Welcome to the

Oxford Battery Energy Storage Project

Open House

BORALEX

Beyond

RENEWABLE ENERGY

Boralex is a Canadian renewable energy company with over 35 years of experience, and has been developing, building and operating renewable energy projects in Ontario for over 15 years.

We are deeply committed to engaging ethically and responsibly with communities, clients, partners, landowners and farmers as we work together to build a more sustainable future for our planet.

3.2 GW of Installed Capacity

- **Wind** 2,817 MW
- **Solar** 268 MW
- **Hydroelectric** 178 MW
- **Storage** 5 MW

505 MW of Storage in Development or Construction

Hagersville	300 MW X 4 hrs	1200 MWh
Tilbury	80 MW x 4 hrs	320 MWh
Oxford	125 MW X 4 hrs	500 MWh

SIX NATIONS OF THE GRAND RIVER
DEVELOPMENT CORPORATION

Investing In A Brighter Future

SNGRDC manages the economic interests of the Six Nations Community through business ventures surrounding the Six Nations territory, including a vast renewable energy portfolio.

230 KV
CAPACITY

1,095 MW
CAPACITY

1,636MW
total participation in clean energy

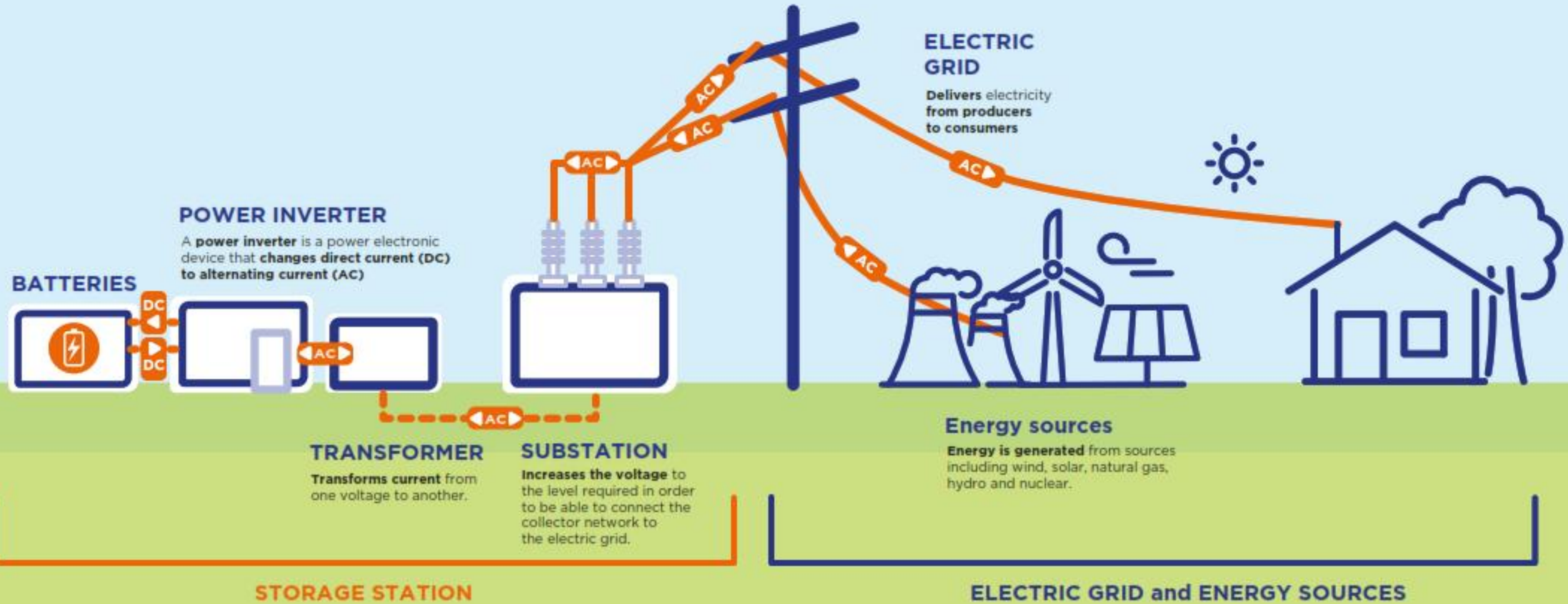
154
WIND TURBINES

635,887
SOLAR PANELS

How Does Battery Storage Work?

ENERGY STORAGE IS THE PROCESS OF CAPTURING AND RETAINING ENERGY AT ONE POINT IN TIME, SO THAT IT CAN BE USED AT ANOTHER POINT IN TIME.

INTRODUCTION TO STORAGE TECHNOLOGY



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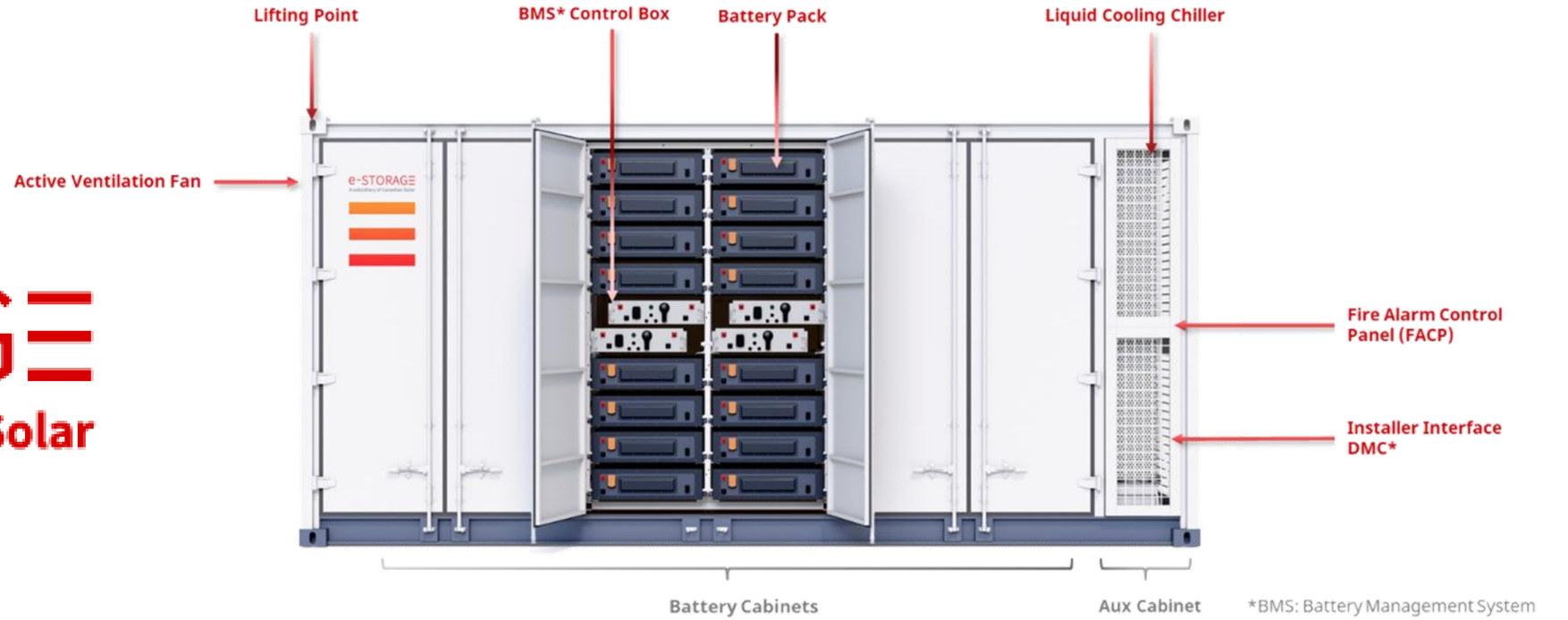
e-STORAGE

A subsidiary of Canadian Solar



Each SolBank 3.0 unit is approx. 20 ft long, 8 ft deep, and 9.5 ft tall

*BMS: Battery Management System
DMC: Distribution Management Cabinet

Oxford BESS will use 120 SolBank 3.0 units

- The SolBank 3.0 adheres to all industry standards: NFPA855, NFPA69, NFPA72, NFPA70E, and NFPA58.
- Certified under UL1973, UL9540, UL9540A, UN38.3/UN3536, ensuring rigorous safety and performance criteria.
- Up to 20% faster detection of abnormal conditions and automatic protection.
- Advanced pack thermal isolation, electrical redundancy protection, and multi-level fire protection.
- The SolBank 3.0 successfully passed the Large-Scale Fire Testing (LSFT) demonstrating that the units meet key fire safety criteria by containing thermal events within a single enclosure, providing enhanced safety assurance for utility-scale deployments.

e-STORAGE, a subsidiary of Canadian Solar, is a global leader in designing, manufacturing, and integrating battery energy storage systems for utility-scale applications.

- The Company operates two fully automated manufacturing facilities with a 20,000 MWh annual capacity and has announced a third plant in the US, to be operational by the end of 2025, with a capacity of 6,000 MWh.
- 60,000 MWh of deployed energy storage projects in the U.S., Australia, and the U.K.

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Oxford BESS Project

After more than a decade of reliable electricity supply, Ontario has entered a period of emerging system needs. To address this need, the Independent Electricity System Operator (IESO) is competitively procuring 4,000 MW of new capacity. The **Oxford Battery Energy Storage System (BESS) project will support this effort by delivering reliable power capacity** - storing energy from the grid during off-peak hours and supplying it back to the Ontario grid when demand is at its highest.

PROJECT DETAILS

125 MW for four-hour duration (500 MWh)

In partnership with Six Nations of the Grand River Development Corporation

The Project will be located within an existing aggregate site, helping to **minimize environmental impact by repurposing non-arable land**

Project site view of the aggregate pit looking east

Pictured is *Crimson II Storage,* a 150MW energy storage project in Riverside County, California, using e-Storage batteries.

PROJECT COMPONENTS

Lithium-Ion Batteries: Self-contained lithium-ion BESS equipped with advanced monitoring and automatic shut-off systems to ensure enhanced safety.

Substation Facility: Includes main power transformers which increase the voltage of the electricity before it goes to the transmission line. In addition, contains other infrastructure to safely manage the integration of the energy storage batteries, such as circuit breakers and a control building.

Transmission Line: Most of the new 1.5 km interconnection line (115 kv) connecting the Project to the existing Hydro One transmission line will be installed underground.

Additional Features: Includes gravel roads, perimeter fencing, and maintenance and operations buildings.

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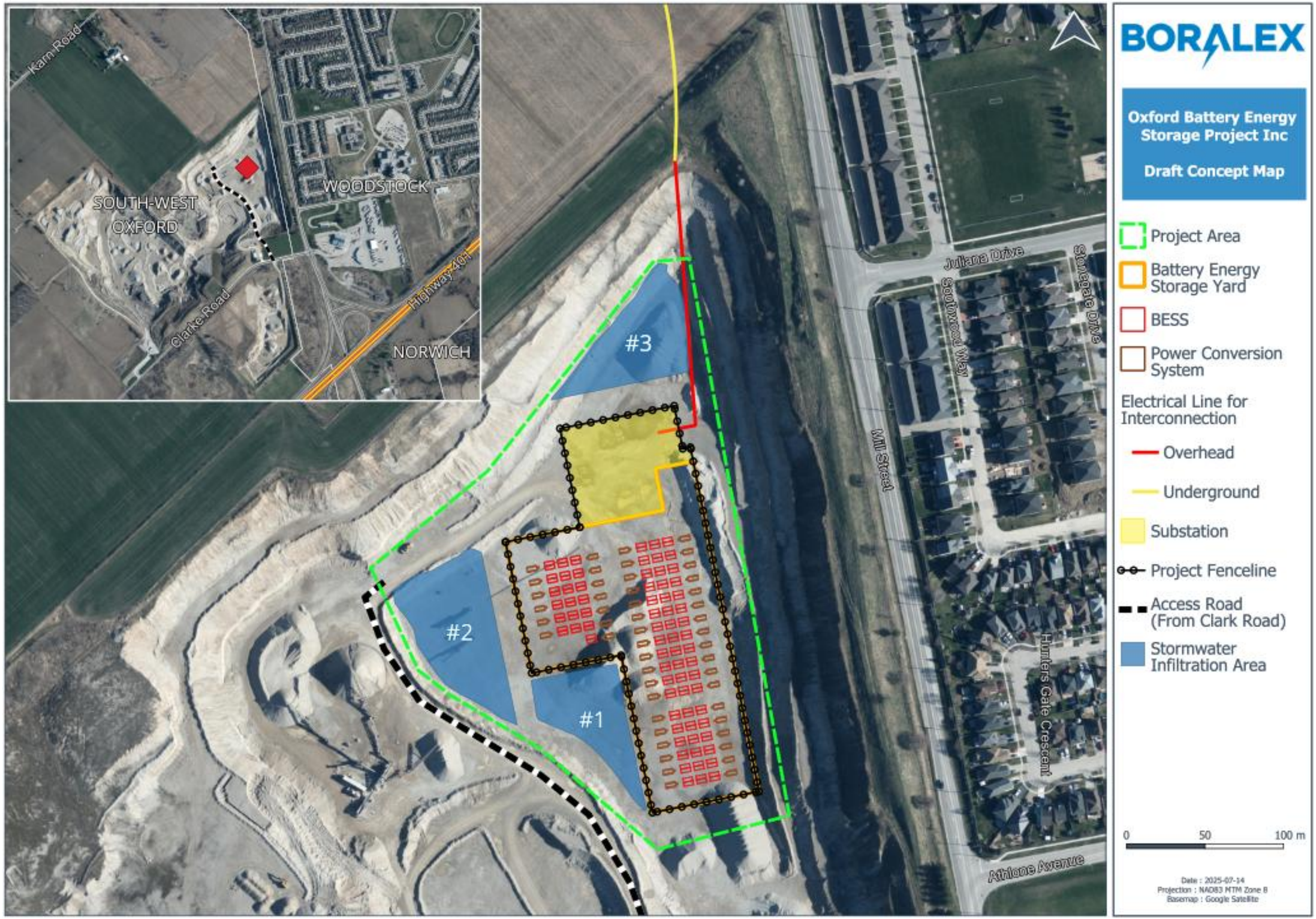
Kam Road
SOUTH-WEST
OXFORD
WOODSTOCK
Clarke Road
Highway 401
NORWICH
#3
#2
#1
Juliana Drive
Southwood Way
Stonegate Drive
Mill Street
Hunters Gate Crescent
Athlone Avenue
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Oxford Battery Energy Storage Project Inc
Draft Concept Map
Project Area
Battery Energy Storage Yard
BESS
Power Conversion System
Electrical Line for Interconnection
Overhead
Underground
Substation
Project Fenceline
Access Road (From Clark Road)
Stormwater Infiltration Area
0
50
100 m
Date : 2025-07-14
Projection : NAD83 MTM Zone 8
Basemap : Google Satellite

Visual Simulation Showing Project Concept

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Anticipated Project Timeline

2023

- 1st Open House
- Preliminary Environmental Studies began
- Municipal Support Resolution
- IESO Request For Proposal Submission

2024

- IESO Contract Awarded
- Technical studies and Environmental Screening Completed
- 2nd Open House
- Meetings with Township of South-West Oxford and Oxford County

Q4 2026/Q1 2027

- Anticipated Commercial Operation Date

2023 — 2024 — 2025 — **Open House We are here!** — 2026 — 2027

Winter to Summer 2025

- Meetings with Oxford Country, City of Woodstock and Township of South-West Oxford
- Official Plan, Site Plan Approval and Zoning By-Law Amendments initiated

May to June 2025

- Completed Environmental Screening Report
- Detailed design and engineering

July to August 2025

- Submit ECA for stormwater management

Fall / Winter 2025

- Obtain Municipal Approvals
- Begin Construction

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Studies & Regulatory Approvals

CLASS EA SCREENING

Class Environmental Assessment for Transmission Facilities – screening **completed May 2025**. Environmental studies include background research and field investigations to assess:

- Natural environment
- Groundwater and aquifer
- Archeological resources
- Cultural heritage
- Soil conditions
- Sound

ENVIRONMENTAL COMPLIANCE APPROVAL (ECA)

An **ECA** is an approval provided by the Ministry of Environment, Conservation and Parks (MECP) that allows proponents to operate a facility with environmental controls **that protect human health and the environment**.

The ECA allows for stormwater management run-off and provides enhanced water quality control to prevent contaminants from reaching the environment in heavy rainfall and emergency situations.

MUNICIPAL APPROVALS & COMMUNITY RISK ASSESSMENT

Municipal permits and approvals including Official Plan and Zoning By-law Amendments and Site Plan Approval.

A **Community Risk Assessment (CRA)** was conducted to understand if the project could pose undue risk to human health. The CRA concluded that overall, all phases of the project **do not pose any significant risk to the to the health and safety of the general public.**

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Building a BESS Facility

Civil Work: The ground is prepared to ensure the facility is built on a flat surface.

Foundation Work: Concrete slabs, piers, or helical piles will be installed as foundations that will accommodate the battery modules and electrical components.

Perimeter Fencing: A fence and safety signage are installed around the perimeter of the facility.

Battery Installation: Modular containers that host the batteries are installed in conjunction with a power conversion system and transformers.

Electrical Components: Balance of electrical equipment includes a Project substation with High Voltage metering, breakers, a main power transformer and a control building. AC collection cables are used to interconnect the Project substation to the battery system rows.

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Barton Malow
CANADA

ABOUT OUR CONTRACTOR

Barton Malow Canada is an Ontario-based contractor with over 14 years of experience building Renewable Energy across Canada. They focus on the energy, automotive, and industrial markets, emphasizing self-perform construction and delivering critical infrastructure projects. Their experience with preconstruction design and in-depth project planning has helped identify, eliminate, and control the hazards that exist in construction environments.

100 YEARS OF BUILDING

PEOPLE PROJECTS COMMUNITIES

INTEGRITY | PARTNERSHIP | EMPOWERMENT

We don't just build projects – we build people and communities, too.

We accomplish this by implementing integrity, partnership, and empowerment in everything we do. By putting people first, we build strong relationships and deliver projects that are exactly what our clients are looking for. Our dedication to supporting our team members empowers us all to work harder, innovate more, and stay at the leading edge of progressive construction in Canada.

SAFETY PHILOSOPHY

Safety isn't just a value; it's the only way we operate.
Our commitment to you, to our team, and to the community demands a safety-first approach—because a safe workplace is the launchpad for successful projects. Our safety focus comes from the top of the company, driven by executive leaders, but we're all a part of building a safer company—and forging a united front for construction industry safety.

BUILD IT SAFE
NO EXCEPTIONS

NATIONAL STANDARD COR™ Certified by IHSA.ca Work Safe for Life

+1250 MW
OF GROUND MOUNT SOLAR PROJECTS

+3,718 MWH
OF BATTERY ENERGY STORAGE PROJECTS

+500 MW
OF WIND PROJECT EXPERIENCE

+30 MW
OF NEW HYDRO ELECTRIC EXPERIENCE

Groundwater Protection

No impacts to groundwater are expected from the Project.

The Project is located within the Lower Thames Valley Source Protection Area adjacent to 3 wellhead protection areas that have **a low vulnerability risk** (2 out of 10).

A **comprehensive hydrogeology assessment has been conducted** to understand site-specific groundwater conditions and identify mitigation measures with the goal of protecting water quality.

As part of the ECA, **groundwater monitoring** will be conducted in consultation, and accordance with standards provided by the MECP.

The stormwater management plan was designed to include **secondary containment catchments at key infrastructure**, such as at the BESS and Transformers, to mitigate risks to groundwater and prevent direct infiltration of runoff.

A **Spill Response Plan** is being developed to manage the risk of spills according to MECP requirements.

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Stormwater Management Plan Overview

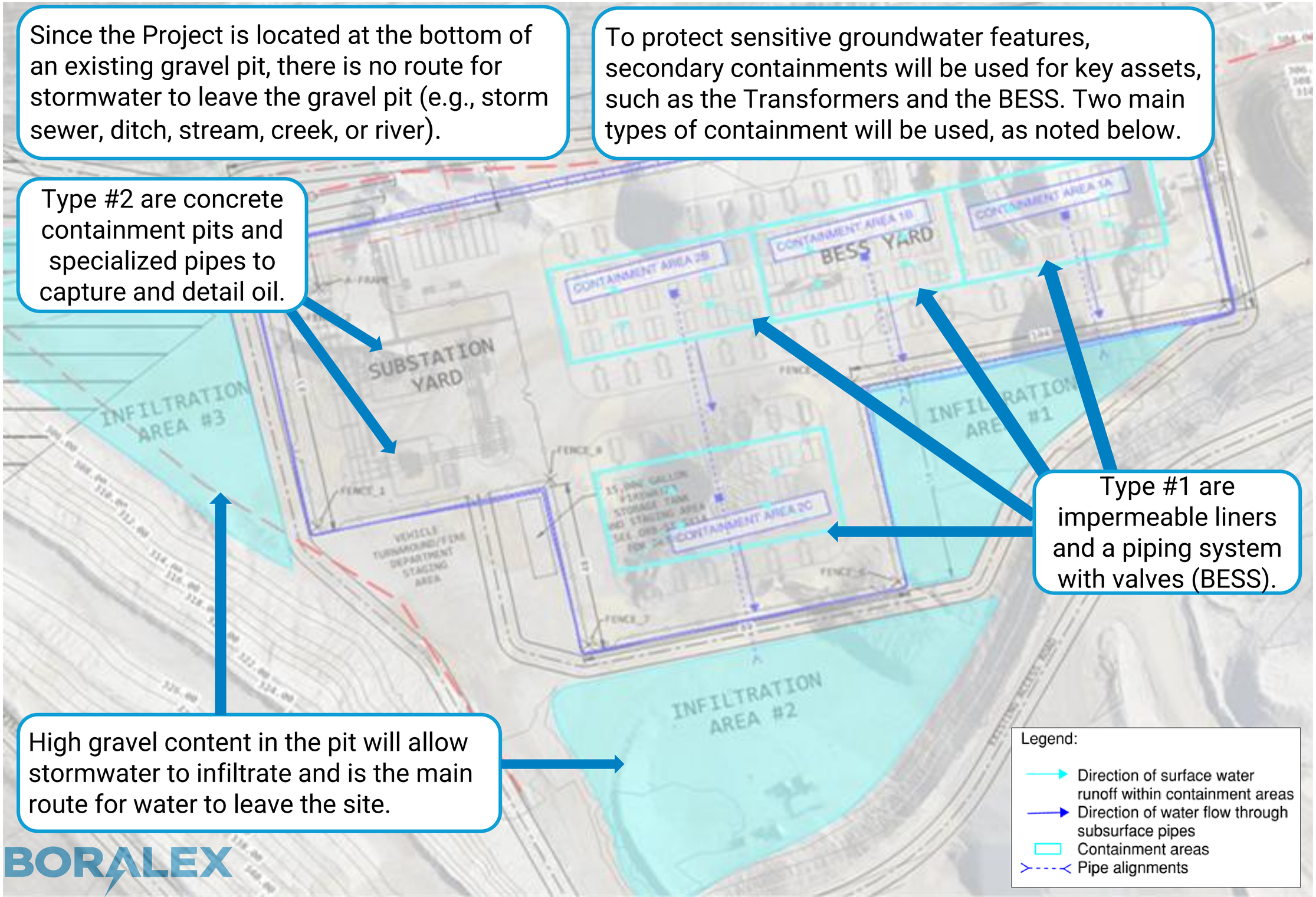
Since the Project is located at the bottom of an existing gravel pit, there is no route for stormwater to leave the gravel pit (e.g., storm sewer, ditch, stream, creek, or river).

To protect sensitive groundwater features, secondary containments will be used for key assets, such as the Transformers and the BESS. Two main types of containment will be used, as noted below.

Type #2 are concrete containment pits and specialized pipes to capture and detail oil.

Type #1 are impermeable liners and a piping system with valves (BESS).

High gravel content in the pit will allow stormwater to infiltrate and is the main route for water to leave the site.



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Stormwater Management Plan Overview

The primary objective of the stormwater system is to capture and direct surface runoff from the Oxford BESS site to three infiltration areas where it will **either infiltrate into the ground or evaporate.**

The site grading and infiltration areas are designed so that **all stormwater will enter the ground or evaporate.**

The three infiltration areas are designed to contain more than 100% of the anticipated runoff from a 100-year storm event, ensuring the site's **natural water balance remains unaffected.**

The BESS will have a localized **secondary containment system to prevent direct infiltration of runoff** to the ground.

Surface ponding will be avoided to maintain access/drivability and protect all sensitive equipment.

The site is relatively flat, and **erosion and sedimentation control is not a primary concern with routine maintenance.**

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Commitment to Fire Safety

ESRG, a verified third-party Fire Safety Expert, and Oxford Battery Energy Storage Project Inc. have been working closely with the Township of South-West Oxford and City of Woodstock Fire Departments to **develop a site-specific emergency response plan**.

Prevention

Oxford BESS equipment is designed to meet **National Fire Code of Canada, NFPA 68 and/or 69 standards.**

Batteries **adhere to and pass evolving safety tests** including **UL 9540 and UL 9540A**.

Monitoring & Detection

Thermal **management systems (fans, ventilations, cooling)** are used to maintain safe operating temperatures. Equipment **safety controls (sensors)** can detect potential abnormal battery behaviours.

A control room **monitors to detect potential variances** in battery behaviors.

Emergency Response

A **comprehensive emergency response plan has been prepared** in collaboration with third-party Fire Safety Experts, ESRG, and local fire departments.

Prior to site operations, **safety training will be provided for first responders & onsite personnel** to understand actions to take in the event of a fire and address any specific equipment (e.g., onsite firewater tank) that is required by the Fire Chiefs.

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Community Risk Assessment

A **CRA** was completed to review the possible impacts of the Oxford BESS on the health and safety of the community and to develop a mitigation plan to minimize potential impacts.

Construction: Construction activities at the Oxford BESS facility will be comparable to those typically seen in industrial developments. As the main site is located within in an active quarry and buffered by an approximately 100-ft berm separating it from the nearest residential area, impacts from dust and sound are expected to be minimal.

Operations: The routine operations of the Oxford BESS facility will have a minimal impact on the local environment and community. All infrastructure is self-contained, with no chemical emissions released into the environment. An Acoustic Assessment Report confirmed that all modelled sound levels fall below the applicable MECP standards. Additionally, the transmission line will be certified in accordance with recognized codes and standards.

Emergency/Malfunctions: The three primary emergency or malfunction scenarios at a BESS facility include power loss, extreme weather conditions and the occurrence of a BESS fire. In the event of a power outage, a heatwave or cold spell, the BESS may be unable to supply electricity to the grid or operate at optimal efficiency. However, as the facility does not produce emissions, there is no risk to the surrounding community. The Project's stormwater management plan will incorporate contingency measures to address potential impacts from severe storm events. A comprehensive Emergency Response Plan is being developed with the local Fire Departments to effectively manage the unlikely event of a BESS fire.

Overall, the Oxford BESS is appropriately sited and **does not pose any significant risk to the health and safety of the surrounding community**.

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Oxford Battery Energy Storage Project Inc

Draft Concept Map

- Project Area
- Battery Energy Storage Yard
- BESS
- Power Conversion System

Electrical Line for Interconnection

- Overhead
- Underground
- Substation
- Switching Station
- Project Fenceline
- Access Road (From Clark Road)
- Stormwater Infiltration Area
- HONI Transmission Line

0 100 200 m

Date : 2025-07-14
Projection : NAD83 MTM Zone 8
Basemap : Google Satellite

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Thank you for attending!

Have more questions or looking for additional information?

Our Project team is ready to answer any questions

Feel free to complete a comment form

Email us at info@boralex.com

Scan the QR code to visit our project website

ca.boralex.com/en/projects-and-sites/storage-oxford

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SIX NATIONS OF THE GRAND RIVER DEVELOPMENT CORPORATION

We acknowledge we are on aboriginal land that has been inhabited by Indigenous peoples since the very beginning. As settlers, we express gratitude for the opportunity to meet here and thank all of the generations of Indigenous people who have cared for this land.
In particular, we acknowledge the Haudenosaunee, Lenape, and Anishnaabek peoples.