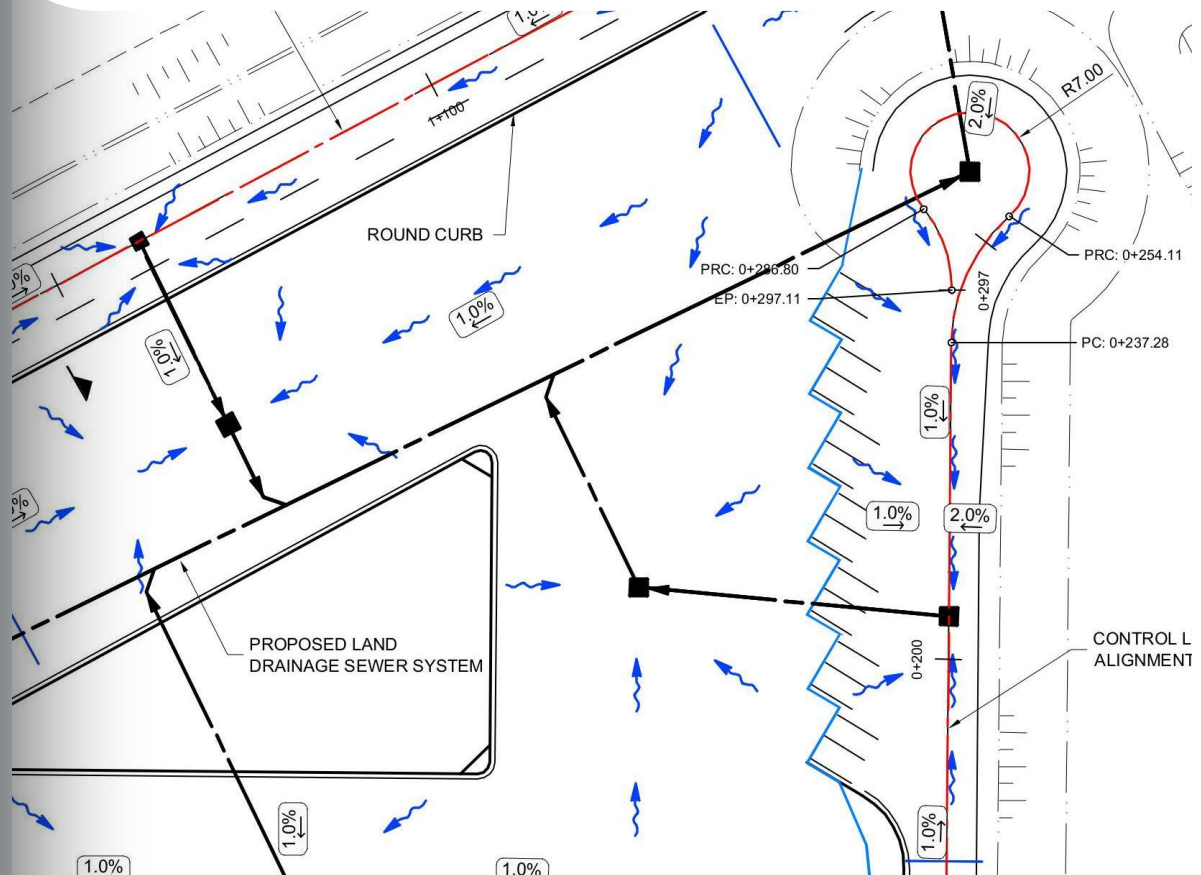




Dangerous Goods Handling and Transportation Act Application Amendment

4R Winnipeg Depot – Brady Road Resource Management Facility



January 20, 2015

Environmental Approvals Branch
Manitoba Conservation
Suite 160 – 123 Main Street
Winnipeg, Manitoba R3C 1A5

Attention: Tracey Braun
Director

**Dillon Consulting
Limited**

1558 Willson Place
Winnipeg, MANITOBA
R3T 0Y4
Tel: 204.453.2301
Fax: 204.452.4412

***Re: Amendment to Dangerous Goods Handling and
Transportation Act Application (File No. 5638.00)***

Dear Ms. Braun:

On behalf of the City of Winnipeg (Winnipeg), we have completed and enclosed for your review, a revised amendment to an application filed under the Manitoba Dangerous Goods Handling and Transportation Act (DGHTA) for the operation of a household hazardous waste (HHW) depot within the waste transfer facility (4R Depot) at the Brady Road Resource Management Facility (BRRMF) in Winnipeg, Manitoba.

The original application was submitted by the City of Winnipeg on February 15, 2013 (Manitoba Conservation File No. 5638.00) and the amendment was submitted on September 3, 2014.

The revised amendment addresses comments received from your office subsequent to the originally submitted amendment, requesting waste quantity, collection, and containment clarifications and details.

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

Yours sincerely,

DILLON CONSULTING LIMITED



Ash Raichura, P.Eng.
Project Manager



ARR: knp

Encl.

Our file: 13-8224-3000



Executive Summary

The main purpose of the 4R Winnipeg Depot (4R Depot) at the Brady Road Resource Management Facility (BRRMF) is to receive, collect, and temporarily store unwanted residential materials (e.g., divertible, recyclable and HHW wastes) prior to transfer of the commodities to one of the product specific management facilities in Winnipeg. The 4R Depot will include an HHW/e-Waste building to receive and prepare residential HHW and e-Waste for transport to an authorized receiver. Materials planned for receipt at the HHW/e-Waste building include:

- Paint
- Flammable liquids
- Toxic materials
- Corrosive materials
- Light bulbs
- Automotive batteries
- Propane tanks
- Used oil

All HHW and e-Waste will be collected and temporarily stored in accordance with the Product Care Association's *Manitoba Collection Site Guidelines, HHW Collection Sites* (October 2012). Used oil and filters will be managed in accordance with the *Used Oil, Oil Filters and Containers Stewardship Regulation* (MR 86/97).

Site security will include the existing perimeter chain link fence that surrounds the BRRMF and a new CCTV system covering the 4R Depot. The entrance gate will be closed and locked outside operating hours. The HHW/e-Waste building will also be locked when the facility is closed.

Design features of the HHW/e-Waste building and staging/unloading area will mitigate potential impacts to the environment. The building and staging area will be located on a relatively impervious (concrete/asphalt) surface. Surface water within the staging area will flow to a dedicated catch basin, which will include a "drain guard" to filter out hydrocarbons, sediment, and other contaminants. The outlet for the catch basin will also have an isolation valve to control flows from the area when containment is required. Portable spill and containment kits will also be strategically placed at the HHW/e-Waste building, and site staff will be trained on how to use them.

It is the opinion of Dillon Consulting Limited (Dillon) that the risk of environmental impacts as a result of the HHW building at the 4R Depot is insignificant, given the mitigative design features of the site.

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1.0

Introduction and Background

In 2011 the City of Winnipeg (the City) received the final report for the Comprehensive Integrated Waste Management Plan (CIWMP). The CIWMP recommends the creation of up to four Community Resource Recovery Centres across the City. The CIWMP report is publically available here: <http://garbage.speakupwinnipeg.com/files/2011/09/CIWMP-FINAL-REPORT.pdf>

The primary purpose of Community Resource Recovery Centres (herein called 4R Depots) is to recover and divert unwanted residential materials from disposal at a landfill. Waste materials from commercial or industrial sources will not be accepted. Although there are some facilities within the City that collect specific recoverable resources (e.g., used batteries, the City's curb-side recycling collection program, e-Waste days), the City has elected to develop 4R Depots to provide a "one-stop-shop" for residents to dispose of unwanted materials, including household hazardous waste (HHW) and electronic waste (e-Waste). The 4R Depots will also provide an opportunity for the City to improve its waste diversion rate.

1.1

Site Use Description

The 4R Depot will be available to residents of the City for the disposal of residential waste materials. Based on load count data provided by the City, the "hourly traffic design volume" used to conduct a traffic analysis for the BRRMF 4R Winnipeg Depot is 112 residential vehicles. The site is divided into three distinct areas based on the type of material:

- Free Cycle – materials with product stewardship programs, e.g., recyclables, yard waste, HHW and e-Waste.
- Fee Cycle – divertible materials, i.e., materials without a stewardship program but have value in the open market.
- Garbage – residual materials.

Figure 1 shows the site layout and location of the HHW/e-Waste building within the 4R Depot site. This application is related solely to the acceptance of HHW and e-Waste in the Free Cycle area. A brief description of the 4R Depot site as it relates to the HHW/e-Waste building follows.

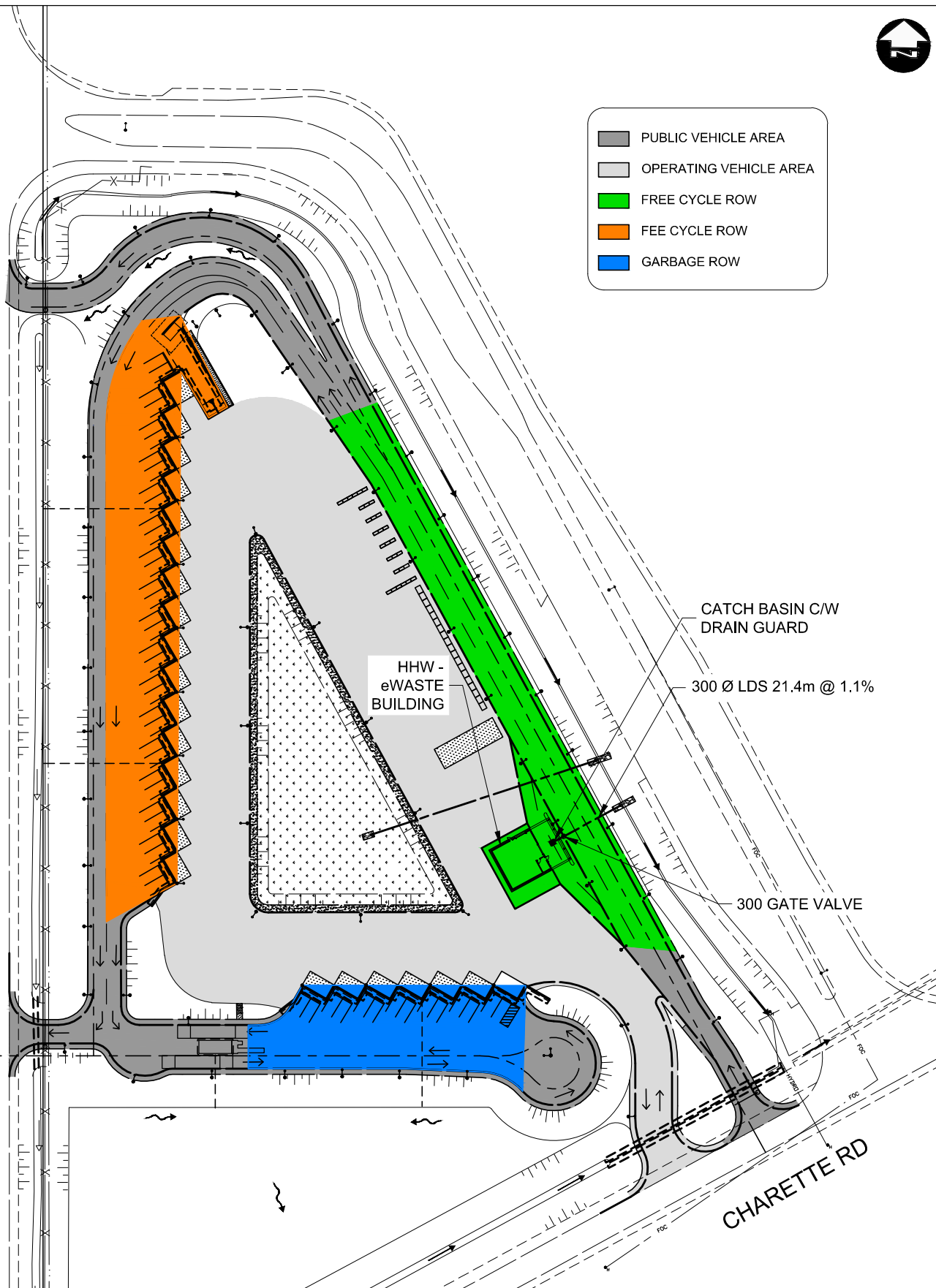
Residential traffic will enter the 4R Depot from Charette Road, an internal road at the BRRMF. The single lane entrance will expand into three lanes; two by-pass lanes and one "unloading" lane for cardboard, leaf and yard waste, and recyclables. A second "unloading" lane will also be provided at the HHW/e-Waste building.

The HHW/e-Waste building will be located within the 4R Depot. The building will be the first "stop" for residents to dispose of materials within the 4R Depot. All users will exit the site onto Brady Road via one of the two exits from the 4R Depot.



- PUBLIC VEHICLE AREA
- OPERATING VEHICLE AREA
- FREE CYCLE ROW
- FEE CYCLE ROW
- GARBAGE ROW

BRADY RD



CATCH BASIN C/W
DRAIN GUARD

300 Ø LDS 21.4m @ 1.1%

HHW -
eWASTE
BUILDING

300 GATE VALVE

CHARETTE RD

G:\CAD\DFS\1382241_Reports\DangerousGoods\Application\Figure-1.dwg



4R WINNIPEG DEPOT

SITE LAYOUT

FIGURE 1

1.2

HHW and e-Waste Quantities

The City's Solid Waste Department provided load count data, material audit data, and other information (e.g., Speak-Up Winnipeg) to estimate the anticipated quantities of the HHW and e-Waste that will be received at the HHW/e-Waste building within the 4R Depot.

A summary of the estimated annual HHW and e-Waste quantities and collection/removal frequency is presented on **Table 1** below. In general, as the facility is only open to residential users, individual deliveries/drop-off of materials is anticipated to be in relatively small quantities (e.g., liquid wastes <5 litres/container).

TABLE 1: ESTIMATED ANNUAL HHW AND E-WASTE QUANTITIES

Commodity	Estimated Annual Quantity	Units	Estimated Removal Frequency
Flammables			
Paint	170,000	Litres	Weekly
Flammable liquids	15	Tub skids	Weekly
Used oil	75,000	Litres	Semimonthly
Used oil filters	2,000	Units	Semimonthly
Flammable gas			
Non-Program Cylinders (propane, Freon, medical oxygen, etc.)	1,000	Cylinders	Monthly
Toxics and non-regulated			
Toxic materials	20	Drums	Weekly
Compact fluorescent bulbs	40,000	Bulbs	Weekly
Fluorescent tubes	20,000	Tubes	Monthly
Sharps (syringes, lancets)	1	kg	Bi-weekly
e-Waste	400	Tonnes	Bi-weekly
Corrosives			
Corrosive materials	15	Drums	Weekly
Automotive batteries	25	Tonnes	Monthly
Lead Acid Batteries	20	Tonnes	Monthly

NOTES:

1. Tub-skid capacity is 432 liters.
2. Drum capacity is 200 litres.
3. Cylinder capacity may range from 3 to 50 litres.

2.0

Site Features and Operations

The HHW/e-Waste building will have one full-time attendant on duty whenever the facility is open. Mobile equipment within the building may include a manual pallet jack or dolly. A high standard of equipment maintenance and good housekeeping and operational practices will be implemented at all times.

In the summer months, the facility will operate Monday to Friday, from 7:00 am to 9:00 pm and Saturday and Sunday, from 7:00 am to 7:00 pm. In the winter months, the facility will operate Monday to Friday, from 7:00 am to 7:00 pm and Saturday and Sunday, from 7:00 am to 5:00 pm. No staff will be present at the depot outside of these operating hours. Site security will include the existing perimeter chain link fence that surrounds the BRRMF and a new CCTV system covering the 4R Depot. The entrance gate will be closed and locked outside operating hours. The HHW/e-Waste building will also be locked when the facility is closed.

2.1

Commodity Collection and Storage

HHW and e-Waste will be received at the site under a sheltered staging area. The commodities will be transferred to designated areas within an HHW/e-Waste building. **Figure 2** shows the proposed layout of the HHW/e-Waste building and staging area.

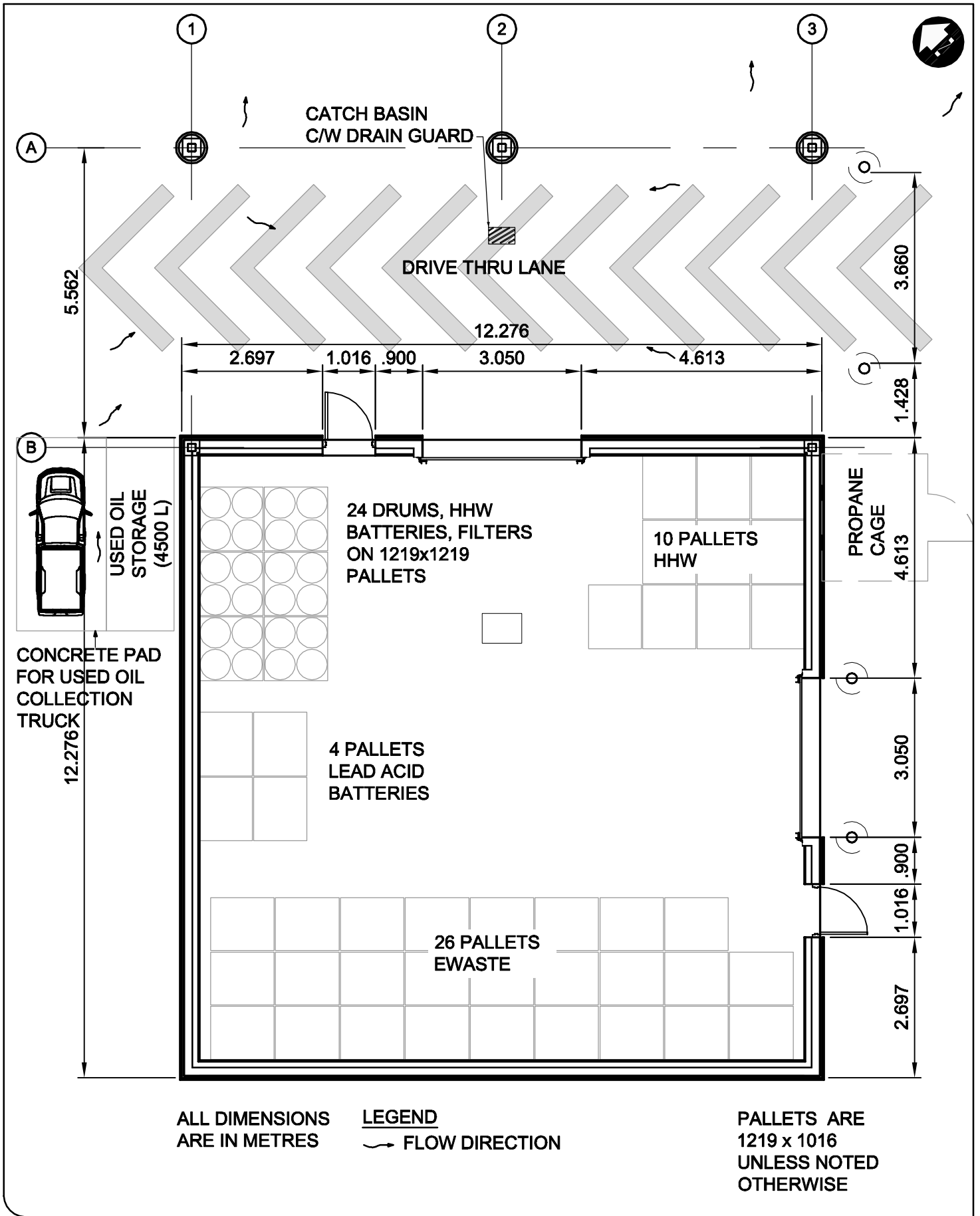
All HHW and e-Waste will be collected and temporarily stored in accordance with the Product Care Association's *Manitoba Collection Site Guidelines, HHW Collection Sites* (October 2012). Used oil and filters will be managed in accordance with the *Used Oil, Oil Filters and Containers Stewardship Regulation* (MR 86/97).

A summary of HHW and e-Waste storage and containment is presented on **Table 2** below. Within the building, space will be maintained around the storage and containment units to permit inspections for leaks, and to allow labelling to be visible. A brief description of the storage systems follows.

TABLE 2: HHW AND E-WASTE STORAGE/CONTAINMENT

Commodity	Storage
Flammables	
Paint	Tub skid
Flammable liquids	Tub skid
Used oil	Double-walled 4,500L tank
Used oil filters	Lined drum
Flammable Gas	
Propane tanks	Fenced in area on exterior HHW building
Toxics and non- regulated	
Toxic Materials	Drums
Compacted Fluorescent bulbs	Drum
Fluorescent tubes	Drum
e-Waste	Pallet
Sharps	Sharps Container*
Corrosives	
Corrosive materials	Drums
Automotive batteries	Pallet

* The sharps container will be in accordance with industry standards, including features to prevent retrieval after disposal and locking lids to provide permanent containment for final disposal.



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4R WINNIPEG DEPOT

FLOOR PLAN

FIGURE 2

2.1.1 HHW/e-Waste Building

The HHW/e-Waste building will provide a safe and secure temporary storage of hazardous materials. The HHW/e-Waste Building will be a single story building (~150 m²) for collecting, sorting, and temporary storage of the materials listed on **Table 1**. Building construction will be wood framed walls clad in pre-finished metal supporting pre-engineered wood trusses with an approximate wall height of 4.2 metres (14 feet). The building will include a drive through area with canopy above, open sides, and roll up door access into the interior storage area. The interior of building will be an open space.

Of primary importance for the collection and temporary storage of these commodities is protection from the elements and adequate ventilation. The HHW/e-Waste building and staging area will be situated over a relatively impervious surface (asphalt) to mitigate infiltration of potential impacts below the surface. The interior floor will be concrete slab on grade with concrete curbs (1 metre high starter wall) to form containment areas. Surface water in the sheltered staging area of the HHW/e-Waste building will be directed to a dedicated catch basin to provide the opportunity to contain and isolate potential spills that may occur within the sheltered HHW/e-Waste staging area of the site. The catch basin will include a “sump” with a capacity of approximately 230 litres.

Spill containment requirements will be achieved through site design (described above) and the strategic placement of appropriately equipped portable spill response kits (provided by Product Care Association Manitoba, PCA). The sheltered staging area outside the building will have a dedicated catch basin and drainage outlet such that spills may be contained and isolated.

The HVAC system include manual control of “occupied mode” (1.5 air changes per hour of tempered air) and “flush mode” (six air changes per hour of non-tempered air) ventilation. Building ventilation may also be achieved via passive means by opening doors (person and roll-up).

Unit heaters will be included throughout the HHW building to maintain a minimum 10°C indoor temperature for typical Winnipeg outdoor design winter temperatures dictated by the Manitoba Building Code. The unit heaters will be controlled by their individual thermostats. The ventilation system will provide “free cooling” in the summer months.

Doorways (person doors and roll-up doors) will be kept unobstructed at all times. The building will also include an ambient air monitor to alert the attendant when potentially harmful gases (e.g., carbon monoxide, solvents, hydrocarbons, lead, nitrogen oxides, ozone, particulate matter, sulfur dioxide, sulfur) have accumulated in the building and (additional) doors should be opened to ventilate the building.

To further reduce spill and ventilation concerns, operational procedures will include a strict policy stating that containers received will not be opened and (liquid) materials will not be mixed or consolidated except for used oil, which will be “bulked” in an aboveground steel horizontal double wall storage tank with a capacity of 4,500 litres.

Hazardous materials to be moved on carts and stored on racks, or deposited into tub skids or drums (supplied by others). Flammable liquids will be stored in tub skids (supplied by others), in their original containers. Open containers will not be permitted within the building.

The building will be equipped with a portable, heated eyewash station, as well as compressed eyewash bottles supplied by PCA.

2.1.2 Fenced-in Area

Propane cylinders will be stored outside the building in a sheltered fenced-in area. The fenced-in area will be a chain-link fence “compound” with a lockable man gate, and will be located on one of the exterior building walls, beneath the building eaves/overhang.

2.1.3 Pallets

Automotive batteries will be placed on wooden pallets in a dedicated area within the HHW/e-Waste building. Cardboard will be placed between each level of batteries. Pallets will be loaded to a maximum of three levels high. When each pallet is full, it will be wrapped in plastic. At any given time, five to a maximum of seven pallets will be stored in the building. The batteries may alternatively be stored in tub skids. A registered/licensed hauler will pick up the pallets from the 4R Depot where required by Transportation of Dangerous Goods (TDG) Regulations. Batteries will not be transported by the City. Materials will be hauled directly to the appropriate processing facility.

e-Waste will be placed on wooden pallets in a dedicated area within the HHW/e-Waste building. Pallets will be loaded to a maximum of one metre high. When each pallet is full, it will be wrapped in plastic for transport to an authorized facility by a registered hauler.

2.1.4 Non-Regulated Items

“Non-program” or “non-regulated” materials are materials that do not fall under the categories of the Waste Reduction and Prevention Act, but are nonetheless hazardous and may be delivered to the site by residents for disposal/management.

While the City does not intend to accept “non-program” or “non-regulated” items, it is anticipated that residents will deliver some of these items to the site for disposal. To accommodate these items, a dedicated storage barrel will be utilized to temporarily store these materials, which will typically be transported to a registered receiver (e.g., Miller Environmental or Clean Harbour) for management and disposal on a weekly basis. However, the frequency may be adjusted depending on the quantity and types of materials received.

2.2 Material Loading for Transport off Site

Materials will be stored within a sheltered area of the HHW/e-Waste building until a registered hauler picks them up. All materials will be transported by a licensed carrier who has a valid license to transport hazardous waste pursuant to Manitoba Regulation 175/87.

Loading involves moving the containers (pallets, drums, and tub skids) through one of the roll-up doors to the exterior of the building using a pallet mover or dolly. Containerized materials will be immediately placed onto the transport vehicle. The carrier is responsible for the loading of containerized materials. In case of any spillage, both the HHW/e-Waste building and the carrier will have spill kits on hand for containment and clean up. Attendants will be trained on the appropriate use of the spill kit.

2.2.1

Used Oil

Used oil will be managed at the site in accordance with the CCME's Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products, as well as the National Fire Code of Canada (NFCC).

Used oil will only be collected for disposal by a registered used oil hauler; site staff will not handle or manage the transfer of used oil from the storage tank to the oil hauling vehicle. The used oil hauler will be responsible to take all reasonable steps to prevent spills.

When the storage tank is being unloaded, the used oil hauler will be required to remain in constant view of the fill pipe, and in constant attendance at the delivery control valve. Used oil haulers will be instructed that suction hoses are not to be dropped or inserted into the used oil storage tank during the product removal process.

A spill kit designed specifically for the planned 4,500 litre above ground used oil storage tank will be located along the side of the building, adjacent to the used oil storage tank. The concrete pad around the used oil tank and at the oil hauling vehicle parking pad will be graded towards the dedicated catch basin beneath the building canopy, as described in **Section 8.0**.

The location of the used oil storage tank and parking pad relative to the HHW building and catch basin is shown in **Figure 2**.

3.0

Description of the Proposed Development

The City has selected the area bound by Brady Road (west), Charette Road (south), and the Scale Access Road (northeast), which is within the BRRMF, for the development of a community resource recovery centre (i.e., 4R Depot). The HHW/e-Waste building will be constructed within the 4R Depot site. It should be noted that the BRRMF operates under Environment Act License No. 3081R.

The site is owned by the City; **Appendix A** provides hard-copy legal descriptions of all of the parcels of land owned by the City which comprise the BRRMF. A graphic illustrating the spatial distribution of these land parcels (City Plan No. 10998/1) is also included in **Appendix A**. The City is also the owner of the mineral rights associated with each individual parcel.

3.1

Land Uses and Designations

Adjoining land uses to the BRRMF include residential to the northwest, north and northeast, and agricultural to the east, south and west, with the exception of CBC broadcasting towers on one parcel to the west of Waverley Street.

The land directly adjacent to the north, east, and south of the 4R Depot is within the limits of the BRRMF. Lands to the west of the 4R Depot are in the RM of Macdonald. Lands are zoned Agricultural General Zone in Bylaw 15/95. In the Macdonald/Ritchot Planning District Development Plan, the lands are designated Rural "Green Zone."

In summary, the 4R Depot is planned for development on land within the currently licensed BRRMF site. Considering the purpose of this site, development of the 4R Depot should be permitted to include the receipt and temporary storage of HHW and e-Waste. Design of the 4R Depot is currently underway. Construction of the site is planned for the spring/summer of 2014, with the 4R Depot scheduled for opening in fall of 2014.

4.0

Funding

No grant or loan of capital funds has been requested by the City of either the provincial or federal government for this development.

5.0

Approval Status

The City received Environment Act License No. 3081R for the BRRMF site on December 23, 2013.

A submission for a Dangerous Goods Handling and Transportation Act License was filed on February 15, 2013 for the receipt of lead acid batteries (Manitoba Conservation File No. 5638.00). To permit the receipt of other regulated materials (e.g., HHW), this amendment is submitted.

As site attributes and operations do not impinge upon any known federal interest or fiduciary duty, there are no known requirements for federal permits, approvals or authorizations.

6.0

Public Consultation

Since 2011, the City has hosted public consultations in respect of current and proposed future developments at the BRRMF. An Open House was convened in St. Norbert on January 23, 2014, for specific consultations on community views about the proposed 4R Depot. In general, members of the public were pleased with the planned development of the 4R Depot at the BRRMF, which provides them with improved opportunities to recycle and divert waste from the landfill.

7.0

Description of Existing Environment in the Project Area

The segment of land within the BRRMF that has been selected for the development of the 4R Depot is currently vacant. The site has no known historical use throughout its “designation” for landfilling activities by the City for the past 40 plus years. The proposed 4R Depot site within the BRRMF is essentially a “greenfield”.

An EIA was conducted for, and submitted with, the Environment Act Proposal for the BRRMF. The EIA represents a comprehensive consideration of the potential vectors for environmental impact in relationship to existing, and future, waste-management practices at BRRMF.

On the basis of the EIA, it has been concluded that there are no significant adverse effects from almost four decades of landfill operations that can be discerned from analysis of publicly available data describing community health, air quality and groundwater quality.

The EIA also considered the consequences of future landfill design and operations as affected by implementation of the Comprehensive Integrated Waste Management Plan (CIWMP). The consequences of reduced waste volumes, increased upstream diversion of recoverable materials, on-site processing and management of organic and inorganic materials in lieu of burial, and increasing vigilance to enforce community bylaws and waste-management policies, will be that the current “envelope” of discernible impacts can only be reduced. The proposed improvements in landfill design and operations should be characterized by a net improvement relative to the current situation.

8.0

Description of Environmental Effects of the Proposed Development

Although the majority of materials planned for receipt at the 4R Depot are relatively inert, some of the materials planned for receipt at the HHW/e-Waste building within the 4R Depot (i.e., dangerous goods) have the potential to impact the environment. The dangerous goods planned for receipt are:

- HHW (paint, flammable liquids, toxic materials, corrosive materials, light bulbs)
- e-Waste
- Automotive Batteries
- Propane Tanks
- Used Oil and Filters

Design features of the HHW/e-Waste building and staging/unloading area will mitigate potential impacts to the environment. The building and staging area will be located on a relatively impervious (concrete/asphalt) surface. The building will have containment curbs, and where required (used oil), dedicated containment systems (double-walled tanks) will be utilized. The grade surrounding the building will be designed such that only surface water within the building and staging areas (i.e., beneath the building canopy) will flow to a dedicated catch basin (see **Figure 1**). The catch basin will include a “drain guard”, which filters out hydrocarbons, sediment, and other contaminants. The base of the catch basin includes a small sump in which spills may be temporarily contained. The outlet for the catch basin will also have an isolation valve to control flows from the area when containment is required.

The depot will be operated by staff trained in Transportation of Dangerous Goods Regulations, facility operating procedures and spill clean-up procedures. Effective neutralizing materials shall be conveniently located for clean-up of spills and an eyewash station shall be located in close proximity to the facility.

An emergency response contingency plan will be in effect for the site, and will be submitted to Manitoba Conservation and Water Stewardship and the City of Winnipeg emergency response departments for review prior to opening the facility to the public.

9.0

Mitigation Measures and Residual Environmental Effects

Storage of HHW/e-Waste materials received is indoors and contained within the HHW/e-Waste building, which is fully covered by a metal roof and which has a concrete floor throughout. The staging area is also sheltered and includes a dedicated surface water collection system so that spills may be contained and isolated from the rest of the site.

Upon receipt of HHW/e-Waste materials at the staging area, the site attendant will move the materials into the building and place them in their dedicated containment unit. When a containment unit is nearing maximum capacity, the associated product steward will be contacted to pick-up the materials.

Transportation of Dangerous Goods Regulations, first aid, fire, and spill containment training will be provided to all employees on site who work at the HHW/e-Waste building. The following requirements, will apply to the handling of materials brought to the HHW/e-Waste building by residents:

- Personal protective equipment requirements – eye protection, hand protection, metatarsal hard-toed boots, long sleeve shirts and pants.
- No smoking in proximity to the HHW/e-Waste building.
- Sparks and open flames kept away from HHW/e-Waste building.
- Metal objects not to be placed on top of the containment units.
- Cardboard or other type of acceptable insulation placed between levels of containment units (e.g., batteries on pallet).
- Containment units to be kept right side up at all times.
- When full, containment units will be immediately sealed (e.g., pallets wrapped in plastic stretch wrap) and labelled according to WHMIS symbols indicating the hazard.

Lastly, good housekeeping practices will be maintained at the HHW/e-Waste building and staging area at all times. The staging area will be left uncluttered.

The proposed development is expected to result in insignificant environmental effects to the site or its surroundings.

9.1

Fire Safety Equipment

Staff working at the HHW building will receive fire extinguisher use training, and be knowledgeable of the BRRMF emergency response plan (Brady Road Resource Management Facility Emergency Response Guidelines, 2014).

Appropriate fire extinguishers will be mounted on the building walls, adjacent to their respective material types (e.g., Class B fire extinguisher will be located beside flammable liquids; Class C fire extinguisher will be located beside e-Waste).

10.0

Follow-up Plans, including Monitoring and Reporting

Regularly scheduled inspections of specialized collection systems and general housekeeping tasks (e.g., picking up litter, reviewing surface water management system) will be included in site operations. The regularly scheduled inspections will promptly identify potential leaks or spills, thereby mitigating off site migration of potential environmental impacts.

Following development of a second, third, and fourth 4R Depot in the City (currently two are planned for 2015, and one for 2017), a reduction in residential traffic and use is anticipated. The opening of the additional 4R Depots is expected to result in a decrease in the quantity of commodities received at the site, which could permit an expansion of the types of commodities received at the 4R Depot.

Expanding the types of commodities received at the site would be coordinated with the product stewards of the specific commodities to ensure the availability of a viable market for the new commodities. One option for the management of the additional commodities is a Re-Use Centre.

11.0

Conclusions

Potential environmental impacts as a result of the development will be mitigated by design features and site operational practices. Impacts to the soil will be mitigated by the use of relatively impervious surfaces throughout the majority of the site. Impacts to surface water from materials received will be mitigated by the HHW/e-Waste building's independent surface water management system, which will be isolated from the surface water management system for the remainder of the 4R Depot.

All materials received will be stored in approved containment units. The HHW/e-Waste building will include curbing to contain spills inside the building. Used oil will be collected in an approved double-walled tank to mitigate potential spills.

It is the opinion of Dillon that the risk of environmental impacts at the 4R Depot site as a result of HHW/e-Waste building operations is low and adequate measures are included in the site design to mitigate potential migration of environmental impacts off-site. In addition, site operational practices will mitigate potential migration of environmental impacts off-site.

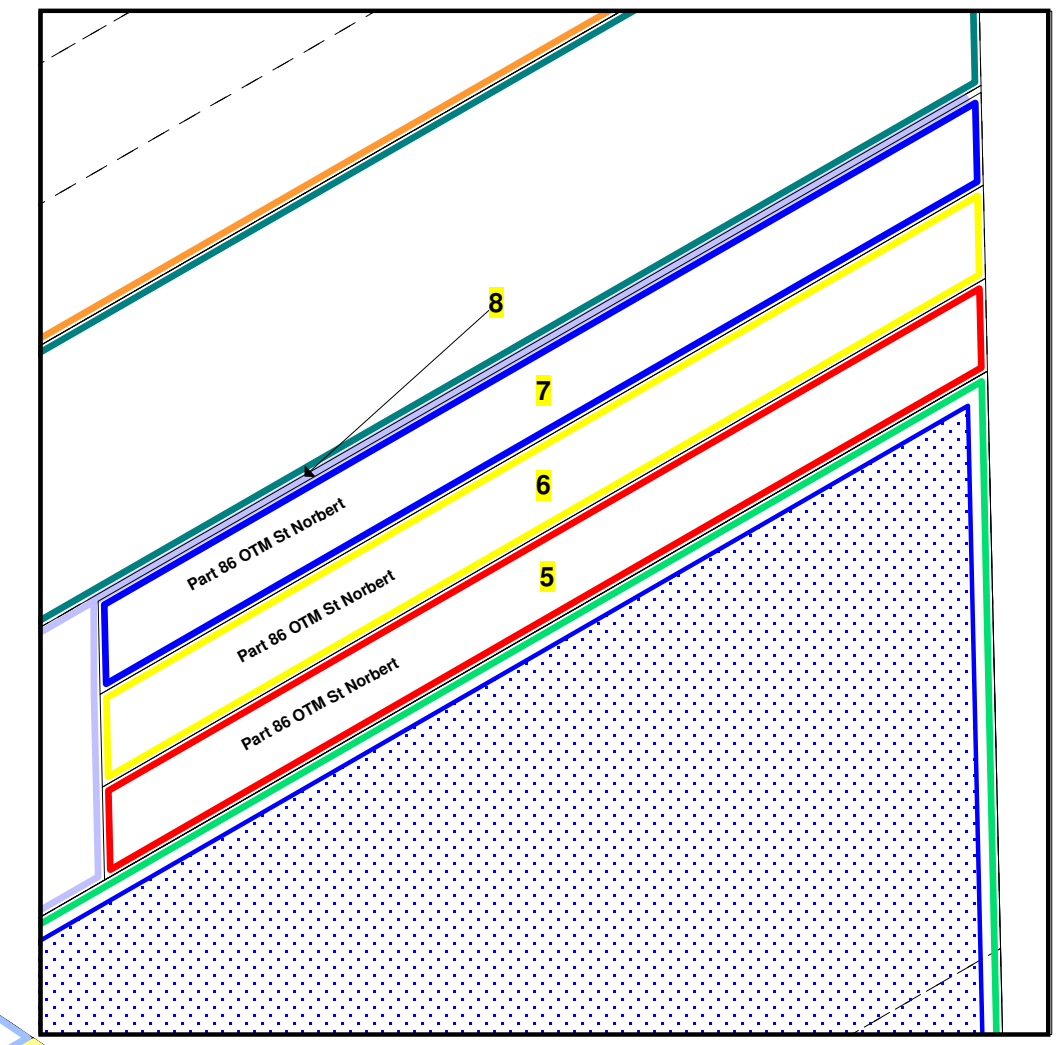
Appendix A

Drawings

Brady Land Fill Title Plot

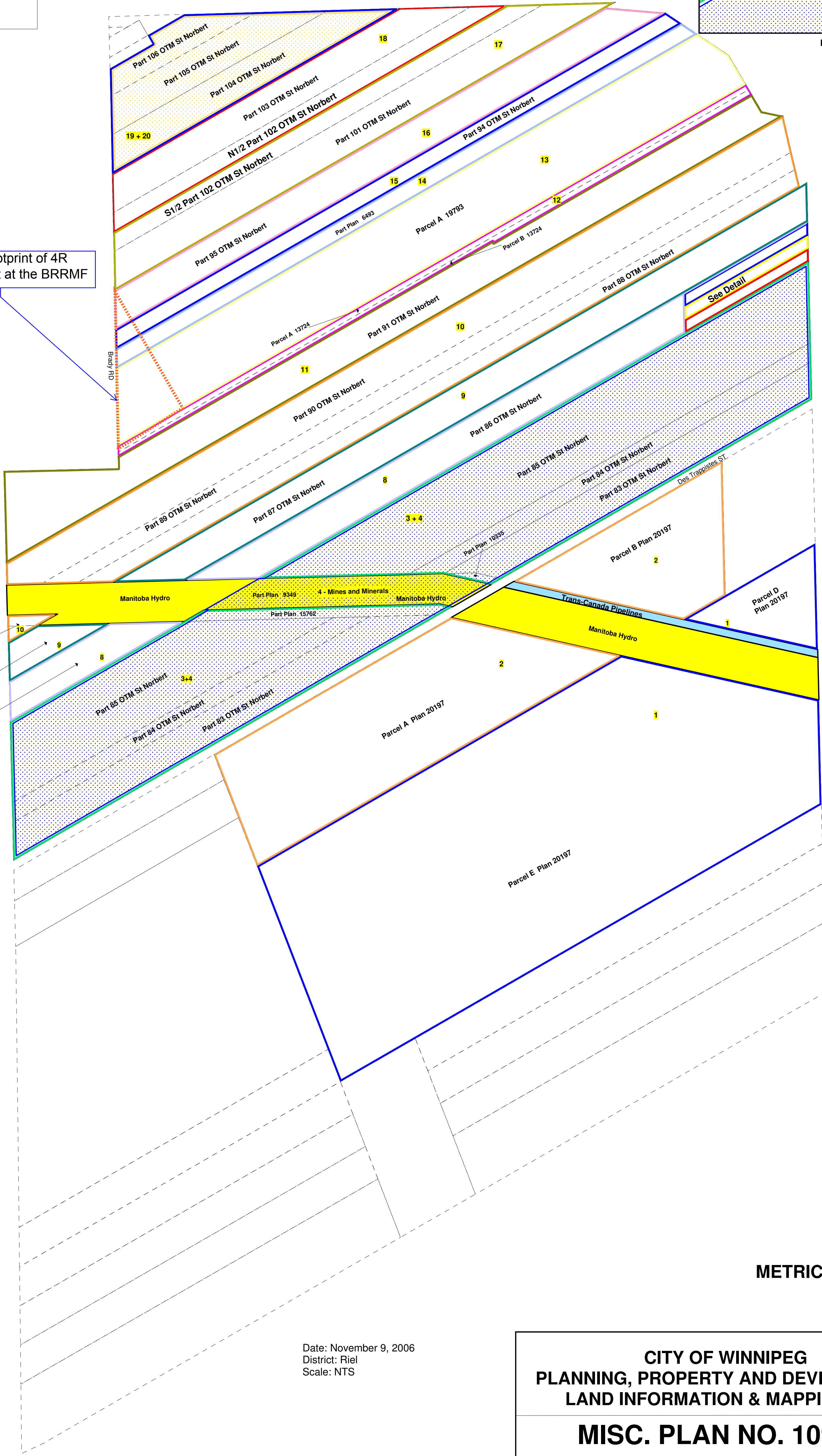
Title Legend

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3 = 1387181
4 = 1387180 - Mines & Minerals
5 = 1233778
6 = 1233776
7 = 1233783
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9 = 1387230
10 = 1387091
11 = 1387094
12 = 1233799
13 = 1233807
14 = 1240481
15 = 1240483
16 = 1233797
17 = 1233785
18 = 1233784
19 = 1240478
20 = 1233795 - Mines & Minerals
Manitoba Hydro
Trans-Canada Pipelines



Perimeter 100 HWY

Approximate footprint of 4R
Winnipeg Depot at the BRRMF



See Detail

METRIC



Date: November 9, 2006
District: Riel
Scale: NTS

**CITY OF WINNIPEG
PLANNING, PROPERTY AND DEVELOPMENT DEPT.
LAND INFORMATION & MAPPING SERVICES**

MISC. PLAN NO. 10998/1

Appendix B

Record of Title

DATE: 2011/11/04
TIME: 14:50

MANITOBA
RECORD OF TITLE

TITLE NO: 1233807

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	CITY OF WINNIPEG (LAND & DEV.)
ORIGINATING OFFICE.....	WINNIPEG	ADDRESS.....	2ND FLOOR
REGISTERING OFFICE.....	WINNIPEG		65 GARRY ST.
REGISTRATION DATE.....	1992/02/06		WINNIPEG MB R3C 4K4
COMPLETION DATE.....	1992/02/26	LTO BOX NO....	97
CONSOLIDATION.....	NO	CLIENT FILE...	BRADY LAND FILL BO 4559 V2
		PRODUCED BY...	M.DERKSEN

LEGAL DESCRIPTION:

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON IN THE FOLLOWING DESCRIBED LAND:

ALL THAT PORTION OF PARCEL "A" PLAN 19793 WLTO WHICH LIES TO THE WEST OF THE WESTERN LIMIT OF ROAD PLAN 24391 WLTO IN OTM LOTS 92 AND 93 PARISH OF ST NORBERT

CHARGE(S):

NO CHARGES EXIST ON THIS TITLE

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE	FIRM NUMBER
ACTIVE	CITY OF WINNIPEG (LAW) 3RD FLOOR 185 KING ST. WPG., MB.	R3B 1J1	29

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
1510548 WPG	TREQ	1992/02/06	\$0.00	\$0.00
PRESENTED BY:		CITY OF WINNIPEG (LAW)		
FROM/BY:		THE CITY OF WINNIPEG		
TO:				

FROM TITLE NUMBER(S):

J55272 WPG PART

SURVEY PLAN INDEX:

LOT	BLOCK	PLAN
A		19793

NOTE: ALL WEST OF ROAD PLAN 24391

ACCEPTED THIS 6TH DAY OF FEBRUARY, 1992
BY A.MAPES FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM ON 2011/11/04 OF TITLE NUMBER 1233807

***** END OF RECORD OF TITLE 1233807 WPG *****

DATE: 2011/11/04
TIME: 14:51

**MANITOBA
RECORD OF TITLE**

TITLE NO: 1240481

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	CITY OF WINNIPEG (LAND & DEV.)
ORIGINATING OFFICE.....	WINNIPEG	ADDRESS.....	2ND FLOOR
REGISTERING OFFICE.....	WINNIPEG		65 GARRY ST.
REGISTRATION DATE.....	1992/04/22		WINNIPEG MB
COMPLETION DATE.....	1992/05/01	LTO BOX NO....	97
CONSOLIDATION.....	NO	CLIENT FILE...	BRADY LAND FILL BO 4559 V2
		PRODUCED BY...	M.DERKSEN

LEGAL DESCRIPTION:

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON IN THE FOLLOWING DESCRIBED LAND:

ALL THAT PORTION OF OTM LOT 94 PARISH OF ST NORBERT
TAKEN FOR PUBLIC WORK PLAN 6493 (NOW CLOSED)
EXC PUBLIC ROAD PLANS 6788 WLTO AND 24391 WLTO

CHARGE(S):

NO CHARGES EXIST ON THIS TITLE

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE	FIRM NUMBER
ACTIVE	CITY OF WINNIPEG (LAW) 510 MAIN STREET WINNIPEG, MB	R3B 1J1	29

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
1533346 WPG	T	1992/04/22	\$1.00	\$45,000.00

PRESENTED BY: CITY OF WINNIPEG (LAW)
FROM/BY: H.M. THE QUEEN (MANITOBA)
TO: THE CITY OF WINNIPEG

FROM TITLE NUMBER(S):

1235221 WPG ALL

PARISH PLAN INDEX:

LOT	TYPE	PARISH
94	OUTER TWO MILE LOT	ST NORBERT

NOTE: PART FOR PL.6493 (CLSD) EXC PLS.6788 & 24391

ACCEPTED THIS 22ND DAY OF APRIL, 1992
BY W.BROWN FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA
STORAGE SYSTEM ON 2011/11/04 OF TITLE NUMBER 1240481

***** END OF RECORD OF TITLE 1240481 WPG *****

DATE: 2011/11/04
TIME: 14:51

MANITOBA
RECORD OF TITLE

TITLE NO: 1240483

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	CITY OF WINNIPEG (LAND & DEV.)
ORIGINATING OFFICE.....	WINNIPEG	ADDRESS.....	2ND FLOOR
REGISTERING OFFICE.....	WINNIPEG		65 GARRY ST.
REGISTRATION DATE.....	1992/04/22		WINNIPEG MB
COMPLETION DATE.....	1992/05/01	LTO BOX NO....	97
CONSOLIDATION.....	NO	CLIENT FILE...	BRADY LAND FILL BO 4559 V2
		PRODUCED BY...	M.DERKSEN

R3C 4K4

LEGAL DESCRIPTION:

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON IN THE FOLLOWING DESCRIBED LAND:

OTM LOT 94 PARISH OF ST NORBERT
EXC FIRSTLY: PUBLIC WORK PLAN 6493 WLTO (CLOSED)
AND SECONDLY: PUBLIC ROAD PLANS 6788 WLTO AND 24391 WLTO

CHARGE(S):

NO CHARGES EXIST ON THIS TITLE

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE	FIRM NUMBER
ACTIVE	CITY OF WINNIPEG (LAW) 510 MAIN STREET WINNIPEG, MB	R3B 1J1	29

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
1533345 WPG	T	1992/04/22	\$1.00	\$44,000.00

PRESENTED BY: CITY OF WINNIPEG (LAW)
FROM/BY: H.M. THE QUEEN (MANITOBA)
TO: THE CITY OF WINNIPEG

FROM TITLE NUMBER(S):

1235155 WPG ALL

PARISH PLAN INDEX:

LOT	TYPE	PARISH
94	OUTER TWO MILE LOT	ST NORBERT

NOTE: EXC PLS.6493, 6788 & 24391

ACCEPTED THIS 22ND DAY OF APRIL, 1992
BY W.BROWN FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM ON 2011/11/04 OF TITLE NUMBER 1240483

***** END OF RECORD OF TITLE 1240483 WPG *****

DATE: 2011/11/04
TIME: 14:52

**MANITOBA
RECORD OF TITLE**

TITLE NO: 1233797

PAGE: 1

STATUS OF TITLE.....	ACCEPTED	PRODUCED FOR..	CITY OF WINNIPEG (LAND & DEV.)
ORIGINATING OFFICE.....	WINNIPEG	ADDRESS.....	2ND FLOOR
REGISTERING OFFICE.....	WINNIPEG		65 GARRY ST.
REGISTRATION DATE.....	1992/02/06		WINNIPEG MB R3C 4K4
COMPLETION DATE.....	1992/02/26	LTO BOX NO....	97
CONSOLIDATION.....	NO	CLIENT FILE...	BRADY LAND FILL BO 4559 V2
		PRODUCED BY...	M.DERKSEN

LEGAL DESCRIPTION:

THE CITY OF WINNIPEG

IS REGISTERED OWNER SUBJECT TO SUCH ENTRIES RECORDED HEREON IN THE FOLLOWING DESCRIBED LAND:

ALL THAT PORTION OF OTM LOT 95 PARISH OF ST NORBERT WHICH LIES TO THE SOUTH WEST OF THE NORTH EASTERN LIMIT OF PUBLIC ROAD PLAN 6788 WLTO
EXC FIRSTLY: SAID ROAD PLAN 6788 AND
SECONDLY: PUBLIC ROAD PLAN 24391 WLTO

CHARGE(S):

NO CHARGES EXIST ON THIS TITLE

ADDRESS(ES) FOR SERVICE:

EFFECT	NAME AND ADDRESS	POSTAL CODE	FIRM NUMBER
ACTIVE	CITY OF WINNIPEG (LAW) 3RD FLOOR 185 KING ST. WPG., MB.	R3B 1J1	29

ORIGINATING INSTRUMENT(S):

REGISTRATION NUMBER	TYPE	REG. DATE	CONSIDERATION	SWORN VALUE
1510539 WPG	TREQ	1992/02/06	\$0.00	\$0.00

PRESENTED BY: CITY OF WINNIPEG (LAW)
FROM/BY: THE CITY OF WINNIPEG
TO:

FROM TITLE NUMBER(S):

J38289 WPG PART

PARISH PLAN INDEX:

LOT	TYPE	PARISH
95	OUTER TWO MILE LOT	ST NORBERT

NOTE: ALL WEST OF ROAD PLAN 24391

ACCEPTED THIS 6TH DAY OF FEBRUARY, 1992
BY A.MAPES FOR THE DISTRICT REGISTRAR OF
THE LAND TITLES DISTRICT OF WINNIPEG.

CERTIFIED TRUE EXTRACT PRODUCED FROM THE LAND TITLES DATA STORAGE SYSTEM ON 2011/11/04 OF TITLE NUMBER 1233797

***** END OF RECORD OF TITLE 1233797 WPG *****