



# Spring 2021 City Council Update Infrastructure Delivery Projects

April 26, 2021



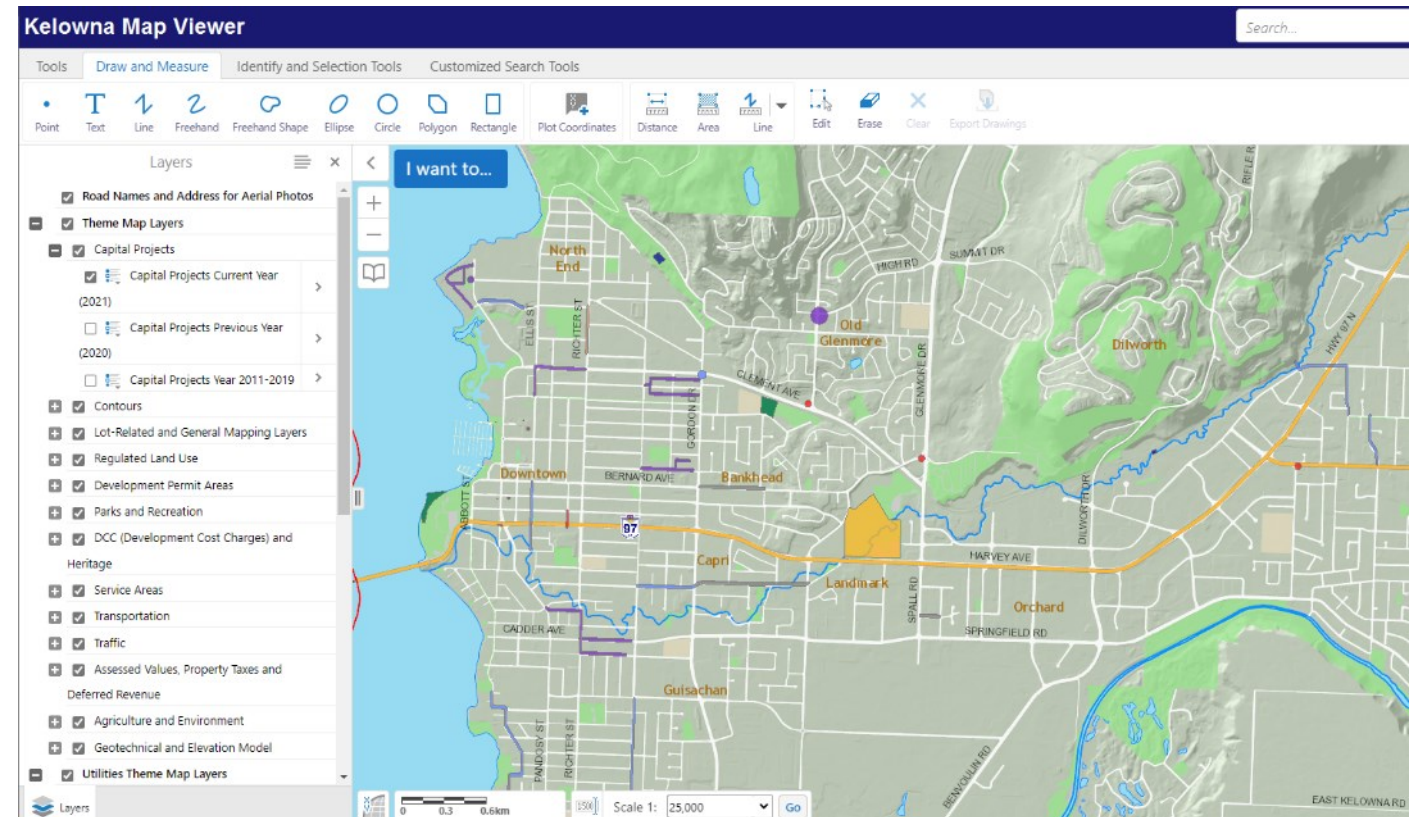
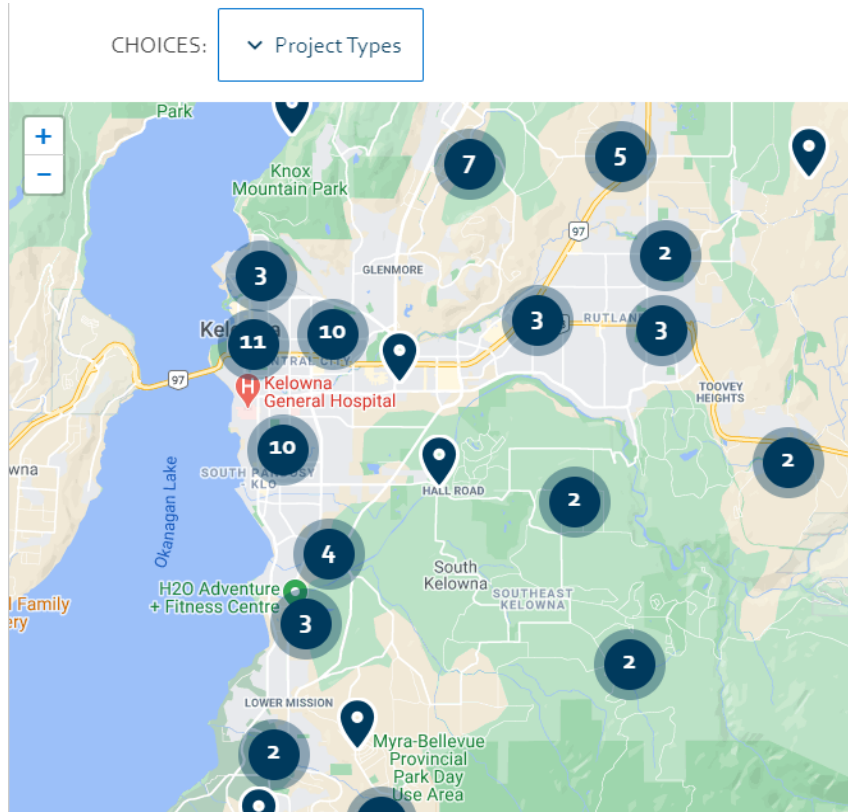
# Infrastructure Delivery – City's Internal Project Management Company

- ▶ The Preliminary Budget for new capital projects this year is \$72.7M. Of that total Infrastructure Delivery is involved in ~\$50M plus ~\$50M of Carryover Budget. Infrastructure Delivery also supports many Operating Budget Projects.
- ▶ Rough projection for capital work to be completed this year is \$65M +/- \$5M. The +/- is dependent mostly on approvals (environmental, archaeological, etc.) and other design and procurement contingencies.
- ▶ City Construction Crew is scheduled to complete approximately \$4M of capital construction plus and an additional \$1M in operating work, emergency repairs and development servicing.



# Project Tracking ~130 projects delivered annually

## Find out more using the Capital Projects Map and Map Viewer Layers





# 2021 Project Highlights

# 2021 Transportation Projects

- ▶ In addition to the major capital transportation projects, Integrated Transportation has a list of over 60 improvements to be completed this year, delivered through various programs
- ▶ This includes Sidewalks, Crosswalks, Bike Lanes, Pedestrian Flashers, Intersection Safety Improvements, Traffic Signal Upgrades, Transit Stops and Shelters, Safe Routes to Schools and Traffic Calming.
- ▶ Check out the Capital Projects Map or Map Viewer Layers for info

# 2021 Transportation Project Issues

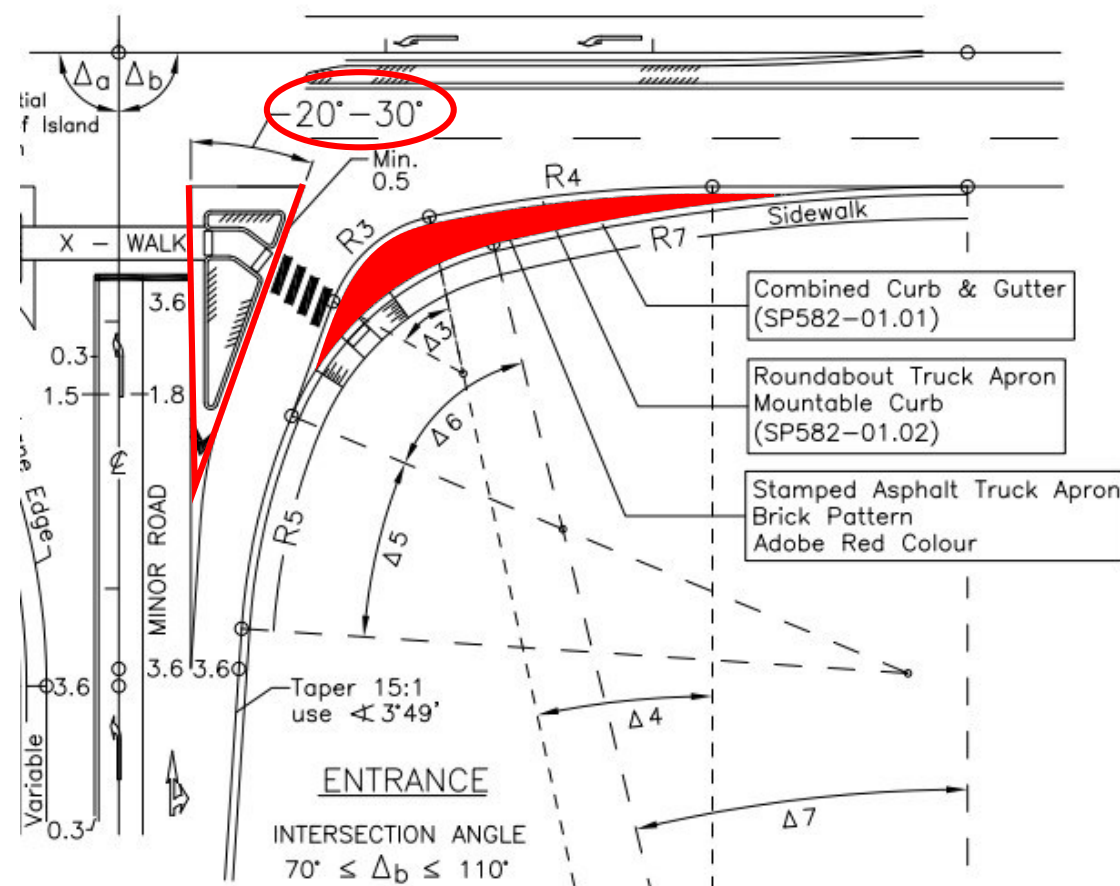
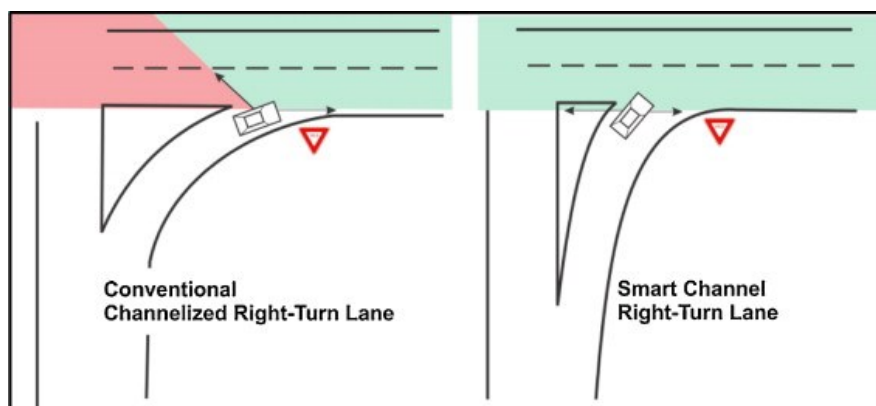
There are two emerging Transportation related issues worth noting.

- ▶ The first is the move to “SMART RIGHT” or “SMART CHANNEL” right turn configurations at channelized intersections (the ones with triangular shaped islands).
- ▶ This is a great example of the evolution of traffic safety. ICBC is helping to pay for these retrofit intersections to help reduce accidents. We have completed a few so far (Cooper @ Benvoulin, Gerstmar @ Springfield) with many more to come.



# What is a “Smart Channel” Design?

- ▶ In a YIELD situation, the right turn should not be designed like a high-speed turn or merge lane.
- ▶ If the light is red, the driver needs to stop and look at a reasonable angle, not backwards because they have gone too far around the curve.
- ▶ This reduces collisions and rear enders when the second driver thinks the first is going to turn and suddenly changes their mind.



From MoTI BC Supplement to TAC Standards



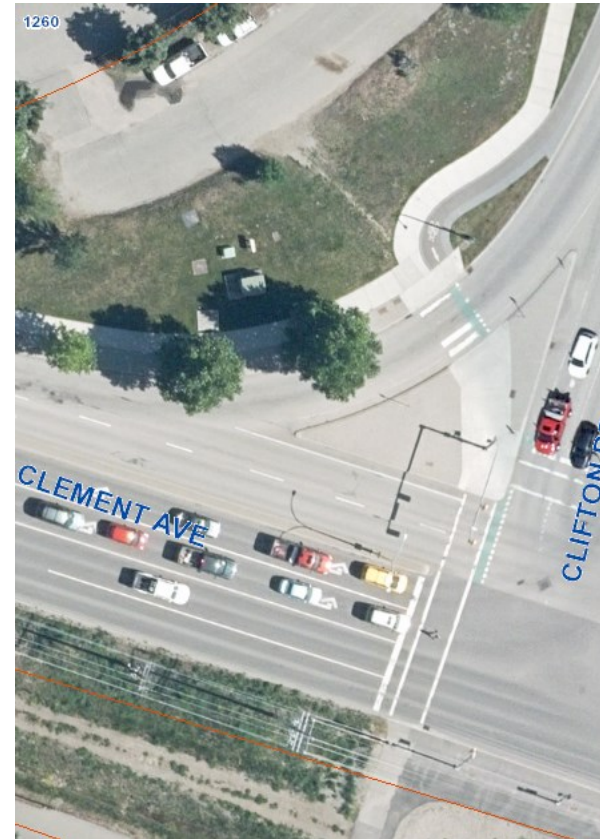
# 2021 “Smart Right” Projects



Gordon at Clement



Bernard at Glenmore/Spall



Clifton at Clement



Ziprick at Hwy. 33



# 2021 Transportation “Do more with Less”

Here are some examples of recent and upcoming interim solutions included in some of this year’s projects



Precast Islands for Pedestrian Safety



Paved Sidewalks



Barriers for Cyclist Separation

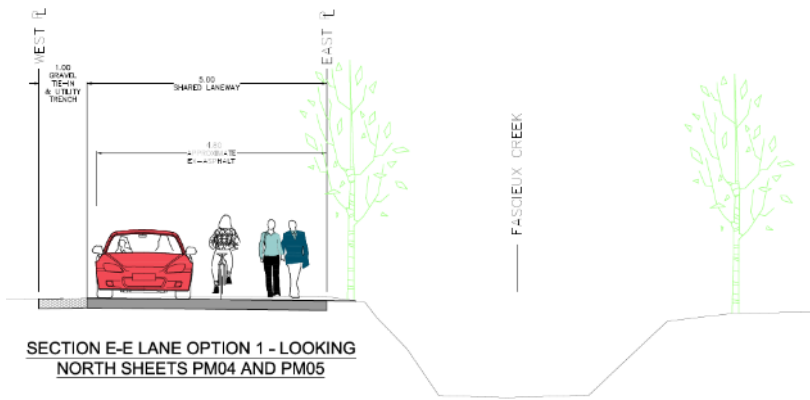
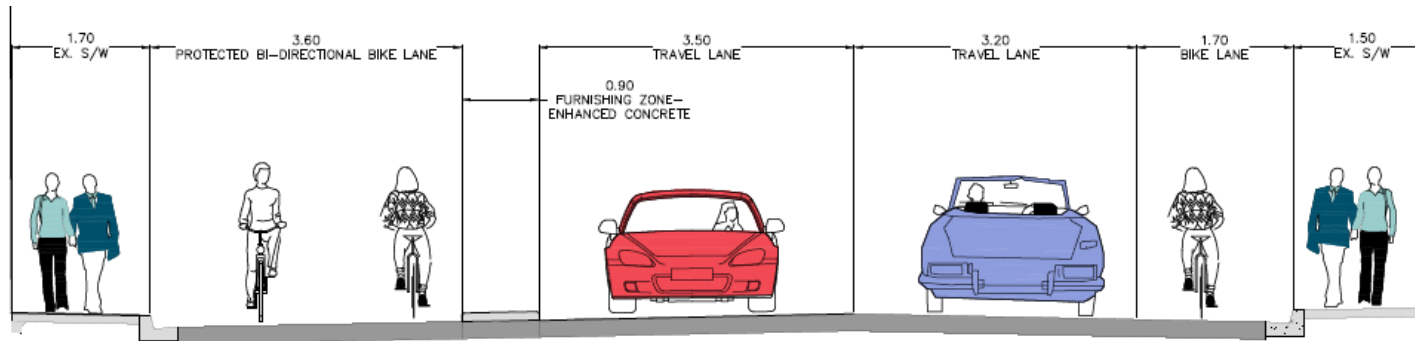


# Ethel - Active Transportation Corridor Phase 6 - Rose/Guisachan to Raymer



Construction in  
progress, will be  
complete Spring  
2021

# Casorso 4 DCC Active Transportation Corridor - Ethel to KLO



This will extend the Ethel ATC corridor to KLO Road.

Next phase of the work will connect to Barrera Road ATC (Casorso Elementary).





# Rutland Active Transportation Corridor Houghton to Rail Trail Connection

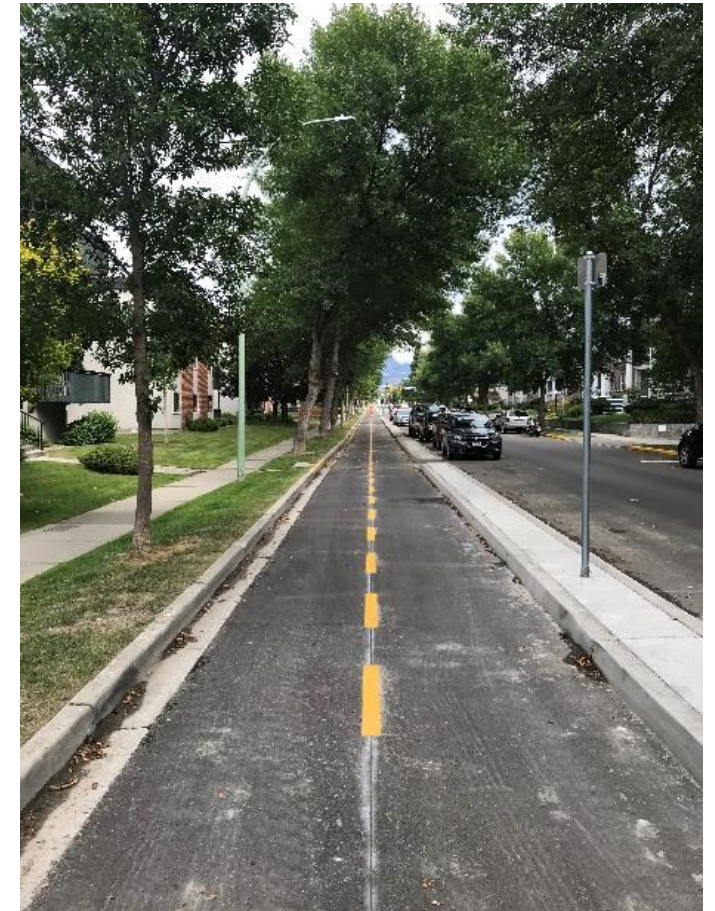
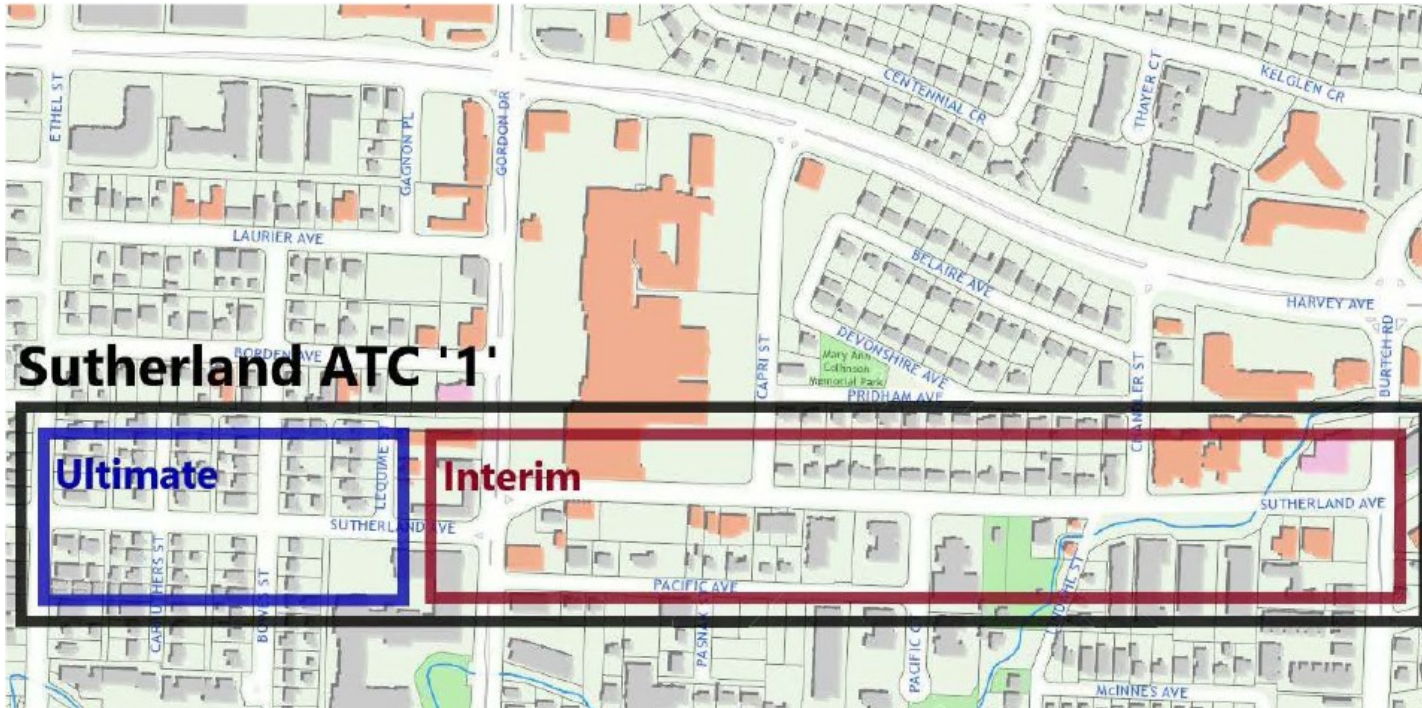


This project will connect the Houghton Multi-Use Path to the Rail Trail, via Lester, Leathead and Enterprise.

A new bridge will be constructed across Mill Creek.

This project is planned for Fall 2021 completion.

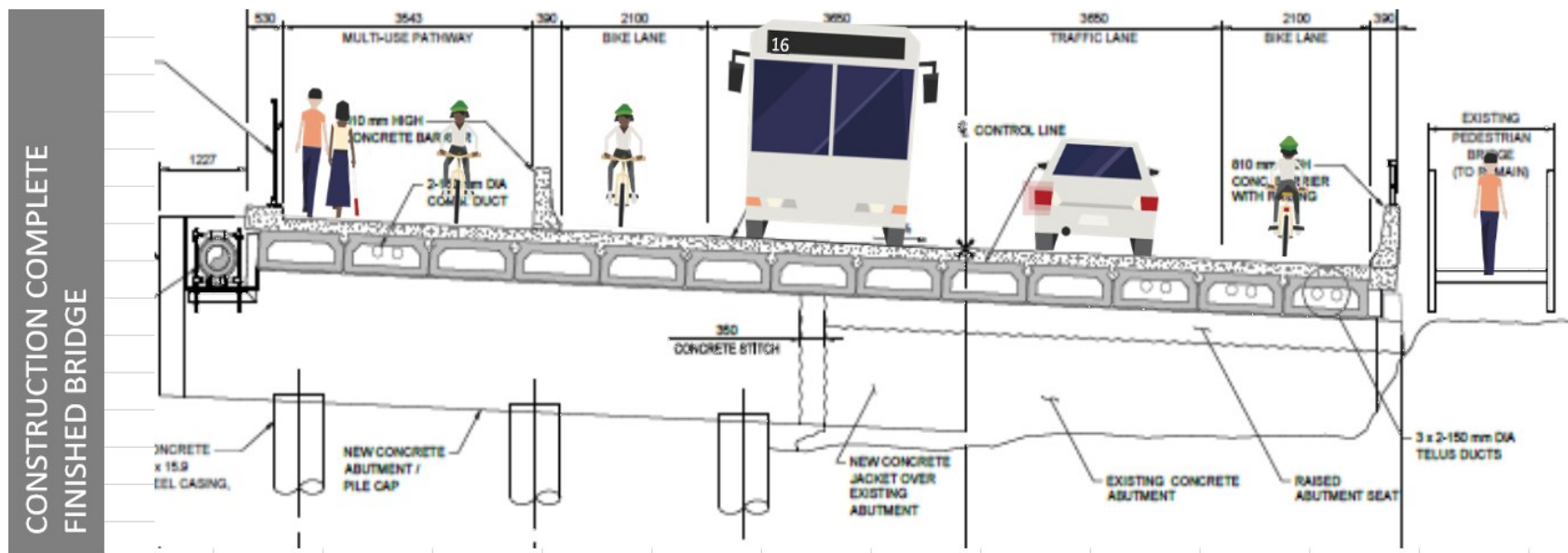
# Sutherland ATC – Ethel to Burtch Interim Connection



The section between Lequime and Burtch will be completed with interim solutions until the Capri Development moves forward.



# Lakeshore Road / Bellevue Creek Bridge Rehabilitation & MUP Widening



Construction in progress, completion in Fall 2021. Two-way traffic will be maintained during the work.



# Okanagan Rail Trail Manhattan Drive - Sunset Connection

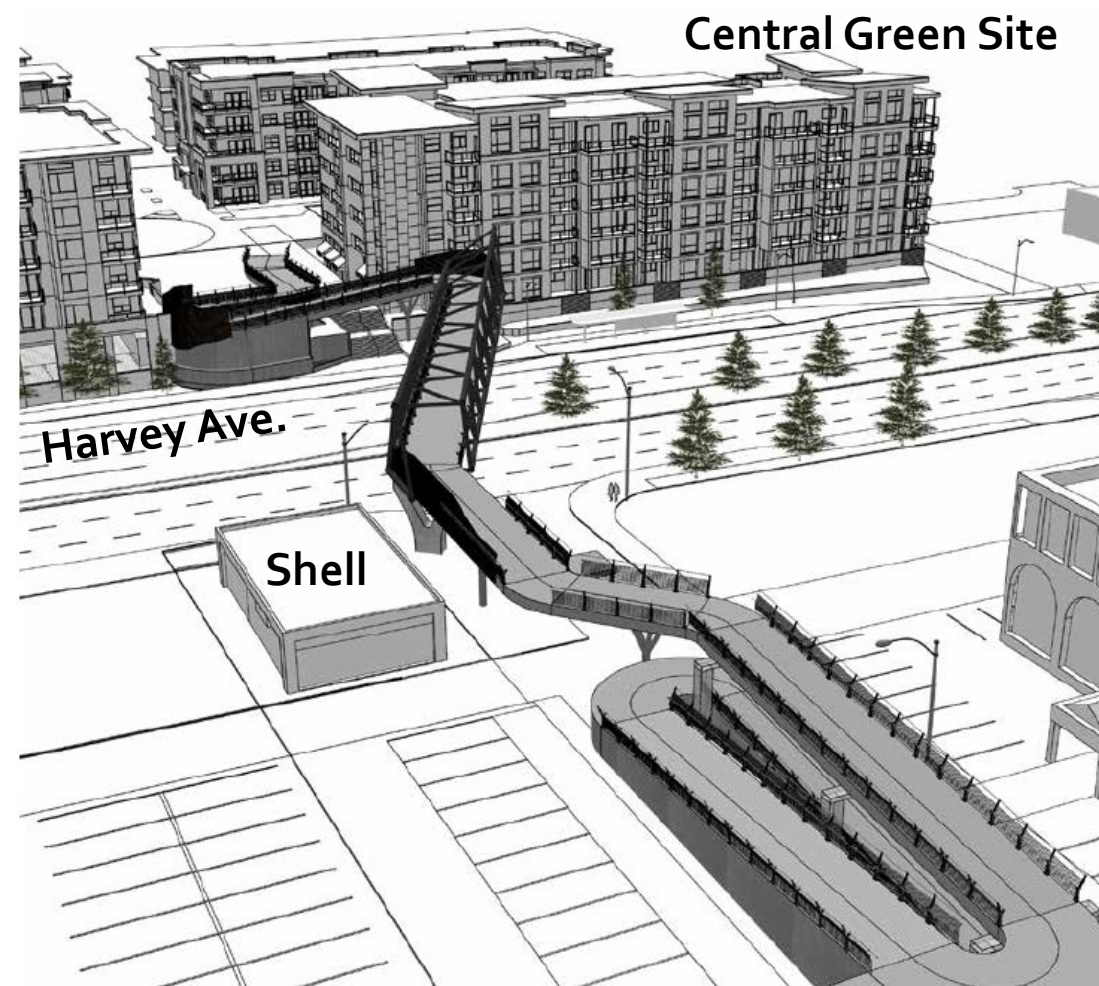


This section will be completed with interim solutions until the Tolko site redevelopment moves forward.

# Central Green – Bertram Road Pedestrian and Bicycle Bridge

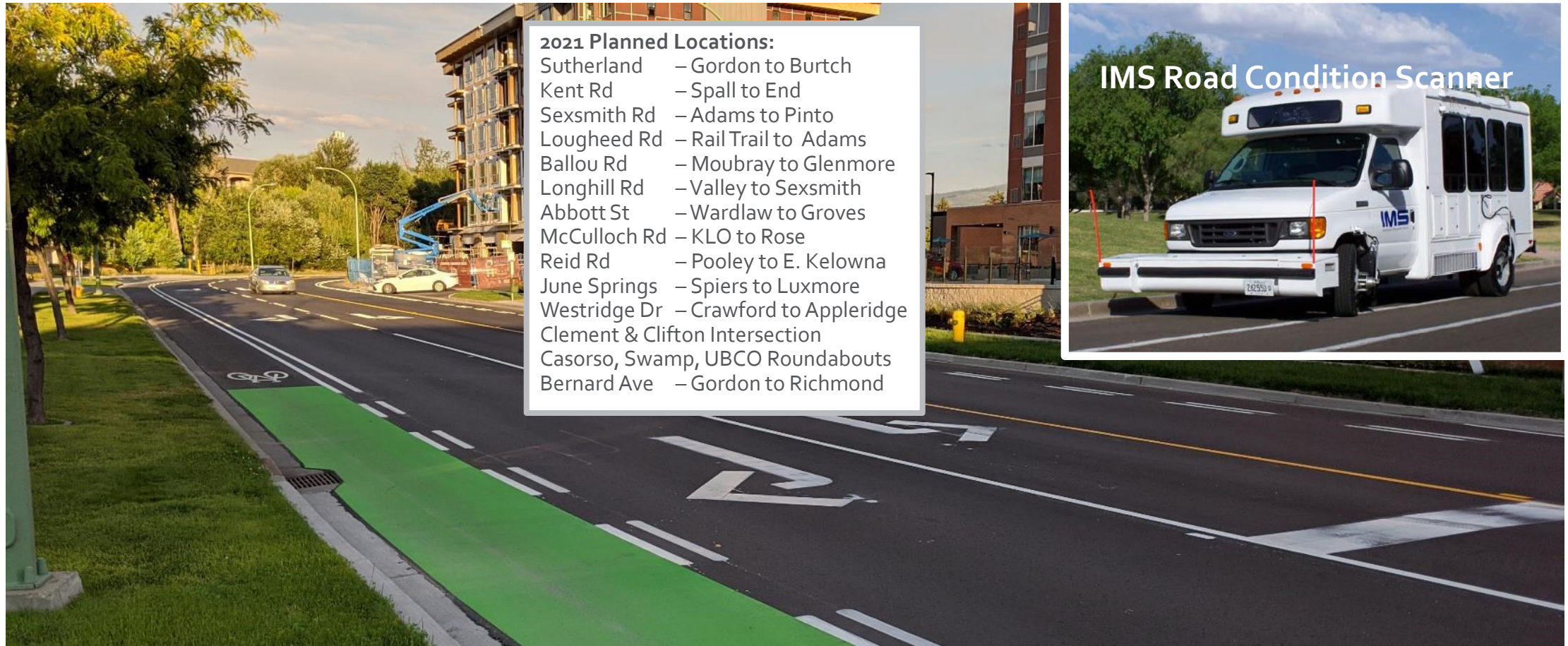
Construction planned to start in Fall 2021 with completion in Spring 2022.

Concept plan shown subject to detailed design.





# Pavement Management





# 2021 Utility Projects

- ▶ Great strides have been made by Infrastructure Engineering to develop the City's Asset Management Program.
- ▶ One of the biggest takeaways is the deteriorating condition of our underground utilities.
- ▶ Much of Kelowna's initial growth and development occurred post-WWII. That infrastructure is now 50-70 years old and is need of replacement.
- ▶ Check out the Capital Projects Map or Map Viewer Layers for info

# Kelowna Integrated Water Project Phase 1 (Completion Work)



Phase 1 of the Kelowna Integrated Water Project has been a success. Some final projects are being completed to improve performance and resilience during peak extreme events.



- ▶ Completion of KVR Reservoir Expansion
- ▶ Westridge Transmission Main
- ▶ Lower Crawford Booster Station Upgrades



# Cast Iron Watermain Replacement

Watermain replacement projects are planned for Clement Avenue from Ellis to Richter, Ellis Street from Clement to Cawston, Cadder Avenue between Richter and Ethel (includes new sidewalk and sanitary upgrades) and Raymer Avenue from Richter to Gordon (to be completed over 2 years).





# Skyline Pump Station Upgrading

This water system pump station at the corner of Clifton Road and High Road is seeing a major facility and electrical upgrade. The key electrical components are being relocated above ground in a new building to prevent the risk of flooding and provide improved worker safety. Completion is scheduled for October 2021.



# Sanitary Sewer Replacement

Projects planned to start this year include Lawson Avenue and Lanes, Lanes North of Cawston and Coronation, Manhattan Dr. and Flintoft Ave. west of Guy Street and the Guy Street Lift Station Replacement.





# 2021 Parks Projects

With the implementation of the new Parks Development DCC, the City is in a catch-up mode to develop and complete many Parks projects that have been in the planning stage. This is going to be an exciting time for Parks Development!



# Pandosy Waterfront Park

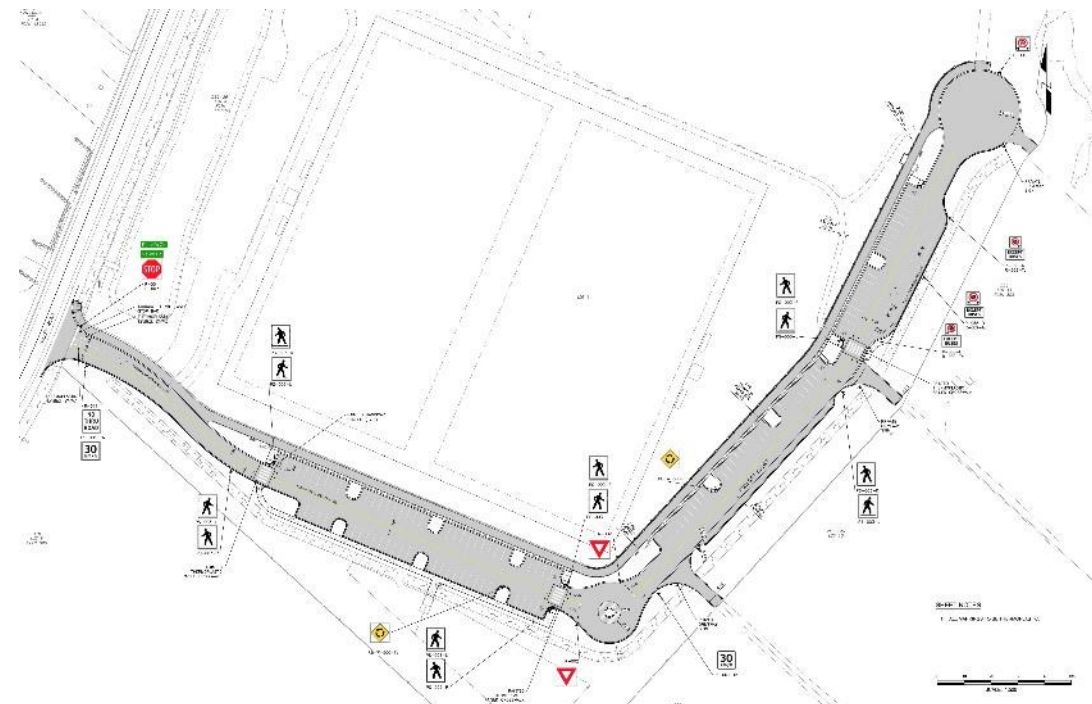


The park at Abbott St. and Cedar Ave. is moving forward.

Construction is expected to start this year with completion in 2022.



# Glenmore Park Phase 3



Construction of the Glenmore Park parking lot is underway which will allow the initial phase of the park (two sports fields) to open for play this year.

# Rutland Centennial Park Phase 4



This multi-phase park rehabilitation project will be completed this Spring, along with a new washroom building.



# City Park Promenade Improvements



This next phase of park rehabilitation is ready to begin.

Construction is expected to start this year with completion in 2022.

# Ballou Neighbourhood Park



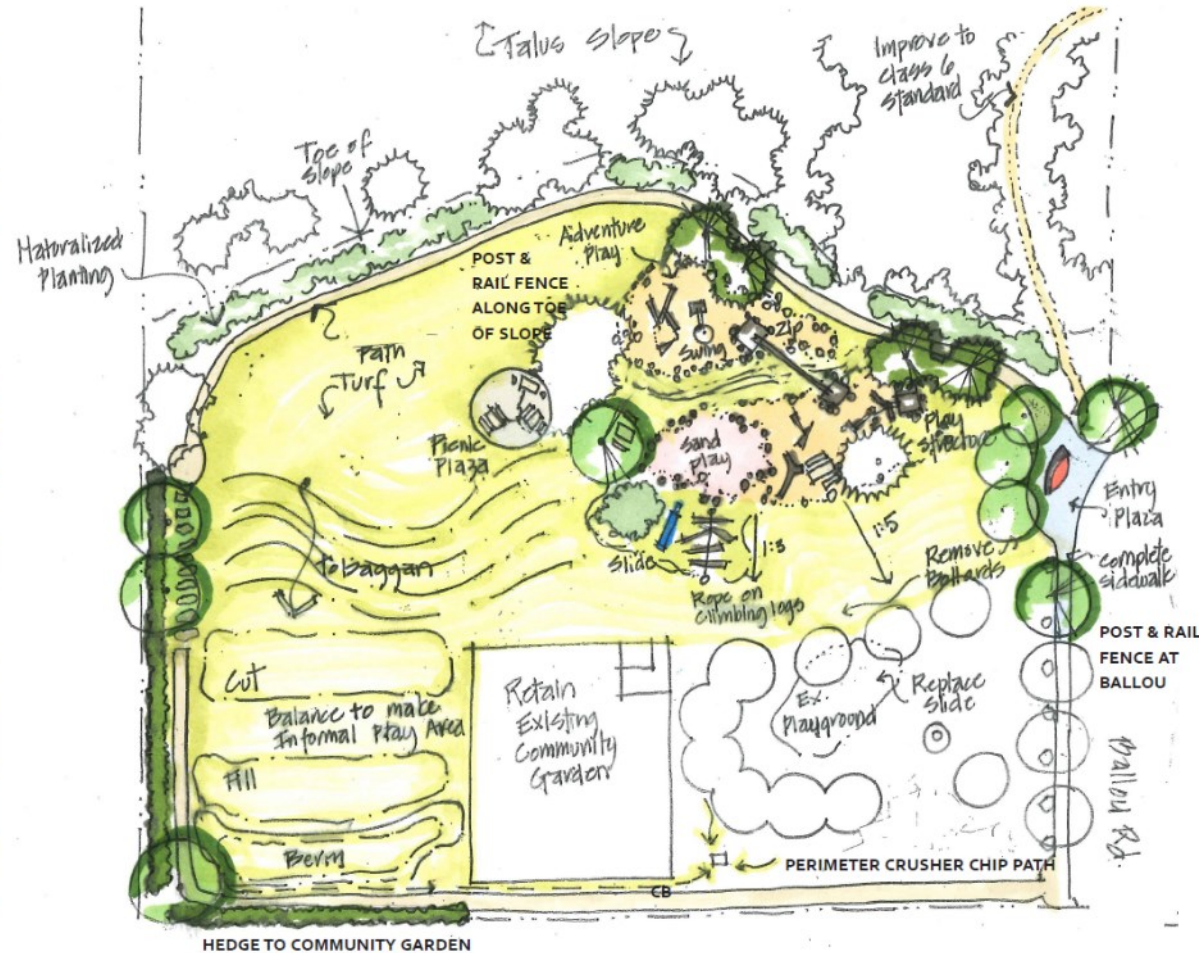
LOW BALANCE PLAY



DISCOVERY PARK (SKAHA)



MUNDARING PARK (PERTH)

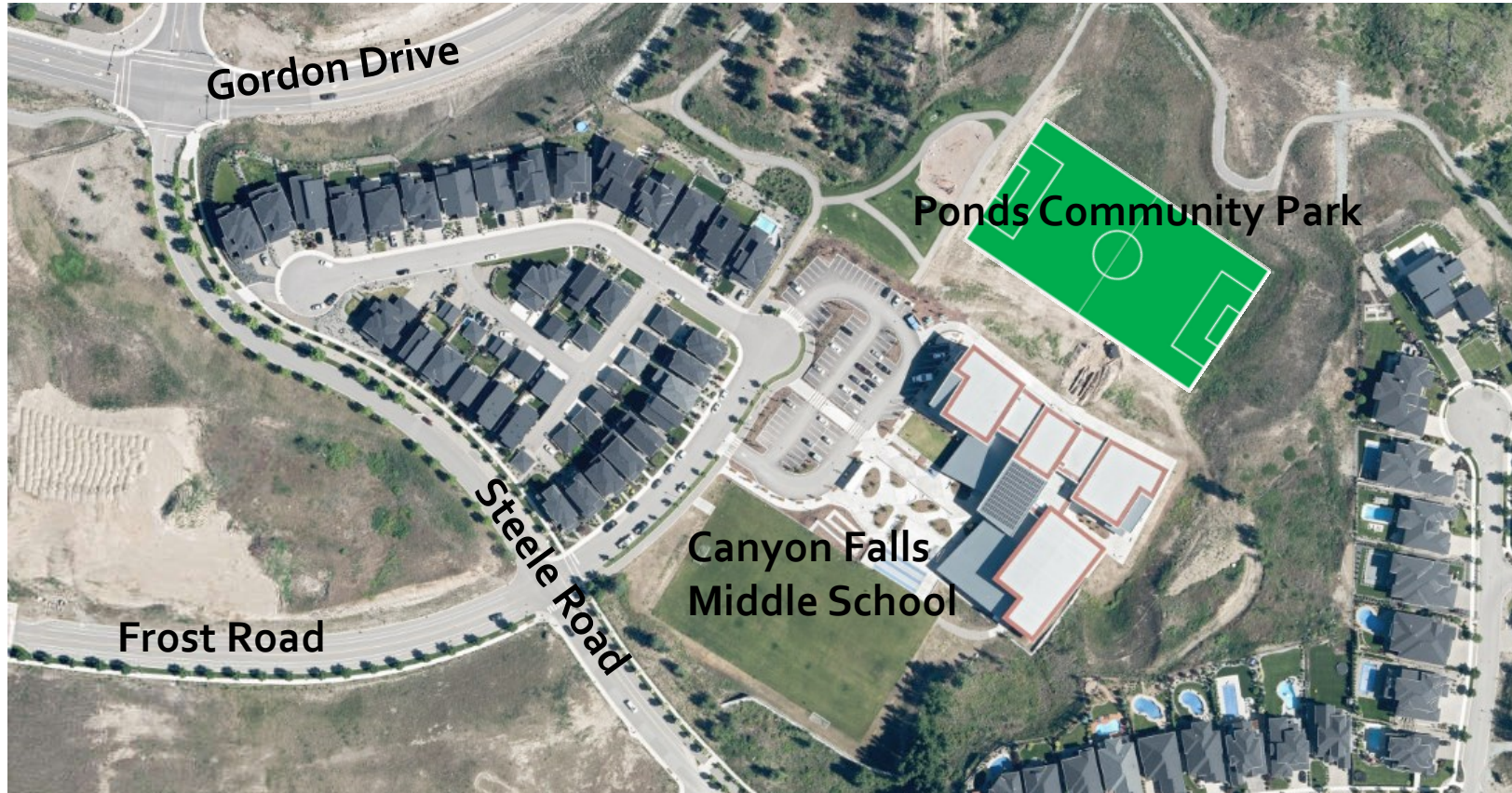


This neighbourhood park in Glenmore will be developed, implementing many new adventure play elements.

Construction is expected to start this year with completion in 2022.



# Ponds Sports Field at Canyon Falls Middle School



This sports field next to Canyon Falls Middle School in the Upper Mission is under construction and will be ready for play in 2022.

# Tallgrass Park at Tower Ranch

- ① PLAY AREA (Approx. 500m<sup>2</sup>)
- ② MAIN ENTRY / PARK SIGN
- ③ UPPER PARK ACCESS / TERRACED OVERLOOK
- ④ SOD LAWN
- ⑤ NATIVE SEED
- ⑥ NATIVE PLANTING
- ⑦ ORNAMENTAL GRASS / PERENNIAL
- ⑧ BENCH / PICNIC TABLE
- ⑨ POST & RAIL FENCING
- ⑩ P.L. CHAINLINK FENCE

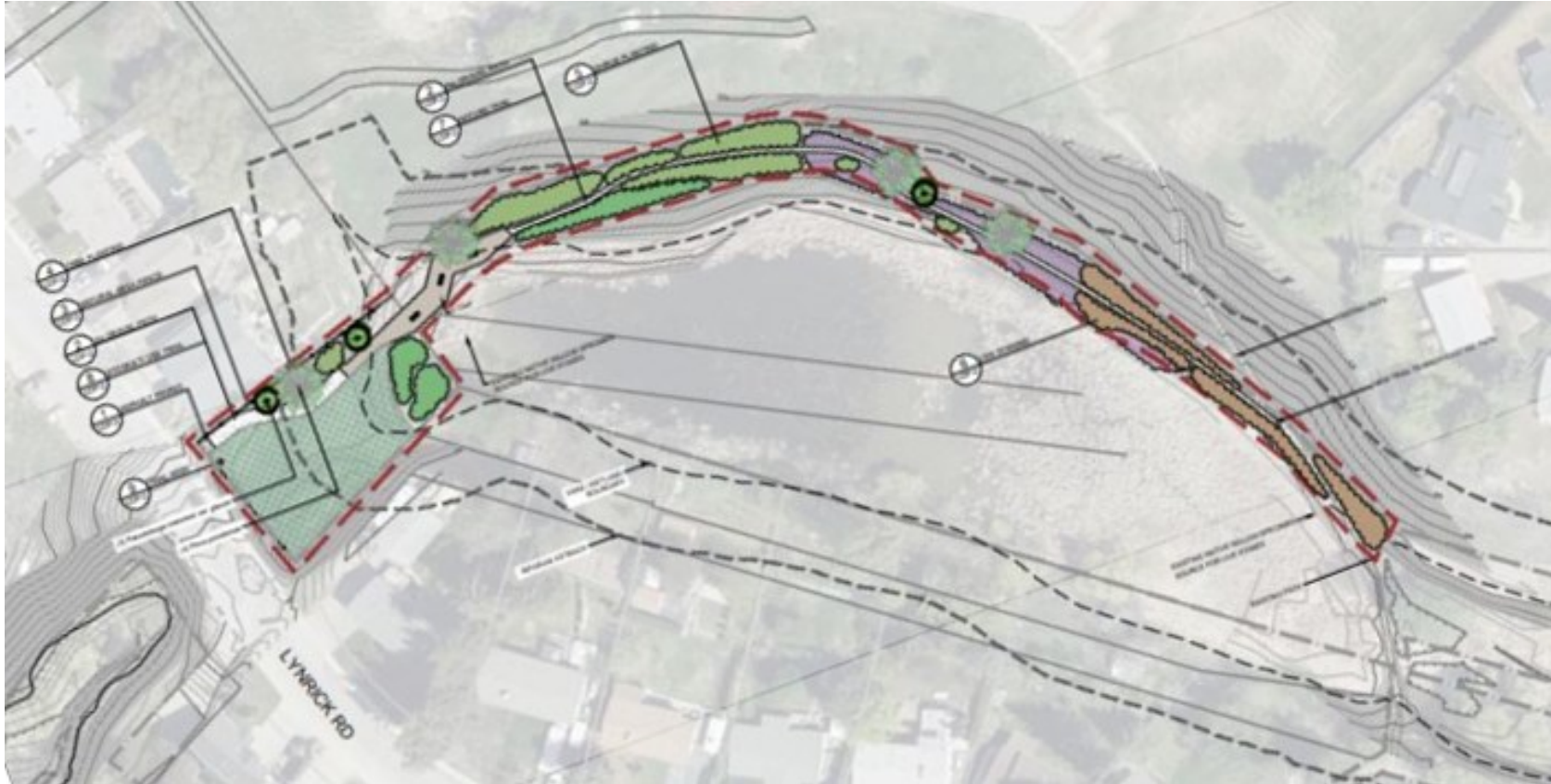


This will be the first neighbourhood park in the new Tower Ranch Golf community.

Construction is expected to start this year with completion in 2022.



# Gopher Creek Linear Park and Lynrick Road Culvert Replacement



This project will expand the linear trail system along Gopher Creek in the Black Mountain neighbourhood.

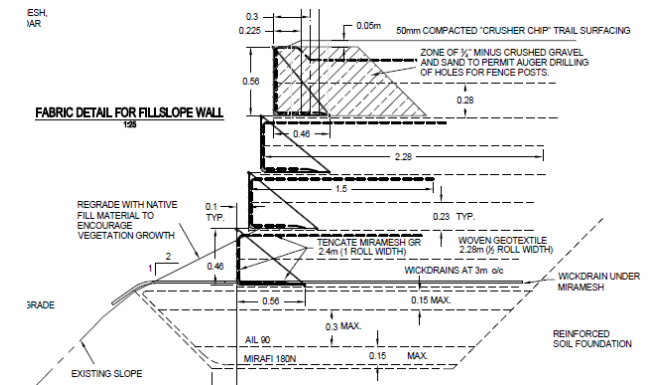
Construction is expected to be completed this year.

# Knox Mtn. Park Paul's Tomb Trail Retaining Wall Improvements



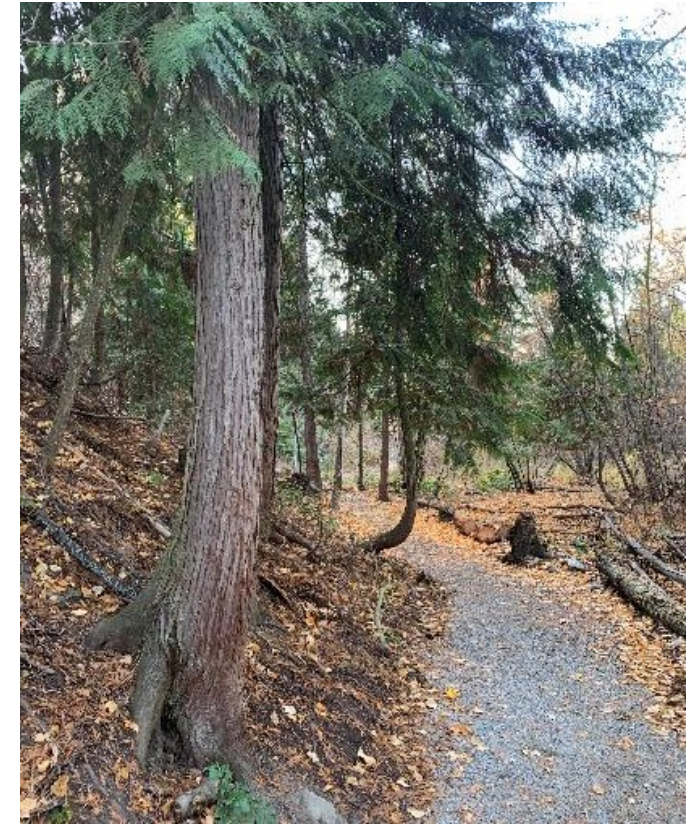
This project replaced the wooden crib walls and short metal railings with a new GRS wall (geotextile reinforced soil) and a continuous wooden railing with wire backing.

In addition to improved safety for users, this provides access for maintenance vehicles and emergency responders from the north end of the trail.





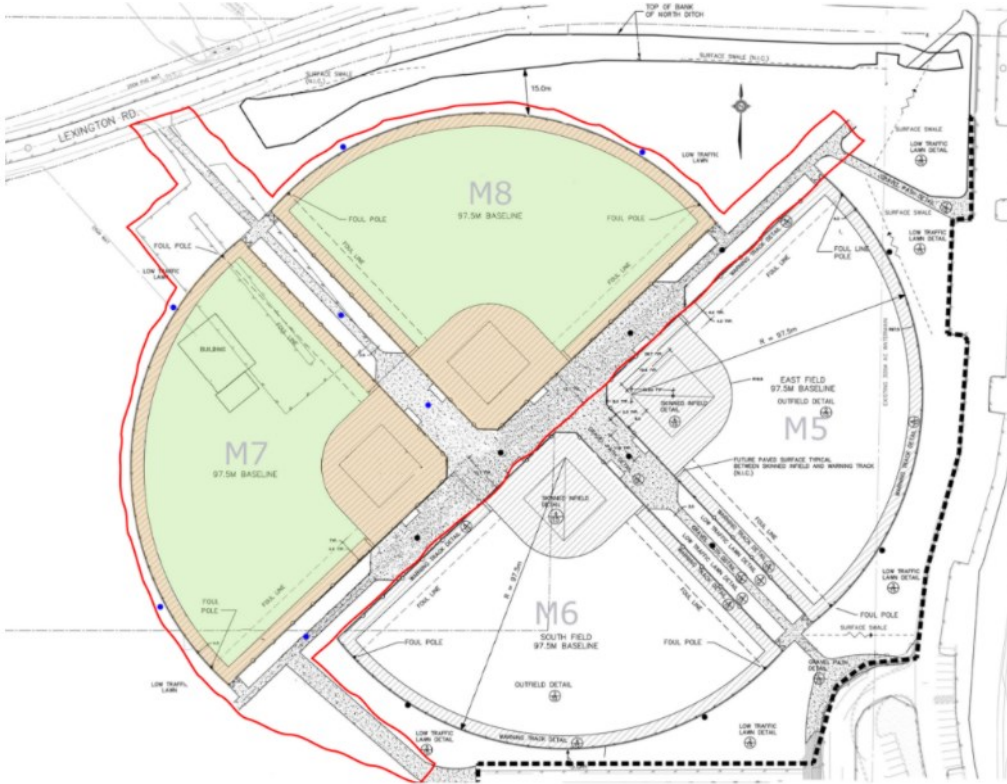
## Trail – Phase 2



This second phase of the trail will complete this section between Lakeshore Road to Gordon Drive.



# Mission Rec Park – Artificial Turf Replacement and Additional Softball Diamonds



Two more softball diamonds in the works for Mission Rec Park, and the artificial turf is being renewed.



# Reid's Corner Landscape Meadow Pilot Project



## advantage

- **Innovative** – The City of Kelowna Parks team would be considered by some to be environmental stewards considering biodiversity and supporting a healthy environment and.....
- **Education** – Reid's Corner is an ideal 'trial' area for a meadow landscape treatment. As we move towards increasing park construction and aging irrigation infrastructure, urban meadows may be the solution.

Not only are meadow landscapes less resource intensive (water, labour inputs, etc.), they are critical in the maintenance of healthy pollinator populations, which is especially important in the Okanagan...

## advantage

- **Drought tolerance** – *reduce water consumption, reduce complexity of irrigation infrastructure.*
- **Soil** – *meadow plants tolerate a wide range of soil conditions and thrive on mediocre soil. Less need for artificial fertilizers and amendments.*
- **Maintenance** – *meadow landscapes require less maintenance input than turf or planting beds. (saving time, money, energy, water fertilizers, pesticides)*

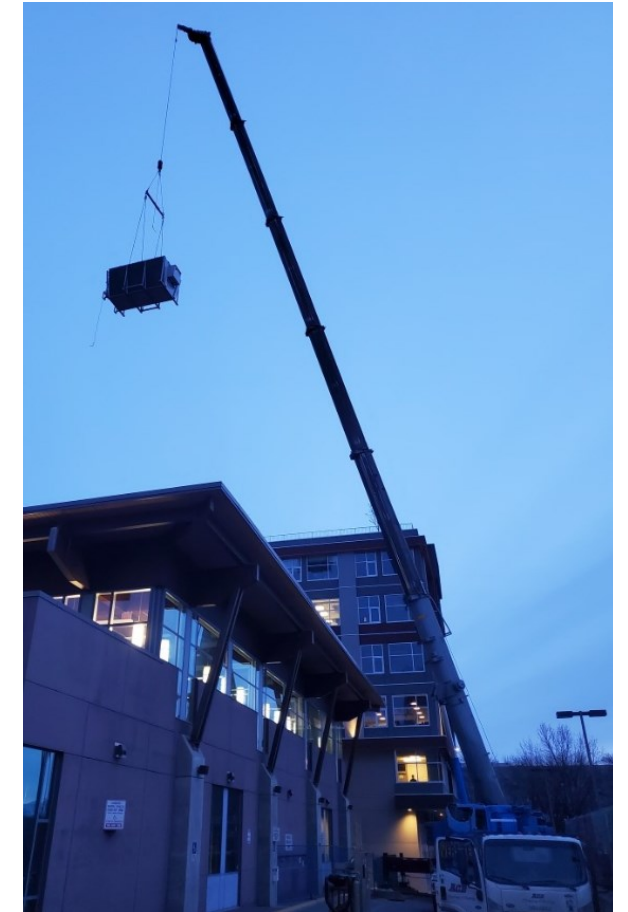
## disadvantage

- **Establishment** – *Takes two to three years to establish, up to 5 to look really good.*
- **Development** – *initial seeding, a step by step process, is a slow process. No immediate satisfaction like the installation of sod and planting of shrubs.*
- **Impressions** – *Can guarantee comments, complaints from the public related to the landscaping of Reid's Corner.*



# More Construction Projects for 2021

- ▶ Cook Road Boat Launch Dredging Program
- ▶ Okanagan Regional Library Chiller Project





# More Construction Projects for 2021

- ▶ Chichester Pond Stormwater Treatment Installation - COMPLETE
- ▶ Completion of the Water St Lift Station Forcemain Twinning – IN PROGRESS
- ▶ Water Street Firehall Brick Restoration Work - IN PROGRESS
- ▶ Mill Creek Flood Capacity Improvements ( Diversion Structure Upgrades)
- ▶ Mill Creek Bridge Replacement at Old Vernon Road
- ▶ Fraser Lake Dam Improvements
- ▶ City Hall Renovations – Garden Level and First Floor
- ▶ Royal View Slide Remediation (above Knox Mountain Metals)

# Looking Further Ahead

- ▶ Sanitary Sewer expansion (Rutland-Holbrook area)
- ▶ Mill Creek Flood Protection (up to \$55 million over 6 – 8 years)
- ▶ JEHWF (Parkinson Recreation Centre Replacement)
- ▶ New Transit Facility (\$60 million)
- ▶ Biosolids Treatment Facility at Burtch / Byrns area
- ▶ KLO Road Mission Creek Bridge Replacement





*Questions?*

For more information, visit [kelowna.ca](http://kelowna.ca).