REPORT

12489 & 12861 Dixie Road Energy and Emissions Reduction Study

Submitted to:

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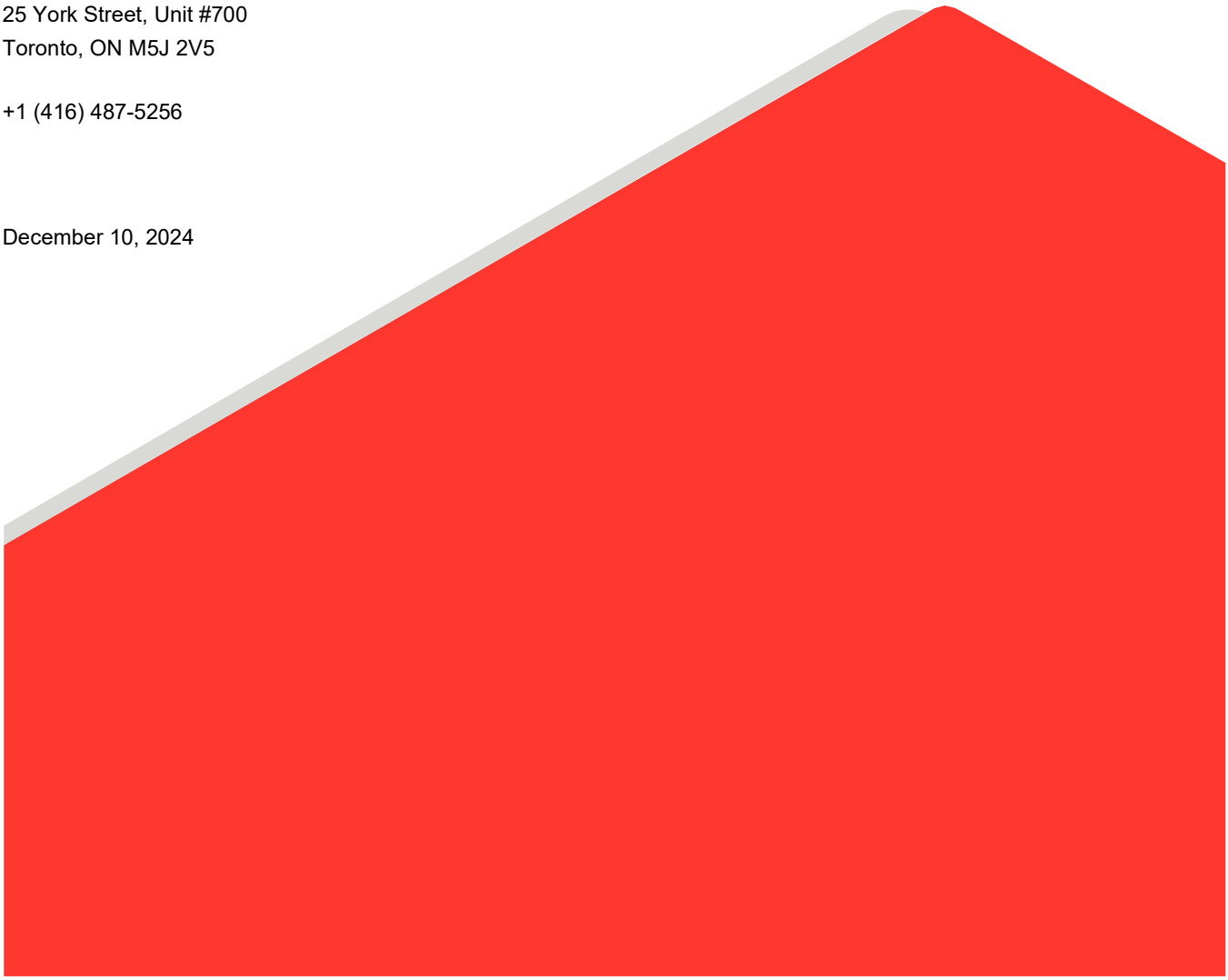

Distribution List

One PDF - QuadReal Property Group

One PDF - WSP Canada Inc.

Executive Summary

WSP Canada Inc. (WSP) has been engaged by QuadReal Property Group (the Applicant) to support the completion of an Energy and Emissions Reduction Study (the Study), as required for the Site as per s.5.6.20.14.17(e) of the Region of Peel Official Plan (RPOP 2051) and s.5.5.9.2(d) of the Town of Caledon Official Plan. The purpose of this report is to deliver a high-level energy and emission reduction assessment following the policies provided by the Region of Peel and Town of Caledon and will be used to support the development application for Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA), and Site Plan Approval (SPA).

The Applicant is proposing to redevelop two 58.2-hectare (144-acre) sites (combined 110.4-hectare or 272.8-acre) on lands that are municipally known as 12489 & 12861 Dixie Road in the Town of Caledon, Ontario (the Site). The Site is currently occupied by agricultural and residential buildings, as well as vacant land consisting of agricultural land and natural features. The existing residential buildings with cultural heritage value will be retained as described in the *Cultural Heritage Impact Statement* (Stantec, 2024), while the remainder of the Site will be regraded to facilitate the construction of an industrial development consisting of five (5) buildings that have a combined floor area of 322,785 m^2. Existing environmental features located within the Greenbelt Plan area will be preserved.

The following plans and reports have been reviewed in support of the Study to identify mandatory planning requirements and voluntary considerations that are relevant to the proposed development:

- Provincial Planning Statement (2024)
- The Greenbelt Plan (2017)
- Region of Peel Official Plan (2022)
- Region of Peel Climate Change Master Plan (2019)
- Region of Peel Settlement Area Boundary Expansion (SABE) Study (2020)
- The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (2014)
- Town of Caledon Official Plan (2024)
- Town of Caledon Mayfield West Secondary Plan (2024)
- Town of Caledon Official Plan Update and Climate Change Discussion Paper (2021)
- Resilient Caledon Community Climate Change Action Plan (2021)
- Resilient Caledon Community Climate Change Action Plan Technical Report (2020)
- Town of Caledon Green Development Standard (2024)
- Caledon Transit Feasibility Study (2019)

Based on a review of climate change policies and guidelines in the identified plans and reports, a total of 28 recommendations are provided in this report and are separated according to themes of low carbon buildings and

transportation systems. They are further divided based on mandatory requirements and voluntary considerations (Section 4.0). The mandatory planning requirement identified as part of this Study includes:

- Ensuring new buildings meet minimum Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) performance targets established in the Town of Caledon Green Development Standard (2024).
- Submit an Energy Modelling Report prior to Site Plan approval.
- Develop a zero-carbon transition plan.
- Develop and implement a Construction and Demolition Waste Management Plan.
- Follow all requirements outlined in the Town of Caledon Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking.
- Develop amenity spaces and walkways on the Site.
- Complete the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking and meet a minimum score of Silver.
- Meet minimum requirements for the number of EV-Ready parking spaces on the Site.
- Complete Submission Requirements identified in the Town of Caledon Green Development Standard to address relevant GDS metric requirements.

Voluntary planning recommendations identified in this Study focus on the use of alternative energy solutions; improving active transportation, public transit and electric vehicle (EV) charging infrastructure; and additional climate change and energy feasibility studies to be considered on Site. The Applicant is encouraged to consider all recommendations provided in this report at the detailed design / SPA stages of the Project.

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Abbreviations and Acronyms

AODA	Accessibilities for Ontarians with Disabilities Act
BUG	Backlight, uplight, and glare
CCMP	Region of Peel Climate Change Master Plan
DES	District Energy System
EPA	Environmental Policy Area
EPD	Environmental Product Disclosure
EV	Electric Vehicle
EVSA	EV Supply Equipment
FSA	Focus Study Area
GDS	Green Development Standard
GGH	Greater Golden Horseshoe
GHG	Greenhouse Gas
GHGI	Greenhouse Gas Intensity
HDA	Healthy Development Assessment
LID	Low Impact Development
LNA	Land Needs Assessment
MTSA	Major Transit Station Area
NABCEP	North American Board of Certified Energy Practitioners
NEP	Niagara Escarpment Plan
ORMCP	Oak Ridges Moraine Conservation Plan
OPA	Official Plan Amendment
PPS	Provincial Planning Statement
PV	Photovoltaic
RPOP	Region of Peel Official Plan
ROW	Right-of-Way
SABE	Settlement Area Boundary Expansion
Site	12489 & 12861 Dixie Road, in Caledon, Ontario, Canada

SPA	Site Plan Approval
the Study	Energy and Emissions Reduction Study
TEDI	Thermal Energy Demand Intensity
TEUI	Total Energy Use Intensity
The Region	The Region of Peel
The Town	Town of Caledon
Town OP	Town of Caledon Official Plan
TRCA	Toronto and Region Conservation Authority
ZBA	Zoning By-law Amendment
ZEV	Zero-emission Vehicle

1.0 INTRODUCTION

WSP Canada Inc. (WSP) has been engaged by QuadReal Property Group to support the completion of a Climate Change Adaptation Study and an Energy and Emissions Reduction Study. This is the Energy and Emissions Reduction Study (the Study) for a proposed industrial development (the Project) located at 12489 & 12861 Dixie Road, in Caledon, Ontario, Canada, as described in Section 1.1. The Climate Change Adaptation Study is provided in a separate document.

An Energy and Emissions Reduction Study is required for the Site as per s.5.6.20.14.17(e) of the Region of Peel Official Plan (RPOP 2051) and s.5.5.9.2(d) of the Town of Caledon Official Plan. The completion of the Study was requested by Town of Caledon staff following the initial Official Plan Amendment (OPA) submission. An Energy and Emissions Reduction Study details how greenhouse gas (GHG) emissions and energy use can be minimized from buildings and transportation systems through alterative energy and urban design. This will be achieved by outlining existing submission requirements, how energy conservation and use is being addressed in the site plan submission, and solutions for GHG emissions reductions that are not covered by existing studies.

1.1 12489 & 12861 Dixie Road Development Proposal

QuadReal Property Group (the Applicant) is proposing to redevelop two 58.2-hectare (144-acre) sites (combined 110.4-hectare or 272.8-acre) on lands that are municipally known as 12489 & 12861 Dixie Road in the Town of Caledon, Ontario (the Site). The location of the Site is displayed in **Figure 1-1**.

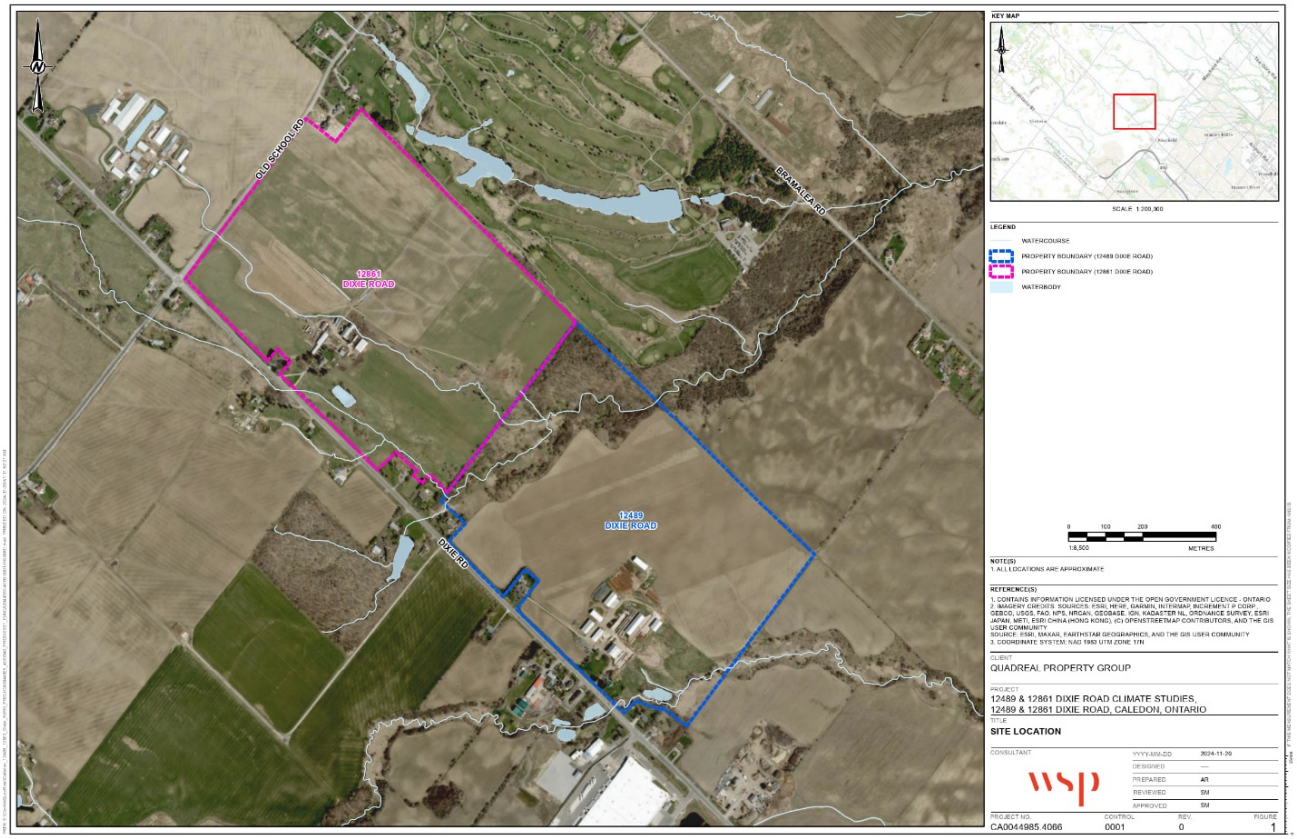

Figure 1-1: 12489 & 12861 Dixie Road, Caledon, Ontario Site Location

The Site is currently occupied by agricultural and residential buildings, as well as vacant land consisting of agricultural land and natural features. The existing residential buildings will be retained, while the remainder of the Site will be regraded to facilitate the construction of an industrial development consisting of five (5) buildings that have a combined floor area of 322,785 m^2. Existing environmental features located within the Greenbelt Plan Area, including Significant Valleylands, Significant Woodlands, Significant Wildlife Habitat, and Candidate Species at Risk (SAR) Habitat, will be preserved.

The proposed use of the Site includes warehouse, distribution, and industrial uses. The proposed development at 12489 Dixie Road is comprised of three (3) industrial buildings, associated road networks, stormwater management facilities, and environmentally protected features. The proposed development will create approximately 134,565.32 m^2 (1,448,447.62 square feet) of employment gross floor area and provide space for approximately 1,034 jobs on site.

The proposed development at 12861 Dixie Road comprises two (2) industrial buildings, associated road networks, stormwater management facilities, and environmentally protected features. The proposed development will create approximately 188,718.37 m^2 (2,031,346 square feet) of employment gross floor area and provide space for approximately 1,451 jobs on site. To facilitate the proposed development, the proposed application will seek to amend the Town of Caledon Official Plan and Zoning By-law and receive Site Plan Approval.

The Site is located within the Region of Peel's 2051 New Urban Area, under the classification of *Designated Greenfield Areas* that have been identified to accommodate growth to 2051 (Region of Peel, 2022). As identified in the Region of Peel's Official Plan (2022), the site is also located in an Employment Area. Part of the site is provincially-designated as part of the Greenbelt Plan's Natural Heritage System.

The Site is designated as Prime Agricultural Area and Environmental Policy Area on Schedule 'A' Land Use Plan in the Town of Caledon Official Plan. The lands are currently zoned Agricultural (A1) and Environmental Policy Area 2 (EPA2) by the Town of Caledon Zoning By-law 2006-50, as amended. The proposed Official Plan Amendment (OPA) seeks to re-designate the lands from Prime Agricultural Area to Prestige Industrial while maintaining the Environmental Policy Area. The Zoning By-law Amendment (ZBA) proposes to rezone the lands from Agricultural (A1) to Prestige Industrial (MP) and maintain the Environmental Policy Area 2 Zone (EPA2). Areas designated as part of the Greenbelt Plan Area will be preserved. The limits of the Greenbelt Natural Heritage System are displayed in **Figure 1-2**, as prepared by Stantec as part of the *Comprehensive Environmental Impact Study and Management Plan* (Stantec Consulting Ltd., 2024).

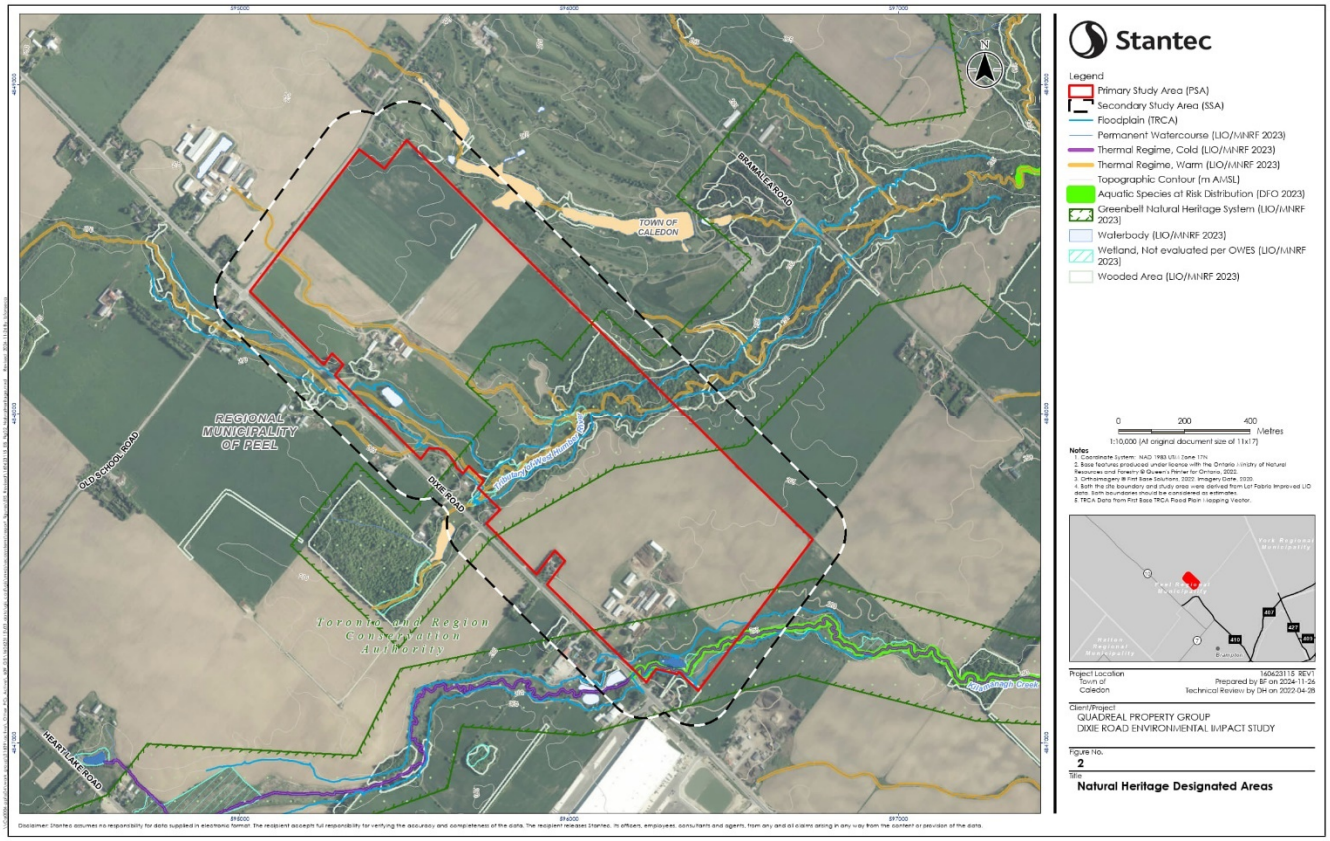

Figure 1-2: Natural Heritage Designated Areas

Source: *Comprehensive Environmental Impact Study and Management Plan* (Stantec Consulting Ltd., 2024)

The Site Plan Application proposes to establish a buffer area of 10 metres between the industrial development and the identified floodplain on the Site, and a 30-metre buffer around significant valleyland features that are part of the Greenbelt Plan Natural Heritage System. The site plans (**Figure 1-3** and **Figure 1-4**) also delineate the proposed building envelope for the industrial building, as well as the stormwater management areas, landscape areas, interior pedestrian network, driveway network, surface parking areas and entrances, and accesses from Dixie Road and Old School Road. The site plans for the two parcels of land are available in **Appendix A** of this report.

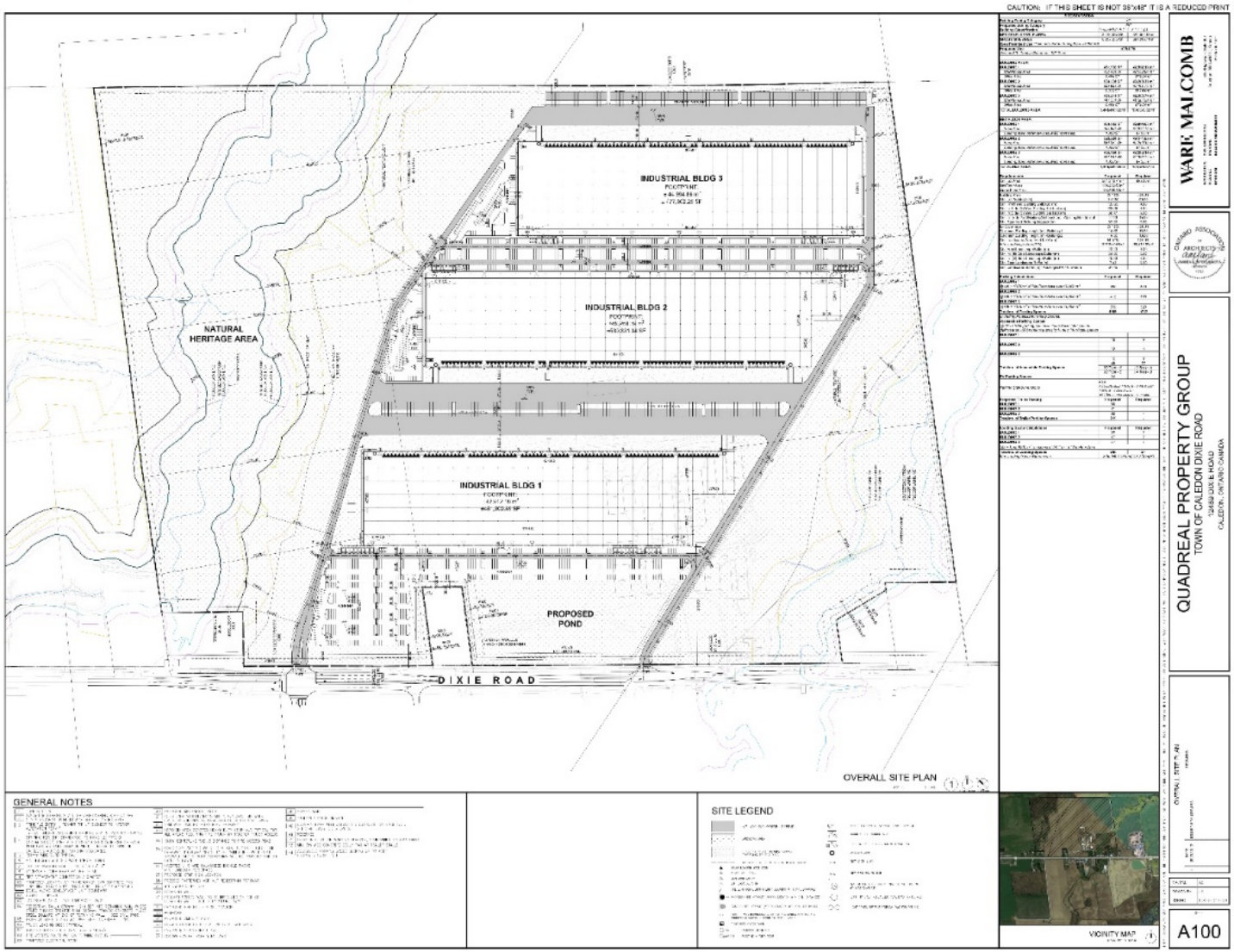

Figure 1-3: Proposed Site Plan of 12489 Dixie Road, Caledon, Ontario

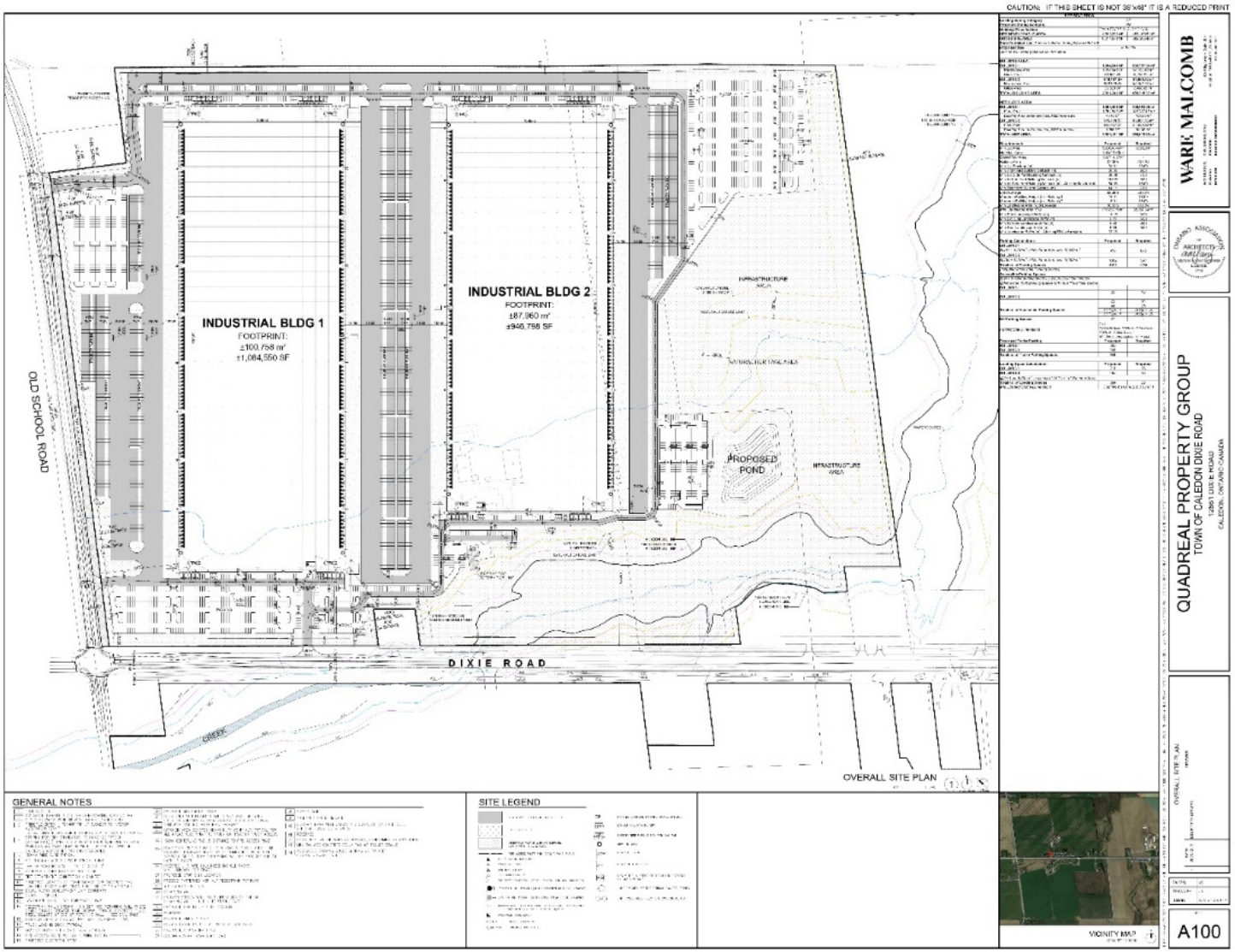

Figure 1-4: Proposed Site Plan of 12861 Dixie Road, Caledon, Ontario

1.2 Purpose of Report

The report will deliver a high-level climate change assessment following the policies provided by the Region of Peel and Town of Caledon. The outcome of this report will be used to support the development application for the Official Plan Amendment (OPA), Zoning By-law Amendment (ZBA), and Site Plan Approval (SPA). The report includes an overview of municipal climate targets and the existing community transportation network in relation to the Site (Section 2.0), identification of relevant climate-related planning policies (Section 3.0), and assessment of the proposed sustainability initiatives and how energy conservation and efficiency will be addressed on the Site (Section 4.0). It also provides recommendations to address the adaptation requirements of the Enhanced Planning Process.

To support the preparation of this report, the following technical reports were reviewed:

- Comprehensive Environmental Impact Study and Management Plan, Stantec Consulting Ltd. (2024)
- Sustainability Narrative Memo, Purpose Building Inc. (2024)
- Scalable Concept Plan, Ware Malcomb (2024)
- Urban Design Brief, Ware Malcomb (2024)
- Planning Rationale Report, Armstrong Planning & Project Management (2024)
- Public Engagement Strategy, Armstrong Planning & Project Management (2024)
- Urban Transportation Considerations, BA Group (2024)
- Landscape Plans, MHBC Planning (2024)
- Arborist Report, Stantec Consulting Ltd. (2024)
- Cultural Heritage Impact Statement, Stantec Consulting Ltd. (2024)
- Functional Servicing and Stormwater Management Design Report, Stantec Consulting Ltd. (2024)
- West Humber River Fluvial Geomorphological Assessment, GEO Morphix Ltd. (2024)
- Geotechnical Investigation and Design Report, Stantec Consulting Ltd. (2024)
- Hydrogeological Assessment Report, Stantec Consulting Ltd. (2024)
- Stage 3 Archaeological Assessment Report, Irvin Heritage Inc. (2024)

2.0 BACKGROUND

In 2017, the Regional Council of Peel endorsed a Climate Change Statement of Commitment to ensure that concrete action is taken to mitigate and adapt to the effects of climate change, provide benefits for residents, and ensure future generations will have access to resources that support a healthy and connected community (Region of Peel, 2019). The Statement of Commitment outlines the Region of Peel's (the Region's) responsibility to reduce greenhouse gas (GHG) emissions and take action to build a more resilient community. Similar to the regional municipality, the Town of Caledon (the Town) has formally acknowledged the need to address climate change urgently in the community by declaring a climate emergency on January 28, 2020 (Town of Caledon, 2022). This section provides an overview of municipal climate targets with regards to GHG emissions reduction and community resiliency (Section 2.1) and brief description of the available community transportation network (Section 2.2).

2.1 Municipal Climate Targets

As of 2022, the majority of GHG emissions in the Region of Peel were from the buildings (43%) and transportation (40%) sectors (The Atmospheric Fund, 2022). In an effort to mitigate and adapt to the effects of climate change, the Town has committed to reducing community-wide GHG emissions to reach net zero by 2050 and follow a carbon budget that aligns with limiting warming to 1.5˚C, which would entail a 36% reduction of emissions by 2030 (Town of Caledon, 2021). The Town is also committed to increasing community resiliency to current and future climate impacts. This involves increasing the capacity of public facilities and services, the local economy, and natural environment to cope with the most significant climate risks impacting the community, as described further in Section 2.2.

2.2 Community Transportation Network

2.2.1 Existing Road Network

The following sections provide a brief description of the roads, lane configurations, and road network classifications in the vicinity of the Site.

2.2.1.1 Dixie Road

Dixie Road is an arterial road in the vicinity of the Site, owned and operated by the Region of Peel. Dixie Road is generally aligned in a north-south direction with a two-lane cross-section (one lane per direction) and extends from Olde Base Line Road to Lakeshore Road East within Mississauga. The portion of Dixie Road north of Mayfield Road adjacent to the Site is classified as a Suburban Connector as per the 2013 Peel Region Road Characterization Study.

A posted speed limit of 80 kilometres per hour is in effect along Dixie Road in the vicinity of the Site.

The Dixie Road / Mayfield Road intersection is signalized. Localized widening allows for the provision of dedicated left turn lanes and right turn slip lanes on each approach.

According to the Region of Peel's Regional Road Map, Dixie Road is classified as a "Regional Road", which indicates that this road has a combination of two, four, and/or six through lanes, driving speeds are generally higher ranging between 60 and 90 km/h, and generally no parking is allowed (Region of Peel, 2011). Dixie Road in the area of the Site has a Right-of-Way (ROW) width of 36 metres and has one driving lane in each direction (Region of Peel, 2022). Regional roads are often less favourable for pedestrian environments. The Site is also

located adjacent to the proposed GTA West Transportation Corridor ("Highway 413") preferred route, with nearby access to the proposed Highway 410 Interchange.

Dixie Road is identified as a Primary Truck Route in the Region of Peel's Goods Movement Strategic Plan (2017-2021), which are routes that have a higher volume of truck traffic and congestion (Region of Peel, 2017).

2.2.1.2 Old School Road

Old School Road is a local collector road in the vicinity of the Site, operated by the Town of Caledon. Old School Road is generally aligned in an east-west direction with a two-lane cross-section (one lane per direction) and extends from Winston Churchill Boulevard within Mississauga to Airport Road within Brampton.

A posted speed limit of 70 kilometres per hour is in effect along Old School Road in the vicinity of the Site.

The Dixie Road / Old School Road intersection is signalized. Future widening is proposed to allow for the provision of dedicated left turn lanes and right turn slip lanes on each approach.

2.2.1.3 Mayfield Road

Mayfield Road is an arterial road in the vicinity of the Site, operated by the Region of Peel. Mayfield Road is generally aligned in an east-west direction with a six-lane cross-section (three lanes per direction) west of Dixie Road until approximately 275 metres west of Heart Lake Road, and a five-lane cross-section (three lanes eastbound, 2 lanes westbound) between Dixie Road and Bramalea Road. It extends from Winston Churchill Boulevard to Highway 50. The portion of Mayfield East of Dixie Road adjacent to the Site is classified as an Industrial Connector as per the 2013 Peel Region Road Characterization Study.

A sidewalk is provided along the south side of Mayfield Road.

A posted speed limit of 80 kilometres per hour is in effect along Mayfield Road in the vicinity of the Site. The Mayfield Road / Bramalea Road intersection is signalized. Localized widening allows for the provision of dedicated left turn lanes and right turn slip lanes on each approach.

Mayfield Road is identified as a Primary Truck Route in the Region of Peel's Goods Movement Strategic Plan (2017-2021), which are routes that have a higher volume of truck traffic and congestion (Region of Peel, 2017).

2.2.1.4 Bramalea Road

Bramalea Road is a collector road operated by the Town of Caledon. Bramalea Road is generally aligned in a north-south direction and operates with a four-lane cross-section (two lanes per direction) within the study area. Bramalea Road extends from Olde Base Line Road to Derry Road East within Mississauga.

A posted speed limit of 60 kilometres per hour is in effect along Bramalea Road in the vicinity of the Site.

2.2.2 Existing Transit Network

Building a well-integrated, safe, and reliable public transit system helps to minimize individual car journeys and reduce GHG emissions across a community. The Site is located in an area of the Town that has limited access to existing public transit network. The Town of Caledon currently does not operate public transit within the municipality, but is serviced by four local bus routes by Brampton Transit and two inter-regional bus routes by GO Transit. Approximately 0.5km-1.2km south of the Site (an 8-16-minute walk) (shorter distance is from 12489 Dixie Road and longer distance is from 12861 Dixie Road) is an existing bus route which provides some access to and

from the Site for future users of the Site. Available transit services in the surrounding area are illustrated in **Figure 2-1** with service details provided below (City of Brampton, 2024).

As part of the Town of Caledon's ongoing Official Plan Review, Caledon has two areas that are being explored as potential Major Transit Station Areas (MTSAs). A GO Transit rail station will be located in Bolton and Mayfield West and is expected to be serviced by an enhanced bus service. The Town of Caledon will be required to undertake studies to examine the potential to create MTSAs in Bolton and Mayfield West and to determine the most appropriate development areas, mix of land uses, density and community planning policies. The implementation of MTSAs in Bolton and Mayfield West have the potential to encourage public transit usage from major urban centres to the Site. Section 3.3.4 of this report provides an overview of more recent feasibility studies that have been conducted to expand transit options in Caledon.

2.2.2.1 15 Bramalea

The 15 Bramalea bus route operates between the Smart Centres - Walmart Plaza near the Mayfield Road / Bramalea Road intersection and Telford Way at Tranmere Drive, generally in a north-south direction. The route operates at intervals of 10 minutes during the AM and PM peak hours. The nearest stop is located south of the Mayfield Road / Bramalea Road intersection, approximately 1 kilometre to the east of the Site.

2.2.2.2 18 Dixie

The 18 Dixie bus route operates between Meyerside Drive and Inspire Boulevard along Dixie Road, generally in a north-south direction. The route operates at intervals of 10 minutes during the AM and PM peak hours. The nearest stop is located at the Inspire Boulevard / Dixie Road intersection, approximately 750 metres to the south of the Site.

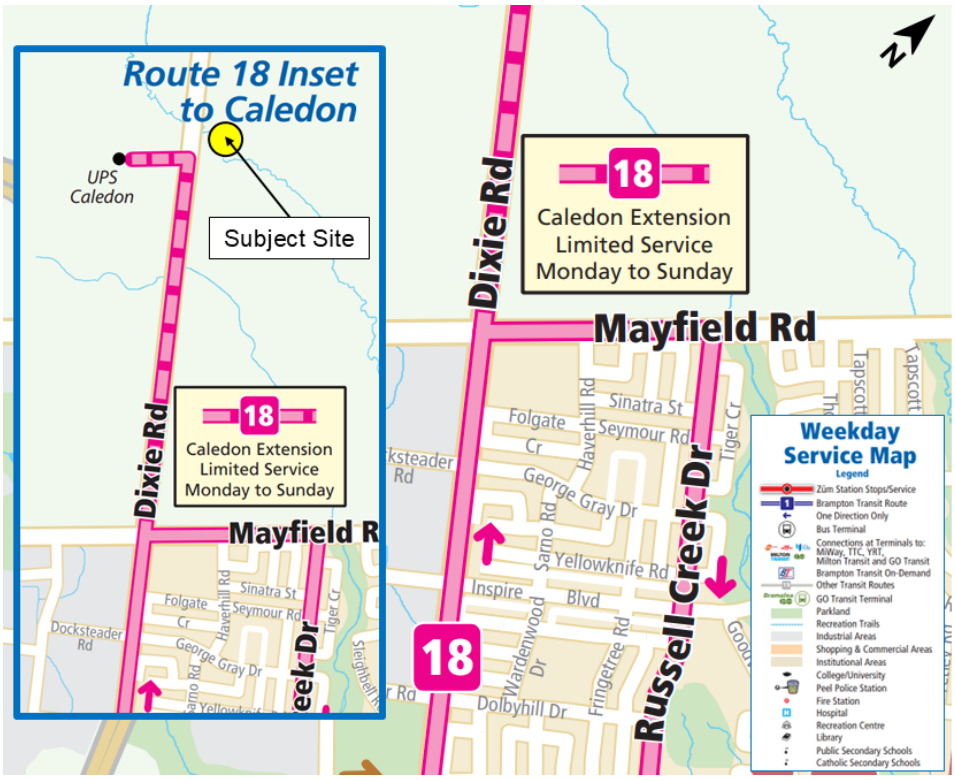

Figure 2-1: City of Brampton Transit Map

2.2.3 Existing Pedestrian Network

Due to the agricultural uses of surrounding lands, there is an absence of sidewalks in the area immediately surrounding the Site. A sidewalk is provided along the south side of Mayfield Road to facilitate residential uses. Despite the minimal pedestrian infrastructure, crosswalks are available at the signalized intersections of Dixie Road / Mayfield Road and Bramalea Road / Mayfield Road.

The Site is also located in an area of the Town that has limited access to the existing cycling network. Existing bicycle infrastructure near the Site includes a multi-use path located along the south side of Mayfield Road, which subsequently provides connections to the wider bicycle network within the City of Brampton. The nearest cycling facilities are located along Old School Road north of the site which operates in an east-west direction. This cycling route connect to other cycling routes along Kennedy Road which provides access to urban areas near Highway 410 South and Highway 10.

The Site is located in an area where there are proposed improvements to the cycling and pedestrian networks as noted in both the Town of Caledon's and Region of Peel's Transportation Master Plans. As noted in both reports, there are proposed cycling lanes along Dixie Road that extend in a north-south direction between the City of Brampton towards Olde Base Line Road. There are also proposed pedestrian facilities along Dixie Road that extend in a north-south direction between the City of Brampton towards Olde Base Line Road.

The existing cycling network in relation to the location of the Site is found in **Figure 2-2**, as extracted from the Transportation Impact Study submitted as part of this SPA.

Figure 2-2: Town of Caledon Cycling Network

3.0 PLANNING CONTEXT

Section 3.0 of this Study outlines key provincial, regional, and municipal planning documents that provide policy direction for the planning of communities to become more resilient to the effects of climate change. The Project will be developed with regard to the guidelines provided in these policies to support climate change initiatives. A complete list of relevant objectives, policies and actions as identified in key provincial, regional, and municipal planning documents relevant to this Study can be found in **Appendix B**.

3.1 Provincial

3.1.1 Provincial Planning Statement

The *Provincial Planning Statement* (PPS), 2024 is a consolidated provincial statement of the Province of Ontario's policies on land use planning. The PPS (2024) leverages housing supportive policies of the *Provincial Policy Statement, 2020* and *A Place to Grow: Growth Plan for the Greater Golden Horseshoe* ("Growth Plan"), removing barriers and continuing to protect the environment through a streamlined province-wide land use planning policy framework.

The initial draft of the Provincial Planning Statement (PPS, 2024) was released on April 6, 2023, and was followed by a consultation period to gain feedback on the proposed changes. An additional draft was released by the province on April 10, 2024.

The Province released the final version of the PPS (2024) in August 2024. The PPS (2024) came into effect on October 20th, 2024. This document includes new and updated policies supporting increased intensification, scoping protections for employment areas, and promoting a range and mix of housing options, including housing for students and seniors.

The PPS (2024) replaces both the Provincial Policy Statement, 2020 and Growth Plan (2022), and the PPS (2024) policies apply across Ontario and to the Site. **Table 3-1** identifies relevant policies from the PPS (2024) applicable to the Project.

Table 3-1: Policies from the Provincial Planning Statement (PPS) Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 2.9: Energy Conservation, Air Quality and Climate Change	
Subsection 2.9.1	"Planning authorities shall plan to reduce greenhouse gas emissions and prepare for the impacts of a changing climate through approaches that: a) support the achievement of compact, transit-supportive, and complete communities; b) incorporate climate change considerations in planning for and the development of infrastructure, including stormwater management systems, and public service facilities; c) support energy conservation and efficiency; d) promote green infrastructure, low impact development, and active transportation, protect the environment and improve air quality; and

Section	Specific Policies Relevant to the Project
	e) take into consideration any additional approaches that help reduce greenhouse gas emissions and build community resilience to the impacts of a changing climate."
Section 3.8: Energy Supply	
Subsection 3.8.1	"Planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, energy storage systems, district energy, renewable energy systems, and alternative energy systems, to accommodate current and projected needs."

3.1.2 The Greenbelt Plan

The Greenbelt Plan (2017) is a provincial plan that serves to protect the agricultural and ecological features of the Greenbelt area in the Greater Golden Horseshoe (GGH) from the effects of increased urbanization. The Greenbelt is the cornerstone of Ontario's Greater Golden Horseshoe Growth Plan (Growth Plan) which is a provincial regional growth management plan that provides clarity and certainty about urban structure, where and how future growth should be accommodated and what must be protected for current and future generations. As discussed in section 3.1.1, the Growth Plan has been revoked and has been replaced with policies part of the Provincial Planning Statement (2024), but the Greenbelt Plan remains in effect. The Greenbelt Plan includes lands within, and builds upon the ecological protections provided by, the Niagara Escarpment Plan (NEP) and the Oak Ridges Moraine Conservation Plan (ORMCP).

The Site is located within the Greenbelt Plan boundary in the Protected Countryside Area, further classified as a Natural Heritage System area. The Protected Countryside Area includes both an Agricultural System and a Natural System, along with settlement areas. Within the Protected Countryside Area and Natural System, the Natural Heritage System includes core areas and linkage areas with the highest concentration of sensitive and significant natural features and functions. The primary purpose of these systems is to enhance agricultural and environmental protections while improving connections to surrounding lake systems and watersheds. As a result, the site is subject to the full provisions of the Greenbelt Plan, with the exception of Section 6 which pertains to Urban River Valley Policies (Ministry of Municipal Affairs and Housing, 2017). **Table 3-2** identifies relevant policies from the Greenbelt Plan applicable to the Project.

Table 3-2: Policies from the Greenbelt Plan Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 1.2: Vision and Goals	
Subsection 1.2.2	"1.2.2.6 a) Integrating climate change considerations into planning and managing the Agricultural System, Natural Heritage System and Water Resource System to improve resilience and protect carbon sequestration potential, recognizing that the Natural Heritage System is also a component of green infrastructure; and"
Subsection 1.2.2	"1.2.2.6 b) Integrating climate change considerations into planning and managing growth that includes incorporating techniques to reduce greenhouse gas emissions, and increasing the resilience of settlement areas and infrastructure within the Greenbelt."
Section 3.2: Geographic-Specific Policies in the Protected Countryside - Natural System	

Section	Specific Policies Relevant to the Project
Subsection 3.2.2	"3.2.2.3 New development or site alteration in the Natural Heritage System (as permitted by the policies of this Plan) shall demonstrate that: a) There will be no negative impacts on key natural heritage features or key hydrologic features or their functions; b) Connectivity along the system and between key natural heritage features and key hydrologic features located within 240 metres of each other will be maintained or, where possible, enhanced for the movement of native plants and animals across the landscape; c) The removal of other natural features not identified as key natural heritage features and key hydrologic features should be avoided. Such features should be incorporated into the planning and design of the proposed use wherever possible; d) Except for uses described in and governed by the policies of sections 4.1.2 and 4.3.2, i. The disturbed area, including any buildings and structures, of the total developable area will not exceed 25 per cent (40 per cent for golf courses); and ii. The impervious surface of the total developable area will not exceed 10 per cent; and e) At least 30 per cent of the total developable area will remain or be returned to natural self-sustaining vegetation, recognizing that section 4.3.2 establishes specific standards for the uses described there."
Subsection 3.2.5	"3.2.5.1 Development or site alteration is not permitted in key hydrologic features and key natural heritage features within the Natural Heritage System, including any associated vegetation protection zone, with the exception of: a) Forest, fish and wildlife management; b) Conservation and flood or erosion control projects, but only if they have been demonstrated to be necessary in the public interest and after all alternatives have been considered; or c) Infrastructure, aggregate, recreational, shoreline and existing uses, as described by and subject to the policies of section 4."
	"3.2.5.4 In the case of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes and significant woodlands, the minimum vegetation protection zone shall be a minimum of 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature."
	"3.2.5.5 A proposal for new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System or a key hydrologic feature anywhere within the Protected Countryside requires a natural heritage evaluation or a hydrological evaluation which identifies a vegetation protection zone which: a) Is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change and associated activities that may occur before, during and after construction and, where possible, restore or enhance the feature and/or its function; and b) Is established to achieve and be maintained as natural self-sustaining vegetation."

3.2 Regional

3.2.1 Region of Peel Official Plan

The *Region of Peel Official Plan (2022)* (RPOP) outlines the long-term policy framework for guiding growth and development in Peel, while protecting the environment. The four primary goals of the RPOP are to create a healthy community; recognize the importance of the environment; recognize the importance of a vibrant economy; and support balanced growth and development (Region of Peel, 2022).

Commencing on July 1, 2024, as per Ontario Bill 23 (*More Homes Built Faster Act*, 2022) and Bill 185 (*Cutting Red Tape to Build More Homes Act*, 2024), several upper-tier municipalities were identified as municipalities without planning responsibilities, including Peel Region. As a result, the lower-tier municipalities of Caledon, Brampton, and Mississauga must take responsibility for implementing regional policies and ensure that planning applications conform to the RPOP. **Table 3-3** identifies relevant policies from the RPOP applicable to the Project.

Table 3-3: Policies from the RPOP Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 2.4: Climate System	
Subsection 2.4.2	"To support the development of sustainable, low-carbon, compact, mixed-use, and transit-supportive communities which reduce greenhouse gas emissions and support active transportation, protect natural systems, features and functions, and promote renewable energy, energy conservation and efficient design".
Subsection 2.4.5	"To promote a culture of conservation through energy, water and soil conservation and integrated waste management".
Section 2.5: Air Quality	
Subsection 2.5.2	"To improve local air quality and reduce greenhouse gas emissions".
Subsection 2.5.3	"To promote sustainable development and land use patterns which address public health, transportation systems, energy conservation and environmental concerns".
Section 6.5: Water and Wastewater Services	
Subsection 6.5.13	"Consider opportunities when designing, planning, and implementing water and wastewater services to reduce greenhouse gas emissions in accordance with provincial and Regional objectives".

3.2.2 Region of Peel Climate Change Master Plan

The *Region of Peel Climate Change Master Plan* (CCMP), adopted in 2019, is the Region's primary climate action plan which provides direction on how the Region aims to be a leader in reducing GHG emissions and to ensure its services, operations, and infrastructure are resilient to the impacts of climate change. The CCMP is comprised of 20 actions and 66 activities that provide direction on the management of Regional assets, infrastructure, and services in a changing climate over the next decade (Region of Peel, 2019).

The CCMP provides direction for both Regional and private development actions for reducing impacts due to climate change. **Table 3-4** identifies relevant policies from the CCMP applicable to the Project.

Table 3-4: Policies from the CCMP Relevant to the Project

Section	Guiding Actions Relevant to the Project
Chapter Three: Reduce GHG Emissions	
Subsection 6.1	"New buildings will be constructed to a high performance and are constructed to net-zero emissions ready".
Subsection 7.2	"Install solar PV panels and geoexchange systems on new assets at the time of construction".
Subsection 9.1	"Apply the Sustainable Transportation Strategy to mode shifting".
Subsection 9.3	"Expand infrastructure to support low and zero-emission vehicle (ZEV) adoption".
Chapter Four: Be Prepared	
Subsection 12.3	"Install or improve cooling solutions (passive and active) for buildings which are currently or are projected to be vulnerable to overheating".
Subsection 14.3	"Implement tree planting and management program for new and existing trees".
Subsection 14.6	"Require buildings undergoing applicable state of good repair work to consider green infrastructure opportunities".

3.2.3 Region of Peel Settlement Area Boundary Expansion (SABE) Study

As part of the Peel 2051 Regional Official Plan Review and Municipal Comprehensive Review, the Region of Peel conducted a Settlement Area Boundary Expansion (SABE) Study to identify locations for settlement area boundary expansions to accommodate employment and residential growth. While the Region prioritizes the accommodation of growth through intensification, it was identified as part of the Region's Land Needs Assessment (LNA) that growth requirements will also need to be accommodated on new designated greenfield lands (Region of Peel; Planning and Growth Management Committee, 2021).

Through the SABE study, the Town of Caledon has been identified as the 'Focus Study Area' (FSA) which includes areas that are considered priority and likely for boundary expansion. The Site is located within the FSA and is identified as an area for boundary expansion within new designated greenfield lands.

Based on the results of the technical studies, a concept map of the areas most suitable for the SABE within the FSA has been developed. The settlement areas of Bolton and Mayfield West are identified in the SABE study as appropriate locations for long-term growth of Community Lands and Employment Lands in the FSA. These areas offer strong potential for near and long-term employment activities due to existing adjacent employment uses in Mayfield West and excellent connections to Highway 410 and the GTA West Highway Corridor (Hemson, 2020).

The SABE study identifies the following areas around Mayfield West for Community Land expansion that are relevant to this Project:

- "Community lands to the north-east of the existing settlement area, to be generally framed by Old School Road and the Greenbelt "finger" west of Tullamore. The boundary of Old School Road and nearby Greenbelt

features provides protection for the cluster of active farms to the south of the GTA West Corridor either side of Dixie Road and excludes an area that is less preferred for water and wastewater servicing expansion. The area included in the proposed SABE is suitable for the extension of water and wastewater services while the area north of Old School Road is less preferred". The extension of water and wastewater services are being expedited by the Region of Peel through the Regional capital works program and will be construction in 2025.

- "Community lands to the immediate north and west of the existing settlement area, to be generally framed by the GTA West Corridor. This area constitutes the most substantial expansion area proposed for Mayfield West to 2051. The lands represent the logical extension of the settlement area and, while much of the area is agriculturally active, there is an ongoing transition to non-farm uses. The area is preferred from a transportation perspective, offering opportunities for sustainable transportation modes, lower congestion, and better road connectivity than other areas in the FSA. As well, the area is well positioned for water and wastewater servicing expansion" (Hemson, 2020).

3.2.4 Toronto and Region Conservation Authority (TRCA) The Living City Policies

Part of the Site is located within the Toronto and Region Conservation Authority (TRCA) regulated area and within the regulatory floodplain boundary area, which is part of the Humber River watershed. The Applicant has engaged with the TRCA regarding the delineation of the regulatory flood plain on the Site, and TRCA completed a site visit on August 24, 2023 to the provincially-designated Natural Heritage System feature limits (dripline and top of bank) on the Site. **Figure 3-1** and **Figure 3-2**, prepared by Stantec (2024) as part of the Comprehensive Environmental Impact Study for the proposed application, displays the boundary of the floodplain and natural heritage feature limits on the Site and their required development setbacks (Stantec Consulting Ltd., 2024). The boundaries of the setback limits are also included in the overall Site Plan.

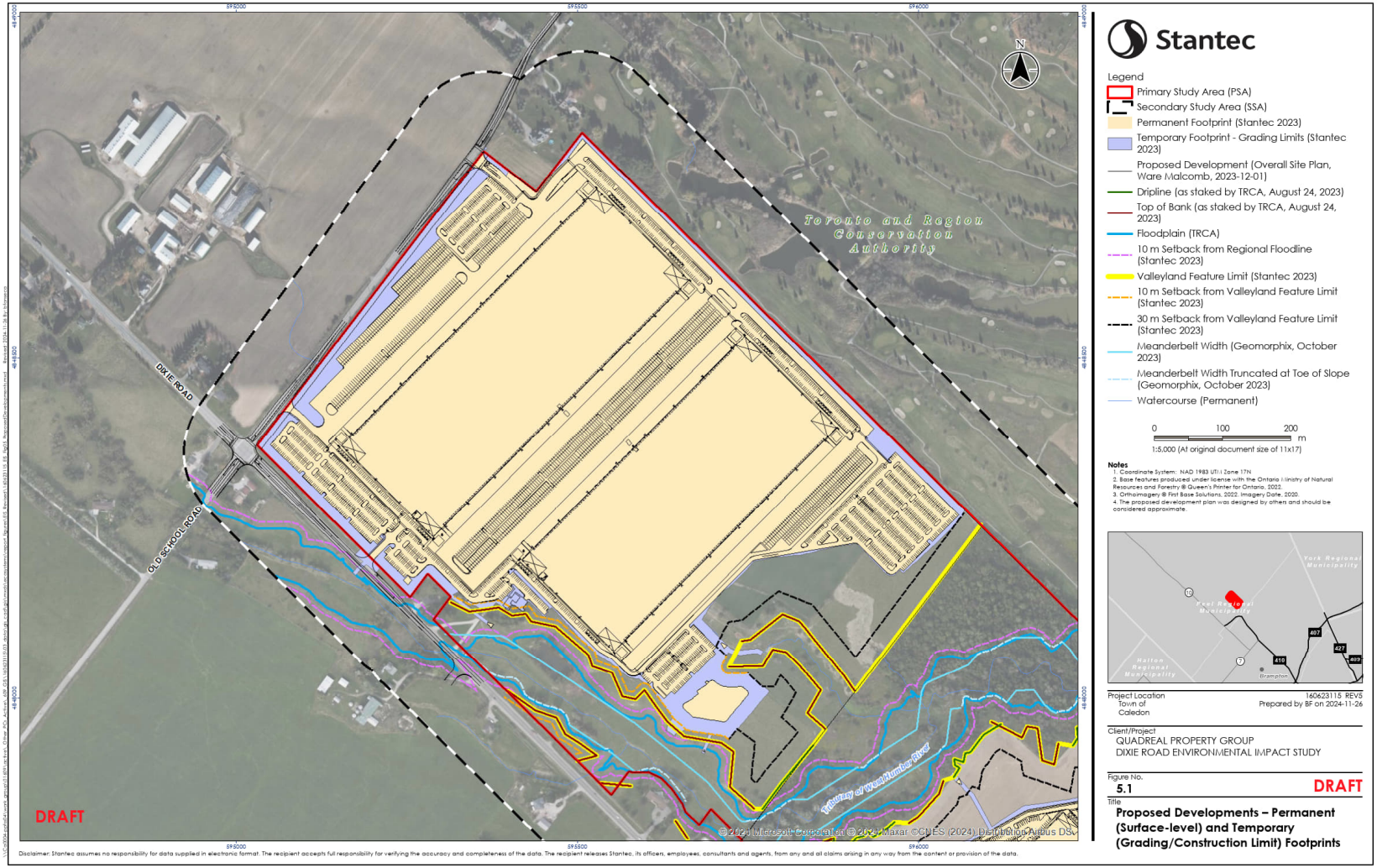

Figure 3-1: 12861 Dixie Road Environmental Features Development Setbacks

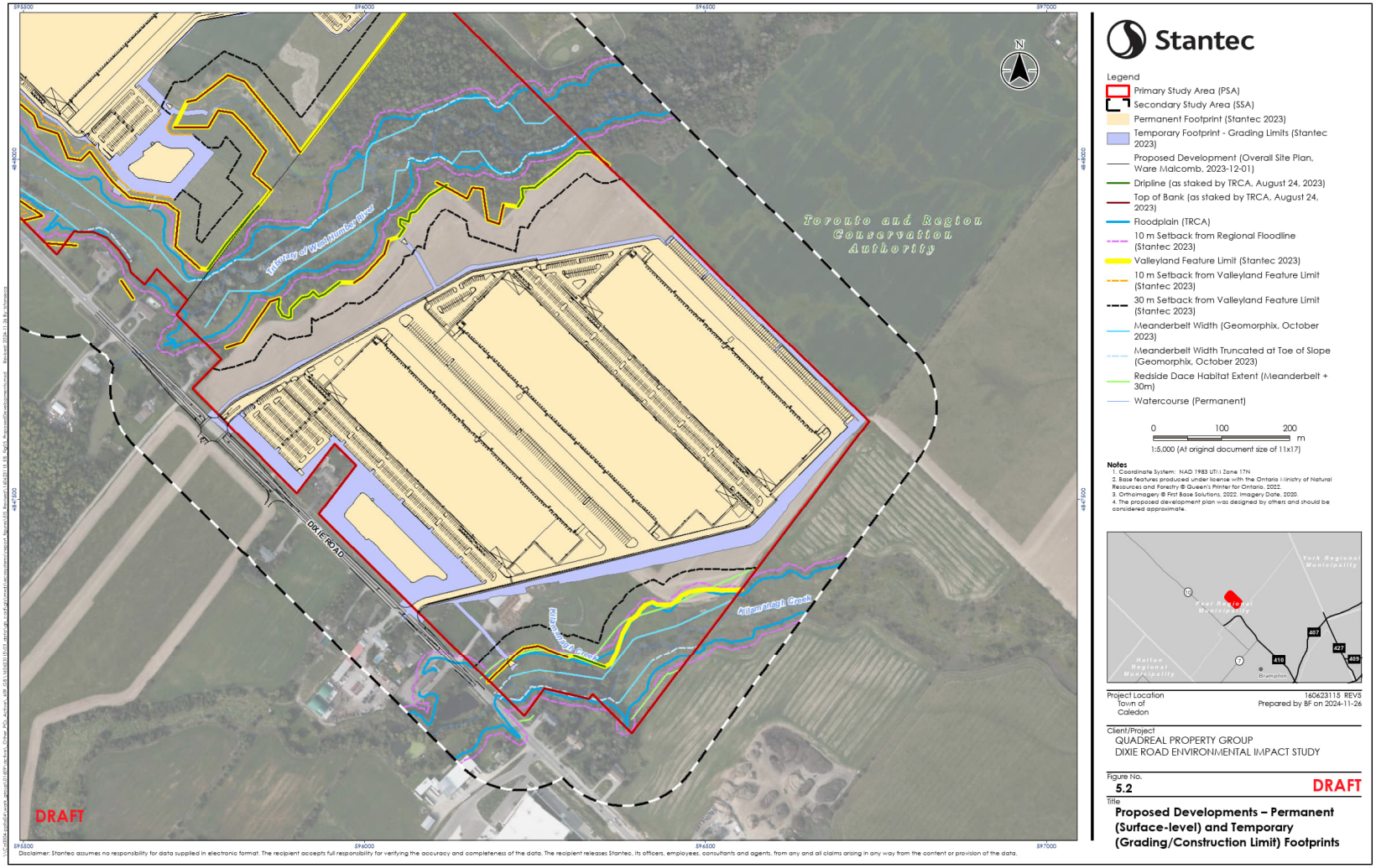

Figure 3-2: 12489 Dixie Road Environmental Features Development Setbacks

Source: *Comprehensive Environmental Impact Study and Management Plan* (Stantec Consulting Ltd., 2024)

The TRCA's *The Living City Policies for Planning and Development in the Watersheds of the Toronto and Region Conservation Authority (2014)* is a document that guides the implementation of TRCA's legislated and delegated roles and responsibilities in the planning and development approvals process (Toronto and Region Conservation Authority, 2014). Chapter 8 of The Living City Policies document outlines policies for TRCA's regulatory review and permit approval process, and outlines application and design requirements for developments in TRCA's regulated area. While the TRCA's The Living City Policies plan does not contain policies that are specific to energy and emissions reduction, policies that are relevant to the Project are found in **Table 3-5**.

Table 3-5: Policies from The Living City Policies Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 8.4: General Regulation Policies	
Subsection 8.4.13	"All development, including new parking facilities (above ground and underground structures and at-grade parking lots), must meet the minimum requirements for safe access for the nature of the development as outlined in the policies in Section 8 in accordance with Provincial and TRCA Standards, and demonstrate to the satisfaction of TRCA that: a) risks due to both flooding and erosion have been addressed".

3.3 Municipal

3.3.1 Town of Caledon Official Plan

The *Town of Caledon Official Plan (March 2024 Consolidation)* (Town OP) identifies goals, principles, objectives and policies that are intended to guide land use development in Caledon, and considers social, economic and environmental impact of growth in the community. The policies of the Town OP are designed to promote involvement in the future of the Town and public input as well to enhance and maintain the quality of life for the residents of Caledon (Town of Caledon, 2024).

As identified within the Town OP, the Site is designated as Prime Agricultural Area and Environmental Policy Area (Town of Caledon, 2024). The proposed Official Plan Amendment (OPA) seeks to re-designate the lands from Prime Agricultural Area to Prestige Industrial while maintaining the Environmental Policy Area designation. **Table 3-6** identifies relevant policies from the Town OP applicable to the Project.

Table 3-6: Policies from the Town of Caledon Official Plan Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 3.1: Sustainability	
Subsection 3.1.3.8	"3.1.3.8.1 The Town shall work with the Region of Peel, development interests and other appropriate partners to identify and implement development patterns, standards and practices that reduce greenhouse gas emissions".
Subsection 3.1.3.9	"3.1.3.9.2 The Town shall encourage proponents of new development to consider energy conservation measures derived by the planning and design for the orientation of streets and buildings to maximize exposure to the sun (passive solar energy), and green design for buildings".

Section	Specific Policies Relevant to the Project
	"3.1.3.9.3 The Town shall encourage proponents of new development to explore innovative land use patterns, building standards, transportation systems and urban design that will significantly reduce the overall demand for energy".
Subsection 3.1.3.10	"3.1.3.10.3 The Town will work with proponents of new development and redevelopment projects to promote compact, mixed-use neighbourhood development patterns that incorporate and enhance opportunities for the use of alternative and renewable energy systems, where appropriate, such as passive and active solar energy, geothermal, wind power, district heating systems and new technologies as they become available and in accordance with the Green Energy Act".
Subsection 3.1.3.11	"3.1.3.11.2 Proponents of new developments shall be encouraged to use green-building guidelines and rating systems for new construction to promote the use of building materials and products that have minimal potential to radiate harmful emissions that affect air quality".

3.3.1.1 Town of Caledon Mayfield West Secondary Plan

The Site is located adjacent to the Mayfield West Secondary Plan area in the Town of Caledon. As the site is situated outside of the Plan area boundary, policies part of Town of Caledon's Mayfield West Secondary Plan (Town of Caledon, Official Plan, Chapter 7) are not applicable to the Project.

3.3.1.2 Town of Caledon Official Plan Update Discussion Paper – Climate Change

In support of the Town of Caledon's 2024 Official Plan Update, the Town's *Official Plan Update Discussion Paper – Climate Change (2021)* was prepared with the purpose of identifying the best policy practices and opportunities for Caledon to fully incorporate climate change into its Official Plan. Climate change is identified as one of the five focus areas in the Town's Official Plan to put climate change issues at the forefront of planning in the community. The discussion paper highlights the benefits of climate-oriented development in an approachable and concise format which helps to showcase Caledon as a local leader in sustainable and resilient development (Town of Caledon, 2021).

Some of the priority policy practices and opportunities identified in the discussion paper that are relevant to energy and emissions reduction and are the responsibility of a land developer include:

- Travel and Transportation Systems:
  - Minimum bicycle parking space requirements;
  - Site plan control requirements to improve pedestrian connectivity at a site;
  - Require electric vehicle charging infrastructure in new and existing developments; and
  - Policies that enable and encourage carshare or carpool programs.
- New & Existing Homes and Buildings:
  - Carbon neutral corporate buildings, infrastructure and operations;
- Renewable and Low-Carbon Energy
  - Undertake a renewable energy study to understand the feasibility of different systems;

- Requirement for new growth areas to complete carbon-neutral energy plans;
- Require district energy-ready new development in areas identified for district energy;
- New development shall be encouraged to have dedicated rooftop solar technologies; and
- Encourage the development of smart grids and microgrids.

- Resilient Communities:
  - Site plan control requirements for the inclusion of green infrastructure.
- Resilient Economy:
  - Support Town of Caledon Green Development Standard (2024) to encourage new net-zero energy, resilient buildings and communities, including support for renewable energy generation and electric vehicle infrastructure; and
  - Encourage eco-industrial and innovation district developments, which include carbon neutral objectives.

3.3.2 Town of Caledon Resilient Caledon Community Climate Change Action Plan

The Town of Caledon's *Resilient Caledon Community Climate Change Action Plan (2021)* identifies objectives and actions to reduce energy use and greenhouse gas (GHG) emissions in the community and better prepare for the impacts of climate change. The Plan aims to support the Town of Caledon in achieving a 36% reduction of emissions by 2030 and net zero GHG emissions by 2050 (Town of Caledon, 2021). The Plan contains over 60 actions and supporting tasks, which are divided into five action areas:

1) Smart Growth;
2) Sustainable Communities;
3) Agriculture and Natural Systems;
4) Low-Carbon Transportation; and
5) Resilient Infrastructure and Energy.

Table 3-7 identifies relevant policies from the Town of Caledon Community Climate Change Action Plan applicable to the Project.

Table 3-7: Policies from the Caledon Community Climate Change Action Plan Relevant to the Project

Section	Specific Policies Relevant to the Project
Section 1: Establish Climate-Friendly Planning and Building Policies	
Subsection 1.2	"Create a sustainable development standard to ensure all new residential and commercial buildings are net zero and climate resilient by 2030, and promote efficient, green, and livable community design".
Section 3: Promote the Development of Compact, Complete Communities that are Walkable, Bikeable, Transit Friendly, and Energy Efficient	
Subsection 3.1	"Support the development of eco-districts in the commercial sector to promote energy efficiency and opportunities for district energy".

Section	Specific Policies Relevant to the Project
Subsection 3.3	"Increase the share of sustainable and active transportation modes both in and between urban areas".
Section 12: Increase Walking and Cycling Through Improved Programs and Infrastructure	
Subsection 12.1	"Expand and enhance active transportation infrastructure to promote walking and cycling in urban areas and as a means of travel between them".
Section 15: Diversify Caledon's Energy Support with Renewable and Resilient Energy Sources and Systems	
Subsection 15.2	"Identify and support opportunities for district energy and renewable energy infrastructure".
Subsection 15.3	"Encourage investment in ground-mount solar projects and support the uptake of rooftop solar on homes and businesses".
Subsection 15.4	"Support the uptake of community rooftop PV".
Subsection 15.5	"Develop energy storage solutions as an emergency back-up power supply and energy demand management measure".

3.3.2.1 Resilient Caledon Community Climate Change Action Plan Technical Report

The Resilient Caledon Community Climate Change Action Plan Technical Report was prepared in November 2020 by the Town of Caledon as a technical resource to support and inform the Town of Caledon's Community Climate Change Action Plan, Resilient Caledon (2021). The primary purpose of the technical report was to document work undertaken to identify an emissions reduction pathway for Caledon, as well as priority actions for the Town to increase its resilience to climate change impacts (Town of Caledon, 2020).

The technical report summaries findings from the Risk and Vulnerability Assessment completed by the Town of Caledon in 2018, which included an assessment of future climate conditions projected for the Town of Caledon out to 2090 and impacts on infrastructure, natural environments, and socio-economic environments. It was assessed that the highest risk impacts were related to infrastructure risks due to increased precipitation, warmer temperatures, and flood risk.

The technical report also summaries findings from GHG emissions modelling. Based on the results, it is predicted that energy use in Caledon is expected to more than double from 2016 to 2050 due to population growth. Despite the overall increase, per capita energy use is expected to decrease due to improvements to space heating/cooling and water heating demands, due in part to smaller homes and also increased energy efficiency resulting from new government regulations on appliances and the building code.

As described in the technical report, the residential buildings and transportation sectors are responsible for most of Caledon's emissions in 2016, with 20% and 54% of total 2016 emissions, respectively. By 2050, transportation emissions are anticipated to double, with a 130% increase, driven by an increase in population and jobs, and the travel associated with each. The commercial building sector is projected to experience a 140% increase in emissions while the residential sector will see just a 58% increase.

3.3.3 Town of Caledon Green Development Standard

In June 2024, the Town of Caledon published its Green Development Standard (GDS) which aims to improve the sustainability and livability of communities for the future and current residents (Town of Caledon, 2024). The GDS outlines climate-friendly design standards for all new residential, commercial, and industrial development in Caledon. The design standards aim to minimize energy use and GHG emissions, help Caledon adapt to a changing climate, protect and enhance the natural environment, and create more walkable communities.

The Town of Caledon Green Development Standard came into effect on July 1, 2024, for new applications. The proposed development application at the Site is therefore subject to the requirements of the Town of Caledon Green Development Standard (2024). The applicant is committed to meeting the requirements of the GDS as well as the sustainability objectives and targets set out by the Town of Caledon, which is discussed further in Section 4.0 of this report.

Caledon's GDS is organized into three theme areas of Community Design and Mobility, Green Infrastructure, and Buildings and Energy (Town of Caledon, 2023). **Table 3-8** lists the metric requirements and submission requirements included in the GDS for industrial developments that can be reviewed in support of this development application.

Table 3-8: Applicable Policies from the Caledon Green Development Standard

Category	Policy	Metric Requirement Relevant to the Project	Relevant Technical Files
Mandatory Metrics:			
Community Design and Mobility	1.3 Light Pollution	▪ All lighting fixtures must be DarkSky approved. If a DarkSky Fixture Seal of Approval is not available, fixtures must be full-cutoff (0 BUG uplight) and with a colour temperature rating of 3000 K or less. ▪ Street and walkway/bikeway lighting must have NEMA 7-pin ANSI 136.41 receptacle and photocells. ▪ All other fixtures must have photocells or astronomic time clock operations. ▪ Sites adjacent to protected natural features shall have no lateral light trespass into the feature.	Lighting Design Plan Photometric Plan
	1.4 Active Transportation	▪ Follow all requirements outlined in the Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking. ▪ Amenity spaces and walkways must be located within site for employees. ▪ Achieve a minimum score of Silver (70%–79%) on the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking. If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.	Traffic Impact Study Peel Healthy Development Assessment Pedestrian Circulation Plan
	1.7 Electric Vehicle (EV) Charging	▪ Provide a minimum of 20% of non-fleet parking spaces as EV-Ready. ▪ Encourage a minimum of 5% of spaces to be equipped with EV Supply Equipment (EVSE). ▪ Dedicated parking spaces for carshare services or carpooling, as well as charging spaces for E-bikes and scooters are encouraged.	Traffic Plan or Parking Plan Site Statistics Template: Electric Vehicle Charging tab

Category	Policy	Metric Requirement Relevant to the Project	Relevant Technical Files
Green Infrastructure	2.1 On-Site Green Infrastructure	▪ Meet a minimum green cover target of 0.2 by completing the Green Factor Tool.[1] Eligible green infrastructure features must comply with specifications in the GDS and other Town standards and guidelines.	Green Factor Scoresheet Landscape and Planting Plans Arborist Report
	2.4 Urban Heat Island	▪ Install cool roof over 90% of available roof area (excluding HVAC and other equipment) except if installing solar PVs and/or green roof over a minimum of 50% of the available roof area. Cool roof materials and/or coatings should have an SRI rating of 78 or higher and an emissivity equal to or greater than 0.9. ▪ Paved areas (excluding loading bays, freight parking, and fire lanes) are to be treated with a minimum of two of the following strategies, covering at least 50% of the total paved area: ○ High-albedo paving materials with an initial solar reflectance of at least 0.33 or an SRI of 29; ○ Canopy of large-growing shade trees planted in landscape islands at regular intervals or in hedgerows to maximize both shading and ecological value. Canopy coverage to be calculated at 75% maturity (also contributes to, and can be demonstrated through, the On-Site Green Infrastructure metric); ○ Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29; ○ Shade from structures with energy generation; and ○ Open-grid pavement with at least 50% perviousness (can be demonstrated through the On-Site Green Infrastructure metric).	Roof Plan Site Statistics Template: Urban Heat Island tab

[1] The Green Factor Tool is a pilot resource adapted by the Town of Caledon from the City of Seattle's Green Factor. This approach sets an overall target for green cover across different development types, which can be achieved through a weighted menu of features. The Green Factor Tool can be found here: https://www.caledon.ca/en/town-services/resources/Energy-Environment/GDS_Green-Factor-Tool.xlsx.

Category	Policy	Metric Requirement Relevant to the Project	Relevant Technical Files
Buildings and Energy	3.1 Operational Energy and GHG Emissions	▪ Meet the following Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) targets: ○ GHGI: 15 kg CO2e/m2/yr ○ TEUI: 130 kWh/m2/yr ○ TEDI: 60 kWh/m2/yr ▪ All new buildings greater than 2000 m^2 gross floor area must complete and submit an Energy Modelling Report. ▪ Projects that come within 15% of the TEDI and TEUI thresholds are permitted where alternative improvements in performance are made. ▪ Provide a zero-carbon transition plan that lays out a pathway toward achieving carbon neutrality in the future, including how the building is designed to support this transition, such as providing the necessary infrastructure for full building electrification and avoidance of on-site combustion of fossil fuels.	Letter of Commitment Energy Modelling Report Zero-Carbon Transition Plan
	3.3 Solar Readiness	▪ All buildings with a pitched roof are designed to be solar-ready according to specifications outlined in NRCan's Photovoltaic Ready Guidelines, and buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP). ▪ All buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP). The design criteria must meet the NABCEP, including, at minimum, the requirements identified in the GDS Guidebook. ▪ Applications for buildings with a rooftop area greater than 50,000 square feet must conduct a feasibility assessment for the installation of an appropriately-sized solar PV system, based on the building's function, return on investment potential, and local generation capacity. However, at a minimum it should assess the system's ability to meet at least 30% of the building's energy requirements. The feasibility study must be conducted by a qualified solar provider or other energy professional, and in consultation with the local distribution company.	Letter of Commitment Building and Roof Plans (prior to permit) Feasibility Study Solar Ready Checklist and Builder's Declaration (page 17 of NRCan Solar Ready Guidelines).

Category	Policy	Metric Requirement Relevant to the Project	Relevant Technical Files
	3.4 Embodied Carbon	▪ Report embodied carbon in these bulk materials based on the relevant Environmental Product Disclosures (EPD): concrete, steel, masonry, wallboard, glass, thermal insulation, and wood. ▪ Include concrete mixes that are at least 10% below the Concrete Ontario baselines per mix type.	Letter of Commitment Embodied Carbon Report (prior to building permit)
	3.5 Water Conservation	▪ Install water fixtures or use non-potable water sources that achieve a minimum 25% reduction in potable water consumption in the building over baseline water fixtures. ▪ Where soft landscaping exists on-site, reduce potable water use for irrigation by 40% using strategies identified in the GDS Guidebook.	Letter of Commitment Relevant drawings
	3.6 Construction Waste	▪ All projects must develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94 to: ○ Identify strategies to reduce waste generation during project design and construction; ○ Establish waste diversion goals by identifying structural and non-structural materials targeted for diversion; ○ Establish the project's diversion strategies; and ○ Identify where materials will be taken and the expected diversion rates for each material. ▪ Divert at least 50% of the total construction and demolition material from the landfill; diverted materials must include at least four material streams.	Construction and Waste Management Plan (third party certified)
	3.7 Owner Education	▪ Distribute a Town-approved sustainability handout to all new building owners/tenant outlining sustainability features and encouraging other activities. The sustainability handout shall include an itemized list of all "green" technologies and programs that the applicant has committed to undertake within this GDS, including references and attachments for any ongoing maintenance requirements or standards, and it should include information to assist building owners/tenants in installing solar PVs. ▪ Provide permanent signage for Green/LID/site features.	Letter of Commitment Sustainability Handout (prior to occupancy)

Category	Policy	Metric Requirement Relevant to the Project	Relevant Technical Files
Voluntary Metrics:			
Higher Performance Buildings	4.1 Higher Performance Buildings	▪ The Higher Performance Buildings metric is a voluntary additional metric that allows applicants to demonstrate ways in which they are going above and beyond the Town's GDS or using innovative practices. This metric is optional to complete and will not be used to approve applications but may be recognized as part of a future awards/recognition program. See the GDS for examples of high-performance measures.	

3.3.4 Town of Caledon Transit Feasibility Study

The Caledon Transit Feasibility Study, prepared by Steer Group in 2019, identifies the need and potential demand for local transit services within Caledon for residents and local communities. The Study provides an overview of opportunities and challenges for transit expansion in the Town and identifies potential approaches for transit service according to priority routes (Steer Group, 2019).

The Site is currently not directly serviced by local or regional public transit. The Transit Feasibility Study identifies seven (7) proposed fixed transit routes through the Mayfield West Secondary Plan Area. However, the identified routes would not directly service the Site and instead service more dense and residential areas of Mayfield West (Steer Group, 2019).

4.0 SITE ANALYSIS AND RECOMMENDATIONS

Section 4.0 of this report provides an overview of the proposed sustainability initiatives on Site and an assessment of how energy conservation and GHG emission reductions will be addressed, including recommendations to improve low carbon buildings and transportation initiatives on the Site. The site analysis will be focused on provincial, regional, and municipal plans, policies, and targets reviewed in Section 3.0 of this report. A total of 28 recommendations are provided in this section. They are separated based on mandatory requirements and voluntary considerations. The Applicant is encouraged to consider all recommendations provided in this report at the detailed design / SPA stages of the Project. A complete list of the recommendations can be found in **Appendix C**.

4.1 Low Carbon Buildings

Key Planning Considerations

As established in the Town of Caledon's Community Climate Action Plan (2021) ("Resilient Caledon"), all new industrial buildings must be net zero by 2050. This can be achieved through the implementation of sustainable technologies, such as installing solar photovoltaic (PV) panels and geoexchange systems among other renewable energy solutions, on new assets at the time of construction.

Proponents of development are also encouraged to consider energy conservation measures derived by the planning and design for the orientation of streets and buildings to maximize exposure to the sun (passive solar energy), and green design for buildings, as outlined in provincial, regional, and local municipal policies. New buildings should also have cooling solutions (passive or active) installed to address heat-related climate risks, particularly for buildings which are projected to be vulnerable to overheating.

The Town of Caledon supports the development of eco-districts in the commercial sector to promote energy efficiency and opportunities for district energy, where appropriate. Compact developments can better utilize district energy systems. In a district energy system (DES), nearby buildings share heating, cooling and hot water. Sharing energy increases efficiency and results in cost and emissions savings.

The use of green-building guidelines and rating systems for new buildings are also encouraged to promote the use of building materials and products that have minimal potential to radiate harmful emissions that affect air quality. Other planning considerations include the development of energy storage solutions as an emergency back-up power supply and energy demand management measure.

As outlined in the Town of Caledon Green Development Standard (2024), the development proposal must meet the following minimum requirements as they relate to low carbon buildings on new industrial sites:

RELEVANT PLANS

- *Provincial Planning Statement (2024)*
- *Region of Peel Climate Change Master Plan (2019)*
- *Town of Caledon Official Plan (2024)*
- *Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)*
- *Town of Caledon Green Development Standard (2024)*

<u>Operational Energy and GHG Emissions</u>

- Meet the following Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) targets:

  - GHGI: 15 kg $CO_2e/m^2/yr$
  - TEUI: 130 $kWh/m^2/yr$
  - TEDI: 60 $kWh/m^2/yr$

- Consider the Town of Caledon's GHGI, TEDI, and TEUI targets for the years of 2027 and 2030 for industrial buildings:
  - 2027 Targets:
    - GHGI: 10 kg $CO_2e/m^2/yr$
    - TEUI: 100 $kWh/m^2/yr$
    - TEDI: 50 $kWh/m^2/yr$
  - 2030 Targets:
    - GHGI: 5 kg $CO_2e/m^2/yr$
    - TEUI: 70 $kWh/m^2/yr$
    - TEDI: 37 $kWh/m^2/yr$
- All new buildings greater than 2000 m^2 gross floor area (GFA) must complete and submit an Energy Modelling Report. The Energy Modelling Report must be submitted prior to Site Plan approval.
- Provide a zero-carbon transition plan that lays out a pathway toward achieving carbon neutrality in the future.

Solar Readiness

- All buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP).
- Applications for buildings with a rooftop area greater than 50,000 square feet must conduct a feasibility assessment for the installation of an appropriately-sized solar PV system, based on the building's function, return on investment potential, and local generation capacity. However, at a minimum it should assess the system's ability to meet at least 30% of the building's energy requirements. The feasibility study must be conducted by a qualified solar provider or other energy professional, and in consultation with the local distribution company.

Embodied Carbon

- Report embodied carbon in these bulk materials based on the relevant Environmental Product Disclosures (EPD): concrete, steel, masonry, wallboard, glass, thermal insulation, and wood.

Water Conservation

- Install water fixtures or use non-potable water sources that achieve a minimum 25% reduction in potable water consumption in the building over baseline water fixtures.
- Where soft landscaping exists on-site, reduce potable water use for irrigation by 40% using strategies identified in the GDS Guidebook.

Construction Waste

- All projects must develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94.

- Divert at least 50% of the total construction and demolition material from the landfill; diverted materials must include at least four material streams.

Owner Education

- Distribute a Town-approved sustainability handout to all new building owners/tenant outlining sustainability features and encouraging other activities. Provide permanent signage for Green/LID/site features.

Applicant-Proposed Energy Conservation and Efficiency Initiatives

QuadReal is part of the LEED 4.1 Volume Program and is standardizing sustainable features in its developments. The development will be pursuing LEED Certified certification. The development will be designed with a high-performance building envelope including insulated metal panel and precast wall assemblies, double-glazed, low-e windows in thermally broken frames, high-efficiency roof-top units for ventilation air heating, windows in warehouse areas to support daylighting, LED fixtures for interior and exterior lighting, and a light coloured “cool roof” where feasible.

Operational Energy and GHG Emissions

As described in the Sustainability Narrative Memo, prepared by Purpose Building Inc. in 2024, the proposed development is anticipated to meet minimum performance targets established in the Town of Caledon Green Development Standard (2024). Below are the minimum performance targets:

- GHGI: 15 kg $CO_2e/m^2/yr$
- TEUI: 130 $kWh/m^2/yr$
- TEDI: 60 $kWh/m^2/yr$

QuadReal has committed to a 50% reduction in carbon emissions by 2030 and net zero carbon by 2050 across its global portfolio. These targets support Caledon’s carbon emission reduction goals (36% reduction by 2030, net zero by 2050). To meet this goal for their industrial assets, QuadReal will transition from fossil-fuel-based space heating equipment to low-carbon, electric air-source heat pumps where feasible. This transition will occur over time, likely at the first renewal of the gas fired units. Heat pumps also support resilience for a future, warmer climate with the ability to provide some cooling to warehouse spaces.

Solar Readiness

The development will be “solar ready” with structural capacity, electrical infrastructure, and space provision on the roof to allow for the installation of roof-top solar PV in the future where feasible to meet the full electrical consumption of the development on a net-metered basis. This is part of QuadReal’s baseline design specification for new industrial buildings to support their net zero commitment.

Embodied Carbon

A life-cycle assessment of the building’s structure and envelope will be conducted as part of the development’s LEED strategy. This analysis will occur post tender once all material selections and quantities are known. To reduce embodied carbon QuadReal intends to procure lower carbon options for key materials (e.g., concrete and steel).

Water Conservation

To minimize water needs on site, the landscape is being designed with native and drought tolerant species so that a permanent irrigation systems is not required. A watering program will be in place for the site for the first three years to support landscaping establishment. The Applicant is to be responsible for providing further information on the watering program to the Town of Caledon if required.

Construction Waste

QuadReal is committed to reducing waste during construction and will develop a Construction and Demolition Waste Management Plan that targets 75% diversion of total construction and demolition waste from landfill using at least three material streams. Material waste will be weighed, tracked and reported throughout the course of construction. This supports the development's LEED certification and will be verified by the LEED Reviewer.

All waste and recyclable materials generated on site will be collected privately. Storage will be provided for all waste streams, including garbage, recycling, and other streams as applicable. During operations, compost collection and disposal will be managed by building tenants.

Waste diversion, in particular reducing the amount of waste generated at site where feasible, will reduce GHG emissions derived from waste material transport during the construction phase.

Owner Education

To educate tenants on the building's sustainability features and to support the project's LEED certification the development will prepare a Green Building Education program including a:

- Comprehensive signage program built into the building's spaces to education occupants and visitors of the benefits of green buildings.
- Manual to inform the design of other buildings based on the successes of this project.

The Applicant should consider including information relating to EV charging infrastructure for cars and scooters, location of bicycling parking, and carpooling programs where feasible.

The feasibility to include district energy in the development proposed has not yet been considered by the Project Team. The Project Team is planning on working with Hydro One to determine power capacity for the Site. Future capacity and line expansion from Kleinberg Transformer Station (TS) is required to distribute power to the area of the Site. If grid power timing or availability is uncertain, the Project Team will consider district energy options on the Site where feasible.

Recommendations

Align with planning requirements, including:

1) Meet the Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) performance targets established in the Town of Caledon Green Development Standard (2024).
2) Submit an Energy Modelling Report as required by the Town of Caledon Green Development Standard (2024).

3) Develop a zero-carbon transition plan that lays out a pathway towards achieving carbon neutrality in the future, as established as a requirement in the Town of Caledon Green Development Standard (2024).

4) Develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94, as established as a requirement in the Town of Caledon Green Development Standard (2024).

5) Develop and distribute a Town-approved sustainability handout to all new building owners/tenants. Consider distributing the handout to all employees of the Site. The sustainability handout may include information relating to EV charging parking for cars and scooters, location of bicycle parking, and carpooling programs.

6) Complete Submission Requirements identified in the Town of Caledon Green Development Standard as required to meet relevant GDS metric requirements. See Table 3-8 of the Energy and Emissions Reduction Study report for Submission Requirements.

Additional voluntary planning recommendations:

7) Explore opportunities to support community-wide GHG emission reduction goals established by the Town of Caledon to have all new buildings be net zero by 2050 and follow a carbon budget that aligns with 1.5˚C warming, which would entail a 36% reduction of emissions by 2030.

8) Explore opportunities to maintain QuadReal's commitment to installing roof-top solar PV in the future as part of the Project.

9) Consider implementing the solar PV panels on the new building in a way that is resilient to the effects of climate change and considers future changes in climate risks.

10) Explore opportunities to develop energy storage solutions as an emergency back-up power supply and energy demand management measures on Site.

11) Consider conducting additional climate change vulnerability assessments on Site to identify infrastructure and assets that are vulnerable to overheating.

12) Consider installing cooling solutions on Site to address heat-related climate risks, particularly if the new building is considered to be vulnerable to overheating.

13) Consider conducting additional energy feasibility studies if deemed required by the Town of Caledon to understand opportunities to implement additional low-carbon and sustainable energy solutions on Site.

4.2 Transportation Systems

4.2.1 Active Transportation and Public Transit Infrastructure

Key Planning Considerations

As established in provincial, regional, and local municipal policy, the use of active transportation and public transit is integral in reducing community-wide GHG emissions. Proponents of new development are encouraged to utilize land use and development patterns that promote walking and cycling in urban areas and as a means of travel between them. This can be achieved through the development of sustainable, low-carbon, compact, mixed-use, and transit-supportive communities and through the implementation of enabling infrastructure.

As noted in Section 2.2 of this report, the Site is located in an area of the Town that has limited access to existing public transit network. The Town of Caledon currently does not operate public transit within the municipality, but is

serviced by four local bus routes by Brampton Transit and two inter-regional bus routes by GO Transit. Approximately 0.5km-1.2km south of the Site (an 8-16-minute walk) (shorter distance is from 12489 Dixie Road and longer distance is from 12861 Dixie Road) is an existing bus route which provides some access to and from the Site for future users of the Site. However, the lack of sidewalks along Dixie Road in this area makes it challenging for future users of the Site to travel south to the nearest public transit stop and will likely discourage public transit usage in this area without safe pedestrian infrastructure available.

The Site is also located in an area of the Town that has limited access to the existing cycling network. The nearest cycling facilities are located along Old School Road north of the site which operates in an east-west direction. This cycling route connect to other cycling routes along Kennedy Road which provides access to urban areas near Highway 410 South and Highway 10.

The Site is located in an area where there are proposed improvements to the cycling network as noted in both the Town of Caledon's and Region of Peel's Transportation Master Plans. As noted in both reports, there are proposed cycling lanes along Dixie Road that extend in a north-south direction between the City of Brampton towards Olde Base Line Road. The subject site is located in an area where there are proposed improvements to the pedestrian network as noted in both the Town of Caledon's Transportation Master Plan and the Region of Peel's. As noted in both reports, there are proposed pedestrian facilities along Dixie Road that extend in a north-south direction between the City of Brampton towards Olde Base Line Road.

RELEVANT PLANS

- *Provincial Planning Statement (2024)*
- *Region of Peel Official Plan (2022)*
- *Region of Peel Climate Change Master Plan (2019)*
- *Town of Caledon Official Plan (2024)*
- *Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)*
- *Town of Caledon Green Development Standard (2024)*

In the Region of Peel's Sustainable Transportation Strategy (2018), the Region identified sustainable mode share targets to the year 2041, including a target of 50% of person-trips in the morning peak period to be made by sustainable modes (i.e., pedestrians, cyclists, transit riders and carpool passengers) (Region of Peel, 2018). It is the responsibility of the Town of Caledon to improve the availability, reliability, and safety of local public transit services in the community and expand public transit services to areas that are not currently well-serviced. It is also the responsibility of the local and regional municipal authorities to expand cycling networks on local and regional roads in and between growing communities and that connect to existing networks. This is particularly important in areas in Peel Region that have been identified as New Urban Areas to accommodate growth to 2051, which includes the Site. These areas will experience more people travelling in and between urban areas, and the use of public transit and active transportation will be integral in reducing GHG emissions in the community and to meet municipal mode share targets. However, proponents of development should consider the implementation of enabling infrastructure on Site, particularly with regards to active transportation, to encourage sustainable modes of transport.

As outlined in the Town of Caledon Green Development Standard (2024), the development proposal must meet the following minimum requirements as they relate to active transportation systems on new industrial sites:

- Follow all requirements outlined in the Town of Caledon Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking.

- Amenity spaces and walkways must be located within site for employees.
- Achieve a minimum score of Silver (70%–79%) on the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking. If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.

Applicant-Proposed Energy Conservation and Efficiency Initiatives

Pedestrian facilities are being proposed on Site that will allow visitors and employees to enter and exit the industrial building areas safely and will provide safe opportunities to cross the internal road network, minimizing the opportunity for pedestrian and vehicle conflicts on the Site. This includes sidewalks from the building throughout the parking lot towards Dixie Road and Old School Road.

The internal pedestrian network should be easy to navigate at all hours during the day. The construction of pedestrian facilities should be done in a way that is accessible and adheres to Access for Ontarians with Disabilities Act (AODA) where feasible. Developments should be encouraged to provide curb ramps and adequate clear widths on sidewalks where necessary.

A landscaped, winding walking trail is being proposed on the Site adjacent to the natural heritage areas. It includes native plantings, rest areas and amenity spaces distributed along its length. The landscaped walking trail will be lit for pedestrian safety and security, and will include appropriate signage for wayfinding where feasible. The design of these areas incorporates the overall landscape features of the site to create an aesthetic and coherent environment, and will effectively encourage the use of active transportation on the Site.

The preservation of natural heritage areas on the Site where feasible can also reduce GHG emissions as forested and wetland areas help to capture carbon from the atmosphere and sequester carbon in plants, soils, and sediments. Limiting construction footprints where feasible also helps to reduce emissions released during construction activities, where the removal of vegetation should be limited to the smallest extent possible.

As described in the Sustainability Narrative Memo (2024), continuous pedestrian scale lighting that is DarkSky compliant will be provide onto sidewalks, pathways, entrances, outdoor waiting areas, and gathering spaces where feasible. All lighting fixtures will be DarkSky approved with 0 backlight, uplight, and glare (BUG) and will have photosensors or astronomic time-clock operation to limit lighting when there is adequate daylight.

Bicycle parking will be available on Site, located conveniently close to each office entrance. Having bicycle parking located on the Site is good practice to provide enabling infrastructure for visitors and employees to use active transportation when travelling to the Site. Bike repair stations are proposed at the north side of both buildings at 12861 Dixie Road and will be located conveniently close to the office entrances and bicycle parking areas where feasible. Bike repair stations are also being proposed for 12489 Dixie Road. To align with design standards used by the Town of Caledon, bike repair stations should be equipped with bike repair tools to complete minor bicycle maintenance, including: Pump (for both for both schrader and presta valves); Allen Keys; Screw Driver; Spoke Tool; Tire Lever; and, Cone Wrench (Town of Caledon, 2022). Pedestrian and cycling connections are proposed on the Site to connect with Dixie Road and Old School Road.

Access for passenger vehicles and trucks is consolidated at the street to minimize the number of curb cuts required; however, passenger vehicles split away from the heavy vehicle traffic upon entry to the site and remain

separated so they can circulate independently within the parking areas safely. Parking is concentrated close to the entrances of the office buildings on the Site.

Due to the agricultural uses of surrounding lands, there is an absence of sidewalks in the area immediately surrounding the Site. Despite the minimal pedestrian infrastructure, crosswalks are available at the signalized intersection of Dixie Road/Mayfield Road and Dixie Road/Old School Road. Crosswalks will be provided at the proposed signalized intersection at the north entrance to the site. Stop signs are included in the site plan throughout the parking lot, in addition to speed bumps to reduce traffic speed and promote pedestrian safety.

Recommendations

Align with planning requirements, including:

14) Follow all requirements outlined in the Town of Caledon Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking.

15) Develop amenity spaces and walkways on the Site to promote active transportation users of the Site. Ensure amenity spaces and walkways meet AODA requirements.

16) Complete the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking and ensure the proposed development achieves a minimum score of Silver (70%–79%). If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.

Consider the following voluntary planning recommendations:

17) Explore opportunities to increase the number of outdoor bicycle parking on the Site to encourage the use of active transportation commuting patterns.

18) Explore opportunities to improve the connectivity of active transportation infrastructure on Site to Dixie Road and Old School Road through the consideration of sidewalks and bike lanes along the primary roads on the Site. Sidewalks and bike lanes should be implemented in a way that encourages pedestrian and cyclist safety and should be located away from industrial truck traffic on Site.

19) Explore opportunities to work collaboratively with the Region of Peel and Town of Caledon on future urbanization projects of Dixie Road and Old School Road near the Site to encourage the development of active transportation networks in the area that connect to the Site.

20) Explore opportunities to implement a shuttle bus for workers of the Site that travels between the nearest local public transit hub (i.e., Mayfield West) and regional transit stations (i.e., Brampton or Malton GO Transit Stations) to encourage the use of public transit in the area. If considered, implement a shuttle bus stop on Site in close proximity to the main entrances of the building.

21) Consider working collaboratively with local public transit agencies (i.e., Town of Caledon, Brampton Transit) to explore opportunities to expand public transit routes to the Site and when implementing supportive infrastructure (e.g., sheltered bus stops) on or adjacent to the Site.

22) Avoid the development of active transportation and public transit infrastructure in flood-risk areas, and consider anticipated changes in flood-risk when planning for the implementation of future active transportation infrastructure.

4.2.2 Low and Zero-Emission Vehicle Infrastructure

Key Planning Considerations

Implementing low and zero-emission vehicle infrastructure, which also encompasses infrastructure for electric vehicles (EVs), is an emerging and impactful strategy for reducing community-wide GHG emissions in the transportation sector. Using EVs or other low and zero-emission vehicles have the potential to significantly reduce GHG emissions, improve air quality, and minimize noise pollution. The implementation of zero emission vehicle infrastructure is a top planning priority for the Region of Peel to support residents and businesses to reduce GHG emissions and air pollution, as described in the Region's Zero Emission Vehicle Strategy (Region of Peel, 2022). In response at the local municipal level, the Town of Caledon has also worked towards implementing enabling infrastructure and currently has 12 EV charging stations available across the municipality which range from Level 2 to Level 3 charging capabilities (Town of Caledon, 2022).

EV charging station capabilities are categorized by Level 1, Level 2, and Level 3. Level 1 stations are the slowest type of charging station, which charges about an 8 km driving range per hour of charge and is most commonly installed on personal properties. Level 2 is the most common charging station, which charges about 30 km of driving range per hour of charge and is typical in businesses, recreation centres and malls. Level 3 is the fastest charging station, which charges about a 250 km driving range per hour.

RELEVANT PLANS

- *Region of Peel Official Plan (2022)*
- *Region of Peel Climate Change Master Plan (2019)*
- *Town of Caledon Official Plan (2024)*
- *Town of Caledon Green Development Standard (2024)*

As outlined in the Region of Peel's Climate Change Master Plan (2019), proponents of new development are encouraged to expand infrastructure that supports low and zero-emission vehicle adoption. This will contribute to achieving broader regional goals of developing sustainable and low-carbon communities.

As outlined in the Town of Caledon Green Development Standard (2024), the development proposal must meet the following minimum requirements as they relate to low and zero-emission vehicle infrastructure on new industrial sites:

- Provide a minimum of 20% of non-fleet parking spaces as EV-Ready.
  - EV-Ready is defined as having an installed panel capacity and raceway with conduit terminating in a junction box or 240-volt charging outlet, to which an EV charging station could simply be plugged in.
- Encourage a minimum of 5% of spaces to be equipped with EV Supply Equipment (EVSE).
  - EVSE is defined (in accordance with the Ontario Electrical Safety Code) as the complete assembly consisting of cables, connectors, devices, apparatus, and fittings installed for the purpose of power transfer and information exchange between the branch circuit and the electric vehicle, commonly referred to as an EV charging station or EV charger.
- Dedicated parking spaces for carshare services or carpooling, as well as charging spaces for E-bikes and scooters are encouraged.

Applicant-Proposed Energy Conservation and Efficiency Initiatives

As discussed in the Urban Transportation Considerations Report, prepared by BA Group in 2024, the Site is subject to car parking requirements of the Town of Caledon Zoning By-law 2006-50. The parking requirements for the Site and total number of parking spaces being proposed are summarized in **Table 4-1**.

Table 4-1: Car Parking Requirements and Proposed Parking Spaces

Location	Use	Gross Floor Area (GFA)	Rate	Required Parking Spaces	Proposed Parking Spaces
12489 Dixie Road	Warehouse (Building 1)	42,912 m^2	1 space per 230 square metres of gross floor area	333	795
	Warehouse (Building 2)	49,269 m^2		370	413
	Warehouse (Building 3)	42,384 m^2		329	398
Subtotal:		134,565 m^2		1,032	1,606
12861 Dixie Road	Warehouse (Building 1)	100,758 m^2	1 space per 230 square metres of gross floor area	672	910
	Warehouse (Building 2)	87,960 m^2		597	1,062
Subtotal:		188,718 m^2		1,269	1,972
Total:		**323,283 m^2**		**2,301**	**3,578**

Of the 3,578 total parking spaces being proposed on the Site, 24 spaces on each parcel of land will include EV charging stations for a total of 48 EV spaces (1.34% of total parking spaces) on the Site. The distribution of the EV spaces results in 2-4 EV charging stations per office node on the Site. All EV charging stations will be capable of Level 2 charging. Conduits will be provided where feasible to allow for future expansion of EV chargers, primarily in parking spaces adjacent to soft landscaping to minimize site distribution. Designated priority parking will be reserved where feasible to low-emission vehicles and their charging infrastructure. The Applicant is encouraged to increase the number of EV-Ready parking spaces on the Site where feasible to meet minimum requirements established in the Town of Caledon Green Development Standard (2024).

Other sustainable transportation initiatives being considered on Site include reserving specific parking stalls for carpooling. Carpool parking spaces should be clearly identified on Site where feasible and appropriate programing should be developed by users of the Site to encourage sustainable commuting options. Accessible parking spaces are provided on the Site and are located by office entrances to meet appropriate accessibility standards.

Recommendations

Align with planning requirements, including:

23) Meet minimum requirements for the number of EV-Ready parking spaces on the Site (20% of non-fleet parking spaces), as established in the Town of Caledon Green Development Standard (2024).

Consider the following voluntary planning recommendations:

24) Explore opportunities to increase the number of EV charging outlets on Site, and/or consider at least one automobile EV charging station capable of Level 3 charging.

25) Consider locating parking spots designated for EV and their charging outlets in priority areas on Site, maintaining accessible and carpool parking spots as the first priority and to be closest to building entrances.

26) Consider implementing dedicated parking spaces and charging stations for electric bikes (E-bikes) and scooters. If installing E-bike and scooter charging, spaces should be equipped with an energized outlet (120 V) adjacent to the bicycle rack or parking spaces, as established in the Town of Caledon Green Development Standard (2024).

27) Avoid the development and implementation of EV charging infrastructure in flood-risk areas while also considering future changes in flood-risk.

28) Consider implementing wayfinding and signage on the Site for accessible, carpool, and EV charging outlet parking spots.

5.0 CONCLUSION

The recommendations section of this Energy and Emissions Reduction Study provides the Applicant with information to align the Project with energy and emissions reduction planning and policy requirements, goals, and objectives set out by the Region of Peel and Town of Caledon. The Applicant is responsible for meeting minimum mandatory requirements established in energy and emissions reduction policies reviewed as part of this Study. The consideration of identified voluntary recommendations will further support the development of a green and sustainable site and low-carbon community.

Minimum mandatory requirements are summarized as follows:

- Meet the Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) performance targets established in the Town of Caledon Green Development Standard (2024).
- Submit an Energy Modelling Report prior to Site Plan approval as required by the Town of Caledon Green Development Standard (2024).
- Develop a zero-carbon transition plan that lays out a pathway towards achieving carbon neutrality in the future.
- Develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94.
- Develop and distribute a Town-approved sustainability handout to all new building owners/tenants.
- Follow all requirements outlined in the Town of Caledon Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking.
- Develop amenity spaces and walkways on the Site to promote active transportation users of the Site. Ensure amenity spaces and walkways meet AODA requirements.
- Complete the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking and ensure the proposed development achieves a minimum score of Silver (70%–79%) prior to Site Plan approval.
- Meet minimum requirements for the number of EV-Ready parking spaces on the Site (20% of non-fleet parking spaces), as established in the Town of Caledon Green Development Standard (2024).
- Complete Submission Requirements identified in the Town of Caledon Green Development Standard as required to meet relevant GDS metric requirements. See Table 3-8 of the Energy and Emissions Reduction Study report for Submission Requirements.

To support low carbon buildings on Site and in the community, the Applicant should consider the following summary of the voluntary planning recommendations:

- Aim to develop new buildings to be net zero by 2030 to support GHG emission reduction targets established by the Town of Caledon.
- Explore opportunities to maintain QuadReal's commitment to installing roof-top solar PV in future phases of the Project.

- Consider implementing and maintaining solar PV panels on the new building in a way that is resilient to the effects of climate change and effectively provides alternative energy on Site.
- Explore opportunities to develop energy storage solutions for emergency back-up power supply.
- Consider install cooling solutions on Site to address heat-related climate risks.
- Consider conducting additional climate change vulnerability assessments and energy feasibility studies as appropriate to support low carbon solutions on Site.

To support sustainable transportation systems on Site and in the community, the Applicant should consider the following summary of the voluntary planning recommendations:

- Explore opportunities to increase the number of outdoor bicycling parking available on Site.
- Explore opportunities to improve the connectivity of active transportation infrastructure on Site to Dixie Road and Old School Road.
- Consider working collaboratively with the Region of Peel and Town of Caledon as appropriate to support future road urbanization and public transit expansion projects.
- Explore opportunities to increase the number of EV charging outlets on Site, and/or implement higher-level charging stations.
- Consider locating EV charging outlets in priority parking areas and implement sufficient wayfinding on the Site.
- Consider implementing dedicated parking spaces and charging stations for electric bikes (E-bikes) and scooters.
- Avoid the development of active transportation, public transit, and EV charging infrastructure in flood-risk areas on Site.

The Applicant is encouraged to consider all recommendations provided in this report at the detailed design / SPA stages of the Project.

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The report is intended to be used in its entirety. No excerpts may be taken to be representative of the findings in the assessment. The conclusions presented in this report are based on work performed by trained, professional and technical staff, in accordance with their reasonable interpretation of current and accepted engineering and scientific practices at the time the work was performed.

The content and opinions contained in the present report are based on the observations and/or information available to WSP at the time of preparation, using investigation techniques and engineering analysis methods consistent with those ordinarily exercised by WSP and other engineering/scientific practitioners working under similar conditions, and subject to the same time, financial and physical constraints applicable to this project.

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Design recommendations given in this report are applicable only to the project and areas as described in the text and then only if constructed in accordance with the details stated in this report. The comments made in this report on potential construction issues and possible methods are intended only for the guidance of the designer. The number of testing and/or sampling locations may not be sufficient to determine all the factors that may affect construction methods and costs. We accept no responsibility for any decisions made or actions taken as a result

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Signature Page

WSP Canada Inc.

Prepared by	*Reviewed by*	*Approved by*
		
Sarah MacKinnon	Aynsley Neufeld	Catherine Gentile
Environmental Planner	*Senior Engineer and Decarbonization Lead*	*Team Lead – Environmental Impact Assessment, Transportation*

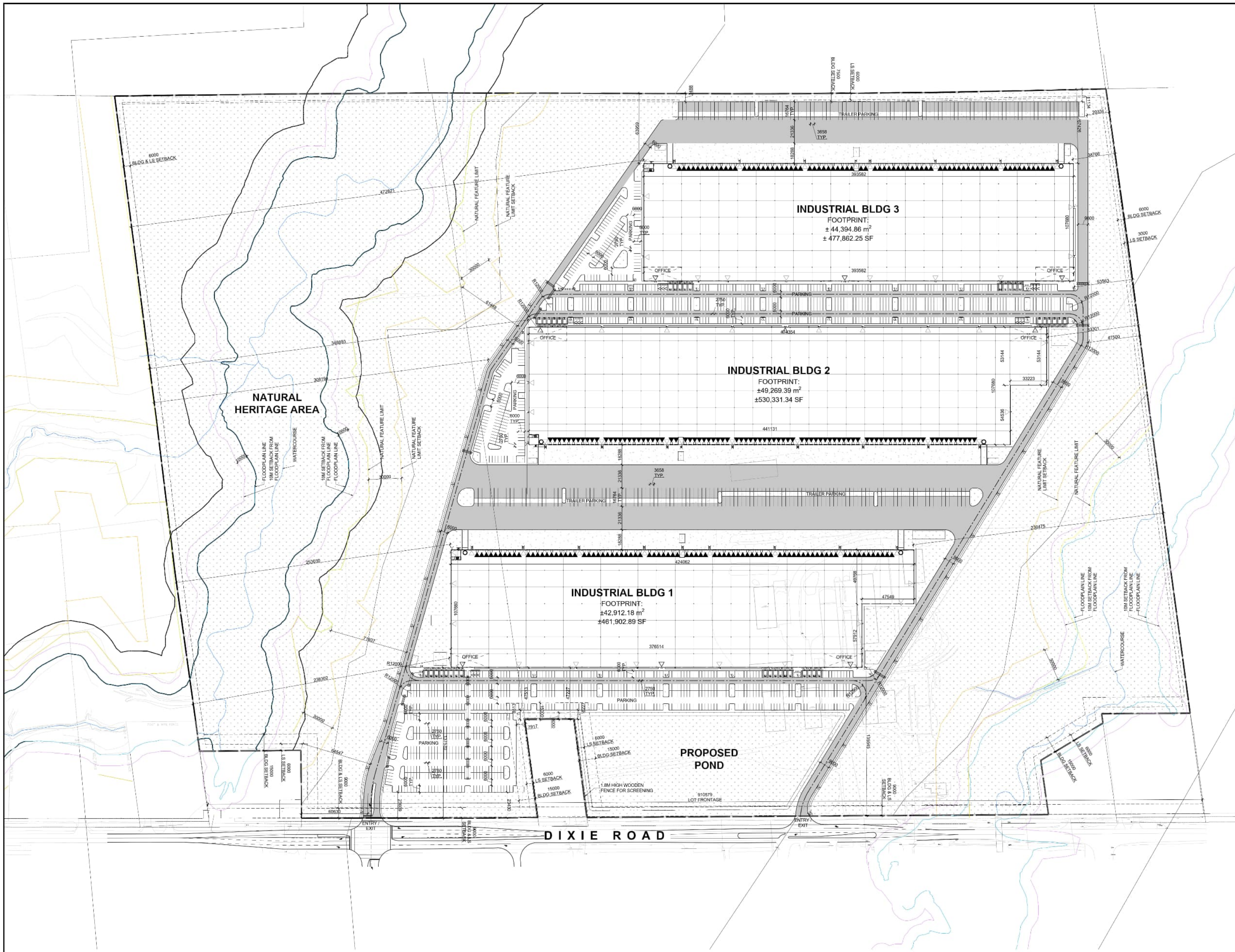
SM/AN/CG

https://wsponlinecan.sharepoint.com/sites/ca-ca0044985.4066/shared documents/05. technical/reports/final reports/energy/12489 & 12861 dixie rd_energy and emissions reduction study_dec 2024_final.docx

APPENDIX A

Site Plan

CAUTION: IF THIS SHEET IS NOT 36"x48" IT IS A REDUCED PRINT



OVERALL SITE PLAN

SCALE: 1:1200

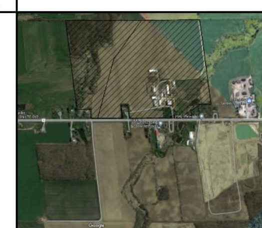
SITE STATISTICS		
Existing Zoning Category	*A1*	
Proposed Zoning Category	*MP*	
Building Classification	*Group F2 (O.B.C. A- 3.1.2.1.(1))*	
NET DEVELOPABLE AREA	3,445,017 SF	320,052.83m²
GROSS SITE AREA	6,257,235 SF	581,316.71m²
Zone Permitted Use *(Town of Caledon Zoning By-law 2006-50)*		
Proposed Use	*Industrial*	
Section 8.3 - Zoning Standards - MP Zone		
BUILDING AREA:		
BUILDING 1	**461,902 SF**	**42,912.18 m²**
Warehouse Area	*452,438 SF*	*42,032.94 m²*
Office Area	*9,464 SF*	*879.24 m²*
BUILDING 2	**530,331 SF**	**49,269.39 m²**
Warehouse Area	*520,992 SF*	*48,401.76 m²*
Office Area	*9,339 SF*	*867.64 m²*
BUILDING 3	**456,214 SF**	**42,383.74 m²**
Warehouse Area	*446,750 SF*	*41,504.50 m²*
Office Area	*9,464 SF*	*879.24 m²*
TOTAL BUILDING AREA	**1,448,447.62 m²**	**134,565.32 m²**
NET FLOOR AREA:		
BUILDING 1	**460,852 SF**	**42,814.63 m²**
Floor Area	*461,902 SF*	*42,912.18 m²*
Building Area under services, M&E rooms etc.	*1,050 SF*	*97.55 m²*
BUILDING 2	**529,281 SF**	**49,171.85 m²**
Floor Area	*530,331 SF*	*49,269.39 m²*
Building Area under services, M&E rooms etc.	*1,050 SF*	*97.55 m²*
BUILDING 3	**455,164 SF**	**42,286.19 m²**
Floor Area	*456,214 SF*	*42,383.74 m²*
Building Area under services, M&E rooms etc.	*1,050 SF*	*97.55 m²*
TOTAL NET AREA	**1,445,297.62 m²**	**134,272.67 m²**
Requirements	**Proposed**	**Required**
Min. Lot Area	581,316.71m²	925.00m²
Net Floor Area	134,272.67m²	-
Gross Floor Area	134,565.32m²	-
Building Area	23.15%	50.00%
Min. Lot Frontage (m)	910.58	30.00
Min. Front Yard Building Setback (m)	135.55	9.00
Min. Int.Side (N) Yard Building Set back (m)	238.30	6.00
Min. Int.Side (S) Yard Building Set back (m)	38.77	6.00
Min. Int. Side Yard Building Set back (m) - Abutting Residential	47.23	15.00
Min. Rear Yard Building Setback (m)	63.96	7.50
Lot Coverage	23.15%	50.00%
Maximum Building Height (m) - Building 1	14.50	18.00
Maximum Building Height (m) - Building 2	14.50	18.00
Min. Landscape Area (% of Lot Area)	54.57%	10.00%
Min. Landscape Area (SM)	*317,244.45m²*	*58,131.67m²*
Min. Front Landscape Buffer (m)	23.43	9.00
Min. Int. (N) Side Landscape Buffer (m)	64.55	6.00
Min. Int. (S) Side Landscape Buffer (m)	20.33	3.00
Min. Rear Landscape Buffer (m)	7.49	6.00
Min. Landscape Buffer (m) - Abutting EPA > 6m width	61.45	-
Parking Calculations	**Proposed**	**Required**
BUILDING 1		
@139 + 1/170m² of Net Floor Area over 10,000 m²	795	333
BUILDING 2		
@139 + 1/170m² of Net Floor Area over 10,000 m²	413	370
BUILDING 3		
@139 + 1/170m² of Net Floor Area over 10,000 m²	398	329
Total no. of Parking Spaces	**1606**	**1032**
(including Accessible Parking Spaces)		
Accessible Parking Spaces		
@201 to 1000 parking spaces is 2 plus 2% of total spaces *@More than 1000 parking spaces is 11 plus 1% of total spaces*		
BUILDING 1		
	18	9
BUILDING 2		
	12	9
BUILDING 3		
	10	9
Total no. of Accessible Parking Spaces	**40**	**27**
	20 Type - A	*13 Type - A*
	20 Type - B	*14 Type - B*
EV Parking Spaces	*24*	-
Parking Stall Dimensions	*Aisle* *ACCESSIBLE: TYPE A - 3.4m X 5.4m* *TYPE B - 2.75m X 5.4m* *w/ 1.5m access aisle on either side*	
Proposed Trailer Parking	**Proposed**	**Required**
BUILDING 1	60	-
BUILDING 2	61	-
BUILDING 3	98	-
Total no. of Trailer Parking Spaces	**219**	-
Loading Space Calculations	**Proposed**	**Required**
BUILDING 1	85	7
BUILDING 2	87	7
BUILDING 3	77	7
@3 + 1 per 9300 m² in excess of 7441 m² of Net Floor Area		
Total no. of Loading Spaces	**249**	**21**
Min. Loading Space Dimensions	*3.5m(W) X 14.0m(L) X 3.35m(H)*	

GENERAL NOTES

1. PROPERTY LINE
2. 2750x6000 PARKING STALL, PAINTED PARKING STRIPING PER CITY STANDARDS, WITH 6M WIDE DOUBLE LOADED AISLE.
3. PRINCIPLE ENTRY – TENANT FIT-UP SUBJECT TO INTERIOR ALTERATION PERMI
4. TYPICAL SHARED ACCESSIBLE PARKING STALLS, PAINTED PARKING STRIPING PER CITY STANDARDS. TO HAVE (2) TYPE B (2750x6000),(2) TYPE A STALLS (3400X6000),OR ONE OF EACH WITH 1500mm PATH STRIP BETWEEN. REFER TO TOWN OF CALEDON'S ACCESSIBLE PARKING STANDARDS.
5. 150mm WIDE CURB TYPICAL
6. MIN. 1500mm WIDE SIDEWALK TYPICAL U.N.O
7. TRAILER PARKING STALL – 12'-0" X 55'-0"
8. ACCESSIBLE CURB RAMP AS PER DETAIL
9. FIRE DEPARTMENT CONNECTION / SIAMESE
10. PROPOSED LOCATION OF TRANSFORMER C/W CONCRETE PAD
11. 1.8m HIGH BLACK VINYL CHAIN LINK FENCING OR APPROVED EQUAL ALONG DEVELOPMENT LIMIT BOUNDARY
12. CONCRETE APRON
13. LANDSCAPE AREA – SEE LANDSCAPE DWGS.
14. PEDESTRIAN RAIL (1070mm HIGH) SET INTO RETAINING WALL WHERE GRADE CHANGE GREATER THAN 600mm. PROVIDE CONCRETE-FILLED STEEL BOLLARD AT END OF RETAINING WALL – SEE CIVIL DWGS.
15. EXTERIOR STEEL STAIRS W/ TUBE STEEL GUARDRAIL, TYP.
16. TRUCK LOADING DOCK (TYPICAL)
17. LOADING SPACE L.S. (MIN. 3.5m x 14.0m)
18. FIRE ACCESS ROUTE W/ 12M TURNING RADIUS
19. PROPOSED ELECTRICAL ROOM
20. PROPOSED MECHANICAL ROOM
21. CURB RADII AT ENTRANCES WITHIN MUNICIPAL SIDEWALK LIMITS TO CONFORM TO OPSD 350.010. – SEE CIVIL DWGS.
22. 1.8M WIDE PAINTED PEDESTRIAN PATHWAY
23. HATCHED AREA DENOTES HEAVY DUTY ASPHALT. TYPICAL FOR ALL AREAS REQUIRING FIRE TRUCK OR TRACTOR TRUCK ACCESS.
24. 15.0m CENTERLINE RADIUS DISTANCE TO FIRE ACCESS ROAD
25. ROAD CURB AND SIDEWALK TO BE CONTINUOUS THROUGH THE DRIVEWAY. DRIVEWAY GRADE TO BE COMPATIBLE WITH EXIST. SIDEWALK AND A CURB DEPRESSION WILL BE PROVIDED FOR AT EACH ENTRANCE.
26. INVERTED U SHAPE GALVANIZED BICYCLE RACKS MIN. 1.8Mx0.6M PER SPACE
27. PROPOSED STOP SIGN LOCATION
28. PRESSED PATTERNED ASPHALT PEDESTRIAN PATHWAY
29. YELLOW PAINTED LINES
30. RETAINING WALL
31. PRECAST SCREEN WALL TO BE INSTALLED ON TOP OF RETAINING WALL – REFER TO STRUC. DWGS
32. PROPOSED FIRE ROUTE SIGN LOCATION
33. RESERVED
34. PROPOSED AMENITY AREA
35. SNOW STORAGE ON SITE AT 2% TOTAL SITE AREA
36. PROPOSED CHAIN-LINK FENCE
37. CONCRETE/STEEL SAFETY BOLLARD
38. SCREEN WALL
39. PROPOSED PYLON SIGNAGE
40. DRIVE-IN RAMP WITH GALVANIZED GUARDRAIL ON EACH SIDE. SEE CIVIL DWGS FOR SLOPE %
41. RESERVED
42. DETECTIBLE TACTILE WARNING SURFACE, CONFORMING TO 2012 O.B.C.
43. MIN. 3m WIDE CONCRETE DOLLY PAD AT TRAILER STALLS
44. ACCESSIBLE PARKING GRADE SLOPING UP TO MEET PROPOSED CURB LEVEL

SITE LEGEND

- NEW HEAVY DUTY PAVEMENT (HATCHED)
- LANDSCAPE AREA
- DETECTIBLE TACTILE WARNING SURFACE, CONFORMING TO 2012 O.B.C.
- FIRE ACCESS ROUTE WITH 12.5M TURNING RADIUS
- TRUCK LOADING DOCK DOOR
- KNOCK OUT PANEL
- MAN DOOR ENTRY
- EXIT DOOR LOCATION
- FIRE DEPT CONNECTION (VERIFY LOCATION WITH CIVIL DRAWINGS)
- FH PROPOSED FIRE HYDRANT (VERIFY LOCATION WITH CIVIL DRAWINGS)
- FH EXISTING FIRE HYDRANT (VERIFY LOCATION WITH CIVIL DRAWINGS)
- D.C. 1500mm WIDE DEPRESSED CURB FOR ACCESSIBLE PARKING AND PEDESTRIAN ACCESS – REFER TO DETAIL 4/A1.2
- PROPOSED CATCH BASIN
- MH DENOTES MANHOLE
- WHP/HP EXISTING HYDRO POLE
- CP PAINTED CARPOOL PARKING SPACE SYMBOL
- BFPS BARRIER FREE PARKING SIGN
- BFPSV BARRIER FREE PARKING SIGN WITH VAN TAB
- DRIVE-IN DOOR
- STOP NEW STOP SIGN
- F.R. NEW FIRE ROUTE SIGN
- GM GAS METER & PRESSURE REGULATING STATION BY GAS COMPANY
- LIGHT FIXTURES, REFER ELECTRICAL DWG FOR DETAILS
- LIGHT POLES, REFER ELECTRICAL DWG FOR DETAILS



VICINITY MAP

NOT TO SCALE

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ONTARIO ASSOCIATION OF ARCHITECTS
AMANDA ILARIO SANABRIA
LICENCE
7712

QUADREAL PROPERTY GROUP

TOWN OF CALEDON DIXIE ROAD
12489 DIXIE ROAD
CALEDON, ONTARIO CANADA

OVERALL SITE PLAN

	DATE	REMARKS
1	2023-12-12	ISSUED FOR OPA/ZBA

PA / PM:	AS
DRAWN BY:	JS
JOB NO.:	TOR22 0111 00

SHEET

A100

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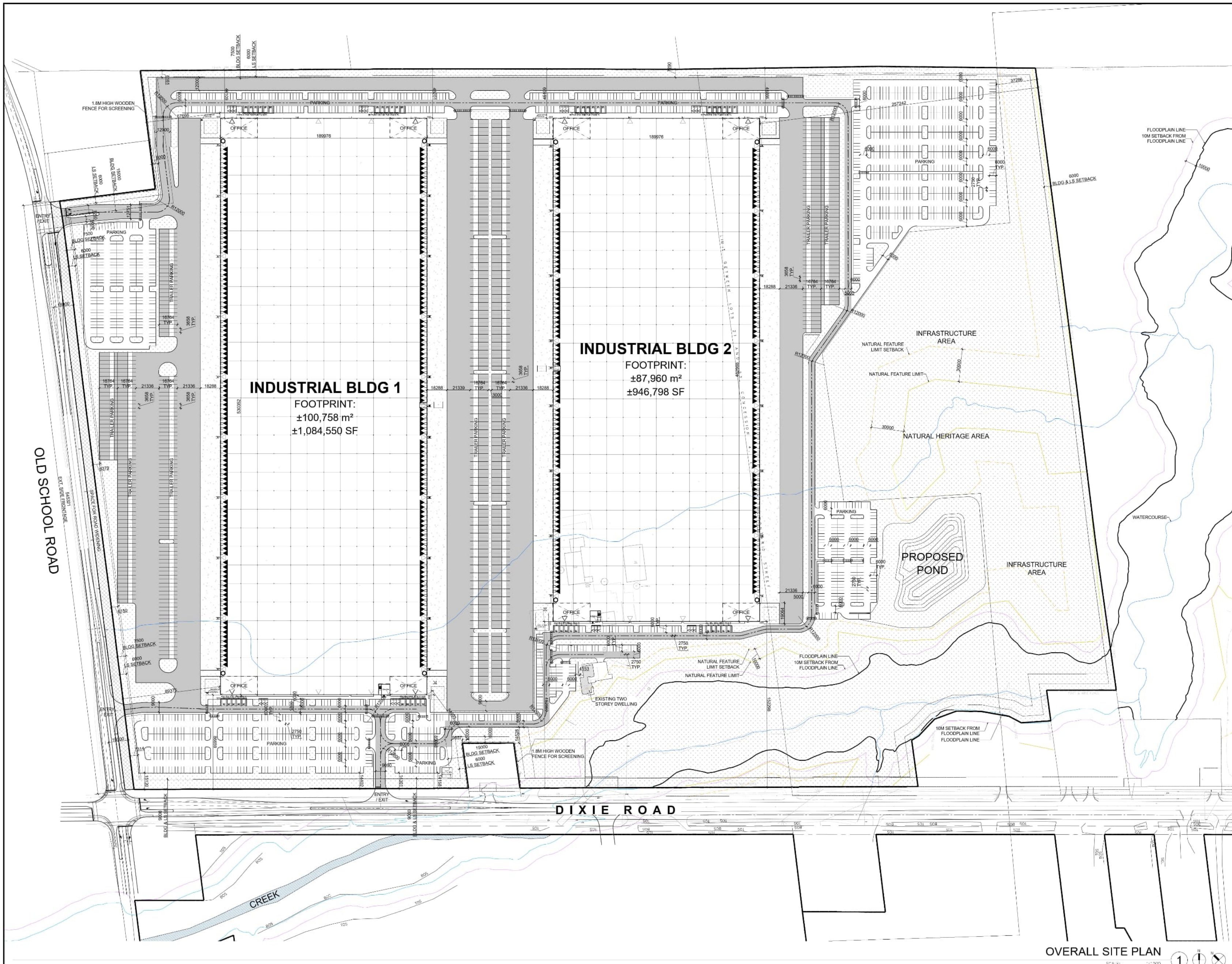

OVERALL SITE PLAN

SITE STATISTICS		
Existing Zoning Category	A1	
Proposed Zoning Category	MP	
Building Classification	Group F2 (O.B.C. A- 3.1.2.1.(1))	
NET DEVELOPABLE AREA	4,899,303 SF	455,160.62m²
GROSS SITE AREA	6,271,978 SF	582,686.42m²
Zone Permitted Use *(Town of Caledon Zoning By-law 2006-50)*		
Proposed Use	Industrial	
Section 8.3 - Zoning Standards - MP Zone		
BUILDING AREA:		
BUILDING 1	**1,084,549 SF**	**100,757.96 m²**
Warehouse Area	*1,058,648 SF*	*98,351.68 m²*
Office Area	*25,901 SF*	*2,406.27 m²*
BUILDING 2	**946,797 SF**	**87,960.42 m²**
Warehouse Area	*920,229 SF*	*85,492.13 m²*
Office Area	*26,568 SF*	*2,468.29 m²*
TOTAL BUILDING AREA	**2,031,346 SF**	**188,718.37 m²**
NET FLOOR AREA:		
BUILDING 1	**1,083,400 SF**	**100,651.28 m²**
Floor Area	*1,084,549 SF*	*100,757.96 m²*
Building Area under services, M&E rooms etc.	*1,148 SF*	*106.68 m²*
BUILDING 2	**945,731 SF**	**87,861.36 m²**
Floor Area	*946,797 SF*	*87,960.42 m²*
Building Area under services, M&E rooms etc.	*1,066 SF*	*99.06 m²*
TOTAL NET AREA	**2,029,131 SF**	**188,512.63 m²**
Requirements	**Proposed**	**Required**
Min. Lot Area	582,686.42m²	925.00m²
Net Floor Area	188,512.63m²	-
Gross Floor Area	188,718.37m²	-
Building Area	32.39%	50.00%
Min. Lot Frontage (m)	91.81	30.00
Min. Front Yard Building Setback (m)	86.00	9.00
Min. Ext.Side Yard Building Set back (m)	89.38	7.50
Min. Int.Side Yard Building Set back (m)	257.24	6.00
Min. Int. Side Yard Building Set back (m) - Abutting Residential	54.99	15.00
Min. Rear Yard Building Setback (m)	44.11	7.50
Lot Coverage	32.39%	50.00%
Maximum Building Height (m) - Building 1	16.01	18.00
Maximum Building Height (m) - Building 2	16.01	18.00
Min. Landscape Area (% of Lot Area)	30.59%	10.00%
Min. Landscape Area (SM)	*178,257.16m²*	*58,268.64m²*
Min. Front Landscape Buffer (m)	14.16	9.00
Min. Ext. Side Landscape Buffer (m)	6.15	6.00
Min. Int. Side Landscape Buffer (m)	6.00	6.00
Min. Rear Landscape Buffer (m)	6.16	6.00
Min. Landscape Buffer (m) - Abutting EPA > 6m width	37.29	-
Parking Calculations	**Proposed**	**Required**
BUILDING 1		
@139 + 1/170m² of Net Floor Area over 10,000 m²	910	672
BUILDING 2		
@139 + 1/170m² of Net Floor Area over 10,000 m²	1062	597
Total no. of Parking Spaces	**1972**	**1269**
(Including Accessible Parking Spaces)		
Accessible Parking Spaces		
@201 to 1000 parking spaces is 2 plus 2% of total spaces		
@More than 1000 parking spaces is 11 plus 1% of total spaces		
BUILDING 1		
	22	15
BUILDING 2		
	22	14
Total no. of Accessible Parking Spaces	**44**	**29**
	22 Type - A	*14 Type - A*
	22 Type - B	*15 Type - B*
EV Parking Spaces	*24*	-
Parking Stall Dimensions	*Aisle* *ACCESSIBLE: TYPE A - 3.4m X 5.4m* *TYPE B - 2.75m X 5.4m* *w/ 1.5m access aisle on either side*	
Proposed Trailer Parking	**Proposed**	**Required**
BUILDING 1	300	-
BUILDING 2	241	-
Total no. of Trailer Parking Spaces	**541**	-
Loading Space Calculations	**Proposed**	**Required**
BUILDING 1	211	13
BUILDING 2	183	12
@3 + 1 per 9300 m² in excess of 7441 m² of Net Floor Area		
Total no. of Loading Spaces	**394**	**25**
Min. Loading Space Dimensions	*3.5m(W) X 14.0m(L) X 3.35m(H)*	

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11. 1.8m HIGH BLACK VINYL CHAIN LINK FENCING OR APPROVED EQUAL ALONG DEVELOPMENT LIMIT BOUNDARY
12. CONCRETE APRON
13. LANDSCAPE AREA – SEE LANDSCAPE DWGS.
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15. EXTERIOR STEEL STAIRS W/ TUBE STEEL GUARDRAIL, TYP.
16. TRUCK LOADING DOCK (TYPICAL)
17. LOADING SPACE – L.S. (MIN. 3.5m x 14.0m)
18. FIRE ACCESS ROUTE W/ 12M TURNING RADIUS (————)
19. PROPOSED ELECTRICAL ROOM
20. PROPOSED MECHANICAL ROOM
21. CURB RADII AT ENTRANCES WITHIN MUNICIPAL SIDEWALK LIMITS TO CONFORM TO OPSD 350.010. – SEE CIVIL DWGS.
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26. INVERTED U-SHAPE GALVANIZED BICYCLE RACKS MIN. 1.8Mx0.6M PER SPACE
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SITE LEGEND

- NEW HEAVY DUTY PAVEMENT (HATCHED)
- LANDSCAPE AREA
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- FIRE ACCESS ROUTE WITH 12.5M TURNING RADIUS
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- EXIT DOOR LOCATION
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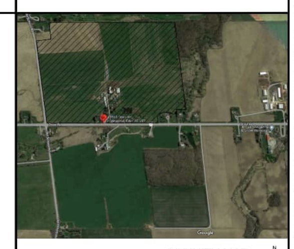
- D.C. 1500mm WIDE DEPRESSED CURB FOR ACCESSIBLE PARKING AND PEDESTRIAN ACCESS – REFER TO DETAIL 4/A1.2
- PROPOSED CATCHBASIN
- MH DENOTES MANHOLE
- WHP/HP EXISTING HYDRO POLE
- CP PAINTED CARPOOL PARKING SPACE SYMBOL
- BFPS BARRIER FREE PARKING SIGN
- BFPSV BARRIER FREE PARKING SIGN WITH VAN TAB
- DRIVE IN DOOR
- STOP NEW STOP SIGN
- F.R. NEW FIRE ROUTE SIGN
- GM GAS METER & PRESSURE REGULATING STATION BY GAS COMPANY
- LIGHT FIXTURES, REFER ELECTRICAL DWG FOR DETAILS
- LIGHT POLES, REFER ELECTRICAL DWG FOR DETAILS



VICINITY MAP

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QUADREAL PROPERTY GROUP
TOWN OF CALEDON DIXIE ROAD
12861 DIXIE ROAD
CALEDON, ONTARIO CANADA

OVERALL SITE PLAN

	DATE	REMARKS
1	2023-12-12	ISSUED FOR OPA/ZBA

PA / PM:	AS
DRAWN BY:	JS
JOB NO.:	TOR22-0060-01

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APPENDIX B

Relevant Plans and Energy and Emissions Reduction Policies

Plan	Section	Specific Policies Relevant to the Project
Provincial Planning Statement (2024)	**Section 2.9: Energy Conservation, Air Quality and Climate Change**	
	Subsection 2.9.1	"Planning authorities shall plan to reduce greenhouse gas emissions and prepare for the impacts of a changing climate through approaches that: a) support the achievement of compact, transit-supportive, and complete communities; b) incorporate climate change considerations in planning for and the development of infrastructure, including stormwater management systems, and public service facilities; c) support energy conservation and efficiency; d) promote green infrastructure, low impact development, and active transportation, protect the environment and improve air quality; and e) take into consideration any additional approaches that help reduce greenhouse gas emissions and build community resilience to the impacts of a changing climate."
	Section 3.8: Energy Supply	
	Subsection 3.8.1	"Planning authorities should provide opportunities for the development of energy supply including electricity generation facilities and transmission and distribution systems, energy storage systems, district energy, renewable energy systems, and alternative energy systems, to accommodate current and projected needs."
Greenbelt Plan (2017)	**Section 1.2: Vision and Goals**	
	Subsection 1.2.2	"1.2.2.6 a) Integrating climate change considerations into planning and managing the Agricultural System, Natural Heritage System and Water Resource System to improve resilience and protect carbon sequestration potential, recognizing that the Natural Heritage System is also a component of green infrastructure; and b) Integrating climate change considerations into planning and managing growth that includes incorporating techniques to reduce greenhouse gas emissions, and increasing the resilience of settlement areas and infrastructure within the Greenbelt."
	Section 3.2: Geographic-Specific Policies in the Protected Countryside - Natural System	
	Subsection 3.2.2	"3.2.2.3 New development or site alteration in the Natural Heritage System (as permitted by the policies of this Plan) shall demonstrate that: a) There will be no negative impacts on key natural heritage features or key hydrologic features or their functions; b) Connectivity along the system and between key natural heritage features and key hydrologic features located within 240 metres of each other will be maintained or, where possible, enhanced for the movement of native plants and animals across the landscape; c) The removal of other natural features not identified as key natural heritage features and key hydrologic features should be avoided. Such features should be incorporated into the planning and design of the proposed use wherever possible; d) Except for uses described in and governed by the policies of sections 4.1.2 and 4.3.2, i. The disturbed area, including any buildings and structures, of the total developable area will not exceed

Plan	Section	Specific Policies Relevant to the Project
		25 per cent (40 per cent for golf courses); and ii. The impervious surface of the total developable area will not exceed 10 per cent; and e) At least 30 per cent of the total developable area will remain or be returned to natural self-sustaining vegetation, recognizing that section 4.3.2 establishes specific standards for the uses described there."
	Subsection 3.2.5	"3.2.5.1 Development or site alteration is not permitted in key hydrologic features and key natural heritage features within the Natural Heritage System, including any associated vegetation protection zone, with the exception of: a. Forest, fish and wildlife management; b. Conservation and flood or erosion control projects, but only if they have been demonstrated to be necessary in the public interest and after all alternatives have been considered; or c. Infrastructure, aggregate, recreational, shoreline and existing uses, as described by and subject to the policies of section 4."
		"3.2.5.4 In the case of wetlands, seepage areas and springs, fish habitat, permanent and intermittent streams, lakes and significant woodlands, the minimum vegetation protection zone shall be a minimum of 30 metres measured from the outside boundary of the key natural heritage feature or key hydrologic feature."
		"3.2.5.5 A proposal for new development or site alteration within 120 metres of a key natural heritage feature within the Natural Heritage System or a key hydrologic feature anywhere within the Protected Countryside requires a natural heritage evaluation or a hydrological evaluation which identifies a vegetation protection zone which: a) Is of sufficient width to protect the key natural heritage feature or key hydrologic feature and its functions from the impacts of the proposed change and associated activities that may occur before, during and after construction and, where possible, restore or enhance the feature and/or its function; and b) Is established to achieve and be maintained as natural self-sustaining vegetation."
Region of Peel Official Plan (2022*)*	**Section 2.4: Climate System**	
	Subsection 2.4.2	"To support the development of sustainable, low-carbon, compact, mixed-use, and transit-supportive communities which reduce greenhouse gas emissions and support active transportation, protect natural systems, features and functions, and promote renewable energy, energy conservation and efficient design".
	Subsection 2.4.5	"To promote a culture of conservation through energy, water and soil conservation and integrated waste management".
	Section 2.5: Air Quality	
	Subsection 2.5.2	"To improve local air quality and reduce greenhouse gas emissions".

Plan	Section	Specific Policies Relevant to the Project
	Subsection 2.5.3	"To promote sustainable development and land use patterns which address public health, transportation systems, energy conservation and environmental concerns".
	Section 6.5: Water and Wastewater Services	
	Subsection 6.5.13	"Consider opportunities when designing, planning, and implementing water and wastewater services to reduce greenhouse gas emissions in accordance with provincial and Regional objectives".
Region of Peel Climate Change Master Plan (2019)	**Chapter 3: Reduce GHG Emissions**	
	Subsection 6.1	"New buildings will be constructed to a high performance and are constructed to net-zero emissions ready".
	Subsection 7.2	"Install solar PV panels and geoexchange systems on new assets at the time of construction".
	Subsection 9.1	"Apply the Sustainable Transportation Strategy to mode shifting".
	Subsection 9.3	"Expand infrastructure to support low and zero-emission vehicle (ZEV) adoption".
	Chapter 4: Be Prepared	
	Subsection 12.3	"Install or improve cooling solutions (passive and active) for buildings which are currently or are projected to be vulnerable to overheating".
	Subsection 14.3	"Implement tree planting and management program for new and existing trees".
	Subsection 14.6	"Require buildings undergoing applicable state of good repair work to consider green infrastructure opportunities".
The Living City Policies (2014)	**Section 8.4: General Regulation Policies**	
	Subsection 8.4.13	"All development, including new parking facilities (above ground and underground structures and at-grade parking lots), must meet the minimum requirements for safe access for the nature of the development as outlined in the policies in Section 8 in accordance with Provincial and TRCA Standards, and demonstrate to the satisfaction of TRCA that: a) risks due to both flooding and erosion have been addressed".
Town of Caledon Official Plan (2024)	**Section 3.1: Sustainability**	
	Subsection 3.1.3.8	"3.1.3.8.1 The Town shall work with the Region of Peel, development interests and other appropriate partners to identify and implement development patterns, standards and practices that reduce greenhouse gas emissions".
	Subsection 3.1.3.9	"3.1.3.9.2 The Town shall encourage proponents of new development to consider energy conservation measures derived by the planning and design for the orientation of streets and buildings to maximize exposure to the sun (passive solar energy), and green design for buildings".

Plan	Section	Specific Policies Relevant to the Project
		"3.1.3.9.3 The Town shall encourage proponents of new development to explore innovative land use patterns, building standards, transportation systems and urban design that will significantly reduce the overall demand for energy".
	Subsection 3.1.3.10	"3.1.3.10.3 The Town will work with proponents of new development and redevelopment projects to promote compact, mixed-use neighbourhood development patterns that incorporate and enhance opportunities for the use of alternative and renewable energy systems, where appropriate, such as passive and active solar energy, geothermal, wind power, district heating systems and new technologies as they become available and in accordance with the Green Energy Act".
	Subsection 3.1.3.11	"3.1.3.11.2 Proponents of new developments shall be encouraged to use green-building guidelines and rating systems for new construction to promote the use of building materials and products that have minimal potential to radiate harmful emissions that affect air quality".
Resilient Caledon Community Climate Change Action Plan (2021)	**Section 1: Establish Climate-Friendly Planning and Building Policies**	
	Subsection 1.2	"Create a sustainable development standard to ensure all new residential and commercial buildings are net zero and climate resilient by 2030, and promote efficient, green, and livable community design".
	Section 3: Promote the Development of Compact, Complete Communities that are Walkable, Bikeable, Transit Friendly, and Energy Efficient	
	Subsection 3.1	"Support the development of eco-districts in the commercial sector to promote energy efficiency and opportunities for district energy".
	Subsection 3.3	"Increase the share of sustainable and active transportation modes both in and between urban areas".
	Section 12: Increase Walking and Cycling Through Improved Programs and Infrastructure	
	Subsection 12.1	"Expand and enhance active transportation infrastructure to promote walking and cycling in urban areas and as a means of travel between them".
	Section 15: Diversify Caledon's Energy Support with Renewable and Resilient Energy Sources and Systems	
	Subsection 11.3	"Increase tree planting and restoration of wetlands, streams, and meadows on public lands including Town-owned Parks, Conservation Areas, public right of ways, and other areas".
	Subsection 15.2	"Identify and support opportunities for district energy and renewable energy infrastructure".
	Subsection 15.3	"Encourage investment in ground-mount solar projects and support the uptake of rooftop solar on homes and businesses".
	Subsection 15.4	"Support the uptake of community rooftop PV".
	Subsection 15.5	"Develop energy storage solutions as an emergency back-up power supply and energy demand management measure".

Plan	Section	Specific Policies Relevant to the Project
Town of Caledon Green Development Standard (2024)	**Section 1: Community Design and Mobility**	
	Metric 1.3: Light Pollution	• All lighting fixtures must be DarkSky approved. If a DarkSky Fixture Seal of Approval is not available, fixtures must be full-cutoff (0 BUG uplight) and with a colour temperature rating of 3000 K or less. • Street and walkway/bikeway lighting must have NEMA 7-pin ANSI 136.41 receptacle and photocells, and all other fixtures must have photocells or astronomic time clock operations • Sites adjacent to protected natural features shall have no lateral light trespass into the feature.
	Metric 1.4: Active Transportation	• Follow all requirements outlined in the Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking. • Amenity spaces and walkways must be located within site for employees. • Achieve a minimum score of Silver (70%–79%) on the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking. If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.
	Metric 1.7: Electric Vehicle (EV) Charging	• Provide a minimum of 20% of non-fleet parking spaces as EV-Ready. • Encourage a minimum of 5% of spaces to be equipped with EV Supply Equipment (EVSE). • Dedicated parking spaces for carshare services or carpooling, as well as charging spaces for E-bikes and scooters are encouraged.
	Section 2: Green Infrastructure	
	Metric 2.1: On-Site Green Infrastructure	• Meet a minimum green cover target of 0.2 by completing the Green Factor Tool. Eligible green infrastructure features must comply with specifications in the GDS and other Town standards and guidelines.

	Metric 2.4: Urban Heat Island	• Install cool roof over 90% of available roof area (excluding HVAC and other equipment) except if installing solar PVs and/or green roof over a minimum of 50% of the available roof area. Cool roof materials and/or coatings should have an SRI rating of 78 or higher and an emissivity equal to or greater than 0.9.
		• Paved areas (excluding loading bays, freight parking, and fire lanes) are to be treated with a minimum of two of the following strategies, covering at least 50% of the total paved area:
		  ○ High-albedo paving materials with an initial solar reflectance of at least 0.33 or an SRI of 29;
		  ○ Canopy of large-growing shade trees planted in landscape islands at regular intervals or in hedgerows to maximize both shading and ecological value. Canopy coverage to

Plan	Section	Specific Policies Relevant to the Project
		be calculated at 75% maturity (also contributes to, and can be demonstrated through, the On-Site Green Infrastructure metric); o Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29; o Shade from structures with energy generation; and o Open-grid pavement with at least 50% perviousness (can be demonstrated through the On-Site Green Infrastructure metric).
	Section 3: Buildings and Energy	
	Metric 3.1: Operational Energy and GHG Emissions	• Meet the following Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) targets: o GHGI: 15 kg CO2e/m2/yr o TEUI: 130 kWh/m2/yr o TEDI: 60 kWh/m2/yr • All new buildings greater than 2000 m^2 gross floor area must complete and submit an Energy Modelling Report. • Projects that come within 15% of the TEDI and TEUI thresholds are permitted where alternative improvements in performance are made. • Provide a zero-carbon transition plan that lays out a pathway toward achieving carbon neutrality in the future, including how the building is designed to support this transition, such as providing the necessary infrastructure for full building electrification and avoidance of on-site combustion of fossil fuels.
	Metric 3.3: Solar Readiness	• All buildings with a pitched roof are designed to be solar-ready according to specifications outlined in NRCan's Photovoltaic Ready Guidelines, and buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP). • All buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP). The design criteria must meet the NABCEP, including, at minimum, the requirements identified in the GDS Guidebook. • Applications for buildings with a rooftop area greater than 50,000 square feet must conduct a feasibility assessment for the installation of an appropriately-sized solar PV system, based on the building's function, return on investment potential, and local generation capacity. However, at a minimum it should assess the system's ability to meet at least 30% of the building's energy requirements. The feasibility study must be conducted by a qualified solar provider or other energy professional, and in consultation with the local distribution company.

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	Metric 3.4: Embodied Carbon	• Report embodied carbon in these bulk materials based on the relevant Environmental Product Disclosures (EPD): concrete, steel, masonry, wallboard, glass, thermal insulation, and wood. • Include concrete mixes that are at least 10% below the Concrete Ontario baselines per mix type.
	Metric 3.5: Water Conservation	• Install water fixtures or use non-potable water sources that achieve a minimum 25% reduction in potable water consumption in the building over baseline water fixtures. • Where soft landscaping exists on-site, reduce potable water use for irrigation by 40% using strategies identified in the GDS Guidebook.
	Metric 3.6: Construction Waste	• All projects must develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94 to: o Identify strategies to reduce waste generation during project design and construction; o Establish waste diversion goals by identifying structural and non-structural materials targeted for diversion; o Establish the project's diversion strategies; and o Identify where materials will be taken and the expected diversion rates for each material. • Divert at least 50% of the total construction and demolition material from the landfill; diverted materials must include at least four material streams.
	Metric 3.7: Owner Education	• Distribute a Town-approved sustainability handout to all new building owners/tenant outlining sustainability features and encouraging other activities. The sustainability handout shall include an itemized list of all "green" technologies and programs that the applicant has committed to undertake within this GDS, including references and attachments for any ongoing maintenance requirements or standards, and it should include information to assist building owners/tenants in installing solar PVs. • Provide permanent signage for Green/LID/site features.
	Section 4: Higher Performance Buildings	
	Metric 4.1: Higher Performance Buildings	• The Higher Performance Buildings metric is a voluntary additional metric that allows applicants to demonstrate ways in which they are going above and beyond the Town's GDS or using innovative practices. This metric is optional to complete and will not be used to approve applications but may be recognized as part of a future awards/recognition program. See the GDS for examples of high-performance measures.

APPENDIX C

Energy and Emissions Reduction Recommendations

= Mandatory recommendations
= Voluntary recommendations

ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
1.	Meet the Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) performance targets established in the Town of Caledon Green Development Standard (2024).	Low Carbon Buildings	Mandatory	Planning, Operations & Maintenance	Town of Caledon Green Development Standard (2024)
2.	Submit an Energy Modelling Report as required by the Town of Caledon Green Development Standard (2024).	Low Carbon Buildings	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
3.	Develop a zero-carbon transition plan that lays out a pathway towards achieving carbon neutrality in the future, as established as a requirement in the Town of Caledon Green Development Standard (2024).	Low Carbon Buildings	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
4.	Develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94, as established as a requirement in the Town of Caledon Green Development Standard (2024).	Low Carbon Buildings	Mandatory	Planning, Construction, Operations & Maintenance	Town of Caledon Green Development Standard (2024)
5.	Develop and distribute a Town-approved sustainability handout to all new building owners/tenants. Consider distributing the handout to all employees of the Site. The sustainability handout may include information relating to EV charging parking for cars and scooters, location of bicycle parking, and carpooling programs.	Low Carbon Buildings	Mandatory	Planning, Operations & Maintenance	Town of Caledon Green Development Standard (2024)

= Mandatory recommendations
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ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
6.	Complete Submission Requirements identified in the Town of Caledon Green Development Standard to meet relevant GDS metric requirements. See Table 3-8 of the Energy and Emissions Reduction Study report for Submission Requirements.	Low Carbon Buildings	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
7.	Explore opportunities to support community-wide GHG emission reduction goals established by the Town of Caledon to have all new buildings be net zero by 2050 and follow a carbon budget that aligns with 1.5˚C warming, which would entail a 36% reduction of emissions by 2030.	Low Carbon Buildings	Voluntary	Planning, Construction, Operations & Maintenance	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
8.	Explore opportunities to maintain QuadReal's commitment to installing roof-top solar PV in the future as part of the Project.	Low Carbon Buildings	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
9.	Consider implementing the solar PV panels on the new building in a way that is resilient to the effects of climate change and considers future changes in climate risks.	Low Carbon Buildings	Voluntary	Planning, Construction, Operations & Maintenance	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
10.	Explore opportunities to develop energy storage solutions as an emergency back-up power supply and energy demand management measures on Site.	Low Carbon Buildings	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
11.	Consider conducting additional climate change vulnerability assessments on Site to identify infrastructure and assets that are vulnerable to overheating.	Low Carbon Buildings	Voluntary	Planning	Town of Caledon Resilient Caledon Community

= Mandatory recommendations
= Voluntary recommendations

ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
					Climate Change Action Plan (2021)
12.	Consider installing cooling solutions on Site to address heat-related climate risks, particularly if the new building is considered to be vulnerable to overheating.	Low Carbon Buildings	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
13.	Consider conducting additional energy feasibility studies if deemed required by the Town of Caledon to understand opportunities to implement additional low-carbon and sustainable energy solutions on Site.	Low Carbon Buildings	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
14.	Follow all requirements outlined in the Town of Caledon Active Transportation Master Plan, for sidewalks, trails, cycling networks, and bicycle parking.	Transportation Systems	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
15.	Develop amenity spaces and walkways on the Site to promote active transportation users of the Site. Ensure amenity spaces and walkways meet AODA requirements.	Transportation Systems	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
16.	Complete the applicable Peel Healthy Development Assessment (HDA) for Streetscape Characteristics, Street Connectivity, and Efficient Parking and ensure the proposed development achieves a minimum score of Silver (70%–79%). If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.	Transportation Systems	Mandatory	Planning	Town of Caledon Green Development Standard (2024)

= Mandatory recommendations
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ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
17.	Explore opportunities to increase the number of outdoor bicycle parking on the Site to encourage the use of active transportation commuting patterns.	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
18.	Explore opportunities to improve the connectivity of active transportation infrastructure on Site to Dixie Road and Old School Road through the consideration of sidewalks and bike lanes along the primary roads on the Site. Sidewalks and bike lanes should be implemented in a way that encourages pedestrian and cyclist safety and should be located away from industrial truck traffic on Site.	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
19.	Explore opportunities to work collaboratively with the Region of Peel and Town of Caledon on future urbanization projects of Dixie Road and Old School Road near the Site to encourage the development of active transportation networks in the area that connect to the Site.	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
20.	Explore opportunities to implement a shuttle bus for workers of the Site that travels between the nearest local public transit hub (i.e., Mayfield West) and regional transit stations (i.e., Brampton or Malton GO Transit Stations) to encourage the use of public transit in the area. If considered, implement a shuttle bus stop on Site in close proximity to the main entrances of the building.	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
21.	Consider working collaboratively with local public transit agencies (i.e., Town of Caledon, Brampton	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community

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ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
	Transit) to explore opportunities to expand public transit routes to the Site and when implementing supportive infrastructure (e.g., sheltered bus stops) on or adjacent to the Site.				Climate Change Action Plan (2021)
22.	Avoid the development of active transportation and public transit infrastructure in flood-risk areas, and consider anticipated changes in flood-risk when planning for the implementation of future active transportation infrastructure.	Transportation Systems	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
23.	Meet minimum requirements for the number of EV-Ready parking spaces on the Site (20% of non-fleet parking spaces), as established in the Town of Caledon Green Development Standard (2024).	Low and Zero-Emission Vehicle Infrastructure	Mandatory	Planning	Town of Caledon Green Development Standard (2024)
24.	Explore opportunities to increase the number of EV charging outlets on Site, and/or consider at least one automobile EV charging station capable of Level 3 charging.	Low and Zero-Emission Vehicle Infrastructure	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
25.	Consider locating parking spots designated for EV and their charging outlets in priority areas on Site, maintaining accessible and carpool parking spots as the first priority and to be closest to building entrances.	Low and Zero-Emission Vehicle Infrastructure	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
26.	Consider implementing dedicated parking spaces and charging stations for electric bikes (E-bikes) and scooters. If installing E-bike and scooter charging, spaces should be equipped with an energized outlet (120 V) adjacent to the bicycle rack or parking	Low and Zero-Emission Vehicle Infrastructure	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)

= Mandatory recommendations
= Voluntary recommendations

ID	Recommendation	Climate Change Adaptation Theme	Requirement	Development Phase	Relevant Planning Document
	spaces, as established in the Town of Caledon Green Development Standard (2024).				
27.	Avoid the development and implementation of EV charging infrastructure in flood-risk areas while also considering future changes in flood-risk.	Low and Zero-Emission Vehicle Infrastructure	Voluntary	Planning	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)
28.	Consider implementing wayfinding and signage on the Site for accessible, carpool, and EV charging outlet parking spots.	Low and Zero-Emission Vehicle Infrastructure	Voluntary	Planning, Construction	Town of Caledon Resilient Caledon Community Climate Change Action Plan (2021)

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