TRANSIT RELOCATION FEASIBILITY STUDY
Class Environmental Assessment

TULLOCH
ENGINEERING

Prepared For:
The City of Sault Ste. Marie
Project #: 16-1085
June 2017

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1. PHASE 1 - PROBLEM OR OPPORTUNITY

1.1 Introduction

Study Background

The Public Works and Engineering Services Department is a relatively new City department combining Public Works and Engineering Services. The Public Works Division includes Parks, Operations, Traffic and Waste Management, while Engineering Services is comprised of Building Services and Engineering and Construction.

The department's administration offices are located at 128 Sackville Road. The Sackville Road site is also the location for Public Works fleet management, where both maintenance and storage is provided for the department's vehicles and equipment. The Engineering Services offices are located at the Civic Centre at 99 Foster Drive.

Sault Ste Marie Transit is located at 111 Huron Street. Formerly a division of Public Works, it was transferred to Community Development and Enterprise Services in the fall of 2016 as part of a corporate restructuring. The Huron Street location provides:

- Transit and Parking Administration
- Daily start/finish point for 8 regular fixed route buses
- Parabus dispatching
- Maintenace facilities for transit fleet
- Indoor storage facilities for the fleet

Transit has traditionally provided its own maintenance and storage activities. Prior to the Huron Street location, the City's "bus barn" was located on the north side of Bay Street, between Tancred Street and Dennis Street.

Study Purpose

The Transit garage was built in 1981 and is in need of major repairs and upgrades. Some of the required repairs, such as the replacement of the existing roof, will be quite costly. In addition to the required repairs, the facility no longer fully meets the needs of the Transit Division and upgrades are required to provide additional maintenance space and office space. The Huron Street location is also no longer central to key transit destinations such as the hospital and major shopping centres. Development has increasingly migrated north, away from the downtown and, as a result, the current location of the Transit garage may not be ideal due to the increased costs associated with servicing customers and their changing travel patterns.

The City's Public Works and Transportation facility at 128 Sackville Road was constructed in 1970. Similar to the City Transit facilities, the PW facilities are in need of major repairs and upgrades. The administration building's HVAC system requires replacement; the second floor meeting rooms are not accessible to disabled persons; the cafeteria is undersized for the staff complement and the locker room and washroom facilities are significantly undersized and do

not meet today's standards. Additional maintenance space and vehicle storage space is required to accommodate the larger and more sophisticated vehicles in the current fleet, compared to the equipment for which the building was designed to accommodate 45 years ago.

Recognizing the shortcomings of the existing Transit and PW facilities, as well as the significant expenditures that will be required to modernize and restore them to an adequate functionality and safety standards, the City is undertaking a Feasibility Study to consider the possibility of integrating the Sault Transit facilities with the Public Works site. Such integration offers the potential for synergies in the operation of the respective facilities and potential cost savings.

In addition, the recent Federal transit infrastructure funding announcement at the Sault Transit bus depot on April 8, 2016 indicated that approximately $1.5 billion of $3.4 billion Canada wide funding would be allocated to Ontario. Timely completion of this feasibility study would, therefore, provide the documentation required to support the City's application to receive the enhanced funding, which would minimize the cost to the City of Sault Ste. Marie taxpayers.

Accordingly, **TULLOCH Engineering** has been engaged to conduct an assessment following the Municipal Class Environmental Assessment process to include a full consideration of alternatives, potential environmental impacts and mitigating measures, capital costs and possible cost savings which would result from the envisioned integration.

1.2 Description of Study Areas

As shown in Figures 1 and 2, the study areas are located around both properties involved. Area 1 includes the industrial properties surrounding 128 Sackville Road and the residential properties along Sackville Road, from Mary Street to Second Line West. Area 2 includes all properties that surround the Transit facility at 111 Huron Street.

1.3 Previous Studies

The full list of previous studies reviewed for this EA is found in Appendix 1. Of particular importance were the 2012-2016 Public Transit Operations Review – Sault Ste Marie, December 2011, completed by HDR, and the City's Asset Management Facility Condition Assessment, April 2014 completed by Morrison Hershfield Limited.

2012-2016 Public Transit Operations Review

The Operations Review considered all aspects of Public Transit in Sault Ste Marie. With regard to the current bus maintenance garage, the report states:

"*The Transit garage facility on Huron Street was built in 1981 and is need of costly major repairs and upgrades. Given the aforementioned, capital improvements will need to be set aside for a new roof, new fuel storage tanks, additional hoists, additional office space, and other*

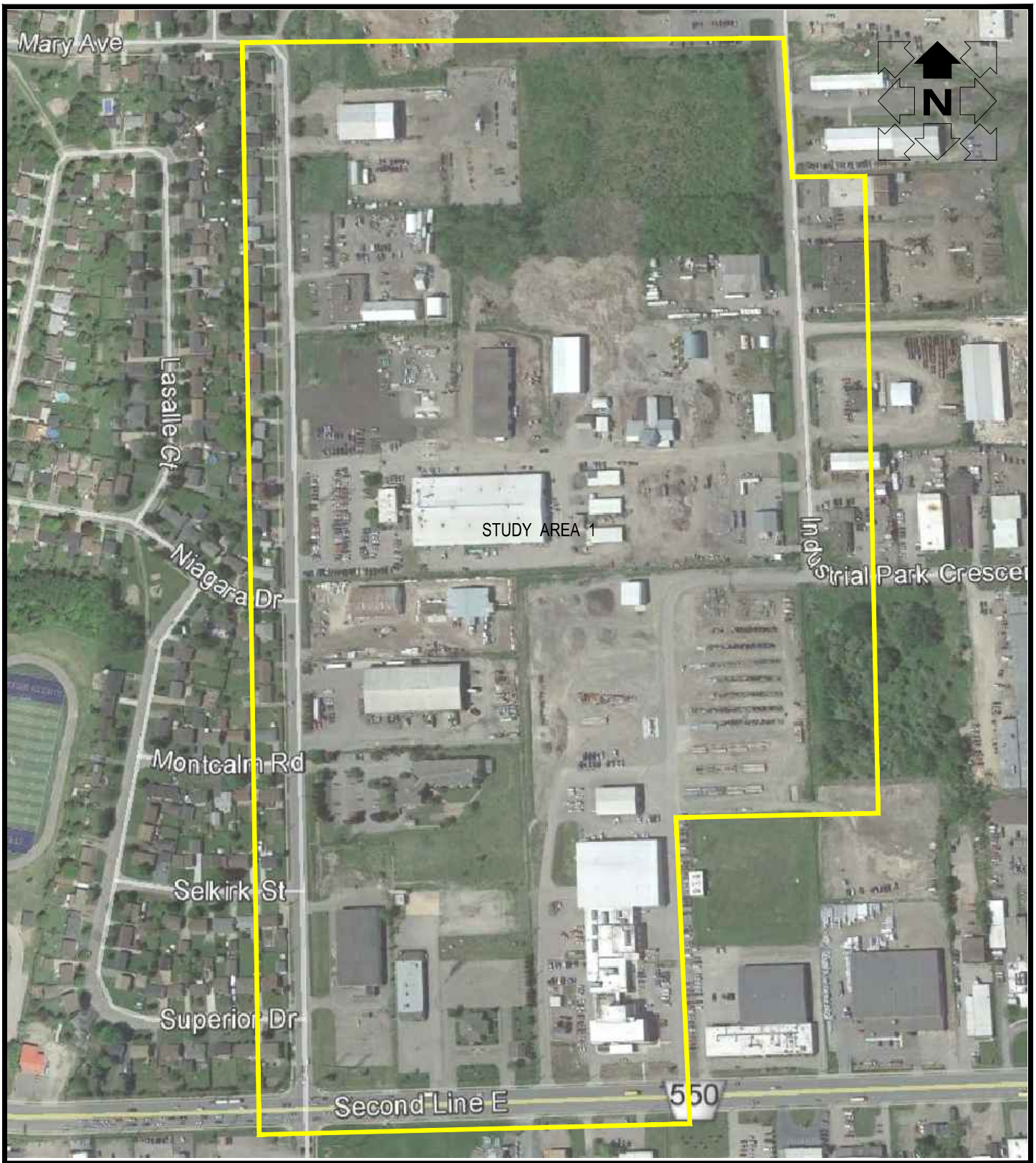

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FIGURE 1
STUDY AREA 1

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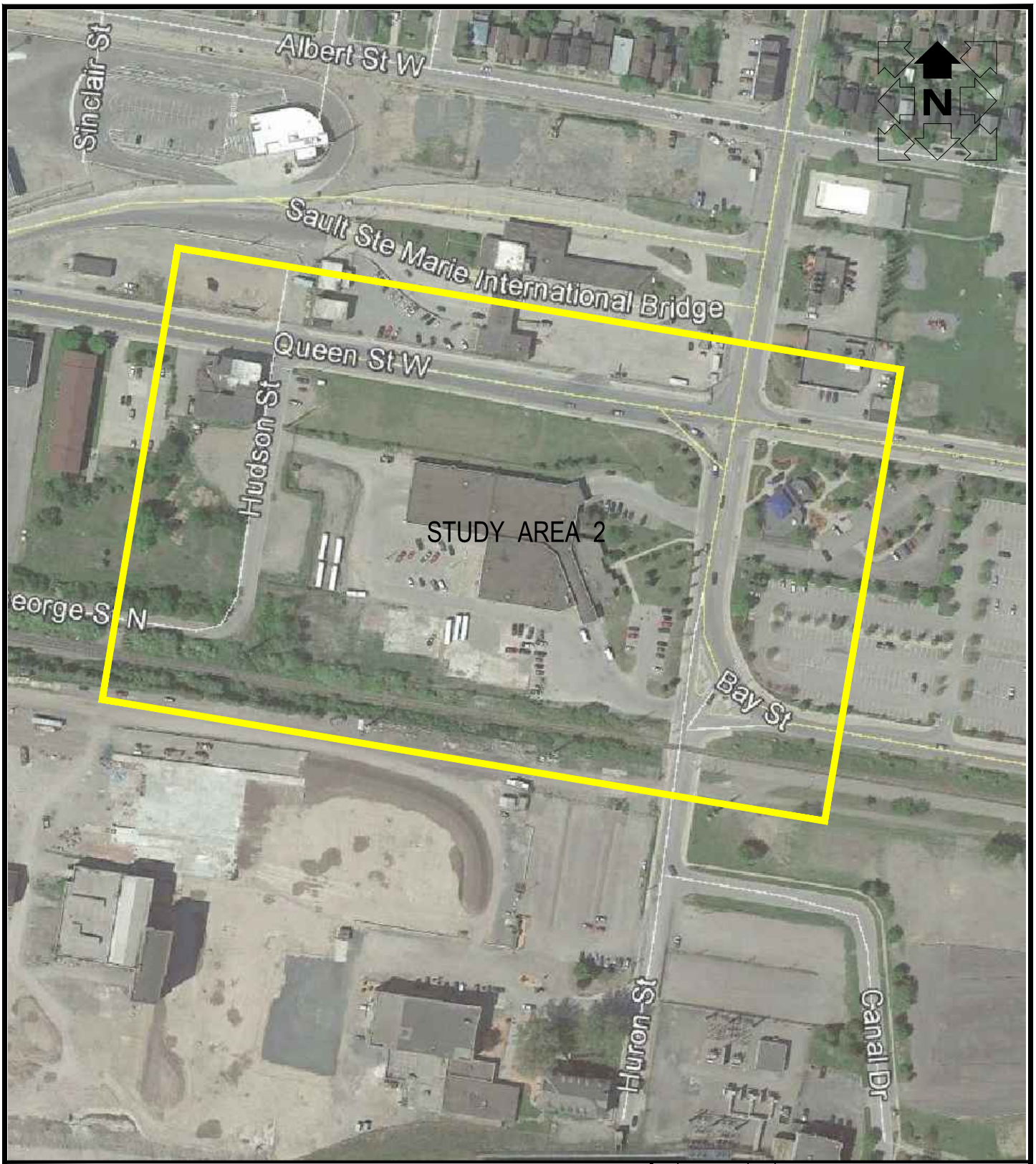

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FIGURE 2
STUDY AREA 2

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improvements. In addition, the southerly garage location on Huron Street is not central, which results in added travel times for buses travelling to and from the garage when beginning and ending service; this adds to costly "deadhead" time.

One of the recommendations from the Operations Review states:

"the *City should investigate the opportunity to provide for a common facility to accommodate the maintenance needs of Public Works and Transportation services."*

This recommendation is, therefore, one of the alternatives being evaluated by this EA.

The City's Asset Management Facility Condition Assessment

In 2013 the City undertook an assessment of all municipally owned buildings in order to identify future maintenance needs and recommended capital spending. Each building was assessed, and a 25 year capital plan provided. The assessments provided for each building are summarized below:

Transit Bus Depot 111 Huron Street

The 44,000 sq. ft. bus garage was constructed in 1981. The report describes it as being in fair condition, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating. A list of capital spending recommendations was made, totalling approximately $896,333, to be expended over the following 3 years (2013 to 2015). Roof replacement over the main garage, using a phased in approach, was the recommendation with the highest cost.

Public Works Facility 128 Sackville

Administration Building
The 10,100 sq. ft. Public Works administration building is a 2-storey steel frame building constructed in 1970. It is considered in fair condition, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating. Capital spending of approximately $473,000 was recommended, to be spread over 3 years (2013 to 2015), including some roof replacement, parking lot repaving and continuing the replacement of original windows. Energy efficiency improvements are also recommended.

Public Works Main Garage Building 'A'
The 61,000 sq. ft. main garage is a single storey building with various mezzanines used for equipment maintenance, storage, offices and shops for PW. It was constructed in 1970 at the same time as the administration building and is connected by a corridor. The building is in fair

condition overall, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating. $802,000 of capital spending was recommended over 3 years (2013-2015), including boiler replacement, metal siding replacement and some electrical work. The cafeteria is too small, having been reduced in size to accommodate Parks administration offices, and washrooms and locker rooms are deficient. Many lockers are located in public corridors where workers change to and from their street clothes. This may have been acceptable in the 1970's when all outside workers were assumed to be male, but is no longer acceptable today.

There is also an identified need for a proper indoor vehicle washing area. The current area is outdated and not large enough, and equipment needs to be properly cleaned, particularly in the winter, to ensure vehicle inspections can be performed for safety, and prior to mechanical repair work and maintenance.

1.4 Accessibility Standards

In 2005, the Provincial Government passed the *Accessibility for Ontarians with Disabilities Act* (AODA) to make Ontario accessible by 2025. The City of Sault Ste Marie has committed to meeting the Act by acknowledging and addressing the differing accessibility needs of employees, residents and visitors. The City's Accessibility Plan is a multiyear plan outlining the City's approach to being an accessible and inclusive workplace by preventing and removing barriers and fulfilling its obligations under the AODA.

To do this, the City has committed to comply with the AODA Design of Public Spaces Standards (Accessibility Standards for The Built Environment) when undertaking new construction and redevelopment of public spaces, including locations where the public accesses municipal services.

In 2009, based on a recommendation from the Planning Director, City Council adopted the City of London's Facility Accessibility Design Standards (FADS) for the construction of new municipal facilities or additions to existing buildings. These include standards for entrances, ramps, stairs, elevators, washrooms, parking, lighting, etc. These design standards for municipal offices are intended to address accessibility for staff and visitors alike.

Current Accessibility Issues

The Public Works Facility on Sackville Road was built to the Ontario Building Code in effect in 1970, which did not include today's standards for accessibility. Improvements have been added over time where possible, including curb cuts, accessible parking spaces, and a main entrance ramp. However, much of the facility is considered inaccessible due to the lack of an elevator serving the second floor offices and meeting rooms. Throughout the facility, there are other

barriers including narrow doorways, stairs in the entrance link to the garage and the lack of accessible washrooms on site.
The Transit Bus Depot on Huron Street is about 11 years newer than the Public Works Facility, but does not meet today's accessibility standards either. Although offices are on the main floor, narrow doors and access routes, lack of accessible counter space for Transit and Parking clients and inaccessible washrooms are prevalent. Substantial improvements are needed to meet current standards.

1.5 Problem/Opportunity Statement

The issues facing Public Works and Transit can be summarized into a problem/opportunity statement:
Currently, the City of Sault Ste Marie maintains two separate garage/maintenance facilities for the equipment, vehicles and buses used by Public Works and Transit. Both facilities have many identified deficiencies and deferred maintenance items that will require major capital spending into the future.

Relocating the Transit facility from 111 Huron Street to 128 Sackville Road may reduce both capital and operating costs for the City and provide other efficiencies through the sharing of common functions for these two large City cost centres.
Given the announced upcoming federal funding program for transit projects, an opportunity thus exists to study the feasibility of improving both Transit and Public Works operations by relocating Transit to the Public Works site.

1.6 Class Environmental Assessment Process

Municipal infrastructure projects are required to meet the requirements of the Ontario Environmental Assessment (EA) Act. The Municipal "Class" EA applies to groups or "classes" of municipal road, water, wastewater and transit projects that occur frequently and have relatively minor and predictable impacts. These projects are approved under the EA Act, as long as they are planned, designed and constructed according to the requirements of the Class EA document. A flow chart detailing the Municipal Class Environmental Assessment Planning and Design Process is included in Appendix 2.

The selection of a preferred alternative is subject to the planning process outlined in the Municipal Class Environmental Assessment document. The preferred solution will be found through the key principles of environmental assessment planning:

- Consultation
- Reasonable range of alternatives
- Consideration of effects on all aspects of the environment

- Systematic evaluation
- Clear documentation
- Traceable decision making

The specific requirements of the Class EA for a particular project depend on the type of project, its complexity and the significance of environmental impacts. Transit projects have a specific section in the Municipal Class EA. To assist proponents in determining the status of projects, four categories of projects are identified, including Schedule “A”,”A+”, “B” and “C” projects:

Schedule A

These projects are limited in scale, have minimal adverse environmental effects, and typically consist of normal maintenance and operational activities. These projects are considered pre-approved and may proceed without following the full Class EA planning process.

Schedule A+

These projects are also limited in scale, have minimal adverse environmental effects, and are considered pre-approved, but there is a requirement for public notification prior to construction or implementation of the project. The purpose of the notification is to inform the public of projects occurring in their local area. Although the public is informed of the project, there is no appeal mechanism to the Ministry of the Environment and Climate Change (MOECC); any concerns raised can be addressed at the municipal council level.

Schedule B

These projects have the potential for some adverse environmental effects, thus requiring a screening process involving mandatory contact with directly affected public and relevant review agencies. If all concerns can be adequately addressed, the project may proceed. These projects generally include improvements and minor expansions to existing facilities.

Schedule C

These projects have the potential for significant environmental effects and are subject to the full planning and documentation procedures specified in the Class EA document. An Environmental Study Report must be prepared and submitted for review by the public and relevant review agencies. If all public and agency comments and issues can be adequately mitigated during the public review period, the project may proceed. These projects generally include construction of new facilities or major expansions to existing facilities.

Initial Schedule Selection

There are a number of alternatives considered to be feasible methods of addressing the problem/opportunity statement. The alternative which potentially has the most impact on the environment involves relocating the storage and maintenance of city transit vehicles to Sackville Road. Description #33 in the Municipal Class Environmental Assessment document for Transit Projects indicates the following is considered a Schedule C activity:

Description #33: Construction of new maintenance facilities in or adjacent to residential land-use or an environmentally-sensitive area including natural heritage features, cultural heritage and archaeological resources, recreational or other sensitive land uses.

The Public Works Centre at 128 Sackville Road is across the street from a residential neighbourhood, accordingly the feasibility study is considered a Schedule C undertaking. This is subject to change should the preferred alternative not include relocating transit maintenance facilities adjacent to a residential land-use.

1.7 Transit Project Assessment Process (TPAP)

It is noted that since the addition of transit projects to the Municipal Class EA process in 2007, the Ministry of the Environment has added an alternative assessment process for transit projects (and Metrolinks Undertakings), under Regulation 231/08 of the Environmental Assessment Act. The Regulation exempts proponents of all transit projects from the Environmental Assessment Act (including the Municipal Class EA process) by creating a specific streamlined and focused process to follow. The process includes consultation, an assessment of potential positive and negative impacts, an assessment of measures to mitigate negative impacts and documentation.

However, to be eligible for this streamlined process the proposed project must meet the following definition:

"transit project" means:

"*An enterprise or activity that is…..(i) a facility or service that…is used exclusively for the transportation of passengers by bus or rail, or (ii) anything that is ancillary… and is used to support or facilitate the transportation of passengers by bus or rail"*

It was concluded that this study does not meet this definition since one of the alternatives being considered includes relocating Transit from Huron Street into a new combined maintenance facility on Sackville Road where all City vehicles and equipment would be serviced and maintained collectively. A combined facility would therefore not be used to "exclusively" support the transportation of passengers.

Accordingly, following discussion with City staff, it was concluded that the evaluation of alternatives should follow the Municipal Class Environmental Assessment process. (See minutes of August 9, 2016 meeting in Appendix 7)

1.8 Publication Notice – Notice of Study Commencement

In order to notify affected/interested residents of the study, a Notice of Study Commencement was published in the Sault Star on Saturday September 3 and Thursday September 8, 2016 (Appendix 3) and placed on the City's web page. Two study areas (Figures 1 & 2) were determined around both existing facilities based on the problem statement. The notice was also mailed to all property owners in the study areas using owner information obtained from the City. In addition, notices were mailed (and faxed and emailed as appropriate) to other parties with potential interest: Garden River First Nation, Batchewana First Nation, Métis Nation of Ontario, Sault Ste Marie Region Conservation Authority, EA Coordinator Ministry of the Environment and Climate Change, and Ward 4 and Ward 5 City Councillors.

Appendix 8 contains copies of correspondence sent to interested parties, and a copy of the 3 responses received from the Notice of Study Commencement from Infrastructure Ontario, Councillor Marchy Bruni and Mr. Frank Darou.

2. PHASE 2

2.1 Identification & Evaluation of Alternative Solutions

Alternative Solutions

The following alternative solutions were considered reasonable and analyzed in this study:

1) Do nothing.
2) Keep the Transit maintenance and storage facility at 111 Huron Street, but address the identified deficiencies at 111 Huron Street and 128 Sackville Road with adequate capital investment. (Stay and Upgrade solution)
3) Relocate Transit from Huron Street to a new and separate facility somewhere on the PW site (Standalone solution)
4) Combine Transit and PW in a fully intergrated maintenace/storage garage with a combined administration area. (Fully Integrated solution)

1) Do Nothing

This alternative represents baseline conditions, and its evaluation is required by the Municipal Class EA process. A decision to "do nothing" would typically be made when the cost of all other alternatives, both financial and environmental, significantly outweigh the benefits. It is not a

preferred solution here since the identified problems are not addressed and with the passage of time, City assets will continue to deteriorate and potential efficiencies will not be realized.

2) Stay and Upgrade

This alternative recognizes the substantial investment the City has made in the PW and Transit buildings on Huron Street and on Sackville Road, and thus considers the capital investments needed to keep them functional, accessible and as efficient as possible for the next 20+ years.

3) Construct a new Standalone Transit Facility at 128 Sackville Road

This alternative would allow the city to sell the Huron Street site, and consolidate City fleet maintenance on one site. This would allow sharing of as many similar staff and equipment maintenance functions as possible, while addressing current Transit deficiencies with a "new build".

4) Provide a new Fully Integrated Transit/PW facility

This alternative combines all maintenance functions under one roof, and thus maximizes the sharing of common functions: administration, locker/washrooms, cafeteria, fueling, vehicle washing, parts store, central lubrication, central body shop, etc.

2.2 Inventory of Natural, Social and Economic Environments

2.2.1 Economic Environment

Public Transit Infrastructure Fund (PTIF)

As previously noted, the recent Federal Transit infrastructure funding announcement at the Sault Transit bus garage on April 8, 2016 indicated that approximately $3.4 billion has been made available to municipalities for transit related projects through the federal government's Public Transit Infrastructure Fund (PTIF), with $1.5 billion allocated to Ontario municipalities. Infrastructure Canada's website indicates "this funding is intended to help accelerate municipal investments to support the rehabilitation of transit systems, new capital projects, and planning and studies for future transit expansion."

It also notes that "eligible investment areas are targeted at meeting immediate public transit priorities that will strengthen communities and grow the economy. Eligible investments include capital projects for the rehabilitation, optimization and modernization of public transit infrastructure, or that improve the efficiency, accessibility and/or safety of public transit infrastructure (including maintenance and storage facilities)"

PTIF total federal funding can be up to 50% of total eligible costs per project. Phase 1 projects are required to be completed by March 31, 2018. Federal funds are expected to be available for future phases; the government's Fall Economic Statement indicated $25.3 billion will be available for Public Transit over the next 11 years (to 2027/28).

Potential Municipal Funding

The balance of funding for any recommended improvements to Transit would need to be provided by the City, potentially in combination with provincial funding. The City also has the ability to debt finance through the issuance of debentures. It is noted that the 2017 staff budget presentation to City Council included for the possibility of an $18 million transit relocation project in 2018/19 consisting of $12 million of other government funding and $6 million raised by the City through debenture.

The economic environment is also affected by the long term prospects of the City's primary employer, Essar Steel Algoma Inc. The company filed for creditor protection under the Companies Creditors Arrangement Act in November 2015, and at the time of writing, is undergoing a Sale and Investment Solicitation Process. The non payment of municipal property taxes by Essar Algoma since November 2015 has had a substantial impact on the City's financal position.

2.2.2 128 Sackville Road

Natural Environment

Tulloch Environmental, a division of Tulloch Engineering (TULLOCH), has completed a Natural Heritage Review for both study areas. (The report can be found in Appendix 4). It outlines the results of a natural heritage desktop review, on-site habitat assessments, assessments of potential impacts of the relocation options, and recommends mitigation methods to address potential impacts. The report should be reviewed, and recommended mitigation methods followed if construction activity is proposed on the Sackville Road site.

Soils and Topography

The underlying bedrock in the Sault Ste. Marie area is of the Cambrian and Precambrian age. Bedrock elevations are approximately 15 metres below the surface in the study area. The natural soils consist of lacustrine clay, with boreholes indicating depths over 6 metres. The permeability of the clay is extremely low and as a result, rainfall and snow melt tend to accumulate on the surface and run off, rather than seep into the ground. The PW site slopes westerly, with approximately 8 meters of fall from Industrial Park Crescent to Sackville Road. This westerly slope has major implications for future buildings on site; any easterly additions to

the existing garage would likely have to be elevated by one storey. The floor of the existing garage slopes 1.4 m from east to west, to accommodate the topography.

Drainage from the site is collected by ditches and swales on both the north and south sides. They connect to the easterly ditch of Sackville Road before entering the City's storm sewer system to the south.

Groundwater Conditions

Groundwater generally flows from the northern areas of the city southerly to the St Mary's River. Boreholes indicate the static water table to be close to the surface (0 to 2 m) in the area. As noted, it is being controlled by roadside ditches on Sackville Road and Industrial Park Crescent, as well as by means of drainage ditches crossing PW property.

Socio Economic Environment

Land Use

The Public Works site at 128 Sackville Road is used for maintaining and storing the majority of the City's fleet of equipment. This includes equipment and vehicles for:

- summer road maintenance
- winter road plowing,sanding and removal
- sanitary and storm sewer repair and maintenance
- traffic controls and municipal signs
- municipal park maintenance and grass cutting

Waste management, landfill and cemeteries' equipment is stored off site, but maintenance on this equipment can take place at 128 Sackville as needed. The administrative offices for the department are also located here.

Land use surrounding the PW site is divided by Sackville Road. On the west side of Sackville Road, from Second Line East north to Mary Street, single family residences are found. On the east side of Sackville, on all sides of PW, light industrial properties are established, including the Soo Mill Roof Truss Division, the Public Utilities Commission (PUC) maintenance facility, S&T Group and Soo Van Moving and Storage.

Zoning and Official Plan

Land Use as indicated on Schedule C of the Official Plan (OP) reflects the above split along the centreline of Sackville Road, with residential uses (R2) on the west side and industrial uses (M2) on the east side of the road. There are two exceptions to this: the Peoples Pentecostal Church, zoned Institutional (I), and the Croatian Housing Association, zoned R4, are on the east

side of Sackville Road, just north of Second Line East. (See Figure 3 for Land Use/Zoning in the area.)
The Public Works property adjoins Industrial Park, an industrial zoned area developed by the City in the 1970/80's to provide land for a variety of industrial uses. PW connects to Industrial Park Crescent along its east property line.

Schedule D – Transportation, indicates both Second Line and Great Northern Road are the two principal urban arterial roads in the area, roads that are " designed to facilitate the movement of large volumes of traffic at a moderate rate of speed over extended distances" according to the OP. The Truck Route map in Traffic Bylaw 77-200 indicates Second Line, Great Northern Road and Industrial Park Crescent are Class A truck routes, where trucking is permitted 24 hours a day, 7 days a week.

Sackville Road Extension

A Schedule C Class Environmental Assessment was conducted by the City in 2012 by Kresin Engineering Corporation to study alternative routes to reduce level of service issues on Great Northern Road (GNR).Traffic volumes have been increasing on GNR following the new hospital construction and continuing commercial development, and are approaching the road's capacity.
Five alternatives to address this capacity problem were analyzed. The Environmental Study Report concluded that the preferred solution is to provide an additional route for north/south traffic on the west side of GNR by extending Sackville Road to Third Line East. The recommended solution would position the road extension along the east side of the utility corridor to avoid existing hydro poles and cause less disruption to the residential properties to the west side of the extension.

The City has yet to schedule the recommended Sackville Road extension in its Capital Works Program, but it is anticipated it will be built within the next few years.

Sackville Road Classification

Sackville Road is considered a collector street and currently provides vehicle access to the residents on the west side of the street, and residents to the north along Mary Street, Northridge Road and Highcrest Street. In addition, the light industrial properties on the east side of the street are accessed via Sackville Road. The most recent traffic count indicates approximately 3690 vehicle use the road, on average, each day. The count was taken over a one week period, just south of Superior Drive in September 2016. It is noted that traffic on the weekend averaged 2332 vehicles per day (vpd) whereas weekday traffic averaged 4370 vpd.

Utilities

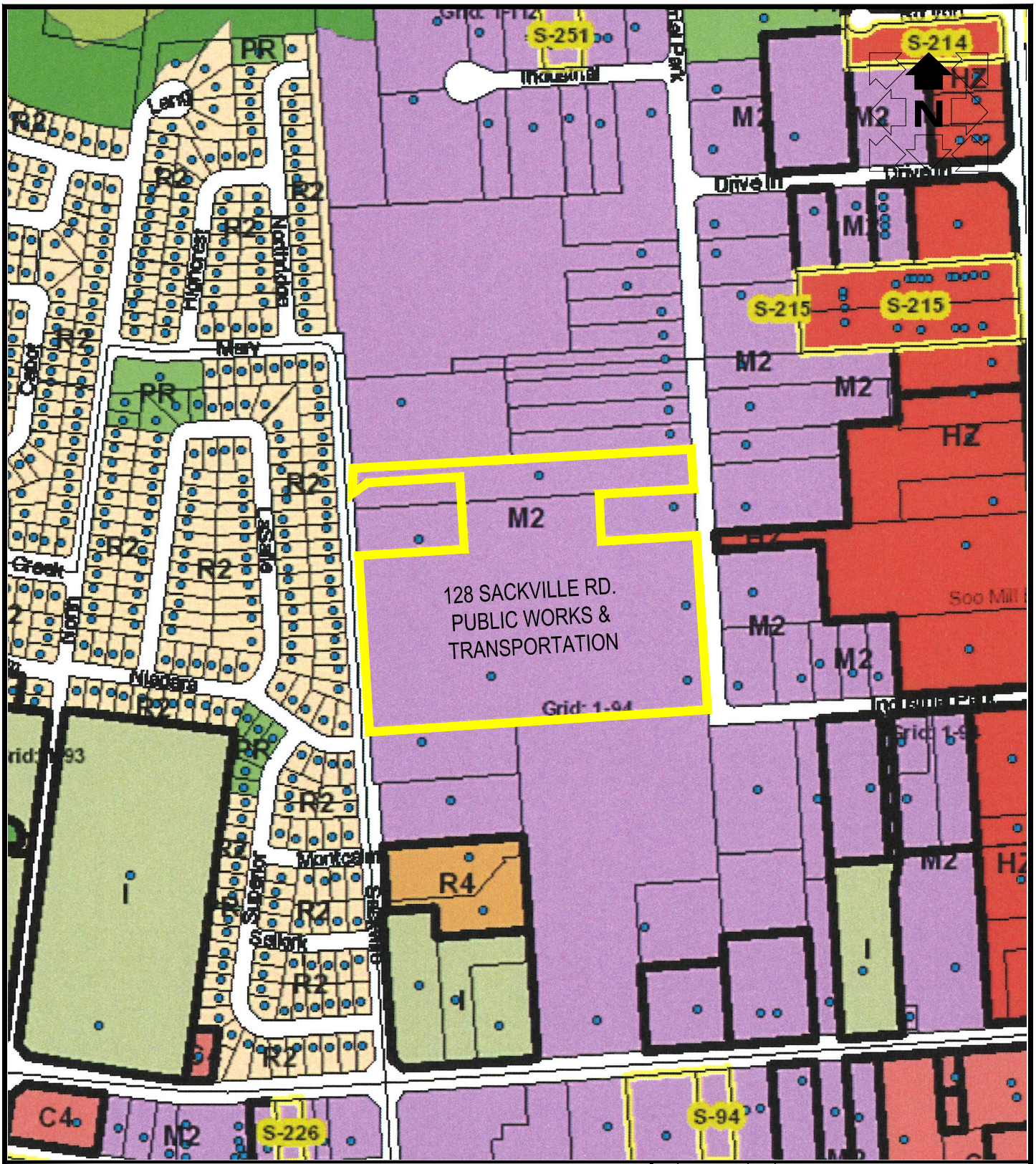

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FIGURE 3

LAND USE ZONING - 128 SACKVILLE ROAD

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Sackville Road, including PW, is serviced with the following utilities:

1. Road, sanitary and storm sewers: City of Sault Ste. Marie
2. Water and electricity: Public Utilities Commission (PUC);
3. Telecommunications: Bell Canada and Shaw Cable;
4. Natural gas: Union Gas.

It is noted that Great Lakes Power Transmission has a 230 kV transmission line on a 200 ft (60.96 m) wide easement which parallels Sackville Road on the east side. The area under this transmission line is used for employee parking, and will continue to be used only for parking. No buildings will be proposed on this easement.

John Rowswell Hub Trail and Area Parks

The John Rowswell Hub trail is located through the Fort Creek Conservation area and along the south side of Third Line, approximately 1 km to the north/northwest of PW. The City's Cycling Design Study, completed in 2014 by MMM Group, proposes a connecting route, or spoke, through Public Works property, connecting Sackville Road with Industrial Park Crescent. There are three network links to the hub trail considered in the study. This particular link forms part of the west route which is planned to eventually connect to Gros Cap in Prince Township. The suggested location on PW property is along the north property line, however, the south property line was also considered.

There are two local parks in the residential neighbourhood to the west: LaSalle Park on North Street at Mary Avenue and Superior Park on Superior Drive at Niagara Drive. Both parks are maintained by the City and used by area residents for recreational activities.

Cultural Environment

Land use planning requirements for municipalities in Ontario require an assessment of archaeological site potential according to the Provincial Policy Statement. The City conducted a study in 2011 to identify areas of archaeological potential city wide. As a condition of approval, archaeological assessments are required when a project proposed by a municipality that is subject to the Environmental Assessment process falls within an area of archaeological potential.
Based on the 2011 review and as indicated in Schedule E of the OP, a section of the northern undeveloped portion of the PW property has potential for archaeological resources. However, Archaeological Policy 2 of the OP notes that "*Archaeological Assessments may not be required in areas that have been subject to previous intensive and extensive soil disturbance.*"

Contact was made with the City's Planning Division, and the following response was received:

"Locally, any archaeological remains are relatively shallow and easily disturbed by activities such as agricultural tilling. A review of historic air photos reveals that the land was cleared and tilled for a short period of time in the early 60's.

Please accept this correspondence as confirmation that an Archaeological Study is not required to develop the northern portion of the PWT property at 128 Sackville Road."

Environmental Compliance Approvals for 128 Sackville Road

In accordance with MOECC requirements, PW has a current Environmental Compliance Approval (ECA) in place to cover emissions and discharges related to air and noise. The City has utilized GHD Canada (formerly Conestoga-Rovers & Associates) to obtain and to renew ECA approvals to date. The following information has been provided by GHD in their annual reporting on behalf of Public Works:

Air Emissions

Public Works was issued an Environmental Compliance Approval with Operational Flexibility (ECA) (Air/Noise) on June 29, 2012, by the MOECC. The ECA approves the Public Works operations including vehicle storage, refueling, and maintenance at the Facility, and provides Limited Operational Flexibility to PW.

A condition of the ECA requires that PW provides an annual written summary of activities undertaken in the previous calendar year. The written summary includes a signed statement that the Facility was in compliance with the performance limits, and a summary of modifications that have taken place and have resulted in a change in the previously calculated concentration at the Point of Impingement (POI) for any Compounds of Concern (COC). The most recent written summary of activities was submitted to the MOECC on August 12, 2016.

Public Works is required under its ECA to maintain vehicle storage, refueling and maintenance activities, including equipment and any other ancillary or support activities, at a facility production limit of up to 500 pieces of equipment stored and 200 vehicles dispatched per day. The facility is currently below these production limits.

The written summary and signed statement provided to the MOECC fulfills the requirement that Public Works provide a signed statement that the facility operated in accordance with the Performance Limits of the ECA.

In 2015, changes were made related to vehicle fueling, including the replacement of the underground tanks with above ground storage tanks and an update of contaminants/emission rates associated with the fuels stored, based on updated Safety Data Sheets (SDS) provided by the fuel supplier. It was concluded that the 2015 changes to the fueling depot meet the intent of the ECA.

It is noted that PWT's ECA was also amended in 2015 to include mobile emergency equipment (generators and pumps). An emergency 250KW generator for standby power was also registered under the Environmental Activity and Sector Registry.

Noise

An Acoustic Assessment Report was also completed by GHD for the City of Sault Ste. Marie Public Works Centre in 2009 and updated in 2013. The assessment focused on the sound emissions from the noise sources identified at the facility with a potential to adversely impact nearby (worst case) sensitive receptors. It was concluded that the facility is noisiest during the snow removal period in the winter months.

Appropriate worst-case sensitive points-of-reception (POR) were identified. They are defined as the sensitive receptors with the greatest potential exposure to the facility noise sources due to proximity and direct line-of-sight exposure. Three PORs were used:

• POR1 – Two-storey Sackville Road Residence, 100 metres west of the Administration building (modeled at a height of 4.5 m above grade)
• POR2 – Two-storey Sackville Road Residence, 92 metres west of the Administration building (modeled at a height of 4.5 m above grade)
• POR3 – Croatian Village, an apartment building 170 metres south of the main garage

The objective of the assessment was to determine the predictable worst-case 1-hour equivalent sound level (1-hour Leq) at the worst-case point(s)-of-reception.

The following sources of noise emitted from Public Works were considered:

- Fourteen (14) exhaust fans
- Two (2) HVAC units
- One (1) Carpentry building dust collector
- One (1) Carpentry building louvre
- One (1) Stationary sand pile front end loader
- Two (2) Carpentry building bay doors
- Four (4) Mechanic bay doors
- One (1) Light duty truck/car route
- One (1) mid-sized duty truck route
- Three (3) plow truck routes
- Three (3) Sander routes
- Three (3) Dump truck routes
- Three (3) Trackless sidewalk machine routes
- Three (3) Grader routes
- Three (3) Front end loader routes

A Noise Abatement Action Plan (NAAP) was created which details the maximum allowable operating scenario for each vehicle at the facility.

GHD's reports conclude that the unattenuated steady-state sound levels estimated at the PORs currently meet the MOECC's minimum exclusionary daytime and nighttime sound level limits, that is, they meet the requirements of NPC-300, " Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning-August, 2013".

GHD also recommended that any future equipment (including vehicles) contribute less than 30 dBA at the applicable POR(s).

2.2.3 111 Huron Street

Natural Environment

Appendix 4 includes Tulloch Environmental's Natural Heritage Review for the Huron Street study area. It outlines the results of a natural heritage desktop review, on-site habitat assessments, assessments of potential impacts of the relocation options, and recommends mitigation methods to address potential impacts. The report should be reviewed and recommended mitigation methods followed if construction activity is proposed on the Huron Street site.

Soils and Topography

The underlying bedrock in the Sault Ste. Marie area is of the Cambrian and Precambrian age. Bedrock elevations vary 3 to 6 metres below the surface in the study area. The natural soils are glacial till in nature, although clay and sand have been observed in area boreholes. The transit site slopes south easterly, with approximately 1 metre of fall across the site.

Groundwater Conditions

Groundwater generally flows from the northern areas of the city southerly to the St Mary's River. Boreholes indicate the static water table to be approximately 3 metres below the surface in the area.

Socio Economic Environment

Land Use/Zoning and Official Plan

The Transit site on Huron Street is zoned M2, Medium Industrial, reflecting its use as a maintenance garage for city buses. The property is surrounded by the Canadian International Bridge Plaza to the north, zoned Institutional (I); the OLG Casino and Ministry of Tourism Information Centre to the east, both zoned C3, Riverfront Zone; the Canadian National Railway to the south, zoned M3, Heavy Industrial; and Studio 10 Hotel to the west, zoned Medium Density Residential (R4). (See Figure 4 for Land Use/Zoning in the area.)

Schedule D of the OP – Transportation, indicates that Queen Street West is an urban collector and Huron Street is an urban arterial road. The Truck Route map in Traffic Bylaw 77-200 indicates that both roads are Class A truck routes, where trucking is permitted 24 hours a day, 7 days a week.

Potential Future Land Use

Should Transit Services relocate from the property at 111 Huron Street, there may be potential for other uses for the property, other than industrial, that reflect the current neighbouring land uses. Its location across from the International Bridge Plaza gives it valuable exposure to international traffic to and from the United States. Several of the adjacent properties are in a state of active redevelopment. At the time of writing, a new Federal Bridge Plaza is under construction, Ontario Lottery and Gaming (OLG) has proposed that the casino be privately operated, and the former St Marys Paper site, south of the railway tracks, is developing as a commercial site reflecting local heritage along with various business uses. The Gateway site to the east, on the south side of Bay St West across from the casino is being marketed for development and has had several proposals since being obtained by the City.

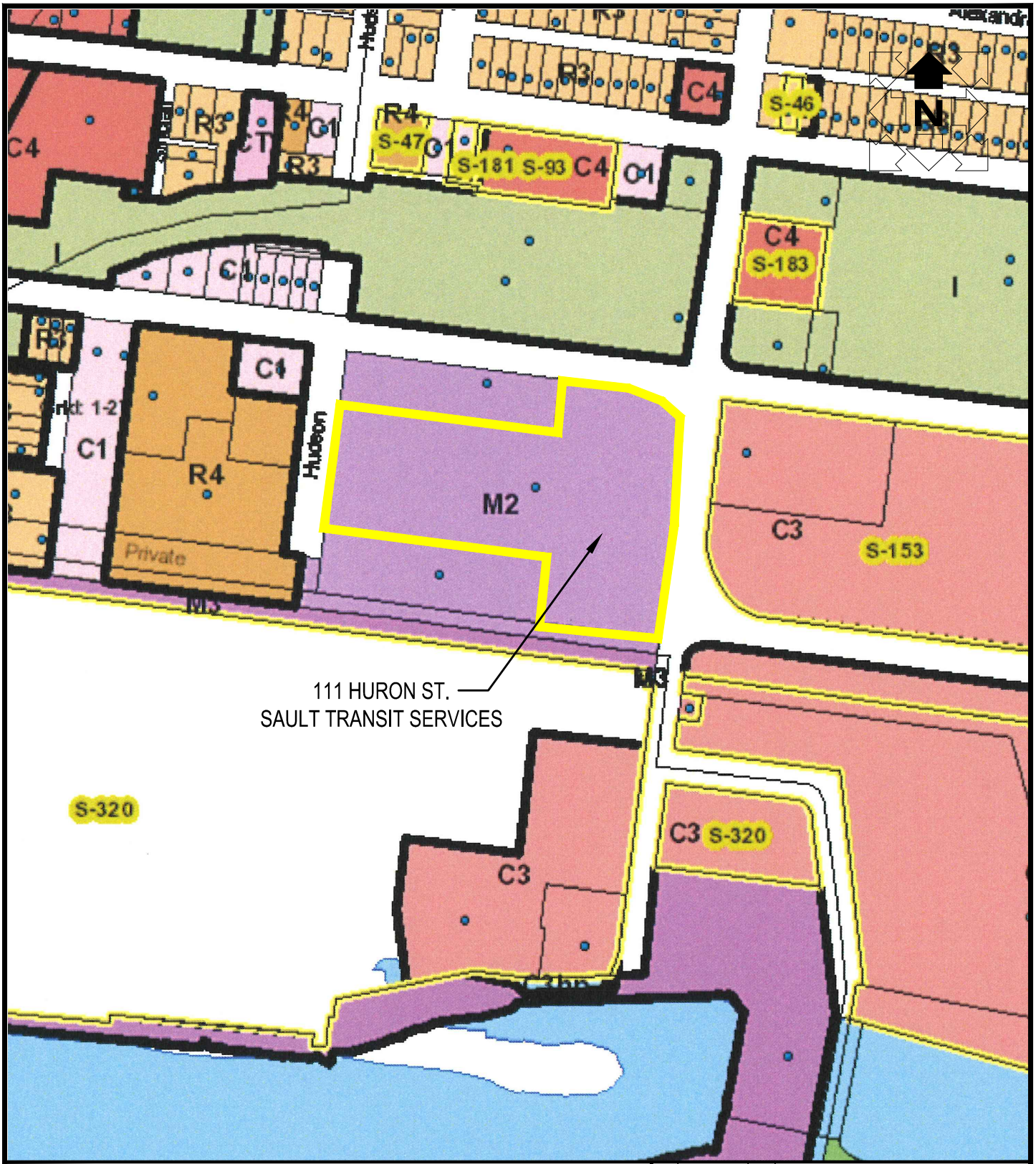
The 111 Huron Street property may prove valuable to the city for tourist or commerce related activities if Transit should relocate in the future.

Cultural Environment

Schedule E of the Official Plan indicates that the 111 Huron Street site has potential for archaeological resources. Should Transit remain on the site and a building addition be proposed, a review may be necessary if the area of construction has not been "*subject to previous intensive and extensive soil disturbance."*

Environmental Compliance Approvals

In accordance with MOECC requirements, Transit has a current Environmental Compliance Approval (ECA) in place to cover emissions and discharges related to air and noise. The City has utilized GHD Canada to obtain and to renew ECA approvals to date. The following information has been provided by GHD in their annual reporting on behalf of Public Works.



PROJECT:

CITY OF SAULT STE. MARIE
TRANSIT RELOCATION
FEASIBILITY STUDY

TULLOCH ENGINEERING

DRAWING:

FIGURE 4

LAND USE ZONING - 111 HURON STREET

No.	DATE	BY	ISSUES / REVISIONS
0	MAY 15, 2017	PM	ISSUED FOR REPORT

DRAWN BY:	CHECKED BY:	PROJECT No. :	
KN	PM	16-1085	
DESIGNED BY:	APPROVED BY:	DRAWING No.	REVISION No.
SCALE: N.T.S.	DATE: MAY 15, 2017	Fig 4	0

K:\2016\Engineering\16-1085 City of SSM Transit Study\16-1000-06 - City SSM Feasibility Study Transit\Figures\Figures.dwg

The Environmental Compliance Approval for Transit differs from the one for Public Works in that it does not have limited operational flexibility. As a result, annual reporting is not required. This reflects the routine daily activities of a Transit maintenance and storage facility.
The current ECA was issued following assessments for air and noise in 2009/2010. The ECA covers:

- natural gas-fired combustion equipment
- ventilation fans
- underground fuel storage
- noise emissions from buses and equipment based on the 2010 Acoustic Assessment Report prepared by Conestoga-Rovers & Associates

The Acoustic Assessment identified two worst case points of reception:

• POR1 – Three storey Hotel, west of the facility (7.5 m above grade)
• POR2 – Residential zoned land, west of the facility (1.5 m above grade)

A Noise Abatement Action Plan (NAAP) was created that details appropriate attenuation measures to be implemented to control adverse impact at the points of reception. Restrictions were placed on bus idling on the west side of the facility, when the western bay doors can be left open, and limiting the operation of the welding bench exhaust fan to daytime hours only.

The assessment concluded that the facility-wide attenuated steady-state sound levels estimated at the points-of-reception are below the MOE sound level limits based on the implementation of the proposed controls defined in the NAAP.

2.2.4 Assessment of Sault Transit Garage Location by Transit Consulting Network

Wally Beck, from Transit Consulting Network, was engaged to provide a review of operations and a current assessment of the 111 Huron Street site to assist in determining which alternative should be brought forward as the “recommended alternative” for the class EA. An assessment of the current facilities requirements and functionality is provided in the report, along with an analysis of the impacts relocation would have on deadhead and greenhouse gas emissions (GHGs). The report is found in Appendix 5.

In summary, many issues will need to be addressed if Sault Transit is to continue to operate from the 111 Huron Street site as detailed in the assessment, including many of those identified in the 2013 Asset Management Facility Condition Assessment.

Relocating buses to the PW site is also feasible, but operating costs and GHG emissions are currently estimated to be higher due to an increase in deadhead costs (costs to operate buses

"out of service", i.e. to and from the garage). This, however, may not be the case in the future if routes are adjusted to minimize deadhead travel, and engine technologies introduced that improve emissions and reduce fuel consumption.

2.2.5 Requirements Report by Perry and Perry Architects Inc.

A Program of Requirements was developed by Perry & Perry Architects Inc to assist in determining the potential to integrate transit operations on the Sackville Road site. The report is found in Appendix 6. It reviews key functional requirements and relationships, general design considerations for the facilities and provides concept designs and preliminary project budgets. The study analyzed three options:

I. Addition/Renovation at 111 Huron St & PW Upgrades at 128 Sackville Rd
II. Addition/Renovation at 128 Sackville Rd - Integrated Option A
III. New Building at 128 Sackville Rd – Integrated Option B

Class D cost estimates are provided in the report as preliminary project budgets:

I.	Addition/Renovation at 111 Huron St & PW Upgrades	$16M
II.	Addition/Renovation at 128 Sackville Rd Integrated Option A	$36M
III.	New Building at 128 Sackville Rd Integrated Option B	$60M

2.3 Evaluation of Alternative Solutions

As noted, the following alternative solutions were initially considered reasonable:

1) Keep the Transit maintenance and storage facility at 111 Huron Street, but address the identified deficiencies at 111 Huron Street and 128 Sackville Road with adequate capital investment. (Stay and upgrade solution)
2) Relocate Transit from Huron Street to a new and separate facility somewhere on the PW site. (Standalone solution)
3) Combine Transit and PW in a fully integrated maintenace/storage garage with a combined administration area. (Fully integrated solution)

Alternative solution #3 was subsequently further divided into two options:

- Option A: build an integrated facility housing Transit and PW at 128 Sackville Road. This concept utilizes the existing PW garage and adds an attached two storey administration wing and transit garage on the north east corner of the existing garage.
- Option B: construct a new building facing Industrial Park Crescent, housing both PW and Transit, including an administration wing.

2.3.1 Evaluation Criteria

In order to evaluate the alternative solutions, the following evaluation criteria were developed. The ratings are shown in Table A below and should be read as the higher the number of asterisks (***) the better the expected result (i.e. the less impact on the environment or the lower the cost).

1) Effectiveness: How well will the alternative solve the problem, as identified in the problem statement? Has the Transit building, as an asset, reached the end of its useful economic life, or can it continue to provide the required level of service if modified? Will a standalone building on site be efficient?
2) Natural Environment: Are impacts to the natural environment minimized? (Note: there are no long term effects anticipated with any alternative, mitigation methods are suggested if woodlot habitat cleared).
3) Cultural, social, economic environments: All undertakings have some negative impacts on people (residents, passengers, business owners, motorists, employees, etc.), possibly short and/or long term. To what extent does the alternative minimize the negative impacts on the social, cultural and economic environments? Examples:
    - increased bus traffic on Sackville Rd adjacent to residential area
    - effects of increased employee generated traffic and parking lot size
    - increased air emissions and noise from maintenance/storage garage
    - economic impact on downtown by transferring employees and closing Transit building
    - workplace effects, union negotiations needed, new work environment

4) Property effects: Is property required to be purchased, or are easements required from private property? Other than costs, what are the effects of vacating 111 Huron St?

5) Cost implications: How cost effective is the alternative in solving the problem? Considerations:

    - available federal/provincial funding for each alternative (Transit oriented funding versus any PW specific funding)
    - Value of 111 Huron Street if listed for sale (potentially a contaminated site, Essar Steel sewer easement under building, new bridge plaza design established)

- City's willingness to debenture for capital funding
- Any deadhead cost savings?
- Efficiency gains and associated cost savings by combining common activities: stores, dispatching, fueling, equipment maintenance, administration functions etc.

2.3.2 Table A - Evaluation Results

Evaluation Criteria	Alternative #1 Stay at Huron and Upgrade both Existing facilities	Alternative #2 New Transit building as Standalone at #128 Sackville	Alternative #3 Option A Fully Integrated Addition at #128 Sackville	Alternative #3 Option B New Fully Integrated Facility at #128 Sackville	Alternative #4 Do Nothing	Rationale
Effectiveness	****	**	***	******	Not effective, so not considered further; other alternatives viable	Alternative #3 B considered most effective due to sharing possibilities, work flow, best use of site restrictions and reduced # of buildings being owned and maintained in the long term
Natural Environment	****	***	***	***		Staying at Huron St does not require the loss of the woodlot on the north side of Sackville property
Cultural, Social, Economic Environments	*****	**	**	***		Staying at Huron eliminates effects of buses on Sackville residents and effects on employees/public due to a transferred workplace
Property Effects	***	**	**	**		Staying at Huron eliminates need to market property or purchase property on Industrial Park
Cost Implications to City	******	***	**	*		Staying and upgrading is lower cost than new buildings, but can still potentially trigger government funding.
Totals	22	12	12	15		Alternative 1 scores the highest
Class EA Schedule	A+	C	C	C		Staying at Huron is a Schedule A+, but the EA has moved into Phase 2 and will be completed as a Schedule B to document study in a Project File Report.

2.3.3 Evaluation Rationale

Alternative #1 Stay and Upgrade

This alternative scores highest as it offers an effective solution to the problem statement at the lowest cost. It also minimizes impacts on the natural environment and the cultural and social environments.

Alternative #2 Standalone Option

Alternative #2 does not offer much advantage to addressing the roblem statement and, in fact, was eliminated during the course of the study, and not advanced in the final draft of the Requirements Report. (See minutes of December 14, 2016 meeting in Appendix 7.)
The current layout at the Huron Street site is near to what is considered the ideal building layout to accommodate bus maintenance and storage for the City's fleet. (See, Requirements Report, Appendix 6, page 8.) Constructing a standalone building of similar design at the Sackville Road site would limit the sharing of common functions. Activities such as dispatching, fueling, bus washing, training, parts inventory, provision of locker/shower rooms and administration would be located too far away to be considered shareable with PW. Increases in deadhead costs and greenhouse gas emissions is also of concern as noted in the Transit Consulting Network report (see Appendix 5). Therefore, replicating the existing building as a standalone structure on the Sackville Road site was eliminated as an alternative.

Alternative #3 Fully Integrated Facility, Option A

Option A of Alternative #3 presents difficulties in that constructing a major garage and office administration addition onto the existing PW garage does not achieve the desired results. To address the site's grade differential, a two storey administration wing would be utilized to connect the two garage buildings, with the Transit garage constructed one storey (3-4 metres) higher in elevation than the existing PW garage. The two work areas would be separated and would interconnect by means of a stairway and an elevator, resulting in considerable loss of functionality.

As well the administration wing would be located in the centre of the Sackville Road site. Public access would therefore need to be provided to the centre of the complex, conflicting with operations and existing heavy equipment circulation routes.

Alternative #3 Fully Integrated Facility, Option B

In the long term, this alternative is considered the most effective as it would leave the City with a new and modern Public Works/Transit facility, addressing all deficiencies and providing the City with a reliable and cost effective hub to operate infrastructure maintenance and transit

activities from for the next 20+ years. The high cost, however, scores the alternative low, primarily due to the current economic climate.

2.4 Selection of Recommended Alternative

The preferred solution to address the problem statement therefore is to provide the necessary upgrades and additions to both 111 Huron Street and 128 Sackville Road (Alternative #1) as detailed in this report and in the *Assessment of Sault Transit Garage Location* and the *Requirements Report* (Appendices 5 & 6).

2.5 Publication Notice – Notice of Study Completion

In order to notify affected/interested residents of the findings of the study and to seek input, a Notice of Study Completion detailing the recommended alternative was published in the Sault Star on Saturday July 8 and July 15, 2017 (Appendix 9) and placed on the City's web page. The notice was also mailed to all property owners in the two study areas using owner information obtained from the City. In addition, notices were mailed (and faxed and emailed as appropriate) to other parties with potential interest: Garden River First Nation, Batchewana First Nation, Métis Nation of Ontario, Sault Ste Marie Region Conservation Authority, EA Coordinator Ministry of the Environment and Climate Change, and Ward 4 and Ward 5 City Councillors.

2.6 Project File Report

The completion of this Project File Report and filing of the Notice of Study Completion concludes the Class EA process for this project. The report is made available to the public for review upon request for thirty (30) calendar days. If concerns regarding the project cannot be resolved in discussion with the City of Sault Ste Marie, a person or party may request that the Minister of the Environment and Climate Change make an order for the project to comply with Part II of the *Environmental Assessment Act* (referred to as a Part II Order), which requires an Individual Environmental Assessment. Requests must be received by the Minister within the 30-day review period. If no new or outstanding concerns are brought forward during the review period, the City may complete detailed design and construction of the project.

APPENDIX 1

Previous Studies, Reports and References

General Reports

1. The Corporation of the City of Sault Ste Marie Asset Management Facility Condition Assessment; April 2014, Morrison Hershfield Ltd.
2. Great Northern Road Corridor Traffic Capacity Improvements; Environmental Study Report, February 2012; Kresin Engineering Corporation.
3. Trans Canada Trail Route Investigation: Sault Ste Marie Cycling Design Study, July 2014, Marshall Macklin Monaghan Limited (MMM) MMM Group
4. City of Sault Ste Marie Official Plan 1996, Amended 2003, City website November 2012
5. Geotechnical Study, City of Sault Ste Marie; The Trow Group, January 1977
6. Municipal Engineers Association: Municipal Class Environmental Assessment, October 2000, as amended in 2007 and 2011.
7. Infrastructure Canada/Public Transit www.infrastructure.gc.ca

Transit Reports

1. 2012 – 2016 Public Transit Operations Review – Sault Ste. Marie, December 2011, HDR.
2. Comprehensive Transit Operational Review of Existing Services with Ridership Growth Plan and Asset Management Plan, March 2006; iTRANS Consulting Inc.
3. Acoustic Assessment Report, Transit Services Centre, Sault Ste. Marie – June 2009, Conestoga-Rovers & Associates.
4. Roof Condition Report, Transit Facility – April 2007; M.R. Wright & Associates Co. Ltd.
5. Administrative Plan 1992-96 – Sault Ste. Marie Transit, December 1991, IBI Group.
6. Service Plan 1992 - 96, Sault Ste. Marie Transit – December 1991, IBI Group.
7. Sault Ste Marie Transit Maintenance Facility Drawings, February 1981, DelCan Deleuw Cather Canada Ltd.

Public Works Reports

1. Rooftop Solar Photovoltaic System at Transit Services and Public Works and Transportation-Feasibility Study – January 2011; AECOM.

2. Asbestos Management and Control Plan – PWT Sackville Road, Administration Building "A" and Garage "A" – 2008; Harris Building Science Inc.

3. Comprehensive Energy Assessment – October 15, 2009; IB Storey Professional Energy Solutions.

4. Electrical System Analysis, Public Works and Transportation, 128 Sackville Road – July 28, 2010; S&T Group.

5. City Works Centre Vehicle Storage Building – June 24, 1988; Gugula/Smedly/Mezzomo.

6. Public Works and Transportation New Generator Installation – January 08, 2014; Tulloch Engineering/NorMech Engineering.

7. NorSteel Buildings Limited Foundation Plan & Typical Pier/Footing Details. Storage Garage Building "O" Public Works and Transportation, 128 Sackville Road - June 12, 2013; A-D Engineering Group Ltd.

8. Upgrade of Water Line at Public Works and Transportation, 128 Sackville Road – January 2014 – WSP Group.

9. Public Works and Transportation Storage Garage Building "O" – Electrical and Ventilation Installation – July 2013; NorMech Engineering.

10. Public Works and Transportation, Storage Building Fire Alarm Upgrade – March 2015; NorMech Engineering.

11. Board of Works Centre Drawings – June 1969; Marani/Rounthwaite & Dick.

12. Board of Works Centre, Detail Drawings – June 1969; Marani/Rounthwaite & Dick.

13. Sault Ste. Marie Transit Maintenance Facility Drawings – February 16, 1981; DeLCan, De Leuw Cather, Canada Ltd. Consulting Engineers and Planners.

14. Acoustic Assessment Report, Public Works Centre, Sault Ste. Marie – June 2009, Conestoga-Rovers & Associates.

APPENDIX 2

Municipal Engineers Class EA Planning and Design Process Flowchart

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PROJECT:
CITY OF SAULT STE. MARIE
TRANSIT RELOCATION
FEASIBILITY STUDY

TULLOCH ENGINEERING

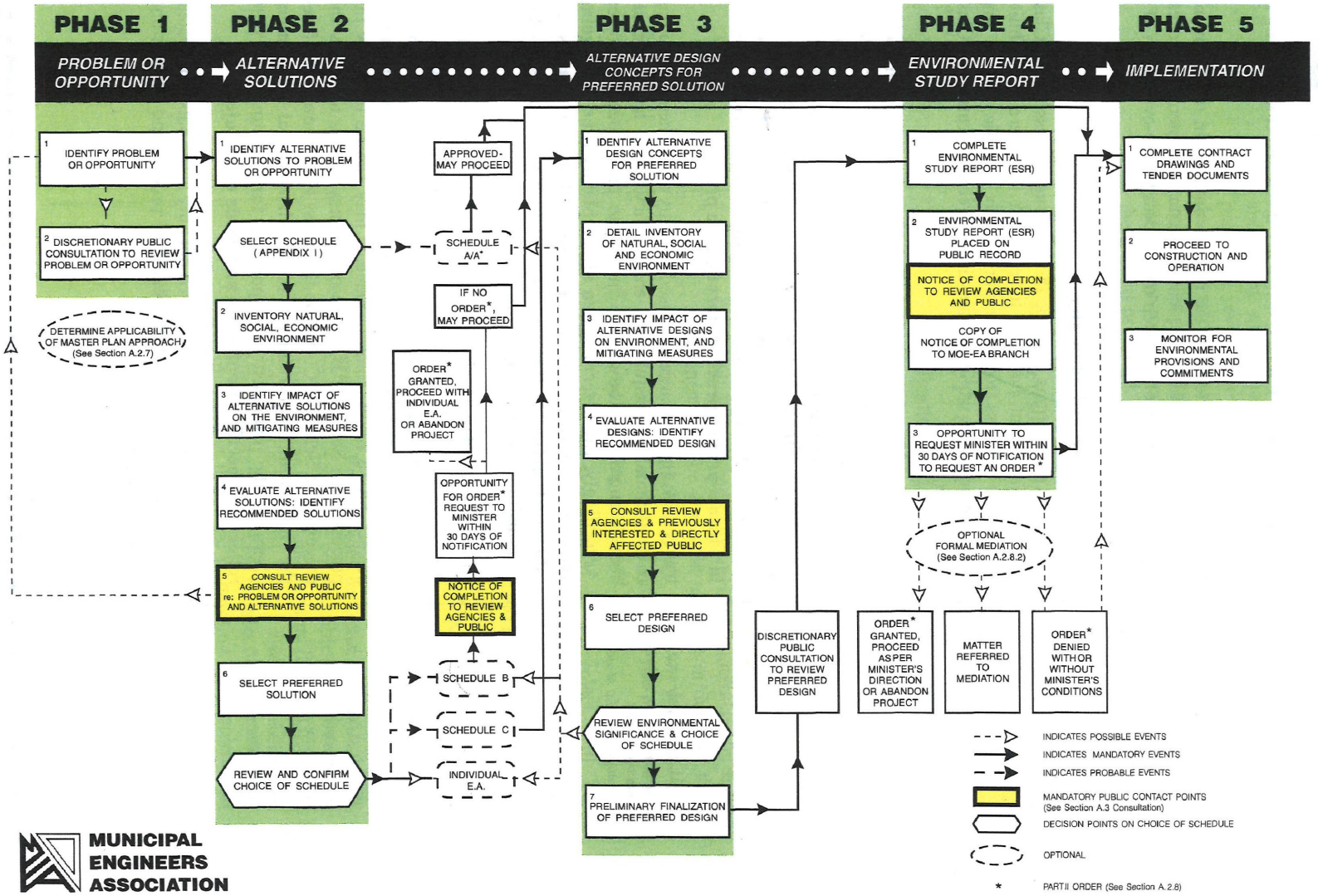
DRAWING:
APPENDIX 2
MUNICIPAL CLASS EA PLANNING
& DESIGN PROCESS

No.	DATE	BY	ISSUES / REVISIONS
0	MAY 15, 2017	PM	ISSUED FOR REPORT

DRAWN BY: KN
CHECKED BY: PM
DESIGNED BY:
APPROVED BY:
SCALE: N.T.S.
DATE: MAY 15, 2017
PROJECT No. : 16-1085
DRAWING No. Ap 2
REVISION No. 0

EXHIBIT A.2 MUNICIPAL CLASS EA PLANNING AND DESIGN PROCESS

NOTE: This flow chart is to be read in conjunction with Part A of the Municipal Class EA



MUNICIPAL ENGINEERS ASSOCIATION

APPENDIX 3

Notice of Study Commencement

Notice of Study Commencement

Feasibility Study

Relocation of City Transit Garage and Administration Offices

The Study

The City of Sault Ste Marie has initiated a Class Environmental Assessment (EA) to evaluate the feasibility of relocating the City Transit maintenance garage and administrative offices from the current location at 111 Huron Street to the Public Works Centre at 128 Sackville Road. The relocation would not affect existing transit routes or parabus operations.

The Process

The project is being planned as a Schedule C project under the Municipal Class Environmental Assessment process.

A key component of the study will be consultation with interested stakeholders (public and review agencies). A Public Information Centre (PIC) will be held this fall, at a date to be announced, to present the alternatives and to consult with interested parties on the project, the environmental impacts of the potential relocation and the identification of reasonable measures to mitigate any adverse impacts.

Upon completion of the study, an Environmental Study Report will be prepared for public review and comment.

How to Get Involved

Public consultation is invited and encouraged. The City of Sault Ste Marie wants to ensure that anyone interested in this study has the opportunity to get involved and provide input. To get involved in the study you can contact us at any time to express your interest and to be added to the study contact list, or interested persons can attend the PIC once scheduled. The initial contact list includes all property owners on Sackville Road and those bordering 128 Sackville Rd and 111 Huron Street.

Further details regarding the PIC, including the time and location, will be advertised in the Sault Star and mailed to those on the contact list in a subsequent notice, in the coming months.

For more information, please contact:

Pat McAuley P. Eng.
Tulloch Engineering
71 Black Rd Unit 8
Sault Ste Marie ON.
P6B 0A3
Phone (705) 949-1457
pat.mcauley@tulloch.ca

Susan Hamilton Beach P. Eng.
City of Sault Ste. Marie
128 Sackville Rd
Sault Ste. Marie, ON
P6B 4T6
Phone (705) 759-5207
s.hamiltonbeach@cityssm.on.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

APPENDIX 4

Natural Heritage Review

TULLOCH Environmental

TULLOCH
ENVIRONMENTAL

ENVIRONMENTAL SERVICES

Sault Ste. Marie Transit Expansion/Relocation
Tulloch Project # 16-1085

November 2016

TULLOCH

2 November 2016

City of Sault Ste. Marie
128 Sackville Rd.
Sault Ste. Marie, ON
P6B 4T6

Attention: Susan Hamilton Beach, P. Eng.

Re: Sault Ste. Marie Transit Expansion/Relocation – Preliminary Natural Heritage Reviews for Current and Potential Future Transit Depot Sites.

1. BACKGROUND

1.1 General

Tulloch Environmental, a division of Tulloch Engineering (TULLOCH), was retained by the City of Sault Ste. Marie to perform natural heritage reviews of the Sault Ste. Marie Transportation public office and garage complex (111 Huron Street) and the Public Works Centre (128 Sackville Road) in support of a Schedule C project under the Municipal Class Environmental Assessment process. Assessments are preliminary and are intended to compare the potential natural heritage impacts of four possible alternatives for the expansion or relocation of the Sault Ste. Marie Transportation administrative office and maintenance facilities.

This report outlines results of a natural heritage desktop review, two on-site habitat assessments, assessments of potential impacts of four relocation options, and recommended mitigation addressing potential impacts. TULLOCH is not currently aware of any specific developments planned at either site location; all information provided herein is therefore preliminary based on typical impacts expected for similar developments.

1.2 Study Area and Project Description

In an effort to modernize and grow their garage and administrative infrastructure, as well as to offer improved service to the general public, the City of Sault Ste. Marie (the City) is investigating options to expand and/or relocate the Sault Ste. Marie Transportation administrative office and maintenance complex. The complex is currently located at 111 Huron Street (Figure 1). As of the creation of this report, TULLOCH has been presented with four options being considered by the City:

1. Do nothing.
2. Perform upgrades to existing complex at 111 Huron Street, including a new roof, equipment and possibly an office expansion.

3. Build a new garage/storage facility at the current Public Works complex at 128 Sackville Road as a standalone building, sharing the existing office, fueling and cafeteria spaces.
4. Build a new integrated public works and transit garage at 128 Sackville Road where fleet maintenance and vehicle storage is shared.

The current Sault Ste. Marie Transportation public office and garage complex at 111 Huron Street (henceforth the Huron Site) is a 1.7 ha facility located in downtown Sault Ste. Marie that consists of single structure integrating both an administrative office section and a series of indoor garage and storage spaces. The Public Works complex at 128 Sackville Road (henceforth the Sackville Site) is a 10.3 ha facility located in the northern industrial park area of the City. It is comprised of approximately 20 permanent structures that serve administrative, workspace and storage functions.

The 'Study Area' is defined in this report as including both the Huron and Sackville sites plus a study buffer at each site (Figure 1). A study buffer of 500m is applied to the natural heritage desktop review portion of this report. The study buffer for on-site habitat assessments is considered all areas visually assessable from within property boundaries and the public areas immediately adjacent. The latter buffer is restricted largely due to access issues associated with private land that encircled both properties.

2. NATURAL HERITAGE DESKTOP REVIEW

2.1 Sources Reviewed

A background natural heritage review was conducted to determine which natural heritage features exist, or have the potential to exist, within the defined Study Area and its general vicinity.

Records and resources searched as part of the background review are listed in Table 1. Communications with regulatory authorities are provided in Appendix A

Table 1 - Records and resources searched in background review.

Record Source		Records Requested and/or Reviewed
Ministry of Natural Resources and Forestry (MNRF) Sault Ste. Marie District	**Date of Request:** September 22, 2016 **Date of Data Receipt:** September 28, 2016	**Derek Goertz** Management Biologist Existing environmental values information, including any sensitivities and environmental constraints.
Natural Heritage Information Centre (NHIC)	**Accessed:** September 22, 2016	Natural Heritage Mapping Tool Square # **16GS0354**, **16GS0355** **16GS0457** and **16GS0557** were searched for: • Rare species • Rare plant communities • Natural Heritage Areas • Invasive species • Wildlife concentration areas
MNRF Species at Risk in Ontario (SARO) List	**Accessed:** September 22, 2016	Determine SAR within range and their status.
MNRF Fish ON-line	**Accessed:** September 22, 2016	Reviewed known fish species present in Lake Huron.
Ontario Breeding Bird Atlas (OBBA)	**Accessed:** September 22, 2016	Determine migratory birds, including SAR within block #: **16GS05**
Ontario Butterfly Atlas Online (OBAO)	**Accessed:** October 14, 2016	Determine SAR within range and their status.
Ontario Nature Mammal Atlas	**Publication Date:** 1994	Species range maps.
Land Information Ontario (LIO)	**Accessed:** October 18, 2016	Accessed 54 GIS spatial data files regarding known significant habitats including: • Significant Wildlife Habitats • Wildlife Nesting Areas • Provincially Significant Wetlands • Areas protected federally, provincially or municipally

2.2 Protected Areas

Reviews of data provided by Land Information Ontario in conjunction with communications with the Ministry of Natural Resources and Forestry (MNRF) have identified no federal, provincial or municipal parks or conservation reserves within 500m of the Study Area. Whitefish Island, located 640m south of the Huron Site, is land reserved for the Batchewana First Nation. The Fort Creek Conservation Area is located approximately 550m west of the Sackville Site. No Areas of Natural or Scientific Interest exist within 1000m of the Study Area.

2.3 Species at Risk

Species at Risk (SAR) included species identified federally under the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) and provincially under the Committee on the Status of Species at Risk in Ontario (COSSARO). Species and their habitat listed as endangered or threatened are regulated federally under the Canadian Species at Risk Act (SARA S.C. 2002 c.29) and provincially under the Ontario Endangered Species Act (ESA S.O. 2007 c.6). In some instances, species listed as special concern may also receive habitat protection under the 2014 Provincial Policy Statement (PPS; MMAH 2014); see Section 2.6 Significant Wildlife Habitat, below.

The MNRF has identified 51 species at risk (SAR) associated with the Sault Ste. Marie District (complete list is provided in Appendix A). MNRF records indicate that Milksnake (*Lampropeltis triangulum*) has been observed within 500m of both the Huron and Sackville Sites. As of June 2016, Milksnake is no longer listed provincially as an ‘at-Risk’ species (formerly considered special concern) but the species remains federally listed as special concern. Bank Swallow (*Riparia riparia*; threatened) is also associated with the area. Lake Sturgeon (*Acipenser fulvescens*; threatened) and American Eel (*Anguilla rostrate*; endangered) are also associated with the St. Mary’s River, which is approximately 200m south of Huron Site.

2.4 Locally Rare Species

The NHIC identifies two locally rare species that are associated with the Study Area. Oval-leaved Bilberry (*Vaccinium ovalifolium*) has been identified within 500m of both the Huron and Sackville Sites. Greene's Rush (*Juncus greenei*) and American Brook Lamprey (*Lampetra appendix*) have been observed within vicinity of the Huron Site and adjacent St. Mary’s River.

2.5 Significant Wildlife Habitat

Significant Wildlife Habitats (SWH) are outlined in the Significant Wildlife Habitat Technical Guide (OMNR 2000) as natural heritage areas that are “ecologically important in terms of features, functions, representation and amount and contribute to the quality and diversity of an identifiable geographic area or Natural Heritage System”. The alteration and development of

SWH is prohibited under the 2014 Provincial Policy Statement (PPS). SWH are considered according to four broad categories:

- Seasonal concentration areas (i.e., winter deer yards, colonial bird nesting sites, reptile hibernacula);
- Rare vegetation communities or specialized habitat for wildlife (i.e., alvars, rare forest types, moose aquatic feeding areas, amphibian woodland breeding ponds, turtle nesting habitat);
- Habitat of species of conservation concern (i.e., species identified as special concern federally or provincially, and species listed as rare or historical in Ontario based on records kept by the NHIC (i.e. S1- Critically Imperiled, S2- Imperiled, S3- Vulnerable and SH - Historic ranks); These ranks are not legal designations but are assigned in a manner to set protection priorities); and,
- Animal movement corridors (i.e., naturally vegetated corridors or man-made features such as power transmission and pipeline corridors that provide animal movement from one habitat to another).

A review of data provided by Land Information Ontario and communications with the MNRF found no records of Significant Wildlife Habitat within 1000m of either the Huron or Sackville Sites (Appendix C).

2.6 Migratory Birds

The Migratory Birds Convention Act (MBCA 1994) prohibits the disturbance and destruction of migratory birds, their nests and eggs. Environment and Climate Change Canada has developed a number of tools, including the general nesting calendars (http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1) and avoidance guidelines (http://ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1) to support compliance with the Act.

2.7 Fisheries and Fish Management Objectives

The Huron Site is located 200m north of St. Mary's River and 280m west of Fort Creek; a tributary to St. Mary's River. The MNRF has indicated that no fisheries data exists for Fort Creek but 58 fish species are known to occur in the St. Mary's River, which is considered a cool water ecosystem. A full listing of fish species attributed to the St. Mary's River is provided in Appendix A.

The MNRF has indicated that the St. Mary's Rapids provide critical fish spawning and nursery habitat, but that these areas are well removed (approximately 1000m) from the Huron Site. The MNRF also reports several barriers to fish passage that may impede some species from passing from the St. Mary's River to Lake Superior, including: Clergue Generating Station, compensating gates, St. Mary's Rapids, and the canal system.

The MNRF has identified the St. Mary's River as an Area of Concern (AOC) under the Canada-United States Great Lakes Water Quality Agreement. See Environment Canada's website (http://www.ec.gc.ca/raps-pas/default.asp?lang=En&n=6D2EB6E1-1) or the Bi-National Public Advisory Council's website (http://bpac.algomau.ca/) for further details. Programs are underway to reduce pollutant input (e.g. petrochemicals, suspended solids, phenols, ammonia and biological oxygen demand) and restore habitat along the river and its tributaries. Future programs will focus on addressing contaminated sediment, stormwater runoff, and fish and wildlife habitat in the St. Mary's River.

The Sackville Site is located 640m east of an unnamed headwater tributary to Fort Creek and constructed drains exist on and around the site. No data is available.

The MNRF has indicated that any in-water work must be performed between July 16 and August 31 (inclusive) in order to safeguard fish spawning activity. This timing window reflects the known species community within vicinity of the Huron and Sackville Sites and could be adjusted, at the discretion of the MNRF, depending on the exact nature and location of intended development. All in-water work, including within the above timing window, must avoid causing serious harm to fish as stipulated in the Fisheries Act. See Fisheries and Oceans Canada (DFO) website for further information: http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html. The DFO may need to be consulted depending on the nature of any in-water work. Before commencing in-water work, see the DFO self-assessment tool to determine if a project review is required: http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html.

The MNRF has indicated that baitfish licenses are assigned on a Township basis and that an active license exists for Township of Tarentorus. Exact locations of harvest are not known.

Fish community objectives are presented in detail in the Great Lakes Fisheries Commission's *Fish Community Objectives for Lake Huron*.

3. FIELD INVESTIGATION METHODS

3.1 Habitat Assessment

The Study Area for on-site habitat assessments includes the property boundaries of the Huron and Sackville Sites and all areas visually assessable from within the property and public areas immediately adjacent. This definition reflects restricted access associated with private land that encircles both properties.

Existing environmental conditions and the presence or potential presence of natural heritage features within the Study Area were assessed by a TULLOCH biologist (terrestrial ecologist)

and a fisheries specialist. Both staff have extensive experience in the identification of flora and fauna (including SAR and their habitat), as well as the identification of SWH as described in the *Significant Wildlife Habitat Technical Guide* (OMNR 2000). The qualifications of all site investigators can be found in Appendix B.

The Study Area was investigated using general reconnaissance methods performed by foot. Aerial imagery of the Study Area and information gained from the natural heritage desktop review were evaluated prior to field assessments to identify priority areas on site. Survey effort varied depending on the potential for an area to possess natural heritage features, as well as the topography and homogeneity of the area. Incidental observations were also collected in transit across the site while performing targeted surveys.

Field observations and spatial data were collected using a combination of traditional field data journaling and GPS mapping. GPS data was uploaded to ArcGIS 10.2 for mapping and is considered accurate to within 3-10m.

4. FIELD INVESTIGATION RESULTS

4.1 Habitat Assessment

Field Assessments were performed at both the Huron and Sackville Sites on October 12, 2016 (Figures 2A and 2B). Field investigations were led by Kelly Major (terrestrial ecologist), assisted by Jennifer Beasley (fisheries specialist) and accompanied by Pat McAuley (Project Manager and Engineering Senior Advisor).

4.1.1 111 Huron Street – Transportation Public Office and Maintenance Garage

Little habitat and no natural environment exists at 111 Huron Street. The property includes a single multi-section building approximately 0.4 ha (47,000 sq./ft.) in area on a 1.7ha lot with paved and gravel parking areas dominating the lot's east, west and south sides. Adjacent land uses are a mix of commercial and industrial spaces including newly constructed parking areas to the north, casino parking to the east, rail lines and a demolished building foundation to the south, and commercial businesses and parking to the west.

Habitat exists on and around site that could support the nesting of migratory bird species. This includes a small stand of Trembling Aspen and Balsam Poplar located southwest of the property (Photograph 1), feral shrubs growing along the southern fence line adjacent the rail corridor (Photograph 2), and ornamental trees planted on the east lawns (Photograph 3). No nests were observed by TULLOCH staff on site but the assessment was performed during a leaf-on condition when evidence of nesting can be obscured.

Milkweed was observed along the north, west and south edges of the property (Photograph 4). Milkweed serves as suitable reproductive and forage habitat for the Monarch Butterfly (*Danaus plexippus*; special concern). This species was not observed on site at the time of the field assessment but the likelihood of its presence on site should be considered moderately high.

Planted trees on site included ornamental species of maple, spruce, cedar and elm. Other vegetation on site included tree (e.g. Manitoba Maple, Trembling Aspen), shrub (Red-osier Dogwood, ornamental Rose) and herbaceous (e.g. Queen-Anne's Lace, Chicory, Cow Vetch, Clover, Mullein, Common Tansey, mixed Goldenrods) species.

All habitats are fragmented and subject to considerable and persistent disturbance associated with arterial road traffic in combination with public access and trains. Terrestrial habitat was subject to considerable household and industrial litter owing to public access and to the storage of decommissioned vehicles on the premises (Photograph 5). Staining of the soil surface, especially on the west side of the property, also suggests soils on site may be contaminated with petroleum hydrocarbons (likely automotive fluids) (Photograph 6). No permanent or temporary aquatic habitat was observed on site.

The vertical edges and overhangs of the facility structure may provide marginally suitable habitat for Barn Swallow (*Hirundo rustica*; threatened). A visual search of these areas using 10x binoculars found no evidence of current or recent swallow nesting.

Dilapidated busses being stored on site have the potential to serve as opportunistic roosting by bats, including three endangered species known to occur in Sault Ste. Marie; Little Brown Myotis (*Myotis lucifugus*), Eastern Small-footed Myotis (*Myotis leibii*) and Northern Myotis (*Myotis septentrionalis*). Cabin interiors and crevices within the machinery provide warm and dry spaces sheltered from the weather and predators. During the summer months these spaces could be used by endangered bat species as day roosts.

Field observations found no other suitable habitat for SAR species associated with the Sault Ste. Marie District. No habitat on site qualified as SWH.

4.1.2 128 Sackville Road – Public Works Complex

The Public Works Complex is a large (~10.7ha) facility comprised of a series of approximately 20 free standing permanent structures used for the administration, vehicle maintenance and equipment storage. The site also serves as a storage facility for municipal road sand and salt supplies. The site is situated on the edge of an industrial park and is bordered on three sides by commercial and industrial land uses. To the west, the Sackville Site is bordered by a residential community.

An urban woodlot borders the northeast side of the Sackville Site which extends approximately 50m into the north side of the property. The entire woodlot within the north neighbouring property was clearcut harvested between June 2011 and May 2012 and has since experienced five years of coppice regeneration from stumps retained on site. The original stand was dominated by White Birch, Red Maple, White Ash and Sugar Maple and these species now form a loosely spaced shrubby environment (Photograph 7). The lack of canopy is supporting a dense understory of mixed wildflowers, grasses and sedges. Extensive networks of game trails, likely reflecting White-tailed Deer activity, were observed throughout this area.

One third of the woodlot within the Sackville Site property was harvested between November 2013 and July 2014 separating the remaining mature woodlot into two parcels. In the northeast corner of the property, the east-most retained parcel of mature woodlot measures 0.5 ha in area and is dominated by White Birch and Red Maple with components of White Ash, Sugar Maple, Red Oak and Yellow Birch (Photograph 8). The closed canopy supports a sparse understory of regenerating overstory species and groundcover dominated by mixed ferns, Large-leaf Aster, False Solomon's Seal, Goldenrod and Raspberry. Household and commercial litter was prevalent throughout the stand (Photographs 9 & 10).

Several cavity trees were observed within the woodlot that appeared to be supporting woodpecker feeding and may serve as habitat for secondary cavity users including rodents and bats (Photograph 11). Only one cavity tree (Photograph 12) was observed to be sufficiently large (>25cm diameter) enough to be considered suitable for bat maternity roosting (BMR) but the cavities in this stem were located very close to the ground (within 1.5m) which suggests this habitat is unlikely to be used for colonial roosting by endangered bat species.

A mammal den was found within the wooded area at UTM (NAD 83) 16 T 705091 5158014 (Photograph 13). The den appeared inactive as evidenced by the undisturbed leaves and spider webs that had partially covered the entrance.

The west-most parcel of mature woodlot retained on the Sackville Site is located 90m west of its eastern counterpart. This smaller parcel measured 0.3ha and was dominated by Trembling Aspen with components of Red Maple, Sugar Maple, Red Oak and Balsam Poplar. The canopy was only half closed owing to several large dead standing White Ash (Photograph 14) that appeared to have succumbed to Emerald Ash Borer (Photograph 15).

Despite being >25cm diameter at breast height, large dead standing ash did not appear to be serving as effective cavity trees as the main stems consistently split within 3m of the ground (Photograph 16) resulting in insufficient size at height to support BMR. Sloughing bark could provide habitat to transient day roosting by male and non-reproductive female bats, including three endangered species; Little Brown Myotis, Eastern Small-footed Myotis and Northern Myotis. Male bats forage freely by night and roost singularly or in small groups in temporary day roosts that are quickly abandoned. Piles of large construction debris observed on site

(Photograph 10) as well as machinery store openly for extended periods of time could also provide opportunities for transient day roosting.

Wooded areas along the northern portion of the Sackville Site present the only semi-naturalized habitat on the property. Their hardwood canopies, shrubby understories and open edges will likely support nesting by migratory bird species protected under the Migratory Bird Convention Act (MBCA 1994). They have the potential to support four species of SAR bird, all of whom are listed as special concern; Canada Warbler (*Wilsonia canadensis*), Golden-winged Warbler (*Vermivora chrysoptera*), Eastern Wood-pewee (*Contopus virens*) and Olive-sided Flycatcher (*Contopus cooperi*).

These wooded areas may also provide marginally suitable habitat for SAR tree butternut (*Juglans cinerea*; endangered) and locally rare shrub Oval-leaved Bilberry. TULLOCH staff remained vigilant for both species while on site. Butternut, which is typically considered a more southerly species, was not observed during field assessment and not believed to exist on site. Preliminary searches also failed to observe Oval-leaved Bilberry within the property but, as the species is attributed to the area, targeted searches for the species during its flowering period (spring) might be recommended by the MNRF prior to development.

Man-made structures on site present potential habitat for Barn Swallow nesting. In particular, open canopies and overhangs, such as the structure at 16 T 704996 5157764 (Photograph 17) provide ideal surfaces for swallow nests. The apparent lack of prime swallow forage habitat nearby (e.g. waterbodies, fields) may reduce the desirability of the site for the species. A preliminary search of the open canopy and surrounding structures found no evidence of current or recent nesting by Barn Swallow.

Stockpiles of exposed aggregate and sand could provide suitable habitat for Bank Swallow if left undisturbed for an extended time. Road sand stockpiles on site appear to be kept active and subject to sufficient disturbance that nesting by the species is unlikely. No evidence of the species was observed during field assessments.

Drainage on site runs east to west and is facilitated by constructed drains located centrally and along the southern edge of the property. The likely destination of run-off from the site is Fort Creek and the Fort Creek Conservation Reserve which outlets to St. Mary's River.

The drainage in the southern extent of the property maintains permanent flow that increases with periods of precipitation and spring melt runoff. A portion of this drain is directed underground by steel culverts. This drain has been artificially constructed and maintains no typical natural stream morphology. During the field investigation, the drains were swollen with the runoff from recent precipitation (Photograph 18). This drain appears to flow west and beyond the study site and eventually into Fort Creek.

Substrate within the southern drain is a combination of sand, gravel, cobble and rubble (Photograph 19). The rubble component appears unnatural and was likely placed there at some point. This section of drain maintains a mostly stable riparian area and banks are stabilized by vegetation. Terrestrial grasses and dogwood compose the majority of riparian bank species along this drain section. Aquatic plants and filamentous algae growing within the drain suggest some level of flow is maintained throughout the year.

Water depth on the southern drain was minimal and did not appear to exceed 10cm in depth at the time of the investigation despite investigations taking place during a rain event. Wetted width did not exceed 1m.

Drainage ditches in the center of the study area have been recently excavated in some sections, as indicated by the uniform appearance of the banks and lack of vegetation (Photograph 20). This drain directs three smaller runoff channels that are dry aside from rain event periods. During the investigation, water flowing here was turbid; transporting sediment from the adjacent landscape downstream, and eventually to Fort Creek. This channel has a straight, manufactured morphology and lacks varying habitat types. This ditch functions as a fast run/ riffle during rain events.

Substrate within the central drain is composed of cobble, gravel and sand amongst clay parent material (Photograph 21). Some sections appear to be only sand on clay. This drain did not exceed 10cm in water depth despite the rain event at the time of investigation. The width of the channel was also not more than 1m at any point. The bank of this drain is high in certain areas which without stabilization may erode into the drain (Photograph 22). The drainage within this site will provide indirect fish benefit to certain species of small bodied fish during periods of high flow (assuming there are no barriers to fish passage between the confluences of these drains with Fort Creek).

No fish were observed during field investigations but habitat usage may be seasonal and will depend on the presence/absence of barriers to fish passage between the site and Fort Creek (of which there is no data).

The remainder of the Sackville Site is thoroughly developed and is subjected to constant disturbance by industrial, commercial and public activities associated with land use on and around the property.

4.2 Summary of Habitat Assessment

4.2.1 111 Huron Street – Transportation Public Office and Garage

Minimal wildlife habitat exists at the Huron Site but ornamental and feral trees/shrubs surrounding the property could support nesting by migratory bird species protected under the Migratory Bird Convention Act. The transit building itself could support marginal Barn Swallow

nesting habitat but searches found no evidence of current or recent nesting by the species. Dilapidated buses on site could serve as summer day roosts for several varieties of bat, including three endangered species; Little Brown Myotis, Eastern Small-footed Myotis and Northern Myotis. Milkweed around the north, west and south peripheries of the property could support Monarch Butterfly reproduction.

4.2.1 128 Sackville Road – Public Works Complex

Wooded areas along the north side of the Sackville Site and within the north adjacent property will likely support migratory bird nesting as well as potential habitat for four special concern SAR birds; Canada Warbler, Golden-winged Warbler, Eastern Wood-pewee and Olive-sided Flycatcher. No SAR birds were observed during field assessments but targeted surveys during peak breeding season were not performed to confirm presence/absence.

The woodlots provide marginal forage habitat for up to three species of endangered bats (Little Brown Myotis, Eastern Small-footed Myotis and Northern Myotis) and dead standing cavity trees may support the transient day roosting by male and non-reproductive bats. Large piles of debris and machinery openly stored for prolonged periods of time on site may also invite opportunistic bat roosting by endangered species. The limited size of the cavity trees (<25cm diameter) and the quality of the cavities observed suggest the potential of colonial bat roosting, including BMR, is unlikely.

The woodlots may provide marginal habitat for locally rare shrub Oval-leaved Bilberry. Preliminary searches failed to find the species on site.

Open canopies and overhangs on man-made structures throughout the Sackville Site provide opportunities for Barn Swallow nesting. Stockpiles of sand and other aggregates present provide opportunities for Bank Swallow nesting.

Constructed drainage ditches on site flow west and likely outlet to Fort Creek and the Fort Creek Conservation Area. Water levels are sufficient for all or part of the year to support potential habitat for small bodied fish. No fish were observed during field investigations but habitat usage will depend on the presence/absence of barriers to fish passage between the site and Fort Creek.

5. IMPACT ASSESSMENT AND MITIGATION

5.1 General

An impact assessment is provided that compares the potential impacts on observed environmental sensitivities of four alternatives being considered for the expansion or relocation of the Sault Ste. Marie Transportation maintenance garage and administrative office. This impact assessment is preliminary as the finer details of location and extent of development is not known at either site. Table 2 identifies which impacts and associated mitigation should be considered for each alternative. A full list of mitigation addressing those impacts is provided in Section 5.2

In instances where multiple differing timing exclusions are provided for a development alternative, the timing exclusion for that alternative should be considered to be from the earliest date to the latest date. For example, should the removal of vegetation be avoided during the General Nesting Period (April 14 to August 28) and the Bat Active Season (May 1 to September 1), then the true period within which no vegetation should be removed is April 14 to September 1.

Table 2 – Preliminary impact assessment of four development alternatives for the expansion or relocation of the Sault Ste. Marie Transportation Public Office and Garage. Each alternative references potential impacts of associated mitigation relevant to that activity. See Section 5.1 for further details.

Development Alternatives	Potential Impacts and Mitigations	Anticipated Impacts if Mitigation is Applied
1. Do Nothing Neither site is altered.	None.	None.
2. Upgrade Huron Site New roof, equipment and possibly an office expansion.	**5.1.1 - Migratory Birds** Clearing of vegetation **5.1.3 - Barn Swallow** Alteration of Existing Structures **5.1.4 - SAR Bats** Removing Old Machinery (buses) **5.1.5 - Monarch Butterfly** Removing Milkweed **5.1.8 - General Mitigation** Best Practices	No long term effects anticipated.
3. Build New Facility at Sackville Site Standalone building, with a sharing existing office, fueling and cafeteria spaces. OR **4. Build Integrated Facility at Sackville Site.** Public works, transit garage and vehicle storage is shared. AND **No alteration of woodlot habitat.** Regarding alternatives 3 and 4; work area will be entirely within existing developed footprint at Sackville Site.	**5.1.3 - Barn Swallow** Alteration of Existing Structures **5.1.4 - SAR Bats** Removing Debris & Old Machinery **5.1.7 - Fisheries** Alteration/sedimentation of drains **5.1.8 - General Mitigation** Best Practices	No long term effects anticipated.
3. Build New Facility at Sackville Site Standalone building, with a sharing existing office, fueling and cafeteria spaces. OR **4. Build Integrated Facility at Sackville Site.** Public works, transit garage and vehicle storage is shared. AND **Woodlot habitat cleared in whole or in part.** Vegetation is removed as work area will extend into the north woodlot.	**5.1.1 - Migratory Birds** Clearing of vegetation **5.1.2 - SAR Birds: Special Concern** Clearing of woodlot **5.1.3 - Barn Swallow** Alteration of Existing Structures **5.1.4 - SAR Bats** Clearing of Woodlot, and Removing Debris & Old Machinery **5.1.6 - Oval-leaved Bilberry** Clearing of Woodlot **5.1.7 - Fisheries** Alteration/sedimentation of drains **5.1.8 - General Mitigation** Best Practices	Depending on the location of the development, the MNRF may request targeted surveys for some SAR or rare species. Some permanent habitat loss will occur if wooded areas are removed and not revegetated.

5.1.1 Migratory Birds

The Migratory Bird Convention Act prohibits the harming of migratory birds, their nests and eggs. The removal of vegetation on site, including feral, ornamental, and dead standing tree stems, may have the following impacts on migratory birds:

- The removal of vegetation during the nesting season may result in the direct mortality of migratory birds and/or their eggs or broods.
- The removal of vegetation during the nesting season may cause the destruction of migratory bird nests.
- The removal of vegetation will reduce the quantity of breeding and foraging habitat available to migratory birds.
- Noise and other vibrations resulting from heavy equipment operation and personnel within the Study Area may disrupt migratory bird nesting and foraging within adjacent areas.

The following mitigation will prevent harm and disruption to migratory birds and their broods while minimizing long term habitat loss:

- Any clearing of vegetation should be performed outside the General Nesting Period identified by Environment and Climate Change Canada as being from April 14 to August 28 (Nesting Zone C4 – Forest Habitat).
- If clearing or construction is required during a General Nesting Period, areas should be checked for nesting prior to work each day and should only proceed if the vegetation is devoid of any sign of nesting.
- Vegetation loss should be minimized where possible.
- If clearing of vegetation is required, cleared areas should be re-vegetated. Re-vegetation should make use of native species as opposed to horticultural varieties.

With the above mitigation in place, development would be expected to have no direct impact on migratory birds and alteration of their habitat would be minimal.

5.1.2 SAR Birds: Special Concern

In some circumstances, habitat supporting species of special concern could qualify as Significant Wildlife Habitat (SWHTG 2000) and receive protection from development under the Provincial Policy Statement (PPS 2014).

Habitat assessments identified four SAR bird species with a potential to occur within the Study Area; Canada Warbler, Golden-winged Warbler, Eastern Wood-pewee and Olive-sided Flycatcher. No SAR birds were observed during field assessments but the MNRF may request

that targeted surveys during peak breeding season be performed to confirm presence/absence. If present on site, the removal of vegetation on site, including feral and ornamental, may have the following impacts on SAR birds:

- The removal of vegetation during the nesting season may result in the direct mortality of SAR birds and/or their eggs or broods.
- The removal of vegetation during the nesting season may cause the destruction of SAR bird nests.
- The removal of vegetation will reduce the quantity of breeding and forage habitat available to SAR birds.
- Noise and other vibrations resulting from heavy equipment operation and personnel within the Study Area may disrupt SAR bird nesting and foraging within adjacent areas.

The following mitigation will prevent harm and disruption to migratory birds and their broods while minimizing long term habitat loss:

- Any clearing of vegetation should be performed outside the General Nesting Period identified by Environment and Climate Change Canada as being from April 14 to August 28 (Nesting Zone C4 – Forest Habitat).
- If clearing or construction is required during a General Nesting Period, areas should be checked for nesting prior to work each day and work should only proceed if the vegetation is devoid of any sign of nesting.
- Vegetation loss should be minimized where possible.
- If clearing of vegetation is required, cleared areas should be re-vegetated. Re-vegetation should make use of native species as opposed to horticultural varieties.
- If SAR birds are observed within a development site work should halt or be altered in order to prevent harm to the species and its habitat. The MNRF should be notified of all SAR bird observations.

With the above mitigation in place, development would be expected to have no direct impact on special concern birds and alteration of their habitat would be minimal.

5.1.3 SAR Birds: Barn Swallows

Barn Swallow is listed as a provincially threatened species which receives general protection and habitat protection under the Endangered Species Act (ESA 2002). Man-made structures in the Study Area, especially overhangs and open canopies, can provide nesting habitat for the species. No Barn Swallows or evidence of recent Barn Swallow nesting were observed during field assessments. If present on site, the demolition or renovation of man-made structures, especially overhangs and open canopies, may have the following impacts on Barn Swallows:

- The demolition or renovation of man-made structures during the nesting season may result in the direct mortality of Barn Swallow and/or their eggs or broods.
- The demolition or renovation of man-made structures may cause the destruction of Barn Swallow bird nests.

The following mitigation will prevent harm and disruption to Barn Swallows and their broods while minimizing long term habitat loss:

- Searches for Barn Swallow nests should be performed before demolishing or altering structures within the Study Area. Emphasis should be placed on overhangs and open canopies. If the species is observed within a development site work should halt or be altered in order to prevent harm to the species and its habitat.
- If Barn Swallow is observed within the work area, contact the MNRF for further guidance.

With the above mitigation in place, development would be expected to have no negative impact on Barn Swallows and to their habitat.

5.1.4 SAR Bats

Three species of endangered bat are known to occur in the Sault Ste. Marie District; Little Brown Myotis, Eastern Small-footed Myotis and Northern Myotis. These species and habitat that supports their critical life functions are protected under the Endangered Species Act (ESA 2002). Of particular conservation concern is habitat that supports bat maternity roosting and bat hibernacula. No habitat was observed within the study that could support BMR or hibernation. Wooded areas can support bat foraging and transient day roosting by male and non-reproductive female bats (MNRF 2015). The removal of vegetation, especially large (>25cm diameter) trees with cracks, crevices or sloughing bark (i.e. cavity trees), in wooded areas within the Study Area may have the following impacts on SAR bats:

- The removal of living and dead woody vegetation, especially cavity trees, during the active bat season may result in the direct mortality of SAR bats in transient day roosts.
- The removal of vegetation will reduce the quantity of forage habitat available to SAR bats.
- Noise and other vibrations resulting from heavy equipment operation and personnel within the Study Area may disrupt SAR bats nesting and foraging within adjacent areas.

SAR bats may also elect to roost opportunistically in large discarded or stockpiled materials/debris on site. Relevant debris are those that provide partly enclosed internal spaces sheltered from the weather and external disturbance (Harvey *et al* 2011). Specific examples include piles of woody material (natural wood or lumber), dilapidated structures, unused machinery and discarded construction materials including culverts, open storage tanks and

concrete rubble. The removal of relevant debris within the Study Area may have the following impacts on SAR bats:

- The removal of relevant debris during the active bat season could result in the direct mortality of SAR bats in transient day roosts.

The following mitigation will prevent harm and disruption to SAR Bats should foraging and day roosting be occurring on site:

- Any clearing of living or dead standing cavity trees should be performed outside the bat active period which is considered May 1 to September 1. These dates are derived MNRF Technical Note: Species at Risk (SAR) Bats (MNRF 2015).
- The MNRF should be consulted if the clearing of vegetation is required during the active period for bats. Searches of vegetation prior to clearing may be deemed appropriate by the Ministry provided that any stems found to have suitable bat roosting spaces (e.g. cavities, cracks, sloughing bark) are retained. Suitable roosting trees should only be removed outside the active period for bats.
- Where possible, the removal or disturbance of relevant debris and stored machinery on site should also be performed outside the active bat season (May 1 to September 1). Otherwise debris and machinery should be inspected for evidence of bat day roosting prior to removal and only be disturbed if bats are not present.
- Vegetation loss should be minimized where possible.
- If clearing is required, cleared areas should be re-vegetated using native species when possible.

With the above mitigation in place, the removal of vegetation, relevant debris and stored machinery would be expected to have no negative impact to SAR bat individuals and minimal long-term impacts to their habitat.

5.1.5 Monarch Butterfly

As a species of special concern, monarch butterfly and their habitat should be safeguarded wherever possible. The removal of milkweed and other wildflowers on site may have the following impacts on the Monarch Butterfly and other pollinators:

- The removal of vegetation during the Monarch active season could result in the mortality of adults or their larva.
- The removal of Milkweed from the site will destroy potential breeding and nursery habitat for the species.
- The removal of wildflowers from the site will destroy forage habitat for adult Monarchs.

The following mitigation will prevent harm to Monarch Butterflies while minimizing long term habitat loss:

- Clear Milkweed outside the Monarch active season, which is considered for the Sault Ste. Marie area to be from May 15 to September 20 according to best management practices established by the Monarch Joint Venture (MJV 2015).
- If clearing or construction is required during the active period, areas should be checked for Monarch adults and larva prior to work each day and should only proceed if the vegetation is devoid of the species.
- Vegetation loss should be minimized where possible.
- The worksite should be re-vegetated with Milkweed and other flowering plants wherever possible; preference should be given to native flowering species.
- Flowering plants should be incorporated into the landscaping of the new facility in support of Monarch Butterflies and other pollinators. Preference should be given to native flowering species. A *Guide to Creating Monarch Friendly Habitat* is provided by the Monarch Teacher Network of Canada at: http://monarchteacher.ca/workshops/creating-monarch-habitat.dot.

With the above mitigation in place, development would be expected to have no direct impact on Monarch Butterfly and alteration of its habitat would be minimal.

5.1.6 Rare Species: Oval-leaved Bilberry

Wooded areas within the Study Area may support locally rare shrub species Oval-leaved Bilberry. If present, habitat supporting this species may qualify as Significant Wildlife Habitat (SWHTG 2000) and receive protection from development under the *Provincial Policy Statement* (PPS 2014). Preliminary surveys performed on site failed to observe the species but the MNRF may instruct that targeted surveys be performed for the species during its flowering period prior to the removal of vegetation. If present, the destruction of wooded habitat may have the following impacts on Oval-leaved Bilberry:

- The removal of vegetation may result in the direct mortality of Oval-leaved Bilberry.
- The removal of vegetation may result in the destruction of suitable habitat of Oval-leaved Bilberry.

The following mitigation will prevent harm to locally rare shrub Oval-leaved Bilberry should it occur on site:

- If Oval-leaved Bilberry is observed on site the MRNF should be contacted for further instruction.

5.1.7 Fisheries

All waterways (including constructed drains) with connectivity to established watercourses such as Fort Creek need to be protected as fish habitat through sediment transport control and ensuring no alteration to fish habitat occurs without authorization from DFO. The drains within the Study Area could be impacted by construction activities in the following ways:

- Transportation of deleterious substances downstream (i.e.: sediment transport) to larger waterbodies, including Fort Creek and the St. Mary's River.
- Harm or kill fish within the drains or downstream.
- Alteration (changing morphology) of the drains.

The following mitigations will ensure regulatory compliance and inhibit any negative impact on the watercourses within the Study Area:

- Complete work outside high water periods and significant precipitation events.
- Ensure any runoff directed to the drainage from construction activities is filtered through the use of geotextile, silt fence material, or a silt filter bag.
- Avoid work below the high water mark of all streams and drains and do not alter the riparian area. If alteration is necessary, a Request for Project Review must be submitted to the DFO for consideration.

With the above mitigation in place, development would be expected to have no direct impact on fish and fish habitat.

5.1.8 General Mitigation: Best Practices

The general mitigations provided below are best practices that should be applied to the preferred alternative determined for this project.

- Minimize vegetation removal within the proposed development area: Use existing trails whenever feasible. Where removal is necessary, minimize clearing, protect adjacent vegetation and use proper clearing techniques. Clearly delineate the boundaries of areas to be cleared using flagging or stakes. Where possible, use techniques that allow the root system to stay intact; this helps bind the soil and encourages rapid colonization of low-growing plant species.
- Restore native vegetation: Restorative plantings and seed mixes of species common to the region should be used for erosion control and rehabilitation of disturbed areas.
- Use original site vegetation: Where possible, retain and reuse original vegetation and topsoil for restorative planting.

- Work site containment: Design and implement a plan to isolate all work thereby preventing entry of potentially deleterious materials (e.g. dust, fuel, eroded soils, etc.) to natural habitat surrounding the site. The design should include the regular inspection, removal and timely disposal of materials generated.

- Excess materials and stockpiles: Store, handle and dispose of all materials used or generated (e.g., rock, organics, soils, woody debris, temporary stockpiles, construction debris, etc.) in a manner that prevents erosion and eventual entry to a waterbody. Temporary storage and stockpiling of materials must take place at a safe distance from any waterbody (not within 30m); these materials must be stabilized or otherwise contained. If stored long term, these areas should be sloped appropriately and vegetated.

- Avoid use of erosion control products with plastic netting: The “gillnet-like” mesh associated with erosion control products can pose an entanglement hazard to wildlife such as snakes, turtles, birds and other wildlife. The use of erosion control products containing any type of plastic mesh should be avoided. Rock, rip rap, various mulches, and polyethylene sheeting may be effective alternatives. It is noted that alternative rolled erosion control products are available without plastic mesh.

- Avoid use of heavy duty silt fencing reinforced with mesh netting: Heavy duty silt fencing constructed with nylon mesh netting reinforcement can pose an entanglement hazard to snakes and other wildlife. The use of heavy duty silt fencing constructed with nylon mesh netting reinforcement should be avoided. Silt fencing without mesh netting may be a suitable alternative.

- Remove temporary erosion control measures: When work is completed and areas are deemed stable, all temporary erosion control measures (silt fencing, straw bales, etc.) should be removed from the work site. These devices can act as a barrier to wildlife and impede their movement.

- Clearly define work areas: Access and activity should be limited to the designated work areas in order to minimize disturbance to adjacent wildlife habitat. These areas will be clearly marked within the site using fencing, stakes, flagging tape, signs etc.

- Check work area each day: reptiles are attracted to roadways, embankments, temporary stockpiles and machinery, as these surfaces absorb heat from the sun and are suitable for reptile basking. Work areas should be checked for reptiles prior to work each day. If there is immediate danger (such as collision with traffic/construction equipment), reptiles can be moved to adjacent habitat without harm (to worker or reptile) by carefully using a shovel or stick and bucket. SAR must be reported immediately to the MNRF and are not to be disturbed or moved without MNRF direction and approval.

- Equipment: Operate, store and maintain (e.g., re-fuel, lubricate) all equipment and associated materials in a manner that prevents the entry of any deleterious substance to a water body.

- Spills: A Spills Management Plan (including materials, instructions regarding their use, education of contract personnel, emergency contact numbers, etc.) is to be on site at all

times for implementation in the event of a spill. All spills must be immediately reported by phone to the Ontario Ministry of the Environment Spills Action Centre (24-hours a day) at 1-800-268-6060.

- Chemicals: Use only specified amounts and types of fertilizer in areas draining to water bodies. Avoid use of chemical dust suppressants and pesticides/herbicides in areas near or draining to water bodies.

6. CLOSING

TULLOCH has completed a natural heritage desktop review and on-site habitat assessment of the current Sault Ste. Marie Transportation public office and garage complex (111 Huron Street) and the Public Works Complex (128 Sackville Road). This report summarizes the findings of these efforts and provides an impact assessment for each of the four transit relocation options being considered by the City of Sault Ste. Marie. Recommended mitigations addressing potential impacts are also provided.

As of the creation of this report, TULLOCH is not aware of any specific plans for development or alteration at either site investigated. As such, the contents of this report should be considered preliminary.

TULLOCH would be pleased to address any questions regarding the contents and findings presented in this report. Please feel free to contact the undersigned.

Yours truly,

TULLOCH ENVIRONMENTAL

Report Prepared by:

Kelly Major M.Sc. EP
Terrestrial Ecologist

Reviewed by:

Paul Koke, M.A. LEED AP, CISEC
Environmental Project Manager

Appendices:

Appendix A – Natural Heritage Review and Communications with Regulators

Appendix B – Project Staff

Appendix C – Figures and Maps

Appendix D – Field Photographs

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APPENDIX A

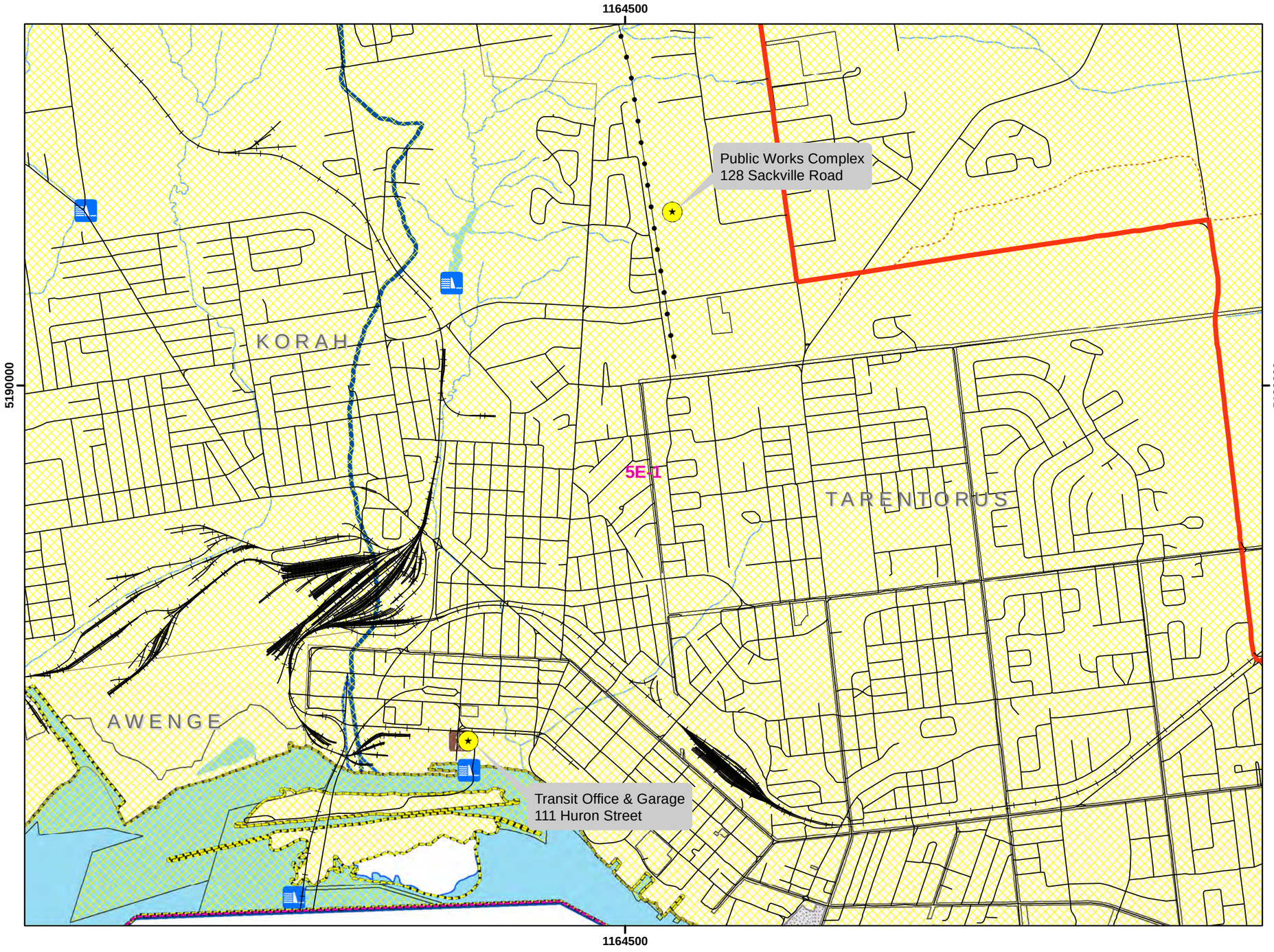
Natural Heritage Review and

Communications with Regulatory Agencies

Data Obtained and Searched from Land Information Ontario

Data File	Last Revision Date	Date Acquired
Aggregate Site Authorized Active	03/06/2016	28/06/2016
Aggregate Sites MTO	03/06/2015	28/06/2016
Airport Official	02/06/2016	14/07/2016
Airport Other	13/07/2016	14/07/2016
Areas of Natural and Scientific Interest	02/06/2016	28/06/2016
Conservation Reserve Regulated	01/06/2016	28/06/2016
Constructed Drains	28/10/2015	11/11/2015
Crown Game Preserves	18/05/2016	28/06/2016
Ecodistrict	19/06/2015	11/11/2015
Federal Protected Areas	28/09/2015	28/06/2016
Fish Feeding Area	21/04/2016	28/06/2016
Fish Nursery Area	10/11/2015	28/06/2016
Fish Spawning Area	27/06/2016	28/06/2016
Fish Staging Area	05/11/2015	28/06/2016
Fish Travel Corridor	05/11/2015	28/06/2016
Fishing Access Point	23/06/2016	28/06/2016
MNR Road Segments	06/08/2015	28/06/2016
Municipal Parks	17/05/2016	29/06/2016
National Wildlife Area	17/05/2016	28/06/2016
Natural Heritage Values Area	27/06/2016	28/06/2016
NGO Nature Reserve	17/05/2016	28/06/2016
OHN - Waterbodies	06/08/2015	28/06/2016
OHN - Watercourses	14/09/2015	28/06/2016
Ontario Dam Inventory	31/05/2016	28/06/2016
Ontario Trail Network Trailhead	07/06/2016	28/06/2016
ORWN Tracks	03/11/2015	14/04/2016
OWES Evaluated Wetlands	30/01/2015	11/11/2015
Patent Land External	27/06/2016	28/06/2016
Provincial Park Regulated Areas	26/10/2015	28/06/2016
Recreation Point	04/11/2015	28/06/2016
Research Plots	27/06/2016	28/06/2016
Significant Ecological Areas	04/11/2015	28/06/2016
Tourism Establishment Area	12/05/2016	14/07/2016
Trail Segment	07/06/2016	28/06/2016
Utility Lines	30/03/2016	14/04/2016
Waste Management Attenuation Zone	29/06/2016	14/07/2016
Waste Management Site	29/06/2016	14/07/2016
Water Well Information System (WWIS)	30/06/2015	14/07/2016
Watersheds - Primary	31/05/2016	28/06/2016

Watersheds - Quarternary	16/07/2015	28/06/2016
Watersheds - Secondary	31/05/2016	28/06/2016
Watersheds - Tertiary	16/07/2015	28/06/2016
Wildlife - Aquatic Feeding Areas	02/10/2015	28/06/2016
Wildlife - Breeding Areas	29/09/2015	28/06/2016
Wildlife - Calving Fawning Sites	01/10/2015	28/06/2016
Wildlife - Den Sites	21/04/2016	28/06/2016
Wildlife - Feeding Areas	03/11/2015	28/06/2016
Wildlife - Nesting Sites	27/06/2016	28/06/2016
Wildlife - Nursery Areas	10/11/2015	28/06/2016
Wildlife - Resting Area	04/11/2015	28/06/2016
Wildlife - Staging Areas	05/11/2015	28/06/2016
Wildlife - Travel Corridors	05/11/2015	28/06/2016
Wildlife - Wintering Area	27/06/2016	28/06/2016
Wooded Areas	30/05/2016	28/06/2016



Sault Ste. Marie Transit Relocation

Natural Heritage
Background Review

Legend

- Highway
- Local Road
- Rail Line
- Utility Line
- Trailhead
- Dam
- Trail Segment
- Aerodrome (Official)
- Township
- Ecodistrict
- Municipalities
- Patent (Private) Land
- OHN Waterbody
- OHN Watercourse
- Primary Watershed
- Secondary Watershed
- Tertiary Watershed
- Quarternary Watershed

PROJECT: 161085
DATE: 18/10/2016

SCALE: 1:24,000
Datum: NAD83
Projection: UTM Zone 15N

Data Provided by Land Information Ontario:
Updated January 2015 through June 2016.

N

TULLOCH
ENVIRONMENTAL

TULLOCH
ENVIRONMENTAL

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22 September 2016

Derek Goertz
Management Biologist
Ontario Ministry of Natural Resources and Forestry – Sault Ste. Marie District
64 Church Street
Sault Ste. Marie, ON P6A 3H3

Re: Natural Heritage Background Information Request: Proposed Relocation of the Sault Ste. Marie Transit Garage and Administration Offices.

Dear Mr. Goertz,

Tulloch Environmental (a Division of Tulloch Engineering) has been retained by Tulloch Engineering to conduct an assessment of natural heritage background information for the proposed undertaking and the adjacent landscape, including a review of available background natural heritage information from regulatory agencies. The background information review and assessment of the aquatic and terrestrial habitats are in support of the proposed relocation of the Sault Ste. Marie transit garage and administration office. The current location of the garage and office building is 111 Huron Street and the proposed new location is 128 Sackville Road in the City of Sault Ste. Marie, ON.

The study area includes the existing location of the garage and administration offices and the proposed new location, plus a 120 m buffer around each of the two locations. The UTM coordinates for the existing location and the proposed new location (NAD 83) are 16T 5155025N 703324E and 16T 5157785N 704884E respectively. Maps indicating the area of the two locations are appended to this letter.

At this time it is currently unknown whether the building located on the existing property (111 Huron Street) will be demolished prior to selling the property. The Public Works buildings that are currently located on the proposed new property (128 Sackville Road) will remain and the new transit garage and administration building will be constructed either north of the existing buildings, or to the east.

A review of online resources including the Natural Heritage Information Centre (NHIC) website, the MNRF Fish ON-Line website, the Ontario Breeding Bird Atlas, and the MNRF Ontario Species At Risk website was completed to screen the site for any significant values (species at risk, rare species, significant wildlife habitat etc.) which may be listed, and general community information. A summary of notable information is provided below:

- Records for significant natural heritage values were returned from an NHIC query and include: Milksnake (*Lampropeltis Triangulum*); Lake Sturgeon (*Acipenser fulvescens*); Oval-leaved Bilberry (*Vaccinium ovalifolium*), ranked S3; and Greene's Rush (*Juncus greenei*) which is also ranked S3. The NHIC also identified the St. Mary's River as a Canadian Heritage River.
- A total of 17 SAR species were identified in the region (Table 1).
- Fish community information was available for Lake Huron and Lake Superior; however, fish community information was not available for Fort Creek which is located west of Sackville Drive.

- We have prepared a list of species (including SAR) that may potentially inhabit the study area based on searches of available resources and habitat preferences. A copy of this list is appended to this letter (Table 1). We are requesting that the OMNRF provide, where possible, any additional details, records of occurrences or other information on the species list and occurrences in the list provided.

We also request the following information and guidance from the OMNRF:

- Fishery data for water bodies adjacent to the project area including:
  - fish community species
  - thermal regime
  - areas of known critical habitat (spawning, etc.)
  - aquatic species at risk (records, local knowledge)
  - barriers to passage

- OMNRF fishery management information:
  - in-water work timing window
  - areas of concern (e.g. known sources of sediment and erosion, sources of pollution)
  - fisheries management objectives (e.g. rehabilitation or protection goals, etc.)
  - Known commercial fishing licenses (i.e. commercial baitfish licenses) in the area

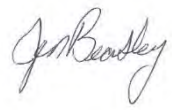
- Terrestrial data for the adjacent lands to the crossing, such as:
  - records of species at risk or species of conservation concern
  - timing windows or other restrictions
  - wildlife habitat use, and
  - significant portions of the habitat of any species at risk.

- Adjacent areas of natural or scientific interest.

If you have any questions or require additional information please do not hesitate to contact the undersigned at (705) 522-6303.

Thank you for your time and assistance.

Sincerely,



Jen Beasley, BA, CET, rcsi
Tulloch Engineering
Fisheries Contracts Specialist
jen.beasley@tulloch.ca
(705) 522-6303, ext. 626

Table 1. Species with a potential or previously documented occurrence in the vicinity of the project area (based on range, habitat and records).

Resources	Common Name	Scientific Name	Note
Ontario SAR database	Bald Eagle	*Haliaeetus leucocephalus*	Special Concern
	Black Tern	*Chlidonias niger*	Special Concern
	Bobolink	*Dolichonyx oryzivorus*	Threatened
	Eastern Meadowlark	*Sturnella magna*	Threatened
	Eastern Whip-poor-will	*Antrostomas vociferus*	Threatened
	Least Bittern	*Ixobrychus exilis*	Threatened
	Peregrine Falcon	*Falco peregrinus*	Special Concern
	Lake Sturgeon	*Acipenser fulvescens*	Threatened
	Northern Brook Lamprey	*Ichthyomyzon fossor*	Special Concern
	Redside Dace	*Clinostomus elongatus*	Endangered
	Shortjaw Cisco	*Coregonus zenithicus*	Threatened
	Rusty-patched Bumble Bee	*Bombus affinis*	Endangered
	Gattinger's Agalinis	*Agalinis gattingeri*	Endangered
	Hill's Thistle	*Cirsium hilii*	Threatened
	Houghton's Goldenrod	*Solidago houghtonii*	Threatened
	Eastern Ribbonsnake	*Thamnophis sauritus*	Special Concern
	Massasauga Rattlesnake	*Sistrurus catenatus*	Threatened
	Blandings Turtle	*Emydoidea blandingii*	Threatened
	Snapping Turtle	*Chelydra serpentina*	Special Concern
NHIC	Milksnake	*Lampropeltis triangulum*	Special Concern 16GS0354, 16GS0355, 16GS0457, 16GS0557
	Lake Sturgeon	*Acipenser fulvescens*	Threatened 16GS0354, 16GS0355

	Oval-leaved Bilberry	*Vaccinium ovalifolium*	S3 16GS0354, 16GS0355, 16GS0457, 16GS0557
	Greene's Rush	*Juncus greenei*	16GS0354 and 16GS0355
MNRF Fish ON-Line	White Bass	*Morone chrysops*	Lake Huron
	Pumpkinseed	*Lepomis gibbosus*	Lake Huron/Lake Superior
	Lake Trout	*Salvelinus namaycush*	Lake Huron/Lake Superior
	White Perch	*Morone americana*	Lake Huron/Lake Superior
	Walleye	*Sander vitreus*	Lake Huron/Lake Superior
	Brown Bullhead	*Ameiurus nebulosus*	Lake Huron/Lake Superior
	Brown Trout	*Salmo trutta*	Lake Huron/Lake Superior
	Rainbow Trout	*Oncorhynchus mykiss*	Lake Huron/Lake Superior
	Bowfin	*Amia calva*	Lake Huron
	Rock Bass	*Ambloplites rupestris*	Lake Huron/Lake Superior
	Lake Whitefish	*Coregonus clupeaformis*	Lake Huron/Lake Superior
	Channel Catfish	*Ictalurus punctatus*	Lake Huron/Lake Superior
	Muskellunge	*Esox masquinongy*	Lake Huron/Lake Superior
	Coho Salmon	*Oncorhynchus kisutch*	Lake Huron/Lake Superior
	Largemouth Bass	*Micropterus salmoides*	Lake Huron/Lake Superior
	Common Carp	*Cyprinus carpio*	Lake Huron/Lake Superior
	Northern Pike	*Esox lucius*	Lake Huron/Lake Superior
	Black Crappie	*Pomoxis nigromaculatus*	Lake Huron/Lake Superior
	Smallmouth Bass	*Micropterus dolomieu*	Lake Huron/Lake Superior
	Sauger	*Sander canadensis*	Lake Huron/Lake Superior
	White Sucker	*Catostomas comersonii*	Lake Huron/Lake Superior
	Yellow Perch	*Perca flavescens*	Lake Huron/Lake Superior
	Brook Trout	*Salvelinus fontinalis*	Lake Huron/Lake Superior
	Bluegill	*Lepomis macrochirus*	Lake Huron/Lake Superior
	Freshwater Drum	*Aplodinotus grunniens*	Lake Huron/Lake Superior
	Burbot	*Lota lota*	Lake Huron/Lake Superior

	Rainbow Smelt	*Osmerus mordax*	Lake Huron/Lake Superior
	Round Whitefish	*Prosopium cylindraceum*	Lake Huron/Lake Superior
	Splake	*Salvelinus fontinalis × S. namaycush*	Lake Superior
	Yellow Bullhead	*Ameiurus natalis*	Lake Superior
	Cisco	*Coregonus sp.*	Lake Superior
Ontario Breeding Bird Atlas	Bald Eagle	*Haliaeetus leucocephalus*	16GS05
	Bank Swallow	*Riparia riparia*	16GS05
	Barn Swallow	*Hirundo rustica*	16GS05
	Bobolink	*Dolichonyx oryzivorus*	16GS05
	Canada Warbler	*Cardellina canadensis*	16GS05
	Chimney Swift	*Chaetura pelagica*	16GS05
	Common Nighthawk	*Chordeiles minor*	16GS05
	Eastern Meadowlark	*Sturnella magna*	16GS05
	Eastern Wood-Pewee	*Contopus virens*	16GS05
	Olive-sided Flycatcher	*Contopus cooperi*	16GS05
	Peregrine Falcon	*Falco peregrinus*	16GS05
	Rusty Blackbird	*Euphagus carolinus*	16GS05
	Wood Thrush	*Hylocichla mustelina*	16GS05

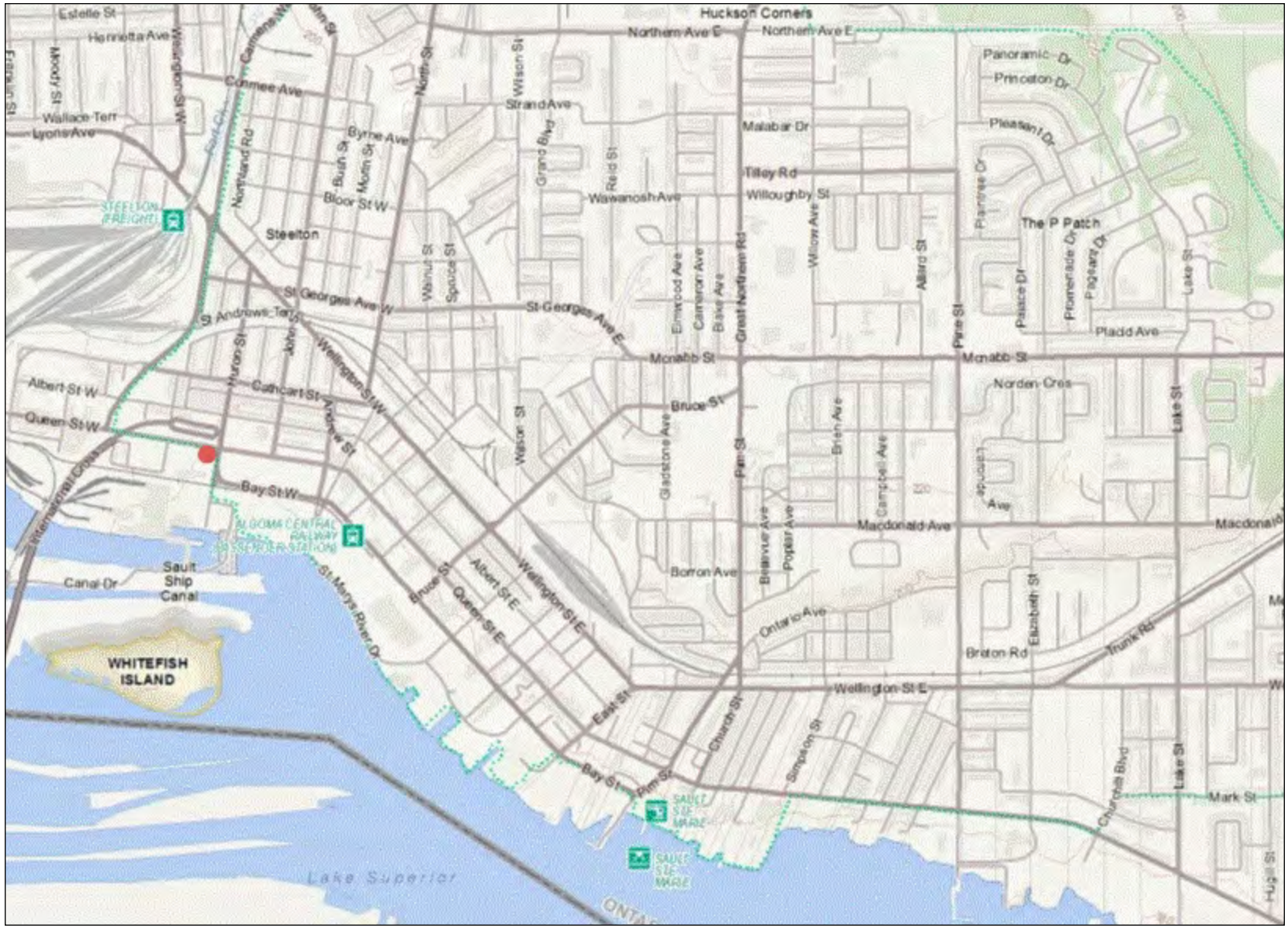
MINISTRY OF NATURAL RESOURCES AND FORESTRY

Ontario

Make a Topographic Map

Existing Location of the SSM Transit Garage and Administration Office

Notes:



Legend

- Building as Symbol
- Building to Scale
- Airport
- Heliport \ Hospital Heliport
- Seaplane Base
- Ferry Route
- Trail Head \ Trail
- Railway \ Train Station
- Railway with Bridge
- Railway with Tunnel
- Road (Major — Minor)
- Winter Road
- Road with Bridge
- Road with Tunnel
- Primary, Kings or 400 Series Highway
- Secondary Highway
- Tertiary Highway
- District, County, Regional or Municipal Road
- Toll Highway
- One Way Road
- Road with Permanent Blocked Passage
- Road with Address Ranges
- Hydro Line, Communication Line or Unknown Transmission Line
- Natural Gas Pipeline, Water Pipeline or Unknown Pipeline
- Spot Height
- Index Contour
- Contour
- Wooded Area
- Wetland
- Waterbody
- Waterbody Elevation
- Watercourse
- Falls
- Rapids
- Rapids \ Falls
- Rapids
- Rocks
- Lock Gate
- Dam \ Hydro Wall
- Dam \ Hydro Wall
- Provincial \ State Boundary
- International Boundary
- Upper Tier \ District Municipal Boundary
- Lower Tier \ Single Tier Municipal Boundary
- Lot Line
- Indian Reserve
- Provincial Park
- National Park
- Conservation Reserve
- Military Lands

0 1.3 km

Projection: Web Mercator

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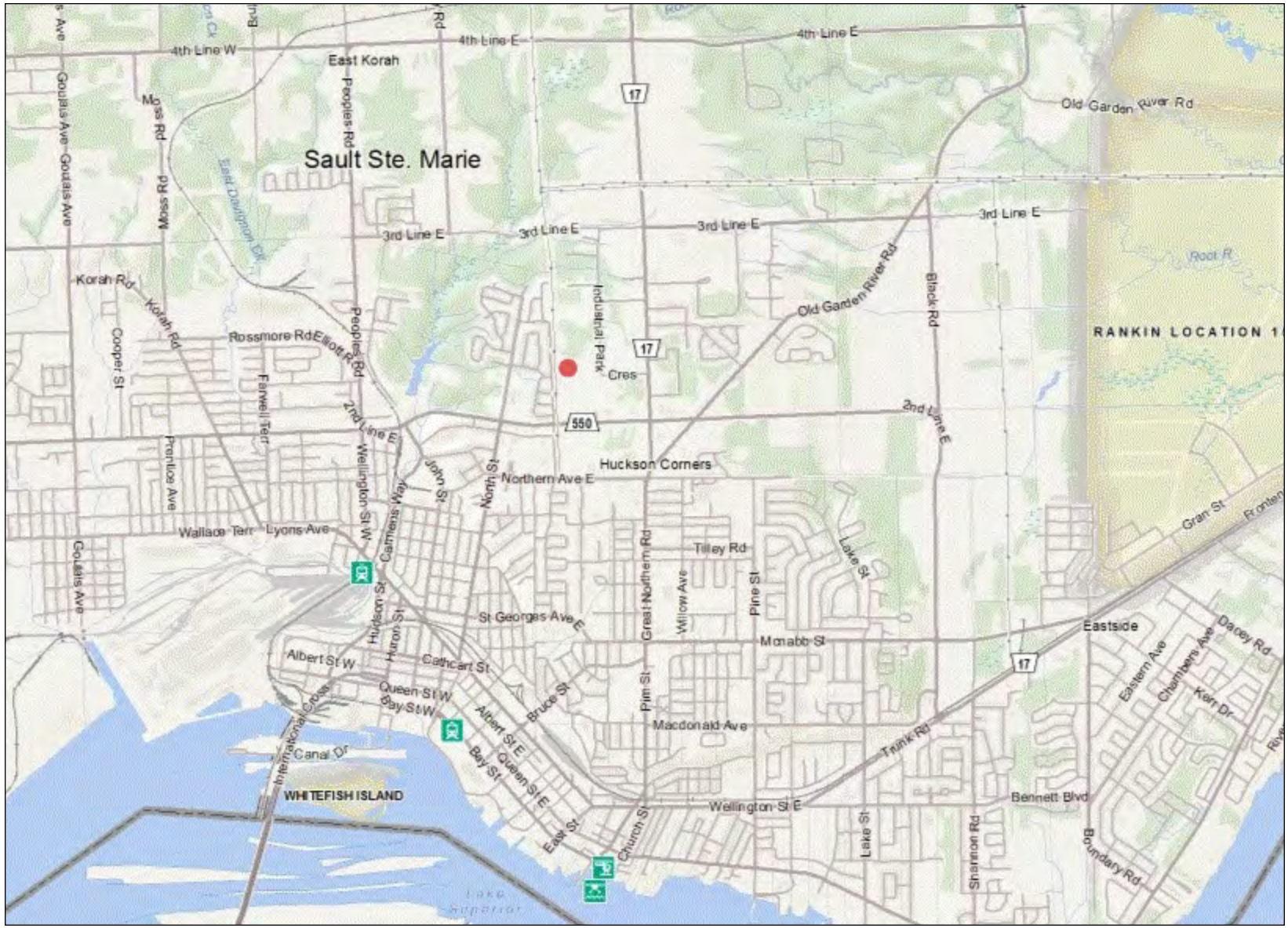
Ontario

MINISTRY OF NATURAL RESOURCES AND FORESTRY

Make a Topographic Map

Proposed New Location of the SSM Transit Garage and Administration Office

Notes:



Legend

- Building as Symbol
- Building to Scale
- Airport
- Heliport \ Hospital Heliport
- Seaplane Base
- Ferry Route
- Trail Head \ Trail
- Railway \ Train Station
- Railway with Bridge
- Railway with Tunnel
- Road (Major — Minor)
- Winter Road
- Road with Bridge
- Road with Tunnel
- Primary, Kings or 400 Series Highway
- Secondary Highway
- Tertiary Highway
- District, County, Regional or Municipal Road
- Toll Highway
- One Way Road
- Road with Permanent Blocked Passage
- Road with Address Ranges
- Hydro Line, Communication Line or Unknown Transmission Line
- Natural Gas Pipeline, Water Pipeline or Unknown Pipeline
- Spot Height
- Index Contour
- Contour
- Wooded Area
- Wetland
- Waterbody
- Waterbody Elevation
- Watercourse
- Falls
- Rapids
- Rapids \ Falls
- Rapids
- Rocks
- Lock Gate
- Dam \ Hydro Wall
- Dam \ Hydro Wall
- Provincial \ State Boundary
- International Boundary
- Upper Tier \ District Municipal Boundary
- Lower Tier \ Single Tier Municipal Boundary
- Lot Line
- Indian Reserve
- Provincial Park
- National Park
- Conservation Reserve
- Military Lands

0 2.5 km

Projection: Web Mercator

N

Kelly Major

From: Paul Koke <paul.koke@tulloch.ca>
Sent: October-03-16 10:45 AM
To: Kelly Major
Subject: FW: Request for Background Information - Proposed relocation of the SSM Transit Garage and Administration Office
Attachments: SSM_SAR_List(March17_2015).pdf; Fishes of the St Marys River.pdf; Fish Community Objectives for Lake Huron.pdf

Flag Status: Flagged

See below information for SSM Transit Study locations…

Paul Koke M.A., LEED AP
Environmental Project Manager

TULLOCH ENGINEERING 25 ANNIVERSARY YEARS

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From: Goertz, Derek (MNRF) [mailto:Derek.Goertz@ontario.ca]
Sent: Wednesday, September 28, 2016 1:38 PM
To: Jen Beasley
Cc: Paul Koke (paul.koke@tulloch.ca)
Subject: RE: Request for Background Information - Proposed relocation of the SSM Transit Garage and Administration Office

Hello Jen,

Thank you for your email requesting natural heritage information pertaining to the existing and proposed SSM Transit Garage sites located in Sault Ste. Marie. I have had the opportunity to review your submission and am pleased to provide you with the following information related to the area within 120m of each site ("subject area") as per your request. (I actually used a 500m radius around each site to ensure that any point feature located beyond 120m, didn't have associated habitat that extended within 120m.)

Fisheries Information

- Unfortunately MNRF does not have any information related to fish or fish habitat relevant to Fort Creek. However, fish community information is available for the St. Mary's River (see attachment). Please note that this list should not be thought of as complete. Both of these watercourses function as cool water ecosystems.

- The following aquatic species at risk are known from the St. Mary's River: Lake Sturgeon (threatened) and American Eel (endangered), however comprehensive inventories are incomplete so please keep in mind that the potential for occurrence of additional species at risk exists. It is important to note that American Brook Lamprey (*Lampetra appendix*) is known from the river, and while not a species at risk, is considered provincially rare (S3).

- The St. Mary's Rapids and vicinity provides critical spawning and nursery habitat for a number of fish species. However, this portion of the St. Mary's is well removed (~1km) from the subject area and may not necessarily be applicable. In addition, there are several obstacles that may impede the passage of fish from the St. Mary's River upstream to Lake Superior. This includes the Clergue Generating Station, compensating gates, St. Mary's Rapids, and the canal system. This is largely dependent on the species in question and facility operations.

Fisheries Management

- Fish community objectives are laid out in detail in the Great Lakes Fisheries Commission's *Fish Community Objectives for Lake Huron*. Please find this document attached.

- The St. Mary's River is identified as an Area of Concern (AOC) in 1987 under the Canada-United States Great Lakes Water Quality Agreement. Information related to this AOC can be found on Environment Canada's website at http://www.ec.gc.ca/raps-pas/default.asp?lang=En&n=6D2EB6E1-1 or the Bi-National Public Advisory Council's website at http://bpac.algomau.ca/

- In order to protect fish during spawning and other critical life stages, any in-water work shall only be conducted within the period of July 16 – August 31 (inclusive). This timing window is based on species known to be present throughout the aquatic ecosystem and vicinity and may be adjusted depending the exact location of any proposed work. Even when operating within this window, the proponent is still required to avoid causing serious harm to fish (under the federal Fisheries Act) by following the measures described on DFO's website: http://www.dfo-mpo.gc.ca/pnw-ppe/measures-mesures/measures-mesures-eng.html

- Department of Fisheries and Oceans (DFO) may need to be consulted. I would suggest the proponent use DFO's online self-assessment tool at http://www.dfo-mpo.gc.ca/pnw-ppe/index-eng.html to determine if project review is required. If the applicant is uncertain about whether their project requires DFO review or has any related questions, they can contact DFO via email at fisheriesprotection@dfo-mpo.gc.ca.

- Commercial baitfish licences are assigned on a Township basis (not by water body). The Township of Tarentorus does have an assigned bait licence. In order to determine where harvesting is occurring, the licensee would need to be contacted.

Terrestrial Data

- There is one known terrestrial Species at Risk (SAR) from the vicinity of the subject area: Bank Swallow (threatened). As mentioned, MNRF's inventory of Species at Risk is often incomplete. Please see the attached *Sault Ste. Marie District Species at Risk List* for your reference. Any of the species have the potential to occur on site should suitable habitat be present. If SAR are encountered during the course of any work, and are likely to be impacted, please stop the work immediately and contact the SSM District MNRF office for further direction. It is the proponent's responsibility to ensure they are in compliance with the Endangered Species Act, 2007.

- One provincially rare species, Oval-leaved Bilberry (*Vaccinium ovalifolium*), is known from the vicinity of the subject area and as a result may occur on site.

- No Provincial Parks, Conservations Reserves, or Areas of Natural or Scientific Interest (ANSIs) exist within 1km of the geographic coordinates provided.

- It is important to avoid contravention of the federally administered *Migratory Birds Convention Act, 1994 (MBCA)* by avoiding impacts to migratory birds, their eggs and/or nests. Environment and Climate Change Canada has developed a number of tools to help reduce the risk of contravening the Act. Specifically, the general nesting calendars (http://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=4F39A78F-1) and avoidance guidelines (http://ec.gc.ca/paom-itmb/default.asp?lang=En&n=AB36A082-1. For information about the MBCA or for advice on how to avoid incidental take of, or reduce risks of detrimental effects to migratory bird nests and eggs, please can contact the Environment and Climate Change Canada or visit their website at http://www.ec.gc.ca/paom-itmb/. It is the proponent's responsibility to comply with all applicable legislation.

- Please report any Species at Risk observations to MNRF's Natural Heritage Information Centre at http://www.ontario.ca/environment-and-energy/report-rare-species-animals-and-plants and any invasive species to http://www.eddmaps.org/ontario/

If you have any questions please don't hesitate to contact me at derek.goertz@ontario.ca or 705-941-5130.

Regards,

Derek Goertz
Management Biologist
Sault Ste. Marie District
Ontario Ministry of Natural Resources and Forestry
64 Church Street, Sault Ste. Marie, ON P6A 3H3
Tel: 705-941-5130, Fax: 705-949-6450
derek.goertz@ontario.ca

From: Jen Beasley [mailto:jen.beasley@tulloch.ca]
Sent: September 23, 2016 10:05 AM
To: Goertz, Derek (MNRF)
Cc: 'Paul Koke'
Subject: Request for Background Information - Proposed relocation of the SSM Transit Garage and Administration Office

Good morning Derek,

Please find attached a Natural Heritage Background Information Request for the proposed relocation of the Sault Ste. Marie transit garage and administration office.

If you require additional information, please do not hesitate to contact us.

Have good weekend!

Jen

Jen Beasley BA, CET, rsci
Fisheries Contracts Specialist

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Sault Ste. Marie District Species at Risk (March 17, 2015)

	At Risk Status – Endangered (**END**), Threatened (**THR**), Special Concern (**SC**)	
Species Common Name	**Species At Risk in Ontario - (SARO)**	**Species at Risk Act (Federal Listing) - (SARA)**
American Chestnut	END	END
American Eel	END	No Status
Butternut	END	END
Cougar or Mountain Lion	END	Data Deficient
Eastern Small-footed Myotis	END	No Status
Golden Eagle	END	Not At Risk
Henslow's Sparrow	END	END
Hickorynut	END	No Status
King Rail	END	END
Kirtland's Warbler	END	END
Little Brown Myotis	END	No Status
Loggerhead Shrike	END	END
Northern Myotis	END	No Status
Redside Dace	END	SC
Shortnose Cisco	END	END
Wood Turtle	END	THR
American White Pelican	THR	Not At Risk
Bank Swallow	THR	No Status
Barn Swallow	THR	No Status
Blanding's Turtle	THR	THR
Bobolink	THR	No Status
Chimney Swift	THR	THR
Eastern Meadowlark	THR	No Status
Flooded Jellyskin	THR	THR
Lake Sturgeon (Great Lakes - Upper St. Lawrence population)	THR	No Status
Least Bittern	THR	THR
Massasauga Rattlesnake	THR	THR
Shortjaw Cisco	THR	THR
Whip-poor-will	THR	No Status
Bald Eagle	SC	Not At Risk
Black Tern	SC	Not At Risk
Canada Warbler	SC	THR
Cerulean Warbler	SC	SC
Common Five-lined Skink	SC	SC
Common Nighthawk	SC	THR
Eastern Wolf	SC	SC
Eastern Wood-Pewee	SC	No Status
Golden-winged Warbler	SC	THR
Milksnake	SC	SC
Monarch Butterfly	SC	SC
Northern Brook Lamprey	SC	SC
Olive-sided Flycatcher	SC	THR
Peregrine Falcon	SC	SC
Red-headed Woodpecker	SC	THR
Short-eared Owl	SC	SC
Silver Lamprey (Great Lakes - Upper St. Lawrence population)	SC	No status
Snapping Turtle	SC	SC
Upper Great Lakes Kiyi	SC	SC
West Virginia White Butterfly	SC	No Status

Wood Thrush	SC	No Status
Yellow Rail	SC	SC

For an updated copy of this list, or more detailed information on any of the species listed above, including identification features and range maps, please visit the OMNR Species at Risk website at Ontario.ca/speciesatrisk or contact the Sault Ste. Marie MNR District Management Biologist, at (705) 949-1231

Fishes of the St Mary's River

COMMON NAME
Alewife
American brook lamprey adult
American eel
Atlantic salmon
Banded killifish
Black crappie
Blacknose shiner
Bluegill
Bowfin
Brook stickleback
Brook trout
Brown bullhead
Brown trout
Burbot
Chinook salmon
Coho salmon
Common Carp
Common shiner
Creek chub
Emerald shiner
Gizzard shad
Golden redhorse
Golden shiner
Hornyhead chub
Johnny darter
Lake chub
Lake sturgeon
Lake trout
Lake whitefish
Largemouth bass
Log perch
Longnose dace
Longnose sucker
Mimic shiner
Mottled sculpin
Ninespine stickleback
Northern Pike
Pink salmon
Pumpkinseed
Rainbow darter
Rainbow smelt
Rainbow trout

Rock bass
Round whitefish
Sand shiner
Sea lamprey adult
Sea lamprey ammocete
Sea lamprey transformer
Silver lamprey adult
Slimy sculpin
Smallmouth bass
Spoonhead sculpin
Spottail shiner
Threespine stickleback
Trout-perch
Walleye
White sucker
Yellow perch

APPENDIX B

Project Staff

PROJECT STAFF

Kelly Major, M.Sc. EP is a Terrestrial Ecologist at Tulloch Engineering. He has worked professionally throughout Ontario for five years in consulting, government and academic sectors. His areas of specialization include species at risk, habitat assessment, wetland evaluation and biostatistics. As an academic, Kelly has acted as principal investigator for various studies in community ecology, plant invasion and silviculture. His research has been peer-reviewed and published. With the Ministry of Natural Resources and Forestry (MNRF), he surveyed wildlife biodiversity across the province and built statistical models forecasting forest succession for Boreal Ontario. As a consultant with Tulloch, Kelly leads species at risk surveys, wetland evaluations (Ontario Wetland Evaluation Systems) and terrestrial habitat description (e.g. Ecological Land Classification). He performs impact assessments at sites of proposed development and prepares site specific mitigation strategies appropriate to the nature of the habitat alteration and the sensitivities present. He also serves as data analyst for Tulloch's environmental department; managing and mapping spatial data in ArcGIS and modeling quantitative data using univariate and multivariate statistical techniques.

Jen Beasley, B.Sc. is a Fisheries Specialist for Tulloch Engineering. She has over eight years of environmental consulting experience and has been a part of project management, planning and executing of field work, as well as data collection, and technical report writing. She has been involved in several highway construction projects requiring compliance to federal and provincial environmental legislation. Responsibilities have included site inspections; the review of plans and submissions for in-water work; species at risk surveys; correspondence with regulatory authorities to obtain necessary permits and approvals; and, identifying potential impacts to fish habitat caused by proposed work.

Jen is currently approved under the MTO's RAQS for the Fisheries Compliance during Construction Contracts specialty. She has also been involved in several fisheries assessment projects for highway construction/rehabilitation projects. Extensive knowledge of provincial and federal legislation pertaining to fish and species at risk has been gained through her experience in the environmental consulting industry. Jen has also successfully completed the Ontario Wetland Evaluation System training course through the Ontario Ministry of Natural Resources and an Erosion and Sediment Control training course offered through Vancouver Island University.

Paul Koke, M.A. LEED AP is an Environmental Project Manager at Tulloch Engineering. He has ten years experience in the environmental and technical services sector, as well as seven years as a consultant. He specializes in environmental permitting, impact assessment, aquatic and terrestrial effects evaluation, project planning and management, and environmental feasibility studies for natural resource and industry sector clients. Much of his recent work has focused on regulatory agency liaison, biophysical assessment, erosion and sediment control planning, and construction management and inspection for large resource sector infrastructure projects in locations across Canada.

APPENDIX C

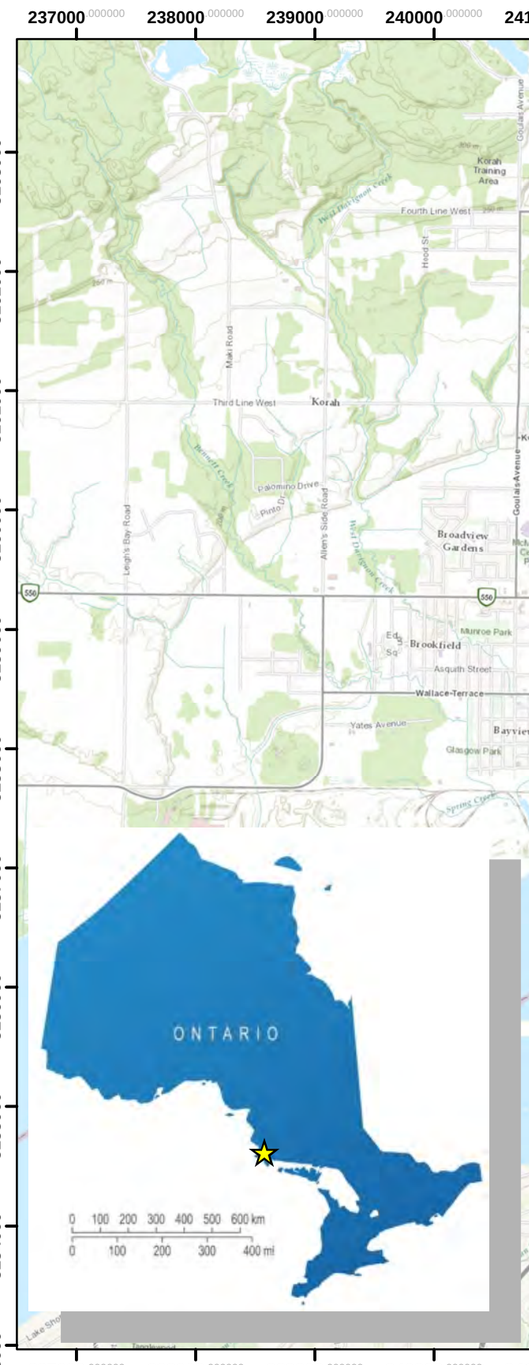
Figures and Maps

Sault Ste. Marie
Transit Expansion/Relocation

Site Location

Legend

Property Boundaries

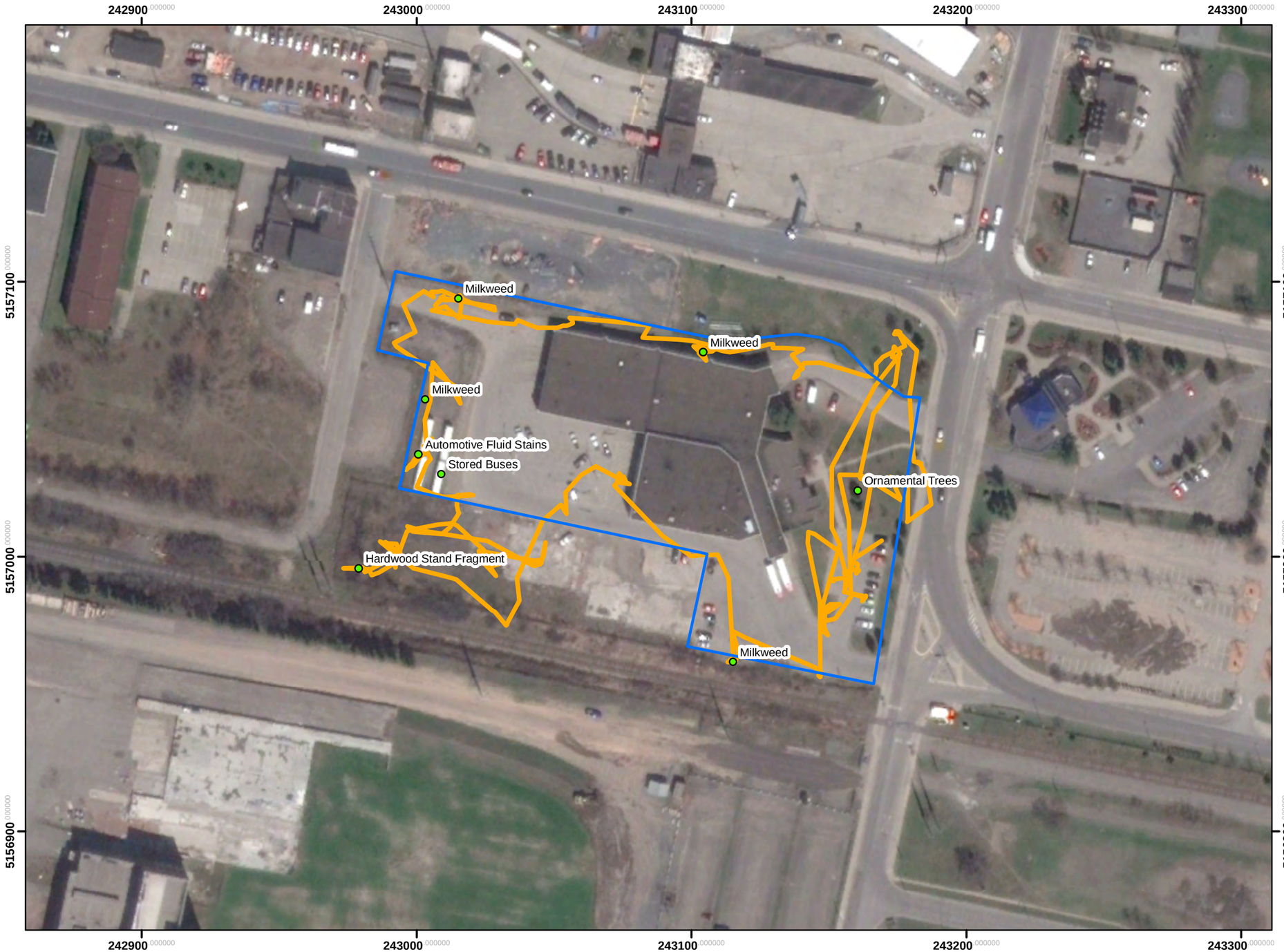


Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Meters

0 1,800 3,600 7,200 10,800 14,400

PROJECT: 16-1085	Figure 1
SCALE: 1:50,000	Date: 31/10/2016
Datum: NAD83 Projection: UTM Zone 16N Declination: +7	
	NOTES None.



Sault Ste. Marie Transit Expansion/Relocation

111 Huron St

Site Habitat Assessment
August 2016

Legend

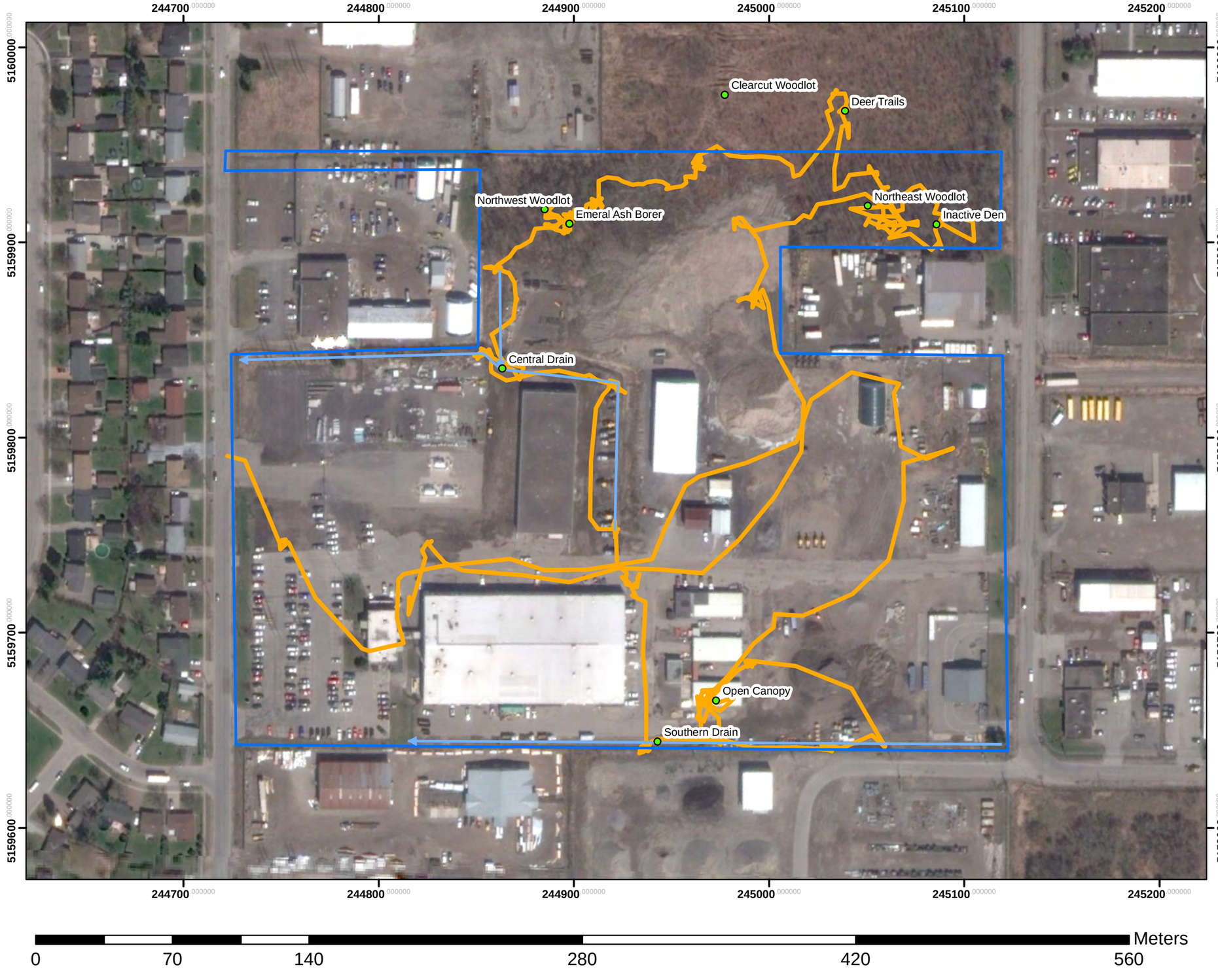
- Property Boundary
- Constructed Drains
- Habitat Assessment (Tracks)
- Observations

PROJECT: 16-1085	Figures 2A & 2B
SCALE: 1:1,500	Date: 31/10/2016
Datum: NAD83 Projection: UTM Zone 16N Declination: +7	
Background basemap obtained from DigitalGlobe. Image Date: 5/4/2016	NOTES None.

Sault Ste. Marie
Transit Expansion/Relocation

128 Sackville Rd

Site Habitat Assessment
August 2016



Legend

- Property Boundary
- Constructed Drains
- Habitat Assessment (Tracks)
- Observations

PROJECT: 16-1085	Figures 2A & 2B
SCALE: 1:2,000	Date: 31/10/2016
Datum: NAD83 Projection: UTM Zone 16N Declination: +7	
Background basemap obtained from DigitalGlobe. Image Date: 5/4/2016	NOTES None.

APPENDIX D

Field Photographs

Photograph 1: Aspen/Birch stand could support migratory bird nesting in the southwest corner of the Huron Site.

Photograph 2: Feral shrubs could support migratory bird nesting along the south edge of the Huron Site.

Photograph 3: Manicured lawns and ornamental trees could support migratory bird nesting on the east side of Huron Site.

Photograph 4: Milkweed on three sides of Huron Site provides potential habitat for Monarch Butterfly.

Photograph 5: Household litter common throughout Huron Site.

Photograph 6: Stains suggest soil contamination by automotive fluids at Huron Site.

Photograph 7: Coppice regeneration abutting the north side of the Sackville Site after recent clearcut.

Photograph 1: Small (0.5ha) woodlot in the northeast corner of the Sackville Site could support migratory bird nesting.

Photograph 2: Woodlots at the Sackville Site indicated a history of household and commercial litter accumulation.

Photograph 3: Litter at the Sackville Site ranged from small consumer packaging to large construction remnants.

Photograph 4: Woodpecker foraging within northeast wooded area at Sackville Site.

Photograph 5: Large cavity tree in northeast wooded area at Sackville Site.

Photograph 13: Unidentified mammal den in wooded area at Sackville Site.

Photograph 14: Semi-closed canopy of northwest wooded area at Sackville Site with dead standing ash trees.

Photograph 15: Evidence of Emerald Ash Borer in northwest wooded area at Sackville Site.

Photograph 16: Low branching of dead standing Ash precludes effective BMR habitat.

Photograph 17: Open canopy with potential for Barn Swallow nesting at the Sackville Site.

Photograph 186: Constructed drain at south edge of Sackville Site.

Photograph 19: Sediment of constructed drain at south edge of Sackville Site.

Photograph 20: Constructed drain at center of Sackville Site.

Photograph 21: Sediment of constructed drain at center of Sackville Site.

Photograph 22: Banks of constructed drain at center of Sackville Site.

APPENDIX 5

Assessment of Sault Transit Garage Location

Transit Consulting Network

Assessment of Sault Transit Garage Location

Wally Beck, President,
Transit Consulting Network
283 Golf Road, Keswick. Ontario
L4P 3C8
Phone: 647-268-9301

TABLE OF CONTENTS

1. INTRODUCTION

In 2013, a comprehensive Asset Management Facility Condition Assessment (AMFCA) report was completed to determine overall capital needs and deficiencies of all city buildings. The consideration to move Sault Transit and ParaBus from the Huron Street site (Transit site) to the Public Works site (PW site) came from the 2012-2016 Public Operations Transit Review.

During the period September 19 - 20, 2016, Wally Beck, Transit Consulting Network, met with the following individuals at the Sault Transit and Para-Bus maintenance facility:

- Don Scott, Manager of Transit and Parking
- Bob Camirand, Maintenance Supervisor
- Brad Miller, Training Supervisor
- Adam Corcoran, Stores Attendant (parts department)
- Mike Vanderloo, Mechanic

On the afternoon of September 20, 2016, Wally Beck and Pat McAuley, Senior Advisor, Tulloch Engineering then met with the following Public Works and Transportation prior to the PW on-site inspection:

- Susan Hamilton Beach, Director of Public Works
- Mike Blanchard, Manager, Equipment/ Building Maintenance

The consultations were undertaken to:

- Obtain feedback on maintenance and operations issues directly from front line staff through very frank discussions
- Reconfirm improvements to the facility that need attention today and over the next 20 years using the AMFCA report as a reference document
- Help identify ‘must haves’ and ‘nice to haves’ in the current Transit site and potential PW site
- Assist the City of Sault Ste. Marie in determining whether to maintain and upgrade the existing Transit site or build new facilities at the PW site.

Mr. Beck also undertook on-site observations at 5:00am at the Sault Transit maintenance facility on September 20, 2016 to record and confirm issues brought up in the previous day’s interviews.

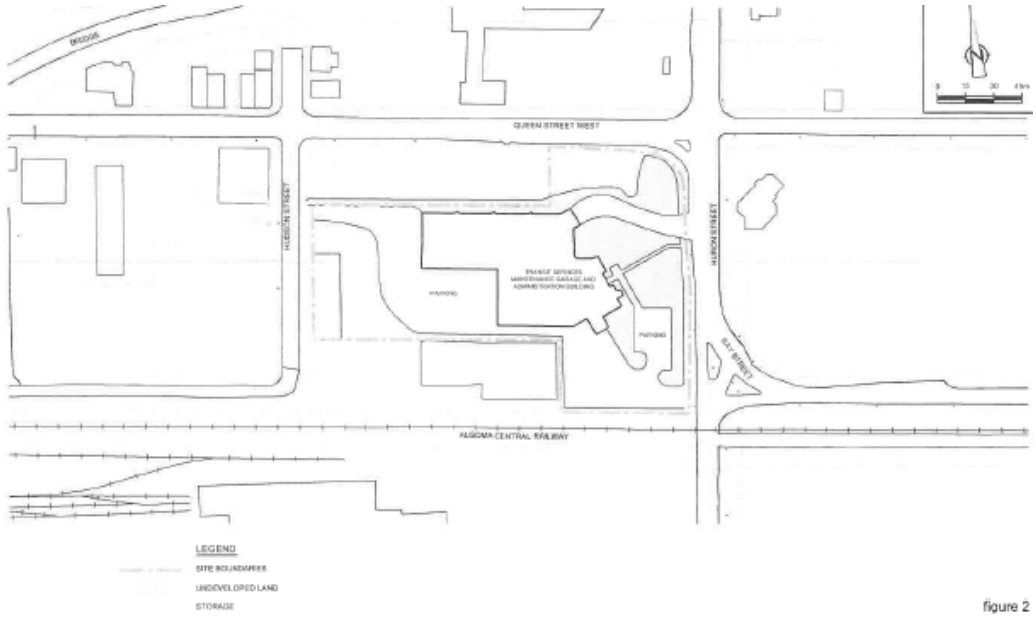
2. EXISTING SAULT TRANSIT SITE

2.1 Introduction

The study team assessed, at a high-level, the transit maintenance facility requirements and functionality over the next 5 years and beyond based on the on-site staff consultations in conjunction with the 2013 AMFCA report. Although some of the AMFCA report's recommendations were addressed since 2013, the approximately $900,000 in expenditures recommended was underspent. As a result, many issues continue to persist or worsen, which are identified in this report from the staff that deal with the issues on a day to day basis.

The key issues identified by staff and the potential issues that need to be addressed are as follows:

- Noise Pollution
- Deadheading
- Vehicle Storage
- Vehicle Access and Egress
- Bus Wash
- Fueling
- Hoists and Mechanic Work Areas
- Building Roof
- Parts Supply and Stores Room
- Other Storage Rooms and Areas
- Body Shop Heating and Transformers
- Other Issues



Sault Transit and Para-Bus Maintenance Facility Site Plan

2.2 Noise Pollution

There is very little residential development in close proximity to the transit facility with the exception of residential units above the commercial building at the intersection of Hudson St. and Queen St. W. A noise abatement policy does exist that limits and prohibits bus idling on the west side of the vehicle parking garage. Since buses pull out for service on this side of the building, departures must be completed within 30 minutes. Another noise abatement policy limits the operation of the welding bench exhaust to the period from 7:00am to 7:00pm.

Since the Sault Transit facility has Environmental Compliance Approvals (ECA's) for both noise and air emissions from the site. It is anticipated that any future expansion of the site can be designed to meet MOECC requirements related to air and noise discharges, and the existing ECA's can be amended accordingly.

The Noise Abatement Action Plan in place is considered to have little impact on future expansion of the transit facility.

2.3 Existing Vehicle Storage Capacity

The Sault Transit and Para-Bus fleet (herein referred to as the 'transit fleet') consists of:

- 26 – 12.2 metre (40') conventional transit vehicles (17 buses operate in the peak)
- 2 – 8.2 metre (27') community buses
- 11 Para-transit small buses
- 39 Total vehicles

Overnight vehicle storage at crush capacity using maintenance area

Sault Transit and Para-Bus vehicles are parked overnight in the bus wash bay (2) and the maintenance area (2), which makes the transit garage appear to be at 'crush capacity'; however, this is not the case since one bus lane in the storage area is used for non-rolling stock items such as the Essar Arena emergency generator. As the day begins and buses pull out, the bus wash and maintenance areas are cleared. It works for now; however, an additional overnight storage lane would provide improved flexibility of the parking plan.

The bus storage capacity currently provides for the equivalent of 48–12.2 metre conventional transit buses – eight lanes with six buses per lane. Currently, five Sault Transit buses are parked in tandem in five of the eight lanes. Two lanes are dedicated to Para-Bus and other vehicles (e.g. Elks vans) while one lane is used to store items. If the lane used to store items is freed up for transit, there would be capacity for 42 conventional transit buses, which is eight more than the current transit fleet (26 conventional transit buses plus 2 community buses).

Recommended action: Permanently clear bus lane used for equipment storage.

2.4.2 Potential Requirements Based on Future Route Network and Ridership Demand

Based on past trends, the growth in the number of transit vehicles that need to be accommodated in the future will be nominal given the modest population growth and ridership experienced in recent years. For example, the total Sault Ste. Marie population reported to the Canadian Urban Transit Association in 2009 was 74,000, which grew to only 74,200 in 2014. To be conservative relative to addressing capacity concerns, it has been assumed that there will be a need to expand the garage capacity by 8 vehicles, which represents a 20% increase in the total fleet size. This can be met with the existing storage area footprint; however, this may change and the City should be prepared.

The public transportation fleet needs may increase significantly for number of reasons, such as:

- Transit use is increasing among younger generations (e.g. millennials) as they delay obtaining automobiles or even getting a driver's license compared to past generations
- The aging population is putting pressure on Para-Bus and low-cost methods of service delivery, which can affect the number of vehicles and the fleet mix (e.g. known as the 'family of services')
- Should Sault College and Algoma University adopt a Universal Pass (U-Pass) program, which is growing in popularity across Canada, an increase in the fleet will likely be needed
- Public transit may replace or complement yellow school buses to provide transportation to secondary school students as the Province and municipalities look for ways to reduce service and funding duplication
- Private automobile ownership could decrease as the cost of ownership increases

Another factor that can influence the required vehicle storage capacity is a change in the service design and fleet mix. Since development is taking place in the more northern areas of the City, an additional transit node(s) or terminal(s) may be required; this could potentially result in a complete route network redesign, which could impact the fleet make-up and size. If the fleet size exceeds the current capacity of the transit storage area and maintenance facility, the storage area will need to be expanded as a minimum. Extending the garage westerly is an option.

Conversely, if the fleet size and service levels are reduced due to a reduction in population and employment, a smaller facility may be needed; however, this may reverse itself down the road.

Recommended action: To be addressed further in future transit operations review.

2.4.2 Exterior Storage of De-commissioned Buses

In addition to interior storage area, a number of buses, which have been taken out of active service (i.e. retired) are parked on the west side of the transit garage site and are 'cannibalized' for parts, as required.

Since the retired buses are located on soil, there is a concern that oils and other lubricants would contaminate the soil.

Decommissioned buses stored on west side of property

Transit staff mentioned that a storage location closer to the garage would be welcomed by the mechanics since it would be more convenient to remove needed parts. This would also eliminate oil and lubricant leaks into the soils. If buses do leak, the leaks would occur on the asphalt area, which can be easily cleaned up, as required.

Recommended action: Relocate outdoor storage of buses closer to garage.

2.5 Vehicle Access and Egress

Transit vehicles access the maintenance facility from the north side of the building via Huron Street and leave via the south end of the building onto Huron Street where buses can turn left onto Huron Street or straight through onto Bay Street.

Buses Departing Garage at 5:30 a.m.

The typical transit vehicle movement onsite and within the garage when buses leave and return from service is described as follows:

- Vehicles depart from overnight storage through one of 7 lanes while an 8th lane is used for non-transit equipment storage
- Transit vehicles travel to downtown bus terminal via Bay Street to begin revenue service
- Vehicles return to garage at end of service day via a single overhead door
- Bus is fueled while farebox is removed, emptied and placed back on bus, and farebox data is transferred from GFI farebox
- Exterior of bus is washed and interior swept
- Bus is parked in designated spot

2.6 Bus Wash

The bus wash, installed in 1981, is now 35 years old. Since parts are becoming scarcer and the bus wash unit has extensive rust, the ability to undertake repairs adequately is jeopardized.

In addition, newer buses are built differently than buses in previous years whereby the air conditioning units and radiators are now located on the roof of the buses and, as such, cannot be adequately cleaned.

The interior of the bus is cleaned manually due to the limitations of the bus wash equipment. It is also worth noting that the water used is not recycled (or partially recycled).

New Bus with Air Conditioner and Radiator Units on Roof of Bus

Recommended action: Purchase a new bus wash system that accommodates current and potentially future bus designs and maximizes recycling of water.

2.7 Fuel and Oil Tanks

Sault Transit staff determined that transit vehicles will continue to have diesel propulsion systems. Sault Transit consumes approximately 1 million litres of diesel fuel per year.

Issue: The in-ground diesel fuel storage tank with 45,400 litre capacity has been in place since 1981 and will need to be replaced in a refurbished transit facility for environmental reasons. To mitigate future environmental concerns and costs, there is a staff preference for above ground storage. There is also an in-ground used oil tank located outside the west wall of the maintenance area, which could be replaced with an above-ground storage tank.

Recommended action: Remove below ground fuel and waste oil tanks and replace with above-ground diesel tank and waste oil tank.

2.8 Vehicle Hoists and Mechanic Work Area

There are three hoists and four licensed mechanic work bays that provide service to a total of 39 vehicles. A separate hoist is located in the body shop. A ratio of one hoist per 10 vehicles is required for ongoing mechanical maintenance work, leaving a shortfall of one hoist. This was previously identified in the 2012-2016 Sault Transit and Para-Bus Master Plan.

A fixed hoist to accommodate a 12.2 metre conventional transit bus is required; however, staff indicated that a lower-cost portable hoist would suffice to meet their needs and provides the flexibility to move the hoist elsewhere, if required.

Recommended action: Purchase portable hoist.

2.9 Roof

Issue: Although the maintenance facility roof is maintained to some extent, problems persist. Maintenance staff stated “Within 10 minutes of a mild rain, the roof leaks all over the place.” Ponding of water and other roof deterioration signs identified in the previous Asset Management Facility Condition Assessment (AMFCA) report likely persist.

Recommended action: Accelerate roof replacement program.

2.10 Parts Supply/Stores Room

Issues: Observations and discussions with the stores attendant revealed the following issues:

- The parts storage area and tool storage area is adequate for meeting current and future inventory needs
- There is no loading dock
- There is no area to store large equipment
- The removal of the parts counter in the past now forces mechanics to access the parts directly, which impedes inventory control (note: this is not the case at the stores area at the Public Works and Transportation facility)
- Parts are received through a doorway in proximity to the stores attendant’s work desk, which is an issue during inclement winter weather conditions
- The stores attendant is obligated to leave the transit maintenance facility to pick up parts during the day, which leaves the stores room unattended

- There is no stores attendant on weekends while on weekdays from 4:30am-8:00am and after 4:00pm, no stores attendant is available. A lead hand is designated the responsibility at these times.

Stores Room

Stores Attendant Work Area in Proximity to Outside

Recommended action: Reconfigure the stores area to improve functionality and employee comfort, add parts counter, and improve parts receiving area.

2.11 Other Storage Rooms and Areas

Observations and discussions with the stores attendant revealed the following issues and possible actions:

Oil and Lubricant Storage Room

Issue: Cannot access room with forklift due to small door opening size; this results in the use of small oil barrels, which are difficult to manoeuvre (health and safety issue).

Action: Enlarge door opening to enable large bulk liquids (oil, gear oil, transmission fluid) to be stored using forklifts. Bulk purchase also save on costs.

Issue: Empty barrels are sometimes placed at exit door, which is a fire violation while liquid storage containers need to be vented at the top in order to have adequate air pressure when pump is being used.

Lubricant Storage Room

Recommended action: Enlarge or redesign lubricant storage area to accommodate larger bulk containers.

Battery Storage Room

Issue: Battery room and access does not allow for forklift access of batteries which weigh 40 kilograms (100 pounds). They are now carried manually; this requires two individuals to lift the battery or risk injury if one person attempts to carry the load.

Battery Storage Room

Recommended action: Enlarge battery storage room and door to accommodate a forklift and movement of the forklift within the room.

Windshield Storage

Issue: Windshields are stored on the second level of the vehicle maintenance area, which requires a person to carry windshields, weighing at over 22 kilograms (50 pounds) down the stairwell, which could be considered a safety issue.

Windshields Stored on Second Level

Recommended action: Add a storage room on the main level in proximity to the mechanic work area. An unheated exterior storage room would be sufficient.

Sand Storage

Issue: Sand storage on-site is provided in a temporary tarp enclosure on the westerly portion of the site. The tarp enclosure is replaced after two years.

Sand Storage Enclosure near Hudson Street

Recommended action: Replace tarp sand enclosure with permanent sand storage enclosure.

Shelter Storage

Issue: Shelters and shelter glass replacements are currently stored in the bus parking area along the north wall, which is also where the Essar Arena spare generator is located. Items such as these eliminate the usability of the overnight parking lane, which is why vehicles are stored in the mechanic's area and bus wash area.

Recommended action: Add unheated exterior storage area to accommodate bus shelters and other items that do not require climate control.

2.12 Body Shop Heating and Transformers

Issue: A heat scan was conducted on the transformer (owned by PW) and it was concluded that the transformer needs to be replaced. The body shop is in-floor electrically heated, which is more expensive than heating by gas.

Recommended action: Rather than **r**eplace transformer for the body shop, remove transformer and convert body shop to gas heating. Replace remaining electrical transformers as recommended in AMFCA report.

2.13 Heating and Cooling

Interviews with administration and maintenance staff revealed issues persist with the HVAC system in place.

Maintenance Area

Issue: During the cold months, the maintenance area constitutes to heat when the overhead doors are open. During the warmer months, work area temperatures of up to 40°C are experienced, which is a health and safety issue. Maintenance staff described it as 'unbearable' and often have to take (paid) breaks.

Recommended action: Provide automatic heat shut-off during cold weather when overhead doors are open for an extended period of time and air cooling/ fans to mechanic work areas in the summer months.

Administration Area

Issue: Air ducts travel a long way under the floor in the administration area. In the winter, cool air is delivered while in the summer, warm air is delivered to the rooms. As a result, ducts are shut off to mitigate the problem.

Recommended action: Re-engineer/ update HVAC system.

Windows

Issue: Window seals throughout the building have never been re-caulked nor have windows been upgraded. This results in costly heat loss and employee discomfort.

Recommended action: Replace all windows or at the very least, immediately re-caulk all windows.

2.14 Other

Building Exterior

Issue: Bricks throughout the exterior of the building are deteriorating, which will accelerate over time due to water penetration causing expansion/ contraction and eventually require costly brick replacement.

Recommended action: Repoint bricks and replace, where necessary and repair deteriorated sealants.

Overhead Doors

Issue: With the exception of the front main door, all overhead doors are have some degree of damage, rust and/or air leakage into the bus parking area. This was clearly identified in the AMFCA report.

Recommended action: Replace all overhead doors with the exception of the recently replaced the main front door.

Air Quality

Issue: Diesel fumes are reported to leak into administration offices, which is a health and safety issue.

Recommended action: Undertake air quality tests and take appropriate action to eliminate leakage into administration offices, training room and lunch room.

Administration Area

Issue: There are shortcomings relative to the administration area such as the need to have a separate dispatch, improved training facilities and washrooms, including the need to meet AODA requirements. In this regard, the public's main entrance power door was identified previously and does not fully open.

Recommended action: Invest in a more functional administration area that better meets staff needs and is AODA compliant. Repairing or replacing the public entrance power door should be undertaken as soon as possible.

Lighting

Issue: Although an LED light replacement program has been underway, complaints of poor lighting was identified as both a safety issue and cost-efficiency issue.

Recommended action: Accelerate the conversion to LED lighting throughout the transit facility building.

3. PUBLIC WORKS SITE OPTION

3.1 Introduction

The alternative to move Sault Transit and ParaBus maintenance and storage function to the Public Works site is discussed in this section. For this part of the analysis, it is assumed that there is sufficient land to accommodate Sault Transit and ParaBus maintenance and storage requirements. The functionality, the impact on traffic, noise, transit operations, and related costs are addressed.

3.2 Traffic Impact

Sault Transit buses entering or leaving the Public Works site can be routed via either Sackville Road, Industrial Park Crescent, or both. Buses using Great Northern Road to Industrial Park Cr., which is a busy intersection; however, since buses deadhead to their start points at approximately 5:30am and return to the garage after 6:30pm and midnight, traffic delays would be minimal.

The two community buses operate during off-peak periods only while the smaller ParaBus vehicles operate during the same hours as Sault Transit and have schedules that are pre-booked and can change daily. These vehicles would have the same options relative to leaving and entering the PW site.

3.3 Noise and Air Pollution

Public Works has existing Environmental Compliance Approvals (ECA's) for noise and air emissions. At the Sault Transit site, a current noise abatement policy does exist that limits and prohibits bus idling on the west side of the vehicle parking garage. Another noise abatement policy limits the operation of the welding bench exhaust to the period from 7:00am to 7:00pm. It is assumed that similar policies would be in effect at the PW site; however, this would be in addition to the existing PW noise and air pollution activities. It will be important to ensure that the combined noise and air pollution impact of a combined Sault Transit and PW site are within performance limits.

In this regard, buses have the option of entering and leaving the PW site away from the closest residents located on Sackville Road, which would mitigate noise pollution levels if they would be exceeded.

4. DEADHEADING IMPACT: SAULT TRANSIT SITE VS PUBLIC WORKS SITE

At the start of the service days, buses depart the garage and deadhead to various locations throughout the city to commence revenue service. When buses return to the garage at the end of their revenue service, they are no longer picking up revenue passengers and as such, are deadheading. A review was undertaken to assess the deadheading impact of the Sault Transit site versus the Public Works site relative to the impact on the carbon footprint and on operating costs based on estimated deadheading distances of Sault Transit buses.

The current environmental impact and financial costs were quantified for Sault Transit's conventional fleet operations only and excludes the demand responsive ParaBus service and the infrequent Community Bus service, which would likely begin and end in proximity to either maintenance facility site.

4.1 Sault Transit Site Deadheading

The existing annual deadheading distances and travel times were calculated to quantify:

- Greenhouse gases (GHGs). GHG impacts global warming and climate change. Greenhouse gases have several components, the most important of which is carbon dioxide (CO_2). GHGs are directly related to the amount of fuel consumed, so that measures aimed at reducing fuel consumption will also reduce GHG emissions.
- Criteria Air Contaminants (CACs). CACs are the components of air pollution and smog, and have a direct impact on human health (among other impacts). They include hydrocarbons (HC), carbon monoxide (CO), particulate matter (PM) and nitrogen oxides (NOx).

During weekdays, there are eight fixed bus routes with two buses on each route to provide 30-minute service. Routes 1 through 5 commence service in the outer areas of the City to being their inbound service while Routes 6 through 8 begin at the bus terminal located at Dennis St. and Queen St. E. At the end of a vehicle's service day, all trips end at the terminal then deadhead to the transit garage. On Saturdays and Sundays only eight buses are used to provide hourly service on all routes. As illustrated in Table 1: Sault Transit Site Annual Deadhead Distances, there were 9,840 deadhead trips where buses travelled a total of 27,054 kilometres, which are used to base the current environmental and cost impacts described in the foregoing.

Existng Sault Transit Site Deadheading				# Trips	# Trips	# Trips	# Annual Deadhead Trips	Annual Deadhead Kilometres
Route	From	To	Distance	Weekday	Sat	Sun		
1 Eastside	Garage	Bennett/ Boundary	6.91	2	1	1	615	4,250
2 Steelton	Garage	Goulais/ Asquith	4.55	2	1	1	615	2,798
3 Second Line	Garage	2nd Line/ Goulais	5.16	2	1	1	615	3,173
4 Riverside	Garage	Queen/ Dacey	9.88	2	1	1	615	6,076
5 McNab	Garage	Trunk/ Capp	5.60	2	1	1	615	3,444
6 Cedar Heights	Garage	Terminal	1.11	2	1	1	615	683
7 North Street	Garage	Terminal	1.11	2	1	1	615	683
8 Sault C/ Algoma U	Garage	Terminal	1.11	2	1	1	615	683
All 8 Routes	Terminal	Garage	1.07	16	8	8	4,920	5,264
						Total	9,840	27,054

Table 1: Sault Transit Site Annual Deadhead Distances

4.1.1 Fuel Consumption, GHGs and Criteria Air Contaminants

Based on the 2014 fuel consumption (1,016,105 litres) and total distance travelled (1,817,555 km), fuel efficiency was 55.9 litres/ 100 kilometres of which 15,123 litres was attributed to the 27,054 km of deadheading, or 1.5% of all diesel fuel consumed. Over the 10-year period, 151,230 litres of fuel would be attributed to deadheading, which translates to the annual CO_2 emissions, as summarized in Table A: CO_2 emissions.

If additional deadheading trips were made as a result of nominal growth in ridership accommodated by additional bus trips, this will also increase the carbon footprint further. Two 10-year scenarios were assessed – no growth and 2% annual growth in deadhead kilometres.

A nominal annual increase in deadheading trips and distances of 2% per annum were assumed, which translates to the following environmental impact over a 10-year period based on no growth in deadheading and 2% growth per year, as summarized in Table 2. For the purposes of this analysis, the current year is assumed to be Year 1.

Based on the current fuel consumed, the distance travelled at an average 40 kph travel speed, the carbon dioxide (CO_2)[1] emissions are 40,631 kg annually (approximately 41 tonnes[2]) and 406 tonnes over 10 years assuming no growth, and 445 tonnes over 10 years based on 2% growth per year in the deadhead kilometres travelled.

Year	Total **Annual** DH km	Total **Annual** DH with 2% growth	CO_2 (kg) no growth	CO_2 (kg) with 2% growth
1	27,054	27,054	40,631	40,631
2	27,054	27,595	40,631	41,444
3	27,054	28,147	40,631	42,273
4	27,054	28,710	40,631	43,118
5	27,054	29,284	40,631	43,980
6	27,054	29,870	40,631	44,860
7	27,054	30,467	40,631	45,757
8	27,054	31,076	40,631	46,672
9	27,054	31,698	40,631	47,606
10	27,054	32,332	40,631	48,558
Cumulative, 10-year	**270,539**	**296,232**	**406,310**	**444,899**

Table 2: CO_2 emissions - Existing Sault Transit Site Deadhead

4.1.2 Deadhead Costs

Deadhead costs are calculated using the Cost Efficiency (cost per hour) derived from the 2014 Canadian Urban Transit Association Fact Book ($98.51/ hour) applied to the hours of deadhead time, which assumes an average speed of 40 kph. On an annual basis, the 27,054 km travelled therefore equates to 676 hours of service at a cost of approximately $66,600 per year.

4.2 Public Works Site Deadheading

The benefit of the current Sault Transit site is that it is in close proximity (1.1 km) to the downtown terminal, which minimizes deadhead times. To compare the impact on deadheading by locating to the Public Works site, it was assumed that all routes would have the same start and end points that are in place today. The annual deadhead distances are illustrated in Table 3: Public Works Site Annual Deadhead Distances.

The Public Works site would result in the need to almost double the deadheading distance to an estimated 54,102 km per year, which translates to 1,352 hours of deadheading based on the average travel speed of 40 kph. The environmental impact and financial costs where then quantified for the Public Works site then compared to that of the Sault Transit site.

[1] CO_2 is the primary component of GHGs. Emission rates were not available for total GHGs.
[2] 1 tonne = 1,000 kg. Values are rounded to the nearest tonne.

Public Works Site Deadheading Route	From	To	Distance	# Trips Weekday	# Trips Sat	# Trips Sun	# Annual Deadhead Trips	Annual Deadhead Kilometres
1 Eastside	Garage	Bennett/ Boundary	7.72	2	1	1	615	4,748
2 Steelton	Garage	Goulais/ Asquith	6.24	2	1	1	615	3,838
3 Second Line	Garage	2nd Line/ Goulais	5.64	2	1	1	615	3,469
4 Riverside	Garage	Queen/ Dacey	11.48	2	1	1	615	7,060
5 McNab	Garage	Trunk/ Capp	5.82	2	1	1	615	3,579
6 Cedar Heights	Garage	Terminal	3.85	2	1	1	615	2,368
7 North Street	Garage	Terminal	3.85	2	1	1	615	2,368
8 Sault C/ Algoma U	Garage	Terminal	4.89	2	1	1	615	3,007
All 8 Routes	Terminal	Garage	4.81	16	8	8	4,920	23,665
						Total	9,840	54,102

Table 3: Public Works Site Deadhead Distances

The environmental impact and financial costs of deadheading were then quantified for the Public Works site.

4.2.1 Fuel Consumption, GHGs and Criteria Air Contaminants

Based on the 2014 fuel consumption and distance travelled, fuel efficiency was 55.9 litres/ 100 kilometres. Deadheading fuel consumption equates to 30,243 litres annually, which translates to the following annual CO_2 emissions, as summarized in Table 4: CO_2 emissions - Public Works Site Deadheading. Based on the current fuel consumed and distance and average 40 kph travel speeds, the carbon dioxide (CO_2) emissions are 81 tonnes annually and 813 tonnes over 10 years assuming no growth, and 890 tonnes over 10 years based on 2% growth per year in the deadhead kilometres travelled. These **CO_2 emissions are double** (2.0x) those associated with the existing site. Because GHGs are directly related to fuel consumption, **fuel consumption is also doubled**.

Year	Total **Annual** DH km	Total **Annual** DH with 2% growth	CO_2 (kg) no growth	CO_2 (kg) with 2% annual growth
1	54,102	54,102	81,253	81,253
2	54,102	55,184	81,253	82,878
3	54,102	56,287	81,253	84,535
4	54,102	57,413	81,253	86,226
5	54,102	58,561	81,253	87,951
6	54,102	59,732	81,253	89,710
7	54,102	60,927	81,253	91,504
8	54,102	62,146	81,253	93,334
9	54,102	63,389	81,253	95,201
10	54,102	64,656	81,253	97,105
Cumulative, 10-year	**541,016**	**592,397**	**812,528**	**889,696**

Table 4: CO_2 emissions - Public Works Site Deadheading

A detailed comparison examines how CO_2 and CACs would increase should the Sault Transit facility be relocated to the Public Works site over a 10-year period, which assumes no growth in deadheading trips taken. Table 5 illustrates the net increase in annual CO_2 emissions, hydrocarbons (HC), carbon monoxide (CO), particulate matter (PM), and nitrogen oxide (NO_x) if buses deadheaded from the Public Works site, according to the no-growth scenario.

[3] Because fuel consumption, CO_2 (and GHGs) and CACs all increase with the additional distances travelled, it is evident that **the Public Works site would generate additional GHGs (and fuel consumption) and CACs, compared with the existing site**. Table 6 shows that the additional 2% per annum growth in deadhead distances travelled (9.5% over the 10-year period, compared with the no-growth deadhead distances) in turn yield a corresponding increase in CO_2 and CACs of 9.5%.

However, the additional amounts of generated fuel, GHGs and CACs should be put into perspective. The current deadhead distance represents 1.5% of the total annual distance travelled by the City's buses today (1,817,555 km per year). The additional deadhead distances associated with the Public Works site add another 1.5% to the total annual bus distances travelled, so that deadhead distances make up 2.9% of the total annual distance. This is a doubling of the current situation; nonetheless, this is still a very small proportion of the overall distance travelled and of the overall fuel consumption, GHG and CAC emissions.

[3] Source: California Air Resources Board, *EMFAC2014 Volume III – Technical Documentation, V1.0.7*, May 12, 2015.

Year	Total increased **Annual** DH km with PW site PW site	CO_2 (kg) no growth	HC (kg) no growth	CO (kg) no growth	PM (kg) no growth	NOx (kg) no growth
1	27,048	40,622	0.47	37.82	34.29	0.24
2	27,048	40,622	0.47	37.82	34.29	0.24
3	27,048	40,622	0.47	37.82	34.29	0.24
4	27,048	40,622	0.47	37.82	34.29	0.24
5	27,048	40,622	0.47	37.82	34.29	0.24
6	27,048	40,622	0.47	37.82	34.29	0.24
7	27,048	40,622	0.47	37.82	34.29	0.24
8	27,048	40,622	0.47	37.82	34.29	0.24
9	27,048	40,622	0.47	37.82	34.29	0.24
10	27,048	40,622	0.47	37.82	34.29	0.24
Cumulative, 10-year	**270,477**	**406,218**	**4.71**	**378.15**	**342.86**	**2.35**

Table 5 Net Impact of Public Works Site on GHGs and Emissions – No Growth in KM

Year	Total **Annual** DH km with growth	CO_2 (kg) with growth	HC (kg) with growth	CO (kg) with growth	PM (kg) with growth	NOx (kg) with growth
1	27,048	40,622	0.47	37.82	34.29	0.24
2	27,589	41,434	0.48	38.57	34.97	0.24
3	28,140	42,263	0.49	39.34	35.67	0.24
4	28,703	43,108	0.50	40.13	36.38	0.25
5	29,277	43,970	0.51	40.93	37.11	0.25
6	29,863	44,850	0.52	41.75	37.85	0.26
7	30,460	45,747	0.53	42.59	38.61	0.26
8	31,069	46,662	0.54	43.44	39.38	0.27
9	31,691	47,595	0.55	44.31	40.17	0.28
10	32,325	48,547	0.56	45.19	40.97	0.28
Cumulative, 10-year	**296,165**	**444,797**	**5.15**	**414.06**	**375.42**	**2.58**

Table 6: Net Impact of Public Works Site on GHGs and Emissions – 2% p.a. Growth in KM

Given the nominal impact associated with the increase in the carbon footprint, the impact of the difference was then assessed relative to the service provided and additional costs.

4.2.1 Deadhead Impact on Service and Costs

Based on the 1,352 hours of deadheading in Year 1, the annual deadheading cost of $98.51 per hour translates to approximately $133,200 per year in total direct operating costs, which is double the deadhead cost when compared to the existing Sault Transit site. Relocating to the Public Works site would increase annual deadhead operating costs by 100% or $66,600; however, this assumes that the downtown terminal would remain as the main transfer point.

Another approach that was considered to assess the impact is what the additional deadhead distance means to revenue service. If the deadhead travel time difference (676 hours) was converted to revenue service in Year 1, this would equate to a number of service increase options such as adding 1.5 hours of Sunday service to all routes or providing a Sunday level of service (12 hours) for all routes on approximately 5 statutory holidays when no service is available.

4.2.2 Environmental and Financial Summary

If the Sault Transit operations were operated out of the Public Works site at 128 Sackville Road, there will be a negative impact on Criteria Air Contaminants and GHGs while there would be an added transit cost of approximately $66,600 per year. While the use of alternative engine propulsion technology or other emissions / fuel reduction technologies could reduce the transit carbon footprint, there will remain to be added costs to accommodate increased deadheading. This may change. Consideration could be given to adjusting the route structure so as to reduce the deadheading distance from the Public Works site while still maintaining the same level and quality of service.

Given that development is occurring in the northern sections of the City (e.g. north of Second Line), the role of the downtown terminal may be diminished in a restructured route network. This would then change the impact on both deadhead costs and GHGs and emissions.

5. SUMMARY

The 2013 Asset Management Facility Condition Assessment (AMFCA) report identified many issues that recommended expenditures at the Sault Transit site during the first three years of the 25-year investment plan. Based on the on-site inspections and staff interviews, there are many issues that have yet to be addressed in whole or in part.

The existing Sault Transit site can accommodate expansion through better use of the existing building footprint or modestly expanding the building footprint. At the very least, the Sault Transit site will need to be repaired and upgraded. Transit operating costs and GHGs and emissions are estimated to be higher if buses were relocated to the Public Works site; however, this may not be the case in the future. The alternative Public Works site is also viable since there is sufficient land available to house a new maintenance and storage facility whether or not it is a stand-alone facility or combined with Public Works.

Key to determining whether or not future Sault Transit requirements will be better met at the existing Sault Transit site or the Public Works site may depend on the role that transit plays in the long-term. Given the change in demographics experienced over the last few years and expected in the future, the opportunities available to grow Sault Transit and Para-Bus ridership can be significant and as such, more buses would be needed along with a functional transit facility. If a decision is to be reached relative to the future site of the transit maintenance facility, whatever is decided must ensure that future needs are met in a fiscally responsible manner.

APPENDIX 6

Requirements Report

Perry and Perry Architects Inc.

TRANSIT OPERATIONS & GARAGE
FEASIBILITY STUDY

REQUIREMENTS REPORT

FEASIBILITY STUDY
TRANSIT OPERATIONS & GARAGE
POTENTIAL TO INTEGRATE WITH PUBLIC WORKS SITE
128 SACKVILLE ROAD

TABLE OF CONTENTS

INTRODUCTION

This report outlines the Program of Requirements for the City of Sault Ste Marie Transit Operations and Garage potential to integrate with the Public Works and Transportation Site located at 128 Sackville Road.

The Study involves the review of three (3) options summarized as follows:

A. Addition/Renovation at 111 Huron Street
B. Addition/Renovation at 128 Sackville Road
C. New Integrated Building at 128 Sackville road

The Program of Requirements was developed through a series of meetings and tours of existing premises with the stakeholders. Additional requirements, best practices, and industry standards for the proper design of a modern fleet and bus garage facility have also been included in this report to assist all stakeholders with the design of the proposed facility during the next stages of this project.

This report includes a program of all the required spaces for the facility, their functional and adjacency requirements, an equipment list, and Concept Designs. A corresponding draft class D cost estimate is being prepared based on the requirements defined in this report. This estimate will be issued when completed, under separate cover.

The facility is to accommodate the daily servicing, storage, and maintenance of 40 buses, including 10 Parabus vehicles. No articulating or double deck buses will be accommodated. The total Gross Floor Area established in the space program is approximately 75,000 square feet including circulation.

It is recommended that the City review this document to ensure all their requirements have been incorporated, and if necessary, provide feedback to the Consultant Team for use in the next phase of the Schematic Design.

PROJECT OBJECTIVES

A meeting with the Project Team was held to confirm the project objectives to clearly define the project scope and establish a clear understanding of the larger gals of the project.

The Project Team has established the following project specific goals and objectives:

- Functional, modern, efficient transit operations and garage facility
- Centrally located with minimal impact on residential areas
- Open concept service area to facilitate easy and efficient supervision
- Functionally efficient dedicated service areas
- Accommodate for current space needs (40 buses) and future (60 buses)
- Environmentally responsible (LEED principles)
- Consider future expansion needs
- Maintenance free design, materials and equipment
- Consolidate and centralize all related City functions (Integrated)
- Barrier Free accessible
- Incorporate design flexibility of space
- Build to current building, life safety, fire and electrical codes
- Technically current ("wired" building)
- Portray a professional image that is efficient, competitive and cost-effective

Both of the sites currently have noted shortcomings and deficiencies that an integrated facility may be able to address. The feasibility study should consider the following potential synergies and design features, but not be limited to the following list. The advantages and disadvantages of the integrated site and each component of the site should be studied as well as consideration given to the option of a new standalone transit facility on the PWT site.

- Facilities must be sized adequate to handle the current and future fleet.
- Traffic flow throughout the site – transit, PWT operations and the general public including adequate turning radii for all heavy equipment including buses, graders and plows.
- Administration offices for both PWT and Transit including reception and dispatch. A central customer service area should be considered.
- Adequate cafeteria space for both PWT and Transit.
- Adequate locker rooms and showers for both PWT and Transit.

- Combined stores area to manage parts and supplies for both PWT and Transit.
- A shared mechanics area with hoists adequate for both PWT and Transit equipment. This area should also include a 5 – 6 tonne overhead crane and ensure adequate shop ventilation.
- PWT site has a newly installed emergency generator and all additional buildings should provide for emergency generator connection (250kV).
- A connection to Building „O" or other appropriate connections may provide efficiencies.
- Adequate equipment storage areas, including consideration for seasonal and spare tires.
- Parking requirements for an integrated staff and the general public needs to be considered.
- Security requirements (i.e. video surveillance) for all new areas of operation should be included.

FUNCTIONAL REQUIREMENTS

The Functional Space Requirements for the facility were determined through a series of meetings and various user groups for the facility. Area calculations for the Administration, Bus Storage, Vehicle Maintenance, Stores, Service lanes, Parking areas and other internal and external areas were based on Owner requirements and good practice industry standards. The resulting detailed Functional Space Program is enclosed in the Appendix.

Relocating to 128 Sackville Road provides an opportunity to consolidate different municipal Public Works Departments and realize space savings in shared functions as follows:

- Meeting/Boardroom (Training Room)
- Reception/Waiting (require one for Garage, one for Administration)
- Lockers/Showers /Lunchroom (80 person capacity)
- Stock Room/ Shipping & Receiving
- Public Washrooms/Staff Washrooms
- Staff Room
- Mechanical/Electrical/Janitor Room
- Compressor Room/Oxygen & Gas
- Wash Bay
- Tool Crib/Tire Storage/Tire Repair Station
- Generator

A summary of the Functional Space Requirements documenting the required allocated spaces is summarized as follows:

DIVISON	DESCRIPTION	EXISTING s.f. per unit	PROPOSED s.f. per unit	TOTAL ASSIGNABLE AREA Sq Ft	TOTAL STAFF REQUIERD	REMARKS AND EXPLANATORY NOTES
TRANSIT DIVISION						
	Sub Total:	0.00	1,345.00	2,423.25	18	
		0.00	1,345.00	**2,423.25**	**18**	
FLEET OPERATIONS						
	Sub Total:	0.00	500.00	2,436.75	15	
		0.00	500.00	**2,436.75**	**15**	
SHARED SUPPORT SPACE						
	Sub Total	0.00	5,305.00	7,161.75	0	
		0.00	5,305.00	**7,161.75**	**0**	
REPAIR SHOP AREA						
	Sub Total	0.00	10,400.00	16,320.00	0	
		0.00	10,400.00	**16,320.00**	**0**	
VEHICLE STORAGE						
	Sub Total	0.00	1,175.00	44,800.00	0	
		0.00	1,175.00	**44,800.00**	**0**	
	CIRCULATION	Included	0.00	0.00	0	
	TOTALS	0.00	8,325.00	**73,141.75**	**33**	

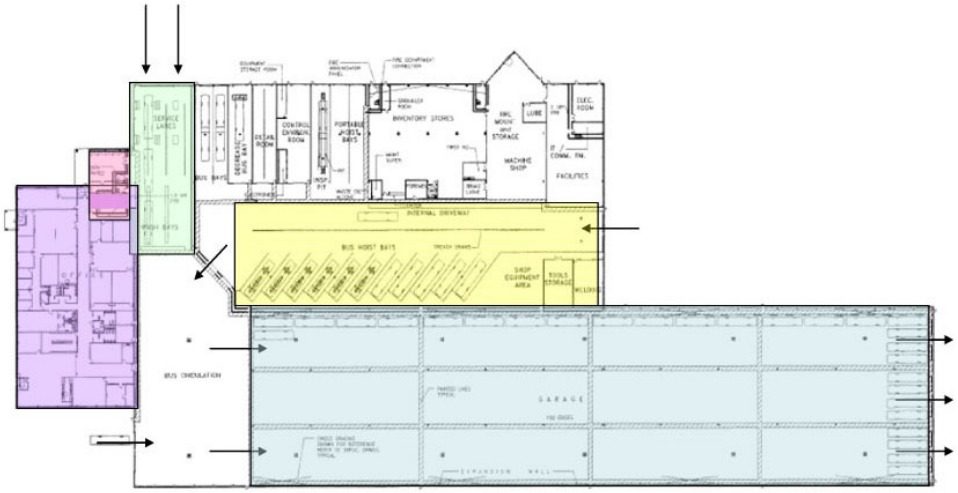
Public Works & Transportation

DIVISON	DESCRIPTION	EXISTING s.f. per unit	PROPOSED s.f. per unit	TOTAL ASSIGNABLE AREA Sq Ft	TOTAL STAFF REQUIERD	REMARKS AND EXPLANATORY NOTES
ADMINISTRATION						
	Sub Total:	0.00	1,030.00	1,390.50	9	
		0.00	1,030.00	**1,390.50**	**9**	
TRAFFIC						
	Sub Total:	0.00	90.00	1,498.50	11	
		0.00	90.00	**1,498.50**	**11**	
BUILDINGS & EQUIPMENT						
	Sub Total	0.00	1,290.00	4,050.00	32	
		0.00	1,290.00	**4,050.00**	**32**	
CARPENTRY						
	Sub Total	0.00	540.00	1,336.50	9	
		0.00	540.00	**1,336.50**	**9**	
PARKS						
	Sub Total	0.00	960.00	4,212.00	85	
		0.00	960.00	**4,212.00**	**85**	
OPERATIONS SUPERVISION						
	Sub Total	0.00	720.00	1,215.00	8	
		0.00	720.00	**1,215.00**	**8**	
OPERATIONS						
	Sub Total	0.00	630.00	14,823.00	122	
		0.00	630.00	**14,823.00**	**122**	
SHARED SUPPORT SPACE						
	Sub Total	0.00	8,570.00	11,569.50	0	
		0.00	8,570.00	**11,569.50**	**0**	
REPAIR GARAGE SHOP AREAS						
	Sub Total	0.00	56,650.00	67,980.00	0	
		0.00	56,650.00	**67,980.00**	**0**	
	CIRCULATION	Included	0.00	0.00	0	
	TOTALS	0.00	70,480.00	**108,075.00**	**276**	

KEY FUNCTIONAL RELATIONSHIPS

Design Team meetings were held to confirm that the existing building can functionally accommodate the space needs. A key functional relationship diagram was further developed to confirm that the interrelationships of the functional requirements could be satisfied. It was concluded that the existing building can accommodate the current and future needs of the City of Sault Ste Marie Transit Operations.

Ideal Bus Layout



111 Huron Street Bus Layout

GENERAL DESIGN CONSIDERATIONS

111 Huron Street

Transit Bus Depot Garage (44,000 SF)

The current transit garage facility is located at 111 Huron Street (Figure 1). Huron Street is in the downtown portion of the city. The Transit Garage was built in 1983 and is in need of costly major repairs and upgrades. Morrison Hershfield completed an Asset Management Facility Condition Assessment in 2013 identifying key capital improvements summarized as follows:

Priority 1 - Replace and relocate transformer in bus wash bay ($5,000.00)

Priority 2 – Capital improvements over the next three years ($896,333):

- Continue repairs in concrete floors at bus hoist frames
- Replace sealant joints at the exterior
- Replace all overhead doors
- Begin a phased program of roof replacements
- Replace make-up air unit at the body shop
- Replace older make-up air units at the storage garage
- Replace electrical transformers
- Convert all interior, exterior and site lighting to LED fixtures
- Repair sprinkler and fire protection systems as needed
- Resurface parking lot for office staff

Figure 1—Transit Location Plan

In addition to these capital investments the current location is in the south central portion of the community. This location is no longer central to key destinations (i.e. hospital, medical office buildings, box stores, college, university, etc.) as the community has developed in a northerly direction. This has resulted in additional travel times for buses travelling to and from the garage when beginning and ending their service routes. The transit terminal is located at 160 Queen Street East (corner of Dennis Street).

128 Sackville Road

The Public Works facility is located at 128 Sackville Road as can be seen on Figure 2 and it should be noted the PWT site does include civic addresses 115 and 137 Industrial Park Crescent, as well. The Public Works and Transportation Centre is an industrial facility designed in 1969 and built in the early 1970s. It abuts a residential area to the west, and primarily (light) industrial/commercial areas to the north, south and east.

Figure 2 – PWT Location Plan

It is used to store and maintain municipal style equipment that support parks, sewer, traffic, and road infrastructure for the City of Sault Ste. Marie. The site also includes an administration building used to monitor the work completed by PWT. This site also includes a fuel island and aboveground storage tanks to supply Public Works equipment with diesel and gasoline.

During the mid-1990s the Parks Division was amalgamated into the Public Works Site. Amalgamation included moving personnel, equipment and

maintenance Facilities into the original Public Works Facility. During the early 2000s satellite garages located in Korah and on McNabb Street were also sold. The result of this was a reduction in space that is available for storage and repair of equipment. During peak operation in the summer months there are currently over 300 employees working from the Public Works Site.

As the facility aged and expanded in use, deficiencies and upgrades have been identified. Morrison Hershfield completed an Asset Management Facility Condition Assessment in 2013 identifying key capital improvements summarized as follows:

Public Works Administration Building (10,100 SF)

The Public Works Administration building is a 2-storey steel frame building acting as the offices for the public works department. The building was constructed in about 1970, and is clad with a combination of brick masonry, stucco and metal cladding. The building is connected with Building A-Garage, which is immediately to the east.

The building is in fair condition, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating. There are no safety concerns requiring immediate expenditures.

Capital improvements over the next three years ($473,000):

- Replace roof over washrooms
- Replace distribution transformer
- Repave front parking lot
- Replace rooftop units
- Allowance to repair hydronic heating system
- Replace front entrance doors
- Replace remaining original windows - second floor and ground floor
- Repair stucco
- Paint metal siding

Functional issues include:

- The second floor of the administration building is not accessible to the public. Meeting rooms are located on the second floor. An elevator is necessary to make the building accessible.
- The cafeteria size was reduced to create office for Parks administration staff and therefore is too small for current PWT staffing levels.

- Expansion of lockers rooms and washrooms are required for both men and women. Currently lockers are located in hallways and workers must dress in the hallways.

Public Works Garage – Building A (61,100)

The Public Works Garage, Building A is a single storey building with mezzanines containing storage, maintenance, offices and shops for the Public Works Department. The building was constructed in about 1970, and is a prefabricated rigid frame steel structure, clad primarily with corrugated metal cladding. The building was constructed at the same time as the adjacent administration building, which is connected with a corridor.

The building is in fair condition overall, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating. There are no safety concerns requiring immediate expenditures.

Capital improvements over the next three years ($802,000):

- Replace metal siding at south and east elevations
- Replace primary heating boilers, expansion tanks, hydronic circulation pumps and allow for repairs to hydronic distribution piping.
- Replace domestic hot water heaters and storage tanks in boiler room
- Allowance to repair fan coil units
- Replace interior distribution transformers
- Resurface asphalt pavements around building

Functional issues include:

- There is a lack of equipment washing facility. The current area is congested and not large enough to efficiently handle all equipment stored and used by Public Works and Parks. Washing of vehicles is especially important in the winter months to clean salt, sand and snow so operators can complete a proper vehicle inspection for safety.
- Lack of equipment storage area results in the use of outdoor storage containers to store Parks equipment. There is also a lack of storage and maintenance area for the Sewer Division. Equipment is currently being stored in outbuildings.
- There is a lack of covered sand storage facility. This creates an environmental problem due to saturation of salt that is occurring in the storage yard.

- The mechanic shop and welding shop are the original design from 1969. There has been an expansion of equipment necessary to provide Public Works services. Equipment is larger and requires specialized tooling that is necessary for the repair of this equipment. This area requires expansion.

Carpentry Building (4,750 SF)

The carpentry building consists of a steel-framed carport structure that was enclosed, as well as an adjoining modular building. The carport was likely constructed in the early 1970's, with the modular building added in the mid-1990's. Fire alarm devices in this building are monitored by the panel in adjacent Building A- Garage.

The building is in fair condition, but several replacement and restoration projects have been deferred such that the overall condition is deteriorating.

Priority 1 - Immediate expenditures ($21,000):

- Exposed rigid insulation throughout the building should be clad with metal or drywall to reduce risk to occupants in a fire.

Priority 2 - Capital improvements over the next three years ($54,000):

- Cover exposed rigid insulation;
- Recoat or paint metal roof; and
- Replace flat roof.

Lab Building (1,236 SF)

The Lab Building is a prefabricated metal building used for testing of concrete, asphalt and granular materials used during road construction. The building is connected with the adjacent CCTV building. We understand the building was moved to its current location in about 1988.

The building is generally in good condition. Capital expenditures for this facility in the future are expected to be minimal, with most costs being below study threshold. There are no safety concerns requiring immediate expenditures. No capital recommendations over the next three years.

CCTV Building (1,216 SF)

The CCTV Building is a prefabricated metal building used to store specialty equipment. The building is connected with the adjacent lab building, and was constructed in 2011.

The building is in excellent condition and essentially brand new. There are no safety concerns requiring immediate expenditures. No major capital expenditures are anticipated in the near future.

Equipment Storage Garage (21,804 SF)

The equipment storage garage is a single-storey building that primarily stores landscaping and snow removal equipment. The building is steel framed, clad with corrugated metal and has a flat roof. The building was constructed in about 1985.

The building is in fair condition apart from the roof. No Priority 1 – Immediate expenditures were identified.

Capital improvements over the next three years ($460,000):

- Replace main building roof;
- Replace suspended unit heaters; and
- Replace distribution transformer.

Ontario Building Code Matrix – 111 Huron Street

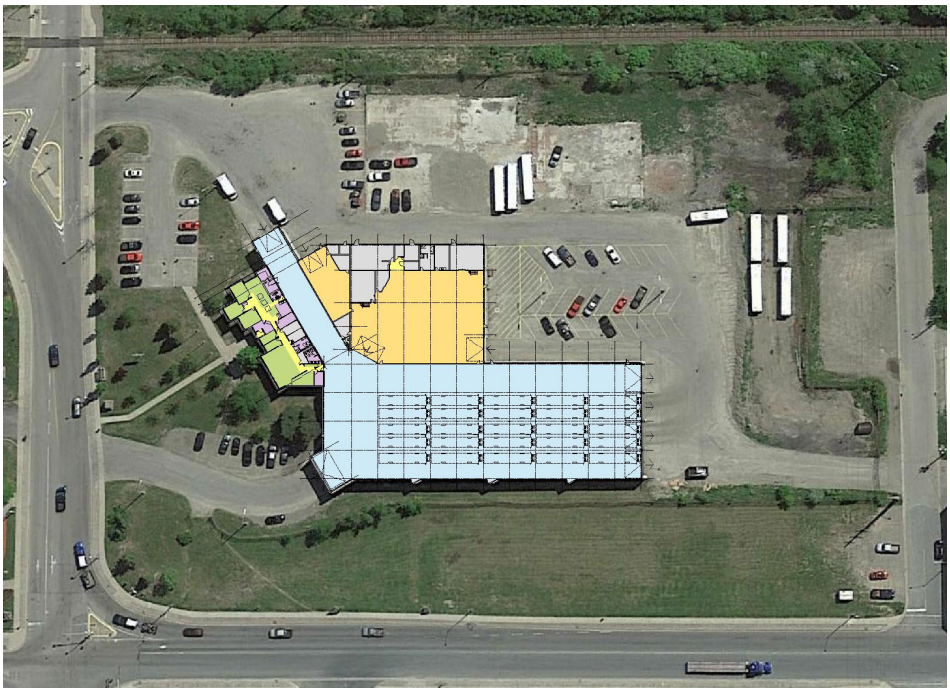
Ontario Building Code Data Sheet		Comments
Project Description	Renovation	
Major Occupancy(s)	Group F2 (major)/ Group D (minor)	Low Hazard Industrial/ Business & Personal Services
Building Area m^2 (ft^2)	7,000 m^2 (+/-75,000 sf)	Existing Building
Gross Area	7,000 m^2 (+/-75,000 sf)	No second floor addition proposed
Number of Storeys	1	Possible 2 storey pending second floor addition
Height of Building (ft)	8.5 m (+/- 28'-0")	
Number of Streets	2 (minimum)	
Building Classification	Group F2, up to 4 Storeys (3.2.2.69)	Minor D Occupancy
Sprinkler System	Required	
Standpipe and Hose	Required	
Fire Alarm System	Required	
Fire Alarm Monitoring	Not Applicable	
Voice Communication	Yes	Public Address System
Emergency Power	Yes	Generator
Water Service/Supply	Yes	Fire Flow Calculations required for addition only
Fire Pumps	Yes	Operation to be confirmed
Maglocks	Not Required	
Special Systems	Yes	Paint Booth, Welding, Vehicle Exhaust
High Building	No	
Permitted Construction	Non-combustible	Floor Assemblies 1 hour FRR
Roof Construction	Non-combustible	
Mezzanine(s) Area m^2	(to be confirmed)	Pending final design solution
Occupancy Load	75	Administration (20) + Repair Garage (50)
Barrier-Free Design	Yes	Administrative and Public areas only
Plumbing Facilities	4 wc (males) / 4 wc (females)	Does not include for M/F Shower/Change
Spatial Separation	(to be confirmed)	Repair Garage requires 2 hour fire separation

Ontario Building Code Matrix – 128 Sackville Road

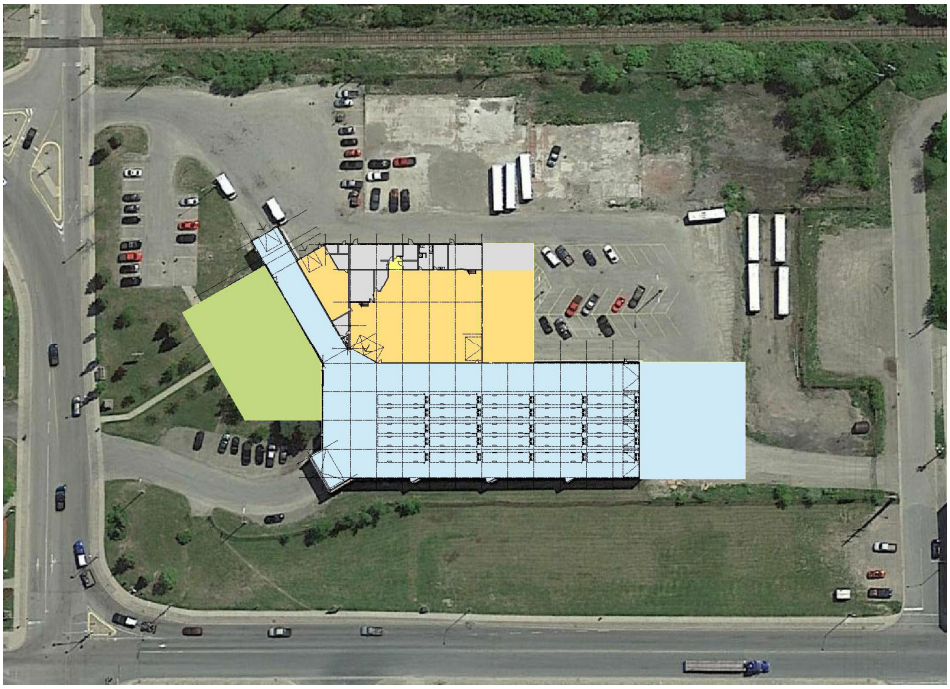
Ontario Building Code Data Sheet		Comments
Project Description	New Construction	
Major Occupancy(s)	Group F2 (major)/ Group D (minor)	Low Hazard Industrial/ Business & Personal Services
Building Area m^2 (ft^2)	15,000 m^2 (+/-185,000 sf)	
Gross Area	17,000 m^2 (+/-185,000 sf)	
Number of Storeys	2	
Height of Building (ft)	8.5 m (+/- 28'-0")	
Number of Streets	1	
Building Classification	Group F2, Any Height or Any Area	(3.2.2.67) Minor D Occupancy
Sprinkler System	Required	
Standpipe and Hose	Required	
Fire Alarm System	Required	
Fire Alarm Monitoring	Not Applicable	
Voice Communication	Yes	Public Address System
Emergency Power	Yes	Generator
Water Service/Supply	Yes	Fire Flow Calculations to be confirmed
Fire Pumps	Yes	Operation to be confirmed
Maglocks	Not Required	
Special Systems	Yes	Paint Booth, Welding, Vehicle Exhaust
High Building	No	
Permitted Construction	Non-combustible	Floor Assemblies 1 hour FRR
Roof Construction	Non-combustible	
Mezzanine(s) Area m^2	(to be confirmed)	Pending final design solution
Occupancy Load	250	
Barrier-Free Design	Yes	Administrative and Public areas only
Plumbing Facilities	12 wc (males) / 12 wc (females)	Does not include for M/F Shower/Change
Spatial Separation	(to be confirmed)	Repair Garage requires 2 hour fire separation

CONCEPT DESIGNS - 111 Huron Street

Existing Site Plan



Proposed Site Plan



PRELIMINARY PROJECT BUDGET

111 Huron Street Addition/Renovation

	Units	Qty	Rate/Lot	TOTAL	Comments
Land Acquisition					
Purchase Cost	fixed	1	$0.00	$0.00	Essar Land to South?
Legal Fees/Closing Costs	%	PP	1.75%	$0.00	
OLS Survey	fixed	1	$2,500.00	$2,500.00	
Topographic Survey	fixed	1	$3,500.00	$2,500.00	
Appraisal Fees	fixed	0	$0.00	$0.00	
Geotechnical Investigation	fixed	1	$25,000.00	$25,000.00	
Environmental Assessment	fixed	1	$25,000.00	$25,000.00	DSS Report
Sub Total			$0.00	**$55,000.00**	
Construction Costs					
Off-Site Improvements	fixed	1	$0.00	$0.00	
On-Site Development	fixed	1	$500,000.00	$500,000.00	Site Drainage
Roof Repair	sf	50000	$25.00	$1,250,000.00	
Existing Building Upgrades	sf	50000	$50.00	$2,500,000.00	Building Envelope
Addition (Service Bays)	sf	4500	$250.00	$1,125,000.00	
Addition (Bus Storage)	sf	4500	$200.00	$900,000.00	
Addition (Administration)	sf	6000	$300.00	$1,800,000.00	
Renovation (Administration)	sf	4000	$150.00	$600,000.00	
Process Equipment	fixed	1	$250,000.00	$250,000.00	New Hoists
Contingency	%	CC	10.00%	$892,500.00	
Sub Total				**$9,817,500.00**	
Professional Fees + Charges					
Architect/Engineer	%	CC	10.0%	$981,750.00	
Civil Engineer	%	CC	10.00%	$50,000.00	
Project Management	%	CC	2.00%	$196,350.00	
Project Administration	%	CC	1.00%	$98,175.00	
Quantity Surveyor	fixed	1	$25,000.00	$25,000.00	
Furnishings and Equipment	fixed	1	$150,000.00	$150,000.00	
Voice/Data/Security	fixed	1	$25,000.00	$25,000.00	
Sub Total				**$1,526,275.00**	
Financing and Administration					
Not Applicable	%	PC	0.0%	$0.00	To be confirmed
Sub Total				**$0.00**	
Project Contingency	%	PC	5.0%	$569,938.75	
TOTAL PROJECT COST				**$11,968,713.75**	does not include HST

This Recommended Project Budget is intended to provide a modified Class D Order of Magnitude assessment (+/-15%) of the project costs associated with the project at the design analysis stage. Accordingly, this cost estimate should only be considered in conjunction with the proposed preliminary scope of work and design documents associated with the project. This type of estimate is used to obtain project approval and maintain a baseline for budgetary control.

PRELIMINARY PROJECT BUDGETS

128 Sackville Road PW Upgrades

	Units	Qty	Rate/Lot	TOTAL	Comments
Land Acquisition					
Purchase Cost	fixed	1	$0.00	$0.00	
Legal Fees/Closing Costs	%	PP	1.75%	$0.00	
OLS Survey	fixed	1	$0.00	$0.00	
Topographic Survey	fixed	1	$0.00	$2,500.00	
Appraisal Fees	fixed	0	$0.00	$0.00	
Geotechnical Investigation	fixed	1	$0.00	$0.00	
Environmental Assessment	fixed	1	$25,000.00	$25,000.00	DSS Report
Sub Total			$0.00	**$27,500.00**	
Construction Costs					
Off-Site Improvements	fixed	1	$0.00	$0.00	
On-Site Development	fixed	1	$300,000.00	$300,000.00	Sand Storage
PW Administration Building	fixed	1	$750,000.00	$750,000.00	Includes Elevator
PW Garage Upgrades	fixed	1	$1,000,000.00	$1,000,000.00	
Equipment Storage Garage	fixed	1	$500,000.00	$500,000.00	
Demolition/Removals	fixed	1	$250,000.00	$250,000.00	
Contingency	%	CC	10.00%	$280,000.00	
Sub Total				**$3,080,000.00**	
Professional Fees + Charges					
Architect/Engineer	%	CC	10.0%	$308,000.00	
Civil Engineer	%	CC	10.00%	$30,000.00	
Project Management	%	CC	2.00%	$61,600.00	
Project Administration	%	CC	1.00%	$30,800.00	
Quantity Surveyor	fixed	1	$15,000.00	$15,000.00	
Furnishings and Equipment	fixed	1	$0.00	$0.00	
Voice/Data/Security	fixed	1	$25,000.00	$25,000.00	
Sub Total				**$470,400.00**	
Financing and Administration					
Not Applicable	%	PC	0.0%	$0.00	To be confirmed
Sub Total				**$0.00**	
Project Contingency	%	PC	5.0%	$178,895.00	
TOTAL PROJECT COST				**$3,756,795.00**	does not include HST

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CONCEPT DESIGNS - 128 Sackville Road

Existing Site Plan

Proposed Site Plan – Integrated Option A

PRELIMINARY PROJECT BUDGETS

128 Sackville Road Integrated Building – Option A

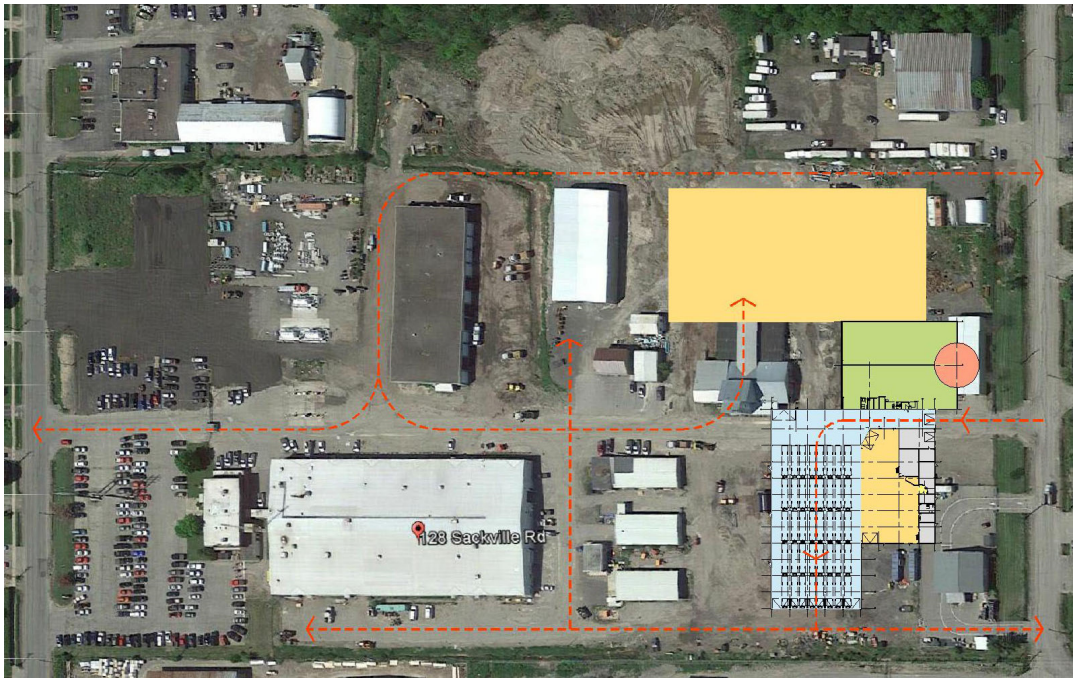
	Units	Qty	Rate/Lot	TOTAL	Comments
Land Acquisition					
Purchase Cost	fixed	1	$0.00	$0.00	
Legal Fees/Closing Costs	%	PP	1.75%	$0.00	
OLS Survey	fixed	1	$3,500.00	$3,500.00	
Topographic Survey	fixed	1	$5,000.00	$2,500.00	
Appraisal Fees	fixed	0	$0.00	$0.00	
Geotechnical Investigation	fixed	1	$40,000.00	$40,000.00	
Environmental Assessment	fixed	1	$25,000.00	$25,000.00	ESA Phase 1/2
Sub Total			$0.00	**$71,000.00**	
Construction Costs					
Off-Site Improvements	fixed	1	$0.00	$0.00	
On-Site Development	sf	50000	$25.00	$1,250,000.00	
Transit Building	sf	75000	$250.00	$18,750,000.00	
Public Works Building	sf	15000	$300.00	$4,500,000.00	
Process Equipment	fixed	1	$2,500,000.00	$2,500,000.00	
Contingency	%	CC	10.00%	$2,700,000.00	
Sub Total				**$29,700,000.00**	
Professional Fees + Charges					
Architect/Engineer	%	CC	10.0%	$2,970,000.00	
Civil Engineer	%	CC	10.00%	$125,000.00	
Project Management	%	CC	1.50%	$445,500.00	
Project Administration	%	CC	0.75%	$222,750.00	
Quantity Surveyor	fixed	1	$35,000.00	$35,000.00	
Furnishings and Equipment	fixed	1	$500,000.00	$500,000.00	
Voice/Data/Security	fixed	1	$75,000.00	$75,000.00	
Sub Total				**$4,373,250.00**	
Financing and Administration					
Not Applicable	%	PC	0.0%	$0.00	To be confirmed
Sub Total				**$0.00**	
Project Contingency	%	PC	5.0%	$1,707,212.50	
TOTAL PROJECT COST				**$35,851,462.50**	does not include HST

This Recommended Project Budget is intended to provide a modified Class D Order of Magnitude assessment (+/-15%) of the project costs associated with the project at the design analysis stage. Accordingly, this cost estimate should only be considered in conjunction with the proposed preliminary scope of work and design documents associated with the project. This type of estimate is used to obtain project approval and maintain a baseline for budgetary control.

CONCEPT DESIGNS - 128 Sackville Road

Existing Site Plan

Proposed Site Plan – Integrated Option B



PRELIMINARY PROJECT BUDGETS

128 Sackville Road Integrated Building – Option B

	Units	Qty	Rate/Lot	TOTAL	Comments
Land Acquisition					
Purchase Cost	fixed	1	$0.00	$0.00	
Legal Fees/Closing Costs	%	PP	1.75%	$0.00	
OLS Survey	fixed	1	$3,500.00	$3,500.00	
Topographic Survey	fixed	1	$5,000.00	$2,500.00	
Appraisal Fees	fixed	0	$0.00	$0.00	
Geotechnical Investigation	fixed	1	$40,000.00	$40,000.00	
Environmental Assessment	fixed	1	$25,000.00	$25,000.00	ESA Phase 1/2
Existing Building Demolition	fixed	1	$250,000.00	$250,000.00	
Sub Total			$0.00	**$321,000.00**	
Construction Costs					
Off-Site Improvements	fixed	1	$0.00	$0.00	
On-Site Development	sf	50000	$25.00	$1,250,000.00	
Transit Building	sf	75000	$250.00	$18,750,000.00	
Public Works Administration	sf	15000	$300.00	$4,500,000.00	
Public Works Garage	sf	95000	$200.00	$19,000,000.00	
Process Equipment	fixed	1	$2,500,000.00	$2,500,000.00	Transit Only
Contingency	%	CC	10.00%	$4,600,000.00	
Sub Total				**$50,600,000.00**	
Professional Fees + Charges					
Architect/Engineer	%	CC	8.0%	$4,048,000.00	
Civil Engineer	%	CC	10.00%	$125,000.00	
Project Management	%	CC	1.00%	$506,000.00	
Project Administration	%	CC	0.50%	$253,000.00	
Quantity Surveyor	fixed	1	$35,000.00	$35,000.00	
Furnishings and Equipment	fixed	1	$500,000.00	$500,000.00	
Voice/Data/Security	fixed	1	$125,000.00	$125,000.00	
Sub Total				**$5,592,000.00**	
Financing and Administration					
Not Applicable	%	PC	0.0%	$0.00	To be confirmed
Sub Total				**$0.00**	
Project Contingency	%	PC	5.0%	$2,825,650.00	
TOTAL PROJECT COST				**$59,338,650.00**	does not include HST

This Recommended Project Budget is intended to provide a modified Class D Order of Magnitude assessment (+/-15%) of the project costs associated with the project at the design analysis stage. Accordingly, this cost estimate should only be considered in conjunction with the proposed preliminary scope of work and design documents associated with the project. This type of estimate is used to obtain project approval and maintain a baseline for budgetary control.

SUMMARY

OPTION	LOCATION	TYPE	COST	REMARKS
I	111 Huron Street 128 Sackville Road	Addition/Renovation PW Upgrades	**$16.0M**	2013 Asset Management Facility Condition Assessment upgrades included
II	128 Sackville Road Integrated Option A	Addition/Renovation	**$36.0M**	Existing grade and public access issues
III	128 Sackville Road Integrated Option B	New Construction	**$60.0M**	

The Project Team agreed that **Option II – 128 Sackville Road Integrated Option A** proposing a major addition on the east end of the existing PW garage did not fully achieve the project objectives. In addition, the current grade across the site (6 m difference between Industrial Park and Sackville) results in a "split" building compromising the functionality of the site and operations. The combined administration and building for staff would be located in the middle however, it is required to be accessible to the public and include public parking.

The third alternative, **Option III – 128 Sackville Road Integrated Option B** constructing a new standalone transit facility on the Sackville Road site has been eliminated. It was concluded that the sharing of common functions with Public Works would be difficult, deadhead costs would increase and there is not much advantage gained by duplicating the existing Huron St building at 128 Sackville Rd.

RECOMMENDATION

The Project Team recommends that **Option I – 111 Huron Street Addition/Renovation** and **128 Sackville Road PW Upgrades** represents the best option to realize the project objectives, accommodate the specified space requirements and achieve the maximum functionality in the most cost-effective solution.

APPENDIX 7

Minutes of Project Meetings

TULLOCH ENGINEERING

71 Black Road
Unit 8
Sault Ste. Marie, ON
P6B 0A3

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F. 705 949.9606
TF. 866 806.6602
saultstemarie@TULLOCH.ca
WWW.TULLOCH.ca

16-1085

City of Sault Ste. Marie
Transit Relocation Feasibility Study
Project Initiation Meeting
Minutes
Tuesday August 9, 2016 – 10:30 a.m.
PWT Boardroom

Present: PWT: Larry Girardi, Susan Hamilton Beach, Don Scott, Mike Blanchard

Tulloch Engineering: Larry Jackson, Pat McAuley

Transit Consulting Network: Wally Beck (by phone)

Perry + Perry Architects: Chris Perry

1. Scope of Work/Overview of Project

Discussion took place on scope of work to be carried out for the feasibility study and the steps to be taken for a schedule C Class EA. The possibility of using the focused Transit Project Assessment Process was discussed as a way to reduce costs ("TPAP" under Regulation 231/08) rather than a Schedule C Class EA. It was decided that based on the alternatives that will be considered to address the issues outlined in the RFP at both PWT and Transit, the project does not meet the definition of a transit project in Regulation 231/08. The focused Transit EA is applicable only to projects that are "used *exclusively* for the transportation of passengers by bus… ". It was agreed that including an integrated facility as one of the alternatives appears to disqualify this study.

Other issues discussed:

- There is a possibility that Fire Services vehicle maintenance may be included.
- The project should consider a joint use cafeteria and welfare building, i.e. lockers, showers etc.
- Accessibility needs should be addressed.

2. Schedule C Class EA

The phases of a schedule C Class EA were reviewed:

Phase 1: Problem Statement (inefficiencies, aging infrastructure, need for storage, office space, lack of accessibility, possible changes to transit routes to address changing passenger needs, etc.)

Phase 2: Identify alternatives, consider environmental impacts, consult with public, confirm schedule. Four alternatives were discussed:
1) Do nothing if environmental impact too great;
2) upgrade both locations but keep Transit at 111 Huron;
3) construct a standalone Transit facility at 128 Sackville;
4) construct a fully integrated facility for both functions at 128 Sackville.

Phase 3: Identify alternative design concepts, evaluate impacts and ways to mitigate, consult with public, select preferred.

Phase 4: Complete Environmental Study Report

3. Background Studies
   Background studies listed in RFP were provided to Tulloch, including the Sackville Road Extension Environmental Study Report. Copies of the zip drive will be provided to sub consultants.
4. Sub consultants roles
   The roles of the sub consultants were briefly discussed. These are outlined in the proposal and include:

Transit Consulting Network:	- affects of relocation on Transit routes
	-traffic impact study
	-assessment of current deficiencies at 111 Huron
	-input into conceptual design at 128 Sackville
Perry + Perry Architects:	-review of both facilities
	-upgrade and renovate existing versus new
	- conceptual site and building designs for new
HGC Engineering:	noise and vibration studies as required

5. Potential Concerns
   Two potential concerns were identified. Relocating Transit operations to Sackville Rd will create potential traffic issues with the increased bus traffic in the area, and increased traffic on Sackville Rd may impact the adjacent residential neighbourhood. It was noted a recent traffic study for the Pino property (south west corner of Industrial Park Crescent and Great Northern Rd.) has recommended traffic signals at the Wal-Mart entrance. The results of this EA may influence future traffic signal locations.
   It was also noted bus traffic would be generated primarily early morning and late evening, if drivers do shift changes on route.

6. Functional Space Requirements
   C. Perry outlined his requirements to begin assessing space requirements for both PWT and Transit. He will need staffing information, job functions etc to determine building conceptual designs. He will contact Mike Blanchard and Don Scott as required.

7. Fleet Size
   Future bus fleet size was discussed. It was suggested conventional bus fleet will not increase in the future, but para-bus fleet size will. No consideration will be given to future double-decker buses, articulating buses or electric buses.

8. Schedule Update
   This will be updated and provided to all following kick off meeting.

9. Health and Safety
   City's Contractor Pre-Qualification Program. Aldo Iacoe will be contacted to ensure Tulloch and sub consultants are in compliance.

10. MEA Agreement Status
    A signed copy of the agreement was provided by the City.

11. Project Capital Funding
    It was noted project funding is not known at this time, nor are any details on the criteria that will be used to assess if a project is eligible for upcoming federal funding. It was agreed the project should proceed as per the RFP by preparing for overall needs. Future funding announcements may alter the decision process by affecting the economic/financial environments that will be assessed in the various phases.

12. Tours
    Tours of both facilities were provided by Mike Blanchard and Don Scott respectively, for Chris Perry and Pat McAuley.

PMc
August 10, 2016

Distribution: all present

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16-1085

City of Sault Ste. Marie
Transit Relocation Feasibility Study
Project Progress Meeting
Minutes
Wednesday December 14, 2016 – 10:30 a.m.
PW Boardroom

Present: PW: Larry Girardi, Susan Hamilton Beach, Mike Blanchard

Community Development: Tom Vair, Don Scott

Tulloch Engineering: Larry Jackson, Pat McAuley

Transit Consulting Network: Wally Beck

Perry + Perry Architects: Chris Perry

1. Current Status of EA process

An update of the steps taken to date, based on the phases of the Municipal Class EA was given. A draft problem statement has been developed and was discussed. Three alternative solutions considered feasible and reasonable, have been developed. Inventories of existing environments have been completed or are underway.

Tulloch Environmental has completed natural heritage reviews and habitat assessments for both sites. Mitigation methods and best practices were developed to minimize natural environment impacts depending on the proposed location of any additions or new buildings. Social and land use reviews have been completed. It was determined an archeological review is not required at either site.

The financial/economic environment is the most challenging as it is influenced by departmental reorganization, the funding program from the federal government for Transit improvements, and the City's financial situation. It was noted the 2017 budget presentation to Council included for the possibility of an $18 million Transit relocation project in 2018/19 consisting of $12 million of other government funding and $6 million raised by the City through debenture. It was agreed departmental reorganization will not be considered in the EA in determining the recommended alternative given that future restructuring could result if a combined transit/PW operation is recommended.

2. Sub Consultants Work to date:

Wally Beck from Transit Consulting Network reviewed his work to date. He has completed his assessment of the existing Transit operations at 111 Huron St and calculations of changes to deadhead costs (cost to operate a bus without passengers, i.e. out of service) if Transit relocates. It was noted deadhead costs increase by $66,000 annually if buses travel to Sackville each evening. Air emissions also double. There are approximately 615 deadhead trips annually.

It was noted this increase assumes Transit routes start and stop at the Dennis St terminal each day. If the bus terminal was relocated or eliminated, and routes redesigned to accommodate a Sackville Road storage garage, deadhead costs and emissions would change.

A review of the traffic implications of a Transit relocation was also undertaken. Given that buses leave the storage garage at 5:30 a.m. and return at midnight, it was concluded buses would not be affected by Second Line or Great Northern Rd traffic volumes, either starting or finishing their routes. Parabus traffic would be more affected but is also more flexible in route selection.
Therefore, the addition of traffic signals on Great Northern Rd at Industrial Park Cres or elsewhere as a result of other development in the area would not be a factor in choosing a preferred alternative in the EA.

Chris Perry of Perry + Perry Architects outlined the Requirements Report he has completed including functional requirements, key functional relationships and general design considerations for both sites. Concept site plans were shown for the three alternatives. In summary:

1) If Transit is to remain at Huron Street, additions could be added to the building to accommodate new administration offices, parts storage and future bus storage, when and if fleet growth is experienced. Consideration could be given to acquiring the former Core Storage property from Essar Steel (80 Hudson St) for fueling/outdoor storage purposes.

2) A site plan showing an integrated building on Sackville was also developed, by adding a major addition on the east end of the existing PW garage. Some of the issues with this include handling the current grade across the site (6 m difference between Industrial Park and Sackville) and where a joint administration and welfare building for staff would be located. It needs to be accessible to the public and include parking. A common administration building between the two garages could be used to address the grade differential, but would also require public access (and parking) to the middle of the site.

3) Several locations were discussed for a new standalone Transit facility on Sackville. It was noted the existing Transit building can functionally accommodate the space needs and interrelationships needed, and the ideal design is very similar to the current 111 Huron St design. If a standalone facility is located at Sackville Rd, the current design, with needed improvements, would be appropriate. It was noted that the administration portion of the building is an integral part of Transit operations (fare box handling, fueling, cleaning, operator and supervisor routines) and it is not advisable to separate it from the maintenance/storage functions.

Potential locations discussed included use of the Soo Van Moving and Storage property, the former Household Hazardous Waste site and where the salt dome is located. It was noted the 200 foot wide Great Lakes Power easement adjacent to Sackville Rd is not available.

3) Environmental Compliance Approvals

Both sites currently operate under ECA's for noise and air emissions. Any functional changes to the sites would require amendments. The PW site operates under "limited flexibility" so annual updates are required. It was noted that GHD Consultants have been the consultant utilized by the City to obtain the original ECA's, and to update them annually. It was agreed that if an assessment of noise and air emissions is required for Transit relocation Tulloch would obtain a quote from GHD, and consider them rather than the consultant carried in the proposal (HGC Engineering) due to the amount of work done to date for both facilities by GHD. It was also noted these assessments will not be done unless relocation is the preferred alternative and a conceptual site plan has been developed.

4) Discussion on Preferred Alternative

Discussion centered on the alternatives and what is feasible in the current economic climate and upper government funding potential. There appears to be no environmental restraints, that could not be mitigated, that would prevent Transit from relocating to Sackville, however public input has not yet been received through a PIC. It was generally agreed that a standalone Transit facility at Sackville, closely resembling the existing building would not offer much advantage if substantial sharing of common functions was not possible.
Other issues:
-the existing building at 111 Huron may have limited value if put on the market. It may be considered a contaminated site due to past industrial activities on and around it, and it has an older, active large diameter outfall sewer from Essar Steel crossing the site on an easement, diagonally under the building. A minimum of $ 1.5 million would need to be spent to make it marketable, if it was not demolished.
-the existing building is about 35 years old, was specifically designed as a Transit facility and has had few upgrades since being built. The 2013 Asset Management Plan considered the building in fair condition. Chris Perry's functional analysis suggests its design is still appropriate for SSM Transit and is near ideal.
-an integrated facility on Sackville offers many advantages if common functions are shared, and if the existing deficiencies are addressed. The PW site, administration building and garage have undergone many updates in attempts to solve issues, however many more remain and need to be addressed in this 47 year old complex. The administration building and the main garage are also considered to be in fair condition in the Asset Management Plan.
-the Transit component costs in an integrated facility building can easily be identified and separated from project costs if required, to capitalize on available federal funding for Transit work.

In conclusion it was agreed a standalone Transit facility located at Sackville Rd is not the preferred alternative, however more work and cost estimating is required before one of the other two alternatives can be eliminated.

5) Review of Scope of Work

The scope of work outlined in the RFP was reviewed to ensure all items are being covered. It was agreed life cycle costing will not be undertaken given the uncertainties of future maintenance, operating and disposal costs of PW and/or Transit facilities. Life cycle costing principles however will form part of the decision process.

6) Next Steps

As noted more work will be done on the two remaining options prior to choosing a preferred. If the preferred alternative is to remain at Huron St the Class Environmental Assessment could be changed from a Schedule C to a Schedule B. Regardless, a public open house will be held, preferably in a few months. The date will be chosen at the next meeting.

7) Next Meeting date - to be determined.

PMc
December 14, 2016

Distribution: all present

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16-1085

City of Sault Ste. Marie
Transit Relocation Feasibility Study
Project Progress Meeting
Minutes
Tuesday February 28, 2017 – 10:30 a.m.
PW Boardroom

Present:

Public Works: Larry Girardi, Susan Hamilton Beach, Mike Blanchard

Community Development: Don Scott, Tom Vair (regrets)

Tulloch Engineering: Larry Jackson, Pat McAuley

Transit Consulting Network: Wally Beck (by phone)

Perry + Perry Architects: Chris Perry

1. Review of previous minutes

The minutes of the Dec 14, 2016 meeting were reviewed to summarize current project status and work done to date. The project is currently in Phase 2 of a Schedule C Municipal Class EA. Phase 2 will be concluded once a preferred solution is selected, following public consultation.

At the December meeting it was concluded that replicating a standalone transit facility at Sackville, similar to the existing building on Huron Street, is not a preferred alternative since it would not offer much advantage. Substantial sharing of common functions would not be feasible without a fully integrated facility.

2. Review of remaining alternatives

The two remaining alternatives are: 1) stay and upgrade both facilities at their current locations; or 2) construct a fully integrated facility at 128 Sackville Road to house both transit and public works maintenance activities.

Chris Perry presented an updated draft copy of the *Transit Operations & Garage Feasibility Study Requirements Report.* The report reviews key functional requirements and relationships, general design

considerations for the facilities and provides proposed site plans. For clarity the "stay and upgrade" alternative is considered as two separate undertakings at the two locations. Thus the study analyzes three options:

A. Addition/Renovation at 111 Huron St
B. Addition/Renovation at 128 Sackville Rd
C. New Building at 128 Sackville Rd

Class D cost estimates are provided in the report as preliminary project budgets:

A. Addition/Renovation at 111 Huron St	$11,968,700 plus HST
B. Addition/Renovation at 128 Sackville Rd	$3,756,800 plus HST
C. New Building at 128 Sackville Rd	$35,851,460 plus HST

The following points were made during the discussion that followed:

- If the Huron St facility is upgraded, a bus bay could be established along the Huron St frontage to accommodate passenger transfers. This would be contingent on a Bay St extension along the CNR railway, south of the transit property, connecting with Carmen's Way, thereby reducing traffic on Queen St W and Huron St. (The Transportation Master Plan recommends an Environmental Assessment be conducted for this Bay St extension within the next 10 years)
- The various site plans for an integrated building at Sackville (connected to the existing garage) are awkward in that they have the central offices/administration building in the centre of the site. This would necessitate public access well into the site, potentially conflicting with heavy equipment routes and maintenance activities.
- It was suggested that some activities requiring public access could be transferred to City Hall (transit ticket sales, parking ticket payment) but accessible public access would still be needed.
- To address these concerns an additional site plan was presented by C Perry, showing a completely new facility fronting on Industrial Park Cres with a combined maintenance garage, central offices, and bus storage garage. The public identity for this facility would thus shift from Sackville Road to Industrial Park Crescent. This has definite benefits in solving the 6 m grade issue and also minimizes potential negative residential impacts, concentrating activity on the east side of the property, away from the residential neighbourhood and facing Industrial Park.
- With this option the existing garage and administration offices could be demolished, or the garage repurposed for equipment cold storage. The Sault Van Moving and Storage property would need to be purchased.
- A combined maintenance facility of this design would be similar to Sudbury's where transit, public works, and fire equipment is maintained in one facility.
- Environmental Assessments require a review and consideration of the economic environment, and based on the current economic climate in Sault Ste Marie and the financial difficulties of Essar Steel Algoma, it is difficult to conclude a best option at this time.
- It was concluded that a presentation should be made to senior city management to get additional input. L Girardi to arrange, tentatively in early April. (April 12th suggested)

3. Upcoming Transit Operations and Route Review

Impacts of the upcoming Route Review Study on this EA were discussed. Deadhead costs may be affected if routes are altered. It was concluded both studies can proceed as planned but should acknowledge that potential route changes could affect the amount of deadhead travel if the bus maintenance and storage garage is moved to Sackville Road. Deadhead costs would not be a determining factor in recommendations.

4. Next Steps

-C Perry will refine his report to expand on the new combined facility facing Industrial Park Crescent
-M Blanchard to review functional requirements report for comment to C Perry
-S Hamilton Beach will provide C Perry with City Logo
-L Girardi to arrange for presentation to senior management
-Presentation preparation by Tulloch and Perry & Perry

5. Next Meeting Date

Tentatively April 12, 2017, to be confirmed.

PMc
March 6, 2017

Distribution: all present + Tom Vair

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16-1085

City of Sault Ste. Marie
Transit Relocation Feasibility Study
Project Progress Meeting
Minutes
Wednesday April 12, 2017 – 10:30 a.m.
Thompson Room Civic Centre

Present:	
Al Horsman	CAO
Larry Girardi	Public Works and Engineering Services
Susan Hamilton Beach	Public Works and Engineering Services
Mike Blanchard	Public Works and Engineering Services
Tom Vair	Community Development and Enterprise Services
Shelley Schell	Corporate Services
Jacob Bruzas	Corporate Services
Larry Jackson	TULLOCH Engineering Inc.
Pat McAuley	TULLOCH Engineering Inc.
Chris Perry	Perry + Perry Architects

1. Review of work done to date

An update was given outlining the work done to date and the steps involved in the Schedule C class environmental assessment being undertaken. Once a preferred alternative is chosen, a Public Information Centre (PIC) will be scheduled to obtain public and review agency input as part of Phase 2 of the EA.

A problem statement has been developed along with three reasonable alternatives. The environmental effects (natural environment, social environment, cultural environment and economic environment) of each alternative have been considered. The economic environment, which includes estimated costs of each alternative, available funding sources, the potential resale value of 111 Huron Street and the City's ability to pay, is the most challenging.

2. Review of remaining alternatives

The two remaining alternatives are:

1) Stay and upgrade both facilities at their current locations;

2) Construct a fully integrated facility at 128 Sackville Road to house both transit and public works maintenance activities.

The third alternative, constructing a new standalone transit facility on the Sackville Road site has been eliminated. It was concluded that the sharing of common functions with PW would be difficult, deadhead costs would increase and there is not much advantage gained by duplicating the existing Huron St building at 128 Sackville Rd.

3. Requirements Report

Chris Perry presented an updated draft copy of the *Transit Operations & Garage Feasibility Study Requirements Report.* The report reviews key functional requirements and relationships, general design considerations for the facilities and provides proposed site plans. For clarity the "stay and upgrade" alternative is considered as two separate undertakings at the two locations. Thus the study analyzes three options:

A. Addition/Renovation at 111 Huron St
B. Addition/Renovation at 128 Sackville Rd
C. New Building at 128 Sackville Rd

Class D cost estimates are provided in the report as preliminary project budgets:

A.	Addition/Renovation at 111 Huron St	$11,968,700 plus HST
B.	Addition/Renovation at 128 Sackville Rd	$3,756,800 plus HST
C.	New Building at 128 Sackville Rd	$59,338,650 plus HST

The following points were made during the discussion that followed:

- One of the reasons for this feasibility study is to be ready for any transit related stimulus funding that may be announced.
- The Public Works garage was built nearly 50 years ago to maintain a much smaller fleet (equipment size, quantity and variety) and badly needs major improvements/replacement.
- The nearly $60 million cost for a fully integrated building reflects the costs of a new 75,000 s.f. transit facility and a 95,000 s.f. PW garage combined with a 15,000 s.f. common administration building.
- 4500 s.f. of additional bus storage space is included, which can be delayed and constructed if needed in the future as a separate phase.
- It is unknown at this time how much of the $12 million cost for Addition/Renovation at 111 Huron St would be eligible for stimulus funding. (Corporate Services to review)
- If option C is not chosen as the preferred, the E.A can be continued as a Schedule B project under the planning and design process, as the preferred alternative would not involve constructing a new transit maintenance facility adjacent to residential land use.
- Should the economic environment change in the future, and work has not been completed on the chosen alternative, the project could be reactivated as a Schedule C undertaking to pursue a fully integrated facility by issuing an addendum to the EA.

Public consultation would be undertaken and the remaining EA phases would be completed.

- Following discussion and staff comments it was concluded that the “stay and upgrade” alternative is the preferred alternative to go forward.

4. Next Steps

- A PIC will be scheduled to present the study to the public and interested parties for comment. Documentation and drawings outlining the EA planning process, the problem statement, alternative solutions and the recommended “stay and upgrade” alternative will be provided.
- To provide accessibility, a room in the Civic Centre will be used.
- A Project File Report will then be produced prior to issuing a Notice of Completion and providing a 30 day review period.

Meeting Adjourned.

/PMc
April 13, 2017

Distribution: All Present
Don Scott – Community Development and Enterprise Services
Wally Beck – Transit Consulting Network

APPENDIX 8

Responses to EA Notice

Ontario
Infrastructure Ontario

One Dundas Street West, Suite 2000, Toronto, ON M5G 2L5
1, rue Dundas Ouest, bureau 2000, Toronto, ON M5G 2L5

November 25, 2016

Response to EA Notice

Thank you for providing Infrastructure Ontario (IO) with a copy of your Environmental Assessment Notice. From the information you have provided, it is unclear if you are proposing to use lands under the control of the Ministry of Infrastructure (MOI lands) to support your proposed project.

Prior to MOI consenting to the use of MOI lands, the applicable environmental assessment, duty to consult Aboriginal peoples (if triggered) and heritage obligations will need to be met. In order for MOI to allow you access to MOI lands and to carry out proposed activities, MOI must ensure that provincial requirements and due diligence obligations are satisfied. These requirements are in addition to any such obligations you as the proponent of the project may have.

You as the proponent of the project will be required to work with Infrastructure Ontario (IO) to fulfill MOI's obligations which may include considering the use of any MOI lands as part of your individual environmental assessment. All costs associated with meeting MOI's obligations will be the responsibility of the proponent. Please note that time should be allocated in your project timelines for MOI to ensure that its obligations have been met and to secure any required internal government approvals required to allow for the use of the MOI lands for your proposed project.

In order for MOI and IO to assist you to meet your required project timelines, please recognize that early, direct contact with IO is imperative. The due diligence required prior to the use of MOI lands for your proposed project, may include but may not be limited to the following:

- Procedural aspects of the Provincial Crown's Aboriginal Duty to Consult obligations – *see Instruction Note 1*
- Requirements of the MOI Public Work Class Environmental Assessment – *see Instruction Note 2*
- Requirements of the Ministry of Tourism Culture and Sport (MTCS) Standards and Guidelines for Consultant Archaeologists– *see Instruction Note 3*
- Requirements of the MTCS Standards and Guidelines for the Conservation of Provincial Heritage Properties Consultant Archaeologists – *see Instruction Note 4*

Representatives from IO are available to discuss your proposed project, the potential need for MOI lands and the corresponding provincial requirements and due diligence obligations.

Please review the attached instruction notes which provide greater detail on the due diligence obligations associated with the use of MOI lands for your proposed project. We are providing this information to allow you as the proponent to allocate adequate time and funding into your project schedule and budgets. If your project requires you to study MOI lands, then an agreement is required and all studies undertaken on MOI lands will be considered confidential until approval is received. IO will require electronic copies of all required studies on MOI lands that you undertake.

We strongly encourage you to work with IO as early as possible in your process to identify if any MOI lands would be required for your proposed project. Please note that on title MOI control may

be identified under the name of MOI or one of its predecessor ministries or agencies which may include but is not limited to variations of the following: Her Majesty the Queen/King, Hydro One, MBS, MEI, MEDEI, MGS, MOI, OLC, ORC, PIR or Ministry of Public Works[1].

Please provide Rita Kelly with a confirmation in writing of any MOI lands that you propose to use for your proposed project and why the lands are required along with a copy of a title search for the MOI lands.

For more information concerning the identification of MOI lands in your study area or the process for acquiring access to or an interest in MOI lands, please contact:

Rita Kelly
Project Manager
Land Transactions, Hydro Corridors & Public Works
Infrastructure Ontario
1 Dundas Street West, Suite 2000
Toronto, ON
M5G 2L5
Tel: (416) 212-4934
Email: rita.kelly@infrastructureontario.ca

An application package and requirements checklist is attached for your reference. Please note that transfer of an interest in MOI lands to a proponent can take up to one year and there is no certainty that approval will be obtained.

For more information concerning the MOI Public Work Class Environmental Assessment process and due diligence requirements, please contact:

Lisa Myslicki
Environmental Specialist
Infrastructure Ontario
1 Dundas Street West, Suite 2000
Toronto, ON
M5G 2L5
Tel: (416) 557-3116
Email: lisa.myslicki@infrastructureontario.ca

[1] MBS - Management Board Secretariat; MEI - Ministry of Energy and Infrastructure; MEDEI – Ministry of Economic Development, Employment and Infrastructure; MGS - Ministry of Government Services; MOI - Ministry of Infrastructure; OLC - Ontario Lands Corporation; ORC - Ontario Realty Corporation; PIR - Ministry of Public Infrastructure Renewal

If MOI lands are not to be impacted by the proposed project, please provide a confirmation in writing to Infrastructure Ontario.

Thank you for the opportunity to provide initial comments on your proposed project.

Sincerely,

Patrick Grace
Director
Land Transactions, Hydro Corridors & Public Works
Infrastructure Ontario
1 Dundas Street West, Suite 2000
Toronto, ON, M5G 2L5

One Dundas Street West, Suite 2000, Toronto, ON M5G 2L5
1, rue Dundas Ouest, bureau 2000, Toronto, ON M5G 2L5

INSTRUCTION NOTE 1

Provincial Crown's Aboriginal Duty to Consult obligations

The Crown has a constitutional Duty to Consult (DTC) in certain circumstances and Aboriginal consultation may be required prior to MOI granting access to MOI lands or undertaking other activities. The requirement for Aboriginal consultation may be triggered given Aboriginal or treaty rights, established consultation or notification protocols, government policy and/or program decisions, archaeological potential or results, and/or cultural heritage consultation obligations. The requirement for Aboriginal consultation will be assessed by MOI.

Prior to the use of MOI lands, MOI must first meet any duty to consult obligations that may be triggered by the proposed use of MOI lands. It is incumbent on you to consult with IO as early in the process as possible once you have confirmed that MOI lands would be involved.

MOI will evaluate the potential impact of your proposed project on Aboriginal and treaty rights. MOI may assess that the Crown's Duty to Consult (DTC) requires consultation of Aboriginal communities. Proponents should discuss with IO whether MOI will require consultation to occur and if so, which communities should be consulted.

Where MOI determines that Aboriginal consultation is required, MOI will formally ask you to consult or continue to consult with Aboriginal peoples at the direction of MOI.

On behalf of MOI you will also be required to:

1. Maintain a record and document all notices and engagement activities, including telephone calls and/or meetings;
2. Provide the Ministry updates on these activities as requested; and
3. Notify the Ministry of any issues raised by Aboriginal communities.

If consultation has already occurred, IO strongly encourages you to provide complete Aboriginal consultation documentation to IO as soon as possible. This documentation should include all notices and engagement activities, including telephone calls and/or meetings.

Any duty to consult obligations must be met prior to publically releasing the Notice of Completion for the assessment undertaken under the MOI PW Class EA.

INSTRUCTION NOTE 2

Requirements of the MOI Public Work Class Environmental Assessment

MOI has an approved Class EA (the Ministry of Infrastructure Public Work Class Environmental Assessment (Public Work Class EA) to assesses undertakings that affect MOI lands including disposing of an interest in land or site development. Details on the Public Work Class EA can be found at:
http://www.infrastructureontario.ca/Templates/Buildings.aspx?id=2147490336&langtype=1033

You may be required to work with IO to complete an environmental assessment under the Public Work Class EA for the undertakings related to MOI lands. IO will work with you to ensure that all of the MOI undertakings or activities related to the use of MOI lands are identified, that the appropriate Category of undertaking is used and a monitoring and report back mechanism is established to ensure that MOI's obligations are met.

The completion of another environmental assessment process that assesses the undertakings related to MOI lands may satisfy MOI's obligations under the Public Work Class EA. You will be required to work with IO to determine the most appropriate approach to meeting the Public Work Class EA obligations for undertakings related to MOI lands on a case by case basis.

Where it is decided that the assessment of undertakings related to MOI lands can be assessed as part of the environmental assessment being undertaken by the proponent then it is likely that the following provisions will be required:

- that the environmental assessment documents set out that one process will be relied on by both the proponent and MOI to evaluate their respective undertakings and meet their respective obligations to assess the potential impacts of their undertakings;
- that the proponent's description of the undertaking to be assessed include all of the MOI undertakings related to the use or access to MOI lands (see Glossary of Terms);
- the associated EA Category from the Public Works Class EA be identified and met by the environmental assessment (see Figure 22. Category Listing Matrix and/or Tale 2.1 EA Category Identification Table);
- that the proponent's environmental assessment indicate that MOI would be relying on the proponent's assessment to satisfy MOI's obligations under the *Environment Assessment Act*;
- establish a monitoring and report back mechanism to ensure that any obligations of MOI resulting from the assessment will be met; and

An environmental assessment consultation plan be developed to ensure that all stakeholders required to be consulted regarding the undertakings on the MOI lands are consulted

Other Due Diligence Requirements

There may also be other additional due diligence requirements for the use of MOI lands in the proposed project. These may include:

- Phase One Environmental Site Assessment and follow up
- Stage 1 Archaeological Assessment and follow up

- Survey
- Title Search
- Species at Risk Survey(s)
- Appraisal

INSTRUCTION NOTE 3 – ARCHAEOLOGY - (see also *Instruction Note on Duty to Consult*)

Archaeological sites are recognized and protected under the *Ontario Heritage Act*. Carrying out archaeological fieldwork is a licensed, regulated activity under the 2011 Ministry of Culture Standards and Guidelines for Consulting Archaeologists. Please visit.....

Archaeological due diligence is required for any proposed project on MOI land that could cause significant below ground disturbance such as, new building construction, installation/modification of site services, and installation/maintenance of new pipelines or transmission lines.

You, as the proponent, must engage IO prior to undertaking any archaeological work on MOI lands.

IO has two in-house licensed archaeologists who should be consulted early in the preparatory stages of a proposed project when geographic and site locations are being considered so that the potential for archaeological resources including historic and Aboriginal material (ion Aboriginal villages and burials sites) can be assessed.

To support both the Public Work Class EA and MOI's duty to consult analysis, archaeological assessments are required to determine if there are any significant findings that may be of cultural value or interest to Aboriginal people (e.g., archaeological or burial sites).

Archaeological work can begin before the assessment under the Public Works Class EA begins but the Class EA cannot be completed until the duty to consult that may be triggered regarding archaeological resources are fulfilled.

Depending upon the number or significance of resources found, the duty to consult may be triggered during any of the 4 phases of archaeological work (see below) or anytime during project construction.

The discovery of Aboriginal resources can impact on activities, including project and site plans, timelines and all costs. As the proponent, you are expected to ensure that you project timelines include adequate time and resources to address MOI due diligence obligations, including internal government approvals. All costs associated with meeting MOI's archaeological obligations will be the responsibility of the proponent.

For Archaeological Assessments (Stages 1 through 4), proponents must adhere to the four stage archaeological fieldwork process prescribed by the Ontario Ministry of Tourism, Culture and Sport (MTCS) as per the 2011 Standards and Guidelines for Consultant Archeologists. Not all noted Stages will be necessary for all work. Respondents must follow industry procedures and practices as per the MTCS Standards and Guidelines for Consultant Archeologists 2011 for each Stage of archaeological assessment, all reporting criteria and formatting, and any other license requirements and/or obligations.

- Stage 1 Background Study - Evaluation of Archaeological Potential
  - Archival research and non-intrusive site visit
- Stage 2 Property Assessment

- In-field systematic pedestrian survey or test pitting and reporting
-

- Stage 3 Site-specific Assessment
  - Limited excavation to determine site significance and size
  - Field works and reporting

- Stage 4 Site mitigation
  - Through either avoidance/protection or excavation Field work 4 to 8 weeks
  - Develop summary report
  - MTCS review – expedited review of summary report 6 weeks
  - Final report
  - Time to develop and implement mitigation measures – negotiation, legal protections, avoidance

IO Contact Information and direction to IO website....

INSTRUCTION NOTE 4 – HERITAGE REQUIREMENTS

Built Heritage/Cultural Landscapes

Built heritage/cultural landscapes (cultural heritage) are recognized and protected under the Ontario Heritage Act, the regulations to that Act and the 2010 Ministry of Culture Standards and Guidelines for Conservation of Provincial Heritage Properties (S&Gs) Criteria for determining cultural heritage value or interest are set out in O. Reg. 9/06 and 10/06. The S&Gs set out a process for identifying properties of cultural heritage value, and the standards for protection, maintenance, use and disposal of these properties. Please visit.....

Cultural heritage due diligence will be required for any proposed project on MOI land with the potential to impact cultural heritage resources, such as new building construction, installation/modification of site services, landscape modifications and installation/maintenance of new pipelines, transmission lines.

To support MOI's heritage and MOI PW Class EA obligations, proponents will be required to undertake cultural heritage assessments for all projects that require MOI lands. This will help to determine if the MOI lands are of cultural value or interest to the Province and the level of heritage significance. Where a property has heritage value, proponents may be required to develop appropriate conservation measures/plans and heritage management plans.

You, as the proponent, are strongly encouraged engage IO heritage staff as early in your project planning process as possible and in advance of beginning any cultural heritage assessment work. IO staff will be able to provide advice on the S&Gs and will provide any available heritage information for the MOI lands.

Proponents must also follow industry procedures and practices for all components of cultural heritage assessment work, all reporting criteria and formatting, and any other requirements and/or obligations. IO heritage staff can help identify any required reports.

Should MOI lands be identified under the S&Gs as a Provincial Heritage Property (local significance) or a Provincial Heritage Property of Provincial Significance, IO must be engaged to determine next steps.

Please note that if a Provincial Heritage Property of Provincial Significance is to be impacted, it is likely that consent from the Minister, Ontario Minister, Tourism, Culture and Sport (MTCS) will be required prior to access being granted to MOI lands. Minister's consent requires a detailed application and approvals should land dispositions or building demolitions be applied for as part of the proposed project.

As the proponent, you are expected to ensure that your project timelines include adequate time and resources to address MOI's heritage due diligence obligations, including internal government approvals. All costs associated with meeting MOI's heritage obligations are the responsibility of the proponent.

Staff contacts.....

Pat McAuley

From: Susan Hamilton Beach [s.hamiltonbeach@cityssm.on.ca]
Sent: Friday, September 09, 2016 4:37 PM
To: 'Pat McAuley'
Cc: Don Scott
Subject: Public Notice for Transit Relocation Study

Hi Pat,

I have received a message from a Mr. Frank Darou – 705-254-6490 regarding the above noted study. He received the notice of the study and would like to be added to the stakeholders list and kept informed as the study progresses.

Regards,

Susan

Susan Hamilton Beach, P.Eng.
Director of Public Works
City of Sault Ste. Marie
(P) 705-759-5207
(F) 705-541-7010

Pat McAuley

From: Marchy Bruni [m.bruni@cityssm.on.ca]
Sent: Monday, September 12, 2016 10:14 AM
To: Susan Hamilton Beach; pat.mcauley@tulloch.ca
Subject: Relocation of City Transit garage and admin offices

Good Morning Susan and Pat,
I received a letter of interest regarding the above.
Please add me to the study contact list.
Thank you,
Regards,

Marchy Bruni
Councillor Ward 5
Cell Phone 705-971-0029
E-mail - m.bruni@cityssm.on.ca

APPENDIX 9

Notice of Study Completion

Notice of Completion

Feasibility Study

Relocation of City Transit Garage and Administration Offices

The Study

In the fall of 2016 the City of Sault Ste Marie initiated a Class Environmental Assessment (EA) to evaluate the feasibility of relocating the City Transit maintenance garage and administrative offices from the current location at 111 Huron Street to the Public Works Centre site at 128 Sackville Road. The prospect of constructing a transit maintenance garage adjacent to a residential neighbourhood triggered the need for an EA. The project was originally planned under **Schedule C** of the **Municipal Class Environmental Assessment** process.

The Findings

After reviewing several alternatives, the recommended solution is to keep the City's Transit garage and administrative office at its current location on Huron Street. Improvements are recommended to both the City's Huron Street and Sackville Road facilities in recognition of the various identified deficiencies, including building additions to address accessibility and storage issues.

This recommendation results from a comparison of the high capital costs of relocating transit compared to the costs of providing needed improvements at both facilities, and in consideration of the current economic environment in the city.

With the recommendation for Transit to remain at 111 Huron Street the project is no longer a **Schedule C** undertaking. The project is being completed under **Schedule B** of the **Municipal Class Environmental Assessment** process.

A formal public information centre (PIC) showing the potential Sackville Road design concepts will not be held. However consultation with the public and review agencies and other interested stakeholders is still very important and encouraged. A Class EA Project File Report documenting the study process and the recommended alternative solution has been prepared and by this notice is being placed in the public record for review and comment. The report is available at the following locations from July 10th to August 11th, 2017:

Public Works and Engineering Services
City of Sault Ste. Marie
128 Sackville Rd, Sault Ste. Marie, ON
P6B 4T6
Phone (705) 759 5201
Mon-Fri 8:30 am – 4:30 pm

TULLOCH Engineering
71 Black Rd Unit 8
Sault Ste. Marie ON.
P6B 0A3
Phone (705) 949 1457
Mon-Fri 8:00 am – 4:30 pm

PTO

The report is also available for review at: saultstemarie.ca/TransitEA

Interested persons should provide written comments to the City on the study on or before August 11, 2017. Comments should be directed to Susan Hamilton Beach at the above address.

If concerns should arise which cannot be resolved in discussion with the City, a person or party may request that the Minister of the Environment and Climate Change order a change in the project status and require a higher level of assessment (referred to as a Part II Order). Requests must be received by the Minister within 30 days of publication of this Notice. Reasons must be provided for the request. Copies of the request must be sent to:

Minister
Ministry of the Environment and Climate Change
Floor 11
77 Wellesley St W
Toronto ON
M7A 2T5

-and-

Director, Environmental Approvals Branch
Ministry of the Environment and Climate Change
135 St. Clair Ave West, 1st Floor
Toronto ON
M4V 1P5

-and-

City Clerk
City of Sault Ste. Marie
99 Foster Drive
Sault Ste. Marie ON
P6A 5X6

This Notice issued July 3, 2017.

Susan Hamilton Beach P.Eng.

Public Works and Engineering Services
s.hamiltonbeach@cityssm.on.ca

Information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.