




MACKENZIE COUNTY

**REGULAR**  
**COUNCIL**  
**MEETING**

**DECEMBER 14, 2021**  
**10:00 AM**

**FORT VERMILION COUNCIL  
CHAMBERS**

 780.927.3718

 [www.mackenziecounty.com](http://www.mackenziecounty.com)

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**Mackenzie County**



**17MACKENZIE COUNTY  
REGULAR COUNCIL MEETING**

**Tuesday December 14, 2021  
10:00 a.m.**

**Fort Vermilion Council Chambers**

**Fort Vermilion, Alberta**

**AGENDA**

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<b>CALL TO ORDER:</b>	1.	a) Call to Order	
<b>AGENDA:</b>	2.	a) Adoption of Agenda	
<b>ADOPTION OF PREVIOUS MINUTES:</b>	3.	a) Minutes of the November 30, 2021 Regular Council Meeting	7
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<b>CLOSED MEETING:</b>		<i>Freedom of Information and Protection of Privacy Act Division 2, Part 1 Exceptions to Disclosure</i>	
	4.	a) Labour Relations (s.23, 24, 27)	
		b) Municipal Planning Commission – Fort Vermilion Urban Development Standards (s.23, 24, 25 and 27)	
		c) Mackenzie County Legal Status Update (s.23, 24, 25 and 27)	
		d)	
<b>TENDERS:</b>		Tender openings are scheduled for 11:00 a.m.	
	5.	a)	
		b)	
<b>PUBLIC HEARINGS:</b>		Public Hearings are scheduled for 1:00 p.m.	
	6.	a) Bylaw 1242-21 Caribou Mountain Area Structure	27

Plan

		b)	Bylaw 1243-21 Land Use Bylaw Amendment Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 "RCR3" to Country Recreational "CREC"	169
<b>DELEGATIONS</b>	7.	a)	Long Service Award Presentations (10 a.m.)	
		b)		
<b>GENERAL REPORTS:</b>	8.	a)	CAO & Director Reports	185
		b)		
<b>AGRICULTURE SERVICES:</b>	9.	a)	None	
		b)		
<b>COMMUNITY SERVICES:</b>	10.	a)	Fort Vermilion Ice Plant Repairs – 2021 Budget Amendment - HANDOUT	
		b)		
		c)		
<b>FINANCE:</b>	11.	a)	Community Aggregate Levy Bylaw 1248-21	203
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		d)	Expense Claims – Councillors	259
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<b>OPERATIONS:</b>	12.	a)	None	
		b)		
<b>UTILITIES:</b>	13.	a)	None	
		b)		



<b>PLANNING &amp; DEVELOPMENT:</b>	14.	a)		
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<b>ADMINISTRATION:</b>	15.	a)	Bylaw 1240-21 Procedural Bylaw	263
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<b>COUNCIL COMMITTEE REPORTS:</b>	16.	a)	Council Committee Reports (verbal)	
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<b>INFORMATION / CORRESPONDENCE:</b>	17.	a)	Information/Correspondence	301
<b>NOTICE OF MOTION:</b>	18.	a)		
<b>NEXT MEETING DATES:</b>	19.	a)	Budget Council Meeting December 16, 2021 10:00 a.m. Fort Vermilion Council Chambers	
		b)		
<b>ADJOURNMENT:</b>	20.	a)	Adjournment	





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Carrie Simpson, Director of Legislative &amp; Support Services</b>
<b>Title:</b>	<b>Minutes of the November 30, 2021 Regular Council Meeting</b>

**BACKGROUND / PROPOSAL:**

Minutes of the November 30, 2021, Regular Council Meeting are attached.

**OPTIONS & BENEFITS:**

**COSTS & SOURCE OF FUNDING:**

**SUSTAINABILITY PLAN:**

**COMMUNICATION / PUBLIC PARTICIPATION:**

Approved Council Meeting minutes are posted on the County website.

**POLICY REFERENCES:**

Author: C. Simpson Reviewed by: \_\_\_\_\_ CAO: \_\_\_\_\_

**RECOMMENDED ACTION:**

- Simple Majority       Requires 2/3       Requires Unanimous

That the minutes of the November 30, 2021 Regular Council Meeting be adopted as presented.

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**MACKENZIE COUNTY  
REGULAR COUNCIL MEETING**

**Tuesday, November 30, 2021  
10:00 a.m.**

**Fort Vermilion Council Chambers  
Fort Vermilion, AB**

**PRESENT:**

Josh Knelsen	Reeve
Walter Sarapuk	Deputy Reeve
Jacque Bateman	Councillor - virtual
Peter F. Braun	Councillor
Cameron Cardinal	Councillor
Darrell Derksen	Councillor
David Driedger	Councillor
Garrell Smith	Councillor
Lisa Wardley	Councillor – virtual
Ernest Peters	Councillor

**REGRETS:**

**ADMINISTRATION:**

Len Racher	Chief Administrative Officer
Carrie Simpson	Director of Legislative Services
Jennifer Batt	Director of Finance
Jeff Simpson	Director of Operations
John Zacharias	Director of Utilities
Don Roberts	Director of Community Services
Caitlin Smith	Manager of Planning and Development
Grant Smith	Agricultural Fieldman
Willie Schmidt	Fleet Maintenance Manager
Sylvia Wheeler	Communications Coordinator
Colleen Sarapuk	Administrative Officer /Recording Secretary

**ALSO PRESENT:** Members of the Public

Minutes of the Regular Council meeting for Mackenzie County held on November 30, 2021 in the Council Chambers at the Fort Vermilion County Office.

**CALL TO ORDER:** 1. a) **Call to Order**

Reeve Knelsen called the meeting to order at 10:00 a.m.

**AGENDA:** 2. a) **Adoption of Agenda**

**MOTION 21-11-791** **MOVED** by Councillor Driedger

That the agenda be adopted with the additions;

12.a) Zama Snow Plow

**CARRIED**

**ADOPTION OF  
PREVIOUS MINUTES:**

**3. a) Minutes of the November 9, 2021 Regular Council Meeting**

**MOTION 21-11-792**

**MOVED** by Councillor Cardinal

That the minutes of the November 9, 2021 Regular Council Meeting be adopted as presented.

**CARRIED**

**ADOPTION OF  
PREVIOUS MINUTES:**

**3. b) Minutes of the November 19, 2021 Budget Council Meeting**

**MOTION 21-11-793**

**MOVED** by Councillor Peters

That the minutes of the November 19, 2021 Budget Council Meeting be adopted as presented.

**CARRIED**

**ADOPTION OF  
PREVIOUS MINUTES:**

**3. c) Business Arising out of the Minutes**

**OPERATIONS**

**12.a) Zama Plow Truck (Addition)**

**MOTION 21-11-794**  
Requires Unanimous

**MOVED** by Councillor Driedger

That administration bring budget options to a future council meeting for a plow truck for Zama.

**CARRIED**

**CLOSED MEETING:**

**4. Closed Meeting**

**MOTION 21-11-795**

**MOVED** by Deputy Reeve Sarapuk

That Council move into a closed meeting at 10:00 a.m. to discuss the following:

4.a) Land – La Crete Airport Lease Agreement – 1649808 AB Ltd.  
(s. 17)

\_\_\_\_\_  
\_\_\_\_\_

The following individuals were present during the closed meeting discussion. (MGA Section 602.08(1)(6))

- All Members of Council
- Len Racher, Chief Administrative Officer
- Jennifer Batt, Director of Finance
- Jeff Simpson, Director of Operations
- Carrie Simpson, Director of Legislative Services
- Don Roberts, Director of Community Services
- Caitlin Smith, Manager of Planning & Development
- Colleen Sarapuk, Administrative Officer
- Sylvia Wheeler, Communication Coordinator
- John Zacharias, Director of Utilities
- Willie Schmidt, Fleet maintenance Managers
- Grant Smith, Agricultural Fieldman

**MOTION 21-11-796**      **MOVED** by Councillor Braun

That Council move out of the closed meeting at 10:40 a.m.

**CARRIED**

**CLOSED MEETING:**      **4.a) Land – La Crete Airport Lease Agreement – 1649808 AB Ltd. (s. 17)**

**MOTION 21-11-797**      **MOVED** by Councillor Cardinal

That the request for the Airport Lease Agreement increase be denied.

**CARRIED**

Reeve Knelsen recessed the meeting at 10:41 a.m. and reconvened the meeting at 10:53 a.m.

**PLANNING & DEVELOPMENT:**      **14. d) Fort Vermilion School Division Bus Shelters**

**MOTION 21-11-798**      **MOVED** by Councillor Braun

That Mackenzie County support the bus shelters and enter into a Memorandum of Understanding with Fort Vermilion School Division.

**CARRIED**

**TENDERS:**      **5.a) None**

**PUBLIC HEARINGS:**      **6.a) None**

**DELEGATIONS** 7.a) None

**GENERAL REPORTS:** 8. a) **CAO & Director Reports for October, 2021**

**MOTION 21-11-799** **MOVED** by Councillor Peters

That the CAO & Director reports for October 2021 be received for information.

**CARRIED**

**AGRICULTURE SERVICES:** 9. a) None

**COMMUNITY SERVICES:** 10. a) **Fort Vermilion Ice Plant Repairs – 2021 Budget Amendment**

**MOTION 21-11-800** **MOVED** by Councillor Driedger  
Requires 2/3

That the Fort Vermilion Ice Plant Repairs – 2021 Amendment be TABLED until the December 14, 2021 Council Meeting.

**CARRIED**

**COMMUNITY SERVICES:** 10. b) **Hutch Dock Pilings – 2021 Budget Amendment**

**MOTION 21-11-801** **MOVED** by Councillor Cardinal  
Requires 2/3

That administration amend the 2021 Capital Budget – Hutch Dock piles by an additional \$3,580.00 with funding coming from the General Operating Reserve, and the Community Services Committee explore options to secure the dock at Hutch Lake.

**CARRIED**

**FINANCE:** 11. a) **Amend Policy FIN025 – Purchasing Authority Directive and Tendering Process**

**MOTION 21-11-802** **MOVED** by Councillor Wardley

That Policy FIN025 Purchasing Authority Directive and Tendering Process be amended as discussed and brought to the next council meeting for approval.



**CARRIED**

**FINANCE: 11. b) Financial Reports – January 1 – October 31, 2021**

**MOTION 21-11-803 MOVED** by Councillor Braun

That the Financial Reports for January - October 31, 2021 be received for information.

**CARRIED**

**FINANCE: 11. c) Flood Mitigation for Land Development Project Budget Amendment**

**MOTION 21-11-804 MOVED** by Councillor Cardinal  
 Requires 2/3

That the Flood Mitigation for Land Development Project be renamed Flood Mitigation and that the budget be amended to include \$12,800,000 with funding coming from the Conditional Grant Agreement with Alberta Municipal Affairs for the relocation of residents from the flood plain.

**CARRIED**

**FINANCE: 11. d) Expense Claims – Councillors**

**MOTION 21-11-805 MOVED** by Councillor Braun

That the Councillor expense claims for October 2021 be received for information.

**CARRIED**

**FINANCE: 11. e) Expense Claims – Members at Large**

**MOTION 21-11-806 MOVED** by Councillor Braun

That the Member at Large Expense Claims for September 2021 be received for information.

**CARRIED**

**OPERATIONS: 12. a) None**

**UTILITIES: 13. a) None**

**PLANNING &  
 DEVELOPMENT:**

**14. a) Bylaw 1243-21 Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 “RCR3” to Country Recreational “CREC”**

**MOTION 21-11-807**

**MOVED** by Councillor Braun

That first reading be given to Bylaw 1243-21 being a Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 “RCR3” to Country Recreational “CREC”, subject to public hearing input.

**CARRIED**

Reeve Knelsen recessed the meeting at 11:51 a.m. and reconvened the meeting at 12:20 p.m.

**PLANNING &  
 DEVELOPMENT:  
 MOTION 21-11-808**

**14. b) Bylaw 1244-21 Land Use Bylaw**

**MOVED** by Councillor Braun

That first reading be given to Bylaw 1244-21 being to rescind Bylaw 1066-17 and to adopt Bylaw 1244-21 being the Land Use Bylaw as presented, subject to public hearing input.

**CARRIED**

**PLANNING &  
 DEVELOPMENT:**

**14. c) Bylaw 1245-21 Municipal Development Plan**

**MOTION 21-11-809**

**MOVED** by Councillor Braun

That first reading be given to Bylaw 1245-21 being to rescind Bylaw 735/09 and to adopt Bylaw 1245-21 being the Municipal Development Plan as presented, subject to public hearing input.

**CARRIED**

**ADMINISTRATION:**

**15. a) Community Streetscape Implementation Committee**

**MOTION 21-11-810**

**MOVED** by Councillor Cardinal

That the following Members at Large be appointed to the Community Streetscape Implementation Committee for a two-year term – November 30, to October 2023:

1. Carson Flett
2. Danny Friesen

3. Ilene Lizotte

**CARRIED**

**COUNCIL  
 COMMITTEE  
 REPORTS:**

**16. a) Council Committee Reports (verbal)**

**MOTION 21-11-811** **MOVED** by Councillor Derksen

That a letter be sent to corporate registries requesting the denial of the name change from Alberta Urban Municipalities Association to Alberta Municipalities due to the name being misleading.

**CARRIED**

**MOTION 21-11-812** **MOVED** by Councillor Driedger

That the Council Committee Reports be received for information.

**CARRIED**

**MOTION 21-11-813** **MOVED** by Councillor Driedger

That a letter be sent to the Minister of Justice and Solicitor General outlining the successes with RCMP and the oversight of the real problem which is justice.

**CARRIED**

**MOTION 21-11-814** **MOVED** by Councillor Wardley

That Council be authorized to attend the March 9, 2022 Provincial Policing Engagement session.

**CARRIED**

**COUNCIL  
 COMMITTEE  
 REPORTS:**

**16. b) Municipal Planning Commission Meeting Minutes**

**MOTION 21-11-815** **MOVED** by Councillor Peters

That the Municipal Planning Commission meeting minutes of November 3 and 18, 2021 be received for information

**CARRIED**

**INFORMATION /  
CORRESPONDENCE:**

**17. a) Information/Correspondence**

**MOTION 21-11-816**

**MOVED** by Councillor Braun

That the information/correspondence items be accepted for information purposes.

**CARRIED**

**NOTICE OF MOTION:**

**18. a) None**

**NEXT MEETING  
DATE:**

**19. a) Next Meeting Dates**

Budget Council Meeting  
December 7, 2021  
10:00 a.m.  
Fort Vermilion Council Chambers

Budget Council Meeting  
December 8, 2021  
10:00 a.m.  
Fort Vermilion Council Chambers

**ADJOURNMENT:**

**20. a) Adjournment**

**MOTION 21-11-817**

**MOVED** by Deputy Reeve Sarapuk

That the council meeting be adjourned at 1:55 p.m.

**CARRIED**

These minutes will be presented to Council for approval on December 14, 2021.

\_\_\_\_\_  
Joshua Knelsen  
Reeve

\_\_\_\_\_  
Lenard Racher  
Chief Administrative Officer



**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Carrie Simpson, Director of Legislative &amp; Support Services</b>
<b>Title:</b>	<b>Minutes of the December 7-8, 2021 Budget Council Meeting</b>

**BACKGROUND / PROPOSAL:**

Minutes of the December 7-8, 2021, Budget Council Meeting are attached.

**OPTIONS & BENEFITS:**

**COSTS & SOURCE OF FUNDING:**

**SUSTAINABILITY PLAN:**

**COMMUNICATION / PUBLIC PARTICIPATION:**

Approved Council Meeting minutes are posted on the County website.

**POLICY REFERENCES:**

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**RECOMMENDED ACTION:**

- Simple Majority       Requires 2/3       Requires Unanimous

That the minutes of the December 7-8, 2021 Budget Council Meeting be adopted as presented.

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**MACKENZIE COUNTY  
BUDGET COUNCIL MEETING**

**Tuesday, December 7, - Wednesday December 8, 2021  
10:00 a.m.**

**Fort Vermilion Council Chambers  
Fort Vermilion, AB**

**PRESENT:**

Josh Knelsen	Reeve
Walter Sarapuk	Deputy Reeve
Jacque Bateman	Councillor – virtual
Peter F. Braun	Councillor
Cameron Cardinal	Councillor
Darrell Derksen	Councillor
David Driedger	Councillor
Garrell Smith	Councillor
Lisa Wardley	Councillor – virtual
Ernest Peters	Councillor

**REGRETS:**

**ADMINISTRATION:**

Len Racher	Chief Administrative Officer – virtual
Byron Peters	Director of Projects & Infrastructure
Jennifer Batt	Director of Finance
Jeff Simpson	Director of Operations
John Zacharias	Director of Utilities
Don Roberts	Director of Community Services
Caitlin Smith	Manager of Planning and Development
Willie Schmidt	Fleet Maintenance Manager
Carrie Simpson	Director of Legislative Services –December 8th
Colleen Sarapuk	Administrative Officer /Recording Secretary

**ALSO PRESENT:**

Minutes of the Budget Council meeting for Mackenzie County held on December 7-8, 2021 in the Council Chambers at the Fort Vermilion County Office.

**CALL TO ORDER:**

**1. a) Call to Order**

Reeve Knelsen called the meeting to order at 10:01 a.m.

**AGENDA:**

**2. a) Adoption of Agenda**

**MOTION 21-12-818**

**MOVED** by Deputy Reeve Sarapuk

That the agenda be adopted as presented.

**CARRIED****ADOPTION OF  
PREVIOUS MINUTES:**

3. a) None

**DELEGATIONS:**

4. a) None

**TENDERS:**

5.a) None

**PUBLIC HEARINGS:**

6.a) None

**GENERAL  
REPORTS:**

7. a) None

**AGRICULTURE  
SERVICES:**

8. a) None

**COMMUNITY  
SERVICES:**

9. a) None

**FINANCE:**10. a) Budget Council Meeting November 19<sup>th</sup>, - Follow up**MOTION 21-12-819****MOVED** by Councillor Braun

That the Budget Council Meeting follow up report be received for information.

**CARRIED****FINANCE:**

10. b) Bylaw 1246-21 Fee Schedule

**MOTION 21-12-820**  
Requires 2/3**MOVED** by Councillor Wardley

That first reading be given to Bylaw 1246-21 being the Fee Schedule for Mackenzie County.

Deputy Reeve Sarapuk requested a recorded vote.

<b>In Favour</b>	<b>Opposed</b>
Councillor Peters	Councillor Smith
Councillor Driedger	Deputy Reeve Sarapuk
Councillor Derksen	Councillor Cardinal
Reeve Knelsen	
Councillor Braun	
Councillor Bateman	
Councillor Wardley	



**CARRIED**

**FINANCE:**                    **10. c) Amend Policy ADM052 Electronic Access and Acceptable Use Policy**

**MOTION 21-12-821**        **MOVED** by Councillor Cardinal

That Policy ADM052 Electronic Access & Acceptable Use Policy be amended as discussed.

**CARRIED**

Reeve Knelsen recessed the meeting at 11:21 a.m. and reconvened the meeting at 11:35 a.m.

**FINANCE:**                    **10. d) Bylaw 1241-21 Honorariums and Related Expense Reimbursement for Councillors and Approved Committee Members**

**MOTION 21-12-822**        **MOVED** by Councillor Wardley  
 Requires 2/3

That first reading be given to Bylaw 1241-21 being the Honorariums and Related Expense Reimbursement Bylaw for Councillors and Approved Committee Members as amended.

**CARRIED**

**MOTION 21-12-823**        **MOVED** by Councillor Braun  
 Requires 2/3

That second reading be given to Bylaw 1241-21 being the Honorariums and Related Expense Reimbursement Bylaw for Councillors and Approved Committee Members as amended

**CARRIED**

**MOTION 21-12-824**        **MOVED** by Councillor Cardinal  
 Requires Unanimous

That consideration be given to go to third reading of Bylaw 1241-21 being the Honorariums and Related Expense Reimbursement Bylaw for Councillors and Approved Committee Members as amended, at this meeting.

**CARRIED**

**MOTION 21-12-825**        **MOVED** by Councillor Braun

Requires 2/3

That third and final reading be given to Bylaw 1241-21 being the Honorariums and Related Expense Reimbursement Bylaw for Councillors and Approved Committee Members as amended.

**CARRIED**

**MOTION 21-12-826**

**MOVED** by Councillor Driedger

That Covid-19 rapid testing to attend RMA in November 2021 be reimbursed to all Councillors that incurred costs.

**CARRIED**

Reeve Knelsen recessed the meeting at 11:55 a.m. and reconvened the meeting at 12:26 p.m.

Councillor Bateman left the meeting at 11:55 a.m.

**FINANCE:**

**10. e) Amend Policy PW004 Winter Road Maintenance and Snowplow Indicator**

**MOTION 21-12-827**

**MOVED** by Councillor Wardley

That Policy PW009 Winter Road Maintenance and Snowplow Indicator be amended as presented.

**CARRIED**

**FINANCE:**

**10. f) Draft 2022 Operating Budget**

**MOTION 21-12-828**

Requires Unanimous

**MOVED** by Councillor Cardinal

That the first reading be given to Bylaw 1247-21 being a Community Aggregate Levy.

**CARRIED**

**MOTION 21-12-829**

Requires Unanimous

**MOVED** by Councillor Braun

That the second reading be given to Bylaw 1247-21 being a Community Aggregate Levy.

**CARRIED**

**MOTION 21-12-830**

**MOVED** by Councillor Derksen

Requires Unanimous

That consideration be given to go to third reading of Bylaw 1247-21 being the Community Aggregate Levy.

**CARRIED**

**MOTION 21-12-831**  
 Requires Unanimous

**MOVED** by Deputy Reeve Sarapuk

That third and final reading be given to Bylaw 1247-21 being a Community Aggregate Levy.

**CARRIED**

Reeve Knelsen recessed the meeting at 1:46 p.m. and reconvened the meeting at 2:01 p.m.

Councillor Bateman rejoined the meeting at 2:00 p.m.

Reeve Knelsen recessed the meeting at 3:27 p.m. and reconvened the meeting at 3:38 p.m.

**MOTION 21-12-832**  
 Requires 2/3

**MOVED** by Councillor Braun

That the Track Sheet change #2 be approved as presented, and incorporated into the Draft 2022 Operating Budget.

**CARRIED**

**FINANCE:**

**10. g) 2022 Insurance Premiums**

**MOTION 21-12-833**  
 Requires 2/3

**MOVED** by Councillor Peters

That administration amend the County's 2021-2022 Insurance Property deductible to \$50,000 effective immediately.

**CARRIED**

**MOTION 21-12-834**

**MOVED** by Councillor Smith

That agenda item 10.h) to 10.m) be TABLED until Council reconvenes.

**CARRIED**

Reeve Knelsen recessed the meeting at 4:12 p.m. on December 7, 2021 and reconvened the meeting at 10:00 a.m. on December 8, 2021.

**FINANCE: 10. h) Dust Control (Oiled) Roads**

**MOTION 21-12-835** **MOVED** by Deputy Reeve Sarapuk

That the Dust Control (Oiled) Roads discussion be received for information.

**CARRIED**

**FINANCE: 10. i) Non Profit Organizations**

Reeve Knelsen recessed the meeting at 11:09 a.m. and reconvened the meeting at 11:18 a.m.

**MOTION 21-12-836** **MOVED** by Councillor Driedger  
 Requires 2/3

That the 2022 Non-Profit Organization grant funding recommendations be incorporated into the 2022 Draft Operating Budget.

**CARRIED**

**FINANCE: 10. j) Review 2021 One Time Projects – Carry Forwards**

**MOTION 21-12-837** **MOVED** by Councillor Peters  
 Requires 2/3

That the Water Diversion License Review Project be amended to include an additional \$10,000, with funding coming from the General Operating Reserve.

**CARRIED**

Reeve Knelsen recessed the meeting at 11:55 a.m. and reconvened the meeting at 12:30 p.m.

Councillor Cardinal left the meeting at 12:30 p.m.

**FINANCE: 10. k) 2022 One Time Projects**

**MOTION 21-12-838** **MOVED** by Councillor Braun  
 Requires 2/3

That administration incorporate the recommended 2022 One Time projects in the Draft 2022 Operating budget as discussed

**CARRIED**

**FINANCE: 10. l) Review 2021 Capital Projects – Carry Forwards**

Requires 2/3

**MOVED** by Councillor Braun

That the FV – Rural Truck Fill Pump Install Project be amended to include an additional \$10,000 with funding coming from the Water Sewer Infrastructure Reserve.

**CARRIED**

**MOTION 21-12-839**

**MOVED** by Councillor Wardley

That administration incorporate the 2021 Capital Carry Forward projects in the Draft 2022 budget as amended.

**CARRIED**

**MOTION 21-12-840**

**MOVED** by Councillor Driedger

That the review of the 2022 Capital Projects discussion be TABLED for a future council meeting.

**CARRIED**

**OPERATIONS:**

11. a) None

**UTILITIES:**

12. a) None

**PLANNING &  
 DEVELOPMENT:**

13. a) None

**ADMINISTRATION:**

14. a) None

**COUNCIL  
 COMMITTEE  
 REPORTS:**

15. a) None)

**INFORMATION /  
 CORRESPONDENCE:**

16. a) Budget Council Meeting November 19, 2021

**NOTICE OF MOTION:**

18. a) None

**NEXT MEETING  
 DATE:**

19. a) Next Meeting Dates

Regular Council Meeting  
 December 14, 2021  
 10:00 a.m.

Fort Vermilion Council Chambers

Budget Council Meeting  
December 16, 2021  
10:00 a.m.  
Fort Vermilion Council Chambers

**ADJOURNMENT: 20. a) Adjournment**

**MOTION 21-12-841 MOVED** by Councillor Driedger

That the council meeting be adjourned at 2:21p.m.

**CARRIED**

These minutes will be presented to Council for approval on December 14, 2021.

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Joshua Knelsen  
Reeve

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Lenard Racher  
Chief Administrative Officer

UNAPPROVED

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- Snow clearing of the access road, emails added to appendices:
  - At least until further development, there should be no issue with the Petro Canada performing the snow clearing as the access road only serves them.
- Section 4.1.7 regarding Solid Waste Management:
  - Added that each development will need to consider on-site solid waste storage and secure contracts for hauling waste to the Regional Landfill.
- Intersection Lighting, addressed in appendices:
  - Alberta Transportation does not require intersection lighting at this time, but the developer is open to upgrading at the time of future development.

Council has already given a rezoning to this entire parcel and the parcel to the South from Agricultural to Rural Industrial. At this time, if the applicant was to apply to further subdivide, they would be required to meet the conditions of approval and the Municipal Planning Commission would be the development authority. The uses within must comply with the uses within the zoning district.

**OPTIONS & BENEFITS:**

Options are to pass, defeat, or table second and third reading of the bylaw subject to additional information or amendments.

**COSTS & SOURCE OF FUNDING:**

Costs included advertising and adjacent landowner letters, which were borne by the applicant.

**SUSTAINABILITY PLAN:**

**Goal E1** That the Region’s transportation system:

- Reduces travel time and increases safe, comfortable, and efficient travel between its communities and between the County and major destinations beyond its borders.

**Strategy E3.1** Work with neighbouring First Nations and other parties to promote the link east to Fort Smith to the provincial, territories, and federal governments.

**Strategy E3.4** Work with the federal government, NWT, and First Nations and local residents to identify the best route to connect additional communities to Highway 58 at points east to Garden River and north to Fort Smith.

**COMMUNICATION / PUBLIC PARTICIPATION:**

Public Hearing is required prior to second and third reading of the bylaw.

**POLICY REFERENCES:**

Author:  N Friesen  Reviewed by:  C Smith  CAO:



**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That second reading be given to Bylaw 1242-21 being an Area Structure Plan for SW 5-110-13-W5M, as amended.

Simple Majority       Requires 2/3       Requires Unanimous

That third reading be given to Bylaw 1242-21 being an Area Structure Plan for SW 5-110-13-W5M.

**Author:** N Friesen      **Reviewed by:** C Smith      **CAO:** \_\_\_\_\_

**BYLAW NO. 1242-21**  
**BEING A BYLAW OF**  
**MACKENZIE COUNTY**  
**IN THE PROVINCE OF ALBERTA**

**TO ADOPT THE AREA STRUCTURE PLAN**  
**FOR SW 5-110-13-W5M FOR CARIBOU MOUNTAIN CENTRE**

**WHEREAS**, pursuant to the provisions of the Municipal Government Act, Revised Statutes of Alberta, 2000, Chapter M-26, Section 633 and amendments thereto, Council may adopt an Area Structure Plan;

**WHEREAS**, the Council of Mackenzie County has deemed it desirable to adopt an Area Structure Plan to guide the future development of SW 5-110-13-W5M;

**NOW THEREFORE**, be it resolved that the Council of Mackenzie County duly assembled, hereby enacts as follows:

1. That an Area Structure Plan for a Rural Commercial and Industrial subdivision on SW 5-110-13-WM be adopted as shown in Schedule A hereto attached.

READ a first time this 9<sup>th</sup> day of November, 2021.

PUBLIC HEARING held this \_\_\_ day of \_\_\_\_\_, 2021

READ a second time this \_\_\_ day of \_\_\_\_\_, 2021.

READ a third time and finally passed this \_\_\_ day of \_\_\_\_\_ 2021.

---

Joshua Knelsen  
Reeve

---

Lenard Racher  
Interim Chief Administrative Officer

---

---

**SCHEDULE "A"**

**CARIBOU MOUNTAIN CENTER AREA STRUCTURE PLAN  
FOR SW 5-110-13-W5M**

\_\_\_\_\_  
\_\_\_\_\_



# CARIBOU MOUNTAIN COMMERCIAL PARK

## AREA STRUCTURE PLAN

July 23, 2021



## **PREPARED FOR:**

Little Red River Group of Companies LP  
9402 114 Ave  
High Level, AB T0H 1Z0

Suite 200, 10345 - 105 Street NW, Edmonton, AB T5J 1E8 | T: 780.430.4041

File: 2847.0015.01

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# **INTRODUCTION**

## **1.1 PURPOSE AND SCOPE**

This Area Structure Plan (ASP) has been prepared for Little Red River Creen Nation (LRRCN) as required by Mackenzie County (County) for multi-parcel development. LRRCN has been working on several background and feasibility studies for the Caribou Mountain Commercial Park including a Conceptual Development Plan, Servicing Strategy, and a supporting Business Feasibility Study.

As shown in **Figure 1: Location Map**, the Caribou Mountain Commercial Park (the Lands) are approximately 160 acres, located northeast of the intersection of Highways 58 and Highway 88.

The Lands are being planned and constructed in several phases and will contain a mixture of commercial and industrial developments.

## **1.2 APPLICABLE POLICY**

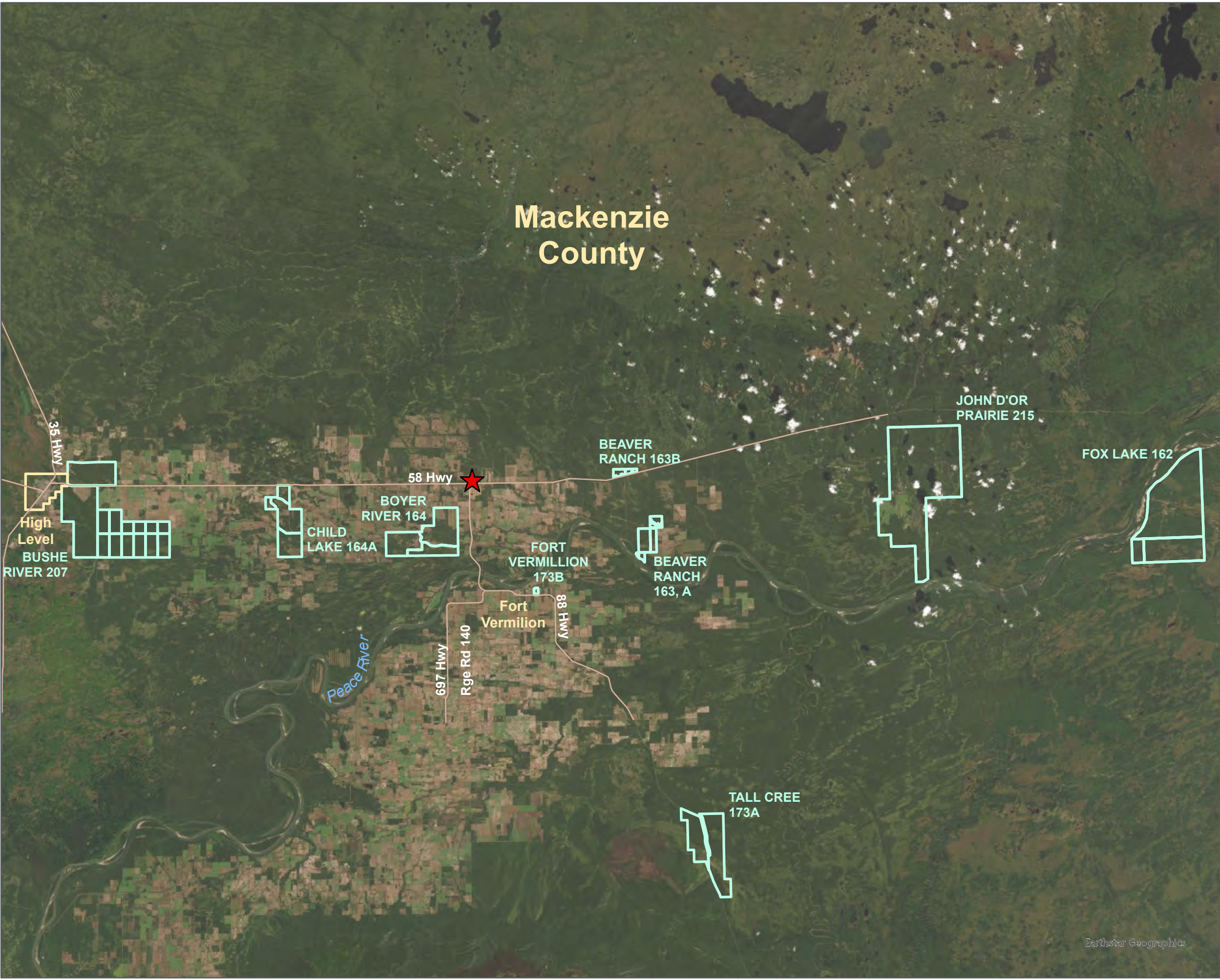
### **1.2.1 FEDERAL POLICY**

Where applicable, the Lands are subject to Federal Acts and Regulations. Examples of relevant applicable legislation include the Migratory Bird Convention Act and the Species at Risk Act. As this project is federally funded by Indigenous Services Canada, they will require an environmental Project Description Form to be submitted as part of the project deliverables.

### **1.2.2 PROVINCIAL POLICY (GOVERNMENT OF ALBERTA)**

The Lands are most directly affected by policies administered by Alberta Transportation and Alberta Environment and Parks. Any development within 800m of a provincial highway requires a Roadside Development Application to be submitted to Alberta Transportation for approval. As the Lands border Highway 58 along the length of the southern boundary, this requirement impacts development of the entire quarter section. It is likely that any Roadside Development permit application will also require submission of a Traffic Impact Assessment to ensure safe access and egress from the provincial highway. Alberta Transportation requires that the general minimum setback for all development is 70 metres from the highway centreline or no closer than 40 metres from the highway right-of-way boundary, except where these distances must be increased to allow for highway widening. Placement of any trees, hedges or shrubs within 30 metres from the highway right-of-way boundary, or 60 metres from the centre line of the highway, whichever distance is greater, is typically prohibited without a permit. Alberta Transportation will also dictate how many accesses are allowed from Highway 58 into the Lands. Their access management guidelines for a minor two-lane highway suggest that access to private lands are not permitted within 400m of a public road intersection and that one access per quarter section is most desirable. Alberta Environment and Parks oversees administration of the Water Act, which is triggered for any modification or removal of wetlands found within the Lands. They also oversee the Environmental Protection and Enhancement Act and Regulations which could be triggered if there is desire to install a communal water and sewer system within the Lands. Private sewage systems fall under the Alberta Safety Codes Council, another provincial body.





**Caribou Mountain Commercial Park  
 Location Map**

- ★ Caribou Mountain Commercial Park
- First Nation Reserve Boundary
- Municipal Boundary

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.

0 5 10  
 Kilometers

**Coordinate System:**  
 NAD 1983 CSRS UTM Zone 11N

**Data Sources:**

- Canada Lands 2020-09-24
- Abadata 2020-09-28
- National Hydro & Road Network

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Author:	SQ
Date:	2020 / 10 / 19



**FIGURE 1**



### 1.2.3 MUNICIPAL POLICY (MACKENZIE COUNTY)

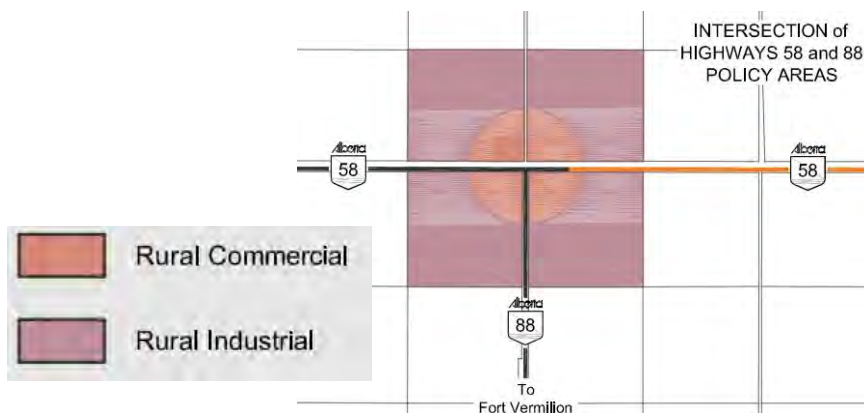
The Lands are fee simple and subject to the bylaws, policies, and procedures of Mackenzie County where they are located.

#### Municipal Development Plan (MDP)

The Municipal Development Plan (MDP) is the long-range, statutory document that is required to be adopted by Bylaw for all municipalities. The MDP communicates the long-term desired land use for the municipality and serves as a high-level blueprint showing how the municipality is expected to change over time and the shape it will take in the future.

The purpose of the MDP is to provide clear direction for Mackenzie County's Council and Administration. The Plan is intended to guide growth and development of the County to 2031 and to accommodate a population of 17,237. The MDP guides future development by defining the vision, principles, objectives, and policies of the County with respect to planning matters. The MDP, in addition to Provincial legislation, provides a foundation for the preparation of more detailed land use plans; is intended to be used in conjunction with Mackenzie County's Land Use Bylaw to implement its policies; and to inform residents and developers of Mackenzie County's future land use strategy. Any plan for future land use and development must be based on the MDP's vision of the future.

The MDP has designated the Lands at the junction of Highway 88 and 58 as Rural Industrial and Rural Commercial (**Figure 2**). This designation aligns with the proposed uses and general intent LRRCN has for the Lands. The MDP also contains general policies for industrial and commercial development that apply to those land uses throughout Mackenzie County.



**Figure 2. Mackenzie County MDP Policy Area around Highway 58/88 Intersection**

#### Land Use Bylaw (LUB)

The Land Use Bylaw (LUB) is a statutory plan adopted by Mackenzie County Council as a means to implement the MDP. The LUB divides the municipality into land use districts and establishes procedures for processing and deciding upon development permits and subdivisions. The LUB is the most consulted document by Mackenzie County's administration and the public when starting the development process. The Lands are currently designated as Rural Industrial General (RIG). The LUB states "*The purpose of the RIG district is to provide for heavy industrial uses on large land parcels, distant from residential uses, that utilize extensive outdoor storage areas and on-site operations are considered to be a nuisance to nonindustrial and residential uses.*"

## 2.0 EXISTING CONDITIONS

### 2.1 CONTEXT

#### 2.1.1 REGIONAL

The Lands are located within the jurisdiction of Mackenzie County. Mackenzie County has a population of over 12,000 and is bordered by the Province of British Columbia to the west, the Northwest Territories to the north, Wood Buffalo National Park and the Regional Municipality of Wood Buffalo to the east, and the Municipal District of Northern Lights No. 22, Northern Sunrise County, the Municipal District of Opportunity No. 17 to the south. The Town of High Level, the Town of Rainbow Lake and several First Nations are located within the boundaries of the County but operate independently from the municipality. Mackenzie County's has a diverse economy that includes agri-business, forestry, and oil and gas industries. With primary resources providing the economic base, the development of a strong support service sector has evolved. The diversified economic base provides the County with a balance of industries, and generally protects its economy from severe market fluctuations.

#### 2.1.2 LOCAL

The Lands are located at the junction of Highway 88 and 58. The town of High Level is located a 35-minute drive (58km) west along Highway 58, the Hamlet of Fort Vermillion is 15 minutes south (22km) along Highway 88 and the Nation's administration building is located 1 hour east (69km) along Highway 58 in John D'Or Prairie. The Lands remain mostly undeveloped with significant tree cover on most of the property and potential wetlands along the east and southeast portion. As shown in **Figure 3: Existing Conditions** the Caribou Mountain Travel Centre and CanGas Bulk Propane Storage are the first developments within the Lands and are in the southwest corner. Upgrades are currently underway to the highway intersection and a new public roadway is being added north of the Highway 88 and 58 junction to provide access to the Travel Centre, Propane Storage, and future planned developments.

#### 2.1.3 THE LANDS

The Lands are undeveloped with no known pipelines, oil wells or domestic gaslines that would impede future planning which allows for flexibility with future development. However, much of the land is not visible from Highway 58 or other road rights-of-way, this should be considered during development to ensure visibility of businesses for travellers. The site requires internal roadways to access most future development because of the large distance to the existing roadways.

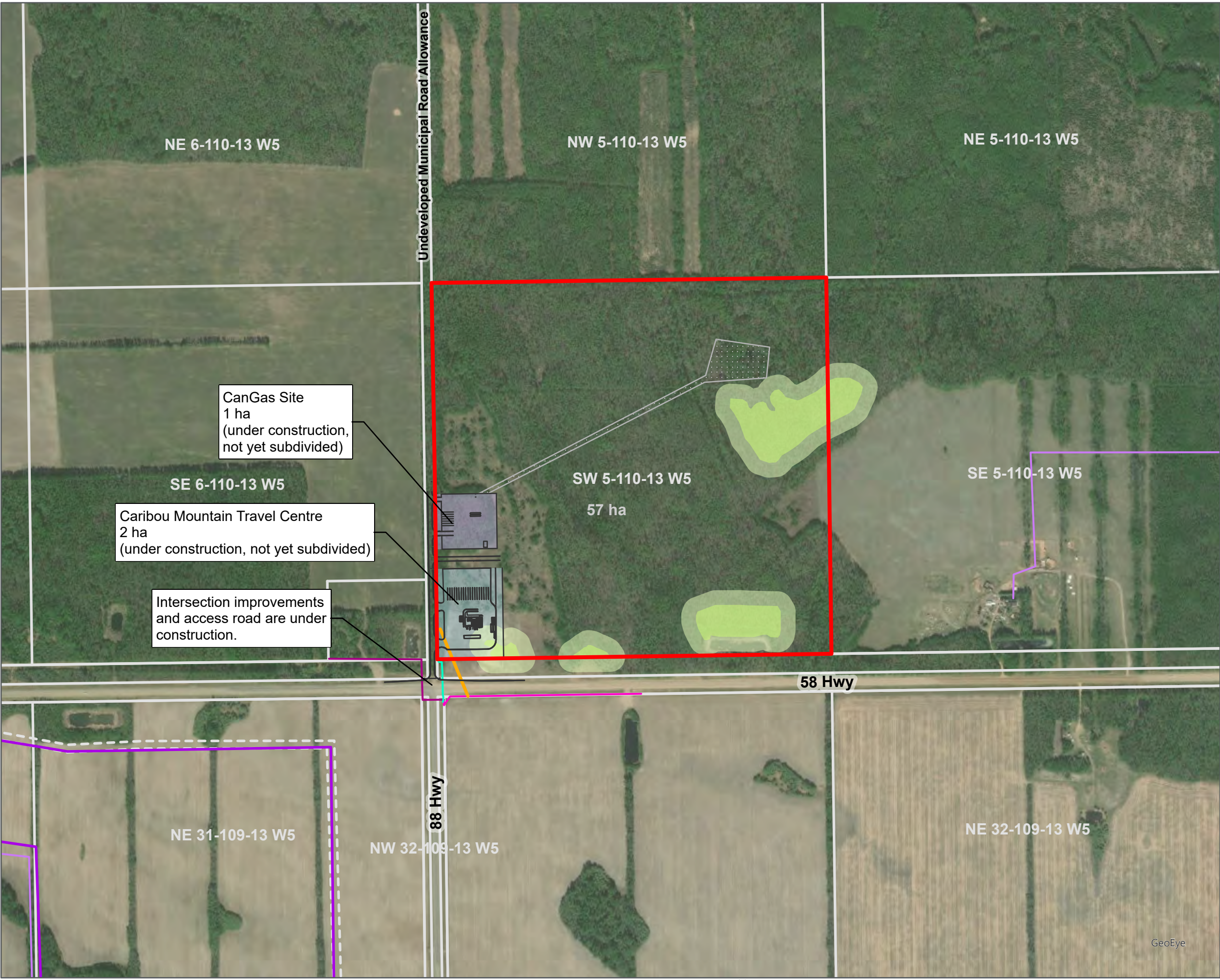
#### 2.1.4 TRANSPORTATION

The only current access to the Lands is at the junction of Highway 88 and 58, which is a major transportation route in the region. Improvements for the intersection have been planned and are currently being constructed. This includes upgrades from the existing Type IVa, three-legged intersection to a Type IVc, all directional intersection with widened tapers on the east and westbound lanes. Alberta Transportation has plans for a future overlay through this intersection in 2021 which will include lighting upgrades. There is an approximately 40 metre right-of-way north of Highway 58 (parallel) which allows for twinning of the highway in the future. Alberta Transportation has no current plans to twin Highway 58 east of the Highway 88 intersection, however,



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 Last exported by squalle on October 19, 2020 2:34 PM  
 Last printed by squalle on September 25, 2017 11:46 AM

U:\Projects\_EDM\2847\001\3\01\1D-Design\GIS\Projects\Pro\_...Projects\Little Red Caribou Mountain Base Map.aprx\Existing Conditions



**Caribou Mountain Commercial Park**  
**Existing Conditions**

- Site Boundary
- Oil & Gas Pipe
- Domestic Gas Pipe
- Temporary Road to Borrow Pit
- Overhead 1 Phase Power
- Overhead 3 Phase Power
- Underground 3 Phase Power
- Telecommunications
- Potential Wetlands
- Wetland 30m Offset

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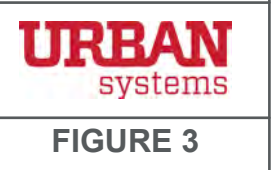
**Coordinate System:**  
 NAD 1983 CSRS UTM Zone 11N

**Data Sources:**

- Canada Lands 2020-09-24
- Abadata 2020-09-28
- National Hydro & Road Network
- ESRI Basemap Oct 2020
- Triton Environmental

Project #: 2847.0013.01  
 Author: SQ

Date: 2020 / 10 / 22





this additional 40 metre right-of-way sets development back on the property which affects visibility and exposure for future businesses that rely on passing traffic.

There will be few access points to the property from Highway 58 allowed due to intersection and driveway setback requirements. There are currently no internal roadways on the Lands, which will be required to access most future development.

### 2.1.5 PROGRAMMING

The Lands are designated as Rural Industrial General, which allows for a variety of permitted and discretionary programming. There is also the potential to capture traffic generated by the Caribou Mountain Travel Centre and provide additional services for travellers. Going forward, bylaw amendments may be required if land use deviates from the permitted and discretionary uses in the Mackenzie County Land Use Bylaw.

### 2.1.6 ENVIRONMENTAL CONSIDERATIONS

There are only two potential identified areas of environmental concern within the Lands, two diesel and gasoline above-ground storage tanks being used to support construction of the CanGas and Caribou Mountain Travel Centre. Once the tanks are removed, a limited Phase 2 Environmental Site Assessment is recommended to ensure there were no spills. Wetlands also exist on the property and a wetland assessment may be required by the Crown. The wetlands are mostly concentrated in the eastern and southern sections of the site. A field investigation was conducted in 2020 to clarify the extent of the wetlands, this is reflected in **Figure 3: Existing Conditions**.

The site is mostly tree-covered with some areas cleared or thinned in the southwest portion. However, significant tree clearing will also be required for future development and may trigger additional environmental investigations.

### 2.1.7 WATER AND SANITARY SERVICES

There is currently no piped water on the Lands. There is a proposed waterline within 5km, however the connection to the piped water could take many years to develop with significant capital investment and negotiation with Mackenzie County. Currently, there are no sewer services on the Lands.

### 2.1.8 POWER, GAS AND TELECOMMUNICATIONS

There is existing power, natural gas and communication utilities to the Lands (**Figure 3: Existing Conditions**). Power and fibre optic communications have been run into the southwest corner of the Lands to service the Caribou Mountain Travel Centre.

### 2.1.9 HISTORICAL AND ARCHAEOLOGICAL OVERVIEW

A historical and archeological assessment does not seem to have been completed for the Lands. This study will likely be required for the area structure planning process with Mackenzie County or to support future subdivision. Typically, this process starts with a review of the Province's Listing of Historic Resources by a qualified professional to determine the likelihood of historic resources within the site and if approval under the Historic Resources Act is required prior to development.

### 2.1.10 FIRE SMART

As the plan area develops over time, it's essential to ensure that emergency preparedness and fire prevention is incorporated into site design and development.

The proximity of the site to existing natural areas, as well as densely treed areas along with intensifying wildfire seasons in Northern Alberta emphasize the tangible threat of forest fires to the Lands. The ability of local emergency services to provide effective fire protection is largely dependent on future development patterns, access, and onsite mitigative measures.

FireSmart is a national initiative to reduce the vulnerability of buildings and property to the impacts of fire. Development on the Lands should consider the creation of defensible space by clearing plants and vegetation from within 10m of a structure, considering deciduous species when planting new trees (versus coniferous, which are highly flammable), and ensuring there are no trees or vegetation overhanging the roofs of structures. Detailed FireSmart standards should be consulted for future development.

## 3.0 LAND USE CONCEPT

### 3.1 LAND USE STRATEGY

The Land Use Strategy generally identifies the intended land uses and integrates the natural and man-made considerations of the land (**Figure 4: Land Use Plan**).

#### 3.1.1 COMMERCIAL

Highway commercial is the primary commercial use planned for the Lands. Highway commercial is planned along Highway 88 and will include a variety of commercial businesses targeting the traveling public. The MDP identifies rural commercial for the area's surrounding the Highway 88 & 58 junction, however, there is no Rural Commercial district in the LUB to provide direction on uses. A Highway Commercial district may be proposed in the future for the Lands to align with the purpose of the uses. These land uses could include:

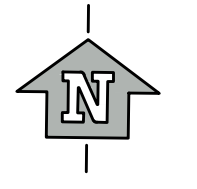
- Grocery Store
- Fast Food Restaurant
- Oil Change / Automotive Repair Centre
- Gas Station Card Lock
- Building Supply Centre

#### 3.1.2 INDUSTRIAL

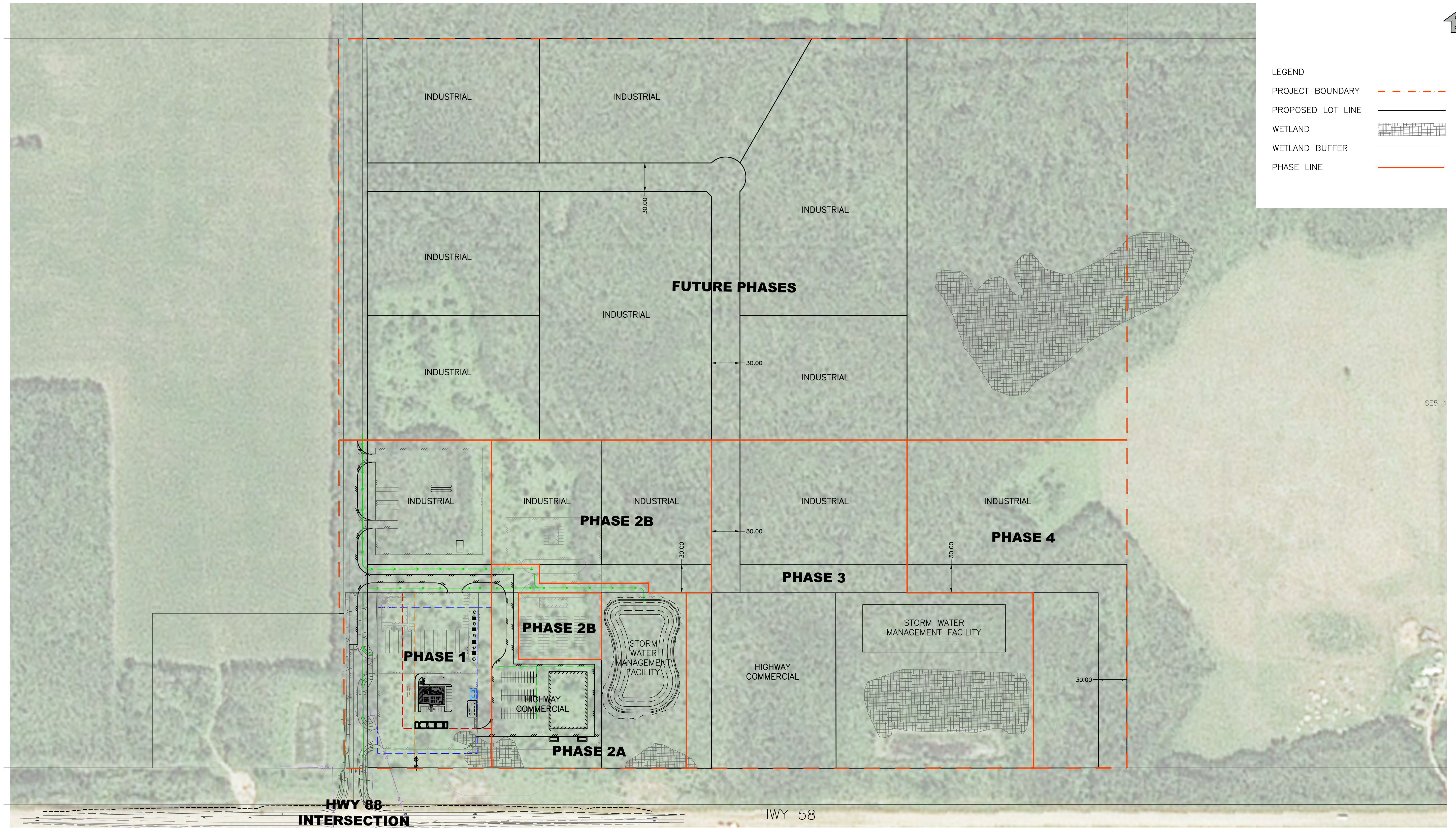
The primary use on the Lands is planned to be industrial. The Lands are designated as Rural Industrial General in Mackenzie County's Land Use Bylaw and will development in alignment with district's purpose. The purpose of the Rural Industrial General district is to provide for heavy industrial uses on large land parcels, distant from residential uses, that utilize extensive outdoor storage areas.



**OVERALL SITE PLAN**



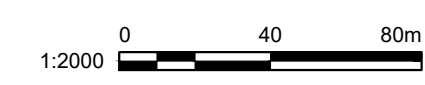
- LEGEND
- PROJECT BOUNDARY
  - PROPOSED LOT LINE
  - WETLAND
  - WETLAND BUFFER
  - PHASE LINE



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PRELIMINARY  
JULY 7, 2021  
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Client/Project	
LITTLE RED RIVER CREE NATION CARIBOU MOUNTAIN COMMERCIAL PARK	
Revision Date	Figure
2021-07-07	01
2847.0013.01	Title

**OVERALL SITE PLAN  
PRELIMINARY**



## 4.0 INFRASTRUCTURE SERVICING

### 4.1 TRANSPORTATION

#### 4.1.1 SITE ACCESS

The only access to the Lands is through the north leg of the Highway 58/88 intersection, which is currently under construction (**Figure 5: Infrastructure Servicing**). Highway 88 does not continue north of the intersection, instead it becomes a public municipal roadway owned and maintained by Mackenzie County. The existing right of way for this municipal roadway is currently 20m wide, however Mackenzie County has initiated a widening process to add 5m on either side for a total of 30m. The first 160m or so of the roadway will only have a 25m right of way as the County was not able to secure the additional 5m to the west from the existing parcel.

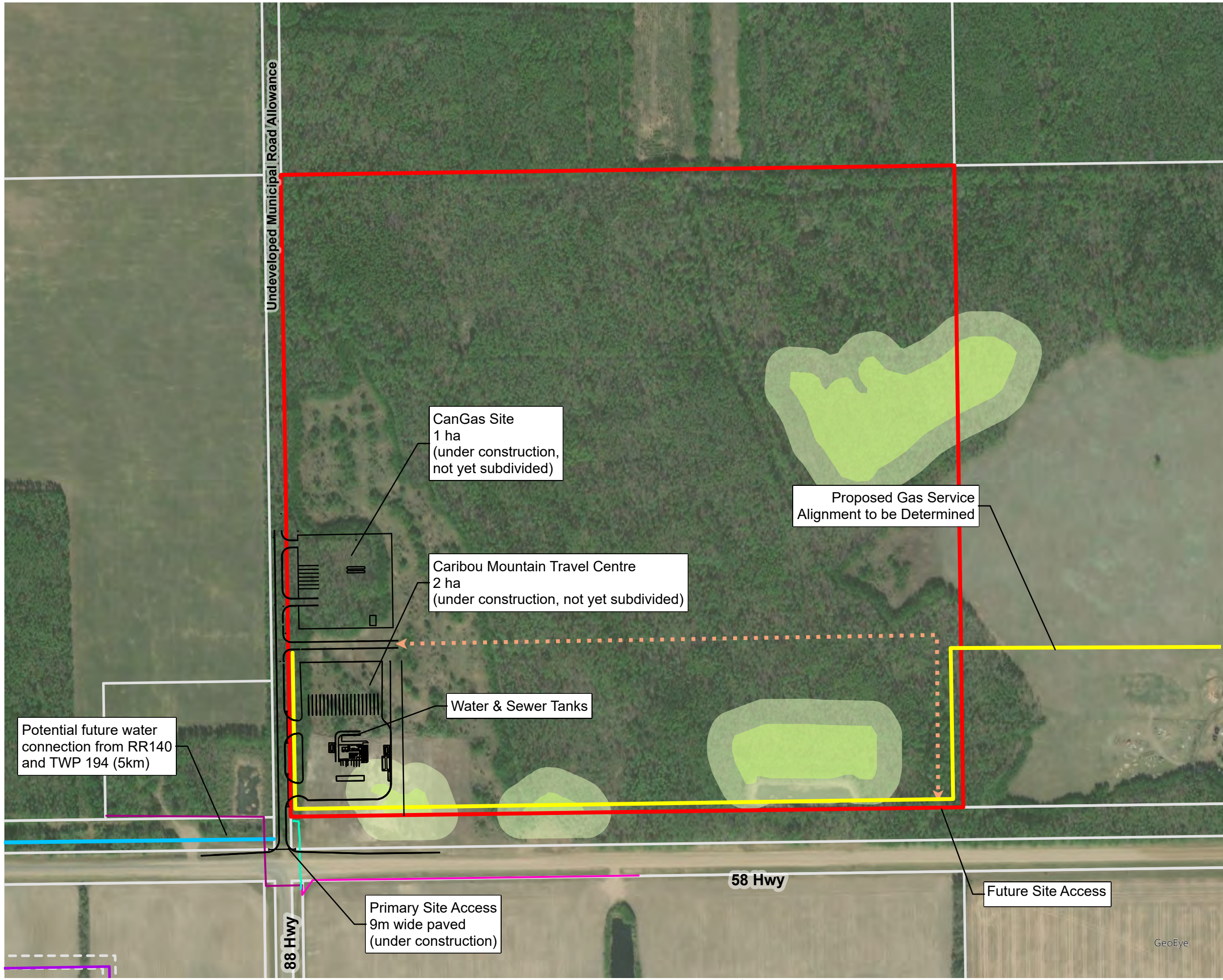
The municipal roadway will have a 9m wide paved surface. This is consistent with a Collector Rural Road Standard as identified in Mackenzie County's Rural Road, Access Construction and Surface Water Management Policy PW039 (**Figure 6**). This size of roadway is typically suitable for the type of large vehicle traffic that is expected to frequent the CanGas and Caribou Mountain Travel Centre.

**Mackenzie County Rural Road Standards/Specifications**

	Unit	Collector	Local Road
Road Top Width	m	9m	8m
Avg Height of Fill (min)	m	1.0m	0.9m
Normal Side Slope	run:rise	3:1	3:1
Normal Ditch Width (min)	m	3m	1-3m
Normal Back slope	run:rise	2:1	2:1
Compaction @ Construction	% of Standard Proctor Density	98%	97%
Moisture Content @ Construction	% of Standard Proctor Density	+ / - 1%	+ / - 3%
Rate of Regraveling		Up to 300m <sup>3</sup> /mi	Up to 200m <sup>3</sup> /mi
Private Approach Radius	m	12m	12m
Crown Rate (m/m)		3-4%	3-4%
Right of Way (min)	m	30m	20m

**Figure 6: Rural Road Standards/Specifications**





**Caribou Mountain Commercial Park**  
**Development Considerations**  
**Infrastructure Servicing**

- Site Boundary
- Future Servicing**
- Potential Future Water
- Proposed Gas Service
- Anticipated Continuation of Service Road
- Existing Utilities**
- Telecommunications
- Overhead 1 Phase Power
- Overhead 3 Phase Power
- Oil & Gas Pipe
- Potential Wetlands
- Wetland 30m Offset

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



**Coordinate System:**  
 NAD 1983 CSRS UTM Zone 11N

**Data Sources:**

- Canada Lands 2020-09-24
- Abadata 2020-09-28
- National Hydro & Road Network

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 Author: SQ

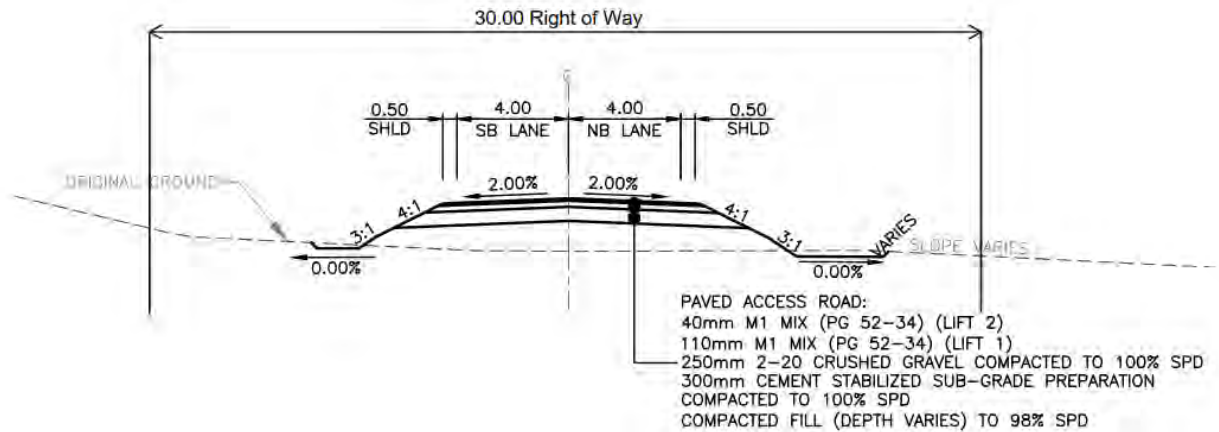
Date: 2020 / 10 / 22

**URBAN**  
 systems

**FIGURE 5**



An example of the cross section for this roadway is shown in **Figure 7**.



**Figure 7: Access Road North of Highway 58**

All future access points to the Lands are most likely to come from Highway 58 as the nearest municipal roadway is 1.6 km to the west (Range Road 140) and 2.4 km to the north (Township Road 1102). East of Highway 88, Highway 58 is considered a minor two-lane highway. Alberta Transportation's access management guidelines for a minor two-lane highway suggest that access to private lands are not permitted within 400m of a public road intersection and that one access per quarter section is most desirable.

There is an existing farm access to the quarter section south of the Lands located approximately 400m east of the Highway 58/88 intersection off Highway 58. This leaves the potential open for a future site access to the Lands at the same location. Otherwise, the only other access point that Alberta Transportation is likely to accept is 800m east of the Highway 58/88 intersection (at the quarter section line). Approval for either of these future access locations would require submission of a Roadside Development Permit application along with an updated Traffic Impact Assessment. The extent of upgrades to Highway 58 to support either of these access locations would depend on the anticipated traffic volumes generated by future development. Refer to **Figure 4: Land Use Plan** for existing and potential future access locations.

#### 4.1.2 INTERNAL ROADWAYS

There are currently no internal roadways that have been constructed within the Lands. An east/west 9m wide roadway is proposed in between the CanGas and Caribou Mountain Travel Centre that would tie into the north/south municipal roadway that is currently under construction. It is assumed that this proposed roadway will have a 30m right of way and a similar cross section to the north/south roadway.

Service roads are often constructed parallel to major provincial highways to provide safe access and egress to adjacent businesses. A service road was not proposed parallel to Highway 58 along the south boundary of the Lands as it would have pushed the Caribou Mountain Travel Centre (and future developments) too far away from Highway 58, reducing the visibility needed to encourage users into

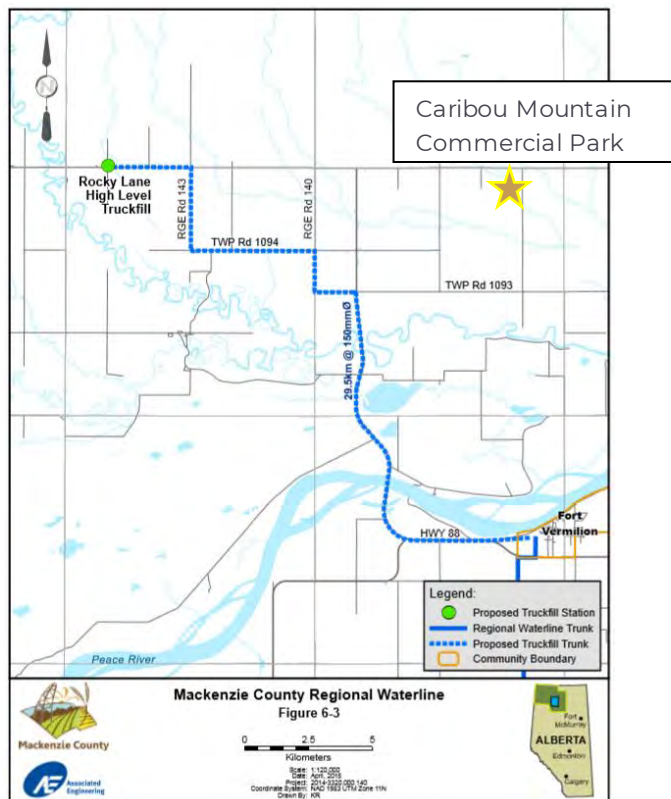
the site. Instead, a service road is anticipated along the north side of the Travel Centre as shown in **Figure 4: Land Use Plan** and would likely have a cross section similar to that shown in **Figure 7**.

A 30m right of way for internal roadways would allow for ditches on both sides of the road and opportunity for it to be used as a corridor for buried and/or overhead utilities (power, gas, communications, water, sewer, etc.). It is anticipated internal roadways would be owned and maintained by the County once constructed.

### 4.1.3 WATER SERVICING

Proposed buildings on the site including the Caribou Mountain Travel Centre will be serviced by a water cistern system. We understand that the option for a private water well was investigated as part of the servicing design for the travel centre, but discussions with local drillers and landowners (including LRRCN) identified poor groundwater quality in the area. The Class 'D' cost estimate assumes each individual lot will have an individual water system. The installation cost of each system was assumed to be the same, regardless of usage or type of structure on the lot.

A study was completed for Mackenzie County by Associated Engineering in 2015 that investigated the potential for regional potable water pipelines in the vicinity of LaCrete and Fort Vermillion (among other things). **Figure 8** shows the proposed alignment of a proposed potable water trunk main from Fort Vermillion to a proposed Rocky Lane Truckfill Station at Highway 58 and Range Road 145. This proposed alignment comes within approximately 5km of the Lands where it turns west down Township 1094 at Range Road 140. It is currently unknown what the status of this proposed waterline is. If the proposed uses within the Lands would significantly benefit from piped water, it is recommended that discussions are initiated with Mackenzie County to discuss the technical and financial implications of connection to this line.



### **Figure 8: Mackenzie County Proposed Waterline (Modified from Associated Engineering, 2015)**

If groundwater quality in the region is generally poor and the opportunity to connect to piped water is low, the only other feasible alternative may be trucked water for all future development on the site. This is typically the least costly and simplest to implement up front, but there can be operational implications and relatively high operations costs associated with trucking water.

Unless piped water is installed to the Lands, it is recommended that any future development is one that is not a large water user.

#### **4.1.4 SANITARY SERVICING**

With no piped sewer connections available nearby, each future development on the Lands will need to consider onsite private sewage treatment (i.e. septic fields, mounds or package treatment plants) or onsite holding tanks. The Alberta Private Sewage Systems Standards of Practice set out design standards, installation standards and material requirements for on-site private sewage systems handling less than 25 cubic metres (5,500 Imperial gallons) of sewage volume per day. The two options for sanitary servicing on the Lands are explained further below:

- Option 1: Each building on the Lands has on-site septic treatment (septic tank).
- Option 2: Gravity mains would be constructed in the short term, with holding tanks being at the location of the lowest elevation (i.e. the storm pond). These holding tanks will be replaced with lift stations once the piped system is installed.

As the desired uses for the Lands are defined, it would be important to determine if a private communal wastewater treatment system is warranted or if separate onsite systems are more practical for each development.

If groundwater quality in the region is generally poor and the opportunity to connect to piped water is low, the only other feasible alternative may be trucked water for all future development on the Lands. This is typically the least costly and simplest to implement up front, but there can be operational implications and relatively high operations costs associated with trucking water.

#### **4.1.5 GEOTECHNICAL**

ENC Testing completed a geotechnical site investigation in 2018 and 2020 to support the Caribou Mountain Travel Centre and access road design and construction. In general, the in-situ material was found to be suitable for construction. There were significant areas of previous fill found within the test areas that will require reworking as part of the site development. Due to the tree cover over the rest of the Lands, it is unlikely that additional fill material will be found. Groundwater elevations found in the test holes indicated levels were approximately 3.5m below the surface.

A site-specific geotechnical site investigation for any future development is recommended as ground conditions can vary drastically in different areas of the site.

#### **4.1.6 SITE TOPOGRAPHY AND STORMWATER MANAGEMENT**

**Figure 9: Stormwater Management** shows the existing ground topography within the site and the immediate surroundings. It also includes consideration for a future stormwater management facility location based on existing low spots in the landscape. The following provides a list of general considerations:

- The Lands are located at the southwest fringe of an unnamed creek's basin. This basin is quite large (about 44 km<sup>2</sup>) and the creek crosses Highway 58 about 4 km east of the site.
- The entire site drains south toward Highway 58, and only the quarter section to the north appears to drain through the site. All other areas around the site appear to drain directly toward the Highway, bypassing the site all together.
- We assume that any kind of stormwater management facilities within the Lands will not need to control offsite runoff from the quarter section to the north, and that only excess runoff from the Lands will need to be controlled. Stormwater management systems would need to be designed to allow pre-development off-site runoff to flow through, under the assumption that any kind of development in the quarter section to the north will include its own stormwater management controls to pre-development rates. Since this quarter section will inevitably flow through the site, consideration may need to be given to a drainage path or right-of-way to allow for this.

Culverts were assumed across all intersections on site (2-3 per intersection), as well as at all accesses into lots (2 accesses/lot). Not including roadways constructed in Phase 1 and 2A, 12 culverts were included for the 4 intersections, including accesses from Highway 58, as well as a further 26 culverts for lot accesses.

In addition to the Phase 2A pond, a stormwater management facility would likely need to be located at the southeast corner of the site, which is the lowest point, to control excess runoff to pre-development rates for the entire quarter section. However, the adequacy of the Highway ditch as an outlet would need to be evaluated in more detail, as it appears to have little topographic relief, and appears to be very shallow compared to the site's ground elevation (which would result in a pond with an excessively large footprint). There are no other obvious outlets.

An alternative to a pond would be to create drainage features throughout the site (i.e., ditches/bioswales), all draining in a southerly direction toward the Highway. These features could be designed to store excess runoff using culverts as controls, and vegetation would serve water quality enhancement purposes.

It is anticipated stormwater management facilities located on utility parcels and within the public road rights-of-way would be maintained by the County once constructed except for occasional mowing which will be the responsibility of the developer. Stormwater management facilities will be designed to have low maintenance requirements with the control structure, outlet, and dry hydrant to be checked and cleaned out as required.

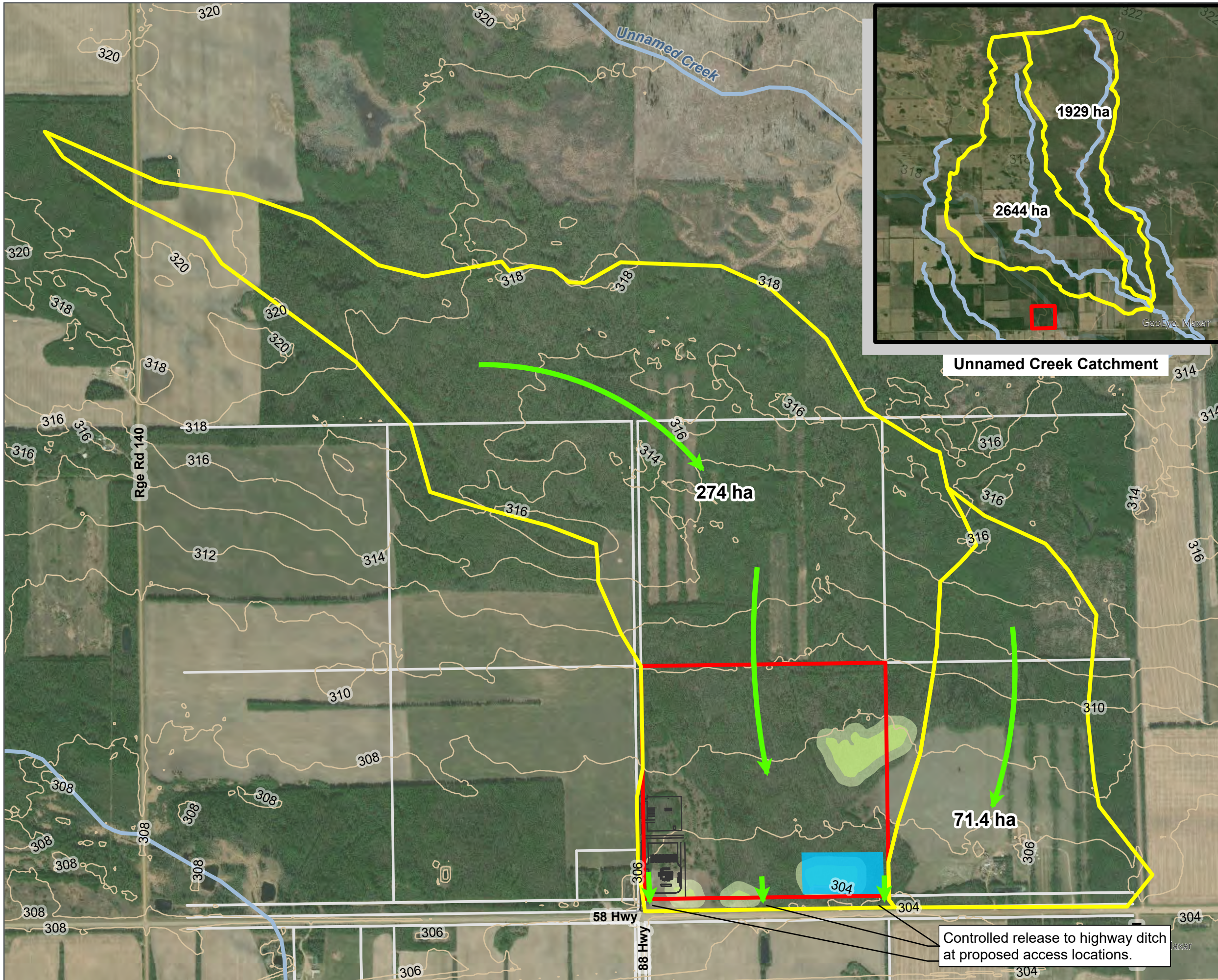
#### 4.1.7 SOLID WASTE MANAGEMENT

Mackenzie County operates several solid waste transfer stations in the region, including the Fort Vermillion and Rocky Lane's transfer stations. Each development within the Lands will need to consider onsite locations for solid waste management which will include setting up contracts to haul waste to the regional landfill.

#### 4.1.8 POWER, GAS AND TELECOMMUNICATIONS

There is an existing overhead three phase power line that runs along the entire south boundary of the Highway 58. An underground three phase power service is proposed from this line to a transformer on the west side of the Caribou Mountain Travel Centre site. Service is provided by Atco Electric. Capacity to service future development from this service is unknown.

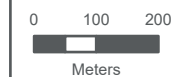




**Caribou Mountain  
 Commercial Park  
 Stormwater Management**

- ▭ Site Boundary
- ▭ Watershed
- ➔ Drainage Direction
- ▭ Potential Stormwater Management Facility
- Contours 2m
- ▭ Potential Wetlands
- ▭ Wetland 30m Offset
- Watercourses
- Caribou Mountain Travel Centre & CanGas Site

The accuracy & completeness of information shown on this drawing is not guaranteed. It will be the responsibility of the user of the information shown on this drawing to locate & establish the precise location of all existing information whether shown or not.



**Coordinate System:**

NAD 1983 CSRS UTM Zone 11N

**Data Sources:**

- Canada Lands 2020-09-24
- Abadata 2020-09-28
- National Hydro & Road Network

Project #: 2847.0013.01  
 Author: SQ

Date: 2020 / 10 / 22



**FIGURE 9**



We understand fibre communications service was installed to service the Caribou Mountain Travel Centre, but the alignment and capacity to service future development is unknown.

Natural gas service is proposed from the property to the east to the Caribou Mountain Travel Centre. The alignment has yet to be confirmed. Service is provided by the Northern Lights Gas Co-op and they have confirmed that the proposed service to the Travel Centre does not have capacity to support any future development. Offsite upgrades would be required.

It is recommended that all shallow utilities be located within utility or road rights of way to ensure easy access for future development and for maintenance by the utility providers.

## 5.0 PART IV: IMPLEMENTATION

Implementation outlines the necessary steps to successfully bring this ASP to life. The following sections address planning processes and the development phase sequencing for the Lands.

### 5.1 IMPLICATIONS FOR OTHER MUNICIPAL PLANS AND BYLAWS

The ASP was created to consistently align with the goals and policies outlined in the MDP, LUB and other municipal, provincial, and federal policy. To achieve harmony between this ASP and existing policy documents, the following is required:

- Review and update the LUB to reflect any differences between the Land Use Concept and the current land use district.
- Review this ASP on a periodic basis.

### 5.2 MUNICIPAL AND ENVIRONMENTAL RESERVE

Mackenzie County requires that 10% of all subdivision areas be dedicated as Municipal Reserve, in accordance with the provisions of the Municipal Government Act. To create a complete and functional community, cooperation and a strategy is required to ensure that Municipal Reserve is in appropriate locations to serve future residents. In the case where Municipal Reserve land would not effectively serve current and future residents and would be unnecessarily costly for Mackenzie County to maintain and operate, 'cash in lieu' may replace a land reserve in the plan area. These cash-in-lieu funds should be used for new or upgraded recreation facilities in nearby areas of the County.

### 5.3 DEVELOPMENT PHASES

The Lands are separated into four specific development phases, with future phases planned more long-term (**Figure 4: Land Use Plan**).

Phase 1 involves the construction of the Caribou Mountain Travel Centre and CanGas Bulk Propane site in the southwestern corner of the Lands. These are scheduled to be finished construction at the end of 2021. Additional phases of development will be pursued as demand warrants.

# Appendix A – Caribou Mountain Commercial Park ASP – Traffic Impact Assessment



# CARIBOU MOUNTAIN COMMERCIAL PARK ASP – TRAFFIC IMPACT ASSESSMENT

**PREPARED FOR**

Little Red River Cree Nation

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# 1.0 EXECUTIVE SUMMARY

Urban Systems Ltd. (USL) was retained by Little Red River Cree Nation (LRRCN) to complete an Area Structure Plan (ASP) of the quarter section of land located in the northeast corner of the intersection of Highway 58 and Highway 88, also known as Caribou Mountain Commercial Park.

This study analyzed the intersections described in **Section 2.1** over the anticipated construction horizons of 2024, 2034 and 2044. Existing traffic volume was estimated using Alberta Transportation (AT) available traffic counts and the approved Phase 1 development traffic volume as provided in the “Caribou Mountain Travel Center Response to TIA comments”, May 2020 Memorandum and the Institute of Transportation Engineer (ITE) Land-Use Code 110 for General Light Industrial which is the anticipated use of gas storage facility.

An annual growth rate for the Highway 58 and Highway 88 traffic volume is calculated using historical Alberta Transportation traffic counts from the intersection of Highway 58 and Highway 88 (Count Reference Number 39960). The calculated historical annual growth rate shows that the through traffic along Highway 58 and Highway 88 increased linearly by 1.2% and 1.1% per year over the past 19 years, respectively. As a conservative approach and per discussion with AT, the future background through traffic volumes along Highway 58 and Highway 88 are grown by 2% linearly per year to the 2024, 2034 and 2044 horizon years. Traffic turning north at the intersection was not adjusted by the mentioned rate as future growth would be driven developments within the Caribou Mountain Commercial Park.

The study utilizes multiple land-use codes from the ITE Trip Generation Manual to estimate the total future traffic generated by the multiple phases of the site. This study relies on the anticipated land uses at the time of completing this study. Future traffic impact assessment updates that build on this study may be required at each phase of development approval, at which time the proposed land use should be confirmed. The Floor Area Ratio (FAR) is assumed to be 10% on all industrial sites based on similar type of developments in rural areas across Alberta.

Based on the analyses completed, the following are the improvements recommended at intersection of Highway 58 with Highway 88 and East Access.

- Dedicated right turn lanes are warranted at the intersection of Highway 58 and Highway 88. The upgrades should be completed after monitoring of traffic growth at the intersection to determine the proper timing of construction.
- Partial/Delineation lighting is to be installed at the intersection of Highway 58 and Highway 88 at opening day and all analyzed horizons. As delineation lighting is already part of the approved Phase 1 improvements (please refer to memorandum submitted by Urban Systems, May 2020 for details), no additional illumination is required for future phases.
- The proposed East Access would operate at acceptable level of service with Type-IIa treatment.

## 2.0 INTRODUCTION

### 2.1 BACKGROUND

Urban Systems Ltd. (USL) was retained by Little Red River Cree Nation (LRRCN) to complete an Area Structure Plan (ASP) of the quarter section of land located in the northeast corner of the intersection of Highway 58 and Highway 88, also known as Caribou Mountain Commercial Park. The land is legally described as SW¼-5-110-13-W5M with an estimated area of 64.7 Hectares (160 Acres). One component of the ASP is the completion of a Traffic Impact Assessment to evaluate development impact on the adjacent road network.

A portion of the land, labelled Phase 1 and Gas Storage site, are currently under construction and expected to be completed by the end of 2021. Phase 1 development had a Traffic Impact Assessment (TIA) completed by Bunt and Associates in 2018, followed by a Technical Memorandum response to TIA comments completed by Urban Systems submitted and approved in May 2020. Phase 1 of the development will include a gas station and a convenience store catering to highway traffic.

This TIA focuses on the remaining phases in the ASP area, while building from the original TIA for Phase 1. This study will analyze the following intersections in accordance with discussion with Alberta Transportation (**Appendix A**) and industry best practices, as appropriate.

- Highway 58/Highway 88
- Highway 58/East site access
- Range Road 135/North site access
- Range Road 135/Phase 1 site access (Road B)

The analyses will recommend appropriate intersections geometry based on Alberta Transportation *Highway Geometric Design Guide (AT-HGDC)*. These intersections have been identified as the only intersections directly impacted by the proposed development.

**Figure 2-1** illustrates the regional site location. The development will be situated between Highway 58 to the south, Range Road 135 to the west and undeveloped land to the east and north.

**Appendix B** shows the detailed site layout and phasing plan for the proposed development.

### 2.2 STUDY OBJECTIVE & SCOPE

This study will examine the impacts of the proposed development on the listed intersections in **Section 2.1**. The TIA will ensure the intersections meets the capacity and operational requirements needed by the proposed development and AT. The study is prepared in accordance with Alberta Transportation's TIA Guidelines (February 2021) where the scope includes:

- Review of existing background traffic volumes near the development.
- Develop trip generation, distribution, and assignment of the proposed development traffic based on ITE Trip Generation Manual 10th edition trip generation rates.



- Analyses of the impacts of the background and post development traffic on the adjacent roadway system in three major year horizons as follows, a breakdown of land-uses within each phase are included in **Section 4.0**
  - Phase 2A/2B – To be completed by 2024
  - Phase 3 - 10 years (2034)
  - Remaining Phase 4 and Future Phases - 20 years (2044)
- Provide overview of the potential improvements necessary to the road network near the subject site.

**Figure 2-1: Caribou Mountain Commercial Park Location**



## 2.3 EXISTING INFRASTRUCTURE CONDITIONS

Highway 58 is a Level 2, two-lane undivided provincial highway which runs east-west along the south border of the study parcel.

West of its intersection with Highway 88, Highway 58 is approximately 10 meters wide, paved with a posted speed limit of 100 km/hr. In 2019, the east leg registered a weekday adjusted average annual daily traffic (WAADT) of approximately 1,850 vehicles per day (vpd). Heavy vehicles and recreational vehicles (RVs) accounted for approximately 20% of vehicles along the corridor, with the remaining 80% being personal vehicles.

East of its intersection with Highway 88, Highway 58 is approximately 10 meters wide, paved for approximately 305 meters before transitioning into gravel surface with a posted speed limit of 80 km/hr. In 2019, the east leg registered a WAADT of approximately 270 vpd. Heavy vehicles and recreational vehicles (RVs) accounted for approximately 15% of vehicles along the corridor, with the remaining 85% being personal vehicles.

Highway 88 is a Level 2, approximately 10 meter wide, paved, two-lane undivided provincial highway which runs north-south and ends at the intersection with Highway 58. The posted speed limit is 100 km/hr near the study site. In 2019, the highway registered a weekday adjusted average annual daily traffic (WAADT) of approximately 1,480 vpd. Heavy vehicles and recreational vehicles (RVs) accounted for approximately 25% of vehicles along the corridor, with the remaining 75% being personal vehicles.

Highway 58 and Highway 88 is a four-legged intersection with two-way stop-control on the north and south approaches. The north leg of the intersection was recently constructed as part of the ongoing Phase 1 development. The north leg, Range Road 135, is not an extension of Highway 88, but will be a County road. The intersection geometry is Type-IVb with a dedicated left turn lane and shared through/right turn lane. The north and south approaches are one shared all directional lanes. The subject intersection is located within Control Section 88:18; Traffic Control Section 16 (between KM 27.118 and KM 42.508) and Control Section 58:08; Traffic Control Section 08 (between KM 0.000 and KM 56.649).

## 2.4 FUTURE HIGHWAY AND MUNICIPAL PLANS

The preparation of this ASP would serve as a preliminary plan for the entire development area for Little Red River Cree Nation. No other municipal development plans were identified at the time of completing this study.



# 3.0 BACKGROUND TRAFFIC AND PROJECTION

## 3.1 HISTORIC BACKGROUND TRAFFIC GROWTH

Background traffic is the traffic that is present on the road network without the development of the subject site. Historic traffic growth rate and future traffic volumes forecasting were completed using the information provided in Section A.4.3 of the AT-HGDC<sup>1</sup>.

Based on a review of Alberta Transportation’s historical AADT for traffic counts along Highway 58 and Highway 88, as summarized in **Table 3-1**, traffic growth rate on Highway 58 increased by a rate of approximately 1.2% per year over the past 19-years and an average of 2.4% per year over the past 5-years. Comparatively, Highway 88 increased annually by an average of approximately 1.1% over the past 19-years and an average of 6.1% over the past 5-years. Given the historic average annual linear growth rate over the past 19-years and discussion with Alberta Transportation, the study will use a background linear annual growth rate of 2.0% for traffic along Highway 58 and Highway 88. This is considered representative based on AT February 2021 TIA guidelines and past 19-year historic growth rate. The 2% growth rate will be applied linearly to background traffic along both highways to estimate traffic volumes for the 2024, 2034 and 2044 horizons. It is noted that the specified growth rate will be applied only to highway traffic volume along east, west and south legs. Traffic to and from Range Road 135 will not be adjusted as volume growth would be driven by future developments within the site.

**Table 3-1: Historic Background Traffic Growth Rate - Highway 58 and Highway 88**

Traffic Count Location		Average Annual Daily Traffic (AADT) (vpd)			Historic Average Annual Growth Rate	
		2002	2016	2020	Past 5-Year	Past 19-year
Highway 58 and Highway 88 (39960)	West Leg Highway 58	990	1,030	1,280	4.88%	1.26%
	South Leg Highway 88	1,000	920	1,250	6.60%	1.11%
	East Leg Highway 58	230	290	290	0.00%	1.15%
<b>Average Along Highway 58</b>					<b>2.4%</b>	<b>1.2%</b>
<b>Average Along Highway 88</b>					<b>6.6%</b>	<b>1.1%</b>

Note: vpd = vehicles per day

## 3.2 EXISTING BACKGROUND TRAFFIC

The intersection of Highway 58 and Highway 88 is an existing intersection that would be impacted by the future traffic volume added. As no traffic counts have been completed since the construction of the north leg the existing traffic volume is estimated based on the approved land use included in the Caribou Mountain Travel Center – May 2020 Memorandum and ITE Land-Use Code 110 for General Light Industrial which is the anticipated use of gas storage facility. **Table 3-2** summarizes the volumes.

<sup>1</sup> Chapter A – Alberta Transportation Highway Geometric Design Guide – April 2018

**Table 3-2: Existing Phase 1 Trip Generation Rate**

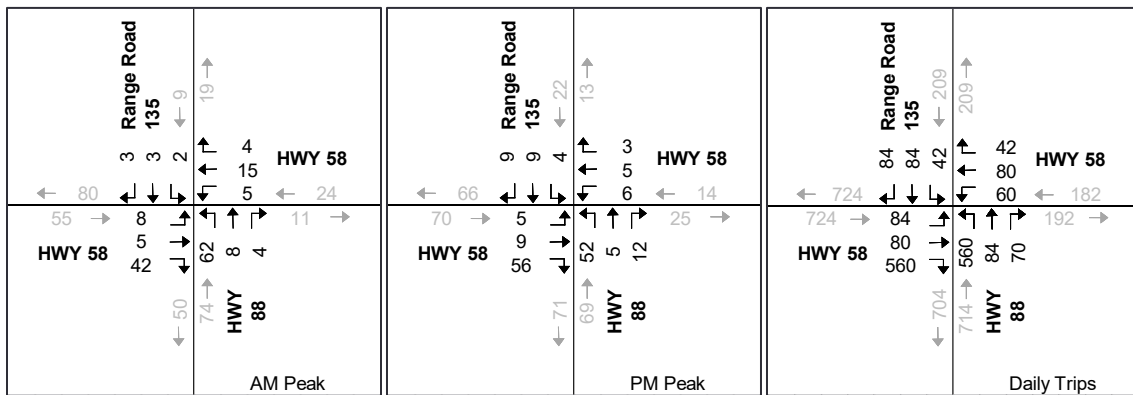
ITE Use (Code)	Trip Rate <sup>1</sup>	Units	In %	Out %	Quantity	Total Trips	Inbound Trips (vph) [vpd]	Outbound Trips (vph) [vpd]
Highway Commercial (Gas station and convenience store)	2.56 (4.21) [N/A]	Trips / KSF	50% (50%) [50%]	50% (50%) [50%]	5.4	14 (22) [320]	7 (11) [160]	7 (11) [160]
General Light Industrial (ITE-110)	0.7 (0.63) [4.96]	Trips / KSF	88% (13%) [50%]	12% (87%) [50%]	19.913	14 (13) [99]	12 (2) [49]	2 (11) [49]
<b>Total Phase 1 Trips</b>						28 (35) [419]	19 (13) [209]	9 (22) [209]

<sup>1</sup> As provided by the client group in the original TIA (Bunt, 2018) and TIA Update Memo (Urban Systems, 2020)

<sup>2</sup> Note: AM (PM) [Daily], vph = vehicles per hour; vpd = vehicles per day, KSF = thousand square feet, Trips per KSF or per fueling station

**Figure 3-1** shows the anticipated opening day traffic volumes based on AT 2020 traffic data plus the future traffic volume from Phase 1 development. The AM and PM Peak represent vehicles per hour, and the Daily Trips represent vehicles per day.

**Figure 3-1: Existing Traffic Volume - Highway 58 and Highway 88**

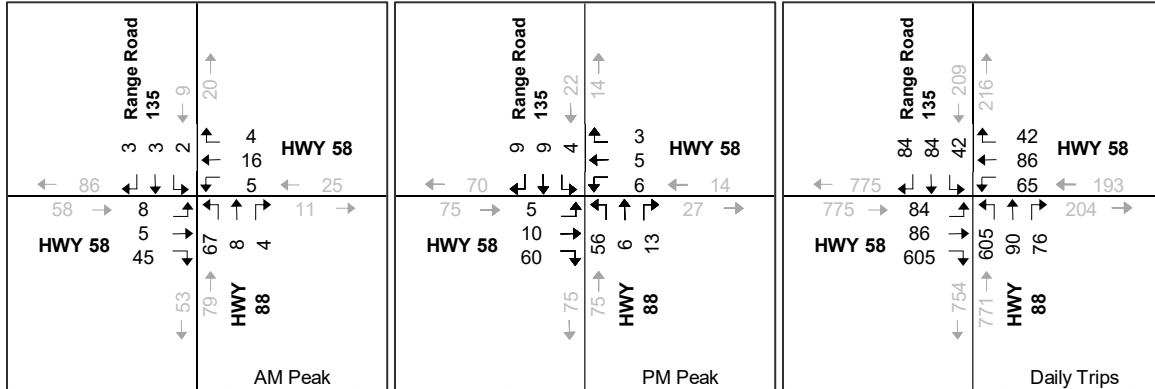


Note: Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

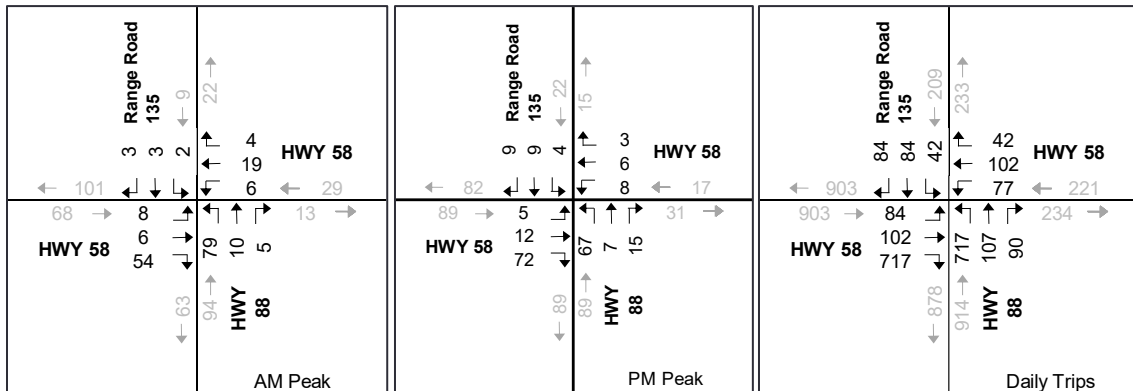
### 3.3 2024, 2034 AND 2044 BACKGROUND TRAFFIC

**Figure 3-2, Figure 3-3** and **Figure 3-4** illustrate the background traffic volumes during the AM and PM peak hours, and the daily traffic volumes for the 2024, 2034 and 2044 horizons for the intersection of Highway 58 and Highway 88. As per **Section 3.1**, traffic volumes on all legs, except north leg, of the intersection were adjusted linearly at 2% from 2020 to 2024, 2034 and 2044 horizons.

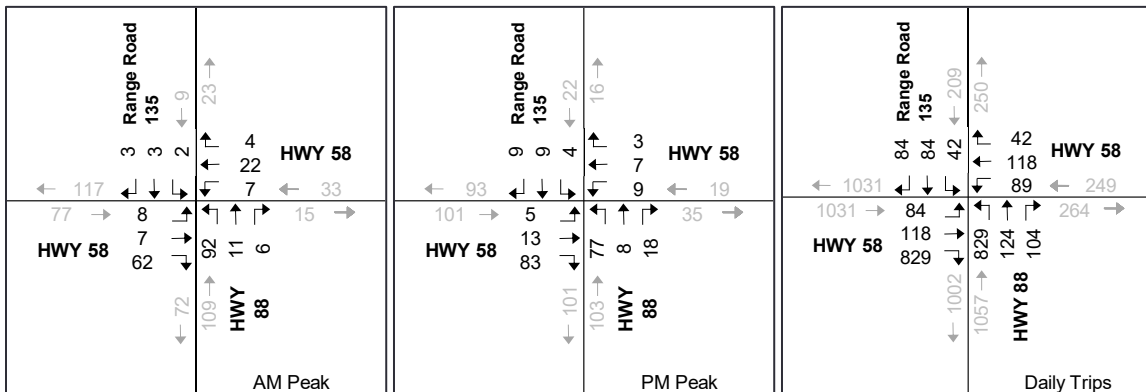
**Figure 3-2: Background Traffic at Highway 58 and Highway 88 - Year 2024**



**Figure 3-3: Background Traffic at Highway 58 and Highway 88 - Year 2034**



**Figure 3-4: Background Traffic at Highway 58 and Highway 88 - Year 2044**



Note (for figures above): Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

## 4.0 PROPOSED DEVELOPMENT TRAFFIC

### 4.1 TOTAL SITE TRIP GENERATION

Trip generation rates have been determined for the proposed site in accordance with the recommendations of the Institute of Transportation Engineers (ITE) *Trip Generation Manual (10<sup>th</sup> Edition)*. ITE trip rates represent land-use specific averages that have been developed through years of case studies and background research. Directionality is also indicated in the ITE *Trip Generation Manual* by specifying what percentage of generated trips is heading into the development (inbound trips) versus how many trips are leaving the development (outbound trips) as well the average daily trips anticipated (daily trips).

The study utilizes multiple land-use codes from the ITE Trip Generation Manual to estimate the total future traffic generated by the multiple phases of the site. This study relies on the anticipated land uses at the time of completing this study. Future traffic impact assessment updates may be required at each phase of development approval, at which time the proposed land use should be confirmed. The Floor Area Ratio (FAR) is assumed to be 10% on all industrial sites based on similar developments in rural areas across Alberta. **Table 4-1** summarizes the AM and PM Peak Hours as well the Daily Traffic Volumes for the proposed development site.

The overall site phasing plan is provided in **Appendix B**.

**Table 4-1: Proposed Development Trip Generation**

Land Use Type	ITE Use (Code)	Trip Rate	Unit	In %	Out %	Quantity	Development Trips (vph) [vpd]		
							Total Trips	Inbound Trips	Outbound Trips
<b>Phase 2A + Phase 2B</b>									
Grocery store (i.e., No Frills)	Supermarket (ITE 850)	3.82 (9.24) [106.78]	Trips / KSF	60% (51%) [50%]	40% (49%) [50%]	26.9 KSF	103 (249) [2,872]	62 (149) [1,436]	41 (99) [1,436]
Fast food drive-through (i.e., McDonald's)	Fast food restaurant with drive-through (ITE 934)	40.19 (32.67) [470.95]	Trips / KSF	51% (52%) [50%]	49% (48%) [50%]	4.75 KSF	191 (155) [2,237]	97 (81) [1,119]	94 (74) [1,119]
Oil change (i.e., Jiffy Lube)	Quick lubrication vehicle shop (ITE 941)	5.80 (8.70) [69.57]	Trips / KSF	75% (42%) [50%]	25% (58%) [50%]	1.94 KSF	11 (17) [135]	8 (7) [67]	3 (10) [67]
Gas station card lock (i.e., Petro Pass)	Gasoline / Service Station (ITE 944 See Specialized Use)	1.33 (0.78) [14.94]	Trips/ Pump Station	54% (49%) [50%]	46% (51%) [50%]	8 pumps	11 (6) [120]	6 (3) [60]	5 (3) [60]
<b>Phase 3</b>									
Light use industrial (i.e., laydown yards)	General Light Industrial (ITE 110)	0.70 (0.63) [4.96]	Trips / KSF	88% (13%) [50%]	12% (87%) [50%]	25 KSF	17 (16) [122]	15 (2) [61]	2 (14) [61]
Building Supply Centre	Building Materials and Lumber (ITE 812)	1.51 (2.06) [18.05]	Trips / KSF	63% (57%) [50%]	37% (53%) [50%]	19 KSF	29 (39) [343]	18 (18) [171]	11 (21) [171]
<b>All Remaining Phases</b>									
Phase 4 Light Industrial	General Light Industrial (ITE 110)	0.70 (0.63) [4.96]	Trips / KSF	88% (13%) [50%]	12% (87%) [50%]	32 KSF	23 (20) [161]	20 (3) [80]	3 (18) [80]
Future Phases Light Industrial	General Light Industrial (ITE 110)	0.70 (0.63) [4.96]	Trips / KSF	88% (13%) [50%]	12% (87%) [50%]	236 KSF	165 (149) [1,331]	145 (19) [585]	20 (129) [585]
<b>Total Trips</b>							<b>550 (651) [7,160]</b>	<b>372 (260) [3,580]</b>	<b>178 (391) [3,580]</b>

Note: AM (PM) [Daily], vph = vehicles per hour; vpd = vehicles per day, KSF = thousand square feet, Trips per KSF

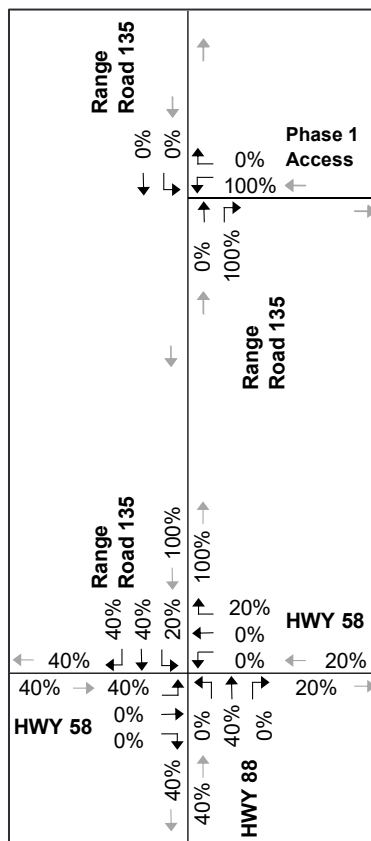
## 4.2 PROPOSED DEVELOPMENT TRIP DISTRIBUTION AND ASSIGNMENT

The site will be developed over multiple phases along which accesses would be constructed, as necessary. For the Phase 2A/2B and Phase 3, the site will be accessed through Range Road 135 from the existing intersection of Highway 58 and Highway 88 to reach Phase 1 Access (Road B), which is the same access for Phase 1. By Phase 4 and Future Phases, the site is assumed to have an additional access along Highway 58 and an access along the extended Range Road 135.

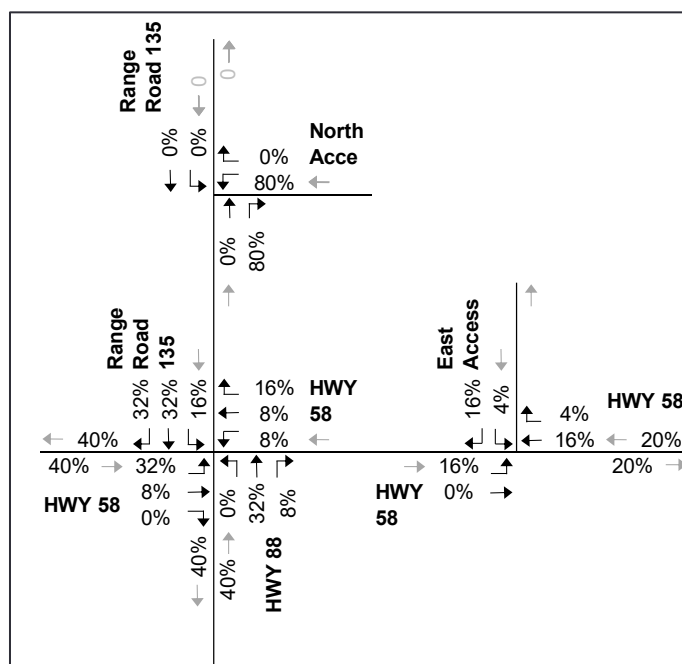
Traffic patterns following the development of Phase 4 and North Phases might change slightly. It is assumed that 20% of the Phase 4 and North Phases would utilize the East Access on Highway 58, with the remaining 80% utilizing the intersection of Highway 58 and Highway 88. This is considered reasonable as traffic destined to the industrial land would likely arrive through Highway 58 and Highway 88. Phase 2A/2B and Phase 3 would continue to utilize Highway 58 and Highway 88 intersection along with Range Road 135 and Phase 1 Access (Road B) intersection.

**Figure 4-1** and **Figure 4-2** summarize the distribution split from each phase at the different accesses.

**Figure 4-1: Proposed Development Trip Distribution for Phase 2A/2B and Phase 3**



**Figure 4-2: Proposed Development Trip Distribution for Phase 4 and Future Phases**



Based on the trip distribution above, the trip assignment for AM and PM peak hour and daily traffic volume at the subject intersection was calculated and summarized in **Figure 4-3**, **Figure 4-4** and **Figure 4-5** for each development phase.

**Figure 4-3: 2024 Proposed Development Trip Assignment – Phase 2A/2B Only**

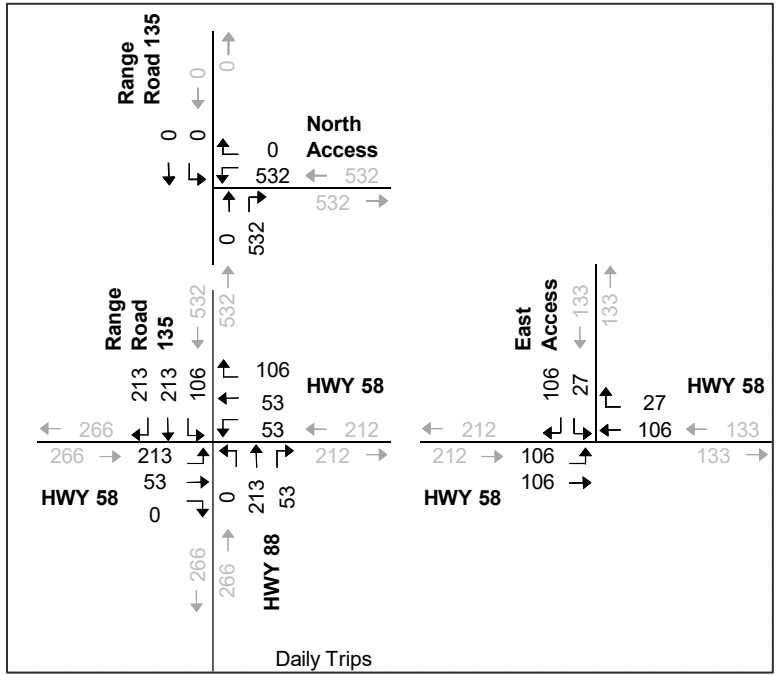
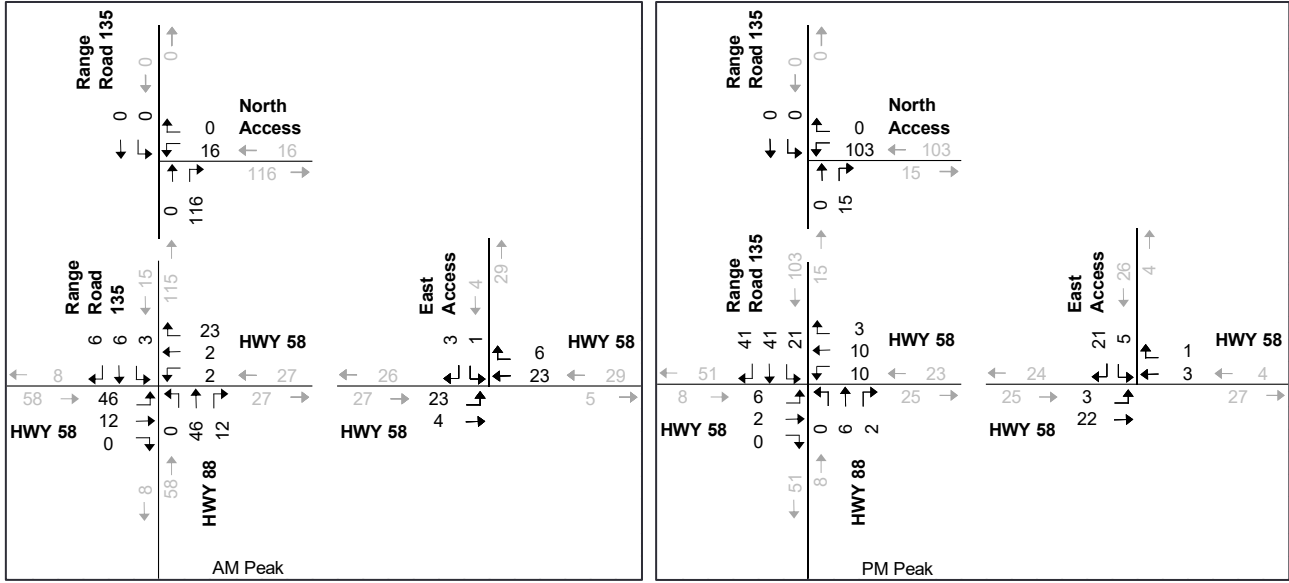
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**Figure 4-4: 2034 Proposed Development Trip Assignment – Phase 3 Only**

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Note (for figures above): Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

Figure 4-5: 2044 Proposed Development Trip Assignment – Phase 4 and Future Phases Only



Note (for figures above): Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

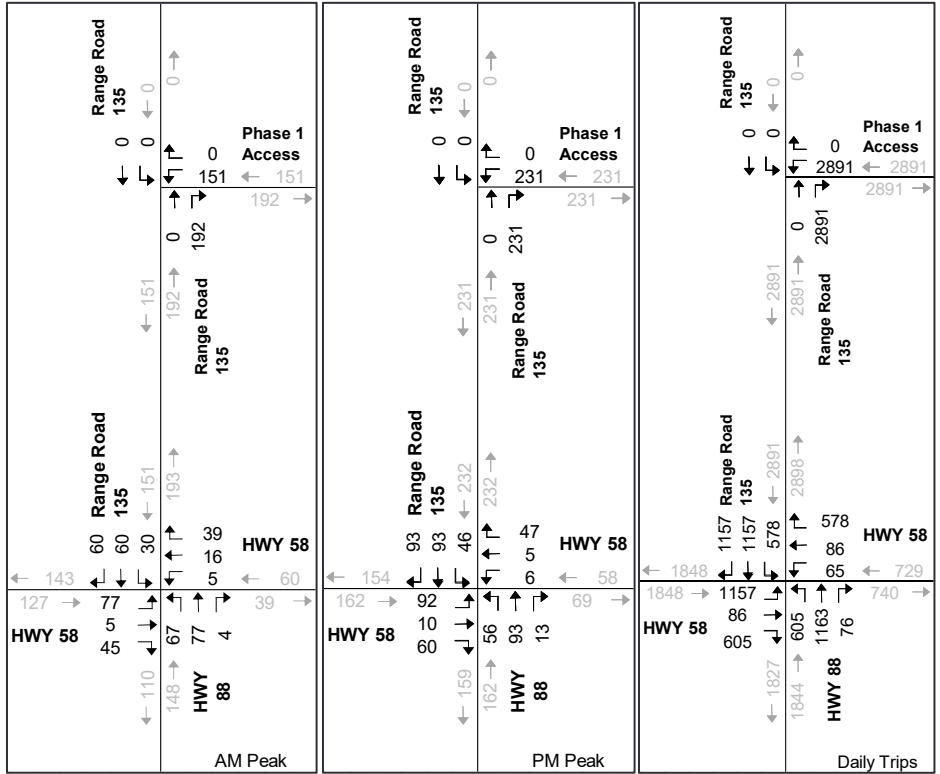


# 5.0 POST DEVELOPMENT TRAFFIC

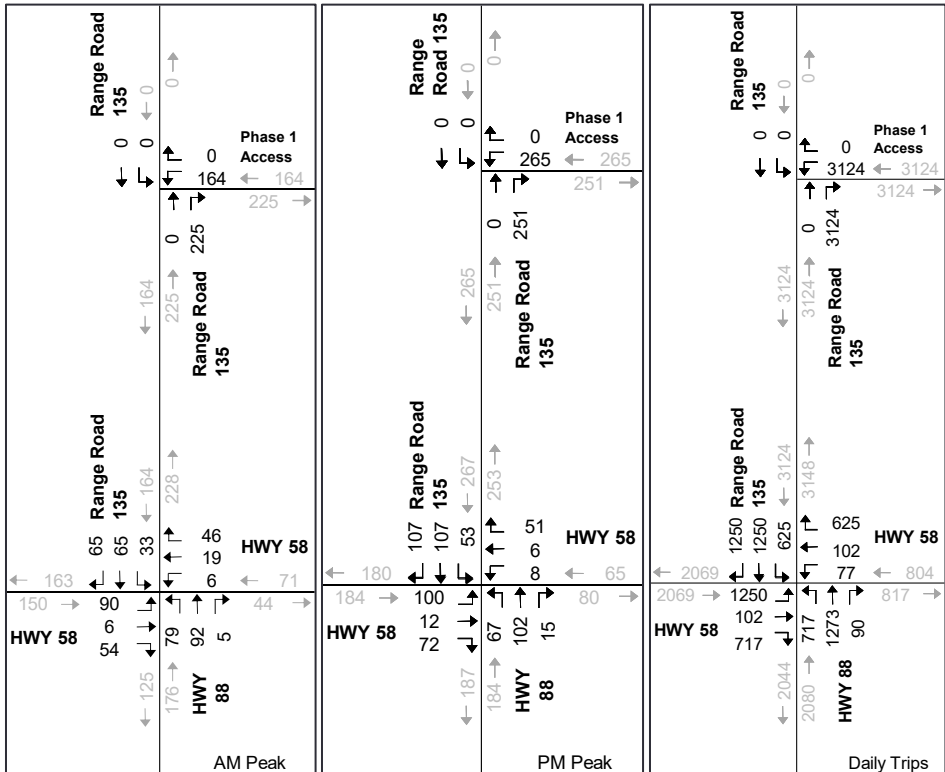
## 5.1 POST DEVELOPMENT TRAFFIC VOLUMES

The Post Development traffic is defined as the projected background traffic, plus other known development traffic and the site generated traffic all summed for the peak periods. Future background traffic volumes have been forecasted for the planned 2024, 2034 and 2044 horizons. The Post Development traffic volumes, which include background traffic and site generated traffic volumes for all three analysis horizons, are shown in **Figure 5-1**, **Figure 5-2** and **Figure 5-3**.

**Figure 5-1: 2024 Post Development Traffic Volumes**

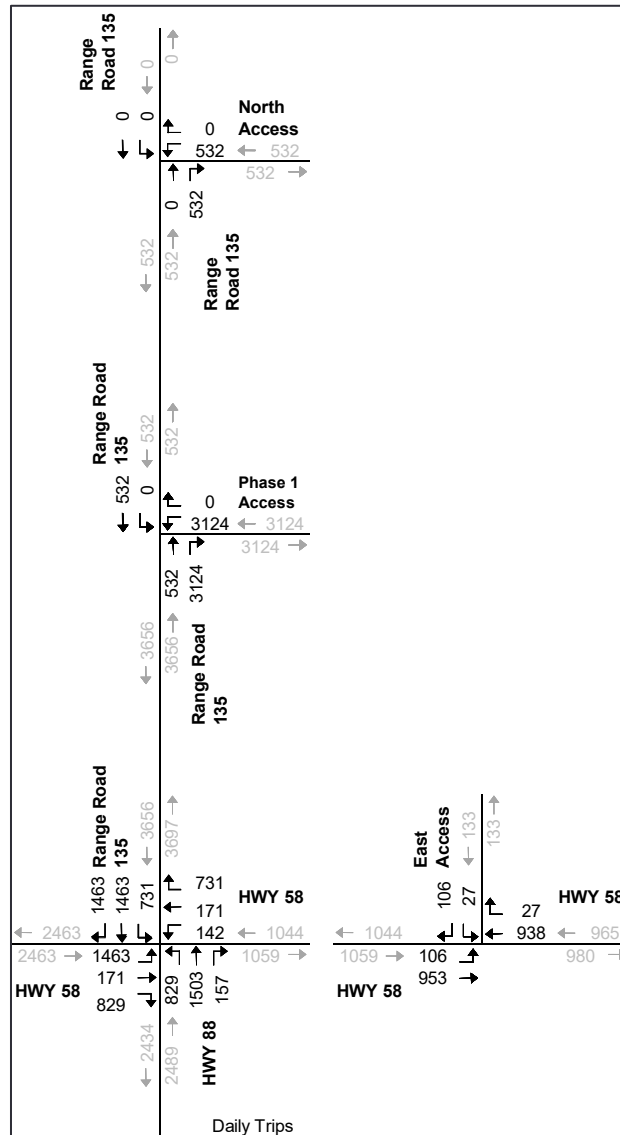
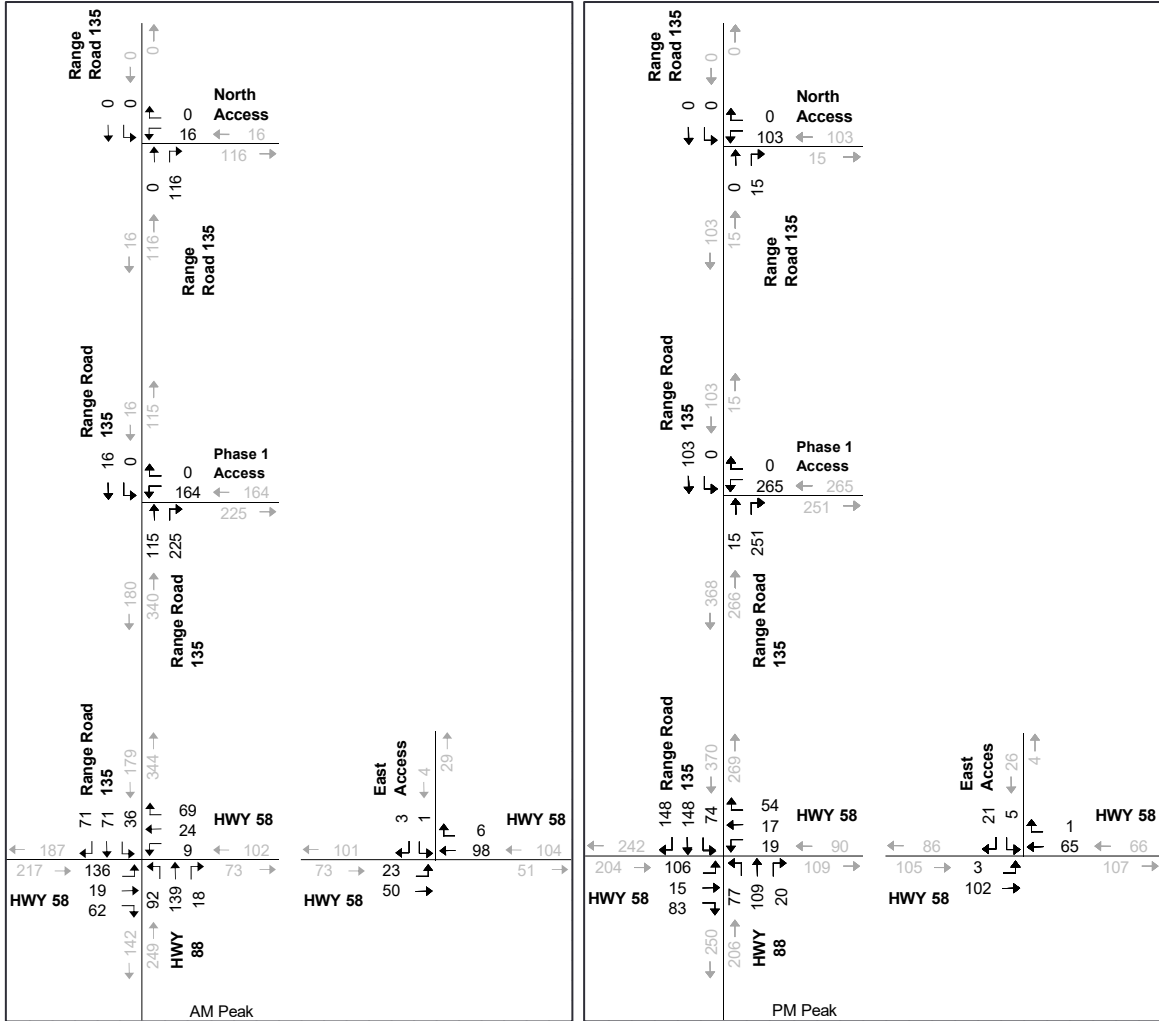


**Figure 5-2: 2034 Post Development Traffic Volumes**



Note (for figures above): Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

Figure 5-3: 2044 Post Development Traffic Volumes



Note (for figures above): Traffic volumes in black are for turning movements and grey are for directional volumes along the corridor.

## 6.0 ANALYSIS METHODOLOGY

Several analyses have been completed based on Alberta Transportation’s (AT) Traffic Impact Assessment Guidelines, including AT intersection analysis, collision review, minimum intersection sight distance and stopping sight distance and intersection illumination analysis.

### 6.1 INTERSECTION TREATMENT WARRANTS

Alberta Transportation’s Highway Geometric Design Guide (AT-HGDG) is typically used to determine the standard intersection configuration required at the intersection. The AT Intersection layout analysis is designed to determine necessary intersection geometry for rural highways. The analysis results are used to determine the standard intersection treatment necessary as per AT-HGDG. As per the methodology outlined in AT’s Highway Geometric Design Guide, warrants for a dedicated left and right turn bays were completed for the intersections along Highway 58 at Highway 88 and at the East Access. It is noted the intersection of Highway 58 and Highway 88 is a Type-IVa intersection. The analysis was not completed for the intersections along Range Road 135. Instead, it is analyzed using the Highway Capacity Manual (HCM) method explained in **Section 6.3**. A summary of intersection treatment analyses results is shown in **Section 6.1.3**

#### 6.1.1 Left Turn Warrant Analysis

The warrant analysis was completed assuming operating speed of 100 km/hr at Highway 58 and Highway 88 intersection and 80 km/hr at the future Highway 58 and East Access. This is based on the currently posted speed near both intersections. Heavy vehicle is expected at 35% of overall site traffic based on existing split and future use of the site.

The intersection of Highway 58 and the East Access was analyzed at the 2044 horizon only as it is not anticipated to be constructed before then.

A summary of AT left turn warrant results, completed using AT intersection treatment warrant sheet, is shown in **Table 6-1** and **Table 6-2**. Detailed analysis sheets are included in **Appendix C**.

**Table 6-1: Left Turn Warrant Analysis Results – Eastbound**

Highway 58 and Highway 88						
Horizon	Time Frame	Left Turn Volume (vehicles)	Volume Advancing (vehicles)	Volume Opposing (vehicles)	Analysis Intersection Treatment	Additional Left Turn Storage Required <sup>2</sup>
2024 Post Development Traffic	AM Peak	73	123	57	Type-II	Not Required
	PM Peak	92	162	57	Type-III	Not Required
2034 Post Development Traffic	AM Peak	86	146	68	Type-III	Not Required
	PM Peak	100	184	64	Type-III	Not Required
2044 Post Development Traffic	AM Peak	132	213	95	Type-IV	Not Required
	PM Peak	106	204	69	Type-III	Not Required
Highway 58 and East Access						
Horizon	Time Frame	Left Turn Volume (vehicles)	Volume Advancing (vehicles)	Volume Opposing (vehicles)	Analysis Intersection Treatment	Additional Left Turn Storage Required
2044 Post Development Traffic	AM Peak	23	72	101	Type-II	Not Required
	PM Peak	3	103	66	Type-II	Not Required

<sup>2</sup> Alberta Transportation intersection analysis two-lane undivided highways (March 8, 2021) <https://open.alberta.ca/publications/traffic-impact-assessment-guidelines>, Accessed April 9 2021

**Table 6-2: Left Turn Warrant Analysis Results – Westbound**

<b>Highway 58 and Highway 88</b>						
<b>Horizon</b>	<b>Time Frame</b>	<b>Left Turn Volume (vehicles)</b>	<b>Volume Advancing (vehicles)</b>	<b>Volume Opposing (vehicles)</b>	<b>Analysis Intersection Treatment</b>	<b>Additional Left Turn Storage Required<sup>3</sup></b>
<b>2024 Post Development Traffic</b>	AM Peak	5	57	123	Type-II	Not Required
	PM Peak	6	57	162	Type-II	Not Required
<b>2034 Post Development Traffic</b>	AM Peak	6	68	146	Type-II	Not Required
	PM Peak	8	64	184	Type-II	Not Required
<b>2044 Post Development Traffic</b>	AM Peak	7	95	213	Type-II	Not Required
	PM Peak	9	69	204	Type-II	Not Required

<sup>3</sup> Alberta Transportation intersection analysis two-lane undivided highways (March 8, 2021) <https://open.alberta.ca/publications/traffic-impact-assessment-guidelines>, Accessed April 9 2021

### 6.1.2 Right Turn Warrant Analysis

To warrant an exclusive right turn lane at a two-lane highway intersection, the following three conditions must all be met:

- Main (or through) road AADT  $\geq$  1,800 vpd;
- Intersecting road AADT  $\geq$  900 vpd; and,
- Right turn daily traffic volume  $\geq$  360 vpd for the movement in question.

Based on a review of these criteria and under Post Development traffic conditions in the 2024, 2034 and 2044 horizons, exclusive eastbound and westbound right turn lanes are warranted for the intersection of Highway 58 and Highway 88. No Exclusive westbound right turn lane is warranted for the intersection of Highway 58 and East Access. A summary of the right turn warrant analysis is presented in **Table 6-3** and **Table 6-4**.

**Table 6-3: Right Turn Warrant Analysis Results – Eastbound**

Highway 58 and Highway 88							
Horizon	Main Road (Highway 58)		Intersecting Road (Highway 88)		EB Right turn		Right Turn Lane Warranted
	AADT (vpd)	AADT > 1800	AADT (vpd)	AADT > 900	AADT (vpd)	AADT > 360	
2024 Post Development Traffic	3,600	Yes	3,600	Yes	605	Yes	Yes
2034 Post Development Traffic	4,000	Yes	4,000	Yes	717	Yes	Yes
2044 Post Development Traffic	5,000	Yes	5,000	Yes	829	Yes	Yes

Note: vpd = vehicles per day; AADT = average annual daily traffic

**Table 6-4: Right Turn Warrant Analysis Results – Westbound**

Highway 58 and Highway 88							
Horizon	Main Road (Highway 58)		Intersecting Road (Highway 88)		EB Right turn		Right Turn Lane Warranted
	AADT (vpd)	AADT > 1800	AADT (vpd)	AADT > 900	AADT (vpd)	AADT > 360	
2024 Post Development Traffic	3,600	Yes	3,600	Yes	568	Yes	Yes
2034 Post Development Traffic	4,000	Yes	4,000	Yes	615	Yes	Yes
2044 Post Development Traffic	5,000	Yes	5,000	Yes	721	Yes	Yes
East Access							
Horizon	Main Road (Highway 652)		Intersecting Road (East Access)		EB Right turn		Right Turn Lane Warranted
	AADT (vpd)	AADT > 1800	AADT (vpd)	AADT > 900	AADT (vpd)	AADT > 360	
2044 Post Development Traffic	2,000	Yes	300	No	27	No	No

Note: vpd = vehicles per day; AADT = average annual daily traffic

### 6.1.3 Alberta Transportation Intersection Analysis Summary

Intersection treatment warrant analyses were completed for the intersections of Highway 58 with Highway 88 and East Access.

The completed left turn warrant analyses show the intersection of Highway 58 and Highway 88 will require a Type-IV treatment with a dedicated left turn lane in the eastbound direction and no additional storage length than provided with standard treatment. The existing intersection is classified as Type-IVa with additional north leg under construction which would bring the intersection to Type-IV. Since the intersection will have dedicated left turn lanes for both eastbound and westbound traffic, no additional upgrades for left turn traffic are identified at this stage. Right turn warrant analysis was also completed and showed that a dedicated right turn lane is warranted for the intersection of Highway 58 and Highway 88.

For Highway 58 and East Access intersection, no dedicated left turn or right turn lanes are warranted based on the analyses results.

Future TIA updates should be completed to confirm if additional upgrades are necessary based on the confirmed land-use proposed at the time of development application. The planned intersection design and typical Type-IV and Type-IIa treatment drawings are included in **Appendix D**.

## 6.2 SITE CIRCULATION AND ACCESS

Vehicular access into the site is planned via two accesses from Highway 58. As shown in **Appendix B**, the intersections are approximately 780 meters apart which exceeds the 400 meters indicated in AT-HGDC Table I.5 for Two-Lane Highway. It is noted an access to the existing single family residential property along the north side of the Highway 58 is located approximately 360 meters from the proposed East Access. The residential property access is expected to remain in place for the foreseeable future as the resident will continue occupying it. The spacing between the residential access and the east access is not anticipated to be an issue given the east access is not anticipated to be needed prior to 2044. As well, the residential access has limited traffic, consisting of primarily the occupant entering and exiting their property. Finally, the simple Type-IIa geometry of the proposed East Access has no turn lanes and would not require tapers that would be impacted by the residential access.

### 6.3 CAPACITY ANALYSIS

A Highway Capacity Manual (HCM) analysis was completed. Synchro Studio v11 was used to perform these calculations to determine intersection delays and levels of service.

Level of Service is based on the estimated average delay per vehicle for all traffic passing through an intersection. A good level of service is a result of a very low average delay; the highest level of service is identified as LOS A. A poor level of service is a result of a large average delay; typically, the lowest level of service is identified as LOS F. The level of service categories also varies depending on whether an intersection is signalized or stop- or yield- controlled. The Highway Capacity Manual justifies this difference by noting that drivers stopped at a signal light will have more tolerance for delays because their perception is that eventually they will get their turn, even with a longer wait. Poor level of service can contribute to drivers taking risks and proceeding unsafely into an intersection. **Table 6-5** identifies the level of service criteria for signalized and unsignalized intersections.

**Table 6-5: Level of Service Definition**

Level of Service	Average Signalized Control Delay per Vehicle (s)	Average Stop Control Delay per Vehicle (s)
A	less than 10	less than 10
B	10 – 20	10 – 15
C	20 – 35	15 – 25
D	35 – 55	25 – 35
E	55 – 80	35 – 50
F	greater than 80	greater than 50

The volume-to-capacity (v/c) ratio of an intersection describes the extent to which the traffic volumes can be accommodated by the theoretical physical capacity of the road configuration and traffic control. A v/c ratio less than 0.9 indicates that there is generally sufficient capacity to accommodate the traffic on the approach or at the intersection. A value between 0.9 and 1.0 suggests unstable operations and congestion may begin to occur as volumes are nearing the theoretical capacity of the roadway. A calculated value over 1.0 indicates that volumes are theoretically exceeding capacity. **Table 6-6** identifies the volume-to-capacity criteria for intersections.

**Table 6-6: Volume to Capacity Ratio Definition**

Volume-to-Capacity (v/c) Ratio	Indication
less than 0.9	sufficient intersection capacity
0.9 to 1.0	volumes approaching intersection capacity
greater than 1.0	volumes exceed theoretical intersection capacity

Typically, Alberta Transportation designs highway and rural roadways to an overall LOS C or better with the minor approach of LOS D or better. Therefore, for the purposes of this analysis, a minimum LOS C was required for the highway leg and minimum LOS D for the minor intersecting leg. The volume-to-capacity ratio should also be less than 0.9 for all approaches. All analyses generally use typical Synchro Studio default values, including a peak hour factor of 0.92. The heavy vehicle percentage is estimated at 10% for all movements based on existing AT traffic counts.

### 6.3.1 Background Traffic - Capacity Analysis – All Horizons

HCM analysis completed for the intersection of Highway 58 and Highway 88, and Range Road 135 with Phase 1 Access Road. The analysis shows that both study intersections would operate at acceptable LOS A in the AM and PM peak hours for 2024, 2034 and 2044 horizons based on Background traffic only. The analysis was completed assuming planned Type-IV treatment upgrades has been completed at the intersection of Highway 58 and Highway 88, and that the intersection is stop controlled on the north and south approaches. **Table 6-7, Table 6-8** and **Table 6-10** summarize the analysis results. Synchro summary reports are included in **Appendix E**.

**Table 6-7: 2024 Horizon Background Traffic Only**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.00 (0.00)	7.5 (7.5)	A (A)	0.1 (0.1)
Eastbound Thru, Right		0.03 (0.04)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.00 (0.01)	7.6 (7.7)	A (A)	0.1 (0.1)
Westbound Thru, Right		0.01 (0.00)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.10 (0.09)	9.7 (9.7)	A (A)	2.4 (2.4)
Southbound Left, Thru, Right	Stop	0.01 (0.01)	9.3 (9.3)	A (A)	0.2 (0.3)
<b>Intersection</b>			<b>5.5 (5.2)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.01 (0.01)	8.8 (8.9)	A (A)	0.2 (0.3)
Northbound Left, Thru, Right	Free	0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>4.4 (4.4)</b>	<b>A (A)</b>	N/A

**Table 6-8: 2034 Horizon Background Traffic Only**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.00 (0.00)	7.5 (7.5)	A (A)	0.1 (0.1)
Eastbound Thru, Right		0.03 (0.04)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.00 (0.01)	7.6 (7.7)	A (A)	0.1 (0.1)
Westbound Thru, Right		0.01 (0.00)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.10 (0.09)	9.7 (9.7)	A (A)	2.4 (2.4)
Southbound Left, Thru, Right	Stop	0.01 (0.01)	9.3 (9.3)	A (A)	0.2 (0.3)
<b>Intersection</b>			<b>5.5 (5.2)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.01 (0.01)	8.8 (8.9)	A (A)	0.2 (0.3)
Northbound Left, Thru, Right	Free	0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>4.4 (4.4)</b>	<b>A (A)</b>	N/A



**Table 6-9: 2044 Horizon Background Traffic Only**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.00 (0.00)	7.5 (7.5)	A (A)	0.1 (0.1)
Eastbound Thru, Right		0.04 (0.06)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.01 (0.01)	7.7 (7.7)	A (A)	0.1 (0.2)
Westbound Thru, Right		0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.14 (0.14)	10.1 (10.1)	B (B)	3.7 (3.6)
Southbound Left, Thru, Right	Stop	0.01 (0.01)	9.4 (9.5)	A (A)	0.3 (0.3)
<b>Intersection</b>			<b>5.7 (5.4)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.01 (0.01)	8.8 (8.9)	A (A)	0.2 (0.3)
Northbound Left, Thru, Right	Free	0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>4.4 (4.4)</b>	<b>A (A)</b>	N/A

**6.3.2 Post Development Traffic 2024 - Capacity Analysis**

HCM analysis completed for the intersections of Highway 58 with Highway 88 and East Access, Range Road 135 with Phase 1 Access, and North Access. It is noted the North Access and the East Access are anticipated to be constructed by year 2044 only.

The analysis shows that intersections would operate at acceptable LOS B or better in the AM and PM peak hours for 2024, 2034 horizons based on Post Development traffic. By year 2044 the movements at the intersection of Highway 58 and Highway 88 would operate at LOS C during the AM and PM peak hours. The movements at the remaining intersections would operate at LOS A or better during both peak hours. **Table 6-10**, **Table 6-11** and **Table 6-12**. summarize the analysis results for the Post Development traffic volumes. Synchro summary reports are included in **Appendix E**.

**Table 6-10: 2024 Horizon Post Development Traffic**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.06 (0.07)	7.8 (7.8)	A (A)	1.4 (1.8)
Eastbound Thru, Right		0.00 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Eastbound Right		0.03 (0.04)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.00 (0.01)	7.6 (7.7)	A (A)	0.1 (0.1)
Westbound Thru, Right		0.01 (0.00)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Right		0.02 (0.03)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.29 (0.36)	14.2 (16.3)	B (C)	8.9 (12.1)
Southbound Left, Thru, Right	Stop	0.24 (0.38)	11.8 (14.1)	B (B)	7.0 (13.5)
<b>Intersection</b>			<b>9.3 (10.8)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.17 (0.01)	9.6 (8.9)	A (A)	4.7 (0.3)
Northbound Left, Thru, Right	Free	0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>9.0 (4.4)</b>	<b>A (A)</b>	N/A

**Table 6-11: 2034 Post Development Traffic**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.07 (0.08)	7.8 (7.8)	A (A)	1.7 (2.0)
Eastbound Thru, Right		0.00 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Eastbound Right		0.03 (0.05)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.01 (0.01)	7.6 (7.7)	A (A)	0.1 (0.2)
Westbound Thru, Right		0.01 (0.00)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Right		0.03 (0.03)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.37 (0.44)	16.3 (19.3)	C (C)	12.7 (16.9)
Southbound Left, Thru, Right	Stop	0.28 (0.46)	12.7 (15.9)	B (C)	8.6 (18.4)
<b>Intersection</b>			<b>10.1 (12.3)</b>	<b>B (B)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.22 (0.35)	10.6 (11.9)	B (B)	6.3 (11.9)
Northbound Left, Thru, Right	Free	0.14 (0.16)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>4.6 (6.0)</b>	<b>A (A)</b>	N/A

**Table 6-12: 2044 Post Development Traffic**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.11 (0.08)	8.0 (7.9)	A (A)	2.8 (2.1)
Eastbound Thru		0.01 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Eastbound Right		0.04 (0.05)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.01 (0.02)	7.7 (7.8)	A (A)	0.2 (0.4)
Westbound Thru		0.02 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Right		0.04 (0.03)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.69 (0.64)	31.9 (32.0)	D (D)	37.9 (32.1)
Southbound Left, Thru, Right	Stop	0.39 (0.73)	16.9 (27.1)	C (D)	13.9 (46.3)
<b>Intersection</b>			<b>16.3 (20.3)</b>	<b>C (C)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.29 (0.44)	12.8 (14.9)	B (B)	9.1 (17.4)
Northbound Left, Thru, Right	Free	0.21 (0.17)	0.0 (0.0)	A (A)	0.0 (0.0)
Southbound Left, Thru, Right	Free	0.01 (0.01)	3.4 (0.8)	A (A)	0.2 (0.2)
<b>Intersection</b>			<b>4.3 (6.3)</b>	<b>A (A)</b>	N/A
<b>HIGHWAY 58 &amp; EAST ACCESS</b>					
Eastbound Left, Thru, Right	Free	0.02 (0.00)	2.6 (0.2)	A (A)	0.4 (0.1)
Westbound Left, Thru, Right	Free	0.06 (0.04)	0.0 (0.0)	A (A)	0.0 (0.0)
Southbound Left, Thru, Right	Stop	0.01 (0.04)	9.9 (9.9)	A (A)	0.1 (0.9)
<b>Intersection</b>			<b>1.3 (1.4)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; NORTH ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.02 (0.12)	9.2 (9.3)	A (A)	0.5 (3.1)
Northbound Left, Thru, Right	Free	0.07 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>1.1 (8.2)</b>	<b>A (A)</b>	N/A

### 6.3.3 Post Development Traffic 2044 – Sensitivity - Capacity Analysis

A sensitivity analysis was completed to understand the operations of directing all traffic to the site through the intersection of Highway 58 and Highway 88. The analysis was completed for 2044 horizon only as the East Access is not anticipated before then. The results show that the intersection would operate at acceptable LOS C, and that all movements would operate at LOS D or better in the AM and PM peak hours. **Table 6-13** summarizes the analysis results for the Post Development traffic volumes. Synchro summary reports are included in **Appendix E**.

**Table 6-13: 2044 Post Development Traffic Sensitivity Analysis**

Approach	Traffic Control	v/c Ratio	Total Delay (s)	Level of Service	95% Queue Length (m)
<b>HIGHWAY 88/RANGE ROAD 135 &amp; HIGHWAY 58</b>					
Eastbound Left	Free	0.12 (0.09)	8.1 (7.9)	A (A)	3.0 (2.1)
Eastbound Thru		0.00 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
Eastbound Right		0.04 (0.05)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Left	Free	0.01 (0.01)	7.7 (7.7)	A (A)	0.1 (0.2)
Westbound Thru		0.01 (0.00)	0.0 (0.0)	A (A)	0.0 (0.0)
Westbound Right		0.05 (0.03)	0.0 (0.0)	A (A)	0.0 (0.0)
Northbound Left, Thru, Right	Stop	0.70 (0.62)	34.1 (29.9)	D (D)	39.4 (30.2)
Southbound Left, Thru, Right	Stop	0.40 (0.73)	17.1 (26.3)	C (D)	14.6 (46.7)
<b>Intersection</b>			<b>17.1 (19.9)</b>	<b>C (C)</b>	N/A
<b>RANGE ROAD 135 &amp; PHASE 1 ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.31 (0.47)	13.4 (15.8)	B (C)	9.8 (18.7)
Northbound Left, Thru, Right	Free	0.23 (0.17)	0.0 (0.0)	A (A)	0.0 (0.0)
Southbound Left, Thru, Right	Free	0.01 (0.1)	2.9 (0.7)	A (A)	0.2 (0.2)
<b>Intersection</b>			<b>4.3 (6.3)</b>	<b>A (A)</b>	N/A
<b>RANGE ROAD 135 &amp; NORTH ACCESS</b>					
Westbound Left, Thru, Right	Stop	0.03 (0.15)	9.3 (9.5)	A (A)	0.6 (4.0)
Northbound Left, Thru, Right	Free	0.09 (0.01)	0.0 (0.0)	A (A)	0.0 (0.0)
<b>Intersection</b>			<b>1.1 (8.3)</b>	<b>A (A)</b>	N/A

### 6.3.4 Capacity Analysis Summary

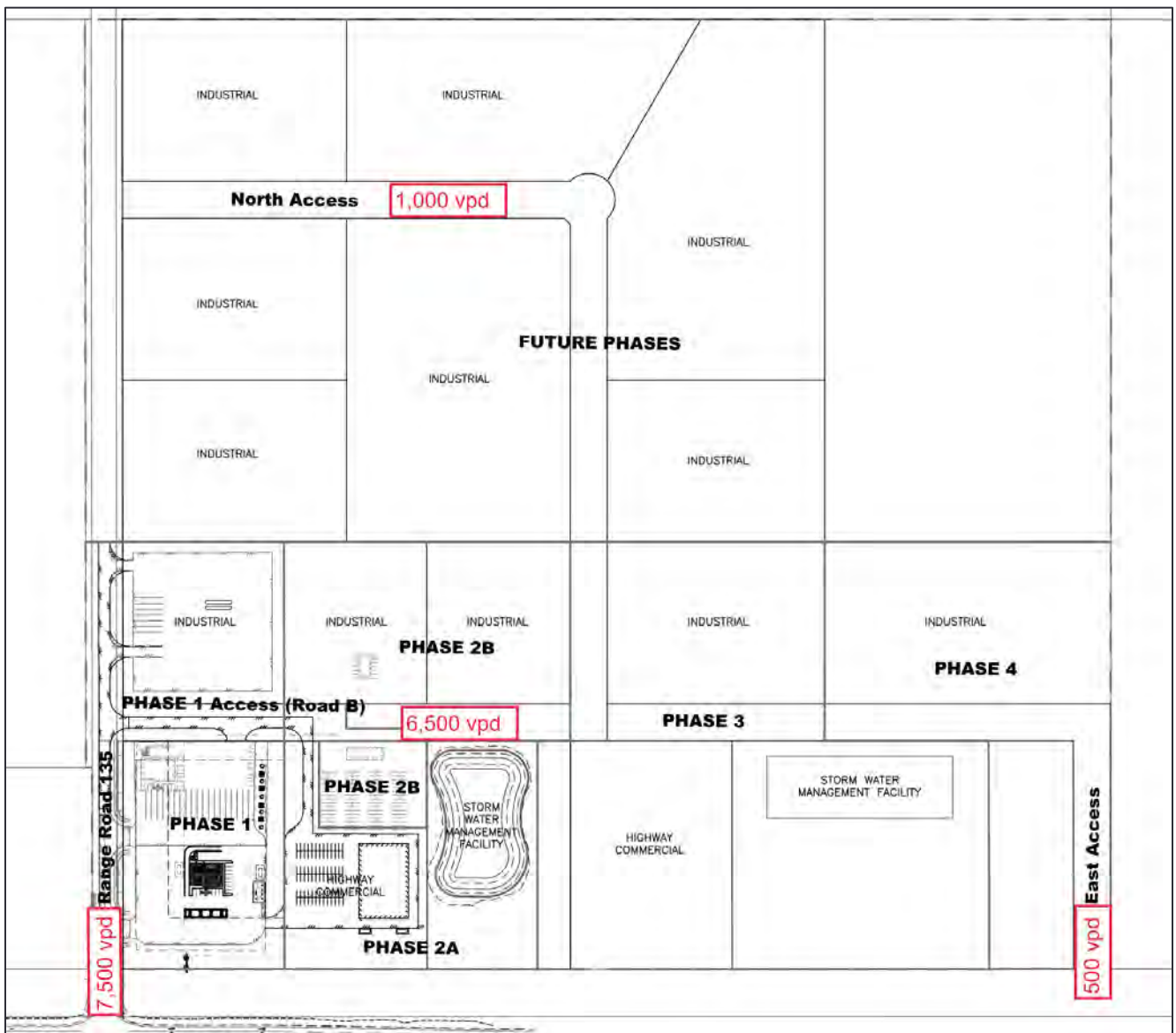
Based on analyses results, the study intersections are anticipated to operate at an acceptable LOS C or better, with all movements anticipated to operate at LOS D or better during both peak hours following the complete development of the site by 2044. Free flow traffic, eastbound and westbound, travelling along highway 58 is expected to experience little to no delay. Northbound and southbound traffic is expected to have limited delays however the overall approaches are expected to continue to operate at an acceptable level of service.

## 6.4 ROADWAY CROSS SECTION AND DAILY VOLUME

The daily traffic volume anticipated at the full build out of the site was estimated based on daily trip rates provided in the ITE Trip Generation Manual for the anticipated land-uses as indicated in **Section 4.1**. A summary of the anticipated daily volumes is shown in **Figure 6-1**.

The Mackenzie County Rural Road, Access Construction and Surface Water Management Policy (PW039), shows that two road cross-sections are generally provided within the county, Collector Road and Local Road. Given the planned industrial land use within the area, the Collector Road standard would provide the appropriate width and capacity for the future traffic as it is recommended for roads with Average Annual Daily Traffic of more than 200 vehicles per day. A copy of the County's standard is attached in **Appendix G**.

**Figure 6-1: Forecasted Daily Traffic Volume at Site Build Out**



## 6.5 ILLUMINATION WARRANT

A lighting assessment was completed at the intersections of Highway 58 with Highway 88 and the East Access using the TAC Illumination of Isolated Rural Intersections (2001). TAC warrant calculations are completed with the following general thresholds for lighting:

- Full Illumination – 240 points or more;
- Partial or Delineation Lighting – 120 to 239 points; and
- No Illumination – less than 120 points.

Full illumination denotes covering an intersection in a uniform manner over the traveled portion of the roadway. Partial lighting refers to the illumination of key decision areas, potential conflict points, and/or hazards in or on the approach to the intersection. Delineation lighting refers to “sentry” lighting that marks an intersection location for approaching traffic, for the illumination of vehicle on a cross street.

If at least 80 of the minimum 120 points are achieved in the Geometric score, partial lighting should be considered. If 120 points or more is achieved in the Operational score, delineation lighting should be considered. If 120 points are achieved in the Collision score, a review of collision history should be conducted to identify the cause of collision. If the causes cannot be rectified, partial or delineation lighting may be considered to address collisions that may be avoided by improved lighting.

According to the collision history provided in AT Online Map (TIMS and NESS), there were four collisions from 2010 to 2020 near the intersection of Highway 58 and Highway 88. The four collisions were categorized as nighttime collisions, however, as noted in the time of collision, two occurred between 5 and 6 a.m. and two occurred between 6 and 7 p.m. All collisions occurred during the months of January, February and November when the day light hours are shorter. The collision data does not provide detail on whether any of the collisions were weather related so as a conservative assumption, it was assumed that the four collisions were related to the lighting.

As well, there was four collisions from 2010 to 2020 near the intersection of Highway 58 and the future East Access. Three of collisions were categorized as nighttime, occurring between November and January when the day light hours are shorter. The data indicated that the collisions were a result of obstruction appearing suddenly in the road such as animal crossing. Therefore, collisions were not attributed to lighting as no systemic trend was established.

As delineation lighting is already part of the approved Phase 1 improvements (please refer to memorandum submitted by Urban Systems, May 2020 for details), no additional illumination is required for future phases. A summary of the Lighting Warrant results is shown in **Table 6-14**. The TAC Warrant worksheets are included in **Appendix E**.

**Table 6-14: Summary of Illumination Warrant Results**

Highway 58 and Highway 88						
Horizon	Geometric Score	Operational Score	Environmental Score	Collision Score	Total Score	Type of Illumination
2024 Post Development	6	160	5	15	186	Partial/Delineation
2034 Post Development	6	160	5	15	186	Partial/Delineation
2044 Post Development	6	170	5	15	196	Partial/Delineation
Highway 58 and East Access						
Horizon	Geometric Score	Operational Score	Environmental Score	Collision Score	Total Score	Type of Illumination
2044 Post Development	3	50	5	15	73	None

## 6.6 SIGNALIZATION WARRANT

Signalization warrant analysis was completed to determine if signalization is warranted for the intersection of Highway 58 and Highway 88. Signals are considered warranted if the score exceeds 100 points. Using the permanent automated traffic recorder located approximately 1.1 km east of Highway 58 and Highway 88 intersection, the ratio between the combined six peak hours of traffic to the combined AM and PM peak hours of traffic was calculated at approximately 2.7. This ratio was then applied to Post Development traffic volumes at year 2044 as it represents the worse case scenario to determine if signalization is warranted. The analysis score shows 82 points therefore signalization is not warranted at this stage. Since it is not warranted for 2044, it is not anticipated to be warranted for the earlier study horizons as the 2044 represents a worse scenario. The result of the signal warrant is attached in **Appendix H**.

## 6.7 PEDESTRIAN WARRANT ANALYSIS

The surrounding area of the site is rural and relatively isolated from any nearby development, and with no presence of pedestrian facilities such as separated sidewalks or pathways. The proposed development is not pedestrian-oriented, with all future clients and employees anticipated to access it using personal and heavy motor vehicles. Therefore, no pedestrian warrant analysis was completed.

## 6.8 EXISTING SAGS AND CRESTS

No existing sags or crests were identified within the development study area.

## 6.9 INTERSECTION SIGHT DISTANCE

According to Alberta Transportation Highway Geometric Design Guide, the intersection sight distance for left turn vehicles onto a highway is the minimum sight distance required along a main (or through) highway at intersections necessary to permit the stopped vehicle to turn left onto the main (or through) two-lane highway<sup>4</sup>.

Given that Highway 58 is an undivided, two-lane highway at Highway 88 and at the East Access with no median to allow vehicles to complete the turn in two steps, Figure D-4.2.2.2 was used as indicated in Section D.4.2.2.2 of the AT Highway Geometric Design Guide. The assessment was completed using WB-21 vehicle as design vehicle as it is the suggested vehicle for major intersections and is expected to be present frequently at the site.

At Highway 88/Range Road 135 Access, using Figure D-4.2.2.2 of the AT Highway Geometric Design Guide, the required intersection sight distance for traffic is approximately 560 meters for a WB-21 Truck to complete a left turn onto Highway 58 assuming design speed of operating speed of 110 km/hr (posted speed of 100 km/hr). At the subject intersection, sight distance is over 560 meters in both directions.

At East Access, using Figure D-4.2.2.2 of the AT Highway Geometric Design Guide, the required intersection sight distance for traffic is approximately 460 meters for a WB-21 Truck to complete a left turn onto Highway 58 based on design speed of 90 km/hr (posted speed of 80 km/hr). At the subject intersection, sight distance is over 560 meters in both directions.

## 6.10 STOPPING SIGHT DISTANCE

Stopping sight distance is the minimum sight distance available on a roadway to allow a vehicle to stop before reaching a stationary object in its path.

At the Highway 58 and Highway 88 access and using Table B-2-3a of the AT Highway Geometric Design Guide, the minimum stopping sight distance for design speed of 110 km/hr (posted speed of 100 km/hr) is 220 meters. At the subject intersection, sight distance is over 560 meters in both directions.

At the Highway 58 and East Access and using Table B-2-3a of the AT-HGDG, the minimum stopping sight distance for design speed of 90 km/hr (posted speed of 80 km/hr) is 160 meters. At the subject intersection, sight distance is over 560 meters in both directions.

## 6.11 COLLISIONS REVIEW

A historic review of collision information along the Highway 58 segment between Highway 88 and the future East Access for the site was completed to understand the safety of the road. The data reviewed shows a total of eight collisions occurring between 2010 and 2020. The collisions, however, were primarily a result of driver judgment error or uncontrolled wild animals reaching the highway. Therefore, no geometric improvements are recommended at this point due to the collision history. Partial delineation might be necessary as described in **Section 6.5**.

<sup>4</sup>Alberta Transportation Highway Geometric Design Guide Chapter D – June 1999  
Alberta Transportation Highway Geometric Design Guide Chapter B – September 2020



## 7.0 RECOMMENDATIONS & CONCLUSIONS

Urban Systems Ltd. (USL) was retained by Little Red River Cree Nation (LRRCN) to complete an Area Structure Plan (ASP) of the quarter section of land located in the northeast corner of the intersection of Highway 58 and Highway 88, also known as Caribou Mountain Commercial Park. **Figure 2-1** shows the proposed site location.

This study analyzed the intersections described in **Section 2.1** over the anticipated construction horizons of 2024, 2034 and 2044. Existing traffic volume was estimated using Alberta Transportation (AT) available traffic counts and the approved Phase 1 development traffic volume as provided in the “Caribou Mountain Travel Center Response to TIA comments”, May 2020 Memorandum and the Institute of Transportation Engineer (ITE) Land-Use Code 110 for General Light Industrial which is the anticipated use of gas storage facility.

An annual growth rate for the Highway 58 and Highway 88 traffic volume is calculated using historical Alberta Transportation traffic counts from the intersection of Highway 58 and Highway 88 (Count Reference Number 39960). The calculated historical annual growth rate shows that the through traffic along Highway 58 and Highway 88 increased linearly by 1.2% and 1.1% per year over the past 19 years, respectively. As a conservative approach and per discussion with AT, the future background through traffic volumes along Highway 58 and Highway 88 are grown by 2% linearly per year to the 2024, 2034 and 2044 horizon years. Traffic turning north at the intersection was not adjusted by the mentioned rate as future growth would be driven developments within the Caribou Mountain Commercial Park.

The study utilizes multiple land-use codes from the ITE Trip Generation Manual to estimate the total future traffic generated by the multiple phases of the site. This study relies on the anticipated land uses at the time of completing this study. Future traffic impact assessment updates that build on this study may be required at each phase of development approval, at which time the proposed land use should be confirmed. The Floor Area Ratio (FAR) is assumed to be 10% on all industrial sites based on similar type of developments in rural areas across Alberta.

Based on the analyses completed, the following are the improvements recommended at intersection of Highway 58 with Highway 88 and East Access.

- Dedicated right turn lanes are warranted at the intersection of Highway 58 and Highway 88. The upgrades should be completed after monitoring of traffic growth at the intersection to determine the proper timing of construction.
- Partial/Delineation lighting to be installed at the intersection of Highway 58 and Highway 88 at opening day and all analyzed horizons. As delineation lighting is already part of the approved Phase 1 improvements (please refer to memorandum submitted by Urban Systems, May 2020 for details), no additional illumination is required for future phases.
- The proposed East Access would operate at acceptable level of service with Type-IIa treatment

## 8.0 AUTHORIZATION & CLOSING

This document entitled "Caribou Mountain Commercial Park ASP – Traffic Impact Assessment" was prepared by Urban Systems for the account of Little Red River Cree Nation. The material in it reflects Urban's best judgment in light of the information available to it at the time of preparation. Any use which a third party, beyond Alberta Transportation, makes of this report, or reliance on or decisions made based on it, are the responsibilities of such third parties. Urban Systems accepts no responsibilities for damages, if any, suffered by such third parties as a result of decisions made or actions based on this report.

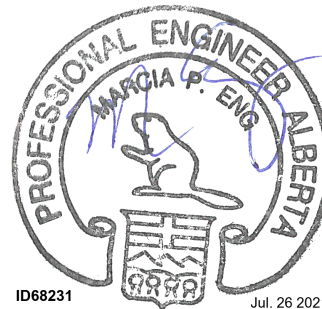
Respectfully submitted,

URBAN SYSTEMS LTD.

PREPARED BY:

Saeed Bashi, P. Eng.  
Transportation Engineer

REVIEWED BY:



Marcia Eng, P. Eng.  
Senior Transportation Engineer

### PERMIT TO PRACTICE URBAN SYSTEMS LTD.

RM SIGNATURE: *[Signature]*

RM APEGA ID #: 80017

DATE: 2021-07-27

**PERMIT NUMBER: P003836**

The Association of Professional Engineers and  
Geoscientists of Alberta (APEGA)

# APPENDIX A:

## ALBERTA TRANSPORTATION CORRESPONDENCE

## Saeed Bashi

---

**From:** TRANS Development Peace River <TRANSDevelopmentPeaceRiver@gov.ab.ca>  
**Sent:** Thursday, June 10, 2021 10:03 AM  
**To:** Saeed Bashi  
**Cc:** Marcia Eng; Dylan Smith; Danny Jung; Mary Crowley  
**Subject:** RE: Proposed TIA Scope for Quarter Section ASP

CAUTION: External Email.

Good Morning Saeed,

Thank you for your email. We have reviewed your proposal and can offer the following comments.

- Alberta Transportations standards for TIA can be found here <https://open.alberta.ca/dataset/0bdbdd46-06f4-4345-8768-d68b8306444e/resource/d5996230-5d08-40d9-a8dc-bec68018b1a4/download/trans-traffic-impact-assessment-guidelines-2021-02.pdf> , these standards must be met. If you are proposing to use different standards such as growth rate, you must first demonstrate why you feel this is necessary.
- The Department will not permit the construction of two additional direct highway accesses to the site, we **MAY** consider an access at the east boundary as shown on the plan provided, if supported by the revised TIA.

If you have any questions or would like to discuss please let me know.

Marlene Cobick  
Development and Planning Technologist  
Alberta Transportation – Peace Region  
Office: 780-624-6372  
Cell: 780-618-8168  
*A little appreciation goes a long way. Thank someone today with an [ecard!](#)*

Classification: Protected A

---

**From:** Saeed Bashi <sbashi@urbansystems.ca>  
**Sent:** Tuesday, June 01, 2021 1:20 PM  
**To:** Marlene Cobick <Marlene.Cobick@gov.ab.ca>  
**Cc:** Marcia Eng <MEng@urbansystems.ca>; Dylan Smith <dsmith@urbansystems.ca>  
**Subject:** Proposed TIA Scope for Quarter Section ASP

CAUTION: This email has been sent from an external source. Treat hyperlinks and attachments in this email with care.

Hello Marlene,

We are working with Little Red River Cree Nation on completing an Area Structure Plan (ASP) of the quarter section of land located at the intersection of Highway 58 and Highway 88. The ASP parcel area is located in the northeast corner of the intersection (Google Maps <https://goo.gl/maps/eXg4yPKwgPZA8wTBA>) and has the proposed site layout attached. The parcel currently has Phase 1 area under construction with expected completion date by the end of 2021. The roadside development permit for Phase 1 was submitted and approved in May 2020.

As part of completing the ASP for the remaining phases, we are proposing to complete a full Traffic Impact Assessment (TIA) that evaluates the impact of the future traffic growth on the surrounding highway network. The study would build

on previously completed work as submitted in the Phase 1 memo attached. Below is a summary of the proposed TIA scope for the ASP area:

- Study horizons  
Based on the attached site layout and development phasing plan shown, the study horizons would be
  - Phase 2A - Opening day (2022),
  - Phase 2B - 10 years (2032),
  - Phase 3, 4 and Future Phases - 20 years (2042)
- Background traffic volume growth
  - Utilize available traffic counts completed by Alberta Transportation to establish existing background volume at the intersection of Highway 58 and Highway 88.
    - Phase 1 development traffic volumes, as indicated in the attached memo, would be included in the background traffic for the study horizons but would not have any growth applied since the development volumes would only grow from additional development.
  - Original highway growth assumptions for Highway 58 and Highway 88, as extracted from AT traffic database, was 1.6% and 1.2% annually for Highway 58 and Highway 88 respectively.
    - We understand that both rates have been accepted by the department in the past as part of the approval for Phase 1 development, a copy of the memo is attached in this email. We are proposing to continue using these average annual noncompound growth rates to maintain consistent background traffic growth forecast.
- Study intersections
  - Highway 58/Highway 88
  - Highway 58/middle site access
  - Highway 58/east site access
  - North-South Range Road/north site access
  - North-South Range Road/Phase 1 site access
  - Note: AT warrants to be completed only for intersections along the highway
- Proposed land uses and ITE Land use Codes (As per attached Site Plan)
  - Phase 2A - Grocery store (Supermarket, ITE Land Use 850)
  - Phase 2B
    - Quick Service Restaurant (Fast Food Restaurant, ITE Land Use 934)
    - Vehicle Service (Vehicle Shop, ITE Land Use 941)
    - Card Lock (Gasoline/Service Station, ITE Land Use 944)
  - Phase 3, 4 and Future Phases
    - Highway Commercial: assume similar uses to Phase 1 and 2 which include fast-food restaurant, gas station and/or potential motel. Associate ITE rates will be used.
    - General Light Industrial (ITE Land Use 110): Assume 10% Floor Area Ratio (FAR) on all industrial sites based on similar industrial developments in rural areas.
- Analysis will be completed for background and post development condition. Analysis to include:
  - AM and PM peak hour intersection operational analysis using Synchro V11
  - Alberta Transportation's left turn lane warrant and right turn lane warrant at highway study intersections
  - Sight distance analysis at study intersections along highway
  - Illumination warrants at highway study intersections
  - Traffic signal warrants – if traffic signals are warranted along highway, would need to explore possible alternatives including roundabout, prior to recommending signals.
- Assume no pedestrian accommodations required along the highway or crossing highway due to the remote nature of the site.

Please feel free to contact me if you have any questions.

Best,

**Saeed Bashi, P.Eng.**  
Transportation Engineer

101-134 11<sup>th</sup> Avenue SE | Calgary, AB T2G 0X5  
**t** 403-291-1193 x4314 | **c** 306-880-5214  
**w** [urbansystems.ca](http://urbansystems.ca)



# TIA Summary Chart

<b>Date</b>	July 26 2021	<b>Consultant</b>	Urban Systems Ltd
<b>Project</b>	Caribou Mountain Commercial Park ASP - Traffic Impact Assessment		

## Site Information

<b>Development Type</b>	Commercial Park - Area Structure Plan		
<b>Highway No.</b>	58 and 88	<b>Control Section</b>	58:08 and 88:18
<b>Legal Land Description</b>	SW...-5-110-13-W5M		
<b>Posted Speed</b>	100	<b>Design Speed</b>	110
<b>Design Vehicle (include turning templates in appendix)</b>	<b>WB 21</b>		
<b>Sight Distance Available</b>	over 560 meters	<b>Min. Requirement</b>	560 m
<b>Lane Configuration</b>	East/West: Shared Thru/right, Dedicated left. North/South: Shared All		
<b>Existing Right of Way Width</b>	53.75 m from Highway 58 centre line		

## Warrants

	Existing	Improvement Required	
		Interim	Ultimate
<b>Year</b>		2024	2044
<b>Left Turn Lane</b>		Warranted	Warranted
<b>Right Turn Lane</b>		Warranted	Warranted
<b>Signal/Roundabout</b>		Not warranted	Not warranted
<b>Illumination (please specify)</b>		Partial/Delineation	Partial/Delineation
<b>Pedestrian</b>		Not required	Not required

## Intersection Treatment

	Existing	Proposed
<b>Intersection Treatment Type</b>	Type-IV	Type-IV
<b>Additional Modifications</b>		Dedicated right turn lanes
<b>Design Constraints</b>		N/A

## Additional Comments

The above identified improvements are for the intersection of Highway 58 and Highway 88. The study also proposes an additional access to the site which, if approved, is proposed as Type-II intersection. Additional details on the analysis methodology is included in the study.

*Disclaimer: Please note this chart does not summarize all of the guideline requirements and does not mean the categories not listed here can be excluded from the TIA*

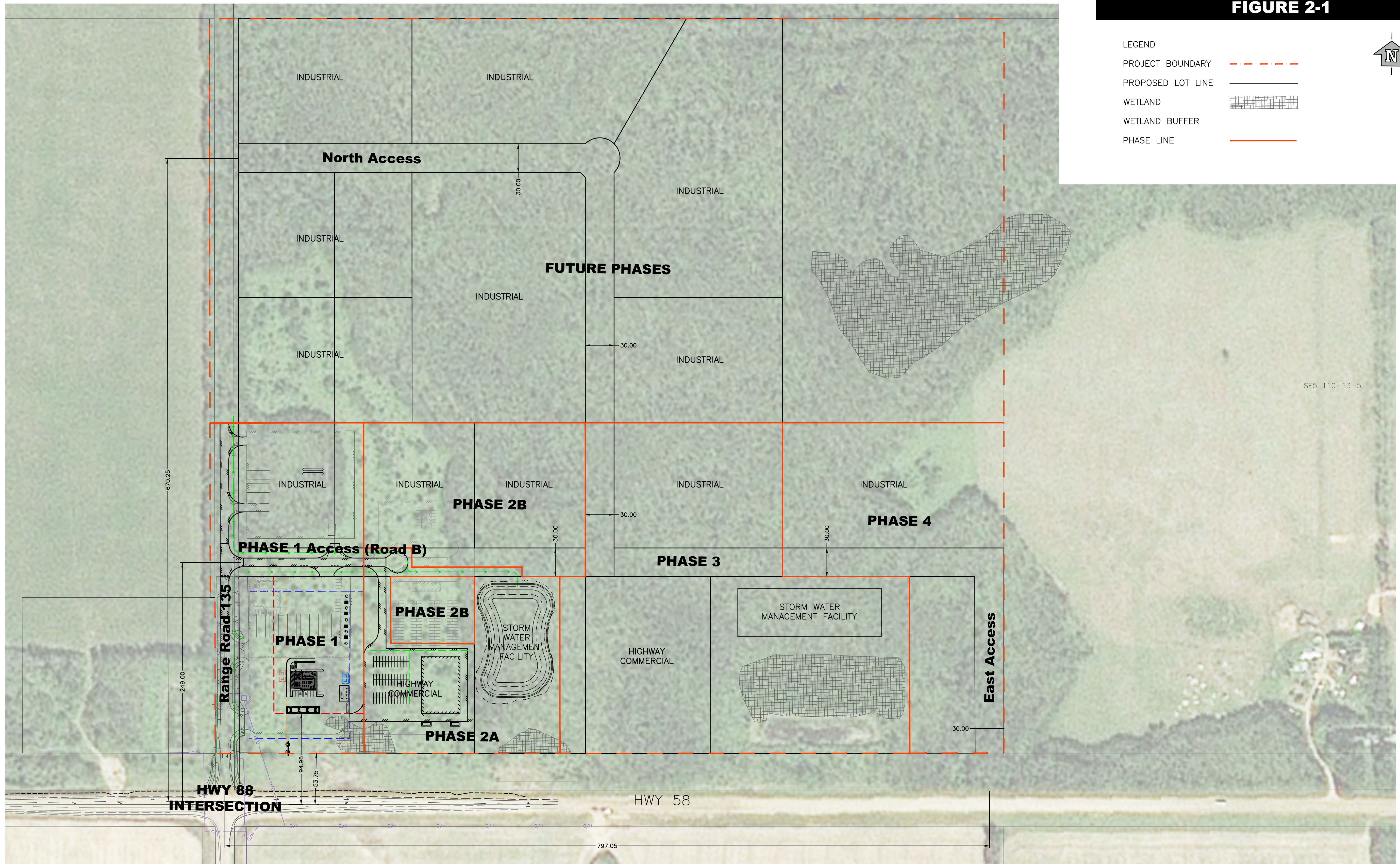
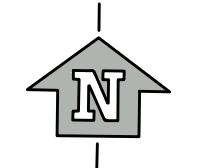


# APPENDIX B: SITE PLAN



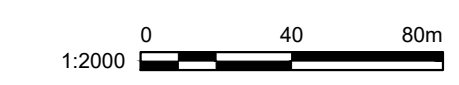
**FIGURE 2-1**

- LEGEND
- PROJECT BOUNDARY
  - PROPOSED LOT LINE
  - WETLAND
  - WETLAND BUFFER
  - PHASE LINE



SE5 110-13-5

U:\Projects\_EDM\2847\0015\01\Design\CAD\20\_PROD\FIG\Fig-2847\0013014.LOCATION & PHASING OF THE PROJECT DEVELOPMENT.dwg, ASP, 2021/07/19 05:02 pm saibong



<b>Client/Project</b>	
LITTLE RED RIVER CREE NATION CARIBOU MOUNTAIN COMMERCIAL PARK ASP	
<b>Revision Date</b>	<b>Figure</b>
2021-07-19	2-1
<b>2847.0015.01</b>	<b>Title</b>
<b>LOCATION &amp; PHASING OF THE PROPOSED DEVELOPMENT</b>	



# APPENDIX C:

## LEFT TURN WARRANT ANALYSIS – ALBERTA TRANSPORTATION



## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: AM. Peak

Year of Analysis: 2024  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	73
Advancing volume ( $V_{adv}$ ), veh/h:	123
Opposing volume ( $V_{opp}$ ), veh/h:	57
Left turn truck volume, trucks/h:	25
Right turn volume ( $V_{RT}$ ), veh/day:	605

OUTPUT	Value
Percent left-turns in advancing volume:	59.3%
Percent trucks in left turn volume:	34.2%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.3%
Calculated conflicts per hour, veh/h:	0.3

Use Detailed Method

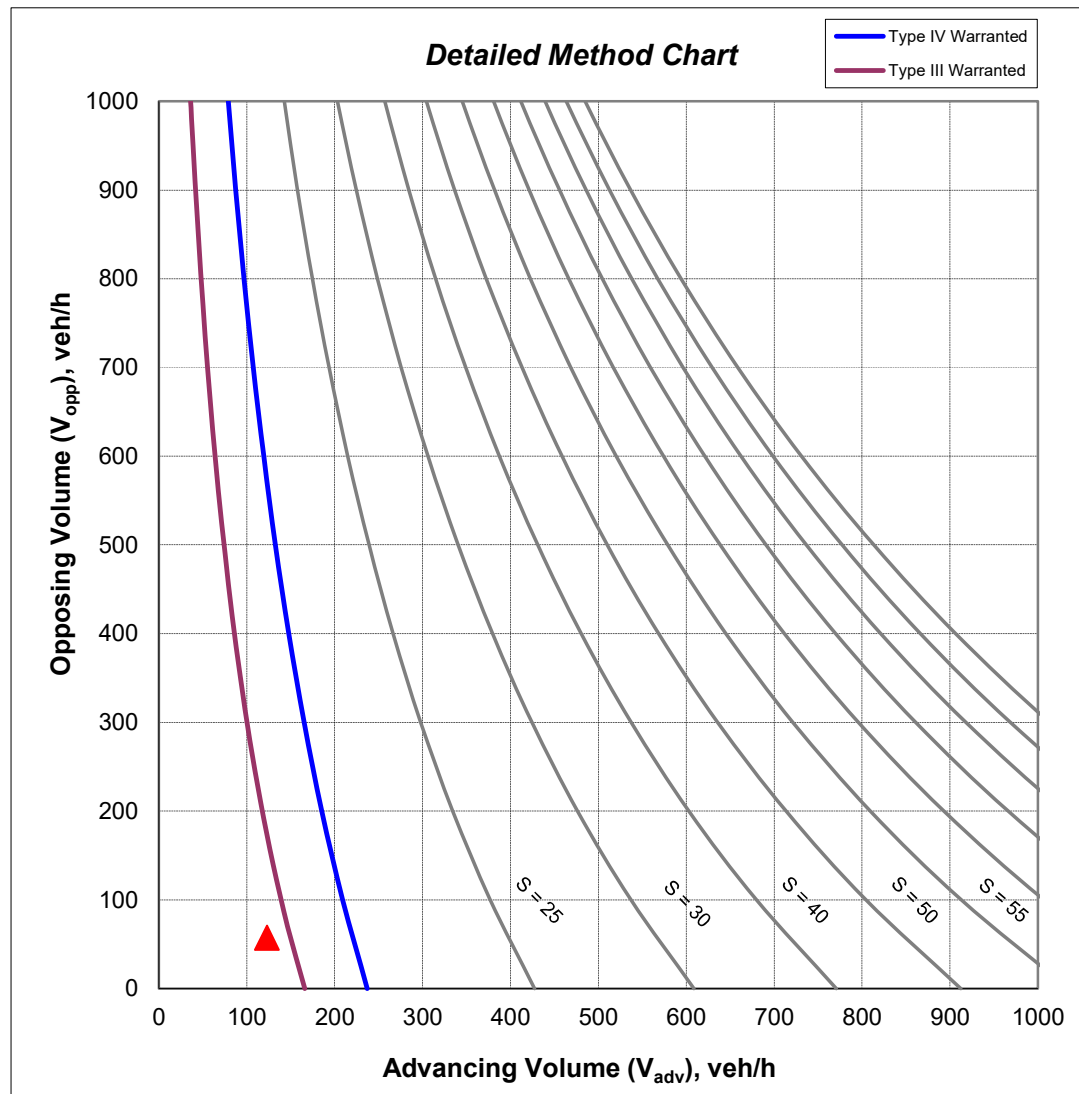
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: PM. Peak

Year of Analysis: 2024  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	92
Advancing volume ( $V_{adv}$ ), veh/h:	162
Opposing volume ( $V_{opp}$ ), veh/h:	57
Left turn truck volume, trucks/h:	30
Right turn volume ( $V_{RT}$ ), veh/day:	605

OUTPUT	Value
Percent left-turns in advancing volume:	56.8%
Percent trucks in left turn volume:	32.6%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.5%
Calculated conflicts per hour, veh/h:	0.8

Use Detailed Method

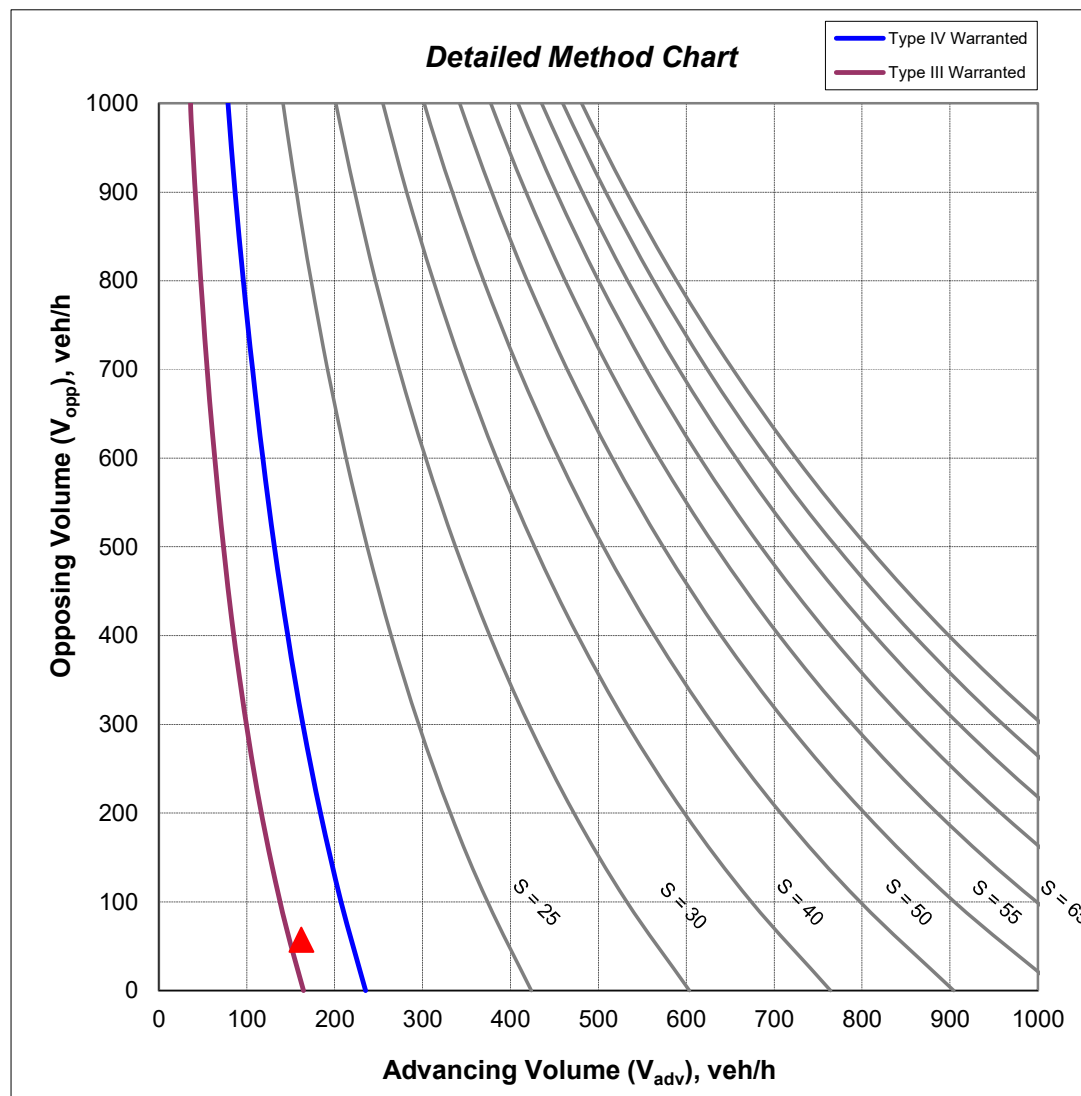
Type III

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: AM. Peak

Year of Analysis: 2024  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	5
Advancing volume ( $V_{adv}$ ), veh/h:	57
Opposing volume ( $V_{opp}$ ), veh/h:	123
Left turn truck volume, trucks/h:	2
Right turn volume ( $V_{RT}$ ), veh/day:	568

OUTPUT	Value
Percent left-turns in advancing volume:	8.8%
Percent trucks in left turn volume:	40.0%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.0

Use Detailed Method

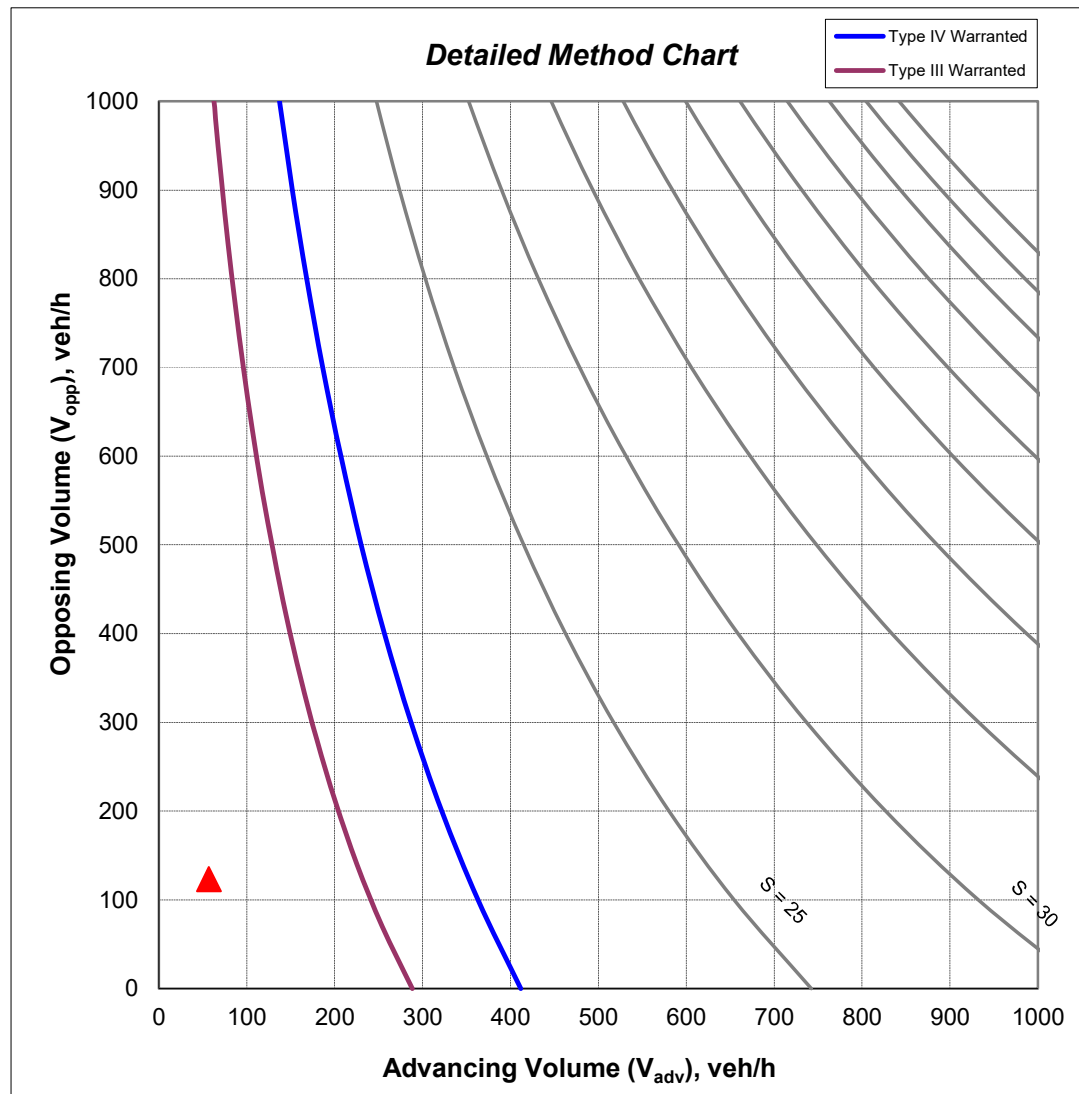
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9







## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: PM Peak

Year of Analysis: 2024  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	6
Advancing volume ( $V_{adv}$ ), veh/h:	57
Opposing volume ( $V_{opp}$ ), veh/h:	162
Left turn truck volume, trucks/h:	2
Right turn volume ( $V_{RT}$ ), veh/day:	568

OUTPUT	Value
Percent left-turns in advancing volume:	10.5%
Percent trucks in left turn volume:	33.3%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.0

Use Detailed Method

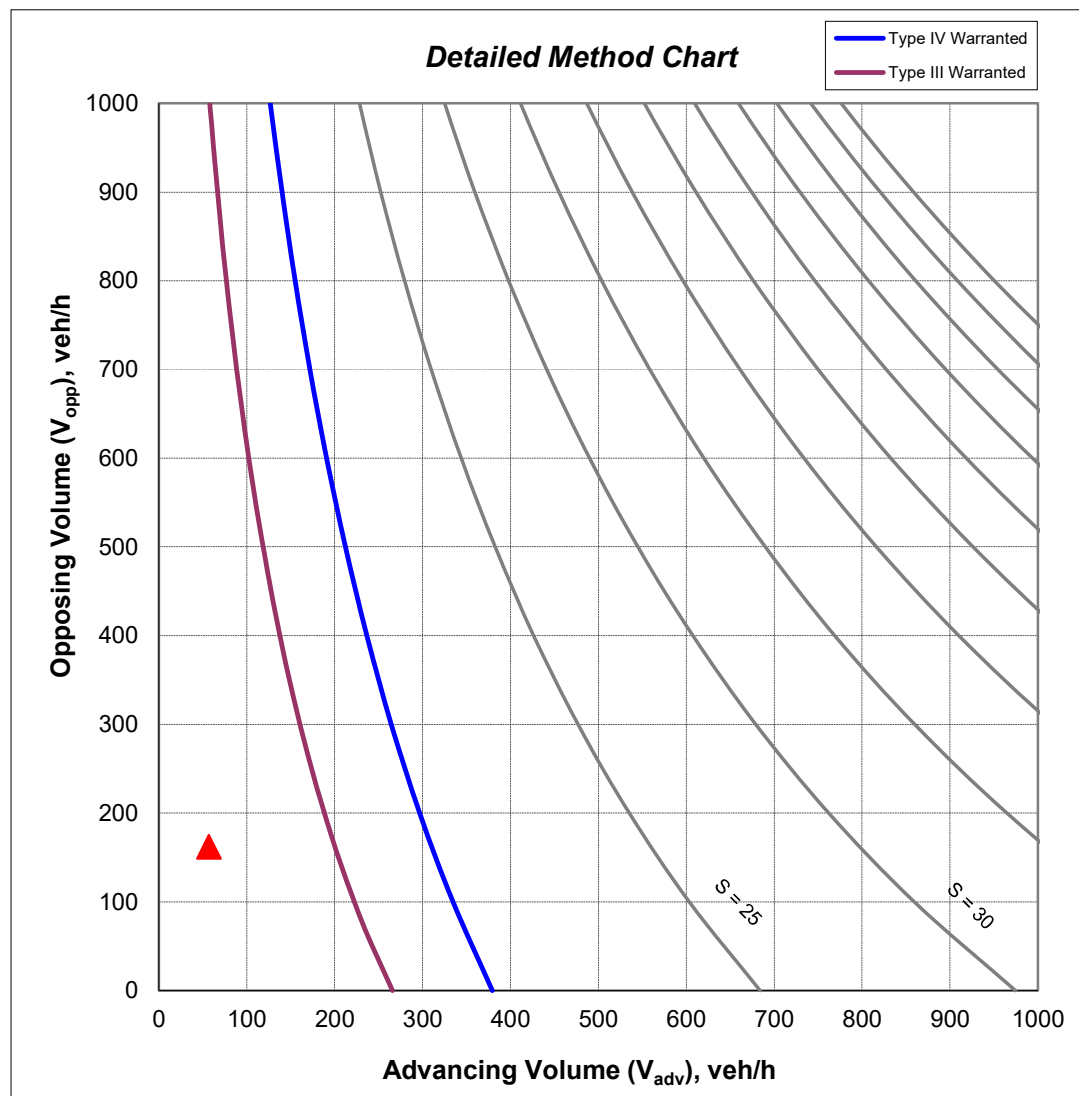
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: AM Peak

Year of Analysis: 2034  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	86
Advancing volume ( $V_{adv}$ ), veh/h:	146
Opposing volume ( $V_{opp}$ ), veh/h:	68
Left turn truck volume, trucks/h:	30
Right turn volume ( $V_{RT}$ ), veh/day:	568

OUTPUT	Value
Percent left-turns in advancing volume:	58.9%
Percent trucks in left turn volume:	34.9%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.4%
Calculated conflicts per hour, veh/h:	0.6

Use Detailed Method

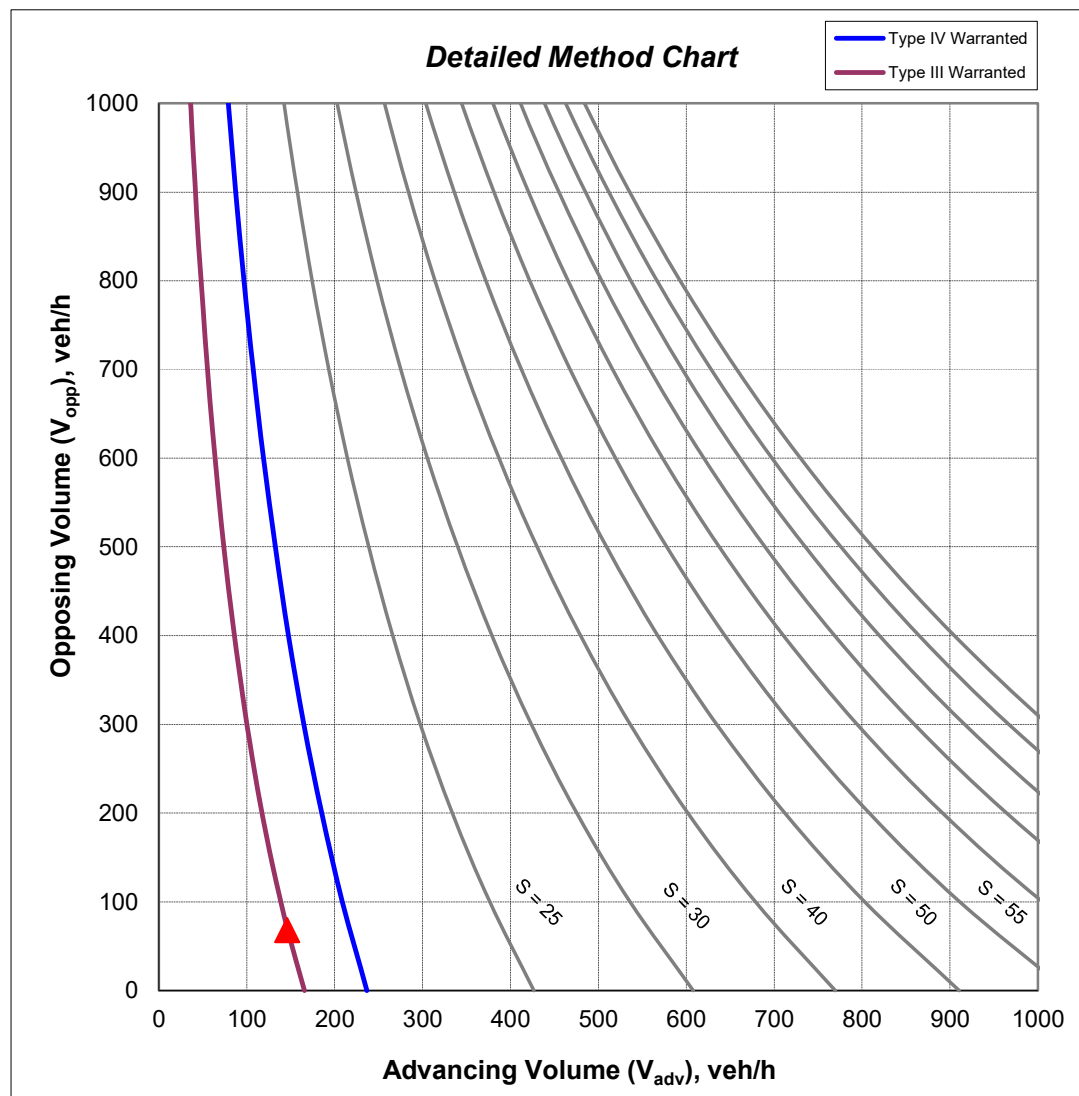
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: PM Peak

Year of Analysis: 2034  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	100
Advancing volume ( $V_{adv}$ ), veh/h:	184
Opposing volume ( $V_{opp}$ ), veh/h:	64
Left turn truck volume, trucks/h:	34
Right turn volume ( $V_{RT}$ ), veh/day:	568

OUTPUT	Value
Percent left-turns in advancing volume:	54.3%
Percent trucks in left turn volume:	34.0%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.7%
Calculated conflicts per hour, veh/h:	1.2

Use Detailed Method

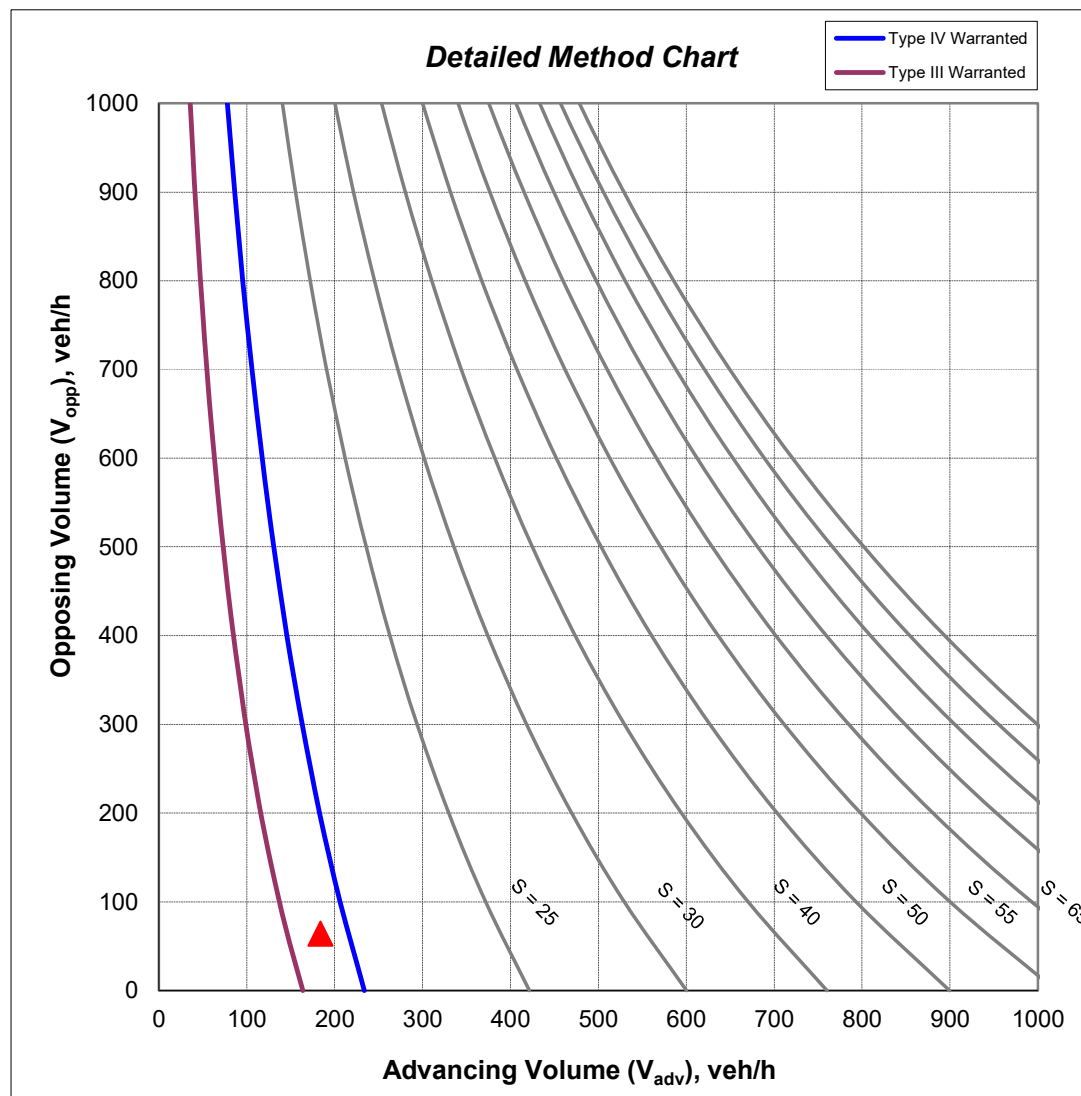
Type III

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: AM Peak

Year of Analysis: 2024  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	6
Advancing volume ( $V_{adv}$ ), veh/h:	68
Opposing volume ( $V_{opp}$ ), veh/h:	146
Left turn truck volume, trucks/h:	2
Right turn volume ( $V_{RT}$ ), veh/day:	615

OUTPUT	Value
Percent left-turns in advancing volume:	8.8%
Percent trucks in left turn volume:	33.3%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.0

Use Detailed Method

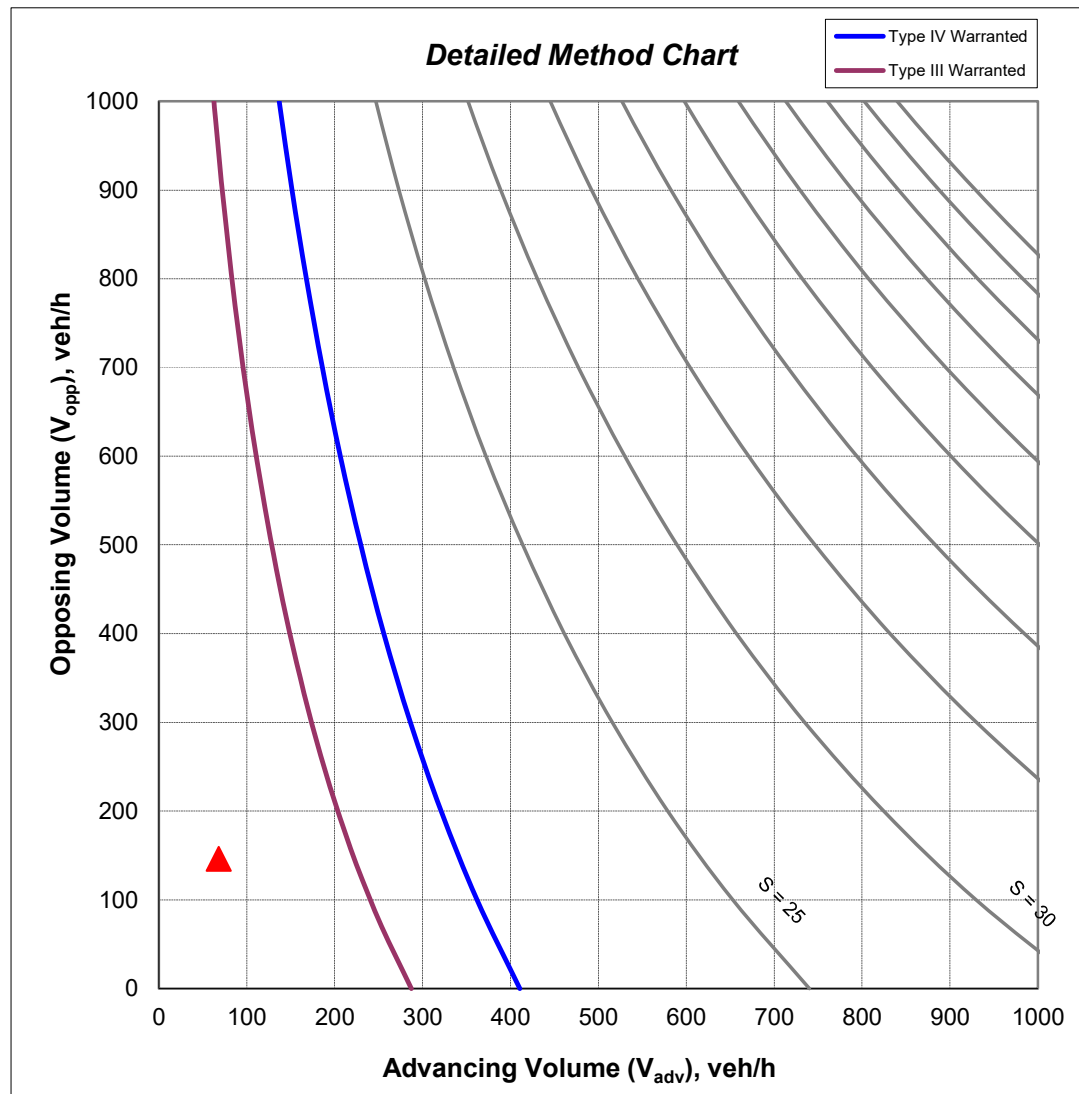
Type II

RT Lane  
warranted

Additional Storage Not Required	<i>base storage requirement</i>		-
	<i>- standard storage length</i>		-
	<i>+ additional truck storage</i>		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: PM Peak

Year of Analysis: 2034  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	4,000
Minor (intersecting) Road A.A.D.T	4,000
Left turn volume ( $V_{LT}$ ), veh/h:	8
Advancing volume ( $V_{adv}$ ), veh/h:	64
Opposing volume ( $V_{opp}$ ), veh/h:	184
Left turn truck volume, trucks/h:	3
Right turn volume ( $V_{RT}$ ), veh/day:	615

OUTPUT	Value
Percent left-turns in advancing volume:	12.5%
Percent trucks in left turn volume:	37.5%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.0

Use Detailed Method

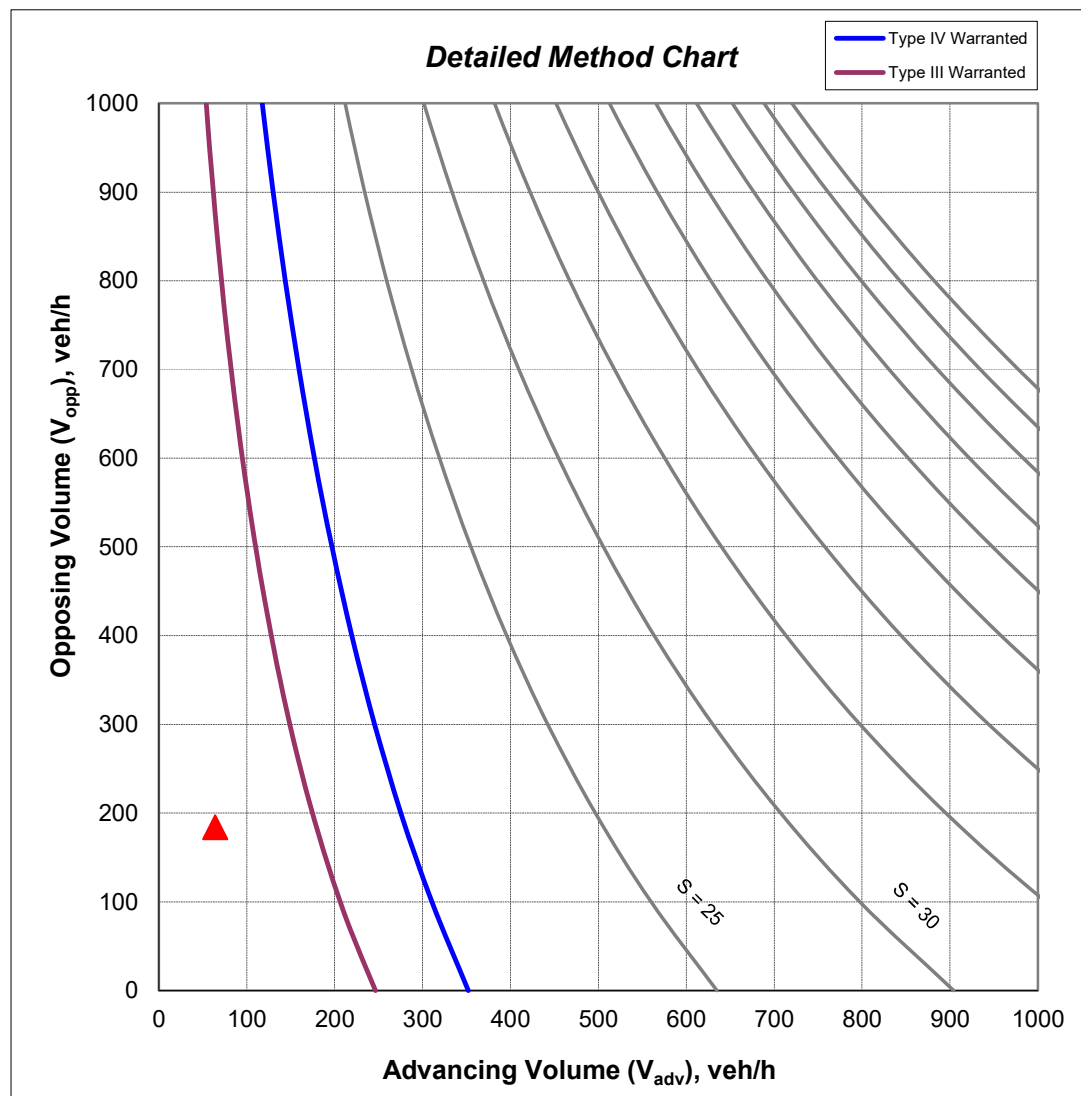
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9







## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: AM Peak

Year of Analysis: 2044  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	5,000
Minor (intersecting) Road A.A.D.T	5,000
Left turn volume ( $V_{LT}$ ), veh/h:	132
Advancing volume ( $V_{adv}$ ), veh/h:	213
Opposing volume ( $V_{opp}$ ), veh/h:	95
Left turn truck volume, trucks/h:	40
Right turn volume ( $V_{RT}$ ), veh/day:	829

OUTPUT	Value
Percent left-turns in advancing volume:	62.0%
Percent trucks in left turn volume:	30.3%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.9%
Calculated conflicts per hour, veh/h:	1.9

Use Detailed Method

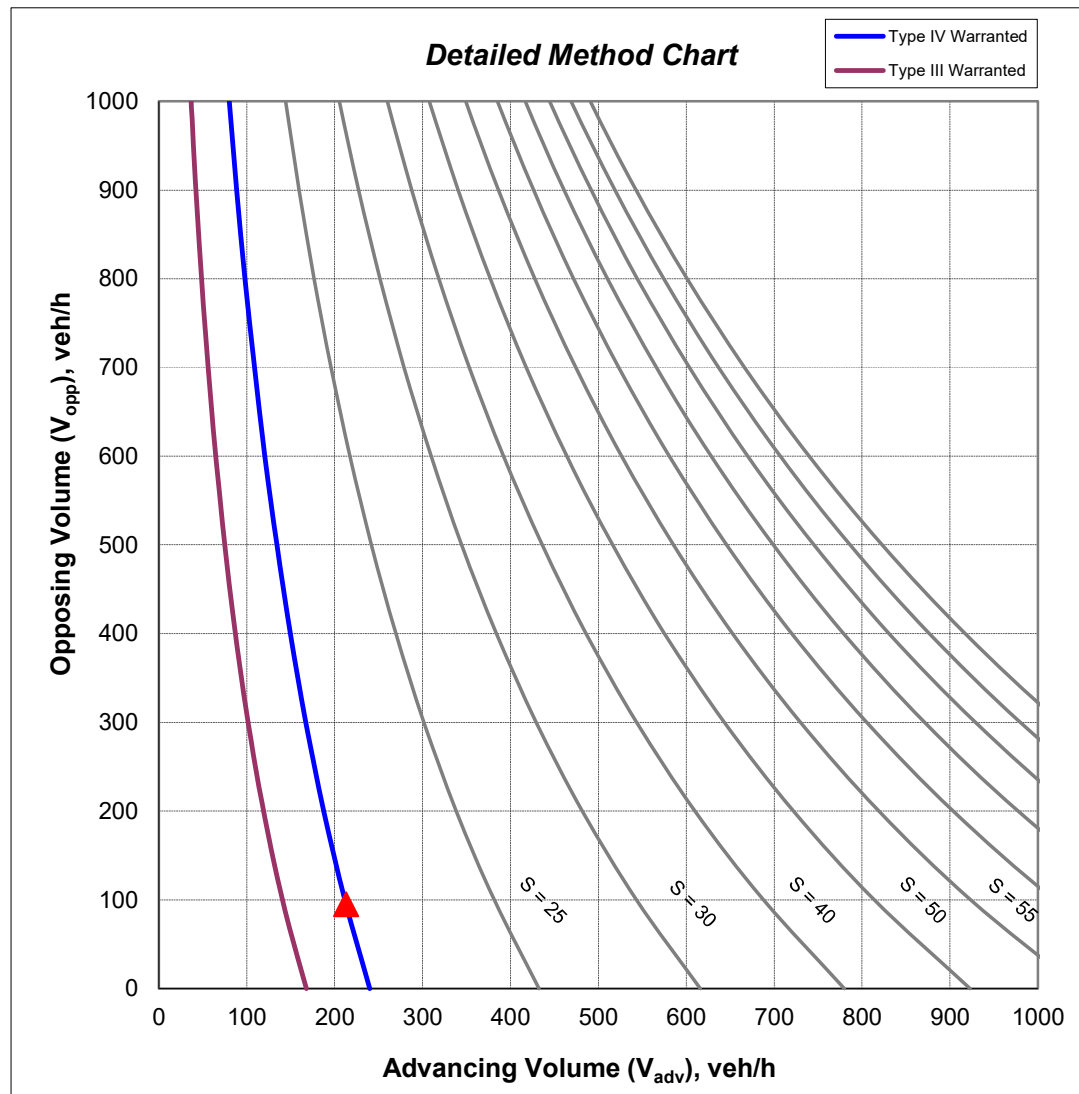
Type IV

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Eastbound  
Period: PM Peak

Year of Analysis: 2044  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	5,000
Minor (intersecting) Road A.A.D.T	5,000
Left turn volume ( $V_{LT}$ ), veh/h:	106
Advancing volume ( $V_{adv}$ ), veh/h:	204
Opposing volume ( $V_{opp}$ ), veh/h:	69
Left turn truck volume, trucks/h:	35
Right turn volume ( $V_{RT}$ ), veh/day:	829

OUTPUT	Value
Percent left-turns in advancing volume:	52.0%
Percent trucks in left turn volume:	33.0%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.8%
Calculated conflicts per hour, veh/h:	1.7

Use Detailed Method

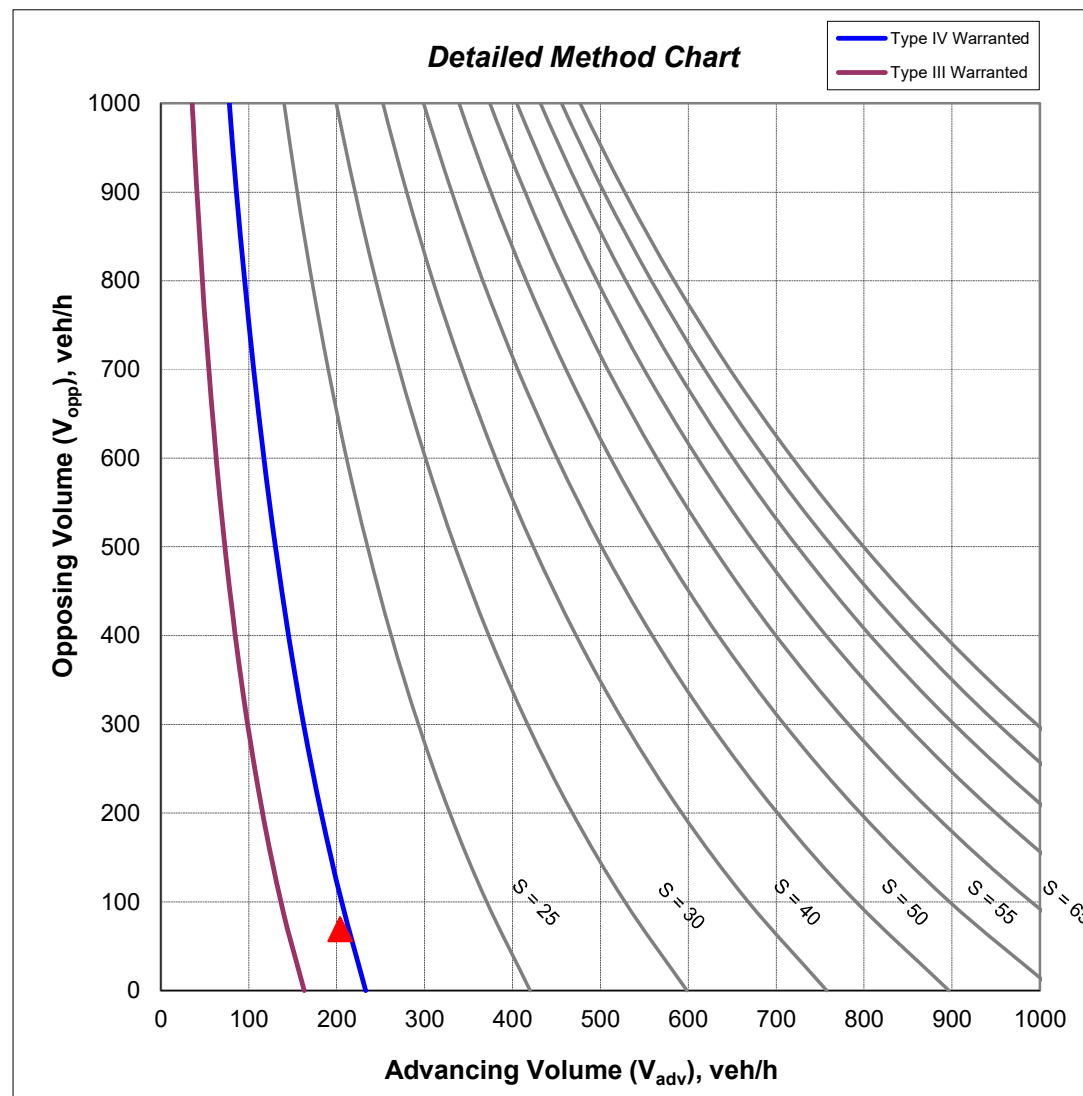
Type III

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: AM Peak

Year of Analysis: 2044  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	5,000
Minor (intersecting) Road A.A.D.T	5,000
Left turn volume ( $V_{LT}$ ), veh/h:	7
Advancing volume ( $V_{adv}$ ), veh/h:	95
Opposing volume ( $V_{opp}$ ), veh/h:	213
Left turn truck volume, trucks/h:	3
Right turn volume ( $V_{RT}$ ), veh/day:	721

OUTPUT	Value
Percent left-turns in advancing volume:	7.4%
Percent trucks in left turn volume:	42.9%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.1

Use Detailed Method

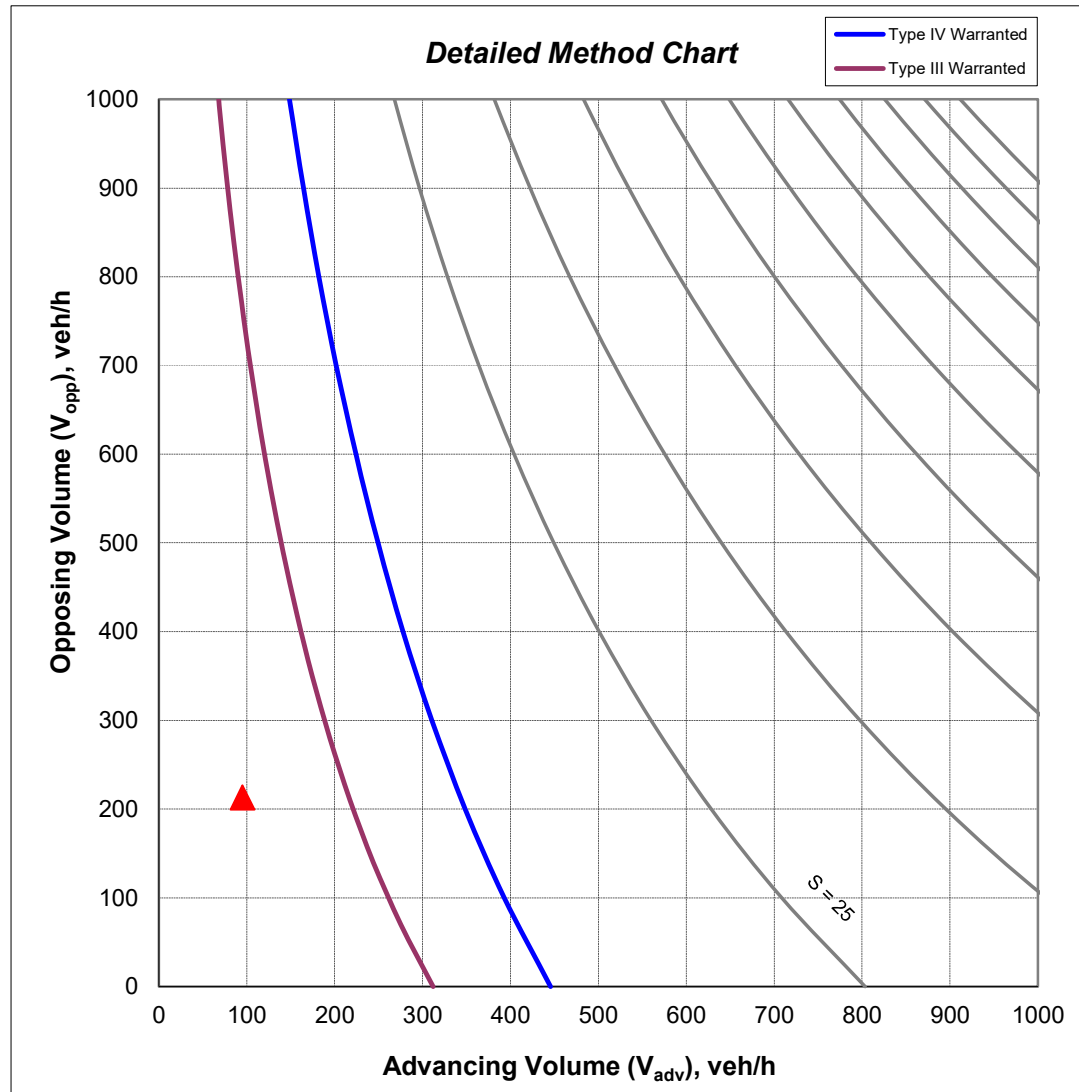
Type II

RT Lane  
warranted

Additional Storage Not Required	<i>base storage requirement</i>		-
	<i>- standard storage length</i>		-
	<i>+ additional truck storage</i>		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: Highway 88

Direction: Westbound  
Period: PM Peak

Year of Analysis: 2044  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	5,000
Minor (intersecting) Road A.A.D.T	5,000
Left turn volume ( $V_{LT}$ ), veh/h:	9
Advancing volume ( $V_{adv}$ ), veh/h:	69
Opposing volume ( $V_{opp}$ ), veh/h:	204
Left turn truck volume, trucks/h:	3
Right turn volume ( $V_{RT}$ ), veh/day:	721

OUTPUT	Value
Percent left-turns in advancing volume:	13.0%
Percent trucks in left turn volume:	33.3%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.0

Use Detailed Method

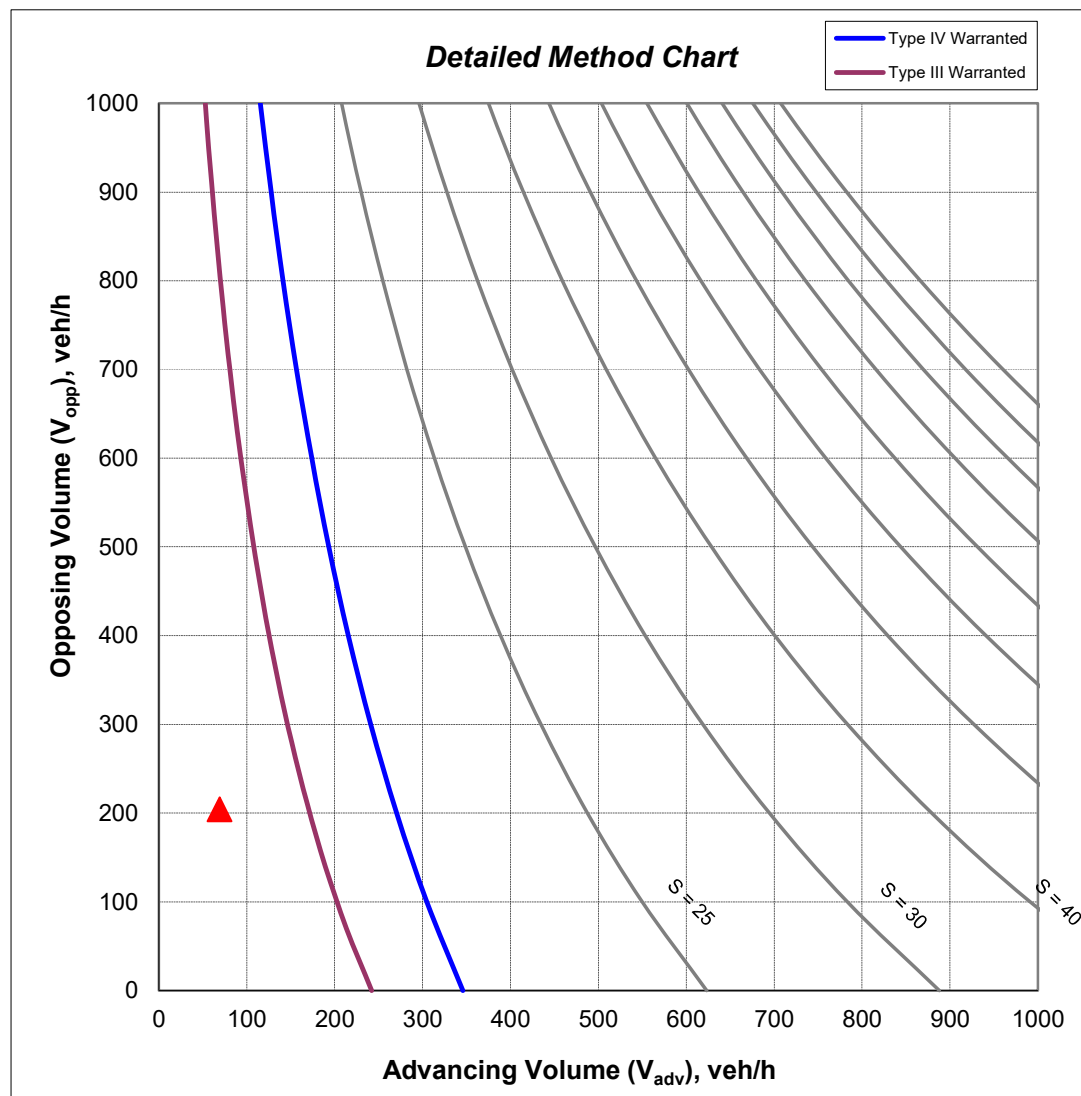
Type II

RT Lane  
warranted

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9





## Intersection Analysis Rural Two-Lane Undivided Highways

Main Rd: Highway 58  
Minor Rd: East Access

Direction: Eastbound  
Period: AM Peak

Year of Analysis: 2044  
Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	2,000
Minor (intersecting) Road A.A.D.T	300
Left turn volume ( $V_{LT}$ ), veh/h:	23
Advancing volume ( $V_{adv}$ ), veh/h:	72
Opposing volume ( $V_{opp}$ ), veh/h:	101
Left turn truck volume, trucks/h:	8
Right turn volume ( $V_{RT}$ ), veh/day:	27

OUTPUT	Value
Percent left-turns in advancing volume:	31.9%
Percent trucks in left turn volume:	34.8%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.1%
Calculated conflicts per hour, veh/h:	0.1

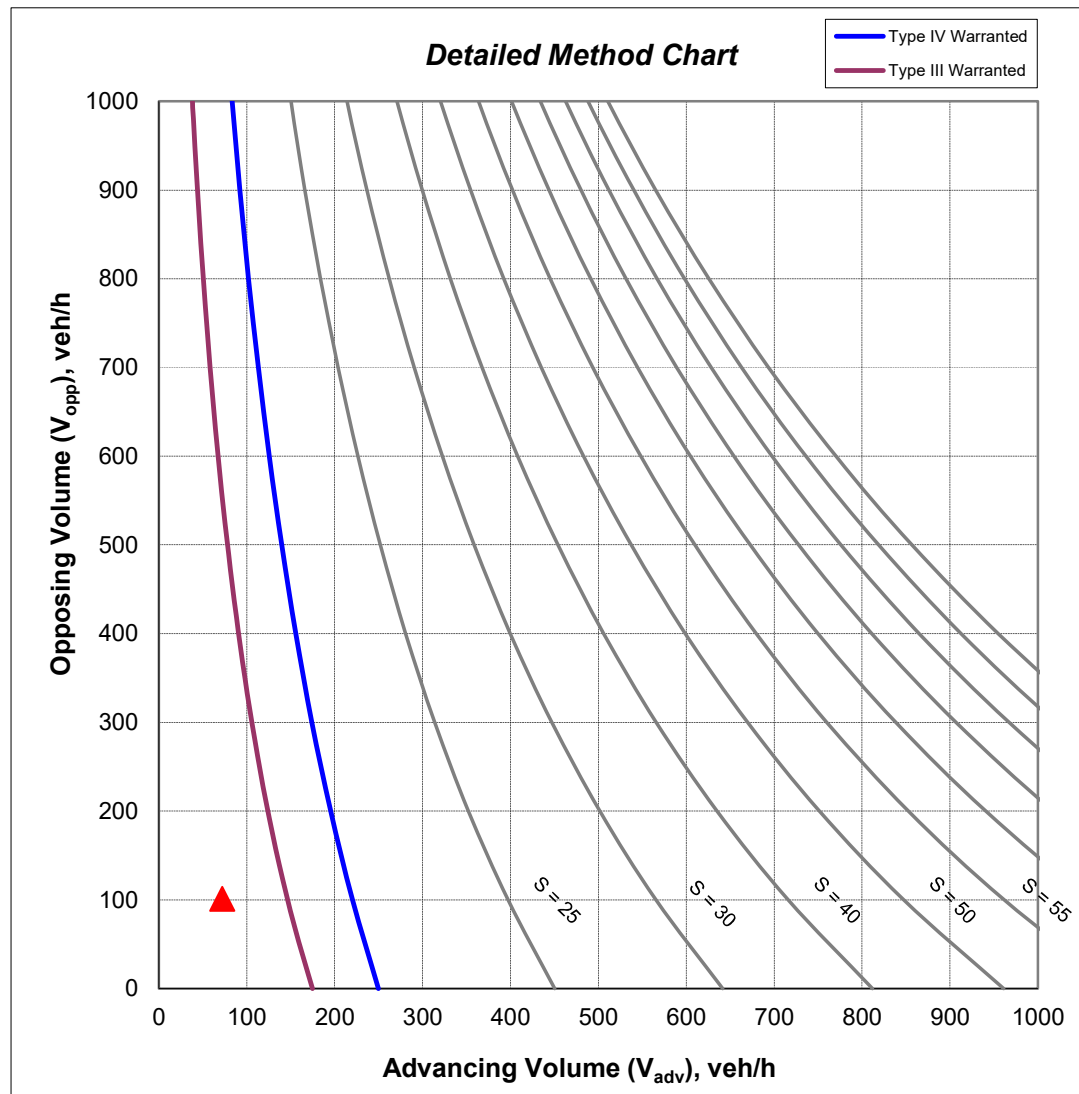
Use Detailed Method

Type II

Additional Storage Not Required	base storage requirement		-
	- standard storage length		-
	+ additional truck storage		-
	= total additional storage required		-

### CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9







**Intersection Analysis**  
**Rural Two-Lane Undivided Highways**

Main Rd: Highway 58  
 Minor Rd: East Access

Direction: Eastbound  
 Period: PM Peak

Year of Analysis: 2044  
 Date of Analysis: 18-Jun-2021

INPUT	Value
85 <sup>th</sup> percentile speed, km/h:	100
Main Road A.A.D.T.	2,000
Minor (intersecting) Road A.A.D.T	300
Left turn volume ( $V_{LT}$ ), veh/h:	3
Advancing volume ( $V_{adv}$ ), veh/h:	103
Opposing volume ( $V_{opp}$ ), veh/h:	66
Left turn truck volume, trucks/h:	1
Right turn volume ( $V_{RT}$ ), veh/day:	27

OUTPUT	Value
Percent left-turns in advancing volume:	2.9%
Percent trucks in left turn volume:	33.3%
Probability of conflict threshold:	0.89%
Calculated probability of conflicting arrival:	0.0%
Calculated conflicts per hour, veh/h:	0.0

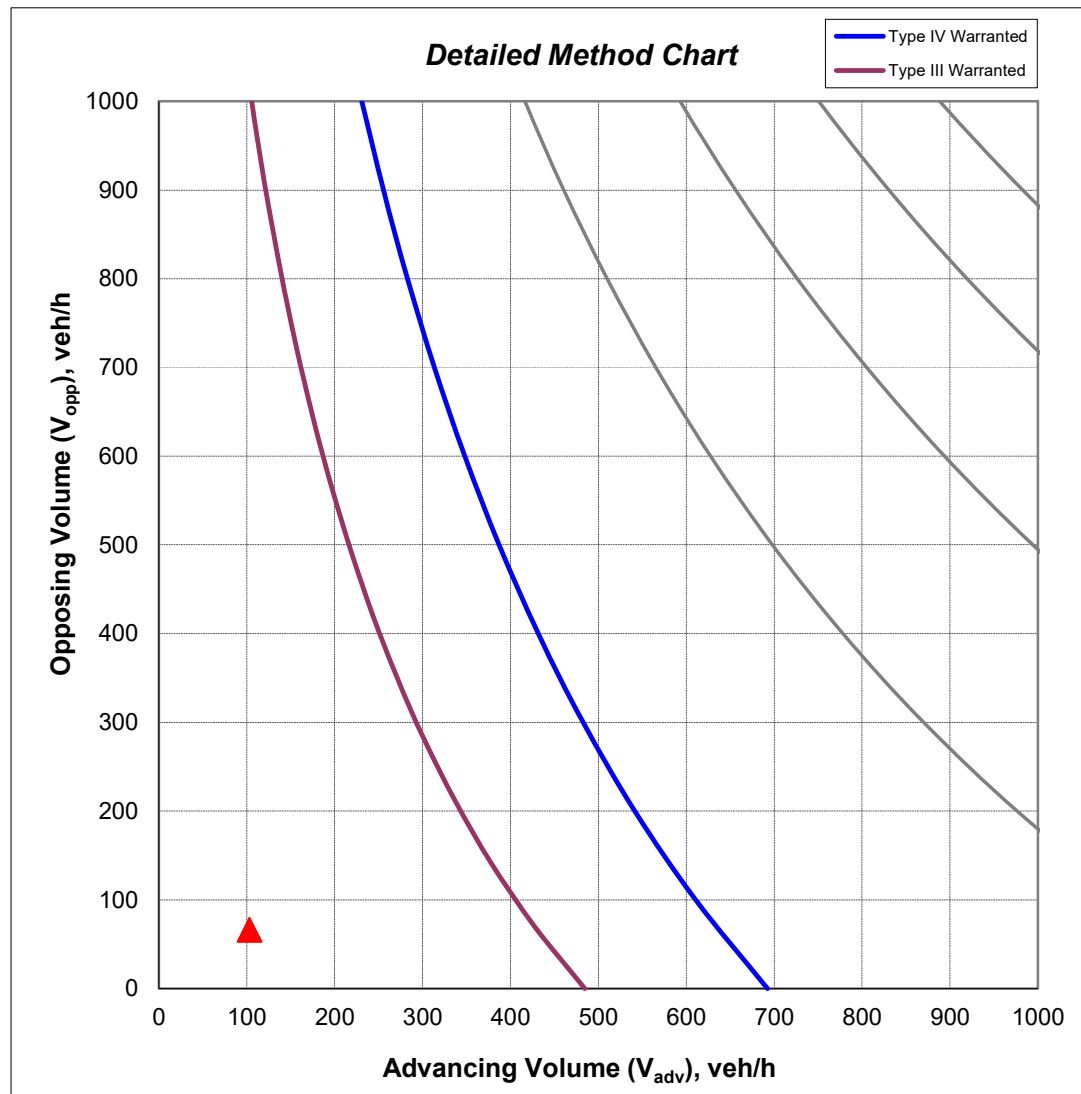
**Use Detailed Method**

**Type II**

Additional Storage Not Required	base storage requirement	-
	- standard storage length	-
	+ additional truck storage	-
	= total additional storage required	-

**CALIBRATION CONSTANTS**

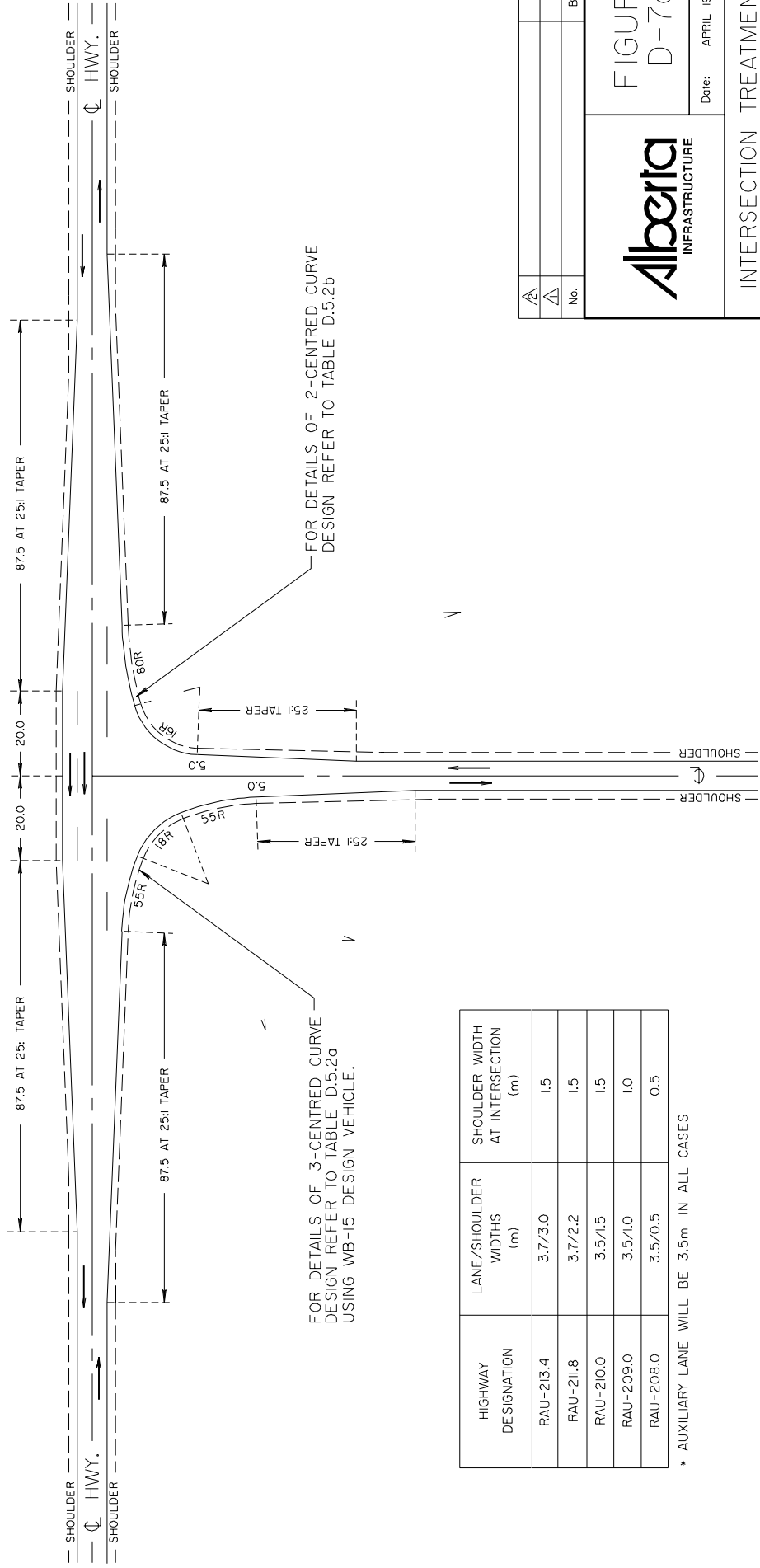
Variable	Value
Average time for making left-turn, s:	3.0
Critical headway (gap), s:	5.0
Average time to clear, s:	1.9



# APPENDIX D:

# INTERSECTION DESIGN AND TREATMENT

NOTES: DIMENSIONS SHOWN ARE FINISHED SURFACE PAVEMENT WIDTHS.  
 ADDITIONAL SUBGRADE WIDTHS TO BE PROVIDED TO ALLOW  
 FOR DEPTH OF BASE COURSE AND PAVEMENT.



FOR DETAILS OF 3-CENTRED CURVE  
 DESIGN REFER TO TABLE D.5.2a  
 USING WB-15 DESIGN VEHICLE.

FOR DETAILS OF 2-CENTRED CURVE  
 DESIGN REFER TO TABLE D.5.2b

HIGHWAY DESIGNATION	LANE/SHOULDER WIDTHS (m)	SHOULDER WIDTH AT INTERSECTION (m)
RAU-213.4	3.7/3.0	1.5
RAU-211.8	3.7/2.2	1.5
RAU-210.0	3.5/1.5	1.5
RAU-209.0	3.5/1.0	1.0
RAU-208.0	3.5/0.5	0.5

\* AUXILIARY LANE WILL BE 3.5m IN ALL CASES

△			
△			
No.		BY	DATE



FIGURE  
D-7c

Date: APRIL 1995

INTERSECTION TREATMENT  
 (TYPE IIa)  
 (TWO-LANE HIGHWAY)

Prepared By: R.T.	Checked By: B.K.	Scale: N.T.S.	Page: D-117
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TABLE 2: LEFT TURN LANE

HIGHWAY DESIGN SPEED km/h	LENGTH AND TAPER RATIO "T" OF BYPASS LANE (m)	PARALLEL DECELERATION LANE "P2" (m)	LENGTH AVAILABLE FOR DECELERATION 1/2 TAPER LANE (m)	DECELERATION LENGTH REQUIRED BASED ON DESIGN SPEED	STORAGE LENGTH PROVIDED BY STANDARD TREATMENT
50	140 or 40:1	20	90	70	20
60	140 or 40:1	35	105	90	15
70	140 or 40:1	55	125	110	15
80	140 or 40:1	80	150	130	20
90	210 or 60:1	70	175	150	25
100	210 or 60:1	85	190	170	20
120	210 or 60:1	120	225	210	15
130	210 or 60:1	125	230	215	15

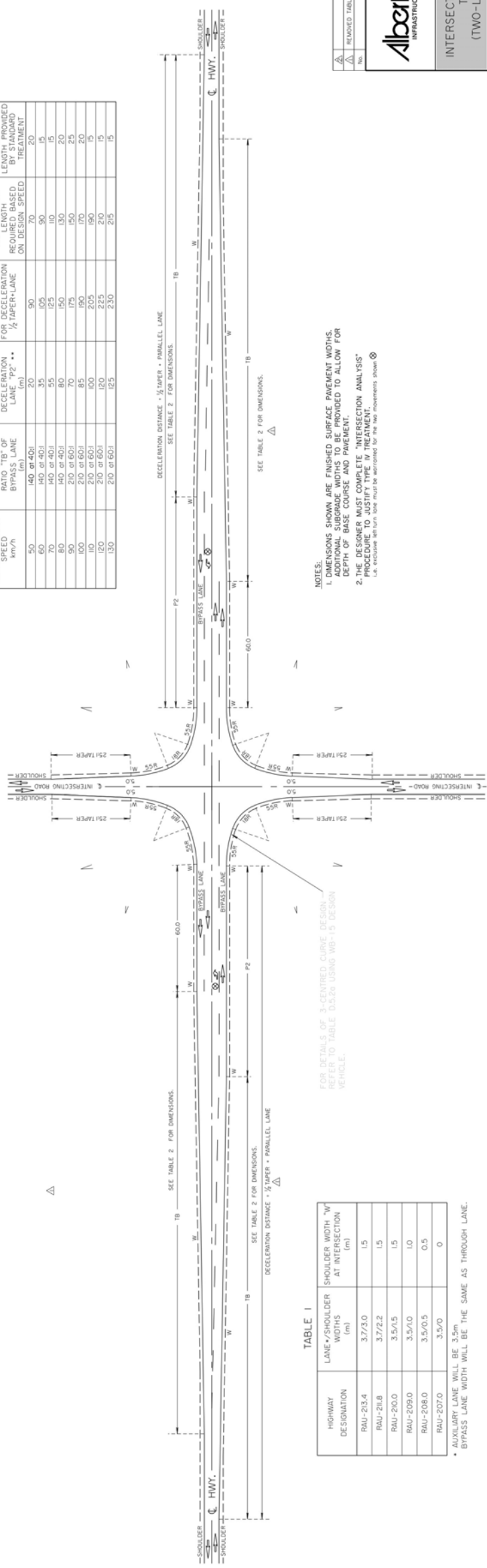


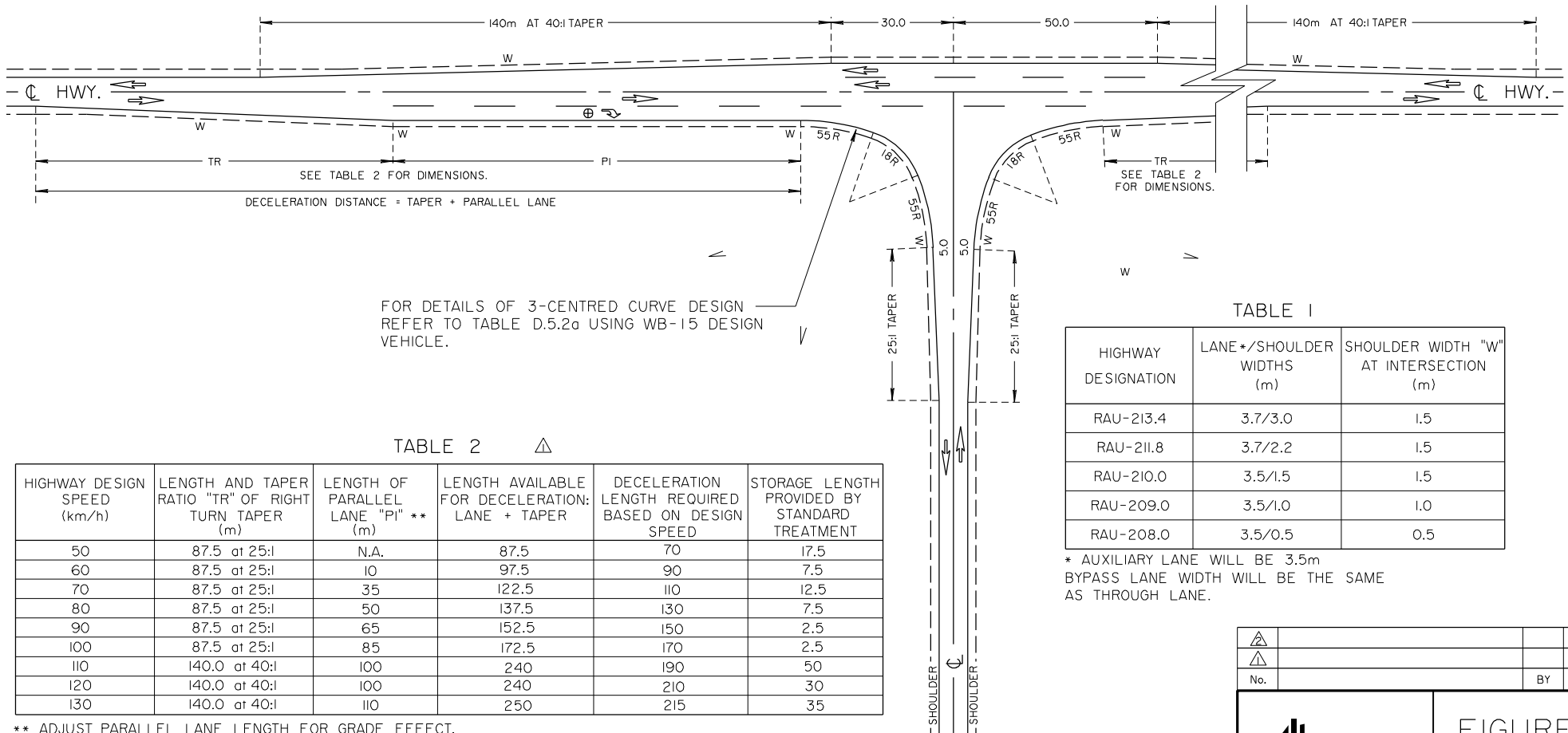
TABLE 1

HIGHWAY DESIGNATION	LANE + SHOULDER WIDTHS (m)	SHOULDER WIDTH AT INTERSECTION (m)
RAU-213.4	3.7/3.0	1.5
RAU-218	3.7/2.2	1.5
RAU-210.0	3.5/1.5	1.5
RAU-209.0	3.5/1.0	1.0
RAU-208.0	3.5/0.5	0.5
RAU-207.0	3.5/0	0

\* AUXILIARY LANE WILL BE 3.5m  
 BYPASS LANE WIDTH WILL BE THE SAME AS THROUGH LANE.

- NOTES:
1. DIMENSIONS SHOWN ARE FINISHED SURFACE PAVEMENT WIDTHS. DIMENSIONS SHOWN IN PARENTHESES ARE PROVIDED TO ALLOW FOR DEPTH OF BASE COURSE AND PAVEMENT.
  2. THE DESIGNER MUST COMPLETE "INTERSECTION ANALYSIS" PROCEDURE TO JUSTIFY TYPE IV TREATMENT.
- i.e. exclusive left turn lane must be provided for the two movements shown ⊗

	REMOVED TABLE 3, REV. TAPER NOTE	BK	9/99
	No.	BT	DATE
<p>FIGURE D-71</p> <p>Date: OCTOBER 1994</p>		<p>INTERSECTION TREATMENT TYPE IVc (TWO-LANE HIGHWAY)</p>	
Prepared By: C.P.	Checked By:	Scale: N.T.S.	PAGE: D-135



FOR DETAILS OF 3-CENTRED CURVE DESIGN REFER TO TABLE D.5.2a USING WB-15 DESIGN VEHICLE.

TABLE 2  $\Delta$

HIGHWAY DESIGN SPEED (km/h)	LENGTH AND TAPER RATIO "TR" OF RIGHT TURN TAPER (m)	LENGTH OF PARALLEL LANE "PI" ** (m)	LENGTH AVAILABLE FOR DECELERATION: LANE + TAPER	DECELERATION LENGTH REQUIRED BASED ON DESIGN SPEED	STORAGE LENGTH PROVIDED BY STANDARD TREATMENT
50	87.5 at 25:1	N.A.	87.5	70	17.5
60	87.5 at 25:1	10	97.5	90	7.5
70	87.5 at 25:1	35	122.5	110	12.5
80	87.5 at 25:1	50	137.5	130	7.5
90	87.5 at 25:1	65	152.5	150	2.5
100	87.5 at 25:1	85	172.5	170	2.5
110	140.0 at 40:1	100	240	190	50
120	140.0 at 40:1	100	240	210	30
130	140.0 at 40:1	110	250	215	35

\*\* ADJUST PARALLEL LANE LENGTH FOR GRADE EFFECT.

NOTES

- DIMENSIONS SHOWN ARE FINISHED SURFACE PAVEMENT WIDTHS. ADDITIONAL SUBGRADE WIDTHS TO BE PROVIDED TO ALLOW FOR DEPTH OF BASE COURSE AND PAVEMENT.
- THE DESIGNER MUST COMPLETE "INTERSECTION ANALYSIS" PROCEDURE TO JUSTIFY THE TYPE IV TREATMENT. i.e. exclusive right turn lane must be warranted for the movement shown  $\oplus$

TABLE 1

HIGHWAY DESIGNATION	LANE*/SHOULDER WIDTHS (m)	SHOULDER WIDTH "W" AT INTERSECTION (m)
RAU-213.4	3.7/3.0	1.5
RAU-211.8	3.7/2.2	1.5
RAU-210.0	3.5/1.5	1.5
RAU-209.0	3.5/1.0	1.0
RAU-208.0	3.5/0.5	0.5

\* AUXILIARY LANE WILL BE 3.5m  
BYPASS LANE WIDTH WILL BE THE SAME AS THROUGH LANE.

$\Delta$			
$\Delta$			
No.		BY	DATE

	<p>FIGURE D-7m</p> <p>Date: APRIL 1995</p>		
	<p>INTERSECTION TREATMENT TYPE IVd EXCLUSIVE RIGHT TURN TREATMENT WARRANTED (TWO-LANE HIGHWAY)</p>		
<p>Prepared By: Cgk</p>	<p>Checked By: B.K.</p>	<p>Scale: N.T.S.</p>	<p>PAGE D-137</p>






















# APPENDIX E:

# SYNCHRO OUTPUT FILES










HCM Unsignalized Intersection Capacity Analysis  
 3: Highway 88/Range Road 135 & Highway 58

2024 AM Peak - Background Traffic  
 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	5	45	5	16	4	67	8	4	2	3	3
Future Volume (Veh/h)	8	5	45	5	16	4	67	8	4	2	3	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	49	5	17	4	73	9	4	2	3	3
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	21			54			79	78	30	60	101	19
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	21			54			79	78	30	60	101	19
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	99			100			91	99	100	100	100	100
cM capacity (veh/h)	1431			1390			834	754	970	852	732	984
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	9	54	5	21	86	8						
Volume Left	9	0	5	0	73	2						
Volume Right	0	49	0	4	4	3						
cSH	1431	1700	1390	1700	830	843						
Volume to Capacity	0.01	0.03	0.00	0.01	0.10	0.01						
Queue Length 95th (m)	0.1	0.0	0.1	0.0	2.6	0.2						
Control Delay (s)	7.5	0.0	7.6	0.0	9.8	9.3						
Lane LOS	A		A		A	A						
Approach Delay (s)	1.1		1.5		9.8	9.3						
Approach LOS					A	A						
<b>Intersection Summary</b>												
Average Delay			5.6									
Intersection Capacity Utilization			25.0%		ICU Level of Service				A			
Analysis Period (min)			15									




















HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2024 AM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	0	0	19	0	0
Future Volume (Veh/h)	9	0	0	19	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	0	0	21	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	10	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10	10			21	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	99	100			100	
cM capacity (veh/h)	942	995			1431	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	10	21	0			
Volume Left	10	0	0			
Volume Right	0	21	0			
cSH	942	1700	1700			
Volume to Capacity	0.01	0.01	0.00			
Queue Length 95th (m)	0.2	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			2.9			
Intersection Capacity Utilization			13.3%		ICU Level of Service	A
Analysis Period (min)			15			










HCM Unsignalized Intersection Capacity Analysis  
 3: Highway 88/Range Road 135 & Highway 58

2024 PM Peak - Background Traffic  
 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	10	60	6	5	3	56	6	13	4	9	9
Future Volume (Veh/h)	5	10	60	6	5	3	56	6	13	4	9	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	11	65	7	5	3	61	7	14	4	10	10
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	8			76			88	76	44	59	106	6
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	8			76			88	76	44	59	106	6
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	100			99			92	99	99	100	99	99
cM capacity (veh/h)	1447			1363			812	758	952	848	728	1000
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	5	76	7	8	82	24						
Volume Left	5	0	7	0	61	4						
Volume Right	0	65	0	3	14	10						
cSH	1447	1700	1363	1700	828	843						
Volume to Capacity	0.00	0.04	0.01	0.00	0.10	0.03						
Queue Length 95th (m)	0.1	0.0	0.1	0.0	2.5	0.7						
Control Delay (s)	7.5	0.0	7.7	0.0	9.8	9.4						
Lane LOS	A		A		A	A						
Approach Delay (s)	0.5		3.6		9.8	9.4						
Approach LOS					A	A						
Intersection Summary												
Average Delay			5.6									
Intersection Capacity Utilization			23.0%		ICU Level of Service		A					
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access





















2024 PM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	0	0	13	0	0
Future Volume (Veh/h)	22	0	0	13	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	0	0	14	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	7	7			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7	7			14	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	97	100			100	
cM capacity (veh/h)	946	999			1440	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	24	14	0			
Volume Left	24	0	0			
Volume Right	0	14	0			
cSH	946	1700	1700			
Volume to Capacity	0.03	0.01	0.00			
Queue Length 95th (m)	0.6	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			5.6			
Intersection Capacity Utilization		13.3%		ICU Level of Service		A
Analysis Period (min)			15			












HCM Unsignalized Intersection Capacity Analysis  
 3: Highway 88/Range Road 135 & Highway 58

2034 AM Peak - Background Traffic  
 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	6	54	6	19	4	79	10	5	2	3	3
Future Volume (Veh/h)	8	6	54	6	19	4	79	10	5	2	3	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	7	59	7	21	4	86	11	5	2	3	3
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	25			66			94	94	36	72	121	23
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	25			66			94	94	36	72	121	23
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	99			99			89	99	99	100	100	100
cM capacity (veh/h)	1426			1375			814	738	961	833	712	978
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	9	66	7	25	102	8						
Volume Left	9	0	7	0	86	2						
Volume Right	0	59	0	4	5	3						
cSH	1426	1700	1375	1700	811	826						
Volume to Capacity	0.01	0.04	0.01	0.01	0.13	0.01						
Queue Length 95th (m)	0.1	0.0	0.1	0.0	3.3	0.2						
Control Delay (s)	7.5	0.0	7.6	0.0	10.1	9.4						
Lane LOS	A		A		B	A						
Approach Delay (s)	0.9		1.7		10.1	9.4						
Approach LOS					B	A						
Intersection Summary												
Average Delay			5.6									
Intersection Capacity Utilization			25.8%		ICU Level of Service		A					
Analysis Period (min)			15									

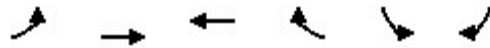
HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2034 AM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	0	0	19	0	0
Future Volume (Veh/h)	9	0	0	19	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	0	0	21	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	10	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10	10			21	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	99	100			100	
cM capacity (veh/h)	942	995			1431	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	10	21	0			
Volume Left	10	0	0			
Volume Right	0	21	0			
cSH	942	1700	1700			
Volume to Capacity	0.01	0.01	0.00			
Queue Length 95th (m)	0.2	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			2.9			
Intersection Capacity Utilization		13.3%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
1: Highway 58 & East Access




















2034 PM Peak - Background Traffic  
07/20/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.4				6.7	6.5
tC, 2 stage (s)						
tF (s)	2.5				3.8	3.6
p0 queue free %	100				100	100
cM capacity (veh/h)	1457				955	1008
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS				A		
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS				A		
<b>Intersection Summary</b>						
Average Delay				0.0		
Intersection Capacity Utilization				0.0%	ICU Level of Service	A
Analysis Period (min)				15		










HCM Unsignalized Intersection Capacity Analysis  
3: Highway 88/Range Road 135 & Highway 58

2034 PM Peak - Background Traffic  
07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	12	72	8	6	3	67	7	15	4	9	9
Future Volume (Veh/h)	5	12	72	8	6	3	67	7	15	4	9	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	13	78	9	7	3	73	8	16	4	10	10
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None					None						
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	10			91			102	90	52	70	128	8
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	10			91			102	90	52	70	128	8
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	100			99			91	99	98	100	99	99
cM capacity (veh/h)	1445			1345			793	742	942	830	707	997
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	5	91	9	10	97	24						
Volume Left	5	0	9	0	73	4						
Volume Right	0	78	0	3	16	10						
cSH	1445	1700	1345	1700	810	828						
Volume to Capacity	0.00	0.05	0.01	0.01	0.12	0.03						
Queue Length 95th (m)	0.1	0.0	0.2	0.0	3.1	0.7						
Control Delay (s)	7.5	0.0	7.7	0.0	10.0	9.5						
Lane LOS	A		A		B	A						
Approach Delay (s)	0.4		3.6		10.0	9.5						
Approach LOS					B	A						
Intersection Summary												
Average Delay			5.5									
Intersection Capacity Utilization			25.6%	ICU Level of Service	A							
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access




















2034 PM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	0	0	13	0	0
Future Volume (Veh/h)	22	0	0	13	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	0	0	14	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	7	7			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7	7			14	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	97	100			100	
cM capacity (veh/h)	946	999			1440	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	24	14	0			
Volume Left	24	0	0			
Volume Right	0	14	0			
cSH	946	1700	1700			
Volume to Capacity	0.03	0.01	0.00			
Queue Length 95th (m)	0.6	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			5.6			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			












HCM Unsignalized Intersection Capacity Analysis  
3: Highway 88/Range Road 135 & Highway 58

2044 AM Peak - Background Traffic  
07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	7	62	7	22	4	92	11	6	2	3	3
Future Volume (Veh/h)	8	7	62	7	22	4	92	11	6	2	3	3
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	8	67	8	24	4	100	12	7	2	3	3
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	28			75			104	104	42	81	135	26
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	28			75			104	104	42	81	135	26
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	99			99			88	98	99	100	100	100
cM capacity (veh/h)	1422			1364			801	728	955	819	698	975
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	9	75	8	28	119	8						
Volume Left	9	0	8	0	100	2						
Volume Right	0	67	0	4	7	3						
cSH	1422	1700	1364	1700	801	815						
Volume to Capacity	0.01	0.04	0.01	0.02	0.15	0.01						
Queue Length 95th (m)	0.1	0.0	0.1	0.0	4.0	0.2						
Control Delay (s)	7.5	0.0	7.7	0.0	10.3	9.5						
Lane LOS	A		A		B	A						
Approach Delay (s)	0.8		1.7		10.3	9.5						
Approach LOS					B	A						
Intersection Summary												
Average Delay			5.8									
Intersection Capacity Utilization			26.7%		ICU Level of Service				A			
Analysis Period (min)			15									

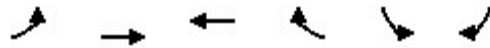
HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2044 AM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	9	0	0	19	0	0
Future Volume (Veh/h)	9	0	0	19	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	0	0	21	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	10	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10	10			21	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	99	100			100	
cM capacity (veh/h)	942	995			1431	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	10	21	0			
Volume Left	10	0	0			
Volume Right	0	21	0			
cSH	942	1700	1700			
Volume to Capacity	0.01	0.01	0.00			
Queue Length 95th (m)	0.2	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			2.9			
Intersection Capacity Utilization			13.3%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 1: Highway 58 & East Access




















2044 PM Peak - Background Traffic  
 07/20/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↗		↘	
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	0				0	0
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	0				0	0
tC, single (s)	4.4				6.7	6.5
tC, 2 stage (s)						
tF (s)	2.5				3.8	3.6
p0 queue free %	100				100	100
cM capacity (veh/h)	1457				955	1008
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service	A	
Analysis Period (min)			15			










HCM Unsignalized Intersection Capacity Analysis  
 3: Highway 88/Range Road 135 & Highway 58

2044 PM Peak - Background Traffic  
 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	13	83	9	7	3	77	8	18	4	9	9
Future Volume (Veh/h)	5	13	83	9	7	3	77	8	18	4	9	9
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	14	90	10	8	3	84	9	20	4	10	10
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	11			104			112	100	59	78	144	10
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	11			104			112	100	59	78	144	10
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	100			99			89	99	98	100	99	99
cM capacity (veh/h)	1443			1330			780	732	933	814	692	996
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NB 1	SB 1						
Volume Total	5	104	10	11	113	24						
Volume Left	5	0	10	0	84	4						
Volume Right	0	90	0	3	20	10						
cSH	1443	1700	1330	1700	799	816						
Volume to Capacity	0.00	0.06	0.01	0.01	0.14	0.03						
Queue Length 95th (m)	0.1	0.0	0.2	0.0	3.7	0.7						
Control Delay (s)	7.5	0.0	7.7	0.0	10.2	9.5						
Lane LOS	A		A		B	A						
Approach Delay (s)	0.3		3.7		10.2	9.5						
Approach LOS					B	A						
Intersection Summary												
Average Delay			5.6									
Intersection Capacity Utilization			26.6%	ICU Level of Service	A							
Analysis Period (min)			15									






















HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2044 PM Peak - Background Traffic  
07/20/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	0	0	13	0	0
Future Volume (Veh/h)	22	0	0	13	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	24	0	0	14	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	7	7			14	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	7	7			14	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	97	100			100	
cM capacity (veh/h)	946	999			1440	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	24	14	0			
Volume Left	24	0	0			
Volume Right	0	14	0			
cSH	946	1700	1700			
Volume to Capacity	0.03	0.01	0.00			
Queue Length 95th (m)	0.6	0.0	0.0			
Control Delay (s)	8.9	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	8.9	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			5.6			
Intersection Capacity Utilization		13.3%		ICU Level of Service		A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis 2024 AM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	5	45	5	16	39	67	77	4	30	60	60
Future Volume (Veh/h)	77	5	45	5	16	39	67	77	4	30	60	60
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	84	5	49	5	17	42	73	84	4	33	65	65
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	59			54			298	242	5	246	249	17
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	59			54			298	242	5	246	249	17
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	94			100			85	85	100	94	89	93
cM capacity (veh/h)	1384			1390			489	575	1002	550	569	986
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	84	5	49	5	17	42	161	163				
Volume Left	84	0	0	5	0	0	73	33				
Volume Right	0	0	49	0	0	42	4	65				
cSH	1384	1700	1700	1390	1700	1700	538	679				
Volume to Capacity	0.06	0.00	0.03	0.00	0.01	0.02	0.30	0.24				
Queue Length 95th (m)	1.5	0.0	0.0	0.1	0.0	0.0	9.5	7.1				
Control Delay (s)	7.8	0.0	0.0	7.6	0.0	0.0	14.5	12.0				
Lane LOS	A			A			B	B				
Approach Delay (s)	4.7			0.6			14.5	12.0				
Approach LOS							B	B				
Intersection Summary												
Average Delay			9.5									
Intersection Capacity Utilization			32.9%			ICU Level of Service		A				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2024 AM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	W		T			T
Traffic Volume (veh/h)	151	0	0	192	0	0
Future Volume (Veh/h)	151	0	0	192	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	164	0	0	209	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	104	104			209	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	104	104			209	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	80	100			100	
cM capacity (veh/h)	830	879			1212	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	164	209	0			
Volume Left	164	0	0			
Volume Right	0	209	0			
cSH	830	1700	1700			
Volume to Capacity	0.20	0.12	0.00			
Queue Length 95th (m)	5.6	0.0	0.0			
Control Delay (s)	10.4	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	10.4	0.0	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			4.6			
Intersection Capacity Utilization			28.0%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2024 PM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	10	60	6	5	47	56	93	13	46	93	93
Future Volume (Veh/h)	92	10	60	6	5	47	56	93	13	46	93	93
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	100	11	65	7	5	51	61	101	14	50	101	101
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	56			76			382	281	11	294	295	5
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	56			76			382	281	11	294	295	5
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	93			99			84	81	99	90	81	90
cM capacity (veh/h)	1387			1363			383	538	994	482	528	1002
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	100	11	65	7	5	51	176	252				
Volume Left	100	0	0	7	0	0	61	50				
Volume Right	0	0	65	0	0	51	14	101				
cSH	1387	1700	1700	1363	1700	1700	487	637				
Volume to Capacity	0.07	0.01	0.04	0.01	0.00	0.03	0.36	0.40				
Queue Length 95th (m)	1.8	0.0	0.0	0.1	0.0	0.0	12.4	14.4				
Control Delay (s)	7.8	0.0	0.0	7.7	0.0	0.0	16.5	14.3				
Lane LOS	A			A			C	B				
Approach Delay (s)	4.4			0.9			16.5	14.3				
Approach LOS							C	B				
Intersection Summary												
Average Delay			11.0									
Intersection Capacity Utilization			34.5%			ICU Level of Service		A				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2024 PM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	231	0	0	231	0	0
Future Volume (Veh/h)	231	0	0	231	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	251	0	0	251	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	126	126			251	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	126	126			251	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	69	100			100	
cM capacity (veh/h)	807	855			1167	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	251	251	0			
Volume Left	251	0	0			
Volume Right	0	251	0			
cSH	807	1700	1700			
Volume to Capacity	0.31	0.15	0.00			
Queue Length 95th (m)	10.1	0.0	0.0			
Control Delay (s)	11.5	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	11.5	0.0	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			5.7			
Intersection Capacity Utilization			35.3%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2034 AM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	6	54	6	19	46	79	92	5	33	65	65
Future Volume (Veh/h)	90	6	54	6	19	46	79	92	5	33	65	65
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	7	59	7	21	50	86	100	5	36	71	71
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	71			66			344	288	7	293	297	21
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	71			66			344	288	7	293	297	21
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	93			99			80	81	99	93	87	93
cM capacity (veh/h)	1369			1375			439	534	999	488	527	981
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	98	7	59	7	21	50	191	178				
Volume Left	98	0	0	7	0	0	86	36				
Volume Right	0	0	59	0	0	50	5	71				
cSH	1369	1700	1700	1375	1700	1700	492	634				
Volume to Capacity	0.07	0.00	0.03	0.01	0.01	0.03	0.39	0.28				
Queue Length 95th (m)	1.8	0.0	0.0	0.1	0.0	0.0	13.8	8.7				
Control Delay (s)	7.8	0.0	0.0	7.6	0.0	0.0	16.9	12.9				
Lane LOS	A			A			C	B				
Approach Delay (s)	4.7			0.7			16.9	12.9				
Approach LOS							C	B				
Intersection Summary												
Average Delay			10.4									
Intersection Capacity Utilization			38.5%			ICU Level of Service		A				
Analysis Period (min)			15									
























HCM Unsignalized Intersection Capacity Analysis 2034 AM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	164	0	0	225	0	0
Future Volume (Veh/h)	164	0	0	225	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	178	0	0	245	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type						
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	122	122			245	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	122	122			245	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	78	100			100	
cM capacity (veh/h)	810	858			1174	
Direction, Lane #						
	WB 1	NB 1	SB 1			
Volume Total	178	245	0			
Volume Left	178	0	0			
Volume Right	0	245	0			
cSH	810	1700	1700			
Volume to Capacity	0.22	0.14	0.00			
Queue Length 95th (m)	6.4	0.0	0.0			
Control Delay (s)	10.7	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	10.7	0.0	0.0			
Approach LOS	B					
Intersection Summary						
Average Delay			4.5			
Intersection Capacity Utilization		31.0%		ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2034 PM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021






















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	12	72	8	6	51	67	102	15	53	107	107
Future Volume (Veh/h)	100	12	72	8	6	51	67	102	15	53	107	107
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	109	13	78	9	7	55	73	111	16	58	116	116
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	62			91			430	311	13	328	334	7
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	62			91			430	311	13	328	334	7
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	92			99			78	78	98	87	77	88
cM capacity (veh/h)	1380			1345			333	513	991	442	497	999
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	109	13	78	9	7	55	200	290				
Volume Left	109	0	0	9	0	0	73	58				
Volume Right	0	0	78	0	0	55	16	116				
cSH	1380	1700	1700	1345	1700	1700	443	603				
Volume to Capacity	0.08	0.01	0.05	0.01	0.00	0.03	0.45	0.48				
Queue Length 95th (m)	2.0	0.0	0.0	0.2	0.0	0.0	17.5	19.8				
Control Delay (s)	7.8	0.0	0.0	7.7	0.0	0.0	19.7	16.4				
Lane LOS	A			A			C	C				
Approach Delay (s)	4.3			1.0			19.7	16.4				
Approach LOS							C	C				
Intersection Summary												
Average Delay			12.6									
Intersection Capacity Utilization			37.7%			ICU Level of Service			A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 2034 PM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	265	0	0	251	0	0
Future Volume (Veh/h)	265	0	0	251	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	288	0	0	273	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	136	136			273	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	136	136			273	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	64	100			100	
cM capacity (veh/h)	795	843			1145	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	288	273	0			
Volume Left	288	0	0			
Volume Right	0	273	0			
cSH	795	1700	1700			
Volume to Capacity	0.36	0.16	0.00			
Queue Length 95th (m)	12.6	0.0	0.0			
Control Delay (s)	12.1	0.0	0.0			
Lane LOS	B					
Approach Delay (s)	12.1	0.0	0.0			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			6.2			
Intersection Capacity Utilization			38.6%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis 2044 AM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	19	62	9	24	69	92	139	18	36	71	71
Future Volume (Veh/h)	136	19	62	9	24	69	92	139	18	36	71	71
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	148	21	67	10	26	75	100	151	20	39	77	77
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	101			88			478	438	21	458	430	26
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	101			88			478	438	21	458	430	26
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	89			99			70	64	98	87	82	92
cM capacity (veh/h)	1333			1349			328	417	981	302	422	975
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	148	21	67	10	26	75	271	193				
Volume Left	148	0	0	10	0	0	100	39				
Volume Right	0	0	67	0	0	75	20	77				
cSH	1333	1700	1700	1349	1700	1700	394	494				
Volume to Capacity	0.11	0.01	0.04	0.01	0.02	0.04	0.69	0.39				
Queue Length 95th (m)	2.8	0.0	0.0	0.2	0.0	0.0	37.9	13.9				
Control Delay (s)	8.0	0.0	0.0	7.7	0.0	0.0	31.9	16.9				
Lane LOS	A			A			D	C				
Approach Delay (s)	5.0			0.7			31.9	16.9				
Approach LOS							D	C				
Intersection Summary												
Average Delay			16.3									
Intersection Capacity Utilization			46.3%			ICU Level of Service		A				
Analysis Period (min)			15									






















HCM Unsignalized Intersection Capacity Analysis 2044 AM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	164	10	115	225	10	16
Future Volume (Veh/h)	164	10	115	225	10	16
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	178	11	125	245	11	17
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	286	248			370	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	286	248			370	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	72	98			99	
cM capacity (veh/h)	642	727			1050	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	189	370	28			
Volume Left	178	0	11			
Volume Right	11	245	0			
cSH	646	1700	1050			
Volume to Capacity	0.29	0.22	0.01			
Queue Length 95th (m)	9.2	0.0	0.2			
Control Delay (s)	12.9	0.0	3.4			
Lane LOS	B		A			
Approach Delay (s)	12.9	0.0	3.4			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			4.3			
Intersection Capacity Utilization			37.9%	ICU Level of Service		A
Analysis Period (min)			15			



HCM Unsignalized Intersection Capacity Analysis 2044 PM Peak - Post Development Traffic  
 3: Highway 88/Range Road 135 & Highway 58 07/20/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	15	83	19	17	54	77	109	20	74	148	148
Future Volume (Veh/h)	106	15	83	19	17	54	77	109	20	74	148	148
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	115	16	90	21	18	59	84	118	22	80	161	161
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	77			106			548	365	16	387	396	18
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	77			106			548	365	16	387	396	18
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	92			98			63	75	98	79	64	84
cM capacity (veh/h)	1362			1328			229	470	987	383	451	985
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	115	16	90	21	18	59	224	402				
Volume Left	115	0	0	21	0	0	84	80				
Volume Right	0	0	90	0	0	59	22	161				
cSH	1362	1700	1700	1328	1700	1700	350	551				
Volume to Capacity	0.08	0.01	0.05	0.02	0.01	0.03	0.64	0.73				
Queue Length 95th (m)	2.1	0.0	0.0	0.4	0.0	0.0	32.1	46.3				
Control Delay (s)	7.9	0.0	0.0	7.8	0.0	0.0	32.0	27.1				
Lane LOS	A			A			D	D				
Approach Delay (s)	4.1			1.7			32.0	27.1				
Approach LOS							D	D				
Intersection Summary												
Average Delay			20.3									
Intersection Capacity Utilization			44.1%			ICU Level of Service			A			
Analysis Period (min)			15									

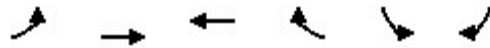
HCM Unsignalized Intersection Capacity Analysis 2044 PM Peak - Post Development Traffic  
 4: Range Road 135 & Phase 1 Access 07/20/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	255	10	15	250	10	103
Future Volume (Veh/h)	255	10	15	250	10	103
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	277	11	16	272	11	112
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	286	152			288	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	286	152			288	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	57	99			99	
cM capacity (veh/h)	643	826			1130	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	288	288	123			
Volume Left	277	0	11			
Volume Right	11	272	0			
cSH	648	1700	1130			
Volume to Capacity	0.44	0.17	0.01			
Queue Length 95th (m)	17.4	0.0	0.2			
Control Delay (s)	14.9	0.0	0.8			
Lane LOS	B		A			
Approach Delay (s)	14.9	0.0	0.8			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			6.3			
Intersection Capacity Utilization			39.4%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
1: Highway 58 & East Access






















2044 AM Peak - Senestivity PD Traffic  
07/26/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↔	↔		↔	
Traffic Volume (veh/h)	0	49	101	0	0	0
Future Volume (Veh/h)	0	49	101	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	53	110	0	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	110				163	110
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	110				163	110
tC, single (s)	4.4				6.7	6.5
tC, 2 stage (s)						
tF (s)	2.5				3.8	3.6
p0 queue free %	100				100	100
cM capacity (veh/h)	1323				767	873
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	53	110	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1323	1700	1700			
Volume to Capacity	0.00	0.06	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			0.0			
Intersection Capacity Utilization			8.9%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
3: Highway 88/Range Road 135 & Highway 58

2044 AM Peak - Senestivity PD Traffic  
07/26/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	7	62	7	22	75	92	151	6	37	73	73
Future Volume (Veh/h)	148	7	62	7	22	75	92	151	6	37	73	73
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	161	8	67	8	24	82	100	164	7	40	79	79
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type		None			None							
Median storage (veh)												
Upstream signal (m)												
pX, platoon unblocked												
vC, conflicting volume	106			75			488	452	8	459	437	24
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	106			75			488	452	8	459	437	24
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5
tC, 2 stage (s)												
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6
p0 queue free %	88			99			69	60	99	86	81	92
cM capacity (veh/h)	1328			1364			318	405	998	290	413	977
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1				
Volume Total	161	8	67	8	24	82	271	198				
Volume Left	161	0	0	8	0	0	100	40				
Volume Right	0	0	67	0	0	82	7	79				
cSH	1328	1700	1700	1364	1700	1700	373	483				
Volume to Capacity	0.12	0.00	0.04	0.01	0.01	0.05	0.73	0.41				
Queue Length 95th (m)	3.1	0.0	0.0	0.1	0.0	0.0	42.2	15.0				
Control Delay (s)	8.1	0.0	0.0	7.7	0.0	0.0	36.5	17.5				
Lane LOS	A			A			E	C				
Approach Delay (s)	5.5			0.5			36.5	17.5				
Approach LOS							E	C				
Intersection Summary												
Average Delay			18.0									
Intersection Capacity Utilization			46.8%			ICU Level of Service		A				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2044 AM Peak - Senestivity PD Traffic  
07/26/2021












Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	164	10	145	215	10	20
Future Volume (Veh/h)	164	10	145	215	10	20
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	178	11	158	234	11	22
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	319	275			392	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	319	275			392	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	71	98			99	
cM capacity (veh/h)	614	701			1029	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	189	392	33			
Volume Left	178	0	11			
Volume Right	11	234	0			
cSH	618	1700	1029			
Volume to Capacity	0.31	0.23	0.01			
Queue Length 95th (m)	9.8	0.0	0.2			
Control Delay (s)	13.4	0.0	2.9			
Lane LOS	B		A			
Approach Delay (s)	13.4	0.0	2.9			
Approach LOS	B					
<b>Intersection Summary</b>						
Average Delay			4.3			
Intersection Capacity Utilization			38.9%	ICU Level of Service	A	
Analysis Period (min)			15			



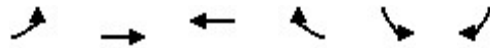
HCM Unsignalized Intersection Capacity Analysis  
5: Range Road 135 & North Access

2044 AM Peak - Senestivity PD Traffic  
07/26/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	0	0	145	0	0
Future Volume (Veh/h)	20	0	0	145	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	22	0	0	158	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	79	79			158	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	79	79			158	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	97	100			100	
cM capacity (veh/h)	859	909			1268	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	22	158	0			
Volume Left	22	0	0			
Volume Right	0	158	0			
cSH	859	1700	1700			
Volume to Capacity	0.03	0.09	0.00			
Queue Length 95th (m)	0.6	0.0	0.0			
Control Delay (s)	9.3	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.3	0.0	0.0			
Approach LOS	A					
Intersection Summary						
Average Delay			1.1			
Intersection Capacity Utilization			19.5%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
 1: Highway 58 & East Access

2044 PM Peak - Senestivity PD Traffic  
 07/26/2021
























Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	104	66	0	0	0
Future Volume (Veh/h)	0	104	66	0	0	0
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	113	72	0	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage (veh)						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	72				185	72
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	72				185	72
tC, single (s)	4.4				6.7	6.5
tC, 2 stage (s)						
tF (s)	2.5				3.8	3.6
p0 queue free %	100				100	100
cM capacity (veh/h)	1368				744	917
<b>Direction, Lane #</b>	<b>EB 1</b>	<b>WB 1</b>	<b>SB 1</b>			
Volume Total	113	72	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1368	1700	1700			
Volume to Capacity	0.00	0.04	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS			A			
Approach Delay (s)	0.0	0.0	0.0			
Approach LOS			A			
<b>Intersection Summary</b>						
Average Delay			0.0			
Intersection Capacity Utilization			9.1%	ICU Level of Service	A	
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
3: Highway 88/Range Road 135 & Highway 58

2044 PM Peak - Senestivity PD Traffic

07/26/2021

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	108	13	83	9	7	55	77	111	18	79	159	159	
Future Volume (Veh/h)	108	13	83	9	7	55	77	111	18	79	159	159	
Sign Control	Free			Free			Stop			Stop			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	117	14	90	10	8	60	84	121	20	86	173	173	
Pedestrians													
Lane Width (m)													
Walking Speed (m/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None			None									
Median storage (veh)													
Upstream signal (m)													
pX, platoon unblocked													
vC, conflicting volume	68			104			536	336	14	356	366	8	
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	68			104			536	336	14	356	366	8	
tC, single (s)	4.4			4.4			7.4	6.8	6.5	7.4	6.8	6.5	
tC, 2 stage (s)													
tF (s)	2.5			2.5			3.8	4.3	3.6	3.8	4.3	3.6	
p0 queue free %	91			99			63	75	98	79	63	83	
cM capacity (veh/h)	1373			1330			229	492	990	407	473	998	
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	117	14	90	10	8	60	225	432					
Volume Left	117	0	0	10	0	0	84	86					
Volume Right	0	0	90	0	0	60	20	173					
cSH	1373	1700	1700	1330	1700	1700	356	576					
Volume to Capacity	0.09	0.01	0.05	0.01	0.00	0.04	0.63	0.75					
Queue Length 95th (m)	2.1	0.0	0.0	0.2	0.0	0.0	31.3	50.2					
Control Delay (s)	7.9	0.0	0.0	7.7	0.0	0.0	31.0	27.7					
Lane LOS	A			A			D	D					
Approach Delay (s)	4.2			1.0			31.0	27.7					
Approach LOS							D	D					
Intersection Summary													
Average Delay	20.9												
Intersection Capacity Utilization	46.0%			ICU Level of Service					A				
Analysis Period (min)	15												

HCM Unsignalized Intersection Capacity Analysis  
4: Range Road 135 & Phase 1 Access

2044 PM Peak - Senestivity PD Traffic  
07/26/2021



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	255	10	20	250	10	130
Future Volume (Veh/h)	255	10	20	250	10	130
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	277	11	22	272	11	141
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	321	158			294	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	321	158			294	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	55	99			99	
cM capacity (veh/h)	613	819			1124	
Direction, Lane #	WB 1	NB 1	SB 1			
Volume Total	288	294	152			
Volume Left	277	0	11			
Volume Right	11	272	0			
cSH	619	1700	1124			
Volume to Capacity	0.47	0.17	0.01			
Queue Length 95th (m)	18.7	0.0	0.2			
Control Delay (s)	15.8	0.0	0.7			
Lane LOS	C		A			
Approach Delay (s)	15.8	0.0	0.7			
Approach LOS	C					
Intersection Summary						
Average Delay			6.3			
Intersection Capacity Utilization			39.6%		ICU Level of Service	A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis  
5: Range Road 135 & North Access

2044 PM Peak - Senestivity PD Traffic  
07/26/2021



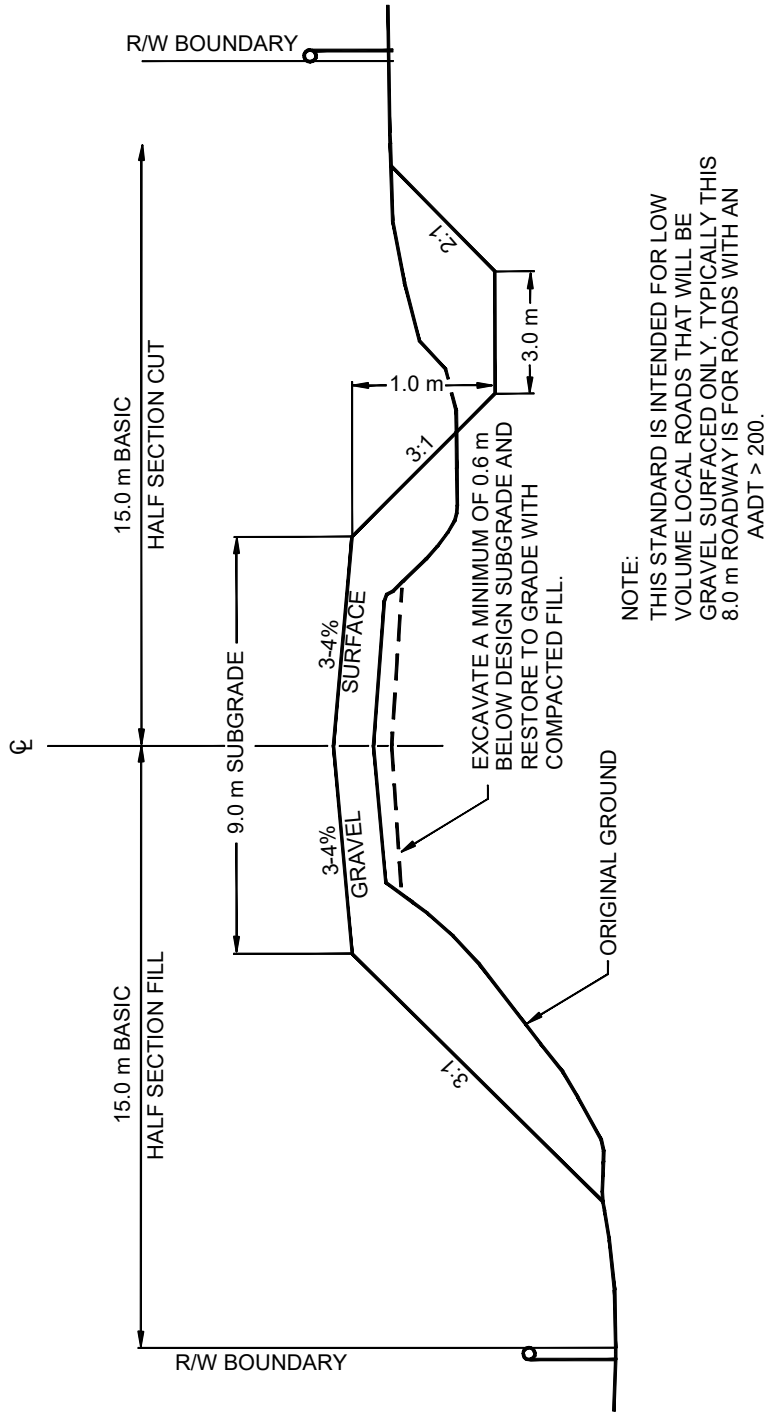
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	129	0	0	19	0	0
Future Volume (Veh/h)	129	0	0	19	0	0
Sign Control	Stop		Free		Free	
Grade	0%		0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	140	0	0	21	0	0
<b>Pedestrians</b>						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	10	10			21	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	10	10			21	
tC, single (s)	6.7	6.5			4.4	
tC, 2 stage (s)						
tF (s)	3.8	3.6			2.5	
p0 queue free %	85	100			100	
cM capacity (veh/h)	942	995			1431	
<b>Direction, Lane #</b>	<b>WB 1</b>	<b>NB 1</b>	<b>SB 1</b>			
Volume Total	140	21	0			
Volume Left	140	0	0			
Volume Right	0	21	0			
cSH	942	1700	1700			
Volume to Capacity	0.15	0.01	0.00			
Queue Length 95th (m)	4.0	0.0	0.0			
Control Delay (s)	9.5	0.0	0.0			
Lane LOS	A					
Approach Delay (s)	9.5	0.0	0.0			
Approach LOS	A					
<b>Intersection Summary</b>						
Average Delay			8.3			
Intersection Capacity Utilization			17.5%	ICU Level of Service	A	
Analysis Period (min)			15			



# APPENDIX F:

## MCKENZIE COUNTY ROAD CROSS SECTION

# COLLECTOR ROAD



**Fig. G - 04**

## MACKENZIE COUNTY GENERAL MUNICIPAL IMPROVEMENTS STANDARDS

TYPICAL CROSS-SECTION FOR GRADING & GRAVEL SURFACING (RLU-209G)

DATE:

DESIGN:

APPROVED:

FILE NO:

**SCALE: NTS**

# APPENDIX G: ILLUMINATION WARRANT

# Illumination of Isolated Rural Intersections

## LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections*, Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

### INTERSECTION CHARACTERISTICS

Hwy 58	Main Road
Hwy 88	Minor Road
Mackenzie County	City/Town

Date	June 24, 2021
Other	2044 Post Development

### GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? ( Y / N )	n				OK	
Highest operating speed on raised, channelized approach (km/h)	100		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	100				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =	B	0				
Posted Speed Category =		0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	0.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	4	2	3	Number of legs = 3 or more	OK	6
<b>Geometric Factors Subtotal</b>						<b>6</b>

### OPERATIONAL FACTORS

Is the intersection signalized ? ( Y / N )	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	3600	3	10	Either Use the two AADT inputs <b>OR</b> the Descriptive Signalization Warrant (Unused values should be set to Zero) Refer to Table 1(B) for description and rating values for signalization warrant.	OK	30
AADT on Minor Road (2-way)	2000	4	20		OK	80
Signalization Warrant	Descriptive	0	30		OK	0
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	2	5	Refer to Table 1(B) for ratings.	OK	10
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
<b>Operational Factors Subtotal</b>						<b>160</b>

### ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	1	1	5	Maximum of 4 quadrants	OK	5
<b>Environmental Factor Subtotal</b>						<b>5</b>

### COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole # )	1.0	1	15	Enter <b>either</b> the annual frequency (See Table 1(C), note #4) <b>OR</b> the number of collisions / MEV (Unused values should be set to Zero)	OK	15
OR Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0		OK	0
Is the average ratio of all night to day collisions >= 1.5 (Y/N)	n	0			OK	
<b>Collision History Subtotal</b>						<b>15</b>

Check Intersection Signalization:  
Intersection is not Signalized

**ILLUMINATION WARRANTED**  
DELINEATION LIGHTING TO ILLUMINATE PEDESTRIANS OR  
CROSS STREET TRAFFIC

### SUMMARY

Geometric Factors Subtotal	6
Operational Factor Subtotal	160
Environmental Factor Subtotal	5
Collision History Subtotal	15

**TOTAL POINTS** **186**

# Illumination of Isolated Rural Intersections

## LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections*, Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

### INTERSECTION CHARACTERISTICS

Hwy 58	Main Road
Hwy 88	Minor Road
Mackenzie County	City/Town

Date	June 24, 2021
Other	2034 Post Development

### GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? ( Y / N )	n				OK	
Highest operating speed on raised, channelized approach (km/h)	100		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	100				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =	B	0				
Posted Speed Category =		0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	0.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	4	2	3	Number of legs = 3 or more	OK	6
<b>Geometric Factors Subtotal</b>						<b>6</b>

### OPERATIONAL FACTORS

Is the intersection signalized ? ( Y / N )	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	4000	3	10	Either Use the two AADT inputs <b>OR</b> the Descriptive Signalization Warrant (Unused values should be set to Zero) Refer to Table 1(B) for description and rating values for signalization warrant.	OK	30
AADT on Minor Road (2-way)	4000	4	20		OK	80
Signalization Warrant	Descriptive	0	30		OK	0
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	2	5	Refer to Table 1(B) for ratings.	OK	10
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
<b>Operational Factors Subtotal</b>						<b>160</b>

### ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	1	1	5	Maximum of 4 quadrants	OK	5
<b>Environmental Factor Subtotal</b>						<b>5</b>

### COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole # )	1.0	1	15	Enter <b>either</b> the annual frequency (See Table 1(C), note #4) <b>OR</b> the number of collisions / MEV (Unused values should be set to Zero)	OK	15
OR Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0		OK	0
Is the average ratio of all night to day collisions >= 1.5 (Y/N)	n	0			OK	
<b>Collision History Subtotal</b>						<b>15</b>

Check Intersection Signalization:  
Intersection is not Signalized

**ILLUMINATION WARRANTED**  
DELINEATION LIGHTING TO ILLUMINATE PEDESTRIANS OR  
CROSS STREET TRAFFIC

### SUMMARY

Geometric Factors Subtotal	6
Operational Factor Subtotal	160
Environmental Factor Subtotal	5
Collision History Subtotal	15

**TOTAL POINTS** **186**



# Illumination of Isolated Rural Intersections

## LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections*, Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

### INTERSECTION CHARACTERISTICS

Hwy 58	Main Road
East Access	Minor Road
Mackenzie County	City/Town

Date	June 24, 2021
Other	2044 Post Development - East Access

### GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? ( Y / N )	n				OK	
Highest operating speed on raised, channelized approach (km/h)	100		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	80				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =		0				
Posted Speed Category =	C	0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	0.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	3	1	3	Number of legs = 3 or more	OK	3
<b>Geometric Factors Subtotal</b>						<b>3</b>

### OPERATIONAL FACTORS

Is the intersection signalized ? ( Y / N )	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	2000	2	10	Either Use the two AADT inputs <b>OR</b> the Descriptive Signalization Warrant (Unused values should be set to Zero) Refer to Table 1(B) for description and rating values for signalization warrant.	OK	20
AADT on Minor Road (2-way)	300	0	20		OK	0
Signalization Warrant	Descriptive	0	30		OK	0
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	1	5	Refer to Table 1(B) for ratings.	OK	5
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	60	1	5	Refer to Table 1(B), note #3	OK	5
<b>Operational Factors Subtotal</b>						<b>50</b>

### ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	1	1	5	Maximum of 4 quadrants	OK	5
<b>Environmental Factor Subtotal</b>						<b>5</b>

### COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole # )	1.0	1	15	Enter <b>either</b> the annual frequency (See Table 1(C), note #4) <b>OR</b> the number of collisions / MEV (Unused values should be set to Zero)	OK	15
OR						
Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0		OK	0
Is the average ratio of all night to day collisions >= 1.5 (Y/N)	n	0			OK	
<b>Collision History Subtotal</b>						<b>15</b>

Check Intersection Signalization:  
Intersection is not Signalized

**LIGHTING IS NOT WARRANTED**

### SUMMARY

Geometric Factors Subtotal	3
Operational Factor Subtotal	50
Environmental Factor Subtotal	5
Collision History Subtotal	15

<b>TOTAL POINTS</b>	<b>73</b>
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# Illumination of Isolated Rural Intersections

## LIGHTING WARRANT SPREADSHEET

This spreadsheet is to be used in conjunction with *Illumination of Isolated Rural Intersections*, Transportation Association of Canada, February 2001.

Please enter information in the cells with yellow background

### INTERSECTION CHARACTERISTICS

Hwy 58	Main Road
Hwy 88	Minor Road
Mackenzie County	City/Town

Date	June 24, 2021
Other	2044 Post Development

### GEOMETRIC FACTORS

	Value	Rating	Weight	Comments	Check	Score
Channelization Rating	Descriptive	0		Refer to Table 1(A) to determine rating value	OK	
Presence of raised channelization? ( Y / N )	n				OK	
Highest operating speed on raised, channelized approach (km/h)	100		5		OK	
Channelization Factor					OK	0
Approach Sight Distance on most constrained approach (%)	100	0	10	Relative to the recommended minimum sight distance	OK	0
Posted Speed limit (in 10's of km/h)	100				OK	
Radius of Horizontal Curve (m)	T			Enter "T" for tangent (no horizontal curve at the intersection)	OK	
Posted Speed Category =		0				
Posted Speed Category =	B	0				
Posted Speed Category =		0				
Posted Speed Category =		0				
Horizontal Curvature Factor		0	5		OK	0
Angle of Intersection (10's of Degrees)	90	0	5		OK	0
Downhill Approach Grade (x.x%)	0.0	0	3	Rounded to nearest tenth of a percent	OK	0
Number of Intersection Legs	4	2	3	Number of legs = 3 or more	OK	6
<b>Geometric Factors Subtotal</b>						<b>6</b>

### OPERATIONAL FACTORS

Is the intersection signalized ? ( Y / N )	n			Calculate the Signalization Warrant Factor		
AADT on Major Road (2-way)	7000	4	10	Either Use the two AADT inputs <b>OR</b> the Descriptive Signalization Warrant (Unused values should be set to Zero) Refer to Table 1(B) for description and rating values for signalization warrant.	OK	40
AADT on Minor Road (2-way)	5000	4	20		OK	80
Signalization Warrant	Descriptive	0	30		OK	0
Night-Time Hourly Pedestrian Volume	0	0	10	Refer to Table 1(B), note #2, to account for children and seniors	OK	0
Intersecting Roadway Classification	Descriptive	2	5	Refer to Table 1(B) for ratings.	OK	10
Operating Speed or Posted Speed on Major Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
Operating Speed on Minor Road (km/h)	100	4	5	Refer to Table 1(B), note #3	OK	20
<b>Operational Factors Subtotal</b>						<b>170</b>

### ENVIRONMENTAL FACTOR

Lighted Developments within 150 m radius of intersection	1	1	5	Maximum of 4 quadrants	OK	5
<b>Environmental Factor Subtotal</b>						<b>5</b>

### COLLISION HISTORY

Average Annual night-time collision frequency due to inadequate lighting (collisions/yr, rounded to nearest whole # )	1.0	1	15	Enter <b>either</b> the annual frequency (See Table 1(C), note #4) <b>OR</b> the number of collisions / MEV (Unused values should be set to Zero)	OK	15
OR						
Collision Rate over last 3 years, due to inadequate lighting (/MEV)	0	0	0		OK	0
Is the average ratio of all night to day collisions >= 1.5 (Y/N)	n	0			OK	
<b>Collision History Subtotal</b>						<b>15</b>

Check Intersection Signalization:  
Intersection is not Signalized

**ILLUMINATION WARRANTED**  
DELINEATION LIGHTING TO ILLUMINATE PEDESTRIANS OR  
CROSS STREET TRAFFIC

### SUMMARY

Geometric Factors Subtotal	6
Operational Factor Subtotal	170
Environmental Factor Subtotal	5
Collision History Subtotal	15

**TOTAL POINTS** **196**

# APPENDIX H:

## SIGNALIZATION WARRANT ANALYSIS



## - Traffic Signal Warrant Analysis

Main Street (name)	Highway 58	Direction (EW or NS)	EW	Comments <b>Warrant analysis for 2044 Post Development scenario - Caribou Mtn</b>
Side Street (name)	Highway 88	Direction (EW or NS)	NS	
Quadrant / Int #	1			
CHECK SHEET				

Road Authority:	
City:	Calgary
Analysis Date:	2021 Jun 24, Thu
Count Date:	
Date Entry Format:	(yyyy-mm-dd)

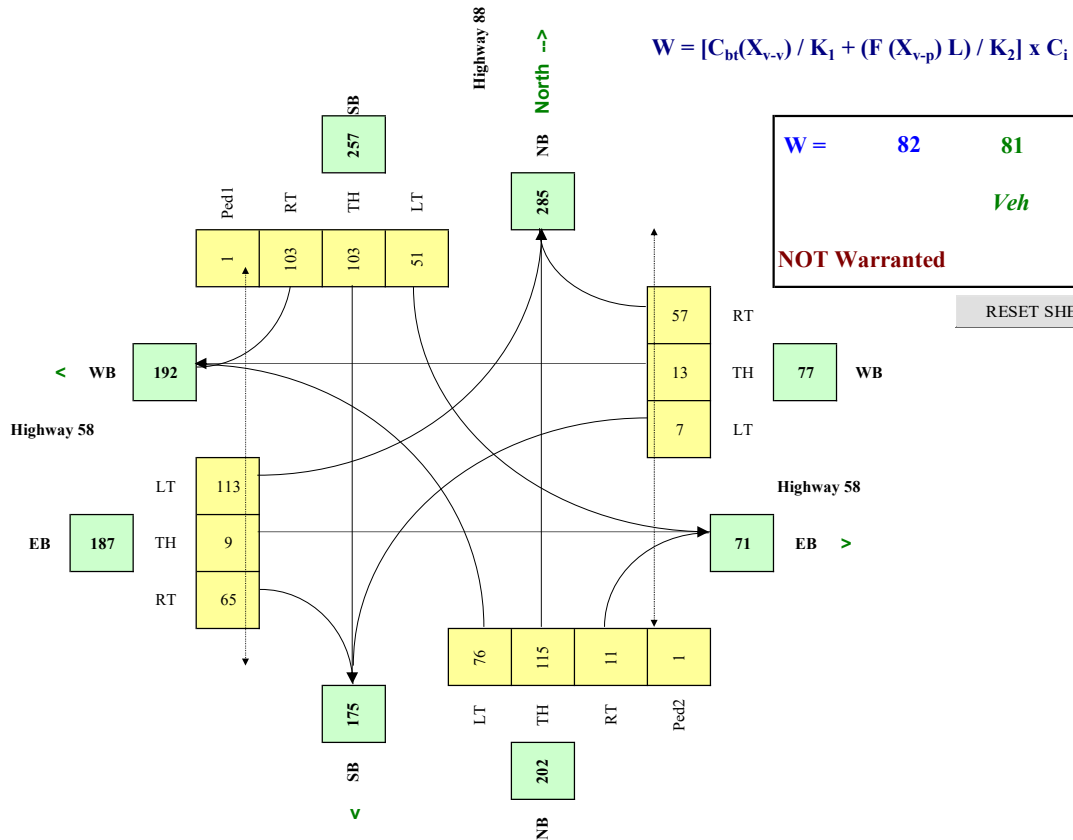
Lane Configuration		Excl LT	Th & LT	Through	Th-RT+LT	Th & RT	Excl RT	Upstream Signal (m)	# of Thru Lanes
Highway 58	WB	1		1			1		1
Highway 58	EB	1		1			1		1
Highway 88	NB				1				
Highway 88	SB				1				

Demographics		
Elem. School/Mobility Challenged	(y/n)	n
Senior's Complex	(y/n)	n
Pathway to School	(y/n)	n
Metro Area Population	(#)	1,000
Central Business District	(y/n)	n

Other input		Speed (Km/h)	Truck %	Bus Rt (y/n)	Median (m)
Highway 58	EW	100	30.0%	n	0.0
Highway 88	NS	80	30.0%	n	0.0

Traffic Input	NB			SB			WB			EB			Ped1 NS	Ped2 NS	Ped3 EW	Ped4 EW
	LT	Th	RT	LT	Th	RT	LT	Th	RT	LT	Th	RT	W Side	E Side	N Side	S Side
	press 'Set Peak Hours' Button to set the peak hour periods	76	115	11	51	103	103	7	13	57	113	9	65	1	1	1
	76	115	11	51	103	103	7	13	57	113	9	65	1	1	1	1
	76	115	11	51	103	103	7	13	57	113	9	65	1	1	1	1
	76	115	11	51	103	103	7	13	57	113	9	65	1	1	1	1
	76	115	11	51	103	103	7	13	57	113	9	65	1	1	1	1
<b>Total (6-hour peak)</b>	<b>456</b>	<b>690</b>	<b>66</b>	<b>306</b>	<b>618</b>	<b>618</b>	<b>42</b>	<b>78</b>	<b>342</b>	<b>678</b>	<b>54</b>	<b>390</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>6</b>
<b>Average (6-hour peak)</b>	<b>76</b>	<b>115</b>	<b>11</b>	<b>51</b>	<b>103</b>	<b>103</b>	<b>7</b>	<b>13</b>	<b>57</b>	<b>113</b>	<b>9</b>	<b>65</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>

### Average 6-hour Peak Turning Movements



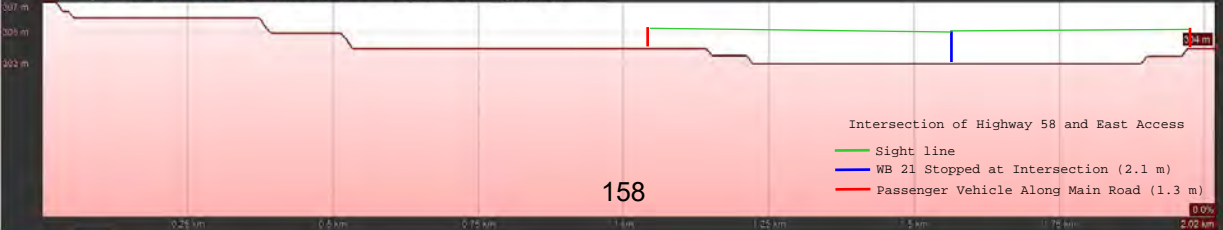
# APPENDIX I:

# SIGHT DISTANCE PROFILE



Graph Min. Avg. Max. Elevation: 303, 304, 307 m

Range Totals Distance: 2.02 km Elev Gain/Loss: 1.00 m / -4.00 m Max Slope: 5.2% / -5.9% Avg Slope: 0.1% / -3.2%



Intersection of Highway 58 and East Access

- Sight line
- WB 21 Stopped at Intersection (2.1 m)
- Passenger Vehicle Along Main Road (1.3 m)

158

0.0%  
2.02 km

Graph Min. Avg. Max. Elevation: 303, 304, 307 m

Range Totals Distance: 2.02 km Elev Gain/Loss: 1.00 m, -4.00 m Max Slope: 5.2%, -5.9% Avg Slope: 0.1%, -3.2%



# Appendix B – Email Correspondence with MacKenzie County

## Bryan Gray

---

**From:** Caitlin Smith <csmith@mackenziecounty.com>  
**Sent:** November 25, 2021 9:35 AM  
**To:** Dale Palmer  
**Cc:** Theresa Shelton; Matt Slorstad; Dylan Smith; Bryan Gray  
**Subject:** RE: LRRCN Area Structure Plan

CAUTION: External Email.

Good morning Dale,

I am in agreeance that all the concerns have been addressed from the administrative perspective.

Thank you,

**Caitlin Smith | Manager of Planning and Development | Mackenzie County**

PO Box 640, 4511-46 Ave. | Fort Vermilion | AB | T0H 1N0

Main Line: 780.928.3983 | Fax: 780.928.3636

Toll Free: 1.877.927.0677 | Cell: 780.841.5529

[www.mackenziecounty.com](http://www.mackenziecounty.com)

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**From:** Dale Palmer <dalep@lrrgroup.ca>  
**Sent:** November 23, 2021 2:25 PM  
**To:** Caitlin Smith <csmith@mackenziecounty.com>  
**Cc:** Theresa Shelton <theresa@lrrcn.ab.ca>; Matt Slorstad <mstorstad@urbansystems.ca>; Dylan Smith <dsmith@urbansystems.ca>; Bryan Gray <bgray@urbansystems.ca>  
**Subject:** RE: LRRCN Area Structure Plan

Good afternoon Caitlin

With reference to the storm pond, I do not believe there will be significant maintenance requirements. The pond will be seeded with a natural mix, and mowing will only be required on a occasional basis. As we have other areas that we will need to attend around this development we see as this as something we could maintain.

The control structure and outlet include a sump that should be checked and cleaned out as required. A dry hydrant is proposed for the pond which will need to be checked for operation on a occasional basis.

By the end of this week, can you please confirm to all parties that the County is in agreeance with the noted items so that we can have a updated ASP to you prior to December 7<sup>th</sup>.

Thanks kindly

Dale



**Dale Palmer CPA, CA**

Chief Financial Officer

Office: 587-758-6144

Mobile: 780-990-5255

Email: [dalep@lrrgroup.ca](mailto:dalep@lrrgroup.ca)

9402-114 Avenue, Building A  
High Level, AB T0H 1Z0

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**From:** Caitlin Smith <[csmith@mackenziecounty.com](mailto:csmith@mackenziecounty.com)>

**Sent:** November 22, 2021 1:14 PM

**To:** Dale Palmer <[dalep@lrrgroup.ca](mailto:dalep@lrrgroup.ca)>

**Cc:** Theresa Shelton <[theresa@lrrcn.ab.ca](mailto:theresa@lrrcn.ab.ca)>; Matt Slorstad <[mstorstad@urbansystems.ca](mailto:mstorstad@urbansystems.ca)>; Dylan Smith <[dsmith@urbansystems.ca](mailto:dsmith@urbansystems.ca)>; Bryan Gray <[bgray@urbansystems.ca](mailto:bgray@urbansystems.ca)>

**Subject:** LRRCN Area Structure Plan

Good morning Dale,

Please note that your e-mail was sent to another Caitlin in the organization. Please send all correspondence regarding the ASP to [csmith@mackenziecounty.com](mailto:csmith@mackenziecounty.com).

I have read through your comments and to clarify number 4; do you believe there will be significant maintenance associated with the Storm Pond? Do you anticipate that it will be just mowing? Will there be an outlet, etc.?

Please send me that revised plan by December 7, 2021 at the latest.

Thank you,

**Caitlin Smith | Manager of Planning and Development | Mackenzie County**

PO Box 640, 4511-46 Ave. | Fort Vermilion | AB | T0H 1N0

Main Line: 780.928.3983 | Fax: 780.928.3636

Toll Free: 1.877.927.0677 | Cell: 780.841.5529

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## Bryan Gray

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**From:** Dale Palmer <dalep@lrrgroup.ca>  
**Sent:** November 16, 2021 12:57 PM  
**To:** Caitlyn Froese  
**Cc:** Theresa Shelton; Matt Slorstad; Dylan Smith; Bryan Gray  
**Subject:** FW: URGENT: Fw: LRRCN Area Structure Plan

CAUTION: External Email.

Good Afternoon Caitlyn

Please see the below with regards to the questions and comments posed on your email of November 10<sup>th</sup>.

- 1) Currently the subdivision operationally has the Petro Canada and access road developed to the Cangas station. The Cangas station will primarily be used for heavy propane truck delivery and seldom used for any other means. As we will have equipment on site to do the parking lot of the Petro Canada and the laydown area, at this time, until further development occurs in the area, we do not feel that it would be much of a burden on the Petro Canada to ensure that the primary access road and road to the Cangas be taken on by the Petro Canada. We would need to open this conversation up further when the development goes into future stages, but for this coming season I do not see this as a concern.
- 2) As for Solid waste, we are only producing the amounts from the Petro-Canada site. Being a first Nation we are already looking at ways to reduce the impact of our imprint of which is primarily organic and cardboard. For any waste that needs to be hauled away, we agree to use the Regional landfill as part of this ASP.
- 3) With any development, infrastructure is assessed and installed in stages. As with this development as the traffic increases and Alberta Transportation or the County deem that it is necessary we would certainly want to have street lighting put in the development. We currently have not as it has not been a requirement of AT, but as the subdivision grows we will ensure that this is in the planning. Particularly as we either add residential or further commercial development. For example, the second phase of development will require partial delineation and will be our responsibility as the developer.
- 4) I am unsure of what is being requested regrading an alternative servicing plan for the storm facilities. Both the engineers of the development and the engineers of the Petro Canada have agreed upon the current storm water facilities, as required by Alberta Transportation. To restrict post-development discharge to pre-development conditions, storm facilities are necessary.
- 5) As for the future sale of lots, we are at the beginning stages and are only looking at having stage 2 underground and road servicing completed next year. There are currently no plans to sell or have any agreements with 3<sup>rd</sup> parties.
- 6) Though I am unsure why this concerns the ASP, as a update, the residential investment consists of possibly 12 residential units in Fort Vermillion. This is in on-going discussions with ISC. The proposal we have put forward currently looks quite favourably that it would be a go forward. Until the Minister has stamped funding approved we cannot confirm this would go forward.

If the responses above satisfy the County's concerns, please let me know as soon as possible and we will update and resubmit the ASP in time for the December 14<sup>th</sup> Public Hearing.

Should anything else arise regarding this ASP please cc all of the above parties.

Thank you

Dale



**Dale Palmer CPA, CA**

Chief Financial Officer

Office: 587-758-6144

Mobile: 780-990-5255

Email: dalep@lrrgroup.ca

9402-114 Avenue, Building A  
High Level, AB T0H 1Z0

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**From:** Caitlin Smith <[csmith@mackenziecounty.com](mailto:csmith@mackenziecounty.com)>

**Sent:** Wednesday, November 10, 2021 4:50 PM

**To:** Theresa Shelton <[theresa@lrrcn.ab.ca](mailto:theresa@lrrcn.ab.ca)>

**Subject:** RE: LRRCN Area Structure Plan

Good afternoon Theresa,

I am sending you this email to inform you that Bylaw 1242-21 Caribou Mountain Area Structure Plan passed first reading yesterday.

Council has requested that the following concerns be addressed in the Area Structure Plan prior to Public Hearing as Council is divided on whether or not to endorse this proposal due to the following concerns:

- Road servicing within a new rural industrial subdivision requires a large maintenance commitment such as snow clearing, this will fall back on the County when service is already spread thin in rural areas.
- Solid waste from commercial and industrial sources should be hauled directly to the Regional Landfill rather than increasing the burden on waste transfer stations, which are intended for residential waste.
- The new intersection improvements will likely require street lighting in the future, perhaps this should be required of the developer now.
- An alternative servicing plan should be made for the storm water management facilities.

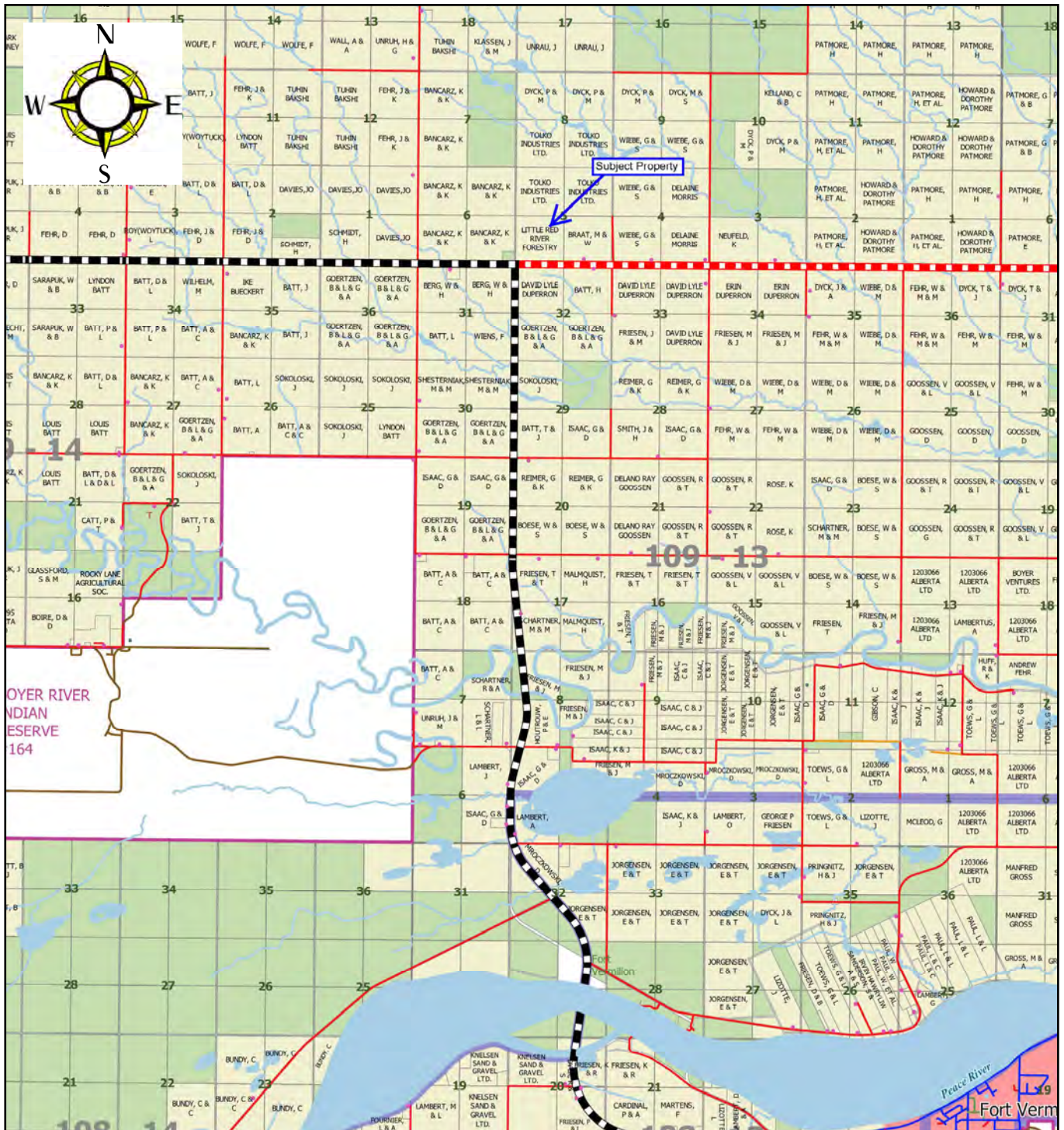
Is there anyway that LRRCN would maintain their own services such as snow clearing? Also, to haul waste to the landfill instead of using rural waste transfer stations?

The biggest concern of Council is that this new development may defer business opportunities away from Fort Vermilion. Will future industrial lots be available for anyone to purchase? Also, I know we had discussed some residential investment in Fort Vermilion, is this still a consideration?

Due to advertising deadlines, Council direction, and the time needed to make these changes if you so choose, this can be presented for Public Hearing on December 14, 2021.



# Area Structure Plan Application Location Map



**Bylaw 1242-21**

**NOT TO SCALE**

**Disclaimer**

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**Mackenzie County**

**PUBLIC HEARING FOR AREA STRUCTURE PLAN**

**BYLAW 1242-21**

**Order of Presentation**

\_\_\_\_\_ This Public Hearing will now come to order at \_\_\_\_\_.

\_\_\_\_\_ Was the Public Hearing properly advertised?

\_\_\_\_\_ Will the Development Authority \_\_\_\_\_, please outline the proposed Area Structure Plan and present his submission.

\_\_\_\_\_ Does the Council have any questions of the proposed Area Structure Plan?

\_\_\_\_\_ Were any submissions received in regards to the proposed Area Structure Plan? *If yes, please read them.*

\_\_\_\_\_ Is there anyone present who would like to speak in regards of the proposed Area Structure Plan?

\_\_\_\_\_ If YES: Does the Council have any questions of the person(s) making their presentation?

\_\_\_\_\_ This Hearing is now closed at \_\_\_\_\_.

**REMARKS/COMMENTS:**







**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Caitlin Smith, Manager of Planning &amp; Development</b>
<b>Title:</b>	<b>PUBLIC HEARING Bylaw 1243-21 Land Use Bylaw Amendment Rezone Plan 102 4542; 1; 39 &amp; 40 from Rural Country Residential 3 “RCR3” to Country Recreational “CREC”</b>

**BACKGROUND / PROPOSAL:**

Administration has received a Land Use Bylaw Amendment application to rezone Plan 102 4542, Block 1, Lots 39 & 40 from Rural Country Residential 3 “RCR3” to Country Recreational “CREC”. The subject lots are located within Greenwood Estates, northeast of the Hamlet of La Crete and are currently vacant.

The purpose of the Rural Country Residential 3 “RCR3” zoning district is to provide low density, multi-lot residential development in rural areas, these developments are typically just outside of hamlet boundaries. The RCR3 zoning is restricted to 3-5 acre lots and does not allow Manufactured Homes. Greenwood Estates and Pinnacle Estates are zoned RCR3.

The purpose of the Country Recreational “CREC” zoning district is to provide for seasonal or permanent residential areas in close proximity to significant natural features or recreational developments. The minimum lot dimensions in CREC are 30.5m x 45.7m (100ft x 150ft), there is no maximum lot size. Permitted uses in this zoning include Cabins and Park Models with a maximum of two (2) dwelling units allowed; a recreational vehicle is considered a dwelling unit in CREC. These areas shall conform to a relevant Area Structure Plan (ASP).

The applicant is proposing to further subdivide the two (2) existing 3-acre lots into six (6) lots, approximately 1 acre each, to be used as a small cabin community for people using the nearby golf course. The development would include an internal road with access from the north (golf course) side and the existing accesses from the south (Greenwood Bend) would be removed. The applicant is proposing private water servicing, consisting of cistern and hauling for each lot individual but is discussing utilizing the lagoon to the north to provide for sewer services. This lagoon is privately

**Author:**  N Friesen  **Reviewed by:**  C Smith  **CAO:**

owned and maintained and provides service for another CREC development to the north.

The proposed recreational use does not conform to the Area Structure Plan for SW 13-106-15-W5M (Greenwood Estates). The existing ASP is for Country Residential development and includes traffic projections based on only those uses. Due to the proximity to Secondary Highway 697, Alberta Transportation may require additional information from the developer, including a new or amended ASP.

North of the subject parcels, a 25-lot Country Recreational development already exists with a strip of land to the west also zoned to allow for a mirrored development. Mackenzie County has not received development permits for any of these lots to date and all but one (1) is still vacant.

The proposed bylaw amendment was presented to the Municipal Planning Commission on November 18, 2021, where the following motion was made:

**MPC 21-11-187** *MOVED* by Tim Driedger

*That the Municipal Planning Commission recommend to Council to APPROVE Bylaw 12xx-21 being a Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 "RCR3" to Country Recreational "CREC", subject to public hearing input.*

**CARRIED**

The proposed bylaw amendment was presented to Council on November 30, 2021, where the following motion was made:

**MOTION 21-11-807** *MOVED* by Councillor Braun

*That first reading be given to Bylaw 1243-21 being a Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 "RCR3" to Country Recreational "CREC", subject to public hearing input.*

**CARRIED**

### **OPTIONS & BENEFITS:**

Options are to pass, defeat, or table second & third reading of the bylaw amendment.

### **COSTS & SOURCE OF FUNDING:**

Costs consisted of advertising the Public Hearing and adjacent landowner letters which were borne by the applicant.

Author: N Friesen Reviewed by: C Smith CAO:

**SUSTAINABILITY PLAN:**

**Goal E26** That Mackenzie County is prepared with infrastructure and services for continually growing population.

**COMMUNICATION / PUBLIC PARTICIPATION:**

The bylaw amendment was advertised as per MGA requirements, this included all adjacent landowners. The applicant was also required to display a sign on the subject property as per MGA requirements.

**POLICY REFERENCES:**

DEV007 Rural Development Standards

**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That second reading be given to Bylaw 1243-21 being a Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 "RCR3" to Country Recreational "CREC".

Simple Majority       Requires 2/3       Requires Unanimous

That second reading be given to Bylaw 1243-21 being a Land Use Bylaw Amendment to Rezone Plan 102 4542; 1; 39 & 40 from Rural Country Residential 3 "RCR3" to Country Recreational "CREC".

**Author:**  N Friesen       **Reviewed by:**  C Smith       **CAO:**

**BYLAW NO. 1243-21**  
**BEING A BYLAW OF MACKENZIE COUNTY**  
**IN THE PROVINCE OF ALBERTA**  
**TO AMEND THE**  
**MACKENZIE COUNTY LAND USE BYLAW**

**WHEREAS**, Mackenzie County has a Municipal Development Plan adopted in 2009, and

**WHEREAS**, Mackenzie County has adopted the Mackenzie County Land Use Bylaw in 2017, and

**WHEREAS**, the Council of Mackenzie County, in the Province of Alberta, has deemed it desirable to amend the Mackenzie County Land Use Bylaw to accommodate a cabin development.

**NOW THEREFORE**, THE COUNCIL OF THE MACKENZIE COUNTY, IN THE PROVINCE OF ALBERTA, DULY ASSEMBLED, HEREBY ENACTS AS FOLLOWS:

1. That the land use designation of the subject parcels known as:

Plan 102 4542, Block 1, Lots 39 & 40

Within the Mackenzie County, be rezoned from Rural Country Residential 3 "RCR3" to Country Recreational "CREC" as outlined in Schedule "A" hereto attached.

READ a first time this 30<sup>th</sup> day of November, 2021.

PUBLIC HEARING held this \_\_\_\_ day of \_\_\_\_\_, 2021

READ a second time this \_\_\_\_ day of \_\_\_\_\_, 2021.

READ a third time and finally passed this \_\_\_\_ day of \_\_\_\_\_, 2021.

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Josh Knelsen  
Reeve

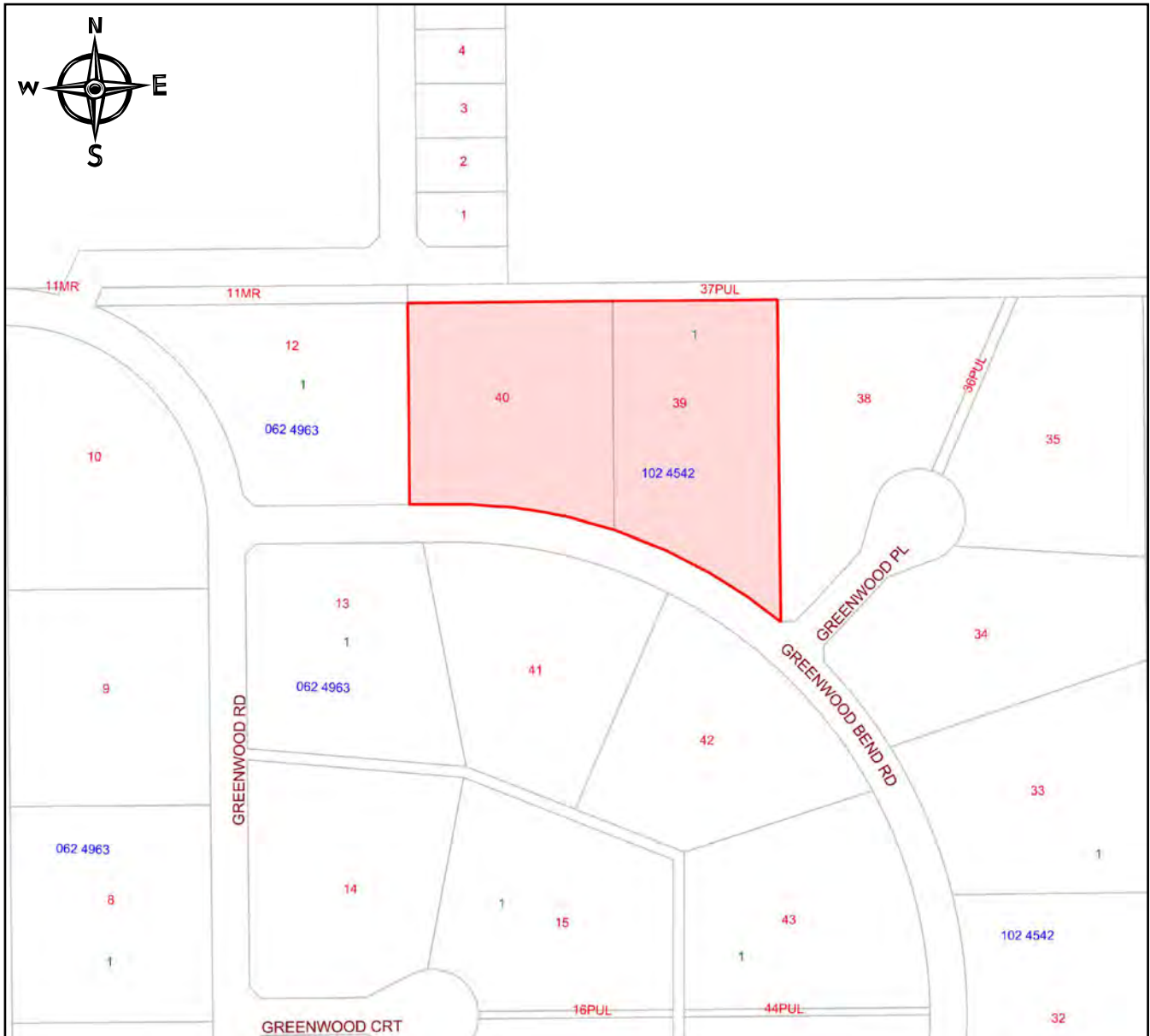
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Len Racher  
Chief Administrative Officer

**BYLAW No. 1243-21**

**SCHEDULE "A"**

1. That the land use designation of the following properties known as Plan 102 4542, Block 1, Lots 39 & 40 within Mackenzie County, be rezoned:



FROM: Rural Country Residential 3 "RCR3"

TO: Country Recreational "CREC"

## Section 9 | Land Use District Regulations

### 9.4 Rural Country Residential 3 (RCR3)

#### Purpose

- 9.4.1 The purpose of the Rural Country Residential 3 (RCR3) district is to provide for low density MULTI-LOT, single family estate dwellings within a rural setting.



#### Permitted and Discretionary Land Use Classes

- 9.4.2 Land use classes within the following table shall be permitted or discretionary within the Rural Country Residential 3 (RCR3) district of this BYLAW.

Permitted	Discretionary
ACCESSORY BUILDING	BED AND BREAKFAST BUSINESS
DWELLING - SINGLE FAMILY	COTTAGE
GARAGE - ATTACHED	DAY CARE FACILITY
GARAGE - DETACHED	DAY CARE HOME
HOME BASED BUSINESS MINOR	GARDEN SUITE
SHOP – PERSONAL	HOME BASED BUSINESS MEDIUM
TOURIST HOME	LIVESTOCK
YARD SITE DEVELOPMENT	RESIDENTIAL SALES CENTRE
	SECONDARY SUITE
	SHOP – COMMERCIAL



## Section 9 | Land Use District Regulations

### Regulations

- 9.4.3 In addition to the regulations contained in Section 8, the following standards shall apply to every DEVELOPMENT in this LAND USE DISTRICT.

Regulation	Standard
<b>Lot Area</b>	
Min.	1.2 ha (3.0 acres)
Max.	2.0 ha (5 acres)
<b>Min. Setback from Highway, Road or Undeveloped Road Allowance</b>	
Right-of-way	41.2m (135.2ft)
Centre Line	64.0m (210.0ft)
Internal Subdivision Road	15.2 m (50 feet)
Or a greater distance as specified by Alberta Transportation	
<b>Min. Setback</b>	
Yard – Exterior Side	15.2m (50.0ft) on a CORNER LOT
Yard – Interior Side	7.6m (25.0ft)
Yard – Rear	7.6m (25.0ft) 15.2m (50.0ft) for a site abutting an Agricultural (A) or Forestry (F) district

### Additional Regulations

- 9.4.4 Within the Rural Country Residential 3 (RCR3) district a SHOP – PERSONAL and SHOP – COMMERCIAL shall have a maximum building:
- Area of 223.0m<sup>2</sup> (2400.0ft<sup>2</sup>); and
  - Height of 6.1m (20.0ft).
- 9.4.5 In addition to Section 8.33 of this BYLAW, the Development Authority may require any DISCRETIONARY USE to be screened from view with a vegetated buffer strip and / or other SCREENING of a visually pleasing nature, satisfactory to the Development Authority.

## Section 9 | Land Use District Regulations

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- 9.4.6 The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards and shall complement the natural features and character of the site to the satisfaction of the Development Authority.
- 9.4.7 The Development Authority may decide on such other requirements as are necessary having due regard to the nature of the proposed DEVELOPMENT and the purpose of this DISTRICT.
- 9.4.8 Rezoning applications involving the Rural Country Residential 3 (RCR3) district shall provide requirements as outlined in Subsection 3.1.6.

# Section 9 | Land Use District Regulations

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## Section 9 | Land Use District Regulations

### 9.5 Country Recreational (CREC)

#### Purpose

- 9.5.1 The general purpose of the Country Recreational (CREC) district is to permit the DEVELOPMENT of seasonal or permanent residential areas in Mackenzie County. All DEVELOPMENTS shall conform to a relevant AREA STRUCTURE PLAN. This zoning is specific to developments on lands within close proximity to significant natural features, lakes, and recreational developments.



#### Permitted and Discretionary Land Use Classes

- 9.5.2 Land use classes within the following table shall be permitted or discretionary within the Country Recreational (CREC) district of this BYLAW.

Permitted	Discretionary
ACCESSORY BUILDING	GARAGE – DETACHED
CABIN	
COTTAGE	
PARK MODEL	
TOURIST HOME	
YARD SITE DEVELOPMENT	

#### Regulations

- 9.5.3 In addition to the regulations contained in Section 8, the following standards shall apply to every DEVELOPMENT in this LAND USE DISTRICT.

Regulation	Standard
Max. Dwelling Density	1 RECREATIONAL VEHICLE and 1 COTTAGE/PARK MODEL; or 2 RECREATIONAL VEHICLES per LOT
Max. Lot Coverage	25%

## Section 9 | Land Use District Regulations

Regulation	Standard
<b>Min. Lot Dimensions</b>	
Width	30.5m (100.0ft)
Depth	45.7m (150.0ft)
<b>Min. Setback</b>	
Yard – Front	9.1m (30.0ft)
Yard – Side	3.1m (10.0ft)
Yard – Rear	3.1m (10.0ft)

### Additional Regulations

- 9.5.4 The density of DEVELOPMENT (number of LOTS per hectare/acre) shall be in accordance with the provisions of the relevant AREA STRUCTURE PLAN.
- 9.5.5 The provision of access to each LOT shall be as required by the Development Authority and developed in accordance with COUNTY standards.
- 9.5.6 A minimum of two (2) parking stalls.
- 9.5.7 There shall be no allowance for on-street parking.
- 9.5.8 Each LOT shall be landscaped as required by the Development Authority to ensure proper vegetation and tree coverage for appearance and drainage purposes. Approval shall be required by the Development Authority prior to the removal of trees and/or vegetation from any LOT.
- 9.5.9 All DEVELOPMENT on a LOT shall be of a style and appearance which is compatible with the natural qualities of the recreation area. The character and appearance of all DEVELOPMENT on each recreation LOT shall be maintained to minimize any adverse impacts which may occur on adjacent recreation LOTS or the recreation area in general.
- 9.5.10 All water and sewage disposal must conform to the requirements of the relevant AREA STRUCTURE PLAN and Alberta Private Sewage Systems Standard of Practice 2015.
- 9.5.11 The architecture, construction materials and appearance of buildings and other structures shall be to accepted standards and shall complement adjoining DEVELOPMENT and character of the site to the satisfaction of the Development Authority.
- 9.5.12 The Development Authority may decide on such other requirements as are necessary having due regard to the nature of the proposed DEVELOPMENT and the purpose of this LAND USE DISTRICT.
- 9.5.13 Rezoning applications involving the Country Recreational (CREC) district shall provide requirements as outlined in Subsection 3.1.6.

# LAND USE BYLAW AMENDMENT APPLICATION

APPLICATION NO. Bylaw 12--21

NAME OF APPLICANT <u>Martin Harder</u>		
ADDRESS		
CITY/TOWN		
POSTAL CODE (RES.)	PHONE	BUS.

**COMPLETE ONLY IF DIFFERENT FROM APPLICANT**

NAME OF REGISTERED OWNER <u>852886 Ltd + Jake Friesse + Peter Poters</u>		
ADDRESS		
CITY/TOWN		
POSTAL CODE	PHONE (RES.)	BUS.

**LEGAL DESCRIPTION OF THE LAND AFFECTED BY THE PROPOSED AMENDMENT**

QTR./LS.	SEC.	TWP.	RANGE	M.	OR	PLAN	BLK	LOT
						<u>102 4542</u>	<u>1</u>	<u>39+40</u>

**LAND USE CLASSIFICATION AMENDMENT PROPOSED:**

FROM: RCR3 TO: CR6C

**REASONS SUPPORTING PROPOSED AMENDMENT:**

- Proposing to build a small cabin community for people wishing to use the golf course.
- Water service to include cistern and hauling - individual
- Sewer to be connected to golf course subdivision lagoon

The personal information on this form is collected in accordance with section 33 of the Freedom of Information and Protection of Privacy (FOIP) Act for the purpose of processing this application, issuing development permits and land use bylaw enforcement. The name of the permit holder and nature of the permit are available to the public upon request. If you have any questions regarding the collection, use or disclosure of this information, please contact the FOIP Coordinator or (780) 927-3718.

I/WE HAVE ENCLOSED THE REQUIRED APPLICATION FEE OF \$ 697<sup>00</sup>

RECEIPT NO. 275942

[Signature]  
APPLICANT SIGNATURE

October 20, 2021  
DATE

**NOTE: REGISTERED OWNER'S SIGNATURE REQUIRED IF DIFFERENT FROM APPLICANT.**

REGISTERED OWNER SIGNATURE

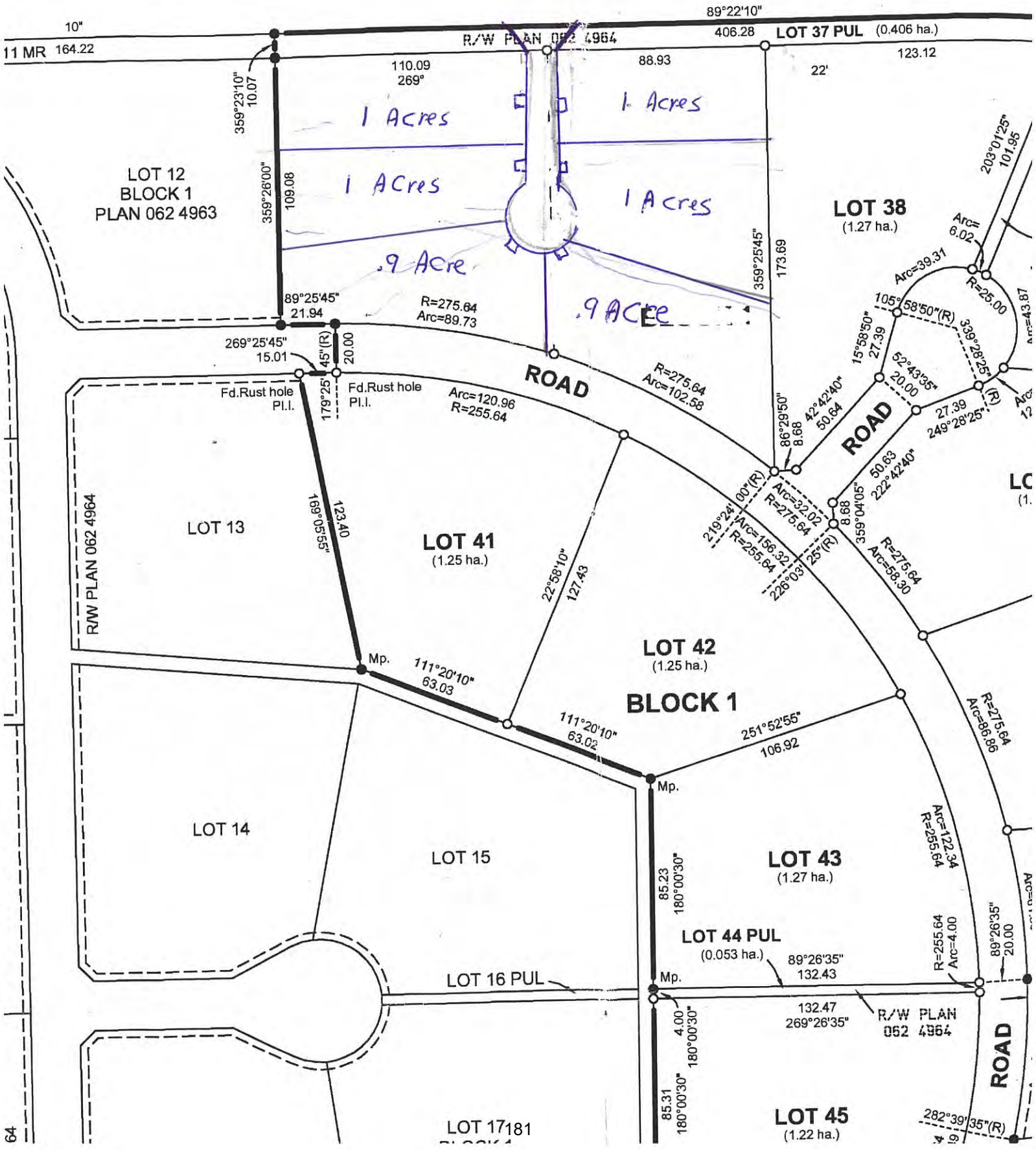
DATE

Mackenzie County  
Box 640, 4511-46 Avenue  
Fort Vermilion, AB T0H 1N0

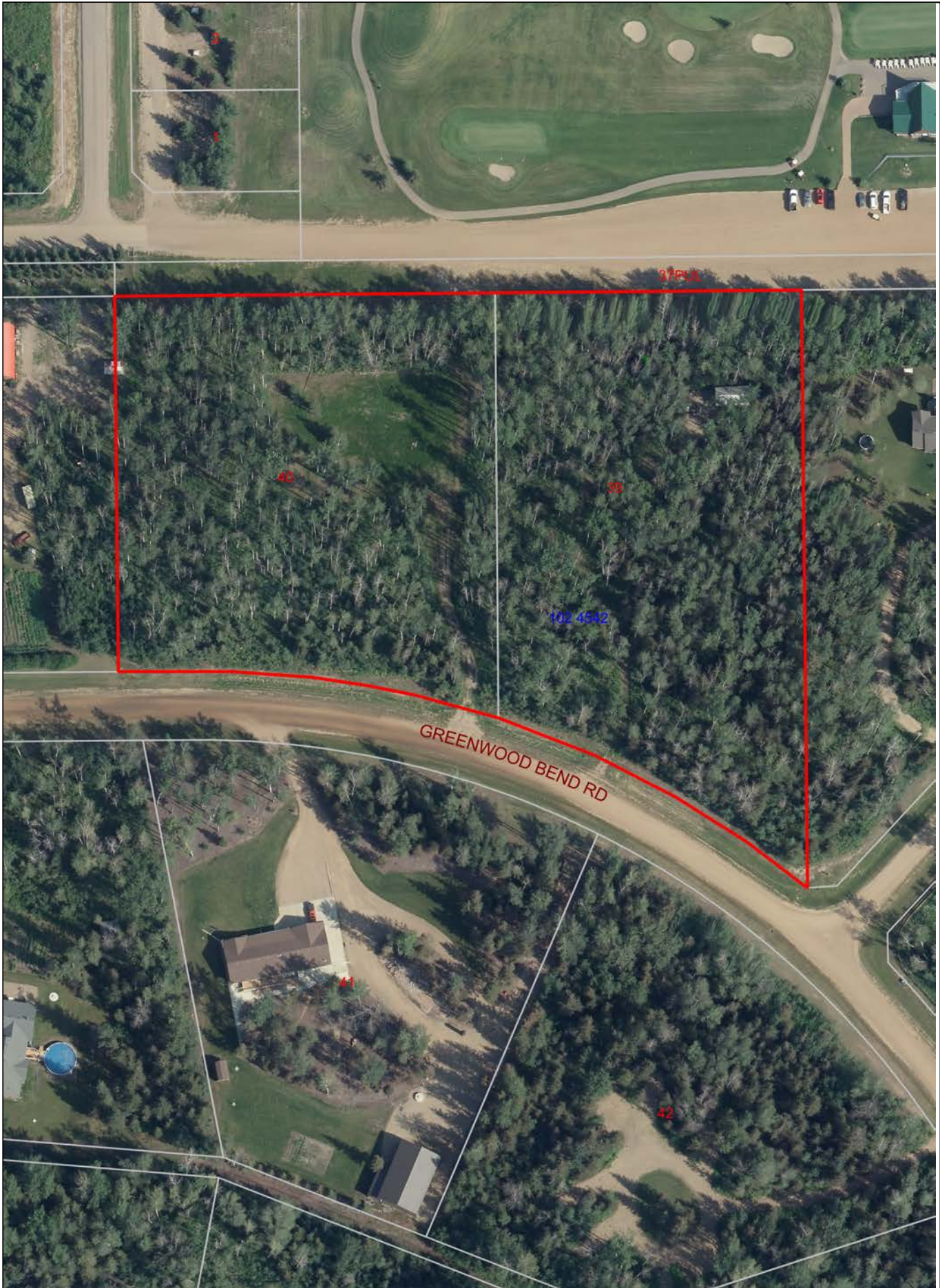


Phone: (780) 927-3718  
Fax: (780) 927-4266  
Email: office@mackenziecounty.com  
www.mackenziecounty.com





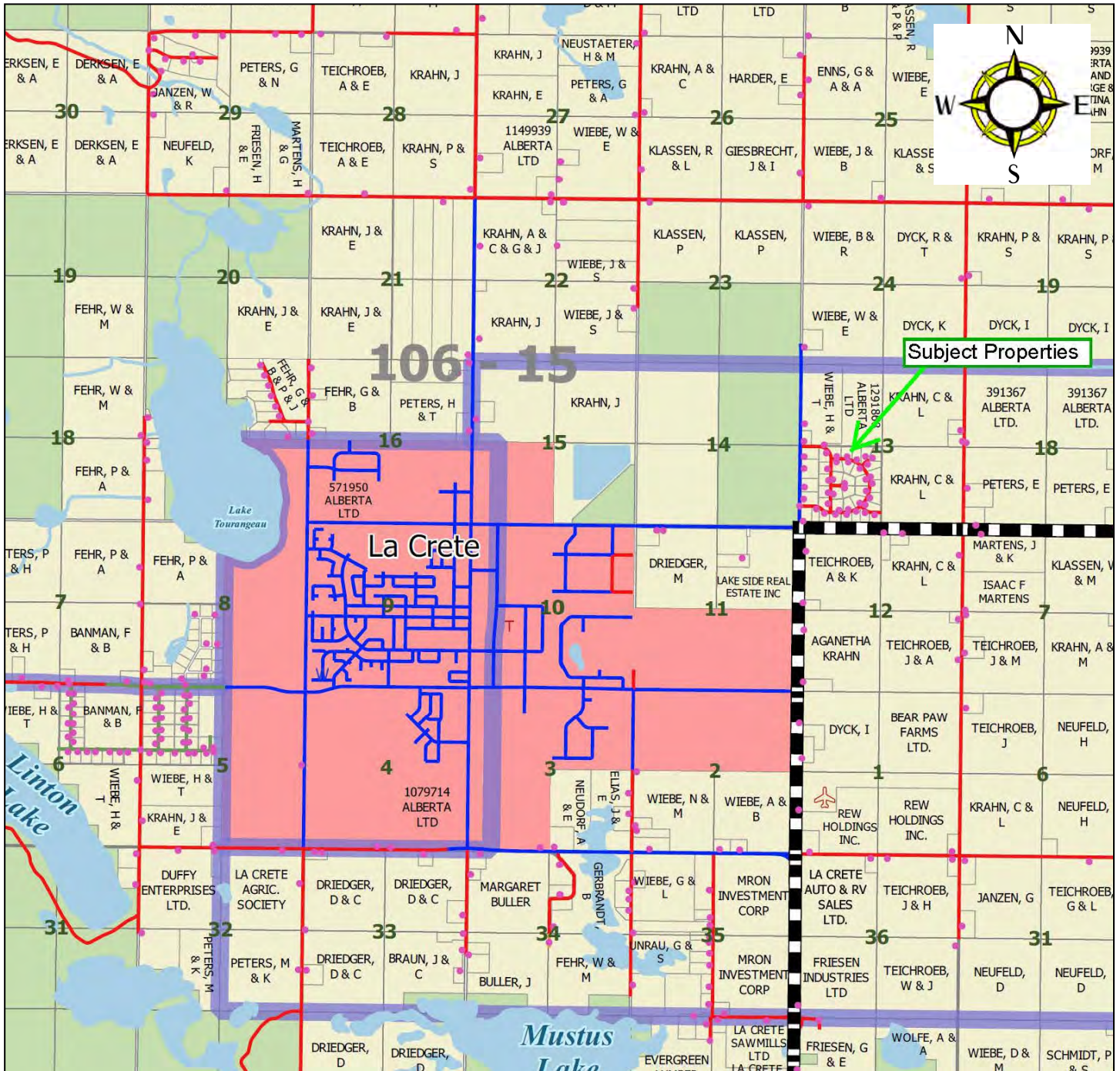






# Land Use Bylaw Amendment Application

## Location Map



**Bylaw 1243-21**

**NOT TO SCALE**

**Disclaimer**

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**Mackenzie County**

**PUBLIC HEARING FOR LAND USE BYLAW AMENDMENT –  
REZONING**

**BYLAW 1243-21**

**Order of Presentation**

\_\_\_\_\_ This Public Hearing will now come to order at \_\_\_\_\_.

\_\_\_\_\_ Was the Public Hearing properly advertised?

\_\_\_\_\_ Will the Development Authority \_\_\_\_\_, please outline the proposed Land Use Bylaw Amendment – Rezoning and present his submission.

\_\_\_\_\_ Does the Council have any questions of the proposed Land Use Bylaw Amendment – Rezoning?

\_\_\_\_\_ Were any submissions received in regards to the proposed Land Use Bylaw Amendment – Rezoning? *If yes, please read them.*

\_\_\_\_\_ Is there anyone present who would like to speak in regards of the proposed Land Use Bylaw Amendment – Rezoning?

\_\_\_\_\_ If YES: Does the Council have any questions of the person(s) making their presentation?

\_\_\_\_\_ This Hearing is now closed at \_\_\_\_\_.

**REMARKS/COMMENTS:**



**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Len Racher, Chief Administrative Officer</b>
<b>Title:</b>	<b>CAO &amp; Director Reports for November, 2021</b>

**BACKGROUND / PROPOSAL:**

The CAO and Director reports for November 2021 are attached for information.

**OPTIONS & BENEFITS:**

N/A

**COSTS & SOURCE OF FUNDING:**

N/A

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION / PUBLIC PARTICIPATION:**

N/A

**POLICY REFERENCES:**

N/A

**Author:** C. Simpson **Reviewed by:** \_\_\_\_\_ **CAO:** \_\_\_\_\_

**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That the CAO & Director reports for November 2021 be received for information.

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_



# MONTHLY REPORT OF THE CHIEF ADMINISTRATIVE OFFICER

Len Racher, CAO

## Daily Activities Log for

Date	Comments
Nov.1/21	Meeting staff my office
Nov.2/21	Work with Sylvia communications
Nov.3/21	Covid update
Nov.4/21	Budget work shop
Nov.5/21	Budget work shop
Nov.8/21	ASB La Crete
Nov.9/21	Council Meeting
Nov.10/21	Work with Carrie on packages for RMA
Nov.12/21	Work at Fort
Nov.15/21	Meet with Jeff and Willie
Nov.16/21	Meet with Sylvia
Nov.17/21	Meet with Carrie
Nov.18/21	Meet with Donny and Jenn

# MONTHLY REPORT OF THE CHIEF ADMINISTRATIVE OFFICER

Len Racher, CAO

Nov.19/21 Budget meeting

Nov.22/21 Attend RMA for the week returning Nov. 26/21

Nov.29/21 Zoom meeting Ambulance hours of work

Nov.30/21 Council meeting

Respectfully,

Len Racher  
Chief Administrative Officer

## Monthly Report to the CAO

For the month of November, 2021

From: Caitlin Smith,  
 Manager of Planning and Development

### Strategic Priorities for Planning & Development

Program/Activity/Project	Timeline	Comments
Land Use Framework	TBA	Joint project report; see Byron's report for project update
Municipal Development Plan, Land Use Bylaw, and Fort Vermilion Area Redevelopment Plan	Q4 2021	Administration meets with the consultant bi-weekly. The MDP and LUB both received first reading, I will be accepting Council comments until the second week of January to ensure integration prior to Public Hearing at the end of January. Administration will also bring back the strategic plan at that time as requested. The Fort Vermilion Area Redevelopment Plan public meeting dates will start in the new year.

### Annual Operating Programs, Projects and Activities

Program/Activity/Project	Timeline	Comments
La Crete Area Structure Plan Revision	Q4 2022	Administration will request an updated ASP for 2022 as an approved development will be changing the transportation plan and the additional development outside of the hamlet.
100A Street Land Acquirement (Future Main Street Widening in La Crete)	Q4 2021	Administration has engaged Borderline Surveys regarding the subdivision and URW survey plan. The project is underway and offers to adjacent landowners will take place once the survey is returned to admin.

### Personnel Update:

All positions within the department are filled.

Lynda Washkevich, Development Officer, will be presented with her 5 year long-service award. She has shown tremendous dedication and growth throughout her tenure having moved from an Administrative Assistant to a Development Officer. She primarily processes Development Permit applications but is able to cover other positions in the department. Her experience and knowledge are second to none.

**Other Comments:**

This year has been the busiest year for development; to date there are over 310 development permits processed and a record 72 subdivision applications.

To date, there are two urban multi-lot subdivisions that are still under construction. Administration reached out to the developers to notify that the municipal engineer was in the area at the beginning of November and the site manager determined that the projects were not substantially complete for inspection. Administration has since given one substantial completion in order to allow one development to be serviced with water. This is contingent on a spring Construction Completion inspection once the snow is gone.

Administration is working on land transfers for the lagoon site which has been signed and sent for registration. The Storm Pond A land offer to purchase has been signed and we will begin the subdivision process.

The drainage ditch located west of the Northridge subdivision which will tie into the storm water drainage plan for Northwest La Crete has been sent for registration and will be owned by the municipality.

The fence along the alley into Vanguard park in La Crete will be installed on December 13, 2021 as per Council request.

I have supported the Projects and Infrastructure department for the past two weeks.

## Monthly Report to the CAO

For the month of November, 2021

From: Byron Peters,

Director of Projects & Infrastructure/Deputy CAO

### PLANNING, PROJECTS & INFRASTRUCTURE

#### Strategic Priorities

Program/Activity/Project	Timeline	Comments
Land Use Framework	TBA	The Access Management Plan (AMP) for Bistcho is in the early stages. Provided feedback to AEP for Bistcho Lake sub-regional plan. Has been quiet for several months now.
Community Infrastructure Master Plans & Offsite Levies	IMPs complete Levies to be completed in Q3 2021	Currently tabled. Will review levy rates once various projects have been tendered/awarded.
Municipal Development Plan	Started Q3 2020	Joint project. See Caitlin's report for project update.
Asset Management	Ongoing	Working our way through priorities and steadily adding more assets and data into a common database. Received a \$50k grant from FCM to further advance our AM progress, which will focus on road infrastructure.

#### Annual Operating Programs, Projects and Activities

Program/Activity/Project	Timeline	Comments
Economic Development		Have not had the time/resources to focus on formal ec dev. Relying on REDI at this time for most overarching items. Met with Organic Alberta and are exploring a potential partnership for ag development in the region.
101 Ave rebuild & pave	done	Construction complete.
100 St & 109 Ave Intersection Improvement	done	Construction complete.
100 St & 94 Ave Traffic Light	end October	Project substantially completed on October 31 <sup>st</sup> . Street lights and sign blades installed on Dec 7.



Gravel Crushing		Overburden removal going well overall. More overburden in a portion of the Tompkins Pit than anticipated, but only required a small change of plans. Developing crushing plan for 2022.
Fort Vermilion (Wop May) Airport Recovery		Project is taking longer than anticipated. Entire works are currently out for tender, to be awarded on December 16 <sup>th</sup> . Contract states that PAPIs & AWOS to be operational by February 28 <sup>th</sup> , with the rest of the works to be complete by July 31 <sup>st</sup> , 2022.
Storm Pond A (LC)		Tender awarded & construction started. Completed enough ditching and pond excavation so that it will function in spring. Will likely need to use a pump this spring to help move waer.
LC North Sanitary	Engineering Q1 2022	Engineering design well underway. Anticipating design completion/tendering in February 2022.
LC West Storm Outlet	Complete	Installed a catch basin along 109 Street and rerouted the ditch at the outfall. Will solve drainage issues and our infrastructure is now fully located on County property.

**Personnel Update:**

No changes in the department.

**Other Comments:**

I was out of the region for two weeks, but spent a lot of time before I left to leave projects in a good a place for contractors and consultants.

We learned that there is a need to invest quite a lot of energy into numerous dispositions at Atlas Landing. There are 5 or 6 separate dispositions that require amendments or renewals, with overlap between several of the dispositions. This overlaps several departments, so a handful of us are working together on this item.

As we continue to work through infrastructure planning for La Crete, a more defined road plan and drainage (storm water management) plan seem to be the two most urgent issues, now that a plan is well in place for sanitary sewer. Administration will be proposing two separate projects to address these items in the 2022 budget deliberations.

Some projects that were expected to be completed in 2021 will roll over into 2022, due to an assortment of delays on our end, engineers, suppliers, insurance/DRP approvals, etc. Overall it was a successful construction year with many projects successfully completed on time and on budget. We are utilizing the winter months to get projects well aligned to resume in spring.

Flood mitigation work continues to proceed well, thanks to the contributions of many people. Lots of work remains, but a lot of work has been completed as well. A large portion of design and engineering work has been completed, tenders drafted, and other legal work in the background.

## Monthly Report to the CAO

For the month of November, 2021

From: Jeff SIMPSON, B. Comm, GDM  
Director of Operations

### Annual Operating Programs, Projects and Activities

Program/Activity/Project	Timeline	Comments
Administration	Ongoing	Budget preparations, capital project estimations, completion of summer project final invoices.
Airport Maintenance	Ongoing	Regular maintenance as required.
Flood Mitigation Project	Ongoing	One on One Meetings continuing as required. Secondary and subsequent meetings are starting to incur as houses are prepped and relocated to Phase 1. Planning continues for Phase 2 and Bestbuy developments.
Gravel Program (2021)	Ongoing	Completed for 2021.
Road Maintenance	Ongoing	All summer programs completed for 2021.  Winter road preparations commencing.
Spring Preparations / Overland Flooding	Ongoing	All culvert projects for the North and South completed as identified.
Winter Preparations	Ongoing	Manufactured fines ordered and mixing started with salt for stockpile.  Christmas lights installed for FV, LC and Zama.  All equipment prepped for winter operations.

**Meetings Attended:**

<b>Date</b>	<b>Description</b>
Nov. 1/21	Employee Performance Evaluation
Nov. 1/21	Site Visit – Atlas Landing Reclamation Planning
Nov. 2/21	Ice Bridge Start Up Meeting – Alberta Transportation
Nov. 4/21	Budget Council Meeting
Nov. 5/21	Budget Council Meeting
Nov. 9/21	Regular Council Meeting
Nov. 15/21	Fleet Meeting
Nov. 17/21	FV Mitigation Meeting – Phase 2 Subdivision Review
Nov. 17/21	FV Mitigation Meeting – Rate Payer Meeting
Nov. 19/21	Health & Safety Meeting
Nov. 19/21	Budget Council Meeting
Nov. 22/21	AMSA Fall Convention
Nov. 23/21	AMSA Fall Convention
Nov. 24/21	AMSA Fall Convention
Nov. 25/21	AMSA Fall Convention
Nov. 26/21	AMSA Fall Convention
Nov. 30/21	Regular Council Meeting

**Submitted by:**

**Jeff SIMPSON, B. Comm, GDM  
Director of Operations**

## **REPORT TO THE CAO**

For the Month of November, 2021

From: Carrie Simpson, Director Legislative & Support Services

### **Meetings Attended**

- **2021-11-04 - Budget Worksop**
- **2021-11-05 - Budget Workshop**
- **2021-11-09 - Regular Council Meeting**
- **2021-11-19 – Budget Council Meeting**
- **2021-11-30 - Regular Council Meeting**

### **Council**

- Preparing for various meetings of Council, correspondence, etc.
- Research and responding to inquiries.
- Work on packages for RMA
- Arrange and coordinate meetings for RMA
- Attended the Rural Municipalities Conference – November 22-26, 2021

### **Appeal Boards**

- 2021-11-10 – Assessment Review Board Hearings – 4
- 2021-11-15 – Work on Appeal Decisions
- 2021-11-19 – Finalize Appeal Decisions

### **Bylaws/Policies/Reports/Publications:**

- Meet with IT with regards to ADM052 Policy

### **Enhanced Policing**

- Regular updates to Council are scheduled for the second council meeting of each month.
- RCMP services are available at the La Crete office on Wednesdays.

### **Emergency Management**

### **Communications:**

- Maintain and respond to County emails.
- Work with Sylvia with regards to social media and website material, advertising for utilities, etc.

### **Human Resources:**

- 2021-11-19 – Brief meeting with front counter staff Fort Vermilion Office
- 2021-11-03 - Meeting with Union and staff

**Other:**

- Assisting legislative and support services department staff (ie. Human Resources, Records Management, Information Technology, etc.)
- Ongoing form review and updating.
- Preparing for various meetings.
- Meeting coordination.
- Assisting other departments as required.
- Mackenzie County Wearing Apparel order



## Monthly Report to the CAO

For the month of November, 2021

From: Don Roberts,  
Director of Community Services

Program/Activity/Project	Timeline	Comments
<b>Fire Departments</b>	November	<p>Activity Summary Report for November 2021</p> <ul style="list-style-type: none"> <li>01- Alarms</li> <li>06 - Fire</li> <li>10 - Medical Co-response</li> <li>04 - Motor Vehicle Incident</li> <li>0 1– Hazmat/Hazard</li> </ul> <p>Administration and all Fire Chiefs held a meeting. Major points of discussion focused on 2022 budget development, inventory/equipment management, future communication upgrade request, and others.</p> <p>Emergency Vehicle Replacement issue will be presented at a Committee of the Whole in the new year.</p>
<b>Parks and Recreation</b>	November	<p>The Campground Partnership public engagement meeting was cancelled until 2022.</p> <p>Past Caretakers are inquiring on 2022 Campground contracts and when they can expect to be informed. There is a concern for Lost Opportunities.</p> <p>Administration is in the middle of developing a plan for DA Thomas park to replace components that were lost during the flood. (DRP) All components are expected to be in place spring 2022. Plan will be presented at a Community Services meeting prior to final implementation.</p>
<b>Waste Management</b>		<p>Insurance premiums for the waste transfer station caretaker have increased. &lt;\$100/year per contractor.</p>
<b>Occupational Health &amp; Safety</b>		<p>The HSC now meet on a quarterly basis with the individual department/site safety meetings being held monthly.</p>

		There were a total of nine incidents reviewed and with recommendations being made to the CAO. Discussions in November included Committee training requirements, Organizational Training Matrix, Formal Worksite Inspection Schedule, and 2022 Union HSC membership.
<b>Zama Trailer Rental</b>		Mackenzie County owns 5 mobile home trailers in Zama. 1 trailer is being held for County employee usage. 1 trailer has a one year rental agreement and the other 3 have a six month rental agreement ending March 31 2022.
<b>Ambulance (AHS)</b>		Administration contacted AHS management and discussed Ambulance services within Mackenzie County. It was stated there had been no changes to services and the same amount of ambulances are being dispatched as always.

**Capital Projects**

Program/Activity/Project	Timeline	Comments
Search & Rescue River Access	Spring 2022	Delay in receiving concrete pads for the Fort Vermilion site have occurred. Site prep was conducted in October and expect completion of this site in spring of 2022
Street Scape	Spring 2022	Fort Vermilion streetscape tree planting project was completed.

**Attended Update:**

<p>Attended the following:</p> <ul style="list-style-type: none"> <li>• Council</li> <li>• Community Services</li> <li>• Waste Transfer Station Caretakers</li> <li>• Managers</li> <li>• FRIAA</li> <li>• Fort Vermilion Rec. Manager</li> <li>• Joint Work Site Health and Safety Committee</li> <li>• Alberta Health Services</li> <li>• Budget Work Shop</li> <li>• Atlas Landing (Site Visit)</li> </ul>
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<b>Personnel Update:</b> Vacation December 15-27
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## MONTHLY REPORT TO THE CAO

For the Month Ending November, 2021

**From:** Jennifer Batt  
Director of Finance

### Annual Operating Programs, Projects and Activities

Program/Activity/Project	Timeline	Comments
2021 Operating & Capital	Ongoing	Review Operating Budget to Actual. Review Capital Budget to Actual. Distribute 2021 reports to CAO & Directors for reporting. 2021 Tax collection and review, and reporting to council.
MSI Reporting	Ongoing	2020 SFE submitted, awaiting for approval
Taxation Auction	Ongoing	Advertising submitted – Feb 23, 2022 Auction date.
2022 Budget	Ongoing	Meet with CAO & various Directors re: 2022 budgets. Compile 2022 Budget information for presentation to Council. Update Budget package as per Council motions
Disaster Recovery Program  <i>2018 Peace River Ice Jam</i>  <i>2019 Chuckegg Wildfire</i>          <i>2020 Peace River Ice Jam / Overland Flood</i>	Ongoing	Review ongoing projects.  2 Projects submitted under review. 1 project confirmed 80% funding to be released.  Administration is still gathering requested information on road project.  Work w various GOA agencies on the flood recovery plan and funding streams available.  Attend one on one meetings.  Work with Mitigation Team, Project manager,

<p><i>2021 Overland Flood</i></p> <p>2021 Sever Storm Overland Flooding</p>		<p>and site supervisor on sites development.</p> <p>8 mobile home moved to site. 2 mobile home planned in December. 1 business planned to move in December.</p> <p>DRP Part 1 &amp; 2 application submission completed in July. Continue to gather reporting data once approved for submission,</p> <p>Application denied – Council request to appeal letter sent.</p>
<p>Attend Various meeting</p>		<p>Regular Council meetings November 9,30</p> <p>Budget Workshop – November 4,5</p> <p>Budget Council Meeting – November 19</p> <p>Managers Meeting – November 4</p> <p>Administration November 3, 19</p> <p>Mitigation &amp; One on one Meetings – November 9,17x3</p> <p>Mitigation GOA Meetings – November 8,22</p> <p>RMA Workshop Zoom meet &amp; greet – November 3</p>
<p>Attend RMA in Edmonton November 23-26 for a Municipal Mitigation Presentation.</p> <p>Days off November 15-16</p>		





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Jennifer Batt, Director of Finance</b>
<b>Title:</b>	<b>Community Aggregate Levy Bylaw 1248-21</b>

**BACKGROUND / PROPOSAL:**

Through Budget deliberations, Council passed Gravel Aggregate Bylaw 1247-21 with a fee amendment.

Another amendment was identified after the third passing of Bylaw 1247-21, and administration is presenting 1248-21 with these amendments.

**OPTIONS & BENEFITS:**

Pass first reading of the Bylaw as presented, amended or table for further information.

**COSTS & SOURCE OF FUNDING:**

N/A

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION / PUBLIC PARTICIPATION:**

Bylaws are available on the Mackenzie County website.

**POLICY REFERENCES:**

Author: J. Batt Reviewed by: \_\_\_\_\_ CAO: \_\_\_\_\_



N/A

**RECOMMENDED ACTION:**

**Motion 1**

Simple Majority       Requires 2/3       Requires Unanimous

That the first reading be given to Bylaw 1248-21 being a Community Aggregate Levy for Mackenzie County.

**Motion 2**

Simple Majority       Requires 2/3       Requires Unanimous

That the first reading be given to Bylaw 1248-21 being a Community Aggregate Levy for Mackenzie County.

**Motion 3**

Simple Majority       Requires 2/3       Requires Unanimous

That consideration be given to go to third reading of Bylaw 1248-21 being the Community Aggregate Levy for Mackenzie County.

**Motion 4**

Simple Majority       Requires 2/3       Requires Unanimous

That the first reading be given to Bylaw 1248-21 being a Community Aggregate Levy for Mackenzie County.

Author: J. Batt      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_

**BYLAW NO. 1248-21**  
**BEING A BYLAW OF**  
**MACKENZIE COUNTY**  
(hereinafter referred to as “the Municipality”)  
**IN THE PROVINCE OF ALBERTA**

**This bylaw authorizes the Council of the Municipality the imposition of a levy in respect of all sand and gravel businesses operating in Mackenzie County.**

**WHEREAS**, pursuant to the provisions contained in the Municipal Government Act (Alberta), section 409.1, the Council of the Municipality is authorized to pass a community aggregate payment levy bylaw to impose a levy in respect of all sand and gravel businesses operating in the Municipality to raise revenue to be used toward the payment of infrastructure and other costs in the Municipality; and

**WHEREAS**, Alberta Regulation 263/2005 made pursuant to section 409.3 of the said Act specifies that any Bylaw passed pursuant to section 409.1 must contain certain provisions including the maximum levy which may be imposed under the Bylaw; and

**WHEREAS**, the Council of the Municipality has determined that it is in the best interests of the residents of Mackenzie County that a Bylaw be passed pursuant to section 409.1 of the said Act to impose a levy in respect of all sand and gravel businesses operating in the Municipality; and

**NOW, THEREFORE, THE COUNCIL OF THE MUNICIPALITY DULY ASSEMBLED, ENACTS AS FOLLOWS:**

**DEFINITIONS:**

1. In this Bylaw:

- a) “Act” means the Municipal Government Act R.S.A. 2000 c. M-26;
- b) “Aggregate” means sand and gravel or both as found naturally or stockpiled;
- c) “Municipality” means Mackenzie County;
- d) “Crown” means the Crown in the right of Alberta or Canada;
- e) “Levy” means the community Aggregate payment levy as authorized by this Bylaw;
- f) “Operator” means a person engaged in extracting Aggregate for Shipment;

- g) "Pit" means a location where Aggregate can be, is or has been extracted from its naturally occurring location;
- h) "Shipment" means a quantity of Aggregate hauled from the Pit where it was extracted.

### **OPERATOR REPORTING REQUIREMENTS:**

- 2. All Operators in the Municipality shall report all Shipments of Aggregate in tones from any Pit within the boundaries of the Municipality on an annual basis within ~~fourteen (14)~~ **twenty one (21)** days of December 31<sup>st</sup> in each calendar year, such report to be in the form attached as Schedule "A" to this Bylaw.
- 3. The Municipality shall record the Aggregate shipped by each Operator for each quarter on an Aggregate shipped tonnage roll based upon the report or reports filed by each Operator pursuant to section 2 of this Bylaw.
- 4. The Municipality shall send a levy notice under this Bylaw to each Operator setting out the amount of the Levy payable by the Operator based upon the Aggregate shipped tonnage roll recorded by the Municipality pursuant to section 3 of this Bylaw within thirty (30) days of December 31<sup>st</sup> in each calendar year.
- 5. In the case of any Operator who shall be unable to provide a measurement of weight for the amount of the Aggregate in any Shipment, the Operator shall use the following conversion rates to record Shipments in tones for the purpose of reporting under section 2 of this Bylaw:
  - a) 1 cubic meter = 1.365 tonnes for sand; and
  - b) 1 cubic meter = 1.632 tonnes for gravel  
where 1 cubic meter is equal to 1.308 cubic yards.

### **LEVY RATE, PAYMENT AND COLLECTION OF LEVY:**

- 6. The uniform Levy Rate for all Shipments of Aggregate from Pit within the Municipality shall be \$0.40 per tonne of Aggregate and the amount of the Levy for each quarter to be imposed upon an Operator shall be determined by multiplying the number of tones of Aggregate for each quarter, as shown on the Aggregate shipped tonnage roll provided for in section 3 of this Bylaw, by the Levy Rate as specified by this Bylaw.
- 7. An amount owing to the Municipality by an Operator as shown on the Levy notice sent to the Operator pursuant to section 4 of this Bylaw shall be paid by the Operator within thirty (30) days of the date or mailing of the Levy notice.
- 8. An Operator shall provide the Municipality with written notice of a mailing address to which all notices under this Bylaw and Division of Part 10 of the Act may be sent.

**EXEMPTIONS FROM LEVY:**

9. No Levy under this Bylaw shall be imposed by the County on the following Shipments of Aggregate:
- a) A Shipment from a Pit owned or leased by the Crown for a use or project that is being undertaken by or on behalf of the Crown;
  - b) A Shipment from a Pit owned or leased by a municipality for a use or a project that is being undertaken by or on behalf of a municipality;
  - c) A Shipment from a Pit owned or leased by the Crown of a municipality for a use or a project that is being undertaken by or on behalf of the Crown of a municipality; and
  - d) A Shipment which is required pursuant to a road haul agreement or a development agreement for the construction, repair or maintenance of a road or roads described in the said agreement that is necessary to provide access to the Pit from which the Aggregate is extracted.
10. An Operator shall report all Shipments of Aggregate as provided for in this Bylaw even though one or more of such Shipments may be exempt under this Bylaw from the Levy.

**PENALTIES:**

11. Any person who fails to comply with any provisions of this Bylaw shall be guilty of an offence and liable on summary conviction to a fine of One Thousand (\$1,000) Dollars.

**EFFECTIVE DATE:**

12. This bylaw shall repeal and replace bylaw 1247-21.
13. This bylaw shall become effective on the date on which this Bylaw is passed pursuant to the Act.

READ a first time this \_\_\_\_ day of \_\_\_\_\_.

READ a second time this \_\_\_\_ day of \_\_\_\_\_.

READ a third time and finally passed this \_\_\_\_ day of \_\_\_\_\_.

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Josh Knelsen  
Reeve

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Len Racher  
Chief Administrative Officer

**Mackenzie County  
Schedule "A"**

**SAND AND GRAVEL SHIPMENTS QUARTERLY REPORT**

This report must be received by the Municipality within fourteen (14) days from the last day of the reporting period each year.

Name of Operator	
Mailing Address of Operator	
Telephone Number	
Fax Number	
E-mail Address	

Location of Sand/Gravel Pit	
Reporting Period (enter quarter)	

Name of Owner of Parcel where Pit is located	
Mailing Address of Owner of Parcel	
Telephone Number	
Fax Number	
E-mail Address	

<b>Total sand and gravel that you shipped from this pit in the reporting period (tonnes)</b>	
<b>TOTAL A</b>	

Shipments exempt from Community Aggregate Payment Levy	
E1) Total sand and gravel that you shipped from this pit, pursuant to a road haul agreement or a development agreement, for the construction, repair or maintenance of access roads to this pit (tonnes)	

Please complete sections E2 to E4 only if this pit is:

- Owned by the Government of Alberta or a municipality, or
- Leased by the Government of Alberta or a municipality from another party

E2) Total sand and gravel that you shipped from this pit to Government of Alberta projects in the reporting periods (tonnes)	
E3) Total sand and gravel that you shipped from this pit to the Municipal District projects in the reporting period (tonnes)	
E4) Total sand and gravel that you shipped from this pit to projects of other municipalities (excluding the Municipal District) in the reporting period (tonnes)	

<b>Total Exempted Shipments [Add E1+E2+E3+E4] (tonnes)</b>	
<b>TOTAL B</b>	-

The Shipments subject to Community Aggregate Payment Levy	
<b>TOTAL A minus TOTAL B</b>	=

The weight of sand and gravel in individual shipments may be estimated if weigh scales are unavailable. The conversion rates to be used in estimating the tonnage are as follows:

1 cubic meter = 1.365 tonnes, for sand

1 cubic meter = 1.632 tonnes, for gravel where 1 cubic meter = 1.308 cubic yards







**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Jennifer Batt, Director of Finance</b>
<b>Title:</b>	<b>Bylaw 1246-21 Fee Schedule</b>

**BACKGROUND / PROPOSAL:**

During the Budget Council Meeting on December 7<sup>th</sup>, Council passed the following motion:

***MOVED** by Councillor Wardley*

*That first reading be given to Bylaw 1246-21 being the Fee Schedule for Mackenzie County.*

***Deputy Reeve Sarapuk requested a recorded vote***

<b><i>In Favour</i></b>	<b><i>Opposed</i></b>
<i>Councillor Peters</i>	<i>Councillor Smith</i>
<i>Councillor Driedger</i>	<i>Deputy Reeve Sarapuk</i>
<i>Councillor Derksen</i>	<i>Councillor Cardinal</i>
<i>Reeve Knelsen</i>	
<i>Councillor Braun</i>	
<i>Councillor Bateman</i>	
<i>Councillor Wardley</i>	

**CARRIED**

Amendments to the Bylaw are as noted below:

Public Works Pg. (22)

Airports Pg. (23)

Water Sewer Rates, Penalties, and Fees and Deposits Pg. (37)

During the Budget Council Meeting on December 8<sup>th</sup>, 2021 Council requested a further amendment be reviewed and brought forward. The amendment is as noted under Airports Pg. (23).

**Author:** J. Batt      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

Penalty Fee – Late/Failure to Report Fuel Flow Charge (late is considered 30 days past quarterly reports)	\$1,000.00	Applicable
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**OPTIONS & BENEFITS:**

Pass second and third reading of the Bylaw as presented, amended or table for further information.

**COSTS & SOURCE OF FUNDING:**

N/A

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION / PUBLIC PARTICIPATION:**

Fee amendments are advertised through the local newspaper, website, and social media. Bylaws are available on the Mackenzie County website.

**POLICY REFERENCES:**

N/A

**RECOMMENDED ACTION:**

**Motion 1**

- Simple Majority       Requires 2/3       Requires Unanimous

That second reading as amended be given to Bylaw 1246-21 being the Fee Schedule for Mackenzie County.

**Motion 2**

- Simple Majority       Requires 2/3       Requires Unanimous

Author: J. Batt      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_

That third reading be given to Bylaw 1246-21 being the Fee Schedule for Mackenzie County.

**Author:** J. Batt **Reviewed by:** \_\_\_\_\_ **CAO:** \_\_\_\_\_

**BYLAW NO. 1246-21**

**BEING A BYLAW OF THE  
MACKENZIE COUNTY  
IN THE PROVINCE OF ALBERTA  
TO ESTABLISH A FEE SCHEDULE FOR SERVICES**

**WHEREAS**, pursuant to the provisions of the Municipal Government Act, Revised Statutes of Alberta, 2000, Chapter M-26, requires fees to be established by bylaw.

**NOW THEREFORE**, the Council of Mackenzie County, in the province of Alberta, duly assembled, enacts as follows:

**1. SHORT TITLE**

This bylaw may be cited as the “Fee Schedule Bylaw”

2. That the fees for services be approved as follows:

**ADMINISTRATION**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Photocopying	\$0.30/sheet	Applicable
Laminating (up to 11 x 17") Laminating (larger than 11 x 17")	\$10.00 per page \$30.00 per page	Applicable
Tax Certificates	\$30.00	N/A
Email, fax or written confirmation of assessment by legal description (legal description to be provided by a requestor in writing)	\$30.00/per request	Applicable
Compliance Certificates	\$60.00	N/A
Land Titles	As per Alberta Government rates in force at the time of the request plus 25% for administration	Applicable
County Ownership Maps 42" bond paper 50"-60" photo paper	\$30.00 \$105.00	Applicable
County Ownership Map Booklet –Laminated Individual Pages - Laminated	\$75.00 \$10.00	Applicable
Hamlet Maps Civic Address/LUB Aerial	\$20.00 \$45.00	Applicable

**ADMINISTRATION CONT'D**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Aerial Photos & Customized Prints Size 8.5" x 11" to 11" x 17"	\$5.00 – Black & White \$10.00 – Color	Applicable
Aerial Photos & Customized Prints Size over 11" x 17" up to 30" x 41.5"	\$45.00 – Black & White \$95.00 – Color	Applicable
Boardroom Rental (no charge to non-profit community groups)	\$300.00/day \$150.00/half-day	Applicable
Mobile Home Rentals – Zama -Damage Deposit -Nonrefundable Cleaning Fee -Nonrefundable Pet Fee (if applicable)	\$1500.00/month \$2000.00 \$400.00 \$250.00	N/A
Council or other Board Minutes	\$5.00/set	Applicable

**AGRICULTURE**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Alberta Agriculture's Irrigation Pump/Pipe (up to October 31 <sup>st</sup> )	\$300.00/48 hours \$100.00/each additional 24 hours	Applicable
Alberta Agriculture's Irrigation Pump/Pipe (after November 1 <sup>st</sup> )	\$600.00/48 hours \$100.00/each additional 24 hours	Applicable
Irrigation Pump – Extra Pipe	\$150.00 per extra mile	Applicable
Shelterbelt Trees	Actual Cost plus 5% Administration Fee	Applicable

**APPEAL FEES**

Agricultural Appeal Board

<b>Relevant Act</b>	<b>Amount</b>	<b>GST</b>
Weed Control Act	\$500.00	N/A
Soil Conservation Act	\$50.00	N/A
Agricultural Pests Act	\$100.00	N/A

Note: The appeal fee shall be refunded to the appellant if the Board rules in favour of the appellant.

**RELEASE OF INFORMATION (FOIPP REQUESTS)**

\_\_\_\_\_  
 \_\_\_\_\_



Pursuant to the provisions of Section 95 of the Freedom of Information and Protection of Privacy Act RSA 2000, Chapter F-25, a local public body may set fees as required to process requests for information; however the fees must not exceed the fees provided for in the regulations.

Mackenzie County shall charge fees in accordance with the Freedom of Information and Protection of Privacy Regulation, AR186/2008, as amended from time to time or any successor Regulation that sets fees for requests for information from the Province.

**BUSINESS LICENSES**

Item	Amount	GST
<b>Fees:</b>		
Business License		
Subsequent Years – Mandatory	\$50.00	N/A
Amendment	\$25.00	N/A
Replacement	\$25.00	N/A
Transfer of Ownership	\$25.00	N/A
Temporary Business License – valid for not longer than four (4) consecutive weeks	\$25.00	N/A
<b>Penalties:</b>		
No Business License (false information, etc.) – 1 <sup>st</sup> Offence	\$250.00	N/A
No Business License (false information, etc.) – 2 <sup>nd</sup> Offence	\$500.00	N/A
Failure to Comply with Business License – 1 <sup>st</sup> Offence	\$250.00	N/A
Failure to Comply with Business License – 2 <sup>nd</sup> Offence	\$500.00	N/A
Failure to Produce Business License on Request	\$50.00	N/A

**HAWKERS AND PEDDLERS LICENSE**

Item	Amount	GST
<b>Fees:</b>		
Application Processing Fee	\$200.00	N/A
Operational Fee – Per Day	\$30.00	N/A
<b>Penalties:</b>		
First Offense	\$250.00	N/A
Second Offense	\$500.00	N/A

Third & Subsequent Offenses	\$1,000.00	N/A
Failure to Report Operational Days	Invoice for total operational business days in a year	N/A

**DEVELOPMENT**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Area Structure Plan	\$30.00 Hard Copy	Applicable
Area Structure Plan Amendment	\$2,300.00	N/A
Advertising & Notification Cost	\$100.00 Plus Cost of Postage \$137.00 Bylaw Amendment Sign Cost	N/A
Compliance Request – Commercial/Industrial	\$85.00 Per Lot	Applicable
Compliance Request – Residential	\$60.00 Per Lot	Applicable
Development Permit – Commercial and Industrial – Discretionary Use	\$175.00	N/A
Development Permit – Commercial and Industrial – Discretionary Use with Variance	\$175.00	N/A
Development Permit – Commercial and Industrial – Permitted Use	\$115.00	N/A
Development Permit – Commercial and Industrial – Permitted Use with Variance	\$175.00	N/A
Development Permit - Other than Commercial or Industrial – Discretionary Use	\$105.00	N/A
Development Permit - Other than Commercial or Industrial – Discretionary Use with Variance	\$105.00	N/A
Development Permit - Other than Commercial or Industrial – Permitted Use	\$60.00	N/A
Development Permit - Other than Commercial or Industrial – Permitted Use with Variance	\$105.00	N/A
Development Permit after Legal Counsel Intervention	Permit Cost Plus Legal Fee Cost	NA
Development Permit Revision	50% of Original Fee	N/A
Development Permit Time Extension	\$60.00	N/A
Development Prior to Development Permit Issuance	1 <sup>st</sup> Offence - \$290.00 Fine 2 <sup>nd</sup> Offence - \$575.00 Fine 3 <sup>rd</sup> Offence - \$1,150.00 Fine	N/A
Discharge of Caveat	\$10.00 Plus Cost of File Search	Applicable
File Search	\$60.00	Applicable
General Municipal Standards Manual	\$60.00 Hard Copy	Applicable

**DEVELOPMENT**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Land Use Bylaw	\$60.00 Hard Copy	Applicable
Land Use Bylaw Amendment	\$805.00	N/A
Land Use Bylaw Rezoning	\$460.00	N/A
Lot Consolidation	\$460.00	N/A
Municipal Development Plan	\$60.00 Hard Copy	Applicable
Municipal Development Plan Amendment	\$2,300.00	N/A
Revised Letter of Compliance (within 3 months)	50% of Full Price	Applicable
Road Closure Bylaw	\$1,000.00	N/A
Rural Addressing Sign – required only after initial Rural Addressing Project is complete (required for all new rural yardsites, either at time of Subdivision or Development Permit approval, whichever occurs first) (Does not include installation)	\$80.00	Applicable
Rush Compliance Request (1-3 Business Days)	Double Listed Price	Applicable
Subdivision and Development Appeal	\$290.00	N/A
Subdivision or Boundary Adjustment Application	\$805 plus \$230/lot created	N/A
Subdivision Re-Inspection Fee	Municipal Engineer's Fee Plus \$500 Administration Fee	N/A
Subdivision Revision/Re-Advertising Fee	\$290.00	N/A
Subdivision Time Extension (Multi-Lot)	\$575.00	N/A
Subdivision Time Extension (Single Lot)	\$290.00	N/A
Street/Rural Address Change	\$200.00	Applicable
Written Zoning Confirmation Request	\$30.00 Per Lot	Applicable

Note: Stop Orders will be issued and delivered to the site and/or the individual(s) conducting unauthorized development requiring all construction to cease immediately and to remain ceased until such time as the necessary Development Permit has been applied for and approved.

\_\_\_\_\_  
 \_\_\_\_\_

**SAFETY CODES FEES**

**BUILDING PERMIT FEES**

<b>RESIDENTIAL</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
Main Floor (basement included)	\$0.65/sq ft	\$0.55/sq ft
Additional Storey's	\$0.40/sq ft	\$0.30/sq ft
Garages (Attached/Detached)/Sheds (over 200 sq ft)	\$0.40 sq/ft	\$0.30/sq ft
Additions	\$0.50/sq ft	\$0.40/sq ft
Relocation of a Building on a Basement or Crawlspace	\$0.60/sq ft	\$0.50/sq ft
Placement of House/Modular/Mobile Home/Garage/Addition only	\$175.00	\$150.00
Major Renovations (Any Structural Change)	\$0.50/sq ft	\$0.40 sq ft

Fireplaces/Wood Burning Appliances	\$175.00	\$150.00
Decks (Greater Than 2 Feet Above Grade)	\$175.00	\$150.00
Minimum Residential Building Permit Fee	\$175.00	\$150.00

<b>COMMERCIAL/ INDUSTRIAL/ INSTITUTIONAL</b>
\$6.00 per \$1,000 of project value
Minimum fee is \$300.00
Notes: 1. Project value is based on the actual cost of material and labour. 2. Verification of cost may be requested prior to permit issuance.

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**ELECTRICAL PERMIT FEES**

<b>RESIDENTIAL INSTALLATIONS (New Single Family Dwellings)</b>		
<b>Square footage of area to be wired</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
Up to 1200	\$218.50	\$184.00
1201 to 1500	\$287.50	\$218.50
1501 to 2000	\$327.75	\$276.00
2001 to 2500	\$362.25	\$299.00
2501 to 3000	\$391.00	\$322.00
3001 to 3500	\$419.75	\$345.00
3501 to 4000	\$437.00	\$368.00
4001 to 5000	\$460.00	\$402.50

\$0.10 per square foot over 5000

<b>DESCRIPTION</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
Mobile/Modular Home Connection only	\$115.00	\$86.25
Temporary and Underground Services (125 amps or less)	\$115.00	\$86.25

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

<b>OTHER THAN NEW NON-RESIDENTIAL AND RENOVATION (Additions and Farm Buildings)</b>		
<b>INSTALLATION COST</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
\$0 – 300	\$99.19	\$86.25
\$301 – 500	\$112.42	\$97.75
\$501 – 1,000	\$125.64	\$109.25
\$1,001 – 1500	\$140.59	\$120.75
\$1,501 – 2,000	\$152.09	\$132.25
\$2,001 – 2,500	\$158.70	\$138.00
\$2,501 – 3,000	\$165.32	\$143.75
\$3,001 – 3,500	\$171.93	\$149.50



**SAFETY CODES FEES CONT'D**

<b>INSTALLATION COST</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
\$3,501 – 4,000	\$178.54	\$155.25
\$4,001 – 4,500	\$190.44	\$165.60
\$4,501 – 5,000	\$195.73	\$170.20
\$5,001 – 5,500	\$210.28	\$182.85
\$5,501 – 6,000	\$220.86	\$192.05
\$6,001 – 6,500	\$228.80	\$198.95
\$6,501 – 7,000	\$238.05	\$207.00
\$7,001 – 7,500	\$248.63	\$216.20
\$7,501 – 8,000	\$257.89	\$224.25
\$8,001 – 8,500	\$267.15	\$232.30
\$8,501 – 9,000	\$276.41	\$240.35
\$9,001 – 9,500	\$286.99	\$249.55
\$9,501 – 10,000	\$296.24	\$257.60
\$10,001 – 11,000	\$304.18	\$264.50
\$11,001 – 12,000	\$314.76	\$273.70
\$12,001 – 13,000	\$324.02	\$281.75
\$13,001 – 14,000	\$334.60	\$290.95
\$14,001 – 15,000	\$342.53	\$297.85
\$15,001 – 16,000	\$350.47	\$304.75
\$16,001 – 17,000	\$362.37	\$315.10
\$17,001 – 18,000	\$372.95	\$324.30
\$18,001 – 19,000	\$380.88	\$331.20
\$19,001 – 20,000	\$390.14	\$339.25
\$20,001 – 21,000		\$348.45
\$21,001 – 22,000		\$350.75
\$22,001 – 23,000		\$359.95
\$23,001 – 24,000		\$368.00
\$24,001 – 25,000		\$377.20

Homeowner Price = %15 > Contractor Price

**SAFETY CODES FEES CONT'D**

<b>INSTALLATION COST</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
\$25,001 – 26,000		\$384.10
\$26,001 – 27,000		\$393.30
\$27,001 – 28,000		\$401.35
\$28,001 – 29,000		\$410.55
\$29,001 – 30,000		\$417.45
\$30,001 – 31,000		\$424.35
\$31,001 – 32,000		\$430.10
\$32,001 – 33,000		\$437.00
\$33,001 – 34,000		\$445.05
\$34,001 – 35,000		\$450.80
\$35,001 – 36,000		\$457.70
\$36,001 – 37,000		\$463.45
\$37,001 – 38,000		\$470.35
\$38,001 – 39,000		\$477.25
\$39,001 – 40,000		\$483.00
\$40,001 – 41,000		\$491.05
\$41,001 – 42,000		\$496.80
\$42,001 – 43,000		\$503.70
\$43,001 – 44,000		\$510.60
\$44,001 – 45,000		\$516.35
\$45,001 – 46,000		\$523.25
\$46,001 – 47,000		\$529.00
\$47,001 – 48,000		\$537.05
\$48,001 – 49,000		\$543.95
\$49,001 – 50,000		\$549.70
\$50,001 – 60,000		\$608.35
\$61,001 – 70,000		\$675.05
\$70,001 – 80,000		\$740.60

**SAFETY CODES FEES CONT'D**

<b>INSTALLATION COST</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
\$80,001 – 90,000		\$807.30
\$90,001 – 100,000		\$872.85
\$100,001 – 110,000		\$906.20
\$110,001 – 120,000		\$954.50
\$120,001 – 130,000		\$1,005.10
\$130,001 – 140,000		\$1,054.55
\$140,001 – 150,000		\$1,104.00
\$150,001 – 160,000		\$1,153.45
\$160,001 – 170,000		\$1,204.05
\$170,001 – 180,000		\$1,252.35
\$180,001 – 190,000		\$1,302.95
\$190,001 – 200,000		\$1,351.25
\$200,001 – 210,000		\$1,385.75
\$210,001 – 220,000		\$1,451.30
\$220,001 – 230,000		\$1,500.75
\$230,001 – 240,000		\$1,550.20
\$240,001 – 250,000		\$1,600.80
\$250,001 – 300,000		\$1,748.00
\$300,001 – 350,000		\$1,913.60
\$350,001 – 400,000		\$2,079.20
\$400,001 – 450,000		\$2,244.80
\$450,001 – 500,000		\$2,409.25
\$500,001 – 550,000		\$2,574.85
\$550,001 – 600,000		\$2,740.45
\$600,001 – 650,000		\$2,906.05
\$650,001 – 700,000		\$3,070.50
\$700,001 – 750,000		\$3,236.10
\$750,001 – 800,000		\$3,401.70

**SAFETY CODES FEES CONT'D**

INSTALLATION COST	HOMEOWNER	CONTRACTOR
\$800,001 – 850,000		\$3,567.30
\$850,001 – 900,000		\$3,731.75
\$900,001 – 950,000		\$3,897.35
\$950,001 – 1,000,000		\$4,062.95

Homeowner Fee = %15 > Contractor Fee

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**ANNUAL ELECTRICAL PERMIT PROCESS**

An Annual Electrical Permit may be issued to an establishment that employs a full time qualified Electrician or hires an electrical contractor to perform minor electrical upgrades or renovations (an electrical project value of less than \$10,000.00) on the premises identified on the permit application. Installations over \$10,000.00 in job value require a separate electrical permit.

The establishment shall maintain a current and accurate two-year record of all electrical upgrades or renovations and shall make it available to Mackenzie County upon request. The establishment is responsible for the electrical work required to satisfactorily complete the electrical installation covered by the permit.

A single Annual Electrical Permit may be issued to cover all minor electrical upgrades or renovations performed during a full calendar year or for a lesser period of time when required. The permit fee shall be based on a full calendar year.

ANNUAL ELECTRICAL PERMIT FEES	
Rating of Establishment (KVA)	Fee
100 or less	\$345.00
101 to 2,500	\$345.00 plus \$15.00 per 100 KVA over 100 KVA
2,501 to 5,000	\$759.00 plus \$12.00 per 100 KVA over 2,500 KVA
5,001 to 10,000	\$1,104.00 plus \$9.00 per 100 KVA over 5,000 KVA
10,001 to 20,000	\$1,621.50 plus \$6.00 per 100 KVA over 10,000 KVA
Over 20,000	\$2,311.50 plus 3.00 per 100 KVA over 20,000 KVA

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

\_\_\_\_\_  
 \_\_\_\_\_

**SAFETY CODES FEES CONT'D**

**GAS PERMIT FEES**

<b>RESIDENTIAL INSTALLATIONS, INCLUDING MOBILE HOMES AND FARM BUILDINGS</b>		
<b>Number of Outlets</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
1	\$97.75	\$86.25
2	\$120.75	\$97.75
3	\$143.75	\$120.75
4	\$179.40	\$149.50
5	\$224.25	\$187.45
6	\$247.25	\$205.85
7	\$269.10	\$224.25
8	\$289.80	\$241.50
9	\$313.95	\$262.20
10	\$336.95	\$280.60
11	\$350.75	\$292.10
12	\$365.70	\$304.75
13	\$379.50	\$316.25
14	\$395.60	\$330.05
15	\$409.40	\$341.55
16	\$426.65	\$355.35
17	\$440.45	\$366.85
18	\$455.40	\$379.50
19	\$469.20	\$391.00
20	\$485.30	\$404.80
<b>Add \$15.00 per outlet over 20</b>		

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**GAS PERMIT FEES - RESIDENTIAL**

<b>RESIDENTIAL PROPANE TANK SET</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
Propane Tank Set	\$103.50	\$86.25
Additional Propane Tanks	\$15.00/tank	\$15.00/per tank
Temporary Heat	\$115.00	\$86.25

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560



**SAFETY CODES FEES CONT'D**

<b>GAS PERMIT FEES - NON-RESIDENTIAL</b>		
<b>NON-RESIDENTIAL INSTALLATIONS</b>		
<b>BTU Input</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
0-100,000	Contractor Required	\$86.25
100,001-110,000	Contractor Required	\$97.75
110,001-120,000	Contractor Required	\$109.25
120,001-130,000	Contractor Required	\$143.75
130,001-140,000	Contractor Required	\$155.25
140,001-150,000	Contractor Required	\$166.75
150,001-170,000	Contractor Required	\$172.50
170,001-190,000	Contractor Required	\$178.25
190,001-210,000	Contractor Required	\$184.00
210,001-230,000	Contractor Required	\$189.75
230,001-250,000	Contractor Required	\$195.50
250,001-300,000	Contractor Required	\$201.25
300,001-350,000	Contractor Required	\$207.00
350,001-400,000	Contractor Required	\$218.50
400,001-450,000	Contractor Required	\$224.25
450,001-500,000	Contractor Required	\$230.00
500,001-550,000	Contractor Required	\$235.75
550,001-600,000	Contractor Required	\$241.50
600,001-650,000	Contractor Required	\$253.00
650,001-700,000	Contractor Required	\$264.50
700,001-750,000	Contractor Required	\$276.00
750,001-800,000	Contractor Required	\$287.50
800,001-850,000	Contractor Required	\$299.00
850,001-900,000	Contractor Required	\$310.50
900,001-950,000	Contractor Required	\$322.00
950,001-1,000,000	Contractor Required	\$333.50
<b>Add \$8.00 for each 100,000 BTU (or portion thereof) over 1,000,000 BTU</b>		

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**GAS PERMIT FEES - NON-RESIDENTIAL**

<b>NON-RESIDENTIAL INSTALLATIONS</b>		
<b>TEMPORARY HEAT</b>		
<b>BTU Input</b>	<b>OWNER</b>	<b>CONTRACTOR</b>
0 to 250,000	Contractor Required	\$86.25
250,001 to 500,000	Contractor Required	\$143.75
Over 500,000	Contractor Required	\$143.75 plus \$10.00 per 100,000 BTU (or portion thereof) over 500,000 BTU

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

<b>REPLACEMENT GAS APPLIANCES</b>		
<b>BTU Input</b>	<b>OWNER</b>	<b>CONTRACTOR</b>
0 to 400,000	Contractor Required	\$92.00
400,001 to 1,000,000	Contractor Required	\$172.50
Over 1,000,000	Contractor Required	\$172.50 plus \$5.00 per 100,000 BTU (or portion thereof) over 1,000,000 BTU

<b>NON- RESIDENTIAL PROPANE TANK SET</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
Propane Tank Set	Contractor Required	\$86.25
Additional Propane Tanks	Contractor Required	\$15.00/per tank
Gas/Propane Cylinder Refill Center	Contractor Required	\$172.50

Grain Dryer	\$287.50	\$287.50
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**SAFETY CODES FEES CONT'D**

**PLUMBING PERMIT FEES**

<b>RESIDENTIAL INSTALLATIONS AND FARM BUILDINGS</b>		
<b>Number of Fixtures</b>	<b>HOMEOWNER</b>	<b>CONTRACTOR</b>
1	\$97.75	See contractor fees
2	\$109.25	See contractor fees
3	\$120.75	See contractor fees
4	\$132.25	See contractor fees
5	\$143.75	See contractor fees
6	\$155.25	See contractor fees
7	\$161.00	See contractor fees
8	\$171.35	See contractor fees
9	\$188.60	See contractor fees
10	\$202.40	See contractor fees
11	\$213.90	See contractor fees
12	\$224.25	See contractor fees
13	\$234.60	See contractor fees
14	\$247.25	See contractor fees
15	\$257.60	See contractor fees
16	\$269.10	See contractor fees
17	\$281.75	See contractor fees
18	\$289.80	See contractor fees
19	\$302.45	See contractor fees
20	\$313.95	See contractor fees
<b>Add \$8.00 for each fixture over 20</b>		

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**PLUMBING PERMIT FEES**

Number of Fixtures	CONTRACTOR
1	\$86.25
2	\$97.75
3	\$103.50
4	\$109.25
5	\$120.75
6	\$126.50
7	\$132.25
8	\$142.60
9	\$157.55
10	\$169.05
11	\$178.25
12	\$187.45
13	\$195.50
14	\$205.85
15	\$215.05
16	\$224.25
17	\$234.60
18	\$241.50
19	\$251.85
20	\$262.20
21	\$269.10
22	\$278.30
23	\$285.20
24	\$292.10
25	\$301.30

Number of Fixtures	CONTRACTOR
26	\$308.20
27	\$315.10
28	\$324.30
29	\$331.20
30	\$338.10
31	\$347.30
32	\$355.35
33	\$361.10
34	\$370.30
35	\$378.35
36	\$385.25
37	\$393.30
38	\$401.35
39	\$410.35
40	\$416.30
41	\$424.35
42	\$433.55
43	\$439.30
44	\$447.35
45	\$456.55
46	\$462.30
47	\$470.35
48	\$479.55
49	\$485.30
50	\$493.35

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**PLUMBING PERMIT FEES**

Number of Fixtures	CONTRACTOR	Number of Fixtures	CONTRACTOR
51	\$500.25	76	\$655.50
52	\$506.00	77	\$660.10
53	\$511.75	78	\$667.00
54	\$517.50	79	\$675.05
55	\$525.55	80	\$680.80
56	\$532.45	81	\$683.10
57	\$537.05	82	\$686.55
58	\$543.95	83	\$688.85
59	\$549.70	84	\$692.30
60	\$556.60	85	\$694.60
61	\$561.20	86	\$699.20
62	\$568.10	87	\$701.50
63	\$575.00	88	\$704.95
64	\$580.75	89	\$709.55
65	\$586.50	90	\$710.70
66	\$592.25	91	\$713.00
67	\$600.30	92	\$716.45
68	\$606.05	93	\$721.05
69	\$611.80	94	\$723.35
70	\$617.55	95	\$726.80
71	\$624.45	96	\$730.25
72	\$631.35	97	\$733.70
73	\$635.95	98	\$734.85
74	\$642.85	99	\$738.30
75	\$648.60	100	\$741.75
<b>Add \$1.00 for each fixture over 100</b>			

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

**SAFETY CODES FEES CONT'D**

**PRIVATE SEWAGE TREATMENT SYSTEMS**

DESCRIPTION OF WORK	HOMEOWNER	CONTRACTOR
Holding Tanks	\$200.00	\$200.00
Fields, Mounds, Sand Filters, Treatment Tanks, Open Discharges, etc.	\$375.00	\$350.00

\* SCC Levy is 4% of the permit fee with a minimum of \$4.50 and a maximum of \$560

PSDS must not be covered until inspection, if not it will be dug up at owner/contractors cost.

**OTHER CHARGES AND PAYMENTS**

Mackenzie County will collect all permit fees and no remuneration will be remitted to the contracted Safety Codes Agency until such time as the permit is closed in accordance with Mackenzie County's Quality Management Plan (QMP). The contracted Safety Codes Agency will invoice and return closed permits to the County on a monthly basis.

Charges for additional services are as follows:

DESCRIPTION OF SERVICE	HOURLY CHARGE
Appeal services	\$75.00
Audit Representation	No charge
Consultative Services	\$75.00
Emergency Services	\$125.00
Enforcement Services	No charge
Investigation Services	\$125.00
Public Works Complaints	No charge

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**SAFETY CODES FEES CONT'D**

**Additional Inspection Services**

In addition to addressing the needs of Mackenzie County's Accreditation, the contracted Safety Codes Agency shall offer to the residents of the County additional Inspection Services.

These types of inspections may not be required under County Accreditation but are, none the less, important services Mackenzie County's residents need on a fairly regular basis. These fees shall be at a competitive rate and billed directly to the customer by the contracted Safety Codes Agency. The County will advise residents that these services are available from the contracted agency, and that they are also free to hire other private firms to complete their required inspections.

- Wood Stove Inspections,
- Progress Payment Inspections (Bank Inspections),
- Insurance Inspections,
- Electrical Equipment Approvals

<b>MISCELLANEOUS</b>
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DESCRIPTION	FEE
Permit Cancellation – before plan review complete	Complete refund minus \$50
Permit Cancellation – after plan review complete	65% of permit fee
Amendments to Permit Application	Any additional fees shall be payable and any decrease in permit fees over \$20 shall be refunded
Permit Extension Requests	Shall be provided in writing and must contain reason for request and additional time requested. Permit extensions, where granted, shall be provided in writing.
Contractor's failure to obtain the proper permits, for the discipline in which they practice, prior to work commencement – due to negligence and/or repeat offences.	2 times the fee shown in the Fee Schedule Bylaw

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**PUBLIC WORKS**

Item	Amount	GST
Hamlet Sidewalk Snow Removal / Sweeping	\$5.00/month*	N/A
Winter Snowplowing Indicator Sign	\$15.00	Applicable
Winter Maintenance Snowplowing Service Flag	\$60.00/up to 1/4 mile (400m)	Applicable
Winter Maintenance Snowplowing Service Flag (Effective January 1, 2022)	\$100.00/up to ¼ mile (400m)	Applicable
Senior/Handicapped Winter Snowplowing Indicator Sign	\$15.00	Applicable
Senior/Handicapped Snowplow Service Flag (Where the Senior/Handicapped person lives in a rural residence where all other persons, excluding spouse or dependent, residing on the property are also Senior Citizens or Handicapped persons)	No Charge	N/A
Senior/Handicapped Snowplow Service Flag (Where the Senior/Handicapped person lives in a rural residence where all other persons, excluding spouse or dependent, residing on the property are also Senior Citizens or Handicapped persons) (Effective January 1, 2022)	\$40.00/up to ¼ mile (400m)	N/A
Dust Control Calcium Chloride	<del>\$1,350.00</del> \$1,500.00 (75% Cost Recovery) (83% Cost Recovery)	Applicable
Dust Control for Seniors	<del>\$450.00</del> \$500.00 (25% Cost Recovery) (28% Cost Recovery)	Applicable
Dust Control Purchased for Self-Application	\$0.30/litre	Applicable
Dust Control Purchased for Self-Application (Effective January 1, 2022)	\$0.32/litre	Applicable
TRAVIS Permits for Over Weight and Over Dimensional Vehicles on the following roads: <ul style="list-style-type: none"> <li>• 88 Connector</li> <li>• Assumption (Chateh)</li> <li>• Fox Lake Road</li> <li>• Golf Course Road (High Level)</li> <li>• Heliport Road</li> <li>• Wadlin Lake Road</li> <li>• Watt Mountain Road (Hutch Lake)</li> <li>• Zama Access</li> </ul>	\$35.00 Non-Refundable	N/A

Note: Hamlet Sidewalk Snow Removal / Sweeping fee will be included in the monthly water/sewer utility billing.

**EQUIPMENT AND LABOUR**

<b>Item</b>	<b>Amount</b>	<b>GST</b>
Sewer Auger	\$20.00 per hour \$100.00 per 24 hours	Applicable
Sewer Line Camera	\$300.00 per hour plus Labour Cost (minimum charge \$600.00)	Applicable
Sanding Unit & Tandem Truck	\$200.00/hour plus Cost of Product (minimum charge 1 hr)	Applicable
Labour	\$40.00 per hour (minimum charge 1 hr.)	Applicable
Weed Eater	\$30.00 per hour plus Labour Cost (minimum charge 1 hr.)	Applicable
35 HP Tractor Mower 6'	\$50.00 per hour plus Labour Cost (minimum charge 1 hr.)	Applicable
75 HP Tractor Mower 15'	\$75.00 per hour plus Labour Cost (minimum charge 1 hr.)	Applicable
Snow Removal within Road Right-of-Ways (Policy PW004)	100% of Alberta Roadbuilders Rates	Applicable

Note: County equipment that is not listed in this bylaw will be charged according to the current Alberta Roadbuilders and Heavy Equipment Association Equipment Rental Rates Guide.

**AIRPORTS**

Item	Amount	GST
Fuel Flow Charge	\$0.045 per liter for each liter of aviation fuel dispensed	Applicable
Penalty Fee – Late/Failure to Report Fuel Flow Charge (late is considered 30 days past quarterly reports)	\$1,000.00	Applicable
Land lease fee for hangars and associated uses	\$1.30 per square meter annually	Applicable
Aircraft Parking (no power)	\$500.00 annually \$75.00 monthly (>5 consecutive days)	Applicable
Aircraft & Vehicle Parking (power)	\$5.00 per day (provided own power cord)	Applicable
Parking Area Maintenance	\$50.00 per occasion, grass trimming	Applicable
Terminal Fees	No charge	N/A
Landing Fees	No charge	N/A

**SOLID WASTE**

**Section 1: Solid Waste Fees**

Refer to Policy UT003 Solid Waste Transfer Station Collection of Refuse for guidelines on acceptable waste collection.

***Rates effective March 1, 2021.***

<b>At Regional Landfill</b>	
Current rate as set by the Mackenzie Regional Waste Management Commission	
<b>At Transfer Station</b>	
<b>Household, Miscellaneous, Burnable Material &amp; Construction/Renovation Waste</b>	
Hamlet & Rural Residential Waste (up to three (3) bags)	\$5.00
Hamlet & Rural Residential Waste (up to six (6) bags)	\$10.00
Pickup Truck (partial or full load)	\$50.00
Pickup Truck with Trailer	\$200.00
<b>Fees for Dumping Loads into 40 Yard Bins</b>	
Dump Trailers (all sizes) using the dump able bins	\$275.00
Untarped loads <u>penalty</u> for commercial, construction, industrial and/or institutional material	\$100.00
Tandem or tridem axle trucks are to be directed to the regional landfill.	

Definitions:

- a) **“Burnable Material”** means branches and untreated wood product.
- b) **“Commercial waste”** means any waste generated from businesses such as, but not limited to, stores, garages, hotels, motels and restaurants.
- b) **“Construction/Demolition/Renovation waste”** means any material that comes from or goes into erecting, demolishing or repairing a structure (commercial builders, residential and farms). This includes, but is not limited to: tubs, toilets, insulation, lumber, drywall, windows, doors, flooring, carpeting, sinks, and such.
- c) **“Household waste”** means daily-generated waste such as, food scraps, tissues, kitchen waste, bathroom waste.
- d) **“Industrial waste”** means any waste generated from an industry such as forestry and energy.

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- e) **“Institutional waste”** means waste generated from institutions such as hospitals, schools, long-term care facilities and lodges.
- f) **“Miscellaneous waste”** means loose or boxed waste generated from shop, yard, basement, house or garage cleanup. May contain items such as clothing, bedding/pillows, small furniture, lawn furniture and ornaments, car seats, plastic toys/pools, etc.

Note: Mackenzie County reserves the right to control the type and nature of refuse which may be deposited at the transfer station and no refuse may be deposited at the transfer station except in accordance with the transfer station operations manual.

Section 2: Residential Waste Collection – Hamlet of La Crete

***Rates in effect until December 31, 2020.***

Residential Waste	Fees
Monthly Collection Waste	\$5.95 per month per residence
One-Time Use Refuse Bin Tags	\$1.50 per tag

***Rates effective January 1, 2021.***

Residential Waste	Fees
Monthly Collection Waste	\$10.00 per month per residence
One-Time Use Refuse Bin Tags	\$2.50 per tag

The fees are applicable to all residential properties identified in the County’s Hamlet Residential Waste Collection Bylaw.

Section 3: Penalties

Offence	Fine
Littering of waste to be disposed at the Waste Transfer Station or Landfill	\$1,000.00



**PARKS**

**Section 1: General Park Fees**

Day Use	Overnight	Weekly	Shelter Rent	Seasonal or Monthly Camping Stalls	Marina Dock Rental	Glamping
<b>Wadlin Lake</b>						
No Charge	\$25	\$120	\$50/day for shelter rental	N/A	\$8/day with camping stall; \$10/day without camping stall	N/A
<b>Machesis Lake</b>						
No Charge	\$25	\$120	\$50/day for shelter rental	Non-Serviced: \$200/Month	N/A	\$50/Day
<b>Machesis Lake Equine Campground</b>						
\$5/horse	\$25 plus \$5 per horse	\$120 plus \$5 per horse	N/A	N/A	N/A	N/A
<b>Hutch Lake</b>						
No Charge	\$25	\$120	\$50/day for shelter rental	N/A	N/A	N/A
<b>Zama Community Park</b>						
No Charge	Non-Serviced: \$10	Non-Serviced: \$60	\$50/day for shelter rental	<u>Monthly:</u> Non-Serviced: \$200	N/A	N/A
N/A	Partially Serviced: \$15	Partially Serviced: \$90	N/A	Partially Serviced: \$275	N/A	N/A
N/A	Fully Serviced: \$20	Fully Serviced: \$100	N/A	Fully Serviced: \$400	N/A	N/A
<b>Tourangeau Lake</b>						
No Charge	N/A	N/A	N/A	N/A	N/A	N/A
<b>Fort Vermilion Bridge Campsite</b>						
No Charge	N/A	N/A	N/A	N/A	N/A	N/A

**PARKS CONT'D**

**Section 2: Penalties**

The voluntary payment, which may be accepted in lieu of prosecution for a contravention of any of the sections set out below, shall be the sum set out opposite the section number:

<b>Section (Municipal Parks Bylaw)</b>	<b>Offence</b>	<b>Penalty</b>
Section 3.1 (a)	Fail to keep land in a clean/tidy condition	\$50.00
Section 3.1 (b)	Fail to comply with lawfully posted signs and/or notices	\$50.00
Section 3.2	Fail to restore land to a clean/tidy condition when vacating park	\$50.00
Section 3.3(a)	Interfere with others quiet enjoyment of park	\$50.00
Section 3.3(b)	Deface/injure/destroy object in park	\$75.00
Section 3.3(c)	Excavate or remove plants/plant fixtures from a park	\$75.00
Section 3.3(d)	Remove park equipment	\$75.00
Section 3.3(e)	Unauthorized display signs/ads in park	\$25.00
Section 3.3(f)	Remove/damage etc. authorized signs/notices in park	\$50.00
Section 3.3(g)	Bathe/clean clothing/ fish/utensils etc. at/near drinking fountain/pump in park	\$25.00
Section 3.4	Unauthorized construction in park	\$50.00
Section 3.5	Unauthorized business in park	\$50.00
Section 4.1	Failure to register when entering park	\$50.00
Section 4.2	Failure to obtain camping permit	\$50.00
Section 4.7	Camping in area not designated for that purpose	\$50.00
Section 4.8	Alteration of camping permit	\$50.00
Section 4.9	Failure to produce camping permit upon request	\$50.00
Section 4.12/4.13	Unauthorized combination of vehicles in campsite	\$50.00
Section 4.14	Camping more than fourteen consecutive days	\$50.00
Section 4.18	Failure to vacate site	cost recovery
Section 4.21	Remain in day use area after 11:00 p.m.	\$50.00
Section 6.1	Unlawfully enter/remain in park	\$50.00
Section 7.1	Set, light, or maintain fire in unauthorized place	\$50.00
Section 7.3	Set, light, or maintain fire after signs/notices have been erected prohibiting same	\$50.00

**PARKS CONT'D**

Section 2: Penalties Cont'd

<b>Section (Municipal Parks Bylaw)</b>	<b>Offence</b>	<b>Penalty</b>
Section 7.4	Leave fire unattended/allow to spread	\$50.00
Section 7.5	Deposit/dispose of hot coals/ashes etc. in unauthorized place	\$50.00
Section 7.6	Fail to extinguish fire etc. before leaving	\$50.00
Section 7.7	Remove firewood from a park	\$100.00
Section 8.1	Operate off-highway vehicle where prohibited	\$50.00
Section 8.2	Enter park when prohibited	\$50.00
Section 8.3	Parking in a manner or location that impedes traffic	\$50.00
Section 8.4	Exceed posted speed limit	\$50.00
Section 9.1(a)	Animal running at large	\$50.00
Section 9.1(b)	Animal in prohibited area	\$50.00
Section 9.7	Bring/allow horse/pony etc. unauthorized into the park	\$100.00
Section 10.1(a)	Deposit waste matter in unauthorized area of park	\$50.00
Section 10.1(b)	Deposit waste water or liquid waste in unauthorized area	\$250.00
Section 10.1(c)	Dispose of commercial/residential waste in park	\$50.00
Section 10.2	Fail to carry waste matter from areas in park without receptacles	\$50.00
Section 11.3	Attempt to enter park within 72 hours of removal from a park	\$100.00
Section 12.1	Discharging of firearm	\$100.00
Section 12.2	Improper storage of firearm	\$75.00
Section 12.3	Hang big game in park	\$50.00

**Note:**

Every person who contravenes a section of the Municipal Parks Bylaw is guilty of an offence and liable to the penalty as set out above or, on summary conviction to a fine not exceeding two thousand dollars (\$2,000.00) or imprisonment for a term of not more than six (6) months or to both a fine and imprisonment (in accordance with Provincial Regulations).

**TRAFFIC REGULATIONS**

Traffic Regulation Bylaw Part 2: Parking

<b>Section</b>	<b>Offence</b>	<b>Fine</b>
Section 3(1)(a)	Prohibited Parking – Emergency Exit Door	\$50.00
Section 3(1)(b)	Prohibited Parking – Entrance to Emergency Service	\$50.00
Section 4(1)	Park in No Parking Zone Prohibited by Traffic Control Device	\$30.00
Section 4(2)	Park in No Parking Zone During Prohibited Times	\$30.00
Section 5 (2)	Park in No Parking Zone Prohibited by Temporary Traffic Control Device	\$30.00
Section 6	Stop in a No Stopping Zone Prohibited by Traffic Control Device	\$30.00
Section 7(2)	Park in a Disabled Person’s Parking Space	\$50.00
Section 8(2)	Park in Fire Lane	\$50.00
Section 9	Park an Unattached Trailer on Highway	\$30.00
	Park in Alley	\$30.00

Traffic Regulation Bylaw Part 3: Rules for Operation of Vehicles

<b>Section</b>	<b>Offence</b>	<b>Fine</b>
Section 11(1)	Drive Tracking Vehicle on Highway Without Authorization	\$100.00
Section 11(2)	Fail to Produce Tracked Vehicle Authorization	\$50.00

Traffic Regulation Bylaw Part 4: Controlled and Restricted Highways

<b>Section</b>	<b>Offence</b>	<b>Fine</b>
Section 13(1)	Operate / Park Heavy Vehicle in Prohibited Area	\$75.00

Traffic Regulation Bylaw Part 5: Miscellaneous

<b>Section</b>	<b>Offence</b>	<b>Fine</b>
Section 14	Proceed Beyond Designated Point Near Fire	\$50.00
Section 15(1)	Cause Damage to Street Furniture	Court
Section 15(2)	Cause Damage to Highway	Court
Section 15(3)	Damage Costs for Sections 14(1) / 14(2)	amount expended

**TRAFFIC REGULATIONS CONT'D**

Note:

Every person who contravenes a section of the Traffic Regulation Bylaw is guilty of an offence and shall forfeit and pay a penalty as set out above or on summary conviction to a fine not exceeding Two Thousand Dollars (\$2,000.00) and/or imprisonment for not more than six (6) months.

Off-Highway Vehicles Bylaw Offences

<b>Section</b>	<b>Offence</b>	<b>Fine</b>
Section 5 (d)	Contravenes Off-Highway Vehicles Bylaw (First Offence)	\$50.00
Section 5 (e)	Contravenes Off-Highway Vehicles Bylaw (Second Offence)	\$100.00

**FIRE SERVICES FEES**

Provincial Roadways Incidents

Alberta Transportation Policy #TCE-DC-501 states that Alberta Transportation is to be invoiced for recovery of services according to the rates set in the policy.

<b>Item</b>	<b>Amount</b>
<b><u>Response fees including man power:</u></b>	
Pumper Unit	As per AT Policy #TCE-DC-501
Ladder Unit (Aerial)	As per AT Policy #TCE-DC-501
Tanker Unit	As per AT Policy #TCE-DC-501
Rescue Unit	As per AT Policy #TCE-DC-501
Command Unit	As per AT Policy #TCE-DC-501
Contracted Services (i.e water haulers, equipment, labour, etc.)	Road Builders Rates

Provincial Incidents – as per Mutual Aid Agreement

<b>Item</b>	<b>Amount</b>
Pumper Unit	\$400.00 per hour
Ladder Unit (Aerial)	\$400.00 per hour
Tanker Unit	\$400.00 per hour
Rescue Unit	\$400.00 per hour
Sprinkler Trailer Type 2	\$400.00 per day
Sprinkler Trailer Type 3	\$750.00 per day
Squad Truck	\$400.00 per hour
Brush Truck	\$200.00 per hour
Command Unit	\$200.00 per hour
Contracted Services (i.e water haulers, equipment, labour, etc.)	Road Builders Rates
Consumables (ie. foam)	Cost plus Ten (10%) Percent
<b><u>Manpower Fee:</u></b>	
Officers	\$50.00 per man hour
Firefighter	\$50.00 per man hour

**FIRE SERVICES FEES CONT'D**

Mackenzie County Rates:

<b>Item</b>	<b>Amount</b>
<b><i><u>Response Fees including Driver:</u></i></b>	
Pumper Unit	\$400.00 per hour
Ladder Unit (Aerial)	\$400.00 per hour
Tanker Unit	\$400.00 per hour
Rescue Unit	\$400.00 per hour
Command Unit	\$200.00 per hour
Shoring Equipment	\$200.00 per day
Great Wall Grain Rescue Equipment	\$200.00 per day
Brush Truck	\$200.00 per hour
Sprinkler Trailer Type 2	\$400.00 per day
Sprinkler Trailer Type 3	\$750.00 per day
Contracted Services (i.e water haulers, equipment, labour, etc.)	Cost plus 15%
Consumable Items	Cost plus 15%
<b><i><u>Manpower Fee:</u></i></b>	
Officers	\$50.00 per man hour
Firefighter	\$50.00 per man hour

Note:

- a) Fees shall be calculated from the time the Response Units leave the Station to the time they return to the Station.
- b) Prior to March 1, 2021, a residential invoice shall not exceed \$5,000 per incident.

False Alarms

<b>Item</b>	<b>Amount</b>
Response to False Alarm 1 <sup>st</sup> Call	No charge
(within same year as 1 <sup>st</sup> Call) 2 <sup>nd</sup> Call	\$100.00
(within same year as 1 <sup>st</sup> Call) 3 <sup>rd</sup> Call	\$200.00
(within same year as 1 <sup>st</sup> Call) 4 <sup>th</sup> Call	\$300.00



**FIRE SERVICES FEES CONT'D**

Other Fees

<b>Item</b>	<b>Amount</b>
Violation Ticket*– 1 <sup>st</sup> Offence	\$250.00
Violation Ticket* – 2 <sup>st</sup> and Subsequent Offences	\$500.00
Filling of Air Cylinders (breathing air) Small cylinder (30 min) Cascade cylinder	\$25.00 \$100.00
Water Flow Testing Reports	\$100.00
File Search (fire inspections and investigations)	\$60.00 per search
Fire Permit	No charge
Fire Inspection Services Within the County	\$50.00 per hour plus expenses
Fire Inspection Services Outside of the County	\$75.00 per hour plus expenses
Re-inspection with Outstanding Fire Code Violations	\$50.00 per visit
Training course(s) to other individuals/groups	Cost plus \$15% administrative fee
Expert Witness Services – Civil Litigation	\$50.00 per hour to a maximum of \$400.00 per day plus expenses
Occupant Load Determination (no charge to non-profit groups)	\$100.00 per certificate

*\*As specified in the Fire Services Bylaw*

Note:

- a) Every person who violates a provision of Fire Services Bylaw is guilty of an offense and is punishable upon summary conviction, to a fine not exceeding two thousand dollars (\$2,000.00) or to a term of imprisonment not exceeding one (1) year or to both.
- b) Nothing shall prevent a Peace Officer from:
  - (i) immediately issuing a Violation Ticket for the mandatory Court appearance to any person who contravenes any provision of the Mackenzie County Fire Services Bylaw, or
  - (ii) issuing a Voluntary Payment ticket in lieu of a mandatory Court appearance for \$100.00.

**DOG CONTROL FEES**

<b>Fees &amp; Penalties</b>	<b>General</b>	<b>Dogs</b>	<b>Dangerous Dogs</b>
Dog License	No Charge	No Charge	No Charge
Failure to wear a dog tag penalty	\$35.00		
Replacement for misplaced, lost, or stolen dog tag	\$5.00		
Failure to obtain a kennel license penalty	\$200.00		
Dog running at large – <i>Handling fee</i>			
1 <sup>st</sup> offence		\$100.00	\$500.00
2 <sup>nd</sup> offence		\$200.00	\$1,000.00
3 <sup>rd</sup> offence and subsequent		\$300.00	\$1,500.00
Bite a person penalty ( <i>DDA</i> )		\$250.00	\$1,000.00
Injure a person penalty ( <i>DDA</i> )		\$250.00	\$1,000.00
Chase or threaten a person penalty ( <i>DDA</i> )		\$150.00	\$1,000.00
Bite, bark at, chase stock, bicycles, wheelchairs, or other vehicles penalty on public property within hamlet boundaries ( <i>SAA</i> )		\$250.00	\$1,000.00
Worry or annoy any other animal penalty ( <i>SAA</i> )	\$50.00		
Damage to public or private property penalty		\$50.00	\$250.00
Upset waste receptacles or scatter contents thereof (Section 1. (b) or Dog Control Bylaw)	\$100.00		
Fail to provide water, food, shelter or proper care penalty ( <i>APA</i> )	\$100.00		
Abuse or abandonment of dog penalty ( <i>APA</i> )	\$250.00		
Dog in prohibited areas as set by Council penalty	\$100.00		
Failure to report dog with a communicable disease penalty	\$100.00		
Failure to confine a dog with a communicable disease penalty	\$100.00		
Failure to keep dog confined for nor less than ten (10) days penalty	\$50.00		
Interfere or threaten a Bylaw Enforcement Officer penalty	\$250.00		
Induce a dog or assist a dog to escape capture penalty	\$250.00		

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**DOG CONTROL FEES CONT'D**

<b>Fees &amp; Penalties</b>	<b>General</b>	<b>Dogs</b>	<b>Dangerous Dogs</b>
Falsely represent him/herself as being in charge of a dog penalty	\$100.00		
Allow, or attempt to allow, a dog(s) to escape from a vehicle, cage, or lice trap penalty	\$100.00		
Remove or attempt to remove a dog from a Bylaw Enforcement Officer penalty	\$250.00		
Unconfined female dog in heat penalty	\$50.00		
Failure to remove defecation	\$50.00		
Impoundment fees (to be verified with the veterinarian)		Amount expended	Amount expended
Veterinary fees (to be verified with the veterinarian)		Amount expended	Amount expended
Destruction of dog fees (to be verified with the veterinarian)		Amount expended	Amount expended
Failure to keep a dangerous dog(s) confined penalty			\$500.00
Improper pen or other structure penalty			\$200.00
Give false information when applying for dangerous dog license penalty			\$500.00
Failure to keep dangerous dog muzzled penalty			\$500.00
Failure to harness or leash a dangerous dog properly penalty			\$500.00
Failure to keep a dangerous dog under the control of an adult person penalty			\$500.00
Failure to stay within the maximum number of dogs allowed as per Part 3 Section 14 of the Dog Control Bylaw	\$200.00		

No penalties will be levied for “dog at large: under Part 5 Section 17 or 21 if impoundment fee and handling fees are paid.

Note:

- a) Any person who contravenes, disobeys, refuses or neglects to obey any provisions of this Bylaw is guilty of an offense and is liable on summary conviction to a fine not exceeding two thousand dollars (\$2,000) in addition to any other fees according to Mackenzie County Fee Schedule Bylaw, and in default of payment to imprisonment for a term not exceeding ninety (90) days.

Note:

- b) “DDA” – means the *Dangerous Dogs Act*, R.S.A. 2000  
 “SAA” – means the *Stray Animals Act*, R.S.A. 2000  
 “APA” – means the *Animal Protection Act*, R.S.A. 2000

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**WATER/SEWER RATES, PENALTIES, AND FEES AND DEPOSITS**

**Water/Sewer Standard Rates**

Rate Description	Water Rates	Sewer Rates
Rates for Metered Users	\$37.04/month plus \$3.43 per m <sup>3</sup> of consumption	\$31.52/month plus \$0.73 per m <sup>3</sup> of water consumption <sup>(1)</sup>
Rates for Cardlock Users (treated water)	\$3.43 per m <sup>3</sup> of consumption	\$0.73 per m <sup>3</sup> of water consumption <sup>(2)</sup>
Rates for Cardlock Users (raw water)	\$2.56 per m <sup>3</sup> of consumption	N/A
High Level South Waterline	\$37.04/month plus \$3.43 per m <sup>3</sup> of consumption <sup>(3)</sup>	N/A

**Penalties**

~~One time 2% penalty will be charged on all current charges if the utility bill is not paid by the due date.~~ Penalty will be charged as per Policy FIN011 - Accounts Receivable / Utility Collection.

**Rural Potable Water Line Rates – Tie-in Directly to the Trunk Line**

Water/Sewer Standard Rates:

Rate Description	Water Rates	Sewer Rates	Lump Sum or Phased Rate
Rates for Metered Users <b>CLASS A</b>	\$37.04/month plus \$3.43 per m <sup>3</sup> of consumption	\$31.52/month <sup>(1)</sup> plus \$0.73 per m <sup>3</sup> of water consumption	\$8,000 lump sum fee <sup>(4)</sup>
Rates for Metered Users <b>CLASS B</b>	\$37.04/month plus \$3.43 per m <sup>3</sup> of consumption	\$31.52/month <sup>(1)</sup> plus \$0.73 per m <sup>3</sup> of water consumption	\$133.34 per month <sup>(4)</sup>

*Class A applies to those that paid the fee in full for rural water tie-in directly to the trunk line either through a lump sum payment of \$8,000 or by paying the phased rate.*

*Class B applies to those that have not yet paid the fee for rural water tie-in directly to the trunk line. Through a phased rate, the rate is calculated to a maximum five-year period per tie-in.*

<sup>(1)</sup>Monthly sewer – fixed charge does not apply to customers that are not connected to the sewer collection system.

<sup>(2)</sup>Cardlock user bills reflect a combined rate of the water and sewer rates.

<sup>(3)</sup>Rate must reflect per agreements.

<sup>(4)</sup>Fee for rural water tie-in directly to the trunk line does not include the actual costs of service installation to the property line, a metering chamber and a meter, which must be

paid prior to tie-in.

**WATER/SEWER RATES, PENALTIES, AND FEES AND DEPOSITS CONT'D**

\*Monthly sewer rate of \$31.52 does not apply to customers that are not connected to the sewer collection system

\*\*Fee for rural water tie-in directly to the trunk line does not include the actual costs of service installation to the property line, a metering chamber and a meter, which must be paid prior to tie-in

**Fees and Deposits**

Description	Fee Amount
Application fee for new account move in	\$75.00
Transfer from one account to another	\$50.00
Reconnection of account due to non-payment	\$50.00 plus \$200.00 Deposit
Deposit for connection of utilities – required for new renters	\$200.00
Fee for services required upon the request of the customer <u>within</u> the one (1) working day requirement (see Water & Sewer Services Bylaw)	\$50.00
Fee for hamlet water and/or sewer service tie-in	\$100.00
Fee for hamlet water and/or sewer main tie-in	\$500.00 plus cost of installation
Fee for rural water tie-in directly to the trunk line PLUS the actual costs of service installation to property line, a metering chamber and a meter	\$8,000.00
Fee for rural water lateral construction or tie-in to a lateral extension PLUS the actual costs of service installation to property line, a metering chamber and a meter	Cost recovery as determined for the specific areas and per Policy UT006 Municipal Rural Water Servicing – Endeavor to Assist
Deposit for Expression of Interest for construction of lateral waterline and servicing.	\$1,000 - Prior to October 1 \$2,000 – October 1 to project completion
Fee for rural water multi-lot subdivision PLUS the actual costs of service installation to property line, a metering chamber and a meter	\$2,800.00/lot
Fee for water meter testing. Refundable if variance of meter reading is greater than 3%.	\$100.00
Fee for County employee services during regular working hours required to construct, repair, inspect, or service where the responsibility for work was borne by the developer, consumer or corporation	\$75.00/hr (minimum 1 hr charge)

**WATER/SEWER RATES, PENALTIES, AND FEES AND DEPOSITS CONT'D**

<b>Description</b>	<b>Fee Amount</b>
Fee for after hour emergency call out of County employee for services born by the consumer	\$100.00/hr (minimum 1 hr charge)
Deposit for Cardlock	\$200.00 for residential \$500.00 for commercial
Replacement card for Cardlock cards	\$25.00
Lagoon Sewage Disposal Fees (agreement required)	\$25.00/Load-Single Axle Unit \$50.00/Load-Tandem Axle Unit \$75.00/Load-All units larger than tandem axle units including pup trailers
Frost Plate	5/8" - \$15.00 3/4" - \$18.00 1" - \$25.00

- (i) Deposits may be transferable from one service to another by the same consumer.
- (ii) The fee shall be retained by Mackenzie County and applied against any outstanding balance upon disconnection of the service. In the event there is no outstanding balance or service charges remaining on the account upon disconnection of the service, Mackenzie County shall refund money to the customer within forty (40) days.
- (iii) In any case money deposited with Mackenzie County as a guarantee deposit remains unclaimed for a period of five years after the account of the consumer so depositing has been discontinued, the amount of the deposit shall be transferred to the general revenue account of Mackenzie County.
- (iv) Mackenzie County remains liable to repay the amount of the deposit to the person lawfully entitled thereto for a period of ten years next following the discontinuance of the account but after the ten year period the deposit becomes the absolute property of Mackenzie County free from any claim in respect thereof.

**Meter Fees**

<b>Size of Meter</b>	<b>Cost of Meter and Install</b>
5/8"	\$440.00
3/4" Residential	\$490.00
3/4" Commercial	\$530.00
1"	\$570.00
1 1/2" and 2"	\$1,890.00
4"	\$2,900.00
6"	\$4,700.00

\* 15% administrative fee is included in all meter costs.

**WATER/SEWER RATES, PENALTIES, AND FEES AND DEPOSITS CONT'D**

**Fines for Water/Sewer**

The voluntary payment, which may be accepted in lieu of prosecution for a contravention shall be the sum as set in the following table:

<b>Description</b>	<b>Penalty</b>
Failing to connect to Municipal Utility	\$5,000.00
Failing to provide grease, oil & sand traps & maintain catch basins	\$2,000.00
Interfering/Tampering with Municipal Utility	\$5,000.00
Operation or use of Municipal Utility without authorization	\$500.00
Failing to allow County staff or agent to enter premises	\$500.00
Failing to maintain water or sewer system	\$200.00
Failure to use proper material	\$500.00
<b>Description</b>	<b>Penalty</b>
Failure to install sewer backflow preventer	\$300.00
Failure to install cross connection control device	\$1,000.00
Failure to execute proper tapping or backfilling	\$500.00
Covering a water or sewer system prior to inspection	\$500.00
Failure to uncover a water or sewer system at the request of an authorized employee after it has been covered	\$1,000.00
Failure to report broken seal to County	\$100.00
Obstruction of Fire Hydrants/Valves	\$500.00
Illegal disposal of water	\$3,000.00
Illegal disposal in sewer or storm drainage system	\$5,000.00
Bringing sprayer equipment onto the potable water truckfill station (applicable to the Fort Vermilion location)	\$500.00

Note: A person who contravenes a provision of the Water and Sewer Bylaw is guilty of an offence and liable on summary conviction to the penalty as prescribed in this Bylaw or, on summary conviction to a fine not less than fifty (\$50.00) dollars and not more than five thousand (\$5,000.00) dollars, and in the event of a failure to pay the fine to imprisonment for a period not exceeding six (6) months.



3. Fees to neighbouring local governments may be subject to mutual aid agreements.
4. This Bylaw shall come into force and effect upon receiving third reading.
5. This Bylaw repeals Bylaw 1194-20 Fee Schedule and any amendments thereto.

In the event that this bylaw is in conflict with any other bylaw, this bylaw shall have paramouncy.

READ a first time this 7th day of December, 2021.

READ a second time this \_\_\_\_ day of \_\_\_\_\_.

READ a third time and finally passed this \_\_\_\_ day of \_\_\_\_\_.

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Joshua Knelsen  
Reeve

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Lenard Racher  
Chief Administrative Officer

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**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Jennifer Batt, Director of Finance</b>
<b>Title:</b>	<b>ZA - Lift Station Upgrade Project – Reallocation of Grant funding</b>

## **BACKGROUND / PROPOSAL:**

At the Council Meeting August 19, 2020 administration brought the Lift Station Upgrade Project before Council as the project was anticipated to be well over budget if approved.

As the water plant and force main in Zama was still in working order and with the steady decline of residents, the water treatment plant is down to less than 20 cubic meters per day of water consumption. Administration is requesting that Council consider the current needs of the municipality and request that the grant funding be reallocated to assist in the flood mitigation strategy.

**MOTION 20-08-498**  
Requires 2/3

***MOVED*** by Councillor Wardley

*That a request be made to the Ministry of Transportation to re-allocate the Alberta Municipal Water & Wastewater Partnership grant funding for the Zama Sewage Forcemain project to the 2020 Fort Vermilion Water and Sewer Infrastructure project to assist with the flood mitigation strategy, and that Zama contractors be given the opportunity to bid on any related project.*

***CARRIED***

Administration submitted a request to reallocate funding toward a Fort Vermilion Sewer Infrastructure project to assist in mitigation, and on June 25<sup>th</sup> a May 18<sup>th</sup> letter was received stating the grant was reallocated under Alberta Community Partnership (ACP) grant, and if all criteria met grant guidelines, this project would be approved. (attached)

As the ZA- Lift Station Upgrade project is not going forward, administration is requesting that the project be removed from the 2021 Capital budget, and current realized costs from the grant is \$185,293 to be funded from the Water/Sewer Infrastructure Reserve,

**Author:** J. Batt      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

and Council approve submitting an application under ACP for a Fort Vermilion Sewer Infrastructure project to assist with mitigation.

**OPTIONS & BENEFITS:**

N/A

**COSTS & SOURCE OF FUNDING:**

Alberta Community Partnership Grant - \$1,226,000

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION / PUBLIC PARTICIPATION:**

N/A

**POLICY REFERENCES:**

N/A

**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That ZA - Lift Station Upgrade Project be removed from the 2021 Capital budget, with the current realized costs funded by the Alberta Municipal Water & Wastewater Partnership grant in the amount of \$185,293 to be funded from the Water Sewer Infrastructure Reserve, and that an application under Alberta Community Partnership grant be submitted for the Fort Vermilion Sewer Infrastructure project to assist with mitigation.

Author: J. Batt      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_



ALBERTA  
TRANSPORTATION

*Office of the Minister  
Deputy Government House Leader  
MLA, Calgary-Hays*

May 18, 2021

AR 85435

Reeve Josh Knelsen  
Mackenzie County  
PO Box 640  
Fort Vermilion, AB T0H 1N0

Dear Reeve Knelsen:

Thank you for your letter outlining the County's request to reallocate Alberta Municipal Water/Wastewater Partnership (AMWWP) funding, currently approved for the Zama Sewage Force Main Upgrade project.

Alberta Transportation officials have reviewed your request and have discussed the more critical Fort Vermilion Sewer Infrastructure project with Municipal Affairs (MA). Officials from MA will contact Mr. Fred Wiebe, the Director of Utilities at Mackenzie County, to obtain project-specific information. The information will allow the project to be evaluated further to determine if it can be funded under the Alberta Community Partnership (ACP) grant program within MA.

If this project is eligible under ACP, approval of \$1,226,000 will be granted by the Minister of MA. The currently approved Zama Sewage Force Main Upgrade project will no longer be funded and will be removed from Alberta Transportation's AMWWP program.

Sincerely,

Ric McIver  
Minister

cc: Dan Williams  
MLA for Peace River

Ryan Konowalyk  
Regional Director, Peace Region, Alberta Transportation





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Jennifer Batt, Director of Finance</b>
<b>Title:</b>	<b>Expense Claims – Councillors</b>

## **BACKGROUND / PROPOSAL:**

Councillor Honorarium and Expense Claims are reviewed by Council on a monthly basis.

A copy of the following Councillor Honorarium and Expense Claims will be presented at the meeting:

- November – All Councillors

## **OPTIONS & BENEFITS:**

N/A

## **COSTS & SOURCE OF FUNDING:**

2021 Operating Budget

## **SUSTAINABILITY PLAN:**

N/A

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**COMMUNICATION / PUBLIC PARTICIPATION:**

N/A

**POLICY REFERENCES:**

Honorariums and Expense Reimbursement Bylaw

**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That the Councillor expense claims for November 2021 be received for information.

Author: C. Simpson      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Jennifer Batt, Director of Finance</b>
<b>Title:</b>	<b>Expense Claims – Members at Large</b>

**BACKGROUND / PROPOSAL:**

Members at Large expense claims are reviewed by Council on a monthly basis.

A copy of the following Members at Large Expense Claims will be presented at the meeting:

<b>Name</b>	<b>Board/Committee</b>	<b>Month</b>
<b>Erick Carter</b>	<b>Municipal Planning Commission</b>	<b>November</b>
<b>Tim Driedger</b>	<b>Municipal Planning Commission</b>	<b>November</b>
<b>Joe Froese</b>	<b>Assessment Review Board</b>	<b>November</b>
<b>Boyd Langford</b>	<b>Assessment Review Board</b>	<b>November</b>
<b>Joe Peters</b>	<b>ASB</b>	<b>November</b>
<b>Erick Carter</b>	<b>Municipal Planning Commission</b>	<b>December</b>
<b>Tim Driedger</b>	<b>Municipal Planning Commission</b>	<b>December</b>
<b>Willie Wieler</b>	<b>Municipal Planning Commission</b>	<b>December</b>

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**OPTIONS & BENEFITS:**

N/A

**COSTS & SOURCE OF FUNDING:**

2021 Operating Budget.

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION / PUBLIC PARTICIPATION:**

N/A

**POLICY REFERENCES:**

Honorariums and Expense Reimbursement Bylaw

**RECOMMENDED ACTION:**

Motion 1

Simple Majority       Requires 2/3       Requires Unanimous

That the Member at Large Expense Claims for November & December 2021 be received for information.

Author: J. Batt      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_



**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Budget Council Meeting</b>
<b>Meeting Date:</b>	<b>December 7, 2021</b>
<b>Presented By:</b>	<b>Carrie Simpson, Director of Legislative Services</b>
<b>Title:</b>	<b>Bylaw 1240-21 Procedural Bylaw</b>

**BACKGROUND / PROPOSAL:**

Mackenzie County’s Procedural Bylaw provides for the establishment of Council committees and other bodies, procedure and conduct of Council, Council Committees and other bodies established by Council. It also includes the conduct of Councillors and members of Council committees.

The Procedural Bylaw was reviewed annually at the organizational meeting and is being brought back with the following amendments:

- Section 2: adding “Committee” to the definitions.
- Section 103: limiting the amount of delegations to 2 per council meeting.
- Section 159 requiring a 2/3 vote on changes to the Organizational Chart.

**OPTIONS & BENEFITS:**

Approve the proposed bylaw as presented or with further amendments.

**COSTS & SOURCE OF FUNDING:**

N/A

**SUSTAINABILITY PLAN:**

N/A

**Author:** C. Sarapuk      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**COMMUNICATION/PUBLIC PARTICIPATION:**

Municipal bylaws are made available on the Mackenzie County website.

**POLICY REFERENCES:**

N/A

**RECOMMENDED ACTION:**

Motion 1

Simple Majority       Requires 2/3       Requires Unanimous

That first reading be given to Bylaw 1240-21 being the procedural bylaw for Mackenzie County.

Motion 2

Simple Majority       Requires 2/3       Requires Unanimous

That second reading be given to Bylaw 1240-21 being the procedural bylaw for Mackenzie County.

Motion 3

Simple Majority       Requires 2/3       Requires Unanimous

That consideration be given to go to third reading of Bylaw 1240-21 being the procedural bylaw for Mackenzie County, at this meeting.

Motion 4

Simple Majority       Requires 2/3       Requires Unanimous

That third and final reading be given to Bylaw 1240-21 being the procedural bylaw for Mackenzie County.

**Author:** C. Sarapuk      **Reviewed by:** C. Simpson      **CAO:** \_\_\_\_\_

**BYLAW NO. 1240-21**

**BEING A BYLAW OF MACKENZIE COUNTY  
IN THE PROVINCE OF ALBERTA**

**TO PROVIDE THE ORGANIZATIONAL AND PROCEDURAL MATTERS  
OF COUNCIL, COUNCIL COMMITTEES AND COUNCILLORS**

**WHEREAS**, the Municipal Government Act, RSA 2000, c. M-26 provides for the establishment of Council committees and other bodies, procedure and conduct of Council, Council committees and other bodies established by Council and the conduct of Councillors and members of Council committees and other bodies established by Council; and

**WHEREAS**, the MGA provides for organizational and procedural matters of Council, Council committees and Councillors.

**NOW THEREFORE**, the Council of Mackenzie County, duly assembled, enacts as follows:

**TITLE**

1. This bylaw shall be cited as the "Procedural Bylaw".

**DEFINITIONS**

2. In this bylaw:
  - a. "Act" means the *Municipal Government Act*, RSA 2000, c.M-26, any regulations thereunder, and any amendments or successor legislation thereto;
  - b. "Administration" means the Chief Administrative Officer or an employee accountable to the CAO employed by the Municipality.
  - c. "Agenda" is the list of items and orders of business for any meeting of Council or a Council Committee;
  - d. "Chief Administrative Officer" (otherwise known as the "CAO") means the person appointed by Council into the position of CAO pursuant to the *Act*.
  - e. "Chairperson" means the person who presides at a Meeting, and, when in attendance at a Council Meeting, shall mean the Reeve or alternate chair.
  - f. "Closed Meeting" means the portion of the meeting at which only members of Council and other persons designated by Council may attend.

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- g. "Committee of the Whole" means a committee comprised of all Councillors which conducts itself as a committee of council;
- h. "Corporate Office" means the office located at 4511-46 Avenue in the Hamlet of Fort Vermilion, Alberta.
- i. "Council Committee" or "Committee" means a committee, board, or other body established by Council under the Act;
- j. "Councillors" means a duly elected Member of Council, including the Reeve.
- k. "Deputy Reeve" means the Deputy Chief Elected Official or Councillor who is appointed by Council pursuant to the *Act* to act as Reeve in the absence or incapacity of the Reeve.
- l. "Ex-Officio" means a member of a Committee, by virtue of the right to hold a public office such as a Reeve, and has the right to make motions and vote.
- m. "Meeting" means an organizational, regular, or special meeting of Council, Committee of the Whole or Committee.
- n. "Member" means a duly elected Member of Council or a duly appointed Member of a Committee.
- o. "Municipality" means Mackenzie County.
- p. "Non-statutory public hearing" means a meeting of Council or Committee of the Whole at which members of the public may attend and may be invited to make submissions to Council, but which is not a Public Hearing;
- q. "Public Hearing" means a meeting or portion of a meeting that council is required to hold under the *Act* or another enactment for the primary purpose of hearing submissions;
- r. "Reeve" means the Chief Elected Official for the Municipality pursuant to the Act.
- s. "Quorum" is the majority of all members, being fifty (50) percent plus one (1), unless Council provides otherwise in this bylaw.

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## **APPLICATION**

3. This Bylaw applies to all Council, Committee of the Whole and Committee Meetings and shall be binding on all Councillors and Committee Members.
4. Notwithstanding Paragraph 3, where the Terms of Reference give Permission to a Committee to establish its own Meeting procedure, if there is a conflict between the Committee's established Meeting procedures and this Bylaw, that Committee's established Meeting procedures will have precedence over this Bylaw for the purposes of that Committee's Meetings.

## **INTERPRETATION**

5. When any matter relating to Meeting procedures is not addressed in this Bylaw, the matter shall be decided by reference to the most current edition of Roberts Rules of Order, if applicable.
6. Procedure is a matter of interpretation by the Reeve or the Committee Chair.
7. In the event of a conflict between the provisions of this Bylaw and Roberts Rules of Order, the provisions of this Bylaw shall apply.
8. In the absence of any statutory obligation, any provision of this Bylaw may be waived by Special Resolution of the Members in attendance at the Meeting.
9. In all cases throughout this Bylaw, reference to "he" or "she" shall mean males and females equally.

## **ROLE OF THE REEVE**

10. The Reeve, when present, shall preside as Chairperson over all Meetings of Council.
11. In the absence, incapacity, or inability, of the Reeve or Deputy Reeve to act, Council Members will elect from among themselves a Chairperson for the day to act as Reeve. This Member shall be referred to as "Acting Reeve" for the duration of that Meeting.
12. Unless otherwise provided in a bylaw, the Reeve shall be an ex-officio Member of all Committees.
13. The Reeve has all of the rights and privileges of other Committee Members.

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\_\_\_\_\_



## **ROLE OF THE CHAIRPERSON**

14. The Chairperson shall preside over the conduct of the Meeting, including the preservation of good order and decorum, ruling on Points of Order, replying to Points of Procedure and deciding on all questions relating to the orderly procedure of the meeting, subject to an appeal by a Councillor from any ruling of the Chairperson.
15. The Chairperson shall make reasonable efforts, including the calling of a recess, to ensure all Councillors in attendance at a Meeting are present while a vote is being taken, unless a Councillor is excused from voting in accordance with the Act or this Bylaw.
16. No Councillor shall leave the Council meeting after a question is put to a vote until the vote is taken, unless the Act requires or permits them to abstain from voting.
17. When the Chairperson wishes to make a motion he/she shall vacate the Chair and request the Vice-Chairperson to assume the Chair.
18. The Chairperson may invite Persons to come forward from the audience to speak with permission of Council if it is deemed to be within the best interests of the issue being discussed, the public, and the conduct of good business.

## **ROLE OF THE CHIEF ADMINISTRATIVE OFFICER (CAO)**

19. The Chief Administrative Officer, in accordance with Sections 207 and 208 of the Act and in accordance with Bylaw 030/95, which created the position of the Chief Administrative Officer, is required to advise and inform Council in writing of its legislative responsibilities and ensure that the Municipality's policies and programs are implemented as well as to advise Council on the operation and affairs of the Municipality.

## **ORGANIZATIONAL MEETINGS**

20. An Organizational Meeting of Council shall be held not later than two weeks after the third Monday in October each year.
21. The CAO or Delegate shall fix the time, date and place of the Organizational Meeting.
22. The CAO or Delegate shall advertise at least three weeks prior to the Organizational Meeting, inviting applications for Committee vacancies which will be required to be filled that year.

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23. The Organizational Meeting Agenda shall be restricted to:
  - a. The election of the Reeve and Deputy Reeve annually;
  - b. The administration of the Oath of Office;
    - i. to the Reeve and Deputy Reeve annually
    - ii. to the entire Council following the municipal election
  - c. Review of honorariums and expense reimbursement;
  - d. Review of procedural bylaw;
  - e. Review of the council/administration protocol policy;
  - f. The establishment of Council Committees and Boards;
  - g. The establishment of membership on Committees and Boards;
  - h. The establishment of regular Council meeting and Committee of the Whole meeting dates for the year;
  - i. Other business as required by the Act, or which Council or the CAO may direct.
  
24. At the Organizational Meeting the CAO shall:
  - a. Call the Meeting to Order;
  - b. Preside over the Meeting until the Reeve has been elected and has taken the Oaths of Office as Reeve.
  
25. In the event that only one nomination is received for the position of Reeve or Deputy Reeve, that nominee shall be declared elected by acclamation by the CAO.
  
26. Where there is more than one nomination for Reeve or Deputy Reeve, the CAO shall request that voting be done by secret ballot.
  
27. If, on the first ballot, no Councillor receives a clear majority of votes, the Council Member who received the least number of votes shall be dropped from the ballot and the second ballot shall be taken. This shall apply to both the Reeve and Deputy Reeve elections.
  
28. On subsequent ballots, a Council Member who receives the least number of votes shall be dropped from the ballot until a Councillor receives a clear majority.
  
29. When there is a tie vote between two candidates, each candidate's name shall be written on a blank sheet of paper, of equal size and color, and deposited into a receptacle and someone shall be directed to withdraw one of the sheets. The candidate whose name appears on the sheet shall be considered to have one more vote than the other candidate.

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30. All Members of Council hold office from the beginning of the Organizational Meeting following the General Election until immediately before the beginning of the Organizational Meeting following the next General Election, in accordance with the *Local Authorities Election Act*.
31. The appointment of Councillors and Members at Large to Committees shall be for a term of one year, unless otherwise specified, and by secret ballot if a vote is required.

### **QUORUM**

32. Quorum of Council is a majority of Councillors.
33. If quorum is not achieved within 30 minutes after the time the meeting was scheduled to begin, the CAO shall record the names of the members present, and the Council shall stand adjourned until the next regular or special meeting.
34. If at any time during a meeting the quorum is lost, the meeting shall be recessed and if quorum is not achieved again within 15 minutes, the meeting shall be deemed to be adjourned.

### **COMMITTEES**

35. Council may, by resolution or by Bylaw, establish Committees as are necessary or advisable for the orderly and efficient handling of the affairs of the Municipality and establish the Terms of Reference and duration of a Committee.
36. All Committee appointments shall be reviewed annually at the Organizational Meeting, unless otherwise specified in this Bylaw or the Terms of Reference.
37. Each Committee shall elect one (1) of its Members to be the Chairperson unless Council designates.
38. A Special or Ad-hoc Committee may be appointed at any time by Council providing that a motion has been adopted specifying the matters, duration of the Committee, and Terms of Reference to be dealt with by the Committee.

### **ALTERNATE COMMITTEE MEMBERS**

39. Council may appoint alternate committee members to ensure that proper representation and quorum is achieved.

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40. Alternate representatives from Council may attend all committee meetings, except where legislation disallows. The alternate Council member may only vote at the committee meeting when the regular Council member is absent from the meeting.
41. Alternate members at large may attend committee meetings as a member of the committee when a regular member at large is absent from the meeting. They cannot vote on matters of the committee unless a regular member at large is absent from the meeting.
42. Alternate committee members are eligible to receive the same training that their respective committee is authorized to attend.

### **REGULAR AND SPECIAL MEETINGS**

43. The date and time of regular Council meetings shall be established by resolution at the Organizational Meeting or at any future Meeting of Council.
44. Regular meetings are generally held on the second Tuesday and the fourth Wednesday of the month, unless otherwise specified.
45. Regular meetings shall commence at 10:00 a.m. and shall be held in the Council Chambers located at the Municipality's Corporate Office, unless otherwise specified.
46. Council may, by resolution (unanimous consent), change the date, time and location of any of its Regular Council meetings.
47. All Meetings shall be open to members of the public, except for the Closed Meeting portions of the Meeting.
48. The CAO or Delegate will post a schedule of regular meetings in the front foyer of all municipal offices and on the Municipality's website.
49. If there are changes to the date and time of a regular meeting, the municipality must give at least twenty-four (24) hours' notice of the change to all members and post the notice in a public office. Posting a public notice in the front foyer of the municipal offices and on the Municipality's Social Media is sufficient notice to the public if administration is unable to advertise the change in a local newspaper.
50. Council has the authority to move into a Closed Meeting pursuant to Section 197 (2) of the Act for the purposes of :

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- a. Protecting the Municipality, its operations, economic interests and delivery of its mandate from harm that could result from the release of certain information; and,
  - b. To comply with Division Two of Part One of the Freedom of Information and Protection of Privacy Act.
  
51. Matters which may be discussed in a Closed Meeting include the following:
  - a. Personnel matters;
  - b. Any information regarding contract negotiations;
  - c. Negotiations regarding acquisition, sale, lease or exchange of land;
  - d. Matters involving litigation, or the discussion of legal advice provided to the Municipality; and
  - e. Matters concerning RCMP investigations or confidential reporting; and
  - f. Any other item that may be considered a private matter under the Freedom of Information and Protection of Privacy Act.
  
52. The Reeve may call a special council meeting whenever he/she considers it appropriate to do so or if he/she receives a written request for the meeting, stating its purpose, from a majority of the Councillors, in accordance with Section 194 of the Act.
  
53. No business other than that stated in the notice shall be conducted at any Special Meeting of Council unless all the Members of Council are present at the Special Meeting and the Council agrees to deal with the matter in question.

#### **COMMITTEE OF THE WHOLE**

54. There shall be a Committee of the Whole comprising all Councillors.
  
55. Subject to the Act, Committee of the Whole may consider any matter that Council may consider, including but not limited to discussion and debate of the following matters:
  - a. the budget;
  - b. the audit;
  - c. transportation issues;
  - d. development issues;
  - e. strategic planning;
  - f. legislative reform;
  - g. policing matters; and
  - h. policy formation.
  
56. Committee of the Whole may:
  - a. Conduct non-statutory public hearings;
  - b. Receive delegations and submissions; and
  - c. Meet with other municipalities and other levels of governments.

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57. Council may receive briefings in Committee of the Whole.
58. In addition to the restrictions contained in Section 203(2) of the Act, the Committee of the Whole shall not hold statutory public hearings.
59. Committee of the Whole may make the following motions:
  - a. To receive agenda reports as information.
  - b. To refer matters to Administration or a Committee for review.
  - c. Make recommendations to Council.
60. A quorum of Committee of the Whole is a majority of Councillors.
61. At a Committee of the Whole meeting, the procedures of Council shall be relaxed as follows:
  - a. A Councillor may speak even though there is no motion on the floor, but if there is a motion on the floor a Councillor shall address that motion;
  - b. A Councillor may speak more than once, on a matter provided that each Councillor who wishes to speak to the matter has already been permitted to do so;
62. Committee of the Whole may consider a matter in Closed Meeting, in accordance with the Act and Freedom of Information and Protection of Privacy Act, RSA 2000, c-F-25.
63. No motions may be made when Committee of the Whole is sitting in Closed Meeting in accordance with the Freedom of Information and Protection of Privacy Act, RSA, 2000, c-F-25 except motions to reconvene the Committee of the Whole meeting.

#### **CANCELLATION OF REGULAR, COMMITTEE OF THE WHOLE AND SPECIAL MEETINGS**

64. A Council Meeting may be cancelled:
  - a. By resolution of a majority of Members at a previously held Meeting; or
  - b. With written consent of a majority of the Members and by providing not less than twenty-four (24) hours notice to Members and the public.

#### **ELECTRONIC PARTICIPATION AT MEETINGS**

65. Council members may attend a Council meeting by means of electronic communication. Acceptable alternatives include through the use of telephone, ensuring that dialogue is available for both parties; through the use of a personal computer; or other means as technology advances.

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66. A Council Member must advise the CAO or Delegate at least one (1) day in advance of their intention to participate through electronic communications.
67. A Council Member may attend Regular, Council Meetings by means of electronic communication to a maximum of three (3) times per calendar year, unless otherwise approved by Council resolution.
68. A Council Member or Committee Member may participate in Committee Meetings, Committee of the Whole Meetings or Special Council Meetings by means of electronic communication.
69. A Council Member attending a meeting via electronic communications is deemed to be present at the meeting for whatever period of time the connection via electronic communications remains active and will be recorded in the minutes as being present via electronic communication.
70. A Council Member attending a meeting via electronic communications must declare if any other persons are present in the room.
71. When a vote is called, Council Members attending the meeting by means of electronic communications shall be asked to state their vote only after all other Council Members have cast their votes by a show of hands.
72. When a Council Member attends a Closed Meeting, via electronic communication, they will be required to confirm that they have attended the Closed Meeting alone in keeping with the definition in this Bylaw of Closed Meeting.

## **COUNCIL AGENDA**

73. The agenda for each regular and special Meeting shall be organized by the CAO and compiled together with copies of all pertinent correspondence, statements, and reports provided to each member of Council at least two (2) working days prior to each regular meeting.
74. Any member of Council wishing to have an item of business placed on the agenda, shall make the submission to the Reeve and CAO not later than seven (7) calendar days prior to the scheduled Council meeting date.
75. Administration wishing to have an item of business placed on the agenda, shall make the submission to the CAO or Delegate not later than seven (7) calendar days prior to the scheduled Council meeting date. The submission shall contain adequate information to the satisfaction of the CAO to enable Council to deal with the matter.

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76. Additions placed on the agenda at the Meeting shall be discouraged however an addition may be made to the agenda with a simple majority consent of the Members present. Actions resulting from the agenda additions require unanimous consent given by those Members present. Exceptions to actions requiring unanimous consent are a tabling motion or that the agenda item be received as information.
77. Documentation for “Closed Meeting” items shall be distributed at the Council Meeting and must be returned to the CAO immediately after the Meeting. Large volume documentation may be distributed to Council prior to the Meeting.
78. The agenda shall list the order of business, as determined by the CAO, in consultation with the Reeve.

#### **MEETING MINUTES OF COUNCIL**

79. The CAO or Delegate shall ensure that all Council Meeting minutes are recorded in the English language, without note or comment.
80. The CAO or Delegate shall ensure that the draft/unapproved Minutes of each Council Meeting be distributed to each Member of Council and administration within a reasonable amount of time after the holding of the Meeting.
81. A Councillor may make a motion requesting that the Minutes be amended to correct an inaccuracy or omission. However, the CAO or Delegate shall be advised of the challenge to the Minutes at least 24 hours before the Council Meeting at which the Minutes are to be officially adopted.
82. Only minor changes may be made to correct errors in grammar, spelling, and punctuation or to correct the omission of a word necessary to the meaning or continuity of a sentence; but no change shall be allowed which would alter or affect, in a material way, the actual decision made by Council.
83. Draft/unapproved Council Meeting Minutes will be made available to the public and media upon request.
84. The minutes of each Council Meeting shall be presented to Council for adoption at the next regular Meeting.
85. Adopted minutes of Council shall be made available at all municipal offices and posted on the Municipality’s website.

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## PROCEEDINGS

86. The Reeve or presiding officer, shall preserve order and decorum and shall decide order of questions.
87. Every member wishing to speak to a question or resolution shall address himself to the Reeve or presiding officer.
88. A resolution submitted to Council does not require a seconder.
89. A motion may be withdrawn by the mover at any time before voting.
90. The following motions are not debatable:
  - a. Adjournment
  - b. Take a recess
  - c. Question or privilege
  - d. Point of order
  - e. Limit debate on the matter before council
  - f. Division of a question
  - g. Table the matter to another meeting
91. When a resolution has been made and is being considered by Council, no other resolution may be made and accepted, except:
  - a. To amend the motion;
  - b. To refer the main motion to committee of the whole, administration, a council committee or some other person or group for consideration;
  - c. To postpone consideration of the main motion; or
  - d. To table the motion.
92. After any question is finally put to vote by the Reeve or other presiding officer, no member shall speak to the question, nor shall any other resolution be made until after the result of the vote has been declared.
93. Voting on all matters shall be done by raising of the hand in such a clear manner that they may be easily counted by the presiding officer.
94. Every member of Council attending a Council meeting must vote on a matter put to vote at the meeting unless the Councillor is required or permitted to abstain from voting.
95. If there is an equal number of votes for and against a resolution or bylaw, the resolution or bylaw is defeated.

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96. When it is requested that a vote be recorded, the minutes must show the names of the Councillors present and whether each Councillor voted for and against a resolution or bylaw or abstained. A request for a recorded vote must be made before the vote is called.
97. Any matter of meeting conduct that is not provided for in this Bylaw shall be determined in accordance with the current *Robert's "Rules of Order, Newly Revised"*.

## DELEGATIONS

98. All requests for delegations shall be submitted in writing to the CAO or Delegate, for approval, at least seven (7) calendar days prior to the proposed date for the delegation. The submission shall contain all relevant information relating to the topic of their request to the satisfaction of the CAO or Delegate to enable Council to deal with the matter.
99. The CAO or Delegate will review all delegation requests and determine if the request will be heard by Council, by a Council Committee or referred to Administration for a response. The CAO may consult with the Reeve when required.
100. Delegations will not be heard if their matter falls under a legislated appeal process (ie. Assessment Review Board, Subdivision & Development Appeal Board, Agricultural Appeal Board).
101. If it is recommended that Council hear the matter, the CAO or Delegate shall contact the person and provide a time in which they can speak.
102. If the request to speak is received after the time required or without the written submission, the CAO or Delegate may:
  - a. Refer the matter to a Committee; or
  - b. Recommend that Council hear from the person; or
  - c. Offer to include the person on the agenda of a future Council meeting; or
  - d. Refuse to hear from the person and refer the matter to Administration for reply.
103. Delegations will be limited to two (2) per Council meeting unless otherwise approved by the Reeve.
104. Delegations will be limited to fifteen (15) minutes to present their matter and be limited to one (1) speaker, except where the Chair permits otherwise.

## PUBLIC HEARINGS

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105. Public Hearings will be held in conjunction with a regular Council meeting, unless otherwise approved by resolution of Council.
106. Council shall hold a Public Hearing when an enactment requires Council to hold a Public Hearing on a proposed bylaw or resolution or any other matter at the direction of Council. The Public Hearing will be held before second reading of the proposed bylaw or before Council votes on a resolution.
107. Any Person who wishes to speak at a Public Hearing must be present at the scheduled time of the Hearing.
108. Any Person wishing to provide a written submission may deliver it to the CAO or Delegate at least seven (7) calendar days prior to the Public Hearing. Written submissions received will be included with the Agenda and will be released to the public.
109. Unless otherwise approved by resolution of Council, the following shall be the procedure for the conduct of the Public Hearing:
  - a. The Chair of the Public Hearing shall declare the Public Hearing open;
  - b. The Development Authority shall provide a brief background on the proposed bylaw or resolution, ensure public notification has been given, and present any written submissions received;
  - c. The Chair shall call for anyone wishing to speak;
  - d. Persons speaking will have only one opportunity to speak;
  - e. Presentations shall be limited to five (5) minutes, unless the Chair permits otherwise;
  - f. Each Person making a presentation shall give his/her name to be recorded in the Minutes;
  - g. Council may ask questions of the speakers after each presentation if clarification on any matter is required;
  - h. The Chair of the Public Hearing shall declare the Public Hearing closed.
110. After the close of the Public Hearing, Council may:
  - a. Pass the proposed bylaw or resolution; or
  - b. Defeat the proposed bylaw or resolution; or
  - c. Make any amendment to the proposed bylaw or resolutions and proceed to pass it without further advertisement or hearing.
111. If there is more than one Public Hearing on the agenda, the Chair must close one Public Hearing before another Public Hearing is opened.
112. Council may change the date, time and place of a Public Hearing by resolution. If the date, time or place of the Public Hearing is changed, then the Public Hearing must be re-advertised.

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113. Public participation through teleconference shall be made available at each County Office for major public hearings, as determined by resolution of Council.

### **DEBATE OF RESOLUTIONS**

114. A member may ask a question, stated concisely, of the previous speaker to explain any part of the previous speaker's remarks.
115. A member may ask questions of the CAO or administration to obtain information relating to a report presented to Council or to any clause contained therein, at the commencement of the debate on the report or on the clause.
116. When it is a member's turn to speak during debate, before speaking he/she may ask questions of the CAO, or administration in order to obtain information relating to the report or clause in question.
117. Any member may require the question or resolution under discussion to be read at any time during the debate but not so as to interrupt a member while speaking.
118. When the resolution has been declared as having been put to a vote, no member shall debate further on the question or speak any words except to request that the resolution be read aloud.
119. The Reeve or presiding officer shall determine when a resolution is to be put to a vote.

### **MOTIONS OUT OF ORDER**

120. It is the duty of the Chair to determine what motions are amendments to motions that are in order subject to challenge by a Member, and decline to put a motion deemed to be out of order.
121. The Chair shall advise the Members that a motion is out of order and cite the applicable rule or authority without further comment.
122. The Chair may refuse to accept a motion to refer, that has the effect of defeating the motion to which it refers, e.g. time constraints.
123. The following motions are out of order:
- a. A motion, similar to a motion voted on in the previous six (6) months, without reconsidering the original motion;
  - b. A motion contrary to law or a previous motion;

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- c. A motion similar to an item which has been tabled;
- d. A motion to reconsider a motion to reconsider;
- e. A motion referring an item to a Committee, if the final report of the Committee is complete; and
- f. A motion which is out of scope of Council business.

## **RECONSIDERING AND RESCINDING A MOTION**

124. A Member wishing to reconsider, alter or rescind a motion already passed, or an action taken at a previous Meeting and when the matter does not appear on the Agenda, shall bring the matter forward by a Notice of Motion, which shall:
- a. Be considered at a Council Meeting;
  - b. Specify the Meeting proposed to bring the matter to; and
  - c. Indicate, in the substantive portion of the motion, the action which is proposed to be taken on the matter.
125. Notwithstanding the above, if Notice of Motion was not given, the requirement for Notice may be waived on a Two-Thirds vote.
126. Notwithstanding the other provisions of this section, no motion made or action taken shall be reconsidered unless:
- a. It is a motion made or an action taken at the same Meeting; or
  - b. It is a motion made or an action taken at a Meeting held six (6) months or more before its reconsideration; or
  - c. Approval for reconsideration of a motion made or an action taken less than six (6) months earlier is given by a Two-Thirds vote prior to reconsideration.
127. A Member who voted with the prevailing side may move to reconsider a motion only at the same meeting or during any continuation of the meeting at which it was decided.
128. The following motions cannot be reconsidered:
- a. A motion which created a contractual liability or obligation, shall not be reconsidered, altered, varied, revoked, rescinded or replaced except to the extent that it does not attempt to avoid or interfere with the liability or obligation;
  - b. A motion to adjourn;
  - c. A motion to close nominations;
  - d. A request for division of a question;
  - e. A point of order, a point of privilege or a point of information;
  - f. A motion to recess;
  - g. A motion to suspend the Procedural Bylaw;
  - h. A motion to lift from the table;
  - i. A motion to bring forward; and

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- j. Motion to adopt the agenda.
129. A motion to reconsider or rescind is debatable only when the motion being reconsidered is debatable.

### **NOTICE OF MOTION**

130. A notice of motion may be given at any council meeting, but may not be dealt with at that meeting.
131. A notice of motion shall be given verbally and in writing to all members of council present. A copy of such notice of motion shall be given to the CAO upon adjournment of the meeting at which the notice is given.
132. Every notice of motion shall precisely specify the entire content of the motion to be considered, and shall be on the agenda for the next regular meeting of Council unless otherwise specified.

### **PECUNIARY INTEREST**

133. When a Member has a pecuniary interest in a matter before Council, a Council Committee or any other body, board, commission, committee or agency to which the Member is appointed as a representative of the Council, the Member shall, if present:
- a. Disclose the general nature of the pecuniary interest prior to any discussion on the matter;
  - b. Abstain from any discussion and voting on any question relating to the matter;
  - c. Leave the room in which the meeting is being held until discussion and voting on the matter are concluded; if required;
  - d. If the matter with respect to which the Member has a pecuniary interest is the payment of an account for which funds have previously been committed, it is not necessary for the Councillor to leave the room; and
  - e. If the matter with respect to which the Member has a pecuniary interest is a question on which the Member as a tax payer, an elector or an owner has a right to be heard by the Council;
    - i. It is not necessary for the Member to leave the room; and
    - ii. The Member may exercise the right to be heard in the same manner as a person who is not a Member.

### **BYLAWS**

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134. The CAO or Delegate must review the form of each proposed bylaw to ensure that it is consistent with the form of bylaw that Council may adopt from time to time.
135. Each proposed bylaw must include:
  - a. The bylaw number assigned to it by the CAO or Delegate; and
  - b. A concise title.
136. Where a Bylaw is presented to Council for enactment, the CAO or Delegate shall cause the number and short title of the Bylaw to appear on the Agenda.
137. The CAO or Delegate must make available a copy of the bylaw to each Councillor before the first reading of the bylaw.
138. A Bylaw shall be introduced for first reading by a motion that the Bylaw, specifying its number and short title, be read a first time.
139. When a Bylaw is subject to a Public Hearing, a Council, without amendment or debate, shall vote on the motion for first reading of a Bylaw and the setting of a public hearing date in accordance with the applicable form of notice. A Member may ask a question or questions concerning the bylaw provided that such questions are to clarify the intent, purpose or objective of the bylaw, and do not indicate the Member's opinion for or against the bylaw.
140. After the holding of the required public hearing, a bylaw shall be introduced for second reading by a motion that it be read a second time specifying the number of the bylaw.
141. After a motion for second reading of the bylaw has been presented, Council may:
  - a. Debate the substance of the bylaw; and
  - b. Propose and consider amendments to the bylaw.
142. A proposed amendment shall be put to a vote and if carried, shall be considered as having been incorporated into the bylaw at second reading.
143. When all amendments have been accepted or rejected the motion for second reading of the bylaw shall be voted on.
144. A bylaw shall not be given more than two readings at one meeting unless the Members present at the meeting unanimously agree that the bylaw may be presented for third reading at the same meeting at which it received two readings, provided that Council is not prohibited from giving more than two readings to a bylaw at one meeting by any valid enactment.

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145. When Council unanimously agrees that a bylaw may be presented for third reading at a meeting at which it has received two readings, the third reading requires no greater majority of affirmative votes to pass the bylaw than if it has received third reading at a subsequent meeting.
146. A bylaw shall be adopted when a majority of the Members present vote in favour of third reading, provided that any applicable provincial statute does not require a greater majority.
147. A bylaw, which has been defeated at any stage, may be subject to a motion to reconsider in accordance with the provisions of this Bylaw.
148. A bylaw is passed and comes into effect when it has received third and final reading unless otherwise provided by statute.
149. The Reeve and CAO shall sign and seal the bylaw as soon as reasonably possible after third reading.
150. The CAO or Delegate is authorized to consolidate one or more bylaws as deemed convenient.

## **CODE OF ETHICS**

151. The proper operation of democratic local government requires that elected officials be independent, impartial and duly responsible to the people. To this end it is imperative that:
  - a. Government decisions and policy be made through the proper channels of government structure.
  - b. Public office not be used for personal gain.
  - c. The public have confidence in the integrity of its government.
152. Accordingly, it is the purpose of these guidelines of conduct to outline certain basic rules for Mackenzie County Council so that they may carry out their duties with impartiality and equality of services to all, recognizing that the basic functions of elected local government officials are, at all times, services to their community and the public.
153. To further these objectives, certain ethical principles should govern the conduct of Mackenzie County Council in order that they shall maintain the highest standards of conduct in public office and faithfully discharge the duties of office without fear or favour.
154. Councillors shall:

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- a. Govern their conduct in accordance with the requirements and obligations set out in the municipal legislation of the Province of Alberta and as specified in this Bylaw.
- b. Not use confidential information for personal profit of themselves or any other person.
- c. Not communicate confidential information to anyone not entitled to receive the applicable confidential information.
- d. Not use their position to secure special privileges, favours, or exemptions for themselves or any other person.
- e. Preserve the integrity and impartiality of Council.
- f. For a period of twelve (12) months after leaving office, abide by the ethical standards of conduct listed above, except those related to confidential information which shall apply in perpetuity.
- g. Not assume that any unethical activities (not covered by or specifically prohibited by these ethical guidelines of conduct, or by any legislation) will be condoned.

## **CONDUCT OF MEMBERS DURING THE MEETING**

155. No Member shall:

- a. Use offensive language, inappropriate actions or unparliamentary language in or against Council or against any Member of Council or any administration or any member of the public;
- b. Speak disrespectfully of any member of the Royal Family, the Governor General, the Lieutenant Governor of any Province, Council, any municipality, an Member or any official or employee of the Municipality;
- c. Engage in private conversations while in the Council Meeting or use personal electronic devices including cellular phones, media players, etc. in any manner that disrupts the Member speaking or interrupts the business of Council;
- d. Leave his/her seat or make noise or disturbance while a vote is being taken and until the result of the vote is announced;
- e. Speak on any subject other than the subject under debate;
- f. Not interrupt the speaker, except on a point of order;
- g. Where a matter has been discussed in a Closed Meeting, and where the matter remains confidential, disclose a confidential matter or the substance of deliberations at a Closed Meeting, except to the extent that Council has previously released or disclosed the matter in public. All information, documentation or deliberations received, reviewed or provided in a Closed Meeting is confidential. Members of Council shall not release, reproduce, copy or make public any information or material considered at a Closed Meeting, or discuss the content of such a meeting with persons other than members of Council or relevant staff members, prior to it being reported in public by Council;

\_\_\_\_\_  
\_\_\_\_\_

- h. Criticize any decision of Council except for the purpose of moving that the question be reconsidered;
  - i. Contravene the rules of Council or a decision of the Chair or of Council on questions of order or practice or upon the interpretation of the rules of Council. In case a Member persists in any such contravention, after having been called to order by the Chair, the Chair shall not recognize that Member, except for the purpose of receiving an apology from the Member tendered at that Meeting or any subsequent Meeting.
156. Members of the public during a Meeting shall:
- a. Address the Members of Council or Committee at the permission of the Chair;
  - b. Maintain order and remain quiet;
  - c. Not applaud nor otherwise interrupt a speech or action of the Members or other Person addressing the Members.
157. The Chair may cause to be expelled and excluded from any Meeting any person who creates any disturbance during a meeting or who, in the opinion of the Chair, has been guilty of improper conduct and for that purpose the Chair may direct that such a person be removed by a Peace Officer or RCMP.
158. A Councillor that displays inappropriate and abusive behavior towards other members of council, administration or the public while on County business may be reprimanded in a form as may be acceptable by 2/3 vote of Council.

## **TWO-THIRDS MAJORITY VOTE**

159. Order in Council No. 54/2001 establishing Mackenzie County as a Specialized Municipality, requires a Two-Thirds (2/3) majority vote for the following:
- a. Procedural Bylaw
  - b. Council Remuneration Bylaw
    - i. A simple majority vote is required when authorized Councillors to attend a seminar, convention, workshop, or any other function that Councillors may attend for reimbursement of expenses.
  - c. All issues regarding property taxes
  - d. A bylaw to change the number of Councillors, the boundaries of wards or the method of electing a Chief Elected Officer.
    - i. A simple majority vote is required when electing a Chief Elected Officer in the manner prescribed in this Bylaw.
  - e. The appointment or termination of the Chief Administrative Officer; however, any direction given to the CAO shall be done by a simple majority vote.
  - f. A resolution for the adoption and amendment of the budget.
  - g. Any amendments to the Organizational Chart.
  - h. Any other matter designated by Council within this Bylaw.

**RECORDING DEVICES AT MEETINGS**

- 160. The CAO may authorize the use of any mechanical or electronic means of recording proceedings of Council and Council Committee meetings necessary to assist with the preparation of an accurate set of minutes. Any such recording will be erased or destroyed after the Council or Council Committee meeting has approved the minutes.
- 161. No person shall, unless a Two-Thirds majority consent of Council is given, record the proceedings of Council through tape recorder, video camera, or other devices.

**REPEAL AND COMING INTO FORCE**

- 162. Bylaw No. 1204-20 and all amendments thereto are hereby repealed.
- 163. This Bylaw shall come into effect upon receiving third and final reading.

READ a first time this \_\_\_ day of November, 2021.

READ a second time this \_\_\_ day of November, 2021.

READ a third time and finally passed this \_\_\_ day of November, 2021.

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Joshua Knelsen  
Reeve

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Lenard Racher  
Chief Administrative Officer

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**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Carrie Simpson, Director of Legislative &amp; Support Services</b>
<b>Title:</b>	<b>Letter of Support – Fort Vermilion School Division</b>

## **BACKGROUND / PROPOSAL:**

Mike McMann, Superintendent at Fort Vermilion School Division is requesting support from Mackenzie County to help facilitate having the child psychologist, Dr. Paul Soper, for the Fort Vermilion School Division's contract renewed.

## **OPTIONS & BENEFITS:**

## **COSTS & SOURCE OF FUNDING:**

## **SUSTAINABILITY PLAN:**

## **COMMUNICATION / PUBLIC PARTICIPATION:**

## **POLICY REFERENCES:**

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**RECOMMENDED ACTION:**

- Simple Majority       Requires 2/3       Requires Unanimous

That a letter be written to Alberta Health Services voicing Mackenzie County's concern of the Psychiatrist for Zone 1 being eliminated.

**Author:** C. Simpson      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Caitlin Smith, Manager of Planning &amp; Development</b>
<b>Title:</b>	<b>Municipal Planning Commission Meeting Minutes</b>

**BACKGROUND / PROPOSAL:**

The minutes of the December 2, 2021 Municipal Planning Commission meeting are attached.

**OPTIONS & BENEFITS:**

N/A

**COSTS & SOURCE OF FUNDING:**

N/A

**SUSTAINABILITY PLAN:**

N/A

**COMMUNICATION:**

N/A

**Author:** K. Unrau      **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**RECOMMENDED ACTION:**

Simple Majority       Requires 2/3       Requires Unanimous

That the Municipal Planning Commission meeting minutes of December 2, 2021 be received for information.

**Author:**     K. Unrau          **Reviewed by:** \_\_\_\_\_      **CAO:** \_\_\_\_\_

**MACKENZIE COUNTY  
Municipal Planning Commission Meeting**

**Mackenzie County Office  
La Crete, AB**

**Thursday, December 2, 2021 @ 10:00 a.m.**

**PRESENT:** Erick Carter Chair, MPC Member  
Willie Wieler Vice Chair, MPC Member  
David Driedger Councillor, MPC Member  
Jacquie Bateman Councillor, MPC Member (virtual)  
Tim Driedger MPC Member

**ADMINISTRATION:** Caitlin Smith Manager of Planning and Development  
Lynda Washkevich Development Officer  
Madison Dyck Development Officer  
Nicole Friesen Development Officer  
Kristyn Unrau Administrative Assistant/Recording Secretary

**MOTION 1. CALL TO ORDER**

Erick Carter called the meeting to order at 10:01 a.m.

**2. ADOPTION OF AGENDA**

**MPC 21-12-188 MOVED** by Willie Wieler

That the agenda be adopted as presented.

**CARRIED**

**3. MINUTES**

**a) Adoption of Minutes**

**MPC 21-12-189 MOVED** by Tim Driedger

That the minutes of the November 18<sup>th</sup>, 2021 Municipal Planning Commission meeting be adopted as presented.

**CARRIED**

b) **Business Arising from Previous Minutes**

i) None.

4. **TERMS OF REFERENCE**

For Information.

5. **DEVELOPMENT**

a) **111-DP-21 Maria's Diner – Time Extension  
Temporary/Portable Unit (12'x44') in "DC2"  
Plan 2938RS; 6; 16 (5005 River Road) (Fort Vermilion)**

Erick Carter, Chair declared himself in conflict, turned chair over to Vice Chair Willie Wieler @ 10:02 a.m. and left his seat.

**MPC 21-12-190 MOVED** by Jacquie Bateman

That a time extension for 111-DP-21 on Plan 2938RS, Block 6, Lot 16 in the name of Maria's Diner be granted to expire on December 8, 2023.

**CARRIED**

Willie Wieler turned chair back to Erick Carter @ 10:04 a.m.

b) **304-DP-21 Blue Hills Harvesting Ltd.  
Professional, Financial Office and Business Service in  
"LC-HC" Plan 062 7695; 24; 4 (Office #106) (La Crete)**

**MPC 21-12-191 MOVED** by Tim Driedger

That Development Permit 304-DP-21 on Plan 062 7695, Block 24, Lot 4 (Office 106) in the name of Blue Hills Harvesting Ltd. be APPROVED with the following conditions:

Failure to comply with one or more of the attached conditions shall render this permit Null and Void

1. This permit is for the APPROVAL of a Professional, Financial, Office & Business Service in the existing building.
2. The Professional, Financial, Office & Business Service shall meet all National Building Code 2019 Alberta Edition requirements for Buildings and any other requirements specified by Superior Safety

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Codes. Failure to do so shall render this permit Null and Void.

3. Building to be connected to the municipal water and sewer system and the cost of connection fees will be borne by the owner.
4. **The Municipality has assigned the following address to the noted property: 10604 99 Street (Office 106).**
5. This permit may be revoked at any time if, in the opinion of the Development Authority, the proposed development has become detrimental or otherwise incompatible with the amenities of the neighbourhood.
6. The sign shall be a minimum of
  - a. 20 meters from regulatory signs, and
  - b. 1.5m (5 ft) from the curb/sidewalk
7. The sign shall be placed on site and is not permitted to be placed on any County lands and/or within the Road Right of Way.
8. The sign shall be a minimum of 2 meters in height from the bottom of the sign above the curb/sidewalk.
9. The site and sign shall be kept in a safe, clean, and tidy condition, or may be required to be renovated or removed.
10. The sign shall:
  - a. Not obstruct the orderly and safe flow of vehicular and pedestrian traffic,
  - b. Not unduly interfere with the amenities of the district,
  - c. Not materially interfere with or affect the use, enjoyment or value of neighbouring properties, and
  - d. Not create visual or aesthetic blight.
11. Illumination of any signs must not negatively affect, nor pose a safety hazard to, an adjacent site or street.
12. Wiring and conduits of any signs must be concealed from view.
13. No construction or development is allowed on a right-of-way. It is the responsibility of the developer/owner/occupant to investigate the utility rights-of-way, if any, that exist on the property prior to commencement of any construction and to ensure that no construction or development is completed on any utility right-of-way.

14. **This permit approval is subject to the access to the property being constructed to County standards.** PRIOR to installation of a new access or changing location of existing access, complete a Request to Construct an Access form by contacting the Operations Department for Mackenzie County at (780) 928-3983. Access to be constructed at the developers' expense.
15. The total site area (lot) shall have a positive surface drainage without adversely affecting the neighbouring properties.
16. The Developer shall at all times comply with all applicable Federal, Provincial and Municipal legislation and regulations and County Bylaws and resolutions relating to the development of the lands.

## **CARRIED**

### **6. SUBDIVISIONS**

- a) **65-SUB-21 Boyer Ventures Ltd.  
10.39 acre Subdivision (1 lot) in "A"  
NE 12-109-13-W5M (High Level Rural)**

### **MPC 21-12-192 MOVED** by David Driedger

That Subdivision Application 65-SUB-21 in the name of Boyer Ventures Ltd. on NE 12-109-13-W5M be APPROVED with the following conditions:

1. This approval is for one (1) **TYPE B** subdivision, 10.39 acres (4.28 hectares) in size.
2. Applicant/developer shall enter into and abide by a Development Agreement with Mackenzie County which shall contain, but is not limited to:
  - a) Prior to any development on the proposed subdivision, the developer shall obtain a development permit from the Municipality;
    - I. **Any permanent buildings on the property must be constructed 2% above the grade of the road.**
  - b) **Mitigation measure must be in place in order to avoid water damage from potential pluvial flooding;**
  - c) Provision of a road and access to both the subdivision

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and the balance of the lands in accordance with Mackenzie County standards at the developer's expense;

- d) All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015;
- e) **Provision of a storm water management plan. Contact Planning and Development staff at (780)928-3983 to discuss the requirements for your subdivision;**
- f) Any outstanding property taxes are to be paid on the land proposed to be subdivided prior to registration;
- g) Provision of utility rights-of-way as required by ATCO Electric, TELUS, Northern Lights Gas Co-op, and others;
- h) Provision of and negotiations for utility rights-of-way and/or easements as required by utility companies. The Developer shall be responsible for any line relocation or correction costs that occur as a result of this development. Responses from utility companies are shown in Schedule "C" hereto attached;
- i) **Mackenzie County shall not be held liable for any concerns, issues or damages related to and/or resulting from the water tables and any other water problems as a result of any low land levels of the proposed development. It is the responsibility of the developer to ensure that adequate drainage and other precautions are taken to avoid water seepage into the dwellings/basement and/or flooding of the basement, and/or any ancillary buildings.**

**CARRIED**

- b) **66-SUB-21 Ernest & Martha Kroeker  
16.83 acre Subdivision (1 lot) in "A"  
NE 5-105-14-W5M (La Crete Rural)**

**MPC 21-12-193** **MOVED** by Willie Wieler

That Subdivision Application 66-SUB-21 in the name of Ernest & Martha Kroeker NE 5-105-14-W5M be APPROVED with the following conditions:

1. This approval is for a **TYPE B** subdivision totalling 16.83 acres (6.81 hectares) in size.

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2. Applicant/developer shall enter into and abide by a Development Agreement with Mackenzie County which shall contain, but is not limited to:
- a) Prior to any development on the proposed subdivision, the developer shall obtain a development permit from the Municipality,
    - I. Any permanent buildings on the property must be constructed 2% above the grade of the road.
  - b) Mitigation measure must be in place in order to avoid water damage from potential pluvial flooding,
  - c) Provision of a road and access to both the subdivision and the balance of the lands in accordance with Mackenzie County standards at the developer's expense,
  - d) All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015,
  - e) **Provision of a storm water management plan. Contact Planning and Development staff at (780) 928-3983 to discuss the requirements for your subdivision,**
  - f) Any outstanding property taxes are to be paid on the land proposed to be subdivided prior to registration,
  - g) Provision of utility rights-of-way as required by ATCO Electric, TELUS, Northern Lights Gas Co-op, and others,
  - h) Provision of and negotiations for utility rights-of-way and/or easements as required by utility companies. The Developer shall be responsible for any line relocation or correction costs that occur as a result of this development. Responses from utilities companies are shown in Schedule "C" hereto attached,
  - i) **Mackenzie County shall not be held liable for any concerns, issues or damages related to and/or resulting from the water tables and any other water problems as a result of any low land levels of the proposed development. It is the responsibility of the developer to ensure that adequate drainage and other precautions are taken to avoid water seepage into the**

**dwellings/basement and/or flooding of the basement,  
and/or any ancillary buildings.**

**CARRIED**

- c) 68-SUB-21 Mackenzie County  
13.95 acre Subdivision (14 lots) in “H-R1”  
Plan FORTVER; 3; 11  
(Fort Vermilion Flood Recovery, Phase 3)**

**MPC 21-12-194 MOVED** by Willie Wieler

That Subdivision Application 68-SUB-21 in the name of Mackenzie County on Plan FORTVER, Block 3, Lot 11 be TABLED pending Council direction regarding minimum urban development standards within all Fort Vermilion Flood Recovery Phases.

**CARRIED**

- d) 69-SUB-21 Robert Braun  
13.84 acre Subdivision (1 lot) in “A”  
NE 24-110-18-W5M (High Level Rural)**

**MPC 21-12-195 MOVED** by David Driedger

That Subdivision Application 69-SUB-21 in the name of Robert Braun on NW 24-110-18-W5M be APPROVED with the following conditions:

1. This approval is for one (1) **TYPE B** subdivision, 13.84 acres (5.60 hectares) in size.
2. Applicant/developer shall enter into and abide by a Development Agreement with Mackenzie County which shall contain, but is not limited to:
  - a) Prior to any development on the proposed subdivision, the developer shall obtain a development permit from the Municipality;
  - II. **Any permanent buildings on the property must be constructed 2% above the grade of the road.**
  - b) **Mitigation measure must be in place in order to avoid water damage from potential pluvial flooding;**

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- c) Provision of a road and access to both the subdivision and the balance of the lands in accordance with Mackenzie County standards at the developer's expense;
- d) All sewage disposals shall conform to the Alberta Private Sewage Systems Standard of Practice 2015;
- e) **Provision of a storm water management plan. Contact Planning and Development staff at (780)928-3983 to discuss the requirements for your subdivision;**
- f) Any outstanding property taxes are to be paid on the land proposed to be subdivided prior to registration;
- g) Provision of utility rights-of-way as required by ATCO Electric, TELUS, Northern Lights Gas Co-op, and others;
- h) Provision of municipal reserve in the form of money in lieu of land. The specific amount is based on 10% of the subject land and on the current market value in accordance with Policy DEV005. To calculate the required Municipal Reserve, 10% of the subject land is multiplied by the current market value. The current market value for this property is \$6,000 per acre and 10% of the subject land is 1.384 acres; **1.384 acres multiplied by \$6000 equals \$8,304.00;**
- i) **The Developer has the option to provide a market value appraisal of the existing parcel of land as of a specified date occurring within the 35-day period following the date on which the application for subdivision approval is made in accordance to the *Municipal Government Act* Section 667(1)(a);**
- j) Provision of and negotiations for utility rights-of-way and/or easements as required by utility companies. The Developer shall be responsible for any line relocation or correction costs that occur as a result of this development. Responses from utility companies are shown in Schedule "C" hereto attached;
- k) **Mackenzie County shall not be held liable for any concerns, issues or damages related to and/or resulting from the water tables and any other water problems as a result of any low land levels of the proposed development. It is the responsibility of the**

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\_\_\_\_\_

**developer to ensure that adequate drainage and other precautions are taken to avoid water seepage into the dwellings/basement and/or flooding of the basement, and/or any ancillary buildings.**

**CARRIED**

**7. MISCELLANEOUS ITEMS**

a) None.

**8. IN CAMERA**

a) None.

**9. MEETING DATES**

- ❖ Wednesday, December 15<sup>th</sup>, 2021 @ 10:00 a.m. in Fort Vermilion
- ❖ Thursday, January 13<sup>th</sup>, 2022 @ 10:00 a.m. in La Crete
- ❖ Thursday, January 27<sup>th</sup>, 2022 @ 10:00 a.m. in Fort Vermilion

**10. ADJOURNMENT**

**MPC 21-12-198 MOVED** by Willie Wieler

That the Municipal Planning Commission Meeting be adjourned at 10:41 a.m.

**CARRIED**

These minutes were adopted this 15<sup>th</sup> day of December, 2021.

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Erick Carter, Chair





**Mackenzie County**

# REQUEST FOR DECISION

<b>Meeting:</b>	<b>Regular Council Meeting</b>
<b>Meeting Date:</b>	<b>December 14, 2021</b>
<b>Presented By:</b>	<b>Len Racher, Chief Administrative Officer</b>
<b>Title:</b>	<b>Information/Correspondence</b>

## **BACKGROUND / PROPOSAL:**

The following items are attached for your information, review, and action if required.

- Council Action List
- 2021-11-12 - RCMP Correspondence
- 2021-11-25 – College of Physicians and Surgeons
- 2021-11-29 - Premier of Alberta – Reeve Knelsen
- 2021-12-02 - Minister of Municipal Affairs – Disaster Recovery Appeal
- 2021-12-06 - Alberta Recreation and Parks Association
- True North Health Advisory Council – Stakeholder letter
- 2021-12-08 - Correspondence – National Police Federation
- 2021-11-05 - Correspondence – Alberta Health Services – High Level re: Critical Staff Shortages
- 2021-12-08 - Correspondence – Alberta Health Services – High Level re: Mental Health Crisis in Northwest Alberta
- 2021-10-19 - MCLB Meeting Minutes

## **OPTIONS & BENEFITS:**

## **COSTS & SOURCE OF FUNDING:**

## **SUSTAINABILITY PLAN:**

**Author:** C. Sarapuk      **Reviewed by:** C. Sarapuk      **CAO:** \_\_\_\_\_

**COMMUNICATION / PUBLIC PARTICIPATION:**

**POLICY REFERENCES:**

**RECOMMENDED ACTION:**

- Simple Majority       Requires 2/3       Requires Unanimous

That the information/correspondence items be accepted for information purposes.

Author: C. Sarapuk      Reviewed by: \_\_\_\_\_      CAO: \_\_\_\_\_



## Mackenzie County Action List as of November 30, 2021

### *Council and Committee of the Whole Meeting Motions Requiring Action*

Motion	Action Required	Action By	Status
<b>February 22, 2016 Council Meeting</b>			
16-02-135	That the County covers the additional cost of the survey on Plan 5999CL, Lot E to date and have administration release a copy of the report to the landowner informing them that the initial investigation survey has been completed.	Byron	Refer to Motion 18-06-411  In progress. Meeting with landowners.  Impacted by 2020 flood.
<b>May 10, 2016 Regular Council Meeting</b>			
16-05-354	That administration be authorized to proceed as follows in regards to the Zama Crown Land Procurement: <ul style="list-style-type: none"> <li>• cancel PLS 080023;</li> <li>• <b>pursue acquisition of land parcels as identified on the map presented in red;</b></li> <li>• identify a parcel of land to be subdivided from Title Number 102 145 574 +1 (Short Legal 0923884; 21; 1) and offered for trade or sale to Alberta Environment and Parks due to its unsuitability for a hamlet development , specifically the land use restrictions per Alberta Energy Regulator.</li> </ul>	Don	PLS Cancelled.  Asset list with all leases, caveats, dispositions, easements, etc.  Response Received from AEP 2017-11-27.  Application submitted.  RFD to Council once response is received to our application.
<b>July 12, 2016 Regular Council Meeting</b>			
16-07-526	That the County pursue purchasing the leased lands at the Hutch Lake campground.	Don Len	Application for purchase of Hutch Lake has been filed.
<b>April 25, 2018 Council Meeting</b>			
18-04-315	That administration move forward in purchasing more land north of the existing Hutch Lake Cabins and that final costs be brought back to Council for decision.	Don	Sketch plan completed. Application to purchase is in submitted
<b>June 12, 2018 Council Meeting</b>			
18-06-432	That the County apply to Alberta Environment & Parks for a bank stabilization and clean-up along the Peace River in the Hamlet of Fort Vermilion as a result of the ice jam flooding event.	Jen & Jeff	In progress. Engineering report received. (WSP) Working on application.  2020 Flood Mitigation
<b>October 9, 2018 Regular Council Meeting</b>			
18-10-763	That administration proceeds with the water diversion license's as discussed.	John	Met with AE Reps. Got update on Licenses. Meeting in DEC.

Motion	Action Required	Action By	Status
<b>November 13, 2018 Regular Council Meeting</b>			
18-11-885	That the Zama Water Treatment Improvements Project be retendered with a project scope change.	John	<b>COMPLETE</b>
<b>November 5, 2019 Regular Council Meeting</b>			
19-11-676	That Mackenzie County representatives appointed to a provincial task force must provide regular written reports to council, shall immediately forward all task force material and information to council and CAO, and shall receive specific, prior approval from council to represent views or negotiate on behalf of the County.	Council	<b>Have not received a written report on this motion</b>
<b>January 29, 2020 Regular Council Meeting</b>			
20-01-055	That Administration move forward with applying for Recreational Leases for the Bistcho Lake cabin areas and consideration be given to the work being done by the Caribou Sub-regional Task Force.	Don	On hold. Pursuing reinstatement of commercial fishing.
20-01-067	That a letter be sent to the Minister of Municipal Affairs in regards to the Section 627(3) of the Municipal Government Act that relates to the number of councillor's on a Subdivision and Development Appeal Board.	Byron Carrie	In progress CC:RMA & AUMA
<b>June 5, 2020 Special Council Meeting</b>			
20-06-334	That administration continues to support a community recovery plan that includes a community engagement component.	DRT	Ongoing
<b>June 15, 2020 Special Council Meeting</b>			
20-06-373	That the Fort Vermilion future development continue to be investigated.	DRT	<b>COMPLETE</b>
<b>June 24, 2020 Regular Council Meeting</b>			
20-06-383	That applications be submitted for the three boat launch locations and that the Mackenzie County Search and Rescue River Access Plan be amended to include the additional access sites as identified in the 1991 Recreation Sites in the Lower Peace River Valley Report and be brought back to Council for approval.	Don	<b>COMPLETE</b>
<b>July 15, 2020 Regular Council Meeting</b>			
20-11-744	That the concepts and guidance provided within the La Crete Industrial Growth Strategy be incorporated into County planning documents.	Byron	Incorporated into the MDP 2022 Budget Request
<b>November 25, 2020 Regular Council Meeting</b>			
20-11-748	That Administration proceed in developing an offsite levy bylaw for the benefitting area of the La Crete South Sanitary Trunk Sewer for the purpose in recovering all costs associated with the sanitary sewer trunk improvements.	Byron	Working on draft offsite levy bylaw. No Change
20-11-774	That a letter be sent to Alberta Health Services regarding critical staff shortages in Northwest Alberta.	Len	In progress

Motion	Action Required	Action By	Status
December 16, 2020 Budget Council Meeting			
20-12-799	That the County lobby the provincial government (Red Tape Reduction) to consolidate grazing leases into a single tax roll to assist the province and the municipality to reduce red tape.	Len	In progress
20-12-808	Administration bring forward a policy review at each Committee of the Whole Meeting.	Len	<b>COMPLETE</b>
January 26, 2021 Committee of the Whole Meeting			
COW-21-01-007	That administration work with the landowner for farmland access options and bring a recommendation to Council.	Byron	<b>COMPLETE</b>
January 27, 2021 Regular Council Meeting			
21-01-075	That administration proceed with the land sale of Plan 082 6817, Block 3, Lots 11MR & 12MR for the purpose of consolidation.	Caitlin	Designation removed, waiting on land transfer
February 9, 2021 Regular Council Meeting			
21-02-111	That administration work with the Fort Vermilion School Division to complete a trade and land transfer for properties adjacent to the Blue Hills Community School, La Crete Public School and Fort Vermilion Public School.	Byron	<b>COMPLETE</b>
21-02-115	That administration prepare a new Land Use Bylaw Amendment to further restrict non-compatible uses near Mackenzie County airports	Caitlin	<b>COMPLETE</b>
March 9, 2021 Regular Council Meeting			
21-03-185	That administration include Option 4 - being place a new building on higher ground (new location) in the flood recovery work for the Fort Vermilion Airport, and that a detailed budget amendment to fund the works be presented to council prior to issuing a tender for the recovery/mitigation works.	Byron	<b>RFP- award on December 14<sup>th</sup> Council meeting</b>
March 24, 2021 Regular Council Meeting			
21-03-246	That administration be authorized to proceed with the sale of the land and transfer of title for amalgamation back into the quarter.	Caitlin	Waiting on land transfer
April 13, 2021 Regular Council Meeting			
21-04-313	That administration proceed with further developing the Offsite levy bylaw taking into consideration the average Canadian offsite levy is 2.5% –5 %.	Byron	<b>COMPLETE</b>
April 28, 2021 Regular Council Meeting			
21-04-337	That Mackenzie County support and submit the 2021 FRIAA grant funding proposal for Mackenzie County FireSmart Home Assessments (EOI-21-13) project.	Don	<b>COMPLETE</b>

Motion	Action Required	Action By	Status
<b>May 11, 2018 Regular Council Meeting</b>			
21-05-391	That administration reach out to non-profit organizations for proposals to proceed with a "Fall Community Clean-up" and bring back findings to Council.	Don	<b>COMPLETE</b>
21-05-419	That administration develop a Charitable Donations Policy.	Jen	In Progress
21-05-429	That administration proceed with submitting an offer to purchase for the land required for Storm Pond "A" as per policy and discussion.	Byron	<b>COMPLETE</b>
<b>May 26, 2021 Regular Council Meeting</b>			
21-05-462	That Administration proceed with issuing a Request for Proposals for the detail design and construction engineering for the La Crete North Sanitary Trunk Sewer.	Byron	<b>COMPLETE</b>
21-05-464	That administration proceed with upgrading the airport lighting at the Fort Vermilion (Wop May) Airport from halogen to LED.	Byron	<b>In Progress</b>
<b>June 8, 2021 Regular Council Meeting</b>			
21-06-498	That Mackenzie County attempt to gain representation in the next policy framework replacing Canadian Agriculture Partnership.	Grant	<b>In Progress</b>
<b>June 23, 2021 Regular Council Meeting</b>			
21-06-546	That the Minister of Agricultural and Forestry be invited to a Council meeting.	Len	Letter is Complete
<b>July 14, 2021 Regular Council Meeting</b>			
21-06-226	That administration work with the Ferry Campground to formulate a plan to obtain the lease for the creation of a new campground.	Don/Byron	In progress
21-07-531	That the property at 1030 Tower Road in Zama be publicly advertised and put up for sale with a closing date of August 14, 2021.	Jen	In Progress
21-07-540	That Councillor Jorgensen works with administration on submitting comments regarding the Draft Conservation Agreement for Wood Bison.	Byron	<b>COMPLETE</b>
21-07-541	That Mackenzie County apply for the Canada Community Revitalization Fund in the amount of \$500,000 to fund downtown improvements for Fort Vermilion.	Byron	<b>COMPLETE</b>
<b>August 18, 2021 Regular Council Meeting</b>			
21-08-563	That Administration advertise Bylaw 1231-21 to include an amendment to the deferral option to include a four (4) year deferral program as discussed.	Caitlin	<b>COMPLETE</b>

<b>Motion</b>	<b>Action Required</b>	<b>Action By</b>	<b>Status</b>
<b>September 14, 2021 Regular Council Meeting</b>			
21-09-607	That Leaders International be engaged for CAO Recruitment.		<b>COMPLETE</b>
21-09-623	That second reading be given to Bylaw 1231-21 being the La Crete Offsite Levy Bylaw be tabled until further date.	Byron	<b>TABLED</b>
21-09-637	That administration obtain required approvals and agreements with affected landowners for the West La Crete Road ditch cleanout.	Grant	In Progress
21-09-644	That a commemorative sign be placed at the Heritage Centre in La Crete and the Fort Vermilion lean-to museum highlighting the contribution that Bill Neufeld had in the paving of the Hwy 88 Connector.	Don/Len	<b>Ongoing. Jan 1<sup>st</sup> Draft</b>
21-09-657	That the Tax Recovery Auction for properties under tax arrears be set for February 23, 2022.	Jen	<b>Advertised</b>
21-09-658	That administration work with the Fort Vermilion School Division to complete a trade and land transfer for properties adjacent to the La Crete Distribution Pumphouse and Fort Vermilion Public School.	Byron	Transfers signed
21-09-667	That information regarding action item 16-05-354 be put together and a meeting requested with AEP at fall RMA convention.	Carrie	<b>COMPLETE</b>
<b>October 12, 2021 Budget Council Meeting</b>			
21-10-673	That the Frontier Veterinary Services Contract be extended for one year ending December 31, 2022.	Grant	<b>COMPLETE</b>
21-10-693	That administration incorporate the 2021 One Time Carry Forward projects in the Draft 2022 Operating budget as discussed.	Jen	<b>COMPLETE at end of year</b>
21-10-694	That the review of 2022 On Time Projects discussion be TABLED for future discussion.	Jen	<b>Presented November 19<sup>th</sup>, Dec 7 &amp; 8</b>
21-10-696	That Administration proceed with the sale of the closed portions of 100A Street to adjacent landowners at assessed value with all associated costs being borne by the buyer with the exception of those costs associated with registration of a waterline URW where required.	Caitlin	In progress- Surveyed
21-10-697	That the north portions of 100A Street (adjacent landowners) be sold back for the same price it was originally purchased to the adjacent landowners with all associated costs being borne by the applicant.	Caitlin	In Progress
<b>October 27, 2021 Regular Council Meeting</b>			
21-10-763	That administration work with legal to create a non-disclosure agreement for Councillors and that the	Len/Carrie	<b>Letter Complete</b>

Motion	Action Required	Action By	Status
	Information Technologist Department investigate electronic options for secure sharing of Closed Meeting information.		
21-10-769	That the Community Services Committee analyze Mackenzie County's Solid Waste requirements at the Waste Transfer Stations and bring back its findings and recommendations no later than August 2022, prior to future budget deliberations	Don	In progress
21-10-771	That Mackenzie County appeal the Disaster Recovery Program claim for the Chateh Road and include pictures and supporting information to facilitate the successful appeal.	Len/Carrie	<b>COMPLETE</b>
<b>November 9, 2021 Regular Council Meeting</b>			
21-11-765	That the current Waste Transfer Station Waste Haul Contract be extended by 6 months while Mackenzie County completes a full cost review of waste requirements and service levels.	Don	<b>COMPLETE</b>
21-11-772	That the Commercial Business Incentive Options be brought a Committee of the Whole meeting for further discussion.	Byron	<b>In Progress</b>
21-11-773	That a document regarding public recreation on crown land and Timber Damage Assessment be created for lobbying purposes.	Carrie	<b>COMPLETE</b>
<b>November 19, 2021 Budget Council Meeting</b>			
21-11-781	That an amendment to the fee schedule bylaw be brought to the next Budget Council meeting to increase the rural snow plow services to \$100/flag for rural residents, and \$40/flag for seniors effective January 1, 2022.	Jen/Carrie	<b>Dec 7<sup>th</sup> Meeting</b>
21-11-782	That an amendment to the fee schedule bylaw be brought to the next Budget Council meeting to include a \$5 monthly fee for hamlet residence for sidewalk snow removal/sweeping effective January 1, 2022.	Jen	<b>Dec 7<sup>th</sup> Meeting</b>
21-11-784	That administration engage with AUPE to begin negotiation discussions.	Carrie	<b>Dec 14<sup>th</sup> Council Meeting</b>
21-11-785	That the Track Sheet Change #1 be approved as presented and incorporated into the Draft 2022 Operating Budget.	Jen	<b>COMPLETE</b>
21-11-786	That the 2 summer staff positions under Community Services be moved to Operations and the Summer Staff Waste Transfer Station position be deleted.	Carrie	<b>Budget Meeting</b>
<b>November 30, 2021 Regular Council Meeting</b>			
21-11-794	That administration bring budget options to a future council meeting for a plow truck for Zama.	Willie	

<b>Motion</b>	<b>Action Required</b>	<b>Action By</b>	<b>Status</b>
21-11-798	That Mackenzie County support the bus shelters and enter into a Memorandum of Understanding with Fort Vermilion School Division.	Len	<b>COMPLETE</b>
21-11-800	That the Fort Vermilion Ice Plant Repairs – 2021 Amendment be TABLED until the December 14, 2021 Council Meeting.	Don/Jen	<b>Ongoing December 14<sup>th</sup> Meeting</b>
21-11-801	That administration amend the 2021 Capital Budget – Hutch Dock piles by an additional \$3,580.00 with funding coming from the General Operating Reserve, and the Community Services Committee explore options to secure the dock at Hutch Lake.	Jen	<b>COMPLETE</b>
21-11-802	That Policy FIN025 Purchasing Authority Directive and Tendering Process be amended as discussed and brought to the next council meeting for approval.	Carrie	December 16 <sup>th</sup> Budget Meeting
21-11-804	That the Flood Mitigation for Land Development Project be renamed Flood Mitigation and that the budget be amended to include \$12,800,000, with funding coming from the Conditional Grant Agreement with Alberta Municipal Affairs for the relocation of residents from the flood plain.	Jen	<b>COMPLETE</b>
21-11-811	That a letter be sent to corporate registries requesting the denial of the name change from Alberta Urban Municipalities Association to Alberta Municipalities due to in being misleading.	Carrie	<b>Ongoing</b>
21-11-813	That a letter be sent to the Minister of Justice and Solicitor General outlining the successes with RCMP and the oversight of the real problem which is justice.	Carrie/Len	<b>Ongoing</b>



Royal Canadian Mounted Police



Gendarmerie royale du Canada

Commanding Officer  
Alberta

Commandant  
de l'Alberta

November 12, 2021

Mackenzie County  
Reeve Josh Knelsen  
4511-46 Ave P.O. Box 640  
Fort Vermilion, Alberta T0H 1N0

Dear Reeve Knelsen:

Congratulations on your recent success in the municipal elections held on October 18, 2021.

Strong relationships and transparency with the local governments and communities we serve are vital in fostering healthy, resilient communities that are safe for all citizens. I look forward working with you and your colleagues as you advance your community's priorities during your term.

Whether re-elected or newly elected, I am certain we share some very similar goals, and you are as eager as I am to support the citizens you serve. Communication and collaboration in our partnership will ensure we meet those shared goals. Please feel free to reach out to your local Detachment Commander or directly to Superintendent Dave Kalist, the Officer in Charge of our Operations Strategy Branch at [dave.kalist@rcmp-grc.gc.ca](mailto:dave.kalist@rcmp-grc.gc.ca), if you have any questions about how the RCMP serves your community. Additionally, you are always welcome to contact me directly at 780-412-5444. We welcome opportunities to answer questions and have discussions about the safety and security of Albertans.

Once again, congratulations, and we look forward to supporting the community you lead.

Yours truly,

A handwritten signature in black ink that reads "C. M. (Curtis) Zablocki".

C. M. (Curtis) Zablocki, M.O.M.  
Deputy Commissioner  
Commanding Officer Alberta RCMP

11140 - 109 Street  
Edmonton, AB T5G 2T4

Telephone: 780-412-5444  
Fax: 780-412-5445



**OFFICE OF THE MAYOR**

November 25, 2021

Via email: [registrar@cpsa.ab.ca](mailto:registrar@cpsa.ab.ca)

College of Physicians & Surgeons of Alberta  
2700, 10020 100 Street NW  
Edmonton, AB  
T5J 0N3

Attention: Dr. Scott McLeod, Registrar

Dear Dr. <sup>Scott</sup>McLeod:

I am writing on behalf of Council to inform you that, at our regular Council meeting held on November 23, 2021, Cold Lake City Council passed a motion requesting that the College of Physicians & Surgeons of Alberta consider streamlining the assessment process for physicians moving to Cold Lake from outside of Canada.

Over the years, the City of Cold Lake has spent hundreds of thousands of dollars on doctor recruitment and retention efforts. These efforts have been — and remain — one of our Council's top priorities as many residents in our community are unattached to a local family physician.

It is our understanding that physicians moving to Cold Lake from outside of Canada must first complete an assessment at another healthcare facility prior to establishing their practice in our community. We understand that this process takes several months, after which the doctor is then oriented to the community and the local healthcare facilities and clinic at which he or she will establish a practice.

We have great respect for the doctors in our community, and we are confident that among them there are several who would be willing and able to assist in this assessment process locally. Doing so, we feel, would greatly streamline this process for doctors who are new to Canada, preventing drawn out orientation process, and allowing for a smoother transition to their community.

.../2



**OFFICE OF THE MAYOR**

-2-

It is our hope that these assessments take place at the Cold Lake Healthcare Centre by local physicians. If this is not a possibility, our Council would appreciate the opportunity to learn more about the assessment process and would like to extend an invitation to speak with you about the process. This information will assist our Council and our administration as we continue to work to support our local healthcare providers.

You may reach out at your earliest convenience or, alternatively, you may contact the City of Cold Lake's Chief Administrative Officer, Kevin Nagoya, at 780-594-4494 or via email at [knagoya@coldlake.com](mailto:knagoya@coldlake.com).

With warm regards,

Craig Copeland,  
Mayor

cc: The Honourable Jason Copping, Minister of Health  
Mr. David Hanson, MLA for Bonnyville - Cold Lake - St. Paul  
Dr. Verna Yiu, AHS President and CEO  
Alberta Municipalities  
Rural Municipalities Association  
Cold Lake City Council  
Kevin Nagoya, CAO





Premier of Alberta

Office of the Premier, 307 Legislature Building, Edmonton, Alberta T5K 2B6 Canada

November 10, 2021

Reeve Joshua Knelsen  
Mackenzie County  
PO Box 640  
Fort Vermilion AB T0H 1N0

Dear Reeve Knelsen:

On behalf of the Government of Alberta, I would like to offer you sincere congratulations on your recent election as Reeve of Mackenzie County. You are now fortunate to lead a truly great Alberta community!

Mackenzie County and our entire province have been through several challenging years. Our economy still has not fully recovered from the 2015 economic downturn, the impact of which was magnified by last year's global COVID-19 recession and energy price collapse. Despite these challenges, Albertans have continued to demonstrate true resilience and our province's greatest strength—a deep and abiding entrepreneurial culture.

Thanks in part to the determination of Albertans, we are experiencing a remarkable economic recovery across our province. With historic new investments across our economy, Alberta is now leading Canada in economic and job growth, and we are projected to continue the momentum in 2022. It is critical that we work together to continue this exciting progress so that those who have experienced so much adversity in recent years can fully participate in the current and coming recovery.

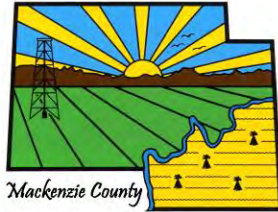
I very much look forward to working with you, your administration, and the Mackenzie County Council toward this end. Whatever political differences may exist, we all serve the same citizens who broadly share the same aspirations: the opportunity to achieve their potential through a strong economy, in a safe community with a high quality of life. You have my commitment to seek solutions together in a respectful and collaborative way. I am excited to meet with you in the weeks ahead to identify common goals and areas in which we can get real results for your residents, and for all Albertans.

With best of luck for a successful mandate as reeve, I remain

Yours sincerely

Hon Jason Kenney PC MLA  
Premier of Alberta

cc: Honourable Ric McIver, Minister of Municipal Affairs



## Mackenzie County

P.O. Box 640, Fort Vermilion, AB T0H 1N0  
Phone (780) 927-3718 Fax (780) 927-4266  
[www.mackenziecounty.com](http://www.mackenziecounty.com)

December 2<sup>nd</sup>, 2021

The Honourable Ric McIver  
Minister of Municipal Affairs  
132 Legislature Building  
10800 – 97 Avenue  
Edmonton, AB T5K 2B6

Dear Minister:

**RE: DISASTER RECOVERY APPEAL (DRP Application AR106274)**

First, Mackenzie County would like to thank you and your department for your support and continued commitment to our residents and their involvement with the Disaster Recovery Program.

On October 14<sup>th</sup>, 2021, Mackenzie County received correspondence (in reference to Mackenzie County DRP Application AR106274) for the Chateh Road, indicating the application did not meet the criteria necessary to support our claim.

Mackenzie County respectfully requests that our application remain open and on record. Our primary concern for this road is a result of the length of time it was under water and the potential for future structural problems to be identified. This road is utilized by heavy industrial trucks in the region as well as the main road for the Dene Tha' First Nations Community.

If you have any questions please feel to contact me at (780) 926-7405 or our Chief Administrative Officer, Len Racher, at (780) 927-3718 or by email to [lracher@mackenziecounty.com](mailto:lracher@mackenziecounty.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Josh Knelsen".

Josh Knelsen, Reeve  
Mackenzie County

cc: Mackenzie County Council

## Alberta Recreation and Parks Association

December 6, 2021

Dear Reeve and elected Councillors,



On behalf of the Alberta Recreation and Parks Association (ARPA), I would like to extend my congratulations on your recent election to your municipal council! You should be proud of the passion and dedication you have to making your communities better places to live, work and play.

I would also like to take this opportunity to introduce you to our Association. ARPA is a non-profit, volunteer run organization whose purpose is to collaboratively support our members and partners to (re)create healthy citizens, communities and environments, enhancing the wellbeing of all Albertans. The majority of municipalities in Alberta are members with ARPA, especially those that have recreation and parks within their planning and services.

Recreation and parks are the heart of our communities and often serve as the hubs for communities to gather and connect. In a recent study ARPA undertook, 77% of Albertans surveyed strongly agree that public recreation services are essential to their community and over 95% believe that recreation and parks make a community a desirable place to live.

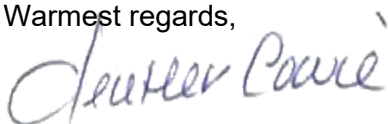
Over the past 18 months, Albertans have reconnected with nature and the outdoors. This has led to both opportunities and challenges. Over this same period the pandemic and changing restrictions has made it difficult to provide consistent, equitable and quality recreation programs in our indoor spaces.

ARPA is here to help our municipal members more than ever to support our citizens and communities to recover and re-engage with the activities they have always loved, or maybe just recently discovered. We are here to support your staff, volunteers and community leaders. We are also here to help you as elected officials.

I would also like to highlight the important role you have as a member of council to ensuring everyone in your community has access to affordable, quality recreation and park experiences. If you and your council would like to learn more about providing leadership to the recreation and parks in your own communities please contact us in regards to the Recreation and Parks for Elected Officials training we have available for both virtual and in-person. We would also love to host you at our annual Conference next October in Jasper. We will send you all invitations next summer once we have the program finalized.

Once again, my sincere congratulations on your appointment to council. We value the work you are doing to support the quality of life in your community, and we encourage you to reach out at any time with questions or simply to connect. You can contact our Executive Director, Steve Allan at 780-415-1745 ext. 102 or [sallan@arpaonline.ca](mailto:sallan@arpaonline.ca)

Warmest regards,



Heather Cowie  
President

11759 Groat Road NW • Edmonton • Alberta • T5M 3K6  
ph: 780-415-1745 • fax: 780-451-7915 • [arpa@arpaonline.ca](mailto:arpa@arpaonline.ca) • [www.arpaonline.ca](http://www.arpaonline.ca)



## True North Health Advisory Council is recruiting new members!

Dear community member:

On behalf of the True North Health Advisory Council, I would like to inform you of a volunteer opportunity with our Council, and invite you to apply.

As a member, you will have the opportunity to engage your friends, neighbours and community in discussion; provide a local perspective to AHS on our province-wide system; participate in engagement activities that contribute to improving health care services; and to provide feedback on what is working well in the health care system, and areas in need of improvement.

More specifically, we are seeking people who are:

- Passionate about healthcare and service delivery and live in the [True North Health Advisory Council area](#);
- 18 years of age or older;
- Appreciative of, and / or from diverse backgrounds of knowledge and experience;
- Connected to their community.

We host [public meetings and community events in our Council area](#) (expenses paid) and our members participate in community activities to hear from, and share information with community members. Learn more about the True North Health Advisory Council on the next page.

[Click here to learn more and to apply.](#)

We look forward to your application. If you are unable to apply but know a person suitable for the role, please share this invite with them.

Sincerely,

Nella Fehr, Chair

True North Health Advisory Council







## Building a better health system with the voice of our community

### Where we are

The True North Health Advisory Council stretches from Indian Cabins in the north to Rainbow Lake in the west, continuing eastward to Garden River and south to the Paddle Prairie Métis Settlement. The council area is a mixture of over 25 communities spread across 90,000 square kilometers of forests, fields, rivers, and lakes. Four reserves with a total of 10 First Nations communities, one Métis settlement, and a multitude of hamlets and rural communities all nestled along our rivers and lakes, and on expansive farmlands.



### Accomplishments

- Advocating for mental health needs and a need to fill staff vacancies; working with Addiction and Mental Health staff on providing regular updates.
- Partnered with AHS to host [Community Conversations](#) in High Level and Paddle Prairie (2019). Stakeholders engaged in discussion on what is working well in health care, challenges and opportunities for partnership.
- Partnered with AHS to host three virtual community engagement events (2021):
  - A training session on Psychological First Aid where we learned about managing stress, self-awareness and emotional literacy;
  - An information session on Wellspring Edmonton, an organization that provides free support services for people living with cancer in Northern Alberta;
  - An information session about the Alberta Healthy Living program and the free healthcare programming that is now available to Northern Albertans.

### Our role and objectives

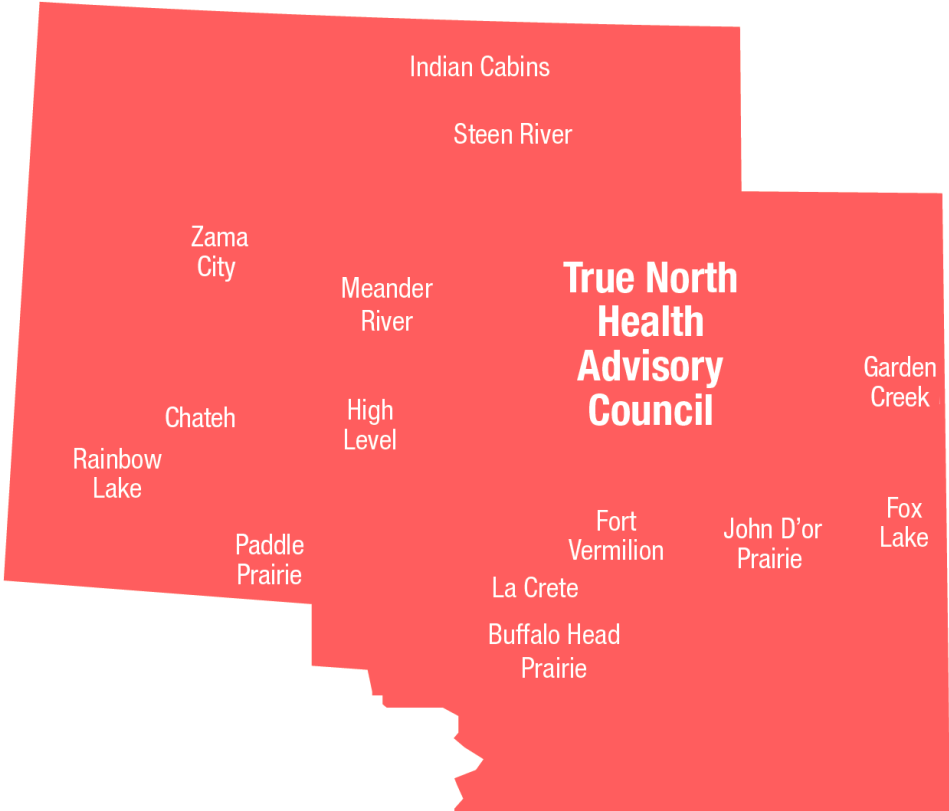
Everything we do is about improving the health and wellness of Albertans, no matter what part of the province they live in. We are a group of volunteers focused on listening to your thoughts and ideas about health services to help AHS enhance care locally and province-wide. We:

- Develop partnerships between the province's diverse communities and AHS.
- Provide feedback about what is working well within the health care system and suggest areas for improvement.
- Promote opportunities for members of our local communities to get engaged.

### Join us - your voice matters

There are a number of opportunities to participate:

- Attend an [upcoming council meeting](#) to hear feedback, offer comments, and ask questions.
- [Make a presentation](#) at our Council meeting on a health area of interest or concern to you.
- Bring your community's voice forward to provide input on local and regional health.
- Volunteer your time as a Council member. Recruitment is ongoing throughout the year until a council is at maximum membership. Members are appointed for a three-year term.
- Share your feedback with Council: [TrueNorth@ahs.ca](mailto:TrueNorth@ahs.ca).



**More information**

[AHS.ca/advisorycouncils](https://AHS.ca/advisorycouncils)

Toll free: 1-877-275-8830

[Full member list](#)

[Twitter](https://twitter.com/ahs_councils) (twitter.com/ahs\_councils)

[Facebook](https://facebook.com/advisorycouncils) (facebook.com/advisorycouncils)

[Indigenous communities map](#)

# Help build a better health system. Join the True North Health Advisory Council!

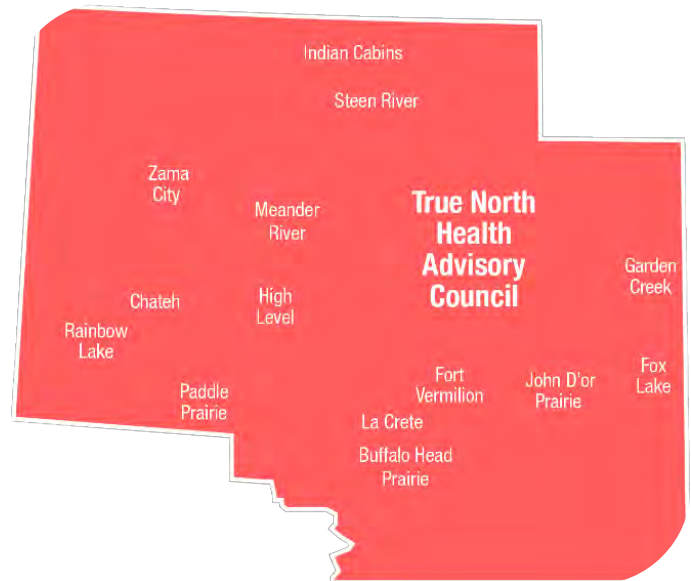
- Are you passionate about healthcare and service delivery?
- Do you enjoy engaging your friends, neighbours and community in discussion?
- Do you have interest in improving health and wellness in your community?

We are recruiting volunteer members to the True North Health Advisory Council.

If you're in the High Level, Rainbow Lake, la Crete, Fort Vermilion and Paddle Prairie areas, we'd like to hear from you!

Learn more about us online and apply today:  
[AHS.ca/advisorycouncils](https://ahs.ca/advisorycouncils)

More information:  
[community.engagement@ahs.ca](mailto:community.engagement@ahs.ca)



**More info:**

call: 1-877-275-8830

email: [truenorth@ahs.ca](mailto:truenorth@ahs.ca)



True North  
Health Advisory Council



**NATIONAL  
POLICE  
FEDERATION**

**FÉDÉRATION  
DE LA POLICE  
NATIONALE**

150 METCALFE STREET, SUITE 2201  
OTTAWA ON K2P 1P1

[www.npf-fpn.com](http://www.npf-fpn.com)

December 8, 2021

Reeve Joshua Knelsen  
Reeve of Mackenzie County  
PO Box 640  
Fort Vermilion, AB  
T0H 1N0  
Email: [josh@mackenziecounty.com](mailto:josh@mackenziecounty.com)

Dear Reeve Knelsen,

On behalf of the National Police Federation (NPF) I write to you today to share a recent [Pollara Strategic Insights survey](#) completed on the eve of the Government of Alberta's (GoA) release of the Alberta Provincial Police Service (APPS) Transition Study and released last week by the NPF.

Support for the Alberta RCMP has held strong in ongoing surveys over the past year despite the heavy politicization on the issue. Establishing a provincial police force remains a very low priority for Albertans with almost 2/3 saying it "does not help at all" and 70% opposing replacing the RCMP.

The NPF welcomed the long-awaited PricewaterhouseCooper (PwC) Transitional Study as it reconfirmed that not only would Albertans be receiving fewer trained police officers versus the RCMP, but the APPS would cost taxpayers more than \$550 million, representing \$188.3 million a year in lost federal contributions on top of the transition costs of over \$366 million. Albertans would be paying more and getting less, as the proposed APPS policing model would see only 1,613 fully trained officers versus the Alberta RCMP's current 3,097. We all know rural policing is complex and situations can evolve quickly. Alberta needs more fully trained officers, not fewer.

Beyond the numbers, we have heard repeatedly from Albertans and municipalities that they are happy with the services the Alberta RCMP provides and would like to continue having them be a part of their communities. In November, we had the privilege of meeting with municipal elected officials at both the Alberta Municipalities as well as the Rural Municipalities of Alberta tradeshows where we heard firsthand the positive impact RCMP Members have had in your communities and how we can continue to work to improve public safety in the province. We also recently attended the United Conservative Party convention where it was clear that the proposed APPS does not have broad support.

Support for the Alberta RCMP doesn't just come from local politicians, it also comes from Albertans. The Pollara Strategic Insights survey showed that 80% of Albertans in RCMP-served communities remain satisfied with RCMP policing. The GoA should focus on the priorities that matter to Albertans: decreasing rural response times, increasing resources for police, finding solutions to the revolving jailhouse door, and tackling crime in our communities.

We hope you will join us in calling on the GoA to listen to Albertans and invest in the existing Alberta RCMP rather than wasting hundreds of millions of dollars on a transition no-one is asking for. From

January 10<sup>th</sup> to April 1<sup>st</sup>, the GoA will be hosting “engagement sessions” throughout the province and we would encourage all elected officials to attend these meetings and speak up for their constituents and communities. We encourage all municipal governments to speak out publicly against this expensive and politicized police transition and keep the pressure on the GoA to walk away from this costly proposal.

If you require any additional details on the APPS and what the NPF is doing to support your communities, please visit [KeepAlbertaRCMP.ca](http://KeepAlbertaRCMP.ca). If you have any questions or comments or would like to schedule a meeting, please feel free to contact Colin Buschman, Western Government Relations Advisor, at [CBuschman@NPF-FPN.com](mailto:CBuschman@NPF-FPN.com).

The working relationship we have developed with you and city councillors is extremely important to us and we are always happy to meet with you and all communities across Alberta to better understand what Albertans really want and need.

Thank you again for your attention and ongoing support.

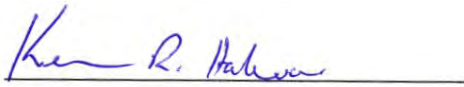
Regards,



Brian Sauvé  
President



Michelle Boutin  
Vice-President



Kevin R. Halwa  
Director, Prairie/North Region



Jeff McGowan  
Director, Prairie/North Region





Town of High Level  
10511 – 103 Street  
High Level, AB T0H 1Z0  
Canada

Telephone: 780-926-2201  
Facsimile: 780-926-2899  
town@highlevel.ca  
www.highlevel.ca

File# 0530 09

November 5, 2020

Alberta Health Services  
Seventh Street Plaza  
14th Floor, North Tower  
10030 – 107 Street NW  
Edmonton, Alberta  
T5J 3E4

Attn.: Dr. Verna Yiu, President & CEO

### **CRITICAL STAFF SHORTAGES IN NORTHWEST ALBERTA**

I am writing on behalf of the Town of High Level Council to express our concern with the ongoing staff shortages at the facilities in Area 1 of the North Zone of Alberta Health Services (AHS). The continued shortages have led to the elimination of health services in our area; including the closure of hospital beds.

The Town of High Level is home to the Northwest Health Centre, the main hospital for a region that is geographically larger than the province of New Brunswick and home to more than 30,000 people. If health services are not available in this region, our residents are required to travel more than 500 kilometres to Grande Prairie, more than 800 kilometres to Edmonton, or worse, completely forgo the required health service.

The Town would like to offer possible solutions to the difficulties in recruiting and retaining health staff.

- 1) Recruitment Incentives – Prior to the formation of Alberta Health Services the Northern Lights Health Authority utilized incentives to entice health care professionals to the north. While we do recognize that AHS provides a Northern Incentive, it appears it is not significant enough to aid in recruitment. Implementing an attraction bonus similar to the provincial government's package for employees who work north of the 57<sup>th</sup> parallel may assist with recruitment.
- 2) Educational Assistance – A few organizations in northwest Alberta have begun "grow our own" programs to educate and train local residents for positions. These programs provide educational incentives at all levels including Masters Degrees. Most of these programs provide funding for tuition, textbooks, and practicum placements.

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While these are not new ideas, they have been proven to work in our region. Recruitment incentives will come with a cost, but this can be balanced against the cost of locum professionals. The “grow our own” option would be less costly, but will require a long-term commitment on the part of AHS. Regardless of the solution, the financial cost should be outweighed by the fact that AHS is not able to deliver the health care programs and services required by our region.

Should you wish to discuss this further or if you have any questions, please contact me directly at (780) 841-5729 or through email: [cmcateer@highlevel.ca](mailto:cmcateer@highlevel.ca)

Sincerely,

A handwritten signature in black ink, appearing to read 'Crystal McAteer', with a long horizontal flourish extending to the right.

Crystal McAteer  
Mayor

cc: Hon. Tyler Shandro, Minister of Health  
Mr. Dan Williams, MLA Peace River  
Town of High Level Council  
Dene Tha' Chief and Council  
Mackenzie County Reeve and Council  
Town of Rainbow Lake Mayor and Council  
Dr. Heinrich Brussow





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December 8, 2021

Alberta Health Services  
Seventh Street Plaza  
14th Floor, North Tower  
10030 – 107 Street NW  
Edmonton, Alberta  
T5J 3E4

Attn.: Dr. Verna Yiu, President & CEO

### **MENTAL HEALTH CRISIS IN NORTHWEST ALBERTA**

I am writing on behalf of the Town of High Level Council to once again express our concern with the ongoing staff shortages at the facilities in Area 1 of the North Zone of Alberta Health Services (AHS). The continued shortages have led to the elimination of health services in our area; including the closure of hospital beds. (November 5, 2020 letter attached) The elimination of services in the northwest has continued with the recent AHS decision to cancel the contract with Dr. Paul Soper. This has led to a complete elimination of psychiatric services in our part of the province.

The Town of High Level is home to the Northwest Health Centre, the main hospital for a region that is geographically larger than the province of New Brunswick and home to more than 30,000 people. If health services are not available in this region, our residents are required to travel more than 500 kilometres to Grande Prairie, more than 800 kilometres to Edmonton, or worse, completely forgo the required health service.

Northwest Alberta faces significant issues related to addictions and mental health. According to *Alberta Health's Community Profile: High Level - Health Data and Summary (3rd edition, March 2017)* addiction and mental health statistics for Area 1 of the North Zone are as follows (numbers are standardized to reflect incidents per 100,000 population)

1. Emergency Department visits for Mental & Behavioural Disorders due to Psychoactive Substance Use are 3.3 times the provincial rate. (2,210.3 vs. 676.0)
2. Inpatient Separations for Mental & Behavioural Disorders due to Psychoactive Substance Use are 3.5 time the provincial rate. (471.3 vs. 136.7)
3. Emergency Department Visits Related to Mood and Anxiety Disorders are 3 times the provincial rate. (3,461.7 vs. 1,167.8)
4. Emergency Department Visits Related to Substance Abuse are 4.4 times the provincial rate (4,680.3 vs. 1,073.0)

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Recent staff relocations and ongoing organizational changes in mental health services has left Area 1 of the North Zone with 1.4 Mental Health Therapists. This is wholly inadequate to serve the needs of a region suffering from the addiction and mental health issues recognized by Alberta Health in their 2017 community profile.

The Town of High Level has been in contact with other concerned organizations in our region and we understand the Fort Vermilion School Division has requested a meeting with you to discuss the crisis situation in which AHS has placed this region through their recent decisions. We would like to request participation in any meetings that may be scheduled with local agencies or organizations to discuss these issues.

Thank you for your consideration of our concerns and our request.

Should you wish to discuss this further or if you have any questions, please contact me directly at (780) 841-5729 or through email: [cmcateer@highlevel.ca](mailto:cmcateer@highlevel.ca)

Sincerely,



Crystal McAteer  
Mayor

cc: Hon. Jason Copping, Minister of Health  
Hon. Mike Ellis, Associate Minister of Mental Health and Addictions  
Mr. Dan Williams, MLA Peace River  
Town of High Level Council  
Dene Tha' Chief and Council  
Mackenzie County Reeve and Council  
Town of Rainbow Lake Mayor and Council  
Dr. Jennifer Parker, Chief of Staff Area 1  
Dr. Mark Forder, Associate Zone Medical Director  
John La Forest, Manager, Addictions and Mental Health

Attachment:

November 5, 2020 letter to Dr. Verna Yiu re: Critical Staff Shortages in Northwest Alberta

**Mackenzie County Library Board (MCLB)  
October 19, 2021 Board Meeting Minutes  
Fort Vermilion Library**

**Present:** Beth Kappelar, Steven Simpson, Lorraine Peters, Wally Schroeder, Kayla Wardley, Sandra Neufeld, Lisa Wardley, and Tamie McLean.

**Absent:** Cameron Cardinal

**1.0** Beth Kappelar called the meeting to order at 6:23 pm.

**2.0 Approval of the Agenda:**

**MOTION #2021-08-01 Kayla Wardley** moved the approval of the agenda.

**CARRIED**

**3.0 Approval of the Minutes:**

**MOTION #2021-08-02 Lorraine Peters** moved the approval of the September 7/21 meeting minutes.

**CARRIED**

**4.0 Review of Action Items:**

- The action items of the previous MCLB meeting were reviewed.

**5.0 Financial:**

**5.1 MCLB Financial Report as of September 30/21:**

- Balance Forward \$ 87,433.11  
- Total Revenues \$ 352,034.12  
- Total Expenses \$ 315,993.68  
- Bank Balance \$ 123,473.55

**MOTION #2021-08-03 Tamie McLean** moved to accept the financial report as presented.

**CARRIED**

**5.2 Fort Vermilion Library Financials:**

- The Fort Vermilion Library has an approximate bank balance of \$60,000.  
- About \$3,700 has been spent on books and audio.  
- An Amazon book buying wish list could be developed with patron input.  
- The Fort Vermilion Library's content insurance will be increased to \$600,000.  
- A purchasing card to buy books and audio items will be obtained for the Fort Vermilion librarian.

**6.0 Library Reports:**

**6.1 La Crete:**

- Circulation for September was 11,848 items.  
- Financial to September 30/21 : Income 147K, Expenses 111K, Bank Balance 36K.  
- Ranwal Plumbing repaired the roof furnace.  
- The library was open during the new September 30<sup>th</sup> statutory holiday.  
- Library services to the lodge have been resumed.  
- A Purdys chocolate fundraiser is being held.  
- Due to new government restrictions, the Salmon Grill has been cancelled.

**6.2 Fort Vermilion:**

- No report.

**6.3 Zama:**

- No report.

**6.4 Mackenzie County Library Consortium (MCLC):**

- No report.

**6.5 High Level:**

- No report.

**MOTION #2021-08-04 Wally Schroeder** moved the acceptance of the library reports for information.

**CARRIED**

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**7.0 Old Business:**

- Tabled.

**8.0 New Business:**

**8.1 Policy Review:**

- The rest of the meeting was spent completing a MCLB policy review to determine changes and additions required.

**9.0 Correspondence:**

- None

**10.0 In Camera:**

- Not required.

**11.0 Next Meeting Date and Location: Fort Vermilion Library Nov 30, 2021 at 7:00 p.m.**

**12.0 Adjournment:**

**MOTION # 2021-08-05 Steven Simpson** moved to adjourn the meeting at 9:02 p.m.

**CARRIED**

**These minutes were adopted this 30th day of November 2021.**

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**Chair**