

Public Information Meeting - 14 September 2015

New Champlain Bridge Corridor Project



Meeting Objective

To provide information on the Highway 15 works
of the New Champlain Bridge Corridor Project in
the Verdun and Sud-Ouest boroughs
up to March 2016

including anticipated impacts and
mitigation measures

and to answer your questions

Agenda

- Welcome
- Introduction to the team
- Project overview
- Overview of the work
 - Urban integration
 - Description of the work
 - Anticipated impacts
 - Mitigation measures
- Communications
- Question period

JEAN-FRANÇOIS PARENTEAU

VERDUN BOROUGH MAYOR

Welcome



DANIEL GENEST
COORDINATION DIRECTOR
SIGNATURE ON THE SAINT-LAURENT

MARTHE ROBITAILLE
ENVIRONMENT DIRECTOR
SIGNATURE ON THE SAINT-LAURENT

Partners

CANADA

PRIVATE PARTNER



DESIGN-BUILD JOINT VENTURE



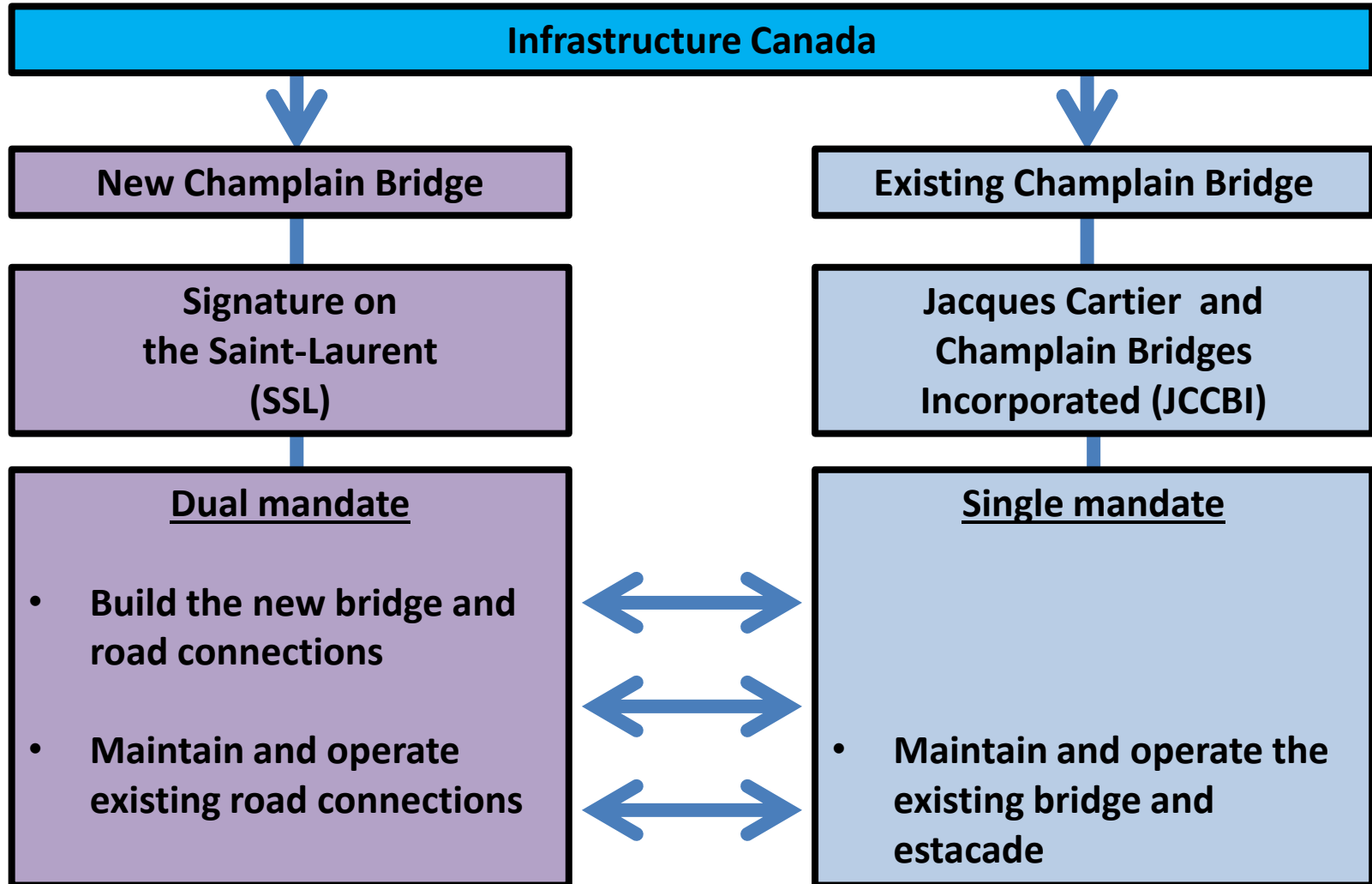
BRIDGE DESIGN TEAM



HIGHWAY DESIGN TEAM

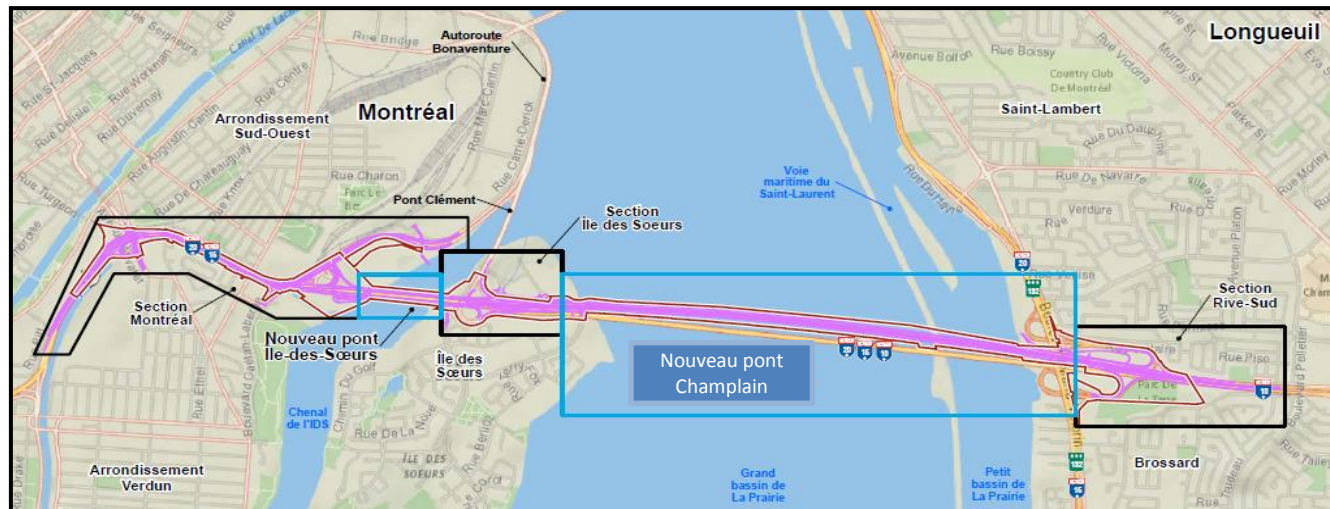


Two Complementary Mandates : 2015 to 2019



General Project Overview

- The New Champlain Bridge Corridor Project is one of the **largest infrastructure projects** in North America
- The project covers the construction of:
 - The new Champlain Bridge, length of 3.4 km
 - The new Nuns' Island Bridge, length of 500 m
 - Improvements to the approaches (Hwy 15 in Montréal and Hwy 10 in Brossard) over a length of 4.5 km



- Bridge commissioning at the end of 2018, with all road work ended by fall 2019

Important Improvements to the Current Situation

Atwater Ave

- Improved Hwy 15 access

LaSalle Blvd and Wellington St

- Improved pedestrian links

New bridge

- Bridge of international stature
- Dedicated public transit corridor
- Pedestrian and bicycle connection



Hwy 15

- Increased number of lanes

Gaétan-Laberge Blvd

- Improved Hwy 15 access
- New access to downtown, harmonized with the city's long term vision

Major Project Activities since our Selection in mid-April

- Major communication efforts with elected officials, municipal teams, citizens and businesses
- Detailed design
- Construction of large-scale temporary works (to support the construction of the new Champlain Bridge): two large jetties essentially completed and a third on its way
- Establishment of construction site facilities in the Pointe Nord sector of Nuns' Island and south of the Gaétan-Laberge interchange
- Planning of construction activities for permanent works : new Champlain Bridge and road connections

West Jetty











Cable Stay Jetty



Overview of the Works : September 2015 to March 2016

Legend : Impacts of Work

- Traffic : 
- Residential proximity : 
- Public transit : 
- Bicycle paths : 

Description of activity Construction period planned Approximate duration of work			
			

Colour-coded indication of impact level:

Minor impact
Moderate impact
Major impact

Breakdown of Hwy 15 Sector - Montreal



Hwy 15 Sector :

September 2015 to March 2016

Priorities:

- Relocation of some public utilities
- First roadworks
- Start of demolition of the Nuns' Island Bridge
- Demolition work on May Street
- Design and planning of the 2016 construction season works

Approach:

- Daytime work, ***to the extent possible***, when the impacts particularly with respect to noise are significant
- Nighttime work, ***to the extent possible***, when the impacts on daytime traffic are too significant

Design and planning ***in development***
thus, in both cases, modifications are possible

Work and Impacts :

Sector 1 - Atwater Interchange



- Demolition of the Hwy 15 median
- Construction of a temporary ramp
- Relocation of public utilities



 Toward Décarie

Toward Champlain Bridge 

Urban Integration : Atwater Avenue



Work and Impacts :

Sector 1 - Atwater Interchange

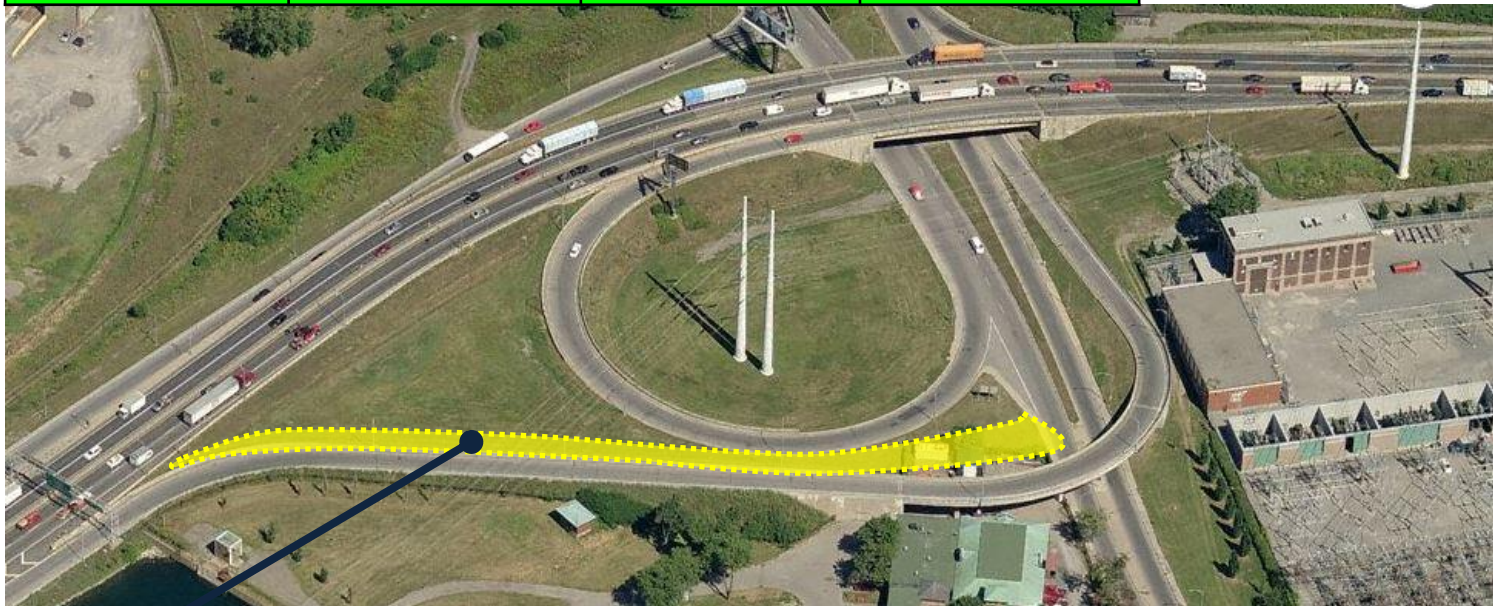
Demolition of the existing Hwy 15 median
Period planned : October 2015
Duration : 3 to 5 days



Work and Impacts :

Sector 1 - Atwater Interchange

Construction of a temporary ramp
Period planned : October 2015
Duration : One month



Temporary ramp to prevent interruption of traffic during demolition of the Hwy 15S exit ramp toward Atwater in the summer of 2016

Work and Impacts :

Sector 1 - Atwater Interchange

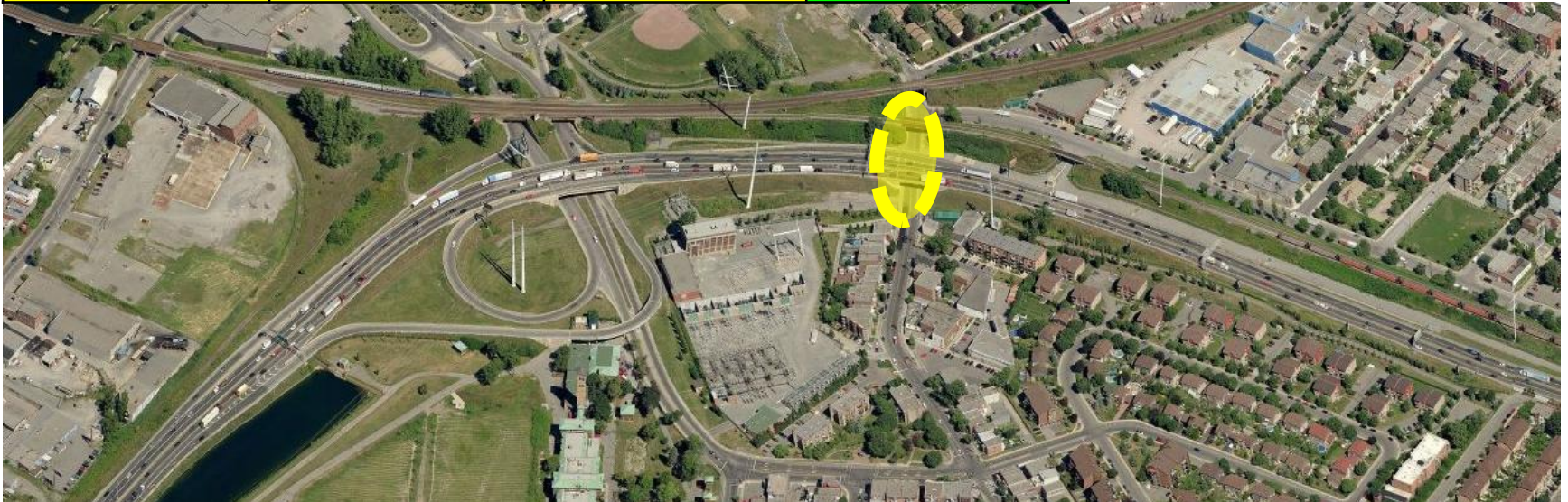
Relocation of watermain along Hwy 15N
Period planned : October to November 2015
Duration : 1.5 months



Work and Impacts :

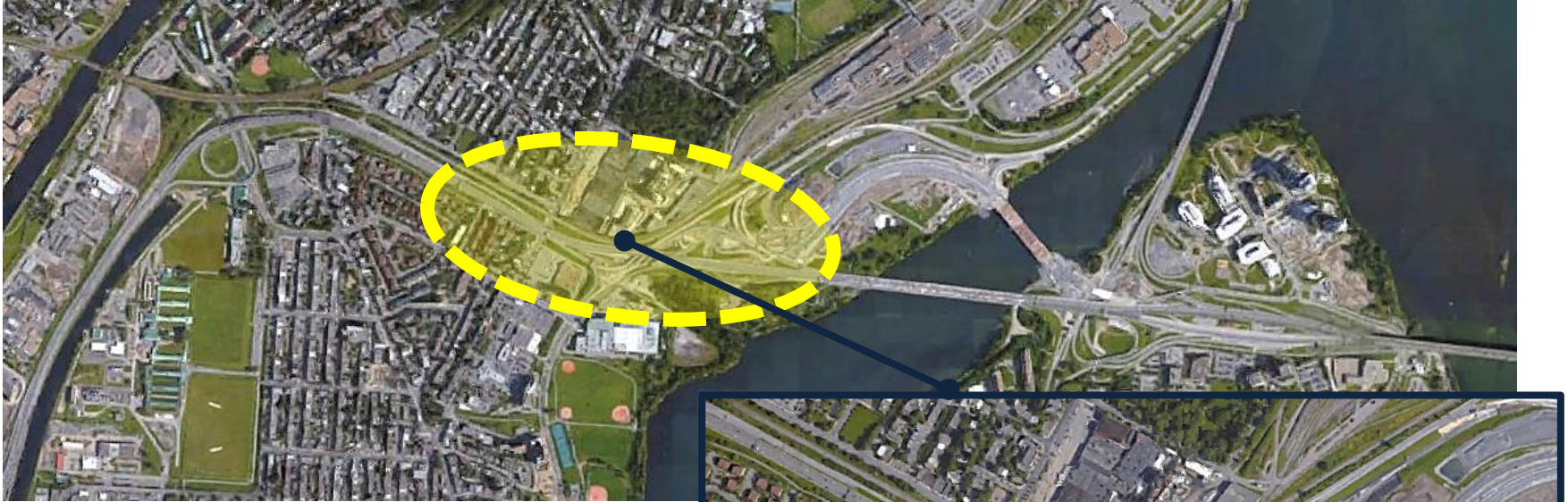
Sector 1 - Atwater Interchange

Relocation of public utilities of Lasalle Blvd.
Period planned : December 2015 to February 2016
Duration : 2 months

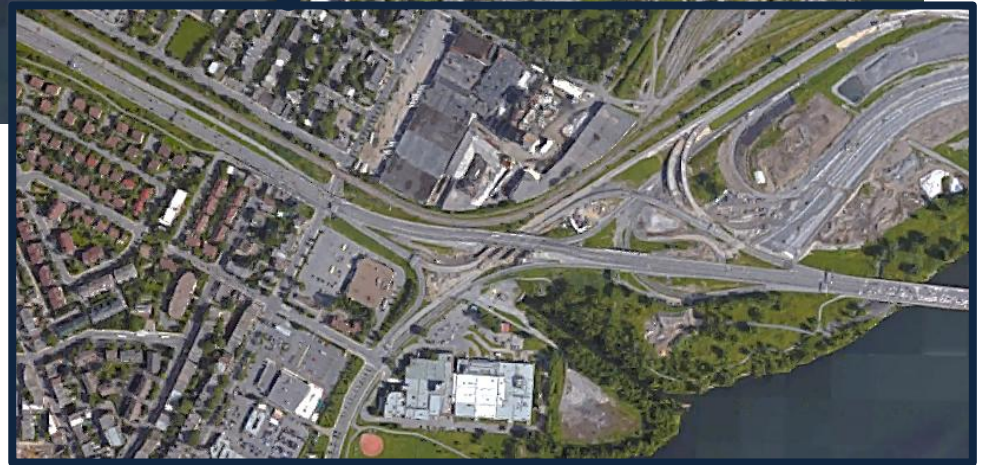


Work and Impacts :

Sector 2 - Gaétan-Laberge Interchange



- Demolition of the Hwy 15 median
- Demolition of May Street houses
- Relocation of public utilities



Toward Décarie

Toward
Champlain
Bridge

Urban Integration: Between LaSalle Boulevard / Wellington Street



Widening of Hwy 15

- Reduction of the buffer zone South of Hwy 15
- 1 m increase of the current profile of Hwy 15
- Construction of a noise barrier South of Hwy 15
- New landscaping

Urban Integration : May Street



Urban Integration : Gaétan-Laberge Boulevard



BEFORE



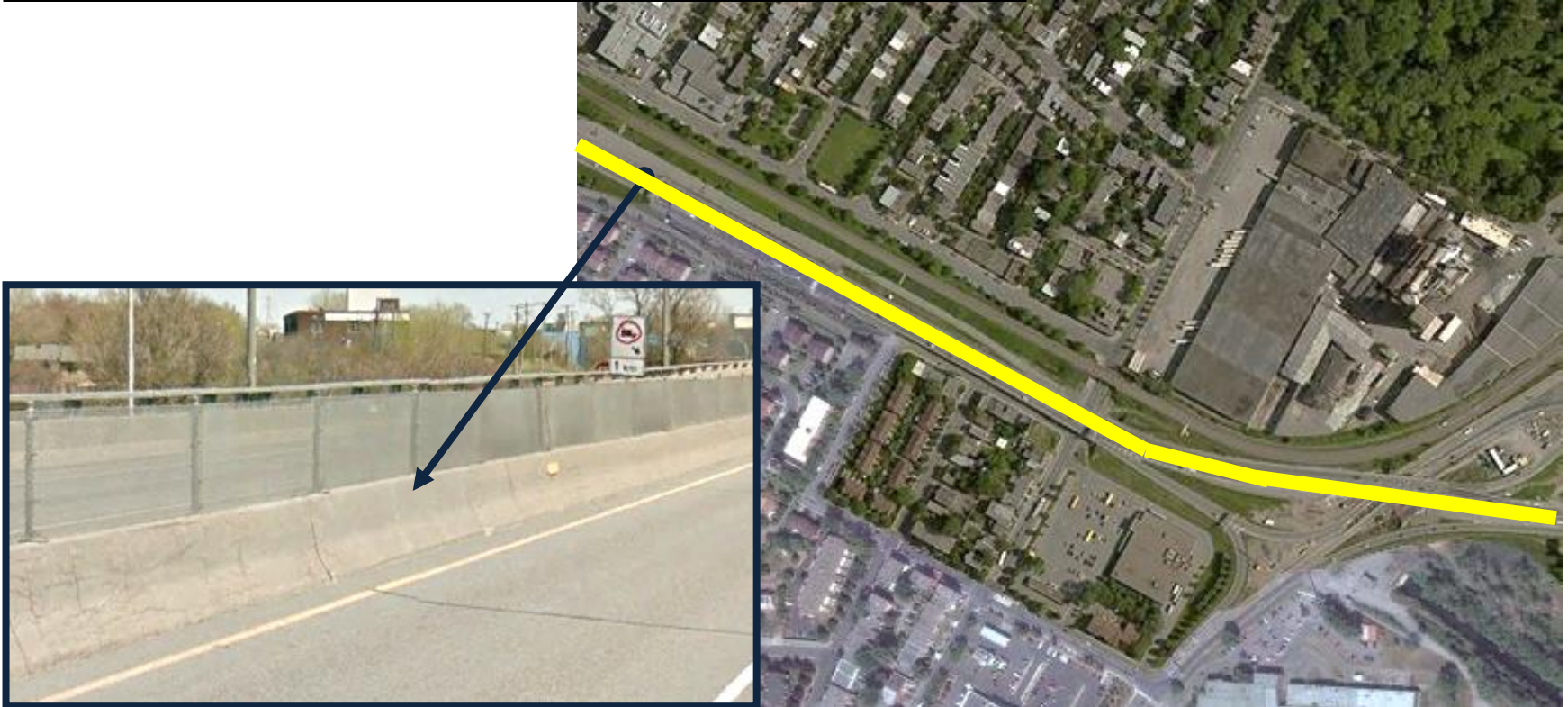
AFTER



Work and Impacts :

Sector 2 - Gaétan-Laberge Interchange

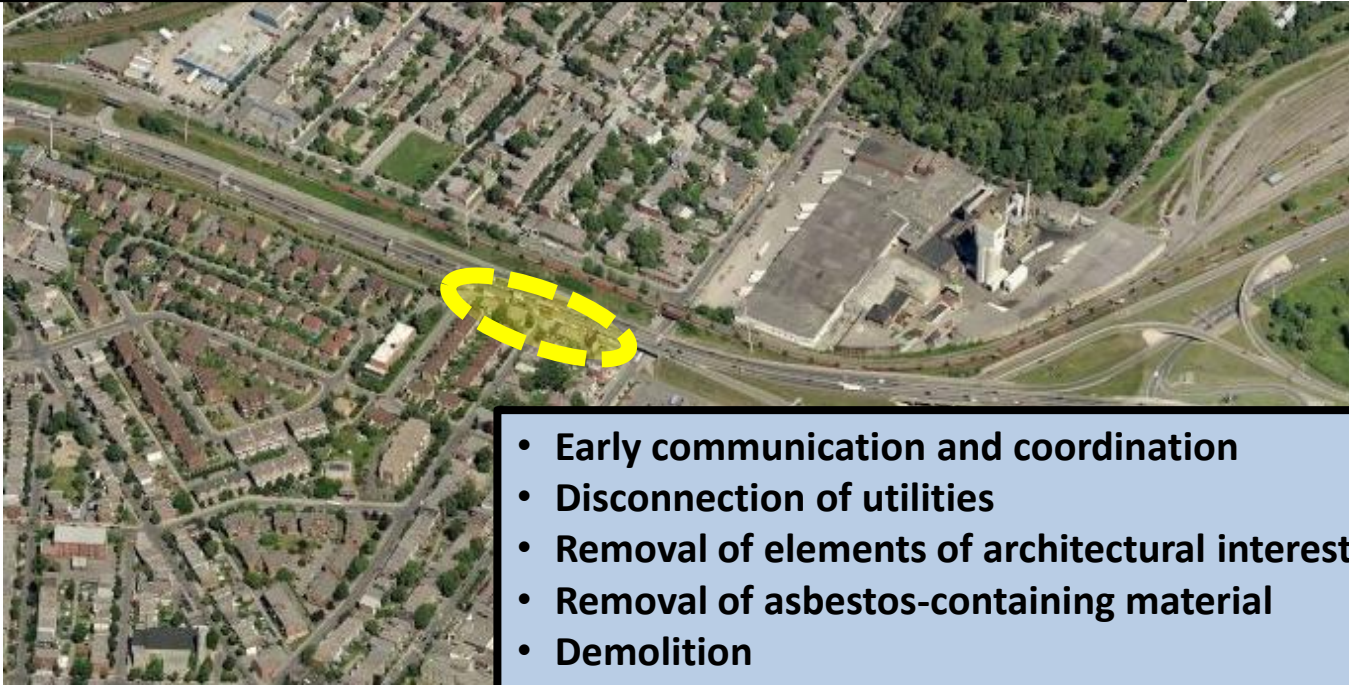
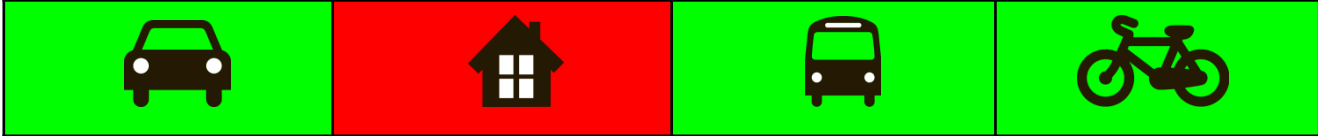
Demolition of the existing Hwy 15 median
Period planned : October 2015
Duration : 3 to 5 days



Work and Impacts :

Sector 2 - Gaétan-Laberge Interchange

Demolition of the houses on May Street
Period planned : end September to end November 2015
Duration : 2 months



- Early communication and coordination
 - Disconnection of utilities
 - Removal of elements of architectural interest
 - Removal of asbestos-containing material
 - Demolition
 - Noise, air-quality and vibration monitoring
- 

1 month



1 month

Work and Impacts :

Sector 2 - Gaétan-Laberge Interchange

Relocation of watermain along Hwy 15S
Period planned : November 2015 to February 2016
Duration : 2 months



- Early communication and coordination
- Excavation and relocation
- Noise, air-quality and vibration monitoring

Work and Impacts :

Sector 2 - Gaétan-Laberge Interchange

Relocation of public utilities on Wellington Street
Period planned : December 2015 to January 2016
Duration : 1.5 months



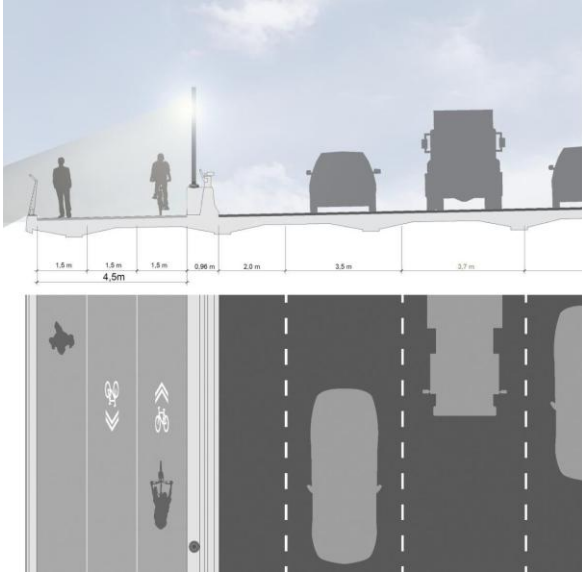
Work and Impacts : Sector 3 - Nuns' Island



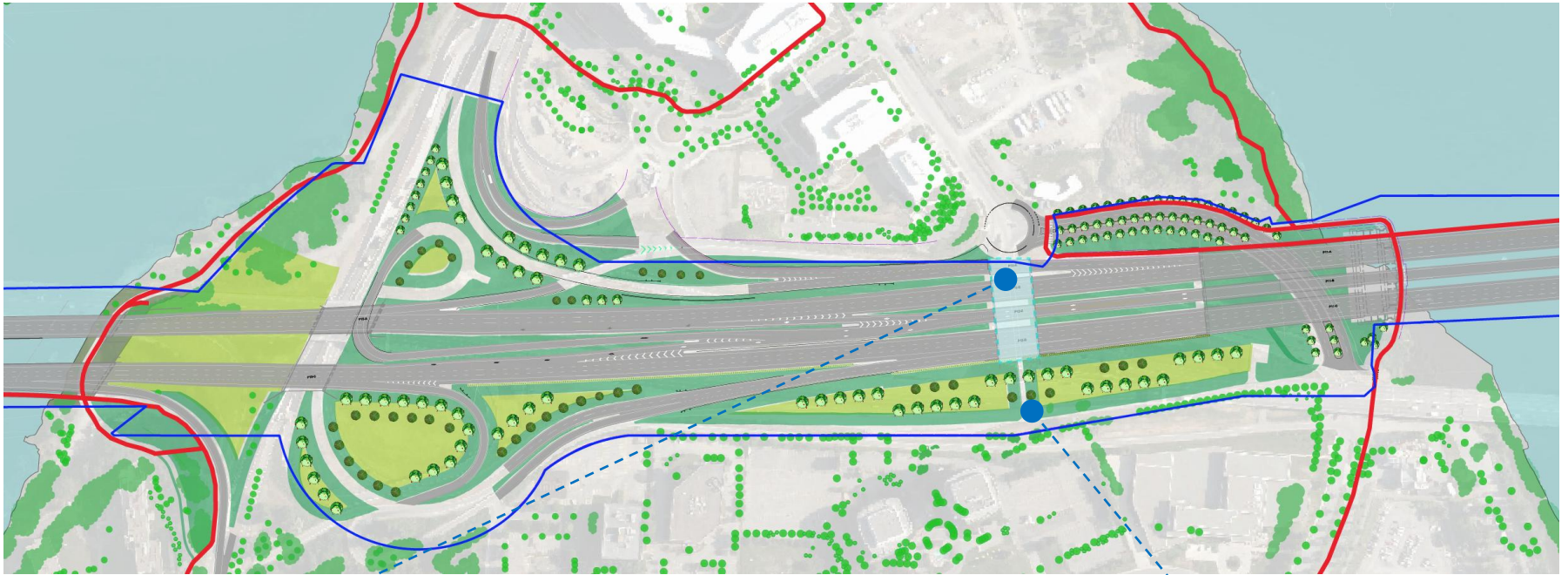
- Demolition and reconstruction of Nuns' Island Bridge

Note: Work planned for the West Jetty of the new Champlain Bridge will be presented at a public information meeting in October on Nuns' Island.

Urban Integration : Nuns' Island Bridge



Urban Integration : Nuns' Island



Work and Impacts : Sector 3 - Nuns' Island

Demolition and reconstruction of the bridge
Period planned : October 2015 to September 2017
Duration : 24 months



Guiding Principles: Work Safety

1. Create and maintain safe conditions for all:
 - Road users, cyclists and pedestrians
 - Residents and merchants
 - Workers

2. Minimize impacts

Work Site Impacts and Mitigation Measures

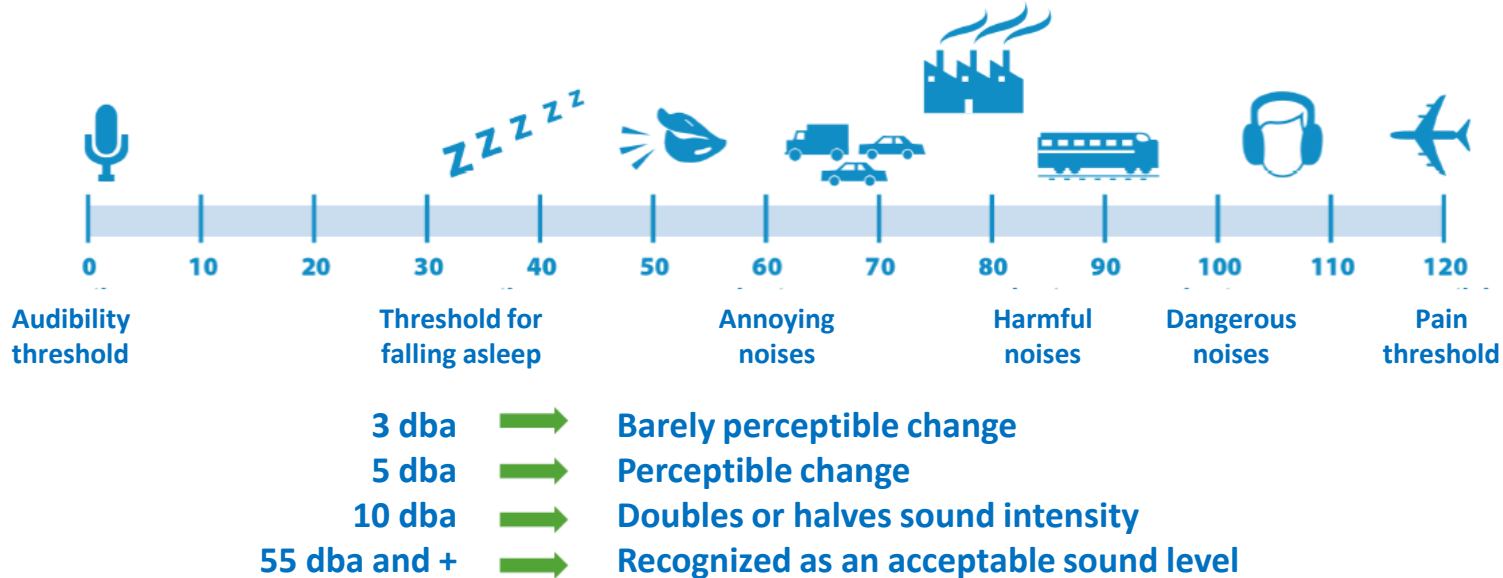
- Noise
- Air quality
- Vibrations
- Green spaces

Noise Management

NOISE CRITERIA

- Day (7:00 a.m. to 7:00 p.m.) : 75 decibels or 5 decibels above ambient noise level
- Evening and night (7:00 p.m. to 7:00 a.m.) : 5 decibels above ambient noise level

Basic notions



Sound levels do not increase linearly

Doubling the sources of noise ≠ doubling the level of noise

Noise Management

Location of sensitive zones – Montreal Island



Location of sensitive zones – Nuns' Island



Ambient noise levels (May 2015) / estimated (August 2015)

	Work period (D / E / N)	Most exposed sensitive zone	Ambient noise in dba (D / E / N)	Criterion in dba (D / E / N)	Estimated noise in dba	Temporary screen
Demolition of the median barrier	D / E / N	M3	61 / 60 / 59	75 / 65 / 64	80	Required M1/M2/M3
Construction of access ramps	D	M3	61	75	69	Not required
Relocation of watermains	D	M3	61	75	90	Required M3
Demolition of houses on May Street	D	M3	61	75	100	Required M2/M3
Construction of jetties in Nuns' Island channel	D	I1	57	75	66	Not required
Demolition of Nuns' Island Bridge	D	I1	57	75	73	Monitoring required
Concrete crushing	D	M3	61	75	63	Not required

Overall mitigation measures:

- Use variable intensity back-up alarms
- Organize traffic in order to minimize backing up
- Minimize production of impact noise (truck tailgates)
- Make site superintendants and employees aware of the importance of respecting the noise mitigation measures

Special mitigation measures:

- Install temporary acoustic screens
- Monitor noise levels during construction
 - At the beginning of critical activities to check the effectiveness of the screens
 - 1 to 2 times every two weeks
 - Check when there are complaints

Location of sensitive zones



Regulatory framework

- Contractual environmental obligations
- Applicable norms

Particulate Matter Norms	
PMT	PM _{2.5}
120 ug/m ³	30 ug/m ³

Air Quality Management

- Main mitigation measures for the entire work site :
 - Transport of materials in dump trucks with tarp covers
 - Appropriate maximum speed for vehicles, to reduce dust emissions on access roads
 - Spraying water on surfaces
 - Regular cleaning of the streets used by vehicles and machinery in order to remove any accumulation of loose material and other debris
 - If necessary, application of dust suppressant
- Additional monitoring measures for M2 and M3 :
 - Continuous monitoring of PMT and PM_{2.5} between April and October

Vibration Management

- Vibration monitoring and management program prepared by a specialized firm
- Program targets :
 - All residential, commercial and industrial buildings located within:
 - 50 metres of compaction work using vibrating rollers
 - 100 metres of construction work such as the use of rock breakers, pile drivers, sonic pile drivers, cable drills, dynamic compaction, etc.
 - Any other activity that can cause vibrations that would threaten the structural integrity of any building or infrastructure

Management of Green Spaces

Diversified tree and plant vegetation



Management of Green Spaces

Requirements :

- The construction of the project requires the clearing of spaces to build the new bridges and road connections, and the work site installations, thus necessitating the removal of shrubs and trees
- The clearance zones are within the project federal right-of-way in the boroughs of Verdun and Sud-Ouest

Approach :

- Minimize the cutting of trees, taking into account worksite imperatives
- The removal of shrubs and trees is overseen by the environment management team

Prior to removing trees :

- Conduct a vegetation survey
- Obtain a tree cutting permit from the boroughs
- Relocate brown snakes, if necessary
- Preserve and protect vegetation that is to be saved
- Ensure that contractors are aware of and adhere to the « Environmental Specifications »

After the work :

- Restore the disturbed land
- Reforest in compliance with contractual requirements, including a landscaping plan

Communications with Citizens

- **Public information meetings** : one to two times per year, by sector
- **Good neighbourly relations committee : CINPA**
 - Call for candidates : 21 September to 5 October 2015
 - First meeting : late October / early November 2015
- Our website www.nouveauchamplain.ca will be online soon
- Subscribe / contact us at:
 - Email: info@ssl.ca
 - Telephone: (514) 876-1020
 - Twitter: @NOUV_CHAMPLAIN

Next Steps

- The activities will be faster-paced and more complex in the next nine-month period (April to December 2016)
- Plan for a public information meeting in March / April 2016

Question Period