



City of
Saskatoon

WELCOME

Circle Drive

Clancy Drive to Laurier Drive Functional Plan

Open House #2

January 22, 2020

4:00pm – 7:00pm

Shaw Centre



Open House Purpose

- Introduce the project and study process.
- Share the options that were explored for the study area:
 - Circle Drive, from Clancy Drive to Laurier Drive, and
 - The 22nd Street intersection with Confederation Drive.
- Share the preferred configuration and gather the community's feedback and input

Open House Format

- This open house is an informal drop-in format, there will be no formal presentation.
- Please view the project information, ask our staff questions.
- Please complete the comment sheet, either at this meeting or on the project website: www.saskatoon.ca/engage



Study Objectives

- Achieve free-flow travel along Circle Drive by removing the left-hand exits and entries at the Clancy Drive and Laurier Drive intersections.
- Retain the current turning movements at both intersections.
- Improve performance of the Circle Drive interchange with 22nd Street West.
- Improve performance of the 22nd Street intersection with Confederation Drive.
- Support Bus Rapid Transit (BRT) objectives along 22nd Street.

Study Process and Timeline



Study Background

- Circle Drive is a core route (urban ring road) in the City of Saskatoon's road network.
- Circle Drive supports travel within and through the City.
- In response to increasing congestion levels and safety concerns, the City continues to prepare plans to upgrade Circle Drive to a freeway standard.

Study Goals

- Remove the traffic signals at Clancy and Laurier Drives and upgrade Circle Drive to free-flow standards.
- Retain or improve pedestrian and cyclist movements across Circle Drive.



Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

Study Area



What We Heard

Key Themes from Open House #1

- 1. Circle Drive Congestion and Traffic Safety**
 - Frequent congestion and low travel speeds along Circle Drive
 - Northbound left-turn queues exceed storage at Clancy and Laurier Drives
 - Left-hand merges at Clancy / Laurier Drives are unsafe; close both accesses
 - Generally, short merge / acceleration lanes when entering Circle Drive
- 2. 22 Street West Congestion**
 - Recurring congestion at Confederation Drive intersection, especially eastbound queues waiting to turn south onto Circle Drive. This is compounded by the northbound-to-eastbound right turns from Fairmont Drive.
 - Congestion at Diefenbaker Drive, particularly westbound
 - Need longer turn lanes for left and right turn movements at intersections
- 3. Sound Attenuation**
 - Improved attenuation, particularly adjacent to the Meadowgreen and Westview communities
- 4. Pedestrian Crossing Safety**
 - Safety of existing pedestrian underpass tunnels
- 5. Access to Circle Drive**
 - Residents of Montgomery Place, Meadowgreen and Parkridge seek greater access
- 6. 11 Street West Interchange**
 - At-grade rail crossing on ramps creates southbound queues
- 7. Costs of Potential Upgrading**



Clancy Drive Structure Options

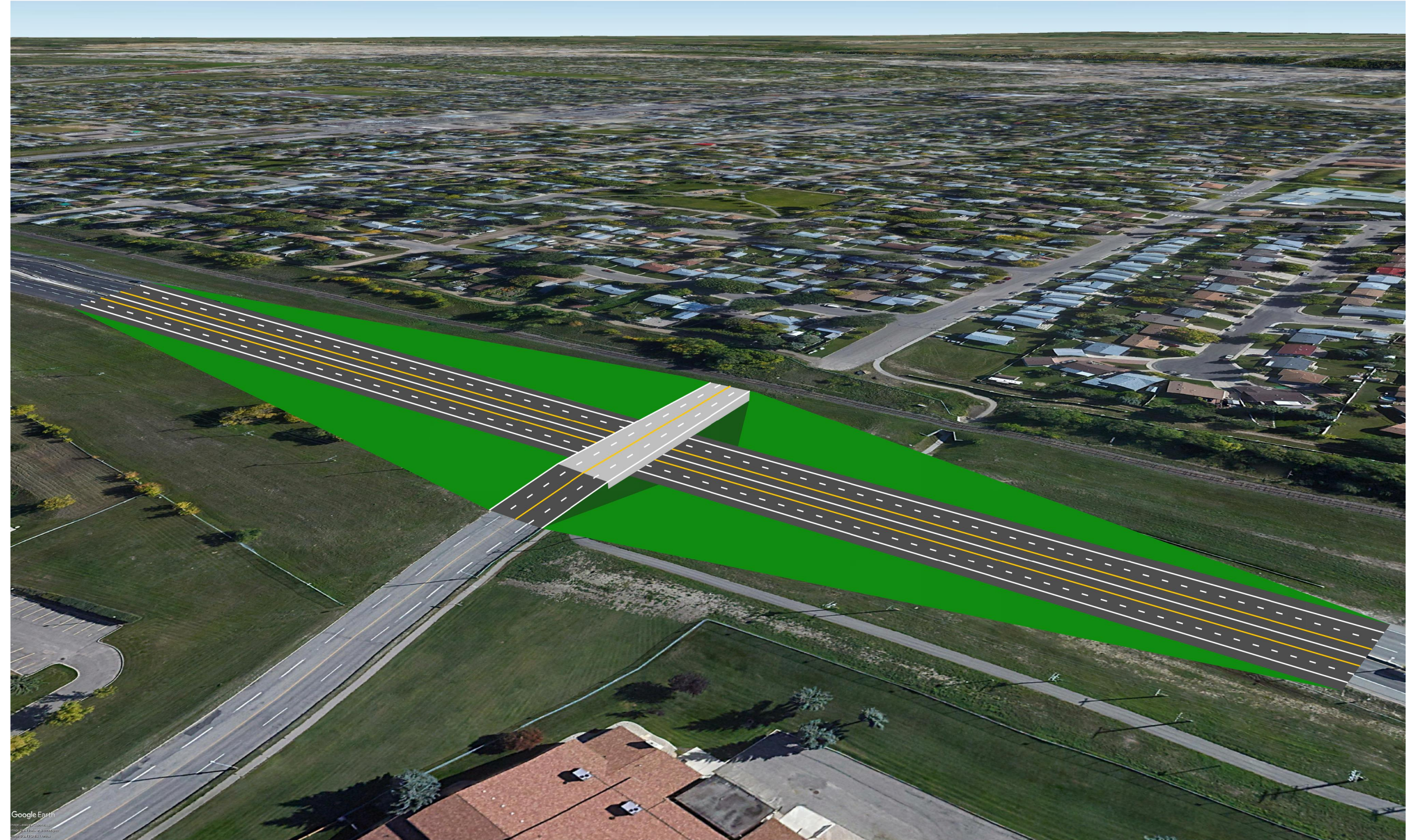
Note: These views exaggerate the design features.



Raise Circle Drive

Rejected

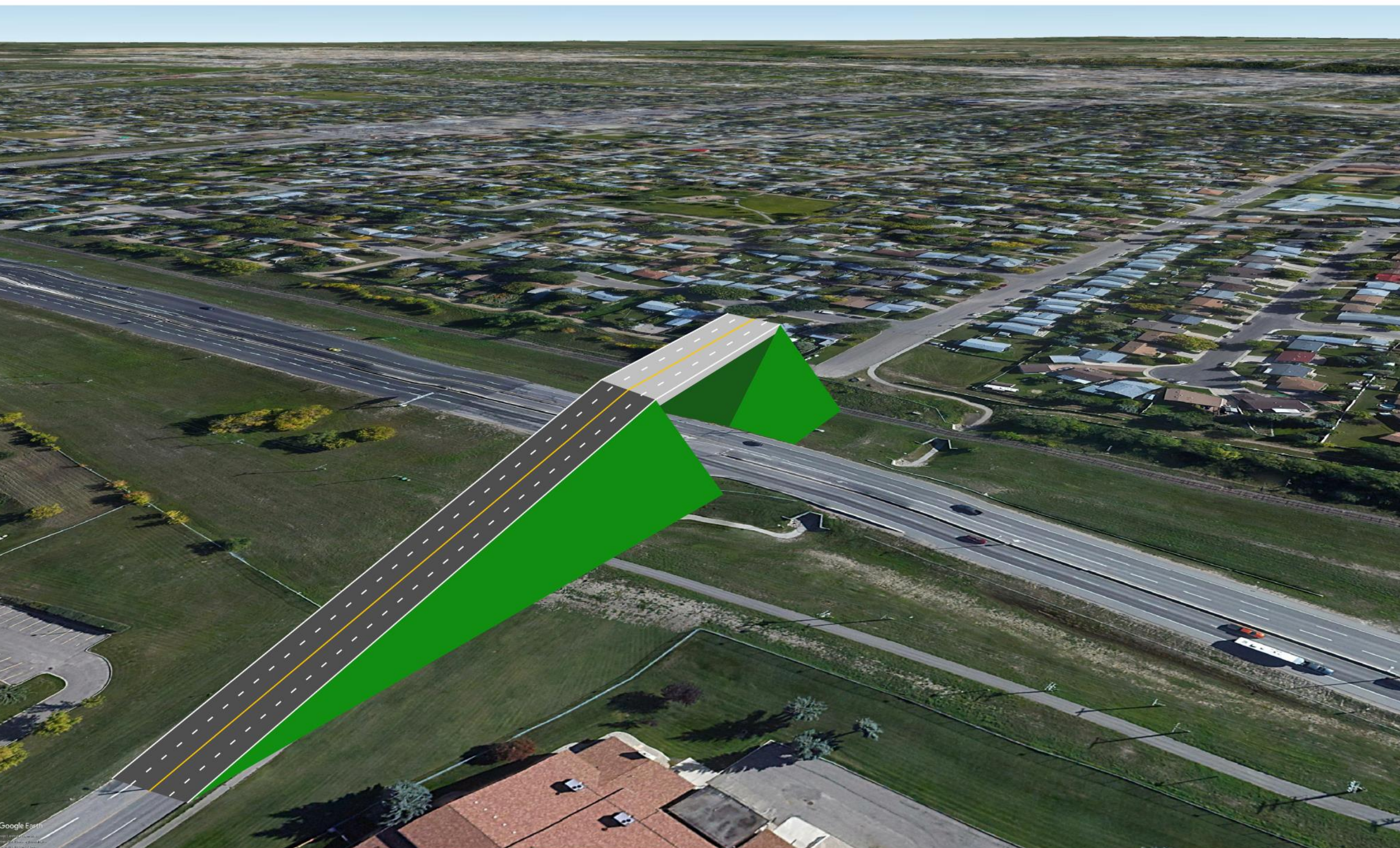
Does not work well with rail underpass to the south.
Elevates Circle Drive passing residential areas.



Lower Circle Drive

Not Preferred

Feasible, but difficult to construct, requiring substantial detours along Circle Drive.



Raise Clancy Drive

Rejected

Results in unacceptable steep grades (more than 12%) along Clancy Drive.



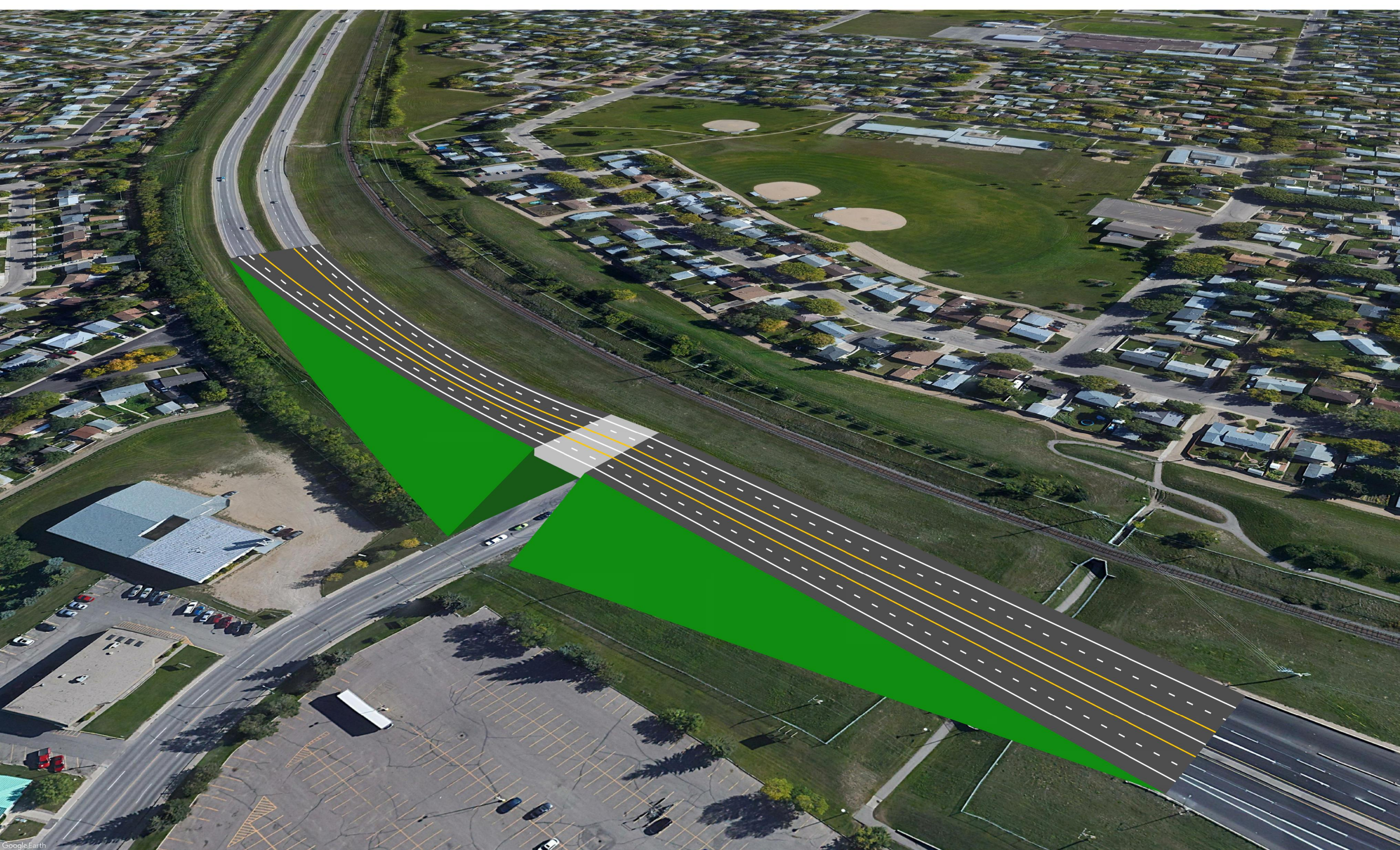
Lower Clancy Drive

Preferred

Takes advantage of Fairmont Drive being lower than Circle Drive.
Improves constructability compared with lowering Circle Drive.

Laurier Drive Structure Options

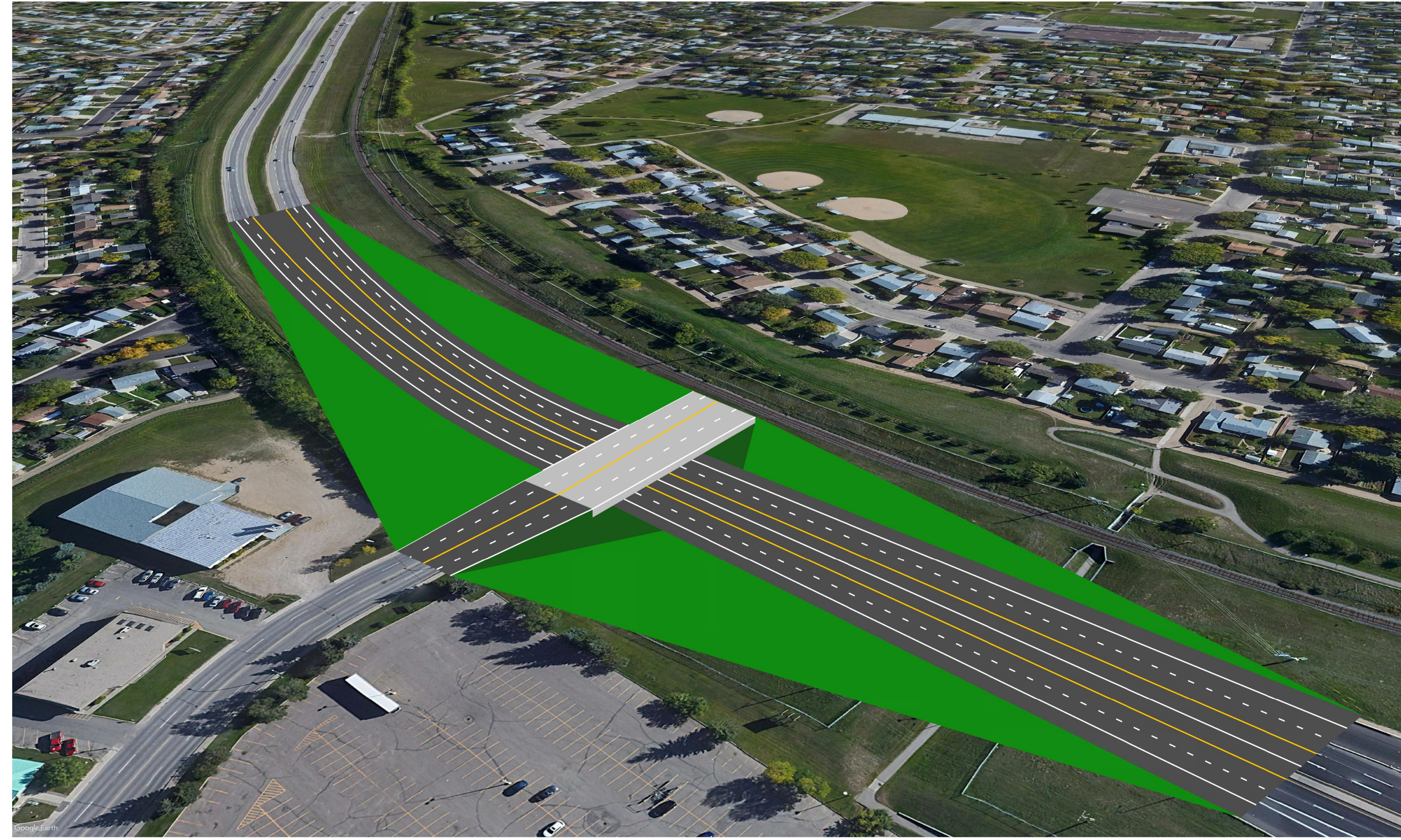
Note: These views exaggerate the design features.



Raise Circle Drive

Not Preferred

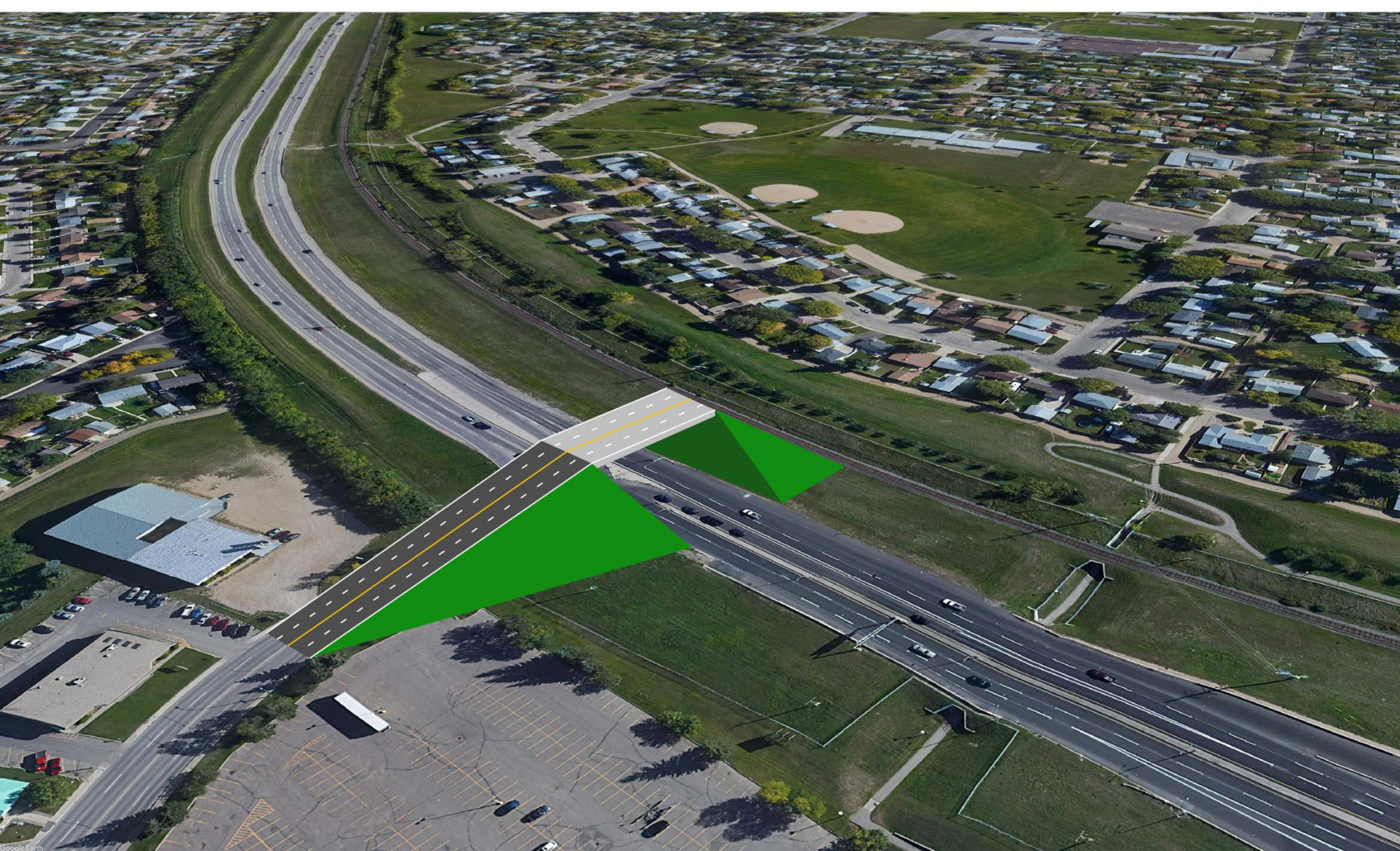
Elevates Circle Drive passing residential areas with noise implications.
Maintains grades along Laurier Drive with minimal impacts to adjacent property accesses.



Lower Circle Drive

Preferred

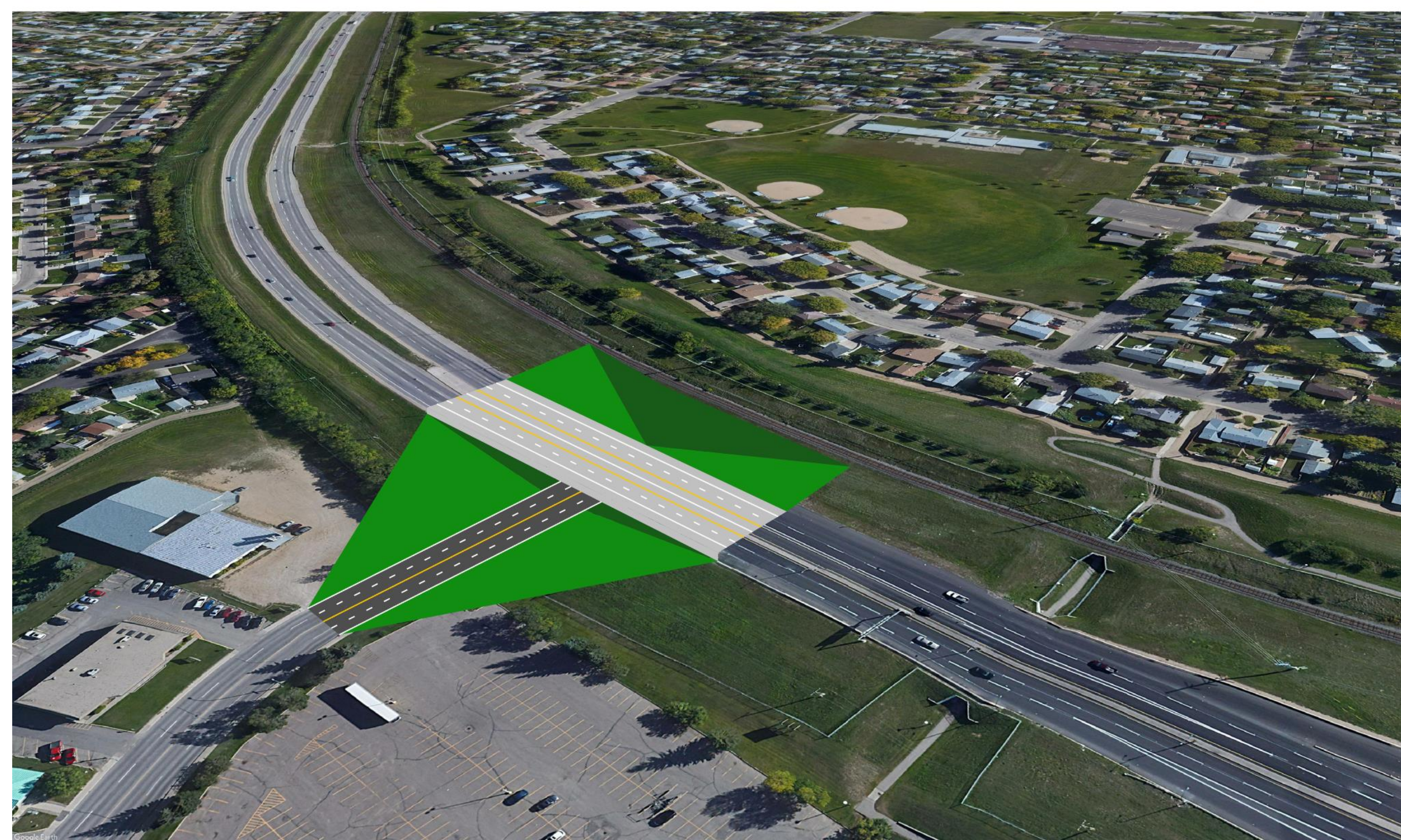
Lower noise exposure.
Maintains grades along Laurier Drive with minimal impacts to adjacent property accesses.
Requires substantial detours for construction.



Raise Laurier Drive

Rejected

Results in steep grades (more than 8%) along Laurier Drive.
Impacts adjacent property accesses along Laurier Drive.



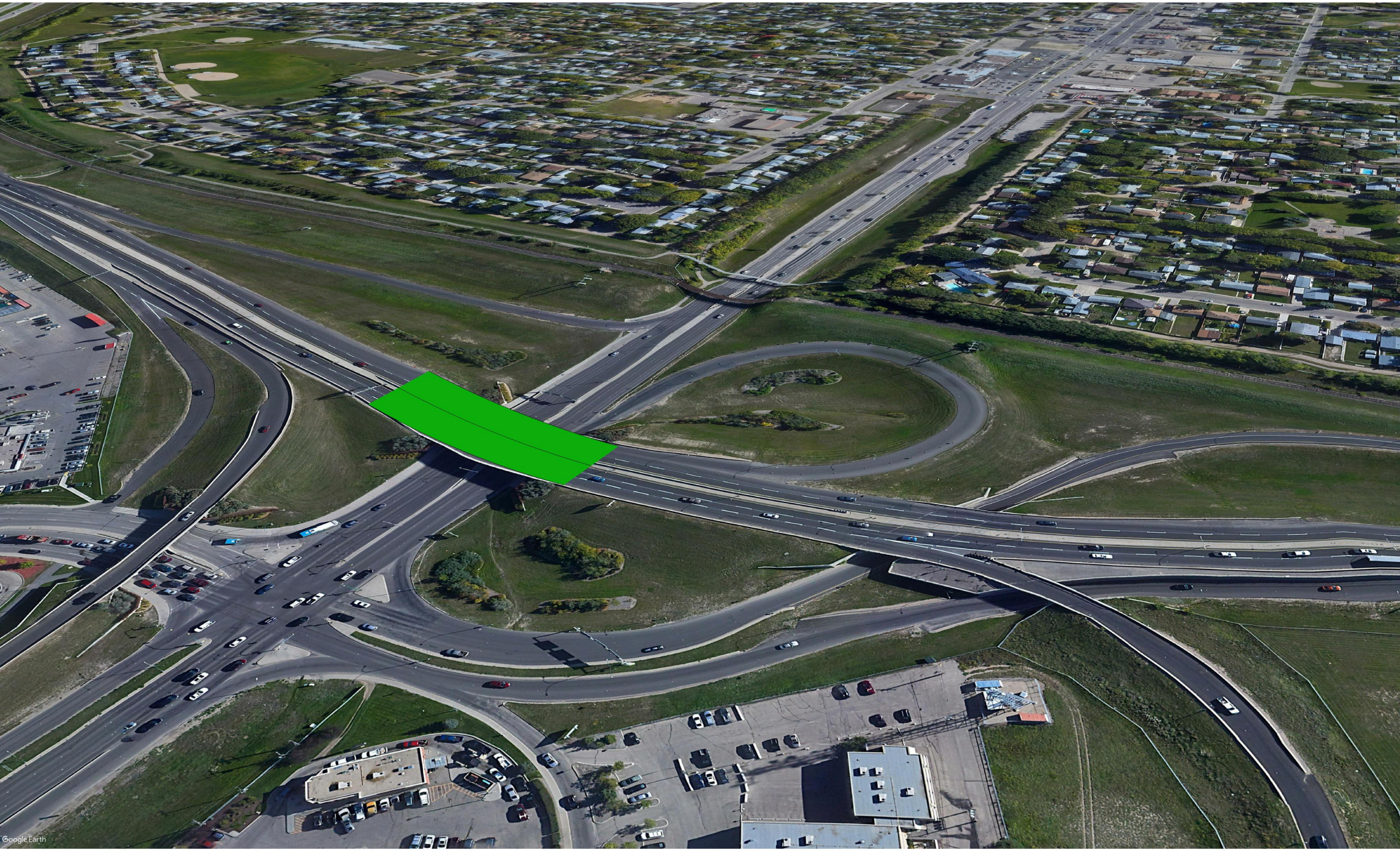
Lower Laurier Drive

Rejected

Impacts adjacent property accesses along Laurier Drive.
Future interchange ramps impact adjacent properties and the CNR right-of-way.

22 Street West Structure Options

Note: These views exaggerate the design features.

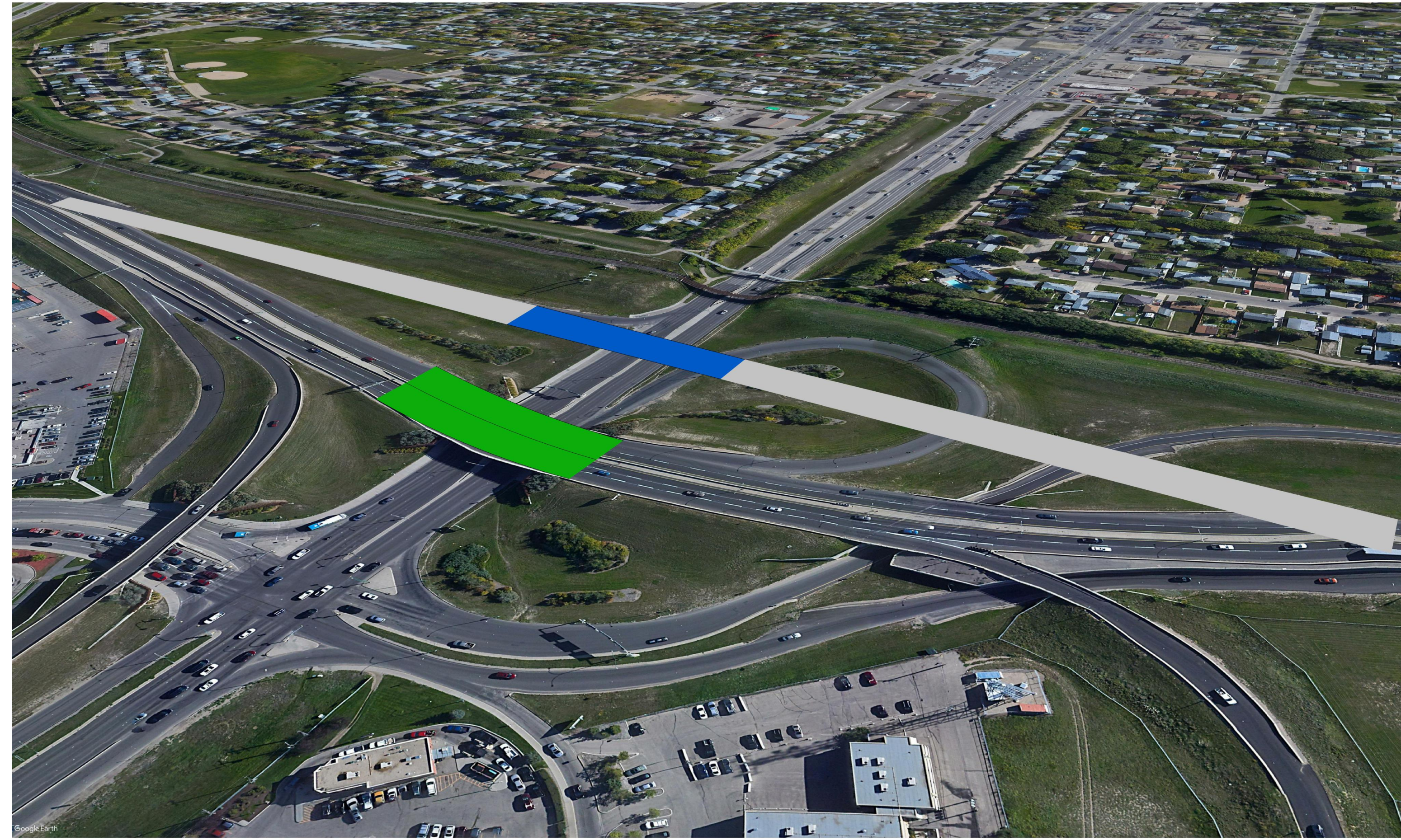


Keep Existing Circle Drive Interchange Bridges

Not Preferred

Does not address low speed curves along Circle Drive.

Retains all existing bridge structures.



Build New Northbound Bridge Keep Existing Southbound Bridges

Not Preferred

Corrects low speed curves along Circle Drive for northbound traffic only.

Reuses all existing bridge structures, including for modified or new ramps.

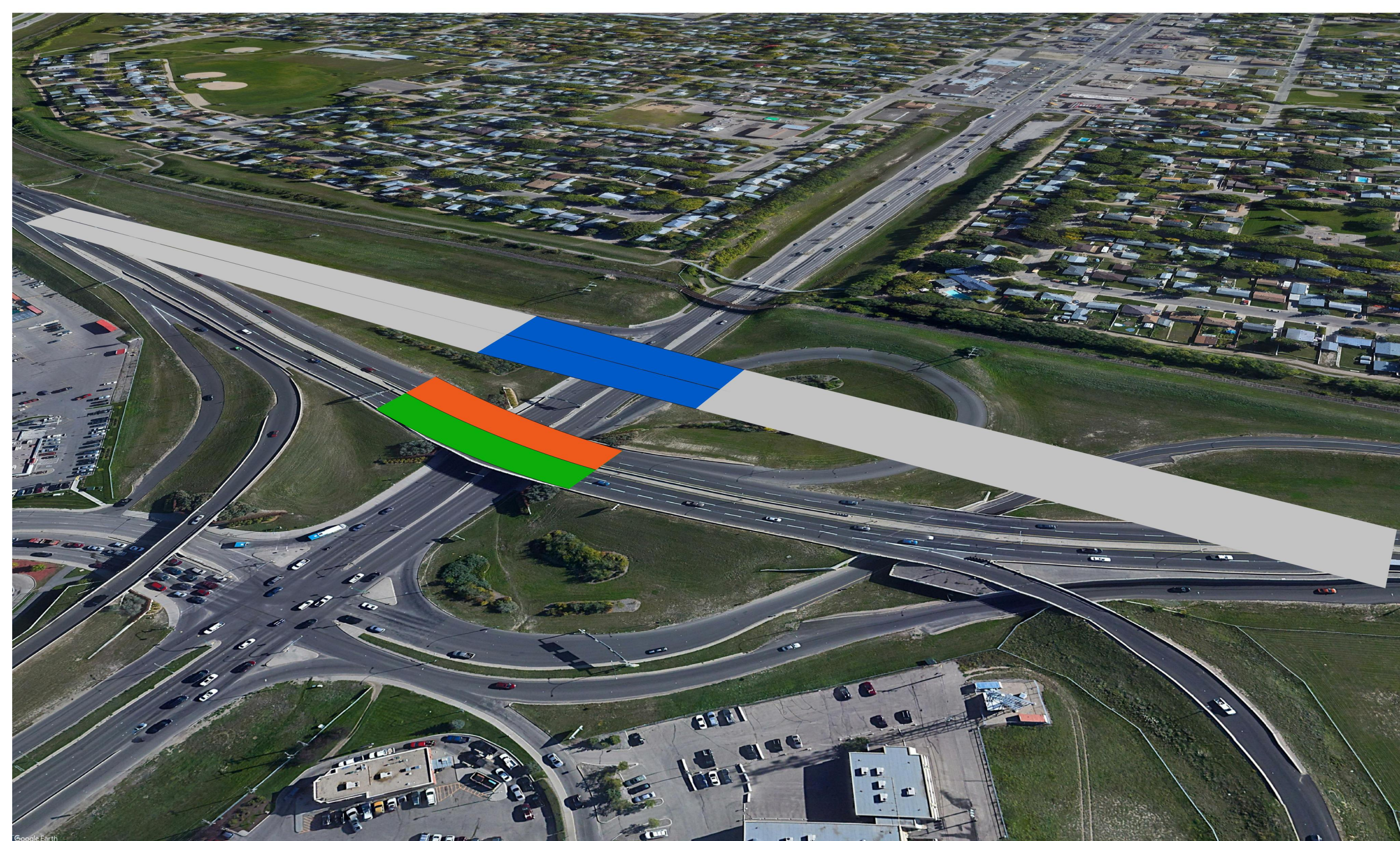


Realign Circle Drive Abandon All Bridges

Not Preferred

Corrects low speed curves along Circle Drive for both northbound and southbound.

Abandons/demolishes all existing bridges.



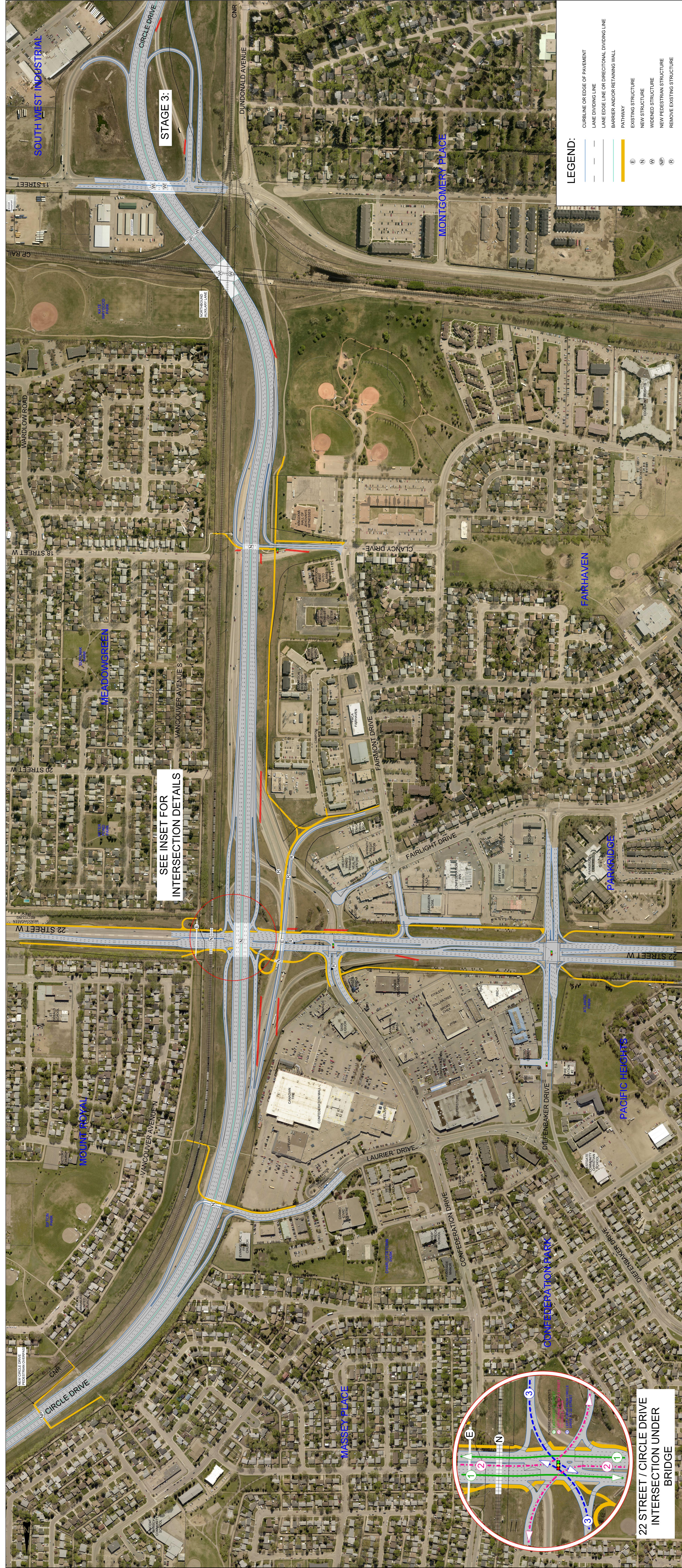
Realign Circle Drive Retain Some Bridges for Ramps

Preferred

Corrects low speed curves along Circle Drive for both northbound and southbound.

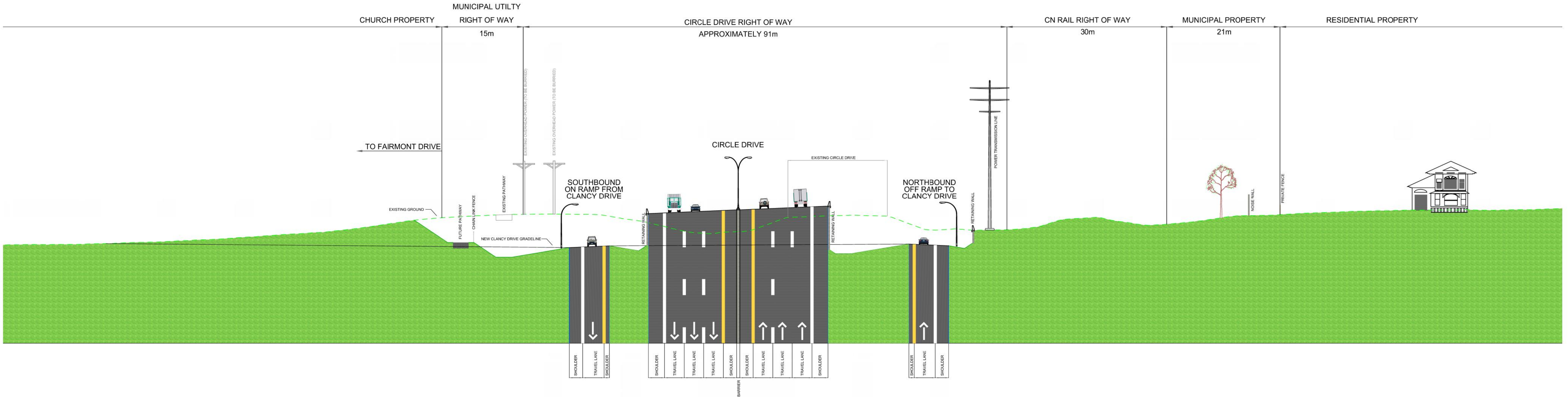
Retains some existing bridges where they can improve access, operations or active modes.

Preferred Circle Drive Plan

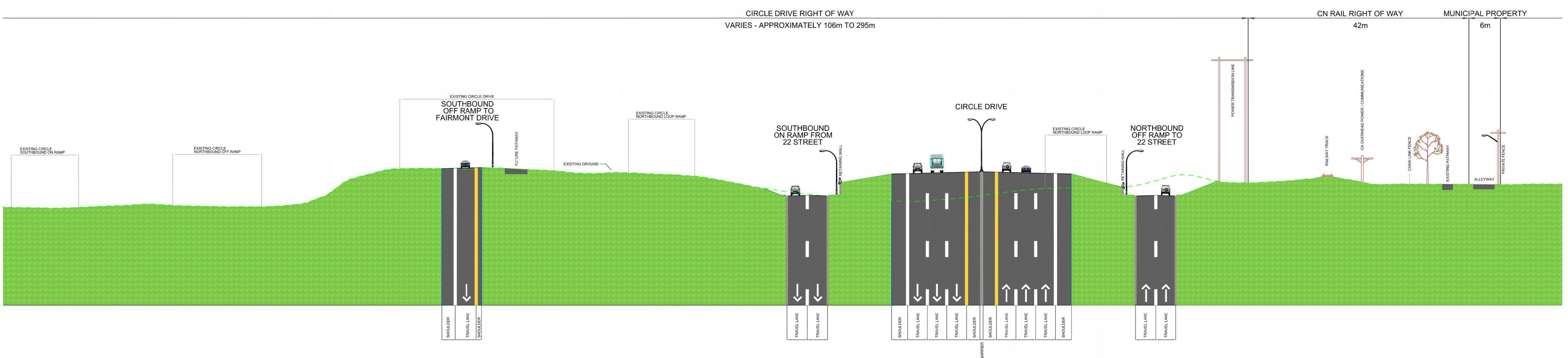


1. Single Point Urban Interchange (SPUI) configuration on a straightened Circle Drive alignment.
2. Partial (1/2 Diamond) interchanges at Laurier and Clancy Drives (to the north and south, respectively)
3. More conventional (less complex) overall plan for the 22nd Street interchange and the Confederation Drive intersection.
4. Preferred plan has fewer structures and lower cost.
5. New plan recognizes that Circle Drive has been extended south across the South Saskatchewan River. Existing primary free-flow routing between Circle Drive's north leg and 22nd Street's west leg is removed.
6. Plan accommodates future Bus Rapid Transit (BRT) routes east-west along 22nd Street.

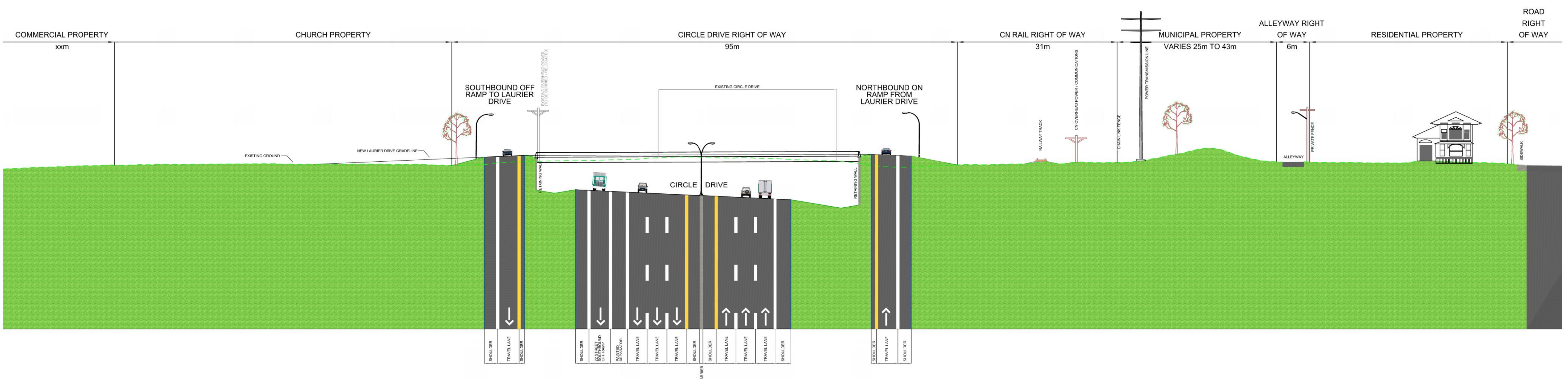
Circle Drive Cross Sections For Preferred Plan



South Side of Clancy Drive – Looking North



120m South of 22 Street W – Looking North



North Side of Laurier Drive – Looking North

Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

Other Options Considered



**Diverging Diamond Interchange (DDI);
Partial collector/distributor (C/D) roads between Laurier and Clancy Drives**



**Diverging Diamond Interchange (DDI);
Two-way collector/distributor (C/D) road parallel to CN tracks;
NO C/D road connection to 22nd Street between Laurier and Clancy Drives**



**Single-Point Urban Interchange (SPUI); situated on
Two-way collector/distributor (C/D) roads parallel to CN tracks;
Connection to 22nd Street between Laurier Drive and Clancy Drive**

ALL THREE OPTIONS REJECTED:

- The DDI configurations are very complicated in this highly constrained location near the Confederation Drive intersection.
- The SPUI configuration on the parallel C/D road does not improve the Circle Drive alignment.
- Too many new structures are needed to retain the existing Circle Drive alignment and retain all turning movements.

Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

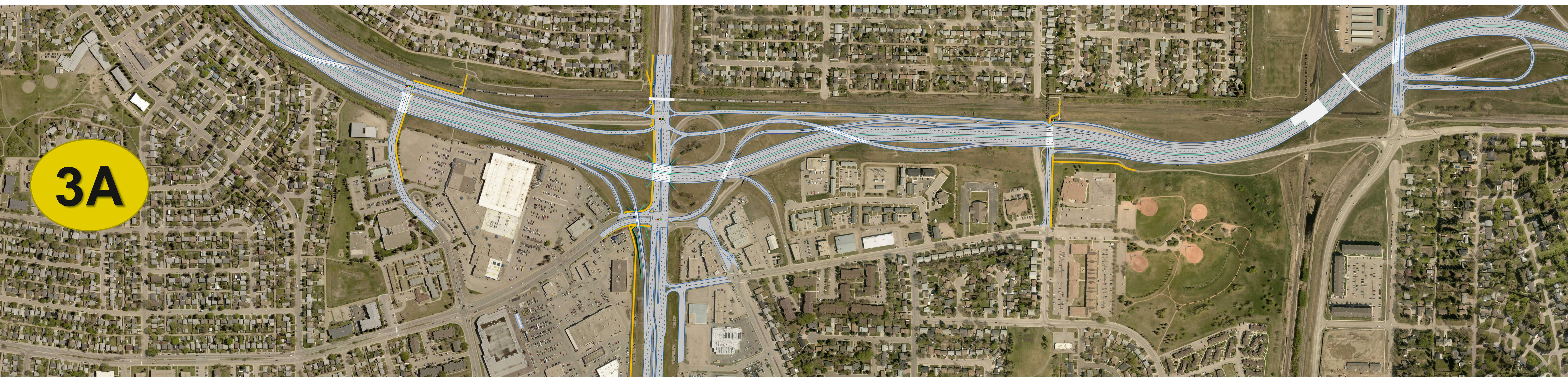
Other (Simplified) Options Considered



Diverging Diamond Interchange (DDI); with partial C/D Roads; and with Partial Interchanges at Laurier and Clancy Drives



Diverging Diamond Interchange (DDI); with enhanced southbound C/D road connections passing Clancy Drive; and with Partial Interchanges at Laurier and Clancy Drives

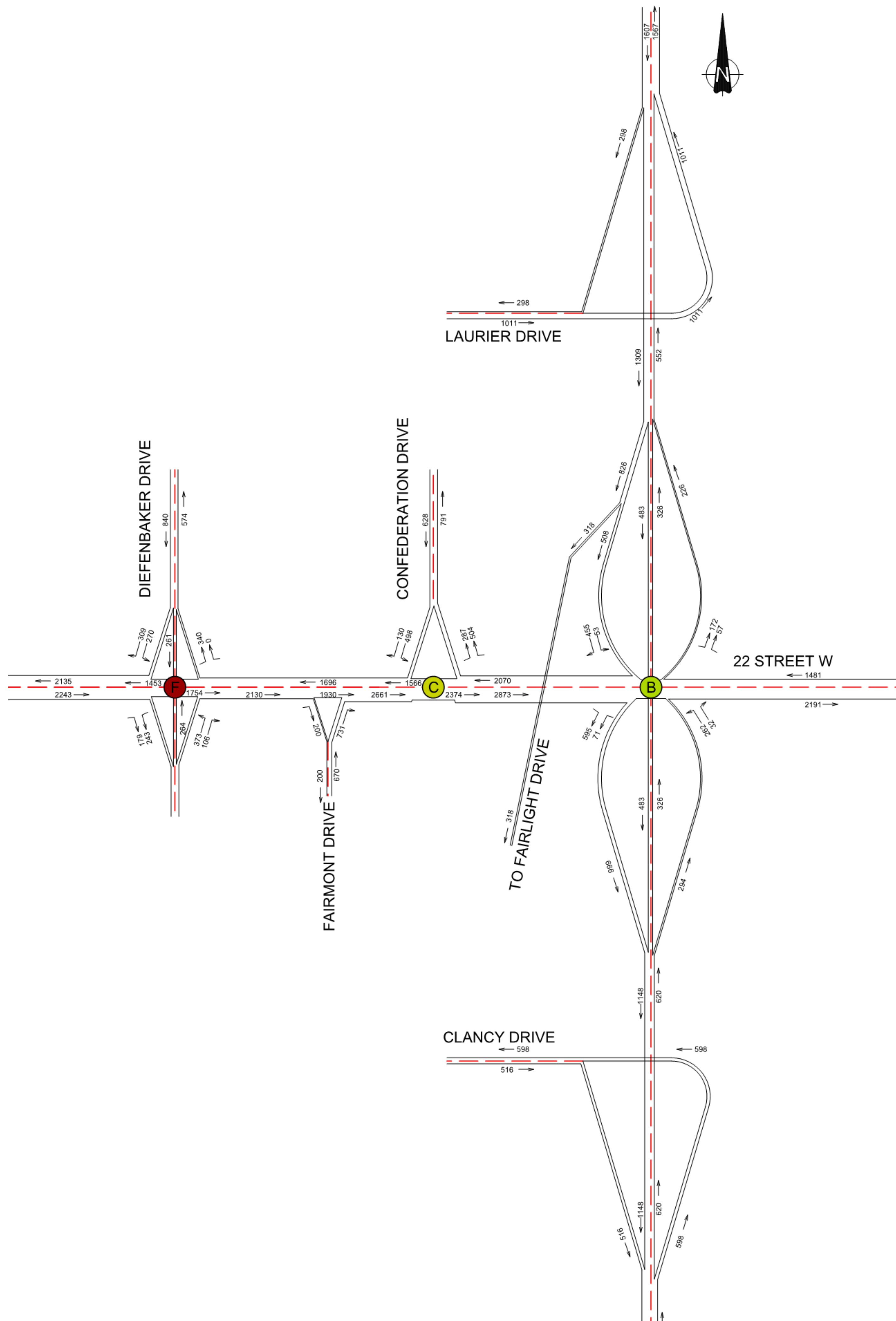


Single Point Urban Interchange (SPUI); with partial C/D Roads; and with Partial Interchanges at Laurier and Clancy Drives

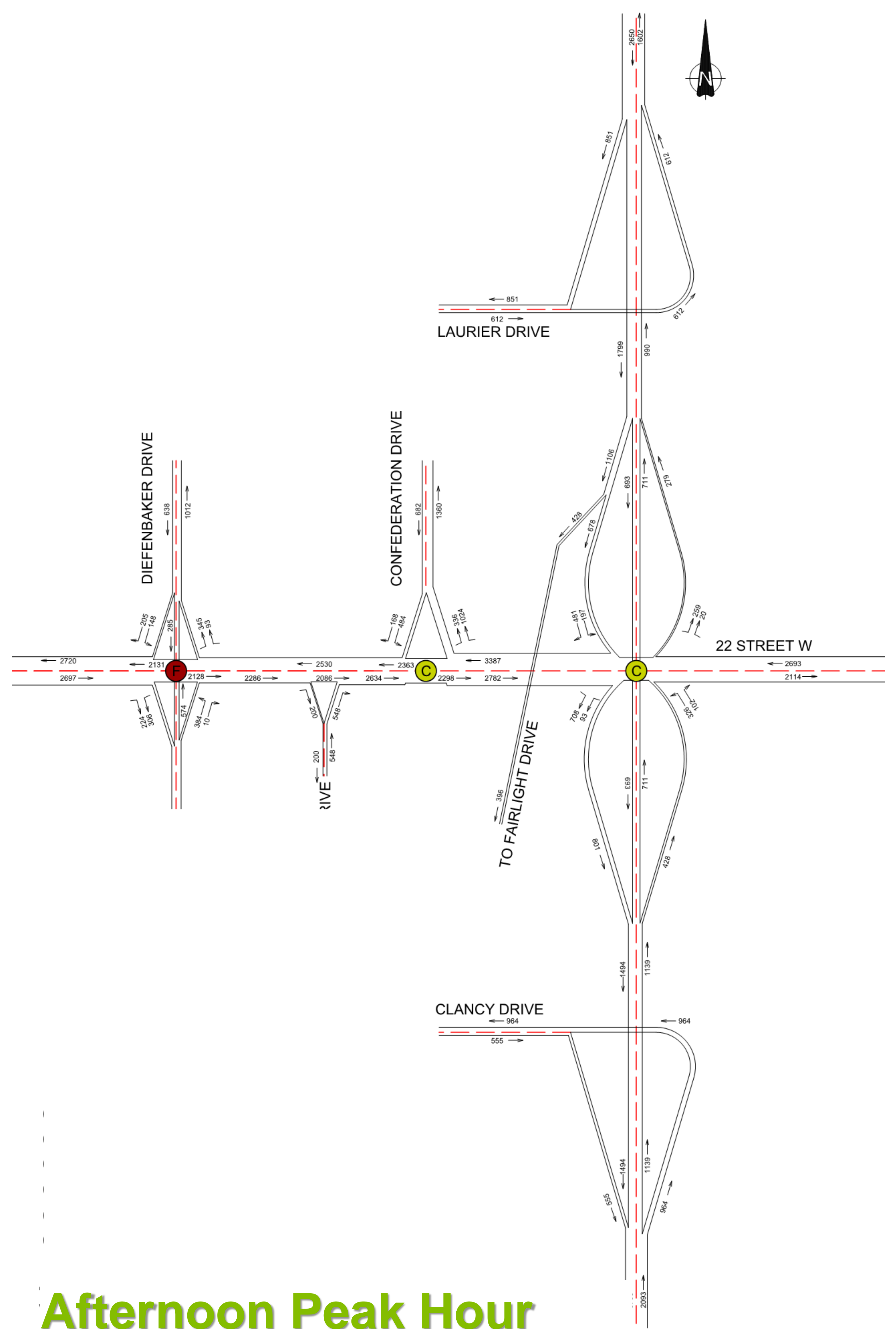
ALL THREE OPTIONS REJECTED:

- The DDI configurations are still very complicated in this highly constrained location near the Confederation Drive intersection.
- The SPUI configuration on the parallel C/D road does not improve the Circle Drive alignment.
- Placing the SPUI off to one side on the C/D road requires too many new and complex structures.
- Both configurations would require two separate left-turn movements at Diefenbaker Drive.

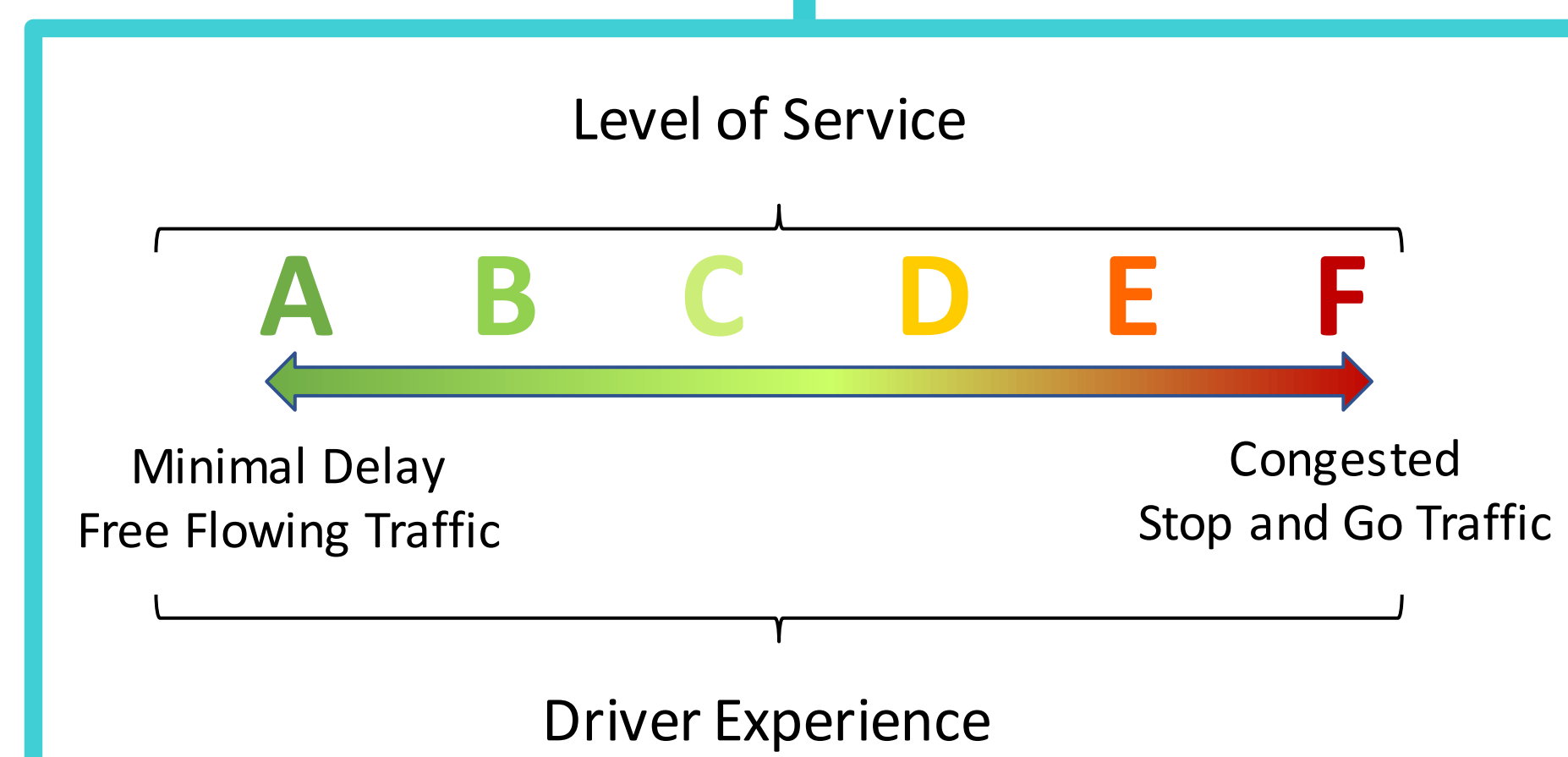
Future Traffic Conditions



Morning Peak Hour
400k Population
 Without Future Saskatoon Freeway



Afternoon Peak Hour
400k Population
 Without Future Saskatoon Freeway

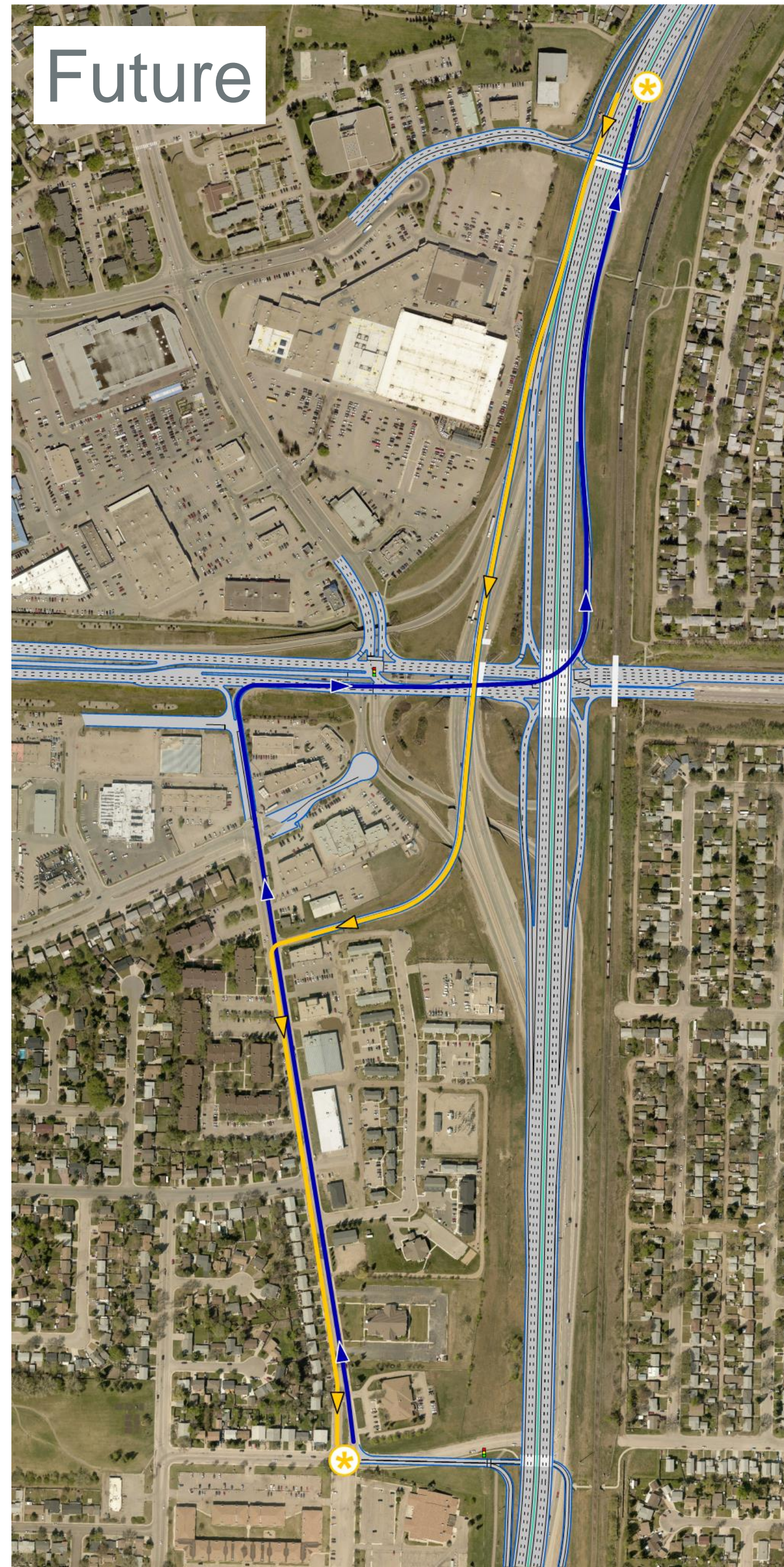
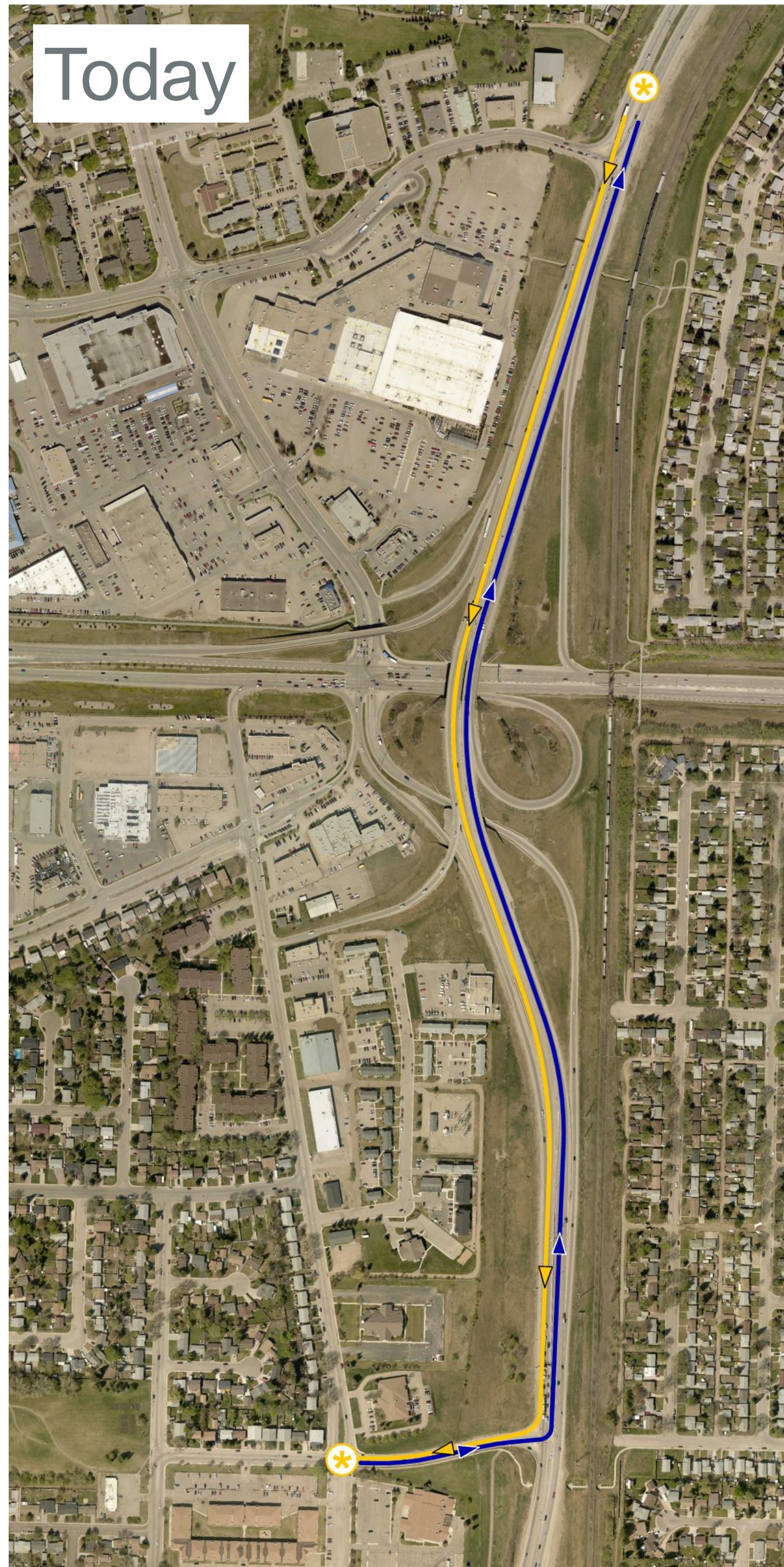


Note: The 22nd Street intersection with Diefenbaker Drive is not part of the current study. It will be addressed by the City in a future study.

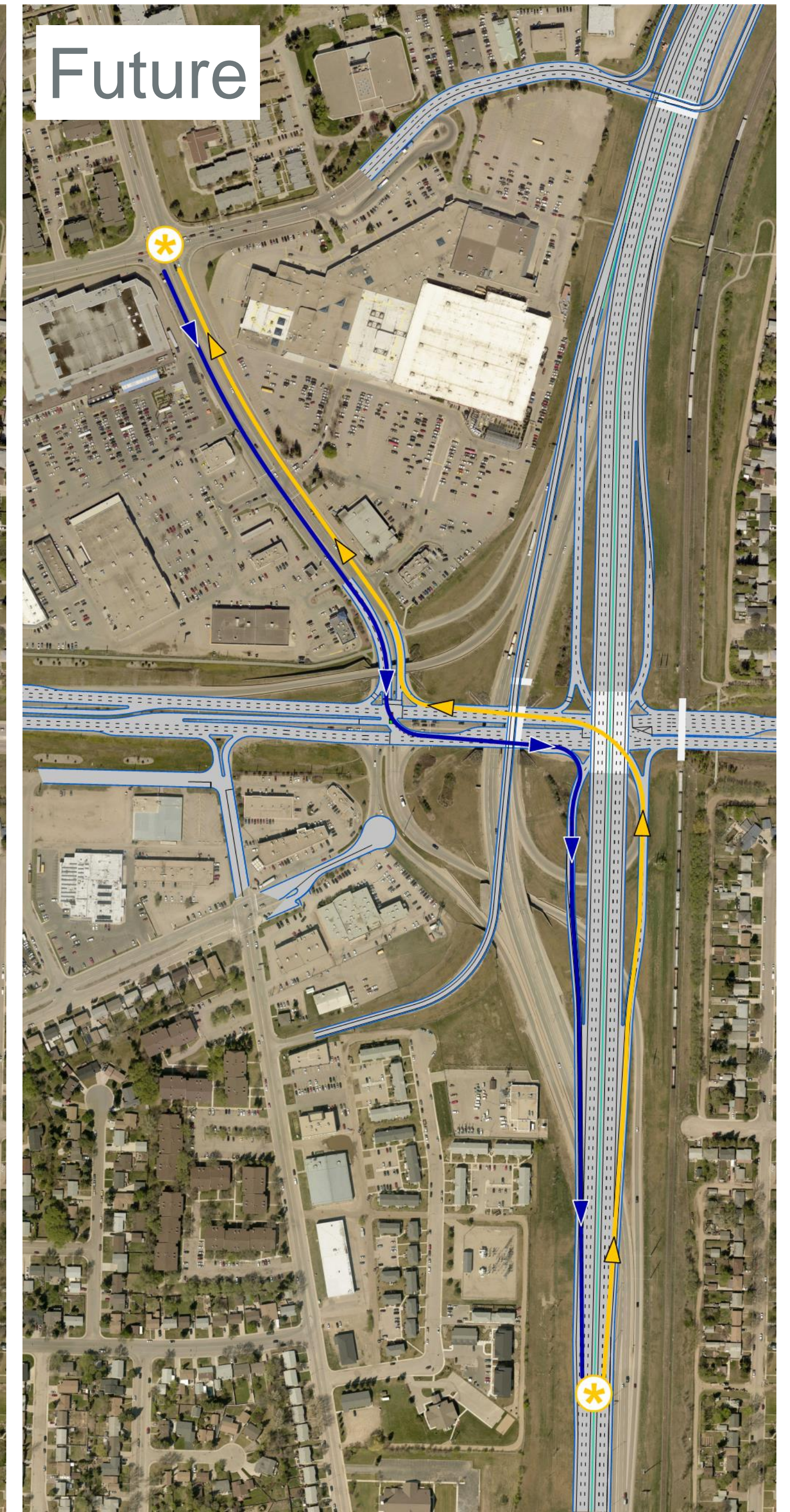
Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

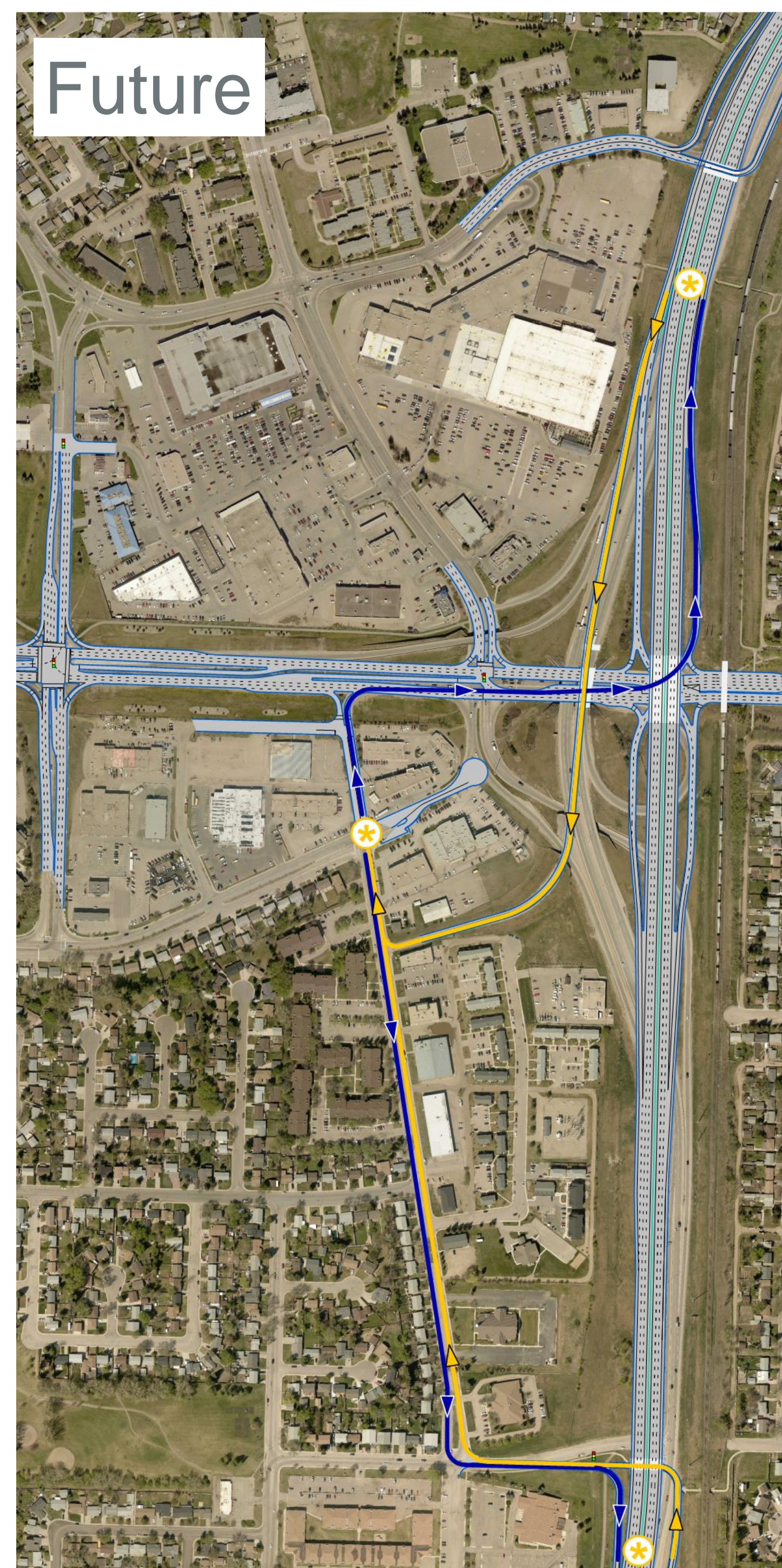
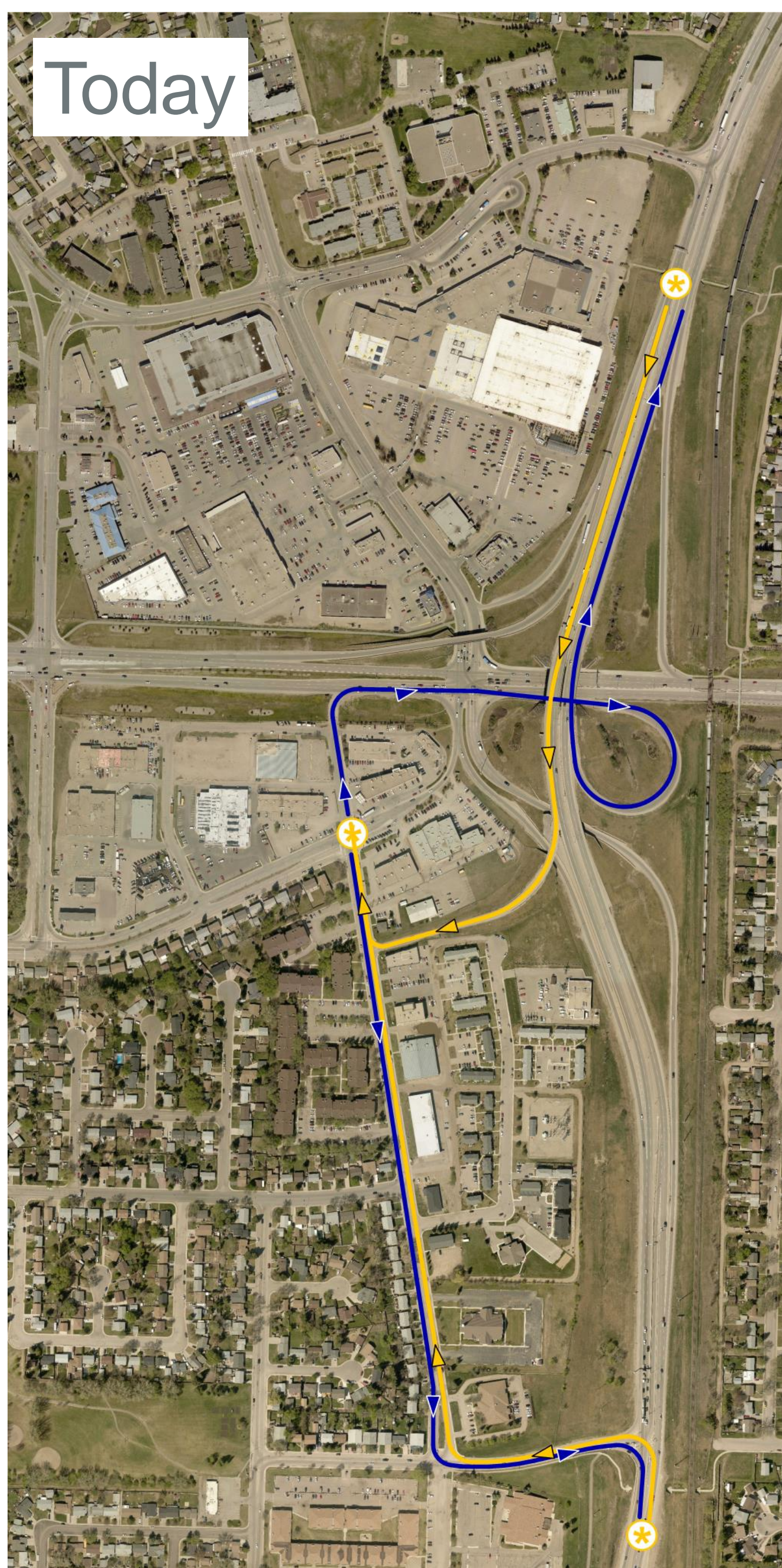
How Do I Get There?



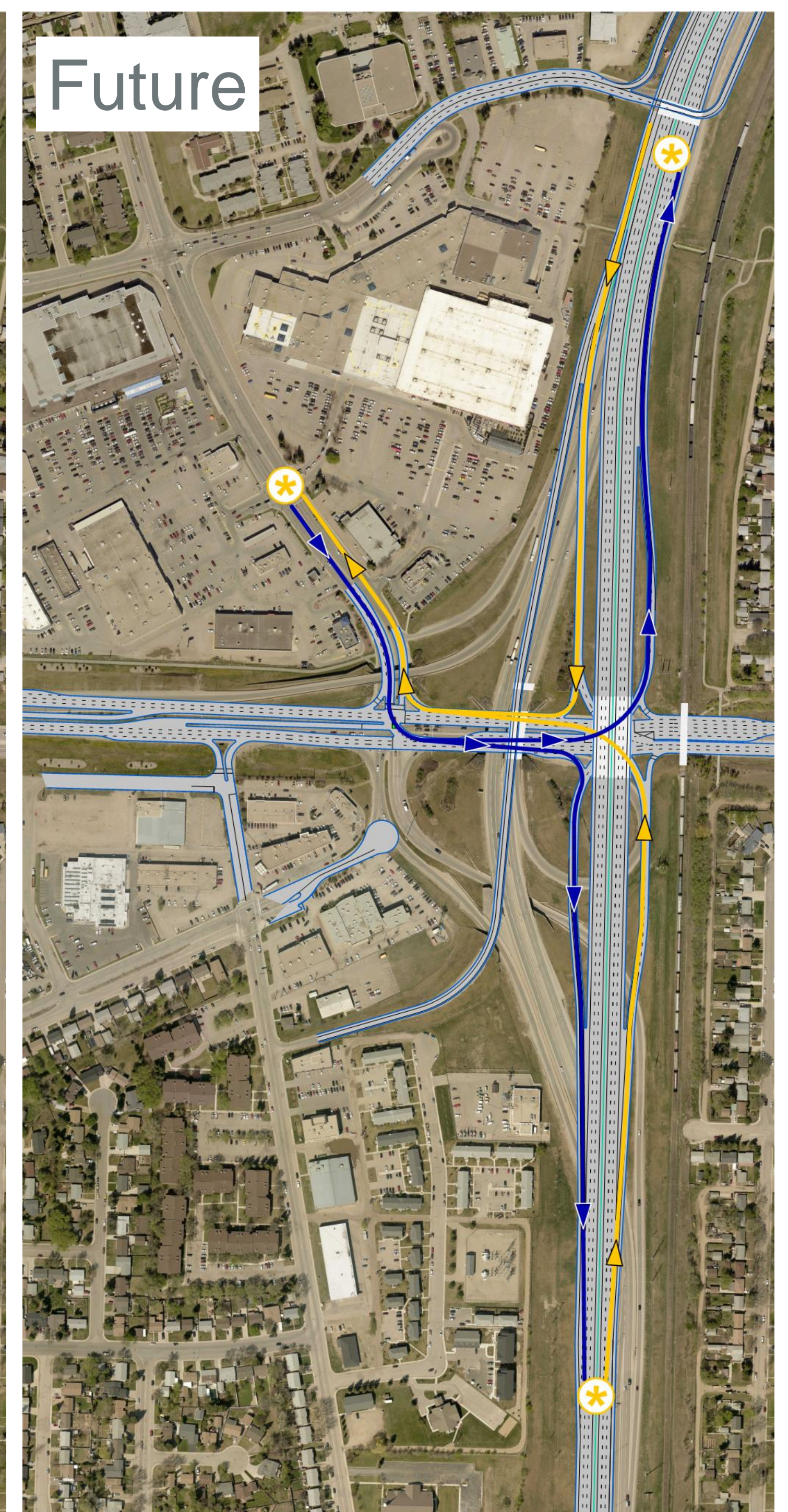
Clancy Drive to / from Northbound Circle Drive




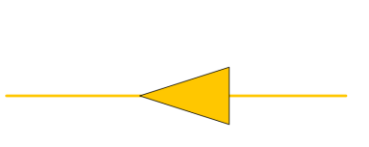
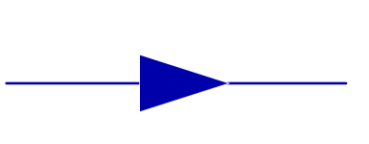
Laurier Drive to / from Southbound Circle Drive



Fairmont Drive to / from Circle Drive



Confederation Drive to / from Circle Drive

-  Start / End
-  Travel Path One Direction
-  Travel Path Return Direction

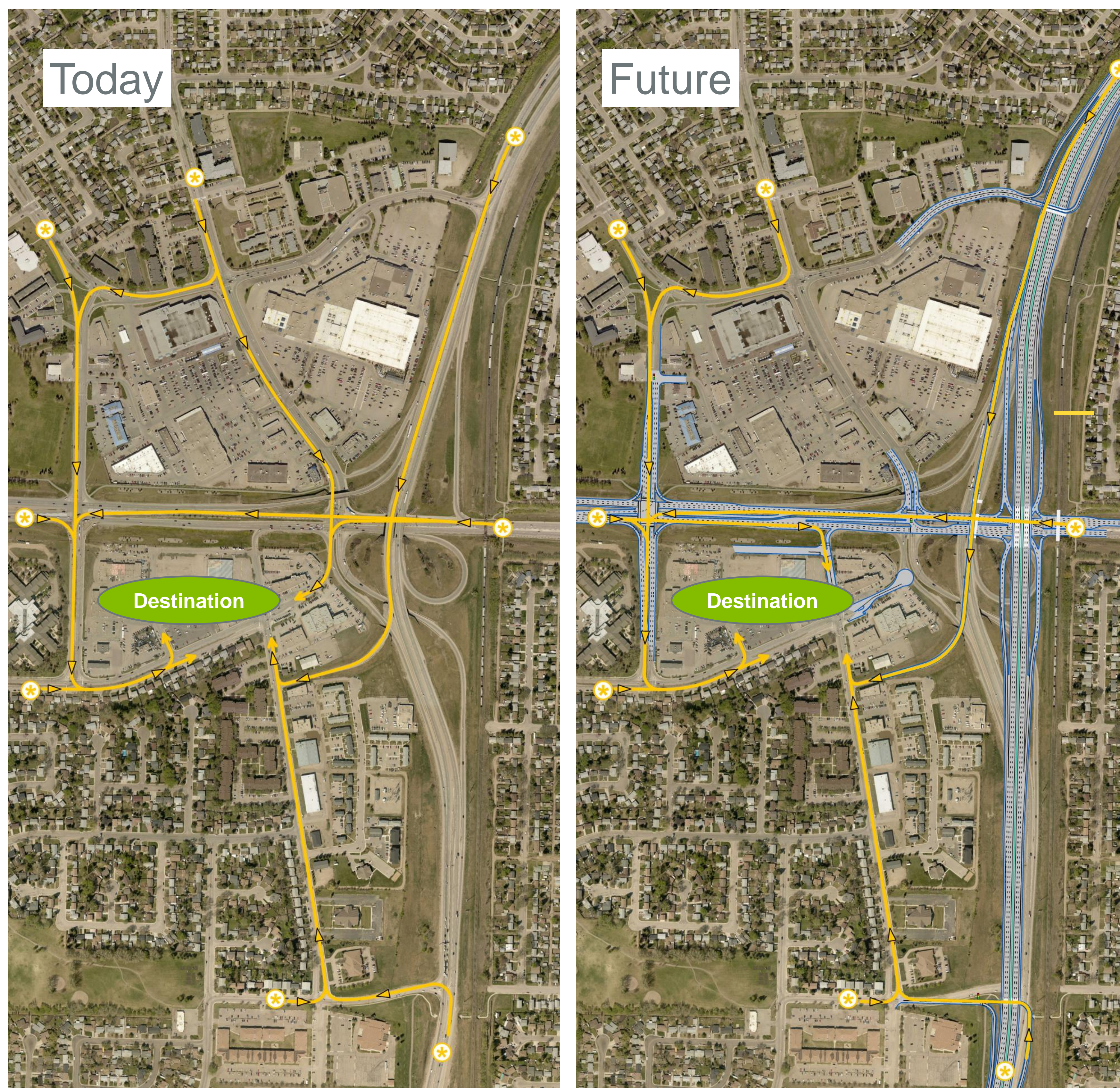
Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

How Do I Get There?

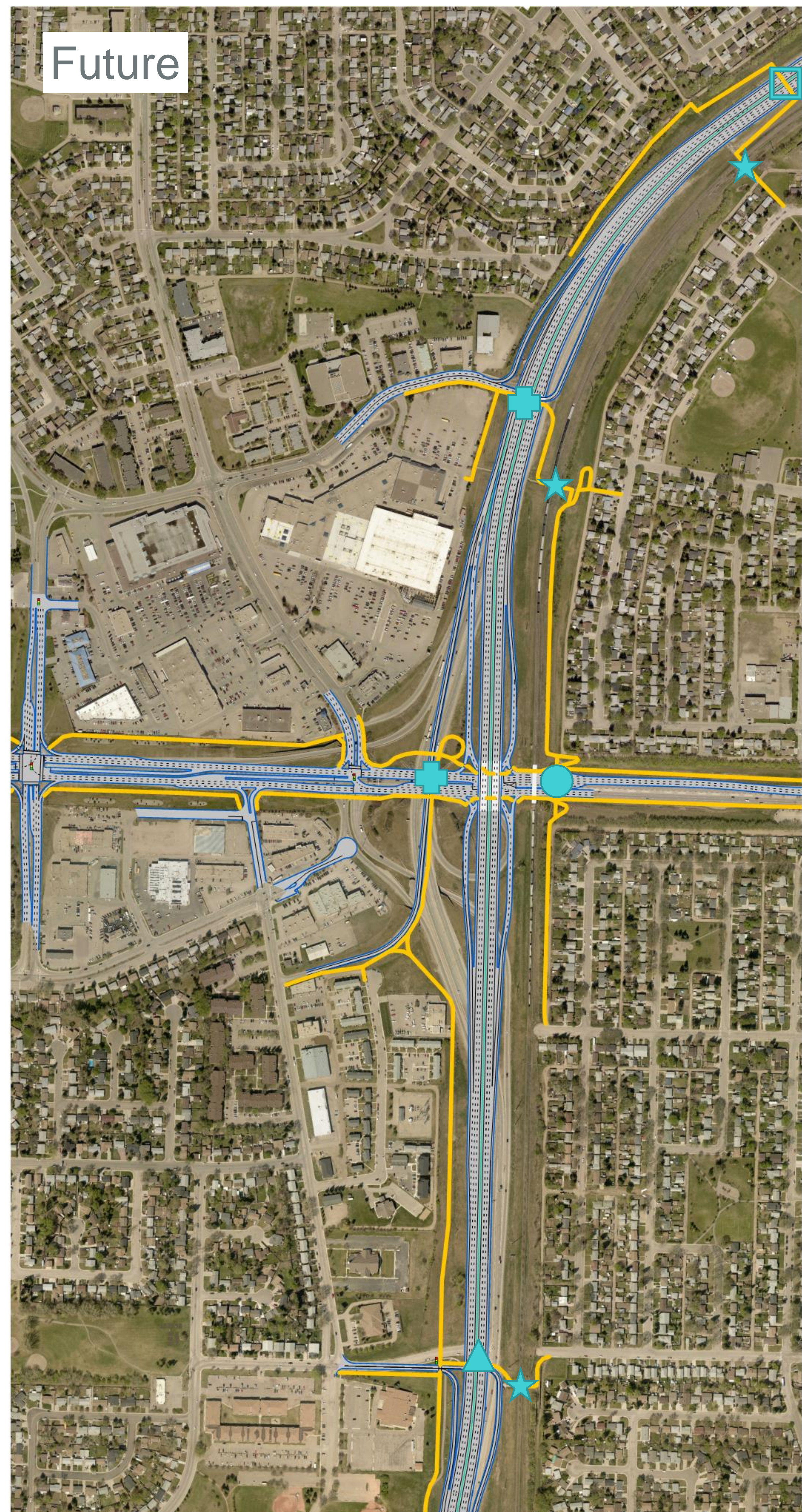


Approaches into Confederation Shopping Area



Approaches into Fairhaven Shopping Area

Multi-Use Trail Pathways



Legend:

- Multi Use Pathway
- ★ Existing Underpass
- Existing Overpass
- ⊕ New Pedestrian + Roadway Overpass
- ▲ New Pedestrian + Roadway Underpass
- New Pedestrian Only Overpass

Note: The City will explore CN's interests in removing the short tunnels under the rail line when the project proceeds to design and construction

Circle Drive

Clancy Drive to Laurier Drive - Functional Plan

Operational Changes/Implications

- 1. Connection from Confederation Drive to Fairlight Drive**
 - Removed to preserve long-term intersection performance
 - Southbound exit directly from Circle Drive to Fairmont Drive is retained
 - Eastbound right-turn from 22 Street into south mall area is provided
- 2. Direct Southbound Exit to Confederation Drive (and Mall)**
 - Southbound exit from Circle Drive replaced by conventional exit onto 22 Street
 - The southbound exit onto Laurier Drive is retained
- 3. Connection from Clancy Drive Eastbound to 22 Street Eastbound**
 - Connection not provided since it would complicate traffic operations and reduce operations along Circle Drive
- 4. Noise Attenuation**
 - The City plans to measure background noise levels in the spring to support assessment of future noise attenuation warrants
- 5. Pedestrian Underpasses**
 - The long tunnels under Circle Drive will become part of the roadway grade separations
 - The City will explore CN's interests in removing the short tunnels under the rail line when the project proceeds to design and construction
- 6. Power Transmission Lines**
 - Powerline routing to accommodate the preferred plan will be determined when the detailed functional plans are prepared following Open House 2.
- 7. CNR bridge over 22 Street**
 - The existing CN bridge is an older structure and will need to be replaced as part of the future upgrading of Circle Drive



Map of Preferred Plan

Please write your comments on sticky notes and place on the large plans on the tables.

- Concerns?
- Suggestions?

City Map

Please mark with coloured dots where you:

- Live – use a red dot
- Work – use a green dot



Next Steps for You

- Please complete a comment sheet, either online or hardcopy, by February 7th
 - Send to justen.mcarthur@cima.ca
- Watch for today's information on the project website:
 - www.saskatoon.ca/engage

Next Steps for Study Team

- Post a summary of feedback to the project website.
- Consider your comments in refinement of the preferred plan.
- Bring a final recommended plan to City Council in March 2020.





City of
Saskatoon

Circle Drive

Clancy Drive to Laurier Drive
Functional Plan

**Thank you
for
attending!**

