## Capilano Water Main Project



### **EUCCA** presentation

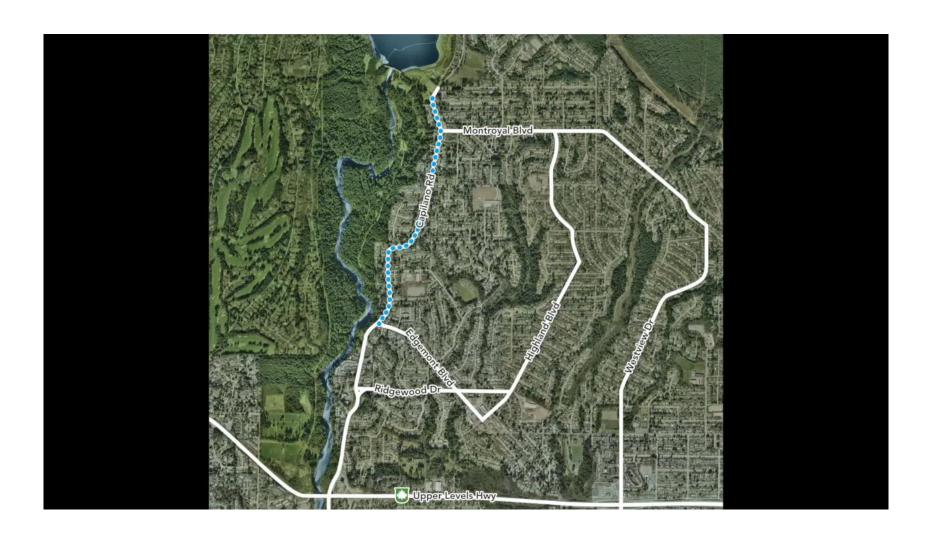
- 1. Project Overview
- 2. Schedule
- 3. Minimizing Impacts
- 4. Traffic Management 1-4
- 5. Transit
- 6. Communication Update



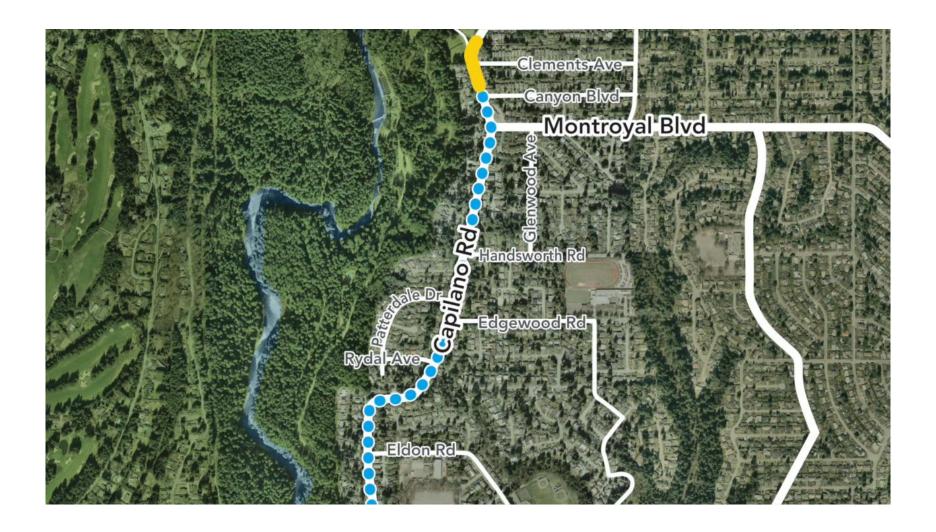
## **Project area**



### 200-metre construction zone



### 200-metre construction zone

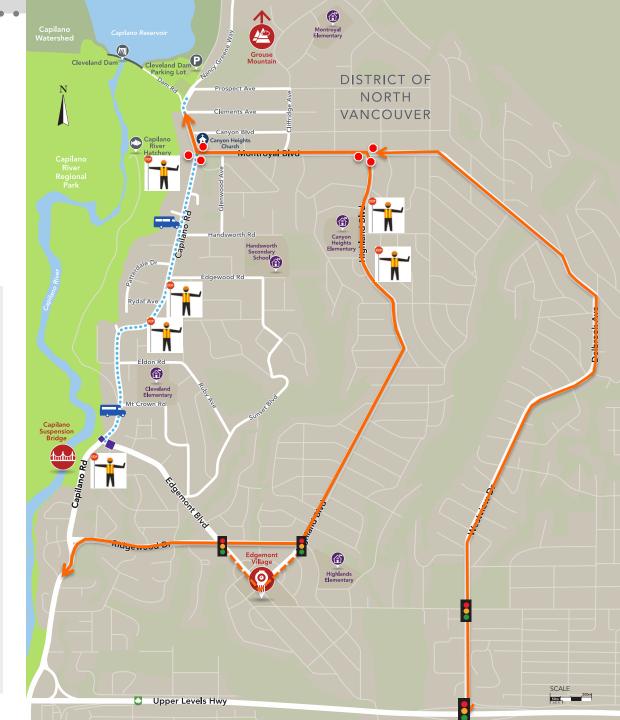


# Project overview

#### Legend

- New Pipe Alignment
- Valve Chambers
- → Detour Routes
- Shuttle Bus
- New Temporary All-Way Stops
- Temporary Signal Control
- School

  Traffic Control + 4



### **Project timeline**

Timeframe:	January 2013 – August 2015	August 2015 – January 2016	January 2016 – April 2016	May-June 2016
Project Activity:	Project planning, design, and preparation	Construction  — Pipe Installation	Construction  - Valve Chamber	Project complete and final restoration

### Minimizing project impacts

- Construction zone 200m
- Capilano Road open to local traffic
- Capilano Road Local Access Pass





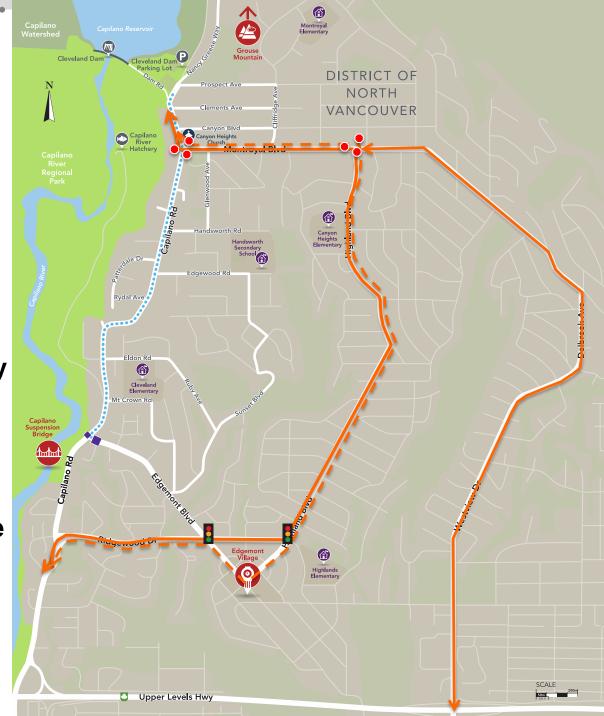
# **Managing Traffic - 1**

**Coordinating with DNV** 

Keep traffic moving, safely

Ensure safety in project area and on detour routes

Ensure emergency vehicle access at all times

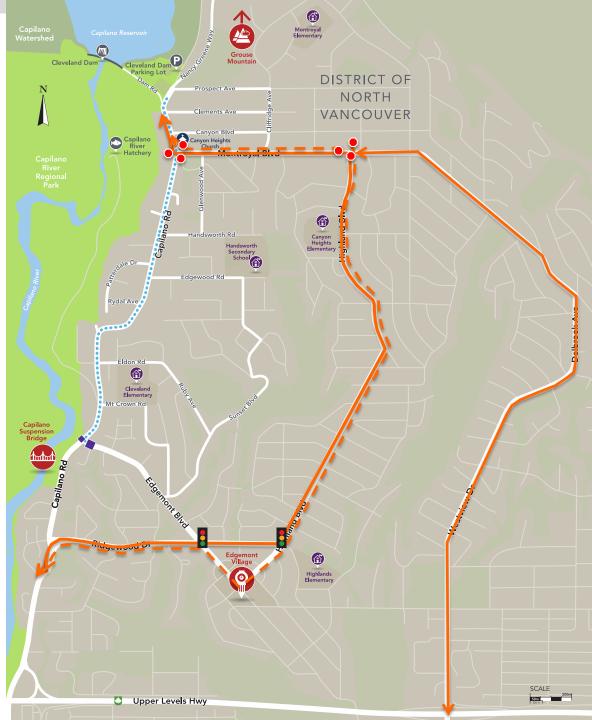


# Managing Traffic - 2

September 2015 – January 2016

Detouring commuter traffic away from the project area





# Managing Traffic - 3

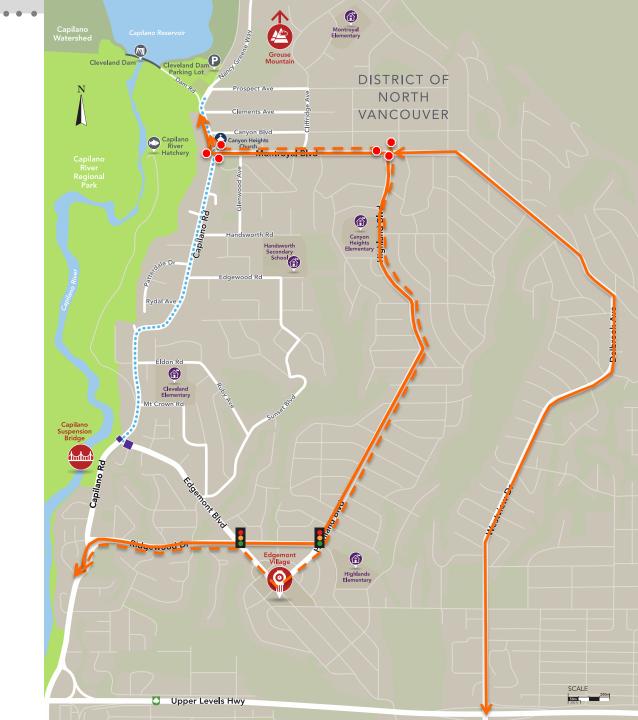
### **Monitoring**

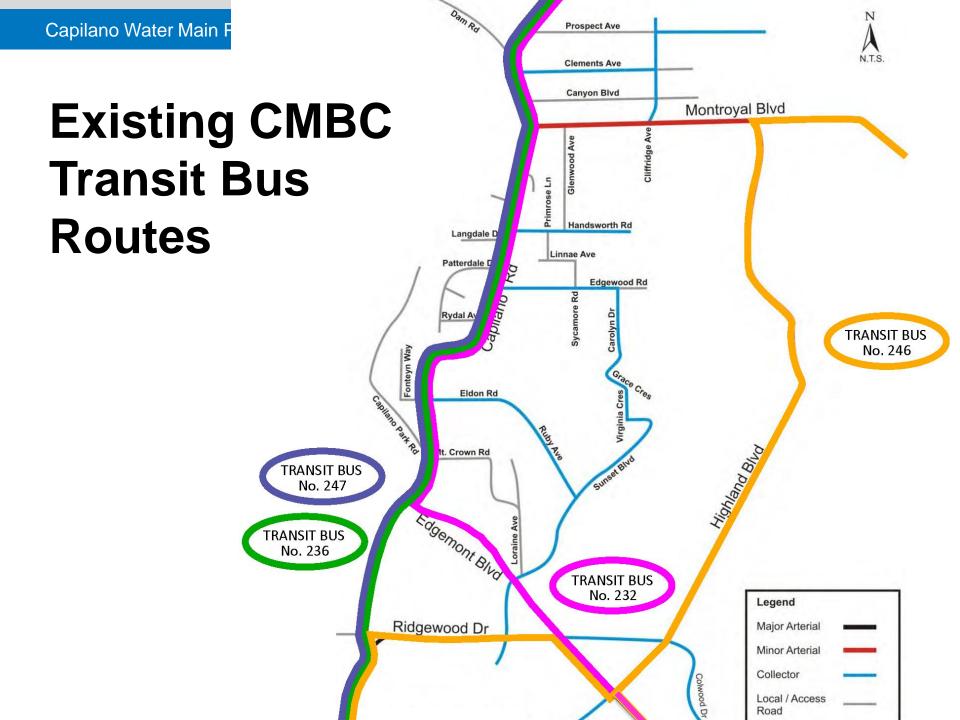
- CLO, Traffic Engineering consultant on site
- RCMP
- Traffic cameras at key intersections
- Contractor's Traffic Management Supervisor
- Daily meetings between DNV staff, Traffic consultant, and MV staff on traffic management

Capilano Water Main Project

### Managing Traffic - 4

**Streets review** 



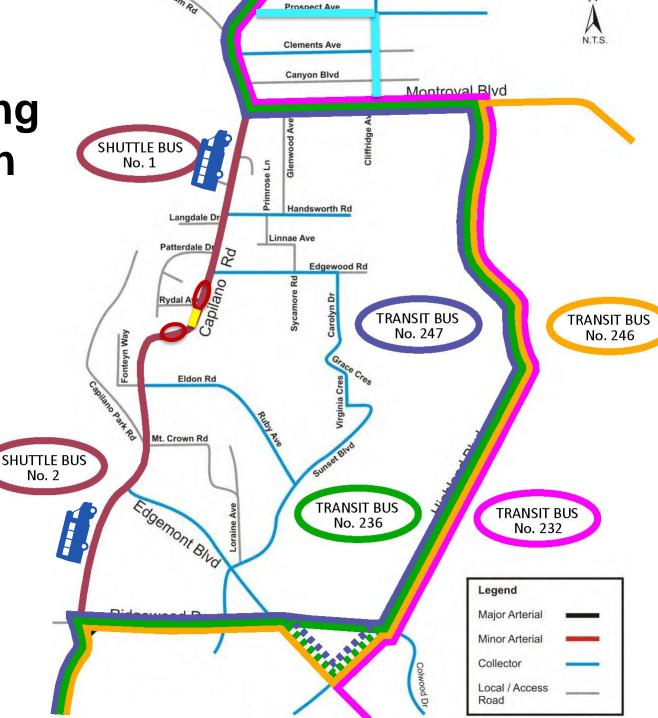


# Capilano Water Main Pro

Transit During Construction Detour

- Transit shuttle
- Bus detours
- Effects on local street parking

Community shuttle buses

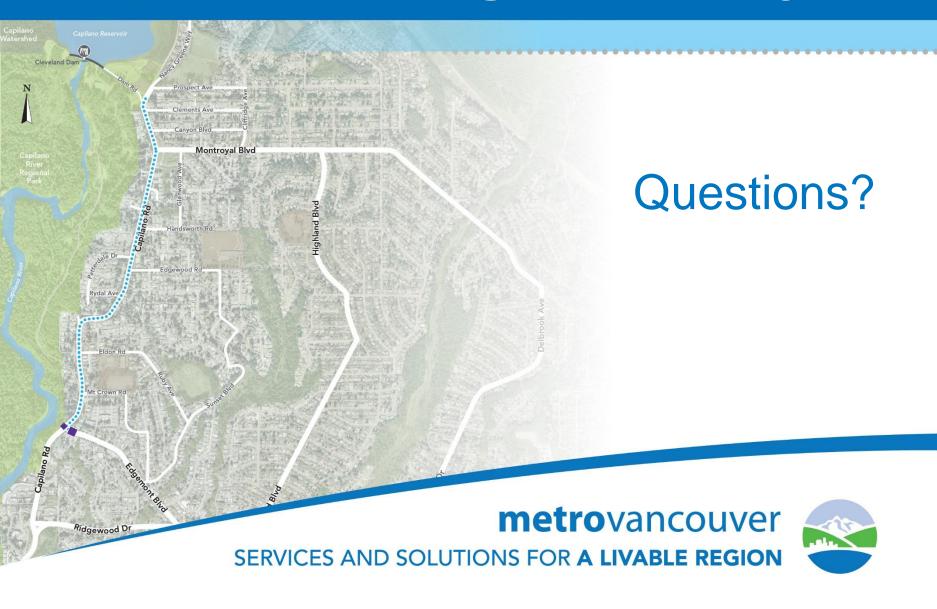


# Community outreach and communications



Timeframe	January 2013 – August 2015	August 2015 – January 2016	January 2016 – April 2016	May-June 2016
Project Activity:	Project planning, design, and preparation	Construction  — Pipe Installation	Construction  - Valve Chamber	Project complete and final restoration
Community outreach activity:	Initial outreach, stakeholder and community meetings, public meeting	Ongoing community engagement	Ongoing community engagement	Final communications

## Capilano Drinking Water Project





Project scale

### **Construction traffic - deliveries**







### **Construction traffic - pipe delivery**





### **Construction traffic - pipe installation**

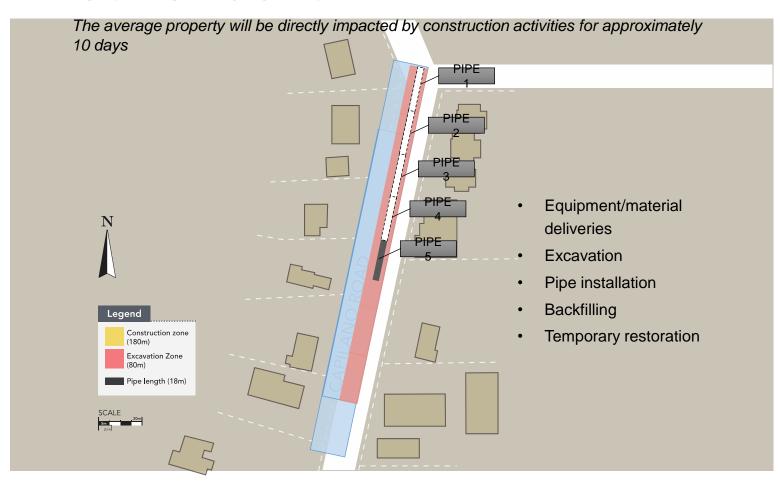




### Construction traffic – hauling to/from

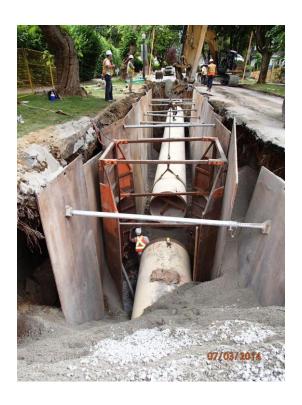


# Typical watermain construction



### Excavation





# Backfilling





## Temporary pavement

Installed following completion of each segment





## Temporary paving complete

Final paving of Capilano Road at end of construction



