

Niagara Region Wind Farm

Mountainview Road Construction Overview

November 25, 2015



Agenda

1. Introduction to Project Parties
2. Transmission Line Route Overview
3. Mountainview Road Construction Plan Overview
4. Mountainview Road Construction Schedule Overview
5. Detours & Traffic Management Overview
6. Q&A

1. Introduction to Project Parties

Project Owners



Wind Farm Contractor

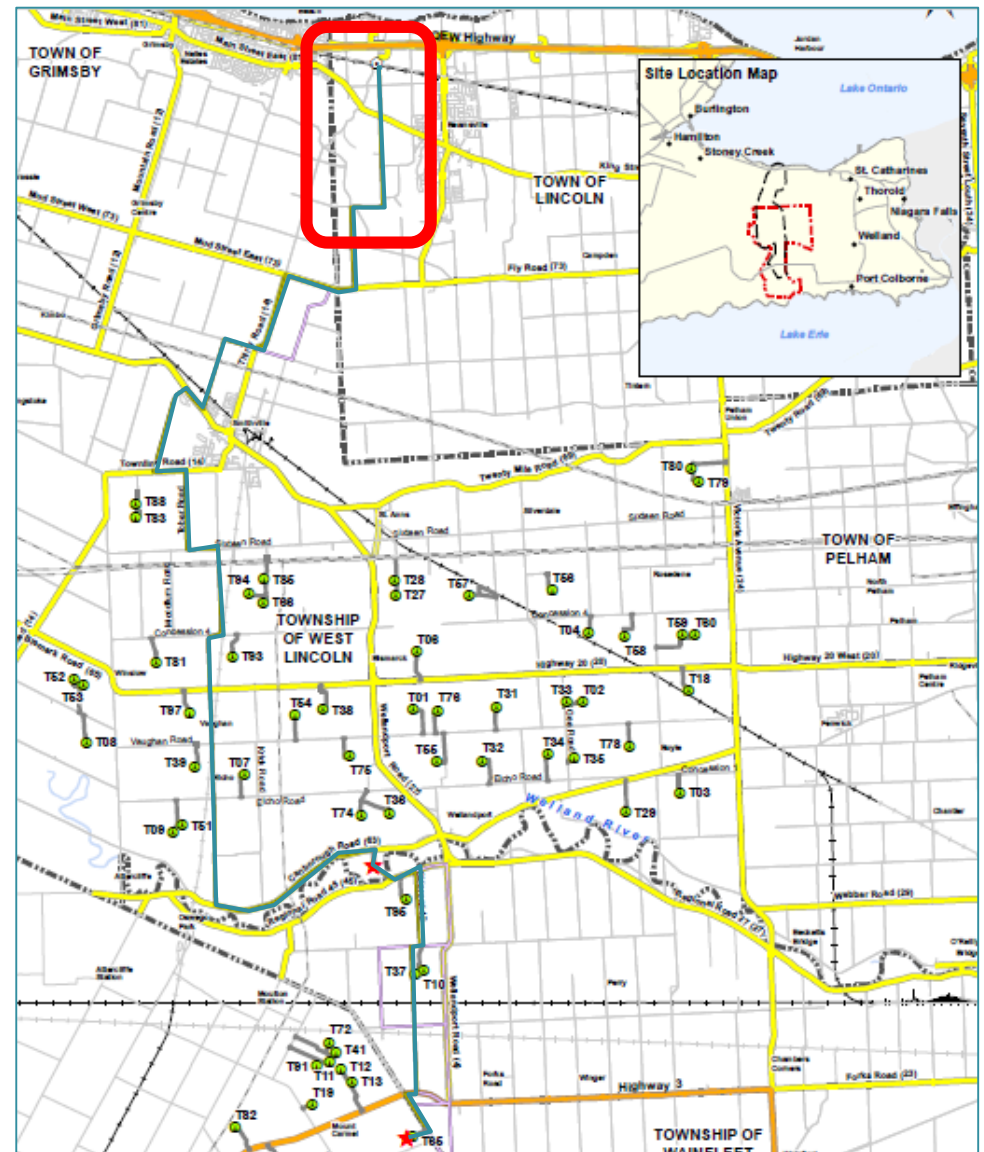


Transmission Line Contractor



2. Transmission Line Route Overview

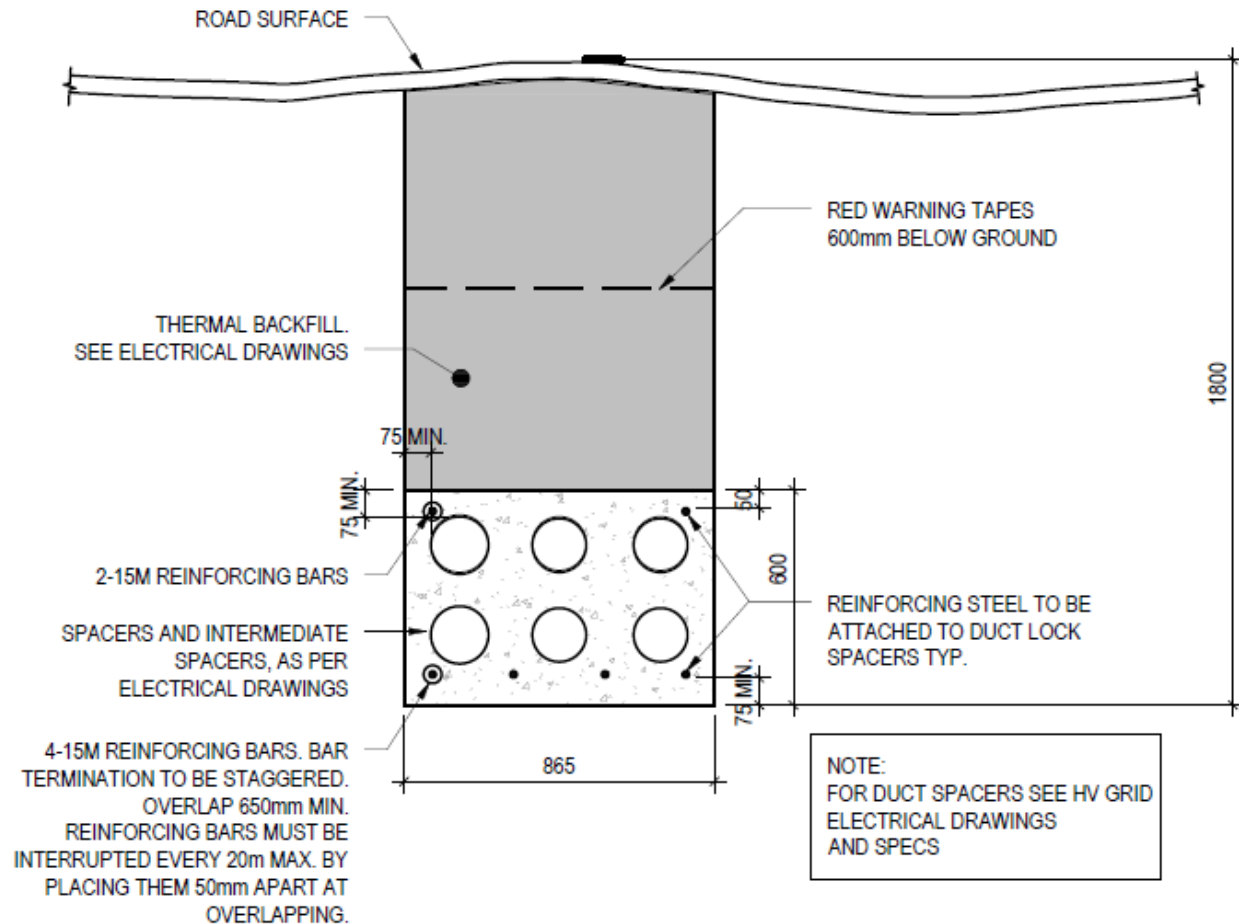
- About 40km long
- 289 poles
- Six underground sections, including the length of Mountainview Road



3. Construction Plan Overview

Duct Banks & Junction Boxes

Duct Bank: buried underground transmission line



3. Construction Plan Overview

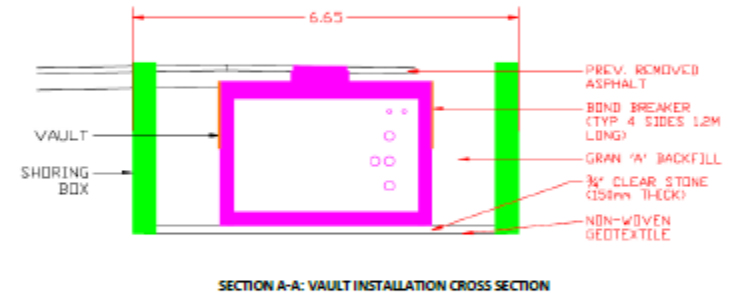
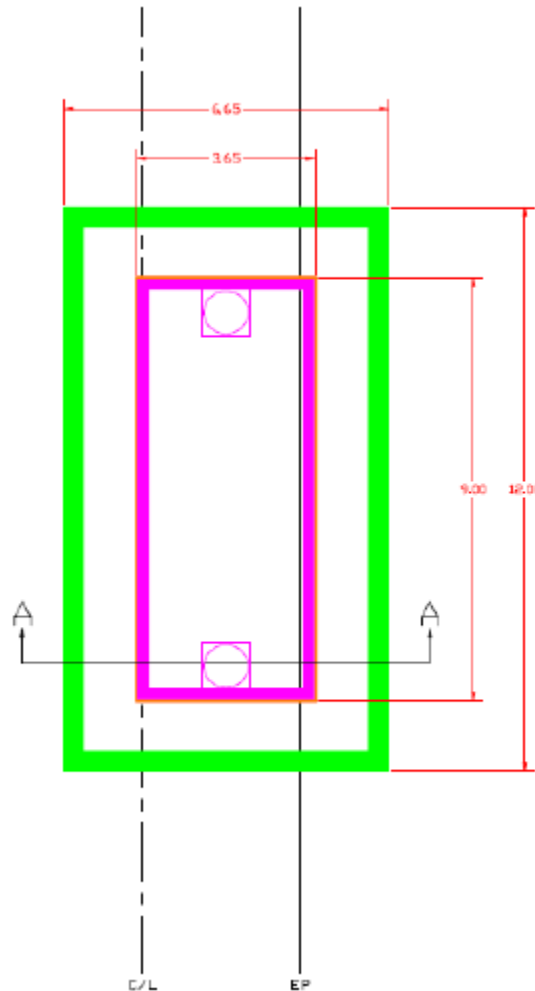
Duct Banks & Junction Boxes

Junction Box: buried vault where cables are spliced together

Width: 3.65 metres

Length: 9.00 metres

Depth: 2.60 metres



3. Construction Plan Overview

Duct Bank Installation Process Summary

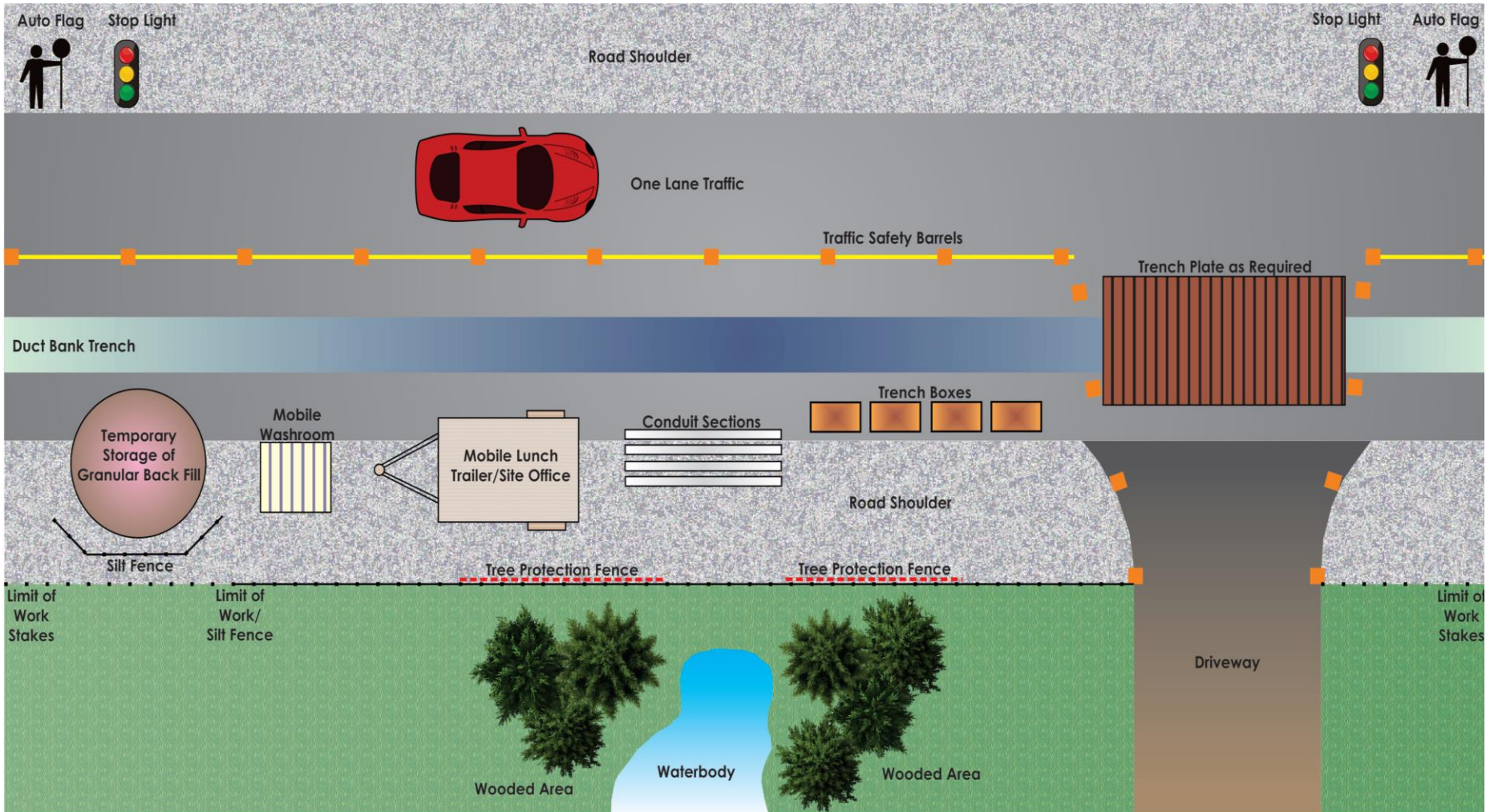
Process

- a) Cut and dispose asphalt road surface
- b) Mobilize to site (inc. set up of traffic barrels & signs)
- c) Excavator digs out trench area (5 – 6m at a time)
- d) Install conduit, spacers and rebar
- e) Pour concrete over conduit
- f) Backfill trench

Road to be resurfaced in Spring.

3. Construction Plan Overview

Duct Bank Installation Overview



3. Construction Plan Overview

Vault Installation Process Summary

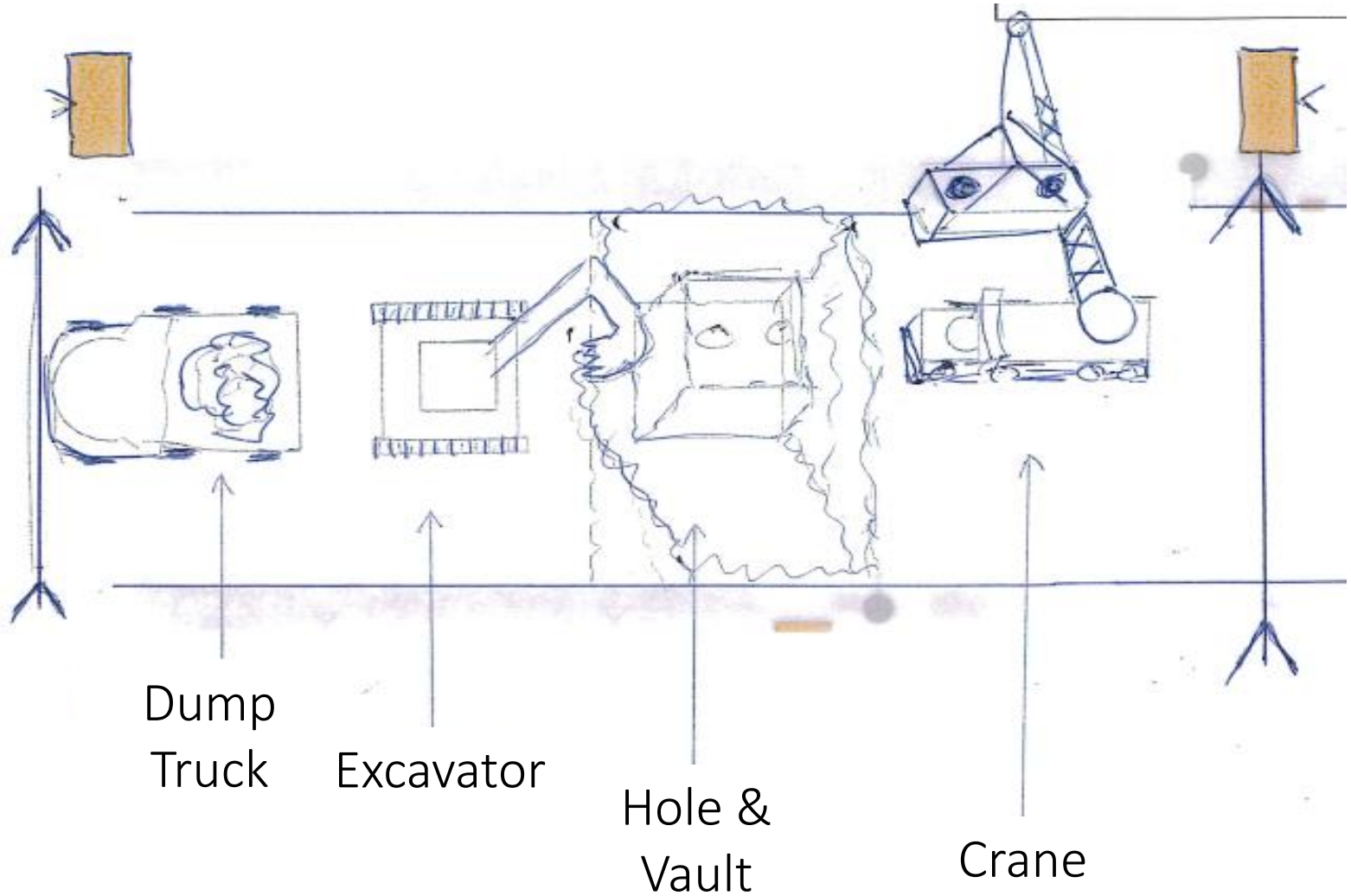
Process

- a) Cut and dispose asphalt road surface
- b) Mobilize to site (inc. set up of traffic barrels & signs)
- c) Excavator digs out vault pit
- d) Placement of shoring box
- e) Install vault & lid
- f) Backfill around vault

N.B. Cable installation will take place after duct bank and vault installations are complete and will require removal of vault lids.

3. Construction Plan Overview

Vault Installation Overview



3. Construction Plan Overview

Dust & Noise Control

Dust Control Measures

- Water trucks (hazard potential – ice forming)
- Calcium chloride
- Light brine solution
- Street brushes
- Proper housekeeping

Noise Control Measures

- Work within allowed hours
- Noise awareness training

4. Construction Schedule Overview

Duct Bank

Activity	Time Period
Mountainview Road Duct Bank Installation (North to South)	
• Interconnect to north of Greenlane Rd	January
• North of Greenlane Rd to north of King St	January – February
• North of King St to north of McLeod St	January – February
• North of McLeod St to south of McLeod St	January – February
• South of McLeod to north of Locust Ln	February
• North of Locust Ln to east of Konkle Rd	February
• East of Konkle Rd to Walker Rd (south of Mountainview Rd)	February – March
• Walker Rd	February – March

Average duct bank installation rate is 100 – 150m per day.

Duct bank installation will require lane closures only.

4. Construction Schedule Overview

Vaults

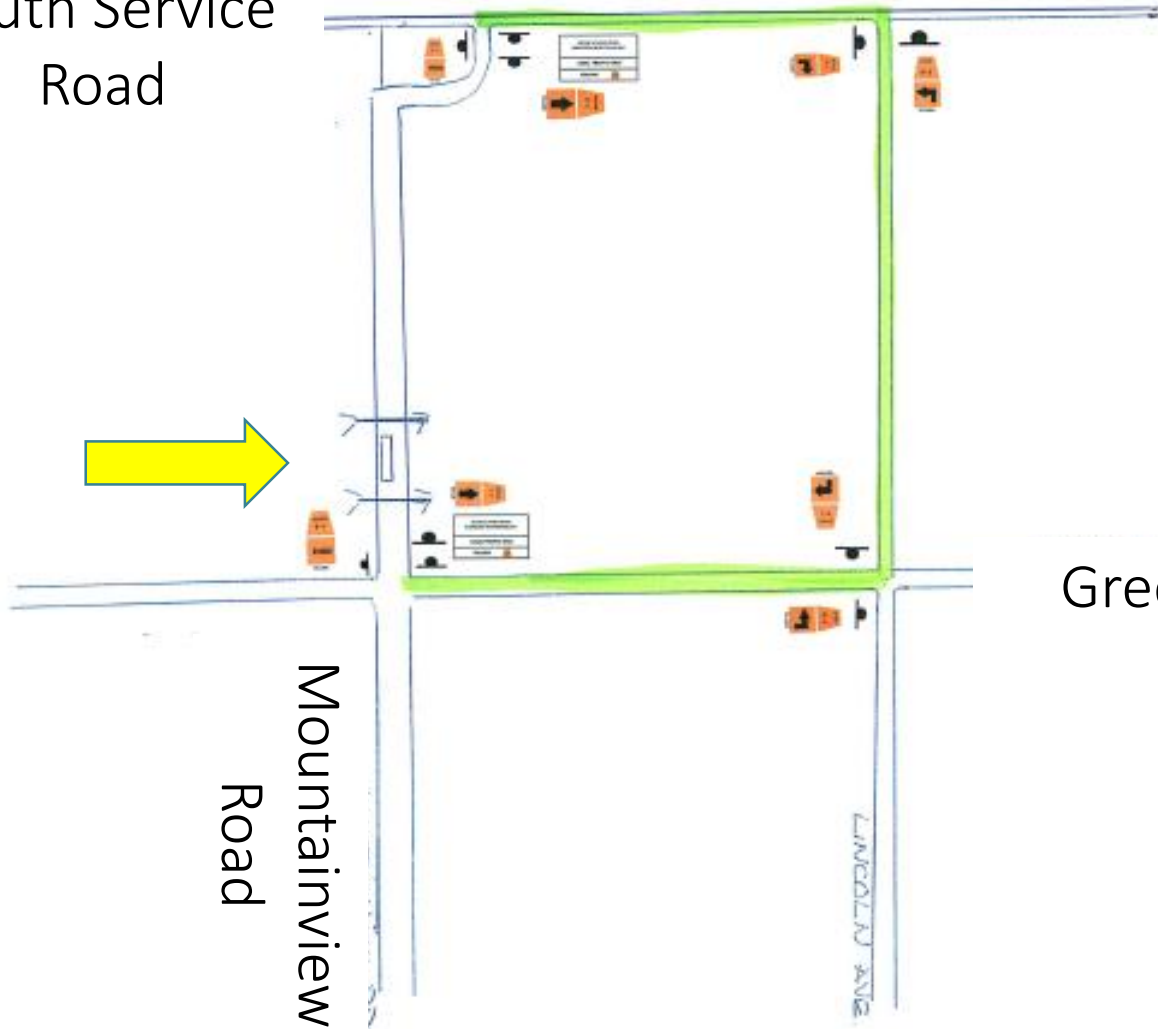
Activity	Time Period
Mountainview Road Vault Installation (North to South)	
• Vault 1 (south of 4621 Mountainview Rd)	January 5 – 7
• Vault 2 (in front of 4514 Mountainview Rd)	January 11 – 13
• Vault 3 (north of 4382 Mountainview Rd)	January 18 – 20
• Vault 4 (in front of 4282 Mountainview Rd)	January 25 – 27
• Vault 5 (south of corner of Mountainview & McLeod)	February 1 – 3
• Vault 6 (in front of 4056 Mountainview Rd)	February 8 – 10
• Vault 7 (between 3994 and 3980 Mountainview Rd)	February 15 – 17
• Vault 8 (south of 3994 Walker Rd)	February 22 – 24

Vault installation will require detours of non-local traffic.

5. Detours & Traffic Management

Vault 1 detour

South Service Road

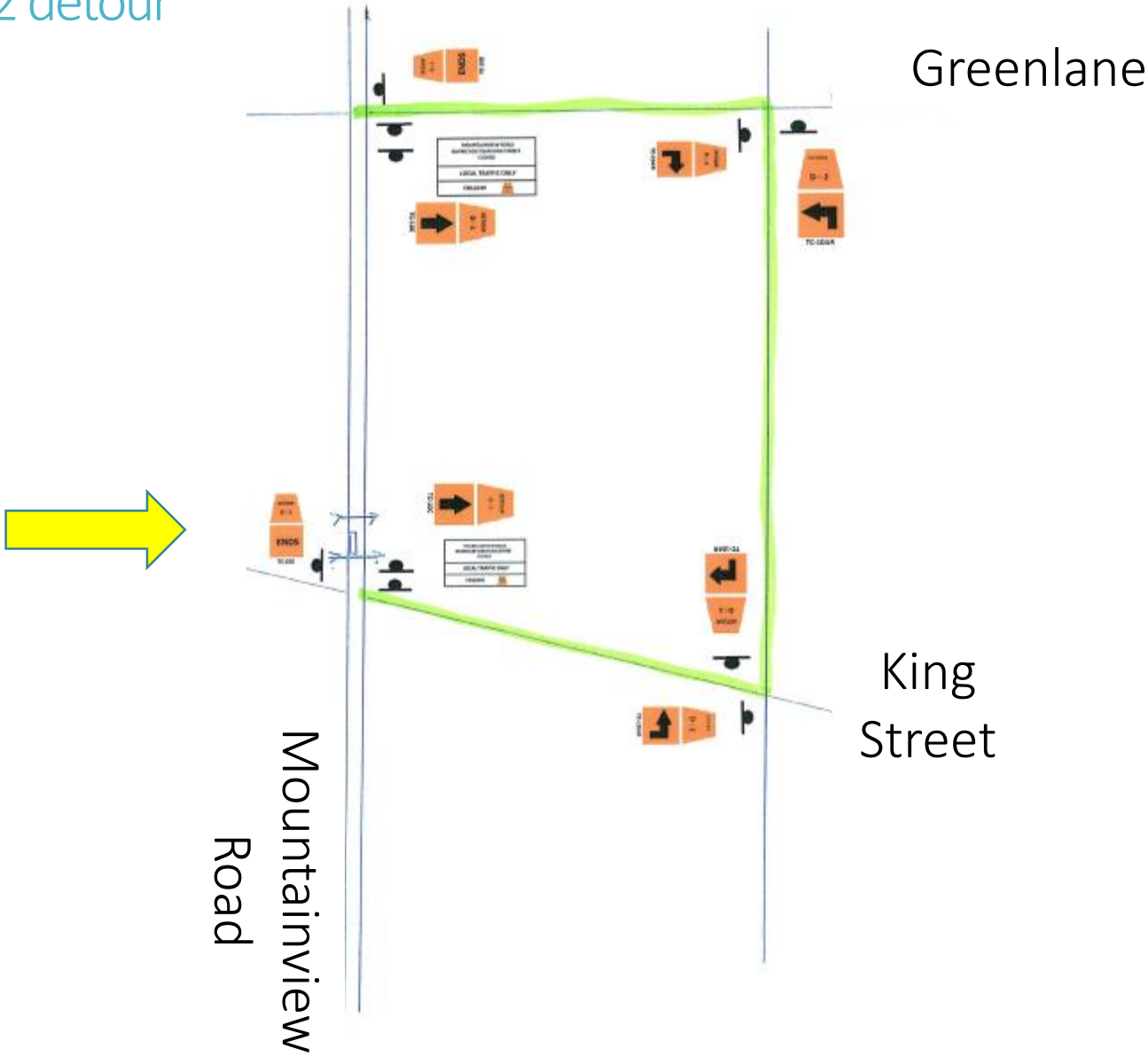


Greenlane

Mountainview Road

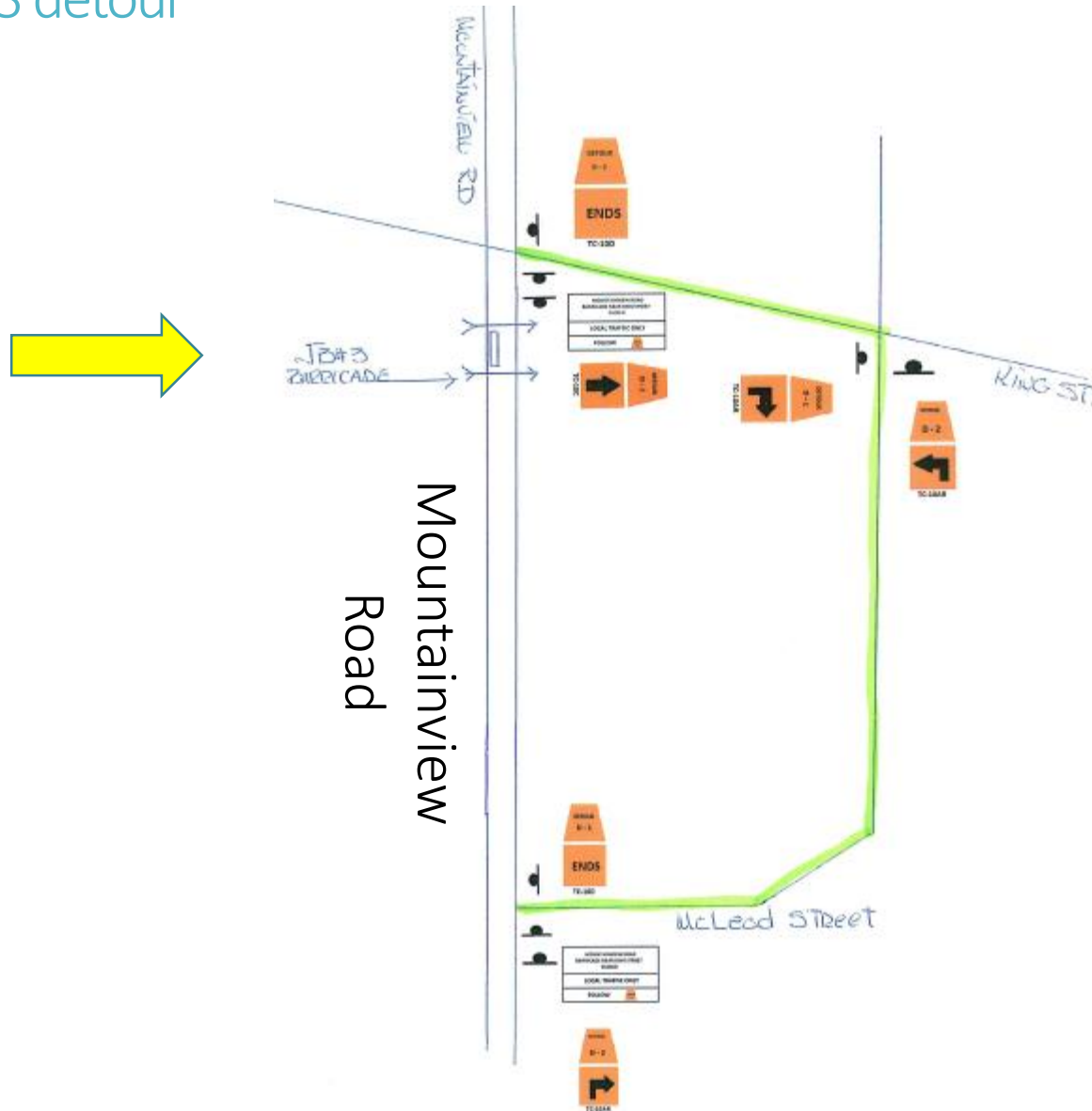
5. Detours & Traffic Management

Vault 2 detour



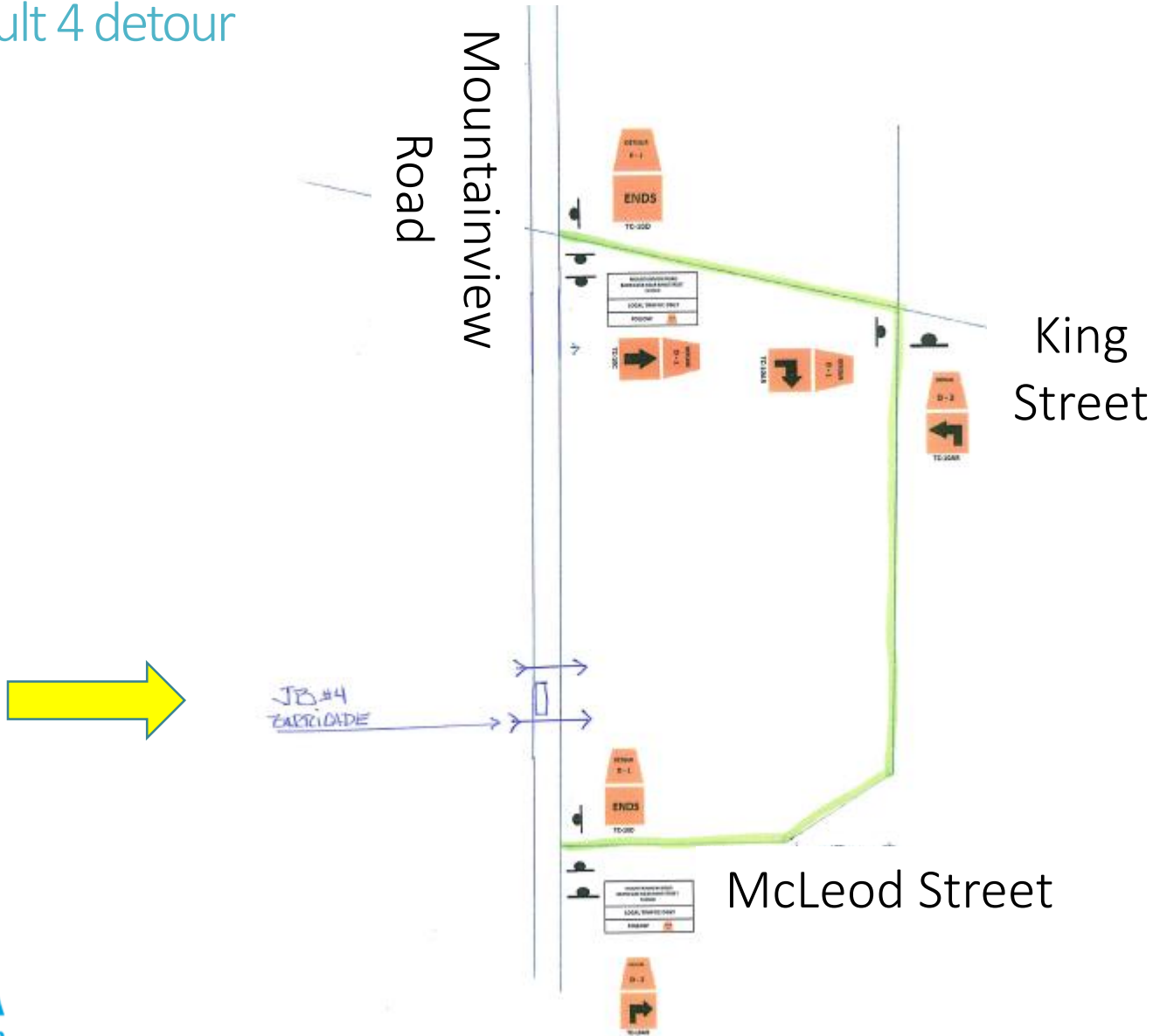
5. Detours & Traffic Management

Vault 3 detour



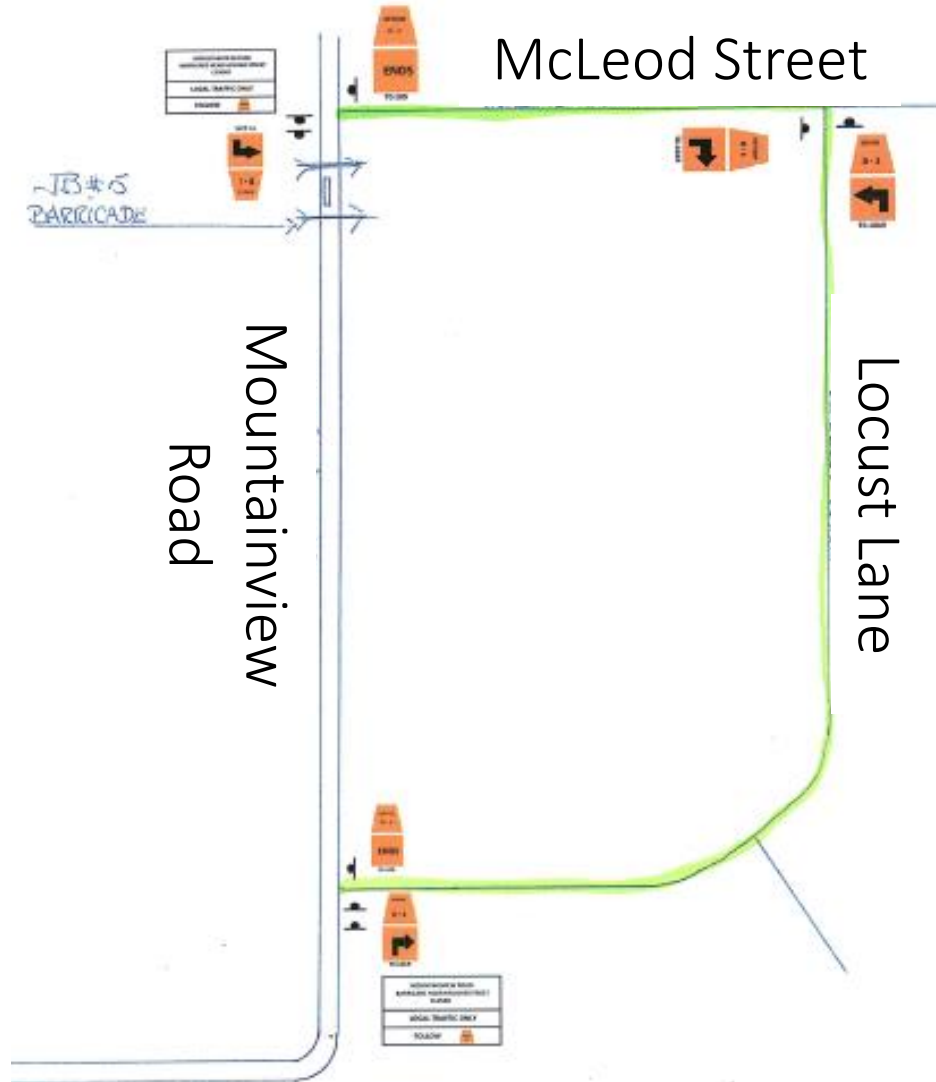
5. Detours & Traffic Management

Vault 4 detour



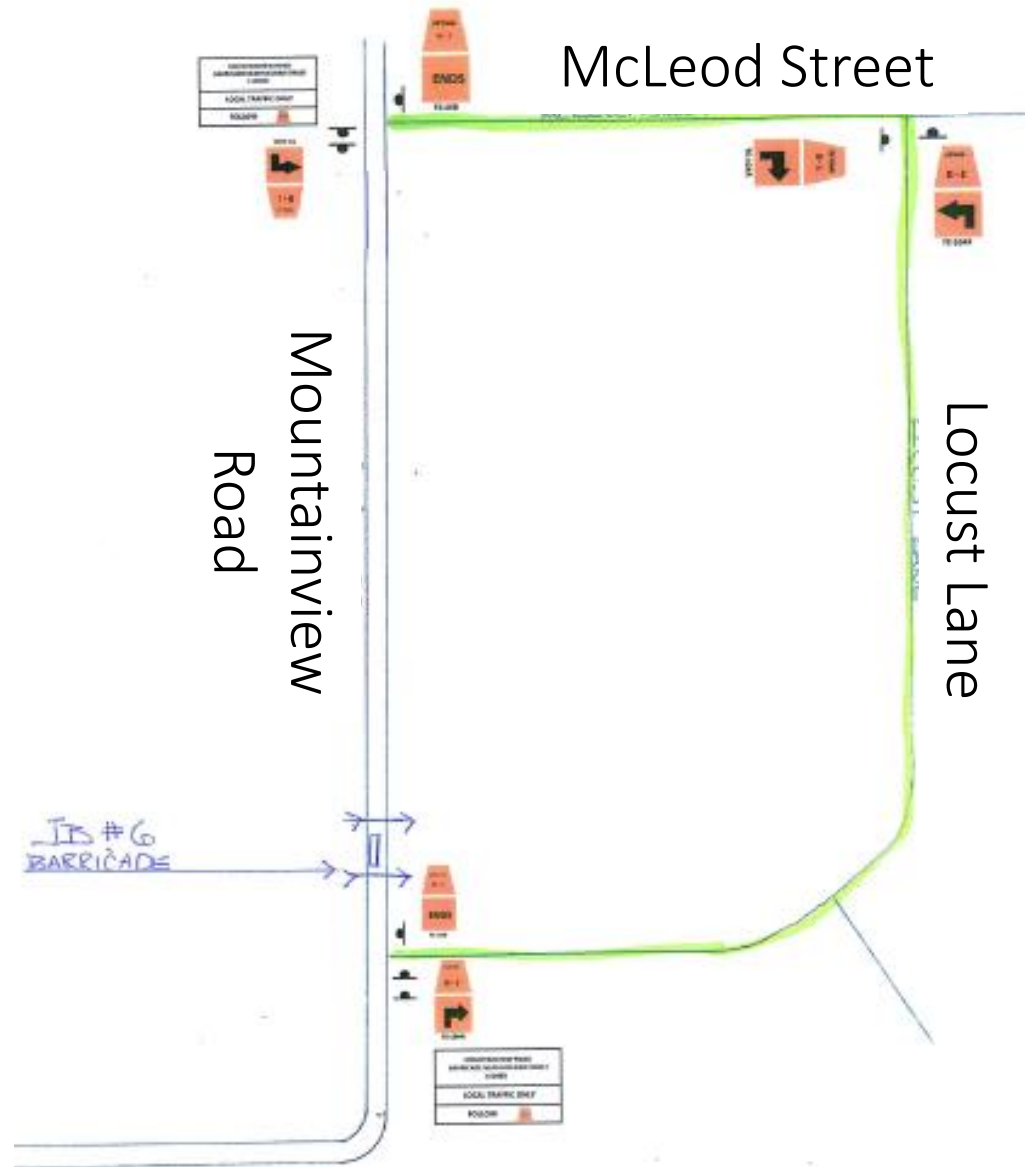
5. Detours & Traffic Management

Vault 5 detour



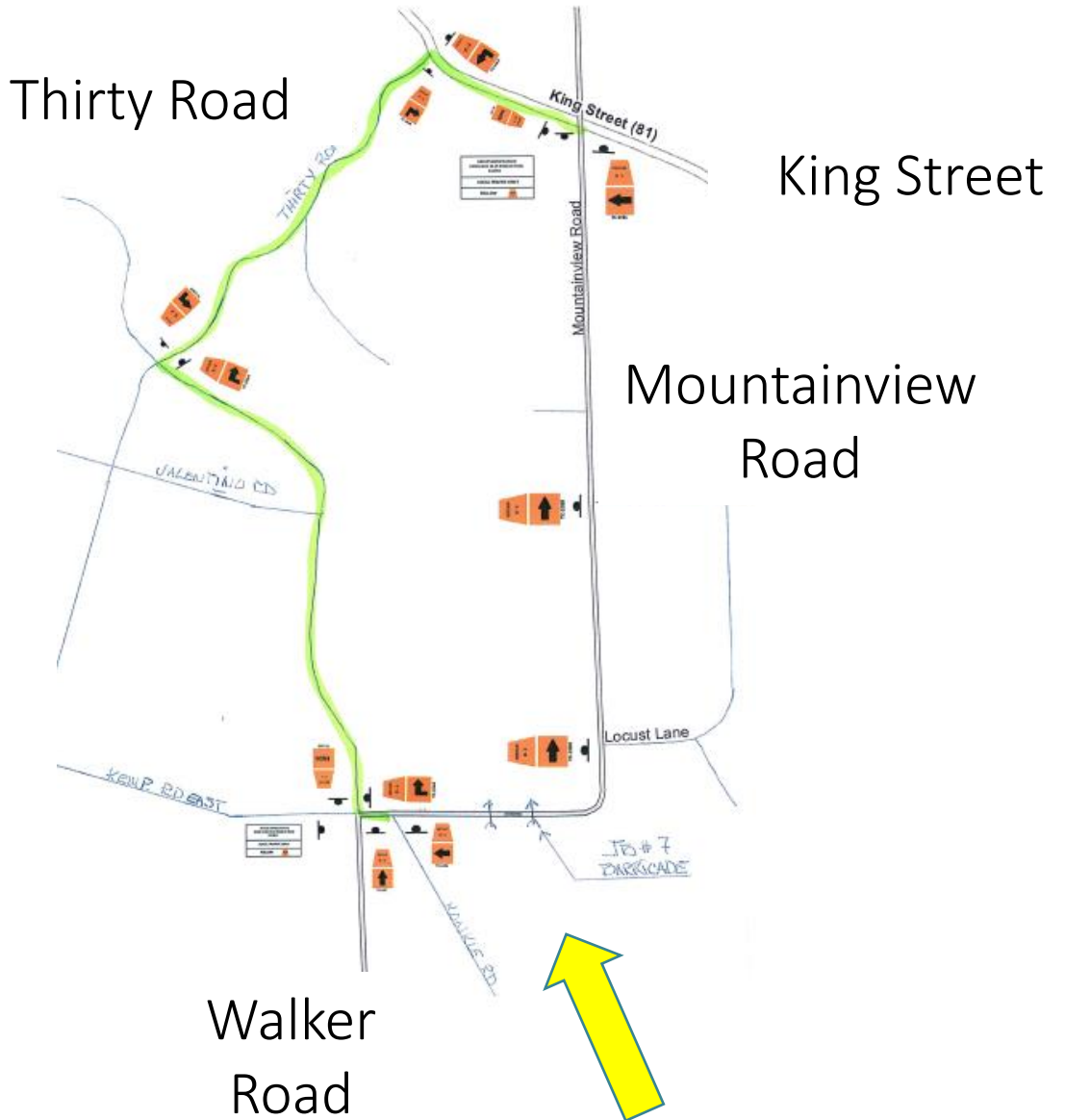
5. Detours & Traffic Management

Vault 6 detour



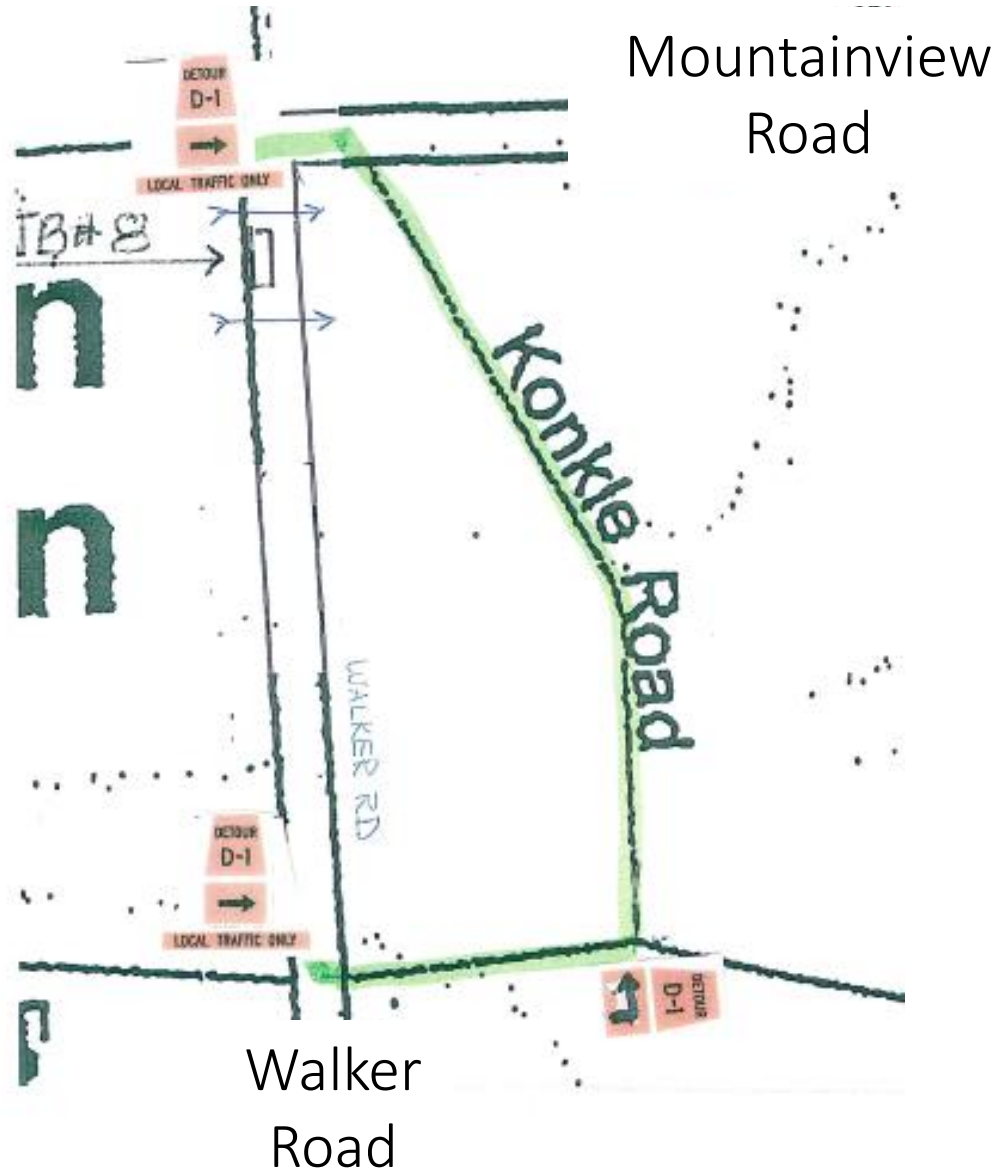
5. Detours & Traffic Management

Vault 7 detour



5. Detours & Traffic Management

Vault 8 detour



5. Detours & Traffic Management

Lane Closures (1 of 15)



5. Detours & Traffic Management

Lane Closures (2 of 15)



5. Detours & Traffic Management

Lane Closures (3 of 15)



Mountainview
Road

5. Detours & Traffic Management

Lane Closures (4 of 15)

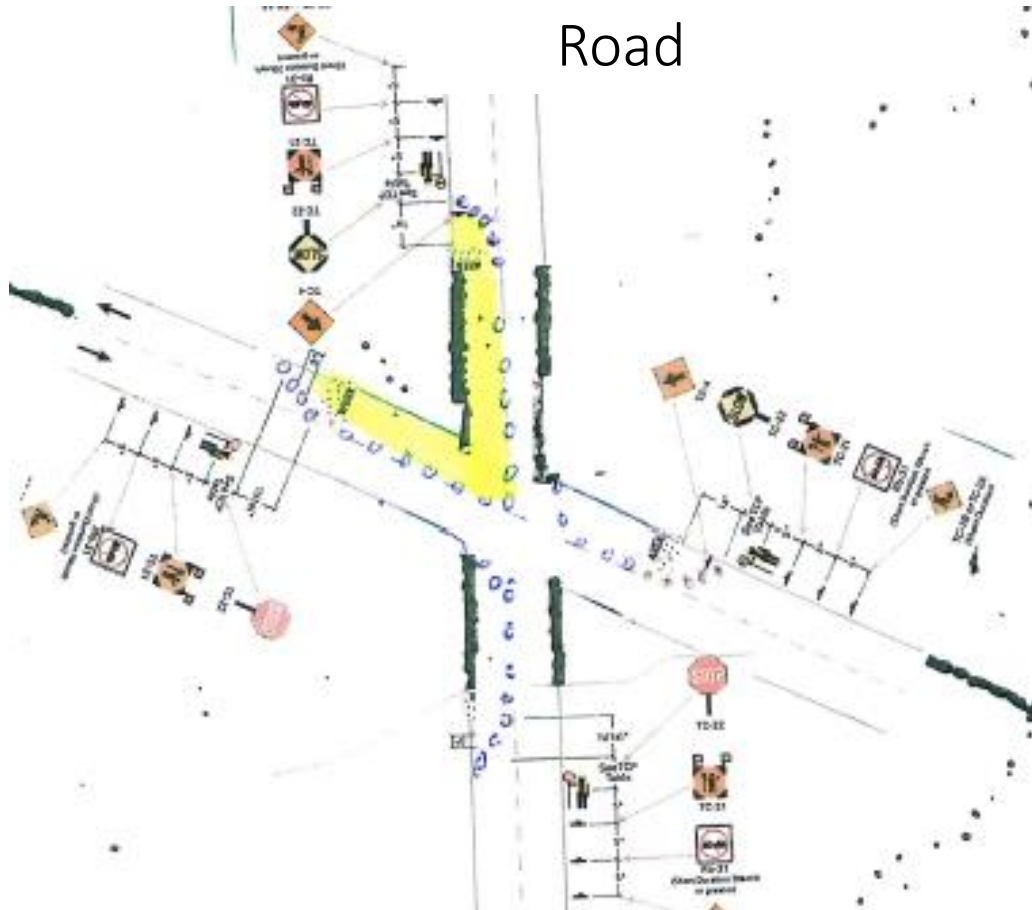
Mountainview
Road



5. Detours & Traffic Management

Lane Closures (5 of 15)

Mountainview
Road



King
Street

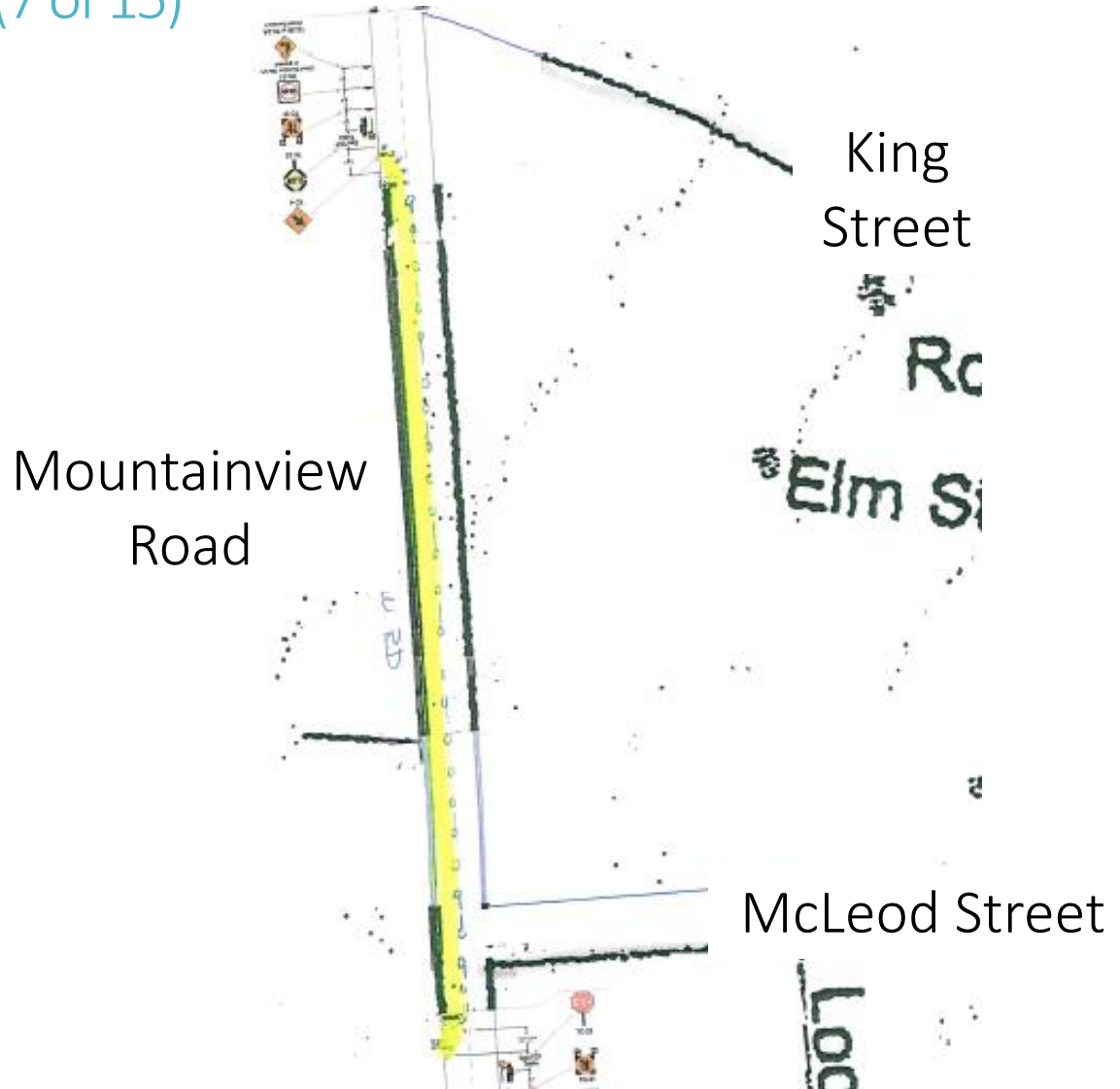
5. Detours & Traffic Management

Lane Closures (6 of 15)



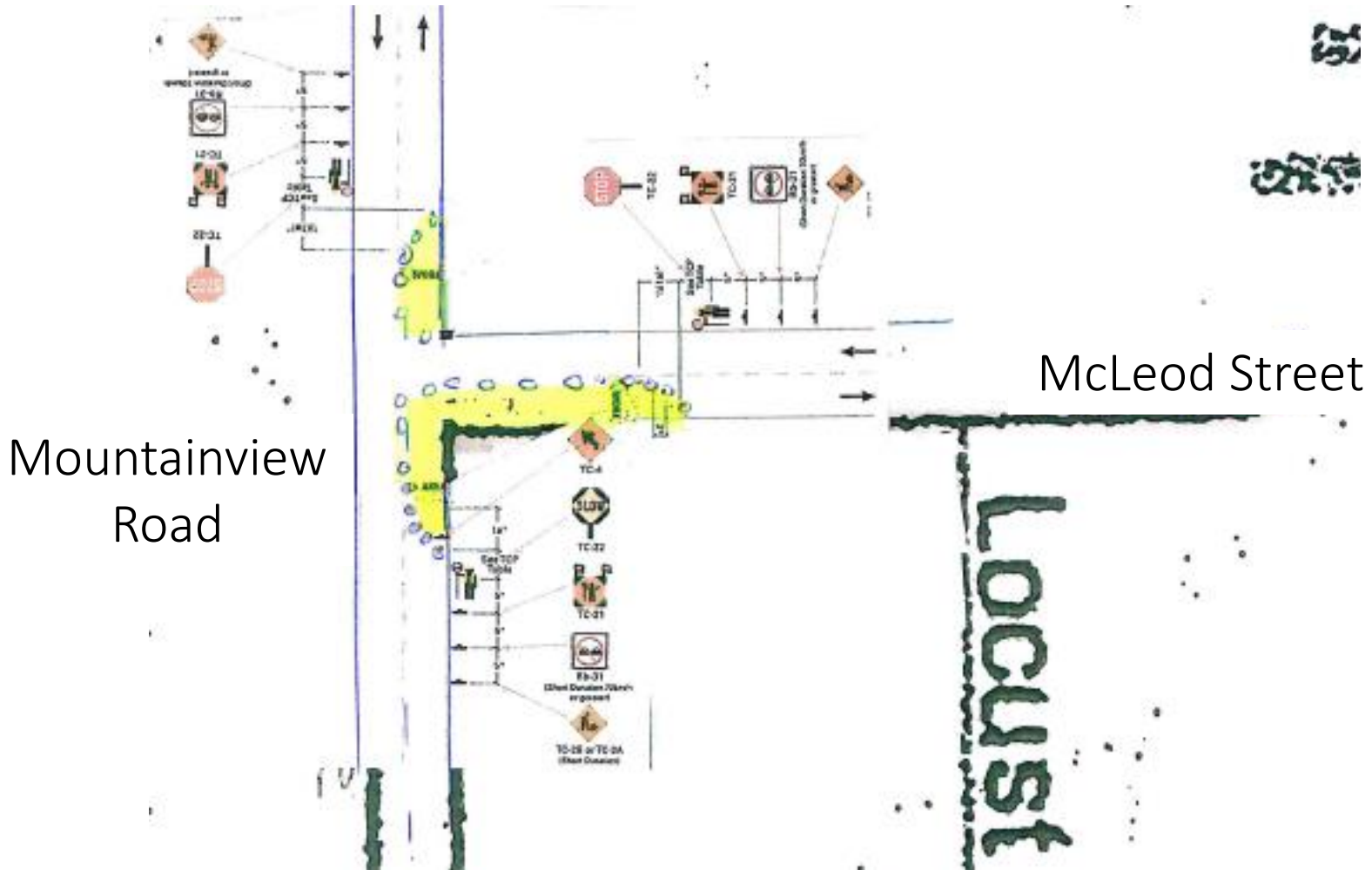
5. Detours & Traffic Management

Lane Closures (7 of 15)



5. Detours & Traffic Management

Lane Closures (8 of 15)



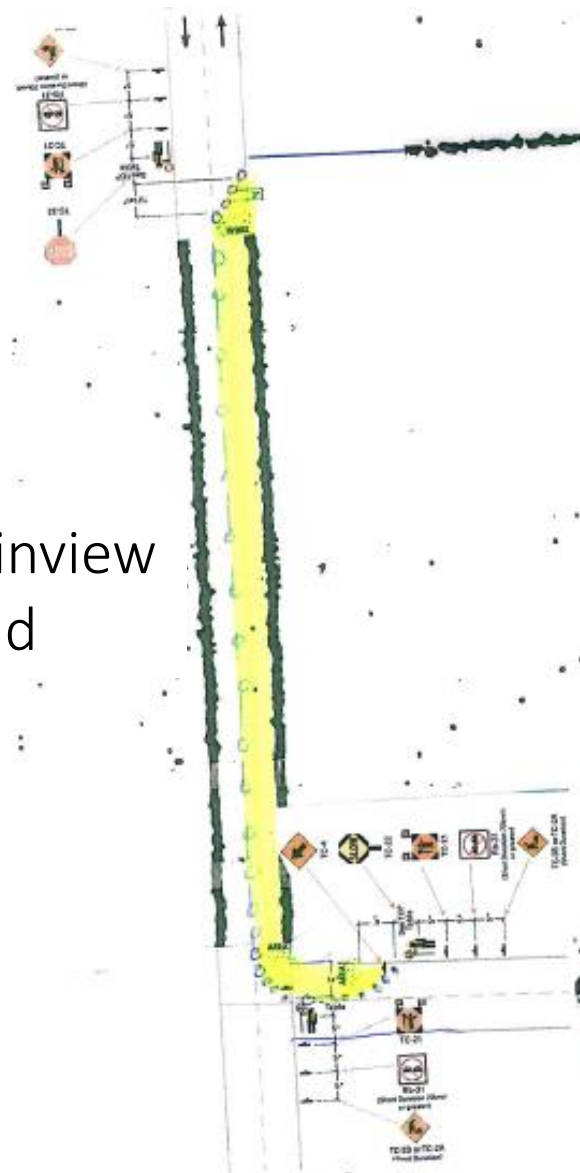
5. Detours & Traffic Management

Lane Closures (9 of 15)

Mountainview
Road

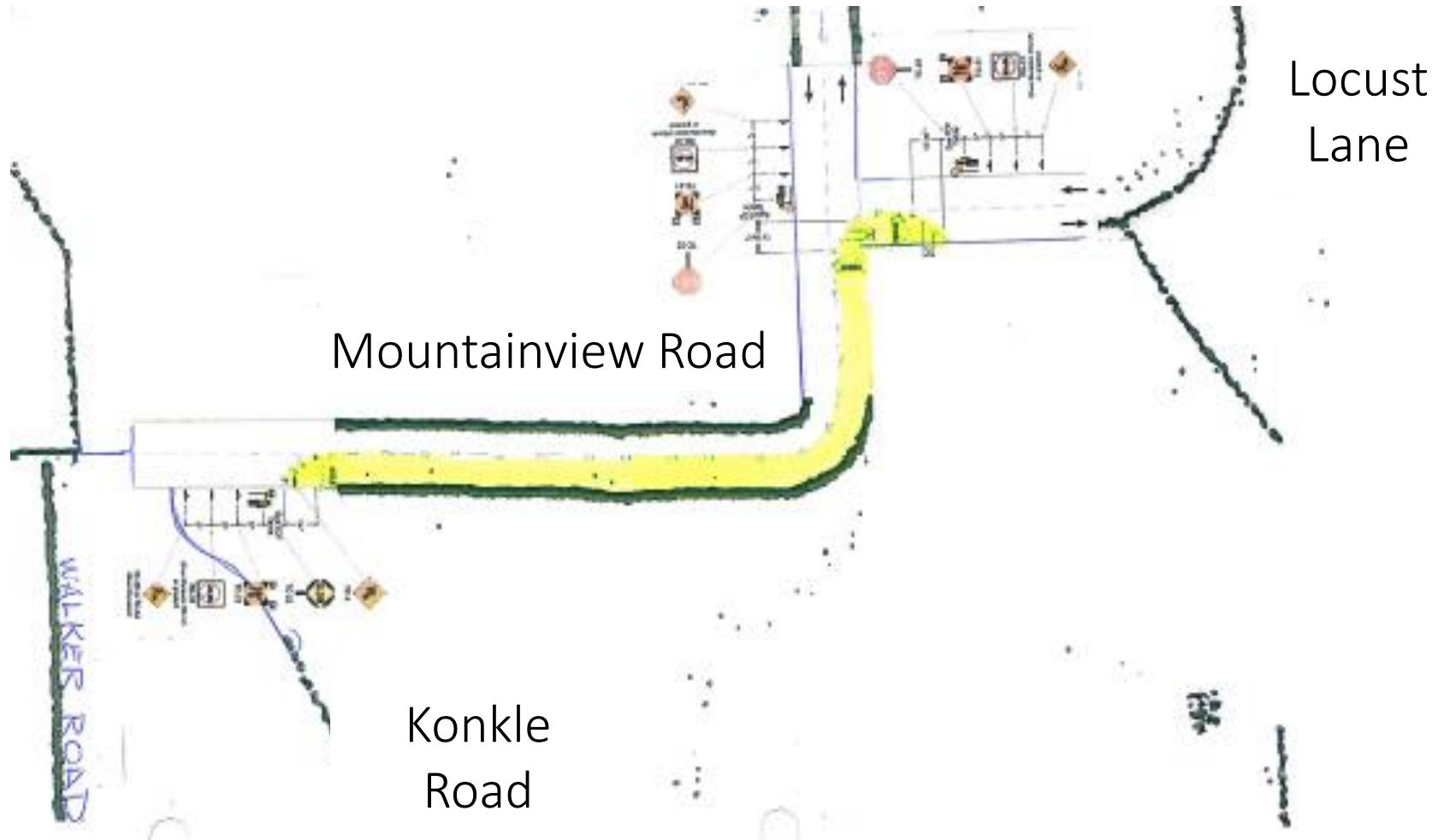
McLeod Street

Locust Lane



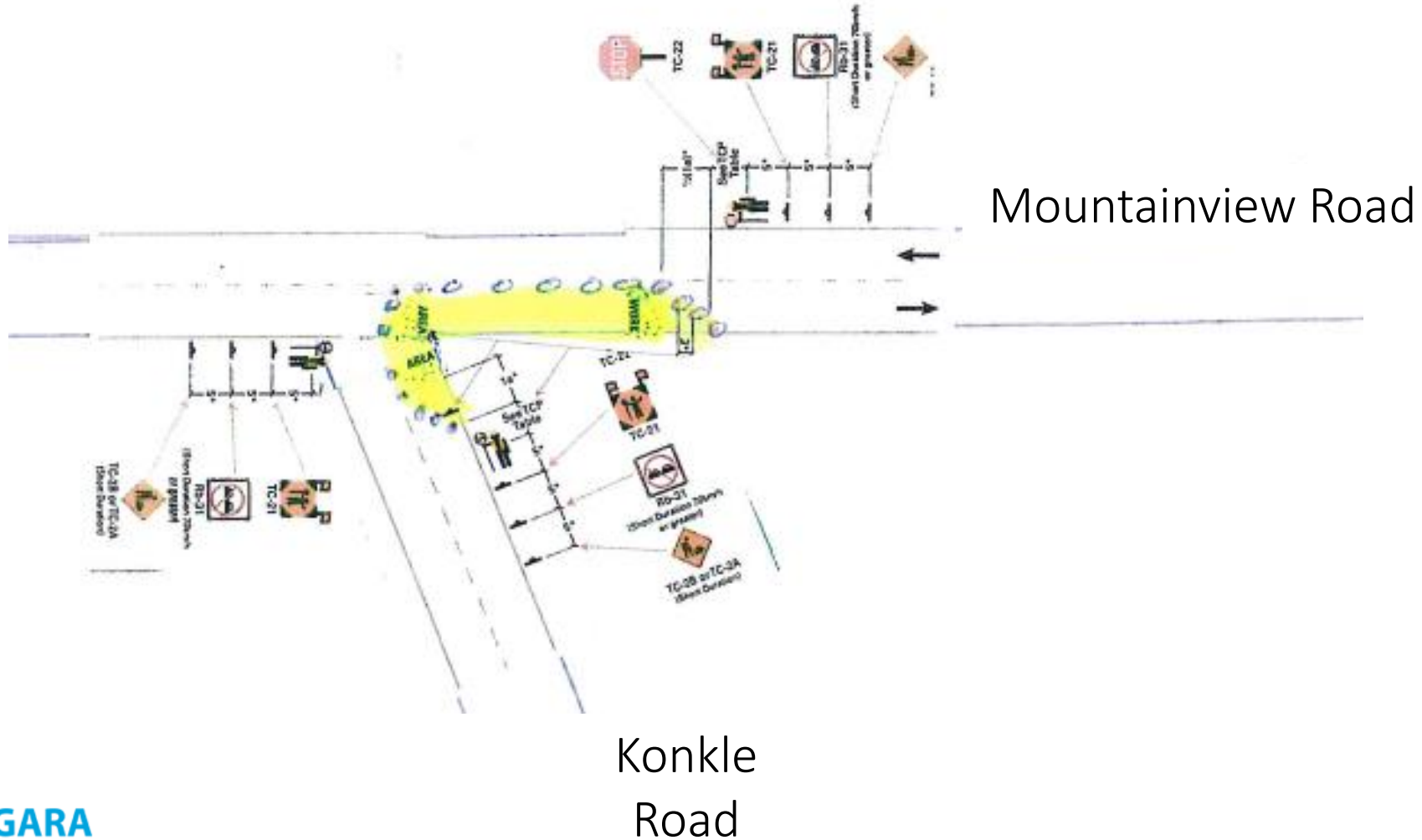
5. Detours & Traffic Management

Lane Closures (10 of 15)



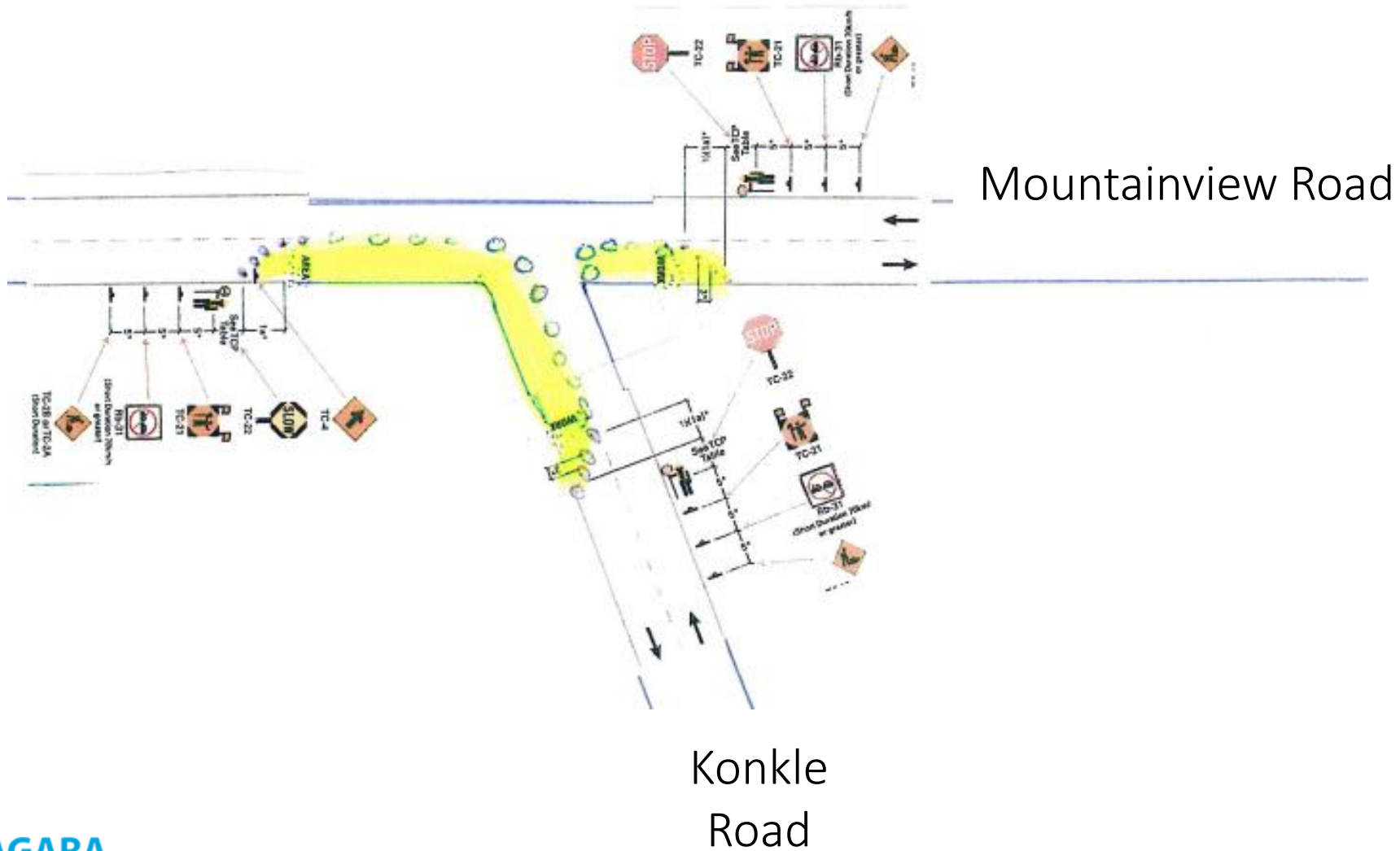
5. Detours & Traffic Management

Lane Closures (11 of 15)



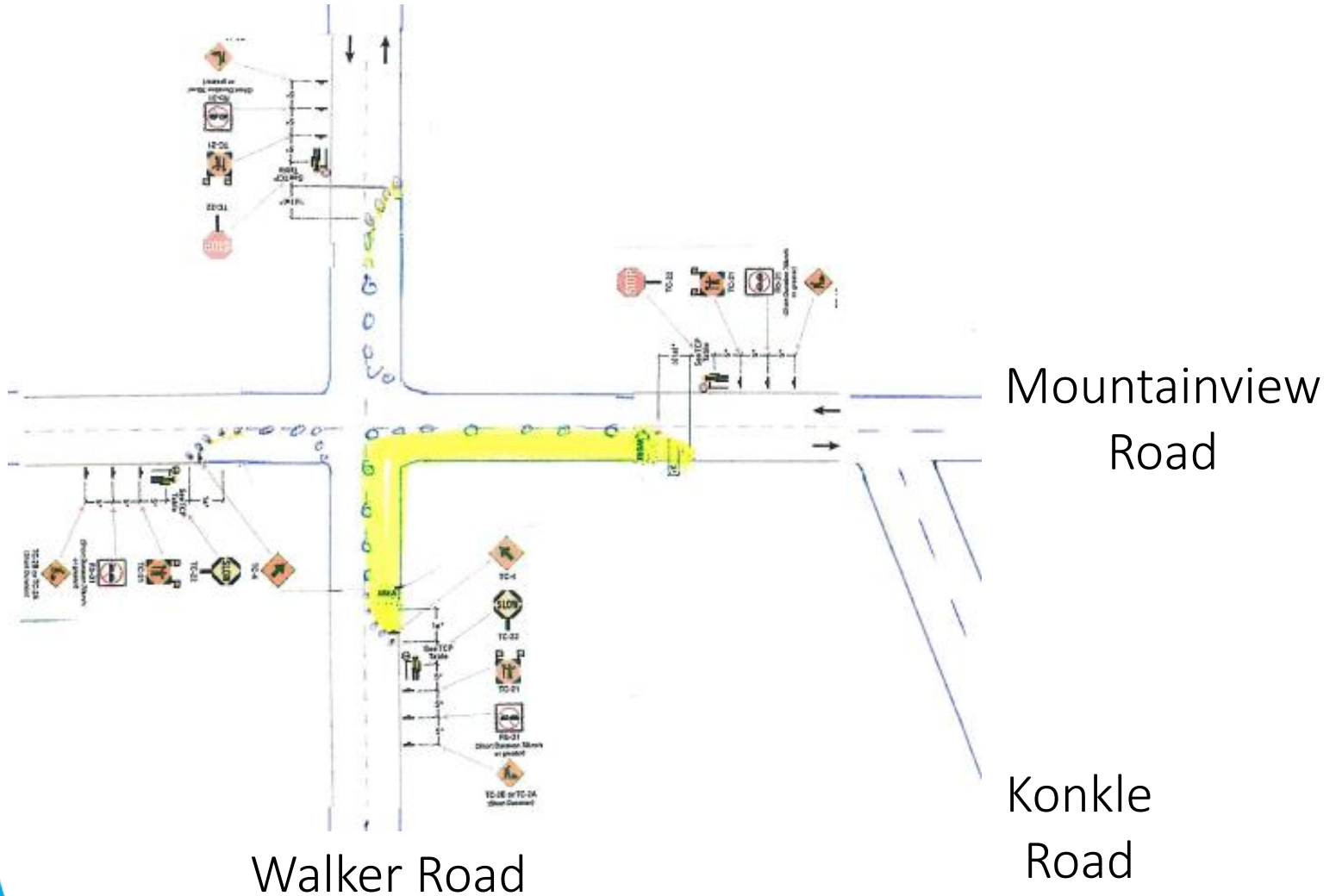
5. Detours & Traffic Management

Lane Closures (12 of 15)



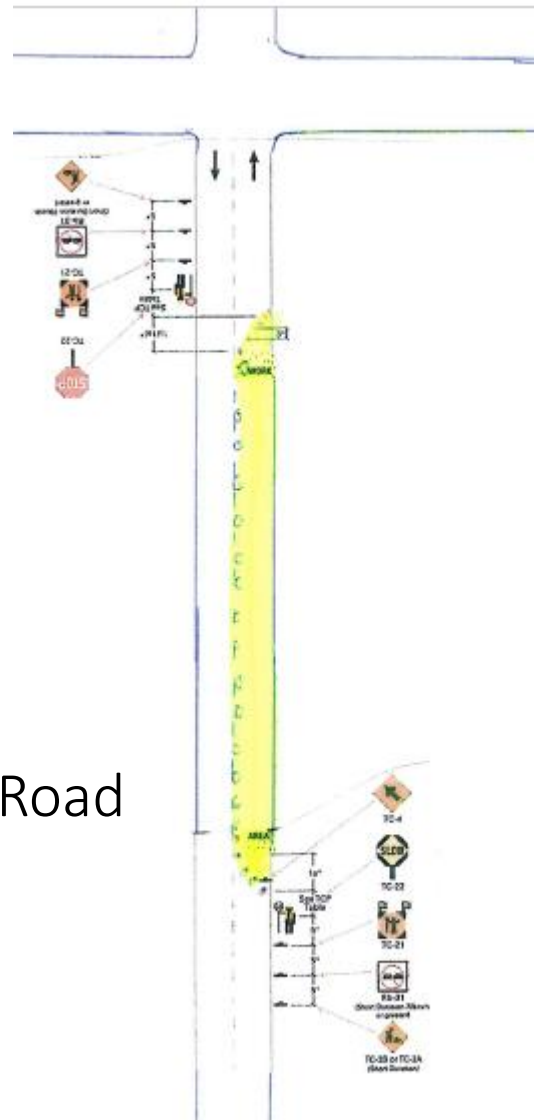
5. Detours & Traffic Management

Lane Closures (13 of 15)



5. Detours & Traffic Management

Lane Closures (14 of 15)

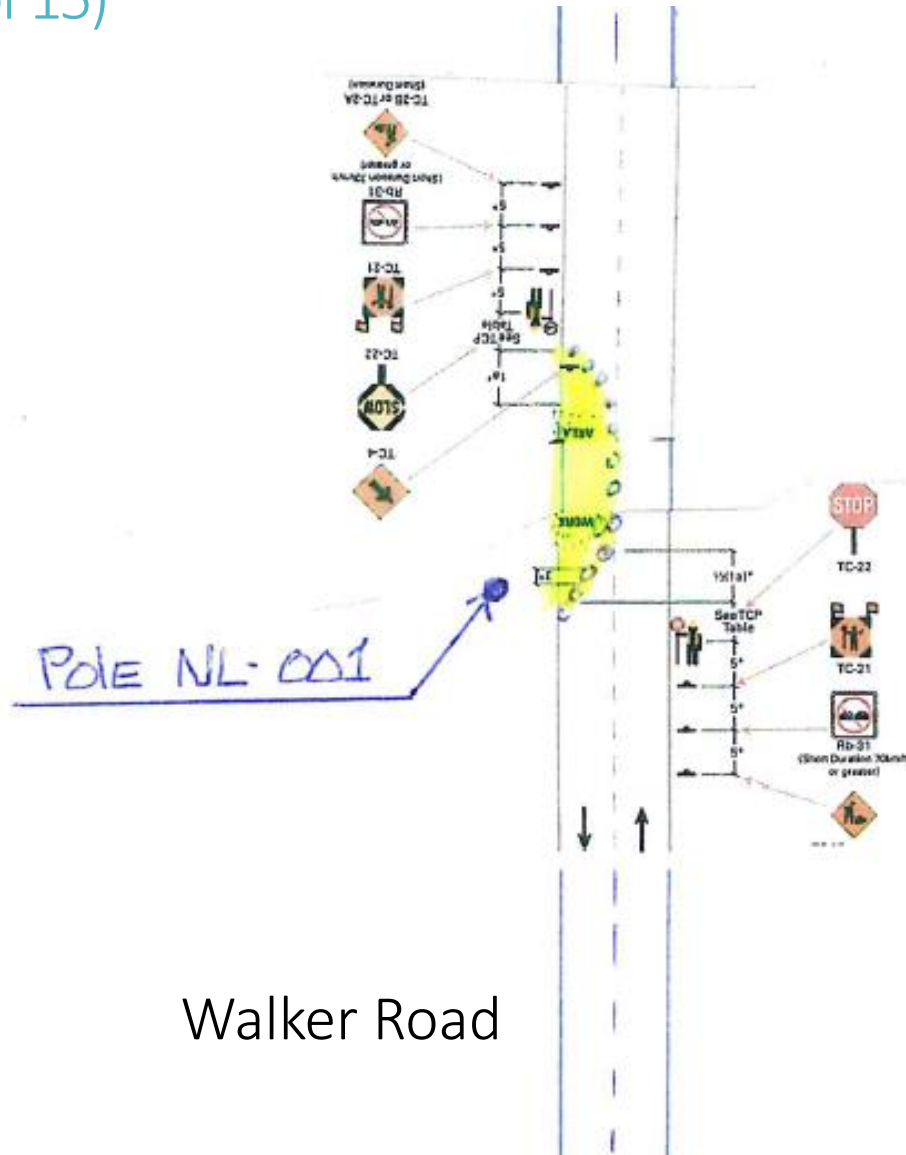


Mountainview
Road

Walker Road

5. Detours & Traffic Management

Lane Closures (15 of 15)



Walker Road

Q & A

Appendix

Cable Installation

