

DURON ONTARIO LTD.

2020 ONTARIO CONCRETE AWARDS
MARS INDUSTRIAL CANADA

8400 GEORGE BOLTON PKWY, BOLTON, ONTARIO



Photo Credit: iPort Caledon



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MARS INDUSTRIAL CANADA
PROJECT FACT SHEET

8400 George Bolton Pkwy, Bolton, Ontario

Project Type	<i>Warehouse and Office Space</i>
Building Area	<i>Warehouse 420,351 sq. ft Office 18,486 sq. ft</i>
Design Start	<i>Summer 2018</i>
Design Complete	<i>Early 2019</i>
Construction Start	<i>May 2019</i>
Occupancy	<i>Mid October, 2020</i>
Official Opening	<i>Mid October, 2020</i>
Maximum Concrete Thickness	<i>8"</i>



MARS INDUSTRIAL CANADA **DESCRIPTION SHEET**

8400 George Bolton Pkwy, Bolton, Ontario

Mars Industrial Canada is a 400,000+ sq. ft state-of-the-art logistics building located in the iPort Caledon flex-industrial campus. It is designed with administrative, maintenance, production, and distribution needs in mind. The new distribution and packing facility will be

Fig. 1 Mars Industrial Canada Aerial View

Mars Industrial Canada is strategically located near Canada's two largest intermodal yards.

LEED-certified to achieve high performance in sustainability and energy efficiency.

This project includes a combined office and warehouse area. The concrete base was poured to 4" and 8" in depth, respectively, with Type 10 Portland Cement. Dramix 55/60 steel fibers were used to reinforce the concrete slabs.



Fig. 2 Polished Warehouse Interior Concrete

Duron installed and polished 8" thick concrete floor slab in the warehouse area. Polished 8" thick concrete slab; laser screed to FF35/F125 tolerance; Dramix 55/60 steel fibers; Traprock hardener; Ashford Formula Densifier; saw cuts filled with polyuria filler Euco Qwik.

Mars Canada is known for requiring high quality elements in their industrial facilities. From the concrete mix, to the superior quality racking system, to the state-of-the-art HVAC system, Mars specifies industry-leading industrial spaces. Duron provided quality concrete forming to satisfy the needs of the top-quality facility.

Known for its industry leadership, Duron

became the first contractor in the world to achieve certified Fmin100 "Superflat" floor tolerance. At the Mars Industrial Canada location, the concrete pour was performed using a Somero Laser Screed for improved floor quality. High attention to detail and accuracy was required to maintain the high FF/FL standard and when installing the c-channel to the loading dock areas.



Fig. 3 Polished Warehouse Interior Concrete

Polished 8" thick concrete slab; laser screed to FF35/F125 tolerance; Dramix 55/60 steel fibers; Traprock hardener; Ashford Formula Densifier; saw cuts filled with polyuria filler Euco Qwik.

Duron's experience in constructing flat, durable flooring for warehousing industries is industry-leading. At this site, Ashford Formula Densifier was utilized to produce a densified and abrasion-resistant concrete surface.

Duron is a certified applicator of this product which is used to produce substantial cost savings by providing long-term performance at a reasonable cost as well as a reduced environmental impact.

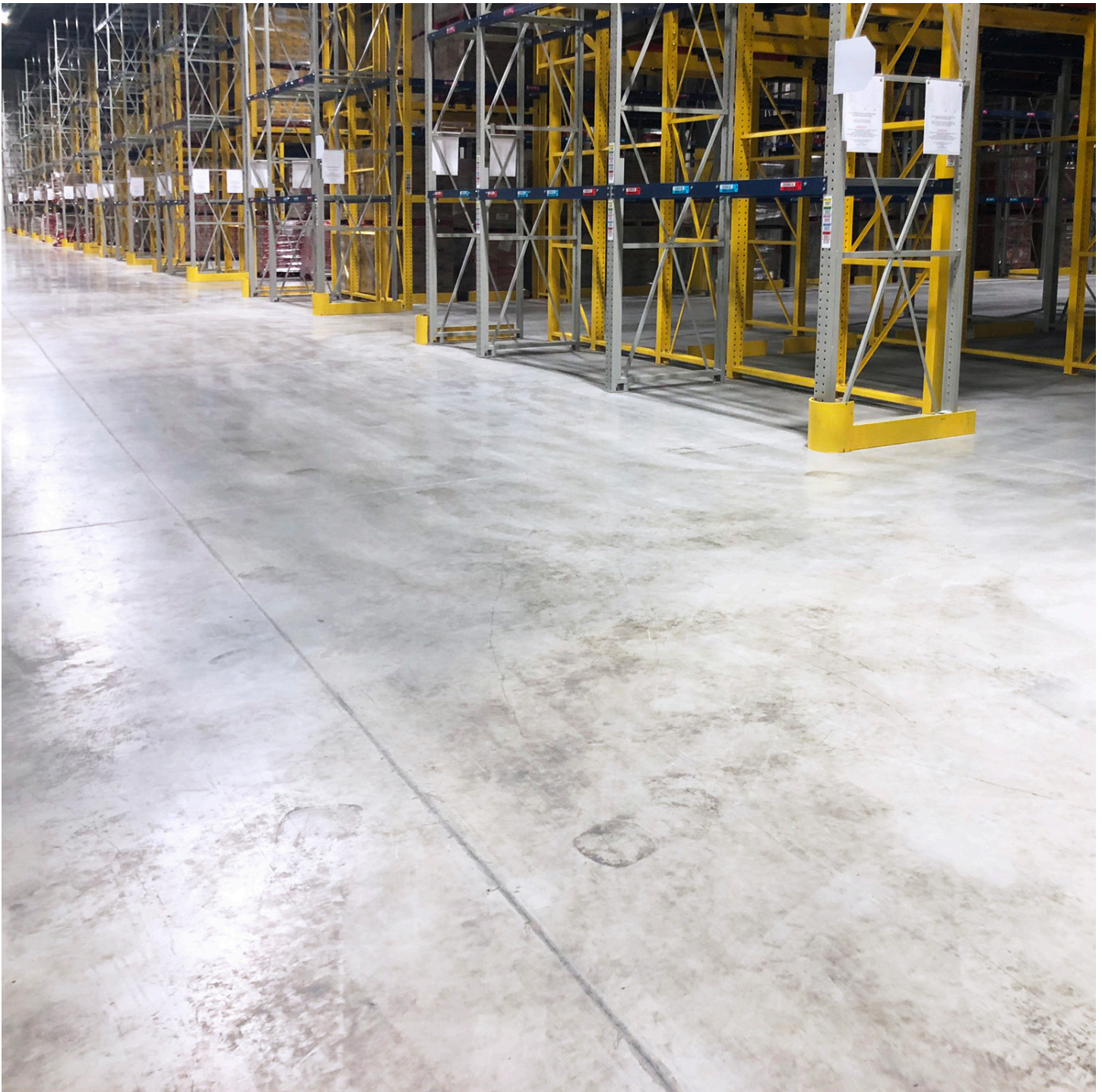


Fig. 4 Polished Warehouse Interior Concrete

Polished 8" thick concrete slab; laser screed to FF35/F125 tolerance; Dramix 55/60 steel fibers; Traprock hardener; Ashford Formula Densifier; saw cuts filled with polyuria filler Euco Qwik.

Euco Qwik 200 polyuria was used to fill the entirety of all sawcuts throughout the facility. Duron also supplied, hoisted, and installed all wire mesh in the office areas and mezzanine. The mechanical, electrical, and generator rooms were installed with 4" housekeeping

pads. During the construction process, Duron took extra measures to ensure adjacent structures and finishes are kept away from possible damage, all floor slabs accommodate 8" levelled, pedestal access, and installed steels fibers for reinforcement.

Fig. 5 Loading Docks
Interior view.



Fig.6 Loading Docks
Interior view.

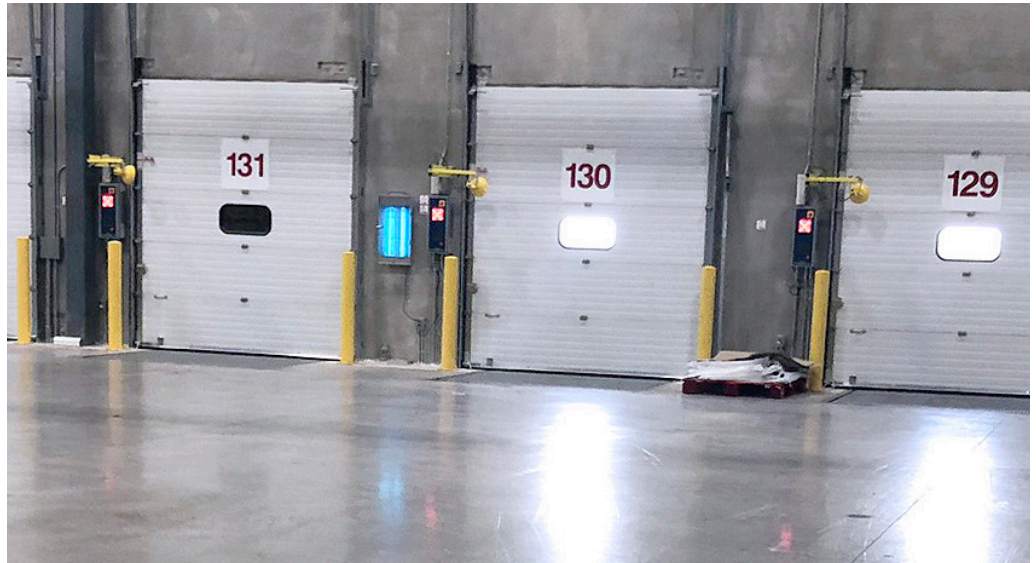
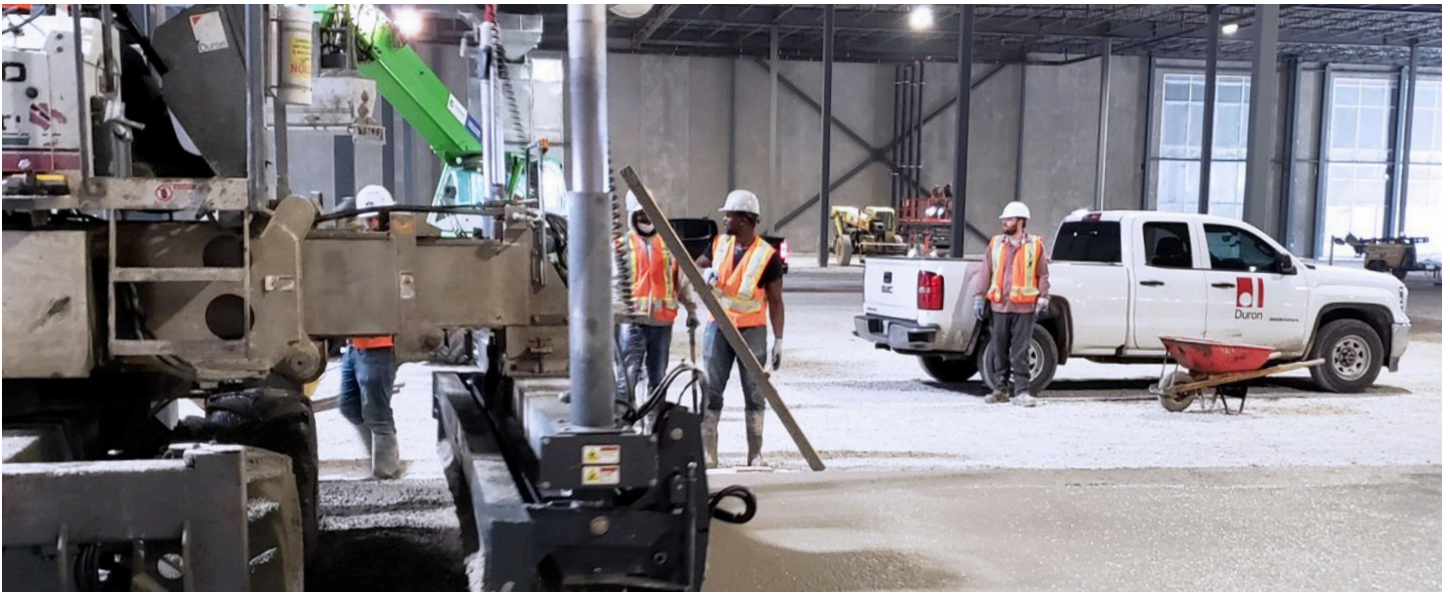


Fig.7 Loading Docks
Concrete was poured to hold vehicle restraint and dock leveler.



The docking system required special designs to handle large volume, heavy-duty shipping and receiving applications.



*Fig. 8 Mars Industrial Canada Concrete Installation
Somero installation with ground heating.*

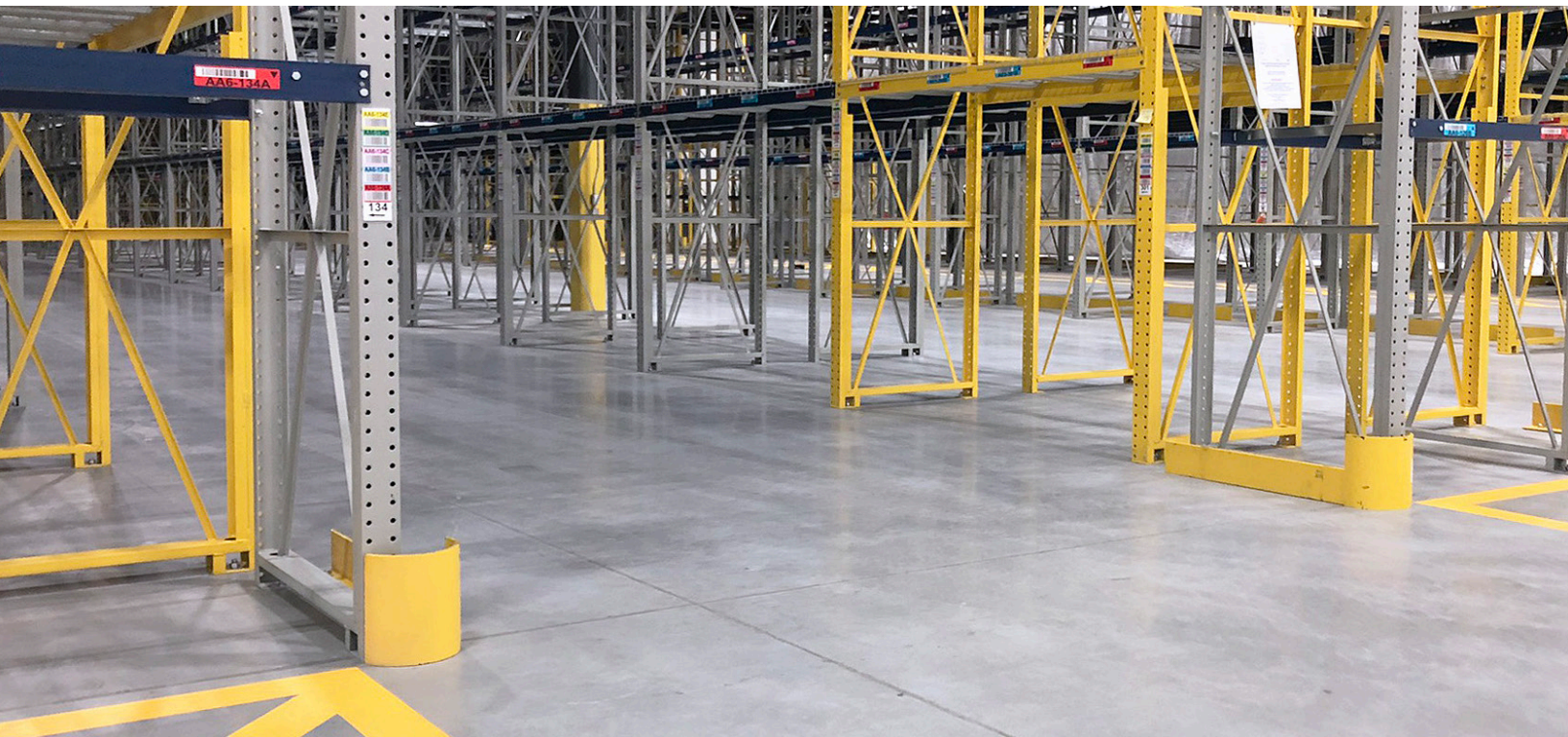
OVERCOMING CHALLENGES

SITE CHALLENGES

Due to delayed municipal site planning approvals, the construction schedule of Mars Industrial Canada was delayed. Winter had set in by the time the concrete floor pour took place and the ground had to be heated to melt snow and frost, and to ensure a dry base. The large 400,000+ sq. ft. building was tarped in sections to more reasonably heat the ground and this necessitated a high degree of co-ordination with the General Contractor to follow the path of the heated sections. Duron's pour sequence had to be re-designed to accommodate the phased heating of the building.

COVID-19

The year of 2020 posed many difficult challenges in the construction industry. Due to the heightened COVID-19 epidemic, Duron had to take extra measures to ensure the safety of our workers and their families. To minimize the potential spread of the corona virus, Duron took every precaution and went above provincially mandated standards. Workers were provided additional PPE such as face coverings and sanitation products, and their temperatures were taken daily before being allowed on site. Duron is proud to have not had a single employee test positive for COVID-19.



DURON ONTARIO LTD.

MARS INDUSTRIAL CANADA
CREDIT SHEET

8400 George Bolton Pkwy, Bolton, Ontario

ARCHITECTS

Ware Malcombe

OWNER

Mars Industrial Canada

STRUCTURAL ENGINEER

Dorlan Engineering

GENERAL CONTRACTOR

Leeswood Construction

READY MIX SUPPLIER

Dufferin

FORMWORK CONTRACTOR - BUILDING & FOUNDATION

Duron Ontario Ltd.

MECHANICAL ENGINEER

Brumar Engineering

ELECTRICAL ENGINEER

Accel Electric

LANDSCAPE ARCHITECT

MHBC

CIVIL ENGINEER

AM Candaras

LEED CONSULTANT

Ecovert

ENERGY/ENVIRONMENTAL

Ecovert

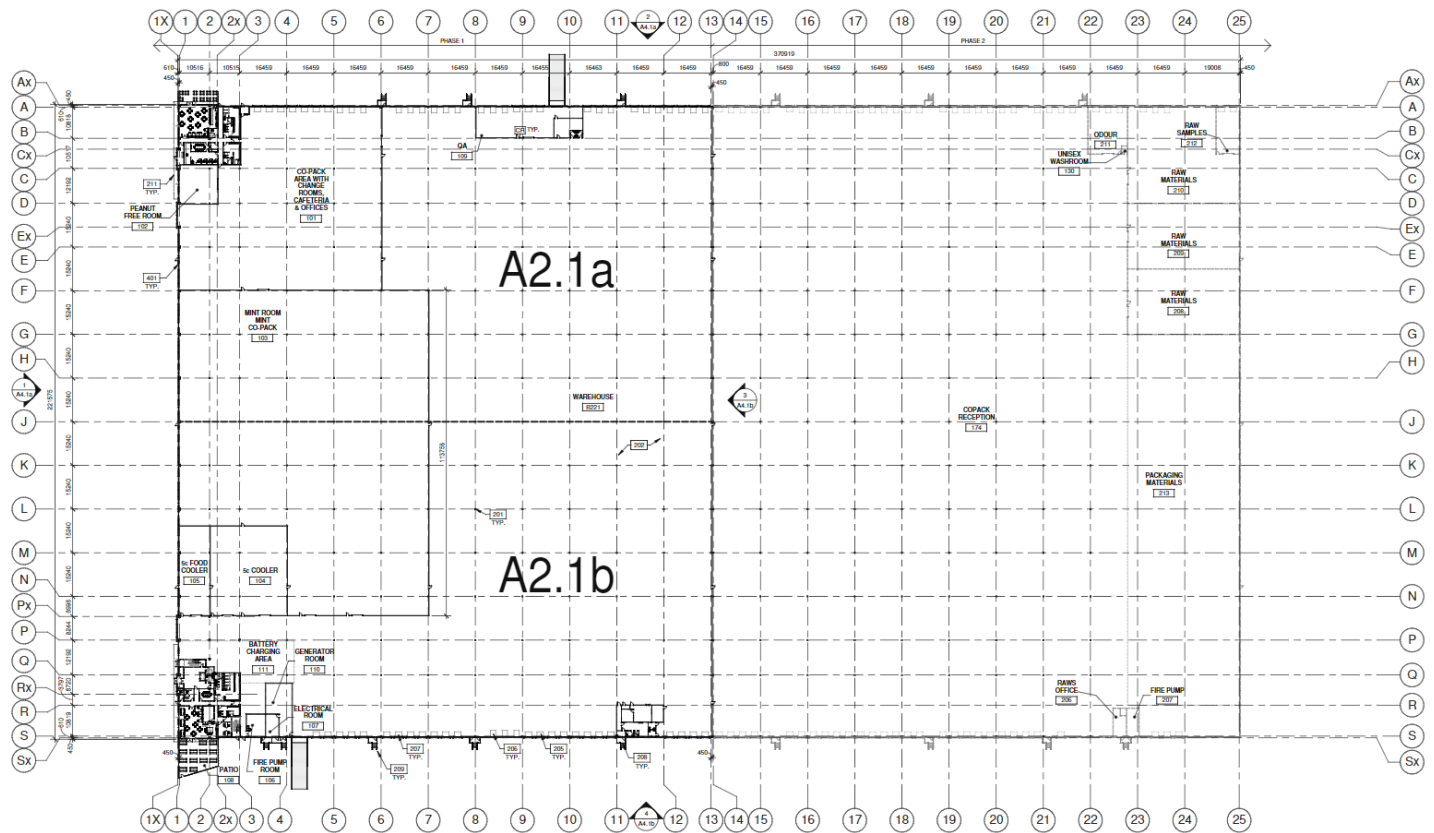


Fig. 9 Mars Industrial Canada Overall Ground Floor Plan

Mars Industrial Canada is a 400,000 sq. ft. state-of-the-art logistics centre strategically located near Canada's two largest intermodal yards.

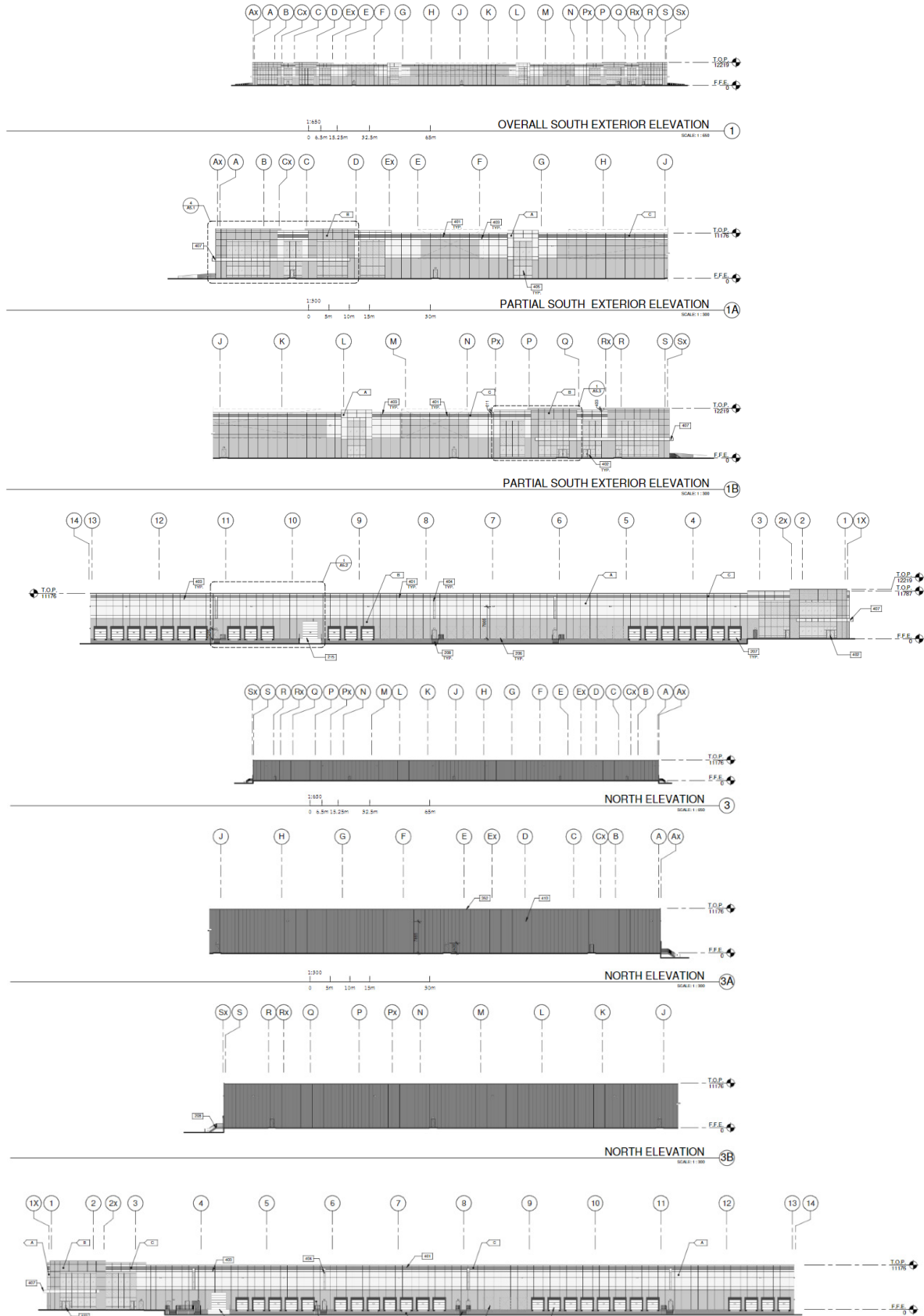


Fig. 10 Mars Industrial Canada Elevation Plan

This busy logistics facility was designed with a total of 46 loading docks, which required a high attention to detail when installing the concrete base.



Fig. 11 Mars Industrial Canada Elevations

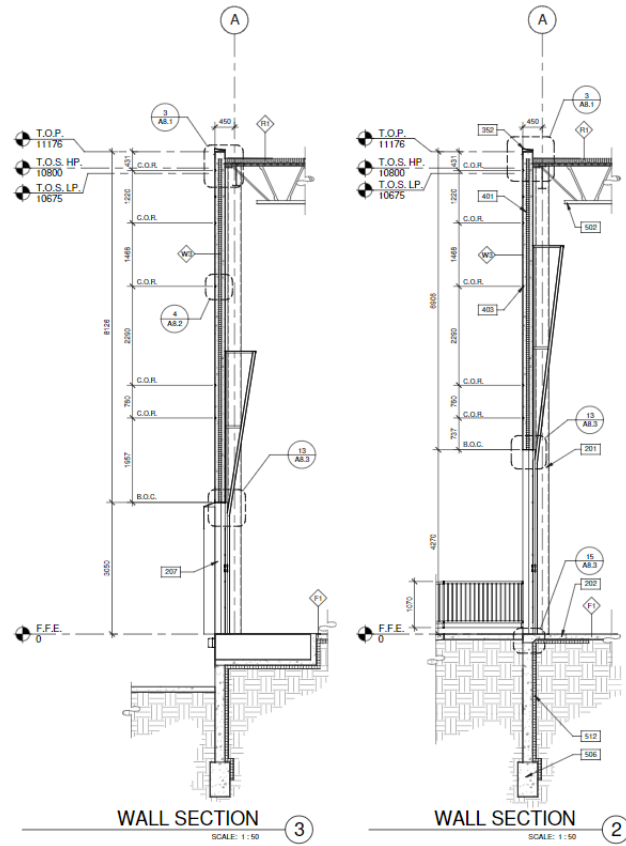


Fig. 12 Mars Industrial Canada Docking Area

The docking system required special capacity designs to handle large volume, heavy-duty shipping and receiving applications.



DURON ONTARIO LTD.

1860 Shawson Dr,
Mississauga ON
L4W 1R7
Canada

Phone
(905) 670 1998 x140

Fax
905 670 4662

Email
eadams@duroon.ca

Website
www.duron.ca

