

APPENDIX D

Letters Missing from the April 3, 2023 Council Agenda

From: Marianne Lee <marianne57lee@gmail.com>
Sent: October 30, 2022 5:24 PM
To: planning@redeer.ca
Subject: 4240 - 59 Street

Orlando Toews
Senior Planner
The City of Red Deer

I am altogether opposed to the proposed amendments to the Land Use Bylaw and the Waskasoo Area ReDevelopment Plan.

1. **Open Space** -

- Residents and stakeholders were consulted during the ARP process and they overwhelmingly wanted this land to retain PS and remain open space and used for recreation and sports. Retain the underlying land-use open space.
- The City's "Major Open Space" system includes this lot - with the intention to protect the environment, build healthy communities, and draw tourism and investments to Red Deer. Keep it open space.

2. **Housing Density**-

- multi-family is higher density and not suitable on this lot
- Municipal Development Plan, Sec 10 - Housing Mix - requires a mix of housing types and forms in all residential neighbourhoods. However, Waskasoo doesn't need apartments. Waskasoo has 58% to 64% multi-family dwellings (depending on the publication). Whereas the City average is 21% and some southeast communities have only 10%.
- Neighbourhood Planning Design Standards, 6.0 Housing Opportunity Choice - 6.1 states neighbourhoods should incorporate a variety of at least 4 housing types to provide housing choices and buying capacity for residents. Waskasoo already has housing choice.
- also, 6.5 - to incorporate a mix of housing that supports affordable housing opportunities within the neighbourhood. Again, Waskasoo already has affordable housing (apartments, suites, and single family homes from small to large size).

3. **Traffic** -

- Neighbourhood Planning & Design Standards - states a neighbourhood should, at minimum, establish 2 road connections on 2 sides of the neighbourhood. The above mentioned lot is at the back of a residential neighbourhood with direct access from only 1 direction - along 45 Avenue. It does not even have the minimum 2 road connections.
- 45 Avenue is not built for higher density traffic. It isn't even built for the existing traffic with existing residents, 3 schools, 1 Daycare, Kerry Wood Nature Centre, McKenzie Trails, Parkland CLASS, and the acreages east of McKenzie Trails. 45 Avenue cannot handle more traffic and is already at over-capacity.
- This lot is not near transit services._

4. Area ReDevelopment Plan -

- The ARP was formed to guide re-development at great great time and expense on behalf of The City administration, residents, and stakeholders in order to protect the vision of Waskasoo. It is totally bizarre to ignore the ARP now.
- All landowners and developers are called to build in a way that fits the environmental character of the area and submit additional studies on impacts to;
 - traffic
 - services
 - bank stability. To remove the need for additional studies puts the Waskasoo Area's sense of place, views and the City's transportation service and environment at risk.
- Previous proposed developments in 2012 were dis-allowed by The City and City Council because there was no ARP at that time to help guide development. Now that there is an ARP, it should not be dismissed or changed in any way.

5. Environment -

- The Environmental Character Area protects the waterways, the environment, the trail system, Gaetz Lakes Sanctuary and wildlife corridor. This lot is at a spot along the Red Deer River where the park system narrows, making it particularly important. We must protect the environment for all Red Deerians.

In summary, I am not at all anti-development. But I am extremely against R3 zoning on this unique spot. There is no rightful and valid reason to implement R3 - this is not the location. If the developer intends to build in a way to benefit and co-exist with the Waskasoo community, then they can easily do that within the existing ARP.

Marianne Lee

4325 - 58 Street

Red Deer, Alberta

T4N 2L7

403-307-5874

marianne57lee@gmail.com

Subject: FW: [External] Attn: Orlando Toews

From: hughnlois@shaw.ca <hughnlois@shaw.ca>
Sent: November 01, 2022 11:50 AM
To: Planning Services <Planning@reddeer.ca>
Cc: secretary@waskasoo.info; Lois McPherson <lmcpherson049@gmail.com>
Subject: [External] Attn: Orlando Toews

Good morning Mr. Toews

We have received information about a proposed change in the Land use by-law at 4240-59 Street in the Waskasoo district from the Waskasoo Community Association. This change would see this parcel of land moving from PS to R3 in order to accommodate the application for a development on this property.

Although we live west of Waskasoo Creek, we were involved in the development of the Waskasoo ARP and appreciated the opportunity to provide input into this community consultation process. It appears that we were not included in the consultation process for this change of land use as our residence is west of Waskasoo Creek. We find it interesting that our street was asked to be involved in the planning of the ARP but not included in proposed changes to the plan.

Regardless, we were very impressed with the process that was used for the development of the Waskasoo plan and the consultation and inclusion of community perspectives in the plan. We are of the opinion that allowing the change of this property from a PS to a R3 land use is inconsistent with the intent, values and character of the neighborhood plan. In the absence of any specifics around the type and nature of the development proposed for this site, we do not feel that this parcel should be changed to an R3 designation. Doing so would open the door to any form a development consistent with an R3 land use either now or in the future. Given the location of this parcel close to the Gaetz Lake Sanctuary and accessed by the limited road allowance of 45 Ave., we feel that allowing for an R3 land use without any type of clarity around the type and nature of the development would be detrimental to the neighborhood and inconsistent with the intent of the ARP. We recognize that it is difficult for a developer to move forward with the planning for a development without some sort of assurance that the land use will allow for development. However, we are opposed to changing this parcel to an R3 land use given the breadth of potential developments that are allowed within this land use category. We do not feel that an R3 land use as currently structured is an appropriate use for this particular area. Our suggestion is to leave the land use as it is or investigate the possibility of moving it to a Direct Control or Future designation land use whereby any zoning or land use change would be dependent on the provision of design and pre-development studies that would ensure that the parcel is being developed consistent with the nature and intent of the Waskasoo ARP.

Sincerely
Hugh and Lois McPherson
4744 56 Street
Red Deer.

Subject: FW: [External] Brenda Garrett's Second Response to 4240 59 St

From: darmont@telus.net <darmont@telus.net>
Sent: Wednesday, March 1, 2023 12:04 PM
To: planning@reddeer.ca
Subject: 4240 59 St

Good Day Orlando,

Thank you for inviting comments from the community regarding East Lincoln Properties' revised proposal to amend the Waskasoo ARP and rezone 4240 59 St to R3. Honestly, it wouldn't matter how the developer tried to amend the ARP, I would never agree to removing land from Red Deer's Open Space-Major at a critical location along the river and the South Bank Trail in order to build R3 multifamily apartment buildings. It is particularly upsetting since there is no pressing reason beyond profit for doing so.

I am also very concerned that rewording specific portions of the Area Redevelopment Plan to accomplish development objectives that are inconsistent with the main objectives of both the plan and the relevant character area will create all kinds of conflicts about character, appropriate siting, form, and massing, preserving the environment, maintaining neighbourhood amenities, and more. These conflicts will inevitably lead to red tape and City staff, possibly even Council, having to act as mediators whenever anything is proposed in this Character Area, which includes much more area than the lot at 4240 59 St. And this is on top of the time and effort City staff have put into mediating this proposal over the last two years. I sincerely hope this developer never complains about red tape and the time it takes to get things through the municipality. It is exactly things like this attempt to sidestep the rules that backlog the system.

As I wrote in my last letter regarding the first version of this proposal, I sincerely hope that Council defeats this proposal, and if they do, that there is something that can be done to keep this kind of request from reoccurring in six months or a year down the road. The lot is obviously too much of a temptation for developers who could make a substantial profit building inappropriate residential developments on it.

Sincerely

Brenda Garrett

5826 45 Avenue

Red Deer, AB

Subject: FW: [External] 4240-59 St Proposed Amendments to Land Use Bylaw and Waskasoo Area Redevelopment Plan

From: John Bouw <johnbouw61@gmail.com>

Sent: October 26, 2022 11:17 AM

To: Planning Services <Planning@reddeer.ca>

Cc: secretary@waskasoo.info

Subject: [External] 4240-59 St Proposed Amendments to Land Use Bylaw and Waskasoo Area Redevelopment Plan

Att: Orlando Toews

I AM OPPOSED TO THE CHANGES IN THE ZONING AND THE WASKASOO AREA REDEVELOPMENT PLAN FOR THE FOLLOWING REASONS

1. The Waskasoo Neighbourhood, Trails, Parks, and Green Areas are the Jewels of Red Deer. No other neighbourhood in the City enjoys nature at its finest in all seasons. These areas are not only enjoyed by neighbourhood residents but by all residents of Red Deer who walk, bike and now skooter the trails, canoe or kayak the Red Deer River, walk the nature trails of Kerry Wood Nature Centre and the many picnic areas of McKenzie Trails. It's not only city residents who use this area but it is a wildlife route for many mammals and birds. This lot is the entry to the green areas and parks north of Gateway School. We personally have had many visitors from other provinces and cities in Alberta who marvel at what we have. We have a natural tourist attraction that we are not promoting enough.

IF THIS PARCEL IS DEVELOPED IT WILL BE LOST FOREVER FOR THE ENJOYMENT OF FUTURE RED DEERIANS AND VISITORS!

2. The local and very knowledgeable developer who purchased this lot knew full well this was PS land. He knew there was and will be opposition to developing this land from the Waskasoo Community and other residents of the city.

3. There were countless hours contributed by many to develop the Waskasoo Area Redevelopment Plan. This plan is only 6 years old. There was an overwhelming support of no development of this parcel, Citizens wanted this land left as is or developed into some sports or play area not housing or apartments.

4. To me it makes no sense that the city would want this parcel rezoned to R3 when the Capstone Development remains empty. The type of development this developer is proposing would fit perfectly into the Capstone Development. If it's river views this developer wants Capstone has it. If the city was smart they would trade land in Capstone for this parcel. It would give a kickstart to Capstone which it definitely needs!

5. Waskasoo does not need any more apartments or condos. Over 60% of residents already live in R3 housing with more in duplexes and basement suites. Compared to the other city neighbourhoods we are overwhelmingly saturated with multi family housing.

6. This parcel is already included in the Waskasoo Environmental Character Area which includes Kerry Wood Nature Centre, Gaetz Lake Sanctuary and the McKenzie Trails Recreation area. This area is also identified in the City of Red Deer's vision for the Major Open Space System that protects the environment.

7. Traffic is already a serious issue in Waskasoo. The addition of numerous more households will only exacerbate the problem. The corner path at 45 Ave and 59 St is already a dangerous crosswalk. Numerous vehicles taking the bend do

not see pedestrians and bicyclists and speeding is an ever present problem. 45 Ave north of 59 St is not built to city road standards. It is very narrow.

8. Site views and privacy for the residents living on 59 St will be greatly impeded. These residents already have to put up with the parking and traffic issues around Gateway school. School buses and parent vehicles already park from the corner of 45 Ave down 59 St. past the school in front of all these homes.

9. The frontage of this property along 45 Ave and the Red Deer River has I think the most beautiful vistas of the river in Red Deer where you can look west toward the bridges and along the north banks. Why do only a privileged few enjoy this view? This view belongs to all residents.

10. Lastly I question why only the residents of Waskasoo East were mailed this package. The residents of Waskasoo west of the Waskasoo Creek are included in the Waskasoo Area Development Plan and are identified as such on all maps and consultations I have seen.

John W. Bouw
4592 Waskasoo Crescent
Red Deer, Alberta
T4N2M2
403-318-7651

PLEASE ACKNOWLEDGE RECEIPT OF THIS EMAIL

December 12, 2022

To: Orlando Toews, Senior Planner

From: Ken Lehman, Chair, Gaetz Lakes Sanctuary Committee

Re: Gaetz Lakes Sanctuary Committee response to the developer's request for feedback for the application to rezone 4240 59 Street from PS to R3, and to amend the *Waskasoo Area Redevelopment Plan (ARP)* to allow for the rezoning, to make optional the now required pre-development studies (geotechnical, bank stability, traffic, etc.) as well as to remove the property from its relevant character area.

While every developer believes they can sustainably alter the land for a housing development, the reality is that any alteration of the land will have negative effects on a myriad of environmental processes. Some of these alterations create challenges that rear their heads regardless of where the development takes place. Others are unique to 4240 59 Street.

Loss of Permeable Surfaces

While the existing schoolyard is not a natural environment, it is a permeable surface. Permeable surfaces allow for the slow, measured dissipation of rainwater and snowmelt by absorbing water, over a large area. This absorption prevents overland water flow and thereby reduces the opportunities for erosion.

Additionally, permeable surfaces allow for a measure of filtration. Rainwater and snowmelt can pick up a vast array of substances as it flows over the ground. Many of these - road salt and de-icing chemicals, oil and other lubricants, pesticides, and others - should not be flowing freely into our rivers and creeks. Permeable surfaces can act as a sort of pre-filter and reduce the load of these toxins in outflowing water.

By building on this land, the permeable surfaces are reduced. Building roofs, parking lots, driveways, and patios all act as physical barriers to permeable ground. These new hard surfaces concentrate water in a few locations and facilitate overland flow. This increased flow rate and volume increases the risk of erosion, placing the riverbank and riparian habitats at risk. Additionally, the increased overland flow loads the water with the previously mentioned substances and debris, carrying them to the river unabated and unfiltered.

Riverbank Stability

The Red Deer River has been increasingly threatened by development and subsequent erosion. There are numerous places along the river, through the city, where the bank has required armoring. The most visible examples are below Oriole Park West and below the houses along Cronquist Drive. Left to its own devices, the river would naturally erode the embankments creating natural cutbanks. The creation of these two neighbourhoods has necessitated the installation of the protection required to prevent the banks from eroding.

Bank armoring creates barriers to wildlife, removes potential spawning habitat, and interferes with the natural evolution of river systems. The proposed development is located on the outside of a bend in the river, as are the other two armored locations. Water flows faster at the outside of the bend, than at the inside. Our concern is that the development creates additional stresses on the riverbank, necessitating armoring. The extremely narrow nature of this habitat linkage heightens the importance of keeping native vegetation and riverbank function intact and unchallenged by development stresses.

Barriers to Wildlife

Corridor connectivity is critical to the protection of biodiversity. The Red Deer River is a regional artery of life, comprising nearly continuous riparian habitat along its banks from Fort Normandeau downstream to River Bend. Many organisms including plants, invertebrates, herptiles, mammals and birds move and thrive along this corridor. Perhaps one of the narrowest stretches of this corridor is along 45th Avenue – the site of this proposed development. This critical pinch point for the flow of biodiversity from south to north and east would certainly be impacted by the proposed development and the increased activity, traffic, impermeable surfacing, noise, lighting, and various other impacts that it would undoubtedly bring. Many of the wildlife species that presently move through this vital habitat linkage, especially the small ones that comprise the bulk biomass of biodiversity, are already at great risk due to the higher likelihood of roadkill that development would bring. Should development occur and traffic (foot and vehicle) increase, there would no doubt be greater impact. If anything, this narrow linkage should be widened and encouraged east to allow for the flow of biodiversity to and from the Gaetz Lakes Sanctuary and McKenzie Trails natural area. We support the current PS zoning and Open Space - Major long-term land use designation of the proposed development site as these designations support the health of the watershed, regional environment, and wildlife.

Trail Realignment

Depending on the design elements of a development, proposal trail connections may or may not be an increased threat. We would need to wait to see what the development proposal is before providing feedback on this element.

Increases in Traffic

Although this has already been touched on, with any increase in residential populations comes an increase in traffic, increased infrastructure, and development to accommodate that increased traffic, and an increased likelihood of wildlife/vehicle conflict. More cars equal more opportunity for negative interactions between wild animals and cars. Squirrels, foxes, deer, moose, weasels, chipmunks, beavers, hares, rabbits, snakes, salamanders all cross 45th Avenue on their way to the riverbank. As the number of cars increases, so does the possibility of animals being hit.

Increase in Pedestrian Traffic

Increased pedestrian traffic, especially with the extreme bottlenecking that we see along 45 Avenue, can also lead to more negative human/wildlife interactions. Increased foot traffic and everything that comes with it (light, noise, garbage, etc.) would restrict animal movement and potentially increase the number of vectors for invasive plant/species movement.

Light Pollution

Nocturnal and crepuscular (active at dawn and dusk) animals rely heavily on the dark for cover and concealment. Their vision is uniquely adapted to low light environments. Some animals rely on being able to see the night sky for navigation and wayfinding. Development lighting will create a barrier between the forest spaces around the perimeter and the feeding and watering areas (ponds, pond edges, shrubs, grasslands, riverbank, and river) located to the east and west of the property. Additionally, any lighting that is proposed along the escarpment will have similar effects on wildlife. The escarpment is a major wildlife corridor. Many deer, moose, foxes, coyotes, and birds rely on the cover of the riverbank forest for safe passage across to First Island. Lighting will be as effective at restricting nocturnal and crepuscular animal movement as would a physical fence. Artificial lighting also interferes with bird migration patterns; imagine the geese throughout Waskasoo Park never leaving.

We would recommend not installing lighting anywhere that crepuscular and nocturnal wildlife transit. The effect on wildlife movement would be too detrimental to justify its use. If lighting is absolutely required throughout the development, it should be well spaced with dark corridors between light pools. The dark spaces will create a path between the dark forest and the spaces beyond. Any lighting should be focussed on the trail (not spilling into the forest), downward firing, and shielded from above so as not to create light pollution in the night sky.

Invasive Plant Species

According to the Government of Alberta, 'invasive species' are "*non-native species that have been introduced, that threaten our ecosystems and biodiversity*" (AB Government definition, www.alberta.ca). To be classified as 'invasive,' a plant must cause harm to the other plants or organisms. Invasive plants can be harmful in many ways, such as by increasing in abundance so rapidly that they out-compete native varieties or by being poisonous to consume. These

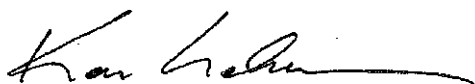
invasive plants are often generalists, which means they are able to grow on many types of landscapes and often thrive in challenging conditions such as in roadsides or disturbed areas. These are introduced plants that are not native to the area in question. The Alberta government has determined various levels of classification when it comes to invasive plants: Noxious Weeds require control and Prohibited Noxious Weeds require eradication.

Several invasive plants currently exist in the area and disturbance caused by development would certainly open the way for greater establishment of these species. A greater presence of invasive plants on the landscape not only threatens the surrounding ecology but it also requires significant resources to control or eradicate and these efforts are often required for the long-term; issues do not go away easily.

The Gaetz Lakes Sanctuary is already under significant threat by invasive plant species. Canada thistle, Cicer's milkvetch, toadflax, black henbane, and scentless chamomile already present significant management challenges requiring significant time, financial, and logistical resources every year. Any development adjacent to the Sanctuary will only add to these challenges.

In conclusion, the Gaetz Lakes Sanctuary Committee does not offer support to this proposal for rezoning/developing the 4240 59 Street parcel, but rather, the committee stresses the importance of protecting, conserving, and enhancing this vital ecological landscape linkage. Intact wildlife movement corridors, undisturbed soil structure and thriving plant and animal communities are a few of the vital elements that help to keep our urban ecosystems healthy and resilient.

Respectfully submitted,



Ken Lehman
Chair, Gaetz Lakes Sanctuary Committee



Monday, 12 December 2022

Mayor and Council
The City of Red Deer
Box 5008
Red Deer, AB, Canada T4N 3T4

Dear Mayor Johnston and Councillors,

RE: Proposed Development/Rezoning at 4240 59 Street

I am writing to you in my role as Board Chair of the Waskasoo Environmental Education Society (WEES) to reflect the WEES Board's position on the proposed development/rezoning at 4240 59 Street.

WEES is a not-for-profit society, and federally-registered charity. We are The City of Red Deer's contracted agency operating the Kerry Wood Nature Centre, the Gaetz Lakes Sanctuary, the Allen Bungalow, and Fort Normandeau. We are also responsible for all of Red Deer's natural and cultural history interpretation, and environmental and cultural history education, throughout the Waskasoo Park System.

One of our roles is to act as the managers, stewards, and protectors of the Gaetz Lakes Sanctuary; the 118 hectare Federal Migratory Bird Sanctuary. The Sanctuary is located adjacent to the Gateway Christian School property and the parcel of land at 45 Ave and 59 St that is currently facing rezoning.

We are writing to endorse the Gaetz Lakes Sanctuary Committee's submission regarding the proposed rezoning application at 45 Ave and 59 St. We agree with the Committee that the threats posed to the Sanctuary outweigh any benefit gained by rezoning the land to allow for development.

The Committee's submission outlines threats including:

- impacts on the river and riverbank;
- threats to wildlife movement and the potential for negative wildlife/human interactions;
- threats to dark skies and to wildlife that rely on pools of darkness for nocturnal migrations;
- threats to native plant species posed by the introduction of invasive species;
- loss of permeable surfaces leading to increased potential for erosion and for the uncontrolled flow of surface contaminants into the river; among others.

WEES respectfully adds its voice to the Gaetz Lakes Sanctuary Committee, Red Deer River Naturalists, Waskasoo Community Association and other groups opposing this rezoning application. A development of the type presented, is simply not compatible with the natural areas surrounding the plot of land.

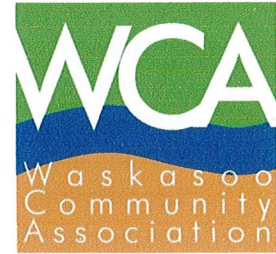
We welcome the opportunity to discuss the rezoning application and/or the proposed development. Please contact Todd Nivens, WEES Executive Director at director@waskasoopark.ca, 403-346-2010. He will be happy to facilitate a meeting or a discussion, or answer any questions you may have.

Sincerely,

Dustin Quirk
Board Chair
Waskasoo Environmental Education Society
cc. Gaetz Lakes Sanctuary Committee

WASKASOO COMMUNITY ASSOCIATION**Press Sheet****Re: 4240 59 St Bylaw Changes**

Contacts: John Bouw, W.C.A. President, 403 318 7651
Brenda Garrett, W.C.A. Director – Communications, 403 358 2646



The Waskasoo Community Association opposes the application by East Lincoln Properties to rezone their property at 4240 59 St from Public Service to R3 multifamily as well as to amend the Waskasoo Area Redevelopment Plan (ARP) and Environmental Character Area (ECA). While we have numerous concerns, the primary issues voiced by the Waskasoo neighbourhood are impacts on the environment and traffic.

a. Environment:

The lot is in a key environmental location because of its proximity to the river, Waskasoo Creek, and Gaetz Lakes. The porous open space here helps control, collect, and filter storm water runoff. The area is also an important wildlife corridor and adjacent to one of the only Central Alberta chipmunk habitats. This key location is also the only section of the riverbank in the city that does not have any kind of protective buffer from development. There is no park and 45th Ave runs directly adjacent to the riparian strip. The only thing that keeps the river, environment, and ecology, not to mention the South Bank Trail and river valley park system, healthy is the open grassy field of the former school yard. R3 zoning and multi-family development will impact wildlife habitat, destroy wildlife corridors, threaten the bank stability, reduce water quality and natural flood management systems, and reduce the trail to a sidewalk between a busy road and apartments.

b. Traffic:

45th Avenue north of 55th Street was designed 120 years ago, and according to City traffic counts and engineering standards, it is 350% over capacity. Besides Waskasoo residents, 45th Avenue services four busy destination schools with over 3500 students and staff, as well as McKenzie Lakes, the river access, the Memorial Centre, Nature Centre, City nursery, and numerous recreation areas. 45th cannot handle traffic from an additional 120 or more dwellings. Traffic that is 350% over capacity impacts the quality of life and amenities for residents, but more to the point, it is unsafe for children, students, and other pedestrians, for drivers, many of whom are new drivers, and will slow an emergency response. Any developments here need to mitigate traffic and parking issues, not contribute to them.

development
The Waskasoo Community Association is not against development, densification, and slowing urban sprawl. We choose to live in a neighbourhood where over 60% of the dwellings are already multifamily (the average across the city is 20%) and hope to see all neighbourhoods welcome density in similar ways to ours. HOWEVER, NOT EVERY PARCEL OF LAND IS THE SAME. This parcel needs to be developed under the discretion of PS zoning with the full protections of the Environmental Character Area. Doing so will ensure responsible development that respects the river, the land, and the people who live in and travel through Waskasoo. It will also support the health and well-being of the larger community by protecting the trail system and encouraging public service uses: sports and recreation, heritage and culture, daycares, assisted living, offices for recreation groups, private clubs, and organizations.

See reverse for more information.

TIMELINE:

- 2022: Developer applies to rezone 4240 59 St to R3 and remove it from the Environmental Character Area. City distributes letters to 162 homes and receives negative responses from 75 residents and no letters of support. Written statements of environmental concerns also submitted by the Red Deer River Naturalists, Red Deer River Watershed Alliance, and Gaetz Lakes Sanctuary Committee. Parkland Community Living and Supports Society submitted concerns over traffic, parking, and future opportunities.
- 2020: Lot purchased by East Lincoln Properties as PS and as part of the Environmental Character Area.
- 2016: Waskasoo Area Redevelopment Plan passed by Council and state that this lot SHALL remain PS and be included in the Environmental Character Area
- 2015: 4240 59 St and land surrounding it were subdivided and divested by Chinook's Edge School Division
- 2014: Start of Waskasoo Neighbourhood Plan research and community meetings / open houses with City of Red Deer Planning Department. WCA requests 100m buffer along the river as recommended as a minimum for wildlife corridors by the River Valley Trails Park Concept Plan and Red Deer River Naturalists. A 30m Municipal Reserve area was set aside.
- 2012: Chinook's Edge School Division proposes 19 lots for single family homes on this parcel. Council rejects their Neighbourhood Area Structure Plan at First Reading because of traffic concerns and because the location "along the river, adjacent to parks, and close to Downtown is a logical setting for [Public Service] uses." (Council Agenda.)
- 2008: Waskasoo Community Association incorporated in response to development concerns on this and surrounding property.
- 1978: Land including 4240 59 St is zoned PS in first City Bylaws
- 1950: Houses south of 59th St. were built through the Veteran Lands Act for returning veterans
- 1941: Land north of 59th St including 4240 59 St. converted from agricultural to Public Service use becoming part of the A-20 Army Camp. After the war it is part of the yards for various schools
- 1911: Waskasoo re-subdivided and expanded
- 1905: Waskasoo neighbourhood created south of today's 59th St

Read our full response at www.waskasoo.info



Public Hearing
Land Use Bylaw 3357/A-2023
Waskasoo Area Redevelopment Plan
Bylaw 3567/A-2023

Public Comments Received

From: Samuel Sandulak <Irv.Sandulak@aglc.ca>

Date: April 6, 2023 at 2:52:51 PM MDT

To: Ken Johnston <Ken.Johnston@reddeer.ca>, Kraymer Barnstable <Kraymer.Barnstable@reddeer.ca>, Bruce Buruma <Bruce.Buruma@reddeer.ca>, Michael Dawe <Michael.Dawe@reddeer.ca>, Victor Doerksen <Victor.Doerksen@reddeer.ca>, vesna.highman@reddeer.ca, Cindy Jefferies <Cindy.Jefferies@reddeer.ca>, Lawrence Lee <Lawrence.Lee@reddeer.ca>, Dianne Wyntjes <dianne.wyntjes@reddeer.ca>

Subject: [External] Waskasoo Development Opposition

Red Deer Mayor and City Councillors

I am writing in regard to the Waskasoo community opposing the development of the former Riverglen portion of land. The Waskasoo Community Association has my full support for their stand against the development of the land at the West end of Gateway Christian School. Our community has been in a very long and tedious conflict with the City of Red Deer and the proposed development of this land. We have been continuously besieged by traffic, developers and Red Deer Public Schools who have been trying to change the very nature of our unique and vibrant neighborhood community.

Follows are a few concerns that I have personally addressed with the City of Red Deer but have little to no feedback other than cursory acknowledgement of my letters.

Land Development

“A request from Chinook’s Edge School Division to sell a portion of the land at the River Glen School site which would be developed into housing has been turned down by City council.”

“We are primarily opposed to this because there is no Area Redevelopment Plan in place. (Red Deer Express Dec 12, 2012)

Eleven years ago, the city opposed the development of this land because there was no Redevelopment plan in place. Now in 2023, there is a neighborhood plan in place with VERY specific guidelines for the use of this piece of property. The developer (East Lincoln Properties) is trying to change the bylaw and neighborhood plan in order to rezone this property for multi-family apartment style housing. When East Lincoln Properties, a subsidiary of Shunda Consulting and Construction Management Ltd.,

bought this property they knew how the land was zoned and now are trying to push through their own agenda. The developer says that this housing will be targeted to the senior market. However, there is no guarantee by the developer that this will in actual fact, be senior housing. There is nothing in place that ensures or forces the developer to make this housing only available to seniors. This land is presently zoned for a type of senior housing that will not compromise our community's status. Why does the developer want to change this to a 3 or 4 story apartment building that does not meet any of our neighborhood plan requirements?

Traffic Congestion

“City administration confirmed that 45 St is classified as a collector road and is therefore not currently used over capacity, nor would it be if the property were to be built at the location.” (Red Deer News Now, April 5, 2023)

This is not true –

this collector road is actually one meter too narrow to meet the city guidelines as set out in city policy. In the city's own study of the traffic flow, it was found that Waskasoo streets operate at 300% over capacity during the beginning and end of school days. It's interesting that the city does not consider high use times, only an average over the course of the day. I will admit we are a quiet neighborhood when the schools are not in session. It is an entirely different situation when students are in attendance. In conversation with Red Deer Public Schools assistant superintendent, Della Ruston, she confirmed that it is likely that 80 percent of students are picked up by parents at Gateway Christian School, population 700. An interesting note is that Gateway Christian School is slated to have 4 additional portable classrooms added (approximately 120 students)

Emergency Vehicle Response times:

Numerous Waskasoo residents and I have written the City of Red Deer in regard to Emergency Vehicle response times. This question has never been answered. The City of Red Deer has never addressed how it will

manage Emergency Services during high density traffic times. Many residents will tell you that we feel trapped in our neighborhood when the schools are beginning or ending their day. It is impossible to leave or enter our neighborhood in a timely manner. Many neighbors can attest to the fact, that it will take 15 minutes to access 55th Street, (a distance of 2 to 3 blocks) from their homes during peak traffic times. I truly believe that the City of Red Deer is acting in a criminally negligent manner, in this regard.

Density

Waskasoo has the highest population density in the city with numerous multifamily and apartment dwellings. City statistics have shown this to be true. Why is there a need to add hundreds of residents to an area that is already saturated?

Environmental Concerns

Migratory paths for large animals is an ecological requirement. It is very common in our neighborhood to see wildlife such as deer, moose, coyotes, fox, skunks, rabbits, or porcupines wandering through the neighborhood. An apartment development would essentially cut animals off from accessing the river, Gaetz Lakes area and Kerrywood Natural preserve. Migratory birds use the river valley and Gaetz Lakes as a sanctuary, a 3 or 4 story apartment building will essentially block these birds flight paths. At this point there has been no environmental impact studies done that I am aware of. If the developer is going to dig foundations to support a 4-story apartment building, then can we assume that there will be significant impact on underground water reserves and streams? How will this affect the Red Deer River system?

Communication

In the letter we received from the City of Red Deer, I noted that the only written communication in regard to upcoming council meetings, will be sent **only** to residents who live EAST of Waskasoo Creek. I have friends who live on the WEST side of the creek who are vehemently opposed to this development and yet they are not being informed as to when and how they can oppose this development. I believe it would be in your best interest to be transparent and up front about these issues.

Thank you for your time and I appreciate having the opportunity to bring these concerns to your attention.

If you choose to respond to this email, please send it to my home email address isand2@telus.net.

Thank you
Irv Sandulak
Waskasoo Resident



Irv Sandulak B. Ed. M.A.

GameSense Advisor, Social Responsibility
Policy & Public Affairs
Serving Red Deer and Area

Cell 403-588-9480

Toll Free 1-800-272-8876

Email irv.sandulak@aglc.ca **Web** GameSenseAB.ca

50 Corriveau Avenue, St. Albert AB T8N 3T5



*Proud to be one of Alberta's Top Employers (2023)
and Canada's Best Employers for New Graduates.*

Protected A

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager. This message contains confidential information and is intended only for the individual named. If you are not the named addressee you should not disseminate, distribute or copy this email. Please notify the sender immediately by email if you have received the email from your system. If you are not the intended recipient you are notified that disclosing, copying, distributing or taking any action in reliance on the contents of this information is strictly p

From: Susan J <susanj9@telus.net>
Sent: April 11, 2023 1:16 PM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Incorrect information on Waskasoo Public Hearing Notice Mail-out

I received the Notice of Public Hearing delivered to Waskasoo homeowners today:

(a) The first line incorrectly lists the date of the hearing as Monday, May 1, 2023. The second paragraph lists the correct date: May 3, 2023 (but the day of the week (Wednesday) is not identified, so may be easily conflated with the erroneously-listed date).

I assume the Agenda package for first reading will also be part of the materials before council at the public hearing. Please confirm.

Thank you.

Susan Jensen
5829 - 45 Avenue
Red Deer
ph: 587-877-3855



Public Hearing Submission Form

All materials submitted for Council consideration at the Public Hearing must form part of the public record. Fields on this form are optional for completion. However, please note that in accordance with [Procedure Bylaw 3681/2022](#), unsigned or anonymous submissions will not be provided to Council or included in the public record as there is no way for Council to properly weigh the contents of the submission.

If your submission exceeds the permitted character limit (maximum 7,500) for comments, or you have additional information to provide as part of your submission (e.g. pictures, videos, PowerPoint presentation), please email your submission to publichearings@reddeer.ca.

Submitter Information

First Name	Carrie
Last Name	Dickman
Address	5813 45 Ave Red Deer T4N 3M1

Submission

Public Hearing Agenda Item	https://www.reddeer.ca/city-government/mayor-and-city-councillors/council-meetings-and-schedule/public-hearings/upcoming-public-hearings/#Bylaw3357A20
Comments	
<p>As a landowner within the Waskasoo neighbourhood, I hereby oppose the proposed amendments to the land use Bylaw (Bylaw 3357/A-2023 ad the Waskasoo Area Redevelopment Plan (Bylaw 3567/A-2023). My family has lived in this neighbourhood for the last eight years. We moved to this neighbourhood for the wide open spaces, the mature trees, and the nature that surrounds us. We live fairly close to Gateway Christian School and are currently impacted by the amount of traffic that comes by our house and into our neighbourhood on a daily basis. We are concerned by the impact a higher density residential development would have on the environment, and the wild animals that call this neighbourhood home. The area clearly does not have the infrastructure for increased traffic that a higher density residential development would bring. It is our hope that our city government will take into consideration the history of this area of our city and the beauty, and culture it offers. We have a special needs son who loves nature and when he heard about this proposal and that it will be built in the field where he hunts for butterflies said "don't they know I love butterflies?"</p>	

Disclosure of Personal Information

I have read and understand that, in accordance with [Procedure Bylaw 3681/2022](#), my first and last name, address, and comments provided on this Public Hearing Submission Form will be made publicly available in the Council agenda and will be included in the public record (<https://meeting.reddeer.ca/onbaseagendaonline/>).

I agree to the above statement

The City of Red Deer is collecting personal information for the purpose of administering the disclosure of comments to Council for their consideration at public hearings. The personal information on this form is collected under the authority of the Municipal Government Act Section 230 and 636 and is protected under the provisions of the Freedom of Information and Protection of Privacy (FOIP) Act. If you have any questions about the collection, use and protection of this information, please contact the Clerk, Legal & Legislative Services, The City of Red Deer, Box 5008, Red Deer, AB T4N 3T4 or phone 403-342-8132.

From: Janet Cole <1janetcole@gmail.com>

Sent: April 12, 2023 4:25 PM

To: Corporate Meeting <CorporateMeeting@reddeer.ca>; City Council <CityCouncil@reddeer.ca>

Subject: [External] East Lincoln Properties rezoning request

Good afternoon,

I recently found out about the Waskasoo neighbourhood's opposition to a proposal by East Lincoln Developments to build apartment buildings close to the Red Deer river on 59 Street. I fully support the opposition to this idea. What are you thinking!!?

A development like this, especially in this location, will impact environmental concerns immediately and in the future. You have already heard opposition from the neighbours, and recognized and respected environmental and nature groups. This must not proceed. Continued exploitation and development of areas like this will impact all of us. The river corridor and extensions into natural areas need to be preserved for all citizens to connect to nature and it is up to you to take a stand to protect it for us. That is your job!

This council needs to start thinking about our future quality of life and the impacts we have on our surrounding environment and non-human communities. You are elected to have the interests of all citizens first and foremost. It is disappointing to hear time and again these old, outdated decisions that benefit a few. Any fall out down the road will be paid by the rest of us.

I urge you to not let this go ahead. Listen to the experts. Preserve all that we can. Tell the developer to find another less sensitive and risky location.

Janet Cole - Red Deerian

From: Susan Delaney <susanjanetdelaney@gmail.com>
Sent: April 13, 2023 7:59 AM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Not in favor of Waskadoo Park rezoning

I am not in favor of rezoning any part of the Waskasoo park system. This park system is critical to the Red Deer ecology (which is critical to our lifestyle here, if you don't care about the ecology) and to our high tourism and quality of life ratings. Don't do it. Please. The economy is not everything, and even if it is, have a little foresight.

Susan Delaney
4026 46 St, Red Deer, AB T4N 1M2, Canada

403-341-9488

From: Brendon Marr-Comstock <marrbren1999@gmail.com>
Sent: April 14, 2023 10:25 PM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Re: Additional Information, Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

Additional information

Address: 4531 Moore Crescent
Phone Number: 587-876-2402
Postal Code: T4N 2M1

On Fri., Apr. 14, 2023, 10:23 p.m. Brendon Marr-Comstock, <marrbren1999@gmail.com> wrote:
My apologies, I don't have any additional stuff to add. My submission wouldn't submit, so I'm attempting an email.

Public Hearing Agenda Item:

Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

Comment:

First off, I'd like to share my concerns over traffic congestion within 45th street towards this high residential R3 property. There are only three ways into this area, 45 Ave, 44 Ave, and 42a Ave, which are all connected to the same street (55 St). Stating that, there's already heavy traffic flow from Lindsay Thurber down 45 Ave around 3:30pm almost all business days of the year, also including Gateway Christian school. Second, this is an area of nature conservation. Not only is there Kerry Wood Nature Center, The Nursery and McKenzie Trails Park to take in mind, it has remained pretty much the same since I was born and lived here the 24 years of my life. Before that, my Grandma and mother moved here in 1981, and it hasn't changed much from their perspectives. Keeping the land intact would be a huge positive for this area. 45 Ave going down into McKenzie Trails feels like a Red Deer landmark for me. I assume land value here is on the upside, due to the scenery and so many trees being in the area. The trees work as a sound barrier from the city, and having constant traffic flow in and out negates that. I feel like a new cookie cutter apartment doesn't belong here and would spoil the feel this beautiful area has. In addition it would affect overall quality of life in several different aspects, stated above and some personal. I completely oppose this property being built or any other small property projects within the Waskasoo section of Red Deer.



Public Hearing Submission Form

All materials submitted for Council consideration at the Public Hearing must form part of the public record. Fields on this form are optional for completion. However, please note that in accordance with [Procedure Bylaw 3681/2022](#), unsigned or anonymous submissions will not be provided to Council or included in the public record as there is no way for Council to properly weigh the contents of the submission.

If your submission exceeds the permitted character limit (maximum 7,500) for comments, or you have additional information to provide as part of your submission (e.g. pictures, videos, PowerPoint presentation), please email your submission to publichearings@reddeer.ca.

Submitter Information

First Name	Donald
Last Name	Holmes
Address	36 Aikman Close

Submission

Public Hearing Agenda Item	Waskasoo area redevelopment
Comments	
I strongly oppose multiunit residential or any building that will irreversibly destroy the open land along the river near to Kerry wood nature Center . Besides inevitable flooding liabilities that many predict, it will destroy irreplaceable wildlife corridor and unique riparian wildlife habitat in that critical area. It will be a poor choice for any type of residential use and unnecessarily break up a segment of the park and pathway system that enhances the city as it now stands.	

Disclosure of Personal Information

I have read and understand that, in accordance with [Procedure Bylaw 3681/2022](#), my first and last name, address, and comments provided on this Public Hearing Submission Form will be made publicly available in the Council agenda and will be included in the public record (<https://meeting.reddeer.ca/onbaseagendaonline/>).

I agree to the above statement

The City of Red Deer is collecting personal information for the purpose of administering the disclosure of comments to Council for their consideration at public hearings. The personal information on this form is collected under the authority of the Municipal Government Act Section 230 and 636 and is protected under the provisions of the Freedom of Information and Protection of Privacy (FOIP) Act. If you have any questions about the collection, use and protection of this information, please contact the Clerk, Legal & Legislative Services, The City of Red Deer, Box 5008, Red Deer, AB T4N 3T4 or phone 403-342-8132.

From: Heather Morigeau <523hlm@gmail.com>
 Sent: April 15, 2023 7:57 PM
 To: Corporate Meeting <CorporateMeeting@reddeer.ca>
 Cc: secretary@waskasoo.info
 Subject: [External] Opposed Waskasoo Development + Alternatives

This letter contains 3 reasons developing Waskasoo area is NOT FEASIBLE & 3 alternatives the city can implement to address housing needs without developing this region.

1. Environmental threats

FLOOD - Riversides require trees and shrubs to mitigate flooding. Removing what few trees remain along the banks will ensure that the Flood of 2005 and 2013 will continue to occur at a more frequent rate
 WILDLIFE - this area is a wildlife corridor for animals, building in this location will
 A. Disturb their habitat
 b. Cause human/animal conflicts
 SEWAGE - the sewage system in this area is already over burdened and causing problems. Increasing the burden will ensure sewage goes into the rivers

2. Crime

High density housing is often linked to higher crime rates - placing high density housing near schools will increase the occurrence of harms against children, drug use by children and general violence in the area.

3. Traffic

There is already traffic congestion in this area and increasing housing density in an area which does NOT have public transportation will ensure the issues increase.

ALTERNATIVES

1. Double taxes on vacant properties

1 in 3 houses in Canada is VACANT causing false inflation of the cost of living.

Double taxes on vacant properties will

- A. increase sales of homes
- B. Lower the cost of home sales by motivated sellers making it more accessible to first time home buyers
- C. More accessible home ownership could potentially decrease the rent rates since city council refuses to cap rental rates

2. Every new development area requires 10% low income housing This mandate has been implemented in Vancouver successfully. It ensures that developers invest in homes which are accessible to ALL income.

This reduces the burden of placing high density housing in one area by spreading it out throughout the city. This effort also reduces classism by which some "wealthy" people who claim they "don't want to live near poor people" are no longer given the option to discriminate based on systemic poverty.

3. Cooperative Housing

Instead of the volatile "landlord/tenant" system of profiting off the basic needs for housing. The city should offer significant subsidies and tax breaks to citizen led initiatives to transition existing high density housing from unmaintained landlord ownership to Co-operative Trust ownership.

Co-operatives have elected committees of tenant members who determine the eligibility of new tenants based on practical skills (finances, skilled trades, child care, etc) which will benefit the whole community. The cost of housing is lower because the maintenance is done by the tenants themselves.

There's many other alternatives to developing the proposed area near Waskasoo. I hope the city considers these alternatives with all seriousness for the future of this growing little city.

Heather Morigeau
403-605-0107

Sent from my iPhone

From: jim gough <jimgough@shaw.ca>
Sent: April 17, 2023 1:44 PM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Zoning change

I wish to register my opposition to the change of zoning or planned use of 4240, 59st from PS to R3. This natural area should remain natural since there are plenty of unused space, **almost all of Capstone**, where residential/commercial development could take place instead. Thanks, Jim Gough, 205-5590, 45th street, Red Deer

From: sandra surbey <sisurbey@gmail.com>
Sent: April 16, 2023 3:05 PM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Public hearing to rezone a Waskasoo parcel from PS to R3. (Bylaw amendment 3357/a-2023 and 3567/a-2023)

We are strongly opposed to any land Use 3357/a-2023 bylaw amendment and a Waskasoo area redevelopment plan amendment 3567/a-2023 to rezone a privately owned parcel in Waskasoo from PS - public service district to the R3 residential(multiple family) district.

The community infrastructure is not designed for what effectively would be high density housing. This proposed change would have negative consequences to the current existing residents.

Please do not go forward with these changes.

Douglas Urness and Sandra Surbey

Sent from my iPhone

From: garrettb@telus.net <garrettb@telus.net>
Sent: April 18, 2023 11:29 AM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Cc: president@waskasoo.info
Subject: [External] WCA Submission 4240 59 St

Please find attached the submission from the Waskasoo Community Association regarding the proposed bylaw amendments for 4240 59 St.

Sincerely
Brenda Garrett
WCA Director
403 358 2646

From: Myrna Pearman <myrnapearman.nature@gmail.com>
Sent: April 18, 2023 4:37 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Cc: secretary@waskasoo.info
Subject: [External] Re: 4240 – 59 Street

To: publichearings@reddeer.ca

Att: Orlando Toews, Senior Planner

Cc: secretary@waskasoo.info

Re: 4240 – 59 Street
Proposed Amendments to the Land Use Bylaw (Bylaw 3357/A-2023) and the Waskasoo Area
Redevelopment Plan (Bylaw 3567/A-2023)

To Whom It May Concern:

As a long-time member of the Red Deer River Naturalists, as an author and biologist who has worked for many years communicating conservation and natural history, and as a concerned citizen, I was disappointed to learn that the City of Red Deer has given first reading to this proposed development.

It is clear that this proposal threatens a key biodiversity linkage along a narrow and important riparian corridor. Developing this small wedge of critical habitat will not only compromise biodiversity, but it will also result in serious degradation to the integrity of Waskasoo Park.

Furthermore, the overall environmental value of this area, including the Kerry Wood Nature Centre and the Gaetz Lakes Sanctuary, will be permanently compromised. Development in this area as proposed will also deny the citizens of Red Deer an important open space.

Finally, as evidenced by the letter from Parkland Class (p 242, first reading), the proposed rezoning and exemptions from the ARP sets a precedent for additional development in this vulnerable corridor.

I strongly urge Red Deer City Council to reject this short-sighted and irreversibly damaging proposal.

Yours truly,

Myrna Pearman
Fellow, Royal Canadian Geographical Society

From: Ronalee Melchert <ronaleemelchert@gmail.com>
Sent: April 18, 2023 9:34 AM
To: Corporate Meeting <CorporateMeeting@reddeer.ca>
Subject: [External] Fwd: letter

April 17, 2023

To: Orlando Toews, Senior Planner

RE: Proposed Land Use Bylaw Amendment (Bylaw 3357/A - 2023) and
Waskasoo Area Redevelopment Plan (Bylaw 3567/A - 2023)

I have only lived in this area for 3 years but it did not take long for me to come to appreciate what a truly unique and special area of Red Deer this is! With that being said, I have worked at Lindsay Thurber High School for 18 years and see first hand the ridiculous amount of traffic that residents and parents have to deal with on a daily basis. I can just imagine how much worse this problem will become if the proposed amendment is accepted so I absolutely oppose the changes to the zoning and Area Redevelopment Plan.

Sincerely,

Ronalee Melchert
4580 Waskasoo Crescent
Red Deer, AB
587-377-7435

From: Bobby Froese <bobby@everybodybenefits.ca>
Sent: April 19, 2023 10:56 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Opposed to Zoning Change _ Waskasoo area

To whom it may concern,

I am opposed to the zoning change of the land beside Gateway Christian School, overlooking the RD river in the Waskasoo neighbourhood. My address is 6412-61 Ave Red Deer, AB, T4N-5R9 – my kids attend this school and we are concerned for the safety of the kids.

Regards,

Thank you,



Bobby Froese

Benefits Consultant / Partner
Group Benefits | **Integrated Benefits**
Integrated Benefits is a People Corporation company

403.346.2191 (Office)
403-.304.9530 (Cell)
bobby@everybodybenefits.ca
www.everybodybenefits.ca
4914 55 Street, Red Deer, AB, T4N 2J4



This email and any attachments may contain confidential information. Any distribution, copying or reliance upon the contents of this email by anyone other than the intended recipient is strictly prohibited. If you have received this email in error, please delete it and notify the sender. Although this message has been screened for viruses, we cannot guarantee that our virus scanner will detect all viruses and we take no responsibility for any damage or loss that may be caused by its contents.

This message is intended only for the use of the person/company/agency ("intended recipient") to whom it is addressed. It may contain information which is privileged and confidential. If you are not the intended recipient, please contact the sender as soon as possible. Any dissemination, distribution, copying or other use of this message, or any of its content, by anyone other than the intended recipient, is strictly prohibited. We have taken every precaution to ensure that this message is virus free, but we cannot be responsible for any damage that may be caused by its content.

Ce message est destiné exclusivement à l'usage de la personne/l'entreprise/l'agence ("destinataire") à qui il est adressé puisqu'il peut contenir des renseignements protégés et confidentiels. Si vous n'êtes pas le destinataire, veuillez aviser l'expéditeur dans les plus brefs délais. Il est strictement interdit à quiconque n'est pas le destinataire de diffuser, distribuer, reproduire, ou d'utiliser le contenu de ce message de toute autre manière. Toutes les précautions nécessaires sont prises pour nous assurer que le message est exempt de virus informatique mais nous ne pouvons être tenus responsables des dommages qui pourraient être causés par le contenu de ce message.

From: Cory Kloss <kloss16@hotmail.com>
Sent: April 19, 2023 7:56 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Zoning of 4240 59 St

Hi there,

I am writing you today to express my opposition to the proposed zoning change of 4240 59street.

This change will not benefit our city and is not in the best interest of the local environment, school, and community.

Sincerely

Cory Kloss

From: Deb <deb2cam@shaw.ca>

Sent: April 19, 2023 4:18 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] Comment to Zoning Change and Waskasoo ARP at 4240 59 Street from PS to R3 - Opposed

Dear Council Members,

After careful reading of the materials on the zone changing request, I oppose this change. Please leave it as PS for the enjoyment of future generations.

We often walk and bike this area, and I cannot vision tall apartment buildings there. Yes, they say for seniors, but I am a senior and I would not move there to disrupt the wildlife in the area, there is no transit, no professional services or grocery stores. What about flooding – have we not learnt enough of the last few years the power of the river. I also feel for the folks in the neighborhood of the increased traffic. I say “no” to any development changes.

If they want to built such a facility for seniors, please consider it at Capstone as there is a lot of empty land. You have the river and trails for recreational enjoyment, but you are close to all of the amenities with a road structure that will take the extra traffic.

Thank you for your time.

Kind regards,

Debbie McCluskey

19 Anders Close

Red Deer AB T4R 1C2

403-585-9724

From: Kevin Braun <kevinbraun8@icloud.com>
Sent: April 19, 2023 10:47 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo

I very much oppose to the rezoning of the land at 4240-59st.
Building condos or any sort of residential living will create a negative environment in the neighbourhood and for Gateway School. The cluster of traffic is already tough with 3 schools in the area. I hope the message gets through to city council.

Thanks

Braun Concrete Ltd
Kevin Braun

From: Linda Cassidy <lmccass@shaw.ca>
Sent: April 19, 2023 1:39 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] East Lincoln

Dear Council;

I was dismayed to read recently that RD City Council is considering a proposal from East Lincoln to build 2 apartment buildings along 54th Ave. This is located in Waskasoo which has more than their share of apartment buildings along 55 ST.

I do not support changing zoning from PS to R3 at all to allow the building of these 2 apartment buildings.

What is this council thinking of allowing two apartment buildings to be approved in a very narrow corridor of the Waskasoo Park? There are disadvantages to wildlife, the environment, the river, traffic and people that cycle by this lovely grassed area with trees. The only ones that could benefit from this plan is the Developer and possibly the people that may choose to live there.

In the last 18 months there are been several wild proposals discussed at council including a gondola to Capstone, a 50million dollar bridge to Capstone and lastly no plan to house the homeless in a permanent shelter. I have written about the lack of a permanent homeless shelter and needed to state that I am against this proposal to build these apartment buildings.

If this developer wants to put up 2 apartments for seniors then he can choose Capstone or another neighbourhood that is already appropriately zoned.

Regards,

Linda Cassidy

From: Megan Stober <stobermegan@gmail.com>
Sent: April 19, 2023 2:55 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo Residential Building Proposal

Hi there, I was told that I was able to send in my opinion on the new residential building that is being proposed for the Waskasoo area, directly adjacent to Gateway Christian School.

I would like to say that I am opposed to the idea mainly because of the problems that it will cause to add even more traffic to an already congested, high traffic area. I am a parent currently of children that attend Gateway Christian School and also my older children attend Lindsay Thurber High school. We drive these roads twice a day, on a daily basis and have for many years and have many more to come. This area is already bursting with traffic problems and concerns, and I believe that adding to this mess, with putting in a residential building with more cars and more residents will only add to the traffic concerns for the area.

If this was to go ahead I believe that a thorough assessment of the traffic concerns in this area should be addressed and the problems rectified first before any other construction and expansion takes place. I think one idea would be to widen 42 Avenue at Lindsay Thurber to allow for another lane for drop off of Students at both Lindsay Thurber and Camille. Adding a 4th lane would allow for traffic to turn into both schools more efficiently, as well as the possibility of a larger drop off zone for parents given that access is not allowed to the bus lane in front of Lindsay Thurber. I also believe that a student walkway could be useful for students to get across the street from Lindsay Thurber to the parking lot at the Memorial Center and then also from Memorial Center to the gravel north of Camille where the preschool is. This would allow for a safe crossing for students at 3 schools across such a busy street and would cut down the stops that vehicles have to make during the busiest times of the day. I also think that the corner where the new building is proposed is an issue, Kerrywood Dr. gets very busy and 59th Street in front of Gateway turns onto Kerrywood which is already limited visibility and a very busy intersection at drop off and pickup times. This is also an intersection with limited visibility due to vehicles parking on the SE corner and the curve in the road coming from Kerry Wood. I think that a smaller traffic circle should be considered at that corner to alleviate the current traffic problems especially if there are more residents and more cars being added to the problem. I know both of these suggestions would mean that some trees would need to come down which is not ideal but this problem needs to be solved, even if this building is not going forward.

We are already trying to be very mindful of the residents in Waskasoo by not parking on residential streets or using alleys to get around traffic. I believe adding a larger residential building will compound the already large and inefficient problem for the people of Waskasoo and also for us who are using the area for our schooling for our children and to access work each day. Throughout the city I see problems being eliminated which is so great for our city, however, this area is one that is and has been a problem for some time, there has to be a solution.

Thank you

From: Nicole Kloss <nicolekloss@outlook.com>
Sent: April 19, 2023 5:05 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Zoning of 4240 59 St

> Hi there,
>
> I am writing you today to express my opposition to the proposed zoning change of 4240 59street.
>
> This change will not benefit our city and is not in the best interest of the local environment, school,
and community.
> This specifically affects the area where my children attend school. I do not think this would be
beneficial to the city.
> Sincerely
>
> Nicole Kloss

From: Susie Heinrichs <susieheinrichs@gmail.com>
Sent: April 19, 2023 2:24 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Riverglen Development

Hello,

As I am unable to make it to May 3rd's public hearing, I would like to state my opinion: I oppose the changes to the zoning and the area redevelopment plan for the Riverglen Development from PS to R3. The only redevelopment I would be okay with is a senior's complex or assisted living development.

Thank you,
Susie Heinrichs

From: Tammy <brownopus@shaw.ca>

Sent: April 19, 2023 5:48 AM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

To whom it may concern:

As I taxpaying citizen of the City of Red Deer, I **oppose** the proposed Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023. Our city is dying and starting to look disgusting enough with all the empty business and unused lots! Not to mention the empty buildings already built trying to get buyers and tenants! The only thing we have left going for us is our river lands, park and trail systems. We don't need to rezone land close to a **NATURE CENTRE to build large apartment buildings.**

Shame on the City of Red Deer for even considering such a disgusting proposal.

Tammy Brown

April 19, 2023

Land Use Bylaw 3357/A-2023 and Waskasoo ARP Bylaw 3567/A-2023
Public Hearing Submission

Honourable Mayor and City Council Members

I disagree with the plan to rezone the parcel in Waskasoo from PS to R3. This proposal goes against the Waskasoo Area Development plan which was extensively studied and accepted. This area should remain a recreation field or used for a small building.

The road through this area must remain as a rural type road for the many species from the very small along the ground to large mammals using this narrow but very vital corridor to the river. Warblers requiring secluded areas would also be affected.

Two apartment buildings would result in heavy traffic and would require upgrading the road resulting in a decreased distance set back from the river. The pollution, activity and noise would be detrimental to this more protected area.

It is hard to believe that this option is now under consideration after plans have been completed for the future of Waskasoo.

We chose to settle in Red Deer because of green areas, nature and quiet walking opportunities. These areas are important in a stressful life for mental and physical health and happiness.

I have walked for many years at Gaetz Sanctuary and biked along the river paths enjoying nature viewing opportunities with grandchildren, family and friends. These areas are a treasure. I hope you will do the right thing and leave these areas for future generations to enjoy.

Thank you for your consideration.



Bertha Ford
Red Deer AB



ÉCOLE CAMILLE J. LEROUGE SCHOOL

April 19, 2023

RE: City of Red Deer; Waskasoo Area Redevelopment Plan

To whom it may concern;

I am writing this letter on behalf of the community of Ecole Camille J. Lerouge School which is a Kindergarten-Grade 9 school that serves 650 students and is located at 5530 42A Avenue. Our school community serves students from all over the city of Red Deer and the surrounding areas, as far north as Blackfalds and as far south as Innisfail. I have been the principal of Ecole Camille J. Lerouge since 2019 and have witnessed the overflow of traffic attempting to access my school daily over the past four years. As the principal of this community, I am opposed to the redevelopment of the land to accommodate 2 apartment buildings in the Waskasoo area due to the increase in traffic that will inevitably occur with more residents living in this area.

Our school community is within 3 city blocks of Lindsay Thurber Comprehensive High School and Gateway Christian School which combined, serve over 2000 students daily. The flow of traffic in these 3 city blocks, from as far east to 45th Avenue and as far south as 53rd Street and Michener Hill is congested and dangerous, to say the least.

The flow of traffic between 8:00-9:00 am and 2:30-3:45 pm on weekdays is significant and has negatively impacted our school community. As a school community, we have been in dialogue with both the RCMP and the City of Red Deer Bylaw to provide support to us to stop speeding, and reckless driving and to help keep our students safe.

I truly hope that the City of Red Deer considers the safety of our children before a decision is made to build more housing in an already busy and high-traffic area. We are not in favor of this housing project moving forward as the safety of our community would be directly impacted.

Thank you in advance for your consideration and the opportunity to provide a voice in this matter.

Kind regards,

A handwritten signature in black ink, appearing to read 'Sinead'.

Sinead Armstrong
Principal

From: Alisha Wiens <alisha.wiens@gmail.com>
Sent: April 20, 2023 11:47 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] 4240 59St from PS to R3

Council Members of the City of Red Deer,

I oppose the changes to the zoning at 4240 59St and the Area Redevelopment Plan due to traffic, environmental and community concerns. The residents of the Waskasoo Community have been loud and clear in their concerns over the development of this land, and I believe that the responsibility of council members is to listen and fight for the concerns of these same constituents that elected them into office.

Alisha Wiens



Public Hearing Submission Form

All materials submitted for Council consideration at the Public Hearing must form part of the public record. Fields on this form are optional for completion. However, please note that in accordance with [Procedure Bylaw 3681/2022](#), unsigned or anonymous submissions will not be provided to Council or included in the public record as there is no way for Council to properly weigh the contents of the submission.

If your submission exceeds the permitted character limit (maximum 7,500) for comments, or you have additional information to provide as part of your submission (e.g. pictures, videos, PowerPoint presentation), please email your submission to publichearings@reddeer.ca.

Submitter Information

First Name	Bernard
Last Name	Graham
Address	31Kidd close red deer

Submission

Public Hearing Agenda Item	3357/A-2023 3567/A-2023 Waskasoo
Comments	I appose the zoning changes and the redevelopment plan for this area, it is perfect the way it is. You can't improve perfection.

Disclosure of Personal Information

I have read and understand that, in accordance with [Procedure Bylaw 3681/2022](#), my first and last name, address, and comments provided on this Public Hearing Submission Form will be made publicly available in the Council agenda and will be included in the public record (<https://meeting.reddeer.ca/onbaseagendaonline/>).

I agree to the above statement

The City of Red Deer is collecting personal information for the purpose of administering the disclosure of comments to Council for their consideration at public hearings. The personal information on this form is collected under the authority of the Municipal Government Act Section 230 and 636 and is protected under the provisions of the Freedom of Information and Protection of Privacy (FOIP) Act. If you have any questions about the collection, use and protection of this information, please contact the Clerk, Legal & Legislative Services, The City of Red Deer, Box 5008, Red Deer, AB T4N 3T4 or phone 403-342-8132.

From: Bobby and Amy Froese <bobamyfroese@hotmail.com>
Sent: April 20, 2023 5:32 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Re: zoning of 4240 59 St in Waskasoo

To whom it may concern,

Please be advised that as a Red Deer resident, I highly OPPOSE the changes to the area redevelopment plan for this area of the city. I have 4 children that attend Gateway Christian School on the shared property, and as a mother, I am very concerned for the chance of higher traffic (and therefore the safety of the kids!), as well as the congestion of the area at drop off/pick up times. This area is extremely narrow and there is no way it would be able to support any kind of development, such as an apartment complex, etc. Not only that, this area is NOT set up for any kind of transit, or in fact able to accommodate higher traffic than it already has.

Please contact me at 403-597-4975 if you would like to discuss.

Thank you,

Amy Froese
6412 61 Ave
Red Deer, AB T4N5R9

Sent from my iPhone

From: Carley Binder <binderc@live.com>

Sent: April 20, 2023 12:49 PM

To: Orlando Toews <Orlando.Toews@reddeer.ca>

Subject: [External] 4240-59 Street Proposed Amendments & Waskasoo Area Redevelopment

Hi Orlando,

I am not sure if I have to re-submit my opposition with the proposed re-zoning in Waskasoo but just in case. I did add a comment about the apartment building by the corner store that is currently for sale. Possibly the builder could consider re-building that apartment? It would clean up that area and it would be an excellent spot for a senior complex. I'd consider this, if it cleaned up that area and added more value to it.

Attention: Orlando Toews, City Planning & Growth,

I Oppose the changes to the Zoning & Area Redevelopment Plan

The proposed changes to the Land Use Bylaw (3357/A-2023) and the Waskasoo Area Redevelopment Plan (Bylaw 3567/A-2023) will negatively impact our already existing Traffic Congestion in Waskasoo. With 3 schools in the neighbourhood and access to 2 recreational facilities & the memorial Centre (Kerry Wood Nature Area, Gaetz Lake Sanctuary & Mackenzie Trails). If there are additional housing/apartments/living/land developments it will add further traffic congestion to this area, which is unsustainable. There are only several access points into the area with no options for adding any more.

I live on 45th Avenue and already see a significant addition to traffic when the County school changed to Gateway Christian; Students were once bused in, now the additional traffic from parents/caregivers driving their kids to school has significantly added more traffic, already.

There is already a lot of apartment buildings in the area. There is even vacant land for sale that will best suit this proposed apartment building. Perhaps they can utilize that space? There is even the apartment building for sale by the corner store on 45th Avenue, why don't they consider re-building that apartment? or renovate it? If they want to consider adding value to the neighborhood, they should consider rebuilding or renovating an already run down building. This would be perfect for seniors.

If the City of Red Deer changes the zoning and Redevelopment Plan in Waskasoo, it will significantly impact the neighbourhood. This type of development will only create further congestion issues and have a direct negative impact on the existing properties in the neighbourhood.

Carley Binder & Amanda Keip
5524 45 Avenue
Red Deer

From: Carson Grant <carsonasgrant@gmail.com>
Sent: April 20, 2023 10:44 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Comments RE: Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

Re: Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

To the Members of the Council,

I am writing to state that I strongly oppose with the proposed rezoning of the 4.16 acre parcel at 4240 59 St in the Waskasoo neighborhood to R3 – Residential (Multiple Family). This proposed rezoning and subsequent development will have clear and predictable negative impacts on the surrounding community, as well as eroding the character of our city as a whole. There are many legitimate concerns surrounding the proposed development of this site, including: adding substantial strain to an already over-taxed roadway through a residential area, creating a large development directly adjacent to a public school with very young students, and eliminating more of the extremely limited remaining green space along the Red Deer River within city limits. None of these negative externalities has been addressed in any meaningful way in the discourse surrounding this proposed rezoning.

The advocates of this rezoning initiative have cited the growing demand for housing, and in particular high-density housing, as important mechanism for the city to grow. I do not disagree with this goal and believe that such high-density developments are both necessary and beneficial to the health of our city—however this parcel of land is not an appropriate location for this type of development. In this location the city has a unique opportunity with a vibrant green space along the banks of the river, one that is connected into the network of trails and natural areas that make Red Deer an attractive and liveable city. Such sites are rare commodity, and utilizing this land in the manner proposed by this rezoning would irrevocably deteriorate the character of Red Deer’s river valley and riverfront. Preserving this area as green space would be a far more valuable legacy to our city than the construction of a high-density housing complex that can easily be developed in other regions of the downtown (ie. the underdeveloped Capstone area), in new development regions, or simply in any other area that will not be deteriorating the natural endowment enjoyed by the entire city. When considering the urban planning missteps from other jurisdictions, ‘preserving green space along attractive waterways for use by all citizens’ is not a common complaint.

Ongoing development and high-density housing will be crucial to Red Deer continuing to grow as a vibrant and liveable city, and I am in no way opposed to these sensible goals. However, in this particular location the city risks expending the uniquely non-renewable resource of urban riverside green space for the short-term gain of a single development site, while at the same time seeding new logistical problems as the infrastructure for the surrounding community is strained beyond its capacity. I believe it will be a clear benefit to our

city as a whole to reject the proposed rezoning and hope the members of council will consider what legacy they leave behind when making this decision.

With sincerity and concern,

Carson Grant
5816 43 Ave
Red Deer, AB

From: Catherine Touche <touchec6@gmail.com>
Sent: April 20, 2023 5:45 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo Area Redevelopment plan

Orando Toews

I am writing in regards to the application to rezone land between the Gateway school and the river on 4240 59 ST in the Wasakoo neighborhood.

I am stating my refusal to have a R3 multifamily development placed in this area.

The neighborhood can not withstand the amount of traffic on this road. The area has an increase of traffic with school in session. I have also seen an increase of traffic with the new amenities of the sport facilities that have been built in the area throughout the year. Our road system in this area is very limited. Having said that, to have apartment buildings in this area is a lack of forward thinking to maintain the atmosphere of an established historic neighborhood of Red Deer. To maintain the balance of nature and a family neighborhood for future generations should be a priority of this council.

Driving toward this neighborhood we are surrounded by multiple family and apartment buildings already. I feel that we have reached our quota for multi-family to single family ratio.

Catherine Touche

From: Celia Hayton <celia.in.reddeer@gmail.com>
Sent: April 20, 2023 10:02 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo development proposal Lincoln Properties

Dear Councillors:

Until recently I owned resided in and owned rental properties in Waskasoo, Red Deer.

During that time and even after, I attended workshops and meetings regarding the future development plan for the community. Eventually a plan that was (and is) acceptable to the community and the City was agreed upon.

That plan allows for low density development on the site where Lincoln Properties is proposing a high density development.

This proposal has not been properly considered by the present council and is insulting to everyone who lives in Waskasoo and who spent time and effort on the AGREED UPON FUTURE DEVELOPMENT PLAN.

The City has invested in the clearing and preparation of the **Capstone area** and it **should be the City's first priority for development.**

Councillors, it is time to set goals and devise a plan for the future development of the City of Red Deer.

Higher density in the inner city is laudable but the areas must be adequately studied for suitability. That includes a proper **environmental impact study**, traffic flow including bicycles and pedestrians study, access to pathways, playgrounds and parks studies.

Modern development has to be a broad plan taking into consideration and contributing to the quality of life of all citizens now and into the future.

Waskasoo has one of the highest population density of Red Deer communities and there is very high intermittent daily density

with the school and theatre populations. Because the community is boxed in, traffic is a problem with the two main access streets. During the Future Development Plan study for Waskasoo, there was much discussion about how, if there was a major disaster, **the area could not be evacuated safely and quickly compounding the disaster.**

The proposed area is near to **sensitive habitat** along the river in an area that is enjoyed by all Red Deerians. The riparian strip has to stay connected to the larger area of Gaetz Lakes and Kerrywood for wildlife sustainability.

These are the reasons that **this proposal for high density development in Waskasoo should not be passed.**

--

Celia Hayton
4109 52 ST
Red Deer AB T4N 2C1
403 346 8799

From: Dan Steenbergen <dansteenbergen@gmail.com>

Sent: April 20, 2023 3:18 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] Letter of Opposition to Zoning and Area Redevelopment Plan

I am writing this email to express my strong opposition to the proposed changes to the Zoning and Area Redevelopment Plan, specifically as affecting the 4240 59 St proposed zoning change from PS to R3.

Regards,
Dan Steenbergen
5820 43 Ave
Red Deer

From: Desiree Gelowitz <des.pro36@gmail.com>
Sent: April 20, 2023 8:18 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo zone development

Good Evening,

I am sending this email to notify you that I oppose to the changes to the zoning and area development of 4240 59th street.

Thank you,

Desiree Gelowitz

From: Kevin U <kevinurness@gmail.com>
Sent: April 20, 2023 8:52 AM
To: City Council <CityCouncil@reddeer.ca>
Subject: [External] opposing ELP

Hi there,

I am writing to express my deep opposition to the proposed zoning change and development in waskasoo by East Lincon Properties.

I would love to write a lengthy email but feel as if your time is as valuable and in demand as mine, and others. Key points.

-Our high density housing is already 60% vs an average of around 20% in Red Deer. Should you not consider those other areas first? With high density comes some issues, and we have shouldered more of the burden already.

-The infrastructure is already very strained with the schools, high density housing, and public centers (memorial and kerrywood). You want to worsen that?

-We have empty developments with a similar profile (capstone). As a taxpayer, it blows my mind that you are going to anger existing residents while leaving a prime location untapped that we (taxpayers) have already wasted a ton of money on to deliberate.

-I've already moved my business of 30+ employees from the downtown/river adjacent community because initiatives like this. I truly want the downtown/riverside areas to thrive but you are doing the exact opposite of what residents and businesses alike need to thrive! Please listen to your constituency!

If this open demonstration of opposition is not enough, I respectfully, but firmly, request you to let us know what would be sufficient? Twice the amount of letters? More publicity?

My fear is that this public consultation and forum is simply lip service to say you "have taken into account public feedback" and make the decision you would've regardless. I apologize for my cynicism but I truly want our city to thrive and feel passionately that you are going in the other direction by approving this.

Regards,

Dr. Kevin Urness

From: Kerry Zacharias <kerryzacharias@gmail.com>
Sent: April 20, 2023 8:08 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

As a family living in the Waskasoo area, we strongly oppose the proposed amendment to the zoning bylaw and the Waskasoo Area Redevelopment Plan. The 4-acre lot at 4240 59 St has been designated as part of the Open Space Major System since the earliest city bylaws were created in 1978, and it has been a key part of the Waskasoo Area Redevelopment Plan and its Environmental Character Statement since 2016. The current zoning of the land as Public Service is in line with the City of Red Deer's vision of preserving open spaces and enhancing the natural environment in the area.

Allowing the construction of two apartment buildings on this land would not only contradict the current land use zoning and the Waskasoo Area Redevelopment Plan, but it would also have a negative impact on the natural environment and the quality of life of the residents in the area. The proposed development would result in the loss of valuable open space, which is important for maintaining the ecological integrity of the area and providing opportunities for recreation and education. Moreover, the proposed development would be located alongside the Red Deer River, which is a vital part of the natural environment in the area. Construction of high-density housing in such a sensitive area could have adverse effects on the ecological balance of the river and the surrounding ecosystem. It is essential that we maintain the natural integrity of this area for the benefit of current and future generations.

In addition, the proposed development would introduce high-density housing in an area that is predominantly low-density residential. This would have a negative impact on the character of the neighbourhood and could lead to increased traffic congestion. The area only has one road going in and out, which means that any significant increase in traffic would lead to significant traffic backups. This could make it difficult for residents to move around and for emergency services to respond in a timely manner.

The overwhelming response from Waskasoo residents and landowners, as well as local organizations such as the Gaetz Lakes Sanctuary Committee, the Waskasoo Environmental Education Society, the Red Deer River Naturalists, the Red Deer River Watershed Alliance, and the Waskasoo Community Association, demonstrates that there is significant opposition to this proposal. The fact that 110 letters were submitted in opposition to the proposed development and none in favour speaks volumes about the level of concern among the community.

As a family living in the Waskasoo area, we urge City Council to reject the proposed amendment to the zoning bylaw and the Waskasoo Area Redevelopment Plan. Instead, we urge them to uphold the current zoning and continue to support the vision of preserving open spaces and enhancing the natural environment in the Waskasoo area. We respectfully request that you carefully consider our concerns and those of the Waskasoo community, and reject the proposed amendment to the zoning bylaw and the Waskasoo Area Redevelopment Plan. Thank you for your attention to this matter.

Sincerely,
Emily & Kerry Zacharias

5808 43 ave, Red Deer, T4N 3E6

From: Eric Touche <emtouche@gmail.com>
Sent: April 20, 2023 6:13 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo area redevelopmentPlan 3357/A-2023

Hello Orlando Toews,

As a homeowner of 5817 43 Avenue I'm against rezoning for multi-family development for the following reasons:

There are already too many multi-family homes in our neighborhood and the roads cannot handle an increase in traffic.

The land is currently being used as is, by many different individuals throughout the day and into the evening. Plus weekend use.

The previous time City Council reviewed this matter the vote was against rezoning the properties, so how could it have been sold to developers?

Thank You for considering my objections,
Eric Touche

From: Gina Marsh <ginaleask@hotmail.com>
Sent: April 20, 2023 2:51 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Concerns Regarding Zoning Change and Development at 4240 59 Street

Good afternoon,

This is in regards to the application to change the zoning of 4240 59th Street from PS to R3, and the application to amend the Waskasoo Area Redevelopment Plan to allow 2 120+ suite apartments to be built.

I am very much opposed to the changes to zoning and the redevelopment plan. My child goes to school at Gateway and there is a high volume of traffic going in and out of this area daily and very little parking as is, this area is already congested with traffic and to put 2 high density apartment complexes in this area would further aggravate the issue and make commute times even longer, and harder for emergency vehicles to access, plus this area can only be accessed from one direction! There is no exit/entrance to the North. The road along the river is also very narrow. It would not be well suited to have these apartments in this area as it would make it even more congested and harder to get in and out of.

Also having two large apartment buildings would not fit well in the neighbourhood, it would ruin the views and wide open spaces of the area. There are no tall buildings or structures in that area and it is a beautiful area, two large apartments would not blend well with the area. Plus it is very close to the school.

Not to mention the impact on wildlife in the area, with the proximity to the river and many natural areas like Kerry Wood Nature Centre, Gaetz Lake Sanctuary, McKenzie Trails etc. there is a lot of wildlife in the area, there are very often moose and deer as well as many other types of wildlife, and increased vehicles along that river road would put them at greater risk.

This land should remained zoned as PS, the developer purchased this lot in 2020 being aware that it is zoned as such and of the restrictions to developing.

Again I am very much concerned and opposed to this application to change the zoning and the building of these high density apartments. Please take these concerns into consideration.

Sincerely,
Gina Marsh

Sent from my iPhone

From: Harold Connell <haconnel@telus.net>

Sent: April 20, 2023 12:22 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] re: bylaw ammendment to Waskasoo ARP and land use rezoning

As homeowners and seniors living in Waskasoo we are opposed to any changes to the ARP or to rezoning of the property in question as we believe this would not bring any benefit to the area and will actually be detrimental in numerous ways. Once rezoned to R3 the proposed development could change dramatically.

Harold & Barbara Connell
5812 43 Ave.
Red Deer

From: Heidi Rew <heidikathleen@gmail.com>

Sent: April 20, 2023 7:48 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] Re: change to zoning for 4240 59 st from PS to R3 - OPPOSE

To the Red Deer City Council members,

I strongly oppose the changes proposed for rezoning 4240 59 st from PS to R3 and the redevelopment plan. I believe that the residents have made their thoughts clearly known and believe that they should be honored by the elected council.

Heidi Rew

From: Jared Williams <rjwilliams2@hotmail.com>
Sent: April 20, 2023 6:44 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Changes to Zoning And Redevelopment Plan

Good afternoon, I am writing to express my opposition to the changes to the zoning and redevelopment plan.
I live at 48 DonLevy Avenue, T4R2Y8.

Kind Regards.
Jared Williams

From: Jena Braun <jena.braun@icloud.com>
Sent: April 20, 2023 11:59 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Proposed Development

My name is Jena Braun, I live at 23 Warwick Drive. I am opposed to the proposed development at 4240 59st wanting to change the zoning from PS to R3. This expansion in high density living would greatly impact the Waskasoo area in a negative way. Our 2 children attend Gateway Christian School. The parking and traffic on 45th Ave and 59th St is already congested resulting in numerous altercations and a shaky relationship between the school and residents living in the area.

I oppose.
Jena Braun

Sent from my iPhone

From: Julie Cavanaugh <jnjcavs@gmail.com>
Sent: April 20, 2023 8:26 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Waskasoo community zoning

Hi, my name is Julie Cavanaugh and I would like to oppose the zoning proposal for 4240 59 St. I live at 3568 Spruce Drive, but my children attend Gateway School and the traffic situation in that area is already incredibly challenging. I can only assume the residents of that area already feel a great frustration. Developing in this way would have a very negative impact on both the schools in the area and the residents.

Because of the park wildlife so close to this proposed development I also oppose this zoning for the increase in damage to such an important natural/wildlife site. The parks system in Red Deer is one of our great treasures and it will always be tempting to give it up for development. However, wildlife is not something we can replace. We should do everything in our power to protect this special area from an onslaught of traffic.

Thank you,
Julie Cavanaugh

Sent from my iPhone

From: Lauren Visser <laurenvisser@gmail.com>
Sent: April 20, 2023 9:37 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Opposition to Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

To Whom It May Concern,

I oppose the changes to the zoning and the Area Redevelopment Plan of 4240 59 St.

I live at 10 Traynor Close in Red Deer. My daughter is a student at Gateway School so I drive around this area twice daily on weekdays throughout the school year. The area is already over capacity with traffic during these times. I cannot fathom how it could handle a further influx of people and vehicles. There are limited roads to take to get to 45 Ave and 59 St; it is not a well suited area for high density apartment buildings.

There are numerous environmental concerns which have been raised by The Waskasoo Community Association, Red Deer River Naturalists, Gaetz Lakes Sanctuary Committee, Red Deer River Watershed Alliance and the Waskasoo Environmental Education Society that should not be taken lightly.

This property is more suited for its current PS zoning. It would be a detriment to allow a zoning change of this area to R3.

Thank-you,

Lauren Visser

From: Greg Roth <merrilyngreg@gmail.com>
Sent: April 20, 2023 4:07 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Re:proposed development

Re: 4240 59 st

Between gateway school and Red Deer River.

We are lifetime residents of Red Deer and our careers were with the City Of Red Deer and the Provincial Government.

We bought a home in Waskasoo 5 years ago to be close to the trails, Kerrywood nature center and McKenzie trails.

The sickening things about this development is the process on how the developer purchased the property, proposed parking and traffic along the bike trails and the fact that city council is even considering this proposal.

We are totally against this development.

This would be a stunning area for city parks further development.

There are so many things the city could do with this property.

We have enough apartments in Waskasoo/Woodlea.

Don't start ruining our park systems.

Greg Roth
City Of Red Deer
Retired Firefighter/Medic
Public Information Officer
VP Local International Association of Firefighters

Merrilyn Holm-Roth
Manager
Employment & Immigration
Alberta Government

Sent from my iPad

From: Stephanie McKenzie <stephandregan@gmail.com>
Sent: April 20, 2023 2:05 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Proposed development for 4240 59th St.

Hello,

I'm writing in response to the rezoning and area redevelopment plan for 4240 59th St.

Red Deer has been part of my whole life, and I have been a resident for 21 years, half my life.

It's very disturbing to learn of this development proposal for numerous reasons!

Traffic congestion is already horrendous in this area on school days! It can take up to 20 minutes to get only 4 streets over to 55th St. from 59th St. Not only is this extremely frustrating for parents driving children to and from school (I know, having done this for appx 10 years) and not to mention for homeowners in the neighborhood. It's also a large safety risk for vehicle accidents and pedestrians both, with the amount of traffic and small streets. There is absolutely no more capacity for expansion of population, therefore traffic increase, in this area. Adding a high-density apartment complex will only complicate this matter further.

It makes me very uncomfortable to think that there could be a high density apartment facing the schoolyard where anybody could be watching every move of these children from their windows? If this were to proceed would the residents of that condo be required to get criminal record and vulnerable sector checks? This is a safety issue for the children.

The current zoning also concerns me! Under no circumstances, should an adult daycare be adjacent to a schoolyard. Once again, that is a safety issue for the children.

We have a beautiful City of Red Deer, and I'm often reminded of that when I am in another city. It makes me very thankful for the care and maintenance in our city, especially the large amount of green spaces.

My recommendation and sincere hope is to protect the green space in this area across from the river banks. Keep this as a green environment, perhaps another city soccer field and exercise equipment or maybe some more community gardens with benches and flowers or even fruit trees that could supply the food bank.

Thank you for hearing my concerns, and I urge you to take them into consideration for the future of this land.

Stephanie McKenzie
Red Deer, AB
T4R0H3
stephandregan@gmail.com

Are you aware of this Proposed Development? Have YOUR say:

★ A developer has applied to change the zoning (or planned use) of 4240 59 St from **P5** to **R3**.

P5: or Public Service promotes uses like sports and recreation and will possibly allow uses like assisted living, daycares, adult day care, museums, health care and education, and campgrounds.

R3: or multi-attached promotes high-density apartments.

★ The developer is also applying to allow the zoning change and to build two apartment buildings, 120+ suites, associated parking, etc.



The Waskasoo Community, Red Deer River Naturalists, Gaetz Lakes Sanctuary Committee, Red Deer River Watershed Alliance, and Waskasoo Environmental Education Society have serious concerns over the application.

A copy of the proposal and the letters submitted can be seen at www.waskasoo.com/planning-and-development

The Developer's application will go to a **Public Hearing at 5:00 pm at City Hall on May 3**, after which Council will decide the future of this space.

★ **The MOST EFFECTIVE way to ensure your voice is heard is to speak at the upcoming public hearing or send an email with your address to publichearings@reddeer.ca**

The deadline for written response is 4:30 pm Friday, April 21

Your response can be as simple as: "I oppose / I support ... the changes to the zoning and the Area Redevelopment Plan."



Sent from my iPhone

From: TIM ROSENKRANZ <skiboy@shaw.ca>
Sent: April 20, 2023 3:01 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Zoning Change Proposal

To Whom It May Concern,

I oppose the proposed zoning changes to the area west of Gateway Christian School. 45 Ave. is already almost impossible to drive on during school drop off and pickup times that adding that many more vehicles will make it impassable. There is basically one street that services that area and it is narrow and busy already. Passing this rezoning will be shortsighted and negligent by city council. Thank you.

Tim Rosenkranz
Parent of multiple students at Gateway and Lindsay Thurber Schools

Sent from my iPhone



Waskasoo Community Association
Land Use Bylaw 3357/A-2023 and Waskasoo ARP Bylaw 3567/A-2023
Public Hearing Submission
 April 21, 2023

Honourable Mayor and City Council Members

Thank you for holding this Special Meeting to accommodate the Public Hearing for the proposed amendments to the LUB and Waskasoo ARP. The Waskasoo Community Association also appreciates the opportunity to respond to new information included in Council’s April 2, 2023, Agenda Packet for First Reading.

First, we want to emphasize that we are not anti-development. We support densification and understand the need to slow urban sprawl. We have chosen to invest and live in a neighbourhood where over 60% of dwellings are multifamily and hope to see all Red Deer neighbourhoods welcome density in similar ways. However, not every lot in the city is the same. The concerns raised by environmental groups and Red Deer residents demonstrate that any redevelopment of this lot must be done carefully and gently, under the PS zoning and with the full protection of the Environmental Character Area. Below please find the WCA’s brief responses to points made in the Agenda Packet.

1. The Lot is Privately Owned, Developable Land:

We agree. The land is privately owned, and neither the zoning nor the ARP preclude redevelopment. Since redevelopment is already possible, we feel there is no reason to change the bylaws or ARP to accommodate such.

However, the bylaws and ARP do insist redevelopment be done gently and carefully for the sake of the environment and the community. We note that most land in the city is privately owned and developable, yet most development occurs within the constraints of City Bylaws and Plans. Further, the owner of this lot purchased it fully aware of its restrictions and the community’s position. On November 24, 2019, he met with the WCA’s past president who advised him of the ARP, the community’s position, and (believing the lot would remain PS) that any proposed development should be small, located at the back of the lot, and leave plenty of open space along both 59th Street and the river. Instead, this proposal, which is the exact opposite of what was suggested, was submitted, and then resubmitted.

2. PS and R3 are Similar in Scale and Use Intensity:

This argument hinges on comparing R3 to PS developed with *large*, assisted living facilities. However, there are very few assisted living facilities on PS land in the city. (Most are in Residential Districts.) Further, assisted living facilities themselves come in an array of sizes from the large Revera buildings to the Hospice to the Harmony Care Homes.



Red Deer Hospice, Anders



Care Cottages is planning to build a 12-room seniors care home in Gasoline Alley. (Graphic: contributed)

Seniors care home approved for Gasoline Alley

12-room care home will be built in Liberty Landing neighbourhood
PAUL COWLEY / Apr. 4, 2023 12:50 p.m. / LOCAL NEWS / NEWS

Harmony Care Planned for Gasoline Alley



Harmony Care, Inglewood

More importantly, assisted living is only one of the PS District's uses. Most PS structures are churches, firehalls, schools, health facilities, and club houses. These PS uses *vary drastically in scale and use intensities*. The Report Summary also states that PS and R3 "appear to" generate similar traffic. This again hinges on equating PS with large Assisted Living facilities. We also note that in the "Pre-Development Meeting Summary" submitted with the developer's application, Engineering states that "Assisted Living facilities generate very low traffic volumes as do daycares."

3. ARP and Character Statements Will Apply to Future Development:

Again, we agree. Any development must be guided by the ARP and character statements. However, the developer is also applying to amend the ARP and the Environmental Character Area, particularly Section 5.3 "Common Form and Scale of Buildings" and 5.6 "Recommended Design Elements." These are the sections that will be relied on most for guidance. Therefore, we are very concerned that the Report Summary provided to Council did not offer any guidance on the impacts of the proposed ARP amendments. For example, how will adding the statement "subject to the development standards in the applicable land use district" to design element 5.6.15 alter what is deemed appropriate in relation to the character, size, massing, form, and height of any redevelopment in the Environmental Character Area?

We are also concerned that the Report to Council did not include an overall discussion of the ARP (how it functions, its objectives, vision, and purpose) or the Environmental Character Area (the common form, scale, and elements that create the area's unique character and how the resulting recommended design elements protect that character). This information is vital for context and for understanding the potential impacts of the amendments on the community and the environment. (See the plans at www.reddeer.ca/waskasoo)

4. Zoning VS Development:

Zoning: Yes, PS zoning has few development standards and R3 is more prescriptive. Because of the variety of uses, it would be difficult to regulate PS in the same way as R3. However, not all lots are the same. The question really is: Do R3's prescriptive standards address the environmental and neighbourhood concerns on this parcel? For example, is R3's 7.5m front yard setback appropriate along 45th Avenue next to the Red Deer River? As noted in our previous submissions, the 2012 NASP decision determined that PS allowed for appropriate infill opportunities and during the many public meetings for the ARP, R3 was never presented as appropriate for this location.

Development: The Report states that if the lot is rezoned, "Administration believes concerns regarding impacts can be addressed at the DP stage." Yet, we note that in the "Pre-Development Meeting Summary," Inspections and Licensing states that the development does not meet the Environmental Character Area's requirements for open space, massing and height, form, or protection of landscaping features. (See attached page). It appears that none of these incongruities have been addressed and we question that they can be reconciled.

We also have concerns over the statement that for PS developments "much is left to the discretion of the Development Authority." As PS, anything other than a sports field is discretionary and triggers input from the community. As R3, because the use and regulations are permitted, the community loses much of its right to notice and input, including any right to appeal a development decision.

5. Compliance with MDP Policies:

We refer you to our earlier submissions, particularly sections 2: Legal Land Use, and 8: Planning Best Practices. In reference to compliance with the Land Use Concept Map, we emphasize the MDP's statement

that “More specific boundaries and information on the precise land uses is intended to be provided through ... area redevelopment plans, and the Land Use Bylaw.” The Waskasoo ARP and LUB support the land use and boundaries as PS within the Open Space Major.

6. No Financial Implication to the City:

While there may not be any immediate financial cost to the City, there will be high costs in the long-term. River armouring to protect this private development will likely be needed as the river moves east. Further, will 45th Avenue north of 59th Street need widening, streetlights, and curbs in the near future to accommodate access and needed parking for 120 dwellings? All of this will cost taxpayers. River armouring to protect Cronquist Dr (also on the outside curve of the river) cost eight million dollars in 2015 (*Advocate* Nov. 24, 2015).

7. 2023-2026 Strategic Plan Alignment:

Once again, we agree that redevelopment in nearby neighbourhoods can contribute to the vitality of Downtown and help meet the Strategic Plan’s goals for a “Thriving City.” But not every lot is the same. If this were about rezoning the PS land at the Armouries, it would be a different conversation. We also note the qualifier at the end of the Strategic Plan’s “Thriving City” focus area statement: “while continuing to protect and enhance the environment.”

The Strategic Plan also has two other focus areas: “Community Health and Wellbeing” and “Engaged and Connected City.” The first is directly countered by the negative impacts of these proposed amendments on the South Bank Trail, Gaetz Lakes Sanctuary, and Waskasoo Park. As for the second, this Council has determined it wants engaged citizens that feel valued and included in decisions about their city. The outpouring of reasoned, carefully crafted concerns about this proposal from Red Deer residents and numerous local environmental groups is exactly that. In the words of one Waskasoo resident, if this is not enough, what is?

Finally, we also note that the developer states that seniors housing is “one of the highest demand housing types in the country, including Alberta, with minimal vacancies.” However, according to the 2021 Seniors Housing Survey by the Canada Mortgage and Housing Corporation, vacancy rates for this housing type are rising and reached 26.8% in Alberta in 2021. Below is a section of the CMHC survey. (See the entire survey [here.](#))

Our survey was conducted in April and May, 2021. The private and non-private residences must have at least 50% of its residents aged 65 or older. The survey looked at standard spaces. That is where the resident doesn’t receive high-level care or isn’t required to pay an extra amount to receive high-level care.

Canada

This year, vacancy rates in seniors’ residences are on the rise in all provinces except Newfoundland and Labrador. Overall, the vacancy rate for standard spaces grew by 7.0 percentage points and now stands at 15.6%. Some provinces reached noteworthy levels such as:

- Ontario (19.6%)
- Alberta (26.8%)
- Saskatchewan (22.4%)

In conclusion, the W.C.A. is not anti-development. In most cases when applications come forward, we work to negotiate a build that suits all parties. The fact that five of our current Directors joined the board after working with the Association to redevelop properties in Waskasoo within the confines of the ARP is a testament to this. In this spirit, because we believe R3 is completely incompatible with this lot, we suggest that the City investigate a land swap with East Lincoln Properties – perhaps with a lot in Capstone where a development such as this belongs and would truly support both its residents and a thriving downtown. It could also be the seed around which the rest of Capstone grows. In return, the City could ensure this property is developed with a suitably sized and placed PS development or, what we believe would suit most Red Deer residents, return it to nature by adding it to the river park and trail system.

Sincerely,

Waskasoo Community Association Board

John Bouw, President

Joanne White, Vice President

Susan Jensen, Treasurer

Linda Cullen-Saik, Secretary

Kristen Steenbergen

Darcy Garrett

Alandra Aucoin

Renaë Sinclair

Phil Smith

Brock Priebe

Tiffany Priebe

Brenda Garrett

Marianne Lee

William Weiswasser

Kristine Abramoff



Pre-Development Meeting RE: Riverglen Village

Meeting Summary

Pre-Development Meeting

2:30 -pm – 3:54 pm

Date

January 7, 2022

bylaw. The main concern will be compatibility in the neighbourhood.

- Waskasoo ARP – Section 5.6 contains recommended design elements:
 - A conservation development pattern which clusters a development's built form together into a portion of the overall area allowing the open space of the development to contribute to the existing adjacent open space and be an amenity to the site users including wildlife.
 - The siting of the building along 45 Avenue and 59 Street removes the contributing factor to the adjacent open space to the west. The site is closed off by having the building sited on the corner. It is the Development Officer's opinion this recommendation is not met.
- Waskasoo ARP Section 15 – New development should not adversely affect the character of the streetscape, as a result of being sited too close to the road, of inappropriate or excessive Massing, form or height having a negative impact on abutting properties in terms of shadows and privacy/over look, or causing the loss of landscape features or other factors which may have a negative effect on the streetscape or abutting properties.
 - It is the Development Officer's opinion that this is not met.
 - Inappropriate massing and height – 3 storey should be maximum
 - There are a minimal number of 2 storey existing developments in the area, new development within 1-2 storeys of existing development would be 3.
 - Inappropriate form – there are no other large scale buildings in the neighbourhood.
 - Loss of landscaping features and closing the site to the west trail and river.
- Suggest that the developer meet with Community Association early in the project so they have the opportunity to review and provide feedback. Even if a final plan

From: Brock and Tiffany Priebe <brockandtiffany@gmail.com>

Sent: April 21, 2023 12:35 PM

To: Orlando Toews <Orlando.Toews@reddeer.ca>

Subject: [External] LUB Changes - 45 Ave and 59 St - Bylaw Amendment 3357/A-2023 and 3567/A-2023

Hello,

Please find attached our letter relating to the latest proposed changes and public hearing. Thank you

Brock and Tiffany Priebe
5818 43 Ave, Red Deer, AB T4N 3E6

Please accept this email as our comments relating to the Proposed Land Use Bylaw amendment (Bylaw 3357/A-2023) and Waskasoo ARP amendment (Bylaw 3567/A-2023) to allow higher density residential uses at 4240-59 Street.

We outright oppose the application to the aforementioned changes to the bylaw. The requested changes are a major and irreversible shift that is not consistent with the established area redevelopment plan. We support the numerous concerns raised by our neighbours, environmental groups, and the Waskasoo Community Association (based on many previous consultations and studies) for this rezoning application and subsequent future development, including:

- Traffic Impact and Fire & Safety Services Access
- Environmental and Geological Impact
- Non-compliance with Land Use Bylaw, ARP, and historical development reviews
- Loss of Neighbourhood Flex Green Space and Potential Future PS permitted development
- Possible Negative Impact/Security to Neighbouring Elementary School

The request to exempt this lot from the Waskasoo Area Redevelopment Plan's Environmental Character Area should not be approved. The request tries to imply that because the Gateway Christian School, Lindsay Thurber School, and Parkland Class building are exempt, this lot due to its proximity should be exempt as well. Of course, existing schools and social services being grandfathered into the ARP (which is fine) is much different than a prospective private apartment development.

The developer should be encouraged to explore opportunities for residential development in locations which they are intended, including the highly anticipated Capstone area. This is entirely reasonable. Furthermore, the idea of improving the Waskasoo community with a new apartment building (that may provide seniors a place to downsize and stay within their community later in life) should not be a justification for rezoning a public service district. While the option to "age within the community" is a concept that most "Red-Deerians" would agree with, there are better ways to provide this development both within Waskasoo and throughout Red Deer. Furthermore, the current green space provides a place for people of all ages to spend time together outdoors.

The current PS zoning for 4240 59 Street, established and upheld through many extensive, rigorous, and comprehensive reviews (including the Waskasoo ARP) should be retained unequivocally, and future development considered within these established controls.

Sincerely,

Brock and Tiffany Priebe
5818 43 Ave
Red Deer AB

Dear City
 Please
 Put ^{Don't}
 building in
 the feed
 because I
 like to
 play in it.
 from: Isla ^{Alford} 7 years old



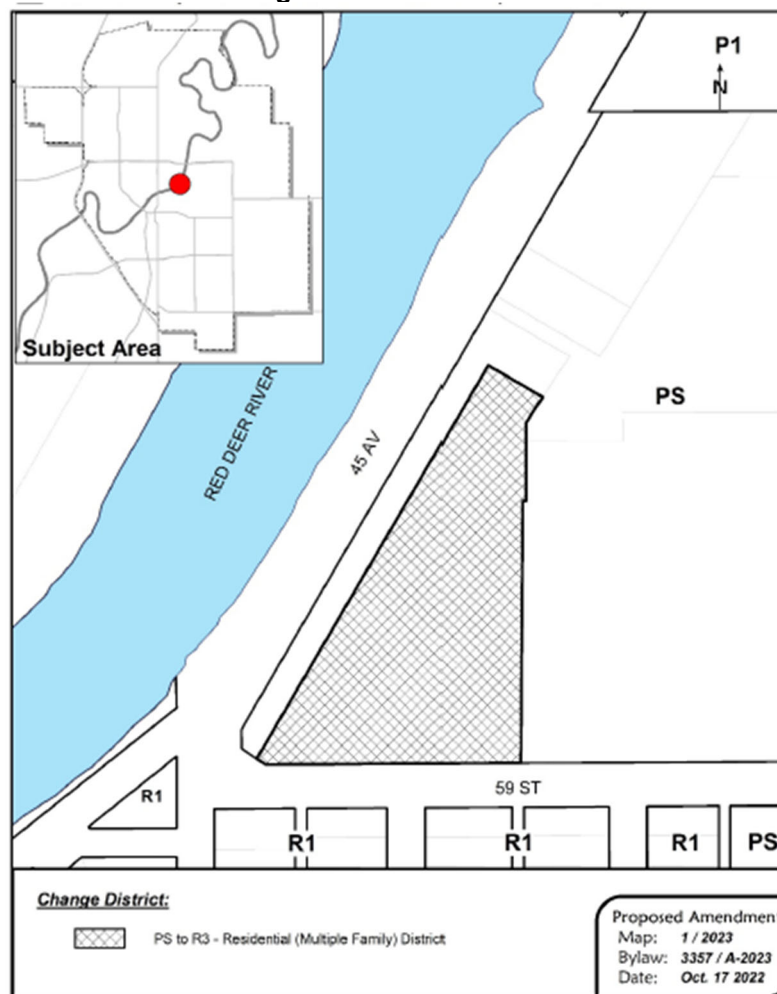
To: City of Red Deer From: Patrick Wong, P.Eng., PTOE
 Stantec Consulting Ltd
 File: 113678532 Date: April 21, 2023

Reference: City of Red Deer – Waskasoo ARP Re-Zoning – Traffic Memo

1 INTRODUCTION

This traffic memorandum intends to evaluate the potential traffic impacts of the proposed rezoning of a 1.682 hectare site located at the northeast quadrant of the intersection of 59 Street and 45 Avenue in the City of Red Deer. The current zoning for the site is PS – Public Service (institutional or Government) District zoning, and it is proposed to re-zone to R3 – Residential (Multiple Family) District zoning to pursue multi-family residential. The site location is illustrated in **Figure 1**.

Figure 1 – Site Location



April 21, 2023
City of Red Deer
Page 2 of 3

Reference: City of Red Deer – Waskasoo ARP Re-Zoning – Traffic Memo

2 ALLOWABLE LAND USE

The PS District zoning allows for a variety of discretionary uses including assisted living facility and institutional service facility.

The proposed R3 zoning will allow for Senior Adult Housing to be constructed within the site.

3 TRIP GENERATION RATES

3.1 EXISTING PS DISTRICT ZONING

The following land use code was selected for this land use:

- ITE Trip Generation Manual 11th Edition, code 254, Assisted Living

Table 1 shows the trip generation rates for the Assisted Living land use.

Table 1 – Trip Generation Rates for Assisted Living

	Trip Rate
AM Peak	0.18 / bed
PM Peak	0.24 / bed
Daily	2.6 / bed

3.2 PROPOSED R3 DISTRICT ZONING

The following land use code was selected for this land use:

- ITE Trip Generation Manual 11th Edition, code 252, Senior Adult Housing – Multi Family

Table 2 shows the trip generation rates for the Senior Adult Housing land use.

Table 2 – Trip Generation Rates for Senior Adult Housing – Multi Family

	Trip Rate
AM Peak	0.20 / dwelling unit
PM Peak	0.25 / dwelling unit
Daily	3.24 / dwelling unit

3.3 TRIP GENERATION RATES COMPARISON

Table 3 compares the trip generation rates of Assisted Living versus Senior Adult Housing – Multi Family.

Table 3 – Trip Generation Rates Comparison

Land Use	AM Peak	PM Peak	Daily
Assisted Living (PS)	0.18	0.24	2.6
Senior Housing (R3)	0.20	0.25	3.24
Difference	+0.02 trips/unit	+0.01 trips/unit	+0.64 trips/unit

April 21, 2023
City of Red Deer
Page 3 of 3

Reference: City of Red Deer – Waskasoo ARP Re-Zoning – Traffic Memo

As shown in Table 3, the change from PS district zoning to R3 district zoning will only incrementally increase the traffic generated by the site.

4 CONCLUSIONS

This traffic memorandum intends to evaluate the potential traffic impacts of the proposed rezoning of a 1.682 hectare site located at the northeast quadrant of the intersection of 59 Street and 45 Avenue in the City of Red Deer. The current zoning for the site is PS – Public Service (institutional or Government) District zoning, and it is proposed to re-zone to R3 – Residential (Multiple Family) District zoning.

Based on the information reviewed, the traffic generated by the development of an independent seniors living accommodation, as allowed under the R3 – Residential (Multiple Family) District for the subject site, will not have a significant impact on the adjacent and surrounding road network, in comparison to the existing PS zoning.

We trust that this will meet your requirements, should have you have further questions or comments please feel free to contact the undersigned.

Sincerely,

STANTEC CONSULTING LTD.



Patrick Wong, P.Eng., PTOE

Transportation Engineer

Stantec

Phone: (780) 917-7488

patrick.wong@stantec.com



Permit Number: P0258



April 21, 2023

Mayor and Councillors,
City of Red Deer,
Red Deer, Alberta

Honourable Mayor and City Council Members:

**Re: Land Use Bylaw 3357/A-2023 and Waskasoo ARP Bylaw 3567/A-2023 Public
Hearing Submission**

The following submission concerns the broad impact of the East Lincoln Properties proposal for development at 4240 – 59 Street.

We have read the submissions from East Lincoln Properties, the Waskasoo Community Association, Red Deer River Naturalists, Red Deer River Watershed Alliance, and numerous individual Waskasoo residents, and we are deeply disturbed to see City Administration making recommendations to Council that appear to contravene both the current Land Use Bylaw, and the one that is proposed in the LUB Review Project documents posted on the City's website. This is very troubling with respect to both this particular development application and the implications for future development in our own community.

Administration is recommending that Council approve the revision of the current Waskasoo Area Redevelopment Plan (ARP) and detailed character elements as requested by East Lincoln Properties. The ARP and character elements were collaboratively developed relatively recently by the Waskasoo Community Association and the City Planning Department, and approved by Council.

According to current Land Use Bylaws, as well as those drafted in the current LUB Review Project, the ARP and character elements (in the case of Waskasoo) and the approved Character Statement (in the case of Woodlea) are required to be used in their entirety to guide development in our respective communities. This is embedded in Municipal Planning documents and the principle was confirmed verbally March 6 in a presentation by the Planning Department to Council.

We cannot see how approving the changes requested by East Lincoln Properties would align with honouring this commitment to our communities. We see that in spite of an existing ARP and character elements, and in spite of overwhelming, reasoned objections from the Waskasoo Community Association, numerous individual residents of the community, and established organizations with legitimate concerns, these relaxations are being recommended anyway.



It appears that rather than the developer being required to make a compelling case for relaxation, the onus has been placed on citizens to prove why duly approved ARP and character elements, which have status within the Land Use Bylaw, should be followed. This is backward, and leaves us feeling that we in Woodlea, and our carefully and collaboratively planned Character Statement documents, are also at risk of being disregarded in the face of future development. We wonder why.

As predicted in the Waskasoo Community Association's submission, the City's apparent willingness to disregard a collaboratively developed ARP and detailed character statements has indeed undermined our confidence that existing and proposed Land Use Bylaws will guarantee that Woodlea Character Statements will be respected as we have been promised.

In closing, we respectfully request that the City deny the application by East Lincoln Properties for the proposed development at 4240 – 59 Street.

Sincerely,

Torben Andersen
Sheila Bannerman
Peter Slade, Board Chair

Woodlea Community Association Development Committee
peterslade10@gmail.com



4, 7935 Edgar Industrial Drive
Red Deer, AB T4P 3R2
www.eastlincolnproperties.com

21 April 2023

Red Deer City Council
c/o Clerk, Legal & Legislative Services
Box 5008
Red Deer, AB
T4N 3T4

RE: Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023 to rezone a parcel in Waskasoo from PS – Public Service District to R3 – Residential (Multiple Family) District; Property 4240 59 Street – Owner East Lincoln Properties Corp Public Hearing Council May 3, 2023

East Lincoln Properties Corp. represents that the subject lands are suitable for development under R3 zoning. East Lincoln supports the position of City Administration in that,

- the subject lands are privately owned and developable under the current PS zoning;
- the application complies with Municipal Development Plan policies; and
- the Waskasoo ARP does not preclude development of the site.

At the hearing, East Lincoln will address concerns raised by the Waskasoo Community Association and select citizens with respect to environmental concerns. East Lincoln will also illustrate suitability for R3 development in the comparison between PS and R3 zoning.

These lands were purposefully subdivided for private ownership. At the time of original subdivision, the Subdivision Authority acknowledged that “the future development of Lot 2 would likely require a change in districting from the current PS designation” (Caveat 152158710). East Lincoln Properties Corp. respectfully requests Council supports this redesignation to R3 – Residential (Multiple Family) District.

Kind regards,

Tanya Kure, MBA, PMP, CPM
Director of Property Development

Attachment

**ALBERTA GOVERNMENT SERVICES
LAND TITLES OFFICE**

IMAGE OF DOCUMENT REGISTERED AS:

152158710

ORDER NUMBER: 47037995

ADVISORY

This electronic image is a reproduction of the original document registered at the Land Titles Office. Please compare the registration number on this coversheet with that on the attached document to ensure that you have received the correct document. Note that Land Titles Staff are not permitted to interpret the contents of this document.

Please contact the Land Titles Office at (780) 422-7874 if the image of the document is not legible.

CAVEAT

TO: THE REGISTRAR, ALBERTA LAND REGISTRATION DISTRICT

TAKE NOTICE THAT the CITY OF RED DEER (the "Caveator"), of Red Deer, Alberta, pursuant to section 651.1 of the *Municipal Government Act*, R.S.A. 2000, c. M-26, hereby claims an interest in the lands legally described within Schedule "A" to this Caveat (the "Servient Lands") pursuant to a Restrictive Covenant dated the 12th day of March, 2015 (a copy of which is attached hereto) between the Caveator and The Board of Trustees of Chinooks Edge School Division No. 73 wherein:

- (a) The Board of Trustees of Chinooks Edge School Division No. 73 as the owner of the Servient Lands, covenanted and agreed with the Caveator to permanently restrict the use and enjoyment of the Servient Lands as described within the Restrictive Covenant attached hereto; and
- (b) the Caveator, a municipality having direction, control and management of the roads described as the Dominant Lands within the Restrictive covenant attached hereto, is entitled to the benefit of the restrictions placed upon the use and enjoyment of the Servient Lands, and is entitled to enforce the said restrictions as against the Landowner and each and every one of its successors in title to the Servient Lands, or any portion thereof;

all of which relates to the Servient Lands which are legally described within Schedule "A" attached to this Caveat, standing in the register in the name of The Board of Trustees of Chinooks Edge School Division No. 73, and it forbids the registration of any person as transferee or owner of, or of any instrument affecting the said estate or interest, unless the instrument or certificate of title, as the case may be, is expressed to be subject to its claim.

IT APPOINTS Box 5008, Red Deer, Alberta, T4N 3T4, as the place at which notices and proceedings relating hereto may be served.

Dated this 12 day of May, 2015.

**THE CITY OF RED DEER, by its agent
and solicitor**

Per: Natasha Wirtanen c/s
Natasha Wirtanen

CANADA)
PROVINCE OF ALBERTA)
TO WIT:)


I, Natasha Wirtanen of the City of Red Deer, in the Province of Alberta, MAKE OATH AND SAY THAT:

1. I am agent for the above named Caveator.
2. I believe that the said Caveator has a good and valid claim upon the said land and I say that this Caveat is not being filed for the purpose of delaying or embarrassing any person interested in or proposing to deal therewith.

SWORN BEFORE ME at the City of Red)
Deer, in the Province of Alberta, this 6th)
day of May, 2015.)



Natasha Wirtanen



A Commissioner for Oaths in and for the
Province of Alberta
Lindsey Flaman
My commission expires September 18,
2017

SCHEDULE "A"

THE SERVIENT LANDS

The Servient Lands shall consist of the following:

PLAN 152 2489

BLOCK 1

LOT 1

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 3.364 HECTARES (8.313 ACRES) MORE OR LESS

PLAN 152 2489

BLOCK 1

LOT 2

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 1.682 HECTARES (4.156 ACRES) MORE OR LESS

PLAN 152 2489

BLOCK 1

LOT 3

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 3.089 HECTARES (7.633 ACRES) MORE OR LESS

PLAN 152 2489

BLOCK 1

LOT 4

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 1.726 HECTARES (4.265 ACRES) MORE OR LESS



THIS RESTRICTIVE COVENANT dated to be effective this 12th day of March, 2015.

BETWEEN:

THE BOARD OF TRUSTEES OF CHINOOKS EDGE SCHOOL DIVISION NO.73
(the "Board")

- and -

THE CITY OF RED DEER
(the "City")

RESTRICTIVE COVENANT

WHEREAS:

- A. Pursuant to the Board Order issued by the Municipal Government Board on August 12, 2014 authorizing the subdivision of the Board Lands subject to certain conditions;
- B. The City is the legal and beneficial Owner of the City Lands, or is designated by statute to be the person with direction, control and management of the City Lands;
- C. The Board is or is entitled to become the legal and beneficial Owner of the Board Lands;
- D. The Board has agreed to restrict the use of the Board Lands as more particularly set forth within this Agreement.

NOW THEREFORE in consideration of the sum of \$1.00 paid to the Board, the receipt and sufficiency of which is hereby acknowledged, and in consideration of the mutual covenants and agreements herein, it is hereby agreed as follows:

1. DEFINITIONS

- (a) "Agreement" means this Restrictive Covenant and includes the preamble and schedules attached hereto;
- (b) "Board Lands" means those lands legally described within Schedule "A" attached to this Agreement;
- (c) "Board Order" means the Board Order No. MGB 029/14 of the Municipal Government Board dated August 12, 2014 and cited as *Chinook's Edge School Authority v. City of Red Deer (Subdivision Authority)* 2014 ABMGB 29 and attached hereto as Schedule "B";

-
- (d) "City" means The City of Red Deer, and all successor in title to the City Lands;
 - (e) "City Lands" means, collectively, those lands described within Schedule "C" attached to this Agreement;
 - (f) "Dominant Lands" means the City Lands;
 - (g) "Owner" means any individual(s), person(s), or corporation(s) holding a legal or beneficial interest in either the Board Lands or the City Lands;
 - (h) "Report" means Environmental Risk Management Plan, Historic Waste Disposal Site, Lindsay Thurber Comprehensive High School, Ptn. NE & SE 21-38-27-W4M Report by Tiamat Environmental Consultants Ltd. for The City of Red Deer dated April 1, 2014, attached, hereto as Schedule "D";
 - (i) "Servient Lands" mean the Board Lands; and
 - (j) "Tenant" means any individual(s), person(s), corporation(s), or other entity holding a leasehold estate or interest in, or otherwise occupying all or a portion of, either the Board Lands or the City Lands.

2. GRANT OF RESTRICTIVE COVENANT

The Board, as Owner of the Board Lands, hereby grants to the City, as Owner of the City Lands, the restrictive covenants contemplated within this Agreement, burdening the Board Lands and benefiting the City Lands.

3. DESCRIPTION OF RESTRICTIVE COVENANT

The Board hereby covenants and agrees that:

- (a) No development can occur on the Servient Lands within one hundred (100) meters of the adjacent non-operating landfill located on the Dominant Lands if the development is restricted pursuant to findings within the Report.

4. COVENANT RUNNING WITH THE LANDS

The restrictions contained herein shall for all purposes constitute a covenant running with the lands such that the burdens and benefits hereby created shall attach to and run respectively with the Board Lands and the City Lands from this date forth.

5. DETERMINATION OF COMPLIANCE

For the purposes of this Agreement, the determination as to whether the Restrictive Covenant has been complied with shall be based upon the interpretation of this Agreement by the City, Owner,

and Tenants of the City Lands from time to time, and any such determination shall be final and binding as against the parties hereto and all Owner or Tenants of the Board Lands.

6. ENFORCEMENT

In the event that any Owner or Tenant of the Board Lands is determined to be in default of the terms of this Agreement, this Agreement may be enforced by the City or any subsequent Owner or Tenant of the City Lands or any portion thereof. Furthermore, the relief available in any such action to enforce this Agreement shall include, without restriction:

- (a) damages against the defaulting Owner or Tenant of the Board Lands, or any portion thereof; and
- (b) injunctive relief.

7. COSTS

In addition to the relief set forth in Section 6 above, any party which successfully enforces this Agreement shall be entitled to its legal costs as between a solicitor and his own client on a full indemnity basis and such costs, if not paid, shall constitute a charge against the interest held by the defaulting Owner or Tenant in Board Lands, or any portion thereof, until fully paid and satisfied. For the purposes of creating and enforcing such charge, and as security for the payment of such costs, the Board hereby mortgages and charges all of its right, title, estate and interest in each of the parcels or lots comprising the Board Lands in favour of the Board and each successor Owner of the parcels or lots comprising the City Lands.

8. REGISTRATION

This Restrictive Covenant shall be registered by way of caveat against the title to the Board Lands.

9. GOVERNING LAW

Any dispute arising herefrom shall be governed by and construed in accordance with the laws of the Province of Alberta and the Courts of the Province of Alberta shall have exclusive jurisdiction.

10. SEVERANCE

If any term or provision of this Agreement or the application thereof to any person or circumstance shall, to any extent be invalid or unenforceable, the remainder of this Agreement, or the application of any such term or provision to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each term or provision of this Agreement shall be enforced to the fullest extent permitted by law.

11. INTERPRETATION

Any word importing the singular number shall include the plural and vice versa, and any word

importing gender shall include the masculine, feminine or neutral gender, and any word importing a person shall include a corporation, individual, partnership and any other entity, all as the context requires.

IN WITNESS WHEREOF the parties have executed this Agreement on the day and year first above written.

**THE BOARD OF TRUSTEES OF CHINOOKS EDGE
SCHOOL DIVISION NO.73**

Allan Tarnoczi

Per: *Tarnoczi*

(c/s)

Per: _____

THE CITY OF RED DEER

Per: *JM Daigne*

(c/s)

SCHEDULE "A"

THE BOARD LANDS

The Board Lands shall consist of the following:

PLAN 152 _____

BLOCK 1

LOT 1

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 3.364 HECTARES (8.313 ACRES) MORE OR LESS

PLAN 152 _____

BLOCK 1

LOT 2

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 1.682 HECTARES (4.156 ACRES) MORE OR LESS

PLAN 152 _____

BLOCK 1

LOT 3

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 3.089 HECTARES (7.633 ACRES) MORE OR LESS

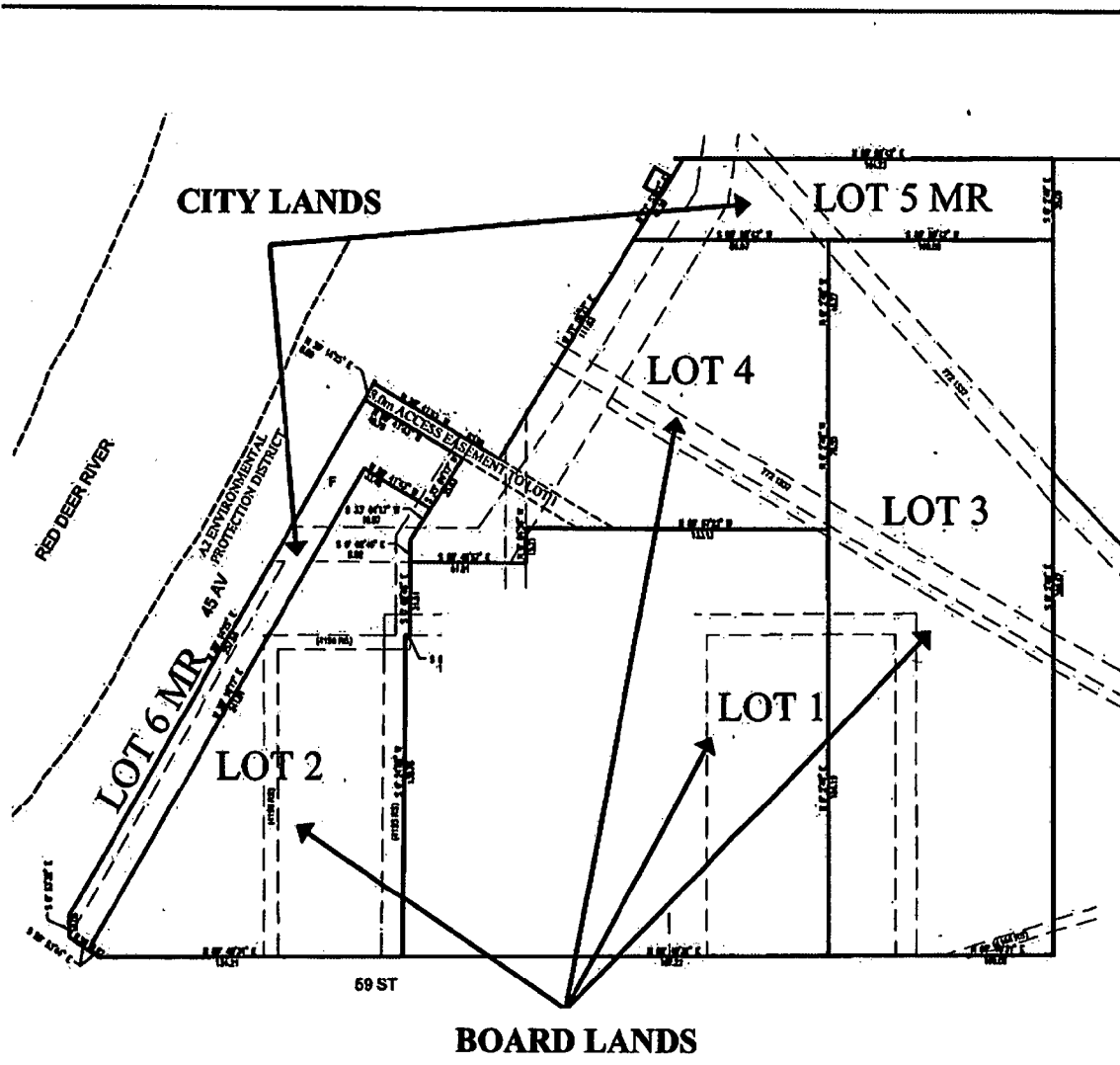
PLAN 152 _____

BLOCK 1

LOT 4

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 1.726 HECTARES (4.265 ACRES) MORE OR LESS



SCHEDULE "B"**THE BOARD ORDER**

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

IN THE MATTER OF THE *Municipal Government Act* being Chapter M-26 of the Revised Statutes of Alberta 2000 (Act).

AND IN THE MATTER OF A SUBDIVISION APPEAL lodged by Chinook's Edge School Authority (Appellant).

CITATION: Chinook's Edge School Authority v City of Red Deer (Subdivision Authority), 2014 ABMGB 29

BEFORE:**Members:**

H. Kim, Presiding Officer
 W. Hughes, Member
 L. Loven, Member

Case Manager:
 K. Lau

Assistant Case Manager:
 K. Starrak

This is an appeal to the Municipal Government Board (MGB) from a refusal of the City of Red Deer Subdivision Authority (SA), respecting the proposed subdivision of NE and SE 21-38-27-W4M. Upon notice being given to the interested parties, a hearing was held in the City of Red Deer, in the Province of Alberta, on July 23, 2014.

OVERVIEW

[1] The MGB considered whether to approve the subdivision of a 10.9573 ha. parcel into 4 Public Service Lots and Municipal Reserve land. The subject land is located within 300m of the disposal area of a non-operating landfill. The City of Red Deer applied to Alberta Environment and Sustainable Resource Development (AESRD) for a waiver of the 300m distance set out in the *Subdivision and Development Regulation 43/2002* (Regulation). AESRD refused this request because there is an active school already on the subject land, and AESRD Policy *APCC-2011-01* states that variance will not be granted after a development permit has been issued. Both the SA and the Appellant agreed, and scientific data supports, that the level of risk beyond 100m from the landfill is negligible and does not require special consideration or mitigative measures. The proposal has been carefully designed to prevent enclosed development within the identified

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

100m. Based on the totality of the evidence, the MGB finds that it is appropriate to use its discretion to vary the setback distance. The subdivision is approved.

REASON APPEAL HEARD BY MGB INSTEAD OF SDAB

[2] Section 678 of the Act authorizes appeals to be lodged with the MGB where the subject land is within the distance of a highway, a body of water or a sewage treatment or waste management facility set out in the Regulation, unless the affected Government department agreed, in writing, to vary the distance under the Regulation. Section 13 of the Regulation states that a subdivision authority shall not approve an application for subdivision for school, hospital, food establishment or residential use if the application would result in the creation of a building site for any of those uses within 300 metres of the disposal area of an operating or non-operating landfill. This appeal is before the MGB because the subject land of the proposed subdivision is a school site located within 300 metres of the disposal area of a non-operating landfill, and Alberta Environment and Sustainable Resource Development (AESRD) declined to vary the setback distance.

PROPOSAL

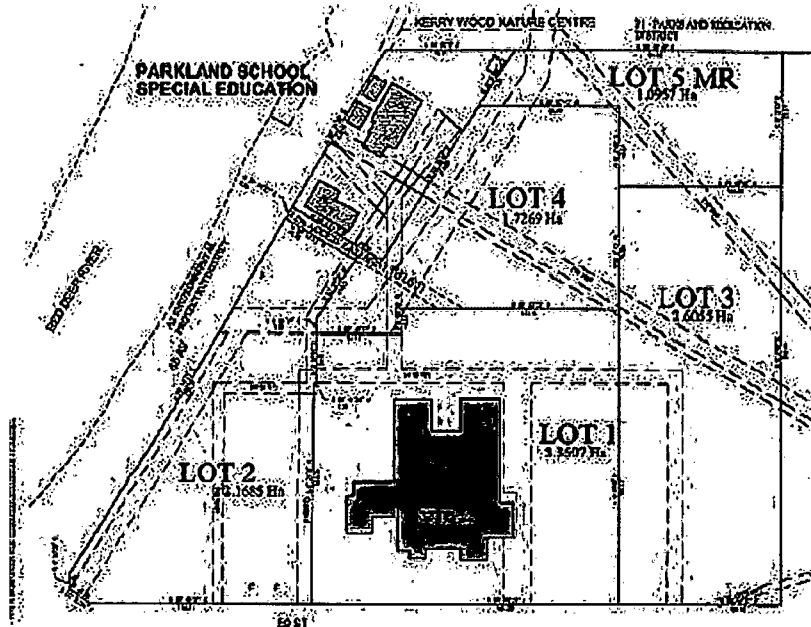
[3] To subdivide 10.9573 ha., currently designated Public Service and used as a school site, into Municipal Reserve Land and four Public Service Lots from 1.0957 to 3.3607 ha. in size.

BACKGROUND

[4] The land to be subdivided is 10.0573 hectares districted Public Service pursuant to section 7.4 of the City of Red Deer Land Use Bylaw (LUB). The land is presently used for school use by River Glen School and Parkland School. The River Glen school building is located on proposed Lot 1, and River Glen play structures and playing fields/courts are located throughout proposed Lots 1, 2 and 3. Proposed Lot 4 contains an existing Parkland School play structure, and proposed Lot 5MR contains a swath of trees and a set of soccer goal posts.

[5] Red Deer River is located to the west of the subject land across 45th Avenue. To the east is an existing non-operating landfill directly adjacent to proposed Lots 3 and 5MR. There is also an existing public trail system along the western edge of proposed Lot 2 that connects through portions of the subject land.

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017



[6] On February 14, 2014, the Board of Trustees of Chinook's Edge School Division, No. 73 (Appellant) applied for subdivision to the City of Red Deer (SA). The parties entered into a valid time extension agreement to allow the SA time to evaluate the proposal, and in particular time to gain the necessary variance from AESRD. On April 22, 2014 and pursuant to section 13(2) of the Regulation, the SA submitted a request to AESRD for landfill setback variance from 300m to 100m. The City had recently completed a Phase 1 and 2 Environmental Assessment and an Environmental Risk Management Plan (ERMP) for the adjacent non-operating landfill and concluded that proposed developments farther than 100m from the landfill would not require mitigative measures. Because the application would not result in development within 100m of the non-operating landfill, the City's Environmental Services had no objection to the proposed subdivision.

[7] The SA did not receive a timely response from AESRD. On May 29, 2014, the SA denied the Appellant's proposal. However, it expressed that, should the MGB allow subdivision within 100m of a non-operating landfill on appeal, it recommended approval subject to the following conditions:

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

1. Subdivision by Plan of Survey;
2. All outstanding taxes to be paid, or satisfactory arrangement for payment thereof, to The City of Red Deer;
3. Concurrent registration of utility easements and right-of-ways as required by The City of Red Deer and shallow utility companies;
4. The developer to enter into a development agreement with and to the satisfaction of The City of Red Deer, to address, among other things, off-site levies, as per Section 655 of the *Municipal Government Act*;
5. The developer to enter into a joint access agreement for joint access between Lot 1 and 4, to the satisfaction of The City of Red Deer; and
6. Municipal Reserves, in the amount of 1.095 hectares, to be provided in a reconfigured Lot SMR (+/- 0.610 hectares) that accommodates the treed area and the balance of the municipal reserve owed (+/- 0.485 hectares) to be provided along the west boundary of Lot 2, to the satisfaction of Recreation, Parks and Culture."

[8] On June 2, 2014, the Appellant appealed the refusal to the MGB. Prior to the hearing and in response to the circulated notice of appeal, AESRD emailed comments to the MGB on June 25, 2014. These comments were submitted as Exhibit 6R and repeated in part as follows:

We received the request for consent on April 22nd 2014, with the September 24, 2013 Phase 1 Environmental Site Assessment and other documents prepared by Tiamat Environmental Consultants Ltd. We have become aware that the subject site of this Variance request already has a school development built on it within the 300 m setback distance. As such, in accordance with our Policy APCC-2011-01 (copy enclosed- page 6 third bullet) we would not issue a letter of consent. This refusal is not based on a technical review.

Due to the fact that we did not review the technical data in any detail we cannot provide insight to the underlying question "is the site suitable?"

You have my permission to offer this letter and attachment to the panel for entry into the proceeding record.

[9] The third bullet of page 6 of Policy APCC-2011-01, as referred to by AESRD, states: "Consent to lessen the setback distance will not be considered after the fact i.e. if, without consent, the development permit or subdivision approval has already been issued by the development authority."

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

ISSUES

[10] In all cases, the legislation requires the MGB to address whether a proposed subdivision complies with the Act, Regulation, Provincial Land Use Policies (LUP), uses of land as prescribed in the land use bylaw (LUB), standards and requirements in the LUB, and requirements set out in any statutory plans (see section 680(2) and 654).

[11] In this particular case, the parties focused on the following issues:

1. Are the sites suitable for the intended purposes?
2. If so, is this an appropriate case for the MGB to relax the setback distance specified under Section 13 of the Regulation?

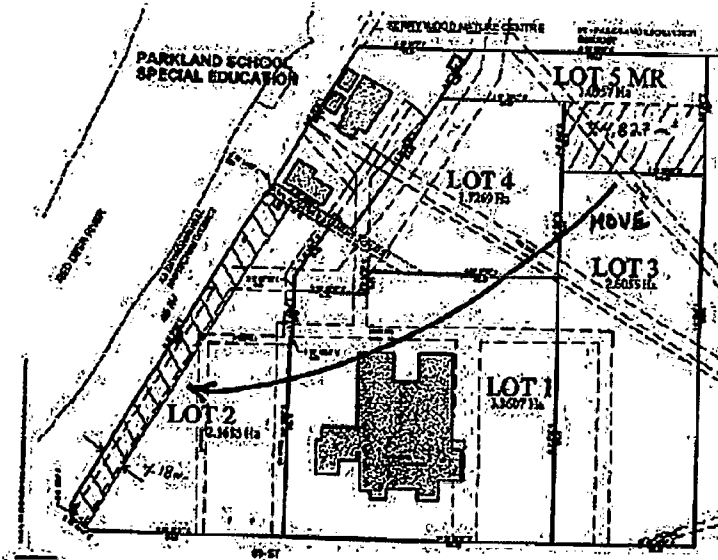
SA'S POSITION

[12] The SA reiterated its position as provided in its original Notice of Decision: It had declined subdivision because no variance had been allowed by AESRD. On appeal, it recommended that the MGB a) grant setback relaxation from 300m to 100m for the subdivision and, if possible, for any future development; and b) grant subdivision approval subject to the aforementioned six conditions.

[13] The SA offered an overview of the subject site and subdivision proposal. The entire 10.9573 hectare site is owned by the Appellant and, unlike municipally-designated school reserve, would not revert back to the municipality if sold. The intent of the subdivision, as the SA understood it, was to reconfigure and dispose of land surplus to Chinook School District's needs. The proposal was appropriately circulated to ten adjacent landowners and no responses were received. However, written comments were received from community organizations and non-adjacent landowners with concern about traffic, sewage, and preservation of the existing trail system, as well as support for the creation of Lot 5MR. The City's Engineering department reviewed the traffic and sewer impact and had no concern. The City's Parks and Planning departments had worked together prior to the appeal to address the expressed trail concerns through reconfiguration of the MR land as depicted in Condition 6 of the SA's approval recommendation as well as the diagram below. The SA provided assurance that the trail system would be preserved with connection to the Lot 5MR even where it traverses private land.

BOARD ORDER: MGB 029/14.

FILE: S14/REDD/C-017



[14] The SA explained that the proposed lots vary in use and in distance to the non-operating landfill. Lot 1 is within 300m but not within 100m of the landfill, and is to remain as the site for River Glen School Building and surrounding amenities. Lot 2 is not within 300m of the landfill, and is to be disposed of by the Appellant at a future date. Lot 3 is within 100m of the landfill, and will remain as a site for play fields. Lot 4 is within 300m but not 100m of the landfill, and is to be sold to Parkland School for its continued use. Lot 5MR is within 100m of the landfill and is to become new MR for the City of Red Deer.

[15] The SA submitted that the landfill setback distances set by the Regulation are historically rather than scientifically based. In 1936, there was an initial 450m setback in place to separate people from nuisances created by landfills. In 1978, the distance changed to 300m based only on mimicking the setback distance for sewage lagoons, without regard for actual risk posed by landfill proximity.

[16] For the past three years, the City has been working on scientific risk assessment of historic landfills throughout the City, and for the subject landfill has completed a Phase I and II Environmental Assessment as well as an April 1, 2014 Environmental Risk Management Plan (ERMP) Report. The landfill operated from June 6, 1965 to July 16, 1967 when there was already an operating school in place on the subject land. Setback relaxation was provided by the

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

Provincial Board of Health (the relevant authority at the time) for the creation of the landfill, and was considered a win-win at the time.

[17] The ERMP Report used Health Canada's Preliminary Quantitative Risk Assessment model which focuses on the health of the receptor, which in this case would be the children and employees of the school. There were no concerns regarding ground water contamination because any future development on the site would be serviced by City water. With regard to the possible risk presented by the generation of landfill gas, the report found that the level of risk for developments beyond 100m is negligible and does not warrant special environmental or mitigative consideration. Within 100m, the report identified that passive and/ or active measures may be required for residential development, but not for school/hospital, food establishment, or other retail/commercial and utility use. The two proposed lots that would be within 100m of the landfill would not contain development - Lot 5MR would be MR space and Lot 3 would be playing fields- and, therefore, the City submitted that no special environmental or mitigative consideration was required for this application. Aside from the Section 13 non-compliance, the City is satisfied that the sites are suitable for the proposed uses and are compliant with all other relevant legislation.

[18] In response to a question from the MGB, the SA acknowledged that it did not know whether the Appellant paid taxes on the subject land and thus would be agreeable to amending Condition 2 to reflect that taxes may not be owed. Also in response to a question from the MGB, the SA acknowledged that future development of Lot 2 would likely require a change in districting from the current PS designation, and said it was prepared to evaluate this step at the time of development. It noted that it would be working towards a development plan for the area which it believed would address and guide the future of the site.

APPELLANT'S POSITION

[19] The Appellant also submitted that the MGB should grant the setback variance from 300m to 100m and approve the subdivision subject to the six conditions set out by the SA. It agreed with the soundness of the City's risk assessment and emphasized that on the basis of the available information, there is no measurable risk of soil vapours (landfill gas generation) beyond 100m from the landfill. The proposal has been carefully designed so that all buildings and development would lie outside of this 100m setback; the anticipated uses of the subject land meet all safety requirements and provide compelling reason to vary the setback distance and approve subdivision.

[20] The Appellant explained the reasons behind the subdivision proposal. Chinook's Edge School Authority is an amalgamation of two areas - Mountain View County and Red Deer County - that originally served the school needs of both populations. However, after the province was petitioned to create a new school for the children in the outlying areas, a new outlying school was built and demand on the subject site decreased. As a result, Chinook's Edge was left

BOARD ORDER: MGB 029/14

FILE: S14/REDD/C-017

with a much larger school site than most, and would now like to use the excess capital to best meet the needs of its constituents and stakeholders. For instance, the Appellant indicated, Sylvan Lake needs a new school and permitting this subdivision could free up the funds to allow that to happen.

[21] The Appellant submitted that the lots were configured so as to clearly outline where development is possible and where it is not pursuant to the City's 2014 ERMP Report. It stated that Red Deer public school system has a continued need for Lots 1 and 3, and that it has entered into an agreement to transfer the land should subdivision be approved. It highlighted that Lot 4 is currently already used as a playing area for Parkland School, and permitting subdivision would allow for subsequent sale and formalization of this use. Lot 5MR would be created for municipality use. The Appellant confirmed that it was working with the City to preserve access to this lot from the existing trail system, and that it agreed with the reconfiguration of MR land as depicted in Condition 6 of the SA's approval recommendation. It also recognized that Lot 2, should it be disposed of, would likely require re-districting before development is permitted. However, like the City, the Appellant agreed that it would address that matter at time of development.

[22] The Appellant submitted that permitting subdivision would allow for the future, normal process of development that is currently needed by the site and its users. The present school on Lot 1 has been in use without issue since the landfill's creation in 1965, and the scientific data supports that the site is suitable for its current and future use. The Appellant noted that AESRD's refusal to consider the technical data has shifted the decision burden to the MGB. It urged the MGB to carefully consider the positive evidence brought before it. In particular, it emphasized that there were no other contested issues beyond the site's non-compliance with the Regulation's historically based setback distance. Varying the setback distance to 100m in light of the scientific data and choosing to approve subdivision subject to the aforementioned six conditions would achieve the best possible outcome for all parties involved.

FINDINGS

1. The sites are suitable for the intended purposes.
2. This is an appropriate case for the MGB to relax the setback distance specified under Section 13 of the Regulation.

DECISION

[23] The appeal is allowed and the subdivision is approved subject to the following conditions:

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

1. Subdivision by Plan of Survey;
2. All outstanding taxes, if any, to be paid, or satisfactory arrangement for payment thereof, to The City of Red Deer;
3. Concurrent registration of utility easements and right-of-ways as required by the City of Red Deer and shallow utility companies;
4. The developer to enter into a development agreement with and to the satisfaction of The City of Red Deer, to address, among other things, off-site levies, as per Section 655 of the *Municipal Government Act*;
5. The developer to enter into a joint access agreement for joint access between Lot 1 and 4, to the satisfaction of The City of Red Deer;
6. Municipal Reserves, in the amount of 1.095 hectares, to be provided in a reconfigured Lot 5MR (+/- 0.610 hectares) that accommodates the treed area and the balance of the municipal reserve owed (+/- 0.485 hectares) to be provided along the west boundary of Lot 2, to the satisfaction of Recreation, Parks and Culture; and
7. In accordance with Section 651.1 of the *Municipal Government Act*, a restrictive covenant to be registered via caveat on title of Lot 3. The restrictive covenant shall advise that development within 100m of the adjacent, non-operating landfill may be restricted pursuant to findings within the *Environmental Risk Management Plan, Historic Waste Disposal Site, Lindsay Thurber Comprehensive High School, Ptn. NE & SE 21-38-27 W4M Report* by Tiamat Environmental Consultants Ltd. for The City of Red Deer, dated April 1, 2014, File 12-435.

[24] **FURTHER**, the Appellant shall provide documentation to the City of Red Deer to demonstrate that the above noted conditions have been met, prior to the endorsement pursuant to sections 657 and 682 of the Act.

[25] **AND FURTHER**, this decision is valid for a period of one year from the date of this Order. Under Section 657(4) if the plan of subdivision or other instrument is not submitted to the subdivision authority within the time prescribed by subsection (1) or any longer period authorized by council, the subdivision approval is void.

REASONS

Introduction

[26] The parties submitted that the subdivision application met all legislative requirements with the exception of its non-compliance with s.13 of the Regulation. The MGB agrees that the proposal is consistent with the statutory planning documents, and that the intended uses are consistent with the LUB. At issue in this appeal is whether or not the sites are suitable for the intended purposes despite being located within 300m of a non-operating landfill.

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

Regulation and Site Suitability

[27] In 2012, the MGB considered a similar appeal: *Riverpointe Crossing Ltd. v City of Red Deer (Subdivision Authority)*. In *Riverpointe*, the proposed subdivision met all other legislative and planning requirements aside from being located within the Section 13 distance of a non-operating landfill. Alberta Environment did not review the site's technical data and refused to grant setback variance only because a development permit had already been issued for the site, and granting approval would run contrary to Policy APCC-2011-01. The issue on appeal was whether to vary the landfill setback distance to allow for subdivision. As quoted from the decision's summary: "Both the SA and the Appellant argued that the land posed no hazards for residential development, and their position was supported by engineering reports and witness testimony; therefore, the MGB determined that the subdivision should be approved."

[28] In this present appeal, the MGB adopted a similar approach by considering two sections of the Regulation: section 13 regarding distance from landfill sites, and section 7 regarding site suitability. As the parties stated, the MGB is not bound by the Section 13 distance, as section 680(2)(d) of the Act requires only that the MGB have regard for the Regulation. As stated in *Riverpointe*, in order for the MGB to be satisfied that waiving the distance is appropriate, the site must be suitable for its intended use. To determine suitability of the subject lands, the MGB considered the evidence brought before it in relation to the two primary risks associated with landfills: groundwater contamination and landfill gas production.

[29] The MGB agrees with the parties that, other than the distance to the landfill, the sites are suitable with respect to the section 7 criteria. The MGB agrees that the issue of groundwater contamination is not applicable because the site is connected to City water. With regard to landfill gas production, the MGB accepts the SA's technical evidence that the level of risk beyond 100m from the landfill is negligible and does not require special consideration or mitigative measures. The MGB further accepts that the school presently on the site has operated for the last 40 some years without apparent negative impact. The comprehensive testimony of the City's professional representatives confirms that the City is confident that the land of this proposed subdivision is suitable for its proposed use. All evidence supports that this is an appropriate case for the MGB to use its discretion to vary the setback requirement of 300m as outlined in Section 13 of the Regulation.

Conditions

[30] The ERMP report identifies that passive and/or active measures may be required for residential development within 100m of the landfill. The MGB notes that the proposal has been carefully designed to ensure that the portions of land within 100m of the landfill - Proposed Lot 3 and Lot 5MR - do not contain enclosed development. However, the MGB recognizes that Lot 3 is currently private land and will remain as such through subdivision; it could be disposed of to another party who is unaware of the potential development restriction on the land. For this

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

reason, the MGB finds it appropriate to impose as a condition of subdivision the requirement that a restrictive covenant via caveat be registered on the title of Lot 3 in accordance with Section 651.1 of the Act. It shall advise that development within 100m of the landfill may be restricted pursuant to the findings within the 2014 ERMP Report, titled *Environmental Risk Management Plan, Historic Waste Disposal Site, Lindsay Thurber Comprehensive High School, Ptn. NE & SE 21-38-27 W4M*. Condition 7 is imposed accordingly.

[31] The MGB also finds it appropriate to amend Condition 2 to reflect that the Appellant may not pay tax on the subject land. With regard to the preservation of park space and continued access to Lot 5MR, the MGB notes that the parties have already worked together to optimally reconfigure the MR land through the creation of Condition 6, and have expressed intention to further address this matter through private agreement. Though the MGB recognizes the value of such an agreement, the MGB agrees that it is best addressed privately and not as a condition of this subdivision. The remainder of the conditions suggested by the parties appear well-founded.

Other Approvals

[37] The SA requested that, if possible, the MGB allow setback variance for all future development in addition to the subject subdivision application. However, the MGB has no authority to make such an order as all development approvals are at the municipal level. The landowner/developer is still responsible for any and all applicable permits for development from the appropriate development authority. The MGB is not granting nor implying any approvals other than that of the conditional subdivision approval. Any other development approvals are beyond the MGB's jurisdiction.

DATED at the City of Edmonton, in the Province of Alberta, this 12th day of August 2014.

MUNICIPAL GOVERNMENT BOARD

(SGD.) H. Kim, Presiding Officer

BOARD ORDER: MGB 029/14

FILE: S14/REDD/C-017

APPENDIX "A"

PERSONS WHO WERE IN ATTENDANCE OR MADE SUBMISSIONS OR GAVE EVIDENCE AT THE HEARING:

NAME	CAPACITY
A. Tarivoczi	Director, Chinook's Edge School Division
R. Murdoch	Agent, Chinook's Edge School Division
O. Toews	Representative, City of Red Deer
T. Lodewyk	Representative, City of Red Deer
N. Wirtanen	Representative, City of Red Deer
J. Whitesell	Engineer, City of Red Deer
A. Huber	Strategic Planner, Alberta Health Services (Observer)
D. Bowness	Adjacent Landowner (Observer)

APPENDIX "B"

DOCUMENTS RECEIVED PRIOR TO THE HEARING:

NO.	ITEM
1	Information Package (112 pp.)

APPENDIX "C"

DOCUMENTS RECEIVED AT THE HEARING:

NO.	ITEM
2R	Red Deer's Request to AESRD re: Setback Variance
3R	Summary of Proposed Subdivision
4R	Map of Proposed Lot Plan
5R	Powerpoint of SA Presentation
6R	AESRD Comments - Consent Not Granted
7A	Appellant's Brief - "Reasons why we think our subdivision should be approved"

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

APPENDIX "D"

LEGISLATION

The Act and associated regulations contain criteria that apply to appeals of subdivision decisions. While the following list may not be exhaustive, some key provisions are reproduced below.

Municipal Government Act

Section 617 is the main guideline from which all other provincial and municipal planning documents are derived. Therefore, in reviewing subdivision appeals, each and every plan must comply with the philosophy expressed in 617.

617 The purpose of this Part and the regulations and bylaws under this Part is to provide means whereby plans and related matters may be prepared and adopted

- (a) to achieve the orderly, economical and beneficial development, use of land and patterns of human settlement, and*
- (b) to maintain and improve the quality of the physical environment within which patterns of human settlement are situated in Alberta,*

without infringing on the rights of individuals for any public interest except to the extent that is necessary for the overall greater public interest.

Upon appeal, the MGB takes on the role of the subdivision authority. Pertinent provisions relative to decisions of the subdivision authority include Section 654(1) and (2) of the Act. The SA (and by extension the MGB) cannot approve a subdivision unless convinced that the site is suitable for the intended use, as per section 654(1)(a) of the Act.

- 654(1) A subdivision authority must not approve an application for subdivision approval unless*
 - (a) the land that is proposed to be subdivided is, in the opinion of the subdivision authority, suitable for the purpose for which the subdivision is intended,*
 - (b) the proposed subdivision conforms to the provisions of any statutory plan and, subject to subsection (2), any land use bylaw that affects the land proposed to be subdivided,*
 - (c) the proposed subdivision complies with this Part and the regulations under this Part, and*
 - (d) all outstanding property taxes on the land proposed to be subdivided have been paid to the municipality where the land is located or arrangements satisfactory to the municipality have been made for their payment pursuant to Part 10.*
- (2) A subdivision authority may approve an application for subdivision approval even though the proposed subdivision does not comply with the land use bylaw if, in its opinion,*
 - (a) the proposed subdivision would not*
 - (i) unduly interfere with the amenities of the neighbourhood, or*

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

- (ii) materially interfere with or affect the use, enjoyment or value of neighbouring parcels of land,
and
(b) the proposed subdivision conforms with the use prescribed for that land in the land use bylaw.

Section 678 sets out the requirements for appeal of a decision by the subdivision authority.

678(1) The decision of a subdivision authority on an application for subdivision approval may be appealed

- (a) by the applicant for the approval,
(b) by a Government department if the application is required by the subdivision and development regulations to be referred to that department,
(c) by the council of the municipality in which the land to be subdivided is located if the council, a designated officer of the municipality or the municipal planning commission of the municipality is not the subdivision authority, or
(d) by a school board with respect to
(i) the allocation of municipal reserve and school reserve or money in place of the reserve,
(ii) the location of school reserve allocated to it, or
(iii) the amount of school reserve or money in place of the reserve.

(2) An appeal under subsection (1) may be commenced by filing a notice of appeal within 14 days after receipt of the written decision of the subdivision authority or deemed refusal by the subdivision authority in accordance with section 681

Section 680(2) of the Act requires that MGB decisions conform to the uses of land referred to in the relevant land use district of the LUB. It does not require that the MGB abide by other provisions of the LUB, the MDP or the Subdivision and Development Regulation, although regard must be given to them.

680(2) In determining an appeal, the board hearing the appeal

- (a) must act in accordance with any applicable ALSA regional plan;
(a.1) must have regard to any statutory plan;
(b) must conform with the uses of land referred to in a land use bylaw;
(c) must be consistent with the land use policies;
(d) must have regard to but is not bound by the subdivision and development regulations;
(e) may confirm, revoke or vary the approval or decision or any condition imposed by the subdivision authority or make or substitute an approval, decision or condition of its own;
(f) may, in addition to the other powers it has, exercise the same power as a subdivision authority is permitted to exercise pursuant to this Part or the regulations or bylaws under this Part.

BOARD ORDER: MGB 029/14
FILE: S14/REDD/C-017

Alberta Subdivision and Development Regulation - Alberta Regulation 43/2002

While the MGB is not bound by the *Subdivision and Development Regulation*, it is the MGB's practice to evaluate the suitability of a proposed site for the purpose intended using the criteria in Section 7 as a guide.

7 In making a decision as to whether to approve an application for subdivision, the subdivision authority must consider, with respect to the land that is the subject of the application,

- (a) its topography,
- (b) its soil characteristics,
- (c) storm water collection and disposal,
- (d) any potential for the flooding, subsidence or erosion of the land,
- (e) its accessibility to a road,
- (f) the availability and adequacy of a water supply, sewage disposal system and solid waste disposal,
- (g) in the case of land not serviced by a licensed water distribution and wastewater collection system, whether the proposed subdivision boundaries, lot sizes and building sites comply with the requirements of the *Private Sewage Disposal Systems Regulation (AR 229/97)* in respect of lot size and distances between property lines, buildings, water sources and private sewage disposal systems as identified in section 4(4)(b) and (c),
- (h) the use of land in the vicinity of the land that is the subject of the application, and
- (i) any other matters that it considers necessary to determine whether the land that is the subject of the application is suitable for the purpose for which the subdivision is intended.

Section 13 sets the setback distance and department consent required for subdivision or development of land within the specified distance of a landfill:

Distance from landfill, waste sites

13(1) In this section,

- (a) "disposal area" means those areas of a parcel of land
 - (i) that have been used and will not be used again for the placing of waste material, or
 - (ii) where waste processing or a burning activity is conducted in conjunction with a hazardous waste management facility or landfill;
- (b) "working area" means those areas of a parcel of land
 - (i) that are currently being used or that still remain to be used for the placing of waste material, or
 - (ii) where waste processing or a burning activity is conducted in conjunction with a hazardous waste management facility, landfill or storage site.

BOARD ORDER: MGB 029/14

FILE: S14/REDD/C-017

(2) Subject to subsection (5), a subdivision authority shall not approve an application for subdivision for school, hospital, food establishment or residential use if the application would result in the creation of a building site for any of those uses

- (a) within 450 metres of the working area of an operating landfill,
- (b) within 300 metres of the disposal area of an operating or non-operating landfill,
- (c) within 450 metres of the disposal area of a non-operating hazardous waste management facility, or
- (d) within 300 metres of the working area of an operating storage site.

(3) Subject to subsection (5), a development authority shall not issue a development permit for a school, hospital, food establishment or residence, nor may a school, hospital, food establishment or residence be constructed if the building site

- (a) is within 450 metres of the working area of an operating landfill,
- (b) is within 300 metres of the disposal area of an operating or non-operating landfill,
- (c) is within 450 metres of the disposal area of a non-operating hazardous waste management facility, or
- (d) is within 300 metres of the working area of an operating storage site.

(4) Subject to subsection (5), a subdivision authority shall not approve an application for subdivision, and a development authority shall not issue a permit, for the purposes of developing a landfill, hazardous waste management facility or storage site unless

- (a) the working area of a landfill is situated at least 450 metres,
- (b) the disposal area of a landfill is situated at least 300 metres,
- (c) the working or disposal area of a hazardous waste management facility is situated at least 450 metres, and
- (d) the working area of a storage site is situated at least 300 metres from the property line of a school, hospital, food establishment or residence or building site proposed for a school, hospital, food establishment or residence.

(5) The requirements contained in subsections (1) to (4) may be varied by a subdivision authority or a development authority with the written consent of the Deputy Minister of Environment and Sustainable Resource Development.

(6) A consent under subsection (5) may refer to applications for subdivision or development generally or to a specific application.

AR 43/2002 s13; 31/2012; 170/2012

BOARD ORDER: MGB 029/14

FILE: S14/REDD/C-017

MUNICIPAL BYLAWS AND STATUTORY PLANS**City of Red Deer Land Use Bylaw 3357/2006****7.4 PS Public Service (Institutional or Government) District****General Purpose**

The general purpose of this District is to provide land for those uses that are public or quasi-public in nature.

1. PS Permitted and Discretionary Uses Table**(a) Permitted Uses**

(i) Any use for National Defence purposes which does not prejudice the character or value of the surrounding property.

(ii) At the Westerner Exposition Site situated upon the following lands namely Lot 5, Block 1, Plan 882 2274, and Plan 615 L.Z, the holding of the annual Westerner Exposition Fair or Exhibition and any use in conjunction with or incidental thereto, agricultural, animal, machinery, automotive shows, rodeos, circuses, concerts, racing and sporting events, the rental of facilities for banquets, weddings, meetings and events.

(iii) Recreation and sport activities operated or sponsored by a governmental body or agency for the participation of the public at large.

(b) Discretionary Uses

(i) Assisted living facility.

(ii) At the Westerner Exposition Site situated upon the following lands namely Lot 5, Block 1, Plan 882-2274, and Plan 615 L.Z:

(1) any use similar to the uses permitted at the Westerner site,

(2) any uses which are accessory to any of the approved uses, provided that they are consistent with the theme of such use, or provide a directly related service to such use.

(3) Gaming establishment.

(iii) At the Red Deer College site, situated upon the following lands namely:

(1) Lot 1, Block 1, Plan 012 0303 and the remainder of Section 5, Township 38, Range 27, West of the 4th meridian.

(2) Residence, nursing home, research facility, diagnostic services, work placement services, and/or technical or administrative support related to education of students at Red Deer College.

(iv) Concession booths for the sale of food or beverages to members and guests of a group approved under this table.

(v) Campground.

(vi) Day care facilities.

(vii) Identification signs on the following types subject to sections 3.3 and 3.4:

(1) awning, canopy signs,

BOARD ORDER: MGB 019/14

FILE: S14/REDD/C-017

- (2) under canopy signs,
- (3) fascia signs, (4) projecting signs, and
- (5) free standing signs.
- (viii) Institutional service facility
 - (ix) Offices for community oriented groups which have recreation as part of their programs.
 - (x) Parking ancillary to any permitted or discretionary use.
 - (xi) Private clubs or organizations.
 - (xii) Retail sales of goods required in connection with a use approved under this table.
 - (xiii) Temporary care facility.
 - (xiv) Utilities.
 - (xv) Deleted.

2. PS Public Service (Institutional or Government) District Regulations

(a) Table 7.3 PS Regulations

<i>Regulations</i>	<i>Requirements</i>
<i>Floor Area Minimum</i>	<i>Not applicable, except for a unit in assisted living residence or retirement home 23.0 m2</i>
<i>Front Yard Minimum</i>	<i>Subject to Commission approval</i>
<i>Side Yard Minimum</i>	<i>Subject to Commission approval</i>
<i>Rear Yard Minimum</i>	<i>Subject to Commission approval</i>
<i>Landscaped Area</i>	<i>Subject to Commission approval</i>
<i>Parking Spaces</i>	<i>Subject to sections 3.1 & 3.2</i>
<i>Loading</i>	<i>Subject to Commission approval</i>

3. Site Development

(a) Within the PS Public Service District the site plan, the relationship between buildings, structures and open space, the architectural treatment of buildings, the provision and architecture of landscaped open space, and the parking layout, shall be subject to approval by the Development Authority.

SCHEDULE "C"

THE CITY LANDS

The City Lands shall consist of the following:

PLAN 152 _____

BLOCK 1

LOT 5 MR

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 0.613 HECTARES (1.515 ACRES) MORE OR LESS

PLAN 152 _____

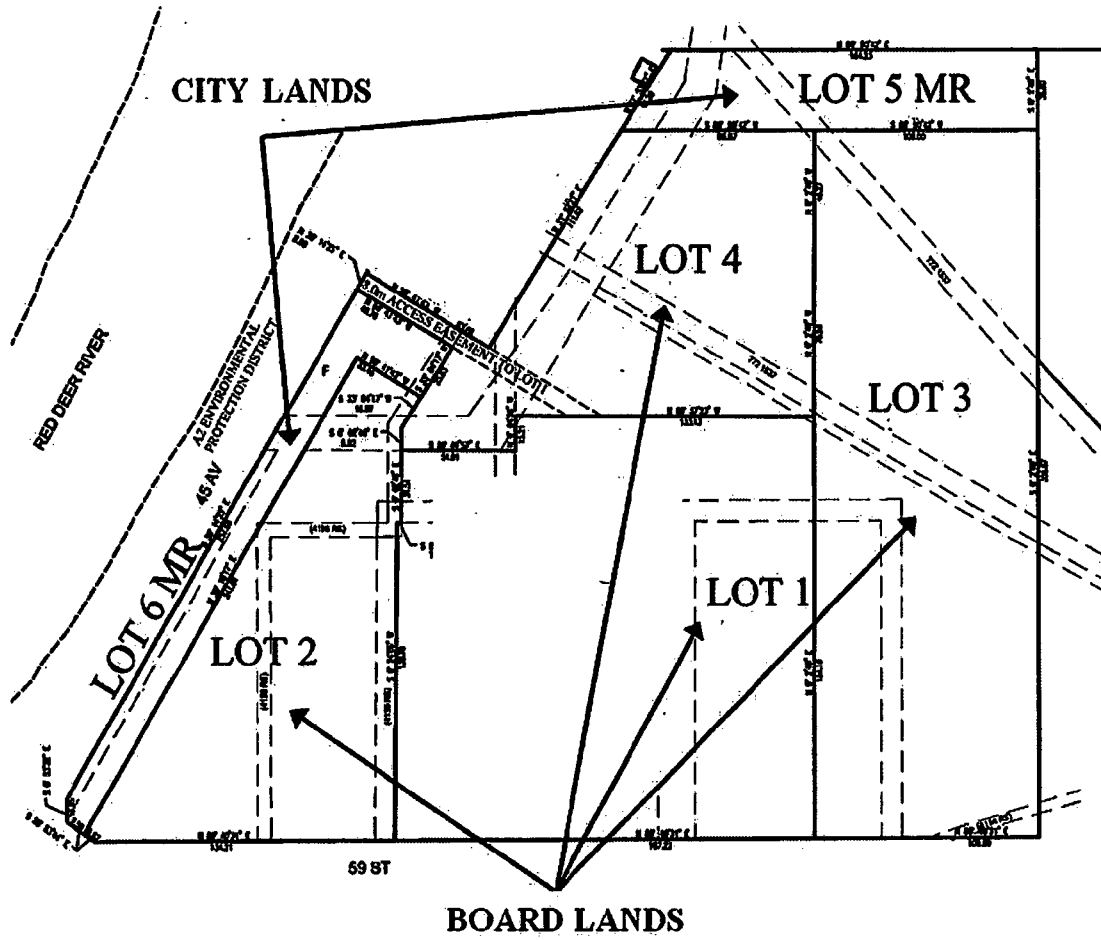
BLOCK 1

LOT 6 MR

EXCEPTING THEREOUT ALL MINES AND MINERALS

AREA: 0.485 HECTARES (1.198 ACRES) MORE OR LESS

together with all those roads located adjacent to the Board Lands;



SCHEDULE "D"

ENVIRONMENTAL RISK MANAGEMENT PLAN REPORT

**Environmental Risk Management Plan
Historic Waste Disposal Site
Lindsay Thurber
Comprehensive High School
Ptn. NE & SE 21-38-27 W4M**

Prepared For: The City of Red Deer
Prepared By: Hiamat Environmental Consultants Ltd.
Date: April 1, 2014
File: 12-435

Unit 107, 2719 - 7 Avenue NE, Calgary, Alberta T2A 2L9
T. 403-640-9009 F. 403-640-9006

12-435

Page i

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Preface

The City of Red Deer is aware of several historic waste disposal sites containing municipal solid waste situated within fully developed urban areas. The Alberta Municipal Government Act, specifically Part 2, Section 13 of the Subdivision and Development Regulation AR 43/2002 specifies a minimum setback distance between the closed historic landfill to certain types of land developments. Restrictions of types of subdivision associated with this regulation include residential, food establishment, school or hospital. This regulation includes provisions for the Provincial Deputy Minister to consider a request to vary the minimum setback distance for a specific development application, provided the local municipal subdivision or development authority supports the proponent's specific development application.

The underlying objective of the project is to develop a level of understanding of the environmental risks arising from each historic waste disposal site leading to a site specific environmental risk management plan (ERMP). To structure the project into manageable components, the work was divided into the following three stages:

1. Phase I ESA Compilation and review of information pertaining to a historic waste disposal site.
2. Phase II ESA Subsurface investigation to verify and characterize information from the Phase I ESA.
3. ERMP Develop a site-specific environmental risk management plan to serve as an aid for the municipal development review process.

This document reflects the third stage, specifically presenting the ERMP for the Lindsay Thurber Comprehensive High School Site. With the available information, the ERMP was developed on the basis of Health Canada guidelines for a preliminary quantitative risk assessment. The outcomes of the ERMP confirm the identified chemicals of concern and the relevant environmental risks are manageable to facilitate future developments which may lie within the regulated setback distance to the historic waste disposal site. This ERMP provides a first-order evaluation for potential future subdivision and development with a focus on methods to minimize the risk of human exposure to landfill gas and other hazards to the environment resulting from the historic waste disposal site.

Ultimately, the goal is to have an effective and timely review process for specific future subdivision and development applications while preserving an appropriate/equivalent level of protection for each stakeholder be it regulatory, developer, owner, public or the natural environment.

12-435
 ERMP – Lindsay Thurber Comprehensive High School Site
 Historic Waste Disposal Sites, The City of Red Deer

Page ii

TABLE OF CONTENTS

Preface	i
1.0	Introduction	1
1.1	Scope of Work	4
1.2	Summary of Previous Work and Project Status	5
1.2.1	Site Description and Environmental Setting	7
1.3	Regional Geology and Hydrogeology	8
1.4	Environmental Guidelines and Regulations	10
2.0	Contaminant Situation	11
2.1	Groundwater	11
2.2	Soil Vapour	11
2.3	Exposure Pathways	13
3.0	Environmental Risk Assessment	14
3.1	Identified Environmental Health Concerns	17
3.2	Boundary Conditions for PQRA	19
3.2.1	Hazard Assessment	19
3.2.2	Exposure Assessment	19
3.2.3	Receptor Characterization	20
3.2.4	Risk Characterization	20
3.2.5	Potential Municipal Administrative Controls	21
4.0	Conceptual Site Model (CSM)	21
4.1	Contaminant Fate and Transport	22
4.1.1	Volatile Organic Compounds in Soil	23
4.1.2	Volatile Organic Compounds in Groundwater	24
4.1.3	Combustible Headspace Vapours	24
4.1.4	Lateral Transport of Groundwater	24
4.1.5	Volatilization and Vapour Migration from Impacted Soil and Groundwater	24
4.2	Summary of CSM	25
5.0	Proposed Site-Specific Environmental Risk Management Plan	27

12-435
ERMP – Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page iii

TABLE OF CONTENTS
Continued...

5.1	Strategy for Subdivision Development Within 100 M	31
5.2	Strategy for Subdivision Developments Between 200 to 300 M	32
5.3	Strategy for Subdivision Development Beyond 300 M	33
5.4	Strategy for Other Commercial Developments and Subsurface Utilities	33
5.5	Proposed Regulatory Monitoring and Quality Assurance	33
5.6	Proposed Risk Communication Plan	34
5.7	Future Review and Update to ERMP	34
6.0	Statement of Limitations	35
7.0	Closure	36
	References	37
Table 1	General Site Attributes for Exposure to Soil Vapour Inhalation	
Table 2A	Identified Chemicals of Concern – Physical Attributes	
Table 2B	Identified Chemicals of Concern – Guidelines and Toxicological Values	
Table 3A	Residential Land Use – Calculated Hazard Quotients for Identified Chemicals of Concern	
Table 3B	Food Enterprise Land Use – Calculated Hazard Quotients for Identified Chemicals of Concern	
Table 3C	Commercial Developments Excluding Food Establishments – Calculated Hazard Quotients for Identified Chemicals of Concern	
Table 3D	Public Institution School & Hospital Developments – Calculated Hazard Quotients for Identified Chemicals of Concern	
Table 3E	Utility Infrastructure Activities Land Use – Calculated Hazard Quotients for Identified Chemicals of Concern	
Figure 1	Site Showing Surrounding Land Use	
Figure 2	Site Showing Interpreted Extent of Waste	
Figure 3	Cross Sections A-A', B-B' and C-C'	
Figure 4	Interpreted Groundwater Elevations – August 2013	
Appendix A	Alberta Environment Information Sheet – Requesting Consent to Vary the Setback Distance for a Development to a Non-Operating Landfill	
Appendix B	Glossary	

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 1

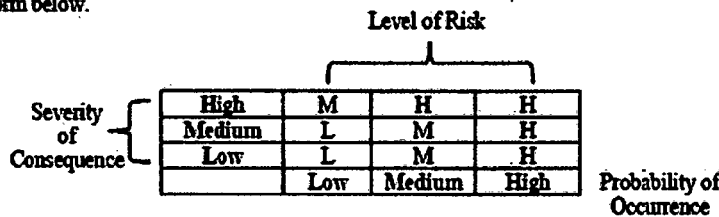
1.0 INTRODUCTION

Assessment of environmental site data to identify potential hazards and exposures is, by its nature, a risk assessment process. The use of various risk assessment tools is a common practice to decision making in professional practice. The body of knowledge for risk assessment has produced a wide assortment of methods to conduct an environmental risk assessment. The many approaches to conducting a risk assessment ranging from very basic site-specific empirical information gathered from the field to complex numerical quantitative models. Typically, selection of the risk assessment protocol is determined by the type of data available and the attributes which are exposed to a potential risk. The risk management process can be a relatively straight-forward analysis to a complex evaluation involving multi-disciplinary team of professionals.

For example, a proposed residential development project within a prescribed river flood plain will have several environmental factors associated to vulnerabilities and potentials for an adverse effect to the proposed development from the river (flood, high groundwater, pollution impact from an upstream source, et cetera). Current practice involves multiple avenues of review ranging from regulatory requirements, design guidelines, codes of practice, industry standards and local considerations to address the potential identifiable vulnerabilities. These reviews and considerations are intended to assist the design professional to manage the identified vulnerabilities and the associated risks to ensure appropriate levels of mitigation and adaptation are incorporated into the development with the objective of having an appropriate level of protection for each stakeholder and the natural environment.

Risk assessment can be broadly categorized into three main types: qualitative, semi-quantitative and quantitative. Each type has unique limitations to subjectivity of data and each have a common outcome to serve as a decision making tool for management.

A commonly applied qualitative risk assessment tool can be simply illustrated in a matrix form below.



A semi-quantitative approach to risk assessment requires some first-order estimates as inputs into a risk model. The semi-quantitative approach is more sophisticated relative to the subjective qualitative screening approach and is not as numerically demanding as a quantitative risk assessment involving more complex numerical models and environmental statistics.

12-435

Page 2

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The semi-quantitative approach is commonly applied to smaller project sites and is an appropriate approach for the LTCHS Site.

As noted, a semi-quantitative approach does not require analyzed probabilities or high level statistical and mathematical data sets, which may largely be subjective and difficult to verify, creating a new set of uncertainty. The semi-quantitative process includes a hierarchy of identified risks specific to the site, numerical risk estimation and an interpretation of qualitative considerations founded on professional experience and judgment. The hierarchy of identifiable risks is generally outlined into a matrix similar to the above, reflecting an order of project specific priorities. The matrix format is intended to illustrate in a logical fashion the likelihood of a possible vulnerability and its adverse impact. Risk rankings are usually divided into three groupings: low, medium and high with a prescribed level of action appropriate to respond to a potential level of adverse consequence such as:

- Low aggregate risk value. Management can decide what form of corrective action(s) to implement or accept the potential risk.
- Medium aggregate risk value indicates mitigative and/or adaptive actions would be deemed prudent to minimize the probability of an adverse effect. Immediate reaction is generally not required but action would be necessary within a site-specific time frame.
- High aggregate risk value. Mitigating and/or adaptive measures are to be exercised as soon as practical in order to reduce the identified hazard.

It should be noted, to a practical level as possible, a risk assessment should be exercised in an objective fact-based manner to avoid pre-determining a desired outcome, i.e. allow the facts to "speak." Accordingly, to effectively develop a risk management plan with a scientifically supported project decision making process, the risk assessment should be developed in a manner which is consistent and defensible while recognizing limitations to the data set and the inherent uncertainty to available site information and subsurface parameters. This knowledge can then be applied in a defensible and justified manner to make appropriate risk-based decisions.

In summary, within the practice of risk assessment, there are many other methods and approaches to completing a risk assessment. Each has differing attributes and limitations. The results of a risk assessment are either applied to better understand the levels of risk to potential identified hazards or the results become an indicator to support further investigation and research. Information on the types and the merits of differing risk assessments are widely available to the reader. For this project, an evaluation of risk is a systematic process involving the identification and comparison of specific assets and its associated vulnerabilities with consideration of the likelihood for an adverse effect to occur.

12-435

Page 3

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The development of a site-specific environmental risk management plan (ERMP) is a component of a structured risk management process utilized by The City of Red Deer. The results of the risk assessment are intended to support risk-based decisions by the Management at The City of Red Deer.

In order to develop a defensible risk management plan, the approach considered to be appropriate for this project is a preliminary quantitative risk assessment. Health Canada has developed guidance documents to enable a consistent and defensible evaluation of site-specific data. A simple semi-quantitative protocol rather than a detailed analytical protocol is appropriate for the level of data available. A semi-quantitative protocol is acceptable to most regulatory jurisdictions for a project of this scope and strikes a reasonable balance between a purely subjective qualitative protocol and the highly analytical intensive quantitative protocol. Health Canada refined and released the framework for environmental risk assessment in September 2010 and an update and revision in 2012. The Health Canada approach was selected over the CCME 1996 Framework for Ecological Risk Assessment. The CCME and the Health Canada risk assessment process are the two nationally accepted processes for risk assessment. Local provincial ministries have developed specific risk assessment protocols that are modeled from selected attributes of various risk protocols from various organizations. For instance, the Alberta Tier 1 and 2 Soil and Groundwater Remediation Guidelines are focused on the assessment and remediation of contaminated soil and groundwater. Generic numeric guidelines for target chemicals were derived by the application of the CCME 2006 Protocols for the Derivation of Environmental and Human Health Soil Quality Guidelines. The CCME Ecological Risk Assessment process is also focused on target chemicals at a site. These approaches are directed at the concentrations of target chemicals at a contaminated site.

The Health Canada approach focusses on the risk of exposure to a receptor and not the concentration of a target chemical. Hence, for this project, in order to develop and evaluate a risk model for potential receptors at various developments to the exposure of transient soil landfill vapours emanating from the LTCHS Site, the Health Canada model is considered more appropriate relative to the above noted alternative risk assessment models.

Health Canada outlines a preliminary quantitative risk assessment (PQRA) in order for various industries to apply a standard method and assumptions to ensure potential environmental exposures and their risks are not underestimated in the risk model. This approach is to address historic problems during peer review of past site risk assessments. The PQRA applies a conservative interpretation to the risk outcome, such that in the event of an identified potential risk outcome being negligible or acceptable, the actual site condition(s) will essentially present a negligible or acceptable level of risk. Conversely, should the outcome for a potential level of risk be deemed unacceptable, further investigation may be warranted to better refine the conservatism and reduce uncertainty or the actual site condition(s) present an unacceptable level of risk warranting a site-specific response to address and reduce the predicted risk for an adverse impact.

12-435

Page 4

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

Key results from the Phase I and II ESA have been consolidated to construct a site-specific preliminary quantitative risk assessment. The output from the PQRA is incorporated into risk management strategies and the development of a site-specific risk management plan. Tiamat Environmental Consultants Ltd. (Tiamat) presents this Environmental Risk Management Plan (ERMP) for a historic waste disposal site designated as the Lindsay Thurber Comprehensive High School (LTCHS) site.

This report presents the scope of work, a summary of the findings of a PQRA and a proposed ERMP for the Lindsay Thurber Comprehensive High School Site. The information presented is intended to be a standalone document. Specific site information that is deemed supplementary and not critical to the ERMP has been excluded in this report. Should the reader wish to review this type of information, the reader should peruse the associated 2013 Phase I and II ESA reports for the LTCHS Site as prepared by Tiamat.

1.1 Scope of Work

A summary of the key tasks for this ERMP are outlined below:

Compile Data for PQRA

- Identify chemicals of concern in environmental media (soil, groundwater, soil gas);
- Assemble chemical and physical attributes of each identified chemical of concern;
- Collect toxicological information and identify data gap(s) for each identified chemical of concern;
- Identify receptors (human, biota and river) and the various routes of potential exposure;
- Evaluate the compiled data using a standard PQRA approach.

ERMP

- Develop a site-specific ERMP incorporating the findings of the PQRA with applications to the four limited/restricted land uses (school, hospital, food enterprise and residential), general commercial developments and the installation of infrastructure such as utilities.

12-435

Page 5

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

1.2 Summary of Previous Work and Project Status

The original LTCHS facility predates the waste disposal activity. Municipal records suggest the historic waste disposal activity occurred over a period of about two years, between June 1965 and July 1967. The estimated age of the waste material, post closure, is about 46 years, more or less. The municipal records also indicate The City of Red Deer, with acknowledgement from the Provincial Health Region and the local School District, undertook the placement of sanitary waste onto this site. Since then, the LTCHS facility has been expanded several times to its current configuration. The interpreted area of the historic waste area lies within 30 m, more or less of the existing LTCHS facility. Other nearby developments includes various public institutions; residential houses and light commercial land uses.

Previous environmental investigations for the site and the high school facility have been conducted by various consultants since June 2004.

- Phase 2 Environmental Site Investigation, Landfill at Lindsay Thurber Comprehensive High School Property, SE 21-38-27 W4M, Red Deer, Alberta, June 2004. Prepared by Parkland Geotechnical Consulting Limited.
- Landfill Gas Control Proposal and Risk Management Plan for the Former Landfill in SE 21-38-27 W4M, Near Lindsay Thurber Comprehensive High School, Red Deer, Alberta, August 30, 2004. Prepared by Parkland Geotechnical Consulting Limited.
- Summary Report Former City Landfill Site Lindsay Thurber Comprehensive High School Property, Part of SE 21-38-27 W4M, Red Deer, Alberta, March 20, 2007. Prepared by Stantec Consulting Ltd. and Parkland Geotechnical Consulting Limited.
- Phase 2 Environmental Site Assessment, River Glen School Lands, Red Deer, Alberta, November, 2008. Prepared by Parkland Geotechnical Consulting Ltd.
- Lindsay Thurber Comprehensive High School, 2011 Gas Monitoring Program, October, 31, 2011. Prepared by Parkland Geotechnical Consulting Ltd.
- Lindsay Thurber Comprehensive High School, 2013 Gas Monitoring Program, June 3, 2013. Prepared by Parkland Geotechnical Consulting Ltd.
- Phase I Environmental Site Assessment, Historic Waste Disposal Sites, Lindsay Thurber Comprehensive High School, September 24, 2013, prepared by Tiamat.
- Phase II Environmental Site Assessment, Historic Waste Disposal Sites, Lindsay Thurber Comprehensive High School, March 6 2014, prepared by Tiamat.

12-435

Page 6

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The noted documents were provided by The City of Red Deer and the Red Deer Public School District No. 104. Key information from the referenced documents was consolidated and identified data gaps were addressed in the Phase I ESA report (Tiamat, 2013).

The scope of investigation for the 2013 Phase II ESA was designed to address the environmental concerns identified from the Phase I ESA.

The key results of the 2013 Phase II ESA are as follows:

- The estimated areal footprint of the historic waste is 105,800 m² (26.14 ac). The waste is situated on native pervious gravel and sand.
- Groundwater is approximately 2.8 m below the ground surface and lies within the waste material. The average horizontal hydraulic gradient leaving the site is 0.3% towards the Red Deer River. Applying an intrinsic horizontal permeability of 10⁻³ m/sec for the sand and gravel, the resulting estimate horizontal flow velocity is about 2.7 m/day, more or less.
- Dissolved volatile organic compounds (VOCs) and other petroleum hydrocarbon constituents were not detected at the down gradient groundwater monitoring wells.
- Laboratory results of groundwater samples from the down-gradient monitoring wells show several dissolved parameters (indicative of the presence of leachate) in the local groundwater leaving the site. This is further characterised by the field measured water quality indices showing high negative redox potential and near anoxic condition of dissolved oxygen in groundwater.
- Leachate in the down-gradient groundwater appears to be predominantly inorganic compounds and nutrients. VOCs and other dissolved hydrocarbons were not detected in the August 2013 testing event.
- Adjacent and nearby developments include two schools, public institution, residential homes and natural areas. There are presently no obvious activities on the adjacent lands that are interpreted as an environmental concern relative to the site.
- Light molecular-weight petroleum gases were not detected at the soil vapour wells.
- Volatile petroleum hydrocarbon constituents to carbon chain 12 were consistently detected in each of the five soil vapour wells. Additionally, semi-volatile, halogenated and oxygenated volatile hydrocarbons and ketones were identified in the soil vapour samples.

12-435

Page 7

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The findings of the 2013 Phase II ESA suggest mild to moderate strength leachate constituents are present in the groundwater leaving the site and flowing towards the Red Deer River.

The initial assessment of landfill gas (LFG) shows the soil gas to compose of numerous volatile chemicals. A summary of the identified chemicals of concern are tabulated in Table 2A.

1.2.1 Site Description and Environmental Setting

The historic waste material lies within three subdivided parcels of land. The legal descriptions are:

- Portion of Lot S Plan 4154S;
- Portion of Lot 1MR Plan 852 0510; and,
- Portion of Lot 4ER Plan 912 0819.

The above areas lie within the NE and SE quarters of 21-38-27 W4M.

The historic waste disposal area is bounded by the Lindsay Thurber School Legion Track on the south, the environmental reserve followed by an oxbow lake (the westerly Gaetz Lake) on the east and the Lindsay Thurber Comprehensive High School (LTCHS) on the west. The area bracketing the oxbow lake is designated as environmental reserve. Land bounding the west and north margins of the waste area are currently an open undeveloped field.

There are no buildings on the area of the historic waste site. An asphalt paved pedestrian trail/bike path meanders across the historic waste site. This public trail extends from the south side of the Lindsay Thurber School Legion Track, parallel to the westerly Gaetz Lake and branches to the Parkland School and the Kerry Wood Nature Centre.

Further west and northwest of this waste site are the River Glen and Parkland Schools and the Kerry Wood Nature Centre followed by the Red Deer River. A site plan showing the current surrounding land uses and the approximate footprint of the historic waste material is presented as Figure 1.

12-435

Page 8

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

1.3 Regional Geology and Hydrogeology

Within the immediate area of the historic waste there is no noted direction of principal overland flow or surface run-off control measures. There are no obvious environmental concerns for surface water run-off or run-on throughout this area. This area is mapped outside of the 100-year flood fringe (Environment Canada and Alberta Environmental Protection, Edition 1, 1995).

Following the recent severe June 2013 flood event, it is recognized the flood fringe may be updated following a review by the provincial authority. The Red Deer River is about 200 m, more or less from the nearest point of the historic waste area.

Two (2) permanent surface water bodies, Gaetz Lakes (pair of oxbow lakes) and the Red Deer River are situated east and west of the historic waste site respectively. The site and immediate area lie within a zone of groundwater discharge with an upward component of flow to the lake and the river.

The river flows from a south to north easterly direction while ground topography indicates the oxbow lake approximately follows the elevation of the Red Deer River. Based on a local topographic map for this area, regional groundwater flow is expected to be north-northwest towards the Red Deer River. A previous study, by others, concluded the water level in the Gaetz Lakes (oxbow lakes) are likely hydraulically connected to the Red Deer River by the underlying river valley gravel. Thus, the inflow and outflow of groundwater at Gaetz Lakes is predominantly influenced by the level of the Red Deer River and other climatic and physical conditions (precipitation, evaporation, soil permeability). In the immediate area of the oxbow lakes, there may be some minor component of flow to the lakes. However, regionally, the lakes and the Red Deer River are interpreted to be hydraulically connected though in an attenuated manner. On this basis, there is a low potential for the oxbow lake to be exposed to leachate from the local groundwater system.

It should be noted that local topography, geology, land development and soil disturbances might influence the local movement and pattern of groundwater. Furthermore, groundwater may also fluctuate from seasonal and climatic conditions.

A summary of the published geological and hydrogeological information is presented in the September 2013 Phase I ESA report.

Underground municipal utilities identified to be in the immediate vicinity of the historic waste site consist of one storm sewer and two sanitary sewers aligned between the LTCHS facilities and the westerly perimeter of the historic waste. These three sewer pipes extend towards and then across the River Glen School yard. A dedicated storm sewer pipe serving the north portion of the LTCHS facility directs surface runoff through the historic waste site with an outfall at Gaetz Lake. The relative locations of the underground municipal utilities are shown on Figure 2.

12-435

Page 9

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

Potential environmental concerns arising from the historic waste site are grouped into three broad categories:

- Ground stability issue where the historic waste lies;
- Continual generation of soil vapour from the decomposing waste materials; and
- Lateral transport of groundwater which passes through the waste material and ultimately discharging to the Red Deer River.

Several geochemical processes and physical settlement occurs as the buried historic waste materials decompose. There is visual evidence the cover for the historic waste has settled in an irregular manner. The grass and underlying loam lies in an uneven mat across areas underlain by the historic waste. Anecdotal reports from the City Parks Department to repair the surface of the running track on an annual basis due to ongoing settlement is indicative of the instability of the ground surface overlying the historic waste.

Landfill gas is a by-product of a geochemical process associated with the decomposing waste materials. The soil vapours comprising of constituents from landfill gas can migrate in the subsurface. The geochemical process also yields soluble hydrocarbons to the groundwater system with some volatile components capable of degassing into the soil vapour regime.

Circa 2004/2005, the Red Deer Public School District and The City of Red Deer commissioned further investigation of the historic waste area and the installation of landfill gas control measures to protect the LTCHS facility from intrusion of landfill soil vapours. Other public institutional buildings lying within a 300 m radius of the historic waste include the River Glen and Parkland Schools and the Red Deer Memorial Centre, refer to Figure 1. To our knowledge, no other mitigative efforts have been undertaken at other nearby buildings.

For the urban developments situated in proximity to the historic waste, the environmental health concerns are broadly defined into two categories:

1. Landfill soil gas from the waste material, and
2. Leachate as groundwater passes through the waste material.

The ground stability overlying the waste area is deemed a structural maintenance issue and an avenue for water infiltration and percolation to the groundwater regime. As surface infiltration percolates through the historic waste materials and contacts the groundwater table, leachate is formed. This leachate is a potentially polluting liquid that can adversely affect the local groundwater system. A summary of the site-specific attributes for potential exposure to landfill soil vapours is presented as Table 1.

12-435

Page 10

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Concentration of landfill soil gas can be influenced by temporal effects such as temperature, precipitation, soil texture, soil moisture and the geochemical processes at the source area. Consequently, the most immediate concern to environmental health of urban developments is the potential exposure to landfill soil gas. There is also a potential for dissolved landfill soil gas constituents to degas from leachate leaving the waste area. This degassing is also capable of contributing to the landfill soil gas matrix.

1.4 Environmental Guidelines and Regulations

This historic waste site has been closed from landfilling for about 46 years and is considered to be a non-operating municipal landfill. It is understood there is no regulatory requirement to remediate or decommission/remove the waste material from its present location.

Within the Province of Alberta, The Municipal Government Act, Alberta Regulation 43/2002 with amendments up to and including AB Reg. 31/2012, Part 2 Subdivision and Development Conditions, Section 13 Distance from landfill waste sites prohibits subdivision and development of the following four types of developments:

- School,
- Hospital,
- Food establishment, or
- Residence,

within 300 m of the disposal area of a non-operating landfill. The regulation has a provision to permit the Deputy Minister of Alberta Environment Sustainable Resource and Development (ESRD) to consider a written consent to vary the regulated setback distance for the above stipulated types of development. ESRD has published a guideline for requesting consent to vary the setback distance for a development to a non-operating landfill. A copy of the most current version (May 2013) of this guideline is provided in Appendix A.

Presently, The Province of Alberta does not have reference criteria for volatile chemicals in air. For this ERMP, a systematic approach to assess the potential risk for an identified chemical of concern has been applied, refer to Section 3.2.2.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 11

2.0 CONTAMINANT SITUATION

Chemicals of concern identified from the Phase II ESA have been applied for the development of a site-specific ERMP. Presumptions for the identified chemicals of concern are solely sourced from the historic waste disposal site and no other off-site source. The lands bounding the historic waste disposal site are considered to be potential receptors of contaminants migrating from the historic waste disposal site. The two principal pathways for exposure are landfill soil gas and groundwater containing leachate.

The available site-specific data set for the LTCHS Site reflects a summer (August 2013) testing event. To gain a "snap shot" of the seasonal range of soil vapour it is recommended a winter data set be obtained. The intent is to obtain subsurface data during frozen ground conditions where soil vapour constituents that would normally vent to atmosphere in the summer would be in a confined state and accumulate beneath the frozen ground. This scenario would reflect a "worst-case" for potential intrusion of soil vapour into a heated building.

2.1 Groundwater

The interpreted pattern of local groundwater appears to flow in a north-northwest direction relative to the historic waste disposal site. The water quality at the down gradient test locations indicate the level of impact by landfill leachate indicators to be relatively low with no detectable dissolved volatile compounds.

The natural gravel and sand in the river valley and underlying the waste material is pervious and the underground sewer pipes traversing the historic waste disposal site are interpreted to not influence the pattern of local groundwater. Thus, the migration of leachate would be governed by the natural pattern of flow.

The groundwater velocity is estimated to be 2.7 m/day. Thus, excluding other influences, the groundwater with leachate leaving the site is predicted to reach the river in 75 to 80 days, more or less.

2.2 Soil Vapour

The concentration of landfill soil gas was not notably elevated at the test locations. However, a variety of VOCs including the presence of various siloxanes was noted and clearly suggests the presence of landfill soil gas.

Aside from soil landfill gas, other potential sources of indoor air vapour intrusion include radon gas, petroleum hydrocarbons and other refined petroleum solvents (chlorinated and non-chlorinated). The presence, fate and movement of these various chemical vapours vary substantially in an unsaturated zone. These boundary conditions can influence their

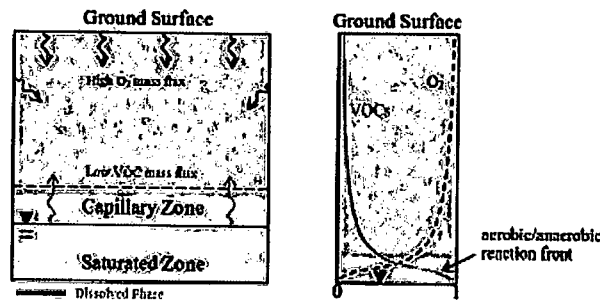
12-435

Page 12

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

respective persistence in the subsurface and the risk of intrusion into a building envelope. For this project, other potential sources and types of volatile soil vapours are not evaluated.

A general conceptualized illustration of volatile soil vapour in the unsaturated zone along with potential naturally occurring attenuating influences is depicted below.



To evaluate whether the potential attenuation of some soil vapour constituents is occurring at a specific development would require an on-site specific evaluation. This level of assessment for the soil landfill gas encountered at the LTCHS Site would require a rigorous seasonal testing program. Attenuation of a specified soil vapour constituent is the reduction of the concentration of the contaminant chemical in a subsurface plume as it migrates from the source area. Physical factors affecting the attenuation of an identified chemical contaminant that is present in a soil vapour plume include, in no order of priority and the following factors are not an exhaustive list:

- Vertical and horizontal separation of the receptor building relative to the source;
- Range of fluctuation, gradient and depth to groundwater;
- Preferential subsurface pathways for soil vapour migration and points of ingress (POIs) into a building; and
- Seasonal climatic effect of temperature to air and soil, wind, precipitation and barometric pressure.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 13

Chemical attributes influencing the in-situ attenuation of soil vapour constituents include:

- Rate of bio-attenuation which is affected by biological (nature and type of microbial activity) processes;
- Availability of subsurface oxygen;
- Soil moisture content and fraction of organic carbon; and
- Vapour pressure and vapour density attributes of the chemical.

The collection of data to determine an attenuation factor for specified contaminant chemicals of concern and whether a chemical interaction exists is a complex and expensive series of tasks and (typically) the results would likely be of limited usefulness for this project.

Hence, natural attenuation factors can be inherently difficult to evaluate and conservatively for this project, attenuation of the soil landfill gas has been not been considered in the calculations for the PQRA.

2.3 Exposure Pathways

Soil Vapours

It is possible that subsurface soil vapour may be present underneath the building footprint. Soil vapour may migrate into the building by way of fractures and joints in the floor that serve as points-of-ingress (POIs). It is understood the building does not have a basement.

Subsurface soil vapour may migrate to near-by residences. The exposure pathway for vapour inhalation via vapour intrusion mechanisms is always considered to human health. Based on the laboratory results and field observations, there is a potential for soil vapours to migrate to residential properties west of the LTCHS facilities, across 43 Avenue. POEs for potential subsurface soil vapours are anticipated to be from pipe penetrations, cracks and joints in the basement floors and foundation walls. Field data and laboratory results for groundwater suggest the degree of saturation is very low. Thus, the potential for soil vapours containing landfill gas from the LTCHS Site is proportionately considered to be low or negligible.

Groundwater

The dissolved organic hydrocarbons measured in the groundwater presents an environmental concern for general water quality objectives. Presently, local groundwater is not utilized. However, the policy of ESRD is to protect all water resources and guidance for managing contaminated groundwater in Alberta on a risk-based approach is applied.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 14

Present findings demonstrate a minor level of leachate parameters in the groundwater leaving the site. This condition and situation will likely continue and persist.

Soil Contamination

Given the depth to the zone of impact, direct contact by local residents with the impacted soil underlying the waste material is considered to be practically negligible. However, direct contact with impacted soil and groundwater may be possible by excavation contractors involved with maintenance and construction activities relating to buried utilities within the area of concern. Contractors should be informed and made aware of the potential hazards and implement an appropriate safe work (ECO, environmental construction operations) plan.

3.0 ENVIRONMENTAL RISK ASSESSMENT

The use of various risk assessment tools is a common practice to decision making in professional practice. For this discussion, an evaluation of risk is a systematic process involving the identification and evaluation of hazards, exposures and receptors with specific focus to its associated vulnerabilities with consideration of the likelihood for an adverse effect to occur. In general, a risk assessment is a tool to assist decision makers to manage the potential risk(s) for an adverse effect from an exposure to an identified hazard.

The reliability of the results from a risk assessment is contingent upon a certain amount of information. Consequently, a natural impediment for a risk assessment can arise from data gap(s) and uncertainties associated with available information. With professional judgement, a Factor of Safety or amplification factor is typically applied to compensate for the uncertainties and data gaps.

Consideration of the available data and resources for this project, a preliminary quantitative risk assessment (PQRA) is viewed as an acceptable approach to conducting a risk assessment to support a site-specific environmental risk management plan. The PQRA strikes a balance between a simple qualitative (highly subjective) risk screening process and a detailed quantitative environmental risk assessment. Generally, the degree of reliability, accuracy and defensible quantification of identified risks improves as the level of uncertainty diminishes from a subjective risk assessment to a quantitative model.

The PQRA may be viewed as a working model that can be further developed into a site-specific quantitative risk assessment. In essence, a PQRA can be directly developed into a site-specific quantitative risk assessment by incorporating more extensive physical data and more complex algorithms in the risk model.

The PQRA applied for this project utilizes prescribed methods to ensure exposures and the assessed risks are not underestimated. Hence, when a risk outcome is deemed negligible then the actual site risk would most likely be presented as negligible. Contrary,

12-435

Page 15

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

when a PQRA risk value shows a potential for an unacceptable level of risk, the actual site risk may be unacceptable or it may require further additional assessment to address the conservatism and uncertainty in the PQRA process such that the specific risk can be better understood and quantified.

At the LTCHS Site the various potential subdivision developments applicable to AB Reg. 43/2002 along with the other potential general commercial developments and activities associated with utility infrastructures, the potential receptor attributes input to the PQRA are outlined below:

Residential – is a primary activity of the property and includes detached houses and multi-family buildings (side-by-side, condominiums/apartments). Default exposure assumptions for adults and children are 32.9 kg child over 5 years old, 70.7 kg adult over 20 years old, inhalation rate 16.6 m³/day for an adult and 14.5 m³/day for a child, total annual exposure 24 hours a day, 365 days/year for a 80 year residence time.

Non-residential Institutional includes school and hospitals. 70.7 kg adult over 20 years old, inhalation rate 16.6 m³/day for an adult and 14.5 m³/day for a child, total annual exposure 8 hours a day, 5 days a week for 52 weeks/year for a 35 year period of employment for workers and 12 years for students.

Non-residential Commercial can include a diverse range of activities and land uses including low sensitive uses including warehousing, service station and more sensitive uses such as day care centre, medical clinic. Default exposure assumptions for workers are 70.7 kg adult, inhalation rate 16.6 m³/day, total annual exposure 8 hours a day, 5 days a week for 52 weeks/year for a 35 year period of employment.

Other potential land developments which are not addressed by Section 13 of AB Reg. 43/2002 such as retail and light commercial activities and the installation and maintenance of underground utilities would also be subject to potential exposure. Thus, for other retail and light commercial activities the above attributes for non-residential activities and an additional group subject to potential exposure to remote soil landfill vapours is the:

Construction/Utility Worker at construction sites with exposure to soil vapours, not including exposure to any other site-specific chemicals. Default exposure assumptions for workers are 70.7 kg adult, inhalation rate 1.4 m³/hr, total annual exposure 10 hours/day, 5 days a week for 48 weeks/year for a 35 year period of employment.

In general, the above exposure settings and the applied attributes are intended to yield a conservative outcome such that the real-case exposure situation would be expected to not be more than the model parameters for the given specified hazard. It is acknowledged the Health Canada protocol for residence time (80 years) and employment time (35 years) may not be reflective of the majority of situations. Regardless, this look-to-exempt approach, meaning that if a single HQ outcome is greater than 1 in a scenario then a mitigative requirement is identified. With receptors being "off-site" relative to the

12-435

Page 16

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

LTCHS Site, the inhalation route to a volatile chemical via vapour intrusion becomes the greatest potential concern for exposure. Subsurface VOCs may degas from leachate leaving the LTCHS Site and thereby contributing to the subsurface soil vapours.

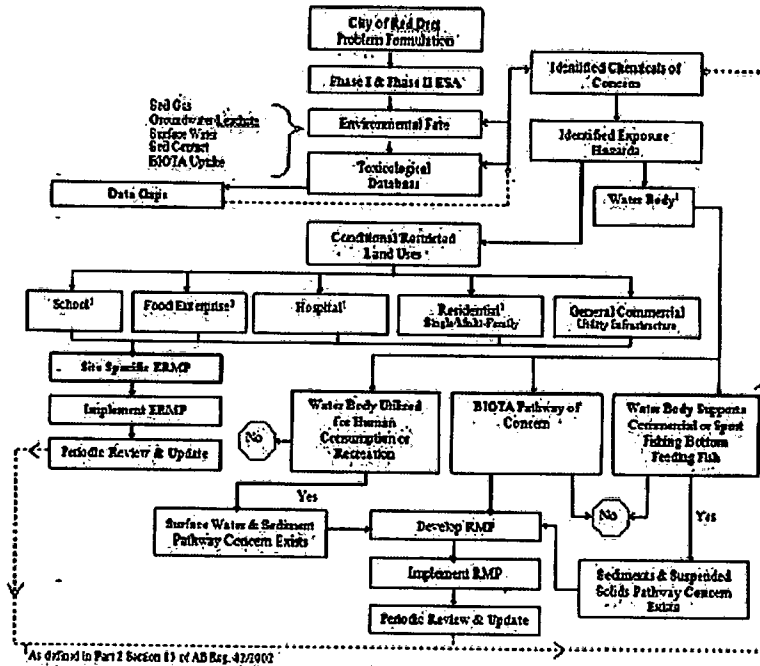
Health effect(s) are contingent on a variety of factors including level, duration and frequency of exposure, toxicity of the chemical and individual sensitivity to the chemical. The principal concern for this PQRA is whether the identified chemicals of concern potentially pose an unacceptable level of risk for chronic health effects due to a long-term, low concentration exposure scenario.

It is recognized, the PQRA presented here is conducted with numerous assumptions and limitations. Consequently, this PQRA should not be viewed as a comprehensive analysis for any particular property lying within the prescribed distances from the LTCHS Site. As noted above, the PRQA is a standardized approach developed by Health Canada and for this project, the PQRA is intended to be utilized to support the regulatory review process for subdivision and development applications which fall into the regulatory framework of AB Reg. 43/2002 and other potential general commercial development and utility activities lying within the prescribed setback distance for the LTCHS Site.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

The diagram below illustrates the process to formulate the risk assessment process to assist with the regulatory review process for a proposed future subdivision development within the regulatory setback distance of the LTCHS historic waste disposal site.

Process of Developing ERMP
Lindsay Thurber Comprehensive High School Site



3.1 Identified Environmental Health Concerns

The environmental health risks presented by this historic waste site to the existing and future developments is primarily from landfill soil gas and to a lesser degree from volatile constituents that degas from leachate leaving the historic waste site into the unsaturated zone above the groundwater table.

The age of this non-operating landfill (about 46 years) suggests the production and quantity of landfill gas may have peaked and/or stabilized. As reported in the 2013 Phase II ESA. It is noted, the initial assessment for soil vapour occurred during the summer and

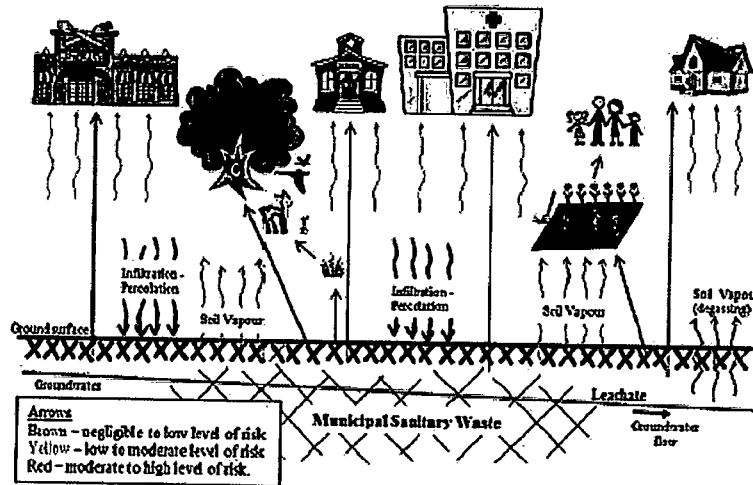
12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

higher subsurface concentrations may result during the winter, in frozen ground conditions. Generally, the potential risk of exposure to soil vapours increases during rising groundwater and frozen ground conditions. Opportunity to gather further seasonal data would assist to better understand the subsurface environmental conditions and whether potentials for transient variables persist at the LTCHS Site that could present further exposure hazard.

For the leachate leaving the site, the river is considered to be the most sensitive receptor. Initial results indicate the leachate is predominantly composed of a mixture of inorganic and nutrient compounds. The measured concentrations do not suggest an immediate risk to the water quality in the river. Hence, it is not anticipated the leachate will be a notable hazard to the river. Dissolved volatile compounds were not detected at the down gradient groundwater monitoring wells in August 2013. Hence, it is presumed VOCs degassing from groundwater will not be a factor to off-site subsurface soil gas.

In general, the risks associated with soil vapour and leachate to land that is off-site of the historic waste disposal area is the focus of protection by AB Reg. 43/2002. To demonstrate the complete soil vapour intrusion pathways for this project, a source, various migration routes and receptors are shown in the pictograph below.

Pictograph Depicting Potential Environmental Exposure Hazards for Soil Vapour Intrusion At Land Uses Near Historic Waste Disposal Sites



12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 19

3.2 Boundary Conditions for PQRA

The logistical boundary for the PQRA is the prescribed 300 m regulatory setback distance shown on Figure 1. The existing residential homes and the schools lying within the regulatory setback are presumed to predate the historic waste disposal activity and AB Reg 43/2002.

Temporal factors (seasonal climate conditions, weather, and natural disasters) can influence the level and duration of exposure. Should data be insufficient to extrapolate the temporal variation; then when necessary, a reasonable conservative assumption(s) can be applied. Critically, it is important to identify the most sensitive temporal factor(s) and consider the potential maximum and minimum fluctuations and its impact to the outcome of the risk model. Accordingly, an extreme temporal event may warrant a special exposure consideration for the ERMP. This may be considered in a future iteration of the PQRA model with inclusion of appropriate climate change adaptation factors.

3.2.1 Hazard Assessment

For this PQRA, the chemicals of concern identified from the Phase II ESA form the basis of the list of target chemicals. The chemicals of concern are summarised in Table 2A. It should be noted, this list should be viewed as an interim/provisional list. Additional chemicals may be added as new information from future testing becomes available.

A database for the identified chemicals of concern has been compiled, refer to Table 2B. Additionally, a brief abstract of each identified chemical of concern is provided in Appendix B. For consistency, physical, chemical and toxicological information was referenced from Canadian sources. It is recognized some Canadian sources do not update the chemical information as frequently as other countries. However, in many instances the values published in Canadian sources are commonly obtained from American agencies, World Health Organization and some European countries. To maintain an updated PQRA for the LTCHS Site, the toxicological information applied in this PQRA should be periodically reviewed and updated.

3.2.2 Exposure Assessment

The historic waste disposal site is viewed as the source of the identified chemicals. As noted in Section 1.4, the location of the waste materials remains fixed and no further mitigative actions are planned.

12-435

Page 20

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

Consequently, the potential exposure pathways consist of the following in order of rising priority:

- Biotic uptake (plants, terrestrial animals, aquatic life).
- Dermal contact, soil ingestion and ponded water at the waste disposal site.
- Groundwater migration pathway.
- Unsaturated zone above the local groundwater table.
- Inhalation of landfill soil gas.

The calculated hazard quotient (HQ) is a risk estimate determined from the ratio of the estimated concentration in an environmental medium (air) and the toxicological reference value (TRV) or tolerable concentration for an identified chemical of concern.

3.2.3 Receptor Characterization

The historic waste disposal site is viewed as the source of the identified chemicals. As noted in Section 1.4, the location of the waste materials remains fixed and the city applies administrative controls to prevent development of either enclosed and/or occupied buildings within the area of the historic waste material. Consequently, the potential receptors consist of the following in order of rising priority:

- Gaetz Lake and the Red Deer River.
- Biotic factors (plants, terrestrial animals, aquatic life).
- Recreational users of the public pathways, park areas and the running track.
- People in occupied buildings including future buildings.

3.2.4 Risk Characterization

Toxicological parameters for the identified chemicals of concern and receptor characteristics were applied determine a Hazard Quotient (HQ). A calculated HQ less than 1 suggests the estimated potential exposure is below the TRV and the corresponding health risk to an exposed person would be negligible for this specific exposure pathway. When the HQ is greater than 1, the potential rate of exposure is predicted to exceed the established acceptable level of exposure thereby warranting a mitigative or adaptive protective requirement.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 21

The inhalation of volatile chemical vapours by humans is quantitatively predicted by:

$$\text{Dose (mg/kg bw/day)} = \frac{C_A \times IR_A \times RAF_{inh} \times D_1 \times D_2 \times D_3 \times D_4}{BW \times LE}$$

Where:

C_A = concentration of contaminant in air (mg/m³)

IR_A = receptor air intake (inhalation) rate (m³/day)

RAF_{inh} = relative absorption factor for inhalation (unitless)

D_1 = hours per week exposed/24 hours

D_2 = days per week exposed/7 days

D_3 = weeks per year exposed/52 weeks

D_4 = total years exposed to site (to be employed for assessment of carcinogens only)

BW = body weight (kg)

LE = life expectancy (years) (to be employed for assessment of carcinogens only)

3.2.5 Potential Municipal Administrative Controls

Should soil gas and potential soil vapour intrusion controls are not feasible, other interim or permanent institutional measures can be considered by the City. These legal and administrative measures can include bylaw zoning conditions, restrictive covenants on land title and land use advisories.

4.0 CONCEPTUAL SITE MODEL (CSM)

A conceptual site model (CSM) has been developed to broadly identify the environmental concerns associated with this historic waste site. This CSM is a simplified representation of the identified chemicals of concern, the potential routes for contaminant migration and potential exposures. These various routes of migration and potential exposures are assessed to qualitatively develop the potential settings for risk (environmental liability). The reader should note, this CSM is preliminary in nature and is limited to initial information compiled from the results of the Tiamat 2013 Phase II ESA.

The CSM is applied to complete the PQRA. A complete environmental risk assessment and evaluation of environmental liability is beyond the context of this report. The information is solely to assist with the development of the site-specific ERMP.

To provide an overview of the contaminant situation, an initial CSM consists of bridging the identified chemicals of concern to the following two main pathways of exposure:

1. Pathways for contaminant migration; and
2. Pathways for exposure.

12-435

Page 22

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The migration pathway is illustrated by schematic cross sections. The cross sections are developed by integrating information from borehole logs, measured groundwater levels, measured groundwater indices and laboratory results. As shown on Figure 2, the selected cross sections transect the site in two directions, in the interpreted direction of local groundwater flow and traversing the flow direction. The interpreted cross sections are presented as Figure 3.

The primary contaminant transport pathways are described as follows:

- Lateral transport of dissolved volatile compounds in the groundwater passing through the waste material.
- Natural degradation process and the volatilization/degassing of dissolved hydrocarbon constituents from groundwater and from hydrocarbons sorbed onto soil particles which can develop into subsurface soil vapour.
- Plume of soil vapour, which, pending several physical and temporal factors, can migrate primarily through the porous media via natural advection and diffusion processes to building envelopes and buried utilities. It is noted, lateral migration could also be influenced by the heterogeneity of the observed texture of subsurface soil (units of silt, sand, clay and gravel).
- The lateral extent of the soil vapours may extend off-site onto third party property. However, the magnitude of the soil vapours are not considered to be significant during summer months. Presently, there is no site data for a winter condition.

4.1 Contaminant Fate and Transport

Contaminant fate and transport refers to the way a substance travels through various environmental mediums. This section discusses the physical and chemical processes that affect the subsurface migration of dissolved chlorinated hydrocarbons identified in the on-site and off-site it areas.

Convection

Convection is the mechanism of transport by diffusion and advection. The generation and quantity of landfill soil gas is presumed to have peaked and/or stabilized at the LTCHS Site. Consequently, the most heavily impacted areas lie adjacent to the LTCHS facilities.

Landfill soil gas may migrate slowly from area of high concentration to regions of lower concentration. Preferential venting to atmosphere likely occurs during the summer. Exposure to volatile vapours exhibiting a specific gravity that is higher than air is generally low. For leachate, the transport process in advection is more rapid than diffusion as substances are usually transported via the bulk motion of groundwater to

12-435

Page 23

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

down gradient areas. In some instances, a dissolved plume can migrate at a rate exceeding the flow of groundwater.

Dispersion

The relative concentration of landfill soil gas in the soil and groundwater is considered low. Accordingly, a dispersion mechanism is not considered to be a dominant factor for the migration of dissolved landfill gas in the subsurface.

Natural Attenuation

Natural bio-chemical and geochemical occurring processes can be effective in reducing the toxicity of organic contaminants in the soil and groundwater. Several factors affecting the efficiency and effectiveness of natural attenuation processes are typically monitored as a method to assess natural biodegradation. Some factors for natural attenuation include:

- Mineral precipitation.
- Absorption – fluid permeates or dissolved by liquid or solid.
- Adsorption – formation of gas or liquid film on solid surface.
- Biological Uptake – transfer of substances from the natural environment to plants, animals and humans.
- Microbiological - biodegradation phenomena where the contaminant constituents are completely mineralized with end products of carbon dioxide and water.

It is noted natural attenuation processes are likely occurring at the site. An example of the dechlorination reduction of cis-1,2-Dichloroethylene can be summarized as: DCE → Vinyl Chloride (VC) → Ethane. To date, ethane and vinyl chloride have not been detected in the soil gas or in the groundwater. DCE was detected in soil samples at TH-04, TH-05 and TH-09.

4.1.1 Volatile Organic Compounds in Soil

DCE and trace amounts of BTEX compounds were noted in the soil underlying the waste material. The concentrations are not considered to be significant. In general the soil quality underlying the historic waste material appears to be relatively acceptable.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 24

4.1.2 Volatile Organic Compounds in Groundwater

VOCs were not detected in the groundwater samples. It is uncertain whether this initial test result is indicative of the environmental quality of the local groundwater. Additional testing would be necessary to better understand the quality of the local groundwater leaving the site.

4.1.3 Combustible Headspace Vapours

On August 15, 2013 combustible headspace vapour readings at test locations lying outside of the historic waste area ranged from non-detect to 270 ppm. A test event during frozen ground conditions would reveal the potential seasonal range of variance for landfill soil gas outside of the waste area.

Headspace vapour readings at monitoring wells situated within the historic waste materials were notably higher with the highest combustible vapours to be greater than 100% LEL and volatile vapours to be 25 ppm.

4.1.4 Lateral Transport of Groundwater

Local groundwater beneath the site and the nearby areas are interpreted to be in an unconfined condition within a zone of discharge (upward flow gradient). The calculated horizontal velocity of the groundwater is about 2.7 m/day. The lateral migration of groundwater is one mechanism for the distribution of dissolved organic compounds and constituents of leachate, specifically ammonia, sulphates, chlorides and nitrates.

The principal direction of flow is estimated to be north-northwest. This suggests the groundwater with leachate leaves the site onto third party property.

4.1.5 Volatilization and Vapour Migration from Impacted Soil and Groundwater

The presence of various volatile organic compounds and methane are the primary components in landfill soil gas. Typically, under an equilibrium condition, the relative density of soil vapour would exhibit a vertical concentration gradient.

Thus, it is expected the soil vapour pattern would exhibit an increasing concentration with depth and proximity to the groundwater table.

The site information has been reviewed by Tiamat along with consideration of the relative age (46 years) of the waste material at this site. In August 2013, vapour measurements at the on-site borehole locations indicate detectable soil vapours are

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 25

present but at low concentrations. Higher concentration may occur when the ground is frozen impeding ventilation to atmosphere.

Vapour measurements at the off-site borehole locations indicate combustible soil vapours are relatively low and are not a significant concern.

The mapping of the groundwater elevations and the dissolved compounds in the groundwater suggest the groundwater to flow to the north-northwest towards and across the park lands associated with the River Glen and Parkland Schools and the Kerry Wood Nature Centre. In addition, potentially, several residential houses located south of 59 Street and west of 43 Avenue are viewed to be along the interpreted flow path of the groundwater from the historic waste area to the river.

Physical factors influencing the distribution of soil vapours include moisture content and texture in the soil and chemical attributes of the contaminants of concern. Soil gas also has a tendency to migrate along pathways of least resistance, including permeable pathways and/or joints/fractures in soil sediments.

Attenuation factors include biodegradation process at the subsurface aerobic/anaerobic interface, refer to illustration in Section 2.2, and the availability of dissolved oxygen. Attenuation can also occur from the vertical and longitudinal separation between source(s) of dissolved VOCs and a building envelope and preferential flow paths. There is a significant knowledge base demonstrating aerobic based biodegradation of VOCs is the dominant mechanism to subsurface attenuation. Ideally, a site-specific test would be necessary to assess the seasonal variability of volatile soil vapour and its propensity to biodegrade within a specific soil texture, moisture regime and availability of oxygen. The cost and benefit to conduct such an evaluation is not viewed to be an effective application of project resource. Conservatively, no attenuating factors have been considered to reduce the potential concentration of the soil vapour constituents.

4.2 Summary of CSM

An initial interpretation of the subsurface stratigraphy, derived from borehole information, is presented as Figure 3. There is insufficient data to map landfill soil gas or the leachate beyond the boundaries of the LTCHS Site. A summary of the identified pathways and receptors at risk by the landfill soil gas and the leachate are as follows.

Groundwater Pathway

Groundwater lies at an average depth of 2.8 m below the ground surface with an interpreted upward hydraulic gradient. The groundwater table exhibits a gentle horizontal gradient of about 3 mm/m to the north-northwest. To our knowledge, groundwater is not utilized at locations down gradient of the waste material.

12-435

Page 26

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The soil cover over the waste material appears to be a thin veneer (less than 30 cm) of organic loam. Differential and irregular settlement of the underlying waste material and soil is clearly evident throughout the historic waste disposal area. The irregular surface topography hampers the ability of previous surface grading to divert surface water from the waste material. Furthermore, the texture of the observed soil cover is interpreted to be a poor material to prevent surface water from infiltrating and percolating into the waste material and generating leachate.

Vapour Pathway

There is no indication of soil vapour intrusion/nuisance into nearby buildings from the contaminants identified at the site. Concentrations of combustible vapours measured from on-site monitoring wells ranged from non-detect to greater than the lower explosive limit during field testing in August 2013. Concentrations of combustible vapours measured at off-site wells ranged from non-detect to 270 ppm in August 2013.

The pervious nature of the soil lying in the unsaturated zone will limit its effectiveness to minimize or inhibit the lateral migration of the soil gas.

Soil Contact Pathway

The historic waste area has been transformed into a natural park area for public use. The potential for visitors to contact the underlying waste is considered low. Pets may disturb the relatively soft and thin soil cover and the potential to expose the underlying waste exists.

Biotic Pathway

To our knowledge, there have been no notable adverse effects to the local flora and fauna located in the vicinity of the site. At this time, there is no obvious concern for food chain transfer or plant uptake leading to a potential adverse situation.

Environmental Receptors

Accordingly, the human exposure pathway is considered (qualitatively) to be low. Nevertheless, there will be a level of risk to soil contact and inhalation should future construction or re-development activities occur at depths below 4.6 m in the areas identified by this Phase III ESA.

For potential developments adjacent and in the vicinity (within 300 m) of the LTCHS Site, the risk of exposure to the identified chemicals of concern are limited to exposure via soil vapour intrusion into an enclosed building. As noted in Section 4.1, migrating leachate leaving the LTCHS Site may also contribute to subsurface soil vapour by natural degassing. The primary route of exposure from the identified chemicals of concern emanating from the LTCHS Site is soil vapour intrusion.

12-435

Page 27

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

5.0 PROPOSED SITE-SPECIFIC ENVIRONMENTAL RISK MANAGEMENT PLAN

Soil vapour intrusion into enclosed buildings is well documented. Preferential pathways of least resistance and various POIs present in building foundations are concerns for potential exposure and resulting impact to human health.

Exposure to soil vapours typically arises from three scenarios:

1. Soil vapours may originate from volatile and semi-volatile organic compounds released into the subsurface.
2. Soil vapours may be sourced from specific inorganic compounds such as radon, hydrogen sulphide and elemental mercury.
3. Soil vapours degas in the subsurface from a dissolved state in groundwater.

In Canada, federal and provincial regulatory agencies have published vapour intrusion guidance information with an objective to educate and protect the environment and human health. Presently, there are no statutory requirements or regulators for soil vapour intrusion. Regulators address soil vapour intrusion on a case-by-case basis.

Given the elapsed time (about 46 years, more or less) for the landfill soil gas, the natural geochemical processes may have reached its limit steady-state and degradation processes have likely stabilized with equilibrium conditions established.

For the fully developed urban setting with consideration of the potential hazards, level of potential exposure and potential receptors, a proposed site-specific environmental risk management plan (ERMP) is presented. The proposed ERMP is a tool to assist with the review of future subdivision and development applications on lands lying within the regulated setback distance from the historic waste disposal site. The ERMP has considered the identified hazards from the historic waste disposal site for each of the four types of regulated land uses (school, food establishment, hospital and residential), general commercial developments and infrastructure utilities lying within the setback distance.

The proposed ERMP is intended to serve as a tool during the review process for a proposed subdivision and development that is located within the regulatory setback distance. Subject to a proponent's application to addressing requirements for design and land use planning, (presently), the general steps for the development review process by The City Inspections & Licensing are application preparation, submission, screening/review, permitting, verification/inspection and approval for occupancy.

The proposed ERMP is consolidated into a spreadsheet format intended to assist the subdivision/development application review process in a timely and effective manner. Where applicable, the risk management actions are presented in an objective-based

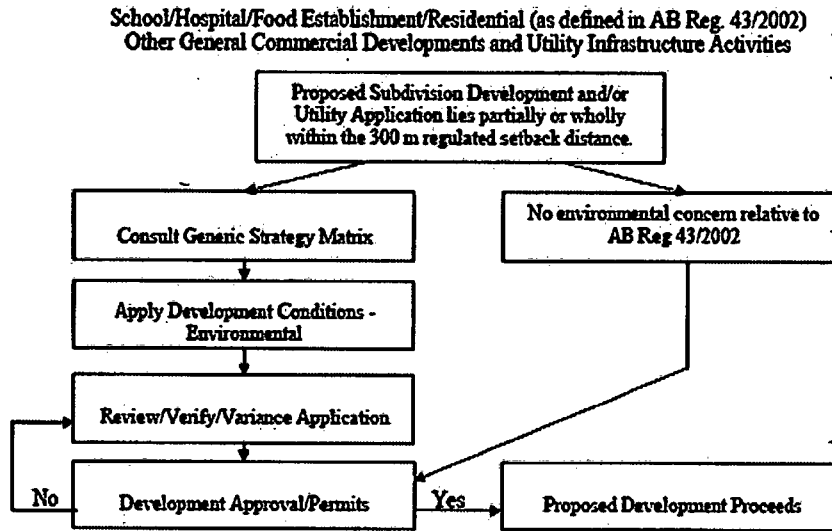
12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 28

format. This approach is to provide flexibility to the proponent for an application with minimal prescriptive restrictions to what and how environmental protective measures can be employed to provide the identified level of protection. Ultimately, responsibility for the specific mitigative measure(s) to effectively address the identified risk lies with the design professional. It is anticipated site inspection during installation would become part of the verification process during construction.

An overview of the proposed process for the screening and review of subdivision development near non-operating landfill applications is presented in the flow chart below.

**Flow Chart for Development Application
Decision Review Process Near Non-Operating Landfill**



The primary risk for the potential ingress of landfill soil gas is a result of the initial screening of identified chemicals of concern having a Hazard Quotient greater than 1.0.

Residential type developments have been identified to be the most sensitive receptors. As such, to address uncertainties, a 10x amplification factor of safety for residential developments has been applied in the PQRA with no applied reduction(s) for attenuation factors. The amplification factor is subject to review and amendment when (and if) additional data such as additional contaminant information become available. As additional site-specific information is evaluated into the PQRA, the uncertainties may also be reviewed and the level of conservatism may be adjusted or reduced.

12-435

Page 29

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

The exposure ratings for the other types of land uses with enclosed buildings will generally be not more than the values for residential. Notwithstanding, other types of building developments such as school, public institutions and commercial complexes typically include higher performance HVAC systems with greater rates of air exchanges and lower periods of human occupancy. Unique exceptions to these generalities would need to be addressed on a specific case basis. The other noteworthy activity subject to worker exposure to potential landfill soil gas is the underground utility worker and the subsurface utility infrastructure including public and private underground utilities.

The results of the risk characterization model as calculated values of HQ for the identified chemicals of concern are summarised in Tables 3A to 3D. The uncertainties and the conservatism applied for this initial PQRA have been incorporated into the baseline ERMP. Generally, a HQ value greater than 1 indicates a level of risk requiring a level of mitigative and/or adaptive action. This broad-based approach is designed to improve the clarity and timeliness for the development application review process. It must be recognized and acknowledged, the proposed ERMP for the LTCHS Site is an approach based on test results obtained from the LTCHS Site. Extrapolations for potential environmental risks associated with leachate and landfill soil gas migrating from the historic waste disposal site have been factored into the proposed ERMP. In the event the city utilizes the proposed ERMP in whole or part, it is recommended, the City view the ERMP as a dynamic guide subject to periodic update, refer to Section 5.6.

It is acknowledged, an applicant may accept the protocols applied in this ERMP or chose to develop their own site-specific plan. In this event, it is recommended the applicant apply a similar assessment and testing methodology to ensure the results can be standardized and compared to the information presented herein. At the discretion of The City of Red Deer and in consultation with the Provincial Ministry, a blanket application for variance may be pursued to reduce the technical and administrative burden for future site-specific variance applications.

The following subsections outline the suggested minimum strategy for the four stipulated types of subdivision developments identified in Part 2 Section 13, AB Reg. 43/2002 along with general commercial developments and activities associated with utility infrastructure. The strategies have been separated into three zones extending radially from the boundary of the non-operating LTCHS historic waste disposal site; refer to Figure 1 for the approximate radial limits.

Each level of preventative/protective action is intended to prevent the ingress of landfill soil gas constituents into a building or enclosed worker space. The two general approaches to achieve this objective are:

1. Seal individual points of ingress (POIs); or
2. Create a barrier to isolate/separate the building from the soil gas.

12-435

Page 30

**ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer**

Historically, either approach has been proven effective. There is a diverse range of engineered controls that can successfully satisfy a particular situation. The specifics for each are dependent on the considerations of the design professional working with specific building configuration, chemicals of concern, subsurface conditions beneath the proposed building and other parameters and boundary conditions.

It is noted, many design standards have unclear prescriptive directions when the design professional is reviewing potential adverse impacts which may result from a known source of environmental pollution. The decisions to manage these potential impacts will include considerations (factor of safety) to address inherent uncertainties arising from subsurface conditions. Consequently, in recognition of this and to provide flexibility to a design professional for a development application, it is recommended in the event an applicant wishes to seek an alternative risk management solution, the existing site information requirements outlined by Alberta ESRD (copy provided in Appendix A) should be consulted.

Generic strategies for the land developments prescribed in Section 13 AB Reg. 43/2002 is divided into three lateral zones as measured from the boundary of the LTCHS Site. Additionally, general commercial developments and utility work have also been evaluated. The various strategies are summarised in the table below and further details are discussed Sections 5.1 to 5.3. The recommended protocols for an ERMP for subsurface utilities is discussed in Section 5.4.

Proposed ERMP Strategies for Subdivision Developments and Utility Infrastructure Activities within 300 m of the LTCHS Site

Distance from Boundary of Landfill	Residential	School/Hospital	Food Establishment	Other Retail/Commercial and Utility
0 - 100 m	Passive/Active	NR	NR	NR
100 - 200 m	NR	NR	NR	NR
200 - 300 m	NR	NR	NR	NR

Notes:

- 1) Above applicable to buildings with or without basement.
- 2) NR - No requirement for potential soil vapour intrusion.

HQ's are calculated for each land use type: residential, food enterprise, commercial developments and public institutions and are shown in Tables 3A to 3F. Calculated HQ's are based solely on receptor variables provided from Health Canada's PQRA.

12-435

Page 31

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

As shown in Table 3A, residential land use appears to be the scenario exhibiting the most sensitivity for a receptor to soil vapours. Calculated HQ values for residential land use are higher than other land uses due to increased exposure times; see Section 3.0. For example, the adjusted safety factor for benzene in residential land use is 56.1, compared to the other land uses at 5.8. This represents almost one order of magnitude amplification. Notwithstanding, calculated HQ values over 1.0 signifies a level of concern to hazard exposure.

Tables 3B to 3E show the calculated HQ values for other land development uses including food enterprise (Table 3B), public institutions including schools and hospitals (Table 3C), general retail/commercial type developments (Table 3D) and Table 3E reflects workers in the construction and maintenance for utility infrastructure. Excepting two chemicals (ethylbenzene and toluene), the identified chemicals of concern that have an adjusted safety factor over 1.0 are similar for the other reviewed land uses.

Various generic measures to mitigate potential soil vapour intrusion for an enclosed building are outlined in the following subsections.

5.1 Strategy for Subdivision Developments Within 100 m

The approach to this strategy consists of either a passive and/or active mitigation strategy. The strategy is a progressively increasing level of protection as the relative level of hazard increases. Examples of engineered mitigative actions as directed by the maximum HQ, refer to Table 3, are outlined as follows:

Passive Measures

1. **Passive Measures for HQ values > 1 and < 5 – Level A**
Subgrade preparation with placement of a compacted clay liner with a minimum compacted thickness of 1 m and confirmed maximum hydraulic conductivity of 10^{-6} cm/sec.
2. **Passive Measures for HQ values > 5 and < 50 – Level B**
Synthetic liner deployed to underlie the entire footprint of the building structure. The type of material, thickness and installation details are dependent on the design professional.
3. **Passive Measures for HQ values > 50 and < 100 – Level C**
Passive sub-slab depressurization (SSD) system with a minimum depressurization of 4 to 10 Pa. In some instances (such as a pervious subgrade), the actual depressurization necessary may require an active SSD or alternative active ventilation system.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 32

Active Measures

Field verify the presence of the identified chemicals of concern and other potential chemicals in the soil gas state at the development site. If confirmed, determine the most appropriate manner to prevent soil vapour intrusion.

1. Active Measures for HQ values > 100 and < 200 – Level D
Active SSD must be configured to compensate for depressurization of the building and have adequate negative pressure gradients across the entire footprint of the foundation.
2. Active Measures for HQ values > 200 – Level E
Installation of a geomembrane and active soil vapour extraction with system fault notification/alarm.
3. Active Measure Alternative to approach to prevent vapour intrusion – Level F
Establish a balanced building ventilation scheme to maintain an interior positive pressure gradient with adjustments for seasonal and temporal effects (extreme low and high temperatures and wind effects).

It should be noted, pending the type and configuration of a structure, the above generic alternative can be modified and/or combined by the design professional.

5.2 Strategy for Subdivision Developments Between 100 m to 300 m

As discussed in Sections 4 and 5, conservatively, the age of the historic waste and the relative concentrations of soil vapour measured during the August 2013 testing event are not deemed to be of sufficient concentration to adversely impact properties beyond 100 m of the boundary of the LTCHS Site. Currently, numeric models to predict transient subsurface soil vapour concentrations from a point source are complex and parameterizing a potential scenario for this project with the available data will include significant uncertainties and the output results would not be considered reliable.

On the basis of the available information, there is presently no identified risk of soil vapour intrusion by soil landfill gas into an enclosed building where the property boundary of the subdivision development lies 100 m or more from the boundary of the LTCHS Site. As noted in Section 5.0, the level of risk for developments beyond 100 m is viewed as negligible and not warranting special environmental mitigative or adaptive considerations.

It is acknowledged that other subsurface sources of contaminants originating from other source(s) which coincidentally lie within the generic landfill setback distance and/or in proximity to a proposed subdivision and development application may present unique risks and such situations will likely require a separate and independent environmental evaluation and consideration.

12-435

Page 33

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

5.3 Strategy for Subdivision Developments Beyond 300 m

There are no considerations necessary for subdivision developments beyond 300 m from a non-operating landfill in AB Reg. 43/2002.

5.4 Strategy Other Commercial Developments and Subsurface Utilities

For development activities which are not addressed in Section 13 AB. Reg. 43/2002, the same strategy to mitigate potential exposure to soil vapour intrusion in enclosed buildings should be applied. HQ values have been calculated with the available results and summarised in Tables 3D and 3E.

For installation of underground utility, the design professional should review the site conditions with consideration of potential soil landfill gas in areas lying within 100 m of the boundary of the LTCHS Site. Appropriate PPE for workers should be included in their respective Safe Work Plan.

In the event, a future utility line is proposed to cross the LTCHS Site and traverse the historic waste, the utility owner should review the proposed work with The City of Red Deer Waste Management to ensure the viability of the proposed utility line within a solid waste environment.

Maintenance activities for underground utilities including confined space entry should include a hazard assessment for the potential presence of soil landfill gas in underground vaults, manways, buried chambers and enclosed work spaces.

5.5 Proposed Regulatory Monitoring and Quality Assurance

A follow-up monitoring event may be required to track and verify the effectiveness of the mitigative measure(s) for an approved and completed development. The manner and specifics of verification testing should be proposed by the design professional.

The Design professional shall show all installation details on as-built drawings along with Assurance Declarations - Schedules A, B, C Alberta Building Code for the generic alternatives above.

12-435

Page 34

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

5.6 Proposed Risk Communication Plan

Present risk management actions consist of the current environmental site investigations and regulatory review process of Part 2 Section 13 AB Reg. 43/2002. The information compiled by the Tiamat 2013 Phase I and II ESAs better identifies the environmental risks associated with the historic waste disposal site. This site specific information has been applied to support this site specific ERMP.

At the discretion of the City, Management in the City Licensing and Inspections and other property owners should also be notified of the proposed risk management actions to address the identified contaminants of concern. In summary, a communication mechanism should be considered for each affected community stakeholder with the objective to ensure questions and issues arising from future property and infrastructure developments within the communities are responded in an appropriate manner.

5.7 Future Review and Update to ERMP

The identified chemicals of concern reflect the initial environmental site assessment conducted in 2013. The list of identified chemicals of concern may be expanded pending results of future testing events. Furthermore, research and development of health risk information for chemical exposures whether the exposure route is direct contact, ingestion or inhalation is an ongoing progressive effort by many organizations.

Notwithstanding the above, technological advancements in building science and risk management tools continues to evolve. Accordingly, it is recommended the information presented in this PQRA be reviewed and updated as new site information becomes available. Pending the scope of an updated PQRA, a review of the ERMP should also be conducted. For instance, in the event the PQRA has been updated with higher concentrations of carcinogenic types VOCs, a review of the ERMP should then be undertaken to ensure the equivalent level of protection is preserved. Alternatively, should updates to the PQRA show no significant changes or a reduction to the level of risk characterization, then the ERMP may be left as-is or amended accordingly.

Regardless of the rate of update to the PQRA, a review and amendment of the ERMP should be undertaken at intervals of not more than 5-years. This proposed 5-year interval is aligned to how standards in the construction and land development industry are generally updated. Typically, regulatory agencies target efforts to publish an updated code edition at approximately 5-year intervals. This is "loosely aligned" with construction and building innovations and related environmental technologies. The objective of this proposed review and amendment strategy is to ensure the level of acceptable risk of human exposure to constituents of landfill soil gas is at an equivalent or lower level set forth in this PQRA.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 35

6.0 STATEMENT OF LIMITATIONS

The conditions prevalent and noted at this time must be recognized as having a limited life. Should activities be introduced or practices change, either of which may be deemed to comply with generally accepted environmental practices, the site conditions would be altered sufficiently for this report to be invalid. This report has been prepared and is intended solely for the use of The City of Red Deer and their approved designates for the specific application described in Section 1.0 of this report.

Tiamat is not the sole source of information, records or documents contained in this report. Tiamat has not verified the information, records or documents of others contained in this report and is not liable for opinions based on inaccurate or misleading information. No representation, warranty, covenant or guarantee is made or given, nor is any responsibility assumed, with respect to the completeness, accuracy or reliability of the information, records or documents contained in this report. This report reflects work in progress and as such, the data and interpretations presented herein are not absolute. However, the general environmental concerns addressed are considered representative of the conditions at the site for which the data reflects. This report does not contain all available data for this project as relevant data is presented in other documents. Tiamat reserves the right to re-evaluate the conclusions in this report should new information become available.

This report has been prepared in accordance with generally accepted environmental engineering practice and no other warranty is made, either express or implied. The opinions, conclusions and recommendations presented herein reflect the best judgment of Tiamat Environmental Consultant Ltd. (Tiamat), ©2014 Tiamat, all rights reserved. As such, Tiamat reserves the right to re-evaluate our conclusions in this report should new information become available.

Any use by a third party of this report or any reliance by a third party upon the information, records or documents in this report is undertaken solely at the risk and responsibility of such third party. Tiamat shall not in any way be responsible for any damages suffered by a third party due to decisions or actions taken by a third party on the basis of this report.

This report was issued electronically in an encrypted PDF format. Notwithstanding, the file encryption, Tiamat cannot guarantee the contents of this report have not been altered. Should an authenticated copy be required, the reader should contact The City of Red Deer and our office.

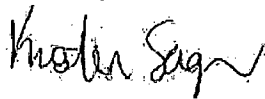
12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 36

7.0 CLOSURE

We trust the information presented herein satisfies your present requirements. Should you have any questions, we invite the reader to contact our office at (403) 640-9009.

Respectfully submitted,
Tiamat Environmental Consultants Ltd.



Per: Kristen E. Sanger, B.Sc., G.I.T.
Environmental Geoscientist

Per: Jessica Lee, E.I.T.
Environmental Engineer



Per: Leon T. Mah, P.Eng., FEC
Senior Project Engineer

ajs

The Association of Professional Engineers and Geoscientists of Alberta
Permit To Practice No.: P 7109

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Page 37

References

1. Gaetz Lake Sanctuary/Michener Centre Geotechnical Site Assessment, Red Deer, Alberta, by AGRA Earth & Environmental Limited, September 3, 1998.
2. Phase 2 – Environmental Site Investigation - Assessment of Former Landfill in SE 21-38-27-W4M near Lindsay Thurber Comprehensive High School, Red Deer, Alberta by Parkland Geotechnical Consulting Ltd., June 2004.
3. Landfill Gas Control Proposal and Risk Management Plan for the Former Landfill in SE 21-38-27-W4M near Lindsay Thurber Comprehensive High School, Red Deer, Alberta by Parkland Geotechnical Consulting Ltd. August 2004.
4. Summary Report Former City Landfill Site Lindsay Thurber Comprehensive High School Part of SE 21-38-27-W4M, Red Deer, Alberta by Stantec Inc. and Parkland Geotechnical Consulting Ltd., March, 2007
5. Phase 2 Environmental Site Assessment, River Glen School Lands, Red Deer, Alberta by Parkland Geotechnical Consulting Ltd., November, 2008.
6. Lindsay Thurber Comprehensive High School, 2011 Gas Monitoring Program by Parkland Geotechnical Consulting Ltd., October 31, 2011.
7. Lindsay Thurber Comprehensive High School, 2013 Gas Monitoring Program by Parkland Geotechnical Consulting Ltd., June 3, 2013.
8. Federal Contaminated Site Risk Assessment in Canada, Part I: Guidance on Human Health Preliminary Quantitative Risk Assessment (PQRA), Version 2.0 by Contaminated Sites Division, Health Canada, September 2010.
9. Federal Contaminated Site Risk Assessment in Canada, Part II: Health Canada Toxicological Reference Values (TRVs) and Chemical-Specific Factors, Version 2.0 by Contaminated Sites Division, Health Canada, September 2010.
10. Federal Contaminated Site Risk Assessment in Canada, Part V: Guidance on Human Health Detailed Quantitative Risk Assessment for Chemicals (DQRA_{chem}) by Contaminated Sites Division, Health Canada, September 2010.
11. Federal Contaminated Site Risk Assessment in Canada, Part VII: Guidance for Soil Vapour Intrusion Assessment at Contaminated Sites by Contaminated Sites Division, Health Canada, September 2010.
12. A framework for Ecological Risk Assessment: General Guidance by Canadian Council of Ministers of the Environment (CCME), 1996

Tiamat Environmental Consultants Ltd.

Electronic Version 03

12-435

Page 38

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

13. Background Indoor Air Concentrations of Volatile Organic Compounds in North American Residences (1990-2005): A Compilation of Statistics for Assessing Vapor Intrusion by Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency (EPA 530-R-10-001), June 2011
14. EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings by Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency (EPA 530-R-10-002), March 16, 2012
15. Interstate Technology & Regulatory Council (ITRC) Vapour Intrusion Pathway: A Practical Guideline, Washington, DC, 2007.
16. Assessing the Significance of Subsurface Contaminant Vapour Migration to Enclosed Spaces: Site-Specific Alternatives to Generic Estimates, Journal of Soil Contamination, Volume 8, No. 3 Pg. 389 -421, Johnson, R.L., Johnson, P.C., M.W. Kemblowski, 1999.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

TABLES

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Table 1
General Site Attributes for Exposure to Soil Vapour Inhalation

<u>Site Information and Environmental Setting</u>				
Site Description:	The site is currently retained as a natural area. A walking/biking trail meanders across the site. Other than the potential pathways, there are currently no buildings within the boundaries of the site.			
Legal Description:	Plan 912 0819, 4154 RS Within Pin N & SE 21-38-27 W4M			
Surrounding Land Use:	Urban Setting (City of Red Deer). Undeveloped fields and environmental reserves to the north, west and east. The Westerly Gaetz Lake is further to the east. Lindsay Thurber School Legion Track and High School (LTCHS) bounds the south and west sides of the site. The residential Community of Waskasoo is located to the south and west. The community of Woodlea is south across 55 Street. The Red Deer River is located to the west and north.			
Groundwater Usage:	No usage on the site presently nor likely in the future.			
Surface Water:	No noted direction of principal overland flow or surface run-off control measures. There are no obvious environmental concerns for surface run-off or run-on throughout this area.			
Underground Structures:	Municipal utilities include one underground storm sewer and two sanitary storm sewers traversing the site.			
Special Environmental Conditions:	The historic waste is bracketed by Gaetz (oxbow) Lakes and the Red Deer River. Landfill has been closed for about 46 years.			
Receptor	Potential Exposure Routes	Soil Gas		
		(Oxygenated)	Ketone	(Chlorinated)
On-Site:				
Recreational Visitors	Inhalation of vapours from soil	x	x	✓
	Inhalation of vapours from groundwater	x	x	✓
	Ingestion of groundwater	✓	✓	✓
Off-Site:				
LTCHS and Running Track	Inhalation of vapours from soil	x	x	✓
	Inhalation of vapours from groundwater	✓	✓	✓
	Ingestion of groundwater	✓	✓	✓
River Glen School	Inhalation of vapours from soil	x	x	✓
	Inhalation of vapours from groundwater	✓	✓	✓
	Ingestion of groundwater	✓	✓	✓
Residential Houses (with basements)	Inhalation of vapours from soil	x	x	x
	Inhalation of vapours from groundwater	x	x	✓
	Ingestion of groundwater	✓	✓	✓
Gaetz Lake	Inhalation of vapours from soil	x	x	x
	Inhalation of vapours from groundwater	✓	✓	✓
	Impact of vapours from soil	x	x	x
	Impact from leachate into groundwater	x	x	x
	Ingestion of groundwater	✓	✓	✓
Underground Utilities:				
Storm Sewer	Impact of vapours from groundwater	x	x	x
	Impact of vapours from soil	x	x	x
Sanitary Sewers	Impact of vapours from groundwater	x	x	x
	Impact of vapours from soil	x	x	x

x - Potential Exposure Hazard
✓ - "Negligible" Potential Exposure Hazard

12-415
EDOP - Litchey Tower Comprehensive High School
Kinross Waste Disposal Site, The City of Red Deer

Table 2A
Identified Chemicals of Concern - Physical Attributes

Table with columns: Chemical, Solubility, Vapor Pressure, Specific Gravity, etc. Lists various chemicals like Dichlorodimethylsilane, Chloroacetylene, etc. with their physical properties.

Note:
1) Above identified chemicals of concern are derived from the results of a Phase II ESA, 2013. Additional chemicals may be added pending future investigation and testing results.
2) Solubility in water, Vapor pressure, Specific Gravity are at 20 °C unless otherwise noted.
3) Flash/Low Combustion and explosion with * Temperature at 15°C.
4) --/N/A - Not tested, no value established or not evaluated.

Third Environmental Consultation L&L

Document Title 02

12-415
EDOP - Litchey Tower Comprehensive High School
Kinross Waste Disposal Site, The City of Red Deer

Table 2B
Identified Chemicals of Concern - Guidelines and Toxicological Values

Table with columns: Chemical, Human Health Guidelines, Acceptable Daily Intake, etc. Lists chemicals like Dichlorodimethylsilane, Chloroacetylene, etc. with their toxicological values.

Note:
1) Above identified chemicals of concern are derived from the results of a Phase II ESA, 2013 at the L&L site. Additional chemicals may be added pending future investigation and testing results.
2) A flow occupational exposure limit is referenced from Alberta Occupational Health & Safety Code 2079 unless no value available in which case a Time Weighted Average is referenced from NIOSH standards.
3) TC - Tolerable Concentration
4) UR - Unit Risk
5) --/N/A - Not tested, no value established or not evaluated.

Third Environmental Consultation L&L

Document Title 02

12-435

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Table 2 Notes

1. Above identified chemicals of concern are derived from the results of a Phase II ESA, 2013. Additional chemicals may be added pending future investigation and testing events.
2. Solubility in water, Vapour pressure, Specific Gravity are at 20 °C unless otherwise stated.
3. Henry's Law Constant and any value with * Temperature at 25°C.
4. 8 Hour occupational Exposure Limit is referenced from Alberta Occupational Health & Safety Code 2009 unless no value available in which Time Weighted Average is referenced from NIOSH standards.
5. TC – Tolerable Concentration.
6. UR – Unit Risk.
7. ND – Not Detected, value is below limit of detection.
8. - /NE – Not tested, no value established or not evaluated.
9. Alberta Environment Sustainable Resource & Development.
10. Environment Canada, Health Canada
11. Ontario Ministry of the Environment, Standards Development Branch
12. United States of America Department of Labor, Occupational Safety & Health Administration
13. Alberta Tier 1 Soil and Groundwater Remediation Guidelines December 2010
14. National Institute for Occupational Safety and Health (NIOSH) Education and Information Division
15. Federal Contaminated Site Risk Assessment in Canada
16. US National Library of Medicine, National Institutes of Health, Department of Health & Human Services, Hazardous Substance Database
17. The Merck Index, 12th Edition, 1996
18. EPA United States Environmental Protection Agency, Technology Transfer Network – Air Toxics Web Site
19. EPA United States Environmental Protection Agency, Chemical Summary Fact Sheets
20. NOAA National Oceanic and Atmospheric Administration - Cameo Chemicals Web Site
21. World Health Organization - International Agency For Research on Cancer
22. UNEP - United Nations Environment Programme

12-435

ERMP - Lindsay Thurber Comprehensive High School
Historic Waste Disposal Sites, The City of Red Deer

**Table 3A Residential Land Use
Calculated Hazard Quotients for Identified Chemicals of Concern**

Chemical	Estimate Dose (ppm bw/day)	Carcinogenic (Carcinogen)	Hazard Quotient	
			Calculated	Adjusted
Chloromethane	0.1700	Carcinogen	56.7	567.0
Benzene	0.0224	Carcinogen	5.6	56.1
Methylene Chloride	0.0632	Carcinogen	1.26	12.6
Chloroform	0.0191	Carcinogen	1.91	19.1
trans-1,3-Dichloropropene	0.0190	Carcinogen	--	--
Trichloroethylene	0.0575	Carcinogen	39.3	393.5
Tetrachloroethylene	0.0863	Carcinogen	6.2	61.6
Ethanol	0.0199	Carcinogen	--	--
Ethylbenzene	0.0311	Possible Carcinogen	0.3115	3.1
Tetrahydrofuran	0.0033	Possible Carcinogen	0.0037	0.0368
1,4-Dioxane	0.0022	Possible Carcinogen	0.0733	0.7332
Trichlorotrifluoroethane	0.0004	Non-Carcinogen	--	--
Methyl Ethyl Ketone	0.0030	Non-Carcinogen	0.0050	0.0496
Dichlorodifluoromethane	0.2612	Non-Carcinogen	--	--
Trichlorofluoromethane	0.4666	Non-Carcinogen	--	--
Toluene	0.0279	Non-Carcinogen	0.1263	1.3
Total Xylene	0.0528	Non-Carcinogen	0.0352	0.3519
M-Xylene	0.0593	Non-Carcinogen	0.0396	0.3956
P-Xylene	0.0572	Non-Carcinogen	0.0381	0.3813
O-Xylene	0.0413	Non-Carcinogen	0.0275	0.2752
Carbon Disulfide	0.0111	Non-Carcinogen	0.1111	1.1
Styrene	0.0003	Non-Carcinogen	0.0022	0.0219
1,2,4-Trimethylbenzene	0.0257	Non-Carcinogen	16.1	160.5
Hexane	0.0111	Non-Carcinogen	0.0158	0.1585
cis-1,2-Dichloroethylene	0.0211	NE	10.5	105.6
2-Propanone	0.0211	NE	--	--
Chloroethane	0.1068	NE	--	--
Heptane	0.0008	NE	--	--
Cyclohexane	0.0010	NE	--	--
2,2,4-Trimethylpentane	0.0004	NE	--	--
Methane	--	Asphyxiant	--	--

Notes:

- Hazard Quotients are calculated on the basis of site-specific values. Generic Health Canada exposure and receptor factors are applied.
- Landfill soil gas is the gaseous constituents present in the pores between soil particles. Once the soil gas enters into a structure, the soil gas is referred to as soil vapour.
- Vapour inhalation for a coarse-grained soil in a basement.
- No reference information for derivation.
- Adjusted HQ - Calculated HQ with a Factor of Safety (10) applied to developments with human occupancy.
- Bold represents HQ's greater than 1 signifying a level of concern to hazard exposure.
- HQ's are calculated based solely on Health Canada Variables obtained in the PQRA.

Tiamat Environmental Consultants Ltd.

Electronic Version 03

12-435

ERMP - Lindsay Thurber Comprehensive High School
Historic Waste Disposal Sites, The City of Red Deer

**Table 3B Food Enterprise Land Use
Calculated Hazard Quotients for Identified Chemicals of Concern**

(Chemical)	(* Estimate Dosage) ppm BW/day	(Carcinogenic (Carcinogen))	(Hazard Quotient)	
			Calculated	Adjusted
Chloromethane	0.0177	Carcinogen	59	59.0
Benzene	0.0023	Carcinogen	0.5841	5.8
Methylene Chloride	0.0066	Carcinogen	0.1316	1.3
Chloroform	0.0020	Carcinogen	0.1986	2.0
trans-1,3-Dichloropropane	0.0020	Carcinogen	--	--
Trichloroethylene	0.0060	Carcinogen	4.1	41.0
Tetrachloroethylene	0.0090	Carcinogen	0.6422	6.4
Ethanol	0.0021	Carcinogen	--	--
Ethylbenzene	0.0032	Possible Carcinogen	0.0324	0.3244
Tetrahydrofuran	0.0003	Possible Carcinogen	0.0004	0.0040
1,4-Dioxane	0.0002	Possible Carcinogen	0.0076	0.0764
Trichlorotrifluoroethane	0.0001	Non-Carcinogen	--	--
Methyl Ethyl Ketone	0.0007	Non-Carcinogen	0.0012	0.0118
Dichlorodifluoromethane	0.0622	Non-Carcinogen	--	--
Trichlorofluoromethane	0.1111	Non-Carcinogen	--	--
Toluene	0.0066	Non-Carcinogen	0.0301	0.3010
Total Xylene	0.0126	Non-Carcinogen	0.0084	0.0838
m-Xylene	0.0141	Non-Carcinogen	0.0094	0.0940
p-Xylene	0.0136	Non-Carcinogen	0.0091	0.0908
o-Xylene	0.0098	Non-Carcinogen	0.0066	0.0655
Carbon Disulfide	0.0025	Non-Carcinogen	0.0264	0.2645
Styrene	0.0001	Non-Carcinogen	0.0005	0.0052
1,1,4 Trimethylbenzene	0.0061	Non-Carcinogen	3.8	38.2
Hexane	0.0026	Non-Carcinogen	0.0038	0.0377
cis-1,2-Dichloroethylene	0.0050	N/E	2.5	25.1
2-Propanone	0.0050	N/E	--	--
Chloroethane	0.0254	N/E	--	--
Heptane	0.0002	N/E	--	--
Cyclohexane	0.0002	N/E	--	--
2,2,4-Trimethylpentane	0.0001	N/E	--	--
Methane	--	Asphyxiant	--	--

Notes:

- Hazard Quotients are calculated on the basis of site-specific values. Generic Health Canada exposure and receptor factors are applied.
- Landfill soil gas is the gaseous constituents present in the pores between soil particles.
Once the soil gas enters into a structure, the soil gas is referred to as soil vapour.
- Vapour inhalation for a coarse-grained soil in a basement.
- No reference information for derivation.
- Adjusted HQ - Calculated HQ with a Factor of Safety (10) applied to developments with human occupancy.
- Bold represents HQ's greater than 1 signifying a level of concern to hazard exposure.
- HQ's are calculated based solely on Health Canada Variables obtained in the PQRA.

Tiamat Environmental Consultants Ltd.

Electronic Version 03

12-435
ERMP - Lindsay Thurber Comprehensive High School
Historic Waste Disposal Sites, The City of Red Deer

Table 3C Public Institution - School & Hospital Developments Land Use
Calculated Hazard Quotients for Identified Chemicals of Concern

Chemical	Estimated Dosage ppm bw/day	Carcinogenic Carcinogen	Hazard Quotient	
			Calculated	Adjusted
Chloromethane	0.0177	Carcinogen	5.9	59.0
Benzene	0.0023	Carcinogen	0.5841	5.8
Methylene Chloride	0.0066	Carcinogen	0.1316	1.3
Chloroform	0.0020	Carcinogen	0.1986	2.0
trans-1,3-Dichloropropene	0.0020	Carcinogen	--	--
Trichloroethylene	0.0060	Carcinogen	4.1	41.0
Tetrachloroethylene	0.0090	Carcinogen	0.6422	6.4
Ethanol	0.0021	Carcinogen	--	--
Ethylbenzene	0.0032	Possible Carcinogen	0.0324	0.3244
Tetrahydrofuran	0.0003	Possible Carcinogen	0.0004	0.0040
1,4-Dioxane	0.0008	Possible Carcinogen	0.0076	0.0764
Trichlorotrifluoroethane	0.4666	Non-Carcinogen	--	--
Methyl Ethyl Ketone	0.0030	Non-Carcinogen	0.0012	0.0118
Dichlorodifluoromethane	0.2612	Non-Carcinogen	--	--
Trichlorofluoromethane	0.4666	Non-Carcinogen	--	--
Toluene	0.0278	Non-Carcinogen	0.0301	0.3010
Total Xylene	0.0528	Non-Carcinogen	0.0084	0.0838
m-Xylene	0.0593	Non-Carcinogen	0.0094	0.0940
p-Xylene	0.0572	Non-Carcinogen	0.0091	0.0908
o-Xylene	0.0413	Non-Carcinogen	0.0066	0.0655
Carbon Disulfide	0.0025	Non-Carcinogen	0.0264	0.2645
Styrene	0.0003	Non-Carcinogen	0.0005	0.0052
1,2,4-Trimethylbenzene	0.0257	Non-Carcinogen	3.8	38.2
Hexane	0.0111	Non-Carcinogen	0.0038	0.0377
cis-1,2-Dichloroethylene	0.0050	N/E	2.5	25.1
2-Propanone	0.0211	N/E	--	--
Chloroethane	0.1068	N/E	--	--
Heptane	0.0008	N/E	--	--
Cyclohexane	0.0010	N/E	--	--
2,2,4-Trimethylpentane	0.0004	N/E	--	--
Methane	--	Asphyxiant	--	--

Notes:

- 1) Hazard Quotients are calculated on the basis of site-specific values. Generic Health Canada exposure and receptor factors are applied.
- 2) Landfill soil gas is the gaseous constituents present in the pores between soil particles. Once the soil gas enters into a structure, the soil gas is referred to as soil vapour.
- 3) Vapour inhalation for a coarse-grained soil in a basement.
- 3) -- No reference information for derivation.
- 4) Adjusted HQ - Calculated HQ with a Factor of Safety (10) applied to developments with human occupancy.
- 5) Bold represents HQ's greater than 1 signifying a level of concern to hazard exposure.
- 6) HQ's are calculated based solely on Health Canada Variables obtained in the PQRA.

12-435
ERMP - Lindsay Thurber Comprehensive High School
Historic Waste Disposal Sites, The City of Red Deer

**Table 3D General Retail/Commercial Developments Excluding Food Establishments Land Use
Calculated Hazard Quotients for Identified Chemicals of Concern**

Chemical	Estimate Dose: ppm bw/day	(Carcinogenic) Carcinogen	Hazard Quotient:	
			Calculated	Adjusted
Chloromethane	0.0177	Carcinogen	5.9	59.0
Benzene	0.0023	Carcinogen	0.5841	5.8
Methylene Chloride	0.0066	Carcinogen	0.1316	1.3
Chloroform	0.0020	Carcinogen	0.1986	2.0
trans-1,3-Dichloropropene	0.0020	Carcinogen	--	--
Trichloroethylene	0.0060	Carcinogen	4.1	41.0
Tetrachloroethylene	0.0090	Carcinogen	0.6422	6.4
Ethanol	0.0021	Carcinogen	--	--
Ethylbenzene	0.0032	Possible Carcinogen	0.0324	0.3244
Tetrahydrofuran	0.0003	Possible Carcinogen	0.0004	0.0040
1,4-Dioxane	0.0008	Possible Carcinogen	0.0076	0.0764
Trichlorotrifluoroethane	0.4666	Non-Carcinogen	--	--
Methyl Ethyl Ketone	0.0030	Non-Carcinogen	0.0012	0.0118
Dichlorodifluoromethane	0.2612	Non-Carcinogen	--	--
Trichlorofluoromethane	0.4666	Non-Carcinogen	--	--
Toluene	0.0278	Non-Carcinogen	0.0301	0.3010
Total Xylene	0.0528	Non-Carcinogen	0.0084	0.0838
m-Xylene	0.0593	Non-Carcinogen	0.0094	0.0940
p-Xylene	0.0572	Non-Carcinogen	0.0091	0.0908
o-Xylene	0.0413	Non-Carcinogen	0.0066	0.0655
Carbon Disulfide	0.0025	Non-Carcinogen	0.0264	0.2645
Styrene	0.0003	Non-Carcinogen	0.0005	0.0052
1,2,4-Trimethylbenzene	0.0257	Non-Carcinogen	3.8	38.2
Hexane	0.0111	Non-Carcinogen	0.0038	0.0377
cis-1,2-Dichloroethylene	0.0050	N/E	2.5	25.1
2-Propanone	0.0211	N/E	--	--
Chloroethane	0.1068	N/E	--	--
Heptane	0.0008	N/E	--	--
Cyclohexane	0.0010	N/E	--	--
2,2,4-Trimethylpentane	0.0004	N/E	--	--
Methane	--	Asphyxiant	--	--

Notes:

- 1) Hazard Quotients are calculated on the basis of site-specific values. Generic Health Canada exposure and receptor factors are applied.
- 2) Landfill soil gas is the gaseous constituents present in the pores between soil particles. Once the soil gas enters into a structure, the soil gas is referred to as soil vapour.
- 3) Vapour inhalation for a coarse-grained soil in a basement.
- 4) -- No reference information for derivation.
- 4) Adjusted HQ - Calculated HQ with a Factor of Safety (10) applied to developments with human occupancy.
- 5) Bold represents HQ's greater than 1 signifying a level of concern to hazard exposure.
- 6) HQ's are calculated based solely on Health Canada Variables obtained in the PQRA.

12-435
ERMP - Lindsay Thurber Comprehensive High School
Historic Waste Disposal Sites, The City of Red Deer

**Table 3E Utility Infrastructure Activities Land Use
Calculated Hazard Quotients for Identified Chemicals of Concern**

Chemical	Estimate Dosage (ppm bw/day)	Carcinogenic? (Carcinogen)	Hazard Quotient	
			Calculated	Adjusted
Chloromethane	0.0172	Carcinogen	5.7	57.5
Benzene	0.0023	Carcinogen	0.5684	5.7
Methylene Chloride	0.0064	Carcinogen	0.1280	1.3
Chloroform	0.0019	Carcinogen	0.1933	1.9
trans-1,3-Dichloropropane	0.0019	Carcinogen	--	--
Trichloroethylene	0.0058	Carcinogen	4.0	40.0
Tetrachloroethylene	0.0087	Carcinogen	0.6249	6.2
Ethanol	0.0020	Carcinogen	--	--
Ethylbenzene	0.0032	Possible Carcinogen	0.0316	0.3160
Tetrahydrofuran	0.0003	Possible Carcinogen	0.0004	0.0040
1,4-Dioxane	0.0002	Possible Carcinogen	0.0074	0.0743
Trichlorofluoroethane	0.0001	Non-Carcinogen	--	--
Methyl Ethyl Ketone	0.0007	Non-Carcinogen	0.0011	0.0115
Dichlorodifluoromethane	0.0605	Non-Carcinogen	--	--
Trichlorofluoromethane	0.1282	Non-Carcinogen	--	--
Toluene	0.0065	Non-Carcinogen	0.0293	0.2943
Total Xylene	0.0122	Non-Carcinogen	0.0082	0.0820
M-Xylene	0.0137	Non-Carcinogen	0.0092	0.0920
P-Xylene	0.0133	Non-Carcinogen	0.0088	0.0880
O-Xylene	0.0096	Non-Carcinogen	0.0064	0.0640
Carbon Disulfide	0.0026	Non-Carcinogen	0.0257	0.2574
Styrene	0.0001	Non-Carcinogen	0.0005	0.0051
1,2,4-Trimethylbenzene	0.0059	Non-Carcinogen	3.7	37.2
Hexane	0.0026	Non-Carcinogen	0.0037	0.0370
cis-1,2-Dichloroethylene	0.0049	N/E	2.4	24.4
D-Propanone	0.0049	N/E	--	--
Chloroethane	0.0248	N/E	--	--
Heptane	0.0002	N/E	--	--
Cyclohexane	0.0002	N/E	--	--
2,2,4-Trimethylpentane	0.0001	N/E	--	--
Methane	--	Asphyxiant	--	--

Notes:

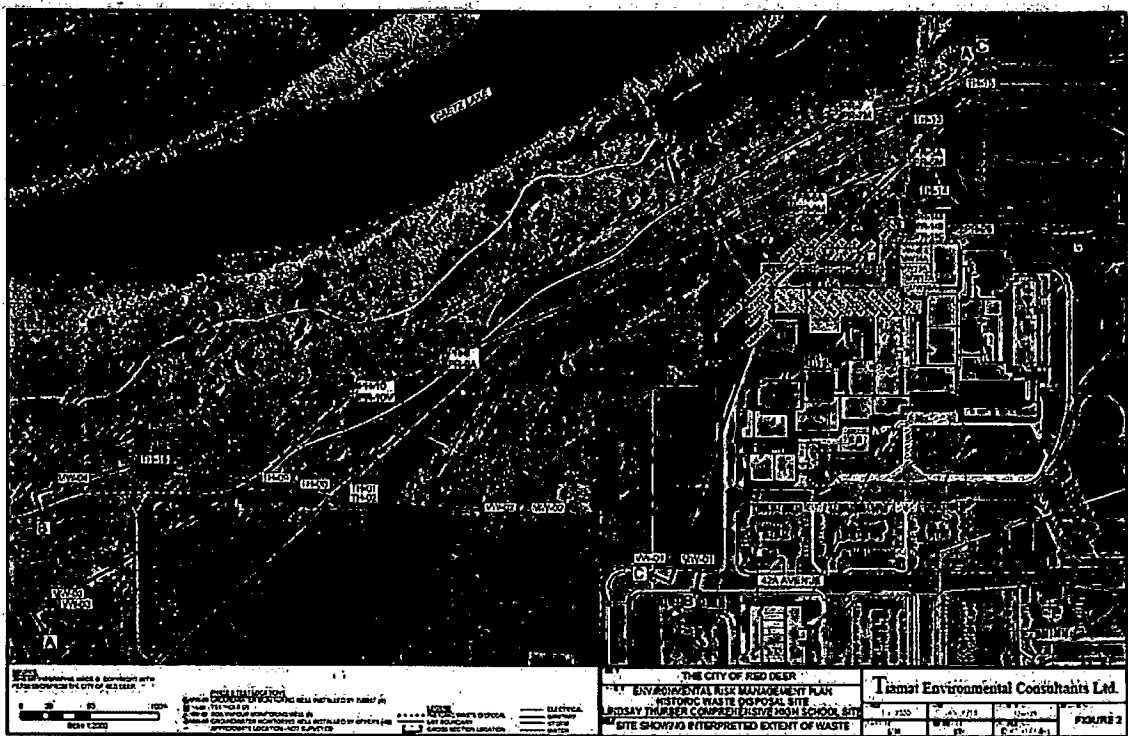
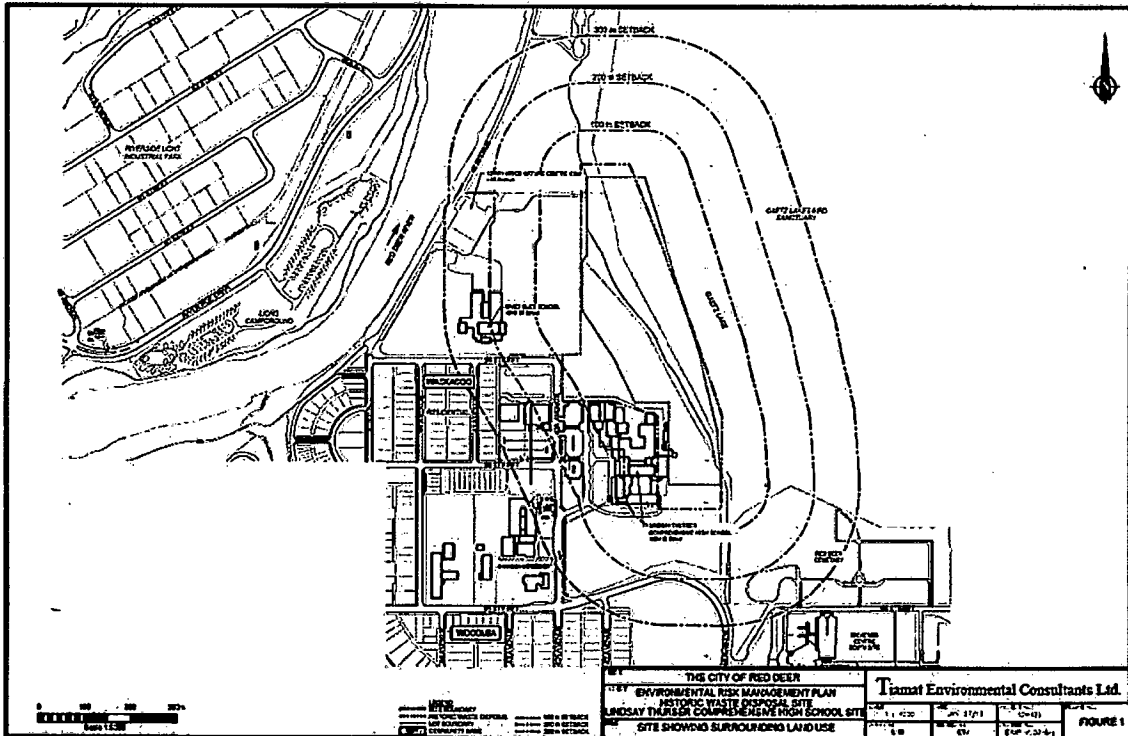
- Hazard Quotients are calculated on the basis of site-specific values. Generic Health Canada exposure and receptor factors are applied.
- Landfill soil gas is the gaseous constituents present in the pores between soil particles. Once the soil gas enters into a structure, the soil gas is referred to as soil vapour.
- Vapour inhalation for a coarse-grained soil in a basement.
- No reference information for derivation.
- Adjusted HQ - Calculated HQ with a Factor of Safety (10) applied to address for uncertainty potential to unknown exposures.
- Bold represents HQ's greater than 1 signifying a level of concern to hazard exposure.
- HQ's are calculated based solely on Health Canada Variables obtained in the PQRA.
- Hazard Quotients are based on new construction, maintenance and decommissioning activities.

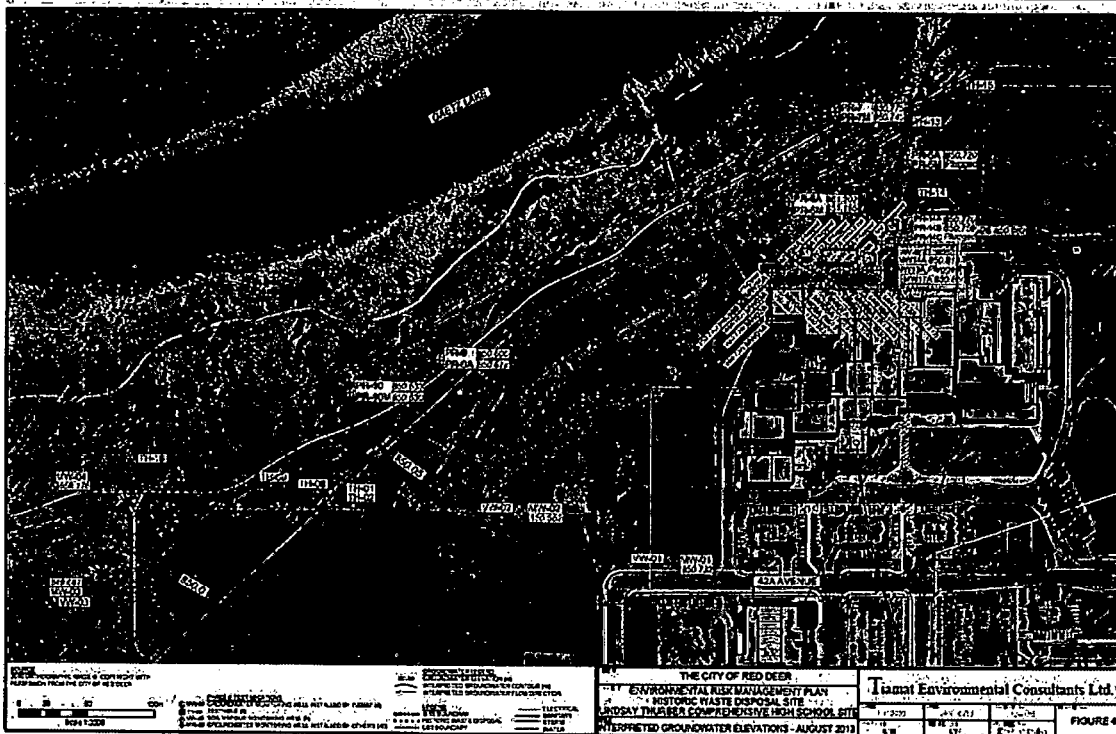
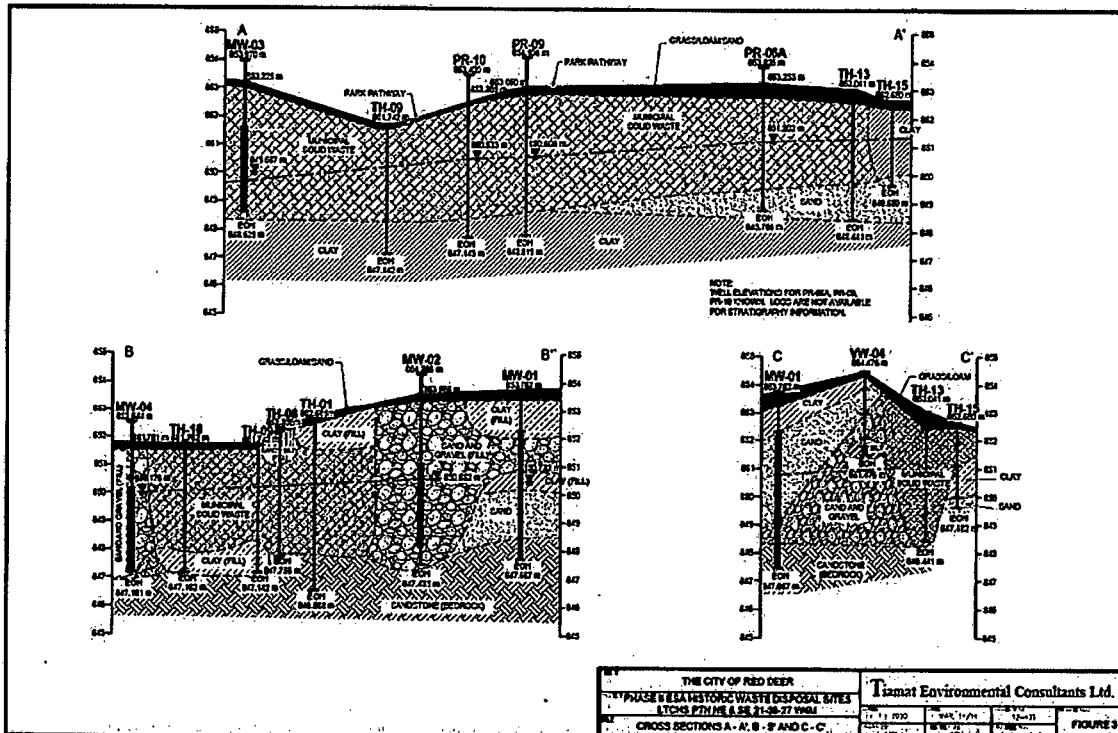
12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

FIGURES

Tiamat Environmental Consultants Ltd.

Electronic Version 03





12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

APPENDIX A

**ALBERTA ENVIRONMENT ESRD
REQUESTING CONSENT TO VARY THE SETBACK DISTANCE FOR A
DEVELOPMENT TO A NON OPERATING LANDFILL**

Tiamat Environmental Consultants Ltd.

Electronic Version 03

Requesting Consent To Vary The Setback Distance For A Development To A Non Operating Landfill

INFORMATION REQUIREMENT

May 2013

Introduction

Section 13 of the *Subdivision and Development Regulation* defines the setback distance required from a subdivision development for a residence, school, hospital, or food establishment to a non-operating landfill. The Regulation allows the subdivision or development authority to vary regulated setback distance upon receiving written consent from Alberta Environment and Sustainable Resource Development.

Considerations for consent

Alberta Environment and Sustainable Resource Development (ESRD) will consider a consent to lessen the setback distance from developments near non-operating landfills, based on the following criteria:

Setback distance from a residence school, hospital, or food establishment to a non-operating landfill is 300m.

1. All Information Requirements set out in this document must be submitted to ESRD by the subdivision or development authority;
2. The subdivision or development authority commits to developing a mechanism whereby future property owners are made aware of any consents issued;
3. Consent will not be considered when all three of the following conditions exist:
 - a. Gas levels above background are present within the waste disposal area of the landfill;
 - b. The land area where development is to occur has no natural physical barrier to gas movement i.e. a valley between the development and the landfill; and
 - c. The development has underground infrastructure or basements
4. Where groundwater has been contaminated, consent will only be considered where:
 - a. potable water to the proposed development is being supplied from a municipal system; and
 - b. vegetation, or other receptors or property will not be affected by the contaminated groundwater

Only the subdivision or development authority may submit a request for variance

Consent after development

Consent to lessen the setback distance will not be considered after a development permit or subdivision approval has been issued by the local authority.

Information Requirements:

Consent must be provided before proceeding with any development not adhering to landfill setback requirements.

The following information is required to be provided to ESRD by the subdivision or development authority before ESRD will consider consenting to a variance request for a development near a non-operating landfill:

1. A covering letter from the subdivision or development authority requesting a variance.
2. A letter of consent from the landfill owner consenting to the encroachment.
3. A letter from the proponent (developer) stating the reasons the site must encroach the landfill setback and the alternatives if the variance is not granted.
4. Details of the type of development within the setback (including proposed design, water supply, wastewater and stormwater systems, topography, location of proposed residences, schools, etc.).



For more information call the Information Centre
at 783-427-2700 (outside Edmonton dial 310-0000)



Requesting Consent To Vary The Setback Distance For A Development To A Non Operating Landfill

INFORMATION REQUIREMENT

May 2013

Information Requirements cont.:

Consent is not provided for developments that have already occurred.

The Standards for Landfills in Alberta can be found at:
<http://environment.alberta.ca/02956.html>

For more information on setback variances please contact your Alberta Environment regional office.
<http://environment.alberta.ca/contact.html>

5. Department of Health Permit Number or Alberta Environment and Sustainable Resource Development approval or registration number of the landfill being encroached upon.
6. An engineering report*, completed by a professional registered with APEGA, that includes, as a minimum, the following information:
 - a) landfill cell delineation including approximate waste depth (use of test pits, historical aerial photography, etc.).
 - b) duration of operation (actual, or estimated if actual not available).
 - c) amount, types of waste, and degree of waste stabilization in the landfill.
 - d) landfill topography for site drainage.
 - e) landfill final cover details such as thickness and composition.
 - f) a visual inspection report that details, at a minimum, vegetative stress and degree of cover, landfill settlement, exposed refuse, leachate breakout, and any other visually notable landfill issues.
 - g) regional and site specific geology and hydrogeology.
 - h) a map showing all water wells and residences within a 1 kilometre radius of the site and other topographical features, such as water bodies, within 5 kilometres of the site.
 - i) the applicable sections of the area structure plan documenting the zoning and expected use of the landfill and surrounding area.
 - j) groundwater monitoring results.
 - k) landfill gas monitoring results.
 - l) an opinion on whether encroachment is feasible (under what mitigative measures, to what distance, etc.), and
 - m) if mitigative measures are proposed, the design details, monitoring, and maintenance program for the mitigative measures.
7. Documentation from the Alberta Health Services that they have provided or refused the variance to construct a private water well within the 450-metre setback as per the Public Health Regulations, if applicable. (Water wells also have a setback requirement under Public Health jurisdiction. Any development with a water well will require both waivers before it can proceed.)
8. Documentation on how the development authority will deal with potential complaints from any residents within the setback.
9. Documentation on how the development authority will convey information on the setback variance to existing and successive property owners.
10. A letter from Alberta Health Services confirming that they have no concerns with the proposed development.

*The subdivision or development authority must utilize applicable sections of the current Standards and Guidelines for Landfills in Alberta to develop the information required in (6).



For more information call the Information Centre
at 760-427-2700 (outside Edmonton dial 310-0000)

Government
of Alberta

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

APPENDIX B
GLOSSARY

12-435

B-1

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Glossary

Physical and Toxicological Terms

8-Hour Occupational Exposure Limit is the maximum concentration of a substance that a worker can be exposed to during a standard 8-hour work day.

Bioconcentration Factor (BCF) provides a measure of the extent of chemical partition at equilibrium between a biological medium (e.g. fish tissue, plant tissue) and an external medium (e.g. water). The higher the BCF, the greater the accumulation in living tissue.

Carcinogenicity is the ability of a substance to produce or result in cancer.

Estimate Dosage is the predicted intake of a substance via inhalation. Calculation is derived from Health Canada's PQRA equation for inhalation of volatile substances.

Half-life is the amount of time it takes for the concentration of a given substance to fall to half its original concentration.

Hazard Quotient (HQ) is the ratio of the calculated estimated dosage of a substance to its tolerable concentration or TRV. If the HQ is greater than 1, the potential rate of exposure could exceed the acceptable levels of exposure. If the HQ is less than 1, the exposure potential is considered negligible.

Henry's Law Constant (H) provides a measure of the extent of chemical partitioning between air and water at equilibrium. The higher the Henry's Law constant, the more likely a chemical is to volatilize than to remain in water.

Molecular Weight is the sum of the weight of all the atoms in a molecule.

Octanol-Water Partition Coefficient (K_{ow}) provides a measure of the extent of chemical partitioning between water and octanol at equilibrium. The greater the K_{ow} , the more likely a chemical is to partition to octanol than to remain in water. Octanol is used as a surrogate for lipids (fats) and K_{ow} can be used to predict bioconcentration in aquatic organisms.

Odour Threshold is the lowest concentration of a substance that can be identified by human olfactory sense.

Organic Carbon-Water Partition Coefficient (K_{oc}) provides a measure of the extent of chemical partitioning between organic carbon and water at equilibrium. A higher K_{oc} , the more likely a chemical is to bind to soil or sediment than to remain in water.

Soil/Sediment-Water Partition Coefficient (K_d) provides a soil or sediment-specific measure of the extent of the chemical partitioning between soil or sediment and water.

12-435

B-2

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

unadjusted for dependence upon organic carbon. To adjust for the fraction of organic carbon present in soil or sediment (f_{oc}), use $K_d = K_{oc} \cdot H \cdot f_{oc}$. The higher the K_d , the more likely a chemical is to bind to soil or sediment than to remain in water.

Solubility is an upper limit of a chemical's dissolved concentration in a solvent at a specified temperature. Aqueous concentrations in excess of solubility may indicate sorption onto sediments, the presence of a non-aqueous phase liquid.

Specific Gravity is the ratio of the density of a substance to the density of a reference substance (in this case, water or air) at the same temperature. A substance with a specific gravity greater than 1.0 has a higher mass per unit volume than the reference substance and will therefore preferentially "sink" beneath the reference substance.

Toxicological Reference Value (TRV)/Acceptable Daily Intake (ADI)/Tolerable Daily Intake (TDI) is the maximum concentration of a substance that can be ingested daily over a lifetime without risk. It is expressed based in body weight.

Vapour Pressure is the pressure exerted by a chemical vapour in equilibrium with its solid or liquid form at any given temperature. It is used to calculate the rate of volatilization of pure substance from a surface, or to estimate a Henry's Law constant for chemicals with low water solubility. The higher the vapour pressure, the more likely a chemical is to exist in a gaseous state.

Abstract for Identified Chemicals of Concern

Benzene

Chemical Formula: C_6H_6

Human Carcinogenicity: Known Carcinogen

Benzene is a well-known petroleum hydrocarbon and is a known carcinogenic, based on numerous toxicity studies. The odour threshold is 1.5 ppm. The current Alberta Tier 1 Guidelines for benzene in soil and groundwater are 0.078 mg/kg and 0.005 mg/L. The 1-hour Alberta Ambient Air Quality Objective for benzene is 0.009 ppm. The Alberta 8-hour occupational exposure limit is 0.5 ppm. Benzene is on Health Canada's Cosmetic Ingredient Hot List and Canada's National Pollutant Release Inventory.

12-435

B-3

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Carbon DisulfideChemical Formula: CS₂

Human Carcinogenicity: Non-Carcinogenic

Carbon disulfide has an odour threshold of 0.016 ppm. Currently, there are no guidelines or standards in Alberta for carbon disulfide in soil and water; the 1-hour average Alberta Ambient Air Quality Objective is 0.010 ppm. The Alberta 8-hour occupational exposure limit is 1 ppm. Carbon disulfide is not classified as toxic under the Canadian Environmental Protection Act (1999). Carbon disulfide is included in Health Canada's Cosmetic Ingredient Hotlist.

ChloroethaneChemical Formula: C₂H₅Cl

Human Carcinogenicity: Not Classified

Chloroethane has an odour threshold of 4.2 ppm. There are no published standards or guidelines in Alberta for chloroethane in soil or groundwater. British Columbia and the State of New Jersey have implemented an interim water guideline of 0.005 mg/L. The Alberta 8-hour occupational exposure limit is 100 ppm. Chloroethane is on Canada's National Pollutant Release Inventory.

ChloroformChemical Formula: CHCl₃

Human Carcinogenicity: Possible Carcinogen

Chloroform is a chlorinated hydrocarbon. The established odour threshold is 85 ppm. The current Alberta Tier 1 Guidelines for chloroform in soil and groundwater are 0.0010 mg/kg and 0.0018 mg/L, respectively. The Alberta 8-hour occupational exposure limit is 10 ppm. Chloroform is on Health Canada's Cosmetic Ingredient Hot List and Canada's National Pollutant Release Inventory.

ChloromethaneChemical Formula: CH₃Cl

Human Carcinogenicity: Not Classified

Chloromethane has an odour threshold of 10 ppm. There are no published standards or guidelines in Alberta for chloromethane in soil and groundwater. The State of New Hampshire has implemented a drinking water guideline of 0.03 mg/L. The Alberta 8-hour occupational exposure limit is 50 ppm. Chloromethane is on Canada's National Pollutant Release Inventory.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

B-4

Cyclohexane
Chemical Formula: C_6H_{12}
Human Carcinogenicity: Not Classified

Limited information exists regarding cyclohexane. The established odour threshold is 0.41 ppm. There are no published standards or guidelines in Alberta for cyclohexane in soil or groundwater. The Alberta 8-hour occupational exposure limit is 300 ppm.

Dichlorodifluoromethane
Chemical Formula: CCL_2F_2
Human Carcinogenicity: Non-Carcinogenic

Dichlorodifluoromethane (Freon 12) is part of a group of synthetic chemicals called Chlorofluorocarbons (CFC's). An odour threshold for Freon 12 has not been established. Currently, there are no published guidelines or standards in Alberta for Freon 12 in soil or groundwater. The Alberta 8-hour occupational exposure limit is currently 1,000 ppm.

cis-1,2-Dichloroethylene
Chemical Formula: $C_2H_2Cl_2$
Human Carcinogenicity: Not Classified

cis-1,2-Dichloroethylene is a chlorinated hydrocarbon with an odour threshold of 0.085 ppm. There are no published standards or guidelines in Alberta for cis-1,2-dichloroethylene in soil or groundwater. The Alberta 8-hour occupational exposure limit is 200 ppm.

trans-1,3-Dichloropropene
Chemical Formula: $C_3H_4Cl_2$
Human Carcinogenicity: Possible Carcinogen

trans-1,3-Dichloropropene is a chlorinated hydrocarbon. The established odour threshold is 1 ppm. There are currently no published standards or guidelines for trans-1,3-dichloropropene in soil and groundwater. The Alberta 8-hour occupational exposure limit is 1 ppm.

1,4-Dioxane
Chemical Formula: $C_4H_8O_2$
Human Carcinogenicity: Possible Carcinogen

1,4-Dioxane vapour has an odour threshold of 24 ppm. Currently, there are no published standards or guidelines in Alberta for 1,4-dioxane in soil or groundwater. Ontario's Ministry of the Environment has a Provincial Water Quality Guideline of 58 mg/L. The Alberta 8-hour occupational exposure limit is 20 ppm. 1,4-dioxane is included in Health Canada's Cosmetic Ingredient Hot List and Canada's National Pollutant Release Inventory. The US EPA is developing a cancer risk assessment for 1,4-dioxane (as of April 2012).

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

B-5

Ethanol
Chemical Formula: C_2H_6O
Human Carcinogenicity: Known Carcinogen

Ethanol has an odour threshold of 0.35 ppm. There are no published standards or guidelines in Alberta for ethanol in soil or groundwater. The Alberta 8-hour occupational exposure limit is 1,000 ppm.

Ethylbenzene
Chemical Formula: $C_6H_5CH_2CH_3$
Carcinogenicity: Possible Carcinogen

Ethylbenzene is a petroleum hydrocarbon and has an odour threshold of 2.3 ppm. The current Alberta Tier 1 Guidelines for Ethylbenzene in soil and groundwater are 0.21 mg/kg and 0.0024 mg/L, respectively. The 1-hour Alberta Ambient Air Quality Objective for Ethylbenzene is 0.460 ppm. The Alberta 8-hour occupational exposure limit is 100 ppm.

Heptane
Chemical Formula: C_7H_{16}
Human Carcinogenicity: Not Classified

Heptane vapour has an odour threshold of 220 ppm. There are no published standards or guidelines in Alberta for heptane in soil and groundwater. The State of New Jersey has adopted a groundwater standard of 0.1 mg/L. The Alberta 8-hour occupational exposure limit is 400 ppm.

Hexane
Chemical Formula: C_6H_{14}
Human Carcinogenicity: Non-Carcinogenic

Hexane vapour has an odour threshold of 130 ppm. There are no published standards or guidelines in Alberta for hexane in soil and groundwater. The Canadian Council for the Ministers of the Environment (CCME) recommends soil guidelines ranging between 0.49 to 21 mg/kg, depending on land use. The 1-hour average Alberta Ambient Air Quality Objective is 5.958 ppm. The Alberta 8-hour occupational exposure limit is 500 ppm.

Methane
Chemical Formula: CH_4
Human Carcinogenicity: Non-Carcinogenic

Methane is a common component of landfill gas. Methane vapour is colourless, odourless and classified as a non-toxic asphyxiant. No odour threshold has been established. There are no published standards or guidelines in Alberta for methane in soil and groundwater. The current Alberta 8-hour occupational exposure limit is 1,000 ppm. It is highly combustible with a lower explosive limit of 50,000 ppm in air (5% by volume).

12-435

B-6

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

Methylene ChlorideChemical Formula: CH_2Cl_2

Human Carcinogenicity: Possible Carcinogen

Methylene Chloride is a chlorinated hydrocarbon and had an odour threshold of 250 ppm. The current Alberta Tier 1 Guidelines for methylene chloride in soil and groundwater are 0.095 mg/kg and 0.05 mg/L, respectively. The Alberta 8-hour occupational exposure limit is 50 ppm. Methylene Chloride is on Health Canada's Cosmetic Ingredient Hot List and Canada's National Pollutant Release Inventory.

Methyl Ethyl KetoneChemical Formula: $\text{C}_4\text{H}_8\text{O}$

Human Carcinogenicity: Not Classified

Methyl Ethyl Ketone has an odour threshold established at 5.4 ppm. There are no published standards or guidelines in Alberta for methyl ethyl ketone in soil or groundwater. The Alberta 8-hour occupational exposure limit is 200 ppm.

2-PropanoneChemical Formula: $\text{C}_3\text{H}_6\text{O}$

Human Carcinogenicity: Not Classified

2-Propanone has an odour threshold of 20 ppm. There are no published standards or guidelines in Alberta for methyl ethyl ketone in soil or groundwater. The 1-hour Alberta Ambient Air Quality Objective is 2.4 ppm. The 8-hour occupational exposure limit is 250 ppm. Acetone is on Canada's National Pollutant Release Inventory.

StyreneChemical Formula: $\text{C}_6\text{H}_5\text{CH}=\text{CH}_2$

Human Carcinogenicity: Possible Carcinogen

Styrene has an odour threshold of 0.008 ppm. The current Alberta Tier 1 Guidelines for styrene in soil and groundwater is 0.80 mg/kg and 0.072 mg/L, respectively. The 1-hour Alberta Ambient Air Quality Objective is 0.052 ppm. The Alberta 8-hour occupational exposure limit is 200 ppm.

TetrachloroethyleneChemical Formula: $\text{Cl}_2\text{C}=\text{CCl}_2$

Human Carcinogenicity: Known Carcinogen

Tetrachloroethylene (PCE) is a chlorinated hydrocarbon and a known carcinogen. The established odour threshold is 1 ppm. The current Alberta Tier 1 Guidelines for PCE in soil and groundwater are 0.77 mg/kg and 0.03 mg/L, respectively. The Alberta 8-hour occupational exposure limit is 25 ppm. PCE is on Canada's National Pollutant Release Inventory.

12-435

B-7

ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

TetrahydrofuranChemical Formula: C_4H_8O

Human Carcinogenicity: Possible Carcinogen

Tetrahydrofuran vapour has an odour threshold of 30 ppm. There are no published standards or guidelines in Alberta for tetrahydrofuran in soil and groundwater. The Alberta 8-hour occupational exposure limit is 50 ppm.

TolueneChemical Formula: $C_6H_5CH_3$

Human Carcinogenicity: Not Classified

Toluene is a petroleum hydrocarbon with an odour threshold of 2.9 ppm. The current Alberta Tier 1 Guidelines for Toluene in soil and groundwater are 0.29 mg/kg and 0.024 mg/L, respectively. The 1-hour Alberta Ambient Air Quality Objective for Toluene is 0.499 ppm. The Alberta 8-hour occupational exposure limit is 50 ppm.

Trichloroethylene (TCE)Chemical Formula: $ClCH=CCl_2$

Human Carcinogenicity: Known Carcinogen

Trichloroethylene (TCE) is a chlorinated hydrocarbon and a known carcinogen. The established odour threshold is 28 ppm. The current Alberta Tier 1 Guidelines for TCE in soil and groundwater are 0.012 mg/kg and 0.005 mg/L, respectively. The Alberta 8-hour occupational exposure limit is 50 ppm.

TrichlorofluoromethaneChemical Formula: CCl_3F

Human Carcinogenicity: Non-Carcinogenic

Trichlorofluoromethane (Freon 11) is a CFC with an odour threshold of 5 ppm. Currently, there are no published guidelines or standards in Alberta for Freon 11 in soil or groundwater. The NIOSH 8-hour occupational exposure limit is currently 1,000 ppm.

TrichlorotrifluoroethaneChemical Formula: $C_2Cl_3F_3$

Human Carcinogenicity: Non-Carcinogenic

Trichlorotrifluoroethane (Freon 113) is a CFC with an odour threshold of 5 ppm. Currently, there are no published guidelines or standards in Alberta for Freon 113 in soil or groundwater. No occupational exposure guideline has been established.

12-435
ERMP - Lindsay Thurber Comprehensive High School Site
Historic Waste Disposal Sites, The City of Red Deer

B-8

1,2,4-Trimethylbenzene
Chemical Formula: C_9H_{12}
Human Carcinogenicity: Non-Carcinogenic

1,2,4-Trimethylbenzene has an odour threshold of 0.4 ppm. There are no published standards or guidelines for hexane in soil and groundwater. The United States Environmental Protection Agency (EPA) has adopted a drinking water guideline of 0.07 mg/L. The Alberta 8-hour occupational exposure limit is 25 ppm.

2,2,4-Trimethylpentane
Chemical Formula: C_8H_{18}
Human Carcinogenicity: Not Classified

Limited information exists regarding 2,2,4-trimethylpentane. No odour threshold for 2,2,4-trimethylpentane has been established. Currently, there are no published guidelines or standards in Alberta for 2,2,4-trimethylpentane in soil, water or air.

Xylenes
Chemical Formula: C_8H_{10}
Human Carcinogenicity: Not Classified

Mixed (or total) xylenes are composed of isomers o-xylene, m-xylene and p-xylene. Each isomer has an odour threshold of 0.5 ppm. The current Alberta Tier 1 Guidelines for Xylenes in soil and groundwater are 12 mg/kg and 0.3 mg/L, respectively. The 1-hour Alberta Ambient Air Quality Objective for Xylenes are 0.529 ppm. The Alberta 8-hour occupational exposure limit is 100 ppm.



152158710

152158710 REGISTERED 2015 05 29
CAVE - CAVEAT
DOC 1 OF 1 DRR#: C0BCF66 ADR/DK0ZAK
LINC/S: 0036686517 +

Tiamat Environmental Consultants Ltd.

Electronic Version 03

From: Charlene Thomas <charlene_thomas@xplornet.ca>
Sent: April 21, 2023 9:46 AM
To: Legislative Services <LegislativeServices@reddeer.ca>
Subject: [External] Waskasoo Redevelopment Plan - public hearings

RE: Waskasoo Redevelopment Plan (Bylaw 3567/A-2023)

The proposal by East Lincoln Properties to build two apartment buildings by Gateway School is a great idea. My understanding is that they would be 55+ buildings. I would hope that the design would be creative architecturally and complimentary to the area and include outdoor living spaces (eg. Balconies). It is a perfect location, accessible to trails, parks and downtown. It would be a great place to live and age in place for residents of the community. These residential buildings would be a great addition to Red Deer. Thank you.

Charlene Thomas

Sent from my iPad

From: Chris Olsen <olsencdel@gmail.com>
Sent: April 21, 2023 4:15 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Cc: Secretary@waskasoo.info
Subject: [External] 4240-59 street rezoning proposal

Dear Sirs:

Attached, please find my comments concerning the rezoning proposal and updated materials provided at the Apr 3rd Council Meeting.

Please acknowledge receipt.

Thanks!

Chris Olsen
5829-45 Avenue, Red Deer.
780-581-4430

Sent from my iPad

From: Chauntille Munchinsky <chauntille@gmail.com>
Sent: April 21, 2023 2:44 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Proposed zoning change of 4240 59 Street

Although I cannot attend the public hearing on May 3rd, I am writing to voice my strong opposition to the proposed change in zoning of 4240 59th Street.

With three children who attend Gateway School, I can attest to the terrible traffic situation that already exists in this neighborhood owing to the three large schools in close proximity. To add high density housing in this location will make a bad situation much, much worse. This will undoubtedly impact the safety of our children and make access to the Red Deer River, Kerry Wood Nature Centre, and McKenzie trails much more difficult. These natural areas are the pride of Red Deer and improve the wellbeing of our citizens.

Please take these concerns into consideration and reject the proposed change in zoning for this location.

Thank you,
Dr. Chauntille Munchinsky

From: Jane Reynolds <ejanereynolds@gmail.com>
Sent: April 21, 2023 1:55 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Land Use Bylaw Amendment 3357/A-2023 & Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

To the Mayor, City Counsellors & Planners for the city of Red Deer,

I am a long time resident of Central Alberta and thoroughly enjoy the Red Deer River valley whilst paddling through &/or walking & birding along the trails. I am concerned and dismayed to learn that the Waskasoo Area Development Plan & Land Use Bylaws may be changed for the development of apartment buildings, be they for "Seniors Residences" or any other type of residence. This area was protected by previous rules & guidelines developed by the city and was deemed as important in the 2016 Area Redevelopment Plan (ARP), so what has changed?

The proposed development will add more density to an already densely populated area, an area that is of importance to the health & vitality of the Red Deer River, the riparian area and the wildlife corridor. There will be less permeable surfaces for absorption & filtration of heavy rains that make their way to the river. This would add to sediments & pollution in the river, & possible instability of the bank. The city should look to preventing bank erosion as it is less damaging & less expensive than repairing it in the future. If anything this area should be naturalized. This would enhance the beauty & diversity of the area & be working with the natural environment instead of against it.

In summary I oppose the proposed changes to the zoning & ARP in the Waskasoo area.

EJ Reynolds

I did submit my comments on The Public Hearing Submission Form but I'm not sure if it worked so my apologies if you get this twice.

From: Fred Nordby <frednordby@gmail.com>
Sent: April 21, 2023 10:51 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] East. Lincoln Proposal

To the Council, City of Red Deer:

My wife and I, Elaine and Fred Nordby of 20 Asmundsen Ave, Red Deer, wish to register our **opposition** to the proposal to change the zoning of the parcel of land between Gateway School and the River, at 4240 59 St from P2 to R3. We regularly drive to Mackenzie Trails to walk most mornings and feel that a large commercial development, such as the one proposed at that location will **drastically** change conditions and the natural appeal of the area. One of the attractive features of the city of Red Deer is its attention in the past to maintaining and developing areas that allow the presence and development of nature with its great variety of plants and animals that we can all enjoy. Please do not allow this change to the zoning of this area. It is to the detriment of what makes Red Deer an attractive place to live.

As to the issue of providing housing which ostensibly seems to be behind the administration's recommendation, we expect this housing will be for "those who can afford it" due to the prime viewing location of this proposal. This will drive a further wedge between the "elite" and "the common man", something we do not need in Red Deer.

There are many other reasons for not allowing this request which others will no doubt be presented by residents of the area and others. We support those reasons as well.

Thank you for your consideration of this request.

Fred and Elaine Nordby

Sent from my iPad

From: Jenna Brotnov <jenna.brotnov@hotmail.com>
Sent: April 21, 2023 10:58 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Proposed Development

I oppose the changes and proposed development and zoning of area:
4240 59 street from PS to R3.

Jenna Brotnov

Sent from my iPhone

From: Lisa Verbisky <verbiskylisa@gmail.com>
Sent: April 21, 2023 12:15 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] East Lincoln Properties' proposal

Please see attached letter opposed to the proposal put forth by East Lincoln Properties'

Lisa Verbisky

From: Maureen McCall <mdmccall@yahoo.com>

Sent: April 21, 2023 4:47 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>

Subject: [External] opposed to re-zoning of Public Service Land to allow new apartment buildings along the Red Deer River west of Gateway School

Dear Red Deer City Council,

I am submitting this letter in OPPOSITION to the request by a developer to have public service land that is located between 59 St and the Kerry Wood Nature Centre re-zoned to allow construction of apartment buildings. I believe that this issue will be heard on May 3, 2023. This land is contained within the riparian corridor that makes up Red Deer's treasured Waskasoo Park system and is highly vulnerable to flooding and environmental degradation. If the developer is allowed to build apartment buildings here, Red Deer's incredible park system, biodiversity linkages and the public trail systems will be irreparably damaged. When (not if) flood damage occurs, will Red Deer tax payers end up bailing out the property developers?

With Capstone sitting empty, the Buffalo Hotel site about to come open for development and the multitude of commercial real estate in downtown Red Deer that is sitting empty and prime for re-development to breathe new life into our downtown core, our City Council should be encouraging/incentivizing developers to build high density housing units in those locations rather than within our public service land and park system.

Yours truly,
Dr. Maureen McCall, MD, MPH, CCFP
Palliative Medicine Physician

Maureen McCall
2 Savoy Crescent
Red Deer, AB T4N 0C9
CANADA
cell: (403) 597-5863

From: Sheldon Nadeau <snadeau1@telus.net>
Sent: April 21, 2023 12:02 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Cc: Kaisa Nadeau <kaisa.nadeau@telus.net>
Subject: [External] BYLAW NO. 3357 / A – 2023 - Waskasoo Rezoning

For Consideration by Red Deer City Council,

For 21 years I have called Red Deer my home and 19 of those years we have made my home in Waskasoo. It is here we are raising our family. It is a community our family enjoys with a great community. When we look at developments in the area, we consider in the context of two questions: What value does it bring to the community? What value does it bring to my family?

I spoke on this same issue approximately 10 years ago when this property was first requested for development and after considerable time my community concerns have not really changed.

Traffic

Our neighbourhood already has significant traffic problems. My family, and many other households, have young children. Our children play in our yards, on the streets, parks, and attend nearby schools by walking. With four schools, theatre, nature center, city yards, sports facilities, and major park areas, 45 Ave is a very busy road and not all motorists are careful drivers nor respect the neighbourhood and speed zones. Accidents are common and thankfully, so far, not with the children. The schools generate excessive traffic due to parent drop offs and student drivers. Some schools in the area do not have bussing services or students live outside of regional bus services so parent drop offs are quite excessive. Adding high density seniors housing to the end of these streets will only add to the traffic situation and congestion. How many thousands of heavy vehicle trips (handy buses) per month will this add? How many blurry eyed motorists will be driving through playground zones? How many staff and guests will be visiting daily? Getting in and out of our neighbourhood during school rushes is already a tedious task.

Environmental

The development area is known to be ex-military grounds and nearby contains both old city and military dumps. If I recall from previous studies, some of these locations were not specifically known. Ground disturbance is a concern regarding hazardous issues. Leave the sleeping dog lie as they say. We all know what happened in neighbouring cities (Calgary) where residential developments were allowed on contaminated lands. <https://www.thestar.com/calgary/2018/04/30/after-31-million-cleanup-former-refinery-site-in-calgary-to-reopen-as-park.html>

The property is adjacent to a riparian area. Riparian areas in modern times have been highly regulated for development and protected from disturbance.

The property is adjacent to an eroding river bank. The city has already made riparian interferences here to stabilize the embankment. In time, nature always wins, and the bank will erode toward the proposed development destabilizing the building site. We all know what happened in neighbouring cities (Edmonton) where residential developments were allowed on eroding river banks. <https://www.cbc.ca/news/canada/edmonton/oct-26-1999-landslide-sends-riverbend-homes-into-the-valley-1.3824342>

The development will also be nearby the Gaetz Lakes Bird Sanctuary. This park has special protections abided by across the region in regards to development and construction activities. Environmentalist actions are now enshrined in regulations across many jurisdictions to protect and enhance bird populations and facilitate seasonal migrations. The sanctuary is part of these projects and adjacent developments do not further those goals. Adding more nearby population will also increase the usage of the park. While we all want to enjoy nature, a nature preserve does not thrive with high human traffic. Additional park areas bordering the river, riparian areas, and bird sanctuary add to the value of the lands already set aside for these purposes. The idea that a suitable wildlife corridor adjacent to the developments or through a parking lot area between buildings per the project proposal is simply daft.



Neighbourhood

Waskasoo already has significant high density housing within its division and many of these properties are negative to our neighbourhood. Additional high density housing adds to this change of character. The property proposal is also out of character compared to neighbouring properties in that it will be adjacent to R1 areas and removed from other R3 areas.

Infrastructure

Waskasoo is an old neighbourhood with very aged infrastructure. I did not see in the proposal how the site would be serviced, but we already have problems with water, sewer, and power services. How is the capacity of existing services going to handle adding such a large development?

Past Decisions

This area is designated as park/public use and the previous councils that reviewed these applications agreed this is the best use of this land. Yet here we are again discussing these same applications every few years. Continually reopening these issues costs hundreds of residents time and energy and quality of life to respond. There are many areas in Red Deer that would provide a more suitable development location for the intended use and closer to services the residents will utilize.

Additional Developments

Parkland School has also planned to build a new admin building in the area. We must also be mindful of the impacts of this development to our community in conjunction with other development applications. Many of the same concerns will be raised in particular the additional traffic. Bringing in two high traffic developments will be really too much.

After years of consideration, I do not feel this development proposal brings additional value to our community. To register a clear position, we are opposed to the request to rezone this property.

Sincerely,
Mr. Sheldon Nadeau, P. Eng.
Mrs. Kaisa Nadeau, P. Eng.
& Family
4511 Moore Cr.

From: Neil Hill <neilhill@hotmail.ca>
Sent: April 21, 2023 9:41 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] 4240 59 St

I oppose the proposed development of a high density apartment building on the site of 4240 59 St. It does not fit the neighborhood, the roads in and out have no capacity to support such a development. There is no way anything other than a public park, sports field, day use, or at most a single story community enhancement such as a single story day care, long term care, small community centre, belongs on this site.

There should be not allowance of outside interests swaying what's best for the community for the short term financial gain of a small group of investors & developers.

The city and council are duty bound to protect this community from short sighted, self interests. The fact that a proposal to build such a development was even made shows with out a doubt zero respect for the area or the residents.

City council needs to stand up and deny this application & show integrity to the people of Waskasoo & the city as a whole.

- Neil Hill

From: Nicole Butler <mattnicolebutler@gmail.com>
Sent: April 21, 2023 11:14 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Zoning 4240 59 street proposal

To whom it may concern,

I oppose the changes and proposed development and zoning of area:

4240 59 street from PS to R3. This area should be used for something very specific since there are so many children there. This is the largest elementary school in Red Deer.

Nicole Butler

From: Olga C <olga5496@gmail.com>
Sent: April 21, 2023 12:40 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] The zoning of 4240 59 St

Hello,

We are a family of five and all of our three children attend either Gateway Christian school or Lindsay Thurber school. We would like to side with the residents of the Waskasoo Community to keep the zoning of 4240 59 St as Public Service.

With everyday commute to these schools we know firsthand how busy the streets of this community get on most mornings and afternoons. And we agree with the residents of the Waskasoo Community that increased population density will cause further traffic and parking difficulties and will have an adverse effect on the wildlife.

We would like to respectfully ask the council to reconsider and keep the zoning of this area at PS.

Best regards,
Olga Chintea
403-307-0046

--

**"We may throw the dice, but the Lord determines how they fall."
Proverbs 16:33 NLT**

From: Peter Slade <peterslade10@gmail.com>

Sent: April 21, 2023 1:33 PM

To: Council Agenda <CouncilAgenda@reddeer.ca>; Torben Andersen <torben_885@hotmail.com>;
Sheila Bannerman <sjbannerman@gmail.com>

Subject: [External] Land Land Use Bylaw 3357/A-2023 and Waskasoo ARP Bylaw 3567/A-2023 Public
Hearing Submission

Attached is the Woodlea Community Association's submission with respect to the above Public Hearing,
concerning East Lincoln Properties' proposed development at 4240 59 St.

Please acknowledge receipt of this submission.

Peter Slade, Chair

Woodlea Community Association

From: Rod Trentham <rod.trentham@gmail.com>
Sent: April 21, 2023 2:42 PM
To: Orlando Toews <Orlando.Toews@reddeer.ca>
Subject: [External] Comments Re: the East Lincoln Developments Zoning Change

Hello Orlando:

Attached please find my comments with regard to East Lincoln Developments proposed change to the Public Service (PS) Zoning to Residential medium Density (R-3) between Gateway Christian School and the Red Deer River.

Thanks!

From: Rod Trentham <rod.trentham@gmail.com>
Sent: April 21, 2023 3:16 PM
To: Vesna Higham <Vesna.Higham@reddeer.ca>
Subject: [External] Re: East Lincoln Development's Proposed Change to the Zoning from Public Service (PS)

Greetings Vesna:

Attached please find my letter.

I **strongly oppose** East Lincoln Development's proposed Zoning change from Public Service (PS) to Residential Medium Density (R-3) between Gateway Christian School and the Red Deer River for a myriad of reasons as outlined in my attached letter.

Thanks!

rodjt

2023 April 21

To: Orlando Toews, orlando.toews@reddeer.ca
City of Red Deer Planning Department

Re: East Lincoln Development Proposal to Change Zoning from PS to R-3

Greetings:

This Developer knew exactly how this land was zoned as Public Service (PS) before purchasing it to develop it as R-3 High Density Residential. This is far more than just a Waskasoo Community Association issue: it is a Waskasoo Park, Red Deer – and a regional issue – although it is the City who pays for Waskasoo Park since the Klein government terminated regional planning, ended the 33 year funding agreement after 11 years and cut municipal funding by 50% in 1994.

People move to Red Deer to retire, choose to stay here, or come to visit here because of Waskasoo Park and its many natural amenities, the Gaetz Lake Sanctuary, and the environmental sentinel that is the Kerry Wood Nature Centre. No City has anything like it. This proposal with 120 apartments will have a profound effect on the ecology of the area as has been mentioned over and over in most of the submissions:

- ❖ the impact of this development a mere 7.5 m from the river along this narrow wildlife corridor for plants, invertebrates, herptiles, mammals and birds will be profound.
- ❖ the loss of a permeable surface to the **Roof Top Effect** (non-permeable roofs, pavement, cement) will lead to a storm trunk gush during major rain events and will require more Rip Rap to armour this bend in the River – a barrier to wildlife.
- ❖ this area is an important buffer between the Gaetz Lake Sanctuary and the Red Deer River

Dangerous Precedent:

We lived for close to 30 years in old Deer Park – the Northwest which was less than a couple of streets wide along 30th Avenue from just north of Alliance Church at 39th Street to Ross Street. In 1987, construction started behind us continued most of the way to Delburne (the road at least). The City had a sign as you entered the neighbourhood, “No School is planned for this Neighbourhood” as they had in the Rosedale subdivision. When a school was later proposed for these large grass parks zoned Public Service (PS), residents adjacent along Dawson Street, Davison Drive and possibly Denison Crescent went ballistic. No school was built.

In Rosedale, homeowners surrounding the (PS) Lawn Grass Park on Ramsey Avenue, Raabis

. . . 2

Street, Reinholt Avenue and Reichley Street went ballistic when a Middle School was proposed. Rosedale ended up with a nice community centre, tennis courts, rinks, ball diamonds, soccer pitches and so on --without a school.

In Dawson Park, on the other hand there is no shelter; that ended up at Holy Family School on the south side of 39th Street. The outdoor rink is seldom used nor are the tennis courts. The ball diamonds, soccer pitches are used in the spring and early summer for leagues. The playgrounds, I am not sure (they are so safe and pretty boring now).

Deer Park does not have anywhere close to the population density of the Waskasoo Community. Perhaps a Developer could change the zoning from Public Service (PS) to Residential High Density (R-3) or (R-4) and build a six story apartment complex with underground parking to mitigate the roof top effect. The location is good: a small Mall just north on Davison; three or four blocks from the Deer Park Community Shelter and rink at Holy Family School; close to the Co-op Grocery Store and larger Co-op Mall with a neighbourhood health services, fast food restaurants, a neighbourhood pub and a gas bar.

And of course, money for the City coffers.

This is but one example of the possibilities. Look at all those Lawn Grass Parks or even wooded ones in the old neighbourhoods zoned PS. There are many other Lawn Grass parks zoned (PS) throughout the City of Red Deer that could be re-zoned R-3 or R-4 – without the ecological ramifications and impact of this proposal.

Thank you!

rodjt

Rod Trentham

4623 B 45th Street
Red Deer AB
T4N 1K3

c: 587.377.5555
rod.trentham@gmail.com

From: Sarah Heikkinen <Sarah.Heikkinen@novachem.com>
Sent: April 21, 2023 2:26 PM
To: Orlando Toews <Orlando.Toews@reddeer.ca>
Cc: Sarah Heikkinen <sarah_switz@hotmail.com>
Subject: [External] East Lincoln Properties' Proposed Amendments to the Waskasoo Area Redevelopment Plan

April 21, 2023

Dear Mr. Toews;

I reside within the Waskasoo neighborhood at 5541 45 Avenue, as property owner and have lived in Waskasoo for 7 years at this address. I am vehemently opposed to the any and all proposed changes to Land Use Bylaw 337-A-2023, and any amendment of the Waskasoo Area Development Plan to rezone 4240 59 street from PS to R3.

While I favor redevelopment over expanding urban sprawl, this proposed change does not add value to the greater community and serves only to drive profit for the developer. The area in question is on the north side of the Waskasoo neighborhood with no access to 67th street, and runs along 45th avenue. As many residents have highlighted, 45th avenue traffic is already congested due to traffic from three neighborhood schools, recreational amenities (Kerry Wood Nature Centre, McKenzie Trails, and ball diamonds), city parks nursery, Parkland C.L.A.S.S., and the Memorial Centre/Festival Hall. The age of the Waskasoo neighborhood predates engineering standards for roadways and infrastructure, yet 45th avenue remains a bus route and main artery for accessing the aforementioned schools, amenities, and residential areas within Waskasoo north of 67th street. In relation to other city "collector roads" 45th avenue is excessively narrow due to its vintage, with traffic studies showing that by design 45th avenue is often well beyond design capacity for its intended use. As a home owner on 45th avenue, I can tell you that it can take upwards of 15 minutes to get out of my driveway during peak periods; how then could emergency vehicles access areas like Moore Crescent or Waskasoo Crescent?

I have chosen to invest in property within the Waskasoo neighborhood because I want to live in a walkable and safe location, accessible to natural spaces, and for the appreciation of wildlife that comes with these features even within the city core. The land in question at 4240 59th street id directly along the South Bank Trail section of our city bike paths as they connect to Kerry Wood Nature Centre and the Gaetz Lakes Sanctuary. This walking path is used throughout the year by neighborhood residents and people from all over Red Deer to recreate and take in the river valley landscape. Development at the proposed site would require revision to this walking path, likely adding driveways or completely disconnecting it from the greater trail system. As residents of Waskasoo the solitude afforded by the ability to connect with nature by way of our parks trail system is core to our quality of life; a key factor in each of us choosing to invest in this neighborhood.

Not only do I live in Waskasoo, but I have chosen to raise my family here. My children have been afforded a great appreciation for the environment because of the green spaces in our city, we pick saskatoons along 45th ave opposite the parcel in question. Moose, deer, weasels, skunks, snakes, and foxes also reside along our river; for some residents walking our trails are their primary interactions with wildlife.

This is not simply a case of opposition to change, as many group submissions have detailed the risk to the sensitive riparian zone along Red Deer river, loss of enjoyment and quality of life for not only Waskasoo residents but all who enjoy our parks and trail system, risk to safety of residents od Waskasoo and employees of neighborhood amenities by exacerbating traffic congestion whereby ignoring lack of

access for emergency vehicles; and lastly, a precedent where PS land can quickly be rezoned in favor of a developer and against public interest.

Sarah Heikkinen
5541 45 Ave
Red Deer, AB
T4N 3L7

From: Taryn Gerock <tgsgsg61@outlook.com>
Sent: April 21, 2023 8:31 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] 4240 59th st

I oppose the proposed zoning changes from P3 to R3.

Kindly,
Taryn Gerock

Sent from my iPad

From: tracy g <tracy.graham24@hotmail.com>
Sent: April 21, 2023 10:27 AM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] zoning change from PS to R3

I absolutely OPPOSE the change of zoning at 4240 59st. beside Gateway Christian School. I am quite frankly shocked that this idea is even being entertained. Not only will it negatively impact the small, quiet community, it will negatively impact the wildlife. Please use common sense and don't let this go through.

Tracy Hill

From: John Bouw <johnbouw61@gmail.com>
Sent: April 21, 2023 3:08 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Cc: secretary@waskasoo.info
Subject: [External] Red Deer City Council Public Hearing May 3, 2023 5:00 PM

City Hall to consider Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023 to rezone a privately owned 1.6822 hectare (4.16 acre) parcel in Waskasoo from the PS-Public Service District to the R3-Residential (Multiple Family) District

I am very disappointed that the City of Red Deer Administration supports these amendments and the proposed apartment development!

The City of Red Deer has received an outpouring of letters and emails from concerned residents. They are all opposed to these amendments and the proposed development for a wide variety of reasons but the predominant ones are concerns with the Environment, Traffic, and Responsible Development.

In addition to these letters you have received letters from the Gaetz Lake Sanctuary Committee, Waskasoo Environmental Education Society, Red Deer River Alliance, Red Deer River Naturalists, and the Waskasoo Community Association, again all in opposition.

I myself have written previous letters of opposition so will not express my views and opinions in this letter again.

I am assuming the city has never received this amount of opposition to bylaw changes and a development, especially one on an Environmentally Sensitive Green Space adjacent to the Red Deer River. Changing land from PS to R3 is setting a very serious and dangerous precedent in Red Deer.

I am asking Red Deer City Council to defeat the 2 bylaws before you on May 3, 2023.

Sincerely

John Bouw
4592 Waskasoo Crescent
Red Deer
T4N 2M2
403-318-7651

From: Kelly Ostermann <kostermann@matrix-solutions.com>
Sent: April 21, 2023 3:42 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Cc: Orlando Toews <Orlando.Toews@reddeer.ca>; Tanya Kure <t.kure@eastlincolnproperties.com>
Subject: [External] Public Hearing May 3, 2023 - Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023

Good afternoon,

Please see the attached documents related to the Public Hearing for the rezoning of parcel at 4240 59 Street. If you have any questions please contact me at your convenience. Best regards,



Kelly Ostermann, M.Sc., P.Ag. | Principal Environmental Scientist
MATRIX SOLUTIONS INC. | Environment & Engineering
600, 214 - 11 Ave. SW, Calgary, AB T2R 0K1
D 403.261.5216 | **C** 780.719.8654 | **T** 403.237.0606
24-Hour Emergency Spill Response 1.877.774.5525
www.matrix-solutions.com

April 21, 2023

Version 1.0
Matrix 36199-510

Red Deer City Council
c/o Clerk, Legal & Legislative Services
Box 5008
Red Deer, AB
T4N 3T4

Subject: Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023 to Rezone a Parcel in Waskasoo from PS – Public Service District to R3 – Residential (Multiple Family) District; Property 4240 59 Street – Owner East Lincoln Properties Corp Public Hearing Council May 3, 2023

1 INTRODUCTION

East Lincoln Properties Corp., the registered owner of the above-mentioned property, commissioned Matrix Solutions Inc. to assist with their rezoning application, and review and evaluate the comments of the Waskasoo Community Association (WCA) and other stakeholders submitted to Council in opposition to the application.

1.1 Scope of Letter Report

In response to the comments, this letter provides an evaluation of the subject rezoning application with respect to certain aspects of the application. We have reviewed the following plans, reports, and materials, among other things: Municipal Development Plan, Waskasoo Area Redevelopment Plan (ARP), and Land Use Bylaw 3357/2006. This report provides expert opinion on the vegetation aspect of the project.

2 INFORMATION REVIEWED

The following information was reviewed:

1. The City of Red Deer City Council Meeting Agenda from Monday, April 3, 2023 – Council Chambers, City Hall and appended documents including:
 - ✦ Land Use Bylaw 3357/2006, and Waskasoo Area Redevelopment Plan Bylaw 3567/2016
 - ✦ East Lincoln Properties Rezoning application
2. Municipal Development Plan Bylaw 3404/2008
3. Waskasoo Community Association (WCA) summary of concerns (WCA 2023)

4. The letter report prepared by Chris Olsen subject “4240-59 Street, proposed amendments to the Land Use Bylaw and Waskasoo Area Redevelopment Plan (ARP)” (Olsen 2023)

3 EVALUATION

This evaluation focused on the concerns of the WCA and Olsen with respect to impacts on the green space and the riparian zone along the Red Deer River with a change in the land use zoning from PS to R3. Currently the East Lincoln Properties proposed rezoning area from PS-Public Service to R3-Multi Residential District. Zoning differences between PS and R3 are attached. Under PS, the permitted uses are recreation and sports activities; for R3 the permitted uses are multi-attached and multi-family buildings. Because the PS and R3 both include assisted living facilities, the R3 use proposed for an independent senior living accommodation has no material difference in the potential for riparian impact from the existing PS zoning.

There are no guidelines related to vegetation resources that are included in the Land Use Bylaw 3357/2006. The Municipal Development Plan Bylaw 3404/2008 states that the City of Red Deer “shall continue to use the Natural Area/Ecospace Classification and Prioritization System as one of the key elements in land use planning”. Bylaw 3404/2008 also states that lands adjacent to water courses require a strip of land dedicated as environmental reserve to provide a buffer and public access if the lands are subdivided.

The subject property is located approximately 25 m east of the Red Deer River within the City of Red Deer. The subject property is fenced, and is a flat tame grass area which appears to have served as a playground area for the Gateway Christian School (AEP 2012). The subject property is not within any vegetation species at risk ranges (SARA 2021) or any historical rare plant occurrences (ACIMS 2022). There are no wetlands within the subject property according to the ABMI and AMWI datasets (AMWI 2017 and ABMI 2021) or based on review available imagery.

Based on current zoning or a rezoning to R3, the riparian area will not be directly impacted. The project will avoid the riparian area and will also avoid the Municipal Reserve (MR) that is on the east side of 45 Avenue. The avenue and the MR are at least 30 m in width from the west edge of 45 Avenue, and will provide a buffer to the riparian zone. The potential rezoning to R3 and redevelopment will result to a change of stormwater management. Based on a shallow borehole drilling report done by Amec Foster Wheeler (2016), there is sand, gravel, and/or bedrock 2 to 3 m below ground surface along 45 Avenue in proximity to the subject property. This zone may or may not be hydrologically connected to the riparian zone; at this time, we have insufficient information to determine if there is a connection.

The subject property is privately owned, fenced, and is currently undeveloped. In the past the subject property was part of the adjacent school site and was used for recreational school activities but currently acts as an extension of the school grounds. While we have not visited the subject property, it is likely agronomic turf grasses with low species diversity. The loss of this area would not negatively impact the native vegetation species diversity in the area.

4 CONCLUSIONS

The following conclusions are drawn based on the evaluation:

- The proposed rezoning will not directly impact the riparian zone. Additional assessment would be required to determine connectivity of the sand, gravel, or bedrock zone to the riparian zone; however, this would have to happen if the parcel stayed zoned as PS and a discretionary use was proposed. This information would need to be integrated into stormwater management to ensure no indirect impacts to the riparian zone and we understand this to be part of the development permit application stage.
- The proposed rezoning will not have a negative impact on native vegetation diversity in the area.

5 CLOSURE

We trust that this letter report suits your present requirements. If you have any questions or comments, please call the undersigned at 403.237.0606.

Yours truly,

MATRIX SOLUTIONS INC.



Kelly Ostermann
Principal Environmental Scientist

KO/cl
Attachment

copy: Tanya Kure, East Lincoln Properties
Rick Grol, Planning and Development Consultant

VERSION CONTROL

Version	Date	Issue Type	Filename	Description
V1.0	21-Apr-2023	Final	36199-510 Vegetation LR 2023-04-21 final V1.0.docx	Issued to client

DISCLAIMER

Matrix Solutions Inc. certifies that this report is accurate and complete and accords with the information available during the project. Information obtained during the project or provided by third parties is believed to be accurate but is not guaranteed. Matrix Solutions Inc. has exercised reasonable skill, care, and diligence in assessing the information obtained during the preparation of this report.

This report was prepared for East Lincoln Properties Corp. The report may not be relied upon by any other person or entity without the written consent of Matrix Solutions Inc. and of East Lincoln Properties Corp. Any uses of this report by a third party, or any reliance on decisions made based on it, are the responsibility of that party. Matrix Solutions Inc. is not responsible for damages or injuries incurred by any third party, as a result of decisions made or actions taken based on this report.

ZONING DIFFERENCES

TABLE 1 Public Service and Multi Residential District Zoning Comparison

PS – Public Service (Institutional or Government) District	R3 Multi Residential District
<p>Permitted Uses:</p> <ul style="list-style-type: none"> • Recreation and sport activities operated or sponsored by a governmental body or agency for the participation of the public at large 	<p>Permitted Uses:</p> <ul style="list-style-type: none"> • Multi-attached building up to 35 units/ha • Multiple family building up to 35 units/ha
<p>Discretionary Uses:</p> <ul style="list-style-type: none"> • Assisted living facility • Campground • Day care facilities • Institutional service facility • Offices for community-oriented groups which have recreation as part of their programs • Private clubs or organizations • Retail sales of goods, excluding Cannabis Retail Sales, required in connection with a use approved under this table • Temporary care facility 	<p>Discretionary Uses:</p> <ul style="list-style-type: none"> • Assisted Living Facility, Day Care Facility, Day Care Adult, Temporary Care Facility, or place of worship or assembly • Multi-attached building over 35 units/ha • Multiple family building over 35 units/ha
<p>Regulations:</p> <ul style="list-style-type: none"> • Floor Area Minimum <ul style="list-style-type: none"> ✦ Not applicable, except for a unit in assisted living residence or retirement home 23.0 m² • Front Yard Minimum <ul style="list-style-type: none"> ✦ Subject to Development Authority approval • Side Yard Minimum <ul style="list-style-type: none"> ✦ Subject to Development Authority approval • Rear Yard Minimum <ul style="list-style-type: none"> ✦ Subject to Development Authority approval • Landscaped Area <ul style="list-style-type: none"> ✦ Subject to Development Authority approval • Parking Spaces <ul style="list-style-type: none"> ✦ Subject to sections 3.1 & 3.2 of the Land Use Bylaw 3357/2006 	<p>Regulations (Multi-attached & Multiple family):</p> <ul style="list-style-type: none"> • Floor Area Minimum <ul style="list-style-type: none"> ✦ Multi-attached: 60.0 m² per unit ✦ Multiple family building: 37.0 m² per unit ✦ Assisted living facility: 23.0 m² per unit • Front Yard Minimum <ul style="list-style-type: none"> ✦ Multiple family: 7.5 m subj to sec 5.7(2) and 3.19 • Side Yard Minimum <ul style="list-style-type: none"> ✦ Multi-attached: 1.8 m to 2.4 m ✦ Multiple family, Assisted Liv: 3 & 4 storey: 4.5 m • Rear Yard Minimum <ul style="list-style-type: none"> ✦ 7.5 m • Landscaped Area Minimum <ul style="list-style-type: none"> ✦ 35% • Parking Spaces <ul style="list-style-type: none"> ✦ Subject to sections 3.1 & 3.2 • Maximum Building Height <ul style="list-style-type: none"> ✦ Multiple family and Assisted living: 4 storeys • Site Coverage Maximum: <ul style="list-style-type: none"> ✦ 60%

Note: Adapted from City of Red Deer 2023

April 21, 2023

Version 1.0
Matrix 36199-510

Red Deer City Council
c/o Clerk, Legal & Legislative Services
Box 5008
Red Deer, AB
T4N 3T4

Subject: Land Use Bylaw Amendment 3357/A-2023 and Waskasoo Area Redevelopment Plan Amendment 3567/A-2023 to Rezone a Parcel in Waskasoo from PS – Public Service District to R3 – Residential (Multiple Family) District; Property 4240 59 Street – Owner East Lincoln Properties Corp Public Hearing Council May 3, 2023

1 INTRODUCTION

East Lincoln Properties Corp., the registered owner of the above-mentioned property, commissioned Matrix Solutions Inc. to assist with their rezoning application, and review and evaluate the comments of the Waskasoo Community Association (WCA) and other stakeholders submitted to Council in opposition to the application.

1.1 Scope of Letter Report

In response to the comments, this letter provides an evaluation of the subject property rezoning application with respect to certain aspects of the application. We have reviewed the following plans, reports, and materials, among other things: Municipal Development Plan, Waskasoo Area Redevelopment Plan (ARP), and Land Use Bylaw 3357/2006. This report provides expert opinion on the wildlife aspect of the project.

2 INFORMATION REVIEWED

The following information was reviewed:

1. The City of Red Deer City Council Meeting Agenda from Monday, April 3, 2023 – Council Chambers, City Hall and appended documents including:
 - ✦ Land Use Bylaw 3357/2006, and Waskasoo Area Redevelopment Plan Bylaw 3567/2016
 - ✦ East Lincoln Properties Rezoning application
2. Municipal Development Plan Bylaw 3404/2008
3. Waskasoo Community Association (WCA) summary of concerns (WCA 2023)

4. The letter report prepared by Chris Olsen subject “4240-59 Street, proposed amendments to the Land Use Bylaw and Waskasoo Area Redevelopment Plan (ARP)” (Olsen 2023)
5. Google Maps (street view) – Imagery at site was reviewed to look at topography and barriers to movement
6. Fish and Wildlife Internet Mapping Tool (FWIMT; AEP 2023) - FWIMT data were reviewed to determine if historical observations of wildlife species at risk (SAR) and wildlife habitat features (e.g., nests, leks, burrows, and dens) are within 1 km of the site (AEP 2023)
7. Landscape Analysis Tool (LAT; AEP 2021b). Provincial wildlife sensitivity data layers (AEP 2021c) were reviewed to identify provincially designated sensitive wildlife ranges, zones, and water bodies that overlap the site are within 1 km

3 CURRENT SITE CONDITIONS AND DISCUSSION

The subject property is located entirely within the sensitive raptor range (bald eagle) and the sharp-tailed grouse survey area (AEP 2023). No other provincially designated wildlife sensitivity areas overlap the subject property or are within 1 km. Wildlife SAR that have been historically observed within 1 km of the subject property as noted in the FWIMT data including American white pelican, bank swallow, common yellowthroat, ferruginous hawk, and pileated woodpecker (AEP 2023).

There is habitat for wildlife species in the area, mainly focused along the river. Raptor and other species could nest in the treed areas along the river and other species may use this area as a travel corridor. However, based on current zoning or a rezoning to R3, the riparian area will not be directly impacted. The project will avoid the riparian area and will also avoid the Municipal Reserve that is on the east side of 45 Avenue.

The main area for development is a flat tame grass area which appears to have served as a playground area for the Gateway Christian School (AEP 2012). Imagery at the subject property from Google Street View and Google Maps indicates that the school yard is currently surrounded with a chain link fence along the sides that parallel the road and river (i.e., west and south sides). The fence is not entirely continuous and while it would be a partial obstacle to movement by medium and large mammals, it would not stop movement of small animals (e.g., snakes and amphibians). The tame grass area that makes up most of the subject property can provide habitat for animals to forage and move across; however, it is very open and may be avoided due to predation risk. Under both PS and R3 zoning, this lower quality habitat could be removed and impacted.

4 ZONING DIFFERENCES

There is no specific mention of wildlife regulations in the documents reviewed. There are different types of buildings that are permitted under each zoning (e.g., assisted living facilities under PS, multi-attached building under R3) and the potential impacts on wildlife would depend on the end land use selected under each zoning scenario. In addition to different uses, the regulations under the R3 program are more prescriptive while the regulations under the PS designation are largely subject to Developmental Authority approval, meaning there is uncertainty in what could be developed under the PS zoning.

The City's Development Authority may require an environmental assessment as part of the development permit application process. If important wildlife habitat features (e.g., nests, dens) are identified near the subject property, proper mitigation measures could be considered by the Development Authority in the review of the development permit application. The applicant should work collaboratively with the City in that regard.

5 CONCLUSIONS

The following conclusions are drawn based on the findings of the wildlife assessment:

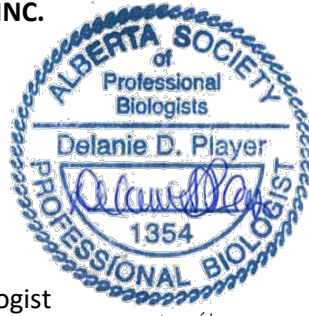
- Rezoning will not directly impact the riparian zone. As wildlife can experience indirect impacts such as sensory disturbance, there could be impacts to wildlife from development under both PS and R3 zones, depending on the development plan.
- Certain types of development allowed under both zoning scenarios could impact wildlife movement.
- There are different types of buildings that are permitted under each zoning designation (e.g., assisted living facilities under PS, multi-attached building under R3) and the potential impacts on wildlife would depend on the end land use selected under each zoning scenario.
- The regulations under the R3 program are more prescriptive while the regulations under the PS designation are largely subject to Developmental Authority approval, meaning there is uncertainty in what could be developed under the PS zoning.
- We understand that if additional assessments are required, they would be done as part of the development permit application stage.

6 CLOSURE

We trust that this letter report suits your present requirements. If you have any questions or comments, please call the undersigned at 403.237.0606.

Yours truly,

MATRIX SOLUTIONS INC.



Delanie Player
Principal Wildlife Biologist

April 21, 2023

DP/cl

copy: Tanya Kure, East Lincoln Properties.
Rick Grol, Planning & Development Consultant

VERSION CONTROL

Version	Date	Issue Type	Filename	Description
V1.0	21-Apr-2023	Final	36199-510 Wildlife LR 2023-04-21 final V1.0.docx	Issued to client

DISCLAIMER

Matrix Solutions Inc. certifies that this report is accurate and complete and accords with the information available during the project. Information obtained during the project or provided by third parties is believed to be accurate but is not guaranteed. Matrix Solutions Inc. has exercised reasonable skill, care, and diligence in assessing the information obtained during the preparation of this report.

This report was prepared for East Lincoln Properties Corp. The report may not be relied upon by any other person or entity without the written consent of Matrix Solutions Inc. and of East Lincoln Properties Corp. Any uses of this report by a third party, or any reliance on decisions made based on it, are the responsibility of that party. Matrix Solutions Inc. is not responsible for damages or injuries incurred by any third party, as a result of decisions made or actions taken based on this report.

From: Erin Black <erin.black@rdpsd.ab.ca>
Sent: April 21, 2023 2:04 PM
To: Council Agenda <CouncilAgenda@reddeer.ca>
Subject: [External] Letter of concern Re: Land Use Bylaw 3357/A-2023, and Waskasoo Area Redevelopment Plan Bylaw 3567/A-2023

Good afternoon,

Please see a letter of concern on behalf of Nicole Buchanan, Board Chair of Red Deer Public Schools regarding Land Use Bylaw 3357/A-2023, and the Waskasoo Area Redevelopment Plan Bylaw 3567/A-2023.

Thank you,
Erin

Erin Black
Communications Assistant

Red Deer Public Schools
4747 53rd Street
Red Deer, Alberta
T4N 2E6



April 21, 2023

Mayor Ken Johnston and Red Deer City Council
c/o Box 5008
Red Deer, Alberta
T4N 3T4

Re: Land Use Bylaw 3357/A-2023, and Waskasoo Area Redevelopment Plan Bylaw 3567/A-2023

Dear Mayor Johnston,

We are writing to express our concerns regarding the proposed amendments to the Waskasoo Area Redevelopment Plan and the City of Red Deer Zoning/Land Use Bylaws and the proposal put forward by East Lincoln Properties.

As Red Deer Public Schools has many facilities in the immediate area of this proposed development, we have concerns regarding student and pedestrian safety due to the increased volume in traffic this development will produce.

For background, Red Deer Public has two schools within the immediate area of 4240 59 Street, including Gateway Christian School, which is a Kindergarten to Grade 12 school, as well as Lindsay Thurber Comprehensive High School. The student population at Gateway is 565, while 1,440 students attend Lindsay Thurber.

Every school day, there are approximately 250 Gateway families who drop off and pick up their children, as well as six school buses carrying many children from across the city. These drop offs happen around the vicinity of the school, with some students having to cross the street or walk through the neighbourhood to get to the doors of Gateway.

At Lindsay Thurber, close to 300 students drive their own vehicles to school. In addition, 17 City Transit buses and four Prairie buses arrive and depart from the school each morning and afternoon. Again, many of our students cross the street or walk through the neighbourhood to get to the school.

The administration at Gateway Christian School have also had complaints from neighbours over the years regarding the high volume of traffic and parents parking or dropping students off in the residential areas. To help mitigate this, Gateway has directed parents to use the gravel parking lot. However, with another development in the immediate area like the proposed 120+ suite apartment building, this traffic could drastically increase.

In addition to Gateway and Lindsay Thurber, Red Deer Public's Facility Services building is located adjacent to The Memorial Centre. This building houses maintenance, tradesmen, and caretaking staff with their personal and work vehicles entering and exiting the area Monday to Friday.

The area is already congested, and has a high volume of traffic on school days. We are concerned that the area during construction of the site, as well as when residents move in, will become even more congested and student and pedestrian safety will be further compromised as a result.

The safety of our students and staff are of the utmost importance, and we hope you take our concerns into consideration when moving forward with this proposal.

Sincerely,

Nicole Buchanan,
Chair of the Board of Trustees



From: Susan J <susanj9@telus.net>

Sent: April 21, 2023 3:34 PM

To: Planning Services <Planning@reddeer.ca>

Subject: [External] Written Submission for May 3, 2023 Public Hearing; Proposed amendment to Waskasoo ARP and rezoning

Attached is my written submission for the above-captioned public hearing.

Susan Jensen
5829 45 Avenue
Red Deer Alberta
T4N 3M1

Thank you for the opportunity to submit written comments for the public hearing and to respond to materials in the First Reading Agenda package.

This letter supplements my previous submissions **OPPOSING** East Lincoln's two applications.

My concerns: Re the City Planning Report in the First Reading Agenda Package

The "Rationale for Recommendations" makes oversimplified generalizations. For example:

- (a) "Both the existing PS and proposed R3 zoning consider similar uses. Assisted Living Facility and Multi-Family apartment style uses are very similar in scale and use intensity". (Pg 27, Rationale for Recommendation #2).

1. Assisted Living is a DISCRETIONARY use for land zoned PS.

Discretionary Use means "a use of land [or] building ... that **may** be permitted by the Development Authority after due consideration is given to the impact of that use upon neighbouring land and other lands in the city (LUB s.2) PS zoning preserves discretion, notice and public input.

Council also needs to clearly send a message that a 'one-size-fits-all' label is not an appropriate analysis: thorough, far-thinking, careful, nuanced thought is critical for this parcel. The unique, special, and irreplaceable nature of the area where this parcel is situated, cannot be overstated.

2. PS zoning permits many uses: not just assisted living. Other uses include for example, recreation & sports use, various institutional service facilities (ex. library, museum, archives, health services) or a daycare.
3. Assisted living (and other PS uses) need not be apartment-sized, akin to R3 developments. For example, see the Harmony Cottage, supportive living care facility at 200 Inglewood Drive, Red Deer. See also the pictures and discussion of this point in the Waskasoo Community Association letter.

PS zoning permits discretion to address **appropriate size and siting**.

4. If this land were to be rezoned as R3, it can be developed in any manner that satisfies R3 zoning requirements.

This is not approval of a development application: it is an application to (a) rezone to R3 and (b) amend the ARP. It would render key characteristics of the Environmental Character Area Statement irrelevant and instead enable R3 requirements to "trump" them.

For a developer to look for "loopholes" that will allow him to maximize profit is not surprising. However, Council needs to balance this with the interests of

its other citizens and the larger community. Council needs to be careful not to be lulled by marketing photos and slogans to appeal to your emotions. Please look critically at what you are being asked to approve.

1. East Lincoln acknowledges that assisted living “is beyond the type of operation it is seeking to provide”. Its application is to build large apartments which it states it intends to market to “active seniors” or people age 55+. We do not oppose development or high-density apartments *per se*, but **do oppose inappropriate development at a location that does not make sense.** This is not about the merits of the type of development that the developer is proposing. It is an issue of the proposed site not being an appropriate location, the impact this development at this location will have on the larger community and the dangerous precedent this will set for development in the Environmental Character Area and Waskasoo generally.
2. R3 zoning obligates no more than compliance with R3 requirements. Thus, for example:
 - a. How would the City monitor or enforce any limit to the renter’s age or infirmity if the land is zoned R3?
 - b. What happens after the apartments are built, if the rental strategy changes (not limited by age, or infirmity). What would stop that from occurring if this lot is zoned R3?

5. Under Background – Strategic Alliance

No discussion or analysis is provided to explain how permitting amendments to the ARP that jeopardize the integrity of the Environmental Character Area, is congruent with “while continuing to protect and enhance the environment.”

6. Under Zoning versus Development

“The current issue is to determine if the development should occur under the PS district or under the R3 district. The PS district has few development standards; much is left to the discretion of the Development Authority. In contrast the R3 district has more detailed development standards regarding such things as building height, front, side and rear yards and landscaping. If the proposed rezoning and ARP amendments are approved, Administration believes concerns regarding impacts can be addressed at the DP (development permit) stage. “

Curiously the Planning Report does not provide any guidance to Council on the meaning of, or implications of the proposed ARP amendments the applicant is seeking. Nor is there any discussion of the pre-development

meeting (page 118 First Reading Agenda) and conclusion that the main concern would be compatibility with the neighbourhood and that the development the applicant proposes would not meet the Environmental Character Area.

East Lincoln's proposed amendments to the two listed sections of the Environmental Character Area add "subject to clauses" that render key characteristics of the Environmental Character Area irrelevant and instead replace them with R3 zoning requirements. In short, it would give East Lincoln a way to *pro forma* comply with the "Environmental Character" (keep the label), but then strip it of its defining aspects that add to the distinct character of the area; factors which should be considered when evaluating whether a proposed development complements or maintains the character of the neighbourhood. (ARP Appendix 1 at page 4). So, for example, although a distinctive characteristic of the Waskasoo Environmental Character area is its natural open space and that building heights are typically 1 storey – the "amended" Environmental Character Area, would now define the Environmental Character Area to say that a development "fits" if it is up to 4 stories high. Likewise with the proposed amendments to s.5.6 which address inappropriate setbacks from the road, excessive massing, form, height etc. that protect against negative impact on the streetscape and abutting properties. Instead R3 minimum requirements would now satisfy.

The Waskasoo ARP states that if there is a conflict between the ARP and the Land Use Bylaw, that the ARP governs. The East Lincoln amendments to the ARP "through the back door" reverses that priority by replacing the key ARP characteristic with whatever LUB requirements are, instead. There is no discussion of whether adoption of same will still permit or may thwart careful consideration of whether the proposed development complements or maintain the character of the neighbourhood and the precious Environmental Character Area.

Mature neighbourhoods like Waskasoo and the amazing parks and trail system that Red Deer so values as well as the importance and implications of the narrow riparian corridor at the location of the parcel, need to be thoughtfully addressed in approaching redevelopment.

What precedent would granting these applications set for the integrity of the ARP and the ARP process?

Diversity of neighbourhoods, preservation of what makes Red Deer stand out as providing its residents with an exceptional park and trail system and attendant health, quality of life and tourism spin-offs are also issues raised by

this application. **All parcels of land are not the same.** This is the critical question that should not be forgotten in this application.

I was surprised to see that more information from the Waskasoo ARP was not included in the First Reading Agenda package to provide Councillors with the context that they need to make an informed decision. (ex. the Objectives of the ARP at s.2.2 and page 8, discussion of the purpose of Character Statements (Appendix 1 page 1 – 4) and the complete Environmental Character Statement (Appendix 1 at pages 17 -19)

Nor was a map that clearly shows (a) the limited roads for access to Waskasoo generally, the schools and the parcel in issues; and (b) current zoning in Waskasoo (not just this parcel) included (See for example, the ARP at page 7).

The Waskasoo ARP can be viewed online at:

<https://www.reddeer.ca/business/planning/area-redevelopment-plans/>