From:

To: Premier; Minister, Env; melissa mlaoffice; Environment Assessment Web Account; claudiachender;

paulwozneymla; lisalachancemla; info; info; mlabradiohns assistant; Brad Johns MLA Sackville

Uniacke; Michael Perry; Elie Moussa; eroulston

Subject: Mount Uniacke Quarry
Date: October 29, 2025 10:25:34 AM

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# \*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\*

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Honourable Premier Tim Houston

I am writing again in concern of the expansion request for the NCCI Quarry in Mount Uniacke. As we are nearing the deadline and to date have not heard of a community meeting with your attendance as requested.

Understandably you are a busy man. However you are our Premier and to address the concerns of the citizens of Nova Scotia is a main reason why you are in office.

Our understanding is the province of NS feels that the bandaid solution they did on the Mount Uniacke Mines Road in 2022 has fixed the safety concerns on this road and it is now safe for the consistent heavy truck traffic from the quarry, which is only going to get heavier if this is approved. As a resident that drives this road frequently I certainly do not see our safety concerns as being addressed. In fact the road is worse now in certain conditions and various times of the year. Yes the TRA will come in and grade but for the most part when it is at its worse during the spring, fall and winter months it is almost impassable and they can't even get in to repair due to the wet conditions. The icy roads are treacherous and several trucks and vehicles have gone off the road this past winter causing blockage for long periods of time. To say they have solved this problem is not true regardless of how much money they put into it it is not conditioned to this traffic flow.

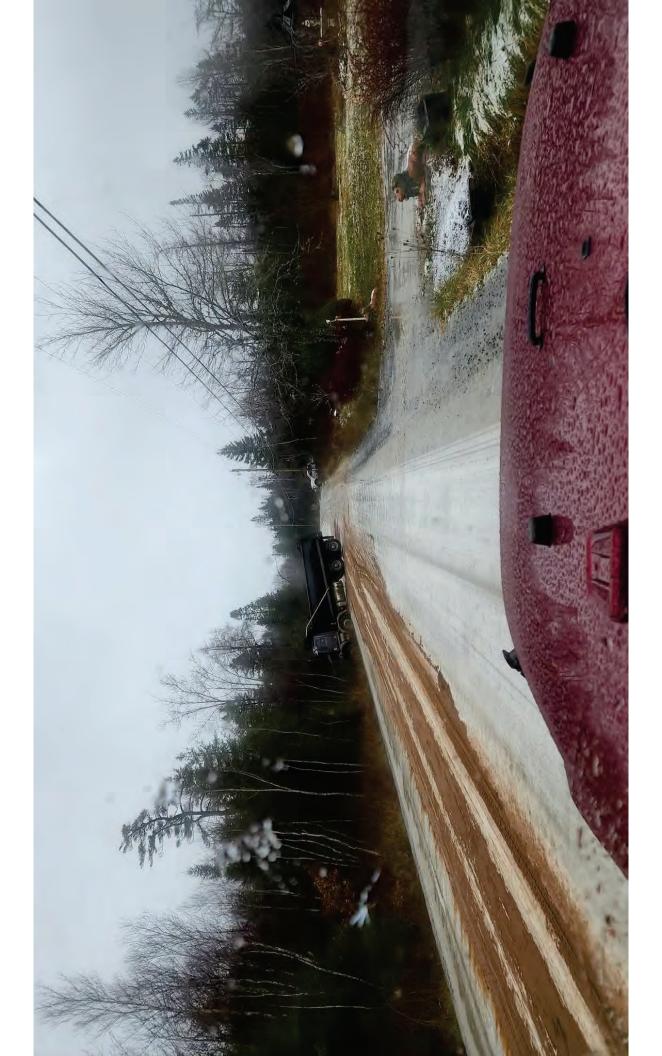
This again is only one area of concern why this expansion should not be granted. As noted in previous letter and I am sure the many letters your office and the department of Environment has received with the concerns for the environmental effects this is having and would continue to have on our wetlands and areas surrounding the quarry should be the biggest red flag our government needs to address. I do hope this is not being swept under the rug so to speak and you take the time to address these concerns.

Thank you

Sent from my Bell Samsung device over Canada's largest network.









From:

To: Premier

Cc: Minister, Env; Environment Assessment Web Account; paulwozneymla@gmail.com; lisalachancemla@gmail.com;

info@mombourquette.ca; info@iainrankin.ca; mlabradjohns@qmail.com; eroulston@easthants.ca;

mperry@easthants.ca

Subject: Why is the Nova Scotia Government Ignoring Proven Contamination at the Uniacke Quarry Site?

Date: October 29, 2025 10:45:51 AM

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It is my understanding, that two years ago, proof of violations and possible contamination at the Uniacke Mines Road quarry site was provided to the Nova Scotia Department of Environment by our MLA, Brad Johns, and members of this community, It included evidence of construction debris and untested soils dumped in wetlands by Northumberland Capital Corp Inc. (NCCI) and their other company, Allterrain Contracting Inc.

Inspections confirmed violations - yet no fines, no penalties, no testing was deemed necessary, no action!

Now, recent test results from NCCI's own consultant confirm (WSP) confirm what residents already suspected: contamination exists in the wetlands at levels harmful to the ecosystem.

Despite this, Mr. Premier, your government is considering approving NCCI's quarry expansion on November 12. Which is outrageous!

The Department of Environment and Climate Change (DECC) claims its mission is to protect the natural environment and human health and ensure clean air and water for everyone. How does ignoring proven actions causing contamination fit that mandate?

Even worse, these new tests weren't conducted by DECC - they were conducted only at the request of concerned residents.

Why isn't our government conducting regular, independent water and soil testing at this industrial site? Especially after what was presented to them!

When illegal dumping was first reported, NCCI's spokesman, Andrew Rodgers, claimed "another licensed business" was responsible. Our Municipality confirmed there are no other licensed operations there. Residents believe debris from NCCI's other Halifax contracting business was buried on the site, in the buffer zone between the quarry and the Headwaters of the Sackville

River. The attached images, provided to your department, Premier Houston, two years ago, confirm this information.

The expression "A picture is worth a thousand words," I would say, applies here!

Before any approval is granted, Premier Houston, your government owes this community further, comprehensive testing of the entire area, a public Town Hall, and a full investigation with full transparency to the public here before any decisions are made.

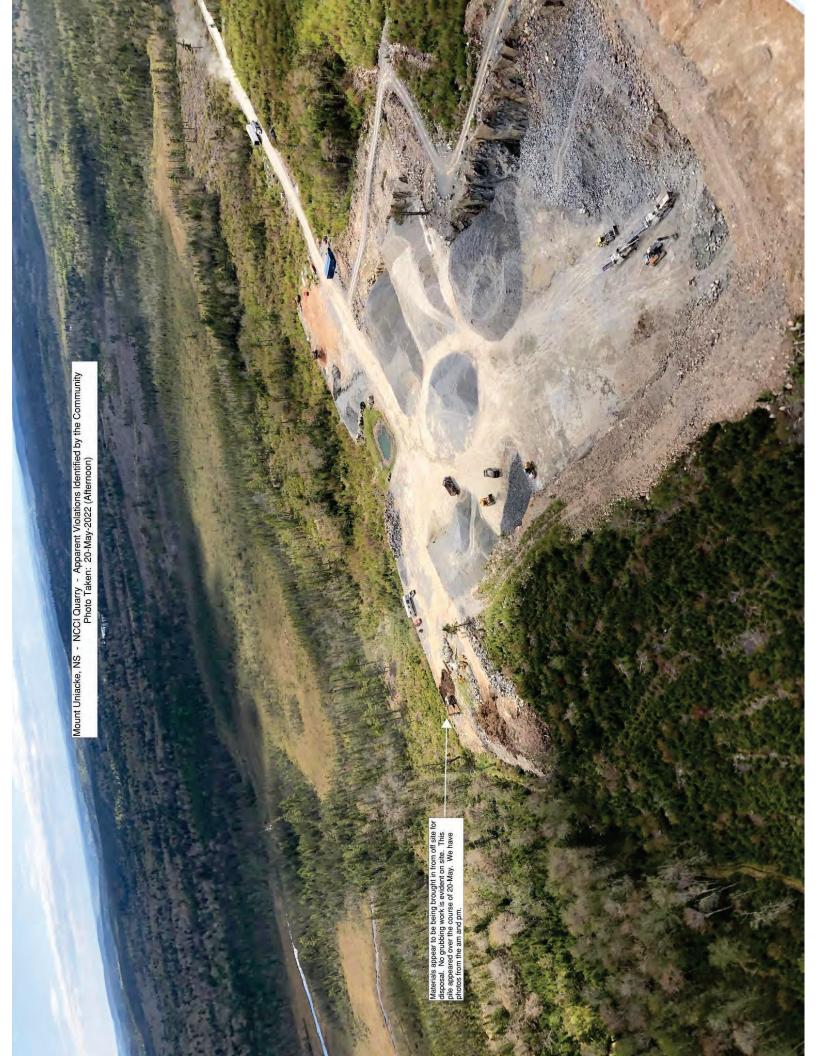
If, after all we have shown your government - the evidence, the lab results, and the truths drawn from the land itself - you still choose to approve this expansion without addressing our concerns. Many of us will feel abandoned by those elected to protect us. Families like mine may have no choice but to leave the place we love - our homes, our lake, our peace.

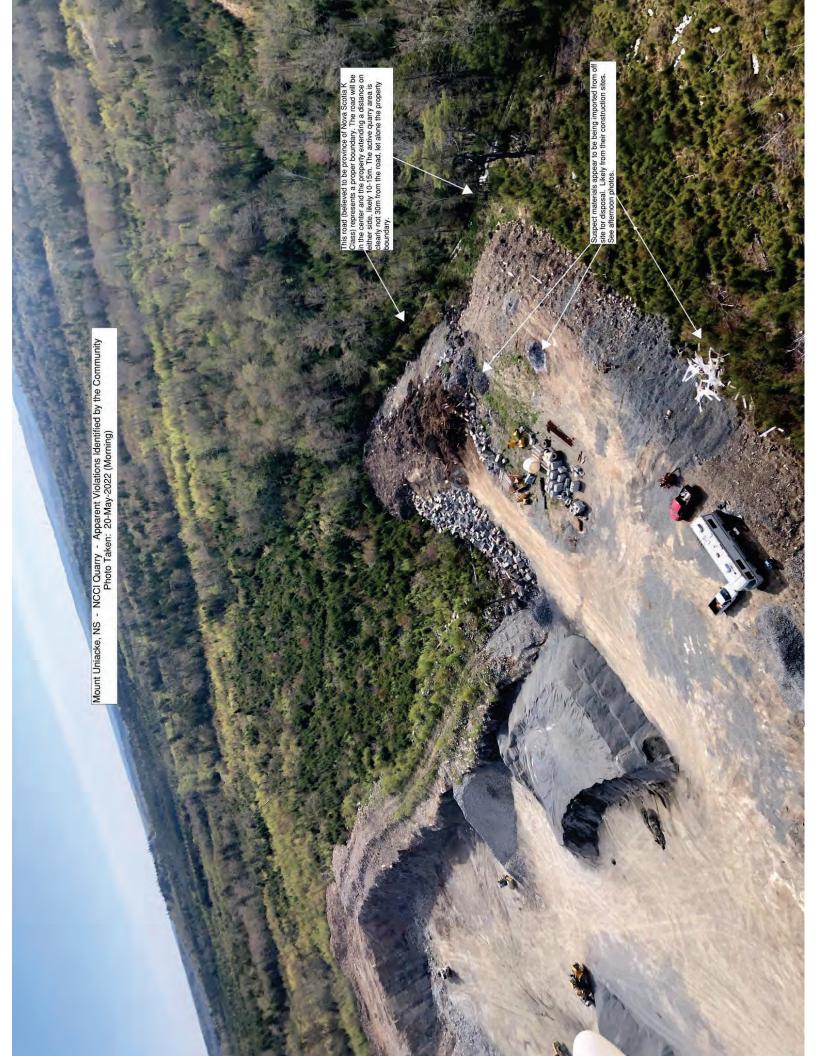
Premier Houston, this is your moment to lead - to prove that your government values people and the land that sustains us over profit and convenience. We ask not for sympathy, but for fairness and action worthy of the trust Nova Scotians have placed in you when you won your landslide election last Fall. That may not be repeated in 2028.

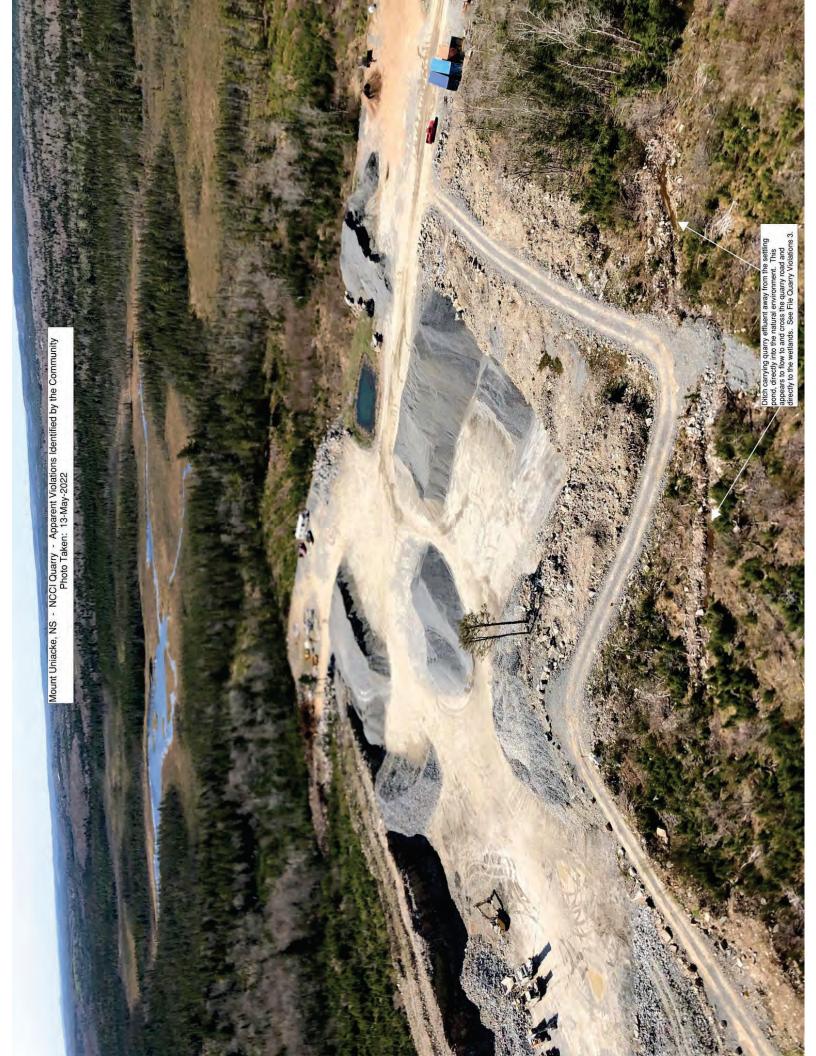
Please find images of support attached

Cockscomb Lake (1.2 km from quarry site)

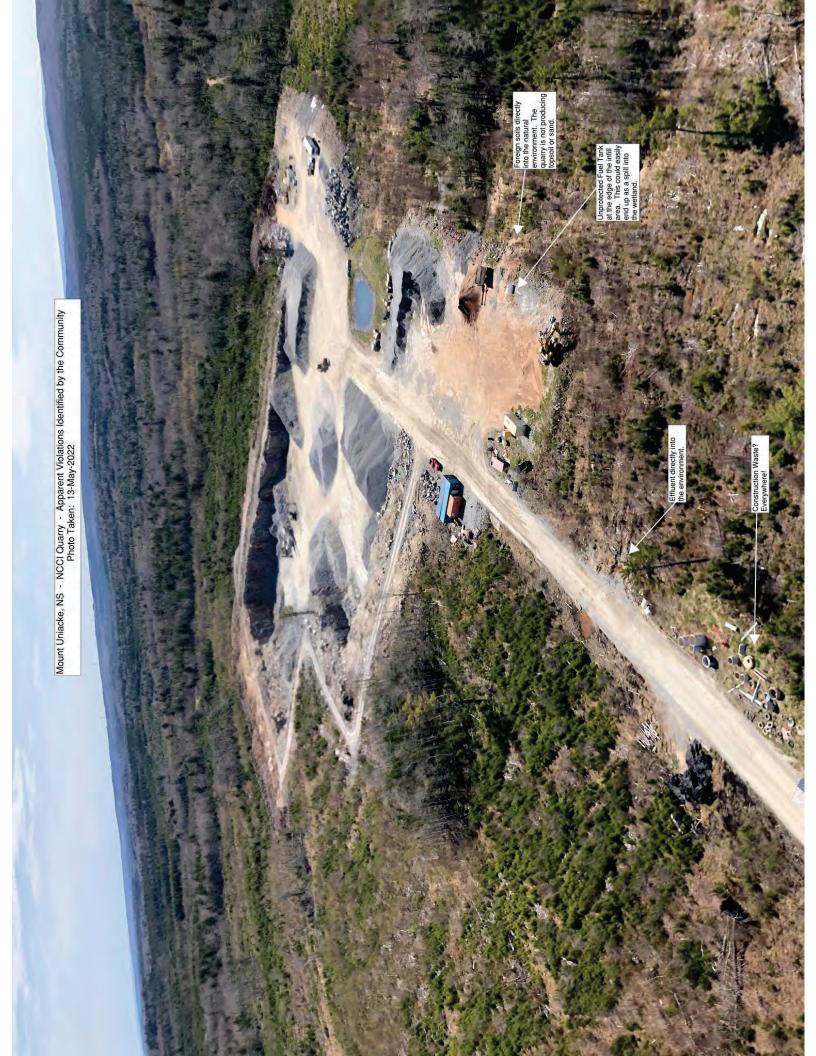


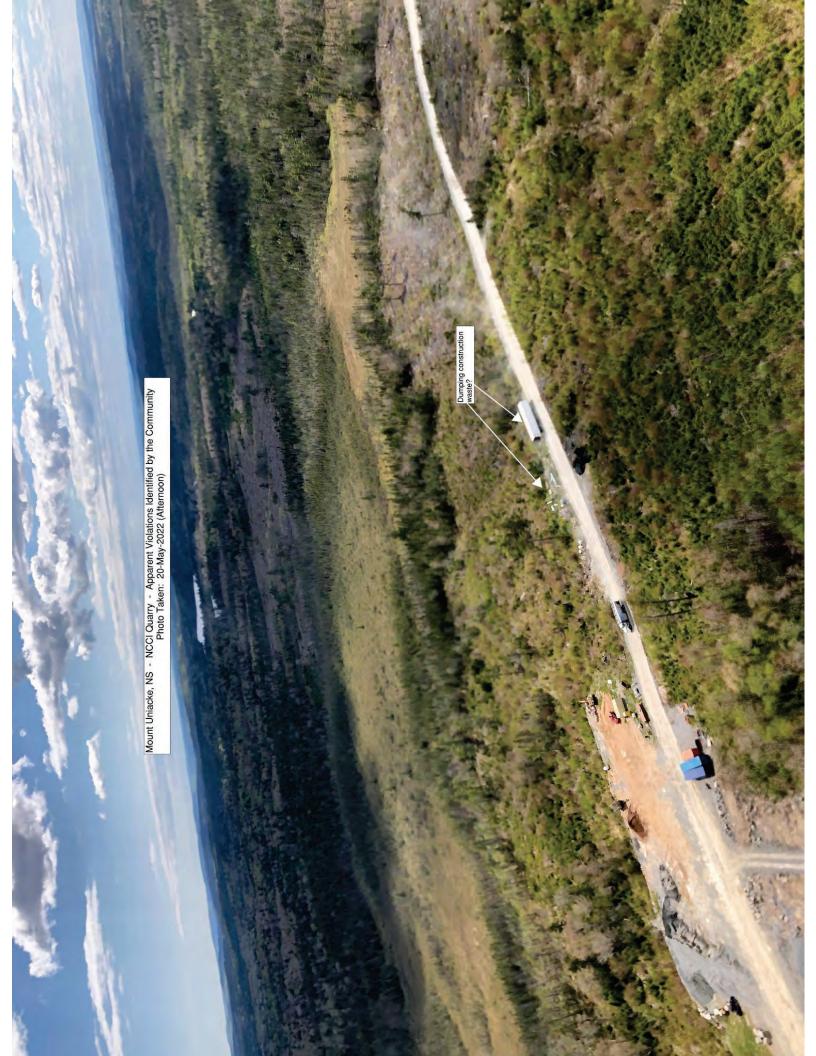




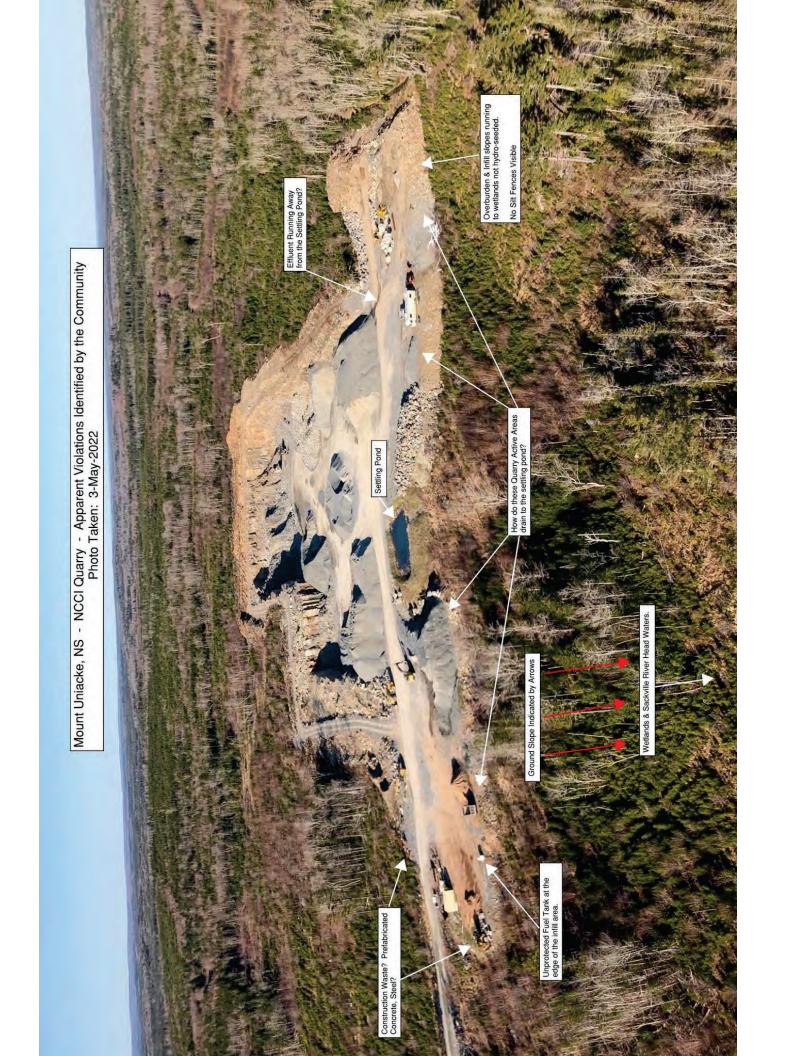


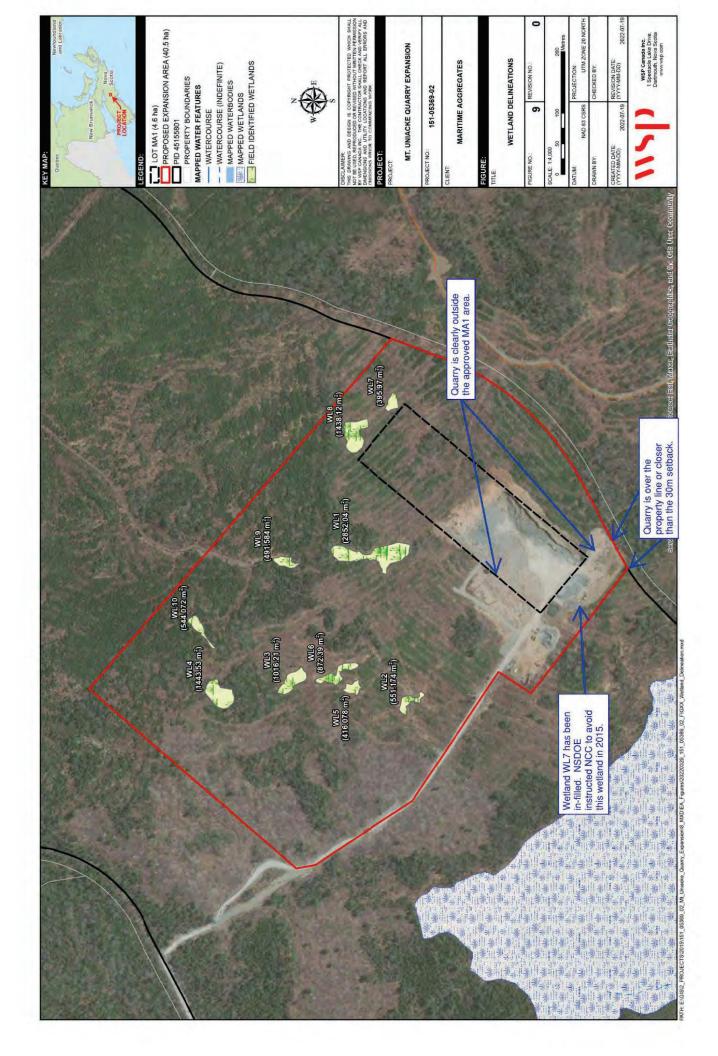












From:

To: Premier

Cc: Minister, Env; Environment Assessment Web Account; paulwozneymla@qmail.com; lisalachancemla@qmail.com;

info@mombourquette.ca; info@iainrankin.ca; MLA Sackville - Uniacke; eroulston@easthants.ca;

mperry@easthants.ca; kody.blois@parl.qc.ca

Subject: Your Vision for NS Can't Ignore Mount Uniacke"s rights and When Rules Bend for Corporations, Communities

Break

Date: October 29, 2025 8:10:12 PM

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## Dear Premier Houston:

Your government's push for expanded industrial activity - quarries, mining, fish farming, and large-scale forestry - affects communities across Nova Scotia.

In the South Shore, people are resisting industrial fish farms. On Hunter's Mountain, Indigenous land defenders are blocking clear-cutting. Here in Mount Uniacke, my neighbors and I face the proposed Uniacke Mines Road quarry expansion and a 10 yr history with Northumberland Capital Corp. Inc. that raises serious doubts. In particular, these new revelations of proven contaminants are backed by science. Now, I understand that key members of my community have requested that, before decisions are made, more intensive testing be conducted and the results known before any approval decision is made. This makes a lot of sense. Otherwise, how can a fully informed decision be made without all of the facts based on science?

If you ask Nova Scotians to accept new projects, Mr. Premier, you must show you will enforce the law, hold polluters to their conditions, and shut down operators who break rules. Instead, many of us have watched conditions get amended and violations swept aside - "business as usual." That destroys trust, Sir!

You have an opportunity here, Sir: use NCCI as a clear example - not of tolerance, but of accountability. Show Nova Scotians everywhere that corporations that flout approvals and harm communities and their environment will face consequences.

Before any decisions are finalized, please call for these further soil testing to be done, as requested. And give our community the town hall we are asking for so residents can speak, be heard, and see how you will protect public health, waterways, and rural livelihoods.

Respectfully,

Uniacke Mines Road, Mount Uniacke

From:

To: Premier

Cc: Minister, Env; Environment Assessment Web Account; paulwozneymla@gmail.com; lisalachancemla@gmail.com;

info@mombourquette.ca; info@iainrankin.ca; mlabradiohns@qmail.com; eroulston@easthants.ca;

mperry@easthants.ca; kody.blois@parl.qc.ca

Subject: Request for Correction and Public Meeting on the Mount Uniacke Quarry Project

Date: October 29, 2025 8:23:49 PM

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# \*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\*

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Dear Premier Houston, Minister Halman, and Department Officials,

The Environmental Assessment (EA) website description of the proposed *Mount Uniacke Quarry* reads:

"The proposed undertaking will take place approximately 2.5 km northeast of the community of Mount Uniacke... The access road to the quarry is located off Uniacke Mines Road."

This description is inaccurate and misleading.

In a letter sent to Ms. Lynn Bowen on February 5, 2024, a request was made to correct it, noting that the project is actually 1.2 km from Cockscomb Lake, 1.6 km from Lewis Lake, and 1.7 km from Morning Breeze Drive—all within Mount Uniacke's residential area.

The current wording falsely suggests that no homes are within 2.5 km of the quarry, thereby significantly misrepresenting the project's proximity to our community and properties. Despite this being brought to the department's attention months ago, the EA website remains unchanged.

This raises serious concerns about transparency and accountability in the environmental assessment process. Residents deserve clear, factual information and open dialogue with our government before any approval is granted.

We, therefore, formally request a public Town Hall meeting in Mount Uniacke with Premier Houston and Minister Halman to address these issues directly, as well as many others that remain unaddressed.

Thank you for your time and attention to this matter.

Sincerely,

Resident of Partridge Lane Cockscomb Lake, Mount Uniacke From: <u>Minister, Env</u>

To: Bowen, Lynn A; Tutty, Bridget R; Rafferty, Meghan

Cc: Rahman, Mohammad

Subject: FW: NCCI Mount Uniacke Quarry - Uniacke Mines Road Safety

Date: October 30, 2025 9:12:31 AM

Attachments: 2022-082 Special Provisions Revision 1, June 15, 2022.pdf

WinterMaintenanceStandards.pdf

### From:

**Sent:** October 29, 2025 9:28 AM

To: Environment Assessment Web Account <EA@novascotia.ca>

Cc: Minister, Env < Minister. Environment@novascotia.ca>; Premier < PREMIER@novascotia.ca>; Brad

Johns (mlabradjohns@gmail.com) <mlabradjohns@gmail.com> **Subject:** NCCI Mount Uniacke Quarry - Uniacke Mines Road Safety

### \*\* EXTERNAL EMAIL / COURRIEL EXTERNE \*\*

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The province's feedback within the EA documents, on the community's concerns regarding the safety of Uniacke Mines Road (UMR), indicate the province feels the 2022 "upgrades" have resolved the safety concerns. The province's opinion is that UMR is now safe and suitable for heavy truck traffic. In my opinion this is far from the case, UMR remains structurally unsound from Norman Lake Road to Sawdust Road and safety has only been marginally improved.

In the NSDPW RFP for the 2022 upgrades (attached), Type 2 and Type M gravels were to be included in the work. Definitions are below. Type 2 gravels would have improved the structure of UMR and would have only been of value between Norman Lake Road and Sawdust Road. Based on my observations of the work, driving through the construction on numerous days, only Type M gravel, 10-12" worth was applied to the road. This has not resolved the structural stability of UMR between Norman Lake Road and Sawdust Road. As in the past, the province has poured fine gravel into a swamp expecting to resolve a structural problem. They were back doing the same this past August (2025).

Regarding safety on UMR, the attached photos speak for themselves, last December's "Dump Trucks on Ice" (5-Dec-2024) was quite the show. Children walk to and wait for the school bus right where these photos were taken. UMR is routinely a sheet of ice and is not maintained until 24 hours after a weather event. See attached for the province's Winter Maintenance Standards, specifically those for gravel roads. The truck traffic related to this quarry continues to put the community at unacceptable risk.

#### President

The Partridge Lane Residents Association

## Aggregate (Gravel) Types & Uses

In Nova Scotia, **Type M aggregate**, also known as granular M or 5/8" crusher run, is a crushed stone and stone dust mixture commonly used for finishing driveways, shouldering, and bases that require strong compaction. The specifications for Type M aggregate are outlined in the Nova Scotia Department of Public Works (NSDPW) Standard Specifications for Highway Construction

In Nova Scotia, **Type 2 aggregate** is a coarse aggregate used for larger construction applications and as a road subbase, with a size up to 2 inches. It's a durable material for building stable foundations and is commonly made from crushed rock. It is a less refined product than Type 1 and may have a higher dust content.

## Attachments:

2022-082 Special Provisions Revision 1, June 15, 2022.pdf NSDPW RFP for the 2022 UMR Upgrades

WinterMaintenanceStandards.pdf

https://novascotia.ca/tran/winter/WinterMaintenanceStandards.pdf

Dump Trucks on Ice (05-Dec-2025) – 10 Photos



Notwithstanding anything to the contrary stated elsewhere in the Standard Specification of the Department, the following Special Provisions shall apply:

#### **GENERAL:**

This Contract shall consist of the following projects in Halifax and Hants County:

#### ONE PROJECT IN HALIFAX COUNTY AND TWO PROJECTS IN HANTS COUNTY

**Project 1.0: TRUNK 1,** from west end of Patton Road westerly to Uniacke Connector, approximately 4.50 kilometres.

**Project 2.0: TRUNK 1,** from Uniacke Mines Road westerly to Route 202 (South Rawdon Road), approximately 4.60 kilometres.

**Project 3.0: UNIACKE MINES ROAD,** from Trunk 1 northerly to Partridge Lane, approximately 2.10 kilometres.

#### **TOTAL APPROXIMATELY .....11.20 kilometres**

## DRAINAGE, PARTIAL DEPTH RECYCLING, AND ASPHALT CONCRETE PATCHING AND REPAVING

In general, work on **Project 1.0: Trunk 1**, of this Contract involves partial depth reclamation prior to repaving and shoulder gravelling. In addition, clearing brush, excavation, ditching, type 1 and type 2 gravels, loose laid and hand laid rip-rap, asphalt gutters, asphalt concrete removal, asphalt concrete patching, concrete driveway entrance, installation of pipe for underground drainage structures, and thermoplastic markings are also required.

In general, work on **Project 2.0: Trunk 1**, of this Contract involves partial depth reclamation prior to repaving and shoulder gravelling. In addition, clearing brush, grubbing of highway, excavation, ditching, borrow, type 1 and type 2 gravels, loose laid and hand laid rip-rap, asphalt gutters, asphalt concrete removal, asphalt concrete patching, guard rail steel, manhole/catch basin – adjust/repair, installation of pipe for underground drainage structures, and headwall repairs are also required.

In general, work on **Project 3.0: Uniacke Mines Road**, of this Contract involves gravelling (Type M). In addition, clearing brush, excavation, ditching, fine grading, type 2 gravels, loose laid and hand laid rip-rap, and installation of pipe for underground drainage structures are also required.



#### **LIQUIDATED DAMAGES:**

- Late Completion Clause: The Department and the Contractor agree that in the event that the Contract is not completed by the Contract completion date of *October 31*st, *2022*, the Department will suffer damages which are very difficult to identify with precision because of the nature of the project. The Department and the Contractor agree that a fair pre-estimate of the amount of set damages is *Two Thousand Dollars (\$2,000.00)* per day. Therefore, the parties agree that the Contractor shall pay to the Minister for each and every day after the Contract completion date, the sum of *Two Thousand Dollars (\$2,000.00)* determined by the parties hereto to be liquidated damages, not a penalty.
- 2.0 <u>Interim Completion Date:</u> The Department and the Contractor agree that in the event that *Project 1.0 (Trunk 1)* and *Project 2.0 (Trunk 1)* are not completed by *September 30<sup>th</sup>*, *2022*, the Department will suffer damages which are very difficult to identify with precision because of the nature of the project. The Department and the Contractor agree that a fair pre-estimate of the amount of set damages *is Two Thousand Dollars (\$2,000.00)* per day. Therefore, the parties agree that the Contractor shall pay to the Minister for each and every day after the Interim completion date, the sum of *Two Thousand Dollars (\$2,000.00)*) determined by the parties hereto to be liquidated damages, not a penalty.
- daytime hours. Work shall include all measures necessary to ensure that the traveled way is clear of all of the Contractor's equipment, materials, and temporary traffic control, and the road is returned to the traveling public for use in a safe manner as identified in the accepted Traffic Control Plan. Day time hours are defined as the period beginning at sunrise and ending at sunset. Sunrise and sunset will be those as posted by Environment Canada for the location nearest the work area. Contractors are expected to schedule their work in accordance with daytime hours. The Contractor will be permitted to position traffic control devices along the shoulder of the road up to one half (1/2) hour prior to sunrise and to remove traffic control devices from along the shoulder of the road up to one half (1/2) hour after sunset. Any other work, as previously detailed, carried out while removing or positioning traffic control devices will be considered to be in noncompliance with daytime hours of work.

All work on this Contract not in compliance with daytime hours as defined above will be subject to a lane rental fee. Any incidence of work on this Contract not in compliance with day time hours as defined above will be subject to a lane rental fee of *One Thousand Five Hundred Dollars* (\$1,500.00) per lane for every 15-minute increment or any part thereof, unless approved night time work provisions are in place.

Work on this Contract outside daytime hours requires approval of the Engineer and the Traffic Authority and shall be in accordance with the Department's Night Work Specification.



The Hours of Work clause shall not be utilized by the Contractor, for the purpose of extending the workday beyond daytime hours at the cost of the Lane rental Fee (Liquidated Damage) as defined herein. Work done by the Contractor beyond day time hours without approval by the Engineer may be considered to be in non-compliance with the Occupational Health and Safety Act or Regulations as defined in the Notice to All Bidders of these Special Provisions. Work carried out by the Contractor beyond daytime hours without approval by the Engineer will not be approved for payment.

4.0 Partial Depth Reclamation and Asphalt Concrete Repaving: The Contractor is advised that in the event that the asphalt concrete paving operation does not start within a maximum time limit of ten (10) calendar days after the completion of the Partial Depth Reclamation with Expanded Asphalt Stabilization operation, Liquidated Damages of *Two Thousand Dollars (\$2,000.00) per day* will be applied.

Each Liquidated Damage is considered separately and applied independently.

#### **SUPPLIERS AND SUBCONTRACTORS:**

On this electronic bid submission, bidders for this Tender shall forward, via fax (902 861-4828), a statement indicating the name and location of all major suppliers and subcontractors. Major suppliers and subcontractors will be identified as those who perform, supply, or contribute more than \$50,000.00 of the project's value. Faxes shall be received prior to Bid Letting (closing). Suppliers or subcontractors so named shall be acceptable to the Department. Failure to provide this information prior to the Tender Letting may result in rejection of the bid. *In the event that there are no suppliers or subcontractors that meet the requirements stated above, the Contractor shall submit the form stating as such.* 

Only one (1) supplier/subcontractor shall be permitted for each material and/or service. Statements which contain multiple names for the same material and/or service will be rejected.

The successful bidder, upon award of the Contract, shall not change the supplier or subcontractors so named without the written approval from the Department.

# **SITE LOCATION, PLANS, APPROVALS:**

The following plans and documents included with this tender can be found in Appendix and with this tender on the DPW BidX website:

- H-2019-016-03 Pavement Markings and Signing Plan, one (1) page
- 2022-082-HW-001 Culvert Headwall Modification, Trunk 1 Near Route 202, one (1) page



#### **INSTRUCTIONS TO BIDDERS:**

#### 1. Bid Submission:

**Bidders are advised that only electronic bids will be accepted.** In order to bid on this tender, Bidders must be registered with our service provider, Bid Express (<a href="www.bidx.com">www.bidx.com</a>)

## 2. <u>Nova Scotia Sustainable Procurement Policy</u>:

This tender is being conducted pursuant to the Nova Scotia Sustainable Procurement Policy and Procurement Manual.

## 3. <u>Terminology</u>:

All capitalized terms used and not otherwise defined in this document, shall have the meanings ascribed to them in the Nova Scotia Department of Transportation and Public Works Standard Specification - Highway Construction and Maintenance (February 1, 1997), and latest revisions (Standard Specification).

## 4. <u>Construction Contract Guidelines</u>:

The policies and procedures of the Nova Scotia Construction Contract Guidelines, latest edition, are applicable to this tender. These Guidelines do not supersede the Department's Standard Specification and Tender Documents for use on this Project.

## 5. Municipal Bylaws:

The Contractor shall abide by all Municipal Bylaws relating to work on this project. This includes but is not limited to restrictions on work areas, hours of operation, sound limits, etc.

### 6. COVID-19 Vaccination Requirement for Suppliers and Contractors:

As part of Phase 3 of the Provinces reopening plan, the Province has lifted mandatory vaccinations requirements as of March 21, 2022. Phase 3 changes will be continually monitored by Public Health and if required, the reopening plan may be paused to respond to current Covid 19 levels.

All Suppliers working on behalf of the Nova Scotia Government and entering government facilities and/or interacting with provincial employees or the public are highly encouraged to complete the Supplier Attestation Form if they have not previously submitted a form. Although there will no longer be a proof of vaccine requirement for Suppliers, we will continue to encourage Suppliers to attest to their vaccination status when renewing or bidding on future contracts. This is to ensure we have accurate data on vaccination status in case the epidemiology changes. Failure to compete the attestation form will not lead to the disqualification of proponents/bidders.



Click here for Supplier and Contractor general information and electronic submission of the attestation form: <u>Supplier Vaccination | Procurement | novascotia.ca</u>. Only one attestation form is required per Supplier or Contractor to address all contracts with the Province. This applies to all new and existing Nova Scotia Public Works contracts.

Suppliers and Contractors who cannot access the electronic form through the above website, or who do not have a supplier vendor number, may choose to complete and submit the attestation form found on the BidX website: https://www.bidx.com/ns/main.

If there is a confirmed positive COVID-19 case on a worksite, the Supplier or Contractor must follow current Public Health recommendations and guidelines and notify the Public Works representative immediately.

# 7. <u>Contractor Safety Documentation</u>:

The successful bidder is required to submit safety documents as per Policy PO 1075.19 "Contractor Safety Policy Program" as found under "Also Available" on the Bid Express website. No work shall commence until the Contractor's HSE Program has been Approved by the Department.

The Contractor shall take all reasonable precautions working around known hazards, as well as all other hazards at or near the workplace (project). The control measures the Contractor chooses to undertake for the hazard reduction strategy are required to be included in the Contract safety plan and hazard assessment. The Contractor is required to complete and submit their own hazard assessment (as part of the HSE Project Plan) and Traffic Control Plan for the project prior to commencing work, or as otherwise authorized in writing by an approved authority within the Department.

Toolbox talks shall be provided to the Engineer at the end of each week. Any Incident reports shall be submitted to the Engineer within 24 hours.

## 8. Contractors Permits:

## 8.1. **Special Move Permits**:

Permits for the transportation of over-dimensional and over-weight loads, if required, shall be obtained from Access Nova Scotia through an on-line service at the government website:

https://novascotia.ca/sns/access/drivers/special-move-permits.asp

This service provides 24 hours, 7 days a week access to haulers requiring Single Trip - Special Move Permits for over-dimensional and over-weight loads.



#### 8.2. Site Access Permits:

Any Work on the roadway or within the highway right-of-way, including construction of a new access point or erecting a structure within 100 metres of any highway, a permit is required prior to starting the work. An application form can be obtained from the local office of the N.S. Department of Public Works or you can download an application from the website.

https://novascotia.ca/tran/hottopics/lpa/highwayrightofwaypermit.pdf

## **8.3.** Environmental Permit Transfers:

All project-specific permits will be transferred from the Department to the Contractor, before or after award of the Contract. Submission of a bid will be considered acceptance to receipt of all permit transfers before or after award of the Contract.

## 9. <u>Survey Requirements</u>:

The Contractor shall be responsible for all survey requirements during this project. The supplemental specification document "Survey Responsibilities", describing the responsibilities of both the Contractor and the Department, posted under "Also Available" on the DPW Bidx website (www.bidx.com) shall be in effect on this Contract.

The Contractor shall be responsible for the supply and placement of construction stakes at 20 metre intervals for all phases of The Work as directed by the Engineer. All costs incurred by the Contractor associated with the survey requirements shall be included in the Contract unit prices.

## 10. <u>Erosion and Sediment Control Personnel:</u>

The Contractor is reminded that on this Contract it is mandatory that the Contractor have a person on site who has successfully met the requirements for training in erosion and sediment control required by the Department of Public Works and has a Certificate in Training (after having completed the Erosion and Sediment Control workshop offered by the Centre for Water Resource Studies (CWRS), DalTech - Dalhousie University).

# 11. Cooperation Between Contractors and Department Staff:

During the course of completing the work on this Contract the Contractor may be required to work in close proximity with the Department of Public Works (DPW) staff and/or other contractors or consultants or utility companies. The Contractor shall make every reasonable effort to schedule their activities so as not to bring them into conflict with the work of other DPW Staff and/or other contractors or consultants or utility companies. Should a conflict arise, the Engineer shall arbitrate any such disputes. The decision of the Engineer will be final.

Delays incurred due to this situation shall not constitute a claim on the part of the Contractor for damages or for any loss of anticipated profits.



## 12. Standard Specification:

The Nova Scotia Department of Transportation and Public Works Standard Specification - Highway Construction and Maintenance (February 1, 1997), and latest revisions, shall be in use on this Contract.

Free downloads are available at: <a href="http://novascotia.ca/tran/publications/standard.pdf">http://novascotia.ca/tran/publications/standard.pdf</a>

The specification contains some major revisions and should be closely reviewed by all Bidders.

Unless otherwise amended in the Special Provisions, all materials, production, and Work shall conform to the Standard Specifications.

### 13. Extended Warranties:

In addition to the obligations stated in Division 1, Section 3, Subsection 41.0, for all warranties extending beyond the standard one-year period, as outlined in the tender documents, the Contractor shall provide Performance Assurance for the full duration of the longest extended warranty period (Extended Warranty). The combined Performance Assurance for the Extended Warranty period(s) for this Contract shall be in the form of a Certified Cheque, Irrevocable Standby Letter of Credit, Bank Draft, Money Order, or Contract Maintenance Bond in the amount of ten percent (10%) of the Contract value. Performance Assurance for the Extended Warranty period shall be delivered to the Engineer at least thirty (30) days prior to the beginning of the Extended Warranty period.

On this Contract, contrary to the Department's Standard Specification, Division 1, Section 3, Subsection 13.0 – Contract Security, the option to reduce Contract Security from 10% to 5% shall not be permitted.

This Extended Warranty shall begin one year following the date of Substantial Performance. The Contractor shall supply the Department with Performance Assurance thirty (30) days prior to the beginning of the Extended Warranty period. The Extended Warranty period shall be for two (2) years. Performance Assurance shall be retained for the full duration of the Extended Warranty period.

Where the Contractor has provided a Certified Cheque, Irrevocable Standby Letter of Credit, Bank Draft, or Money Order as Contract Security and elects not to replace the original security deposit with new Performance Assurance for the Extended Warranty period, the Engineer shall retain the full amount of the Contractor's original security deposit for the duration of the Extended Warranty period.

Subject to satisfactory performance and fulfillment of all obligations under the Contract, the Contractor shall be entitled to be repaid the money so deposited, without interest.



## 14. Superpave Asphalt Concrete End Product Specification (EPS):

The Department's "Superpave Asphalt Concrete End Product Specification (EPS) March 2022" specification shall be in use on this Contract.

#### Download available at:

https://novascotia.ca/tran/publications/asphalt/Superpave Special Provision Specification - March 2022.pdf

## 15. <u>Smoothness Testing</u>:

The following chart as detailed in the Smoothness Specification found in "Appendix H" of the Department's Standard Specification shall be used as a guide for implementation of the payment adjustments.

The payment adjustment for all categories of works will be applied as follows:

Smoothness Specification Payment Adjustment Chart		
Lifts	Overall Bonus/Penalty	Localized Roughness
2	Full Bonus/Full Penalty	100%
1	Full Bonus/Full Penalty	50%

## 16. Price Escalation/De-Escalation - Performance Graded Asphalt Binder (PGAB):

The Contractor may be assessed a price increase or decrease for asphalt cement utilized in the production of asphalt concrete under this contract, if the Monthly Asphalt Binder Rack Price (MABRP) for the PGAB specified differs, from the month prior to the month in which this tender closes and the month(s) in which the paving/repaving work is performed. The MABRP will be the weighted average posted rack price established for the month, based on the rack prices provided by each approved supplier. This information will be posted on the Department's website at the end of each month: <a href="http://novascotia.ca/tran/trucking/rackprice.asp">http://novascotia.ca/tran/trucking/rackprice.asp</a>

CONTRACTORS ARE ADVISED THAT PARTICIPATION IN THE PRICE ESCALATION/DE-ESCALATION PROGRAM FOR PERFORMANCE GRADED ASPHALT BINDER (PGAB) USED IN ASPHALT CONCRETE MIX IS MANDATORY ON THIS CONTRACT.

For asphalt concrete mixtures containing Recycled Asphalt Pavement (RAP) the quantity of liquid asphalt in the RAP will be subtracted from the total liquid asphalt calculated for the project. For the purposes of this payment adjustment the amount of liquid asphalt contained in the RAP will be assumed to be 4.5%.



Price adjustments due to the Contractor or amounts owing to the Department will be paid/recovered when the paving/repaving is completed.

## **17.** Traffic Control:

On this Contract, Traffic Control is the responsibility of the Contractor and all costs associated with the provision of Traffic Control shall be included in the Contract unit prices.

Upon award of this contract, the Department will be removing all traffic control devices in place at the Black Brook Structure (HAN002). Once the Department has removed all traffic control devices at HAN002, the Contractor shall assume all responsibilities and liabilities for traffic control at this location, as well as physically maintaining the approaches and departures to the structure to ensure safe passage to all public users, all at no cost to the Department.

Traffic Control, in accordance with the latest editions of the Department's Standard Specification and the **Nova Scotia Temporary Workplace Traffic Control Manual**, is required for the Contractor to complete all work under this Contract in a safe manner for the travelling public and for all personnel on the work site.

Traffic Control Signs identified as "TC Signs and Regulatory Signs" in the latest edition of the Department's "Temporary Workplace Traffic Control Manual", as required, shall be supplied, installed, and maintained by the Contractor. "Minister - Project Signs" and "Joint Federal Provincial Signs" will be supplied by the Department and shall be installed and maintained by the Contractor. Traffic Control Signs required but not identified as "TC Signs or Regulatory Signs" in the latest edition of the Department's "Temporary Workplace Traffic Control Manual" will be supplied by the Department and shall be installed and maintained by the Contractor. Signs supplied by the Department and not returned by the Contractor at completion of the project, will be charged to the Contractor at 100% of their replacement cost.

The Contractor is advised that lane closures are not permitted beyond daytime hours as defined in Liquidated Damages Paragraph 2.0 - Hours of Work, of these Contract Documents.

The Contractor is hereby notified that parking construction equipment, trucks etc. on the roadway shoulders during off hours shall be a minimum of 10 metres from the edge of the roadway and have a minimum of 400 metres of sight distance with traffic control devices in place as required. Temporary access locations adjacent to the highway shall have six to one sloped ends.

Prior to the commencement of any construction, the Contractor shall provide to the Engineer a schedule of work activities, which shall include a Traffic Control Plan which clearly indicates all control devices, outline of temporary painted centerline/outside white lines, spacing of the lanes, spacing of the work area, access points to the work area and any other necessary information



required by the Engineer. All costs associated with traffic control shall be included in the Contract bid items.

On this Contract, the Contractor will be required to maintain two lanes of traffic during weekdays as follows:

- Project 1.0 (Trunk 1) Monday thru Friday 7AM to 9AM and 4PM to 6PM.
- Project 2.0 (Trunk 1) Monday thru Friday 7AM to 9AM and 4PM to 6PM.

### 18. <u>Truck Rates:</u>

The Department of Public Works truck rates which came into effect on *January 17, 2022* are in effect for this Contract, in situations where the 80-20 Rule applies. The rates are posted under "Also Available" on the DPW Bidx website.

For Asphalt Concrete produced under the End Product Specification, during the production of any mix type when the Contractor is establishing their Job Mix Formula, trucks hired under 80-20 Rule to haul trial mix asphalt concrete will be paid at the hourly rate for the hours worked during the trial period until production commences, at which point tonne-kilometre rates will apply.

No overweight portion of any weight certificate/ticket will be paid regardless of who completed the weighing and the reason for the overweight portion. All trucks shall provide their license plate number to the Department's Weigher. The Department will not issue a weigh ticket unless the licence plate number is provided.

In cases where Recycled Asphalt Pavement (RAP) is to be hauled by tonne-km rates, the rate for asphalt concrete shall be used.

All trucks hauling asphalt concrete mix that requires liquid anti-strip agents to be used must show proof that they have received this training to the Weigher.

The Contractor shall provide a completed Haul Distance Agreement Form at the pre-job meeting.

Effective for contracts awarded after April 1, 2019, the Department has approved a 3% rate increase to the hourly rate and the tonne kilometer rates for gravel and asphalt concrete when delivered in a live bottom trailer (for TANS Trucks only).

## 19. <u>Directives Related to the 80-20 Rule</u>:

In consultation with the Truckers Association of Nova Scotia (TANS) and the Nova Scotia Road Builders Association (NSRBA) two directives relating to the application of the 80-20 Rule have been developed: Directive 22 (Guide for Hiring TANS Trucks) and Directive 23 (TANS Unable to Supply all Trucks Requested by the Contractor). These directives will apply to all contract work unless



otherwise instructed. Copies of the Directives are posted under "Also Available" on the DPW Bidx website.

### 20. Site Access:

The Contractor shall be responsible to provide all access to the work site, either through public or private property at all times. The Contractor is responsible for maintaining all entrances to public or private properties such that they are accessible with acceptable grades at all times. The Contractor shall provide the Department with a site access plan for review and approval prior to the start of The Work.

# 21. Access to Highways from Pits and Quarries:

In order to access any public highway, Contractors are reminded that prior to opening a new pit or quarry, approval to access the highway shall first be obtained from the Department's local Area Manager.

# 22. <u>Conditions for Temporary Permit - Pits and Quarries:</u>

In order for the Contractor to seek approval by the Department under the Exemption, the Contractor shall, prior to any development of the pit or quarry, adhere to the conditions as stated in the document "DPW Supervision of Pits and Quarries" as found under "Also Available" on the DPW Bidx website.

The Contractor shall notify the Department of their intent to make use of the Department's Exemption. In order for the Department to consider the request for the Exemption, no activity on a previously active site or a proposed new site (e.g. clearing, grubbing, excavation, construction of an access road) will be permitted. In the event that the development of the site has been initiated prior to the Department receiving notification, the Department will not consider the request to utilize the Exemption, and the site request will be referred to the Department of Environment. Prior to notifying the Department, the Contractor will only be permitted to perform activities required to determine the quality of the source rock (e.g. test pits and/or core drilling).

Approval of any source under the Exemption will not be a condition of award. The Department will review the submission for compliance. The Department reserves the right to reject any proposal that does not meet the stated requirements. Time required by the Department to review the submission will not be considered as a claim for damages on the part of the Contractor. Should approval not be granted, the Contractor shall supply the material(s) from an approved source. The Contractor will be permitted to change sources after award provided the conditions outlined above are met.



#### 23. Utilities:

All existing utilities are to be located, protected, and maintained in working order. Any damages occurring as a result of construction activities are the responsibility of the Contractor to remedy. The Department will coordinate the relocation of utilities, including poles for power, telephone, and television, as required to complete The Work (excluding the installation and removal of poles for traffic signals). The Contractor shall cooperate to the fullest possible extent with utility companies (and their subcontractors) where work overlaps or where one is dependent on the other for work or space. Delays resulting from the location or relocation of these services shall not constitute a claim on the part of the Contractor for damages or for any loss of anticipated profits.

### 24. <u>Land Acquisition/Utilities</u>:

## 24.1. Land Acquisition:

At the time of award of this Contract all the required right-of-way may not have been acquired by the Department. It is the Contractor's responsibility to become informed of these areas by contacting the Contract Administrator. The Contractor is not permitted to work on any section of the contract until first obtaining permission from the Engineer.

Delays in acquiring the necessary right-of-way by the Department shall not constitute a claim on the part of a Contractor for damages or for any loss of anticipated profits.

## 24.2. Utilities:

The Department will coordinate the relocation of utilities (within our right of way), including poles for power, telephone, and television, as required to complete the work (excluding the installation and removal of poles for traffic signals). The Contractor shall cooperate to the fullest possible extent with utility companies (and their subcontractors) where work overlaps or where one is dependent on the other for work or space. Delays resulting from the location or relocation of these services shall not constitute a claim on the part of the Contractor for damages or for any loss of anticipated profits.

# 25. Damage and Repairs to Existing Roadways:

The Contractor is responsible for any and all damage to the existing roadway, caused by their adjacent construction work. The Contractor shall make timely repairs acceptable to the Department, at their own cost, as directed by the Engineer, during execution of the Contract. In the event that repairs are not carried out within 72 hrs after the Contractor has been advised to do so by the Engineer, the Department will carry out repairs and recover the cost of such repairs from the Contractor.



## 26. Shouldering:

Gravels shall be applied directly to the road shoulders by means of an approved side delivery shoulder spreader. Spreading or placing by end dumping of gravels on the pavement shall not be permitted. The shoulder shall be graded such that the outside edges of the shoulder, including the rounding, appear neat and uniform to the satisfaction of the Engineer.

Compaction of gravel for shoulders shall be as detailed in Division 3 Section 5 or as approved by the Engineer.

On highway paving and re-paving contracts where the roadway is open to the public, the shouldering operation shall commence, in a continuous operation until completion, beginning the next working day after the completion of the placement of the final lift of asphalt concrete. Should the Contractor suspend final lift paving operations prior to finishing the final lift, the shouldering operation shall be completed up to the point of suspension of the final lift. The shouldering operation shall commence one working day following the suspension of the paving operation.

Variances in this time frame may be granted on Contracts which contain multiple paving projects within geographical areas as defined by electoral constituency. These variances must be applied for to the Engineer who will examine the request and underlying reasons and decide on an appropriate adjustment.

Immediate gravelling of shoulders shall be required in areas where the distance between the top of the final lift of pavement and the graveled shoulder exceeds 300 mm. Immediate shouldering may be required if the Engineer determines areas require immediate attention. These areas may include, but not be limited to, unsupported highway edges, safety concerns, steep drop offs, washouts, and driveway entrances.

## 27. <u>Shoulder Rental:</u>

All shouldering work on this Contract that is not in compliance with the timelines and methods described above in <u>Section 26.0 Shouldering</u> of <u>Instructions to Bidders</u> shall be subject to a Shoulder Rental fee. Shoulder Rental fees will also apply when the Contractor has not commenced the shouldering operation or is not proceeding in a continuous operation as per the timelines applied for and approved by the Engineer for contracts with multiple projects. The value of the Shoulder Rental fee will be determined based upon the project value, class of road, traffic volume, safety risk, and overall importance of the road. The rate of rental shall be daily and stated in the special provisions for each separate Project.

# 28. <u>Indigenous Labour Engagement</u>:

The Contractor and/or Sub-Contractors (sub-contractors when possible) shall demonstrate a commitment to employ a minimum of 10%. of the labour (skilled and unskilled) required on this contract from qualified individuals identified by the Mi'kmaw Economic Benefits Office (MEBO). In



addition, Contractors shall be aware that many Indigenous communities are home to small businesses that can provide local services that may benefit the contractor. The contractor shall contact Alex Paul, Executive Director at 902-565-6897 or by email: <a href="mailto:alexpaul@mebons.ca">alexpaul@mebons.ca</a> to start the process of identifying potential workers, and businesses, from the Indigenous Community, along with their experience, skills, or trade qualifications.

In order to show that the Contractor has made every reasonable effort to meet the above referenced employment requirement and show what engagement steps have been taken; the Contractor shall complete the INDIGENOUS LABOUR ENGAGEMENT CHECKLIST, found under "Also Available" on the BIDX website <a href="https://www.bidx.com/ns/main">https://www.bidx.com/ns/main</a>. Engagement may include but is not limited to a community information session, an employment and supplier session, as well as regular project update calls.

At the start of the contract Part 1A and 1B of the checklist shall be completed as follows: PART 1A shall be completed by the Contractor and submitted to MEBO at the start of the Contract. PART 1B shall be completed by MEBO, signed, and returned via email to the Contractor, with a copy to the Project Engineer.

At the conclusion of the contract Part 2 of the checklist shall be completed as follows: PART 2 shall be completed by the Contractor and emailed to MEBO at the conclusion of the contract. This will demonstrate what steps the Contractor, and/or Sub-contractor made during the Contract to engage the Indigenous community. MEBO will sign and return via email to the Contractor, with a copy to the Project Engineer.

If a worker, identified by the community engaged on this Contract, cannot demonstrate an ability to perform the work they are qualified for the Contractor has the authority to replace them with another qualified worker as approved by the Engineer. The intent with any replacement worker is to maintain the minimum 10% participation. Should a dispute arise in relation to employment of any Indigenous person the Employment Officer, in consultation with MEBO, shall contact the Engineer. The Engineer will examine all evidence submitted by the parties involved. The Engineer may make whatever enquiries as they deem necessary to resolve the dispute. The Engineer's decision will be final and not subject to appeal.

## 29. <u>Contractors Price Escalation / De-Escalation – Diesel Fuel:</u>

The Contractor may be assessed a price increase or decrease (as outlined in the Unit Price Adjustment Tables) to the Contract unit prices for Excavation Common, Asphalt Concrete (all Mix Types), Gravels (Type 1, Type 2 and Type 1S), Pulverization, Partial Depth Reclamation and Full Depth Reclamation if the Monthly Average Price for Self - Service Diesel Fuel differs by more than +/- 5% from the month prior to the month in which this tender closes and the month(s) in which the work is performed.



The Monthly Average Price for Self-Service Diesel Fuel will be posted on the DPW website: https://novascotia.ca/tran/trucking/contractorsdieselfuel.asp

The Project Engineer will calculate the percent change in diesel fuel, if it differs by more than +/- 5%, they will refer to the Unit Price Adjustment Tables.

The Project Engineer will apply the appropriate unit price adjustment to the applicable unit cost(s) to obtain the payment adjustment.

The applicable quantity(ies) of work completed is/are multiplied by the applicable payment adjustment(s) and totalled to obtain the fuel escalation/de-escalation adjustment.

The escalation/de-escalation adjustment will be applied to applicable quantity(ies) of work completed on the final progress estimate relevant to this Contract.

Example of price adjustment calculations are as follows:

**Example:** Pulverization, Graveling and Asphalt Paving Contract

- Tender closed October 16, 2017 with completion date July 31, 2018
- Quantities of work completed and Unit Prices
- Pulverization: 10,000 square metres at \$1.50/square metre
- Gravel Type 1: 12,000 tonne at \$14.00/tonne
- Gravel Type 1S: 9,000 tonne at \$12.00/tonne
- Asphalt B-HF: 10,000 tonne at \$80.00/tonne
- Asphalt C-HF: 8,000 tonne at \$70.00/tonne
- Fuel price posted on DPW web site for month September 2017 (month before the tender closed) is 103.7 cents
- Fuel price posted on DPW web site for month July 2018 (month the work was performed) is 113.6 cents
- Percent change in diesel fuel equals (113.6-103.7)/103.7\*100= 9.6%

The Unit Price Adjustment Tables (as follows in this Notice to Bidder) indicate that the price adjustments are as follows:

Pulverization: 1%
Gravel Type 1: 2%
Gravel Type 1S: 2%
Asphalt Concrete Type B-HF: 2%
Asphalt Concrete Type C-HF: 2%

Payment Adjustment:



Pulverization: \$1.50 x 1% = \$0.01 10,000 square metres x \$0.01 = \$100.00

Gravel Type 1: \$14.00 x 0.02 = \$0.28 12,000 tonne x \$0.28 = \$3,360.00

Gravel Type 1S: \$12.00 x 0.02 = \$0.24 9,000 tonne x \$0.24 = \$2,160.00

Asphalt Concrete Type B-HF:  $$80.00 \times 0.02 = $1.60$ 10,000 tonne x \$1.60 = \$16,000.00

Asphalt Concrete Type C-HF: \$70.00 x 0.02 = \$1.40 8,000 tonne x \$1.40 = \$11,200.00

Amount Owing to the Contractor for Diesel Fuel Escalation: \$100.00 + \$3,360.00 + \$2,160.00 + \$16,000.00 + \$11,200.00 = \$32,820.00

# UNIT PRICE ADJUSTMENTS FOR EXCAVATION COMMON, ASPHALT & GRAVEL RELATIVE TO PERCENT CHANGE IN DIESEL FUEL PRICES

PERCENTAGE CHANGE RELATIVE TO PRICE OF FUEL IN MONTH PRIOR to TENDER CLOSED VS PRICE FUEL IN MONTH WORK WAS PERFORMED	UNIT PRICE ADJUSTMENT, % EXCAVATION COMMON, ASPHALT & GRAVEL	UNIT PRICE ADJUSTMENT, % EXCAVATION COMMON, ASPHALT & GRAVEL
+/- 0.01 - 5.00 %	0	0
+/- 5.01 - 10.00 %	2 %	-2 %
+/- 10.01 - 15.00 %	3 %	-3 %
+/- 15.01 - 20.00 %	4 %	-4 %
+/- 20.01 - 25.00 %	5 %	-5 %
+/- 25.01 - 30.00 %	6 %	-6 %
+/- 30.01 - 35.00 %	7 %	-7 %
+/- 35.01 - 40.00 %	8 %	-8 %



# UNIT PRICE ADJUSTMENTS FOR PULVERIZATION, PARTIAL DEPTH RECLAMATION & FULL DEPTH RECLAMATION RELATIVE TO PERCENT CHANGE IN DIESEL FUEL PRICES

PERCENTAGE CHANGE RELATIVE TO PRICE OF FUEL IN MONTH PRIOR to TENDER CLOSED VS PRICE FUEL IN MONTH WORK WAS PERFORMED	UNIT PRICE ADJUSTMENT, % PULVERIZATION, PARTIAL DEPTH RECLAMATION & FULL DEPTH RECLAMATION	UNIT PRICE ADJUSTMENT, % PULVERIZATION, PARTIAL DEPTH RECLAMATION & FULL DEPTH RECLAMATION
+/- 0.01 - 5.00 %	0	0
+/- 5.01 - 10.00 %	1 %	-1 %
+/- 10.01 - 15.00 %	1.5 %	-1.5 %
+/- 15.01 - 20.00 %	2 %	-2 %
+/- 20.01 - 25.00 %	2.5 %	-2.5 %
+/- 25.01 - 30.00 %	3 %	-3 %
+/- 30.01 - 35.00 %	3.5 %	-3.5 %
+/- 35.01 - 40.00 %	4 %	-4 %

#### 30. Shop Drawings:

Shop drawings shall be stamped by a Professional Engineer registered to practice with the Association of Professional Engineers of Nova Scotia.

In addition to the requirements of the Standard Specifications, the Contractor shall provide the Department with electronically scanned versions of final approved shop drawings in portable document format (PDF). Scanned drawings shall be submitted prior to the completion of The Work and shall include any as built changes.

#### 31. Construction Phasing:

The following items shall have a high priority on this contract.

- Asphalt Paving of the HAN002 (Black Brook) bridge deck.



#### ITEM 02.01.003: CLEARING BRUSH:

Brush clearing shall be performed in accordance with the Department's Standard Specification, Division 2 Section 1 - Clearing, except as modified below.

- i. Brush clearing shall include cutting by hand or machine methods, all brush, trees, and other growth, within the Department's Right-of-Way and to the limits directed by the Engineer.
- ii. The maximum cut-off height for all brush and trees shall be 200 mm.
- iii. Removal of trees / limbs within a safe clearance zone, as determined by the utility, shall be performed by a contractor certified to do the work within the safe clearance zones. The utility company shall verify the qualifications of personnel and shall approve felling methods prior to the Contractor clearing trees near power lines.

Prior to the commencement of work, the Engineer or his designated representative shall mark in the field, all areas for brush clearing. The areas shall be marked at the start and at the end with stakes, as well as the width of clearing with ribbons at no more than forty (40) metre intervals. These brush clearing sections shall be reviewed by the Contractor, with the Engineer, to confirm locations and limits for clearing. The areas marked shall also have the areas calculated by the Engineer and agreed upon by the Contractor prior to any work being performed.

Clearing with mechanized, self-propelled, brush clearing machinery, shall not be permitted within 60 metres of homes, buildings, pedestrian ways, or other locations inhabited or frequented by people. All cutting within these restricted zones shall be performed by hand cutting machines.

The Contractor shall clean the site of all brush, cuttings, slashings, chips, and fallen growth and remove this material to an approved disposal site. The Contractor shall be responsible for securing an approved disposal location and shall comply with all current regulations and permit requirements, governing the disposal of this material. Burning of this material shall not be allowed on this Contract.

The Engineer may permit the discharge of chipped brush material onto the Department's Right-of-Way. The Engineer shall clearly identify the areas where this disposal method is permitted and shall instruct the Contractor on the practices to be employed in the depositing of the brush chips in this manner. At no time shall chips be discharged onto the Department's Right-of-Way without the approval of the Engineer. At no time shall any brush materials be permitted on the roadway.

All damages to pavement, shoulders, ditches, slopes, lawns, and other areas on or off the Department's Right-of-Way, arising from the Contractor's work, shall be repaired to the satisfaction of the Engineer within five (5) working days.



All brush clearing will be clearly marked by the Department prior to the commencement of work. Measurements will be taken to the nearest 0.1 metres. The width of clearing shall be uniform throughout each section and the area (hectares) will be calculated by multiplying the uniform width by the identified length in each section. No deductions will be made for such items as driveways or small areas with little or no brush. However, the Engineer may elect to terminate a section length to exclude a particular area, as required.

Payment for Clearing Brush will be at the Contract unit price per hectare of approved cleared area which shall be full compensation for the furnishing of all equipment, plant, labour, tools, supervision, permits, and incidentals required to complete the work herein specified to the satisfaction of the Engineer.

### ITEM 02.02.001:

#### **GRUBBING OF HIGHWAY:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 2 – Grubbing except as modified below.

Material resulting from the grubbing operation shall not be placed along the embankment slopes. The contractor shall be responsible for obtaining disposal areas outside the department's right-of-way and for all costs associated with obtaining disposal sites outside the department's right-of-way and transporting and placing the grubbing's including overhaul.

#### ITEM 02.03.001:

#### **EXCAVATION ROADWAY & DRAINAGE COMMON:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 3 - Roadway and Drainage Excavation, except as modified below.

On this project all Excavation, Roadway and Drainage Common, shall be hauled away to an approved sited unless directed by the Engineer. Placement of Excavation Roadway and Drainage Common on side slopes will not be permitted.

#### ITEM 02.03.003:

#### **EXCAVATION SOLID ROCK:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 3 – Roadway and Drainage Excavation, except as modified below:

The quantity of excavation solid rock is approximate. The Contractor shall be responsible for disposal of all surplus and waste material, including rock. Rock fragments may be used for slope or ditch erosion protection at identified locations by the Engineer throughout the project. The contractor shall be



responsible for relocating the rock fragments at the Engineers request and will be included in the unit price.

### ITEM 02.03.007: DITCHING:

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 3 – Roadway and Drainage Excavation, except as modified below.

On this Contract Ditching shall also include hand cleaning of the inlet and outlet end of culverts blocked or partially blocked during the ditching operation, and the removal of any stumps located within the ditching limits. Work to be completed as directed by and to the satisfaction of the Engineer.

#### ITEM 02.09.001:

#### WATER FOR COMPACTION AND DUST CONTROL:

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 9 - Water for Compaction and Dust Control, except as modified below:

The maximum allowable unit price for Water for Compaction and Dust Control shall be \$10.00/kilolitre (ten dollars per kilolitre).

The Contractor shall be advised that daily water slips shall be provided to the Project Engineer at the end of each day.

If the unit bid price for this item is greater than the maximum allowable, the Contractor's unit bid price will be reduced to the maximum allowable unit bid price of \$10.00/kilolitre (ten dollars per kilolitre). The aggregate amount of the bid will be adjusted accordingly.

# ITEM 02.11.001: GRADING FINE:

This item shall be carried out in accordance with the Department's Standard Specification, Division 2 Section 11 – Fine Grading, except as modified below.

On **Project 3.0 (Uniacke Mines Road)** of this Contract, this item shall be for shaping the existing road surface to a 2% crown prior to the application of the top Gravel Type M as directed by and to the satisfaction of the Engineer to a maximum width of approximately 8.4 metres.

Payment for Fine Grading shall include compaction, and all materials, equipment, labour, and incidentals required to complete the work.



The roadbed crown must be approved by the Engineer on this Project prior to placement of Gravel Type M.

#### ITEM 02.12.001:

#### **EXCAVATION FOUNDATION COMMON:**

On this Contract, this item shall be carried out in accordance with the Departments Standard Specification, Division 2 Section 3 - Roadway and Drainage Excavation except as modified below.

All existing cross culverts to be removed on this contract are to be disposed of at an approved location.

All excavation must be in accordance with applicable NS regulations and NSDPW specifications.

Any excavation, asphalt removal, gravels, or other materials beyond NSDPW excavation limits will be the responsibility of the contractor. Any quantity of materials used for widening of the road will be the responsibility of the contractor.

The Contractor is responsible for the removal and disposal of all unsalvageable materials to the satisfaction of the Engineer.

When a property owner (including the Contractor's property) is the receiver of surplus material excavated from NSDPW's rights-of-way during the course of contracted activities, the Contractor is responsible to have the property owner sign and date a Release (copy contained in Appendix "A" of the Department's Standard Specification) which holds the Department free from all claims associated with the delivery and unloading of the excavated material. The Contractor must also sign the Release and provide the Engineer, or designate, with copies of the signed release at the end of each week.

The Engineer will provide the Contractor with blank Release forms. The completed forms must be returned to the Engineer before the surplus material is disposed of.

#### ITEM 02.12.002:

#### **EXCAVATION FOUNDATION SOLID ROCK:**

On this Contract, this item shall be carried out in accordance with the Departments Standard Specification, Division 2 Section 3 - Roadway and Drainage Excavation except as modified below.

On this Contract, should solid rock be found during installation of HDPE Pipe, Items 05.12.184, 05.12.185 or 05.12.186, excavation foundation solid rock will be paid under this unit item.

The Contractor shall be responsible for disposal of all surplus and waste material, including rock. Rock fragments may be used for slope or ditch erosion protection at identified locations by the Engineer



throughout the project. The contractor shall be responsible for relocating the rock fragments at the Engineers request and will be included in the unit price.

All excavation must be in accordance with applicable NS regulations and NSDPW specifications.

When a property owner (including the Contractor's property) is the receiver of surplus material excavated from NSDPW's rights-of-way during the course of contracted activities, the Contractor is responsible to have the property owner sign and date a Release (copy contained in Appendix "A" of the Department's Standard Specification) which holds the Department free from all claims associated with the delivery and unloading of the excavated material. The Contractor must also sign the Release and provide the Engineer, or designate, with copies of the signed release at the end of each week.

The Engineer will provide the Contractor with blank Release forms. The completed forms must be returned to the Engineer before the surplus material is disposed of.

#### <u>ITEM 03.02.001</u>: <u>GRAVEL TYPE 1S (MS)</u>:

This item shall be carried out in accordance with the Department's Standard Specification, Division 3 Section 02 - Gravel Type 1, 1S, 2 & M - (MS), AND Division 2 Section 7 except as modified below. Note: Division 2 Section 7 has been revised and the requirements are reiterated in the Notice to Bidders.

The Contractor shall place the gravel Type 1S on the existing gravel shoulders with a shoulder machine. The gravel shall be placed and compacted where and as directed by the Engineer. Gravel Type 1S shall be cut, graded, swept, and compacted immediately behind the shouldering machine to ensure that a high shoulder condition does not exists, and that the material conforms to the slopes and grades of the adjacent asphalt concrete pavement at the end of each day's gravel shouldering operation.

Gravel Type 1S placed by the Contractor shall be hand raked to the satisfaction of the Engineer in the vicinity of guard rail posts and signs. The shoulder shall be graded such that the outside edges of the shoulder, including the rounding, appear neat and uniform, to the satisfaction of the Engineer.

The Shoulder Rental for this contract is **One Hundred Dollars (\$100) per kilometre of road (or any part thereof) per day** for any sections of shoulder that is not serviced as required.

Any water used for compaction in the Gravel Type 1S shall be included in this item.

#### <u>ITEMS 03.02.002 and 03.02.003</u>: <u>GRAVEL TYPE 1 and GRAVEL TYPE 2 (MS)</u>:

This item shall be carried out in accordance with the Department's Standard Specification, Division 3 Section 02 - Gravel Type 1, 1S, 2 & M, except as modified below.



The minimum Percent Fractured Particles for Gravel Type 1 and Type 2 shall be eighty (80%) percent.

On this Contract the stockpiling of Gravel Type 1 and Type 2 on site for later use will not be permitted unless otherwise approved by the Project Engineer.

The Contractor shall provide gravel testing results to the Engineer before gravel haulage.

Gravel Type 1 and Gravel Type 2 (MS) shall be at the Contract unit price per tonne which shall be full compensation for work described in this item, including plant, equipment, grading, materials, labour, and incidentals necessary to complete the work as directed by and to the satisfaction of the Engineer.

#### ITEM 03.06.002:

#### **RIP RAP LOOSE LAID:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 3, Section 6 – Loose Laid Rip-Rap, except as modified below.

On this Contract the stockpiling of Rip Rap Loose Laid on site for later use will not be permitted.

There shall be a minimum of 70% of Loose Laid rip-rap shall be between the 300 mm and 450 mm size sieve. The loose laid rip rap shall be clean blasted quarry stone, free from organics and other debris. Loose laid rip rap may need to be washed prior to placement at the contractor's expense.

This item is intended to be supplied and placed at both the inlet and outlet ends of driveway ends and/or cross culverts or where and as directed by the Engineer and shall be machine placed to avoid waste and ensure stability. This shall be completed within *fourteen (14) days* of culvert installation.

Payment for Rip-Rap Loose Laid will be at the Contract unit bid price per tonne which payment shall include the supply, transportation, and placement in the locations shown including excavation. Payment for this item shall also include all tools, materials, equipment, and services necessary to complete the work to the satisfaction of the Engineer.

#### ITEM 03.07.001:

#### **RIP RAP HAND LAID:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 3 Section 7 – Hand Laid Rip Rap except as modified below.



On this Contract, Rip Rap Hand Laid shall include the removal of the existing Rip Rap (if applicable), base preparation, the hand cleaning of culvert ends (if required) and the supply and installation of Hand Laid Rip Rap on new and/or existing culverts, as directed by and to the satisfaction of the Engineer.

On this Contract, prefabricated concrete blocks will not be considered for use as Rip Rap Hand-Laid, installation of hand laid rip rap as required for Driveway Culverts shall be completed within 14 days of the culvert's installation.

On this Contract the stockpiling of Rip Rap Hand Laid on site for later use will not be permitted.

Payment for Rip-Rap Hand Laid will be at the Contract unit bid price per cubic metre which payment shall include the supply, transportation, and placement as directed by the engineer. Payment for this item shall also include all tools, materials, equipment, and services necessary to complete the work to the satisfaction of the Engineer.

#### ITEM 03.12.006: GRAVEL TYPE M (EPS):

This item shall be carried out in accordance with the Department's Standard Specification, Division 3 Section 12 - Gravel Type 1, 1S, 2 & M except as modified below.

On **Project 3.0 (Uniacke Mines Road)** of this Contract, Gravel Type M shall be placed, compacted, and graded on the existing roadways at an estimated thickness of **150mm** or as otherwise directed by the Engineer. Gravel thickness shall be tapered at the roadway edges as directed by the Engineer.

The Contractor shall provide gravel testing results to the Engineer before gravel haulage.

Gravel Type M operations will not be permitted to commence on this Project until all Grading Fine (Item 02.11.001) has been completed.

On this Contract the stockpiling of Gravel Type M on site for later use will not be permitted unless otherwise approved by the Project Engineer.

Gravel Type M shall be placed and compacted to a minimum of 100 % maximum dry density attained using the method prescribed herein as "Control Strip". The shaping of the material shall be continued until it is well compacted, free from ruts, waves, and undulations.

Gravel Type M (EPS) shall be at the Contract unit price per tonne which shall be full compensation for work described in this item, including plant, equipment, grading, materials, labour, and incidentals necessary to complete the work as directed by and to the satisfaction of the Engineer.



#### ITEM 04.02.005:

#### LIQUID ASPHALT FOR PARTIAL DEPTH RECLAMATION:

On this Contract, the Performance Graded Asphalt Binder (PGAB) added to the un-stabilized mix in accordance with the Department's Standard Specification, Division 4 Section 21 — Partial Depth Reclamation with Expanded Asphalt Mix will be paid based on the Contractor's daily weigh slips plus appropriate documentation from the supplier to verify the amount in the last tanker.

This item shall be carried out in accordance with the Department's Standard Specification, Division 4 Section 2 - Performance Graded Asphalt Binder (PGAB), except as modified below.

The minimum allowable unit price for <u>LIQUID ASPHALT FOR PARTIAL DEPTH RECLAMATION</u> shall be \$1,050.00/t. (One Thousand Fifty Dollars per Tonne).

If the unit bid price for this item is less than the minimum allowable, the Contractor's unit bid price will be increased to the minimum allowable unit bid price of \$1,050.00/t. (One Thousand Fifty Dollars per Tonne). The aggregate amount of the Tender will be adjusted accordingly.

On this Contract, Performance Graded Asphalt Binder added to the unstabilized mix in accordance with the Department's Standard Specification, Division 4 Section 21 – Partial Depth Reclamation with Expanded Asphalt Mix specification shall conform to the Department Specification for PG58S-28, unless otherwise approved by the Engineer.

#### 04.02.006:

#### **ASPHALT BINDER PGAB PG58S-28:**

This item shall be carried out in accordance with Department's Standard Specification, Division 4 Section 2 - Performance Graded Asphalt Binder (PGAB), except as modified below:

The Performance Graded Asphalt Binder for all Asphalt Concrete Mix Types on this End Product Specification Contract shall conform to the Department Specification for PG58S-28, unless otherwise approved by the Engineer.

The minimum allowable unit price for <u>ASPHALT BINDER PGAB PG58S-28</u> shall be \$1,050.00/t. (One Thousand Fifty Dollars per Tonne).

If the unit bid price for this item is less than the minimum allowable, the Contractor's unit bid price will be increased to the minimum allowable unit bid price of \$1,050.00/t. (One Thousand Fifty Dollars per Tonne). The aggregate amount of the Tender will be adjusted accordingly.

For this Contract, PGAB shall be obtained from a Supplier approved by the Department for supply of PGAB.



On this End Product Specification Contract, the Performance Graded Asphalt Binder (PGAB) used in the Asphalt Concrete Mix (*not including patching material*) will be paid as a separate item. Performance Graded Asphalt Binder for all Asphalt Concrete Mix Types will be paid based on the average lot Quality Assurance ignition oven burns.

#### ITEM 04.03.004:

#### **ASPHALT GUTTER (EPS):**

This item shall be carried out in accordance with the Department's Standard Specification, Division 4 Section 3 - Asphalt Concrete Curb and Gutters and Division 4 Section 6 – Removal of Asphalt Concrete except as modified below.

On this Contract, this item shall include the removal and disposal of existing asphalt gutter and off-chutes (if required), excavation and preparation of the surface prior to placement of new asphalt gutter, off-chutes, and incidentals necessary to complete the work. The contractor is advised that asphalt gutter shall not be placed through driveways. The asphalt concrete mix for the gutter shall be Type D-HF (EPS) and is to be installed in areas as directed by the Engineer. The construction of the asphalt gutter off-chutes shall be included in the unit bid cost per metre of gutter. Asphalt Gutter off-chutes shall be constructed as the gutter is constructed.

#### ITEM 04.04.033:

#### **ASPHALT PARTIAL DEPTH RECLAMATION:**

This item shall be carried out in accordance with Department's Standard Specification, Division 4 Section 21 – Partial Depth Reclamation with Expanded Asphalt Mix (MS), except as modified below.

Department's Standard Specification Division 4 Section 21 – Paragraph 3.0 Submission and Design Requirements is removed and replaced with the following:

- **3.1 Equipment.** The Contractor shall submit to the Engineer, at least ten (10) days prior to commencing the work, a list of all pieces of equipment intended for use in the work.
- **3.2 Calibration Certificates.** The Contractor shall submit to the Engineer, at least seven (7) days prior to commencing the work, recent calibration certificates of all metering, weighing, and other controlling devices to be used in controlling and monitoring the mixture production. Certificates must be dated within the same calendar year or prior to the start of construction season.
- **3.3 PGAB Requirements.** The Contractor shall be responsible for sampling and providing the samples to the Department's representative and ensuring that the Performance Graded Asphalt Binder (PGAB) meets the requirements of the Departments Standard Specification, Division 4, Section 2.



Department's Standard Specification Division 4 Section 21 – Paragraph 5.1.1 Partial Depth Stabilizing Equipment is removed and replaced with the following:

**5.1.1 Partial Depth Reclamation and Stabilizing Equipment.** Partial Depth Reclamation shall be undertaken by use of a multi-unit recycling train. The reclamation and stabilizing equipment shall consist of one of the following equipment lists: a cold milling machine, an intermediate unit having material sizing, screening and mixing capability, and a means to convey the processed material directly to the paver; or a recycling/reclaiming unit and an intermediate unit of which the combination shall have material sizing, screening, and mixing capability, and a means to convey material directly to the paver. The multi-unit recycling train shall be capable of ensuring that 100% of the reclaimed asphalt concrete passes the 37.5 mm sieve by way of sizing or screening the oversize material. A single unit for reclamation and stabilization feeding directly to the paver shall not be permitted.

Department's Standard Specification Division 4 Section 21 – Paragraph 5.2 Placement is removed and replaced with the following:

**5.2.1 Trial Mixture Placement.** The Contractor shall commence the work by processing and placing a specified quantity of Expanded Asphalt Mixture over a distance of approximately 500 m at a location approved by the Engineer. The Department will conduct testing for thickness, moisture content, and compaction during the trial production.

Continuation of the placement of the Expanded Asphalt Mixture shall commence following acceptance of the trial production.

The Contractor shall be responsible for verifying quantities of liquid asphalt and water by mass used for the Expanded Asphalt Mixture prior to, during, and following the trial production.

Stabilized Expanded Asphalt Mixture placed in the trial section must meet the requirements of Section 6.0.

**5.2.2 Placement and Compaction.** The surface of the EAM shall be uniform in texture and free of segregation, contamination, raveling, rutting, potholing, cracking, and other surface defects. The Expanded Asphalt Mixture shall be spread to the profile and cross section as specified in the Contract Documents or as approved by the Engineer. The compacted surface of the mixture shall be smooth and true to the specified crown and grade.

The stabilized mixture shall be compacted to ensure that the density of the mixture is in accordance with Section 6.6 determined from the recovery and testing of representative field samples.

**5.3 Operational Constraints.** Soft spots or areas of compacted Expanded Asphalt Mixture exhibiting deflection, rutting, sagging, or cracking shall be removed full depth and repaired with suitable, freedraining granular material. The repair work shall be approved by the Engineer prior to placement of the wearing surface.



The Contractor shall not place the Expanded Asphalt Mixture during rain, when the surface is frozen, when there is free-standing water present, or when the ambient temperature is below 10°C.

Traffic, including construction traffic, shall not be allowed on the freshly placed Expanded Asphalt Mixture until such time as it is able to carry traffic without damage. The Contractor shall be responsible for repair of the damaged mat.

Placement of the surfacing course may commence at such time when the stabilized mixture can support a fully loaded, tandem truck with minimum deflection, and all defective areas, including contamination, raveling, rutting, potholing, cracking, have been repaired to the satisfaction of the Engineer. Asphalt concrete repaving shall commence, in a continuous operation until completion, within a time limit of ten (10) calendar days of completion of the Partial Depth Reclamation operation provided the mixture meets the requirements of this specification.

Asphalt pavement in areas inaccessible to the reclaiming equipment shall be removed and replaced with an equivalent thickness of Type B-HF or Type C-HF asphalt concrete mixture or equivalent mixture approved by the Engineer.

- **5.4 Joint Preparation.** All deleterious and loose milled material shall be removed from the milled surfaces at longitudinal and transverse joints after reclaiming operations are completed and before placing the EAM.
- **5.5 Surface Appearance.** The surface of the mat shall be of uniform texture and free of segregation, longitudinal streaks, fat spots, oil spills, roller marks, and other defects. Final smoothness is the responsibility of the Contractor.

On this Contract, there is a mandatory requirement to provide the proposed Partial Depth Reclamation equipment list as a condition of award with one of the following options:

- A. The Recycling Contractor can choose to submit the equipment list to Highway Construction Services prior to Bid Letting to become Pre-Qualified. This Pre-Qualification will apply to all 2022-23 Contracts once approved.
- B. Upon Bid Letting, the Contract Administrator shall request the proposed partial depth reclamation equipment list of the low bidder for review by Highway Construction Services. Highway Construction Services will review the equipment list to ensure it is in compliance with the Department's Standard Specification and these Special Provisions. The lowest bidder can also send the equipment list to <a href="tendering.hcs@novascotia.ca">tendering.hcs@novascotia.ca</a> upon bid letting. Failure to provide an equipment list within five (5) business days of the letting date or date of request, whichever is later, will result in the rejection of the tender. Any Partial Depth Reclamation equipment that does not meet the Department's Standard Specification and these Special Provisions will be deemed to be noncompliant.



The Department will award the Contract to the lowest priced, compliant bid submitted by a responsible bidder to be deemed the lowest competent bid.

The Contractor is advised that in the event that the asphalt concrete paving operation does not start within a maximum time limit of ten (10) calendar days after the completion of the Partial Depth Reclamation with Expanded Asphalt Stabilization operation, Liquidated Damages of \$2,000/day will be applied.

The Contractor is responsible, at their expense, for maintaining the recycled, stabilized pavement surface to prevent raveling, pot-holing and other forms of degradation, until such time that asphalt concrete repaving has been completed.

The Contractor is responsible for complete removal and disposal of crack sealer and/or filler from the existing asphalt pavement, disposal shall be at a location approved for disposal of these materials. Crack sealer/filler shall be removed prior to the Partial Depth Reclamation with Asphalt Stabilization operation and shall be included in the Contract unit price for this item.

On this Contract, the Contractor shall process (reclaim) the existing asphalt concrete pavement, existing full width (3.525m per lane), to an estimated **depth of 125 mm** or as otherwise required and directed by the Engineer. The material shall be re-laid at a depth of 100 mm and surplus material shall be placed to widen the shoulders for a final width of 9.4 metres or as directed by the engineer.

This item shall also include the rough grading of the shoulders prior to the partial depth reclamation with asphalt stabilization to remove vegetation and unusable material from the existing shoulder, shoulder edges, fore slopes and existing guardrail locations as directed by the Engineer. Unusable material shall not be disposed of in the existing ditches or within the right-of way unless approved by the Engineer. The unusable material shall be loaded and transported to a disposal area outside the right-of way. The disposal area shall be supplied by the Contractor and approved by the Engineer. The loading, transporting, disposal, and the supply of disposal site shall be at the Contractor's expense.

Payment for partial depth reclamation with asphalt stabilization shall include the supply and placement of RAP at culvert locations, grading, shaping, and compaction of the existing granular shoulders to match the finished grade of the completed expanded asphalt stabilization. The existing shoulders shall also be rough graded, shaped, proof rolled, and compacted to match the adjacent lane prior to closing operations each day. Should the Contractor choose to perform any work to the existing asphalt concrete paved surface (ie. patching or cold planing) prior to Asphalt Partial Depth Reclamation in order to potentially improve smoothness these activities shall also be included in the unit bid price for Partial Depth Reclamation with Asphalt Stabilization.

On this Contract, a mix design has been completed and mix design proportions and the properties of the expanded asphalt mix are presented in Table 1



### Project 1.0 (Trunk 1) - Table 1: Mix Design Proportions

Material Designation	Source	Mix Design
Reclaimed Asphalt Pavement (RAP)	Trunk 1, Hants Co.	100 %
Optimum Water Content for Compaction		5.7 %
Optimum Foamed Asphalt Content	McAsphalt PG58S-28 with 2.7 % Water	1.6 %
Portland Cement	General Use	1.0 %

### Project 1 (Trunk 1) - Table 2: Coring Table

Station	Thickness, mm	Station	Thickness, mm
0+200	290	2+600	280
0+700	320	3+000	40*
1+500	70*	3+500	40*
2+000	280	4+000	80*
Comments	Pavement coring conductor representative of section.	ed 2021 by Englobe Limit	ed. *Cores may not be

### Project 2.0 (Trunk 1) - Table 1: Mix Design Proportions

Material Designation	Source	Mix Design
Reclaimed Asphalt Pavement (RAP)	Trunk 1, Hants Co.	100 %
Optimum Water Content for Compaction		3.6 %
Optimum Foamed Asphalt Content	GLC PG58S-28 with 2.0 % Water	1.3 %
Portland Cement	General Use	1.0 %

### Project 2.0 (Trunk 1) - Table 2: Coring Table

Station	Thickness, mm	Station	Thickness, mm
0+500	375+	3+000	195+
1+000	320+	3+500	235+
1+500	240+	4+000	225+
2+000	195+	4+500	275+



2+500	320+		
Comments	Pavement coring conducted 2022 by Englobe Limited.		

#### ITEM 04.04.036:

#### PORTLAND CEMENT FOR RECLAMATION:

On this contract, the Contractor shall be required to add one (1.0%) percent Portland Cement to the pulverized material, as indicated in *Item 04.04.033 Asphalt Partial Depth Reclamation* of these Special Provisions, and to the satisfaction of the Engineer.

#### ITEM 04.06.001:

#### **ASPHALT CONCRETE REMOVAL:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 4 Section 6 - Removal of Asphalt Concrete, except as modified below.

If asphalt concrete is removed by cold planing, the planer shall be of a width no larger than the width of material to be removed as directed by the Engineer and to the satisfaction of the Engineer.

Asphalt concrete material shall be removed, full depth, or as directed by the Engineer. All asphalt concrete edges shall be cut smooth and square. The Contractor is responsible for disposal of all asphalt concrete removed, at a site approved for disposal of these materials.

Payment for asphalt concrete removal will be at the Contract unit bid price per square metre, regardless of depth, which price shall be full compensation for the furnishing of all equipment, materials, labour, transportation, unloading, disposal, and incidentals necessary to complete the work herein specified.

#### ITEM 04.07.002:

#### **ASPHALT CONCRETE PATCHING (EPS):**

This item shall be carried out in accordance with the Department's Standard Specification, Division 4 Section 7 - Asphalt Concrete Patching, except as modified below.

Asphalt Concrete Mix Type "C-HF" PG58S-28 (EPS) shall be used for Asphalt Concrete Patching or as otherwise directed by the Engineer.

All patching for driveway tie-ins shall include keying into the existing driveways. These limits shall be marked by the Departments Representative. Existing removed sections of asphalt shall be prepared and patched prior to paving. Preparation of the existing surface shall be included in this item.



On this Contract, the Project Engineer estimates that *approximately sixty (60)* % of Asphalt Concrete Patching shall be placed by machine, the remainder will be placed by hand. This is a rough estimate and may be altered at the Engineer's discretion.

Driveway and intersection key-ins shall be cold planed or saw cut as directed by the Engineer. These shall be marked by the Department Representative.

Prior to patching the cold planed surfaces must be swept and/or blown (air pressure) clean of any loose debris, leaving clean square edges and a solid foundation.

The use of hydrocarbon fuels or solvents to lubricate truck bodies or to clean tools or equipment as well as refueling equipment on the new asphalt shall not be permitted.

On this Contract, asphalt removed for the installation of cross-culverts, removal of soft spots, or any other reason must be reinstated by asphalt patching within 96 hours from the removal of the asphalt at a depth of 50mm or as otherwise directed by the Engineer.

The cost of Asphalt Binder PGAB 58S-28 (including any anti-strip additives if required) used in the production of the asphalt for patching shall be included in the bid price of Asphalt Concrete Patching (EPS).

#### ITEM 04.19.033:

#### **ASPHALT MIX TYPE C-HF PG58S-28 (EPS):**

These items shall be carried out in accordance with Superpave Asphalt Concrete End Product Specification (EPS), except as modified below.

#### i. Work Category:

The work category for this Contract shall be Work Category 1.

#### ii. Aggregate Production:

In cases where the Contractor has produced aggregates prior to award of this Contract, in accordance with the Department's requirements, the Inspection Testing Plan (ITP) shall be submitted at least ten (10) working days prior to commencement of asphalt concrete paving and patching operations. The ITP shall describe the proposed aggregate source for this project and reference that aggregate QC testing was carried out in advance of this Contract.



#### iii. Anti-Stripping Additives:

If required, and the Contractor elects to use an anti-stripping additive, the Department will pay the following rates in addition to the bid unit prices per tonne of asphalt concrete:

- a) liquid agent: \$0.65 per tonne of asphalt concrete.
- b) hydrated lime: rates are posted on the NSDPW BidX Website (www.bidx.com)

These rates shall be full compensation for supplying, transporting and all related costs and labor incidental to the work.

#### iv. Physical Requirements for Coarse and Fine Aggregates:

The Micro Deval (%, max) for coarse and fine aggregates, as detailed in *Superpave Asphalt Concrete End Product Specification (EPS)*, for all asphalt concrete placed on this Contract is categorized as follows:

Project	ESALs
Project 1.0: Trunk 1	0.3 < 3 Million ESAL's
Project 2.0: Trunk 1	0.3 < 3 Million ESAL's

#### v. Application of Asphalt Concrete:

On Project 1.0 (Trunk 1) of this Contract Asphalt Concrete Material shall be applied as follows:

- A surface lift of Asphalt Mix Type C-HF PG58S-28 (EPS) shall be applied at a rate of 120 kg/m<sup>2</sup> (plus 10% allowable tolerances) or as otherwise directed by the Engineer:
- Asphalt widths: Existing = 7.05 m, Future = 9.4 m

# On Project 2.0 (Trunk 1) of this Contract Asphalt Concrete Material shall be applied as follows:

- A base lift of Asphalt Mix Type C-HF PG58S-28 (EPS) shall be applied at a rate of 120 kg/m<sup>2</sup> (plus 10% allowable tolerances) from Station 3+000 to 3+800 or as otherwise directed by the Engineer:
- A surface lift of Asphalt Mix Type C-HF PG58S-28 (EPS) shall be applied at a rate of 120 kg/m<sup>2</sup> (plus 10% allowable tolerances) or as otherwise directed by the Engineer:



- Asphalt widths: Existing = 7.05 m, Future = where feasible, 9.4 m
- No vibratory rolling, only static rolling shall occur on bridge structures.

On the structure HAN002 (Black Brook) Asphalt Concrete Material shall be applied under this item as follows:

- The contractor shall be responsible for adding 1" x 3" rough cut lumber every 16" on the wooden bridge deck of HAN002 (Black Brook) prior to paving. This shall be inspected by the Engineer prior to any paving commencing.
- A base lift of Asphalt Mix Type C-HF PG58S-28 (EPS) shall be applied at a rate of 120 kg/m<sup>2</sup> (no allowable tolerances) within fourteen (14) days of the project start date or as otherwise directed by the Engineer.
- No vibratory rolling, only static rolling shall occur on bridge structures.
- Check weight restrictions

The maximum length of exposed asphalt joint edge at the end of each day shall be 100m as indicated in the Standard Specifications.

Emulsified Asphalt Tacking of Intersection and Driveway tie-ins shall be included in the bid price of Asphalt Mix Type C-HF PG58S-28 (EPS) on this Contract. The rate at which tack will be paid will be at the specified application rate for RS-1 (0.40  $L/m^2$ ). Non-tracking emulsion may be used, when approved by the Engineer, at rate of 0.25  $L/m^2$  to 0.42  $L/m^2$  but shall be paid at a theoretical rate of 0.40  $L/m^2$ .

The use of hydrocarbon fuels or solvents to lubricate truck bodies or to clean tools or equipment as well as refueling equipment on the new asphalt shall not be permitted.

#### vi. Material Transfer Vehicle - Optional not Mandatory:

On this Contract, a Material Transfer Vehicle has been permitted for use by the Engineer.

#### vii. Smoothness Testing:

The Smoothness Specification, as detailed in Appendix "H" (Smoothness Specification) December 2019 will be in effect for all asphalt concrete placed on this Contract, as follows:

Project	Category	Qualifying Lift(s)	
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Project 1.0: Trunk 1	С	1
Project 2.0: Trunk 1	С	1

#### viii. Paving to Match Iron Works:

The Contractor is advised that the finish roadway surfaces of manholes, catch basins, and other iron works shall be matched during the surface (finish) course of asphalt concrete paving. Asphalt concrete patching around these iron works following final paving of the surface course will not be permitted.

#### ix. RAP In Mix:

On this Contract, the Contractor *may* incorporate RAP into the asphalt concrete mix. The Contractor shall supply the mix design data for the RAP (including asphalt content of the RAP) to the Project Engineer.

## ITEM 05.06.001:

#### **GUARD RAIL STEEL:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 6 - Steel Guard Rail Systems and *Wooden Guide Posts*, except as modified below.

Guard rail installation shall be in accordance with Department Drawing Number HS520.DWG at the terminal ends of the guard rail. Payment for Guard Rail Steel shall include rough grading of the shoulders prior to installation, removal of any existing terminal ends, and reinstallation of any terminal ends as directed by the Engineer.

#### On Project 2.0 (Trunk 1), of this Contract, there will be approximately Four (4) buried ends.

The estimate of the number of buried ends and curved guardrail sections on this Contract is provided for information only and shall not constitute grounds for a claim by the Contractor should additional buried ends sections be required.

The mounting of guard rail posts to the headwalls of culverts shall be included in this item, the Contractor is to submit shop drawings outlining the details of the mounting procedure to the Engineer for approval two (2) weeks prior to commencing the work.

Guard Rail Steel shall be at the Contract unit price per metre which shall be full compensation for work described in this item, including plant, equipment, grading, mounting brackets for culvert headwalls, materials, labour, transportation, and incidentals necessary to complete the work as directed by and to the satisfaction of the Engineer.



# ITEM 05.07.027: CONCRETE DRIVEWAY ENTRANCE:

This item shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 7 - Cast in Place Concrete, and Division 6 Section 5 - Removal of Existing Sidewalks, Driveways and Curbs, except as modified below.

On **Project 1.0 (Trunk 1)** of this Contract, this item includes removal and preparation of concrete driveways as per the provided job list.

On this Contract, Quality Control (QC) of the Portland Cement Concrete is the responsibility of the Contractor. No additional payment will be made for QC.

Payment for Concrete Driveway Entrance will be paid at the Contract unit bid price per square metre which price shall include saw cutting, removal and disposal of the existing material, *regardless of depth*, at a site approved for disposal of these materials, installation of new Portland Cement concrete driveway entrance which shall include the design, supply and installation of Portland Cement concrete, dowels, steel rebar, the furnishing of labour, materials, equipment, form work, plant and incidentals required to complete the work to the satisfaction of the Engineer. *The thickness of the new driveway shall be at least the thickness of the existing driveway or as otherwise specified by the Engineer.* All transportation, loading and unloading of materials and equipment shall also be included in the unit bid price for this item.

# <u>ITEMS 05.12.005, 05.12.006 and 05.12.007:</u> <u>PIPE - CONCRETE PIPE 600 MM, 750 MM and 900 MM DIA. CLASS 65D:</u>

This item shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 12 - Underground Drainage Systems, except as modified below.

On this Contract, payment for Concrete Pipe 600 mm, 750 mm, and 9000 mm dia. 65D will be by the unit bid price per metre which price shall be full compensation for supply and installation of the new concrete pipe, including all materials, labour, tools, saw cutting, coring, grouting, equipment, transportation, erosion and sediment controls, construction of energy dissipation pools (including any excavation), supply and installation of inlet and outlet cut-off walls, and any incidentals necessary to complete the work including removal and disposal of any existing culverts, asphalt removal, excavation of solid rock or swamp and water control. Foundation excavation and gravels (as required) will be paid at the Contract unit bid price for these items. Clear stone, type 1 gravels (as required) and type 2 gravels (as required) and loose laid rip rap will be paid at the Contract unit bid price for these items.

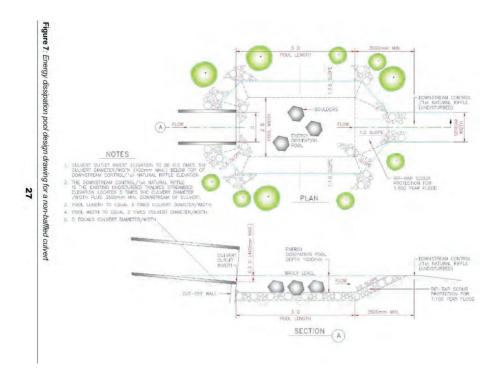
Contractor is to confirm with the Engineer prior to ordering pipes.

For Concrete Pipe 600 mm dia. 65D requiring NSE Permits outlet cut-off walls constructed of rock fill will be installed to the satisfaction of the Engineer.



For Concrete Pipe 750 mm and 900 mm dia. 65D requiring NSE Permits the Contractor shall supply and install non reinforced concrete cut-off walls under the inlet and outlet of each culvert location. Dimensions of the cut off walls are as follows: 2500 mm length, 1000 mm depth, and 300 mm thickness. The cut-off walls may be pre-cast or cast in place.

All work shall conform to any Nova Scotia Environment Approvals and/or Notifications, the Nova Scotia Environment Activities Designation Regulations, and the Nova Scotia Watercourse Alterations Standard.



### <u>ITEMS 05.12.184, 05.12.185 and 05.12.186:</u> <u>PIPE-HDPE – 375 MM DIA., 450 MM DIA. and 600 MM DIA.:</u>

This item shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 12 – Underground Drainage Systems, except as modified below.

Where two or more sections of HDPE pipe are to be connected the sections shall be joined as follows: For Cross Culverts, Type 1 (watertight) connection shall be used. For Driveways, Type 1 (watertight), Type 2 (soil tight), or Type 3 (requiring split couplers) connections may be used. If Type 2 connections are used, they are to be wrapped in geotextile. Split Couplers shall be permitted on driveways only.

Contractor is to confirm with the Engineer prior to ordering pipes.



On this Contract, should solid rock be found during installation of HDPE Pipe, foundation excavation solid rock will be paid under unit item 02.12.002.

Payment for Pipe-HDPE 375 mm dia., 450 mm dia. and 600 mm dia. will be at the Contract unit price per linear metre of pipe satisfactorily installed. This price shall be full compensation for all labour, equipment, materials, erosion and sediment controls, compaction of native materials in 150 mm lifts, and any incidentals necessary to complete the work **including removal and disposal of any existing culverts,** as herein specified, to the satisfaction of the Engineer.

On this Contract, prefabricated concrete blocks will not be considered for use as Rip Rap Hand-Laid. Installation of hand laid rip rap as required for Driveway Culverts shall be completed within 14 days of the culvert's installation.

#### ITEM 05.12.332:

#### **MANHOLE/CATCH BASIN - ADJUST/REPAIR:**

This item shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 12 - Underground Drainage Systems, except as modified below.

On **Project 2.0 (Trunk 1)** of this Contract, the Contractor shall be responsible for contacting the Municipality and coordinating arrangements prior to making necessary adjustments and repairs to manhole/catch basins. Costs associated with making these arrangements shall be considered included in the Contract unit bid price per each unit adjusted and repaired.

The adjustment and/or repair of existing manholes and catch basins shall include change of elevation of any of these structures regardless of size or type. The adjustments may include cast in-place concrete which shall be approved by the Engineer. Where new frames and covers/grates are required they shall be supplied by the Contractor.

Cast in-place concrete shall be carried out in accordance with Division 5 section 7 - Cast In-Place Concrete of the Department's Standard Specification. Grout shall be "Rapid Set", "Emaco S88" or approved equivalent and shall be mixed to the Manufacturer's specifications.

Manhole/Catch Basin - Adjust/Repair will be paid at the Contract unit bid price for each, which price shall be full compensation for locating these structures, removal of asphalt concrete material, foundation excavation, supply and placing of all materials used in the adjustment and/or repair, backfilling with suitable material including compaction, concrete, grout, pavement reinstatement, new frames and covers (where required), and all labour, tools, equipment, transportation and incidentals necessary to complete the work as herein described to the satisfaction of the Engineer.



#### ITEM 05.13.030: HEADWALL - REPAIR:

Headwall Repair shall be carried out in accordance with the Department's Standard Specification, Division 5 Section 7 - Cast in Place Concrete, Division 5 Section 13 – Concrete Restoration – Bridge Structures and Division 7 Section 11 – Water Control at Culvert Extensions or Installations, except as modified below.

Headwall Repair is for the raising of inlet and outlet headwalls of an existing cast in place culvert at the inlet and outlet ends. The new headwall will be raised approximately 150 to 300mm high (final height to be determined in the field), 3000 mm wide, and 300mm deep. The culvert is located on Trunk 1, approximately 60 metres west of the intersection of Trunk 1 and Route 202 (South Rawdon Road).

The Cast in Place Reinforced Concrete head wall repair shall be as detailed on Drawing 2022-082-HW-001. The Contractor shall verify all lines and dimensions at the site prior to the ordering of rebar, it is the responsibility of the Contractor to ensure the design of the repair is adequate to anchor into sound existing concrete. If adjustments to the length and/or configuration of the reinforcing steel is required, the Contractor is to notify the Engineer for approval. No additional payment will be made if design changes are required.

This item shall include all costs associated with the raising of the head walls at the existing cast in place reinforced concrete culvert where and as directed by the Engineer. The existing structure shall be doweled to permit solid connections between the existing structure and the new head wall. Unsalvageable material is the responsibility of the Contractor for disposal at a site approved for disposal of these materials.

The Contractor shall field verify all elevations and dimensions prior to commencement of work and report discrepancies to the Engineer. Existing conditions may require the Contractor to deviate from the details as shown on Drawing 2018-110-02-001.

All reinforcing steel shall be Grade 400W and conform to CAN/CSA G30.18 latest edition. At least two (2) weeks prior to fabrication, the Contractor shall submit reinforcing steel shop drawings to the Engineer for review and approval. Fabrication shall not proceed until the final approval of shop drawings. Shop drawings shall be stamped by an engineer registered to practice in Nova Scotia. Bend diameters shall conform to Table 5.1 of the Department's Standard Specification.

Prior to the placement of concrete, the existing concrete surface shall be mechanically roughened to the satisfaction of the Engineer. A latex bonding agent shall be applied to the existing surface. All work under this item shall conform to CSA - A23.3. Concrete to have a compressive strength of 35 MPa at 28 days, contain 6% +/- 1% entrained air, have a slump of 80mm +/- 20mm, and maximum aggregate size of 20mm. All concrete admixtures are to be approved by the Engineer. Concrete cover over reinforcing steel shall be 50mm.



The mounting of guard rail posts to the headwalls shall be included in this item, the Contractor is to submit shop drawings outlining the details of the mounting procedure to the Engineer for approval two (2) weeks prior to commencing the work.

Payment for Headwall - Repair will be at the Contract unit bid price per each. This price shall be full compensation for water control, all excavation, removal and disposal of existing headwall as required, saw cutting, reinforcing steel, anchor bolts, dowels, grouting, epoxy, formwork, the supply, placement and curing of Portland cement concrete, removal of formwork, reinstatement of disturbed areas, mounting brackets for culvert headwalls, and the supply of all equipment, plant, labour and incidentals necessary to complete the work herein described to the satisfaction of the Engineer. The Contractor shall provide a minimum 24 hours' notice prior to placement of Portland cement concrete.

## ITEM 06.60.001: MOBILIZATION:

This item shall be carried out in accordance with the Department's Standard Specification, Division 6 Section 13 - Mobilization, except as modified below.

For this Project **Option A** will be utilized.

#### ITEM 30.02.005:

#### **THERMOPLASTIC MARKINGS:**

On **Project 1.0 (Trunk 1)** of this Contract, this item shall include the supply and installation of **Preformed** Thermoplastic markings for the intersection improvements. Markings shall be applied as per dimensions shown on the Pavement Markings and Signing Plan.

This item *does not* include painted yellow and white lane lines as shown on the Pavement Markings and Signing Plan.

The contractor is responsible for the removal by grinding of a minimum depth of 3.5 millimetres (3.5mm) of asphalt prior to the placement of new thermoplastic markings. The new markings shall be flush or slightly below the finished surface of the asphalt.

The Contractor shall submit specifications and installation procedures on the Preformed Thermoplastic Markings to the Engineer at least two (2) weeks prior to installation. All traffic arrows, hatching, cross walks, stop bars, and yield bars shown on the project's Pavement Markings and Signing Plan shall be inlaid preformed thermoplastic markings.

Payment for this item will be at the Contract lump sum price. This price shall be full compensation for the supply and installation of all pavement markings as per the design plans and in accordance with Department Specifications (as detailed on the BidX Website), or as otherwise directed by the Engineer.

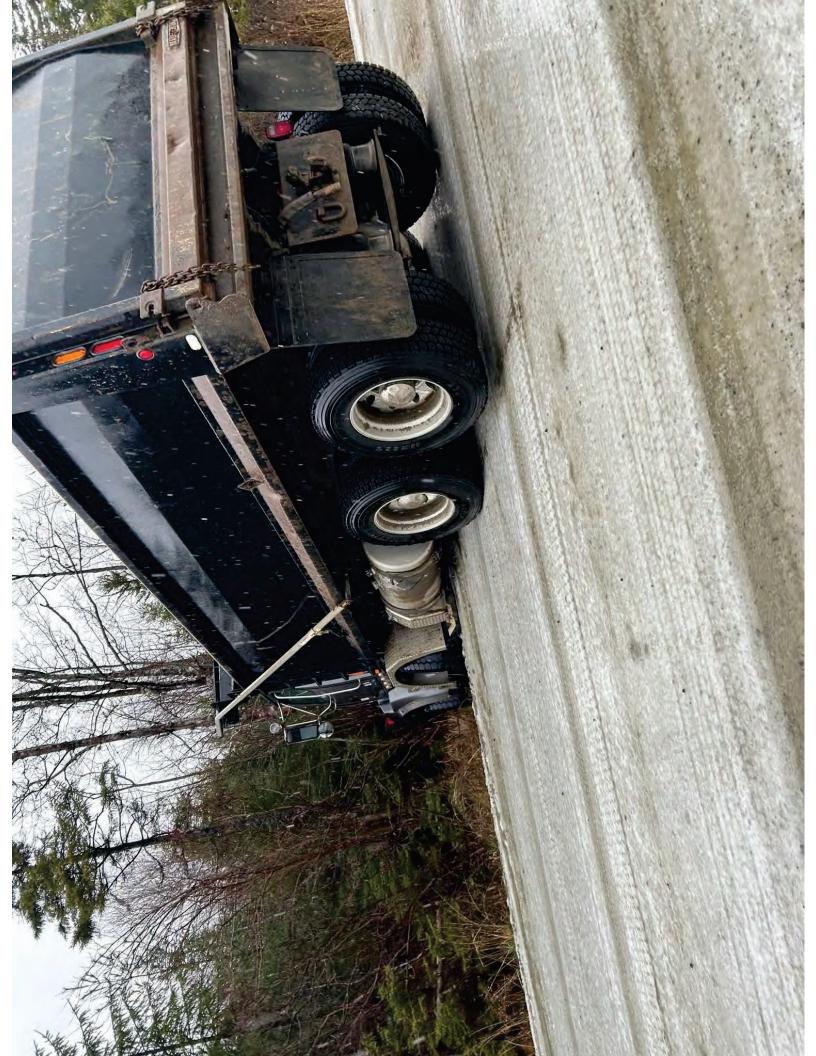


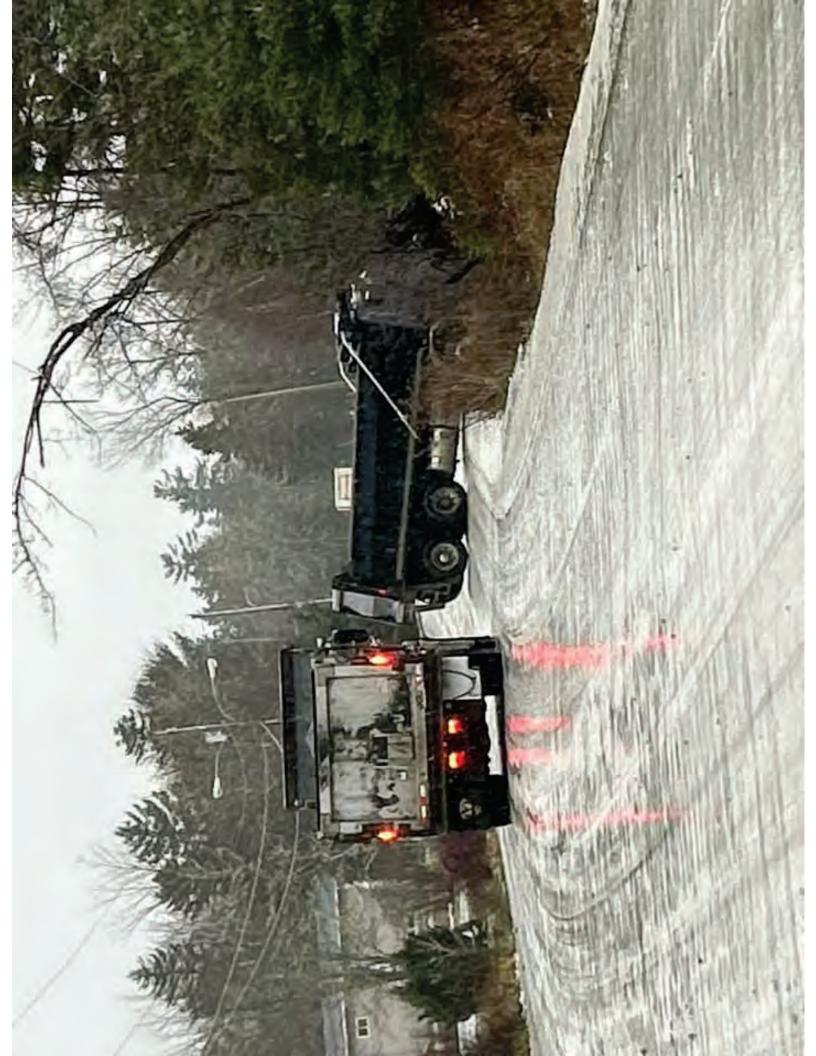


The Contract lump sum bid price shall also include the submission of specifications and installation procedures, supply of all equipment, plant, labour, asphalt grinding, inlaid preformed thermoplastic markings, paint, and incidentals necessary to complete the work herein specified to the satisfaction of the Engineer.

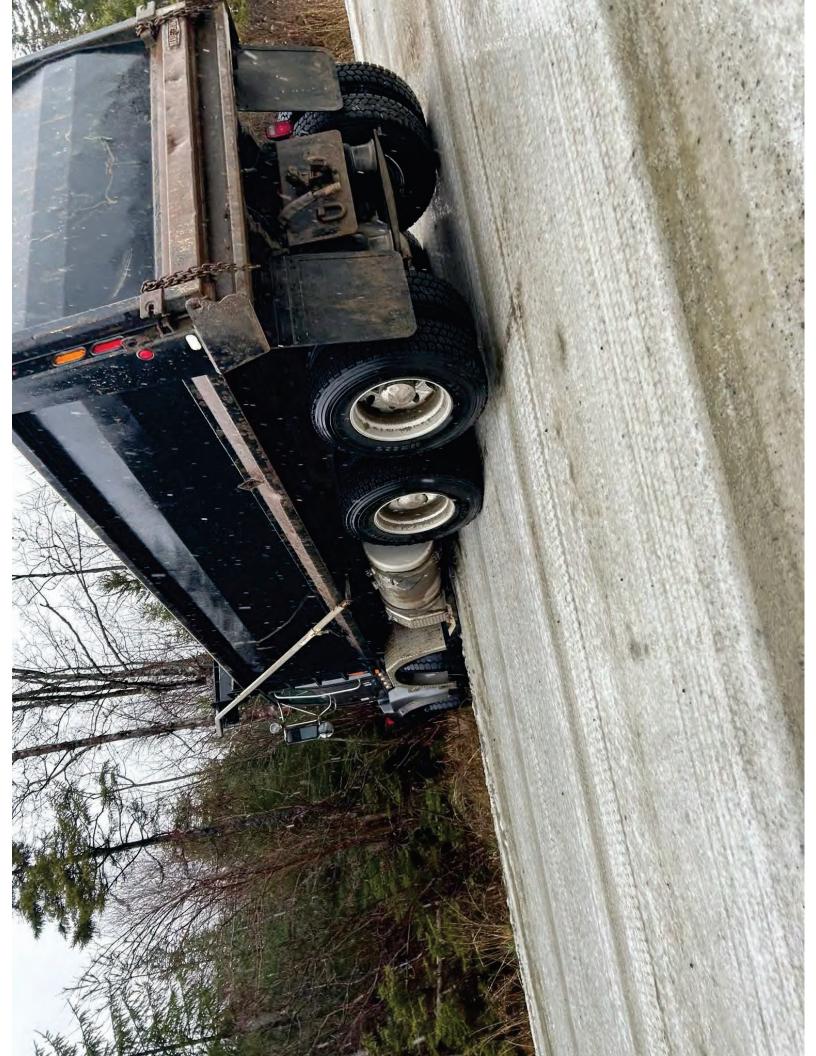


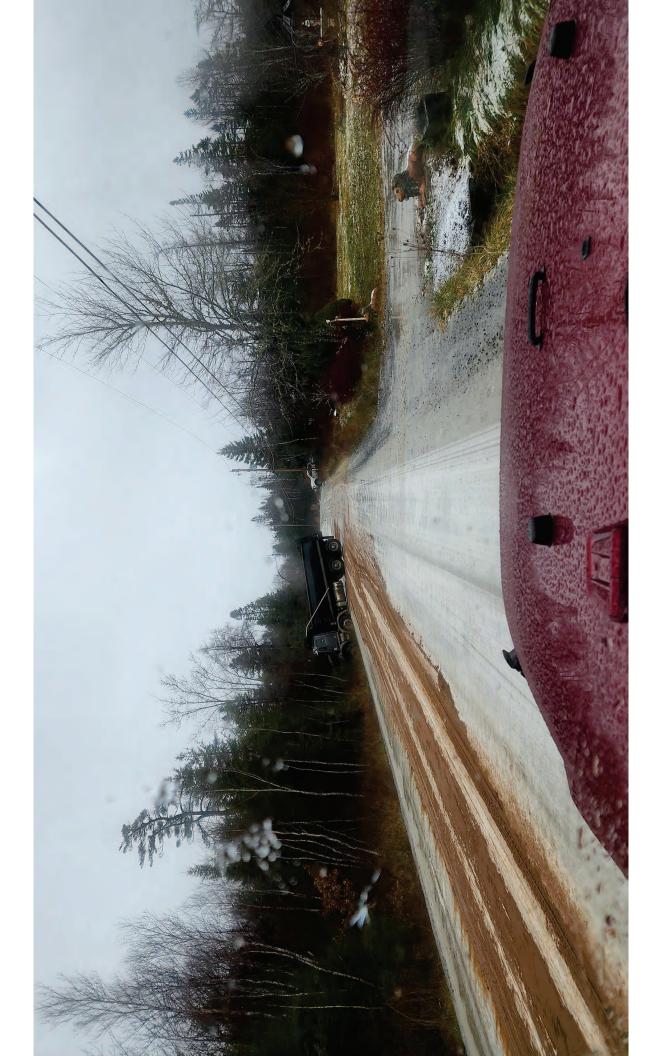
**APPENDIX** 



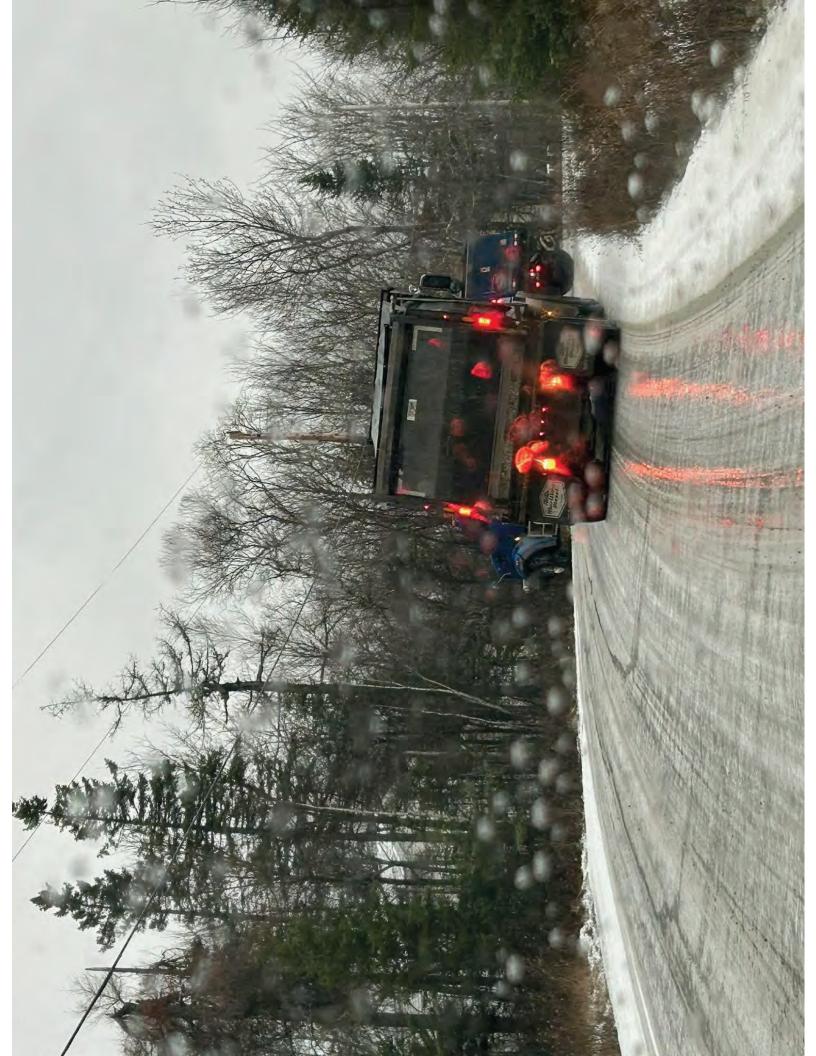




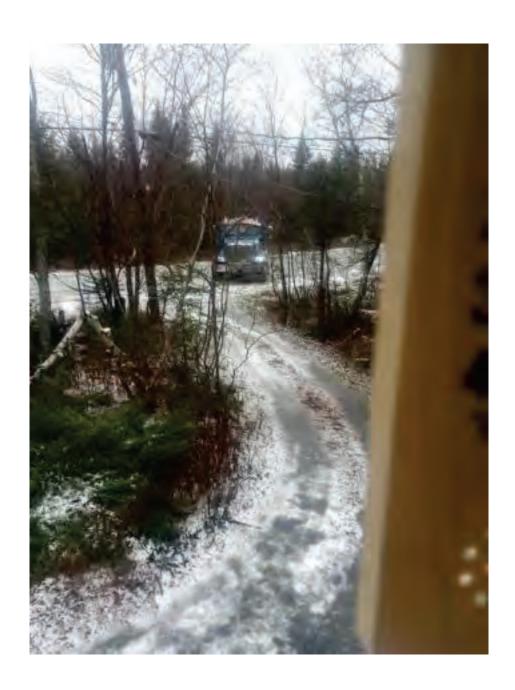














# When will my road get plowed?

## SERVICE TIMES

Type of Road	Clearing Time	
100-Series and trunk highways, and other high traffic roads	8 hours after snow stops	
Secondary routes and other medium traffic roads	12 hours after snow stops	
Local paved roads, most subdivision and residential streets	24 hours after snow stops	
Gravel roads	24 hours after snow stops	

## SALTING<sup>1</sup> AND SANDING

## 100-Series and trunk highways, and other high traffic roads

- Salted to achieve bare pavement
- Salt applied before, during and after a storm if required

## \*Secondary routes and other medium traffic roads

- Salted to achieve a bare centre line
- Salt applied at beginning of storm and after a storm if required

## \*Local paved roads, most subdivision and residential streets

- Salted to achieve a bare centre line
- Salt applied only after a storm

#### Gravel roads

- Snow packed
- Sanding as needed
- \* In sanding only sections, acceptable driving condition is considered to be snow packed and sanded as required.
- <sup>1</sup>Note that salt will start to lose its effectiveness at temperatures below -12° C. In these conditions sand may be applied to increase traction for all service levels.



There are more than 400 snow plows and other snow-clearing vehicles working to keep Nova Scotia's roads, highways, and bridges safe during the winter months. Crews are on the job day and night, 24/7, keeping the roads as safe and as clear as possible. Work starts before the storm and continues during and after the storm. At left is more information to help explain what you can expect this winter.





