

WELCOME

South LRT Extension (Century Park to Ellerslie Road)

Public Open House

The purpose of tonight's Open House is to share information about the South LRT Extension project and gather your input.

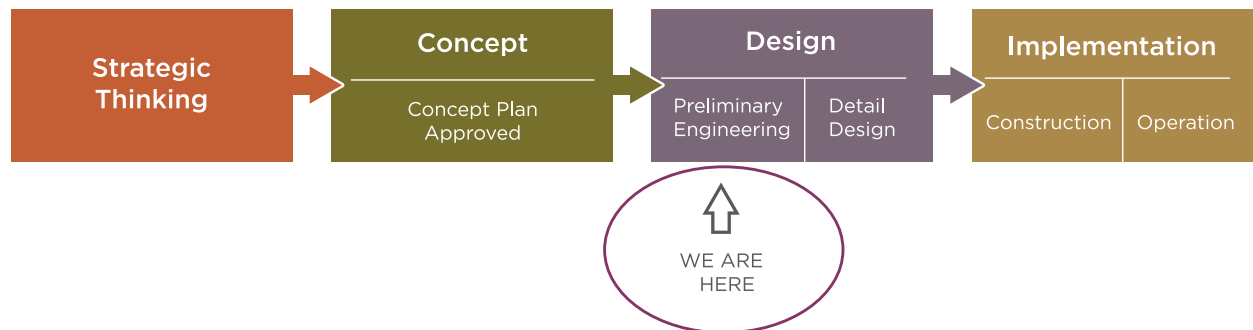
Please review the information displays, ask project team members questions and complete the comment form.

Your feedback will be considered in the Preliminary Design of this project which will be presented at a final Public Information Session in Spring 2010.

To view key information and updates about this project from past meetings and today's open house, please visit the City of Edmonton's website at: www.edmonton.ca/lrtprojects

Thank you.

Project Life Cycle



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SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



Project Schedule

Fall/Winter 2009

- **Stakeholder (business and adjacent residents) Meetings –**
September 8 & 10, 2009
- **Stakeholder Information Panel Meeting #1 –**
September 24, 2009
- **Public Open House –**
October 8, 2009
- **Continue Preliminary Design**
- **Stakeholder Information Panel Meeting #2 –**
Winter 2009

Early 2010

- **Refinement of Preliminary Design**
- **Public Information Session –**
Spring 2010
- **Finalize Preliminary Design Report –**
Spring 2010

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CENTURY PARK TO ELLERSLIE ROAD



What is Preliminary Engineering?

The evaluation and recommendation of LRT corridors occurs during the concept planning phase of a project. Preliminary engineering, where we are today, refines how LRT will operate in the corridor; how to integrate the LRT in with adjacent communities and existing landscaping and how to mitigate impacts of the LRT on the existing transportation infrastructure. Our project team is working towards the following deliverables:

- **Public involvement materials for information sharing** – communicating information about the project to the public.
- **Risk Management Plan** – how the City can minimize fiscal risk.
- **Constructability Report** – the best way to implement the LRT extension.
- **Cost Estimates Report** – updated and refined estimates for the extension.
- **Preliminary Engineering Reports:**
 - » **Track** - define horizontal and vertical geometry of track alignment.
 - » **Noise and Vibration** - sound attenuation and vibration mitigation required in accordance with City policy.
 - » **Drainage** - for the LRT and connections to the City's existing system.
 - » **Utilities** - relocation of overhead and underground utilities to accommodate LRT.
 - » **Roads** - how the LRT will affect or change the existing roads.
 - » **Cyclists and Pedestrians** – ensuring connectivity for cyclists and pedestrians to and across the LRT.

continued >

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SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



What is Preliminary Engineering?

(continued)

- » **Safety** - ensuring all features of project are designed to current safety standards including CPTED (Crime Prevention Through Environmental Design)
- » **Landscape Architecture** - landscaping for the areas in the vicinity of the LRT extension, LRT Station, Transit Centre, and Park & Ride facility.
- » **Environmental and Historical** - protection and/or remediation of impact to environmental and historical resources.
- » **Geotechnical** - issues relating to soil conditions in the vicinity of the LRT extension and related structures.
- » **Systems and Communications** – technology required to operate LRT.
- » **Structures** - options for types of structures required to accommodate the LRT extension.
- » **Architecture** - building aesthetics incorporated into the design of the LRT.

In addition, the Project Team will design the permanent Park & Ride facility to be located at Ellerslie Road and 127 Street.

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SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



South LRT Extension (Century Park - Ellerslie Road) Concept Plan (Approved by City Council July 2008)

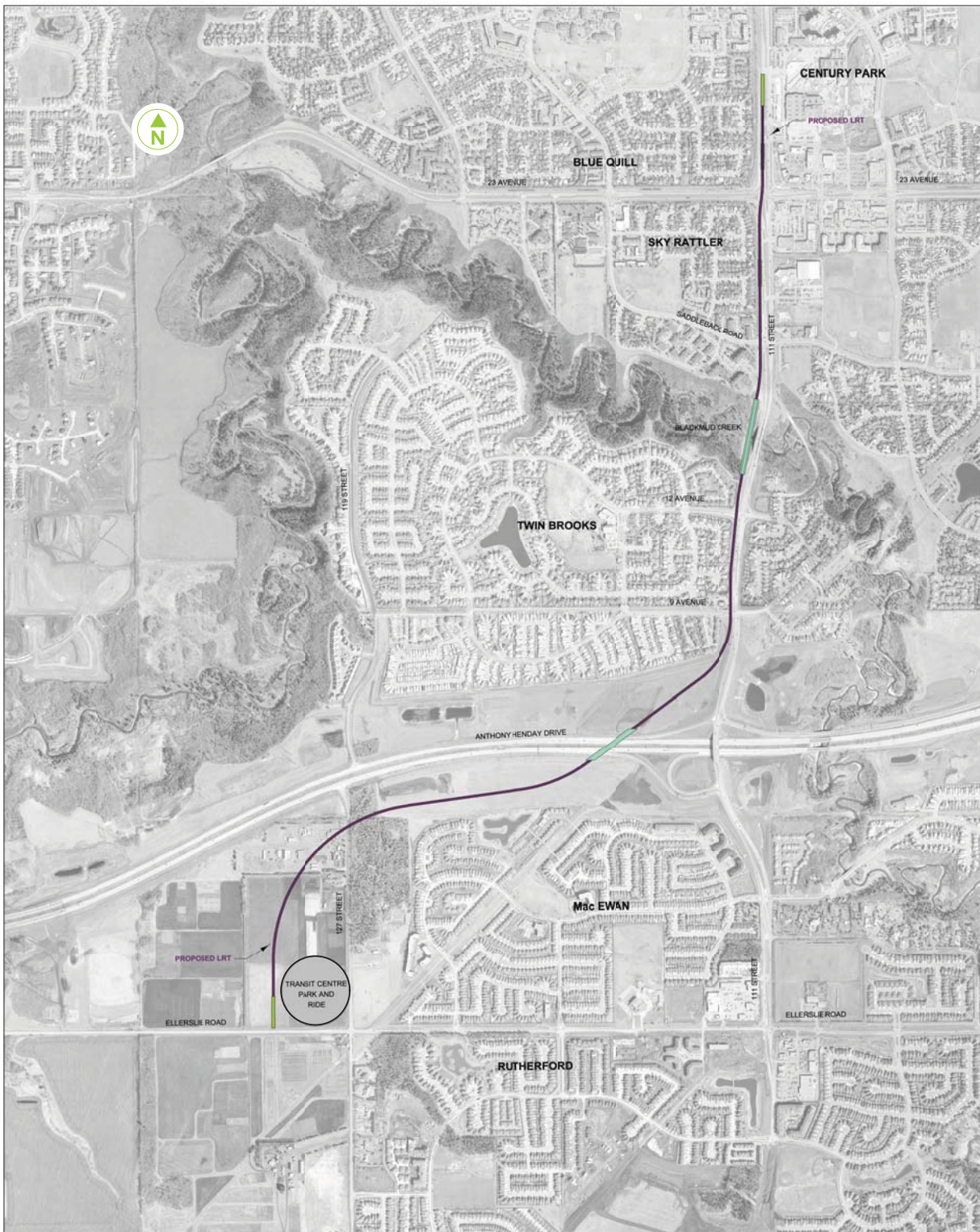


- 4.5 km LRT extension south from Century Park Station to Ellerslie Road
- Underpass at 23 Avenue.
- Surface on the west side of 111 Street.
- Bridge over Blackmud Creek.
- Grade separated over Anthony Henday Drive
- LRT Station, Transit Centre, and Park & Ride facility at Ellerslie Road/127 Street.

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Study Area



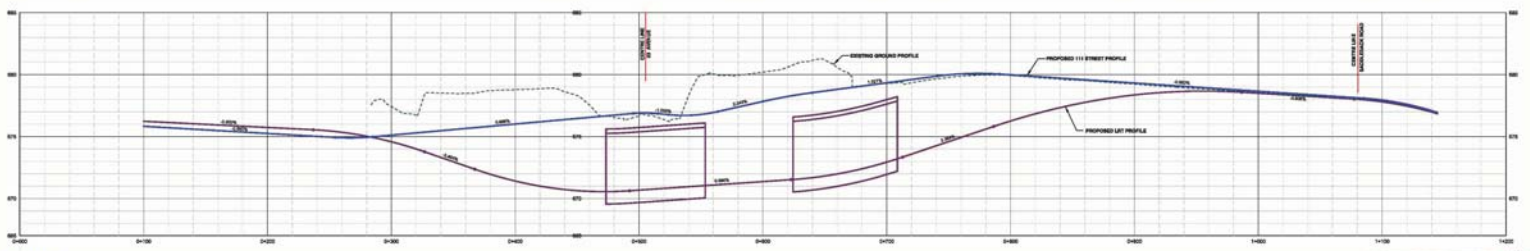
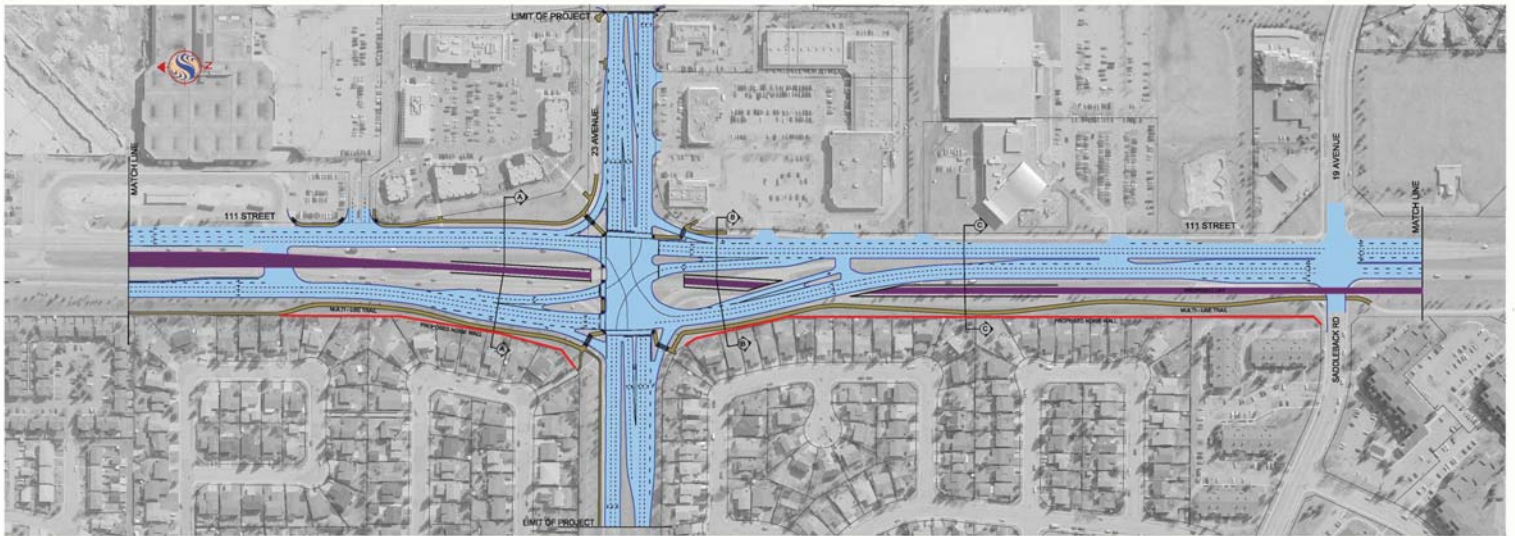
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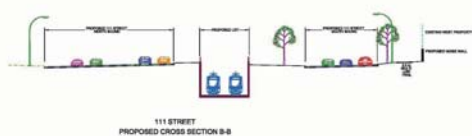
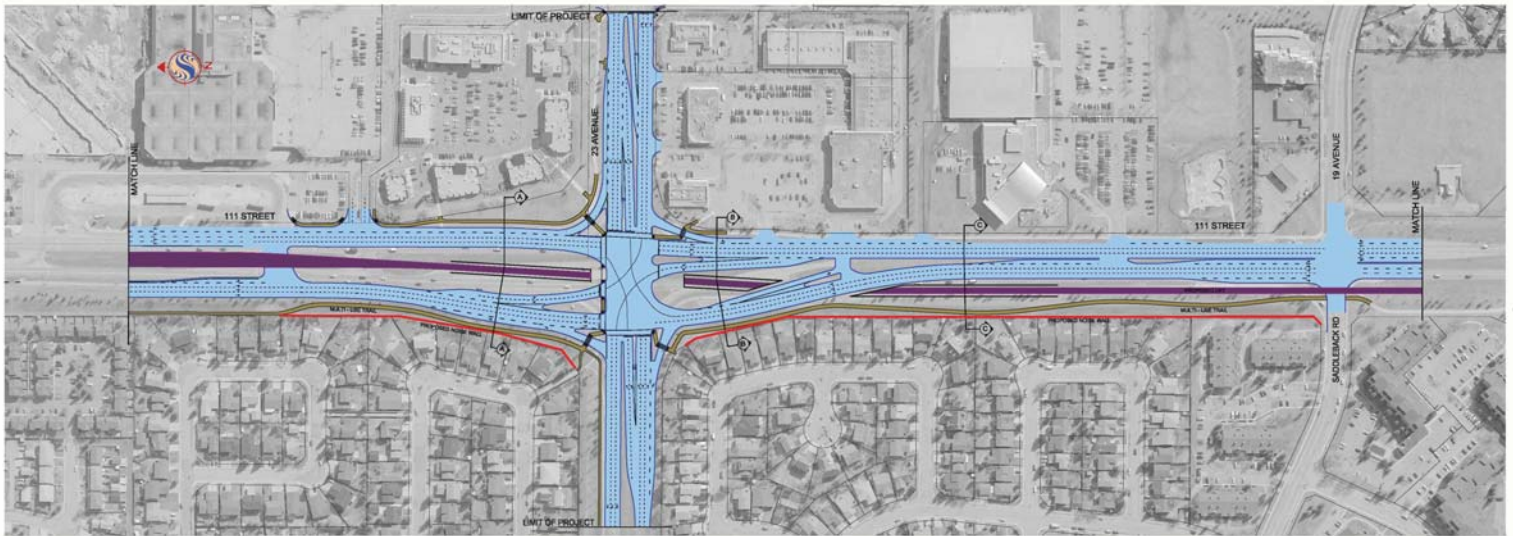
SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



111 STREET CENTURY PARK STATION TO SADDLEBACK ROAD PLAN & PROFILE



111 STREET CENTURY PARK STATION TO SADDLEBACK ROAD PLAN & CROSS SECTIONS



23rd Avenue & 111th Street Underpass



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ISL Engineering and Land Services

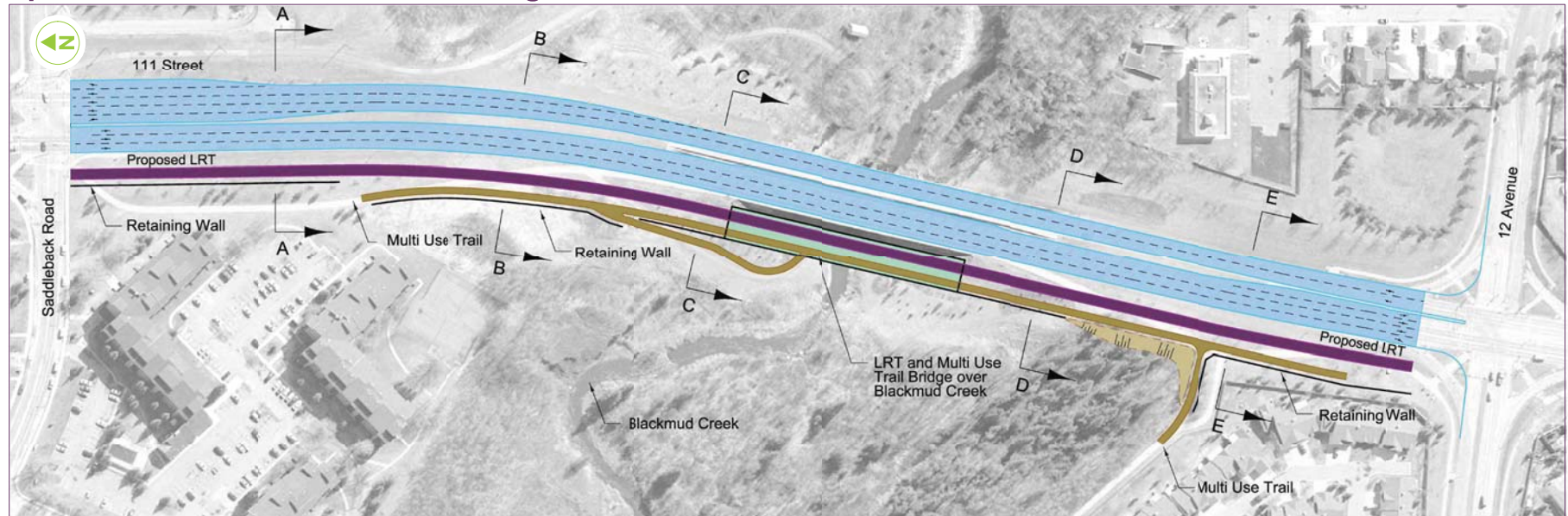
SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD

City of Edmonton
CAPITAL CONSTRUCTION
LRT EXPANSION BRANCH



Bridge over Blackmud Creek

Option 1 Multi Use Trail on LRT Bridge



Possible Bridge Concepts



3 Span Girder Bridge



Suspended Arch Bridge

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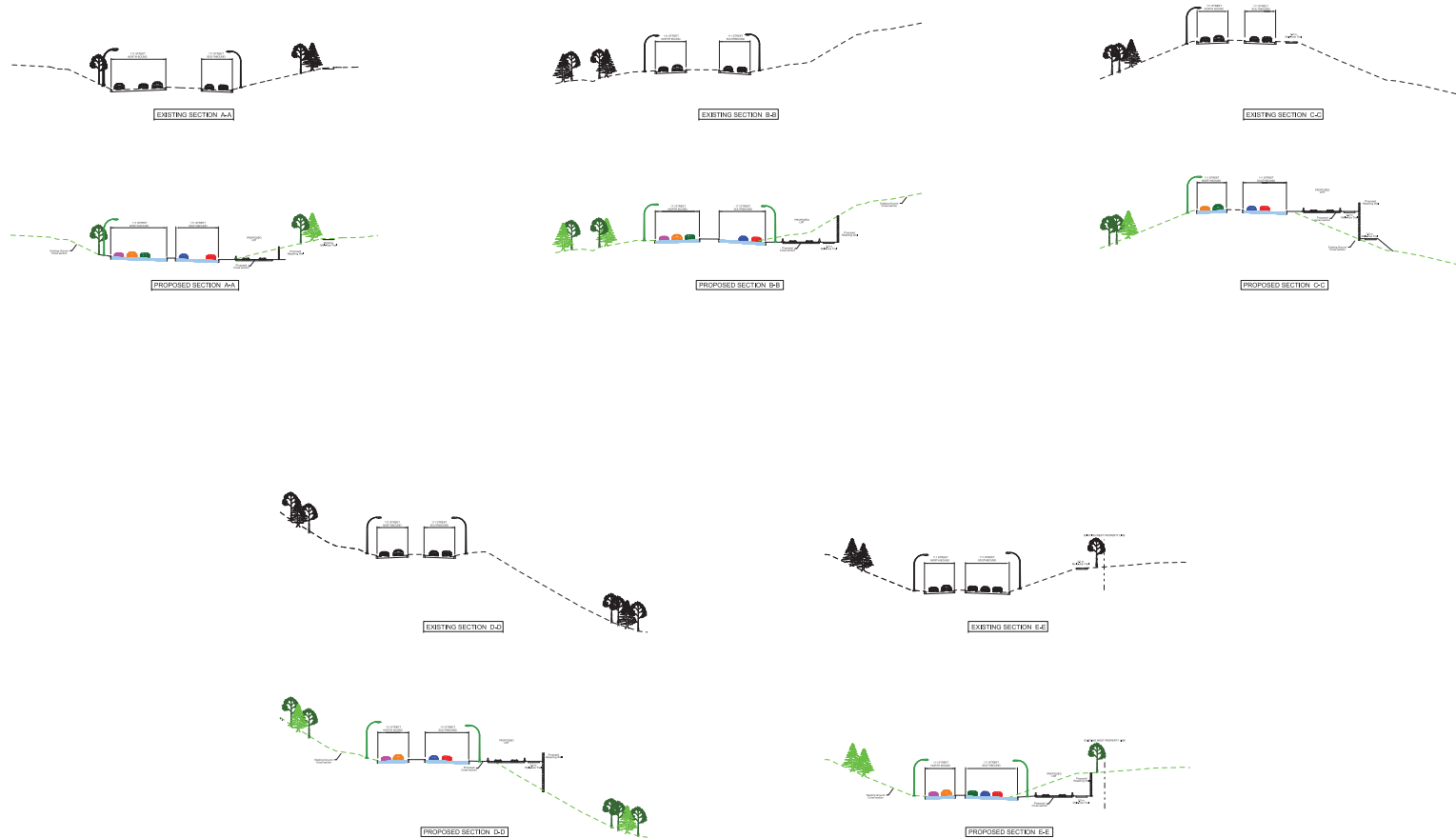
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CENTURY PARK TO ELLERSLIE ROAD



Bridge over Blackmud Creek

Option 1 Multi Use Trail on LRT Bridge

Cross - Sections



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CENTURY PARK TO ELLERSLIE ROAD

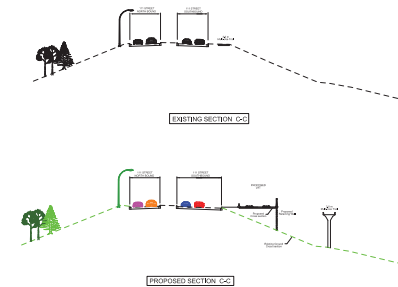
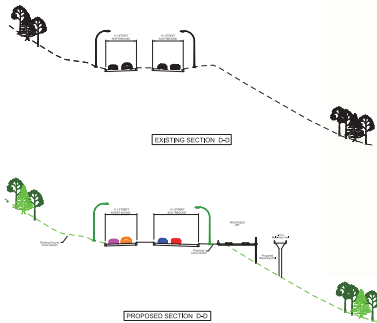
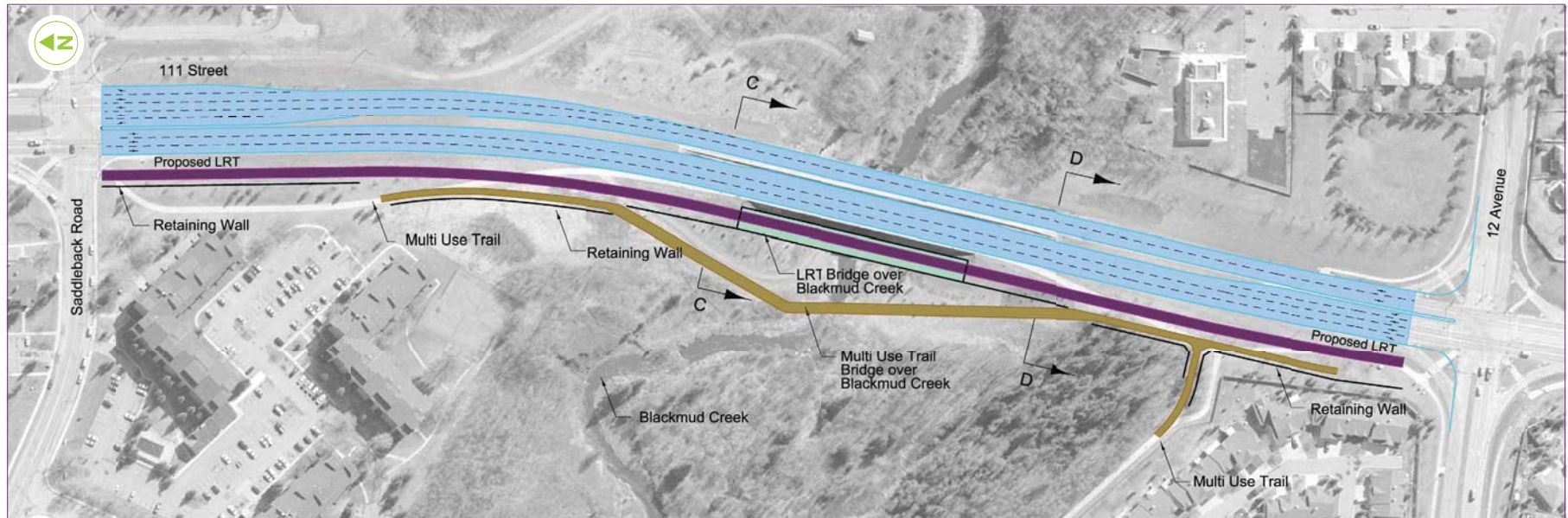
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Bridge over Blackmud Creek

Option 2 Multi Use Trail on Separate Bridge



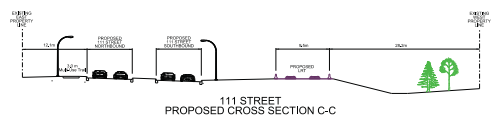
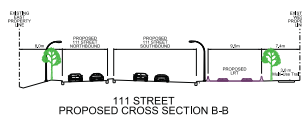
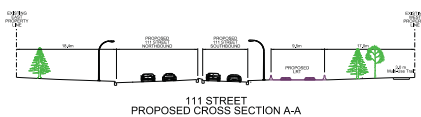
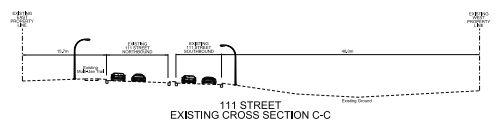
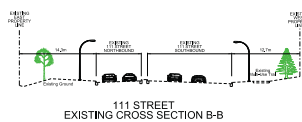
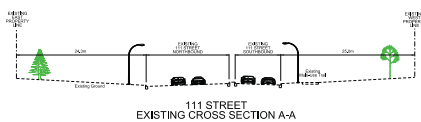
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SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



111 STREET 12 AVENUE TO ANTHONY HENDAY DRIVE PLAN & CROSS SECTIONS



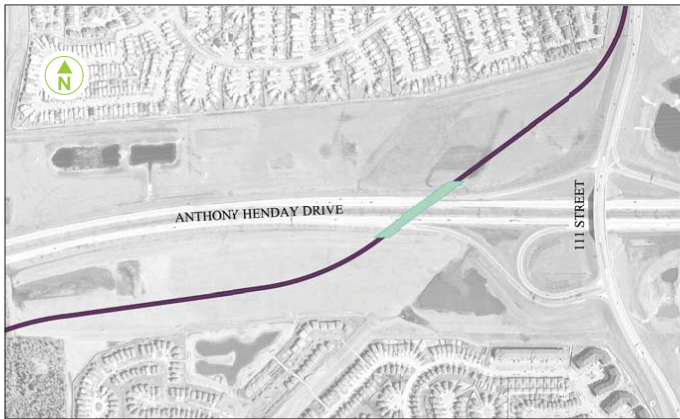
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CENTURY PARK TO ELLERSLIE ROAD
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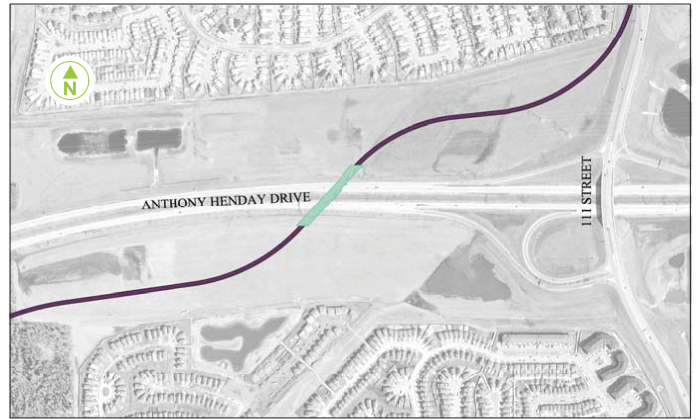


LRT over Anthony Henday Drive



Option 1 - Concept Plan

- Under powerlines
- Over Anthony Henday Drive
at 111 Street ramp terminals
- 166m long bridge



Option 2

- Aligned parallel to Anthony Henday Drive
- Under powerlines further to west.
- Over Anthony Henday Drive
- Improved crossing angle
- 116m long bridge

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**Decision on alignment dependant
on further technical evaluation**

SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



Anthony Henday Drive Bridge Crossing





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Draft Ultimate Stage Ellerslie Park and Ride Concept

SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



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LEGEND	
	TRANSIT CENTRE
	STAGE 1 PARKING
	KISS AND RIDE
	STORMWATER MANAGEMENT FACILITY

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Draft Stage 1 - 2010 Construction Ellerslie Park and Ride Concept



SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



Public Involvement - What We've Heard

To date the project team has met with:

- Residential landowners and business owner/operators directly adjacent to the LRT alignment on September 8 and 10, 2009; and
- Stakeholder Information Panel (SIP) members on September 24, 2009

Concerns Raised at these Meetings Included:

- Access & Emergency Access –LRT Crossings Timed with Traffic Lights and Maintain Access
- Bridge Aesthetics – Minimize Impacts on the Environment and Build Less Expensive Bridges and Spend Money on Landscaping and Aesthetics
- Impact on Existing Berms and Mature Trees – Relocate Trees within Community and Replace Lost Trees
- Impact on Property Values due to LRT
- Impacts During and Following Construction – Temporary Road Closures and Traffic Congestion
- Landscaping/Aesthetics – Natural Theme with Lots of Trees
- Multi Use Trails – Protected Pedestrian Crossings, Connectivity and Safe, Well Lit Trails
- Noise/Noise Walls – Natural Theme and Avoid Long Straight Noise Walls
- Park & Ride/Transit Centre Access and Aesthetics – Natural Theme with Landscaping/Screening to Shield View of Park & Ride Parking Lot and Transit Centre
- Potential for Crime around LRT Stations
- Safety and Security – Protected Pedestrian Crossings, Trails, Lighting and Fences
- Station Aesthetics – Natural Theme with Landscaping/Screening to Shield View of Station
- Timing of Construction – When the LRT will be Built, Duration of Construction and Don't Lose Momentum for LRT Extension
- Traffic Impacts and Roadway Modifications – Maintain Access and Capacity
- Visual Buffering – Screening to Shield View of LRT

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SOUTH LRT EXTENSION
CENTURY PARK TO ELLERSLIE ROAD



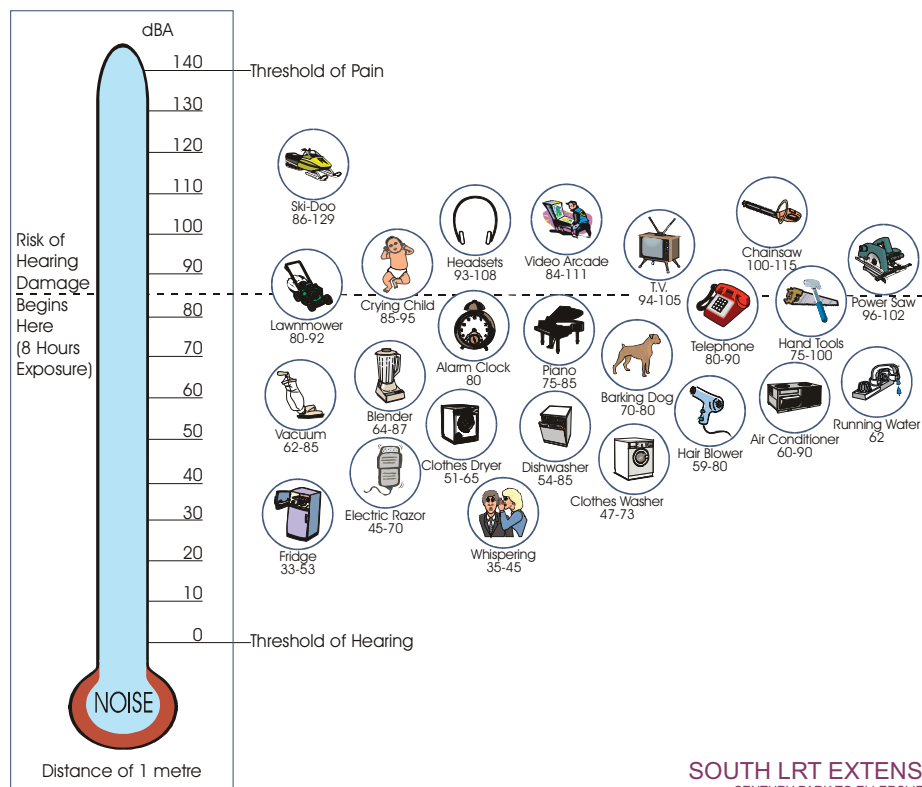
The City of Edmonton Urban Traffic Noise Policy

The Urban Traffic Noise Policy, adopted by City Council on May 16, 2004:

The City of Edmonton will seek to achieve a projected attenuated noise level below 65 **dB(A) Leq24*** or as low as technically, administratively, and economically practical, with an objective of achieving a noise level of 60 dB(A) Leq24, where any urban transportation facility (major arterial roadway, light rail transit, or future high speed transit) is proposed to be built or upgraded through or adjacent to a developed residential area. Funding for noise attenuation, where appropriate, and subject to availability, is considered in the cost of the project.

***dB(A) Leq24** is a measurement that means the traffic noise sound energy level, averaged over a 24-hour period.

Typical Everyday Peak Noise Examples



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CENTURY PARK TO ELLERSLIE ROAD



Existing Noise Measurements



Measurements taken throughout September 2009 in rear outdoor amenity areas.

A 3D Model similar to the sample below will be developed using:

- Noise monitoring data
- Topography
- Existing and projected future traffic volumes

The results from the model will be used to determine if attenuation will be required, based on the City of Edmonton Urban Traffic Noise Policy.

Sample Noise Model:



24-Hour Noise Modeling Results from Southwest Anthony Henday Drive Noise Study

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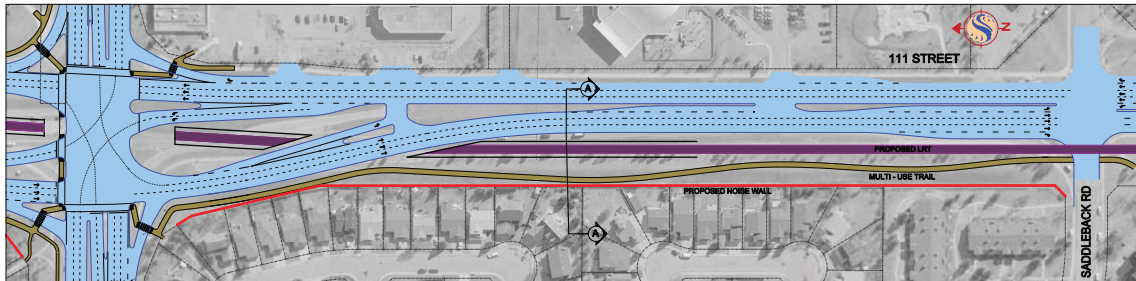
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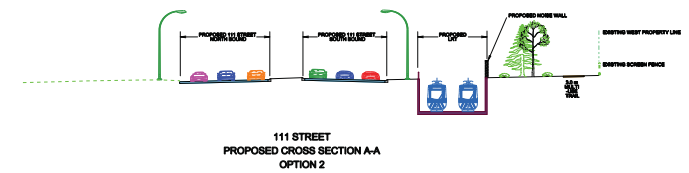
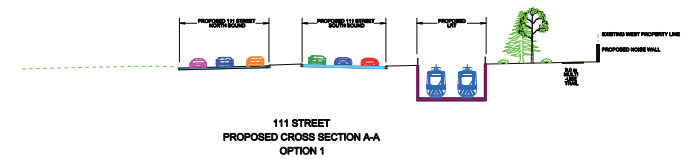
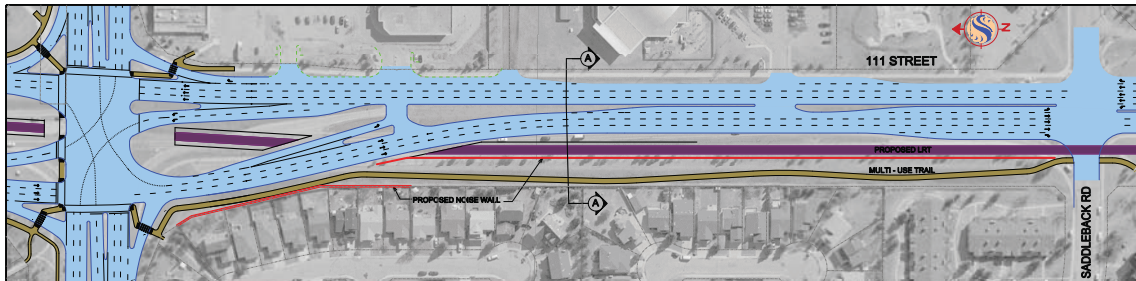


111 STREET (23 AVENUE - SADDLEBACK ROAD) NOISE ATTENUATION ALTERNATIVES

OPTION 1 NOISE WALL ON PROPERTY LINE



OPTION 2 NOISE WALL ON LRT RETAINING WALL



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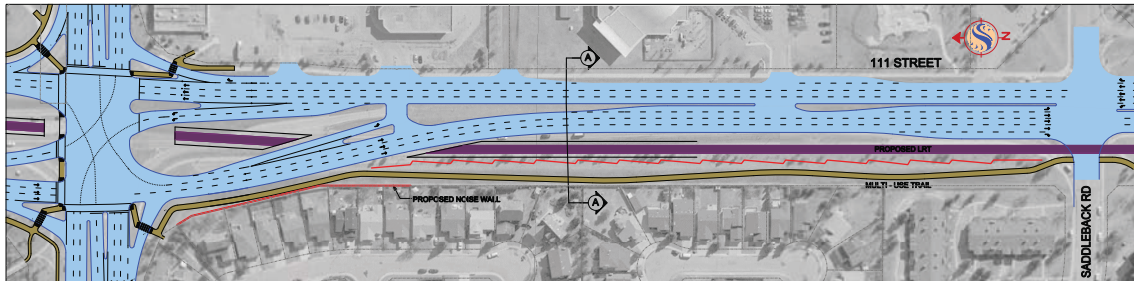


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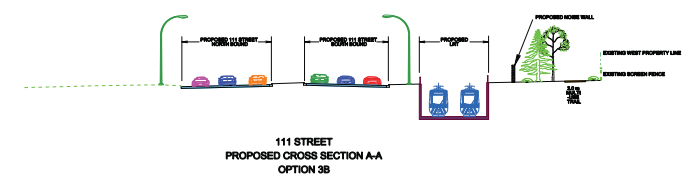
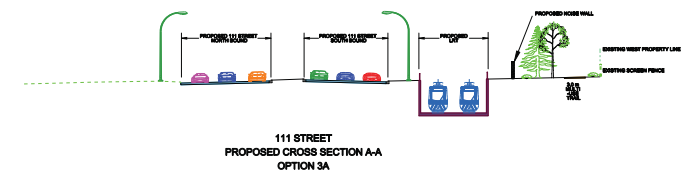
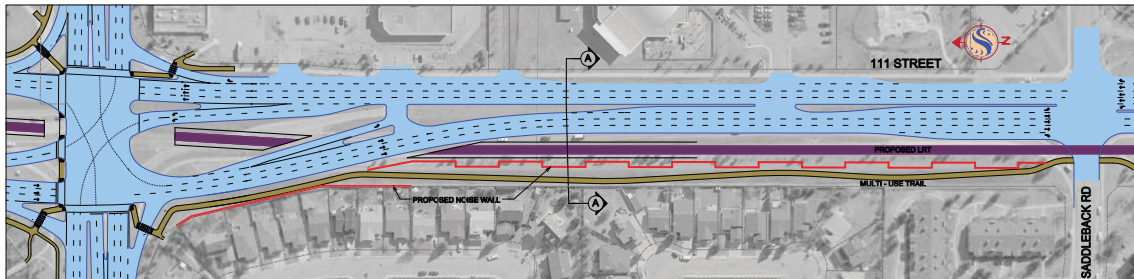


111 STREET (23 AVENUE - SADDLEBACK ROAD) NOISE ATTENUATION ALTERNATIVES

OPTION 3A NOISE WALL BETWEEN LRT AND MULTI - USE TRAIL



OPTION 3B NOISE WALL BETWEEN LRT AND MULTI - USE TRAIL



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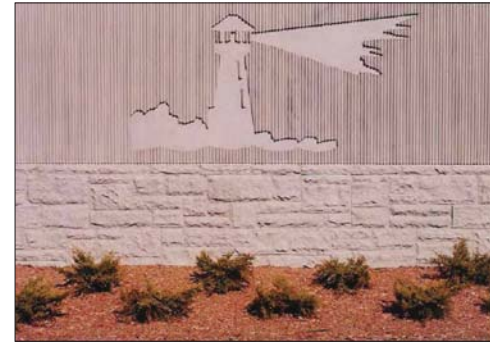


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and Land Services

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Safety & Security

- Designed to Crime Prevention Through Environmental Design (CPTED) standards
- Crossing protection identified through safety analysis of each individual crossing
 - » Gates and flashing lights for vehicles
 - » Directional crossing bells for pedestrians
- Security features:
 - » Closed Circuit TV cameras at stations
 - » Appropriate lighting
 - » Security patrol

Safety & Security Examples



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SOUTH LRT EXTENSION
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Landscaping

Relocate Existing Trees within Adjacent Community



Blend into Community



Enhance with New Landscaping



Additional Stormwater Management



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CENTURY PARK TO ELLERSLIE ROAD



R

MacEwan Station



Health Sciences Station



Belgravia/McEwan Station



South Campus Station



Belgravia/McEwan Station



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