

December 12, 2024

The Mayor and Council
Municipality of North Middlesex
229 Parkhill Main Street
Parkhill, ON
N0M 2K0

Gentlemen and Mesdames:

Re: Spruytte-Cunningham Drain (2025) (DRAFT)

In accordance with your instructions, R. Dobbin Engineering has undertaken an examination with regards to improving the lower end of the drain in the Municipality of North-Middlesex.

Authorization under the Drainage Act

This Engineers Report that has been prepared under Section 78 of the Drainage Act.

R. Dobbin Engineering Inc. was appointed by council on January 17th, 2024.

Under Section 78 of the Drainage Act, Council may undertake and complete the maintenance or repair of any drainage works constructed under a bylaw passed under this Act or its predecessor. Section 78 is to be used where it is considered expedient to change the course of the drainage works, or to make a new outlet for the whole or any part of the drainage works, or to construct a tile drain under the bed of the whole or any part of the drainage works as ancillary thereto, or to construct, reconstruct or extend embankments, walls, dykes, dams, reservoirs, bridges, pumping stations, or other protective works as ancillary to the drainage works, or to otherwise improve, extend to an outlet or alter the drainage works or to cover the whole or any part of it, or to consolidate two or more drainage works, the Council whose duty it is to maintain and repair the drainage works or any part thereof may, without a petition required under Section 4 but on the report of an Engineer appointed by it, undertake and complete the drainage works as set forth in such report.

Existing Conditions

The Spruytte-Cunningham Drain is a combination of open and closed drains. The drain outlets into the Little Ausable River in Lot 23, Concession 4. It continues southeasterly to the east side of Neil Road and includes Branches "A" to "C".

The Spruytte-Cunningham was originally constructed under an Engineer's Report dated February 15, 1979. Under this report the Main Drain and Branch "B" were constructed. The Main Drain consisted of 1,130m of 250mm to 350mm dia. tile drain from the east side of Neil Road and the construction of 180m of open channel in Lot 25, Concession 4. Branch "B" includes a 200mm dia. tile drain.

Under an Engineer's Report dated June 11, 1992 the Main Drain was extended downstream to the Little Ausable River, the lower end was cleaned out and 40m of a 600mm dia. HDPE pipe was installed at the outlet to the Little Ausable River.

Under an Engineer's Report dated September 25, 2012 103m of 200mm dia. plastic tile was incorporated and 45m of 250mm dia. HDPE pipe was constructed, all to be known as Branch "A" of the Spruytte-Cunningham Drain.

On-Site Meeting

A site meeting was held on March 12, 2024.

The following were present at the meeting:

- Josh Warner (R. Dobbin Engineering)
- Joanne Sadler (Municipality of North Middlesex)
- Doug Richards (Landowner)
- Paul Vanneste (Landowner)
- Don Cunningham (Landowner)
- Ruth Ann Cunningham (Landowner)
- Alan Cunningham (Landowner)
- Lois Noland (Landowner)
- Fred Lewis (Landowner)

The following is a brief summary of the meeting:

- General discussion of the Drainage Act and Landowners rights under the Drainage Act.
- Owners of the property with Roll Number 000-020-032 expressed concern with the current outlet pipe into the Little Ausable River. They stated that it is too small and causes flooding upstream. The pipe was installed under a drainage report in 1992.
- Discussed option of a closed or open drain.
- No other concerns on the drain were brought forward.
- No adverse soil conditions were noted at the site meeting.

Drain Classification

The Spruytte-Cunningham Drain and Little Ausable River are currently "Not Rated" Drains according to the Department of Fisheries and Oceans (DFO) classification as

presented by the Ontario Ministry of Agriculture, Food and Rural Affairs' Agricultural Information Atlas.

The proposed work shall be carried out during low flows in the channel. The work area is to be maintained in a dry condition during construction by the Contractor.

Approvals

The drain will require approval from the Ausable Bayfield Conservation Authority and the Department of Fisheries and Oceans. Construction cannot commence without necessary approvals.

Design

The proposed culvert shall be designed to provide outlet for a 1 in 10-year storm event with a tail water elevation reaching 237.40m. The drain will not function to the design storm when water levels in the Little Ausable River are higher.

Recommendations

It is therefore recommended that the following work be carried out:

1. The existing culvert outletting the Spruytte-Cunningham Drain into the Little Ausable River shall be replaced with a 1200mm dia. Sanitite Pipe. This pipe shall be installed to provide as much of the pipe above the water level in the Little Ausable River as possible.

Estimate of Cost

It is recommended that the work be carried out in accordance with the accompanying Specification of Work and Profile that forms part of this Report. There has been prepared an Estimate of Cost in the amount of \$85,110, including engineering of the report, attending the Meeting to Consider the Report, attending the Court of Revision, and an estimate for tendering, contract administration and inspection. Appearances before appeal bodies have not been included in the cost estimate.

A Plan has been prepared showing the location of the work and the approximate drainage area. A profile is included showing the depths and grades of the proposed work.

Assessment

As per Section 21 of the Drainage Act, the Engineer in their Report shall assess for benefit and outlet for each parcel of land and road liable for assessment. Lands, roads, buildings, utilities, or other structures that are increased in value or are more easily maintained as a result of the construction, improvement, maintenance, or repair of a drainage works may be assessed for benefit. (Section 22)

Lands and roads that use a drainage works as an outlet, or for which, when the drainage works is constructed or improved, an improved outlet is provided either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse may be assessed for outlet. The assessment for outlet shall be based on the volume and rate of flow of the water artificially caused to flow into the drainage works from the lands and roads liable for such assessments. (Section 23)

The Engineer may assess for special benefit any lands for which special benefits have been provided by the drainage works. (Section 24)

A Schedule of Assessment for the lands and roads affected by the work and therefore liable for the cost thereof will be prepared as per the Drainage Act. Also, assessments may be made against any public utility or road authority, as per Section 26 of the Drainage Act, for any increased cost for the removal or relocation of any of its facilities and plant that may be necessitated by the construction or maintenance of the drainage works.

The cost of any approvals, permits or any extra work, beyond that specified in this Report that is required by any utility, government ministry or organization (federal or provincial), or road authority shall be assessed to that organization requiring the permit, approval, or extra work.

The estimated cost of the drainage works has been assessed in the following manner:

1. The cost of the drainage improvements has been assessed with 10% of the cost applied as a benefit assessment to the property with roll number 000-020-032, 30% of the cost applied as a benefit assessment to the property with roll number 000-020-031, and the remainder applied as outlet assessment to the upstream lands and roads based on equivalent hectares.

All final costs included in the cost estimate of this report shall be pro-rated based on the Schedule of Assessment. Any additional costs shall be assessed in a manner as determined by the Engineer in accordance with the Drainage Act.

If a Landowner intends to sell their property they shall disclose this project to any potential purchasers.

Allowances

Under Section 29 of the Drainage Act, the Engineer in his Report shall estimate and allow in money to the Landowner of any land that it is necessary to use for the construction or improvement of a drainage works or for the disposal of material removed from drainage works. This shall be considered an allowance for right-of-way.

Under Section 30 of the Drainage Act, the Engineer shall determine the amount to be paid to persons entitled thereto for damage, if any, to ornamental trees, lawns, fences,

land and crops occasioned by the disposal of material removed from a drainage works. This shall be considered an allowance for damages.

Allowances have been made, where appropriate, as per Section 29 of the Drainage Act for right-of-way and as per Section 30 of the Drainage Act for damages to lands and crops. Allowances for right of way are based on a land value of \$50,000.00 per hectare. Allowances for crop loss are based on \$2,000.00 per hectare for the first year, \$1,000.00 for the second year (\$3,000.00 per hectare total).

Access and Working Area

Access to the work site for construction and future maintenance shall be from Maguire Road and along the existing access at the south limit of the property with Roll Number 000-020-031. Access shall generally be restricted to a width of 6 metres. The working area shall extend 15m past the extents of the proposed culvert in all directions.

Restrictions

No trees and shrubs shall be planted nor shall permanent structures be erected within 15m of either side of the proposed drain without prior written permission of Council.

Attention is also drawn to Sections 80 and 82 of the Drainage Act, which refer to the removal of obstructions in a drain and damage caused to a drain.

Agricultural Grant

If available, it is recommended that application for subsidy be made for eligible agricultural properties. Any assessments against non-agricultural properties are shown separately in the Schedule of Assessment.

Maintenance

Upon completion of the work, the proposed culvert shall be repaired and maintained in same proportions as the Schedule of Assessment included in this report, unless otherwise altered under provisions of the Drainage Act.

The proposed culvert shall be maintained as per the specifications and drawings contained in this Engineers Report.

Yours truly,

Josh Warner, P. Eng.
R. Dobbin Engineering Inc.

Spruytte-Cunningham Drain
Municipality of North Middlesex
December 12, 2024

ALLOWANCES

Allowances have been made as per Sections 29 & 30 of the Drainage Act for Right of Way and damages to lands and crops

Conc.	Lot or part	Roll No.	Owner	Section 29 (\$)	Section 30 (\$)	Total (\$)
4	Lot 23	000-020-031	P. Vanneste	-	500	500
	Lot 24	000-020-032	D. Richards	-	100	100
TOTAL ALLOWANCES				\$0	\$600	\$600

Estimate of Cost

<u>Item Description (Supply and Install New)</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
Pre-Construction Meeting	1	LS	200	200
De-Watering	1	LS	8,000	8,000
Removal and Disposal of Existing Culvert and Level Excess Material	1	LS	5,000	5,000
Remove and Reinstall Concrete Blocks at Outlet	1	LS	2,000	2,000
Supply and Install 1200mmø Sanitite Pipe	42	m	800	33,600
Clear Stone Bedding	150	tonne	45	6,750
Supply and Install Granular "B"	100	tonne	35	3,500
Supply and Install 100% Crushed Granular "A"	30	tonne	45	1,350
Restoration/Seeding	1	LS	1,500	1,500
Rip Rap	15	tonne	100	1,500
Provisional: Supply and Install Additional Concrete Blocks	5	each	200	1,000
Contingency				<u>3,240</u>
				Sub Total 67,640
				Allowances 600
				Engineering 10,470
				Estimate for Tendering, Inspection and Contract Administration 4,500
				ABCA Fee 450
				Total Estimate excluding HST 83,660
				Non-Recoverable HST (1.76%) 1,450
				Total Estimate \$ 85,110

SCHEDULE OF ASSESSMENT

Conc.	Lot or Part	Affected Hectares	Roll No.	Owner	Benefit	Outlet	Total
Public Lands							
	Prince William Street	1.60		Municipality of North Middlesex	-	3,007	3,007
	Neil Road	0.90		Municipality of North Middlesex	-	1,691	1,691
					-	4,698	4,698
Agricultural Lands							
2	Pt. Lot 24	1.60	000-020-070	C & M Genetics Inc.	-	752	752
	N 1/2 Lot 25	14.20	000-020-071	A. & G. Cunningham	-	6,671	6,671
	S 1/2 Lot 25	8.10	000-020-072	D. & R. Cunningham	-	3,805	3,805
3	N 1/2 Lot 25	20.20	000-020-056	Frans Livestock Inc.	-	4,745	4,745
	S 1/2 Lot 25 & Lot 25 Conc.	48.10	000-020-033	Vannsons Farms Limited	-	22,597	22,597
	Lot 26	1.20	000-020-055	Vannsons Farms Limited	-	564	564
4	Lot 23	0.00	000-020-031	P. Vanneste	25,532	-	25,532
	Lot 24	15.40	000-020-032	D. Richards	8,511	7,235	15,746
	Total Area	111.30			34,043	46,369	80,412
				Total - Public Lands	4,698		
				Total Agricultural Lands	80,412		
				Total Assessment	\$85,110		

Estimated Net Assessment

Net assessment subject to OMAFRA ADIP Policy and actual construction costs.

Conc.	Lot or Part	Affected Hecatares	Roll No.	Owner	Total Assessment (\$)	Estimated Grant (\$)	Allowances (\$)	Estimated Net Assessment (\$)
Public Lands								
	Prince William Street	1.60		Municipality of North Middlesex	3,007			3,007
	Neil Road	0.90		Municipality of North Middlesex	1,691			1,691
Agricultural Lands								
2	Pt. Lot 24	1.60	000-020-070	C & M Genetics Inc.	752	251		501
	N 1/2 Lot 25	14.20	000-020-071	A. & G. Cunningham	6,671	2,224		4,447
	S 1/2 Lot 25	8.10	000-020-072	D. & R. Cunningham	3,805	1,268		2,537
3	N 1/2 Lot 25	20.20	000-020-056	Frans Livestock Inc.	4,745	1,582		3,163
	S 1/2 Lot 25 & Lot 25 Conc. 4	48.10	000-020-033	Vannsons Farms Limited	22,597	7,532		15,065
	Lot 26	1.20	000-020-055	Vannsons Farms Limited	564	188		376
4	Lot 23	0.00	000-020-031	P. Vanneste	25,532	8,511	500	16,521
	Lot 24	15.40	000-020-032	D. Richards	15,746	5,249	100	10,397
					85,110	26,805	600	57,705

Spruytte-Cunningham Drain
Municipality of North Middlesex
December 12, 2024

SPECIFICATION OF WORK

1. Location

The Spruytte-Cunningham improvements is located in Lot 23, Concession 4 in The Municipality of North Middlesex.

2. Scope of Work

The work included in this specification includes, but is not limited to, the following:

- culvert replacement

3. General

Each tenderer must inspect the site prior to submitting their tender and satisfy themselves by personal examination as to the local conditions that may be encountered during this project. The Contractor shall make allowance in their tender for any difficulties which they may encounter. Quantities or any information supplied by the Engineer is not guaranteed and is for reference only.

All work and materials shall be to the satisfaction of the Drainage Superintendent who may vary these specifications as to minor details but in no way decrease the proposed capacity of the drain.

The Contractor shall be responsible for the notification of all utilities prior to the start of construction.

4. Plans and Specifications

This Specification of Work shall take precedence over all plans and general conditions pertaining to the Contract. The Contractor shall provide all labour, equipment, and supervision necessary to complete the work as shown in the Plans and described in these specifications. Any work not described in these specifications shall be completed according to the Ontario Provincial Standard Specifications and Standard Drawings.

5. Health and Safety

The Contractor at all times shall be responsible for health and safety on the worksite including ensuring that all employees wear suitable personal protective equipment including safety boots and hard hats.

When applicable the Contractor shall be responsible for traffic control as per the Ontario Traffic Manual Book 7 – Temporary Conditions (latest revision).

The Contractor shall be responsible to ensure that all procedures are followed under the Occupational Health and Safety Act to ensure that work sites are safe and that accidents are prevented. In the event of a serious or recurring problem, a notice of non-compliance will be issued. The Contractor will be responsible for reacting immediately to any deficiency and correcting any potential health and safety risk. Continuous disregard for any requirement of the Occupational Health and Safety Act could be cause for the issuance of a stop work order or even termination of the Contract.

The Contractor shall also ensure that only competent workers are employed onsite and that appropriate training and certification is supplied to all employees.

6. Utilities

The Contractor is responsible for organizing locates and exposing all the utilities along the length of the drainage works. If any utilities interfere with the proposed drainage works in a manner not shown on the accompanying Estimate of Cost or profile the Contractor shall notify the Drainage Superintendent and Engineer.

The Contractor is responsible for coordinating the replacement of additional utilities with the utility company if they interfere with the proposed drain. All costs for the utility to replace their services will be outside of this report and shall be borne by the utility as per Section 26 of the Drainage Act.

All additional costs to work around and organize replacement of the utilities not included in the estimate shall be tracked separately and the cost plus a portion of the engineering (25% of the cost) shall be borne by that utility.

7. Pre-Construction Meeting

There is a requirement for a pre-construction meeting to be held prior to any construction taking place. The meeting shall be scheduled by the Contractor. The Landowners, Engineer, and the Municipality of North-Middlesex shall be notified of the pre-construction meeting at least 48 hours prior.

8. Benchmarks

The benchmarks are based on geodetic elevations. Elevations are available at the locations shown on the Plan and Profile drawings. Where these elevations are on existing structures to be replaced, they shall be transferred by the Contractor prior to the removal.

The Contractor is required to complete a benchmark loop prior to construction to verify the benchmarks. If discrepancies exist the Contractor must notify the Drainage Superintendent and Engineer prior to completing any work.

9. Traffic Control

Access and driveways to private properties shall not be obstructed longer than the minimum time necessary for the work and shall be reinstated as soon as possible all to the satisfaction of the Engineer. The contractor shall schedule any obstruction of existing driveways with the owners at least two full working days in advance. Roads must be kept open to local traffic and all obstructions and diversions of traffic must be approved by the Engineer or Drainage Superintendent and Roads Superintendent at least two (2) full working days in advance.

- a) The Contractor shall supply, erect and maintain all detour signs and special signs necessary for detours to divert traffic from the area under construction as directed by the Road Superintendent or Engineer. All this work shall be at the Contractor's expense.
- b) The Contractor shall be responsible for supplying, erecting and maintaining all signs, supports, barricades, flashers, cones, etc. in the construction area and at the boundaries of the work as part of the above detours, all to the satisfaction of the Engineer or Drainage Superintendent. All this work shall be done by the Contractor at their own expense.
- c) The Contractor shall not be allowed to proceed with construction activities unless proper signage and flagmen are present. Flagging procedures, signage and detours shall conform to the recommendations of Book 7, Temporary Conditions, Ontario Traffic Manual, issued by the Ministry of Transportation. Conformance shall be enforced by the Ministry of Labour Inspector.

10. Access and Working Area

Access to the work site for construction and future maintenance shall be from Maguire Road and along the existing access at the south limit of the property with Roll Number 000-020-031. Access shall generally be restricted to a width of 6 metres. The working area shall extend 15m past the extents of the proposed culvert in all directions.

11. De-Watering

De-watering shall be done in order to facilitate construction. The exact methodology for de-watering is up to the Contractor.

The water control plan shall be submitted to the Engineer and Municipality of North Middlesex prior to work commencing.

12. Removals

The existing culvert shall be removed in its entirety. The culvert and the concrete rubble shall be disposed offsite at the expense of the Contractor. Suitable backfill shall be stockpiled adjacent to the site for reuse during installation of the proposed culvert. The concrete blocks shall be removed in order to facilitate the installation of the larger culvert. The concrete blocks shall be re-installed at the direction of the Engineer or Drainage Superintendent in order to protect the new outlet and banks.

13. Installation of Culvert

The Contractor is required to notify the Landowner forty-eight (48) hours prior to the removal of a culvert.

The culvert shall be SaniTite HP with 320kPa and bell and spigot joints or approved equivalent.

The culverts designated to be replaced in the future under this report shall be examined after any cleanout of the open channel as to its condition. If it is found to be in disrepair (i.e. there are holes corroded in the bottom or sides) it shall be replaced as per these specifications.

The culverts shall be installed generally in the same location or as approved by the Drainage Superintendent or Engineer. It is the Contractors responsibility to ensure that the minimum cover is achieved when backfilling the culverts. The minimum cover is 300mm.

Any tile outlets extended as a result of a culvert shall be extended at the landowner's expense. The pipes that shall be extended upstream or downstream of the proposed culvert shall be done with non-perforated HDPE agricultural tubing with a manufactured coupling, elbow and rodent grate.

The bottom of the excavation shall be 100mm below the proposed invert or to the bottom of the excavation caused by the removed pipe, whichever is lower. The pipe shall be bedded with $\frac{3}{4}$ " clear stone. When the pipe has been installed to the proper grade and depth, the excavation shall be backfilled with $\frac{3}{4}$ " clear stone and wrapped in filter fabric from the bottom of the excavation to the spring line of the pipe. Care shall be taken to ensure that the backfill on either side of the culvert does not differ by more than 300mm so that the pipe is not displaced. The culvert shall be backfilled from the spring line to within 150mm of finished grade with Granular "B". Where no vehicular traffic is proposed to cross the culvert, the culvert may be backfilled with select native material. If the native material is deemed insufficient by the Drainage Superintendent or Engineer Granular "B" shall be used. The excess excavated material shall be spread within the area of the proposed culvert to ensure 300mm of cover and shall be spread to the satisfaction of the Engineer or Drainage Superintendent. Where vehicular access is proposed, the top

150mm shall be backfilled with compacted 100% crushed granular "A" material to finished grade. In sections where no vehicular traffic is proposed to cross the culvert, the top 100mm shall be topsoil and seeded as per the restoration specification.

The south end wall shall be rip rap. It shall consist of 150mm x 300mm quarry stone or approved equal. The area to receive the rip rap shall be graded to a depth of 400mm below finished grade. Filter fabric (Mirafi P150 or approved equal) shall then be placed with any joints overlapped a minimum 600mm. The quarry stone shall then be placed with the smaller pieces placed in the gaps and voids to give it a uniform appearance.

If additional concrete blocks are required at the north end of the proposed pipe they shall consist of concrete blocks with dimensions of approx. 600mm x 600mm x 1200mm, 600mm x 600mm x 2400mm or 300mm x 600mm x 1200mm as required. 600mm x 600mm x 2400mm concrete blocks will be paid at twice the unit price established per block, all others will be at a unit of 1. The blocks shall be set at each end of the culvert so that each row of blocks will be offset approx. 100mm from the row below. The blocks shall be imbedded a minimum of 300mm into each bank.

The blocks shall be placed over a layer of filter fabric (Mirafi P150 or approved equal). The culvert shall be backfilled in conjunction with the placement of the blocks. The gaps between the culvert and the blocks shall be filled with concrete cinder blocks/bricks and mortar to give the end wall a finished appearance.

14. Seeding/Restoration

All areas disturbed by construction shall be returned to their pre-construction state. The grassed areas shall be restored 100mm of screened topsoil and hand seeded.

If the hand seed or hydroseed has not germinated, at the discretion of the Engineer or Drainage Superintendent, prior to the one-year maintenance period, 100mm of topsoil shall be placed and hydroseeded in accordance with the seed mixture, fertilizer and application rate as shown below.

Seed mixture, fertilizer and application rates are as follows:

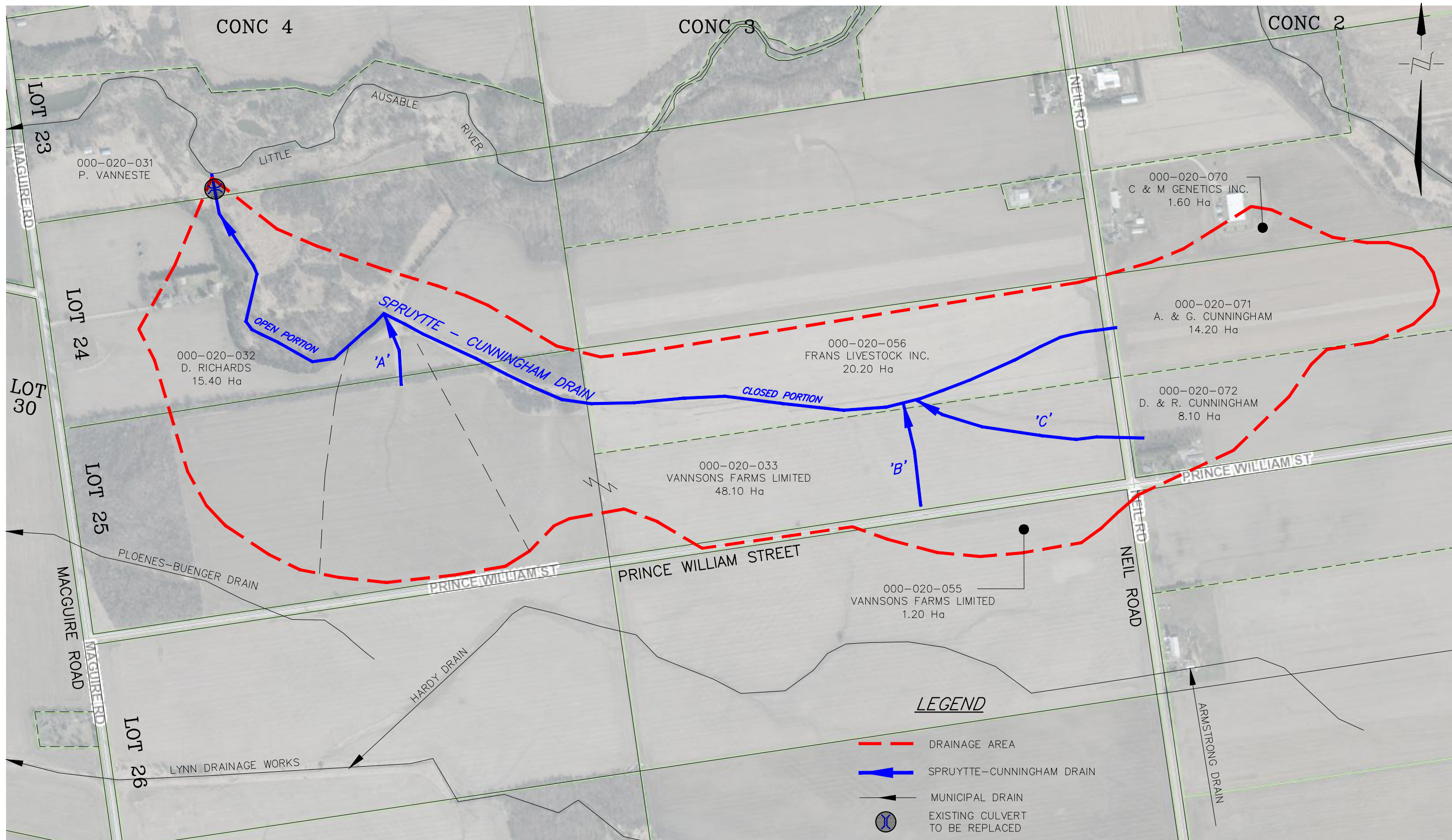
- Canada Wild Rye (*Elymus Canadensis*), Virginia Wild Rye (*Elymus virginicus*), or Indian grass (*Sorghastrum nutans*)
- Fertilizer (300 kg/ha.) consisting of 8-32-16.
- Hydraulic mulch (2,999 kg/ha.) type "B" and water (52,700 litres/ha.) in accordance with OPSS 572 (hydroseed).

The above seed mixture shall apply unless otherwise approved by the Drainage Superintendent or Engineer.

15. Environmental Considerations

The Contractor shall take care to adhere to the following considerations.

- Operate machinery in a manner that minimizes disturbance to the banks of the watercourse.
- Erosion and sediment control measures must be installed prior to construction to prevent sediment from entering the water body.
- Material shall not be in areas regulated by the Conservation Authority or Ministry of Natural Resources.
- All granular and erosion control materials shall be stockpiled a minimum of 3.0m from the top of the bank or excavation. Material shall not be placed in surface water runs or open inlets that enter the channel.
- All activities, including maintenance procedures, shall be controlled to prevent the entry of petroleum products, debris, rubble, concrete, or other deleterious substances into the water. Vehicle and equipment refuelling and maintenance shall be conducted away from the channel, any surface water runs, or open inlets. All waste materials shall be stockpiled well back from the top of the bank and all surface water runs and open inlets that enter the drain.
- When possible, all construction within the open channel shall be carried out during periods of low flow or in dry conditions.
- The Contractor shall conduct regular inspections and maintain erosion and sediment control measures and structures during the course of construction.
- The Contractor shall repair erosion and sediment control measures and structures if damage occurs.
- The Contractor shall remove non-biodegradable erosion and sediment control materials once site is stabilized.
- Remove all construction materials from site upon project completion.



4218 Oil Heritage Road
 Petrolia Ontario, N0N 1R0
 Phone: (519) 882-0032 Fax: (519) 882-2233

DRAWING NAME:
 Spruytte-Cunningham Drain Plan

PROJECT No.
 2024-1591

APPROVED
 J. WARNER

CHECKED
 B. VAN RUITENBURG

DRAWN
 C. SAUNDERS

NO.	REVISIONS	DATE	BY
1	FINAL REPORT	DEC. 12, 2024	CS

SCALE: 1:7500

0 100 200 300m

MUNICIPALITY of NORTH MIDDLESEX

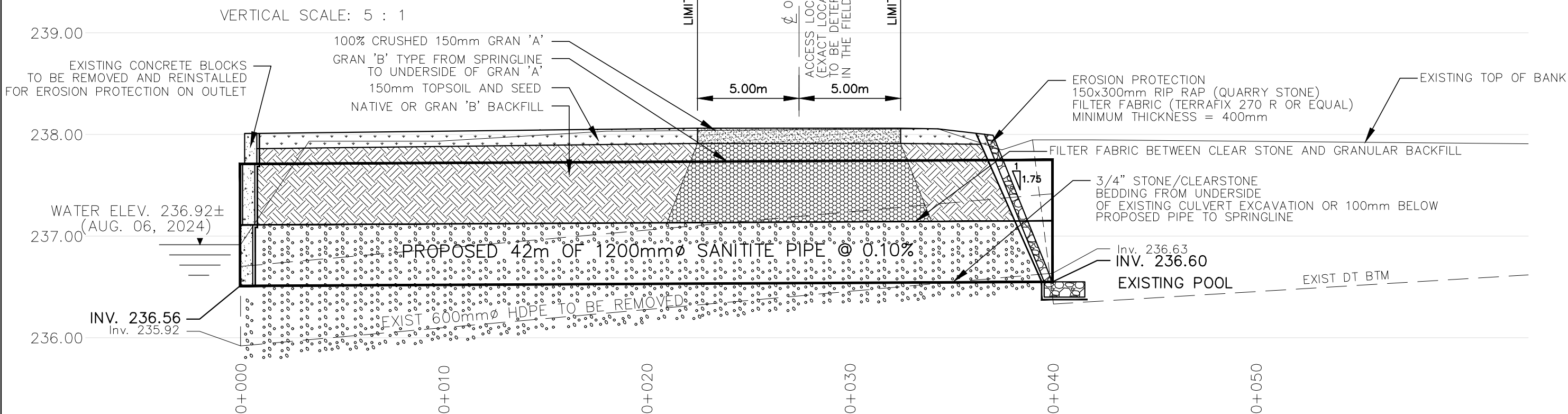
SPRUYTTE - CUNNINGHAM DRAIN PLAN

GENERAL NOTES

1. CONTRACTOR TO ENSURE MINIMUM COVER OF 300mm ABOVE PROPOSED 1200mmØ SANITITE PIPE.

2. EXISTING CONCRETE BLOCKS TO BE REMOVED AND REINSTALLED ARE LOCATED IN THE LITTLE AUSABLE RIVER, MOST BEING SUBMERGED AND EXISTING CONDITION NOT KNOWN.

3. ANY EXCESS MATERIAL FROM EXCAVATION TO BE REUSED ON SITE.



4218 Oil Heritage Road
Petrolia Ontario, N0N 1R0
Phone: (519) 882-0032 Fax: (519) 882-2233

DRAWING NAME: Spruytte - Cunningham Drain Detailed Plan & Profile
PROJECT No. 2024-1591

APPROVED	NO.	REVISIONS	DATE	BY
J. WARNER				
CHECKED	1	FINAL REPORT	DEC. 12, 2024	CS
C. SAUNDERS				
DRAWN				
B. VAN RUITENBURG				

SCALE 1:200

0 2 4 6m

MUNICIPALITY of NORTH MIDDLESEX
SPRUYTTE - CUNNINGHAM DRAIN
DETAILED PLAN & PROFILE