



APPENDIX



APPENDIX A: HEALTH AND HAPPINESS

HH1: COMMUNITY HAPPINESS

Table 1: Summary of baseline Health and Happiness survey results.

UNIT	COMPLETE?	# RESIDENTS	HAPPINESS	HEALTHY?	COMMENTS
	n				
	y	1	4	Yes	
	y				
	y	2	4	Yes	Mental health
	y	1	x	x	
	n				
	n				
	y	1	4	Yes	More exercise, better access to bike paths
	y				
	y	N/A	4	Yes	
	y	2	3	Yes	More socialization
	y	2	4	Yes	More socialization
	y	2	3	No	Health
	n				
	n				
	n				
	y	N/A	2	Yes	Better customer service from Zibi
	y	2	4	Yes	
	y	2	4	Yes	
	y	2	4	Yes	More exercise and socialization
	y	1	4	Yes	More exercise, less work stress
	n				
	n				

UNIT	COMPLETE?	# RESIDENTS	HAPPINESS	HEALTHY?	COMMENTS
	n				
	n				
	n				
	n				
	n				
	n				
	n				
	n				
	y	2	4	Yes	Getting younger
	y	2	4	Yes	More socialization
	y	2	4	Yes	More exercise
	n				
	y	N/A	4	Yes	Work-life_balance
	y	N/A	4	Yes	Service in French
	y	2	4	Yes	Reduce_stress
	y	2	4	Yes	
	y	1	4	Yes	N/A
	n				
	y	1	4	Yes	More exercise
	n				
	n				
	y	N/A	2	Yes	Mental health
	y	2	4	Yes	Health (Kids)
	n				
	y	1	3	Yes	Work-life_balance
	y	2	4	Yes	Retirement
	y	2	4	Yes	Retirement, being closer to nature
	n				
	y	2	4	Yes	
	y	1	3	Yes	Improve physical health, (activity and diet)
	y	1	4	No	Physical health and more socialization
	n				

UNIT	COMPLETE?	# RESIDENTS	HAPPINESS	HEALTHY?	COMMENTS
	y	N/A	4	Yes	Health
	n				
	n				
	n				
	n				
	y	N/A	4	Yes	Lose weight
	y	N/A	4	Yes	Work-life balance
	n				
TOTAL RESPONDANTS: 35					
AVERAGE HAPPINESS: 3.75/4					

Table 2: Baseline Health and Happiness data from trade workers surveyed on site in 2018.

TOTAL NUMBER OF RESPONDENTS: 42		
QUESTION: How would you describe your overall health (mental and physical combined)?	NUMBER OF RESPONSES	PERCENTAGE (%)
Great	21	50
Good	19	45
Average	0	0
Room for Some Improvement	2	5
Room for Significant Improvement	0	0

Table 3: Agenda for Condominium O Preoccupancy Move In Event.

TIME	ACTIVITIES	ACTION PLAN
5:00 – 5:40	Residents arrive	– Greet neighbours, offer refreshments
5:40 – 5:45	Official welcome by MC	– Welcome speech by MC – Explanation of event (why they are here and how to proceed)
5:45 – 6:25	Stations	<p>Waste: Ville de Gatineau – What goes in what bin – Diversion tips</p> <p>District Thermal/Energy Efficiency: Scott Demark – Introduction to the app/how to use it – How to use your thermostat – In suite energy efficiency tips – DT introduction</p> <p>Transportation: Scott Bentley and Cat Laska – Public transportation resources – Booth St corridor redevelopment – Active transportation resources – Transit planning tools – Map to employment nodes</p> <p>One Planet Community: Thomas Desjardins and Ashley Graham – Intro to framework – What makes our community different – Unique building features: DT, EV charging options, cistern and related toilet considerations – Specific targets around, waste, water and energy – What's to come...workshops, events – Survey</p>
6:25-6:40	At screen	<p>Phasing of Zibi – Information on what's to come, what it looks like and events – Give away door prize</p>
6:40 – 7:00	Mingling and Wrap Up	

HH3: WORKSHOPS AND EVENTS

Figure 1: A screen shot of the invitation sent to purchasers for the Preoccupancy Move In Event.

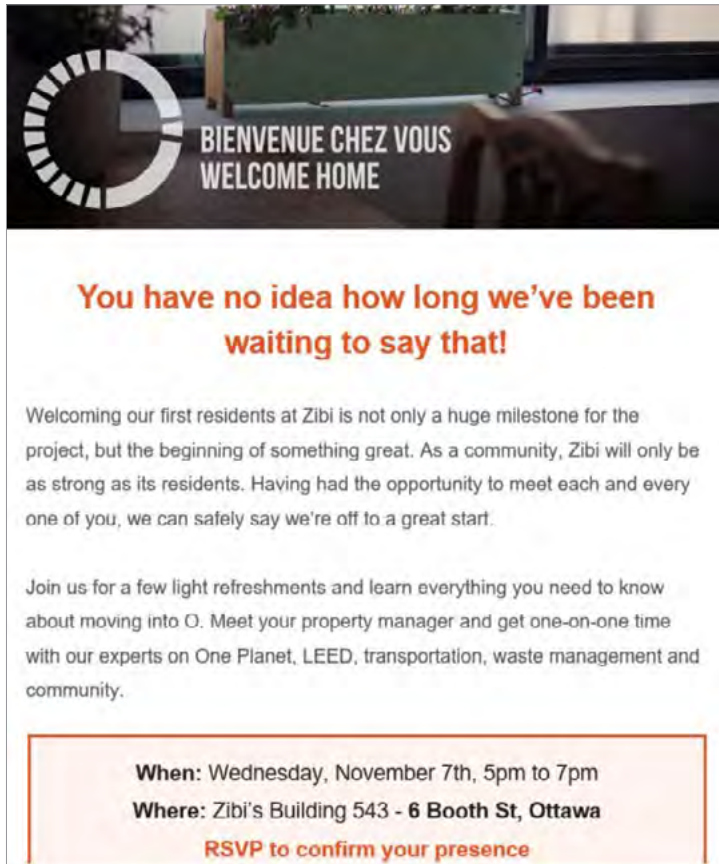


Table 4: Workshops and Events held for residents in 2018.

WORKSHOP	DATE	LOCATION	NO OF PARTICIPANTS
Opening the Hive Workshop	August 17, 2018	Chaudière Island East, ON	8
Extracting the Honey Workshop	October 19, 2018	6 Booth St, Ottawa, ON	8
Welcome to the Neighbourhood	November 7, 2018	6 Booth St, Ottawa, ON	32

APPENDIX B: CULTURE & COMMUNITY

CC5: ADVISORY COUNCIL MEETINGS

In 2018, Zibi and the Memengweshii Council met 5 times, meeting dates were as follows:

- January 2018
- April 2018 (cancelled due to ice storm)
- May 2018
- July 2018
- September 2018
- November 2018

APPENDIX C: SUSTAINABLE WATER

SW1: RESIDENTIAL WATER CONSUMPTION

The efficiency of fixtures installed in suites in Condominium O:

Average Flow Rate Kitchen Faucet	5.7 L/min
Average Flow Rate Lavatory Faucet	5.7 L/min
Average Flow Rate for All Showers	6.62 L/min
Average Flow Rate for All Toilets	4.8 L/flush

APPENDIX D: MATERIALS AND PRODUCTS

PM1: BUILDINGS BEING RETAINED AND REPURPOSED

Zibi has committed to retaining and repurposing 50% of the buildings on site. While several buildings on site are protected by municipal law due to their heritage value, retaining these buildings also allows for Zibi to celebrate the rich industrial history of the site. Unfortunately, retaining aged and in most cases unmaintained buildings bring forth challenges associated with structural integrity and energy efficiency once repurposed, not to mention the financial implications associated with these activities. As such, Zibi undertook an extensive study to assess the retention and reuse feasibility of buildings on site. Buildings protected by law for their heritage value as well as those planned for retention are highlighted in the figures below.

Figure 1: Buildings to be retained in Gatineau highlighted in red.

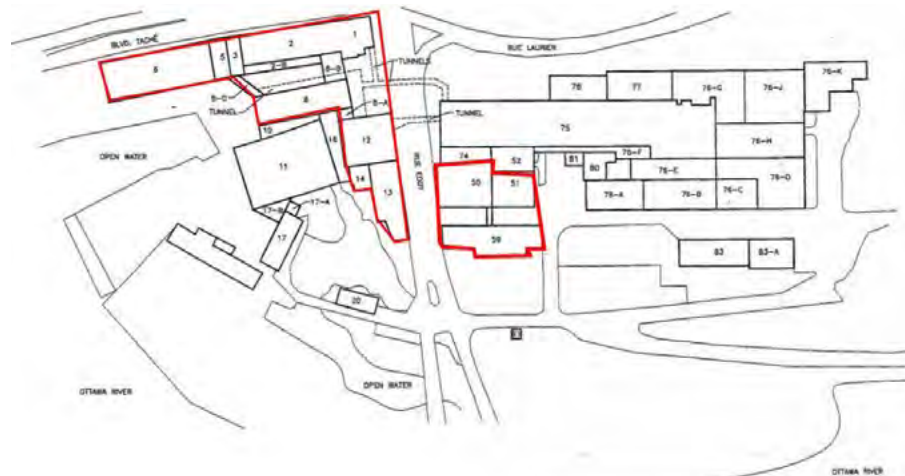


Figure 2: Buildings to be retained in Ottawa highlighted in pink.



PM2: REPURPOSING OR RECYCLING DEMOLITION MATERIAL

Table 1: Demolition waste hauled offsite by weight. Asbestos is a hazardous material and as such is excluded from calculations pertaining to recycling of demolition material.

PRODUCT	QUANTITY (METRIC TON)
Asbestos	84.65
Concrete	5.04
Steel	958.95
Waste	14.74
TOTAL	1063.38

Table 2: Percent of Demolition Waste Recycled

RECYCLABLES	RECYCLABLES WEIGHT (METRIC TON)	NON-RECYCLABLE (METRIC TON)
Concrete	5.04	0
Steel	958.95	0
Waste	0	14.74
TOTAL	963.99	14.74
% BY WEIGHT	98.5%	1.5%

PM4: SUSTAINABLE WOOD SOURCES

Table 4: Summary of wood products used in Condominium O, note these are estimates in some instances. Approximately 67.62% of wood products were either reclaimed or FSC products.

WOOD PRODUCT	SUPPLIER	FSC OR RECLAIMED	VALUE (\$)
Reclaimed Benches	Ottawa City Woodshop	reclaimed	\$800.00
Lobby wood panels	A1 Carpentry	reclaimed	\$2,602.00
Wood panels floors	A1 Carpentry	reclaimed	\$8,982.00
Wood panels vestibules	A1 Carpentry	reclaimed	\$4,122.00
Unit wood door frames	A1 Carpentry	FSC Poplar	\$14,333.33
Trellis	A1 Carpentry	FSC Pine	\$14,333.33
Stair Treads and Floor Nosing	A1 Carpentry	FSC Oak	\$14,333.33
Torly's Everest Premier Bedtime Cocoa Oak	Quadecore	FSC	\$49,404.69
Torly's Everest Premier Simply Suede Oak	Quadecore	FSC	\$104,976.74
HM and suite doors	ARJ	72% FSC	\$63,400.00
Kitchen Cabinetry	Cuisine Poirier	FSC	\$268,057.62
Washroom Cabinetry	Cuisine Poirier	FSC	\$39,482.64
TOTAL FSC/RECLAIMED:			\$584,827.68
Doors, Closets, Shelves	Lafontaine		\$83,473.04
Privacy screen	A1 Carpentry		\$6,346.00
Annunciator panel	A1 Carpentry		\$22,179.00
Unit 506+606 upgrades	A1 Carpentry		\$7,994.00
Waste bin	A1 Carpentry		\$2,988.00
Newtown Floor	Quadecore		\$147,080.57
Plywood for Hoarding	Various		\$10,000.00
TOTAL NON FSC/RECLAIMED:			\$280,060.61
TOTAL COST OF WOOD PRODUCTS:			\$864,888.29
% TOTAL FSC/RECLAIMED:			67.62

APPENDIX E: ZERO WASTE

ZW3: REUSE CONCRETE DEMOLITION WASTE

Table 1: Concrete use on and off site.

	METRIC TONS	PERCENT OF TOTAL
Total Concrete Crushed and Reused on Site	19000	71
Total Concrete Recycled	5.04	0.01
Total Concrete Used Offsite	7800	29
TOTAL:	26805.04	100

ZW4:

Table 2: Summary of construction waste diversion on site for 2018 demonstrating that Zibi diverted 92.4% of construction waste.

DATE	POIDS	BOIS	MÉTAL	CARTON	BARDEAUX	GYPSE	ISOLANT	AGRÉGAT	PLASTIQUE	REJETS	TOTAL	TOTAL CUM	RECYCLED
RAMASSÉ	(MT)	%	%	%	%	%	%	%	%	%	%	(MT)	%
9/13/2017	4.10	60	10	7			10		10	3	100	4.10	97.00%
9/26/2017	6.86	40	15	10			10	15	5	5	100	10.96	95.75%
10/17/2017	4.51	80	10							10	100	15.47	94.07%
10/27/2017	8.33	60						40			100	23.80	96.15%
11/8/2017	6.25	40	10	10				40			100	30.05	96.95%
11/16/2017	3.02	90						5	3	2	100	33.07	97.04%
11/29/2017	6.01	40	15	10			10	10	15		100	39.08	97.50%
12/7/2017	5.92	100									100	45.00	97.83%
12/15/2017	4.99	30	10	30					30		100	49.99	98.04%
12/21/2018	4.56	80	5	5					10		100	54.55	98.21%

DATE	POIDS	BOIS	MÉTAL	CARTON	BARDEAUX	GYPSE	ISOLANT	AGRÉGAT	PLASTIQUE	REJETS	TOTAL	TOTAL CUM	RECYCLED
RAMASSÉ	(MT)	%	%	%	%	%	%	%	%	%	%	(MT)	%
1/15/2018	3.80	40	10	10		10		30			100	58.35	98.32%
1/18/2018	5.04	40	10		20	10	10		10		100	63.39	98.46%
1/23/2018	5.79	40	15	10			10	15	10		100	69.18	98.59%
1/26/2018	4.73	100									100	73.91	98.68%
1/31/2018	5.29	95							5		100	79.20	98.77%
11/22/2018	11.97	20	10	10				60			100	91.17	98.93%
3/2/2018	3.36	20	20		60						100	94.53	98.97%
3/9/2018	4.24	50	5	30			5		10		100	98.77	99.01%
3/6/2018	2.74	5				95					100	101.51	99.04%
3/9/2018	3.18	80		5		5	5		5		100	104.69	99.07%
3/19/2018	5.09	20	20			40	10		10		100	109.78	99.11%
3/22/2018	3.59	20	10	20		30	10		10		100	113.37	99.14%
3/27/2018	1.94	10		85					5		100	115.31	99.15%
4/3/2018	2.69	60	30						10		100	118.00	99.17%
4/10/2018	6.61	30		20		10	20	20			100	124.61	99.22%
4/13/2018	5.23	25	15	10		15	10	15	10		100	129.84	99.25%
4/19/2018	2.4	30	10	15		10	15		20		100	132.24	99.26%
4/25/2018	3.32	20		20		20	20		20		100	135.56	99.28%
4/30/2018	3.36	20	10	15		20	10	10	15		100	138.92	99.30%
4/26/2018	1.25	100									100	140.17	99.30%
5/2/2018	5.42	25	25	25					25		100	145.59	99.33%
5/8/2018	4.24	25	15	10		15	10	10	15		100	149.83	99.35%
5/10/2018	4.34	60		10		30					100	154.17	99.37%
5/17/2018	2.44	50		10		20			20		100	156.61	99.38%
5/17/2018	2.57	20	10	40		10	10		10		100	159.18	99.39%
5/22/2018	3.18	20		10		40			30		100	162.36	99.40%
5/24/2018	3.65	40		10		40			10		100	166.01	99.41%
5/28/2018	1.96	20		15		10	15		40		100	167.97	99.42%
5/29/2018	3.05	5	5	20		50	15		5		100	171.02	99.43%
6/4/2018	4.05	15	15	10		20	15	10	15		100	175.07	99.44%

DATE	POIDS	BOIS	MÉTAL	CARTON	BARDEAUX	GYPSE	ISOLANT	AGRÉGAT	PLASTIQUE	REJETS	TOTAL	TOTAL CUM	RECYCLED
RAMASSÉ	(MT)	%	%	%	%	%	%	%	%	%	%	(MT)	%
6/6/2018	3.52	10	20	20		40			10		100	178.59	99.45%
6/7/2018	3.47	20		5		70			5		100	182.06	99.46%
6/11/2018	3.27	15	5	10		60			10		100	185.33	99.47%
6/13/2018	5.9	20	10	10		40		10	10		100	191.23	99.49%
6/14/2018	2.87	5	5	20		60			10		100	194.10	99.50%
6/15/2018	2	20	10	30		10	10		20		100	196.10	99.50%
6/18/2018	3.09	20		10		30	10		30		100	199.19	99.51%
6/20/2018	1.83	20		20		40	10		10		100	201.02	99.51%
6/21/2018	4.52	15	15	15		20	15	10	10		100	205.54	99.52%
6/22/2018	1.71	90		5					5		100	207.25	99.53%
6/27/2018	2.99	40	5	10		30	5		10		100	210.24	99.54%
6/29/2018	4.07	40	10	10		20		10	10		100	214.31	99.54%
7/3/2018	4.28					95		5			100	218.59	99.55%
7/5/2018	3.85	20	15	15		10	10	15	15		100	222.44	99.56%
7/10/2018	4.35	20	20	20			20		20		100	226.79	99.57%
7/9/2018	0.38			40					20	40	100	227.17	99.50%
7/12/2018	1.86	10	5	5		80					100	229.03	99.51%
7/13/2018	3.15	45	5			50					100	232.18	99.51%
7/17/2018	1.31	80							20		100	233.49	99.52%
7/16/2018	3.17	15	10	10		25	15	10	15		100	236.66	99.52%
7/19/2018	4.88	10		20		40	10		20		100	241.54	99.53%
7/20/2018	1.5	30	10	10		30	10		10		100	243.04	99.54%
8/8/2018	vide										0		
8/6/2018	2.72	30	5	5		40	5		15		100	2.72	100.00%
8/8/2018	3.57	30	10	20		10		20	10		100	6.29	100.00%
8/9/2018	3.96	35	5	40			5	5	10		100	10.25	100.00%
8/13/2018	2.63	20	10	10		30	20		10		100	12.88	100.00%
8/15/2018	2.01	20	10	10		40		10	10		100	14.89	100.00%
8/16/2018	2.3	15	15	10		20	15	10	15		100	17.19	100.00%
8/17/2018	2.05	15	15	15		20	15	10	10		100	19.24	100.00%

DATE	POIDS	BOIS	MÉTAL	CARTON	BARDEAUX	GYPSE	ISOLANT	AGRÉGAT	PLASTIQUE	REJETS	TOTAL	TOTAL CUM	RECYCLED
RAMASSÉ	(MT)	%	%	%	%	%	%	%	%	%	%	(MT)	%
8/21/2018	1.45	30	10	15		10	15	5	15		100	20.69	100.00%
8/23/2018	1.88	50		25					25		100	22.57	100.00%
8/27/2018	2.19	40				10		5	45		100	24.76	100.00%
8/29/2018	2.77	20	5	20		30	5		20		100	27.53	100.00%
9/4/2018	2.18	30	15	15		15	10	5	10		100	29.71	100.00%
9/6/2018	1.41	25	15	20		15	10	5	10		100	31.12	100.00%
9/10/2018	1.36	25	10	15		20	10	5	15		100	32.48	100.00%
9/12/2018	1.42	25	15	15		10	10	10	15		100	33.90	100.00%
9/14/2018	1.11	15	10	20		5	15		35		100	35.01	100.00%
9/18/2018	2.34	25	10	20		10	15	5	15		100	37.35	100.00%
9/20/2018	1.09	20	15	20		15	15		15		100	38.44	100.00%
9/24/2018	1.56	40	15	10		10	15		10		100	40.00	100.00%
9/25/2018	2.95	20		20		20	20		20		100	42.95	100.00%
9/27/2018	2.83	20	20	10		20	10	10	10		100	45.78	100.00%
10/2/2018	2.56	30	15	10		15	10	5	15		100	48.34	100.00%
10/4/2018	1.72	20	10	20		10	15	5	20		100	50.06	100.00%
10/10/2018	1.46	20	15	15		10	15	10	15		100	51.52	100.00%
10/15/2018	2.21	15	15	25		15	10	5	15		100	53.73	100.00%
10/12/2018	1.48	15	10	15		10	30	5	15		100	55.21	100.00%
10/18/2018	1.35	20	10	40				10	20		100	56.56	100.00%
10/23/2018	3.62	20	15	15	5	10	15	5	15		100	60.18	100.00%
10/22/2018	1.43	20	10	30					40		100	61.61	100.00%
10/26/2018	1.28	20	10	20		30	10		10		100	62.89	100.00%
10/30/2018	1.48	20		50			10		20		100	64.37	100.00%
11/2/2018	3.1	60		20					20		100	67.47	100.00%
11/9/2018	0.91	10		80					10		100	68.38	100.00%
11/14/2018	3.15	25	10	15		15	10	10	15		100	71.53	100.00%
11/22/2018	1.63	20		70					10		100	73.16	100.00%
11/30/2018	3.4	35	15	10		10	15		15		100	76.56	100.00%
													99.30%

Table 3: Zibi waste diversion on Ontario site from 09/01/2018 to 11/30/2018.

LEED Audit Report

Reporting Period from 09/01/2018 to 11/30/2018

Customer: 004929 - Ledcor Construction Ltd.
Address: 300 - 3930 Nashua Dr.
 Mississauga, ON L4V 1M5

Site: 0000 - Eddie Lands
Address: 4 Booth St
 Ottawa, ON

TOTAL RESIDUAL WASTE 4.85
 TOTAL DIVERTED WASTE 39.21
 TOTAL QTY (MT): 44.06

DIVERSION RATE 88.99%

Date	Ticket #	Work Order #	Asphalt	Fibre	Cleanfill	Concrete	Concrete/Rebar	Drywall	Metal	Aggregate	Wood	Total Diverted	Total Residual	Total
09/12/18	01 - 283228	280684	0.00	0.52	0.00	0.34	0.00	0.00	0.17	1.03	0.86	2.92	0.52	3.44
Container:	30-207													
09/21/18	01 - 284835	281631	0.00	0.54	0.00	0.00	0.00	0.00	0.22	0.54	0.54	1.84	0.33	2.17
Container:	30-228													
10/03/18	01 - 286777	281706	0.00	1.64	0.00	2.19	0.00	0.00	0.87	2.19	2.73	9.62	1.31	10.93
Container:	30-228													
10/15/18	01 - 288414	282030	0.00	0.88	0.00	0.35	0.00	0.00	0.35	0.53	1.05	3.16	0.35	3.51
Container:	30-228													
10/25/18	01 - 290288	0	0.00	1.14	0.00	0.57	0.00	0.00	0.06	0.06	1.71	5.14	0.57	5.71
Container:	30-327													
11/17/18	11 - 350873	288872	0.00	1.13	0.00	0.45	0.00	0.00	0.45	1.36	0.54	3.93	0.60	4.53
Container:	30-327													
11/19/18	01 - 294133	206673	0.00	1.15	0.00	0.57	0.00	0.00	0.06	1.72	0.06	5.16	0.58	5.74
Container:	30-614													
11/26/18	01 - 295197	280900	0.00	0.96	0.00	0.58	0.00	0.00	0.39	0.96	0.77	3.66	0.19	3.85
Container:	30-517													
11/29/18	01 - 295799	289920	0.00	1.05	0.00	0.42	0.00	0.00	0.63	1.05	0.63	3.78	0.40	4.18
Container:	30-038													
Customer Totals			MT	0.00	9.01	0.00	5.17	0.00	1.80	10.21	9.69	39.21	4.85	44.06
			%	0.00	20.45	0.00	12.41	0.00	10.89	23.24	21.99	88.99	11.01	100.00

Table 4: Zibi waste diversion on Ontario site from 12/01/2018 to 12/31/2018.

LEED Audit Report			Reporting Period from 12/01/2018 to 12/31/2018												
Customer: 004929 - Ledcor Construction Ltd. Address: 300 - 3930 Nashua Dr. Mississauga, ON L4V 1M5			Site: 0003 - Eddie Lands Address: 4 Booth St Ottawa, ON			TOTAL RESIDUAL WASTE 4.00 TOTAL DIVERTED WASTE 32.24 TOTAL QTY (MT): 36.24		DIVERSION RATE 88.96%							
Date	Ticket #	Work Order #	Asphalt	Flare	Cleanfill	Concrete	Concrete/Rebar	Drywall	Metal	Aggregate	Wood	Total Diverted	Total Residual	Total	
12/03/18	01 - 296107	287207	0.00	1.35	0.00	0.90	0.00	0.00	1.35	3.14	1.35	8.09	0.88	8.97	
Container: 30-370															
12/06/18	01 - 296700	287299	0.00	1.24	0.00	0.93	0.00	0.00	0.93	1.24	1.24	5.58	0.64	6.22	
Container: 30-079															
12/06/18	01 - 296769	289933	0.00	0.93	0.00	0.56	0.00	0.00	0.37	0.93	0.37	3.16	0.57	3.73	
Container: 30 370															
12/12/18	01 - 297508	288837	0.00	1.21	0.00	0.24	0.00	0.00	0.72	1.45	0.72	4.34	0.48	4.82	
Container: 30-260															
12/20/18	01 - 298731	287257	0.00	0.42	0.00	0.00	0.00	0.42	0.28	0.14	1.25	2.51	0.26	2.77	
Container: 30 284															
12/20/18	01 - 300206	287255	0.00	0.74	0.00	0.00	0.00	0.74	0.49	0.15	2.22	4.34	0.59	4.93	
Container: 30-370															
12/20/18	01 - 300287	287256	0.00	0.77	0.00	0.00	0.00	0.58	0.38	0.19	2.30	4.22	0.58	4.80	
Container: 30-350															
Customer Totals			MT	0.00	6.66	0.00	2.63	0.00	1.74	4.52	7.24	9.45	32.24	4.00	36.24
			%	0.00	18.38	0.00	7.26	0.00	4.80	12.47	19.98	26.08	88.96	11.04	

APPENDIX F: ZERO CARBON

ZC3: EXCAVATED ROCK REUSE

Table 1: Summary of rock use on and off site.

	2018 ROCK CRUSHED ON SITE MT	2018 ROCK REUSED ON SITE MT	2018 ROCK STOCKPILED ON SITE MT	2018 ROCK SOLD FOR OFFSITE REGIONAL USE
	47,000	17,000	17,000	13,000
PERCENTAGE		36%	36%	28%

