

TOWNSHIP OF BLANDFORD-BLENHEIM

COUNCIL MEETING AGENDA

Wednesday, September 7, 2022

Watch via Live Stream on Township's YouTube:

<https://www.youtube.com/channel/UCdKRV0GAEuFaGbwhRPzoEXA>

4:00 p.m.

1. Welcome

2. Call to Order

3. Approval of the Agenda

Recommendation:

That the agenda for the September 7, 2022 Regular Meeting of Council be adopted.

4. Disclosure of Pecuniary Interest

5. Minutes

a. [August 3, 2022 Minutes of Council](#)

Recommendation:

That the minutes of the August 3, 2022 Meeting of Council be adopted, as printed and circulated.

6. Business Arising from the Minutes

7. Presentations/Delegations

a. K. Smart Associates – Princeton Drain

<https://www.blandfordblenheim.ca/en/news/project-outline-proposed-princeton-drainage-system-2022.aspx>

Re: Staff Report DS-22-20

Recommendation:

That report DS 22-20 be received as information;

And further that council gives consideration to By-Law No. 2313-2022 for the Princeton Drainage System 2022 and give first and second reading (provisional by-laws);

[Township of Blandford-Blenheim Website](#)

And further that the Court of Revision be set for Wednesday October 5, 2022 at 4:00 p.m.

- b. Darlene Flemming Re: Plattsville Estates Phase 4

7. Public Meetings

a. Public Meeting Under the Planning Act

i. Application for Zone Change – ZN-22-01 (Christopher McLaren & Larenwood Farms Ltd.)

Recommendation:

That the Council of the Township of Blandford-Blenheim not approve the zone change application File No. ZN1-22-01 as submitted by Christopher McLaren & Larenwood Farms Ltd. for lands described as Part Lot 8 & 9, Concession 5 (Blenheim), in the Township of Blandford-Blenheim whereby the lands are proposed to be rezoned from 'General Agricultural Zone (A2)' to 'Rural Residential Zone (RR)'

ii. Application for Zone Change – ZN-22-06 (Brenden Lee & Leah Wynia)

Recommendation:

That the Council of the Township of Blandford-Blenheim approve the Zone Change Application, File No. ZN 1-22-06, as submitted by Brenden Lee & Leah Wynia, for lands described as Part Lot 2, Concession 13 (Blandford) in the Township of Blandford-Blenheim, are to be rezoned from 'Special General Agricultural Zone (A2-32(H)) to 'Special General Agricultural Zone (A2-32)' to remove the Holding (H) provision from the subject lands

b. Public Meeting Under the Planning Act, Committee of Adjustment

i. Minutes

July 6, 2022 Meeting of the Committee of Adjustment

ii. Applications

MVA-04-22 David Lyle & Anita Bosiger, 140 Mechanic Street Drumbo

Recommendation:

That the Township of Blandford-Blenheim Committee of Adjustment approve Application File A04-22, submitted by David Lyle & Anita Bosiger for lands described as Lot 1, Plan 41M151, in the Township of Blandford-Blenheim, as it relates to:

1. Relief from Section 5.1 – Table 5.1.1.3 – Regulations for accessory buildings and structures, to permit an accessory structure (detached garage) within an exterior side yard; and,
2. Relief from Section 12.2 Table 12.2 – R1 Zone Provisions, to reduce the minimum required exterior side yard width from 7.5 m (24.6 ft.) to 1.2 m (3.9 ft) to facilitate the construction of an accessory structure (detached garage).

Subject to the following condition:

- i. That the proposed relief shall only apply to the accessory structure (detached garage) of the approximate size and location as depicted on Plate 3 of Report CP 2022-336.

The proposed relief meets the four tests of a minor variance as set out in Section 45 (1) of the Planning Act as follows::

- i) in keeping with the general intent and purpose of the County's Official Plan;
- ii) a minor variance from the provisions of the Township of Blandford-Blenheim Zoning By-Law No. 1360-2002;
- iii) desirable for the appropriate development or use of the land, building or structure; and,
- iv) in keeping with the general intent and purpose of the Township of Blandford-Blenheim Zoning By-Law No.1360-2002.

8. Correspondence

a. Specific

- i. [Big Brothers Big Sisters of Oxford County](#)

Recommendation:

That the month of September 2022 be declared Big Brother Big Sister month in the Township of Blandford-Blenheim.

b. General

- i. [Oxford County report PW 2022-35 – Proposed Backflow Prevention Program.](#)
- ii. [Oxford County Report PW 2022-37 – 2022 – 2032 Renewable Energy Action Plan](#)
- iii. [Oxford County 2024 Transportation Master Plan](#)
[Township of Blandford-Blenheim Website](#)

Recommendation:

That the general correspondence items be received as information.

10. Staff Reports

a. Rick Richardson – Director of Protective Services

i. FC-22-16 –Monthly Report

Recommendation:

That Report FC-22-15 be received as information.

ii. FC-22-17 – Fire Dispatch Agreement

Recommendation:

THAT Staff Report FC-22-17 entitled “Fire Dispatch Agreement” be accepted as information;

AND THAT staff be directed to prepare a By-law for Council consideration to enter into an agreement with Woodstock Police Services to provide Fire Dispatching Services from January 1, 2023 to January 1, 2027

iii. FC-22-18 – Fire Department ER By-law

Recommendation:

THAT Staff Report FC-22-18 entitled Fire Department Establishing and Regulating By-Law be accepted as information;

AND THAT the By-law attached as By-Law Number 2314-2022 a by-law to Establish and Regulate a Fire Department for the Township of Blandford-Blenheim be presented to Council for all three readings to repeal and replace By-Law Number 1701-2011 in its entirety.

iv. FC-22-19 – Driver Training Agreement

Recommendation:

THAT Staff Report FC-22-19 entitled Fire Department Driver Training Agreement be accepted as information;

AND FURTHER THAT Council approves the draft By-Law to authorize the execution of a fire department driver certification program agreement between the Township of Norwich and the Township of Blandford Blenheim

b. Jim Harmer – Drainage Superintendent

i. [DS-22-18 – Monthly Report](#)

Recommendation:

That Report DS-22-18 be received as information.

ii. DS-22-19 – Petition for Drainage Baker Drain

Recommendation:

That Report DS-22-19 be received as Information; and,

That Council accepts the petition for drainage works from Don Steinman and 1058672 Ontario Inc. for repair and improvements of the Baker Drain at Part of lot 5 and 4 con 11 at 906072 Township Road 12

That the Clerk notify the Grand River Conservation Authority that it has received a petition for drainage work and that they intend to proceed with this petition

c. Jim Borton – Director of Public Works

i. [PW-22-18 – Monthly Report](#)

Recommendation:

That Report PW-22-17 be received for information.

ii. Oxford County Road Supervisors Association

Recommendation:

Whereas the Oxford County Road Supervisors Association is seeking to host the 2025 Association of Ontario Road Supervisor's (AORS) Municipal Trade Show;

And Whereas this event draws more than 2,000 participants to share information and technical developments related to municipal roads and infrastructure with 200+ exhibitors (300 booths) of public works products and services;

And Whereas this event provides an opportunity to show case the County and local municipalities while providing support to the local economy through accommodations, meals and other related spinoffs;

And Whereas municipal support for the show and public works staff involved in planning, organizing and running the Trade Show is required for it to be successful;

Now therefore the Council of the Township of Blandford-Blenheim hereby endorses the Oxford County Road Supervisors Association bid for the 2025 AORS Municipal Trade Show;

And further endorses the utilization of public works staff to assist with planning, organizing and running the 2025 AORS Municipal Trade Show.

d. John Scherer – Manager of Building Services/CBO

i. [CBO-22-09 – Monthly Report](#)

Recommendation:

That Report CBO – 22 - 09 be received as information

e. Trevor Baer – Manager of Community Services

i. [CS-22-13 – Monthly Report](#)

Recommendation:

That Report CS-22-11 be received as information

f. Denise Krug – Director of Finance / Treasurer

i. [TR-22-12 – 2023 Budget Schedule](#)

Recommendation:

That Report TR-22-12 be received as information;

And further that Council adopt the budget schedule for the 2023 Operating and Capital Budgets, set out in Report TR-22-12.

g. Rodger Mordue – Chief Administrative Officer / Clerk

i. [CAO-22-21 – January 2023 Council meetings](#)

Recommendation:

That Report CAO-22-21 be received; and,

That the Council meeting for January 4, 2023 be cancelled and the following meetings be established for the month of January 2023:

- January 11, 2022 at 4:00 p.m., Regular Council
- January 18, 2022 at 10:00 a.m., Operating Budget presentation

12. Reports from Council Members

13. Unfinished Business

14. Motions and Notices of Motion

11. New Business

12. Closed Session

- a. A proposed or pending acquisition or disposition of land by the municipality or local board.
 - i. Unopened road allowance in Drumbo
- b. Personal matters about an identifiable individual, including municipal or local board employees

17. By-laws

- a. [2313-2022, Princeton Drainage System 2022](#)
- b. [2314-2022, Fire ER By-Law](#)
- c. [2315-2022, Being a By-law to amend the zoning by-law](#)
- d. [2312-2022, Being a By-law to confirm the proceedings of Council](#)

Recommendation:

That the following By-laws be now read a first and second time: 2313-2022, 2314-2022, 2315-2022 & 2316-2022

Recommendation:

That the following By-laws be now given a third and final reading: 2314-2022 2315-2022 & 2316-2022.

17. Other

18. Adjournment and Next Meeting

Wednesday, September 7, 2022

Recommendation:

That Whereas business before Council has been completed at _____ pm;

That Council adjourn to meet again on Wednesday, September 7, 2022 at 4:00 p.m.

MINUTES

Council met at 4:00 p.m. for their only Regular Meeting of the month.

Present: Mayor Peterson, Councillors Balzer, Banbury and Read.

Staff: Baer, Harmer, Krug, Matheson, Mordue, and Scherer.

Others: Dustin Robson, Planner, Oxford County.

Regrets: Councillor Demarest

Mayor Peterson in the Chair.

1. Welcome

2. Call to Order

3. Approval of the Agenda

RESOLUTION #1

Moved by – Councillor Read
Seconded by – Councillor Balzer

Be it hereby resolved that the amended agenda for the August 3rd, 2022 Regular Meeting of Council be adopted as printed and circulated.

.Carried

4. Disclosure of Pecuniary Interest

None.

5. Adoption of Minutes

a. July 6th, 2022 Minutes of Council

RESOLUTION #2

Moved by – Councillor Read
Seconded by – Councillor Balzer

Be it hereby resolved that the Minutes of the July 6th, 2022 Meeting of Council be adopted, as printed and circulated.

.Carried

6. Business Arising from the Minutes

None.

7. Public Meeting

a. Public Meeting under the Planning Act

- i. Application for Zone Change – ZN 1-22-05 (Christopher & Barbara Perry)

RESOLUTION #3

Moved by – Councillor Read

Seconded by – Councillor Balzer

Be it hereby resolved that Council rise and go into a Public Meeting under the Planning Act to consider applications for Zone Change:

ZN 1-22-05, Christopher & Barbara Perry,

And that Mayor Peterson Chair the Public Meeting.

.Carried

The Planner presented the report for ZN1-22-05, recommending to approval. Council did not ask any questions. The applicant was present and spoke in favour of the application. No one spoke further in favour or opposition of the application.

RESOLUTION #4

Moved by – Councillor Read

Seconded by – Councillor Balzer

Be it hereby resolved that the Public Meeting be adjourned and that the Regular Meeting of Council reconvene.

.Carried

RESOLUTION #5

Moved by – Councillor Read

Seconded by – Councillor Balzer

Be it hereby resolved that the Council of the Township of Blandford-Blenheim approve the zone change application submitted by Christopher & Barbara Perry whereby the lands described as Part Lot 7, Concession 5 (Blenheim), in the Township of Blandford-Blenheim are to be rezoned from 'Residential Existing Lot (RE)' to 'Special Residential Existing Lot Zone (RE-5)' to remove the requirement for compliance with Minimum Distance

Separation 1 (MDS 1) to facilitate the construction of a new single detached dwelling.

.Carried

8. Delegations / Presentations

None.

9. Correspondence

a. Specific

i. Drumbo Lions Club Harvest Carnival Request

RESOLUTION #6

Moved by – Councillor Read
Seconded by – Councillor Balzer

Be it hereby resolved that whereas Regulation 389/91 of the Liquor License Act was amended in 2011; and,

Where Regulations require that an applicant for the Special Occasion Permit for a Public Event request the municipality to designate the event as an event of municipal significance;

Be it hereby resolved that the Drumbo Lions Club August 19th, 20th, & 21st Harvest Carnival being held at the Drumbo Park, be declared an event of municipal significance.

.Carried

b. General

i. 2021 Oxford County Cycling Master Plan.

ii. AORS Road Supervisor Certification – Ben Minutillo.

RESOLUTION #7

Moved by – Councillor Read
Seconded by – Councillor Balzer

Be it hereby resolved the general correspondence items be received as information.

.Carried

10. Staff Reports

a. Rick Richardson – Director of Protective Services

- i. FC-22-15 – Monthly Report

RESOLUTION #8

Moved by – Councillor Balzer
Seconded by – Councillor Read

Be it hereby resolved that Report FC-22-15 be received as information.
.Carried

b. Jim Harmer – Drainage Superintendent

- i. DS-22-15 – Petition for Drainage Appointment of Engineer

RESOLUTION #9

Moved by – Councillor Balzer
Seconded by – Councillor Read

That Report DS-22-15 be received as information; and,

Whereas the Grand River Conservation Authority have registered their comments and do not have any concern with the petition for drainage works for the improved drainage outlet and road safety along Township Road 8 and Hubbard Road,

Be It resolved that Council appoints K Smart & Associates Ltd., 85 McIntyre Dr. Kitchener, Ont. N2R 1H6, to prepare a new drainage report as per the petition accordance with Section 4 of the Drainage Act.

.Carried

- ii. DS-22-16 – Petition for Drainage Appointment of Engineer

RESOLUTION #10

Moved by – Councillor Balzer
Seconded by – Councillor Read

That Report DS-22-16 be received as information; and,

Whereas the Upper Thames River Conservation Authority not have registered any comments or any concern for the petition for drainage works from W.A. Chesney & Sons Limited for the repair and improvements of the Hotson Drain at North part of lot 6 concession 7 at 825996 Township Road 8,

Be It resolved that Council appoints K Smart & Associates Ltd., 85 McIntyre Dr. Kitchener, Ont. N2R 1H6, to prepare a new drainage report as per the petition accordance with Section 4 of the Drainage Act.

.Carried

iii DS-22-17 – Monthly Report

RESOLUTION #11

Moved by – Councillor Balzer
Seconded by – Councillor Read

That Report DS-22-17 be received as information.

.Carried

c. Jim Borton – Director of Public Works

i. PW-22-17 – Monthly Report

RESOLUTION #12

Moved by – Councillor Balzer
Seconded by – Councillor Read

Be it hereby resolved that Report PW-22-17 be received as information.

.Carried

d. John Scherer – Chief Building Official

i. CBO-22-08 – Monthly Report

RESOLUTION #13

Moved by – Councillor Balzer
Seconded by – Councillor Read

Be it hereby resolved that Report CBO-22-08 be received as information.

.Carried

e. Trevor Baer – Manager of Community Services

i. CS-22-11 – Monthly Report

RESOLUTION #14

Moved by – Councillor Balzer
Seconded by – Councillor Read

Be it hereby resolved that Report CS-22-11 be received as information.

.Carried

ii. CS-22-12 – Ice Resurfacer

RESOLUTION #15

Moved by – Councillor Banbury
Seconded by – Councillor Read

Be it hereby resolved that Report CS-22-12 be received as information; and,

That the Township of Blandford Blenheim Council award the electrical ice resurfacers with charging station, to Zamboni company at 38 Morton Avenue East Brantford, Ontario for a price of 144,850.00 + HST

.Carried

f. Denise Krug – Director of Finance

- i. TR-22-11 – Interim Financial Report – 2nd Quarter

RESOLUTION #16

Moved by – Councillor Banbury
Seconded by – Councillor Read

Be it hereby resolved that Report TR-22-11 be received as information.

.Carried

g. Rodger Mordue – Chief Administrative Officer / Clerk

- i. CAO-22-18 – Request for closure and transfer of a portion of Canning Rd. north of Twp Rd 2

RESOLUTION #17

Moved by – Councillor Banbury
Seconded by – Councillor Read

Be it hereby resolved that Report CAO-22-18 be received; and,

That the request to officially close up and transfer a portion of Canning Road north of Twp. Rd. 2 be denied.

.Carried

11. Reports from Council Members

Mayor Peterson reported that the CAO for Oxford County has resigned and will be finished on September 8th, 2022. Mayor Peterson reported that Ben Addley will be the interim CAO until after the election sometime. Mayor Peterson reported that the Harvest Carnival is on during the 20th and 21st of August. Mayor Peterson reported Princeton Cemetery Decoration Day is the 21st of August, with a ceremony at 2:30 p.m. Mayor Peterson reported that the Princeton Museum is

having their 25th anniversary at the Museum on September 16th or 17th, 2022 and will report further details at the September meeting.

12. Unfinished Business

None.

13. Motions and Notices of Motion

None.

14. New Business

None.

15. Closed Session

- a. A proposed or pending acquisition or disposition of land by the municipality or local board.

- i. Princeton drainage project properties; &

- ii. Unopened road allowance in Drumbo.

RESOLUTION #18

Moved by – Councillor Banbury

Seconded by – Councillor Read

Be it hereby resolved that Council move into Closed Session under the authority of section 239 of the Municipal Act at 4:30 p.m. to discuss:

- i. A proposed or pending acquisition or disposition of land by the municipality or local board.

1. Princeton drainage project properties; &

2. Unopened road allowance in Drumbo.

.Carried

RESOLUTION #19

Moved by – Councillor Banbury

Seconded by – Councillor Read

Be it hereby resolved that Council does now adjourn from Closed Session and resume into Open Session at 5:18 p.m.

.Carried

16. By-laws

- a. 2310-2022, Being a By-law to amend the zoning by-law;
- b. 2311-2022, Being a By-law to amend the zoning by-law; &
- e. 2312-2022, Being a By-law to confirm the proceedings of Council.

RESOLUTION #20

Moved by – Councillor Banbury
Seconded by – Councillor Read

Be it hereby resolved that the following By-laws be now read a first and second time: 2310-2022, 2311-2022, & 2312-2022.

.Carried

RESOLUTION #21

Moved by – Councillor Banbury
Seconded by – Councillor Read

Be it hereby resolved that the following By-laws be now read a third and final reading: 2310-2022, 2311-2022, & 2312-2022.

.Carried

17. Other Business

None.

18. Adjournment and Next Meeting

RESOLUTION #22

Moved by – Councillor Banbury
Seconded by – Councillor Read

Whereas business before Council has been completed at 5:20 p.m.;

Be it hereby resolved that Council does now adjourn to meet again on Wednesday, September 7th, 2022 at 4:00 p.m.

.Carried

Mark Peterson, Mayor
Township of Blandford-Blenheim

Rodger Mordue CAO / Clerk
Township of Blandford-Blenheim



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Harmer Drainage Superintendent
Reviewed By:	Rodger Mordue	Date:	August 24, 2022
Subject:	Consideration of Report Section 4 & 78 Princeton Drainage System 2022	Council Meeting Date:	September 7, 2022
Report #:	DS 22-20		

Recommendation:

That report DS 22-20 be received as information;

And further that council gives consideration to By-Law No. 2313-2022 for the Princeton Drainage System 2022 and give first and second reading (provisional by-laws);

And further that the Court of Revision be set for Wednesday October 5, 2022 at 4:00 p.m.

Background:

On June 7th, 2017 Kenn Smart P.ENG. was appointed Engineer, to file a report for improved drainage in Princeton, under Section 4, 8 and 78 of the Drainage Act to improved the drainage in the former Village of Princeton

On August 8, 2022 the Report for the Princeton Drainage System 2022 was filed by Kenn Smart P.Eng. of K Smart Associates Limited with the Township Clerk

Analysis/Discussion:

The report has been mailed to the assessed owners and effected agencies in accordance with Section 41 of the Drainage Act. The report will be considered on September 7th, 2022 at 4:00 p.m. in accordance with Section 42 of the Drainage Act. All owner and agencies have been invited and the Engineer will be in attendance to present the reports and answer any questions.

Provide no major concern are expressed, the By-Law's (copy's attached to agenda) can be provisionally adopted and Court of Revision date set

Financial Considerations:

Cost of report is assessed to effected ratepayer as per the Schedule of Assessment in the drain report

Attachments:

Draft By-Law's # 2313-2022 attached to agenda

Copy of Reports attached to agenda as Princeton Drainage System 2022

Respectfully submitted by:

Jim Harmer

Jim Harmer
Drainage Superintendent

From: [Dustin Robson](#)
To: [Rodger Mordue](#)
Cc: [Rick Richardson](#)
Subject: FW: Council meeting September
Date: August 30, 2022 9:46:28 AM
Attachments: [20220825_122933.jpg](#)
[20220823_103510.jpg](#)
[20220823_103545.jpg](#)

Good Morning Rodger,

Please find below Darlene Fleming's request to be a delegate at Council concerning the ongoing activities at the Cress-Ridge development site. Darlene has also attached some photos as well.

If you could please coordinate with Darlene in Sarah's absence it would be greatly appreciated.

Best Regards,
Dustin

Dustin Robson, RPP, MCIP
Development Planner

County of Oxford
Community Planning
21 Reeve Street
Woodstock, ON N4S 3G1
Tel: 519-539-9800, ext 3211
drobson@oxfordcounty.ca

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 **Think about our Environment. Print only if necessary.**

From: flemingmd <flemingmd@bell.net>
Sent: August 30, 2022 9:41 AM
To: Dustin Robson <drobson@oxfordcounty.ca>
Subject: FW: Council meeting September

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or on clicking links from unknown senders.

Dustin,

I sent Sarah an email however she is away from the office until the 7th.

Can I have you forward my request to the appropriate person to be included in the council meeting.

Thanks

Darlene

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

----- Original message -----

From: flemingmd <flemingmd@bell.net>

Date: 2022-08-30 9:14 a.m. (GMT-05:00)

To: smatheson@blandfordblenheim.ca

Subject: Council meeting September

Sarah,

There are a few questions that I would like to ask council concerning the proposed development behind me.

Zone change-zn 1-20-02

Official plan Amendments-OP20-03-1

Subdivision -SB 20-01-1

Severance-B21-11-1

In speaking with the town it was noted that there were 31 conditions that had to be met and as of the time a week ago no conditions have been met yet the developer is removing 120 truck loads of topsoil daily.

I am attaching a couple of pictures. I have also been in contact with Rick Richardson in regards to the safety of the area and if there is permission to remove the soil. It is being dumped in several areas in the township.

Thanks in advance for your help

Darlene Fleming

519-502-8625

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

To: Mayor and Members of Township of Blandford-Blenheim Council

From: Dustin Robson, Development Planner, Community Planning

Application for Zone Change

ZN 1-22-01 – Christopher McLaren & Larenwood Farms Ltd.

REPORT HIGHLIGHTS

- The Zone Change Application proposes to rezone the lot to be retained resulting from Consent Application B22-19-1 from 'General Agricultural Zone (A2)' to 'Rural Residential Zone (RR).' The purpose of the rezoning is to recognize the proposed use of the lands for non-farm rural residential purposes.
- Consent Application B22-19-1 was approved by the Oxford County Land Division Committee on June 2, 2022. The Zone Change Application is a required to fulfill a condition of the consent and facilitate a proposed farm consolidation.
- Planning staff are recommending that the application not be approved as it is not consistent with the intent and purpose of the Official Plan and Provincial Policy Statement (PPS) with respect to farm consolidations and non-farm rural residential development in prime agricultural areas.

DISCUSSION

Background

OWNERS: Christopher McLaren & Larenwood Farms Ltd.
935603 Blenheim Road, Drumbo, ON N0J 1B0

AGENTS: Zachary & Dean Jancsar
825946 Township Road 8, Innkerip, ON N0J 1M0

LOCATION:

The subject lands are described as Part Lots 8 & 9, Concession 5, in the former Township of Blenheim, now in the Township of Blandford-Blenheim. The lands are located on the north side of Township Road 5, between Motheral Road and Blenheim Road, and are municipally known as 767317 Township Road 5.

COUNTY OF OXFORD OFFICIAL PLAN:

Schedule "B-1"	Township of Blandford-Blenheim Land Use Plan	Agricultural Reserve & Open Space
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TOWNSHIP OF BLANDFORD-BLENHEIM ZONING BY-LAW 1360-2002:

Existing Zoning: General Agricultural Zone (A2)

Proposed Zoning: Rural Residential Zone (RR)

PROPOSAL:

The Zone Change Application proposes to rezone the lot to be retained resulting from Consent Application B22-19-1 from 'General Agricultural Zone (A2)' to 'Rural Residential Zone (RR).' It is the purpose of the rezoning to recognize the proposed use of the said retained lands for non-farm rural residential purposes. The related Consent Application was approved by the Oxford County Land Division Committee on June 2, 2022. The subject Zone Change Application is required to facilitate the farm consolidation proposed by the noted consent application and fulfill a condition of the consent.

Plate 1 – Location Map & Existing Zoning, indicates the location of the subject property and the existing zoning in the immediate vicinity.

Plate 2 – Aerial Photography (2020), provides an aerial view of the subject lands with existing zoning.

Plate 3, Sand & Gravel Resource Area Map, provides an overview of the Sand & Gravel Resource Area in relation to the subject lands.

Plate 4A, Applicant's Sketch, shows the configuration and dimensions of the lands to be severed, retained and enlarged as proposed by the applicants.

Plate 4B, Applicant's Sketch (Retained Lot), shows the configuration and dimensions of the lands to be retained as proposed by the applicants.

Application Review

2020 Provincial Policy Statement

The 2020 Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. Under Section 3 of the *Planning Act*, where a municipality is exercising its authority affecting a planning matter, such decisions shall be consistent with all policy statements issued under the Act.

Section 2.3 of the PPS directs that prime agricultural areas shall be protected for long term agricultural use. In prime agricultural areas, permitted uses include agricultural uses, agriculture-related uses, and on-farm diversified uses. All types, sizes, and intensities of agricultural uses and normal farm practices shall be promoted and protected in accordance with provincial standards. New land uses, including the creation of new lots, shall comply with the Minimum Distance Separation formulae (MDS I).

Furthermore, Section 2.3.4 (Lot Creation and Lot Adjustments) discourages the creation of new lots in prime agricultural areas and provides only four instances where such lot creation may be permitted, as summarized below:

- For agricultural uses, provided the lots are of a sufficient size for the type of production common in the area and are sufficiently large enough to maintain flexibility in adapting the operation in the future;
- For agricultural-related uses;
- For a surplus farm residence resulting from a farm consolidation; and,
- For infrastructure facilities and corridors in lieu of an easement or right-of-way.

The creation of new residential lots in prime agricultural areas shall not be permitted, except in accordance with policy 2.3.4.1(c), which permits a lot for a surplus residence subject to the area of the new lot being limited to a minimum size needed to accommodate the uses and appropriate sewage and water services.

Section 2.5 of the PPS directs that mineral aggregate resources shall be protected for long-term use and deposits of mineral aggregate resources shall be identified. In known deposits, and on adjacent lands, development and activities which preclude or hinder the establishment of new operations or access to the resources shall only be permitted if:

- Resource use would not be feasible; or
- The proposed land use or development serves a greater long-term public interest; and
- Issues of public health, public safety and environmental impact are addressed.

Official Plan

The majority of the subject lands are located within the 'Agricultural Reserve' designation according to the Township of Blandford-Blenheim Land Use Plan, as contained in the Official Plan. A small portion at the north end of the lot to be severed is designated as 'Open Space.'

According to Section 3.1.1, the goal of the Agricultural Reserve policies is to ensure prime agricultural lands are preserved for food and fibre production by avoiding the fragmentation of the land base, by minimizing conflict between agricultural and non-agricultural uses, and by supporting the needs of the agricultural community by permitting land uses which are complementary to, and supportive of, agriculture. The ongoing goal of the Agricultural Reserve designation is to minimize conflict with farm operations, including commercial, industrial, and residential.

Further, a strategic aim of the Agricultural Reserve policies is to prevent situations of land use conflict in the agricultural designations by careful management of non-farm uses, including rural residential development, recreational uses, commercial and industrial uses, and aggregate resource extraction.

The policies of Section 3.1.4.4.1 (Farm Consolidation) apply to proposals where lands being conveyed are to be added to an adjoining farm property. The following criteria will be evaluated to determine the acceptability of severing agricultural land for farm consolidation purposes:

- The intended use of the lands must be farming;
- Proposals to consolidate farm parcels must conform to the provisions of the Zoning By-Law;

- Conformity with criteria regarding flexibility, suitability, viability, and avoidance of further fragmentation of Class 1 to 3 agricultural lands and removal of woodlots;
- Compliance with Minimum Distance Separation formulae II (MDS II); and,
- Compliance with Section 3.2 Environmental Resource policies.

In addition to the above farm consolidation policies, an evaluation system has been included in the County Official Plan under Section 3.1.5.4 (Rural Residential Uses) to provide an impartial and consistent method of evaluating proposals which would result in non-farm rural residential development within the Agricultural Reserve designation. The system is designed to evaluate proposals on the basis of criteria such as agricultural land preservation, location, land use compatibility, and environmental compatibility. Points are assigned to each factor to reflect that particular factor's level of importance in supporting the goal for agricultural policies.

According to the policies of the Official Plan, proposals for non-farm residential development which accumulate less than +12 points may be considered for approval, provided that the proposal conforms to the general policies for such consent applications.

On-farm dwellings are to be considered as part of the farm unit and consent to sever any surplus farm dwellings will not be permitted by the Land Division Committee unless the proposal involves a farm consolidation in accordance with the above policies.

In this case, the proposal to retain approximately 0.7 ha (1.9 ac) for non-farm rural residential purposes would accumulate +15 points, as follows:

<u>Site Assessment Factors</u>	<u>Points</u>
Land Capability for Agriculture	N/A
Surrounding Agricultural Land Use	+10
Compliance with the Minimum Distance Separation I	0
Surrounding Extractive Resource Land Use	+5
Access to Major Roads	0
Traffic Safety	0
Surplus Farm Dwelling	0
Heritage	<u>0</u>
Total	+15

The final step of the evaluation system consists of general policies for the consideration of non-farm rural residential severance proposals. It is the intent that new or expanded non-farm rural residential lots will be as small as is practical in order to preserve the County's agricultural land base.

Severance proposals to create new or expanded lots for non-farm rural residential development will generally not exceed 0.8 ha (2.0 ac) in area. Proposals seeking to sever parcels larger than this limit will only be permitted where it can be demonstrated that the additional area is required to accommodate private services, where the topography of the area has limitations for agriculture, or where the proposed lots are physically isolated by natural features such as streams.

The proposed lot to be retained is located in an identified Sand and Gravel Resource Area as illustrated on Plate 3. Pursuant to Section 3.4, the County shall focus on protecting existing mineral aggregate operations and mineral aggregate resources from incompatible land uses while ensuring that extraction is carried out in a manner that minimizes negative community, economic, and environmental impacts. Section 3.4.1.1 outlines that where areas of high quality sand and

gravel and limestone resources are identified with a high potential for extraction, proposed land uses and development in proximity to said resources will be evaluated in regard to compatibility with existing or future extraction. It is further outlined in Section 3.4.1.3.1.3 of that new non-agricultural commercial, industrial or institutional non-farm rural residential uses shall not be permitted within the Sand and Gravel Resource Areas.

Zoning By-law

The subject lands are zoned 'General Agricultural Zone (A2)' in the Township of Blandford-Blenheim Zoning By-Law. The 'A2' zone permits a variety of agriculture-related uses, including a farm and a single-detached dwelling if accessory to a farm. The 'A2' zone requires a minimum lot area of 30 ha (74.1 ac) and a minimum lot frontage of 100 m (328.1 ft). Once merged, the newly enlarged lot resulting from the previously noted consent application will be approximately 67.9 ha (168 ac) in size, with approximately 316.4 m (1,038 ft) of frontage on Township Road 5 and 217.9 m (714.8 ft) on Motheral Road.

The lot to be retained is proposed to be used for non-farm rural residential purposes and is required to be rezoned to recognize the use of the lands for such purposes. The 'Rural Residential Zone (RR)' requires a minimum lot area of 2,800 m² (30,139 ft²), a minimum lot frontage of 35 m (114.8 ft), and a minimum lot depth of 80 m (262.5 ft). The lot to be retained is proposed to have an area of 0.7 ha (1.9 ac), frontage of approximately 60.6 m (198.8 ft) on Township Road 5, and a depth of 132.9 m (436 ft).

Agency Comments

Enbridge Gas Inc. has indicated that there are service lines running within the area which may or may not be affected by the proposed severance. Should the proposed severance impact these services, it may be necessary to terminate the gas service and relocate the line according to the new property boundaries. Any service relocation required due to a severance would be at the cost of the property owner.

The Township Drainage Superintendent, the Township Director of Protective Services, Grand River Conservation Authority (GRCA), the Oxford County Public Works Department, Hydro One, and Bell Canada have indicated no concerns or objections.

Public Consultation

Public Notice of the consent application was provided to surrounding property owners in accordance with the requirements of the *Planning Act*. At the time of writing this report, no comments or concerns had been received from the public.

Planning Analysis

The Application for Consent, which proposes a farm consolidation and the retention of a lot for non-farm rural residential use, was reviewed under the policy direction of the Provincial Policy Statement (PPS) and the County Official Plan.

It proposed that approximately 37.7 ha (93.2 ac) of agricultural land would be severed and added to the existing farm parcel to the immediate east, which is approximately 30.2 ha (74.8 ac) in size, for a total farm parcel size of approximately 67.9 ha (168 ac). The resulting agricultural lot size and configuration is consistent with policies of the Provincial Policy Statement and the intent of the Official Plan with respect to maintaining farm parcels of adequate size to adapt to changing agricultural conditions.

The retained parcel would be approximately 0.7 ha (1.9 ac) in area and will be used for non-farm rural residential purposes. As previously outlined, a lot for a surplus residence is generally permitted in the context of a farm consolidation subject to the area of the new lot being limited to a minimum size needed to accommodate the uses and appropriate sewage and water services.

While staff generally do not have concerns with the consolidation of the two (2) agricultural lots and the retention of a surplus dwelling from a strictly agricultural policy perspective, the proposal does not maintain the general intent of the Official Plan. Proposals for non-farm residential development are evaluated on a point system that is outlined in the Official Plan. Proposals that accumulate less than +12 points may be considered for approval, provided that the proposal conforms to the general policies for such consent applications. Proposals that score +12 points or more are prohibited.

In the case of the subject proposal, when evaluated against the Official Plan's point system, the proposed surplus dwelling renders a score of +15. This score was calculated as the retained non-farm rural residential lot would be within 300 m (984 ft) of an agricultural use (+10) and within 500 m (1,640 ft) of an identified Sand and Gravel Resource Area (+5).

During the evaluation of the application, it was determined that the proposed lot to be retained would be located within an identified Primary Sand and Gravel Resource Area. Sand and Gravel Resource Areas are lands that have been identified as having high quality sand and gravel deposits and where possible future extraction activity may occur. When evaluating an application, lands within 500 m (1,640 ft) of an identified resource area are assigned +5 points. The purpose of discouraging the establishment of new non-farm rural residential lots within 500 m (1,640 ft) of a Sand and Gravel Resource Area is to reduce the potential for conflict between a residential use and future (or current) aggregate uses.

In addition to not meeting the point total required to consider the retention of a surplus dwelling resulting from a farm consolidation, the Official Plan further notes that new non-agricultural commercial, industrial or institutional non-farm rural residential uses shall not be permitted within the Sand and Gravel Resource Areas. With the proposed lot to be retained, which is a non-farm rural residential lot, being located entirely within the Sand and Gravel Resource Area, the proposal does not meet the current policies.

Staff have also reviewed the recently adopted policies for agricultural areas as contained in Official Plan Amendment No. 269. The noted policies were adopted by County Council on May 25, 2022 and have been forwarded to the Minister of Municipal Affairs and Housing for consideration and approval. The proposed policies adopted by County Council removes the existing point system and replaces it with alternative criteria, which includes the removal of the prohibition of new non-farm rural residential lots within 500 m (1,640 ft) of identified Sand and Gravel Resource Areas. However, lands that are inside the actual resource area, as is the case with this application, continue to be prohibited.

In reviewing the proposal for the creation of a non-farm rural residential lot within an identified Sand and Gravel Resource Area, it is the opinion of staff that it does not comply with the policies of the PPS. It is the intent of PPS that development within known deposits of mineral aggregate resources shall not be permitted unless resource use would not be feasible, the proposal serves a greater long-term public interest, and issues of public health/public safety/environmental impact are addressed. In staff's opinion the establishment of one (1) non-farm rural residential lot does not represent a greater public interest than aggregate extraction and there is no indication that the extraction of the identified aggregate in the immediate area is not feasible. While the proposal does not facilitate new development in terms of new buildings or structures being constructed, it does create a new lot with separate ownership which could further the potential for conflict in the future should abutting lands be extracted for aggregate.

At the June 2, 2022 Land Division Committee meeting Planning staff provided a Staff Report recommending that the affiliated Consent Application (B22-19-1) not be approved, based on the concerns outlined above. The Land Division Committee considered the recommendation but approved the Consent Application. As part of the approval, a condition to appropriately zone the lot to be retained was included. The subject Zone Change Application is intended to satisfy the said condition of approval.

While Planning staff respect the decision of the Land Division Committee, Planning staff continue to be of the opinion that the proposal is not consistent with the PPS and does not meet the intent and purpose of the Official Plan with respect to retaining a surplus dwelling as a result of a farm consolidation. As such, Planning staff recommend that Township Council not approve the subject Zone Change Application.

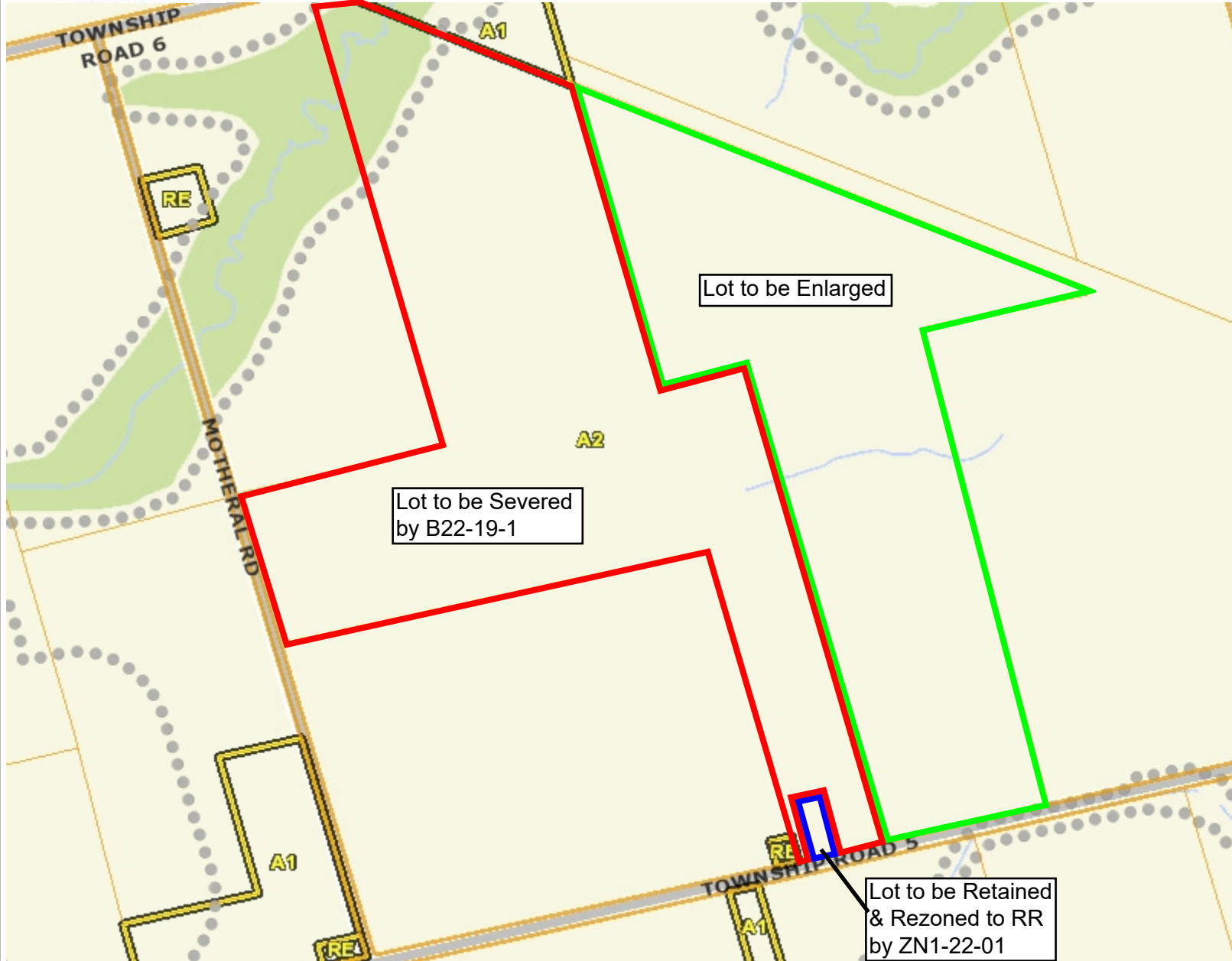
RECOMMENDATIONS

That the Council of the Township of Blandford-Blenheim not approve the Zone Change Application, File No. ZN1-22-01, as submitted by Christopher McLaren & Larenwood Farms Ltd., for lands described as Part Lots 8 & 9, Concession 5 (Blenheim), in the Township of Blandford-Blenheim, whereby lands are proposed to be rezoned from 'General Agricultural Zone (A2)' to 'Rural Residential Zone (RR)'.

SIGNATURES

Authored by: *"Original Signed By"* Dustin Robson, MCIP, RPP
Development Planner

Approved for submission: *"Original Signed By"* Gordon K. Hough, RPP
Director



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)**

Notes



0 205 409 Meters

NAD_1983_UTM_Zone_17N



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. This is not a plan of survey

April 14, 2022



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)

Notes



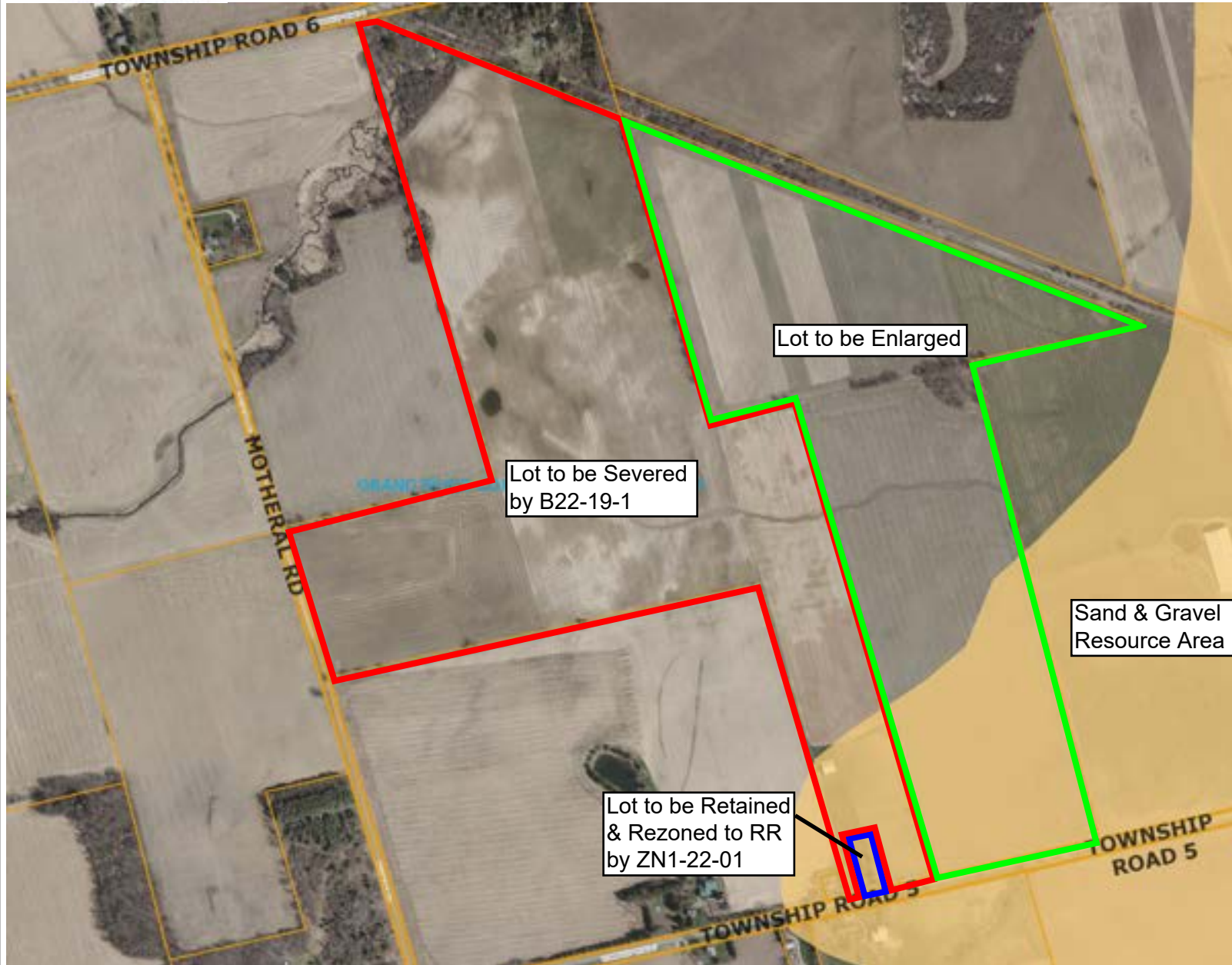
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NAD_1983_UTM_Zone_17N



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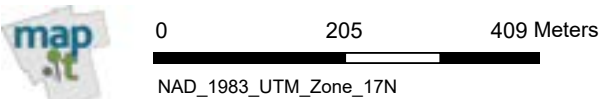
May 18, 2022



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Sites Licensed under the Aggregate Resources Act**
 - Limestone Resource
 - Gypsum Resource
 - Sand and Gravel Resource (Primary)
 - Sand and Gravel Resource (Secondary)
 - Buried Sand and Gravel Deposit
- Petroleum Resources**
 - Natural Gas Pool
 - Oil Pool
- Conservation Authority Watersheds

Notes

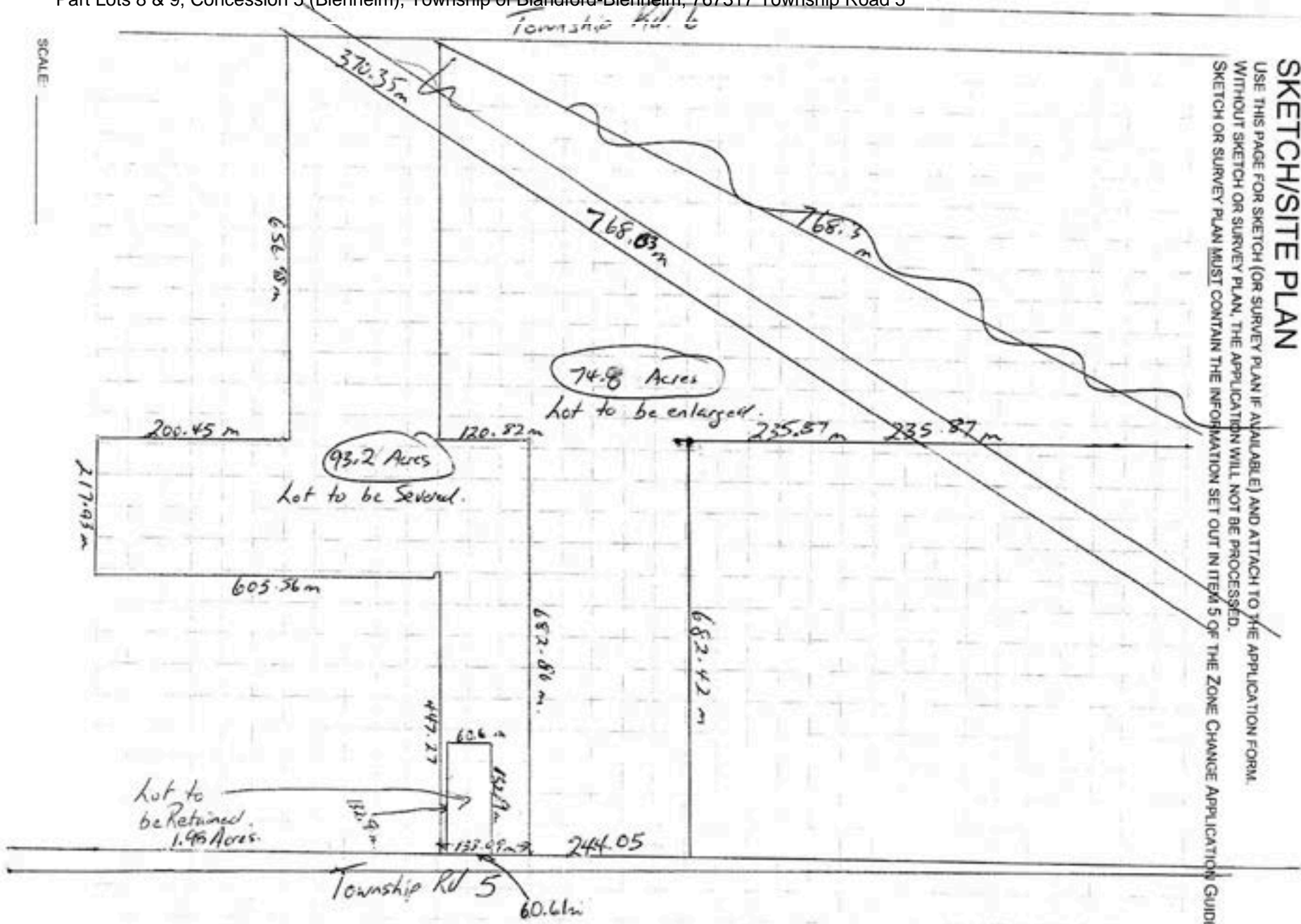


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May 20, 2022

SKETCH/SITE PLAN

USE THIS PAGE FOR SKETCH (OR SURVEY PLAN IF AVAILABLE) AND ATTACH TO THE APPLICATION FORM.
WITHOUT SKETCH OR SURVEY PLAN, THE APPLICATION WILL NOT BE PROCESSED.
SKETCH OR SURVEY PLAN MUST CONTAIN THE INFORMATION SET OUT IN ITEM 5 OF THE ZONE CHANGE APPLICATION GUIDE.

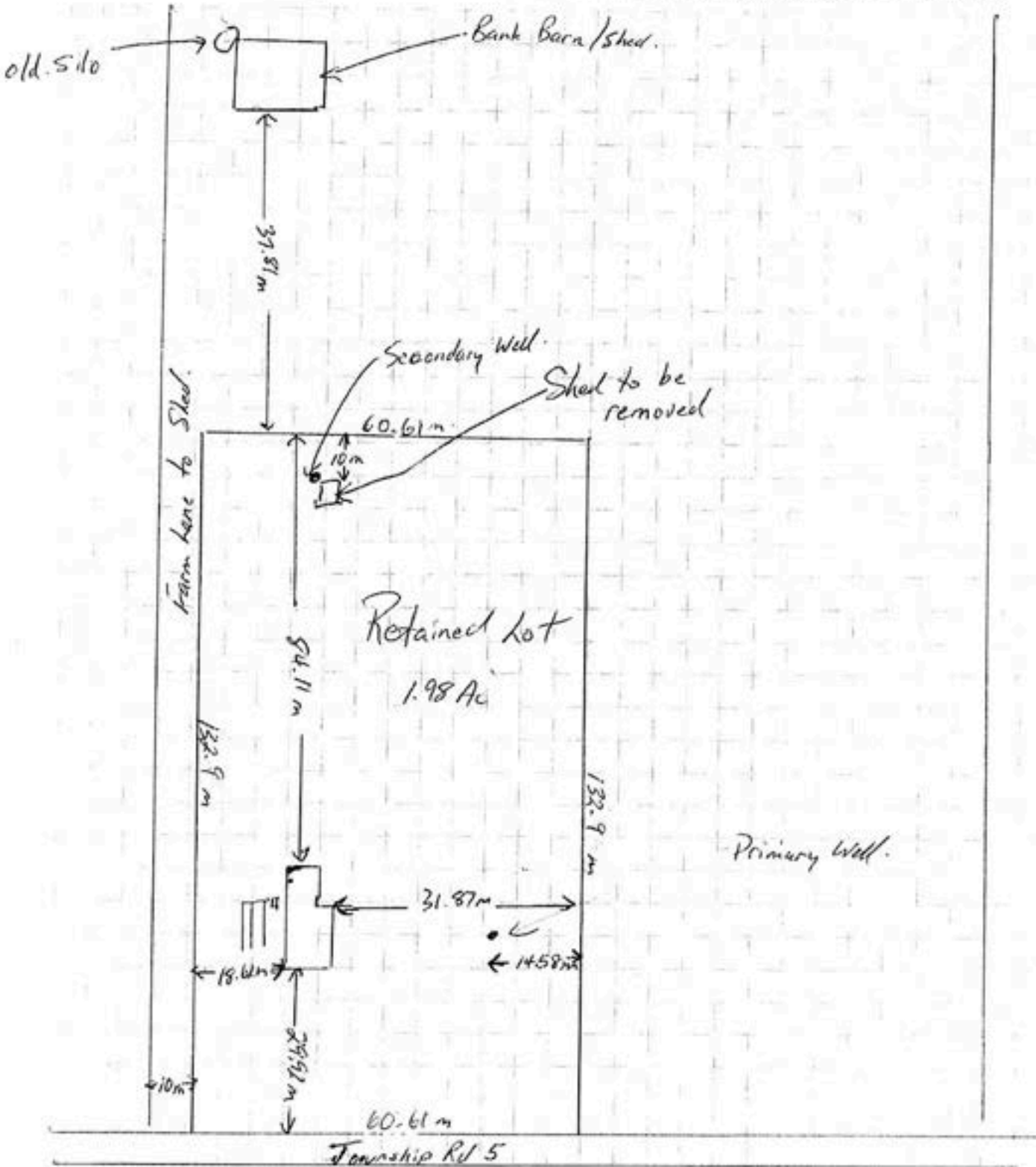


SCALE _____

SKETCH/SITE PLAN

Proposed Retained Lot.

USE THIS PAGE FOR SKETCH (OR SURVEY PLAN IF AVAILABLE) AND ATTACH TO THE APPLICATION FORM.
WITHOUT SKETCH OR SURVEY PLAN, THE APPLICATION WILL NOT BE PROCESSED.
SKETCH OR SURVEY PLAN MUST CONTAIN THE INFORMATION SET OUT IN ITEM 5 OF THE ZONE CHANGE APPLICATION GUIDE.



SCALE: _____

To: Mayor and Members of Township of Blandford-Blenheim Council

From: Dustin Robson, Development Planner, Community Planning

Application for Zone Change ZN 1-22-06 – Brenden Lee & Leah Wynia

REPORT HIGHLIGHTS

- The Application for Zone Change proposes to remove the Holding (H) provision that applies to the lands to permit the development of a single detached dwelling accessory to a farm.
- Council approved an Application for Zone Change to rezone the lands from 'General Agricultural Zone (A2)' to 'Special General Agricultural Zone (A2-32(H))' at the September 1, 2021 Council Meeting. The purpose of imposing the Holding (H) provision was to ensure the first year of the submitted farm plan was implemented prior to permitting a dwelling.
- Planning staff are recommending that the request to change the zoning be approved as staff are satisfied that the requirements of the holding provision have been met and development of the dwelling can now proceed.

DISCUSSION

Background

APPLICANT/OWNER: Brenden Lee & Leah Wynia
35 Daniel Street, Plattsville, ON N0J 1S0

LOCATION:

The subject lands are described as Part Lot 2, Concession 13, in the former Township of Blandford, now in the Township of Blandford-Blenheim. The lands are located on the south side of Township Road 14, between Oxford Road 22 and Blandford Road and are municipally known as 946256 Township Road 14.

COUNTY OF OXFORD OFFICIAL PLAN:

Schedule "B-1" Township of Blandford-Blenheim Agricultural Reserve
Land Use Plan

TOWNSHIP OF BLANDFORD-BLENHEIM ZONING BY-LAW 1360-2002:

Existing Zoning: Special General Agricultural Zone (A2-32(H))

Requested Zoning: Special General Agricultural Zone (A2-32)

PROPOSAL:

For Council's reference, Township Council approved an application to rezone the subject lands from 'General Agricultural Zone (A2)' to 'Special General Agricultural Zone (A2-32(H))' on September 1, 2021. A Holding (H) provision was included in the amending zoning by-law and required the applicant to carry out the first year of the provided farm plan to ensure that the lands would be subject to a suitable investment in agricultural and not strictly for estate residential purposes.

A Zone Change Application has now been submitted to remove the Holding (H) provision on the subject lands to allow for the development of a single detached dwelling accessory to a farm. The applicants are requesting the removal of the Holding (H) provision as the first year of the associated farm plan has now been implemented. If approved, the current zoning of 'Special General Agricultural Zone (A2-32(H))' would be changed to 'Special General Agricultural Zone (A2-32).'

Plate 1 – Location Map and Existing Zoning indicates the location of the subject property and the existing zoning in the immediate vicinity.

Plate 2 – Aerial Photography (2020), shows an aerial view of the vacant subject lands.

Plate 3, Applicant's Sketch, identifies the intended location of the proposed storage building and accessory dwelling.

Application Review

2020 PROVINCIAL POLICY STATEMENT (PPS)

Section 2.3 of the PPS directs that prime agricultural areas shall be protected for long term agricultural use. In prime agricultural areas, permitted uses and activities include agricultural uses, agriculture-related uses and on-farm diversified uses. All types, sizes and intensities of agricultural uses and normal farm practices shall be promoted and protected in accordance with provincial standards.

The PPS defines agricultural uses to mean the growing of crops, including nursery, biomass and horticulture crops, as well as the raising of livestock and animals for food, fur or fibre including poultry and fish, apiaries, agro-forestry, maple syrup production and associated on-farm buildings and structure including accommodation for full-time farm labour when the size and nature of the operation requires additional employment.

OFFICIAL PLAN

The subject site is located within the Agricultural Reserve designation according to the Township of Blandford-Blenheim Land Use Plan, as contained in the County Official Plan.

In the Agricultural Reserve designation lands are to be developed for a wide variety of agricultural land uses, such as general farming, animal or poultry operations, regulated livestock farms, cash crop farms and specialty crop farms. Permitted uses also include woodlands, market gardening, tobacco farming, nurseries and orchards, together with farm buildings and structures necessary to the farming operation, and accessory residential uses required for the farm.

At 10.2 ha (25.2 ac), the subject property is considered undersized for the agricultural area. While it is recognized that there are numerous small agricultural land holdings in the Agricultural Reserve, it is the intent of the undersized agricultural policies to ensure that undersized parcels are primarily used for agricultural pursuits and not for non-agriculturally related development which can conflict with agriculture. Undersized farm parcels are smaller than the established zoning standard and require an amendment to the Township Zoning By-Law prior to the development of farm buildings or accessory residential uses (applied for and approved in 2021).

Prior to the development of an existing undersized agricultural parcel for agricultural use, the following criteria shall be satisfied:

- It has been demonstrated that the proposed farm will be economically viable within a period of five (5) years;
- The applicant has provided information necessary to evaluate the viability of a new farming operation including the scale and nature of the operation, projected revenues, expenses, financing and any other criteria deemed to be relevant to the proposal;
- Proposals will be evaluated by OMAFRA to provide an objective opinion regarding the information and analysis pertaining to a viable operation;
- Proposals shall comply with Environmental Resource Policies;
- Private services will be established in accordance with County Public Health;
- Any accessory residential dwelling will be situated in close proximity to any farm buildings, and will utilize the same driveway, and satisfy the Minimum Distance Separation Formula I (MDS I) requirements;
- Any accessory residential dwelling will be located on a property that has frontage on a public road maintained year round;
- Where the development of farm outbuildings is proposed, the proponent shall enter into an agreement with the municipality, prior to the development approval, requiring that the construction of the proposed farm buildings be complete prior to the construction of any residential building. Alternatively, where no farm outbuildings are proposed, the implementing zoning by-law shall include an "H" holding provision prohibiting the construction of a residential building until the proponent has demonstrated, to the satisfaction of the Area Municipality, that the first two years of the approved farm plan has been implemented.

Township of Blandford-Blenheim Zoning By-law

The subject lands are currently zoned 'Special General Agricultural Zone (A2-32(H))' in the Township of Blandford Blenheim Zoning By-law 1360-2002. The A2 zone permits a wide range of agricultural uses including farming, conservation projects, and a communications structure, as well as single detached dwellings accessory to the farm operation. The 'A2' zone requires a minimum lot area of 30 ha (74.1 ac) and a minimum lot frontage of 100 m (328.1 ft) in order to develop the property for any farm related buildings.

The A2-32(H) zone provides site specific provision to permit a minimum lot area of 10.2 ha (25.2 ac). The site specific zoning is intended to permit development of a single detached dwelling accessory to a farm. The Holding (H) provision was included in the amending zoning by-law to ensure that the first year of the provided farm plan had been implemented to ensure that the lands were being used for agricultural purposes.

Agency Comments

The application was circulated to various public agencies considered to have an interest in the proposal. No objections were received to the proposed Holding (H) provision removal.

Planning Analysis

At the time of the initial Application for Zone Change in September 2021, the applicants provided a farm plan that outlined their intentions for each of the first five (5) years of the agricultural operation. For Council's information, below are the endeavours that were proposed for the first two (2) years of the farm. The progress of each point is located in parenthesis:

Year 1 (2021):

- Submit rezoning application. (Complete)
- Building laneway and install culvert at road frontage. (Complete)
- Disc and create beds for garlic. (Complete)
- Pay and set up services on the land. (Underway)
- Plant half acre of hardneck garlic. (Complete)

Year 2 (2022):

- Construction of drive shed. (Underway)
- Finish construction of walk-in cooler in drive shed. (Underway)
- Plant 1 acre of strawberries. (Complete)
- Harvest day neutral berries and sell. (Upcoming)
- Harvest previous year's garlic, dry and sell. (Upcoming)
- Begin construction of dwelling. (Underway with this application)
- Plant another fall garlic crop and mulch for winter. (Upcoming)
- Cut back berry plants to crown and mulch for winter. (Upcoming)

In assessing the progress of the agricultural operation on the subject lands, staff are of the opinion that the applicant has adequately fulfilled the requirements of the farm plan as approved by Council. The Year 1 items as outlined above have been implemented with the exception of establishing services (hydro), which will be completed once the shop currently under construction is completed.

Many of the targets for Year 2 are currently underway and the planting of the strawberries has been completed. The shop is currently under construction and it is the intent of the applicants to begin the construction of the dwelling this year (2022), which would require the Holding (H) provision to be removed. Removing the Holding (H) provision would allow the applicants to obtain a Building Permit for the dwelling from the Township.

It is the opinion of Planning staff that the request to remove the Holding (H) provision on the subject lands to facilitate the development of a single detached dwelling accessory to a farm is appropriate from a planning perspective and can be given favourable consideration.

RECOMMENDATIONS

That the Council of the Township of Blandford-Blenheim approve the Zone Change Application, File No. ZN 1-22-06, as submitted by Brenden Lee & Leah Wynia, for lands described as Part Lot 2, Concession 13 (Blandford) in the Township of Blandford-Blenheim, are to be rezoned from ‘Special General Agricultural Zone (A2-32(H)) to ‘Special General Agricultural Zone (A2-32)’ to remove the Holding (H) provision from the subject lands.

SIGNATURES

Authored by: *original signed by* Dustin Robson, MCIP, RPP
Development Planner

Approved for submission: *original signed by* Gordon K. Hough, RPP
Director, Community Planning



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)**

Notes



0 205 409 Meters

NAD_1983_UTM_Zone_17N



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July 20, 2022



Legend

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 - Property Boundary
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 - ⋯ 100 Year Flood Line
 - ⋯ 30 Metre Setback
 - ⋯ Conservation Authority Regulation Limit
 - ⋯ Regulatory Flood And Fill Lines
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Notes



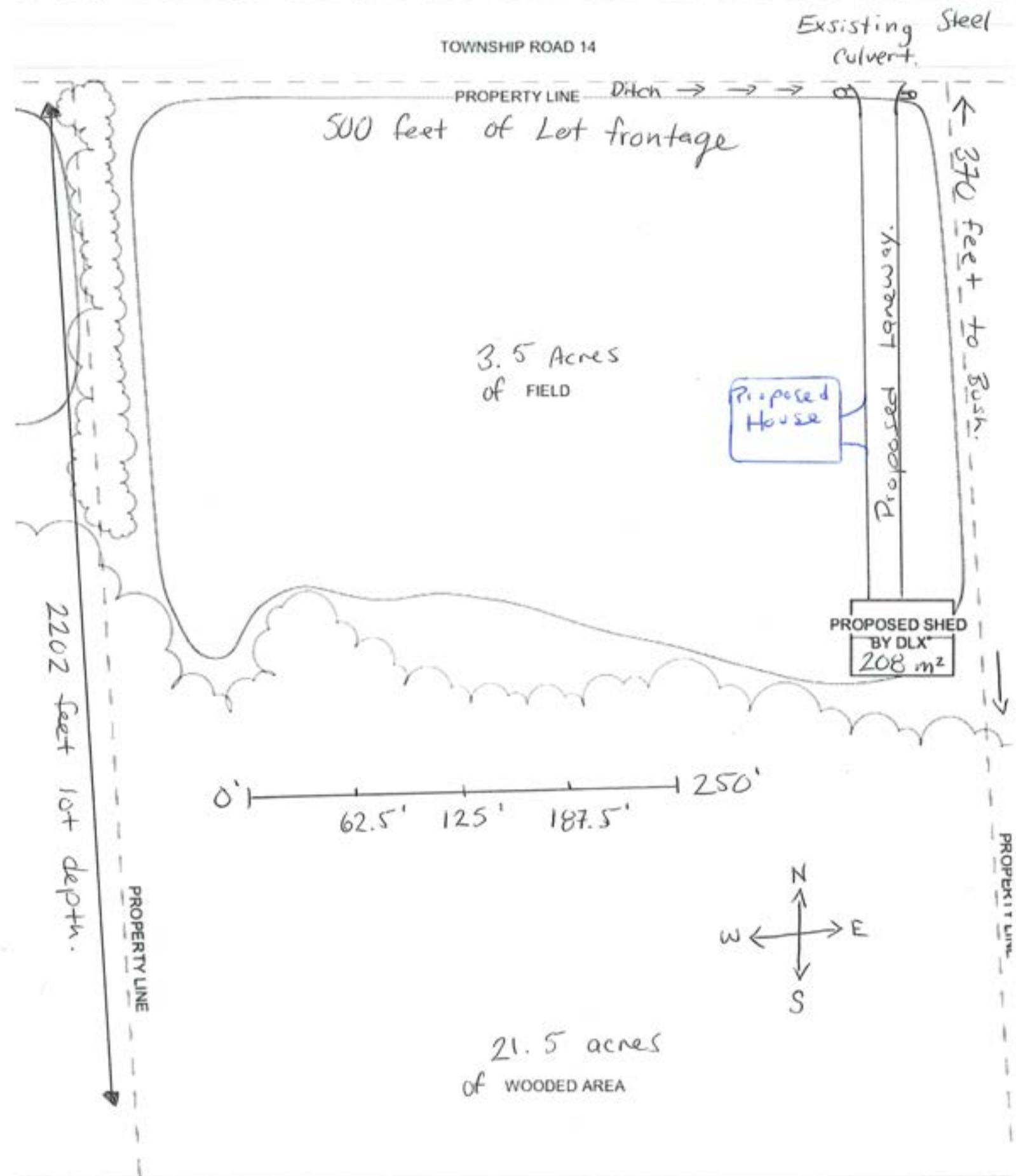
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July 20, 2022



COMMITTEE OF ADJUSTMENT MINUTES

The Township of Blandford-Blenheim Committee of Adjustment met at 4:07 p.m.

Present: Mayor Peterson, Members Balzer, Banbury, and Demarest.

Staff: Baer, Borton, Krug, Matheson, and Mordue

Others: Dustin Robson, Planner, Oxford County.

Mayor Peterson in the Chair

Disclosure of Pecuniary Interest

None.

Minutes

i. April 20th, 2022 Meeting of the Committee of Adjustment

Verbal adoption of the Minutes of the Meeting of the Committee of Adjustment.

Moved by – Councillor Demarest

Seconded by – Councillor Balzer

Applications

i. Application for Minor Variance MVA-03-22 Mackenzie Woodall & Melinda Mokren, 28 George Street Bright

The Planner presented the report, recommending approval. The applicant was present and did not speak to the application. Council had no questions or comments.

Verbal motion to approve the application.

Moved by – Councillor Demarest

Seconded by – Councillor Banbury

For application A03-22 the decision was signed as approved.

The Committee adjourned at 4:12 p.m. and the Open Council meeting resumed.



Community Planning

P. O. Box 1614, 21 Reeve Street
Woodstock Ontario N4S 7Y3
Phone: 519-539-9800 • Fax: 519-421-4712
Web site: www.oxfordcounty.ca

Our File: **A04-22**

APPLICATION FOR MINOR VARIANCE

TO: Township of Blandford-Blenheim Committee of Adjustment
MEETING: September 7, 2022
REPORT NUMBER: CP 2022-336

OWNERS: David Lyle & Anita Bosiger
140 Mechanic Street, Drumbo, ON N0J 1G0

VARIANCES REQUESTED:

1. Relief from **Section 5.1 - Table 5.1.1.3 - Regulations for Accessory Buildings and Structures**, to permit an accessory structure (detached garage) within an exterior side yard; and,
2. Relief from **Section 12.2, Table 12.2 – R1 Zone Provisions**, to reduce the minimum required exterior side yard width from 7.5 m (24.6 ft) to 1.2 m (3.9 ft) to facilitate the construction of an accessory structure (detached garage).

LOCATION:

The subject lands are described as Lot 1, Plan 41M-151, in the Village of Drumbo. The lands are located on the southwest corner of Taylor Street and Mechanic Street and municipally known as 140 Mechanic Street.

BACKGROUND INFORMATION:

COUNTY OF OXFORD OFFICIAL PLAN:

Schedule 'C-3'	County of Oxford Settlement Strategy Plan	Serviced Village
Schedule 'B-1'	Township of Blandford-Blenheim Land Use Plan	Settlement
Schedule 'B-3'	Village of Drumbo Land Use Plan	Low Density Residential

TOWNSHIP OF BLANDFORD-BLENHEIM ZONING BY-LAW 1360-2002:

Residential Type 1 Zone (R1)

COMMENTS:(a) Purpose of the Application:

The applicants are requesting relief from the above noted provisions of the Township Zoning By-law to facilitate the construction of a 50.1 m² (540 ft²) detached garage within the required exterior side yard and with a reduced exterior side yard width.

The subject lands have an area of 927.4 m² (9,982.4 ft²) and contain a single detached dwelling and an accessory building located on the site where the proposed detached garage will be located. The existing accessory building will need to be removed. The subject lands are surrounded by a residential neighbourhood consisting of predominately single detached dwellings. A converted dwelling exists to the east of the lands.

Plate 1, Existing Zoning & Location Map, shows the location of the subject lands and the current zoning in the immediate vicinity.

Plate 2, Aerial Photography (2020), shows the location of the subject lands and surrounding properties.

Plate 3, Applicants' Sketch, illustrates the general location of the existing single detached dwelling and the location of the proposed detached garage.

(b) Agency Comments

The application was circulated to a number of public agencies considered to have an interest in the proposal. The following comment was received:

The Director of Public Works has commented that the property already has 2 driveway and in accordance with the Township's By-laws only 2 are permitted. The new structure will need to be attached to an existing driveway for access if required. A new driveway will not be permitted. The proposed 1.2 m separation from the right-of-way does make it close to the road, but will still allow for snow storage and does meet the minimum separation required.

The Township Director of Protective Services has indicated no concerns.

(c) Intent and Purpose of the Official Plan:

The subject lands are designated 'Low Density Residential' according to the Village of Drumbo Land Use Plan, as contained in the County Official Plan. The use of the lands for a single detached dwelling and accessory uses, such as a detached garage, conforms to the relevant policies of the Official Plan.

(d) Intent and Purpose of the Zoning By-law:

The subject property is currently zoned 'Residential Type 1 Zone (R1)', according to the Township of Blandford-Blenheim Zoning By-law. Permitted uses within the R1 zone include a single detached dwelling and associated accessory buildings.

The provisions of the R1 zone require a minimum lot area of 600 m² (6,458.6 ft²) for a corner lot, a minimum lot depth of 30 m (98.4 ft), a front yard depth, rear yard depth, and exterior side yard width of 7.5 m (24.6 ft). Properties within the R1 zone are permitted a maximum lot coverage of 40%.

Table 5.1.1.3 only permits residential accessory buildings and structures within the rear yard or interior side yard. The 7.5 m (24.6 ft) setback to an exterior lot line for the R1 zone also applies to accessory buildings and structures. The purpose of the minimum required exterior side yard provision and the general prohibition on accessory structures within exterior side yards is to ensure that there is adequate separation between structures or buildings on the lot and the public road allowance.

Staff note that there is approximately 6 m (19.6 ft) of separation between the exterior lot line of the subject property and the edge of Taylor Street. Within the 6 m (19.6 ft) of separation is a grass boulevard. Planning staff believe that the proposed detached garage will be adequately setback to not hinder the municipal right-of-way. Further, no concerns were raised by the Township Director of Works Manager concerning the proposal's proximity to the right-of-way as it was pointed out that the proposed 1.2 m (3.9 ft) setback would be adequate for snow clearing.

Planning staff are of the opinion that the requested relief is consistent with the general intent of the Zoning By-Law.

(e) Desirable Development/Use:

It is the opinion of this office that the applicants' proposal to obtain relief for the placement of an accessory building in the exterior side yard and with a reduced exterior side yard can be considered minor and desirable for the development of the subject property, as the proposed relief will facilitate the construction of a detached garage within a yard that will be enclosed and fenced. In terms of the proposed relief for the detached garage, no impacts to the public right-of-way on Taylor Street are expected and the proposal would not appear to have adverse impacts on abutting properties. It is further noted that no comments of concern have been received from any of the neighbouring property owners.

In light of the foregoing, it is the opinion of this office that the requested relief is in keeping with the general intent and purpose of the Official Plan and Township's Zoning By-law and can be given favourable consideration.

RECOMMENDATION:

That the Township of Blandford-Blenheim Committee of Adjustment **approve** Application File A04-22, submitted by David Lyle & Anita Bosiger for lands described as Lot 1, Plan 41M151 in the Township of Blandford-Blenheim as it relates to:

1. Relief from **Section 5.1 - Table 5.1.1.3 - Regulations for Accessory Buildings and Structures**, to permit an accessory structure (detached garage) within an exterior side yard; and,
2. Relief from **Section 12.2, Table 12.2 – R1 Zone Provisions**, to reduce the minimum required exterior side yard width from 7.5 m (24.6 ft) to 1.2 m (3.9 ft) to facilitate the construction of an accessory structure (detached garage).

Subject to the following condition:

- i. That the proposed relief shall only apply to accessory structure (detached garage) of the approximate size and location as depicted on Plate 3 of Report CP 2022-336.

The proposed relief meets the four tests of a minor variance as set out in Section 45(1) of the Planning Act as follows:

- (i) deemed to be a minor variance from the provisions of the Township of Blandford-Blenheim Zoning By-law No. 1360-2002;
- (ii) desirable for the appropriate development or use of the land;
- (iii) in keeping with the general intent and purpose of the Township of Blandford-Blenheim Zoning By-law No. 1360-2002, and;
- (iv) in keeping with the general intent and purpose of the Official Plan of the County of Oxford.

Authored by: *original signed by*

Dustin Robson, MCIP, RPP
Development Planner

Approved for submission by: *original signed by*

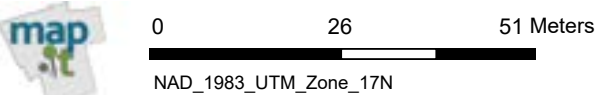
Gordon K. Hough, RPP,
Director



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)**

Notes



This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. This is not a plan of survey

July 20, 2022



Legend

- Parcel Lines**
 - Property Boundary
 - Assessment Boundary
 - Unit
 - Road
 - Municipal Boundary
- Zoning Floodlines**
- Regulation Limit**
 - 100 Year Flood Line
 - 30 Metre Setback
 - Conservation Authority Regulation Limit
 - Regulatory Flood And Fill Lines
- Land Use Zoning (Displays 1:16000 to 1:500)**

Notes



0 13 26 Meters



NAD_1983_UTM_Zone_17N



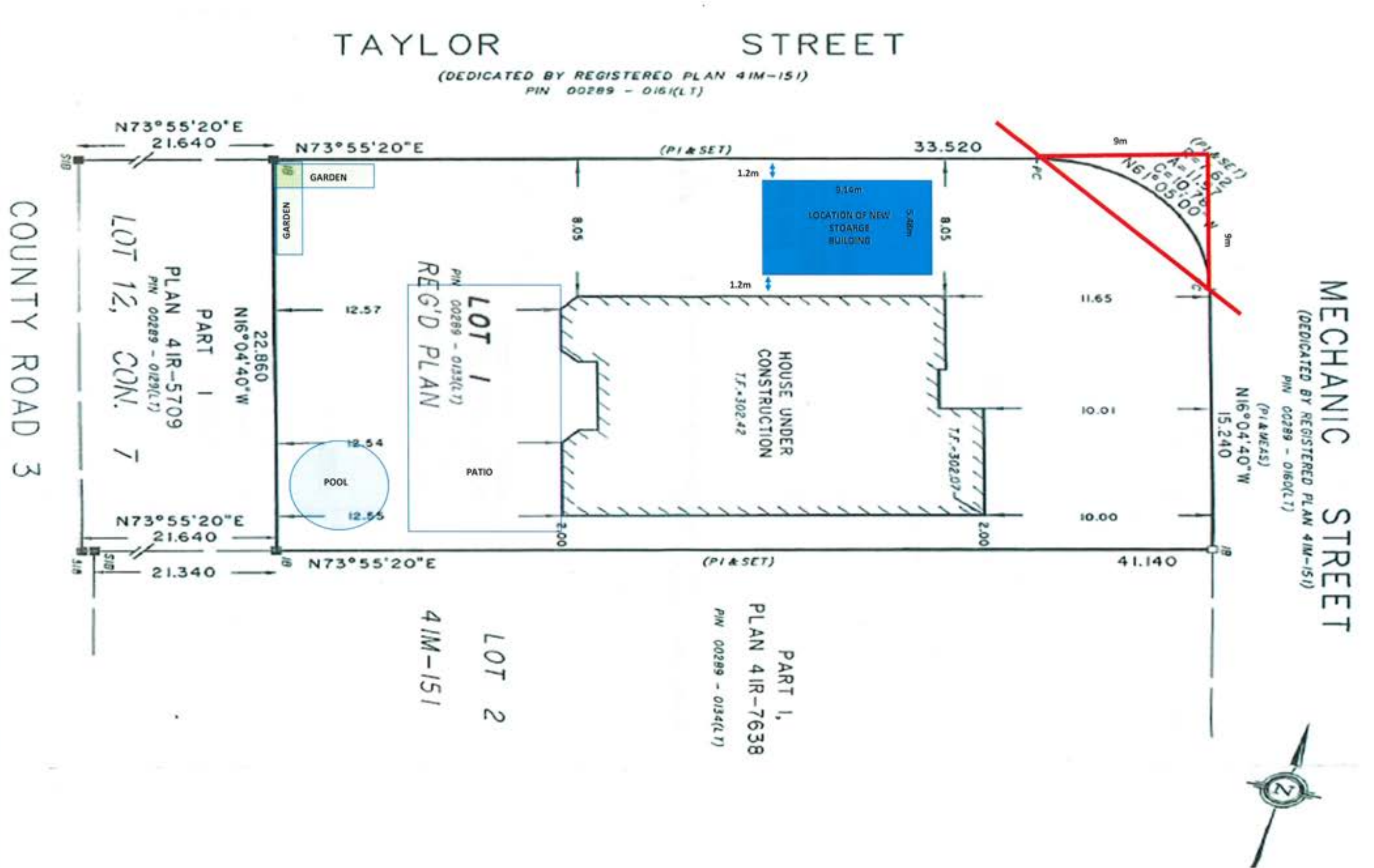
This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. This is not a plan of survey

July 20, 2022

Plate 3: Applicants' Sketch

File No. A04-22 (Lyle & Bosiger)

Lot 1, Plan 41M151, Township of Blandford-Blenheim, 140 Mechanic Street, Drumbo



PROCLAMATION

Big Brothers Big Sisters Month September 2022

- WHEREAS,** Big Brothers Big Sisters of Oxford County play an integral role in creating and supporting caring, healthy and positive role models for young people in the City of Woodstock; and
- WHEREAS,** for over 50 years have made it a priority to provide excellent mentors for young people, regardless of their age, gender, race, and religion; and
- WHEREAS,** there is quantifiable proof that mentorship increases school attendance, self-esteem and overall health and happiness in our young people; and
- WHEREAS,** they realize they are making an investment in the future of our community; and
- WHEREAS,** they envision a community where all young people realize their full potential; and
- WHEREAS,** they rely on the generosity and support of donors and volunteers to help them achieve their goals.

NOW THEREFORE, I, Mark Peterson, Mayor of Blandford-Blenheim Township, **DO HEREBY PROCLAIM** September, 2022 as **Big Brother Big Sister Month**. I encourage everyone to Volunteer or Donate by visiting www.bbbsoxford.ca and discover how you can be the spark that ignites the power and potential of a young person in your community!

To: Warden and Members of County Council

From: Director of Public Works

Proposed Backflow Prevention Program and Draft By-law

RECOMMENDATIONS

1. That Oxford County Council receive Report No. PW 2022-35 entitled “Proposed Backflow Prevention Program and Draft By-law” as information;
2. And further, that Oxford County Council authorize staff to undertake a public consultation and engagement campaign to seek input on the proposed Backflow Prevention Program and draft By-law, and report back to Council with final policy recommendations and results for consideration in 2023.

REPORT HIGHLIGHTS

- The purpose of this report is to obtain Oxford County Council approval to initiate a public consultation and engagement campaign in Q3 2022 to Q2 2023 for the development of a user fee based Backflow Prevention Program in order to further safeguard Oxford’s municipal drinking water systems and the public health of its water customers.
- This report provides an overview of the proposed Backflow Prevention Program including a phased multi-year implementation plan and a draft Backflow Prevention By-law to govern the program. This report also outlines the existing areas in which the Backflow Prevention By-law would align with legal and regulatory requirements, industry best practices and recommendations, and the County’s levels of service.
- The proposed Backflow Prevention Program and By-law will regulate and enforce the installation, inspection, maintenance and testing requirements of backflow prevention devices and other associated cross-connection activities that pose potential risk to the safety of the County’s municipal drinking water system.
- Based on the Canadian Standards Association B64 Standard definition of hazards, the proposed Backflow Prevention Program will focus on medium to severe/high hazard threats at industrial, commercial, institutional and multi-residential properties across the County.
- Upon full implementation, it is estimated that the proposed user fee based Backflow Prevention Program will annually offset over \$150,000 of existing rate funded water system operational activity costs.

Implementation Points

Upon approval of the recommendations contained in this report, staff will begin to effectively facilitate communications, program development, and administrative activities associated with the development and implementation of the Backflow Prevention Program and By-law.

The Backflow Prevention Program will be implemented in a multi-year phased plan involving the following key work tasks:

- Public Consultation, Education and Communication (Q3 2022 to Q2 2023);
- Development of Backflow Prevention Program Administration and Financial Requirements (Q3 2022 to Q2 2023); and
- Development of the Backflow Prevention Implementation Program (Q3 2023 to Q3 2024).

Staff will be reporting back to County Council with regular status updates on the implementation progress of the Backflow Prevention Program. Staff will also be seeking future Council approval of the associated Backflow Prevention By-law once finalized.

Financial Impact

Backflow Prevention Program User Pay Fee Model

In Ontario, nearly all of the municipalities with Backflow Prevention Programs charge user fees (property owner) for different elements of the program to recover costs, including but not limited to the following:

- Backflow Prevention Device and Installation Permit Fees (Building Permit);
- Test Tag Fees;
- Cross Connection Inspection and Report Submission Fees;
- Backflow Testing and Report Submission Fees; and,
- Backflow Prevention Device Tester Registration Fees (Qualified Person or Contractor).

The proposed Backflow Prevention Program will help the County ensure that minimum requirements for annual inspections, maintenance, reporting and auditing of Backflow Prevention devices are followed. The proposed Backflow Prevention Program and By-law also ensures that best practices related to the selection, purchase, installation, inspection and maintenance of Backflow Prevention device systems are appropriately carried out by property owners (at their expense) in order to further safeguard the municipal drinking water system.

The County reviewed different cost recovery structures of five other municipalities' backflow prevention programs (refer to Attachment 1). In all cases, compliance with the Municipalities Backflow Prevention By-law does not negate the premise owner's responsibility to obtain any other required permits (i.e. building permits).

The specific fees and operational costs of the Backflow Prevention Program will vary across municipalities based on levels of service, implementation/enforcement practices and hazard risk mitigation process. The County will complete a more detailed review of municipal comparators and develop a budget neutral financial plan to fund the operational and resource costs of Backflow Prevention Program on a full cost recovery basis through a user pay model system.

The user pay approach appropriately removes the cost burden of backflow protection from the residential homeowner (rate payer) who is not posing a hazard to the municipal drinking water system and places that onus, cost and responsibility to the Industrial, Commercial and Institutional (ICI) and Multi-residential customers that are connected to the municipal water distribution system and posing the risk to the safety of the drinking water.

All financial aspects of the County's administration requirements of the Backflow Prevention Program will be brought forward for Council consideration as part of the 2023 and 2024 Business Plan and Budget Process.

The proposed user pay model is intended to nominally charge user fees at a level which is sufficient to offset annual backflow prevention program costs in a manner which operates a net zero budget.

Operational Cost Savings

On June 22, 2022, Report No. [PW 2022-32](#) entitled "2018-2020 Water Distribution and Wastewater Collection Service Delivery Review – Outcomes and Recommendations", identified Backflow prevention of drinking water systems as a best management practice across almost all municipalities across Ontario. The proposed implementation of a County-wide Backflow Prevention Program will annually afford the reallocation of approximately \$100,000 in front line operator costs from the City of Woodstock. This would be achieved by migrating the operational cost of backflow device installation, testing and inspection activities from rate payers to user fees. These services can be delivered by appropriately certified third parties, instead of municipal water operators, as is the standard municipal practice across the province.

Report No. PW 2022-32 also further recognized that additional annual savings of approximately \$50,000 in operational resources (reallocated from rate to Backflow Prevention Program user fees) can be achieved once the County's proposed Backflow Prevention Program is fully implemented (based on a user fee program).

Communications







Upon approval of the recommendations contained in this report, Public Works staff will work with the Communications team to develop a detailed public consultation and engagement plan to seek input and feedback on the proposed Backflow Prevention Program and draft By-law (refer to Attachment 2).

The consultation and engagement campaign includes, but is not limited to, virtual and in-person public meetings, social media, media outreach, advertising and/or other approaches. More information with respect to the campaign is detailed later in this report.

The findings and outcomes of the consultation process will be documented by County staff and utilized to refine the Backflow Prevention Program and its associated policy recommendations. Staff will report back to Council with the findings of the public consultation and provide final By-law policy recommendations for consideration.

Following Council deliberation, Report No. PW 2022-35 will be circulated to Area Municipalities, local Chambers of Commerce/Business Improvement Associations, Rural Oxford Economic Development Corporation, local Economic Development Officers and local Building Officials for information.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
1.i. 1.ii.		3.ii.	4.i. 4.ii.	5.i. 5.ii.	

DISCUSSION

Background

Over the last 30 years across North America, there has been a number of documented backflow incidents that have posed a potentially significant threat to municipal drinking water systems. Backflow incidents within the water distribution system can contaminate the quality and safety of municipal drinking water that can result in health risks to consumers, disrupt the supply of municipal drinking water to residents and businesses, and affect public confidence in municipal water system operations.

As a result of Justice Dennis O’Connor’s Walkerton Inquiry Report (2002), a number of municipal water system best management practice recommendations were identified, along with subsequent legislative changes, namely the *Safe Drinking Water Act, 2002*. As the municipal water purveyor, Oxford County provides safe, reliable and high quality drinking water to consumers and is legally responsible for continuously protecting its municipal drinking water system from potential contamination under the *Safe Drinking Water Act, 2002*.

Since the Walkerton water tragedy, the Ministry of the Environment, Conservation and Parks (MECP) has been urging municipalities to implement backflow prevention programs as another multi-barrier protective measure to help ensure municipal water distribution systems are free from potential contamination. Currently, there are more than 50 municipalities in Ontario (i.e. Toronto, Hamilton, Region of Waterloo, Halton Region, York Region, London, Stratford, Guelph, Barrie) that have implemented a Backflow Prevention By-law and successfully executed a Backflow Prevention program.

O. Reg. 332/12 (Ontario Building Code) under the *Building Code Act, 1992*, and the Canadian Standards Association (B64 standard) have also introduced similar backflow prevention requirements in this regard. The *Ontario Building Code* includes technical objectives and administrative provisions to prevent the contamination of the drinking water in private or plumbing systems. The *Ontario Building Code* sets out minimum requirements that must be met when a building is constructed, renovated or undergoes a change of use to a property.

In the document “*Guide for Drinking Water System Owners Seeking To Undertake a Backflow Prevention Program Backflow Prevention Guide*”, the MECP identifies that the *Ontario Building Code* contains objectives and provisions to limit the public’s exposure to an unacceptable risk of injury or illness as a result of hazardous substances including contaminated water.

However, the MECP also identified some limitations with the *Ontario Building Code* backflow prevention provisions as follows:

- Some properties or cross connections may be excluded from requiring a backflow prevention device under the general design requirements.
- Once a premise is occupied, source isolation requirements can be circumvented through changes made to plumbing systems, resulting in new cross-connections within the property.
- During the construction and inspection stages, the design requirements are not always properly identified, documented or enforced due to staff limitations and capacity.
- Limited requirements related to the inspection, maintenance and field-testing of backflow prevention devices once installed.

Such limitations under the *Ontario Building Code* may leave municipal water supply systems at risk. The above are examples of how some premises that may pose a risk to the municipal water supply can bypass the need for a backflow prevention device. This protective gap in coverage can be filled by a municipal backflow prevention program that allow municipalities to intervene and ensure that risk and public safety are consistently evaluated.

The implementation of the proposed Backflow Prevention Program and By-law provides enhanced protection for the County’s municipal drinking water system to address the potential limitations associated with the *Ontario Building Code* to ensure the health risk is fully and consistently assessed for all foreseeable circumstances.

Backflow and Cross Connection

Under typical conditions in the County’s municipal drinking water system, the normal direction of drinking (potable) water flows from the County’s pressurized municipal water distribution system into the private property owner’s plumbing or building system(s). As the municipal water system is operated under continuous positive pressure, water can rarely flow backwards from a serviced private property into the municipal water distribution system.

Backflow refers to the rare circumstance where contaminants may potentially enter the municipal water distribution system from private water services. Backflow is defined as the reversal in the direction of flow where water (and any contaminants within the water) may flow from private plumbing or building system(s) into the County’s municipal water distribution system. Backflow can occur due to either back siphonage or back pressure events as follows:

- Back pressure can occur when the pressure in a private water system is greater than the municipal water distribution system. Back pressure can be caused in industrial processes and situations where booster pumps, elevated process water tanks, temperature increases in boiler systems and elevated piping systems exist.
- Back siphonage can occur when there is a loss of positive pressure in the municipal water distribution system (i.e. large fire fighting event, watermain break, equipment power failures, customer peak demand water use).

A cross connection is defined as any actual or potential connection between the municipal potable drinking water distribution system and any private side non-potable water supply containing source of pollution or contamination. It includes any temporary or permanent connections to private side water systems (through which backflow may occur) including, but not limited to, the following:

- A water conditioning (softener) equipment or boiler systems;
- Auxiliary water supply (wells and storage tanks);
- A chemical or pesticide sprayer attached to a garden hose;
- A high pressure washer utilizing soaps or cleaners connected to a hose bib;
- Heat and cooling systems;
- Irrigation or lawn sprinkler system;
- Connections to firefighting equipment or fire prevention systems (sprinkler systems);
- Industrial chemical feed and process systems;
- Food and beverage processing equipment;
- Connections for medical devices such as dental procedures or dialysis equipment; and
- Photo developing equipment.

The potential for cross connections exists in each of the County's 17 municipal drinking water systems. When backflow occurs through an unprotected cross connection, pollutants or contaminants can enter the County's municipal drinking water system which could threaten the safe, reliable and sustainable supply for its residents and businesses.

Backflow Prevention and Cross Connection Control

If a cross connection cannot be eliminated, a backflow prevention (BFP) device can be installed to prevent backflow (including back siphonage and back pressure) from impacting the County's municipal drinking water distribution system. There are three different methods available to protect the County's municipal drinking water distribution system:

- Fixture or Source Isolation – the installation of a BFP device on each source of potential contamination within a building or facility, which only provides protection to a portion of the plumbing system at the fixture.
- Zone or Area Isolation – the installation of a BFP device that provides protection of individual zones or areas within a building or facility.
- Premise Isolation – the installation of a BFP device at the municipal water line connection within the building or facility providing protection to the County municipal drinking water system.

The *Ontario Building Code* requires protection be provided for both fixture isolation and premise isolation which serves to protect private buildings from any potential water contamination or prevent any potential contaminated water from private buildings flowing back into the municipal water distribution system, respectively. In most cases, premise isolation is generally in place for residential water customers for homes built since this version of the *Ontario Building Code* came into effect.

Backflow Prevention in Oxford County

Oxford County completes annual backflow prevention inspections on approximately 70 County owned BFP devices that are installed at water treatment facilities and bulk water filling stations across 15 municipal drinking water systems. The County also maintains an inventory of voluntarily submitted BFP test reports from various water customers. In 2021, nearly 30 commercial, industrial, and multi residential customers submitted backflow prevention test reports for water services connected to eight different County municipal drinking water distribution systems.

The County's 2016 Design Guidelines and Supplemental Specifications for Municipal Services (Design Guidelines) require that BFP devices be installed at all ICI developments at the property owner's expense. The Design Guidelines indicate the requirement for calibration, testing and records, annual testing and that BFP devices be specified as per the AWWA Canadian Cross Connection Control Manual, which also include the requirements of the CSA B64 Standards.

While the County does not currently have a formal authorized Backflow Prevention By-law in place for the ICI sector, the City of Woodstock has an informal process in place where approximately 900 existing BFP devices within the ICI sector are annually inspected by their water operations staff. However, costs for this service are currently being passed on to all ratepayers as opposed to only those customers who pose the water contamination threat to the municipal drinking water system. The proposed By-law would transition such costs (and related responsibilities) back to these ICI sector customers, as appropriate, via a user fee model.

Comments

Backflow events can expose the County's municipal drinking water system to contaminants, which can result in a deterioration of water quality and in some cases even introduce a public health risk. It is the responsibility of the County to ensure that potable water is protected against the entry of contaminants, pollutants, infectious agents, or other materials or substances.

The proposed Backflow Prevention Program and By-law is considered a best management practice that will provide the County with more authority to further control and safeguard the integrity of their water supply from source to tap. It will formally regulate and enforce the installation, inspection, and testing requirements of BFP devices and other associated cross-connection activities that pose potential risk to the safety of the County's municipal drinking water system. The proposed implementation of backflow prevention will serve to help reduce the risk of cross connections during backflow events by ensuring that in all cases where a BFP device is required, an appropriately selected BFP device is installed, annually tested and regularly maintained.

These proposed undertakings are consistent with the Statutory Standard of Care provisions of the *Clean Water Act, 2006*, *Safe Drinking Water Act, 2002* and the County’s drinking water Quality Management System (QMS) policy. Report No. [PW 2022-11](#) (2021 Annual Drinking Water Quality Management System Update) details the requirements of County Council with respect to the Statutory Standard of Care, QMS Annual Management Review, and Risk Assessment process. Such proposed action further complements and expands on the backflow prevention requirements contained within O.Reg. 332/12 (Ontario Building Code) under the *Building Code Act, 1992*.

The County’s proposed Backflow Prevention By-law and associated implementation program will mirror those of other successful municipalities in terms of definitions, legal authority, hazard surveys, and ICI/multi-residential property owner obligations for installation, testing, servicing, and records requirements for BFP devices.

Backflow or Cross-Connection Hazard Identification

Oxford County contains a diverse array of serviced mixed-use buildings and businesses. All types of building classification may carry some degree of hazard risk to the municipal drinking water system. As shown in Attachment 3, the Canadian Standards Association (CSA B64 Standard) provides a guide for the assessment of hazards and assigns building types, facilities or operations into three categories (minor, moderate, severe/high).

Through the application of the CSA B64 Standard to MPAC assessed properties, over 2,500 ICI and multi-residential properties were categorized to pose either a moderate or severe/high hazard to the Oxford’s municipal water distribution system as shown in Table 1. Single family residential homes will be excluded from the Backflow Prevention Program and By-law as the properties represent a low potential risk to the County municipal water supply and are generally regulated under O.Reg. 332/12 (Ontario Building Code) of the *Building Code Act, 1992*.

Table 1: Property by Zone Category and Potential Hazard Risk Level

Zone Category	Number of Properties*	Potential Hazard Rating
Commercial	1,200	Severe/High, Moderate
Industrial	850	Severe/High, Moderate
Institutional	80	Severe/High, Moderate
Mixed Use	450	Severe/High, Moderate
Multi Residential (Includes apartments, condos, seasonal residences, retirement homes)	TBD	Moderate

* May include up to 900 ICI customers in Woodstock which already have operational BFP devices

As part of the proposed implementation of a Backflow Prevention By-law and Program, the County will begin the process of validating the specific property hazard ratings using cross-connection surveys to better understand the potential risk to the County's municipal drinking water system. The County will initiate the process with an internal review of records associated with water billings, building permits, business licences, and planning and zoning information.

For each hazard category, the CSA B64 Standard and the AWWA Canadian Cross Connection Control Manual is then used to confirm the need and type of backflow prevention measures (i.e. BFP devices for premise, zone or fixture isolation) to be employed at a given property in order to sufficiently address the existing/potential risk to the County's municipal drinking water system.

Backflow Prevention Implementation Plan

Based on the Backflow Prevention Guide and Federation of Canadian Municipalities (FCM) Methodology for Setting a Cross-Connection Control Program, the County has developed a multi-year phased Backflow Prevention implementation plan that will consist of 13 detailed steps as shown in Attachment 4.

The implementation plan would begin by first surveying ICI and multi-residential properties categorized to contain severe/high hazards. Once the surveys are assessed, the installation of BFP devices on their water services would be mandated as appropriate.

The implementation plan includes communication strategies to inform and engage ICI, and mixed-use and multi-residential property owners of the proposed Backflow Prevention By-law and related implementation program. The proposed community engagement and consultation campaign will involve the following activities and tasks:

- Development of detailed Consultation and Communication Plan;
- Virtual Public Consultation Centres (PCC) or Open Houses;
- Consultation and coordination with the Area Municipalities related to the development, implementation and maintenance of the Backflow Prevention Program;
- Consultation with large volume water users to provide an opportunity to obtain input and provide feedback from the public on the draft proposed Backflow Prevention By-law;
- Various online communication and engagement opportunities (e.g. Website, Speak Up Oxford, Social media), including the ability to review related information and materials and submit comments and feedback; and
- Any other consultation and engagement opportunities that may be identified as being required through the review process.

Conclusions

The proposed Backflow Prevention Program and By-law is considered a best management practice that will provide Oxford County with more authority to further control and safeguard the integrity of its water system from source to tap by formally regulating and enforcing the installation, inspection, and testing requirements of backflow prevention devices and other associated cross-connection activities that may pose potential risk to the safety of the County's municipal drinking water system.

SIGNATURES

Report Author:

Original signed by

Travis Pawlick, P.Eng.
Supervisor of Water and Wastewater Technical Services

Departmental Approval:

Original signed by

David Simpson, P.Eng., PMP
Director of Public Works

Approved for submission:

Original signed by

Michael Duben, B.A., LL.B.
Chief Administrative Officer

ATTACHMENTS

- Attachment 1: Municipal Backflow Prevention Fees
- Attachment 2: Draft Backflow Prevention By-law
- Attachment 3: CSA B64 Standard – Guide to Hazards
- Attachment 4: County Backflow Prevention Implementation Plan

Municipal Backflow Prevention Fees

Type of Service	City of Ottawa	Town of The Blue Mountains	Halton Region	City of Barrie	City of Hamilton
Test Tag Fees	-	\$5.65 / device (annual)	-	\$5.65 / device (annual) \$28.25 / device (5 year test tag)	-
Cross Connection Inspection and Report Submission Fees	-	\$113.00 / survey review (required every 5 years) \$39.55 / air gap certification review (annual)	\$131.90 / premise with no BFP device Existing device: \$65.96 / premise with existing BFP device. No fee for resurveys	\$58.76 / property (one time fee)	\$194.74 / submission
Backflow Testing and Report Submission Fees	\$59.89 / test result submission	\$56.50 / test result submission	\$65.96 / premise isolation device	\$39.55 / per test and maintenance report	\$72.61 per test result submission
Backflow Prevention Device Tester Registration Fees	-	\$113.00 / Business (one time registration fee) \$84.75 / Business (annual renewal)	-	\$113.00 / Business (one time registration fee) \$87.58 / Business (annual renewal)	\$163.76 / Contractor (annual renewal)

*This table includes HST. Fees associated with compliance to the backflow prevention programs do not absolve the property owner of the requirement to retain additional permits from the Building Official whenever necessary.



COUNTY OF OXFORD
BY-LAW NO. XXXX-2022

BEING a By-Law to regulate Backflow Prevention and Cross Connection Control to Protect the County of Oxford Drinking Water Systems

AND WHEREAS Section 11(2) of the *Municipal Act, 2001*, S.O. 2001, c. 25, as amended (the "**Municipal Act, 2001**"), provides that an upper-tier municipality, may pass By-Laws with respect to the financial management of the municipality, its local boards, and services and things that the municipality is authorized to provide;

AND WHEREAS Section 11 (3) of the *Municipal Act, 2001*, as amended, provides that an upper-tier municipality, may pass By-Laws respecting the matters within the spheres of jurisdiction outlined in subsection 11(4);

AND WHEREAS Section 9 of the *Municipal Act, 2001*, as amended, provides that a municipality has the capacity, rights, powers and privileges of a natural person for the purpose of exercising its authority under the Act. Further, section 9(1) of the *Municipal Act, 2001* provides that section 11 shall be interpreted broadly so as to confer broad authority on municipalities to enable them to govern their affairs as they consider appropriate and to enhance their ability to respond to municipal issues;

AND WHEREAS Section 80 of the *Municipal Act, 2001* provides that a municipality may, at reasonable times, enter on land to which it supplies a public utility, to inspect, repair, alter or disconnect the service pipe, wire, machinery, equipment and other works used to supply the public utility; to inspect, install, repair, replace or alter a public utility meter; and, for such purposes, to shut off or reduce the supply of the public utility to the land; and, if a customer discontinues the use of a public utility on land or the municipality lawfully decides to cease supplying the public utility to land, to shut off the supply of the public utility; remove any Property of the municipality; or to determine whether the public utility has been or is being unlawfully used;

AND WHEREAS the *Municipal Act, 2001*, section 81 provides the authority to a municipality for shutting off a supply of a utility. The municipality may shut off the supply of a public utility to land if fees and charges payable by the Owners or occupants of the land for the supply of the public utility are overdue, subject at all times to the municipality providing reasonable notice of the overdue fees and charges and proposed shut off date to the Owners and occupants of the land by personal service or prepaid mail and posting the notice on the land in a conspicuous place;

AND WHEREAS the County of Oxford operates and maintains existing and future municipal drinking water systems and wastewater systems within its municipal boundaries;

NOW THEREFORE, the Council of the County of Oxford enacts as follows:

CROSS CONNECTION AND BACKFLOW PREVENTION

1. County of Oxford enacts a formal Backflow Prevention Program, and includes Schedule 'A' to this By-Law, County of Oxford Cross Connection Control and Backflow Prevention Standards

1.1. CROSS CONNECTION PREVENTION

- 1.1.1. No person shall connect, cause to be connected, or allow to remain connected to the Water Systems any piping, fixtures fitting, container or appliance that, under any circumstances, might allow any untreated water, wastewater, non-potable water, pollutant, or any other liquid, chemical or substance to enter the Water Systems.

1.1.2. No person shall connect, cause to be connected, or leave connected to the Water Systems, any alternate water supply. Where an alternate water supply services the same Property as a municipal connection, a physical separation between the supplies must exist creating separate systems.

1.2. BACKFLOW PREVENTION

1.2.1. Backflow Prevention Devices shall be selected, installed, maintained and field tested in accordance with the Canadian Standards Association (CSA), and any other Applicable Law.

1.2.2. Every Owner who has a Premises Backflow Prevention Device located on their Property must ensure that testing occurs in accordance with all Applicable Law, including but not limited to Ontario Regulation 333/12 (the *Ontario Building Code*) and CSA Standard, and the testing results shall be maintained and available to the County of Oxford upon request and further all industrial, commercial, institutional and multi-residential property owners shall provide a plan to the County of Oxford for their internal staff use of water either through source isolation or an alternative approach acceptable to the County of Oxford.

1.2.3. If it is determined that a Backflow Prevention Device being tested is malfunctioning or not properly working, the Property Owner and County of Oxford are to be notified immediately and appropriate action shall be taken to ensure continued protection of the Potable Water supply is maintained at the cost of the Owner.

1.2.4. Should the Property Owner refuse or fail to have the identified malfunctioning Backflow Prevention Device fixed or replaced within the timeline specified by County of Oxford in writing, supply of water to the Property may be discontinued in order to maintain the integrity of the Water Systems water quality.

SCHEDULE 'A' TO BY-LAW XXXX-2022

COUNTY OF OXFORD CROSS CONNECTION CONTROL AND BACKFLOW PREVENTION STANDARDS

TABLE OF CONTENTS

Heading	Section
Definitions	1
Application of By-Law	2
Protection from Contamination and Backflow Prevention	3
Persons Permitted to Carry Out Work	4
Application of CSA Standard	5
Cross Connection Survey and Inspection Reports	6
Selection of Backflow Prevention Devices	7
Premise Isolation	8
Installation of Backflow Prevention Devices	9
Lawn Sprinkler Systems	10
Fire Protection Systems	11
Testing of Devices	12
Inspections	13
Removal of Backflow Prevention Devices Prohibited	14
Implementation	15
Offences	16
Orders	17
Enforcement	18
Penalties	19
Effective Date	20
Table 4.1: Authorized Functions List	xx

1. DEFINITIONS

For the purposes of this Schedule, the following terms shall have the corresponding meanings:

“**ASSE**” means the American Society of Sanitary Engineering;

“**AWWA**” means the American Water Works Association;

“**Authorized Functions List**” means the list of functions and Persons that are authorized to carry out such functions as set out in Table 4.1;

“**Auxiliary Water Supply**” means any water source or system other than the County of Oxford’s direct water supply that may be available in a Building or any Property, including but not limited to any recycled water or cistern;

“**Backflow**” means the flowing back of or reversal of the normal direction of flow of water;

“**Backflow Prevention Device**” means a device that prevents backflow, as further defined in Section 7.2.10.10 of the Ontario Building Code (O. Reg 403/97) and CAN/CSA references therein;

“**Backflow Prevention Test Report**” means the County of Oxford Official document submitted detailing the performance of all Backflow Prevention Devices at a given Property;

“**Backflow Prevention Test**” means a confirmatory assessment that identifies if a back flow prevention device is functioning properly carried out as deemed by the County of Oxford or at regular intervals;

“**Backflow Prevention Test Tag**” means a County of Oxford issued tag that is to be affixed to backflow prevention devices after a satisfactory backflow prevention test confirms that the device is good working order;

“**Building**” shall have the same meaning as set out in the *Building Code Act*, S.O. 1992, c. 23, as amended, or any successor thereof;

“**Building Code**” means the regulations made under Section 34 of the *Building Code Act*, being O. Reg 332/12, as amended, or any successor thereof;

“**County**” means the County of Oxford;

“**Chief Building Official**” means the Chief Building Official for the Municipality or the Chief Building Official’s authorized representative;

“**County By-Law Officer**” means an individual or individuals appointed by Council of the County of Oxford or under the Delegation of Authority By-Law for the administration and enforcement of this By-Law;

“**Cross Connection**” means any actual or potential connection between a potable water supply or Water System and any source of pollution or contamination and includes any by-pass, jumper

connection, removable section of pipe, swivel or changeover device and any other temporary or permanent connection arrangement through which backflow may occur;

“Cross Connection Inspection” means a detailed assessment carried out by a Qualified Person to investigate all potential hazards, cross connections, and existing backflow prevention devices present at a Property. The Cross Connection Inspection must identify all actual or potential cross connections between a Potable water supply and any potential source of contamination within a premises;

“Cross Connection Inspection Report” means the County of Oxford official document that must be submitted within 14 days of a Cross Connection Inspection which details all potential hazards and existing cross connections that exist at a facility and their overall risk level;

“Cross Connection Survey Inventory” means the Appendix A document to be submitted with a Cross Connection Inspection Report that details all identifies the associated hazard of all cross connection, includes all corrective actions, and recommendations that is submitted to the County of Oxford using County form for approval;

“CSA” means the Canadian Standards Association;

“CSA Standard” means CSA Standard Series B64.10-11/B64.10.1-11 – Selection and Installation of Backflow Preventers / Maintenance and Field Testing of Backflow Preventers Standard, as amended;

“Fixture isolation” see **“Source isolation”**

“Irrigation Systems” means artificially supplying land with water for agriculture or landscaping, usually by artificial means such as pipes and sprinklers;

“Multi-Residential” means all dwelling units designed or intended for use as a residence or household in excess of three (3) stories or higher;

“Municipality” means the City of Woodstock, Town of Ingersoll and Town of Tillsonburg, and the Townships of Blandford-Blenheim, East Zorra-Tavistock, Norwich, South West Oxford, and Zorra, as amended, and includes its employees, service providers, and its agents;

“Owner” means any Person, firm, or corporation having control over Property to which this By-Law applies and includes the Owner registered on the title of the Property and any occupant of any Building or Structure located on such Property;

“OWWA” means Ontario Water Works Association;

“Person” includes an individual, association, organization, partnership, corporation, or an agent or employee thereof;

“Plumbing system” shall mean the drinking water system of connected piping, fittings, valves, equipment, fixtures and appurtenances contained in plumbing that begins, is located and is connected immediately after the water meter;

“Potable water” means water that is safe for human consumption;

“**Premises**” shall mean any house, tenement, Building, Structure, lot, or part of a lot, or both, in, through, or past which water service pipes run;

“**Premise Isolation**” means isolation of the water plumbing system at the entrance of the Building or Structure from the municipal water supply;

“**Property**” means any land within the County of Oxford and includes all Buildings and Structures;

“**Qualified Person**” means a private contractor or person who has met all requirements in Schedule “A” and has completed and passed a Cross Connection Control course in Backflow Prevention Device Testing at an accredited school or college and shall be in accordance with CSA Standard as amended, or any successor thereof, and must have an active OWWA Cross-Connection Control Tester Certificate, an active ASSE Backflow Preventer Tester Certificate or approved equivalent, and must be registered with the County of Oxford;

“**Service Provider**” means the City of Woodstock or Town of Tillsonburg water distribution and wastewater collection contracted service provider;

“**Source isolation**” means isolation of the water located within or having flowed through a source or potential source of contamination within a Building or Structure, including but not limited to, a device, machine or water system, from any potable Water System;

“**Structure**” means anything constructed or built permanently or temporarily which is provided with a source of Potable Water, including but not limited to a boat or mobile home;

“**Water distribution system**” means water mains with connections to feeder mains, feeder mains within municipal road allowances or easements, private mains, services, fire hydrants, and shut-off valves and all other appurtenances thereto;

“**Water Systems**” means any current or future drinking water systems owned by the County of Oxford; and,

“**Zone isolation / Area isolation**” means the protection provided for sections of a piping network, Building, or facility where there are no domestic or potable water connections downstream of a backflow prevention device.

2. APPLICATION OF BY-LAW

2.1. This By-Law applies to existing and future industrial, commercial, institutional and multi-residential Buildings and Structures that are connected to a County Water System, except Buildings of residential occupancies within the scope of Part 9 of Ontario Regulation (O. Reg.) 332/12 (“the Ontario Building Code”).

2.2. In addition to and notwithstanding Section 2.1 of this By-Law, this By-Law applies to lawn sprinkler systems, Auxiliary Water Supplies, or in accordance with Part 7 of the *Ontario Building Code*, CSA Standard, where a condition exists in any Building or Structure that may be

hazardous or detrimental to the potable water system as determined by the County or its Service Provider.

2.3. The use of Fire Hydrants for bulk water is strictly prohibited unless directed by the County or its Service Provider. Fire Hydrants used for bulk water shall require backflow prevention as set out in this By-Law.

3. PROTECTION FROM CONTAMINATION AND BACKFLOW PREVENTION

3.1. No Person or Owner shall connect, cause to be connected, or allow to remain connected to the Plumbing System or water distribution system any piping, fixture, fitting, container or appliance, in a manner which under any circumstances, may allow, untreated water, wastewater, any other source of contamination to enter the County's Water System.

3.2. In addition to Section 3.1, every Owner of Property to which this By-Law applies shall ensure that their Premise is equipped with a backflow prevention device in accordance with all other provisions of this By-Law, and is installed in respect of Premise Isolation, Source Isolation and Zone Isolation at the Owner's expense.

3.3. No Owner shall permit an Auxiliary Water Supply to be connected, cause to be connected, or allow to remain connected to the County's Water System.

4. PERSONS PERMITTED TO CARRY OUT WORK

4.1. A Qualified Person shall obtain certification through an accredited school or college, in accordance with CSA Standard or as amended and meet the criteria as set out in Table 4.1: Authorized Functions List to this schedule.

4.2. The Qualified Person shall maintain current certification with the appropriate certification association.

4.3. Registration with the County is required for all Qualified Persons.

4.4. Only the Persons with the qualifications listed in Table 4.1: Authorized Functions List and who are registered with both the OWWA and the County shall carry out the corresponding functions in the Table.

4.5. The County may suspend or revoke the registration status of the Qualified Person if they:

- a) fail to provide active OWWA recertification documentation to the County;
- b) submit a falsified Cross Connection Survey Inventory or falsified Cross Connection Inspection Report;
- c) are found to conduct inaccurate Cross Connection Inspection; or,

d) provide improper installation of Backflow Prevention Devices.

4.6. The County may require the Qualified Person successfully complete a refresher backflow prevention course as approved by the OWWA, following any action outlined in section 4.5 prior to any re-instatement to the registered list of Qualified Persons.

5. APPLICATION OF CSA STANDARD

5.1. Except as otherwise set out in this By-Law, the installation, maintenance and field testing of Backflow Prevention Devices shall be in accordance with the CSA Standard.

5.2. Wherever the CSA Standard and this By-Law are in conflict, the provisions of this By-Law shall prevail.

5.3. In the event of a conflict between any provision of this By-Law and any applicable Act or regulation, the provision that is the most restrictive prevails.

6. CROSS CONNECTION INSPECTION

6.1. Every Owner for any Property, Building, or Structure subject to this By-law shall, at the Owner's expense, ensure that:

a) A Qualified Person as indicated in Section 4, is retained to prepare a Cross Connection Inspection or Cross Connection Inspection Report whenever required by this By-law.

b) A submission of the Cross Connection Inspection Report is submitted in the prescribed format to the County no later than two (2) weeks following the date that a Cross Connection Inspection was carried out.

c) A Cross Connection Inspection shall be completed at a frequency of every five (5) years from the date of the initial Cross Connection Inspection Report, or where a change of use, machinery, fixtures or alteration of the piping occurs, and/or, as otherwise required by the County.

d) The completed Cross Connection Inspection Report shall be submitted to the County no later than 14 days from the date that the Cross Connection Inspection was carried out.

6.2. In addition to the obligations set out in subsection 6.1, each time that one or more of the following events occur, the Owner of a Property to which this By-Law applies shall also comply with the requirements of subsection 6.1 within 30 days of the date on which such event occurred:

a) The hazard level of a Building or Structure on the Property has changed;

b) The Ownership of the Property has changed.

6.3. The Cross Connection Inspection Reports shall include a plan for protecting internal staff from contamination after the required Premise Isolation that is acceptable to the County and include any existing Backflow Prevention Devices, Cross Connections discovered, corrective measures, recommendations and a schedule of work to be completed.

7. SELECTION OF BACKFLOW PREVENTION DEVICES

7.1. Every Owner shall ensure that every Backflow Prevention Device required for Premise Isolation on their Property is a testable device and is the proper device to be used pursuant to Section 12 of this By-Law.

7.2. Backflow Prevention Devices for Premise Isolation shall be determined using the Selection Guide in CAN/CSA B64.10/B64.10.1-11 or when the type of Cross Connection is not identified in the Selection Guide by a Professional Engineer using the CSA Standard.

7.3. Despite Section 7.2 of this By-Law, when the type of Cross Connection is not identified in the Selection Guide, the County or the Chief Building Official may require a particular Backflow Prevention Device to be used in respect of any Cross Connection.

7.4. Despite Section 7.2 of this By-Law, the County may permit an existing Backflow Prevention Device if previously approved, as long as the safety of the Water System can be demonstrated through testing, and that the device can be maintained to the satisfaction of the County. Testing shall be conducted by Qualified Persons with the qualifications listed in Table 4.1.

7.5. Despite Section 7.2 of this By-Law, where a source isolation Backflow Prevention Device has been installed by the manufacturer of equipment, the Cross Connection is required to be reviewed to determine if the Backflow Prevention Device meets the requirements of the Selection Guide. These Cross Connections are to be indicated on the Cross Connection Survey Inventory when a Cross Connection Inspection is required.

8. PREMISE ISOLATION

8.1. All industrial, commercial, institutional businesses, and multi-residential units who do not comply with Section 7.2 and Section 7.3 are required to install a RP Backflow Prevention Device for Premise Isolation. Such device shall be inspected and tested annually for compliance with this By-Law.

8.2. Premise Isolation shall be required:

- a) in Buildings or Structures of high or severe hazard in accordance with Premise Isolation requirements as stated in the *Ontario Building Code Part 7 - Plumbing*;
- b) as stated in Section 9.1 of this By-Law; or
- c) as specified by the County.

9. INSTALLATION OF BACKFLOW PREVENTION DEVICES

9.1. Every Person installing a Backflow Prevention Device shall ensure that:

- a) such device is installed in accordance with the AWWA Canadian Cross Connection Control Manual as amended, the manufacturer's specifications, the requirements of the *Ontario Building Code*, the CSA Standard, and this By-Law;
- b) such device is located in such a manner so that in the event of backflow the device prevents contamination of the County Water System and any other potable water system;
- c) such device is installed in such a manner that the device is easily accessible at all times for testing, repair, or replacement. Location and placement of such device will be to the satisfaction of the County or the Chief Building Official;
- d) where such device is installed in respect of Premise Isolation, such device is located within a maximum of 3.0 meters downstream of the water meter, and, as per the water meter manufacturers recommendations regarding lay length requirements. Location of installation shall be to the satisfaction of the County or the Chief Building Official;
- e) where such device is installed in respect of Premise Isolation, all piping between the water meter and such device is clearly labeled "no connection permitted"; and
- f) where such device is installed in respect of Source or Zone Isolation, all piping between the point of contamination and the point at which the device is located is labeled "non-potable water".

9.2. Every Owner of a Property or Structure upon which a Backflow Prevention Device is installed shall ensure that a copy of the record of the installation is provided to the County within 14 days of the installation.

9.3. Every Owner of a Property or Structure upon which a Backflow Prevention Device is installed shall ensure that such device is in proper working order at all times.

10. LAWN SPRINKLER SYSTEMS

10.1. Upon approval of this By-Law, all new lawn sprinkler systems must be connected downstream of the Buildings water meter where applicable. The Buildings water supply must be protected with the proper Backflow Prevention Device in accordance with CSA Standard.

10.2. By June XX, 20XX all systems installed prior to January XX, 20XX must be compliant with the requirements of 11.1.

11. FIRE PROTECTION SYSTEMS

- 11.1. Potable water connections to fire protection systems (standpipe and sprinkler systems) shall be protected against backflow in accordance with the CSA Standard and the *Ontario Building Code*.

12. TESTING OF BACKFLOW PREVENTION DEVICES

- 12.1. Every Owner who has a Backflow Prevention Device located on their Property shall, at their expense, ensure that:

- a) such device is tested by a Qualified Person when it is first installed and annually thereafter or when requested by the County, and also when it is cleaned, repaired, overhauled or relocated;
- b) when such device is tested a Backflow Prevention Test Report is prepared and submitted to the County within 14 days of the test being conducted in the format prescribed by the County;
- c) in the event that such device is malfunctioning or otherwise not in proper working order, the device is immediately repaired or replaced;
- d) in the event that the water supply to the device cannot be shut down in order to facilitate annual testing, a parallel system shall be installed, with a suitable Backflow Prevention Device installed to allow for annual testing of both devices.

- 12.2. Every Qualified Person who tests a Backflow Prevention Device shall carry out such testing in accordance with this By-Law as well as those set out in the CSA Standard and test procedures established by the ASSE or AWWA for testing Backflow Prevention Devices.

- 12.3. Every Qualified Person who tests a Backflow Prevention Device shall:

- a) provide a legible Backflow Prevention Device Report to the County in respect of such test and must include the tester's name (if self-employed) or the name of their employer, and certificate number;
- b) upon completing such test, complete and affix a Backflow Prevention Test Tag as prescribed by the County to the device or immediately adjacent to the device on the piping connected thereto. The tester shall ensure that the County Backflow Prevention Test Tag is affixed to the device, at all times;
- c) upon finding that such device is malfunctioning or otherwise not in proper working order, immediately notify the Owner of the premises and the County of such condition; and
- d) in the event that such device is malfunctioning or otherwise not in proper working order, the device is immediately repaired or replaced.

13. INSPECTIONS

- 13.1. The County may with reasonable notice and at any reasonable time enter onto any Property, Building, or Structure of any Owner to inspect for compliance with this By-Law.
- 13.2. When carrying out an inspection pursuant to Section 11 the County may:
- a) require the production of documents or items relevant to the inspection;
 - b) inspect and remove documents or things relevant to the inspection for the purposes of making copies or extracts;
 - c) require any additional information from any person concerning a matter related to the inspection; and
 - d) make examinations or take tests, samples or photographs necessary for the purposes of the inspections.
- 13.3. Where the County, or the Chief Building Official finds that a condition exists on any Property that may allow contamination of the municipal water supply or the contamination of any other potable water system on such Property, including any residential Building or Structure, the County may:
- a) order the Owner to eliminate the condition and in so doing may prescribe the time period for compliance with such Order; or
 - b) shut off the water supply to the Property or any portion thereof until the condition is eliminated.

14. REMOVAL OF BACKFLOW PREVENTION DEVICES PROHIBITED

- 14.1. No person shall remove a Backflow Prevention Device or part thereof after it has been installed, and no Owner of a Building or Structure in which a Backflow Prevention Device is installed shall cause or permit the removal of such device, unless such removal is:
- a) to facilitate the repair of the device and such device is replaced immediately after such repair is carried out; or
 - b) to replace the device with another device that meets or exceeds the provisions of this By-Law.

15. IMPLEMENTATION

- 15.1. For new customers, compliance with the provisions of this By-Law is required prior to the connection to the County Water Systems.

- 15.2. For existing customers, compliance with the provisions of this By-Law is required within three years of the date that the By-Law is approved.
- 15.3. Despite section 15.2, the County may issue formal notification to an Owner that compliance is required. Upon such formal notification the Owner is required to comply with the provisions of this By-Law no later than three months of the date the notification is issued.
- 15.4. Despite section 15.3, if in the opinion of the County, lack of backflow prevention at a Property presents an immediate health hazard to the County Water Systems, the Owner must immediately comply with the provisions of this By-Law or the water service to the Property must be terminated until such time as the Property comes into compliance with the provisions of this By-Law.

16. OFFENCES

16.1. No Person shall:

- a) hinder, obstruct, refuse entry or interrupt, or cause or permit to be hindered or interrupted, any County Employee or any of its authorized County By-Law Officers, contractors, agents, servants or workers in the exercise of any of the powers conferred by this By-Law;
- b) let off or discharge water so that water runs waste or useless from County's Water System;
- c) alter, remove or bypass, or cause or permit to be altered, removed or by-passed any Backflow Prevention Device or County Water Meter;
- d) transfer an agreement for any works related to the connection to, or supply of, water from the Water System without the approval of the County;
- e) without lawful authority, open or close any Hydrant, Valve or chamber connected to the County Water System, or obstruct the free access to any Hydrant, chamber, pipe or Hydrant chamber by placing on or near to it any Building material, rubbish, temporary Structure, or other obstruction of any nature whatsoever;
- f) obstruct access by County Employee to any part of the County's Water System;
- g) deposit any injurious, noxious, noisome or offensive matter and substances that are considered to be toxic as defined in Section 64 of the *Canadian Environmental Protection Act*, 1999 (CEPA 1999) into the water or Water System, or upon ice, if the water is frozen, or in any way foul the water or commit any willful damage or harm to the Water System, the pipes or water, or encourage the same to be done;

- h) alter, cause or permit to be altered any County Water Meter placed upon any service pipe or connected therewith, within or without any Property, so as to lessen or alter in any manner the amount of water consumption registered;
- i) lay or cause or permit to be laid any pipe or main to connect with any pipe or watermain of the Water System, or in any way tap into or obtain the use of the water without the written consent of County;
- j) place or cause to be placed any material including snow, ice, trees, shrubs, plants, fences, berms, or other obstruction or vehicle of any kind whatsoever that obstructs access to a Hydrant;
- k) use water contrary to a water use prohibition or restriction by County or in a manner which is contrary to any direction given by the County;
- l) fail to notify the County immediately of any damage caused to the Water System.

17. ORDERS

- 17.1. If an County By-Law Officer is satisfied that a contravention of this By-Law has occurred, they may make an Order requiring the Person who contravened this By-Law or who caused or permitted the contravention, or the Owner of the Property on which the contravention occurred to discontinue the contravening activity.
- 17.2. An Order under subsection 17.1 shall set out:
- a) reasonable particulars of the contravention adequate to identify the contravention and the location of the Property on which the contravention occurred;
 - b) the date by which there must be compliance with the Order, which may be of immediate effect should the County By-Law Officer determine that the circumstances warrant; and
 - c) the work to be completed which may include but is not limited to requiring that:
 - i. prior to performing any work, all necessary permits or other approvals be applied for and obtained;
 - ii. Cross Connection Inspection Report be completed;
 - iii. Backflow Prevention Device be installed;
 - iv. Backflow Prevention Device be tested;
 - v. Backflow Prevention Device be repaired;

- vi. Backflow Prevention Device be replaced;
 - vii. legible test report be submitted to the County for approval;
 - viii. Backflow Prevention Test Tag be applied to a Backflow Prevention Device;
 - ix. arrangements be made for the shutting off of the supply of water from the Water System until the work ordered to be done is completed;
 - x. Illegal Connection or by-pass be removed; and
 - xi. disconnection of Private Service that is dormant or extraneous.
- 17.3. An Order to discontinue a contravening activity made under subsection 16.1 or an Order to do work made under subsection 17.2 may be served personally or by registered mail to the last known address of:
- a) the Person the County By-Law Officer believes contravened this By-Law; and
 - b) such other Persons affected by the Order as the County By-Law Officer making the Order determines.
- 17.4. Service by registered mail shall be deemed to have taken place five (5) business days after the date of mailing or on the date of personal delivery.
- 17.5. An Officer who is unable to effect service of an Order pursuant to this By-Law shall place a placard containing the Order in a conspicuous place on the Property and the placing of the placard shall be deemed to be sufficient service.
- 17.6. Where service cannot be given in accordance with subsections 17.3 and 17.4, sufficient service is deemed to have taken place when given in accordance with subsection 17.5.
- 17.7. No Person shall remove an Order, notice, direction or placard posted on a Property indicating that it was posted under this By-Law, except a County By-Law Officer.
- 17.8. Where a time frame is set out in an Order for carrying out any action, the County By-Law Officer may extend the time for compliance beyond the established time frame provided such extension is required and is acceptable to the County By-Law Officer.
- 17.9. Where a Person does not comply with a direction or a requirement, including an Order, under this By-Law to do a matter or thing, the County By-Law Officer, with such assistance by others as may be required, may carry out such direction, requirement or Order at the Person's expense.

- 17.10. The County may recover the costs of doing a matter or thing under subsection 17.09 by action or by adding the costs to the tax roll and collecting them in the same manner as Property taxes and such costs shall include an interest rate of fifteen percent commencing on the day the County incurs the costs and ending on the day the costs, including the interest, are paid in full.
- 17.11. A Person who has been served with an Order and who is not satisfied with the terms and conditions of the Order may appeal to County of Oxford by sending a notice of appeal by registered mail or personal delivery to the County within 14 days after being served with the Order.
- 17.12. An appeal under section 17.11 shall be conducted pursuant to the *Statutory Powers and Procedures Act*, R.S.O. 1990, c. S. 22.
- 17.13. An Order under this By-Law that is not appealed within the time referred in section 17.11 shall be deemed to be final.

18. ENFORCEMENT

- 18.1. The enforcement of this By-Law shall be conducted by a County By-Law Officer.
- 18.2. A County By-Law Officer may enter on Premises at any reasonable time for the purpose of carrying out an inspection to determine whether or not the By-Law is complied with.
- 18.3. No Person shall hinder or obstruct, or attempt to hinder or obstruct, any County By-Law Officer exercising a power or performing a duty under this By-Law.
- 18.4. Every Person who is alleged to have contravened any of the provisions of this By-Law, shall identify themselves to a County By-Law Officer upon request, failure to do so shall be deemed to have hindered or obstructed a County By-Law Officer in the execution of their duties.
- 18.5. Without limiting the generality of subsections 17.1 to 18.4, where County has determined, in their sole discretion, that an immediate threat of contamination in the Water System exists that can endanger public health and safety, County may shut off the water supply to the Property or any Building or Structure thereon, until the threat of contamination has been eliminated.

19. PENALTIES

- 19.1. Every Person who contravenes any provision of this By-Law or an Order issued pursuant to this By-Law or every director or officer of a corporation, who knowingly concurs in the contravention by a corporation is guilty of an offence and upon conviction is liable to a fine as provided for by the *Provincial Offences Act*, R.S.O. 1990, c. P. 33, as amended:
 - a) on a first offence, to a fine not more than \$50,000.00;

- b) on a second offence and each subsequent offence, to a fine of not more than \$100,000.00; and
- c) Each day that any provision of this By-Law is contravened is considered a separate offence. In the case of continuing offences, for each day or part of a day that the offence continues, the maximum fine shall be \$10,000.00 per day for every day in contravention and the total of all daily fines for the offence is not limited to \$100,000.00.

19.2 If a Person is convicted of an offence under this By-Law, the court in which the conviction has been entered and any court of competent jurisdiction may, in addition to any other remedy and to any penalty imposed, make an Order prohibiting the continuation or repetition of the offence by the Person convicted.

20. EFFECTIVE DATE

20.1 This Bylaw shall come into effect on **Month, DD, YYYY**.

20.2 Every Owner shall, at the Owner's expense, ensure the completion of an initial Cross Connection Inspection within one year of the date when this By-Law comes into effect or within the time limit specified by the County in a notice delivered to the Owner.

TABLE 4.1: AUTHORIZED FUNCTIONS LIST

ITEM	FUNCTION	Professional Engineer with Tester's License	Certified Water Operator employed by the County with a testers license	*Certified Engineering Technologist with Tester's License	Licensed Master Plumber with Contractor and Tester's License	**Journeyman Plumber with Tester's License	***Apprentice Plumber with Tester's License	Fire System Sprinkler Fitter with a Tester's License	Lawn Irrigation Installer with Tester's License
1	Carry out Cross Connection Inspection Report	√	√	√	√	√			
2	Install, Relocate or Replace Backflow Prevention Device		√		√	√	√		
3	Repair of Backflow Prevention Device	√	√	√	√	√	√		
4	Test Backflow Prevention Device	√	√	√	√	√	√		
5	Items 1,2,3, & 4 above in respect of Fire Protection Systems							√	
6	Item 3 & 4 above in respect of Lawn Sprinkler Systems								√
*		Required to be under the direction of a Licensed Professional Engineer							
**		Required to be employed by a Licensed Plumbing Contractor							
***		Required to be employed by a Licensed Plumbing Contractor and under the direct supervision of a Journeyman Plumber or Master Plumber.							

Annex B (informative)

Guide to the assessment of hazards

Note: This Annex is not a mandatory part of this Standard.

B.1

To protect the municipal and private potable water supply systems from contamination, the authority administering the local cross-connection control program has several options available when determining the location of backflow preventers within industrial, commercial, and residential premises:

- a) The first option is based on a containment theory according to which backflow protection is installed on the incoming service, providing premises isolation that utilizes a minimum number of backflow preventers to isolate the municipal potable water system from the private system, but that does not protect the consumer from the source of contamination via internal cross-connections.
- b) The second option is based on internal protection: backflow preventers are either installed on individual water usages or zones of usage. This approach protects the private potable water system from internal contamination, but does not adequately protect the municipal potable water system, because of the complexity of the plumbing system (e.g., plumbing modifications and occupancy changes) that are inherent in industrial, commercial, or residential developments.
- c) The third option is based on combining premises, zone, and individual protection to ensure that both the public and private potable water supply systems are protected from contamination.

B.2

Tables [B.1](#) and [B.2](#) are a guide to the degree of hazard, but do not provide a complete list of potential hazards.

Table B.1
Guide to degree of hazard — Point of use cross-connections
(See Clauses [5.4.1](#) and [B.2](#).)

Source of pollution or contamination	Degree of hazard
Agricultural chemical (sprayer)	Severe
Air compressor oil cooler	Moderate
Animal watering	Moderate
Aspirator (non-toxic)	Moderate
Aspirator (toxic)	Severe
Autoclave	Severe
Autopsy and mortuary equipment	Severe
Auxiliary water supply	Severe
Baptistery	Moderate
Basin	Moderate

(Continued)

Table B.1 (Continued)

Source of pollution or contamination	Degree of hazard
Bathtub (all)	Moderate
Bedpan washer	Severe
Beverage dispensing equipment (no carbonator)	Minor
Beverage dispensing equipment (with carbonator)	Moderate
Bidet	Moderate to severe
Bottle washer	Moderate to severe
Bread making equipment	Minor to moderate
Canopy washers	Severe
Carwash	Severe
Chemical feed tank	Severe
Chiller tank (closed, no chemicals)	Moderate to severe
Chiller tank (open or with chemicals)	Severe
Chlorinator	Severe
Clothes washer (residential)	Moderate
Condensate tank	Severe
Condensate tank (top feed)	Moderate
Cooking kettle (for food only)	Minor
Cooling condenser, AC unit (solenoid downstream)	Severe
Cooling condenser, AC unit (solenoid upstream)	Minor
Cooling tower	Severe
Cuspidor	Severe
De-aerator (bottom feed)	Severe
De-aerator (top feed)	Moderate
Degreasing equipment	Severe
Dental delivery system (water supply)	Minor
Dental vacuum pump	Severe
Detergent dispenser	Severe
Dipper well in ice cream parlour or restaurant	Moderate
Dish rinse unit with flex hose	Moderate
Dishwasher (commercial)	Moderate

(Continued)

Table B.1 (Continued)

Source of pollution or contamination	Degree of hazard
Dishwasher (residential)	Moderate
Distiller	Minor
Dockside marine facility	Severe
Emergency eyewash/shower	Eyewash/shower to be installed upstream of the zone isolation
Flexible shower head with hose	Minor to severe
Floor drain with flushing rim	Severe
Flush tank	Moderate
Flushing equipment device	Severe
Flushometer	Severe
Fountain, ornamental	Moderate to severe
Fountain, ornamental (chemicals added)	Severe
Fume hood	Severe
Garbage can washer	Severe
Garbage disposal unit	Severe
Heat exchanger (see Annex F and Clause 5.10)	Minor to severe
Hose connection (other than residential)	Moderate to severe
Hose connection (residential)	Minor to moderate
Hospital (active treatment area)	Severe
Hospital (non-treatment area)	Moderate
Hot tub or spa	Moderate
Hot water systems (all types — direct heating of water supply) (see Annex F and Clause 5.10)	Minor
Humidifier	Moderate
Humidifier with sump (chemicals added)	Severe
Hydrotherapy bath	Moderate
Ice machine for commercial restaurant	Moderate to severe
Ice making equipment for sports arena	Severe
Industrial fluid system	Severe
Irrigation system (chemicals injected)	Severe
Irrigation system (no chemicals injected)	Moderate

(Continued)

Table B.1 (Continued)

Source of pollution or contamination	Degree of hazard
Lab bench equipment (non-toxic)	Minor
Lab bench equipment (toxic)	Severe
Lab faucet	Moderate to severe
Laboratory	Severe
Laundry machine	Moderate
Lavatory	Moderate
Lethal substance	Severe
Livestock equipment	Severe
Mixing tee with steam and water	Moderate
Mortuary or morgue	Severe
Non-potable water	Severe
Optician or ophthalmology equipment	Minor to moderate
Pedicure chair	Moderate to severe
Photo lab sink	Severe
Pipette washer	Severe
Piping to chemical dispensers	Minor to severe
Plating tank	Severe
Potato peeler	Moderate
Poultry barn	Severe
Pressure washer (no aspirator)	Minor
Pressure washer (with aspirator)	Severe
Private fire hydrants	Moderate
Private water source	Severe
Pump primer line (non-toxic)	Moderate
Pump primer line (toxic)	Severe
Radiator flushing equipment	Severe
Restricted area	Severe
Residential reverse osmosis equipment	Minor
Reverse osmosis equipment with backwashing	Moderate
Reverse osmosis equipment with chemical cleaning	Severe

(Continued)

Table B.1 (Continued)

Source of pollution or contamination	Degree of hazard
Serrated faucets	Severe
Sewage ejectors	Severe
Sewage pump	Severe
Shampoo sinks	Moderate
Sizing vats	Severe
Solar hot water systems (residential — no chemicals added) (see Annex F and Clause 5.10)	Minor to moderate
Solar hot water systems (residential — relatively harmless heat-transfer fluid) (see Annexes F , G and Clause 5.10)	Minor to moderate
Solar hot water systems (residential — toxic heat-transfer fluid) (see Annexes F , G and Clause 5.10)	Severe
Solar hot water systems (commercial — single wall heat exchangers) (see Annex F and Clause 5.10)	Moderate to severe
Solar hot water systems (all types — double walled heat exchangers) (see Annex F and Clause 5.10)	Minor
Solar hot water systems (make-up water connection to the heat-transfer fluid piping loop) (see Annex F and Clause 5.10)	Minor to severe
Solution tanks	Severe
Spa or hot tub	Moderate
Specimen tank	Severe
Steam boiler	Severe
Steam cleaner	Moderate
Steam generator	Moderate
Steam table	Minor to moderate
Sterilizer (condensate cooling only)	Moderate
Sterilizer (connection into chamber)	Severe
Still	Minor
Swimming pool (direct connection)	Moderate
Swimming pool (other than residential)	Moderate
Swimming pool (residential)	Minor
Swimming pool makeup tank	Moderate
Teeth cleaning equipment (veterinary type)	Moderate
Trap primer	Severe

(Continued)

Table B.1 (Concluded)

Source of pollution or contamination	Degree of hazard
Vending machine with no carbonators	Minor
Wash rack	Severe
Wash tank	Moderate
Wash tanks (toxic)	Severe
Water closet (flushometer type)	Moderate
Water closet (tank type)	Moderate
Water hauling equipment (see Annex C)	Severe
Water softener (residential)	Minor
Water softener drain (residential)	Moderate
Wok table (for Oriental cooking) with submerged inlet	Moderate
X-ray equipment	Severe

Table B.2
Guide to degree of hazard — Premises
 (See Clauses [5.3.1.2](#), [5.3.4.2](#), [5.3.4.3](#), and [B.2](#).)

Type of building or facility	Degree of hazard
Airport	Moderate
Animal feed lot	Moderate to severe
Animal stock yard	Moderate to severe
Apartment building	Moderate
Aquaculture farm	Severe
Aquarium (public)	Severe
Arena	Moderate
Asphalt plant	Severe
Auto body shop	Severe
Auto dealership	Moderate
Automotive repair	Severe
Automotive repair shop	Severe
Beverage processing plant (includes distillery and brewery)	Severe
Blood clinic	Severe
Campsite	Moderate

(Continued)

Table B.2 (Continued)

Type of building or facility	Degree of hazard
Campsite with RV hook-ups or dump-stations	Severe
Carwash	Severe
Chemical plant	Severe
Church	Minor to moderate
College	Moderate
Commercial premises	Moderate to severe
Concrete plant	Severe
Dental office	Moderate
Dental surgery facility	Severe
Dock and marine facility	Severe
Dry cleaning plant	Severe
Duplex housing with shared service	Minor
Dye plant	Severe
Exhibition ground	Severe
Farm	Moderate to severe
Film processing facility	Severe
Fire station	Moderate to severe
Fish farms or hatchery	Severe
Food processing plant	Severe
Fuel dispensing facility	Moderate
Funeral home	Moderate to severe
Garbage transfer facility	Severe
Golf course	Moderate to severe
Grocer	Moderate
Hair salon	Moderate
Hospital	Severe
Hotel	Moderate
Industrial and institutional premises	Moderate to severe
Kennel	Moderate
Laboratory	Severe
Laundry (commercial)	Severe

(Continued)

Table B.2 (Continued)

Type of building or facility	Degree of hazard
Laundry (commercial, coin-operated)	Moderate
Manufacturing plant (not specified)	Moderate
Marina (pleasure-boat)	Moderate to severe
Meat packing plant	Severe
Medical clinic (non surgical)	Moderate
Medical clinic (surgical)	Severe
Milk processing plant	Severe
Mining facility	Severe
Mobile home park	Moderate
Mortuary or morgue	Severe
Motel	Moderate
Motorcycle repair facility	Severe
Multi-service interconnected facility	Moderate
Multi-tenant single-service facility	Moderate
Nursing home	Moderate
Office building	Moderate
Oil refinery	Severe
Paint manufacturing plant	Severe
Penitentiary	Moderate
Petroleum processing or storage facility	Severe
Pharmaceutical manufacturing facility	Severe
Photo processing facility	Severe
Plants using radioactive material	Severe
Plastic manufacturing plant	Severe
Plating shop and plant	Severe
Poultry farm	Severe
Power generating facility	Severe
Premises where access is prohibited or restricted	Severe
Printing plant	Severe
Pulp and/or paper plant	Severe

(Continued)

Table B.2 (Concluded)

Type of building or facility	Degree of hazard
Radiator shop	Severe
Recycling facility	Severe
Refinery, petroleum processing	Severe
Rendering facility	Severe
Research building	Severe
Residential premises	Minor
Restaurant	Moderate
School (elementary, junior high, and senior high)	Moderate
Sewage dump station	Severe
Sewage treatment plant	Severe
Shopping mall	Moderate
Steam plant	Severe
Steel manufacturing plant	Severe
Swimming pool facility	Moderate
Townhouse (shared services)	Minor
Trackside facility for trains	Severe
University	Moderate to severe
Veterinary clinic	Moderate to severe
Waste disposal plant	Moderate to severe
Wastewater facility	Severe
Wastewater pump station	Severe
Wastewater treatment plant	Severe
Water filling station	Severe
Water park	Moderate
Water treatment plant	Severe
Water treatment pump station	Severe
Zoo	Severe

Backflow Prevention Implementation Plan

- 1) Establish Program Authority and Administrative Responsibility
 - a) The establishment and County Council approval of a Backflow Prevention By-law
 - b) Administration of the County Backflow Prevention Program and the enforcement of the Backflow By-law through Oxford County Public Works under the Supervisor of Water and Wastewater Technical Services.

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law

- 2) Establish Standard and Policy
 - a) A current standard proposed in Schedule A of draft Backflow Prevention By-law - County of Oxford Cross Connection Control and Backflow Prevention Standards which will require additional review to finalize
 - b) Development of a County Backflow Bylaw Prevention Policy that will provide general details as it relates to backflow preventer selection, installation, testing and maintenance practices and procedures

Status: In-Progress

- The administration of the County Backflow Prevention Program will be developed and detailed in a County Policy

- 3) Evaluate Financial Implications, Establish Budget Structure and Identify Source of Funding
 - a) The development of the Backflow Program will be funded through current rate structure and operating budget. Additional financial review will be required to properly transition the program to fee based cost recovery at the initial implementation stage.
 - b) The County will evaluate the benefit of a phased in approach based on the degree of hazard.

Status: Planned

- 4) Review Regulations and Standards for Backflow Prevention Devices
 - a) Reviewed applicable legislation and standards including, but limited to the following:
 - i) *Building Code Act, 1992*
 - ii) *Safe Drinking Water Act, 2002*
 - iii) *Municipal Act, 2001*
 - iv) *Fire Protection and Prevention Act, 1997*
 - b) Reviewed and incorporated requirements of CSA B64 Standard into Backflow By-law Appendix A and County Policy

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, based on the regulations and standards indicated above.
- The administration of the County Backflow Prevention Program will be developed and detailed in a County Policy

- 5) Establish a Database Management System
 - a) Evaluation and selection of platform that will track facilities assessed and inspected, associated inspection records and device records, inventory of backflow prevention devices, issued correspondence, etc.
 - b) Developing and maintaining a roster of certified or registered companies for completing testing and inspections
 - c) Evaluation and review of the County's current work order system (i.e. Cartegraph) as a platform for the Backflow Prevention Program

Status: Planned

- 6) Develop a Public Consultation, Education and Communication Campaign
 - a) Identification of stakeholders (ICI, residents, municipal staff, professional, trade and technical groups, etc.)
 - b) Public consultation with Large Water Users
 - c) Consultation with Local Authorities of Area Municipalities
 - d) Development of material and content to individual stakeholder groups
 - e) Development of awareness and educational program
 - f) Development of fact sheets, presentations, frequent ask questions, and resources material
 - g) Development and updating of information on the County website

Status: Planned

- 7) Coordination with Area Municipalities
 - a) The development, implementation, and maintenance of a Backflow Prevention Program requires co-ordination with many local authorities including business improvement areas, building, plumbing, public works and planning officials at the local Area Municipalities

Status: Planned

- 8) Development of Standard Correspondence and Content
 - a) Development of backflow forms and surveys including, but not limited to the following:
 - i) Letter of introduction to the program
 - ii) Notice of requirement for installation of backflow devices
 - iii) Notice of inspection and testing requirements
 - iv) Notice of fines and penalties
 - v) Notice of renewals and certification updates
 - vi) Cross connection inspection reports and surveys
 - vii) Backflow test reports

Status: In-Progress

- County staff have developed draft cross connection inspection reports and surveys, and backflow test reports as part of the draft Backflow Prevention By-law.

- 9) Requirements for a Survey and Hazard Assessment
 - a) Identify and evaluate requirements for survey and hazard assessment in the Backflow Prevention Program which is outlined in the Backflow By-law Appendix A standards

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, which identifies

requirements for surveys and hazard assessments.

10) Establishment of Training, Inspection and Testing Protocols

- a) Development of standard operating procedures for County program administration including, notification protocols, maintenance and reviewing records and forms, review of testers/surveyors licenses and accreditation, conducting audits, inspections, and bylaw enforcement
- b) Development of inspections, certification and testing requirements including timelines will be outlined in the Backflow By-law Appendix A standards and County Backflow Bylaw Prevention Policy
- c) Develop and maintain a publically posted third party roster of "Qualified Testers" to install, service and test backflow prevention devices and appurtenances

Status: In-Progress

- County staff have developed a draft Backflow Prevention By-law, which identifies inspections, certification and testing requirements

11) Development of a Backflow Incident Response Plan

- a) Develop and incorporate backflow incidents into the Water Services Emergency Response Plan within the County's drinking water QMS
- b) Evaluate the potential of creating a specific backflow incident response procedure which would include sampling, flushing, communication and documentation requirements
- c) Develop and provide training to internal and external stakeholders to ensure appropriate and timely actions are taken in response to an incident

Status: Planned

12) Establish Enforcement Strategies

- a) Development of inspections, reporting, installation, certification and testing requirements including timelines will be outlined in the Backflow By-law Appendix A standards and County Backflow Bylaw Prevention Policy
- b) Development of notices, fine and penalties will be outlined in the Backflow By-law Appendix A standards and County Backflow Bylaw Prevention Policy
- c) Development of enforcement strategies which will be incorporated as part of Section 10 - Establishment of Training, Inspection and Testing Protocols

Status: In-Progress

- County staff have developed draft cross connection inspection reports and surveys, and backflow test reports which are identified in the draft Backflow Prevention By-law.

13) Implement Quality Control and Assurance Strategies

- a) Development of quality control and assurance strategies which will be incorporated as part of Section 10 - Establishment of Training, Inspection and Testing Protocols, which will include but not limited to the following:
 - i) Review of backflow preventer testers' performance, assessment and device test results
 - ii) Review of certification and licensing requirements
- b) Development and tracking of level of service framework as part of the County Asset Management Plan

- c) Development of a report that summarizes the annual performance of the County's Backflow Prevention Program to County council

Status: Planned

To: Warden and Members of County Council

From: Director of Public Works

2022-2032 Renewable Energy Action Plan

RECOMMENDATION

1. That Oxford County Council support, in principle, the related initiatives outlined within the 2022-2032 *Renewable Energy Action Plan* which serve to support the achievement of the previously adopted 100% Renewable Energy Plan targets, recognizing that implementation will be considered by Council as part of annual Business Plan and Budget approval processes.

REPORT HIGHLIGHTS

- The purpose of this report is to seek Council support to proceed with the proposed implementation of the 2022-2032 *Renewable Energy Action Plan (REAP)* subject to annual Business Plan and Budget approval review processes over the same term.
- The 2022-2032 *REAP* will expand upon Oxford's 22 solar photovoltaic (PV) systems through a proposed multi-year capital implementation plan (23 projects) comprised of additional solar PV system, geothermal / air source heat pump, heat recovery and wood pellet boiler technology applications.
- Through the proposed implementation of the projects identified in the 2022-2032 *REAP*, it is anticipated that by 2032 County facility greenhouse gas (GHG) levels can be reduced by 34% (compared with 2015 levels) and the renewable energy mix can be increased to a total of 21.4% of projected annual energy consumption.

Implementation Points

Upon adoption of the 2022-2032 *REAP*, staff will proceed with the implementation of the identified projects in order to meet the goals outlined in the Plan and as permitted through approved annual budgets.

Financial Impact

The 2022-2032 *REAP* covers a total of eleven annual budgets, with the first year having already been approved through the 2022 Business Plan and Budget. Table 1 summarizes the projected annual capital commitment outlined in the Plan as well as the anticipated ongoing cumulative operational impact year over year.

Table 1 – Summary of Annual Financial Impacts

Year	Capital Cost (Future Value)	Cumulative Operational Impact (Future Value)
2022	\$135,000	\$0
2023	899,300	(45,052)
2024	1,315,290	(77,853)
2025	7,415,451	(154,523)
2026	968,989	(188,449)
2027	1,829,310	(227,844)
2028	1,589,876	(271,969)
2029	709,595	(337,354)
2030	860,136	(389,078)
2031	896,319	(430,611)
2032	657,301	(451,086)
TOTAL	\$17,276,567	(\$2,573,819)

Note: Future Value costs based on present value cost plus annual inflation (2%).
 Assumes electrical and biomass fuel rate increase of 3%.
 Assumes natural gas rate increase of 5%.
 Assumes federal carbon tax increase of 3% annually.

Overall, the projects identified in the 2022-2032 *REAP* will cost \$17.3 million (FV) with overall operational cost avoidances of \$15.8 million. The overall operational cost avoidance associated with these projects is the sum of each year’s future value annual cash flow balance (utilities cost and maintenance cost avoidances) between 2023 to 2050. Accordingly, these proposed projects are projected to pay for themselves within their average useful service life (30 years), however this assumption does not take into account the cost of debt servicing as the Facilities Reserve has not established a funding source for these projects.

Further to the above, County staff will continue to seek funding opportunities to support the implementation of this plan in order to reduce the reliance on debt funding and will consider additional funding to build capacity in the Facilities Reserve to fund these projects. An example of potential funding opportunities was introduced in Report No. *PW 2022-15*, in which County Council approved staff to submit an application for the *Low Carbon Economy Challenge*. If successful, this funding will cover up to 40% of the project costs for the Ground Source Heat Pump (GSHP) project at Woodingford Lodge Woodstock.

This report is not requesting budget allocation approval or commitment. Annual budgets related to design and implementation of projects identified in this plan will be validated and submitted for approval as part of the associated annual Business Plan and Budget each year.







Communications

Through Report No. [PW 2021-11](#), the evaluation criteria and weighting system to identify select renewable energy implementation projects was approved by Oxford County Council. This Council Report document was shared with Smart Energy Oxford (SEO) for information and comment on April 15, 2021. The draft REAP was then further developed over time and an overview of the draft plan was presented to SEO on July 28, 2022.

Following Council deliberation, Report No. PW 2022-37 will also be shared with the Public Works division, Asset Management, Area Municipalities, Future Oxford and SEO as information about Oxford County’s progress on the goals of the *100% RE Plan* and the *Future Oxford Community Sustainability Plan*.

The release of the 2022-2032 *REAP* will also be promoted to the community through *Council This Week*, social media and on the County’s “Reports & Publications” web page. Longer term, the County will seek opportunities to profile this work and its inter-connectedness to the County’s other sustainability goals.

Strategic Plan (2020-2022)

					
WORKS WELL TOGETHER	WELL CONNECTED	SHAPES THE FUTURE	INFORMS & ENGAGES	PERFORMS & DELIVERS	POSITIVE IMPACT
		3.iii.	4.ii.	5.ii.	

DISCUSSION

Background

On June 27, 2018, County Council adopted the *100% RE Plan*, which lays out a strategic approach to achieving the goal of 100% renewable energy by 2050. As part of this plan, the County organization has a large role to play, both as a contributor and as a leader. While Oxford County actively contributes towards achievement of the 100% RE goal, it is important to note that the community also plays a large role in contributing to the *100% RE Plan*.

Further to this Plan, on August 14, 2019, County Council approved Report No. [PW 2019-33](#), which outlined the County’s updated *Energy Management Plan* (EMP) for 2019. Part of this EMP included recommendations for 51 energy efficiency measures along with 13 qualitative goals to maintain Oxford County’s incremental path towards 100% renewable energy (RE) by 2050. One of these qualitative goals was to develop a long term renewable energy plan in order to create an organized approach to progress the County’s renewable energy portfolio.

Public Works staff began investigation work in 2020 to create a long term renewable energy plan, with the goal of increasing the renewable energy portfolio and reducing GHG emissions through energy conversion.

On April 14, 2021, County Council approved Report No. PW 2021-11, which outlined criteria and a weighting system for evaluating renewable energy projects that had been identified in the investigation process. This approval allowed staff to proceed with project selection based on a series of criteria and scoring weightings relating to GHG, change in natural gas consumption, renewable energy mix, change in electricity consumption, change in annual utility costs, capital costs and costs to reduce GHG emissions (on a per tonne basis).

Comments

Since 2011, the County has been progressively working to implement renewable energy systems and improve energy utilization in an effort to lower operating costs and improve its overall sustainability. With the adoption of the *100% RE Plan*, the County's sustainability work became part of supporting the overall community goals. The County already had the *Energy Management Plan* and *Green Fleet Plan* to support the community performance, but it was determined that a third plan was needed to investigate, plan and implement renewable energy projects that focused on generation and conversion. The *REAP* works with the two existing County plans to support the *100% RE Plan* in conjunction with a number of other community partners and resources as outlined in Figure 1.



Figure 2: 100% Renewable Energy Plan Contributors

To date, the County organization has implemented a total of 19 solar photovoltaic (PV) systems through the FIT, MicroFIT or Net-Metering programs. It is anticipated that an additional three Net-Meter systems (budgeted in 2021) will be completed and brought online in 2022, bringing the total number of solar PV systems to 22. Figure 2 outlines how the total system capacity has grown, as well as the total cumulative generation since 2011.

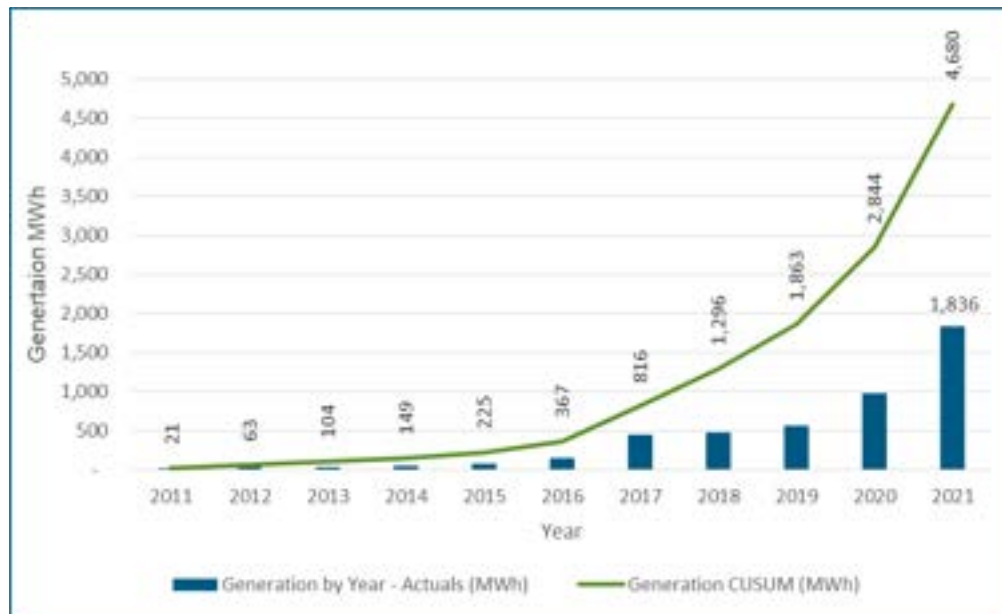


Figure 2: Solar PV System Growth at Municipal Facilities

A major driver for the development of the *REAP* was to better understand the County's expansion options and develop a longer-term strategy for deployment. Further to this, the renewable energy systems that have been implemented to date largely focus on solar PV systems, which will only progress the organization's goals so far. As part of the overall *REAP* development, alternate technologies were explored for viability, including:

- Solar PV (rooftop)
- Solar PV (ground mount)
- Solar PV (parking lot canopy)
- Solar Thermal for Domestic Hot Water
- Solar Thermal for Ventilation Air
- Geothermal Heat Pumps for Space Heating and Cooling
- Air Source Heat Pumps for Space Heating and Cooling
- Air Source Heat Pumps for Domestic Hot Water
- Rooftop Units with Heat Pumps
- Wind
- Biogas
- Wood Pellet Boiler
- Waste Heat Recovery
- Small Hydro

Through the analysis of the above technologies at a number of County-owned sites, a final list of 23 technology projects was identified for inclusion in the 2022-2032 REAP. Projects were selected and scheduled based on:

- Cost of deployment (historical budget targets for renewable energy projects have been around \$1M/year, so this was taken into consideration when grouping projects where applicable),
- Testing small-scale deployment for less-familiar technologies as pilot projects earlier in the plan,
- Balancing solar PV growth with alternate technology deployment to diversify the portfolio, and
- Balancing high-performing projects with lower-performing projects to achieve results.

The full 2022-2023 REAP is included as Attachment 1 to this report.

Performance Targets

The 100% RE Plan outlines community performance targets (refer to Table 2) that are being used as a guide by Oxford County and the community.

Table 2 – Summary of 100% RE Targets

Year	Total Reduction of GHG Emissions	Renewable Energy Mix* Target	Renewable Energy Purchased Mix Target
2015	-	-	5.5%
2020	3.2%	5.3%	6.1%
2025	14.1%	11.7%	7.3%
2030	25.0%	19.5%	8.7%
2035	36.0%	29.1%	10.4%
2040	46.9%	41.4%	12.7%
2045	57.8%	57.8%	15.6%
2050	68.7%	80.3%	19.7%

**Renewable Energy Mix is the amount of RE generation/harvesting versus total consumption shown as a percentage.*

As outlined in the 2022-2032 REAP, the implementation of the identified projects is projected to achieve the following performance targets for facility-related GHG reduction and total renewable energy mix as outlined in Tables 3 and 4 respectively.

Table 3 – Cumulative GHG Reduction Target

Year	Annual GHG Reduction (tCO ₂ e/yr)	Cumulative GHG Reduction (tCO ₂ e/yr)	% Reduction from 2015 Baseline (4,044 tCO ₂ e)	% Reduction from 2019 Baseline (3,648 tCO ₂ e)
2022	0	0	0.0%	0.0%
2023	51	51	1.3%	1.4%
2024	318	369	9.1%	10.1%
2025	713	1082	26.8%	29.7%
2026	28	1110	27.4%	30.4%
2027	71	1181	29.2%	32.4%
2028	76	1257	31.1%	34.4%
2029	6	1262	31.2%	34.6%
2030	29	1292	31.9%	35.4%
2031	21	1313	32.5%	36.0%
2032	78	1391	34.4%	38.1%
Totals	1391		34.4%	38.1%

In Table 3, the *REAP* reduction targets are shown in comparison to the 2015 baseline (*100% RE Plan*) and to the 2019 baseline (which takes into account conservation work that has been implemented through the 2019 *EMP*). Since the *100% RE Plan* targets are not simply about implementing renewable energy systems, but also about reduced consumption and conservation, it is important to take all of these integrated measures into account in order to maximize performance targets.

Table 4 – Total Energy and RE Mix

Year	Total Energy Consumption (eMWh/yr)*	RE Utilization (eMWh/yr)	RE Mix %**
2022	39,707	1,781	4.5%
2023	39,840	2,137	5.4%
2024	39,800	3,928	9.9%
2025	40,132	7,144	17.8%
2026	40,559	7,393	18.2%
2027	41,082	7,825	19.0%
2028	41,594	8,254	19.8%
2029	42,035	8,444	20.1%
2030	42,480	8,640	20.3%
2031	42,950	8,868	20.6%
2032	43,404	9,293	21.4%

* Total Energy Consumption is based on 2019 actuals plus 1% Year over Year Growth and energy conservation measures identified in the 2019 *EMP*.

** RE Mix % is based on RE Utilization over Total Energy Consumption.

Table 4 identifies the quantity of renewable energy generated or harvested on an annual basis through the implementation of this plan. This number is then compared to the estimated energy consumption across all County facilities to determine the renewable energy mix percentage. Energy estimates are based on 2019 actuals to exclude COVID-19 impacts, plus a 1% annual increase, while also taking into account projected impacts from the 2019 *EMP*. This is a conservative approach as the 2019 *EMP* is only projected to 2024, and subsequent plans will produce further overall reductions in consumption.

As indicated in Tables 3 and 4, the current plan is projected to achieve both the 100% RE Plan GHG reduction and renewable energy mix 2030 targets

It is important to note that this industry is rapidly changing and in order to achieve some of the identified targets, regulatory restrictions related to Virtual Net-Metering and other constraints will need to continue to be advocated for in order to expand potential deployment capacity. County staff will continue to look for opportunities to provide feedback and influence regulatory decision making.

Conclusions

Along with the 2019 *Energy Management Plan* and 2021-2025 *Green Fleet Plan*, implementation of the 2022-2032 *REAP* will provide significant ongoing opportunities for the County to reduce its environmental footprint and support climate change mitigation, all in alignment with the County's ultimate goal of reaching 100% renewable energy by 2050.

The 2022-2032 *REAP* seeks to reduce facility GHG emissions by 34% as compared to the 2015 baseline, and increase the total renewable energy mix to 21.4% of projected total energy consumption in 2032.

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ATTACHMENT

Attachment 1: *2022-2032 Renewable Energy Action Plan*



Renewable Energy Action Plan

CONTENTS

Preface	4
1 Overview	4
1.1 About Oxford County.....	4
1.2 Purpose of the Plan.....	4
1.3 Relationship to Oxford County's Strategic Plan	7
1.4 Goals and Objectives	7
1.5 Planning and Execution Strategy.....	8
2 Plan Development	9
2.1 Site Screening.....	9
2.2 Evaluation Development	10
2.3 Project Selection & Prioritization.....	10
3 Project Summaries	14
3.1 – 364 Athlone Solar PV.....	14
3.2 – Thamesford WWTP Solar PV	15
3.3 – WDSK WWTP Biogas Utilization	15
3.4 – 59 George Johnson Wood Pellet Boilers.....	16
3.5 – 135 Carroll Solar PV	17
3.6 – 300 Juliana GSHP.....	18
3.7 – Woodstock Patrol Wood Pellet Boilers	19
3.8 – Highland Patrol Solar PV	19
3.9 – 16 George Solar PV	19
3.10 – 415 Hunter GSHP	20
3.11 – 410 Buller GSHP	20
3.12 – Ingersoll WWTP Heat Recovery	21
3.13 – 82 Finkle Solar PV	21
3.14 – Springford Patrol Solar PV.....	22
3.15 – Woodstock Patrol Solar PV.....	22
3.16 – Drumbo Patrol Solar PV.....	23
3.17 – Springford Patrol Wood Pellet Boilers	23
3.18 – 742 Pavey Solar PV	25
3.19 – 377 Mill ASHP	25
3.20 – 70 Maria Solar PV	26
3.21 – 221 Thames Solar PV	26
3.22 – 742 Pavey Wood Pellet Boilers	27
3.23 – OCWMF Biogas Utilization Study.....	27
4 Target Performance	28
4.1 – GHG Reduction	28
4.2 – Renewable Energy Mix.....	29

5	Financial	33
6	Plan Updates	35
7	Approval	37

FIGURES

Figure 1	100% RE Plan Contributors.....	5
Figure 2	Solar PV Generation - Actuals.....	6
Figure 3	Total Non-Renewable Energy Reduction by Technology	13
Figure 4	GHG Reduction by Year and Cumulative	28
Figure 5	Renewable Energy Utilization Increase & Cumulative.....	31
Figure 6	RE versus NON-RE Energy Consumption Mix	31
Figure 7	NPV and Equity Balance (with Grant Funding)	34
Figure 8	NPV and Equity Balance (No Grant Funding).....	35
Figure 9	Energy Usage & RE Mix to 2050.....	36
Figure 10	Energy Usage & RE Mix % to 2050	36

TABLES

Table 1	2011 to 2021 Solar PV Generation.....	6
Table 2	100% RE Plan Targets (for REAP).....	8
Table 3	REAP Proposed Implementation	12
Table 4	Cumulative GHG Reduction Target.....	28
Table 5	Solar PV Generation and Electrical Mix ...	29
Table 6	Projected Total RE Mix	30
Table 7	Annual Financial Impacts.....	33

PREFACE

On June 24, 2015, Oxford County Council unanimously passed the goal of 100% renewable energy (RE) by 2050, detailed in the *100% RE Plan* for the County community (all energy users within the County's geographical boundary). Since that date, County Council has thoroughly committed itself to sustainability with the addition of the Zero Waste and Zero Poverty initiatives. This *Renewable Energy Action Plan* (hereafter the *REAP*) aims to outline a road map for how the County, as an organization, will contribute to the 100% RE community goal within its own facilities portfolio. The goals of this plan are to reduce energy dependence and greenhouse gas (GHG) emission sources, as well as increase renewable energy generation on property owned and operated by the Oxford County organization. While the *100% RE Plan* is for the broad community, the County organization is an important part of that plan, not only as a contributor, but as a leader in demonstrating how it can achieve its own sustainability goals and share this knowledge with other organizations both within and outside of the County boundary.

1 OVERVIEW

1.1 About Oxford County

Oxford County is an upper-tier municipality located in southwestern Ontario and home to approximately 125,000 residents. The services provided by the County include, but are not limited to, engineering services, facilities, fleet, housing, libraries, planning, roads, waste management, water & wastewater collection & treatment, paramedicine and long-term care.

1.2 Purpose of the Plan

While County Council initially adopted the *100% RE Plan* in 2015, the County organization began investing in and installing renewable energy systems in 2011. These projects began with small-scale solar photovoltaic (PV) installations that were under the provincial Feed-In Tariff (FIT and Micro-FIT) program, which began in 2009 as a means of promoting greater use of renewable energy systems. Since then, there has been a gradual increase in the County's renewable energy portfolio, which then grew significantly in 2015 after County Council adopted the *100% RE Plan*.

The *100% RE Plan* is a community-wide initiative in which the County organization does not lead but has a major role to play. This role is not only as a contributor to addressing the energy consumption and generation potential of the County's own facility portfolio but also to be a leader within the community and demonstrate active support for the community goal. As shown in Figure 1 below, the *100% RE Plan* has a number of contributor groups, including individual residents, organization groups, businesses residing in the community and governments, which include the lower-tier municipalities, as well as the County organization. To date, the County organization has drafted and released an *Energy Management Plan (EMP)* and *Green Fleet Plan (GFP)*, which both lay out initiatives and objectives that contribute toward the County organization's goals and feed into the efforts to advance the *100% RE Plan*. While the County

has continued to advance its renewable energy portfolio, it has not developed a longer-term roadmap outlining what that advancement looks like into the future. The purpose of this *REAP* is to outline opportunities to advance the County’s renewable energy profile through increases in renewable energy utilization, by way of generation and harvesting, as well as energy conversions which in turn will reduce overall GHG emissions in the County’s facility portfolio. The *REAP*, along with the *EMP* – which primarily focuses on energy conservation – and the *GFP* – which focuses on fleet energy consumption and emissions – holistically lay the groundwork for the County organization’s contribution to the community *100% RE Plan*.



Figure 1 – 100% RE Plan Contributors

Further to supporting Oxford County’s community goals, these three plans collectively support the federal government’s **mandate to achieve net-zero emissions by 2050**. The *Canadian Net-Zero Emissions Accountability Act*, which became law on June 29, 2021, enshrines in legislation Canada’s commitment to achieving net-zero emissions by 2050. As such, this *REAP* is a step towards supporting the overall emissions goals for the country as a whole.

To date, the County’s deployed renewable energy systems have mainly been solar PV-type, which makes up 98% of the County’s portfolio, with the remainder being solar thermal. Table 1 below outlines how the County’s solar PV portfolio has grown since 2011. In total, the County has deployed systems at 18 different sites with a total capacity rating of 1,502 kW. Further to that, the total PV system generation baseline in 2021 was estimated at 1,781 MWh, and the actual generation was 1,836 MWh. Figure 2 shows that the cumulative generation from 2011 to the end of 2021 has been 4,680 MWh.

Table 1 – Municipal Solar PV Generation (2011 to 2021)

	Added Capacity (kW)	Added Generation Baseline (MWh)
2011	19	23
2012	10	12
2014	30	36
2016	53	63
2017	280	332
2019	120	142
2020	757	898
2021	233	276
Cumulative	1,502	1,781

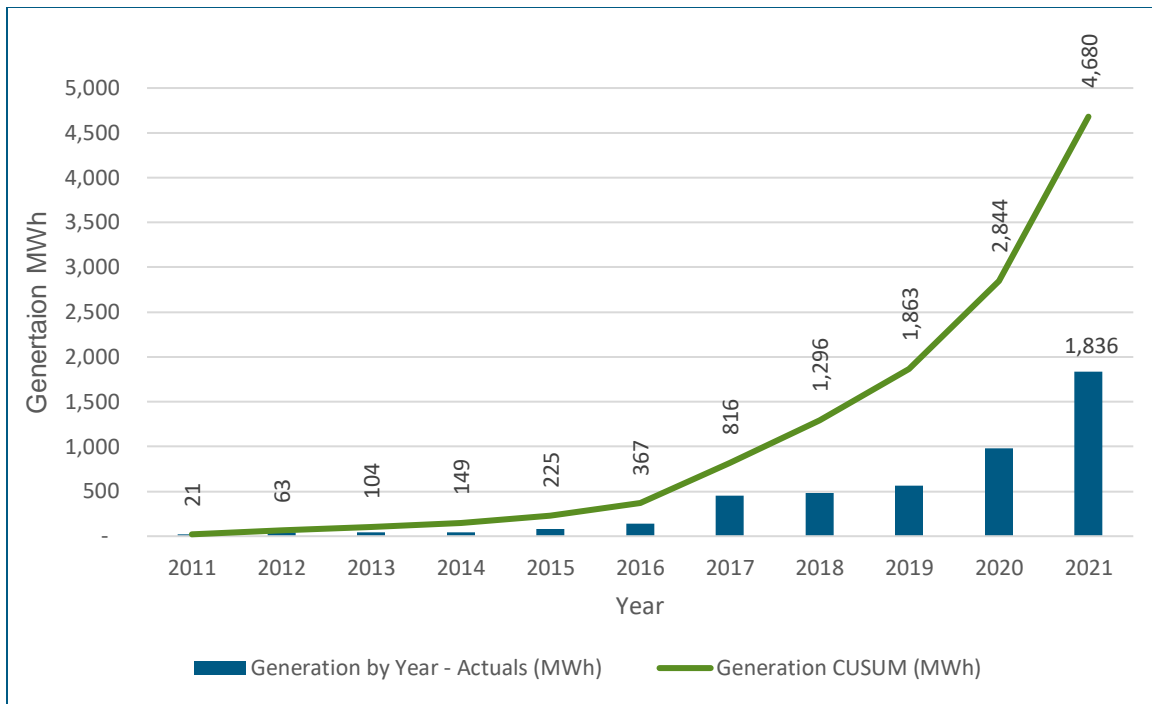


Figure 1 – Municipal Solar PV Generation

While the County organization has become very familiar with the technology and effort to install and operate this type of technology, it is understood that solar PV alone can only progress the 100% RE goals so far. A core objective of this *REAP* is to expand to other types of renewable energy technologies to explore additional implementation options. At the same time, the *REAP* provides a roadmap to grow the solar PV portfolio that the County organization has established to date.

1.3 Relationship to Oxford County's Strategic Plan

The *REAP* meets the County's initiative as set out in the following sections of the *Strategic Plan 2020-2022*:

3. *iii. A County that Thinks Ahead and Wisely Shapes the Future* - Demonstrated commitment to sustainability by:
 - *Ensuring that all significant decisions are informed by assessing all options with regard to the community, economic and environmental implications including:*
 - o *Life cycle costs and benefit/costs, including debt, tax and reserve levels and implications*
 - o *Responsible environmental leadership and stewardship*
4. *ii. A County that Informs and Engages* - Inform the public about County programs, services and activities through planned communication that includes:
 - *A County Report Card that engages and informs our community and celebrates our successes and our history*
5. *ii. A County that Performs and Delivers Results* - Deliver exceptional services by:
 - *Conducting regular service reviews to ensure delivery effectiveness and efficiency*
 - *Developing and tracking key performance indicators against goals and report results*
 - *Identify best practices and appropriate benchmarking*

1.4 Goals and Objectives

The *100% RE Plan* outlines various targets related to energy conservation, GHG reduction and renewable energy generation. This *REAP* focuses on the latter-two items, as the *EMP* already has goals and objectives for energy conservation. For the purposes of this plan, the goals set out in the *100% RE Plan* will be used for the *REAP*, with the targets based on the County's original 2015 baseline. The target goals are outlined below in Table 2. "Renewable energy mix" refers to the percentage of renewable energy utilized from generation and harvesting from County-owned systems, versus total energy consumption. In order to reach the net 100% Renewable energy goal, the remainder would require purchasing from the Grid. The performance of this *REAP* will be measured against these targets, specifically striving for the 2030 targets.

Table 2 – 100% RE Plan Targets (for REAP)

Year	Total Reduction of GHG Emissions	Renewable Energy Mix Target	Renewable Energy Purchased Mix Target
2015	-	-	5.5%
2020	3.2%	5.3%	6.1%
2025	14.1%	11.7%	7.3%
2030	25.0%	19.5%	15.6%
2035	36.0%	29.1%	10.4%
2040	46.9%	41.4%	12.7%
2045	57.8%	57.8%	15.6%
2050	68.7%	80.3%	19.7%

1.5 Planning and Execution Strategy

The initial version of the *REAP* takes a 10-year outlook for project implementation. The *REAP* outlines financial requirements for each project, as well as anticipated outcomes resulting from implementation. Anticipated outcomes are estimates at this time and will need to be validated during the design phase of each project. The multi-year *REAP* will assist the County's Public Works department with allocating budget requests on an annual basis by giving a clear outline of what projects are to be implemented. The 10-year timeline was selected as it aligns with the Capital Plan requirements, and it is very likely that technology will evolve to the point where anything planned further out may be obsolete or no longer the best option.

The project execution strategy of this *REAP* is to complete validation and design work in year one, with project tender and execution in the following year or two, depending on the project scope. This strategy aligns with the general project management strategy employed in most projects within the Public Works portfolio and gives adequate time to plan, design, budget and tender, which helps improve budget accuracy and overall project quality.

2 PLAN DEVELOPMENT

This section provides an overview of how the *REAP* was developed, and the basis for the projects that were selected as part of its 10-year outlook. Oxford County undertook a Letter of Interest and subsequent Request for Proposal process and eventually awarded a contract to JL Richards & Associates Ltd. to undertake a review of existing County properties and facilities to evaluate various technologies and their potential performance. In addition, a second screening exercise was undertaken by Zon Engineering Inc. to evaluate additional sites for solar PV feasibility only.

2.1 Site Screening

To begin, JL Richards was tasked with reviewing 41 different County-owned sites and evaluating the feasibility of 14 various renewable energy systems. County staff provided site information, including facility drawings and utility consumption data. The system types that were reviewed included the following:

1. Solar PV (rooftop)
2. Solar PV (ground mount)
3. Solar PV (parking lot canopy)
4. Solar Thermal for Domestic Hot Water
5. Solar Thermal for Ventilation Air
6. Geothermal Heat Pumps for Space Heating and Cooling
7. Air Source Heat Pumps for Space Heating and Cooling
8. Air Source Heat Pumps for Domestic Hot Water
9. Rooftop Units with Heat Pumps
10. Wind
11. Biogas
12. Wood Pellet Boiler
13. Waste Heat Recovery
14. Small Hydro

A summary of the sites that were evaluated as well as an overview of each of these technologies, is included in sections 2.0 and 4.0 of Appendix A. Each technology type was assigned a rating for each site (from 0 to 4) based on the overall feasibility of that system being implemented at that particular site. A maximum of three technologies were selected for each site, which were then presented with potential performance metrics and estimated cost to implement. Selections were limited to a maximum of three in order to keep focus on the most viable technologies for each site.

2.2 Evaluation Development

Once the site screening phase was complete, a summary was completed which outlined potential performance metrics of each proposed system related to the following criteria:

1. Annual Change in Electricity Consumption (MWh)
2. Annual Change in Natural Gas Consumption (MWh)
3. Annual Change in Electricity Consumption (%)
4. Annual Change in Natural Gas Consumption (%)
5. Renewable as Portion of Building Consumption (%)
6. GHG Reductions (tCO₂e/yr)
7. Estimated Capital Costs
8. Net Change in Annual Utility Costs
9. Lifecycle Costs/GHG (\$/tCO₂e)
10. Green Municipal Fund Eligible (this item was removed from the evaluation as it requires a loan)

The performance of each technology for each site was scored out of 10 for each of the above 10 criteria in order to give an overall evaluation score. In addition to the base scoring, County staff took these various criteria and assigned an additional weighting based on their importance to the County's goals. Weightings were determined based on how each criteria was supported in the following documents:

- *100% Renewable Energy Plan*
- *Energy Management Plan*
- *Future Oxford Sustainability Plan*
- *Oxford County Strategic Plan*

The weighting criteria and overall evaluation philosophy were presented to and approved by County Council on April 14, 2021, through Report No. [PW 2021-11](#).

2.3 Project Selection & Prioritization

Based on the approved evaluation criteria and weightings, County staff worked with JL Richards to complete a final ranking of all technologies. From there, the list was further vetted to get to a final set of projects. This final vetting took into account items such as selecting smaller wood pellet boiler systems first to establish a pilot site in order to test the technology. Some sites also had two high-scoring technologies; however, if one was implemented, the other was no longer viable, so this vetting removed those redundancies.

Overall, projects were selected and prioritized in a manner to balance the following items:

- Explore, test and implement new technologies that the organization is not yet familiar with. Implementation would be monitored with the goal of duplication at other sites in the future.

- Continue to grow the existing solar PV portfolio.
- Maintain an annual capital investment of approximately \$1M to maintain historical investment targets. All costs identified are estimated in 2021 dollars, and actual annual budget requests will take into consideration more accurate estimates obtained through the design process.

In addition to the technologies and projects noted above as part of the assessment by JL Richards, Solar PV sites were included based on assessment by Zon Engineering, as well as one additional project; Woodstock WWTP Biogas Utilization, initially identified in the *EMP*, has been included in this list as it is undergoing feasibility assessment, with results expected later in 2022.

This plan includes a study to explore the utilization of biogas at the County's Waste Management Facility (OCWMF) in Salford. The OCWMF began operation in 1986 and has a maximum approved waste capacity of 5,905,200 m³. The site receives approximately 45,000 tonnes of municipal solid waste annually, and a landfill gas (LFG) collection and flaring system was installed in 2010. It is estimated that the collection system covers approximately 25-35% of the total waste mass. High-level estimates based on biogas flare consumption detailed in the [OCWMFs flare gas operators 2021 annual report](#), provides the indication of renewable energy potential. OCWMF has a low energy demand, resulting from previous net-zero electrification and no Enbridge natural gas pipeline currently connected to the site; therefore, utilization of the energy may be an issue considering these existing site conditions, and regulatory challenges related to the distribution off-site. This study will determine the biogas potential, options for utilizing the energy and determine the overall feasibility of utilizing biogas at the OCWMF site for consideration in future iterations of this plan.

Based on the above items, as well as the execution strategy of design in Year 1 and construction in Year 2; Table 3 below identifies the proposed projects and implementation year. As a note, the heat recovery system at the Ingersoll Wastewater Treatment Plant and Woodstock Biogas Utilization projects are spread over three years, as additional time should be spent on design, installation and commissioning to ensure optimal performance. In addition, the annual budget estimate per year is included at the bottom of the figure. Figure 3 provides a summary of proposed project technologies and their impact on reducing the County's dependence on non-renewable energy by way of energy conversion or offset through renewable energy utilization. Refer to Section 3 Project Summaries for further details on specific projects.

Projects were staged in a manner to keep capital expenditures as close to \$1M/year as possible to mirror sustainable investment from previous budget years. With the addition of the Woodstock WWTP Biogas project, the average capital expenditure is just under \$1.5M/year. As noted, years 2025 and 2027 significantly exceed this due to the projects planned for these years. These are larger projects which can't be broken up, which is why the investment requirement is more significant in these years. Capital requirements for all projects will be validated and refined during the design phase of each project.

Table 3 – REAP Proposed Implementation

Project	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
364 Athlone Solar PV											
Thamesford WWTP Solar PV											
WDSK Biogas Utilization											
OCWFM Flare Preliminary Energy Study											
59 George Johnson Wood Pellet Boilers											
135 Carroll Solar PV											
300 Juliana GSHP*											
WDSK Patrol Wood Pellet Boilers											
Highland Patrol Solar PV											
16 George Solar PV											
415 Hunter GSHP											
410 Buller GSHP											
Ingersoll WWTP Heat Recovery											
82 Finkle Solar PV											
Springford Solar PV											
Woodstock Patrol Solar PV											
Drumbo Patrol Solar PV											
Springford Wood Pellet Boiler											
742 Pavey Solar PV											
377 Mill Street ASHP											
70 Maria Solar PV											
221 Thames Solar PV											
742 Pavey Wood Pellet Boilers											
Annual Budget	\$135,000	\$899,300	\$1,315,290	\$7,415,451	\$968,989	\$1,829,310	\$1,589,876	\$709,595	\$860,136	\$896,319	\$657,301
<p>*300 Juliana GSHP project submitted an application for the Low Carbon Economy Challenge in the summer of 2022. If successful, this project will be completed earlier than identified to align with funding requirements.</p>											

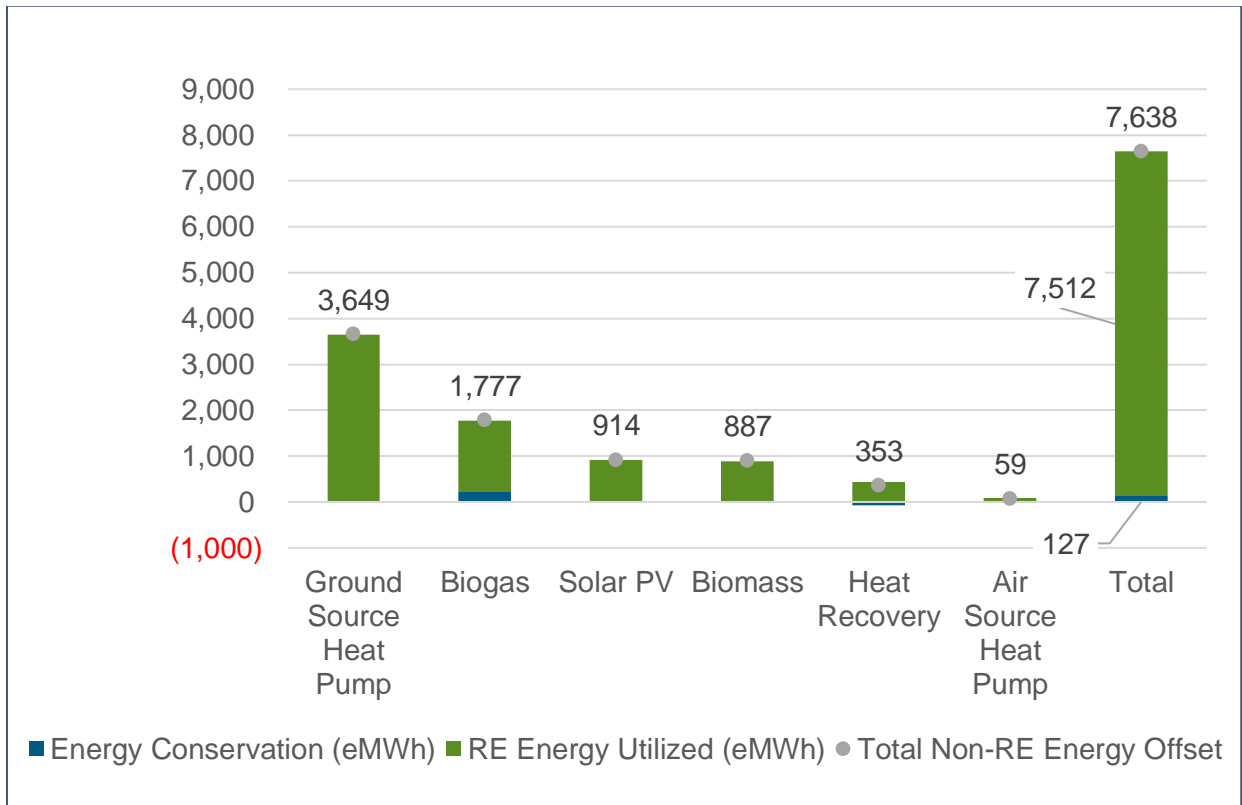


Figure 2 – Total Non-Renewable Energy Reduction by Technology

3 PROJECT SUMMARIES

This section provides an overview of each of the proposed projects. Capital Cost Estimates are based on the present value of projects adjusted for inflation to the implementation year. Financial analysis is based on the nominal discount rate, reinvestment and borrowing rate of 4.18%, annual inflation rate of 2% (adjusts capital cost and operations cost impacts), electrical and biomass fuel rate increase of 3% and natural gas rate increase of 5%. It also includes the cost of carbon based on the federal carbon tax table to 2030, with an increase of 3% for the subsequent year over year.

The Net Present Value (NPV) represents the value of the project(s) in 2022 dollars in contrast to the future value of the annual cash flow balance (cash inflow minus cash outflow) compounded at the nominal discount rate as noted above. The higher the NPV at the end of the project's life cycle, the better the investment. In fact, a project with a positive NPV at the end of its life cycle indicates that the project provided a return equal to or greater than if the capital cost was invested at the nominal discount rate compounded over the projects life cycle; with the added benefit of the renewable energy and GHG emissions reductions.

The Modified Internal Rate of Return (MIRR) is the return on the project's annual future value cash flow (cash inflow minus cash outflow), assuming positive cash inflow can be invested at the reinvestment rate noted above and negative cash flow is borrowed at the rate noted above. A project with a MIRR equal to the nominal discount rate would have a NPV of \$0 (i.e., refer to Project 3.21 - 221 Thames Solar PV details).

3.1 – 364 Athlone Solar PV

Beneath the area of the proposed ground-mount system is a 24 m by 24 m reservoir cell for storing water; there is a plan to add a second cell that is 23 m in length beside it, but after talking with the operations group, no date has yet been set for this expansion. In order to make use of this site and provide long-term flexibility in the event that the reservoir expansion is needed, a ballasted foundation system would be explored for the solar PV system. Typically, ballasted systems are used for flat-roof applications, but in this case would provide a solid foundation without penetrating the ground, allowing for the system to be easily removed and reinstalled if and when the expansion work occurs.

A 192 kWAC system is proposed to be installed on this site, which is anticipated to offset the majority of the site's current consumption; however, this will need to be validated during the design phase.

Implementation	2022/2023
Capital Cost Estimate	\$578,000
GHG Reduction	7.2 tCO ₂ e/yr
Renewable Energy Utilized	240.0 MWh/yr
Equity Payback	16 Years
30 Year NPV/ MIRR	\$165,000 / 5.2%

3.2 – Thamesford WWTP Solar PV

Installation of a 90.9kWAC rooftop solar PV system at the Thamesford Wastewater Treatment Plant would result in an anticipated annual generation of 116MWh. This generation would equate to approximately 18% of the site’s total electrical consumption. The system would be focused on the existing rooftop only so as to maintain ground availability for future plant expansion opportunities.

Implementation	2022/2023
Capital Cost Estimate	\$246,300
GHG Reduction	3.48 tCO ₂ e/yr
Renewable Energy Utilized	116.0 MWh/yr
Equity Payback	15 Years
30 Year NPV/ MIRR	\$105,000 / 5.6%

3.3 – WDSK WWTP Biogas Utilization

Numerous County facilities are producing a form of renewable energy through biogas, and there is an opportunity to examine more efficient methods of utilizing this resource. If this energy is properly utilized, it can significantly reduce greenhouse gas (GHG) emissions, energy consumption and operational costs. If this initiative is successful, it will greatly contribute to the County’s 100% renewable energy goal, have a positive impact on the environment and will free up fixed finances.

The goal of this project is to complete a Preliminary Engineering Study (PES) at the County's Woodstock WWTP, located at 195 Admiral St., for utilizing and maximizing its biogas production. Pending the recommended solution having favourable results, the subsequent engineering design, contract and construction will be undertaken, targeting completion in 2024.

This initiative was identified as part of the *EMP*, with preliminary data on potential renewable energy utilization. Capital costs and GHG reductions are estimated based on the assumed potential natural gas offset as a result of biogas utilization.

Implementation	2022-2024
Capital Cost Estimate	\$457,000 (\$450,000 PV) *
GHG Reduction	324 tCO ₂ e/yr
Renewable Energy Utilized	1,555 eMWh/yr *
Energy Conservation	222 eMWh/yr *
Equity Payback	9 Years
30 Year NPV/ MIRR	\$1,320,000 / 9.7%
* Pending results of PES. Capital Cost could increase to \$1.7 million with energy impact noted or energy reduction reduced to only 20% of indicated with cost noted, in order to maintain a positive NPV over a 30-year life cycle, and equity payback within 20 years.	

3.4 – 59 George Johnson Wood Pellet Boilers

Wood pellet boilers can supplement natural gas boilers with a zero-GHG fuel. The GHG emissions emitted during the combustion of wood pellets is equivalent to the amount consumed during the growth stage of the tree which is used for pellet fuel. Residential wood pellet boilers can ramp up/down their heating capacities automatically and multiple units can be connected to provide staged heating in larger buildings. All of the heating sources would be controlled through the same system, prioritizing the wood pellet boilers in stages for baseload heating and the natural gas heaters for peak (and back-up).

As a retrofit, these wood pellet boilers would be installed outdoors, close to the existing mechanical room in a containerized package requiring approximately 15 m² to 30 m² of ground area, depending on the number of boilers. A wood pellet storage silo would be constructed next to this container requiring approximately 13 m² of ground area. A wood pellet delivery truck would require access to this silo approximately once a month during the heating season.

Compared to natural gas boilers, maintenance costs are higher for wood pellet boilers, as the ash box must be emptied monthly in addition to the detailed cleaning required twice per heating season. Although the operating cost of a wood pellet boiler is higher than that of a natural gas boiler, it should be noted that common natural gas is not a clean or renewable energy source, and considering that wood pellet energy is less than the cost of electricity, replacing equipment

with wood pellets as the primary fuel source would provide the County organization a technology to showcase as a means toward attaining its renewable energy goals.

Three (3) 48 kW wood pellet boilers would supplement the existing natural gas heating system to provide 100% of the building’s peak heating supply. The wood pellet boilers would provide heat to a new hydronic heating loop connected to new unit heaters. The wood pellet containerized system and storage silo would have a similar appearance to other buildings and structures on the sites.

Implementation	2023/2024
Capital Cost Estimate	\$687,100 (\$675,000 PV)
GHG Reduction	31.7 tCO2e/yr
Renewable Energy Utilized	174 eMWh/yr
Equity Payback	54 Years
30 Year NPV/ MIRR	-\$590,000 / -5.8%

3.5 – 135 Carroll Solar PV

This would entail the installation of a 43.2kWAC rooftop solar PV system at the multi-unit residential site at 135 Carroll Street in Ingersoll. It is anticipated that this system will have an annual generation of approximately 60MWh, which equates to 24% of the building’s current consumption. This site was selected early in the *REAP* as the roof was recently replaced in 2020, and it is ideal to install PV panels on a newer roof to avoid having to remove the system to replace an aging roofing system. In most cases to date, the County has only installed solar PV systems on new roof systems. In addition, solar PV systems can actually prolong the life of the roof system by protecting it from the elements.

Implementation	2023/2024
Capital Cost Estimate	\$144,440 (\$142,000 PV)
GHG Reduction	1.9 tCO2e/yr
Renewable Energy Utilized	61.9 MWh/yr
Equity Payback	15 Years
30 Year NPV/ MIRR	\$45,000 / 5.4%

3.6 – 300 Juliana GSHP

Ground source heat pumps (GSHP) provide both heating and cooling to a building by transferring heat energy to and from the earth through underground fluid loops. During the winter months, the system extracts natural heat from the ground and brings it up into the building, while in the summer months, the system collects excess heat from the building and transfers it to the ground, which cools the facility space. The ground heat exchanger (GHX) can be either open or closed-loop, with closed-loop currently more common in Canada. Construction of the GHX component is a significant capital cost but has an expected useful life of 50+ years. Closed-loop systems can be constructed in almost any subsurface conditions, while open-loop – generally lower cost – require a highly productive aquifer to be feasible. For the purposes of Oxford County sites, closed-loop systems will likely be explored for Source Water Protection purposes.

For all buildings, the new GSHP would replace as much of the building’s space heating and cooling supply as possible. Shifting the entire heating load to electricity may be beyond the existing capacity of the incoming electrical service for some buildings, and an upgrade may be required. No increase or decrease in maintenance costs is expected, as the maintenance requirements for GSHPs are similar to natural gas boilers, and the GSHP replace the current chillers, eliminating their maintenance.

At 300 Juliana, four (4) 140-ton ground-source heat pumps (GSHP) would replace the existing natural-gas boilers. For a closed-loop system, a borehole field area of approximately 11,000 m² would be required. The existing perimeter hydronic heating system uses hot water at temperatures that can be provided by a GSHP. New fan coils retrofitted onto the existing RTUs would be required to utilize the hot and chilled water provided by the GSHP.

Implementation	2024/2025 (<i>This timeline may be brought forward if Low Carbon Economy Challenge funding is granted in 2022.</i>)
Capital Cost Estimate	\$7,538,565 (\$7,250,000 PV)
GHG Reduction	713 tCO ₂ e/yr
Renewable Energy Utilized	3,216 MWh/yr
Energy Conservation	92 eMWh/yr
Equity Payback	30 Years 23 Years (with LCEC Funding)
30 Year NPV/ MIRR	-\$3.17 million / 1.9% -\$635,000 / 3.6% (with LCEC Funding)

3.7 – Woodstock Patrol Wood Pellet Boilers

Implementation of a pellet boiler system at this site would be dependent on a successful deployment of the earlier project at 59 George Johnson in Ingersoll. Two (2) 48 kW wood pellet boilers would supplement the existing natural gas heating system to provide 95% of the building’s peak heating supply. The wood pellet boilers would provide heat to the existing hydronic heating loop connected. The wood pellet containerized system and storage silo would have a similar appearance to other buildings and structures on the site.

Implementation	2025/2026
Capital Cost Estimate	\$540,000 (\$510,000 PV)
GHG Reduction	24.5 tCO ₂ e/yr
Renewable Energy Utilized	134.4 eMWh/yr
Equity Payback	52 Years
30 Year NPV/ MIRR	-\$420,000 / -4.6%

3.8 – Highland Patrol Solar PV

Installation of a 37.5kWAC rooftop solar PV system at the Highland Patrol Yard. It is anticipated that this system will have an annual generation of approximately 50MWh, which equates to 100% of the building’s current consumption. The majority of the main shop roof was replaced in 2020 with a new metal roof making it an ideal time to install a solar PV system.

Implementation	2025/2026
Capital Cost Estimate	\$152,500 (\$144,100 PV)
GHG Reduction	1.5 tCO ₂ e/yr
Renewable Energy Utilized	49.9 MWh/yr
Equity Payback	18 Years
30 Year NPV/ MIRR	\$10,000 / 4.5%

3.9 – 16 George Solar PV

Installation of a 43.2kWAC rooftop solar PV system at the multi-unit residential site at 16 George Street in Norwich. It is anticipated that this system will have an annual generation of approximately 65MWh which equates to 33% of the building’s current consumption.

Implementation	2025/2026
Capital Cost Estimate	\$157,700 (\$149,000 PV)
GHG Reduction	1.95 tCO2e/yr
Renewable Energy Utilized	65.0 MWh/yr
Equity Payback	15 Years
30 Year NPV/ MIRR	\$50,000 / 5.4%

3.10– 415 Hunter GSHP

A 66-ton GSHP will replace the existing natural-gas boilers. For a closed-loop system, a borehole field area of approximately 930 m² would be required. This GSHP would provide hot and chilled water to the existing closed loop water source heat pump system. The existing hydronic perimeter heaters require inlet temperatures that are beyond the capacity of most GSHPs, requiring either a specialty heat pump or replacement of the perimeter heaters.

Implementation	2026/2027
Capital Cost Estimate	\$1,297,000 (\$1,200,000 PV)
GHG Reduction	56.9 tCO2e/yr
Renewable Energy Utilized	328 eMWh/yr
Energy Conservation	-56 eMWh/yr
Equity Payback	39 Years
30 Year NPV/ MIRR	-\$720,000 / 0.3%

3.11– 410 Buller GSHP

A 16-ton GSHP will replace the existing natural-gas boilers. For a closed-loop system, a borehole field area of approximately 130 m² would be required. Due to the proximity of the Oxford County Courthouse, there is the potential for significant costs savings if these projects are deployed at the same time in order to share the same ground loop. This GSHP would provide hot and chilled water to the existing closed-loop water source heat pump system.

Implementation	2026/2027
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Capital Cost Estimate	\$584,000 (\$540,000 PV)
GHG Reduction	13.9 tCO2e/yr
Renewable Energy Utilized	104 eMWh/yr
Energy Conservation	-35 eMWh/yr
Equity Payback	48 Years
30 Year NPV/ MIRR	-\$375,000 / -1.2%

3.12– Ingersoll WWTP Heat Recovery

A 325 kW waste heat recovery system would largely replace the existing natural gas and electric heater systems to provide 100% of the building’s space heating. 1,000 kW of waste heat is continuously available during the heating season from the plant’s effluent stream. It is rarely economical to transport this low-grade heat, so it must be used on the same or an adjacent property.

Since the effluent at the end of the treatment process is largely clear of solid material, standard heat exchanger equipment can be utilized. The output of the heat exchanger is run through heat pumps to maintain the heating loop temperature utilizing the existing hydronic loop in the newer portion of the plant. This loop would be extended to the old plant, and new hydronic unit heaters would be installed. No increase or decrease in maintenance costs is expected, as conventional equipment is used, which can be maintained by trained HVAC technicians.

Implementation	2026 – 2028
Capital Cost Estimate	\$1,663,000 (\$1,510,000 PV)
GHG Reduction	76.0 tCO2e/yr
Renewable Energy Utilized	429 eMWh/yr
Energy Conservation	-76 eMWh/yr
Equity Payback	40 Years
30 Year NPV/ MIRR	-\$900,000 / 0.2%

3.13– 82 Finkle Solar PV

Installation of a 28.8kWAC rooftop solar PV system at the multi-unit residential site at 82 Finkle Street in Woodstock. It is anticipated that this system will have an annual generation of approximately 40MWh, which equates to 23% of the building’s current consumption.

Implementation	2028/2029
Capital Cost Estimate	\$149,000 (\$132,600 PV)
GHG Reduction	1.35 tCO2e/yr
Renewable Energy Utilized	42.2 MWh/yr
Equity Payback	19 Years
30 Year NPV/ MIRR	\$5,000 / 4.3%

3.14– Springford Patrol Solar PV

Installation of a 25kWAC rooftop solar PV system at the Springford Patrol Yard. It is anticipated that this system will have an annual generation of 34MWh, which equates to 100% of the building’s current consumption. The site already includes a 10kW MicroFIT system, and this system would offset the total site consumption through the Net-Meter program. Panels would be installed on the main shop facility, as well as a new storage facility that was constructed in 2021.

Implementation	2028/2029
Capital Cost Estimate	\$172,000 (\$152,300 PV)
GHG Reduction	1.04 tCO2e/yr
Renewable Energy Utilized	34.7 MWh/yr
Equity Payback	24 Years
30 Year NPV/ MIRR	-\$30,000 / 3.2%

3.15– Woodstock Patrol Solar PV

Installation of a 50kWAC rooftop solar PV system at the Woodstock Patrol Yard. It is anticipated that this system will have an annual generation of approximately 60MWh, which equates to 83% of the building’s current consumption. The site already includes a 10kW MicroFIT system, and this system would offset the majority of site consumption through the Net-Meter program. As part of the design stage, the overall site consumption would be re-evaluated to take into consideration the implementation of the wood pellet boiler system.

Implementation	2028/2029
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Capital Cost Estimate	\$212,000 (\$188,400 PV)
GHG Reduction	1.8 tCO2e/yr
Renewable Energy Utilized	60.1 MWh/yr
Equity Payback	19 Years
30 Year NPV/ MIRR	\$5,000 / 4.3%

3.16– Drumbo Patrol Solar PV

Installation of a 45kWAC rooftop solar PV system at the Woodstock Patrol Yard. It is anticipated that this system will have an annual generation of approximately 53MWh, which equates to 100% of the building’s current consumption. The current *Asset Management Plan* identifies this roof to be replaced in 2025, making an implementation in 2029 on a newer roof system ideal to avoid unnecessary costs related to system removal.

Implementation	2028/2029
Capital Cost Estimate	\$170,500 (\$151,800 PV)
GHG Reduction	1.6 tCO2e/yr
Renewable Energy Utilized	53.6 MWh/yr
Equity Payback	18 Years
30 Year NPV/ MIRR	\$15,000 / 4.6%

3.17– Springford Patrol Wood Pellet Boilers

As with the project at 59 George Johnson, three (3) 48 kW wood pellet boilers would supplement the existing natural gas heating system to provide 100% of the building’s peak heating supply. The wood pellet boilers would provide heat to a new hydronic heating loop connected to new unit heaters. The wood pellet containerized system and storage silo would have a similar appearance to other buildings and structures on the site.

Implementation	2029/2030
Capital Cost Estimate	\$722,000 (\$630,000 PV)
GHG Reduction	28.0 tCO2e/yr
Renewable Energy Utilized	154 eMWh/yr
Equity Payback	51 Years
30 Year NPV/ MIRR	-\$460,000 / -2.9%

3.18– 742 Pavey Solar PV

Installation of a 28.8kWAC rooftop solar PV system at the multi-unit residential site at 742 Pavey Street in Woodstock. It is anticipated that this system will have an annual generation of approximately 40MWh which equates to 15% of the building’s current consumption. The current *Asset Management Plan* identifies this roof to be replaced in 2028, making an implementation in 2030 ideal.

Implementation	2029/2030
Capital Cost Estimate	\$148,000 (\$128,800 PV)
GHG Reduction	1.27 tCO2e/yr
Renewable Energy Utilized	42.2 MWh/yr
Equity Payback	18 Years
30 Year NPV/ MIRR	\$5,000 / 4.5%

3.19– 377 Mill ASHP

Four (4) 5-ton air-source heat pump (ASHP) rooftop units (RTUs) would replace the existing natural gas RTUs to provide 100% of the buildings heating and cooling supply. A back-up electric resistance heater is built into these RTUs for use in extreme cold winter temperatures when the heat pump becomes ineffective, typically only a few hours a year. Shifting the entire heating load to electricity may be beyond the existing capacity of the incoming electrical service and an upgrade may be required. No increase or decrease in maintenance costs are expected as the maintenance requirements for ASHP RTUs are like natural gas RTUs. The project is planned for 2031 to align with the anticipated replacement of the existing RTUs.

Implementation	2030/2031
Capital Cost Estimate	\$407,000 (\$348,000 PV)
GHG Reduction	16.8 tCO2e/yr
Renewable Energy Utilized	80 MWh/yr
Energy Conservation	-20.7 eMWh/yr
Equity Payback	51 Years
30 Year NPV/ MIRR	-\$250,000 / -2.9%

3.20– 70 Maria Solar PV

Installation of a 100.8kWAC rooftop solar PV system at the multi-unit residential site at 70 Maria Street in Tavistock. It is anticipated that this system will have an annual generation of approximately 120MWh, which equates to 47% of the building’s current consumption. The local grid currently does not have capacity to support this system, so it is being included later in the *REAP* with the hope that additional system capacity is freed up, which would allow this project to proceed. Validation of grid capacity will be completed as part of the design phase. In addition, the current *Asset Management Plan* identifies this roof to be replaced in 2030, making an implementation in 2031 ideal.

Implementation	2030/2031
Capital Cost Estimate	\$400,200 (\$342,000 PV)
GHG Reduction	3.6 tCO ₂ e/yr
Renewable Energy Utilized	121 MWh/yr
Equity Payback	17 Years
30 Year NPV/ MIRR	\$55,000 / 4.8%

3.21– 221 Thames Solar PV

Installation of a 17.3kWAC rooftop solar PV system at the multi-unit residential site at 221 Thames Street in Ingersoll. It is anticipated that this system will have an annual generation of 27MWh, which equates to 34% of the building’s current consumption. The current *Asset Management Plan* identifies this roof to be replaced in 2030, making an implementation in 2031 ideal.

Implementation	2030/2031
Capital Cost Estimate	\$105,100 (\$90,600 PV)
GHG Reduction	0.83 tCO ₂ e/yr
Renewable Energy Utilized	27 MWh/yr
Equity Payback	20 Years
30 Year NPV/ MIRR	\$0.00 / 4.1%

3.22– 742 Pavey Wood Pellet Boilers

Four (4) 48 kW wood pellet boilers would supplement the existing natural gas boilers to provide 50% of the buildings peak heating supply. The wood pellet boilers would provide heat to the existing hydronic loop system. With this being a non-industrial application, implementation will be dependent on successful implementation of previous wood pellet systems included earlier in the *REAP*. There are also additional considerations for storage and supply accessibility at this site which is why it is later in the *REAP*.

Implementation	2031/2032
Capital Cost Estimate	\$728,000 (\$610,000 PV)
GHG Reduction	77.6 tCO ₂ e/yr
Renewable Energy Utilized	425 eMWh/yr
Equity Payback	35 Years
30 Year NPV/ MIRR	-\$340,000 / 0.6%

3.23– OCWMF Biogas Utilization Study

The Oxford County Waste Management Facility is a potential source of biogas renewable energy. High-level estimates based on current biogas flare consumption show substantial renewable energy potential; however, utilization of the energy may be an issue considering low energy requirements on-site resulting from previous net-zero electrification and regulatory challenges of distribution off-site. The County has budget costing to complete a high-level feasibility study to determine the quality and characteristics of the biogas, the life cycle of the biogas considering methane depletion on site and how the energy could be utilized; whether there is demand on-site for utilization or if it can be distributed. Further investigation will be required to determine if future development is viable, and identify any existing regulatory constraints. Subsequent design and implementation will be included as part of the annual budget process.

Implementation	2023
Feasibility Study Cost Estimate	\$20,000

4 TARGET PERFORMANCE

This section provides an overview of the cumulative performance of the proposed systems and technology once they are implemented. The performance is measured against both the 2015 baseline, as well as a 2019 baseline which is the most recent year that data is available. This additional metric is important to consider, as steps have been taken by the County organization to progress these goals since 2015.

4.1 – GHG Reduction

Through the implementation of this *REAP*, the projected GHG emissions reduction is outlined in Figure 4 below. Further to this, Table 4 quantifies the annual GHG reduction for each year, and also provides a percentage in relation to the 2015 and 2019 baselines. As noted, the performance is anticipated to exceed the 2030 goal of 25% reduction over 2015 levels set out in the *100% RE Plan*.

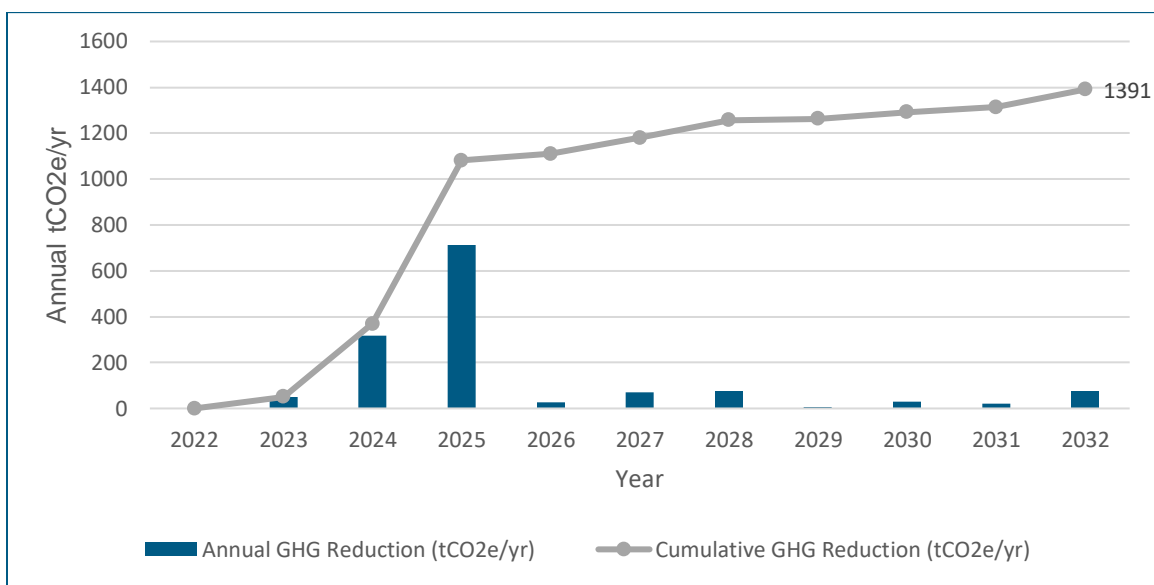


Figure 3 – GHG Reduction by Year and Cumulative

Table 4 – Cumulative GHG Reduction Target

Year	Annual GHG Reduction (tCO2e/yr)	Cumulative GHG Reduction (tCO2e/yr)	% Reduction from 2015 Baseline (4,044 tCO2e)	% Reduction from 2019 Baseline (3,648 tCO2e)
2022	0	0	0.0%	0.0%
2023	51	51	1.3%	1.4%
2024	318	369	9.1%	10.1%
2025	713	1082	26.8%	29.7%

2026	28	1110	27.4%	30.4%
2027	71	1181	29.2%	32.4%
2028	76	1257	31.1%	34.4%
2029	6	1262	31.2%	34.6%
2030	29	1292	31.9%	35.4%
2031	21	1313	32.5%	36.0%
2032	78	1391	34.4%	38.1%
Totals	1391		34.4%	38.1%

In Table 4 above, comparisons are made against baselines from both 2015 and 2019 (2019 was selected as it is the last year of data not impacted by the COVID-19 pandemic). This was done as a comparison to the 2015 targets set out in the initial *100% RE Plan* document, but also to compare against the 2019 baseline which takes into account conservation work that has been implemented through the *EMP*. Since the *100% RE Plan* targets are not simply about implementing renewable energy systems, but also about reduced consumption and conservation, it is important to take these measures into account. Essentially, this demonstrates how the various County plans work together to maximize performance targets.

4.2 – Renewable Energy Mix

To date, the majority of the renewable energy systems implemented by the County organization have been solar PV systems. Due to regulatory constraints, this technology can only go so far in achieving the desired renewable energy mix. Table 5 shows how the REAP will expand the current solar PV portfolio, as well as the projected impact on the renewable electricity mix percentage. As shown in the table, even with EMP impacts to the baseline between 2015 and 2019, solar alone falls short on achieving the targets set out in Table 2.

Table 5 – Solar PV Generation and Electrical Mix

Year	Solar Portfolio Increase (kW)	Solar Generation (MWh)	Cumulative Solar Generation (MWh)	Renewable Energy Mix from 2015 Electrical Baseline	Renewable Energy Mix from 2019 Electrical Baseline
2022	N/A	N/A	1,781	6.06%	7.10%
2023	283	356	2,137	7.27%	8.52%
2024	43	62	2,199	7.48%	8.77%
2025	0	-	2,199	7.48%	8.77%
2026	80	115	2,314	7.88%	9.23%
2027	0	-	2,314	7.88%	9.23%
2028	0	-	2,314	7.88%	9.23%

2029	149	191	2,504	8.52%	9.99%
2030	29	42	2,547	8.67%	10.16%
2031	118	148	2,695	9.17%	10.75%
2032	0	-	2,695	9.17%	10.75%
Totals	702	914			

In order to expand the renewable energy portfolio beyond solar PV, and further reduce GHG emissions and increase the renewable energy mix, the REAP will look to deploy additional energy utilization technologies. Through the holistic implementation of the REAP, renewable energy utilization and the associated mix percentage in terms of total consumption are outlined in Table 6. Table 6 identifies the quantity of renewable energy generated or harvested on an annual basis through the implementation of this plan. This number is then compared to the estimated energy consumption across all County facilities to determine the renewable energy mix percentage. Energy estimates are based on 2019 actuals to exclude COVID-19 impacts, plus a 1% annual increase, while also taking into account projected impacts from the current EMP. This is a conservative approach as the current EMP only goes to 2024, and subsequent plans will produce overall reductions in consumption. Further to that, Figures 5 and 6 also demonstrate this year-over-year growth.

Table 6 - Projected Total RE Mix

Year	Total Energy Consumption (eMWh/yr)*	RE Utilization (eMWh/yr)	RE Mix %**
2022	39,707	1,781	4.5%
2023	39,840	2,137	5.4%
2024	39,800	3,928	9.9%
2025	40,132	7,144	17.8%
2026	40,559	7,393	18.2%
2027	41,082	7,825	19.0%
2028	41,594	8,254	19.8%
2029	42,035	8,444	20.1%
2030	42,480	8,640	20.3%
2031	42,950	8,868	20.6%
2032	43,404	9,293	21.4%

* Total Energy Consumption is based on 2019 actuals plus 1% Year over Year Growth and energy conservation measures identified in the EMP.

** RE Mix % is based on RE Utilization over Total Energy Consumption

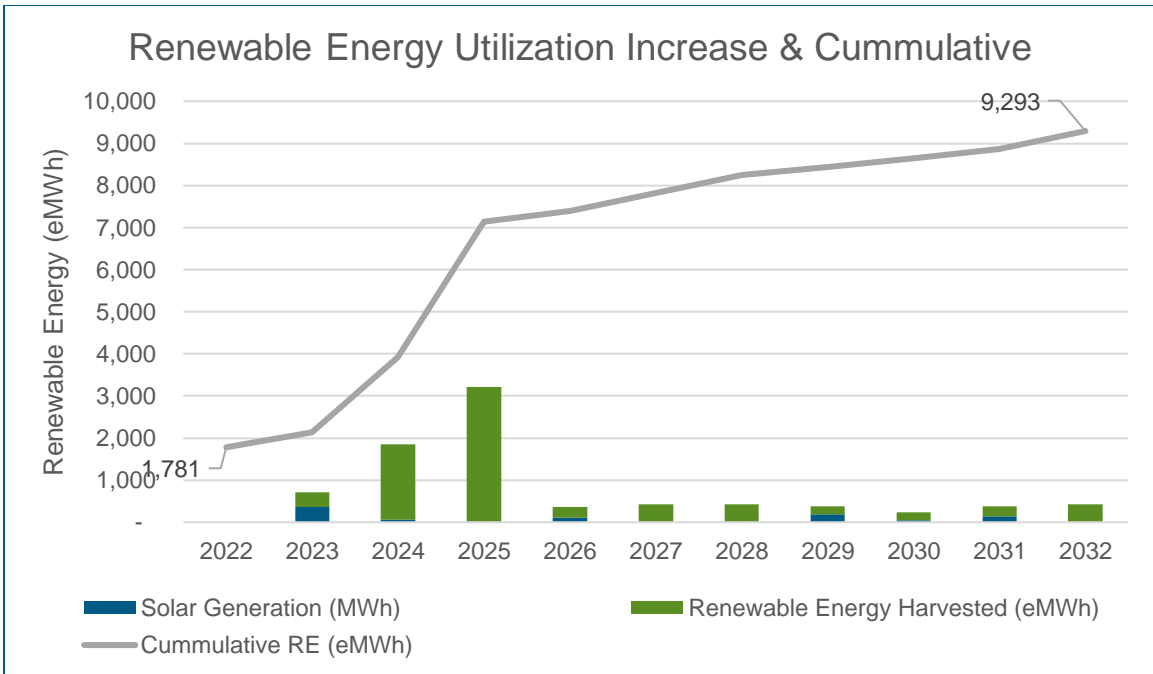


Figure 4 – Renewable Energy Utilization Increase & Cumulative

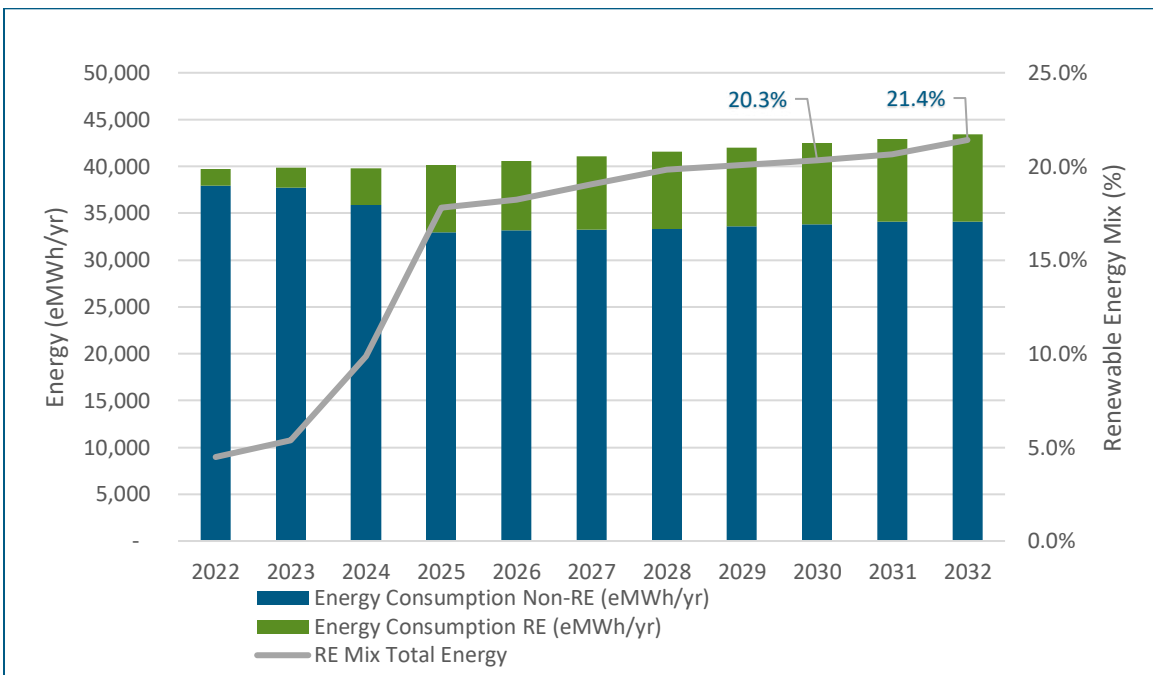


Figure 6 – RE versus NON-RE Energy Consumption Mix

As noted, the renewable energy generation through solar PV alone does not meet the 2030 target for renewable energy mix of 19.5% of total energy; however, by including other renewable

energy utilization technologies, and including planned energy conservation initiatives, this mix increases to 20.3% by 2030. The County's goals through the *REAP* will only be met with an integrated approach of expanding renewable energy utilization and generation, while at the same time improving energy conservation through the *EMP*. This is evident in the increase of the renewable electricity mix between the 2015 baseline and the 2019 baseline, which includes a lower overall electricity consumption due to conservation initiatives that were put in place.

Although the projects implemented as part of this *REAP* will reduce overall energy dependence, this will result in an increase to the County's net electrical consumption. This increase is crucial to allow renewable energy utilization and reducing the GHG emissions through electrification and other technologies. Overall, energy conservation and reduction across the portfolio is still projected to be achieved through this *REAP* and the *EMP* initiatives.

5 FINANCIAL

To date, the County has been attempting to invest approximately \$1M per year into renewable energy systems in an effort to progress its portion of the larger community goal. Through the development of a longer-term *REAP*, there is a better understanding of not only what projects should be implemented along with expected performance but also a quantifiable capital expenditure impact to execute the projects.

5.1 – Capital Costs

Table 7 outlines the estimated annual capital requirements, along with possible operational cost impacts to implement the above-noted projects. All capital costs are shown as future value (FV) using 2022 present value (PV) dollars plus an annual inflation rate of 2%, and future project costs will be validated through the design phases and updated with current costing for annual budget approvals.

Table 7 – Annual Financial Impacts

Year	Capital Cost (FV)	Capital Cost (PV)	Operational Impact (FV)
2022	\$135,000	\$135,000	\$0
2023	\$899,300	\$899,300	(\$45,052)
2024	\$1,315,290	\$1,289,500	(\$77,853)
2025	\$7,415,451	\$7,127,500	(\$154,523)
2026	\$968,989	\$913,100	(\$188,449)
2027	\$1,829,310	\$1,690,000	(\$227,844)
2028	\$1,589,876	\$1,440,000	(\$271,969)
2029	\$709,595	\$630,100	(\$337,354)
2030	\$860,136	\$748,800	(\$389,078)
2031	\$896,319	\$765,000	(\$430,611)
2032	\$657,301	\$550,000	(\$451,086)
Total	\$17,276,567	\$16,188,300	(\$2,573,818)

Future value (FV) costs are based present value (PV) costs plus annual inflation rate of 2% (adjusts capital cost and operations cost impacts), electrical and biomass fuel rate increase of 3% and natural gas rate increase of 5%. It also includes cost of carbon based on federal carbon tax table to 2030 with an increase of 3% for subsequent year over year.

Further to the above-noted costing, County staff will continue to seek funding opportunities to support the implementation of this plan in order to reduce the Facilities Reserve impact as much as possible. As an example, the County is currently seeking funding for the GSHP Loop initiative at 300 Juliana under the *Low Carbon Economy Challenge* (LCEC) fund, which covers 40% of the project's capital cost.

5.2 – Return on Investment

Overall, the projects identified in this *REAP* will cost \$17.3 million (FV) with overall operational cost avoidances of \$15.8 million. Overall operational cost avoidance is the sum of each year’s future value annual cash flow balance (avoided utilities costs plus increased maintenance costs) to 2050¹.

This represents an equity balance² of **-\$1.5 million** (\$1.5 million with LCEC) and NPV³ of **-\$6.6 million** (**-\$4.0 million** with LCEC) by year 2050. The projects as a whole, will pay for themselves within 30 years (27 years with LCEC), which is within the projects average useful life.

Figure 7 and Figure 8 show NPV and Equity balance of the projects, with and without LCEC grant funding, respectively.

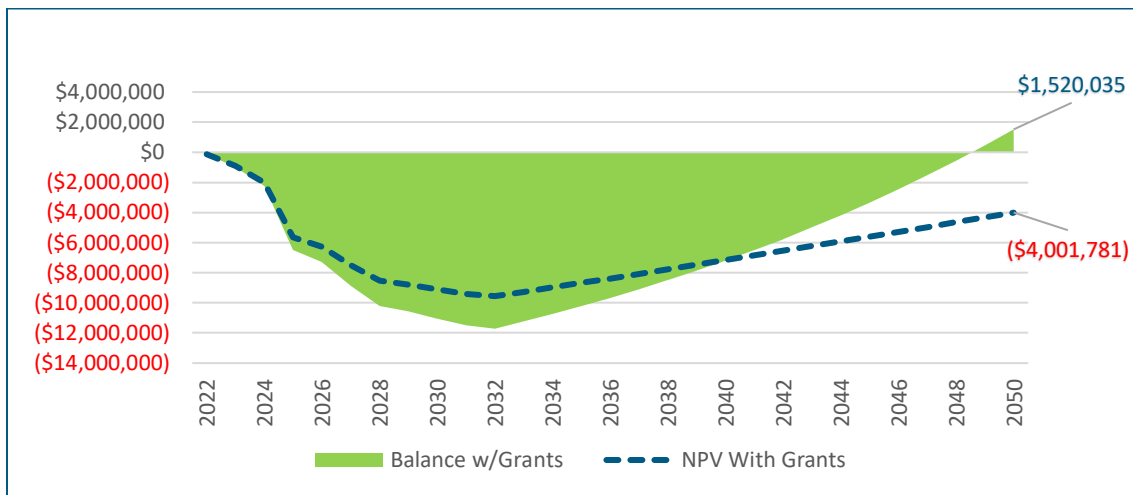


Figure 7 – NPV and Equity Balance (with Grant Funding)

¹ Refer to Table 7 which indicates annual operational (utilities costs and maintenance) avoidances related to the projects included in this plan increasing year over year as new projects come online and to match projected inflation, energy and carbon tax rates through to year 2050.

² Equity balance the is sum of each years future cash flow including cash inflows (avoided energy costs, grant funding, etc.) minus cash outflows (capital cost, increased maintenance, etc.).

³ Based on nominal discount rate, reinvestment and borrowing rate of 4.18%, annual inflation rate of 2%, electrical rate, and biomass rate increase of 3% and natural gas rate increase of 5%. Includes cost of carbon based on federal carbon tax table to 2030, plus increase of 3% year over year.

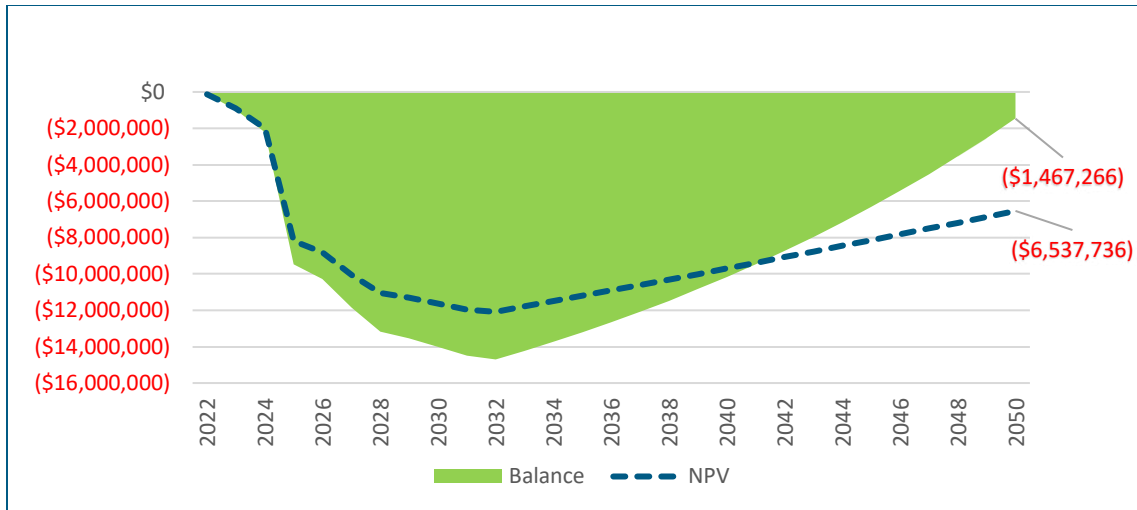


Figure 8 – NPV and Equity Balance (No Grant Funding)

6 PLAN UPDATES

The *REAP* has been set out with a 10-year planning horizon. Based on the screening completed, the target investments and performance targets, a 10-year plan was viable to progress the County’s goals in a meaningful way. This timeline was also deemed a reasonable period, as technology in the renewable energy sector over the next decade will likely advance significantly, and a renewal of the *REAP* within 10 years will allow the County to leverage that advancement. It is also the intent to learn and adjust from findings learned through the implementation of the projects identified in this *REAP*.

Further to technological advancements, regulatory changes are also likely to occur as the renewable energy sector expands, and governments of various levels look to progress their own renewable energy goals. This may open additional opportunities that do not exist today. Oxford County has and will continue to discuss new opportunities with regulatory bodies and also look for opportunities to partner in demonstration-style projects. While these aren’t identified specifically in this *REAP*, opportunities may be pursued with the intent to explore how they can be incorporated into the new plan revision, or executed during this plan period through the annual budget approval process.

In future iterations of this *REAP*, new technologies and opportunities for procurement should be considered as they become available to further accelerate the County’s RE mix to line up with the *100% RE Plan*’s renewable energy goal by 2050. Figure 9 and Figure 10 below show scenario for 2033 through 2050 impacts on renewable energy utilization, renewable energy purchase requirements, as well as reduction of total energy usage through energy conservation, in order to reach 100% renewable energy by 2050.

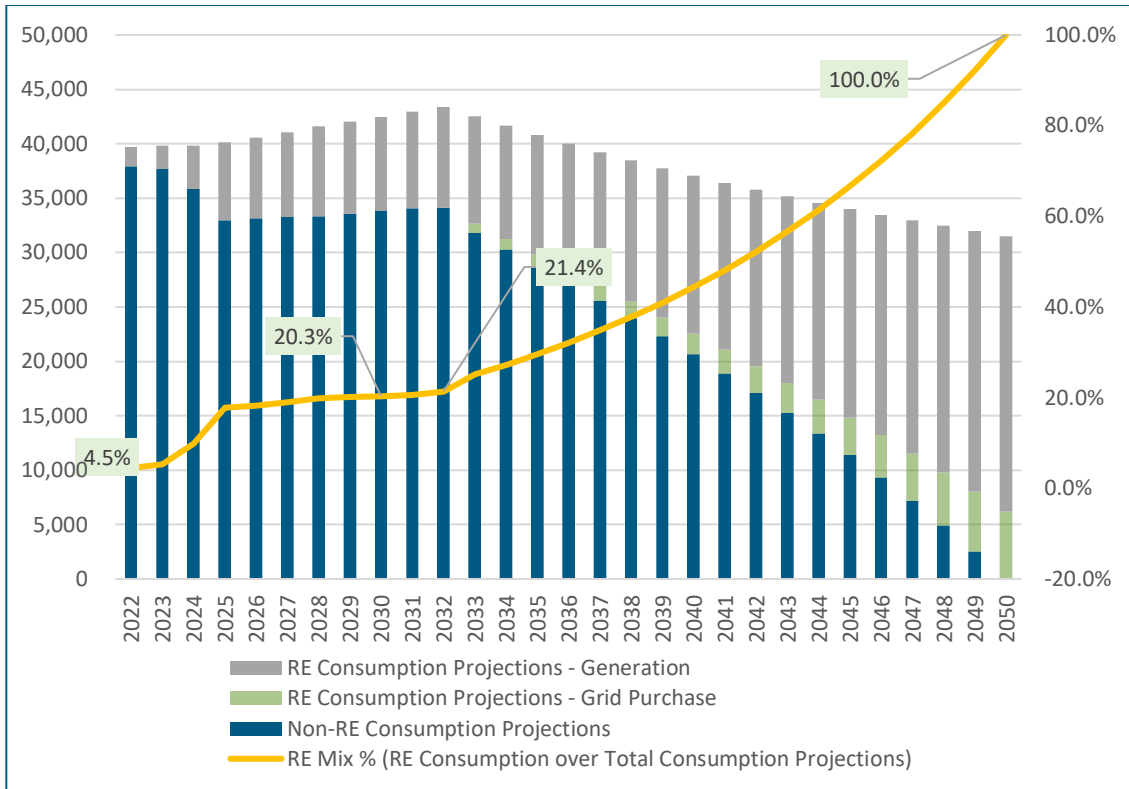


Figure 9 – Energy Usage & RE Mix to 2050

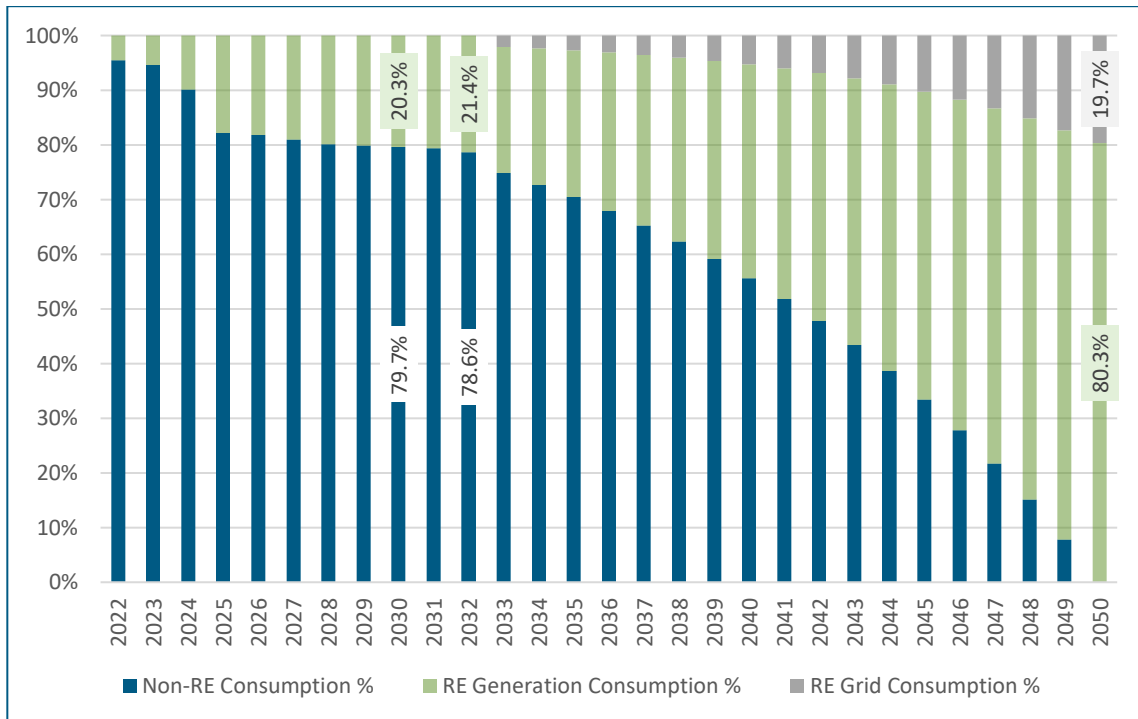


Figure 5 – Energy Usage & RE Mix % to 2050

7 APPROVAL

The implementation of this *REAP* is subject to annual Business Plan and Budget approval. It is the intent that each project will be validated for construction and regulatory constraints, as well as for confirmation of costing and performance during the detailed design phase. This work will be used to inform the update to the annual budget each year.

Should annual budget approval is not granted in accordance with this plan, the performance projections noted within the *REAP* will not be met within the identified time period.

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Renewable Energy Screening Study Background Information

Oxford County



Renewable Energy Screening Study

Background Information

Oxford County

Table of Contents

1.0	Introduction	1
2.0	Site Listing.....	1
3.0	Energy Analysis Methodology	3
3.1	Building Equilibrium Temperature (BET)	3
3.2	Heating & Cooling Loads.....	3
3.3	Peak Loads	3
3.4	Buildings Without Hourly Electricity Data.....	4
4.0	Background on Renewable Technologies.....	4
4.1	Solar PV (rooftop)	4
4.2	Solar PV (ground mount).....	4
4.3	Solar PV (parking lot canopy).....	5
4.4	Solar Thermal for DHW	5
4.5	Solar Thermal, Ventilation Air.....	6
4.6	Geothermal Heat Pumps for Space Heating and Cooling.....	6
4.7	Air Source Heat Pumps for Space Heating and Cooling.....	7
4.8	Air Source Heat Pumps for DHW (from indoor air)	7
4.9	Rooftop Units with Heat Pumps.....	7
4.10	Wind.....	8
4.11	Biogas.....	8
4.12	Wood Pellet Boiler.....	9
4.13	Waste Heat Recovery	9
4.14	Small Hydro.....	10
5.0	Utility Costs	10
5.1	Electricity.....	10
5.2	Natural Gas.....	10
5.3	Wood Pellets.....	10
6.0	Limitations.....	11

List of Abbreviations

ASHP	Air source heat pump
COP	Coefficient of performance
DHW	Domestic hot water
DWHX	Drain water heat exchanger
EUI	Energy use intensity, that is, energy consumption per floor area
GHG	Greenhouse gas
GSHP	Ground source heat pump
IESO	Independent Electricity System Operator (of Ontario)
kW and kWh	Kilowatt and kilowatt-hour
PV	Photovoltaic
RTU	Rooftop unit
tCO ₂ e	Tonnes of carbon dioxide equivalent
WHR	Waste heat recovery

Renewable Energy Screening Study

Background Information

Oxford County

1.0 Introduction

This report is a companion document to the renewable energy screening studies for 41 Oxford County properties completed by J.L. Richards. This background information provides additional details on the methodology used in the energy analysis as well as a description of the renewable energy technologies considered. The purpose of this report is to provide Oxford County personnel with a description of the assumptions and methods used to screen renewable energy on County-owned properties, while not repeating this. This document should be read in parallel with one of the screen reports. Tables and figures listed in this document refer to those in the screen reports.

The focus of the review was on the technical feasibility of various technologies, although known regulatory and cost factors were then considered they are highlighted in case future changes warrant a reassessment of the renewable energy technology. The renewable technologies considered can be found in section 4.1.

These screening reports were prepared by reviewing two years of historical energy consumption data, including hourly electricity consumption, provided by Oxford County, by reviewing satellite and street level images of the property, and by reviewing building drawings.

Please note that mutually exclusive solutions may have been proposed, when more than one technology is feasible, but they should not all be implemented, at least at the capacities provided in this report. As an example, a wood pellet boiler, an air-source heat pump and a ground source heat pump may all be identified as viable heating solutions, each sized to provide 100% of the required building heat load. Any such overlap will need to be considered in subsequent phases.

2.0 Site Listing

Table 1: List of Sites Included in Study

No.	Building ID	Building Name	Street Address	Hourly Electric Data	Type
1	01_300_Julian	Woodstock Woodingford Lodge	300 Juliana Drive	Yes	Long Term Care
2	02_195_Admira	Woodstock WWTP	195 Admiral Street	Yes	WWTP
3	03_56_McKeand	Ingersoll WWTP	56 McKeand Street	Yes	WWTP
4	04_52_Venison	Tillsonburg Woodingford Lodge	52 Venison Street West	Yes	Long Term Care
5	05_325_Thames	Ingersoll Woodingford Lodge	325 Thames Street South	Yes	Long Term Care
6	06_19_Van	Tillsonburg WWTP	19 Van Street	Yes	WWTP
7	07_381_Willia	Tavistock Lagoon	381 William Street South	Yes	WWTP

Renewable Energy Screening Study

Background Information

Oxford County

No.	Building ID	Building Name	Street Address	Hourly Electric Data	Type
8	08_21_Reeve	Oxford County Administration Building	21 Reeve Street	Yes	Administration
9	09_742_Pavey	N/A	742 Pavey Street	Yes	Apartment
10	10_161_Fyfe	N/A	161 Fyfe Avenue	Yes	Apartment
11	11_484981_Swe	Thornton WTF	484981 Sweaburg Road	Yes	Water
12	12_415_Hunter	Oxford County Courthouse	415 Hunter Street	Yes	Administration
13	13_5_Thompson	Thompson Road WTF	5 Thompson Road	No	Water
14	14_10_Middlet	Thamesford WWTP	10 Middleton Street	No	WWTP
15	15_816_Alice	N/A	816 Alice Street	Yes	Apartment
16	16_1322_Bell	Bell Mill Side Road WTF	1322 Bell Mill Side Road	No	Water
17	17_901_James	N/A	901 - 905 James Street	No	Townhouse
18	18_135_Carrol	N/A	135 Carroll Street	Yes	Apartment
19	19_178_Earl	N/A	178 Earl Street	Yes	Apartment
20	20_174_Lisgar	N/A	174 Lisgar Avenue	Yes	Apartment
21	21_215_Lisgar	N/A	215 Lisgar Avenue	Yes	Apartment
22	22_738_Parkin	N/A	738 Parkinson Road	Yes	Apartment
23	23_200_Mall	Mall Road WTF	200 Mall Road	Yes	Water
24	24_70_Maria	N/A	70 Maria Street	Yes	Apartment
25	25_82_Finkle	N/A	82 Finkle Street	Yes	Apartment
26	26_202_Stanle	Thamesford WTP	202 Stanley Street North	No	Water
27	27_235_Thames	N/A	235 Thames Street North	No	Townhouse
28	28_93_Graham	Public Health - Dental Clinic	93 Graham Street	Yes	Administration
29	29_154_Canter	Canterbury Street WTF	154 Canterbury Street	No	Water
30	30_410_Buller	Public Health	410 Buller Street	Yes	Apartment
31	31_6_Pitcher	Pitcher Street WTF	6 Pitcher Street	Yes	Water
32	32_16_George	N/A	16 George Street	Yes	Apartment
33	33_464852_Riv	Tabor Well 2 & 4 Pumphouses	464852 Rivers Road	No	Water
34	34_59_George	N/A	59 George Johnson Boulevard	Yes	Water
35	35_432594_Zen	Springford Patrol Yard	432594 Zenda Line	Yes	Roads Shop
36	36_377_Mill	EMS Headquarters	377 Mill Street	Yes	EMS Base
37	37_515165_11t	Woodstock Patrol Yard	515165 11th Line	Yes	Roads Shop

Renewable Energy Screening Study

Background Information

Oxford County

No.	Building ID	Building Name	Street Address	Hourly Electric Data	Type
38	38_18_Henders	Tavistock WTF	18 Hendershot Street	Yes	Water
39	39_364_Athlon	Athlone Booster Station	364 Athlone Avenue	Yes	Water
40	40_895939_Oxf	Drumbo Patrol Yard	895939 Oxford Road 3	Yes	Roads Shop
41	41_221_Thames	N/A	221 Thames Street North	Yes	Apartment

3.0 Energy Analysis Methodology

This section of the report provides an explanation of the methodology behind the analysis of the historical energy consumption of the building, including deriving some peak load sizes from this data.

3.1 Building Equilibrium Temperature (BET)

For the purpose of this study, the BET is the ambient temperature at which the building requires neither heating nor cooling. The BET for most buildings is expected to fall in the range of 10-18°C. Only normal working hours on weekdays are considered for this analysis, when it is assumed that the building is fully occupied and fully heated or cooled. Note that, in each screening study, an error value is associated with the BET. For buildings where electricity consumption is strongly dependant on ambient temperature, the error typically does not exceed 3°C. Buildings with a higher error value may indicate a building with no space cooling and minimal electricity use for heating, or buildings where the heating and cooling needs are inconsistent. When a reasonable BET could not be calculated from the hourly electricity data “no BET” is displayed.

3.2 Heating & Cooling Loads

Most buildings with gas heating systems do also consume more electricity for heating, due to increased blower or pump usage to circulate the heat, as well as possible use of supplementary heaters (e.g. entrances, cooler locations). In most buildings, the extreme temperatures, at -40°C and +40°C, are reasonable estimates of the highest electrical load the building will draw, as such temperatures are somewhat beyond what buildings in southern Ontario are exposed to, even with expected increased global warming.

3.3 Peak Loads

The peak electrical load was estimated from the hourly electricity data and is found in Table 3. It is the estimated load during extreme weather (either -40°C or +40°C, whichever causes the highest load) with typical plug and equipment loads for when the building is occupied. This load could also be reached at more moderate temperatures, but with high plug and equipment loads. Please note that even higher loads of shorter duration (less than one hour) may also occur.

The peak heating load, also found in Table 3 was estimated from the monthly gas consumption, our understanding of the building, and our experience with detailed energy modeling of numerous

Renewable Energy Screening Study

Background Information

Oxford County

buildings. Based on this, we assumed the peak heating load by applying a factor of 3 to the average heating load during January. Again, higher peak loads of shorter duration could be experienced.

The average domestic hot water load (see Table 3) was estimated from the summer natural gas consumption, when DHW is assumed to be the only load. This average value represents a constant load throughout each day, and throughout the year. In fact, the DHW load will vary with the level of occupancy and the activities, which typically follow a daily pattern (with little seasonal variation). Because the DHW load is relatively small compared to the overall building load, no attempt was made to estimate the peak DHW load.

3.4 Buildings Without Hourly Electricity Data

For buildings that hourly electricity data was not provided, BET, heating and cooling loads, and electrical peak loads could not be estimated.

4.0 Background on Renewable Technologies

This section contains background information on each of the fourteen renewable energy technologies evaluated during this study.

4.1 Solar PV (rooftop)

Rooftop PV systems are generally technically practical on most buildings, whether they have flat or pitched roofs. Some few buildings may lack structural strength, but there are lightweight PV array designs which may be acceptable. As PV systems currently generate electricity at the approximate retail value of electricity in Oxford County, economic viability is also generally good, although economics improve with system size. Roofs with many different levels or large amounts of existing rooftop “furniture” (e.g. fresh air intakes, air conditioning units, vents, skylights) may not be able to accommodate rooftop PV systems.

Rooftop PV systems are considered Class 1 (<10 kW) or Class 2 (>10 kW) solar facilities systems under O. Reg. 359/09 and are therefore exempt from the Renewable Energy Approval (REA) process.

Rooftop PV system sizes are estimated on a kW DC power rating basis by considering the available roof as show on site images provided by Oxford County cross referenced with the latest satellite imagery from Google Earth. For properties with recently installed rooftop PV systems not shown, the south facing roofs are assumed to be in use. A 80% ground coverage ratio and 20% module efficiency was assumed. Estimated capital costs are based on 2019 installation costs as a turn-key system direct from an Ontario based solar PV EPC firm.

4.2 Solar PV (ground mount)

Ground mount PV systems are generally technically and economically viable throughout Oxford County, providing there is sufficient cleared land available. (Clearly wooded land to accommodate PV system is certainly possible, but was not considered in this study.) Given the local climate and current costs, we will assume 2,000 m² (0.2 ha) of available land as a minimum land area considered in this study.

Renewable Energy Screening Study

Background Information

Oxford County

Ground mount PV systems greater than 10 kW in size are considered Class 3 solar facilities systems under O. Reg. 359/09 and are therefore required to obtain the Renewable Energy Approval (REA), as of August 31, 2019. (They no longer fall under the old requirements of O. Reg. 274/18 which, among other things, required a 15 m setback from property boundaries.). As part of there application, Class 3 solar facilities are required to submit: a project plan, consultation report (including public meetings, municipal and aboriginal consultation) and various assessment (heritage, archaeological, natural heritage and water).

In this study, ground mount PV system sizes are estimated on a kW DC power rating basis by considering the available ground as shown on site images provided by Oxford County (within the property lines indicated), cross referenced with satellite imagery from Google Earth. Design parameters typical of many plants in Ontario were assumed (e.g. fixed tilt racking with a 35% ground coverage ratio, 20% PV module efficiency). Estimated capital costs were estimated as a turn-key system design and installation costs, from available data.

4.3 Solar PV (parking lot canopy)

PV parking lot canopies perform similar to rooftop PV systems, but are somewhat more costly due to the need to build a structure from the ground up. Canopies can be built that cover only the parking spaces, or the parking spaces and driving aisles. Covering the entire parking and driving areas has the obvious advantage of providing space for more PV modules; it may also provide benefits with respect to protecting users from snow and rain and reducing the amount of snow to be cleared. In the screening studies, all capacity estimates are for the smaller style systems that cover only the actual parking spaces.

It is unclear if PV parking lot canopies would be considered as Class 2 (buildings) or Class 3 (ground mount) systems under O. Reg. 359/09, If Class 2, they would be exempt from the Renewable Energy Approval (REA) process. This should be confirmed in subsequent phases if a PV parking lot canopy is considered for any of the properties.

PV parking lot canopy system sizes are estimated on a kW DC power rating basis by considering the parking lot area suitable for a PV system as show on site images provided by Oxford County cross referenced with the latest satellite imagery from Google Earth. The PV canopy was estimated to cover the entire parking spot but driving lanes were not covered. A 20% module efficiency was assumed. Estimated capital costs are based on 2019 installation costs as a turn-key system direct from an Ontario based solar PV EPC firm.

(Note that all types of PV systems in Oxford County require permission from the local distribution company to connect to the grid, and a contractual means of compensating the owner for electricity generated. Currently the “net metering” program is the most widely available, but regulations have been changing rapidly in recent years. Net-metering projects that generate less than 90% of the annual on-site electricity load are exempt from the REA process.)

4.4 Solar Thermal for DHW

Solar water heating collectors can be used to heat domestic hot water and are typically limited to the size needed to meet a high fraction of the DHW load during summer weather (and thus a

Renewable Energy Screening Study

Background Information

Oxford County

smaller fraction during winter weather). While solar water heating systems often appear financially viable on paper, the market in Canada has been neither robust nor consistent. As a result, it can be challenging to find local contractors to design, install and provide long-term service to solar thermal installations, thus making them less economic than expected. Larger installations – or a collection of smaller ones – where it is reasonable for the system owner to train their own personnel to undertake much of the maintenance are likely to prove more cost-effective, simply by having a longer life. Solar water heating systems generally increase in financial attractiveness along with the size of the building's DHW load. Because insulated pipes or hoses must run between the existing hot water tanks and the location of the solar collectors, the solar collectors must normally be mounted close to the mechanical room. The area required for the solar collectors is typically a small fraction of a buildings total roof area.

Solar water heating collector sizes are estimated on a kW power rating basis by considering a portion of the estimated peak DHW demand that a solar thermal system could meet. The collector area (in m²) assumed a 70% collector nameplate efficiency (a typical value). Annual average efficiency is typically no more than half of this nameplate efficiency. Estimated capital costs assume a turn-key system installation by a competent installer.

4.5 Solar Thermal, Ventilation Air

These systems are most commonly mounted on generally south-facing walls, and work by preheating incoming ventilation air for a building. Most common on industrial and agricultural buildings with high ventilation requirements, they can be viable on commercial and residential buildings with suitable wall space and ventilation systems. Ventilation systems that have a centralized fresh air intake located near the top of any south-facing wall allow for easier integration of these systems.

Solar thermal air system sizes are estimated on a kW power rating basis by considering a 70% collector efficiency and the available southwest and southeast facing wall area. Estimated capital costs assume a turn-key system installation by a competent installer, for a project of substantial size. Any required modifications to the building or its HVAC system are excluded.

4.6 Geothermal Heat Pumps for Space Heating and Cooling

Geothermal heat pumps provide both heating and cooling at high efficiency (more correctly, high COP) from electricity. The ground heat exchanger (GHX) can be either open- or closed loop, with closed-loop currently more common in Canada. Construction of the GHX component is a significant capital cost but has an expected useful life in the range of 50 years. Closed loop systems can be constructed in almost any subsurface conditions, while open loop – generally lower cost, where they are feasible – require a highly productive aquifer.

For closed loop geothermal systems, the balance between heating and cooling loads must be considered. Since GSHP systems withdraw heat from the ground in winter, and then send heat into the ground during summer, a strong imbalance can lead to gradually shifting ground temperatures over a few years, impairing operation of the system. Balance is not an issue in some soil conditions, nor is it an issue for open loop systems.

Renewable Energy Screening Study

Background Information

Oxford County

For these studies geothermal heat pumps system capacities were chosen to meet 100% of the estimated peak heating load. Estimated capital costs are based on installation costs for a closed loop ground-source heat pump system with vertical boreholes. Costs exclude any costs to retrofit the building to utilize the lower temperature water produce by heat pumps vs. boilers.

4.7 Air Source Heat Pumps for Space Heating and Cooling

ASHP systems are essentially a chiller than can run in reverse to provide heating during winter. While previous generations of heat pumps could not operate during very cold weather (requiring a backup heating system), current commercial units can operate during almost all winter temperatures experienced in Oxford County, and cold operation performance continues to improve.

For these studies, air source heat pumps system capacities were chosen to meet 100% of the estimated peak heating load. Estimated capital costs are based on estimated turnkey design and installation costs. Costs exclude any costs to retrofit the building to utilize the lower temperature water produce by heat pumps vs. boilers.

(While heat pump technology has been advancing quickly, currently available commercial units (both air- and ground-source) are currently limited to providing a maximum supply temperature in the range of 60°C. Because this is lower than the 80 – 90°C commonly supplied by boilers, the heat distribution equipment inside a building may need to be modified when switching from a boiler to heat pump (e.g. larger coils in air handlers). No changes should be required to cooling distribution equipment.)

4.8 Air Source Heat Pumps for DHW (from indoor air)

These units directly replace a gas or electric hot water tank; they use heat from indoor air (~20°C) to heat the incoming cold water from approximately 10°C to ~45°C. They are purpose-built, packaged units that serve a single purpose. In summer, they can draw excess heat from the indoor air, reducing the load on the building's air-conditioning system. Conversely, in winter the building heating system must produce slightly more heat to compensate for the heat being drawn for use to heat water.

For these studies, these units were sized to meet 100% of the estimated peak DHW load.

4.9 Rooftop Units with Heat Pumps

These are “drop in” replacements for packaged RTU's that provide heated and cooled fresh air for a building. Standard units include a chiller to cool and either a gas burner or electric resistance heater to heat the fresh air. The RTU's being suggested in the screening studies have a bidirectional heat pump (air-source) to both heat or cool the incoming fresh air. Normally they also retain the gas burner or electric resistance heater, for use in extreme cold winter temperatures when the heat pump becomes ineffective. Typically, this backup heater would be used for only a few dozen hours per year, in Oxford County. They are usually both technically and economically viable as end-of-life replacements for conventional units.

These RTU units work well as a stand-alone retrofit project for replacing an existing RTU that has reached it's end of life. For costing purposes, this study assumes that the RTU being replaced

Renewable Energy Screening Study

Background Information

Oxford County

uses gas for heating; the economics would be substantially more attractive if the existing RTU uses electric heat. As these replacements are being considered at **equipment end of life**, the capital cost estimates only include the incremental cost of a new RTU with heat pump over a new gas-fired RTU. The installation, engineering and other costs would be very nearly identical for an RTU heat pump compared to a gas RTU.

The RTU heat pump will consume less energy to deliver the same amount of heat but it will be fuel switching from natural gas to electricity, which is currently more expensive although with much lower GHG content. At this stage we have assumed these differences will balance out, such that annual utility costs will be unchanged.

4.10 Wind

Small (5 – 200 kW) “urban” wind turbines for use on buildings and in built-up areas have been repeatedly introduced to the market for more than 25 years, but with limited success. Both costs and useful life are uncertain, and regulatory barriers exist. Alternatively, large wind turbines (>1 MW) have become common in rural areas, typically installed in clusters of 25+ turbines. Some large wind farms are currently operational in Oxford County and neighbouring municipalities.

Wind systems greater than 3 kW in size are considered as Class 2-5 wind facilities systems under O. Reg. 359/09 and are therefore required to obtain the Renewable Energy Approval (REA). All renewable energy generation facilities that complete construction after August 31, 2019 no longer fall under the old requirements of O. Reg. 274/18 Siting Restriction for Renewable Energy Generation Facilities (e.g. 15 m setback from property boundary), instead they must obtain a REA. Class 3 (>50 kW < 70 m) wind facilities are required to submit as part of their application: a project plan, consultation report (including public meetings, municipal and aboriginal consultation), various assessment (heritage, archaeological, natural heritage and water), noise report and a setback plan. The complete REA process can take over 12 months to complete.

Wind system sizes assumed that the local utility would permit half of the interface transformer size without substantial upgrades. Cost estimates were based on deployment of pole mounted 10 kW turbines.

4.11 Biogas

This technology, sometimes referred to as renewable natural gas (RNG) involves creating and burning a gaseous fuel from organic matter, often waste material. Creating and capturing biogas is increasingly common at landfills and wastewater treatment plants, typically used only on-site. Biogas can be burned directly for space and/or process heating as well as cleaned for use in co-generation systems to produce electricity as well as heat. There are expectations (and some facilities) where biogas will be injected into lines – including the existing natural gas distribution network – for distribution to any customer. However, there are regulatory and technical challenges associated with biogas in the natural gas distribution network which are currently limiting this practice.

Anaerobic digestion facilities that utilize biogas to generate electricity and are not located on a farm are considered as Class 3 anaerobic digestion facilities systems under O. Reg. 359/09 and

Renewable Energy Screening Study

Background Information

Oxford County

are therefore required to obtain the Renewable Energy Approval (REA). Note that a REA is not required if the biogas on site is not used to generate electricity. Class 3 bio-energy facilities are required to submit as part of their application: a project plan, consultation report (including public meetings, municipal and aboriginal consultation), various assessments (heritage, archaeological, natural heritage and water), and additional technical reports (emissions dispersion modelling, noise study, effluent management plan, hydrogeological assessment, surface water assessment, financial assurance estimate). The complete REA process can take over 12 months to complete.

Biogas system sizes were estimated based on the average daily flow values from Oxford County's 2019 Annual Wastewater Treatment System Summary Report. Cost estimates for biogas systems vary significantly depending on the existing infrastructure and intended end use of the gas. As a result, no estimates were provided at this stage.

4.12 Wood Pellet Boiler

Generally, biomass refers to the combustion of any solid organic material; for the purposes of this study, only manufactured wood pellet fuel is considered, as a fuel for wood pellet boilers, which effectively directly replace natural gas boilers, but with a zero-GHG fuel. Pellet boilers are generally technically viable wherever gas boilers are currently in use but can be limited due to their physical size (larger than gas boilers) and fuel delivery and the requirement for on-site fuel storage, typically in an outdoor silo or bin.

Pellet boilers are not required to obtain a Renewable Energy Approval (REA) under O. Reg. 359/09, as they do not generate electricity. (A wood pellet cogeneration system would require a REA, but these are not considered in the screening studies.)

For these studies, pellet boiler systems are estimated to meet approximately 50% of the peak heating load. In turn, this enables them to meet approximately 80% of a building's annual heating load. The existing equipment (gas or electric) is assumed to provide the balance of the needed heat.

4.13 Waste Heat Recovery

There is potential to recover low grade waste heat from sources, especially from water and wastewater treatment plants and arenas, but even from simple devices such as drain water heat recovery units in residential buildings. It is rarely economical to transport heat, so it usually is used on the same or an adjacent property, and may be useful in conjunction with heat pumps.

System sizing and costing is highly dependent on the source and on-site uses available. Waste heat was assumed to only be recovered during the heating season as for space heating. For water treatment plants, waste heat was estimated as 2% of pumping energy. For wastewater treatment plants, waste heat was based on the average daily flow values from Oxford County's 2019 Annual Wastewater Treatment System Summary Report. Cost estimates for waste heat recovery systems are entirely dependent on the existing infrastructure and vary drastically from site to site. As a result, they are not provided at this stage.

Renewable Energy Screening Study

Background Information

Oxford County

4.14 Small Hydro

Small “run of river” hydro generators can be very economical, as they can reliably produce electricity 24/7/365, but require unique site condition. Essentially, they require a river that flows at speed, year-round. None of the properties screened during this study met the unique site conditions required for a technically feasible small hydro system.

Facilities that utilize waterpower to generate electricity are not required to obtain the Renewable Energy Approval (REA) under O. Reg. 359/09.

5.0 Utility Costs

5.1 Electricity

For these studies we have used \$0.139/kWh as the costs for electricity at all sites. This rate reflects the upper tier rate for non-residential customers set by the Ontario Energy Board effective May 1, 2020. This rate assumes that all sites are billed as delivery demand-based customers where their delivery charges are calculated based on their monthly peak demand. At this stage we have not considered what effect these technologies could have on monthly peak demand. The electricity rates for each specific site will differ depending on the local utility delivery charges and customer rate class.

5.2 Natural Gas

For these studies we have used \$0.22/m³ (\$0.027/kWh) as the cost for natural gas at all sites. This rate reflects the Union Gas Rate M2 – Union South set for April 2020. This rate assumes that any change in natural gas consumption will be an incremental effect is the 13,000 m³ to 20,000 m³ deliver class. This rate does not consider the additional savings such as eliminating the fixed monthly charge that could be realized by completely removing natural gas service at a site. As well, this rate is based on the current price of natural gas, while it is difficult to predict what this rate will be in the future, we do know that the federal carbon tax portion will increase. This rate includes the current federal carbon charge on natural gas of \$0.059/m³, this is expected to increase to \$0.098/m³ by 2022. Further consideration of technologies that reduce natural gas consumption should escalate this rate to include the federal carbon tax forecasted for when the project is implemented.

5.3 Wood Pellets

For these studies we have used \$220/ton (\$0.044/kWh) as the cost for wood pellets at all sites. This rate reflects the current pricing from Southwestern Ontario wood pellet distributors and is inline with historical wholesale pricing.

5.4 Fuel Cost Comparison

From the above, we note that we have assumed electricity costs approximately five times that of natural gas, and wood pellets approximately 60% higher than natural gas:

Renewable Energy Screening Study

Background Information

Oxford County

- 2.7 ¢/kWh, natural gas
- 4.4 ¢/kWh, wood pellets; 163% of gas price
- 13.9 ¢/kWh, electricity; 515% of gas price

These prices were derived from local rate structures (gas and electricity) or from a local supplier (Gildale Farms for wood pellets). However, they are all equivalent. Specifically, when used for heating gas and wood pellets tend to be around 80% efficient, while electric resistance heaters are 100% efficient. Thus the effective cost of both gas and wood pellets is about 25% higher than this listed price. Also, these prices are based on the current federal carbon tax rate of \$30/ton of CO_{2e}. This rate will very soon be \$50/ton, and will have a substantial impact on natural gas pricing, with minimal impact on the pricing of wood pellets or electricity (in Ontario). With these two considerations, and a longer outlook, it would be **more appropriate to assume that wood pellets and electricity cost approximately 125% and 320%, respectively, of the cost of natural gas.** In effect, by using current pricing for these three fuels, and ignoring the efficiency differences, we have effectively biased the economics away from electricity and wood pellets, toward natural gas.

It should also be noted that any renewable energy project can be expected to operate for many years, and thus those that consume a “fuel” will be subject to any price fluctuations of natural gas, electricity and wood pellets. We have not attempted to define future pricing of these energy commodities, but we do note that natural gas prices are widely reported as being near historic lows, and that wood pellet pricing has been volatile, both substantially higher and lower than the current price of \$220/ton.

6.0 Limitations

Please note that, in this high-level study, there is potential for a substantial impediment to have remained unidentified. Examples could include zoning restrictions, unknown underground conditions which would make a GSHP untenable, or inadequate roof structural capacity that would make rooftop PV more costly than expected. Also, two or more technologies that are mutually exclusive may receive high feasibility ratings, but not all would be implemented (e.g. ground source heat pumps, air source heat pumps and wood pellet boilers).

The accompanying reports contain findings from a preliminary overview of the buildings and their energy consumption. Costing information is based on general costs for services and goods in Ontario, rather than on specific cost information from local suppliers. Further study of the technical and pricing conclusions are recommended before investment decisions are finalized.

The findings in these reports are based on information provided to us by Oxford County and was not verified by JLR; any inaccuracy or incompleteness in the data provided could lead to inaccurate conclusions. Furthermore, the findings of this report are based on technical and cost considerations at the time the report was prepared. The field of renewable energy has experienced rapid changes in both technology and costs; should such rapid changes continue, the findings in this report will be impacted.

This report has been prepared for the exclusive use of Oxford County, for the stated purpose, for the named facilities. Its discussions and conclusions are summary in nature and cannot be

Renewable Energy Screening Study

Background Information

Oxford County

properly used, interpreted or extended to other purposes without a detailed understanding and discussions with the client as to its mandated purpose, scope and limitations. This report was prepared for the sole benefit and use of Oxford County and may not be used or relied on by any other party without the express written consent of J.L. Richards & Associates Limited.

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Public Works MEMORANDUM

TO: All Oxford County Area Municipal Councils

FROM: David Simpson, Director of Public Works

DATE: August 12, 2022

RE: **Oxford County 2024 Transportation Master Plan
Municipal Class Environmental Assessment Study – Phase 1 & 2
Notice of Public Consultation Centre #1 (Virtual), Oxford County**

Oxford County has commenced the 2024 *Transportation Master Plan* Class Environmental Assessment (EA) Study to provide the County with a strategic long-term multi-modal transportation system planning document to 2046. The Study Area encompasses the entire geographic boundary of Oxford County. As part of the Transportation Master Plan Update, a corridor study of Oxford Road 4 is also being completed. Public and review agency consultation is a key element of the Master Plan process.

Public Consultation Centre (PCC) #1 will be in virtual meeting format, and will include a presentation by the County's project Consultant (Parsons Inc.) followed by a Q/A period. The presentation agenda will include an introduction to the Transportation Master Plan, provide an overview of the Class EA Master Plan process, summarize the existing/current travel and transportation patterns of the County, and discuss next steps in the Master Plan Process. A short survey and interactive map to leave comments will be available through the *Speak-Up! Oxford* (SUO) project web page and remain active 3 weeks after the Virtual PCC date. As detailed in the attached Notice, the PCC #1 date and registration information are as follows:

Date: **Tuesday, September 27, 2022**
Time: **5:00 p.m. - 7:00 p.m.**
Register: <https://speakup.oxfordcounty.ca/2024tmp>

In addition to the virtual PCC #1, in-Person opportunities for public engagement will also be available on Tuesday September 13th in Woodstock at the Outdoor Farm Show, Tuesday September 20th in Ingersoll at Town Council Chambers, and Friday September 23rd in Tillsonburg at the Tillsonburg Ribfest (Tillsonburg Fairgrounds).

Notice of the Virtual PCC #1 and the in-person engagement opportunities will be advertised in local newspapers and social media in advance of these events.



David Simpson, P.Eng., PMP
Director of Public Works

Encl. Notice of Public Consultation Centre #1

Notice of Public Consultation Centre #1

Oxford County 2024 Transportation Master Plan

Oxford County has initiated the development of a Transportation Master Plan (TMP) to provide the County with long-term strategic planning for the transportation system through to 2046.

What is the Transportation Master Plan?

The Transportation Master Plan (TMP) is a long-term strategic transportation planning document that lays out the County's vision and goals for its transportation system until 2046. The Plan will consider:

- Population and employment growth in the County;
- Accommodation of future transportation conditions, while also considering sustainable and multi-modal transportation solutions (e.g., promoting active transportation, transportation demand strategies, and public transportation over single-occupant vehicle trips); and
- Specific needs of the County, including people and goods movement, along with agricultural mobility.

Parsons Inc. has been retained by Oxford County to complete the Transportation Master Plan Update. Key objectives of the update include:

- Assess existing and future transportation network conditions and performance, with consideration to travel demand and patterns;
- Identify needs of the transportation system and develop policies to address them; and
- Develop a safe, effective and financially viable integrated transportation system implementation plan that maximizes the use of existing infrastructure and promotes regional connectivity.

As part of the Transportation Master Plan Update, a corridor study of Oxford Road 4 will be completed. This corridor is a key transportation link between Highways 401/403 and the northern part of the County. Findings of this study will be incorporated into the Plan.

The Transportation Master Plan Update is being conducted in accordance with the Master Plan requirements of Phases 1 and 2 of the Municipal Class Environmental Assessment (2000, as amended to 2007, 2011, & 2015), approved under the Ontario *Environmental Assessment Act*.

Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information, all comments will become part of the public record.

We want to hear from you

The Project Team is hosting the study's first virtual Public Consultation Centre (PCC) to introduce the Transportation Master Plan Update study and provide an opportunity to hear from the public on the existing transportation system and future transportation goals and visions. PCC #1 will be held:

Tuesday, September 27, 2022
5:00 - 7:00 p.m.

Register at www.oxfordcounty.ca/2024tmp

The comment period for PCC #1 is from September 27 to October 19, 2022.

In addition to the virtual PCC #1, the Project Team is hosting "pop-up events" at various local events to further make known this Transportation Master Plan Update Study and to engage directly with members of the community. Pop-up events are planned for September 13 at Canada's Outdoor Farm Show in Woodstock, September 20 at the Ingersoll Town Council Chambers, and September 23 at Ribfest in Tillsonburg. Events will be advertised via social media, *Speak Up Oxford*, and other advertisements prior to the event.

Public comments and feedback may be submitted online now at www.oxfordcounty.ca/2024tmp. This site includes an online comment form, questionnaire, and feedback through an interactive map.

Comments are welcome for the duration of the study on the project website or by contacting the project leads listed below.

Contacts for information

Ryan Vink, P.Eng.
Oxford County Project Manager
rvink@oxfordcounty.ca | 1-800-755-0394, ext. 3023

John McGill, P.Eng., PTOE, RSP1
Project Manager, Parsons
john.mcgill@parsons.com | 905-330-9569

Posted August 5, 2022



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Rick Richardson Director of Protective Services
Reviewed By:	Rodger Mordue	Date:	August 30 th , 2022
Subject:	August Monthly Report	Council Meeting Date:	Sept 7 th , 2022
Report #:	FC-22-16		

Recommendation:

That Report FC-22-16 is received as information.

Background:

To provide Council with an update regarding the activities of the Protective Services Department, for the month of August 2022

Analysis/Discussion:

Fire:

- (22) burn permits were issued in August 2022
- August 2022 monthly fire calls (included)
- Fire calls 2021 vs 2022 (included)

Meetings, Courses and Training Attended:

- July 28th – August 15th vacation time
- August 4th attended our monthly RFSOC meeting in Norwich to discuss:
 1. Recruit training calendar and courses that will be offered in 2023
 2. New Fire Prevention Officer Geoff Hayman will begin his duties starting in EZT on August 8th. Geoff will arrive in our Township on August 15th
 3. RFSOC group decided to increase the daily rate for instructors to \$200.00 beginning in 2023
 4. RFSOC fire departments will participate in this years Farm Show on Sept 13th, 14th & 15th. Our reception tent will be situated at the front gate providing free fire prevention material to the general public
- August 8th Fire Marshal Grant for Firefighter Certification (information attached)
- August 16th, our 2023 Recruitment night was hosted at the Drumbo Station with a great turnout of 30 residents interested in becoming Township firefighters
- August 29th staff attend a meeting with representatives from Norwich, Zorra and SWO to discuss the idea of a hiring a shared By -Law enforcement officer

August 2022 Fire Call Report**Bright**

21	01-Aug	Twp Rd 5	Barn Fire Assist
22	07-Aug	Main St S	Structure Fire Assist

Drumbo

64	01-Aug	Twp Rd 5	Barn Fire
65	03-Aug	Hyw 401 Km 250	MVC
66	07-Aug	Main St S	Structure Fire Assist
67	08-Aug	Hwy 401 Km 245	MVC
68	09-Aug	Hwy 401 Km 242	Vehicle Fire
69	11-Aug	Oxford Rd 29	Vehicle Fire
70	12-Aug	Oxford Rd 29	MVC - cancelled
71	27-Aug	Hwy 401 Km 263	Other

Plattsville

50	01-Aug	Twp Rd 5	Barn Fire Assist
51	07-Aug	Glenbriar	Medical Call
52	07-Aug	Main St S	Structure Fire Assist
53	14-Aug	Mill St E	Fire Alarm
54	17-Aug	Krystal Crt	Grass Fire
55	21-Aug	Washington Rd	MVC
56	27-Aug	Washington Rd	Brush Fire
57	29-Aug	Twp Rd 11	Hydro Lines

Princeton

47	01-Aug	Twp Rd 5	Barn Fire
48	03-Aug	Hwy 401 Km 242	MVC Assist
49	05-Aug	Hwy 2	MVC
50	07-Aug	Main St S	Structure Fire
51	13-Aug	Twp Rd 2	Dirt Bike MVC
52	21-Aug	Gobles Rd	Medical Call
53	24-Aug	Hwy 403 MM 9	MVC
54	30-Aug	Hwy 403 MM 12	MVC

EZT

12 calls to date

North Dumfries

0 calls to date

Wilmot

0 calls to date

BB Fire Calls as of January-August

	<u>2021</u>		<u>2022</u>	
	<u>Medical</u>	<u>Total Calls</u>	<u>Medical</u>	<u>Total Calls</u>
Bright	1	17	3	22
Drumbo	8	50	7	71
Plattsville	3	40	9	57
Princeton	5	45	6	54
EZT	2	8	3	12
North Dumfries	0	1	0	0
Wilmot	<u>0</u>	<u>1</u>	<u>0</u>	<u>0</u>
	19	162	28	216

By-Law Enforcement – August 2022

2022

- 01 Cats
- 02 Noise – dogs
- 03 Dogs running at large
- 04 Noise
- 05 Dogs running at large
- 06 Dog bite
- 07 Dogs running at large
- 08 Noise
- 09 Parking
- 10 Noise
- 11 Cats & cameras
- 12 Dogs
- 13 Parking
- 14 Cameras
- 15 Noise

CEMC-August 2022

- Emergency Compliance
 - Beginning to plan annual training exercise

Respectfully submitted by:

Rick Richardson

Rick Richardson
 Director of Protective Services



“MAKING ONTARIO A SAFER PLACE FROM FIRE.”

DATE: August 8, 2022

TO: Ontario Fire Chiefs
Municipal CAOs

FROM: Jon Pegg
Chair, Fire Marshal’s Public Fire Safety Council

SUBJECT: Firefighter Certification

On July 1, 2022, [O. Reg. 343/22: Firefighter Certification](#) came into force in the Province of Ontario.

Following the consultation period, the Fire Marshal’s Public Fire Safety Council (FMPFSC) Board of Directors has been working with the Office of the Fire Marshal to understand the requirements of the certification regulation and its impact on Ontario’s fire services. Over the course of the next 4 to 6 years, departments will be required to certify their members to the level of fire protection service established by their municipality.

It became apparent in our discussions and understanding of feedback provided throughout the regulation’s consultation period that municipalities were seeking financial support to assist with the requirements under O. Reg. 343/22. Some departments will require online access to training material whereas others will be required to purchase textbooks to support their members in achieving certification.

Today, on behalf of the FMPFSC, I am pleased to announce the creation of a \$750,000 grant to support firefighter certification in Ontario. This grant will be provided over three years and is open to all Ontario fire departments who can demonstrate a need for educational materials to support training and certifying their members. The grant will be administered through the FMPFSC’s Distribution Centre with details to follow on the application process and what materials will be eligible as part of this funding.

The FMPFSC has worked closely with both Jones and Bartlett and the International Fire Service Training Association (IFSTA) to provide a suite of both hard copy and online materials that will benefit the fire service in meeting the requirements of the regulation.

The Board and FMPFSC is honoured to be able to provide this funding to the fire service in Ontario and will continue to look for opportunities to give back to the Ontario fire service to continue to support a fire safe Ontario.

It would be appreciated if fire chiefs could share the news of this grant with their training officers and others so that thought can be given on what is needed at the local level to support training and certification.

Details on the grant application process will be available through Jamie Kovacs, Executive Director, in the coming weeks.

Sincerely,

Jon Pegg
Chair

cc: Ontario Association of Fire Chiefs



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Rick Richardson – Director of Protective Services
Reviewed By:	Rodger Mordue	Date:	August 22 nd , 2022
Subject:	Fire Dispatch Agreement	Council Meeting Date:	September 7 th , 2022
Report #:	FC-22-17		

RECOMMENDATION:

THAT Staff Report FC-22-17 entitled “Fire Dispatch Agreement” be accepted as information;

AND THAT staff be directed to prepare a By-law for Council consideration to enter into an agreement with Woodstock Police Services to provide Fire Dispatching Services from January 1, 2023 to January 1, 2027.

BACKGROUND:

In November 2017 the five Oxford County rural municipalities entered into a joint agreement for fire dispatching services with the Woodstock Police Service (WPS). The current agreement expires on January 1, 2023.

This Agreement provided the costs to be shared among the participating municipalities on a per capita basis. The 2016 Census population statistics were used to apportion the cost and would see an annual increase of 2.5% per year.

The five rural Fire Chiefs have met with WPS to discuss extending the Agreement for an additional five years.

The participating fire services are satisfied with the level of service being provided by WPS, and their commitment to ongoing improvements for fire dispatching services.

ANALYSIS/DISCUSSION:

The proposed Agreement to extend the dispatching service has a term from January 1st, 2023 to January 1st, 2027.

The 2021 Census population statistics will be used to apportion the costs to each municipality.

The Township of Blandford Blenheim population increased from 7,399 residents in 2016 to 7,565 residents.

The cost per capita in 2022 is \$2.85 per resident. With an annual increase in cost of 3.5% in 2023 the cost per capita will be \$2.95. The annual cost will continue to increase at a rate of 3.5% annually for the duration of the Agreement. The annual increase covers wage increases of WPS dispatch staff.

The projected annual cost (including non-refundable HST) in 2022 for the Township is \$21,087.15 as compared to the 2023 projected cost of \$22,316.75.

The WPS Board has approved the proposed new agreement.

Staff suggests that Council enter into an agreement with WPS to extend the current Fire Dispatch Service Agreement for another five years.

FINANCIAL CONSIDERATIONS:

The costs associated with fire dispatching services will be included in the 2023 draft Operating Budget.

ATTACHMENTS

Proposed Fire Dispatch Services Agreement.

Respectfully submitted by:

Rick Richardson

Director of Protective Services

THIS AGREEMENT, dated this 1st day of January, 2023

BETWEEN

City of Woodstock Police Service
(hereinafter "WPSCOMMCENTRE")

-and-

THE CORPORATION OF THE TOWNSHIP OF BLANDFORD-BLENHEIM
(hereinafter "the Township of Blandford-Blenheim")
OF THE SECOND PART

-and-

THE CORPORATION OF THE TOWNSHIP OF EAST ZORRA-TAVISTOCK
(hereinafter "the Township of East Zorra-Tavistock")
OF THE THIRD PART

-and-

THE CORPORATION OF THE TOWNSHIP OF NORWICH
(hereinafter "the Township of Norwich")
OF THE FOURTH PART

-and-

THE CORPORATION OF THE TOWNSHIP OF SOUTH-WEST OXFORD
(hereinafter "the Township of South-West Oxford")
OF THE FIFTH PART

-and-

THE CORPORATION OF THE TOWNSHIP OF ZORRA
(hereinafter "the Township of Zorra")
OF THE SIXTH PART

WHEREAS:

1. Pursuant to the provisions of *the Municipal Act*, S.O. 2001, c. 25, as amended, the parties have enacted By-laws to authorize an agreement between the parties;
2. *The Fire Protection and Prevention Act*, S.O. 1997, c. 4, as amended, authorizes a municipality to provide and/or receive fire protection services to or from other municipalities;
3. WPSCOMM CENTRE operates fire protection services and hold fire protection assets including fire communications personnel and equipment suitable to meet municipal responsibilities required by *the Fire Protection and Prevention Act*, through a communications dispatch pod situated within the Woodstock Police Station located on Dundas Street and a backup dispatch pod situated in the Woodstock Fire Station located on Parkinson Road, both in Woodstock, Ontario.
4. WPSCOMM CENTRE has agreed to provide such Fire Communications services to the Township of Blandford-Blenheim, the Township of East Zorra-Tavistock, the Township of Norwich, the Township of South-West Oxford and the Township of Zorra (hereinafter, collectively "the Coalition")

NOW THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties agree as follows:

Services Provided:

5. WPSCOMM CENTRE shall supply fire communications services to the Coalition, the particulars of which are as described in Schedule "A" to this agreement. Failure to fulfill said particulars described in Schedule "A" to the satisfaction of the members of the Coalition jointly will constitute reasonable grounds to terminate the agreement.
6. The fire communications services provided by WPSCOMM CENTRE shall comply with the Standard Operating Guidelines prepared by WPSCOMM CENTRE and approved by the Coalition, which regulate the delivery, operation and maintenance of same delivered to the Coalition.

Consideration:

7. The Coalition shall pay fees to WPSCOMM CENTRE as described in Schedule "B" to this agreement.
8. This agreement shall remain effective for a period of five years from the date of signature. If not expressly renewed in writing or supplanted by a succeeding agreement, this Agreement shall be deemed to have been automatically renewed for a period of indefinite duration unless and until one of the parties provides written notice of termination as contemplated in paragraph nine below.

9. Notwithstanding the provisions of paragraph eight above, any of the parties may withdraw from this Agreement upon providing twelve months written notice to the other parties (hereinafter "the party or parties withdrawing").
10. In the event that notice of withdrawal from this Agreement is provided by one or more of the Coalition, WPSCOMM CENTRE shall continue to provide the services described in Schedule "B" to the party or parties withdrawing until the expiry of the twelve month notice period, unless the provision of these services is waived by the Coalition or by the party or parties withdrawing from this Agreement.
11. In the event that notice of termination is provided by one or more of The Coalition, the withdrawing party or parties shall continue to remit and shall be liable to pay to WPSCOMM CENTRE the consideration described in Schedule "C" until the expiry of the twelve month notice period.
12. In the event one or more of the Coalition withdraws from this Agreement, the terms of the Agreement shall remain in effect as between the remaining parties, and the total consideration payable by the Coalition shall be apportioned between the Coalition members which have not withdrawn from the Agreement, proportionately to their populations.

Service Commencement Date:

13. Fire Communications services shall come into effect on the date that all signatories have signed and placed their corporate seals unto. The Woodstock Police Services shall continue to provide fire communications services to the member municipalities of the Coalition in accordance with the existing agreements dated May 28th 2013 contiguously until this agreement comes into effect.

Indemnity and Limitation of Liability:

14. The parties agree to indemnify and save each other harm, along with their respective councilors, officers, employees and agents from any liability, action, claim, loss, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees arising out of the performance of their respective obligations under this Agreement, save and except in respect of any liability, action, claim, loss, damage, payment, cost, fine, fine surcharge, recovery or expense, including assessable legal fees, directly attributable to, arising from, or caused by the negligence or breach of contractual obligation hereunder by any party hereto.
15. Notwithstanding that set forth in paragraph fourteen above, the parties agree that no party or parties shall be held responsible for damages caused by delay or failure to perform its or their undertakings under the terms of the agreement when the delay or failure is due to fires, strikes, floods, acts of God or the Queen's enemies, lawful acts of public authorities, or delays or defaults caused by common carriers which cannot reasonably be foreseen or provided against.

16. Notwithstanding any other provision in this contract or any applicable statutory provisions, none of the parties shall be liable to any other party for special or consequential damages or damages for loss of use arising directly or indirectly from any breach of this contract, fundamental or otherwise, or from any tortious acts or omissions of their respective employees or agents, the parties specifically agree that WPSCOMM CENTRE shall not be liable for any damages arising as a result of any injury or damage caused or sustained by personnel, apparatus, or equipment of the fire departments of The Coalition while engaged in the provision of fire protection services in the Coalition. Nothing in this provision shall be interpreted to affect or interfere with the right of any of the parties to take action to enforce the terms of this Agreement.
17. The parties hereto agree that no provision herein, or any part thereof, shall be interpreted or act so as to affect, restrict, prohibit, or interfere with the right of any party or parties hereto, either individually or in combination, to demand or otherwise take action or commence proceedings to enforce the terms of this Agreement.

Amendment:

18. The parties may amend this agreement from time to time by further written memorandum.
19. Should any of the parties wish to amend the terms of this agreement, they shall provide a minimum of thirty days written notice to the other party of the proposed terms of amendment.

Dispute Resolution:

20. In the event that a dispute arises or disputes arise between the parties which cannot be resolved, the parties shall submit the dispute or disputes to arbitration using the procedure set out in *the Municipal Arbitrations Act*, R.S.O. 1990, c. M-48, as amended.
21. In the event that a dispute or disputes is submitted for arbitration, the decision or decisions of the arbitrator shall be final and binding upon the parties to this agreement.
22. In the event that arbitration cannot be conducted using the procedure set out in *the Municipal Arbitrations Act*, the parties shall select a single arbitrator, and in the absence of agreement on an arbitrator, the arbitrator shall be nominated by a justice of the Superior Court of Justice of the Ontario Courts under the procedure set out in the *Arbitration Act*, S.O. 1991, c. 17, as amended.

General Provisions:

23. This agreement is not assignable without the written consent of the parties. Any attempt to assign any of the rights, duties or obligations of this agreement without written consent is void.
24. This agreement shall not be in force, or bind any of the parties, until executed by all the parties named in it.
25. This agreement shall take effect upon its execution by the authorized representative or representatives of WPSCOMM CENTRE and the Coalition.
26. Any notice under this agreement shall be sufficiently given by personal delivery or by registered letter, postage prepaid and mailed in a Canadian post office, addressed, in the case of notice to WPSCOMM CENTRE and, in the case of notice to any of the members of The Coalition, or to any other address as may be designated in writing by the parties, and the date of receipt of any notice by mailing shall be deemed conclusively to be ten days after the mailing.
27. No change or modification of this agreement (including the schedules to this agreement) shall be valid unless it is in writing and signed by each party.
28. WPSCOMM CENTRE and the Coalition agree that no representation, statement or agreement, other than those set out in this agreement, shall be binding upon the parties unless expressed in writing, signed by an authorized representative or by authorized representatives of each and purporting to be expressed in modification of this agreement.
29. The parties agree that each of them shall, upon reasonable written request of the other, do or cause to be done all further lawful acts, deeds and assurances whatever for the better performance of the terms and conditions of this agreement.
30. It is intended that all provisions of this agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or part of one is found to be void, voidable or unenforceable for any reason whatever, then the particular provision or provisions or part of the provision shall be deemed severed from the remainder of this agreement and all other provisions shall remain in full force.
31. This agreement shall be governed by and construed in accordance with the laws of the Province of Ontario.
32. Subject to the restrictions on transfer and assignment, this agreement shall endure to the benefit of and be binding on the parties and their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have affixed their Corporate Seals attested by the hands of their proper officers and further this agreement shall be signed in counterpart with the parties named below and a copy of each counterpart shall remain attached to and form part of this agreement.

**THE CORPORATION OF THE TOWNSHIP
OF BLANDFORD-BLENHEIM**

MAYOR

DATE

CAO

DATE

**THE CORPORATION OF THE TOWNSHIP
OF EAST ZORRA-TAVISTOCK**

MAYOR

DATE

CAO

DATE

**THE CORPORATION OF THE TOWNSHIP
OF NORWICH**

MAYOR

DATE

CAO

DATE

**THE CORPORATION OF THE TOWNSHIP
OF SOUTH-WEST OXFORD**

MAYOR

DATE

CAO

DATE

**THE CORPORATION OF THE TOWNSHIP
OF ZORRA**

MAYOR

DATE

CAO

DATE

**THE CITY OF WOODSTOCK POLICE
SERVICES BOARD**

CHAIR, POLICE SERVICES BOARD

DATE

CHIEF OF POLICE

DATE

SCHEDULE "A"

WPSCOMMCENTRE shall provide the following services and facilities:

1. Maintain a 24 hour, seven days a week, 365 days a year Fire Dispatch facility complete with a fully integrated Computer Aided Dispatch (CAD) system in accordance with NFPA 1221. The dispatch facility and backup dispatch facility will remain compliant NFPA 1221 and any applicable legislation at all times.
2. Maintain Ingenious Software (Fire Pro 2) at all communication consoles within WPSCOMMCENTRE. Maintain training of all communications staff and full implementation of Incident Response Reports.
3. Where practical, forward an Incident Report to the appropriate fire agency within 2 hours of the termination of command. The report shall be complete including all data provided by the caller, responding units and all benchmarks and notes from the incident commander's transmissions to dispatch.
4. Prepare and Maintain approved Standard Operating Guidelines (SOGs) to the satisfaction of the Coalition members. SOGs are reviewed and approved by fire chiefs who represent the municipalities of the Coalition. SOGs prescribe the duties and responsibilities of fire communications staff with respect to all aspects of fire communications services provided by WPSCOMMCENTRE within this agreement. Fire Communications staff shall be trained to SOGs and other specific standards as outlined in sentences 5 through 9 below.
5. Have a current copy of NFPA 1221, NFPA 1061 and all Standard Operating Guidelines within the communications dispatch pod at all times. **Copies of current NFPA 1221 and NFPA 1061 shall be provided to WPSCOMMCENTRE by the Coalition at their expense.**
6. Maintain a training program that includes the core elements of NFPA 1061. WPSCOMMCENTRE will designate a Communications Centre liaison to work with Coalition members to maintain the required training program.

7. Ensure that any person who is assigned fire communications responsibilities and duties will complete the fire-related training program prior to commencement of said duties.
8. The Coalition and WPSCOMM CENTRE will implement an approved client feedback and client concern process to address any concerns of both parties, users of the dispatch system.
9. Host meetings for dialogue between the parties in the interest of continuous quality improvement of services provided. Meetings will be held as needed.
10. Each Fire Chief member of The Coalition will receive a report from the Woodstock Police Service when requested. The report will include all critical times of each event that each member fire service was requested to respond for service. The report will include data that is owned by each member municipality of the Coalition.
11. **Within 48 hours** of a written request by a fire chief or his designate, provide an unedited digital audio file of any incident, excluding weekends and holidays. The file will include all telephone and radio transmissions complete with time stamps from the initial report until termination of command.
12. The Coalition shall provide updated Community Control Group contact information annually upon request of WPSCOMM CENTRE.
13. The Coalition and WPSCOMM CENTRE shall maintain an approved SOG that addresses Running Assignments.
14. The Coalition and WPSCOMM CENTRE shall maintain an approved SOG that addresses Burn Permit logging and activations.
15. In conjunction with the Coalition Fire Chiefs WPSCOMM CENTRE shall continue to utilize text to firefighter notification.
16. The WPSCOMM CENTRE and Coalition agree to make written recommendation or proposal of new required equipment and subsequent cost sharing responsibilities cost specific to fire dispatch. Mutual agreement on the equipment and costs shall be made prior to the purchase and installation.

SCHEDULE "B"

Coalition "Detailed" Cost Protection Chart 2023-2027

COALITION PARTNER	POPULATION CENSUS (2021)	2022	2023 3.50%	YEAR 1 ANNUAL COST	2024 3.50%	YEAR 2 ANNUAL COST	2025 3.50%	YEAR 3 ANNUAL COST	2026 3.50%	YEAR 4 ANNUAL COST	2027 3.50%	YEAR 5 ANNUAL COST	
BLANDFORD-BLENHEIM	7565	\$2.85	\$21,087.15	\$2.95	\$22,316.75	\$3.05	\$23,073.25	\$3.16	\$23,905.40	\$3.27	\$24,737.55	\$3.38	\$25,569.70
EZT	7841	\$2.85	\$20,317.65	\$2.95	\$23,130.95	\$3.05	\$23,915.05	\$3.16	\$24,777.56	\$3.27	\$25,640.07	\$3.38	\$26,502.58
NORWICH	11151	\$2.85	\$31,352.85	\$2.95	\$32,895.45	\$3.05	\$34,010.55	\$3.16	\$35,237.16	\$3.27	\$36,463.77	\$3.38	\$37,690.38
SW OXFORD	7583	\$2.85	\$21,842.40	\$2.95	\$22,369.85	\$3.05	\$23,128.15	\$3.16	\$23,962.28	\$3.27	\$24,796.41	\$3.38	\$25,630.54
ZORRA	8628	\$2.85	\$23,193.30	\$2.95	\$25,452.60	\$3.05	\$26,315.40	\$3.16	\$27,264.48	\$3.27	\$28,213.56	\$3.38	\$29,162.64
	ANNUAL TOTALS EXCLUDING HST PLUS HST @13%		\$117,793.35 \$15,313.14	\$126,165.60 \$16,401.53	\$130,442.40 \$16,957.51	\$135,146.88 \$17,569.09	\$139,851.36 \$18,180.68	\$144,555.84 \$18,792.26					
FINAL TOTAL ANNUAL COST			\$133,106.49	\$142,567.13	\$147,399.91	\$152,715.97	\$158,032.04	\$163,348.01					

REQUEST FOR PROPOSAL FOR FIRE DISPATCH SERVICES

ITEM	DESCRIPTION	ESTIMATED COST
1.0	ANNUAL COST – 1 st YEAR	\$126,165.60
2.0	ANNUAL COST – 2 nd YEAR	\$130,442.40
3.0	ANNUAL COST – 3 rd YEAR	\$135,146.88
4.0	ANNUAL COST – 4 th YEAR	\$139,851.36
5.0	ANNUAL COST – 5 th YEAR	\$144,555.84
	SUBTOTAL	\$676,162.08
	HST (13%)	\$87,901.07
	TOTAL PROPOSED PRICE (CAD)	\$764,063.15



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Rick Richardson – Director of Protective Services
Reviewed By:	Rodger Mordue	Date:	August 26 th , 2022
Subject:	Fire Department ER By Law	Council Meeting Date:	September 7 th , 2022
Report #:	FC-22-18		

RECOMMENDATION:

THAT Staff Report FC-22-18 entitled Fire Department Establishing and Regulating By-Law be accepted as information;

AND THAT the By-law attached as By-Law Number 2314-2022 a by-law to Establish and Regulate a Fire Department for the Township of Blandford-Blenheim be presented to Council for all three readings to repeal and replace By-Law Number 1701-2011 in its entirety.

BACKGROUND:

In the Province of Ontario, the provision of fire protection is a municipal responsibility, carried out in accordance with the Fire Protection and Prevention Act, 1997, S.O. 1997, c.4 (the FPPA). When a municipality establishes a fire service, the Council of the municipality is required to pass a By-Law establishing the fire department and regulating the provision of fire protection services.

ANALYSIS/DISCUSSION:

The purpose of updating our current ER By-Law is to provide the Township of Blandford-Blenheim Fire Prevention staff with a guideline for addressing fire and life safety concerns required by the Ontario Fire Code.

Fire Prevention Staff are responsible for ensuring all referrals from members of the Blandford-Blenheim Fire Service, complaints from the public and other agencies and violations noted during inspections are acted upon.

The Fire Prevention Officer, Firefighters, or other involved Fire Prevention staff are expected to utilize experience, training, and good judgement to implement such actions as required to complete fire inspections in a safe and effective manner.

FINANCIAL CONSIDERATIONS:

N/A

ATTACHMENTS

Fire Department Establishing & Regulating By-Law 2314 -2022

Respectfully submitted by:

Rick Richardson

Director of Protective Services

THE CORPORATION OF THE TOWNSHIP OF BLANDFORD-BLENHEIM

BY-LAW NUMBER 2314-2022

FIRE DEPARTMENT ESTABLISHING AND REGULATING BY-LAW

WHEREAS section 2(1) of the *Fire Protection and Prevention Act, 1997*, S.O. 1997, c 4, as amended (the "FPPA"), requires that every municipality establish a program which must include public education with respect to fire safety and certain components of fire prevention and to provide such other fire protection services as it determines may be necessary in accordance with its needs and circumstances;

AND WHEREAS section 5(0.1) of the FPPA states that a council of a municipality may establish, maintain and operate a fire department for all or any part of the municipality;

AND WHEREAS section 5(1) of the FPPA states that a fire department shall provide fire suppression services and may provide other fire protection services in a municipality;

NOW THEREFORE the Council of The Corporation of the Township of Blandford-Blenheim enacts as follows:

1. DEFINITIONS

In this by-law, unless the context otherwise requires:

- 1.1 "Additional Services" includes retaining a private contractor, renting special equipment not normally carried on a fire apparatus, or using more materials than are carried on a fire apparatus normally;
- 1.2 "CAO" means the Chief Administrative Officer of the Township or his or her designate;
- 1.3 "Confined Space" means any space that has limited or restricted means for entry or exit, such as tanks, vessels, silos, storage bins, hoppers, vaults, trenches, excavations and pits, and which are not designed for continuous human occupancy;
- 1.4 "Council" means the Council of the Township of Blandford-Blenheim;
- 1.5 "Deputy Fire Chief" means the person(s) appointed by the Fire Chief to act on behalf of the Fire Chief in the case of an absence in the office of the fire chief, and to carry out those duties as assigned;
- 1.6 "Division" means a Division of the Fire Department as provided for in this by-law;
- 1.7 "Fire Chief" means the person appointed by Council pursuant to sections 6 (1), (2) or (4) of the FPPA;
- 1.8 "Fire Code" means Ontario Regulation 213/07 under the FPPA;
- 1.9 "Fire Department" means a group comprised to those individuals outlined in section 3.1 of this by-law which has been established pursuant to section 2.1 of this by-law;
- 1.10 "Firefighter" means any person employed in, or appointed to, a fire department and assigned to undertake fire protection services, and includes a volunteer firefighter.

- 1.11 "FPPA" means the *Fire Protection and Prevention Act, 1997*, S.O. 1997, c 4, as amended;
- 1.12 "Fire Protection Services" includes fire suppression, fire prevention, fire safety education, training of persons involved in the provision of fire protection services, rescue and emergency services and the delivery of all those services;
- 1.13 "Member" means any person employed by or appointed to the Fire Department and includes the Fire Chief, Deputy Fire Chief(s), Captains, other officers and administrative support staff; and
- 1.14 "Township" means The Corporation of the Township of Blandford-Blenheim;

2. ESTABLISHMENT

- 2.1 The Fire Department is continued under this by-law to provide Fire Protection Services for the Township and shall be known as "Township of Blandford-Blenheim Fire Department".

3. COMPOSITION

- 3.1 The Fire Department shall consist of the Fire Chief, Deputy Chiefs, Captains, other officers, administrative support staff and any other person as may be authorized or considered necessary from time to time by Council or by the CAO for the Fire Department to perform Fire Protection Services.

4. EMPLOYMENT

- 4.1 In relation to the re-staffing of existing positions, the Fire Chief may recommend to the CAO the employment in or the appointment to the Fire Department, as the case may be, of any person, as a Member who meet the qualifications and, if applicable, completes criteria (including, without limitation, training courses and physical skills and other examinations) and otherwise satisfies any applicable hiring policies, practices or procedures established by the Fire Department for such employment or appointment.

5. TERMS AND CONDITIONS OF EMPLOYMENT

- 5.1 Subject to the FPPA, the remuneration and other terms and conditions of employment or appointment of the Members that comprise the Fire Department shall be determined by:
 - 5.1.1 Council acting in accordance with policies and programs established or approved for the Members.

6. ORGANIZATION

- 6.1 The Fire Department shall be organized to perform the following functions:
 - 6.1.1 Fire Prevention;
 - 6.1.2 Emergency Operations;
 - 6.1.3 Training and Staff Development;

6.1.4 Technical Maintenance; and,

6.1.5 Administration and Support Services.

6.2 Each function of the Fire Department is the responsibility of the Fire Chief or a Member designated by the Fire Chief. Designated Members shall report to the Fire Chief on the activities under their supervision and shall carry out all orders of the Fire Chief.

6.3 The Fire Chief may assign or re-assign such Members to assist him or her in the administration and operation of the Department.

7. CORE SERVICES

7.1 For the purposes of this by-law, core services provided by the Fire Department shall be outlined in **Appendix "A"** which shall form a part of this by-law.

8. RESPONSIBILITIES AND AUTHORITY OF FIRE CHIEF

8.1 The Fire Chief shall be the head of the Fire Department and is ultimately responsible to Council, through the CAO, for proper administration and operation of the Fire Department including the delivery of Fire Protection Services.

8.2 Acting within the appropriate Township policies established by Council, the Fire Chief shall be authorized to make such general orders, policies, procedures, guidelines, rules, and regulations and to take such other measures as the Fire Chief may consider necessary for the proper administration and efficient operations of the Fire Department and the effective management of the Fire Protection Services for the Township and for the prevention, control and extinguishment of fires, the protection of life and property and the management of emergencies and, without restricting the generality of the foregoing:

8.2.1 for the care and protection of all property belonging to the Fire Department;

8.2.2 for arranging for the provision of necessary and proper facilities, apparatus, equipment, services and supplies for the Fire Department in cooperation with the appropriate Township departments;

8.2.3 for determining and establishing the qualifications and criteria for employment or appointment and the duties of all Members of the Fire Department in consultation with the CAO;

8.2.4 for the conduct and the discipline of Members of the Fire Department, and in doing so may counsel, reprimand, suspend, or terminate the employment of any Member for insubordination, inefficiency, misconduct, tardiness or for non-compliance with any of the provisions of this by-law, the general orders, policies, procedures, guidelines, rules, and regulations, or infraction of the *Criminal Code* that, in the opinion of the Fire Chief would be detrimental to the order, discipline and efficiency of the Fire Department;

8.2.5 for preparing and, upon approval by the Council, implementing and maintaining a community emergency management plan and program for the Township;

- 8.2.6 for coordinating any community emergency management plan and program adopted or to be adopted by the Council and assisting in the preparation, implementation and maintenance of any emergency plans, organizations, services or measures established or to be established by the Township, alone or with others, and, if so requested or required, any emergency plan established by the Province of Ontario or the Government of Canada and for coordinating with and assisting any other public official in a declared emergency;
 - 8.2.7 for reporting to the appropriate crown attorney or other prosecutor, including the Township Solicitor, or law enforcement officer or other officer that the facts upon the evidence in any case in which there is reason to believe that a fire has been the result of criminal intent or negligence or in which there is reason to believe an offence has been committed under the FPPA, the Fire Code or this by-law;
 - 8.2.8 for keeping an accurate record, in convenient form for references, of all fires, rescues and emergencies responded to by the Fire Department;
 - 8.2.9 for keeping such other records as may be required by the Council and the FPPA;
 - 8.2.10 for preparing and presenting the annual report of the Fire Department to Council;
 - 8.2.11 for preparing and presenting the annual estimates of the Fire Department;
 - 8.2.12 for exercising control over the budget approved by Council for the Fire Department, as established by the policies or procedures of the Township;
 - 8.2.13 for the appointment, promotion, and demotion of Members of the Fire Department in accordance with such policies, procedures, guidelines, rules and regulations as may be in existence from time to time provided that such measures do not conflict with the provisions of this by-law or any other by-law of the Township, including without limitation those requiring the prior approval of or prior notice to the Council of the satisfaction of certain conditions, general or otherwise, specified by the Council before such measures can be implemented, or with the provisions of the FPPA; and,
 - 8.2.14 for any other duties assigned by the CAO.
- 8.3 The Fire Chief shall be responsible for the administration and enforcement of this by-law and all general orders, policies, procedures, guidelines, rules, and regulations made under this by-law and for the enforcement of any other by-laws of the Township respecting Fire Protection Services, and shall review periodically such by-laws, and may for this purpose, establish an advisory committee consisting of such officers and other persons, including members of the general public, as the Fire Chief may determine from time to time, to assist him or her in the discharge of this duty and, in the case of such by-laws, including this by-law, recommend to the CAO and/or Council such amendments as the Fire Chief considers appropriate and, in the case of general orders, policies, procedures, guidelines, rules, and regulations made under this by-law, revise or terminate any of them if the Fire Chief considers it appropriate.
- 8.4 The Fire Chief shall have all powers, rights and duties assigned to a Fire Chief under the FPPA including without limitations the authority to enforce compliance with the Fire Code.
- 8.5 The Fire Chief may liaise with the Office of the Fire Marshal of Ontario and any other office or organization as required by the CAO or Council as considered necessary or advisable

by the Fire Chief for the proper administration and efficient operation of the Fire Department and the effective management of the Fire Protection Services for the Township.

8.6 The Fire Chief may utilize such Members of the Fire Department as the Fire Chief may determine, from time to time, to assist in the performance of his duties.

9. **DEPUTY FIRE CHIEFS**

9.1 The Deputy Fire Chiefs shall be subject to and shall obey all orders of the Fire Chief and shall perform such duties as are assigned to him or her by the Fire Chief and shall act on behalf of the Fire Chief in case of absence or a vacancy.

10. **SUPERVISION**

10.1 The Members of the Fire Department, while on duty, shall be under the direction and control of the Fire Chief, Deputy Chiefs or the next ranking officer present in any place.

11. **GENERAL DUTIES AND RESPONSIBILITIES**

11.1 Every Member shall conduct themselves in accordance with general orders, policies, procedures, guidelines, rules and regulations made by the Fire Chief and shall give their whole and undivided attention while on duty to the efficient operation of the Fire Department and shall perform the duties assigned to them to the best of their ability in accordance with the FPPA.

12. **PROPERTY**

12.1 No person shall use any apparatus, equipment or other property of the Fire Department for any personal or private use.

12.2 No person shall willfully damage or render ineffective or inoperative any apparatus, equipment or other property belonging to or used by the Fire Department.

13. **FIRE SUPPRESSION**

13.1 The Fire Department may suppress any fire, or other hazardous condition, by extinguishing it or by other reasonable action and, for this purpose, may enter private property, if necessary, to do so without notice.

13.2 The Fire Department may pull down or demolish any building or structure when considered necessary to prevent the spread of fire.

13.3 The Fire Department may request other persons present at a fire to assist in:

13.3.1 extinguishing fires;

13.3.2 pulling down or demolishing buildings or structures to prevent the spread of fire;

13.3.3 crowd and traffic control; or,

13.3.4 suppression of fires or other hazardous conditions in other reasonable ways.

14. REFUSAL TO LEAVE

14.1 No person present at a fire shall refuse to leave the immediate vicinity of that fire when required to do so by a Member of the Fire Department if, in the opinion of that Member, the fire poses a threat to that person's health or safety.

15. CONDUCT AT FIRES

15.1 During a fire and for the time after it has been extinguished that is required to remove the apparatus and equipment of the Fire Department and render the location and vicinity safe from fire, no person, either on foot or with a vehicle of any kind, shall enter or remain upon or within:

15.1.1 the portion of any street or lane upon which the site of the fire abuts or upon any street or lane for a distance of fifteen (15) metres on each side of the property damaged by fire; or

15.1.2 any additional street or lane or part of a street or lane or any additional limits in the vicinity of the fire as may be prescribed by the Fire Chief, Deputy Chiefs or the next ranking officer present at the fire.

15.2 The provisions of section 15.1 shall not apply to a resident of any street or lane or within the prescribed additional limit or to any person so authorized to enter or remain by an officer of the Fire Department or by an O.P.P. police officer.

16. ADDITIONAL SERVICES

16.1 If, as a result of the Fire Department's response to an emergency including a motor vehicle incident or, in order to carry out any of its duties or functions, the Fire Chief or Deputy Chiefs may determine that it is necessary to obtain Additional Services in order to suppress or extinguish a fire, preserve property, prevent a fire from spreading, control and eliminate an emergency, carry out or prevent damage to equipment owned by the Township or otherwise carry out the duties and functions of the Fire Department, then the owner of the property requiring or causing the need for the Additional Services may be charged the costs to provide the Additional Services including all applicable taxes.

16.2 The Additional Services obtained pursuant to section 16.1 may be obtained notwithstanding any other Township by-law or policy.

17. EMERGENCY RESPONSES OUTSIDE THE LIMITS OF THE MUNICIPALITY

17.1 The Fire Department shall not respond to a call with respect to a fire or emergency outside the territorial limits of the Township except with respect to a fire or emergency:

17.1.1 that, in the opinion of the Fire Chief or his or her designate, threatens property in the territorial limits of the Township or property situated outside the territorial limits of the Township that is owned or occupied by the Township;

17.1.2 in a municipality with which an automatic aid or mutual aid agreement has been entered into to provide Fire Protection Services;

17.1.3 on property with which an approved agreement has been entered into with any person or Township to provide Fire Protection Services;

17.1.4 at the discretion of the Fire Chief, to a municipality authorized to participate in the County of Oxford mutual aid plan or any other similar reciprocal plan or program; or,

17.1.5 on property beyond the territorial limits of the Township where the Fire Chief or designate determines immediate action is necessary to preserve life or property and the appropriate fire department is notified to respond and assume command or establish alternative measures acceptable to the Fire Chief or designate.

18. INTERFERENCE

18.1 No person shall impede or interfere with or hinder the Fire Department in the performance of its duties as set out in this by-law, the FPPA or the Fire Code.

19. FIRE ALARM

19.1 No person shall prevent, obstruct or interfere in any manner whatsoever with the communication of a fire alarm to the Fire Department or with the Fire Department responding to a fire alarm that has been activated.

20. OFFENCES

20.1 Every person who contravenes any provisions of this by-law is guilty of an offence and upon conviction is liable to a fine or penalty established by the *Provincial Offences Act*, R.S.O. 1990, c P.33, as amended.

21. CONFLICT

21.1 Where this by-law may conflict with any other by-law of the Township, this by-law shall take precedence to the extent of the conflict.

22. SEVERABILITY

22.1 If any or part of this by-law is found to be illegal or beyond the power of the Township, such section or part or item shall be deemed to be severable and all other sections or parts of this by-law shall be deemed to be separate and independent there from and to enacted as such.

23. REPEAL

23.1 By-law Number 1701-2011 is hereby repealed.

24. ENACTMENT

24.1 This by-law shall come into force and effect the day it is passed by Council.

25. Schedule A & B are deemed to be an integral part of this By -Law

READ a first and second time this 7th day of September, 2022.

READ a third time and finally passed this 7th day of September, 2022.

Mayor

CAO/Clerk

APPENDIX "A" TO BY-LAW 2314-2022

1. FIRE PREVENTION (FIRE SAFETY INSPECTIONS, ENFORCEMENT, PUBLIC EDUCATION and FIRE CAUSE DETERMINATION)

If an Inspection is to be conducted because of a **request** from an owner or a **complaint** received by the Township, the Fire Prevention Officer shall adhere to the following steps:

- *The Fire Prevention Officer, shall inform the owner of the need to conduct a fire inspection at the identified location within a reasonable timeframe that works for the inspector and owner. In situations where entry is denied, the Fire Prevention Officer shall notify the Chief Fire Official who will proceed with legal counsel to obtain a warrant to enter the property.*
- *Upon attending the location, the Fire Prevention Officer shall conduct the inspection with the assistance of those he or she considers advisable to assist. Inspections shall be conducted in the presence of the owner or a representative.*
- *The Fire Prevention Officer shall ensure that documentation is made contemporaneously of any observations of Ontario Fire Code violations.*
- *The Fire Prevention Officer shall, in the event of an inspection, make every reasonable attempt to inspect the violations of the Ontario Fire Code identified in this policy and issue any necessary Orders.*

Routine inspections shall take place at the request of the Chief Fire and are based on the following criteria for priority/selection of Inspections:

Very High Priority

- Vulnerable Occupancies (mandatory annual inspections and fire drills)

High Priority

- Locations with large gatherings of people (churches, schools, community centers etc.,)
- Industrial facilities which are determined to have one or more of the following: large quantities of fertilizer storage, large quantities of combustibles, quantities of fuel storage
- Multiple-use occupancies with fire separations between.

The Fire Prevention Officer shall ensure that all Inspections are noted in the Inspection notebook used by the Fire Prevention Officer. The Fire Prevention Officer shall ensure the information is accurately recorded in Fire Pro as soon as reasonably practicable.

The Fire Prevention Officer shall ensure that they have entered the land or premises lawfully and in compliance with the requirements as outlined in Part VI of the FPPA.

The Fire Prevention Officer shall make note in their Inspection Notebook under which Section of the FPPA they exercised their authority to enter the land or premises.

The Fire Prevention Officer shall issue an Inspection Order (21 (1)(g)) to the owner, ordering the owner to correct the violations of the Ontario Fire Code referenced in the inspection reports used by the Township of Blandford Blenheim. The Inspection Order, listing the violations of the Ontario Fire Code noted during the inspection shall be sent to the owner and, where tenants are present, posted on-site in a conspicuous location. The Inspection Order shall be sent by regular letter mail or by another appropriate manner as outlined in Section 24 (1) and 77 of the FPPA no later than five (5) business days following the discovery of the violations.

The Fire Prevention Officer shall not provide the owner with any written suggestions or advice on how to correct the violation(s). The time permitted for compliance of the Inspection Order, as permitted by Section 23(c) of the FPPA, is to be at the discretion of the Fire Prevention Officer based on the risk to the public and firefighting operations.

The Fire Prevention Officer shall not provide the owner with any written correspondence stating the building complies with the Ontario Fire Code. The Fire Prevention Officer may state "*The previously noted violations have been corrected.*" The Fire Prevention Officer shall also include, in all written correspondence, a statement indicating that although the violations identified have been corrected, this does not mean that the building complies with any other Municipal, Provincial or Federal Statute or Regulation.

If the Inspection Order is not complied with in the specified time frame, the Fire Prevention Officer shall notify the Chief Fire in charge of the legal section; the owner shall be charged with failing to comply with the Inspection Order.

EMERGENCY OPERATIONS

- 1.1 The Fire Department shall provide structural, vehicle, and wild land (i.e., grass or brush) fire suppression services, delivered in both an offensive and defensive mode and shall include search and rescue operations, forcible entry, ventilation, protecting exposures, salvage and overhaul as appropriate.
- 1.2 The Fire Department shall provide pre-hospital emergency patient care services such as first aid, Cardio Pulmonary Resuscitation (CPR), and defibrillation in accordance with response agreements with other agencies such as may be in existence from time to time.
- 1.3 The Fire Department shall maintain a response capacity for hazardous material incidents at the operations level with available resources such that the protection of life and the environment may be addressed and shall provide such services in accordance with any response agreements with other agencies such as may be in existence from time to time.
- 1.4 Special technical and/or rescue services provided by the Fire Department shall include performing vehicle extrication using hand tools, air bags and heavy hydraulic tools as

required and water/ice rescue services shore based. HUSAR or other highly specialized technical and/or rescue services shall not be provided by the Fire Department beyond the basic firefighter operations level.

2. TRAINING AND STAFF DEVELOPMENT

2.1 The Fire Department shall provide such training and staff development activities such as are necessary for the efficient operation of all Divisions. The National Fire Protection Association and other related industry training standards and reference materials may be used as reference guides for the Township of Blandford Blenheim Fire Department training as approved by the Fire Chief. Members may be required to attend any recognized training venue as designated by the Fire Chief in order to acquire or maintain the necessary knowledge, skills and abilities to perform their job function. All training will comply with the *Occupational Health and Safety Act*, R.S.O. 1990, c. 0.1, as amended, and other applicable provincial legislation.

3. TECHNICAL MAINTENANCE

3.1 The Fire Department shall ensure that all apparatus and equipment is inspected regularly and maintained in good repair in accordance with industry best practices and the legislated requirements in effect from time to time.

4. ADMINISTRATION AND SUPPORT SERVICES

4.1 The Fire Department will maintain adequate administrative resources to effectively provide support to all departmental activities including but not limited to communications liaison, information services liaison, purchasing liaison, human resources liaison, and support for the Community Emergency Management Program.

APPENDIX "B" TO BY-LAW 2314-2022

Township of Blandford - Blenheim Fire Department

Core Services

Emergency Response Services	Approved to Deliver	
	YES	NO
1. Basic firefighting	X	
2. Structural firefighting including rescue	X	
3. Vehicle firefighting	X	
4. Grass, brush, forestry firefighting	X	
5. Marine firefighting	X	
6. Automatic aid	X	
7. Mutual aid	X	
8. Basic medical assist	X	
9. Medical assist with defibrillation (AED)	X	
10. Awareness level hazardous materials	X	
11. Operations level hazardous materials	X	
12. Technician level hazardous materials		X
13. Vehicle accidents	X	
14. Vehicle extrication	X	
15. Transportation incidents involving vehicles, trains, aircraft and watercraft	X	
16. Water and ice - shore based	X	
17. Water and ice - water entry		X
18. Water and ice - boat		X
19. Public Hazards - Downed hydro lines, Carbon monoxide, gas leaks	X	
20. Ambulance assistance	X	
21. Police assistance	X	
22. Public utilities assistance	X	
23. Community emergency plan participation	X	
24. Urban search and rescue	X	
25. High angle rescue		X
26. Confined space rescue	X	
27. Farm/silo rescue	X	
28. Fire Safety Inspections	X	
29. Animal rescue (farm, domestic ,wild		X



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Rick Richardson – Director of Protective Services
Reviewed By:	Rodger Mordue	Date:	August 26 th , 2022
Subject:	Driver Training Agreement	Council Meeting Date:	September 7 th , 2022
Report #:	FC-22-19		

RECOMMENDATION:

THAT Staff Report FC-22-19 entitled Fire Department Driver Training Agreement be accepted as information;

AND FURTHER THAT Council approves the draft By-Law to authorize the execution of a fire department driver certification program agreement between the Township of Norwich and the Township of Blandford Blenheim.

BACKGROUND:

The purpose of this report is to request Council's support to enter into an agreement with the Township of Norwich to provide driver certification which will ensure adequate training and DZ driver licensing for our firefighters .

The RFSOC Chiefs have identified a need to expand our training and testing to Ministry of Transportation Driver Certification for Class DZ driver licensing.

ANALYSIS/DISCUSSION :

Staff is seeking Council's support to authorize the execution of an agreement with the Township of Norwich to provide the driver certification training and testing. The responsibilities of each party in the proposed agreement are summarized within this document under Appendix A and Appendix B .

FINANCIAL CONSIDERATIONS:

All five participating rural municipalities will share the cost of the required audit in the amount of \$4,500. Each municipality will also be responsible for their own instructor costs.

ATTACHMENTS:

- Fire Department Driver Certification Program
- Appendix A & Appendix B

Respectfully submitted by:

Rick Richardson

Director of Protective Services

THE CORPORATION OF THE TOWNSHIP OF NORWICH

BY-LAW NO. XX-XXXX

Being a By-law to authorize the execution of a Fire Department Driver Certification Program Agreement between the Township of Norwich and The Township of Blandford-Blenheim.

WHEREAS Section 20(1) of the Municipal Act, 2001, S. O. 2001, c. 25, as amended, provides that a municipality by enter into an agreement with one or more municipalities or local bodies, as defined in section 19, or a combination of both to jointly provide, for their joint benefit, any matter which all of them have the power to provide within their own boundaries;

AND WHEREAS the above parties wish to exercise a shared services approach to the respective needs for Ministry of Transportation of Ontario Driver Certification for Ontario Class DZ driver licensing services;

AND WHEREAS it is deemed expedient to share services between the municipalities to ensure adequate training and testing to Ministry of Transportation Driver Certification for Class DZ driver licensing to volunteer firefighters is available in each community;

NOW THEREFORE the Council of The Corporation of the Township of Norwich HEREBY ENACTS AS FOLLOWS:

1. THAT the entering into a Fire Service Driver Certification Agreement between The Corporation of the Township of Norwich and the Township of Blandford-Blenheim is hereby approved and authorized.
2. THAT the Mayor and the Clerk be and they are hereby authorized and directed to execute on behalf of the Corporation of the Township of Norwich the said Fire Services Driver Certification Agreement in substantially the same for as the attached hereto as Schedule "A" and forming part of this By-law.
3. THAT the said Fire Services Driver Certification Agreement shall take effect and come into force upon the signing thereof by all parties thereto.
4. THAT this By-law shall come into force and take effect on the final passing thereof.

READ A FIRST, SECOND AND THIRD TIME AND FINALLY PASSED THIS DAY OF _____, 2022.

Mayor
Larry Martin

CAO/CLERK
Kyle Kruger

Fire Services Driver Certification Agreement

BETWEEN:

The Corporation of the Township of Norwich, hereinafter called Township of Norwich, of the First Part

AND

The Corporation of the Township of Blandford -Blenheim , hereinafter called Blandford-Blenheim , of the Second Part.

WHEREAS pursuant to the provisions of the Municipal Act, 2001, S. O. 2001, c. 25, s. 20(1) as amended, the parties have enacted By-laws to authorized an agreement between the parties:

AND WHEREAS the above parties wish to exercise a shared services approach to the respective needs for fire service training and testing, specifically Ministry of Transportation Driver Certification for Ontario Class DZ driver licensing;

AND WHEREAS it is deemed expedient to share services between the municipalities to ensure adequate training and testing for Ministry of Transportation Driver Certification for Ontario Class DZ driver licensing to volunteer firefighters is available in each community:

NOW THERFORE the parties here unto agree as follows:

Services Provided:

1. The Township of Norwich agrees to maintain, in so far as possible, an approved Ministry of Transportation Driver Certification Program for the certification of Class DZ driver licensing and renewals of Class AZ and DZ driver licensing in accordance with Ministry of Transportation Driver Certification Program polices and guidelines.
2. The Township of Norwich agrees to administer the Driver Certification Program on behalf of the above party(s), and maintain all records as prescribed under the Program.
3. The Township of Norwich agrees to maintain a minimum of one approved Signing Authority for training and testing services for Class D licencing, and a minimum of one approved person for training and certifying drivers in Air Brake Endorsement under the Driver Certification Program.

Consideration:

4. The Township of Blandford-Blenheim agrees to provide the items and personnel as prescribed under Appendix B as part of their participation in the Driver Certification Program.
5. The Township of Blandford-Blenheim agrees to purchase one share of the total number of municipalities participating in the program of the cost of all expenses incurred by the Township of Norwich for maintaining the Driver Certification Program as outlined under Appendix A of this Agreement.
6. The Township of Norwich will invoice each participating municipality on a quarterly basis, for one share of the total number of municipalities participating in the Program of the estimated cost for the months of March, June, and September. The December invoice will reflect the reconciliation for actual expenses incurred by the Township of Norwich for the calendar year.

Term:

7. The Agreement shall remain in effective for a period of three (3) years from the date of signature. If not expressly renewed in writing or supplanted by a succeeding agreement, this Agreement shall be deemed to have been automatically renewed for a period of indefinite duration unless and until one of the parties provides written notice of termination as contemplated in paragraph eight (8).

8. Notwithstanding the provisions of paragraph seven (7) above, any of the parties may withdraw from the Agreement upon providing 30 days written notice to the other party.
9. In the event that a notice of withdrawal from the Agreement is provided by one or more of the total number of municipalities participating in the Program, the Township of Norwich shall continue to provide the services described in the Agreement to the party or parties withdrawing until the expiry of the 30 days notice period, unless the provision of these services is waived by the party withdrawing from this Agreement.
10. In the event that the notice of termination is provided by one or more of the participating municipalities, the withdrawing municipality or municipalities shall continue to remit and shall be liable to pay to the Township of Norwich the consideration described in Appendix A until the expiry of the 30-day period.

Service Commencement Date:

11. This Agreement shall come into force on the date that all signatories have signed and placed their corporate seals unto.

Indemnity and Limitation of Liability:

12. The parties agree to indemnify and save each other harm, along with their respective councillors, officers, employees and agents from any liability, action, claim, loss, damage, payment, cost, fee, fine surcharge, recovery of expense, including assessable legal fees arising out of the performance of their respective obligations under this Agreement, save and except in respect of any liability, action, claim, loss, damage, pay, cost, fee, fine surcharge, recovery of expense, including assessable legal fees, directly attributed to, arising from, or caused by the negligence or breach of contractual obligation hereunder by any party hereto.
13. Notwithstanding that set forth in paragraph twelve (12) above, the parties agree that no party or parties shall be held responsible for damages caused by delay or failure to perform its or their undertakings under the terms of this agreement when the delay or failure is due to fires, strikes, floods, acts of God or the Queen's enemies, lawful acts of public authorities, or delays or defaults caused by common carriers which cannot reasonably be foreseen or provided against.
14. Notwithstanding any other provision in this agreement or any applicable statutory provisions, none of the parties shall be liable to any other party for special or consequential damages or damages for loss of use arising directly or indirectly from any breach of this contract, fundamental or otherwise, or from omissions of their respective employees or agents. Without limiting the generality of the foregoing, the parties specifically agree that the Township of Norwich shall not be liable for any damages arising as a result of injury or damage caused or sustained by personnel, apparatus, or equipment of the fire departments of the parties while engaged in the provision of driver licensing certification services by the parties.
15. The parties hereto agree that no provision herein, or any part thereof, shall be interpreted or act so as to affect, restrict, prohibit, or interfere with the right of any party or parties hereto, either individually or in combination, to demand or otherwise take action or commence proceedings to enforce the terms of this Agreement.

Amendment:

16. The parties may amend this Agreement from time to time by further written memorandum.

17. Should any of the parties wish to amend the terms of this Agreement, they shall provide a minimum of ninety days written notice to the other party of the proposed terms of this Agreement.

Dispute Resolution:

18. In the event that a dispute arises or disputes arise between the parties which cannot be resolved, the parties shall submit the dispute or disputes to arbitration using the procedure set out in the Municipal Arbitrations Act, R.S.O. 1990, c. M-48, as amended.
19. In the event that a dispute or disputes is submitted for arbitration, the decision or decisions of the arbitrator shall be final and binding upon all the parties to this agreement.
20. In the event that arbitration cannot be conducted using the procedures set out in the Municipal Arbitrations Act, the parties shall select a single arbitrator, and in the absence of agreement on an arbitrator, the arbitrator shall be nominated by a justice of the Superior Court of Justice of the Ontario Courts under the procedure set out in the Arbitration Act, S.O. 1991, c. 17, as amended.

General Provisions:

21. This Agreement is not assignable without the written consent of the parties. Any attempt to assign any rights, duties or obligations of this Agreement without the written consent is void.
22. This Agreement shall not be in force, or bind any of the parties, until executed by all parties named in it, and shall take effect upon its execution by the authorized representative or representatives of the Township of Norwich.
23. Any notice under this Agreement shall be sufficiently given by personal delivery or by registered letter, postage prepaid and mailed in Canada post office, addressed, in the case of notice to the Township of Norwich and, in the case of notice to any of the parties, or to any other address as may be designated in writing by the parties, and the date of receipt of any notice by mailing shall be deemed conclusively to be ten days after the mailing.
24. The parties agree that each of them shall, upon reasonable written request of the other, do or cause to be done all further lawful acts, deed, and assurances whatever for the better performance to be expressed in modification of this agreement.
25. It is intended that all provisions of this Agreement shall be fully binding and effective between the parties, but in the event that any particular provision or provisions or part of one is found to be void, voidable or unenforceable for any reason whatever, then the particular provision or provisions or part of the provision shall be deemed severed from the remainder of the Agreement and all other provisions shall remain in full force.
26. This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario.
27. Subject to the restrictions on transfer and assignment, this Agreement shall ensure to the benefit of an be binding on the parties and their respective successors and assigns.

IN WITNESS WHEREOF the parties hereto have affixed the Corporate Seals attested by the hands of their proper officers and further this agreement shall be signed in counterpart with the parties named below and a copy of each counterpart shall remain attached to and form part of this Agreement.

SIGNED, SEALED AND DELIVERED

In the presence of:
The Corporation of the Township of Norwich

Mayor: Larry Martin

CAO/Clerk: Kyle Kruger

The Corporation of the Township of Blandford -Blenheim

Mayor:

CAO/Clerk:

Appendix A – Share cost of audit as required

The Participating Municipal Fire Department agrees to pay an equal share of the total number of participating fire departments for the costs associated with the administration of the Township of Norwich Fire Service Driver Certification Program, including but not limited to the following:

1. Share all costs of fees for a third-party auditor to complete an audit of the Norwich Fire Service Driver Certification Program as required by the Ministry of Transportation;
2. Share cost of maintaining two Norwich Fire Service Air Brake Lead Instructors (for training and testing purposes)

3. Agree to pay fees for MTO written tests and on-road tests as well as testing costs as per the Norwich Fire Service Volunteer Firefighter Payroll Schedule as follows:
 - a. Class D written tests, including D, air brake renewal, and sign tests – one hour minimum and maximum regardless of number of test(s) challenged;
 - b. All Classes A and D Licence Renewal tests, one hour minimum and maximum regardless of number of test(s) challenged providing tests are administered at one location;
 - c. Class D On-road testing – two hours, and;
 - d. Mileage, as per the Township of Norwich employee mileage compensation rate, where the testing Signing Authority travels outside of the Township of Norwich to perform any tests, if necessary.
4. Agrees to pay all training course costs on a per student cost recovery basis, either through the Rural Fire Services of Oxford County training programs or through a different delivery method and training provider (e.g., Township of Norwich).

Appendix B – Partner Municipality Responsibilities

1. Participating municipal fire departments shall maintain their own MTO Approved Signing Authorities for on-road practical training of their own members;
2. Participating municipal fire departments shall only use MTO Approved Signing Authorities as in-vehicle/on-road trainers for the required number of hours that each driver trainee is required to perform practical training as per the Township of Norwich Driver Certification Program approved requirements;
3. All Signing Authorities shall be registered as a Signing Authority under the Norwich Fire Service Driver Certification Program in accordance with MTO policies and procedures, and all Signing Authorities shall agree to and submit the necessary documentation as required by the MTO, including but not limited to a criminal record check, MTO Signing Authority Declaration and copy of driver abstract and driver license, as required;
4. Participating municipal fire departments shall agree that their MTO Approved Signing Authorities may be asked to assist with instructing Class D Training Courses, and Air Brake Endorsement Courses where the MTO Approved Signing Authority has the required instructor certification and is approved by the MTO to instruct and train in Air Brakes.
5. Agree that the Township of Norwich Fire Service is the approved MTO Driver Certification Program Recognized Authority and will be responsible for administering all aspects of the Driver Certification Program as per the Ministry of Transportation of Ontario rules, policies and guidelines;
6. The participating municipal fire department agrees to submit a list of their fire apparatus to the Township of Norwich Fire Service, and that their fire apparatus shall be used for on-road training and testing purposes of their members;
7. The participating municipal fire department agrees to provide the Township of Norwich Fire Service a copy of their municipalities fleet insurance policy annually;
8. The participating municipal fire department agrees that all on-road testing will be as per the MTO approved Norwich Fire Service on-road testing routes. Further, the Township of Norwich Fire Service agree to submit to the MTO at least one route for approval that is at least partially located within the participating municipalities geographical boundaries;
9. The participating municipal fire department agrees the Norwich Fire Service will be responsible for maintaining confidential driver files as per the MTO Driver Certification Program policies and procedures;
10. The participating municipal fire department agrees that all Norwich Fire Service Driver Certification Program training programs will be delivered within the Township of Norwich;

11. The participating municipal fire department agrees that only appointed fire service members shall only be allowed to train and test under the Norwich Fire Service Driver Certification Program.



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Harmer Drainage Superintendent
Reviewed By:	Rodger Mordue	Date:	July 27, 2022
Subject:	Monthly Report	Council Meeting Date:	August 3, 2022
Report #:	DS-22- 18		

Recommendation:

That Report DS-22-18 be received as information

Background:

Monthly activities of the Drainage Department to August 30, 2022

Analysis/Discussion

- Working on drain maintenance and various site meeting to review work required with ratepayers.
- Working with lawyer on compliance letters.
- Working on Section 65 reports for granted severances
- Commenting on planning applications
- 36 locates for ON 1 Call in July 2022 including 1 emergency locates.
- Update of drainage mapping for ON 1 Call / OMAFRA / Township Web site and asset management, 100-year storm review, update SWMP mapping
- Mitchell Drain County and Region have submitted petitions for drainage works, for the construction work being proposed at Trussler Road and Oxford Road 8. Council has accepted petition from County and Region for improved outlet, Engineer appointed on September 4 2019. Kenn Smart (Project Engineer). Had meeting with Engineer, Folling and Hurlbut about next step. Site meeting January 29 2020 for the road petition. Engineer working on concept plans and cost estimates waiting to have 2 site meeting with Ratepayer to review option for new report ON HOLD

- Princeton Drain working with Engineer on final report. Report dated July 29/22 filed with the Township on August 8, 2022. Consideration of report at council meeting September 7th ,2022
- Princeton Drain Section 78 report has been approved by GRCA and council and will be add to the new Engineer's Report for Princeton Drain (2017) report filed as part of Princeton Drainage System 2022 consideration of report at council meeting September 7th 2022
- Hanchiruk Drain (Magda) petition received and P Eng. appointed at December 18 2019 council meeting, GRCA have been informed of the appointment. Site meeting with Magda and Engineer February 4 2020 engineer has been reviewing option with Magda. Drain is temporary on hold for Magda to review route options. ON HOLD
- Working on SWMP with engineer on the silting issue at the outlet at Fennel and Todd Way, final design has been reviewed and approved by Township Engineer, the repair work to the outlet to be done Fall 2022 (SEPT/OCT) by developer
- McCrow Drain Council accepted petition for drainage on September 2, 2020. Engineer appointed October 7, 2020; project Engineer will be Curtis MacIntyre K Smart & Assoc. site meeting held March 23 2021. Engineer working on surveys. ON HOLD
- Hughes Drain major settlement and major repair will be required See Section 78 report DS 22-03 appointment of Engineer. John Kuntze has accepted appointment as project Engineer from K Smart & Assoc
- Hotson Drain drainage petition received by Council June 15 2022. Engineer appointed August 3, 2022, project Engineer will be Curtis MacIntyre of K Smart & Assoc. Onsite meeting scheduled for September 6th @10.00am at Township Road 8 and Blandford Road
- Holt Drain meeting with Brant County Drainage Supt. and engineer re Section 78 report. Council approved Section 78 request. Brant have appointed K Smart & Assoc. (Curtis MacIntyre) Onsite meeting schedule for September 15th 2022 in Princeton
- Township Road 8 and Hubbard Road petition by Jim Borton Director of Public Works received by Council June 1 2022 council appointed Engineer August 3 2022, project Engineer will be Curtis MacIntyre of K Smart & Assoc
- Baker Drain petition received August 23rd for repair and improvements see report DS 22-19 to accept petition by Council
- Working on CLI-ECA (Consolidated Linear Infrastructure – Environmental Compliance Approval) report with Adam and Jim Burton
- Attended by council meeting
- Vacation time of 1 weeks
- Webinar DFO update on species at risk

- Working on Dumbo SWMP on details of ownership and existing subdivision agreements
- Working on updates on the Municipal Service Standards
- Working on Bright Park drain repair with Trevor and Adam (tree root issue)

Financial Considerations:

None

Attachments:

None

Respectfully submitted by:

Jim Harmer

Jim Harmer Drainage Superintendent



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Harmer Drainage Superintendent
Reviewed By:	Rodger Mordue	Date:	August 23, 2022
Subject:	Petition for Drainage Baker Drain	Council Meeting Date:	September 7, 2022
Report #:	DS-22-19		

Recommendation:

That Report DS-22-19 be received as Information; and,

That Council accepts the petition for drainage works from Don Steinman and 1058672 Ontario Inc. for repair and improvements of the Baker Drain at Part of lot 5 and 4 con 11 at 906072 Township Road 12

That the Clerk notify the Grand River Conservation Authority that it has received a petition for drainage work and that they intend to proceed with this petition

Background:

The Township has received a signed petition for repair and improved drainage of the Baker Drain for parts of lots 4 and 5 Con 11. This drain was last improved in 1975.

Analysis/Discussion:

A petition, as per Section 4 of the Drainage Act, petition may be signed by majority of the landowner or 60% of the land area in the area requiring drainage.

I believed that the petition received meets the requirements of Section 4(1)(a)(b)

Therefore, council should send notice to the Petitioner and the Conservation Authority (GRCA) that may be affected by the petition that they intend to proceed with the petition in accordance with Section 5 of the Drainage Act

Financial Considerations:

The cost of all municipal drain are assessed to effected landowner in the area requiring drainage

Attachments:

Copy of petition received August 23rd, 2022

PDF of the Baker Drain watershed

Respectfully submitted by:

Jim Harmer

Jim Harmer



BakerDrainarearequ
iringimprovement.pdf



BAKERDRAINPETITI
ONSIGNED.pdf



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Jim Borton Director of Public Works
Reviewed By:	Rodger Mordue	Date:	August 31, 2022
Subject:	Monthly Report	Council Meeting Date:	September 7, 2022
Report #:	PW-22-18		

Recommendation:

That Report PW-22-18 be received as information.

Capital

- Blenheim CN Bridge – The deck replacement is scheduled to start in October of this year and be completed by the end of 2022.
- Gobles CN Bridge – It has been determined that the deck needs to be replaced. The work is being scheduled to start in April of 2023 with completion by the end of June 2023. CN is looking into a better way to control traffic over the bridge until the end of construction. Looking at hydro powered traffic lights.
- Princeton project – The Drain report is completed and a notification has been sent out. The plan is to tender for the pond work in 2022 and have the CN boring completed this year. Road construction will be tendered in early 2023 for the construction of phase 2.

County Shared Service/Road Association/Training

- Shared Services meeting – The service sharing committee is on summer break. The group will meet again in September in Tillsonburg.
- Road Association – The next meeting is in September. Work has started for the planning of the fall Joint meeting hosted by Oxford in October. The Oxford County Road Supervisors Assoc. has submitted an Expression of interest to host the 2025 trade show.
- AORS – The next meetings will be the supplier meeting and BOD meeting in late September.

Other

- August activities – Staff has been performing regular maintenance on the right of ways. Road side cutting has been completed for the first time; the second cut will start in early September. Culvert replacements, ditch cleaning, brushing, spot grading, weed eating around signs and guard rails are all activities taking place.
- Working with the GRCA & Sedum Master to get a gas line to run down Township Road 2.
- Met with engineer to discuss future drainage projects.
- Met with KSmart to review future road projects.
- Working with the Active & Safe routes to school committee and Oxford County to get Wayfinding signs in Drumbo.
- Working with KSmart and Drainage Superintendent on the Princeton project.
- Staff is still continuing to meet with land owners at outdoor sites to discuss ditch or road issues.
- Staff used 8 days of vacation in August.

Attachments None

Respectfully submitted by:



Jim Borton CRS-I
Director of Public Works



Mayor and members of Council
CAO/Clerk

RE: 2025 AORS Municipal Trade Show Proposal

The Oxford County Road Supervisor's Association is seeking support from Councils within the County of Oxford for a proposal to host the 2025 Association of Ontario Road Supervisor's (AORS) Municipal Trade Show at the Canada Outdoor Farm Show site in Woodstock.

Our Association last hosted a successful trade show in 1994 and recently submitted an Expression of Interest to host the Trade show in 2025.

This annual trade show typically draws more than 2,000 participants to share information and technical developments related to municipal roads and infrastructure with 200+ exhibitors (300 booths) of public works products and services.

The 2-day show is held the first week of June providing an opportunity to show case the County while providing support to the local economy through accommodations, meals and other related spinoffs that a show like this generates. Insurance coverage is provided by AORS for this show and there are no monetary requirements from the municipalities. There will be a need for public works staff time during the show to assist with parking, registration, etc along with association members time that may be on various committees planning and organizing leading up to the show.

Revenue generated from this show is shared on a 60/40 split between AORS and the host Association. Any profit from the 40% remains with the Local Association to utilize as they wish. It is anticipated that much of the profits will be given to local County beneficiaries. These may include school bursaries, local hospitals, and children aid programs to name a few.

The remainder of profits will assist our association with various activities and training that we provide to staff.

Some of the 1994 Trade Show proceeds were used to provide a bursary that is currently awarded annually to Oxford County students enrolled in a Civil Engineering program at Fanshawe College.

The Oxford County Road Supervisors Association has a very long history, established in 1960, and continues to have a very active membership both at the local and provincial level. We currently have 27 Municipal members, 28 Supplier members and 13 honorary retired members.

Many members have worked hard over the years to keep our association vibrant. The current membership is very active at our local level as well as through joint ventures. It is because of this commitment and geographical location, that we feel confident; Oxford County can host a very successful show.

We are asking that Council approve a motion:

- Endorsing the bid for the 2025 AORS Municipal Trade Show
- Endorsing the utilization of public works staff for the show

A suggested motion is attached for your consideration.

Respectfully submitted by:

Oxford County Road Supervisor's Association

Adam Prouse, President

Ken Farkas, Vice President

Tom Lightfoot, Past President

Jim Borton, AORS Board Representative, Secretary/Treasurer
C/O Township of Blandford-Blenheim
47 Wilmot Street South
Drumbo, ON N0J 1G0

Whereas the Oxford County Road Supervisors Association is seeking to host the 2025 Association of Ontario Road Supervisor's (AORS) Municipal Trade Show;

And Whereas this event draws more than 2,000 participants to share information and technical developments related to municipal roads and infrastructure with 200+ exhibitors (300 booths) of public works products and services;

And Whereas this event provides an opportunity to show case the County and local municipalities while providing support to the local economy through accommodations, meals and other related spinoffs;

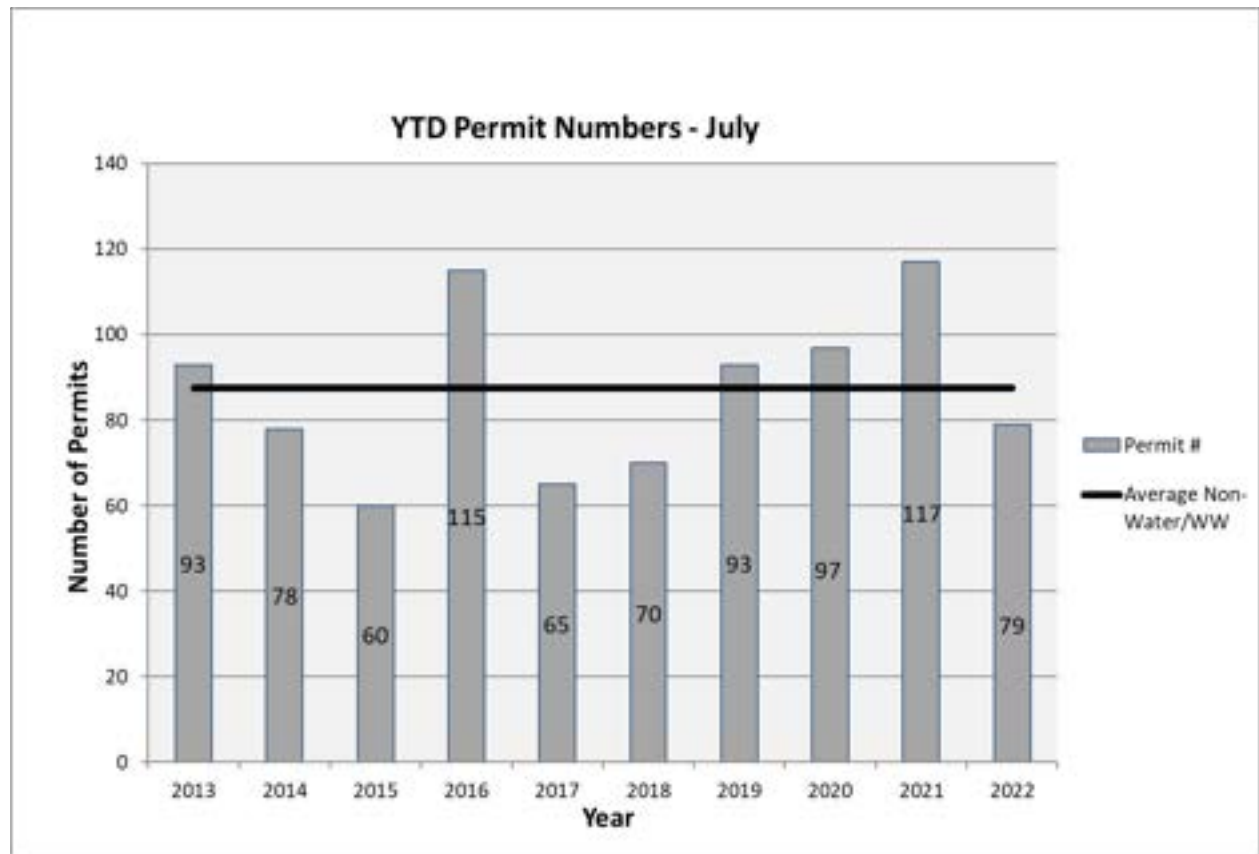
And Whereas municipal support for the show and public works staff involved in planning, organizing and running the Trade Show is required for it to be successful;

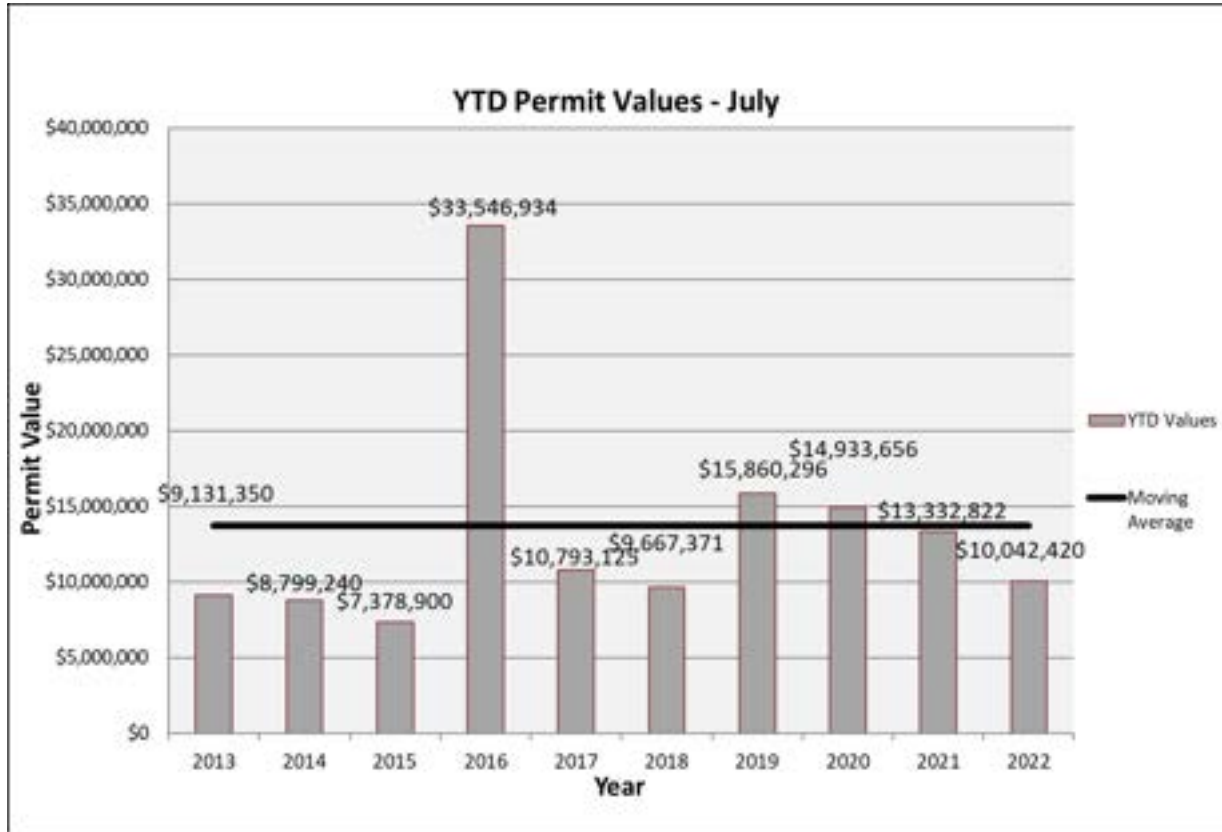
Now therefore the Council of the _____ hereby endorses the Oxford County Road Supervisors Association bid for the 2025 AORS Municipal Trade Show;

And further endorses the utilization of public works staff to assist with planning, organizing and running the 2025 AORS Municipal Trade Show.

Monthly Report to Council – September 7, 2022

Building Description			Permit Value	Permit Fee
Residential building	Addition	Single-family dwelling	\$ 694.00	\$ 80,000.00
Residential building	New	Single Detached Dwelling	\$ 2,246.79	\$ 250,000.00
Sewage system	New	Single-family dwelling	\$ 635.00	\$ 19,200.00
Farm	New	Building	\$ 3,525.87	\$ 400,000.00
Accessory structures	Addition	Garage - Residential	\$ 565.28	\$ 10,000.00
Residential building	Alteration	Single Detached Dwelling	\$ 578.00	\$ 84,520.00
Residential building	Alteration	Single-family dwelling	\$ 1,778.14	\$ 280,000.00
Pools	New	Residential - Inground	\$ 216.00	\$ 65,000.00
TOTALS			\$10,239.08	\$1,188,720.00





Respectfully submitted by:

John Scherer
Manager Building Services/CBO



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To: Members of Council

From: Trevor Baer

Reviewed By: Rodger Mordue, CAO/Clerk

Date: August 30th 2022

Subject: Monthly Report – August

Council Meeting Date:
Sept 7 2022

Report #: CS-22-13

Recommendation:

That Report CS-22-13 be received as information.

Background:

The following will provide Council with an update regarding the activities of the Community Services Department, for the month of August.

Analysis/Discussion

Arena

Staff have been organizing the arena's ice time schedule for the 2022-2023 season with the regular user groups, we have had some minor changes since the ice time request forms were submitted. Our first ice time is scheduled for September 14.

Staff have been doing annual maintenance in the arena, this includes painting, adjusting rink doors, deep cleaning players benches, fixing boards etc. The compressor will be turned on September 2, 2022.

Southwest public health had multiple COVID vaccination clinics at both the Arena and Princeton Hall, they will be running more in September.

Parks

The parks have been busy throughout the month of August with four baseball tournaments, and various pavilion rentals. We still have some events taking place in September, such as, the Co-ed adult baseball tournament, the Friday night slo-pitch league tournament, a U17 girls tournament in Princeton, and also the Drumbo Fall Fair.

Cemeteries

The Princeton cemetery Decoration Day was moved to the Princeton Hall due to inclement weather. It was very well attended. We have started phase 3 in our cemetery maintenance plan, beginning in Princeton Cemetery, fixing monument foundations.

Thanks,

Trevor Baer



TOWNSHIP OF BLANDFORD-BLENHEIM

Agenda Item

To:	Members of Council	From:	Denise Krug, Director of Finance
Reviewed By:	Rodger Mordue	Date:	August 24, 2022
Subject:	2023 Budget Schedule	Council Meeting Date:	September 7, 2022
Report #:	TR-22-12		

Recommendation:

That Report TR-22-12 be received as information;

And further that Council adopt the budget schedule for the 2023 Operating and Capital Budgets, set out in Report TR-22-12.

Background:

The purpose of this report is to present to Council for its consideration a schedule to review and approve the Tax Rate supported 2023 Operating Budget and Capital Budget for the Township of Blandford-Blenheim.

Section 290 of the Municipal Act, 2001, as amended, provides for the following in regard to annual budgets:

Yearly budget, local municipalities

- (1) For each year, a local municipality shall, in the year or the immediately preceding year, prepare and adopt a budget including estimates of all sums required during the year for the purposes of the municipality, including,
 - (a) Amounts sufficient to pay all debts of the municipality falling due during the year;
 - (b) Amounts required to be raised for sinking funds or retirement funds; and
 - (c) Amounts required for any board, commission or other body

Detail and form

- (2) The budget shall, in such detail and form as the Minister may require, set out the following amounts:
 - (a) The estimated revenues, including the amount the municipality intends to raise on all the rateable property in the municipality by its general local municipality levy and the

amount it intends to raise on less than all the rateable property in the municipality by a special local municipality levy under section 312

- (b) The estimated portion of the estimated revenues described in paragraph (a), if any, to be paid into the municipality's reserve, sinking and retirement funds.
- (c) The estimated revenues, are equal to the estimated expenditures
- (d) The estimated portion of the expenses, if any, to be paid out of the municipality's reserves and reserve funds.

Allowance

- (3) In preparing the budget for a year, the local municipality,
 - (a) Shall not include in the estimated revenues, the estimated proceeds of any borrowing during the year;
 - (b) Shall treat any operating surplus of any previous year as revenue that will be available during the current year;
 - (c) Shall provide for any operating deficit of any previous year;
 - (d) Shall provide for taxes and other revenues that in the opinion of the treasurer are uncollectible and for which provision has not been previously made;
 - (e) May provide for taxes and other revenues that it is estimated will not be collected during the year; and
 - (f) May provide for such reserves as the municipality considers necessary.

Analysis/Discussion:

For the upcoming 2023 budget deliberations, staff are proposing the following schedule.

The Capital Project/Road Tour is cancelled again this year due to COVID-19. Staff will provide a map highlighting 2023 Capital Projects.

2023 Fees and Charges will be presented to Council for approval on November 2nd and the by-law will be brought to the December 21st Council meeting for approval. The Capital Budget will be presented at the December 7th Council meeting, which will start at 2 p.m. Outstanding items will be discussed at the following regular Council meeting on December 21st.

We are proposing an extra Council meeting as in recent years, on Wednesday, January 18th, starting at 10 a.m. as an extended budget meeting to present the Operating Budget for all departments. This will allow Council to discuss any outstanding items and consider the tax rates during the two regular Council meetings in February and adopt the 2023 Budget By-law at the first Council meeting in March.

This time-line provides public the ability to have input into the proposed budgets weeks in advance of Council passing the Tax Rate By-Law for 2023.

<i>Date</i>	<i>Staff / Council Involvement</i>	<i>Description</i>
November 2nd	Council/Director of Finance	Fees & Charges Report provided to Council for approval.
November 16th	Council/Director of Finance	Council Approval of 2023 Salaries & Wages
December 7th	Council/Directors	Presentation of Capital Budget – All Depts. Council meeting to start at 2 p.m.
December 21st	Council/Director of Finance	Fees & Charges By-Law to council for approval.
December 21st	Council/Directors	Council Review of Capital Budget Outstanding items (if necessary)
January 11th	Director of Finance	Provide members of Council budget binders.
January 18th	Council / Directors	Presentation of Operating Budget <ul style="list-style-type: none"> • All departments Special Council Meeting to start at 10 a.m.
February 1st	Council / Directors	Council review of outstanding requests. Overall budget discussions.
February 15 th	Council / Directors	Council finalization of budget estimates
February 15th	Director of Finance	Post 2023 budget on website
March 1st	Council	Adoption of 2023 budget estimates By-law
April/May	Council	Tax Rate By-Law to Council for approval.

Financial Considerations:

Not applicable

Attachments:

None

Respectfully submitted by:

Denise Krug
Treasurer

Attachments:

- N/A

Respectfully submitted by:

Rodger Mordue
CAO/Clerk

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM
BY-LAW NUMBER 2313-2022

Princeton Drainage System 2022

A By-law to provide for drainage works in the Township of Blandford-Blenheim in the Restructured County of Oxford.

WHEREAS the Council of the Township of Blandford-Blenheim in the County of Oxford appointed K.A. Smart, P. Eng., of K. Smart Associates Limited, of Kitchener, Ontario, and the Section 4, 8 and 78 report is attached hereto and forms part of this By-law.

AND WHEREAS the estimated total cost of this report consisting of the engineering, construction costs and administration is \$18,300,000.

THEREFORE the Council of The Corporation of the Township of Blandford-Blenheim pursuant to the Drainage Act, R.S.O. 1990, and amendments thereto, enacts as follows:

1. The report dated July 29, 2022 and attached hereto, is hereby adopted and the Drainage Works as therein indicated and set forth is hereby authorized, and shall be completed in accordance therewith.
2. The Corporation may borrow on the credit of the Corporation the amount of **\$18,300,000**, being the necessary amount for construction of the Drainage Works.
3. The Corporation may arrange for the issue of debentures on its behalf for the amount borrowed, less the total amount of,
 - (a) grants received under Section 85 of the Act;
 - (b) commuted payments made in respect of lands and roads assessed within the municipality;
 - (c) moneys paid under subsection 61(3) of the Act; and

such debentures shall be made payable within Ten (10) years from the date of the debenture and shall bear interest at a rate to be established at the date of the sale of such debentures.

The County of Oxford shall handle the sale of such debentures, with interest at the prevailing rates at the time of debenture sale. The Municipality of the Township of Blandford-Blenheim shall make annual payments without coupons payable to the County of Oxford.

4. A special equal annual rate sufficient to redeem the principal and interest on the debentures shall be levied upon the lands and roads as set forth in the Schedule to be collected in the same manner and at the same time as other taxes are collected in each year for Ten (10) years, the year following the due date of the final invoice that calculates the actual costs of the Drainage Works in accordance with the Schedule contained in this By-law.

5. This by-law comes into force on the passing thereof and may be cited as **Princeton Drainage System 2022.**

Read a First and Second Time this 7th day of September, 2022.

Rodger Mordue, CAO/Clerk

Mark Peterson, Mayor

Read a Third Time and Finally Passed this _____ of _____, 2022

Rodger Mordue, CAO/Clerk

Mark Peterson, Mayor

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM
BY-LAW NUMBER 2315-2022

A By-law to amend Zoning By-Law Number 1360-2002, as amended.

WHEREAS the Municipal Council of the Corporation of the Township of Blandford-Blenheim deems it advisable to amend By-Law Number 1360-2002 as amended.

THEREFORE, the Municipal Council of the Corporation of the Township of Blandford-Blenheim, enacts as follows:

1. That Schedule "A" to By-law Number 1360-2002, as amended, is hereby further amended by changing to 'A2-32' the zone symbol of the lands so designated 'A2-32' on Schedule "A" attached hereto.
2. That Section 7.6 to By-law Number 1360-2002, as amended, is hereby further amended by deleting the first paragraph of subsection 7.6.32, **LOCATION: Part Lot 2, Concession 13 (Blandford) A2-32(H) (Key Map 2)** and replacing it with the following:

"LOCATION: Part Lot 2, Concession 13 (Blandford) A2-32 (Key Map 2)".

3. This By-law comes into force in accordance with Sections 34(21) and (30) of the Planning Act, R.S.O. 1990, as amended.

READ a first and second time this 7th day of September, 2022.

READ a third time and finally passed this 7th day of September, 2022.

Mark Peterson – Mayor

(SEAL)

Rodger Mordue, CAO/Clerk

ZN1-22-06

TOWNSHIP OF BLANDFORD-BLENHEIM

BY-LAW NUMBER 2315-2022

EXPLANATORY NOTE

The purpose of By-law Number 2315-2022 is to rezone the subject property from 'Special General Agricultural Zone (A2-32(H))' to 'Special General Agricultural Zone (A2-32).' The purpose of the removal of the Holding (H) provision is to permit the construction of a single detached dwelling, accessory to a farm.

A Holding (H) provision was originally applied to the property to ensure that no accessory single detached dwelling was constructed until the owner had demonstrated, to the satisfaction of Staff, that the first year of the approved farm plan has been implemented. Staff are of the opinion that the applicants satisfied this condition and the Holding (H) provision can be removed.

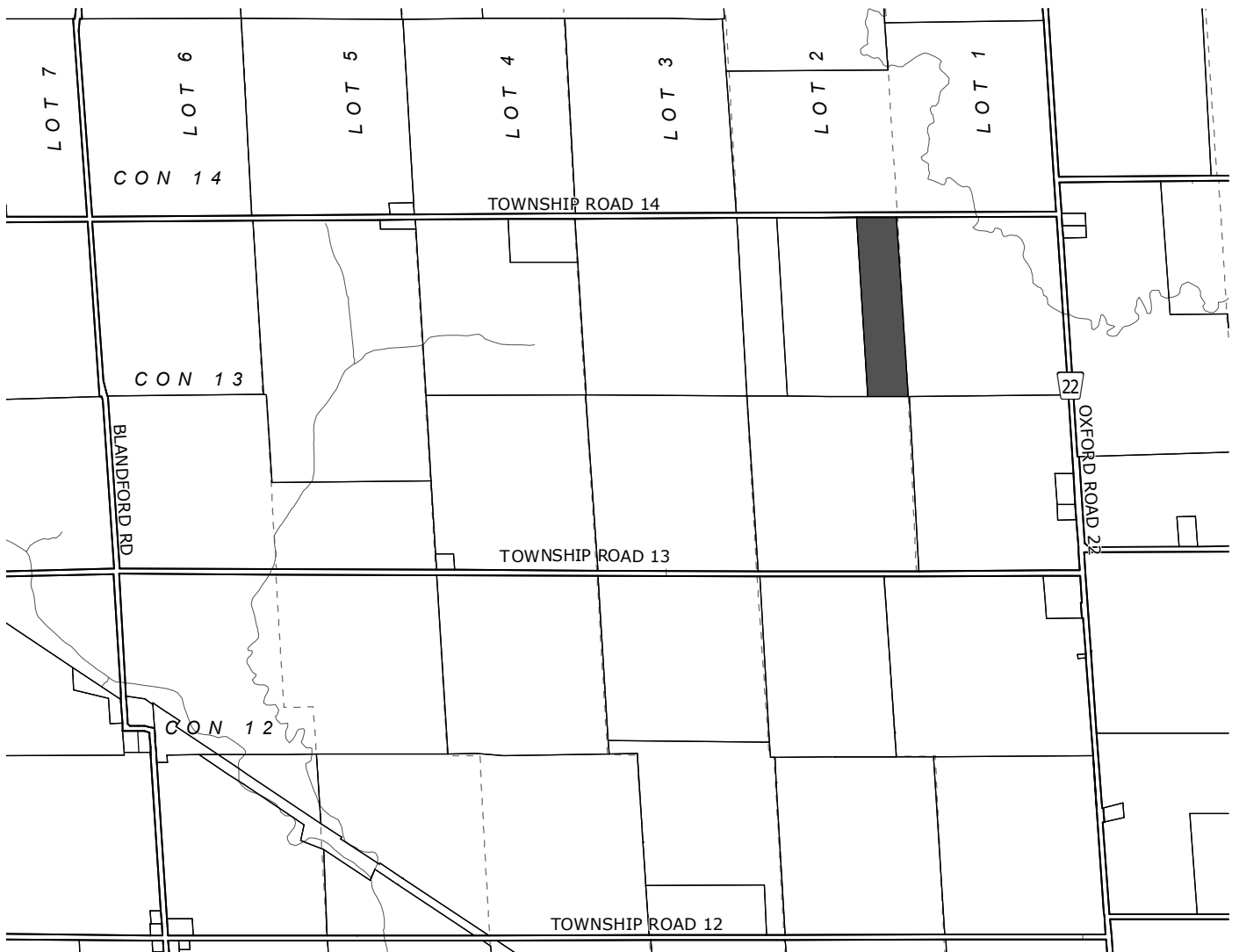
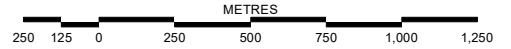
The subject lands are described as Part Lot 2, Concession 13 (Blandford). The lands are located on the south side of Township Road 14, lying between Oxford Road 22 and Blandford Road, and municipally known as 946256 Township Road 14.

Any person wishing further information regarding Zoning By-Law Number 2315-2022 may contact the undersigned.

Mr. Rodger Mordue, CAO/Clerk
Township of Blandford-Blenheim
47 Wilmot Street South
Drumbo, Ontario
N0J 1G0

Telephone: 463-5347

KEY MAP



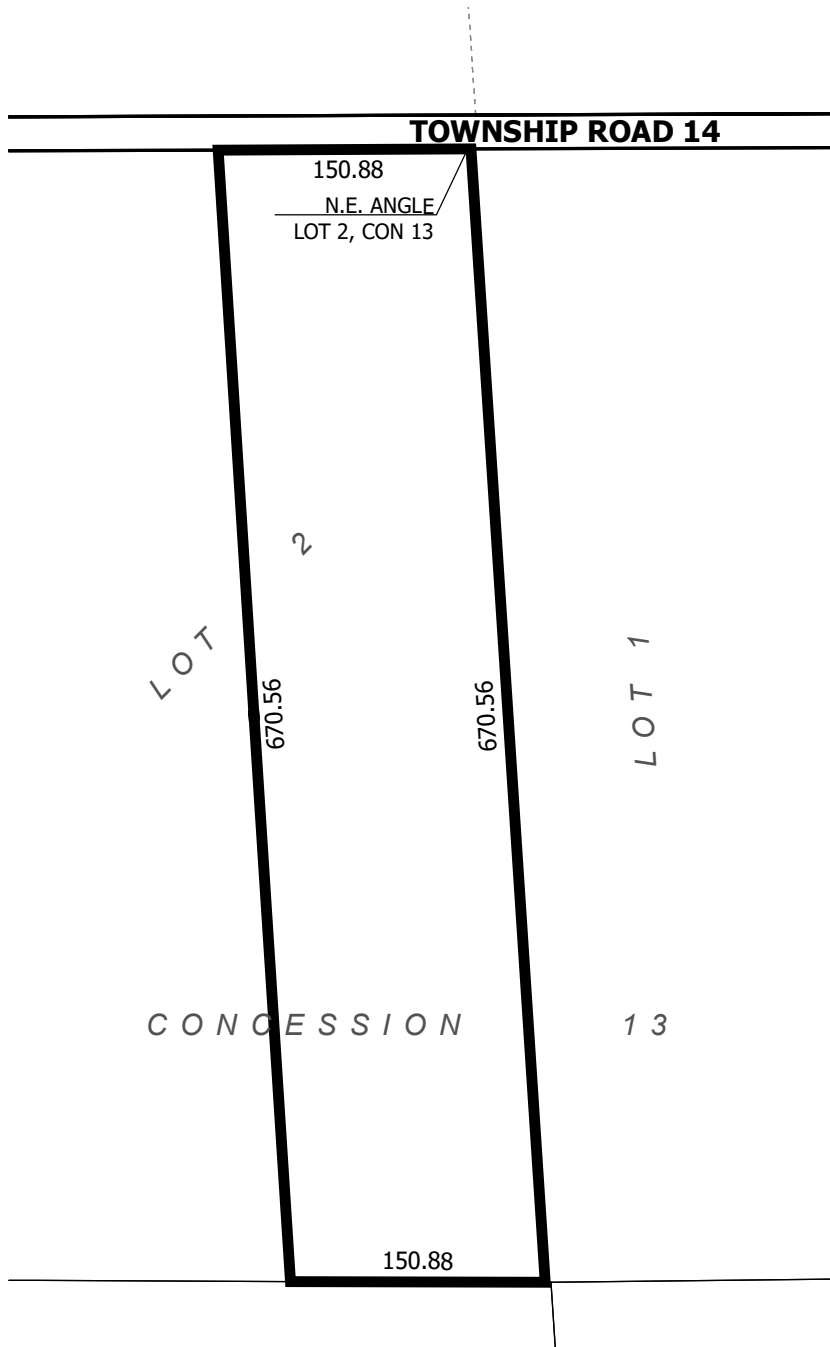
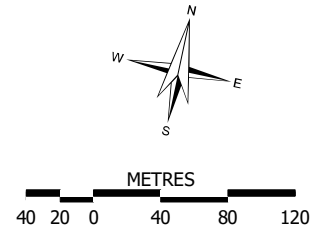
 LANDS TO WHICH BYLAW 2315-2022 APPLIES



Growing stronger together

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SCHEDULE "A"
 TO BY-LAW No. 2315-2022
 PT LOT 2, CONCESSION 13 (BLANDFORD)
 TOWNSHIP OF BLANDFORD-BLENHEIM



 AREA OF ZONE CHANGE TO A2-32

NOTE: ALL DIMENSIONS IN METRES

THIS IS SCHEDULE "A"

TO BY-LAW No. __2315-2022__, PASSED

THE _____ DAY OF _____, 2022

 MAYOR

 CAO/CLERK

THE CORPORATION OF THE
TOWNSHIP OF BLANDFORD-BLENHEIM
BY-LAW NUMBER 2316-2022

Being a By-law to confirm the proceedings of Council.

WHEREAS by Section 5 of the *Municipal Act* 2001, S.O. 2001, c.25, the powers of a municipal corporation are to be exercised by its Council.

AND WHEREAS by Section 11 of the *Municipal Act* 2001, S.O. 2001, c.25, the powers of every Council are to be exercised by by-law;

AND WHEREAS it is deemed expedient that the proceedings of the Council of the Corporation of the Township of Blandford-Blenheim at this meeting be confirmed and adopted by by-law;

NOW THEREFORE the Council of the Corporation of the Township of Blandford-Blenheim hereby enacts as follows:

1. That the actions of the Council of the Corporation of the Township of Blandford-Blenheim in respect of each recommendation contained in the reports of the Committees and each motion and resolution passed and other action taken by the Council of the Corporation of the Township of Blandford-Blenheim, at this meeting held on September 7, 2022 is hereby adopted and confirmed as if all such proceedings were expressly embodied in this by-law.
2. That the Mayor and proper officials of the Corporation of the Township of Blandford-Blenheim are hereby authorized and directed to do all things necessary to give effect to the actions of the Council referred to in the proceeding section hereof.
3. That the Mayor and the CAO / Clerk be authorized and directed to execute all documents in that behalf and to affix thereto the seal of the Corporation of the Township of Blandford-Blenheim.

By-law read a first and second time this 7 day of September, 2022.

By-law read a third time and finally passed this 7 day of September, 2022.

MAYOR
MARK PETERSON

CAO / CLERK
RODGER MORDUE