ENVIRONMENTAL ASSESSMENT REPORT
103-251 SAULTEAUX CRESCENT
WINNIPEG, MANITOBA

Submitted to:

Central Dental Solutions
103-251 Saulteaux Crescent
Winnipeg, Manitoba
R3J 3C4

Attention: Mr. Cam Mailey, General Manager

Submitted by:

AMEC Environment & Infrastructure
A Division of AMEC Americas Limited
440 Dovercourt Drive
Winnipeg, Manitoba
R3Y 1N4

AMEC Project Number: WX17208

August 20, 2013

EXECUTIVE SUMMARY

Central Dental Solutions authorized AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC) to complete an Environmental Assessment (ES) Report for the proposed hazardous waste and bio-hazard facility to be located at 103 – 251 Saulteaux Crescent in Winnipeg, Manitoba. This Environmental Assessment (EA) Report will support the proponents permit application for a Hazardous Waste Generation (Bio-Hazard) and Transportation Permit and a license application to store and transfer hazardous waste (bio-hazard) is under the Dangerous Goods Handling and Transportation (DGHT) Act.

Project Description and Existing Land Use

Central Dental is applying for a license for the proposed project site which would allow them to temporarily store and transfer hazardous waste / bio-hazard. Hazardous waste and bio-hazard would be picked up from various dental and medical offices in a sealed containment box and brought into the warehouse to be packaged, sterilized and palletized.

The bio-hazard would be stored in a closed containment until processed. Once palletized, the pallets will be transported by Western messenger to be disposed of as per current procedures.

The hazardous waste will be sealed and have a serial numbers. Central Dental will pick up the containers and transport them in a sealed containment box to the warehouse. At the warehouse, the containers with the serial numbers will be entered into their internal database. The containers will then be packed tightly into a new UN steel drum. Once the drum is full, it will be sealed and shipped to Miller Environmental or BioMed to be put in freight containers and sent to a certified disposal company.

The proposed project site is located along the south side of Saulteaux Crescent, east of Moray Street in the St. James Assiniboia East neighbourhood of the Murray Industrial Park ward of the City of Winnipeg, Manitoba. According to the City of Winnipeg Citizen's Information Service, the Site and adjacent properties are zoned for Manufacturing – General (M2).

The site is developed with a large commercial building divided into office spaces, a warehouse area and cross dock area along the west of the facility. The surrounding land consists of commercial and industrial uses.

Potential Effects and Mitigation

As a result of the project site being located in an area zoned as manufacturing, presence of industrial and commercial uses surroundings the site and the project site being disturbed and used commercially, no effects to flora or fauna species are anticipated from this project. There is the potential for amphibians and reptiles to be present in low lying areas adjacent to the site but no effects are anticipated as the proposed storage and transfer of hazardous waste and bio-hazard material will not affect the low lying areas.

There are no waterbodies, municipal, provincial or federal parks, First Nation lands, schools or heritage sites located on or adjacent to the site. A rail line and right of way are located south of the Site. The nearest residential area is located approximately 0.8 km south of the project site. The proposed hazardous waste and bio-hazard will not affect the existing rail line or the residential area.

There is the potential for air emissions to be produced from the operation of the proposed hazardous waste and bio-hazard facility. These emissions include those that may be generated by increased truck traffic transporting the hazardous waste and bio-hazard. Mitigation measures to reduce these potential effects include, ensuring transport vehicles for the bio-hazard and hazardous waste are maintained and in proper working condition. It is anticipated that potential effects as a result of air emissions from the project are negligible.

The operation of the proposed hazardous waste and bio-hazard facility will have no effects on the climate or greenhouse gas emissions. Although there is the potential for a slight increase in traffic in the area, the number of trucks transporting the bio-hazard and hazardous waste and exhaust produced will be minimal in comparison to the existing and new traffic that is generated from the existing industrial and commercial development surrounding the site.

There is the potential for additional noise to be generated from the slight increase in truck traffic that will be generated as a result of the proposed hazardous waste and bio-hazard facility.

Given the location of the facility in a manufacturing – general zone, existing industrial and commercial properties surrounding the site, and distance to the nearest residential property of approximately 0.8 km, effects from noise emissions are considered negligible.

Increased traffic may result from the addition of transport trucks used for the delivery and hauling away of the hazardous waste and bio-hazard. It is anticipated that the number of additional vehicles/trucks will be minimal in comparison to the existing traffic that is generated from the existing industrial and commercial development surrounding the site.

There is the potential for spills to occur as a result of the storage and transfer of hazardous materials on site. Spills or leakage from machinery (i.e, forklifts) may also occur. Potential effects from spills are considered negligible if the following mitigation measures are followed: maintenance of equipment; proper storage of hazardous materials; adherence to all emergency, and fire safety plans.

There are no anticipated residual effects as a result of the proposed bio-hazard and hazardous waste facility.

Follow-up Plans

Central Dental will ensure that the Emergency Plan (Appendix A) and the Fire Escape (Appendix B) is reviewed, understood and adhered to by all personnel.

As the project is not anticipated to cause any effects to the biophysical or socio-economic environments adjacent to the site, no follow-up plans or monitoring plans are required.

Conclusion

As a result of the project location (manufacturing - general), current existing environment of the site (commercial use) and adherence to the emergency plan developed by Central Dental Solutions for the hazardous waste and bio-hazard transfer station, it has been determined there will be no environmental effects as a result of the proposed project.

SIGNATURE PAGE

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1.0 INTRODUCTION

Mr. Cam Mailey of Central Dental Solutions authorized AMEC Environment & Infrastructure, a division of AMEC Americas Limited (AMEC), to complete an Environmental Assessment (EA) Report to support the proponents permit application for a Hazardous Waste Generation (Bio-Hazard) and Transportation Permit. Currently, the proposed project site is located within the North Moray Centre (Figure 1) with various other tenants; np2 strategy branding advertising, Acure Group Inc., Western Environmental Canada – Petroleum Equipment, Douglas Paul Design, Kennedy & Samuels, Vista Finishing Systems, and Meditek.

A license for a facility to store and transfer hazardous waste (bio-hazard) is required under the Dangerous Goods Handling and Transportation (DGHT) Act. Central Dental Solutions requested AMEC prepare the Environmental Assessment Report as part of their DGHT Act application for the Site.

2.0 DESCRIPTION OF PROPOSED DEVELOPMENT

2.1 Legal Land Description

The proposed project site is located along the south side of Saulteaux Crescent, east of Moray Street in the St. James Assiniboia East Neighborhood of the Murray Industrial Park Ward of the City of Winnipeg, Manitoba (Figure 2).

2.2 Current Site Description and Facilities

The proposed project site identified for the bio-hazard and hazardous waste facility is located along the south side of Saulteaux Crescent in the St. James Assiniboia East neighborhood of the Murray Industrial Park Ward of Winnipeg, Manitoba. The site is developed with a large commercial building divided into office spaces, a warehouse area and cross dock area along the west of the facility. Site photos of the existing commercial building, and associated facilities, and surrounding land can be found in Appendix D.

2.3 Land Use Designation

According to the City of Winnipeg Citizen's Information Service, the Site and adjacent properties are zoned for Manufacturing – General (M2). The Site is additionally zoned as airport vicinity (PDO designation).

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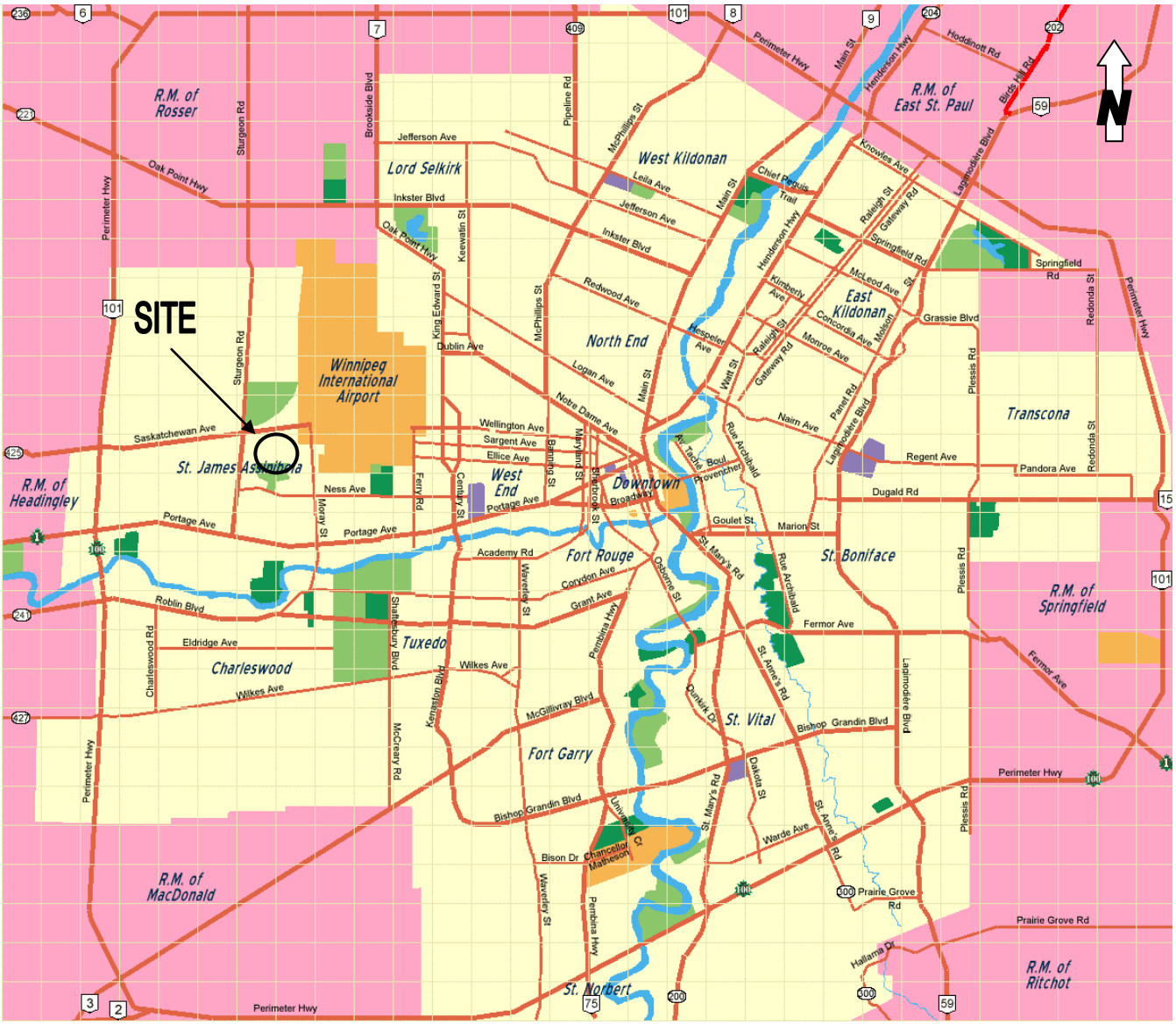
CENTRAL DENTAL SOLUTIONS

PROJECT SITE PLAN
ENVIRONMENTAL ASSESSMENT REPORT
103-251 SAULTEAUX
WINNIPEG, MANITOBA

Drawn: N/A	Original Scale: 1:1500	Date: AUG/2013	Project No.: WX17208	Figure: 1



CITY OF WINNIPEG

amec Environment & Infrastructure CENTRAL DENTAL SOLUTIONS		REGIONAL SITE LOCATION ENVIRONMENTAL ASSESSMENT REPORT 103-251 SAULTEAUX CRESCENT WINNIPEG, MANITOBA		
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2.4 Proposed Development Use

Central Dental is applying for a license for the proposed project site which would allow them to store and transfer hazardous waste / bio-hazard (Figure 3).

Hazardous waste and bio-hazard would be picked up from various dental and medical offices in a sealed containment box and brought into the warehouse to be packaged, sterilized and palletized. The bio-hazard would be stored in a closed containment until processed.

The bio hazard material would be processed as follows:

- Material will be processed in batches no larger than 5 gallons at one time
- The material will be labelled, a sterilization indicator attached to each container, and then it will be steamed for 20 minutes at 250ºF.
- The sterilization indicator will be checked to confirm proper sterilization
- Containers will be palletized.

Once palletized, the pallets will be transported by Western messenger to be disposed of as per current procedures.

The hazardous waste will be sealed and have a serial number. Central Dental will pick up the containers and transport them in a sealed containment box to the warehouse. At the warehouse, the containers with the serial numbers will be entered into their internal database. The containers will then be packed tightly into a new UN steel drum. Once the drum is full, it will be sealed and shipped to Miller Environmental or BioMed to be put in freight containers and sent to a certified disposal company.

Central Dental proposes to operate the business during the hours of 7:00 am to 4:30 pm, Monday to Friday. The facility will be operated by staff trained in facility operating procedures and spill clean up procedures. Within the warehouse, spill kits shall be conveniently located for cleanup of spills. An Emergency Plan will be in effect for the Site and has been included in Appendix A.

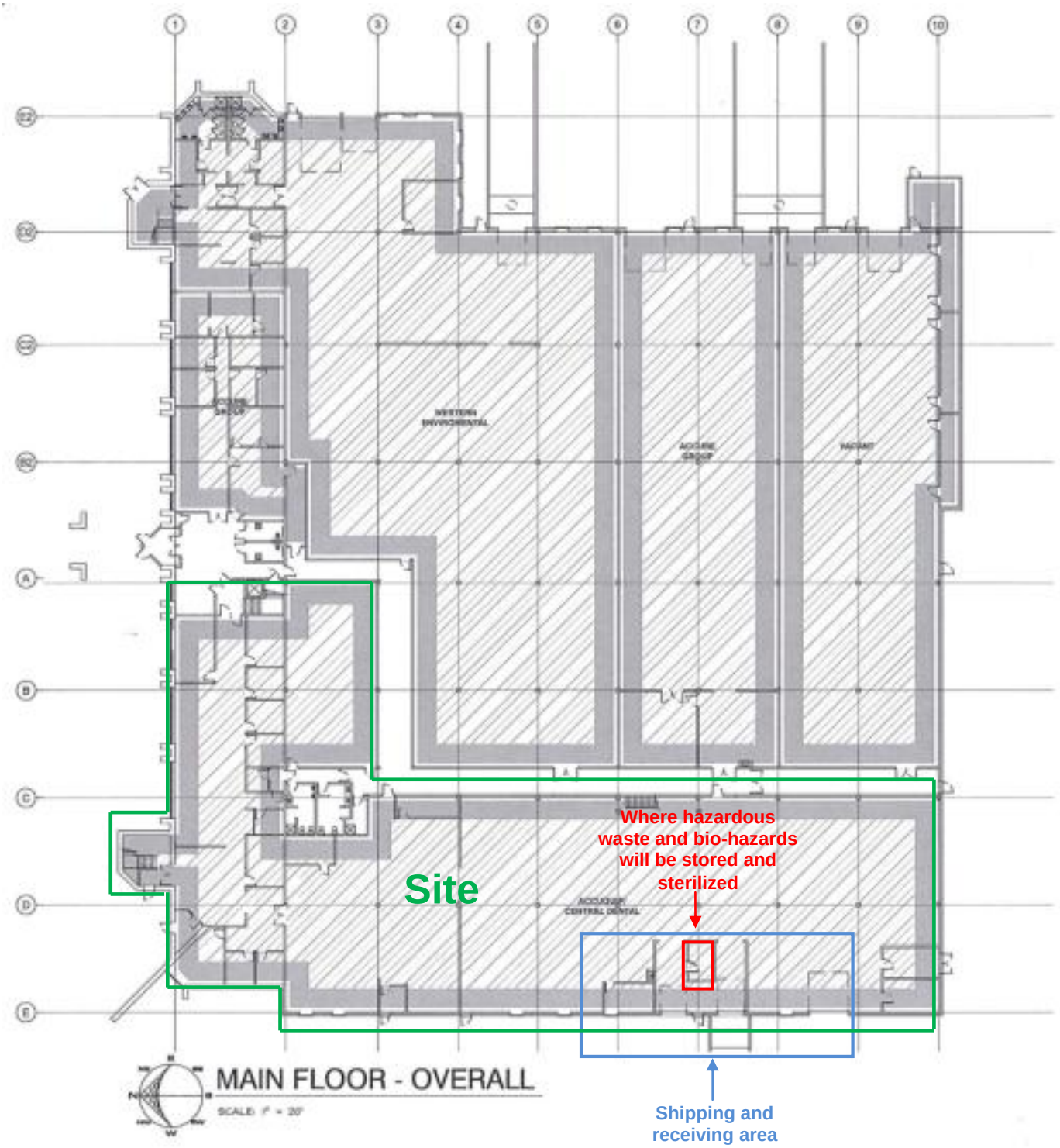
2.5 Funding

All costs required for the development of the bio-hazard and hazardous waste transfer and handling storage areas would be funded by Central Dental Solutions (owners of the property).

2.6 Regulatory Permits/Authorizations/Approvals

Central Dental Solution will require an application for a Hazardous Waste Generation (Bio-Hazard) and Transportation Permit and a license application to store and transfer hazardous waste (bio-hazard) is under the Dangerous Goods Handling and Transportation (DGHT) Act. This Environmental Assessment will be submitted with the completed license application and provided to Manitoba Conservation for review and approval.

Any applicable regulations listed in the City of Winnipeg Solid Waste By-Law 110/2012 will be adhered to. There are no federal legislations applicable to the project.



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Environment & Infrastructure

CENTRAL DENTAL SOLUTIONS

LOCATION OF HAZARDOUS WASTE AND BIO-HAZARD STORAGE ON SITE
ENVIRONMENTAL ASSESSMENT REPORT
103-251 SAULTEAUX
WINNIPEG, MANITOBA

Drawn: N/A	Original Scale: N/A	Date: AUG/2013	Project No.: WX17208	Figure: 3

2.7 Public Advertisement

If determined by Manitoba Conservation Procedures, a notice, describing the development of the proposed bio-hazard and hazardous waste facility, will be published in local newspapers. A thirty day period will be granted to the public to provide comments or concerns on the project to Manitoba Conservation.

3.0 DESCRIPTION OF EXISTING ENVIRONMENT

3.1 Biophysical Environment

3.1.1 Ecological Land Classification

The site identified for the proposed bio-hazard and hazardous waste storage and transfer facility is located in the Prairies Ecozone, Lake Manitoba Plains Ecoregion and the Winnipeg Ecodistrict. The Winnipeg Ecodistrict (849) occupies most of the southeast portion of the Lake Manitoba Plains Ecoregion (Smith et. al., 1998).

3.1.2 Climate

The Winnipeg ecodistrict is in the most humid subdivision of the Grassland Transition Ecoclimatic Region in southern Manitoba. The climate is characterized by short, warm summers and long, cold winters with a mean annual temperature about 2.4 C. The average growing season is 183 days and the growing degree days number about 1,720 (Smith et. al., 1998).

Mean annual precipitation is approximately 515 mm of which less than 25% falls as snow. Year to year precipitation varies greatly from highest in late spring through summer and the average yearly moisture deficit is about 200 mm. The ecodistrict also has a cool, subhumid to humid, Boreal to moderately cold, Cryoboreal soil climate (Smith et. al., 1998).

Table 1 shows selected climate data for the City of Winnipeg collected from 1971 to 2000 from the station located at the Winnipeg Richardson International Airport (Government of Canada, 2013). The mean annual temperature for the Winnipeg Richardson International Airport station is 2.6^{o}C. The mean annual precipitation is 513.4 mm with 415.6 mm occurring as rainfall.

Table 1 :Selected Climate Data for the Winnipeg Richardson International Airport

Parameters	Year	June – Aug.	May – Sept.	July	Jan.
Temperature ^{0}C	2.6	18.3	15.8	19.5	-17.8
Precipitation mm (equiv.)	513.4	235.2	346.3	70.6	19.7
Rain/Snow (mm/cm)	415.6/110.6	235.2/0.0	345.1/1.2	70.6/0.0	0.2/23.1
Growing degree-days >5^{o}C	1806.3	1228.40	1675.40	450.50	0.0

Source: Government of Canada. 2013. Environment Canada Calculation Information for 1971 to 2000 Canadian Normals Data – Winnipeg Richardson Airport. Website Accessed August 2013. http://climate.weather.gc.ca/climate_normals

3.1.3 Geology and Groundwater

Based on available geological maps, the subsurface stratigraphy in this area of Winnipeg normally consists of topsoil and fill materials underlain by glacio-lacustrine silt and clay to a depth of about 6 to 9 m from grade. A deposit of silty till, typically a number of metres thick, occurs between the clay and the underlying bedrock. The bedrock in this area is of the Gunton Member and largely consists of dolomite with variable argillaceous content (Baracos et al., 1983). Bedrock is estimated to occur at about 6 to 9 m below grade.

According to Smith et. al., the Winnipeg Ecodistrict lies in the central lowland of the Red River Plain and is characterized as being smooth, level to very gently sloping, with clayey glaciolacustrine plain with a mean elevation of approximately 236 metres above sea level (masl).

Fractured zones in the bedrock comprise the major aquifer in the area. There are no aquifers above the bedrock. (Baracos et al., 1983).

3.1.4 Physiography and Surficial Drainage

The Site appeared to be relatively flat lying and level with the adjacent properties. It appeared that the asphalted areas of the Site were graded such that overland drainage was directed towards catch basins located in the adjacent Saulteaux Crescent and Moray Street. The south end of the site, near the railway, was inferred to be poorly drained, as there was no ditch along the railway.

3.1.5 Surface Water Bodies

There are no surface water bodies located within the Site. The closet surface water body to the site is Sturgeon Creek, which is located approximately 1.9 km east of the Site. The project site will not affect this surface water body.

3.1.6 Vegetation

During the Site visit completed as part of the Environmental Screening, the ground surface was predominantly asphalt with trees, low lying vegetation and manicured grasses. The areas surrounding the site contained similar vegetation and ground cover.

The Manitoba Conservation Data Centre (MBCDC) maintains a list of plant species of conservation concern in the province. Appendix C, Table C1 lists flora of conservation concern in the Lake Manitoba Plain Ecoregion which encompasses the Site. Species listed by *The Endangered Species Act* of Manitoba (MBESA), *Species at Risk Act* (SARA) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) are also included in Appendix C, Table C2.

The potential for any species of concern to occur at the Site is low due to industrial use, ground paving, and maintained vegetation areas.

3.1.7 Wildlife, Amphibians, Reptiles and Terrestrial Invertebrates

Mammals and birds that may be observed within industrial areas of Winnipeg include rodents and common bird species such as crows, robins and Canada geese. There is the potential for amphibians and reptiles to be present in low lying areas adjacent to the site.

The Manitoba Conservation Data Centre (MBCDC) maintains a list of wildlife and invertebrate species of conservation concern in the province. Appendix C, Table C1 lists species of conservation concern in the Lake Manitoba Plain Ecoregion which encompasses the Site. Species listed by *The Endangered Species Act* of Manitoba (MBESA), *Species at Risk Act* (SARA) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) are also included in Appendix C, Table C2.

As a result of the proposed site being located in an existing manufacturing area the potential to encounter wildlife, terrestrial invertebrates, amphibians and reptile species of concern in the project area is low. The proposed project will not impact the adjacent land and low-lying areas and therefore the effect to invertebrates, amphibians and reptiles is negligible.

There are no wildlife management areas or ecologically significant areas within two (2) km of the proposed site.

3.1.8 Aquatic Species and Habitat

There are no surface water bodies located within the Site. The closet surface water body to the site is Sturgeon Creek, which is located approximately 1.9 km east of the Site. The project site will not affect this surface water body or aquatic species within this water body.

3.2 SOCIOECONOMIC AND LAND USE ENVIRONMENT

3.2.1 Infrastructure and Commercial Properties

The proposed site is located in an area zoned for manufacturing by the City of Winnipeg. Existing infrastructure located adjacent to the proposed site includes the following:

North: Saulteaux Crescent is followed from the northwest to northeast by; Login Canada, OMT Technologies, AML Wireless Systems Inc., Argus Industries, Moray Street and K-Tel International.

South: A rail line and right of way is followed from the southwest to the southeast by the Discovery/Lancer Group, Moray Collision (auto-body and truck centre) and ACR Glass. A Canada Post distribution centre is located south of Moray Collision and ACR Glass;

East: Moray Street followed by Transcontinental LGM Coronet and to the southeast by Macdon Industries Ltd.;

West: Saulteaux Crescent is followed by an undeveloped treed lot and to the southwest by a rail line. A large multi-tenant commercial building located south of the rail line includes; NJ Industries, Hyflex Assemblies Ltd.,

Hemisphere GPS, and Crown Construction Equipment.

3.2.2 Recreation

There are no federal, provincial or municipal parks located on or immediately adjacent to the proposed site. The closest municipal parks are Living Prairie Museum Park and Uplands Park located approximately one kilometre and 1.4 kilometres southwest of the site.

The Living Prairie Museum Park is a 30 acre tall grass prairie that has been set aside by the City of Winnipeg Nature Park. This was set aside to provide awareness and conservation of natural areas. There are over 160 species of prairie grasses and wildflowers as well as a great array of prairie wildlife. It is one of the few remaining fragments of this once vast ecosystem.

Uplands Park is designated as a City of Winnipeg "other open space" and is available for public use (City of Winnipeg, 2013)

3.2.3 Heritage Sites

There are no City of Winnipeg municipal, provincial or national designated sites within five kilometres of the proposed site (City of Winnipeg, 2010)

3.2.4 First Nations

There are no First Nations reserve lands or TLE's (Treaty Land Entitlement) selections located within two (2) kilometres of the proposed project site.

3.2.5 Schools

There are no schools located within one kilometre of the proposed site.

3.2.6 Residential

The Booth neighbourhood is the closest residential area located approximately 0.8 km south of the site.

4.0 DESCRIPTION OF POTENTIAL ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

The following outlines potential effects on the physical, biophysical and socio-economic environment that may occur from the operation of the proposed bio-hazard and hazardous waste handling and transfer depot. Mitigation measures for any potential effects identified are also discussed.

4.1 Air Emissions

Air emissions that may result from the operation of the proposed bio-hazard and hazardous waste handling and transfer depot include those generated by increased truck traffic transporting the bio-hazard and hazardous waste. Mitigation measures include:

- Ensuring transport vehicles for the bio-hazard and hazardous waste are in proper working condition

No other emissions will be generated by the proposed bio-hazard and hazardous waste and handling facility.

4.2 Climate

The operation of the proposed bio-hazard and hazardous waste handling and transport facility will have no effects on the climate or greenhouse gas emissions. Although there is the potential for a slight increase in traffic in the area, the number of trucks transporting the hazardous waste will be minimal with respect to the amount of vehicles currently used for other reasons in the area (i.e. commercial, residential, and industrial). Air emissions (exhaust) produced from the trucks are considered negligible.

4.3 Noise Emissions

There is the potential for additional noise to be generated from the slight increased in truck traffic that will be generated as a result of the proposed bio-hazard and hazardous waste facility. Given the location of the facility in a manufacturing – general area of the City of Winnipeg and the distance to the nearest residential property of approximately 0.8 km, effects from noise emissions are considered negligible.

4.4 Hazardous and Non-Hazardous Waste

Based on the information provided by Central Dental, hazardous materials that will be stored as a result of the proposed operation of the hazardous waste handling and storage includes:

- Waste Mercury
- Small amounts of petroleum hydrocarbons (for forklift operation and maintenance) including motor oil, hydraulic oil, lubricants and grease.

There is the potential for spills to occur as a result of the storage and transfer of the bio-hazard and hazardous materials on site. Spills or leakage from machinery (i.e, forklifts) may also occur. The following mitigation measures will be followed to minimize potential effects from spills or leakage from any hazardous or non-hazardous waste generated, stored and transferred from the site:

- Forklifts and other machinery that may be used will be kept in good working condition. Regular inspections and maintenance of equipment will be conducted.
- All used oil on site will be stored in sealed containers until it is transported off site by EnviroWest.

- Absorb All will be used to clean up any minor spills that occur and EnviroWest will be contacted immediately to remove the Absorb all and spilled material
- All applicable regulations and conditions of the DGHT License will be adhered to for the collection, storage and transportation of the bio-hazard and hazardous waste
- Storage of hazardous waste will be for a limited time until transportation can be arranged
- Follow Emergency Response plan outlined in Appendix A

Non hazardous material that may be generated on site includes domestic garbage and recyclable material. Non-hazardous wastes, including domestic garbage and recyclables, will be separated and disposed of in commercial dumpsters and picked-up by a licensed commercial hauler.

4.5 Wildlife and Vegetation

As the proposed location for the bio-hazard and hazardous waste storage and handling depot will be located in an existing manufacturing area, and that the existing site is predominantly asphalt with tree low lying vegetation and manicured grasses there are no anticipated effects to any wildlife or vegetation species of conservation concern.

4.6 Aquatic Habitat and TIAR

As there are no waterbodies located in the proposed project site, the project will no effects on any aquatic species or aquatic habitats. There is the potential for amphibians and reptiles to be present in the surround land to the site.

As a result of the ground surface consisting predominantly of asphalt with trees, low lying vegetation and manicured grasses, no effects to terrestrial invertebrate species of concern area anticipated from the storage and transfer of hazardous and bio-hazard waste..

4.7 Socio-Economic Effects

Socio-economic effects that are anticipated as a result of the project include increased traffic and economic benefits

4.7.1 Increased Traffic

Increased traffic may result from the addition of transport trucks used for the delivery and hauling away of the bio-hazard and hazardous waste. It is anticipated that the number of additional vehicles/trucks will be minimal and therefore are negligible as a result of additional cars/truck that would occur from current workers from other industries accessing the area.

There are no designated parks (municipal, provincial or federal), First Nations, schools or heritage sites located on or adjacent to the property.

4.8 Health and Safety

There is the potential for workers on site to be affected if potential spills of hazardous materials stored on site occur. The following mitigation measures will be adhered to minimize potential effect:

- Employees will ensure they review and understand the Emergency Plan that will be posted at the Site (Appendix A).
- Employees will review and understand the Fire Escape Plan (Appendix B) which will be posted at the Site.

4.9 Residual Effects

There are no anticipated residual effects as a result of the proposed biohazard and hazardous waste.

5.0 FOLLOW-UP PLANS

Central Dental will ensure that the Emergency Plan (Appendix A) and the Fire Escape Plan (Appendix B) is reviewed, understood and adhered to by all personnel.

As the project is not anticipated to cause any effects to the biophysical or socio-economic environments adjacent to the site, no follow-up plans or monitoring plans are required.

6.0 CONCLUSIONS

This environmental assessment has been prepared for Central Dental Solutions to support the application that will be completed in order to receive a licence for a facility to store and transfer hazardous waste (bio-hazard) under the Dangerous Goods Handling and Transportation (DGHT) Act.

Central Dental Solutions proposes to develop the hazardous waste (bio-hazard) facility at 103-251 Saulteaux Crescent in an area already designated for manufacturing – general use with existing facilities occupied by Central Dental Solutions and other business located on site. After review of the proposed site location (Manufacturing – General) and adherence to the Emergency Plan developed by Central Dental Solutions for the hazardous waste and bio-hazard transfer station, it has been determined there will be no environmental effects as a result of the proposed project.

7.0 REFERENCES

Baracos, A., Shields, D. and Kjartanson, B. 1983. Geological Engineering Maps & Report for Urban Development of Winnipeg. The University of Manitoba, Department of Geological Engineering. Winnipeg, MB.

City of Winnipeg. 2010. Heritage Conservation. Website accessed August 2013. http://www.winnipeg.ca/ppd/historic/historic.stm

City of Winnipeg. 2012. The Living Prairie Museum. Website accessed August 2013. http://www.winnipeg.ca/publicworks/naturalist/livingprairie/

City of Winnipeg. 2013. Uplands Park – Now Neighbourhoods of Winnipeg. Website accessed August 2013. http://now.winnipeg.ca

COSEWIC. 2011. Canadian Wildlife Species at Risk. Committee on the Status of Endangered Wildlife in Canada. Website accessed August 2013. http://www.cosewic.gc.ca/eng/sct0/rpt/rpt_csar_e.cfm

Government of Canada. 2013. Environment Canada Calculation Information for 1971 to 2000 Canadian Normals Data – Winnipeg Richardson Airport. Website Accessed August 2013. http://climate.weather.gc.ca/climate_normals

Government of Canada. Species at Risk Public Registry website accessed August 2013. http://www.sararegistry.gc.ca/species/schedules

Manitoba Conservation Data Centre. Occurrence of species by ecoregion. Website Accessed August 2013.http://www.gov.mb.ca/conservation/cdc/ecoreg/lakembplain.html

Manitoba Conservation Data Centre. Conservation Data Centre Ranks. Website Accessed August 2013. http://www.gov.mb.ca/conservation/cdc/consranks.html

Manitoba Conservation. Wildlife Branch. Species Listed Under the *Manitoba Endangered Species Act* website accessed August 2013. https://www.gov.mb.ca/conservation/wildlife/sar/sarlist.html

Smith, R.E., H. Veldhuis, G.F. Mills, R.G. Eilers, W.R. Fraser, and G.W. Lelyk. 1998. Terrestrial Ecozones, Ecoregions, and Ecodistricts, An Ecological Stratification of Manitoba's Landscapes. Technical Bulletin 98-9E. Land Resource Unit, Brandon Research Centre, Research Branch, Agriculture and Agri-Food Canada, Winnipeg, Manitoba. Report and Map at 1:1 500 000 scale. CD-ROM 2001

APPENDIX A

EMERGENCY RESPONSE PLAN

Evaluate, Consult, Supply
Central Dental SOLUTIONS

EMERGENCY PLAN

FIRE – in the event that there is a fire, please take the following steps in this order:

1) LEAVE THE BUILDING!
2) Call 911 if at all possible.
3) EMERGENCY CONTACT - 911

CHEMICAL SPILL OR LEAK – in the event that there is a spill or leak of any liquid chemical at all, please take the following steps in this order:

1) Put on protective wear (mask, gloves, rubber boots)
2) Place approved absorbent material around the area that is affected.
3) Sprinkle absorbent material over the affected area.
4) Wait for 15 minutes for the absorbent material to soak up as much moisture as possible.
5) Using caution scoop up all material from the affected area and dispose of in an appropriate manner.
6) EMERGENCY CONTACT – CANUTEC – 1-613-996-6666.
7) NON-EMERGENCY CONTACT – CANUTEC – 1-613-992-4624

FORKLIFT – in the event that there is a forklift accident, please take the following steps in this order:

1) Ensure everyone is OK. If not, call emergency immediately and ensure proper care is in place for any injured person.
2) Ensure that the forklift is in good condition and no fluids are leaking from anywhere on the forklift.
3) Dispose of any damage or affected product in an appropriate manner.
4) EMERGENCY CONTACT - 911

FLOOD – in the event that there is a flood, please take the following steps in this order:

1) Dispose of any affected product in an appropriate manner.
2) Vacuum up as much standing water as possible. If there is a floor drain nearby squeegee the water toward the floor drain.
3) Place fans around flooded area to assist the drying process.
4) If necessary call the 'Flood Contact' listed below.
5) FLOOD CONTACT – FIRST ON SITE RESTORATION – 204-783-9086

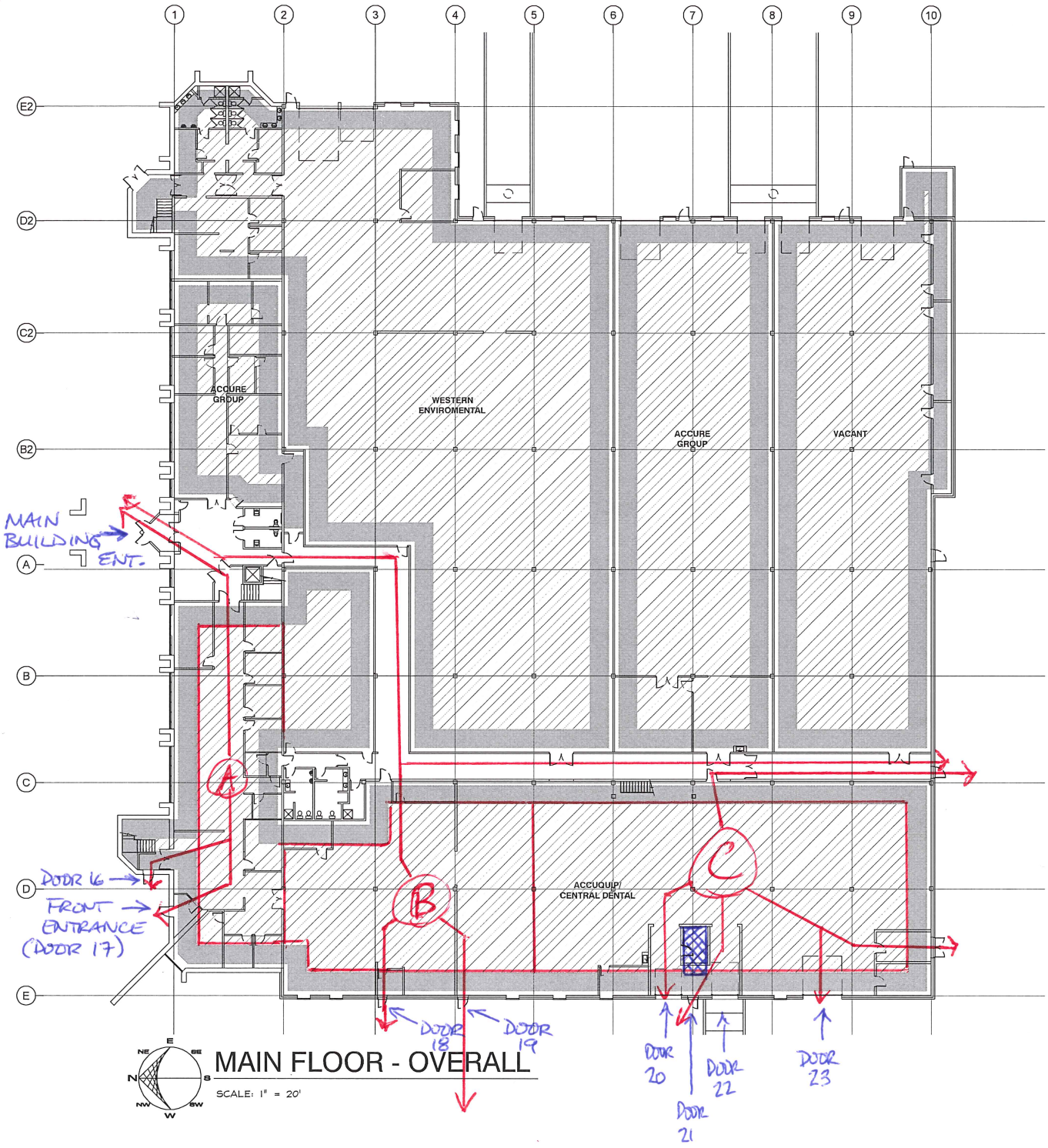
Evaluate, Consult, Supply
Central Dental SOLUTIONS

BIO HAZARD SPILL OR LEAK – in the event that there is a bio hazardous spill or leak, please take the following steps in this order:

1) Put on protective wear (mask, gloves, rubber boots)
2) Place approved absorbent material around the area that is affected.
3) Sprinkle absorbent material over the affected area.
4) Wait for 15 minutes for the absorbent material to soak up as much moisture as possible.
5) Using caution scoop up all material from the affected area and place into an approved bio hazard waste bag.
6) Sterilize the affected area by using approved cleaner and wiping up with approved wipers and place into an approved bio hazard waste bag.
7) After the affected area has been sterilized rinse the area with hot water.
8) EMERGENCY CONTACT – CANUTEC – 1-613-996-6666.
9) NON-EMERGENCY CONTACT – CANUTEC – 1-613-992-4624

APPENDIX B

FIRE ESCAPE PLAN



MAIN FLOOR - OVERALL

SCALE: 1" = 20'

= AREA WHERE BIO HAZARD MATERIAL IS STORED/STERILIZED

FIRE ESCAPE PLAN

ANY PERSONS IN AREA (A) DOORS 16, 17, MAIN BLDG EXIT

ANY PERSONS IN AREA (B) DOORS 18, 19, MAIN BLDG EXIT

ANY PERSONS IN AREA (C) DOORS 20, 21, 23

REVISION			
04	11/08/23	REVISIONS AS PER CITY	SSM
03	11/08/09	REVISIONS AS PER CLIENT & A.H.J.	RTD
02	11/07/06	REVISIONS AS PER CLIENT	JPA
01	11/06/13	REVISIONS AS PER CLIENT	SSM
ISSUE			
03	11/07/06	RE-ISSUED FOR CONSTRUCTION	JPA
02	11/06/30	RE-ISSUED FOR CONSTRUCTION	JPA
01	11/06/03	ISSUED FOR CONSTRUCTION	SSM
NO.	DATE	DESCRIPTION	INITIAL

PRINTED DATE: 8/23/2011 4:04:22 PM

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APPENDIX C

SPECIES OF CONSERVATION CONCERN

Table C1: Species of Conservation Concern in the Lake Manitoba Plain Ecoregion.

Animal Assemblage			
Gull Colony		GNR	SNR
Snake Hibernaculum		GNR	SNR
Tern Colony		GNR	SNR
Invertebrate Animal			
Hesperia dacotae	Dakota Skipper	G2	S2
Ligumia recta	Black Sandshell	G5	SNR
Orconectes immunis	Calico Crayfish	G5	SNR
Quadrula quadrula	Mapleleaf Mussel	G5	S2
Strophitus undulatus	Creeper	G5	SNR
Stylurus amnicola		G4	SNR
Terrestrial Community - Other Classification			
Andropogon gerardii-sporobolus heterolepis-andropogon scoparius herbaceous vegetation	Big Bluestem-prairie Dropseed-little Bluestem Herbaceous Vegetation	GNR	S1
Fraxinus pennsylvanica-(ulmus americana)-acer negundo forest	Green Ash-(American Elm)-manitoba Maple Forest	GNR	S3
Fraxinus pennsylvanica-ulmus americana-(celtis occidentalis, tilia americana) forest	Green Ash-american Elm-(Hackberry, Basswood) Forest	GNR	S2
Phragmites australis herbaceous vegetation	Common Reed Herbaceous Vegetation	GNR	S3?
Populus tremuloides/corylus americana-(symphoricarpos occidentalis) forest	Trembling Aspen/american Hazel-(Snowberry) Forest	GNR	S4
Populus tremuloides-quercus macrocarpa/aralia nudicaulis forest	Trembling Aspen-bur Oak/sarsaparilla Forest	GNR	S3S4
Quercus macrocarpa/amelanchier alnifolia/aralia nudicaulis-carex assiniboinensis forest	Bur Oak/saskatoon Serviceberry/sarsaparilla-assiniboia Sedge Forest	GNR	S3?
Salix exigua shrubland	Sandbar Willow Shrubland	GNR	S3S4
Scolochloa festucacea herbaceous vegetation	Sprangletop Herbaceous Vegetation	GNR	S3S4
Typha spp. herbaceous vegetation	Cattail Herbaceous Vegetation	GNR	S5
Vascular Plant			
Agalinis aspera	Rough Purple False-foxglove	G5	S1S2
Agalinis gattingeri	Gattinger's Agalinis	G4	S1
Agalinis tenuifolia	Narrow-leaved Gerardia	G5	S2S3
Agrimonia gryposepala	Common Agrimony	G5	S1S2
Alisma gramineum	Narrow-leaved Water-plantain	G5	S1
Ambrosia acanthicarpa	Sandbur	G5	S1S2
Amorpha fruticosa	False Indigo	G5	S1S2
Antennaria plantaginifolia	Plantain-leaved Everlasting	G5	S1S2
Arisaema triphyllum ssp. triphyllum	Jack-in-the-pulpit	G5T5	S2
Asclepias verticillata	Whorled Milkweed	G5	S2
Astragalus neglectus	Milkvetch	G4	S1
Atriplex argentea	Saltbrush	G5	S2
Boltonia asteroides var. recognita	White Boltonia	G5T3T5	S2S3
Botrychium pallidum	Pale Moonwort	G3	SH
Bouteloua curtipendula	Side-oats Grama	G5	S2
Bromus porteri	Porter's Chess	G5	S3?
Bromus pubescens	Canada Brome Grass	G5	SNA
Calamagrostis montanensis	Plains Reed Grass	G5	S3
Cardamine bulbosa	Spring Cress	G5	SH
Carex albicans var. albicans	Bellow-beaked Sedge	G5T4T5	SNA
Carex crawei	Crawe's Sedge	G5	S3S4
Carex cristatella	Crested Sedge	G5	S2
Carex douglasii	Douglas Sedge	G5	S3?
Carex emoryi	Emory's Sedge	G5	S2?
Carex hallii	Hall's Sedge	G4?Q	S3
Carex hystericina	Porcupine Sedge	G5	S3?
Carex livida	Livid Sedge	G5	S3
Carex parryana	Stalked Sedge	G5	S3?
Carex pedunculata	Parry's Sedge	G4	S3?
Carex projecta	Necklace Sedge	G5	S2?
Carex supina var. spaniocarpa	Weak Sedge	G5T3T5	S2?
Carex tetanica	Rigid Sedge	G4G5	S2
Carex tribuloides	Prickly Sedge	G5	SNA

Carex vulpinoidea	Fox Sedge	G5	S3?
Celtis occidentalis	Hackberry	G5	S1
Chamaesyce geyeri	Prostrate Spurge	G5	S1
Circaea lutetiana ssp. canadensis	Large Enchanter's-nightshade	G5T5	S2
Cirsium discolor	Field Thistle	G5	S1
Clematis ligusticifolia	Western Virgin's-bower	G5	S1
Clematis virginiana	Virgin's-bower	G5	S2
Corispermum americanum var. americanum	American Bugseed	G5?T5?	S2S3
Corispermum villosum	Hairy Bugseed	G4?	S1S2
Cornus alternifolia	Alternate-leaved Dogwood	G5	S3
Cuscuta pentagona var. pentagona	Dodder	G5T5	SU
Cyperus erythrorhizos	Red-root Flatsedge	G5	S1
Cyperus houghtonii	Houghton's Umbrella-sedge	G4?	S2
Cyperus schweinitzii	Schweinitz's Flatsedge	G5	S2
Cypripedium candidum	Small White Lady's-slipper	G4	S1
Dalea villosa var. villosa	Silky Prairie-clover	G5T5	S2
Desmodium canadense	Beggar's-lice	G5	S2
Dichanthelium linearifolium	White-haired Panic-grass	GNR	S2
Draba reptans	Creeping Whitlow-grass	G5	SU
Elatine americana	mud-purslane	G4	S1
Elodea nuttallii	Waterweed	G5	S1
Elymus diversiglumis	Various-glumed Wild Rye	G3G4Q	S2?
Elymus hystrix	Bottle-brush Grass	G5	S2
Eragrostis hypnoides	Creeping Teal Love Grass	G5	S4
Festuca hallii	Plains Rough Fescue	G4	S3
Festuca subverticillata	Nodding Fescue	G5	S1
Fraxinus nigra	Black Ash	G5	S3
Galium aparine	Cleavers	G5	SU
Gentiana puberulenta	Downy Gentian	G4G5	S2
Helianthus pauciflorus ssp. pauciflorus	Stiff Sunflower	G5T5?	SU
Heteranthera dubia	Water Star-grass	G5	S2
Hudsonia tomentosa	False Heather	G5	S3
Hypoxis hirsuta	Yellow Stargrass	G5	S3
Krigia biflora	Cynthia	G5	S2
Lactuca floridana	Woodland Lettuce	G5	SH
Lechea intermedia	Pinweed	G5	S1
Leersia oryzoides	Rice Cutgrass	G5	S3?
Leucophysalis grandiflora	Large White-flowered Ground-cherry	G4?	S3
Linum sulcatum	Grooved Yellow Flax	G5	S3
Lotus unifoliolatus	prarie trefoil	G5	S2S3
Lysimachia quadriflora	Whorled Loosestrife	G5?	S2
Menispermum canadense	Moonseed	G5	S3
Nassella viridula	Green Needle Grass	G5	S3
Oenothera perennis	Sundrops	G5	S1S2
Orobanche ludoviciana	Louisiana Broom-rape	G5	S2
Orobanche uniflora		G5	SU
Osmorhiza claytonii	Wooly or Hairy Sweet Cicely	G5	S2
Osmorhiza depauperata	Blunt-fruited Sweet Cicely	G5	S2
Parietaria pensylvanica	American Pellitory	G5	S4
Pellaea glabella ssp. occidentalis	Cliff-brake	G5T4	S2
Penthorum sedoides	Ditch-stonecrop	G5	S1S2
Phryma leptostachya	Lopseed	G5	S3
Platanthera orbiculata	Round-leaved Bog Orchid	G5	S3
Polygala verticillata	Whorled Milkwort	G5	S2
Polygala verticillata var. isocycla	Whorled Milkwort	G5T5	S2
Ranunculus cymbalaria var. saximontanus	Seaside Crowfoot	G5T5	S1S2
Sanguinaria canadensis	Blood-root	G5	S2
Shinnersoseris rostrata	Annual Skeletonweed	G5?	S1S2
Sisyrinchium campestre	White-eyed Grass	G5	SU
Solidago riddellii	Riddell's Goldenrod	G5	S2
Sporobolus compositus	tall dropseed	G5	
Sporobolus neglectus	Annual Dropseed	G5	S3?
Symphyotrichum sericeum	Western Silvery Aster	G5	S2S3
Townsendia exscapa	Silky Townsend-daisy	G5	S2
Verbena bracteata	Bracted Vervain	G5	S3
Vernonia fasciculata ssp. corymbosa	Western Ironweed	G5T3T5	S1

Veronicastrum virginicum	Culver's-root	G4	S1
Viola conspersa	Dog Violet	G5	S3?
Vertebrate Animal			
Accipiter cooperii	Cooper's Hawk	G5	S4S5B
Aechmophorus occidentalis	Western Grebe	G5	S4B
Ammodramus bairdii	Baird's Sparrow	G4	S1S2B
Ammodramus savannarum	Grasshopper Sparrow	G5	S2B
Anthus spragueii	Sprague's Pipit	G4	S2B
Ardea herodias	Great Blue Heron	G5	S4S5B
Athene cunicularia	Burrowing Owl	G4	S1B
Calcarius ornatus	Chestnut-collared Longspur	G5	S1S2B
Caprimulgus vociferus	Whip-poor-will	G5	S3B
Cardinalis cardinalis	Northern Cardinal	G5	S1B
Chaetura pelagica	Chimney Swift	G5	S2B
Chordeiles minor	Piping Plover	G3	S1B
Chelydra serpentina serpentina	Common Snapping Turtle	G5T5	S3
Charadrius melodus	Common Nighthawk	G5	S3B
Coturnicops noveboracensis	Yellow Rail	G4	S3S4B
Dolichonyx oryzivorus	Bobolink	G5	S4B
Falco peregrinus anatum	Peregrine Falcon	G4T4	S1B
Geomys bursarius	Plains Pocket Gopher	G5	S3
Hirundo rustica	Barn Swallow	G5	S5B
Ichthyomyzon castaneus	Chestnut Lamprey	G4	S3S4
Ixobrychus exilis	Least Bittern	G5	S2S3B
Lanius ludovicianus excubitorides	Loggerhead Shrike	G4T4	S2B
Lanius ludovicianus migrans	Loggerhead Shrike	G4T3Q	S1B
Macrhybopsis storeriana	Silver Chub	G5	S3
Margariscus margarita	Pearl Dace	G5	S5
Melanerpes erythrocephalus	Red-headed Woodpecker	G5	S2S3B
Numenius borealis	Eskimo Curlew	GH	SNA
Nycticorax nycticorax	Black-crowned Night-heron	G5	S3S4B
Pelecanus erythrorhynchos	American White Pelican	G3	S3S4B
Phalacrocorax auritus	Double-crested Cormorant	G5	S5B
Podiceps auritus	Horned Grebe	G5	S3B
Podiceps nigricollis	Eared Grebe	G5	S4S5B
Spea bombifrons	Plains Spadefoot Toad	G5	S2S3
Sterna caspia	Caspian Tern	G5	S3S4B
Sterna forsteri	Forster's Tern	G5	S4B
Strix varia	Barred Owl	G5	S3S4
Thamnophis sirtalis	Red-sided Garter Snake	G5	S4
Vermivora chrysoptera	Golden-winged Warbler	G4	S3B

Source:

Manitoba Conservation. Manitoba Conservation Data Centre. Occurrences of Species by Ecoregion – Lake Manitoba Plain website accessed August 2013. http://www.gov.mb.ca/conservation/cdc/ecoreg/lakembplain.html

Conservation Data Centre Rankings Definitions

Rank	Definition
1	Very rare throughout its range or in the province (5 or fewer occurrences, or very few remaining individuals). May be especially vulnerable to extirpation.
2	Rare throughout its range or in the province (6 to 20 occurrences). May be vulnerable to extirpation.
3	Uncommon throughout its range or in the province (21 to 100 occurrences).
4	Widespread, abundant, and apparently secure throughout its range or in the province, with many occurrences, but the element is of long-term concern (> 100 occurrences).
5	Demonstrably widespread, abundant, and secure throughout its range or in the province, and essentially impossible to eradicate under present conditions.
U	Possibly in peril, but status uncertain; more information needed.
H	Historically known; may be rediscovered.
X	Believed to be extinct; historical records only, continue search.
SNR	A species not ranked. A rank has not yet assigned or the species has not been evaluated.
SNA	A conservation status rank is not applicable to the element
G	Global
S	Sub-National

Other Heritage Codes

Code	Definition
G#G# S#S#	Numeric range rank: A range between two of the numeric ranks. Denotes range of uncertainty about the exact rarity of the species.

Subrank

Code	Definition
T	Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species, e.g. G4T3.

Qualifiers

Code	Definition
B	Breeding status of a migratory species. Example: S1B,SZN - breeding occurrences for the species are ranked S1 (critically imperilled) in the province, nonbreeding occurrences are not ranked in the province.
N	Non-breeding status of a migratory species. Example: S1B,SZN - breeding occurrences for the species are ranked S1 (critically imperilled) in the province, nonbreeding occurrences are not ranked in the province.
Q	Taxonomic questions or problems involved, more information needed; appended to the global rank.
T	Rank for subspecific taxon (subspecies, variety, or population); appended to the global rank for the full species.
#	A modifier to SX or SH; the species has been reintroduced but the population is not yet established.
?	Inexact or uncertain; for numeric ranks, denotes inexactness.

Source: Manitoba Conservation Data Centre. Website Accessed July 2013. http://www.gov.mb.ca/conservation/cdc/consranks.html

Table C2: Species Listed by the Manitoba Endangered Species Act (MBESA), the Species at Risk Act (SARA) and the Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

Scientific Name	Common Name	MBESA	SARA	COSEWIC
Vascular Plants				
Agalinis aspera	Rough Agalinis	Endangered	Endangered	Endangered
Agalinis gattingeri	Gattinger's Agalinis	Endangered	Endangered	Endangered
Buchloë dactyloides	Buffalo Grass	Threatened	Threatened	Threatened
Celtis occidentalis	Hackberry	Threatened	-	-
Chenopodium subglabrum	Smooth Goosefoot	Endangered	Threatened	Threatened
Cypripedium candidum	Small White Lady's-slipper	Endangered	Endangered	Endangered
Dalea villosa	Hairy Prairie-clover	Threatened	Threatened	Threatened
Platanthera praeclara	Western Prairie Fringed Orchid	Endangered	Endangered	Endangered
Solidago riddellii	Riddell's Goldenrod	Threatened	Special Concern	Special Concern
Spiranthes magnicamporum	Great Plains Ladies'-tresses	Endangered	Endangered	-
Symphyotrichum sericeum	Western Silvery Aster	Threatened	Threatened	Threatened
Tradescantia occidentalis	Western Spiderwort	Threatened	Threatened	Threatened
Veronia fasciculata	Western Ironweed	Endangered	-	-
Veronicastrum virginicum	Culver's-root	Threatened	-	-
Invertebrates				
Hesperia dacotae	Dakota Skipper	Threatened	Threatened	Threatened
Quadrula quadrula	Mapleleaf Mussel	Endangered	Threatened	-
Vertebrate Animal				
Ammodramus bairdii	Baird's Sparrow	Endangered	-	-
Anthus spragueii	Sprague's Pipit	Threatened	Threatened	Threatened
Athene cunicularia	Burrowing Owl	Endangered	Endangered	Endangered
Calcarius ornatus	Chestnut-collared Longspur	Endangered	Threatened	-
Caprimulgus vociferous	Whip-poor-will	Threatened	-	-
Chaetura pelagic	Chimney Swift	Threatened	Threatened	-
Chordeiles minor	Piping Plover	Endangered	Endangered	-
Chelydra serpentina serpentine	Common Snapping Turtle	-	Special Concern	-
Charadrius melodus	Common Nighthawk	Threatened	Threatened	-
Coturnicops noveboracensis	Yellow Rail	-	Special Concern	Special Concern
Falco peregrines anatum	Peregrine Falcon	Endangered	Special Concern	Threatened
Ixobrychus exilis	Least Bittern	Endangered	Threatened	Threatened
Lanius ludovicianus excubitorides	Loggerhead Shrike	-	Threatened	Threatened
Lanius ludovicianus migrans	Loggerhead Shrike	Endangered	Endangered	Endangered
Macrhybopsis storeriana	Silver Chub	-	Special Concern	Special Concern
Melanerpes erythrorhynchos	Red-headed Woodpecker	Threatened	Threatened	Threatened
Numenius borealis	Eskimo Curlew	Endangered	Endangered	Endangered
Podiceps auritus	Horned Grebe	Endangered	-	-
Vermivora chrysoptera	Golden-winged Warbler	Threatened	-	-

Sources:

Government of Canada. Species at Risk Public Registry website accessed August 2013. http://www.sararegistry.gc.ca/species/schedules

Manitoba Conservation. Wildlife Branch. Species Listed Under the *Manitoba Endangered Species Act* website accessed August 2013. https://www.gov.mb.ca/conservation/wildlife/sar/sarlist.html

COSEWIC. 2011. Canadian Wildlife Species at Risk. Committee on the Status of Endangered Wildlife in Canada. Web site accessed August 2013. http://www.cosewic.gc.ca/eng/sct0/rpt/rpt_csar_e.cfm

APPENDIX D

SITE PHOTOS

PHOTOGRAPH 1: Looking south, exterior of building.

PHOTOGRAPH 2: Looking east, west wall of Site building, loading and unloading zone.

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Drawn: N/A	Scale: N/A	Date: AUG/13	Project No.: WX17208	Figure: D1

PHOTOGRAPH 3: Looking east from the southwest corner of the Site showing the adjacent rail spur.

PHOTOGRAPH 4: Facing west, west of building, showing adjacent property.

PHOTOGRAPH 5: Facing southwest from southwest corner of Site building, showing surrounding land.

PHOTOGRAPH 6: Looking north from north of Site building, showing surrounding land..

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Drawn: N/A	Scale: N/A	Date: AUG/13	Project No.: WX17208	Figure: D3

PHOTOGRAPH 7: Disinfection Machine: located within Site building in the warehouse area.

PHOTOGRAPH 8: Locked storage for hazardous waste.