THE CITY OF DAWSON

COMMITTEE OF THE WHOLE MEETING #CW23-07

DATE: WEDNESDAY May 3, 2023
TIME: 7:30 PM
LOCATION: City of Dawson Council Chambers

Join Zoom Meeting
https://us02web.zoom.us/j/87240725358?pwd=aWx0cU1YMVFpaUdxWWtFRHY2VTRhZz09
Meeting ID: 872 4072 5358
Passcode: 615220

1. **CALL TO ORDER**

2. **ACCEPTANCE OF ADDENDUM & ADOPTION OF AGENDA**
   1. Committee of the Whole Meeting CW23-07

3. **DELEGATIONS & GUESTS**
   1. Katie English, Erini Petroutsas and Kim Bouzane RE: Waste Diversion

4. **BUSINESS ARISING FROM DELEGATIONS & GUESTS**

5. **MINUTES**
   1. Committee of the Whole Meeting Minutes CW23-06 of April 5, 2023

6. **BUSINESS ARISING FROM MINUTES**

7. **SPECIAL MEETING, COMMITTEE, AND DEPARTMENTAL REPORTS**
   1. Waste Diversion Centre
   2. RCMP 2023-2024 Policing Priorities
   3. CBC Artifacts
   4. Zoning Bylaw Amendment No. 21 (2022-21)-Housekeeping
   5. Temporary Accommodation Update
   6. CAO Update Report

8. **PUBLIC QUESTIONS**

9. **IN CAMERA-LAND RELATED MATTER**

10. **ADJOURNMENT**

MINUTES OF COMMITTEE OF THE WHOLE MEETING CW23-06 of the Council of the City of Dawson held on Wednesday, April 5, 2023 at 7:30 p.m. via City of Dawson Council Chambers

PRESENT:
Mayor Kendrick
Councillor Somerville
Councillor Lister
Councillor Pikálek
Councillor Spriggs

REGRETS:

ALSO PRESENT:
CAO: David Henderson
EA: Elizabeth Grenon
PDM: Maria Fisher
RECM: Paul Robitaille

	1	**Call To Order** The Chair, Mayor Kendrick called Committee of the Whole meeting CW23-06 to order at 7:31 p.m.
CW23-06-01	**2**	**Acceptance of Addendum & Adoption of Agenda** **Moved By:** Councillor Somerville **Seconded By:** Councillor Spriggs That the agenda for Committee of the Whole meeting CW23-06 of April 5, 2023 be adopted as presented. CARRIED 5-0
	3	**Minutes**
CW23-06-02	**3.1**	**Committee of the Whole Meeting CW23-06** **Moved By:** Councillor Somerville **Seconded By:** Mayor Kendrick That the minutes of Committee of the Whole Meeting CW23-05 of March 15, 2023 be approved as presented. CARRIED 5-0
	4	**Special Meeting, Committee, and Departmental Reports**
CW23-06-03	**4.1**	**New Rec Centre Schematic Design Decision** **Moved By:** Councillor Somerville **Seconded By:** Councillor Spriggs That Committee of the Whole forwards to Council the direction to pursue the finalization of schematic design Option B. CARRIED 5-0

CW23-06-04	4.2	**Advocacy Issue & Strategy a. Canada/USA Border b. Assessment Process c. Mill Rates outside of the Municipal Boundaries d. YG Municipal Funding Grant** **Moved By:** Councillor Pikálek **Seconded By:** Councillor Somerville That Committee of the Whole consider the identified advocacy issues, and endorse the identified steps. CARRIED 5-0
	5	**Public Questions** Various people had questions regarding the rec center schematic design.
CW23-06-05	6	**Adjournment** **Moved By:** Councillor Spriggs **Seconded By:** Councillor Somerville That Committee of the Whole Meeting CW23-06 be adjourned at 9:39 p.m. with the next regular meeting of Committee of the Whole being May 3, 2023. CARRIED 5-0

THE MINUTES OF COMMITTEE OF THE WHOLE MEETING CW23-06 WERE APPROVED BY COMMITTEE OF THE WHOLE RESOLUTION #CW23-07-XX AT COMMITTEE OF THE WHOLE MEETING CW23-07 OF MAY 3, 2023.

William Kendrick, Chair

David Henderson, CAO

Report to Council

	For Council Decision		For Council Direction	x	For Council Information		In Camera

AGENDA ITEM:	Diversion Centre operations and Recycle Planning	
PREPARED BY:	CAO with recommendation input from PW Superintendent and Waste Diversion Op.	**ATTACHMENTS:** 1. Morrison Hershfield Final report Solid Waste Management Program Design Assessment 2. Letters Received – see package
DATE:	April 29, 2023	
RELEVANT BYLAWS / POLICY / LEGISLATION: CoD Official Community Plan CoD Integrated Community Sustainability Plan		

Purpose

To address questions /suggestions raised by members of the public regarding recycling and diversion services in Dawson including:

a. Operations and services related to the newly opened diversion centre
b. Challenges faced by Businesses, Institutions and organizations regarding recycling
c. Long term planning for recycling in Dawson

Recommendations

Diversion Centre –

Please see staff recommendations under "analysis". Staff will implement these recommendations in the normal course of business based on resident feedback. Staff will also take into account further direction from Council based on discussion in committee with regard to service levels and will continue to seek feedback from residents as the Diversion centre is completed, fully equipped and fully staffed.

Long Term Planning –

1. Recommend that staff prioritize getting the Diversion centre and associated operations up and running with continued feedback from residents and

2. That Council direct staff to then develop and return to committee a recommended City of Dawson recycling plan for consideration that includes:

   - Curb Side recycling Pick-up options with associated costing
   - Consideration of commercial / institutional Options
   - Cost Recovery Options and recommendations
   - Solid Waste Service Constraint options that may encourage recycling
   - An implementation plan
   - An advisory feedback mechanism in the development process

Issue / Background

Diversion Centre (Not All-Inclusive)

Recycling activities In Dawson have been provided by the non-profit organization **Conservation Klondike Society (CKS)** since approx. 1992. Recycling services were provided from CKS's Downtown Dawson location and the Quigley Landfill location. The volume of recyclables increased annually, exceeding the capacity of CKS facilities and by 2021 the capacity of the organization. CKS identified in 2021 that they no longer had the capacity to operate the recycling program and recycling operations were assumed by the municipality, using a temporary diversion centre and city staff.

As of 2021 the CKS recycling efforts were funded by a "***refundables"*** contract with the Yukon Government (approx. $40,000 annually based on volume of refundables plus $30,000 to support the process) ,annual Municipality funding of $100,000, and various private contracts.

CKS lobbied and worked with Municipal and Territorial governments for many years to develop increased recycling facility capacity in Dawson with the City moving forward in 2020-2021 with a new Diversion centre which began operations in March of 2023 as a branch of the City of Dawson Public Works.

Capital costs of the new facility have been funded via the Yukon Government, Federal Gas Tax, and the City of Dawson. Operating funding is from the City of Dawson and a "***refundables"*** contract from the Yukon Government (Approx. $47,000 annually based on volume of refundables). The facility currently operates on the same schedule as the municipal landfill, Tuesday to Saturday, 11am to 6pm.

The New Diversion centre includes additional equipment to bale recyclable material, crush glass, etc. As of writing, not all new equipment is in and up and running yet. The new facility opened for business March 15th with a grand opening scheduled for May 19th

Relative to previous CKS operations the new facility has different operating procedures. Placement of material and flow of operations is different. Signage is different. The location of the facility is different. Access to the facility is different. Equipment and staffing are different. These differences have brought forth several questions and suggestions about efficient and effective operations from members of the public

Staff have reviewed questions and suggestions with members of the Public that have expressed an interest and developed recommendations that are included below.

Commercial/Institutional recycling

With the new Facility, "***refundables"*** (Most drinkable containers) must be sorted by residents as they are dropped off. Given the volume of drink containers that must be separated for refund this poses some challenges for commercial and institutional operations.

Long Term Recycling Plans

As noted in this year's budget discussions there is an underlying assumption amongst council, members of the public, and some staff that the City of Dawson is moving towards curbside Recycling of some form. It was also noted that at the current point in time the City has not adopted formally a definitive plan to do so.

The 2018 Morrison Hershfield - Final report - Solid Waste Management Program Design Assessment addressed Recycling in the City of Dawson in great detail, contemplating the just completed diversion centre, and potentially curb side recycling. The Diversion centre includes a conveyor belt separating table in anticipation of curbside collection in some form.

Diverting material from the Landfill has significant positive long-term financial benefit to the municipality owing to the costs associated with closing a landfill and opening a new landfill. Diversion can delay these costs by years and decades, effectively lowering the costs. An updated City of Dawson 10yr Solid waste Management Plan will be finalized in May.

The city currently provides weekly curbside pickup of residential and commercial Garbage and Cardboard.

Concerned residents have brought forward various requests and recommendations to

- make recycling easier
- increase the volume of recycling through curbside pickup
- identify the challenge that commercial and institutional entities face with recycling

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Analysis / Discussion

Diversion Centre – with concerns identified by residents in a review session and staff recommended solutions

SIGNAGE

Concern: Lack of signs, inadequate or confusing signage.

Staff recommendation: We will now include examples of material above the totes in a clean, well-organized, and concise way. Signs will be edited to include more information and direction for the public to follow. Once the bins for outdoor refundable counting arrive, signs pertaining to those materials will be put outside. A sign on the highway indicating where the depot is, like the one for the dump, could be helpful.

OUTDOOR SORTING

Concern: Outdoors bags aren't grouped together by material; this set up makes the public have to walk more and is not easy or ergonomic for disposing of material.

Staff recommendation: We commit to grouping the material back together for a *trial period***.** Depot staff have noticed a large reduction in contamination or poorly done sorting since having the bags of material in a random order.

Note: This concern was raised by avid recyclers that have already sorted their material properly at home, whereas the contamination issues/poorly done sorting comes from other members of the public. Depot staff believe that having the materials in separate randomized locations helps those other members of the public visualize and understand that not all plastics or metals are the same (examples: mixed plastic vs. plastic film or aluminum vs tin) and do not go together. We will trial re-organizing the bags, however if contamination ramps back up a new solution will have to be found.

5 BAG LIMIT -

Concern: 5 bag limit is not encouraging to the public; more recycling is being landfilled because of it.

Staff Recommendation: 5 bag limit was put in place to keep the temporary Crocus Bluff facility functional. With the increase in capacity, machinery, and functionality the new recycling depot can handle accepting larger volume. We are ready to come up with new rules and regulations regarding drop-off volume. Our shipping numbers show that we are already diverting more than last year, with the new process of bailing and bigger shipping commitments made by Kluane recently we expect to see these numbers continue to increase.

Note: If we decide to get rid of drop off or bag limits we need an action plan for commercial and large volume drop off. The depot, while larger in capacity and machinery, is still limited to 3 staff members that are already at their labour capacity. Increasing daily volume would directly increase the need for staffing.

PUBLIC SORTING VS STAFF SORTING

Concern: The public does not like the new self-sorting method in regards to refundable material.

Staff Recommendation: Depot staff will continue to help and work with the public while they self-sort. Sorting space will be reorganized to be more comfortable and easier to understand; outdoor space for sorting will be up and running once we receive a shipment of bins.

Note: Since self-sorting was put in place Depot staff have noticed a dramatic reduction in the volume of dead animals, human waste, dirty diapers, tampons, or condoms, used drug paraphernalia, bullets, used bloody uncapped razor blades, and other dangerous or hazardous material coming into the depot. These materials present a hazard to staff and steps that reduce this material is beneficial.

ACCESSIBILITY & LOCATION

Concern: The location of the new depot is too far out of town; is not accessible to members of the public that depend on their refund money. Location does not encourage people to recycle and causes people to burn more gas or use too much personal time or labour.

Staff Recommendation: An in town drop off or transfer location has been discussed. Depot staff and Public Works staff all agree that it is a great and workable idea. But the issues of location, permitting, budgeting, building it, and staffing the location make this a long term project.

HOURS OF OPERATION & 24 HOUR DROP OFF

Concern: The new facility is not open enough, public wants 24-hour drop off at the site.

Staff Recommendation: The facility is currently open to refundables 4 days a week (Wednesday to Saturday 11AM-6PM) and additionally open to non-refundables drop off on Tuesdays (11AM-6:00PM), the depot runs on the same hours as the landfill. All current depot staff members are full-time unionized employees, in order to increase hours of operation we would need to increase staffing.

Notes: The depot cannot offer 24 hour drop off on site as Yukon WIldlife & Conservation Officers require us to lock up and electrify the fence in to protect bears. Having unsupervised 24hour access to the site is a liability and theft concern; this includes vandalism and the repeated threats of violence made against staff and the building. The Crocus Bluff facility really struggled with illegal dumping of non-recyclable material such as compost or garbage, contamination of recyclable material, wildlife ripping bags open, and having tools stolen before the electric fence and porch doors were installed. The CKS Depot in town and Raven Recycling both offered 24 hour drop off; both facilities were wildlife attractants, messy, and unsafe unsanitary work environments. Raven Recycling has had to shut down their 24hour drop off on numerous occasions due to overwhelming volume, messes, and contamination issues.

CARDBOARD & BAILING; SCALING UP

Concern: is the Depot facility doing enough?

Staff Recommendation: Scaling up and bailing, as it stands right now, currently requires a 3rd attendant to be hired. Current staff (1 operator, 2 attendants) cannot keep up with admin/paperwork, refunds, bag swapping, shipment, sorting, donations, and cleaning along with the bailing. With cardboard drop off coming from the truck, as planned, we now need someone to attend to that task and that task solely. The depot needs more staff so that facility operators along with the 2 current attendants can adequately and safely manage the other services and responsibilities.

COMMERCIAL

Concern: The new facility, its location, and self count/self sort does not work for commercial operations such as bars, restaurants, hotels, or goldmines.

Staff Recommendation: We recognize all these issues. In the short-term Depot staff are ready to commit to being open Tuesdays *solely* for commercial drop off and to help commercial operations/businesses unload, count, and sort their material. In the long term an increase in days of operation (going from 5 days a week to 7 days a week) in order to have multiple days for commercial operations/businesses to recycle. This would require a massive increase in staffing and spending. The depot operator would like to find a more effective and direct way to communicate with businesses - especially gold mines- in regards to their large volume drop off and to discuss more effective recycling plans for those concerned.

Other ideas under discussion include how to encourage commercial or 3rd party pickup and sort options for commercial institutional entities.

CURBSIDE PICKUP (Long Term Recycling planning)

Concern: The community wants and needs curbside pickup

Solution: The new diversion center was designed with curbside pickup in mind; the hopper and conveyor were installed specifically for this.

City Staff have been researching and developing a preliminary plan/idea for curbside since November 2022. Curbside is a long term project that will be piloted in the future as we scale up the facility, budgeting, and staffing of the new solid waste diversion center.

Curbside pickup will require a new truck. A concern with curbside pickup is residential vs commercial. Budget for this fiscal year is already done, if we can't increase spending we cant increase operations or the staffing necessary to offer curbside pickup.

Who will do commercial curbside pickup: will it be the City of Dawson or a private entity?

APPROVAL		
NAME:	David Henderson	**SIGNATURE:** David Henderson
DATE:	April 27,2023	

From:	Nora Van Bibber
To:	CAO Dawson
Cc:	Executive Assistant
Subject:	Recycling
Date:	April 28, 2023 2:37:00 PM

Good afternoon,
My name is Nora Van Bibber , I am currently employed at TH as the kitchen supervisor for the community hall kitchen. I was disappointed when the city took over the recycling center and the bins that were being used for recycling and compost were removed with no plan to replace them. I don't feel that I should use my own vehicle to transport compost and recycling.

I may have at some point if I found bringing anything to the recycling center an enjoyable experience. The first time I was there, I was treated rather rudely. I am 68, and was asked to stop what I was doing and go down the stairs, and get out of the way of a YOUNG person moving one of the large canvas bins. I had one small bag of refundables left. But the staff was in a rush and I was in the way.

The next time I drove someone out with refundables on a Saturday at 1:00 pm. Thought that was a reasonable time for them to be open. There was no sign on the door mentioning anything about being closed. But the staff person was in a bobcat, clearing the yard, and told the second person who asked to come back in a couple of hours. There were three customers there at the time.

The customer service seems to be non-existent.

I used to like taking our recycling out when ever, but we can't go there when it's closed any more.

I am also wondering why we are bothering to compost if it gets dumped in with the rest of the garbage. I thought we would eventually get bags of dirt back and was looking forward to that.

So we don't recycle at the hall kitchen any more and I don't recycle at home either any more.

Thank you for reading my letter.

Nora Van Bibber

April 20, 2023

Dear Mayor and Council,

I am writing to you today regarding the new Waste Diversion Centre (i.e. Recycling Depot) located out on Rabbit Creek Road. First let me say how I pleased I am that we are finally at a point in time where we can have conversations about how the city plans to move forward with ongoing efforts that support waste diversion from the Quigley Landfill. As you are aware, up until recently our town has relied on CKS, as a small non-profit organization, to offer the necessary recycling services. Over the years, it became clear that the CKS Recycling Depot located downtown was operating well past its capacity and the CKS Board members and staff communicated to territorial and city officials that it was necessary, and past time, that the City of Dawson offer a solution. Our town's long-term commitment to waste diversion has remained constant, however our residential and commercial needs simply outgrew the physical space that CKS could offer.

As a non-profit organization, CKS always did a great job at offering recycling services. This was true when they operated in the tight (far too small!) space on Second Avenue, with a chronically under-funded budget to cover basic costs associated with the town's diversion, working with patched together equipment that represented safety concerns for the staff operators, and employing staff who were making relatively low wages without additional health and/ or dental benefits, pension contribution, or unionization. Again, even under all these challenging conditions, CKS did an excellent job at providing recycling services that were accessible to Dawson City (and beyond). And even though the back deck, especially during the busy days of summer over the past few years, was often spilling over with recyclables (both refundable and non-refundable), the upside was that more and more people had come to rely on these services.

It is 2023 and most Yukon residents, tourists visiting the Territory, as well as mining and other industrial camps expect to sort their waste and to assume an ability to recycle it. Being responsible for all our various forms of waste has become an accepted chore and obligation for people. This is a good thing! But when recognizing that people want to do their part in recycling, the City of Dawson does have an obligation to ensure that recycling continues to be fully accessible to the public.

This brings me to my main point and key concern which is that I believe the new location of the depot, and its current operating procedures, have resulted in far less accessibility to the public. Please remember that when plans of building a new waste diversion centre on Rabbit Creek Road were being discussed, it had always been assumed that the downtown depot would remain open in operation and that it would continue to offer a place for recyclable waste to be dropped off. This is true as far as I know. With the closure of the downtown recycling depot, I would like to know what the City of Dawson will do to offset the inaccessibility of the new facility to make sure that more, as opposed to less, recycling will continue to happen in our little town.

Above all concerns, I would like to express my displeasure at paying residential taxes that go towards the weekly pick-up of household waste slotted to be disposed of at the Quigley Landfill. Now that we have a functional waste diversion and sorting facility, I would like City of Dawson officials to commit to reducing the waste collection services by (at least) half. Garbage, or any waste that can not be diverted from the landfill, should amount to no more than half (<50%) of waste being generated from residences, commercial businesses, or industrial kitchen camp refuse. Most containers and packaging once cleaned

can be recycled, and the remaining kitchen refuse is often compostable. Why does the City of Dawson continue to offer weekly garbage pick-up services when more than half of human waste is recyclable or compostable? Should this weekly service not be replaced (at a minimum) to bi-weekly service for garbage pick-up. With savings from the reduction in the waste service, funds could then be diverted and reallocated to an alternating bi-weekly curbside recycling pick up. I would like to see our new waste diversion and sorting centre support a curbside pick-up schedule such as this.

While reducing garbage pick-up to a bi-weekly service would result in some financial savings, I expect that a bi-weekly curbside recycling pick-up service would result in increased costs to the City due to costs associated with sorting, bundling, and shipping the recyclable waste. I understand this and still support my tax dollars being used to cover the increased costs associated with a responsible waste diversion program. I also understand that planning for a systemic change such as this will take time, and so, until an alternate bi-weekly curbside pick-up can be established (2 weeks per month garbage/ 2 weeks per month recycling), I'd like to bring your attention to ways of ensuring that the new waste diversion centre continues to be accessible to the public and offers similar, if not improved services than our beloved non-profit, Conservation Klondike Society, worked so hard at achieving for so many years.

Concerns with accessibility of new location and current services:

One key concern I have is ensuring that recycling our waste (both refundables and non-refundables) is accessible to all. Currently those without a driver's license, those without a vehicle, those too young to drive, and those that work a typical job schedule with work hours fluctuating between 8am – 6pm have reduced accessibility to the new depot located out of town. At the very minimum, please ensure that the gates remain open at all hours of the day to ensure that folks can sort and dispose of their non-refundable outside of the current 28 hours that are being offered for this service. Additionally, would the City of Dawson consider establishing a transfer station in town to support folks who are unable to drive out to Rabbit Creek Road?

Currently there is a maximum bag limit of 5 bags for refundables that is being advertised at the City of Dawson. How is this policy supportive of mining camps who typically make infrequent trips to town with large loads of recyclables? How is this policy supportive of youth fundraising initiatives that often include a focused effort to conduct a house-to-house pick up of refundables? How is this policy supportive of those without vehicles who may save up their recycling and must ask a friend for a ride to the depot? This happens more frequently than one might expect, and detailed ledgers can be reviewed from CKS to analyze patterns of these large drop-offs. Will the City of Dawson consider retracting the 5-bag limit?

One of our roles and responsibilities as adults is teaching the next generation better ways of doing and being. This absolutely must include the "5 r's" of waste management. Refuse, reduce, reuse, repurpose and recycle. How are we teaching our children these principles when the depot is inaccessible to the school? On any give day, if the school would like to recycle its waste, they will almost certainly be over the 5-bag limit. Additionally, accessing the depot requires an organized effort on behalf of the teachers to ensure that this huge amount of waste is being diverted from our landfill, and trucks capable of carrying these large loads would have to be secured daily. Will the City of Dawson consider curbside recycling pick-up for the Robert Service School?

And will the City of Dawson consider curbside pick-up for other large institutions operating in town (such as the hospital, the arena or the TH Community Hall) where large numbers of people are consistently

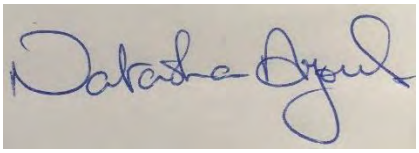
being fed from disposable containers? If curbside pick-up is currently unattainable, will the City of Dawson support locally operated businesses who offer recycling pick-up service for a fee by allowing these services to circumvent the 5-bag limit?

And finally, in regard to ensuring accessibility for people of all backgrounds, ages, abilities, and limitations, I am concerned with the current policy in place at the depot whereby a customer requesting their deposit back from their refundables must count (and classify) their own recycling. There are so many issues with this lack of service I am not sure where to begin. First and foremost, this policy puts many people who have challenges around counting in a compromising and overwhelming situation. This may include people with head injuries, elderly people who have a hard time counting and/ or remembering, those who simply have a hard time counting, parents with young children prone to interrupting, etc. etc. Many people who return refundables and request their refundable deposit may fall into this category yet still rely on these small additions to supplement income to get by. Do we want the practice of recycling to become such an unbearable chore that it becomes not worth doing? Do we want to make recycling so difficult, even too difficult, for the marginalized people in our community? At the very least, the recycling depot could encourage folks to count their own refundables but offer this service to those who would like it or may need it.

I am writing this letter in the hopes of providing Mayor and Council with an alternate view of the services currently being offered. It is not meant to simply complain about the less accessible services but expose some of the issues with the current operational policies and the limitations that they are presenting which may be making recycling more difficult than it should be. I want to make sure that waste diversion is encouraged and supported and that our diversion rates continue to increase, as they should in an ever-increasing waste filled world. And most importantly, I want to make sure that Mayor and Council is working towards a curbside pick-up program for our recycling waste to encourage and support consistent (and accessible) waste diversion. If viable solutions to waste diversion are not planned for and committed to now, the result will be exceeding Quigley Landfill limits and having to invest in an alternate location; this is an approach which will inevitably cost Dawson City much more in the long run.

Thank you for your time and consideration to ensure that our waste diversion centre continues to be accessible to all,

Sincerely,



Natasha Ayoub

To: Bill Kendrick
Subject: RE: waste diversion centre

From: Katie English <katienglish@gmail.com>
Sent: April 21, 2023 7:59 PM
To: CAO Dawson; Bill Kendrick; Alexander Somerville; Patrik Pikalek; Julia Spriggs; Brennan Lister
Subject: waste diversion centre

Dear Mayor and Council,

I would like the opportunity to speak at your next meeting in regards to the town's waste diversion. As a long time resident of this community and as the previous Coordinator of the Conservation Klondike Society for the last decade before the closure in December of 2021, I feel like I have a deep understanding of the current issues and inner workings of how to run an effective diversion centre.

Because of the role I have played in our town's waste diversion and education, I have had many concerned citizens come to speak to me on this topic. Although I wish that they would voice their concerns to the City on their own, some of them have a difficult time with this and so as an advocate for waste diversion and an advocate for this community and an advocate for the citizens who rely heavily on this service for a source of income, I would like the opportunity to raise my voice on the topic.

I dedicated my life to this town's waste diversion, I worked in the schools to educate and develop zero waste stations, community collection services for business and the City, zero waste event stations, bike libraries, repair cafes, bag libraries, bulk soap dispensing etc. Through this advocacy, education and action we had raised the bar on waste diversion and quickly outgrew our aging building. We started to work with the Territory and the City of Dawson on the development of a new waste diversion facility. This work started 10 years ago. I personally selected lot 11 on rabbit creek road and worked with YG on a land application to acquire the lot for municipal purposes. I worked out an agreement for CKS the City and YG for the acquisition of the lot in the City's name. I worked with the previous public works manager Norm Carlson to have the ground leveled, filled and fenced in preparation for the new facility. It was over 10 years ago that we had outgrown our facility, that we needed to update equipment, we asked and we pleaded for support. The building was promised and we would move one step forward and two steps back. I am proud that the City decided to take the lead to see this vision to fruition. I know that the City staff has hard feelings of CKS pulling out, but it was because of our building needing electrical upgrades, aged out equipment, floors rotting from the 30 years of service and the lack of space to handle the town's increased diversion. 10 years of waiting was too long and the health and safety was of our utmost priority.

CKS had an agreement with YG to operate the recycling depot. In this agreement it outlines that we were responsible for the collection, sorting and handling of the communities recycling and to disburse refunds. I want to highlight the word sorting. The $40,000 agreement plus $30,000 in handling fees was not enough to sustain the work we were doing. We made an agreement with the City for $100,000 to process the town's non refundable recycling, bringing our budget up to $170,000. For this $100,000 we accepted bag drop offs, we accepted mixed bags from customers that we would sort out the non refundables and count the refundables and issue refunds. On top of this was education. Through meetings with the City it was discussed that we need to make things as simple as possible for people to reach the ultimate goals of diversion. We were held to a high standard and had to report regularly on all the non refundables we were handling. We had to hand in financial statements, a yearly report outlining our diversion

and for that $100,000 we needed to at the very least have processed 800 large tote bags of non refundable recycling. Ultimately all of us believed that we were working for the greater good of our community and we were devoted to recycling and sorting, because every piece we touched meant one less piece in the landfill. It meant that our plastics weren't being mixed with our organics and that we were decreasing leachates from the landfill and lowering the output of methane gas. We all understand our landfill is located in our watershed, and that the leachetes are running down into Quigley creek which runs into the Klondike and thus into the Yukon river. Community and environmental health are at the base of everything we do. We are all passionate citizens that want to see the best for this community and want to protect our lands and waters. We care deeply for every citizen and did our best to serve and be there as the community depot helping and assisting people to make the right choices, to divert their waste and to treat everyone with kindness and respect. We never imposed a bag limit, only very temporarily during covid lockdown, as this was the only way in which we could still provide a service to the community while upholding the regulations. We only asked people to call ahead with their recycling due to covid regulations limiting how many people could be in a facility at one time. As soon as the regulations were lifted we lifted all limits and the need for calling ahead.

I want to applaud the City for coming up with quick solutions and creating a temporary facility to alleviate disruptions in service. I applaud the City for building the new diversion centre. Sadly a large portion of the town has been throwing their recycling away, due to lack of access, disrespect at the facility,bag limits, lack of customer service and having to sort and count your own, and now write out your own claims for refunds. People are continuously going and being turned away and there is a lack of care for what this facility is supposed to embody. This facility was built with the intention of a curbside collection, so that we could further increase diversion, extend the life of the landfill and because of its out of town location curbside collection would alleviate the hardships that might be faced with its distance from town. We had worked hard on a vision for curbside collection and compost collection. I am sad to hear so many people have lost hope in the recycling services due to staff turning them away, lack of access to self sorting and donating. We need to all do our part and care about this land we live and work on. We need to respect whose land we are on, This is the traditional territory of the Tr'ondek Hwech'in and their values in care for land and water should be at the heart of all of the work we do here. We are one community, we need to work together for the greater good of all.

I would love to discuss this further, I am also still working on encouraging those who have come to me to speak for themselves and hope that if they choose to speak they can be included with my name.

Thank you for your time and energy
Katie English

(note please read the attached agreements specifically the YG agreement section A2.0 Workplan/Deliverables)

FUNDING AGREEMENT
(Transfer Payment)

AN AGREEMENT BETWEEN:

Recipient's full legal name and complete address	City of Dawson address, department and contact
Conservation Klondike Society Box 365 Dawson City, YT, Y0B 1G0	City of Dawson Dept: Administration Box 308 Dawson City, YT, Y0B 1G0 Attention: Cory Bellmore, CAO
hereinafter referred to as '**Recipient**'	hereinafter referred to as the '**City**'

being collectively the parties (the '**Parties**') to this Transfer Payment Agreement.

WHEREAS the **Recipient** provides a valuable service to the **City** and its residents through its work to encourage solid waste diversion and recycling services in Dawson City; and

WHEREAS the **City** seeks to assist the Recipient in providing sustainable recycling services in Dawson City; and

WHEREAS council passed resolution # C20-07-13 at their meeting on May 12, 2020; and

WHEREAS the **City** has funds available to assist the **Recipient**, and wishes to provide the **Recipient** with financial assistance to support the Funding Purpose of:

To provide funding up to a maximum of **$ 200,000** to the **Recipient** to assist Conservation Klondike Society (CKS) with recouping its costs associated with the handling of recyclables for which there is no handling fee or other compensation provided by Government of Yukon.

NOW THEREFORE the Parties agree as follows:

This agreement to commence **January 1, 2020** and terminate on **December 31, 2021.**
The maximum amount payable by the **City** under this agreement shall not exceed **$ 200,000**

NOTICES TO RECIPIENT

1. This agreement is subject to the Standard Terms and Conditions on Page 2 of this agreement, and to the terms set out in any Appendices or Attachments that may be appended to this Agreement.
2. The maximum dollar amount stated above will prevail over any dollar amounts noted in other Appendices or Attachments.
3. The **Recipient**'s performance under this Agreement may be used by the **City** in evaluating future requests for funding.

IN WITNESS WHEREOF the Parties have executed this Agreement by their duly authorized representatives.

Recipient:

Signature	Name & Position	Date

(Witness)

The City:

Signature	Name & Position	Date

STANDARD TERMS AND CONDITIONS

The **Parties** to this agreement covenant and agree as follows:

1. The **City** shall provide the **Recipient** with financial assistance (the 'Funds' or 'Funding') as set out in the attached Appendices in an amount not to exceed the maximum as noted on Page 1 of this Agreement for the Funding Purpose identified on Page 1 and more specifically described in Appendix A.

2. The **Recipient** shall use the Funds to carry out the Funding Purpose in a manner acceptable to the **City**, and in respect of the Funds, the **Recipient**:
   2.1. shall follow the budget outlined in Appendix A and shall use the Funding solely for the Funding Purpose;
   2.2. shall return any Funds not required for the Funding Purpose to the **City**;
   2.3. shall maintain proper and accurate accounts and records and the original cancelled cheques and invoices relating to the use of the Funds and the expenses incurred by it for the Funding Purpose, which accounts and records shall be subject to audit by an officer or agent of the **City** at any time up to and including one year from the date of termination of this Agreement;
   2.4. shall permit an officer or agent of the **City** to inspect the **Recipient**'s performance under this Agreement and/or its use of the Funding at any reasonable time up to and including one year from the date of termination of this Agreement, which inspection may occur at the premises of the **Recipien**t;
   2.5. shall advise the **City**, if for any reason, the **Recipient** is unable to meet its commitments under this Agreement, as set out in Appendix A and as approved by the **City**;
   2.6. warrants that it has declared all amounts owing by it to the **City** and that it is not in default of any payment schedule in respect of any amounts owing by it to the **City**;
   2.7. agrees that any monies due to the **Recipient** under this Agreement may be withheld by the **City** and applied against any amounts owing to the **City** by the **Recipient**; and
   2.8. shall publicly acknowledge the assistance of the **City** under this Agreement whenever possible and shall allow the **City** to make public announcements relating to the Funding.

3. The **Recipient** shall report to the **City** as required by this Agreement.

4. Legal Relationship: The **Recipient** agrees that it is not, and will not hold itself out to be, an agent of the **City**, and that the **Recipient** will indemnify the **City** against any liability, claim or loss that may arise as a result of what the **Recipient** does in performing the **Recipient's** obligations under this Agreement.

5. Conflict of Interest: The **Recipient** agrees that no current or former public office holder or public servant who is, or who may be perceived to be, in a conflict of interest situation relating to the Funding shall derive any direct benefit from this Agreement, unless any such benefit is available to the public at large. Furthermore, the **Recipient** will provide written statements from any **City** employee, any elected official, or otherwise involved with the **Recipient** that any such person has considered and appropriately addressed any perceived or real conflict(s) of interest.

6. Termination:
   6.1. Either Party may terminate this Agreement without cause by giving the other Party 30 days written notice of its intention to do so.
   6.2. If this agreement is terminated under section 6.1, the **Recipient** shall within 60 days of the termination, provide the **City** with a full accounting of all outstanding claims, and the **City** shall make payment within 30 days of receiving the final claim.
   6.3. Failure by the **Recipient** to comply with the provisions of this Agreement entitles the **City** to demand the return from the **Recipient** of some or all of the Funding, and the **Recipient** agrees that it will repay any amount so demanded by the **City** within 30 calendar days of receiving any such demand in writing.

7. Written Communication: All notices and communications in connection with this Agreement shall be sent to the addresses on page 1 of this Agreement.

8. NOTICE: By signing this Agreement, you understand and agree that it is not an unreasonable invasion of your personal privacy for the **City** to disclose any personal information about you that the **City** collected in the process of administering this Agreement, or that may be set out in this Agreement, and you further understand and agree that the **City** may disclose such personal information about you to third parties. You further understand and agree that no business information collected by the **City** in the process of administering this Agreement, or that may be set out in this Agreement, is confidential, and you further understand and agree that the **City** may disclose any such business information to third parties.

APPENDIX A

A. FUNDING PURPOSE

1. **Deliverables and Work Plan**

The **City** shall provide Funding to the **Recipient** to assist Conservation Klondike Society (CKS) with recouping its costs associated with the handling of recyclables for which there is no handling fee or other compensation provided by Government of Yukon.

a. The **Recipient** agrees to:
   i. continue the work of diverting recyclables for the benefit of the residents of Dawson City; and
   ii. acknowledge the **City** for its assistance at CKS facilities and in all materials issued to promote diversion of recyclables handled under this Agreement.
b. Any revisions to this Agreement must be approved by the **City** and then processed in the form of an amendment to this document.

2. Reporting

a. The **Recipient** shall:

   i. maintain financial records relating to the business activities of CKS in its customary manner and in accordance with generally accepted accounting principles, and provide these reports annually to the **City** .
   ii. provide the **City** financial statements that have undergone a Review Engagement by a professional accounting firm as required/accepted by the societies act; and
   iii. provide a full accounting of all Funds issued under this Agreement; and
   iv. provide an annual statistical report of all recyclables handled under this agreement; and
   v. provide an annual report to the **City**, by way of presentation to Council at a regularly scheduled meeting towards the beginning of each year, detailing the total amounts of all recyclables diverted for the previous year.

B. TERMS OF PAYMENT

1. Funds

a. Limits: The **City** shall provide the **Recipient** with Funds for the Funding Purpose in an amount up to an annual maximum amount not to exceed $100,000.
b. Amounts contained in the following table, section B(1)(c) are provisional, and may be altered, adjusted or deleted at the sole discretion of the **City**. The obligation of the **City** to provide the diversion credit amounts is subject to the funds being allocated for this Agreement within the final annual budget of the **City**.
c. Table: The **City** shall pay to the **Recipient** the Funds upon presentation of a quarterly invoice for all diversion credits claimed that are supported by documentation from Government of Yukon recycling freight contractor that identifies the total number of applicable bags transported

	Deliverable(s) (includes: Milestones and/or other Triggering Events	Proposed Payment Allocation
1.	**2020 Diversion Credits:** January 1st to March 31st, 2020 – quarterly invoice April 1st to June 30th, 2020 – quarterly invoice July 1st to September 30th, 2020 – quarterly invoice October 1st to December 31, 2020 – quarterly invoice	$125.00 per full large fibre bag up to an annual, January 1 to December 31, 2020, maximum amount of $100,000
2.	**2021 Diversion Credits:** January 1st to March 31st, 2021 – quarterly invoice April 1st to June 30th, 2021 – quarterly invoice July 1st to September 30th, 2021 – quarterly invoice October 1st to December 31, 2021 – quarterly invoice	$125.00 per full large fibre bag up to an annual, January 1 to December 31, 2021, maximum amount of $100,000
Maximum Total Payable (as per this Agreement)		**$200,000**
Payment will only be made if the required deliverables have been received		

and deemed appropriate and acceptable by the City

d. In the event that the total sum of diversion credits claimed by the **Recipient** under this Agreement are under the annual maximum amount for any given year, the **City** may, at its sole discretion, invite the **Recipient** to prepare a plan to utilize the unspent allocation for a program of community education to promote diversion and the use of CKS services by Dawson residents. The **City** retains the sole discretion to approve the use of unspent allocations to implement the plan.

To: Bill Kendrick
Subject: RE: Solid waste diversion

From: Red Mammoth Bistro <redmammothbistro@gmail.com>
Sent: April 24, 2023 1:47 PM
To: Bill Kendrick; Alexander Somerville; Brennan Lister; julia.springgs@cityofdawson.ca; Patrik Pikalek
Cc: CAO Dawson
Subject: Solid waste diversion

Dear Mayor and Councils,

As business owners and citizens, we try our best everyday to reduce, reuse and recycle because we believe everyone has to do their part in reducing the impact of solid waste on the environment. However, we have few concerns regarding the recycling situation in Dawson City after opening the newly built and well staffed facility.

We are wondering if you have a plan for providing a curbside pick up for recycling in town. We noticed friends and neighbours throwing everything in the garbage. We don't agree but, in a way, we understand they might not have time, space to store or a vehicle. The same principle applies to any business.

We are also wondering about the relevance of a maximum of 5 bags of refundable. This restriction makes it challenging for a business like ours since it leads to making more frequent trips to the recycling facility or having the recycling going to the landfill.

Similarly, we are wondering why we now have to count the refundable ourselves. First, the counter for refundable at the facility is not designed to accommodate one person coming with different types of containers. Furthermore, the space available doesn't allow many people at the same time sorting their refundable. Second, we consider this major change as an additional drop of the service offered.

We are finally wondering about the compost situation. As composting can divert up to 50% of waste from the landfill, we believe curbside pick up would help businesses and citizens to contribute to the reduction of garbage. Are you considering reinstating a curbside pickup for the compost ?

We would be pleased to discuss this matter with you.

Yours truly,

Lilianne Bessette & Paul Wettstein
Owners
Red Mammoth Bistro
redmammothbistro@gmail.com
867 993 3759

932, 2nd avenue
Po Box 1748
Dawson City

Yukon

FUNDING AGREEMENT (TRANSFER PAYMENT)

Government agreement number	YG internal file number	Funding type
T00024843		☐ Project ☒ Operational

Within a funding program? ☐ Yes ☒ No

If yes, name of funding program: _____

An agreement between	and Government of Yukon
CITY OF DAWSON BOX 308 DAWSON CITY, YT, Y0B 1G0	Community Operations & Programs, C-12 Community Services Whitehorse, Yukon Y1A 2C6
Attention: Jonathan Howe Phone: 867-993-3163 Hereinafter referred to as **'Recipient'**	Attention: Virginia Cobbett Phone: 867-332-0026 Hereinafter referred to as **'YG'**

being collectively the parties (the **'Parties'**) to this Transfer Payment Agreement (the **'Agreement'**).

Whereas:

A. The Recipient has submitted a proposal for financial assistance for:

Funding purpose (short title): 2023 Operational Funding for Recycling Depot

Location: Dawson City

B. YG wishes to provide the Recipient with financial assistance to support the funding purpose.
Now therefore the Parties agree as follows:

This Agreement to commence on January 1, 2023 and terminate on February 28, 2024.

The maximum amount payable by YG under this Agreement shall not exceed: $ 47,124

Notices to recipient:

(1) This Agreement is subject to the standard terms and conditions on page 2 of this Agreement, and to the terms set out in the standard schedules (A,B and C) appended to this Agreement, and to any other appendices, attachments or schedules that may be appended to this Agreement.

(2) The maximum dollar amount stated above will prevail over any dollar amounts noted in other schedules, appendices or attachments.

(3) The Recipient's performance under this Agreement may be used by YG in evaluating future requests for funding.

In witness thereof, the Parties have executed this Agreement by their duly authorized representatives.

The Recipient agrees to use the funding provided for the specifed purpose, and in accordance with the terms and conditions set out in this Agreement, including all schedules and appendices (if any).

Signature of recipient or officer		Date
	City of Dawson	08/11/22
Name of recipient or officer (print)	Title	Phone
Jonathan Howe	Public Works Manager	867-993-3163

YG – Certified pursuant to section 23 (contracting authority) of the *Financial Administration Act.*

Signature of public officer		Date
Name of public officer (print)	Title	Phone
Virginia Cobbett	Community Operations Supervisor	867-332-0026

Standard terms and conditions

The Parties to this Agreement covenant and agree as follows:

1.0 YG shall provide the Recipient with financial assistance (the 'Funds' or 'Funding') as set out in the attached schedules in an amount not to exceed the maximum as noted on page 1 of this Agreement for the Funding Purpose identified on page 1 and more specifically described in schedule A.

2.0 The Recipient shall use the Funds to carry out the Funding Purpose in a manner acceptable to YG, and, in respect of the Funds, the Recipient:

- 2.1 shall follow the budget outlined in schedule B and shall use the Funding solely for the Funding Purpose;
- 2.2 shall return any Funds not required for the Funding Purpose to YG;
- 2.3 shall maintain proper and accurate accounts and records and the original cancelled cheques and invoices relating to the use of the Funds and the expenses incurred by it for the Funding Purpose, which accounts and records shall be subject to audit by an officer or agent of YG at any time up to and including one year from the date of termination of this Agreement;
- 2.4 shall permit an officer or agent of YG to inspect the Recipient's performance under this Agreement and/or its use of the Funding at any reasonable time up to and including one year from the date of termination of this Agreement, which inspection may occur at the premises of the Recipient;
- 2.5 shall advise YG, if for any reason, the Recipient is unable to meet its commitments under this Agreement, as set out in schedules A and B and as approved by YG;
- 2.6 warrants that it has declared all amounts owing by it to YG and that it is not in default of any payment schedule in respect of any amounts owing by it to YG;
- 2.7 agrees that any monies due to the Recipient under this Agreement may be withheld by YG and applied against any amounts owing to YG by the Recipient; and
- 2.8 shall publicly acknowledge the assistance of YG under this Agreement whenever possible, and shall allow YG to make public announcements relating to the Funding.

3.0 The Recipient shall report to YG as required by schedule A (and schedules B and C, or as per any other attached appendices).

4.0 Legal relationship: The Recipient agrees that it is not, and will not hold itself out to be, an agent of YG, and that the Recipient will indemnify YG against any liability, claim or loss that may arise as a result of what the Recipient does in performing the Recipient's obligations under this Agreement.

5.0 Conflict of interest: The Recipient agrees that no current or former public office holder or public servant who is, or who may be perceived to be, in a conflict of interest situation relating to the Funding shall derive any direct benefit from this Agreement, unless any such benefit is available to the public at large. Furthermore, the Recipient will provide written statements from any YG employee, any elected official or any cabinet or caucus employee on its board, or otherwise involved with the Recipient that any such person has considered and appropriately addressed any perceived or real conflict(s) of interest.

6.0 Termination:

- 6.1 Either Party may terminate this Agreement without cause by giving the other Party 30 days written notice of its intention to do so.
- 6.2 Failure by the Recipient to comply with the provisions of this Agreement entitles YG to demand the return from the Recipient of some or all of the Funding, and the Recipient agrees that it will repay any amount so demanded by YG within 30 calendar days of receiving any such demand in writing.

7.0 Written communication: All notices and communications in connection with this Agreement shall be sent to the addresses on page 1 of this Agreement.

8.0 Legal compliance: The Recipient will comply with all applicable laws as amended from time to time, and will fully cooperate with YG in its compliance with the law, including but not limited to providing proof of compliance with any law.

9.0 Disclosure of information: The Recipient acknowledges that the *Access to information and Privacy Act*, SY 2018 c.9 and regulations, as amended from time to time, applies to this Agreement, and agrees that YG may disclose any information related to this Agreement in accordance with the law.

Schedule A
Funding Purpose

Schedule A
Project

A1.0 Description and Details

Background: This Transfer Payment Agreement (TPA) is to provide operational funding to **City of Dawson** for the operation of **Dawson City Recycling Depot**. The recycling depot collects recyclable material and pays refunds on scheduled containers, as outlined in *Environment Act; Beverage Container Regulations.*

Mandate: This TPA supports Community Services' goal to support a waste management system that is environmentally sustainable and financially sound.

Objectives: The objectives for this TPA are as follows:

1) Maintain a recycling depot in **Dawson City** to increase diversion and reduce waste and illegal dumping.

2) Meet or exceed the value of refundable material that the recycling depot handled in the previous year.

A2.0 Work Plan / Deliverables

A2.1 The recycling depot will collect recyclable material and pay refunds on scheduled containers, as outlined in Schedule A of the *Environment Act; Beverage Container Regulations.* See Appendix A or a copy of Schedule A.

A2.2 The recycling depot will act in accordance with Beverage Container Permit 2018-009

A2.3 The recycling depot will sort, count, and record refundable material on Beverage Container Regulations Depot Claim forms provided by YG. See Appendix B of this TPA for a copy of the Depot Claim forms.

A2.4 Refundable materials must be prepared for transport in bags, bales or pallets as required for shipping. To improve the efficiency of transportation, bags should be filled to capacity and recycling depots that have balers should be producing bales which must be palletized for shipping. Material is to be prepared for transportation and shipping in accordance with the Transportation of Recyclables Contract – Part 3: Contract Specifications, attached as Appendix C of this Transfer Payment Agreement.

A2.5 The recycling depot will submit the Depot Claim form to a **Recycling Processor** for tracking of the materials collected for recycling.

A2.6 The recycling depot will maintain records and follow Generally Accepted Accounting Principles to account for the refundable material collected, deposit refunds paid out, and recyclable material shipped to a processor under the following acts & regulations: *The Environment Act*; *Beverage Container Regulation*, and the Yukon Government's *Financial Administration Act*.

A2.7 The recycling depot must be operational for a minimum of **24 hours monthly** in order to be eligible to receive the recycling depot operational funding.

A2.8 The recycling depot will participate in the Recycling Club Points Rewards Program. The program administrator for **2023** is **to be determined**. Participation in the program will include but is not limited to the following activities: promotion of the program, maintenance of a list of members of the program, and acting as a liaison with the program administrator. The recycling depot will provide one copy of redeemed point coupons to members and one copy to the program administrator. The recycling depot operators will maintain contact with **the program administrator** for all program related questions and inquiries.

A2.9 Depot operators must inform Raven Recycling via email or phone when material is being transported to Whitehorse so that they can prepare for a shipment.

A3.0 Term

A3.1 The term of this Agreement shall be from **January 1, 2023** through **February 28, 2024**

A3.2 Program/Project Delivery phase is from **January 1, 2023** through **December 31, 2023**

A3.3 The reporting phase is from **January 1, 2023** through **February 28, 2024**

A4.0 Reporting

A4.1 Submit to YG a final project report and financial report for the period of **January 1, 2023 - December 31, 2023** on or before **February 28, 2024**

A4.1.2 The final project and financial report is to include;

1. An Activity Report briefly outlining the activities which were carried out during the year (i.e. sorting, counting, baling, palletizing, wrapping etc.);
2. A complete summary of depot claims forms (claim numbers, dates, depot claim totals, handling totals, refund totals, self-transport totals, voided claims and any other relevant back-up documentation) signed by the Recipient;
3. The hours of operation.

Schedule B
Budget

B1.0 Budget and Expenses

B1.1 The Recipient shall carry out the Funding Purpose in accordance with the Work Plan / Deliverables outlined in Schedule A2.0.

B1.2 The budget for this TPA is estimated based on the predicted value of refundable material that the recycling depot will handle between **January 1, 2023** and **December 31, 2023**

The budget for this TPA will be re-assessed in **March 2023**, once the final report for the previous year, as described in the **T00022864**, is accepted by Community Services. Based on this final report, the value of this TPA may increase or decrease such that the value accurately reflects the value of refundable material handled in the previous year.

The total value of refundable material handled by the recycling depot in the previous year corresponds to a prescribed funding level, as outlined in Appendix D.

The estimated budget for this TPA is identified in Table B1.2.1 below. Payment terms will be in accordance with Schedule C. The annual reporting requirements as outlined in A4.0 must be met in order for the recycling depot to be eligible to enter into an operational funding TPA in subsequent years.

B1.2.1 Budget

Depot Operating Allowance (Annex A)		
Level (Value of Refundable Material)	**Monthly Allowance**	**Annual Allowance**
Level Category – A	$ 3,927 / month	$ 47,124 / year

B1.4 Government of Yukon will only issue payments under this agreement if Department of Community Services receives appropriation of funds from Yukon Legislative Assembly for the fiscal year in which any payment is to be made.

B1.5 For clarity purposes payments on subsequent transfer payment agreements for this funding purpose must not be fully disbursed within the funding fiscal year without YG having received and accepted the final report as laid out in A4.0 of this agreement.

B1.6 Government of Yukon will only issue payments under this agreement if the recipient is in good standing with Corporate Affairs. Section 20 (1), (2)(a)(b) of the Societies Act.

Schedule C
Terms of Payment

C1.0 Funds

C1.1 Payment schedule is as described below.

Deliverable(s) (includes: Milestones and/or other Triggering Events)		Proposed		
		Percentage of Total	**Date of Payment, or, Event**	**Payment**
1	1st Payment	25%	Upon signing but no sooner than January 1, 2023	$ 11,781.00
2	2nd Payment	65%	No sooner than April 1, 2023 *(See Note: below)*	$ 30,630.60
3	3rd Payment	10%	Upon receipt of final report	$ 4,712.40
Maximum Total Payable (as per page 1 of this Agreement) (if amount stated is, or, totals to an amount greater than page 1 of the agreement, then the total on page 1 prevails)				**$ 47,124 / year**

Note: The value of this TPA is dependent on the value of refundable material that the depot handled in the previous year. For this reason, once the final report from the previous year (per agreement T00022864) is accepted, Community Services may increase or decrease the maximum total payable under this TPA (and thus increase or decrease the individual payments as outlined above) such that the funding accurately reflects the value of refundable material handled in the previous year.

MORRISON HERSHFIELD

FINAL REPORT FOR BOARD REVIEW

Solid Waste Management Program Design Assessment

City of Dawson, Yukon Territory

Presented to:

CITY OF DAWSON
1336 Front Street / P.O. Box 308
Dawson City, YT Y0B 1G0

Report No. 108283500 August 15, 2018

P:\2018\180283500-CITY OF DAWSON SWM PROGRAM DESIGN\12. DELIVERABLES\RPT_2018-08-15_COD SWM PROGRAM DESIGN ASSESSMENT REPORT_FINAL FOR BOARD REVIEW.DOCX

EXECUTIVE SUMMARY

Currently, municipal solid waste is collected weekly from residents at the curb and taken to the Quigley Landfill. The City of Dawson (CoD) engages a contractor to provide this collection service. Commercial waste is collected on an as-needed basis by the same contractor. The Conservation Klondike Society (CKS) provides curbside collection of recyclables to approximately 40 households.

CKS operates two recycling depots: one downtown and the other at the Quigley Landfill. These depots are at or beyond their operational capacity.

There are currently no incentives for any waste generators (i.e. residents, businesses) to reduce the waste that ends up in the landfill, and with existing depot infrastructure there are limited opportunities for waste diversion within the CoD. The City has a long-term goal of achieving 34% waste diversion by 2023 through a variety of means. The City has set out on the path of first developing a citywide recycling program, which is to consist of curbside collection of recyclables and organics (in the long term), and the establishment of a new waste diversion centre. A site has already been established for a new waste diversion centre.

The key drivers for undertaking this study are the current high garbage collection costs, limited waste diversion programs, limited remaining landfill life span (only 10 years of landfill capacity remaining under the current design), and the desire to build on the partnership with CKS.

The City commissioned Morrison Hershfield (MH) to assess the current solid waste management system and provide an assessment of options and costs for implementing the citywide recycling program.

Curbside Collection

MH assessed the options for the CoD to expand the existing municipal curbside collection service to not only collect garbage, but also recyclables and potentially organic waste (food and yard waste).

The CoD currently services 537 residential units and 264 commercial units. It is suggested that the CoD is best to provide a weekly collection of garbage and recyclables. The collection could be performed using manual or semi-automated collection systems.

Manual collection would require home owners to supply their own garbage containers; size and weight limits would be placed on the containers to facilitate manual lifting. One of the issues with residents providing their own garbage container is the high risk of attracting wildlife compared to providing an approved wildlife resistant container to each resident, such as the containers assessed as part of the semi-automated option. With manual collection, only pick-up of one garbage container is recommended to offer as part of regular service; additional containers or bags would need pre-paid stickers.

If semi-automatic garbage collection is introduced, each unit would require a standardized container (such as a wildlife proof wheeled carts). These are best to be provided as part of the

program cost. Residents could choose a small, regular or large container and pay less or more for the collection service depending on the size of container chosen.

The materials that are suggested for curbside recycling include two streams: fibres (paper and cardboard products) and containers (plastics and metal). Glass is assumed to only be collected at depots. The fibres and containers are best to be separated for placement at the curb in standardized recycling containers: fibres in a 'bluebox' container, and mixed containers in reusable plastic bags. Source separation at the curb saves on sorting and processing costs and increases marketability of the recyclables to end markets.

The enhanced curbside collection service will provide the convenience of garbage and recyclables pick-up at the curb. The recovery of more recyclable materials would improve the environmental performance of the area, and substantially reduce the waste that will have to be disposed at the Quigley Landfill.

Although the study assessed the potential quantities of organics to collect from residents and ICI customers, we recommend that organics (yard & garden and kitchen waste) should not be collected at this time, since the available processing facility is not suitable to handle larger quantities of organics at this point. Backyard composting can be actively encouraged until a processing facility that can handle larger quantities of organic waste has been evaluated and established.

The table below presents the initial cost estimates for two of the main curbside collection options for garbage and recyclables: manual collection versus a semi-automated collection. Curbside collection for garbage and recyclables is estimated to cost between $815 and $900) per household per year (or a monthly cost of approximately $70 to $80 per household).

Cost Estimates of Two Options for Curbside Collection of Garbage and Recyclables

	OPTION 1 Weekly Collection of Garbage and Recyclables (manual)	OPTION 2 Weekly Collection of Garbage and Recyclables (semi-automated)
Collection Containers	$15,841	$123,241
Collection Vehicles (Annual costs of equipment, maintenance and insurance)	$251,280	$159,600
Operational Collection Costs ((labor and fuel)	$137,099	$77,195
Processing of Recyclables	$77,792	$77,792
Total Costs	**$482,012**	**$437,828**
Cost per HH	$898	$815

The cost to collect garbage on a weekly basis from ICI customers in 3 yd^3 bins using a front-end loading truck is estimated to cost $1,092 per customer (or $292,000 in total). However not all customers will need that much capacity, and many may want to opt into the residential curbside recycling program or share a collection bin with adjacent businesses. If ICI customers can be serviced by the provision of carts, which may be suitable for recyclables, the costs are likely to be half of those of front-end loaded bins. If garbage is collected via carts this would require semi or fully automated trucks.

Based on the study, MH suggests that the CoD consider the following:

- The final decision regarding selecting a manual or semi-automated collection could be made by the CoD, or left to the private sector firms proposing the services as part of a Request for Proposal submission.

- The entire curbside collection system should be user-pay. This is also emphasized in the City of Dawson Integrated Community Sustainability Plan, which was developed in partnership with the Tr'ondëk Hwëch'in in 2009, and more recently encouraged by the Yukon Ministerial Committee on Solid Waste in 2018. User-pay can be achieved by funding the program through utility fees and, in the case of a manual system, additional use of stickers for anyone wishing to dispose of garbage over and above the basic container limit. It should be noted that user fees do not necessarily cover the entire cost of the service, and a collection service can be funded by a combination of revenue sources.

- There seems to be a limited pool of private contractors/haulers that can provide collection services (i.e. limited competition), and there are concerns about the cost of the current service. To determine how many private service providers might be interested, the next step is best to include some consultation with the private sector and then a Request for Expressions of Interest (RfEOI) could be developed to confirm how many providers could compete at the Request for Proposal (RfP) stage. To increase competition, the CoD should consider also bidding on the contract.

- In addition to offering curbside collection of garbage and recycling, the CoD could consider a ban at the landfill on materials that are recyclable. The CoD is advised to develop a communications plan in which promotion and education methods for the period prior to program-roll out, around the launch and for long-term are clear and financed adequately.

New Solid Waste Diversion Centre

MH prepared a proposed design and cost estimate for the design of a new Solid Waste Diversion Centre (SWDC) on an industrial property within the municipality. Two main design concepts were initially developed in collaboration with the CKS, the expected final operator of the facility. MH developed a conceptual design and incorporated elements from the two previous conceptual designs.

The conceptual design was prepared with the following objectives:

- Provide additional space for sorting recyclables.
- Provide additional space for public drop-off of recycling.
- Provide infrastructure to allow for processing of recyclables collected curbside.
- Provide space allocation to allow for acceptance and processing of additional materials in the future.

A capital cost estimate was prepared based on various system components outlined in this report. The cost estimate is presented below and is considered a Class D preliminary cost estimate (±50 %).

Class D Capital Cost Estimate for Proposed SWDC

Item #		Item	Unit	Quantity	Unit Price	Total Price
1		**Project Summary**				
	1.01	Mob/Demob	LS	1	$ 50,000	$ 50,000
	1.02	Site Preparation	LS	1	$ 195,000	$ 195,000
	1.03	Surfacing, barriers and signs	LS	1	$ 197,500	$ 197,500
	1.04	Lock-block Wall	LS	1	$ 12,600	$ 12,600
	1.05	Surface water management	LS	1	$ 61,800	$ 61,800
	1.06	Site Buildings	LS	1	$ 550,000	$ 550,000
	1.07	Equipment and Containers	LS	1	$ 196,500	$ 196,500
					Subtotal	**$ 1,263,400**
					40% Construction Contingency	$ 505,000
					Subtotal - Construction Cost	$ 1,768,000
					Engineering - Detailed Design Services (8%)	$ 141,000
					Construction Oversight, Contract Administration (7%)	$ 124,000
					TOTAL - PHASE 1 COST	**$ 2,033,000**

The capital cost estimate is suitable for preliminary discussion of the proposed SWDC. MH recommends discussing the proposed conceptual design of the new SWDC with various stakeholders, including YG.

This report only considered one concept. The CoD has many options with the new SWDC and the final design can be developed to suit the solid waste management system needs, with consideration of potential budgetary restrictions.

Operating costs have not been estimated due to the limited information about staffing, waste processing at the facility, and waste hauling to and from the facility.

Next Steps

The CoD is proposing many improvements to the existing solid waste management system, and all of them cannot be implemented at once. MH has proposed a road map in this report to guide the sequence of events.

All significant changes to the existing system should be informed throughout the process by stakeholder input and consultation. At first, the CoD will need to develop a communications strategy aimed to consult on proposed changes to level of service and changes to costs. Council must be kept informed of proposed changes, associated costs, and stakeholder feedback, and be part of deciding whether adjustments are needed to the plan. The new solid waste management program will need to include a revised solid waste budget based on proposed changes, and the CoD will need to develop a revised revenue structure based on a combination of taxes, utility fees, tipping fees, etc.

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APPENDICES

APPENDIX A: Sorting Requirements for Recyclables Collected at Recycling Depots

1. BACKGROUND

Currently, municipal solid waste is collected at the curb and taken to the Quigley Landfill. The landfill operates under a Solid Waste Management Plan that expires in 2023. Conservation Klondike Society (CKS) operates two recycling depots: one downtown and the other at the Quigley Landfill. These depots are at or beyond their operational capacity. Municipal solid waste (MSW or garbage) is collected from residents weekly by a private hauler contracted by the City of Dawson (CoD). Industrial, commercial and institutional (ICI) waste is also collected on an as-needed basis. CKS also provides curbside collection of recyclables to approximately 43 households.

There are currently no incentives for any waste generators (i.e. residents, businesses) to reduce the waste that ends up in the landfill. Based on the current design, the local landfill has less than 10 years of landfill capacity remaining. The CoD has a long-term goal of achieving 34% waste diversion by 2023 through a variety of means. The CoD has set out on the path of first developing a citywide recycling program, which is to consist of curbside collection of recyclables and a new waste diversion centre. Diversion of organics will be considered in the future.

The CoD commissioned Morrison Hershfield (MH) to assess the current solid waste management system and provide guidance for implementing the citywide recycling program.

The key drivers for undertaking this study are the current high collection costs, limited waste diversion programs, remaining landfill life span (only 10 years of landfill capacity remaining), and the desire to build on the partnership with Conservation Klondike Society (CKS).

2. CITY OF DAWSON

This section provides an overview of the population (current and predicted) in the CoD, characterization of the solid waste generated in the CoD, including the composition of the waste stream, the amount disposed in landfill and the amount diverted. This information, along with the system description in Section 3 provides the baseline for the development of the Solid Waste Management Program Design.

2.1 Demographics

The wasteshed for the CoD's solid waste management program is defined as the geographical area contributing waste and recyclables to the Quigley solid waste management facility. It includes the City of Dawson and the Tr'ondëk Hwëch'in First Nations residential areas.

According to 2016 census data, the City's population is 1,375 with 756 dwellings, of which 678 are private dwellings occupied by permanent residents. There are 80 apartments in buildings that have fewer than five storeys, and no apartments with more than 5 storeys. The population density is 42.2 per km^2 and the town covers 32.45 km^2 [1].

The Tr'ondëk Hwëch'in – a Self-Governing Yukon First Nation – is based within the boundaries of the CoD. According to the Tr'ondëk Hwëch'in Citizenship Registrar, the total population of Tr'ondëk Hwëch'in citizens is 1174, with about 320 currently living in Dawson City. Others live in Whitehorse, elsewhere in the Yukon, and outside the Territory[2].

The permanent population of the entire wasteshed (i.e. the area beyond the municipal limits) was estimated at 1,999 in 2013.

Although the permanent population of the wasteshed is 1,999, seasonal influx of people over the summer months due to construction, mining and tourism is estimated to double the population. Assuming the seasonal influx lasts for four months of the year, the annual average population in 2016 was 2,665.

Based on 2016 data, the population is projected to increase, with a compound annual growth rate of approximately 1% in the Yukon, slightly lower than the Canada average of 1.2%[3].

2.2 Current Disposal and Diversion Quantities

2.2.1 Disposal

As there is no weigh scale at the landfill, waste disposal rates were estimated using scale data from the Son of War Eagle Landfill in Whitehorse and the Canadian average waste disposal rate.

[1] https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/index-eng.cfm
[2] As per correspondence with the Tr'ondëk Hwëch'in First Nation, August 2018.
[3] https://www150.statcan.gc.ca/n1/pub/91-215-x/2017000/sec1-eng.htm

Based on City of Whitehorse data from 2006 to 2013, the per capita MSW disposal rate, including industrial, commercial and institutional (ICI) waste and organics, is 1.9 kg/capita/day. The per capita disposal rate for C&D is 0.7 kg/capita/day, resulting in a total disposal rate of 2.6 kg/capita/day. Using the census 2016 population size of 1,375, the ICI and residential sectors of CoD are estimated to generate 1,305 tonnes of MSW and C&D wastes per year.

The Ministerial Committee on Solid Waste estimated an annual tonnage for the CoD based on Canada's average annual municipal waste generation rate of 0.9 tonnes per capita (Bryna Cable, personal communication, June 26, 2018). For the CoD population, this equates to at 1,238 tonnes of MSW per year.

When planning for a curbside collection program for garbage, recyclables and potentially organics, MH estimated the waste quantities coming from residential customers and ICI customers. All MSW is not assumed to be collected as part of curbside collection. Refer to Section 5.1.1 for these estimates.

2.2.2 Diversion

Insufficient data are available to accurately estimate quantities diverted through methods such as the segregation of clean wood and brush, composting, freestore operations, tire recycling, electrical and electronics ("e-waste") collection, and salvaging of metals from major appliances, scrap metals and autobodies.

The CoD currently estimates that 10% of the MSW and the C&D waste stream is currently being diverted from the landfill. The Quigley SWMP 2013-2023 (published in 2015), sets a diversion target of 34% of the MSW stream by 2023.

The CoD currently lacks the infrastructure or system in place to record or estimate diverted quantities.

2.3 Waste Stream Characterization

Waste audits were conducted by CKS in 2008 and 2009 at the Quigley Landfill. The waste composition of domestic waste is shown in Figure 1.

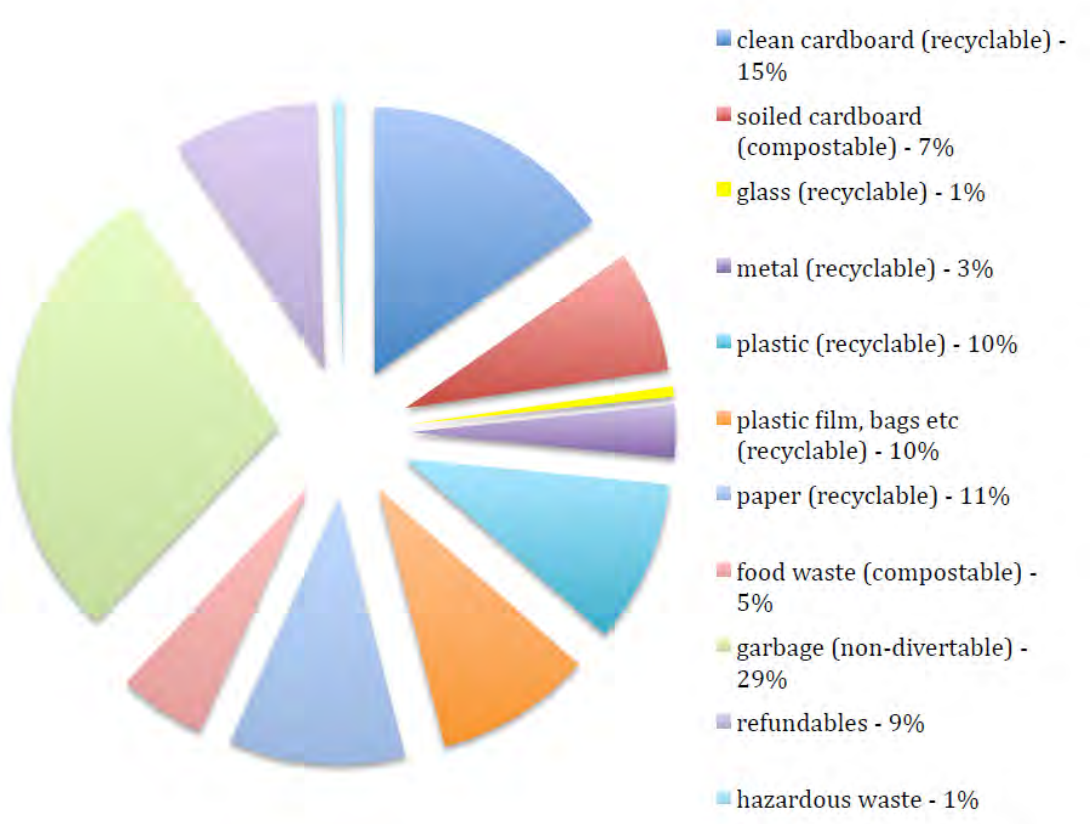


Figure 1 Waste Composition of Domestic Waste at the Quigley Landfill in 2009[4]

Of the domestic waste, 71% of the waste is considered divertible (29% is non-divertible garbage). The large components of the divertible material categories include clean cardboard (15%), paper (11%), plastic packaging (10%) and refundables (9%). Compostable materials made up only 12%. However, typically compostable materials/organics make up to 40% of MSW if organics are not collected at the curb. A waste composition study only represents conditions and characteristics of sampled waste during the time of the audit (i.e. it represents a "snapshot" in time). The composition of waste can change over time (e.g. seasonality), and the waste audit may simply have captured a portion of the waste stream when the organics fraction was low. Another contributing factor to the low organics fraction of the MSW may be due to many households undertaking backyard composting in the CoD.

When CKS audited the C&D waste, the bulk of the waste was found to be lumber and wood products (38%), with cardboard/paper (19%) and plastic and linoleum (18%) being significant contributors as well. It is clear that much of the C&D waste material could be reused.

The City of Whitehorse recently audited its waste stream. Figure 2 shows the waste composition from November 2017, during the winter/low tourism season. This was the first

[4] Quigley Sustainable Landfill Study – Phase II, Aug 2009

sampling event, which is part of a two-season waste composition study during 2017-18. Another sampling event will take place in July 2018 (high tourism season), with results available during fall of 2018.

Residential curbside waste represented 12% of the waste disposed. Figure 2 illustrates the estimated composition of the residential waste stream. As shown, the primary components of the waste stream are: organic waste (39%), plastic and composite materials (11% each), pet waste (9%), personal hygiene (8%), and paper (7%)[5]. The City of Whitehorse offers curbside collection of organics and garbage. Residents self-haul recyclables to a depot or hire private collectors.

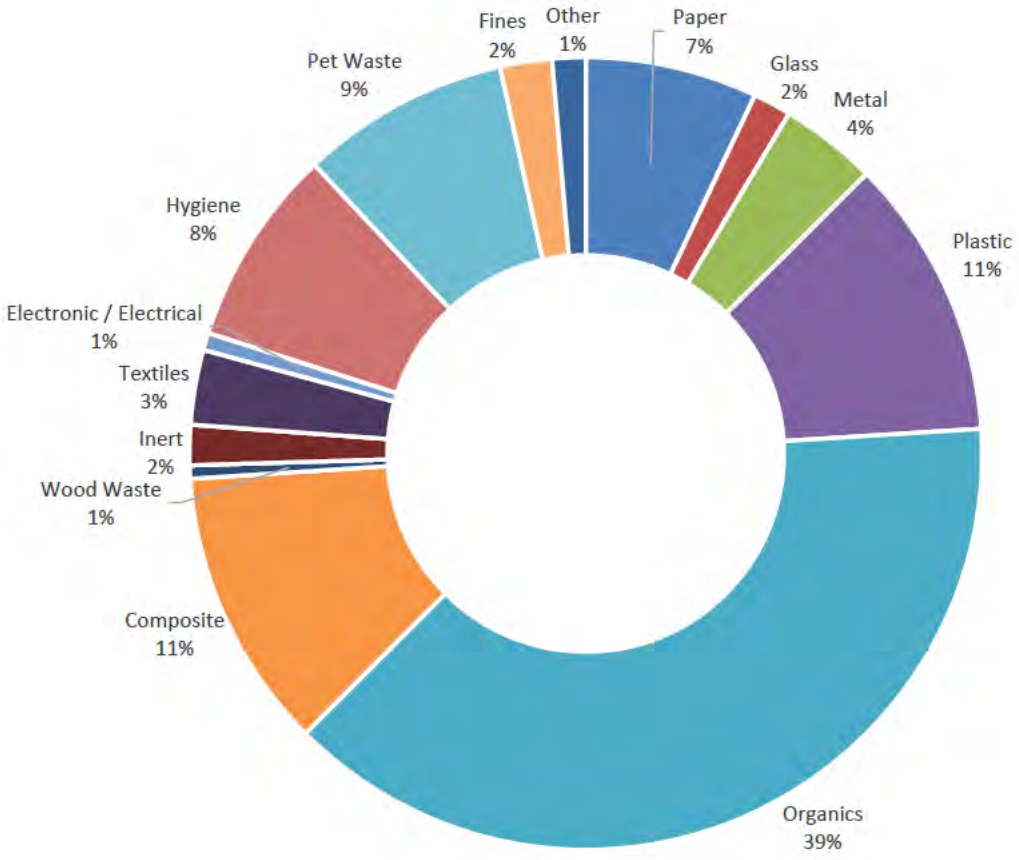


Figure 2: Percent Composition of Residential Waste Landfilled by the City of Whitehorse, Based on Weight (November 2017)

[5] City of Whitehorse 2017-18 Waste Composition Study November 2017, Interim Report by Maura Walker and Associates, January 10, 2017.

3. Existing Solid Waste Management System

3.1 Waste Diversion

3.1.1 Reduction & Reuse Activities

The CoD is currently not actively promoting reduction and reuse activities, however the CKS has some initiatives that target the first 2 Rs (reduce and reuse) of the sequential 5 R pollution prevention hierarchy (reduce, reuse, recycle, recover and residuals management).

At the Quigley Landfill, reusable goods are accepted and stored in the freestore shelter (adjacent to recycling depot). The freestore accepts donated items/clothing in good working order and reuseable construction material that has already been de-nailed and sorted. Bicycles and plastic buckets are stockpiled outside for reuse by the local community.

In 2008, turquoise Dawson City reusable bags were distributed by CKS to reduce the amount of single-use plastic bags used by store customers.

3.1.2 Curbside Collection of Recyclables and Organics

Private Collection of Recyclables

A private curbside collection service for recyclables is available in Dawson. The service is either offered by CKS or by one of the CKS Board members independently. There are currently 43 households signed up for this service at a cost of $20 per month. There is also private collection of cardboard from ICI customers. However, at this time, the majority of cardboard is burned at the Quigley Landfill and not recycled.

CKS offers a commercial paper collection service.

Organics Collection

For residents of the Dome subdivision, Dredge Pond Subdivision, the Tr'ondëk Hwëch'in First Nation subdivision and the rec centre, compost bins (individual garbage cans) are provided in each of these areas during the summer. These are emptied twice per week. Due to the high level of contamination, the compost product is used for final cover at the landfill.

Compostable materials are collected in the summer from commercial areas as needed.

Recycling in Public Spaces

CKS has a contract through the CoD’s recreational department to rent out recycling bins and place them around town. CKS empties bins weekly and retains the value of the refundables. All recyclable materials are being collected in one stream in those bins. There are 14 bins around town (e.g. at the parks, the community garden, baseball diamonds, skate park, and Victory gardens). Other bins are rented out by CKS for events.

3.1.3 Recycling Activities at the Recycling Depot and Landfill

CKS operates a recycling depot in downtown Dawson at 1067 2nd Avenue, as well as another at the Quigley Landfill. At the CKS depots, residents can drop off their recyclables and refundables[6]. Table 1 outlines the recycling opportunities offered at each of the CKS depots. CKS has indicated that they are currently operating at or beyond capacity.

Table 1: Recycling Activities at the Depots Downtown and at the Quigley Landfill

Recycling	Downtown	Quigley Landfill
BCR materials (refundables)	x	x
Glass (non-refundables)	x	x
Plastics (e.g. #1, #2, #4 - #7, plastic film	x	x
White paper (e.g. hard mixed paper & office pack)	x	x
Brown paper (Cardboard & Boxboard)	x	x
Metal	x	x
Polystyrene Foam	x	x
Tin	x	x
Tetra Pak®/Wax Cartons	x	x
Household Hazardous Waste (HHW)		x[7]
Tires		x
Used oil		x
Major appliances		x
Compostable organic waste		x
Electronic waste (including cell phones)		x
Batteries[8]		x
Reusable Goods[9]		x

Although cardboard and glass are currently accepted, they are not being recycled. Cardboard is burned at the landfill throughout the year as conditions permit. If there are prolonged dry periods, the cardboard is buried with the C&D waste to prevent a fire hazard. Glass is crushed and disposed of in the landfill. There are currently no reuse options for glass.

HHW collection is currently done once per year. The depot at the Quigley Landfill stockpiles any HHW that is dropped off, but HHW is not commonly accepted as regular practice.

[6] Material covered under the Beverage Container Regulation (BCR).
[7] Quigley landfill accepts HHW such as asbestos, antifreeze, mercury-containing equipment, paint, used oil, etc. (SWMP 2013-2023).
[8] Alkaline batteries & lead acid.
[9] Reusable goods are salvaged and sold via the reuse store.

During the summer, the Quigley Landfill is open from Tuesday to Saturday, 12:00 pm to 7:00 pm, and is closed on Sundays, Mondays and Public Holidays. Winter hours are 11:00 am to 6:00 pm.

3.1.4 Processing of Recyclables

The recyclables collected at the CKS depots are sent to Raven Recycling, where they are consolidated for transport to other material recovery facilities for sorting and processing.

One baler is currently used at the Downtown location. The following materials are received from the CKS depots to Raven Recycling in Whitehorse:

- Materials in mega bags: mixed plastics, polyethylene film, polystyrene foam, tetra (refundable), cans, plastic bottles.
- Materials transported on pallets: glass (refundable), cans, plastic bottles/fibre/aluminum/tin, all in bags on top of pallets.
- Baled materials: cardboard (sometimes). It is unclear which other materials are currently baled.

YG manages the contract for transfer of recyclables from both depots to a local recycling processor in Whitehorse. On a weekly basis, the contractor, Kluane Freightlines, hauls recyclables from the two depots in CoD to Raven Recycling for processing. The hauling of materials is only performed when backhauls are available.

3.1.5 Organics Management

Compostable materials from organics collection bins around the City (Section 3.1.2) and organics accepted from customers at the landfill depot are managed on a concrete slab by the Quigley Landfill.

The organic material is being composted at the landfill. This facility is able to handle compostable food waste (fruit and vegetable trimmings), but is not equipped to handle the full range of food waste (e.g. cooked food and meat). Composting is currently undertaken without a rigid composting process and without any regular testing of product quality.

More work is required to determine the requirements for proper composting and for producing a high quality compost.

3.2 Residual Waste Management

3.2.1 Curbside Collection of Garbage

Curbside collection of garbage is currently undertaken by a private hauler, Ed's Repair. Within municipal boundaries, curbside garbage collection is provided weekly on Wednesdays, Mondays or Fridays. The contractor is servicing residents and small ICI customers at the same time.

Commercial waste is collected by the same private hauler, Ed's Repair, as often as is necessary to keep up with the amount of waste being generated by the businesses. Often,

commercial waste is collected six days per week in the summer and three days per week in the winter. Garbage from ICI customers is currently collected in either 6 yd^3 containers or in garbage bags placed in self-made boxes.

For residents of the Dome subdivision, Dredge Pond Subdivision, and Tr'ondëk Hwëch'in First Nation subdivision, 6 yd^3 MSW bins are provided.

3.2.2 Operational Waste Disposal Facilities

MSW is not accepted at the downtown depot, and is only accepted at the depot at the Quigley Landfill.

The CoD is operating one waste disposal facility. All MSW from within the CoD is hauled to the Quigley Landfill, which is currently operating under a Solid Waste Management Plan (SWMP) that expires in 2023. Landfilling operations began in 1987.

The landfill currently accepts waste from areas outside their municipal boundaries through separate agreements. The CoD is unable to provide volume estimates of MSW from these areas.

The operating hours of the depot at the landfill are outlined in Section 3.1.3. Specific waste haulers and contractors are granted access to the landfill after operational hours; however, in general, the landfill is only operated during the same hours as the depot. The hours of operation for the facility differ by season and correspond with when the depot is open.

There is no weigh scale on site. No tipping fees are collected for accepting waste or recyclables at the facility. Based on the type of collection and landfilling equipment used, compaction of MSW and C&D waste at the landfill is minimal. Separate landfill cells are maintained for MSW and C&D wastes. With the current design, there is landfill capacity remaining for MSW until the year 2021. For C&D wastes, there is capacity until 2032; however, the Sustainable Landfill Study (Aug 2009), estimated that as of 2008, the C&D waste area may only have 5-6 years remaining in its lifespan. There is a need for an accurate assessment of the remaining landfill capacity. Based on a review of the landfill design and an inspection of the site, there is likely additional capacity that can be gained by revising the final topography plan.

A landfill study conducted in 2008 and 2009, estimated that approximately 66% of the landfill users were residential customers with household waste materials and the second largest user category was ICI at 16% (Quigley Sustainable Landfill Study – Phase II, Jeremy Taylor, Aug 2009).

3.3 Solid Waste Bylaws

The Waste Management Bylaw (#99-06) governs solid waste management activities within the CoD. This bylaw states that all commercial and institutional users must separate cardboard and other recyclables as identified by Council resolution prior to placing them out for pick-up or delivering them to the waste management site.

3.4 Solid Waste Management Budget

Based on the 2017 calendar year, the CoD received revenues from utility fees and YG funding for waste management and groundwater monitoring as follows:

Table 2: 2017 City of Dawson's Solid Waste Management Revenues

Funding Source	Actual	Description
Waste Management Facility Fees	$ 168,833	Further information about the fee structure is included in section 3.2.1.
YG Funding for Waste Management	$ 47,871	Operational funding for the Quigley WMF (for operations and maintenance) of up to $75,000 per year from YG as per the transfer payment agreement (valid until March 31, 2019). The agreement with YG may be revised ahead of March 31, 2019.
YG Funding for Ground Water Monitoring	$ 20,000	
Total	**$ 236,703**	

The YG Funding for waste management is specifically for YGs contribution to cover the additional costs associated with the landfill users that are outside of the municipal boundary but within the wasteshed. It does not fund any portion of the cost of the landfilled waste generated within municipal boundaries.

In the 2017 calendar year, the CoD had total expenses related to waste management of $640,000, of which approximately $330,000 is related to waste collection from residential and commercial customers. There is an obvious shortfall between the revenue and the expenses for solid waste management services.

There is no formal contract set up for the curbside collection of residential or ICI waste by the contractor. It is not possible to break down the cost to collect residential garbage separate from that of ICI. The contractor is currently paid an hourly rate, without any incentives to deliver the service as efficiently as possible.

Structure of Waste Management Facility Fees

The CoD charged the following annual waste collection program fees in 2017:

- Commercial Space $215.00
- Commercial Mobile Refreshment Stands[10] $150.00
- Residential Unit $145.00
- Vacant Institutional Commercial Lot $57.50
- Vacant Non-Institutional Residential Lot $45 00

The vacant lots do not generate any garbage that require collection.

[10] Food trucks receiving the service during the tourist season.

4. LINKAGES WITH OTHER PLANS AND GOALS

4.1 Official Community Plans

The Official Community Plan (OCP) Bylaw is the main policy document for the CoD. It outlines the goals and policies that are used to guide decision making on planning and land use management.

The OCP mentions environmental stewardship and the need to address important local environmental impacts with a long-term goal of minimizing the environmental impacts of municipal regulations, programs, services and projects. The OCP states that the CoD should consider examining methods and approaches to delay the need for a new landfill, such as supporting further recycling and waste diversion programs.

4.2 Integrated Community Sustainability Plan

After the Gold Rush, the Tr'ondëk Hwëch'in and City of Dawson Integrated Community Sustainability Plan (ICSP) was developed in partnership with the Tr'ondëk Hwëch'in and the CoD in 2009. It outlines waste management as one of the sustainability dimensions. The ICSP highlights some aspects of waste management that need improvement. It states, "Initiatives should be introduced to reduce material consumption and associated waste, and raise awareness of solid waste issues. Improved recycling programs and infrastructure would increase the volumes of waste diverted. Better facilities and supervision at the landfill would similarly help reduce the waste deposited at the facility". It identifies the following actions for how these objectives can be achieved:

- Improve facilities at the landfill, including better signage and separation.
- Improve opening hours at the landfill and remove public key access.
- Community promotion of education and initiatives to encourage reduced consumption.
- More local government support and partnerships for local environmental organizations.
- Increase the types of materials that can be recycled.
- Household "blue box" program.
- Public recycling bins, particularly during the tourist season.
- Community composting program.
- Improved downtown recycling depot and drop-off facilities.
- Plastic bag eradication initiative.
- Identify environmentally sustainable alternatives for materials.
- Investigate alternatives to burning waste.
- Research alternatives for recycling waste oil.
- "Polluter/user pays" policy and users paying the full cost for consumption and disposal.
- Lobby governments for greater recycling and waste reduction funding and resources.

4.3 Other Relevant Strategies and Plans

The Minister of Community Services, John Streicker, spoke during the Association of Yukon Communities' annual general meeting on May 11, 2018, about actions towards a sustainable solid waste management system for Yukon. He presented the findings from a report by the Ministerial Committee on Solid Waste on recommendations for actions. Some of these are presented as part of three themes in the Table 3 below, together with potential actions for the CoD.

Table 3: Key Recommendations by Ministerial Committee on Solid Waste Relevant to CoD

Theme	Recommended Initiatives Relevant to CoD	Potential Action for CoD
Regionalization	▪ Develop and implement a solid waste regionalization strategy and framework	▪ Work with YG and other nearby communities to assess synergies to reduce costs
User Pay	▪ Implement Designated Material regulation (DMR) as expediently as possible and explore Extended Producer Responsibility with industry	▪ Plan for the management of increased number of DMR material categories in the development of a new SWDC
	▪ Implement a solid waste user fee pilot in Whitehorse periphery to explore potential user fees at all sites	▪ Communicate all intentions of implementing user fees with City of Whitehorse to make sure that efforts do not work against each other
	▪ Implement a coordinated communications strategy promoting stewardship programs and practices in Yukon	▪ Collaborate with YG and other municipalities to develop a shared communication strategy
Clear Standards	▪ Establish a Solid Waste Implementation Working Group	▪ Participate in the working group to represent CoD interests
	▪ Implement best practices for waste management facility operations	▪ Ensure that agreed-upon best practices are implemented
	▪ Explore the role of social enterprise, entrepreneurship and local innovation in solid waste management across Yukon	▪ Continue to work closely with CKS and other non-profit organizations to improve current waste management

5. PROGRAM DESIGN DEVELOPMENT OPTIONS

5.1 Curbside Collection Service

There are many considerations for developing a curbside collection program. Key aspects are which waste materials to collect: garbage, recyclables, and organics. The types collected will determine the collection frequency.

For recyclables, decisions need to be made as to which recyclable materials should be included and how these are best collected, either through a commingled collection in larger receptacles or via dual/multi streams that require the residents to sort the materials more.

The service can be provided to single-family dwellings only, or it can also include multifamily (MF) buildings and ICI buildings. For example municipalities often choose to provide services to MF buildings with less than 4 units and to ICI if these can be serviced at curb.

Decisions related to these considerations will inform the collection truck requirements and service costs.

5.1.1 Quantity of Garbage, Organics and Recyclables to Collect

Potential Customers to Service

The primary objective for the CoD is to provide curbside collection service to all of the residential units within City boundaries that are currently being serviced by garbage collection only. An extended curbside collection service for garbage, recyclables and potentially organics must service at least 537 units (currently serviced). Service needs to also account for population growth.

The current garbage collection service also services 260 commercial units and four seasonal food trucks. This section will assess the suitable options and costs for curbside collection for residential and ICI customers.

Table 4: Potential Customers to Service

Customer Type	Number to Service
Residential Unit	537[11]
Commercial Space	260
Commercial Mobile Refreshment Stands (food trucks receiving the service during the tourist season)	4 (seasonal)

Quantities to Collect from Residential Units

There is no information on the amount of recyclables currently diverted by the collection bins for recyclables provided within the City. In order to estimate the quantity of

[11] Includes 80 units located in MF buildings.

recyclables that could be collected, the CoD's waste composition results from 2009 and a typical garbage set-out rate with no collection of recyclables were used. MH worked with the City of Terrace and the Regional District of Kitimat-Stikine for the planning of a curbside collection service for garbage and recycling in 2013. Based on numbers from other places, the CoD is likely to have a garbage set-out rate of approximately 15.0 kg/household. This waste generation rate will provide a suitably conservative estimate on which to base the preliminary design of the new curbside collection system.

Garbage set-out rates from City of Whitehorse and their recent waste composition results cannot be directly applied to City of Dawson, since Whitehorse has offered an organics curbside collection for residents for many years and there is wide uptake of recycling through private collection and drop-off at depots.

Experience in other jurisdictions indicates that not all recyclables will be successfully captured. It is reasonable to assume that at the beginning of the program, 70% of households will participate, and those households will successfully divert 70% of their recyclables and organics, yielding an overall recovery rate of 49% of the recyclables and organics respectively. The participation and capture rates may increase over time. Well-established recycling programs can have participation rates of over 95% and capture rates of over 90%.

Table 5 summarizes the potential quantities of the three waste streams: garbage, recyclables and organics.

Table 5: Potential Quantities of Garbage, Recyclables and Organics to Collect from Residents

Waste Stream	Tonnes to Collect per Year	Tonnes to Collect per Week
Garbage	284	5.1
Total recyclables	110	2.1
Recyclable fibres	53	1.0
Recyclable plastic and metal containers[12]	56	1.1
Organics	25	0.5

In BC, Recycle BC is the stewardship organization responsible for the Extended Producer Responsibility (EPR) program, which was launched in BC in 2014. Prior to the launch, they collected data on collection quantities and costs from over twenty local governments.

The estimate of recyclables to collect per serviced household of 0.20 tonnes per household per year is within the range of collection rates reported by Recycle BC. In BC, the rates ranged from 0.05 to 0.27 tonnes per household with a mean of 0.18 tonnes and a median of 0.19 tonnes per household.

[12] Assuming half of refundable containers currently found in the garbage would be collected at the curb.

When estimating the set-out rates for organics, based on waste composition and garbage set-out rates, each household is only assumed to generate approximately 1 kg of organic waste for collection per week (in total 0.5 tonnes to collect per week).

The City of Whitehorse provides a curbside collection for organic waste. The collection covers all food and yard waste free of packaging, food soiled cardboard (i.e., pizza boxes), paper towel, and newspaper used as compost bin liners. When applying the organics set-out rate per household recorded by the City of Whitehorse (5.3 kg per week per household), it yields an annual generation estimate of 148 tonnes organic waste or 2.8 tonnes per week. This rate is only likely to be achieved after several years of successful operation, and it would be reasonable to expect the initial capture rate to be modest (1 kg/week). The curbside collection must be able to handle increasing tonnages of organic waste as the program develops.

Quantities to Collect from Commercial Customers (ICI)

The quantities to collect from commercial customers depend on the types of businesses and institutions operating in the City. It is difficult to simply apply waste generation rates from other regions of Canada, as the make-up of the ICI sector greatly varies. The CoD is currently collecting ICI waste, but does not have any data as to quantities collected. Table 6 provides a summary of the estimated maximum tonnages of materials (garbage, recyclables and organics) available to collect from the ICI sector at the curb.

In 2014, MH was involved in estimating waste disposal rates for southeast Yukon communities as part of a Southeast Yukon Recycling Circuit Study for the Yukon Government (YG). The study resulted in an estimated combined disposal rate for the communities outside Whitehorse of 781 kg/cap/yr. This disposal rate includes residential and ICI quantities, but excludes construction and demolition waste quantities.

For the City of Dawson and its permanent population of 1,375, this equates to 1,074 tonnes, of which an estimated 284 tonnes is likely to be collected from residents. The remaining 789 tonnes (or 15 tonnes per week) can either be available for collection from ICI or from residents self-hauling MSW to the landfill. CoD's population almost doubles during the summer months and will increase ICI waste quantities, rather than the residential curbside collection quantities. Table 6 includes the estimated peak quantities to collect from ICI customers during the summer months. It is unlikely that all of this MSW will be available for curbside collection from the ICI sector; however, this waste disposal rate will be used as a conservative estimate.

In 2012, the Regional District of Nanaimo (RDN) reported 38,717 tonnes of recyclable materials from all sectors (ICI and residential), based on data acquired through waste facility licencing requirements. This represents approximately 0.26 tonnes per capita per year. If this is applied to the City of Dawson's population (1,375 according to 2016 census data), this would equate to 358 tonnes of recyclables per year. If the estimated tonnages of residential recyclables are deducted (110 tonnes as shown in the table above), the ICI sector is likely to generate a total of 248 tonnes of recyclables (or typically 4.8 tonnes per week). This estimate is likely to be applicable after a few years of program implementation. The RDN already had a well-established waste diversion

program with a disposal ban on recyclables when the quantities of recyclables were reported.

The annual capture rates for organic waste from the ICI sector can be expressed per capita. The Comox Valley Regional District (CVRD) in BC has estimated a capture rate from the ICI sector equivalent to 18 kg/capita/year and the Abbotsford transfer station has recorded a capture rate of 31 kg/capita/ year. For the Dawson population, the capture rate in the CVRD is applicable where organics disposal bans have not been enforced yet. The ICI sector is likely to generate approximately 25 tonnes organic waste per year available for collection (the same estimated quantity as from the residential customers).

Table 6: Potential Quantities of Garbage, Recyclables and Organics to Collect from ICI Customers

Waste Stream	Tonnes to Collect per Year	Tonnes to Collect per Week	Peak tonnes to collect per week (summer months)
Garbage	789	15	30
Total recycling	248	4.8	10
Organics	25	0.5	1

Combined Quantities to Collect from Residential and Commercial Customers

The combined annual quantities of garbage, recyclables and organics to collect from both residential and ICI customers are summarized in Table 7 below.

Table 7: Combined Quantities of Garbage, Recyclables and Organics to Collect from ICI and Residential Customers Annually

Waste Stream	Tonnes to collect from residents	Tonnes to collect from ICI	Combined Quantities
Garbage	284	789	1,074
Total recycling	110	248	358
Organics	25	25	49
TOTAL	**419**	**1,062**	**1,481**

5.1.2 Collection Frequency

Most jurisdictions, particularly those that do not offer separate collection of organics waste (food scraps), collect garbage every week. This is the case in the CoD.

If organics are not separated at source (i.e. the household or business), weekly collection is considered appropriate, as the waste contains kitchen scraps and the mixed waste can become odourous when stored for longer than a week. If the CoD is wanting to offer a comprehensive organic waste collection that includes all food scraps, the frequency of garbage collection can be reduced to biweekly. If only yard waste is collected, the CoD may want to consider only seasonal collection of yard waste.

As recyclables are not putrescible and do not generate odours, they do not require weekly collection. A biweekly collection may be sufficient for residents. If organic waste is collected

on a weekly basis, the CoD may want to offer an alternate week curbside collection for recyclables and garbage.

5.1.3 Collection Truck Types for the Residential Quantities

The collection of garbage from residents is likely to require a different truck than what is needed to collect garbage from ICI customers.

For the residential collection of waste materials, the CoD must decide whether it prefers to implement manual, semi-automated or automated collection. Each option has strengths and weaknesses that must be considered.

Figure 3: Manual Garbage Collection (London ON)

Manual collection has been the industry standard for many years. Vehicles are typically operated by a 1 to 3-person crew, with one that drives while the other(s) collect the waste and lift it into the truck. Access can be via a rear-loading or side- loading compartment. Side-loading compartments are now more common in residential applications, as the lift height can be lower. With a manual system, residents provide their own garbage can, which is usually required to meet certain specifications with respect to volume and weight limits. Manual collection trucks cost in the order of $250,000 to $350,000.

Figure 4: Manual Garbage Collection (Edmonton, AB)

Work Safe BC is not in favour of using single-operator manual trucks. For the CoD, it is reasonable to assume that two operators are needed for one manual truck: one for driving and one for collecting waste.

Automated collection uses an articulated arm to reach out and grab a standardized garbage cart (Figure 5 and Figure 6). Automated collection vehicles can be operated by a single person who remains in the cab at all times, operating the arm via a joystick. Fully automated systems work well in areas with good access to the garbage carts. Areas with narrow streets, on-street parking, street trees, or those that experience significant quantities of snow are less well served by automated collection. Fully automated

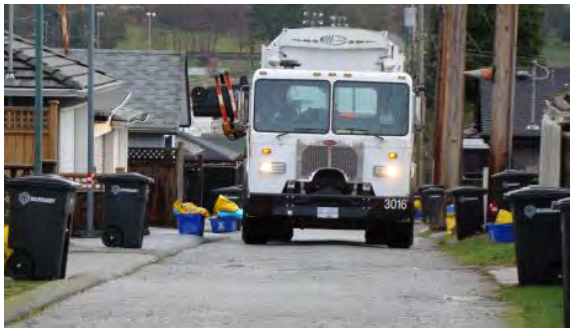


Figure 5: Typical Automated Collection (Burnaby, BC)

systems are more commonly used in cities with laneways (such as Vancouver), or in cities where most households have driveways (such as Prince George). The cost of an automated vehicle is higher than a manual collection vehicle, due to the incremental cost of the arm. However, the increased speed means more households can be serviced in a single day. The capital cost of the standardized carts required can be a barrier to introducing automated collection. The standardized containers are usually purchased and provided by the local government and remain with the property when an owner/occupant leaves.

Figure 6: Typical Automated Collection (Prince George, BC)

Figure 7: Semi-automated Collection (View Royal, BC)

Semi-automated collection (Figure 7) provides the flexibility of manual collection of recyclables, but reduces the health and safety risks associated with lifting garbage containers from the ground. The truck performs this by a hydraulic lift. This method is similar to manual collection and usually involves the use of standardized collection containers that are compatible with the lift.

Figure 9 shows a collection truck with the option to split the body to manually collect separate streams (e.g. recyclables) or to collect waste streams via carts through a semi-automated system. The M-Class truck is a side-load collection truck available in capacities of 14 to 22 yd^3. The unit can pick up any combination of garbage, recyclables and organics. The truck body can be mounted on a hook-lift frame so the chassis can collect roll-off bins. When a single axle chassis is selected (for sizes of 14 to 16 yd^3) the operator does not require a commercial driver's license. Dual steering can be provided to eliminate the need for two operators.

Figure 8: Semi-automated Collection M-Class Truck

We recommend the use of manual or semi-automated collection for collecting garbage in the CoD. While other jurisdictions have shown that fully automated collection can work in rural areas with snowy winters (e.g. Regional District of Central Okanagan), we believe that fully automated collection is not necessary in the CoD. The additional capital costs

associated with the mechanized arm and the higher maintenance requirements make this option less attractive for a service area of only 537 homes. It would be necessary to have a back-up vehicle that would also be capable of doing automated collection, and this represents a significant amount of capital resources that would not be fully utilized.

While semi-automated collection also has some additional costs (i.e. the purchase of standardized carts), the incremental cost for the trucks is substantially lower than a fully automated truck. Existing trucks can be retrofitted with lifts, providing more flexibility in terms of securing primary and back-up collection vehicles. Semi-automated collection offers the potential for increased efficiency and definite improvements to worker health and safety, which should not be overlooked when comparing it to manual collection.

The collection of recycling can be performed differently than the collection of garbage. Manual collection of recyclables is sometimes undertaken when automated or semi-automated collection of garbage is introduced. This is partly because recycling tends to be lighter than garbage, and there are fewer health and safety issues associated with lifting recycling into the truck. Another reason to undertake manual collection is to maintain the ability to collect multiple streams of recyclables (e.g. newsprint, other paper products and containers).

The main advantages of switching to automated or semi-automated recycling collection are potential consistency with the garbage collection system, the potential to use split compartment collection trucks (Figure 8) to collect garbage and recyclables (as commingled) at the same time, and the increased volume of the containers used by residents compared to standard blue boxes (which may increase the capture rate). Refer to Section 5.1.5 for more information about collection containers. However, choosing the appropriate split between compartments may be challenging. If residents of a particular route divert more of one waste stream than other routes, that side of the split truck will fill up faster and may need to be emptied before the other part of the truck is full. Changes in diversion rates over time or the addition of recyclable items to the collection program can have an impact on split requirement of the container.

Figure 9. Semi-automated Collection Truck with a Split Compartment (Toronto, ON)

Trucks used for collection of residential organics and recyclables can be the same as those used for garbage pick-up, as long as the trucks are cleaned between uses. It is important to not contaminate the organics and recyclables.

5.1.3.1 Truck Size Requirements

Garbage Collection

Based on an 8-hour work day (480 minutes available time), approximately 350 minutes was assumed to be available for manual collection (excluding time for breaks, clean-up and to get to landfill/depot). Typical collection times in suburban neighbourhoods with manual collection are in the order of 0.7 min (42 seconds) per household. On this basis, a single manual truck can be expected to service approximately 560 households per day. The City of Whitehorse has reported performing approximately 700 lifts per day per truck.

The number of households in the CoD (currently 537 residential units being serviced) is within the number that can be serviced by a single truck in a single day. However, it is best to plan for collection that also allows for population growth or the addition of ICI buildings, if these can be serviced at curb.

The estimated garbage disposal rate from each household is approximately 10 kg per household per week if recyclables are also collected at the curb and approximately 11 kg per household per week if recyclables and organic waste are also collected at the curb. With these disposal rates and the typical compaction ratios for collection vehicles, a truck servicing 560 dwellings would require a minimum capacity of 16.5 yd^3. To provide sufficient flexibility, we recommend a truck size of at least 18 yd^3 be used for garbage collection using a manual collection truck.

If a multi-purpose semi-automated truck with a 16 yd^3 capacity is used for the collection of garbage (e.g., M-class truck, which does not require a commercial driver's license), it can service approximately 200 households before it needs to dump its load at the landfill. It should still be possible to cover all of the residential units currently serviced within one working day. The main benefit of the semi-automated truck is that it only needs one operator, compared to two operators needed to safely operate a manual collection truck.

We recommend the use of two trucks, with one as a contingency vehicle for those times when the primary truck is out of service, waste volumes are higher than predicted, or when weather and road conditions slow collection activity.

Recyclables

For recyclables, a weekly collection service would require a truck capacity of at least 16.5 yd^3 to service 560 households in a day, if all materials were commingled.

For this study, we assumed that recyclables are collected as two separate streams: fibres (paper, cardboard and boxboard), and mixed containers (plastics and metal). Glass is assumed to only be collected at depots.

Weekly collection of recyclable fibres and mixed containers separately will require truck capacities of 5 yd^3 and 11 yd^3, respectively. Biweekly collection would require a truck capacity of over 22 yd^3 for mixed containers, which may be a larger size of collection vehicle than the City wants to use for other waste streams (garbage and organics).

As mentioned above, two trucks are recommended at a capacity of at least 18 yd^3 each, since this capacity is needed for the garbage collection. The additional truck can be used for weekly collection of the second stream of recyclables.

A smaller collection truck (at a capacity of 16 yd^3), such as an M-class truck with a split compartment for fibres and mixed containers, can also be used. However, two collection days would be required to cover all households with one truck. If two trucks are used, each one can cover the two streams of recyclables (fibres and mixed containers) in one working day.

Organics

Organic waste can be collected with any of the truck sizes that work for garbage and recyclable collection. There is no concern about capacity issues, since the capture rates per households are likely to be modest.

5.1.4 Collection Truck Types for the Commercial Quantities

Garbage from ICI customers is currently collected either via 6 yd^3 bins or garbage bags. Often commercial waste is collected six days per week in the summer and three days per week in the winter.

Front-end loading trucks (Figure 10) currently used by the waste hauler in Dawson can typically collect bins at capacities of 3, 4, and 6 yd^3. These collection trucks are different than the ones used for collecting residential waste quantities at the curb.

Figure 10: Front-end Loading Truck

Truck Size Requirements

As a conservative estimate, 15 tonnes of garbage will be available to collect from ICI customers each week (assuming no collection of organics is provided at the curb). Currently, 264 commercial customers are serviced, which equates to 0.5 tonnes per customer per week. The average volume per customer equates to only 0.5 yd^3, which means a total of 133 yd^3 of uncompacted garbage will be available to collect.

Depending on the business size and type of organization, the quantities will vary greatly. When the population base doubles during the summer months, the waste quantities will also peak and a service will need to cater for this increase. The garbage quantities can reach an estimated 1 tonne per week.

ICI customers can be offered several options, and the preferred option can be made the default. Carts can be serviced by a semi-automated truck used for residential collection, but these will be too heavy for manual collection. Bins at capacities of 3, 4, and 6 yd^3 will require a front-end loading truck.

It is difficult to determine the type of truck needed and the number of lifts required until there is more information on the current waste collected and the types of ICI customers

to service. The collection of waste and recyclables for these customers can be fully left to the private sector to manage. If the CoD wants to continue to service the ICI customers, they can either choose to service them with the residential collection truck or have a separate front-end loading truck dedicated to ICI customers. A dedicated truck for larger volumes may need less frequent collection. The benefits and disadvantages with a City-managed curbside collection program collection is included in 5.1.7.

With the use of an M-class truck, ICI waste can be collected via a semi-automated system for carts. For larger volumes using larger containers, a front-loading system would be required.

5.1.5 Collection Containers for Residents

If a manual garbage collection system is chosen, the CoD will not supply collection containers to residents. The CoD can set requirements for the containers purchased and maintained by residents. Any containers that do not meet the requirements may not be collected. The CoD should work with local retailers to ensure that suitable containers are available for purchase.

The requirements for resident-owned garbage containers should address the number, size and weight of the collection containers. Based on WorkSafe BC standards, it is recommended that the maximum weight of a container be less than 20 kg (44 lbs). It is also advantageous to workers to limit the size of container; a typical restriction is 80 litres. It is also standard to limit the number of containers allowed to be placed at the curb.

In addition to size and weight restrictions, the CoD may also wish to implement additional requirements to limit wildlife attraction, such as requiring garbage to be enclosed in containers with animal-resistant lids (requirements may also specify that lids be able to be removed completely and that residents unlatch lids in the morning of garbage collection). Many jurisdictions have a bylaw that requires residents not to set out their garbage before 7:00 am the day of collection.

For manual recycling collection, the CoD could supply standardized containers or could set requirements for the containers to be purchased and maintained by residents. It is recommended the CoD purchase and supply a recycling container to each household. This will distinguish recycling from the garbage, create more awareness and excitement about the program, and increase participation. Specifying container requirements is not likely to be as effective in addressing wildlife attraction issues compared to providing an approved wildlife resistant container to each resident.

Many municipalities across Canada provide Bluebox Containers (typically approximately 50 litre volume), in which households can place commingled or source-separated recyclables. If source separation is required, each household usually has extra bags for fibres (sometimes broken into newspaper vs cardboard), or they are provided with an additional container (e.g. grey box for other materials such as glass or fibres). Processors that receive source-separated recyclables are likely to achieve a higher operational efficiency and lower processing costs compared to when commingled recyclables are collected.

Figure 11: Common Curbside Collection Containers for Recyclables

If a semi-automated garbage collection system is chosen, the CoD would need to provide standardized collection containers for garbage to residents. Containers are best to remain the property of the CoD, and would be registered to each property receiving the service rather than to the property owner. If the owner moves, the container remains with the residential unit. No weight restriction is required in a semi-automated system, as no manual lifting takes place during collection. Containers typically cost $65-$100, depending on size and number ordered. Bear-proof containers cost approximately $200-$350, depending on the sophistication of the system. The most expensive containers have automated latch systems.

The CoD can offer a range of container sizes for garbage to meet the needs of different households. The estimated weekly volume of garbage and recyclables is approximately 74 litres and 22 litres, respectively. The provision of varying sizes can allow the CoD to implement a user-pay system, whereby a household needing a larger container pays a higher annual fee, reflecting their increased use of the system. While some jurisdictions offer as many as five sizes of cart, we have observed that the majority of local governments offer three sizes (see example shown in Figure 12). Three typical sizes that may suit the CoD are:

- Small: 80 litres (reduced fee)
- Standard: 120 litres (default fee)
- Large: 240 or 360 litres (additional fee)

Figure 12: Three Typical Cart Sizes Used for Semi-Automated Curbside Collection (Vancouver, BC)

For semi-automated collection of garbage, 120, 240 or 360 litre carts are typically provided to all residents. It is not typical to offer multiple sizes of recycling carts. The provision of a single large cart would only allow for commingled collection of recyclables.

Alternatively, recyclables from residents can be collected manually using bluebox containers for mixed containers and separate bags for fibres. This can be done on either a weekly or a biweekly basis. If a biweekly service is selected, the selected container must provide sufficient volume (the average volume of mixed containers will be approximately 40 litres per household every two weeks). If recyclables are comingled, the anticipated volume is approximately 50 litres every two weeks.

5.1.6 Collection Containers for ICI Customers

Waste materials (garbage, recyclables and organics) can be collected from the ICI customers at the curb if there are small quantities that can be collected as part of the residential collection.

Examples of container options for garbage include:

- One cart at a volume of 240 litres (by default), or
- One 3 yd^3 front-end load container.

For larger quantities, ICI customers can be allowed to place several carts at the curb or use larger collection bins (3, 4, and 6 yd^3) at a higher fee. Customers that share a bin can be provided a discount as incentive to save space and reduce waste.

For small quantities of recyclables, ICI customers may want to use carts that can be serviced by a semi-automated curbside collection. Recyclables in some areas are collected from ICI in split bins, in which three types of recyclables can be collected (Figure 13). These collection bins come in capacities ranging from 4 to 14 yd^3.

For ICI customers with large quantities of recyclables, ICI can be serviced by a 20 or 30 yd^3 roll-off for wood waste, metal, or plastics. These large roll-off bins dedicated to source-separated materials are probably not suitable options in the Dawson context. ICI customers are best to contract privately for this type of large-scale pickup.

Figure 13: Split Bin Options for Recyclables

The City of Whitehorse has been offering a voluntary organics collection program for ICI customers since 2014 using small volume carts. Since this program is now at capacity, they are also offering large volume dumpster-based collection of organic waste (2 or 3 yd^3)[13]. The CoD may want to look at similar options and correspond with the City of Whitehorse on key learnings.

5.1.7 Procurement Considerations

The CoD can either provide curbside collection as an in-house delivered service or contract it out to private contractors. There are numerous pros and cons of a City-managed curbside collection program (i.e. a program delivered in-house), as outlined in the Table below.

Table 8: Advantages and Disadvantages of providing a City-managed curbside collection program

Advantages	Disadvantages
▪ More robust monitoring and enforcement of bylaws ▪ Greater flexibility to increase the number of customers receiving service in the future ▪ Better coordination of waste collection with public education and outreach initiatives, which may result in greater potential for customer participation in diversion programs as well as customer satisfaction ▪ Greater flexibility to modify services in the future ▪ Improved coordination between the collection from residential, multi-family, and ICI customers	▪ High initial capital investment to cover equipment costs ▪ Additional staff required – greater risk due to labour market conditions and availability ▪ Greater risk to changing waste stream tonnages and composition ▪ Exposure to greater liability through additional high risk operations ▪ Safety considerations and risks associated with collection ▪ Greater competition with private sector and potential complaints or conflicts

[13] http://www.whitehorse.ca/departments/environmental-sustainability/waste-diversion/additional-information/ici-organic-collection

Advantages	Disadvantages
▪ Potentially better opportunities to track safety data and more confidence in reporting of safety data ▪ Better coordination of waste transfer between transfer stations and processing facilities ▪ Greater control over quality of waste material entering facilities achieved through enforcement at the curb, including recyclables and organics	▪ Potential for higher operating/annual costs (staffing, maintenance, etc.) ▪ Potential for higher administrative, management, coordination costs compared to current contracted delivery model due to additional staff and resources managed

If contracted out, the CoD needs to consider the ability for the contractor to collect the materials. If a contractor has to invest in new trucks, the contract length needs to allow the contractor to amortize the cost of new trucks. It is difficult to determine the cost of contracting out garbage and recyclables collection without determining a market response to a request for proposals (RFP).

The following considerations should be taken into account when developing the RFP for curbside collection services:

- The length of a curbside garbage collection contract should be dependent on the level of service prescribed. Since manual collection has lower up-front costs, a shorter contract term (5 years) should result in an acceptable price. Semi-automated collection requires more expensive equipment; therefore, a longer contract term (8-10 years) will result in a more competitive price. A successful contractor may require six months' lead time from contract award date to purchase specialized equipment. However, if the CoD will accept the use of used equipment that meets performance standards, then the lead time can be reduced.
- All CoD households should be included in the same contract. The population base is not large enough to require multiple contracts. The service for ICI buildings should be separated into its own contract, since different trucks may be required.
- A more prescriptive RFP will yield submissions that are more directly comparable, but may also stifle creativity and the development of local solutions.
- The criteria against which the submissions are evaluated should be clearly defined (e.g. minimum performance standards for collection trucks).
- When manual collection is proposed, enforcement of weight restrictions should be the responsibility of the contractor.
- Receiving and managing complaints arising from the curbside collection should be the responsibility of the contractor.
- Paying of all applicable tipping fees should be the responsibility of the contractor.
- The CoD should have the right to final approval of the proposed route and timing.

We recommend that if the service is contracted out, the promotion and education related to the curbside collection of both garbage and recycling should be the responsibility of the CoD.

There seems to be a limited pool of private contractors/haulers that can provide collection services (i.e. limited competition), and there are concerns about the cost of the current service. One option for increasing competition and making sure costs are reasonable would be to put out a competitive tender and allow the CoD to also bid. To determine how many private service providers might be interested, some consultation with the private sector could be undertaken and then a Request for Expressions of Interest (RFEOI) could be developed to confirm how many providers could compete at the RFP stage.

5.1.8 Estimated Curbside Collection Costs to Households

There are two cost elements for the collection of recyclables: the costs for collection and the costs for processing materials. Processing costs add to the overall cost for recycling in the Yukon, due to the distance from markets as compared to other jurisdictions. The cost to collect recyclables will depend on the collection frequency and the number of streams the CoD chooses to collect.

There are many different ways that the CoD can provide curbside collection of garbage and recyclables to its residents. Two feasible collection options are described below and the estimated costs are described in Table 9.

Option 1: Manual Collection

- Collect garbage in containers purchased and maintained by residents (self-provided and not standardized), with one bluebox provided for mixed containers and reusable plastic bags provided for fibres.
- Collect via manual trucks (two trucks needed) at a capacity of 18 yd^3. Two operators would be needed per truck to operate safely.
- Garbage from all residential units can be covered in one day and two trucks can cover all the units in one day to collect the source-separated recyclables.
- Weekly collection of garbage and recyclables.

Option 2: Semi-Automated Collection

- Collect garbage in a wildlife-proof wheeled cart with one bluebox provided for mixed containers and reusable plastic bags provided for fibres.
- Collect via semi-automated trucks (two trucks needed) at a capacity of 16yd^3. One operator is only needed per truck.
- Garbage is collected in wheeled carts using the semi-automated truck arm, while with two streams of recyclables are collected manually using two trucks.
- All residential units can be covered in one day and two trucks can cover all the units in one day to collect the source-separated recyclables.
- Weekly collection of garbage and recyclables.

Table 9 presents the initial cost estimates for two of the main curbside collection options for garbage and recyclables: manual collection versus and semi-automated collection. Curbside

collection for garbage and recyclables is estimated to cost between $815 and $900 per household per year (or a monthly cost of approximately $70 - $80 per household).

Table 9: Cost Estimates for Two Options for Curbside Collection of Garbage and Recyclables

	OPTION 1 Weekly Collection of Garbage and Recyclables (manual)	OPTION 2 Weekly Collection of Garbage and Recyclables (semi-automated)
Collection Containers	$15,841	$123,241
Collection Vehicles (Annual costs of equipment, maintenance and insurance)	$251,280	$159,600
Operational Collection Costs (labour and fuel)	$137,099	$77,195
Processing of Recyclables (excluding amalgamation costs)	$77,792	$77,792
Total Costs	$482,012	$437,828
Cost per HH	$898	$815

Labour costs for the amalgamation of recyclables (sorting and baling) prior to haulage to the processor in Whitehorse were not included as the costs are largely dependent on the sorting equipment selected at the SWDC, and staffing levels. These costs are unlikely to increase overall costs significantly.

The cost estimates in Table 9 do not include the transportation costs of recyclables to a processor in Whitehorse, as these are costs are covered by YG. The transportation cost for the recyclable materials captured by the residential curbside collection are estimated at approximately $85,000. However, the increased use of balers in the new SWDC is expected to significantly decrease the cost for transportation of recyclables from CoD to Whitehorse.

5.1.9 Estimated Curbside Collection Costs to ICI customers

The following costs were gathered through hauler surveys and interviews conducted by MH (both locally and in BC's lower mainland) in 2016. The costs are assumed to include processing costs of recyclables. The costs from 2016 have been adjusted to account for historic inflation in Canada. The potential collection costs for haulers in Dawson depends on the available trucks and local processing costs. The information below simply provides cost estimates for possible service options. Sometimes customers also pay rental costs for the use of the containers.

Table 10: Typical Cost of ICI Collection Services per Haul for Lower Mainland BC and Whitehorse

Min. Size of Collection Containers	Frequency	Typical Cost of Service per haul Lower Mainland BC	Whitehorse Hauler Cost per haul
1 – cart	Weekly	$6	n/a
2 – carts	Weekly	$11	n/a
1 - 3 yd^3	Weekly	$18	$21
1 - 4 yd^3	Weekly	$18	$26
1 - 6 yd^3	Weekly	$18	$36

Min. Size of Collection Containers	Frequency	Typical Cost of Service per haul Lower Mainland BC	Whitehorse Hauler Cost per haul
1 – 3 yd^3 & 1 cart	Weekly	$24	n/a
1 – 6 yd^3 & 1 cart	Weekly	$24	n/a
1 - 6 yd^3 & 2 carts	Weekly	$29	n/a
14 yd^3 split bin (3 types of recycling)	Weekly	$0	$142
20 or 30 yd^3 roll-off (for e.g. wood waste, metal, or plastics)	On call	$155	$155

Assuming that each ICI customer (267 customers) will be provided a 3 yd^3 bin for weekly garbage collection using a front-end loading truck, the annual waste collection program fees will equate to $1,092 per customer (or $292,000 in total). In reality, not all customers will need that much capacity; many may want to opt into the residential curbside recycling or share a collection bin with adjacent businesses.

If ICI customers can be serviced by the provision of carts, which may be suitable for recyclables, the costs are likely to be half of those of front-end loaded bins. Garbage collected via carts would require semi or fully automated trucks.

5.1.10 Considerations of Processing Costs of Recyclables

It is assumed that all collected recyclables will be delivered to the new SWDC. At this point, it is very difficult to estimate costs per tonne of material processed. These will be dependent on the number of recyclables streams the CoD wants to collect, the market conditions for the collected materials and how much the processor will be paid as diversion credits per tonne of non-refundable recycling shipped to end market. Currently markets are down for many recyclable materials since the largest recycling market, China, is only accepting clean and source-separated recyclables.

There are two recycling processors in Whitehorse that are subsidized by the diversion credits: Raven Recycling and P&M. The processors are paid $150/tonne to offset the high cost of processing recyclables and shipping to markets. However, both processors have indicated there is insufficient revenue to continue recycling the products currently being recycled. YG has been considering other funding options, but there is no indication how the processing costs will be covered in future.

The cost estimates developed for the City of Whitehorse for the residential curbside collection of recyclables included processing costs (refer to Section 5.1.8).

5.1.11 Potential Funding

Table 11 below provides a comparison of the waste management fees for curbside collection based on a jurisdictional review of other municipalities in the Yukon. It shows that only Whitehorse and Faro offer residential curbside collection at lower user fees than CoD, and that CoD's commercial collection fee is the lowest of all jurisdictions. In fact, the City of Whitehorse's fee includes the collection of garbage and organic waste.

We suggest the CoD consider increasing collection fees for both residents and commercial customers. However, it is important to note that many jurisdictions use a combination of user fees and taxes. The CoD only charges residential and ICI customers waste management facility fees and no other taxes. User fees do not necessarily cover the entire cost of the service, and a collection service can be funded by a combination of revenue sources.

Table 11: Curbside Collection Fees in Other Jurisdictions of Yukon[14]

Municipality	Customer Type	Annual Fee or other Fee Structures	Service Level Provided
Faro	Residential Dwelling	$145.72	Curbside collection for garbage
	Commercial	$312.44/year $28.20/pick-up of 6 cubic yards $18.80/pick-up of 4 cubic yards	Curbside collection for garbage
Watson Lake	Residential Dwelling	$300	Curbside collection includes organics, garbage, and may include recycling
	Commercial	$600 (for twice/week pick up)	Curbside collection includes garbage, organics and recycling may be the responsibility of the owner[15]
Whitehorse	Residential Dwelling	$133 $240 (for recycling service)	Curbside collection for organics and garbage. Optional curbside collection for recycling
	Commercial	$133 Fee for recycling service is dependent upon frequency and amount collected	Curbside collection for organics and garbage. Optional curbside collection for recycling[16]
Teslin	Residential Dwelling	$ 300	Curbside collection for garbage. It is unclear whether Teslin also provides curbside collection of recyclables
	Commercial	$600 (for twice/week pick up)	Curbside collection for garbage
City of Dawson	Residential Dwelling	$215	Garbage collection only
	Commercial	$145	Garbage collection only

It is important to note that the user pay philosophy is strongly encouraged by the Ministerial Committee on Solid Waste (April 2018). In practice, this means that curbside collection of

[14] 2018 Yukon Municipal Waste Fee Summary, Compiled from Municipal data by Community Affairs branch, Government of Yukon, June 5, 2018.
[15] http://www.watsonlake.ca/wp/wp-content/uploads/2014/10/014-04-Garbage-Collection-Recycling-By-Law.pdf
[16] http://whitehorse.ca/departments/environmental-sustainability/waste-diversion/additional-information/residential-curbside-collection

garbage, recyclables and organic waste should largely be funded by the customers that receive the service (via user fees).

Many municipalities in BC mainly fund their collection services via utility charges to the property owner. The use of a utility fee is recommended for the CoD as well, as it is in line with “user pay” or “pay-as-you-throw” philosophies, which are equitable and generally received better by the public than an increase in taxes.

The collection services should be made mandatory for each household in the serviced areas, even if residents choose not to use the service. Any properties that will not receive the service (e.g. vacant properties, or households with insufficient road access) will be exempt from paying the fee.

If the CoD adopts a semi-automated collection system, the delivery of collection carts can trigger the need for payment. The carts would be linked to the property rather than the property owner. As noted earlier, households can be given an opportunity to increase or decrease the size of their container, which would result in the utility fee being adjusted accordingly.

In case of manual collection, all customers within the service area can be automatically assessed the utility fee for the basic level of service (e.g. 1 can of garbage + recyclables pick up per week). If customers (e.g. ICI and MF buildings) require additional garbage disposal capacity, the following mechanisms are proposed:

- Tag-a-bag stickers that would be made available for purchase from local sources (e.g. municipal facilities, local super markets) at a fee that reflects the additional cost of collection and disposal, and/or
- Self-haul the additional waste to the landfill or transfer station and pay the tipping fee (assuming a scale will be installed at the landfill).

The volumes of recyclables and organic waste will be limited by the types of containers used. Any additional recyclable materials will need to be taken to a depot. Some municipalities in BC offer pick-up of unlimited quantities of yard waste when they are stored in paper bags. Alternatively, additional bags can require a tag-a-bag sticker for organics, as described for additional garbage.

5.2 New Solid Waste Diversion Centre

The CoD wishes to explore the option to design and construct a new Solid Waste Diversion Centre (SWDC) on an industrial property within the municipality in collaboration with the Conservation Klondike Society (CKS), the expected final operator of the facility.

The objectives of the new solid waste diversion centre are:

- Increase capacity for sorting by providing a larger sorting table and receiving area.
- Improve materials sorting and processing efficiency of materials dropped off by the public and material collected curbside.

- Provide a processing area (tipping floor and lock-block bays) for receiving recyclables collected from a residential curbside collection program.
- Improve safety controls.
- Provide space to accept and process additional material in future that may be included under the YG DMR.

5.2.1 Site Description

The site for the SWDC is vacant Lot 11, Guggieville Subdivision, in Callison.

The lot was owned by YG and has now been transferred to the CoD.

The CoD has prepared the lot for construction of road and buildings by adding 12 inches of fill, 8 inches of pit run and 4 inches of screened material, compacted and graded.

The lot has an area of 0.608 ha (1.5 acres). However, due to the north area having a pond at a much lower elevation, the useable area for construction and roadways/parking is at most two thirds of the existing lot (i.e. approximately 1 acre).

There is power available on two sides of the lot: the south and the east. The site does not currently have water or sanitary sewer connections. There is a lower undeveloped area to the northwest, west of the existing pond, which may be suitable for a septic field to maximize useable space for parking, roads and construction on the lot.

The CoD has erected fencing around the lot, including two sliding vehicle gates and one man gate. The vehicle gate on the south access will be located approximately 24 m from the southeast property corner, and the vehicle gate on the east access will be located approximately 25 m from the northeast property corner. The main gate is to be located on the northwest side of the fence, essentially opening to the potential location of the septic field to the west of the pond.

5.2.2 Yukon Acts and Regulations Governing Solid Waste Management Facilities in Yukon

Yukon acts and regulations provide the regulatory framework governing development, operations, closure, and post-closure of Yukon solid waste management facilities, and must be considered for the new SWDC. Environment Act RSY 2002, c.76 defines the requirement for SWMPs and provides legislation for the following SWMF related regulations:

- Recycling Fund Regulation O.I.C. 1992/135;
- Beverage Container Regulation O.I.C. 1992/136;
- Special Waste Regulation O.I.C. 1995/47;
- Spills Regulation O.I.C. 1996/193;
- Air Emission Regulations O.I.C. 1998/2007;
- Solid Waste Regulations O.I.C. 2000/11;
- Ozone Depleting Substances and Other Halocarbon Regulations O.I.C. 2000/127;

- Contaminated Sites Regulation O.I.C. 2002/171; and
- Designated Materials O.I.C. 2003/184.

The preliminary conceptual design presented in this report has been prepared with consideration given to the YG's Designated Materials Regulation (DMR) initiatives, which may impact the materials accepted at the SWDC and how the materials are managed in the future.

Materials that may fall under the DMR in future are listed below. These materials are proposed to be added to the DMR, with a proposed fee structure to cover the costs of managing these materials.

Materials expected to be managed under the DMR by the end of 2018

- Vehicle tires (19.5" or less, between 19.5" and 24.5", larger than 24.5").
- Electronic and electrical products (E-waste), such as computers, printers, display monitors, home audio/video systems, phones, and small appliances, including kitchen countertop appliances, microwaves, clocks, bathroom scales).

Tires are already included under the DMR, however the YG is planning for upcoming regulatory changes to tire categories, and the inclusion of additional products such as e-waste with program implementation October 1, 2018. It is unknown at this time exactly what role the YG will play in managing these materials.

Additional features incorporated into the conceptual design to provide flexibility for future modifications include the following:

- A spare bay in the lock-block wall recycling tipping floor area.
- An open recycling shelter structure that can be rearranged to allow for additional materials to be accepted.
- Space allocation to accept additional materials in recycling bins and an additional recycling structure in the southeast corner of the site.

We recommend the CoD discuss this conceptual plan with YG to ensure that as materials are added to the DMR, the CoD is able to transfer the handling and storage to YG or be in a position to negotiate for compensation to accept, handle and store future DMR materials.

5.2.3 Previous Conceptual Designs

CKS developed a preliminary concept design in 2015. Two conceptual designs have since been prepared by YG in 2017 as shown in Figure 14 and Figure 15, next page.

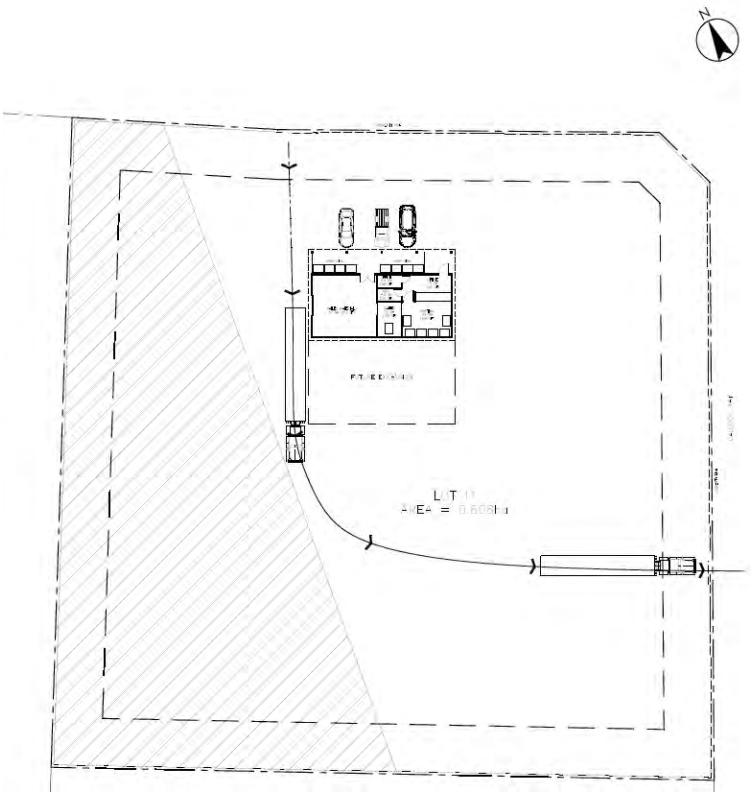


Figure 14: Option 1 for New SWDC

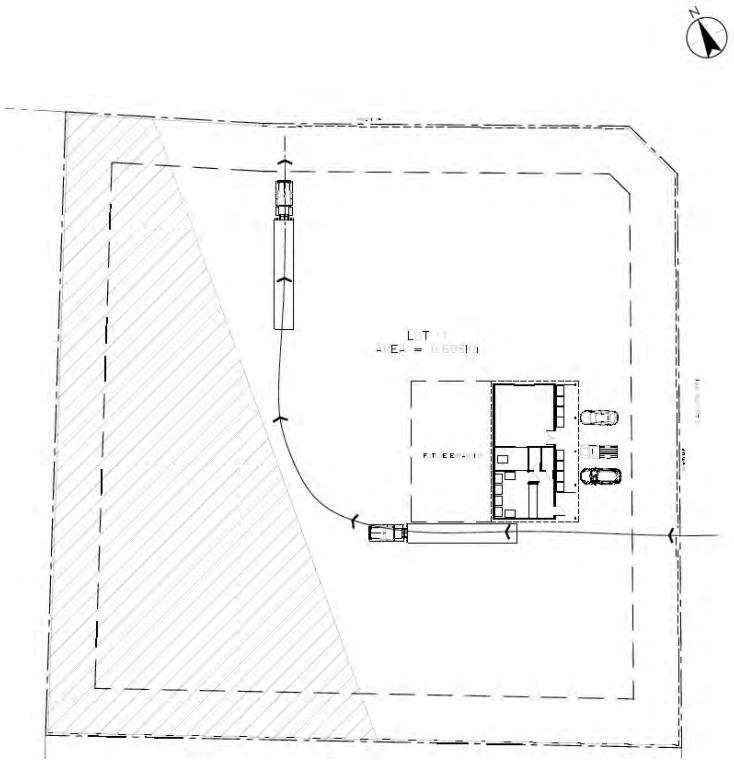


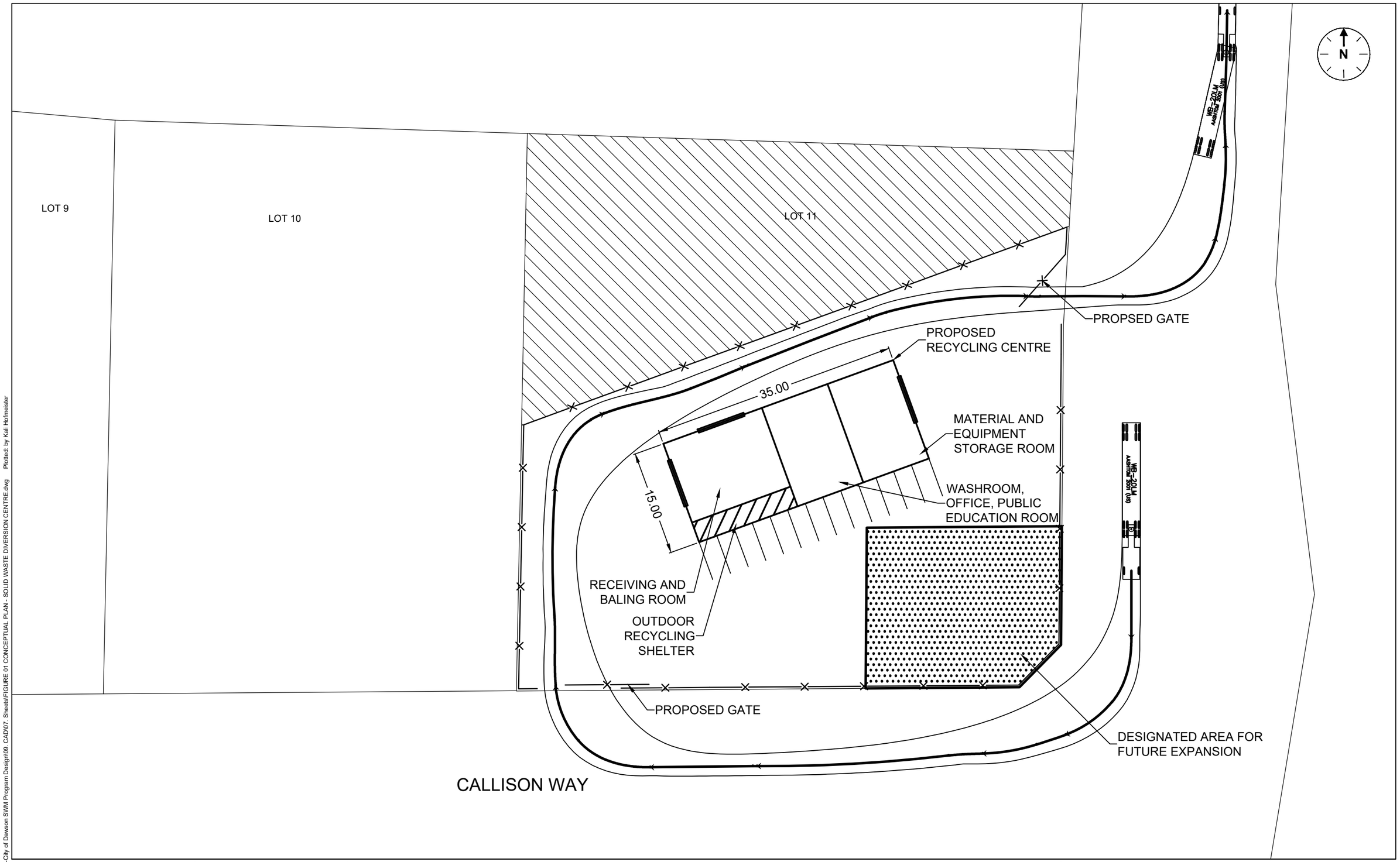
Figure 15: Option 2 for New SWDC

5.2.4 Updated Conceptual Design

MH reviewed the previous two conceptual designs prepared by CKS in 2015 and YG in 2017. Based on updated information and the assessment provided in this report, an updated conceptual design for the new SWDC was prepared. The updated conceptual design incorporates elements from the two previous conceptual designs.

The conceptual design described in this section is considered a preliminary design suitable for discussion and preliminary costing purposes only.

The conceptual plan is presented in Figure 16, next page.



P:\2018\180283500-City of Dawson SWM Program Design\09. CAD\07. Sheets\FIGURE 01 CONCEPTUAL PLAN - SOLID WASTE DIVERSION CENTRE.dwg Plotted: by Kali Hofmeister

MORRISON HERSHFIELD

DAWSON CITY, YUKON

CITY OF DAWSON
SOLID WASTE MANAGMENT
PROGRAM DESIGN

LEGEND:
UNUSABLE WET LANDS
FENCE

FIGURE 16
CONCEPTUAL PLAN - SOLID WASTE
DIVERSION CENTRE

SCALE 1:500 0 2.5m 12.5m 25m

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Aug 01, 2018
VERSION 01

5.2.4.1 Objectives

The conceptual design was prepared with the following objectives:

- Provide additional space for sorting recyclables.
- Provide additional space for public drop-off of recycling.
- Provide infrastructure to allow for processing of recyclables collected curbside.
- Provide space allocation to allow for acceptance and processing of additional materials in the future.

5.2.4.2 Materials to Manage at SWDC

Materials that may be accepted at the SWDC include the following:

- BCR materials (refundables)
- Glass (non-refundables)
- #1 Plastic (Clear and Coloured)
- #2 Plastic (Natural/Cloudy)
- Newspaper
- Hard Mixed Paper & Office Pack
- Cardboard & Boxboard
- Metal
- Mixed Plastics (#4 - #7)
- Plastic Film
- Polystyrene Foam
- Tin
- Tetra Pak®/Wax Cartons
- Propane tanks
- Household Hazardous Waste (HHW)
- Tires
- Used oil
- Lead-acid batteries
- Major appliances
- Compostable organic waste
- E- waste
- Household batteries

The CoD has the option to accept and store larger DMR materials, such as tires, fridges, and appliances at the new SWDC. Another option is to continue accepting these larger items at the landfill and not manage them at the new SWDC.

The proposed conceptual design includes a space allocation to manage larger items; however, this may be less practical from an operational point of view, and it may be more cost effective to manage larger items at the landfill only.

YG is committed to providing an annual HHW collection event at the Quigley Landfill. This is also assumed to be the case for a new SWDC.

5.2.4.3 Key Features

SWDC Main Building

The main building of the proposed SWDC includes the following rooms as shown on Figure 16:

- Receiving and baling room
- Material and equipment storage room
- Washroom
- Office

- Public education room
- Recycling shelter (attached, accessed from the outside)

The structure proposed is a pre-fabricated insulated metal building. The building will require electrical, sanitary, and water connections.

The footprint of the proposed building is estimated to be 525 m^2 and includes the rooms listed above. The recycling shelter will be attached to the main building and is included in the 525 m^2 building footprint.

Lock-Block Wall Receiving Area for Curbside Recyclables

The conceptual design includes an area for receiving recyclables collected from a future curbside collection program. The receiving area consists of a concrete tipping floor and a three-bay lock-block wall for temporary storage of the materials.

It is assumed that two streams of recyclables will be collected from the future curbside collection program: mixed paper (includes newspaper and cardboard) and mixed containers (includes all beverage containers and aluminum cans). A third lock-block receiving bay has been included for future materials that may be collected. It could also be used as a general storage area for materials such as e-waste or bulky waste.

When the collection truck arrives at the facility, the materials are emptied onto the tipping floor. A skid steer would then be used to move the materials into one of the two receiving bays. The material would then be baled at regular intervals (baler located in the receiving room) and the bales would be moved to the storage room.

The conceptual design and cost estimate includes the cost for a three-bay lock-block bunker and a skid steer to manage the incoming recyclables.

An example of a recycling depot with a concrete tipping floor and lock-block bays for receiving recyclables is shown in Figure 17.

Figure 17: Recycling Depot with Tipping Floor and Lock-Block Sorting Bays for Recyclables

Upgraded Balers

One baler is currently used at the depot in downtown Dawson. However, the majority of the recyclables collected at the CKS depots are sent unbaled to Raven Recycling.

YG currently pays for the transportation of materials accepted at the current depots. However, it is in the COD's best interest to manage and store materials as efficiently as possible prior to transport.

The processor, Raven Recycling, currently accepts (and often prefers) that many of the recyclable materials are baled at the depot prior to transportation (refer to Appendix A for preferred sorting requirements). A baler can compress materials prior to shipment to the Whitehorse processing facilities. Baling allows greater quantities of recyclables to be shipped on a single transport vehicle to Whitehorse and improves materials management at the depot facility (space savings if storage capacity is limited).

All BCR materials need to be managed separately from non-refundables at the depot for auditing purposes. YG periodically audits BCR bales to ensure the number of containers per bale remains consistent.

Based on previous work for the YG, it is understood that YG has budgeted to purchase balers. YG will first focus on purchasing balers for depots with access to power and available space. We recommend the CoD contact YG about specific needs for its depots.

The conceptual design and cost estimate include two new horizontal recycling balers and supporting equipment, including a pallet jack. The pallet jack is used for maneuvering and stacking of bales indoors/outdoors.

An example of a horizontal baler is shown in Figure 18

Figure 18: Horizontal Baler

Storage for Bailed Materials and Other Materials

The conceptual design includes a baling and sorting room that will provide sufficient storage for baled materials, including paper and mixed containers. Additional materials, such as HHW and e-waste, can also be stored in this room.

Material storage is an important consideration, because BCR and non-refundables are to be baled separately for auditing purposes.

Improved Sorting Efficiency

The recycling depot located downtown currently has one sorting table, which staff use to sort through mixed recyclables and place sorted items into pails located beside the table.

The conceptual design proposes three potential options to improve the sorting efficiency of mixed recyclables.

Option 1: Larger Rectangular Sorting Table

It appears the current sorting table is undersized for the quantity of recyclables received at the facility. A larger sorting table would provide additional space for more recyclables, and would allow staff to sort through material from either side of the table.

The sorting table would have perimeter guards/rails to prevent material from falling off. The table top would be finished with sheet metal for durability. It is recommended that the table be sloped for drainage purposes. If staff are expected to sort from both sides of the table, the table can be designed so the crest/peak runs along the table's centre and slopes towards both edges. Drainage holes, side channels, and buckets would be required to convey and capture any liquids.

Option 2: Rotating Circular (Rotary) Table

There are several styles of rotating circular tables available. The intent of the rotating table is to improve sorting efficiency by moving the recyclables to the staff completing the sorting, which reduces the amount of bending and reaching staff are required to do during sorting.

Rotary tables are typically produced in stainless steel and are available in a range of diameters up to 1.5 m. The tables have standard guardrails fitted on the outside edge to prevent materials from falling off. The motors can also be variable speed, so users can adjust the RPM to accommodate the speed at which staff can sort.

Mixed recyclables must be manually loaded onto the rotary table, and any materials remaining on the table after sorting is complete must be manually unloaded off the table.

An example of a rotary table is shown in Figure 19 below.

Figure 19: Example of a 2.5 m Diameter Stainless Steel Rotary Table[17]

Option 3: Straight Belt Conveyor

The purpose of a straight belt conveyor is to allow staff to sort through mixed recyclables more efficiently by reducing the amount of bending and reaching required while sorting. The conveyor transports materials to the staff completing the sorting. The conveyors are typically produced with PVC or rubber belts; however, other belt materials are available for specific applications. The conveyors are available in a range of widths, and are produced with variable speed motors that can be adjusted to match the operators' sorting speed. It should be noted that the belts do need to be replaced, and replacement belts are available and relatively easy to replace. The replacement frequency depends on several factors, including belt material, duration of use, nature of materials on the belt, and speed of the motor.

The conveyor is manually loaded with mixed recyclables at one end, and a bucket or bin is placed at the other end of the conveyor to collect any unsorted recyclables. Unsorted materials can be manually loaded back to the front of the conveyor to complete sorting a load of recyclables.

An example of a straight belt conveyor is shown in Figure 20, next page.

[17] https://www.eqm.co.nz/product/rotary-tables/

Figure 20: Straight Belt Conveyor with Guardrails[18]

Outdoor Recycling Shelter

The conceptual design includes a semi-enclosed recycling shelter attached to the main SWDC building. The recycling shelter would be primarily for residential drop-off of sorted recyclables, and would have separate bays for accepting the materials listed in Section 5.2.4.2.

Recyclables would be stored in mega bags (1 m by 1 m freestanding bags). Approximately 2-3 mega bags would fit in each compartment of the recycling shelter. The total number of recycling compartments and shelter size would be determined during detailed design, once a detailed review of anticipated tonnages and accepted materials has been completed.

The purpose of having the recycling shelter attached to the main SWDC building is to minimize the handling distance between placement of recyclables in the bags, transportation to the baler for baling of the materials, and transportation of the baled materials to the storage room.

One advantage of having the recycling shelter attached to the primary building is that transportation distance is minimized. Doors could be installed on the SWDC between the back of the recycling shelter and the building to allow the mega bags to be transferred directly into the building without needing to collect the bags from outside. The style of doors could be either sliding or garage-style roll-up doors, as determined during the preliminary or detailed design stage of the SWDC.

An example of a detached recycling shelter used by a similar sized community in the Yukon is shown in Figure 21.

[18] http://www.cisco-eagle.com

Figure 21: Detached Recycling Shelter Used to Collect Sorted Recyclables Dropped Off by Residents

Two potential door configurations that could be used to transfer the mega bags from the back of the recycling shelter into the main SWDC building are shown in Figure 22 below; a garage style roll up door (shown left) and a sliding door (shown right).

Figure 22: Garage Style Roll Up Door and Sliding Door

Designated Area for Future Expansion and Acceptance of Additional Materials

As noted in Section 5.2.2, changes to the YG's DMR initiatives may impact what materials are accepted at the SWDC and how the materials are managed in the future.

A primary objective of the conceptual design is to provide sufficient flexibility for accepting and managing future materials. As shown in Figure 16, an area has been

designated in the southeast corner of the site for future infrastructure. This space is large enough for an additional detached recycling shelter or multiple 40 yd^3 roll-off bins. This space could also be used as a general storage area for equipment or baled materials.

At this time, given the quantity of recyclables expected to be managed at the facility, it is anticipated that this space will not be used and the proposed SWDC will be sufficient for receiving, processing, and storing all materials in the short term.

5.2.4.4 Future Considerations

Future considerations that should be evaluated as the proposed SWDC progresses into the preliminary and detailed design phases are listed below:

- **Management of materials between the new SWDC and current downtown facility.** If the new SWDC were operated out of Lot 11, the CKS may still wish to receive refundables at the downtown depot location, as opposed to closing down operations at their downtown location. CKS would keep the downtown location open as a bottle depot to distribute refunds to customers.
- **Future DMR material management.** The CoD should meet with YG to assess which materials may be managed by YG in the future and what role YG expects to play in managing the materials. This may impact the space and infrastructure required at the new SWDC. Materials that may be managed by YG in the future include C&D waste, and waste oil.
- **Review of recycling curbside collection program.** The new SWDC is expected to act as the drop-off location for recyclables if a recycling curbside collection program is implemented in the future. It is important to review the requirement of any curbside collection program being considered to ensure drop-off requirements are compatible with the layout of the proposed SWDC. Factors to consider include: type of collection vehicle being used, vehicle capacity, how materials are emptied from the truck, and recyclable streams that will be collected.
- **Staffing.** A new SWDC will require additional staff to operate the facility. If the downtown facility continues to operate as planned, then CKS will require double the staff to operate their depots. CKS currently has five employees and six during the summer. One is the coordinator and the rest are depot attendants. Employees receive a wage of $17.00 an hour at the downtown depot, $18.00 at the landfill and $21 for the coordinator. All positions are part time.

5.2.5 Capital Cost Estimate

A capital cost estimate has been prepared based on the system components presented in this section. The cost estimate is considered a Class D preliminary cost estimate (±50 %) based on the information available on the site at this time. The cost estimate is suitable for preliminary discussion of the proposed SWDC.

Operating costs have not been estimated due to the limited information about staffing, waste processing at the facility, and waste hauling to and from the facility.

The capital cost estimate is presented in Table 12 below.

Table 12: Class D Capital Cost Estimate for Proposed SWDC

Item #		Item	Unit	Quantity	Unit Price	Total Price
1		**Project Summary**				
	1.01	Mob/Demob	LS	1	$ 50,000	$ 50,000
	1.02	Site Preparation	LS	1	$ 195,000	$ 195,000
	1.03	Surfacing, barriers and signs	LS	1	$ 197,500	$ 197,500
	1.04	Lock-block Wall	LS	1	$ 12,600	$ 12,600
	1.05	Surface water management	LS	1	$ 61,800	$ 61,800
	1.06	Site Buildings	LS	1	$ 550,000	$ 550,000
	1.07	Equipment and Containers	LS	1	$ 196,500	$ 196,500
					Subtotal	**$ 1,263,400**
					40% Construction Contingency	$ 505,000
					Subtotal - Construction Cost	$ 1,768,000
					Engineering - Detailed Design Services (8%)	$ 141,000
					Construction Oversight, Contract Administration (7%)	$ 124,000
					TOTAL - PHASE 1 COST	**$ 2,033,000**

5.2.6 Funding

Recycling depots are financially incentivized via the Recycling Fund to manage BCR materials. The funding does not cover the management of non-refundables, although the non-refundables often make up the majority of the quantities of materials managed at many depots in YT.

CKS receives an operating grant from YG of $40,800 a year, an average of $30,000 in handling fees a year.

YG has the full financial responsibility for removing all DMR materials from the Quigley Landfill. This is assumed to also be the case for a new SWDC. YG may be able to provide funding for capital projects from federal sources, such as rural and northern communities infrastructure funds.

5.3 Public Education Programs

5.3.1 Curbside Collection Program

A well-designed collection system can live up to its potential if it is well promoted and households receive sufficient education about the system before and during program roll-out. Adequate communication is crucial to achieve a smooth transition to a new system, to maximize participation rates and to ensure the ongoing success of the program.

At first the CoD may want to seek additional stakeholder feedback (e.g. haulers, processors and the public) in order to refine the program design and costs.

The following considerations should be taken into account prior to program launch to create awareness and build interest about the new collection program:

Methods of Communication

- Advise households about the upcoming program using a range of media, including the municipal website, direct mailings, utility bill notices, newspaper articles, print and broadcast public service announcements, community meetings, and paid advertising (newspaper and radio). Representatives from CoD may also attend local events/shows with information about the upcoming program.
- Social media offers additional routes for authorities to engage with residents. For example, Twitter can be used to hold question and answer sessions on waste services. Another example is the use of smart phone apps, which can offer residents information about service details (e.g. which materials can and cannot be recycled, how and when to put out collection containers) and can also send automated reminders about collection days.
- Calendars containing curbside collection schedules and tips are an essential communication tool for many authorities.
- Some information can also be embossed on collection containers (if containers are provided by CoD).

Information to Communicate

- Details about what services will be provided, how this system was selected, who is impacted (and who is excluded), how the system will work (e.g. service rules), program start-date, what happens to their garbage and recyclables after collection and the promotion of a hotline to call with questions.
- Where suitable, address people's barriers to using the system by including positive quotes from residents who are looking forward to the curbside collection program or who have had curbside collection in other jurisdictions
- Information about the benefits (environmental and financial) from waste diversion.
- CoD may want to clarify the long-term plan for waste management, e.g. progress on the Waste Diversion Centre and the potential for organics waste collection.

How to Communicate

- If available, use outreach specialists and other communications-related staff at CoD to build on existing communication programs and branding.
- Inform all relevant CoD staff of a planned change ahead and train staff to respond to hotline calls.

Timing

Approximately 2 months prior to program launch, CoD should start to provide practical information, such as the curbside collection schedule, set-out practices, and details on

what can be recycled and disposed of as garbage. Information channels can be expanded to include an increase in earned media, paid advertising, and may also include direct mail, such as a collection calendar.

Approximately 1 month before program launch, the CoD should send information to residents by mail that focuses on the start date and set-out practices.

Approximately 1 month to 2 weeks before program launch, any collection containers that will be supplied by the CoD should be delivered to households. This is another opportunity to provide printed material.

At this time, the CoD also needs to make sure that sufficient staff are in place and are trained to respond to calls. The number of calls typically diminishes within a month or two after program roll-out.

Once the call volume has tapered, the CoD may wish to consider transferring the responsibility for responding to customer enquiries about the collection service from the CoD to the collection contractor (if undertaken by a private contractor). If possible, ensure that the hotline number used during the program launch is transferred to ensure that printed promotional material is still relevant.

The success of the program should be evaluated and communicated on an ongoing basis to encourage participation. The CoD can provide households with information on recycling rates achieved, results from waste composition data and what environmental outcomes are being achieved from the collection so far. Positive messaging is important to keep people engaged and participating in the collection program.

Public Education Costs

Once the CoD invests in a curbside collection program for recyclables, it is important to maximize the waste diversion from this program. There needs to be adequate funding for the launch costs and promotion associated with the program roll-out. The CoD should expect to spend a minimum of $10,000.

On an ongoing basis, the CoD will need to plan for education costs. Recycle BC has reported that among over 20 municipalities in BC, these ongoing costs have varied widely. Before the implementation of the Extended Producer Responsibility (EPR) Program for packaging and printed paper in BC, the cost per household ranged from $0.24 to $11.18 with a mean of $1.71 and a median of $1.05.

5.3.2 New Solid Waste Diversion Centre

The CoD should take the unique opportunity to raise awareness of its solid waste management program and how a new SWDC fits into this program.

The public can be invited to an open house for the facility opening. Ideally, it can coincide with a local celebration or festival. The open house should be staffed with local experts (e.g. CKS and municipal representatives).

On an ongoing basis, the facility is envisioned as being an environmental educational centre for Dawson, providing educational opportunities for schools and other interested groups. CKS may want to provide this education as part of the operation of the SWDC.

5.4 Diversion Opportunities

This section covers potential opportunities for improvements, either in terms of diversion from landfill or from material management.

5.4.1 Waste Reduction

The CoD is able to target waste diversion by implementing some of the initiatives that promote waste reduction and reuse of resources. Some examples include:

- **Hold repair cafés.** These are often popular meetings free of charge aimed at bringing people together to repair broken goods and reduce wastage. Typically, municipalities are making sure that participants can find all the tools and materials required to help make repairs. Volunteer specialists in the community can be invited to guide the repairs.
- **Promote "Make Holiday Memories, Not Garbage" initiative.** Provide ideas of wonderful gift ideas that make memories and create little to no waste.
- **Encourage residential backyard composting.** Until a curbside collection program for organic waste is rolled out, the CoD may want to more actively encourage backyard composting. The City can, for example, subsidize the cost and distribute suitable types of composters and provide education on their use. Backyard composting reduces the amount of organic waste going to landfill and reduces the need for collecting the waste materials (either as part of the garbage or an organic waste collection).
- **Encourage residents to reuse bags.** Develop waste reduction campaign to encourage the use of reusable bags, rather than single-use plastic bags.
- **Promote Food Waste Reduction.** Uneaten leftovers and spoiled food make up over 25% of the waste discarded from a household. The CoD may want to use some of the strategies found in the BC Residential Food Waste Prevention toolkit developed by BC Ministry of Environment. It includes the promotion of a Love Food, Hate Waste style campaign.
- **Support the development of a sharing library.** Several permanent libraries have been set up in Vancouver that offer tools, sports equipment and more. The so called "Thingery" has been a huge success[19]. That pooling of resources means less demand for goods production.

[19] http://thethingery.com/

5.4.2 Regulatory Options to Encourage Waste Diversion

Many towns and cities in North America have established bylaws requiring residents and ICI sector waste generators to source separate recyclable and/or compostable materials in order to ensure diversion from landfill.

There are legislative options for requiring ICI sector waste generators to source separate recyclable and/or compostable materials in order to ensure diversion from landfill (landfill bans, aggressive differential tipping fees, bylaw amendments).

Suitable options that are available to the CoD include:

- Landfill disposal bans on readily recyclable and compostable materials (implemented in conjunction with or after the provision of collection services).
- Landfill disposal bans on all materials covered under BCR and DMR.
- Aggressive differential tipping fees for source-separated materials that can be processed for diversion at the landfill (only feasible for facilities where tipping fees are collected).
- Bylaw requirement requiring ICI sector waste generators to source separate recyclable and/or compostable materials.

5.5 Improvement to Material Management at Depot

5.5.1 HHW Management

The CoD is currently collecting HHW once a year, which makes it difficult for residents and the ICI sector that often want the ability to drop off these materials when the depots are open. YG is responsible for the management of HHW. The CoD may want to influence YG to collect HHW from residents via a mobile HHW depot, which visits each of the territory's depots several times a year. A mobile HHW depot can stay at each location for a period of one week before moving on to another. In 2016, The County of Wellington, ON, established a mobile depot at a capital expense of $15,000, which includes safety features, lockers and shelving. The mobile unit (55 yd^3 roll off bin) can accommodate 25 55-gallon drums that are single stacked[20]. Operating costs are estimated between $130,000 and $215,000. However, there may be opportunities to obtain funding for capital and operational costs from YG.

By targeting HHW, only small quantities of waste are diverted (not noticeable in terms of waste diversion performance tracking), but with significant environmental benefits from avoided costs of pollution and environmental mitigation if these HHW materials ended in the landfill or in the environment.

[20] Information provided by Das Soligo, County of Wellington, January 2018, personal communication.

5.5.2 Glass

Dawson has equipment to crush BCR and non-refundable glass. Instead of simply crushing and disposing of glass into the landfill, the CoD may want to look at finding local uses for it. Glass is costly to transport because there is a very low to no market value for recycled glass.

The Government of the Northwest Territories sends crushed glass to Airdrie, Alberta, where it is processed into fibreglass insulation[21].

In Alaska, they have created a market for crushed glass as a pipe bedding medium for the Water and Wastewater Utility. The Solid Waste and Water and Wastewater Utilities of the Municipality of Anchorage worked together to write a new pipe bedding specification.

C&D glass waste can be diverted from the landfill using deconstruction processes, which involve sorting materials from a building tear-down for reuse and recycling. The City of Portland has a non-profit organization called Rebuilding Center that sorts and sells used building materials for 50-90% of their retail value. The largest issue with deconstruction is time, where demolition typically takes 1 day, deconstruction can take 1-2 weeks. However, the cost of deconstruction can be reduced by reusing glass windows in greenhouses or for interior household windows. Recycled glass can be used as aggregate in concrete, as a sand supplement, or it can be donated to local artists and up-cycled for glass blowing, glass tiles, jewelry, or landscaping decorations[22]. The revenue generated from more profitable recycling materials, such as metals, may be able to subsidize some transportation costs for the recycling of less profitable materials, such as glass[23].

The CoD may want to investigate whether any of these are suitable reuse options for the crushed glass.

5.5.3 Cardboard

Cardboard is currently landfilled in the summer and burned in the winter. The CoD is interested in finding a better use for the collected cardboard than currently burning it at the landfill without energy recovery.

We recommend the CoD consider the feasibility of having balers at each of the depots to allow for baling and stockpiling of cardboard. Recycling of baled cardboard is preferred instead of lower uses of cardboard (recovery or residual waste disposal).

Cardboard can also be made into pellets; however, it presents unique challenges with conventional manufacturing processes. When cardboard goes through size reduction in a hammer mill, it produces a fluffy material that has a static charge. This material does not

[21] https://www.enr.gov.nt.ca/en/about-environment-and-natural-resources
[22] 2013 Possible options for reuse and recycling of end-of-life waste glass from deconstruction projects, Veronica Vaughan, April 3, 2013.
[23] 2017 Solid Waste Management for Northern and Remote Communities, Planning and technical guidance document, Environment and Climate Change Canada, March 2017.

flow well through the augers of a pellet plant. The production of cardboard pellets would require unconventional equipment that may increase cost. Furthermore, there is a limited market for cardboard pellets, since only some pellet burners can handle their higher ash content[24].

5.5.4 Waste Oil

St. Theresa Point, in northeastern Manitoba, has installed a used oil burner and storage unit for the community. They collect recycled oil and use it as heating fuel for the Municipal Fire Station during the winter[25]. This may be a suitable option in Dawson if there sufficient quantities of oil collected and users of the oil for heating.

5.5.5 Waste Textiles

Textiles can often make up a significant part of the waste streams. For example, it made up 3% of City of Whitehorse' residential waste stream in 2017. Many waste textiles can be diverted and reused. The CoD may want to place a textile collection container at the depots and/or the landfill. There are several non-profit organizations across Canada (such as Goodwill, Big Brother and Canadian Diabetes Association) that are willing to collaborate with municipalities across Canada to find unwanted clothing to donate to people in need, either in Canada or in developing countries.

5.5.6 End-of-Life Mattresses

The disposal of mattresses at the landfill is operationally challenging due to the bulkiness of mattresses. One mattress takes up approximately 0.9 m^3. The mattress springs have a tendency to impact landfill and transfer station equipment (e.g. puncture hydraulic systems). The removal of mattresses from the waste stream can help to reduce maintenance costs of transfer station and landfill equipment.

The CoD may want to look at the possibility for manually deconstructing mattresses with high metal content, as there are secondary markets for the steel of the innerspring unit. This recycling has several benefits, such as diverting waste from landfill and creating local jobs.

[24] http://www.pelheat.com/cardboard_pellets.html
[25] http://usedoilrecycling.com/recycling-in-canadas-remote-northern-communities/

6. STAKEHOLDER CONSULTATION

The CoD is looking at making significant changes to the existing solid waste management system and the level of service its residents and businesses are currently provided. As part of this project, MH staff engaged with private waste haulers operating in the CoD to understand the current services provided and what issues they experience.

The CoD may want to plan for consultation with the public and other impacted stakeholders on the new direction by:

1. *Informing* the general public and potentially affected stakeholders about the content of the draft design of the SWM program;
2. Obtaining *input* from affected stakeholders (including general public) on the proposed plan components; and
3. *Collaborating* with member municipalities to undertake consultation events that broadly engage with the community on matters related to solid waste management.

The CoD may want to use some of the following strategies to undertake consultation:

- Open Houses at depots or landfill staffed with local experts
- Presentations to stakeholder groups/organizations
- Presentations to First Nation Councils
- Online information on municipal website
- Determine opportunities to piggyback on municipal communications (newsletters, mailers, utility bills, billboards, etc.)
- Use of social media (Facebook)
- TV/radio commercials
- Radio advertisements
- Feedback surveys (online, exit surveys at open houses, at landfills and depots, phone interviews)
- Promotional activities

Feedback from various stakeholders during this consultation can inform how to best design/revise a service. It is important to report out on feedback received and how it will be incorporated into the Final SWM program design.

7. CONCLUSIONS AND RECOMMENDATIONS

7.1 Curbside Collection Service

This study assessed options for solid waste management program designs to improve the management of waste materials (such as MSW/garbage, recyclables and organics) from within the City boundaries. The CoD currently only collects garbage through the use of a contractor, and there is limited curbside collection of recyclables and organics. The introduction of curbside recycling and (eventually) source separation of organics, will improve the CoD's environmental performance and reduce the amount of waste that goes to landfill.

The materials that are suggested for recycling include the collection of two streams: fibres (paper and cardboard products) and containers (plastics and metal). Glass can be added when there are local markets for crushed glass, but is not included at this stage. The fibres and containers are best to be source separated at the curb. Residents can be made to source separate recyclables if the education and promotion of the program is planned adequately. Source separation at the curb saves on sorting and processing costs and increases marketability of the recyclables to end markets. This is especially important now when large recycling markets, such as China, are only willing to receive clean and source-separated recyclables.

Although the study has assessed the potential quantities of organics to collect from residents and ICI customers, we recommend that organics (yard & garden and kitchen waste) should not be collected at this time, since the available processing facility is not suitable to handle larger quantities of organics at this point. All residual waste (i.e. the garbage collected) will be disposed of at the Quigley Landfill.

Residential Curbside Collection

There are 80 apartment units in MF buildings in CoD, which are currently serviced by a curbside garbage collection. Accessibility for collection trucks and space requirements for collection containers may require further investigation prior to the inclusion of this sector in the residential collection program. As these MF buildings are currently serviced by the existing curbside collection service, it was assumed that a residential service will continue to service them.

There are many different ways that the CoD can provide residential curbside collection of garbage and recyclables to its residents. Some of the main options include:

Option 1: Manual Collection

- Collect garbage in containers purchased and maintained by residents (self-provided and not standardized), with one bluebox provided for mixed containers and reusable plastic bags provided for fibres.
- Collect via manual trucks (two trucks needed) at a capacity of 18 yd^3. Two operators would be needed per truck to operate safely.

- Garbage from all residential units can be covered in one day and two trucks can cover all the units in one day to collect the source-separated recyclables.
- Weekly collection of garbage and recyclables.

Option 2: Semi-Automated Collection

- Collect garbage in a wildlife-proof wheeled cart with one bluebox provided for mixed containers and reusable plastic bags provided for fibres.
- Collect via semi-automated trucks (two trucks needed) at a capacity of 16 yd^3. One operator is only needed per truck.
- Garbage is collected in wheeled carts using the semi-automated truck arm, while with two streams of recyclables are collected manually using two trucks.
- All residential units can be covered in one day and two trucks can cover all the units in one day to collect the source-separated recyclables.
- Weekly collection of garbage and recyclables.

Curbside collection for garbage and recyclables is estimated to cost between $815 and $900) per household per year (or a monthly cost of approximately $70 to $80 per household).

Curbside Collection from ICI

Based on cost estimates from private haulers in Whitehorse, the cost to collect garbage in 3 yd^3 bins on a weekly basis using a front-end loading truck equates to $1,008 per customer (or $287,000 in total). In reality, not all customers will need that much capacity, and many may want to opt into the residential curbside recycling or share a collection bin with adjacent businesses.

If ICI customers can be serviced by the provision of carts, the costs are likely to be half of those of front-end loaded bins, provided that the semi or fully automated trucks are available for cart collection.

With the use of an M-class truck, ICI waste can be collected via a semi-automated system for carts, or for larger volumes (in roll-off bins with capacities of 8 – 12 yd^3). In the CoD there are not likely to be many ICI customers who require these roll-off bin capacities. Most jurisdictions in BC do not collect garbage or recyclables from the ICI sector and instead leave it to the private sector. This is an option for the CoD to consider.

Procurement Considerations

Regardless of servicing residential or ICI customers, it is recommended that the CoD move toward a full cost recovery user-pay system for providing the services. The first step on this path to a more financially sustainable system is to implement a user-pay residential curbside collection system for garbage and recyclables, and eventually organics when the processing capacity has been established.

In order to achieve the most economical system, the collection service should be obtained through a competitive bidding process.

The proposed next steps for implementation include more detailed assessment of garbage and recyclable materials to be included in the collection program and procurement options. Stakeholder consultation (e.g. haulers, processors and the public) will be required to refine estimated program costs and initiate the undertaking of the procurement process.

There seems to be a limited pool of private contractors/haulers that can provide collection services (i.e. limited competition) and there are concerns about the cost of the current service. The CoD may want undertake some stakeholder consultation with the private sector and develop an RFEOI to confirm how many private service providers can potentially compete at the RFP stage.

The RFP can specify the conditions and level of service desired, but leave sufficient leeway for service providers to be able to provide innovative solutions. The use of an RFP gives the CoD more flexibility in terms of evaluating submissions, compared to a traditional tender process. To increase competition, the CoD should consider also bidding on the contract.

If the CoD elects to use specialized carts for the curbside collection (e.g. bear proof), the RFP can specify that the purchase of the specialized carts would be the responsibility of the CoD. This will enable a more accurate comparison between manual and semi-automated collection costs.

7.2 New Solid Waste Diversion Centre

MH recommends discussing the proposed conceptual design of the new SWDC with various stakeholders, including YG.

The design presented in this report is considered only one concept. The CoD has many options with the new SWDC and the final design can be developed to suit the solid waste management system needs, with consideration to budgetary restrictions.

Additional recommendations and considerations are provided in Section 5.2.

7.3 Road Map for Dawson’s Solid Waste Management Program

The CoD is proposing many improvements to the existing solid waste management system, and all of them cannot be implemented at once. MH has developed a road map to guide the sequence of events. Firstly, the CoD needs to focus on immediate operational improvements that can extend the landfill life. This was not the focus of this report; however, MH recommends a thorough review to increase operational efficiencies at the landfill.

CKS has been eager to advance plans for a new waste diversion centre for several years, and it will be important for the CoD to build on this enthusiasm and prioritize the development of a detailed facility design. With a detailed plan and cost estimate, the CoD

should be able to secure any additional external funding (e.g., from YG and/or federal sources) for the facility or for the equipment needed, such as bailers, scales, etc. The new facility will provide a sorting facility that can receive recyclables collected via a curbside collection program. In terms of curbside collection, the CoD should initially focus on only providing a collection service for garbage and recyclables, and leave the collection of organics until a processing facility that can handle larger quantities of organic waste has been evaluated and established. It will require significant investment in related infrastructure, such as a composting facility suitable to process larger quantities of organic waste and varying types of wastes (including food waste). It is likely to require a fully contained processing facility, which often costs several millions of dollars in investment.

All significant changes to the existing system should be informed throughout the process by stakeholder input and consultation. At first, the CoD will need to develop a communications strategy aimed to consult on proposed changes to level of service and changes to costs. Council must be kept informed of proposed changes, associated costs, and stakeholder feedback, and be part of deciding whether adjustments are needed to the plan. The new solid waste management program will need to include a revised solid waste budget based on proposed changes, and the CoD will need to develop a revised revenue structure based on a combination of taxes, utility fees, tipping fees, etc.

Figure 23 below summarizes the proposed road map for the CoD's new solid waste management program.

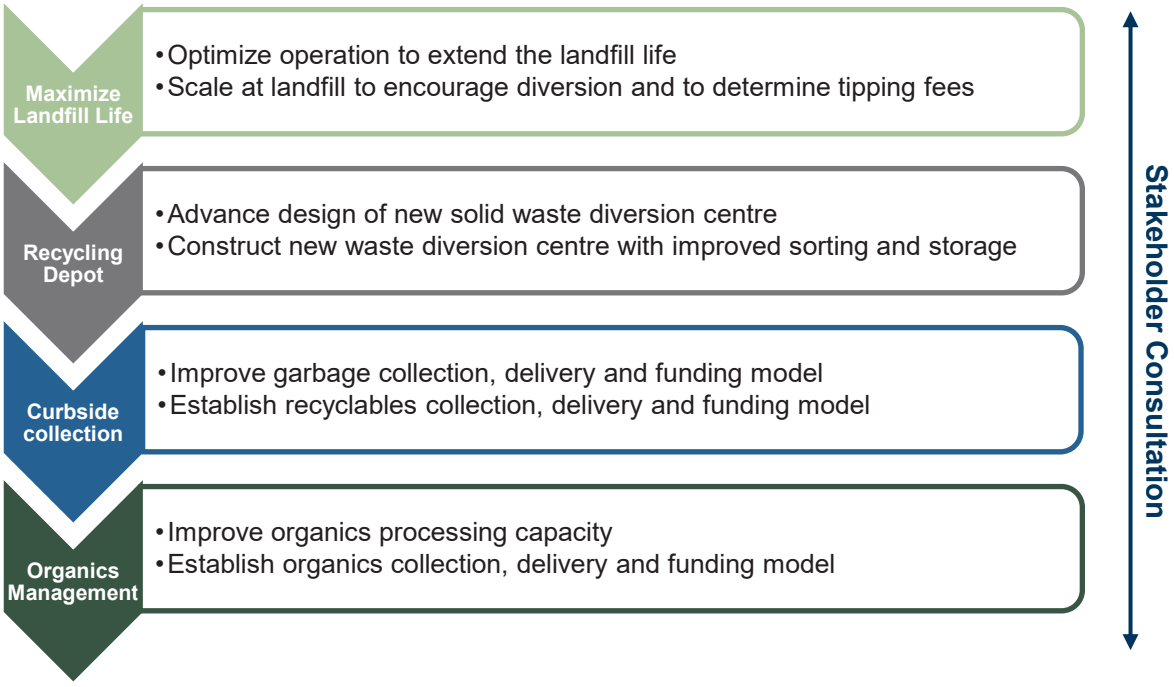

Figure 23: Proposed Road Map for the CoD's Solid Waste Management Program

APPENDIX A:

Sorting Requirements for Recyclables Collected at Recycling Depots

DEPOT SORTING REQUIREMENTS FOR BEVERAGE CONTAINERS (as of July 18, 2018 based on interview with Raven Recycling)

Beverage Container Material	Typical Containers	Sorting Instructions	Preferred Collection Procedure	Alternate Collection Option
Aluminum Cans	Pop and Beer Cans	• No sorting by type of beverage required • Separated from non-refundables	Baled	Mega fibre bags
Refillable Beer Bottles*	Domestic Brown Beer Bottles Clear/Green Cider Bottles (Growers, Okanagan)	• Fill original beer/cider cases. • 6 packs fill cardboard flat. Not recommended to use 4 packs. • Stack similar sized bottles together in same row on pallet (long-necked or short-necked). • Only one row of cardboard flats per layer – with 2 rows of 24 cases for stability. • Alternate orientation of cases with each layer to increase strength of a full pallet. • NEVER STACK LOOSE BOTTLES - Even in the middle of a layer. They will fall through or get pushed around and compromise entire pallet!	Shrink-Wrapped Pallets • The entire pallet should be wrapped twice with shrink wrap. • Maximum height of a pallet is 7 layers.	Beer cases in a larger box/tote (**ONLY** if very small volumes – less than one layer of cases on a pallet)
Glass	Liquor and Wine Bottles, Non-refillable Beer Bottles, Pop Bottles, Juice Bottles	• No sorting by size required • Bottles (unbroken) placed in boxes or plastic totes • **NO NON-REFUNDABLES**	Boxes or plastic totes • Containers holding bottles within should be small and/or light enough to lift out without breakage • **NO GLASS IN MEGA FIBRE BAGS**	
#1 Plastic (Clear and Coloured)	Pop/Water/Juice Bottles	• No sorting by size required • Separated from non-refundables	Baled	Mega fibre bags
#2 Plastic (Natural/Cloudy)	Milk Jugs, Water Jugs, Juice Containers	• Milk Jugs and ‘cloudy’ #2 (HDPE) containers ONLY	Mega fibre bags	

DEPOT SORTING REQUIREMENTS FOR BEVERAGE CONTAINERS (as of July 18, 2018 based on interview with Raven Recycling)

Beverage Container Material	Typical Containers	Sorting Instructions	Preferred Collection Procedure	Alternate Collection Option
#2 Plastic (coloured)	Milk 2 Go White Bottles, Juice Bottles	• No sorting by size required • Separated from non-refundables • Can be commingled with Tetra Paks/Waxed Cartons/Foil Packs	Mega fibre bags	Baled (if large baler capable of compaction)
Tetra Paks®/Waxed Cartons/Foil Packs	Juice Boxes, Milk and Juice Cartons, Drink Pouches	• No sorting by size required • Separated from non-refundables	Baled	Mega fibre bags
Tin	Tomato Juice and Coconut Water Cans	• Commingle with non-refundable tin	Mega fibre bags	

*Please refer to Yukon Liquor Corporation 2011 list of what is refillable. No imports/small liquor/coolers/Alaskan products.

Notes:

1. **There is a higher handling fee of 4 cents per container for non-refillable beer/cider vs. 2.5 cents per container for refillable. To ensure maximum handling fees are received by the depot, only include refillable beer/cider on pallets.**
2. Even though categories on Depot Claim Form are counted together by size (<750 ml, >750 ml) – product must be shipped separately by material type.
3. Refundable beverage containers should not be commingled with non-refundable product (provided space constraints allow).
4. Labels are not required on containers to ensure refund, nor must they be removed prior to shipping.
5. Lids do not have to be removed from beverage containers, provided containers are empty of all residual liquids.

DEPOT SORTING REQUIREMENTS FOR NON-REFUNDABLES (as of July 18, 2018 based on interview with Raven Recycling)

Material	Typical Products	Sorting Instructions	Preferred Collection Procedure	Alternate Collection Option
Glass	Jam Jars, Pickle Jars	• **No longer accepted AT ALL by Raven** • P&M - Jars (unbroken) placed in boxes or plastic totes	• Collect, crush and dispose of on-site	Boxes or plastic totes • Containers holding bottles within should be small and/or light enough to lift out without breakage • NO GLASS in mega fibre bags
White Paper	Newspaper, Flyers, Magazines, Office Paper (white),	• Separate from brown paper	Baled or in boxes On pallet if high volume (Shredded paper in mega fibre bags)	Mega fibre bags
Brown Paper	Corrugated Brown, Cardboard Boxes, Cereal Boxes	• Separate from white paper if space allows • Flattened and clean of food residue • No wax-coated cardboard	Baled •	Mega fibre bags
#1 Plastic (clear)	Produce Clamshells, Dish Detergent Bottles	• Can be commingled with other plastics if not refundable (NO FILM / STYROFOAM!) • Separate from other mixed plastics if space allows	Baled	Mega fibre bags
#2 Plastic (coloured)	Laundry Detergent Bottles	• Can be commingled with other plastics if not refundable (NO FILM / STYROFOAM!) • Separate from other mixed plastics if space allows	Baled	Mega fibre bags
Mixed Plastics (#4 - #7)	Yogurt Containers, Margarine Containers, styrofoam meat trays and all coloured styrofoam	• Can be commingled (NO FILM / STYROFOAM!)	Mega fibre bags	
Plastic Film	Grocery Bags, Bread Bags, Garbage bags, Shrink Wrap	• NOT TO BE MIXED WITH OTHER PLASTICS • No loose bags, smaller bags placed within larger bags • No tarps allowed and lumber plastic wrapping. If sufficient volumes, these can be collected in separate mega fibre bags.	Mega fibre bags	Bale if sufficient volume

DEPOT SORTING REQUIREMENTS FOR NON-REFUNDABLES (as of July 18, 2018 based on interview with Raven Recycling)

Material	Typical Products	Sorting Instructions	Preferred Collection Procedure	Alternate Collection Option
Polystyrene Foam	Styrofoam® Protective Packaging for Electronics, TVs (only white Styrofoam)	• WHITE PACKAGING STYROFOAM ONLY • NOT TO BE MIXED WITH OTHER PLASTICS • Break large protective packaging into smaller pieces • Coloured foam and meat trays to be placed in with mixed plastics	Mega fibre bags	
Tin	Soup Cans, Dog and Cat Food Cans (if not Aluminum)	• Can be commingled with BCR tin • Separate from aluminum cans	Mega fibre bags	
Tetra Pak®/Wax Cartons	Soup broth, meal supplement drinks	• Can be commingled with BCR materials	Baled if sufficient volume	Mega fibre Bags

Royal Canadian Mounted Police / Gendarmerie royale du Canada

Security Classification / Designation
Classification / Désignation sécuritaire

2023.04.19

Your file / Votre référence

Our file / Notre référence

Mayor Bill KENDRICK
Box 308
Dawson City, Yukon
Y0B 1G0

Dear Mayor KENDRICK,

RE: 2023-2024 Policing Priorities

It is that time of year again and I am reaching out to you with the hope of gathering formal input regarding the 2023/2024 policing priorities for the Dawson City RCMP Detachment. I am looking for input from yourself and the council with regards to what areas and activities you would like your local RCMP Detachment to focus on in relation to policing in the Dawson City area.

Last year, our four areas of focus as determined by yourself and the City of Dawson are as follows:

(1) Substance Abuse

(2) Road Safety

(3) Youth Initiatives

(4) Attendance at THFN, City of Dawson and Community Events

(5) Restorative Justice

The issues that you would like us to focus on can remain the same or be changed in any way to address issues identified by the council. We will take into account issues that you identify, issues identified by other stakeholders in the community, Yukon Territorial Government policing priorities and National policing concerns. Once all the feedback has been collected, an unique plan will be developed for Dawson City taking into account all stakeholder's input. This information is used to develop the Detachments Annual Performance Plan for 2023-2024, in which we determine the areas that we concentrate our efforts and will measure how well we are working towards successfully addressing your priority issues for policing.
I will be pleased to be available to discuss the matter at an upcoming council meeting at your leisure.

Canada

If you have any concerns with regards to this request, please do not hesitate to contact me directly.

Kindest regards,

Sgt. David WALLACE
N. C. O. In Charge
Dawson City Detachment

Box 159
Dawson City, YT
Y0B 1G0
(867) 993-2677

/am

Report to Council

[ ] For Council Decision [X] For Council Direction [ ] For Council Information

[ ] In Camera

AGENDA ITEM:	Canadian Bank of Commerce Items found	
PREPARED BY:	Asset & Project Manager	**ATTACHMENTS:** CBC items photos
DATE:	24/04/2023	
RELEVANT BYLAWS / POLICY / LEGISLATION:		

RECOMMENDATION

That Council temporarily give possession of the artifacts from the Canadian Bank of Commerce to the Dawson City Museum while the restoration is underway or until further direction is provided.

ISSUE / PURPOSE

During construction at the Canadian Bank of Commerce National Historic Site, several artifacts were found. These artifacts require proper storage and handling.

BACKGOUND SUMMARY

The Canadian Bank of Commerce phase 1 restoration will soon be taking place with two subsequent phases planned until the building is restored. The location will not be suitable for the storage of the attached artifacts.

ANALYSIS / DISCUSSION

The Dawson City Museum has agreed to safeguard the Canadian Bank of Commerce artifacts until further direction is provided. These artifacts are of significant historical and heritage value. The Dawson City Museum has the expertise to safely manage these items.

Upon direction from Council, the items will be transported to the Dawson City Museum.

APPROVAL		
NAME:	David Henderson, CAO	**SIGNATURE:** David Henderson
DATE:	April 27, 2023	

DIEBOLD
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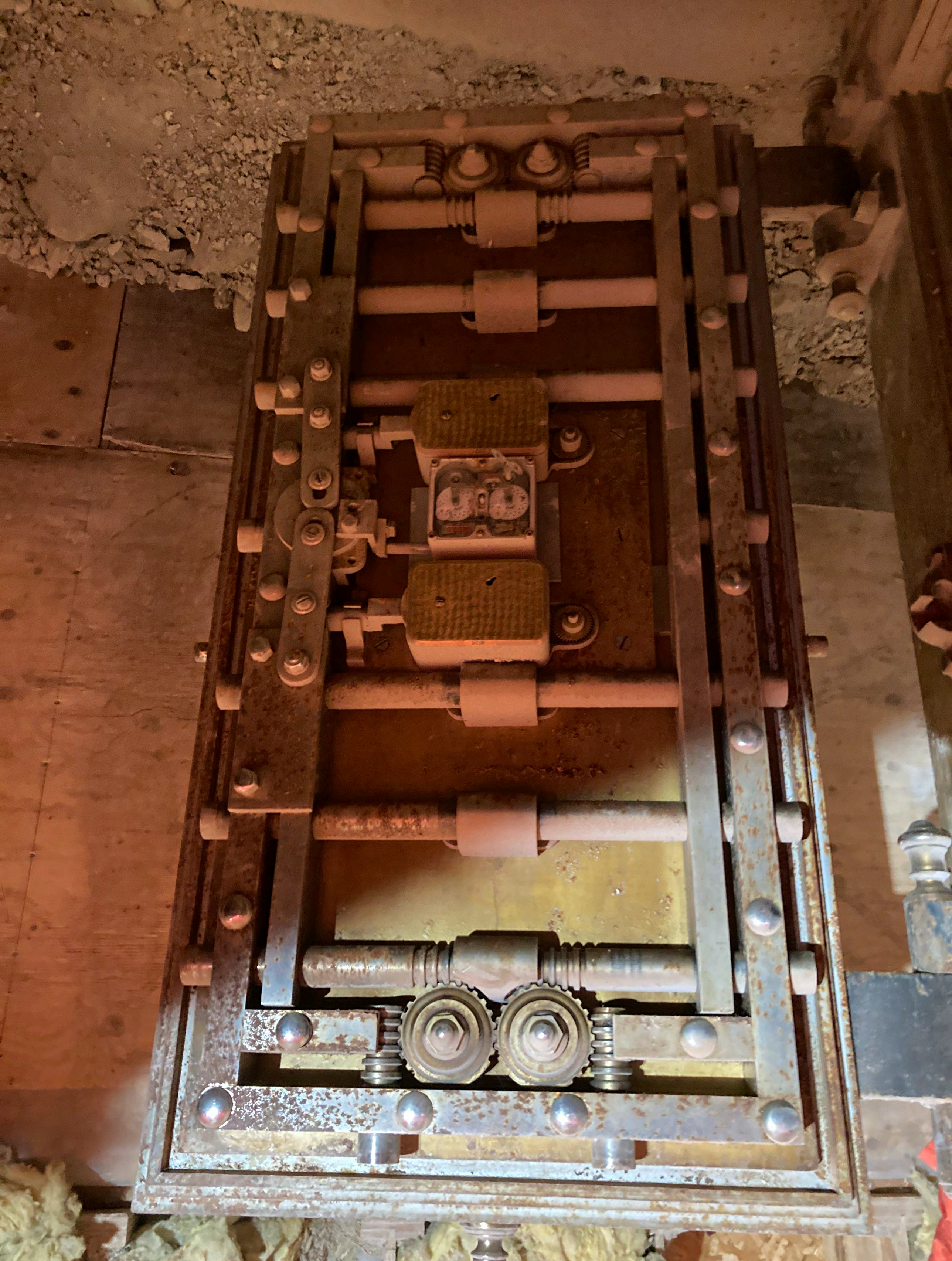


AQUA-TECH

Report to Council

[ ] For Council Decision [X] For Council Direction [X] For Council Information

[ ] In Camera

AGENDA ITEM:	Official Community Plan and Zoning Bylaw 2022 Annual Review	
PREPARED BY:	Planning & Development Department	**ATTACHMENTS:** 1. Draft Bylaw 2022-21 (ZBL Amendment No. 21)
DATE:	April 4, 2023	
RELEVANT BYLAWS / POLICY / LEGISLATION: Municipal Act Official Community Plan Zoning Bylaw		

RECOMMENDATION

It is respectfully recommended that Committee of the Whole accept this as information, and forward ZBL Amendment Bylaw #2022-21 to Council for first reading and public hearing.

ISSUE / PURPOSE

The OCP is required to be reviewed on an ongoing basis, specifically in October each year. The Zoning Bylaw is reviewed annually in tandem. This review was initiated in December on account of the 2021 annual amendments having recently passed 3rd/final reading on August 3, 2022 as well as due to staff turnover limiting capacity.

BACKGOUND SUMMARY

OCP s. 16.2 states that "Council shall schedule a review of the OCP at the first regular meeting in the month of October in each year and proceed to amend it as deemed advisable at that time". The Zoning Bylaw is also reviewed in tandem.

ANALYSIS / DISCUSSION

When assessing the OCP and Zoning Bylaw, it is first important to understand the fundamental purpose of each document. Though they are both binding documents under *the Municipal Act*, they both serve a different purpose that is implemented differently in practice.

An OCP is conceptual and high-level, outlining municipal goals and strategies. According to S. 279(1) of the *Municipal Act*, the purpose of an OCP is to address a range of concepts such as goals for future land development, the provision of municipal services and facilities, environmental matters, transportation systems, etc.

A ZBL is different in the sense that it provides the actionable mechanism to implement the goals and conceptual framework provided by the OCP. According to S. 289(1) of *the Municipal Act*, "A zoning bylaw may prohibit, regulate, and control the use and development of land and buildings in a municipality".

Official Community Plan Amendments

No OCP amendments have been flagged in 2022.

Zoning Bylaw Amendments

1. Amend Table of Contents formatting: change s.5.3 'Water and Sewer Facilities' to s.4.8 for accuracy.

2. Add 'Personal Service Establishment' to C1 permitted uses and edit the definition to permit a wider range of services.
    - 'PERSONAL SERVICE ESTABLISHMENT' means a business which is associated with the grooming or health of persons or the maintenance or repair of personal wardrobe articles and accessories, and may include a barber shop, spa, medical and dental office, beauty parlor, shoe repair shop, self-service laundry or dry-cleaning establishment.

3. Remove 'PERSONAL SERVICES' from definitions, as it is redundant since the definition of 'PERSONAL SERVICE ESTABLISHMENT' was added in 2021.

4. Remove one of the SEASONAL from definitions, since they are duplicates.

5. Edit the definition of LANDSCAPING to conform to the OCP's S.9.2.:
    - LANDSCAPING means to change, modify, or enhance the visual appearance of a site in order to beautify or screen the appearance of a lot. This may be done by reshaping the earth; planting lawns, shrubs, or trees; preserving the original natural vegetation; and adding walks, fencing, patios, ~~and other~~ ornamental features, and public art.

6. Edit S.4.2.2. to provide a safer and more sustainable environment:
    - [No development permit is required for the following:]
      landscaping where the existing grade and surface drainage pattern is not materially altered, except when landscaping is required as part of a development permit. Landscaping should not impact existing utilities, obstruct windows and entryways, or divert pedestrian, cyclist and vehicular circulations.

7. Add the following definition to S.2.2: "RELIGIOUS ASSEMBLY means development used for worship and related religious, philanthropic or social activities and includes accessory rectories, manses, meeting rooms, food preparation and service facilities, classrooms, dormitories and other buildings. This use does not include Commercial School".

8. Add 'Temporary Shelter Services' to R1, P2, and C1 permitted uses and to definitions.
   The City of Whitehorse defines and permits 'temporary shelter services' in their CM1 & CM2: Mixed Use Commercial zones, PS: Public Service zone, and as a conditional use in their RD: Residential Downtown zone.
    - The addition of this use will create a common definition for existing temporary shelters, such as the Men's shelter (located in the C1 zone and classified as 'mixed-use residential') and the women's shelter (located in R1 and classified as a 'boarding house').
    - Given the purpose of the P2: Institutional zone to provide government and health services, it makes sense to permit temporary shelter services as a use.
    - 'TEMPORARY SHELTER SERVICES' means the provision of communal, transient accommodation sponsored or supervised by a public authority or non-profit agency intended to provide basic lodgings for persons requiring immediate shelter and assistance for a short period of time.

9. Remove s.7.9 Visibility at Intersections. This clause mandates a 20-foot setback from the corner of parcels at intersections. Other guidelines, particularly *Design Guidelines for Historic Dawson,* do not support this. Additionally, most of the existing properties, including historic ones, do not adhere to this clause and will eventually cease to be compliant.
10. Amend s.3.2.2 for accuracy: "by resolution appoint the members of the Heritage Advisory Committee for terms of office, as specified under the *Heritage ~~Advisory Committee~~ Bylaw*".
11. Amend 'Demolitions' section to provide a clearer decision-making process when receiving applications for heritage demolitions, and for bridging the gap between the two separate demolition processes that currently exist (Protective Services vs. Planning processes).
12. <u>Direction from Council:</u>

    Currently, there is a discrepancy between the definition of 'Public Utilities' (in S.2.2) and S.8.7.1 'Public Utilities':

    S.2.2. 'General Definitions' reads as follows:

    - PUBLIC UTILITIES means buildings, facilities, or equipment, — that is either owned or operated by the City or by an external body under agreement with the City to comply with a territorial or federal statute, — which furnishes services and facilities for the use of all Dawson City residents. Typical uses include, but are not limited to, landfills and waste treatment facilities, **sewage treatment facilities**, pump houses and stations, water treatment plants, and electrical production facilities.

    However, S.8.7. 'Public Utilities' reads as follows:

    - 1. Public utility facilities for the distribution of water, sewage, electrical power, telephone, cable television, and other similar services are permitted in all zones.
        - I. This does not include **sewage treatment plants, lagoons**, or electrical substations.

    Not only are these two sections incompatible, but no zone permits sewage treatment plants or lagoons. They are therefore not allowed anywhere within the city limits. Options include:

    a) Remove the sewage treatment plants from the Definition section. Research appropriate zones for such uses, then add them to the specific zone(s).
    b) Remove S.8.7.1.I and permit sewage treatment plants and lagoons in all zones. That might lead to some concerns about sustainable development.

Historic Resource Demolitions

Discussion was held at the August 2, 2022 and October 20, 2022 joint Council and HAC meetings regarding historic building demolitions. S. 4.1.1.5 of the ZBL was discussed in reference to what the intent of the "Yukon Government Historic Sites Registry" was – was it intended to refer only to the *Yukon Register of Historic Places* or to *Yukon Historic Sites Inventory* (YHSI) listed structures? Council discussed the possibility of reviewing this section of the Zoning Bylaw to provide clarity.

Few privately owned structures are on the *Yukon Register of Historic Places*. The following 8 sites are listed:

- Arctic Brotherhood Hall
- Bank Of Commerce
- Dawson City Telegraph Office

- Harrington's Store
- Minto Park
- Moosehide Slide
- P. Denhardt Cabin
- Yukon Sawmill Company Office

Given that there are so few structures listed on the *Yukon Register of Historic Places*, it has been administrative practice to forward YHSI listed structures to the HAC and Council for recommendation and approval, respectively, given that there are many highly valued historic resources listed on YHSI and to ensure a public process is followed. Administration recommends the continuation of this practice.

The City of Whitehorse's *Heritage Bylaw 2002-10* sets out a framework for identifying and protecting historic buildings. It enables the creation of the 'Heritage Registry' by Council, which provides a listing of all heritage resources in the City – some are municipal historic sites, many are not. If someone proposes to demolish a building on the Whitehorse Heritage Registry:

1. The Bylaw doesn't contemplate a process for proposals to demolish a designated Municipal Historic Site. It assumes that the resource will be protected.
2. An application to demolish a building that is listed as a Historic Resource on the registry but is not designated triggers a 30-day review period where Council considers whether to designate the building as a Municipal Historic Site. **It assumes that if the building is designated then the demolition will not be allowed; if Council decides not to designate then the demolition would be allowed to proceed.** If the building is a residence and the owner does not consent to designation, then the demolition is allowed without Council review.

Administration recommends that a similar process be followed for determining when a historic resource can or cannot be demolished. The Municipal Historic Site designation process is currently an under-utilized tool that provides an opportunity to determine the perceived value of the heritage resource under consideration, and serves as a method of ensuring that all historic buildings are not weighted the same when considering demolition applications. For example: a small, derelict, 1970s shed would not be weighted the same as a showpiece, gold rush era residence. As such, Administration recommends the following amendments to s.4.1.1.5:

"Demolition of a structure 40 or more years old or listed in the Yukon ~~Government~~ Historic Sites ~~Registry~~ Inventory shall occur only in extenuating circumstances, and must be approved by Council in consultation with the Heritage Advisory Committee and Yukon Government Historic Sites.

I. Upon receipt of a complete application for the demolition of an undesignated heritage resource listed on the Yukon Historic Sites Inventory, the application shall be subject to a thirty (30) day review period whereby Council shall determine if there is a consensus to commence the process of Municipal Historic Site designation. If there is not, a demolition permit shall be issued.
II. Council may not designate a site as a heritage resource without the written consent of the owner, if the site proposed for designation is a residence in which its owner resides.
III. No person shall carry out an activity that will alter the historic character of a site that is designated or where Council has provided notice of intent to designate unless the activity is carried out in accordance with a Historic Resources Permit, as specified in the *Heritage Bylaw*.
IV. Any person who proposes to carry out an activity that may alter the historic character of a designated historic site or a site that is subject to a notice of intended designation shall, prior to commencing the proposed activity, submit an application for a Historic Resources Permit, as specified in the *Heritage Bylaw*."

<u>Rationale for insertions</u>

- *Dawson City Heritage Management Plan* states “[b]uildings and structures 40 or more years old may be demolished only in exceptional circumstances”.
- The City of Dawson’s *Heritage Bylaw* defines a Historic Resource as, “a historic site, historic object, or any work or assembly of works of nature or human endeavor listed in the Yukon Historic Sites Inventory”. Requiring this 30-day review period for the proposed demolition of all buildings in the YHSI is therefore consistent with the intent of the City’s Heritage Bylaw.
- The *Historic Resources Act* provides for the protection and preservation, the orderly development, and designation of historic resources in the Yukon. S.15.5 states, “If the site proposed for designation is a residence in which its owner resides, the Minister may not designate the site as a historic site without the written consent of the owner”. Therefore, if a private owner of a residence does not consent, there is no ground for obliging designation.

Question for Council

What role (and how and when) might the HAC play in the procedure? The current language of the Bylaw is not clear on what the HAC’s role would be in this process.

‘Historic resource’ should be defined in s.2.2 for clarity. Administration recommends copying the definition from the *Heritage Bylaw* for consistency.

On September 14th, 2022 at Committee of the Whole meeting #CW22-12, Council suggested that ‘tests’ be established to ensure consistency in decision making. The City of Whitehorse outlines Evaluation Criteria in the *Heritage Bylaw 2002-10*, which are used to attribute a ‘score’ to a historic resource based on Architectural History, Cultural History, Context, Integrity, and Age. Higher scoring resources are more likely to be designated. Administration recommends that similar evaluation criteria are used as ‘tests’ for determining whether a resource should be designated, and ultimately either demolished or protected. As such, Administration recommends the following insertion to s.4.1.1.6:

Council shall establish a Heritage Evaluation Criteria in order to attribute a score to a historic resource based on the five following categories:

Architectural History

I. The building may embody characteristics of an architectural type valuable for the study of a style or a method of construction of its period or the City or the Yukon. It may also be a notable example of a builder or architect's work.

II. The building has the strong potential for illustrating the City's heritage to a degree such that it will be possible for the visitor to gain from the building an understanding of the architecture or history with which it is associated.

III. The building is significant because of the original materials and workmanship remaining.

Architectural criteria may include such attributes as its picturesque quality or functional nature including massing, proportion, scale, layout, material detailing, colour, texture, fenestration, ornamentation or artwork.

Cultural History

I. A building and/or site that has an association with a person, group, or institution with historical significance to the city. This may include a well-known pioneer, an organization or business, or distinct group of people.

II. A building and/or site that has an association with an event or activity of historical significance to the City. This may be a unique event or a recurring event.

III. A building and/or sites association with broad patterns of local area or civic history including ecological, social, political, economic or geographic change. (theme)

Context

The historical context of a building or site refers to the historical relationship between the building's site and its immediate environment.

I. A notable and historical relationship between a building's site and the street, railway, waterfront, view or other geographic features which were a part of the building's original function. (landscape)

II. A building's continuity and compatibility with adjacent and surrounding buildings and the building's visual contribution to a group of similar buildings. (urban design/streetscape)

III. A building's and/or site's visual or symbolic importance as a local landmark.

Integrity

The historical integrity of a building refers to the degree of alteration the building has sustained since its original construction.

I. The extent and the impact of the changes and alterations that have occurred to the building over time. The items to consider may include style, design and construction.

II. The structural integrity of the building, the interior, exterior and the site.

III. The location of the building in relation to its original site.

Age

This category refers only to the age of the building.

Suggestion

Following are some examples of evaluation criteria and scoring systems:

Criteria		**Excellent (3)**	**Good (2)**	**Fair/Poor (1)**
Architectural History	Form and function			
Cultural History	Association			
	Pattern			
Context				
Integrity				
Age (for information only, not to be scored)				
Total				

Planning vs. Protective Services Demolition Processes

There is currently a lack of clarity and transparency in how historic building demolitions are addressed. Application-driven demolitions go through a different process than Protective Services-administered Orders for Demolition.

On September 14th, 2022 at Committee of the Whole meeting #CW22-12 and on October 20, 2022 at the joint HAC/Council meeting, Council discussed the demolition of historic buildings, including what measures could be put in place to improve transparency and equitability in the decision-making process. The following were briefly discussed as possibilities:

- It was suggested that a definition be established for 'unsafe' buildings, to more clearly outline what would deem a building possibly eligible for demolition.
    - At the City of Whitehorse, building safety is not identified as a criterion in considering whether to designate a building, however one of the criteria is 'Integrity', which includes structural integrity, so poor structural integrity could reduce the likelihood of designating a building. The same is recommended, as reflected in s.4.9.6 the 'Evaluation Criteria' above.
- Council has queried whether or not there should be a requirement for a property owner to contract a structural engineer to undertake an official inspection to report on the structural integrity of the building, additionally to the Fire Chief's inspection report when looking to demolish a historic building. This would be context dependent based on the building's context (perceived historic value).

Administration recommends the following options to provide some flexibility to property owners. Instead of requiring an official inspection done by a structural engineer – since this could be a costly imposition on property owners to contract this service, the City of Dawson could require:

a. an inspection report by the Protective Services Manager, and;

b. either an inspection report by a Building Inspector or a structural engineer.

The procedure may be referred to as 'de-designation of a historic resource' and may only be initiated for demolition permits.

<u>Questions for Council</u>

1. How many inspection reports should be required, and who should be contracted to undertake them?
2. At what stage would an official inspection be required?
3. Is an official inspection a submission requirement that should be required for *all* historic demolition applications? If not, what is the threshold for requiring vs. not requiring an official inspection?

13. Create a new section for 'Demolitions' outside of s.4.1 'Development Permit Required'. Remove s.4.1.1 'Demolitions' and insert its contents into new s.4.9.

14. Amend floor area numbers in Table 9-1 'REQUIRED OFF-STREET PARKING SPACES' to round to the nearest whole number for clarity and consistency among line items. For example: round 99.96m.^{2} to 100m.^{2}.

15. It has been observed in practice that the '1 per *x* seats' metric for determining parking requirements is not applicable in various cases, as some uses do not require physical seating, and the number of seats

associated with a use can fluctuate without clear regulation. This has commonly led to difficultly in interpreting parking requirements, and imposes the risk of variable/inequitable decision making. Therefore, it is proposed that a different metric is used to assign parking, reflecting parking requirements other municipalities Zoning Bylaws. Municipalities such as the City of Victoria, the City of Nelson, the City of Kamloops, and the City of Revelstoke assign a number of stalls based on the floor area associated with a use, which have been used as a reference. Administration recommends the following amendments to Table 9-1 'REQUIRED OFF-STREET PARKING SPACES':

Use	Required Parking Spaces	Rationale
Place of public assembly, including arena, assembly halls, auditorium, club, lodge and fraternal building, community centre, convention hall, funeral parlour and undertaking establishment, gymnasium, meeting hall, ~~or~~ theatre, or community recreation facility	~~1 per 8 seats~~ 1 per 10m^2 (108ft^2) of floor area	a) the City of Nelson's Off-Street Parking and Landscaping Bylaw No. 3274 requires 1 space/10m^2 of floor area used for assembly purposes. b) the City of Revelstoke requires 1 space/10m^2 of floor area for places of public assembly. c) the City of Kamloops requires 10 spaces/ 100m$_2$ of floor area (also 1 space/10m^2 floor area).
~~Recreational use, including curling rink~~	~~1 per 3.5 seats~~	a) this use group is redundant – similar use as above 'public assembly' uses. Ex: what is the difference between a curling rink and an arena?
Restaurant or eating establishment, lunch counter, diner, beer parlour, cocktail lounge, bar, or other similar establishment for the sale and consumption of food or beverages on the premises	~~1 per 8 seats~~ 1 per 50m^2 (538ft^2) of floor area	a) the City of Nelson's Off-Street Parking and Landscaping Bylaw No. 3274 requires 1 space/30m^2 (323 ft^2) of floor area. b) the City of Kamloops Zoning Bylaw No. 55 requires 0.4 spaces per 100m^2 (1,076ft^2) of floor area. c) to maintain similarity with other municipalities parking requirements, while being numerically consistent with other parking requirements in our ZBL.

16. Add 'Temporary Shelter Services' to Table 9-1 'REQUIRED OFF-STREET PARKING SPACES' The City of Whitehorse requires 1 parking stall per every 2 sleeping units for Temporary Shelter Services. The same is recommended.

17. Amend floor area numbers in Table 9-2 'REQUIRED OFF-STREET LOADING SPACES' to round to the nearest whole number for consistency among line items. For example: round 2,000.02m^2 to 2,000m^2.

18. Remove 'recreation facilities' as a permitted use from s.12.1.1 since 'community recreation facility' was added in 2020 with the intent of replacing it.

19. Administrative numbering edits of C2 zone numbering (change from S.12.0, 12.0.1, and 12.0.2 to S.12.2, 12.2.1, and 12.2.2 to match correct numbering, as reflected in the Table of Contents).

APPROVAL		
NAME:	David Henderson	**SIGNATURE:** David Henderson
DATE:	April 28, 2023	

THE CITY OF DAWSON

Zoning Bylaw Amendment No. 21 Bylaw

Bylaw No. 2022-21

WHEREAS section 265 of the Municipal Act, RSY 2002, c. 154, and amendments thereto, provides that a council may pass bylaws for municipal purposes, and

WHEREAS section 289 of the Municipal Act provides that a zoning bylaw may prohibit, regulate and control the use and development of land and buildings in a municipality; and

WHEREAS section 294 of the Municipal Act provides for amendment of the Zoning Bylaw;

THEREFORE, pursuant to the provisions of the *Municipal Act* of the Yukon, the council of the City of Dawson, in open meeting assembled, **ENACT AS FOLLOWS**:

PART I - INTERPRETATION

1.00 Short Title

This bylaw may be cited as the ***Zoning Bylaw Amendment No. 21 Bylaw***

2.00 Purpose

2.01 The purpose of this bylaw is to provide for:

(a) A series of text amendments.
(b) A series of amendments to Table 9-1 ‘REQUIRED OFF-STREET PARKING SPACES’, as shown in Appendix 1.
(c) Amendments to Table 9-2 ‘REQUIRED OFF-STREET LOADING SPACES’, as shown in Appendix 2.

CAO

Presiding Officer

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3.00 **Definitions**

3.01 In this Bylaw:

(a) Unless expressly provided for elsewhere within this bylaw the provisions of the *Interpretations Act,* RSY 2002, c. 125, shall apply;

(b) "city" means the City of Dawson;

(c) "council" means the Council of the City of Dawson;

PART II – APPLICATION

4.00 **Amendments**

4.01 Repeal S.5.3 Water and Sewer Facilities from the Table of Contents and insert: "4.8 Water and Sewer Facilities".

4.02 Insert "4.9 Demolitions" to Table of Contents.

4.03 Insert the following definition to S.2.2: "HISTORIC RESOURCE means a historic site, historic object, or any work or assembly of works of nature or human endeavor listed in the Yukon Historic Sites Inventory".

4.04 Repeal SEASONAL definition duplicate in S.2.2.

4.05 Repeal the LANDSCAPING definition in S.2.2 and replace with the following: "LANDSCAPING means to change, modify, or enhance the visual appearance of a site in order to beautify or screen the appearance of a lot. This may be done by reshaping the earth; planting lawns, shrubs, or trees; preserving the original natural vegetation; and adding walks, fencing, patios, ornamental features, and public art."

4.06 Repeal S.4.2.2 and replace with the following: "landscaping where the existing grade and surface drainage pattern is not materially altered, except when landscaping is required as part of a development permit. Landscaping should not impact existing utilities, obstruct windows and entryways, or divert pedestrian, cyclist and vehicular circulations."

4.07 Insert the following definition to S.2.2: “RELIGIOUS ASSEMBLY means development used for worship and related religious, philanthropic or social activities and includes accessory rectories, manses, meeting rooms, food preparation and service facilities, classrooms, dormitories and other buildings. This use does not include Commercial School”.

4.08 Repeal the PERSONAL SERVICE ESTABLISHMENT definition in S.2.2 and replace with the following: “PERSONAL SERVICE ESTABLISHMENT means a business which is associated with the grooming or health of persons or the maintenance or repair of personal wardrobe articles and accessories, and may include a barber shop, spa, medical and dental office, beauty parlor, shoe repair shop, self-service laundry or dry-cleaning establishment”.

4.09 Repeal ‘PERSONAL SERVICES’ definition in S.2.2.

4.10 Insert the following definition to S.2.2: “TEMPORARY SHELTER SERVICES means the provision of communal, transient accommodation sponsored or supervised by a public authority or nonprofit agency intended to provide basic lodgings for persons requiring immediate shelter and assistance for a short period of time”.

4.11 Repeal S.7.9 Visibility at Intersections.

4.12 Repeal S.3.2.2 and replace with the following: “by resolution appoint the members of the Heritage Advisory Committee for terms of office, as specified under the *Heritage Bylaw*.”

4.13 Repeal S.4.1.1.5 and replace with the following: “Demolition of a structure 40 or more years old or listed in the Yukon Historic Sites Inventory shall occur only in extenuating circumstances, and must be approved by Council in consultation with the Heritage Advisory Committee and Yukon Government Historic Sites.”

I. Upon receipt of a complete application for the demolition of an undesignated heritage resource listed on the Yukon Historic Sites Inventory, the application shall be subject to a thirty (30) day review period whereby Council shall determine if there is a consensus to commence the process of Municipal Historic Site designation. If there is not, a demolition permit shall be issued.

II. Council may not designate a site as a heritage resource without the written consent of the owner, if the site proposed for designation is a residence in which its owner resides.

III. No person shall carry out an activity that will alter the historic character of a site that is designated or where Council has provided notice of intent to designate unless the activity is carried out in accordance with a Historic Resources Permit, as specified in the *Heritage Bylaw*.

IV. Any person who proposes to carry out an activity that may alter the historic character of a designated historic site or a site that is subject to a notice of intended designation shall, prior to commencing the proposed activity, submit an application for a Historic Resources Permit, as specified in the *Heritage Bylaw*."

4.14 Insert the following to S.4.1.1.6:
"Council shall establish a Heritage Evaluation Criteria in order to attribute a score to a historic resource based on the five following categories:

Architectural History

I. The building may embody characteristics of an architectural type valuable for the study of a style or a method of construction of its period or the City or the Yukon. It may also be a notable example of a builder or architect's work.

II. The building has the strong potential for illustrating the City's heritage to a degree such that it will be possible for the visitor to gain from the building an understanding of the architecture or history with which it is associated.

III. The building is significant because of the original materials and workmanship remaining.

Architectural criteria may include such attributes as its picturesque quality or functional nature including massing, proportion, scale, layout, material detailing, colour, texture, fenestration, ornamentation or artwork.

Cultural History

I. A building and/or site that has an association with a person, group, or institution with historical significance to the city. This may include a well-known pioneer, an organization or business, or distinct group of people.

II. A building and/or site that has an association with an event or activity of historical significance to the City. This may be a unique event or a recurring event.

III. A building and/or sites association with broad patterns of local area or civic history including ecological, social, political, economic or geographic change. (theme)

Context

The historical context of a building or site refers to the historical relationship between the building's site and its immediate environment.

I. A notable and historical relationship between a building's site and the street, railway, waterfront, view or other geographic features which were a part of the building's original function. (landscape)
II. A building's continuity and compatibility with adjacent and surrounding buildings and the building's visual contribution to a group of similar buildings. (urban design/streetscape)
III. A building's and/or site's visual or symbolic importance as a local landmark.

Integrity

The historical integrity of a building refers to the degree of alteration the building has sustained since its original construction.

I. The extent and the impact of the changes and alterations that have occurred to the building over time. The items to consider may include style, design and construction.
II. The structural integrity of the building, the interior, exterior and the site.
III. The location of the building in relation to its original site.

Age

This category refers only to the age of the building."

4.15 Repeal S.4.1.1 and insert contents into new S.4.9.

4.16 Repeal and replace Table 9-1 with the amendments shown in Appendix 1.

4.17 Repeal and replace Table 9-2 with the amendments shown in Appendix 2.

4.18 Insert 'temporary shelter services' to S.11.1.1.

4.19 Insert 'temporary shelter services' to S.11.2.1.

4.20 Insert 'personal service establishment' to S.12.1.1.

4.21 Repeal ‘recreation facilities’ from S.12.1.1.

4.22 Insert ‘temporary shelter services’ to S.12.1.1.

4.23 Administrative numbering edit of S.12.0 ‘C2 Zone (Commercial Mixed Use)’ to S.12.2.

4.24 Administrative numbering edit of S.12.0.1 to S.12.2.1.

4.25 Administrative numbering edit of S.12.0.2 to S.12.2.2.

PART III – FORCE AND EFFECT

5.00 Severability

5.01 If any section, subsection, sentence, clause, or phrase of this bylaw is for any reason held to be invalid by the decision of a court of competent jurisdiction, the invalid portion shall be severed and the part that is invalid shall not affect the validity of the remainder unless the court makes an order to the contrary.

6.00 Enactment

6.01 This bylaw shall come into force on the day of the passing by Council of the third and final reading.

7.00 Bylaw Readings

Readings	Date of Reading
FIRST	
PUBLIC HEARING	
SECOND	
THIRD and FINAL	

CAO

Presiding Officer

William Kendrick, Mayor

Presiding Officer

Dennis Shewfelt, CAO

Chief Administrative Officer

8.00 **Appendices**

Appendix 1. Amended Table 9-1 'REQUIRED OFF-STREET PARKING SPACES':

USE	REQUIRED PARKING SPACES
Residential uses	
Single detached and duplex dwelling (4 bedrooms or less)	1 per dwelling unit
Single detached and duplex dwelling (over 4 bedrooms)	2 per dwelling unit and 1 per additional bedroom over 4
Multi-unit residential	1 per dwelling unit
Bed and breakfast	1 per 2 bedrooms available for rent (in addition to the space required for the residential use)
Secondary suite or garden suite	1 per suite
Temporary shelter services	1 per every 2 sleeping units
Institutional uses	
Hospital	1 per 100m.^{2} (1,076ft.^{2}) of floor area
School	1 per classroom
Place of public assembly, including arena, assembly halls, auditorium, club, lodge and fraternal building, community centre, convention hall, funeral parlour and undertaking establishment, gymnasium, meeting hall, theatre, or community recreation facility	1 per 10m.^{2} (108ft.^{2}) of floor area
Museum and public library	1 per 50m.^{2} (538ft.^{2}) of floor area
Child Care Centres	1 parking stall per 8 children (Bylaw 2021-15 passed on August 3, 2022)
Commercial uses	
Bank, administrative, or professional office	1 per 100m.^{2} (1,076ft.^{2}) of floor area
Medical or dental office or clinic	1 per 100m.^{2} (1,076ft.^{2}) of floor area
Retail store, personal service establishment, shopping centre, department store, and supermarket	1 per 100m.^{2} (1,076ft.^{2}) of floor area
Furniture and appliance sales, automobile and boat sales	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Restaurant or eating establishment, lunch counter, diner, beer parlour, cocktail lounge, bar, or other similar establishment for the sale and consumption of food or	1 per 50m.^{2} (538ft.^{2}) of floor area

beverages on the premises	
Hotel	1 per every 4 dwelling or sleeping unit with bus stall 1 per every 2 dwelling or sleeping unit without bus stall
Motel	1 per dwelling or sleeping unit
Lodging facility, non-permanent or permanent	1 per dwelling or sleeping unit
Billiard and pool hall	1 per playing table
Bowling alley	2 per alley
Laundromat	1 per 4 washing machines
Campground	1 per camping site + 1 space for the operator
Industrial uses	
Contractor or public works yard	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Machinery sales and repair	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Warehousing or storage	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Tire repair	1 per 150m.^{2} (1,615ft.^{2}) of floor area + 1 per service bay
Manufacturing and industrial	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Contractor or public works yard	1 per 150m.^{2} (1,615ft.^{2}) of floor area
Machinery sales and repair	1 per 150m.^{2} (1,615ft.^{2}) of floor area

Appendix 2. Amended Table 9-2 'REQUIRED OFF-STREET LOADING SPACES':

CLASS OF BUILDING	REQUIRED LOADING SPACES
Retail store, manufacturing, fabricating, processing, warehousing and wholesaling establishment	
i. Less than 2,000m.^{2} (21,528ft.^{2}) in floor area	1
ii. 2,000m.^{2} (21,528ft.^{2}) to 4,000m.^{2} (43,056ft.^{2}) in floor area	2
iii. Greater than 4,000m.^{2} (43,056ft.^{2}) in floor area	3

CAO _____ Presiding Officer _____

Report to Council

	For Council Decision		For Council Direction	x	For Council Information		In Camera

AGENDA ITEM:	Temporary Accommodation for Seasonal Workers	
PREPARED BY:	Chief Administrative Officer	**ATTACHMENTS:**
DATE:	April 27, 2023	
RELEVANT BYLAWS / POLICY / LEGISLATION:		

DISCUSSION

Proposed Development

The Klondike Visitors Association is proposing an accommodation project that will facilitate the need for additional housing for seasonal staff.

- The first iteration of the proposal was for 20 prospector style tents with a common wash/toilet building and it would be located behind the wastewater treatment plant on property owned by YG and zoned institutional.
    - This was discussed with City Staff at the end of March. This proposal faced a number of timing, municipal planning, project planning and regulatory challenges which were outlined to the proponents.
    - Institutional zoning does not allow this type of project. Zoning changes take time. Good planning would not recommend temporary housing next to a waste treatment plant
- The proponents then redeveloped the plan to include a mix of prospector style tents and cabins. The location has also been moved to private property zoned commercial which currently has similar types of buildings.
- Staff also identified to the proponents the current shortage of staff the municipality is dealing with and the challenge this presents to process the project as we understand it to date.
    - In response, YG Tourism, which is a funding partner of the project, proposed that the City hire a consultant to assist with the research and preparation required, and YG Tourism would provide funding assistance to do so.
    - The Planning arm of Stantec engineering has been contacted and a sole source contract negotiated for a very limited scope of work on this specific project. The Cost of this contract will be covered by a transfer payment agreement from YG.
    - Stantec was approached as they have done extensive work on the City's Official Community Plan and Zoning Bylaw and they have staff available to work on it now.
- Depending on the work of the contractor and the details of the project, the proposal will be moved forward to council for consideration.
- Staff do not yet have enough information to understand what hurdles may yet pose problems to the project. Suffice to say time is very tight given the steps normally involved in municipal planning and staff will expedite where possible.
- The purpose of this report is to
    - inform Council of the project,
    - inform council of the consulting and funding arrangement associated with it
    - make council aware that timing and Municipal planning challenges may exist with the project

APPROVAL		
NAME:	David Henderson	**SIGNATURE:** David Henderson
DATE:	April 27,2023	

Report to Council

	For Council Decision		For Council Direction	x	For Council Information		In Camera

AGENDA ITEM:	CAO Update on Administrative Activities for information Purposes	
PREPARED BY:	Chief Administrative Officer	**ATTACHMENTS:**
DATE:	April 27, 2023	
RELEVANT BYLAWS / POLICY / LEGISLATION:		

DISCUSSION

Emergency Medical Services –

The CAO, Fire Chief, EA, TH Jeffrey Shannon, RCMP David Wallace, YG Municipal liaison Roxanne Stasyszyn met with YG EMS Gerard Dinn to review issues related to ambulance services in the Dawson Area

- Discussions included a review of coverage, callout procedures and how a callout is extended to the Volunteer Fire Services or other agencies. Discussed the perception of lack of EMS coverage and a worsening trend locally. Discussed consistent local EMS call volumes and the reality of EMS service in one of the lowest population densitiy's in Canada. Discussed recruiting challenges and efforts for part time paramedics or associates.
- Dawson Volunteer Fire Services will be reviewing Standard Operating Procedures related to EMS calls and establishing such with the EMS dispatch services.
- Dawson Volunteer Fire Services and EMS will develop an MOU for callout services
- Dawson Volunteer Fire Service will review possible dispatch agreements with EMS
- Area agencies will monitor ems related call volume to evaluate trends.
- EMS is adding 4 mobile Paramedics to its service which will backup remote service areas
- Follow-up discussions will take place

Trondek Hwechin Update

The City of Dawson is committed to reconciliation threaded through the fabric of everything that we do. Projects currently underway include:

- Work to support and enable the GAZEBO Project for the 25th anniversary Celebrations this summer
- The review and development of a road sign project to include Han language
- Working with Trondek Hwechin on trail development projects
- The development and raising of Trondek Hwechin banners related to special events and celebrations
- Identification of a location for the placement of a Trondek Hwechin historical statue (s)
- The Development of a new City of Dawson Logo that incorporates the Natural environment, The Klondike , a Trondek Hwechin element or reference.
- Shared Participation in emergency planning and preparedness training

APPROVAL		
NAME:	David Henderson	**SIGNATURE:** David Henderson
DATE:	April 27,2023	