EINP ROADS RENEWAL PROGRAM

VISITOR INFORMATION CENTRE PARKING LOT

ADDENDUM No. 1

ADDITIONS AND DELETIONS

1. Environmental Mitigation Measures have been included with this addendum. (9 pages)

QUESTIONS and ANSWERS

Q_1 Will the additional three large spruce trees be cut down by others?
A_1 The three large trees will be cut down and removed prior to award.

Q_2 Where should questions be directed during the Tender period?
A_2 Questions arising during the Tender period should be directed to Tammy Hugo as per the Invitation to Tender Documents.

Q_3 Can work hours be extended to 7 days per week?
A_3 The work hours can be extended to 7a.m. to 7p.m., seven days per week, provided 1/3 of the parking lot is available to the public with safe access provided to and from the Visitor Centre building.

Q_4 What are the weight restrictions on the Park Access Roads?
A_4 Weight restrictions on the Park Access Roads will be the same as those restrictions placed on Highway 831 South of Lamont. This will include the percent axle weights at the beginning and end of the road ban restrictions.

Q_5 Where can waste material be disposed of?
A_5 Asphalt and concrete material or unsuitable fill material is to be disposed of off site. Excess usable fill material, stripped vegetation, clearing debris or granular material free of deleterious material can be disposed of in the wood lot area approximately 15km north of the Visitor Centre across from the Astotin Day Use Area.

Q_6 Can the work be started in the spring of 2017?
A_6 Every effort must be made to complete the contract within the 10 week construction period, based on the expected weather conditions for the time of year.

Q_7 Will the Contractor have to remove the eight large tree stumps in the parking lot area?
A_7 Yes, the Contractor will have to remove the eight tree stumps, which are up to approx. 1.2m in diameter.

Q_8 Is there a requirement for equipment to be cleaned prior to coming into the Park?
A_8 Yes, this is covered in the attached environmental mitigation measures.

Q_9 Does the imported topsoil have to be certified weed free coming into the Park?
A_9 Yes, as per the specifications.

Q_{10} Is Amec Foster Wheeler available for survey layout on the site?

A_{10} Yes, the Contractor is responsible for cost of survey and can contact Chris Hittinger, Amec Foster Wheeler, (780) 377-3665 to discuss their survey requirements.

END OF ADDENDUM No. 1

(Total 11 pages)

EINP Visitor Information Centre Parking Lot Project
Environmental Mitigations

GENERAL

- Advise Lori Parker, Elk Island National Park Environmental Assessment Officer (EAO), when work begins, so that a briefing and periodic monitoring can take place.
- All employees must attend a briefing with the EAO before beginning work at the site review and explain the mitigations that are conditions of the project approvals.
- Minimize vegetation-clearing activities and ground disturbance by staging on existing hardened areas wherever possible.
- Ensure machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species, noxious weeds and soils from off-site. Power wash equipment as required prior to mobilizing to site. The EAO will inspect equipment on site at the environmental briefing prior to start up, and should be notified of any new equipment upon arrival before it being used on site.
- Avoid or terminate activities on site that attract or disturb wildlife. Vacate the area and stay away from the immediate location if wildlife display aggressive behaviour or persistent intrusion.
- Control materials that might attract wildlife (e.g. petroleum products, human food and garbage).
- Notify the EAO immediately about dens, litters, nests, carcasses (road kills), wildlife activity or encounters on or around the site or crew accommodation. Other wildlife-related encounters are to be reported within 24 hours.
- Delineate the work zone; clearly mark the limits to active construction and the access and egress locations.

EROSION AND SEDIMENTATION CONTROL

- When work involves the disturbance of soils or the use of erodible materials (e.g. sands, topsoil), prevent the transport of sediment by the installing of appropriate erosion and sediment control.
- An Erosion and Sedimentation Management Plan shall be prepared by the contractor for the components of the work undertaken in proximity to (within 100m of) watercourses, wetlands or riparian environments. If sediment ponds are required, they shall be designed to settle all sediment particles 0.02 mm or larger. The ponds shall also be designed to handle 1:5 year storm events, with overflow spill capacity for 1:10 year storm events and emergency spillway capacity for 1:100 year storm events. All components require regular maintenance to ensure effectiveness.

- A Spill Response Plan shall be prepared by the contractor and detail the containment and storage, security, handling, use and disposal of empty containers, surplus product or waste generated in the application of these products in accordance with all applicable federal and provincial legislation. The Plan shall include a list of products and materials to be used or brought to the construction site that are considered or defined as hazardous or toxic to the environment. Such products include, but are not limited to, waterproofing agents, grout, cement, concrete finishing agents, hot poured rubber membrane materials, asphalt cement and sand blasting agents.
- Spill kits shall be provided at re-fuelling, lubrication, and repair locations that are capable of dealing with 110% of the largest potential spill and shall be maintained in good working order. Site staff shall be informed of the location of the spill response kit(s) and be trained in its use.
- If potentially hazardous materials (e.g. cement-based products, sealants or paints) are used on site ensure raw material, mixed compounds and wash water are not released to any watercourse or soils. Measures such as collection/drip trays and berms lined with occlusive material such as plastic and a layer of sand, and double-lined fuel tanks can prevent spills into the environment.
- Hazardous or toxic products shall be stored no closer than 100 metres from streams, wetlands, water bodies or waterways.
- Timely and effective action shall be taken to stop, contain and clean-up all spills as long as the site is safe to enter. The SO shall be notified immediately of any spill. In the event of a major spill, all other work shall be stopped and all personnel devoted to spill containment and clean-up.
- The costs involved in a spill incident (the control, clean up, disposal of contaminants and site remediation to pre-spill conditions), shall be the responsibility of the proponent. The site will be inspected to ensure completion to the expected standard and to the satisfaction of Parks Canada.
- Used oil, filters, grease cartridges, oil cans and other waste products will be collected and disposed of at the nearest industrial waste facility.
- Clean tools and equipment off-site to prevent the release of wash water that may contain deleterious substances.
- Where possible, sweep up loose material or debris. Any material thought to pose a risk of contamination to soils, surface water or groundwater should be disposed of appropriately off-site.
- Construction, trade, hazardous waste and domestic waste materials shall not be burned, buried or discarded at the construction site or elsewhere in Parks Canada protected heritage places. These wastes shall be contained and removed in a timely and approved manner and disposed at an appropriate waste landfill site located outside the Parks Canada protected heritage place. Construction waste storage containers, shall be emptied when 90% full. Waste containers will have lids, be wildlife proof if there

attractants and waste loads shall be covered while being transported.

- Sanitary facilities, such as a portable container toilet, shall be provided and maintained in a clean condition

VEGETATION

- Tree and shrub removal or mulching shall only occur between August 15 and April 15 to avoid the breeding period for migratory birds and resident bats.
- Clearing extent not to exceed the planned extent without a written amendment.
- Vegetation removal shall be limited to the minimum Clear Zone Distance dependent on type and size of road and maximum height needed to meet the road safety objectives.
- Minimize full removal and retain vegetation when possible to reduce erosion.
- Prior to the commencement of any vegetation removal, the worksite must be surveyed for species at risk. If species at risk are found, work must be stopped until site-specific mitigations to address potential adverse effects are developed.
- Survey vegetation for non-native species, clear vegetation areas with non-native vegetation in spring and early summer to avoid further spread and development of the non-native seed bank.
- Clearing activities shall be avoided during nesting seasons for birds, reptiles and amphibian species in the project area.
- If wildlife is observed during work, give animals the opportunity to escape the work area to the surrounding forest or elsewhere to seek new shelter.
- Avoid ground vegetation removal during dry, windy periods to prevent erosion of topsoil and reduction of air quality with dirt/dust.
- Retain 30 metre vegetated buffer around water bodies, where disturbance is necessary and unavoidable restoration is required.
- Debris will not be deposited in water bodies.
- Ensure tree limbs/stumps are flush cut as close to the ground or stem as possible.
- Logs and other salvage materials are to be conveyed to and placed at a storage site without spread of debris or damage to other standing trees or landscape resources outside the marked clearing or storage limits. They shall not be skidded through wetlands, waterways or water bodies.
- During the grubbing component, stumps, roots, imbedded logs and other non-soil debris shall be pulled and shaken free of loose soil and rock before transport to a designated pit
- Where possible preserve identified wildlife trees by limbing or topping if they are not assessed as hazard trees.
- Brush and Trees should be mulched to extent possible, with debris spread so they do not exceed 4 cm in depth and should even across the forest floor a minimum of 5m from the edge of any clearing and 15 m away from any water body or water course.
- Material must not be burned or buried without prior approval

- If wet or riparian areas exist within the area to be cleared, vegetation should be retained to the extent possible. Consult with the Environmental Assessment Officer.
- Any vehicles or equipment shall be cleaned prior to arrival on site and free of vegetation material that could spread noxious weed species into cleared areas.
- All vegetation debris must be removed as soon as possible from the right-of-way, either by transporting off-site for disposal or piling and burning on-site.
- All vegetation containing non-native species will be removed off site to disposal facility.
- In some cases, logs from newly cut trees may be set aside for use elsewhere as directed by local park site managers and the EAO.
- A Field Unit Integrated Pest Management Plan (IPMP) must be completed and approved prior to the use of herbicides to ensure the most effective and least harmful substances are properly used.

ASPHALT

- Asphalt works are preferably undertaken during periods of dry weather as this allows easier control of contaminated runoff and sediment.
- If the work schedule requires working in the rain, the area of work must be isolated and appropriate sediment controls must be installed to prevent the release of sediment-laden water or any other deleterious substances into surface waters, particularly for surface repair works requiring the application of patching and sealing compounds, tar, asphalt, and chemical surface sealant.
- The proponent shall be responsible for the purchase and safe delivery/storage/handling of asphalt cement and emulsions
- Excess hot mix or reject new asphalt shall be temporarily in stored in the containment area sufficient to prevent runoff of petroleum into soils or surface waters as directed by the EAO, and removed from the Parks Canada protected heritage place, prior to project completion.
- Trucks for hauling asphalt mixture shall have tight, clean, smooth metal beds that have been sprayed with a minimum amount of thin fuel oil to prevent the mixture from adhering and causing waste asphalt.
- Truck boxes may be oiled only when absolutely necessary.
- Vehicle covers shall be securely fastened.
- To ensure regular clean-up of waste asphalt and petroleum spills, a defined clean up schedule will be established.
- Leaks will be collected in drip-trays, the collected material will be removed from the park, or recycled back through an Asphalt Plant. For any material removed outside the park to an approved facility, a detailed receipt will be provided to the EAO.
- Every effort will be made to recycle waste asphalt, either as a base course, or by recycling waste asphalt through the asphalt plant according to engineering specifications. Old cured ground asphalt material shall be removed,

recycled, or stored for future recycling at an approved operational gravel pit or asphalt plant site in accordance with the contract Specifications. Stockpiles must be further than 30 metres from any surface waters.

GRADING/ PAVING/ RE-SURFACING

- Works are preferably undertaken during periods of dry weather (e.g., summer) as this allows easier control of contaminated runoff and sediment.
- If the work schedule requires working in the rain, the area of work must be isolated and appropriate sediment controls must be installed to prevent the release of sediment-laden water or any other deleterious substances into surface waters, particularly for surface repair works requiring the application of patching and sealing compounds, tar, asphalt, and chemical surface sealants.
- During grade construction conducted close to any watercourse, water body or wetland ensure materials are not pushed, fall or are eroded into the water or wetlands.
- No grade building shall occur outside of the delineated work area or within 1 metre of the drip line of existing forest. Any material inadvertently falling outside the work limits will be removed promptly in a manner that does not damage trees or vegetation.
- Materials shall be placed at storage sites or on the grade without spillage outside the work limits. Any material inadvertently falling outside the work limits will be removed promptly in a manner that does not damage trees or vegetation.
- Retain a 30 metre vegetated buffer around water bodies or install runoff management structures.
- If possible, grade roads early in the spring before vegetation develops seed heads or late in season after vegetation has set seed and is dormant to minimize non-native vegetation propagation.
- Ensure gravel or road bed material is free of weeds and comes from an approved operational gravel source free of other contaminates.
- Minimize changes to the surface that could affect infiltration and runoff characteristics and maintain effective surface drainage to limit direct runoff into surface waters.
- Minimize application of seal coats in wet conditions. Attempt to apply only to dry surfaces and not prior to (within 24 hrs.) or during rainfall. If unforeseen rain arrives ensure runoff from recently seal coated surfaces are prevented from entering surface waters.
- Pavement marking shall be undertaken pursuant to standard methods applied in National Parks for control of paint products, both in transport and handling. The Contractor shall present a description of methods to be employed for transporting and controlling paint and hazardous products, application of paint, cleaning of equipment, containment and disposal of waste paint and cleaning products, etc. the satisfaction of the Parks Canada Representative.

EXCAVATIONS/ SOIL HANDLING AND STORAGE

- Where excavation is required, schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
- Materials shall be placed at storage sites or on the grade without spillage outside the working limits. Any material inadvertently falling outside the work limits is to be removed promptly in a manner that does not damage trees or vegetation.
- All sediment control measures must be in place before starting work in the vicinity of rivers, water bodies, watercourses, and wetlands.
- Special precautions may have to be taken during excavation in the vicinity of intermittent or active drainage channels.
- Excavation plans must be compared to local archaeological resource inventories, if available. If no archaeological information is available for the work area, an Archaeological Overview Assessment (AOA) may be required to determine the archaeological potential of the work area. Based on the results from the AOA, an Archaeological Impact Assessment might be required. It would be time and cost efficient to refer the plan to Parks Canada's Terrestrial Archaeology section before conducting any excavation to determine the appropriate course of action.
- If cultural resources (eg. archaeological resources) are discovered, immediately cease work, and alert SO.
- Minimize changes to the ground surface that affects its infiltration and runoff characteristics and maintain/re-establish effective surface drainage on completion of the project
- Backfill and compact excavations as soon as possible. Optimize degree of compaction to minimize erosion and allow for re-vegetation.
- All trenches or ditches left unattended overnight must be fenced or covered to prevent wildlife entrapment.
- Strip topsoil under dry conditions.
- No stripping shall occur outside of the delineated work area or within 1 metre of the drip line of existing forest.
- In the event of a work program shutdown during inclement weather (e.g. winter conditions unfavourable for construction, heavy rain events, construction delays, etc.) erosion control of bared soils or excavated material stockpiles is required.
- Stripping close to any watercourse, water body or wetland shall employ methods to ensure materials are not pushed, do not fall or erode into the water or wetlands.
- Work within a 100 metre buffer from the high water mark of waterways or wetlands will require a site specific sediment and erosion control plan.
- An erosion control plan is also needed to control dust generated from the construction site.
- Salvage topsoil at all excavation sites for reclamation purposes.

- Usually the upper 15 cm of soil, below the sod layer if present, is considered topsoil, where depths exceed 15cm salvage the entire depth of topsoil.
- Remove stumps and woody debris from topsoil, wherever possible
- Allow space for separate storage of topsoil and spoil; where space is available separate stored topsoil from spoil by at least 1 m. Use appropriate material (e.g., geo-textile) to separate soil components where space is limited.
- Topsoil may be stored on hardened surfaces, geo-textile material or directly on undisturbed vegetation. If storage occurs on vegetation, material recovery by hand may be required.
- Cover all stockpiled material with heavy-duty plastic or filter cloth to prevent erosion during precipitation events.
- Topsoil should be stockpiled on the uphill side of the disturbance on sloped terrain.
- Construct barricades to prevent losses on steep terrain (>18°, 3:1) and within 100m of watercourses
- Remove excess excavated material from site where it cannot be used for the final grading of the area. Site specific arrangements must be made for disposal locations and procedures of overburden.
- Surplus excavated material may be used to fill depressions around the project site providing topsoil is stripped before filling, with approval from EAO.

SOIL AND VEGETATION RESTORATION

- Develop restoration plan as part of the project scoping
- Vegetation restoration is most effective if seeded in the fall, this allows for full scarification of the seed over the winter and adequate moisture available. Spring and early summer will also work, consider using seed that requires shorter scarification times for these applications.
- Implement restoration plan for the disturbed area immediately following completion of construction.
- Replace topsoil to all areas immediately following fine grading.
- Do not compact topsoil.
- Where insufficient topsoil is available imported soil may be used as a last resort. Imported topsoil must be certified completely free of non-native seeds and compost developed from sewage treatment plants. Methods of improving vegetation succession using locally sourced, weed and contaminant free materials are preferred.
- Where remaining soils are unstable due to steepness or soil characteristics, immediate installation of sod or erosion control blanket is required.
- Methods of bioengineering such as terracing, willow staking, live pole drain systems should be assessed as solutions where soils are steeper or remain unstable.
- Select site prep methods, seeding rates, and seed mixtures based on native species variety and quality (guaranteed weed seed free content and highest purity and

germination), consult with vegetation restoration specialist or fire/vegetation ecologist.

- Use approved native seed mixes developed for site-specific conditions for various elevations.

DRAINAGE STRUCTURES

- Conduct in-stream work during periods of low flow, or at low tide, to further reduce the risk to fish and their habitat or to allow work in water to be isolated from flows.
- Schedule work to avoid wet, windy and rainy periods that may increase erosion and sedimentation.
- If the work schedule requires working in the rain, the area of work must be isolated and appropriate sediment controls installed to prevent the release of sediment-laden water or any other deleterious substances into surface waters
- Isolate work area from any flowing water that may be present. Ensure any flows are temporarily diverted around the portion of the ditch or watercourse where you are working.
- Select appropriate equipment and work access routes to reduce damage to riparian vegetation and watercourse banks when using earth-moving equipment.
- For smaller scale debris and sediment removal activities, remove materials by hand.
- To assist with bank stability and invasive plant prevention, leave topsoil and root systems intact on channel banks surrounding your work area.
- Ensure any works to repair damaged structures retain the pre-repair channel conditions (e.g., streambed profile, substrate, channel cross section) and do not constrict the stream width.
- Maintain effective sediment and erosion control measures until complete re-vegetation of disturbed areas is achieved.
- Ideally, crossings should have natural streambed material through them to allow continuous substrate that matches the streambed below and above the crossing. Open bottom crossings are ideal for maintaining natural substrate.
- Utilize a single large culvert design over a multiple culverts design (i.e. several smaller culverts) to reduce debris blockage and increased fish and wildlife passage, where hydrologically feasible
- The culvert slope should follow the existing streambed slope where possible.
- The culvert, inlet(s) and outlet(s) should be adequately protected with rip-rap to prevent erosion and scour around the culvert during high runoff events. The following measures should be incorporated when using replacement rock to stabilize the culvert:
- Place appropriately-sized, clean rocks into the eroding bank area by hand or machinery operating outside the water course.
- Do not obtain rocks from below the ordinary high water mark of any water body.
- Where possible, install rock at a slope similar to the stream bank to maintain a uniform stream profile and natural stream alignment. Otherwise, install the rock at the closest slope required to ensure it is stable.

- Ensure rock does not interfere with fish passage or constrict the channel width.
- Trash racks should not be used near the culvert inlet. Accumulated debris may lead to severely restricted fish passage and potential injuries to fish. Where trash racks cannot be avoided in culvert installations, they must only be installed above the water surface indicated by bank full flow. A minimum of 9 inches clear spacing should be provided between trash rack vertical members. If trash racks are used, a long term maintenance plan must be provided along with the design, to allow for timely clearing of debris.
- Natural or artificial supplemental lighting should be considered in new or replacement culverts that are over 150 feet in length.
- Ensure designs locate culvert structures in areas that minimize impacts to riparian vegetation and associated wildlife.
- Maintain effective sediment and erosion control measures until complete re-vegetation of disturbed areas is achieved.
- Remove any old structures to a suitable upland disposal facility away from the riparian area and floodplain to avoid waste material from re-entering the watercourse
- At times, culverts are placed along portions of highways that bisect wetlands or specific habitats that support an abundance of wildlife. Consider building natural rock ledges through culverts to allow for small and medium-sized animals to walk on during periods of high flow.

Bidders' Site Meeting Attendance Sheet

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