

Appendix 1

Departmental & Agency Comments

File: 701-6/17-9 & 751-6/17-24

RE: Application for Official Plan Amendment and Rezoning – 1916596 Ontario Ltd
Part of PINs 73561-0282 & 73561-0264, Part 6 and Part of Part 11, Plan
53R-19391, Lots 9 & 10, Concession 4, Township of Neelon, Kingsway,
Sudbury

Nickel District Conservation Authority

No concerns or objection.

Building Services

No objection. Building Services has the following comments for the applicant's information:

1. The site is subject to site plan agreement.
2. The site plan sketch provided is not fully dimensioned. Parking spaces and driving aisles are not clearly shown.
3. An interior side yard variance is not required however a variance for rear yard setback is required as it is established that the front yard is along the Kingsway, Municipal Road #55.
4. The applicant is to ensure minimum Ontario Building Code requirements are met for the bridge linking the proposed place of amusement (casino) and the proposed recreation and community centre.
5. The applicant should also be aware that further variances may be required.
6. The portion of Festival Square on the casino property is not a permitted use as a "Place of Amusement" and only permits indoor facilities. Parking will also need to be addressed for this area.

Development Engineering

No objection. The subject property is within the boundaries of the draft approved subdivision known as the Jack Nicholas Business & Innovation Park. The subject property is not presently serviced with municipal water, sanitary sewer, or a storm sewer system. Through the development of the draft approved subdivision, municipal infrastructure will become available.

Municipal water and sanitary sewer has been provided within the Kingsway road allowance through a Section 391 Charge of the Municipal Act, 2001. As such, the owner/applicant will be required to pay \$16.49/square meter of development for the place of amusement and hotel towards the Kingsway Sewer and Water Project provided that a building permit is issued prior to December 31, 2022. Higher rates apply starting in 2023 to 2027. This Section 391 charge offsets the cost of construction relating to the existing infrastructure on the Kingsway and the cost of upgrading the Levesque sewage lift station. The upgrades to the Levesque sewage lift station are required to support this development.

The owner/applicant's agent provided the City with peak sewage flow calculations to determine what, if any, downstream sewage improvements are required as a direct result of the development of these lands as proposed along with the development of the Arena lands and the balance of the lands within the draft approved subdivision known as the Jack Nicholas Business & Innovation Park. The sewage flow from this application was assumed to enter the existing City system at the intersection of Street A and the Kingsway. The total peak sewage flow calculated by the owner/applicant's agent J. L. Richards for the entire development was 97.9 litres/second. In 2011 the City undertook improvements to Levesque and Rheal Streets including upgrades to water and sanitary sewers. The sanitary sewers were upgraded from 400 mm to a combination of 450 mm and 500 mm mains.

The City has reviewed the impact of the estimated 97.9 l/s sanitary sewer flows coming from the new development on Kingsway on the downstream capacity of the sanitary sewer system and based on hydraulic modeling assessment the sanitary sewer system has enough capacity to handle this additional new flows with no additional upgrades to the linear collection system. The Levesque Lift station, as identified in section 391 previously, will need upgrades first to remedy existing capacity deficiencies in terms of peak flows, but also to provide some needed equipment upgrades. The upgrades will also account for new flows coming from the new development. The City is in the process of issuing a Request For Proposal (RFP) for the Levesque Lift Station upgrades and the City is expecting to complete detailed design/Schedule B Environmental Assessment (EA) by the end of year 2018 with construction complete by the end of year 2019.

The municipal water supply for this site should be sufficient provided that the watermain within the Jack Nicholas Business & Innovation Park is sized sufficiently by the subdivision developer's engineer through the subdivision approval process. This site will connect to municipal water within the Street A road allowance once the subdivision has been constructed. Street A connects to an existing 300 mm diameter main on the north side of the Kingsway that was provided as part of the Kingsway Sewer and Water Project and Street C connects to a 200 mm diameter stub provided for this development at the Kingsway/Levesque Street intersection that was also provided as part of the Kingsway Sewer and Water Project.

It is our understanding that this Casino site and the Arena site will utilize a combined stormwater management facility with the stormwater management pond that is required for the overall subdivision. The stormwater management facilities for this development must address the requirements of the Ontario Ministry of Environment and Climate Change (MOECC) sourcewater protection requirements under the Clean Water Act, 2006 as this area within the Intake Protection Zone (IPZ) 3 of Ramsey Lake with a vulnerability score of 9 defines the stormwater works as a significant threat and as such, the stormwater management facilities must provide enhanced level water quality control and an additional 20% water quantity control in addition to the requirements of the MOECC Stormwater Management and Planning Manual. Furthermore, through the review of the detailed design for Phase 1 of the Jack Nicholas Business & Innovation Park, there is a constraint as to the peak flow that can leave this development through the existing 1.8 metre x 0.9 metre concrete box culvert that crosses the Kingsway west of Levesque Street. The peak storm sewer flow that can be released into the area south of the Kingsway is 2,200 litres/second.

This development must proceed by way of a Site Plan Control Agreement concurrent with, or following, the development of the Jack Nicholas Business & Innovation Park subdivision. Our concerns regarding the site, including site servicing, and stormwater management will be addressed at that time.

Environmental Planning Initiatives

Field surveys were undertaken in 2014 and 2015 by NAR Environmental Consultants Inc. to determine if the Blanding's Turtle or the Eastern Whip-poor-will or their habitat were present on the Subject Lands. Both species and their habitat are protected by the Endangered Species Act.

Based on a review of the information provided by NAR Environmental Consultants Inc, the Ministry of Natural Resources and Forestry (MNRF) determined that the activities associated with the development of the site, as currently proposed, have a low probability of contravening section 9 (species protection) and/or section 10 (habitat protection) of the Endangered Species Act, 2007 (ESA 2007) for Blanding's Turtle and Eastern Whip-poor-will. A letter dated September 23, 2015 from the MNRF outlines this determination as well as its conditions.

Environmental Services

The Sudbury Landfill & Waste Diversion Site will continue to receive, process and dispose of waste. Environmental Services expects over time to increase the processing or diverting of waste as new programs develop under the Waste Free Ontario Act. Environmental Services will conduct our operation as required and take the appropriate action to mitigate nuisances associated with the operation of this site. This action will also continue as Environmental Services vertically expands the waste disposal footprint and as we expand the waste diversion/processing areas to the southwest of our property (permitted under our current MOECC Environmental Compliance Approval).

Environmental Services can continue in this fashion with on-going operational funds to conduct inspections, monitoring and regular operational tasks. Capital funding to regularly cap filled areas, manage/expand storm water, leachate and landfill gas systems will also be required.

It is understood that the proponent will manage their storm water on-site and since their property is located outside the 500 meter buffer zone, no assessment will be required. Environmental Services recommends however, that the proponent consider MOECC regulations and guidelines on land use near landfill sites.

Roads, Traffic and Transportation

Initial TIS Review Comments

We have reviewed the submitted Traffic Impact Study (TIS) and provide the comments below. Included separately are comments from a peer review of the study completed by [WSP](#). We require that both sets of comments be addressed.

Trip Generation Rate – Arrival/Departure Rate

We note that the study proposes to use an alternate arrival rate from a 1976 ITE report entitled "Traffic Considerations for Special Events". Although a table from the report was provided, the complete report has not been included so it is unclear what assumptions were made and if it is applicable to the proposed development. To use this reduced arrival rate, the TIS must include the complete report and provide a justification explaining why it is applicable.

Interaction Between Land Uses

We require the TIS provide a justification for interaction reductions that are assumed in the study.

Parking Generation

It is unclear from the TIS how the arena operator will be able to ensure the proposed shared parking areas will not be used during event nights. We require the TIS include details on the types of agreements that will need to be in place and how they will be enforced to ensure parking is available on event nights.

Business Park Trip Generation (Weekday PM Peak)

As indicated in the report, the Business Park component of the site is anticipated to generate approximately 1,510 trips during a typical non-event PM peak. This represents 72 percent of the net total site trips that are anticipated to be generated from the entire proposed site. Based on the trip distribution proposed in the study, there will be approximately 950 vehicle trips travelling westbound on the Kingsway from the site during the PM Peak Hour.

The background traffic analysis indicates that, with some adjustments to the traffic signal timing, the intersections of the Kingsway at Falconbridge Road and the Kingsway at Barry Downe Road will operate near full capacity. The analysis indicates that the addition of the Business Park trips will put these intersections over capacity. No mitigation measures are recommended other than the need to accelerate construction of road links identified in the Transportation Master Plan to divert traffic away from these two intersections.

We require the TIS to identify the amount of site development that can occur prior to these intersections operating over capacity and detail what, if any, measures could be implemented to mitigate these capacity constraints. In addition, we require a phasing plan be included which indicates how much more additional development of the site can occur with the addition of each of the proposed road links in the Transportation Master Plan.

Arena Trip Generation – Pre-Game and Post-Game Peak Hours

The analysis indicates that a single left turn lane will operate at an acceptable level of service at both the intersections of the Kingsway at Street A and the Kingsway at Street C. We require the TIS provide a justification for why a dual left turn lane is required to the satisfaction of the City. Also, we require the review of these left turn lanes to consider and discuss the expected delay to transit vehicles accessing the site during event nights.

Post-Game Peak Hour Capacity - Street A

We have concerns regarding the queue length from the signalized intersection of the Kingsway at Street A during the post-game peak hour and the proposed signals for the internal bus loop. It is unclear if the queue from the Kingsway will reach the exit of the bus loop and impede buses trying to exit. We require the TIS provide details on the expected queue length, how the bus loop signals will operate (ex. actuation, timing, coordination schemes) and what the expected delay will be for buses exiting the bus loop.

Transit Services has also expressed concerns with conflicts between pedestrians walking to their parked vehicles on the north side of Street A and buses trying to exit the bus loop. We require the TIS provide an analysis of how vehicles, pedestrians and transit buses will circulate in the area of the bus loop. This analysis should include details on where fencing will be provided, where the parking lots will exit and where marked crossing areas are proposed. Details must also be provided on how site access will be controlled if and when the temporary parking lot areas are developed.

Active Transportation

The TIS recommends pedestrian crossings be provided east of the exit to the bus loop and west of the parking lot entrance on Street A to the easterly parking lot. While the crossing east of the bus loop entrance can be controlled by the proposed traffic signals, it is unclear if a protected crossing is also proposed for the easterly crossing. Also, the site plan drawing included in Appendix 'A' seems to indicate that a third pedestrian crossing is proposed west of the entrance to the bus loop. We require the TIS clarify the number of pedestrian crossings

proposed, if a protected crossing is proposed for the easterly crossing, and as described in the previous section, how will pedestrians safely access the parking lots on the north side of Street A (fencing, parking lot exits, etc).

The TIS also identifies an opportunity to connect the bicycle lanes on Bancroft Drive to the site. We require the TIS include a detailed analysis of the cycling infrastructure that would be recommended on Street A, Street C and Levesque Street (at a minimum) using the three step bicycle facility selection process that is detailed in Book 18 of the Ontario Traffic Manual. The analysis should consider the expected vehicle volumes for an event night.

Transportation Demand Management

The TIS provides high level recommendations for transportation demand management (TDM) measures that could be considered. It is unclear who would operate or deliver some of the measures described as well as who would provide ongoing financing to fund these initiatives. We require the TIS include details on how these TDM measures will be operated or delivered, how they will be funded and how the ongoing success of these measures will be measured and reported. In addition, the TIS does not explain how many vehicle trips would be expected to be reduced if these measures were implemented. We require the TIS include this trip reduction analysis.

TIS Addendum Comments

A traffic impact study (TIS) completed by Dillon Consulting was provided in support of the rezoning applications submitted for the 5,800 seat community arena, casino and parking lots. The TIS also considered the remainder of the subdivision lands, a 200 room hotel and a potential twin pad arena. A memo was also provided by Dillon Consulting on February 23, 2018 as a supplement to the TIS to provide additional information on the time required for a vehicle to exit the site following an event at the proposed arena. The TIS is intended to be used by the City of Greater Sudbury, Gateway Casinos and Entertainment Ltd., and 1777223 Ontario Ltd.

Staff reviewed and provided comments to Dillon Consulting on the December 2017 study. In addition, WSP was retained by the City to complete a peer review of the study. Both sets of comments are included as part of the staff report. Based on the comments provided, Dillon Consulting provided an addendum to the TIS dated March 9, 2018. Staff's comments are based on the December 2017 TIS, the February 23, 2018 memo and the March 9, 2018 addendum.

Study Methodology

The study considered the impact to the transportation network if the site were developed to include the following uses:

- a 5,800 seat arena
- a casino with 780 gaming positions as well as restaurants
- a 200 room hotel with meeting space
- a twin pad arena
- a 93.67 acre business park

To measure the impact, the study reviewed the weekday afternoon peak hour (PM peak hour), the weekday "pre-game" peak hour (the 1 hour prior to the start of an event) and the weekday "post-game" peak hour (the 1 hour period immediately following the end of an event). In addition, a Saturday mid-day peak hour review of the intersection of the Kingsway and Barry Downe Road was completed due to the high traffic volumes through this intersection from the surrounding commercial district.

The review of the impact on the transportation network during the pre-game peak considered a sold out OHL hockey game. As detailed in the study, this can be considered a conservative approach given that the Sudbury Wolves have typically drawn 3,000 to 4,000 spectators per game over the past 6 seasons and only 5% to 10% of games per season draw a capacity crowd. An OHL team typically hosts 34 regular season games per season.

Based on the time frames identified above, the study reviewed a series of intersections identified by staff. The review considered three scenarios:

- how the intersections are currently operating
- how the intersections are expected to operate in 2022 based on an annual growth factor of 1.5%
- how the intersections are expected to operate in 2022 based on an annual growth factor of 1.5% and the number of trips the overall site is expected to generate.

While the arena, casino and hotel are expected to be built out and operational by 2020, the timing for build out for the remainder of the subdivision is unknown and will depend on market conditions. Based on this unknown condition, the year 2022 was chosen for the analysis.

The study also reviewed the expected parking requirements for the overall site.

Results of Analysis

Required Parking

The study utilized a first principles approach to determine the expected parking required for the arena, casino and hotel. When a hockey game is scheduled, the site is expected to require approximately 3,365 parking spaces. The preliminary site plan indicates a total parking supply of 2,142 parking spaces. It is proposed that the surrounding vacant subdivision lands be used for overflow parking while events are occurring at the arena. To ensure this overflow parking remains available as the surrounding lands are developed, the study has identified the need to register this use on the title of the lands. The study has also identified that maintenance agreements for the parking lots may be required to ensure the appropriate standard of maintenance is provided. Staff is satisfied that sufficient parking can be provided within the subdivision lands to satisfy the needs of the site.

Pre-Game Transportation Network Operations

During the pre-game peak hour, it is expected that approximately 2,285 vehicles will be travelling to the site to attend the event. This value considers that 5% of event goers will utilize transit and that a small percentage of event goers will be people who work within the proposed business park or are already at the casino. During the pre-game peak hour, this volume of vehicles exceeds the capacity of the intersections of the Kingsway at Barry Downe Road and the Kingsway at Falconbridge Road.

Specifically, at the intersection of the Kingsway at Barry Downe Road, the southbound left turn movement and eastbound through movement have been identified as not having sufficient capacity to accommodate this expected volume of vehicles. For the southbound left turn movement, vehicle queue lengths are expected to extend to approximately Palm Dairy Road, while for the eastbound through movement, queue lengths are expected to extend just beyond the driveway entrance which serves the Keg Steakhouse and Bar and other commercial properties. In addition, each southbound left turning vehicle is expected to be delayed 110 seconds before being able to travel through the intersection, while each eastbound through vehicle is expected to be delayed 78 seconds.

Similar capacity constraints are identified at the intersection of the Kingsway at Falconbridge Road. Both the southbound left turn movement and eastbound through movement have been identified as not having sufficient capacity to accommodate this expected volume of vehicles.

The southbound left turn movement is expected to have vehicle queue lengths extend 4 or 5 vehicle lengths beyond the driveway entrance to the Ambassador Hotel, while the eastbound through movement will have vehicle queue lengths extend beyond the Cambrian Ford site. In addition, each southbound left turning vehicle is expected to be delayed 116 seconds before being able to travel through the intersection while each eastbound through vehicle is expected to be delayed 109 seconds.

While the study has identified capacity constraints at these intersections, it is the opinion of staff that the existing road network can sufficiently store these vehicles without impacting nearby intersections. However, as identified above, some existing business driveways may be impacted by the expected vehicles queue lengths.

Based on the expected volume of vehicles that will be travelling from west of the site, the study reviewed the need for dual left turn lanes at the intersections of the Kingsway at the proposed Street A and the Kingsway at the proposed Street C. The analysis identified that although vehicle queue lengths will be substantially longer, a single left turn lane will operate more efficiently than a dual left turn lane and result in less delay for vehicles at both intersections. It is the opinion of staff that a single left turn lane is sufficient at both intersections for the expected volume of vehicles that will be attending the site on event nights.

The study also noted that based on the high volume of vehicles that will be travelling eastbound to the site, it is expected that 10% of these vehicles travelling eastbound will use Bancroft Drive as an alternate route to avoid any anticipated congestion on the Kingsway. This represents approximately 220 additional vehicles during the pre-game hour.

Afternoon Peak Hour Transportation Network Operations

During the afternoon peak hour, it is expected that 600 vehicles will be travelling to the site and 1,575 vehicles will be leaving the site. Of these 2,175 total trips, 72% are expected to be generated by the remainder of the subdivision lands or the business park as identified in the study. Staff are satisfied that there is sufficient capacity in the transportation network to support the vehicle trips being generated by the arena, casino and hotel during the afternoon peak hour. However, with the volume of vehicles expected to be generated by the business park, the study has identified that the intersections of the Kingsway at Barry Downe Road and the Kingsway at Falconbridge Road do not have sufficient capacity to accommodate the expected total volume of vehicles. The study has recommended that the capacity constraint be mitigated by accelerating the construction of new roadway links that are identified in the Official Plan, specifically, the northerly extension of Street C and westerly connection to Falconbridge Road and the bypass around New Sudbury from Highway 17 to Maley Drive.

The study also reviewed the amount of development that could occur in the business park before these intersections are beyond their capacity. Staff are not satisfied with the results of analysis that was completed in this regard. For a typical development, mitigation measures are expected to be implemented as critical movements go beyond 85% of their capacity unless there were existing capacity constraints. The study indicated that the critical movements at these intersections would not be beyond 85% of their capacity in the future without the proposed business park. The analysis completed in the study considered the amount of development that could occur in the business park before the critical movements went beyond 100% of their capacity. Since the remaining subdivision lands are not being considered as part of the submitted applications, staff will continue to work with the developer of the subdivision lands to determine the amount of development that can occur prior to the construction of the new roadway links identified in the Official Plan.

Additionally, the study noted that the intersection of the Kingsway at the proposed Street A may benefit from a dual left turn lane based on the volumes expected to be generated during the afternoon peak hour of the business park. Staff will continue to work with the developer of the remaining subdivision lands to determine the need for a dual left turn lane at the intersection of the Kingsway at Street A.

Transportation Demand Management Measures

The study has identified that casinos typically limit Transportation Demand Management (TDM) measures to those which encourage attendance by larger groups, however no details have been provided to this point as to what is intended for this site. Staff recommends that a detailed TDM plan be developed for the casino to determine the details of the TDM measures which intend to be implemented at this site.

Transit Services

Greater Sudbury Transit currently provides local transit services to the surrounding area as described in the Traffic Impact Study.

Capacity for Increased Demand

In order to assess the Transit System's capacity within existing operating hours, both ridership performance and passenger loading standards have been reviewed.

Ridership Performance: One of the most effective ways to assess ridership performance on a route is to review boarding per vehicle service hours, also known as rides per revenue hours (RRH). Based on Greater Sudbury Transit Service Design Standards, boarding per vehicle hour by class (urban vs. commuter) and time of day is measured against a set of thresholds. For the purpose of this analysis, the weekday peak and midday threshold should be between 13-45 RRH.

Based on a daily average route level analysis, ridership performance of the routes currently operating in the vicinity of the proposed site fall consistently within average thresholds. In 2016, the average RRH for the urban routes (101, 102 and 241) ranged from 17-20 boarding per service hour.

The average RRH on the current route indicates that the area is well served, and current frequency levels meet the demand.

Passenger Loading Standards: The number of buses required for a route may be determined by route loading capacities. Urban routes should not exceed a maximum average load of 150% seating capacity, which equals approximately 55 persons. When passenger loads consistently exceed or fall below the standards targets, a service review is triggered. As the average daily boarding is between 17-20 passengers per service hour, this indicates that the average capacity is at approximately 36%.

Until the passenger loading percentage increases, the current frequency levels would be adequate to meet demand in this urban area.

Transit Action Plan Recommendations

In June 2017, a comprehensive review of Greater Sudbury Transit Services was launched, known as the Transit Action Plan. The service review work plan consists of three Phases. The study is within the final Phase of the work plan, and final recommendations are anticipated to be presented to Council in early Spring 2018.

The second phase of the Transit Action Plan presented draft recommendations to Council in January 2018. The preliminary recommendations proposed a restructuring of the transit route network system, where routes are reorganized by level of service, to address proper frequencies based on demand. The preliminary proposals further indicate that the reduced level of service currently operating after 10pm and on Sundays should be eliminated, leaving all routes to be served based on Transit Service Design Standards. The routes are proposed to be redesigned based on a three hub system, reducing the number of routes requiring to transfer at the Downtown Transit Centre.

In the preliminary recommendations of the Transit Action Plan, one route is being proposed to service the site, which is a combination of all routes currently operating in the area.

The proposed route design consists of:

- Similar route pattern with several minor areas being streamlined for efficiency purposes and to ensure on time performance would be achieved with the addition of this site.
- The route would depart the Downtown Transit Centre and the proposed development would become the terminus. A terminus is usually the mid-point or destination of a route and it provides a safe location for a bus to layover for a few minutes before returning to the hub.
- For passengers travelling from the New Sudbury Centre, a connection can be made to the proposed route at the corner of Bancroft and Second Ave.
- Span of service would extend approximately from 7am to midnight, seven days a week.
- The route would be categorized as a neighborhood service level without the proposed development.
- The route would have potential of being a core service level with the proposed development, should ridership increase due to the additional trip generator to the area.
- As a neighborhood service level, frequencies are proposed to be 30 minutes from start of service to 9am, and 3pm to 6pm Monday to Friday, with 60-minute frequency all other times including all day Sunday. This frequency mirrors what is currently being provided to the area.

The introduction of this trip generator in the urban area would trigger careful monitoring of route performance to ensure proper levels of Transit Services are offered. Any increase in service required would be presented to Council for consideration.

Mitigating Operational Costs and Improving Transit Efficiency

The Traffic Impact Study provides information on mitigation considerations being proposed to provide prioritization of the movement of Transit Buses. These mitigations will be helpful in reducing the number of hours required to service the area during Event Nights.

In order to further improve on the effectiveness of Transit services, and in consideration of reducing traffic impacts by providing more efficient non-automobile modes of access to the site, the following should be considered:

- A robust Transportation Demand Management plan.
- Bus queue jumping lanes, or bus only lanes to prioritize Transit Vehicles over cars
- Site design considerations to mitigate pedestrian and transit vehicle conflict.
- Amenities for spectators waiting for buses near the entrance such as wayfinding and benches.
- Turning radius consideration for both conventional 40 foot buses, as well as 60 foot articulated buses.

Water/Wastewater Services

The land use requires a Risk Management Plan, as identified in Part IV of the Clean Water Act, 2006, in order to be carried out within a vulnerable area. The Risk Management Plan is required to manage the future threats related to the handling and storage of road salt, the on-site application of road salt, and the storage of snow.

A Risk Management Plan must be agreed to or established before a Section 59 Notice of Clearance to proceed will be issued. A Section 59 Notice is required before the Development Application may receive final approval.