



NAPP ULC

***Canadian Environmental Assessment
Act Project Description***
NAPP Rail Yard

208005-00053 – EN-REP-0003

26 May 2016

CONTENTS

1.	GENERAL INFORMATION AND CONTACTS.....	1
1.1	Nature of the Designated Project and Proposed Location.....	1
1.2	Proponent Information	2
1.3	Summary of Parties Consulted to Date.....	2
1.4	Requirements Under Other Jurisdictions	4
1.5	Regional Environmental Studies	6
2.	PROJECT INFORMATION.....	8
2.1	General Project Description	8
2.2	Designated Physical Activities	9
2.3	Components and Activities	9
2.4	Emissions, Discharges and Waste	12
2.5	Project Phases and Scheduling	16
3.	PROJECT LOCATION.....	19
3.1	Designated Project Location	19
3.2	Land and Water Use	20
4.	FEDERAL INVOLVEMENT – FINANCIAL SUPPORT, LANDS AND LEGISLATIVE REQUIREMENTS.....	24
4.1	Federal Financial Support	24
4.2	Federal Lands	24
4.3	Federal Permit, Licence, or Other Authorization Requirements	24
5.	ENVIRONMENTAL EFFECTS	25
5.1	Site Conditions	25
5.2	Potential Effects Related to Federal Legislation	43
5.3	Potential Effects Related to Interprovincial/Federal/International Lands	46
5.4	Potential Effects on Aboriginal Peoples from Changes to the Environment.....	46
6.	PROPONENT ENGAGEMENT AND CONSULTATION WITH ABORIGINAL GROUPS	47
6.1	Potentially Interested or Affected Groups	47



6.2	Aboriginal Consultation	48
6.3	Aboriginal Concerns.....	48
6.4	Aboriginal Consultation Program	48
7.	CONSULTATION WITH THE PUBLIC AND OTHER PARTIES	50
7.1	Key Comments and Concerns.....	50
7.2	Overview of Ongoing or Proposed Stakeholder Consultations	50
7.3	Consultation with Other Jurisdictions.....	52
8.	SUMMARY OF THE PROJECT DESCRIPTION	54
9.	REFERENCES	55

TABLES WITHIN TEXT

TABLE A	ESTIMATED GHG EMISSIONS: CONSTRUCTION PHASE	13
TABLE B	PRELIMINARY EXPECTED ATMOSPHERIC EMISSIONS	14
TABLE C	PROJECT LIQUID DISCHARGES	15
TABLE D	PROJECT SOLID WASTE	16
TABLE E	PROJECT SCHEDULE	17
TABLE F	HISTORICAL OCCURRENCE RECORDS FOR WILDLIFE WITHIN 3 KM OF THE PROJECT FOOTPRINT AS RETURNED BY THE FWMIS NOVEMBER 23, 2015	27
TABLE G	AT-RISK WILDLIFE SPECIES WITH POTENTIAL TO OCCUR WITHIN AND ADJACENT TO THE PROJECT FOOTPRINT	28
TABLE H	WILDLIFE SPECIES RECORDED WITHIN THE PROJECT FOOTPRINT DURING THE JUNE 4, 2013 WILDLIFE SIGN SURVEY (GOLDER 2013C)	30
TABLE I	CHARACTERISTICS OF SOIL SERIES IN THE PROJECT SITE	33
TABLE J	AMBIENT AIR QUALITY CRITERIA.....	37
TABLE K	AIR QUALITY PARAMETERS CONTINUOUSLY MONITORED AT THE FORT AIR PARTNERSHIP STATIONS WITHIN 5 KM FROM THE PROJECT	39
TABLE L	FIRST NATIONS AND MÉTIS GROUPS WITH POTENTIAL INTEREST IN THE PROJECT	47

Figures

- FIGURE 1 SITE LOCATION MAP
- FIGURE 2 REGIONAL FEATURES LOCATION MAP
- FIGURE 3A SITE LAYOUT PLAN
- FIGURE 3B AREA 1 – RAIL YARD
- FIGURE 3C AREA 2 – RAIL LOADING
- FIGURE 3D AREA 3 – ADMIN AREA
- FIGURE 4 LOCAL INFRASTRUCTURE
- FIGURE 5 MAP OF FIRST NATIONS GROUPS

Appendices

- APPENDIX 1 MAP OF ALBERTA INDUSTRIAL HEARTLAND LAND HOLDINGS
(INCLUDING WILLIAMS LAND)
- APPENDIX 2 TYPICAL RAIL CAR SPECIFICATIONS
- APPENDIX 3 SITE PHOTOS
- APPENDIX 4 LAND TITLE CERTIFICATE (WILLIAMS LAND)
- APPENDIX 5 CONSULTATION INFORMATION

1. GENERAL INFORMATION AND CONTACTS

This Project Description document has been prepared in accordance with the Canadian Environmental Assessment Agency (CEAA) Guidance (CEAA 2015) with the objective of conforming to the requirements set out in the *Prescribed Information for a Description of a Designated Project Regulations* (CEAA 2012a) under the *Canadian Environmental Assessment Act, 2012* (CEAA 2012b). This Project Description has been prepared for the purpose of determining whether a federal environmental assessment is required for a designated project pursuant to the *Canadian Environmental Assessment Act* (CEAA 2012b).

1.1 Nature of the Designated Project and Proposed Location

1.1.1 Nature of the Designated Project

The Proponent (North American Polypropylene [NAPP] ULC) plans to build, own and operate the NAPP Rail Yard (the Project) in Alberta's Industrial Heartland (AIH), which is directly associated with adjacent NAPP manufacturing plant. The Project will be located in the center of the AIH within the area designated as "Williams" on the map of the Industrial Heartland Land Holdings, included in Appendix 1. The map puts the proposed Project into context with the overall plans for development of the area as largely industrial with a strong local industrial base of oil refineries, chemical manufacturing, and power generation facilities.

The NAPP manufacturing plant could produce up to approximately 600,000 metric tons or 600 kilotonnes (kt) of polypropylene per year. The polypropylene pellets will be loaded into rail cars for transport to local and international markets. The Project area will include 30 sidings with approximately 14 kilometers (km) total length of track. The Project will include tracks for hopper car loading, rail car storage of both empty and full cars and a building for rail car loading and associated pneumatic cleaning. Once constructed, the Project site will occupy an area of approximately 11.5 hectares (ha).

1.1.2 Proposed Project Location

The Project will be located on land owned by Williams Canada Propylene ULC (Williams) within the northeast (NE) and southeast (SE) quarters of Section 25, Township 55, Range 22, West of the Fourth Meridian (W4M).

The Project is a linear site with latitudinal and longitudinal co-ordinates as follows:

- NE limit - N53° 47' 16.80" and W113° 07' 27.79"; and
- Southwest (SW) limit - N53° 46' 32.63" and W113° 08' 10.01".

Figure 1 is a map of the region showing the Project location.

Williams will host the Project, the NAPP manufacturing plant, the ATCO Power Canada Ltd. (ATCO) Strathcona Cogeneration Plant, and the Williams Alberta Propane Dehydrogenation (PDH) Facility. While the Project will be independently owned and operated by NAPP, it will be located on land leased from Williams.



1.2 Proponent Information

1.2.1 Name of the Designated Project

NAPP Rail Yard

1.2.2 Name of the Proponent

North American Polypropylene ULC (NAPP ULC)

1.2.3 Address of the Proponent

Suite 2400, 525-8 Avenue SW
Calgary, Alberta
T2P 1G1

1.2.4 Chief Executive Officer

Mr. Hemant Goradia, Director
NAPP ULC
Email: hgoradia@goradiacapital.com
Office Phone: +1 281 618 1300

1.2.5 Principal Contact Person for the Project Description

Mr. Thomas B. Stengel, Executive Project Director
NAPP ULC
Email: thomas.stengel@northamericanpp.ca
Office Phone: +1 403 537 4914

1.3 Summary of Parties Consulted to Date

Below is a summary of the key stakeholders and groups consulted to date:

1.3.1 Government Bodies and Regulatory Agencies

- Alberta Environment and Parks (AEP);
- Federal Members of Parliament (MP);
- Provincial Members of the Legislative Assembly (MLA);
- CEAA;
- Canadian Wildlife Service;

- Canadian Transportation Association Regional Associations;
- AIH Association;
- Fort Air Partnership;
- Northeast Capital Industrial Association (NCIA);
- Local Members of the Legislature;
- Strathcona County;
- City of Fort Saskatchewan; and
- Sturgeon County.

1.3.2 Direct Neighbours

- Landowners within 800 meters (m) of the Project site;
- Residents and occupants within 2 km of the Project site;
- Project Partners: ATCO and Williams;
- Canadian National Railway (CNR); and
- Canadian Pacific Railway (CPR).

1.3.3 Aboriginal Groups

The proposed Aboriginal Consultation Plan is summarized in Section 6.4.

1.3.4 Other Relevant Information

In Alberta, industrial rail yards are regulated through the *Railway (Alberta) Act – Railway Regulation* (Government of Alberta 2009). Prior to construction, a “Notice to Construct New Railway Works”, which includes preliminary design information, will be submitted to the Alberta Transportation Railway Administrator in accordance with the *Railway (Alberta) Act – Revised Statutes of Alberta* (Government of Alberta 2010a). After a letter accepting the proposed new works is received, NAPP will proceed with an “Operating Approval Application”. This application will include information on Project design, the safety management system, and the security management program. An Operating Approval is granted for a three year term.

The *Railway (Alberta) Act* also includes the federal requirements as contained within the *Rail Safety Act* (Government of Canada 1985) and Canada’s *Transportation of Dangerous Goods Act* (Government of Canada 1992).



1.4 Requirements Under Other Jurisdictions

1.4.1 Municipal Jurisdiction

The Project will be located in Strathcona County, where the following regional initiatives apply:

- Alberta Environment and Sustainable Resource Development (ESRD) Cumulative Effects Management System (ESRD 2015a);
 - Water Management Framework for the Industrial Heartland and Capital Region (ESRD 2008);
 - Capital Region Air Quality Management Framework (ESRD 2012); and
 - Water Management Framework for the Industrial Heartland and Capital Region - Effluent Characterization Program (ESRD 2015b).
- Strathcona County Management Plans:
 - AIH Area Structure Plan Bylaw and Amendment (Strathcona County 2001);
 - Municipal Development Plan Bylaw (Strathcona County 2007);
 - Capital Region Land Use Plan (Capital Region Board 2009); and
 - Land Use Bylaw (Strathcona County 2015).
- NCIA:
 - Regional Noise Management Plan (RNMP) (NCIA 2014); and
 - Regional Groundwater Monitoring Framework (NCIA 2015).

Each of these initiatives and how they apply to the Project are discussed in detail in Section 3.2 below.

Project Development Permit

Municipal requirements for industrial rail yards are addressed as part of the Development Permit Application process. The following studies are required to support the Development Permit application for the Project:

- Complete Development Permit Application;
- Current copy of Certificate of Title;
- Abandoned Well Site Information;
- Itemized Project Cost Breakdown;
- Project Plans (engineering drawing set, site plan, building plans, elevation plans, site grading plans, and servicing plans);

- Storm Water Management Plans;
- Erosion and Sediment Control Plans;
- Landscaping Plans;
- Detailed Letter of Intent;
- Cumulative Risk Assessment; and
- Fire Prevention Plans.

1.4.2 Provincial Jurisdiction

Pursuant to Schedule 1 of the Alberta *Environmental Protection and Enhancement Act* (EPEA) *Environmental Assessment (Mandatory and Exempted Activities) Regulation* (Government of Alberta 1993), the development of an industrial rail yard is not considered an activity for which an Environmental Impact Assessment (EIA) must be conducted prior to receiving approval from AEP. Therefore, no specific operating “Approval” or “Registration” for the NAPP Rail Yard is required under EPEA.

The Project is described in the Industrial Approval Application (IAA) that was submitted to AEP on March 28, 2016 for the NAPP manufacturing plant which requires an operating industrial Approval under EPEA. Public consultation for the Project has been undertaken as part of the NAPP manufacturing plant EPEA IAA process.

The Alberta PDH Facility, the NAPP manufacturing plant and the Strathcona Cogeneration Plant will be permitted through the EPEA IAA process. The Alberta PDH Facility received EPEA Approval No. 341558-00-00 on January 30, 2015.

1.4.3 Current Status

No licences, permits or approvals related to the NAPP Rail Yard have been issued to date. The following applications have been or will be submitted for the various licences and authorizations that will be required to operate the NAPP Rail Yard and associated production facility:

- AEP – IAA under the EPEA (submitted March 2016);
- AEP – *Water Act* Approval, for water use licence for water coming from a third party (submitted by third party on January 29, 2016);
- Alberta Culture – *Historical Resources Act* Clearance (submitted March 28, 2015);
- Alberta Transportation - Operating Approval for the industrial rail yard (notice to construct submitted May 2016);
- CEAA - Project Description (this submission);
- Strathcona County - Development Permit Application (Land Use Bylaw 6-2015) (submitted May 2016);



-
- Strathcona County - Building Permit Application (Land Use Bylaw 6-2015) (to be submitted once Development Permit is granted);
 - Canadian Pacific Railways – Crossing Agreement (to be submitted by a third party); and
 - Altalink – Crossing Agreement (to be submitted by a third party).

Electrical power will be provided to the NAPP Facility by the ATCO Strathcona Cogeneration Plant, also located on Williams-owned land, adjacent to the Project. Water will be provided by a third party. All permitting requirements related to connecting to the Alberta Interconnected Electric System (AIES) and the natural gas transmission pipeline system will be completed by ATCO and other designates under separate cover.

1.5 Regional Environmental Studies

Canadian Environmental Assessment Act (CEAA 2012b) Section 73 indicates the following regarding regional studies:

- 73 (1) The Minister may establish a committee to conduct a study of the effects of existing or future physical activities carried out in a region that is entirely on federal lands.
- 73 (2) If the Minister establishes a committee, he or she must establish its terms of reference and appoint as a member of the committee one or more persons.

There are no Regional Environmental Studies as defined under the *Canadian Environmental Assessment Act* 2012 that apply to the region in which the Project is located.

In 2007, the Government of Alberta adopted the Cumulative Effects Management System (ESRD 2015a). The Cumulative Effects Management System provides a comprehensive integrated and legislated system to protect water, air, land and biodiversity in Alberta (ESRD 2015a). While the Cumulative Effects Management System applies to all of Alberta, the AIH is identified as a key area for managing cumulative environmental effects because of industrial and municipal development.

Since the adoption of the Cumulative Effects Management System, three frameworks were developed for the AIH that are applicable to the Project:

- the Water Management Framework for the Industrial Heartland (ESRD 2008);
- the Capital Region Air Quality Management Framework (ESRD 2012); and
- the Water Management Framework for the Industrial Heartland and Capital Region - Effluent Characterization Program (ESRD 2015b).

These frameworks are described in Section 3.2.3.

Under the *Alberta Land Stewardship Act*, the North Saskatchewan Regional Plan (NSRP) is under development for the North Saskatchewan Region (ESRD 2015c). The first phase of consultation for the

plan has been completed, and the Regional Advisory Council is preparing its recommendations. The NSRP has not yet been finalized and implemented.

In the event that the NSRP is completed in advance of the application for Approval under EPEA, NAPP will ensure that the Project is constructed and operated in accordance with applicable constraints, conditions, targets or thresholds established within the NSRP, as required according to the conditions of Approval for the Project, to be issued by AEP.



2. PROJECT INFORMATION

2.1 General Project Description

NAPP is proposing to build the Project as shown on Figures 1 and 2 on land owned by Williams. The Project will be independently owned and operated by NAPP. The objective of the Project is to facilitate a product shipment service to the NAPP manufacturing plant. The NAPP manufacturing plant is not listed in the *Regulations Designating Physical Activities* (CEAA 2012c) but is subject to the Provincial EPEA IAA process.

The NAPP manufacturing plant, located east (E) -adjacent to the Rail Loading Area in the shaded area shown on Figure 3A, has the annual operating potential to produce up to 600 kt of polypropylene pellets and is expected to produce an initial capacity of approximately 450 kt per year (kt/a). The manufactured polypropylene will be processed into small pellets, which will be gravity-loaded into rail cars for transport to local and international markets. Rail car loading will be completed in the Rail Loading Area (Area 2, Figures 3A and 3C). The end product being handled is clean polypropylene solid which is a commercial product and a non-hazardous material.

The Project will include 30 sidings with approximately 14 km total length of track. The NAPP Rail Yard (Area 1, Figures 3A and 3B) will handle both empty and full rail cars. In addition, the Project will include tracks for hopper car loading, rail car storage of both empty and full cars and a building for rail car loading and vacuum air cleaning of the rail cars. No water will be used to clean the rail cars. Once constructed, the Project will occupy an area of approximately 11.5 ha.

The Project will accommodate the storage of up to two weeks of production, with expected loading of approximately 25 rail cars per day. NAPP is currently exploring the use of various sizes of rail cars. As such, the anticipated number of rail cars to be loaded per day may change. The Project will only receive empty hopper cars, and only manufactured polypropylene in pellet form will be shipped out by rail.

The NAPP Rail Yard operations will be undertaken by suitably qualified third party under the control of NAPP management. Removal of full cars from the site and delivery of empty cars to the site will be completed by CNR and/or CPR. Connection to the rail operators is currently being negotiated with both CNR and CPR, and one or both of these rail operators will be contracted to deliver full rail cars to market, with possible interchange to other lines, depending on the destination. The likely points of rail car entry/exit are indicated on Figure 3A.

The NAPP Rail Yard and Rail Loading facilities will be supported by the administrative area (Area 3, Figures 3A and 3D).

2.2 Designated Physical Activities

Canadian Environmental Assessment Act, 2012 defines the *Regulations Designating Physical Activities* (CEAA 2012c). Pursuant to Paragraph 25(b) of the *Canadian Environmental Assessment Act, 2012* (CEAA 2012b) *Regulations Designating Physical Activities*:

The “construction, operation, decommissioning and abandonment of a new railway yard with seven or more yard tracks or a total track length of 20 km or more”.

Consequently, the proposed Project is considered to be a Designated Project.

2.3 Components and Activities

2.3.1 Physical Works

The Project will consist of approximately 14 km of track with 30 sidings, and associated buildings, equipment and utilities. The main components of the Project include:

- Area 1 – the NAPP Rail Yard including maintenance area (Figure 3B);
- Area 2 - a hopper car blending/loading building (including localized vacuum cleaning of rail cars) (Figure 3C); and
- Area 3 - a rail office within the planned NAPP administrative building and parking lot (Figure 3D).

A brief description of the Project’s major components is included below. The site layout is shown on Figure 3A. Other, minor, components of the Project include:

- expansion of on-site firewater piping;
- connection to existing on-site power lines;
- connection to off-site rail lines; and
- surface water runoff control.

Area 1 - NAPP Rail Yard

The storage yard provides a total of two weeks of rail car inventory: one week of empty and one week of full rail cars. The storage yard, which is approximately 7.1 ha in area, will hold up to 250 hopper cars, each approximately 22 m long. It is expected that approximately up to 14,000 rail cars will travel in and out of the NAPP Rail Yard per year. This number can vary daily, weekly and monthly based on the overall output of the plant. NAPP is currently evaluating the optimum size of rail cars. The number and size of rail cars quoted may change somewhat, but the overall size of the NAPP Rail Yard and number/length of rail sidings will not change.

The rail cars are covered hopper car type rail cars as illustrated Appendix 2. Each rail car will have a maximum capacity of approximately 90 tonnes (t) of polypropylene. Hopper cars will be moved between



the storage yard and the rail car blending/loading area using a locomotive. It is expected that there will be one locomotive operating on site, and a track mobile rail car mover for when the locomotive is out of service.

Locomotive maintenance will be conducted in a designated maintenance area, which will also be equipped with secondary containment. Locomotive fuelling will be undertaken by a fuel truck that will come to site. No fuels will be stored on site.

Area 2 - Rail Loading Area

The rail car loading area will be approximately 135 m long by 15 m wide and able to accommodate 88 hopper cars. The blending/loading area covers an area of approximately 3.1 ha. It will include two tracks with three loading stations each, for a total of six loading stations. Each rail car loading station will be equipped with a dedicated vacuum system to remove streamers and fines that may be generated during polypropylene pellet blending and transfer. The streamers and fines are a saleable product stream, which will be picked up by a qualified recycling company. There will be four or six independently functioning rail scales. A vacuum cleaner system will be incorporated into the design of the loading area and will be operated during cleaning and loading activities.

Area 3 - Administrative Area

The administrative building will host rail operations staff. Rail operations staff will also be located within the NAPP Rail Yard itself and in the Rail Car Blending/Loading Area. The NAPP Rail Yard facilities will be sized to accommodate approximately 15 people for the rail yard, rail car loading and rail car cleaning operations of the Project. Staff will work in shifts. The administrative building will include management offices, a break room and washroom facilities. Potable water for the building will be trucked in, and sanitary waste will be trucked out for disposal at an approved facility. The administrative area will also include the Chemical Storage Building for the NAPP manufacturing plant which will include small quantities of locomotive maintenance supplies (e.g., oils and lubricants).

Surface and Storm Water Management

Surface and storm water will be managed by Williams for all Williams-owned land, including the Project area. A permanent storm drainage water retention system has been designed by Williams to collect and retain the storm water flows during the construction and operation phases based on the most conservative 1:100 year 24 hour storm event.

Key features of the surface/storm water management system for the Project will include:

- a storm water pond with capacity for a 1:100 year 24 hour storm event;
- grading to ensure effective collection and control of storm water runoff;

- construction of a system of ditches and culverts that will drain to the Admin/Rail Yard storm water pond (to be operated by Williams);
- open roadside ditches lined with geotextile and high density polyethylene (HDPE) geomembrane to contain runoff;
- turf reinforcement mats installed across ditches to cover the bottom and slopes to provide immediate erosion protection and long-term side armoring;
- any culverts designed to have 3H:1V sloped mitred ends with rip-rap treatments; and
- water stored in the Admin/Rail Yard pond will be tested to meet approved discharge limits prior to being released through an outfall into the North Saskatchewan River (NSR).

2.3.2 Anticipated Size and Production Capacity

There will not be any production undertaken in the NAPP Rail Yard. The NAPP Rail Yard itself consists of approximately 14 km of track with 30 sidings.

As described in Section 2.3.1 and shown on Figure 3A, permanent structures will include a rail car storage yard, a rail blending/loading area within a covered building and an administration building and parking lot. The total Project footprint is expected to be approximately 11.5 ha. Temporary structures will be required during construction, including office space, equipment storage, workforce muster points and for various other functions. The temporary structures will be similar to those typically used on large construction sites, such as integrated workforce trailer systems. All temporary structures will be removed from the site once construction is complete.

2.3.3 Percentage Increase in Capacity

The Project is not an expansion of an existing project. The Project and partner facilities (ATCO Strathcona Cogeneration Plant, Alberta PDH Facility, and NAPP manufacturing plant) are proposed new developments.

2.3.4 Description of Physical Activities Incidental to the Designated Project

As previously determined by CEAA, the NAPP manufacturing plant is not an incidental activity to the Project. Polypropylene product will be pneumatically transferred from the NAPP manufacturing plant to the Rail Loading Area via aboveground aluminum or stainless steel flanged piping. Utilities will be provided by the on-site ATCO Strathcona Cogeneration Plant which is located adjacent to the Project. Removal of full cars from the site and delivery of empty cars to the site will be completed by CNR and/or CPR. The likely points of rail car entry/exit are indicated on Figure 3A.



2.4 Emissions, Discharges and Waste

2.4.1 Atmospheric Emissions

During the life of the Project, emissions of criteria air contaminants (CACs) and greenhouse gases (GHGs) are expected. The CACs include hydrocarbon (HC), nitrogen oxides (NO_x), sulphur dioxide (SO₂), carbon monoxide (CO) and suspended particulates in various sizes such as total suspended particulates (TSP), particulates with a diameter less than 10 microns (PM₁₀) and particulates with a diameter less than 2.5 microns (PM_{2.5}). GHG emissions are typically reported as carbon dioxide equivalent (CO₂e).

Project Construction and Decommissioning

There are two primary sources of atmospheric emissions associated with Project construction: fugitive dust and mobile equipment exhaust. On-site vehicular traffic and earthwork activities will be the primary sources of dust during construction. Emissions may also be expected from the intermittent use of portable diesel generators during construction. The key contaminants from mobile equipment exhaust are SO₂, NO_x, CO and PM_{2.5}.

Air contaminants will be emitted mainly from fuel combustion through the tailpipes of equipment during the construction and closure phases. Fugitive dust emissions will also be emitted from the disturbance of material. During the construction and closure phases, temporary emissions are expected from equipment such as excavators, dozers, crane, etc.; therefore, the effort is focused on estimating the emissions during the operation phase. Emission sources and associated impacts are only expected in the close vicinity of the NAPP Rail Yard.

Based on prior experience, activities expected to construct the project may include land clearing, grading track work, building structures such as office trailers and security fences. Diesel equipment such as graders, trackers, and bulldozers are expected during the construction phase. Various types of trucks are also expected to be used. The construction phase is anticipated to extend over a period of 8 months (10 hours/day and 5 days/week) with the exception of trucks which will be operating for 3 months only. The equipment required and the emissions estimated using emission factors from Environment Canada (EC) (EC 2016), presented in CO₂e, are shown in Table A below. The total amount of GHG emissions during the construction phase is estimated to be approximately 4,642 t of CO₂e.

Table A Estimated GHG Emissions: Construction Phase

Equipment	Units	Fuel Type	Assumed Horsepower (HP)	Fuel Consumption (liter, l)	GHG Emissions (t CO₂e)
Bulldozer	2	Diesel	240	157,473	472
Tractor	1	Diesel	350	114,824	344
Grader	2	Diesel	240	157,473	472
Packer/Compactor	2	Diesel	320	209,964	628
Truck	10	Diesel	420	516,708	1,547
Pickup Truck	5	Diesel	240	393,683	1,179
Total					4,642

Project Operations

During Project operations, atmospheric emissions are expected to include locomotive exhaust and particulate matter associated with loading or cleaning of hopper cars. Each rail car loading station will be equipped with a dedicated vacuum system to remove streamers and fines that may be produced during polypropylene pellet blending and transfer and housed within the rail loading building. Diesel combustion in the locomotives will result in emissions of SO₂, NO_x, CO, HC and particulate matter.

During the operation phase, the main source of emissions is the combustion of diesel fuel in the locomotives. One locomotive and a second spare locomotive or track mobile rail car will be available when the locomotive is out of service. There will be continuous operation of one locomotive (approximately 20 hours/day) and the spare (locomotive or track mobile rail car) in partial operation (approximately 8 hours/day). Each locomotive is 1,500 HP and is expected to operate for 330 days/year. With an expected fuel consumption of 26.5 liters/hour (7 gallons/hour) of diesel, emissions for CACs and GHGs can be estimated. Since it is not known at this stage what tier of locomotives will be used, the estimation method described by Railway Association of Canada (RAC) cannot be used. The RAC's estimation methods were based on the United States (US) Environmental Protection Agency (EPA) emission factor; therefore, predicted future emission factors for 2016 published by US EPA based on the average fleet of the year were used at this early stage of the Project. The preliminary expected amount of CACs and GHGs during the operation phase is presented below in Table B.

In Alberta, GHG emissions are considered negligible if the total direct emissions from all sources at a facility are less than 100 t CO₂e (ESRD 2014). The specified gas reporting threshold for Alberta is 50,000 t of CO₂e (ESRD 2014). The Federal reporting threshold for EC is also 50,000 t of CO₂e (EC 2015). Although the estimated GHG emissions are not considered negligible, the emissions are very low and not expected to meet the reporting threshold.



Table B Preliminary Expected Atmospheric Emissions

Emissions (t/year)							
HC	NO _x	SO ₂	CO	TSP	PM ₁₀	PM _{2.5}	CO _{2e}
0.3	7.8	0.006	17.7	0.2	0.2	0.2	661

2.4.2 Liquid Discharges

The liquid discharges associated with the Project will primarily consist of surface water runoff, which will be contained in the Williams-owned/operated Admin/Rail Area storm water pond. The storm water pond will be operated by Williams in accordance with their EPEA Approval No. 341558-00-00, as amended. The water collected in the storm water pond will be tested and released via a storm water outfall owned by Williams to the NSR. The operation of the storm water outfall will also be governed by Williams' EPEA Approval No. 341558-00-00, as amended. A series of "over/under" weirs will be installed to ensure removal of any floating solids prior to discharge. The storm water pond will be tested by Williams in compliance with its EPEA Approval prior to discharge. If the storm water contents do not meet the EPEA Approval limits, then the water will be tested again if there is sufficient capacity to warrant a settling period. If immediate discharge is required, the water will be removed from site by a licensed disposal contractor. There is no on-site water treatment planned for storm water runoff.

Other liquid discharges generated by the Project are detailed in Table C.

Table C Project Liquid Discharges

Liquid Waste	Description	Containment	Disposal Method	Potential Residual Effects on the Environment
Surface runoff water	Surface water runoff from the Project will be collected and routed to the storm water pond.	Storm water pond	Outfall to NSR	None
Used oil and other solvents (hazardous waste)	Used lube and seal oil, from locomotive maintenance	Barrels located in designated area	Removal by a qualified carrier for disposal or recycling at an approved facility, on an as-needed basis	None
Domestic sewage	As generated by site staff	Aboveground containment	Third Party off site tanker disposal	None

2.4.3 Wastes

The Project will generate both recyclable and non-recyclable solid waste. Recyclable material will be separated into containers and removed from the Project site for recycling by a qualified carrier. Non-recyclable waste will be collected on-site and then sent off-site for disposal through a qualified carrier. Table D describes the types of solid waste expected to be generated by the Project and plans for disposing the waste.



Table D Project Solid Waste

Waste Stream	Containment	Disposal Method	Potential Residual Effects on the Environment
Polypropylene pellets	Vacuumed and contained within rail car loading building	Recycled and/or third party to remove	None
Domestic waste	Containers	Removal for disposal at an approved facility	None
Metal and recyclables (cardboard, air filters)	Containers	Will be recycled at an approved recycling facility	None
Oil filters (hazardous waste)	Oil containment area with surrounding berm	Removal for disposal or recycling at an approved facility, on an as-needed basis	None
Dust	Filters and containers	Will be sent to an approved facility for recycling or disposal	None
Batteries	Plastic containers	Will be sent to an approved facility for recycling or disposal	None

2.5 Project Phases and Scheduling

2.5.1 Anticipated Key Project Phases

The high level Project schedule is provided in Table E.

Table E Project Schedule

Project Task	Planned Start Date	Status
Public consultation and engagement	September 2015 to present	Ongoing
Construction	2017 to 2019	Pending
Commissioning	2019 to 2020	Pending
Operation	2020	Pending
Decommissioning	Approximately 2053	Pending

Project activities will include the construction, commissioning, operation and decommissioning of the NAPP Rail Yard and ancillary facilities. The Project will have a design life of approximately 35 years, after which the Project could be decommissioned.

2.5.2 Main Activities

Public Consultation and Engagement

The consultation and engagement program commenced in September 2015 and is still ongoing. The progress to date is discussed further in Section 7.

Construction

Topsoil and subsoil will be stripped, salvaged and stockpiled prior to site grading, placement of fill, and/or site development. Soil will be stockpiled in designated topsoil and subsoil stockpiles located off site.

The site will be fenced off. Roadways and railways into the site will be constructed to connect to existing transportation infrastructure. Site construction infrastructure (e.g., trailers, electricity, natural gas services) will be installed. Construction laydown, storage and fabrication areas will be established.

Grading activities within the Project footprint will include collecting/placing fill with earth-moving equipment to build the subgrade, followed by compacting the subgrade. Once the subgrade has been constructed, the ties and steel rails will be laid by qualified contractor. Ballast will then be dumped in place. Specialized rail construction equipment will tamp the ties and steel rails so that the ballast settles into place.

Final grading will include contouring drainage ditches such that outlets channel water into the storm water pond.

The foundations for the rail car cleaning/loading building will be excavated, and concrete poured. Structural steel will then be erected on the foundations. Some modularization and preassembly work will occur where practical to speed building erection. Roof cladding and wall cladding will then be installed to enclose the building while equipment installation continues indoors. Once the building is enclosed, the building can be heated to facilitate construction in cold weather.



Temporary structures will be required during construction, including office space, equipment storage, workforce muster points, and for various other functions. The temporary structures will be similar to those typically used on large construction sites, such as integrated workforce trailer systems. All temporary structures will be removed from the site once construction is complete.

Commissioning

Prior to Project operation, testing and commissioning of various pieces of equipment and systems will occur. It is expected that the testing and commissioning phase of the Project will span the final three to six months of construction. The Project will then be ready for commercial operation.

Operation

The NAPP Rail Yard loading area is expected to operate continuously, with new rail cars being positioned once or twice daily. It is anticipated that full rail cars will be stored on-site and taken off-site as required, with replacement (empty) cars brought on-site daily to replace them.

Polypropylene will enter the rail car loading area from the NAPP manufacturing plant. The rail car loading area will include two tracks with three loading stations along each, with a total of six loading stations. Each rail car loading station will be equipped with a dedicated vacuum system to remove streamers and fines that may be produced during polypropylene pellet transfer. The vacuum cleaner system will be operated during loading activities, approximately 16 to 24 hours a day, on production days. There will also be four or six rail car loading scales to measure the loads.

Decommissioning

The proposed reclamation activities for the entire NAPP site are outlined in the IAA which was submitted to AEP on March 28, 2016. During site development, topsoil and subsoil from the project footprint will be salvaged and stockpiled for future site reclamation. Prior to the end of life of the Project, NAPP will submit a detailed decommissioning and reclamation plan to AEP for review and approval. The NAPP EPEA Approval will then be amended to include the conditions of the proposed and approved program.

Project decommissioning will include removing all major equipment and the associated tracks, buildings, piping and electrical systems from the site. Depending on the condition at the time of decommissioning, the track materials will be sold for reuse or recycling. Following Project decommissioning, the Project footprint (i.e., the area occupied by buildings and infrastructure during Project operation) will be regraded to promote positive drainage. The reclamation program will include the replacement of the salvaged topsoil and subsoil and re-vegetation to re-establish the pre-disturbance agricultural land use capability. It is anticipated that the decommissioning program will be completed within a period of six months.

3. PROJECT LOCATION

3.1 Designated Project Location

The Proposed Designated Project is situated north (N) of, and borders the northern limits of, the City of Fort Saskatchewan (Figure 2). The Designated Project is in the AIH and is near multiple industrial facilities (see Appendix 1). The NSR is approximately 200 m west (W) of the site boundary. A location plan is provided in Figure 1 and the Regional Features and Local Infrastructure are shown on Figures 2 and 4, respectively.

3.1.1 Project Coordinates

The Project will be located within the NE and SE quarter sections of 25-55-22 W4M. This land is privately owned by Williams and will be leased to NAPP for the lifetime of the Project.

The Project is a linear site with latitudinal and longitudinal co-ordinates as follows:

- NE limit - N53° 47' 16.80" and W113° 07' 27.79"; and
- SW limit - N53° 46' 32.63" and W113° 08' 10.01".

3.1.2 Site Location Plan and Map

Figure 2 shows the Project location relative to occupied residences, environmentally sensitive areas, watercourses, waterbodies, federal lands and transportation infrastructure. Figure 4 shows the Project location relative to local infrastructure. Figure 5 shows the Project location relative to Aboriginal communities.

3.1.3 Location of Designated Project Components and Activities Map

A site layout plan is provided in Figure 3A.

3.1.4 Photographs of Work Locations

Photographs of the Project site are provided in Appendix 3.

3.1.5 Proximity to Other Land Uses and Other Aspects

There are two currently occupied permanent singular residences (private farmland) within 1.5 km of the Project site (Figure 2). The closest residence is located just N of the site as shown on Figure 2.

Through discussions with CEAA, NAPP has reviewed the proximal Aboriginal territories. The Project is located within Treaty 6. Although NAPP does not have specific information regarding the traditional territories of the First Nations and Métis Communities in proximity to the project, NAPP recognizes and understands that all First Nations who are signatories to Treaty 6 may practice their Treaty rights anywhere within the Treaty area. From previous experience, some First Nations who are signatories to



Treaty 7 and Treaty 8 may assert that their traditional territories include the project location. The nearest First Nation Reserves are the Alexander First Nation (Treaty 6) on Indian Reserves 134, 134A and 134B (located W of Morinville, Alberta) located approximately 55 km W of the Project, and the Enoch Cree Nation (Treaty 6) located approximately 53 km SW of the Project (Figure 5). The Gunn Métis Local #55 is approximately 79 km NE of the Project.

Based on discussions with the previous landowners, it has been determined that the Williams-owned land was homesteaded in the late 1800s and was continuously farmed since that time until it was acquired by Williams. As such, no traditional use of the land by Aboriginal peoples has been noted.

The closest Federal lands are Elk Island National Park, located 20 km SE of the Project and Canadian Forces Base Edmonton, located 20 km W of the Project (Figure 2).

Federal Lands

The Designated Project will not be located on federal land and there is no federal land within approximately 20 km of the Project site.

3.2 Land and Water Use

3.2.1 Zoning Designations

The Project will be located on 11.5 ha of the 94 ha land parcel privately owned by Williams. The Project site is within the Strathcona: Heavy Industrial Policy Area per the AIH Area Structure Plan Bylaw (Strathcona County 2001).

On January 14, 2014, the Project site was rezoned from AG Agricultural: General District to IH (Heavy Industrial) District to support the development of the Alberta PDH Facility. The areas surrounding the Project site are zoned AR (Agriculture: River Valley), IM (Medium Industrial), and IH.

3.2.2 Legal Description of Land to be Used

The Project site is located within the NE and SE quarters of Section 25, Township 55, Range 22, W4M (25-55-22 W4M). The land parcel is owned by Williams and a portion will be leased to NAPP for the life of the Project. The Land Title Certificate showing Williams ownership is included in Appendix 4.

3.2.3 Resource Management and Conservation Plans

The Project site is located within the Capital Region and the AIH, where several regional plans and initiatives apply. A description of each of these plans or initiatives and how they apply to the Project are provided in the following subsections. All of the plans and initiatives described below were subject to public consultation.

Water Management Framework for the Industrial Heartland and Capital Region

As part of the Cumulative Effects Management System, ESRD developed a Water Management Framework for the AIH and Capital Region (ESRD 2015a) to protect water quantity and quality within the Devon to Pakan reach of the NSR and to address the cumulative effects of various individually regulated projects. Framework goals include improving water quality from fair to good, minimizing load discharge, and minimizing the impacts on the NSR.

The framework also endeavors to ensure that sufficient water remains in the river to maintain aquatic life and support current and proposed industrial development (ESRD 2015a). Specific targets and requirements are currently under development, including a maximum allowable load for certain pollutants. Based on water withdrawal and returns data for *Water Act* licences in the Devon to Pakan reach of the NSR, there is sufficient flow within the NSR to support current and future use (ESRD 2008). Water use within this reach of the NSR continues to be tracked and considered by decision makers in new licence applications and amendments (ESRD 2008).

Capital Region Air Quality Management Framework

ESRD has also developed an ambient air quality framework for the Capital Region (including the AIH). The Capital Region Air Quality Framework sets ambient air quality levels for four contaminants of concern: nitrogen dioxide (NO₂), SO₂, PM_{2.5} and ozone (O₃). These limits are based on the Alberta's Ambient Air Quality Objectives (AAAQO) for NO₂ and SO₂, (ESRD 2012) and Canada Wide Standards for PM_{2.5} and O₃ (CCME 2012a). Each level includes various management actions that can range from baseline monitoring and data gathering to a mandatory plan to reduce the ambient levels below the applicable air quality standard (ESRD 2012).

NAPP will ensure compliance with the Capital Region Air Quality Framework through existing ambient air quality monitoring. Air quality in the region is monitored by the Fort Air Partnership, which currently operates nine continuous and 55 passive air monitoring stations. NAPP will work with the Fort Air Partnership to ensure appropriate air monitoring is conducted in the vicinity of the Project.

Capital Region Land Use Plan

The Capital Region Land Use Plan was developed by the Capital Region Board in 2009 to provide an integrated approach to managing the region's footprint and land use while ensuring sustainable economic growth and environmental health (Capital Region Board 2009). An important component of this plan is the establishment of a Land Use Committee, which consists of 12 Mayors from the Capital Region. The Land Use Committee, with advice from leading academics and professionals, assisted in the development of this plan and will contribute to future work in the region. The following core principles form the basis of the plan's guidelines:

- protect the environment and resources;
- minimize regional footprint;



-
- strengthen communities;
 - increase transportation choices;
 - ensure efficient provision of services; and
 - support regional economic development (Capital Region Board 2009).

Each of these principles consists of numerous policies that must be considered during project development in the Capital Region. The Capital Region Land Use Plan will be enforced through a collaborative effort between the Capital Region Board, various Capital Region municipalities, and the Government of Alberta.

Northeast Capital Industrial Association – Regional Groundwater Management

Both the NCIA and AEP (formerly ESRD) recognize the importance and environmental sensitivity of the Beverly Channel aquifer to the province and to the AIH. In 2006, a regional groundwater monitoring project was initiated by the NCIA in association with ESRD and the public. The goal of the project was to identify ways to improve and streamline groundwater management through a cooperative approach for monitoring and reporting to the public. The project was known as the “Regional Assessment of the Groundwater Quality in the Beverly Channel in the Fort Saskatchewan Area”. The project included the Counties of both Sturgeon and Strathcona, and consisted of several phases, including data collection, database development, monitoring, and groundwater modelling (NCIA 2015).

The results of this study have allowed the NCIA to provide input into the Province’s Water Management Framework (discussed above). The NCIA is currently developing the Regional Groundwater Monitoring Framework in conjunction with ESRD, which will be part of the North Saskatchewan Regional Planning process (NCIA 2015). In addition, NCIA has been working with the provincial government to finalize a Groundwater Monitoring Directive for the AIH. The NCIA is currently proceeding with an annual groundwater quality monitoring program.

Strathcona County Management Plans

Zoning for the Project is specified by the Strathcona County Land Use Bylaw. The Project site is zoned as “Heavy Industrial”. Land use in the AIH is also addressed by an Area Structure Plan Bylaw (Strathcona County 2001) and amendment.

Strathcona County has prepared a Municipal Development Plan according to the legislative framework in the *Municipal Government Act* (Government of Alberta 2016). The Municipal Development Plan provides an overall plan for the next 20 years and beyond, and can be used to manage growth, development and sustainability in an orderly manner (Strathcona County 2007). The Municipal Development Plan includes specific policies that deal with development along the NSR and the conservation and quality of water, land, air and natural resources within Strathcona County.

3.2.4 Aboriginal Lands/Resource Involvement

The Project will not require access to, use or occupation of, or the exploration, development and production of lands and resources currently used for traditional purposes by Aboriginal peoples. The Project will be constructed and operated on an existing industrial zoned site that is privately owned by Williams. The nearest Aboriginal land area is approximately 50 km from the Project site (Figure 5). The Project will be constructed on lands that were homesteaded in the late 1800s and have been privately owned/farmed since that time.



4. FEDERAL INVOLVEMENT – FINANCIAL SUPPORT, LANDS AND LEGISLATIVE REQUIREMENTS

4.1 Federal Financial Support

No federal authority will be providing any financial support for the Project.

4.2 Federal Lands

No federal lands will be required for the Project.

4.3 Federal Permit, Licence, or Other Authorization Requirements

There are no federal legislative or regulatory requirements (including any federal license or permit) that are applicable to the Project. The only purported Federal Regulatory Requirement is in relation to the *Canadian Environmental Assessment Act 2012* reporting requirements herein.

5. ENVIRONMENTAL EFFECTS

Section 5.1 summarizes available information on the existing physical, biological and human environment on the Project site and surrounding area. The section also describes the potential interactions between the Project and the environment, and assesses changes that might occur as a result of Project activities or infrastructure.

Section 5.2 provides a more detailed description of the potential environmental effects on fish and fish habitat as defined under the *Fisheries Act*, aquatic species as defined under the *Species at Risk Act* (SARA; Government of Canada 2015), and migratory birds as defined in the *Migratory Birds Convention Act* (Government of Canada 1994).

5.1 Site Conditions

5.1.1 Local and Regional Vegetation Types

The Project site is situated within the Central Parkland and Dry Mixedwood Natural Subregions. The Project site and surrounding landscape are dominated by agricultural land and forested patches bordering the NSR. The Project site was cleared of vegetation in 2015 as part of the Alberta PDH Project development activities. Prior to clearance, the Project site was primarily tame pasture with patches of trembling aspen (*Populus tremuloides*) and balsam poplar (*Populus balsamifera*), and small wetlands surrounded by Canada thistle (*Cirsium arvense*) and willow species (*Salix* sp.). The majority of the Project footprint is located within the area of the Project site that was formerly tame pasture [Golder Associates Ltd. (Golder) 2013a].

Provincially and federally listed species occurrences (Alberta Conservation Information Management System [ACIMS], AEP 2015; Government of Alberta 2010b; Committee on the Status of Endangered Wildlife in Canada [COSEWIC] 2015; SARA [Government of Canada 2015]) were reviewed, as applicable for the Project site. An ACIMS database search was completed on November 23, 2015 (AEP 2015) to help determine the potential for sensitive element occurrences known to occur within 3 km of the Project site. The search resulted in no sensitive element occurrences, and no sensitive ecological communities within 3 km of the Project site. In addition, a search of the ACIMS database, focused on section 25-55-22 W4M, did not identify any sensitive species; however, this did not preclude the potential that they may be present within the Project site.

Golder conducted baseline vegetation and wetland field surveys on the Williams-owned land on June 3 and August 22, 2013 and a report was prepared for submission with the Alberta PDH Facility's IAA (Golder 2013a). Six weed plots and 12 reconnaissance plots were completed during the early and late flowering vegetation and wetland surveys. No federally or provincially listed species of concern were observed during the vegetation surveys at the Project site. There were 72 vascular plants recorded during the survey. Although listed plants were not observed during the vegetation surveys, listed plants could have been present on the Project site as they are often associated with wetlands.



At the time of the assessments, the pasture contained northern brome (*Bromus inermis*) with extensive populations of common dandelion (*Taraxacum officinale*), common tansy (*Tanacetum vulgare*) and Canada thistle. The forest bordering the NSR (W and N of the Project footprint) has been untouched by site development activities and is primarily a trembling aspen and balsam poplar stand with an understory of prickly rose (*Rosa acicularis*), tall lungwort (*Mertensia paniculata*) and northern brome.

The forest stand in the NE portion of the Williams-owned land was comprised of a small seasonal wetland (Class III; Stewart and Kantrud 1971) surrounded by trembling aspen, Manitoba maple (*Acer negundo*), willow (*Salix* sp.), bluejoint (*Calamagrostis canadensis*) and red-osier dogwood (*Cornus canadensis*).

In the SW portion of the Williams-owned lands small aspen stand was located adjacent to a seasonal wetland (Class III; Stewart and Kantrud 1971) that supported a dense cover of wild mint, common cattail (*Typha latifolia*) and small bottle sedge (*Carex utriculata*).

Five noxious weeds as per the *Weed Control Act* (Government of Alberta 2008), Canada thistle, scentless chamomile (*Matricaria perforatum*), yellow toadflax (*Linaria vulgaris*), perennial sow thistle (*Sonchus arvensis*), and common tansy were observed throughout the pasture. Canada thistle plants were prevalent throughout the Williams-owned land, including the forested and wetland areas. At the time of the assessments, there were approximately 20 to 30 individuals each of scentless chamomile, yellow toadflax and perennial sow thistle.

A wetland assessment was conducted on the Williams-owned land on June 3 and June 4, 2013 (Golder 2013b). Four wetlands were noted within the assessment area. Williams received *Water Act* Approval No. 361345-00-00 to remove all the wetlands on site, and has paid Ducks Unlimited to provide habitat compensation for their removal.

5.1.2 Habitat and Wildlife

General habitat within the Project Footprint predominantly consisted of tame pasture vegetation species such as awnless brome (*Bromus inermis*) and common dandelion (*Taraxacum officinale*). Prior to clearing, the Project footprint consisted of grazing pasture, interspersed with trembling aspen (*Populus tremuloides*) and balsam poplar (*Populus balsamifera*) patches (Golder 2013b). Several small wetlands previously occurred in the Williams-owned land, but were drained as part of development of the Alberta PDH Facility under *Water Act* Approval No. 361345-00-00. Habitat adjacent to the Project footprint includes the forest bordering the NSR (untouched by site development activities), which primarily consists of trembling aspen and balsam poplar with an understory dominated by prickly rose (*Rosa acicularis*). White spruce (*Picea glauca*) and Manitoba maple (*Acer negundo*) are also present in the adjacent forest patches (Golder 2013b).

A query of the Fish and Wildlife Management Information System (FWMIS) (ESRD 2015d) for historical wildlife observations within 3 km of the Project footprint was conducted on November 23, 2015. Results of the query returned historical records for seventeen species. These species are noted in Table F along with their conservation status. The Sprague's pipit (*Anthus spragueii*) and the North American badger (*Taxidea*

NAPP ULC
CANADIAN ENVIRONMENTAL ASSESSMENT ACT PROJECT DESCRIPTION
NAPP RAIL YARD

taxus) are federally listed as Threatened and Special Concern respectively (COSEWIC 2015). The peregrine falcon (*Falco peregrinus*) is provincially listed as At Risk (Government of Alberta 2010b) and federally listed as Special Concern (COSEWIC 2015). The Canadian toad (*Anaxyrus hemiophrys*) is listed provincially as May be at Risk (Government of Alberta 2010b).

Table F Historical Occurrence Records for Wildlife within 3 km of the Project footprint as Returned by the FWMIS November 23, 2015

Common Name	Species Name	General Status of Alberta ¹	COSEWIC ²	SARA ³
Amphibians				
Canadian Toad	<i>Anaxyrus hemiophrys</i>	May be at Risk	Not at Risk	N/A
Birds				
American Kestrel	<i>Falco sparverius</i>	Sensitive	N/A	N/A
Bald Eagle	<i>Haliaeetus leucocephalus</i>	Sensitive	Not at Risk	N/A
Baltimore Oriole	<i>Icterus galbula</i>	Sensitive	N/A	N/A
Black Tern	<i>Chlidonias niger</i>	Sensitive	Not at Risk	N/A
Black-backed Woodpecker	<i>Picooides arcticus</i>	Sensitive	N/A	N/A
Eastern Phoebe	<i>Sayornis phoebe</i>	Sensitive	N/A	N/A
Green-winged Teal	<i>Anas crecca</i>	Sensitive	N/A	N/A
Least Flycatcher	<i>Empidonax minimus</i>	Sensitive	N/A	N/A
Lesser Scaup	<i>Aythya affinis</i>	Sensitive	N/A	N/A
Northern Pintail	<i>Anas acuta</i>	Sensitive	N/A	N/A
Peregrine Falcon	<i>Falco peregrinus</i>	At Risk	Special Concern	Schedule ¹
Pileated Woodpecker	<i>Dryocopus pileatus</i>	Sensitive	N/A	N/A
Sora	<i>Porzana carolina</i>	Sensitive	N/A	N/A
Sprague's Pipit	<i>Anthus spragueii</i>	Sensitive	Threatened	Schedule ¹
Swainson's Hawk	<i>Buteo swainsoni</i>	Sensitive	N/A	N/A
Mammals				
North American Badger	<i>Taxidea taxus</i>	Sensitive	Special Concern	No schedule

¹ Provincial status according to the ESRD General Status of Alberta Wildlife Species (Government of Alberta 2010b).

² Federal status according to the COSEWIC Wildlife Species Search (COSEWIC 2015).

³ Legal status under the SARA, according to the Species at Risk Public Registry (Government of Canada 2015).



In addition, a review of provincial and federal status reports, distribution maps, habitat requirements, and aerial imagery (Government of Alberta 2010b; COSEWIC 2015) revealed seven species at risk (federally listed as: Endangered, Threatened or Special Concern or provincially listed as: May be at Risk or At Risk) with potential to occur within or adjacent to the Project footprint (Table G). These include the bank swallow (*Riparia riparia*), common nighthawk (*Chordeiles minor*), short-eared owl (*Asio flammeus*), little brown myotis (*Myotis lucifugus*), long-tailed weasel (*Mustela frenata*), North American badger (*Taxidea taxus*), and northern myotis (*Myotis septentrionalis*). The short-eared owl and North American badger are federally listed as Special Concern, the bank swallow and common nighthawk are federally listed as Threatened, the little brown myotis and northern myotis are federally listed as Endangered (COSEWIC 2015), and the long-tailed weasel is provincially listed as May be at Risk (Government of Alberta 2010b).

Table G At-Risk Wildlife Species with Potential to Occur within and adjacent to the Project Footprint

Common Name	Species Name	General Status of Alberta ¹	COSEWIC ²	SARA ³
Birds				
Bank Swallow	<i>Riparia riparia</i>	Secure	Threatened	No schedule
Common Nighthawk	<i>Chordeiles minor</i>	Sensitive	Threatened	Schedule 1
Short-eared Owl	<i>Asio flammeus</i>	May Be At Risk	Special Concern	Schedule 1
Mammals				
Little Brown Myotis	<i>Myotis lucifugus</i>	Secure	Endangered	Schedule 1
Long-tailed Weasel	<i>Mustela frenata</i>	May be at Risk	Not at Risk	No schedule
North American Badger	<i>Taxidea taxus</i>	Sensitive	Special Concern	No schedule
Northern Myotis	<i>Myotis septentrionalis</i>	May Be At Risk	Endangered	Schedule 1

¹ Provincial status according to ESRD General Status of Alberta Wildlife Species (Government of Alberta 2010b).

² Federal status according to the COSEWIC Wildlife Species Search (COSEWIC 2015).

³ Legal status under the SARA, according to the Species at Risk Public Registry (Government of Canada 2015).

In addition to a desktop review of historical and potential wildlife occurrences, wildlife field surveys have been conducted at the Project site. Golder conducted a wildlife sign survey, which involved walking the wetland margins and surrounding upland areas for a half day period on June 4, 2013. The survey coincided with the breeding season for migratory birds and the rearing season for amphibians. All direct sightings, calls, and sign of wildlife species were identified and recorded (Golder 2013c).

During the wildlife sign survey, 18 wildlife species were observed or detected at the Site (Table H). Two species of conservation concern were heard: least flycatcher (*Empidonax minimus*) and sora rail (*Porzana Carolina*), both provincially listed as Sensitive (Government of Alberta 2010b). Other species observed or detected included two amphibian species (Boreal Chorus Frog [*Pseudacris maculata*] and Wood Frog [*Lithobates sylvatica*]), deer (*Odocoileus* sp.), moose (*Alces alces*), red-tailed hawk (*Buteo jamaicensis*), American robin (*Turdus migratorius*), woodpeckers (*Picoides* spp.), five species of sparrow, and three warbler species (Table G; Golder 2013c).



Table H Wildlife Species Recorded within the Project Footprint during the June 4, 2013 Wildlife Sign Survey (Golder 2013c)

Common Name	Species Name	General Status of Alberta ¹	COSEWIC ²	SARA ³
Amphibians				
Boreal Chorus Frog	<i>Pseudacris maculata</i>	Secure	N/A	N/A
Wood Frog	<i>Lithobates sylvatica</i>	Secure	N/A	N/A
Birds				
American Robin	<i>Turdus migratorius</i>	Secure	N/A	N/A
Chipping Sparrow	<i>Spizella passerina</i>	Secure	N/A	N/A
Clay-colored Sparrow	<i>Spizella pallida</i>	Secure	N/A	N/A
Least Flycatcher	<i>Empidonax minimus</i>	Sensitive	N/A	N/A
Red-tailed Hawk	<i>Buteo jamaicensis</i>	Secure	Not at Risk	N/A
Song Sparrow	<i>Melospiza melodia</i>	Secure	N/A	N/A
Sora	<i>Porzana carolina</i>	Sensitive	N/A	N/A
Tennessee Warbler	<i>Oreothlypis peregrina</i>	N/A	N/A	N/A
Vesper Sparrow	<i>Pooecetes gramineus</i>	Secure	N/A	N/A
White-throated Sparrow	<i>Zonotrichia albicollis</i>	Secure	N/A	N/A
Woodpeckers	<i>Picoides</i> spp.	N/A	N/A	N/A
Yellow-rumped Warbler	<i>Setophaga coronata</i>	Secure	N/A	N/A
Yellow Warbler	<i>Setophaga petechia</i>	Secure	N/A	N/A
Mammals				
Coyote	<i>Canis latrans</i>	Secure	N/A	N/A
Deer	<i>Odocoileus</i> spp.	Secure	N/A	N/A
Moose	<i>Alces alces</i>	Secure	N/A	N/A

¹ Provincial status according to ESRD General Status of Alberta Wildlife Species (Government of Alberta 2010b).

² Federal status according to the COSEWIC Wildlife Species Search (COSEWIC 2015).

³ Legal status under the SARA, according to the Species at Risk Public Registry (Government of Canada 2015).

Golder also inventoried owls on March 16, 2015 (Golder 2015). This inventory included a visual survey for nesting evidence during daylight hours and a nocturnal call-playback survey (ESRD Research Permit Numbers 5547 and 55621). No owl nests were located during the visual search and no owls were observed or detected during the call-playback survey.

Overall, the original surrounding vegetation provided limited foraging, security, breeding, and thermal habitat for wildlife, particularly ground-nesting birds and small mammals. However, the Project footprint was cleared of vegetation in 2015 and is no longer natural. Given previous site use as agricultural and the current condition, this habitat is of low quality.

Although there have been historical records for some at-risk species, given their habitat requirements and the current conditions, it is unlikely Sprague's pipits, peregrine falcons, and Canadian toads occupy the Site. Sprague's pipits are strongly associated with native prairie in Alberta, and are rarely associated with cultivated land and introduced, pasture vegetation species (Prescott 1997). Canadian toads use a wide variety of breeding habitats including natural ponds, borrow pits, streams, and lake margins, but are most often found near rivers and lakes with stable water levels and gradually emerging shores with mud flats (Hamilton et al. 1998). The present lack of wetlands and suitable breeding habitat likely precludes this species from the Project footprint. Peregrine falcons typically nest on cliffs close to riparian or wetland habitats, especially near major river systems such as the NSR. Buildings and other man-made structures are also often chosen as nesting sites (Rowell and Stepnisky 1997). Given the lack of cliffs and buildings within the Project footprint, it is unlikely that this species utilizes the Site for nesting, though individuals could nest along the NSR.

North American badgers have had historical occurrences near the Project site. They are most often found in treeless habitats with an available food source such as Richardson's ground squirrels (*Urocitellus richardsonii*) (Scobie 2002). They have been found to roam in a variety of habitats in Alberta, including pastures, in search for prey (Scobie 2002). Similarly, long-tailed weasels generally inhabit grasslands, parklands, and open coniferous forests (Smith 1993). Considering badgers have a historical occurrence near the Project footprint, and that badgers and weasels use open areas for foraging and denning, it is possible these species use the Project footprint. However, badgers are nomadic (Messick and Hornocker 1981) and their (and likely to some extent, weasel) occurrence is largely driven by prey availability (Hoodicoff 2006). Cleared vegetation is likely to have reduced foraging opportunities. As such, it is unlikely these species will occur with any permanency in the Project footprint.

Common nighthawks and short-eared owls were identified as having potential to utilize areas within the Project footprint. Common nighthawks nest and forage in open, cleared areas such as pastures and roads; similarly, short-eared owls, use a wide variety of open habitats, including old pastures and agricultural fields for nesting and foraging (COSEWIC 2008; 2011). Given their requirements and the available habitat, it is possible common nighthawks could nest and forage within the current Project footprint. The likelihood of short-eared owls nesting is low given the lack of abundant vegetation cover; however it is possible this species could use the Site for foraging.

Little brown myotis and northern myotis summer roosting sites include crevasses, cavities, and under bark of mature deciduous or coniferous forest trees (COSEWIC 2013). Roosting trees are usually tall,



large-diameter snags in the early to middle stages of decay. Individuals leave the roost in the evening and forage over nearby water, along waterways, and near forest edges for flying insects (COSEWIC 2013). Adjacent forest patches and banks of the NSR could provide roosting and foraging habitat.

The Williams-owned land is also located within a Key Wildlife and Biodiversity Zone (KWBZ), which extends along the riparian area of the NSR (Figure 2). KWBZs are areas that have been identified as important ungulate winter habitat and that have high potential for biodiversity. They are often located along major river valleys. To maintain areas of high biodiversity and productive ungulate habitat, ESRD developed recommended land use guidelines for KWBZ (ESRD 2015e). These guidelines outline strategies to protect vegetation from clearing by minimizing industrial activity, minimize activity during winter months to avoid displacing wildlife, reduce or prevent new access, and follow general timing restrictions between January 15 and April 30. Presently, recommended land use guidelines for KWBZ only apply to crown land. Given that Williams has freehold ownership of the Project footprint and is leasing the Site to NAPP, the KWBZ guidelines are not required though efforts will be made to consider them in construction where possible. In consultation with Strathcona County, NAPP and Williams have committed to no new disturbance of the existing forested area along the NSR. An existing cleared right-of-way (owned by a third party) will be used to house the proposed storm water outfall structure to the NSR. Where possible, construction activities in proximity to the forested area will be conducted outside of the January 15 to April 30 timing restriction. Any proximal construction activities completed within the timing restriction period will be conducted following appropriate area assessment (i.e. wildlife surveys) and receipt of regulatory approval.

5.1.3 Soils

In June 2013, Golder conducted a pre-disturbance soil survey of the entire Williams Canada project site including the current study area (Golder 2013d). The survey included 33 soil inspection points as well as a desktop review of available soil information. Four of the inspection points were located within or adjacent to the NAPP project site area.

In August 2015, WorleyParsons conducted a supplemental soil survey for Williams with the objective of determining the upper subsoil salvage depth and volume required to support future reclamation activities. A total of 15 locations were inspected and 12 locations were sampled. Four of the inspection points were located within the NAPP Rail Yard area (WorleyParsons 2015a).

Review of the available soil baseline data showed a data gap in the NAPP project site area. To address this data gap, WorleyParsons was retained by NAPP to conduct a supplemental soil survey at six selected locations (S15-21 through S15-26) within the NAPP area. This most recent soil survey conducted (WorleyParsons 2015a) found Peace Hills, Mundare, Ukalta and Primula soil series were identified at the Site. These soils were predominantly Orthic Black Chernozems with some inclusion of Eluviated Eutric Brunisols. The soils developed on low relief terrain with a level to slightly undulating topography. Soil texture was generally coarse in both topsoil and subsoil layers. All soils were rated as having a high risk of

wind erosion due to the coarse soil textures, and low risk of water erosion due to level topography. Characteristics of the soil series found on site are provided in Table I.

In terms of soil reclamation suitability, previous soil surveys rated both topsoil and subsoil of the NAPP Rail Yard area as ‘fair’ to ‘poor’. The supplemental soil survey in the NAPP project site area showed that the topsoil in this area had a rating of ‘poor.’ Subsoil ratings for the NAPP project site area and both topsoil and subsoil ratings for the NAPP Rail Yard area were consistent with previous survey findings.

The average topsoil and upper subsoil thicknesses in the NAPP manufacturing plant area were 25 and 31 centimeters (cm), respectively; the average topsoil and upper subsoil thicknesses in the NAPP Rail Yard area were 16 and 25 cm, respectively.

The estimated topsoil and upper subsoil salvage volumes (in situ) for the whole NAPP Site were approximately 39,660 cubic meters (m³) and 53,100 m³, respectively.

Table I Characteristics of Soil Series in the Project Site

Soil Series	Parent Material	Classification	Drainage
Peace Hills (PHS)	Glacial fluvial	Orthic Black Chernozem	Well
Primula (PRM)	Eolian	Eluviated Eutric Brunisol	Rapid
Mundare (MDR)	Glacial fluvial	Orthic Black Chernozem	Well
Ukalta (UKT)	Glacial fluvial/moraine	Orthic Black Chernozem	Moderately well to imperfect

Source: Golder 2013d

Williams completed an environmental due-diligence exercise prior to the acquisition of the purchased land including a Phase I Environmental Site Assessment (Trace 2013). The results of that Phase I Environmental Site Assessment did not indicate historical issues of significant environmental concern. Specifically, the potential risks associated with soil quality impairment were deemed to be low. In 2015 further soil investigations were undertaken for the NAPP Facility as part of a Phase II Environmental Site Assessment (Advisian 2016a). During these investigations no evidence of soil contamination was found.

5.1.4 Surface Watercourses and Drainage

The Project site is located E of the NSR and W of the lower portion of Astotin Creek. Runoff from the Williams-owned land generally flows in W and E directions with high-relief topography near the centre. The W portion of the Project site drains to the W towards the NSR. The E portion drains to the E, and then northwest (NW) toward the NSR. Standing water with relatively small areas and depths were observed in local depressions near the SE corner of the Alberta PDH Facility footprint.



Astotin Creek is located 3.3 km E of the Project site. Astotin Creek flows in a NE direction to Beaverhill Creek, approximately 6 km SE of the Beaverhill Creek confluence with the NSR.

The NSR is approximately 200 m from the edge of the Project footprint. It has its headwaters approximately 300 km upstream of Fort Saskatchewan, originating at the Saskatchewan Glacier of the Columbia Icefield, located on the eastern slope of the Rocky Mountains. Recorded long term streamflow data from the EC hydrometric station on the NSR at Edmonton gauging station (Station 05DF001) were used to characterize the flow regime for the NSR (EC 2013).

The NSR at Edmonton has a gross drainage area of 28,000 square kilometers (km²) and an effective drainage area of 27,300 km². On the river reach between the Devon and Pakan, additional drainage areas are contributing flows via small tributaries, including:

- Sturgeon River (gross drainage area of 3,250 km² and an effective drainage area of 2,320 km²);
- Ross Creek (gross and effective drainage areas of 111 km²);
- Whitemud/blackmud Creek,
- Mill Creek
- Pointe-aux-Pins Creek (gross and effective drainage areas of 106 km²); and
- Oldman Creek (gross and effective drainage areas of 130 km²).

These minor tributaries have low water yields compared with the upper NSR watershed, with the majority of the head-watershed located in mountainous regions. Flows in the NSR are regulated at two upstream locations, including the Brazeau Dam on the Brazeau River (since 1961) and Bighorn Dam on the NSR (since 1972). These impoundments reduce flood peaks and increase low flows on the NSR but have little effect on mean annual flows.

Corrugated pipes to be located between the rail tracks in the NAPP Rail Yard will divert the drainage water to a main drainage pipe, which will discharge water to a Williams owned and operated storm water pond, designed to contain a 1:100 year 24 hour event. In accordance with Williams' EPEA Approval, the storm water pond will be sampled prior to discharge to an outfall structure on the NSR.

The Project is not expected to adversely affect surface hydrology.

5.1.5 Groundwater

A groundwater study was completed for the Williams-owned land, and a report was prepared for submission with the Alberta PDH Facility's Industrial Approval Application (Golder 2013a). The regional hydrogeology in the Fort Saskatchewan area is influenced by pre-glacial, glacial, and post-glacial events.

The Quaternary (surficial) geology in the area has been described by Andriashek (1988). The surficial soils at the Project site consist of a sequence of upper Aeolian sands, underlain by lacustrine clay, glacial till and pre-glacial sand and gravel overlying bedrock. Although local aquifers are present in the upper soil

strata, the pre-glacial sand and gravel deposits represent an important regional aquifer. These coarse materials are situated 30 to 45 m below grade in the vicinity of the Project site, and are regionally known as the Beverly Channel aquifer.

The Beverly Channel represents a pre-glacial valley which geographically parallels the present day NSR valley, and has been infilled with sands and gravels overlying bedrock. These pre-glacial sand and gravel deposits are regional aquifers which affect both groundwater availability and flow distribution (Stantec Consulting Ltd. [Stantec] 2004).

The Beverly Channel deposits are known to be in direct hydraulic connection with the NSR, and the water levels in the channel vary with river water levels. The regional direction of groundwater flow is toward both the Beverly Channel and the NSR. The sand and gravel deposits of the Beverly Channel form an important regional aquifer (Stantec 2004).

Groundwater testing was undertaken in 2015 as part of a Phase II Environmental Site Assessment (Advisian 2016a). Nitrate as N exceedances were noted in most groundwater samples, as is consistent with previous analytical data collected from the Williams-owned land. It is inferred that these exceedances are related to former agricultural activities in the area. A few anomalous hydrocarbon, polycyclic aromatic hydrocarbon (PAH) and metal exceedances were noted in some of the groundwater samples collected. Some of these exceedances are relatable to naturally occurring conditions, while others are not and do not correlate with past activities on site or adjacent properties. Further baseline groundwater sampling will be conducted prior to Project commissioning, which will help to further characterize the noted anomalies and establish baseline groundwater quality.

In addition, Williams has committed to developing a groundwater monitoring program for the Williams-owned land and will be responsible for groundwater monitoring around and on the Project footprint. Williams submitted the proposed groundwater monitoring program to AEP on October 1, 2015 and received regulatory authorization for the plan on October 15, 2015.

5.1.6 Air Quality

The Project is located within the boundaries of the North Saskatchewan Air Zone, which includes both the Capital Region Airshed Zone and the Fort Air Partnership Airshed Zone. The North Saskatchewan Air Zone is characterized by a strong industrial base of oil refineries, chemical manufacturing, and power generation. Future industrial activity in the region is also expected to include bitumen upgrading. Industrial activity, in combination with fuel combustion from vehicle use, home heating and urban activity, contribute to the generation of NO₂, SO₂, PM_{2.5} and O₃.

The Capital Region Air Quality Management Framework (ESRD 2012) describes the principles and approach to managing these four compounds, from a cumulative effects perspective. The management framework focuses on ambient air quality pressures from point and non-point sources within the region, and is consistent with national and provincial policies. The need for air quality management action within the Capital Region was triggered by current ozone levels. O₃ within the Capital Region exceeds the



Planning Trigger under the Clean Air Strategic Alliance Particulate Matter and Ozone Management Framework (Clean Air Strategic Alliance [CASA] 2003).

The management of air quality across Canada is the collaboration between federal, provincial, and municipal governments. The *Canadian Environmental Protection Act* (Government of Canada 1999) came into force in 2000 which aims at preventing pollution and protecting the environment and human health. The federal government has set the National Ambient Air Quality Objectives (NAAQO) (CCME 2012a) and Canadian Ambient Air Quality Standards (CAAQS) (CCME 2012b) where NAAQOs are benchmark levels and CAAQS are achievable targets. New CAAQS for PM_{2.5} were adopted in 2013 and will become even more stringent in 2020.

AAAQOs and guidelines are developed under the Alberta's EPEA (AEP 2013a). Relevant ambient air quality criteria are summarized in Table J.

Table J Ambient Air Quality Criteria

Pollutant	Average Time	Concentration (microgram per cubic meter, µg/m ³)	
		AAAQO	CAAQS
SO ₂	1-hour	450	-
	24-hour	125	-
	30-day	30	-
	Annual	20	-
NO ₂	1-hour	300	-
	Annual	45	-
CO	1-hour	15,000	-
	8-hour	6,000	-
PM _{2.5}	24-hour	30	28 and 27 ^a
	Annual	-	10 and 8.8 ^a
Ethylene	1-hour	1,200	-
	3-day	45	-
	Annual	30	-
n-hexane	1-hour	21,000	
	24-hour	7,000	

Note: Dash (-) indicates information not applicable.

^a Will become effective in 2020.

Air quality within the Capital Region is monitored by a number of different organizations, including ESRD, the Fort Air Partnership, and the Strathcona Industrial Association. The Project lies within the Fort Air Partnership Airshed Zone, which collects air quality data through a combination of nine continuous and 55 passive monitoring stations. Data from the Fort Air Partnership (FAP 2009, 2010, 2011, 2014) can be evaluated to determine compliance with the AAAQOs (ESRD 2012).



The names of the nine continuous Fort Air Partnership monitoring are as follows with the stations inside the air quality modelling domain in bold font:

- Bruderheim;
- Elk Island;
- **Fort Saskatchewan;**
- **Range Road 220;**
- **Redwater Industrial;**
- **Ross Creek;**
- Lamont County;
- **Scotford 2;** and
- Gibbons.

The parameters monitored and the concentrations at each Fort Air Partnership station that are within a 5 km radius of the site are summarized in Table K. The parameters of interest include SO₂, NO₂, CO, PM_{2.5} and ethylene. Monitored concentrations for 2014 for each station are summarized except Scotford 2 where 2013 data were used. This is because data completeness for Scotford 2 in 2014 was less than 75% and was not deemed representative. These concentrations were calculated following the *Air Quality Model Guideline* (AEP 2013b). The guideline recommends using hourly (continuously monitored) data with at least one year of data that has 75% completeness. The concentrations shown in Table K represent 90th percentile of the dataset used.

Table K Air Quality Parameters Continuously Monitored at the Fort Air Partnership Stations within 5 km from the Project

Pollutant	Averaging Time	Concentrations ($\mu\text{g}/\text{m}^3$)						
		Criteria ^a	Range Road 220	Scotford 2 ^b	Ross Creek	Redwater Industrial	Fort Saskatchewan	Average
SO ₂	1-hour	450	5.2	10.5	5.2	20.9	2.9	9
	24-hour	125	5.4	7.5	4.8	40.6	3.5	12
	30-day	30	3.9	4.3	2.1	23.1	2.2	7
	Annual	20	2.5	3.9	1.6	13.2	1.3	5
NO ₂	1-hour	300	31	-	42	48	43	41
	Annual	45	12	-	16	21	15	16
CO	1-hour	15,000	-	-	-	-	344	344
	8-hour	6,000	-	-	-	-	344	344
PM _{2.5}	24-hour	28	-	-	-	13	15	14
	Annual	10	-	-	-	7	7	7



Pollutant	Averaging Time	Concentrations ($\mu\text{g}/\text{m}^3$)						
		Criteria ^a	Range Road 220	Scotford 2 ^b	Ross Creek	Redwater Industrial	Fort Saskatchewan	Average
Ethylene	1-hour	1,200	6.9	-	8.0	-	-	7.5
	3-day	45	5.6	-	6.7	-	-	6.2
	Annual	30	3.3	-	3.3	-	-	3.3

Notes: ^a Criteria for PM_{2.5} refer to CAAQS and criteria for all other pollutants refer to AAAQO.

^b Ambient data from 2014 with the exception of Scotford 2 Station which is from 2013 in order to have at least 75% data completeness.

Emissions of SO₂ within the Capital Region are primarily from coal combustion, petroleum operations, chemical production and metal manufacturing (ESRD 2012). The highest maximum and the highest average concentrations of SO₂ between 2009 and 2013 were observed at the Redwater Industrial station (approximately 7 km N of the Project site). There have been exceedances of the 1-hour, 24-hour, 30 day and annual AAAQO for SO₂ at Redwater Industrial station over this monitoring period. In the Fort Air Partnership Annual Report (FAP 2014), the causes of these SO₂ exceedances were attributed to local industry. The SO₂ concentrations recorded at the remaining monitoring stations within the Fort Air Partnership network were below the AAAQO. The 90th percentile concentrations from 2014 and 2013 are less than the corresponding criteria.

Emissions of NO₂ within the Capital Region are primarily from combustion, including fuel combustion in vehicles and for home heating, and coal, oil and natural gas combustion within industrial facilities (ESRD 2012). There was one exceedance of the AAAQO for 1-hour NO₂ concentration at the Redwater Industrial monitoring station in 2010. NO₂ emissions from local industry are considered the most likely cause of this exceedance (FAP 2011). The 1 hour NO₂ concentrations at all other monitoring stations within the Fort Air Partnership network were below the AAAQO. The 90th percentile concentrations from 2014 and 2013 are less than the corresponding criteria.

Ambient CO concentrations are only measured at the Fort Saskatchewan monitoring station. Based on the most recent five years of ambient monitoring data, the maximum 1-hour and 8-hour concentrations between 2008 and 2013 are below the AAAQO (FAP 2014). The 90th percentile concentrations are shown in Table K above.

PM_{2.5} within the Capital Region is either emitted directly or formed in the atmosphere from precursors such as NO_x, SO₂, ammonia (NH₃), and Volatile Organic Compounds (VOCs). PM_{2.5} concentrations at all of the monitoring stations exceeded the AAAQO at some point between 2008 and 2013. These high PM_{2.5} events are typically attributed to forest fires, brush fires, peat fires or poor meteorological conditions, like winter time inversion (FAP 2009, 2010). The 90th percentile concentrations from Redwater Industrial and Fort Saskatchewan in 2014 are less than the CAAQS.

Ethylene is a naturally occurring compound by soil microorganism, algae, lichens and plants. Anthropogenic sources include combustions of fossil fuels, and processing of natural gas in petrochemical facilities. Ambient concentrations of ethylene were monitored at Range Road 220 and Ross Creek. The 90th percentile concentrations, shown in Table K, are less than the AAAQO.

Combustion emissions (e.g., NO₂, NO_x, SO₂ and CO) from the Project are not expected to measurably affect existing ambient concentrations. The release of polypropylene fines during rail car loading will result in PM_{2.5} emissions but contribution to existing emissions will be small. Each rail car loading station will be equipped with a dedicated elutriation system to remove streamers and fines that may be produced during polypropylene pellet blending and transfer.

Project emissions were modelled, and predicted ambient air quality concentrations were compared with the AAAQO in the air quality assessment report that was submitted to AEP as part of the IAA. It is



anticipated that any concerns with respect to air quality will be resolved with emissions limits set by ESRD as part of the EPEA Approval.

5.1.7 Noise

The NCIA consists of member industrial companies in the Fort Saskatchewan area. The NCIA has developed a RNMP for the AIH (NCIA 2014). The purpose of the RNMP is to provide facilities in the AIH with an alternative method for demonstrating noise compliance, that is, an alternative to Permissible Sound Level (PSL) compliance conventionally required by Alberta Utilities Commission (AUC) Rule 012 (AUC 2011) and by Alberta Energy Regulator (AER) Directive 038 (AER 2007).

The NCIA RNMP was approved by both the AUC and the AER as an acceptable alternative to conventional PSL compliance. As such, facilities operating in the AIH can now demonstrate noise compliance via either the conventional PSL approach (i.e., by showing that cumulative noise levels will not exceed the PSL at the nearest or most impacted occupied dwellings) or by adherence to the RNMP.

Rather than setting strict noise thresholds that must not be exceeded, the RNMP has been established on the basis of due diligence (i.e., taking all reasonable steps to minimize noise impact). The RNMP requires participating companies to implement a noise management framework. The noise management framework requires senior management to set clear expectations for management of noise compliance at their site. It further requires participating companies to develop and implement a site-specific noise management plan that integrates both occupational and environmental objectives. Companies participating in the RNMP must also conduct regular self-audits, disclose results of their site-specific noise management plan to the NCIA, support development and updates of the NCIA's regional noise model, and use the "Life in the Heartland" platform to communicate and engage public feedback on the RNMP.

A qualitative noise assessment has been conducted for the proposed Project. This assessment describes the steps that NAPP will take to manage noise, including noise from the NAPP manufacturing plant and NAPP Rail Yard activities. The assessment has shown that with mitigation, the cumulative noise levels at the closest two receptors, which are within 1.2 km from the Project site, will be within the noise thresholds specified in Directive 038 for both the daytime and nighttime periods (Advisian 2016b). As additional noise data is defined through detailed design, NAPP will re-visit its noise assessment to ensure impacts are minimized.

5.1.8 Potential Environmental Effects

Overall, due to the location of the Project site and the nature of the area (pasture), environmental impacts as a result of the project are considered to be minimal.

The Project site is within an existing industrial park and the Project site is not identified as providing significant wildlife habitat. Therefore environmental wildlife impacts from the Project are considered to be unlikely. Furthermore, to avoid construction impacts on birds, a wildlife sweep will be conducted prior to any works which are planned to take place over the period mid-April to August 31 in any given year. This

sweep will identify if there are nesting birds present at the site. Should any evidence of migratory birds on the site be found, AEP will be contacted to determine a suitable management approach.

No significant issues with terrain or soil were noted for the proposed Project location. Operational soil impacts from the Project are considered to be unlikely as Project activities will take place indoors on a concrete floor; the concrete floor is constructed in such a way to collect facility wash water.

The previous environmental surveys indicated the presence of wetlands within the Williams-owned land, though none of these wetlands were located within the NAPP Project footprint. As stated previously, Williams received *Water Act* Approval No. 361345-00-00 to remove all the wetlands on site, and has paid Ducks Unlimited to provide habitat compensation for their removal. Currently, there are no wetlands present within the Project site.

Other than the NSR, there are no other fish-bearing watercourses in proximity to the Project site. The only discharge from the Project site will be storm water runoff that will be directed to a Williams-owned/operated storm water pond and then to the NSR via an outfall following compliance testing. The Williams storm water pond will be managed according to Williams' EPEA Approval No. 341558-00-00. Any storm water that does not meet the prescribed discharge limits will be removed from site via a licensed contractor and will not be discharged to the NSR.

Sewage will be transported off-site by a qualified disposal contractor.

It is considered unlikely that the project will have any impacts on groundwater as the polypropylene loaded and stored in the NAPP Rail Yard is solid and inert. No wastewater will be generated as part of the Project.

5.2 Potential Effects Related to Federal Legislation

5.2.1 Historical Resources

Over 60 previous Historical Resources Impact Assessments (HRIAs) have been conducted in the general vicinity of the Project site, none of which identified any significant historic resource sites. The Project site has been extensively disturbed by agricultural activities and; therefore, it is highly unlikely that any intact, previously unrecorded historic resource sites will be adversely affected by the Project.

A Statement of Justification (SoJ), including a desktop assessment of the NE and SE quarter sections of 25-55-22-W4M was prepared and submitted to Alberta Culture for the Alberta PDH Facility by Williams. *Historical Resources Act* Clearance was granted for the development of Williams site (where NAPP is a leaseholder) on October 16, 2013 subject to Section 31 of the *Historical Resources Act* - whereby "a person who discovers an historic resource in the course of making an excavation for a purpose other than for the purpose of seeking historic resources shall forthwith notify the minister of the discovery".



5.2.2 Effects on Fish and Fish Habitat

Surface runoff will be routed to the Williams-owned/operated storm water pond, and will be tested prior to release in accordance with EPEA Approval No. 341558-00-00. The storm water will be piped from the Williams-managed storm water pond (following testing) to an outfall at the NSR. A series of “over/under” weirs will be installed to ensure that any oily residue, plastics or other contaminants are removed from the water prior to discharge to the storm water pond. As a result, no adverse effects are expected to result from the Project on fish in the NSR that are part of a commercial, recreational or Aboriginal fishery, or their habitat.

Prior to the start of Williams’ site development activities, the majority of the site was classified as pasture and did not constitute suitable habitat for aquatic species. There were no aquatic species, as defined under the SARA, observed during the wildlife surveys conducted at the Project site.

In support of the Department License of Occupation (DLO) Application prepared by Williams for the proposed outfall structure to the NSR, a baseline fisheries assessment of the study area was completed between September 29 and October 2, 2014 (WorleyParsons 2015b). The assessment included:

- a review of historical fisheries information available for the NSR in the vicinity of the Project area;
- completion of a bathymetric and habitat survey of the Project area; and
- determination of fish presence within the study area during fall.

This information was used to determine potential risks to fish and their habitat to

- assure AEP that aquatic productive capacity can be maintained post-works;
- assure Fisheries and Oceans Canada (DFO) that there will be no serious harm to fish that are part of a commercial, recreational, or Aboriginal fishery, or to fish that support such a fishery; and
- assure Transport Canada (TC) that navigability requirements are addressed as necessary.

The primary results are summarized here:

- a desktop review identified 36 fish species that are present in the NSR, 20 of which are known to occur within a 5 km radius of the project area (most notably: goldeye, longnose sucker, mountain whitefish, northern pike, walleye, and white sucker);
- no lake sturgeon habitat sites were noted in the vicinity of the project area; the closest sites are located 15 km upstream and 75 km downstream;
- in-stream structure within the river channel and adjacent to banks was sparse, limiting formation of micro-habitat units over much of the study reach;
- banks throughout the study area were stable and well-vegetated with much of the area undisturbed;

- base substrate within the study area was predominately cobble and gravel with varying combinations of sandy fines and boulders present; and
- fish sampling was conducted with minnow traps and electrofishing; a total of five fish were captured (via electrofishing, white sucker, longnose sucker, and trout-perch) and another seven were observed (unidentified cyprinids, and shorthead rednose).

As a follow up to the baseline study, a DFO Self-Assessment was completed by Williams (Advisian 2015). The assessment did not identify any residual effects, and indicated that the proposed outfall construction is unlikely to result in serious harm to fish that are a part of or support a commercial, recreational, or Aboriginal fishery. The assessment did, however, recommend a few protection measures (i.e. monitoring during construction) to avoid potential harm to fish and their habitat that Williams will implement during construction of the proposed outfall.

The Project footprint does not contain any aquatic environments, nor are there any potential effects that extend beyond the Project footprint (e.g. off-site deposition of fugitive dust) likely to interact with aquatic environments. Consequently, there are no anticipated effects on aquatic species as defined in the federal SARA.

5.2.3 Effects on Marine Plants

As defined in the *Fisheries Act*, There are no marine plants in this area of Alberta therefore there will be no impact on marine plants as a result of this Project.

5.2.4 Effects on Migratory Birds

The majority of the Project site is pasture and is not considered preferred habitat for most bird species, including migratory birds. Given the scale and scope of the Alberta PDH Facility, the Strathcona Cogeneration Plant, and the NAPP manufacturing plant, Williams has already proposed and received Alberta Wetland *Water Act* approval to remove the wetlands within the NE and SE quarter sections of 25-55-22 W4M, thus reducing the amount of suitable bird habitat in the vicinity of the Project. If any nests are found during Project construction, the appropriate regulatory agencies will be contacted (EC and/or AEP) and an appropriate plan of action will be developed. No adverse effects on migratory birds are expected as a result of the Project.

There is a storm water pond designed to accept surface runoff from the rail area. The storm water pond will be owned and operated by Williams. The local area is heavily industrialized and the noise of continuous plant and rail operations are likely to act as a deterrent to any wildlife. The proposed rail site has been surveyed for wildlife in 2013 (Golder 2013b) and no significant migratory bird habitat was found within the project development area. No specific bird deterrents are planned for the site.

The pond will be designed to discourage bird wildlife from the area. As a minimum the pond will be constructed using a synthetic liner to reduce the potential for aquatic life and food growth within the pond. The edges of the pond will be designed to prevent vegetation growth in order to deter birds from roosting, nesting, foraging or resting. The berm surrounding the pond will also have a hard surface. Any migratory



birds temporarily utilizing the ponds will not be adversely affected as any water contained within the storm water pond will be effectively clean runoff and subjected to regular analytical testing and approval prior to discharge.

5.3 Potential Effects Related to Interprovincial/Federal/International Lands

It is anticipated that there will be no environmental effects of the Project on federal lands or on other provinces or countries. The Project is not located on federal land and there is no federal land within approximately 20 km of the Project site. Nor is the Project site located near a provincial or international border.

The closest federal lands are Elk Island National Park, approximately 20 km SE of the Project and Canadian Forces Base Edmonton located 20 km W of the Project (Figure 2). Given the distance of the Project from federal lands, it is not anticipated that the off-site dispersion of noise or air emissions will affect those federal lands. Adverse environmental effects are also not anticipated on lands outside Alberta or Canada.

5.4 Potential Effects on Aboriginal Peoples from Changes to the Environment

NAPP will not require access to, use of, or the exploration, development, and production of resources or lands currently used for traditional purposes by Aboriginal peoples. The nearest First Nation Reserves are the Alexander First Nation (Treaty 6) on Indian Reserves 134, 134A and 134B (located W of Morinville, Alberta) located approximately 55 km W of the Project, and the Enoch Cree Nation (Treaty 6) located approximately 53 km SW of the Project (Figure 5). The Gunn Métis Local #55 is approximately 79 km NE of the Project.

The Project site is privately owned and there are no current or known traditional uses of the Project site by Aboriginal groups or peoples.

Over 60 previous HRIAs have been conducted in the general vicinity of the Project, none of which identified any significant historic resource sites. The Project site has been extensively disturbed by agricultural activities and; therefore, it is highly unlikely that any intact, previously unrecorded historic resource sites will be impacted by the Project.

Given that the closest First Nation community is over 50 km from the Project, and that air and noise emissions from the Project will disperse over that distance, adverse effects over or on lands currently used by Aboriginal peoples are not anticipated.

As discussed in previous sections, adverse effects are also not expected on water quality and quantity (Section 5.1.5), and fish and fish habitat (Section 5.2.2) in the NSR.

6. PROPONENT ENGAGEMENT AND CONSULTATION WITH ABORIGINAL GROUPS

6.1 Potentially Interested or Affected Groups

NAPP has identified 27 First Nations (see Figure 5) as potentially interested in the Project based on First Nation consultation efforts of other recently proposed projects in the AIH region as shown in Table L.

Table L First Nations and Métis Groups with Potential Interest in the Project

First Nations – Treaty 6	
Alexander First Nation	Montana First Nation
Alexis Nakota Sioux Nation	Paul First Nation
Beaver Lake Cree Nation	Saddle Lake Cree Nation
Enoch Cree Nation	Samson Cree Nation
Ermineskin Cree Nation	Whitefish Lake #128 First Nation
Louis Bull Tribe	
First Nations – Treaty 7	
Blood Tribe	Stoney (Chiniki) Band
Piikani Nation	Stoney (Wesley) Band
Siksika Nation	TsuuT'ina Nation
Stoney (Bears paw) Band	
First Nations – Treaty 8	
Chipewyan Prairie Dene First Nation	Fort McMurray #468 First Nation
Métis	
Métis Nation of Alberta – Region 1	Buffalo Lake Métis Settlement
Métis Nation of Alberta – Region 2	Kikino Métis Settlement
Métis Nation of Alberta – Region 4	Gunn Métis Local #55
Other First Nations	
Foothills Ojibway First Nation	



6.2 Aboriginal Consultation

At the time of submission of this Project Description, information packages (cover letter and brochure) have been delivered via registered mail to the Aboriginal groups noted in Table L (see example in Appendix 5). Information packages were delivered between May 16, 2016 and May 27, 2016. Section 6.4 describes NAPP's forward plan with regards to Aboriginal consultation.

6.3 Aboriginal Concerns

At the time of submission of this Project Description, no comments or concerns have been expressed by the Aboriginal groups identified for engagement. In order to understand any potential concerns, all comments or concerns received in response to the notification package will be logged by NAPP and follow-up consultation will be completed as required.

6.4 Aboriginal Consultation Program

NAPP has willingly accepted the opportunity to develop and implement an Aboriginal Consultation Program based on CEAA's recommendation. To demonstrate good faith, NAPP will inform all 21 First Nations and the six Métis Organizations that NAPP identified and CEAA confirmed, which include the following:

- Alexis Nakota Sioux Nation
- Paul First Nation
- Beaver Lake Cree Nation
- Saddle Lake Cree Nation
- Ermineskin Cree Nation
- Montana First Nation
- Siksika Nation
- Stoney (Bears paw) Band
- Stoney (Wesley) Band
- Chipewyan Prairie Dene First Nation
- Foothills Ojibway First Nation
- Kikino Métis Settlement
- Métis Nation of Alberta – Region 2
- Gunn Métis Local #55
- Alexander First Nation
- Enoch Cree Nation
- Whitefish Lake #128 First Nation
- Louis Bull Tribe
- Samson Cree Nation
- Blood Tribe
- Piikani Nation
- Stoney (Chiniki) Band
- TsuuT'ina Nation
- Fort McMurray #468 First Nation
- Buffalo Lake Métis Settlement
- Métis Nation of Alberta – Region 1
- Métis Nation of Alberta – Region 4

NAPP has sent, by Canada Post registered mail, a cover letter and information package with Project specific details to the 27 identified Aboriginal groups, to inform as well as to provide them with an opportunity to voice their issues or concerns with the proposed project.

After five Government of Canada business days, NAPP will follow up by telephone to confirm that the information package was received by the appropriate contact and if any site-specific issues or concerns have been identified.

If an Aboriginal group identifies specific issues and concerns with the Project, NAPP will document and respond to these issues, with the potential for in person consultation as required.



7. CONSULTATION WITH THE PUBLIC AND OTHER PARTIES

7.1 Key Comments and Concerns

Non-Project specific environmental concerns were raised by one local landowner (non-resident) during the course of the public consultation process to date. The concerns are related to:

- Emissions associated with NO₂, SO₂, CO₂;
- Particulate matter during the operations phase; and
- Noise during the construction and operations phase.

NAPP is taking a proactive approach to address public and regulatory concerns. It is important to note that few concerns with respect to the Project have been received. The concerns recorded are being carefully considered by NAPP and will be addressed and incorporated into the planning process. NAPP is actively looking to reduce water use, dust emissions and GHGs in consideration for the public's comments to date. NAPP is committed to continue consultation throughout the Application process and will continue updating and informing stakeholders into the construction and operations phases.

7.2 Overview of Ongoing or Proposed Stakeholder Consultations

A Community and Stakeholder Consultation Strategy and Plan was developed for the combined NAPP manufacturing plant and this Project (which is the subject of this Project Description). The Plan, which is included in Appendix 5, outlines the primary communication methods by which information regarding the Project was and continues to be delivered to the public and Project stakeholders, and describes how the consultation activities were and will be conducted. The overall goal of the Plan is to ensure that all communication regarding the Project is timely, targeted, personalized and relevant to the audience.

The approach to community and stakeholder consultation implementation was and continues to be delivered in a manner that enhances the understanding by NAPP of community and stakeholder issues and concerns, identifies options for their resolution and allows the company to make future choices in the design of the Project to mitigate potential adverse effects.

The phased initiatives of the consultation planning and subsequent activities were as follows:

- to confirm and identify all occupants, residents and landowners within 2,000 m of the Project site as well as identify all other interested stakeholders to be consulted;
- to send information packages by registered mail regarding the NAPP manufacturing plant and this Project including the project description, location, timelines and environmental and safety measures to all those within the 2,000 m site boundary of the Project;
- to send information packages to local, municipal, provincial and federal policy and regulatory decision-makers for their information and review;

- to actively seek feedback from all occupants, residents and landowners within 800 m of the Project site by confirming receipt of the Project Information Package;
- to respond to any identified community and stakeholder issues and concerns regarding the Project and suggest in-person meetings to discuss;
- to develop mitigation strategies to address identified issues or concerns regarding the Project; and
- to demonstrate how issues and concerns have been addressed in the approval process.

7.2.1 Stakeholder Identification

Extensive stakeholder mapping was undertaken prior to commencing community and stakeholder consultation. A 2,000 m boundary (measured from the edge of the Project site) was created to identify all occupants, residents and landowners to receive public notification, and an 800 m boundary was created to identify all occupants, residents and landowners to conduct personal consultation with. A figure showing these areas is provided in Appendix 5.

In addition to Project information being distributed to all those within 2,000 m, the following other key stakeholders and groups were provided Project information:

- Local, provincial and federal Government Bodies and Regulatory agencies;
- Community and Industry associations; and
- Special interest groups.

A consultation log was created to link all occupant's, resident's and landowner's legal descriptions and contact information with questions and concerns raised throughout the consultation process. This database includes information regarding type of communication, summary of conversation and response action taken and when. An overview of this consultation log is included in Appendix 5 along with the information package that was provided to all stakeholders.

7.2.2 Implementation of the Consultation Plan

Consultation and Engagement began on September 12, 2015. A Project Information Package was sent by Canada Post registered mail on November 3, 2015 to all identified occupants, residents, landowners and interest holders within 2 km of the Project, as shown in Appendix 5.

A Project Information Package (Appendix 5) was sent by Canada Post on November 4, 2015 to all local, municipal, provincial and federal policy and regulatory decision-makers as well as all other interested stakeholders.

The following points summarize the details to date with respect to the Community and Stakeholder Plan:

- NAPP has taken a diligent approach to consultation and engagement by disseminating information regarding project location, environmental measures and safety of the Project to all those occupants,



residents and landowners within 2 km of the Project site boundary, as well as municipal, provincial and federal regulatory agencies;

- Commencing on November 12, 2015, consultation with all those occupants, residents, landowners within 800 m of the Project site boundary has been accomplished by conducting telephone calls or proposing in-person consultation. A total of 24 Public Information Packages were sent to all occupants, residents and landowners within 800 m of the Project site;
- A total of 34 Public Information Packages were sent to occupants, residents and landowners within 800 m to 2,000 m of the Project boundary;
- A total of 29 Public Information Packages were sent to local, municipal and federal Government Bodies and Regulatory agencies;
- Since mail out on November 4, 2015, 15 non-objections have been acquired, four written and 11 verbal. NAPP will continue to follow up with the remaining nine occupants, residents and landowners within 800 m to obtain non-objections;
- The overall feedback with respect to the Project has been positive. The public and the local municipalities were generally supportive of the Project; and
- One local landowner has expressed non project specific public safety and environmental concerns. NAPP is taking a proactive approach to addressing these concerns and will be meeting in person with the landowner directly to address their concerns.

NAPP is committed to maintaining and documenting the public consultation and stakeholder engagement process throughout the life of the Project, and recognizes that consultation is an on-going process. Continued communication with individual stakeholders as follow-up to the Public Information Package is underway to address any outstanding questions or concerns. NAPP will provide Project updates on significant milestone events such as successful regulatory approval, completion of ground clearing, grading and grubbing or construction progress, to all those occupants, residents and landowners within the 2 km site boundary and to other interested parties including government agencies, municipalities and regional associations.

7.3 Consultation with Other Jurisdictions

Discussions with the CEAA began in July 2014. Early discussions focussed on introducing NAPP and the Project and obtaining information on the regulatory processes that should be followed. The notification materials issued at each stage of the consultation program has also been sent to the CEAA and AEP.

The following is a list of consultations held by NAPP, including the associated facility, in the planning of the Project:

- October 2, 2015: Call with Strathcona County to determine Development Permit Application Requirements;

- October 14, 2015: Conference Call with AEP to Introduce Project and get buy-in on air modelling approach;
- October 28, 2015 to February 26, 2016: Various email/telephone communications with CEAA (Tawanis Testart);
- November 24, 2015 to March 3, 2016: Various email/telephone communications with AEP (Shiya Jayapathy);
- December 1, 2015: In-person meeting with Strathcona County to Introduce Project;
- December 2, 2015: In-person meeting with CEAA to Introduce Project;
- December 2, 2015: In-person meeting with AEP to Introduce Project (new AEP Industrial Approval Engineer);
- December 4, 2015: Conference Call with AEP to confirm air modelling approach; and
- March 14, 2016: In-person meeting with Strathcona County to provide project update and receive latest maps and aerial photos.



8. SUMMARY OF THE PROJECT DESCRIPTION

A summary of this Project Description has been provided as a separate document. In accordance with the *Officials Language Act*, the summary has been prepared and provided in both English and French. The summary will be posted on the Agency website.

9. REFERENCES

- Advisian, 2015. Williams Alberta Propane Dehydrogenation Site Proposed Outfall Fisheries Act Self-Assessment Summary. DRAFT DOCUMENT, December 2015.
- Advisian, 2016a. 2015 Phase II Environmental Site Assessment. Project Number 208005-00053-CA-REP-0001. Prepared for NAPP. 2016
- Advisian, 2016b. North American Polypropylene Plant Noise Assessment Report. Project Number 208005-00053-CA-REP-0001. Prepared for NAPP. 2016
- AEP (Alberta Environment and Parks), 2013a. Alberta Ambient Air Quality Objectives and Guidelines Summary August 2013. Available at: <http://aep.alberta.ca/air/legislation/ambient-air-quality-objectives/documents/AmbientAirQualityObjectives-Aug2013.pdf>
- AEP (Alberta Environment and Parks), 2013b. Air Quality Model Guideline
- AEP (Alberta Environment and Parks), 2015. ACIMS (Alberta Conservation Information Management System) Database – All Tracked and Watched Elements and Element Occurrences (Parts 1 and 2, Non-sensitive and Sensitive Occurrences) as of July 2015. Available at: [http://albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-\(acims\)/download-data.aspx](http://albertaparks.ca/albertaparksca/management-land-use/alberta-conservation-information-management-system-(acims)/download-data.aspx). Data Downloaded November 23, 2015.
- AER (Alberta Energy Regulator), 2007. Directive 038: Noise Control. Available at: <https://www.aer.ca/rules-and-regulations/directives/directive-038>
- Andriashek, L.D., 1988. Open File Report 1988-04. Quaternary stratigraphy of the Edmonton map Area, NTS 83H. Alberta Research Council.
- AUC (Alberta Utilities Commission), 2011. AUC Rule 012: Noise Control. Available at: <http://www.auc.ab.ca/acts-regulations-and-auc-rules/rules/Pages/Rule012.aspx>
- Capital Region Board. 2009. Capital Region Land Use Plan. Available at: <http://capitalregionboard.ab.ca/priorities/land-use>
- CASA (Clean Air Strategic Alliance), 2003. Particulate Matter and Ozone Management Framework. Available at <http://environment.alberta.ca/0895.html>
- CCME (Canadian Council of Ministers of the Environment) 2012a. Canada-wide Standards for Particulate Matter and Ozone. PN 1526 ISBN 978-1-77202-009-0 PDF. Available online at: http://www.ccme.ca/files/Resources/air/pm_ozone/PN_1526_2012_CWS_for_PM_and_Ozone_Final_Report.pdf
- CCME (Canadian Council of Ministers of the Environment) 2012b. Guidance Document on Achievement Determination Canadian Ambient Air Quality Standards for Fine Particulate Matter and Ozone. PN 1483 ISBN 978-1-896997-91-9 PDF. Available online at: http://www.ccme.ca/files/Resources/air/aqms/pn_1483_gdad_eng.pdf



-
- CEAA (Canadian Environmental Assessment Agency), 2012a. Prescribed Information for the Description of a Designated Project Regulations. SOR/2012-148 *Canadian Environmental Assessment Act*, 2012.
- CEAA (Canadian Environmental Assessment Agency), 2012b. *Canadian Environmental Assessment Act*. Available at: <http://laws-lois.justice.gc.ca/PDF/C-15.21.pdf>
- CEAA (Canadian Environmental Assessment Agency), 2012c. *Regulations Designating Physical Activities*. SOR/2012-147. *Canadian Environmental Assessment Act*, 2012.
- CEAA (Canadian Environmental Assessment Agency), 2015. Guide to Preparing a Description of a Designated Project under the *Canadian Environmental Assessment Act*. March 2015.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada), 2008. COSEWIC assessment and update status report on the short-eared owl (*Asio flammeus*) in Canada. Ottawa. vi + 24 pp.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada), 2011. COSEWIC assessment and status report on the Barn Swallow (*Hirundo rustica*) in Canada. Ottawa. ix + 37 pp.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada), 2013. COSEWIC assessment and status report on the Little Brown Myotis (*Myotis lucifugus*), Northern Myotis (*Myotis septentrionalis*) and Tri-colored Bat (*Perimyotis subflavus*) in Canada. Ottawa. Xxiv + 93 pp.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada), 2015. Wildlife Species Search: Database of wildlife species assessed by COSEWIC. Committee on the Status of Endangered Wildlife in Canada, Environment Canada, Ottawa, ON, Canada. Available from http://www.cosewic.gc.ca/eng/sct1/index_e.cfm [accessed 9 November 2015].
- EC (Environment Canada), 2013. HYDAT National Water Data Archive, Environment Canada, Water Survey Branch. Available at: <http://www.wsc.ec.gc.ca>
- EC (Environment Canada), 2015. Technical Guidance on Reporting Greenhouse Gas Emissions. Facility Greenhouse gas emission reporting. November 2015. Available at: <https://www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=47B640C5-1>
- EC (Environment Canada), 2016. Environment and Climate Change Canada. GHG Emissions Quantification Guidance – Fuel Consumption. Access Link: <https://www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=AC2B7641-1> (accessed May 2016)
- ESRD (Alberta Environment and Sustainable Resource Development), 2008. The Water Management Framework for the Industrial Heartland and Capital Region. Edmonton, Alberta. Available at: <http://aep.alberta.ca/focus/cumulative-effects/capital-region-industrial-heartland/documents/WaterManagementFrameworkCapitalRegion.pdf>

- ESRD (Alberta Environment and Sustainable Resource Development), 2012. Capital Region Air Quality Management Framework. ISBN No. 978-1-4601-0065-3.
- ESRD (Alberta Environment and Sustainable Resource Development), 2014. Specified Gas Reporting Standard Version 8.0. Available at: <http://aep.alberta.ca/climate-change/guidelines-legislation/specified-gas-reporting-regulation/documents/SpecifiedGasReportingStandard-Mar2014.pdf>
- ESRD (Alberta Environment and Sustainable Resource Development), 2015a. Cumulative Effects Management System Within the Industrial Heartland and Capital Region. Available at: esrd.alberta.ca/focus/cumulative-effects/capital-region.../8827.pdf. Accessed April 8, 2015.
- ESRD (Alberta Environment and Sustainable Resource Development), 2015b. Water Management Framework for the Industrial Heartland and Capital Region Effluent Characterization Program. June 15, 2015. Available at <http://esrd.alberta.ca/focus/cumulative-effects/capital-region-industrial-heartland/documents/EffluentCharacterizationProgram-Jun15-2015.pdf>
- ESRD (Alberta Environment and Sustainable Resource Development), 2015c. Land Use Framework – Regional Plans. Available at: <https://landuse.alberta.ca/REGIONALPLANS/NORTHSASKATCHEWANREGION/Pages/default.aspx>. Accessed April 23, 2015.
- ESRD (Alberta Environment and Sustainable Resource Development), 2015d. FWMIS (Fish and Wildlife Internet Mapping System). Available at: <http://esrd.alberta.ca/fish-wildlife/fwmis/default.aspx>. Data downloaded: March 2015.
- ESRD (Alberta Environment and Sustainable Resource Development), 2015e. Recommended Land Use Guidelines: Key Wildlife and Biodiversity Zones. Fish and Wildlife Division, Alberta Environment and Sustainable resource Development. Edmonton, AB. 2 p. Available online at: <http://aep.alberta.ca/fish-wildlife/wildlife-land-use-guidelines/documents/KeyWildlifeBiodiversityZones-Apr08-2015.pdf>
- FAP (Fort Air Partnership), 2009. Fort Air Partnership Ambient Air Monitoring Network 2008 Annual Technical Report Network and Data Summary.
- FAP (Fort Air Partnership), 2010. Fort Air Partnership Ambient Air Monitoring Network 2009 Annual Technical Report Network and Data Summary.
- FAP (Fort Air Partnership), 2011. Fort Air Partnership Ambient Air Monitoring Network 2010 Annual Technical Report Network and Data Summary.
- FAP (Fort Air Partnership). 2014. Fort Air Partnership Ambient Air Monitoring Network 2013 Annual Technical Report Network and Data Summary. ESRD. 2015. Cumulative Effects Management. Available at: <https://landuse.alberta.ca/CumulativeEffects/CumulativeEffectsManagement/Pages/default.aspx>. Accessed March 29, 2015.



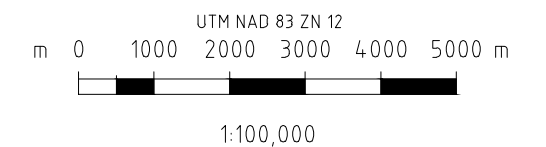
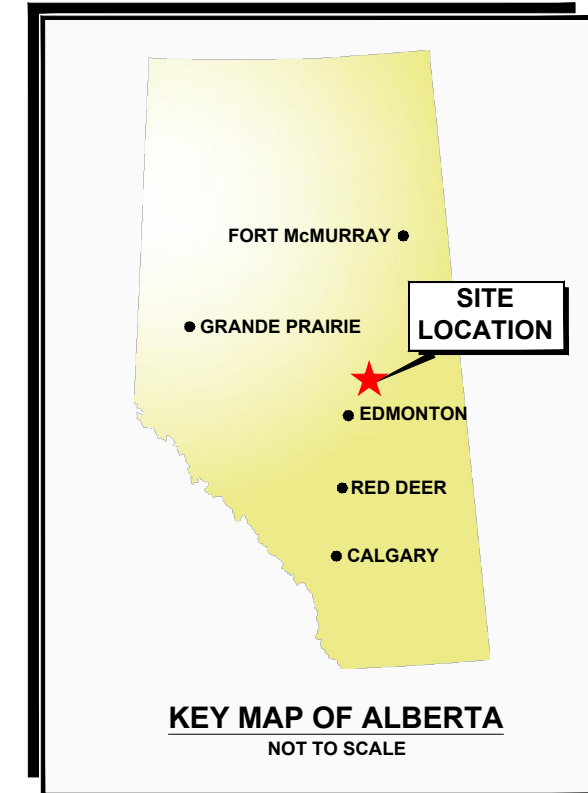
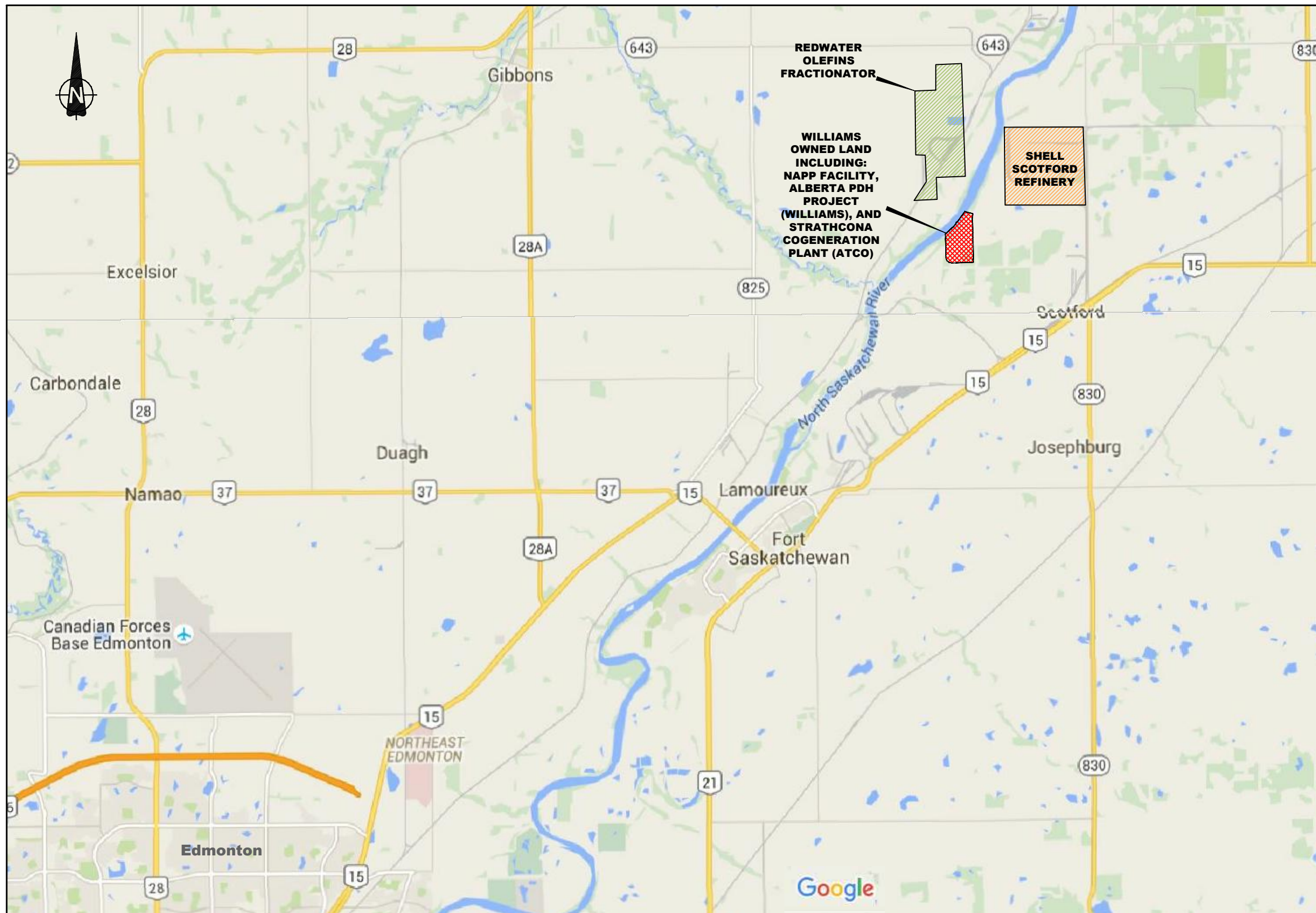
-
- Golder (Golder Associates), 2013a. Groundwater Report - Industrial Approval Application Alberta PDH Project, Strathcona County, Alberta. Report No. 13-1379-0018.4600. September 2013.
- Golder (Golder Associates), 2013b. Supporting Document 5: Vegetation and Wetlands Baseline Assessment. Industrial Approval Application Alberta PDH Project Strathcona County, Alberta. Report No. 13-1379-0018.4100. September 2013.
- Golder (Golder Associates), 2013c. Supporting Document 6: Wildlife Baseline Assessment. Industrial Approval Application Alberta PDH Project Strathcona County, Alberta. Report No. 13-1379-0018.4000. September 2013.
- Golder (Golder Associates), 2013d. Supporting Document 2: Terrain and Soil Baseline Assessment. Industrial Approval Application Alberta PDH Project Strathcona County, Alberta. Report No. 13-1379-0018.4200. September 2013.
- Golder (Golder Associates), 2015. Owl Survey at Williams Alberta PDH Project near Fort Saskatchewan, Alberta. Technical Memorandum. Sent to Williams Canada Propylene ULC. Project No. 1418121.
- Government of Alberta, 1993. *Environmental Protection and Enhancement Act. Environmental Assessment (Mandatory and Exempted Activities) Regulation*. Alberta Regulation 111/1993 with amendments up to and including Alberta Regulation 62/2008. Available at: http://www.qp.alberta.ca/documents/Regs/1993_111.pdf
- Government of Alberta, 2008. *Weed Control Act*. Statutes of Alberta, 2008 Chapter W-5.1. Alberta Queen's Printer, Edmonton, AB. Available online at: http://www.qp.alberta.ca/1266.cfm?page=W05P1.cfm&leg_type=Acts&isbncln=9780779760602
- Government of Alberta, 2009. *Railway (Alberta) Act*. Alberta Regulation 338/2009. Alberta Queen's Printer, Edmonton, AB. Available online at: http://www.qp.alberta.ca/documents/Regs/2009_338.pdf
- Government of Alberta, 2010a. *Railway (Alberta) Act*. Revised Statutes of Alberta, 2000 Chapter R-4. Alberta Queen's Printer, Edmonton, AB. Available online at: <http://www.qp.alberta.ca/documents/Acts/R04.pdf>
- Government of Alberta, 2010b. General Status of Alberta Wild Species. Alberta Environment and Parks. Available from <http://esrd.alberta.ca/fish-wildlife/species-at-risk/wild-species-statussearch.aspx> (Accessed 6 November 2015).
- Government of Alberta, 2016. *Municipal Government Act*. Revised Statutes of Alberta 2000, Chapter M-26. Current as of March 1, 2016. Available at: <http://www.qp.alberta.ca/documents/Acts/m26.pdf>

- Government of Canada, 1985. *Rail Safety Act* R.S.C., c42, (4th Supp). Available at: <http://laws-lois.justice.gc.ca/eng/acts/R-4.2/page-1.html#h-1>
- Government of Canada, 1992. *Transport of Dangerous Goods Act* 1992 (c34). Available at: <https://www.tc.gc.ca/eng/acts-regulations/acts-1992c34.htm>
- Government of Canada, 1994. *Migratory Birds Convention Act*. Available at <http://laws-lois.justice.gc.ca/eng/acts/M-7.01/>
- Government of Canada, 1999. CEPA (*Canadian Environmental Protection Act*), 1999. S.C. 1999. Environment Canada. Available at: <http://www.ec.gc.ca/lcpe-cepa/default.asp?lang=En&n=26A03BFA-1>
- Government of Canada, 2015. SARA Registry (*Species at Risk Act Public Registry*). A to Z Species Index. Available at: http://www.sararegistry.gc.ca/sar/index/default_e.cfm. Accessed April 1, 2015.
- Hamilton, I.M., J.L. Skilnick, H. Troughton, A.P. Russell, and G.L. Powell, 1998. Status of the Canadian Toad (*Bufo hemiophrys*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, and the Alberta Conservation Association, Wildlife Status Report No. 12, Edmonton, AB.
- Hoodicoff, C., 2006. Badger prey ecology: the ecology of six mammals found in British Columbia. B.C. Ministry of Environment, Ecosystems Branch, Victoria, B.C. Wildlife Working Report No. WR-109.
- Messick, J.P. and M.G. Hornocker, 1981. Ecology of the badger in southwestern Idaho. Wildlife Monographs. 76. 53 pp.
- NCIA (Northeast Capital Industrial Association), 2014. NCIA Regional Noise Management Plan Annual Report. Available at www.ncia.ab.ca/documents/rnmp_aer_2014.
- NCIA (Northeast Capital Industrial Association), 2015. Our Environment – Protecting our Groundwater. Available at http://www.ncia.ab.ca/environment_groundwater.html. Accessed March 29, 2015.
- Prescott, D.R.C., 1997. Status of the Sprague's Pipit (*Anthus spragueii*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, Wildlife Status Report No. 10, Edmonton, AB.
- Rowell, P., and D.P. Stepnisky, 1997. Status of the Peregrine Falcon (*Falco peregrinus anatum*) in Alberta. Alberta Environmental Protection, Wildlife Management Division, Wildlife Status Report No. 8, Edmonton, AB.
- Scobie, D., 2002. Status of the American Badger (*Taxidea taxus*) in Alberta. Alberta Sustainable Resource Development, Fish and Wildlife Division, and Alberta Conservation Association, Wildlife Status Report No. 43, Edmonton, AB.



-
- Smith, H.C., 1993. Alberta Mammals: an atlas and guide. The Provincial Museum of Alberta, Edmonton, AB. 238 pp.
- Stantec (Stantec Consulting Ltd.), 2004. Regional Assessment of the Groundwater Quality in the Beverly Channel in the Fort Saskatchewan Area. Prepared for the Northeast Capital Industrial Association, by Stantec Consulting Ltd., Dated May 2004.
- Stewart, R.E. and H.A. Kantrud, 1971. Classification of Natural Ponds and Lakes in the Glaciated Prairie Region. Bureau of Sport Fisheries and Wildlife, U.S. Fish and Wildlife Service, Washington, D.C., USA. Resource Publication 92. 57 pp.
- Strathcona County, 2001. Strathcona County Alberta's Industrial Heartland Area Structure Plan Bylaw. Available at:
http://www.industrialheartland.com/index.php?option=com_content&view=article&id=59&Itemid=100033
- Strathcona County, 2007. Municipal Development Plan Bylaw 1-2007. Approved May 22, 2007. Available online at: <http://www.strathcona.ca/departments/planning-development-services/zoning-and-planning-documents/municipal-development-plan-bylaw-1-2007/>
- Strathcona County, 2015. Strathcona County Land Use Bylaw. Available at:
<http://www.strathcona.ca/departments/planning-development-services/zoning-and-planning-documents/land-use-bylaw-8-2001/land-use-bylaw-review/>
- Trace (Trace Associates Inc.), 2013. Phase I Environmental Site Assessment: Future Industrial Property PDH Facility Project E1/2-25-055-22 W4M, Near Fort Saskatchewan, Alberta. Trace Project No. 200-596-01, June 17, 2013. Prepared for Williams Energy Canada ULC. St. Albert, AB. 326 pp.
- WorleyParsons (WorleyParsons Canada Services Ltd.), 2015a. Letter Report: Soil Salvage Plan – Williams Fort Saskatchewan PDH Site. Addressed to Williams Canada Propylene ULC. September 2015.
- WorleyParsons (WorleyParsons Canada Services Ltd.) 2015b. Water intake on the North Saskatchewan River Fisheries Assessment. Letter Report prepared for Williams Canada Propylene ULC, Calgary Alberta.

Figures




SOURCE:

1. MAP BACKGROUND IS FROM GOOGLE MAP, 25-SEP-2015.

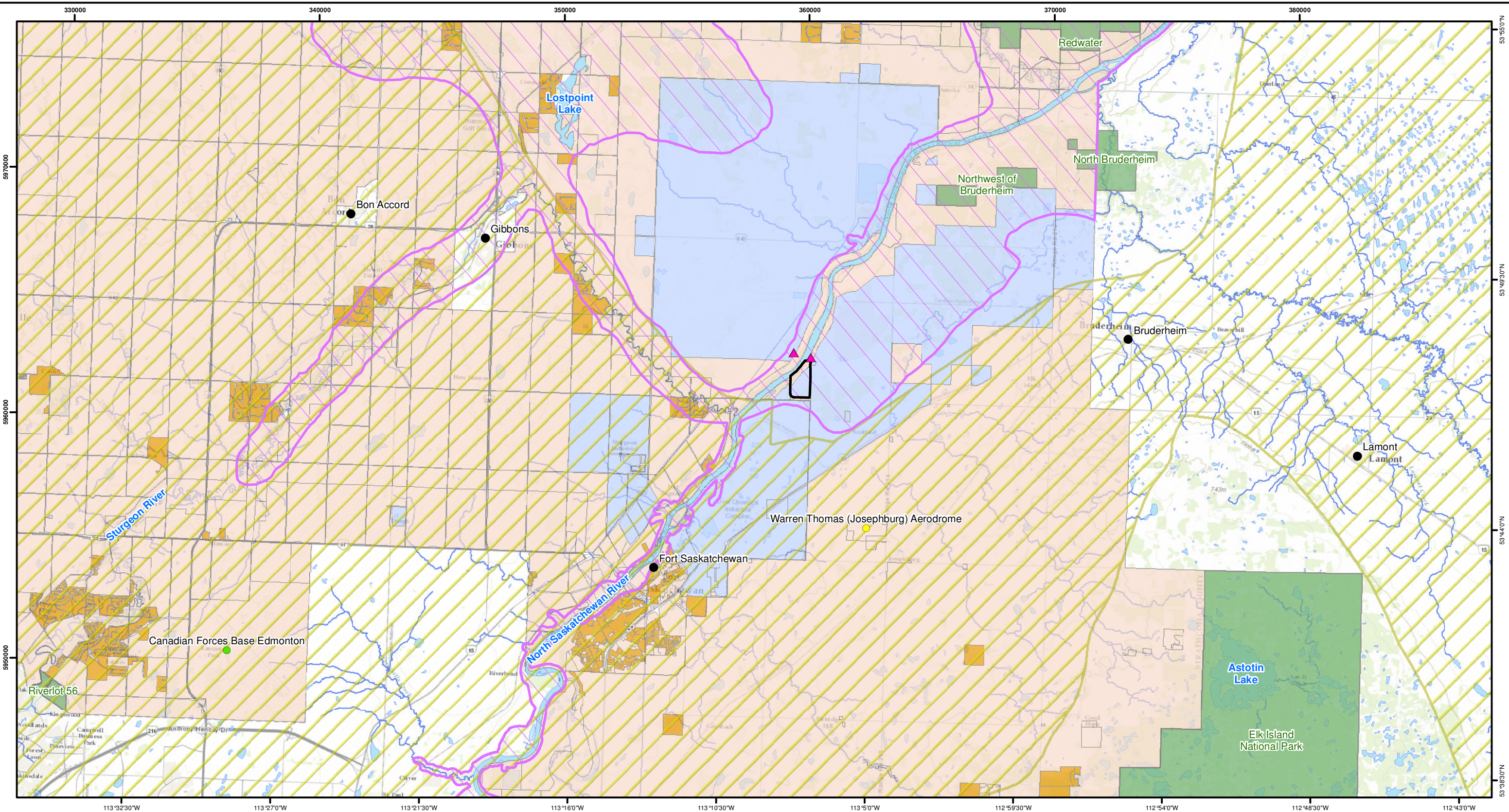
**NAPP ULC
NAPP RAIL YARD - PROJECT DESCRIPTION**

SITE LOCATION MAP

Date:	16-MAY-16	Drawn by:	FY	Edited by:	MYT	App'd by:	JM
		WorleyParsons Project No.					
		208005-00053					
FIG No		1				REV	
						0	

This drawing is prepared for the use of the contractual customer of WorleyParsons Canada Services Ltd. and WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.

FILE LOCATION: Y:\Kenny.Ritchie\for_tamer\Fort_SK01_Mxd\CEAA_Project_Description\20160516_Fig2_Regional_Features_Location_Map_Rev0_ENG.mxd



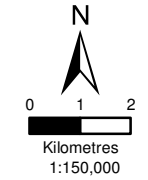
- Legend**
- Town
 - Canadian Forces Base Edmonton
 - Warren Thomas (Josephburg)
 - ▲ Nearest Residences
 - Creek/River
 - Lake

- ▭ Williams Owned Site including NAPP Facility, Alberta PDH Facility, and ATCO Project
- ▭ Key Wildlife and Biodiversity Zone¹
- ▭ Sensitive Raptor Range and Sharp Tailed Grouse Range¹
- ▭ Parks²

- Fort Saskatchewan, Strathcona County and Sturgeon County Land Use Plan³**
- All Other Land Use
 - Industrial
 - Residential


Notes:
Site Locations are approximate

Sources:
¹Government of Alberta
²Parks 'Parks Division – Alberta Tourism, Parks and Recreation'
³City of Edmonton, Fort Saskatchewan, Sturgeon County



B SHEET	SCALE: SHOWN
DATE:	16/05/2016
DRAWN:	Y.M.
EDITED:	K.R.
APPROVED:	J.M.

This drawing is prepared for the use of our customer as specified in the accompanying report. WorleyParsons Canada Ltd. assumes no liability to any other party for any representations contained in this drawing.



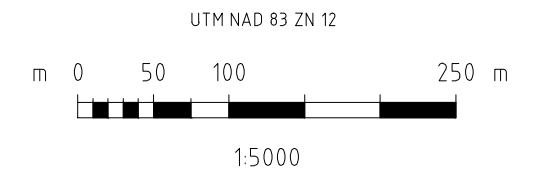
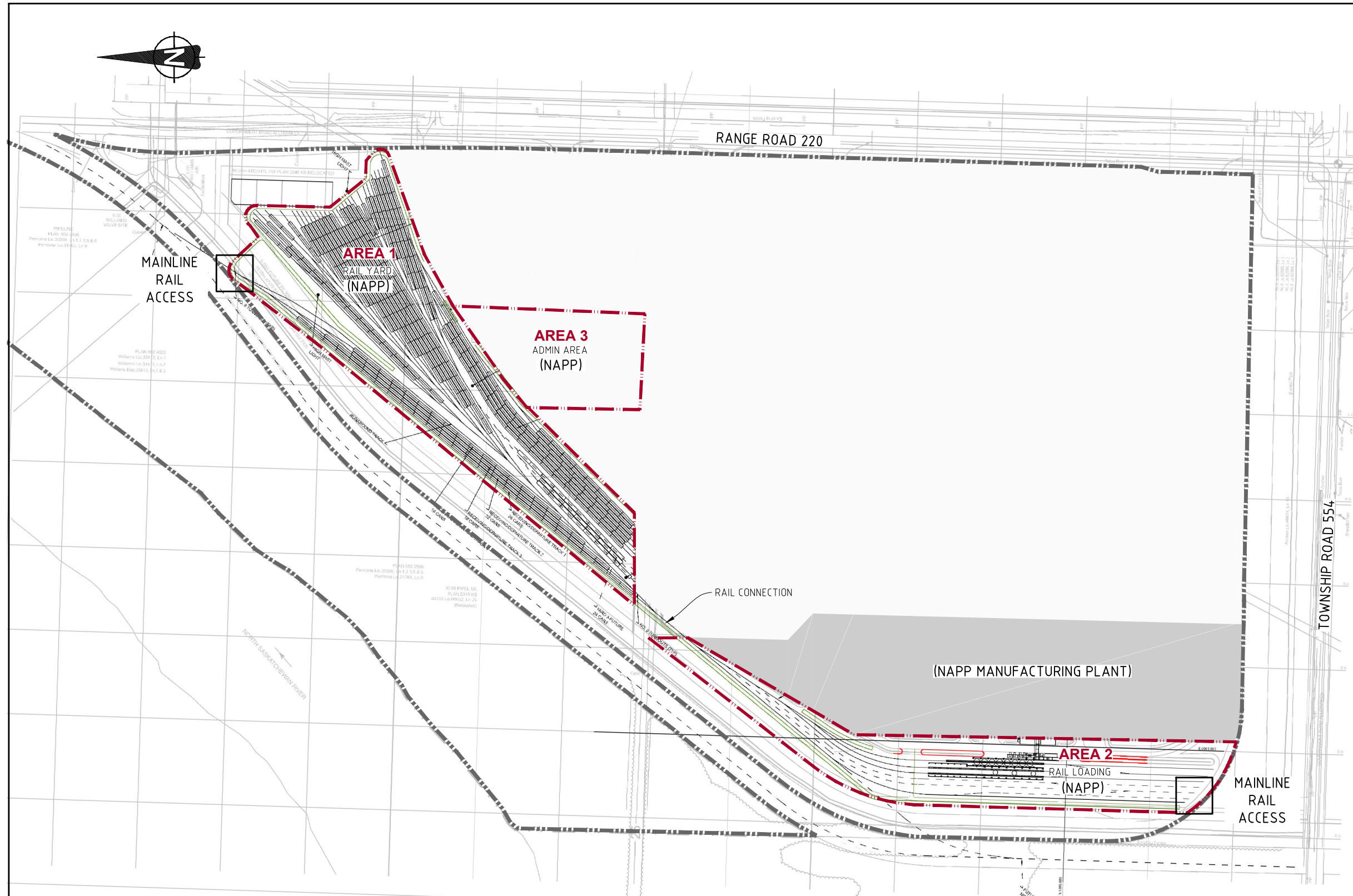
NAPP ULC
NAPP Rail Yard - Project Description
Regional Features Location Map

WORLEYPARSONS PROJECT No: 208005-00053	FIG No: 2	REV 0
--	---------------------	-----------------



LEGEND

----- WILLIAMS' PROPERTY BOUNDARY



SOURCE:

KE GROUP INC., KTN-2501-NAPP, PDF FILE: A101 SITE PLAN OVERALL-20160114.PDF, DATED 1/14/16.

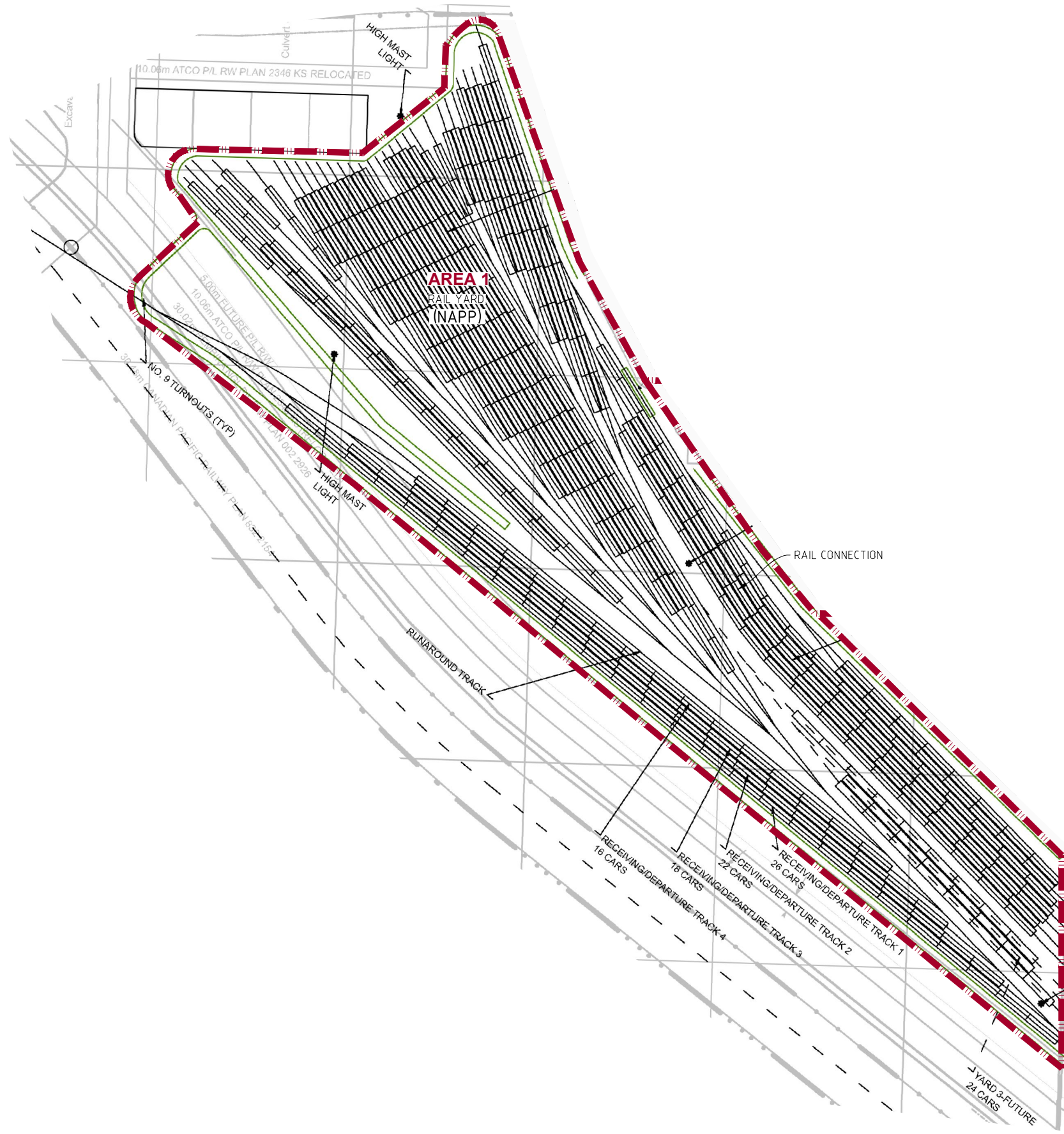
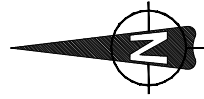
**NAPP ULC
NAPP RAIL YARD - PROJECT DESCRIPTION**

SITE LAYOUT PLAN

Date: 16-MAY-16	Drawn by: OTHERS	Edited by: MYT	App'd by: JM
WorleyParsons Project No. 208005-00053			
FIG No 3A		REV 0	

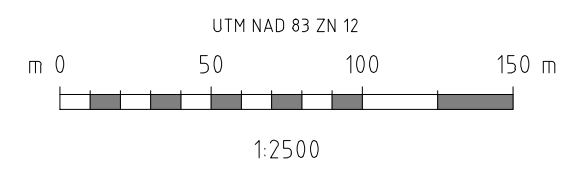


This drawing is prepared for the use of the contractual customer of WorleyParsons Canada Services Ltd. and WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.




SOURCE:

KE GROUP INC., KTN-2501-NAPP, PDF FILE: A101 SITE PLAN OVERALL-20160114.PDF, DATED 1/14/16.

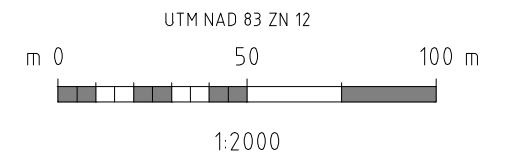
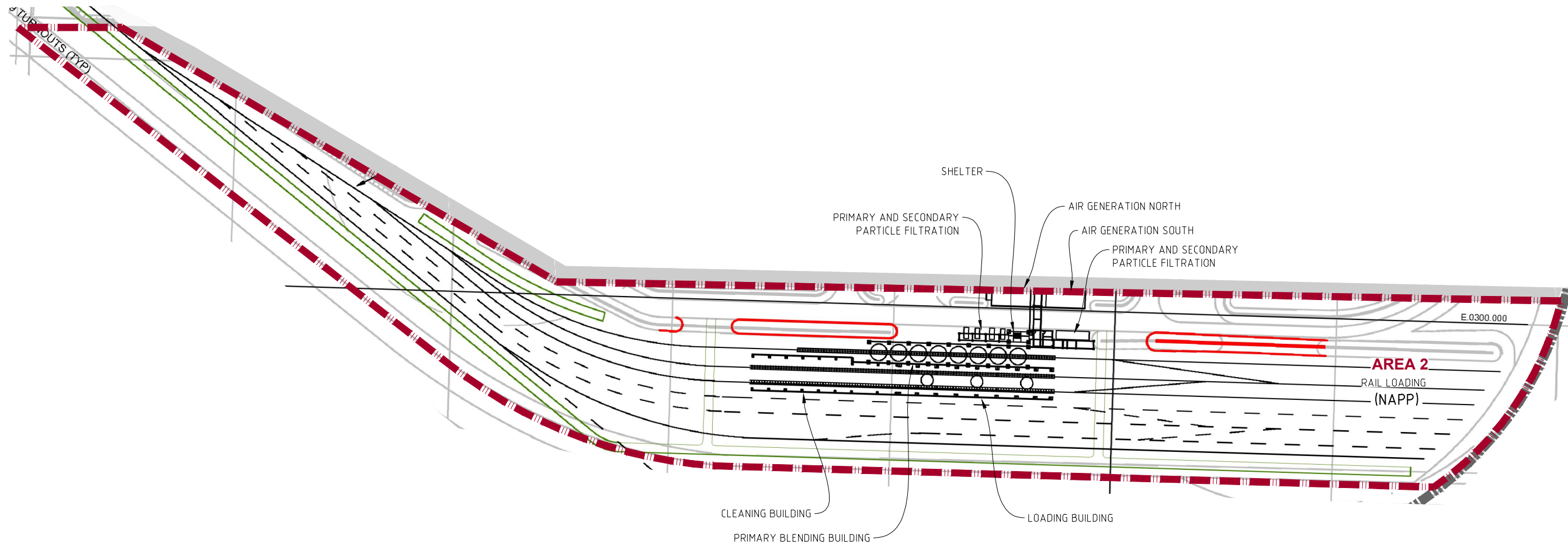
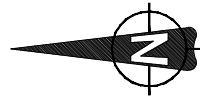


NAPP ULC
NAPP RAIL YARD - PROJECT DESCRIPTION

AREA 1 - RAIL YARD

Date:	16-MAY-16	Drawn by:	OTHERS	Edited by:	MYT	App'd by:	JM
		WorleyParsons Project No.				208005-00053	
		FIG No		3B		REV 0	

This drawing is prepared for the use of the contractual customer of WorleyParsons Canada Services Ltd. and WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.




SOURCE:

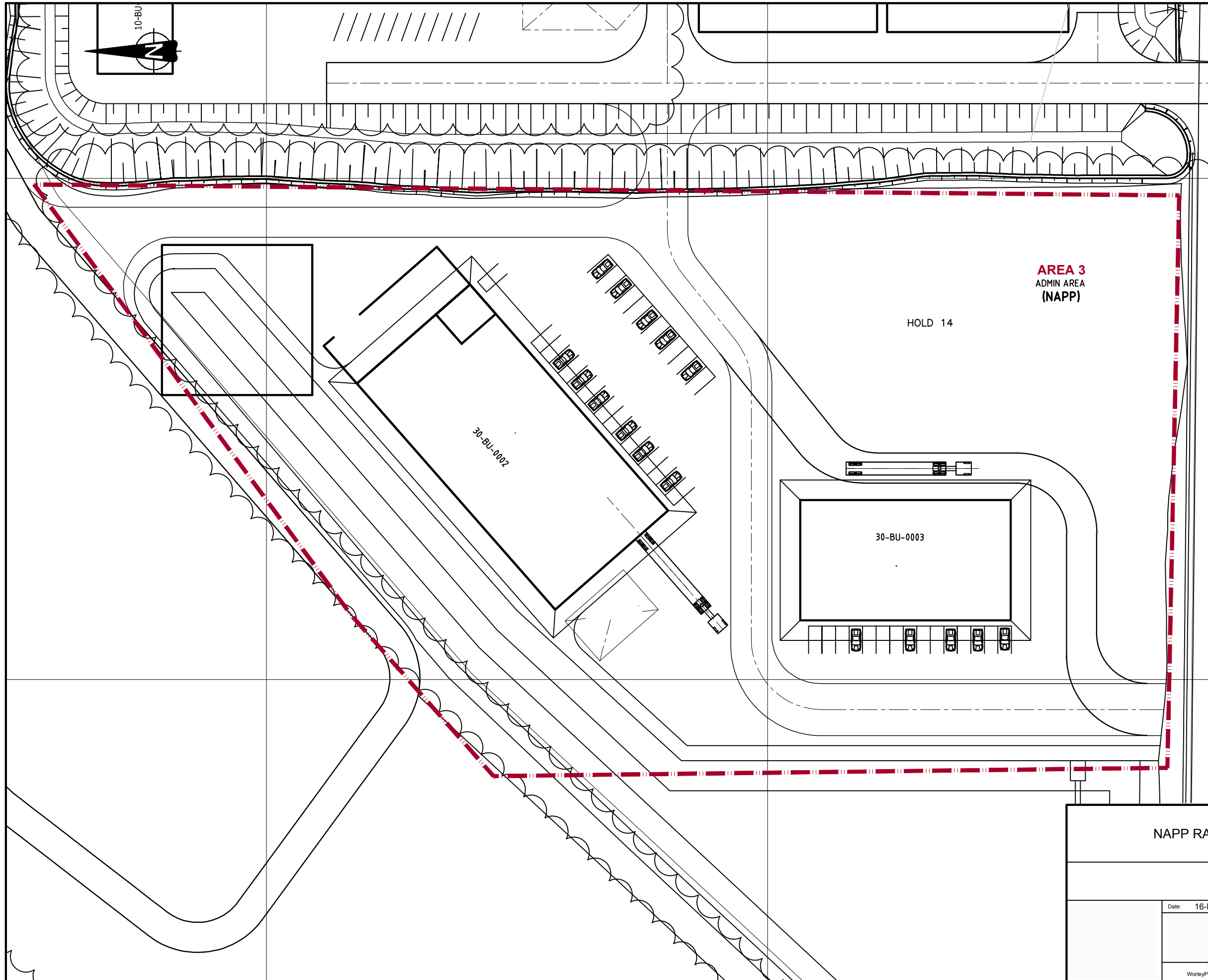
KE GROUP INC., KTN-2501-NAPP, PDF FILE: A101 SITE PLAN OVERALL-20160114.PDF, DATED 1/14/16.

**NAPP ULC
NAPP RAIL YARD - PROJECT DESCRIPTION**

AREA 2 - RAIL LOADING

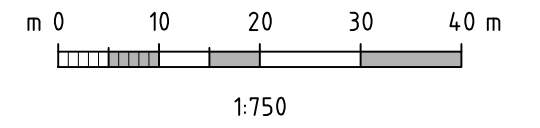
Date:	16-MAY-16	Drawn by:	OTHERS	Edited by:	MYT	App'd by:	JM
		WorleyParsons Project No.				208005-00053	
		FIG No		3C		REV	
						0	

This drawing is prepared for the use of the contractual customer of WorleyParsons Canada Services Ltd. and WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.




SOURCE:

FLUOR, CAD FILE NAPP-P10-J0002_NAPP OVERALL PLANT OVERALL PLOT PLAN_RE.dwg, REV E, DATED 10-DEC-2015.



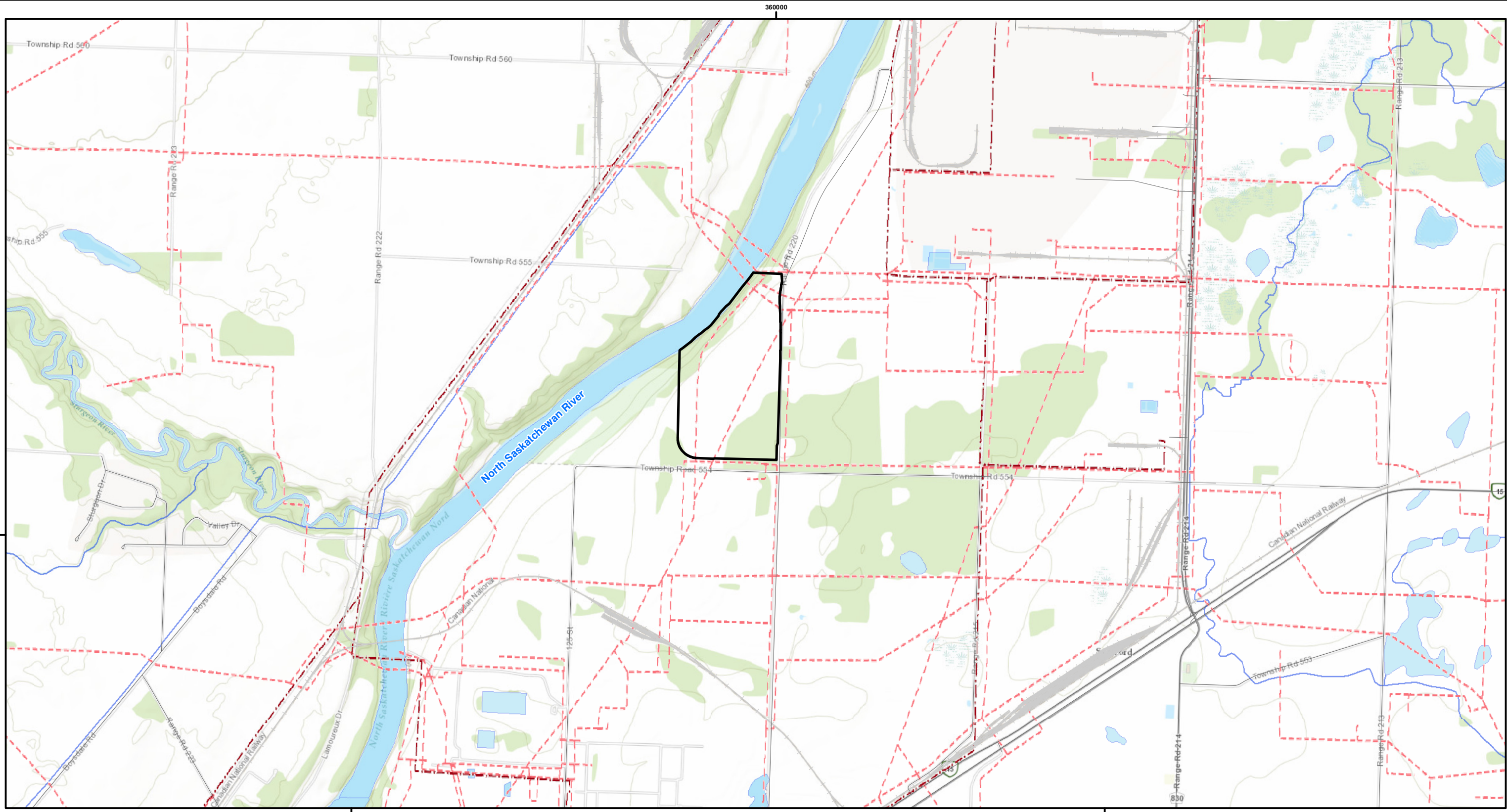
NAPP ULC
NAPP RAIL YARD - PROJECT DESCRIPTION

AREA 3 - ADMIN AREA

Date:	16-MAY-16	Drawn by:	OTHERS	Edited by:	MYT	App'd by:	JM
		WorleyParsons Project No.				208005-00053	
		FIG No		3D		REV 0	

This drawing is prepared for the use of the contractual customer of WorleyParsons Canada Services Ltd. and WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.

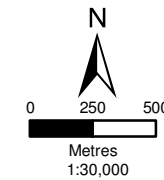
FILE LOCATION: Y:\Kenny.Ritchie\for_tamer\Fort_SK01_Mxd\CEAA_Project_Description\20160516_Fig4_NAPP_ULC_Local_Infrastructure_Rev0_ENG.mxd



- Legend**
- Powerline¹
 - Pipeline¹
 - Railway¹
 - Road¹
 - Creek/River
 - Lake
 - Parks²
 - Williams Owned Site including NAPP Facility, Alberta PDH Facility, and ATCO Project


Notes:
Site Locations are approximate

Sources:
¹Government of Canada
²Parks 'Parks Division – Alberta Tourism, Parks and Recreation'



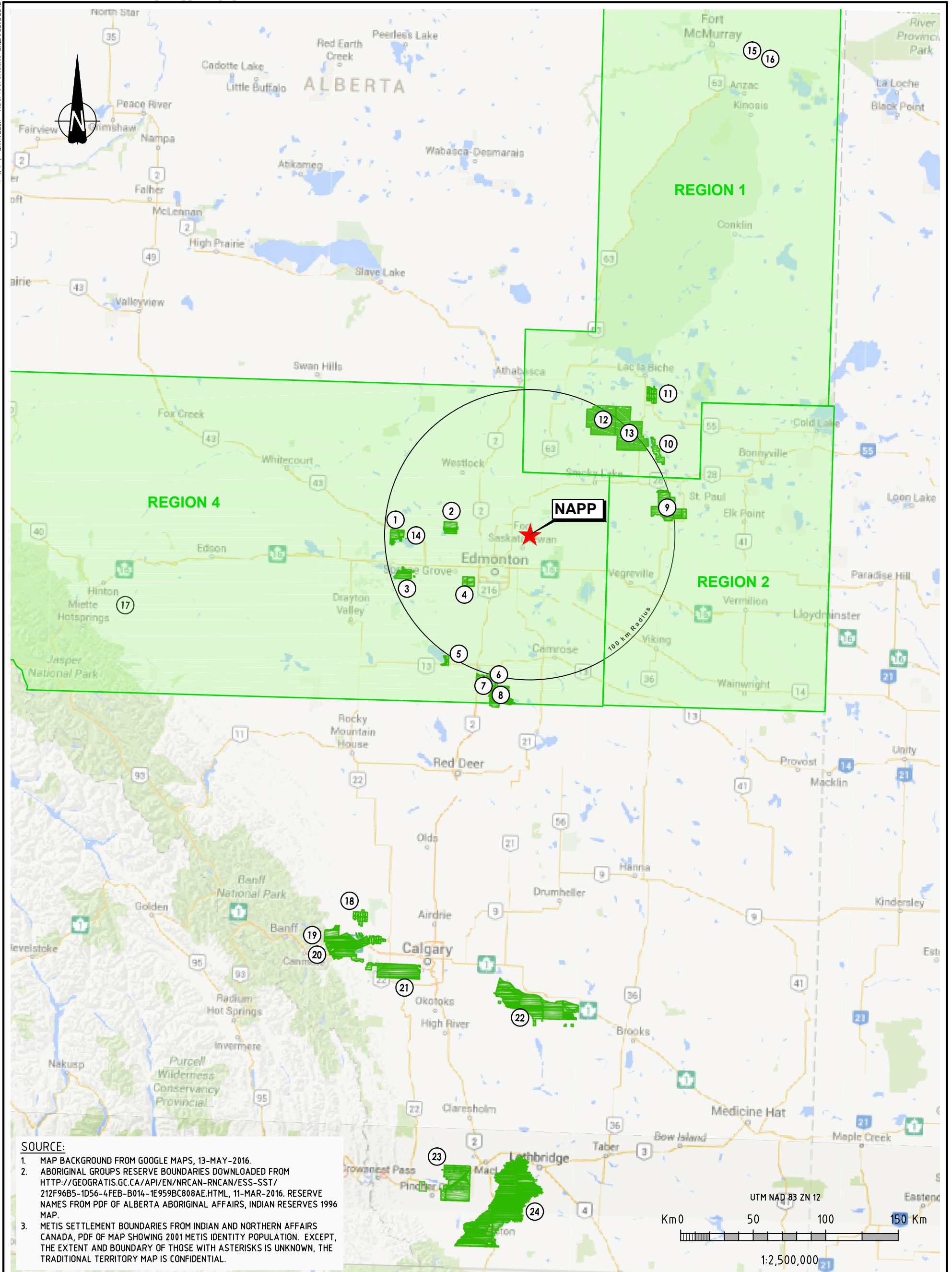
B SHEET	SCALE: SHOWN
DATE:	16/05/2016
DRAWN:	Y.M.
EDITED:	K.R.
APPROVED:	J.M.

This drawing is prepared for the use of our customer as specified in the accompanying report. WorleyParsons Canada Ltd. assumes no liability to any other party for any representations contained in this drawing.



NAPP ULC
NAPP Rail Yard - Project Description
Local Infrastructure


WORLEYPARSONS PROJECT No: 208005-00053	FIG No: 4	REV 0
---	--------------	----------



SOURCE:

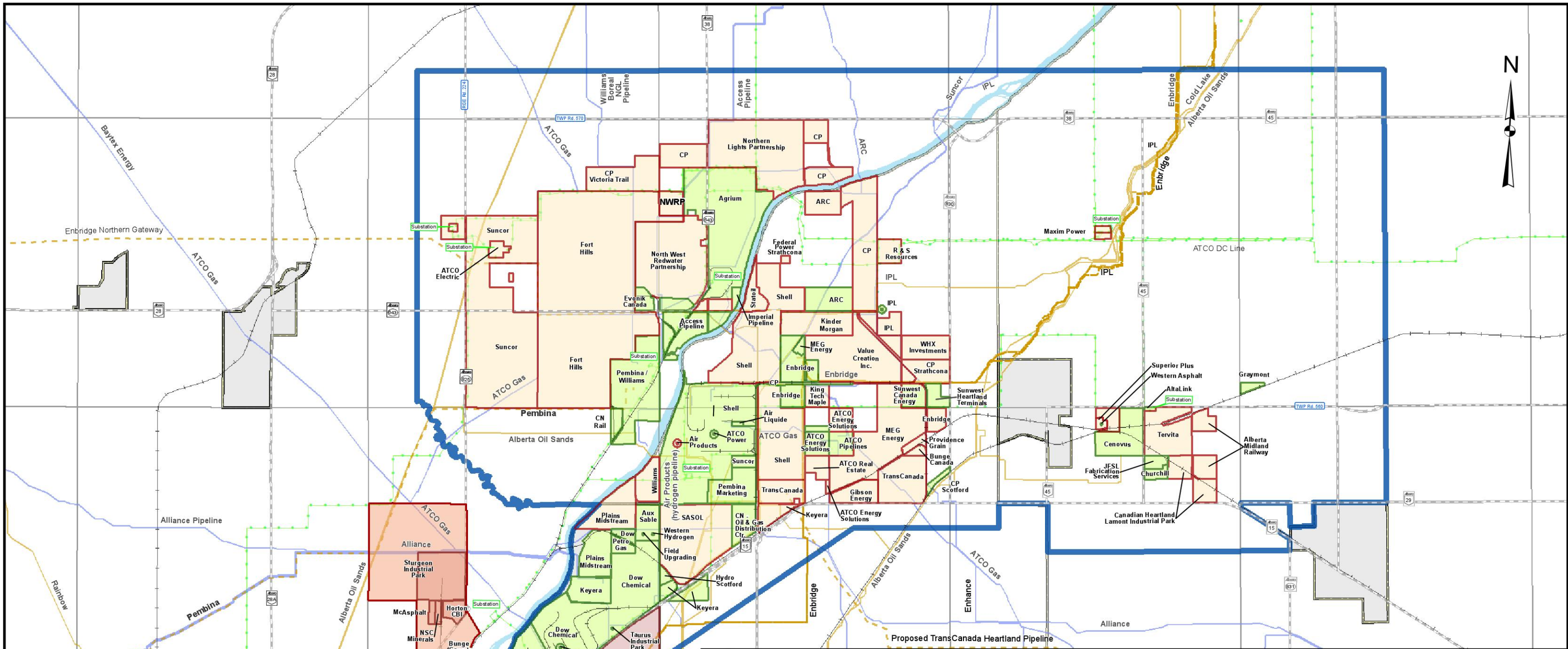
1. MAP BACKGROUND FROM GOOGLE MAPS, 13-MAY-2016.
2. ABORIGINAL GROUPS RESERVE BOUNDARIES DOWNLOADED FROM [HTTP://GEOGRATIS.GC.CA/API/EN/NRCAN-RNCAN/ESS-SST/212F96B5-1D56-4FEB-B014-1E959BC808AE.HTML](http://GEOGRATIS.GC.CA/API/EN/NRCAN-RNCAN/ESS-SST/212F96B5-1D56-4FEB-B014-1E959BC808AE.HTML), 11-MAR-2016. RESERVE NAMES FROM PDF OF ALBERTA ABORIGINAL AFFAIRS, INDIAN RESERVES 1996 MAP.
3. METIS SETTLEMENT BOUNDARIES FROM INDIAN AND NORTHERN AFFAIRS CANADA, PDF OF MAP SHOWING 2001 METIS IDENTITY POPULATION. EXCEPT, THE EXTENT AND BOUNDARY OF THOSE WITH ASTERISKS IS UNKNOWN, THE TRADITIONAL TERRITORY MAP IS CONFIDENTIAL.

	ABORIGINAL GROUP RESERVE		METIS NATION OF ALBERTA REGION
1	ALEXIS NAKOTA SIOUX NATION	13	KIKINO METIS SETTLEMENT
2	ALEXANDER FIRST NATION	14	GUNN MÉTIS LOCAL #55*
3	PAUL FIRST NATION	15	FORT MCMURRAY #468 FIRST NATION*
4	ENOCH CREE NATION	16	CHIPEWYAN PRAIRIE DENE FIRST NATION*
5	LOUIS BULL TRIBE	17	FOOTHILLS OJIBWAY FIRST NATION*
6	ERMINESKIN CREE NATION	18	STONE (WESLEY) BAND
7	MONTANA FIRST NATION	19	STONE (BEARSPAW) BAND
8	SAMSON CREE NATION	20	STONE (CHINKI) BAND
9	SADDLE LAKE CREE NATION	21	TSUUT'INA NATION
10	WHITEFISH LAKE #128 FIRST NATION	22	SIKSIKA NATION
11	BEAVER LAKE CREE NATION	23	PIIKANI NATION
12	BUFFALO LAKE MÉTIS SETTLEMENT	24	BLOOD TRIBE

NAPP ULC NAPP RAIL YARD - PROJECT DESCRIPTION			
LOCATION OF ABORIGINAL GROUPS RELATIVE TO NAPP SITE			
Date: 26-MAY-16	Drawn by: MYT	Edited by: MYT	App'd by: JM
		WorleyParsons Project No. 208005-00053	
FIG No 5		REV 1	
This drawing is prepared for the use of our customer as specified in the accompanying report. WorleyParsons Canada Services Ltd. assumes no liability to any other party for any representations contained in this drawing.			

Appendices

Appendix 1 Map of Alberta Industrial Heartland Land Holdings (including Williams Land)



Edmonton

- Main Transportation Network
- Railroad
- Power / Transmission Line
- Proposed Pipeline
- Major Crude Oil Pipeline (>400mm)
- Major Natural Gas Pipeline (>300mm)
- Alberta's Industrial Heartland Boundary
- Existing Facilities
- Proposed Facilities
- Medium Industrial
- City / Town Area

Disclaimer:
 This map is to be used for general purposes only and subject to change. Please contact companies directly for specific information on landholdings.



Industrial Heartland Land Holdings

Alberta's Industrial Heartland

Kilometers
 0 0.5 1 2 3 4 5
 Scale: 1:125,000 1 cm = 1.3 km
 Projection: Alberta 10TM Datum: NAD83

OPUS STEWART WEIR
 140-2121 Premier Way Sherwood Park,
 Alberta Canada T8H 0B8
 Phone: (780) 410-2580 Fax: (780) 410-2589

SWiMap
 www.SWiMap.com E-mail: info@SWiMap.com

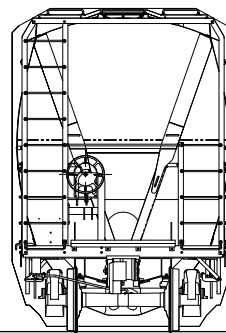
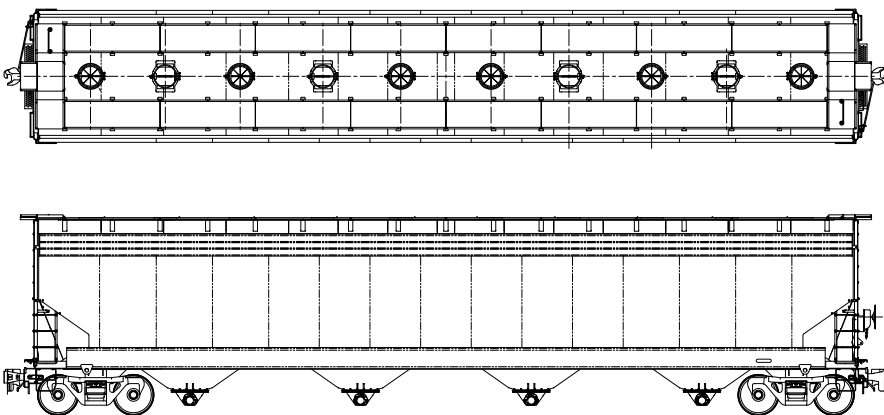
File Name: AIH_LandHoldings_v2.6_11x17.mxd
 Version 2.6 Date: December 8, 2015 Cartographer: HHZ/JAA

Appendix 2 Typical Rail Car Specifications



PLASTIC PELLET SERVICE

This 6,250 cubic foot capacity covered hopper is specially lined and equipped with four pneumatic gates, which make it ideally suited for the storage and transportation of plastics, resin, and other free-flowing, light-density products. From top hatches to bottom unloading gates, Greenbrier's 6250 cube cars are built to protect against even the smallest product contamination. Its curve sided, all welded design incorporates four aluminum pneumatic gates and a ten hatch arrangement (4 vented and 6 unvented).



20" vented hatch covers allow necessary ventilation, protecting against vacuum pull and product contamination.

4 aluminum pneumatic discharge outlets provide optimal product flow with clean-out.

6250 COVERED HOPPER

DIMENSIONS (APPROX.)

LENGTH, INSIDE	62' - 9 5/8"
LENGTH, OVER COUPLERS	67' - 10"
LENGTH, BETWEEN TRUCK CENTERS	54' - 2"
HEIGHT, EXTREME	15' - 6"
WIDTH, EXTREME	10' - 4 3/4"
DISCHARGE GATE SIZE	4X PNEUMATIC GATES
HATCH OPENING	10 OPENINGS AT 20" DIA.
CLEARANCE	AAR PLATE C

WEIGHT/CAPACITY (EST.)

LIGHT WEIGHT.	66,500 LBS.
GROSS RAIL LOAD.	286,000 LBS.
LOAD LIMIT.	219,500 LBS.
CUBIC CAPACITY	6,250 CU. FT.

CURVE NEGOTIABILITY RADIUS

UNCOUPLED	180'
COUPLED TO LIKE CAR	256'
COUPLED TO BASE CAR	253'

DESIGNED AND BUILT TO AAR SPECIFICATION FOR M-1001

THESE GENERAL DIMENSIONS ARE REPRESENTATIVE AND SUBJECT TO CHANGE WITHOUT NOTICE AS REQUIRED BY CUSTOMER SPECIFICATIONS OR DESIGN IMPROVEMENTS BY THE GREENBRIER COS.

Appendix 3 Site Photos



PHOTO 1: Natural vegetation prior to clearing. Altalink tower in the background.



PHOTO 2: Natural vegetation prior to site clearing. View west-northwest towards the North Saskatchewan River.





PHOTO 3: View of North Saskatchewan River from forested area along the west boundary of the Rail Yard.



PHOTO 4: View from west site boundary, across Pembina and CPR Rights-of-Way towards the forested area along the North Saskatchewan River.





PHOTO 5: Altalink Right-of-Way towards the North Saskatchewan River. Proposed routing for outfall pipeline (owned by Williams).



PHOTO 6: View of Altalink Right-of-Way from the North Saskatchewan River bank.





PHOTO 7: Alberta PDH Facility footprint during soil salvage.



PHOTO 8: Alberta PDH Facility footprint during soil salvage.



Appendix 4 Land Title Certificate (Williams Land)



LAND TITLE CERTIFICATE

S	LINC	SHORT LEGAL	TITLE NUMBER
	0036 517 168	4;22;55;25;NE	152 021 523 +17
	0036 517 176	4;22;55;25;SE	

LEGAL DESCRIPTION

FIRST

ALL THAT PORTION OF THE NORTH EAST QUARTER OF SECTION TWENTY FIVE (25)
TOWNSHIP FIFTY FIVE (55)
RANGE TWENTY TWO (22)
WEST OF THE FOURTH MERIDIAN
WHICH IS NOT COVERED BY ANY OF THE WATERS OF THE NORTH
SASKATCHEWAN RIVER, AS SHOWN ON A PLAN OF SURVEY OF THE
SAID TOWNSHIP SIGNED AT OTTAWA ON THE 2ND DAY OF MAY A.D.
1883, CONTAINING 46.70 HECTARES (115.5 ACRES) MORE OR LESS
EXCEPTING THEREOUT:

(A) ALL THAT PORTION WHICH LIES TO THE NORTH OF THE SAID RIVER
CONTAINING 5.462 HECTARES (13.50 ACRES) MORE OR LESS
5.462 HECTARES (13.50 ACRES) MORE OR LESS

(B) ALL THAT PORTION OF THE NORTH EAST OF SAID SECTION,
AS TAKEN FOR RIGHT-OF-WAY ON RAILWAY PLAN 8322154
CONTAINING 3.08 HECTARES MORE OR LESS.

(C) 0.491 HECTARES (1.21 ACRES) MORE OR LESS AS SHOWN ON
ROAD PLAN 1520323

EXCEPTING THEREOUT ALL MINES AND MINERALS

SECOND

MERIDIAN 4 RANGE 22 TOWNSHIP 55
SECTION 25

ALL THAT PORTION OF THE SOUTH EAST QUARTER
WHICH IS NOT COVERED BY ANY OF THE WATERS OF THE
NORTH SASKATCHEWAN RIVER, AS SHOWN ON A PLAN OF SURVEY
OF THE SAID TOWNSHIP SIGNED AT OTTAWA ON 02 MAY, 1883
CONTAINING 64.7 HECTARES (160 ACRES) MORE OR LESS
EXCEPTING THEREOUT:

	HECTARES	(ACRES)	MORE OR LESS
A) PLAN 8322154 - RAILWAY	0.936	2.31	
B) PLAN 0826605 - RAILWAY	7.41	18.31	
C) PLAN 1520323 - ROAD	0.062	0.15	

EXCEPTING THEREOUT ALL MINES AND MINERALS

ESTATE: FEE SIMPLE

MUNICIPALITY: STRATHCONA COUNTY

 ENCUMBRANCES, LIENS & INTERESTS

PAGE 3

152 021 523 +17

REGISTRATION

 NUMBER DATE (D/M/Y) PARTICULARS

GRANTEE - PEMBINA NGL CORPORATION.
 3800, 525-8 AVE SW
 CALGARY
 ALBERTA T2P1G1
 (DATA UPDATED BY: TRANSFER OF UTILITY RIGHT
 OF WAY 002341477)
 (DATA UPDATED BY: TRANSFER OF UTILITY RIGHT
 OF WAY 032397518)
 (DATA UPDATED BY: CHANGE OF NAME 122205690)

972 371 918 02/12/1997 UTILITY RIGHT OF WAY
 GRANTEE - PEMBINA NGL CORPORATION.
 3800, 525-8 AVE SW
 CALGARY
 ALBERTA T2P1G1
 AFFECTED LAND: 4;22;55;25;NE
 (DATA UPDATED BY: TRANSFER OF UTILITY RIGHT
 OF WAY 002341477)
 (DATA UPDATED BY: TRANSFER OF UTILITY RIGHT
 OF WAY 032397518)
 (DATA UPDATED BY: CHANGE OF NAME 122205690)

002 245 557 24/08/2000 SURFACE RIGHTS BOARD ORDER
 IN FAVOUR OF - NOVAGAS CANADA LTD.
 AFFECTED LAND: 4;22;55;25;NE
 ORDER # 2034/2000

012 341 843 25/10/2001 SURFACE RIGHTS BOARD AMENDING ORDER
 AFFECTS INSTRUMENT: 002245557
 SURFACE RIGHTS BOARD ORDER NO. 0409/2001
 AMENDING ORDER NO. 2034/2000

022 059 342 20/02/2002 CAVEAT
 RE : UTILITY RIGHT OF WAY AMENDING AGREEMENT
 CAVEATOR - ALTALINK MANAGEMENT LTD.
 2611 - 3 AVE SE
 CALGARY
 ALBERTA T2A7W7
 (DATA UPDATED BY: TRANSFER OF CAVEAT
 022231492)
 (DATA UPDATED BY: CHANGE OF ADDRESS 082539663)

032 011 010 09/01/2003 CAVEAT
 RE : SURFACE LEASE UNDER 20 ACRES
 CAVEATOR - PEMBINA NGL CORPORATION.
 3800, 525-8 AVE SW
 CALGARY
 ALBERTA T2P1G1
 AFFECTED LAND: 4;22;55;25;NE

ENCUMBRANCES, LIENS & INTERESTS

PAGE 4

152 021 523 +17

REGISTRATION

NUMBER DATE (D/M/Y) PARTICULARS

(DATA UPDATED BY: TRANSFER OF CAVEAT
032397384)

(DATA UPDATED BY: CHANGE OF NAME 122249579)

042 118 682 24/03/2004 SURFACE RIGHTS BOARD AMENDING ORDER
AFFECTS INSTRUMENT: 002245557
SURFACE RIGHTS BOARD ORDER 2034/2000
AMENDING ORDER 0588/2004

062 507 120 04/11/2006 UTILITY RIGHT OF WAY
GRANTEE - ACCESS PIPELINE INC.
AFFECTED LAND: 4;22;55;25;SE

092 398 376 04/11/2009 DISCHARGE OF UTILITY RIGHT OF WAY 062507120
PARTIAL
EXCEPT PLAN/PORTION: 0929315

142 157 596 27/05/2014 UTILITY RIGHT OF WAY
GRANTEE - ATCO GAS AND PIPELINES LTD.

152 144 863 19/05/2015 DISCHARGE OF UTILITY RIGHT OF WAY 142157596
PARTIAL
EXCEPT PLAN/PORTION: 1520820

TOTAL INSTRUMENTS: 014

THE REGISTRAR OF TITLES CERTIFIES THIS TO BE AN
ACCURATE REPRODUCTION OF THE CERTIFICATE OF
TITLE REPRESENTED HEREIN THIS 7 DAY OF
OCTOBER, 2015 AT 02:15 P.M.

ORDER NUMBER: 29416814

CUSTOMER FILE NUMBER: F00006



END OF CERTIFICATE

THIS ELECTRONICALLY TRANSMITTED LAND TITLES PRODUCT IS INTENDED
FOR THE SOLE USE OF THE ORIGINAL PURCHASER, AND NONE OTHER,
SUBJECT TO WHAT IS SET OUT IN THE PARAGRAPH BELOW.

THE ABOVE PROVISIONS DO NOT PROHIBIT THE ORIGINAL PURCHASER FROM
INCLUDING THIS UNMODIFIED PRODUCT IN ANY REPORT, OPINION,
APPRAISAL OR OTHER ADVICE PREPARED BY THE ORIGINAL PURCHASER AS
PART OF THE ORIGINAL PURCHASER APPLYING PROFESSIONAL, CONSULTING
OR TECHNICAL EXPERTISE FOR THE BENEFIT OF CLIENT(S).

Appendix 5 Consultation Information

**North American Polypropylene ULC
Proposed Polypropylene Facility Located In
Strathcona County, Alberta**

Community and Stakeholder Consultation Strategy and Plan

September 1, 2015

Table of Contents

1. Introduction 3

2. Proposed Polypropylene Facility 3

3. Strategic Approach 4

4. Strategy and Plan Delivery 4

5. Business Case 5

6. Phased Initiative 5

1. Introduction

A thorough and documented Community and Stakeholder Consultation Strategy and Plan is requisite to the successful filing of North American Polypropylene ULC (NAPP) regulatory applications for a proposed Polypropylene Facility located in Strathcona County, Alberta.

The following Strategy and Plan anticipates community and stakeholder consultation activities for the period September 1, 2015 to November 30, 2015. This period of community and stakeholder consultation addresses NAPP's specific operational requirements for the filing of an industrial approval regulatory application with Alberta Environment and Parks and a designated project application with the Canadian Environmental Assessment Agency by December 2015.

The Strategy and Plan does not address the need for the ongoing engagement of communities and stakeholders following the filing of the regulatory applications for the proposed Polypropylene Facility.

2. Proposed Polypropylene Facility

NAPP is proposing to design, build, own and operate Canada's first Polypropylene Facility. NAPP is an affiliate of Vinmar International Ltd. a global marketing, distribution and project development company that brings value to the world's leading producers and users of petrochemical products. Founded in 1978, Vinmar has steadily grown to become a major player in the global petrochemical industry, producing and marketing more than three million metric tonnes of petrochemicals around the world.

The proposed Polypropylene Facility will be located adjacent to the Government of Alberta authorized and approved Williams Canada Propylene ULC (Williams) Alberta Propane Dehydrogenation (Alberta PDH) Facility. Both Facilities are located in Strathcona County northwest of the intersection of Range Road 220 and Township Road 554 in E25-55-22-W4M. The subject lands are owned by Williams and are zoned Heavy Industrial pursuant to Strathcona County Land Use Bylaw 65-2013.

As feedstock, the proposed Polypropylene Facility will use the polymer grade propylene produced by Alberta PDH and convert it into polypropylene – a thermoplastic. Thermoplastic is made from polymer resins that are a homogenized liquid when heated and a solid when cooled. These characteristics, which lend thermoplastic its name, are reversible. As a result polypropylene can be reheated and reshaped repeatedly making it highly reusable and recyclable. Polypropylene has a wide variety of applications in the production of many consumer products including food packaging, plastic containers, textiles and automotive components.

The proposed Polypropylene Facility will have an annual nameplate capacity of approximately 450,000 metric tonnes. When produced the thermoplastic will be formed into small pellets that will be loaded into rail cars for shipment to market. ATCO Power (ATCO) has been selected to build and operate a Cogeneration Plant at the same location to produce the electricity and steam necessary for both the proposed Polypropylene Facility and Alberta PDH.

3. Strategic Approach

The Community and Stakeholder Consultation Strategy and Plan for the proposed Polypropylene Facility will meet and exceed Alberta Environment and Parks as well as Canadian Environmental Assessment Agency policy and regulatory expectations and will be conducted prior to the submission of regulatory applications for the Facility. Community and stakeholder consultation is an all-encompassing term including all aspects of government, public, local authority and industry interactions and communications.

Local, municipal, provincial and federal authorities all play an important part in the determination of orderly land use in Strathcona County and must be involved at an early stage in the development of the Community and Stakeholder Consultation Strategy and Plan. As well, previous knowledge gained by both Williams and ATCO of the communities and stakeholders in the area of the proposed Polypropylene Facility will be helpful in the implementation of the Strategy and Plan.

Both Alberta Environment and Parks and the Canadian Environmental Assessment Agency require that effective consultation take place among industry, government and the public so that potential issues or concerns regarding proposed projects may be raised, properly addressed and if possible resolved. Should a dispute arise the regulatory agencies expect the parties to discuss the issues or concerns identified and develop potential options for their resolution.

The regulatory agencies mandate that all persons whose rights may be directly or adversely affected by a proposed project must be informed of a pending regulatory application and have the opportunity to voice their concerns and be heard. When filing regulatory applications to Alberta Environment and Parks and the Canadian Environmental Assessment Agency NAPP must identify any outstanding objections or concerns raised by communities or stakeholders with the proposed Polypropylene Facility and attach a written summary of the outstanding issues to the application.

As a result, implementation of the Community and Stakeholder Consultation Strategy and Plan will be sensitive to the constraints of communities and stakeholders and provide various opportunities for communities and stakeholders to voice their concerns or issues and work together with NAPP to share information and build long-term mutually beneficial relationships.

4. Strategy and Plan Delivery

Both Alberta Environment and Parks and the Canadian Environmental Assessment Agency recognize that they cannot predetermine the precise extent and scope of a proponent's public consultation strategy and plan because every application is unique and each proposed project will present circumstances that must be dealt with on an individual basis. As a result the regulatory agencies require that each project proponent assume responsibility for involving communities and stakeholders and be aware of circumstances or applications where public consultation should exceed minimum regulatory requirements.

To meet and exceed regulatory expectations the Strategy and Plan for the consultation of communities and stakeholders associated with the proposed Polypropylene Facility will follow the parameters used by Williams and ATCO in the execution and delivery of the consultation strategies and plans for Alberta PDH and the Cogeneration Plant.

NAPP will, therefore, provide public notification regarding the proposed Polypropylene Facility to all occupants, residents and landowners within 2,000 metres measured from the edge of the Facility site boundary and in-person consultation to all occupants, residents and landowners within 800 metres measured from the edge of the Facility site boundary.

To ensure regulatory approval for the proposed Polypropylene Facility, the approach, elements and objectives of the Community and Stakeholder Consultation Strategy and Plan must be coordinated with the regulatory application strategy and plan developed and implemented by WorleyParsons Canada (WorleyParsons). Implementation of the Community and Stakeholder Consultation Strategy and Plan for the proposed Polypropylene Facility will anticipate the requirements and outcomes for each step of the regulatory pathway.

The approach to Strategy and Plan implementation will be executed in a manner that enhances the understanding by NAPP of community and stakeholder issues or concerns, identifies options for their resolution and allows the company to make future choices in the design of the proposed Polypropylene Facility to mitigate potential adverse effects.

5. Business Case

Simply stated, the business case for consulting communities and stakeholders associated with the proposed Polypropylene Facility includes the following:

- ❑ reduce and mitigate risk to NAPP's corporate goals and objectives;
- ❑ reduce the number of community and stakeholder 'statements of concern';
- ❑ meet and exceed government policy and regulatory requirements;
- ❑ reduce the number of conditions of regulatory approval;
- ❑ reduce the cycle-time from the present through regulatory approval to Facility start up; and,
- ❑ establish and increase NAPP's corporate reputation and social license to operate.

6. Phased Initiative

The Community and Stakeholder Consultation Strategy and Plan will be delivered in the following five phases:

Phase 1: *Receive NAPP Senior Management Approval To Proceed* will take place over a two-week period from September 1, 2015 to September 11, 2015.

The purpose of Phase 1 is to finalize the Community and Stakeholder Consultation Strategy and Plan with input from NAPP and WorleyParsons. This will ensure that NAPP's corporate goals and objectives for the proposed Polypropylene Facility, the approach, elements and objectives of the Community and Stakeholder Consultation Strategy and Plan and the regulatory application strategy and plan are seamless and integrated.

As part of this Phase NAPP will complete all requisite Front End Engineering and Design (FEED) work necessary to describe the proposed Polypropylene Facility for inclusion in the public

notification package that will be sent to all occupants, residents, landowners within the 2000 metre site boundary of the Facility as well as other interested stakeholders.

The Phase 1 work will not only clearly establish the strategy and plan for public consultation regarding the proposed Polypropylene Facility but help with designing media and government relations strategies and plans. The overall goal of the Community and Stakeholder Consultation Strategy and Plan is to ensure that all communication regarding the proposed Polypropylene Facility is timely, targeted, personalized and relevant to the audience.

Table 1 identifies the specific planned activities for the Phase 1 work.

Table 1

Phase 1	Planned Activities
<p align="center">Receive NAPP Senior Management Approval to Proceed (September 1, 2015 to September 11, 2015)</p>	<ol style="list-style-type: none"> 1. Finalize the Community and Stakeholder Consultation Strategy and Plan with input from NAPP and WorleyParsons 2. Complete necessary FEED analysis to appropriately describe the proposed Polypropylene Facility for inclusion in the public notification package 3. Receive NAPP senior management approval, including budget, to implement the finalized Community and Stakeholder Consultation Strategy and Plan

Phase 2: *Build Community and Stakeholder Awareness and Understanding* will take place over a three-week period from September 12, 2015 to October 2, 2015.

Phase 2 creates the opportunity to meet with all local, municipal, provincial and federal policy and regulatory decision-makers to reintroduce NAPP and the proposed Polypropylene Facility as well as confirm policy and regulatory expectations regarding community and stakeholder consultation. If necessary as a result of these meetings the Community and Stakeholder Consultation Strategy and Plan will be revised.

During this Phase of the process all necessary corporate documentation and the public notification package will be prepared for use during the community and stakeholder consultation process. This is also the time to prepare and develop other specific communication tools such as a Polypropylene Facility web page. Williams' reconfirmation will be necessary for the use of David Luff's mobile telephone number and email address to receive community and stakeholder input regarding the proposed Polypropylene Facility.

During Phase 2 the consultation audit documentation database will be developed to retain communication logs, records of confirmation of non-objection, consultation meeting notes and registered mail/courier tracking. As well all occupants, residents, landowners within the 2000 metre site boundary of the proposed Polypropylene Facility (and other stakeholders to be consulted) will be identified.

Phase 2 will conclude with the dissemination of the public notification package by Canada Post registered mail to all the occupants, residents and landowners within the 2000 metre site boundary of the proposed Polypropylene Facility. All other stakeholders to be informed about the proposed Polypropylene Facility will receive the public notification package via Canada Post regular mail.

Table 2 identifies the specific planned activities for the Phase 2 work.

Table 2

Phase 2	Planned Activities
<p style="text-align: center;">Build Community and Stakeholder Awareness and Understanding (September 12, 2015 – October 2, 2015)</p>	<ol style="list-style-type: none"> 1. Meet with local municipal, provincial and federal policy and regulatory decision makers to confirm policy and regulatory expectations regarding the implementation of a Community and Stakeholder Consultation Strategy and Plan for the proposed Polypropylene Facility 2. Revise, if necessary, the Community and Stakeholder Consultation Strategy and Plan based on feedback from local municipal, provincial and federal policy and regulatory decision makers 3. Create a consultation audit documentation database including; retention of communication logs, registered mail/courier tracking information; consultation meeting notes and all other consultation-related documentation 4. Confirm with Williams the use of David Luff's mobile telephone number and email address as a means to receive community and stakeholder input regarding the proposed Polypropylene Facility 5. Confirm and identify all occupants, residents and landowners within the 2000 metre site boundary of the proposed Polypropylene Facility, as well as all other interested stakeholders to be consulted 6. Develop a list of mailing addresses with corresponding land locations for all the occupants, residents, landowners and other stakeholders to be consulted 7. Develop a preliminary set of anticipated community and stakeholder issues, concerns or questions regarding the proposed Polypropylene Facility and NAPP responses to each 8. Prepare a public notification package to be sent to all occupants, residents and landowners within the 2000 metre site boundary of the proposed Polypropylene Facility as well as other stakeholders to be consulted 9. Send by registered mail the public notification package to all occupants, residents and landowners within the 2000 metre site boundary of the proposed Polypropylene Facility 10. Send the public notification package to local, municipal, provincial and federal policy and regulatory decision-makers for their information and review

Phase 3: Identify Community and Stakeholder Potential Issues or Concerns will take place over a four-week period from October 3, 2015 to October 30, 2015.

During Phase 3 in-person meetings will be held with all occupants, residents and landowners within the 800 metre site boundary of the proposed Polypropylene Facility as well as all other stakeholders who request such a meeting. Ongoing dialogue with local, municipal, provincial and federal policy and regulatory decision-makers will also take place as required. If an occupant, resident or landowner within the 800 metre site boundary of the proposed Polypropylene Facility does not want to meet in-person this will be documented for audit purposes.

Table 3 identifies the specific planned activities for the Phase 3 work.

Table 3

Phase 3	Planned Activities
<p align="center">Identify Community and Stakeholder Issues or Concerns (October 3, 2015 – October 30, 2015)</p>	<ol style="list-style-type: none"> 1. After 14 days of receipt of the public notification package directly follow up with occupants, residents and landowners within the 800 metre site boundary of the proposed Polypropylene Facility by telephone requesting an in-person meeting to discuss the proposed Polypropylene Facility in detail 2. Follow up by telephone with local, municipal, provincial and federal policy and regulatory decision-makers to ensure they received the public notification package and address any potential issues or concerns 3. Respond to any concerns or issues received from occupants, residents and landowners or other stakeholders regarding the proposed Polypropylene Facility through personal conversation, telephone or by email 4. Maintain records of all discussions with potentially, directly or adversely affected persons regarding any concerns or issues respecting the proposed Polypropylene Facility 5. Meet with all occupants, residents and landowners within the 800 metre site boundary of the proposed Polypropylene Facility to discuss the proposed Facility in detail and identify potential issues or concerns 6. If an occupant, resident or landowner does not want to meet to discuss the proposed Polypropylene Facility, document the refusal for audit purposes 7. Document all identified potential issues or concerns raised by occupants, residents and landowners or other stakeholders 8. Document and follow-up on all commitments made to occupants, residents and landowners or other stakeholders 9. Continue dialogue with all local, municipal, provincial and federal policy and regulatory decision-makers as required 10. Document discussions held with municipalities ensuring compatibility of the proposed Polypropylene Facility with municipal services 11. Develop preliminary options for how potential community and stakeholders issues or concerns will be addressed and mitigated

The purpose of the Phase 3 work is to begin the process of identifying and recording potential community and stakeholder issues or concerns regarding the proposed Polypropylene Facility and to develop potential options for how these issues or concerns might be addressed.

Records of all discussions with potentially directly or adversely affected persons will be maintained. All identified potential issues or concerns will be included in the consultation audit database along with any commitments made to occupants, residents, landowners or other stakeholders.

Phase 4: *Address Identified Community and Stakeholder Issues or Concerns* will take place over a three-week period from October 31, 2015 to November 20, 2015.

The purpose of Phase 4 is to develop specific options and mitigation strategies for identified community and stakeholder issues or concerns regarding the proposed Polypropylene Facility.

During this Phase in-person meetings will continue to be held with all occupants, residents and landowners within the 800 metre site boundary of the proposed Polypropylene Facility as well as all other stakeholders who request such a meeting. Ongoing dialogue with local, municipal, provincial and federal policy and regulatory decision-makers will also continue to take place as required.

As with the Phase 3 work, records of all discussions with potentially directly or adversely affected persons will be maintained and all identified potential issues or concerns will be included in the consultation audit database along with any commitments made to occupants, residents, landowners or other stakeholders.

Table 4 identifies the specific planned activities for the Phase 4 work.

Table 4

Phase 4	Planned Activities
<p align="center">Address Identified Community and Stakeholder Issues or Concerns (October 31, 2015 – November 20, 2015)</p>	<ol style="list-style-type: none"> 1. Continue to meet with all occupants, residents and landowners as required within the 800 metre site boundary of the Polypropylene Facility to discuss the proposed Facility in detail and identify any potential issues or concerns 2. Continue to respond to any concerns or issues received from occupants, residents and landowners or other stakeholders regarding the proposed Polypropylene Facility through personal conversation, telephone or by email 3. Document all identified potential issues or concerns raised by occupants, residents and landowners or other stakeholders 4. Document and follow-up on all commitments made to occupants, residents and landowners or other stakeholders 5. Develop specific options and mitigation strategies for how identified issues or concerns regarding the proposed Polypropylene Facility will be addressed

Phase 5: *Prepare the Consultation Summary for Inclusion in the Regulatory Applications* will take place over a one-week period from November 21, 2015 to November 30, 2015.

The purpose of Phase 5 is to prepare the consultation summary for inclusion in the proposed Polypropylene Facility regulatory applications to be filed with Alberta Environment and Parks and the Canadian Environmental Assessment Agency.

As part of the consultation process summary, documentation of the Aboriginal Consultation Office April 30, 2015 First Nations Consultation Adequacy Assessment will be included indicating that First Nations consultation is not required for the proposed Polypropylene Facility.

Table 5 identifies the specific planned activities for the Phase 5 work.

Table 5

Phase 5	Planned Activities
<p align="center">Prepare the Consultation Summary for Inclusion in the Regulatory Applications (November 21, 2015 – November 30, 2015)</p>	<ol style="list-style-type: none"> 1. Describe and summarize the results of the community and stakeholder consultation process for inclusion in the regulatory applications to Alberta Environment and Parks and the Canadian Environmental Assessment Agency 2. As part of the community and stakeholder consultation summary include the following: <ol style="list-style-type: none"> a. details and outcomes of consultation with occupants, residents and landowners and other stakeholders b. a list of parties that were potentially affected by the proposed Polypropylene Facility with confirmation that the parties had no concerns regarding the regulatory applications c. a legible map showing the location of the proposed Polypropylene Facility and land ownership including any dwellings within 2000 metres of the proposed site boundary



North American Polypropylene ULC
16800 Imperial Valley Drive, Ste. 499
Houston, TX 77060
Phone: 281-618-1337
Fax: 281-448-4474

November 3, 2015

Dear Neighbour,

North American Polypropylene ULC (NAPP) is proposing to design, build, own and operate a state-of-the-art polypropylene facility (NAPP Facility) located in Strathcona County, Alberta. The attached project information package provides background information regarding NAPP and the NAPP Facility.

Polypropylene Facility:

The NAPP Facility will have a nameplate capacity to produce 450,000 metric tonnes of polypropylene on a yearly basis. The NAPP Facility will be located adjacent to the Williams Propylene Canada ULC (Williams) Alberta Propane Dehydrogenation (Alberta PDH) Facility. Both the NAPP Facility and Alberta PDH are located northwest of the intersection of Range Road 220 and Township Road 554 in E25-55-22-W4M.

Adding Value in Alberta:

Albertans will benefit from the construction of the NAPP Facility as it will create the prospect for a new manufacturing industry and associated businesses in the province. Rather than exporting Alberta propane and propylene to other jurisdictions the NAPP Facility will locally add value to these provincial resources and contribute to both municipal and provincial taxes as well as expand Alberta's economy and tax base.

If you have any questions, concerns, feedback or require further information regarding the NAPP Facility please contact me directly at 1.403.815.0808 or send me an email at luff@talkingstickcg.ca. I will respond to your inquiries promptly and look forward to meeting with you personally in the coming months.

Sincerely,

David Luff
Consultation and Community Relations
North American Polypropylene ULC



North American Polypropylene ULC
16800 Imperial Valley Drive, Ste. 499
Houston, TX 77060
Phone: 281-618-1337
Fax: 281-448-4474

November 4, 2015

Dear Interested Party,

North American Polypropylene ULC (NAPP) is proposing to design, build, own and operate a state-of-the-art polypropylene facility (NAPP Facility) located in Strathcona County, Alberta. On November 3, 2015 NAPP delivered the attached project information package regarding the NAPP Facility to all occupants, residents and landowners within 2000 meters of the Facility location.

Polypropylene Facility:

The NAPP Facility will have a nameplate capacity to produce 450,000 metric tonnes of polypropylene on a yearly basis. The NAPP Facility will be located adjacent to the Williams Propylene Canada ULC (Williams) Alberta Propane Dehydrogenation (Alberta PDH) Facility. Both the NAPP Facility and Alberta PDH are located northwest of the intersection of Range Road 220 and Township Road 554 in E25-55-22-W4M.

Adding Value in Alberta:

Albertans will benefit from the construction of the NAPP Facility as it will create the prospect for a new manufacturing industry and associated businesses in the province. Rather than exporting Alberta propane and propylene to other jurisdictions the NAPP Facility will locally add value to these provincial resources and contribute to both municipal and provincial taxes as well as expand Alberta's economy and tax base.

If you have any questions, concerns, feedback or require further information regarding the NAPP Facility please contact me directly at 1.403.815.0808 or send me an email at luff@talkingstickcg.ca. I will respond to your inquiries promptly and look forward to meeting with you personally in the coming months.

Sincerely,

David Luff
Consultation and Community Relations
North American Polypropylene ULC



North American Polypropylene ULC
16800 Imperial Valley Drive, Ste. 499
Houston, TX 77060
Phone: 281-618-1337
Fax: 281-448-4474

May 16, 2016

ADDRESSEE

RE: Proposed Polypropylene Plant and Associated Rail Yard

Dear ADDRESSEE,

North American Polypropylene ULC (NAPP) is proposing to design, build, own and operate a state-of-the-art polypropylene plant and associated rail yard (NAPP Facility) located in Alberta's Industrial Heartland within Strathcona County.

NAPP Facility

The NAPP Facility will have a nameplate capacity to produce 450,000 metric tonnes of polypropylene on a yearly basis and once in operation will safely ship approximately 20 train cars per day of polypropylene in the form of small recyclable plastic granules to North American markets or in containers for markets overseas. Although the proposed polypropylene plant is regulated by Alberta Environment and Parks, the associated rail yard is regulated by the Canadian Environmental Assessment Agency.

The attached project information brochure provides an overview of the NAPP Facility as well as background information about polypropylene and how, if approved, the NAPP Facility will add value to the provincial and local economy.

Location

The NAPP Facility will be located adjacent to the Government of Alberta approved Williams Canada Propylene ULC (Williams) propane dehydrogenation facility. Both facilities will be located on Williams' privately owned land northwest of the intersection of Range Road 220 and Township Road 554 in E25-55-22-W4M. The land is zoned Heavy Industrial pursuant to Strathcona County Land Use Bylaw 65-2013.

Community Relationships

As part of its corporate values and beliefs NAPP strives to develop and maintain positive, meaningful, long-term relationships with communities adjacent to our facilities and operations and we are committed to operating our business with integrity and open communication.

As a result, even though the Aboriginal Consultation Office, Alberta Indigenous Relations determined that neither First Nations nor Métis Settlements consultation was required for the NAPP Facility or the Williams' privately owned lands, we are providing our project information brochure to a number of Métis and First Nation communities as a means to introduce our company and proposed project.

For general questions, or if you require further information regarding the NAPP Facility please contact me directly by telephone at 1-403-815-0808 or send me an email at luff@talkingstickcg.ca. I will respond to your inquiries promptly.

Sincerely,

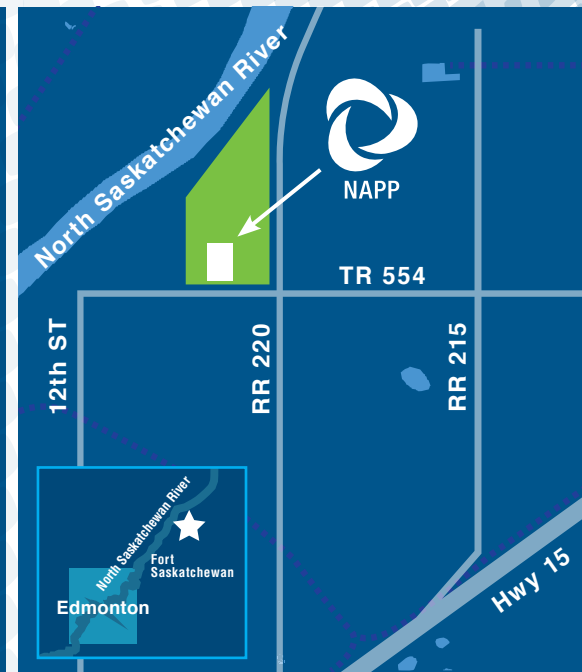
David Luff
Consultation and Community Relations
North American Polypropylene ULC



North American Polypropylene ULC

NAPP Polypropylene Facility

North American Polypropylene ULC (NAPP) is proposing to design, build, own and operate a state-of-the-art polypropylene facility (NAPP Facility) located in Strathcona County, Alberta. NAPP is part of a global marketing, distribution and project development company that brings value to the world's leading producers and users of petrochemical products.



Polypropylene Facility

The NAPP Facility will have the capability to produce approximately 450,000 metric tonnes of polypropylene on a yearly basis. Polypropylene is derived from propane, a natural gas liquid, that has been converted to polymer grade propylene.

As feedstock the NAPP Facility will use the polymer grade propylene produced by the Williams Canada Propylene ULC (Williams) Alberta Propane Dehydrogenation (Alberta PDH) Facility. Propane produced in Alberta will supply Alberta PDH.

The NAPP Facility will employ advanced, contemporary technology that has been proven to be a safe, efficient and globally competitive means to convert propylene to polypropylene in the form of small granules that will be loaded into hopper cars for shipment to North American markets or in containers for markets overseas.

A cogeneration plant to be built at the same location will supply electricity, steam and other utilities necessary for both the NAPP Facility and Alberta PDH. ATCO Energy Solutions will supply the raw water to and dispose of wastewater from the NAPP Facility.

Location

The NAPP Facility and associated rail yard will be located on 21.06 hectares of freehold land adjacent to Government of Alberta authorized and approved Alberta PDH. Both the NAPP Facility and Alberta PDH are located northwest of the intersection of Range Road 220 and Township Road 554 in E25-55-22-W4M. The land is owned by Williams and zoned Heavy Industrial pursuant to Strathcona County Land Use Bylaw 65-2013. Vehicle access to the NAPP Facility will be from Township Road 554.

Polypropylene

Polypropylene is a thermoplastic made from polymer grade propylene through a process of polymerization. Polypropylene resins melt under heat and can be formed into different usable shapes when cooled. These characteristics, which lend thermoplastic its name, are reversible. As a result polypropylene can be reheated and reshaped repeatedly making it highly reusable and recyclable.

Polypropylene is very versatile and has a wide variety of applications in the production of many consumer products. Polypropylene is lightweight, flexible and resistant to fatigue allowing it to be used in numerous applications including: children's toys; automobile parts; monofilament fibers for carpeting and furniture upholstery; screw-on caps for water and soft drink bottles; sheets for stationery and note books; medical containers; food containers; microwave and dishwasher safe utensils; and, sturdy seating for football stadiums and hockey arenas.

Products made from polypropylene are designated with the plastic recycling symbol 5 and often recycled into many other types of products that support our daily lives including: composite deck and porch lumber; ice scrapers; bicycle racks; and, landscape borders. In Strathcona County curbside recycling takes place once a week and all plastics with the recycling symbol 1 through 7 are collected.



Adding Value In Alberta

The NAPP Facility will create hundreds of skilled jobs during construction that will benefit local businesses and suppliers. Once in operation the NAPP Facility will add about one hundred permanent new jobs in Alberta's Industrial Heartland. NAPP will preferentially hire local qualified contractors and employees for our operations.

Once in operation the NAPP Facility will safely ship approximately 20 train cars per day of polypropylene to global markets. Albertans will benefit from the construction of the NAPP Facility as it will create the prospect for a new manufacturing industry and associated

businesses in the province. Rather than exporting Alberta propane and propylene to other jurisdictions the NAPP Facility will locally add value to these provincial resources and contribute to both municipal and provincial taxes as well as expand Alberta's economy and tax base.



Polypropylene is a significant value-added commodity that has a growing demand in Canada and around the world because of its many uses and recyclability. Once in operation the NAPP Facility will ensure that the economic benefits from local propane and propylene resources stay in Alberta rather than being exported as raw materials to other jurisdictions and then imported back to Canada as finished products. Currently, Canada exports 2,700,000 metric tonnes of propane and 525,000 metric tonnes of propylene on a yearly basis. Annually, Canada imports 522,000 metric tonnes of polypropylene. Once in operation the NAPP Facility will be the only one of its kind in Canada and have the capacity to supply 87% of Canada's imported polypropylene.

Public Consultation

NAPP will provide public notification regarding the NAPP Facility to all occupants, residents and landowners within 2,000 metres measured from the edge of the Facility site boundary. In-person consultation will be provided to all occupants, residents and landowners within 800 metres from the edge of the NAPP Facility site boundary. NAPP will work collaboratively and responsively with all interested parties to answer questions and to better appreciate and understand potential issues or concerns regarding the NAPP Facility.

Our desire is to build long-term mutually beneficial relationships with occupants, residents and landowners in Strathcona County, Sturgeon County and the City of Fort Saskatchewan who have an interest in the NAPP Facility.

Protecting The Environment

The NAPP Facility is being designed and will be operated in a way that minimizes potential adverse effects on the environment. NAPP will continue to work with, adhere to or exceed, all Government of Alberta and Government of Canada regulatory requirements for protection of the environment. Environmental studies and assessments have been carried out and are ongoing. The environmental studies and assessments will provide the information necessary to develop specific environmental protection and mitigation measures.

Air Quality

A detailed air quality assessment is being undertaken to ensure that air emissions from the NAPP Facility meet the requirements of the Alberta Ambient Air Quality Objectives and Guidelines established by Alberta Environment and Parks. The air quality assessment will form part of the NAPP regulatory application to the Government of Alberta.

NAPP supports the vision and values of the Fort Air Partnership and is committed to ensuring that the NAPP Facility will not materially change the air quality in the area and will meet the air emissions limits criteria and action levels established by the Air Management Framework for the Capital Region.

Noise

A detailed noise impact assessment is currently underway to document the noise that will be generated by the NAPP Facility. In regard to noise management in the region, the Northeast

Safety

NAPP vigorously supports policies that protect and enhance the safety of our workers and the communities within which we operate. We believe that no task is so critical or important that the proper time cannot be taken to accomplish it safely. A telephone 'hot line' will be established, widely distributed and publicly available in the case of an emergency or community concern regarding the NAPP Facility.



Capital Industrial Association, Government of Alberta policy and regulatory agencies, local municipalities and industry have worked together to develop and complete a Regional Noise Management Plan for the Industrial Heartland. The NAPP Facility will be designed using best management practices to reduce the amount of noise caused by the Facility and comply with both the Regional Noise Management Plan and Government of Alberta requirements.

Project Schedule

In winter 2015, following completion of environmental studies and assessments and public consultation, NAPP will submit regulatory applications for the NAPP Facility to both the Government of Alberta and the Government of Canada. Following regulatory approval construction is anticipated to commence in spring 2017 subject to receiving development approval applications from Strathcona County.

The planned in-service date for the NAPP Facility is 2019.



Further Information

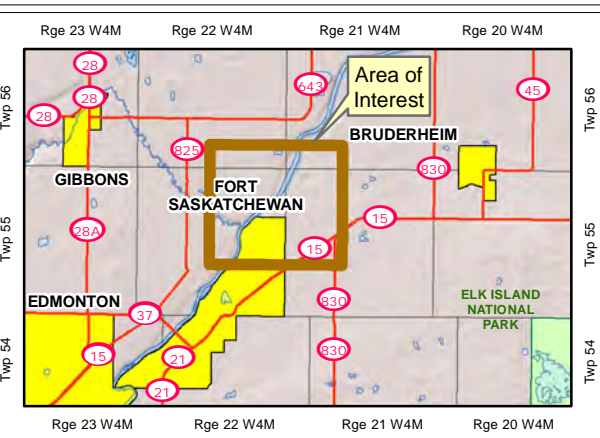
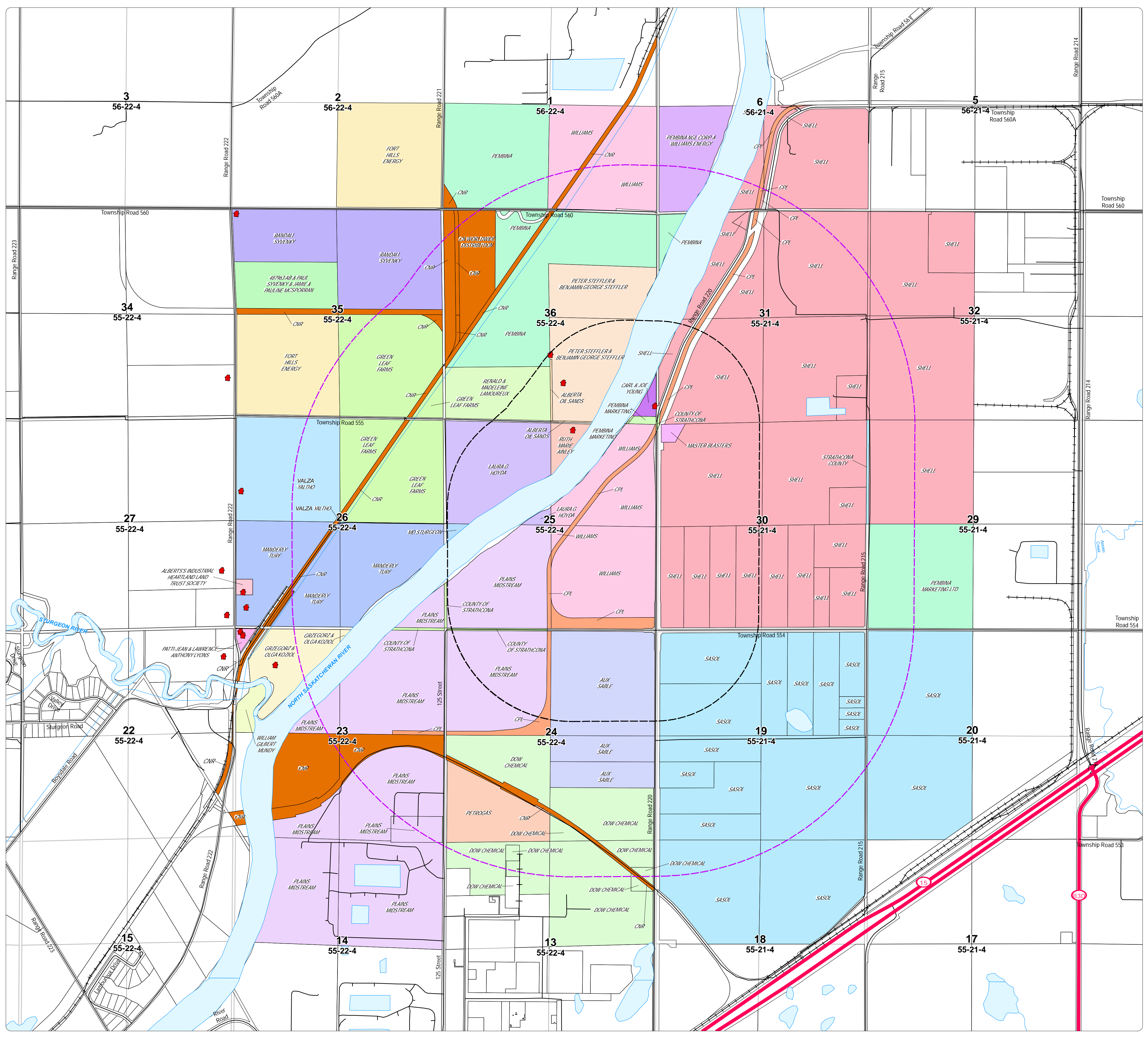
For further information regarding
the NAPP Facility contact:

David Luff

Consultation & Community Relations

CALL: 403-815-0808

EMAIL: luff@talkingstickcg.ca



LEGEND

- Roads
- Highway
- Railways
- Residents
- 0.8km Personal Consultation Boundary
- 2.0km Notification Boundary

0 0.4 0.8 1.2 KM

SCALE: 1:15,000

NAPP

global raymac surveys

PH: 403.283.5455
www.globalraymac.ca

PARTICIPANT INVOLVEMENT MAP
within
Twp's 55 & 56 Rge's 21 & 22 W4M

PREP BY	DESCRIPTION	DATE	REV
SD/LD	UPDATED PARCELS & OWNERS	12 Jan 2016	4

CLIENT FILE:
GRS FILE: 14CS0049

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW19	Sasol Canada Holdings Ltd. Ken Bradley Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 (1:00 PM)	Telephone Call	Eileen McCord left a voicemail, calling on behalf of NAPP, following up on information package.	Calling to follow up on receipt of Information Package			Connor McCord
					Nov 19, 2015 (9:00 AM)	Telephone Call	Eileen McCord provided the information Ken Bradley requested.	Ken Bradley returned Eileen McCord's Nov 13, 2015 voicemail.	Ken Bradley asked what the Project Timelines are, who NAPP is regulated by, if NAPP is required to do an Environmental Impact Assessment.	Yes, Ken Bradley provided a verbal Non-Objection.	
NW19	Hutterian Brethern Church of Scotford George Hofer Occupant	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:10 PM	Telephone Call	Eileen McCord called George Hofer, George was not familiar with NAPP asked to please call him back later.	Calling to follow up on receipt of Information Package			Yes, George Hofer provided a verbal Non-Objection.
					Nov 17, 2015 12:45 PM	Telephone Call	Eileen McCord called back and left a voice mail.				
					Nov 18, 2015 9:00 AM	Telephone Call	Eileen McCord called George Hofer and spoke with him. George indicated he was leasing lands from Shell and Sasol for grazing.				
NW19	Duane Yaworski	November 3, 2015		Eileen McCord	Nov 12, 2015 3:10 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package. Eileen indicated she would call back on Nov 16, 2015.	Calling to follow up on receipt of Information Package			
					Nov 25, 2015	Telephone Call	Eileen McCord called and talked with Ramona Yaworski	Ramona Yaworski did not review the information package. Will put the package on Duane's desk for him to review			
NE24	Aux Sable Todd Janzen Landowner	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:15 PM	Telephone Call	Eileen McCord left a voicemail, calling on behalf of NAPP, following up on information package.	Calling to follow up on receipt of Information Package			
					Nov 23, 2015 2:15 PM	Telephone Call	Eileen McCord called Todd Janzen and spoke with him.	Todd Janzen indicated he had received the Information Package and passed it onto Brandon Holteman (Land and Government Affairs). Todd indicated to follow up with Brandon, 1.403.508.6791 or brandonholteman@auxsable.ca			
					Dec 18, 2015 1:50 PM Jan 4, 2016 12:05PM	Telephone Call Email	Eileen McCord called Brandon Holteman and left a voicemail.		Yes, Brandon Holteman provided a written Non-Objection.		
NW24	Plains Midstream ULC Trena Catchick Landowner	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:20 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package, indicated she would call back next week. 1.403.365.7338	Trena Catchick had not looked at the Information Package. Will send out the package to the Integrity Department and then the field. Asked for Eileen to follow up in a week.			
					Nov 23, 2015 9:15 AM	Telephone Call	Eileen McCord called and left a voice mail.				
					Dec 18, 2015 1:45 PM	Telephone Call	Eileen McCord called and left a voice mail.				
NW24	Canadian Pacific Limited Rod Klopp Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:30 PM	Telephone Call	Eileen McCord called and left a voice mail.	Rod Klopp out of town until Nov 23, 2015. If urgent please contact Steven Cross 1.403.319.3286			
					Nov 16, 2015 1:00PM	Telephone Call	Eileen McCord called Steven Cross and left a voice mail.				
					Nov 23, 2015 1:05 PM	Telephone Call	Eileen McCord called Rod Klopp and spoke with him.	Rod Klopp indicated that he wouldn't be able to look at the information package until the end of the year.			

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW 24	County of Strathcona Lori Mills Landowner	November 3, 2015			Nov 13, 2015 1:35 PM	Telephone Call	Eileen McCord called and left a voicemail.				
					Nov 16, 2015 2:40PM	Telephone Call	Eileen McCord indicated that NAPP will have a permit separate from Williams.	Lori Mills called back confirming receipt of Information Package.	Will NAPP require a development permit separate from Williams.	Yes, Lori Mills provided a verbal Non-Objection.	
SW25	MD Sturgeon Colin Krywiak Landowner	November 3, 2015		Eileen McCord	Nov 13, 2015 1:40 PM	Telephone Call	Eileen McCord called and spoke with Colin Krywiak.	Colin Krywiak asked if there was a map that we can provide him showing residents/landowners. If any residents/landowners north of Sturgeon follow up can we let him know.		Yes Colin Krywiak provided a verbal Non-Objection.	
SW30	Shell Canada Limited Vince Stastny, Jennifer Downs Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:40 PM	Telephone Call	Eileen McCord left a voice mail.				
					Nov 23, 2015 9:15 AM	Telephone Call	Eileen McCord left a voice mail.				
					Nov 23, 2015 9:30 AM	Telephone Call		Vince Stastny called back confirming receipt of package.		Yes, Vince Stastny provided a verbal Non-Objection.	
NW30	Master Blasters Industrial Coatings Inc. Brian Jones	November 3, 2015	November 17, 2015	Eileen McCord	Nov 17, 2015 2:20 PM	Telephone Call	Eileen McCord called Brian Jones and spoke with him.	Brian Jones indicated he owns the land, but Master Blasters does not exist as a company anymore.		Yes, Brian Jones provided a verbal Non-Objection	
NW30	Mary Chartrand Occupant	November 3, 2015		Eileen McCord	Nov 17, 2015 2:30PM	Telephone Call	Eileen McCord left a voice mail.	Mary Chartrand left a voice mail for Eileen indicating she had not picked up the package yet.			
					Nov 23, 2015 2:05 PM	Telephone Call	Eileen McCord left a voice mail with Mary Chartrand's receptionist				
					Dec 18, 2015 2:30 PM	Telephone Call	Eileen McCord called Mary Chartrand and spoke with her.	Mary Chartrand indicated the brochure did not have very much useful information. She believes it was a waste of time for her to pick it up from the Post Office. If there is an open house in the area she would like to come to that, as long as it's not a contractor and actually an employee from NAPP running it.	Would like to set up a face to face meeting for sometime after Jan 15, 2016.		
NE25	Land Trust Society Ryerson Christie Landowner	November 3, 2015	November 17, 2015	Eileen McCord	Nov 17, 2015 2:15PM	Telephone Call	Eileen McCord called Ryerson Christie and confirmed receipt of Information Package.	Ryerson Christie would like his home address added to the mailing list.	Is NAPP leasing on Williams land.	Yes, Ryerson Christie provided a verbal Non-Objection.	
NE25	Todd Clarke Occupant	November 3, 2015			Nov 17, 2015 2:00 PM	Telephone Call	Eileen McCord called and left a voice mail.				
					Dec 18, 2015 2:10 PM	Telephone Call	Eileen McCord called and spoke with Todd Clarke.	Todd Clarke indicated he had not received the Information Package would like Eileen McCord to send a PDF of the Information Package to his email: tclarke@albertacom.com and follow up in the new year.			
NE25	Williams Canada Lorraine Royer Landowner	N/A	N/A	N/A	Dec 18, 2015 2:25 PM	Email	Eileen McCord emailed Todd Clarke the information package.	N/A	N/A	N/A	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW25	Laura Hoyda Landowner	November 3, 2015		Eileen McCord	Nov 17, 2015 1:45 PM	Telephone Call	Eileen McCord called Laura Hoyda and spoke with Donald Hoyda. Eileen confirmed Donald Hoyda had not received the brochure.	Donald Hoyda asked whether NAPP was willing to buy his land.	Donald Hoyda indicated he had voice numerous objections to the Williams PDH development, he felt his objections fell on deaf ears and doesn't want to go through the same process. Donald feels frustrated that Ruth Ainley's property was bought out but there has not been an offer to buy their land. - safety concerns, a Williams plant blew up in Louisiana two years ago, that is very similar to the one being built - excessive noise during construction phase - rail noise - excessive air pollution - Williams has a poor safety record in Louisiana, very concerned for the safety of the Mexican agriculture workers he has working on his land - unless NAPP is seriously interested in buying their land, they are not interested in participating in the regulatory process.		
					#####	Telephone Call	Eileen McCord called Donald Hoyda and spoke with Laura Hoyda. Laura asked for Eileen to call tomorrow morning.				
					#####	Telephone Call	Eileen McCord called Donald Hoyda and left a voice mail.				
					Dec 18, 2015 1:40 PM	Telephone Call	Eileen McCord called Donald Hoyda informing him that she had shared his concerns with the NAPP team. She indicated NAPP would like to set up a face to face meeting to discuss the issues and concerns he raised.	Donald Hoyda indicated he would get back to Eileen at a time convenient for him, he needs to talk about it with his wife.			
SE36	Alberta Oil Sands Pipeline Ltd. Deborah Guest Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:45 PM	Telephone Call	Eileen McCord called and left a voice mail.				
					Nov 17, 2015 8:30 AM	Telephone Call		Deborah Guest called Eileen McCord and left a voice mail.			
					Nov 18, 2015 9:05 AM	Telephone Call	Eileen McCord called and spoke with Deborah Guest, Deborah indicated she had sent the package to the field but no response was received. Eileen indicated she would follow up later in the week.				
					Nov 23, 2015 9:20 AM	Telephone Call	Eileen McCord called and left a voice mail.				
SE36	Peter Steffler Landowner	November 3, 2015	November 10, 2015	Eileen McCord	Nov 12, 2015 3:20 PM	Telephone Call	Eileen McCord called Peter Steffler and confirmed receipt of Information Package.	Peter Steffler indicated he was aware that this is just a little part of a bigger project. Peter also indicated that he is Benjamin Stefflers nephew.		Yes, Peter Steffler provided a verbal Non-Objection.	
SE36	Benjamin George Steffler Landowner	November 3, 2015	November 10, 2015	Eileen McCord	Nov 12, 2015 3:25 PM	Telephone Call	Eileen McCord confirmed receipt of Information Package.	Benjamin Steffler had not looked at the Information Package would like Eileen to call back on Nov 16, 2015.			
					Nov 16, 2015 11:30 AM	Telephone Call	Eileen McCord called Benjamin to follow up on Nov 12, 2015 phone call.			Yes, Benjamin Steffler provided a verbal Non-Objection.	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
SE36	Pembina Marketing Bart Grant Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:47 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package, Eileen sent a PDF of the Information Package by email.	Bart Grant give the Information Package to a third party administrator agency, it will be reviewed by thirty different people. Bart Grant would like to be sent the brochure by email:			
					Nov 23, 2015 9:20 AM	Telephone Call	Eileen McCord called Bart Grant to follow up on her Nov 16, 2015 email.	Bart Grant indicated the third party administrator had looked at the package, but could not speak for the company. His word doesn't hold any weight for the overall company, can not provide any comment on it.		Yes, Bart Grant provided a verbal Non-Objection.	
SE36	Carl Young	November 3, 2015	November 13, 2015	Eileen McCord	Nov 16, 2015 10:30 AM	Telephone Call	Eileen McCord called Carl Young and confirmed receipt of Information Package.			Yes, Carl Young provided a verbal Non-Objection.	
SE25	Altalink Management Ltd. Danny MacDonald	November 3, 2015	November 5, 2015	Eileen McCord	Nov 16, 2015 11:15 AM	Telephone Call	Eileen McCord called and left a voicemail.				
					Nov 17, 2015 2:00PM	Telephone Call		Danny MacDonald called and left Eileen McCord a voice mail. Danny indicated that he typically does not respond to Information Packages, he asked Eileen to send the Information Package by email: daniel.macdonald@altalink.ca. Danny indicated he would have a look at it and respond ASAP.			
					Nov 23, 2015 1:20 PM	Email	Eileen McCord emailed Danny MacDonald and asked whether he has any further questions/concerns.	Danny MacDonald emailed Eileen McCord and indicated he had received the brochure and passed it along to his asset management group. Either Drew or Ally would follow up with Eileen.			
					Dec 21, 2015 9:05AM	Email				Yes, Drew Cunningham provided a written Non-Objection.	
SE25	Access Pipeline Inc. Cyril Karvonen	November 3, 2015	November 4, 2015	Eileen McCord	Nov 16, 2015 11:20 AM	Email	Eileen McCord called and talked with Cyril's assistant, she indicated Cyril is on vacation until Nov 24, 2015. Cyril's assistant advised Eileen to email the brochure to Kurt Roebuck: kroebuck@accesspipeline.com, Director of Operations. Eileen sent the Information Package to Kurt Roebuck.	Kurt Roebuck emailed Eileen McCord saying he took a look at the brochure and would let Eileen know if he has any questions/concerns at a later date.			
					Nov 25, 2015 11:00AM	Email	Eileen McCord emailed Kurt Roebuck to follow up on the emails exchanged on Nov 16, 2015.				
					Dec 9, 2015 12:05 PM	Email				Yes, Lisa Brigden provided a written Non-Objection.	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
SE25	ATCO Gas & Pipelines Ashley Theberge	November 3, 2015	November 10, 2015	Eileen McCord	Nov 16, 2015 11:30 AM	Telephone Call	Eileen McCord called and left a voice mail.				
					Nov 23, 2015 2:45 PM	Email	Eileen McCord emailed the Information Package to Shannon Mahoney.	Shannon Mahoney called Eileen and said she did not have the Information Package in front of her but if Eileen would send it via email: shannon.mahoney@atcopipelines.com and give her an answer ASAP.		Yes, Ashley Reynolds provided a written Non-Objection.	
					Dec 8, 2015 8:15AM	Email				Yes, Ifiok Isaiah Etim provided a written Non-	
SE25	AGT Limited Ifiok Etim	November 3, 2015	November 9, 2015	Eileen McCord	Nov 16, 2015 11:45 AM	Telephone Call	Eileen McCord called and left a voicemail.				

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW19	Sasol Canada Holdings Ltd. Ken Bradley Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 (1:00 PM)	Telephone Call	Eileen McCord left a voicemail, calling on behalf of NAPP, following up on information package.	Calling to follow up on receipt of Information Package			Connor McCord
					Nov 19, 2015 (9:00 AM)	Telephone Call	Eileen McCord provided the information Ken Bradley requested.	Ken Bradley returned Eileen McCord's Nov 13, 2015 voicemail.	Ken Bradley asked what the Project Timelines are, who NAPP is regulated by, if NAPP is required to do an Environmental Impact Assessment.	Yes, Ken Bradley provided a verbal Non-Objection.	
NW19	Hutterian Brethern Church of Scotford George Hofer Occupant	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:10 PM	Telephone Call	Eileen McCord called George Hofer, George was not familiar with NAPP asked to please call him back later.	Calling to follow up on receipt of Information Package			Yes, George Hofer provided a verbal Non-Objection.
					Nov 17, 2015 12:45 PM	Telephone Call	Eileen McCord called back and left a voice mail.				
					Nov 18, 2015 9:00 AM	Telephone Call	Eileen McCord called George Hofer and spoke with him. George indicated he was leasing lands from Shell and Sasol for grazing.				
NW19	Duane Yaworski	November 3, 2015		Eileen McCord	Nov 12, 2015 3:10 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package. Eileen indicated she would call back on Nov 16, 2015.	Calling to follow up on receipt of Information Package			
					Nov 25, 2015	Telephone Call	Eileen McCord called and talked with Ramona Yaworski	Ramona Yaworski did not review the information package. Will put the package on Duane's desk for him to review			
NE24	Aux Sable Todd Janzen Landowner	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:15 PM	Telephone Call	Eileen McCord left a voicemail, calling on behalf of NAPP, following up on information package.	Calling to follow up on receipt of Information Package			
					Nov 23, 2015 2:15 PM	Telephone Call	Eileen McCord called Todd Janzen and spoke with him.	Todd Janzen indicated he had received the Information Package and passed it onto Brandon Holteman (Land and Government Affairs). Todd indicated to follow up with Brandon, 1.403.508.6791 or brandonholteman@auxsable.ca			
					Dec 18, 2015 1:50 PM Jan 4, 2016 12:05PM	Telephone Call Email	Eileen McCord called Brandon Holteman and left a voicemail.		Yes, Brandon Holteman provided a written Non-Objection.		
NW24	Plains Midstream ULC Trena Catchick Landowner	November 3, 2015	November 4, 2015	Eileen McCord	Nov 13, 2015 1:20 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package, indicated she would call back next week. 1.403.365.7338	Trena Catchick had not looked at the Information Package. Will send out the package to the Integrity Department and then the field. Asked for Eileen to follow up in a week.			
					Nov 23, 2015 9:15 AM	Telephone Call	Eileen McCord called and left a voice mail.				
					Dec 18, 2015 1:45 PM	Telephone Call	Eileen McCord called and left a voice mail.				
NW24	Canadian Pacific Limited Rod Klopp Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:30 PM	Telephone Call	Eileen McCord called and left a voice mail.	Rod Klopp out of town until Nov 23, 2015. If urgent please contact Steven Cross 1.403.319.3286			
					Nov 16, 2015 1:00PM	Telephone Call	Eileen McCord called Steven Cross and left a voice mail.				
					Nov 23, 2015 1:05 PM	Telephone Call	Eileen McCord called Rod Klopp and spoke with him.	Rod Klopp indicated that he wouldn't be able to look at the information package until the end of the year.			

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW 24	County of Strathcona Lori Mills Landowner	November 3, 2015			Nov 13, 2015 1:35 PM	Telephone Call	Eileen McCord called and left a voicemail.				
					Nov 16, 2015 2:40PM	Telephone Call	Eileen McCord indicated that NAPP will have a permit separate from Williams.	Lori Mills called back confirming receipt of Information Package.	Will NAPP require a development permit separate from Williams.	Yes, Lori Mills provided a verbal Non-Objection.	
SW25	MD Sturgeon Colin Krywiak Landowner	November 3, 2015		Eileen McCord	Nov 13, 2015 1:40 PM	Telephone Call	Eileen McCord called and spoke with Colin Krywiak.	Colin Krywiak asked if there was a map that we can provide him showing residents/landowners. If any residents/landowners north of Sturgeon follow up can we let him know.		Yes Colin Krywiak provided a verbal Non-Objection.	
SW30	Shell Canada Limited Vince Stastny, Jennifer Downs Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:40 PM	Telephone Call	Eileen McCord left a voice mail.				
					Nov 23, 2015 9:15 AM	Telephone Call	Eileen McCord left a voice mail.				
					Nov 23, 2015 9:30 AM	Telephone Call		Vince Stastny called back confirming receipt of package.		Yes, Vince Stastny provided a verbal Non-Objection.	
NW30	Master Blasters Industrial Coatings Inc. Brian Jones	November 3, 2015	November 17, 2015	Eileen McCord	Nov 17, 2015 2:20 PM	Telephone Call	Eileen McCord called Brian Jones and spoke with him.	Brian Jones indicated he owns the land, but Master Blasters does not exist as a company anymore.		Yes, Brian Jones provided a verbal Non-Objection	
NW30	Mary Chartrand Occupant	November 3, 2015		Eileen McCord	Nov 17, 2015 2:30PM	Telephone Call	Eileen McCord left a voice mail.	Mary Chartrand left a voice mail for Eileen indicating she had not picked up the package yet.			
					Nov 23, 2015 2:05 PM	Telephone Call	Eileen McCord left a voice mail with Mary Chartrand's receptionist				
					Dec 18, 2015 2:30 PM	Telephone Call	Eileen McCord called Mary Chartrand and spoke with her.	Mary Chartrand indicated the brochure did not have very much useful information. She believes it was a waste of time for her to pick it up from the Post Office. If there is a open house in the area she would like to come to that, as long as its not a contractor and actually a employee from NAPP running it.	Would like to set up a face to face meeting for sometime after Jan 15, 2016.		
NE25	Land Trust Society Ryerson Christie Landowner	November 3, 2015	November 17, 2015	Eileen McCord	Nov 17, 2015 2:15PM	Telephone Call	Eileen McCord called Ryerson Christie and confirmed receipt of Information Package.	Ryerson Christie would like his home address added to the mailing list.	Is NAPP leasing on Williams land.	Yes, Ryerson Christie provided a verbal Non-Objection.	
NE25	Todd Clarke Occupant	November 3, 2015			Nov 17, 2015 2:00 PM	Telephone Call	Eileen McCord called and left a voice mail.				
					Dec 18, 2015 2:10 PM	Telephone Call	Eileen McCord called and spoke with Todd Clarke.	Todd Clarke indicated he had not received the Information Package would like Eileen McCord to send a PDF of the Information Package to his email: tclarke@albertacom.com and follow up in the new year.			
NE25	Williams Canada Lorraine Royer Landowner	N/A	N/A	N/A	Dec 18, 2015 2:25 PM	Email	Eileen McCord emailed Todd Clarke the information package.	N/A	N/A	N/A	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
NW25	Laura Hoyda Landowner	November 3, 2015		Eileen McCord	Nov 17, 2015 1:45 PM	Telephone Call	Eileen McCord called Laura Hoyda and spoke with Donald Hoyda. Eileen confirmed Donald Hoyda had not received the brochure.	Donald Hoyda asked whether NAPP was willing to buy his land.	Donald Hoyda indicated he had voice numerous objections to the Williams PDH development, he felt his objections fell on deaf ears and doesn't want to go through the same process. Donald feels frustrated that Ruth Ainley's property was bought out but there has not been an offer to buy their land. - safety concerns, a Williams plant blew up in Louisiana two years ago, that is very similar to the one being built - excessive noise during construction phase - rail noise - excessive air pollution - Williams has a poor safety record in Louisiana, very concerned for the safety of the Mexican agriculture workers he has working on his land - unless NAPP is seriously interested in buying their land, they are not interested in participating in the regulatory process.		
					#####	Telephone Call	Eileen McCord called Donald Hoyda and spoke with Laura Hoyda. Laura asked for Eileen to call tomorrow morning.				
					#####	Telephone Call	Eileen McCord called Donald Hoyda and left a voice mail.				
					Dec 18, 2015 1:40 PM	Telephone Call	Eileen McCord called Donald Hoyda informing him that she had shared his concerns with the NAPP team. She indicated NAPP would like to set up a face to face meeting to discuss the issues and concerns he raised.	Donald Hoyda indicated he would get back to Eileen at a time convenient for him, he needs to talk about it with his wife.			
SE36	Alberta Oil Sands Pipeline Ltd. Deborah Guest Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:45 PM	Telephone Call	Eileen McCord called and left a voice mail.				
					Nov 17, 2015 8:30 AM	Telephone Call		Deborah Guest called Eileen McCord and left a voice mail.			
					Nov 18, 2015 9:05 AM	Telephone Call	Eileen McCord called and spoke with Deborah Guest, Deborah indicated she had sent the package to the field but no response was received. Eileen indicated she would follow up later in the week.				
					Nov 23, 2015 9:20 AM	Telephone Call	Eileen McCord called and left a voice mail.				
SE36	Peter Steffler Landowner	November 3, 2015	November 10, 2015	Eileen McCord	Nov 12, 2015 3:20 PM	Telephone Call	Eileen McCord called Peter Steffler and confirmed receipt of Information Package.	Peter Steffler indicated he was aware that this is just a little part of a bigger project. Peter also indicated that he is Benjamin Stefflers nephew.		Yes, Peter Steffler provided a verbal Non-Objection.	
SE36	Benjamin George Steffler Landowner	November 3, 2015	November 10, 2015	Eileen McCord	Nov 12, 2015 3:25 PM	Telephone Call	Eileen McCord confirmed receipt of Information Package.	Benjamin Steffler had not looked at the Information Package would like Eileen to call back on Nov 16, 2015.			
					Nov 16, 2015 11:30 AM	Telephone Call	Eileen McCord called Benjamin to follow up on Nov 12, 2015 phone call.			Yes, Benjamin Steffler provided a verbal Non-Objection.	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
SE36	Pembina Marketing Bart Grant Landowner	November 3, 2015	November 5, 2015	Eileen McCord	Nov 13, 2015 1:47 PM	Telephone Call	Eileen McCord called and confirmed receipt of Information Package, Eileen sent a PDF of the Information Package by email.	Bart Grant give the Information Package to a third party administrator agency, it will be reviewed by thirty different people. Bart Grant would like to be sent the brochure by email:			
					Nov 23, 2015 9:20 AM	Telephone Call	Eileen McCord called Bart Grant to follow up on her Nov 16, 2015 email.	Bart Grant indicated the third party administrator had looked at the package, but could not speak for the company. His word doesn't hold any weight for the overall company, can not provide any comment on it.		Yes, Bart Grant provided a verbal Non-Objection.	
SE36	Carl Young	November 3, 2015	November 13, 2015	Eileen McCord	Nov 16, 2015 10:30 AM	Telephone Call	Eileen McCord called Carl Young and confirmed receipt of Information Package.			Yes, Carl Young provided a verbal Non-Objection.	
SE25	Altalink Management Ltd. Danny MacDonald	November 3, 2015	November 5, 2015	Eileen McCord	Nov 16, 2015 11:15 AM	Telephone Call	Eileen McCord called and left a voicemail.				
					Nov 17, 2015 2:00PM	Telephone Call		Danny MacDonald called and left Eileen McCord a voice mail. Danny indicated that he typically does not respond to Information Packages, he asked Eileen to send the Information Package by email: daniel.macdonald@altalink.ca. Danny indicated he would have a look at it and respond ASAP.			
					Nov 23, 2015 1:20 PM	Email	Eileen McCord emailed Danny MacDonald and asked whether he has any further questions/concerns.	Danny MacDonald emailed Eileen McCord and indicated he had received the brochure and passed it along to his asset management group. Either Drew or Ally would follow up with Eileen.			
					Dec 21, 2015 9:05AM	Email				Yes, Drew Cunningham provided a written Non-Objection.	
SE25	Access Pipeline Inc. Cyril Karvonen	November 3, 2015	November 4, 2015	Eileen McCord	Nov 16, 2015 11:20 AM	Email	Eileen McCord called and talked with Cyril's assistant, she indicated Cyril is on vacation until Nov 24, 2015. Cyril's assistant advised Eileen to email the brochure to Kurt Roebuck: kroebuck@accesspipeline.com, Director of Operations. Eileen sent the Information Package to Kurt Roebuck.	Kurt Roebuck emailed Eileen McCord saying he took a look at the brochure and would let Eileen know if he has any questions/concerns at a later date.			
					Nov 25, 2015 11:00AM	Email	Eileen McCord emailed Kurt Roebuck to follow up on the emails exchanged on Nov 16, 2015.				
					Dec 9, 2015 12:05 PM	Email				Yes, Lisa Brigden provided a written Non-Objection.	

Legal Description	Resident, Landowner, Occupant	Information Package Sent	Information Package Received	NAPP Representative	Date Consulted	Type of Interaction	Action	Discussion Topic	Question or Concerns Raised	Non-Objection	Record Submitter
SE25	ATCO Gas & Pipelines Ashley Theberge	November 3, 2015	November 10, 2015	Eileen McCord	Nov 16, 2015 11:30 AM	Telephone Call	Eileen McCord called and left a voice mail.				
					Nov 23, 2015 2:45 PM	Email	Eileen McCord emailed the Information Package to Shannon Mahoney.	Shannon Mahoney called Eileen and said she did not have the Information Package in front of her but if Eileen would send it via email: shannon.mahoney@atcopipelines.com and give her an answer ASAP.			
					Dec 8, 2015 8:15AM	Email				Yes, Ashley Reynolds provided a written Non-Objection.	
SE25	AGT Limited Ifiok Etim	November 3, 2015	November 9, 2015	Eileen McCord	Nov 16, 2015 11:45 AM	Telephone Call	Eileen McCord called and left a voicemail.			Yes, Ifiok Isaiah Etim provided a written Non-	