Notice of Alteration Form

Manitoba
Sustainable Development

Client File No. : 318.10	Environment Act Licence No. : 744 R
Legal name of the Licencee: Manitoba Housing and Renewal Corporation	
Name of the development: Sandy Bar Road Wastewater Treatment Facility	
Category and Type of development per Classes of Development Regulation: Waste Treatment and Storage — Wastewater treatment lagoons	
Licencee Contact Person: Brooke Drzystek, District Manager - Manitoba Housing and Renewal Corporati Mailing address of the Licencee: B18 – 25 Tupper Street N Portage la Prairie MB City: Portage la Prairie Province: MB Postal Code: R1N 3K1 Phone Number: (204) 871-0141 Fax: Email: brooke.drzystek@gov.mb.ca	
Name of proponent contact person for purposes of the environmental assessment (e.g. consultant): Jessica Manness, B.Sc, P.Eng, JME World Consultants	
Phone: (204) 330-1773 Fax:	Mailing address: 4 Stevens Avenue East Lockport, MB, R1A 3C7
Email address: jess@jme-consultants.com	
Short Description of Alteration *(max 90 characters)*: The effluent from the MMF Develop to the Manitoba Housing Sandy Bar Lagoon.	
Alteration fee attached: Yes: ☑ No: ☐ If No, please explain:	
Date: Jan 11/21	Signature: [redacted] Printed name: Brooke Drzystek, District Manager

A complete Notice of Alteration **(NoA)** consists of the following components:

- ☐ **Cover letter**
- ☑ **Notice of Alteration Form**
- ☐ **4 hard copies and 1 electronic copy of the NOA detailed report** (see "Information Bulletin - Alteration to Developments with Environment Act Licences")
- ☑ **$500 Application fee, if applicable** (Cheque, payable to the Minister of Finance)

Submit the complete NOA to:

Director
Environmental Approvals Branch
Manitoba Sustainable Development
Suite 160, 123 Main Street
Winnipeg, Manitoba R3C 1A5

For more information:

Phone: (204) 945-8321
Fax: (204) 945-5229
http://www.gov.mb.ca/conservation/eal

Wastewater Management System Design Brief

Gravity Services
Settlement and Effluent Tank
Low Pressure Sewer Forcemain

Proposed Development:

Sandy Bar Road Manitoba Metis Federation Seniors Housing Complex

Project Owners:

Manitoba Metis Federation

Report Date:

July 27, 2020

Project Engineers:
JME World Consultants
www.jme-consultants.com
4 Stevens Avenue East
Lockport, MB, R1A 3C7

1 Project Description

The Manitoba Metis Federation is planning the development of a 55-plus housing block, which is to be completed in two phases and include fully serviced stand-alone units. Accordingly, the proponent intends to construct a wastewater management system in support of the municipal needs of the development.

The project site is located at NE-14-16-4W, and in the lot north of Sandy Bar Road and west of St. Veterans Memorial Road, as shown in Figure 1.

Figure 1: Site Location

The first phase of development commenced construction in the fall of 2019. This phase includes:

- 9 wheelchair accessible residences
- One shared gathering building
- Groundwater well supplied water system
- Wastewater management system
- Two cul-de-sacs roads
- One laneway road

The second phase of development is scheduled for completion in approximately 2025. This phase of work will include:

- 10 additional multi-family structures (duplexes, i.e. 20 housing units are in Phase 2)

2 Wastewater Generation (from the new MMF Development)

There are two types of 55-plus homes planned to be serviced within the development area. This includes single detached dwellings and duplex dwelling units. Each residence is intended for an occupancy of 2 persons, with 2.3 persons used as the design occupancy herein. The home size will be 600 to 1000 sq. ft. There are 29 residences and 1 gathering centre in the development plan. This yields a design occupancy of 70 persons and a wastewater generation of 6899 m^3 per year.

3 Wastewater Collection System

The proposed wastewater collection system from the new residential housing units includes gravity piping, settlement and temporary storage, and a low-pressure sewer lift station. The residential buildings will be serviced with a gravity sewer network that discharges into a common-use onsite baffled septic tank. The baffled tank will contain a settlement chamber and a pumping chamber.

Each housing unit will be serviced by a gravity service line connected to a wastewater sewer main. There are three branches of wastewater mains which will converge at the septic tank. The tank will allow settlement and flow of the effluent into the second chamber.

3.1 Effluent and Sludge Removal

The liquid effluent will be extracted by a pump within the effluent chamber of the septic tank. The effluent will be conveyed by this low pressure forcemain to the wastewater lagoon.

The sludge (solid waste) removal from the tank shall be lifted via truck and deposited into the St Laurent Municipal Lagoon. The municipality authorizes the disposal of sludge to the municipal lagoon. It is planned for sludge removal from the septic tank to occur once a year.

3.2 Baffled Septic Tank Design

The baffled septic tank is designed as follows:

- 24-hour settlement time
- 10-day minimum solids holding period
- Average daily wastewater generation from new houses: 18,900 L/day (10% diverted from wws)
- There is no infiltration at manholes (cleanouts are designed instead)
- Sludge/scum accumulation rate: 40 L/pers/yr = 40 L x 70 pers /365 d/yr = 7.7 L/d
- Sludge removal will occur once per year

The settlement chamber requires a 24-hour retention capacity.

Settlement chamber volume = ADD x 90% + sludge accumulation
= 18,900 x 0.9 + 7.7 x 183 days
= 18,419 L/d (4051 Igal)

Effluent compartment volume = 20% of settlement volume = 3,683 L (810 Igal)

Total tank storage size required: 4,861 Igal

It is intended that one standard size 8000 Igal fibreglass septic tank be installed, with a divider for the second chamber installed at 1000 gal.

3.2.1 Baffled Septic Tank Construction

The septic tank material and installation shall follow the Manitoba Onsite Wastewater Guidelines and CSA Standards. Additionally, the septic tank shall be anchored down to prevent floating.

4 LPS Effluent Treatment Lagoon (Sandy Bar Lagoon)

The effluent will be pumped to the Manitoba Housing Sandy Bar Lagoon. Manitoba Housing has provided authorization for the MMF Development to discharge effluent to this lagoon. The civil plans for the MMF development, LPS forcemain, and lagoon alterations drawings are appended to this design brief.

It is noted that the capacity and condition of the lagoon must be adequate and sufficient for delivery of the effluent. As such, the JME World Consultants team have reviewed the following lagoon study and letter and summarized the applicable findings below:

- "Lagoon Assessment, St. Laurent, Manitoba"; Report Number: 12-1380-0086; Golder and Associates, 2013
- Letter: Notice of Alteration – Sandy Bar Road Wastewater Treatment Facility; KGS Consultants to Tracey Braun; Conservation and Water Stewardship; November 17, 2015

The purpose of the Golder's assessment report (Number: 12-1380-0086; Golder and Associates,) was to investigate the apparent stability of the berm, the local groundwater conditions and the potential for environmental concern related to seepage from the lagoon to the surrounding landscape.

The purpose of the KGS' letter of alternation is to introduce a tertiary cell to increase the storage capacity as well as the retention time.

4.1 Lagoon Location

The Sandy Bar Lagoon is located to the north of Pioneer Drive and east of St. Veterans Memorial in the rural settlement centre of St. Laurent, Manitoba. There is a maintenance-only access road from Pioneer Drive.

4.2 Lagoon Construction Details

The lagoon was constructed early 1970's. The following design standards (references S-1-A drawn by KSY, October 1971) were followed for the Sandy Bar Lagoon construction:

- The bases of the cells were constructed of compacted clay.
- The inner and outer slope is 3H:1V.
- The maximum operating depth of liquid in the cell is 0.9 m (2.95 ft).
- The height of the freeboard is 0.61 m (2ft).
- The width of the berm at crest is 2.44 m (8ft).
- The berm was constructed with compacted impervious earth.

5 Lagoon Stability Condition

Based on the visual inspection conducted by Golder on June 12, 2013, the following issues were observed and that can be mitigated by routine maintenance.

- Erosion was occurring on the interior of the berm and reducing the slope of the interior bank.
- Minor sliding was observed on the interior of the berm.
- Tension cracks were observed at discrete locations on the interior side of the crest of the berm.
- Depressions were noted on the crest of the berm.

5.1 Lagoon Groundwater Condition

The following summarizes groundwater risks, as documented by Golder in 2013:

- The groundwater at the site had not been impacted by nutrients (nitrogen and phosphorus) as indicated in the analytic result of the groundwater sampled on August 28, 2013.
- The Golder report also indicated the absence of a conductive aquifer and the thickness of fine-grained materials were identified beneath the lagoon, which lead to the conclusion that there is no significant risk of groundwater impacts.
- The analytical results, at the time of investigation and monitoring indicated that the groundwater at the site was not impacted by nutrients. The analytical test results for the ground water had been compared to the Canadian Council of Ministers of the Environment (CCME) guidelines Canadian Water Quality for the Protection of Aquatic Life (updated 2012) and Manitoba Water Quality Standards, Objectives and Guidelines (updated in 2011).

5.2 Lagoon Surface Water Condition

Based on the assessment report by Golder in 2013, the concentrations of nitrite, TKN, total phosphorus and BOD were found to be low and within the Manitoba Surface Water Quality Guidelines. The concentration of nitrate and nitrites were below the analytical detection limit in the surface water samples.

5.3 Total Effluent

It is documented that the Sandy Bar Lagoon was designed to service the local school, a senior's residence, and thirty-four houses along Sandy Bar Road, Buffalo Drive, and Louis Riel Drive. The design capacity of the lagoon is 26,900 m^3 per year and the combined maximum hydraulic retention time for the Primary cell and Secondary cell is approximately 18 months. The total loading on this facility has been reduced approximately 50% due to the closure of 26 homes in the area (as per the KGS letter, 2015). The estimated total yearly flow is 13,600 m^3 per year from the school, senior's residence, and 8 houses.

JME calculated the generated effluent from the proposed houses to be 6,899 m^3 annually. Therefore, the total accumulation of effluent generation is 20,500 m^3 ,which is within the lagoon design capacity (26,900 m^3).

Table 1: Overall Wastewater Generation to Sandy Bar Lagoon:

Item #	Wastewater Contribution Categories	Estimated Number of Individuals	Hydraulic Loading Rate (L/pers/day)	Estimated Total Daily Flow(L/day)	Estimated Total Yearly Flow(m^3)	Comments
	New Residential Facilities					
1.	Manitoba Metis Federation Sandy Bar Housing Development	29 housing units plus a shared gathering building (total 70 persons)	270	18,900	6,899	JME World consultants - Water Servicing Design Report
		Subtotal		**18,900**	**6,899**	
	Existing Facilities					
2.	Senior Residents	22	350	8,750	3,200	KGS Report
3.	Students and Faculty	150	200	30000 (210 days/yr.)	6,300	KGS Report
4.	Manitoba Housing	8 houses, 32 persons	350	11,200	4,100	KGS Report

	(existing houses)					
		Subtotal		**49,950**	**13,600**	
		Total		**68,850**	**20,499**	

5.4 Effluent Discharge Path

The effluent from the secondary cell was initially directly discharged to Lake Manitoba. However, in 2015 an alteration of the effluent discharge practises and procedure was designed by KGS (KGS file NO. 15-0321-01). Subsequently, the area between the flood protection dike and the primary and secondary cells is now used as a tertiary cell for further polishing of effluent before release to the nearby surface waterbody.

As guided in KGS report, a new interconnected valve was installed on the Secondary Cell and converted the culvert through the flood protection dyke to a valve. Following CEC744 guidelines, the effluent from the tertiary cell is discharged into the nearby marshy area located west of the lagoon typically annually in October, when the lagoon liquid meets the licenced water quality limits.

5.5 Lagoon Capacity and Retention Times

After introducing the tertiary cell, the lagoon is estimated to have a maximum storage capacity of approximately 43,000 m^3 that yields a maximum hydraulic retention time of 25 months (KGS, 2015).

6 Summary

The Manitoba Metis Federation would like to construct 29 new housing units with a common gathering centre, specifically designed for senior citizens. That yields a design occupancy of 70 persons which will generate approximate 6,900 m^3 of wastewater effluent per year. In support of the municipal needs of the new development, a wastewater management system is required, and the MMF intends to discharge the effluent to the Sandy Bar Lagoon that is owned by Manitoba Housing. Manitoba Housing has provided authorization for the use of this lagoon.

The condition of the lagoon was assessed in 2013 by Golder's Associates and the capacity of the lagoon capacity was increased by introducing the tertiary cell in 2015 by following the "Letter of Alternation" prepared by KGS' Consultants. After reviewing these documents, it is contemplated that the condition and capacity of the lagoon are adequate and sufficient for storage of the additional effluent generated by the MMF development.

The effluent from the new MMF development will be discharged to the Sandy Bar Lagoon directly via a new low pressure sewer forcemain. The lagoon will require alteration to add an effluent inflow pipe, pipe valve, and inflow splash pad.

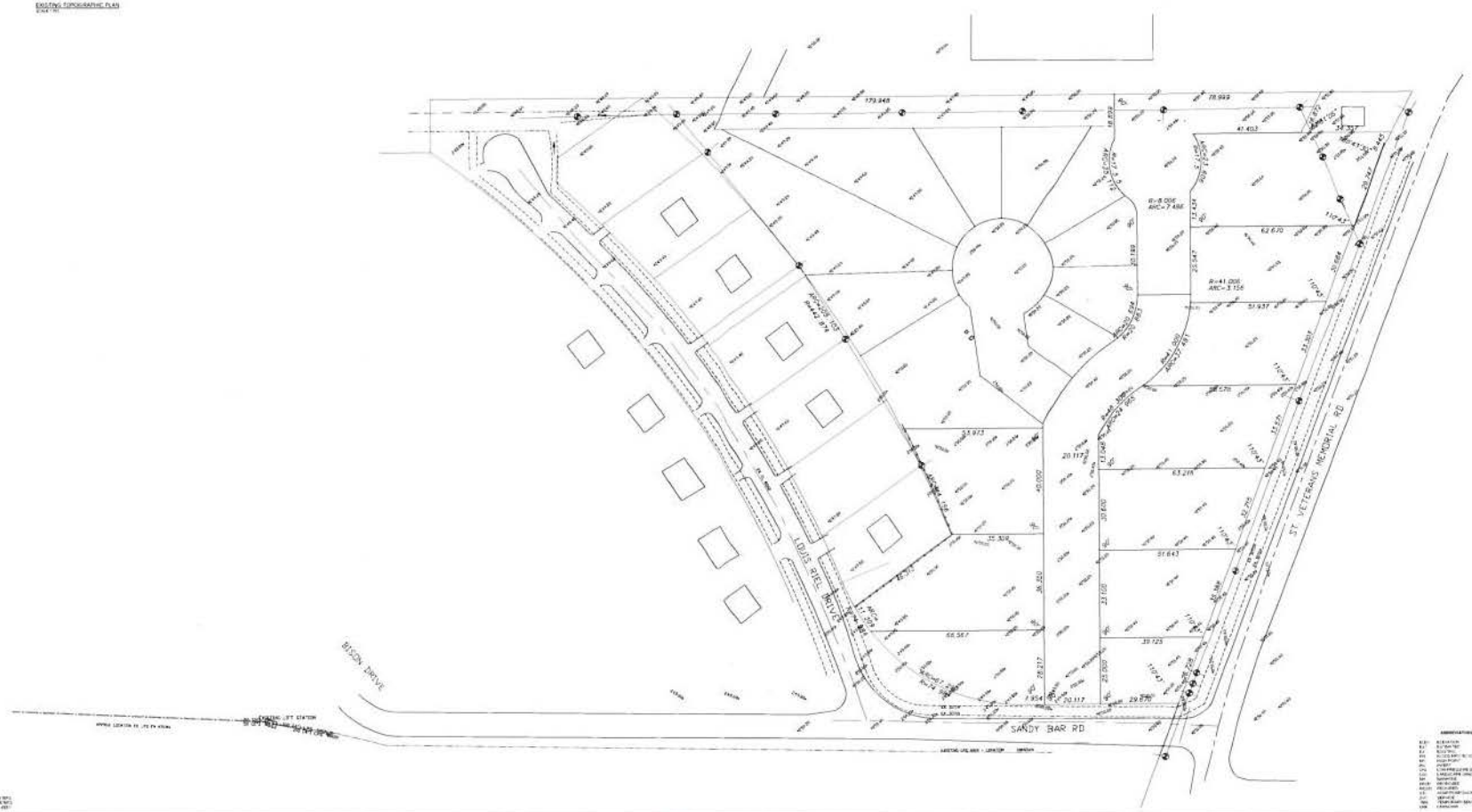
7 Recommendation

To provide the wastewater management required for the new MMF development, JME World Consultants recommends from each unit a gravity service pipes flows to a common baffled septic tank. The tank effluent is then to be pumped through a low pressure sewer forcemain which terminates within the Sandy Bar Lagoon. The tank sludge is to be hauled to the St. Laurent Municipal Lagoon. This will provide the residential area with safe and reliable wastewater management.

GENERAL NOTES

1. THIS DRAFT PLOT PLAN ALL DISTANCES ARE APPROXIMATE
2. ALL DISTANCES ARE IN METRES AND SHALL BE CONVERTED TO FEET BY METRIC UNITED CANADA
3. DIMENSIONS AND REAL TIME LOCATION OF EXISTING STRUCTURES SHALL BE CONFIRMED PRIOR TO MAKING CONSTRUCTION. THE PROPERTY SHALL BE INSPECTED BY ALL CONTRACTORS
4. ZONE DISTRICTS DETAILS WERE APPROVED BY LOCAL BASIS
5. LOCATIONS OF UNDERGROUND UTILITIES MUST BE CONFIRMED
6. ALL CONSTRUCTION SHALL COMPLY WITH MINISTRY LAWS, REGULATIONS AND LOCAL STANDARDS
7. ALL PLANS PROVIDED TO ARE IN METRIC & THE ANSWER LOAD TYPES DRIVE
8. ALL ELEVATIONS BETWEEN ELEVATIONS DATUM AND GEODETIC ELEVATIONS MAY BE CONVERTED TO GEODETIC ELEVATIONS BY ADDING 0.00

EXISTING TOPOGRAPHIC PLAN
SCALE 1:750



METRIC

	PROPERTY BOUNDARY			WATER LINE						
	BUILDING (FOOTPRINT)			DOMESTIC WELL						
	RETAINING WALL			VALVE						
	TOP OF BANK			MANHOLE						
	DRAINAGE DITCH			SEPTIC FIELD						
	GAS		LPS	LOW PRESSURE SEWER	LPS					
	UNDERGROUND HYDRO			SEPTIC / HOLDING TANK / LID						
	RAILWAY			BENCHMARK						
232.20	ELEVATION	232.20		CURBSTOP		2	REVISED PROPERTY LINES			
232.20	SITE PLANNED ELEVATION	232.20		PLUG		1	UPDATED ANNOTATIONS			
	PROPOSED GRADING SLOPE	-0.5%		HYDRO, POLE AND ANCHOR		A	SUBMITTED FOR REVIEW			
EXISTING	LEGEND PLAN	PROPOSED	EXISTING	LEGEND PLAN	PROPOSED	NO.	REVISIONS	DATE	BY	CHK

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DESIGNED: JAM	
DRAWN: TR/RH	
HOR. SCALE: 1:750 (24X36)	PROJECT NUMBER: 190607
DATE DRAWN: JUN 18, 2019	DATE OF SURVEY: UNKNOWN

[redacted]

C100

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Certificate of Authorization
JESSICA MANNESS
ENGINEERING, INC.
No. 5834

RM OF ST. LAURENT

EXISTING TOPOGRAPHIC PLAN

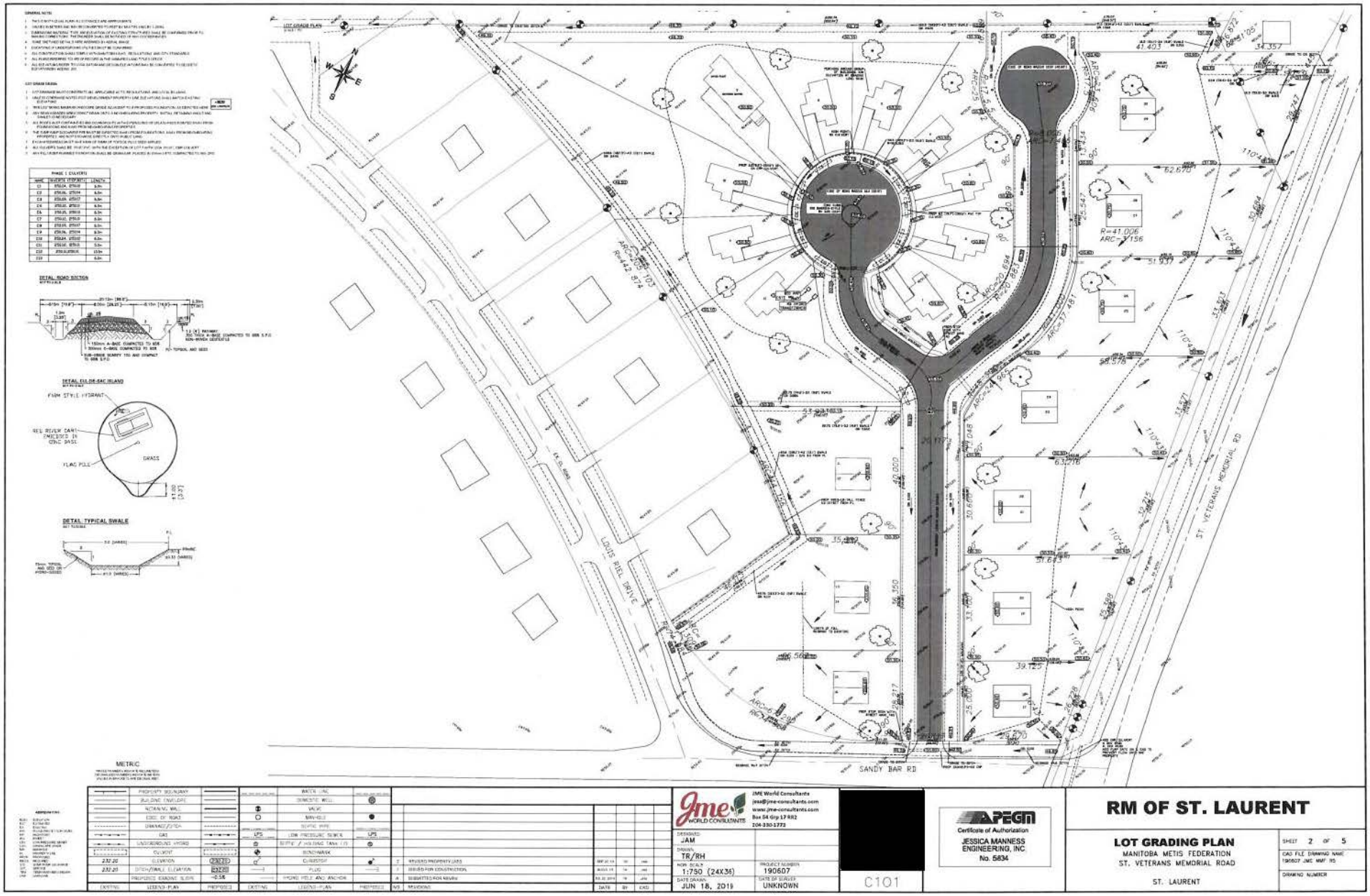
MAR-PELL ENTERPRISES LTD.
ST. VETERANS MEMORIAL ROAD

ST. LAURENT

SHEET 1 OF 5

CAD FILE DRAWING NAME
190607 JME MMF 45

DRAWING NUMBER


GENERAL NOTES
LOT GRADE PLAN
DETAIL ROAD SECTION
DETAIL CUL-DE-SAC ISLAND
FARM STYLE HYDRANT
RED RIVER CART EMBEDDED IN CONC BASE
GRASS
FLAG POLE
DETAIL TYPICAL SWALE
LOUIS RIEL DRIVE
SANDY BAR RD
ST. VETERANS MEMORIAL RD
METRIC
PROPERTY BOUNDARY
BUILDING ENVELOPE
RETAINING WALL
EDGE OF ROAD
DRAINAGE DITCH
CAT
UNDERGROUND HYDRO
CLIENT
ELEVATION
DITCH/SWALE ELEVATION
PROPOSED GRADING SLOPE
EXISTING
LEGEND PLAN
PROPOSED
WATER LINE
DOMESTIC WELL
VALVE
MANHOLE
SEPTIC PIPE
LOW PRESSURE SEWER
SEPTIC / HOLDING TANK LID
BENCHMARK
CURB STOP
PLUG
PHONE POLE AND ANCHOR
EXISTING
LEGEND PLAN
PROPOSED
REVISED PROPERTY LINES
ISSUED FOR CONSTRUCTION
SUBMITTED FOR REVIEW
REVISIONS
DATE
BY
DES
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1:750 (24X36)
DATE DRAWN
JUN 18, 2019
PROJECT NUMBER
190607
DATE OF SURVEY
UNKNOWN
C101
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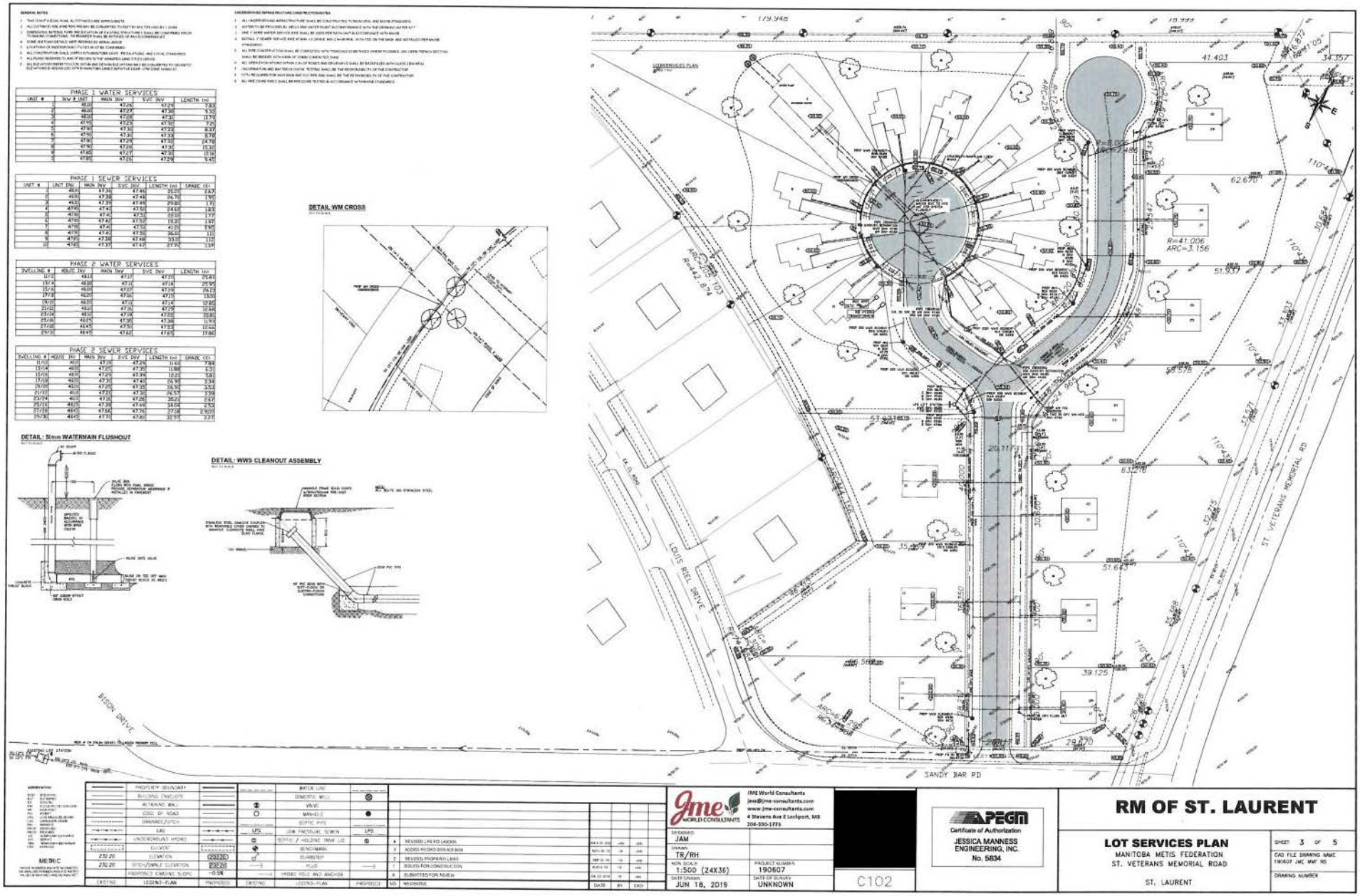
No. 5834
RM OF ST. LAURENT
LOT GRADING PLAN
MANITOBA METIS FEDERATION
ST. VETERANS MEMORIAL ROAD
ST. LAURENT
SHEET 2 OF 5
CAD FILE DRAWING NAME
190607 JME MMF 95
DRAWING NUMBER



PHASE 1 WATER SERVICES

UNIT #	W/V # UNIT	MAIN INV.	SVC INV.	LENGTH (m)
1	48.00	47.29	47.29	7.83
2	48.00	47.27	47.30	9.30
3	48.00	47.28	47.32	13.79
4	47.95	47.29	47.30	7.71
5	47.90	47.30	47.32	8.97
6	47.90	47.30	47.33	8.78
7	47.90	47.29	47.32	24.78
8	47.90	47.28	47.30	15.30
9	47.85	47.27	47.30	20.16
10	47.85	47.26	47.29	9.45

PHASE 1 SEWER SERVICES

UNIT #	UNIT INV.	MAIN INV.	SVC INV.	LENGTH (m)	GRADE (%)
1	48.05	47.36	47.46	20.20	2.67
2	48.00	47.38	47.48	24.76	1.90
3	48.00	47.39	47.49	29.86	1.71
4	47.90	47.42	47.52	24.83	1.81
5	47.90	47.42	47.51	20.06	1.77
6	47.90	47.42	47.52	19.23	1.97
7	47.90	47.42	47.51	42.23	1.90
8	47.90	47.43	47.50	36.00	1.11
9	47.85	47.38	47.48	33.01	1.12
10	47.85	47.37	47.47	27.76	1.39

PHASE 2 WATER SERVICES

DWELLING #	HOUSE INV.	MAIN INV.	SVC INV.	LENGTH (m)
12/13	48.10	47.17	47.29	25.87
13/14	48.00	47.19	47.34	25.95
15/16	48.00	47.27	47.39	26.13
17/18	48.20	47.36	47.51	13.06
19/20	48.55	47.51	47.64	12.85
21/22	48.60	47.56	47.70	12.84
23/24	48.50	47.56	47.70	25.81
25/26	48.65	47.56	47.68	11.93
27/28	48.45	47.55	47.67	12.44
29/30	48.45	47.54	47.65	17.86

PHASE 2 SEWER SERVICES

DWELLING #	HOUSE INV.	MAIN INV.	SVC INV.	LENGTH (m)	GRADE (%)
12/13	48.0	47.26	47.26	11.66	7.84
13/14	48.00	47.25	47.35	11.86	6.31
15/16	48.00	47.29	47.39	12.22	5.81
17/18	48.15	47.31	47.41	16.96	3.54
19/20	48.25	47.28	47.38	26.30	3.53
21/22	48.0	47.30	47.36	26.57	3.39
23/24	48.0	47.16	47.26	36.21	2.67
25/26	48.25	47.29	47.49	34.04	2.50
27/28	48.45	47.56	47.76	27.16	2.93
29/30	48.45	47.73	47.83	20.97	2.27

	PROPERTY BOUNDARY			WATER LINE	
	BUILDING ENVELOPE			DOMESTIC WELL	
	RETAINING WALL			VALVE	
	EDGE OF ROAD			MANHOLE	
	DRAINAGE DITCH			SEPTIC PIPE	
	CAB		UPS	LOW PRESSURE SEWER	UPS
	UNDERGROUND HYDRO			SEPTIC / HOLDING TANK LID	
	EASEMENT			BENCHMARK	
232.20	ELEVATION	232.20		DUMPSTER	
232.20	BUILDING ELEVATION	232.20		FLUE	
	PROPOSED GRADING SLOPE	-0.5%		HYDRO POLE AND ANCHOR	
EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED

METRIC

NO	REVISIONS	DATE	BY	CKD
4	REVISED LPS TO LAGOON	NOV. 05 '19	JAM	JAM
3	ADDED HYDRO SERVICE BOX	NOV. 01 '19	JAM	JAM
2	REVISED PROPERTY LINES	SEP. 25 '19	JAM	JAM
1	ISSUED FOR CONSTRUCTION	AUG. 16 '19	JAM	JAM
A	SUBMITTED FOR REVIEW	JUL. 18 '19	JAM	JAM

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NON. SCALE: 1:500 (24X36)
DATE DRAWN: JUN 18, 2019
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DATE OF SURVEY: UNKNOWN

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RM OF ST. LAURENT

LOT SERVICES PLAN

MANITOBA METIS FEDERATION
ST. VETERANS MEMORIAL ROAD

ST. LAURENT

SHEET 3 OF 5
CAD FILE DRAWING NAME: 190607 JME MMF RS
DRAWING NUMBER

MUNICIPAL INFRASTRUCTURE OVERVIEW
SHEET NO.

	PROPERTY BOUNDARY			WATER LINE	
	BUILDING ENVELOPE			DOMESTIC WELL	
	RETAINING WALL			VALVE	
	EDGE OF ROAD			MANHOLE	
	DRAINAGE/DITCH			SEPTIC RISER	
	GAS		LPS	LOW PRESSURE SEWER	LPS
	UNDERGROUND HYDRO			SEPTIC / HOLDING TANK LID	
	TELEPHONE			BENCHMARK	
232.20	ELEVATION	(232.20)		CURB STOP	
232.20	DITCH/SWALE ELEVATION	232.20		PILE	
	PROPOSED GRADING SLOPE	-0.5%		HYDRO POLE AND ANCHOR	
EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LOCING - PLAN	PROPOSED

NO	REVISIONS	DATE	BY	CKD
3	REVISED LOT LOCATION DESIGN			
2	REVISED PROPERTY LINES			
1	ISSUED FOR CONSTRUCTION			
A	SUBMITTED FOR REVIEW			

METRIC

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PROJECT NUMBER: 190607
DATE OF SURVEY: UNKNOWN

[redacted]

C201

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No. 5834

RM OF ST. LAURENT

INFRASTRUCTURE OVERVIEW

MANITOBA METIS FEDERATION
ST. VETERANS MEMORIAL ROAD

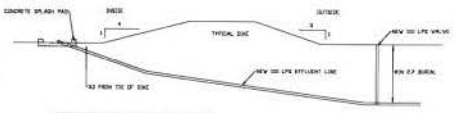
ST. LAURENT

SHEET 4 OF 5
CAD FILE DRAWING NAME: 190607 JME MMF R5
DRAWING NUMBER

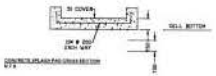
LAGOON AND EFFLUENT INFLOW PLAN VIEW

NEW LOW PRESSURE SEWER EFFLUENT LINE CONSTRUCTION NOTES

1. ALL UNDERGROUND INFRASTRUCTURE SHALL BE CONSTRUCTED TO MUNICIPAL RECORDS STANDARDS.
2. DESIGN BASED ON REASONABLE FEATURES, AERIAL PHOTOGRAPH AND HISTORIC KNOWLEDGE. SOME FEATURES MAY NOT BE EXACTLY AS SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE FIELD REVISIONS ARE TO BE REVIEWED TO THE SUB-ENGINEER.
3. UNDERGROUND UTILITY LOCATES REQUIRED.
4. CONTRACTOR TO PROVIDE CONTAINING AND EXCAVATION BARRIERS FOR THE DURATION OF WORK WITHIN THE PROVINCIAL FLOOD DIKE. SITE INSPECTION OF NEW PIPE MUST BE COMPLETED PRIOR TO REMOVAL OF THE CONTAINING.
5. SURFACE AND DEEP TOPSOIL MATERIAL MUST BE REMOVED FROM THE CONCRETE PAD LOCATION PRIOR TO INSTALLATION OF THE PVC SURFACE TYPE EXPOSED OF ALL UNSUITED SOIL WITHIN THE FOOTPRINT OF THE PRIMARY CELL.
6. PRESSURE TESTING OF THE LPS PIPE UP TO THE VALVE NEAR THE LAGOON REQUIRED. AS PER PROVINCE OF MANITOBA STANDARDS.



TYPICAL DIKE CROSS SECTION WITH LPS EFFLUENT INFLOW PIPE
N.T.S



CONCRETE SPLASH PAD CROSS SECTION
N.T.S

CONCRETE SPLASH PAD DETAIL
N.T.S

METRIC

	PROPERTY BOUNDARY			WATER LINE					
	BUILDING ENVELOPE			DOMESTIC WELL					
	RETAINING WALL			VALVE					
	EDGE OF ROAD			MANHOLE					
	DRAINAGE DITCH			SEPTIC PIPE					
	GAS		LPS	LOW PRESSURE SEWER		LPS			
	UNDERGROUND HYDRO			SEPTIC / HOLDING TANK LID					
	FENCE			BENCHMARK					
232.20	ELEVATION	(232.20)		CURB STOP					
232.20	DITCH/SWALE ELEVATION	232.20		FLAG					
	PROPOSED GRADING SLOPE	-0.5%		HYDRO POLE AND ANCHOR			A	SUBMITTED FOR PERMIT	
EXISTING	LEGEND - PLAN	PROPOSED	EXISTING	LEGEND - PLAN	PROPOSED		NO	REVISIONS	DATE

JME World Consultants
jess@jme-consultants.com
www.jme-consultants.com
4 Stevens Ave E Lockport, MB
204-530-1773

DESIGNED: JAM
DRAWN: JAM
NON SCALE: 1:500 (24X36)
DATE DRAWN: JULY 26, 2020
PROJECT NUMBER: 190607
DATE OF SURVEY: UNKNOWN

C202

APEGM
Certificate of Authorization
JESSICA MANNESS ENGINEERING, INC.
No. 5834

RM OF ST. LAURENT

PROPOSED LPS OUTFLOW

MANITOBA METIS FEDERATION
ST. VETERANS MEMORIAL ROAD

ST. LAURENT

SHEET 5 OF 5
CAD FILE DRAWING NAME: 190607 JME MAF R5
DRAWING NUMBER

ASSINIBOINE INJECTIONS

Assiniboine Injections Ltd.
BOX 160, 177 Notre Dame Ave
Notre Dame de Lourdes, MB, R0G 1M0
PH: 204-248-2559 FAX: 204-248-2799
Email: info@lagooncleaning.com

BIOSOLIDS SURVEY

LOCATION
SAINT LAURENT
50.407641, -97.952192

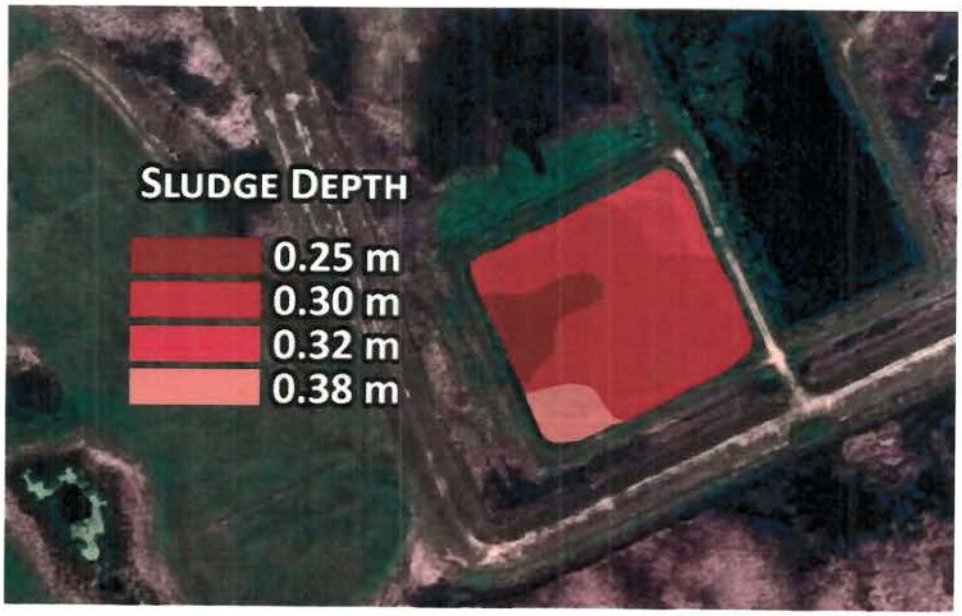
DATE MEASURED - JULY 16, 2020

SAINT LAURENT PRIMARY CELL

AVERAGE SLUDGE DEPTH
0.299 METERS

SLUDGE VOLUME
2,131 m³

WATER DEPTH
0.711 METERS

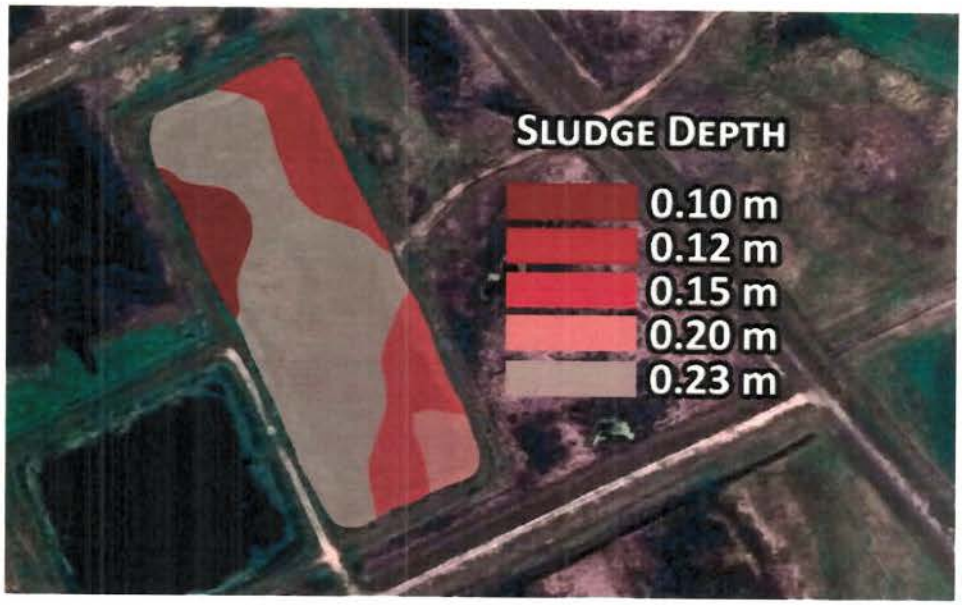


SAINT LAURENT SECONDARY CELL

AVERAGE SLUDGE DEPTH
0.190 METERS

SLUDGE VOLUME
1994 m³

AVERAGE WATER DEPTH
1.016 METERS



All measurements are taken from a watercraft within the cell and surveyed using a grid pattern. Our surveyors probe the bottom of the cell obtaining accurate measurements using physical measuring tools. The sludge depth is determined by gauging the top of the sludge blanket to the base of the lagoon.

From: Parsons, Travis
To: Sagan, Barsha
Cc: Malkowich, Brian
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10
Date: May 23, 2024 4:29:35 PM

Hi Sasha,

The Water Services Branch implements water and sewer infrastructure projects on behalf of the Manitoba Water Services Board (MWSB). MWSB is a crown corporation comprised of 3 Deputy Ministers (MNR, CPGS & ECC) and two Association of Manitoba Municipalities (AMM) members (President and Executive Director). MWSB's main object is to provide technical and financial assistance in the delivery of municipal water and wastewater projects. MWSB enters into cost-sharing agreements with municipalities (except for the City of Winnipeg) and procures engineering services, tenders projects, and oversees construction. MWSB also enters into agreements and delivers all Parks Branch and Northern Affairs Branch water and wastewater projects.

MWSB entered into a MOU agreement with Manitoba Housing Renewal Corporation (MHRC) to manage their lift station upgrade project. MWSB has retained the services of MPE Engineering to prepare detailed design plans and specifications, which are intended to go to tender shortly to replace the old lift station owned and operated by MHRC. MWSB will further contract with MPE to provide contract administration services during construction.

MMF had previously retained MPE Engineering regarding the wastewater infrastructure to be owned and operated by MMF. Officially our office (Water Services Branch) is not involved with the MMF Sandy Bar Housing Complex component of this project but I am familiar with those components, which includes a gravity sewer collection system, a baffled septic tank, and forcemain as described in the NOA. The one difference is the MMF forcemain is no longer planned to be constructed to the lagoon but will discharge into MHRC's lift station. I'm not aware of any other scope changes.

Happy to provide further clarification if needed.

Best regards,

Travis Parsons, M.A.Sc., P.Eng.
MWSB General Manager, Water Services Branch
T: 204-726-6085 C:204-761-3825

From: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Sent: Thursday, May 23, 2024 3:40 PM
To: Parsons, Travis <Travis.Parsons2@gov.mb.ca>
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Thank you Travis! I have two additional requests.

Since the consultant for the work has been changed, did the scope of the NOA work change after the 2021 submission.

- Also you are not listed as the proponent in the 2021 NOA application- perhaps if you cc a contact person from Manitoba Housing in the response and explain your role in this project briefly, that may work. I will then include you in the cc list in the NOA approval letter.

Regards,
Barsha Sagan (she/her)
Department of Environment and Climate Change; Phone: 204-795-7175

From: Parsons, Travis <Travis.Parsons2@gov.mb.ca>
Sent: Thursday, May 23, 2024 12:05 PM
To: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Hi Barsha,

Please see my responses in red text as follows:

1. Please also provide the daily organic loading that will be introduced into the lagoon after Phase 2 Development is complete. Does the total organic loading due to Phase 1&2 Development comply with clause 21 a) of Licence No. 744 R regarding meeting the 56 kg BOD5/ha/day organic loading requirements?
   See attached Appendix I – Manitoba Housing Sandy Bar Connection Permission indicating the organic loading to the lagoon is 17Kg/BOD_5/day, which is less than the organic capacity of 56 Kg BOD_5/day. I confirmed with the MPE consultant that the lagoon has lots of organic capacity as all contributions to the MB-Housing St. Laurent lagoon are from septic tanks which deliver their sludge to the RM Municipal Lagoon instead.
2. Please elaborate the construction method that will be followed to construct the influent line into the lagoon including the measures that will be followed to protect the liner of the lagoon.
   Please note that the new influent line (force main) from MMF will discharge into the new lift station instead of directly to the lagoon. The system will utilize the existing force main from the lift station to the lagoon. Normally the contractor is given the option of force main construction method. However, I understand that due to rock conditions, the force main will be installed by open cut and directionally drilled under any roads.
3. Please provide a signed copy of the Services Sharing Agreement between Manitoba Metis Federation and Manitoba Housing.
   I understand that there is not a Service Sharing Agreement but permission was granted as per the attached signed correspondence.
4. Please also note that a certified operator will be required to monitor the lagoon.
   I will follow-up with MHRC to determine that they have a certified lagoon operator.

Let me know if you need additional information.

Best regards,

Travis Parsons, M.A.Sc., P.Eng.
MWSB General Manager, Water Services Branch
T: 204-726-6085 C:204-761-3825

From: Parsons, Travis
Sent: Friday, May 17, 2024 11:54 AM
To: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Hi Barsha,

I'll look into this next week and speak with the Engineering Consultant and Manitoba Housing Renewal Corporation and hopefully get you this information ASAP.

If I need clarification, I'll reach out.

Best regards,

Travis Parsons, M.A.Sc., P.Eng.
MWSB General Manager, Water Services Branch
T: 204-726-6085 C:204-761-3825

From: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Sent: Friday, May 17, 2024 11:33 AM
To: Parsons, Travis <Travis.Parsons2@gov.mb.ca>
Subject: FW: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Hi Travis,

I hope you are doing well. My predecessor reviewed the submitted NOA dated January 11, 2021, for MB-housing - St Laurent-lagoon and requested for additional information. Siobhan, you and I discussed this project, and you indicated that a new consultant was hired to do the work. If the previous NOA still needs to be approved by EAB, then the following outstanding additional information request needs to be responded to:

1. Please also provide the daily organic loading that will be introduced into the lagoon after Phase 2 Development is complete. Does the total organic loading due to Phase 1&2 Development comply with clause 21 a) of Licence No. 744 R regarding meeting the 56 kg BOD5/ha/day organic loading requirements?
2. Please elaborate the construction method that will be followed to construct the influent line into the lagoon including the measures that will be followed to protect the liner of the lagoon.
3. Please provide a signed copy of the Services Sharing Agreement between

Manitoba Metis Federation and Manitoba Housing.

4. Please also note that a certified operator will be required to monitor the lagoon.

Can you please respond to these inquiries, or do you want a short meeting to discuss this project?

Thank you.

Regards,
Barsha Sagan (she/her)
Department of Environment and Climate Change; Phone: 204-795-7175

From: Malkowich, Brian <Brian.Malkowich@gov.mb.ca>
Sent: Thursday, May 16, 2024 8:35 AM
To: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Cc: Brett Baker <bbaker@mpe.ca>
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Barsha

I understand you have been in communication with Travis Parsons and at this point do not require anything further from myself. Please let me know should you have any other questions.

Brian Malkowich | T 204.782.6057
Chief Operating Officer | Assistant Deputy Minister
Manitoba Housing | Housing, Addictions and Homelessness
700 – 352 Donald Street | Winnipeg MB | R3B 2H8

I acknowledge that Manitoba Housing operates on the original lands of the Ojibwe, Cree, Ojibwe-Cree, Dakota, Dene, Metis, Inuit and Red River Metis. We respect the Treaties that were made on these territories and we are committed to working in partnership with First Nation, Metis and Inuit in the spirit of reconciliation and collaboration.

From: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Sent: Monday, May 13, 2024 4:39 PM

To: Malkowich, Brian <Brian.Malkowich@gov.mb.ca>
Cc: Brett Baker <bbaker@mpe.ca>
Subject: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Good day,

I am the new contact person for this project, and I believe the following email was forwarded to you on 16 August 2023. It appears that the previously submitted project has been broken into two parts and a consultant submitted an application for the COA under the PHA for wastewater collection system and proposed new lift station. I would like to get an update on the submitted NOA dated January 11, 2021 and assess the status of the previous NOA. Please provide response to the following outstanding information requested on February 2021 (if these are still relevant to the submitted NOA):

1. Please also provide the daily organic loading that will be introduced into the lagoon after Phase 2 Development is complete. Does the total organic loading due to Phase 1&2 Development comply with clause 21 a) of Licence No. 744 R regarding meeting the 56 kg BOD5/ha/day organic loading requirements?
2. Please elaborate the construction method that will be followed to construct the influent line into the lagoon including the measures that will be followed to protect the liner of the lagoon.
3. Please provide a signed copy of the Services Sharing Agreement between Manitoba Metis Federation and Manitoba Housing.
4. Please also note that a certified operator will be required to monitor the lagoon.

Please discuss as necessary.
Thank you.

Regards,
Barsha Sagan (she/her)
Department of Environment and Climate Change; Phone: 204-795-7175

From: Dey, Asit (CC)
Sent: Tuesday, February 2, 2021 4:25 PM
To: jbotha@jdbprojects.ca
Cc: Jessica Manness <jess@jme-consultants.com>; Leon Hebert <leon.hebert@mmf.mb.ca>; Yatkowski, Susanne (MHRC) <Susanne.Yatkowski@gov.mb.ca>; Drzystek, Brooke (MHRC) <Brooke.Drzystek@gov.mb.ca>; Burland Ross, Siobhan (CC) <Siobhan.BurlandRoss@gov.mb.ca>
Subject: 2021-02-02_request-for-additional-info_mb-housing-st-laurent-lagoon_file318.10

Hello Johan, Susanne, Brooke, and Leon,

Good afternoon. This email is in response to the Notice of Alteration request dated January 11, 2021 regarding construction of a wastewater management system in support of the municipal needs of a 55-plus housing block development initiated by Manitoba Metis Federation. The Development is proposed to be constructed in two phases (phase 1: 9 wheelchair accessible residences and phase 2: 10 additional multi-family duplexes) and includes fully serviced stand-alone units. The project site is

located on portions of NE-14-16-4 WPM. Based on the review of submitted documents, I would like to request you to submit the following additional information:

1. Please confirm that the construction of the wastewater collection system conforms to the Ten State Standards.
2. Section 3.2 indicates that the sludge/scum (septage) accumulation rate is 40 L/person/year and the settlement chamber was designed accordingly. Could you please provide the source of this information? Per US EPA, annual septage generation rate is 200 L/person and we have been using this standard for septic tank projects. Please recalculate your septic tank volume if required.
3. Please also provide the daily organic loading that will be introduced into the lagoon after Phase 2 Development is complete. Does the total organic loading due to Phase 1&2 Development comply with clause 21 a) of Licence No. 744 R regarding meeting the 56 kg BOD5/ha/day organic loading requirements?
4. Please note that all licensed lagoons in Manitoba that are designed to accept septage can only accept septage between June 1st and October 15th of a given year. This provides a total of 137 days available for septage hauling purposes. Therefore, the sludge will remain in the tank for remaining part of the year which is more than 183 days as outlined in Section 3.2 of the NoA submission. Please comment on this discrepancy and please recalculate your septic tank volume accordingly. Please also comment on whether the selected septic tank is able to meet all of the required designed parameters.
5. Based on our conversation, it appears that the septic tank as proposed in the Notice of Alteration submission has already been constructed. Please provide documentation demonstrating that the constructed septic tank conforms to Canadian Standards Association (Standard CSA B66) for the collection and storage of wastewater from the Development.
6. The engineering drawings submitted with the Notice of Alteration documents are not readable. Please resubmit engineering drawings such that the dimensions are readable. It is recommended that any proposed splash pad in the primary cell should have a dimension of 3m by 3m.
7. Please elaborate the construction method that will be followed to construct the influent line into the lagoon including the measures that will be followed to protect the liner of the lagoon.
8. Please provide a signed copy of the Services Sharing Agreement between Manitoba Metis Federation and Manitoba Housing.
9. Please update engineering drawings with the location of the septic tank. Please also include a cross section profile showing the relative elevation of top and bottom of the tank, and the elevation of the grade.
10. Please note that the proposed septic tank will be required to include a high level alarm. Please update your drawings accordingly.
11. Please also note that a certified operator will be required to monitor the septic tank and the lagoon.
12. Does the septic tank have any reserve capacity in order to ensure that there is no potential back up of wastewater in the event of pump failure.

Regards,
Barsha Sagan (she/her)
Department of Environment and Climate Change; Phone: 204-795-7175

From: Malkowich, Brian <Brian.Malkowich@gov.mb.ca>
Sent: Thursday, May 16, 2024 8:35 AM
To: Sagan, Barsha <Barsha.Sagan@gov.mb.ca>
Cc: Brett Baker <bbaker@mpe.ca>
Subject: RE: Update on NOA for MB-housing-st-laurent-lagoon_file318.10

Barsha

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To: Malkowich, Brian <Brian.Malkowich@gov.mb.ca>
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To: jbotha@jdbprojects.ca
Cc: Jessica Manness <jess@jme-consultants.com>; Leon Hebert <leon.hebert@mmf.mb.ca>; Yatkowski, Susanne (MHRC) <Susanne.Yatkowski@gov.mb.ca>; Drzystek, Brooke (MHRC) <Brooke.Drzystek@gov.mb.ca>; Burland Ross, Siobhan (CC) <Siobhan.BurlandRoss@gov.mb.ca>
Subject: 2021-02-02_request-for-additional-info_mb-housing-st-laurent-lagoon_file318.10

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2. Section 3.2 indicates that the sludge/scum (septage) accumulation rate is 40 L/person/year and the settlement chamber was designed accordingly. Could you please provide the source of this information? Per US EPA, annual septage generation rate is 200

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10. Please note that the proposed septic tank will be required to include a high level alarm. Please update your drawings accordingly.
11. Please also note that a certified operator will be required to monitor the septic tank and the lagoon.
12. Does the septic tank have any reserve capacity in order to ensure that there is no potential back up of wastewater in the event of pump failure.

We will continue our review upon receipt of the requested information. Should you require any clarification, please feel free to contact me.

Thanks,

Regards,

Asit Dey, P.Eng., Environmental Engineer

manitobahousing

January 10, 2024

To MPE Engineering Ltd. ("MPE"):
#202, 2211 McPhillips Street
Winnipeg MB
R2V 3M5

Attention: Mark Baker, P. Eng.

RE: Connection of Manitoba Metis Federation Seniors Complex to Sandy Bar Lift Station

The Manitoba Housing and Renewal Corporation ("MHRC") hereby approves the connection of the Manitoba Metis Federation ("MMF") Frank Bruce Seniors Complex Sanitary System to the Lift Station and Wastewater Treatment Facility owned by MHRC on Sandy Bar Road in St. Laurent, MB (the "Project"). The Project must be done properly, professionally, prudently and in full compliance with all laws, by-laws, regulations, codes and applicable standards (the "Professional Quality Requirement"). The Project must be professionally inspected by MPE from time to time and upon completion, and the Project's compliance with the Professional Quality Requirement must be confirmed in writing to MHRC under a professional engineer's seal, immediately upon completion of the Project. MPE will indemnify MHRC and save MHRC harmless for any injury, loss or damage caused by MPE or for which MPE is responsible at law. All work on the Project requires the prior written approval of MHRC, but such approval shall not be considered a waiver of MHRC's reliance on MPE's professional skills and judgement. Commencement of the Project shall be deemed acceptance by MPE of the terms herein. MPE acknowledges receipt and sufficiency of valuable consideration for being bound by said terms.

This approval relies upon the attached capacity assessment prepared by MPE showing that the facility has both hydraulic and organic capacity to support the contributing developments including the MMF Frank Bruce Seniors Complex.

It is understood that the capacity assessment of the Sandy Bar Lagoon is based on conservative assumptions and a contributing population of 262 persons, which includes the MMF Seniors Complex population. The hydraulic storage needed for this facility is 13,650m^3, which is below

the actual storage provided of 14,092m^3. The organic load is 17kg BOD_5/day, which is less than the organic capacity of 56kg BOD_5/day.

Sincerely,

[redacted]

Signature

Brian Malkowich

Name

Chief Operating Officer

Position

January 15, 2024

Date

Sandy Bar Lagoon Capacity Review

The current Environment Act Licence (744 R) for the Sandy Bar Lagoon, for which the RM of St. Laurent is currently in agreement to obtaining ownership, contains the following requirements:

- Discharge Quality Limits:
  - BOD_5 concentration < 25mg/L
  - Fecal Coliform MPN < 200/100mL
  - TSS Concentration < 25mg/L
  - Total Phosphorous Concentration < 1mg/L
  - Unionized Ammonia Concentration (as N at 15 +/- 1°C) < 1.25mg/L
- The lagoon shall not be discharged:
  - Between November 1 of any year and May 15 the following year
  - Between June 15 and September 15 in any one year
  - When there is flooding in the effluent discharge route or if discharge will cause such flooding
- The lagoon must be maintained and operated such that:
  - The organic loading (BOD_5) on the primary cell does not exceed 56 kg/Ha-day
  - The depth of the primary cell does not exceed 1.5m
  - The freeboard in any cell is not reduced below 1.0 m

Lagoon Design Parameters	Unit	Sandy Bar Lagoon
Wastewater Flows		
Population (Including Frank Bruce Development)	Capita	262
Design Daily Wastewater Flowrate per Capita[1]	L/cap-day	200
Design Raw Wastewater BOD_5 Concentration[1]	mg/L	250
Lagoon Capacity		
Storage Days Required[2]	days	197
Primary Cell Total Volume	m^3	12,484
Secondary Cell Total Volume	m^3	9,840
Primary Cell Area	Hectare	1.0
Organic Capacity	kg BOD_5 / day	56

[1]*Based on Metcalf & Eddy 5th Ed. 2014*

[2]*Based on licenced discharge windows for each facility*

Lagoon Capacity Review - Current Conditions	Unit	Sandy Bar Lagoon
Summer Wastewater Flows & Loads		
Seasonal Residents Multiplier[1]	- -	0.5
Septic Field Hydraulic Load Multiplier[2]	- -	1
Season Length[5]	days	151
Storage Duration[5]	days	93
Hydraulic Load	m^3/day	26
Seasonal Storage Required	**m^3**	**2,437**
Organic Load[3,6]	**kg BOD_5/day**	**7**
Winter Wastewater Flows & Loads		
Seasonal Residents Multiplier[1]	- -	1.0
Septic Field Hydraulic Load Multiplier[2]	- -	1.0
Season Length[5]	days	214
Hydraulic Load	m^3/day	52
Seasonal Storage Required	**m^3**	**11,214**
Organic Load[3]	**kg BOD_5/day**	**13**
Total Current Wastewater Flows & Loads		
Storage Required	**m^3**	**13,650**
Organic Load[3]	**kg BOD_5/day**	**17**
Lagoon Capacity		
Storage Provided[4]	**m^3**	**14,092**
Organic Capacity	**kg BOD_5 / day**	**56**

[1]Based on population increases due to seasonal residents and schools - estimates in original design report

[2]Based on approximate proportion of population with holding tanks rather than septic fields in each season

[3]Almost all organic loads to Sandy Bar Lagoon are in reality directed to the Municipal Lagoon from septic tanks

[4]Based on 50% of the Primary Cell and the Secondary Cell less the bottom 0.3m

[5] Only minor hydraulic storage requirements are attributed to the summer season due to the school season and the seasonal discharge window for the facility.

Rural Municipality of St. Laurent
Municipalité rurale de Saint-Laurent
Box/c.p. 220 St. Laurent, Manitoba R0C 2S0
Telephone/telephone (204)646-2259
Fax/télécopieur (204)646-2705
Email/courriel rmstlaur@mymts.net

June 18, 2021

RE: MMF (Manitoba Métis Federation) Housing at St. Laurent

To whom it may concern:

Further to our letter of support for the planned construction of more MMF Housing units at St. Laurent issued on June 10, 2021 and a subsequent request for permission to dump sewage from these units into the municipal lagoon once per year as a matter of regular sewage system maintenance, the RM of St. Laurent confirms that this is a permitted use of the lagoon for all residents and property owners in the municipality and does not require special permission.

In the case of the MMF Housing project, it is our understanding that Manitoba Housing has agreed to accommodate sewage effluent from the project into its lagoon located on the adjacent property and that the current, day to day dumping of the raw sewage from the project into the municipal lagoon is a temporary measure that is expected to cease when the effluent from the project can be pumped into the Manitoba Housing lagoon.

Sincerely,

[redacted]

HILDA ZOTTER
Chief Administrative Officer
RURAL MUNICIPALITY OF ST. LAURENT
Telephone: (204)646-2259
Fax: (204)646-2705

Rural Municipality of St. Laurent
Municipalité rurale de Saint-Laurent
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June 10, 2021

RE: MMF Housing at St. Laurent

To whom it may concern:

This will confirm that the Rural Municipality of St. Laurent is fully in support of the housing development plans of the Manitoba Métis Federation on the property known as Lot 16, plan 11790 in the RM of St. Laurent.

The said development is expected to consist of up to 20 new housing units over the next 3 to 4 years and is in addition to the 10 units constructed on the same property in 2019-2020.

Sincerely,

[redacted]

HILDA ZOTTER
Chief Administrative Officer
RURAL MUNICIPALITY OF ST. LAURENT
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