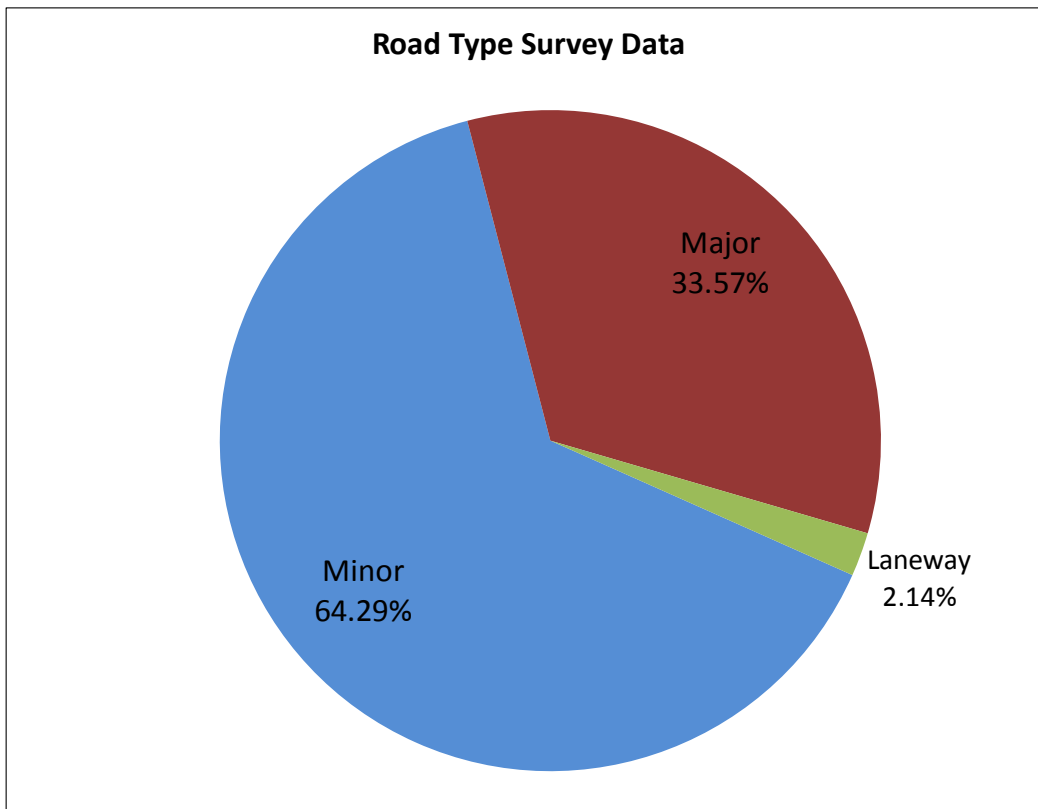


Figure 3.1 Road Type Results – Survey Data

AET staff completed a visual rating for each site based on the amount of litter visible. The sites were rated on a scale from 1-4, 1 representing the cleanest sites with less than 5 items of litter visible, and 4 representing the dirtiest sites with greater than 20 items of litter visible. Figure 3.2 illustrates the visual ratings across all litter sites. The most common visual rating was Litter Index 1, where 70% of the sites were classified as the cleanest rating with less than 5 items of litter visible. Of the sites classified as Litter Index 1, 73.47% were located on minor streets, 24.49% were located on major streets and 2.04% were located on laneways.

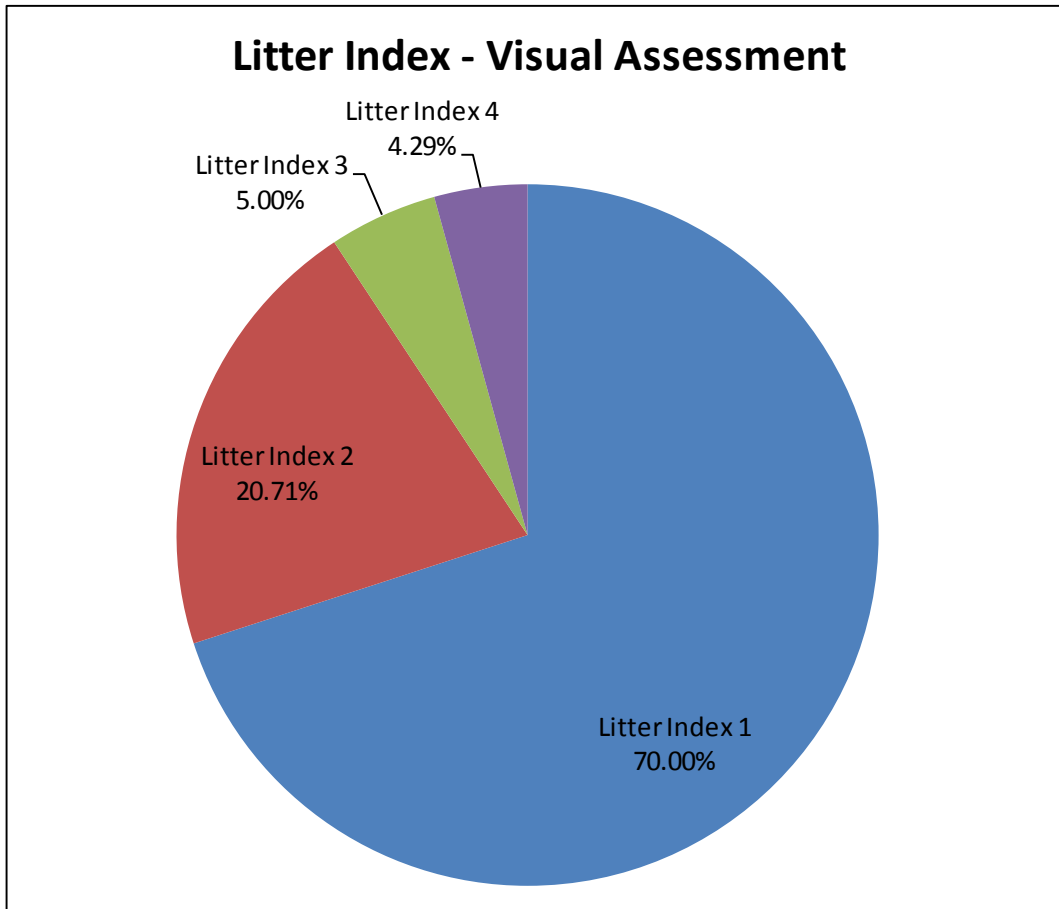


Figure 3.2 Visual Rating Distribution Across All Litter Sites

3.2 Large Litter Results

Large litter is any item of litter within the site that is equal to or greater than 25.8 cm². The 2019 audit had an overall large litter average of 7.3 large litter items per site. A total of 1,024 items were counted across 140 sites. This was a decrease from the 2018 average of 9.7 items per site.

In 2019, the most common type of large litter, No Brand Name Napkins/Serviettes, represented 12.40% of all large litter identified. Miscellaneous Plastic was the second most common type of large litter, representing 6.54%, followed by Miscellaneous Paper, at 5.66%, and Straws (full size), at 5.57%. In 2018, Miscellaneous Plastic was the most common large litter item identified, representing 10.53%, followed by No Brand Name Napkins/Serviettes, at 7.36%, and Tobacco other, at 6.92%.

Table 3.1 illustrates the 20 most common items of large litter found during the audit. These items account for 79.59% of the large litter identified. The complete list of all the items identified during the large litter audit can be found in Appendix E.

Table 3.1 Top 20 Large Litter Items

#	Large Litter Items	2019 Count	2019 Percent	2018 Count	2018 Percent	Acc. %
1	No Brand Name Napkins /Serviettes	127.0	12.40%	100.0	7.36%	12.40%
2	Misc. Plastic	67.0	6.54%	143.0	10.53%	18.95%
3	Misc. Paper	58.0	5.66%	82.0	6.04%	24.61%
4	Straws (full size)	57.0	5.57%	64.0	4.71%	30.18%
5	Tobacco other	53.0	5.18%	94.0	6.92%	35.35%
6	Plastic Packaging Other	48.0	4.69%	68.0	5.01%	40.04%
7	Cup Lids, Pieces, Lids	47.0	4.59%	73.0	5.37%	44.63%
8	Home Articles	39.0	3.81%	22.0	1.62%	48.44%
9	Paper Packaging Other	37.0	3.61%	43.0	3.17%	52.05%
10	Printed Material	37.0	3.61%	50.5	3.72%	55.66%
11	Receipts (business forms, bus tickets)	37.0	3.61%	72.0	5.30%	59.28%
12	Construction debris	30.0	2.93%	41.0	3.02%	62.21%
13	Paper Cups (hot)	29.0	2.83%	29.0	2.13%	65.04%
14	Snack Food Packaging	28.0	2.73%	29.0	2.13%	67.77%
15	Paperboard (boxboard)	26.0	2.54%	39.0	2.87%	70.31%
16	Plastic Drink Cups	22.0	2.15%	29.0	2.13%	72.46%
17	Plastic Bags - Not Retail	22.0	2.15%	17.0	1.25%	74.61%
18	Clothing or Clothing Pieces	18.0	1.76%	8.5	0.63%	76.37%
19	Candy Bar Wraps	17.0	1.66%	18.0	1.32%	78.03%
20	Sweet Packaging	16.0	1.56%	12.0	0.88%	79.59%
Total Top 20		815.0	79.59%	1034.0	76.11%	
Total - All Litter		1024.0	100.00%	1358.5	100.00%	

3.2.1 Large Litter by Material Type

Items within the large litter categories are composed of different material types. These items were categorized based on their known composition, including: paper, plastic, composite (made of multiple materials), metal, glass and other. Figure 3.3 illustrates the most common material types of the 1,024 large litter items observed. Both paper and plastic materials were the most common items observed, at 40.14% and 35.25%, respectively. Other, is the third largest material type, representing 18.95% of the items observed. This includes cloth, tobacco, and items such as food and road debris.

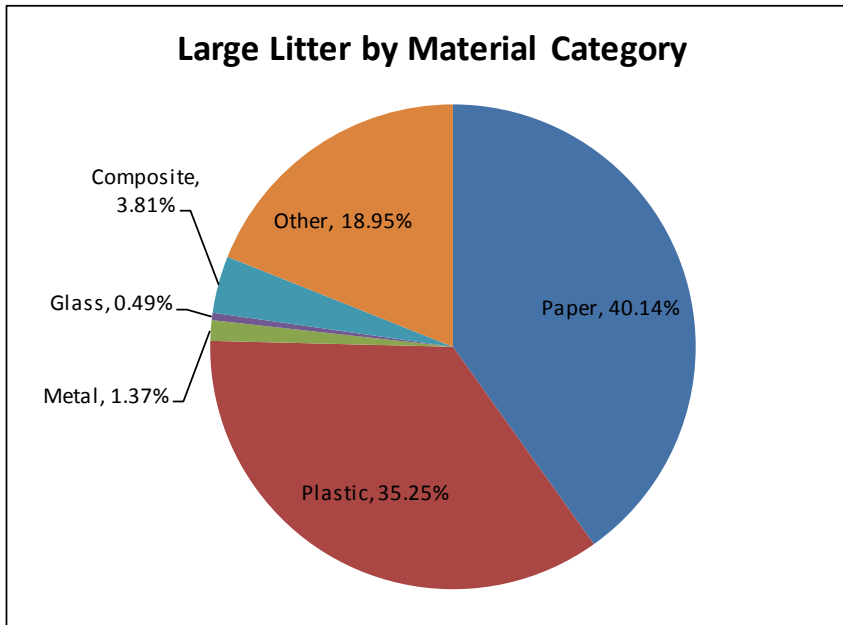


Figure 3.3 Large Litter by Material Type

3.2.2 Large Litter by Category

Table 3.2 below provides a summary of the total amount of large litter observed by each of the 13 categories used for the analysis of the large litter items. The three most common categories of litter audited in 2019 include Cups, Fast Food Items and Miscellaneous Litter. Miscellaneous Litter includes items such as miscellaneous paper and plastic. In 2018, Miscellaneous Litter, Cups and Printed Materials were the top three categories identified.

Table 3.2 Large Litter by Category 2019 and 2018

Survey Year	2019		2018	
Sub-Category	Items	Percent	Items	Percent
Cups	166.0	16.21%	210.0	15.46%
Fast Food Items	144.0	14.06%	138.0	10.16%
Miscellaneous Litter	127.0	12.40%	225.0	16.56%
Household Articles	119.0	11.62%	108.5	7.99%
Other Containers	109.0	10.64%	137.5	10.12%
Printed Materials	85.0	8.30%	152.5	11.23%
Candy & Gum & Snacks	69.0	6.74%	84.0	6.18%
Tobacco Products	53.0	5.18%	97.0	7.14%
Boxes	46.0	4.49%	64.0	4.71%
Bags	42.0	4.10%	53.5	3.94%
Wraps & Trays	35.0	3.42%	45.0	3.31%
Beverage Containers	20.0	1.95%	11.0	0.81%
Additional Categories	9.0	0.88%	32.5	2.39%
Total	1024.0	100%	1358.5	100%

Figures 3.4 and 3.5 below provide a comparison of each of the categories in the Large Litter audit in 2019 and 2018, respectively. The values for miscellaneous litter have been broken down into the individual categories (misc. plastic, paper, paperboard, cardboard and glass) to better demonstrate the types of miscellaneous litter found since they represent such a high percentage.

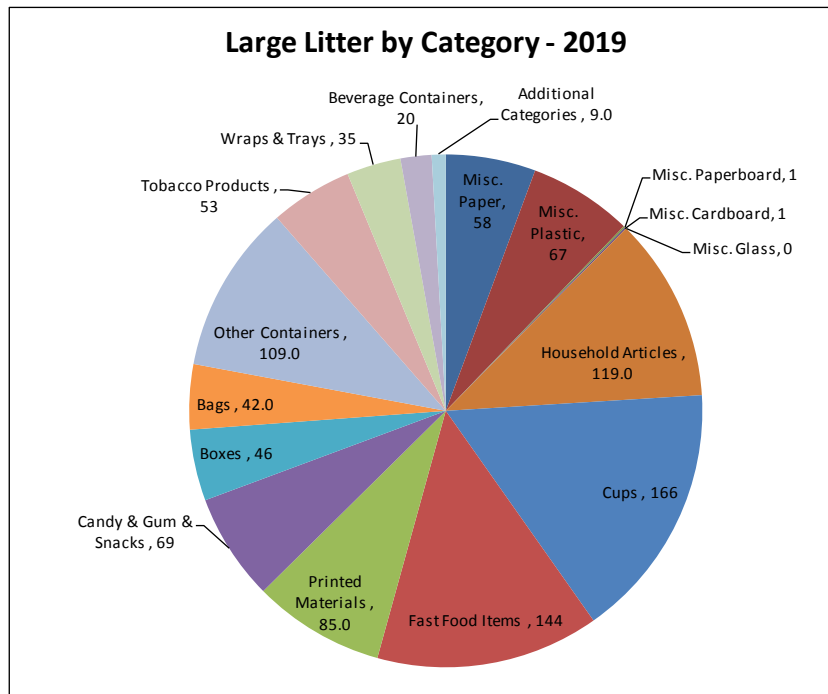


Figure 3.4 Large Litter by Category 2019

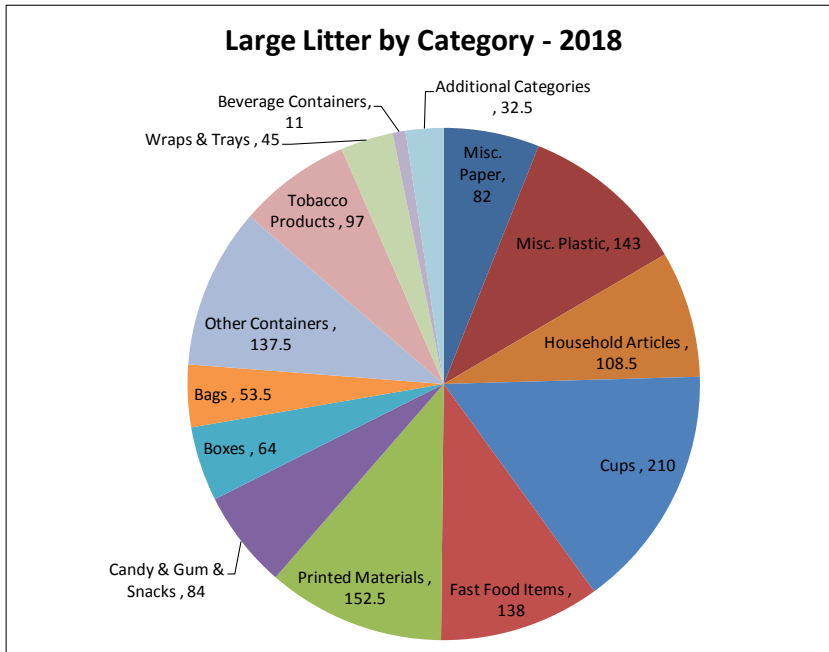


Figure 3.5 Large Litter by Category 2018

3.2.3 Large Litter by Sites

Tables 3.3 and 3.4 below illustrate the 10 sites with the highest item counts for Large Litter in 2019 and 2018. In 2019, Site #27 had the highest amount of Large Litter with 69 items audited. The site with the second highest amount of Large Litter was Site #36, with 58 items audited. Site #19 had the third highest amount of Large Litter, with 39 items audited. A total of 4 of the sites that fall within the top 10 highest litter count have remained the same from 2019 to 2018. These sites include sites #27, #36, #19 and #98.

Table 3.3 Highest Ranking Sites for Large Litter 2019

Site #	Lg Litter	Street Name	Site Description
27	69	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
36	58	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
19	39	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	39	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
23	38	118 Ave NW	Site in on 118 Ave at 38 ST NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
18	31	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
97	30	120 St NW	Started corner of 120 St and 114 Ave on north side of street, heading west in front of AMRE supply parking lot.
98	28	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.
114	28	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
41	22	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.

Table 3.4 Highest Ranking Sites for Large Litter 2018

Site #	Lg Litter	Street Name	Site Description
21	105	50 Street NW	Site starts on 50 St NW in front of end of Kennedale Shopping Centre, proceeds south on East side towards 129 Ave.
98	60	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.
27	50	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
43	43	40 St. at 139 Ave	Site starts at NW corner of 40 St and 139 Ave. Runs north towards condos. Beside Clareview Community and Recreation Centre.
38	41	Schonsee Drive NW	Start across street from 5509 Schonsee Dr. Site runs along new condo development. Travel NW on NE side of street. Very muddy in 2018, construction complete in 2019.
19	39	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
47	38	50 St at 162A Ave	On 50 St, start at corner of 50 St and 162A Ave on West side, proceed down grassed boulevard.
16	34	106 Ave	Start outside doors of 9664 106 Ave.
36	32	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
73	28	139 Ave NW	Site starts just past Mr. Lube on 139 Ave NW, 13703 40 Street NW.

3.2.4 Large Litter Statistical Tests

Statistical tests were conducted on the results of the large litter audits. A total of 27 sites had zero large litter in 2019 and 25 sites had zero large litter in 2018. The numbers of sites that rank above, on and below the average number of items audited are displayed in Table 3.5. The average number of large litter items in 2019 is 7.3. In 2019, a total of 43 sites (30.71%) fell above average, 2 sites (1.43%) were average, and the remaining 95 sites (67.86%) were below the overall average of 7.3 items/site. The results from 2018 showed a similar trend, however the average was higher, at 9.7 items/site.

Table 3.5 Site Ranking Distribution 2019 and 2018

Site Ranking	2019		2018	
	# of Sites	Percent	# of Sites	Percent
Above Average	43	30.71%	43	30.71%
Average	2	1.43%	4	2.86%
Below Average	95	67.86%	93	66.43%

3.3 Small Litter Results

In 2019, AET staff observed 906 items which were classified as small litter. These items were less than 25.8 cm² in size. This represents a decrease in Small Litter of 26.46% compared to 2018.

Table 3.6 illustrates the differences in the audited small litter from 2019 to 2018. Cigarette butts/debris experienced a significant decrease of 42.1% (from 482 items in 2018 to 279 items in 2019). Candy packaging and wrappers, paper and plastic film also experienced decreases from 2018, as displayed in Table 3.6. Materials that experienced an increase from 2018 to 2019 include Glass (increase of 225%), Chewing gum (increase of 164%) and Other Material (increase of 127.3%).

Cigarette butts/debris and Paper have remained the top two material categories identified as small litter, presenting 30.79% and 23.29% of all small litter identified.

Table 3.6 Small Litter Results 2019 & 2018

Small Litter Items	2019		2018		2018 to 2019
	Items	Percent	Items	Percent	% Change
Cigarette butts/debris	279	30.79%	482	39.12%	(42.1%)
Paper	211	23.29%	321	26.06%	(34.3%)
Chewing gum (stuck on pavement)	66	7.28%	25	2.03%	164.0%
Hard plastic	63	6.95%	85	6.90%	(25.9%)
Plastic film	60	6.62%	91	7.39%	(34.1%)
Food & Other Organics	58	6.40%	35	2.84%	65.7%
Aluminum/foil debris	33	3.64%	22	1.79%	50.0%
Glass	26	2.87%	8	0.65%	225.0%
Other material	25	2.76%	11	0.89%	127.3%
Candy packaging and wrappers	23	2.54%	86	6.98%	(73.3%)
Other polystyrene debris, ie. poly foam pieces	22	2.43%	27	2.19%	(18.5%)
Metal (not aluminum)	14	1.55%	14	1.14%	0.0%
Rubber	13	1.43%	7	0.57%	85.7%
Straws (pieces, cocktail straws)	8	0.88%	10	0.81%	(20.0%)
Bottle caps	4	0.44%	5	0.41%	(20.0%)
Polystyrene packing materials, ie. foam peanuts	1	0.11%	3	0.24%	(66.7%)
Other tobacco	0	0.00%	0	0.00%	n/a
Total Site Litter	906	100.00%	1,232	100.00%	-26.46%

3.3.1 Small Litter by Sites

Tables 3.7 and 3.8 illustrate the 10 sites with the highest item counts for Small Litter in 2019 and 2018. In 2019, the largest amount of small litter found was 39 items at Site #41 and #49. In 2018, the largest amount of small litter found was 55 items at Site #54. A total of three sites fell in the top 10 for small litter count in 2019 and 2018. These sites include site #49, #32 and #36.

Table 3.7 Highest Ranking Sites for Small Litter 2019

Site ID #:	Sm Litter	Street Name	Site Description
41	39	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
49	39	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.
27	34	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
32	34	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
18	33	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
76	33	105 St NW	Corner of 105 St NW and 82 Ave (Whyte) NW on North side of street, heading W in front of Chapters.
5	30	Yellowhead Trail	Start on south side of Yellowhead Trail/ St. Albert Trail's exit off ramp, site starts at corner of Yellowhead and St. Albert, proceed down ramp end at 5290 Bus stop.
36	28	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
56	25	50 St at 137 Ave NW	Start at edge of crosswalk at 50 St and 137 Ave NW, across street from Earl's. Proceed west on south side. Across from Earl's sign and Petsmart.
17	24	108A Avenue	Start at property line of 9541 108A Ave apartments, proceed towards 9521 108A Ave.

Table 3.8 Highest Ranking Sites for Small Litter 2018

Site ID #:	Sm Litter	Street Name	Site Description
54	55	111 Ave and 142 St	Across from Telus World of Science. Intersection of 111 Ave and 142 St, on SW side of street heading SE.
32	50	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
3	41	107 Ave NW - Mayfield Road	Start on NW side of 107 Ave NW and Mayfield Road intersection. Head south west. Curling Club close by.
49	34	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.
36	33	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
129	31	Stony Plain Rd	Started on corner of Stony Plain Road and 171st, on NE side of street, headed SE. Address 17107 Stony Plain Rd.
8	30	124 St. NW	Start in front of 11644 on North Side of street, heading west.
21	29	50 Street NW	Site starts on 50 St NW in front of end of Kennedale Shopping Centre, proceeds south on East side towards 129 Ave.
98	25	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.
130	25	Stony Plain Rd	ATB Financial. Intersection of Stony Plain Road and 156 St NW. Started on N side of street, headed E. Address 15548 Stony Plain Rd.

3.3.2 Small Litter Statistical Tests

Statistical tests were conducted on the results of the small litter audit (Table 3.9). A total of 29 sites had zero small litter in 2019 and 19 sites had zero small litter in 2018. The number of sites that rank above, on and below the average number of items audited per site are displayed in Table 3.9. The average number of small litter items per site was 6.5 in 2019 and 8.8 in 2018. In 2019, a total of 40 sites (28.57%) fell above average, 5 sites (3.57%) were average and 95 sites (67.86%) were below average.

Table 3.9 Site Ranking Distribution 2019 and 2018

Site Ranking	2019		2018	
	# of Sites	Percent	# of Sites	Percent
Above Average	40	28.57%	48	34.29%
Average	5	3.57%	7	5.00%
Below Average	95	67.86%	85	60.71%

4.0 COMPARISON TO PREVIOUS YEARS

A total of seventeen (17) of the sites selected for the new baseline audit in 2018 remained the same from the previous years audits. The following tables provide an overview of the litter counts for these sites from 2015 to 2019. Caution should be used when looking at individual site litter count over the years as it is a snapshot in time.

Table 4.1 Large Litter Trends for Reoccurring Sites

Site ID	Street	Large Litter 2015	Large Litter 2016	Large Litter 2017	Large Litter 2018	Large Litter 2019
3	107 Ave NW - Mayfield Road	13	27.5	5	12	10
5	Yellowhead Trail	18	12	19.5	16	10
21	50 Street NW	21	18	56	105	12
23	118 Ave NW	35.5	28	1	26	38
27	66th St NW	54	28	5	50	69
33	119 Ave NW	7	11	5	23	8
36	Jasper Ave	6	10	34.5	32	58
41	Yellowhead Trail at 82 St.	21	39	15	14	22
49	Jasper Ave west of 111 St	10.5	22	16	21.5	3
64	170 St and 69 Ave	10	15	5	9	3
74	Gateway Blvd NW at 51 Ave	5	2	1	3	1
76	105 St NW	1	0	2	2	8
86	23 Ave NW and 66 St	13	22	8	26	8
102	Cameron Heights Dr	22	3	1	2	1
114	Wayne Gretzky Drive	4	1	6	18	28
121	112 Ave NW - Highland Plaza & Apartments	18	5	10	16	13
123	88 Ave	14	10	5	0	4
Average for reoccurring 17 sites		16.1	14.9	11.5	22.1	17.4

Table 4.2 Small Litter Trends for Reoccurring Sites

Site ID	Street	Small Litter 2015	Small Litter 2016	Small Litter 2017	Small Litter 2018	Small Litter 2019
3	107 Ave NW - Mayfield Road	13	27	12	41	13
5	Yellowhead Trail	19	27	8	16	30
21	50 Street NW	43	14	29	29	15
23	118 Ave NW	16	6	15	11	13
27	66th St NW	22	11	0	17	34
33	119 Ave NW	13	6	45	2	2
36	Jasper Ave	15	11	8	33	28
41	Yellowhead Trail at 82 St.	14	50	13	21	39
49	Jasper Ave west of 111 St	40	32	45	34	39
64	170 St and 69 Ave	12	14	4	19	7
74	Gateway Blvd NW at 51 Ave	2	1	2	6	6
76	105 St NW	23	25	29	12	33
86	23 Ave NW and 66 St	10	127	13	12	10
102	Cameron Heights Dr	15	4	3	4	3
114	Wayne Gretzky Drive	26	2	7	16	17
121	112 Ave NW - Highland Plaza & Apartments	23	41	9	12	9
123	88 Ave	10	8	11	16	4
Average for reoccurring 17 sites		18.6	23.9	14.9	17.7	17.8

5.0 ADDITIONAL OBSERVATIONS

AET staff noted the presence of any City of Edmonton waste receptacles within a 200 metre radius from the site boundary. Areas with waste receptacles within a 200 metre radius had on average 9.9 items of Large Litter, and the areas without waste receptacles within a 200 metre radius had an average of 5.4 items of large litter. Waste receptacles located throughout the City were generally observed in areas with more public foot traffic. This could be the reason for the difference in the average amount of litter within areas with and without city litter bins. Minor streets had an average of 4.7 items per site of large litter and 3.2 items per site of small litter. Major streets had an average of 12.5 items per site of large litter and 13 items per site of small litter.

Figures 5.1 to 5.3 are examples of waste receptacles that were present within or near some of the 140 audited sites. Figures 5.1 to 5.3 illustrate the City's waste receptacles that are commonly present at transit stops and streetscape locations. Figure 5.4 illustrates waste receptacles that were commonly found in City of Edmonton downtown core and high traffic areas for cigarette

disposal. Of the 140 sites that were audited, 60 sites (42.86%) had waste receptacles present within a 200 metre radius, while 80 sites did not (57.14%).



Figure 5.1 City of Edmonton Transit Waste Receptacle

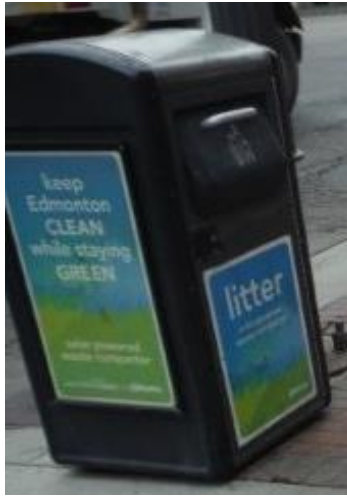


Figure 5.2 City of Edmonton Solar Street Waste Receptacle Compactor



Figure 5.3 City of Edmonton Street Waste Receptacle



Figure 5.4 City of Edmonton Cigarette Butt Disposal Bin



Figure 5.5 City of Edmonton Pet Waste Bag Dispenser

Figure 5.4 illustrates a pet waste bag dispenser located close to a walking trail. This dispenser is a great initiative put in place by the City to minimize the amount of loose dog feces present on City property. As a part of the 2018 and 2019 audits, AET auditors recorded the presence of loose dog feces. A total of two (2) sites out of the 140 audited had loose dog feces present. In addition to loose dog feces, auditors were on the lookout for loose human feces. This was not seen at any of the 140 sites audited.

The presence of homelessness was spotted at a total of four sites. Homelessness was detected by seeing people loitering in parks, walking the streets with shopping carts and seeing shopping carts full of clothing. The presence of homelessness was spotted at sites #16, #51, #122 and #129. Some of the homelessness was spotted in areas of the City that were located close to soup kitchens and funded housing complexes.

Figures 5.6 to 5.15 illustrates examples of both large and small litter identified at different sites across the City of Edmonton. Auditor's noted a significant improvement in litter at Site #21 on 50 St NW. Site #49 continued to have a high amount of cigarette butt litter. This site is located along a busy walkway in front of a hospital and includes a bus stop on site where a lot of cigarette butts are located. It is recommended that the City considers installing cigarette butt disposal bins to assist with capturing the cigarette butt litter.



Figure 5.6 Site 30 – Example of Litter Accumulated along curb

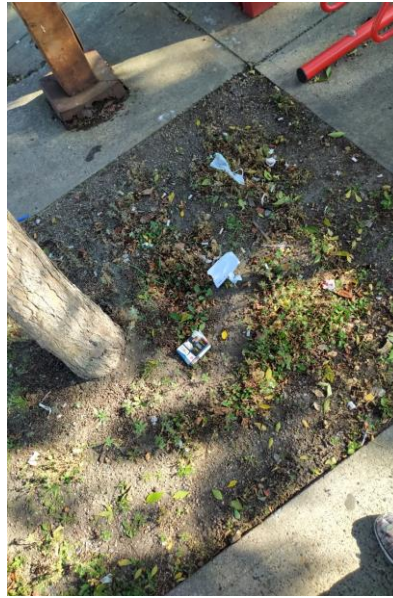


Figure 5.7 Site 28 – Example of Litter surrounding tree base



Figure 5.8 Site 50 – Scattered Small Litter

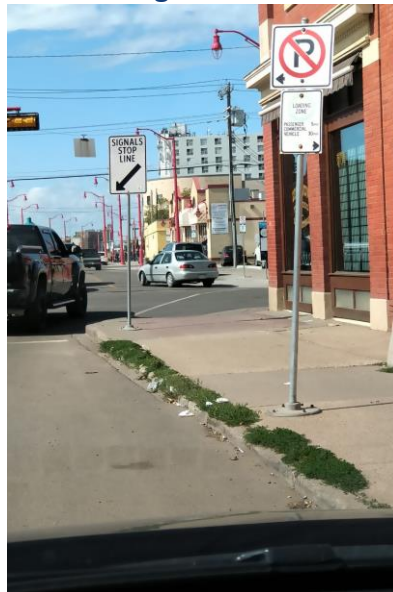


Figure 5.9 Site 16 – Accumulated Litter along curb



Figure 5.10 Site 18 - Small Litter along grassline



Figure 5.11 Site 27 - Large Litter Accumulation



Figure 5.12 Site 49 - Small litter scattered along grassline



Figure 5.13 Site 22 - Litter accumulation along curb



Figure 5.14 Site 45 – Scattered Litter near bus stop



Figure 5.15 Site 122 – Possible illegal dumping

6.0 SITE RANKING AND ATTRIBUTES

AET staff ranked each of the 140 audited sites three different ways: 1) By the total number of large litter items that were audited within each site; 2) By the total number of small litter items that were audited within each site; and, 3) The total combined amount of large and small litter. Table 6.1 illustrates the sites that have the greatest amount of large and small litter combined. A full list of all 140 sites can be found in Appendix G.

Table 6.1 Site Ranking for Combined Large and Small Litter

Site ID #:	All Litter	Street Name	Site Description
27	103	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
36	86	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
18	64	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
41	61	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
19	55	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	55	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
23	51	118 Ave NW	Site in on 118 Ave at 38 St NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
32	51	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
114	45	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
49	42	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.

Attributes of the sites with the highest amount of combined small and large litter are provided in Table 6.2. Within these sites, 6 have fast food, 5 have convenience stores, and 4 sites have both present. A stop sign or light is present at 100% of the sites and 70% have waste receptacles present. Major roads account for 90% of these areas, with 60% of the areas having commercial attributes, 20% having commercial-residential attributes, 10% having commercial-industrial attributes and 10% having residential attributes.

Table 6.2 Top Ten Sites with the Highest Quantity of Large and Small Litter Items and Site Attributes

Site #	All Litter	Fast Food	Convenience Store	Traffic Light or Stop Sign	Waste Receptacle	Street Type	Area	Street Name	Site Description
27	103	N	N	Y	N	Major	Commercial - Industrial	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
36	86	Y	Y	Y	Y	Major	Commercial	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
18	64	N	N	Y	N	Major	Residential	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
41	61	Y	Y	Y	Y	Major	Commercial - Residential	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
19	55	N	N	Y	Y	Minor	Commercial - Residential	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	55	Y	N	Y	Y	Major	Commercial	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
23	51	Y	N	Y	Y	Major	Commercial	118 Ave NW	Site in on 118 Ave at 38 St NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
32	51	N	Y	Y	N	Major	Commercial	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
114	45	Y	Y	Y	Y	Major	Commercial	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
49	42	Y	Y	Y	Y	Major	Commercial	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.

7.0 LITTER ABATEMENT

The following litter abatement practices are utilized for the City of Edmonton.

7.1 Capital City Clean Up Program

Litter Initiatives

Litter Clean Up Kit Program

Free Litter Kits were distributed at most COE Recreation Centres. The supplies come in an envelope with bags, gloves, safety guidelines and a litter grabber. The package can support clean ups with participant individuals or groups of up to 10 people. No registration is required.

Organized Litter Pick Up Events

Capital City Clean Up organizes these events once per month from April – September and all participants must register as formal CCCU volunteers and take a short on-line training module. CCCU staff are on site during the clean up supervising the registered volunteers.

Community Bin Grants

Each spring, dozens of Edmonton community groups apply for help to get rid of any large, bulky items cluttering up the back alleys, streets or other areas in their neighbourhoods. Under the

Community Bin Grant Program, the City offers funds on a first-come, first-served basis that can be used for bin rentals (including the truck, driver and disposal costs) and truck rentals to drive through the area and collect large items.

Ashtray Program

The city ashtray program works within Edmonton Business Revitalization Zones. We have locally designed, installed and maintained over 500 ashtrays throughout 8 commercial districts throughout the city year round.

Super Bin Grant pilot program

A pilot called “Super Bin Grants” was launched for identified high needs communities to apply multiple times for a grant of up to \$2000 to do cleanups over the spring, summer and fall. These communities were selected based on nuisance property complaints that were generated in each of the following neighbourhoods over the past two years; Alberta Avenue, Calder, Westwood, Central McDougall, McCauley. The pilot will be assessed at the end of the season and may continue in 2020 based on the outcome and demand for use.

Big Bin Events

The City of Edmonton's Big Bin Events accept household items that can't be set out for regular waste collection at no charge. Twelve of the weekend events are held in various locations throughout the City. This program accepts materials such as large furniture, white goods and e-waste.

Fifteen to Clean Challenge

Capital City Clean Up has the 15-to-Clean challenge which challenges citizens throughout the year to spend 15 minutes cleaning up an area around their home, school, business or workplace. Capital City Clean Up offers free cleanup packages (one glove and garbage bag).

Clean Canada Together Initiative

In 2019, The City of Edmonton and Capital City Clean Up joined together again with 37 other large and small Canadian municipalities to promote a cross Canada clean up initiative from April 20 – May 20. Communities included Vancouver, Toronto, Winnipeg, Mississauga, Portage La Prairie, Nova Scotia, Hamilton, Langley and Calgary. Combined the 37 communities (65% increase from 2018) collected 1245 tonnes of litter (56% increase over 2018). Plans are in the works to continue to expand and grow this national initiative in 2020. (visit takepride.mb.ca/programs/cleancanadatotogether for further information)

8.0 CONCLUSION

AET Group Inc. conducted litter audits at 140 pre-selected locations within the public realm across the City of Edmonton. The audits were conducted from August 19th to August 23rd, 2019 with the purpose of assessing the composition and amount of litter present on Edmonton streets.

The type of litter was classified into two sizes: large litter, which is equal or larger than 25.8 cm², and small litter, which is smaller than 25.8 cm².

8.1 Large Litter Conclusions

Over the one-week study period, 140 sites within the City of Edmonton were audited for large litter. The key findings include:

- A total of 1,024 items were counted across 140 sites, equaling an average of 7.3 items per site;
- This was an overall decrease in large litter from 2018, where 1,358.5 items were counted, equaling an average of 9.7 items per site;
- A total of 27 sites had zero large litter identified. A total of 23 sites (85.2%) with zero large litter were located on minor roadways and 4 sites (14.8%) with zero large litter were located on major roadways; and,
- The most commonly found item in the large litter audit was No Brand Name Napkins/Serviettes representing 12.40% of all large items audited. Other common materials include Miscellaneous Plastic, at 6.54%, Miscellaneous Paper, at 5.66%, and Straws (full size), at 5.57%.

8.2 Small Litter Conclusions

Over the one-week study period, 140 sites within the City of Edmonton were audited for small litter. The key findings include:

- A total of 906 items of small litter were counted across 140 sites, equaling an average of 6.5 items per site;
- This was an overall decrease in small litter from 2018, where 1,232 items were counted, equaling an average of 8.8 items per site;
- A total of 29 sites had zero small litter identified; and,
- The most commonly found small litter item was cigarette butts, accounting for 30.79% of all small litter audited, followed by paper at 23.29%.

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Disclaimer

AET Group Inc. makes no warranty and assumes no liability for the information contained in this report outlining the litter audit results. These results reflect measurements made over a onetime “snapshot” time period, meaning they only represent the conditions for the period of time in which they were collected. Seasonal variability, holidays and weather, among other factors, can affect the amount of litter within an area.

APPENDIX A

SITE LOCATION DETAILS

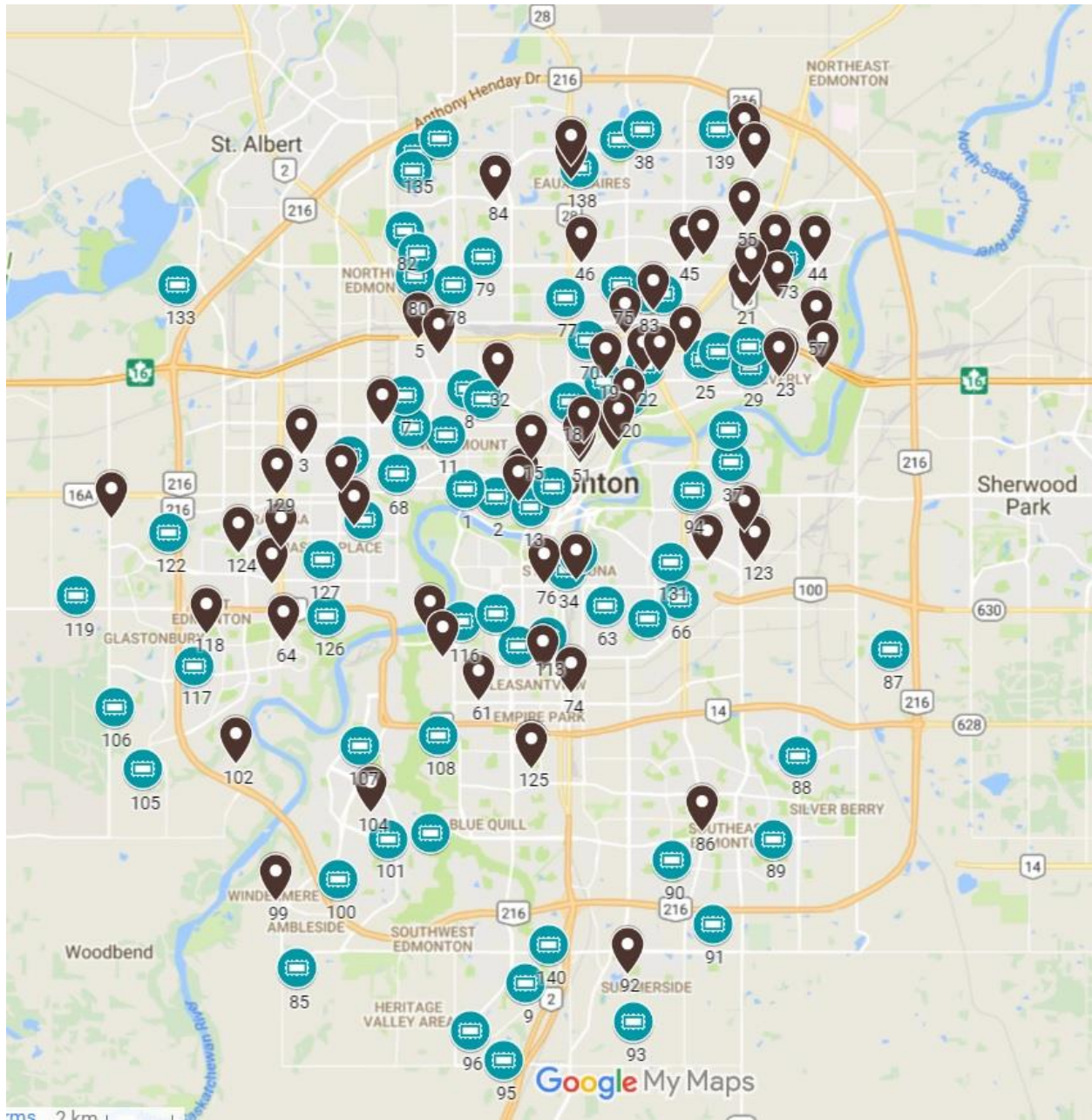
Site #	Street	Site Description	Date (mm/dd/yyyy)	Start	Finish	Team	Fixed	Width 1 (metres)	Width 2 (metres)	Width 3 (metres)	Street Type	Divided	Lanes	Area	Grass Ht. (cm)	Fast Food	Cafe Store	Mobile Food Vendor	Recliner or Resting Structure	Bus Stop	Traffic Light or Stop Sign	Waste Receptacle	Details on Street Waste Receptacle	Litter Cleanup Observed on Site	Lg Litter	Sm Litter	Catch Pt	Plastic Bag Count per Site	Litter Index	Latitude	Longitude	Comments	Scattered vs. Piled	Details on where litter could be coming from	Approx. distance from audited site, i.e. infrastructure	Closest intersection notes on cigarette butts	Evidence of Homelessness	Details on Homeless Presence	Loose Dog Feces Present?	Number of Loose Dog Feces Piles	Human Feces Present?	Number of Human Feces Piles
1	102 Ave NW	Start in front of 12421 102 Ave, proceed north on west side of street, ends in front of High Street Plaza	08/22/2019	11:30 AM	11:42 AM	A	F	5.49	5.49	5.49	Major	Y	4	Commercial	<7.6 cm	N	Y	N	N	N	Y	N	N/A	N	1.0	13.0	Curb - Grass Line	0	1	N 53° 32.576	W113° 32.218		N/A	Businesses	N/A	N/A	N	N/A	N	0	N	0
2	Jasper Ave	Start at corner of Jasper and 118 St. across street from Shoppers Drugmart. Ends at 11729 Jasper Ave.	08/22/2019	11:14 AM	11:22 AM	A	V	5.49	3.35	3.35	Major	Y	6	Commercial	<7.6 cm	Y	Y	N	Y	Y	Y	Y	Corner of 118 and Jasper	N	2.0	9.0	Curb - Grass Line	0	1	N 53° 32.447	W113° 30.967		S	Businesses	N/A	N/A	N	N/A	N	0	N	0
3	107 Ave NW - Mayfield Road	Start on NW side of 107 Ave NW and Mayfield Road intersection. Head south west. Curving Club close by.	08/23/2019	9:49 AM	10:00 AM	B	F	5.49	5.49	5.49	Major	Y	4	Commercial - Residential	<7.6 cm	N	N	N	Y	Y	Y	Y	Blue garbage bin at bus stop	N	10.0	13.0	Curb - Grass Line	0	3	N 53° 34.090	W113° 36.455		N/A	N/A	N/A	N/A	N	0	N	0		
4	150 St. NW	Started in front of 9708 on East Side of the street, headed south.	08/23/2019	10:53 AM	11:00 AM	B	V	4.88	4.88	4.88	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	2.0	Curb - Grass Line	0	1	N 53° 34.092	W113° 34.794		N/A	N/A	N/A	N/A	N	0	N	0		
5	Yellowhead Trail	Start on south side of Yellowhead Trail/ St. Albert Trail's exit off ramp, site starts at corner of Yellowhead and St. Albert, proceed down ramp and at 5290 Bus stop.	08/23/2019	8:07 AM	8:24 AM	A	F	5.49	5.49	5.49	Major	Y	4	Industrial	7.6 cm - 15.2 cm	Y	Y	N	Y	Y	Y	N	N/A	N	10.0	30.0	Curb - Grass Line	0	2	N 53° 34.832	W113° 33.415		S	Residents in area, drivers	N/A	N/A	N	N/A	N	0	N	0
6	131 St.	Site starts directly across street from 12232 131 St. and proceeds along school, ends across from 12240 131St.	08/23/2019	8:29 AM	8:41 AM	A	F	5.49	5.49	5.49	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	Y	N	N/A	N	6.0	11.0	Curb - Grass Line	0	1	N 53° 34.537	W113° 32.967	Proceed towards ascending numbers in N-NW direction.	S	School, residents	N/A	N/A	N	N/A	Y	1	N	0
7	140 St. N	Start in front of 11521 on SW side, headed SE.	08/23/2019	11:34 AM	11:41 AM	B	V	5.18	5.49	5.49	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	0.0	Curb - Grass Line - Tree Line	0	1	N 53° 34.001	W113° 33.777		N/A	N/A	N/A	N/A	N	0	N	0		
8	124 St. NW	Start in front of 11644 on North Side of street, heading west.	08/23/2019	8:48 AM	8:56 AM	A	V	3.05	3.05	3.05	Major	N	4	Residential	<7.6 cm	N	N	N	Y	Y	Y	Y	At bus stop #1329	N	8.0	11.0	Curb - Grass Line	0	1	N 53° 34.104	W113° 32.175		S	Residents	N/A	N/A	N	N/A	N	0	N	0
9	Bowman Point SW	Start in front of Bowman Point 1829, head around corner towards mailboxes	08/19/2019	2:30 PM	2:36 PM	B	V	2.74	2.74	2.74	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	1.0	Grass line - Tree Line	0	1	N 53° 35.009	W113° 30.673		N/A	N/A	N/A	N/A	N	0	N	0		
10	110A Ave NW	Start in front of 23558 on East side of street, headed south. Head towards descending numbers.	08/23/2019	11:47 AM	11:57 AM	B	V	4.88	4.88	4.88	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	0.0	Curb - Grass Line	0	1	N 53° 33.490	W113° 33.567	Head towards descending numbers.	N/A	N/A	N/A	N/A	N	0	N	0		
11	129 St. NW	Start in front of 10980 - 129 St. NW, on west side of street, heading south. Stop in between 10964 and 10966.	08/23/2019	12:00 PM	12:09 PM	B	F	5.49	5.49	5.49	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	N	N	N/A	N	2.0	2.0	Curb - Grass Line	0	1	N 53° 33.392	W113° 32.679	Stop in between 10964 and 10966	N/A	N/A	N/A	N/A	N	0	N	0		
12	100 Ave at 112 St. NE Corner	On 100 Ave, start at NE corner of 100 Ave and 112 St. and proceed east on north side along Covenant Health Edmonton General.	08/23/2019	10:48 AM	10:56 AM	A	V	5.49	5.03	5.49	Minor	N	2	Commercial - Residential	<7.6 cm	N	N	N	Y	Y	Y	N	N/A	N	3.0	6.0	Hedge - Curb	0	1	N 53° 32.339	W113° 30.824		S	Residents, Covenant Health building	N/A	N/A	N	N/A	N	0	N	0
13	109 St. NW	Start on 109 St NW at edge of 9918 109 St. NW next to roll up door of Central ice, proceed SW on SE side, ends at edge of Petro gas station.	08/22/2019	10:27 AM	10:40 AM	A	V	4.27	4.27	4.27	Major	Y	4	Commercial	N/A	N	Y	N	Y	Y	Y	Y	Next to bus stop sign, north east corner of traffic light, 109 Street and 100 Ave	N	1.0	23.0	Hedge	0	1	N 53° 32.233	W113° 30.489		S	Street traffic, businesses	N/A	N/A	N	N/A	N	0	N	0
14	104 St. at 102 Ave	Start at corner of 104 St and 102 Ave across from 10320 102 Ave across ends at 10326 104 St.	08/22/2019	10:05 AM	10:18 AM	A	V	5.33	5.49	5.49	Major	N	2	Commercial	N/A	N	N	N	Y	N	Y	Y	Outside 10320 - 102 Ave building.	Y	14.0	8.0	Curb	1	2	N 53° 32.576	W113° 29.957		S	Businesses, foot traffic	N/A	N/A	N	N/A	Y	1	N	0
15	109 St. NW	Queen Mary Park. Start at 20578 109 St NW, proceed towards 10550 109 St. NW, ends at 10550.	08/22/2019	9:49 AM	9:58 AM	A	V	4.27	3.35	3.35	Major	Y	6	Commercial	N/A	N	Y	N	Y	Y	Y	Y	At crossing light	N	9.0	3.0	Hedge	0	2	N 53° 32.973	W113° 30.158		S	Businesses	N/A	Small pile of cigarette butts in front of 10552 109 Street, pictures taken.	N	N/A	N	0	N	0
16	106 Ave	Start outside doors of 9664 106 Ave.	08/22/2019	12:20 PM	12:32 PM	A	V	3.66	3.66	3.66	Minor	N	2	Commercial - Residential	<7.6 cm	Y	Y	N	N	N	Y	Y	North east corner of 106 Ave and 97 Street	Y	21.0	16.0	Curb - Grass line	3	4	N 53° 33.020	W113° 29.294		S	Businesses, foot traffic	N/A	N/A	Y	People with carts, homeless presence one street over (105A) has tents set up, lots of litter.	N	0	N	0
17	108A Avenue	Start at property line of 9541 108A Ave apartments, proceed towards 9521 108A Ave.	08/22/2019	1:37 PM	1:49 PM	A	F	5.49	5.49	5.49	Minor	N	2	Residential	<7.6 cm	N	N	N	Y	N	Y	Y	North west corner of 96 Street and 108A Ave.	N	13.0	24.0	Curb - Grass Line	0	2	N 53° 33.315	W113° 29.206	Syringe found on site. Reported to Don Belanger.	S	Residents	N/A	N/A	N	N/A	N	0	N	0
18	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW	08/23/2019	9:43 AM	9:53 AM	A	F	5.49	5.49	5.49	Major	Y	4	Residential	<7.6 cm	N	N	N	Y	Y	Y	N	N/A	N	31.0	33.0	Curb	1	2	N 53° 33.872	W113° 29.522		S	Residents	N/A	N/A	N	N/A	N	0	N	0
19	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.	08/22/2019	3:30 PM	3:41 PM	A	V	5.49	2.44	5.49	Minor	N	4	Commercial - Residential	<7.6 cm	N	N	N	Y	Y	Y	Y	On the corner of 88 Street and 118 Ave	N	39.0	16.0	Hedge - Curb	1	3	N 53° 34.215	W113° 28.596	11732 88 Street, lots of litter accumulated in front of house	S	Businesses, residents	N/A	N/A	N	N/A	N	0	N	0
20	82nd Street	Start at 11515 82nd St., proceed north on east side of road towards 11513 82 St.	08/22/2019	3:02 PM	3:12 PM	A	V	2.74	2.59	2.59	Major	N	4	Residential	<7.6 cm	N	N	N	Y	Y	Y	Y	At bus stop	N	2.0	8.0	Hedge - Curb	0	1	N 53° 33.972	W113° 28.032		S	Residents	N/A	N/A	N	N/A	N	0	N	0
21	50 Street NW	Site starts on 50 St NW in front of end of Kennedee Shopping Centre, proceeds south on East side towards 129 Ave.	08/20/2019	11:12 AM	11:31 AM	A	F	5.49	5.49	5.49	Major	Y	6	Commercial	7.6 cm - 15.2 cm	Y	Y	N	N	Y	Y	Y	A receptacle across the street at the bus stop.	N	12.0	15.0	Curb - Grass Line	0	1	N 53° 35.318	W113° 25.088		S	Commercial stores, foot traffic, condos above stores	N/A	N/A	N	N/A	N	0	N	0
22	77 St. NW	Started in front of 12008 on East side of street, headed south.	22/08/2019	12:25 PM	12:34 PM	B	V	0.91	0.91	1.52	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	Y	N	N/A	N	12.0	2.0	Curb - Grass Line	0	2	N 53° 34.427	W113° 27.578	Started in front of house, headed towards blue dumpster.	S	Two large garbage bins for nearby offices and businesses.	N/A	N/A	N	N/A	N	0	N	0
23	118 Ave NW	Site in on 118 Ave at 38 St NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.	08/20/2019	10:04 AM	10:15 AM	A	F	5.49	5.49	5.49	Major	N	4	Commercial	N/A	Y	N	N	Y	Y	Y	Y	One located near intersection, and one located by the bus stop (receptacle at each intersection seen)	N	38.0	13.0	Curb - Tree Line	2	4	N 53° 34.218	W113° 24.011		S	Foot traffic, bus stops, Hope Mission Youth Centre across the street	N/A	Cigarette butts present - 19 butts counted on the north side of the street	N	N/A	N	0	N	0
24	109B Ave NW	Start at 5904 - 109B Ave NW, proceed West on North side of street.	08/20/2019	9:07 AM	9:12 AM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	Y	N	N/A	N	0.0	0.0	Curb - Grass Line	0	1	N 53° 33.545	W113° 25.482		N/A	Foot traffic, residents	N/A	N/A	N	N/A	N	0	N	0
25	61 St. NW	Start at 12115, proceed east on south side of street. (12115 61 Street NW)	08/23/2019	11:01 AM	11:09 AM	A	V	4.88	4.88	4.57	Minor	N	2	Residential	<7.6 cm	N	N	N	Y	Y	N	N	N/A	N	0.0	4.0	Curb - Grass Line	0	1	N 53° 34.528	W113° 26.114		S	Residents	N/A	N/A	N	N/A	N	0	N	0
26	57 St NW	Start at corner of 57 St. NW and 123 Ave. Beside 12231 57 St NW, proceed towards 12215 57 St. NW.	08/23/2019	10:42 AM	10:55 AM	A	V	5.18	5.18	5.18	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	Y	N	N/A	N	2.0	8.0	Curb - Grass Line	0	1	N 53° 34.682	W113° 25.744		S	Residents	N/A	N/A	N	N/A	N	0	N	0
27	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aker Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.	08/23/2019	11:15 AM	11:33 AM	A	V	3.20	3.51	5.49	Major	N	4	Commercial - Industrial	7.6 cm - 15.2 cm	N	N	N	N	Y	Y	N	N/A	N	69.0	34.0	Fence - Curb - Grass Line - Tree Line	2	4	N 53° 34.607	W113° 26.581		S	Businesses	N/A	N/A	N	N/A	N	0	N	0
28	48 St NW	Start at 12320 - 48 St. NW, proceed towards 12308 48 St. NW.	08/23/2019	10:31 AM	10:38 AM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	<7.6 cm	N	N	N	N	N	Y	N	N/A	N	0.0	0.0	Curb - Grass Line - Tree Line	0	1	N 53° 35.168	W113° 27.429		S	Residents	N/A	N/A	N	N/A	N	0	N	0
29	48 St NW	Start at 12003 48 St. NW, proceed north on East side of street, ends at 12015 48 St. NW.	08/20/2019	9:25 AM	9:33 AM	A	V	4.27	4.42	4.57	Minor	N	2	Residential	7.6 cm - 15.2 cm	N	N	N	N	N	Y	N	N/A	N	7.0	1.0	Curb - Grass line	0	1	N 53° 34.430	W113° 24.912	House on the corner is boarded up (for sale), long grass.	N/A	Foot traffic, residents living here	N/A	N/A	N	0	N	0		
30	118 Ave	Start at corner of 118Ave and 40 St. in front of CIBC, proceed East on the North Side.	08/20/2019	9:41 AM	9:57 AM	A	V	3.35	3.81	4.57	Major	N	4	Commercial	N/A	Y	N	N	Y	Y	Y	Y	1 receptacle	N	39.0	16.0	Curb - Buildings	1	4	N 53° 34.222	W113° 24.115	Most litter accumulated along the curb. Photos taken.	S	Foot traffic, hotel, bar, daycare	N/A	Cigarette butts present - 17 butts counted on the north side of the street	N	N/A	N	0	N	0
31	Saskatchewan Drive NW	Started in front of 9947 apartments on Westside of street, headed south.	08/22/2019	2:23 PM	2:32 PM	B	F	5.49	5.49	5.49	Minor	Y	2	Residential - Parkland	<7.6 cm	N	N	N	Y	Y	Y	Y	N/A	N	3.0	5.0	Curb - Grass Line - Tree Line	0	1	N 53° 33.576	W113° 29.299		N/A	N/A	N	N/A	N	0	N	0		
32	Kingway Ave NW	Started on Main Road in front of 11810 (Kingway Business Centre) on west side of street, headed North.	08/23/2019	9:21 AM	9:32 AM	A	F	5.49	5.49	5.49	Major	N	4	Commercial	<7.6 cm	N	Y	N	Y	Y	Y	N	N/A	N	17.0	34.0	Curb - Grass Line	0	1	N 53° 34.423	W113° 31.224	A bunch of torn up litter from lawn mowing.	S	Businesses, traffic	N/A	N/A	N	N/A	N	0	N	0
33	119 Ave NW	Site north of Coliseum Transit Centre (765 NW). Site on south side of 119 Ave NW, between 77 St. and 78 St. in front of James Kidney Park.	08/23/2019	12:02 PM	12:14 PM	A	F	5.49	5.49	5.49	Minor	N	2	Residential	7.6 cm - 15.2 cm	N	N	N	N	Y	Y	Y	Bin located in Kames Kidney Park	N	8.0	2.0	Curb - Grass Line	1	1	N 53° 34.308	W113° 27.660		S	Residents, park	N/A	N/A	N	N/A	N	0	N	0
34	87 Ave NW	Started on corner of Tommy Banks Way and 87 Ave NW, on East side of street, headed North.	08/22/2019	1:49 PM	1:58 PM	B	F	5.49	5.49	5.49	Minor	N	2	Residential - Parkland	<7.6 cm	N	N	N	Y	Y	Y	Y	Multiple bins in park	N	6.0	4.0	Curb - Grass Line - Construction															

Site #	Street	Site Description	Date (mm/dd/yyyy)	Start	Finish	Team	Fixed	Width 1 (metres)	Width 2 (metres)	Width 3 (metres)	Street Type	Divided	Lanes	Area	Grass Ht. (cm)	Fast Food	Carve Store	Mobile Food Vendor	Benches or Resting Structure	Bus Stop	Traffic Light or Stop Sign	Waste Receptacle	Details on Street Waste Receptacle	Litter Cleanup Observed on Site	Lg Litter	Sm Litter	Catch Pt	Plastic Bag Count per Site	Litter Index	Latitude	Longitude	Comments	Scattered vs. Piled	Details on where litter could be coming from	Approx. distance from audited site, re: infrastructure	Closest intersection notes on cigarette butts	Evidence of Homelessness	Details on Homeless Presence	Loose Dog Feces Present?	Number of Loose Dog Feces Piles	Human Feces Present?	Number of Human Feces Piles	
67	73 Ave NW	Start in front of 8516 73 Ave NW on SW side, headed SE.	08/22/2019	2:56 PM	3:03 PM	B	V	2.44	2.44	2.44	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	0.0	Curb - Grass Line	0	1	N 53° 30.564	W113° 27.513		N/A	N/A	N/A	N	N/A	N	0	N	0		
68	142 St NW	Start in front of 10404 142 St NW, on NW side of street. Start on the corner, and head north west towards walkways.	08/23/2019	11:05 AM	11:31 AM	A	V	5.49	2.44	2.44	Major	Y	4	Residential	< 7.6 cm	N	N	N	N	Y	Y	Y	Y	Y	0.0	1.0	Curb - Grass Line	0	1	N 53° 32.783	W113° 33.953		N/A	N/A	N/A	N	N/A	N	0	N	0		
69	61 St NW	Start at corner of 61 St and 140 Ave. Site runs along York School, located at 13015 61 St NW.	08/23/2019	1:13 PM	1:25 PM	B	F	5.49	5.49	5.49	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	Y	Y	N	N/A	N	0.0	4.0	Curb - Grass Line	0	1	N 53° 36.127	W113° 26.126		N/A	N/A	N/A	N	N/A	N	0	N	0	
70	93 St NW	Start in front of 12422 93 St NW on East side of street, headed south.	23/08/2019	2:26 PM	2:35 PM	A	V	5.18	5.49	5.49	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	6.0	7.0	Curb - Grass Line	0	1	N 53° 34.840	W113° 29.062		N/A	N/A	N/A	N	N/A	N	0	N	0		
71	74 St NW	Site starts beside tennis court directly across street from 12907- 74 St NW. Proceed towards playground.	08/23/2019	3:17 PM	3:29 PM	A	F	5.49	5.49	5.49	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	N	Y	N/A	N	2.0	9.0	Curb - Grass Line	0	1	N 53° 35.284	W113° 27.340		S	Park, residents	N/A	N/A	N	N/A	N	0	N	0	
72	72 St NW	Start at 13303 72 St NW, proceed E on South side.	08/23/2019	2:47 PM	2:54 PM	B	V	2.44	1.83	1.98	Minor	Y	4	Commercial-Residential	< 7.6 cm	N	Y	N	Y	Y	Y	Y	Y	N	3.0	6.0	Curb - Grass Line	0	2	N 53° 35.541	W113° 27.134		N/A	N/A	N/A	N	N/A	N	0	N	0		
73	139 Ave NW	Site starts just past Mr. Lube on 139 Ave NW, 13703 40 Street NW.	08/21/2019	9:25 AM	9:32 AM	A	F	5.49	5.49	5.49	Minor	N	2	Commercial-Residential	< 7.6 cm	N	N	N	N	Y	Y	N	Y	N	4.0	7.0	Curb - Grass Line	0	1	N 53° 36.076	W113° 24.077		S	Foot traffic, residents from condo complex/recreation centre	N/A	N/A	N	N/A	N	0	N	0	
74	Gateway Blvd NW at 51 Ave	5121 Gateway Blvd NW on south east side of street, next to Ford dealership headed SW.	08/22/2019	11:55 AM	12:12 PM	B	V	5.49	2.13	2.13	Minor	N	4	Commercial-Industrial	N/A	Y	N	N	N	Y	Y	N	N/A	N	1.0	6.0	Curb	0	2	N 53° 37.301	W113° 29.474		N/A	N/A	N/A	N	N/A	N	0	N	0		
75	133A Ave NW	Started in front of 8406 133A Ave NW on north side of street heading north.	08/22/2019	9:11 AM	9:20 AM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	N	N	N	N/A	N	2.0	3.0	Hedge - Curb	0	1	N 53° 35.665	W113° 28.199		S	Residents, school ground	N/A	N/A	N	N/A	N	0	N	0
76	105 St NW	Corner of 105 St NW and 82 Ave (Whyte) NW on North side of street, heading W in front of Chapters.	08/22/2019	1:23 PM	1:37 PM	B	V	4.57	4.88	4.88	Major	Y	6	Commercial	N/A	Y	Y	N	Y	Y	Y	Y	Y	Y	8.0	33.0	Curb - Grass Line - Tree Grates - Bike Racks - Benches - Light Posts	2	2	N 53° 31.088	W113° 30.036	City of Edmonton staff member picking up litter while AET team was leaving.	S	Foot traffic, Fringe Festival	N/A	N/A	N	N/A	N	0	N	0	
77	101 St NW	Site starts in front of 13122 101St NW and proceeds toward 13042 101 St NW.	08/23/2019	2:10 PM	2:20 PM	A	V	4.27	4.27	4.11	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N	N/A	N	2.0	2.0	Curb	1	1	N 53° 35.482	W113° 29.627		S	Residents	N/A	N/A	N	N/A	N	0	N	0
78	134 Ave NW	Start at 12707 134 Ave NW proceed west on south side of street and at 12803 13th Ave NW.	08/22/2019	8:08 AM	8:26 AM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	5.0	0.0	Curb - Grass Line	0	1	N 53° 35.676	W113° 32.525		N/A	N/A	N/A	N	N/A	N	0	N	0		
79	139 Ave NW	Start at corner of 139 Ave NW and 128 St, proceed along apartment complex.	08/22/2019	8:35 AM	8:42 AM	A	V	2.44	4.27	4.27	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	Y	N	Y	N/A	N	5.0	2.0	Hedge - Curb	0	1	N 53° 36.097	W113° 31.719		S	Residents, playground	N/A	N/A	N	N/A	N	0	N	0
80	137 St NW	Start at 13511 137 St NW, proceed North on east side of street, ends at 13523 137 St NW.	08/21/2019	2:07 PM	2:14 PM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	7.6 cm - 15.2 cm	N	N	N	N	N	Y	N	N/A	N	0.0	0.0	Grass Line	0	1	N 53° 35.798	W113° 33.501		N/A	Residents - construction nearby, however the site is clean	N/A	N/A	N	N/A	N	0	N	0	
81	138 Street NW	Start at 13920 138 St NW, proceed east on south side of street. Ends just across street.	08/21/2019	3:48 PM	3:55 PM	A	V	3.05	1.98	1.98	Laneway	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	3.0	0.0	Fence - Grass Line	0	1	N 53° 36.164	W113° 33.436		S	Residents	N/A	N/A	N	N/A	N	0	N	0	
82	146 Ave NW	Site starts at 14024 146 Ave NW, proceed west on north side. Ends at 14034 146 Ave NW.	08/21/2019	3:36 PM	3:41 PM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	0.0	0.0	Grass Line	0	1	N 53° 36.488	W113° 33.769		N/A	Residents	N/A	N/A	N	N/A	N	0	N	0	
83	132 Ave NW	Started in front of 7704 on West side of street, headed south.	08/23/2019	2:38 PM	2:43 PM	B	V	1.52	1.52	1.52	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	Y	Y	Y	N/A	N	3.0	0.0	Curb - Grass Line	0	1	N 53° 35.544	W113° 27.583		N/A	N/A	N/A	N	N/A	N	0	N	0	
84	Castledowns Park on 153 Ave	Start on 153 Ave immediately behind the skate park, proceed towards the YMCA on NE side of road.	08/21/2019	2:20 PM	2:35 PM	A	F	5.49	5.49	5.49	Major	Y	4	Parkland	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	16.0	5.0	Curb - Grass Line	0	2	N 53° 36.940	W113° 31.538		S	Park	N/A	N/A	N	N/A	N	0	N	0	
85	14 Ave SW	Start at edge of loop, in front of 426600 14 Ave NW, head West around loop.	08/21/2019	9:43 AM	9:54 AM	B	V	2.44	2.44	2.44	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	4.0	2.0	Curb - Grass Line	0	2	N 53° 35.252	W113° 36.532		S	Foot traffic and garbage day	N/A	N/A	N	N/A	N	0	N	0	
86	23 Ave NW and 66 St	Start on corner of 23 Ave and 66 St in front of Millwoods Park sign and head SW.	08/20/2019	10:25 AM	10:40 AM	B	F	5.49	5.49	5.49	Major	Y	6	Parkland	< 7.6 cm	N	N	N	N	Y	Y	Y	Y	N	8.0	10.0	Hedge - Curb - Big Sign - Flower Bed	0	3	N 53° 37.230	W113° 26.108		S	Near sports facilities, big church and mall	N/A	N/A	N	N/A	N	0	N	0	
87	8 St NW	Start in front of 4008 8 St NW on west side, head N/A.	08/20/2019	9:12 AM	9:17 AM	B	V	2.13	2.13	2.13	Major	N	2	Parkland	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	2.0	2.0	Curb - Grass Line	0	1	N 53° 37.636	W113° 21.362		S	Foot traffic	N/A	N/A	N	N/A	N	0	N	0	
88	35 St NW	Start in front of #3911 35 St NW on East side, head North.	08/20/2019	9:38 AM	9:46 AM	B	F	2.13	2.13	2.13	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	6.0	0.0	Curb - Grass Line	2	1	N 53° 30.489	W113° 23.679		S	N/A	N/A	N	N/A	N	0	N	0		
89	42 St NW	Start on corner in front of 2123 42 St NW, head East.	08/20/2019	9:57 AM	10:06 AM	B	V	4.57	0.91	1.22	Minor	Y	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	13.0	0.0	Hedge - Curb - Sewage Hole/Drain	0	1	N 53° 37.214	W113° 24.367		S	Local curbside recycling and garbage	N/A	N/A	N	N/A	N	0	N	0	
90	75 St NW	Start on corner in front of 1904 75 St NW, head SW down 75 St.	08/20/2019	10:49 AM	10:58 AM	B	V	3.35	2.13	2.44	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	Y	Y	N/A	N	1.0	1.0	Curb - Grass Line	0	1	N 53° 36.886	W113° 26.899		S	Nearby park and foot traffic	N/A	N/A	N	N/A	N	0	N	0
91	1A Ave SW	Start in front of 5806 1A Ave SW, head East along sidewalk (R's decreasing) on North side.	08/20/2019	11:10 AM	11:18 AM	B	V	2.44	4.27	4.27	Minor	Y	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	5.0	0.0	Curb - Grass Line	0	1	N 53° 35.904	W113° 25.845		S	Garbage collection day, garbage and recycling on curb	N/A	N/A	N	N/A	N	0	N	0	
92	88 St SW	Start at 1720 88 St SW (In front of the Beach Club sign) on westside, head south.	08/19/2019	3:06 PM	3:19 PM	B	V	5.49	5.49	5.18	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	Y	Y	Y	Y	Y	5.0	4.0	Beach club worker cleaning up near site	0	1	N 53° 35.050	W113° 28.044		S	Road and foot traffic	N/A	N/A	N	N/A	N	0	N	0	
93	Orchards Way SW	Start on corner of Orchards Way Blvd, on west side head south.	08/19/2019	3:51 PM	4:05 PM	A	V	5.49	5.18	4.57	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	20.0	5.0	Fence - Curb - Grass Line	1	2	N 53° 34.488	W113° 27.168		S	Traffic, walkway - most litter close to area where construction is happening	N/A	N/A	N	N/A	N	0	N	0	
94	72 St NW	Start at 10120 72 St NW. Proceed north on west side.	08/20/2019	8:33 AM	8:41 AM	A	V	5.18	5.18	5.18	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	Y	N	N/A	N	4.0	1.0	Curb - Grass Line	0	1	N 53° 33.498	W113° 26.405		S	Foot traffic, residents	N/A	N/A	N	N/A	N	0	N	0	
95	Auxier Ct SW	Start in front of 2110 Auxier Ct SW on north side, head east.	08/19/2019	1:48 PM	2:02 PM	A	V	2.13	2.13	2.13	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	9.0	0.0	Grass Line	1	1	N 53° 33.813	W113° 31.226		S	N/A	N/A	N	N/A	N	0	N	0		
96	Cole Crescent SW	Start in front of 2573 Cole Crescent SW on west side of street, headed north around loop.	08/19/2019	2:14 PM	2:22 PM	A	V	2.44	2.44	2.44	Minor	N	2	Residential	7.6 cm - 15.2 cm	N	N	N	N	N	N	N	N/A	N	2.0	0.0	Grass Line	0	1	N 53° 34.293	W113° 32.038		S	N/A	N/A	N	N/A	N	0	N	0		
97	120 St NW	Started corner of 130 St and 114 Ave on North side of street, heading west in front of AMRE supply parking lot.	08/23/2019	9:02 AM	9:13 AM	A	V	5.49	4.27	5.49	Minor	N	2	Industrial	< 7.6 cm	N	N	N	N	Y	Y	N	N/A	N	30.0	7.0	Fence - Curb - Grass Line	3	2	N 53° 33.859	W113° 31.741		S	Businesses	N/A	N/A	N	N/A	N	0	N	0	
98	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.	08/23/2019	8:19 AM	8:32 AM	B	F	5.49	5.49	5.49	Major	Y	6	Commercial-Residential	< 7.6 cm	Y	Y	N	Y	Y	Y	Y	Y	N	28.0	9.0	Curb - Grass Line	1	4	N 53° 35.471	W113° 30.949		S		N/A	N/A	N	N/A	N	0	N	0	
99	1155 Windermere Way SW	Start behind liquor depot on south side of street at 1155 Windermere Way SW, headed east towards Starbucks.	08/20/2019	11:52 AM	12:09 PM	B	F	5.49	5.49	5.49	Major	Y	4	Commercial	< 7.6 cm	Y	N	N	N	Y	Y	Y	N	N/A	N	5.0	4.0	Curb - Grass Line - Tree Line	0	1	N 53° 36.279	W113° 37.111		S	Foot traffic, shopping area, near multi-unit dwellings.	N/A	N/A	N	N/A	N	0	N	0
100	156 St NW	Started in front of church on west side, headed south.	08/21/2019	10:10 AM	10:19 AM	B	V	3.66	1.83	3.96	Minor	N	2	Residential	> 15.6 cm	N	N	N	N	N	N	N	N/A	N	10.0	4.0	Curb - Grass Line - Tree Line	0	1	N 53° 36.615	W113° 35.407		S	Dog walkers, church events, nearby apartments	N/A	N/A	N	N/A	N	0	N	0	
101	Tony Crescent NW	Start at 225 Tony Crescent NW on North side, travel west.	08/21/2019	10:28 AM	10:40 AM	B	V	2.44	2.44	2.44	Minor	N	2	Residential	< 7.6 cm	N	N	N	N	N	N	N	N/A	N	0.0	1.0	Curb - Grass Line	0	1	N 53° 37.200	W113° 34.200		S	Garbage day, foot traffic	N/A	N/A	N	N/A	N	0	N	0	
102	Cameron Heights Dr																																										

APPENDIX B

SITE DISTRIBUTION MAP

Edmonton Litter Sites 2019



APPENDIX C

METHODOLOGY

Conducting the Litter Audit

Audit area at the sites should be the same size. Audit Areas are to be 60.96 metres x 5.49 metres. These full sized audit areas are termed FIXED sites. The site width may be less than 5.49 metres in some cases, such as when in commercial areas the storefront is set back less than the prescribed distance. In these cases, each site should be 60.96 metres in length by the width available (<5.49 metres), which will be recorded. These sites are termed VARIABLE sites.

Beginning at the front of the parked car or the start of the site, the team shall use a measuring device to measure 15.24 metres ahead of the start of the site. Using street marking paint (water based to dissolve) or some other temporary marking method (e.g. chalk, pylons), a mark should be made on the pavement ahead to denote the starting point of the audit site. From this point the team will measure 30.48 metres, marking the roadway with another identifier to show the mid-point of the site. A final measurement of an additional 30.48 metres denotes the end of the audit site. As mentioned above, each site is to be 60.96 metres in length.

The width measurement shall be taken at the start, midpoint and end of the site. The width of the site should be measured 0.46 metres from inside the curb or the start of the pavement, towards the outer edge of the site, up to a maximum width of 5.49 metres and marked to indicate the boundary. This rule is set to include 0.46 metres into the street since curbs are normal catchment structures, for which the City is responsible for litter clean up. Refer to Figure 1 below depicting the audit site setup.

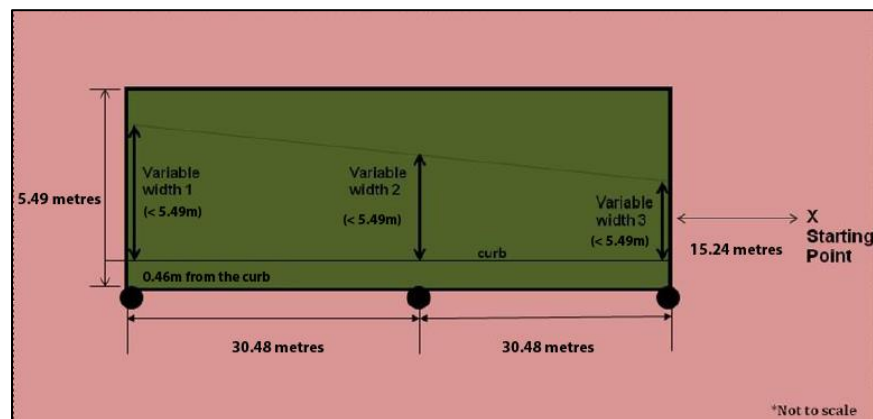


Figure 1: Schematic of Survey Site

Classification of Large Litter

For purposes of classifying litter, and in accordance with the methods used in previous litter surveys, large litter is defined as being greater than 25.8 cm² in size. To assist the field teams with determining the litter sizes, each audit team will be provided with three templates of 25.8 cm² in rectangle, square and round shape form. Refer to Figure 2 depicting diagrams of the litter templates.

At each site location this litter audit will observe and document large litter in 13 categories and 88 sub-categories.

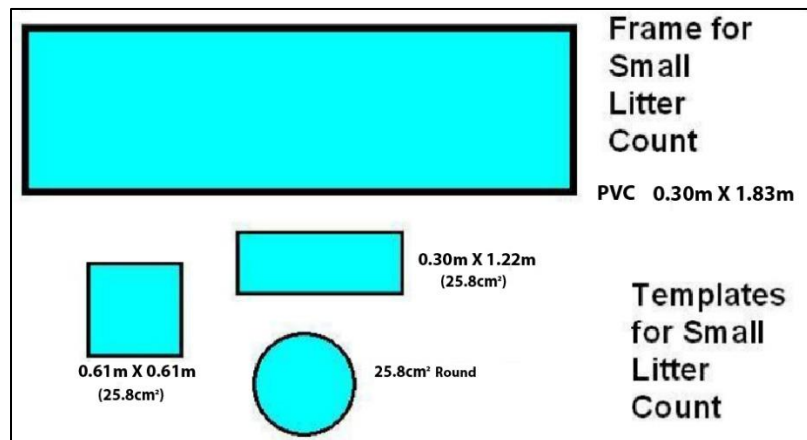


Figure 2: Litter Template

Classification of Small Litter

Small litter is defined as those pieces of debris that are less than 25.8 cm² in size. It is classified under 17 categories. The small litter audit involves examining three segments, or slices taken through the audit site. The successful bidder shall construct a frame for each audit team, using 1.27cm P.V.C. plastic tubing (or a similar material) to act as the template. This frame shall measure 0.30 metres wide and 1.83 metres long. Three successive “flips” of the frame will complete crossing the site to the 5.49 metre boundary of the site. The litter auditor will observe and count all the small litter contained within the frames at three locations within each site: at the start, mid-point and end of the site. At each segment three flips of the frame will be analyzed, thus surveying a total of 1.67 square metres for a total of 16.46 metres of the entire site. See Figure 3 for a depiction of the site setup for the small litter survey. The Site Surveyor Form – Small Litter Count Sheet will be used to record the findings for each site.

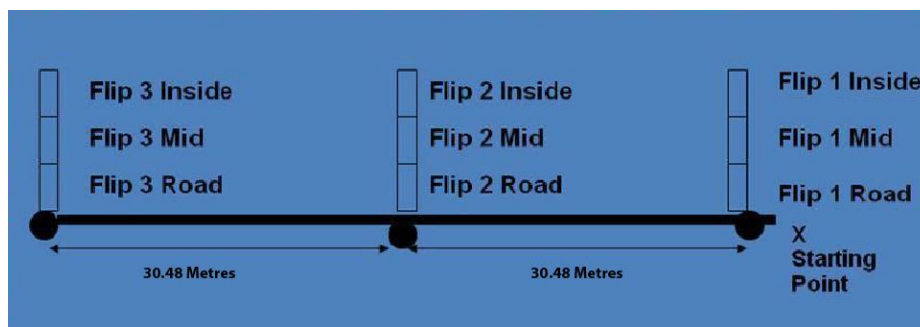


Figure 3: Site Set up Small Litter

APPENDIX D

FIELD FORMS

Site Surveyor Form

Date: _____ (DD/MM/YYYY) Start Time: _____ (AM/PM) End Time: _____ (AM/PM)

Team ID _____ Surveyors Names: _____

Site ID Number: _____ Site Name: _____

Site type: Fixed ☐ Variable ☐ Site length: **Always 200 feet long**

If variable:

GPS Coordinates: N _____ W _____

Width 1 - Start: _____ ft. (up to 18ft.)

Width 2 - Middle: _____ ft. (up to 18ft.)

Width 3 - End: _____ ft. (up to 18ft.)

Road type (check one): Major City Street ☐ Minor City Street ☐ Laneway ☐

Is roadway divided: Y / N

Number of Lanes: 2 ☐ 4 ☐ 6 ☐ Other ☐ (explain): _____

Area Attributes:

Commercial ☐ Residential ☐ Industrial ☐ Parkland ☐

Grass Height (Check one): N/A ☐ < 3 inches ☐ 3" – 6" ☐ over 6" ☐

Fast food within sight: Y / N

Convenience store within sight: Y / N

Mobile Food Vendor within sight: Y / N

Bench or other resting structure within sight: Y / N

Bus stop within sight: Y / N

Traffic light or stop sign within sight? Y / N

City street/park waste receptacle within 200 meter radius from site boundary: Y / N

City street/park litter bin details: _____

Evidence of litter cleanup? Y / N

Cleanup details: _____

Catch point: fence ☐ hedge ☐ curb ☐ grass line ☐ tree line ☐ other ☐ _____

Details: _____

Photos Taken: _____

Visual rating of site (1 = cleanest, ie. <5 large pieces of litter; 4 = dirtiest, ie. >20 large pieces of litter) _____

Evidence of litter dumping? Y / N Details: _____

Scattered vs. Piled Litter? _____

Details on where litter could be coming from and approximate distance from audited site (infrastructure, congregation spots, land usage): _____

Assessment of closest intersection for cigarette butts: _____

Evidence of Homelessness? Y / N Details: _____

Loose Dog Feces? Y / N, If yes, number of piles: _____ Loose Human Feces? Y / N, If yes, number of piles: _____

Site Surveyor Form - Small Litter (<4") Count Sheet

Date (DD/MM/YY): _____

Start Time: _____ End Time: _____

Team ID: _____ Surveyors Names: _____

Site ID Number: _____

Site Name: _____

		Section #1*				Section #2				Section #3				
SMALL LITTER CATEGORY	Item	Flip 1	Flip 2	Flip 3	Total	Flip 1	Flip 2	Flip 3	Total	Flip 1	Flip 2	Flip 3	Total	Grand Total
Cigarette butts/debris	1													
Other tobacco	2													
Bottle caps	3													
Straws (pieces, cocktail straws)	4													
Candy packaging and wrappers	5													
Polystyrene packing materials, ie. foam peanuts	6													
Other polystyrene debris, ie. poly foam pieces	7													
Glass	8													
Paper	9													
Plastic film	10													
Hard plastic	11													
Aluminum/foil debris	12													
Rubber	13													
Metal (not aluminum)	14													
Other material	15													
Chewing gum (stuck on pavement)	16													
Food & Other Organics	17													

*closest to vehicle/starting point

Large Litter Survey Form

Site ID:

Site Name:

Time:

Survey Team:

Site Description:					
CATEGORY	PASS 1	TOTAL	PASS 2	TOTAL	BRAND NAMES OBSERVED
MISCELLANEOUS LITTER					
Misc. Paper					
Misc. Plastic					
Misc. Paperboard					
Misc. Cardboard					
Misc. Glass					
BEVERAGE CONTAINERS					
Beer Cans					
Beer Bottles (glass)					
Soft Drink (glass)					
Soft Drink (cans)					
Soft Drink (plastic)					
Sport Drink (glass)					
Sport Drink (plastic)					
Water (glass)					
Water (plastic)					
Wine/ Liquor (glass)					
Wine/ Liquor (plastic/other)					
Milk/Juice (plastic)					
Milk/Juice (glass)					
Milk/Juice (gable top)					
Foil Pouches					
Aseptic (box)					
Broken Glass Container					
Six Pack Plastic Rings					
CUPS					
Plastic Drink Cups					
Paper Cups (cold)					
Paper Cups (hot)					
Polystyrene Cups (foam)					
Other Paper Cups					
Cup Lids, Pieces, Lids					
Straws (full size)					
BAGS					
Plastic Retail Bags					
Paper Retail Bags					
Paper Bags - Fast Food					
Plastic Bags - Not Retail					
Paper Bags - Not Retail					
Zipper Bags/Sandwich Bags					
BOXES					
Cardboard Boxes/ Box Material					
Paperboard (boxboard)					
Paper Beverage Cases/Sleeves					
Polystyrene Clamshells					
Paper Clamshells					
Other Plastic Shells/Boxes					

Plastic Bag Count: _____

CATEGORY	PASS 1	TOTAL	PASS 2	TOTAL	BRAND NAMES OBSERVED
OTHER CONTAINERS					
Plastic Jars / Bottles/ Lids					
Glass Jars/Bottles					
Cans - Steel					
Cans - Aluminum					
Container Lids					
Aerosol cans (paint, oils, etc.)					
Plastic Packaging Other					
Paper Packaging Other					
Plastic/Composite Other					
Foil Materials/Foil Pieces					
Foil Containers					
WRAPS & TRAYS					
Paper Food Wrap					
Paper /Foil Composite Wrap					
Plastic Wrap					
Polystyrene Trays					
Paper Trays					
Other Trays					
CANDY & GUM & SNACKS					
Gum Wrappers					
Candy Bar Wraps					
Candy Pouches					
Sweet Packaging					
Other Confectionery					
Snack Food Packaging					
FAST FOOD ITEMS					
Condiment Packaging					
Utensils					
Name Brand Napkins / Serviettes					
Paper Fast Food Plates					
Poly Fast Food Plates					
Other Plastic FF Plates					
Plates - Other Mat's					
No Brand Name Napkins /Serviettes					
HOUSEHOLD ARTICLES					
Clothing or Clothing Pieces					
Other Cloth					
Vehicle & Metal Road Debris					
Construction debris					
Tire & Rubber debris					
Home Articles					
PRINTED MATERIALS					
Lottery \Ticket Debris					
Printed Material					
Stationary (school, business etc.)					
Receipts (business forms, bus tickets)					
TOBACCO PRODUCTS					
Cigarette / Cigar Debris					
Tobacco other					
OTHER ADDITIONAL ITEMS					
Pet Waste in a Bag					
Food Waste					
Popsicle Sticks					

APPENDIX E

LARGE LITTER DATA

Large Litter Items	2019 Total	2019 Percent
Misc. Paper	58	5.66%
Misc. Plastic	67	6.54%
Misc. Paperboard	1	0.10%
Misc. Cardboard	1	0.10%
Misc. Glass	0	0.00%
Beer Cans	1	0.10%
Beer Bottles (glass)	1	0.10%
Soft Drink (glass)	0	0.00%
Soft Drink (cans)	3	0.29%
Soft Drink (plastic)	0	0.00%
Sport Drink (glass)	0	0.00%
Sport Drink (plastic)	0	0.00%
Water (glass)	0	0.00%
Water (plastic)	4	0.39%
Wine/ Liquor (glass)	1	0.10%
Wine/ Liquor (plastic/other)	3	0.29%
Milk/Juice (plastic)	1	0.10%
Milk/Juice (glass)	0	0.00%
Milk/Juice (gable top)	0	0.00%
Foil Pouches	0	0.00%
Aseptic (box)	0	0.00%
Broken Glass Container	3	0.29%
Six Pack Plastic Rings	3	0.29%
Plastic Drink Cups	22	2.15%
Paper Cups (cold)	7	0.68%
Paper Cups (hot)	29	2.83%
Polystyrene Cups (foam)	2	0.20%
Other Paper Cups	2	0.20%
Cup Lids, Pieces, Lids	47	4.59%
Straws (full size)	57	5.57%
Plastic Retail Bags	5	0.49%
Paper Retail Bags	0	0.00%
Paper Bags - Fast Food	8	0.78%
Plastic Bags - Not Retail	22	2.15%
Paper Bags - Not Retail	0	0.00%
Zipper Bags/Sandwich Bags	7	0.68%
Cardboard Boxes/ Box Material	15	1.46%
Paperboard (boxboard)	26	2.54%
Paper Beverage Cases/Sleeves	2	0.20%
Polystyrene Clamshells	3	0.29%
Paper Clamshells	0	0.00%
Other Plastic Shells/Boxes	0	0.00%
Plastic Jars / Bottles/ Lids	7	0.68%
Glass Jars/Bottles	0	0.00%
Cans - Steel	0	0.00%
Cans - Aluminum	2	0.20%
Container Lids	2	0.20%
Aerosol cans (paint, oils, etc.)	0	0.00%
Plastic Packaging Other	48	4.69%
Paper Packaging Other	37	3.61%
Plastic/Composite Other	5	0.49%
Foil Materials/Foil Pieces	8	0.78%
Foil Containers	0	0.00%
Paper Food Wrap	11	1.07%
Paper /Foil Composite Wrap	6	0.59%
Plastic Wrap	15	1.46%
Polystyrene Trays	3	0.29%

Large Litter Items	2019 Total	2019 Percent
Paper Trays	0	0.00%
Other Trays	0	0.00%
Gum Wrappers	5	0.49%
Candy Bar Wraps	17	1.66%
Candy Pouches	3	0.29%
Sweet Packaging	16	1.56%
Other Confectionery	0	0.00%
Snack Food Packaging	28	2.73%
Condiment Packaging	5	0.49%
Utensils	10	0.98%
Name Brand Napkins / Serviettes	1	0.10%
Paper Fast Food Plates	1	0.10%
Poly Fast Food Plates	0	0.00%
Other Plastic FF Plates	0	0.00%
Plates - Other Mat's	0	0.00%
No Brand Name Napkins /Serviettes	127	12.40%
Clothing or Clothing Pieces	18	1.76%
Other Cloth	12	1.17%
Vehicle & Metal Road Debris	13	1.27%
Construction debris	30	2.93%
Tire & Rubber debris	7	0.68%
Home Articles	39	3.81%
Lottery \Ticket Debris	1	0.10%
Printed Material	37	3.61%
Stationary (school, business etc.)	10	0.98%
Receipts (business forms, bus tickets)	37	3.61%
Cigarette / Cigar Debris	0	0.00%
Tobacco other	53	5.18%
Pet Waste in a Bag	2	0.20%
Food Waste	6	0.59%
Popsicle Sticks	1	0.10%
Total Site Litter	1024.00	100.00%

APPENDIX F

SMALL LITTER DATA

Small Litter Items	2019	
	Items	Percent
Cigarette butts/debris	279	30.79%
Other tobacco	0	0.00%
Bottle caps	4	0.44%
Straws (pieces, cocktail straws)	8	0.88%
Candy packaging and wrappers	23	2.54%
Polystyrene packing materials, ie. foam peanuts	1	0.11%
Other polystyrene debris, ie. poly foam pieces	22	2.43%
Glass	26	2.87%
Paper	211	23.29%
Plastic film	60	6.62%
Hard plastic	63	6.95%
Aluminum/foil debris	33	3.64%
Rubber	13	1.43%
Metal (not aluminum)	14	1.55%
Other material	25	2.76%
Chewing gum (stuck on pavement)	66	7.28%
Food & Other Organics	58	6.40%
Total Site Litter	906	100.00%

APPENDIX G

RANKING OF SITES

2019			
Site #	Lg Litter	Street Name	Site Description
27	69	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
36	58	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
19	39	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	39	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
23	38	118 Ave NW	Site in on 118 Ave at 38 ST NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
18	31	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
97	30	120 St NW	Started corner of 120 St and 114 Ave on north side of street, heading west in front of AMRE supply parking lot.
98	28	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.
114	28	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
41	22	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
16	21	106 Ave	Start outside doors of 9664 106 Ave.
93	20	Orchards Way SW	Start on corner of Orchards Way Blvd, on west side head south.
118	20	72 Ave	Start in front of Lymburn School at 18710 72 Ave on West side of street, headed North.
47	19	50 St at 162A Ave	On 50 St, start at corner of 50 St and 162A Ave on West side, proceed down grassed boulevard.
48	18	40 St and 131 Ave	Start at corner of 40 st and 131 Ave on west side of street. Proceed South.
32	17	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
84	16	Castledowns Park on 153 Ave	Start on 153 Ave immediately behind the skate park, proceed towards the YMCA on NE side of road.
50	15	97 Street at 160 Ave	On 97 St, start at crosswalk at corner of 97 St and 160 Ave. Proceed on SE side. Across from BMO.

2019			
Site #	Lg Litter	Street Name	Site Description
14	14	104 St. at 102 Ave	Start at corner of 104 St and 102 Ave across from 10320 102 Ave across ends at 10226 104 St.
35	14	118 Ave	Start in front of 8807 118 Ave NW, proceed towards 89 St.
17	13	108A Avenue	Start at property line of 9541 108A Ave apartments, proceed towards 9521 108A Ave.
46	13	137 Ave at Northtown Shopping Centre	Start on 137 Ave beside Quizno's Sub (9304 137 Ave). Proceed West on north side of street towards Starbucks.
89	13	42 St NW	Start on corner in front of 2123 42 St NW, head East.
120	13	Winterburn Rd NW	Start on corner of Winterburn Rd NW and Secord Blvd on North side, headed West. Address 9527 Winterburn.
121	13	112 Ave NW - Highland Plaza & Apartments	Measured 100 ft from corner of 112 Ave and 82 St. Start in front of Cromdale Plaza (8145 112 Ave) proceed towards Highland apartments.
138	13	162 Ave NW	Site runs along North Refund Centre Bottle Depot, at 9504 162 Ave NW. Start at back entrance on NW side, travel SW.
21	12	50 Street NW	Site starts on 50 St NW in front of end of Kennedale Shopping Centre, proceeds south on East side towards 129 Ave.
22	12	77 St. NW	Started in front of 12008 on East side of street, headed south.
52	12	Jasper Ave - West of 84 St (Greenbelt)	Start at corner of Jasper Ave and 84th Street across street from apartment buildings. Proceed southwest on southeast side, across from 8508 Jasper Ave.
126	12	159 St NW	Start in front of 7805 159 St NW, on SW side, headed SE.
3	10	107 Ave NW - Mayfield Road	Start on NW side of 107 Ave NW and Mayfield Road intersection. Head south west. Curling Club close by.
5	10	Yellowhead Trail	Start on south side of Yellowhead Trail/ St. Albert Trail's exit off ramp, site starts at corner of Yellowhead and St. Albert, proceed down ramp end at 5290 Bus stop.
43	10	40 St. at 139 Ave	Site starts at NW corner of 40 St and 139 Ave. Runs north towards condos. Beside Clareview Community and Recreation Centre.
45	10	137 Ave at 66 St NorthEast corner	On 137 Ave, start at NE corner of 137 Ave and 66 St crosswalk. Proceed E on N side. Shell behind store start point.
53	10	Griesbach Road, southside of 97 St	On Griesbach Road, start at corner of Griesbach and 97 St. Proceed West on South side of road. Put 103 Grisbach into GPS to get there.

2019			
Site #	Lg Litter	Street Name	Site Description
55	10	50 Street NW at 146 Ave	Start at NW corner of 50 St (14634 50 St NW) and 146 Ave. Proceed North on W side along Casselwood Shopping Centre.
100	10	156 St NW	Started in front of church on west side, headed south.
8	9	124 St. NW	Start in front of 11644 on North Side of street, heading west.
15	9	109 St. NW	Queen Mary Park. Start at 10578 109 St NW, proceed towards 10550 109 St. NW, ends at 10550.
95	9	Auxier Ct SW	Start in front of 2110 Auxier Ct SW on north side, head east.
33	8	119 Ave NW	Site north of Coliseum Transit Centre (76St NW). Site on south side of 119 Ave NW, between 77 St. and 78 St. in front of James Kidney Park.
76	8	105 St NW	Corner of 105 St NW and 82 Ave (Whyte) NW on North side of street, heading W in front of Chapters.
86	8	23 Ave NW and 66 St	Start on corner of 23 Ave and 66 St in front of Millwoods Park sign and head SW.
29	7	48 St NW	Start at 12003 48 St. NW, proceed north on East Side of street, ends at 12015 48 St. NW.
59	7	85 Ave and 173 St	Trail to right of 8503 173 St. heading SW.
6	6	131 St.	Site starts directly across street from 12232 131 St. and proceeds along school, ends across from 12240 131St.
34	6	87 Ave NW	Started on corner of Tommy Banks Way and 87 Ave NW, on East side of street, headed North.
57	6	Hooke/Hermitage Road playground	On Hermitage Road, start in front of overlanders park sign. Proceed West on North side of street towards Overlanders School.
70	6	93 St NW	Start in front of 12422 93 St NW on East side of street, headed south.
88	6	35 St NW	Start in front of #3911 35 St NW on East side, head North.
113	6	69 Ave NW	Start in front of 10525 69 Ave NW on East side of street, heading North.
40	5	50 Street	Start in front of 9333 50 St. (Capilano Christian Assembly) on West side, headed North, sidewalk walkway.
44	5	137 Ave at Victoria Trail	Start at NW corner of 137 Ave and Victoria Trail at crosswalk. Proceed west on north side.

2019			
Site #	Lg Litter	Street Name	Site Description
62	5	83 Ave	Start at 10006 83 Ave. (apartments) on North side, headed West.
78	5	134 Ave NW	Start at 12707 134 Ave NW proceed west on south side of street and at 12803 13th Ave NW.
79	5	139 Ave NW	Start at corner of 139 Ave NW and 120 St, proceed along apartment complex.
91	5	1A Ave SW	Start in front of 5808 1A Ave SW, head East along sidewalk (#'s decreasing) on North side.
92	5	88 St SW	Start at 1720 88 St SW (In front of the Beach club sign) on westside, head south.
99	5	1155 Windermere Way SW	Start behind liquor depot on south side of street at 1155 Windermere Way SW, headed east towards Starbucks.
56	4	50 St at 137 Ave NW	Start at edge of crosswalk at 50 St and 137 Ave NW, across street from Earl's. Proceed west on south side. Across from Earl's sign and Petsmart.
63	4	77 Ave NW	Start on corner in front of 9605 77 Ave, on East side of street, head South towards 9607 77 Ave.
73	4	139 Ave NW	Site starts just past Mr. Lube on 139 Ave NW, 13703 40 Street NW.
85	4	14 Ave SW	Start at edge of loop, in front of #16600 14 Ave NW, head West around loop.
94	4	73 St NW	Start at 10110 73 St NW. Proceed north on west side.
117	4	Ormsby Road West NW	Start in front of 739 Ormsby Road West NW, on SW side, heading NW.
123	4	88 Ave	Highlevel Diner 10912 88 Ave, Bridgeway in front of Highlevel Diner, on North side, headed East.
131	4	79 St NW	Start in front of 8815 79 St NW on SE side, heading SW.
139	4	McConachie Blvd NW	Start on 1079 McConachie Blvd NW, travel NE on SE side.
12	3	100 Ave at 112 St. NE Corner	On 100 Ave, start at NE corner of 100 Ave and 112 St. and proceed east on north side along Covenant Health Edmonton General.
31	3	Saskatchewan Drive NW	Started in front of 9947 apartments on Westside of street, headed south.
49	3	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.
51	3	97 St and 105 Ave (Mary Burlie Park)	Start in front of Mary Burlie Park, across from 97 St and 105 Ave intersection. Travel down 97 St. Site ends just before underpass.
64	3	170 St and 69 Ave	6827 1709 St NW. Start at edge of Husky Station heading south on 170 St NW, right in front of Canadian cannabis clinics.

2019			
Site #	Lg Litter	Street Name	Site Description
66	3	78 Ave NW	Start in front of 7544 78 Ave NW on SW side, heading SE.
72	3	72 St NW	Start at 13203 72 St NW, proceed E on South side.
81	3	138 Street NW	Start at 13920 138 St NW, proceed east on south side of street. Ends just across street.
83	3	132 Ave NW	Started in front of 7704 on West side of street, headed south.
87	3	8 St NW	Start in front of 4008 8 St NW on west side, head N/NE.
111	3	10541 60A Ave	Start on corner of 106 St. and 60A Ave in front of Mount Pleasant School on NE side of the street, headed NW.
115	3	66 Ave NW	Start in front of 10947 66 Ave NW on SW side, heading SE.
129	3	Stony Plain Rd	Started on corner of Stony Plain Road and 171st, on NE side of street, headed SE. Address 17107 Stony Plain Rd.
130	3	Stony Plain Rd	ATB Financial. Intersection of Stony Plain Road and 156 St NW. Started on N side of street, headed E. Address 15548 Stony Plain Rd.
134	3	138 St NW	Start at 16244 138 St NW, proceed S on W side of street.
2	2	Jasper Ave	Start at corner of Jasper and 118 St. across street from Shoppers Drugmart. Ends at 11729 Jasper Ave.
11	2	129 St. NW	Start in front of 10980 - 129 St. NW, on west side of street, heading south. Stop in between 10964 and 10966.
20	2	82nd Street	Start at 11515 82nd St., proceed north on east side of road towards 11533 82 St.
26	2	57 St NW	Start at corner of 57 St. NW and 123 Ave. Beside 12231 57 St NW, proceed towards 12215 57 St. NW.
38	2	Schonsee Drive NW	Start across street from 5509 Schonsee Dr. Site runs along new condo development. Travel NW on NE side of street. Very muddy in 2018, construction complete in 2019.
39	2	73 Street NW	Start at 10131, on west side of street, head North.
58	2	Victoria Trail (north of walking path)	Site starts on Victoria Trail at Tim Horton's entrance. Proceed NW on NE side of street. Ends in front of Petro Canada near Hermitage Road.
60	2	170 St and 90 Ave	Walking Trail on 170, just north of 90 Ave, next to entrance for Italian Centre Stop.
65	2	89 Ave	Start in front of Waterly Elementary School on East side, heading South. Address 6825 89 Ave.
71	2	74 St NW	Site starts beside tennis court directly across street from 12907- 74 St NW. Proceed towards playground.
75	2	133A Ave NW	Started in front of 8406 133A Ave NW on north side of street heading east.
77	2	101 St NW	Site starts in front of 13122 101St NW and proceeds toward 13042 101 St NW.
96	2	Cole Crescent SW	Start in front of 2575 Cole Crescent SW on west side of street, headed north around loop.
103	2	Hollands pt. NW	Start in front of 1016 Hollands Pt NW, on east side heading west around loop.
110	2	75 Ave NW	Start in front of 11307 75 Ave NW, on NE side, headed SE.

2019			
Site #	Lg Litter	Street Name	Site Description
112	2	12603 63 Ave	Start on South corner in front of Grandview Heights School, located at 12603 63 Ave, heading East.
119	2	224 St NW	Start in front of 8167 224 St NW on NE side, heading SE.
122	2	199 St NW	Start in front of Hydro tower, at 9503 199 St NW on NE side of street, headed SE.
124	2	93 Ave	Start in front of St. Benedict School, at 18015 93 Ave on NE side, headed SE.
128	2	152 St	Started at corner of 152 St NW and 95 Ave, in front of Sherwood School playground on West side of the street, headed North. Address 9550 152 St NW.
1	1	102 Ave NW	Start in front of 12421 102 Ave, proceed north on west side of street, ends in front of High Street Plaza
13	1	109 St. NW	Start on 109 St NW at edge of 9918 109 St. NW next to roll up doors of Central tire, proceed SW on SE side, ends at edge of Petro gas station.
74	1	Gateway Blvd NW at 51 Ave	5121 Gateway Blvd NW on south east side of street, next to Ford dealership headed SW.
90	1	75 St NW	Start on corner in front of 1904 75 St NW, head SW down 75 St.
102	1	Cameron Heights Dr	Corner of Cameron Heights and Caldwell Way, south side of street, headed SE.
104	1	Leger Way	Start on corner of Leger Way and Leber Court south side (2204 Leber Crt) headed east across from school/ park. In front of Brass III Leger Court.
108	1	Aspen Dr. West NW	Start in Alley-way behind house # 12115, on SE side headed SW.
125	1	108 St @ 36 A Ave	Start at corner of 36 A Ave and 108 St, on North side, headed West.
127	1	161 St NW	Started across the street from 8847 - 161 St NW, in front of sign for Meadowlark Park, on SE side, headed SW.
137	1	Klarvatten Lake Wynd NW	Start at 503 Klarvatten Lake Wynd NW, proceed N toward 511 on E side. Middle point in middle of road by median.
4	0	150 St. NW	Started in front of 970B on East Side of the street, headed south.
7	0	140 St. N	Start in front of 11521 on SW side, headed SE.
9	0	Bowman Point SW	Start in front of Bowman Point 1829, head around corner towards mailboxes.
10	0	110A Ave NW	Start in front of 13558 on East side of street, headed south. Head towards descending numbers.
24	0	109B Ave NW	Start at 5904 - 109B Ave NW, proceed West on North side of street.
25	0	61 St. NW	Start at 12115, proceed east on south side of street. (12115 61 Street NW)
28	0	48 St NW	Start at 12320 - 48 St. NW, proceed towards 12308 48 St. NW.
37	0	105A Ave NW	Start at 5504 105A, proceed west on north side of street. Site end at 105A Ave.
42	0	167 Ave NW	Starts at fenceline just East of Bus stop on 107 Ave NW. Runs along the side of Shopper's Drugmart.

2019			
Site #	Lg Litter	Street Name	Site Description
54	0	111 Ave and 142 St	Across from Telus World of Science. Intersection of 111 Ave and 142 St, on SW side of street heading SE.
61	0	51 Ave and 115 St E	Start on walkway across the street from 5103 115 St, on East side, headed South. Started across from 5103 115. Headed west on 51 Ave, by bus stop.
67	0	73 Ave NW	Start in front of 8516 73 Ave NW on SW side, headed SE.
68	0	142 St NW	Start in front of 10404 142 St NW, on NW side of street. (Start on the corner, and head north west towards walkway).
69	0	61 St NW	Start at corner of 61 St and 140 Ave. Site runs along York School, located at 13915 61 St NW.
80	0	137 St NW	Start at 13511 137 St NW, proceed North on east side of street, ends at 13523 137 St NW.
82	0	146 Ave NW	Site starts at 14024 146 Ave NW, proceed west on north side. Ends at 14034 146 Ave NW.
101	0	Tory Crescent NW	Start at 225 Tory Crescent NW on North side, travel west.
105	0	Erasmus Crescent NW	Start in front of 7903 Erasmus Cres on NE side, headed SE.
106	0	213A St NW	Start in front of 5113 213A St NW on NE side, head SE.
107	0	150 St NW	Start in front of 3940 on Northside, head East around loop.
109	0	Whitemud Park and 119 St/Saskatchewan Dr	Intersection of 119 St. and Saskatchewan Drive. Walking trail (paved) SE side of street heading SW.
116	0	119 St NW	Start in front of 7218 119 St NW (7220 DNE) on SW side, heading SE. *checked back alley as well, no litter.
132	0	154 St NW	Start in front of 10703 154 St NW, on SW side of the street, heading SE.
133	0	Chickadee Dr NW	Start at 3399 Chickadee Dr NW, proceed around bend, end at 3413 Chickadee Dr NW.
135	0	166 Ave NW	Start in front of 13434 166 Ave NW in front of fire hydrant and S in front of 16524 135 St.
136	0	Albany Dr NW	Start at 209 Albany Dr NW, proceed towards Albany Dr NW which is across street. Ends across from 218.
140	0	Ellerslie Rd SW	Start at unit 11 of 10550 Ellerslie Rd SW, on E side, head N (#'s increasing).

2019			
Site ID #:	Sm Litter	Street Name	Site Description
41	39	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
49	39	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.
27	34	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
32	34	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
18	33	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
76	33	105 St NW	Corner of 105 St NW and 82 Ave (Whyte) NW on North side of street, heading W in front of Chapters.
5	30	Yellowhead Trail	Start on south side of Yellowhead Trail/ St. Albert Trail's exit off ramp, site starts at corner of Yellowhead and St. Albert, proceed down ramp end at 5290 Bus stop.
36	28	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
56	25	50 St at 137 Ave NW	Start at edge of crosswalk at 50 St and 137 Ave NW, across street from Earl's. Proceed west on south side. Across from Earl's sign and Petsmart.
17	24	108A Avenue	Start at property line of 9541 108A Ave apartments, proceed towards 9521 108A Ave.
13	23	109 St. NW	Start on 109 St NW at edge of 9918 109 St. NW next to roll up doors of Central tire, proceed SW on SE side, ends at edge of Petro gas station.
35	19	118 Ave	Start in front of 8807 118 Ave NW, proceed towards 89 St.
114	17	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
16	16	106 Ave	Start outside doors of 9664 106 Ave.
19	16	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	16	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
21	15	50 Street NW	Site starts on 50 St NW in front of end of Kennedale Shopping Centre, proceeds south on East side towards 129 Ave.
45	15	137 Ave at 66 St NorthEast corner	On 137 Ave, start at NE corner of 137 Ave and 66 St crosswalk. Proceed E on N side. Shell behind store start point.
47	15	50 St at 162A Ave	On 50 St, start at corner of 50 St and 162A Ave on West side, proceed down grassed boulevard.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
50	15	97 Street at 160 Ave	On 97 St, start at crosswalk at corner of 97 St and 160 Ave. Proceed on SE side. Across from BMO.
138	15	162 Ave NW	Site runs along North Refund Centre Bottle Depot, at 9504 162 Ave NW. Start at back entrance on NW side, travel SW.
52	14	Jasper Ave - West of 84 St (Greenbelt)	Start at corner of Jasper Ave and 84th Street across street from apartment buildings. Proceed southwest on southeast side, across from 8508 Jasper Ave.
1	13	102 Ave NW	Start in front of 12421 102 Ave, proceed north on west side of street, ends in front of High Street Plaza
3	13	107 Ave NW - Mayfield Road	Start on NW side of 107 Ave NW and Mayfield Road intersection. Head south west. Curling Club close by.
23	13	118 Ave NW	Site in on 118 Ave at 38 ST NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
6	11	131 St.	Site starts directly across street from 12232 131 St. and proceeds along school, ends across from 12240 131St.
8	11	124 St. NW	Start in front of 11644 on North Side of street, heading west.
51	11	97 St and 105 Ave (Mary Burlie Park)	Start in front of Mary Burlie Park, across from 97 St and 105 Ave intersection. Travel down 97 St. Site ends just before underpass.
43	10	40 St. at 139 Ave	Site starts at NW corner of 40 St and 139 Ave. Runs north towards condos. Beside Clareview Community and Recreation Centre.
86	10	23 Ave NW and 66 St	Start on corner of 23 Ave and 66 St in front of Millwoods Park sign and head SW.
2	9	Jasper Ave	Start at corner of Jasper and 118 St. across street from Shoppers Drugmart. Ends at 11729 Jasper Ave.
46	9	137 Ave at Northtown Shopping Centre	Start on 137 Ave beside Quizno's Sub (9304 137 Ave). Proceed West on north side of street towards Starbucks.
71	9	74 St NW	Site starts beside tennis court directly across street from 12907- 74 St NW. Proceed towards playground.
98	9	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.
118	9	72 Ave	Start in front of Lymburn School at 18710 72 Ave on West side of street, headed North.
121	9	112 Ave NW - Highland Plaza & Apartments	Measured 100 ft from corner of 112 Ave and 82 St. Start in front of Cromdale Plaza (8145 112 Ave) proceed towards Highland apartments.
14	8	104 St. at 102 Ave	Start at corner of 104 St and 102 Ave across from 10320 102 Ave across ends at 10226 104 St.
20	8	82nd Street	Start at 11515 82nd St., proceed north on east side of road towards 11533 82 St.
26	8	57 St NW	Start at corner of 57 St. NW and 123 Ave. Beside 12231 57 St NW, proceed towards 12215 57 St. NW.
42	8	167 Ave NW	Starts at fenceline just East of Bus stop on 107 Ave NW. Runs along the side of Shopper's Drugmart.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
60	7	170 St and 90 Ave	Walking Trail on 170, just north of 90 Ave, next to entrance for Italian Centre Stop.
64	7	170 St and 69 Ave	6827 1709 St NW. Start at edge of Husky Station heading south on 170 St NW, right in front of Canadian cannabis clinics.
70	7	93 St NW	Start in front of 12422 93 St NW on East side of street, headed south.
73	7	139 Ave NW	Site starts just past Mr. Lube on 139 Ave NW, 13703 40 Street NW.
97	7	120 St NW	Started corner of 120 St and 114 Ave on north side of street, heading west in front of AMRE supply parking lot.
12	6	100 Ave at 112 St. NE Corner	On 100 Ave, start at NE corner of 100 Ave and 112 St. and proceed east on north side along Covenant Health Edmonton General.
72	6	72 St NW	Start at 13203 72 St NW, proceed E on South side.
74	6	Gateway Blvd NW at 51 Ave	5121 Gateway Blvd NW on south east side of street, next to Ford dealership headed SW.
31	5	Saskatchewan Drive NW	Started in front of 9947 apartments on Westside of street, headed south.
57	5	Hooke/Hermitage Road playground	On Hermitage Road, start in front of overlanders park sign. Proceed West on North side of street towards Overlanders School.
84	5	Castledowns Park on 153 Ave	Start on 153 Ave immediately behind the skate park, proceed towards the YMCA on NE side of road.
93	5	Orchards Way SW	Start on corner of Orchards Way Blvd, on west side head south.
120	5	Winterburn Rd NW	Start on corner of Winterburn Rd NW and Secord Blvd on North side, headed West. Address 9527 Winterburn.
25	4	61 St. NW	Start at 12115, proceed east on south side of street. (12115 61 Street NW)
34	4	87 Ave NW	Started on corner of Tommy Banks Way and 87 Ave NW, on East side of street, headed North.
53	4	Griesbach Road, southside of 97 St	On Griesbach Road, start at corner of Griesbach and 97 St. Proceed West on South side of road. Put 103 Grisbach into GPS to get there.
61	4	51 Ave and 115 St E	Start on walkway across the street from 5103 115 St, on East side, headed South. Started across from 5103 115. Headed west on 51 Ave, by bus stop.
62	4	83 Ave	Start at 10006 83 Ave. (apartments) on North side, headed West.
69	4	61 St NW	Start at corner of 61 St and 140 Ave. Site runs along York School, located at 13915 61 St NW.
92	4	88 St SW	Start at 1720 88 St SW (In front of the Beach club sign) on westside, head south.
99	4	1155 Windermere Way SW	Start behind liquor depot on south side of street at 1155 Windermere Way SW, headed east towards Starbucks.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
100	4	156 St NW	Started in front of church on west side, headed south.
110	4	75 Ave NW	Start in front of 11307 75 Ave NW, on NE side, headed SE.
115	4	66 Ave NW	Start in front of 10947 66 Ave NW on SW side, heading SE.
123	4	88 Ave	Highlevel Diner 10912 88 Ave, Bridgewalkway in front of Highlevel Diner, on North side, headed East.
129	4	Stony Plain Rd	Started on corner of Stony Plain Road and 171st, on NE side of street, headed SE. Address 17107 Stony Plain Rd.
15	3	109 St. NW	Queen Mary Park. Start at 10578 109 St NW, proceed towards 10550 109 St. NW, ends at 10550.
22	3	77 St. NW	Started in front of 12008 on East side of street, headed south.
40	3	50 Street	Start in front of 9333 50 St. (Capilano Christian Assembly) on West side, headed North, sidewalk walkway.
55	3	50 Street NW at 146 Ave	Start at NW corner of 50 St (14634 50 St NW) and 146 Ave. Proceed North on W side along Casselwood Shopping Centre.
58	3	Victoria Trail (north of walking path)	Site starts on Victoria Trail at Tim Horton's entrance. Proceed NW on NE side of street. Ends in front of Petro Canada near Hermitage Road.
63	3	77 Ave NW	Start on corner in front of 9605 77 Ave, on East side of street, head South towards 9607 77 Ave.
65	3	89 Ave	Start in front of Waterly Elementary School on East side, heading South. Address 6825 89 Ave.
75	3	133A Ave NW	Started in front of 8406 133A Ave NW on north side of street heading east.
102	3	Cameron Heights Dr	Corner of Cameron Heights and Caldwell Way, south side of street, headed SE.
108	3	Aspen Dr. West NW	Start in Alley-way behind house # 12115, on SE side headed SW.
113	3	69 Ave NW	Start in front of 10525 69 Ave NW on East side of street, heading North.
126	3	159 St NW	Start in front of 7805 159 St NW, on SW side, headed SE.
130	3	Stony Plain Rd	ATB Financial. Intersection of Stony Plain Road and 156 St NW. Started on N side of street, headed E. Address 15548 Stony Plain Rd.
4	2	150 St. NW	Started in front of 970B on East Side of the street, headed south.
11	2	129 St. NW	Start in front of 10980 - 129 St. NW, on west side of street, heading south. Stop in between 10964 and 10966.
33	2	119 Ave NW	Site north of Coliseum Transit Centre (76St NW). Site on south side of 119 Ave NW, between 77 St. and 78 St. in front of James Kidney Park.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
59	2	85 Ave and 173 St	Trail to right of 8503 173 St. heading SW.
77	2	101 St NW	Site starts in front of 13122 101St NW and proceeds toward 13042 101 St NW.
79	2	139 Ave NW	Start at corner of 139 Ave NW and 120 St, proceed along apartment complex.
85	2	14 Ave SW	Start at edge of loop, in front of #16600 14 Ave NW, head West around loop.
87	2	8 St NW	Start in front of 4008 8 St NW on west side, head N/NE.
104	2	Leger Way	Start on corner of Leger Way and Leber Court south side (2204 Leber Crt) headed east across from school/ park. In front of Brass III Leger Court.
106	2	213A St NW	Start in front of 5113 213A St NW on NE side, head SE.
134	2	138 St NW	Start at 16244 138 St NW, proceed S on W side of street.
139	2	McConachie Blvd NW	Start on 1079 McConachie Blvd NW, travel NE on SE side.
9	1	Bowman Point SW	Start in front of Bowman Point 1829, head around corner towards mailboxes.
29	1	48 St NW	Start at 12003 48 St. NW, proceed north on East Side of street, ends at 12015 48 St. NW.
37	1	105A Ave NW	Start at 5504 105A, proceed west on north side of street. Site end at 105A Ave.
39	1	73 Street NW	Start at 10131, on west side of street, head North.
44	1	137 Ave at Victoria Trail	Start at NW corner of 137 Ave and Victoria Trail at crosswalk. Proceed west on north side.
48	1	40 St and 131 Ave	Start at corner of 40 st and 131 Ave on west side of street. Proceed South.
54	1	111 Ave and 142 St	Across from Telus World of Science. Intersection of 111 Ave and 142 St, on SW side of street heading SE.
68	1	142 St NW	Start in front of 10404 142 St NW, on NW side of street. (Start on the corner, and head north west towards walkway).
90	1	75 St NW	Start on corner in front of 1904 75 St NW, head SW down 75 St.
94	1	73 St NW	Start at 10110 73 St NW. Proceed north on west side.
101	1	Tory Crescent NW	Start at 225 Tory Crescent NW on North side, travel west.
103	1	Hollands pt. NW	Start in front of 1016 Hollands Pt NW, on east side heading west around loop.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
105	1	Erasmus Crescent NW	Start in front of 7903 Erasmus Cres on NE side, headed SE.
109	1	Whitemud Park and 119 St/Saskatchewan Dr	Intersection of 119 St. and Saskatchewan Drive. Walking trail (paved) SE side of street heading SW.
111	1	10541 60A Ave	Start on corner of 106 St. and 60A Ave in front of Mount Pleasant School on NE side of the street, headed NW.
116	1	119 St NW	Start in front of 7218 119 St NW (7220 DNE) on SW side, heading SE. *checked back alley as well, no litter.
122	1	199 St NW	Start in front of Hydro tower, at 9503 199 St NW on NE side of street, headed SE.
127	1	161 St NW	Started across the street from 8847 - 161 St NW, in front of sign for Meadowlark Park, on SE side, headed SW.
131	1	79 St NW	Start in front of 8815 79 St NW on SE side, heading SW.
135	1	166 Ave NW	Start in front of 13434 166 Ave NW in front of fire hydrant and S in front of 16524 135 St.
7	0	140 St. N	Start in front of 11521 on SW side, headed SE.
10	0	110A Ave NW	Start in front of 13558 on East side of street, headed south. Head towards descending numbers.
24	0	109B Ave NW	Start at 5904 - 109B Ave NW, proceed West on North side of street.
28	0	48 St NW	Start at 12320 - 48 St. NW, proceed towards 12308 48 St. NW.
38	0	Schonsee Drive NW	Start across street from 5509 Schonsee Dr. Site runs along new condo development. Travel NW on NE side of street. Very muddy in 2018, construction complete in 2019.
66	0	78 Ave NW	Start in front of 7544 78 Ave NW on SW side, heading SE.
67	0	73 Ave NW	Start in front of 8516 73 Ave NW on SW side, headed SE.
78	0	134 Ave NW	Start at 12707 134 Ave NW proceed west on south side of street and at 12803 13th Ave NW.
80	0	137 St NW	Start at 13511 137 St NW, proceed North on east side of street, ends at 13523 137 St NW.
81	0	138 Street NW	Start at 13920 138 St NW, proceed east on south side of street. Ends just across street.
82	0	146 Ave NW	Site starts at 14024 146 Ave NW, proceed west on north side. Ends at 14034 146 Ave NW.
83	0	132 Ave NW	Started in front of 7704 on West side of street, headed south.
88	0	35 St NW	Start in front of #3911 35 St NW on East side, head North.

2019			
Site ID #:	Sm Litter	Street Name	Site Description
89	0	42 St NW	Start on corner in front of 2123 42 St NW, head East.
91	0	1A Ave SW	Start in front of 5808 1A Ave SW, head East along sidewalk (#'s decreasing) on North side.
95	0	Auxier Ct SW	Start in front of 2110 Auxier Ct SW on north side, head east.
96	0	Cole Crescent SW	Start in front of 2575 Cole Crescent SW on west side of street, headed north around loop.
107	0	150 St NW	Start in front of 3940 on Northside, head East around loop.
112	0	12603 63 Ave	Start on South corner in front of Grandview Heights School, located at 12603 63 Ave, heading East.
117	0	Ormsby Road West NW	Start in front of 739 Ormsby Road West NW, on SW side, heading NW.
119	0	224 St NW	Start in front of 8167 224 St NW on NE side, heading SE.
124	0	93 Ave	Start in front of St. Benedict School, at 18015 93 Ave on NE side, headed SE.
125	0	108 St @ 36 A Ave	Start at corner of 36 A Ave and 108 St, on North side, headed West.
128	0	152 St	Started at corner of 152 St NW and 95 Ave, in front of Sherwood School playground on West side of the street, headed North. Address 9550 152 St NW.
132	0	154 St NW	Start in front of 10703 154 St NW, on SW side of the street, heading SE.
133	0	Chickadee Dr NW	Start at 3399 Chickadee Dr NW, proceed around bend, end at 3413 Chickadee Dr NW.
136	0	Albany Dr NW	Start at 209 Albany Dr NW, proceed towards Albany Dr NW which is across street. Ends across from 218.
137	0	Klarvatten Lake Wynd NW	Start at 503 Klarvatten Lake Wynd NW, proceed N toward 511 on E side. Middle point in middle of road by median.
140	0	Ellerslie Rd SW	Start at unit 11 of 10550 Ellerslie Rd SW, on E side, head N (#'s increasing).

2019			
Site ID #:	All Litter	Street Name	Site Description
27	103	66th St NW	Start at SE corner of 66 St and 122 Ave, proceed towards Yellowhead Trail along Aster Auto (12208 - 66 St). South east corner of 66 St and 122 Ave.
36	86	Jasper Ave	Jasper Ave at 90 St. NW. Site is on west boulevard commencing at 90 St. NW in front of Boardwalk Centre and proceeding south.
18	64	97 St. N	Started on corner of 114 Ave and 97 St. in front of 11418 (apartments) on SE side of street, headed SW.
41	61	Yellowhead Trail at 82 St.	Proceed East on Yellowhead Trail. Site on ramp to 82 St NW. Site beginning at pumping station and proceeding West. Start right under yellow Wildrose Garments sign.
19	55	88 St. NW	Started on corner of 118 Ave and 88 St NW, in front of 11739 88 St NW on north side of street, headed east.
30	55	118 Ave	Start at corner of 118 Ave and 40 St. in front of CIBC, proceed East on the North Side.
23	51	118 Ave NW	Site in on 118 Ave at 38 ST NW. Site is on the north side of 118 Ave. NW and begins at Shopper's Drugmart proceeding west 200'.
32	51	Kingsway Ave NW	Started on Main Road in front of 11810 (Kingsway Business Centre) on west side of street, headed North.
114	45	Wayne Gretzky Drive	Site is south of 119 Avenue in the boulevard of parking lot B of Rexall Place on Wayne Gretzky Dr.
49	42	Jasper Ave west of 111 St	Site is west of 111 St NW. Site on South side of Jasper Ave. commencing at bus stop #1466 and proceeding east. Site is in front of Covenant Health Edmonton General.
76	41	105 St NW	Corner of 105 St NW and 82 Ave (Whyte) NW on North side of street, heading W in front of Chapters.
5	40	Yellowhead Trail	Start on south side of Yellowhead Trail/ St. Albert Trail's exit off ramp, site starts at corner of Yellowhead and St. Albert, proceed down ramp end at 5290 Bus stop.
16	37	106 Ave	Start outside doors of 9664 106 Ave.
17	37	108A Avenue	Start at property line of 9541 108A Ave apartments, proceed towards 9521 108A Ave.
97	37	120 St NW	Started corner of 120 St and 114 Ave on north side of street, heading west in front of AMRE supply parking lot.
98	37	111 St @ Ellerslie NE corner	On 111 St start at NE corner of 111 St and Ellerslie. Site runs behind Petro Canada and ends near TD, weird outer curb that catches a lot of litter inside.

2019			
Site ID #:	All Litter	Street Name	Site Description
47	34	50 St at 162A Ave	On 50 St, start at corner of 50 St and 162A Ave on West side, proceed down grassed boulevard.
35	33	118 Ave	Start in front of 8807 118 Ave NW, proceed towards 89 St.
50	30	97 Street at 160 Ave	On 97 St, start at crosswalk at corner of 97 St and 160 Ave. Proceed on SE side. Across from BMO.
56	29	50 St at 137 Ave NW	Start at edge of crosswalk at 50 St and 137 Ave NW, across street from Earl's. Proceed west on south side. Across from Earl's sign and Petsmart.
118	29	72 Ave	Start in front of Lymburn School at 18710 72 Ave on West side of street, headed North.
138	28	162 Ave NW	Site runs along North Refund Centre Bottle Depot, at 9504 162 Ave NW. Start at back entrance on NW side, travel SW.
21	27	50 Street NW	Site starts on 50 St NW in front of end of Kennedale Shopping Centre, proceeds south on East side towards 129 Ave.
52	26	Jasper Ave - West of 84 St (Greenbelt)	Start at corner of Jasper Ave and 84th Street across street from apartment buildings. Proceed southwest on southeast side, across from 8508 Jasper Ave.
45	25	137 Ave at 66 St NorthEast corner	On 137 Ave, start at NE corner of 137 Ave and 66 St crosswalk. Proceed E on N side. Shell behind store start point.
93	25	Orchards Way SW	Start on corner of Orchards Way Blvd, on west side head south.
13	24	109 St. NW	Start on 109 St NW at edge of 9918 109 St. NW next to roll up doors of Central tire, proceed SW on SE side, ends at edge of Petro gas station.
3	23	107 Ave NW - Mayfield Road	Start on NW side of 107 Ave NW and Mayfield Road intersection. Head south west. Curling Club close by.
14	22	104 St. at 102 Ave	Start at corner of 104 St and 102 Ave across from 10320 102 Ave across ends at 10226 104 St.
46	22	137 Ave at Northtown Shopping Centre	Start on 137 Ave beside Quizno's Sub (9304 137 Ave). Proceed West on north side of street towards Starbucks.
121	22	2 Ave NW - Highland Plaza & Apartmen	Measured 100 ft from corner of 112 Ave and 82 St. Start in front of Cromdale Plaza (8145 112 Ave) proceed towards Highland apartments.
84	21	Castledowns Park on 153 Ave	Start on 153 Ave immediately behind the skate park, proceed towards the YMCA on NE side of road.
8	20	124 St. NW	Start in front of 11644 on North Side of street, heading west.
43	20	40 St. at 139 Ave	Site starts at NW corner of 40 St and 139 Ave. Runs north towards condos. Beside Clareview Community and Recreation Centre.
48	19	40 St and 131 Ave	Start at corner of 40 st and 131 Ave on west side of street. Proceed South.
86	18	23 Ave NW and 66 St	Start on corner of 23 Ave and 66 St in front of Millwoods Park sign and head SW.
120	18	Winterburn Rd NW	Start on corner of Winterburn Rd NW and Secord Blvd on North side, headed West. Address 9527 Winterburn.

2019			
Site ID #:	All Litter	Street Name	Site Description
6	17	131 St.	Site starts directly across street from 12232 131 St. and proceeds along school, ends across from 12240 131St.
22	15	77 St. NW	Started in front of 12008 on East side of street, headed south.
126	15	159 St NW	Start in front of 7805 159 St NW, on SW side, headed SE.
1	14	102 Ave NW	Start in front of 12421 102 Ave, proceed north on west side of street, ends in front of High Street Plaza
51	14	97 St and 105 Ave (Mary Burlie Park)	Start in front of Mary Burlie Park, across from 97 St and 105 Ave intersection. Travel down 97 St. Site ends just before underpass.
53	14	Griesbach Road, southside of 97 St	On Griesbach Road, start at corner of Griesbach and 97 St. Proceed West on South side of road. Put 103 Grisbach into GPS to get there.
100	14	156 St NW	Started in front of church on west side, headed south.
55	13	50 Street NW at 146 Ave	Start at NW corner of 50 St (14634 50 St NW) and 146 Ave. Proceed North on W side along Casselwood Shopping Centre.
70	13	93 St NW	Start in front of 12422 93 St NW on East side of street, headed south.
89	13	42 St NW	Start on corner in front of 2123 42 St NW, head East.
15	12	109 St. NW	Queen Mary Park. Start at 10578 109 St NW, proceed towards 10550 109 St. NW, ends at 10550.
2	11	Jasper Ave	Start at corner of Jasper and 118 St. across street from Shoppers Drugmart. Ends at 11729 Jasper Ave.
57	11	Hooke/Hermitage Road playground	On Hermitage Road, start in front of overlanders park sign. Proceed West on North side of street towards Overlanders School.
71	11	74 St NW	Site starts beside tennis court directly across street from 12907- 74 St NW. Proceed towards playground.
73	11	139 Ave NW	Site starts just past Mr. Lube on 139 Ave NW, 13703 40 Street NW.
20	10	82nd Street	Start at 11515 82nd St., proceed north on east side of road towards 11533 82 St.
26	10	57 St NW	Start at corner of 57 St. NW and 123 Ave. Beside 12231 57 St NW, proceed towards 12215 57 St. NW.
33	10	119 Ave NW	Site north of Coliseum Transit Centre (76St NW). Site on south side of 119 Ave NW, between 77 St. and 78 St. in front of James Kidney Park.
34	10	87 Ave NW	Started on corner of Tommy Banks Way and 87 Ave NW, on East side of street, headed North.
64	10	170 St and 69 Ave	6827 1709 St NW. Start at edge of Husky Station heading south on 170 St NW, right in front of Canadian cannabis clinics.
12	9	100 Ave at 112 St. NE Corner	On 100 Ave, start at NE corner of 100 Ave and 112 St. and proceed east on north side along Covenant Health Edmonton General.
59	9	85 Ave and 173 St	Trail to right of 8503 173 St. heading SW.
60	9	170 St and 90 Ave	Walking Trail on 170, just north of 90 Ave, next to entrance for Italian Centre Stop.

2019			
Site ID #:	All Litter	Street Name	Site Description
62	9	83 Ave	Start at 10006 83 Ave. (apartments) on North side, headed West.
72	9	72 St NW	Start at 13203 72 St NW, proceed E on South side.
92	9	88 St SW	Start at 1720 88 St SW (In front of the Beach club sign) on westside, head south.
95	9	Auxier Ct SW	Start in front of 2110 Auxier Ct SW on north side, head east.
99	9	1155 Windermere Way SW	Start behind liquor depot on south side of street at 1155 Windermere Way SW, headed east towards Starbucks.
113	9	69 Ave NW	Start in front of 10525 69 Ave NW on East side of street, heading North.
29	8	48 St NW	Start at 12003 48 St. NW, proceed north on East Side of street, ends at 12015 48 St. NW.
31	8	Saskatchewan Drive NW	Started in front of 9947 apartments on Westside of street, headed south.
40	8	50 Street	Start in front of 9333 50 St. (Capilano Christian Assembly) on West side, headed North, sidewalk walkway.
42	8	167 Ave NW	Starts at fenceline just East of Bus stop on 107 Ave NW. Runs along the side of Shopper's Drugmart.
123	8	88 Ave	Highlevel Diner 10912 88 Ave, Bridgeway in front of Highlevel Diner, on North side, headed East.
63	7	77 Ave NW	Start on corner in front of 9605 77 Ave, on East side of street, head South towards 9607 77 Ave.
74	7	Gateway Blvd NW at 51 Ave	5121 Gateway Blvd NW on south east side of street, next to Ford dealership headed SW.
79	7	139 Ave NW	Start at corner of 139 Ave NW and 120 St, proceed along apartment complex.
115	7	66 Ave NW	Start in front of 10947 66 Ave NW on SW side, heading SE.
129	7	Stony Plain Rd	Started on corner of Stony Plain Road and 171st, on NE side of street, headed SE. Address 17107 Stony Plain Rd.
44	6	137 Ave at Victoria Trail	Start at NW corner of 137 Ave and Victoria Trail at crosswalk. Proceed west on north side.
85	6	14 Ave SW	Start at edge of loop, in front of #16600 14 Ave NW, head West around loop.
88	6	35 St NW	Start in front of #3911 35 St NW on East side, head North.
110	6	75 Ave NW	Start in front of 11307 75 Ave NW, on NE side, headed SE.
130	6	Stony Plain Rd	ATB Financial. Intersection of Stony Plain Road and 156 St NW. Started on N side of street, headed E. Address 15548 Stony Plain Rd.
139	6	McConachie Blvd NW	Start on 1079 McConachie Blvd NW, travel NE on SE side.
58	5	Victoria Trail (north of walking path)	Site starts on Victoria Trail at Tim Horton's entrance. Proceed NW on NE side of street. Ends in front of Petro Canada near Hermitage Road.
65	5	89 Ave	Start in front of Waterly Elementary School on East side, heading South. Address 6825 89 Ave.

2019			
Site ID #:	All Litter	Street Name	Site Description
75	5	133A Ave NW	Started in front of 8406 133A Ave NW on north side of street heading east.
78	5	134 Ave NW	Start at 12707 134 Ave NW proceed west on south side of street and at 12803 13th Ave NW.
87	5	8 St NW	Start in front of 4008 8 St NW on west side, head N/NE.
91	5	1A Ave SW	Start in front of 5808 1A Ave SW, head East along sidewalk (#'s decreasing) on North side.
94	5	73 St NW	Start at 10110 73 St NW. Proceed north on west side.
131	5	79 St NW	Start in front of 8815 79 St NW on SE side, heading SW.
134	5	138 St NW	Start at 16244 138 St NW, proceed S on W side of street.
11	4	129 St. NW	Start in front of 10980 - 129 St. NW, on west side of street, heading south. Stop in between 10964 and 10966.
25	4	61 St. NW	Start at 12115, proceed east on south side of street. (12115 61 Street NW)
61	4	51 Ave and 115 St E	Start on walkway across the street from 5103 115 St, on East side, headed South. Started across from 5103 115. Headed west on 51 Ave, by bus stop.
69	4	61 St NW	Start at corner of 61 St and 140 Ave. Site runs along York School, located at 13915 61 St NW.
77	4	101 St NW	Site starts in front of 13122 101St NW and proceeds toward 13042 101 St NW.
102	4	Cameron Heights Dr	Corner of Cameron Heights and Caldwell Way, south side of street, headed SE.
108	4	Aspen Dr. West NW	Start in Alley-way behind house # 12115, on SE side headed SW.
111	4	10541 60A Ave	Start on corner of 106 St. and 60A Ave in front of Mount Pleasant School on NE side of the street, headed NW.
117	4	Ormsby Road West NW	Start in front of 739 Ormsby Road West NW, on SW side, heading NW.
39	3	73 Street NW	Start at 10131, on west side of street, head North.
66	3	78 Ave NW	Start in front of 7544 78 Ave NW on SW side, heading SE.
81	3	138 Street NW	Start at 13920 138 St NW, proceed east on south side of street. Ends just across street.
83	3	132 Ave NW	Started in front of 7704 on West side of street, headed south.
103	3	Hollands pt. NW	Start in front of 1016 Hollands Pt NW, on east side heading west around loop.
104	3	Leger Way	Start on corner of Leger Way and Leber Court south side (2204 Leber Crt) headed east across from school/ park. In front of Brass III Leger Court.
122	3	199 St NW	Start in front of Hydro tower, at 9503 199 St NW on NE side of street, headed SE.
4	2	150 St. NW	Started in front of 970B on East Side of the street, headed south.
38	2	Schonsee Drive NW	Start across street from 5509 Schonsee Dr. Site runs along new condo development. Travel NW on NE side of street. Very muddy in 2018, construction complete in 2019.
90	2	75 St NW	Start on corner in front of 1904 75 St NW, head SW down 75 St.
96	2	Cole Crescent SW	Start in front of 2575 Cole Crescent SW on west side of street, headed north around loop.
106	2	213A St NW	Start in front of 5113 213A St NW on NE side, head SE.
112	2	12603 63 Ave	Start on South corner in front of Grandview Heights School, located at 12603 63 Ave, heading East.

2019			
Site ID #:	All Litter	Street Name	Site Description
119	2	224 St NW	Start in front of 8167 224 St NW on NE side, heading SE.
124	2	93 Ave	Start in front of St. Benedict School, at 18015 93 Ave on NE side, headed SE.
127	2	161 St NW	Started across the street from 8847 - 161 St NW, in front of sign for Meadowlark Park, on SE side, headed SW.
128	2	152 St	Started at corner of 152 St NW and 95 Ave, in front of Sherwood School playground on West side of the street, headed North. Address 9550 152 St NW.
9	1	Bowman Point SW	Start in front of Bowman Point 1829, head around corner towards mailboxes.
37	1	105A Ave NW	Start at 5504 105A, proceed west on north side of street. Site end at 105A Ave.
54	1	111 Ave and 142 St	Across from Telus World of Science. Intersection of 111 Ave and 142 St, on SW side of street heading SE.
68	1	142 St NW	Start in front of 10404 142 St NW, on NW side of street. (Start on the corner, and head north west towards walkway).
101	1	Tory Crescent NW	Start at 225 Tory Crescent NW on North side, travel west.
105	1	Erasmus Crescent NW	Start in front of 7903 Erasmus Cres on NE side, headed SE.
109	1	Whitemud Park and 119 St/Saskatchewan	Intersection of 119 St. and Saskatchewan Drive. Walking trail (paved) SE side of street heading SW.
116	1	119 St NW	Start in front of 7218 119 St NW (7220 DNE) on SW side, heading SE. *checked back alley as well, no litter.
125	1	108 St @ 36 A Ave	Start at corner of 36 A Ave and 108 St, on North side, headed West.
135	1	166 Ave NW	Start in front of 13434 166 Ave NW in front of fire hydrant and S in front of 16524 135 St.
137	1	Klarvatten Lake Wynd NW	Start at 503 Klarvatten Lake Wynd NW, proceed N toward 511 on E side. Middle point in middle of road by median.
7	0	140 St. N	Start in front of 11521 on SW side, headed SE.
10	0	110A Ave NW	Start in front of 13558 on East side of street, headed south. Head towards descending numbers.
24	0	109B Ave NW	Start at 5904 - 109B Ave NW, proceed West on North side of street.
28	0	48 St NW	Start at 12320 - 48 St. NW, proceed towards 12308 48 St. NW.
67	0	73 Ave NW	Start in front of 8516 73 Ave NW on SW side, headed SE.
80	0	137 St NW	Start at 13511 137 St NW, proceed North on east side of street, ends at 13523 137 St NW.
82	0	146 Ave NW	Site starts at 14024 146 Ave NW, proceed west on north side. Ends at 14034 146 Ave NW.
107	0	150 St NW	Start in front of 3940 on Northside, head East around loop.
132	0	154 St NW	Start in front of 10703 154 St NW, on SW side of the street, heading SE.
133	0	Chickadee Dr NW	Start at 3399 Chickadee Dr NW, proceed around bend, end at 3413 Chickadee Dr NW.
136	0	Albany Dr NW	Start at 209 Albany Dr NW, proceed towards Albany Dr NW which is across street. Ends across from 218.
140	0	Ellerslie Rd SW	Start at unit 11 of 10550 Ellerslie Rd SW, on E side, head N (#'s increasing).