

CLOVERLEY NEIGHBOURHOOD TRAFFIC MANAGEMENT STUDY

Project Objective:

Enhance safety and livability of the Cloverley neighbourhood by reducing volumes and speeds of traffic using local roads as a cut-through, while maintaining adequate access for local residents.

Background:

Over the years the volume of vehicles short-cutting and speeding through the local streets in the Cloverley area has been increasing. This issue is particularly prominent when the accesses to Provincial Highway 1 and Second Narrows Bridge are congested due to incidents on the highway or road work. The City is therefore undertaking a traffic management study of the area to develop a plan to mitigate these issues.

The traffic calming measures that were implemented as part of the 2003 Cloverley Neighbourhood Traffic Calming Plan, which was developed in consultation with the residents of the neighbourhood, included:

- Speed humps / bumps
- Parking restrictions to improve visibility
- Reconfiguring curbs at the Heywood Street and 4th Street intersection to improve safety

These measures, however, have not deterred people from using the area as a cut-through. More substantial measures such as median islands and traffic diverters that can physically prevent through-traffic from using these local streets are therefore being considered in this study.

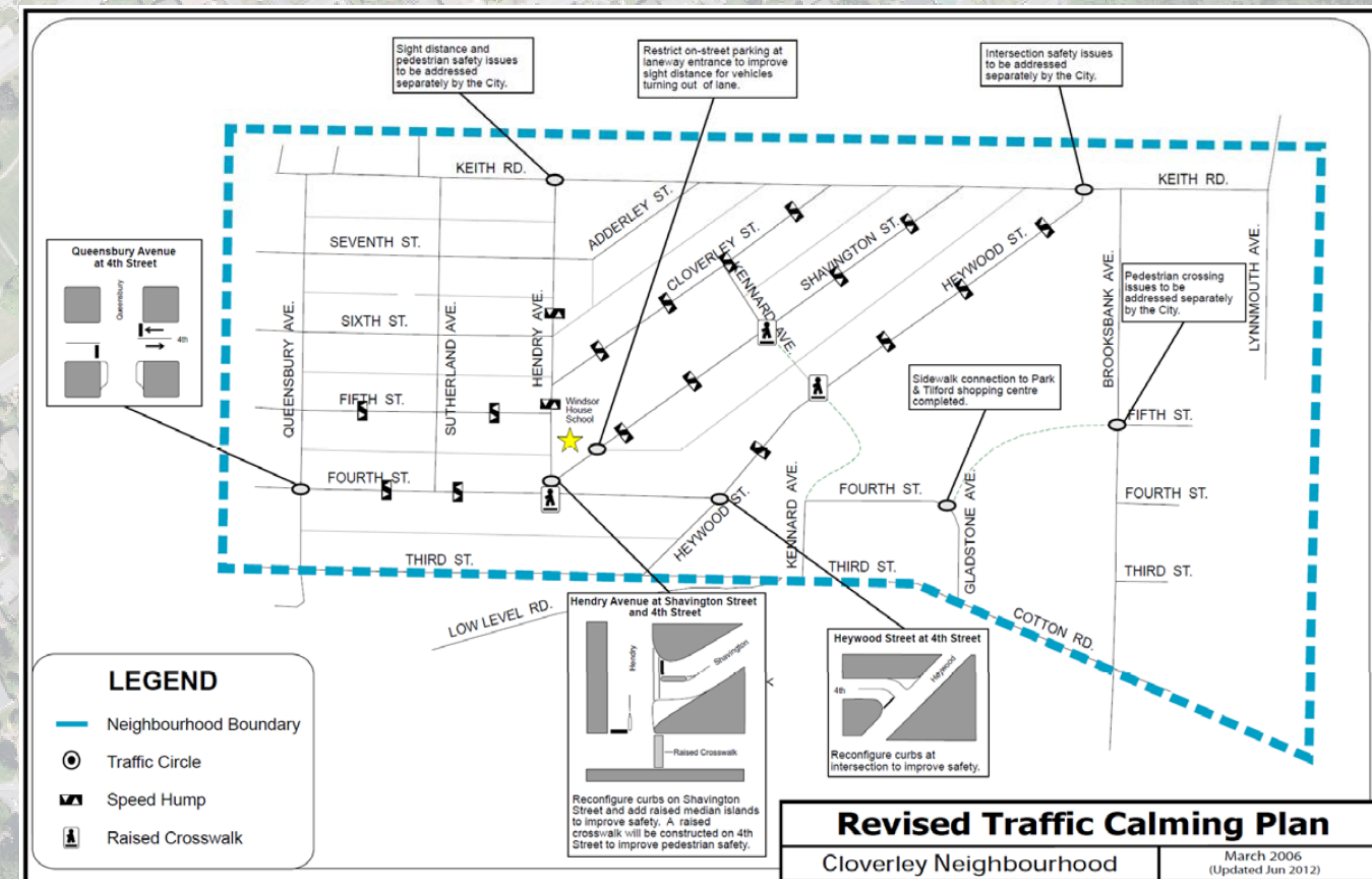
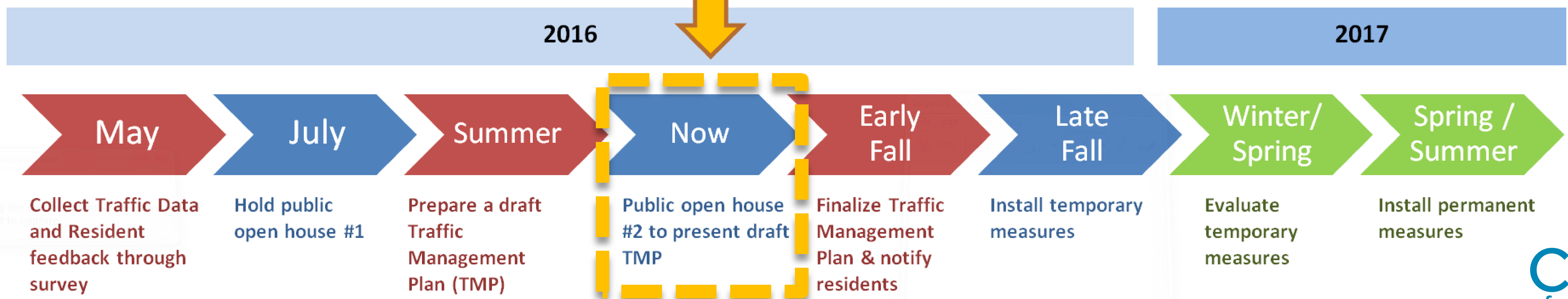


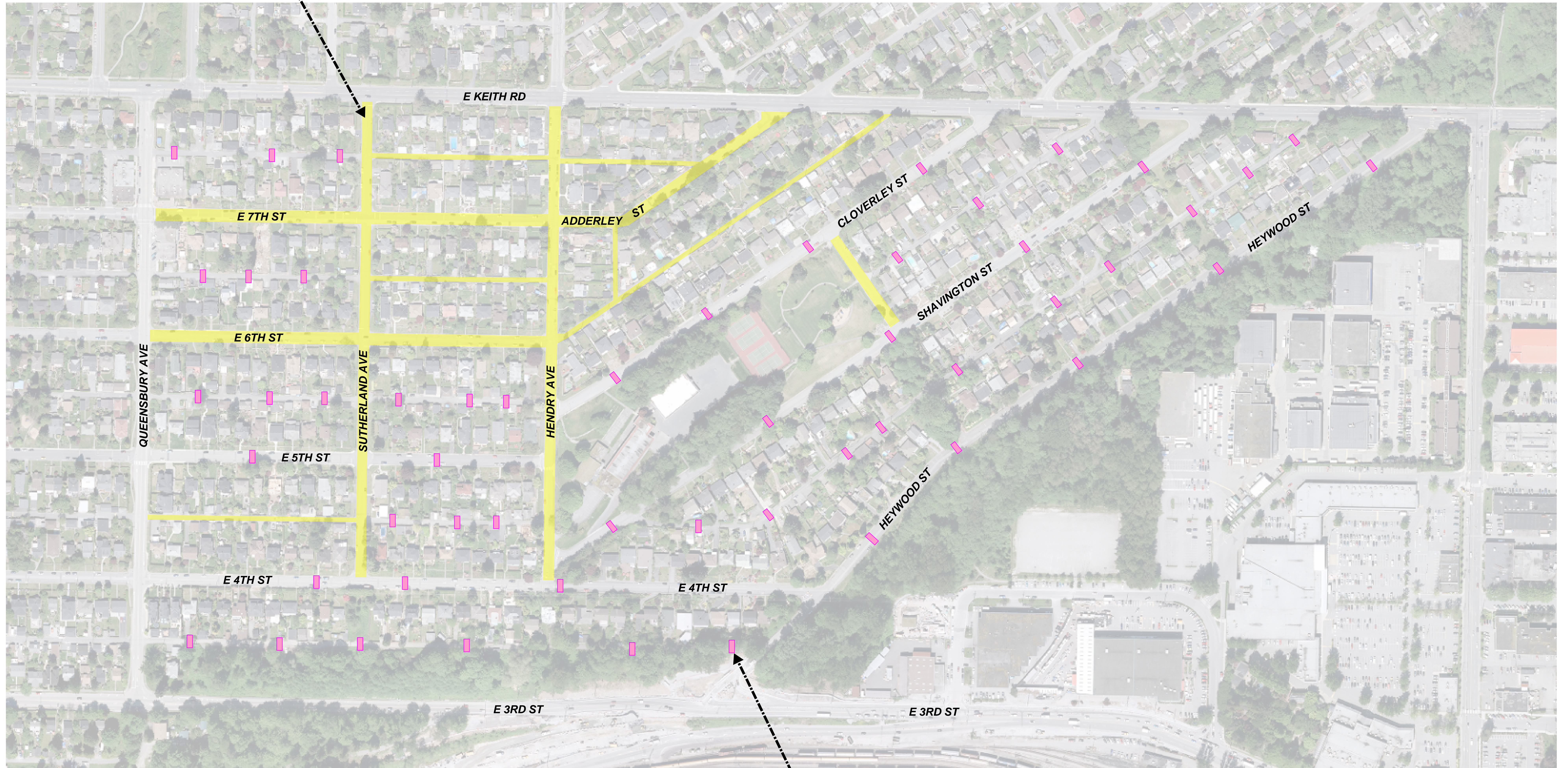
Image: 2003 Cloverley Traffic Calming Plan

Today



WHAT'S OUT THERE NOW? CURRENT TRAFFIC CALMING DEVICES

What's out there now?
The areas highlighted in yellow do not have traffic control measures.



LEGEND:

 Current speed humps / bumps on streets and lanes

 Streets and lanes with no traffic calming devices or measures

What's out there now?
Currently, there are only speed humps and bumps on streets and lanes.



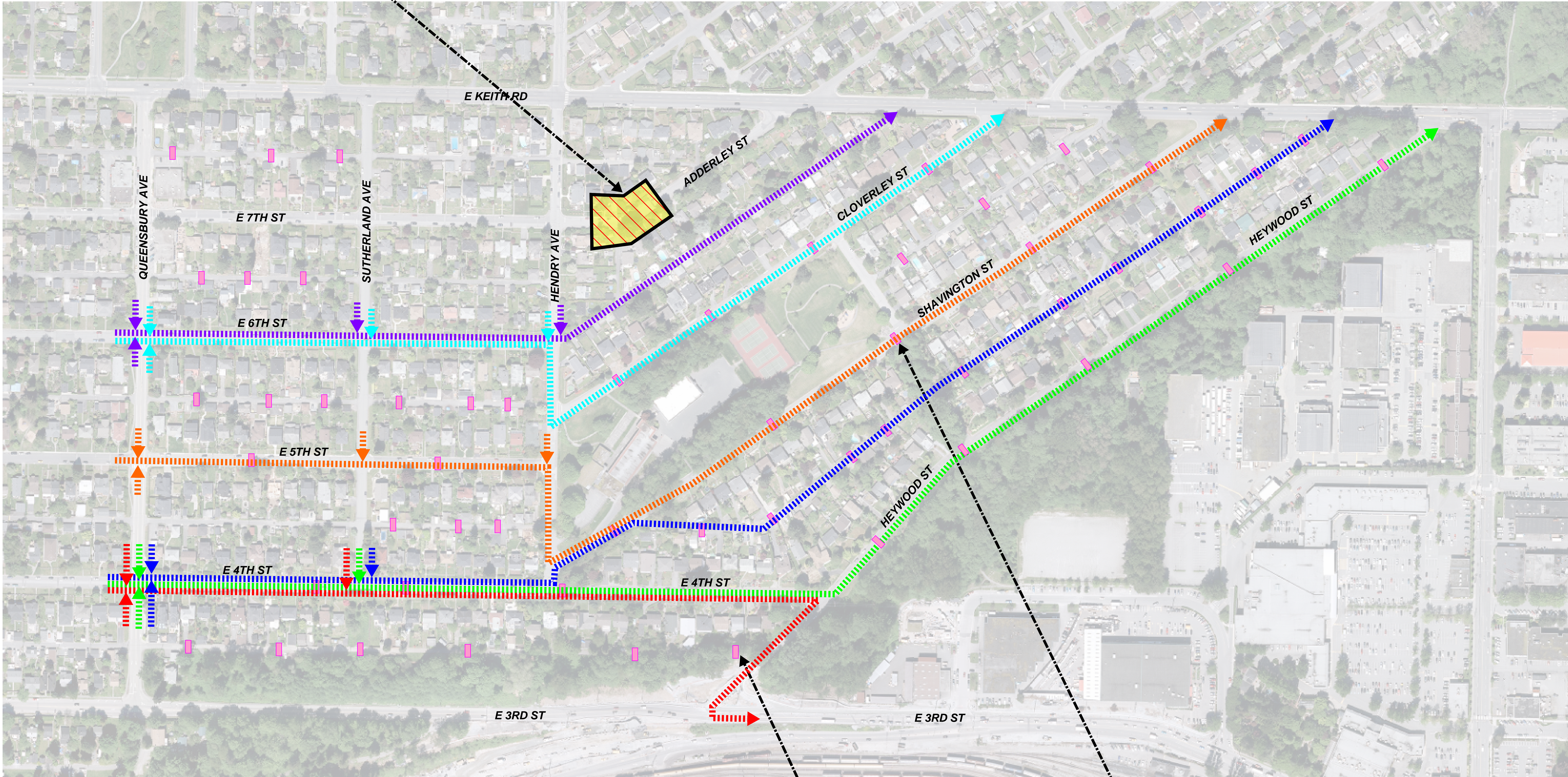
Speed humps – On a Street



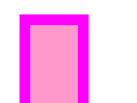



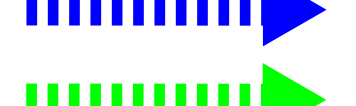

Speed bumps – On a Lane

WHERE ARE PEOPLE SHORTCUTTING THROUGH THE CLOVERLEY NEIGHBOURHOOD?

Blind Corner
 The bend on Adderley Street is a blind corner. Speed reduction is required to provide more time for visibility and improve safety.



LEGEND:

-  Current speed humps/bumps on streets and lanes
-      Current shortcutting routes through the Cloverley Neighbourhood



TRAFFIC CALMING DEVICES



Speed humps – On a Street



Speed bumps – In a Lane

Speed Humps

Reduce vehicle speeds by introducing modest up-and-down changes in the level of the street

Benefits

- Slow down traffic without making drivers uncomfortable if placed at frequent intervals

Limitations

- Do not prevent vehicles from accessing a street
- May create additional noise



"Local Traffic Only"



"No Right Turn"

Signage

Signage can range from Local Traffic Only to turning movement restrictions

Benefits

- Relatively inexpensive and easy to install

Limitations

- Mainly self-enforcing (no physical changes to prevent vehicles from turning), although police can enforce turning restriction signage (although resources are limited)
- Little impact on speed reduction



Median Islands

Median Islands

Elevated islands parallel to traffic lanes down the middle of the street

Benefits

- Reduce road space, signaling motorists to slow down
- Provide refuge for pedestrians
- Can also control traffic movements when extended across an intersection
- Some speed reduction

Limitations

- Do not prevent vehicles from accessing a street



Traffic Circles

Traffic Circles

Raised, circular islands at the middle of major intersections

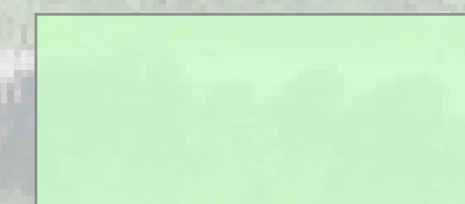
Benefits

- Slow down motorists at intersections
- Provide space for landscaping

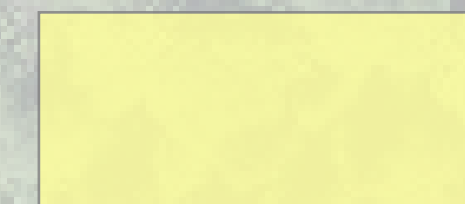
Limitations

- Impact localized to intersections only unless implemented in a series

LEGEND:



Devices used in DRAFT PLAN



Other possible traffic calming devices



Semi-diverters



Diagonal diverters



Full Diverter / Mountable Median

DiverTERS

Physical barriers that redirect vehicle traffic heading for a certain street onto a different course.

Benefits

- Can effectively reduce traffic volumes
- Provide space for landscaping
- Increase safety of pedestrians & cyclists

Limitations

- Reduce number of access points into a neighbourhood for local residents



Right-in, right-out diverters



Speed reader boards

Speed reader boards

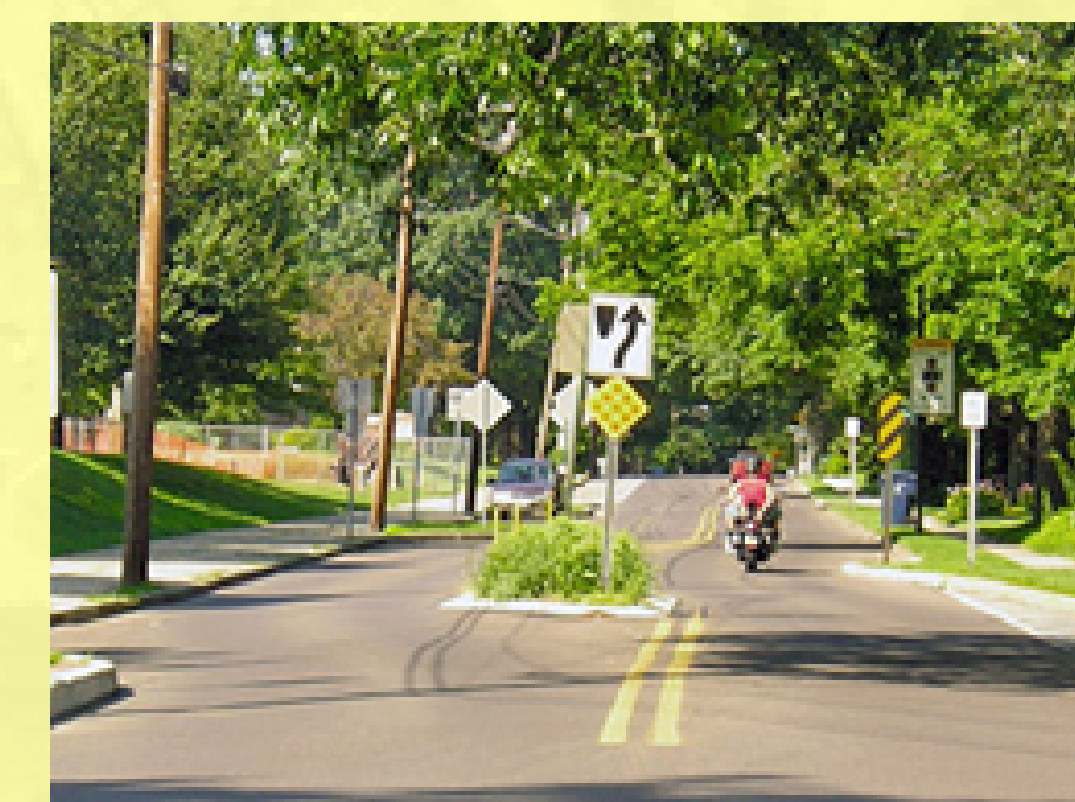
Display the speed of passing vehicles

Benefits

- Display the speed of passing vehicles

Limitations

- Self-enforcing
- Impact localized to where boards are placed
- Does not prevent vehicles from entering a street
- More appropriate for arterial roads



Chicanes

Chicanes

Sidewalk extensions that jog from one side of a street to the other to create a circuitous route.

Benefits

- Effective in slowing down motorists if implemented in a series
- Reduce pedestrian crossing distance
- Provide space for landscaping

Limitations

- Do not prevent vehicles from entering a street
- Higher cost



Curb Extensions

Curb Extensions

Extend curb into the street

Benefits

- Reduce pedestrian crossing distances
- Control traffic movement
- Some speed reduction
- Provide space for landscaping

Limitations

- Do not prevent vehicles from entering a street

RESIDENT FEEDBACK

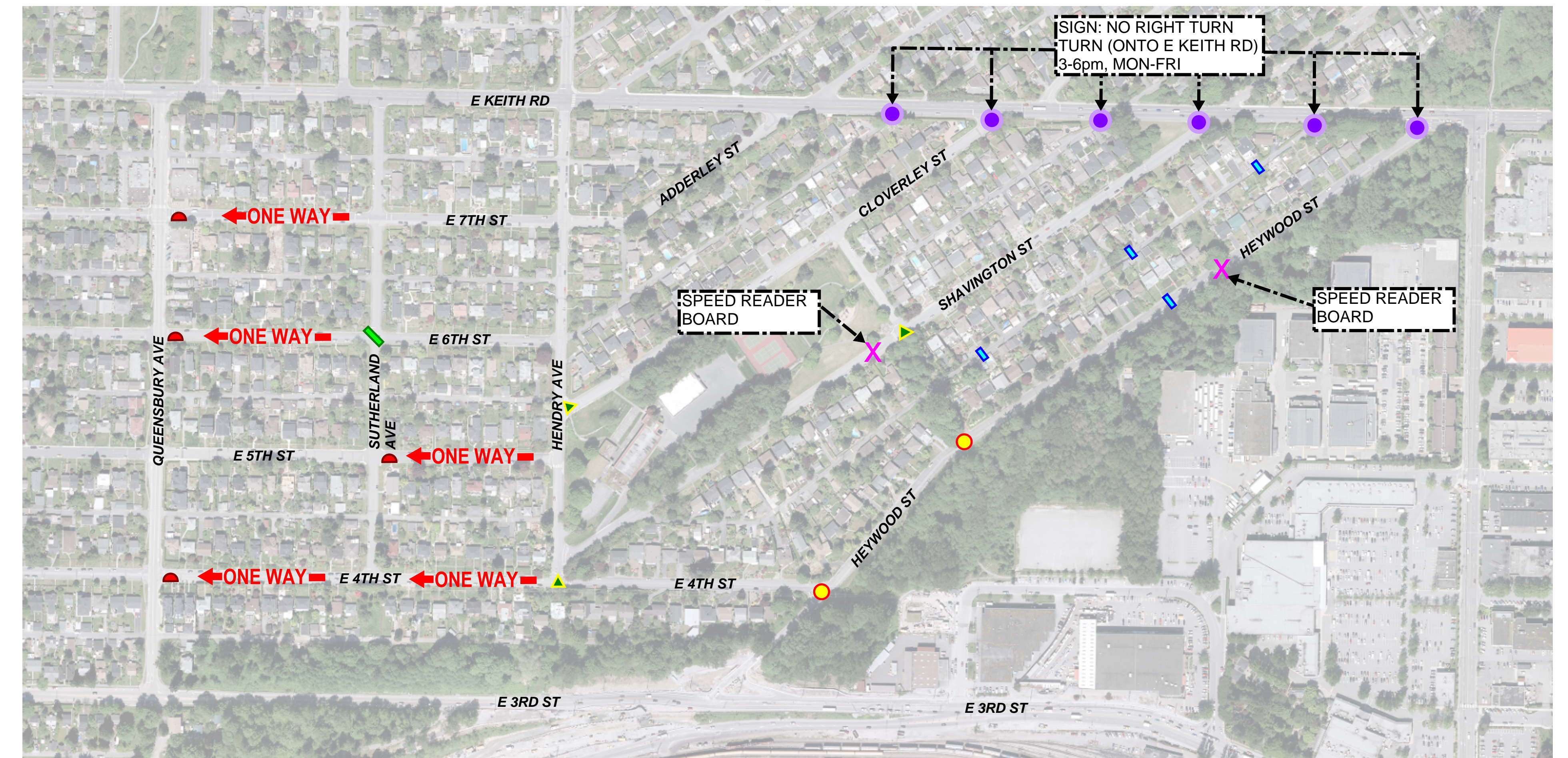
SCENARIOS DEVELOPED BY PARTICIPANTS AT THE JULY WORKSHOP

At our July workshop, after learning about the different traffic calming devices, attendees worked in groups to develop their own transportation management scenarios for the neighbourhood. By working with people from across the neighbourhood, participants had the opportunity to share their different perspectives and ideas. Participants also learned that it was not always easy to gain consensus amongst the resident group and it was clear that trade-offs would be required for the plan to benefit the entire neighbourhood. By the end of the workshop, the following six scenarios were developed by residents:

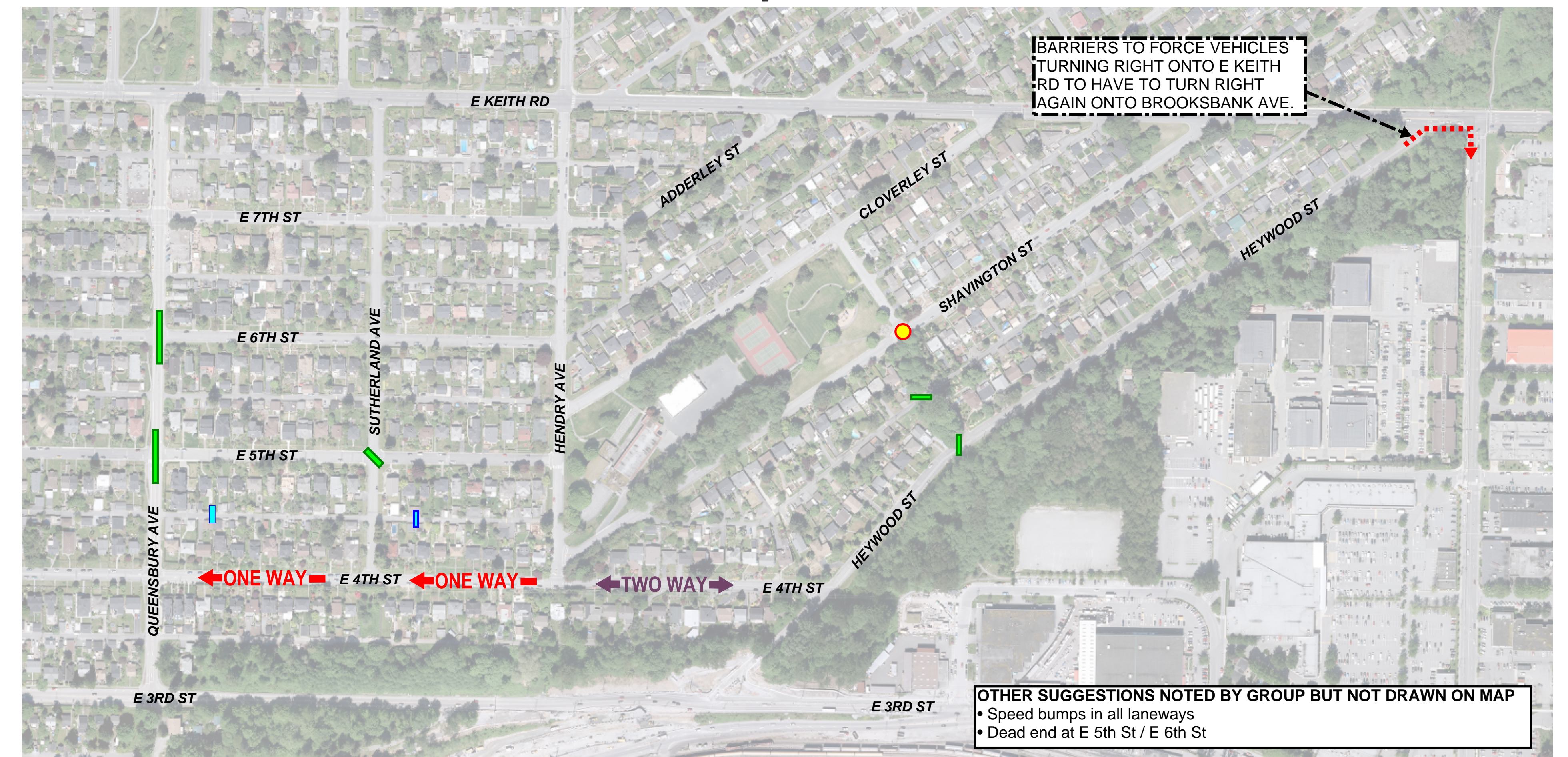
Group 1 Plan



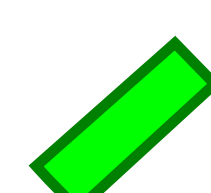
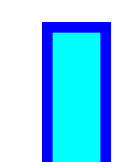
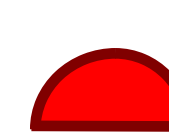

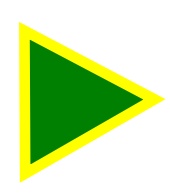


Group 2 Plan



Group 3 Plan



LEGEND:

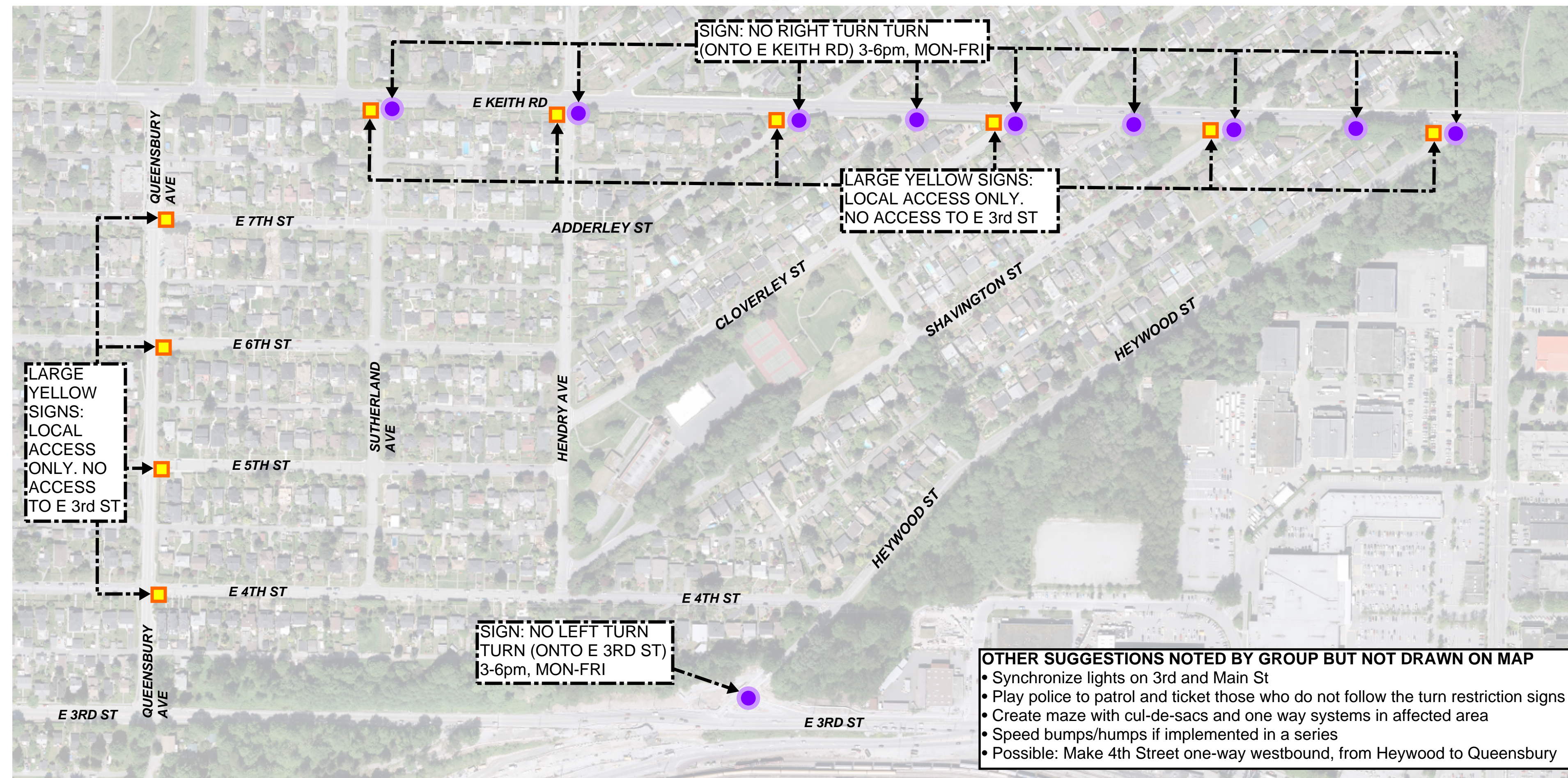
-  New Diverter / Median Island
-  New Speed Humps / Bumps on streets and lanes
-  New Semi-Diverter
-  New Sign: No Right/Left Turn
-  New Right-in, Right-out Diverter
-  New Speed Reader Board
-  New Traffic Circle

RESIDENT FEEDBACK

SCENARIOS DEVELOPED BY PARTICIPANTS AT THE JULY WORKSHOP

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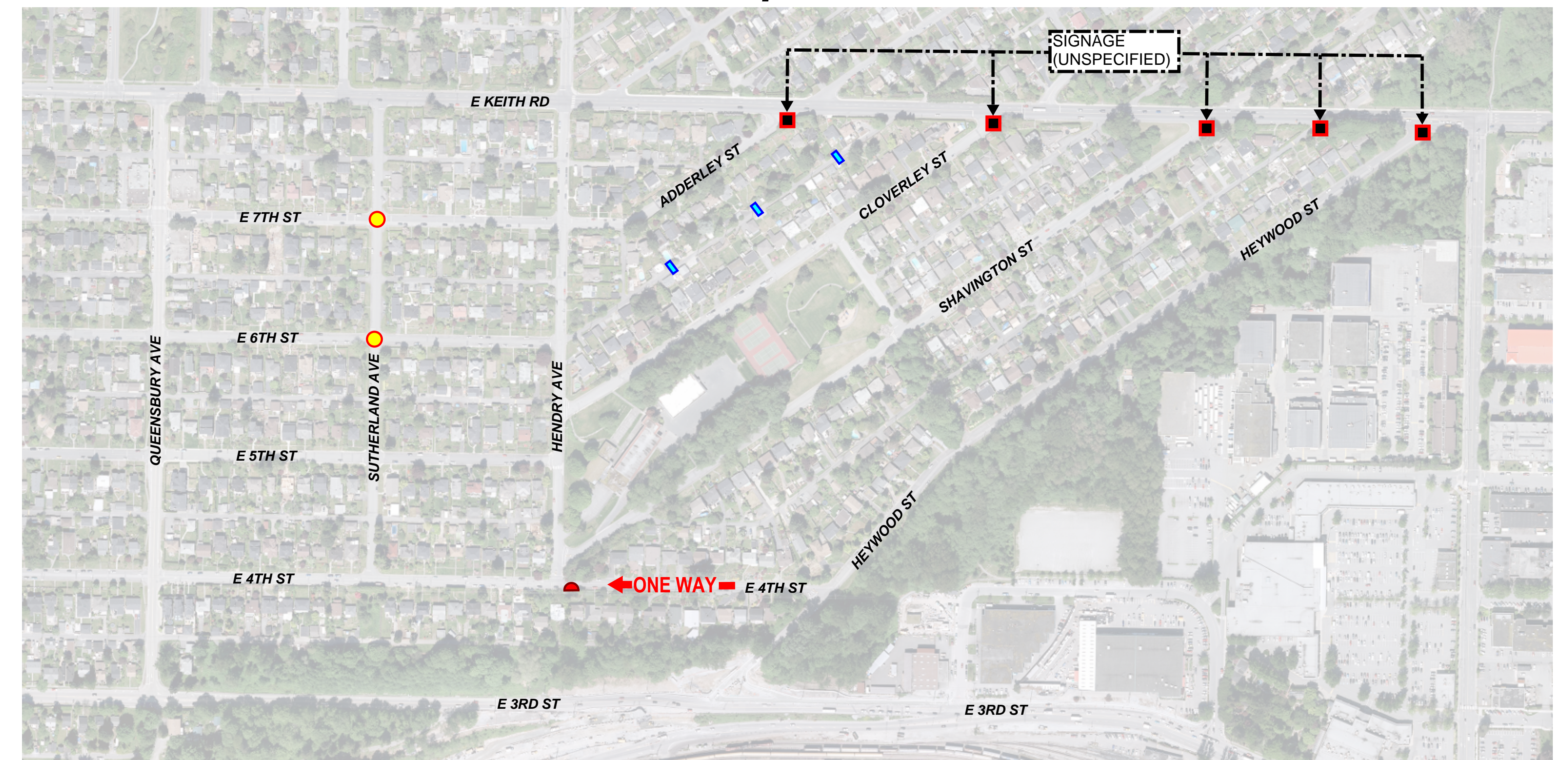
Group 4 Plan




Group 5 Plan



Group 6 Plan



LEGEND:

-  New Diverter / Median Island
-  New Speed Humps / Bumps on streets and lanes
-  New Semi-Diverter
-  New Curb Bulge
-  New Right-in, Right-out Diverter
-  New Traffic Circle
-  New Sign: No Right/Left Turn
-  New Sign: Local Access Only
-  Sign: Unspecified

CLOVERLEY NEIGHBOURHOOD TRAFFIC STUDY

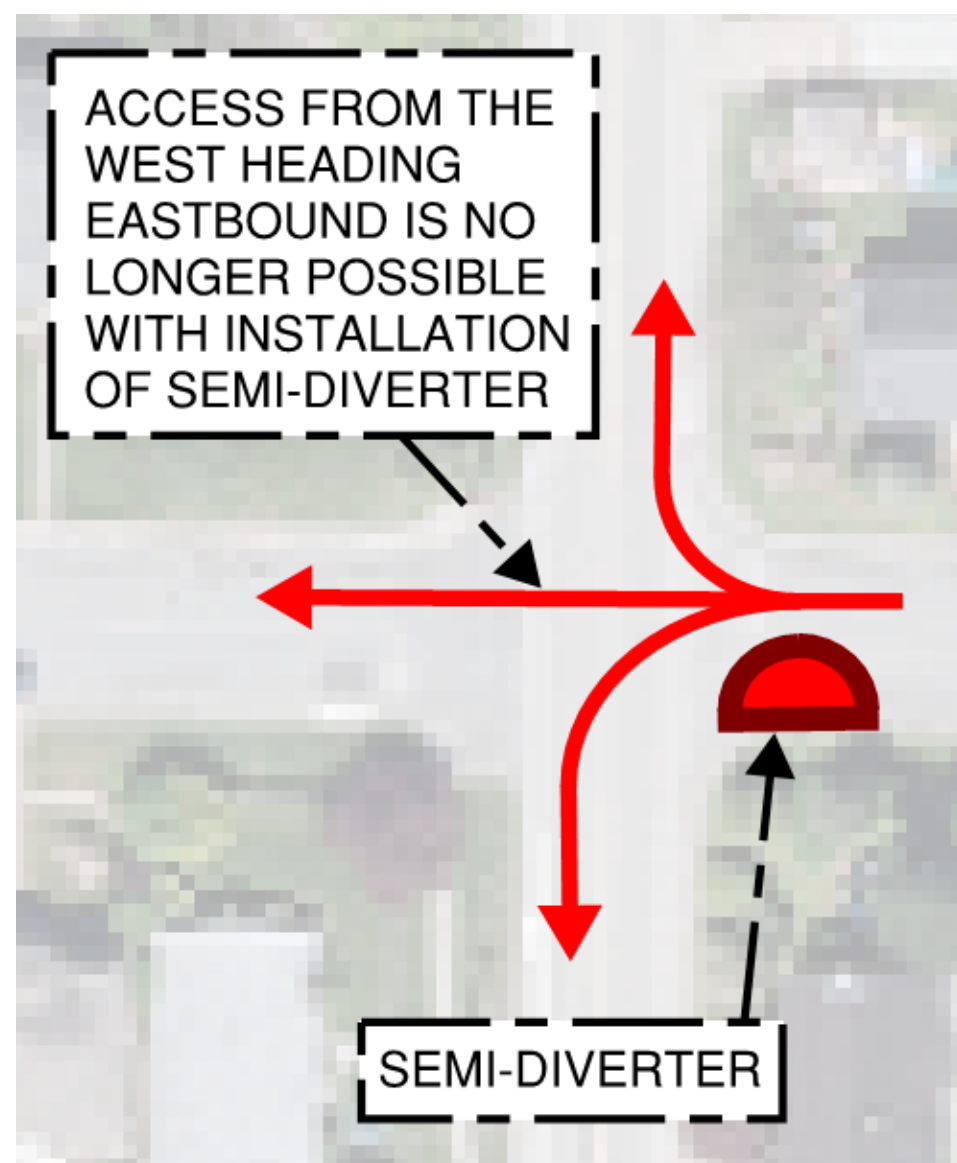
DRAFT PLAN

The following draft plan was developed based on resident feedback from the July Open House Workshop and Survey:

1, 4, 7, 8

Semi-Diverter

To prevent commuters from using these local roads to access East Keith Road and 3rd Street. There would still be space for emergency vehicles to travel eastbound, as westbound vehicles would be required to pull over, as is the case now.



11

Speed Bumps/Humps

To reduce vehicle speeds.



12

Sign: No Right Turn (on to East Keith Road) 3-6pm, Mon-Fri

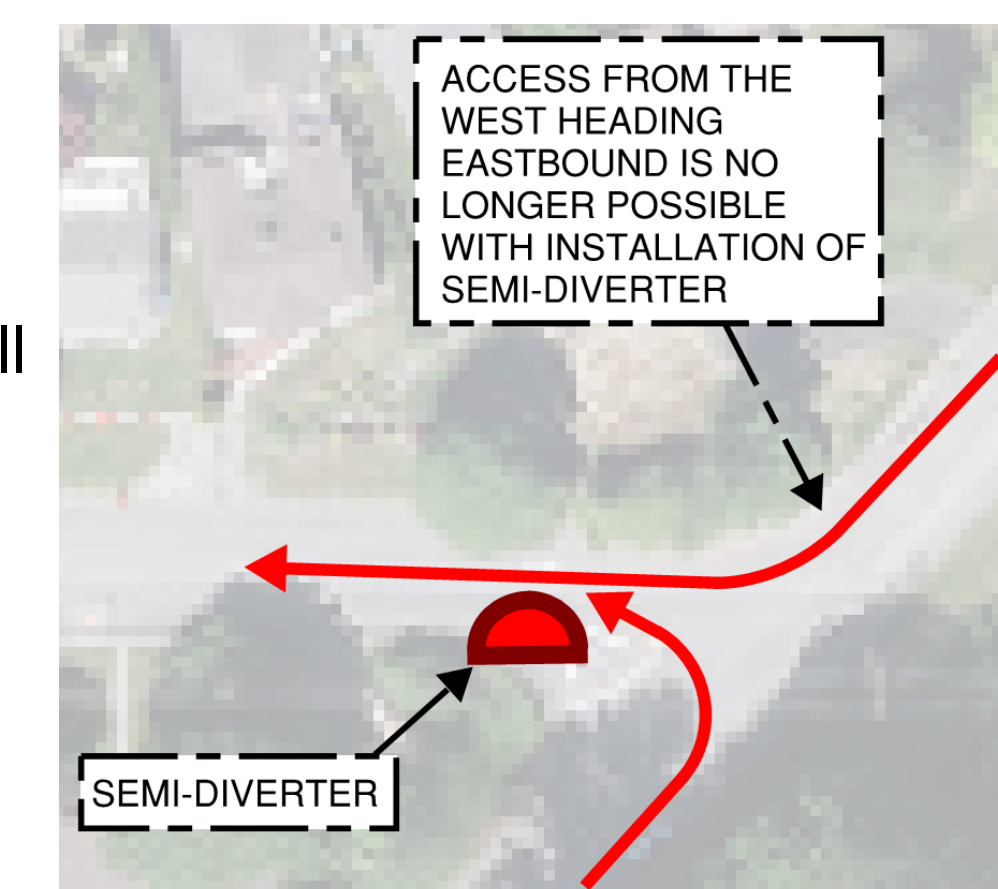
To discourage commuters from using local roads and laneways for access E Keith Rd.



2, 9

Semi-Diverter with No Exit Sign, Except Bicycles

To discourage commuters from using Shavington Street to access East Keith Road. Shavington Street will remain a two-way road.



10

Full Diverter / Mountable Median

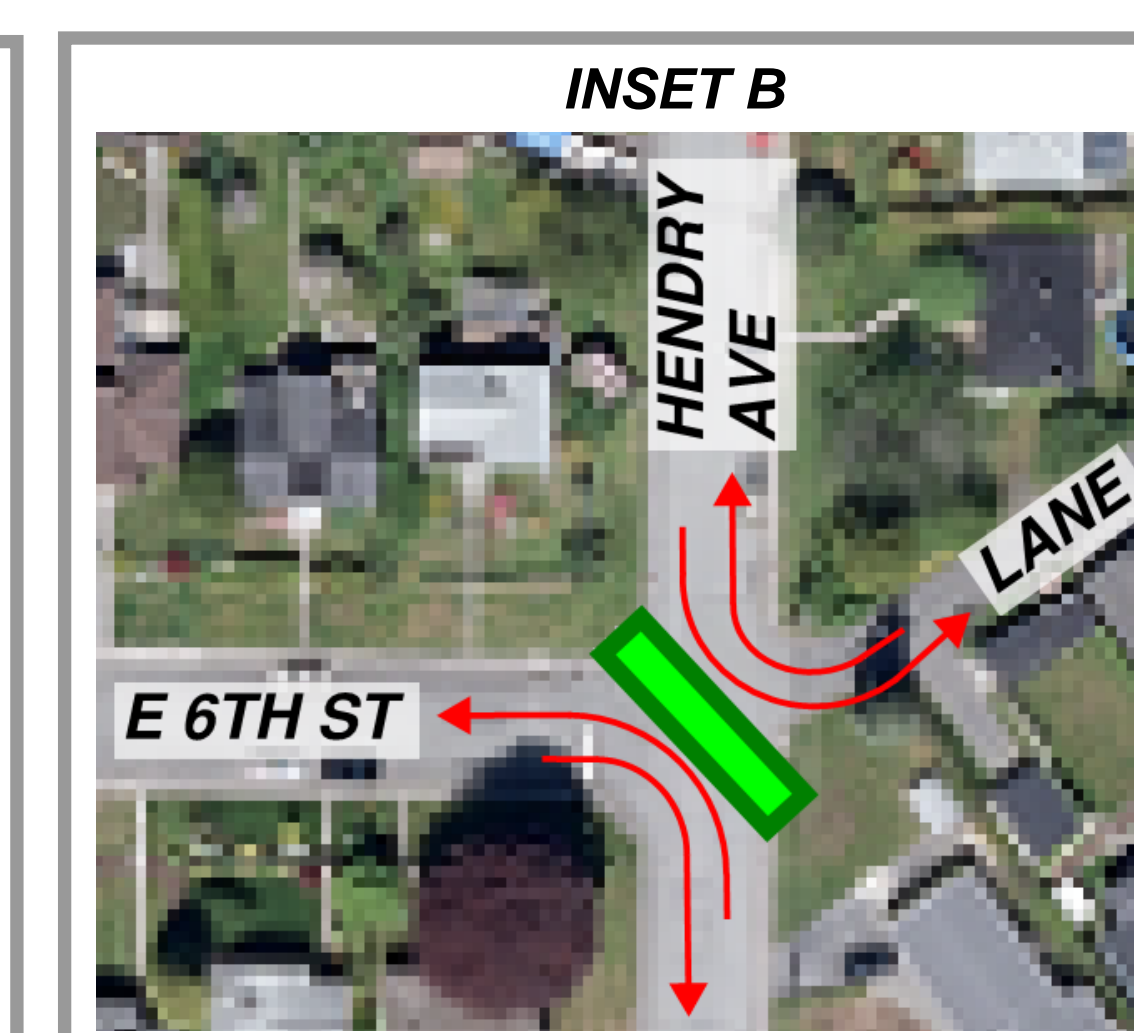
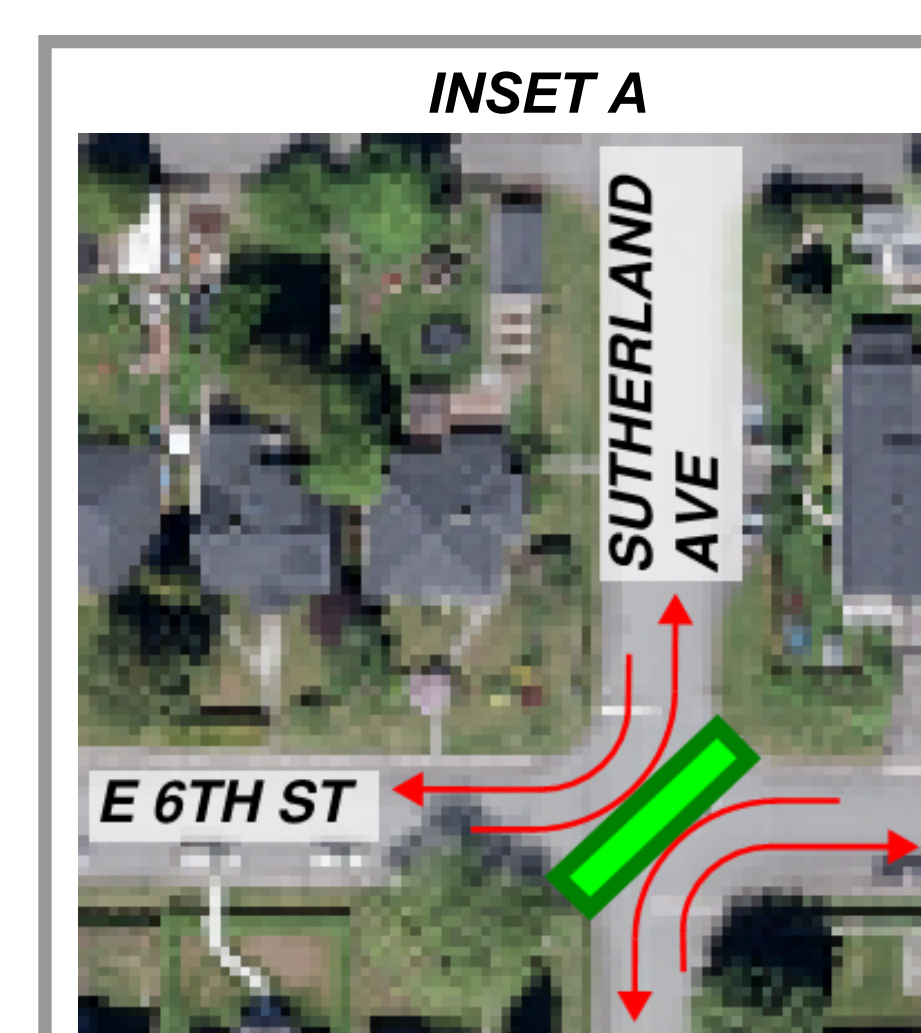
To prevent commuters from using the lane between Shavington Street and Heywood Street to access East Keith Road. However, the mountable curb will still allow for garbage collection and emergency access.



5, 6

Diagonal Diverter

To discourage commuters from using Sutherland as cut-through route. Access by emergency vehicles maintained.



13

Sign: No Exit

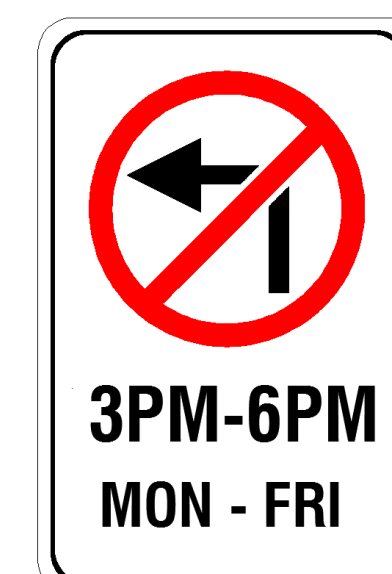
To discourage commuters from using Shavington Street and laneway to access East Keith Road.



12

Sign: No Left Turn (on to East 3rd St) 3-6pm, Mon-Fri

To discourage commuters from using local roads and laneways to access E 3rd St.



LEGEND:

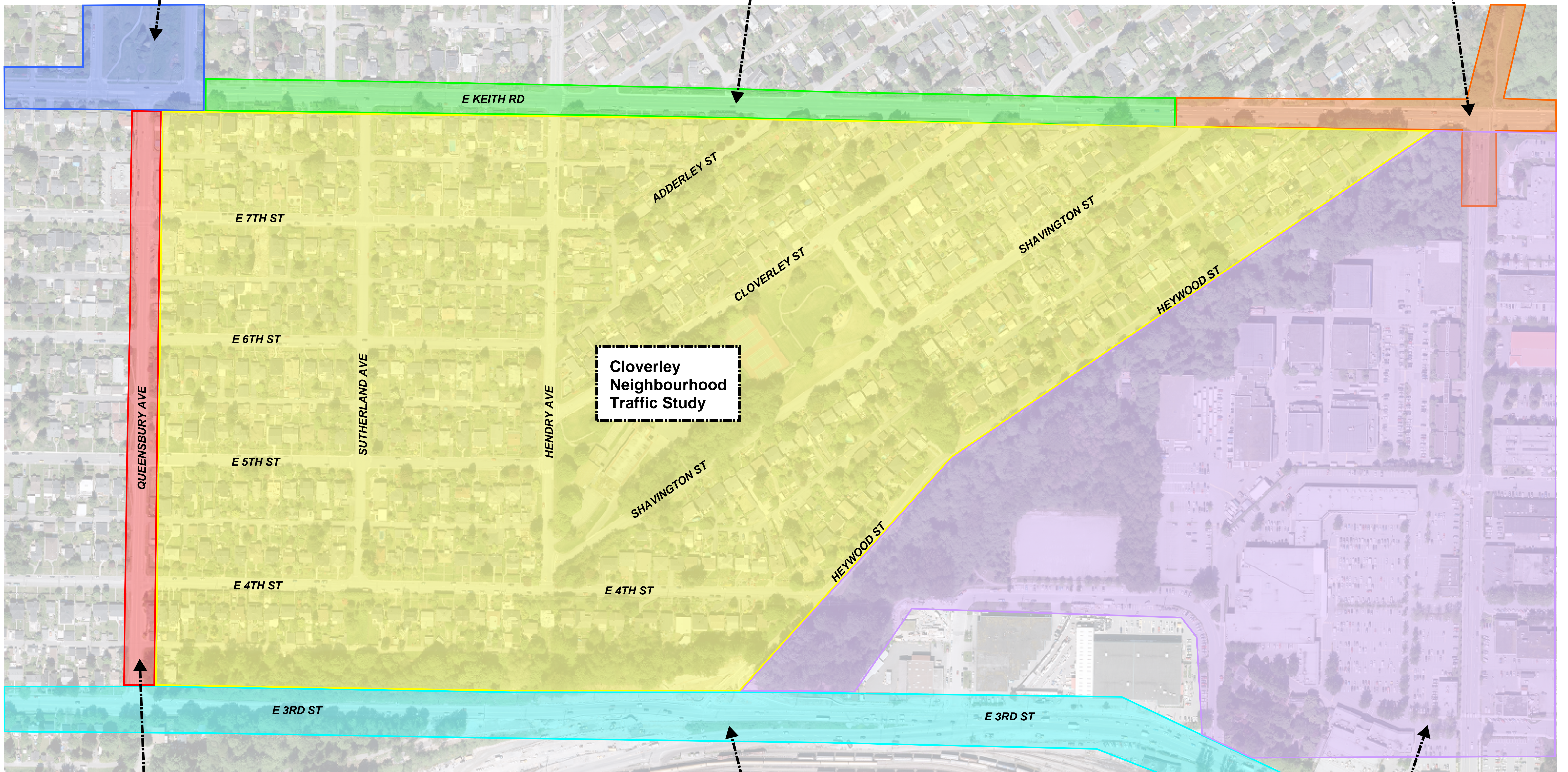
- New Diagonal Diverter
- New Speed Humps/Bumps on streets and lanes
- New Semi-Diverter
- New Full Diverter / Mountable Median
- New Sign: No Right/Left Turn
- New Sign: No Exit
- Current Speed Humps/Bumps on streets and lanes

CLOVERLEY NEIGHBOURHOOD TRAFFIC STUDY AND OTHER PLANNED IMPROVEMENTS AND STUDIES

East Keith and Grand Boulevard - Green Necklace
A City of North Vancouver project currently under construction which will provide bike lanes and multi-use paths as part of the greater Green Necklace plan.

East Keith Multi-modal Improvements Study
The City is working with the District of North Vancouver to identify safety and operational improvements for all modes of travel.

Mountain Highway Interchange
A Ministry of Transportation and Infrastructure project to improve access to Highway 1.



Cloverley Neighbourhood Traffic Study

Planned Queensbury Greenway Project
The City will be developing a plan to provide a greenway along Queensbury Avenue.

Future Rapid Transit Corridor (Marine - Main)
The City is working with Translink and both districts to develop a plan for this corridor.

Spirit Trail
Extension of the Spirit Trail. Long term planning for potential multiple routes in coordination with the District of North Vancouver.