

CURVE LAKE FIRST NATION

LOT 12 & 13 SUBDIVISION – ROAD CONSTRUCTION TENDER

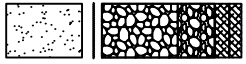
March 20, 2020

Attention: Tenderers

The Following Revisions and/or Clarifications are to be Noted as Part of the Tender Package.

1. The tender closing has been extended one week to April 1, 2020 at 2:00pm local time and will be at the Public Works Office as the Administration office is closed. Please contact Shawn Williams at 705-768-9880 prior to arrange for him to be there to receive the tender package.
2. The completion date will be three (3) months after the approved start date, which is flexible based on the current Corona Virus concern unless approved by Curve Lake First Nation. The top layer of asphalt which is to be completed within the 12th month after the first layer has been installed including padding etc. as required.
3. The road cross section shown on drawings RD 100 and RD 102 will be replaced by the cross section below which is for a 6.8m paved width.
4. The Culverts are to be corrugated steel pipe with a minimum 2.4 wall thickness.
5. A22 is still to be approved pending the confirmation of required additional fill along with C7. With the survey being done prior to the removal of the trees, the unknown quantity of stone, and grubbing material, the additional fill locations are present if required. Lot 24 has been added to Section A as it will be completed first if required.
6. Excess Fill will be placed on lot 24 upon completion of the clearing, grubbing and topsoil removal. Excess topsoil will remain on the lots placed initially.
7. SP 28 includes the fully cleared road right of way along with all ditching and lot areas cleared under this contract.
8. SP 25 will be paid per linear meter of roadway completed.
9. The compacted granular material for the roadway is 350mm Granular B and 150mm Granular A.
10. The rock removal specification #35 has been added & the revised specifications are attached.
11. Curve Lake Public Works will have the topsoil screened to remove small stones, etc., for use by the contractor for the final site works. The top soil is to be deposited in the cleared lots in a manner to allow for it to be screened. The Contractor is to accommodate the access of Curve Lake Public works to and from the topsoil areas.
12. The slopes of the ditches are very flat due to the drainage constraints of the site, so significant care is to be taken to ensure they work properly.
13. The revised form of tender is contained below which is to be provided in the tender submission package.

This concludes the Addendum 1. The contractors are to acknowledge the addendums in their submitted tender package.



40mm MIN. ASPHALT HL3
 60mm MIN. ASPHALT HL8
 150mm MIN. GRANULAR A
 350mm MIN. GRANULAR B
 NON-WOVEN GEOTEXTILE
 APPROVED SUBGRADE

ROAD STRUCTURE

ROLLIE'S POINT ROAD CROSS-SECTION A-A

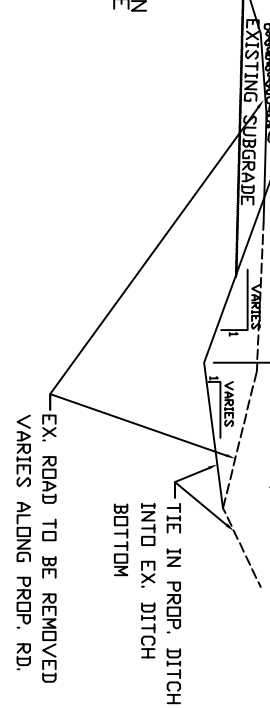
NTS

All dimensions are in metres unless otherwise noted.

EX. ROAD TO BE REMOVED
 VARIES ALONG PROP. RD.
 TIE IN PROP. DITCH INTO EX. DITCH BOTTOM

MIN. 900mm BETWEEN
 CROWN OF ROAD
 & ϕ OF DITCH

NON-WOVEN
 GEOTEXTILE



VARIES

VARIES

VARIES

VARIES

VARIES

**THE TENDER
SCHEDULE A**

Addendum 1

Item OPS & Special Provision Description Unit Quantity Unit Price Amount
Roads 1, 2 & 3

A1	SP 31	Mobilization/ Demobilization/Bonding/ Insurance	L.S.	1		
A2	SP 5, SP 33	Layout and Survey Verification.	L.S.	1		
A3	100+, 200+, 500+, SP 7, SP 9, SP 22, SP 23	Topsoil Removal, Earth Excavation, Cut/Fill - Grading	L.S.	1		
A4	200+,500+,SP 7,SP 9,SP 20,SP 21,SP 22,SP 23, SP 28	Outlet Ditches including Clearing, Grubbing, Grading, Topsoil & Hydroseed	m	230		
A5	200+, 500+, SP 7, SP 20, SP 21	Erosion Control of Site & Ditches	L.S.	1		
A6	200+, 300+, SP 9, SP 23	Road Base Construction Including cut/fill	L.S.	1		
A7	200+, SP 9, SP 24	Fine Grade Road Sub-Grade	L.S.	1		
A8	200+, 1860, SP 25	Geotextile Class 2	L.M.	965		
A9	200+, 300+, SP 25	Granular B - 350 mm	L.M.	965		
A10	200+, 300+, SP 25	Granular A - 150 mm	L.M.	965		
A11	200+, 300+, SP25	Geotextile, Granular A & B for Extra Cul-de-sac Width	Each	2		
A12	300+, SP 26	Asphalt Base Layer HL8.	L.M.	1063		
A13	300+, SP 26	Asphalt Top Layer HL3	L.M.	1063		
A14	300+, SP 26	Asphalt Top layer HL3 for Extra Cul-de-sac Width	Each	2		
A15	300+, SP 26	Asphalt Base layer HL8 for Extra Cul-de-sac Width	Each	2		
A16	2000+, SP 29	Stop & Street Sign	Each	5		
A17	2000+, SP 29	Speed Limit, Stop Ahead, No Exit Signs	Each	4		
A18	200+, 300+, SP 25	Cleaning Up the Temporary 95m Entrance & Preparing for Asphalt.	L.S.	1		
A19	SP 34	Road Barrier Removal & Connecting to Ex. Road 1	L.S.	1		
A20	200+,500+,800+SP 28	Fine Grading, Hydro-Seeding & Sod	L.S.	1		
A21	422, SP 27	600mm Culvert Supply & Installation	L.M.	86		
A22	SP22	Clear & Grub 1500 m2 lot to store topsoil	Each	3		
A23	SP22	Clear, Grub & Remove Topsoil for Lot 24 for Fill Removal 2590 m2	L.S.	1		
Sub Total						

Rollies Point Road

B1	SP 31	Insurance	L.S.	1		
B2	SP 5, SP 33	Layout and Survey Verification.	L.S.	1		
B3	200+, 500+, SP 7, SP 20, SP 21	Erosion Control of Site & Ditches	L.S.	1		
B4	100+, 200+, 500+, SP 7, SP 9, SP 22, SP 23	Topsoil Removal, Earth Excavation, Cut/Fill - Grading	L.S.	1		
B5	200+, 300+, SP 9, SP 23	Road Base Construction Including cut/fill	L.S.	1		
B6	200+, SP 9, SP 24	Fine Grade Road Sub-Grade	L.S.	1		
B7	200+, 1860, SP 25	Geotextile Class 2	L.M.	455		
B8	200+, 300+, SP 25	Granular B - 350 mm	L.M.	455		
B9	200+, 300+, SP 25	Granular A - 150 mm	L.M.	455		
B10	300+, SP 26	Asphalt Base Layer HL8.	L.M.	455		
B11	300+, SP 26	Asphalt Top Layer HL3	L.M.	455		
B12	200+,500+,800+SP 28	Fine Grading, Hydro-Seeding & Sod	L.S.	1		
B13	422, SP 27	600mm Culvert Supply & Installation	L.M.	50		
B14	422, SP 27	Relocate Culvert at Mississauga Rd for New Alignment	L.S.	1		
B15	SP 34	Connect to Mississauga Road & Ex. Rollies Point Road to the East	L.S.	1		
Sub Total						

Provisional Items

C1	400+, SP 27	600mm Culverts Installed	L.M.	65		
C2	800+	Straw Bale Barrier	Each	3		
C3	500+	Rip Rap 100-150mm above non woven geotextile.	m2	40		
C4	100+, 200+, SP23, SP24	Sub-Excavation, and Back Fill with Native Material	m3	100		
C5	100+, 200+, SP23, SP24	Sub-Excavation & Backfill with Granular B Material, Placed & Compacted.	m3	100		
C6	SP 34	Road Connections to Rollies Point Road as it currently Exists.	L.S.	1		
C7	200+,500+,SP 7,SP 9,SP 20,SP 21,SP 22,SP 23	Clear, Grub & Remove Topsoil lot 28 for Fill Removal 1890 m2	L.S.	1		
C8	200+, 500+, SP 7, SP 9, SP 20, SP 22	Clearing, grubbing, removal of fill material from on site.	L.S.	1		
C9	200+, SP 35	Rock Removal - Rock above 1.0 m3 or Bedrock.	m3	50		
C10	200+, 300+, SP 25	Additional Granular B material Placed & Compacted Along Road - 50mm Extra Depth.	LM	400		
Sub Total						

Cash Allowance

D1	General Terms 4.14	Power Distribution				\$ 250,000
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Total

The items above include all items required as per the intent of the project.

EVALUATION CRITERIA

The Quotations submitted will be evaluated to determine if a contract will be provided based on Cost, Schedule and the Use of Local Resources and Labour.

Curve Lake reserves the right to refuse any tender submitted.

SECTION 'E'

GENERAL AND CONTRACT SPECIFIC PROVISIONS

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GENERAL AND CONTRACT SPECIFIC PROVISIONAL ITEMS

1. CONTRACT ADMINISTRATOR

Curve Lake First Nation's Contract Administrator/Engineer for this project will be Michael Murray, P.Eng., (Phone: Office 905-628-9170 Cell 416-737-0656) or their designate.

2. ASSUMED CONSTRUCTION NORTH

For the purpose of this Contract, it is assumed that Rollies Point Road runs east-west, therefore north is perpendicular to Rollies Point Road.

3. WORK BY OTHERS WITHIN THE CONTRACT LIMITS

There is a chance that the construction of some of the houses will commence before the work is completed. Both contractors are to work together to the benefit of Curve Lake First Nation. Access will be the main concern and the House Contractor is to provide sufficient notification of their access requirements to allow this contract to be completed.

Hydro may also require entry during this project, although likely towards the end. They are also to be accommodated.

The relocation of utilities shall be carried out with the approval of the appropriate utility companies. It is the Contractor's responsibility to contact the appropriate agencies in regard to the exact location of all utilities, to exercise the necessary care in construction operations and to take such precautions as are necessary to safeguard the utilities from damage.

No claims will be considered which are based on delays or inconvenience resulting from this work.

4. CONTRACT SCHEDULE AND MEETINGS

The Contractor shall report the progress of the work to the Contract Administrator at biweekly site meetings (or more frequently if deemed necessary). The report shall focus on tracking of the actual progress of the work against the Contractor's detailed hard copy schedule, which is based on the above time frame.

A detailed critical path schedule shall be prepared by the Contractor and submitted with the Tender. Tenders submitted without the schedule may be deemed incomplete and subsequently may be rejected at the discretion of Curve Lake First Nation. The schedule shall include all controlling operations, major milestone dates and requirements of others. Updates of the work program shall be provided every two weeks on the same day of the week for the duration of the contract. Regular submissions shall coincide with the Contract site meetings. The Schedule is to be updated as requested by the owner.

The pre-construction meeting is also required as part of the project.

5. LAYOUT BY THE CONTRACTOR

The Contractor will be responsible for all layout required to the provided line and grades and for protecting the same for the duration of the Contract so as to ensure the accuracy of the work. The existing legal bars indicated on the drawings are to be used for layout and elevation and be verified in relation to each other in advance. The Center Line of the roadway and some lot line control will be provided before the start of construction by Coe Fisher Cameron Surveyors.

The elevations were from an aerial survey and have some variability. The Contractor is to determine and verify the key elevations then work with the engineer to verify/re-establish the key grades work from the existing Road to the drainage outlets. There is some flexibility in the grading to allow for the fine grading to work. The drainage ditching is the main area of concern but the other elevations must also work as per the intent of the project,

The ditching it to be completed well in advance of fine grading the road.

The works detailed in this section are covered in the Layout Survey Verification item.

6. OPERATIONAL CONSTRAINTS

- A: The Contractor's hours of work are restricted to 7:00 a.m. and 7:00 p.m., Monday 0.
- B: The minimum hours of work for this contract shall be 50 hours per week (Monday to Saturday). The Contractor shall coordinate and ensure the efficient operation of his own crews, subcontractors and material suppliers on a regular basis during these hours throughout the life of the Contract. The hours of work may be ordered increased by the Contract Administrator if deemed necessary to meet the project schedule. Any cost resulting from such increase in the hours of work shall be borne by Contractor.
- C: No work to be carried out on Sunday or Statutory Holidays, without written authorization from Curve Lake First Nation.
- D: No work to be carried out on any day where a funeral procession will be taking place on the Curve Lake First Nation. The Contractor will be provided with at least one (1) day notice in this event.

7. ENVIRONMENTAL CONSIDERATIONS

The Contractor is advised that erosion and siltation controls installed and maintained in conformance with OPSS 182, will be required to prevent destruction of natural habitats in the surrounding environment by runoff. There is a federal species at risk within the greater subdivision in and around the wetland. Caution is to be taken to ensure they are not disturbed.

In all areas, the Contractor shall, as a means of controlling erosion and runoff, so schedule his operations as to limit the areas of slope and ditches exposed and the time that such areas are exposed prior to final treatment.

Prior to any grubbing erosion control features are required to be in place. This consists of a minimum of heavy duty silt fence as well as straw bales in drainage corridors.

In areas where excavated materials are stored temporarily, heavy duty silt fence is to be installed on all down gradient locations. The Contractor shall prevent erosion of any material into watercourses, wetland area, sewer systems or onto private property. Prior to commencing any operations on the contract, the Contractor shall submit his proposed methods for controlling erosion and runoff to the Contract Administrator. The existing erosion control items are to be restored and maintained throughout the construction period, then removed upon the complete establishment of the vegetation.

The Contractor shall immediately report any discharge of sediment, silt or other deleterious substance into a watercourse to the Contract Administrator and/or the Ministry of Environment (Spills Action Centre), as appropriate.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

The erosion control required for the drainage ditches is to prevent sediment from entering the wetland. It is to consist of straw bales, rip rap and rock check dams if required. These items are to be included in the Erosion Control of the site and ditches tender item. Extreme care is to take place on this site due to the Status of the Chorus Frogs present in the wetland.

8. TRAFFIC

The contractor must be aware and cautious of traffic as the entrances are off of existing roadways. The main entrance is to be off of Rollies Point Road. They are also not to track mud onto the roadways. If Curve Lakes feel that they are required to clean the road of mud/construction debris they will back charge the contractor. The contractor must provide a plan for traffic control. Neither of the existing roadways is to be blocked off or have their traffic disrupted.

Appropriate traffic control signs are required throughout construction. Notification of the neighbours is required to provide them with the project details.

The traffic for the house construction occurring during this project will take place off of Mississauga Road.

A temporary access to the end of Road 1 is to be included to avoid affecting the temporary roadway for the house construction until the connection to the roadway.

Traffic is to be maintained along Rollies Point Road at all times or via a bypass through the subdivision when the roadways are approved for traffic.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the form of tender.

9. DISPOSAL OF MATERIAL OFF SITE

All roots, rocks(over 150mm in any dimension), debris, wood, etc., that are surplus to this contract, shall be disposed off-site in an acceptable manner at the rear of the waste transfer site. Rocks can be disposed of at the front end of the solid waste transfer site. Any damage to the

roadway or landfill site is to be repair to the satisfaction of the Engineer.

The grubbing material is to be disposed of at the rear of the solid waste transfer site.

Any wood that is suitable for firewood is to remain on site and piled in an organized manner. All brush is to be chipped and spread well into the lots not to be used in the initial phase.

Note: Excess fill will be disposed of within the greater subdivision. The topsoil will be stored with three lot locations to be cleared under this project.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the form of tender.

10. EXISTING UTILITIES

The Contractor is responsible for coordinating all construction activities with the proper authorities. Hydro One is in the process of completing their design. Hydro installation is slated for summer of 2020 and may have to be coordinated with this project. The contractor is to work with those installing the hydro to allow both contracts to move forward.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

11. SAFETY REQUIREMENTS

The Contractor shall conform to and enforce strict compliance with the Construction Safety Act and regulations made under the Act.

The successful bidder for the purpose of the Occupational Health and Safety Act will be designated as the Constructor for this project and will assume all of the responsibilities of the construction set out in the Act and its regulations. The Constructor shall file a Notice of Project with the Ontario Ministry of Labour.

The contractor is to provide their safety and training plan to Curve Lake First Nation, before the start of construction.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

12. FENCING OF THE CONSTRUCTION AREA

The Contractor is to provide protection from access by the public to any area of the site which may pose any risk. This is to be done by adequate fencing or other measures to prevent injury. Fencing will be required as a minimum along entrances of the roads off the main roads. Any additional fencing required by the Contractor to secure the site will be their responsibility and to be included in the fencing cost. The Contractor, shall erect, maintain, remove and dispose of the temporary fencing required as per the drawings & to restrict access.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

13. WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM (WHMIS)

Section GC4.03.06 is deleted and replaced with the following:

Prior to the commencement of work the Contractor shall provide, to the Contract Administrator, a list of those products controlled under WHMIS which he expects to use on this Contract. Related Material Safety Data Sheets shall accompany the submission. All containers used in the application of products controlled under WHMIS shall be labeled.

The Contractor shall notify the Contract Administrator of changes to the list in writing and provide the relevant Material Safety Data Sheets.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

14. SPILLS REPORTING

Spills or discharges of pollutants or contaminants under the control of the Contractor, and spills or discharges of pollutants or contaminants that are a result of the Contractor's operations that cause or are likely to cause adverse effects shall forthwith be reported to the Contract Administrator and Curve Lake First Nation Director of Capital Development. Such spills or discharges and their adverse effects shall be as defined in the Environmental Protection Act R.S.O. 1980.

The contractor must provide a refueling location plan due to the presence of wells on the site. All equipment is to have its own fuel spill kit on it at all times.

All spills or discharges of liquid, other than accumulated rain water, from any of their activity under the control of the Contractor, and all spills or discharges from this equipment that are a result of the Contractor's operations shall, unless otherwise indicated in the Contract, be assumed to contain PCB's and shall forthwith be reported to the Contract Administrator and Curve Lake First Nation Director of Capital Development.

This reporting will not relieve the Contractor of his legislated responsibilities regarding such spills or discharges.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

15. REVIEW OF SHOP / WORKING DRAWINGS

For the portions of the work to be done under this Contract where detail drawings are to be supplied by the Contractor, three (3) copies of the same, together with specifications, plus such additional copies as the Contractor and his subcontractors may require, shall be submitted to

the Contract Administrator for review.

The Contractor or his Subcontractor shall check and initial all shop drawings before submission to the Contract Administrator so as to intercept and correct any major errors or omissions. Shop drawings will not be reviewed by the Contract Administrator unless they have been previously checked and approved by the Contractor.

The review by the Contract Administrator is for the sole purpose of ascertaining conformance with the general design concept. This review shall not mean that the Contract Administrator approves the detail design inherent in the shop drawings, responsibility for which shall remain with the Contractor submitting the same, and such review shall not relieve the Contractor of their responsibility for errors or omissions in the shop drawings or of their responsibility for meeting all requirements of the Contract Documents.

The Contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for coordination of the work of all subtrades.

Work which relates to the shop drawings shall not be carried out before the Contract Administrator's review of the shop drawings is complete.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

16. WORKPLACE SAFETY AND INSURANCE BOARD

The Contractor shall at the time of entering into any Contract with Curve Lake First Nation, furnish a satisfactory clearance certificate from the Workplace Safety and Insurance Board stating that all assessments or compensation payable to the Board have been paid. The Contractor shall also at any time during the project, when requested by Curve Lake First Nation, and upon completion of such Contract, furnish a satisfactory certificate from the Board as outlined above. Such certificates shall also be required prior to the release of progress payment certificates.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

17. DELETIONS FROM CONTRACT

Curve Lake First Nation reserves the right to delete any portion of the work from the Contract should it be deemed in the interest of Curve Lake First Nation to do so. There will be no compensation to the Contractor for the removal of any items or adjustments of quantities of the work from the contract.

18. COMMENCEMENT OF WORK

The Contractor shall commence work within 48 hours of being notified to do so and shall construct the works in accordance with the above schedule or as directed by the Contract

Administrator. When in the opinion of the Contract Administrator, the Contractor is failing to maintain a schedule of construction which will enable them to meet the required timetable, the Contractor shall be required to add additional staff or equipment necessary to place back on schedule within 48 hours of being requested.

19. STRAW BALE SEDIMENT TRAPS

For the unit price tendered the Contractor shall supply all labour, equipment, material, supervision and services, to install and maintain sediment traps as per OPSD 511 granted or they are no longer required(the full establishment of all grass) and then they shall be removed.

The straw bales are to be maintained weekly and after rainfall events.

Measure of payment will be lump sum for the locations shown on the drawings. Progress payment for the above item will be based on the following percentage of the Contract Price.

- 60% for supply and installation
- 25% for maintenance
- 15% for removal

20. SILT FENCE

For the unit price tendered the Contractor shall provide all labour, equipment, material, supervision and services for the installation and maintenance of the silt fence(s) as per OPSD 219.130.

The Silt Fence is to be inspected and maintained after every rain event, thaw, and weekly during the construction period.

Measure of payment will be lump sum for the locations shown on the drawings. Progress payment for the above item will be based on the following percentage of the Contract Price.

- 60% for supply and installation
- 25% for maintenance
- 15% for removal

21. RIP RAP

For the unit price tendered the Contractor shall supply all labour, equipment, material, supervision and services, to install and maintain Rip Rap as per OPSD 219.180.

The rip rap is to be a minimum depth of 300mm above the Class II non woven geotextile.

Measure of payment will be per square meter of rip rap.

Progress payment for the above item will be based on the following percentage of the Contract Price.

- 85% for supply and installation
- 15% for maintenance

22. CLEARING AND GRUBBING

Clearing shall consist of removing of all natural and artificial objectionable materials from the entire site including road right-of-way, areas through ditches and channels are to be excavated, and such other areas as may be shown in the Specifications. The work shall be performed in advance of grading operations and in accordance with the requirements herein specified, subject to erosion control requirements. Demolition of buildings and structures, other than foundations or slabs, shall be as shown in the specifications. Clearing of trees is to be as low to the ground as possible.

The natural ground surface shall be cleared of all vegetative growth, such as trees, logs, upturned stumps, of downed trees, brush, grass, weeds, and all other objectionable materials/debris/garbage, within the limits of construction.

Grubbing consists of the removal of all roots, rocks, stumps, etc.

Clearing and Grubbing shall extend to the boundaries indicated on the drawings. Within the limits of clearing, all stumps, roots 40mm in diameter or larger, buried logs, and all other objectionable material shall be removed one m below the existing ground surface or subgrade, whichever is deeper. To reduce the stump/roots that will require removal from site, they may be chipped into the ground to a minimum depth of 450mm below grade. The wood chips are to be located in areas acceptable to Curve Lake First Nation.

No roots or stumps are to be burned on site. Prior approval is required by Curve Lake First Nation in writing before any burning can occur on the site. Any roots/stumps not chipped and debris, are to be removed from Curve Lake First Nation to the rear of the solid waste transfer site property.

No Payment will be made to the Contractor for clearing and grubbing outside the stated limits unless such work is authorized by the Engineer.

Trees and plants that are not to be removed shall be fully protected from injury by the Contractor at their expense. Trees shall be removed in such a manner as not to injure standing trees, plants, and improvements which are to be preserved.

Tree branches which hang within four (4)m above finished roadway grades or within 2.75 m above finished sidewalk or parking grade shall be cut off to the boles in an acceptable manner. The Contractor shall remove additional tree branches under the direction of the Engineer, in such manner that the tree will present a balanced appearance. Scars resulting from removal of branches shall be treated with a heavy coat of tree sealant.

All rocks and boulders larger than 0.01 meter square are to be removed from the site and disposed of within Curve Lake First Nation or utilized for bank stability or erosion control to the approval of the Engineer.

Existing improvements, adjacent property, utility and other facilities, and trees and plants that

are not to be removed shall be protected from injury or damage.

All brush and wood materials removed shall be disposed of off site to the front of the solid waste transfer site property. Any wood acceptable for fire wood is to be separated and orderly piled away from the disposal material in 4 foot lengths.

The lump sum price, bid for clearing and grubbing shall include full compensation for removal and disposal of all resulting materials including debris.

The Contractor shall inspect the site to determine the exact limits and extent of the works prior to submitting the tender.

Note: Excess fill or topsoil will be disposed of within the site on a future lot. The material will be placed and shaped into single piles under this item.

23. EARTHWORKS - GRADING

For the lump sum prices tendered the Contractor shall supply all labour, equipment, materials, supervision and services to perform earth grading as specified or reasonably infer from the contract drawings including but not necessarily limited to the following: cut to fill all road right-of-ways, remove and haul material to fill any short fall, stockpile any surplus material and ensure the material is placed and compacted is suitable for a road base. There are two lots available with extra fill. They are to be used for fill for the roadways as required. Rocks over the size of 150mm in any dimension are to be removed from the road material.

Topsoil shall be removed from the construction area and stockpiled, for future use on the site within a lot slated for future development. Each stockpile shall be protected with silt fence. The areas is to be cleared and grubbed prior to placement of topsoil. The area is also to have the topsoil removed if the area it to store excess fill. There are lots identified for the storage of topsoil and fill. A clearing plan is to be provided to Curve Lake identifying the area to be cleared and approved prior to the clearing.

All fill areas shall be compacted as per OPSS 206, 501 to a minimum 95% standard proctor maximum dry density, except as noted.

Pooling of water is not acceptable. Wet or frozen material is not acceptable. Organic material is not acceptable as fill.

Measure for payment will be lump sum for this item.

24. FINE GRADE ROAD SUBGRADE

For the lump sum price tendered for the Contractor shall supply all labour, material, equipment, supervision and services to fine grade the right-of-ways including, but not necessarily limited to the following reshaping and fine grading of the roadways, and roadside ditches as specified or reasonable inferred from the contract drawing. This includes sub-grade consolidation and replacement of soft material as required with suitable material.

The Contractor is required to produce a sub-grade properly shaped to the required cross-section, capable of supporting construction traffic without rutting, rolling or deformation. The Contractor shall at all times maintain proper drainage measures so that surface runoff is not impeded and pooling of water does not occur on the sub-grade. Vibratory compaction is to be avoided.

Should the sub-grade material be shown to be soft, wet or otherwise unsuitable for road base construction the Contractor shall replace the sub-grade with satisfactory material capable of being compacted to the specified density.

The subgrade is to be tested and deemed acceptable by the geotechnical engineer prior to placement of the granular material. Minimum 98% SPMDD.

The frost taper over the culvert crossing Road 1 is to be extended to the top of the subgrade/underside of the granular base under this item.

Quantities for payment under this item shall be lump sum.

Payment for sub-grade replacement under the applicable provisional items may not be approved when the unsuitable sub-grade is the result of the Contractor's failure to properly construct road fills, to properly backfill and compact trenches as specified, or to adequately drain the sub-grade surface. Payment based on field measured and confirmed volume(m³) may be approved when unsuitable sub-grade is caused by reasons not attributed to the Contractor or their operations.

Final responsibility shall remain with the Contractor for the satisfactory performance of the completed roadway. A decision by the client not to approve payment for replacement of sub-grade shall not relieve the Contractor of their responsibility to produce a satisfactory project.

The Sub-grade elevations are to be checked by the engineer and no granular sub-base material is to be placed until the Engineer has approved the sub-grade.

If prior approval the supply of suitable replacement fill will be paid per placed m³.

Pooling of water at any time in the road construction process is not acceptable.

25. GEOTEXTILE, GRANULAR SUB-BASE, BASE, AND SURFACE MATERIAL

The non woven geotextile class II is to be placed on the approved subgrade prior to placement of granular materials. It is to be overlapped by a minimum of 200mm and installed as per manufacturers recommendations.

The sub base is to be a minimum of 350mm Granular 'B' and base material will be a minimum 150mm Granular 'A' per OPSS 1010.

It is to be placed and compacted in layers no thicker than 125mm. The bottom 350mm is to be compacted with vibratory action.

Backfill shall consist of select native material compacted to a minimum of 95% standard proctor

maximum dry density without vibratory action.

All granular road base and sub-base materials shall be compacted to 100% standard proctor maximum dry density, ASTM-D698. Care should be taken to compact in small layers to prevent drawing moisture from the sub grade or softening the sub grade

Quantities for payment under this item shall be lump-sum.

26. ASPHALT PAVEMENT

Upon approval of the granular material placement, compaction and grading, the supply and placement of the Base Asphalt(60mm HL8) is to be installed as per OPSS 304, 310 and 1150. The asphalt is to be approved by a geotechnical engineering firm upon sampling and testing the material.

Upon the completion of a year warranty of the asphalt the top course layer (HL3) is to be installed. If there are any settled or damaged areas they are to be repaired/padded prior to the placement of the top layer of asphalt. A tack coat is to be installed prior to the placement of the top layer.

Quantities for payment under ths items shall be per linear meter of road length.

27. PIPE CULVERTS

Bedding shall be as per OPSD 802.01

Bedding and cover shall be Granular 'A'.

All culverts are to have frost tapers as per the drawings, OPSS 401 and OPSD 801.030/031

Measurement for payment shall be unit length for road crossings and per culvert for the driveways.

28. FINE GRADE, TOPSOIL AND SEED/SOD

Topsoil shall be placed a minimum of 150 mm depth and finely graded as per OPSS 206

The area is to be hydro-seeded with an approved acceptable native lawn seed. As per OPSS 804.

The final elevations are to be within 25mm tolerance of the proposed grades with the ditch bottoms to a 10mm tolerance due to very flat slopes.

Boulevards and ditches shall be graded to 150 mm below designed finished grades to accommodate topsoil and hydroseed/sod.

The main ditches are to have two (2) strips of sod placed along the center of the ditch as part of this item and include in the lump sum cost.

Pooling of water is not acceptable.

The entire area of the cleared site except for the buildings, road, and field bed area are included in this item.

Measurement for payment shall be in lump sum for the entire area up to the edges of the houses, property lines, back of the ditches, installed driveways and roadway.

29. SIGNS

For the unit price tendered the Contractor shall supply all labour, equipment, materials, supervision services to supply and install street name and traffic regulatory signs and in accordance with Curve Lake First Nations standards and specifications, and the manual of Uniform Traffic Control Devices.

The Street and Stop sign is to be located on one post and paid under a single item. Speed, curve ahead, no exit, cul-de-sac sign, etc. will be located on independent sign posts all to meet the MTO requirements. The street signs should be similar to the existing signs in Curve Lake or as approved.

30. SOIL REPORTS

The Contractor is advised that a soil report has been prepared for this site. The information within the report is available for your interpretation of the sub surface conditions. If additional information is required, please contact Curve Lake First Nation within the period for questions with your specific questions.

31. MOBILIZATION/DEMOBILIZATION/BONDING/INSURANCE

This item covers, but is not limited to, the following work:

- Mobilization including set up of site trailer(s), sanitary facilities and secure work areas;
- Transportation of equipment and materials;
- Provision of bonds and insurance certificates;
- Providing an initial construction schedule and updating it on a bi-weekly basis;
- Site security;
- Stakeout of existing utilities and services;
- Communications with property owners, business owners, tenants, and residents;
- Attendance at pre-construction and progress meetings;
- Demobilization and removal of equipment, materials, etc;

Partial payments will be made on the following basis:

- i) 60% of the tender amount will be paid upon providing bonds, insurance, mobilization and initial construction schedule to the satisfaction of the Contract Administrator.

- ii) The remaining 40% will be paid upon completion of construction to the satisfaction of the Contract Administrator.

32. TRAFFIC CONTROL AND STAGING

This item includes the supply and installation of all TC54 flexible drums (barrels), temporary concrete barrier, end treatments and associated signage, as required for construction staging. All of these shall be in accordance with the Ontario Traffic Manual (Book 7) Temporary Conditions.

Signs shall be in place before work-affecting traffic begins. They shall be well maintained to be effective at all times and remain operational throughout the duration of the operation requiring signs, including the shutdown periods.

The Contractor is required to provide one (1) week notice to the Contract Administrator will regard to construction start date.

The Contractor will be required to report any problems with traffic to the Contract Administrator immediately so that remedial measures can be undertaken. No modifications will be permitted to the initial traffic control plan(s) without written authorization by the Contract Administrator.

The Contractor is responsible for the removal, salvage, storage and replacement (in their original locations) of all signs and signposts that interfere with the installation of the proposed facilities.

Proper and sufficient construction signs to meet the MTO and the OPSS relating to construction activities including vehicles and activities is required.

During construction, the Contractor shall either:

- a) store the signs and posts in a safe and secure manner or;
- b) temporarily re-install the signs as necessary for the safety of the public, e.g. stop signs.

The Contractor will be responsible for any signs, and sign posts that are damaged or misplaced.

No additional payment shall be made for this work.

Under this item, the Contractor shall supply and maintain all temporary signing, traffic and pedestrian protection as per the Occupational Health and Safety Act, Ontario Traffic Manual (OTM) Book 7 Supplement and OPSS 706. This item is applicable to all components and schedules of this Contract.

All works detailed in this section will not be paid directly but shall be included in the applicable items in the tender.

33. LAYOUT SURVEY VERIFICATION

The Contractor is to verify the location and elevation of the key drainage areas and outlets. The design is based on aerial low elevation Lidar survey data with field verifications, and the elevations may not be exact. This is to be taken into account by the contractor and they are to confirm that they are satisfied with the elevations prior to the start of the construction. If there are significant discrepancies that will cause issues with the construction they are to bring them forward before they start the construction work.

34. CONNECTION TO EXISTING ROADWAYS

The contractor is to supply all material, labour and equipment to safely make the connections to the existing roadways at the edges of the construction boundary. This will include all grading, earth work, granular material, ditching, culverts, erosion control, asphalt, etc, as required for the successful connection to the existing roads.

The barrier on the first portion of Road 1 is also to be removed and culvert installed for the connection to occur as part of the connection.

This item will also include Rolli's Point road connection if the road reconstruction is not included in this project.

The first portion of Road 1 is to be cleaned and prepared to the final grade for the asphalt to be included in this contract. All materials, labour, and equipment is to be provided to complete this task in preparation for the placement of the base asphalt.

Safety procedures are to be followed as the existing Roads have vehicle traffic which must be maintained.

All works detailed in this section will be paid as a lump sum for all of the work required for the successful completion of the connection.

35. ROCK REMOVAL

All rock larger in volume than 1.0 m³ or bedrock that is to be removed shall be under this item. The rock is to be disposed of off site in the location determined by the client. This includes bedrock that can be removed by mechanical means (ie, hoe ram, etc.).

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All safety protection is to be provided for the removal and disposal process.

All works detailed in this section will be paid per unit price per m³ of rock removed from the site. All bedrock is to be surveyed prior to the removal and upon completion by the owners representative.