

SCHEDULE 08 – Public Safety Plan



---

**AMHERST ISLAND WIND FARM**

**CONTRACT-SPECIFIC PUBLIC SAFETY  
PLAN**

---

# Algonquin Power

December 2016

---

**TABLE OF CONTENTS**

|            |                              |          |
|------------|------------------------------|----------|
| <b>1.0</b> | <b>INTRODUCTION .....</b>    | <b>2</b> |
| 1.1        | Objective.....               | 2        |
| 1.2        | Responsibility.....          | 2        |
| <b>2.0</b> | <b>RISK ASSESSMENT .....</b> | <b>2</b> |
| 2.1        | Risk Ranking.....            | 3        |
| 2.2        | Risk Levels .....            | 4        |
| 2.3        | Risk Mitigation .....        | 5        |
| 2.4        | Public Notifications.....    | 5        |

DRAFT

## 1.0 INTRODUCTION

This document shall constitute the Pennecon Heavy Civil Limited (PHCL) Public Safety Plan for the Amherst Island Wind Farm Project. The content of this plan shall apply to all Pennecon Heavy Civil Limited employees, subcontractors and any visitors to the site. Copies of the Pennecon Heavy Civil Limited Public Safety Plan may be made available as required and will be available on the project site.

### 1.1 Objective

The objective of this Public Safety Management Plan (PSMP) is to describe the requirements for PHCL and its contractors in managing public safety. The PSMP applies to all work sites and all activities associated with construction of the Project.

Each contractor must:

- Conduct a public safety risk assessment as described below; and
- Implement appropriate mitigation measures.

Contractor Public Safety Management Plans will be provided to local authorities.

### 1.2 Responsibility

The Pennecon Heavy Civil Limited Management team, appointed to oversee the work, holds the primary responsibility for the development and execution of this plan. All employees and subcontractors are responsible for fulfilling the requirements of the Plan.

## 2.0 RISK ASSESSMENT

PHCL will provide its understanding of hazards to the public associated with Project construction, in particular hazards resulting from:

- Turbine Access Road Construction
- Post Construction Remediation
- Dock Access Road Construction
- Road Maintenance
- Collection system installation
- Turbine Offloading and Travel
- General Trucking Activities
- Batch Plant Operations

- General Construction
- Excavation activities
- Blasting activities
- Emergency Response
- Barge Activities
- Laydown Activities
- Crane Travel and erection
- Turbine Erection

Each contractor must consider the information provided by PHCL, and their own knowledge of the site and construction activities in conducting a risk assessment and in implementing appropriate mitigation measures.

The risk assessment will be based on the steps described below.

Appendix A provides the public safety risks and associated activities that PHCL has identified to date.

## **2.1 Risk Ranking**

Risk ranking consists of a combination of likelihood and consequence. Likelihood refers to the possibility that members of the public will suffer an injury from the activity. Consequence refers to the severity of injury as a result of the worst probable outcome. Because the likelihood of an incident resulting in a minor injury is higher than the likelihood of an incident resulting in a serious injury, as consequences rise, likelihood goes down. Because the final risk ranking is achieved by multiplying the likelihood score by the consequence score, reducing either likelihood or consequence will reduce the total risk score.

|                          |   | Hazard Severity   |  |  |  |  |
|--------------------------|---|---|--|--|--|--|
|                          |   | 1<br>Negligible injury,<br>or absence from<br>work.<br>No damage to<br>equipment or the<br>environment. | 2<br>Minor injury<br>requiring first aid<br>treatment.<br>Minor damage to<br>equipment or<br>environment | 3<br>Injury leading to<br>a lost time<br>incident.<br>Equipment<br>damage and<br>environmental<br>impact moderate. | 4<br>Involving a single<br>death or serious injury.<br>Major damage to<br>equipment. Severe<br>impact on environment<br>with significant<br>restitution costs. | 5<br>Multiple deaths.<br>Production shutdown.<br>Major pollution with long<br>term implications and high<br>restitution costs. |
| Likelihood of Occurrence | 1<br>A freak combination of factors would be required for an incident to result. Not credible, i.e. the team have never heard of event occurring in industry.   | 1   | 2  | 3  | 4  | 5  |
|                          | 2<br>A rare combination of factors would be required for an incident to result. Conceivable, but would require multiple failures of systems and controls.   | 2   | 4  | 6  | 8  | 10   |
|                          | 3<br>Could happen when additional factors are present but otherwise unlikely to occur. Less than average, i.e. easy to put forward a scenario for incident but considered unlikely.                                       | 3   | 6  | 9  | 12   | 15   |
|                          | 4<br>Not certain to happen but an additional factor may result in an incident. More than average, i.e. the team do not have direct knowledge but suspect that event may have occurred and represents a credible scenario. | 4   | 8  | 12   | 16   | 20   |
|                          | 5<br>Almost inevitable that an incident would result. Likely to occur and the team have knowledge of a similar event.   | 5   | 10   | 15   | 20   | 25   |

## 2.2 Risk Levels

Determining the risk level of each activity follows a three part process.

1. Incident Likelihood and Incident Consequence ratings are determined by examining the “as is” condition of each activity within a component area with respect to identifiable hazards with no risk reduction measures in place.
2. The overall risk level of the activity being examined is then determined by multiplying the Likelihood and Consequence ratings together.
3. New or modified risk reduction measures are then applied and Likelihood and consequence ratings are reassessed with the additional measures.

The above three steps are repeated for each activity within the component area until sufficient risk reduction measures are implemented to eliminate or to significantly reduce initial high risk levels to medium or low.

|        |  |          |
|--------|--|----------|
| High   |  | 15 to 25 |
| Medium |  | 8 to 12  |
| Low    |  | 1 to 6   |

### **2.3 Risk Mitigation**

Each contractor must take into account the results of the risk assessment and identify the appropriate mitigation measures. The contractor will employ the following hierarchy (in order of priority) to identify and implement appropriate mitigation measures prior to the commencement of relevant construction activities:

1. Elimination of exposure: Exclude the public from dangerous areas through the use of effective means, such as fencing, gates and barricades
2. Substitution of different procedures: e.g., changes to construction procedures
3. Engineering: e.g., Innovative barricades, modification of equipment, lighting
4. Administration: e.g., Public education, effective signage
5. Protection of persons: e.g., security patrol, video surveillance

Selection of the appropriate risk reduction measure will depend upon the nature and degree of risk each safety hazard represents to the public. The practicability and effectiveness of implementation and the site-specific conditions must be taken into account in the choice of risk reduction measures used.

### **2.4 Public Notifications**

Public Notification must be in accordance with the Construction Communications Plan.



| Construction Activities          | Public Activities/Concerns | Risk   | Mitigation  | Reference Document  |
|----------------------------------|----------------------------|--|---|---|
| Turbine Access Road Construction | Vehicle Traffic            | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                                  | Pedestrian Traffic         | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> </ul>  | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                                  | Bicycle Traffic            | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site</li> </ul>   | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                       |  |   |   |
|--|-----------------------|--|---|---|
|  |                       |  | <p>construction rules.</p> <ul style="list-style-type: none"> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> |   |
|  | <p>Equine Traffic</p> | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul> | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                               |                       |  |   |   |
|-------------------------------|-----------------------|--|---|---|
|                               |                       |  | <ul style="list-style-type: none"> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  |   |
|                               | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> </ul>   | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area.</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> </ul>                      | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
| Post Construction Remediation | Vehicle Traffic       | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                    |   |   |   |
|--|--------------------|---|---|---|
|  | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> </ul>  | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:               <ol style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is</li> </ol> </li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|             |                       |  |  |   |
|-------------|-----------------------|--|--|---|
|             |                       |  | <p>safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</p>   |   |
|             | Equine Traffic        | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul>   | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|             | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
| Dock Access | Vehicle Traffic       | <ul style="list-style-type: none"> <li>- Interaction between</li> </ul>  | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management</li> </ul>  |

|                   |                    |  |   |   |
|-------------------|--------------------|--|---|---|
| Road Construction |                    | <p>equipment and public vehicle traffic results in property damage</p> <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul> | <p>(e.g. traffic cones) will provide sufficient width for all road users to pass.</p> <ul style="list-style-type: none"> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul>   | <p>Plan</p> <ul style="list-style-type: none"> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul>                        |
|                   | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> </ul>  | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                   | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                |  |   |   |
|--|----------------|--|---|---|
|  |                |  | <p>be accommodated through work zones as long as it is safe to do so.</p> <ul style="list-style-type: none"> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> |   |
|  | Equine Traffic | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul> | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                  |                       |  |   |   |
|------------------|-----------------------|--|---|---|
|                  | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> </ul>   | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> </ul>                       | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
| Road Maintenance | Vehicle Traffic       | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                  | Pedestrian Traffic    | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven</li> </ul>   | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |



|  |                 |   |   |   |
|--|-----------------|---|---|---|
|  |                 | terrain results in personal injury  |   |   |
|  | Bicycle Traffic | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> <li>-</li> </ul> | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                                |                       |  |  |   |
|--------------------------------|-----------------------|--|--|---|
|                                | Equine Traffic        | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul>   | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                                | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
| Collection system installation | Vehicle Traffic       | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public</li> </ul>  | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                    |   |   |   |
|--|--------------------|---|---|---|
|  |                    | <p>vehicle traffic results in personal injury</p> <ul style="list-style-type: none"> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul>                            | <ul style="list-style-type: none"> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul>  |   |
|  | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> </ul>  | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:           <ol style="list-style-type: none"> <li>A maximum vehicle speed of 20 km</li> </ol> </li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                       |  |  |  |  |
|-----------------------|--|--|--|--|
|                       |  |  | <ul style="list-style-type: none"> <li>per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> |  |
| Equine Traffic        | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul>           | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul>  |  |
| Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific</li> </ul>   | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul>  |  |

|                               |                    |  |   |   |
|-------------------------------|--------------------|--|---|---|
|                               |                    | <ul style="list-style-type: none"> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> </ul>   | <ul style="list-style-type: none"> <li>- area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> </ul>  |   |
| Turbine Offloading and Travel | Vehicle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                               | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> </ul>  | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                               | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their</li> </ul>               | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                |  |   |   |
|--|----------------|--|---|---|
|  |                |  | <p>mandatory safety site orientation prior to commencing work.</p> <ul style="list-style-type: none"> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads: <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> |   |
|  | Equine Traffic | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> </ul> | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                             |                    |   |   |   |
|-----------------------------|--------------------|---|---|---|
|                             |                    |   | <ul style="list-style-type: none"> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> </ul>  |   |
| General Trucking Activities | Vehicle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in personal injury</li> <li>- Debris coming off truck striking vehicles</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                             | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> <li>- Debris coming off truck striking pedestrians</li> </ul>   | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|                             | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management</li> </ul>  |

|  |  |   |   |  |
|--|--|---|---|--|
|  |  | <p>and construction equipment results in personal injury.</p> <ul style="list-style-type: none"> <li>- Debris coming off truck striking bicycles</li> </ul> | <p>treated as vehicular traffic and directed accordingly through active construction sites</p> <ul style="list-style-type: none"> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ol style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the</li> </ol> </li> </ul> | <ul style="list-style-type: none"> <li>- Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|--|--|---|---|--|



|  |                       |   | Project.   |   |
|--|-----------------------|---|--|---|
|  | Equine Traffic        | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> <li>- Debris coming off truck striking equine</li> </ul>                               | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                        |                         |   |   |   |
|------------------------|-------------------------|---|---|---|
|                        |                         | to ferry terminal.<br>- Debris coming off truck striking bus  | route completion.<br>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.<br>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.   |   |
| Batch Plant Operations | Fugitive Dust Emissions | - Traffic movement (raw material delivery trucks / tankers; ready mix-trucks; loaders)                | - Traffic speed on site is limited to a maximum of 20 km/hr;<br>- Unpaved roads and areas are treated with a water truck or equivalent dust suppression measures as required.   | Best Management Practices Plan For The Control Of Fugitive Dust Emissions |
|                        |                         | - Accumulated dust from raw material delivery, storage and transfer                                   | - Unpaved roads and areas are treated with a water truck or equivalent dust suppression measures as required.<br>- The working face of each stockpile is to be minimized.<br>- Aggregate is only to be handled on a very minimal basis, ideally 2 times, 1 for delivery and then for loading into plant hoppers.<br>- The emissions are controlled by a dedicated Dust Collector, one for each of the in truss silos, and shared usage for delivery trucks filling on site auxiliary storage silo. Each Dust Collector contains polyester – siliconized bags and a pulse type cleaning mechanism. | - Traffic Management Plan<br>- Operations Plan<br>- Communications Plan   |
|                        |                         | - Fines generated on unpaved areas; accumulated dust from raw material delivery, storage and transfer | - Traffic speed on site is limited to a maximum of 20 km/hr.<br>- Unpaved roads and areas are treated with a water truck or equivalent dust suppression measures as required.   | - Traffic Management Plan<br>- Operations Plan<br>- Communications Plan   |
|                        |                         | - Raw material drops outside  | - The front-end loader working area and   | - Traffic Management  |

|  |  |                               |   |   |
|--|--|-------------------------------|---|---|
|  |  | of a transfer point           | <p>beneath the conveyor will be monitored (visual inspection) throughout the day, with particular attention to spillage</p> <ul style="list-style-type: none"> <li>- Spilled aggregate will be cleaned up promptly</li> </ul>   | <p>Plan</p> <ul style="list-style-type: none"> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul>                        |
|  |  | - Production                  | <ul style="list-style-type: none"> <li>- Finished product is delivered to Ready Mix trucks at the Loading Point. The Loading point is equipped with a loading sock, dust shroud and enclosures on 3 sides and top.</li> </ul>   | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  |  | - Wind                        | <ul style="list-style-type: none"> <li>- Unpaved roads and areas are treated with a water truck or equivalent dust suppression measures as required.</li> <li>- The working face of each stockpile is to be minimized.</li> <li>- Aggregate is only to be handled on a very minimal basis, ideally 2 times, 1 for delivery and then for loading into plant hoppers.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  |  | - Material conveyance systems | <ul style="list-style-type: none"> <li>- The conveyor leading to the aggregate bins is constructed with 35 degree outside rollers creating a trough for material as it travels up to the bins. The flow (drop) of material onto the conveyor is controlled by the gates and opening in the bottom of the above ground hopper.</li> <li>- The flow of material is set to directly correlate to the length of the conveyor, width and speed of the conveyor belt, to avoid any material spillage from its sides and to keep material below the edge of the belt.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  |  | - Cement silo                 | <ul style="list-style-type: none"> <li>- Each silo is equipped with a bag house dust collector.</li> <li>- Bag house dust collectors are inspected on a monthly basis as per the Maintenance Log</li> </ul>   | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications</li> </ul>      |

|                      |  |   |   |  |
|----------------------|--|---|---|--|
|                      |  |   | Book.<br>- Auxiliary storage silo utilize main silo dust collector systems or in truss systems.   | Plan<br>Best Management Practices Plan For The Control Of Fugitive Dust Emissions                                  |
|                      | Excessive Noise                                      | Regulated noise level are exceeded causing disruption to daily activities | Noise sampling will be performed to ensure we are in compliance to REA amendment #3   | REA modification #3  |
| General Construction | Excessive noise generated by construction activities | Regulated noise level are exceeded causing disruption to daily activities | <ul style="list-style-type: none"> <li>- Regular inspection of equipment to ensure exhaust systems are working to manufacturers specifications.</li> <li>- Contractor will perform noise monitoring at regular intervals to ensure compliance with Ontario regulations.</li> <li>- Construction activities will be performed as per</li> <li>- Signage will be posted as per Ontario noise regulations (where noise levels exceed 85dBa)</li> </ul> | <ul style="list-style-type: none"> <li>- Renewable Energy Approval</li> <li>- ONTARIO REGULATION 381/15</li> </ul> |
|                      | Lighting   | Construction lighting causing interference with routine public activities | <ul style="list-style-type: none"> <li>- Where natural lighting is inadequate to ensure the safety of any worker, artificial lighting shall be provided and shadows and glare shall be reduced to a minimum.</li> <li>- Lighting placement will be focused primarily on the construction work area and will be placed to minimize glare to outside structures.</li> </ul>   | Operations Plans   |
|                      | Airborne Dust  | Dust from construction traffic  | - A water truck will be on site full time once road construction begins until completion of   | Operations Plans   |

|                       |                           |  |   |  |
|-----------------------|---------------------------|--|---|--|
|                       |                           |  | major construction works.<br>- Trucks will spray the road with water in advance of the transport vehicles in order to keep the dust down.   |  |
|                       | Hazardous material spills | Environmental contamination due to spills from construction activities | - All crew will have spill response training<br>- Equipment will be equipped with spill response materials (spill kits)<br>- 55 gallon site spill response containers will be distributed throughout the work site.<br>- Third party spill response contractor to be established prior to start of construction and ready to responds to spill if required. | Operations Plan  |
|                       | Site security             | Unauthorized access to construction site results in injury             | - Construction fencing and signage to ensure clear demarcation of construction zones.<br>- All visitor are required to sign in/out.<br>- All people entering the construction site must complete a site specific orientation prior to access.   | HSE Execution Plan   |
| Excavation activities | Contaminated materials    | Exposure to contamination due to excavation activities                 | - Will be remediated as per Ontario Environmental Legislation.<br>- Competent third party will be used for clean-up and removal.<br>- Will be remediated as per Invista Canada CPU for north and south parcels.   | - Environmental Protection Act, R.S.O. 1990, c. E.19<br>- Invista Canada CPU 6676-9CWHB7-2S south parcel<br>- Invista Canada CPU 6676-9CWHB7-1N North Parcel |
| Blasting              | Damage to                 | - Damage caused by fly rock  | - Pre blast survey by competent consultant to   | - R.R.O. 1990, Reg.  |

|                    |   |  |   |   |
|--------------------|---|--|---|---|
| activities         | structures resulting from blasting activities                 | <ul style="list-style-type: none"> <li>- Damage caused by ground vibration</li> </ul>  | <p>ensure pre and post blast condition of surrounding structures.</p> <ul style="list-style-type: none"> <li>- Blasting mats will be used to control blast energy.</li> <li>- Blasting protocol to ensure all third party notifications are complied with</li> <li>- Clear communication with public regarding blast location and schedule</li> </ul>   | 854: MINES AND MINING PLANTS  |
| Emergency Response | Emergency response times impacted by construction activities. | Lack of communication between emergency response and project management team results in decreased response time and possible ill effects to the public.  | <ul style="list-style-type: none"> <li>- The contractor will work with the local ES to ensure any road can be opened up to emergency service within the time frame required by ES or to identify alternate routes.</li> </ul>   | Highway Traffic Act, R.S.O. 1990, c. H.8  |
| Barge Activities   | Barging of construction materials and equipment               | <ul style="list-style-type: none"> <li>- Impediment of ferry schedule</li> <li>- Unplanned interaction between recreational boaters and barge/tug</li> </ul>   | All vessels to obey maritime regulations  |   |
| Laydown Activities | Vehicle Traffic   | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> <li>- Interactions between construction workers and public vehicles results in</li> </ul> | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All loaded trucks will follow the load, haul</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                    |   |   |   |
|--|--------------------|---|---|---|
|  |                    | <ul style="list-style-type: none"> <li>- personal injury</li> <li>- Debris coming off truck striking vehicles</li> </ul>  | <ul style="list-style-type: none"> <li>- place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>   |   |
|  | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> <li>- Debris coming off truck striking pedestrians</li> </ul> | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> <li>- Debris coming off truck striking bicycles</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                       |   |   |   |
|--|-----------------------|---|---|---|
|  |                       |   | <p>travel inspections have been completed.</p> <ul style="list-style-type: none"> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> |   |
|  | <p>Equine Traffic</p> | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> <li>- Debris coming off truck striking equine</li> </ul> | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to commencing work.</li> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |



|                           |                       |  |   |   |
|---------------------------|-----------------------|--|---|---|
|                           |                       |  | <p>will be accommodated through work zones as long as it is safe to do so.</p> <ul style="list-style-type: none"> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>   |   |
|                           | Public School Bussing | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> <li>- Debris coming off truck striking bus</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
| Crane Travel and erection | Vehicle Traffic       | <ul style="list-style-type: none"> <li>- Interaction between equipment and public vehicle traffic results in property damage</li> <li>- Interaction between equipment and public vehicle traffic results in personal injury</li> </ul>   | <ul style="list-style-type: none"> <li>- Installation of temporary traffic control devices (e.g. traffic cones) will provide sufficient width for all road users to pass.</li> <li>- Informational materials with maps identifying construction road traffic routes will be provided</li> <li>- All construction traffic will be courteous to vehicle traffic and will provide them the right</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                    |   |   |   |
|--|--------------------|---|---|---|
|  |                    | <ul style="list-style-type: none"> <li>- Interactions between construction workers and public vehicles results in personal injury</li> <li>- Debris coming off truck striking vehicles</li> </ul>   | <p>of way as per highway traffic law and the site construction rules.</p> <ul style="list-style-type: none"> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>  |   |
|  | Pedestrian Traffic | <ul style="list-style-type: none"> <li>- Interactions between pedestrian traffic and construction equipment results in personal injury</li> <li>- Pedestrian walking uneven terrain results in personal injury</li> <li>- Debris coming off truck striking pedestrians</li> </ul> | <ul style="list-style-type: none"> <li>- Pedestrian accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul>  | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |
|  | Bicycle Traffic    | <ul style="list-style-type: none"> <li>- Interaction between bicyclist and construction equipment results in personal injury.</li> <li>- Debris coming off truck striking bicycles</li> </ul>   | <ul style="list-style-type: none"> <li>- Bicycle traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to cyclists and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to cyclists during their mandatory safety site orientation prior to commencing work.</li> <li>- Cyclist accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|  |                       |   |   |   |
|--|-----------------------|---|---|---|
|  |                       |   | <p>long as it is safe to do so.</p> <ul style="list-style-type: none"> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> <li>- The following measures will be followed whenever construction vehicles encounter pedestrians or cyclists on the public roads:             <ul style="list-style-type: none"> <li>i. A maximum vehicle speed of 20 km per hour within 50m of a cyclist or pedestrian;</li> <li>ii. A minimum separation of 2m when passing a cyclist or pedestrian, and</li> <li>iii. Construction vehicles will remain behind cyclists or pedestrians until it is safe to pass. It will be a policy of the Contractor that failure to comply with these Constructor safety rules will be grounds for driver dismissal from the Project.</li> </ul> </li> </ul> |   |
|  | <p>Equine Traffic</p> | <ul style="list-style-type: none"> <li>- Interaction between construction equipment and equine traffic results in personal/equine injury.</li> <li>- Debris coming off truck striking equine</li> </ul> | <ul style="list-style-type: none"> <li>- Equine traffic on public roadways will be treated as vehicular traffic and directed accordingly through active construction sites</li> <li>- All construction traffic will be courteous to equine traffic and will provide them the right of way as per highway traffic law and the site construction rules.</li> <li>- All site personnel will be warned to pay particular attention to equine traffic during their mandatory safety site orientation prior to</li> </ul>   | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul> |

|                                  |  |   |  |  |
|----------------------------------|--|---|--|--|
|                                  |  |   | <p>commencing work.</p> <ul style="list-style-type: none"> <li>- Equine traffic accommodation will typically be on-road as this is the current condition, and will be accommodated through work zones as long as it is safe to do so.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul> |  |
| Public School Bussing            | <ul style="list-style-type: none"> <li>- Interaction between school busses and construction equipment results in personal injury or property damage</li> <li>- Construction activity results in late arrival of school bus to ferry terminal.</li> <li>- Debris coming off truck striking bus</li> </ul> | <ul style="list-style-type: none"> <li>- Transportation of oversized loads in front of the school and through Stella will not take place during the 30 minute periods at the start and end of the school day.</li> <li>- Road closures will not take place prior to school bus route completion for that specific area</li> <li>- No construction activity that could impact bussing will take place prior to school bus route completion.</li> <li>- All loaded trucks will follow the load, haul place JSA to ensure proper loading and pre travel inspections have been completed.</li> <li>- All trucks with dual rear wheels will be inspected for debris between wheels before access on public roads.</li> </ul> | <ul style="list-style-type: none"> <li>- Traffic Management Plan</li> <li>- Operations Plan</li> <li>- Communications Plan</li> </ul>  |  |
| Contact with overhead powerlines | <ul style="list-style-type: none"> <li>- Contact with overhead powerline causes power disruption to public buildings or homes.</li> </ul>  | <ul style="list-style-type: none"> <li>- Powerline hazard awareness training for all personnel.</li> <li>- Use spotters while Crane is traveling</li> <li>- Signage in high traffic areas when travelling</li> </ul>  |  |  |

|                  |               |  |   |                    |
|------------------|---------------|--|---|--------------------|
|                  |               |  | under powerlines.   |                    |
| Turbine Erection | Site security | Unauthorized access to construction site results in injury | <ul style="list-style-type: none"><li>- Construction fencing and signage to ensure clear demarcation of construction zones.</li><li>- All visitor are required to sign in/out.</li><li>- All people entering the construction site must complete a site specific orientation prior to access.</li></ul> | HSE Execution Plan |

DRAFT