

Welcome!

Brampton Transit Bus Maintenance and Storage Facility

Public Open House #2
June 17 to July 15, 2020

We want to hear from you!

Please feel free to provide your feedback through the online survey available on the project website or by contacting the project number (289)-298-1066 or the project team members.

Land Acknowledgement

We respectfully acknowledge that the land we occupy as Bramptonians is traditional territory of the Mississaugas of the Credit, Anishinabek, Huron-Wendat, Haudenosaunee, Ojibway-Chippewa and Métis peoples. This territory is covered by the Upper Canada Treaties, specifically Treaty 19 & 13A.

How to Participate



Review these boards to learn more about the project.



Watch the informational videos on the [project website](#) to learn more about the project and preferred site concept.



Complete the online survey, available on the [project webpage](#), to provide your feedback.



Call the project hotline at (289)-298-1066 to provide feedback, ask questions and request printed materials.



Share your email address with one of the project team members to receive updates on the project.



We invite you to participate through our digital platform by visiting the [project webpage](#).

The purpose of today's event is to:

- **Review alternative site concepts** for the proposed bus maintenance & storage facility;
- Share **the emerging findings and recommendations** of the technical studies;
- Provide **an opportunity to participate in the planning and decision making process**; and,
- **Provide comments to** the City of Brampton, Brampton Transit and the consultants, IBI Group.

Public Open House Feedback



Six attendees at the November 2019 Public Open House

What We Heard



Concerns raised relate to the:

- Natural and socio-economic environments;
- Impacts to traffic;
- Air quality; and
- Stormwater management.

See boards 16 to 19 for how we're working to address these concerns.



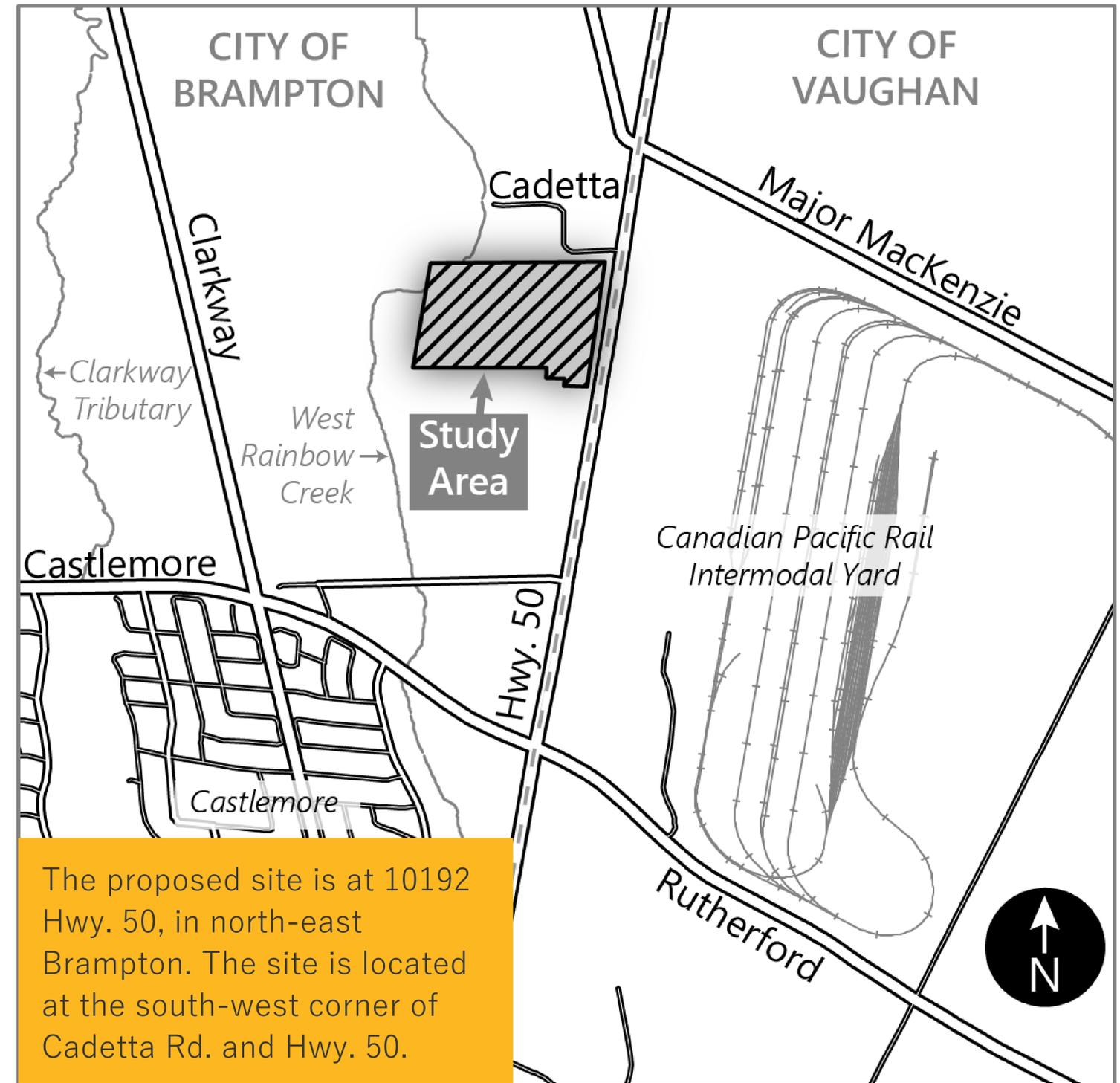
There is support for the facility to enable enhanced transit. See board 4 for how the facility will help this.

Project Need and Study Area

A third bus facility is required as:

- **Brampton Transit plans to add 65 new buses by 2022** to expand and enhance transit service;
- **There is a maximum capacity of 616 buses** at the two existing Brampton Transit facilities;
- By 2022, the **bus fleet will exceed the optimum capacity of the existing facilities** and will approach their maximum capacities. A third facility is needed to house the new buses; and,
- A new facility **will create efficiencies by reducing the time spent “Not In Service” each day** while travelling between the facility and the start/end point of each bus route (i.e. deadheading).

The need has previously been identified in the City’s Transportation Master Plan and Transit Business Plan (2018-2022).



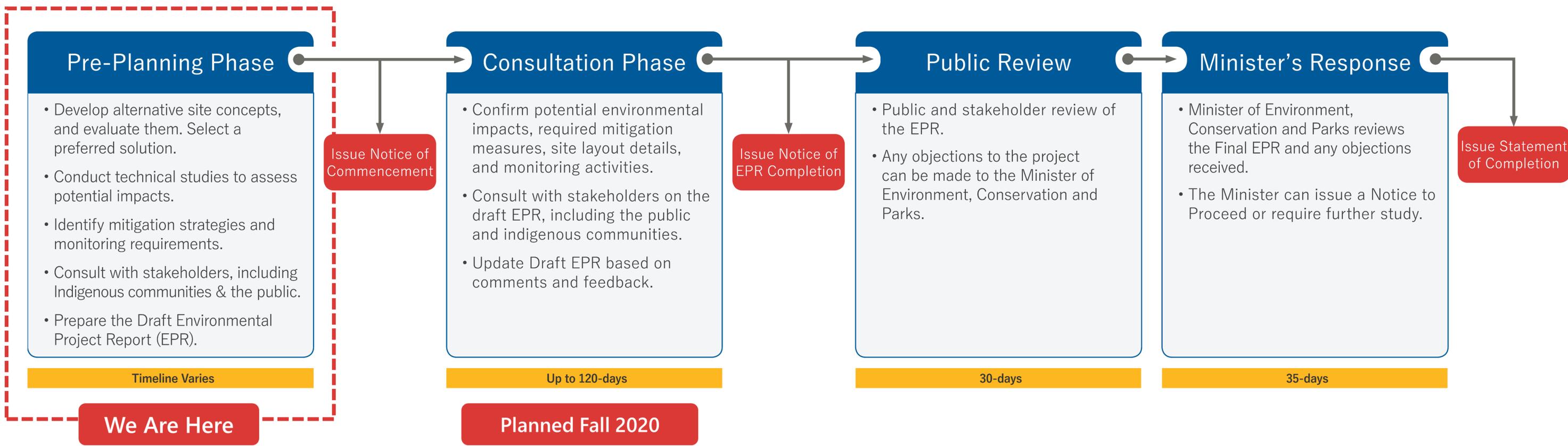
Transit Project Assessment Process

The planning and environmental assessment for the new facility is following the Transit Project Assessment Process (TPAP).

The TPAP is prescribed in Ontario Regulation 231/08 under the Environmental Assessment Act.

TPAP requires consultation, assessment of potential impacts arising from the project, and identification of measures to mitigate any adverse effects.

The findings of the study will be documented in an Environmental Project Report (EPR) and made available for review by the public, agencies, Indigenous communities and other interested parties.



Project Scope and Facility Requirements

Space in the facility will be allocated to a variety of uses. Major functions will include:

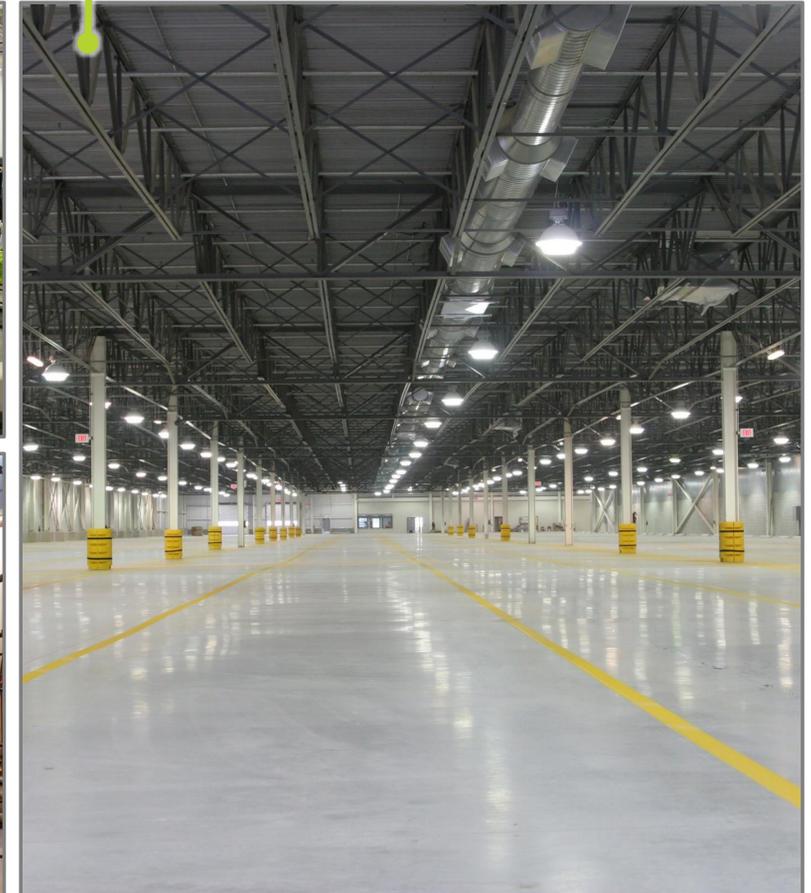
Storage Area

- Indoor storage for approximately 350 buses



Maintenance Area

- Tire storage and workspace
- Inventory storage areas
- Bus maintenance bays and inspection pits
- Engine wash bay and degrease bay
- Welding room
- Bus wash lanes and fueling area



Administration and Offices

- Training office and rooms
- Operator dispatch and supervisor offices
- Operator lunchroom, fitness and quiet room
- General office space and meeting rooms

Mechanical System Space

- Mechanical and electrical rooms
- Space for potential future bus charging infrastructure

Site Features

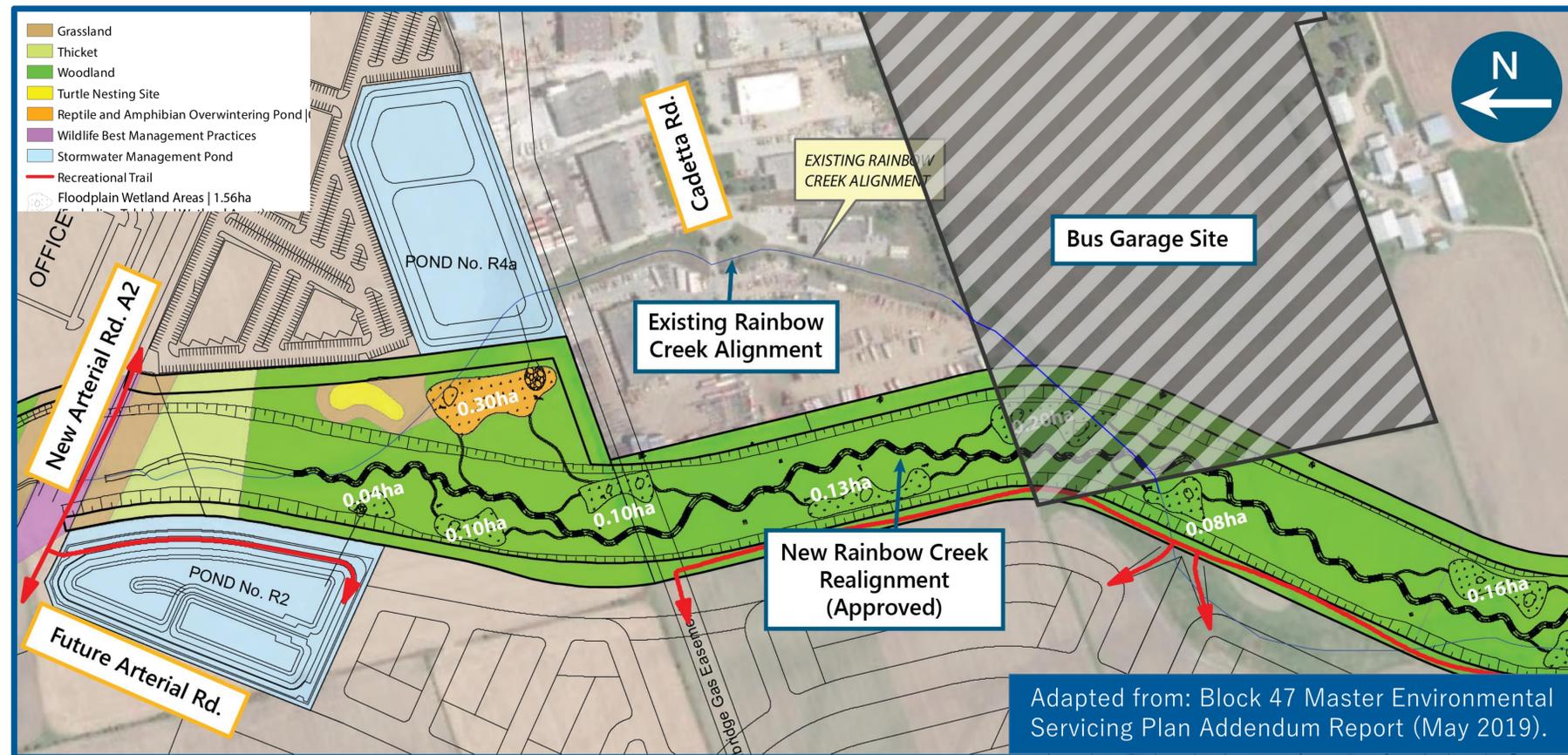
- Surface parking for staff and visitors
- Back-up power generators
- Space for potential future battery storage and rapid bus charging stations
- Covered bike shelter
- Reclaimed water systems and storage
- Landscaping

Rainbow Creek Realignment

Rainbow Creek cuts through the north-west corner of the site. The existing alignment has a large floodplain, reducing the developable land. As part of the Block 47 Master Environmental Servicing Plan Addendum (May 2019), the creek will be re-aligned (see below).

The realigned creek will help establish a healthy, diverse eco-system, reduce flood risks, support long-term stewardship, and provide sufficient flood storage.

It is anticipated that the first phase of the garage will open prior to the realignment. A phased approach to constructing the garage will be needed to maximize the use of the site as a transit garage.



Alternatives Considered

Option 1

 One-storey bus garage

 Built in four phases

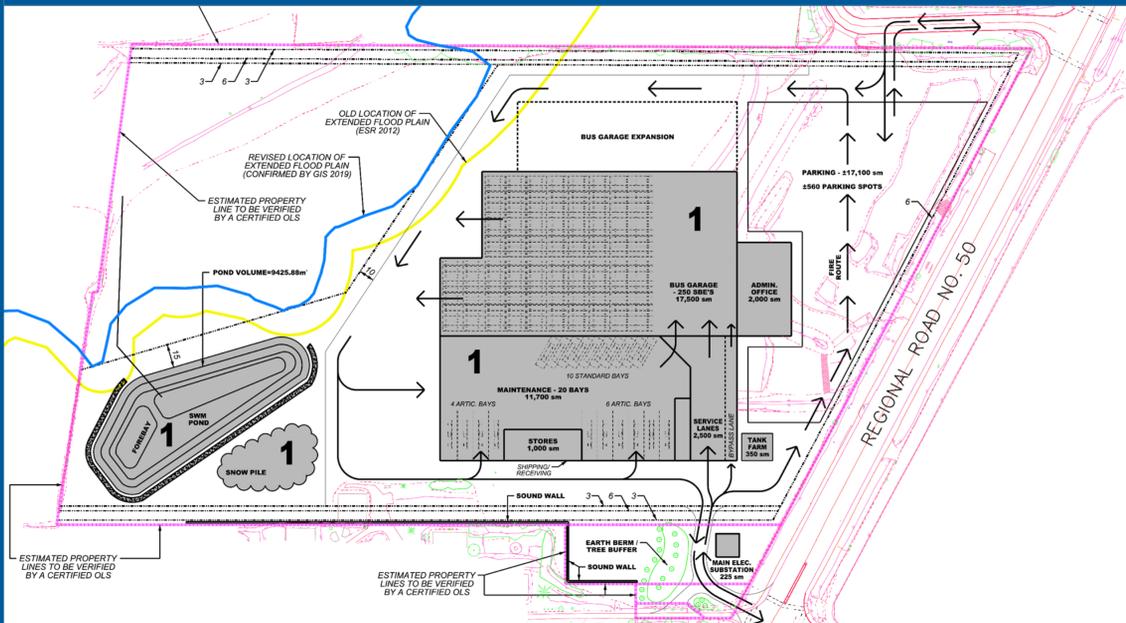
 Space for 438 buses

 36 maintenance bays

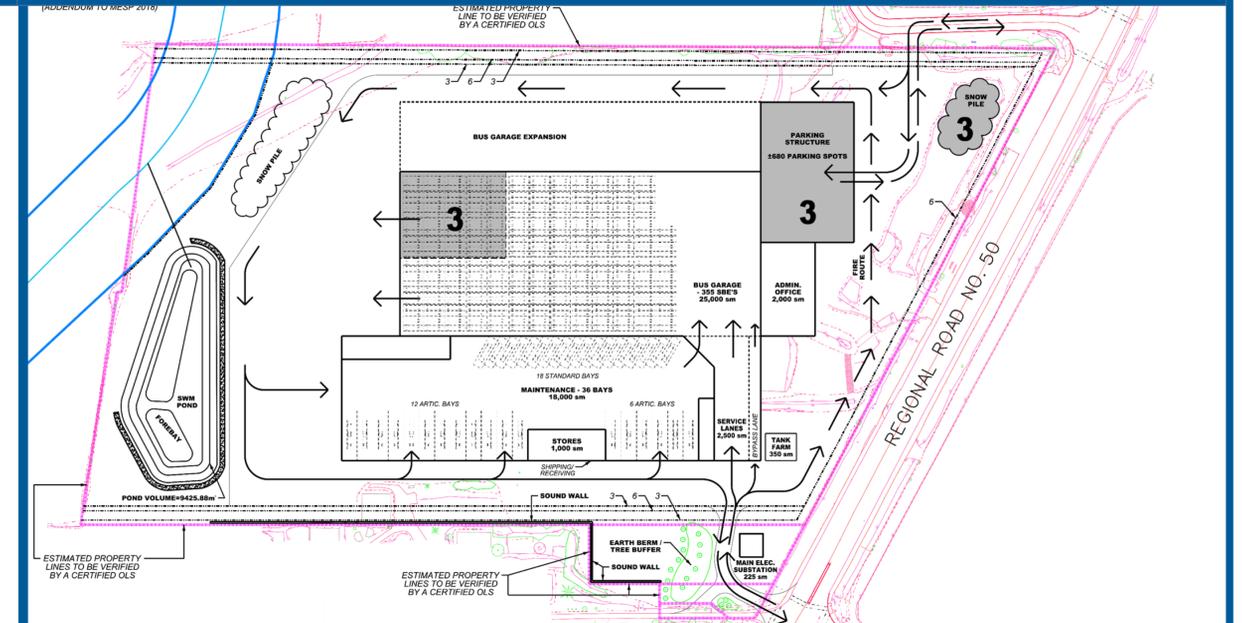
 76,900 square metres

- Phases 2 to 5 require Rainbow Creek to be realigned.

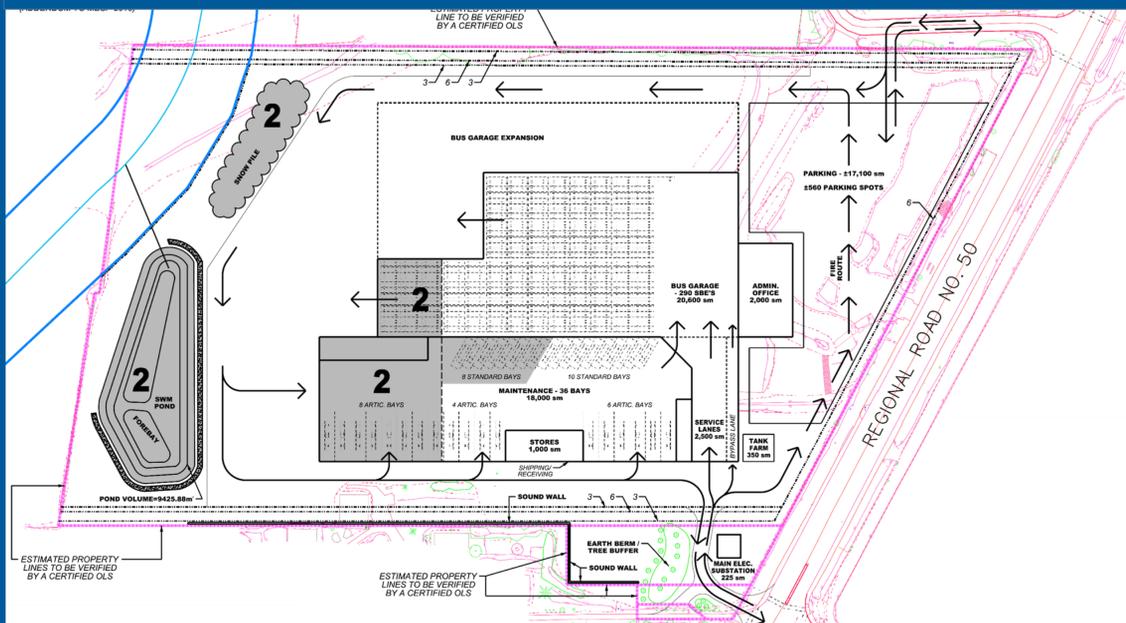
Phase 1: 250 buses, 20 maintenance bays



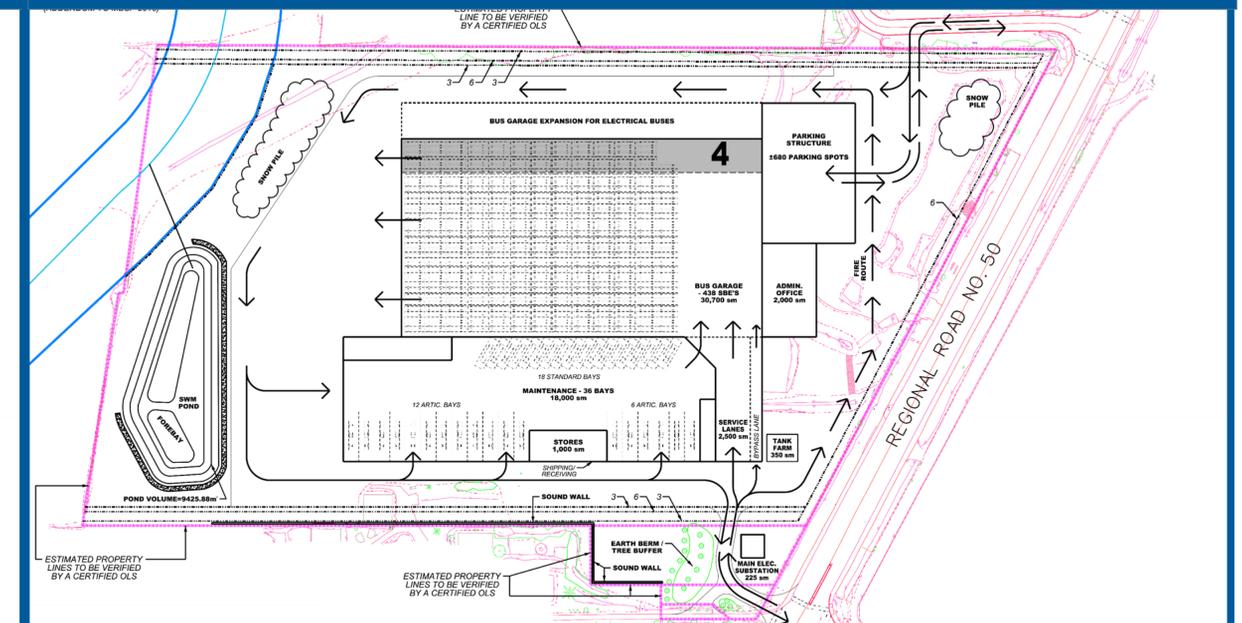
Phase 3: +65 buses, +parking structure



Phase 2: +50 buses, +16 maintenance bays



Phase 4: +83 buses



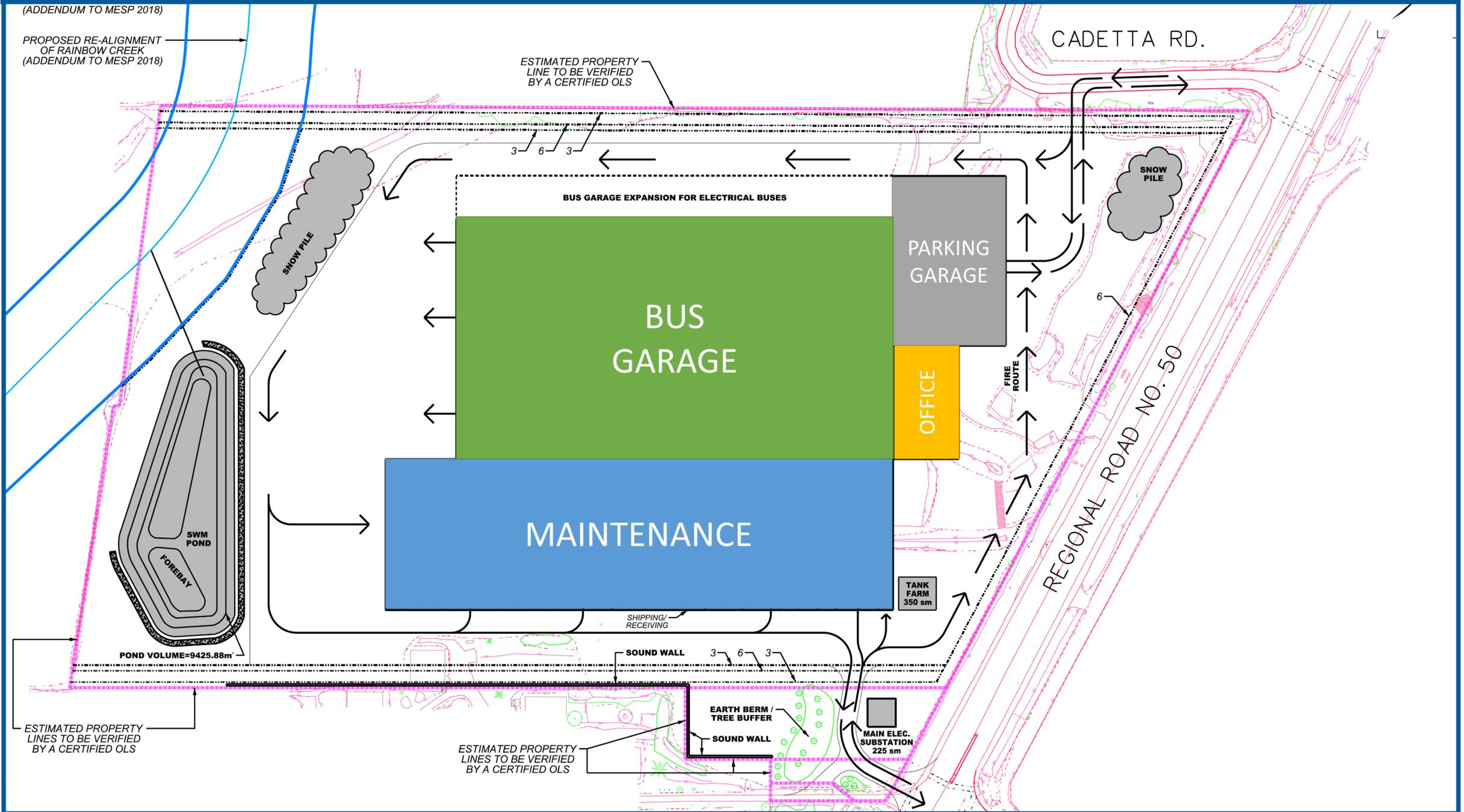
Alternatives Considered

Option 1

Final Build Out: 438 buses, 36 maintenance bays

-  One-storey bus garage
-  Built in four phases
-  Space for 438 buses
-  36 maintenance bays
-  76,900 square metres

- Phases 2 to 5 require Rainbow Creek to be realigned.



Alternatives Considered

Option 2



Two-storey bus garage



Built in two phases



Space for 438 buses

- The full build-out does not require Rainbow Creek to be realigned.



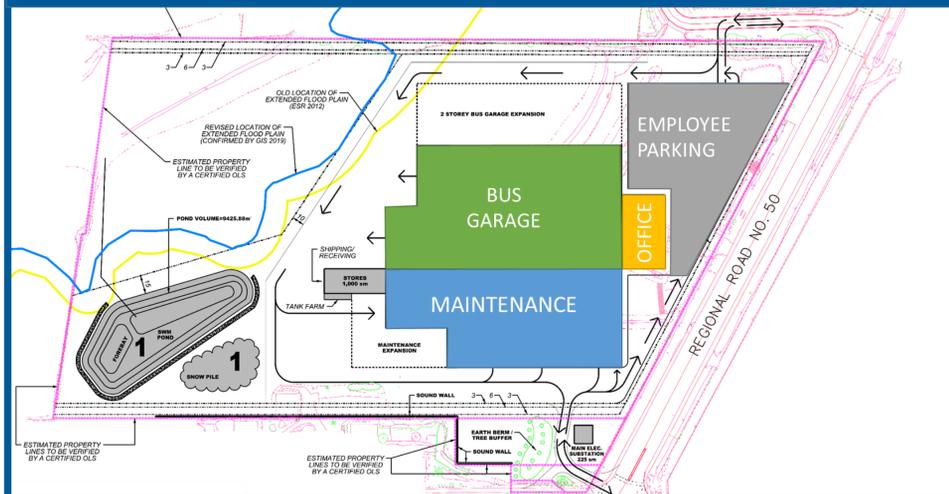
36 maintenance bays



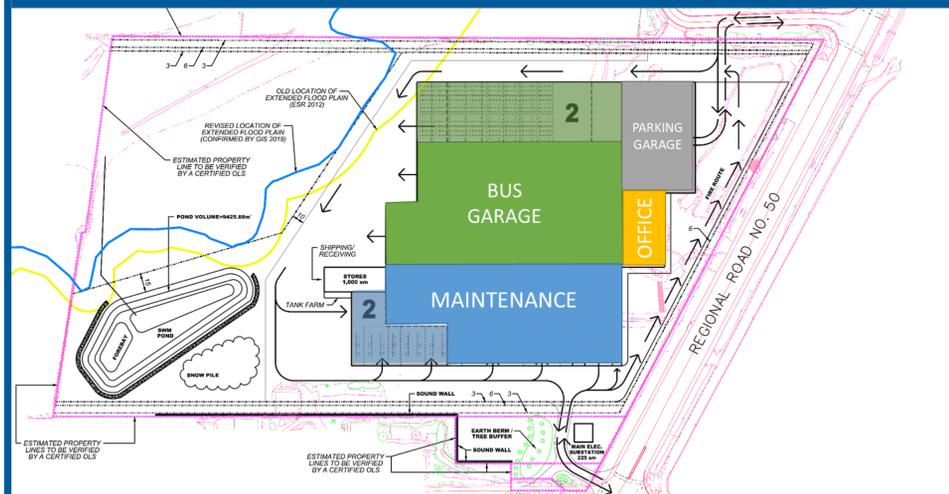
96,400 square metres

* Upon full build-out

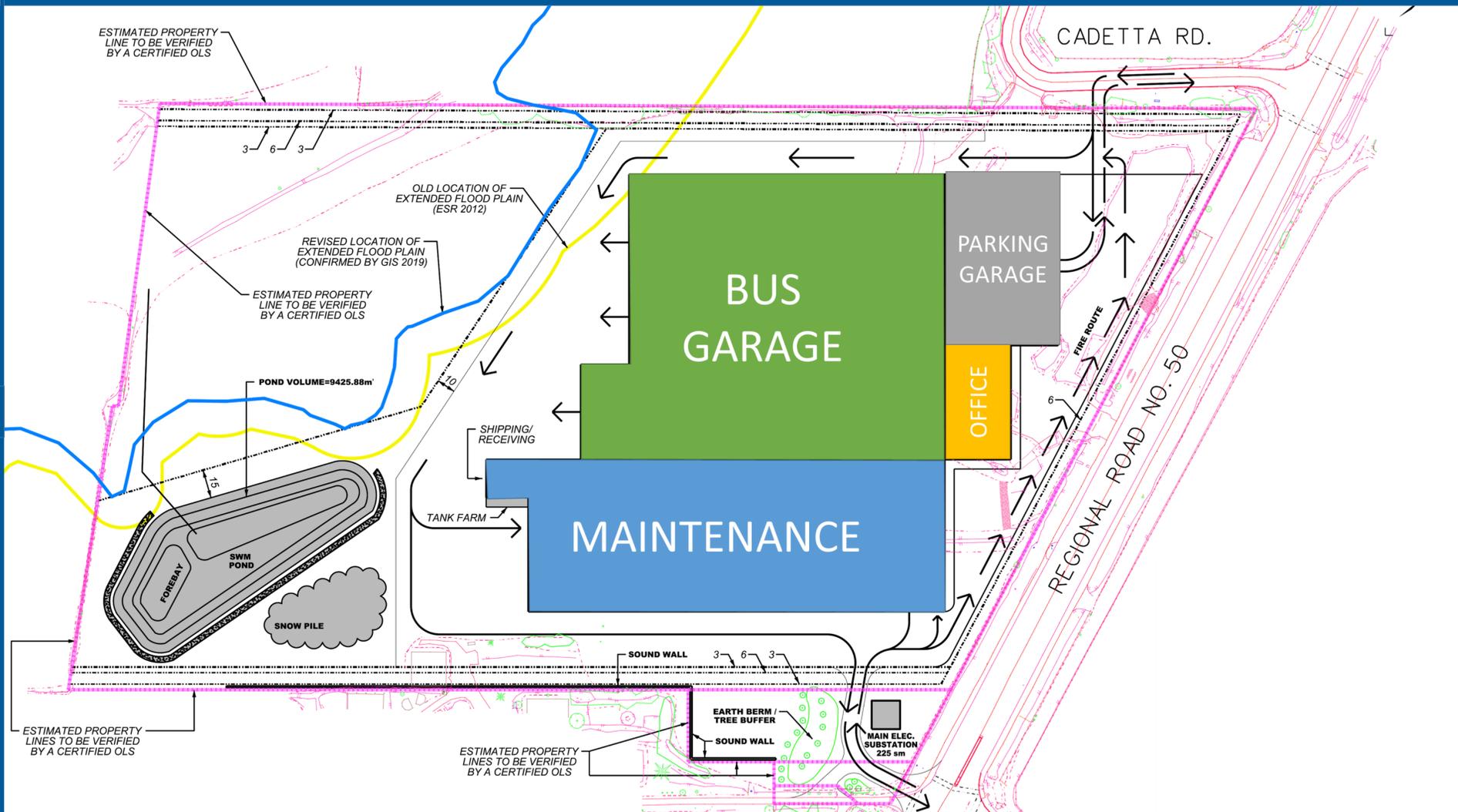
Phase 1: 284 buses, 20 maintenance bays



Phase 2: +154 buses, +16 maintenance bays



Final Build Out: 438 buses, 36 maintenance bays



Alternatives Considered

Option 3



One-storey bus garage



Built in two phases



Space for 438 buses

- Phase 2 requires Rainbow Creek to be realigned.
- Has room on the north side to accommodate future expansion for electrical buses.



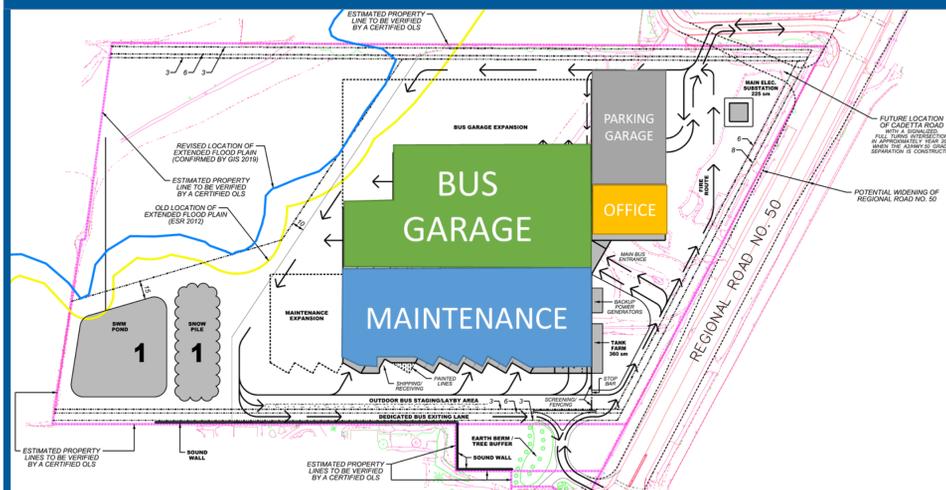
36 maintenance bays



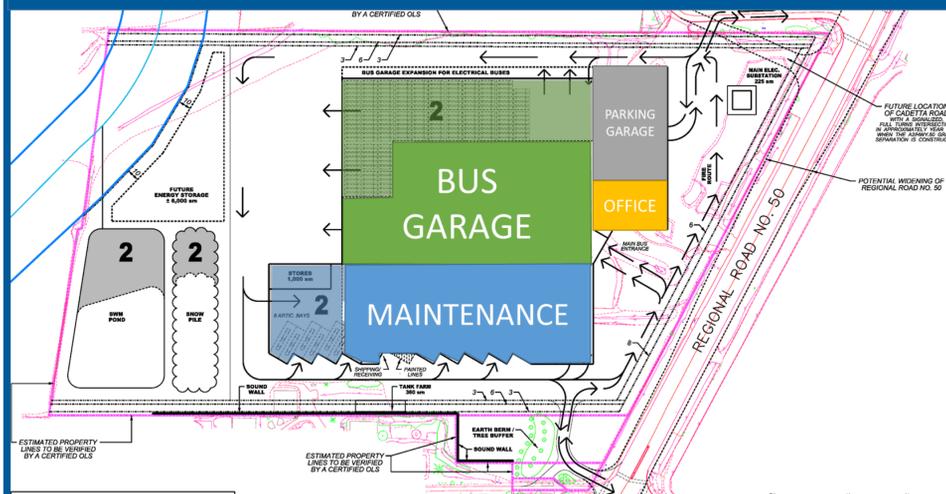
71,100 square metres

* Upon full build-out

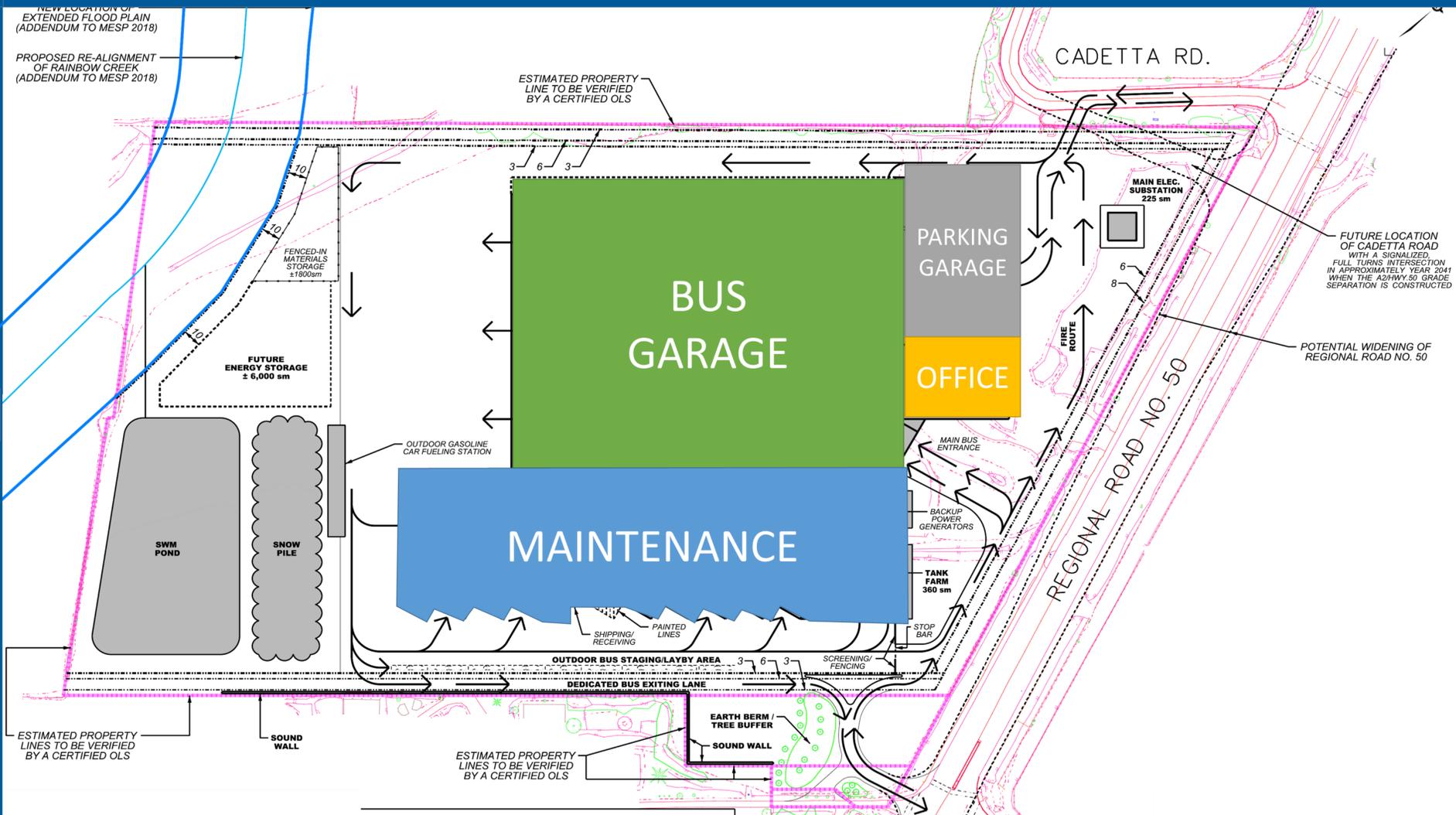
Phase 1: 250 buses, 20 maintenance bays



Phase 2: +188 buses, +16 maintenance bays



Final Build Out: 438 buses, 36 maintenance bays



Alternatives Considered

Option 4



One-storey bus garage



Built in two phases



Space for 438 buses

- Phase 2 requires Rainbow Creek to be realigned.
- Has room on the west side to accommodate future expansion for electrical buses



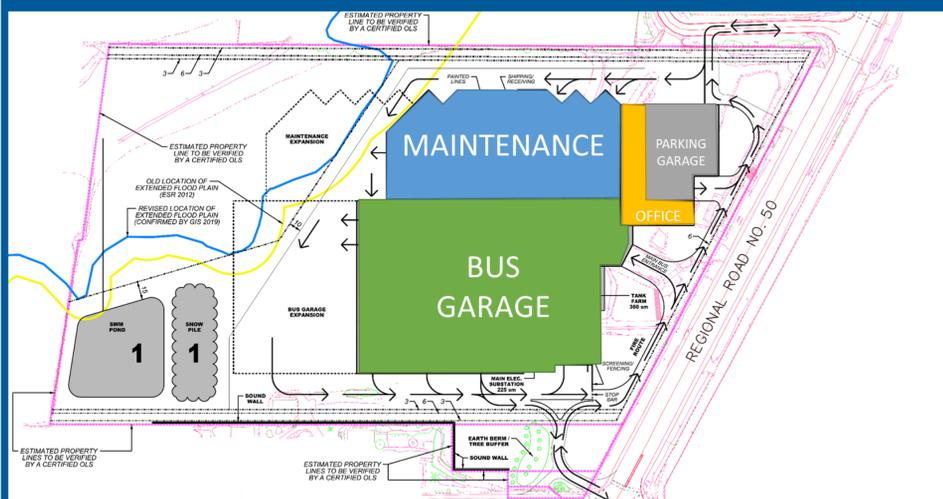
38 maintenance bays



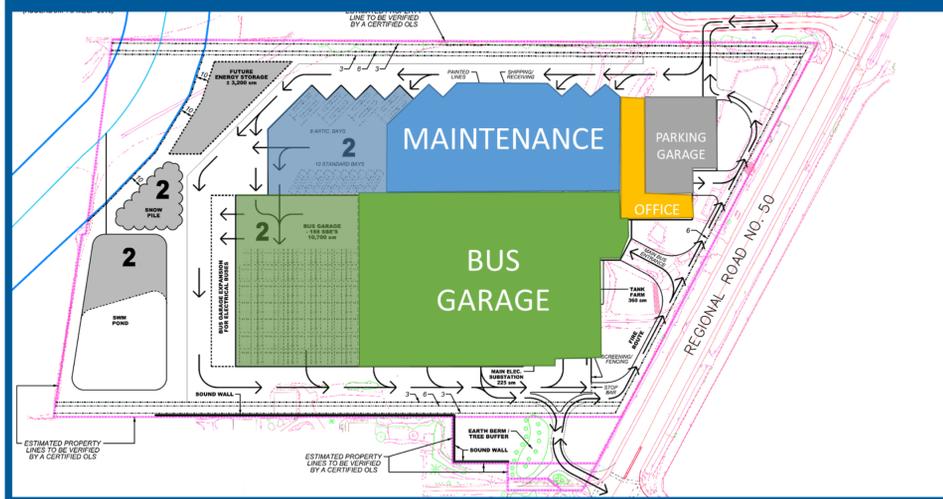
91,800 square metres

* Upon full build-out

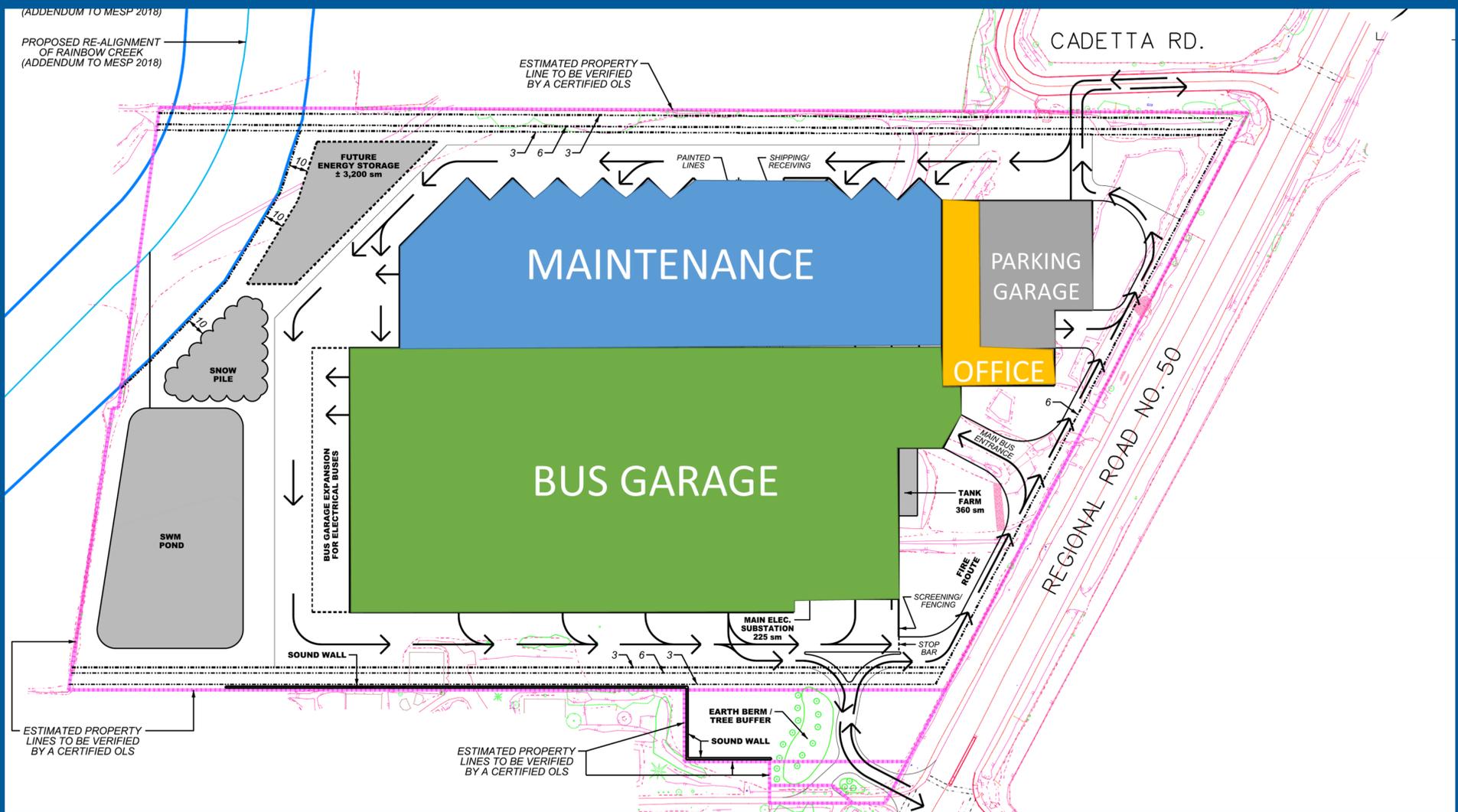
Phase 1: 250 buses, 20 maintenance bays



Phase 2: +188 buses, +18 maintenance bays



Final Build Out: 438 buses, 38 maintenance bays



Alternatives Considered

Option 5



One-storey bus garage



Built in two phases



Space for 438 buses



36 maintenance bays

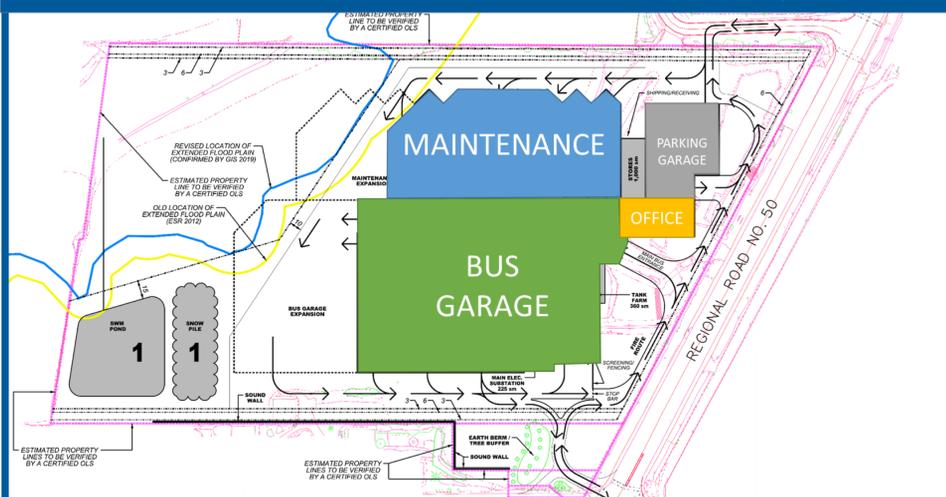


87,900 square metres

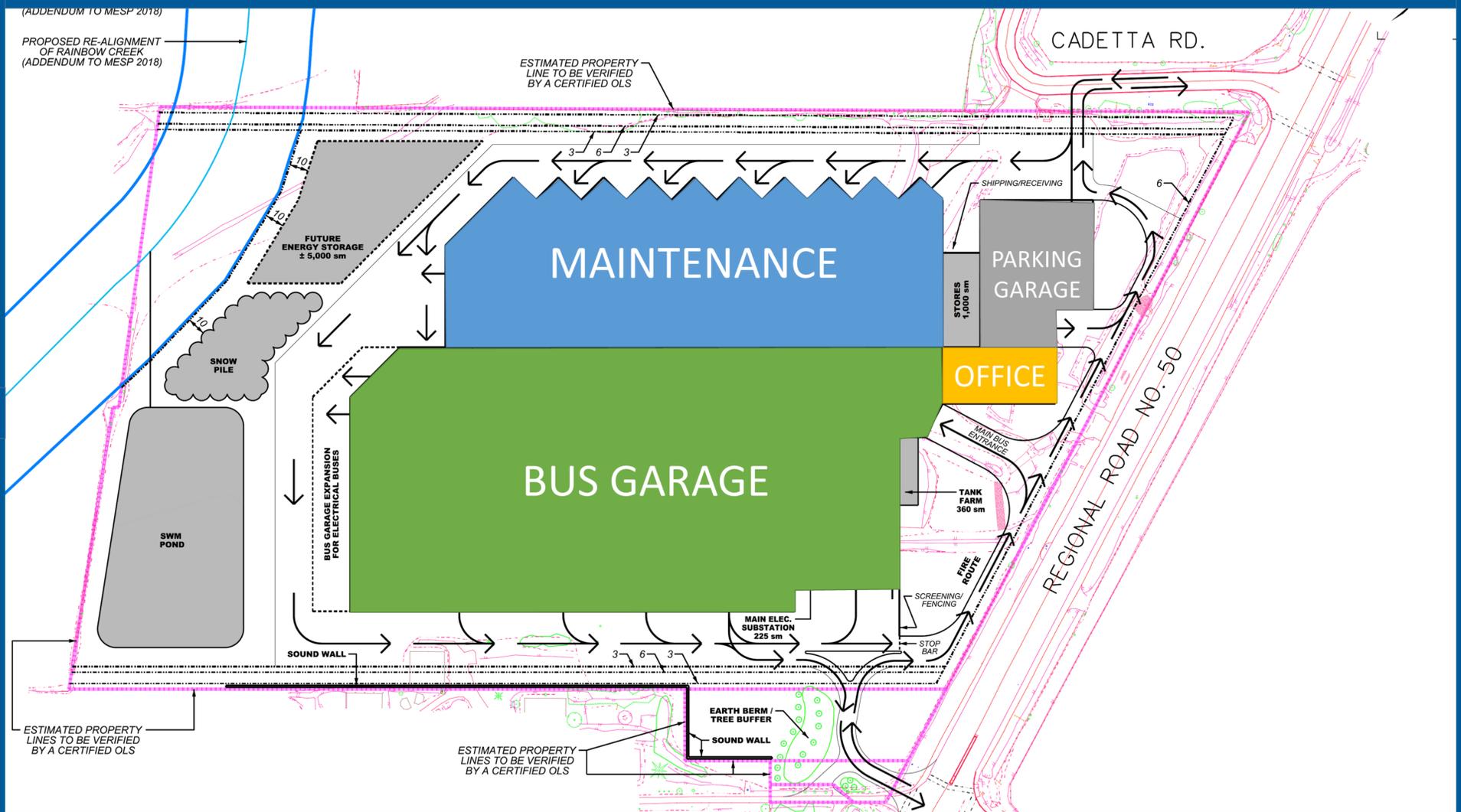
- Phase 2 requires Rainbow Creek to be realigned.
- Has 36 maintenance bays, two more than the others.
- Options 5 is similar to Option 4, but its footprint is approximately 3,900 sq.m. smaller.
- Has room on the west side to accommodate future expansion for electrical buses.

* Upon full build-out

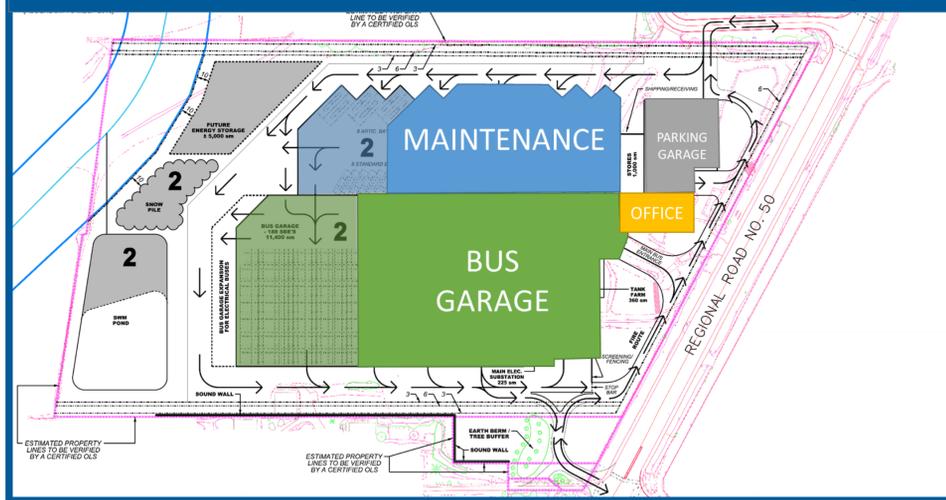
Phase 1: 250 buses, 20 maintenance bays



Final Build Out: 438 buses, 36 maintenance bays



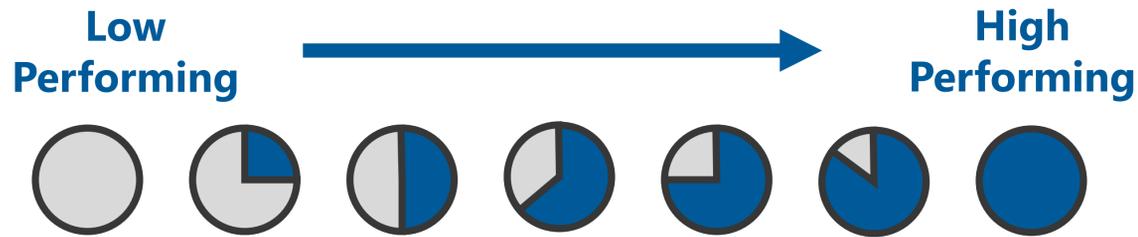
Phase 2: +188 buses, +16 maintenance bays



Assessment of Options

The five alternative site concepts were evaluated to select a preferred site concept.

The results of the evaluation are shown in the table to the right.



	Option 1	Option 2	Option 3	Option 4	Option 5
Site Access					
Capacity					
Circulation					
Building Simplicity					
Operational Efficiencies					
Future Proofing					
Capital Cost					
OVERALL EVALUATION					

Option 3 is the preferred option

The Environmental Project Report (EPR) will document the:

- Project background
- Preferred site concept
- Potential impacts and mitigation measures, based on the findings of the various environmental studies; and,
- Feedback collected during public and stakeholder consultation, and how concerns were addressed.

The environmental studies that will be completed as part of the study are listed to the right.

Environmental Studies (Ongoing and Planned)



Traffic impact



Cultural heritage



Archaeological investigation



Air quality



Noise



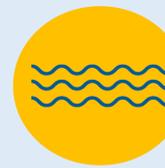
Stormwater management



Socio-economic assessment



Natural Environment



Fluvial-Geomorphological (the interaction between Rainbow Creek and landbanks)

Traffic Impact Assessment: Existing Conditions



Existing Conditions

Level of Service (LOS) is a letter designation used to describe a range of operating conditions on a road experienced by users:

A= Free flow

B= Reasonably free flow

C= Stable Flow

D= Approaching unstable flow

E= Unstable flow

F= Forced or breakdown flow

Critical Movements are movements that have adverse operational or safety impacts. These factors include:

- Overall level of congestion experienced by shared/individual movements (Volume-to-Capacity Ratio*, average delays); and,
- Whether individual movements are projected to exceed available turning lane storage

Conclusions

- All intersections along the corridor have critical movements.
- The Castlemore Rd. and Major Mackenzie Dr. intersections perform poorly with long expected delays and queues.

A future conditions traffic assessment will be conducted once the preferred site design is confirmed.

**Volume-to-Capacity (V/C) is defined as the total number of vehicles passing a point divided by the maximum number of cars that can pass through the point*



Cultural Heritage

The Cultural Heritage Resource (CHR) assessment (October 2019), found two resources within or adjacent to the site.

ID	Location	Description
CHR1	10191A Highway 50	A farmscape consisting of parts of the site and the property to the south. A Heritage Impact Assessment will be completed to assess the potential impacts of the bus facility on it.
CHR2	10307 Clarkway Drive	A farmscape confined to the property to the west. A Heritage Impact Assessment was completed in 2016 and found it does not retain significant heritage value.

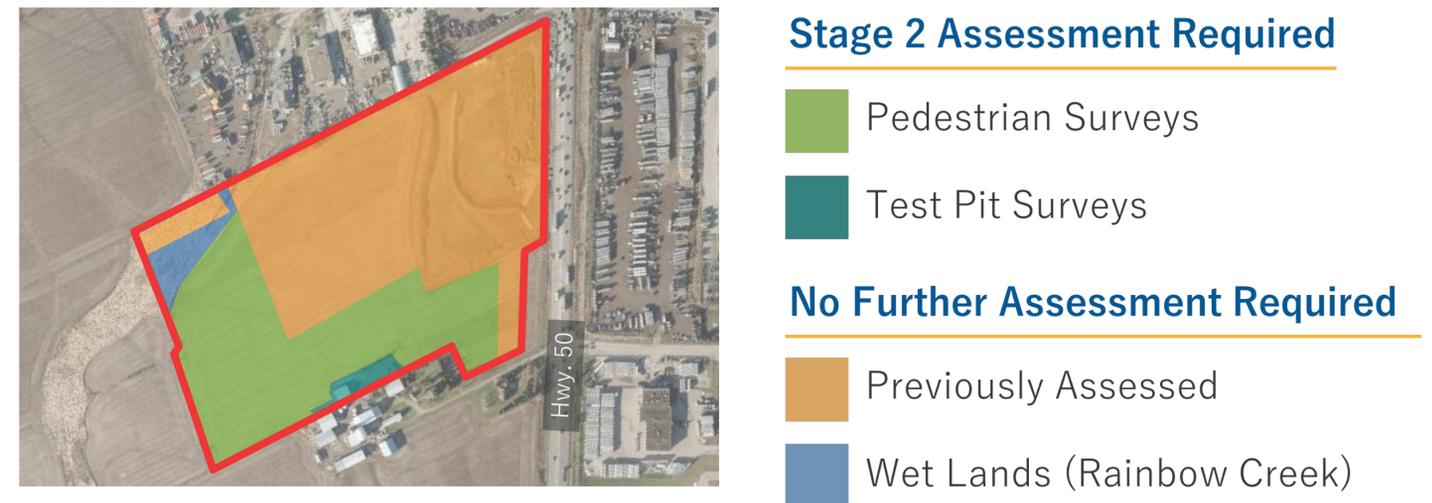


Archaeology

The Stage 1 Archaeological assessment of site (November 2019) found:

- There are seven registered archaeological sites within one kilometer of the bus facility site;
- That a portion of the site exhibits archaeological potential. A Stage 2 assessment is required for this portion of the site; and
- The rest of the site does not exhibit archaeological potential, and no further assessment is required.

The Stage 2 assessment is planned for Spring 2020.





Air Quality

An air quality assessment will be carried out in accordance with guidelines set by the Ministry of Environment, Conservation and Parks. The study will forecast the emissions produced by the facility. If required, appropriate mitigation strategies will be identified.



Noise Study

A noise study will be conducted using the Ministry of Environment, Conservation and Parks' Noise Guideline Limits. If levels are found to be above the Noise Guideline limits, appropriate mitigation measures will be implemented.



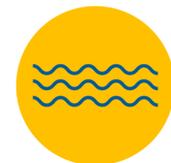
Socio-Economic

A socio-economic environmental assessment will be undertaken to document the existing conditions in the area. It will assess the potential impacts, if any, and identify appropriate mitigation measures.



Stormwater Management

A stormwater management strategy will be developed to identify how to manage runoff from the site. The strategy will consider low-impact development measures to reduce run-off from the site.



Fluvial-Geomorphology

Fluvial geomorphology is the study of the interactions between the physical shapes of rivers/creeks, their water and sediment transport processes, and the landforms they create.

A fluvial-geomorphology assessment was completed for the existing Rainbow Creek alignment. The assessment delineates, in part, development constraints and identifies appropriate mitigation measures.

Erosion control requirements for the area have previously been identified by work undertaken by the Region of Peel, based on Toronto and Region Conservation Authority guidelines.

Next Steps

- **Review all comments and suggestions** received before, during and following this Open House.
- Based on input, **confirm the preferred site concept alternative.**
- **Complete necessary environmental studies, and identify potential mitigation measures,** as required.
- **Hold Public Consultation Centre #3** in Fall 2020.
- **Prepare draft Environmental Project Report** for City Council review and approval.



Comments/Questions?

Please provide feedback by filling out the survey on the project website or by emailing them to the project team by July 15, 2020. Your comments are important and will be reviewed by the City as part of the study.



Project Team Contacts

If you would like more information on the study, **the project team can be reached at:**

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