City of Sault Ste. Marie

Black Road / Third Line Corridor Improvements – Environmental Study Report

Prepared by:

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Project Number:

60190552

Date:

January, 2016 (Modified January, 2017)

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AECOM: 2012-01-06

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January 20, 2017

Mr. Don Elliott, P. Eng.
Director, Engineering Services
City of Sault Ste. Marie
Engineering Department
99 Foster Drive, 5th Floor
Sault Ste. Marie, Ontario P6A 5N1

Dear Mr. Elliott:

Project No: 60190552

Regarding: Black Road / Third Line Corridor Improvements – Environmental Study Report

We are pleased to submit our Final Modified Environmental Study Report (ESR) addressing corridor improvements along Black Road and Third Line from McNabb Street to east of the Sault Area Hospital (SAH) entrance. This report documents the process followed and the alternatives and design options considered in the developing a preferred conceptual/preliminary design. The ESR has been modified at the request of the Ministry of Environment and Climate Change (MOECC) and includes additional details and clarifications related to Aboriginal and Agency consultation and impact assessment and mitigation.

We will also proceed with issuing a Notice of Addendum to initiate the mandatory 30 day public review period for the modified ESR.

We appreciate the assistance received from staff in completing this study. Should you have any questions please contact the undersigned.

Sincerely,
AECOM Canada Ltd.

Rick Talvitie, P. Eng.
Manager, Northern Ontario

RT:nm

Encl.

Distribution List

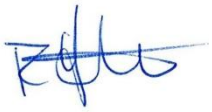
# of Hard Copies	PDF Required	Association / Company Name
2	Yes	City of Sault Ste. Marie
2	Yes	AECOM, Sault Ste. Marie

Revision Log

Revision #	Revised By	Date	Issue / Revision Description
0	R. Talvitie	December 23, 2015	DRAFT for City Review
1	R. Talvitie	January 6, 2016	Final for City
2	R. Talvitie	January 20, 2017	Modified to address MOECC comments

AECOM Signatures

Report Prepared By:



Rick Talvitie, P. Eng.
Manager, Northern Ontario

Report Reviewed By:

Darrell Maahs, C.Tech.
Project Manager

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List of Abbreviations

AADT	Average Annual Daily Traffic
City	City of Sault Ste. Marie
Class EA	Class Environmental Assessment
EA Act	Environmental Assessment Act
ESR	Environmental Study Report
GDGCR	Geometric Design Guide for Canadian Roads
GDSOH	Geometric Design Standards for Ontario Highways
MEA	Municipal Engineers Association
MNRF	Ministry of Natural Resources and Forestry
MOECC	Ministry of the Environment and Climate Change
MTO	Ministry of Transportation
OTM	Ontario Traffic Manual
PUC	Public Utilities Commission
RSM	Roadside Safety Manual
SAH	Sault Area Hospital
SSMRCA	Sault Ste. Marie Region Conservation Authority
vph	Vehicles Per Hour

1. INTRODUCTION AND BACKGROUND

1.1 Introduction

In 2014, the City of Sault Ste. Marie initiated a Transportation Master Plan (TMP) Study update. That study, completed in January 2015, was undertaken “to advance the implementation of various transportation improvements while considering the current and future conditions of the community.” In particular the study noted that the City is unlikely to experience significant population growth over the next 20 years and as a result significant traffic volume increases are unlikely. However, with the relocation of the hospital and the amalgamation of four secondary schools into two new schools, as well as ongoing commercial development, travel patterns are changing particularly with increased pressures for travel to and from the northern part of the City. The TMP was completed within the framework of the Class EA process, incorporated several opportunities for public input and considered all travel modes.

One of the multimodal network priorities identified in the recommendations is to provide needed capacity improvements along Black Road and Third Line. Another important recommendation was to maximize the use of the right-of-way for multiple modes of travel.

The City initiated this Class Environmental Assessment (Class EA) to address existing or potential future operational problems within the Black Road corridor from McNabb Street to Third Line and along Third Line from Black Road to the Sault Area Hospital (SAH) entrance.

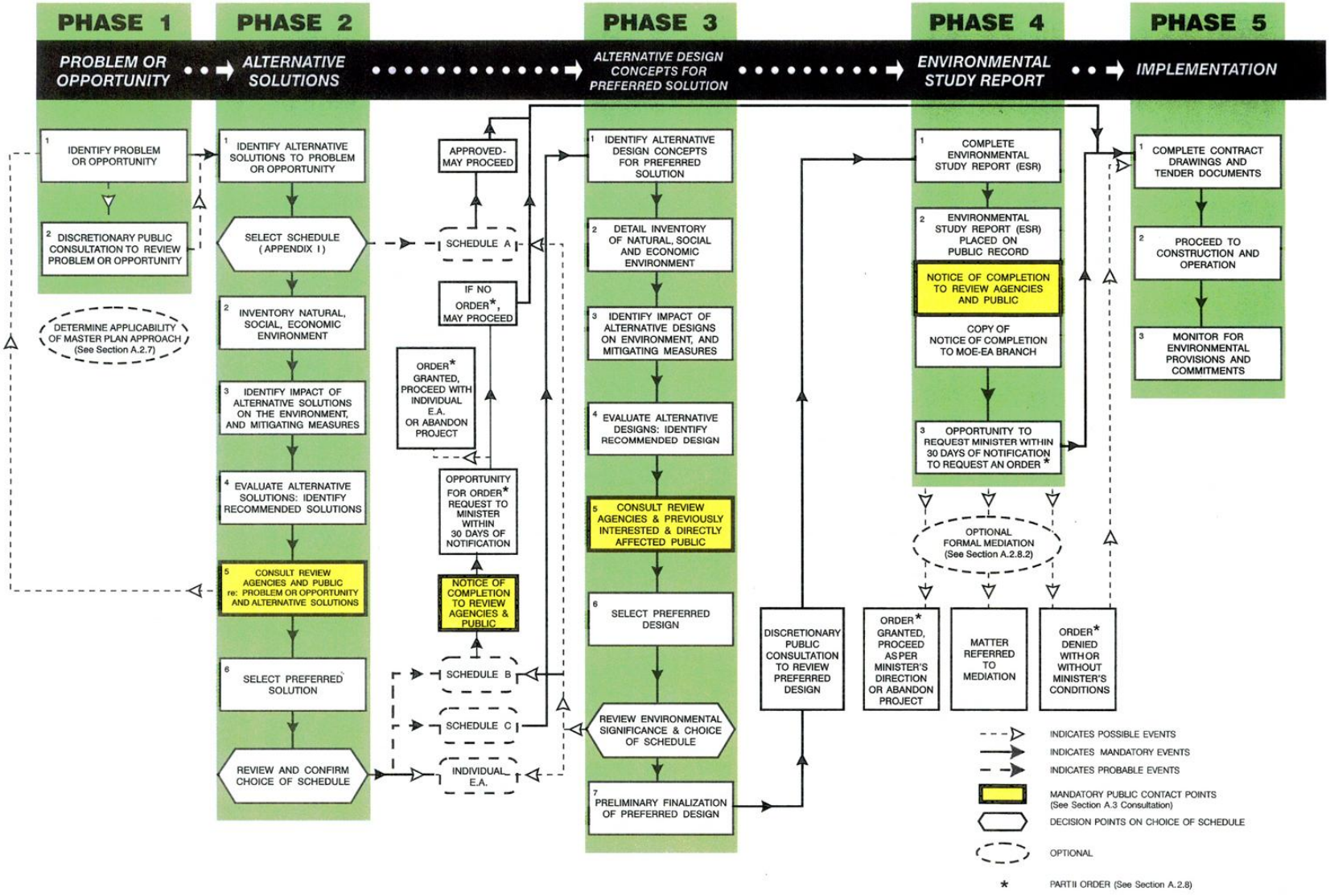
1.2 Class Environmental Assessment Process (Class EA)

This project is being undertaken in compliance with the Environmental Assessment Act ("EA Act"). The EA Act was enacted by the Province of Ontario to ensure that all reasonable alternatives and environmental impacts are identified and public input is solicited during the implementation of public undertakings.

Municipal road and servicing (ie: water and waste water) undertakings are not subject to a full environmental assessment but are subject to a Class Environmental Assessment (Class EA). The Class EA process does not require formal ministerial approval provided the municipality complies with the activities and procedures set out in the pre-approved document entitled "Municipal Class Environmental Assessment – October 2000 as amended in 2007" prepared by the Municipal Engineers Association (MEA). That document provides a planning framework that must be followed to ensure that Public and Agency concerns are properly addressed throughout the development of the proposed solutions and designs.

The Class EA document stipulates that a five-phase process is to be followed and that careful consideration be given to the potential impacts of the project on the natural, social, cultural and economic environments. Information and data relating to the existing environment has been gathered to assist in the evaluation of alternative solutions and design options. Relevant agencies and the residents of Sault Ste. Marie were contacted and encouraged to participate in the process. The Class EA process is illustrated graphically in Figure 1.2(a).

Figure 1.2(a) – Class EA Process Flowchart



Briefly, Phases I through IV of the Class EA process for this project involved the following key study activities:

1. Research background data, gather additional data, and identify and document the problems/opportunities;
2. Notify area property owners and relevant agencies of the study and solicit their input;
3. Identify alternative solutions to address the problems/opportunities;
4. Identify natural, social, cultural and economic environmental conditions within the study area;
5. Identify the impact of each alternative solution relative to the environmental conditions;
6. Evaluate each alternative solution relative to each other considering technical, environmental, cost and other relevant criteria and identify a preliminary preferred solution;
7. Solicit Public and Agency input on the alternative solutions through correspondence and a public open house;
8. Incorporate the public input;
9. Finalize the preferred solution;
10. Identify design options for the preferred solution;
11. Identify the impact of each design option relative to the environmental conditions;
12. Evaluate each design option relative to each other considering technical, environmental, cost and other relevant criteria and identify a preliminary preferred design;
13. Solicit Public and Agency input on the design options through a public open house;
14. Incorporate the public input;
15. Finalize the preliminary design;
16. Document the process and findings in an Environmental Study Report (ESR);
17. Submit the ESR for the mandatory thirty day public review period; and
18. Proceed with detail design and construction subject to the receipt of Environmental Approval.

1.3 Environmental Study Report ("ESR") and Part II Order Provisions

In general, the Environmental Study Report ("ESR") documents the Class EA planning and design process.

Following its completion, the ESR is placed in the public record for a period of thirty calendar days. Copies of the ESR are also filed with the Ministry of Environment and Climate Change (MOECC) and any other Agency that requests a copy. If there are no irreconcilable objections submitted during the mandatory thirty day review period, the project may proceed to final design and construction. If concerns are raised that cannot be resolved, the objector may request a Part II Order.

The Part II Order is a provision in the process for elevating the status of a project from a Class EA to an individual environmental assessment. This provision is necessary to allow for special treatment of those undertakings that carry significant adverse environmental effects. Members of the public, interested groups, or government agencies may request that an individual environmental assessment be prepared for a special project. The Minister of the Environment assesses any requests for a Part II Order and determines whether a full EA is necessary.

1.4 Project Organization

AECOM Canada Ltd. (AECOM), a consulting engineering firm, was selected to undertake the Class EA study tasks on behalf of the City of Sault Ste. Marie. Direction was provided throughout the study process by the municipality's engineering department. In addition, the City's Public Works and Transportation Department and its Transportation Planning Consultant, HDR were also involved in providing relevant traffic related data to AECOM for use in undertaking the study tasks.

External agencies, utility companies and the general public were invited to participate at key points in the study process. Input was generally received throughout the study process by both the consulting engineer and the City of Sault Ste. Marie Engineering Department. All of the input received was incorporated into the overall study process by AECOM.

1.5 Public Involvement

Public involvement was an important element of the project. A public consultation plan was developed early in the study process to guide the proposed approach to soliciting public input and comments (refer to Appendix A). The public consultation plan included dissemination of information through a project website, periodic notices and two public open houses (Phases II and III of the process). A description of each open house is summarized in Sections 4.4 and 5.12 of this report.

Interest in this project originated primarily from property owners in the vicinity of the study area. There was however some input received from residents interested in the City's overall transportation network.

2. The Problem/Opportunity

This study was initiated to address a number of existing and anticipated future problems and opportunities within the Black Road and Third Line road corridors from McNabb Street to the Sault Area Hospital (SAH) entrance on Third Line. The specific problems/opportunities to be addressed are summarized in the following subsections.

2.1 Emergency Service Response

The Sault Area Hospital (SAH) relocated to its new location near the Third Line/Great Northern Road intersection in March 2011. Black Road and Third Line are being used as principle transportation routes for staff, visitors and emergency service vehicles accessing the hospital from the eastern portion of the City. ***The existing road platform width on Third Line east of the SAH entrance and along Black Road from Second Line to Third Line is less than desirable particularly considering this route is used for emergency service vehicle response. The problem is exacerbated during the winter months when snow banks encroach into the roadway.***

2.2 Corridor Capacity

In 2013 the Ministry of Transportation (MTO) completed a traffic study (ie. origin/destination study) within Sault Ste. Marie. Based on the results of that study the MTO has decided to defer route planning and environmental assessment studies for a new Highway 17 route that was originally intended to connect to Second Line at Black Road. MTO also indicated that they will complete similar traffic studies in approximately 10 years' time to reassess the need for a new Highway 17 route.

As a result of MTO's decision, provincial highway traffic will continue to be routed through the City from Highway 17 East along Trunk Road, Black Road, Second Line and Great Northern Road to Highway 17 North. With the exception of Black Road from McNabb Street to Second Line the entire route, through the urbanized area (i.e. intersection of Highway 17 E / Trunk Road through to the intersection of Highway 17N / Fourth Line), includes two through lanes in each direction.

Furthermore, significant additional development in the vicinity of the new hospital and along Great Northern Road has occurred in recent years and is expected to continue. The new development has resulted and will continue to

result in additional vehicular traffic in the Black Road and Third Line corridors. Traffic congestion within the Second Line (Black Road to Great Northern Road) and Great Northern Road (Second Line to Third Line) corridors may also result in changing traffic patterns with increased use of the Black Road and Third Line corridors.

The City has completed a Transportation Master Plan update. Through that study, traffic volume projections were developed for the Black Road and Third Line corridors within the study limits. The projections are summarized in **Table 2.2(a)** below.

Table 2.2(a): Existing and Future Traffic Volume Projections

Location	2012 AADT	2040 Forecast Traffic*
Black Road from McNabb Street to Second Line	21,400	33,300
Black Road from Second Line to Third Line	8,100	12,300
Third Line from Black Road to Great Northern Road	3,200-5,200	7,300

*Note: the above forecasts were developed by HDR Consultants.

Black Road from McNabb Street to Second Line currently accommodates significant traffic volumes and significant growth is projected for both the Black Road and Third Line corridors. ***There is a need to ensure the road corridors have adequate capacity to accommodate both current and future traffic volumes.***

2.3 Road Structure and Integrity

Black Road from McNabb Street to Second Line is classified as a Class A truck route (heavy truck traffic permitted 24/7) and Black Road from Second Line to Third Line and Third Line within the study limits are classified as Class B truck routes (heavy truck traffic permitted Monday to Saturdays from 7am to 8pm). The road structure was upgraded along Black Road from McNabb Street to Second Line in 2000-2001 and with the exception of localized areas of distress, primarily in the vicinity of intersections, is holding up well. However, with heavy truck traffic and increased traffic volumes, the road integrity is suffering along Black Road from Second Line to Third Line and along Third Line from Black Road to the SAH entrance. ***There is a need to ensure the road structure is adequate to accommodate both existing and projected future traffic volumes.***

2.4 Pedestrian and Cyclist Safety

The increased development in the project area is contributing to increased traffic volumes including heavy truck traffic. The new development includes a significant new inventory of residential units which is contributing to additional pedestrian/cycling activity. The Black Road and Third Line corridors, within the limits of this study, are identified as spoke routes in the City's Cycling Master Plan. Pedestrian/cyclist traffic is currently accommodated on shoulders within the study limits. ***The shoulders were upgraded/widened along Black Road from McNabb Street to Second Line in 2000-2001 but the shoulders on Black Road north of Second Line and along Third Line within the study limits are narrow.***

2.5 Municipal Services

The extent of the municipal servicing within the study area limits is summarized in **Table 2.5(a).**

Table 2.5(a): Inventory of Municipal Services within the Study Area

Road Corridor	Service	From	To
Black Road	Potable water (300mm main)	McNabb Street	Second Line
Black Road	Waste water	McNabb Street 620m south of Second Line	Northerly 270 m Second Line
Third Line	Potable water (300mm main)	SAH entrance	190m easterly

A significant proportion of these corridors lie outside of the Municipal service line. The corridors outside of the municipal service line include Third Line from approximately 390 m east of the SAH entrance and Black Road from Second Line to Third Line. ***It was considered prudent to assess potential servicing extensions in conjunction with this Class EA.***

3. Inventory of Existing Conditions

In order to assess the potential environmental impacts associated with the implementation of the various alternative solutions and design options presented in Chapters 4.0 and 5.0 it was first necessary to inventory the existing conditions within and adjacent to the study area.

3.1 Natural Environment

The study area generally comprises of a mix of developed semi-urban areas, undeveloped forested or grassed areas and recreational uses. The most prominent natural environment features are discussed in the following subsections.

3.1.1 Physiography and Surface Geology

Geologic and Aggregate Resource base mapping produced by the Ministry of Natural Resources ("MNR") was reviewed relative to Sault Ste. Marie and the study area. This mapping provides a general overview of the physiography and surficial geology of the study area.

The geologic formations in the Sault Ste. Marie area are largely the result of significant glacial activity from the Wisconsinan Stage of the Pleistocene Epoch which was marked by the repeated advance and retreat of extensive continental ice sheets.

The Sault Ste. Marie area is underlain by rocks of Precambrian and Cambrian age. The Official Plan "Hazards" mapping shows the majority of the Third Line corridor within the study area and a small portion of the Black Road corridor near McNabb Street within an area consisting of lacustrine clay deposits.

In addition the Data Base Mapping from the Northern Ontario Engineering Geology Terrain Study suggests that both Third Line and Black Road are dominated by clay soils in a glaciolacustrine plain landform with mainly low local relief

and dry surface conditions. Third Line is also noted to be dissected/gullied while Black Road is noted to have a suspected high water table.

A geotechnical investigation was also completed along Black Road from Trunk Road to Second Line in 1999 to support the reconstruction project completed in 2000-2001. The investigation included 53 shallow boreholes and one deeper auger probe. The subgrade materials were generally found to consist of a thin layer of organic, silty sand or granular fill overlying either compact grey silt, clayey silt, or firm red brown silty clay. The pavement design for that project consisted of 130mm asphalt, 150mm Granular A base and 750mm Granular B subbase.

A detailed geotechnical investigation will also be undertaken in conjunction with the project detail design along Black Road from Second Line to Third Line and Third Line from Black Road to the SAH entrance.

The topography within the study area ranges from flat to undulating. The Black Road corridor is characterized by very flat terrain which creates challenges with storm water drainage while the Third Line corridor is characterized as undulating with a several ravines crossing or paralleling the road corridor.

3.1.2 Surface Water Resources and Aquatic Habitat

There are a number ravines with seasonal watercourses within or adjacent to the Third line corridor. The Official Plan “Natural Resources and Environmental Constraints” mapping identifies an intermittent watercourse paralleling Third Line along the south side of the roadway over a portion of its length and a single intermittent watercourse crossing within the study limits.

Based on input received from the Ministry of Natural Resources and Forestry (MNRF) there are three small tributaries/drainage features that intersect the project area and drain to the Root River and Black Creek which ultimately discharge to the St. Mary’s River. The Root River could potentially support Lake Sturgeon, a threatened species under the Endangered Species Act, 2007.

Any works that are contemplated within these corridors will require stringent sediment control measures to mitigate the transport of sediment to downstream receivers. There may also be additional mitigating measures that will be dependent upon the specific design details and may include timing restrictions for in-water work.

A portion of the study area is located within the Sault Ste. Marie Region Conservation Authority (“SSMRCA”) regulated area (ie. O.Reg.176/06 - Development, Interference with Wetlands and Alterations to Shoreline and Watercourses). Any construction that falls within the regulated area will require a permit from the SSMRCA prior to initiating construction.

Consideration of the potential impacts to surface water resources and aquatic habitat will be included in the evaluation of the various alternatives and mitigation measures will be identified to minimize impacts.

3.1.3 Vegetation and Terrestrial Habitat

There are significant undeveloped forested and/or grassed lands either immediately adjacent to, or in close proximity to the subject road corridors. These undeveloped areas, provide habitat for a variety of wildlife that are indigenous to the area.

Based on input received from the MNRF the Natural Heritage Information Center database identifies the following species occurrences in the project area:

- Oval-leaved Bilberry;
- Riffle Snaketail;
- Ski-tailed Emerald; and
- Boreal Bedstraw.

Species at risk in the project area identified by the MNRF include snapping turtle and milksnake. In addition, a full list of known species at risk within the Sault Ste. Marie District was also provided. Specific details are included in Appendix B.

Consideration of the potential impacts to vegetation and terrestrial habitat will be included in the evaluation of the various alternatives developed through the study process and specific mitigation to address the species noted above will be developed through consultation with MNRF once the design details are advanced further. As an example, mitigation may include exclusion fencing to keep species outside of the areas that will be disturbed by construction.

3.1.4 Cultural/Heritage Resources

There are no known cultural or heritage values (past or present) within the subject transportation corridors. However, Third Line and portions of the Black Road corridor are situated within an 'Archaeological Potential' area as depicted in the City's Official Plan.

In the areas where archaeological potential is identified the road reconstruction activity will largely be contained within the existing road corridor which has been previously disturbed. There is however an area of archaeological potential identified along Black Road near McNabb Street where road widening from two through lanes to four through lanes is planned. Based on historical aerial photos of this area going back to 1937, it was determined that the property adjacent to Black Road has been cleared for many years. The majority, if not all of the property has been farmed which would have led to the removal or destruction of any near surface artifacts. Deeply buried artifacts are not likely to be encountered in this area.

Despite the unlikelihood of uncovering artifacts through the construction activity, as a further mitigation measure all construction contracts will include special provisions to suspend construction operations if heritage resources are uncovered.

3.1.5 Ground Water Resources

The road corridors that are the subject of this study cross the capture zones for the Lorna and Shannon wells that supply water for the Municipality's drinking water system.

Consideration of the potential impacts to the capture zones and relevant source water protection documentation will be included in the evaluation of the various alternatives developed through the study process.

3.2 Social Environment

In addition to the natural environmental features the more prominent social environmental features were also identified and inventoried. Each of the social environmental features is discussed in the following subsections.

3.2.1 Land Use

According to the City's Official Plan the land use within the study area comprises of a mix of Rural Area, Residential, Industrial, Institutional and Recreational. There are a significant number of single family residential homes throughout the project limits which are primarily concentrated along the east side of Black Road and both sides of Third Line. In addition, Strathclair Field, located to the northwest of the Second Line/Black Road intersection is a significant recreational complex used seasonally for soccer and baseball. Finn Hill, to the northwest of the McNabb Street/Black Road intersection is also a popular recreational area, particularly in the winter months. The City's hub trail also parallels Black Road between McNabb Street and the Northern Avenue right-of-way on the west side of Black Road. Much of the trail in this area is in a forested area and buffered from the Black Road Transportation corridor.

A church and several commercial operations including, solar farms, auto sales, composting operations, and contractor yards are also present within the study limits.

There is also a significant inventory of vacant undeveloped land immediately adjacent to and in close proximity to the Black Road corridor.

Consideration of the potential impacts on land uses will be included in the evaluation of the various alternatives developed through the study process.

3.2.2 Road Corridor/Property

The existing right-of-way width along Black Road between McNabb Street and Second Line is 30.48m. In contrast the ROW along Black Road and Third Line north of Second Line to the SAH entrance varies significantly from 20m to 30.48m.

Despite careful planning to minimize property impacts, some of the alternatives will require property acquisition. Consideration of the property acquisition requirements will be included in the evaluation of the various alternatives.

3.2.3 Municipal Water, Sewage and Electrical Services

The extent of the municipal servicing within the study area limits is summarized in **Table 2.5(a)** in Section 2.5 of this report.

A significant proportion of the subject road corridors lie outside of the Municipal service line. The corridors outside of the municipal service line include Third Line from 390 m east of the SAH entrance and Black Road from Second Line to Third Line.

Overhead electrical distribution plant is present throughout the project limits.

The municipal water distribution and electrical distribution plant are owned and operated by the Public Utilities Commission ("PUC"). The communal sewage collection and conveyance systems are owned and operated by the City of Sault Ste. Marie.

Consideration will be given to extending municipal servicing to existing vacant or developed properties during the evaluation of the various alternatives developed through the study process.

3.2.4 Utilities

The following utility authorities are known to have plant within the study area:

- PUC
- Union Gas;
- Bell Canada; and
- Shaw Cable.

Consideration of the utility conflicts will be considered during the evaluation of the various alternatives developed through the study process. Utility companies will also have an opportunity to extend/upgrade their plant in conjunction with any proposed road and servicing work.

3.2.5 Recreation

Within and adjacent to the study area there are formal recreational opportunities at Finn Hill and Strathclair Field which are supplemented by significant areas of undisturbed vacant land that offer significant recreational opportunities including tobogganing, soccer, baseball, biking, hiking, cross country skiing, snowmobiling and others.

Furthermore the Black Road and Third Line corridors, within the limits of this study, are identified as spoke routes in the City's Cycling Master Plan.

The Sault Trailblazers have a staging area at Strathclair with groomed snowmobile trails leading north from Strathclair adjacent to Black Road and crossing Black Road at the solar fields south of Third Line.

Consideration of the existing and proposed recreational facilities will be incorporated into the development and evaluation of various alternatives.

4. Identification and Evaluation of Alternative Solutions

The Class Environmental Assessment process requires the proponent to identify and evaluate all reasonable alternative solutions/designs to address the identified problems/opportunities. The development and evaluation of alternative solutions and designs is completed in two phases. Within the first phase, alternative solutions are identified and evaluated to address the identified problems/opportunities with due consideration of the anticipated environmental impacts. In the second phase various design options are identified and evaluated for the preferred solution. The following subsections describe the process undertaken to identify, evaluate and select a preferred solution and preliminary design.

4.1 Alternative Solutions

The Class EA process guidance document suggests that reasonable alternatives are to be considered in the process. The Class EA process is also designed to be transparent and responsive to allow for the inclusion of additional alternatives that may surface as the project evolves.

Four alternative solutions were developed to address the identified problems/opportunities. Each of the alternatives is described in **Table 4.1(a).**

Table 4.1 (a) Alternative Solutions

Reference	Description
1	**Do Nothing** – Under this alternative no improvements would be undertaken. This alternative has been included in the process to provide a basis for comparing the other alternatives.
2	**Widen the road platform while maintaining a basic two-lane configuration.**
3	**Widen the road platform and incorporate additional through lanes.**
4	**Extend municipal water and/or waste water servicing – considered and evaluated separately following the evaluation of Alternatives 1 through 3.**
Note: Alternatives 2 and 3 may also include intersection improvements which will be considered under Phase 3 of the Class EA process.	

4.2 Evaluation Methodology and Criteria

For the purposes of this study the corridor has been subdivided into two separate sections; McNabb Street to Second Line (Section 1); and Second Line to east of the SAH entrance on Third Line (Section 2). The key characteristics within and adjacent to each of these sections are generally consistent and are summarized in **Table 4.2(a)**.

Table 4.2(a): Road Section Characteristics

Characteristic	Section 1 (McNabb Street to Second Line)	Section 2 (Second Line to SAH Entrance)
Section Length	1950m	3200m
Road Width Characteristics: **ROW width =** **Lane widths =** **Shoulder Widths =** **Overall Platform width =**	 30.48 m 3.75 m 2.5 m 13.0 m	 Variable (20m to 30.48m) 3.5m 0.9m 8.8m
Roadside environment	Adjacent land uses are primarily residential, recreational with some commercial. There are also significant abutting vacant/undeveloped lands. Utility pole line is present on the east side from McNabb Street to the "S" curve and along the west side from the "S" curve to Second Line. The Hub Trail parallels the roadway from McNabb Street northerly to the Northern Avenue ROW. It is located immediately adjacent to the road at the foot of Finn Hill and then is routed through the forested area at a significant offset from the roadway.	Adjacent land uses are primarily residential, recreational, commercial and institutional. There are also some undeveloped/vacant lands. A major utility pole line is present along the north side of Third Line with a secondary line/service poles located on the south side of the road. Similarly there is also a major pole line along the west side of Black Road with a secondary line/service poles along the east side.
Average Annual Daily Traffic (AADT)	Existing traffic volumes are in the range of 21,400 vpd and are forecasted to reach 33,000 vpd by 2040.	Existing traffic volumes are in the range of 8,100 on Black Road and forecasted to reach 12,300 by 2040. Existing traffic volumes are in the range of 3,200 to 5,200 on Third Line and forecasted to reach 7,300 by 2040

The major differences between Sections 1 and 2 are traffic volumes, and road and ROW widths.

There are many different approaches to structuring evaluation matrices. In some cases weightings can be assigned to the evaluation criteria to reflect those criteria that may be perceived as being more important. Oftentimes the weightings generate significant discussion and lead to differences of opinion on the proposed weightings. In this case the evaluation methodology was developed to support the complexity of this project. The proposed approach provides increased focus on specific elements of the evaluation by incorporating more individual criteria in lieu of weightings. We have found that this approach is readily understood and can easily be modified based on input

received.

As an example the Natural Environmental Impacts have been grouped under a single criterion because the potential impacts are similar under the alternatives being considered, are typical of road construction/reconstruction projects, are well understood and can be effectively mitigated. Furthermore based on the range of alternatives being considered, the project is expected to have more significant impacts related to the social environment. These potential impacts are articulated through the "technical" and "social" groupings. The "technical" grouping is primarily focussed on the safety aspects while the "social" grouping is focussed on the potential impacts to the use and enjoyment of adjacent land uses.

Based on the foregoing approach a total of nine (9) evaluation criteria were established under four broad criteria groups including technical, natural environment, social environment and costs. A comparative qualitative approach was developed to evaluate each of the alternatives, whereby a green, yellow or red circle was assigned to each alternative under each criterion.

The approach consisted of comparing the alternatives relative to each other and assigning a green circle to the alternative(s) that rated most favourably and a red circle to those alternatives that rated least favourably under each criterion. A yellow circle was assigned to those alternatives that fit in between the two extremes. In cases where the preference under a particular criterion was similar for two or more alternatives they were each assigned the same colour rating. This methodology was selected in lieu of a more complex quantitative approach to provide the general public with a better understanding of the evaluation process. The approach and criteria included will be vetted through the public consultation process.

Each of the nine evaluation criteria is summarized in **Table 4.2(b)**. The "general guidelines" applied by the project team in assigning ratings under each criterion is also documented. The key principle employed in assigning the ratings was to rank the alternatives relative to each other under each criterion.

Table 4.2(b) – Evaluation Criteria

Criteria Group	Criterion	Description
Technical	Vehicular Circulation and Safety	Relative measure of safety and efficiency of vehicular traffic flow within and through the study area.
	Pedestrian Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.
	Cyclist Circulation and Safety	Relative measure of cyclist circulation and safety within and through the study area.
	Emergency Service Response	Relative measure of ESR within and through the study area.
Natural Environment	Groundwater, Surface Drainage System, Aquatic Habitat, Vegetation, Terrestrial Habitat, Heritage Resources	Relative measure of the net impacts on the surrounding natural environment.
Social Environment	Recreation	Relative measure of the impacts on recreational opportunities in the study area
	Property Needs	Relative measure of property acquisition impacts on land use.
	Adjacent Property Owners	Relative measure of impacts to adjacent property owners
Lifecycle Costs	Capital, Operation and Maintenance Costs	Relative measure of anticipated lifecycle costs associated with the implementation of the alternative.

4.3 Results of Alternative Solutions Evaluation

The design team completed an evaluation of the alternative solutions. Ratings were assigned to each alternative under each criterion using a green, yellow, or red circle as described in Section 4.2. The rationale for each colour rating was documented during the evaluation process and is summarized in Appendix C. Following the completion of the evaluation process, the design team selected a preliminary preferred solution. The results of the evaluation are summarized in **Table 4.3(a)**.

Table 4.3(a) – Evaluation of Alternative Solutions Summary

Alternative	Key Considerations (Section 1-Black Road from McNabb to Second Line)	Key Considerations (Section 2-Black Road from Second Line to Third Line and Third Line from Black to SAH))
1 – Do Nothing	• Fails to address the key problem of traffic capacity and route/lane continuity.	• Fails to address key problems of emergency response and pedestrian and cyclist safety.
2 – Widen the road platform while maintaining a basic two-lane configuration.	• Existing travel lanes and shoulder widths were upgraded in 2000-2001 and are generally within acceptable standards. • Reduced property and natural environmental impacts relative to Alternative 3. • Lower capital and operating/maintenance costs relative to Alternative 3. • Fails to address the key problem of traffic capacity and route/lane continuity.	• Addresses the key problems of emergency response and pedestrian and cyclist safety. • Reduced property and natural environmental impacts relative to Alternative 3. • Significantly lower capital and operating/maintenance costs relative to Alternative 3.
3 – Widen the road platform and incorporate additional through lanes.	• Will alleviate, to some extent, congestion within this road corridor and possibly adjacent road corridors. • May improve driveway ingress and egress along the corridor. • May improve safety for left turns along the corridor. • Will enhance emergency response time. • Provides effective lane balancing through the connecting link corridors through the City (four through lanes present on Trunk Road, Black Road south of McNabb Street, Second Line and Great Northern Road). • Requires property acquisition. • Some impacts to natural environment - adjacent naturally vegetated area generally consists of grassland sand immature forest. • Although the costs are high this is the only alternative that addresses the key problems.	• Based on existing and projected future traffic volumes within Section 2, additional lanes are not warranted. • Requires property acquisition. • Some impacts to natural environment. • Higher cost alternative is not warranted.

Note: refer also to the evaluation matrix in Appendix C.

Based on the results of the evaluation completed by the design team, Alternative 3 – widen the road platform and incorporate additional through lanes and Alternative 2 – widen the road platform while maintaining a basic two lane configuration were selected as the preliminary preferred solution for Sections 1 and 2 respectively.

Following the evaluation of alternative transportation corridor solutions consideration was given to the extension of municipal services within these corridors. The pros and cons of extending municipal services were considered and are summarized in **Table 4.3(b).**

Table 4.3(b): Evaluation of Municipal Servicing Extensions

Location and Description of Existing Services	Pros	Cons
Black Road (McNabb Street to Second Line) – currently serviced with potable water throughout the limits and waste water collection is provided for 888m of the 1950m length.	Included within the Urban Service Line (USL) and Urban Settlement Area (USA). Potable water provided throughout already. Property owners would have full municipal servicing.	Any extension of the existing Black Road waste water collection servicing will require pumping. Presently there are only 4 developed properties that are not serviced with Municipal waste water collection. There has not been any development pressure in this area to justify an extension of waste water collection services. Options were previously assessed in conjunction with the 2000-2001 upgrading projects and the conclusion reached was that the areas that are currently not serviced can be serviced most cost efficiently with low pressure forcemain and grinder pumps if required in the future. Alternatively there may be an opportunity to tie into a future Northern Avenue sewer extension or service these properties from the rear with drainage directed to the existing trunk sewer located east of and paralleling Black Road.
Black Road and Third Line (Second Line to SAH entrance) – potable water has been extended from the SAH entrance approximately 190 m easterly.	Property owners would have full municipal servicing.	Most of this area lies outside of the Urban Service Line (USL) and would require a change to the USL limits. In addition a significant proportion of this area also lies outside the Urban Settlement Area (USA). Expansion of the USA requires a scoped or comprehensive review which demonstrates, within the next ten years, housing demand cannot be accommodated within the existing USA. Although, it is at times possible, to expand the USL without expanding the USA, the two are closely linked and it would be very difficult to expand the USL without expanding the USA. There would be a need for clear justification. Both potable water and waste water collection would have to be extended together. The Black Road corridor is very flat and the Third Line corridor is undulating resulting in challenges in providing gravity waste water collection servicing throughout these corridors. The servicing strategy would include, at least in part, low pressure forcemain with grinder pumps or a City owned and operated pump station(s). Charges to be levied to individual property owners would, in part, be related to their frontages. As an example the estimated total cost for a watermain and gravity sanitary sewer including services installed to the property line is in the range of $17,290 based on 2014 rates and 100 ft of frontage. In addition to these charges, property owners would also be responsible to arrange and pay for the installation of services on their properties (ie. from the road allowance to their homes) including any necessary internal plumbing modifications.

Based on consideration of the pros and cons, as summarized in **Table 4.3(b),** the preliminary preferred solution is to exclude any extension of municipal potable water or waste water collection services within the study area. The study team is not aware of any widespread problems with private services within or adjacent to the subject road corridors and there are challenges in expanding the Urban Services Line and Urban Settlement Area and significant costs to property owners.

4.4 Phase II Public and Agency Input

At the onset of this project (ie: June 2011) a notice of study commencement was published and individual notices were mailed to potentially impacted agencies and property owners. At that time, the project scope consisted of Third Line from east of the SAH entrance to Black Road and Black Road from Third Line to Second Line. In December 2014 the project scope was expanded to include Black Road from McNabb Street to Second Line. A revised Notice was published and mailed to agencies and property owners including the additional property owners along Black Road from Second Line to McNabb Street.

A Phase II public open house was subsequently conducted on January 22, 2015. The intent of the Open House was to provide potentially impacted residents, agencies and interested individuals with an opportunity to become more familiar with the Class EA process and to comment on the evaluation methodology, evaluation criteria and the preliminary preferred alternative solutions (ie. preferred lane configuration) selected by the Design Team.

Representatives of AECOM, and the City of Sault Ste. Marie were in attendance throughout the session to provide information, address questions, and facilitate discussions. The information session was open from 3:30 p.m. to 7:30 p.m. and was very well attended with a total of 54 individuals recording their names on the sign-in sheet.

Notification of the Open House was advertised as follows:

- Sault Star on January 10, 2015.
- Sault this Week on January 8 and 15, 2015.
- City of Sault Ste. Marie website.
- Hardcopies of the Notice were mailed to all properties fronting onto Black Road and Third Line from McNabb Street to the Sault Area Hospital entrance.
- Individual Notices were also mailed or emailed to all other individuals/agencies on the contact list that do not own properties adjacent to these corridors.

The Notices indicated that comments would be received until February 27, 2015 to allow input from individuals unable to attend the open house. A copy of the Notice is included in Appendix D.

An Information Bulletin was available for pick-up at the registration table and displays were posted on the walls to disseminate information to individuals that attended the open house. The following displays were posted on the walls (copies of the displays and Information Bulletin are included in the Appendix D):

- A display welcoming residents;
- Purpose of the Open House;
- Problem/Opportunity Definitions;
    1. Emergency Service Response
    2. Corridor Capacity
    3. Road Structure Integrity

4. Pedestrian/Cyclist Safety
5. Municipal Servicing

- Inventory of Existing Conditions;
- Alternative Solutions;
    1. Do Nothing
    2. Widen the road platform while maintaining a basic two-lane configuration.
    3. Widen the road platform and incorporate additional through lanes.
    4. Extend municipal water and/or waste water servicing – considered and evaluated separately following the evaluation of Alternatives 1 through 3.
- How Were the Alternatives Evaluated;
- Evaluation Matrix;
- Summary of Evaluations;
- Consideration of Servicing Extensions;
- Preliminary Preferred Solution;
- Next Steps in process.

Throughout Phases I and II of the Class EA process many property owners along and adjacent to the Third Line and Black Road corridors and other interested individuals and stakeholders provided comments and identified issues for consideration. The public consultation process was effective in obtaining a significant level of input, particularly from area residents. A comprehensive summary of the issues and concerns raised throughout the Class EA process by area residents and interested individuals together with responses/proposed mitigation is included in Appendix G. The proposed mitigation measures and future monitoring are also summarized in Tables 8.4(a) and 8.5(a) respectively. Agency input and responses are included in Table 7.0(a).

The Phase II public consultation process confirmed that a reasonable range of alternatives was being considered as no new alternatives were identified and there was significant support for the selected alternatives. The input received also supported the approach that was taken in evaluating the alternatives. The vast majority of the input received related to the social environment and the safety aspects.

4.5 Selection of Preliminary Preferred Solutions

Following the evaluation of the alternatives including careful consideration of the input received through the public consultation process, the preferred alternative is a combination of alternatives 2 and 3. The preferred alternative solution is described below.

- Widen Black Road from McNabb Street to Second Line to include two through lanes in each direction.
- Maintain a single though lane in each direction and widen the Black Road and Third Line road platforms from Second Line to Third Line and from Third Line to east of the SAH entrance respectively.
- Include road base/subbase improvements along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance (ie. previous reconstruction limits).
- Forgo any municipal water distribution or waste water collection servicing extensions at this time.

The principle reasons for the selection of this alternative are as follows:

- In general, a two lane road configuration (one through lane in each direction) is typically suitable for daily traffic volumes in the range of 14,000 vpd. The existing and projected daily traffic volumes on Black Road from McNabb Street to Second Line significantly exceed this threshold but are within this threshold north of Second Line along Black Road and along Third Line.

- Although a single lane in each direction is adequate along Black Road north of Second Line and along Third Line the existing platform width is narrow and does not provide adequate space for emergency response vehicles, pedestrians, cyclists and other non-motorized uses.
- The road structure along Black Road from McNabb Street to Second Line is generally in good condition but Black Road north of Second Line and along Third Line is badly deteriorated and is in need of repair and upgrading.
- Black Road from Second Line to Third Line and most of Third Line within the study limits are situated outside of the Urban Service Line (USL) and would require a change to the USL limits to permit servicing extensions. In addition a significant proportion of this area also lies outside the Urban Settlement Area (USA). Expansion of the USA requires a scoped or comprehensive review which demonstrates, within the next ten years, housing demand cannot be accommodated within the existing USA. Furthermore the cost for municipal servicing, to property owners and the City, would be significant and there are no significant development pressures adjacent to these corridors at this time.

5. Identification and Evaluation of Alternative Design Concepts

The development and evaluation of alternative solutions, as outlined in Chapter 4 of this report, resulted in the selection of road platform widening throughout the study limits. The extent of the widening will vary with additional travel lanes proposed on Black Road between McNabb Street and Second Line only and limited widening elsewhere to enhance the overall platform width while retaining the basic two lane configuration. In the following subsections, design options are identified and evaluated for various design elements. The following manuals and guidelines were consulted to assist in the selection of each preferred design option:

- MTO Geometric Design Standards for Ontario Highways (GDSOH);
- MTO Roadside Safety Manual (RSM);
- OTM Book 18: Bicycle Facilities (OTM 18);
- OTM Book 5: Regulatory Signs (OTM 5); and
- TAC Geometric Design Guide for Canadian Roads (GDGCR).

The design elements considered within the context of this Class EA include:

- Roadway horizontal and vertical alignment;
- Roadway cross-section;
- Pedestrian and cyclists;
- Intersection configurations at the following locations; Black Road/McNabb Street, Black Road/Second Line, Black Road/Strathclair entrance, Black Road/Third Line, Third Line/Old Garden River Road, Third Line Birkshire Road, and Third Line/Foxborough Trail; and
- Street lighting.

5.1 Roadway Design Speed and Classification

The classification of the proposed roadway and selection of an appropriate design speed are important factors in the selection of many other design parameters. Generally it is desirable to select a design speed greater than the posted legal speed. There may be restrictive circumstances where the design speed is equal to the posted speed. The posted speed on Black Road is 70 km/h from McNabb Street to Second Line and 60 km/h from Second Line to Third Line. The posted speed on Third Line is 50 km/h.

The proposed design speeds are as follows:

- Black Road (McNabb Street to Second Line)= 80 km/h;
- Black Road (Second Line to Third Line)= 70 km/h; and
- Third Line (Black Road to SAH entrance) = 60 km/h.

The classification of a roadway generally reflects the desirable balance between providing mobility versus land access. There are two major classifications; rural and urban and four functional classifications; freeway, arterial, collector, and local road. In terms of the functional classification, mobility is most important for freeways and becomes less important for each successive classification. For local roads land access becomes the most important factor.

The Black Road corridor from McNabb Street to Second Line forms part of the Trans Canada Highway system and mobility has a high importance. This section of roadway is classified as an arterial. Conversely, the portion of Black Road from Second Line to Third Line and Third Line from Black Road to the SAH entrance are classified as collector roadways as access and mobility are both important.

These road corridors are situated partly within an urban environment and partly within a rural environment. The existing roadways consist of a rural road cross-section with roadside ditching. A further discussion relating to a rural versus urban designation is included in Section 5.4.3 of this report.

As noted above, the portion of Black Road from McNabb Street to Second Line forms part of the Trans Canada Highway system. The adjacent road sections including Black Road south of McNabb Street and Second Line west of Black Road include posted speeds of 60km/h while the section of Black Road from McNabb Street to Second Line is posted at 70 km/h. **It is recommended that the posted speed along Black Road from McNabb Street to Second Line be modified to 60km/h to provide consistency with the adjacent sections and to provide some traffic calming in conjunction with the widening to four lanes**.

5.2 Horizontal Alignment

With the exception of back to back curves (i.e. “S” curve) on Black Road south of Second Line the existing horizontal alignment is tangential throughout the project limits.

The existing back to back curves incorporate two 325m radius curves which are consistent with a design speed in excess of 80km/h.

The existing horizontal alignment is acceptable and there is no need to consider horizontal alignment options.

Minor modifications to the horizontal alignment may be required as the detail design evolves particularly to minimize property acquisitions requirements and to accommodate auxiliary lanes at intersections. Future modifications to the horizontal alignment should not result in any substantial changes to the environmental impacts and proposed mitigating measures identified in this report.

5.3 Vertical Alignment

As noted previously Black Road is very flat and there is very limited flexibility in altering the road grades due to the very flat terrain and constraints at intersecting roadways and private driveways. In contrast there are a number of ravines along Third Line and the existing vertical alignment is undulating.

Table C4-4 of the GDSOH indicates that the absolute minimum profile grade for curbed and uncurbed roadways is 0.3% and 0% respectively but 0.5% is considered the desirable minimum grade if achievable. The minimum grade

for ditches is 0.1% with a desirable minimum of 0.5%. The maximum profile grade is identified as a range from 6%-12% for urban roadways with a design speed of 60-70km/h and traffic volumes greater than 6000 AADT (Table C4-2 GDSOH). The final profile grades will meet the requirements included herein.

Vertical curves in the form of a parabola are incorporated to provide a transition between different road grades. Tables C4-6 and C4-7 of the GDSOH identify values of 15 and 18 as the minimum curvature for crest and sag curves based on a 60 km/h design speed. These values are reduced to 8 and 12 for crest and sag curves based on a 50 km/h design speed.

The proposed grades along the roadway will closely match the existing grades to allow appropriate tie-ins for driveways and front yards. The proposed road grades will not change appreciably relative to the existing grades but there may be modest changes to enhance drainage and/or minimize utility and property impacts. There are a few existing vertical curves along Third Line that would be substandard for a design speed of 50km/h or 60km/h. Every effort will be made during the detail design phase to incorporate vertical curves that at least meet a 50 km/h design speed with due consideration of property, utilities, driveways and yard drainage.

The existing road profile is illustrated in drawings P1 through P17 included in Appendix E. Modifications to the existing road profile will be addressed in the detail design phase. Consideration will be given to modest changes in the road profile on the approaches to and through the Birkshire Place intersection to improve sight distances. Modifications to the road profile during detail design will be modest and should not result in any substantial changes to the environmental impacts and proposed mitigating measures identified in this report.

5.4 Proposed Road Cross-section

Roadways typically consist of several components including through lanes, auxiliary turning lanes, ditching or curb and gutter, and boulevards/walkways or shoulders. In the following subsections of the report the existing roadway is described and the selection of the preliminary preferred roadway cross-section is discussed and rationalized.

5.4.1 Existing Cross-section

The Black Road and Third Line transportation corridors are located within a semi-urban environment. A mix of land uses, including residential properties, front onto Black Road and Third Line. Black Road has been constructed to an urban cross-section immediately south of McNabb Street and Third Line has been constructed to an urban cross-section from Great Northern Road to the SAH entrance. In addition Second Line from Great Northern Road to Black Road incorporates an urban road cross-section over a portion of its length and transitions to and maintains a rural cross-section from the foot of the hill to Black Road.

The existing roadway within the limits of the project along Black Road and Third Line incorporates a rural road cross-section with roadside ditching to control storm runoff. The existing roadway is paved throughout its length and includes two traffic lanes, one in each direction, with auxiliary turn lanes included at McNabb Street and Second Line. Further details are provided in **Table 4.2(a).**

5.4.2 Right-of-Way Constraints/Considerations

With road retrofit projects potential property impacts are a significant consideration. It is often not possible to incorporate standard design elements in a retrofit design and typically design compromises are tolerated to minimize undesirable impacts to private properties. The existing rights-of-way widths vary significantly throughout the project limits from a minimum of 20.1m to a maximum 30.48m.

Significant consideration was given to potential property impacts in developing the design of the road and road side cross-sectional elements for this project.

5.4.3 Urban Versus Rural Cross-section

The principle difference between urban and rural road cross-sections is the manner in which storm water is collected and managed. An urban road cross-section typically incorporates curbs and gutters at the edge of the roadway to collect and channel storm water to catch basins and a storm sewer system. Conversely a rural road cross-section typically incorporates road side ditches to collect and channel storm water to downstream outlets. Since the selection and design of other cross-sectional elements are dependent on the type of cross-section selected, this design element was considered first.

An important component of an urban road cross-section is the design and construction of a storm sewer system to collect and channel storm runoff. Therefore the first step in considering cross-section type is to evaluate the feasibility of establishing a storm sewer system to collect and channel storm runoff. Storm water generated within and to the west of the project area drains to the Root River and Black Creek which ultimately discharges to the St. Mary's River. There are a total of five outlets within the project limits that convey water easterly including four channels/ditches and one trunk storm sewer. The existing elevations of these outlets control the maximum depths of the upstream drainage system (ditches or storm sewers) along Black Road and Third Line.

Preliminary design work was undertaken to identify the maximum length of a trunk storm sewer that could be established from each of these four outlets using minimum allowable pipe grades. It was confirmed through this preliminary design work that significant proportions of Black Road cannot accommodate a trunk storm sewer due to the very flat topography along Black Road which precludes adequate depths of bury or cover over a storm sewer pipe. Through this analysis it was concluded that Black Road from McNabb Street to Third Line would remain a rural road cross-section with roadside ditches for storm water management.

Preliminary design work was also undertaken to assess the feasibility of establishing a storm sewer system along Third Line. The undulating terrain and the presence of ravines which parallel and cross Third Line provide some opportunities for discharging storm sewers. However, the only outlet available for storm water generated from the top of the hill east of Birkshire to Black Road is the roadside ditch that continues easterly along Third Line east of Black Road. The invert of this ditch is the controlling elevation for storm water at or near the Third Line/Black Road intersection. A

Based on the preliminary design work completed it was confirmed that a storm sewer system could be established along Third Line from east of the SAH entrance easterly to Black Road. The existing ditch depths at or near the Black Road/Third Line intersection are marginal but can likely accommodate a shallow storm sewer. Therefore the following options were developed and evaluated:

- Provide an urban road cross-section from east of the SAH entrance to Black Road; and
- Provide a rural road cross-section from east of the SAH entrance to Black Road.

The evaluation of these deign options was completed by considering the pros and cons of each option which are summarized in **Table 5.4.3(a)**.

Table 5.4.3(a) Urban vs. Rural Cross-section for Third Line

Option 1 – Urban Cross-section	Option 2 – Rural Road Cross-section
Overall urban road width including pavement, curbs and gutters, boulevard and paved path is in the range of 14 to 15m (excludes drainage swale that may be required in specific areas) whereas a rural cross-section including travel lanes, shoulders and ditching is in excess of 20m.	Overall urban road width including pavement, curbs and gutters, boulevard and sidewalk is in the range of 14 to 15m whereas a rural cross-section including travel lanes, shoulders and ditching is in excess of 20m.
An urban section requires less overall width which will enhance opportunities for off-road pedestrian/non-motorized modes of travel within the available right-of-way width. There are a significant number of residences abutting Third Line and there are significant residential subdivisions in this area. Off-road pedestrian facilities would provide safer pedestrian/non-motorized access to the Hub Trail.	Pedestrian facilities would be established immediately adjacent to the roadway (i.e. road shoulder). The wider road cross-section will have greater adverse impacts on site grading and vegetation on adjacent private properties.
The reduced overall cross-section width will also reduce impacts to adjacent private properties including site grading and vegetation (i.e. Property impacts are less likely).	Design compromises would be required to minimize property impacts.
The capital cost for an urban cross section is moderately higher relative to a rural road cross-section.	The capital cost for a rural cross section is moderately lower relative to an urban road cross-section.

Following an evaluation of the pros and cons of each design option, the preliminary preferred design option is:

- provide an urban cross-section along Third Line from east of the SAH entrance to Black Road.

Although the urban cross-section is moderately higher in cost, it was selected because it provides the best opportunity to enhance the safety of pedestrian / other non-motorized modes of travel within the existing available right-of-way width and also reduces the potential for impacts to private properties.

5.4.4 Proposed Number and Width of Traffic Lanes

In the first phase of this project the proposed number of through travel lanes for each road segment was identified. Alternative 3 – widen the road platform and incorporate additional through lanes and Alternative 2 – widen the road platform while maintaining a basic two lane configuration were selected as the preferred solution for Black Road (McNabb to Second Line) and Black Road and Third Line (Second Line to SAH entrance) respectively.

Once the number of lanes is selected, the required width of the through lanes is determined using design guidelines. The selection of lane widths is dependent on traffic volumes and design speed. Reference was made to the GDSOH and GDGCR. Given the differences in the projected traffic characteristics and the proposed road cross-section within the project limits the project was divided into three sections when considering lane widths. The recommended lane widths for each section are summarized in **Table 5.4.4(a).**

Table 5.4.4(a): Lane Widths

Road Section	GDSOH	GDGCR
Section 1 – Black Road from McNabb to Second Line (rural)	Table D2-3 – 4 lane undivided with a design speed<100km/h = 3.5m	Table 2.2.2.2 – multi lane rural road with a design speed < 100km/h = 3.5 – 3.7m
Section 2 – Black Road from Second Line to Third Line (rural)	Table D2-2 – major secondary highway shall have a minimum lane width of 3.5m	Table 2.2.2.1 – two lane rural collector road with a design hour volume >450 and design speed of 60km/h = 3.5-3.7m
Section 3 - Third Line from Black to east of SAH entrance (urban) – see Note 1.	Table D2-4 – design speed of 60 km/h and design hour volume > 600 = 3.5m	Table 2.2.2.3 –two lane urban collector = 3.5-3.7m

Notes: 1. City of Sault Ste. Marie standard for an urban road is 4.4m wide lanes.

The design standards provide some flexibility in the proposed widths. This flexibility will be considered in conjunction with other cross-sectional elements and the overall available right-of-way width in developing the preliminary preferred road cross-section. It is also noted that these widths exclude any consideration for bicycles or parking.

In addition to providing through lanes, auxiliary lanes will be required at locations where the forecasted turning movements warrant a separate lane. The design standards for left and right turn lanes suggest that the width be established at the same width as the through lane or 0.2 to 0.25 m less than the through lane width with a minimum width of 3.25 or 3.3m.

5.4.5 Provision for Cyclists

In addition to the vehicular lane width requirements, the City recognizes the importance of other modes of transportation. A Cycling Master Plan was prepared in 1995 and updated in 2007. That plan designates Black Road and Third Line within the limits of this project as spoke routes.

In keeping with the recommendations of the Cycling Master Plan, provisions for safe cycling have been considered for this project. Consideration was given to the Cycling Master Plan and Ontario Traffic Manual Book 18 – Cycling Facilities which provides guidance on the planning, design and operation of cycling facilities in Ontario.

Two primary types of bikeways are generally recognized consisting of on-road or in-boulevard facilities. There are six different types of on-road bicycle facilities and two types of in-boulevard facilities. Book 18 also includes a bicycle facility selection tool to assist in identifying practical types of bicycle facilities. The tool is intended to assist in identifying suitable bicycle facilities but also acknowledges that there may be constraints particularly in retrofit conditions. The tool generally advocates that as the risk to cyclists increases, with increased traffic volumes and/or vehicular speeds, additional operating space and separation should be considered.

Given the differences in the projected traffic characteristics and the proposed road cross-section within the project limits the project was divided into three sections when considering bicycle provisions.

Section 1 – Black Road from McNabb Street to Second Line

In general, the application of the cycling pre-selection tool to Section 1 suggests that a separated facility such as a pathway or buffered paved shoulder may be appropriate along Black Road from McNabb Street to Second Line based on traffic speeds and high traffic volumes.

Presently an off-road multi-use path (i.e. hub trail) is provided adjacent to Black Road from McNabb Street northerly to approximately 535m south of Second Line. In addition the City's Trails Master Plan identifies the possible future extension of this trail along the base of the hill from the Northern Avenue right-of-way northerly to Second Line to provide a link to the Starthclair recreational complex. A future possible extension is also identified through the Strathclair complex and connecting to Old Garden River Road and continuing north to Hiawatha highlands. These trails may be considered under a separate project in the future.

Under this project, buffered paved shoulders, incorporating two white edge lines to provide added separation between motorists and cyclists, are proposed from McNabb Street to Second Line for the following reasons:

- Black Road is designated as a spoke route and important cycling destinations are located north of the project (eg. Hiawatha Highlands); and
- An off-road trail is already present in close proximity to the Black Road corridor from McNabb Street to the Northern Avenue ROW and this path may be extended further north in the future under a separate project.

Section 2 – Black Road from Second Line to Third Line

In general, the application of the cycling pre-selection tool to Section 2 suggests that either an on-road or off-road facility is acceptable based on the lower travel speeds and reduced traffic volumes on Section 2 relative to Section 1.

Again based on the designation of Black Road as a spoke route and recognizing the important cycling destinations located north of the City, it is important to incorporate safe cycling into the overall project design.

Under this project, fully paved shoulders with a single solid white line are proposed to accommodate cyclists from Second Line to Third Line for the following reasons:

- Black Road is designated as a spoke route and important cycling destinations are located north of the project (eg. Hiawatha Highlands); and
- The right-of-way width is constrained and an off-road trail would result in significant property impacts. Furthermore an off-road trail may be constructed through the Strathclair recreational complex and along Old Garden River Road in the future.

Section 3 – Third Line from Black Road to east of SAH Entrance

In general, the application of the cycling pre-selection tool to Section 3 suggests that an on-road or off-road facility is acceptable based on the lower travel speeds and reduced traffic volumes on Section 3 relative to Section 1.

Considering that Third Line is designated as a spoke route and there are important cycling destinations located north of the City, it is important to incorporate safe cycling into the overall project design.

Under this project, wide shared curb lanes are proposed and in accordance with OTM Book 18 the proposed lane widths are 4.5m. The reasons for this selection are as follows:

- Third Line is designated as a spoke route and important cycling destinations are located north of the project (eg. Hiawatha Highlands);
- Third Line will consist of an urban cross-section, with curbs and gutters (i.e. no shoulders); and
- The typical City pavement width for a two lane road is 8.8m and therefore the proposed 9.0m width required to accommodate motorists and cyclists is modestly wider.

Refer also to Section 5.4.6 for a discussion regarding off-road elements along Third Line.

5.4.6 Pedestrians and Other Cross-Sectional Elements

In addition to the design elements described in the forgoing sections there are other cross-sectional elements that need to be considered in the design of these transportation corridors. The specific elements to be considered are dependent on the type of cross-section, rural versus urban. The relevant cross-sectional elements are discussed in greater detail below.

Rural Road Cross-section (Black Road from McNabb Street to Third Line)

In addition to the travel lanes the principle elements to be considered with a rural road cross-section are the shoulders and the drainage ditches. The road shoulder serves a number of useful functions as follows:

- Support for the road structure;
- Accommodating disabled vehicles;
- Providing an area of refuge for vehicles when emergency service response vehicles require passage;
- Accommodating pedestrians and cyclists; and
- Winter snow storage.

GDSOH indicates the minimum shoulder width acceptable for pavement support is 0.5 m if the shoulder is paved and 1.0m if the shoulder is gravel. The minimum usable shoulder width required to accommodate a disabled vehicle is 2.0m. The preferred width for design speeds of 70km/h and 80 km/h and higher traffic volumes are in the range of 2.0 to 2.5m.

GDGCR suggests a width of 2.5m for design speeds of 70 km/h and 80 km/h and higher traffic volumes.

OTM Book 18 suggests shoulder widths to accommodate cyclists should typically be between 1.5 and 2.0m with a minimum of 1.2m. It also suggests wider widths should be considered together with a buffered zone in cases where traffic volumes are higher.

Based on these considerations the following recommendations apply to each rural road section within the study limits.

Section 1- Black Road from McNabb Street to Second Line

A fully paved 2.5m shoulder width is recommended inclusive of a double solid white painted line to provide a buffer between traffic and cyclists/ pedestrians /other non-motorized uses. The buffer is recommended based on the high traffic volumes and significant volume of truck traffic.

The preferred cross-section configuration for Black Road from McNabb Street to Second Line is included in Appendix E.

Section 2 – Black Road from Second Line to Third Line

A fully paved shoulder with a minimum width of 1.5m and a preferred width of 2.0m is recommended where adequate property is available or constraints can be readily addressed. Constrained shoulder widths will be identified during the detail design phase. Pedestrians and other non-motorized uses will be accommodated on shoulders due to the constrained right-of-way width.

Roadside ditching will be incorporated on both sides of Black Road from McNabb Street to Third Line. The ditching will serve to provide drainage of the road base and subbase and will also collect and channel storm water to existing outlets. In general the standard ditch design extends 0.5m below the road subbase and will include 3:1 granular slopes and 2:1 ditch slopes. The ditch depth and geometry will however be modified to ensure positive drainage and to minimize impacts to adjacent properties and utilities.

The preferred cross-section configuration for Black Road from Second Line to Third Line is included in Appendix E.

Urban Road Cross-section (Third Line from Black Road to East of the SAH Entrance)

Third Line shall consist of an urban road cross-section with curbs and gutter and storm sewers. There are a number of cross-sectional elements that will be incorporated into the design of the proposed road.

Beyond the limits of the asphalt driving surface, a curb and gutter will be constructed along the edges of pavement to collect and channel storm water to catch basins. A standard curb with wide gutter (OPSD 600.01) will be used to collect and channel the runoff generated on the paved surface.

There has been a significant level of development in the vicinity of Third Line including a significant increase in residential properties. The proposed Third Line lane widths are adequate to accommodate motorists and cyclists as described in Section 5.4.5. Accommodating pedestrians and non-motorized modes of travel is an important consideration in the planning for this project.

Based on the preliminary design work completed to date it is anticipated that the existing right-of-way width is adequate to accommodate a minimum 2.0m and a preferred 3.0m wide pedestrian/non-motorized corridor on the south side of the roadway adjacent to the curb. This width may consist of a paved path/trail or a paved path/trail with a boulevard or a sidewalk and boulevard.

The GDSOH provides for a minimum sidewalk width of 1.5 m which is the same as the City of Sault Ste. Marie standard. The area between the sidewalk and back of the curb and gutter is referred to as the boulevard. The boulevard provides an area for aerial and underground utility lines, light standards and snow storage and also serves as a safety separation between motorists and pedestrians and other non-motorized uses when a walkway is present. The GDSOH provides for a standard boulevard width of 2.0 for collector and local roads with a desirable minimum width of 1.5m. It is often necessary to compromise the boulevard widths in urban environments due to limited right-of -way widths and the need for other cross-sectional elements.

Alternatively a paved path/trail could be provided with or without a boulevard adjacent to the curb and gutter. The preferred design would consist of a 2.5m wide paved path/trail together with a 0.5m wide concrete boulevard. In areas where the right-of-way width is constrained and cannot be readily addressed or where overhead utilities are adversely impacted a 2.0m wide paved path/trail would be provided without a boulevard.

The preliminary preferred option is to provide a 2.5 m wide paved path/trail with a 0.5m wide concrete boulevard. In areas where the right-of-way is constrained and cannot be readily addressed a 2.0m wide paved path/trail will be provided without a boulevard. This design option was selected because it better accommodates pedestrians and other non-motorized uses relative to a sidewalk and is generally better suited to a semi-urban environment that is prevalent along Third Line.

The preferred cross-section configuration for Third Line from Black Road to east of the SAH entrance is included in Appendix E.

5.5 Road Side Safety

The Ministry of Transportation (MTO) has produced a manual dedicated to addressing roadside safety hazards and protection measures to safeguard motorists. The guidelines and policies described in the "Roadside Safety Manual" (RSM) have been considered in the design of Black Road and Third Line in order to achieve a safety conscious design.

Road side safety design is based largely on the concept of "clear zone width" which is a function of design speed and traffic volume. The clear zone width is defined as the distance from the edge of the traveled portion of the roadway to the face of the unprotected hazard. The clear zone width for each road segment is provided in **Table 5.5(a)**.

Table 5.5(a): Clear Zone Width for each Road Segment

Road Section	Design Speed	Clear Zone Width
Black Road (McNabb to Second Line)	80	5 (refer to Note 1)
Black Road (Second Line to Third Line)	70	4
Third Line (Black to SAH Entrance)	60	3

Notes: 1. It is recommended in this report that the posted speed on Black Road from McNabb to Second Line be reduced from 70 km/h to 60km/h. This results in a reduction in the design speed from 80 km/h to 70 km/h and a reduction in the clear zone width from 5m to 4m.

Specific provisions in the RSM have been developed recognizing that road allowances are often constrained in urban environments. Utility poles, fire hydrants, and other hazards are often located adjacent to roadways in urban environments and the removal, relocation, or shielding these hazards is not practical. The manual states that "in urban areas where operating speeds are 60km/h or less, a standard curb may be used to shield hazards, provided the clear zone offsets cannot be met and removal or relocation is not practical." The operating speed is defined as the speed below which 85% of drivers are operating under low traffic densities and good weather.

In addition the RSM also acknowledges that risk acceptance in lieu of protection may be an acceptable alternative particularly in cases where there is a historical record of little or no run-off-the-road impacts.

In general, the proposed design will maintain the existing offsets to utility poles, street lights and other hazards (eg. culvert end walls) along Black Road from McNabb Street to Second Line where no widening is proposed (i.e. east side from McNabb Street to the "S" curve and west side from the "S" curve to Second Line). In all areas along Black Road where widening is proposed every effort will be made to respect the required clear zone width noted in the table (i.e. 4 m based on the recommended posted speed reduction), particularly in the vicinity of the "S" curve. In cases where it is not practical or cost efficient to provide the prescribed clear zone width, reduced offsets to potential hazards may be tolerated based on the favourable horizontal geometrics (tangent), favourable vertical geometrics (flat) and generous shoulder widths along Black Road.

In general, the proposed design of Black Road from Second Line to Third Line incorporates widenings on both sides of the road which will require utility pole/street light relocations. In addition new street lights are planned for a portion of the length. Every effort will be made to respect the required clear zone width noted in the table (i.e. 4 m). In cases where it is not practical or cost efficient to provide the prescribed clear zone width, reduced offsets to potential hazards may be tolerated based on the favourable horizontal geometrics (tangent) and favourable vertical geometrics (flat).

An urban cross-section inclusive of standard curb is proposed along Third Line. Reduced clear zone widths are generally considered acceptable when standard curb is present and operating speeds are less than 60 km/h. Standard curb does not however afford adequate protection from high earth embankments where the top of the slope is located within the clear zone width. Every effort will be made in the detail design phase to provide at least 3m from the edge of pavement to the top of the bank in the areas of high earth embankments. If this is not practical due to property or other constraints steel beam guide rail installations will be considered.

5.5.1 Guide Rail

As noted in the foregoing section appropriate traffic protection measures will be required at locations where the embankment height warrants protection along the roadway and adequate clear zone width cannot be provided. The only guide rail that is suitable adjacent to standard curb is steel beam with channel and it must be installed no farther than 250mm from the face of the standard curb.

5.6 Intersection Improvements

Within the limits of the project there are a total of six intersections. These intersections are located at McNabb Street, Second Line, Third Line, Old Garden River Road, Birkshire Place and Foxborough Trail. In the following subsections we have reviewed the need for enhancements to each of these intersections given that the level of traffic is expected to increase. In addition there is a major entrance into Strathclair recreational complex from Black Road north of Second Line.

5.6.1 Black Road/McNabb Street

McNabb Street consists of five lanes on each approach to Black Road including a left turn lane. The westbound approach to the intersection also includes a separate channelized right turn lane with yield control and an acceleration lane and the curb lane on the northbound approach is a dedicated right turn lane. The McNabb Street/Black Road intersection is currently signalized.

The most prominent turning movements at this intersection are from westbound McNabb Street to northbound Black Road (i.e. channelized right turn) and the left turn movement from the southbound Black Road to eastbound McNabb.

Two design options considered at this intersection as follows:

1. Convert the dedicated right turn lane on the northbound approach to a combined through / right turn movement. This would require the removal of a portion of the westbound to northbound right turn channelization island to allow two northbound lanes through the intersection. This would impact the right turn movement as there would no longer be an acceleration lane for the westbound to northbound merge.
2. Continue to maintain a dedicated northbound to eastbound right turn lane and maintain the existing westbound to northbound channelization design. With the proposed widening and an additional northbound

lane on Black Road, the right turn movement would be enhanced as it would be uncontrolled (i.e. free flow with the yield control removed).

It is recommended to proceed with the design option 1 primarily to mitigate ingress and egress challenges at several entrances on the east side of Black Road immediately north of McNabb Street. Ingress and egress at these entrances is difficult due to the short distance and limited sight distance to vehicles entering Black Road from the right turn channelization lane, significant traffic volumes and the limited gaps in traffic. Design option 2 would likely exacerbate the current ingress and egress challenges as the right turn movement would operate under free flow conditions at higher speeds. Although the preferred preliminary design will adversely impact the capacity of the right turn movement it will likely improve ingress and egress at the downstream entrances by increasing the distance between the entrances and the downstream end of the channelization, reducing the speed of the right turn movement and introducing additional gaps in traffic. The channelization island will be reduced in size and the entry angle will be reduced to approximately 60 degrees to allow right turning motorists to better observe vehicles approaching from the south. The reduction in the size of the island will also result in a need to relocate some of the infrastructure that is located within the island. The proposed design will also enhance the capacity of the northbound through movement (i.e. two northbound lanes through the intersection) and will reduce lane changes on the northbound approach that result from the conversion of the curb lane from a though lane to a dedicated right turn lane.

Although the volume of the Black Road southbound to McNabb Street eastbound volume is in a range that may support a dual left turn lane there are significant property constraints and utility impacts associated with the addition of a second left turn lane. Motorists also have the option of proceeding southbound through the intersection and turning eastbound at Trunk Road in lieu of a left turn at McNabb. It is recommended that the intersection continue to be monitored and the center through lane could potentially be converted to a combined through/ left turn lane if there is a need.

Enhanced overhead signage is also recommended on the southbound approach to clearly identify the Trans Canada Highway routing and the principle truck route along Black Road to Trunk Road.

The design also includes a proposed relocation of the Finn Hill entrance further to the north to accommodate an enhanced left turn storage lane length on the southbound approach. A short left turn lane will also be provided for the Finn Hill entrance.

Given that traffic volumes along Black Road and McNabb Street are projected to grow in the future, it is recommended that the City consider acquiring property, at market prices, to accommodate a possible right turn deceleration lane along McNabb Street on the westbound approach to the intersection. The future need for this improvement may not materialize if the MTO proceeds with a future bypass connecting at Black Road and Second Line.

The proposed intersection configuration is illustrated a Drawing P1 in Appendix E.

5.6.2 Black Road/Second Line

Currently, the Black Road/Second Line intersection is signalized. It is currently a “T” intersection with a left turn lane and through lane on the northbound approach and a single combined through/right turn lane on the southbound approach. The eastbound approach includes a channelized right turn lane with acceleration lane and yield control and a dedicated left turn lane. There are also two westbound lanes on the west leg of the intersection.

The most prominent turning movements at this intersection are from eastbound Second Line to southbound Black Road (i.e. channelized right turn) and the left turn movement from northbound Black Road to westbound Second Line. The channelized right turn movement will be enhanced in the proposed design as this movement will have a dedicated southbound lane and will be uncontrolled to allow free flow movements. Similar to the Black Road/McNabb Street intersection there are several entrances located downstream of the eastbound to southbound right turn channelization lane where ingress and egress is challenging. The addition of a southbound through lane may offer enhanced opportunities to enter the southbound traffic stream as a significant proportion of the traffic originating from north of Second Line will be in the center southbound lane. In addition the sight distance from the nearest downstream entrance is more generous relative to what is available from the nearest downstream entrance north of McNabb Street and a recommendation has been included to reduce the posted speed on Black Road to 60km/h from Second Line to McNabb Street.

Although the volume of the Black Road northbound to Second Line westbound volume may support a dual left turn lane the current signal cycle times result in limited delays to left turning movements as very limited green time is allocated to the eastbound to northbound left turn movement. The proposed design will also incorporate enhanced left turn lane storage as the centre through lane is converted to a left turn lane on the approach to Second Line. The conversion of this lane from a through lane to a left turn lane is necessary to achieve the lane reduction from two northbound through lanes south of Second Line to one northbound through lane north of Second Line. To facilitate the conversion of this lane from to a through lane to a left turn lane overhead signage will be provided on the approach to the intersection to allow for necessary lane changes in advance of the intersection. In addition the overhead signage will also serve the important function of clearly identifying the principle route to be followed by heavy trucks.

Given that traffic volumes along Black Road and Second Line are projected to grow in the future and property acquisition is required to accommodate the proposed widening south of Second Line, it is recommended that the City acquire adequate property to accommodate a possible future dual left turn lane at this location which may be necessary if traffic growth projections are realized. The future need for a dual left turn lane may not materialize if the MTO proceeds with a future bypass connecting at Black Road and Second Line.

The proposed intersection configuration is illustrated on Drawings P6 and P7 in Appendix E.

5.6.3 Black Road/Third Line

The Black Road/Third Line intersection includes stop control on Third Line and is free flow along Black Road. There is a single lane on each approach to the intersection which acts as a combined through, right and left turn lane.

Consideration was given to the following design options for this intersection:

1. Replace the current intersection with a roundabout.
2. Add a dedicated left turn lane on the northbound approach to accommodate the significant northbound to westbound left turn movement. A dedicated left turn lane would also be provided on the southbound approach for lane balancing.
3. Add a dedicated right turn lane on the eastbound approach to accommodate the large westbound to southbound movement.
4. Options 2 and 3 combined.

It is recommended to proceed with design option 2 for the following reasons:

- a roundabout would require the acquisition of significantly more property and is the most costly option;
- the existing intersection is generally operating reasonably well with a relatively low incidence of reported accidents (i.e. a total of 8 over the last five years and only 2 over the last two years); and

- a left turn lane can likely be accommodated along Black Road with limited property impacts but the dedicated right turn lane proposed in Option 3 may adversely impact adjacent properties.
- although a dedicated right turn lane would provide some benefit it is not essential based on the observed intersection operations.
- with a generous radius at this location there will likely be adequate space for a right turning vehicle to slip past a stationary vehicle in the left/though lane.

In addition to the foregoing, consideration was also given to establishing all-way stop control at this intersection. Guidance on the need for all-way stops is provided in Ontario Traffic Manual Book 5 which includes warrants to assist in identifying when there may be a need to incorporate an all-way stop. In this case an 8 hour intersection traffic count and warrant calculations were completed. The results indicated that an all-way stop is not currently warranted based on the collision history and the traffic volume warrants. It is recommended that traffic volumes and the warrants continue to be monitored in the future particularly as the traffic volumes change over time. The City may also want to consider acquiring property, at market prices, to accommodate a possible future roundabout at this location.

The proposed intersection configuration is illustrated on Drawings P12 in Appendix E.

5.6.4 Old Garden River Road/Third Line

The Old Garden River Road/Third Line intersection includes all-way stop control. There is a single lane on each approach to the intersection which acts as a combined through, right and left turn lane. The intersection was converted to all-way stop control in 2003 to address a significant accident history. The accident history since the conversion has been modest.

Consideration was given to the following design options for this intersection:

1. Add a dedicated left turn lane on the eastbound and westbound approaches.
2. Create a “T” intersection by dead ending Old Garden River Road on the southbound approach.

It is recommended to retain the existing intersection configuration for the following reasons:

- the existing Third Line ROW width is constrained and the addition of a left turn lane on the eastbound and westbound approaches may result in adverse property impacts;
- the existing intersection generally operates reasonably well with a relatively low incidence of reported accidents (i.e. a total of 7 over the five year period from 2010 to 2014); and
- dead ending Old Garden River Road on the southbound approach would increase traffic volumes at the Black Rd/Third Line intersection which may adversely impact its operations.

The proposed intersection configuration is illustrated on Drawings P13 in Appendix E.

5.6.5 Third Line/Birkshire Place and Foxborough Trail

Presently there are no supplementary turning lanes provided along Third Line on the approaches to the Birkshire Place or Foxborough Trail intersections. Stop control is provided on Birkshire Place and Foxborough Trail and Third Line is free flow.

In general the design guidelines suggest that a supplementary left turn lane may be warranted when the number of left turning vehicles creates a hazard and reduces capacity. Specifically the GDSOH includes left turn warrant graphs which are based on the number of left turn movements and the opposing and advancing traffic volumes on Third Line.

Based on a review of the warrant graphs and considering estimated turning movements and traffic volumes on Third Line, left turn lanes are not warranted. Some modest changes to the road profile grade will be considered on the westbound approach to the intersection to enhance sight distance looking east from Birkshire Place.

The proposed intersection configurations are illustrated on Drawings P15 and P16 in Appendix E.

5.6.6 Black Road/Strathclair Recreational Complex

There is a significant level of traffic that is generated by the Strathclair Recreational Complex. Presently there is no dedicated left turn lane along Black Road at the main Strathclair entrance. With the significant volume of traffic accessing this facility and the high and growing traffic volumes along Third Line a dedicated left turn lane is proposed on the approach to the Strathclair entrance.

The proposed intersection configuration is illustrated on Drawing P8 in Appendix E.

5.7 Preliminary Pavement Design

During the detail design phase for this project subsurface investigations will be undertaken along portions of these road corridors where adequate information is not currently available in order to identify specific design requirements for the roadway. Based on the pavement design for other road projects including the upgrades undertaken along Black Road from McMabb Street to Second Line in 2000/2001 it is anticipated that the pavement design will likely consist of the following.

- 130mm of asphalt;
- 150mm of Granular ‘A’ base; and
- 600 to 750mm of Granular subbase.

Additional pavement structure recommendations, pipe bedding requirements, excavation challenges, and de-watering requirements will all be addressed through geotechnical investigations completed during the detail design phase. Some modifications to the preliminary pavement design, noted above, may be identified following the completion of detailed geotechnical investigations.

5.8 Storm Drainage

Existing storm drainage along the Black Road and Third Line is controlled by roadside ditching. Storm water generated within and adjacent to the project drains to the Root River and Black Creek which ultimately discharge to the St. Mary’s River. There are a total of five outlets within the project limits that convey water easterly including four channels/ditches and one trunk storm sewer.

Storm drainage will continue to be managed in roadside ditches along Black Road from McNabb Street to Third Line. Although there are significant drainage challenges due to the very flat topography along Black Road, efforts will be made, during the detail design phase to enhance, to the extent possible, existing storm water drainage within and adjacent to the Black Road corridor. Given that there is virtually no flexibility with the existing ditch grades, consideration will be given to ditch capacities and culvert locations and sizing. Options to be considered will include the possible addition of relief culverts to convey flows from the west to the east side of Black Road at critical locations. This will enhance storage through better usage of existing under utilized ditching.

Given that an urban cross-section is proposed along Third Line from east of the SAH to Black Road, a storm sewer system will be required to manage storm water flows. Roadside ditches/swales may also be required in some areas to collect and channel surface drainage from adjacent properties. Any required trunk storm sewers will be established at a suitable location within the proposed road cross-section and will collect storm runoff generated within and adjacent to Third Line. Catch basins will be established at a suitable spacing along the road using curb inlets and the storm water will be collected and diverted to suitable outlets in adjacent ravines and the Third Line drainage ditch east of Black Road.

Where possible storm drainage will be managed with catch basins and storm laterals discharging directly to adjacent ravines. The embankments will be protected from erosion with rock protection wherever outlets are proposed. Although the intent will be to minimize the length of trunk storm sewer installations careful attention to yard/sump pump drainage will be required during the detail design phase. There may be a need to provide trunk storm sewers in some locations specifically to address storm drainage from the adjacent private properties. However individual storm services will not be provided to each property.

There are a number of existing culverts that convey drainage ditches or seasonal watercourses across Black Road and Third Line. The need to replace these existing culverts due to condition or inadequate size will be assessed during the detail design phase.

5.9 Street Lighting

Street lighting is present throughout the project limits with the exception of a portion of Black Road from the Strathclair entrance northerly to Third Line. The following upgrades are proposed within the scope of this project:

- add street lighting within the Black Road corridor from the Strathclair entrance northerly to Third Lines; and
- upgrade, as necessary, the street lighting along Black Road from McNabb Street to Second Line to ensure it is adequate for the additional travel lanes.

5.10 Utilities

Each of the following Utility Companies was contacted during the study process to identify plant locations, relocation requirements and upgrading plans:

- Bell Canada;
- Union Gas;
- Shaw Cable; and
- PUC.

There are a significant number of aerial plant installations within the road corridors. Although consideration of the existing aerial infrastructure was incorporated into the development of the final preliminary design, further attention will be required as the detail design work progresses. Specifically, efforts were made during the preliminary design development, to minimize impacts to existing installations wherever possible but with any widening project conflicts are inevitable. General notes addressing utility conflicts are included on the final preliminary design plans included in Appendix E.

Conflicts with utility infrastructure will be further investigated and addressed in the detail design phase.

5.11 On-Street Parking

On-Street parking is currently prohibited along Black Road throughout the project limits. Although on-street parking is not formerly prohibited along Third Line anecdotal evidence suggests that it does not occur likely due to the narrow roadway width. Based on the undulating terrain and the restricted sight distance that are present in some areas along Third Line it is recommended that on-street parking be prohibited along Third Line within the limits of the project.

5.12 Phase III Public Open House

A Phase III public open house was conducted on November 26, 2015 in the Russ Ramsay Boardroom of the Sault Ste. Marie Civic Centre. The session provided a forum for interested individuals, agency representatives, and property owners, to review and discuss the design options developed for the preferred solution.

Representatives of AECOM, and the City of Sault Ste. Marie were in attendance throughout the session to provide information, address questions, and facilitate discussions. The information session was open from 3:30 p.m. to 7:30 p.m. and was very well attended with a total of 61 individuals recording their names on the sign-in sheet.

Notification of the Open House was advertised as follows:

- Sault Star on November 21, 2015.
- Sault this Week on November 12 and November 19, 2015.
- City of Sault Ste. Marie website.
- Hardcopies of the Notice were mailed to all properties fronting onto Black Road and Third Line from McNabb Street to the Sault Area Hospital entrance.
- Individual Notices were also mailed or emailed to all other individuals/agencies on the contact list that do not own properties adjacent to these corridors.

A copy of the Notice is included in Appendix F.

Numerous displays were mounted on the walls to inform the public of the process followed, options considered, and preliminary decisions reached. In addition to the displays, a sign-in sheet, information bulletin, and comment sheet were available. The following displays were mounted on the walls or laid out on the tables:

- A display welcoming residents;
- Purpose of the Open House;
- Problem/Opportunity Definitions;
    1. Corridor Capacity
    2. Emergency Service Response
    3. Road Structure Integrity
    4. Pedestrian/Cyclist Safety
    5. Municipal Servicing
- Summary of Evaluations;
- Final Preferred Solution;
- Design Options considered in Phase 3 of the process;
- Urban versus Rural road cross-section characteristics;
- Preliminary preferred cross-section:
    1. Black Road (McNabb Street to Second Line);
    2. Black Road (Second Line to Third Line);

3. Third Line (Black Road to east of the Sault Are Hospital Entrance).

- Intersection Design Options;
- Other Design Considerations (property, road alignment, utilities, street lighting, on-street parking and posted speed);
- Description of the Preferred Preliminary Design;
- Large scale plans showing existing conditions and the preliminary preferred design; and
- Next Steps in process.

Individuals were encouraged to record their names on the sign-in sheet and provide written input on the comment sheets provided. The public consultation process was effective in obtaining a significant level of input, particularly from area residents. Documentation related to the open house is included in Appendix F and a summary of the issues and concerns raised throughout the Class EA process by area residents and interested individuals together with responses/proposed mitigation is included in Appendix G. The proposed mitigation measures and future monitoring are also summarized in Tables 8.4(a) and 8.5(a) respectively. Agency input and responses are included in Table 7.0(a).

6. Aboriginal Consultation

In addition to the formal public open houses which were intended for residents, agencies and Aboriginal Communities, some additional activities were specifically undertaken to engage various Aboriginal Communities that may have an interest in the project. The Aboriginal Communities and Agencies that were consulted consisted of the following:

- Batchewana First Nation;
- Garden River First Nation;
- Historic Sault Ste. Marie Metis Council;
- Metis Nation of Ontario Historic Sault Ste. Marie Traditional Territory Consultation Committee;
- Missanabie Cree;
- Ministry of Aboriginal Affairs;
- Indigenous and Northern Affairs Canada; and
- Ministry of Environment and Climate change.

The agencies contacted above provided guidance with respect to the Aboriginal consultation process and the relevant Aboriginal Communities to be contacted. The approach taken in developing the Aboriginal Community contact list included a review of Aboriginal Communities that are proximal to the project. This was completed by reviewing available online mapping together with a review of land claims in the area (Note: none were identified that would impact this project). Consideration was also given to the Aboriginal Communities that were contacted on other similar City of Sault Ste. Marie infrastructure projects such as the recently completed City of Sault Ste. Marie Storm Water Master Plan.

The steps taken to solicit input from Aboriginal Communities are summarized in Table 6.0(a).

Table 6.0(a): Summary of Aboriginal Communities Consultation Activities

Aboriginal Community	Details
General (i.e. published Notices)	Published Notice of Commencement in the Sault This Week on June 1 and 8, 2011 and Sault Star on Jun 4, 2011. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.

Aboriginal Community	Details
	Published Revised Notice of Commencement in the Sault This Week on December 4 and 11, 2014 and Sault Star on December 6, 2014. The revised notice highlighted that the project scope and study area had been expanded. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.
	Published Notice of the January 22, 2015 Public Open House in the Sault This Week on January 8 and 15, 2015 and Sault Star on January 10, 2015. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.
	Published Notice of the November 26, 2015 Public Open House in the Sault This Week on November 12 and 19, 2015 and Sault Star on November 21, 2015. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.
	Published Notice of Completion in the Sault This Week on January 20 and 27, 2016 and Sault Star on January 16, 2016. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.
	Published the Notice of Class EA Addendum in the Sault This Week on Sault Star in February, 2017. These publications have general circulation in Sault Ste. Marie and surrounding area including Batchewana First Nation and Garden River First Nation.
Batchewana First Nation (BFN)	Issued Notice of Commencement directly to BFN Chief Dean Sayers.
	Issued revised Notice of Commencement directly to BFN Chief Dean Sayers.
	Issued an invitation to the Phase 2 Public Information center to BFN Chief Dean Sayers.
	Issued an invitation to the Phase 3 Public Information center to BFN Chief Dean Sayers.
	Issued Notice of Completion to BFN Chief Dean Sayers.
	Issued Notice of Addendum to BFN Chief Dean Sayers.
Garden River First Nation	Issued an invitation to the Phase 2 Public Information center to GRFN Chief Paul Syrette.
	Issued project correspondence to GRFN Chief Paul Syrette updating them on the status of the project, inviting comments or questions and offering to meet to provide further information if there is an interest in the project.
	Issued Notice of Addendum to GRFN Chief Paul Syrette.
Metis Nation of Ontario – Local Sault Ste. Marie office	Issued an invitation to the Phase 2 Public Information center to the Sault Metis Center.
	Issued project correspondence to the Sault Metis Centre updating them on the status of the project, inviting comments or questions and offering to meet to provide further information if there is an interest in the project.
	Issued Notice of Addendum to the Sault Metis Centre.
Metis Nation of Ontario Historic Sault	At the request of Jesse Fieldwebster we forwarded some project

Aboriginal Community	Details
Ste. Marie Traditional Territory Consultation Committee	information which highlighted the proposed limits and details of the planned upgrades along Black Road and Third Line. We subsequently followed up with Jesse approximately a week later to confirm whether the Consultation Committee has an interest in the project. He noted that they receive a significant number of requests for a variety of projects and there is a need to prioritize their interests based on anticipated impacts. He confirmed that if we do not hear from him they will not participate.
	Issued Notice of Addendum to Jesse Fieldwebster.
Missanabie Cree	Issued project correspondence to Chief Jason Gauthier updating them on the status of the project, inviting comments or questions and offering to meet to provide further information if there is an interest in the project.
	Issued Notice of Addendum to Chief Jason Gauthier.

Aboriginal Communities were contacted at various stages throughout the Class EA process. No responses were received from any of the Communities contacted. We were however informed by the coordinator of the Metis Nation of Ontario Historic Sault Ste. Marie Traditional Territory Consultation Committee that if a response is not received they are not interested in participating further. He also commented that they receive many requests to participate in the planning for various projects and have to prioritize accordingly.

Although no specific input was received from Aboriginal Communities the project has been carefully planned with due regard to mitigate adverse impacts and ultimately to provide a project that results in the betterment of the community. The proposed mitigation measures which include contract provisions to cease construction activities if archaeological resources are discovered are detailed in Chapter 8.

7. Review Agency Input

In addition to the consultation activities described elsewhere in this document focussed activities were undertaken to engage various Review Agencies that may have an interest in the project. The Agencies that were consulted and input received is summarized in Table 7.0(a).

Table 7.0(a): Summary of Agency Consultation

Agency	Comments	Response/Actions
Sault Ste. Marie Regional Conservation Authority (SSMRCA)	Project is located in an area under the jurisdiction of the SSMRCA with regard to Development, Interference with Wetlands and Alterations to Shoreline and Watercourses. A permit will be required. Portions of the corridor also lie within the 5 and 25 year capture zones for two municipal well supplies.	Application for a permit under Development, Interference with Wetlands and Alterations to Shoreline and Watercourses shall be submitted during detail design as noted in Section 8.3. The Lorna well supply was taken out of active service in May 2014 and remains available on standby in the event of high system demands or emergencies. Ultimately this supply is to be permanently decommissioned at a future date. The Source Protection Plan is administered by City Planning staff. They were contacted and confirmed that roads, and therefore the

Agency	Comments	Response/Actions
		proposed reconstruction of Black Road and Third Line East are not currently identified as 'Prescribed Threats' under the Clean Water Act and they did not identify a need for any specific mitigation measures related to this project. The proposed construction includes relatively shallow excavation depths and the native soils are dominated by clay which provides effective protection to the aquifer.
Algoma Public Health	Supportive of enhancements that promote alternative transportation modes including 3m wide shoulders throughout, provision of street lighting where it is not currently provided and installation of flashing lights on stop signs at Old Garden River Road and Third Line to improve compliance with the stop condition.	Although property constraints will not accommodate 3m wide shoulders throughout, shoulder widening is proposed on Black Road from Second Line to Third Line and shared bike/travel lanes and an off-road multi-use trail is proposed along Third Line. The 2.5m wide Black Road shoulders between McNabb Street and Second Line are adequate but a double painted white line will be added to provide an enhanced buffer between vehicular traffic and non-motorized uses on the shoulders. Street lighting will be enhanced from McNabb Street to Second Line and will be added along Black Road from the Strathclair Park northerly to Third Line. Following the project street lighting will be provided throughout the project limits. The City's Public Works and Transportation Department confirmed that flashing lights are not warranted on the stop signs at Third Line and Old Garden River Road based on the accident history.
Infrastructure Ontario	Potential impacts to Infrastructure Ontario (IO) managed lands and or tenants located on those lands. Construction should proceed with appropriate best practices mitigation measures. If impacts to cultural heritage features are identified they should be discussed further with IO.	There are IO lands that are impacted by the project and there is a need to acquire some IO lands to accommodate the proposed widening from two lanes to four lanes along Black Road from McNabb Street to Second Line. The lands are currently vacant with no active uses or tenants and a relatively small proportion of the adjacent lands are required. The required lands have been clearly identified on property acquisition plans and the City has been actively working with IO to satisfy their specific requirements and acquire the lands. The Province has agreed to the sale of these lands to the City. Best management mitigation measures are proposed for the project and are documented in Section 8.4. No impacts to cultural heritage features have been identified.
Ministry of Environment and	Ecosystem protection and restoration – avoid where possible	Modest impacts are anticipated with the proposed widening of Black Road from McNabb Street to Second Line. Existing grass

Agency	Comments	Response/Actions
Climate Change	and incorporate appropriate mitigation where impacts are identified. Consult with MNRF, DFO and the local conservation authority to determine special measures or if additional study is required. No adverse impacts to natural features or ecological functions of water courses.	lands and immature treed areas will be impacted. We have consulted with MNRF and SSMRCA and have identified appropriate mitigation measures. In addition IO has agreed to the sale of these lands to the City. Further consultation with MNRF and mitigation development will occur as the design evolves. The project will include an erosion and sedimentation control plan which will be developed during the detail design and construction phases. Plans will be reviewed in detail by MNRF staff. Temporary sediment control features will have to remain active until vegetation has been re-established. The construction contract will include provisions to ensure that only designated areas are disturbed by construction activity. The contract will also include provisions to ensure all areas disturbed by the construction are stabilized to mitigate erosion. The contractor will be responsible for re-establishing vegetation in disturbed areas as soon as practical and within the same construction season. Every effort will be made to avoid in-water work and if needed it will only be undertaken between July 1 and September 1 to avoid potential impacts to Lake Sturgeon and salmonid species as dictated by the MNRF. For any culvert extensions work shall be scheduled during drier periods and flows shall be diverted to permit construction of the culvert extension in dry conditions. In addition the work will be planned to span the shortest timeframe possible. Details will be reviewed with MNRF staff during design/construction. In cases where a full culvert replacement is required based on the condition of the culvert the preferred approach will be to replace in the dry along a new alignment adjacent to the existing culvert. The last step in the construction sequence would be to divert the flows to the new culvert. The contract will include provisions to ensure the Contractor has appropriate spill response kits readily available on-site and any spills will be promptly reported through appropriate channels.
	Address additional storm water runoff and quality.	There are significant challenges with drainage along and downstream of Black Road (i.e. flat topography and ditch capacity). The challenges exist now and this project provides an opportunity to mitigate property flooding that would otherwise not likely be undertaken until a later date. It is however important to recognize that although drainage improvements will be incorporated into this project, flooding will continue to occur in this

Agency	Comments	Response/Actions
		area during major storm events or significant snow melts events. The proposed project will maintain the same drainage paths that exist pre-development. Drainage within the project limits and in the vicinity of the project is managed within roadside and offtake ditches. The existing ditching will be maintained or replaced and enhanced throughout the Black Road corridor and will be replaced in part with storm sewers along Third Line. There is some additional runoff that will be generated by the additional paved surfaces. Based on preliminary modeling completed we are anticipating an additional 7 L/s post development which represents approximately 0.7% of the peak flow from the contributing drainage areas. To address the increased flows the following mitigation is proposed: Detailed field information will be collected during the detail design phase and options will be considered to best manage storm water within and adjacent to the project. Proposed enhancements to mitigate the increased stormwater flows include increasing the available storage in the roadside ditching and transferring some of the stormwater to the underutilized ditching on the east side of Black Road through the installation of additional cross culverts. In addition the City has proactively constructed supplementary offtake ditching upstream of Black Road in advance of this project to mitigate concerns raised by some area residents. Stormwater modelling will be undertaken during detail design to confirm the level of improvement that can be achieved. The City will also continue to undertake ongoing maintenance of downstream offtake and roadside ditches and will monitor the need for downstream improvements over time. Management features will be incorporated to preferably improve conditions but as a minimum the downstream flows will not be increased. The design of the storm water management features will completed in accordance with the City of Sault Ste. Marie Storm Water Master Plan and the MOECC Storm Water Management Planning and Design Manual.
	Potential impacts to well water.	It is anticipated that the excavation activity is likely to remain above the water table and no adverse impacts to groundwater resources are anticipated in conjunction with this project. Excavation depths relative to the groundwater table will be confirmed through a geotechnical investigation undertaken in conjunction with the detail design phase. A permit to take water is not anticipated. As a precautionary measure steps will be taken in advance of

Agency	Comments	Response/Actions
		construction to sample and analyse well water quality at select locations adjacent to the project. The data will provide a baseline for comparison of the well water quality following construction and in future years if necessary. Based on available mapping together with previous geotechnical investigations in the area, there is an abundance of fine grained silty and clay soils that afford effective protection to the aquifer.
	Noise and dust impacts.	The proposed project will accommodate both motorized and non-motorized traffic more safely and efficiently. Noise and pollution from traffic is not expected to increase significantly and some positive impacts are expected to offset the potential increases in motorized vehicular noise and pollution. One of the key focal points of this study was to address and better accommodate non-motorized uses within the subject transportation corridors (refer to Section 5.4 of the ESR). Due to the lack of convenient alternative routes to the Black Road corridor we are not anticipating a significant increase in traffic volumes resulting from the proposed improvements. Some traffic growth is expected over time as development patterns shift to the north as noted in the Transportation Master Plan however the proposed improvements are not expected to have an immediate impact on traffic volumes. Therefore an increase in noise and pollution may occur as traffic volumes grow over time but the growth is expected to be modest. (i.e. existing AADT from McNabb to Second Line is in the range of 21,400 and is projected to grow to 24,700 in 2022 and 27,100 in 2032). The proposed improvements will accommodate these volumes more effectively and efficiently particularly along Black Road from McNabb Street to Second Line where the roadway is proposed to be widened from 2 lanes to 4 lanes. In addition there are sections of these road corridors that are in particularly poor condition with significant frost heaves and deteriorating asphalt. The improvement in the road condition and the resulting smoother riding surface will reduce noise. The proposed improvements will also have a positive impact on noise and pollution by providing enhanced and safer provisions for alternative non-motorized modes of travel. Area residents have raised this issue and believe the changes will be a significant improvement. The proposed project will also reduce dust nuisance by providing fully paved shoulders throughout the project. During construction dust will be mitigated through the application of dust suppressants

Agency	Comments	Response/Actions
		and noise will be mitigated to the extent that is practical by ensuring equipment is properly muffled and construction timing restrictions are properly adhered to.
	Requirements for an Environmental Compliance Approval should be confirmed.	An ECA will be required for the proposed storm water management features. An application will be prepared and submitted during the detail design phase.
	Land use compatibility impacts.	No land use compatibility impacts are anticipated as existing land uses will be maintained.
	Management of contaminated soils.	Although a geotechnical investigation and previous construction activities have not identified any contaminated soils within these corridors there is the potential to identify, during construction, contaminated soils. In the event contaminated soils are identified during construction a suitably qualified consultant will provide guidance and advise and ensure the materials are managed in accordance with relevant regulatory requirements.
	Mitigation and monitoring.	The City of Sault Ste. Marie is committed to best management construction practices and environmental management. Careful consideration has been given to potential impacts associated with the construction and operation of the proposed project. Mitigation and monitoring is proposed and documented in Sections 8.4 and 8.5.
	Consideration of planning and policy issues.	Consideration has been given to planning documents including the City Official Plan and the City's Source Protection Plan. The City's Official Plan recognizes the subject corridors as major arterial roadways in the City. The project has been planned to minimize adverse impacts to the environment through carefully planned design decisions and also through the inclusion of appropriate mitigation measures.
	Meeting the intent of the Class EA process and respecting all necessary approvals required to implement the project.	The Class EA process has been followed and the team has been very responsive to the input received throughout the process. The Class EA process offers some autonomy in navigating through the process with the ultimate goal of transparency in decision making, soliciting public, Aboriginal and agency input, identifying potential impacts and incorporating effective mitigation. Through the process followed, these key objectives have been achieved for this project. Through the two open houses, project webpage and ongoing interaction and meaningful dialogue with numerous individuals, this project and its potential impacts are well understood by the general public. Ultimately the identified project effectively addresses the problems/opportunities in an environmentally responsible manner with appropriate mitigation incorporated.

Agency	Comments	Response/Actions
		The approvals required to implement the project have been included in Section 8.5.
	Aboriginal consultation.	Consultation has been an important and integral component of the Project Class EA. Aboriginal Communities were consulted during the process as summarized in Chapter 6.
Ministry of Natural Resources	Downstream water quality protection.	The project will include an erosion and sedimentation control plan which will be developed during the detail design and construction phases. Plans are to be reviewed by MNRF staff. Temporary sediment control features will have to remain active until vegetation has been re-established. The contractor will be responsible for re-establishing vegetation in disturbed areas as soon as practical and within the same construction season. In-water work shall be undertaken between July 1 and September 1 to avoid potential impacts to Lake Sturgeon and salmonid species. For any culvert extensions, work shall be scheduled during drier periods and flows shall be diverted to permit construction of the culvert extension in dry conditions. In addition the work would be planned to span the shortest timeframe possible. Details will be reviewed with MNRF staff during design/construction. In cases where a full culvert replacement is required based on the condition of the culvert the preferred approach will be to replace in the dry along a new alignment adjacent to the existing culvert. The last step in the construction sequence would be to divert the flows to the new culvert.
Ministry of Transportation	No comments	N/A
Fisheries and Oceans Canada	No comments	N/A
Sault Ste. Marie Fire Department	No comments	N/A
Sault Ste. Marie Ambulance (EMS)	No comments	N/A
Sault Area Hospital	No comments	N/A
Sault Ste. Marie Police Services	No comments	N/A
Sault Ste. Marie Public Utilities	Provided input on the charges to property owners to establish	Incorporated the information into the evaluations.

Agency	Comments	Response/Actions
Commission	communal water serving.	
Sault Ste. Marie Transit Services	No comments	N/A
Bell Canada	No comments	N/A
Union Gas	Union gas has pipelines within the subject road corridors.	The project team will engage Union gas further as the design evolves and the impacts, if any, to gas lines becomes apparent.

8. Project Description

Following the selection of a preferred alternative solution, as documented in Chapter 4, selection of preferred design options as documented in Chapter 5, and consideration of the input received the overall preliminary design was finalized.

8.1 The Project

The proposed Black Road and Third Line corridor improvements project generally consists of the following components:

- Maintain a rural road cross-section with roadside ditches and widen Black Road from McNabb Street to Second Line to include two 3.5m wide through lanes in each direction together with 2.5m wide fully paved shoulders inclusive of double solid white painted lines to provide a buffer between traffic and non-motorized uses. Upgrade the existing street lighting to provide adequate lighting for the widened roadway. The design will also incorporate additional storm water storage in expanded roadside ditching. The introduction of one or more cross culverts will also be considered in the detail design phase to take advantage of existing underutilized ditch capacity.
- Reconstruct Black Road from Second Line to Third Line with a single 3.5m wide though lane in each direction and roadside ditches and widen and pave the shoulders to provide a minimum 1.5m and preferably 2.0m width with a single solid white painted line to separate traffic from non-motorized uses. Incorporate street lighting from Strathclair entrance northerly to Third Line in the area where it is not currently provided. The design will also incorporate additional storm water storage in expanded roadside ditching. The introduction of one or more cross culverts will also be considered in the detail design phase to take advantage of existing underutilized ditch capacity.Reconstruct Third Line from Black Road to east of the SAH entrance with an urban cross-section consisting of 4.5m wide shared travel/bicycle lanes, standard curb and gutter at the edges of pavement and a minimum 2.0m wide paved trail and preferably a 2.5m wide paved trail with a 0.5m concrete boulevard to accommodate non-motorized uses along the south side of the roadway. Storm drainage shall be primarily accommodated within a storm sewer system. The storm sewer system shall generally consist of a combination of curb inlets and catch basins connecting to trunk storm sewers in some areas or discharging directly to adjacent ravines where possible. The embankments will be protected from erosion with rock protection wherever outlets are proposed. Roadside ditches/swales may also be required in some areas to collect and channel surface drainage from adjacent properties.Incorporate intersection improvements at Black Road/McNabb Street, Black Road/Second Line and Black Road/Third Line.
- Reduce the posted speed along Black Road from McNabb Street to Second Line from 70km/h to 60km/h.
- Reduce the posted speed along Black Road from Second line to Third Line from 60km/h to 50km/h.
- Prohibit on-street parking throughout the limits of the project.

- Incorporate modest vertical alignment changes to improve drainage and enhance sight distance at the Birkshire Place intersection.
- Undertake full reconstruction of the roadway along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance to provide an adequate road structure to accommodate the increase in traffic volumes including truck traffic.
- Incorporate signage improvements to clearly delineate the principle truck route and the Trans Canada Highway routing.

The overall preferred preliminary design is illustrated on Drawings P1 to P17 in Appendix E.

The preliminary estimated cost for this project is $15.5 M excluding HST. This estimate includes an allowance for engineering together with a reasonable contingency allowance. The estimated cost has been developed assuming that the work would be tendered in several construction contracts but reflects 2015 $'s. Additional costs will be incurred based on inflation and the timing for the work.

8.2 Property Requirements

The City of Sault Ste. Marie owns the road corridors/rights-of-ways. Generally the existing road allowance varies from 20 m to 30.48m. The most significant property acquisition requirements have been identified along Black Road from McNabb Street to Second Line where the road will be widened from two lanes to four lanes. In this area, it is recommended that the City consider acquiring adequate property for a possible future continuous centre left turn. There are also a number of areas along Black Road north of Second Line and along Third Line where property acquisition may be required to accommodate the proposed fill slopes or back slopes. Some flexibility has however been retained with the following design elements to mitigate or forgo property acquisition in some or all of these areas:

- Ditch and fill slopes;
- Pavement structure depths;
- Shoulder widths; and
- Boulevard/trail widths.

Although the precise property acquisition requirements will be developed during the detail design phase the preliminary requirements are highlighted on Drawings P1 to P17 included in Appendix E. The extent of possible property acquisition and/or design compromises has been illustrated conceptually with a heavy black dashed line.

8.3 Technical Approvals

A number of technical approvals will be required prior to proceeding with the implementation of this project. A preliminary listing of the technical approvals is provided in **Table 8.3(a)**. Additional approval requirements may be identified during the detail design phase for this project.

Table 8.3(a): Summary of Required Technical Approvals

Description	Agency
Construction of a storm sewer system within the Third Line corridor.	City of Sault Ste. Marie Ministry of Environment and Climate Change Sault Ste. Marie Conservation Authority
Installation of street lighting.	PUC Electrical Safety Authority
Approval to construct within the prescribed flood and fill	Sault Ste. Marie Conservation Authority

regulated area.	
Protection of water quality.	Ministry of Natural Resources and Forestry
Permit to Take Water – need will be confirmed during the detail design phase	Ministry of Environment and Climate Change

8.4 Summary of Potential Effects and Mitigating Measures

Although there are potential impacts associated with the implementation of the proposed project the anticipated impacts are typical of what would be expected for this class of project and the impacts can be effectively mitigated. Aside from the widening from two lanes to four lanes the remainder of the project is generally a reconstruction of the existing roadways within existing rights-of-ways with much needed improvements to accommodate alternative non-motorized uses and to improve the pavement structure and riding surface.

There was a significant level of interest in this project particularly from property owners along the route. In keeping with the spirit of the Class EA process, efforts were focused on working with individuals to resolve issues and concerns as they were raised. As noted in the project description widening is planned for the "connecting link" section of the corridor which must accommodate much heavier traffic volumes including provincial traffic. This 2 km section is the only remaining two lane section of "connecting link" roadway within the urbanized area of the City. Careful consideration was given to the widening in the planning stages to minimize the potential for impacts to the environment. This included widening on one side only to focus property acquisition on surplus provincially owned lands with limited ecological significance.

Table 8.4(a) summarizes the potential impacts and the proposed mitigation measures. In addition a comprehensive summary of all issues and concerns raised throughout the project together with the team's responses are documented in Appendix G.

Table 8.4(a): Summary of Potential Impacts and proposed Mitigating Measures

Potential Effects	Proposed Mitigation
Property impacts – the proposed improvements will require property acquisitions. In addition the construction may impact trees or other features that are located on or adjacent to private properties.	Careful consideration was given to property impacts during the alternative solutions and design options phases of the project. Road widening from two lanes to four lanes is only proposed where it is absolutely necessary to accommodate existing and future projected traffic volumes (i.e. approximately 2km of the overall 5.2 km project length). Although there are some modest private property acquisitions planned to accommodate the proposed widening, the vast majority of the property to be acquired is surplus Provincially-owned lands. Discussions have been initiated with various property owners and there is a general acceptance of the planned approach and required acquisitions. Infrastructure Ontario (IO) has granted approval for the sale of the necessary crown lands. For the remainder of the project (i.e. approximately 3.2km) modest widening of the road platform width is proposed to enhance corridor safety while maintaining the basic two lane configuration. The modest widening was planned to take advantage of adjacent City-owned lands where possible. There are however several private property acquisitions planned. Discussions have been initiated with various property owners and there is a general acceptance of the planned approach and required acquisitions. Furthermore the preferred design incorporates adequate flexibility to proceed without the acquisitions if hurdles are encountered in the next phase of the property acquisition process. Every effort will also be made to maintain as much of the existing vegetation as possible. Most of the mature trees are located along Third Line and the design has largely been developed to fit

Potential Effects	Proposed Mitigation
	within the existing right-of-way width. We will also ensure that all areas that are disturbed by the construction activity will be stabilized to mitigate erosion.
Vehicular speeds and aggressive driving - the proposed improvements may lead to increased speeds and more aggressive driving within the corridors	Black Road from McNabb Street to Second Line is a major arterial, a Class A truck (i.e. accommodates truck traffic 24/7) and forms part of the Trans Canada Highway system. This classification dictates that mobility is the principle function for this road segment. In addition Black Road north of Second Line to Third Line and Third Line within the project limits are classified as major collectors. For the latter two road segments access and mobility are equally important and hence the speed limit is lower as noted below. The City understands the challenges in addressing speeding and aggressive driving on municipal roads and provincial highways and also recognizes the proposed improvements may result in an increased prevalence of aggressive driving. To address these potential impacts City staff shall recommend to Council to reduce the speed limits as follows: • 70 kph to 60 kph on Black Road from McNabb Street to Second Line; and • 60 kph to 50 kph on Black Road from Second Line to Third Line. The City Police Services will also be contacted to consider increased enforcement as the staged construction proceeds. The reduction in posted speed in conjunction with increased enforcement will assist in mitigating aggressive driving. We also understand that the wider road section from McNabb Street to Second Line may result in an increased tolerated level of risk. The entire Trans Canada Highway routing through the urbanized area of the City consists of a similar road cross-section as is proposed from McNabb Street to Second Line. The proposed project will bring consistency throughout the urbanized Trans Canada Highway corridor which is an advantage for road users and in keeping with recommendations in the design guidelines. Care was also taken in defining the proposed lanes widths. As noted in Section 5.4.4 suitable lane widths for the Black Road corridor could be established from a range of 3.5m to 3.7m based on the traffic characteristics. The selected lane width is at the low end of the range (i.e. 3.5m) to help discourage aggressive driving. In addition a solid double white line is proposed along Black Road to separate the shoulders from the travel lanes from McNabb Street to Second Line to provide a distinct buffer for non-motorized uses. The double solid white line will also visually reduce the width of the roadway to further mitigate aggressive driving (refer to Section 5.4 of the ESR for a full understanding of the rationale for the selected road cross-section elements).
Left turn movements to access driveways off of Black Road south of Second Line	Although a dedicated continuous left turn lane is generally preferred to accommodate left turns from Black Road to access adjacent properties there is a significant cost as well as additional property acquisition requirements to accommodate a fifth lane. In this case the number of driveways along the route is relatively small. The widening to four lanes will allow through vehicles to slip around left turning vehicles. It is recommended that when making a left turn to access a property along Black Road motorists signal their intention well in advance and slow down gradually. Also on Black Road south of Second Line there are two lanes in each direction but north of Second Line there is only one lane in each direction. Therefore there is a need to drop a northbound lane on the south approach to Second Line. To achieve the lane reduction, the northbound lane adjacent to the centerline is converted from a through lane to a left turn lane (i.e. the lane ends at

Potential Effects	Proposed Mitigation
	Second Line). Overhead signage and symbol painting on the pavement is planned on the south approach to Second Line to alert motorists that the lane changes to a dedicated left turn lane. As a further mitigation it is also proposed to reduce the speed limits from 70 kph to 60 kph from McNabb Street to Second Line.
Impacts to well water – the construction activities and types of materials incorporated into the work (eg. slag subbase) may adversely impact groundwater quality.	Steps will be taken in advance of construction to sample and analyse well water quality at select locations adjacent to the project. The data will provide a baseline for comparison of the well water quality following construction and in future years if necessary. Typically City road construction contracts are tendered in a manner that allows the Contractor the option of using iron blast furnace slag or an alternate material for the road subbase material. This is done to ensure competitive pricing for the subbase. Iron blast furnace slag has been used elsewhere in areas where wells are present including Leigh's Bay Road from Second Line northerly 580 m and on Korah Road from Moss Road to Cooper Street. The City is not aware of any well water problems in these areas. It was also used on Black Road from McNabb Street to Second Line. The subbase material will be situated above the water table and in general the subbase is not exposed to a significant quantity of infiltrating precipitation as the shoulders will be paved. Based on mapping available for this area it appears there is an abundance of fine grained silty and clay soils that limit infiltration of storm water into the water table. There will be a need to undertake a full geotechnical investigation in this area at the time that the detail design is initiated. The Terms of Reference for the geotechnical investigation and reporting will include a requirement to address this matter and provide a recommendation taking into consideration all relevant scientific evidence and information.
Access during construction – access to private properties will be required during construction	This is a problem that is typical for any road reconstruction project. There will be challenges in accessing private properties during construction and in some cases access may only be available from one direction. The construction contract will however incorporate provisions that require the Contractor to maintain driveway access. Despite these provisions there may be short periods of time when access to individual properties will not be possible but the Contractor will be required to provide adequate advance notice to allow property owners to plan accordingly. They will also be required to assist property owners when access restrictions are in place.
Erosion / sedimentation and downstream water quality – there is the potential for erosion and sedimentation to occur with the excavation disturbances which could adversely impact downstream water quality	The project will include an erosion and sedimentation control plan which will be developed during the detail design and construction phases. Plans will be reviewed in detail by MNRF staff. Temporary sediment control features will have to remain active until vegetation has been re-established. The construction contract will include provisions to ensure that only designated areas are disturbed by construction activity. The contract will also include provisions to ensure all areas disturbed by the construction are stabilized to mitigate erosion. The contractor will be responsible for re-establishing vegetation in disturbed areas as soon as practical and within the same construction

Potential Effects	Proposed Mitigation
	season. In-water work shall be undertaken between July 1 and September 1 to avoid potential impacts to Lake Sturgeon and salmonid species as dictated by the MNRF. For any culvert extensions work shall be scheduled during drier periods and flows shall be diverted to permit construction of the culvert extension in dry conditions. In addition the work will be planned to span the shortest timeframe possible. Details will be reviewed with MNRF staff during design/construction. In cases where a full culvert replacement is required based on the condition of the culvert the preferred approach will be to replace in the dry along a new alignment adjacent to the existing culvert. The last step in the construction sequence would be to divert the flows to the new culvert.
Black Road/Third Line Intersection Traffic Control – concerns were expressed with the safety of the existing stop control on Third Line at Black Road and the lengthy delays experienced at times on the westbound approach to the intersection.	A dedicated left turn lane is proposed on Black Road at Third Line which will allow northbound through movements to be completed in concert with left turning movements. This may assist in clearing traffic and possibly opening up more gaps and thereby reduce wait times on the westbound approach. There are guidelines available to assist in determining when enhanced or more restrictive traffic controls (eg. signals) should be considered at an intersection. Specifically there are warrant calculations included in the Ontario Traffic Manuals that are completed to determine the need for all-way stop or signal controls. The warrant calculations were completed at this location and all-way stop control or signals are not warranted at this time. The City will however continue to monitor this intersection and the need for enhanced control as traffic volumes change over time. It is important to understand that the addition of an all-way stop can also have adverse impacts as there is the potential for an increase in rear end collisions particularly if motorists perceive that it may not be warranted. It is for these reasons that it is important to respect the warrant calculations.
Old Garden River Road/Third Line intersection traffic control – concerns were expressed with motorists disobeying the stop control at this location and increased traffic volumes may exacerbate the problem.	The all way stop control was installed at this location in or about 2003 despite the fact that the warrants are not met. The all way stop was installed specifically to address a visibility problem associated with the skewed intersection angle. Data provided to us from the City indicates there were 4 and 6 accidents reported at this location in 2001 and 2002 respectively. Since 2003 the number of reported accidents has been reduced to approximately 1 per year. Most recently there were 0 in 2012, 5 in 2013 and 1 in 2014. The reported prevalence of motorists disobeying the stop control will be reported to the City Police Services so they have an opportunity to increase enforcement efforts.
Drainage and storm water management – the proposed increase in paved areas may adversely impact storm water flows and exacerbate property flooding.	There are significant challenges with drainage along and downstream of Black Road (i.e. flat topography and ditch capacity). The challenges exist now and this project provides an opportunity to mitigate property flooding that would otherwise not likely be undertaken until a later date. It is however important to recognize that although drainage improvements will be incorporated into this project, flooding will continue to occur in this area during major storm events and/or major snow melt events. The proposed project will maintain the same drainage paths that exist pre-development. Drainage within the project limits and in the vicinity of the project is managed within roadside and offtake

Potential Effects	Proposed Mitigation
	ditches. The existing ditching will be maintained or replaced and enhanced throughout the Black Road corridor and will be replaced in part with storm sewers along Third Line. There is some additional runoff that will be generated by the additional paved surfaces. Based on preliminary modeling completed we are anticipating an additional 7 L/s post development which represents approximately 0.7% of the peak flow from the contributing drainage areas. To address the increased flows the following mitigation is proposed: Detailed field information will be collected during the detail design phase and options will be considered to best manage storm water within and adjacent to the project. Proposed enhancements to mitigate the increased stormwater flows include increasing the available storage in the roadside ditching and transferring some of the stormwater to the underutilized ditching on the east side of Black Road through the installation of additional cross culverts. In addition the City has proactively constructed supplementary offtake ditching upstream of Black Road in advance of this project to mitigate concerns raised by some area residents. Stormwater modelling will be undertaken during detail design to confirm the level of improvement that can be achieved. The City will also continue to undertake ongoing maintenance of downstream offtake and roadside ditches and will monitor the need for downstream improvements over time. Management features will be incorporated to preferably improve conditions but as a minimum the downstream flows will not be increased. An application for Development, Interference with Wetlands and Alterations to Shoreline and Watercourses will also be prepared and submitted to the Sault Ste. Marie Regional Conservation Authority during the detail design phase.
Corridor safety – the proposed improvements will enhance the safety of the road corridors	There are various enhancements and improvements proposed under this project to enhance corridor safety. The proposed shoulders widths on Black Road will be enhanced or better delineated to provide a buffer between vehicular traffic and non-motorized uses. The proposed shoulder configurations are as follows: • Black Road from McNabb Street to Second Line = 2.5m width with two painted white lines to provide a buffer between motorists and mon-motorized uses. • Black Road from Second Line to Third Line = preferred width of 2.0m and a minimum width of 1.5m in areas where property impacts cannot be readily addressed. A single solid white line will separate motorists from non-motorized uses. Third Line will be reconstructed with an urban cross-section with curbs and gutters at the edges of pavement. Although no shoulders are proposed the lane width (ie. 4.5m) is adequate for cyclists and motorists to share. In addition an off-road boulevard trail is proposed along the south side of the road for non-motorized uses. Lighting upgrades are proposed along Black Road from McNabb Street to Second Line and new lighting is proposed along Black Road from the Strathclair Park entrance northerly to Third Line. The wider road platform widths will allow easier passage for emergency response vehicles.
Truck routing – truck	Black Road north of Second Line and Third Line are Class B truck routes. Truck traffic is permitted

Potential Effects	Proposed Mitigation
traffic is using Black Road north of Second Line and Third Line during restricted periods. The truck traffic is also resulting in vibrations in adjacent structures.	along these routes during restricted hours. The project will mitigate the volume of truck traffic within the Class B corridors through the inclusion of overhead signage improvements on the northbound approach to Second Line to clearly delineate the connecting link highway route and principle truck route through the City. To mitigate the impacts of the truck traffic on the road structure and adjacent properties (i.e. vibration on homes from truck traffic) Black Road from Second Line to Third Line and Third Line will be fully reconstructed with a pavement design tailored to the heavy truck loading. The improved pavement structure and smoother surface will mitigate the current vibrations.
Archaeological and/or heritage impacts	The City Planning division was consulted and there are no known cultural or heritage values that will be impacted by the project. In the areas where archaeological potential is identified on City mapping the road reconstruction activity will largely be contained within the existing road corridor which has been previously disturbed. There is however an area of archaeological potential identified along Black Road near McNabb Street where road widening from two through lanes to four through lanes is planned. Based on historical aerial photos of this area going back to 1937, it was determined that the property adjacent to Black Road has been cleared for many years. The majority, if not all of the property has been farmed which would have led to the removal or destruction of any near surface artifacts. Deeply buried artifacts are not likely to be encountered in this area. Despite the unlikelihood of uncovering artifacts through the construction activity, as a further mitigation measure all construction contracts will include special provisions to suspend construction operations if heritage resources are uncovered.
Environmental effects from climate change	Climate change has been considered in the preliminary design and will continue to be considered through detail design when the level of field information is adequate for these elements. The most significant climate change impacts for this project relate to storm water management. The City has recently completed a storm water investigative study which included consideration of climate change. The proposed project will comply with the requirements of the new storm water management guidelines which were issued by the City in September 2015. The guidelines include increased storm intensity for the design of the minor system. In particular drainage improvements are planned including increased ditch capacity to provide storage for modest increased runoff generated from increased impervious paved areas. In addition the installation of relief culverts to divert flows to the opposite side of the road will also be considered in the detail design to take advantage of unused storage capacity in existing ditches.
Natural and human environment project level impacts	The anticipated impacts to the natural environment are most significant in the section from McNabb Street to Second Line where widening to four lanes will result in the loss of natural features. As noted in Section 3.1.4 of the ESR a significant proportion of the area where widening is proposed was previously cleared and farmed. The project team has also consulted with local MNRF staff and appropriate mitigation is being incorporated into the project to address erosion, sedimentation and water quality. The roadside environment where the widening is proposed generally consists of wild grass lands, immature tree stands and scrub (photos are included in Appendix H). In terms of the human environment there has been widespread support of the proposed lane configurations including widening to four lanes and also for the improved provisions for alternative non-motorized uses. Issues and concerns raised have typically NOT been related to the proposed

Potential Effects	Proposed Mitigation
	lane configuration but have been focused primarily on storm water management, property acquisition, protection of private property features (eg. trees) and intersection operations. The project team has been responsive and has been able to satisfactorily address all concerns raised by area property owners. We believe the positive impacts which include enhanced traffic capacity and more efficient traffic operations, improved provisions for emergency response from the City's east end to the Sault Area Hospital, replacement of the poor deteriorated road structure along Black Road north of Second Line and along Third Line, noise reduction with a smoother riding surface, enhanced safety for non-motorized uses within these corridors and increased economic activity associated with the construction activity are significant benefits. Furthermore potential adverse impacts that have been identified including storm water management and protection of water quality, protection of sensitive natural environment features, intersection operations, property acquisition, protection of private property features (eg. trees) and excessive speed can be effectively mitigated as noted elsewhere in this table.
Contribution to greenhouse gas emissions from construction and loss of natural settings	A key objective at the onset of the project was to provide enhanced facilities to accommodate alternative non-motorized modes of travel. This has significant benefits including a reduction in greenhouse gas emissions and associated climate change impacts. The provisions of an off-road trail coupled with shared travel bike lanes along Third Line and wider shoulders along Black Road will encourage and enhance non-motorized uses within these corridors. In addition to reducing greenhouse gas emissions through reduced motorized vehicle use these provisions address a principle safety concern that has been raised by area residents. The project received significant support through the public consultation process for these proposed corridor enhancements (i.e proposed lane configuration, enhanced shoulder widths, shared lanes and off-road trail). We understand there will be greenhouse gas emission related to the construction activity and the loss of natural vegetation along the Black Road corridor from McNabb Street to Second Line. These adverse impacts will however be offset with the improved provisions for non-motorized uses in these corridors together with the more efficient travel within the corridor from McNabb Street to Second Line. The adverse greenhouse gas emissions will also be offset by the positive economic impacts stemming from the construction activity. This is particularly important at this time given the very challenging economic climate locally with our largest employer, Essar Steel under creditor protection and other major employers working at reduced staffing levels (eg. Tenaris).
Health impacts associated with traffic pollution and noise	The proposed project will accommodate both motorized and non-motorized traffic more safely and efficiently. One of the key focal points of this study was to address and better accommodate non-motorized uses within the subject transportation corridors (refer to Section 5.4 of the ESR for a full understanding of the rationale for the selected road cross-section elements). Due to the lack of convenient alternative routes to the Black Road corridor we are not anticipating a significant increase in traffic volumes resulting from the proposed improvements. Some traffic growth is expected over time as development patterns shift to the north as noted in the Transportation Master Plan however the proposed improvements are not expected to have an immediate impact on traffic volumes. Therefore an increase in noise and pollution may occur as traffic volumes grow over time but the growth is expected to be modest. (i.e. existing AADT from McNabb to Second Line is in the range of 21,400 and is projected to grow to 24,700 in 2022 and 27,100 in 2032). The proposed improvements will accommodate these volumes more effectively and efficiently particularly along Black Road from McNabb Street to Second Line where the roadway is proposed to be widened

Potential Effects	Proposed Mitigation
	from 2 lanes to 4 lanes. In addition there are sections of these road corridors that are in particularly poor condition with significant frost heaves and deteriorating asphalt. The improvement in the road condition and the resulting smoother riding surface will reduce noise. The proposed improvements will also have a positive impact on noise and pollution by providing enhanced and safer provisions for alternative non-motorized modes of travel. Area residents have raised this issue and believe the changes will be a significant improvement.
Species at risk and wildlife	The proposed project will largely be accommodated within existing disturbed rights-of-ways. However the proposed widening from two lanes to four lanes from McNabb Street to Second Line will require the disturbance of some of the adjacent naturally vegetated area immediately adjacent to the road corridor. Some photos of the adjacent area have been included in Appendix H. These photos together with the aerial imagery in Appendix H show the character of this area which typically consists of wild grass lands and immature trees and/or scrub. The more mature tree stands are further removed from the roadway and will not be disturbed. Following the construction of the proposed improvements there will continue to be a significant naturally vegetated buffer area (i.e. the road project is only impacting a small proportion of the naturally vegetated corridors adjacent to the roadway). In addition during the Class EA process we corresponded with the local MNRF office. They provided input during the process and ultimately they are generally satisfied with the proposed mitigation. The City has committed to keeping the MNRF apprised of the project details as the detail design evolves and will consider potential impacts to habitat and incorporate necessary provisions and work window restrictions as necessary. Further mitigation may be developed through the detail design process.

8.5 Future Monitoring

The effective implementation of this project will also require ongoing monitoring to ensure the proposed mitigation is effective. The proposed monitoring to be undertaken is summarized in Table 8.5(a).

Table 8.5(a): Proposed Monitoring

Description	Proposed Monitoring
Vehicular speeds and aggressive driving	The City will undertake speed studies pre and post development and complete further study if the results identify a problem.
Corridor Safety	The City will continue to monitor accidents and analyze accident rates, types and severity pre and post development. In the event that accident rates are above acceptable thresholds the City will undertake to complete a review of any areas that are prone to unacceptable accident rates to improve safety.
Intersection control	The City will monitor vehicular and pedestrian volumes and accidents at stop control intersections to assess the adequacy of the intersection controls over time. A review will be completed at least every five years and may be undertaken more frequently if changes are significant.
Truck traffic	If necessary, based on the level of complaints, the City will investigate compliance with truck route bylaws. This will consist of an assessment of the volume of truck traffic using Class B

	routes within the study area outside of permitted hours. Enforcement will be increased as necessary to address significant non-compliance.
Drainage and storm water management	The City will continue to undertake ongoing maintenance of downstream offtake and roadside ditches and will monitor the need for downstream capacity improvements over time.
Well water quality	Steps will be taken in advance of construction to sample and analyse well water quality adjacent to the project. The data will provide a baseline for comparison.
Sedimentation and erosion control	During construction the resident inspector will be responsible for monitoring Contractor compliance with the approved erosion and sedimentation control plan.
Road condition	The City will continue to monitor the road condition and will consider improvements once the condition rating falls below the improvement threshold.

8.6 Implementation

Recognizing the size, complexity and financial commitment required for this project the work will be phased. It is anticipated that the overall project will be divided into three or four phases with the first phase to be initiated in 2018 subject to budget constraints, and receipt of Council and technical approvals.

9. Conclusions

The ultimate goals of the Class EA process include transparency in decision making, soliciting public, Aboriginal and agency input, identifying potential impacts and incorporating effective mitigation. Through the process followed, these key objectives have been achieved for this project. Through the two open houses, project webpage coupled with ongoing interaction and meaningful dialogue with numerous individuals, this project and its potential impacts are well understood by the general public. Ultimately the identified project effectively addresses the problems/opportunities in an environmentally responsible manner with appropriate mitigation and monitoring incorporated.

Appendix A

Public Consultation Plan

City of Sault Ste. Marie

Third Line/Black Road Corridors Class EA Public Consultation Plan

Prepared by:

AECOM
523 Wellington Street East
Sault Ste. Marie, ON, Canada P6A 2M4
www.aecom.com

705 942 2612 tel
705 942 3642 fax

Project Number:

Date:

Revised November, 2014

Statement of Qualifications and Limitations

The attached Report (the "Report") has been prepared by AECOM Canada Ltd. ("Consultant") for the benefit of the client ("Client") in accordance with the agreement between Consultant and Client, including the scope of work detailed therein (the "Agreement").

The information, data, recommendations and conclusions contained in the Report (collectively, the "Information"):

- is subject to the scope, schedule, and other constraints and limitations in the Agreement and the qualifications contained in the Report (the "Limitations")
- represents Consultant's professional judgement in light of the Limitations and industry standards for the preparation of similar reports
- may be based on information provided to Consultant which has not been independently verified
- has not been updated since the date of issuance of the Report and its accuracy is limited to the time period and circumstances in which it was collected, processed, made or issued
- must be read as a whole and sections thereof should not be read out of such context
- was prepared for the specific purposes described in the Report and the Agreement
- in the case of subsurface, environmental or geotechnical conditions, may be based on limited testing and on the assumption that such conditions are uniform and not variable either geographically or over time

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- as required by law
- for use by governmental reviewing agencies

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Revision Log

Revision #	Revised By	Date	Issue / Revision Description
1	R.Talvitie	November 21, 2014	Updated to reflect a Schedule C project.

AECOM Signatures

Report Prepared By:

Rick Talvitie, P. Eng.
Branch Manager

Report Reviewed By:

Darrell Maahs
Project Manager

Table of Contents

1. Introduction

The City of Sault Ste. Marie has retained AECOM to complete the **Third Line/Black Road Corridors Class Environmental Assessment Study** to identify what, if any, improvements may be required within these corridors to address changing traffic patterns and vehicular and pedestrian safety.

The preferred solution will be determined based on technical requirements, environmental considerations, cost and public input and information gathered during the study.

The study is being conducted in accordance with the Municipal Class Environmental Assessment Process (Class EA process). The Class EA process includes an assessment of the problem and opportunities, evaluation of alternative solutions, public and review agency consultation, an assessment of potential effects on the environment and identification of reasonable measures to mitigate any adverse affects.

2. Proposed Consultation Activities

Public and external agency consultation is a key component of this study. This public consultation program has been developed to incorporate and address input received from a broad cross-section of people and interests. The principle objective of the public consultation process is to solicit meaningful input from the public and review agencies throughout the process. The solicitation of public input will:

- Enhance the quality of the decision making process by capturing ideas and experiences of a broad cross-section of people;
- Ensure transparency in the decision making process;
- Enhance public understanding of the process, and rationale for the decisions reached; and
- Meet legislative requirements.

The City is taking a proactive approach and proposing to use a variety of media, tools and methodologies to reach out to as many individuals as possible. A description of each element of the public consultation program is included in the following subsections.

2.1 Website

A webpage has been established on the City's website. The page will include important and relevant planning documentation and will be updated periodically as the study progresses. The site will also include contact information for the Consultant Project Manager and the City's Project Manager.

2.2 Newsletters/Notices

Newsletters/Notices will be used to disseminate important information and project updates. Newsletters will also be used to invite input into the planning process. We anticipate that the following Notices will be issued:

- Initial notification of the project;
- Notification of modified project limits;
- Selection of the preliminary preferred alternative and invitation to a Public Open House;
- Selection of preliminary preferred design options and invitation to a Public Open House;
- Notice of Completion.

2.3 Public Open Houses

Two Public Open Houses are planned to disseminate project information once key milestones or decision points have been reached in the process (ie. after a preliminary preferred solution has been identified and following the selection of the preliminary preferred design options). These sessions will be used to solicit feedback and input from review agencies and the public. The format will include a series of display panels arranged to guide individuals through the process. The project team will usher individuals or groups of individuals through the presentation materials, explain the contents and address questions and issues as they arise. A summary report will be prepared which includes a listing of issues, questions and concerns raised together with the responses provided.

2.4 Notices and Advertising

A broad range of media will be used to reach as many people as possible with the Notices and advertising. Advertisements and Notices will be placed in the local newspapers (Sault Star and Sault This Week), mailed or emailed to all individuals on the project mailing list and posted on the City website. Other forms of media may also be used.

2.5 Records Management

An excel spreadsheet will be used to track input received from the public and responses issued by the project team.

Appendix B

MNR Input

Ministry of Natural Resources and Forestry

Sault Ste. Marie District Office
64 Church Street
Sault Ste. Marie, ON P6A 3H3
Tel.: 705-949-1231
Fax.: 705-949-6450

Ministère des Richesses naturelles et des Forêts

Bureau du district de Sault Ste. Marie
64, rue Church
Sault Ste. Marie, ON P6A 3H3
Tél.: 705-949-1231
Téléc.: 705-949-6450

November 13, 2014

Via Email Only

Mr. Rick Talvitie
AECOM
523 Wellington Street East
Sault Ste. Marie, ON P6A 2M4

SUBJECT: Significant Natural Features and Natural Heritage Information Request
Black Road/Third Line Class Environmental Assessment

Dear Mr. Talvitie,

Thank you for your email, dated October 5, 2014, requesting information on sensitive features related to a Class Environmental Assessment looking at proposed roadway improvements within the Black Road and Third Line corridors from McNabb Street northerly to Third Line and along Third Line westerly to the new Sault Area Hospital entrance. As well, thank you for your follow-up email, dated October 21, 2014, providing additional details on the proposed work.

Our search of the Natural Heritage Information Centre (NHIC) database within the vicinity of the project area confirmed the following species occurrences:

- Oval-leaved Bilberry – S3 vulnerable; documented within Tarentorus Township (around the Northern boundary), Trout Lake Rd., and Bennet Park (formerly Korah Township)
- Riffle Snaketail – S2S3 Tracked; has been documented along the Root River in the area of Wishart Park
- Ski-tailed Emerald – S3 Vulnerable
- Boreal Bedstraw – S2 Imperiled

Species at Risk within the project area include:

- Snapping Turtle – Special Concern
- Milksnake – Special Concern

Should any of the project parameters change or any additional work be proposed at this site, please notify the Ministry of Natural Resources and Forestry (MNRF) Sault Ste. Marie District office immediately to obtain advice on whether the changes may require authorization under the ESA 2007.

Please note that MNRF's inventory of species at risk and vulnerable species is incomplete. There is the potential for additional species to be present in and adjacent to

the project area. A list of all known species at risk within the Sault Ste. Marie District is included with this letter. All species have the potential to be present, should suitable habitat be available.

Without knowing the final design plan as per the four options provided it is difficult to provide concrete direction on the extent of mitigation recommended to address special concern and vulnerable species concerns. Generally, if the work is planned for the spring/summer, we would recommend some exclusion fencing be erected prior to the nesting season (late May – mid June) around the areas where snapping turtles have been known to nest. This will prevent any turtles from nesting along the road bed which could then be disturbed during construction. Any areas where the road crosses the Root River (or one of its tributaries) would be an area of high potential for nesting: at the intersection of Third Line and Black Road, as well as various locations along Third Line and Black Road. We would suggest that you contact us once you have selected a final option so we can ensure that our recommendations are adequate for the work you will be undertaking.

From a fisheries perspective, we have identified three small tributaries/drainage features that intersect the project area. All of these are tributaries to the Root River which could potentially support Lake Sturgeon, a threatened species under the Endangered Species Act, 2007, downstream from the project area.

As above, we cannot provide firm recommendations for mitigation until a final alternative has been selected. As a minimum we would recommend that stringent sediment control measures are employed during construction to protect these watercourses. Assuming there will be little need for in water work, and based on the potential presence of Lake Sturgeon and other salmonid species downstream, we recommend keeping the in water work isolated to the July 1 to September 1 work window. Should there be more in water work required (e.g., replacing the culverts at these locations), MNRF will likely have more stringent recommendations regarding mitigation and timing of work.

Our review did not identify any significant ANSIs or wetlands within 120 metres of the project area that you provided.

Please be aware that it is also your responsibility to comply with all other relevant provincial or federal legislation, municipal by-laws, or required approvals from other agencies. As such, it is recommended that you contact the Sault Ste. Marie Region Conservation Authority if you have not already done so, to discuss your proposed project.

Please don't hesitate to contact Marjorie Hall, District Planner, if you have any questions. She can be reached via email at Marjorie.Hall@ontario.ca, or via phone at (705) 941 – 5127.

Sincerely,

Kim Mihell

Kim Mihell
Resource Planner
Sault Ste. Marie District

Enclosures (1)

- List of Species at Risk in Sault Ste. Marie District

c: Erin Nixon; A/Resource Operations Supervisor; OMNRF SSM District
Greg Cull; Management Biologist; OMNRF SSM District
Jessica Sicoly; A/Management Biologist; OMNRF SSM District
Marjorie Hall; District Planner; OMNRF SSM District

Sault Ste. Marie District Species at Risk (June 27, 2014)

	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
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
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	-
Yellow Rail	SC	SC

Appendix C

Alternative Solutions Evaluation Matrix

Evaluation of Alternative Solutions – Black Road (McNabb to Second Line)

Evaluation Criteria			1 – Do Nothing	2 –Widen the road platform while maintaining a basic two-lane configuration.	3 – Widen the road platform and incorporate additional through lanes.
Technical	**Vehicular Circulation and Safety**	Relative measure of safety and efficiency of vehicular traffic flow within and through the study area.	Traffic congestion is prevalent now and traffic volumes are projected to increase substantially in the future. A Provincial highway by-pass connecting at Black Rd/Second Line has been deferred indefinitely. Current routing through the City includes two through lanes in each direction except for this section of roadway. Based on the existing and projected traffic volumes two lanes are not adequate.	Travel lanes to match existing Traffic congestion is prevalent now and traffic volumes are projected to increase substantially in the future. A Provincial highway by-pass connecting at Black Rd/Second Line has been deferred indefinitely. Current routing through the City includes two through lanes in each direction except for this section of roadway. Based on the existing and projected traffic volumes two lanes are not adequate.	Existing and projected traffic volumes are within a range that supports two through lanes in each direction. Two through lanes in each direction will enhance traffic circulation within the study limits and result in better lane balancing with the adjacent road corridors which include two through lanes in each direction.
	Pedestrian Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.	Existing shoulders are reasonably wide and meet current standards. Also hub trail is adjacent to the corridor from McNabb to "S" curve.	Shoulder widths to match existing - No significant impact on pedestrian safety. Also hub trail is adjacent to the corridor from McNabb to "S" curve.	Shoulder widths to match existing - No significant impact on pedestrian safety. Also hub trail is adjacent to the corridor from McNabb to "S" curve.
	Cyclist Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.	Existing shoulders are reasonably wide and meet current standards. Also hub trail is adjacent to the corridor.	Shoulder widths to match existing - No significant impact on cyclist safety. Further consideration will be given to pedestrian safety in the next phase of the project.	Shoulder widths to match existing - No significant impact on cyclist safety. Further consideration will be given to pedestrian safety in the next phase of the project.
	Emergency Service Response	Relative measure of ESR within and through the study area.	Travel lanes and shoulders widths meet current standards but traffic congestion is present at times which could adversely impact ESR. Problem could be exacerbated in the winter when snowbanks encroach into shoulders.	Travel lanes and shoulders widths meet current standards but traffic congestion is present at times which could adversely impact ESR. Problem could be exacerbated in the winter when snowbanks encroach into shoulders.	Provides additional width to allow emergency response vehicles to pass stopped motorists. This becomes more important during the winter months when snow banks encroach into shoulders.
Natural Environment Groundwater,Surface Drainage System, Aquatic Habitat, Vegetation, Terrestrial Habitat, Heritage Resources		Relative measure of the net impacts on the surrounding natural environment.	Status quo – no additional impacts	Limited if any impacts anticipated as widening not likely required.	Most significant impacts as widening would impact existing undisturbed lands but impacts can likely be mitigated based on initial input from MNRF.
Social Environment	**Recreation**	Relative measure of the impacts on recreational opportunities in the study area	Status quo – no additional impacts	Limited impacts anticipated as widening would be moderate.	May have impacts on the Finn Hill recreational area as the toboggan runout area may be reduced. Impacts could be mitigated with the construction of a berm to bring toboggans to a stop or inclusion of an urban cross-section to reduce the overall cross-section width. May also impact the Hub Trail.
	Property Needs	Relative measure of property acquisition impacts on land use.	Status quo – no additional impacts	Limited impacts anticipated as widening would be moderate.	Significant property acquisition required to accommodate necessary widening. Impacts could be mitigated by undertaking the widening on one side only to reduce the number of impacted properties.
	Adjacent Property Owners	Relative measure of impacts to adjacent property owners	Challenges for driveway ingress and egress at times due to long lines of continuous traffic. Noise levels expected to be similar under all alternatives.	Challenges for driveway ingress and egress at times due to long lines of continuous traffic. Noise levels expected to be similar under all alternatives.	Will improve ingress and egress from private driveways. Additional lane will allow through vehicles to navigate around left and right turning vehicles. Noise levels expected to be similar under all alternatives.
Lifecycle Costs Includes consideration of capital and operation and maintenance costs		Relative measure of anticipated lifecycle costs associated with the implementation of the alternative.	Status quo – no impact.	No impact to lifecycle costs.	Highest lifecycle costs.

Evaluation of Alternative Solutions – Black Road and Third Line (Second Line to SAH)

Evaluation Criteria			1 – Do Nothing	2 –Widen the road platform while maintaining a basic two-lane configuration.	3 – Widen the road platform and incorporate additional through lanes.
Technical	**Vehicular Circulation and Safety**	Relative measure of safety and efficiency of vehicular traffic flow within and through the study area.	Traffic volumes are currently within and although projected to increase are expected to remain within levels that can be accommodated with one through lane in each direction. One through lane in each direction can typically accommodate in the range of 14,000 vpd.	Traffic volumes are currently within and although projected to increase are expected to remain within levels that can be accommodated with one through lane in each direction. One through lane in each direction can typically accommodate in the range of 14,000 vpd.	Widening to provide two through lanes in each direction will not significantly enhance traffic operations in these corridors.
	Pedestrian Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.	The only provision for pedestrians within these corridors is along existing shoulders. Existing shoulders are narrow and do not meet current standards.	Shoulder widths to be widened to enhance pedestrian safety. Further consideration will also be given to pedestrian safety in the next phase of the project.	Shoulder widths to be widened to enhance pedestrian safety. Further consideration will also be given to pedestrian safety in the next phase of the project.
	Cyclist Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.	Existing shoulders are narrow and do not meet current standards.	Shoulder widths to be widened to enhance cyclist safety.	Shoulder widths to be widened to enhance cyclist safety.
	Emergency Service Response	Relative measure of ESR within and through the study area.	The overall road platform width is substandard and is inadequate to safely accommodate the passage of a emergency service vehicle adjacent to stopped side-by-side vehicles. The problem is exacerbated in the winte	The overall platform width will be widened to provide enhanced opportunity for emergency response vehicles to pass stopped motorists.	Provides additional width to allow emergency response vehicles to pass stopped motorists. This becomes more important during the winter months when snow banks encroach into shoulders.
Natural Environment Groundwater, Surface Drainage System, Aquatic Habitat, Vegetation, Terrestrial Habitat, Heritage Resources		Relative measure of the net impacts on the surrounding natural environment.	Status quo – no additional impacts	Limited impacts anticipated as widening would be moderate.	Most significant impacts as widening would impact existing undisturbed lands but impacts can likely be mitigated based on initial input from MNRF.
Social Environment	**Recreation**	Relative measure of the impacts on recreational opportunities in the study area	No impacts to Strathclair property. Ingress and egress at Strathclair is challenging due to congestion.	Limited impacts to Strathclair property anticipated as widening would be moderate. Ingress and egress at Strathclair can be enhanced with addition of a turn lane.	Strathclair Field recreational area may be impacted by the additional right-of-way width required to accommodate the roadway. Ingress and egress at Strathclair can be enhanced with addition of a turn lane or use of center through lane for left turns.
	Property Needs	Relative measure of property acquisition impacts on land use.	Status quo – no additional impacts	Modest impacts anticipated but some property acquisition may be required particularly in areas where supplementary turn lanes are required. Impacts could be mitigated by undertaking the widening on one side only to reduce the number of impacted properties.	Significant property acquisition required to accommodate necessary widening. Impacts could be mitigated by undertaking the widening on one side only to reduce the number of impacted properties.
	Adjacent Property Owners	Relative measure of impacts to adjacent property owners	Noise levels expected to be similar under all alternatives.	Noise levels expected to be similar under all alternatives. The additional platform width may improve safety for driveway access as the additional width will allow vehicles to slip around left turning vehicles. Right turning vehicles may use the shoulder for deceleration.	Noise levels expected to be similar under all alternatives. May improve ingress and egress from private driveways. Additional lane may improve safety for left turn movements into driveways. Right turning vehicles may use the shoulder or additional lane for deceleration.
Lifecycle Costs Includes consideration of capital and operation and maintenance costs		Relative measure of anticipated lifecycle costs associated with the implementation of the alternative.	Status quo – no impact.	Modest increase in lifecycle costs.	Highest lifecycle costs.

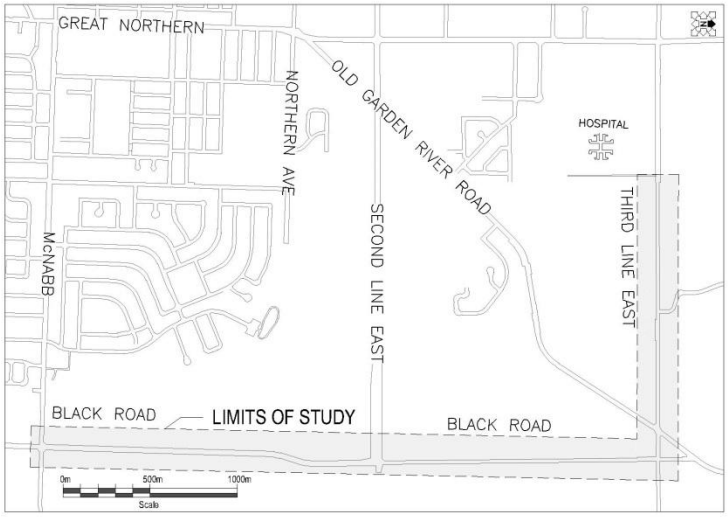
Appendix D

Public Open House No. 1

City of Sault Ste. Marie
Black Road and Third Line Corridor Improvements
From McNabb Street to the Sault Area Hospital Entrance
Class Environmental Assessment

Notice of Public Open House

The purpose of this Notice to invite you to an **Open House** to discuss the preliminary preferred solution to address changing traffic patterns and vehicular and pedestrian safety in the Black Road and Third Line corridors from McNabb Street to Third Line and from Black Road to the Sault Area Hospital entrance respectively (refer to key plan below).



Background

Changing traffic patterns along Black Road and Third Line are the result of congestion in other parallel corridors and recent new and planned developments in the northern portion of the City, including the new Sault Area Hospital (SAH).

Alternative solutions being considered include doing nothing, road widening while maintaining the existing two lane configuration and road widening to include additional through lanes. Consideration is also being given to the extension of municipal potable water distribution and waste water collection services where they do not presently exist.

The preliminary preferred solution was determined based on technical requirements, environmental considerations and costs.

Class Environmental Assessment (EA)

This project is being planned as a **Schedule C** project under the **Municipal Class Environmental Assessment Process (Class EA process)**. The Class EA process includes identification of problems and opportunities, evaluation of alternative solutions and designs, stakeholder consultation, assessment of potential effects on the environment and identification of reasonable measures to mitigate any adverse effects.

Public and external agency consultation is a key component of this Study. The City of Sault Ste. Marie is making preliminary study materials available for public viewing at a **Public Open House** to be held as follows:

Date: Thursday January 22, 2015
Time: 3:30 pm to 7:30pm
Location: Russ Ramsay Room (Level 3) in the Civic Center (99 Foster Drive)

The displays will include the results of the preliminary evaluation and the preliminary preferred lane configuration. The City's Consultant and City staff will be available to discuss the project details with you.

Interested individuals are also encouraged to visit the project web page (ie. www.saultstemarie.ca/BlackRoadEA) to access project documentation and updates.

In the meantime should you have any questions or require further information please contact either:

Don Elliott, P.Eng.
Director of Engineering Services
City of Sault Ste. Marie
Tel: 705-759-5329
Fax: 705-541-7165
Email: d.elliott@cityssm.on.ca

Rick Talvitie, P.Eng.
Project Manager
AECOM Canada Ltd.
Tel: 705-942-2612
Fax: 705-942-3642
Email: rick.talvitie@aecom.com

Please note that information related to this study will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments received will become part of the public record and may be included in Study documentation prepared for public review.

This Notice issued on January 8, 10 and 15, 2015.

Don Elliott, P.Eng.
Director of Engineering Services
City of Sault Ste. Marie

We look forward to seeing you at the open house!

Issue No. 1

INFORMATION BULLETIN

January, 2015

Introduction and Background

The City of Sault Ste. Marie has identified a need to address the following problems/opportunities:

1. **Emergency service response** – Black Road and Third Line are principle routes for staff, visitors and emergency service vehicles accessing the hospital. The overall road platform width is narrow along Black Road north of Second Line and along Third Line from Black Road to east of the hospital entrance.
2. **Corridor capacity** – Traffic volumes have increased along these transportation corridors and based on the results of the City's Transportation Master Plan update further increases are projected in the future. The Ministry of Transportation (MTO) has deferred plans to extend the Highway by-pass through Batchewana First Nations to the Second Line/Black Road intersection. There is a need to ensure the road corridors have adequate capacity to accommodate existing and future traffic volumes.
3. **Pavement structure** - There is a need to ensure the existing pavement structure is adequate to carry the existing and projected future traffic volumes.
4. **Pedestrian and cyclist safety**– Black Road and Third Line are identified as spoke routes in the Cycling Master Plan and cyclists and pedestrians are currently accommodated on shoulders. The shoulders were upgraded along Black Road from McNabb Street to Second Line in 2000-2001 but the shoulders along Black Road north of Second Line and along Third Line from Black Road to the Hospital entrance are narrow.
5. **Municipal Servicing** – It is considered prudent to assess potential servicing extensions within the subject transportation corridors in conjunction with this Class EA.

What is a Class Environmental Assessment?

Municipal infrastructure projects must be undertaken in accordance with the Environmental Assessment ("EA") Act. Municipal infrastructure projects of this type are not subject to a complete environmental assessment but are subject to a "Class" Environmental Assessment ("Class EA"). The Class EA process was developed to ensure that environmental concerns and public input are considered in the implementation of municipal infrastructure projects.

Under this process it is mandatory to consult with the public and relevant review agencies. A pubic open house is being conducted to provide an opportunity for agencies, area residents and the general public to review and comment on the alternative solutions being considered.

Any input or comments received through the public consultation process will be considered in the planning and design of this project. Individuals are encouraged to submit comments, in writing, to the project team.

Alternative Solutions

Alternative solutions were developed and evaluated to address the identified problems/opportunity. The alternatives consisted of:

1. Do nothing.
2. Widen the road platform while maintaining a basic two-lane configuration.
3. Widen the road platform and incorporate additional through lanes.
4. Extend municipal water and/or waste water servicing.

The preferred solution may consist of one or a combination of more than one of the alternative solutions listed above. The existing environment was inventoried and a detailed evaluation of the alternatives was completed with due consideration of technical issues, natural and social environmental impacts and costs.

Preliminary Preferred Solution

Based on the results of the evaluation the preliminary preferred solution consists of the following:

- Widen Black Road from McNabb Street to Second Line to include two through lanes in each direction.
- Maintain a single through lane in each direction and widen the Black Road and Third Line shoulders and overall platform width from Second Line to Third Line and from Third line to east of the SAH entrance.
- Complete Pavement structure improvements along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance (ie. previous reconstruction limits).
- Forego any municipal waste water or potable water extensions at this time.

The principle reasons for the selection of this alternative are as follows:

- In general, a two lane road configuration (one through lane in each direction) is suitable for average daily traffic volumes in the range of 14,000 vehicles per day. The projected volumes on Black Road from McNabb Street to Second Line significantly exceed this threshold but are within this threshold north of Second Line along Black Road and along Third Line.
- The Highway 17 routing through the City includes Black Road to Second Line. This is the only section of the Highway route within the urban center that does not include four lanes.
- Although a single lane in each direction is adequate along Black Road north of Second Line and along Third Line, the existing platform width is narrow and does not provide adequate space for emergency response vehicles to safely pass two vehicles stopped adjacent to each other. In addition pedestrian and cyclist safety can be enhanced with widened shoulders.
- The existing pavement structure south of Second Line was upgraded in 2000-2001 and has held up well but the Black Road and Third Line pavement structure north of Second Line to east of the SAH entrance is in poor condition and in need of upgrading.
- The installation of service extensions is costly and there is not adequate justification to proceed at this time.

Your Involvement

You are encouraged to review the project plans and documentation and to ask any questions of the Engineering Consultant or City Staff. Comment sheets have been provided for you to record your opinions, comments and concerns. The Engineering Consultant will accept comments relating to the alternative solutions until February 27, 2015. Comments can be left with the Consultant at the Public Information Centre or mailed or delivered to:

AECOM Canada Ltd.
523 Wellington Street East,
Sault Ste. Marie ON P6A 2M4

Attention: Rick Talvitie, P.Eng.,
Project Manager

Next Steps in the Class EA Process

Once the comments have been received (ie: after February 27, 2015), the Engineering Consultant will compile the information and finalize the preferred solution. All of the comments received will be considered and incorporated into the planning for this project.

Once the preferred solution is finalized, the Engineering Consultant will confirm the appropriate Class EA Schedule based on the scope of the project. Provided the project remains a Schedule C undertaking, another Public Open House will take place to give agencies and interested individuals an opportunity to review design options for the preferred solution.

The design options will generally include consideration of cross-section types (urban/rural), lane and shoulder widths, intersection configurations and other cross-sectional elements.

Once the preferred preliminary design is selected, an Environmental Study Report (“ESR”) will be prepared and issued for public review. At the time of completion of that report a Notice of Completion will be advertised and issued to all individuals that expressed an interest in the project. The public will be given an opportunity to review the ESR over a period of 30 calendar days.

Provided no significant concerns or objections to the proposed undertaking are received during the 30 day review period the City may proceed with the detail design and construction.

In some cases concerns regarding a project cannot be resolved through discussions with the project Consulting Engineer and/or City Staff. In this unlikely event a person / agency may request that the Minister of Environment make an order for the project to comply with Part II of the Environmental Assessment Act (referred to as a Part II Order). A Part II Order addresses individual Environmental Assessments. Requests for a Part II Order must clearly identify the rationale for the objection and ultimately the Minister will decide based on the process followed and the rationale for the decisions reached.

Thank-you.

We appreciate the time you have taken to review the preliminary project plans.

Welcome

City of Sault Ste. Marie
Black Road/Third Line
Class Environmental Assessment

Public Information Centre

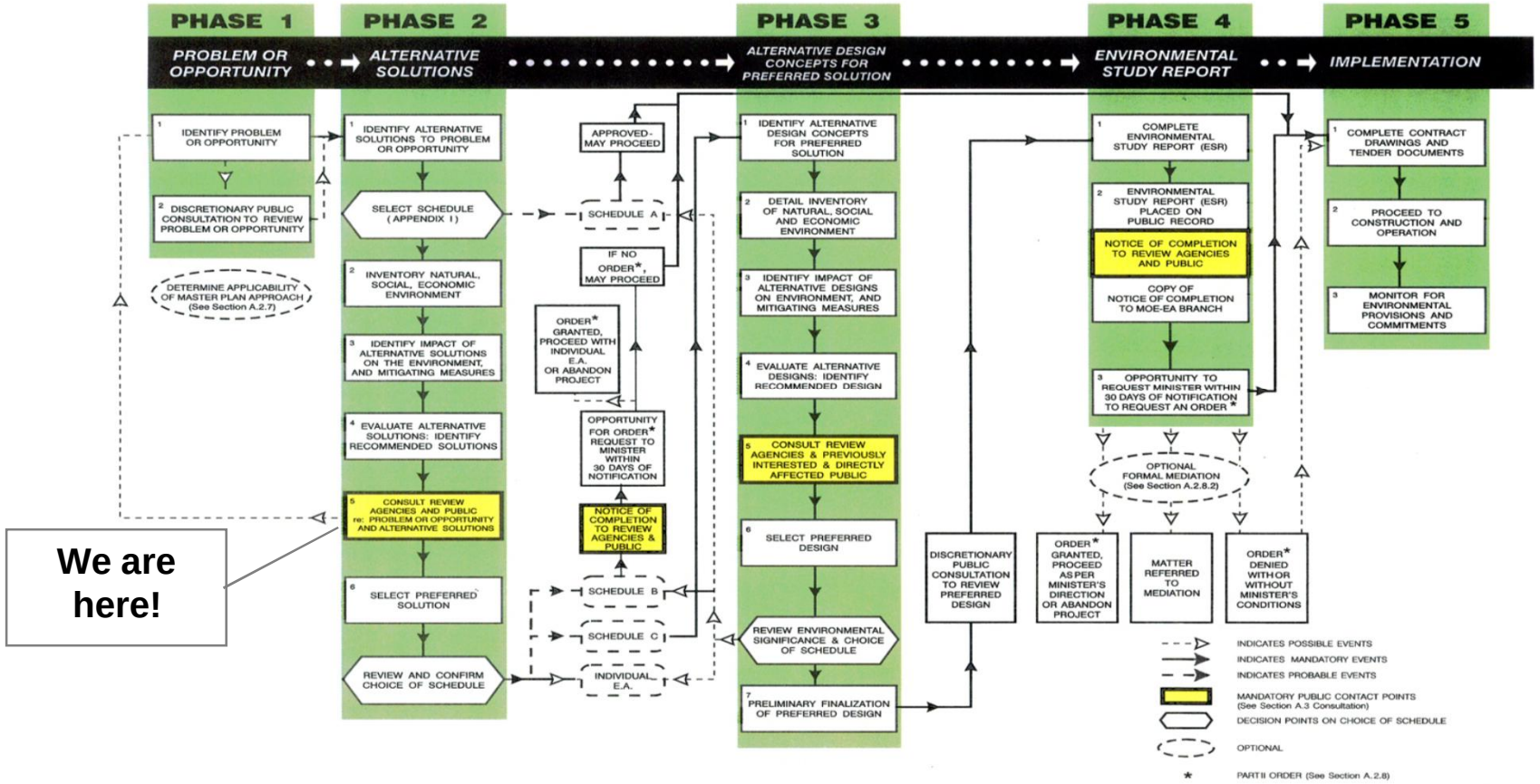
January 22, 2015 - 3:30p.m. to 7:30p.m.

What am I Supposed to Do ?

- Sign the Attendance Register;
- Pick up an Information Package;
- View the Displays;
- Ask Questions; and
- Complete a Comment Sheet.

Representatives from the City of Sault Ste. Marie and the Engineering Consultant (AECOM) are present to answer your questions.

Class Environmental Assessment Process



We are here!

This flowchart highlights the steps that must be undertaken to meet the requirements under the Environmental Assessment Act.

Problem/Opportunity Definition

The City of Sault Ste. Marie has identified a need to address the following problems/opportunities:

1. **Emergency service response** – Black Road and Third Line are principle routes for staff, visitors and emergency service vehicles accessing the hospital. The overall road platform width is narrow along Black Road north of Second Line and along Third Line from Black Road to east of the hospital entrance.
2. **Corridor capacity** – Traffic volumes have increased along these transportation corridors and based on the results of the City's Transportation Plan update further increases are projected in the future. The Ministry of Transportation (MTO) has deferred plans to extend the Highway by-pass through Batchewana First Nations to the Second Line/Black Road intersection. There is a need to ensure the road corridors have adequate capacity to accommodate existing and future traffic volumes.

Problem/Opportunity Definition

3. **Road Structure and Integrity** - There is a need to ensure the existing road structure is adequate to carry the existing and projected future traffic volumes.
4. **Pedestrian and Cyclist Safety**– Black Road and Third Line are identified as spoke routes in the Cycling Master Plan and cyclists and pedestrians are currently accommodated on shoulders. The shoulders were upgraded along Black Road from McNabb Street to Second Line in 2000-2001 but the shoulders along Black Road north of Second Line and along Third Line from Black Road to the Hospital entrance are narrow.
5. **Municipal Servicing** – It is considered prudent to assess potential servicing extensions within the subject transportation corridors in conjunction with this Class EA.

Inventory of Existing Conditions

- Study area generally consists of the Black Road and Third Line corridors and abutting properties from McNabb Street to Third Line and from Black Road to east of the Sault Area Hospital entrance respectively.
- These road corridors are designated truck routes (Class A from McNabb to Second Line and Class B for the remainder).
- Land uses within and adjacent to the study area are primarily single family residential but also includes commercial, institutional and recreational uses. A significant area also remains vacant and undeveloped.
- A portion of the study area is serviced with municipal water and sanitary services. Black Road from McNabb to Second Line is within the Urban Service Line (USL) and generally the remainder of the study area is outside the USL.
- Third Line is characterized by undulating terrain while Black Road is very flat.
- Storm water drainage is generally accommodated in roadside ditches which drain to Root River to the east.
- The Ministry of Natural Resources and Forestry identified two species at risk (snapping turtle and milksnake) that may be found in the project area and noted Lake Sturgeon may be present in tributaries in the project area.
- Existing and projected traffic volumes are summarized on the displays.

Alternative Solutions

Reference	Description
1	**Do Nothing** – Under this alternative no improvements would be undertaken. This alternative has been included to provide a basis for comparing the other alternatives.
2	**Widen the road platform while maintaining a basic two-lane configuration.**
3	**Widen the road platform and incorporate additional through lanes.**
4	**Extend municipal water and/or waste water servicing – considered and evaluated separately following the evaluation of Alternatives 1 through 3.**
Note: Alternatives 2 and 3 may also include intersection improvements which will be considered under Phase 3 – Design Options of the Class EA process.	

How were the Alternatives Evaluated?

In order to select a preferred solution a number of evaluation criteria were developed and applied to each of the alternatives.

A total of ten (10) evaluation criteria were established under four broad categories; technical, natural environment, social environment and cost. A comparative qualitative approach was undertaken in evaluating each of the alternatives, whereby a green, yellow or red circle was assigned to each alternative for each criterion. This approach consists of rating the alternatives relative to each other considering both the positive and negative qualities relative to each of the evaluation criteria. The colour scheme selected generally fits within typical thinking patterns (ie: a **green** circle has a **positive** connotation, a **red** circle a **negative or adverse** connotation and a **yellow** circle **fits in between** these extremes).

Interested Parties are encouraged to provide input regarding the evaluations assigned (ie: red, yellow, green) and may suggest other relevant criteria for inclusion in the evaluation of alternatives.

How were the Alternatives Evaluated?

For the purposes of this study the transportation corridors have been subdivided into two separate sections; McNabb Street to Second Line (Section 1); and Second Line to the SAH entrance on Third Line (Section 2). The principle characteristics within and adjacent to each of these sections are generally consistent and are summarized below.

Characteristic	Section 1 (McNabb Street to Second Line)	Section 2 (Second Line to SAH Entrance)
Section Length	1950m	3200m
Road Width Characteristics: ROW width = Lane widths = Shoulder Widths = Platform width =	 30.48 m 3.75 m 2.5 m 13.0 m	 Variable (20m to 30.48m) 3.5m 0.9m 9.3m to 9.8m
Roadside environment	Adjacent land uses are primarily residential, recreational with limited commercial. There are also significant abutting vacant/undeveloped lands. Utility pole line is present on the east side from McNabb Street to the "S" curve and along the west side from the "S" curve to Second Line. Hub Trail parallels the roadway for most of the length but is immediately adjacent to the road at the foot of Finn Hill and then is routed through the forested area at a significant offset from the roadway.	Adjacent land uses are primarily residential, recreational, commercial and institutional. There are also some undeveloped/vacant lands. Utility pole line is present on both sides of the roadway for the majority of the length. North side only from SAH entrance to Birkshire.
Average Annual Daily Traffic (AADT)	In the range of 21,400 vpd and forecasted to reach 33,000 vpd by 2040	8,100 on Black Road and forecasted to reach 12,000 by 2040 3,500 on Third Line and forecasted to reach 12,000 by 2040

Evaluation of Alternative Solutions (Black Rd – McNabb to Second Line)

Evaluation Criteria			1 – Do Nothing	2 –Widen the road platform while maintaining a basic two-lane configuration.	3 – Widen the road platform and incorporate additional through lanes.
Technical	**Vehicular Circulation and Safety**	Relative measure of safety and efficiency of vehicular traffic flow within and through the study area.			
	Pedestrian Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.			
	Cyclist Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.			
	Emergency Service Response	Relative measure of ESR within and through the study area.			
Natural Environment Groundwater,Surface Drainage System, Aquatic Habitat, Vegetation, Terrestrial Habitat, Heritage Resources		Relative measure of the net impacts on the surrounding natural environment.			
Social Environment	**Recreation**	Relative measure of the impacts on recreational opportunities in the study area			
	Property Needs	Relative measure of property acquisition impacts on land use.			
	Adjacent Property Owners	Relative measure of impacts to adjacent property owners			
Lifecycle Costs **Includes consideration of capital and operation and maintenance costs**		Relative measure of anticipated lifecycle costs associated with the implementation of the alternative.			

Summary of Evaluation – Black Road (McNabb to Second Line)

Alternative	Key Issues
1 – Do Nothing	• Fails to address Problem/Opportunity
2 – Widen the road platform while maintaining a basic two-lane configuration.	• This section of Black Road was previously widened in 2000-2001 and meets current standards for a two lane roadway.
3 – Widen the road platform and incorporate additional through lanes.	• Existing and projected traffic volumes support two through lanes in each direction • Better lane balancing with adjacent road sections (the entire Highway 17 routing through the City includes two through lanes in each direction except for this section) • Provides additional width to enhance passage of stopped vehicles by emergency responders. • May improve ingress and egress from private driveways within this section. • Impacts can likely be adequately managed/mitigated. Challenges include property impacts and costs. Private property acquisition to be minimized.

Note: Preliminary preferred alternative is highlighted.

Evaluation of Alternative Solutions: Black Road and Third Line (Second Line to SAH)

Evaluation Criteria			1 – Do Nothing	2 –Widen the road platform while maintaining a basic two-lane configuration.	3 – Widen the road platform and incorporate additional through lanes.
Technical	**Vehicular Circulation and Safety**	Relative measure of safety and efficiency of vehicular traffic flow within and through the study area.			
	Pedestrian Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.			
	Cyclist Circulation and Safety	Relative measure of pedestrian circulation and safety within and through the study area.			
	Emergency Service Response	Relative measure of ESR within and through the study area.			
Natural Environment Groundwater,Surface Drainage System, Aquatic Habitat, Vegetation, Terrestrial Habitat, Heritage Resources		Relative measure of the net impacts on the surrounding natural environment.		. 	
Social Environment	**Recreation**	Relative measure of the impacts on recreational opportunities in the study area			
	Property Needs	Relative measure of property acquisition impacts on land use.			
	Adjacent Property Owners	Relative measure of impacts to adjacent property owners			
Lifecycle Costs **Includes consideration of capital and operation and maintenance costs**		Relative measure of anticipated lifecycle costs associated with the implementation of the alternative.			

Summary of Evaluation – Black Road and Third Line (Second Line to SAH)

Alternative	Key Issues
1 – Do Nothing	• Fails to address Problem/Opportunity
2 – Widen the road platform while maintaining a basic two-lane configuration.	• Existing and projected traffic volumes support one through lane in each direction. • Shoulder widths to be widened to enhance pedestrian and cyclist safety. • Provides additional width to enhance passage of stopped vehicles by emergency responders. • May improve ingress and egress from private driveways. • Impacts can likely be adequately managed/mitigated. • Costs, property and utility impacts are moderate relative to Alt.#3..
3 – Widen the road platform and incorporate additional through lanes.	• Existing and projected traffic volumes do not support two through lanes in each direction. • Shoulder widths to be widened to enhance pedestrian and cyclist safety. • Provides best opportunity for emergency responders to pass stopped vehicles. • Enhanced ingress and egress to driveways. • Significant utility and property impacts and high cost.

Note: Preliminary preferred alternative is highlighted.

Consideration of Servicing Extensions

Location and Description of Existing Services	Pros	Cons
Black Road (McNabb Street to Second Line) – currently serviced with potable water throughout the limits and waste water collection is provided for 888m of the 1950m length.	Included within the Urban Service Line (USL) and Urban Settlement Area (USA). Potable water provided throughout already. Property owners would have full municipal servicing.	Extension of Black Road sewers requires some form of pumping. Only 4 developed properties not serviced No significant development pressure. Options were previously assessed in 2000-2001 - conclusion reached was that these areas can be serviced most cost efficiently with low pressure forcemain and grinder pumps but is not necessary. Alternatively there may be an opportunity to tie into a future Northern Avenue sewer extension or service these properties from the rear with drainage directed to the existing trunk sewer located east of and paralleling Black Road.
Black Road and Third Line (Second Line to SAH entrance) – no servicing currently provided with the exception that potable water has been extended from the SAH entrance approximately 190 m easterly.	Property owners would have full municipal servicing.	Most of this area lies outside of the Urban Service Line (USL) and the Urban Settlement Area (USA). Expansion of the USA requires a scoped or comprehensive review to demonstrate, within the next ten years, housing demand cannot be accommodated within the existing USA. Although, it is at times possible, to expand the USL without expanding the USA, the two are closely linked and it would be very difficult to expand the USL without expanding the USA unless there is clear justification. Both potable water and waste water collection would have to be extended together. The Black Road corridor is very flat and the Third Line corridor is undulating resulting in challenges in providing gravity waste water servicing throughout these corridors. The servicing strategy may require some form of pumping Charges and costs to property owners would be significant.

Preliminary Preferred Solution

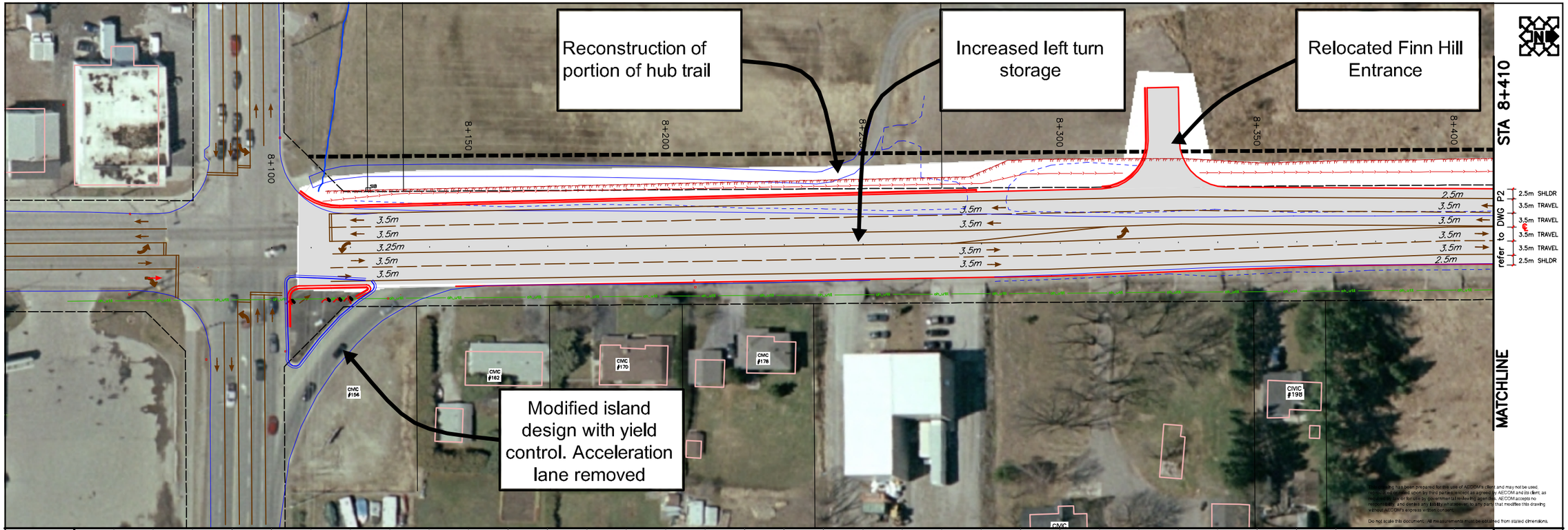
- Widen Black Road from McNabb Street to Second Line to include two through lanes in each direction.
- Maintain a single though lane in each direction and widen the Black Road and Third Line shoulders and overall platform width from Second Line to Third Line and from Third Line to east of the SAH entrance.
- Complete pavement structure improvements along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance (ie. previous reconstruction limits).
- Forego any municipal waste water or potable water extensions at this time.

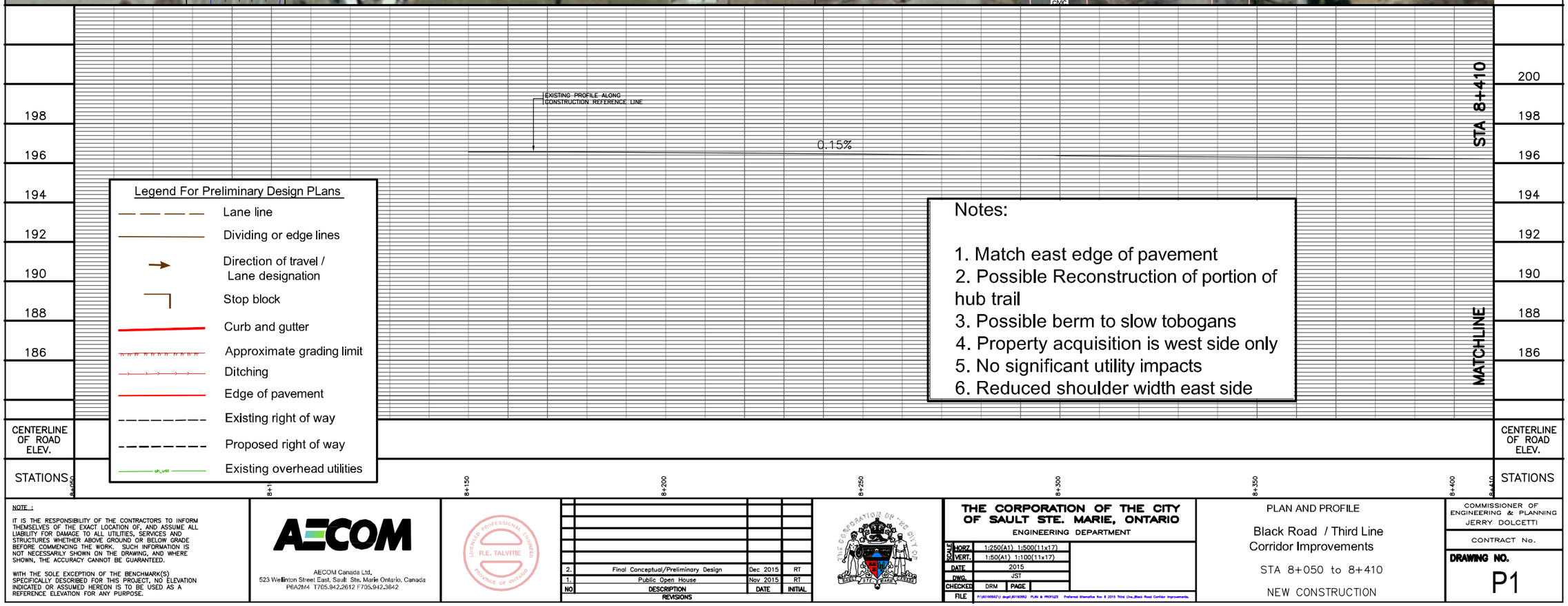
Next Steps

- Summarize the public and agency input received;
- Identify changes required to the preliminary preferred solution based on the input received;
- Confirm the Class EA schedule (ie: expected to be Schedule C);
- Proceed with Phase 3 – Design Options for the preferred solution - design options will generally include consideration of cross-section types (urban/rural), lane and shoulder widths, intersection configurations and other cross-sectional elements.
- Conduct a second public open house to present the design options;
- Finalize the preliminary preferred design based on input received;
- Finalize the Environmental Study Report (ESR);
- Issue a Notice of Completion and allow for further input over a 30 day period; and
- Subject to Council approval and provided there are no Part II Order requests proceed with detail design and construction

Appendix E

Preferred Preliminary Design





Legend For Preliminary Design PLans

- Lane line
- Dividing or edge lines
- Direction of travel / Lane designation
- Stop block
- Curb and gutter
- Approximate grading limit
- Ditching
- Edge of pavement
- Existing right of way
- Proposed right of way
- Existing overhead utilities

Notes:

1. Match east edge of pavement
2. Possible Reconstruction of portion of hub trail
3. Possible berm to slow tobogans
4. Property acquisition is west side only
5. No significant utility impacts
6. Reduced shoulder width east side

NOTE :

IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO INFORM THEMSELVES OF THE EXACT LOCATION OF, AND ASSUME ALL LIABILITY FOR DAMAGE TO ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE GROUND OR BELOW GRADE BEFORE COMMENCING THE WORK. SUCH INFORMATION IS NOT NECESSARILY SHOWN ON THE DRAWING, AND WHERE SHOWN, THE ACCURACY CANNOT BE GUARANTEED.

WITH THE SOLE EXCEPTION OF THE BENCHMARK(S) SPECIFICALLY DESCRIBED FOR THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON IS TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

AECOM

AECOM Canada Ltd.
523 Wellington Street East, Sault Ste. Marie Ontario, Canada
P6A2M4 T705.942.2612 F705.942.3642

LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
2.	Final Conceptual/Preliminary Design	Dec 2015	RT
1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO

ENGINEERING DEPARTMENT

SCALE HORZ.	1:250(A1) 1:500(11x17)
SCALE VERT.	1:50(A1) 1:100(11x17)
DATE	2015
DWG.	JST
CHECKED	DRM
PAGE	
FILE	P:\60190952\3 dwgs\60190952 PLAN & PROFILES Preferred Alternative Rev 6 2015 Third Line_Black Road Corridor Improvements.

PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 8+050 to 8+410

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P1

STA 8+400

refer to DWG P1

MATCHLINE

8+450 8+500 8+550 8+600 8+650 8+700 8+750

STA 8+760

refer to DWG P3

MATCHLINE

2.5m SHLDR
3.5m TRAVEL
3.5m TRAVEL
3.5m TRAVEL
3.5m TRAVEL
2.5m SHLDR

2.5m
3.5m
3.5m
3.5m
3.5m
2.5m

CIVIC #300

CIVIC #308

SCALES:
1M = 500M HOR
1M = 100M VER

ALL ELEVATIONS ARE TO GEODETIC DATUM

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

0.15%

Notes:

1. Match east edge of pavement
2. Property acquisition is west side only
3. No significant utility impacts

200	200
198	198
196	196
194	194
192	192
190	190
188	188
186	186

STA 8+760

MATCHLINE

CENTERLINE OF ROAD ELEV.

STATIONS 8+400 8+450 8+500 8+550 8+600 8+650 8+700 8+750 8+760

NOTE :

IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO INFORM THEMSELVES OF THE EXACT LOCATION OF, AND ASSUME ALL LIABILITY FOR DAMAGE TO ALL UTILITIES, SERVICES AND STRUCTURES WHETHER ABOVE GROUND OR BELOW GRADE BEFORE COMMENCING THE WORK. SUCH INFORMATION IS NOT NECESSARILY SHOWN ON THE DRAWING, AND WHERE SHOWN, THE ACCURACY CANNOT BE GUARANTEED.

WITH THE SOLE EXCEPTION OF THE BENCHMARK(S) SPECIFICALLY DESCRIBED FOR THIS PROJECT, NO ELEVATION INDICATED OR ASSUMED HEREON IS TO BE USED AS A REFERENCE ELEVATION FOR ANY PURPOSE.

AECOM

AECOM Canada Ltd.
523 Wellington Street East, Sault Ste. Marie Ontario, Canada
P6A2M4 T705.942.2612 F705.942.3842

LICENCED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
2.	Final Conceptual/Preliminary Design	Dec 2015	RT
1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

SCALE HORZ.	1:250(A1) 1:500(11x17)
SCALE VERT.	1:50(A1) 1:100(11x17)
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DWG.	JST
CHECKED	DRM PAGE
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

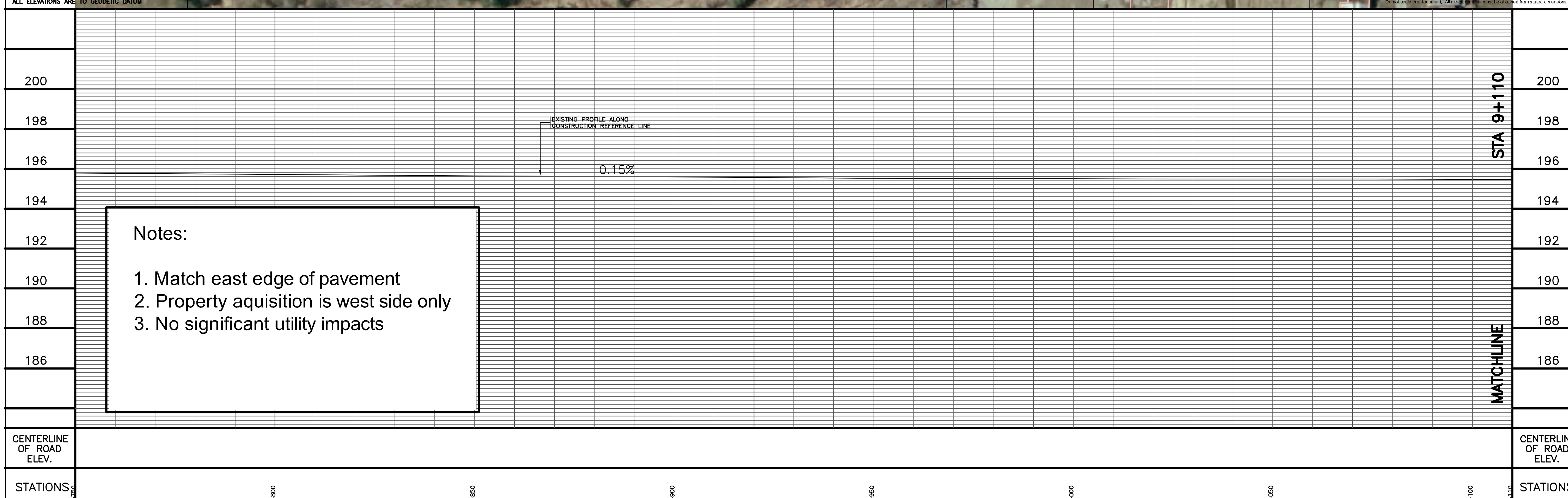
STA 8+400 to 8+760

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P2



Notes:

1. Match east edge of pavement
2. Property aquisition is west side only
3. No significant utility impacts

NOTE :

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
2.	Final Conceptual/Preliminary Design	Dec 2015	RT
1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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SCALE VERT.	1:50(A1) 1:100(11x17)	
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DWG.	JST	
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 8+750 to 9+110

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P3

MATCHLINE refer to DWG P3 STA 9+100

MATCHLINE refer to DWG P5 STA 9+460

2.5m SHLDR
3.5m TRAVEL
3.5m TRAVEL
3.5m TRAVEL
3.5m TRAVEL
2.5m SHLDR

ALL ELEVATIONS ARE TO GEODETIC DATUM

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

0.3%

-0.2%

Elevations: 200, 198, 196, 194, 192, 190, 188, 186

STA 9+460

MATCHLINE

Notes:

1. Match east edge of pavement
2. Property acquisition is west side only
3. Some utility impacts

CENTERLINE OF ROAD ELEV.	
STATIONS	9+100, 9+150, 9+200, 9+250, 9+300, 9+350, 9+400, 9+450, 9+460

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
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1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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DATE	2015
DWG.	JST
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FILE	

PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

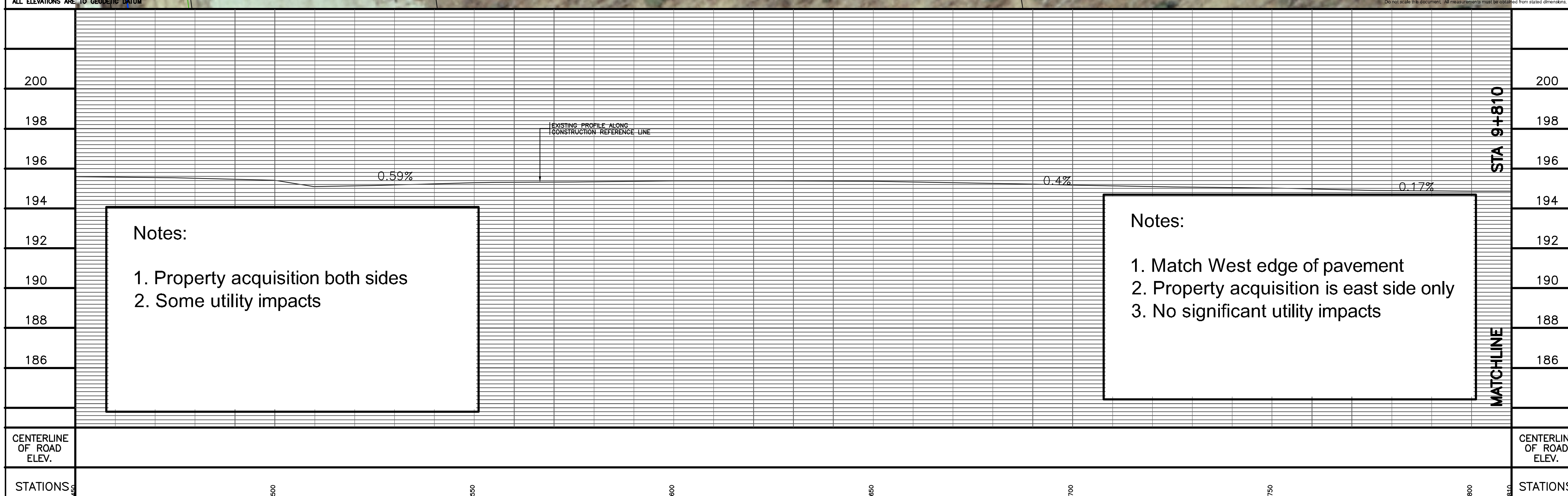
STA 9+100 to 9+460

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P4



Notes:

1. Property acquisition both sides
2. Some utility impacts

Notes:

1. Match West edge of pavement
2. Property acquisition is east side only
3. No significant utility impacts

NOTE :

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
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1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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DATE	2015
DWG.	JST
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

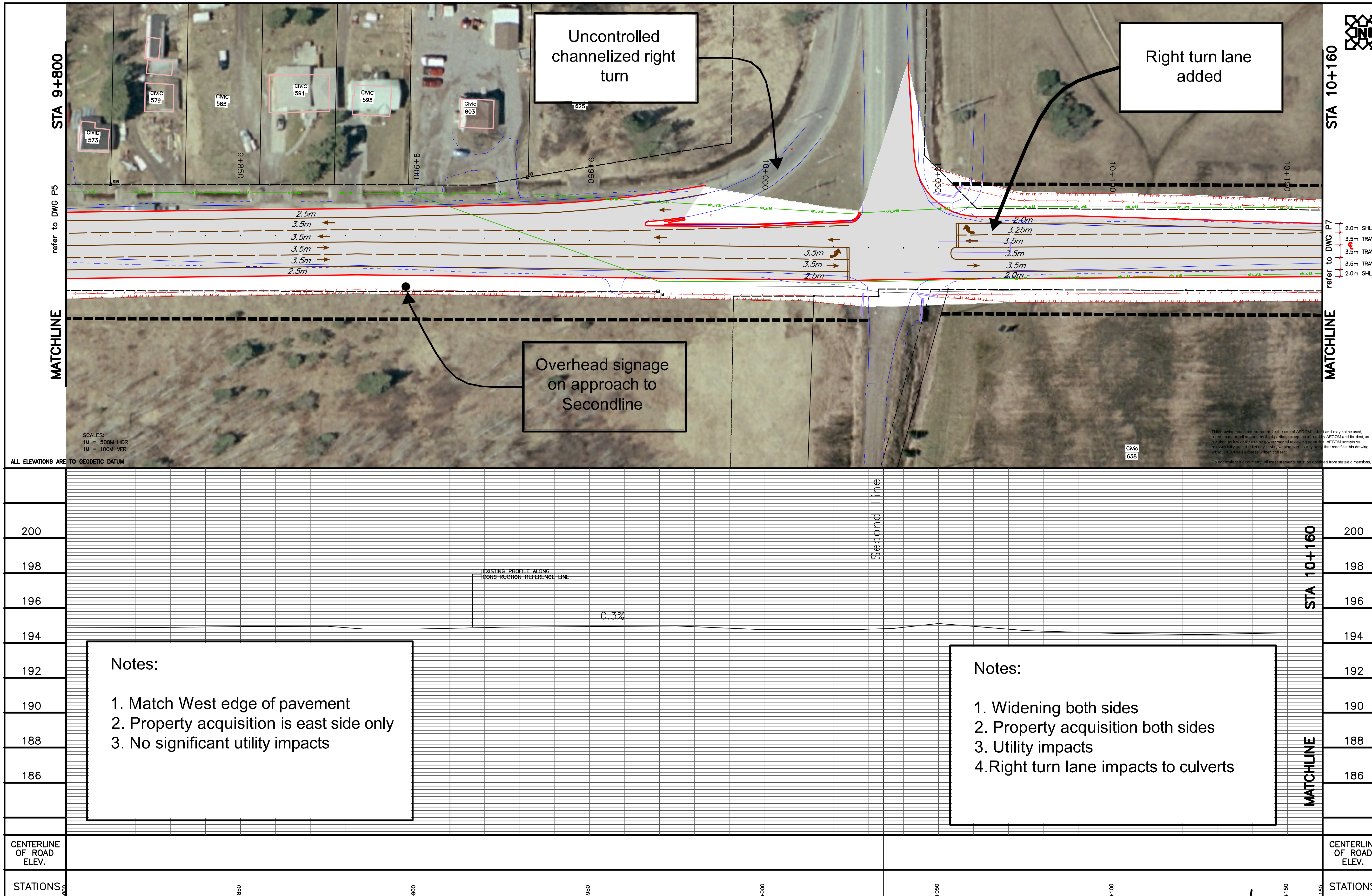
STA 9+450 to 9+810

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P5



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REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
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DATE	2015
DWG.	JST
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

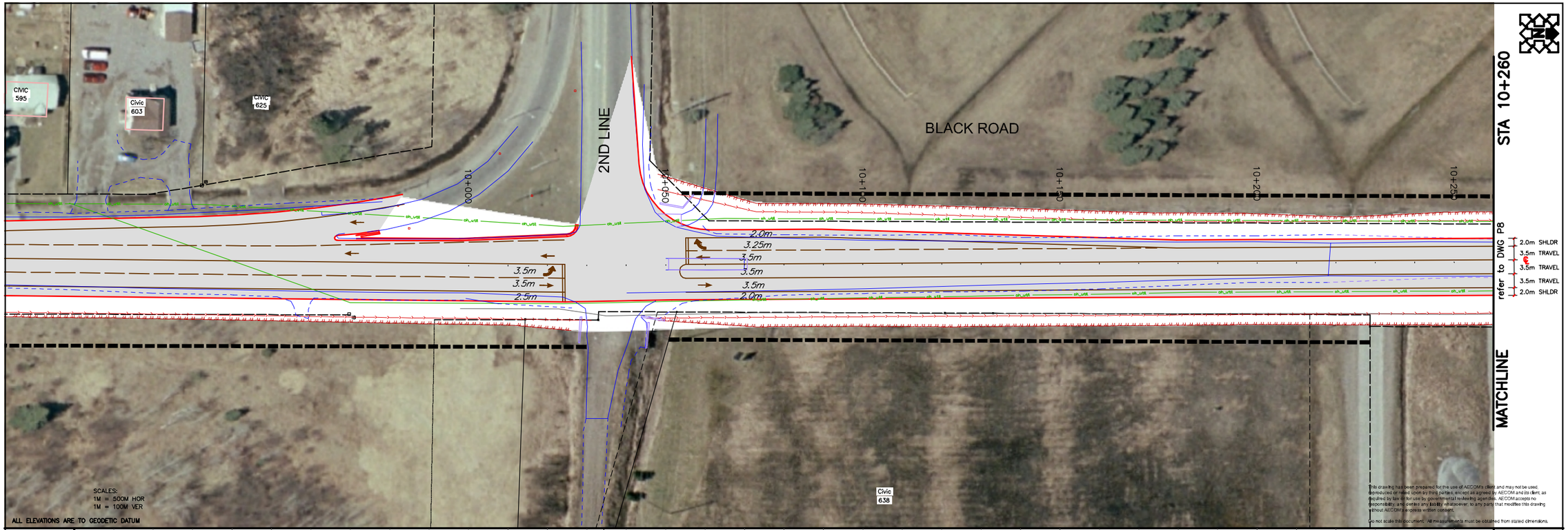
STA 9+800 to 9+900

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P6



Second Line

200
198
196
194
192
190
188
186

-0.2%

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

STA 10+260

MATCHLINE

Notes:

1. Widening both sides
2. Property acquisition both sides
3. Utility impacts
4. Right turn lane impacts to culverts

CENTERLINE OF ROAD ELEV.

STATIONS 9+900 9+950 10+000 10+050 10+100 10+150 10+200 10+250

NOTE :

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
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1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

9+900 to 10+260

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P7

STA 10+250

refer to DWG P7

MATCHLINE

Left turn lane added for strathclair field

STRATHCLAIR

BLACK ROAD

10+300 10+350 10+400 10+450 10+500 10+550 10+600

2.0m 3.5m 3.5m 3.5m 3.5m 2.0m

STA 10+610

refer to DWG P9

2.0m SHLDR
3.5m TRAVEL
3.5m TRAVEL
2.0m SHLDR

MATCHLINE

Civic 722

SCALES:
1M = 500M HOR
1M = 100M VER

ALL ELEVATIONS ARE TO GEODETIC DATUM

Strathclair Field

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

−0.2% 0.1% 0.0% 0.2%

200 198 196 194 192 190 188 186

Notes:

1. Widening both sides
2. Property acquisition west side only
3. Utility impacts

CENTERLINE OF ROAD ELEV.

STATIONS 10+250 10+300 10+350 10+400 10+450 10+500 10+550 10+600 10+610

NOTE :

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 10+250 to STA 10+610

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P8

STA 10+600

refer to DWG P8

MATCHLINE

BLACK ROAD

10+550 10+600 10+650 10+700 10+750 10+800 10+850 10+900 10+950

STA 10+960

refer to DWG P10

MATCHLINE

2.0m SHLDR
3.5m TRAVEL
3.5m TRAVEL
2.0m SHLDR

Civic 764

Civic 790

Civic 816

SCALES:
1M = 500M HOR
1M = 100M VER

ALL ELEVATIONS ARE TO GEODETIC DATUM

200
198
196
194
192
190
188
186

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

0.2%

0.2%

STA 10+960

MATCHLINE

Notes:

1. Widening both sides
2. Property acquisition both sides
3. Utility impacts

CENTERLINE OF ROAD ELEV.

STATIONS

NOTE :

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REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO

ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 10+600 to STA 10+960

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P9

STA 10+950

refer to DWG P9

MATCHLINE

BLACK ROAD

Civic 931

Civic 953

Civic 950

11+000 11+050 11+100 11+150 11+200 11+250 11+300 11+310

11+310

refer to DWG P11

2.0m SHLDR
3.5m TRAVEL
3.5m TRAVEL
2.0m SHLDR

MATCHLINE

SCALES:
1IN = 500IN HOR
1IN = 100IN VER

ALL ELEVATIONS ARE TO GEODETIC DATUM

200
198
196
194
192
190
188
186

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

0.2% 0.3% 0.3%

Notes:

1. Widening both sides
2. Property acquisition both sides
3. Utility impacts

MATCHLINE 11+310

CENTERLINE OF ROAD ELEV.

STATIONS 10+950 11+000 11+050 11+100 11+150 11+200 11+250 11+300 11+310

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

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REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 10+950 to 11+310

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P10

STA 11+300

MATCHLINE

refer to DWG P10

BLACK ROAD

Civic 975

Civic 1003

Civic 1005

Civic 1015

Civic 1023

1033

Civic 958

11+350

11+400

11+450

11+500

11+550

11+600

11+660

4.5m

4.5m

2.0m

3.5m

3.25m

3.5m

2.0m

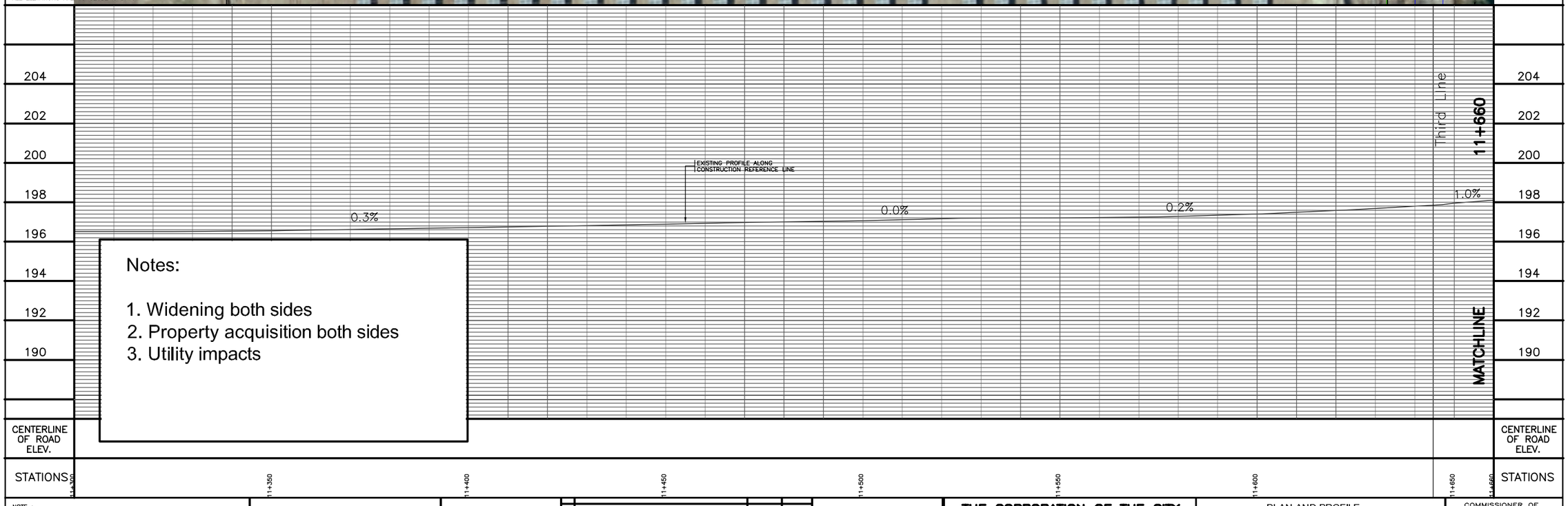
refer to DWG P12

MATCHLINE

Left turn lane added

SCALES:
1M = 500M HOR
1M = 100M VER

ALL ELEVATIONS ARE TO GEODETIC DATUM



Notes:

1. Widening both sides
2. Property acquisition both sides
3. Utility impacts

CENTERLINE OF ROAD ELEV.

STATIONS

11+300 11+350 11+400 11+450 11+500 11+550 11+600 11+650 11+660

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
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1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO

ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 11+300 to 11+660

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

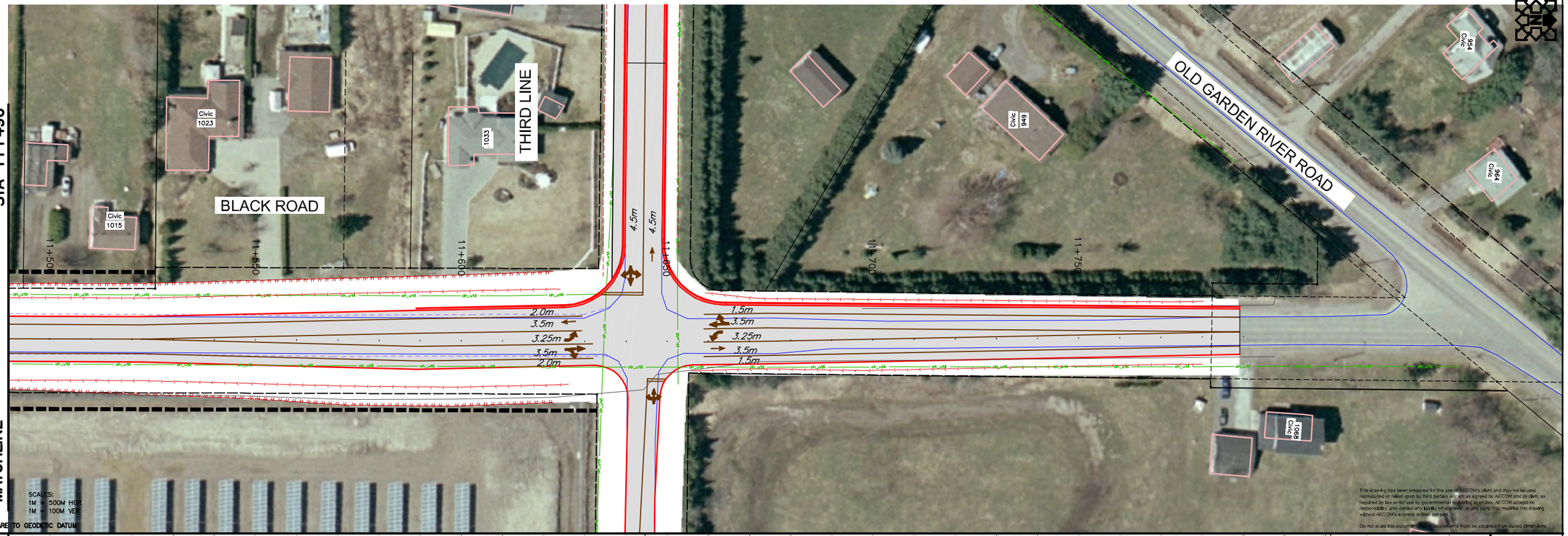
DRAWING NO.
P11

refer to DWG P13

STA 11+490

refer to DWG P11

MATCHLINE



Notes:

1. Widening both sides
2. Property aquisition both sides
3. Utility impacts

Notes:

1. Modified section with subdrains
2. No property acquisition expected
3. Utility impacts

206
204
202
200
198
196
194
192

CENTERLINE OF ROAD ELEV.

STATIONS 11+490 11+500 11+550 11+600 11+650 11+700 11+750 11+800 11+850

NOTE :

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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
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2.	Final Conceptual/Preliminary Design	Dec 2015	RT
1.	Public Open House	Nov 2015	RT

THE CORPORATION OF THE CITY OF SAULT STE. MARIE

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 11+490 to STA 11+850

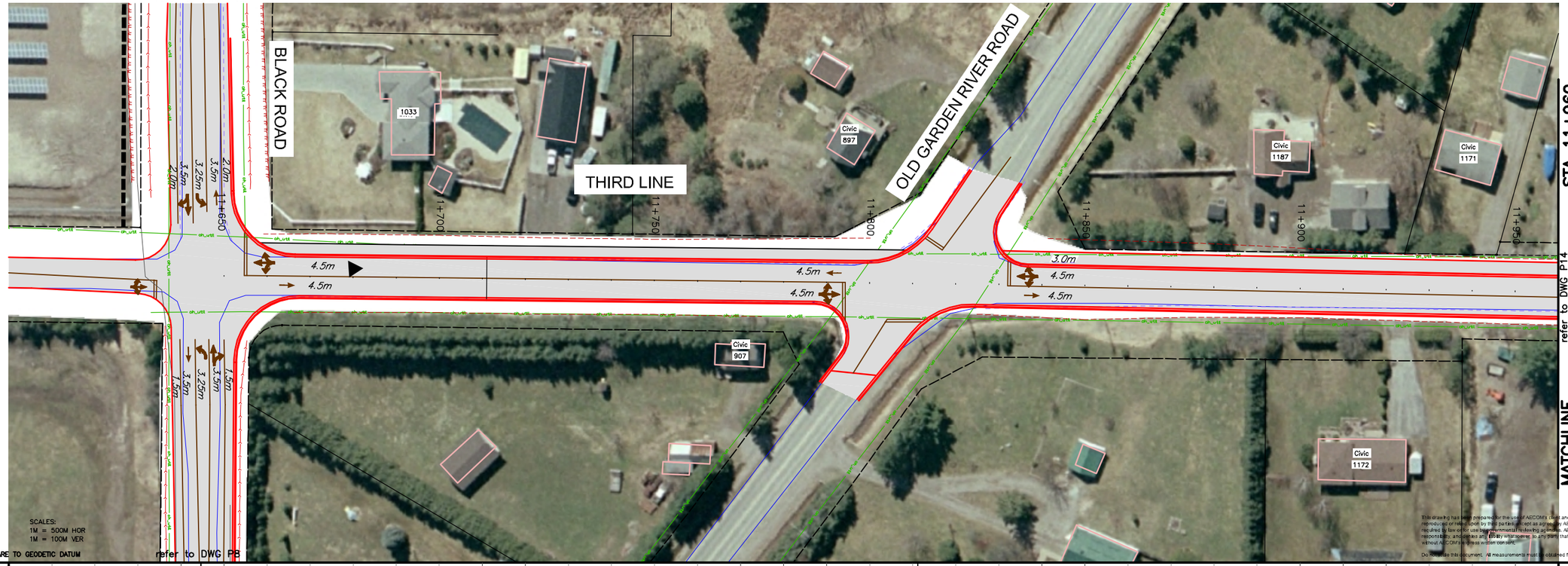
NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P12

refer to DWG P12



Black road / Third Line

Old Garden River Road

STA 11+960

206
204
202
200
198
196
194
192

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

0.2% −0.4% 2.0% −0.5% 3.0%

MATCHLINE

CENTERLINE OF ROAD ELEV.

STATIONS 11+600 11+650 11+700 11+750 11+800 11+850 11+900 11+950 11+960

Notes:

1. Urban section with curb and gutter
2. No property accquisitions expected
3. Utility impacts

NOTE :

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523 Wellington Street East, Sault Ste. Marie Ontario, Canada
P6A2M4 T705.942.2612 F705.942.3642

LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

NO	DESCRIPTION	DATE	INITIAL
2.	Final Conceptual/Preliminary Design	Dec 2015	RT
1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

SCALE HORZ.	1:250(A1) 1:500(11x17)
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 11+600 to STA 11+960

NEW CONSTRUCTION

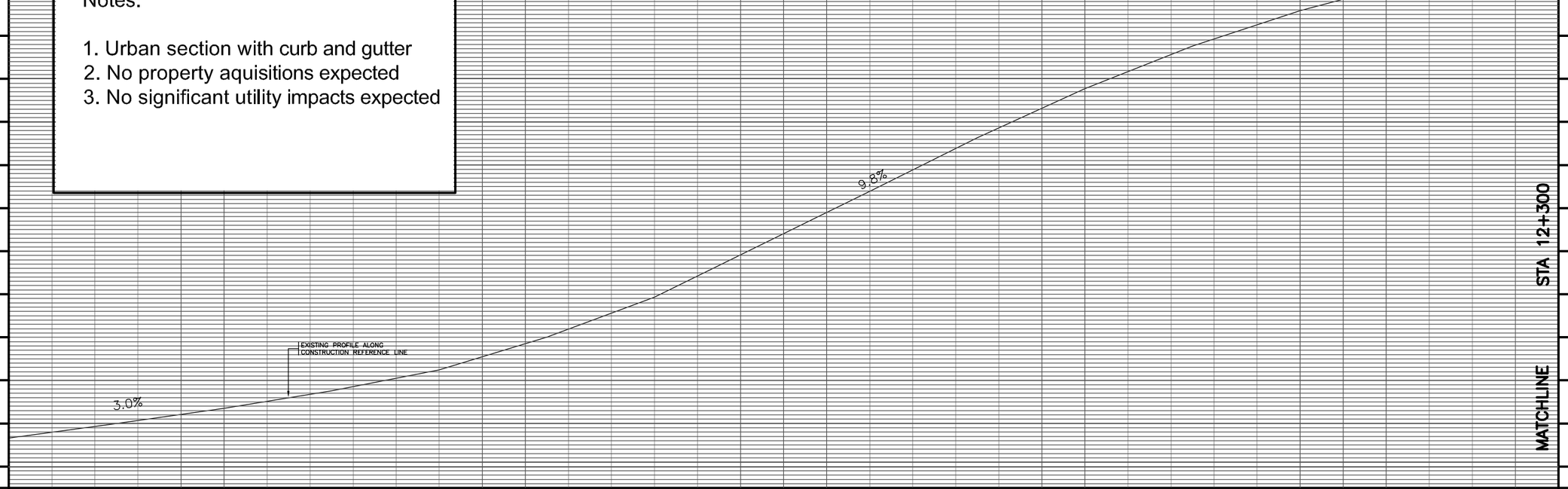
COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P13

Notes:

1. Urban section with curb and gutter
2. No property aquisitions expected
3. No significant utility impacts expected



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THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 11+950 to STA 12+300

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

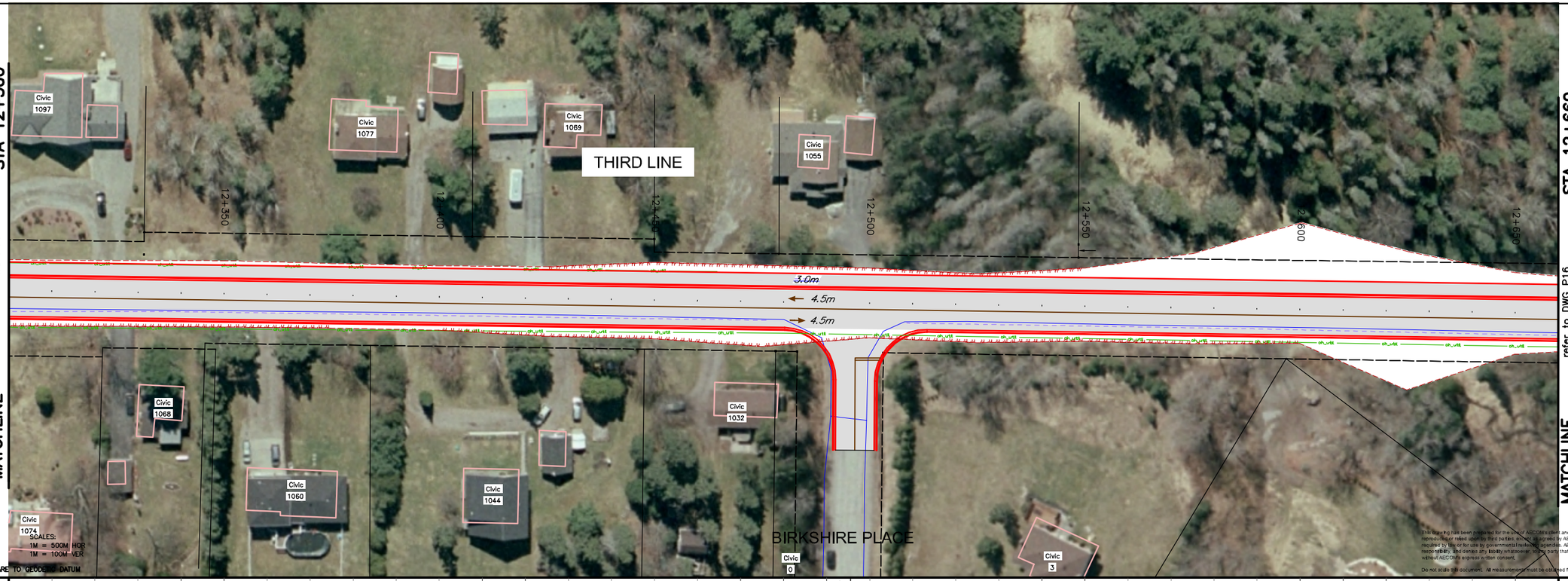
CONTRACT No.

DRAWING NO.
P14

STA 12+300

refer to DWG P14

MATCHLINE



STA 12+660

refer to DWG P16

1.5m SWK
1.5m BLVD
0.6m CURB
4.5m TRAVEL
4.5m TRAVEL
0.6m CURB
1.5m

MATCHLINE

ALL ELEVATIONS ARE TO GEODETIC DATUM

Birkshire estate

EXISTING PROFILE ALONG CONSTRUCTION REFERENCE LINE

3.0%

-3.8%

6.3%

-1.1%

230
228
226
224
222
220
218
216

Notes:

1. Urban section with curb and gutter
2. Possible property impacts in ravine
3. No significant utility impacts expected

CENTERLINE OF ROAD ELEV.

STATIONS

12+300 12+350 12+400 12+450 12+500 12+550 12+600 12+650 12+660

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REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO

ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

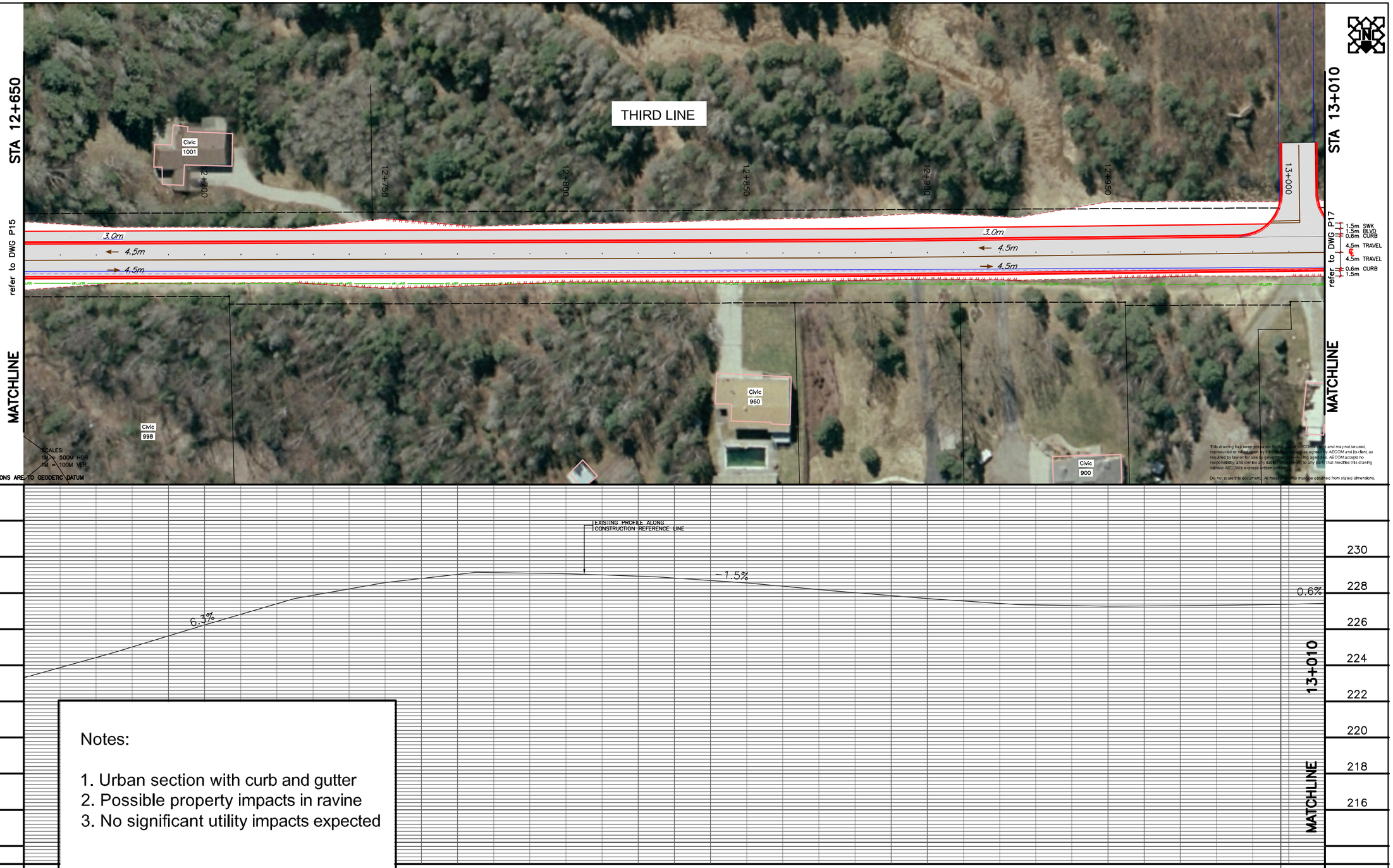
STA 12+300 to STA 12+660

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P15



Notes:

1. Urban section with curb and gutter
2. Possible property impacts in ravine
3. No significant utility impacts expected

CENTERLINE OF ROAD ELEV.

STATIONS 12+650 12+700 12+750 12+800 12+850 12+900 12+950 13+000 13+010

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REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 12+650 to STA 13+010

NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P16

STA 13+000

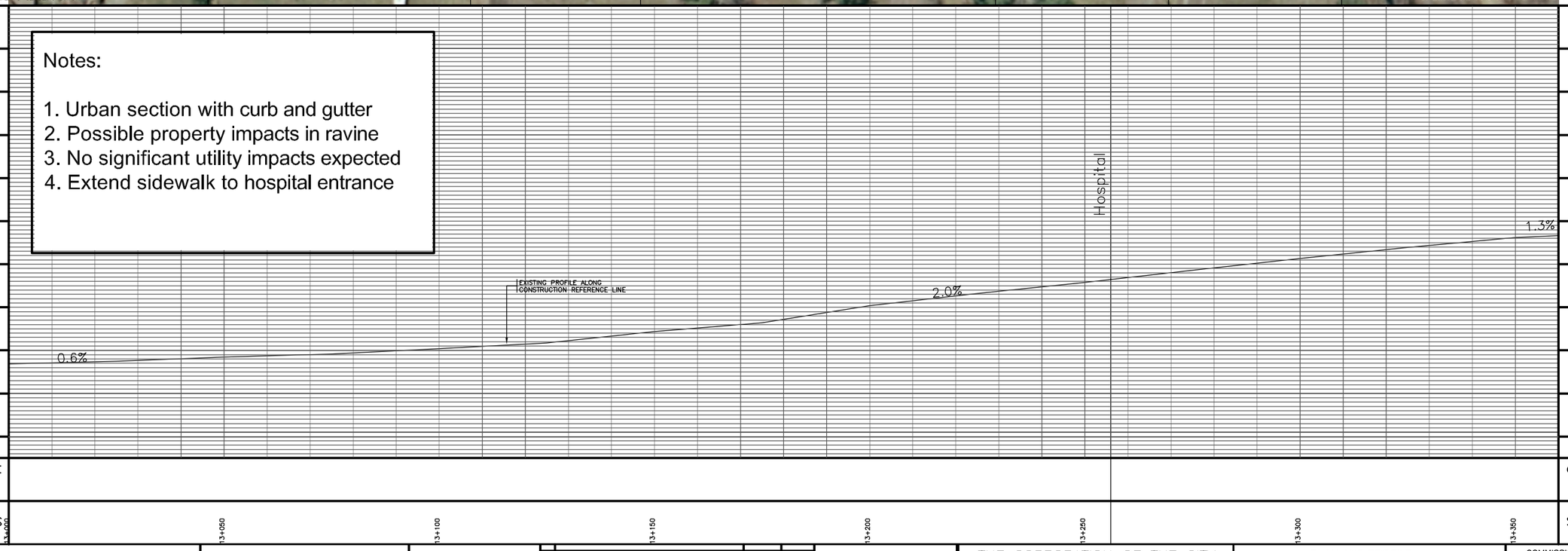
MATCHLINE

refer to DWG P16

ALL ELEVATIONS ARE TO GEODETIC DATUM

Notes:

1. Urban section with curb and gutter
2. Possible property impacts in ravine
3. No significant utility impacts expected
4. Extend sidewalk to hospital entrance



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LICENSED PROFESSIONAL ENGINEER R.E. TALVITIE PROVINCE OF ONTARIO

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1.	Public Open House	Nov 2015	RT

REVISIONS

THE CORPORATION OF THE CITY OF SAULT STE. MARIE

THE CORPORATION OF THE CITY OF SAULT STE. MARIE, ONTARIO
ENGINEERING DEPARTMENT

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PLAN AND PROFILE

Black Road / Third Line
Corridor Improvements

STA 13+000 to 13+350

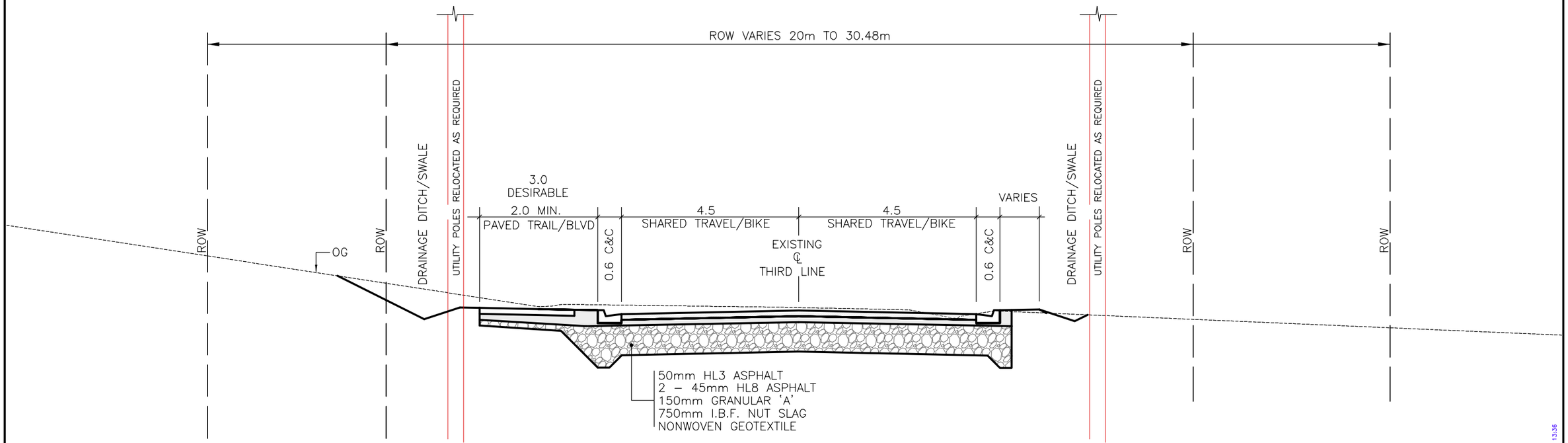
NEW CONSTRUCTION

COMMISSIONER OF ENGINEERING & PLANNING
JERRY DOLCETTI

CONTRACT No.

DRAWING NO.
P17

THIRD LINE



THIRD LINE TYPICAL SECTION
BLACK ROAD TO HOSPITAL

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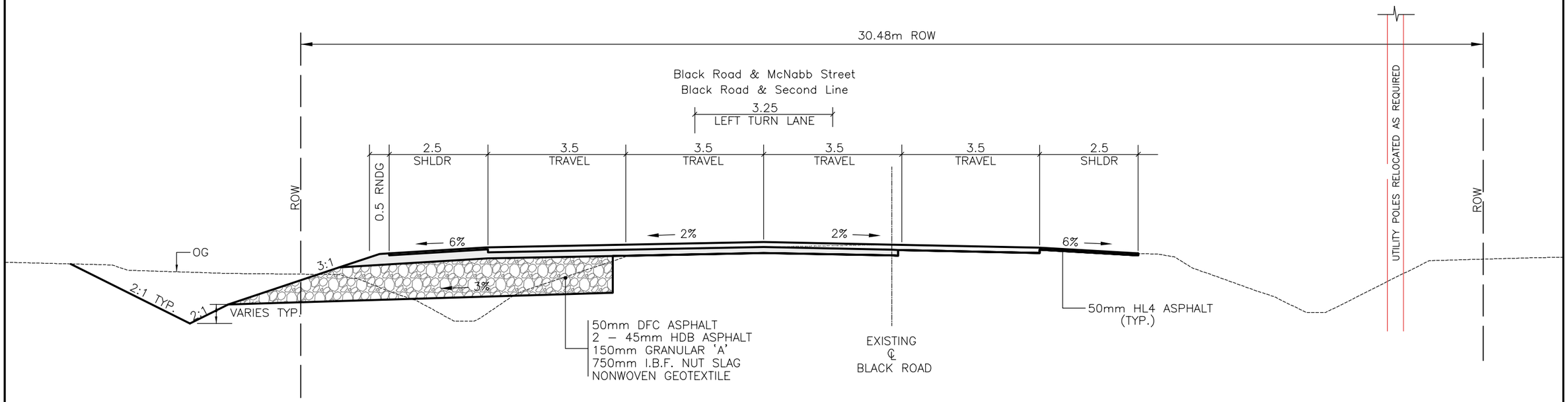
CITY OF SAULT STE. MARIE
Proposed Sections
Black Road/Third Line Corridor Improvements

	PROJECT No. 60190552
SCALE: 1:100	DWG BY: JST



BLACK ROAD TYPICAL SECTION
FROM McNABB STREET TO SECOND LINE

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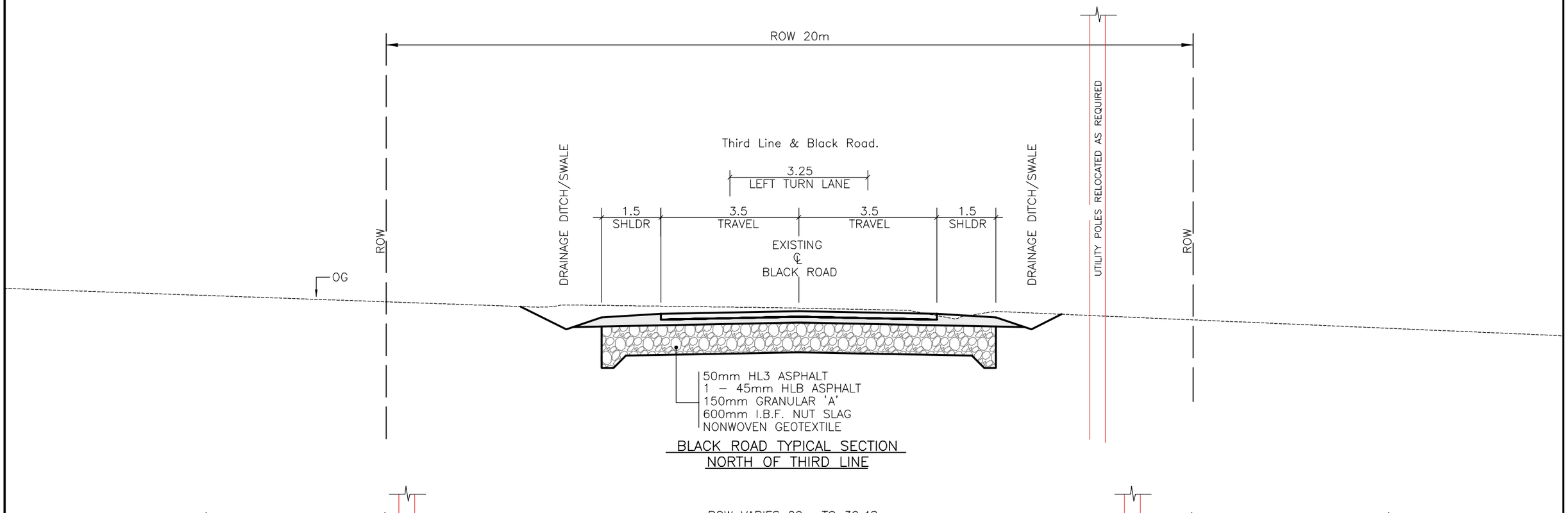
CITY OF SAULT STE. MARIE
Proposed Sections
Black Road/Third Line Corridor Improvements

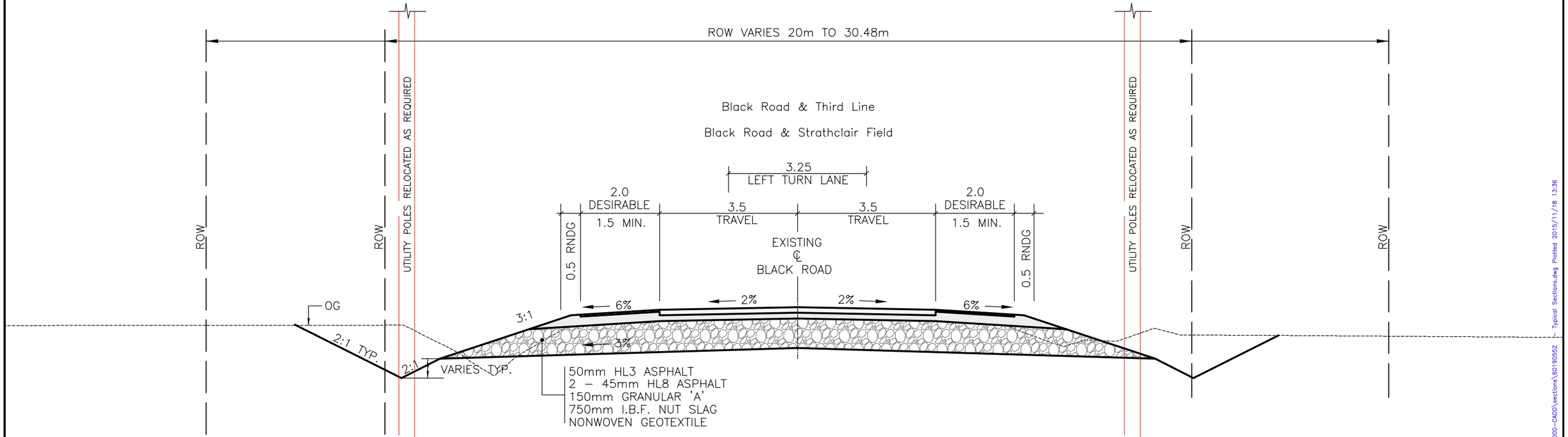
SCALE: 1:100

PROJECT No. 60190552

DWG BY: JST



BLACK ROAD TYPICAL SECTION
NORTH OF THIRD LINE



BLACK ROAD TYPICAL SECTION
SECOND LINE TO THIRD LINE

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CITY OF SAULT STE. MARIE
Proposed Sections
Black Road/Third Line Corridor Improvements

	PROJECT No. 60190552
SCALE: 1:100	DWG BY: JST

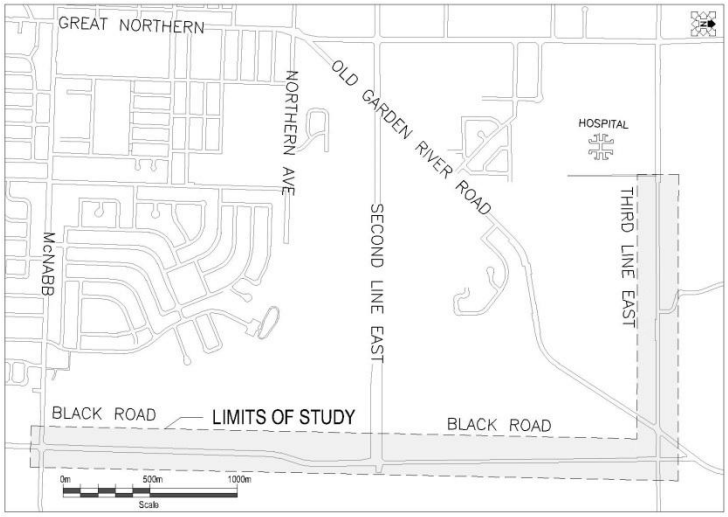
Appendix F

Public Open House No. 2

City of Sault Ste. Marie
Black Road and Third Line Corridor Improvements
From McNabb Street to the Sault Area Hospital Entrance
Class Environmental Assessment

Notice of Public Open House

The purpose of this Notice to invite you to an **Open House** to discuss the preferred preliminary design to address changing traffic patterns and vehicular and pedestrian safety in the Black Road and Third Line corridors from McNabb Street to Third Line and from Black Road to the Sault Area Hospital entrance respectively (refer to key plan below).



Background

Changing traffic patterns along Black Road and Third Line are the result of congestion in other parallel corridors and recent new and planned developments in the northern portion of the City, including the Sault Area Hospital (SAH).

The preferred solution consists of widening to provide four through lanes (two in each direction) along Black Road from McNabb Street to Second Line and widening to provide a wider road platform while maintaining two through lanes (one in each direction) along Black Road from Second Line to Third Line and along Third Line from Black Road to the SAH entrance.

Design options being considered for the preferred solution include cross-section type, lane widths, cyclists and pedestrians and intersection configurations. The purpose of the open house is to discuss the various design options considered and to present the preliminary preferred design which was determined based on technical requirements, environmental considerations and costs.

Class Environmental Assessment (EA)

This project is being planned as a **Schedule C** project under the **Municipal Class Environmental Assessment Process (Class EA process)**. The Class EA process includes identification of problems and opportunities, evaluation of alternative solutions and designs, stakeholder consultation, assessment

of potential effects on the environment and identification of reasonable measures to mitigate any adverse effects.

Public and external agency consultation is a key component of this Study. The City of Sault Ste. Marie is making preliminary study materials available for public viewing at a **Public Open House** to be held as follows:

Date: Thursday November 26, 2015
Time: 3:30 pm to 7:30pm
Location: Russ Ramsay Room (Level 3) in the Civic Center (99 Foster Drive)

The City's Consultant and City staff will be available to discuss the project details with you.

Interested individuals are also encouraged to visit the project web page (ie. www.saultstemarie.ca/BlackRoadEA) to access project documentation and updates.

In the meantime should you have any questions or require further information please contact either:

Don Elliott, P.Eng.
Director of Engineering Services
City of Sault Ste. Marie
Tel: 705-759-5329
Fax: 705-541-7165
Email: d.elliott@cityssm.on.ca

Rick Talvitie, P.Eng.
Project Manager
AECOM Canada Ltd.
Tel: 705-942-2612
Fax: 705-942-3642
Email: rick.talvitie@aecom.com

Please note that information related to this study will be collected in accordance with the Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments received will become part of the public record and may be included in Study documentation prepared for public review.

This Notice issued on November 12, 19 and 21, 2015.

Don Elliott, P.Eng.
Director of Engineering Services
City of Sault Ste. Marie

We look forward to seeing you at the open house!

Issue No. 2

INFORMATION BULLETIN

November, 2015

Introduction

The January, 2015 information bulletin provided an outline of the work completed in Phases I and II of the Class Environmental Assessment (Class EA) process. Specifically, the Phase I and II activities included the identification of the problems/opportunities and the development and evaluation of alternative solutions to address the problems/opportunities. At the January 22, 2015 public open house a preliminary preferred alternative was presented based on an evaluation completed by the engineering Consultant and City Staff. This information bulletin summarizes the project activities completed since the January 22, 2015 Public Open House.

Public Input and Selection of a Preferred Solution

Significant public support for the preliminary preferred solution was received before, during, and after the first public open house.

After careful consideration of the input received, the preferred solution was finalized and consists of the following components:

- Widen Black Road from McNabb Street to Second Line to include two through lanes in each direction.
- Maintain a single though lane in each direction and widen the Black Road and Third Line road platforms from Second Line to Third Line and from Third Line to east of the Sault Area Hospital (SAH) entrance respectively.
- Undertake road base/subbase improvements along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance (ie. previous reconstruction limits).
- Forgo any municipal water distribution or waste water collection servicing extensions at this time.

The principle reasons for the selection of this alternative are as follows:

- In general, a two lane road configuration (one through lane in each direction) is typically suitable for daily traffic volumes in the range of 14,000 vpd. The existing and projected daily traffic volumes on Black Road from McNabb Street to Second Line significantly exceed this threshold but are within this threshold north of Second Line along Black Road and along Third Line.
- Although a single lane in each direction is adequate along Black Road north of Second Line and along Third Line, the existing platform width is narrow and does not provide adequate space for emergency response vehicles, pedestrians, cyclists and other non-motorized uses.
- The road structure along Black Road from McNabb Street to Second Line is generally in good condition but Black Road north of Second Line to Third Line and Third Line from Black Road to east of the SAH entrance are badly deteriorated and are in need of repair and upgrading.
- Black Road from Second Line to Third Line and most of Third Line within the study limits are situated outside of the Urban Service Line (USL) and would require a change to the USL limits to permit servicing extensions. In addition a significant proportion of this area also lies outside the Urban Settlement Area (USA). Expansion of the USA requires a scoped or comprehensive review which demonstrates, within the next ten years, housing demand cannot be accommodated within the existing USA. Furthermore the cost for municipal servicing, to property owners and the City would be significant and there are no significant development pressures adjacent to these corridors at this time.

Phase III of the Class EA Process

Phase III of the Class EA process involves the development and review of design options for the preferred solution. Specifically, options have been developed for the following design elements:

- Roadway horizontal and vertical alignment;
- Roadway cross-section;
- Pedestrian and cyclist considerations;
- Intersection configurations; and
- Street lighting.

Each of the design options developed by the project team has been evaluated and a preliminary preferred design has been developed. Preliminary project plans and design information will be on display at the November 26, 2015 Public Open House.

The purpose of the second public open house and public

response period (ending December 24, 2015) is to allow interested individuals to comment and provide input on the design options being considered.

Preliminary Preferred Design

After careful evaluation of each design option, the preliminary preferred design consists of the following:

- Maintain a rural road cross-section with roadside ditches and widen Black Road from McNabb Street to Second Line to include two 3.5m wide through lanes in each direction together with 2.5m wide fully paved shoulders inclusive of double solid white painted lines to provide a buffer between traffic and non-motorized uses. Upgrade the existing street lighting to provide adequate lighting for the widened roadway.
- Reconstruct Black Road from Second Line to Third Line with a rural cross-section consisting of a single 3.5m wide though lane in each direction, roadside ditches and paved 1.5m and preferably 2.0m wide shoulders inclusive of a single solid white painted line to separate traffic from non-motorized uses. Extend the existing street lighting from Strathclair entrance northerly to Third Line in the area where it is not currently provided.
- Reconstruct Third Line from Black Road to east of the SAH entrance with an urban cross-section consisting of 4.5m wide shared travel/bicycle lanes, standard curb and gutter at the edges of pavement and a minimum 2.0m wide paved trail or preferably a 2.5m wide paved trail with a 0.5m concrete boulevard to accommodate non-motorized uses along the south side of the roadway. Storm drainage is to be accommodated with a storm sewer system. Drainage swales/ditches may be required in specific areas to supplement the storm sewer system.

Your Involvement

You are encouraged to review the project plans and documentation and to ask any questions of the Engineering Consultant or City Officials. Comment sheets have been provided for you to record your opinions, comments and concerns. The Engineering Consultant will accept comments relating to the planning and design of this project until December 24, 2015. Comments can be left with the Consultant at the Public Information Centre or emailed to rick.talvitie@aecom.com or mailed or delivered to:

AECOM Canada Ltd.
523 Wellington Street East,
Sault Ste. Marie ON P6A 2M4

Attention: Rick Talvitie, P.Eng.
Project Manager

Next Steps in the Class EA Process

Once the comments have been received (ie: after December 24, 2015), the Engineering Consultant will compile the information and finalize the preferred design. All of the comments received will be considered and incorporated into the planning for this project.

Once the preferred design is finalized, the Engineering Consultant will proceed with Phase IV of the Class EA process which consists of preparing an Environmental Study Report (ESR) documenting the planning and design process followed and decisions reached.

At the time of completion of the ESR (expected in early January, 2016) a Notice of Completion will be advertised and issued to all individuals that expressed an interest in the project. The public will be given an opportunity to review the ESR over a period of 30 calendar days.

Provided no significant concerns or objections to the proposed undertaking are received during the 30 day review period the City may proceed with the detail design and construction.

In some cases concerns regarding a project cannot be resolved through discussions with the project Consulting Engineer and/or City Staff. In this unlikely event a person / agency may request that the Minister of Environment make an order for the project to comply with Part II of the Environmental Assessment Act (referred to as a Part II Order). A Part II Order addresses individual Environmental Assessments. Requests for a Part II Order must clearly identify the rationale for the objection and ultimately the Minister will decide whether an individual environmental assessment is warranted.

Thank-you.

We appreciate the time you have taken to review the preliminary project plans.

Welcome

City of Sault Ste. Marie
Black Road and Third Line Corridor Improvements
Class Environmental Assessment

Public Information Centre

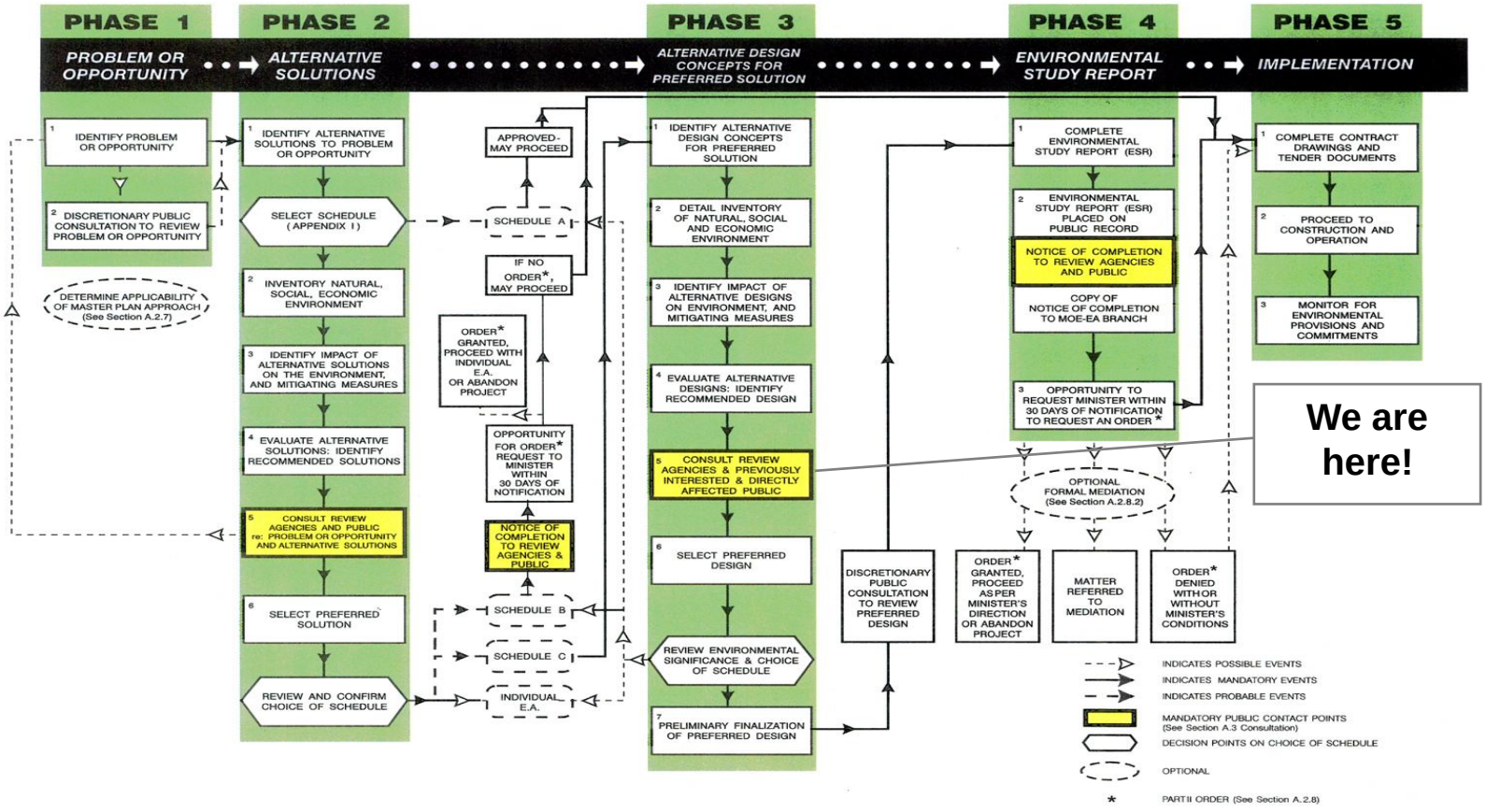
November 26, 2015 - 3:30p.m. to 7:30p.m.

What am I Supposed to Do ?

- Sign the Attendance Register;
- Pick up an Information Package;
- View the Displays;
- Ask Questions; and
- Complete a Comment Sheet.

Representatives from the City of Sault Ste. Marie and the Engineering Consultant (AECOM) are present to answer your questions.

Class Environmental Assessment Process



This flowchart highlights the steps that must be undertaken to meet the requirements under the Environmental Assessment Act.

Problem/Opportunity Definition

The City of Sault Ste. Marie identified a need to address the following problems/opportunities:

1. **Corridor capacity** – Traffic volumes have increased along these transportation corridors and based on the results of the City's Transportation Plan update further increases are projected in the future. The Ministry of Transportation (MTO) has deferred plans to extend the Highway by-pass through Batchewana First Nations to the Second Line/Black Road intersection. There is a need to ensure the road corridors have adequate capacity to accommodate existing and future traffic volumes.
2. **Emergency service response** – Black Road and Third Line are principle routes for staff, visitors and emergency service vehicles accessing the hospital. The overall road platform width is narrow along Black Road north of Second Line and along Third Line from Black Road to east of the hospital entrance.

Problem/Opportunity Definition

3. **Road Structure and Integrity** - There is a need to ensure the existing road structure is adequate to carry the existing and projected future traffic volumes.
4. **Pedestrian and Cyclist Safety**– Black Road and Third Line are identified as spoke routes in the Cycling Master Plan and cyclists and pedestrians are currently accommodated on shoulders. The shoulders were upgraded along Black Road from McNabb Street to Second Line in 2000-2001 but the shoulders along Black Road north of Second Line and along Third Line from Black Road to the Hospital entrance are narrow.
5. **Municipal Servicing** – It was considered prudent to assess potential servicing extensions within the subject transportation corridors in conjunction with this Class EA.

Evaluation of Alternatives – Black Road (McNabb to Second Line)

Alternative	Key Issues
1 – Do Nothing	• Fails to address Problem/Opportunity
2 – Widen the road platform while maintaining a basic two-lane configuration.	• This section of Black Road was previously widened in 2000-2001 and meets current standards for a two lane roadway.
3 – Widen the road platform and incorporate additional through lanes.	• Existing and projected traffic volumes support two through lanes in each direction • Better lane balancing with adjacent road sections (the entire Highway 17 routing through the City includes two through lanes in each direction except for this section) • Provides additional width to enhance passage of stopped vehicles by emergency responders. • May improve ingress and egress from private driveways within this section. • Impacts can likely be adequately managed/mitigated. Challenges include property impacts and costs. Private property acquisition to be minimized.

Note: Selected alternative is highlighted.

Evaluation of Alternatives – Black Road and Third Line (Second Line to SAH)

Alternative	Key Issues
1 – Do Nothing	• Fails to address Problem/Opportunity
2 – Widen the road platform while maintaining a basic two-lane configuration.	• Existing and projected traffic volumes support one through lane in each direction. • Road platform to be widened to enhance pedestrian and cyclist safety. • Provides additional width to enhance passage of stopped vehicles by emergency responders. • May improve ingress and egress from private driveways. • Impacts can likely be adequately managed/mitigated. • Costs, property and utility impacts are moderate relative to Alt.#3..
3 – Widen the road platform and incorporate additional through lanes.	• Existing and projected traffic volumes do not support two through lanes in each direction. • Shoulder widths to be widened to enhance pedestrian and cyclist safety. • Provides best opportunity for emergency responders to pass stopped vehicles. • Enhanced ingress and egress to driveways. • Significant utility and property impacts and high cost.

Note: Selected alternative is highlighted.

Final Preferred Solution

- Widen Black Road from McNabb Street to Second Line to include two through lanes in each direction.
- Maintain a single though lane in each direction and widen the Black Road and Third Line overall road platform widths from Second Line to Third Line and from Black Road to east of the SAH entrance.
- Complete pavement structure improvements along Black Road from Second Line to Third Line and along Third Line from Black Road to east of the SAH entrance (ie. previous reconstruction limits).
- Forego any municipal waste water or potable water extensions at this time.

Note: This solution received significant public support at the January 22, 2015 Open House.

Design Options

In Phase 3 of the Planning process DESIGN OPTIONS have been developed and assessed for several key design elements:

- Road cross-section configuration;
- Lane and shoulder widths;
- Bicycle and Pedestrian considerations;
- Intersection configurations; and
- Street lighting.

Cross Section Options

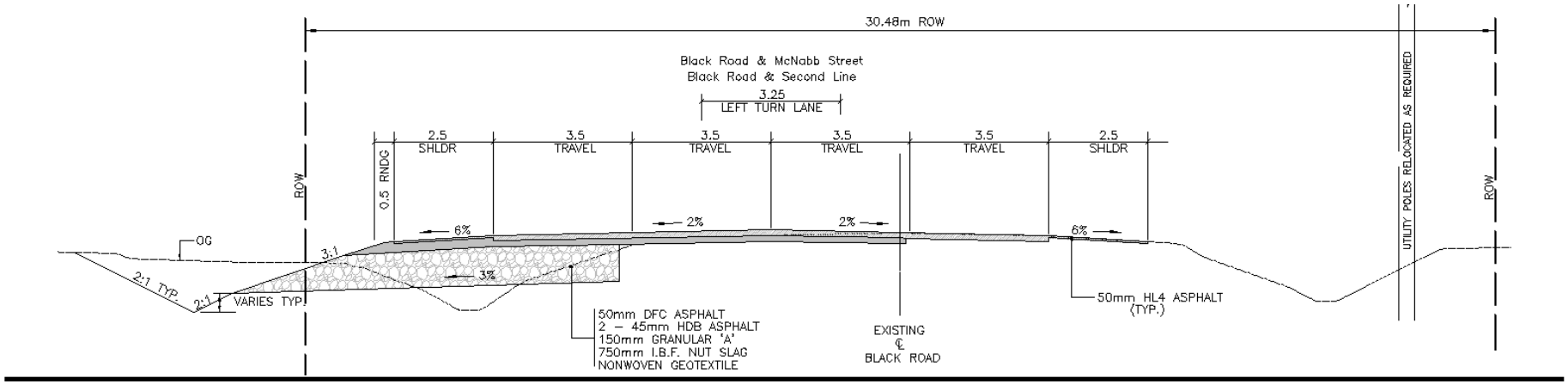
In assessing the various cross-section configurations consideration is given to lane widths, shoulder widths, drainage, pedestrian and bicycle safety, utilities, property impacts and costs. The principle differences between urban and rural cross-sections are summarized below.

Rural Cross-Section	Urban Cross-Section
• Includes travel lanes and shoulders and storm water is managed in roadside ditches; • Difficult to include sidewalks with a rural section; • Can accommodate bicycles and pedestrians on a paved shoulder; • Separation from traffic with white line; • Most economical alternative; • Requires significantly more overall width to accommodate ditches - greater potential for property and utility impacts	• Includes travel lanes and curb and gutter and storm water is managed in storm sewers; • Sidewalks can more easily be incorporated with an urban section; • Can accommodate bicycles in a shared travel/bicycle lane or boulevard trail; • Boulevard and curb and gutter provides separation from traffic; • More costly option; • Requires less width as storm water management is beneath the road – less likely to impact property and utilities.

Black Road (McNabb St. to Second Line) Preliminary Preferred Cross-Section

The preliminary preferred cross-section consists of the following:

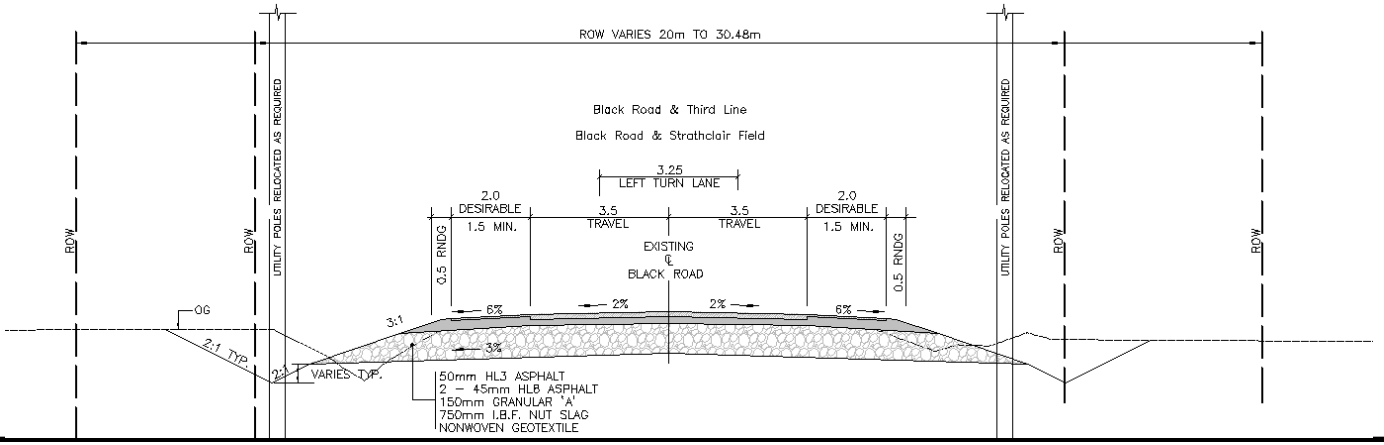
- Four 3.5 m wide travel lanes;
- 2.5 m wide paved shoulders to accommodate cyclists/pedestrians;
- Double white line to provide 0.5 m buffer from traffic; and
- Ditches for storm water management – road grades too flat for storm sewers and cannot provide adequate cover.



Black Road (Second Line to Third Line) Preliminary Preferred Cross-Section

The preliminary preferred cross-section consists of the following:

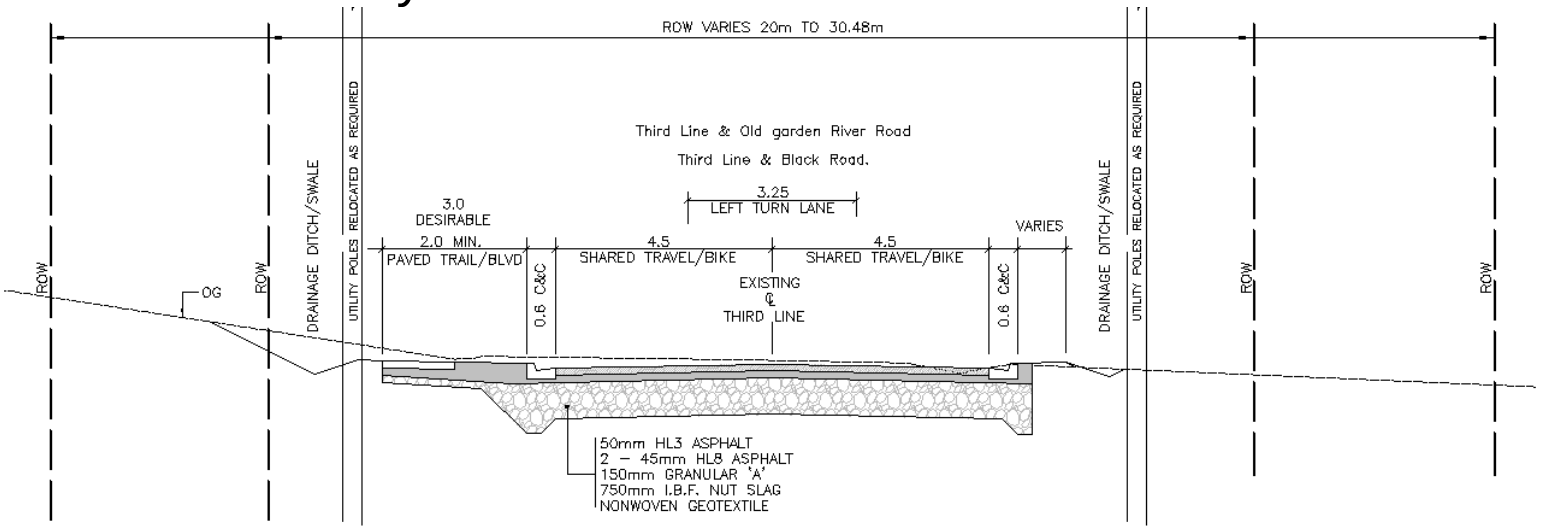
- Two 3.5 m wide travel lanes;
- Minimum 1.5 m wide paved shoulders to accommodate cyclists/pedestrians;
- Single white line to separate traffic; and
- Ditches for storm water management – road grades too flat for storm sewers and cannot provide adequate cover.



Third Line
Preliminary Preferred Cross-Section

The preliminary preferred cross-section consists of the following:

- Two 4.5 m wide shared travel/bicycle lanes;
- Standard barrier curb and gutter along the edges of pavement;
- Minimum 2.0m wide paved trail/boulevard along the south side of the roadway.



Intersections

Black Rd/McNabb St

- Two northbound lanes to be provided through the intersection;
- Channelized westbound to northbound right turn to be modified to reduced speed and improve adjacent driveway ingress/egress;
- Finn Hill entrance to be moved further north;
- Increased left turn lane storage; and
- Enhanced signage to highlight the highway and truck route.

Black Rd/Second Line

- Uncontrolled eastbound to southbound channelized right turn;
- Significant queuing capacity for the northbound to westbound left turn;
- Southbound to westbound right turn lane added; and
- Enhanced signage to highlight the highway and truck route.

Intersections

Black Rd/Strathclair Entrance

- Left turn lane added to access the facility.

Black Rd/Third Line

- Left turn lanes added on northbound and southbound approaches.
- Dedicated right turn lane provided on eastbound approach with enhanced turning radius.

Third Line/Old Garden River Rd

- Left turn lanes added on eastbound and westbound approaches.

Other Design Considerations

Property

- There will be a need for property acquisition to accommodate the proposed road widenings but every effort has been made to minimize residential property impacts. In some cases, design compromises may be acceptable in lieu of property impacts/acquisition.

Road Alignment

- The horizontal alignment has been shifted moderately within the right-of-way at various locations to minimize the impacts to properties and utility installations.
- The vertical alignment will be modified moderately to enhance drainage to the extent possible and to improve sight distances near Birkshire Place.

Other Design Considerations

Utilities

- Existing aerial utility infrastructure will require relocation to accommodate the reconstructed roadway. Further discussions will be required during detail design with service providers to identify specific plant relocations.

Street Lighting

- Street lighting will be upgraded from McNabb Street to Second Line and added from Strathclair entrance to Third line.

On Street Parking

- Parking will be prohibited on Black Road and Third Line.

Posted Speed

- Posted speed may be reduced to 60km/h from McNabb to Second Line to be consistent with adjacent road sections.

Preliminary Preferred Design

The preliminary preferred design consists of the following:

- A rural road cross-section consisting of four 3.5m wide travel lanes and 2.5m wide paved shoulders along Black Rd from McNabb St to Second Line;
- A rural road cross-section consisting of two 3.5m wide travel lanes and minimum 1.5m wide paved shoulders along Black Rd from Second Line to Third Line;
- An urban road cross-section consisting of two 4.5m wide shared bike/travel lanes, concrete curb and gutter along the edges of pavement, minimum 2.0m wide multi-use path/boulevard on the south side of the roadway along Third Line from Black Road to east of the SAH entrance;
- A horizontal and vertical alignment that minimizes, to the extent possible, the impact on the existing ravines, utilities and property and enhances drainage and sight distance to the extent possible.

Refer also to the “Preliminary Preferred Plan Drawings on Display”

Next Steps

- Review public/Agency input;
- Select and finalize a preferred preliminary design;
- Complete Environmental Study Report;
- Issue Notice of Completion;
- Address concerns during 30-day review period;
- Complete detailed design;
- Timing for implementation (construction) is unknown but may may be initiated in the spring of 2015 pending receipt of necessary approvals and funding; and
- Project will be phased with the work being spread over several construction seasons (approximately 5 years).

Appendix G

Summary of Issues/Concerns and Proposed Mitigation

THIRD LINE / BLACK ROAD IMPROVEMENTS CLASS EA
Summary of Issues/Concerns and Proposed Mitigation
(Note: Issues and Concerns have generally been documented in reverse chronological order in this table)

Name	Address	Issues/Questions or Comments	AECOM Response/Proposed Mitigation
Comments/Issues from Nov 2015 Open House			
		• In our discussion you mentioned the increased water flow (GPM) that will occur due to the redirection of the natural water flow on the ravine at the top of Third Line East, as well as the curb and gutter installation with the extra wide road surface • Sending you photos to follow this email of properties taken on Dec. 14, 2015, on Third Line East (East of Black Road). As you can see the water flow is already an issue. This issue occurs several times throughout the year depending on how much snow/rain we get. I have seen much worse than this. My concerns are with the proposed changes to the ravine etc., are you certain that the increased GPM's will not cause more flooding on our properties • If the current system fails and we will need new larger culverts installed who will pay for this? Will it be the City Board of Works • Did AECOM research any other ways or different directions to divert the water from the ravine? Example; outflow ditch by the animal clinic along Black Road • You mentioned you have a way to slow the water from the new storm system that will be carrying all the water to Third Line but you did not have any details at that time. We just want to make sure that this will be implemented as you can see from the photos that the current system would not be able to handle more water or a faster flow	• There may have been some misunderstanding here and I apologize for my lack of clarity. We do not anticipate any redirection of natural flow resulting from this project. In general water that is currently making its way to the Third Line roadside ditches will be collected in the proposed storm sewer system. The water collected in the storm sewer system will generally discharge to the same ravines or downstream drainage ditches. There are ravines that parallel and cross the Third Line road allowance which flow east and are intercepted by the Old Garden River Road ditch system. The Old Garden River Road ditches then flow to Third Line and continue in the Third Line ditch system east of Black Road. These drainage patterns will not be changing. The existing road including shoulders on Third Line is in the range of 8.6 to 8.8 m in width and the proposed road will be 9.8m inclusive of the concrete gutters. We will also be including a paved trail/boulevard on the south side. The additional hard surface width will contribute to some additional runoff but we will be exploring storm water management options in greater detail during the detail design phase. • Unfortunately the photos did not come through but I was driving the Third Line corridor when the ditches were full on the date noted. There are significant challenges with drainage in this area (i.e. flat topography and ditch capacity) as you know based on what you have witnessed. Although drainage improvements will be considered during the detail design flooding will continue to occur in this area during major storm events. Although not the focus of this current study there may be a need to consider improvements to downstream ditches (ie. east of Black Road) to better manage storm runoff in this area in the future • This will be addressed during detail design and storm water modeling will be undertaken with actual detailed field information. • The culverts are owned and maintained by the City. • Detailed field information will be collected during the detail design phase and options will be considered to best manage storm water within and adjacent to the project. • This aspect will be incorporated into an overall storm water management model to understand and best manage storm water based on the proposed changes. The modeling will allow us to compare the current configuration to the proposed configuration. We can also incorporate management features to ensure we are either improving conditions or not making the situation worse.
		• The proposed changes do not consider the impact on residents living along the eastern portion of Third Line East. Since the hospital and the Third Line E extension west of GNR opened, it has been extremely difficult to exit Third Line E (east) during peak times in the morning and afternoon, particularly during mid-summer, and when roads are slippery in mid-winter. It is not unusual to have to wait for 5 minutes or more for there to be a gap in both the Black Rd and the Third line east (western arm) so that we can turn left exiting Third Line E (eastern arm). Our street is a dead-end, and this is our only means of exiting. I expect the proposed changes to Black Rd will cause traffic levels along this route to increase, making exiting our street even more difficult. These difficulties will only be compounded by the addition of a turning lane on Black Road. • In our conversations, you outlined that there are only a few houses on our street, and that our numbers are small relative to the large volume of traffic moving between Black Road south and Third line east (west). As such, we don't qualify for any traffic control measures. While I agree that our numbers are small relative to the HUGE volume of traffic now using Black Road, I think it unfair that residents (including motorists, cyclists and pedestrians) should be inconvenienced to this degree just because our numbers have been swamped by	• The turning lane on Black Road will allow northbound through movements to be completed in concert with left turning movements which may assist in clearing traffic and possibly opening up more gaps. • In addition I am sorry if you felt that I minimized the importance of the residents east of Black Road as this was not my intention. It is however important to apply guidelines appropriately as note below. • I understand your frustration and recognize there are times during the year when the wait time is significantly greater due to increased traffic or poor weather. There are guidelines available to assist in determining when additional traffic control should be considered at an intersection. Specifically there are warrant calculations included in the Ontario Traffic Manuals that are completed to determine the need for all-way stop or signal controls. The warrant calculations were completed at this location and all-way stop control or signals are not warranted at this time. The City will however continue to monitor this intersection and the need for enhanced control as traffic volumes change over time. It is important to understand that the addition of an all-way stop can also have adverse impacts as there is the potential for an increase in rear end collisions

		the rest of Sault Ste Marie using this route to bypass the Great Northern Road/Second Line intersection. I believe this intersection is unsafe for our residents. I understand that there are few reported accidents at this intersection, but I believe accident numbers are low because accidents go unreported since they are slow-speed accidents. There is frequently plastic and glass at this intersection • I would like to see a four-way stop placed at this intersection, so that residents can exit Third Line East (eastern arm) without having to force their way into oncoming traffic. This will NOT slow the majority of traffic flowing between Black Road and Third line east (western arm), but will simply give residents on the eastern arm of Third line east the opportunity to exit safely, and in a timely manner, particularly when this intersection is slippery in winter • Please consider the safety of residents living on Third Line East while improving the Black Road/Third line intersection to benefit residents that live in other sectors of Sault Ste Marie.	particularly if motorists perceive that it may not be warranted. It is for these reasons that it is important to respect the warrant calculations.
		• Downstream water quality.	• The project will include an erosion and sedimentation control plan which will be developed during the detail design and construction phases. Plans to be reviewed by MNRF staff. • Temporary sediment control features will have to remain active until vegetation has been re-established. • The contractor will be responsible for re-establishing vegetation in disturbed areas as soon as practical and within the same construction season. • In-water work shall be undertaken between July 1 and September 1 to avoid potential impacts to Lake Sturgeon and salmonid species. • For any culvert extensions work shall be scheduled during drier periods and flows shall be diverted to permit construction of the culvert extension in dry conditions. In addition the work would be planned to span the shortest timeframe possible. Details will be reviewed with MNRF staff during design/construction. • In cases where a full culvert replacement is required based on the condition of the culvert the preferred approach will be to replace in the dry along a new alignment adjacent to the existing culvert. The last step in the construction sequence would be to divert the flows to the new culvert.
		• Would it be possible to view culvert and drainage component of this project, in particular drainage west to east across Black Rd.	• We will be addressing drainage including ditching and culverts as part of the project detail design which will be ongoing over the next 4 months. • Darrell Maahs to contact you to discuss this further during the design process.
		• Possible widening of culverts at both of the entrances to facilitate tractor trailers.	• This will be considered during the detail design phase.
		• We have a fence that would need to be rebuilt or moved in front of the property. Possibility of two driveways on the “S” bend for safety of our company employees. • Is there going to be more lighting on the road. This is a safety concern.	• Fencing and driveways will be addressed during the detail design phase. • Lighting upgrades are proposed along Black Road from McNabb Street to Second Line.
		• Provide large signs directing general/truck/tourist traffic to the Bridge/USA/Trans Canada Hwy., traffic proceeds past the Second Line then needs to turn around – usually Bethel Bible or sports complex.	• Overhead signage improvements are proposed on the northbound approach to Second Line.
		• Road cyclists use Black Road to access Hiawatha, they travel 30 to 40 km/hr. and a wide pave shoulder 2 to 2.5m would be most appropriate and safe, if a designated cycle lane next to the travel lane is not an option. • Hub trail travel use if for leisure cyclist not road bikes who ride for fitness.	• The proposed shoulders widths on Black Road are as follows: o McNabb Street to Second Line = 2.5m with two painted white lines to provide a buffer between motorists and mon-motorized uses. o Second Line to Third Line = preferred width of 2.0m and a minimum width of 1.5m in areas where property impacts cannot be readily addressed. A single solid white line will separate motorists from non-motorized uses.
		• Signs for traffic moving north to Second Line need to be direct west on Second Line for travel north on Hwy. 17. • Because of the Canada Post mailboxes on Bethel Bible Chapel property, there is a constant flow of traffic in and out of our driveway. A turning lane would be helpful or a widened opening to the driveway for turning in and out.	• Overhead signage improvements are proposed on the northbound approach to Second Line. • Driveway improvements will be considered during the detail design phase.

		• Noise from trucks – truck engine brakes from S-bend to Second Line; truck accelerating from Second line – reduced speed in this area will reduce the noise level. • Call to the City asking for a sign – said no problem, but still no sign. • At the last meeting we were told when they took property from us (14 ft.) when they put the By-pass in, they allowed enough room for any expansions. Concern about taking more. • Years ago there was a culvert installed beside my property, when they built the by-pass they took the culvert out. There has been flooding ever since. • Do a noise study. • Why are you saving the vacant City land and pushing everything to the homeowners side of the road?	• A recommendation has been made to reduce the posted speed from 70km/h to 60 km/h from McNabb Street to Second line. • No property acquisition is planned on the west side of Black Road in the vicinity of 561 Black Road. • The City has recently completed some drainage improvements and additional improvements including the possibility of additional cross culvert(s) will be considered during the detail design phase. Drainage in this area is however very challenging due to the very flat topography and some flooding during major storms is likely unavoidable. • No noise studies are planned at this time. • Widening in the vicinity of 561 Black Road will be completed on the east side of the road.
		• We are encouraged by the accommodation for increased traffic with a focus on wider shoulders to permit bicycle access/travel.	• No comment required.
		• Eastbound Second Line should have a dual right ramp onto Black Rd. to utilize 4 lanes of Second Line properly. Now everyone comes over the hill getting into curb lane. • All way stop at OGRR and Third Line should be checked for warrants after rebuilt Third Line is open. May only warrant stop signs on OGRR.	• There is a significant southbound traffic volume from Black Road north of Second Line also. The proposed design includes a through lane for the southbound traffic and a through lane for the eastbound to southbound left turn. A dual right ramp wold require additional traffic control for southbound traffic to merge into the traffic stream. • The all-way stop at OGRR/Third Line was installed to address a significant accident history related to restricted sight lines due to the skewed intersection. It has been successful in reducing the accident frequency and will remain.
		• Agree with the proposed 4 lane roadway and encourage a width of 3m shoulders for potential cyclists and pedestrian traffic from McNabb to Second Line. • Agree with the recommended plans from Second to Third Line and encourage a 3m shoulder. • Encourage that Third Line have a 3m shoulder as well. The widening of shoulders would connect residents in the lower end of Third Line and Black Rd. to the Hub trail by the hospital and schools encouraging active transportation possibly decreasing vehicular traffic in that area. • Suggest putting flashing lights on the Stop sign at the intersection of Old Garden River Rd. and Third Line. • Like to see street lights on that area of roadway if there are other forms of transportation using the roads ie: bikes and pedestrian.	• The proposed shoulders widths on Black Road are as follows: o McNabb Street to Second Line = 2.5m with two painted white lines to provide a buffer between motorists and mon-motorized uses. o Second Line to Third Line = preferred width of 2.0m and a minimum width of 1.5m in areas where property impacts cannot be readily addressed. A single solid white line will separate motorists from non-motorized uses. There are property constraints from Second Line to Third Line that preclude a wider width. • Third Line will be reconstructed with an urban cross-section with curbs and gutters at the edges of pavement. Although no shoulders are proposed the lane width (ie. 4.5m) is adequate for cyclists and motorists to share. In addition an off-road boulevard trail is proposed along the south side of the road for non-motorized uses. • We forwarded your comment re: flashing lights on stop signs to the City's PW&T department. They indicated that flashing lights are not warranted based on the accident history. • It is proposed to extend the street lighting along Black Road from Strathclair northerly to Third Line where light is currently absent.
		• Property allowance, check property frontage on the map. I believe it is incorrect. It was noted that they did not give up property like their neighbours and noted that she believes the trees are on their property. • Keeping existing mature trees important wind break. • Ditching keep angle that is working for water flow. • Bike path/snowmachine path on Park side off road separate. • No water or sewer. There is no evidence there is warrant for this service, nor do we need or want it. • Hills on Third Line (winter always slippery) if the grade was no so steep • Widen Third Line from Black Rd. to Old Garden River Rd. – hard to turn off Black Rd. because traffic sticks out on Black Rd., cars stopped on Third Line to turn right onto Black Rd. pull out really far to see oncoming traffic coming from Old Garden on the Black Rd. This makes it hard to turn left with a larger truck or trailer. Perhaps 2 lanes or widen should to safely accommodate. • Black Rd. widening would priority of plowing be higher or more often due to more drifting on surface. • Is there any costs to the homeowner and how would it affect our taxes? • Concern natural gas runs directly in our ditch on our side of the road, would that mean any widening would have to be on the other ditch side? • Overall the map is outdated and definitely would change traffic counts. Noticed a huge increase when hospital was first built but since then it has decreased – Pine St. extension.	• The property fabric shown on the plans is not always correct as it has not been generated from registered property plans. • Every effort will be made to retain existing mature trees. In areas where trees cannot be salvaged the City will consider replacing trees. • Ditching will be constructed with standard slopes (maximum 2 horizontal :1 vertical). • No changes to snow mobile trails due to this project. • Cyclists will be accommodated on shoulders along Black Road in this area. The City may consider extending off-road cycling trails through Strathclair under a separate project in the future. • Water and sanitary sewer is not proposed for this area. • Modest changes to the Third Line road grades are planned due to constraints with existing entrances/driveways. • The throat of the Black Road/Third Line intersection will be improved but consideration will also be given to enhancing the sightline to the north from the west approach. • We will forward your question re: plowing frequency to the City's PW&T department. • No costs to the homeowner and taxes are based on assessed value. • Utility impacts and the need for relocations will be addressed during detail design. In general widening in this area is planned on both sides of the road. • Traffic is expected to fluctuate but the design has been developed based on 15 year traffic projections. • We forwarded your comment re: the Black Rd/Second Line traffic signal to PW&T and

		• Light at Second Line and Black Rd. does not work well. Up to 10 minute wait. • I believe truck traffic would drop significantly on Black Rd. to Third Line and Landslide with better advanced signage. • Road conditions (bumps) have been considerably worse due to frost and moist ground. • I am not in favour of 4 lane. I feel the traffic is better dispersed on all routes than directed to one. • I believe the road already handle ambulance and hospital traffic as it is. My first choice would be Do Nothing. My second choice would be some widening to the shoulders utilizing the City Property on the west side of Black Rd. Note we do have poles and lines on both sides of the road and would hope they could be left in place. • Bike traffic could be accommodated through the Stathclair Park and already established trails.	they noted that the maximum wait time is 1 minute 30 seconds. There may be problems with the vehicle detection loops on the west approach which will be investigated further as part of the upgrading project. • Overhead signage improvements are proposed on the northbound approach to Second Line. • Poor road condition will be addressed with the proposed full reconstruction (road subbase, base and surface) of the roadway in this area. • Four Lanes are proposed from McNabb to Second Line only (ie. Trans Canada Highway). This will better differentiate this route as the principle truck route, will accommodate the projected growth in traffic over the next 15 years and is consistent with the four lanes sections on Second Line and on Black Road south of McNabb. • The section of Black Road in your area will be widened modestly to provide a safer refuge for non-motorized uses on the shoulders. Widening for a left turn lane to access Strathclair field is also proposed in this area. Lane widths will not change. In general the widening will be accommodated on both sides of the road and pole relocations will be required.
		• Agree that the Black Rd. and Third Line need widening. Third Line from the SAH entrance to Black Rd. should have been addressed at least while the new SAH was being built and in place when the SAH was completed. • When this widening is completed, the corner of Black Rd. and Trunk Rd. will still be congested. A by-pass like Sudbury and Thunder Bay and most other cities would alleviate this. A by-pass would take all the unnecessary traffic away from the now very congested intersections such as the corner of Second Line and Great Northern and Black Rd. and Trunk Rd. • Therefore, you might be able to get away with just widening the Black Rd. from Third Line to McNabb St. instead of "four-laning" from Second Line to McNabb.	• Sudbury and Thunder Bay have MTO maintained by-passes and Sault Ste. Marie does not. What Makes Sault Ste. Marie unique is that we also have a connection to the US Interstate highway system at the International Bridge located in our downtown. So for provincial traffic bound for Michigan we cannot be by-passed. The City feels that is all the more reason for MTO to make the connection at Second Line/Black Road to reduce the impact on our roads. MTO should also consider a two lane by-pass between 17N and 17E. City staff work towards that end when we discuss common issues with MTO. • In 2013 the MTO completed a traffic study (ie. origin/destination study) within Sault Ste. Marie. Based on the results of that study the MTO has decided to defer route planning and environmental assessment studies for a new Highway 17 route that was originally intended to connect to Second Line at Black Road. MTO also indicated that they will complete similar traffic studies in approximately 10 years' time to reassess the need for a new Highway 17 route. As a result of MTO's decision, provincial highway traffic will continue to be routed through the City from Highway 17 East along Trunk Road, Black Road, Second Line and Great Northern Road to Highway 17 North. With the exception of Black Road from McNabb Street to Second Line the entire route, through the City, includes two through lanes in each direction. • The proposed project will result in widening Black Road from McNabb Street to Second Line from two lanes to four lanes and Black Road from Second Line to Third Line and Third Line from Black Road to Sault Area Hospital will remain two lanes but the road platform width will be widened to improve corridor safety.
		• Concern as a motorist who uses that area often, of course you are aware of the unfortunate death of a biker not long ago at or near the intersection of Black Rd. and Second Line. • Many times we have witnessed 'near accidents' from people coming from the Second Line around the curved portion [which is a YIELD] onto the Black Rd. • Very few read that sign as a YIELD, they read it as a MERGE. • Some race to get ahead of the oncoming traffic travelling south on the Black Rd.....others drive along the extra lane and then try to fit into spaces where cars behind them have already pulled into the driving lane.....there are many different [dangerous] examples of how people handle that entrance.	• The proposed project will result in enhanced safety particularly with the right turn channelization. The channelized right turn will no longer be a merge with yield control. Under the proposed design the channelization lane continues as a through southbound lane which eliminates a lane change/merge. There will however be an adjustment period as motorists become familiar with the change.
		• I think that the city map should include Foxborough Trail since it intersects directly onto Third Line. As well, with the opening of the new high school we have seen even more traffic now using Foxborough Trail as a route from Old Garden River Road to Third Line.	• Foxborough Traill will be exposed to some through traffic.
		• Will very low gully west of Birkshire be raised to a safer level? • Are city services (waste, water, and sidewalks) considered, especially from Black Rd. to new Hospital entrance? • Are LED street lights included? • Are entrances to Ball parks on Black Rd. addressed? Several near misses. • Is the radius of the turn circle at Black Rd. & Third Line to the Hospital addressed? • Will traffic use for larger vehicles and emergency vehicles be addressed and included?	• In general the undulating terrain will assist in tempering speeds. There may be some modest changes to the third Line Road grades but there will not be significant changes as there are numerous constraints with existing driveways. The "low gully" has not been a significant problem and generally meets standards for the design speed. • No extension of City services is proposed. Most of this area lies outside of the Urban Service Line (USL) and would require a change to the USL limits. In addition a significant proportion of this area also lies outside the Urban Settlement Area (USA).

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Black Rd. & Third Line E and the extension on Third Line from Peoples Rd. are creating a natural bypass situation.

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Expansion of the USA requires a scoped or comprehensive review which demonstrates, within the next ten years, housing demand cannot be accommodated within the existing USA. Although, it is at times possible, to expand the USL without expanding the USA, the two are closely linked and it would be very difficult to expand the USL without expanding the USA. There would be a need for clear justification. Charges to be levied to individual property owners would, in part, be related to their frontages. As an example the estimated total cost for a watermain and gravity sanitary sewer including services installed to the property line is in the range of $17,290 based on 2014 rates and 100 ft of frontage. In addition to these charges, property owners would also be responsible to arrange and pay for the installation of services on their properties (ie. from the road allowance to their homes) including any necessary internal plumbing modifications.

LED street lights will be installed under the current replacement program being undertaken separately by the PUC.
A left turn lane is proposed along Black Road to gain access to Strathclair.
The throat of the Black Road/Third Line intersection will be improved and consideration will also be given to enhancing the sightline to the north from the west approach.
The design includes consideration of larger vehicles.
Third Line is an important transportation corridor in the City and is identified as a an arterial roadway (important for mobility) in the City’s Official Plan.

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Increased traffic flow while trying to cross Black Road at Third Line East.
Significantly increase since our new hospital has opened.
It is my understanding that at completion of the project the traffic is expected to be 3 times the volume of what we have now. At present time I find that it is dangerous to cross Third Line E at Black Rd in a car and especially dangerous for any children who ride their bike to school.
I would like to see a 4 way stop or perhaps a round a bout. This issue really needs to be addressed or the residents of Third Line East (East of Black Rd.), will face increasing difficulty and possible tragic accidents just trying to exit our street as it is a dead end.

What I came away with is that the city engineer's as well as AECOM did not see any issues with this section of Third Line East therefore no considerations have been made.
Am I correct to assume that at present that neither a 4 way stop or round a bout are in your current plans.
I would have to disagree with those numbers as I would anticipate even more traffic due to easier access and better traffic flow for vehicles. Second Line and Great Northern Rd., has many issues as traffic is very heavy and I would assume that residents in the east end of the city will see Black Rd. To Third Line East will be an easier and faster way to access the west end.
Has the city seen an increase in vehicle accidents at Third Line East and Black Rd., due to the increased traffic volume since the new hospital?
Disappointed to know that aside from the Third Line/Black Road intersection, Third Line east of Black Road was not included within the limits of the current study.
As for the accident data that was provide, this information would only show reported accidents. It would be impossible to know all of the minor accidents that occur.

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We have presented below some information regarding existing and projected future traffic volumes. The values in the table represent average total daily traffic in both directions. As noted in the table the Black Road volumes between Second Line and Third Line are projected to grow by 50% relative to 2012 volumes over a significant time period.

<table>
<tr><th>Location</th><th>2012 AADT</th><th>2040 Forecast Traffic*</th></tr>
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There are guidelines available to assist in determining when additional traffic control should be considered at an intersection. Specifically there are warrant calculations included in the Ontario Traffic Manuals that are completed to determine the need for all-way stop or signal controls. The warrant calculations were completed at this location and all-way stop control or signals are not warranted at this time. The City will however continue to monitor this intersection and the need for enhanced control as traffic volumes change over time. It is important to understand that the addition of an all-way stop can also have adverse impacts as there is the potential for an increase in rear end collisions particularly if motorists perceive that it may not be warranted. It is for these reasons that it is important to respect the warrant calculations.
Perhaps the message was that aside from the Third Line/Black Road intersection, Third Line east of Black Road is not included within the limits of the current study.
Consideration is being given to traffic control at this intersection and we will have more information at the open house.
The forecasted future traffic volumes were obtained from the Transportation Master Plan update that was completed by another consultant for the City. As you can imagine there are many assumptions that have to be made in developing traffic forecasts. The City will continue to monitor traffic volumes periodically over time.
Based on the data provided from the City there have been a total of 8 accidents since January 2011 (i.e. almost 5 years) and only two over the last two years. This is a very low accident rate.

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Concern was noted regarding drainage and flooding.
Concern was noted with well water quality and indicates a desire to be connected to the

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Drainage is challenging and the road is presently at a higher elevation than the adjacent properties in this area. Consideration will be given to lowering the road grade in this

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		municipal system.	area but some flooding during major storms is likely unavoidable. • No extension of City services is proposed. Most of this area lies outside of the Urban Service Line (USL) and would require a change to the USL limits. In addition a significant proportion of this area also lies outside the Urban Settlement Area (USA). Expansion of the USA requires a scoped or comprehensive review which demonstrates, within the next ten years, housing demand cannot be accommodated within the existing USA. Although, it is at times possible, to expand the USL without expanding the USA, the two are closely linked and it would be very difficult to expand the USL without expanding the USA. There would be a need for clear justification. Charges to be levied to individual property owners would, in part, be related to their frontages. As an example the estimated total cost for a watermain and gravity sanitary sewer including services installed to the property line is in the range of $17,290 based on 2014 rates and 100 ft of frontage. In addition to these charges, property owners would also be responsible to arrange and pay for the installation of services on their properties (ie. from the road allowance to their homes) including any necessary internal plumbing modifications.
		• Concern was noted with ditch erosion. • Concern with culvert headwalls when cars leave the road. • A 30 ft widening was taken by the City previously when a building permit was issued. • Consideration should be given to the culvert that conveys a creek beneath Third Line.	• Erosion should be mitigated with the proposed urban cross-section. • Most culverts will likely be removed with the proposed urban cross-section and the curb and gutter will afford some protection from leaving the road. • The culvert crossing will be assessed during the detail design phase.
		• Concerned with high speeds. • Roof drains discharge to roadside ditch	• The curbed roadway may assist in reducing travel speeds. There is likely a need for enhanced enforcement. This concern will be brought to the attention of Police Services. • An outlet (i.e. either storm sewer or ditch/swale) will be required for the roof drains and this will be addressed during detail design.
		• Sight distance is poor to the west from entrance.	• Modest improvements to the road grade will be considered during the detail design phase. In changes to the profile grade to address sight distance will also have to consider impacts to driveway grades.
		• Sight distance from his driveway is poor looking to the east.	• Modest improvements to the road grade will be considered during the detail design phase. In changes to the profile grade to address sight distance will also have to consider impacts to driveway grades.
		• Trees planted along Third Line were planted 4' inside of the property line. • Has witnessed many vehicles missing the stop control at third Line and Old Garden River Road.	• Efforts will be made to preserve the tress along Third Line. A left turn lane was initially proposed along Third Line and has been removed to reduce the overall road width and the potential impacts to properties adjacent to the road. • The City's PW&T department will be notified regarding the stop control. We raised the possibility of adding solar powered lights to the stop signs and PW&T indicated that flashing lights are not warranted based on the accident history.
Comments/Issues Generally from Revised Notice of Commencement and January 2015 Open House			
		• How much property I will lose? • To what extent will the sub-base of the road be improved to stop my house from the vibrations it is subjected to with the passing of each truck, transport and school bus • That the elevation of the crown of the road stays the same, due to the fact that my road floods with each heavy rainfall • Is there any way that the culvert in front of my property which links the east and west ditches can be moved or done away with completely, seldom have I ever seen flow through it, and if the ditches are of equal depth and slope on the east and west side there would be no need for this cross pipe, it creates a bump which I believe is also a contributing factor to the vibrations that my home is exposed to on a regular basis	• There may be a need to acquire an approximate 3m width to accommodate the widened road platform at this location. • It is proposed to reconstruct the full depth of the roadway and incorporate adequate subbase and base materials to accommodate the project traffic volumes and types. • There may be modest changes to the road grade. This will be considered further during the details design phase. • The need for and location of the cross culvert that you mentioned will be reviewed further during the detail design phase once a detailed filed survey has been competed.
		• Is there any costs to us the home owner and how would it affect our taxes? • No to water or sewer. There is no evidence there is warrant for this service, nor do we need or want it. • We would like the mature trees left alone on our property because they play a vital role as a valuable wind break. • Concern natural gas runs directly in our ditch on our side of the road, would that mean any widening would have to be on the other ditch side?	• There is no cost to property owners and taxes are based on assessed property value. • Water and sanitary sewer is not proposed for this area. • Every effort will be made to retain existing mature trees. In areas where trees cannot be salvaged the City will consider replacing trees. • Utility impacts and the need for relocations will be addressed during detail design. In general widening in this area is planned on both sides of the road. • The section of Black Road in your area will be widened modestly to provide a safer

		• I have never had to wait on Black Road for traffic turning into Strathclair Park. Traffic leaving is spermatic and only last approximately a few minutes. All the parking is closer to Second Line with a turning lane which I believe most people use and seem to prefer that entrance. It is much easier to get in and out of since the lights have been installed at Second Line and Black Road. • Light at Second Line and Black Road does not work well. I have waited many time up to and over 10 minutes. • Truck traffic would drop significantly on Black Road to Third Line and Landslide with better signage. Possible signage overhead for Trans Canada Route, Thunder Bay etc. As well advance signage so they ensure they are in the turning lane to go up Second Line. • I am not in favour of a four lane. First I feel the traffic is better dispersed on all routes than directed to one. McNabb to Second Line four lanes would help accommodate the Trans Canada Hwy traffic for the bypass. Maybe even consider running Northern Ave down to Black Road for local traffic. I believe a four lane on Black Road from Second Line to Third Line would be a huge safety factor. • I believe the road already handles ambulance and hospital traffic as it is. My first choice would be Do Nothing. My second choice would be some widening to the shoulders utilizing the City property on the west side of Black Road. Note we do have poles and lines on both sides of the road and would hope they could be left in place. Bike traffic could be accommodated through the Strathclair Park and already established trails.	refuge for non-motorized uses on the shoulders. Widening for a left turn lane to access Strathclair field is also proposed in this area. Lane widths will not change. In general the widening will be accommodated on both sides of the road and pole relocations will be required. • We forwarded your comment re: the Black Rd/Second Line traffic signal to PW&T and they noted that the maximum wait time is 1 minute 30 seconds. There may be problems with the vehicle detection loops on the west approach which will be investigated further as part of the upgrading project. • Overhead signage improvements are proposed on the northbound approach to Second Line. • Four Lanes are proposed from McNabb to Second Line only (ie. Trans Canada Highway). This will better differentiate this route as the principle truck route, will accommodate the projected growth in traffic over the next 15 years and is consistent with the four lanes sections on Second Line and on Black Road south of McNabb. Black Road from Second Line to Third Line will remain two lanes with supplementary turn lanes at key locations. • The section of Black Road in your area will be widened modestly to provide a safer refuge for non-motorized uses on the shoulders. Widening for a left turn lane to access Strathclair field is also proposed in this area. Lane widths will not change. In general the widening will be accommodated on both sides of the road and pole relocations will be required. Cyclists will be accommodated on shoulders along Black Road in this area. The City may consider extending off-road cycling trails through Strathclair under a separate project in the future.
		• Accommodation of cyclists/pedestrians, safety and sustainability. The wider road helps a bit but mostly hinders, it raises a number of issues and concerns, notably speed, convenience and aggressive driving, and therefore lacks demand management and adversely affects safety and sustainability within and elsewhere beyond the catchment area. • Wider shoulder does not address noise, pollution and safety. Will shoulder be accessible in winter? • No apparent action to reduce speeds and improve safety, especially for non-motorized users - wider roads invite higher speeds. • Standard design w/o consideration of greenspace, speed, safety, aggressiveness, traffic calming - had a central median sufficient for trees, etc. been considered at all? Is additional lighting being considered as any part of this area? • Link to hiawatha and hub from strathclair not incorporated into current proposed design making difficult and more costly future plans. • In order to better accommodate emergency vehicle access along route, has consideration been given to restricting access to odd license plates during odd days, thereby having traffic any given day combined with/or similar measures such as road tolls?	• One of the principle objectives in developing the preliminary design was to safely accommodate various modes of travel. The subject road corridors are classified as arterial roadways in the City's Official Plan and Black Road from McNabb to Second Line forms part of the Trans Canada Highway system. Mobility is an important consideration based on these classifications. The proposed lanes and shoulder widths have been designed with due consideration of design guidelines. The widths have been developed in part to provide adequate separation and space for non-motorized uses. • In the proposed design, the lanes along Black Road from McNabb Street to Second Line are reduced from the present 3.75m to 3.5m and we have included a recommendation to reduce the posted speed from 70 km/h to 60 km/h. Furthermore a double painted white line will be included to separate vehicular traffic from non-motorized uses between the lanes and shoulder from McNabb Street to Second Line where traffic volumes are particularly high. • Standard practices will be used in clearing snow from the road in the winter which may include use of the shoulder in part for snow storage. • A median island has not been considered due to the cost and property impacts. • Upgrades to street lighting is proposed along Black Road from McNabb Street to Second Line to provide adequate lighting levels for the widened road. In addition street lighting will be added along Black Road from Strathclair entrance northerly to Third Line where it is not currently provided. • The project includes links to the Hub Trail at McNabb Street, Strathclair Park and the Third Line SAH entrance and incorporates cycling provisions throughout the limits of the project. • Based on the arterial classification of these road corridors in the City's Official Plan and the Trans Canada Highway routing along Black Road from McNabb to Second Line demand management based on license plate numbers or tolls is not desirable and difficult/costly to enforce/administer.
		• Drainage to both sides of road should be considered. • With widened road, what are plans for snow removal? • A proper quality of engineering and management be applied to this project. • Design and install drainage for present and future commercial snow dumps.	• The City has recently completed some drainage improvements in this area and additional improvements including the possibility of additional cross culvert(s) will be considered during the detail design phase. Drainage in this area is however very challenging due to the very flat topography and some flooding during major storms is likely unavoidable. • Standard practices will be used in clearing snow from the road in the winter which may

			include use of the shoulder in part for snow storage. • The project will be engineered and construction oversight will be provided.
		• Years ago there was flooding and the City installed a culvert across the road. When they constructed the Black Road by-pass they removed that culvert and the flooding began again. Frequent complaints about this. • Constant flooding and something needs to be done about this. • Truck engine brakes are in constant use day and night. • There needs to be a sign directing trucks at the “S” bend.	• The City has recently completed some drainage improvements in this area and additional improvements including the possibility of additional cross culvert(s) will be considered during the detail design phase. Drainage in this area is however very challenging due to the very flat topography and some flooding during major storms is likely unavoidable. • Overhead signage improvements are proposed on the northbound approach to Second Line.
		• Do not want to see this turned into 3rd. line bypass. • The road needs to be repaved maybe a wider shoulder and that would be good. • Transports should use 2nd. line not black rd.	• Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor. • Black Road north of Second Line will be fully reconstructed with new road subbase, base and asphalt and the shoulders will be widened.
		• Black Road – Third Line to hospital entrance should be 3 lanes with center lane turn-off and pedestrian/cyclist path as is on existing Third Line, from west of hospital entrance. • Black Rd. at the baseball field entrance has a sinkhole-type condition that has sunk in the past and should be given attention. • The drainage culverts on Third Line crossing Black Road must be increased in size or numbers as they periodically overflow Third Line at Black Road. • The gully or ravine west of Birkshire is too low, dangerous and fatality waiting to happen. This was verified by a local engineering firm 20 years ago.	• There are significant property constraints along the route. The addition of a third centre turn lane from Second Line to Third Line would have undesirable property impacts and it is generally not warranted. • The “sink hole” type condition will be considered during the detail design phase. • The culvert sizes will be reviewed during the detail design phase. It is however noted that there are likely downstream restrictions (i.e. ditch sizes and very flat topography) that are resulting in flooding within the project area during major storms. • In general the undulating terrain will assist in tempering speeds. There may be some modest changes to the Third Line Road grades but there will not be significant changes as there are numerous constraints with existing driveways. The “low gully” has not been a significant problem and generally meets standards for the design speed.
		• Regarding the closed dirt road that extends from eastward from the Black Road/Second Line intersection and the ditch that parallels this closed road on the south side of Bethel’s property: o Is there any detail on the water drainage issue that runs along the dirt road in front of our building. Just looking at google maps and other maps, water from all around us as far as Millcreek Dr. all converge at the corner. There used to be creeks to manage the flow but that has all been converted to ditches and it all ends up at the corner of Black Rd. and Second Line and runs into the ditch in front of our building. Was there any indication to expand the ditch to take on more water? In the spring or during the odd big storm it is at capacity.	• A significant area does drain to the ditching as you have noted. The City has recently completed some drainage improvements to the south of this area and additional improvements including the possibility of additional cross culvert(s) will be considered during the detail design phase. Drainage in this area is however very challenging due to the very flat topography and some flooding during major storms is likely unavoidable. • Although not the focus of this current study there may be a need to consider improvements to downstream ditches to better manage storm runoff in this area in the future.
		• Agree with widening Black Rd. from McNabb to Second Line to include 2 through lanes in each direction. • Maintain a single through lane in each direction and widen the Black Rd. and Third Line shoulders and overall platform width from Second to Third Line and from Third Line to east of SAH entrance. Also, this section needs a serious upgrade of the present road structure. Cannot afford afford waste water or potable water extensions on this section.	• The Black Road and Third Line road structure (i.e subbase, base and pavement) will be completely reconstructed from Second Line northerly to Third Line and from Black Road westerly to east of the SAH entrance respectively. • No water or waste water extensions planned.
		• Agree with the proposed 4 lane roadway and encourage a width of 3 meter shoulders for potential cyclists and pedestrian traffic from McNabb to Second Line. • Agree with the recommended plans that from Second Line to Third Line should stay as 2 lanes, again we encourage a 3 meter shoulder for cycling and pedestrian traffic • Encourage that Third Line have 3 meter shoulders as well. The widening of shoulders would connect residents in the lower end of Third Line and Black Road to the Hub trail by the hospital and to schools (Tarentorus) encouraging active transportation, possibly decreasing vehicular traffic in that area. • Also suggest putting flashing lights on the Stop signs at the intersection of Old Garden River	• The proposed shoulders widths on Black Road are as follows: o McNabb Street to Second Line = 2.5m with two painted white lines to provide a buffer between motorists and mon-motorized uses. o Second Line to Third Line = preferred width of 2.0m and a minimum width of 1.5m in areas where property impacts cannot be readily addressed. A single solid white line will separate motorists from non-motorized uses. There are property constraints from Second Line to Third Line that preclude a wider width. • Third Line will be reconstructed with an urban cross-section with curbs and gutters at the edges of pavement. Although no shoulders are proposed the lane width (ie. 4.5m) is

		Rd. and Third Line to remind people that they are to stop, not yield. (Lights can be powered by solar panels as other stop signs e.g. MacDonald and Pine St). • We'd like to also see street lights on that area of roadway if there are other forms of transportation using the roads i.e. bikes and pedestrian traffic.	adequate for cyclists and motorists to share. In addition an off-road boulevard trail is proposed along the south side of the road for non-motorized uses. • We forwarded your comment re: flashing lights on stop signs to the City's PW&T department. They indicated that flashing lights are not warranted based on the accident history. • It is proposed to extend the street lighting along Black Road from Strathclair northerly to Third Line where light is currently absent.
		• Have lived at this address since 1994 before any expansions. • Over the years the increased traffic and noise has had a substantial negative impact on the quality of enjoyment to property. • We have a very large, beautiful 40 year old cedar hedge that stands approx.. 20 ft. high that performs a vital role in reducing noise and provides privacy. We do not hedge disturbed or damaged. • Concerns are that by increasing the width of Third Line, could cause negative effects: o There will be further increase in traffic flow, associated road noise and less privacy; o In the process of widening Third Line, it may destroy highly valued hedge causing damage and depreciation to property; o Decrease in public safety to all residences.	• Third Line will be reconstructed with an urban cross-section with curbs and gutters at the edges of pavement. Although no shoulders are proposed the lane width (ie. 4.5m) is adequate for cyclists and motorists to share. In addition an off-road boulevard trail is proposed along the south side of the road for non-motorized uses. These changes will enhance safety within the corridor particularly for non-motorized uses. • Every effort will be made to preserve mature trees including the hedge that you have referenced. An urban cross-section is proposed in large part to reduve the overall width of the cross-section. An urban cross-section requires less width relative to a rural cross-section as the storm drainage is accommodated in storm sewers beneath the road rather than in ditches adjacent to the road. The potential impact to trees cannot be confirmed until the detail design phase when a detailed topographic survey is undertaken. We will be in touch with you at that time. • Although traffic volumes are projected to increase along Third Line which is designated as an arterial road corridor in the City's Official Plan there are plans to incorporate overhead signage on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor.
		• Better and more visible signage is required along Black Rd. to direct northbound transport trucks to turn left onto Second Line, avoiding Third Line. • Black Rd. should have a left turn lane at the parking lot entrances at Bethel Bible Chapel and Strathclair Field. • City bus routes should be instituted along Black Rd. to Third Line. • Turn lane from McNabb onto northbound Black Rd. should be extended along Black Rd. to better facilitate traffic merging. • Turn lane from Second Line onto southbound Black Rd. should be extended along Black Rd. to better facilitate traffic merging. • The alignment of Black Rd.'s lanes at Second Line has to be improved to allow a smooth flow of traffic.	• Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor. • A left turn lane is proposed to access the Strathclair Field. • We will forward your comment re: City transit routes to the City's PW&T department for their consideration. • In the proposed design the acceleration lane for the westbound to northbound right turn movement is lost as there will be two northbound lanes incorporated through the intersection. Right turn vehicles will be required to yield and in many cases will likely have to stop before entering the northbound traffic stream. This design was adopted in large part due to the ingress and egress challenges faced by property owners immediately north of the intersection. • The channelized right turn from eastbound Second Line to southbound Black Road will no longer be a merge with yield control. Under the proposed design the channelization lane continues as a through southbound lane which eliminates a lane change/merge. • Lane alignments have been considered at the Black Road/Second Line intersection.
		• Concerned about well being affected. • Would prefer underground water and catch basins for storm sewers.	• An urban cross-section with underground storm sewers is proposed along Third Line but not Black Road. The Black Road topography is too flat to accommodate storm sewers.
		• How much is set back going to be because our house is very close to the road. • Ditches and draining. • Turning lane for the entrance of the ball field entrance on Black Road.	• We are anticipating a need to acquire approximately 3m (10 ft) across the front of the property to accommodate the proposed design. This will however be confirmed during the detail design phase following the completion of a topographic survey? • Although drainage improvements will be considered during the detail design phase there are drainage challenges in his area (i.e. flat topography and ditch capacity). There may be downstream restrictions that could result in flooding in this area during major storm events. • A left turn lane is proposed on the south approach to the Strathclair entrance.
		• Drainage issues on Black Road and Third Line.	• Although drainage improvements will be considered during the detail design phase

		• Pedestrian traffic solutions for safety of families (connection to Hub Trail) • Flow of traffic for safety, corner of Third Line and Black Rd. – witnessed several accidents. • Property decrease due to widening of road. • Covered ditches and sidewalks on Black Rd. and Third Line.	there are drainage challenges in his area (i.e. flat topography and ditch capacity). There may be downstream restrictions that could result in flooding in this area during major storm events. • An off-road boulevard trail is proposed along the south side of Third Line from Black Road to the SAH entrance. • The reports accident history at Black Road/Third Line was reviewed and it is not significant. In addition the intersection operations were video taped over an 8 hour period and it appears to operate effectively. A dedicated left turn lane is proposed on the north and south approaches to the intersection. • No property acquisition is anticipated at this location. • Due to property and grade restrictions along Black Road pedestrian will be accommodated on a widened shoulder and storm sewers cannot be installed due to the very flat topography and fixed outlets.
		• Continue to look at ways to widen the shoulder on Third Line from Black Rd. to Hospital. • Good link to Hub Trail and safety for kids and pedestrians. • Concern about loss of some large evergreen trees in front yard – currently good noise and privacy barrier. • Need more police enforcement – speed of large trucks, well over 50 km/hr., and after hour use of transports and large trucks. • Trucks cause house vibration.	• Third Line will be reconstructed with an urban cross-section with curbs and gutters at the edges of pavement. Although no shoulders are proposed the lane width (ie. 4.5m) is adequate for cyclists and motorists to share. In addition an off-road boulevard trail is proposed along the south side of the road for non-motorized uses which will connect to the Hub Trail at the SAG entrance. These changes will enhance safety within the corridor particularly for non-motorized uses. • Every effort will be made to preserve mature trees including the evergreen trees that you have referenced. An urban cross-section is proposed in large part to reduce the overall width of the cross-section. An urban cross-section requires less width relative to a rural cross-section as the storm drainage is accommodated in storm sewers beneath the road rather than in ditches adjacent to the road. The potential impact to trees cannot be confirmed until the detail design phase when a detailed topographic survey is undertaken. We will be in touch with you at that time. • We will forward your comments regarding enforcement to Police Services. • Third Line will be completely reconstructed including new road subbase, base and asphalt. The enhanced road structure and smoother riding surfaces should reduce the vibration.
		• Preference would be for the City to purchase the required land to have a stand alone non-motorized trail (Hub Trail). • Has the potential to be a main cycling route. • If preferred option of cycling on shoulders is selected; strongly recommend cycling signs posted indicating cyclists use the shoulders, and that City bylaw is amended. • Strathclair is very busy and even if stand alone trail could only be extended to end of park, this is preferred alternative.	• Third Line includes an off-road non-motorized boulevard trail. The property restrictions along Black Road from Second Line to Third Line preclude an off-road trail. An off-road trail has however been identified in the City's Trails Master Plan extending along the foot of the hill from the Northern Ave. road allowance northerly to and through Strathclair Field to Old Garden River Road. Although not part of the current project this may be pursued by the City in the future. • Provisions for cyclists has been included throughout the project limits either on a paved shoulder, shared travel/bicycle lane or an off-road Hib Trail or boulevard trail. • Will review inclusion of cycling signage and by-law amendment with the City during detail design. • Trail may traverse Strathclair Park in the future as noted above.
		• A separate path to Strathclair park from the east end, one which would allow for a level path rather than climb up Finn Hill.	• An off-road trail has been identified in the City's Trails Master Plan extending along the foot of the hill from the Northern Ave. road allowance northerly to and through Strathclair Field to Old Garden River Road. Although not part of the current project this may be pursued by the City in the future.
		• This in the long term is an excellent improvement to our road system and Hwy. 17 transport route. • Since Black Rd. was originally all swamp/lowlands and black muck, there is inadequate proper drainage through to Root River. With the sudden 1:100 and 1:25 year storms causing flooding, larger more culverts and improved ditching to Root river would certainly help alleviate flooding, in garage.	• Although drainage improvements will be considered during the detail design phase there are drainage challenges in his area (i.e. flat topography and ditch capacity). There may be downstream restrictions that could result in flooding in this area during major storm events. • Although not the focus of this current study there may be a need to consider improvements to downstream ditches to better manage storm runoff in this area in the future.

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Crossing Black Rd. at Third Line East, very dangerous. Cars coming from 3 directions.
Roads are deteriorating due to heavy trucks and transports using Third Line as a truck route. Is there any way the City could stop the trucks from using Third Line?
There have been a number of accidents at the 4 way stop on OGRR and Third Line, as well as Black Rd. and Third Line.

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Given that Black Road has free flow traffic with new control at Third Line care must be taken in crossing the road at this location
Third Line will be fully reconstructed including new subbase, base and asphalt. The pavement structure design will be developed to accommodate the projected traffic volumes and types.
Third Line will continue to be a Class B truck route.
It is anticipated that accidents will occur at intersections and the accident history at the two intersections noted is not outside of expectations. The implementation of the four way stop at Third Line /OGRR has reduced the accident frequency at this location.

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Agrees with Alternative 2 – Black Road, Third Line to Hospital, and Alternative 3 for Black Rd., Second Line to McNabb.
There is a need for proper shoulders for bike and pedestrian traffic.
There is a real need to enforce the truck route times.
Do not see the need to run water lines as well.

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Adequate shoulder widths are proposed along Black Road from McNabb to Third Line to accommodate cyclists and other non-motorized uses in accordance with design guidelines.
We will forward to City Police Services your comment re: enforcement of Class B truck route provisions.
No extension of municipal services is planned.

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Third Line traffic considerably increased – transports and dump trucks.
Need a sidewalk from Hub Trail going east - too dangerous for local residents.
Need to address the fact that long-haul trucks are now using Black Rd./Third Line as a bypass.
Need to make Second Line/Great Northern Road a mandatory truck route.

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We have presented below some information regarding existing and projected future traffic volumes. The values in the table represent average total daily traffic in both directions. As noted in the table the Black Road volumes between Second Line and Third Line are projected to grow by 50% relative to 2012 volumes over a significant time period.

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An off-road boulevard trail is proposed along the south side of Third Line from the SAH entrance easterly to Black Road.
Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor.
Second Line and Great Northern Road are designated Class A (main) truck routes.

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Some very good road/traffic ideas.
Proper sized bike lanes are needed of Black Road (north of Second Line). Very dangerous to cycle there with potholes and narrow spaces.
Black Road and Third Line intersection is getting very busy. A turning lane and traffic light would be needed.
Third Line needs proper bike lanes for safety issues.
Paint lines in spring.
Trucks need signs to know where to turn onto Second Line.

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Adequate shoulder widths are proposed along Black Road from McNabb to Third Line to accommodate cyclists and other non-motorized uses in accordance with design guidelines.
A left turn lane is proposed on the north and south approaches to the Black Road/Third Line intersection but based on recently completed signal warrant calculations signals are not warranted. The intersection will continue to be monitored in the future.
Third Line will include shared travel/bicycle lanes and an off-road boulevard trail for non-motorized uses.
Regular line painting will be undertaken as needed.
Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor.

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Consider as an option having Second Line to Third Line along Black Road corridor widened to 3 lanes.
Is City bus service being considered?
Have dramatic large illuminated signage for transports/trucks approaching Second Line turning left at Second Line.

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There are significant property constraints along the route. The addition of a centre turn lane from Second Line to Third Line would have undesirable property impacts and it is generally not warranted.
We will review with the City Transit Division their plans for transit services in this area.
Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition

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			the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor.
		• Need for better signage for trucks approaching Second Line. Too many trucks are missing the turn at Second Line and using Third Line. Some trucks turn into Bethel Bible Chapel and drive around the property damaging the lawn areas while trying to get back to Second Line. • The single lane of Hwy. 17 traffic on the intersection of Black Road and McNabb is totally inadequate. Two lanes should be available to move traffic north on Black Road.	• Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor. • Two northbound lanes through the McNabb/Black Road intersection are proposed.
		• Like the idea of 3 lanes from Second Line to Third Line – might be the same width as 2 lanes and paved shoulder. • Third Line must have wider walking shoulders. • Only one through lane on Black Rd. to accommodate Trans Canada Hwy. traffic – going north at McNabb – this should be fixed. • Overhead signage needed at Second Line to direct transports to turn left onto Second Line.	• There are significant property constraints along the route. The addition of a centre turn lane from Second Line to Third Line would have undesirable property impacts and it is generally not warranted. The shoulders are important for non-motorized uses (eg. cyclists) and other functions including snow storage. • Third Line will include shared travel/bicycle lanes and an off-road boulevard trail for non-motorized uses. • Two northbound lanes through the McNabb/Black Road intersection are proposed. • Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor.
		• Insist on having a center left turn lane for getting in or out of my driveway. Very dangerous now and don't think 4 lanes would be safer. Should be 5 lanes, 2 in each direction and centre left turn lane.	• There is considerable expense in adding a fifth lane. The proposed design includes supplementary turn lanes at locations where significant left turns are occurring or forecasted. It is important to signal well in advance which will allow motorists to use the other though lane. • It has been recommended, in this report, that the City consider acquiring adequate property to accommodate a potential future continuous left turn lane.
		• Petro Pass would like to have an entrance on McNabb, this would stop the traffic jam from trucks coming from the west. • Petro Pass would give access to the back end of the property for fill.	• A McNabb Street entrance should be pursued directly with the City. • Use of the back portion of the property for fill should be addressed with the successful contractor.
		The subject property is located in an area under the jurisdiction of the Conservation Authority with regard to O.Reg. 176/06 for Development, Interference with Wetlands and Alterations to Shoreline and Watercourses. A permit will be required for any development.	• A permit will be pursued during the detail design phase.
		Is any consideration being given to upgrade the subbase of the road? The water table in the north end of Black Rd. is very high, my well being only 40-50 feet in depth and there are several artesian wells in the area as well. I am sure when the road was first engineered, no consideration was given to the amount of heavy truck traffic that it could possibly see in the future. My house shakes and rattles with the passing of every truck, not to mention the non-stop engine brake usage and non-compliance of the Class-B truck route schedule.	• Third Line will be fully reconstructed including new subbase, base and asphalt. The pavement structure design will be developed to accommodate the projected traffic volumes and types. We anticipate the new pavement structure coupled with the smoother surface will reduce the "shaking".
		From December, 2014: Third Line is currently a Class B truck route (as per Larry Girardi) and while that may have made sense some years ago, the city has changed and it's time to recognize that. Did you know that "long haul trucks" now use Black Road / Third Line as a city by-pass? I can't blame them. Why turn left at Second Line and then deal with 6 or 7 traffic lights and the traffic on Great Northern Road. I can't believe that the city really wants that to continue. **From July, 2013**: We knew that the relocation of the hospital and the opening of Third Line East connecting Great Northern Road and Peoples Road would greatly increase traffic on Third Line, but we were not prepared to see fully loaded 53' long transport trucks on Third Line East. Very dangerous situation. We used to walk regularly along Third Line, but not anymore. No sidewalk and too scary. As well, we've seen numerous young people on bicycles trying to connect to the Hub Trail by riding along Third Line. One young family was trying to come up the steep hill and swerved a bit into the lane and got quite a horn blast from a trucker. Third Line East from Old Garden River Road to Great Northern Road needs to be reclassified to "not" allow commercial truck traffic.	• Third Line is identified as an arterial roadway in the City's Official Plan and is considered an important transportation corridor. The route is designated as a Class B truck route and is considered an important supplementary truck route that the City wishes to retain. • Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor. • The proposed design for Third Line incorporates shared travel/cycling lanes together with an off-road boulevard trail on the south side of the roadway which will extend from Black Road westerly to the Hub Trail at the SAH entrance.
		This area is definitely in need of upgrading. Third Line is extremely unsafe for pedestrian and	• The proposed design for Third Line incorporates shared travel/cycling lanes together

		bicycle traffic with the increased vehicle and truck use. I do think this section of roadway should be given priority in future improvement projects.	with an off-road boulevard trail on the south side of the roadway which will extend from Black Road westerly to the Hub Trail at the SAH entrance. • The phasing of the project will be determined by Council and the availability of funding.
		Located at 686 Black Rd, the chapel owns frontage along Black Road on the other side from Strathclair Fields. The chapel is very pleased that the study area has been expanded to include the McNabb/Black Road and 2nd Line/Black Road intersections and the road between them. We have seen too many near miss accidents as cars merge from 2nd Line south onto Black Road and from McNabb north onto Black Road. These areas are posted as yield points but people treat them as merge lanes. This is exacerbated by the heavy volume of out-of-town cars and heavy transports using these intersections. Most people we have talked to see 4-laning the McNabb to 2-Line section as obvious in the immediate short term and the 2nd Line to 3rd line section as someday in the not too distant future. When this is done, we would like to see accommodation for cyclists and hikers provided as well, especially on the east side of Black Rd. At times there are heavy volumes of traffic turning onto Black Road from the Strathclair Fields Black Rd. parking area and from Bethel's laneway. Most of this traffic turns southward. Widening black road to the equivalent of four lanes to the Strathclair parking area could be considered for when the McNabb to 2nd Line section is 4-laned.	• In the proposed design the acceleration lane for the westbound to northbound right turn movement is lost as there will be two northbound lanes incorporated through the intersection. Right turn vehicles will be required to yield and in many cases will likely have to stop before entering the northbound traffic stream. This design was adopted in large part due to the ingress and egress challenges faced by property owners immediately north of the intersection. • The channelized right turn from eastbound Second Line to southbound Black Road will no longer be a merge with yield control. Under the proposed design the channelization lane continues as a through southbound lane which eliminates a lane change/merge. • Provisions for cyclists has been included throughout the project limits. • A left turn lane has been provided on Black Road on the south approach to the Strathclair entrance.
		1. Presently the roadways are 2 lanes with centre line, 2. Deep ditches app. 1 meter on both sides, 3. Black Road & Third Line is a 90° turn with 1meter plus ditches all sides, 4. Third Line East has a very steep up-grade from Black Road to Birkshire Drive, similar as Lake Street, Pine Street, Pim Street and Bruce Street, if not higher, 5. The gully, or lowest point on 3rd Line East, west of Birkshire Drive was classified too low by a local Engineering firm 20 years ago and was recommended to be raised if this is not corrected, the Elliott Lake Syndrome may take effect some day. 6. Black Road near the baseball field parking lot has a sinkhole area that was repaired twice as far as I remember. If this is not factored into the tender call, it could cause a cost over run that could be greater than the project. This area is also subject to flooding every year. 7. I am a resident and a taxpayer at 960 Third Line East and have lived here for 38 years since the opening of the new hospital and the Third Line East expansion to Peoples Road, traffic has increased multiple times over, and is the fastest way to get around the city we have seen more emergency vehicles, construction vehicles, and transports here now than the other 38 years altogether. 8. This study should be based on the needs and safety of all the people of this city and not just an advantaged few. It must consider sewer lines, water lines, and development potentials for a waste area of the city. If ever the extension of Northern Avenue from Pine Street to Black Road is done service requirements might double or more. 9. The intersection of 3rd line E and Foxborough, Dr, has a culvert from the north side to the Centre of Foxborough Dr. That the contractor and Developer had no information of, to check the records may avoid extras.	• In general the undulating terrain will assist in tempering speeds. There may be some modest changes to the Third Line Road grades but there will not be significant changes as there are numerous constraints with existing driveways. The "low gully" has not been a significant problem and generally meets standards for the design speed. • The "sink hole" type condition will be considered during the detail design phase. • Although drainage improvements will be considered during the detail design phase there are drainage challenges in his area (i.e. flat topography and ditch capacity). There may be downstream restrictions that could result in flooding in the prpject area during major storm events. • Although not the focus of this current study there may be a need to consider improvements to downstream ditches to better manage storm runoff in this area in the future. • Overhead signage improvements are proposed on the northbound approach to Second Line to direct most trucks and Provincial Highway traffic along Second Line. In addition the four lane roadways along Black Road south of Second Line and along Second Line will assist in delineating this routing as the main traffic corridor. • The project design has been developed with consideration of safe travel using multiple modes of travel. • No servicing extensions are proposed at this time. • The culvert noted a Foxborough Drive will be reviewed during the detail design phase.
		Owns a property on Black Road south of Second Line. He questioned the road structure and noted that with heavy truck traffic, there is significant shaking of the buildings. He questioned whether the roadway would be widened to four lanes. He questioned whether the sanitary sewer would be extended along this section of roadway. He questioned whether storm sewers would be installed. There have been 2, 1:100 year events and a couple of 1:25 year storm events in the recent past which has resulted in significant flooding of his property. In some cases, the water has been several feet deep within his garage structure which has caused damage to his equipment and airplane parts.	• The subject section of roadway was upgraded in 2000/2001 and the road structure was constructed with a significant subbase and base and it is unlikely that further upgrades would be undertaken and it is unlikely that further upgrades would have any significant impact on the shaking. • It is proposed to widen Black Road from McNabb Street to Second Line to four lanes (two in each direction). • The sanitary sewer already extends southerly from Second Line past the subject property and through to the S-curve. No servicing extensions are proposed under this project. • Storm drainage will continue to be accommodated in open ditches along Black Road. It is not possible to install storm sewers based on the very flat topography and fixed outlets. • Although drainage improvements will be considered during the detail design phase there are drainage challenges in his area (i.e. flat topography and ditch capacity). There may be downstream restrictions that could result in flooding in the project area during major storm events. • Although not the focus of this current study there may be a need to consider

			improvements to downstream ditches to better manage storm runoff in this area in the future.
		He resides on Black Road north of McNabb Street and called to convey the drainage issues that he has with his property and has been working with Susan Hamilton Beach and Carl Rumiel regarding drainage issues and they met with him on site in the recent past. Dan eluded to a culvert that was removed back in 2001 as part of the upgrading project. The culvert was apparently located around 525 Black Road and was oriented in a northeast direction. He believes drainage problems on his property stem from the removal of this culvert together with the adjacent property owners building up the elevation of their properties. When the flood plain to the east of these properties get inundated with water, the water backs up into his property and causes significant problems.	• The City has recently completed some drainage improvements in this area and additional improvements including the possibility of additional cross culvert(s) will be considered during the detail design phase. Drainage in this area is however very challenging due to the very flat topography and some flooding during major storms is likely unavoidable. • Although not the focus of this current study there may be a need to consider improvements to downstream ditches to better manage storm runoff in this area in the future.
		Union Gas has natural gas pipeline in the proposed work area, therefore continue to forward correspondence to him.	Final preliminary plans were forwarded and discussion will continue through the detail design phase.
Comments/Issues from Notice of Commencement			
		Mr Coccimiglio has expressed a keen interest in this subject matter. He would very much like to keep abreast of the entire proceedings and has requested that hard copies all current and future project information pertaining to the subject above, be forwarded directly to him for his review. Of prime interest are the complete study findings and the corresponding plan(s) of action, if any, which would pertain directly to, and/or in the near vicinity of, all properties currently held by Mr Coccimiglio, specifically the North-east corner of Black Road and Third Line East. If prior and/or present e-copies of reports exist and are available for public review, I too would be very much interested in reviewing	Included on the project mailing list and will be kept apprised of key project milestones.
		"This study is being undertaken to look at alternative solutions to address potential impacts and possible improvements in the Black Road and Third Line corridors from Second Line to the SAH Entrance." Have any potential impacts been identified? .If so, what are they? What possible improvements is the city considering for this corridor? Why, when countless roads in the city are dilapidated, is the city considering improving what already is a fairly good quality road? Wouldn't funding be better spent on improving some other roadways in more urgent need of repairs? My experience in that corridor has been very good. I often drive, cycle and walk the corridor, and, despite the move of the hospital, see very little traffic in the area. I think this would be a prime opportunity to discourage additional private vehicle use within the corridor while at the same time expand the trail network (eg. Hub Trail to Hiawatha Highland areas), and enhance public transport in the corridor. Would the city consider reducing corridor speed limits, designing a traffic calming plan for the area, and looking for other opportunities this corridor offers that might enable improved access for citizens while reducing mobility costs? Does an origin-destination study exist for the area? On the other hand, would a nice smooth wide new road not function to encourage more traffic in the corridor? How much of the capacity shortfall on GNR be resolved by encouraging a shift of trips to the Black Road corridor, thereby saving taxpayers from the costs of extending Sackville? Would it not be possible to identify ways to save taxpayers money, improve other more critical municipal infrastructure and simultaneously give residents options to, and relief from, the ever rising gas prices?	Sault Area Hospital is a significant generator of traffic. In addition to the hospital there are several other developments that have been initiated or are in the planning stages that will also generate trips to and from this area. The Class EA that we have initiated on behalf of the City is a Planning Study. Its focus is to plan for the future based on what we know today and what we anticipate may occur in the future. There have been a couple of studies that have been prepared to date including the Sault Area Hospital Traffic Impact Study (2005) and the Third Line Upgrading Traffic Component (2006). These reports indicate that although traffic volumes may increase significantly over time along Black Road and Third Line a basic two-lane roadway together with possible intersection improvements is adequate along these corridors based on the traffic forecasts included in the analysis. The current study will focus on several forms of mobility including vehicular travel, pedestrian travel and cyclists. The speculated growth in trips to and from this area will result from new residential subdivisions, and new or expanded institutional and commercial uses. With these changes it is prudent for the City to ensure the various modes of travel can be accommodated safely. This includes the safe and efficient passage of emergency service vehicles. We will also compare actual traffic volumes pre and post hospital opening and pre and post Third Line opening to through traffic west of Great Northern Road. The alternatives that have been identified to date include do nothing, possible widening of the road platform to better accommodate motorists, pedestrians and cyclists safely, and intersection improvements. Alternatives will be included that provide enhanced cycling opportunities enroute to Hiawatha Highlands. Other alternatives may be considered as the study progresses. Speed limits and traffic calming may be considered as appropriate. The timing for any improvements that may be recommended through this study is currently unknown and will be subject to the City's budgeting process and capital works priorities. The road will very likely suffer further deterioration prior to implementing any improvements.
		I think the road just needs to be re-paved to stop the dump trucks from shaking our house like they do now, if you widen the road even more traffic will go this way. This could become the	The proposed design retains the two lane configuration on Black Road from Second Line to Third Line and along Third Line from Black Road to the SAH. These sections of road will be

		black road / third line bypass instead of second line bypass, traffic already comes this way to avoid second line we do not need more. There was a difference in traffic when the hospital opened but only at shift change , so lets keep it that way.	fully reconstructed with new subbase, base and asphalt. The renewed road structure including a smoother riding surface should reduce the “shaking”.
		Don Elliott spoke with Kathy Lemieux about the EA. Her concerns are the following: speeding on Black, queuing of vehicles at the four-way stop on OGRR, hills too steep on Third Line, cars parking on Black Road for baseball, ditches too deep on Black and full of water in spring etc. She wonders if the wider platform will effect her property. She doesn't want sewer or water. EB lefts on Second Line at Black are difficult. She also made the point that the construction traffic to the solar projects may have skewed recent traffic counts falsely upwards.	• The issue of speeding on Black Road will be forwarded to City Police Services for their attention. • The four way stop at Third Line /OGRR were installed in 2003 to address a significant accident history at this location. Although it results in queuing it has been effective in reducing accidents. • There may be modest changes to the Third Line Road grade but significant changes are not possible due to the potential impacts to driveway grades. • Parking is prohibited along Black Road. • Deep ditches cannot be avoided because of the very flat topography along Black Road and the importance of draining the road structure including base and subbase. The flat ditches also result in significant level in the ditches in the spring. • We are not anticipating any property acquisition on the east side in this area. Every effort will be made to reserve mature trees. The potential impact to trees cannot be confirmed until the detail design phase when a detailed topographic survey is undertaken. We will be in touch with you at that time. • Water and sanitary sewer is not proposed for this area. • We forwarded your comment re: the Black Rd/Second Line traffic signal to PW&T and they noted that the maximum wait time is 1 minute 30 seconds. There may be problems with the vehicle detection loops on the west approach which will be investigated further as part of the upgrading project.
		In determining your duty to consult, you may wish to contact the First Nations in the vicinity of your area of interest to advise them of your intentions. To do this you may: find the Reserves in your area of interest by consulting a map of the region such as the Province of Ontario Ministry of Aboriginal Affairs online map at http://www.ainc-inac.gc.ca/ai/scr/on/rp/mcarte/mcarte-eng.asp . Please rest assured that it is the policy of the Government of Canada as expressed in The Specific Claims Policy and Process Guide that: “in any settlement of specific native claims the government will take third party interests into account. As a general rule, the government will not accept any settlement which will lead to third parties being dispossessed.” We can only speak directly to claims filed under the Specific Claims Policy in the Province of Ontario. We cannot make any comments regarding potential or future claims, or claims filed under other departmental policies.	First Nations communities in the area will be notified at key points in the study process.
		My wife is a registered nurse at Sault Area Hospital. As east end residents (Anna Street) she travels to work by way of Black Road and Third Line. It is the shortest route and the traffic is only a fraction of what she would have to contend with if she were to access the hospital via Great Northern Road. As the majority of nurses work 12 hours shifts, they are either arriving at the hospital or heading home at 7:00 am. Despite the fact that our city works crews do an exemplary job of snow removal in the winter months – my wife has noted that many times neither Third line or the stretch of Black Road from Second to Third Line has been ploughed at that time of day. I imagine that this particular stretch of Black Road must be difficult to keep clear due to the drifting from the soccer field. I am sure that the new hospital has dramatically increased the traffic flow on the two above mentioned roads. I can only imagine that neither stretch of road was ever intended to carry the new volume of cars. My wife is not alone in this situation, a good percentage of her co-workers are based in the East end of the city. Hopefully developments in the near future will improve both stretches of road to provide well ploughed, well lit, wide laned access to our wonderful new hospital. I imagine that the ambulance drivers would benefit from these improvements as well.	Comments related to snow removal were forwarded to the City’s Public Works and Transportation Department. The preferred preliminary design incorporates widened shoulders on Black Road from Second Line to Third Line, an urban cross-section with 4.5m lanes along Third Line and the addition of street lighting from the Strathclair entrance to Third Line along Black Road where it is not presently illuminated.
		We believe that the City did not plan properly when Third Line was expanded only up to the entrance of the hospital. Traffic has increased substantially and with only a few feet of gravel on either side of the road from the entrance to Old Garden River Rd., it has become dangerous to walk on that road. While we appreciate the improvements made up to the entrance point, it was not carried forward for the entire road. The amount of traffic and speed of traffic should warrant	• The proposed design for Third Line incorporates shared travel/cycling lanes together with an off-road boulevard trail on the south side of the roadway which will extend from Black Road westerly to the Hub Trail at the SAH entrance.

		a safe walk place. In addition, given that SAH has gone smoke free on their property, you now have people parking their car on the side of the road, smoking in them. This is not the answer to their problem and obviously the police are not able to patrol 24-7.	
		Would hope that the east-bound exit from Second Line onto Black Road would be improved for East-bound traffic. Visibility coming onto that ramp is poor and it is short with a pretty acute turning radius as evidenced by prior transport tips. I would like this exit from Second line totally re-vamped. Traffic on Black Road has increased due to relocation of SAH and other businesses on Great Northern Road. I attended consultative meetings about possible future scenarios to connect the bypass, Black Road and Second line. IMO, plans were inadequate, with the use of a service road to the east of Black Road as an access point to the proposed new bypass. There is too much traffic on Black Road for this type of secondary access to a 4-lane highway bypass. Please make allowances in your present plans for a possible adequate hook up to new Hwy 17 bypass . My suggestion was a clover-leaf type access , but it was felt that the location of Strathclair sport field would prevent this. A Black Road bridge over a new bypass would not infringe on Strathclair and would be similar to the Reserve's 2 overpasses. I feel the amount of traffic on Black Road would warrant this. A bike path along Black Road or wide paved shoulders would be nice for bikers, depending on how much this route is widened. Many bikers travel to Hiawatha Park. The present paved shoulders make this relatively safe. Personally, I think Black Road should be a 4-lane street from McNabb St to at least Second Line. If 4-laning were extended to 3rd line, there would be a bottleneck at the intersection of Black Rd and 3rd Line. This might necessitate the 4-laning or 3-laning of 3rd Line as well. The intersection of Black Rd and 3rd Line would definitely need revamping. The 4-way stop sign at Old Garden River Road works well with the present 2-lane system, but if traffic continues to increase, 3rd Line may need to be made the through street with stop on Old Garden River Rd. I don't think there is enough traffic on Old Garden River rd to warrant directional stop signals	• There are no plans to modify the existing eastbound to southbound ramp at Second Line/Black Road. Street lighting upgrades have been completed on the eastbound approach and will also be undertaken on the south side. Increasing the radius would encourage higher speeds which is not desirable particularly as there are a number of homes immediately south of this ramp where ingress and egress from the driveways would become even more difficult/ • In 2013 the MTO completed a traffic study (ie. origin/destination study) within Sault Ste. Marie. Based on the results of that study the MTO has decided to defer route planning and environmental assessment studies for a new Highway 17 route that was originally intended to connect to Second Line at Black Road. MTO also indicated that they will complete similar traffic studies in approximately 10 years' time to reassess the need for a new Highway 17 route. • As a result of MTO's decision, provincial highway traffic will continue to be routed through the City from Highway 17 East along Trunk Road, Black Road, Second Line and Great Northern Road to Highway 17 North. With the exception of Black Road from McNabb Street to Second Line the entire route, through the City, includes two through lanes in each direction. • Changes can be made to the Black Rd/Second Line intersection in the future should the plans for a by-pass materialize. • The proposed project will result in widening Black Road from McNabb Street to Second Line from two lanes to four lanes and Black Road from Second Line to Third Line and Third Line from Black Road to Sault Area Hospital will remain two lanes but the road platform width will be widened to improve corridor safety. • The shoulders along Black Road will be of adequate width to accommodate cyclists. • The existing intersection controls will remain as there are for the time being at Third Line/Black Road and Third Line/Old Garden River Road but they will continue to be monitored in the future.
		1. Are there plans to widen Third Line between the hospital access and Old Garden River Road/Black Road? 2. Are there plans to fill in the ravine (dip in the road) near Birkshire? 3. Are sidewalks planned?	1. Traffic counts are available for these road corridors prior to the hospital opening and we are collecting counts after the hospital opening. We will also be collecting counts once Third Line opens as a through fare between Great Northern Road and Peoples Road. A couple of studies have also been completed which estimate the future traffic volumes within these corridors based on anticipated future development in this area. Based on our preliminary analysis, a basic two lane roadway should be adequate to address current and future traffic volumes along Black Road north of Second Line and along Third Line from the Black Road to the Sault Area Hospital entrance. We will however be looking at widening the platform width to allow emergency service vehicles to pass two vehicles stopped side by side and we will also address possible intersection improvements. 2. We will be looking at possible improvements to the vertical alignment within this corridor however we will also be considering possible impacts including costs, property acquisition, natural environmental impacts, etc. 3. Attached for your consideration is the Problem/Opportunity statement that has been developed for this project. This statement may change as the project proceeds and input is received. You will note that consideration of pedestrians and cyclists is an important priority. We plan to look at alternative ways and means of accommodating pedestrians and cyclists. These alternatives will include on-road (ie. wider shoulders) and off-road facilities (eg. sidewalk/trail). There are however a number of constraints that will have to be considered in our evaluation including available right-of-way width, natural and social environmental impacts, costs, etc. Once we have identified all relevant options and completed a preliminary evaluation we will conduct an open house to present our preliminary findings and to solicit input from the public at large on the options and our evaluation. The Public Open House will be advertised in the local newspapers and you will receive notification by mail.

		Concerned about 20 ft. high privacy hedge.	It appears the existing privacy hedge may be located within the City owned road allowance. The preferred preliminary design along Third Line includes an urban cross-section in part because it requires less overall width while allowing the inclusion of an off-road paved trail for non-motorized uses. There may also be need for grade changes in this area. Every effort will be made to retain the existing hedge however in the event the construction may adversely impact the hedge the City will considerer replacing the hedge.