

HOW IT STARTED.

In 2018, the integration of Aecon, Parsons and Amico formed the consortium chosen and contracted by the Ministry of Transportation and Infrastructure Ontario to design, build and finance the Highway 401 Expansion Project.

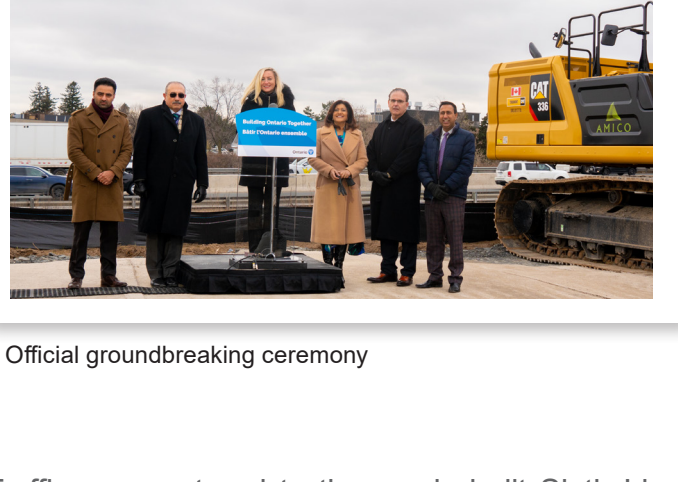
In 2019, construction commenced. Teams forged ahead preparing the lands parallel to the existing lanes for new and supporting underground infrastructure, the rehabilitation and addition of culverts and bridges, and the realignment and protection of the watercourses - prioritizing the protection of wildlife and vegetation from day one.

In 2020, the first of three complete bridge demolitions started with Sixth Line Bridge in July 2020, proceeded by Creditview Bridge and Trafalgar Road Bridge in 2021. Aside from these bridge demolitions, three lanes in both the eastbound and westbound directions remained open during peak hours to keep motorists moving with minimal disruption.

HOW IT'S GOING.

Throughout 2022, vital underground infrastructure was completed including electrical works and the installation of storm sewers and concrete work. Various segments throughout the project limits went into full alignment in the second half of the year and, WCC concluded Phase 1 of the highway expansion project, officially opening all lanes to the public on December 9th, 2022.

Two new car pool lots have also been added at the Trafalgar Road and Winston Churchill Boulevard interchanges and the lot was expanded at the Mississauga Road interchange.



Official groundbreaking ceremony

Traffic was restored to the newly built Sixth Line Bridge in 2020. In the summer of 2021, motorists were diverted back into the newly built centre lanes of the alignment and the new Trafalgar Road Bridge, and in the fall of 2022, pedestrians and vehicles were welcomed back to a new multi-use path and expanded bridge on Creditview Road.

In 2023, the final layer of asphalt and freshly painted lane markings have been applied, allowing for a smooth driving surface across the project limits from the Credit River (Mississauga) to the west of Regional Road 25 (Milton).

We're very proud to have expanded this critical highway to improve mobility & connect communities, people and businesses across the GTA.

Stephen Cleary, Project Director
West Corridor Constructors

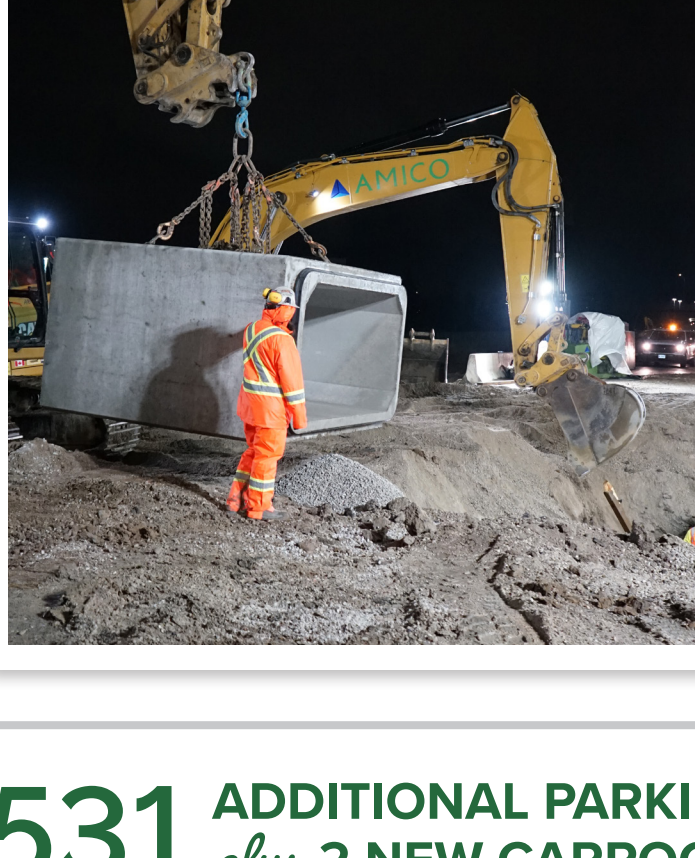
Most recently, vital culvert installations were successfully completed between Regional Road 25 and James Snow Parkway in the east and west-bound directions.



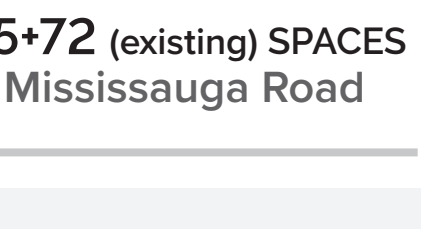
All lanes in full alignment

CULVERT INSTALLATION

WCC recently completed four culvert installations between Regional Road 25 and James Snow Parkway in the eastbound and westbound directions, over two, 56-hour periods. Precise planning and coordination between Halton Region, and the Design, Construction, and Traffic teams resulted in the execution of a progressive opening, restoring full access for motorists as they started the work week. The additional 46 metres (approx.) of culvert panels per direction augment the existing culverts and provide additional capacity for the watershed table across the project limits for the next 100 years.



531 ADDITIONAL PARKING SPACES, plus 2 NEW CARPOOL LOTS



330 SPACES | **146 SPACES** | **55+72 (existing) SPACES**
Trafalgar Road | Winston Churchill Boulevard | Mississauga Road

SUSTAINABILITY ON THE 401

Given WCC's commitment to sustainability, we required a unique solution for removing and processing approximately 120,000 square metres of existing concrete pavement in a safe and environmentally responsible way. This process had to be cost effective and avoid disruption to daily traffic operations while maintaining the construction schedule. The team developed a solution by performing an on-site crushing operation that removed and reused 960,000 tons of pavement and road base material on the project. Reclaimed materials were fed into a mobile impact crusher and reused directly on-site.

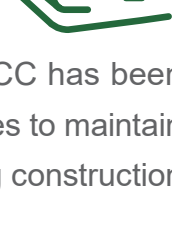
This on-site solution requiring specialized equipment, training and operations, allowed significant

long-term environmental benefits and created improved site safety by significantly reducing our trucking and hauling operations into the work zone and into live traffic. The crushers were used to break down and separate 27% of the original highway materials, keeping asphalt and concrete on-site for reuse and separating steel into bins for off-site recycling. This approach has delivered numerous benefits for the betterment of the project and environment.

WCC's hyper-focus on sustainability has ensured environmental remediation, and restoration activities for various species of wildlife and vegetation remains ongoing throughout surrounding areas - from the regions of Halton and Peel to the Town of Halton Hills, the Town of Milton, and the City of Mississauga.

<p>960,000 METRIC TONNES OF RECYCLED GRANULAR</p> <p>8x the weight of the CN Tower</p>	<p>2,000 METRIC TONNES OF CO₂ EMISSIONS AVOIDED FROM MATERIAL TRANSPORT ALONE</p> <p>Equivalent to planting 101,000 trees</p>	<p>3,500 METRIC TONNES OF RECLAIMED STEEL</p> <p>1/3 the weight of the Eiffel Tower</p>
<p>1.9M KMS IN TRUCK TRANSPORT DISTANCE SAVED</p> <p>5x the distance from the earth to the moon</p>	<p>27% was used from the original highway</p>	<p>440,000 M³ OF MATERIAL AVOIDED LANDFILL</p> <p>Equivalent to 175 Olympic swimming pools</p>

ENVIRONMENTAL PROTECTION



For the duration of construction, WCC has been implementing environmental practices to maintain the quality of the environment during construction activities.

Since 2019, several different terrestrial enhancement and mitigation features have been installed throughout the project corridor including 30 bat boxes, 3 wildlife passages, 6 wildlife escape ramps, and the installation of wildlife fencing. Each of these features is monitored regularly for effectiveness and maintenance by WCC environmental inspectors while landscaping and restoration activities are ongoing.

4,800 TREES and 33,000 SHRUBS PLANTED

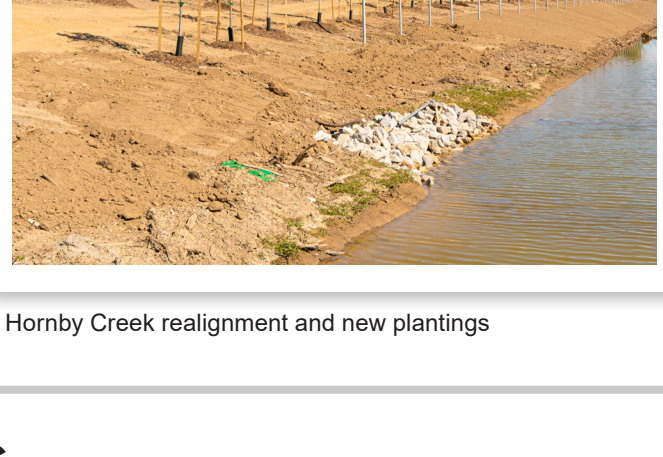
Erosion and Sediment Controls (ESC) were installed and maintained throughout the corridor to protect the environment from construction related activities. Environmental inspections were performed daily during major construction works including bridge and culvert construction, working in and around watercourses, and landscaping and restoration. Surface water quality is monitored bi-weekly using a handheld device and physical water samples are taken and sent for laboratory-testing. Inspectors contribute expertise regarding best management practices for environmental protection, permit and approval compliance, consistency with environmental plans, and identification of deficiencies and corrective actions.

Construction has taken place at 21 watercourse crossings and 2 storm water management ponds that support fish and/or provide fish habitat. Works included culvert replacements and extensions, grading and ditch relocation, bridge replace-

ments, channel realignments and tie-ins, and pond clean-outs. Agency consultation identified 2 aquatic species at risk present within the project area: Redside Dace (*Clinostomus elongatus*) and American Eel (*Anguilla rostrata*). Approvals were obtained and protection measures implemented including in-water work timing restrictions, fish salvages, and erosion and sediment control (ESC) measures. Works within or near water were reviewed by a WCC fisheries biologist. Where work has been completed, functional fish habitats are present and areas surrounding the watercourses are stable.

Stage 2, 3, and 4 archaeology assessments were also completed in the area, including near the Credit River Bridge and Trafalgar Road. Members of Indigenous communities were engaged in the field activities and reviewed the archaeology reports before they were submitted to the Ministry of Citizenship and Multiculturalism.

Best management practices to minimize impacts from noise, vibration, and air quality were implemented during construction works, including limiting louder construction to daytime hours, minimizing idling, obtaining noise by-law exemptions for work in the municipal right of ways, and investigation of complaints as per the MTO Environmental Guide for Noise. Air Quality best management practices included periodic watering for dust suppression, re-vegetation of bare soils, and regular cleaning of construction sites and access roads.

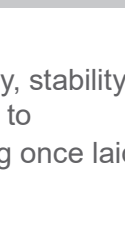


Hornby Creek realignment and new plantings

QUALITY AND MONITORING (CONSTRUCTION)

Stringent metrics and expectations are followed to ensure materials and processes are compliant and in place to ensure durability and longevity, and to ensure works are performed ethically and with efficacy. Internal and external subject matters experts are deeply involved throughout and beyond the construction period. WCC is subject to an audit with an external agency with all disciplines annually.

Quality Testing Process Examples:



Asphalt: Evaluated asphalt density, stability, durability and resistance to deformation and cracking once laid.

Waterproofing: Applied to all bridge structures to protect the materials from deterioration due to precipitation and other fluids.

Friction Testing: Measured the skid resistance from a tire on the pavements' surface.

Crossfall Testing: Measured slope of asphalt required for precipitation to run off the road surface and eliminate pooling on the pavement surface.

Vibration Monitoring: Used sensors to monitor small movements caused by various types of machinery.



Left to right: Olga Urošević (Aecon), Jessica Palombo (Parsons), Said Said (Aecon), Yadwinder Dhaliwal (WSP)

Thank You!

Thank you to all who have travelled through the Highway 401 Expansion corridor during the construction period. We appreciate your patience and cooperation during the exciting transformation of Highway 401, from Mississauga to Milton.

Motorists are reminded to follow posted speed limits, be aware of their route and surroundings, and always drive with caution according to road conditions.