

Welcome to the Noise and Noise Mitigation Presentation



Whitemud Drive & Quesnell Bridge Project

E d m o n t o n , A B



The Noise and Noise Mitigation Presentation

The main purposes of this presentation are as follows:

- To inform and build understanding regarding:
 - causes and impacts of road and traffic noise
 - how noise travels and disperses from source
 - measurement of noise, standards of noise measurement, and mitigation measures, including which methods work and which do not
 - the Urban Traffic Noise Policy and how it relates and applies to noise mitigation for this project



The Noise and Noise Mitigation Presentation

- To provide historical background, including noise measurements and noise modeling results within the project area
- To engage the corridor residents and solicit feedback
- To present the Transportation Department's recommended noise mitigation strategies



Moderator and Presenters

- Al Parsons, Public Communication Consultant
Gray Scott
- Adam Laughlin, Project Manager
City of Edmonton
- Gary Faulkner, Acoustical Engineer
ACI Acoustical Consultants Inc.
- Steven Bilawchuk, Acoustical Engineer
ACI Acoustical Consultants Inc.



Whitemud Drive & Quesnell Bridge Project Purpose and Objectives

Purpose of the Project

- Improve the level of service and safety for the traveling public
- Extend the life of the Quesnell Bridge and Fox Drive Overpass

Project Delivery Objectives

- Complete all construction by the end of 2010
- Minimize impact to the public
- Provide noise mitigation in accordance with the City's Urban Traffic Noise Policy



Whitemud Drive & Quesnell Bridge Project Purpose and Objectives

Project Delivery Objectives (continued)

- Mitigate environmental impacts
- Deliver the project in an efficient and cost effective manner
- Maintain flexibility to accommodate future multi-modal transportation systems



Complete Project

The project will be completed in 2010 and will provide the following:

- 6 through traffic lanes, 2 auxiliary lanes along Whitemud Drive between 149 Street and Fox Drive Overpass, and Transit Priority Lanes over the Quesnell Bridge
- A rehabilitated and widened Quesnell Bridge
- A reconstructed and widened Fox Drive Overpass
- 2 traffic lanes and a Transit Priority Lane on the Whitemud Drive/Fox Drive loop ramp
- Improved access to Fort Edmonton Park

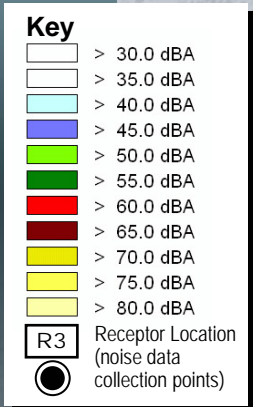


Complete Project

- 149 Street off ramp widened to 2 lanes
- A reconstructed retaining wall northeast of Quesnell Bridge
- A modified multi-use trail system
- A new stormwater management facility
- Noise mitigation as recommended by the City's Transportation Department and endorsed by corridor residents and City Council

Existing Noise Levels

North Side 2007 Noise Levels



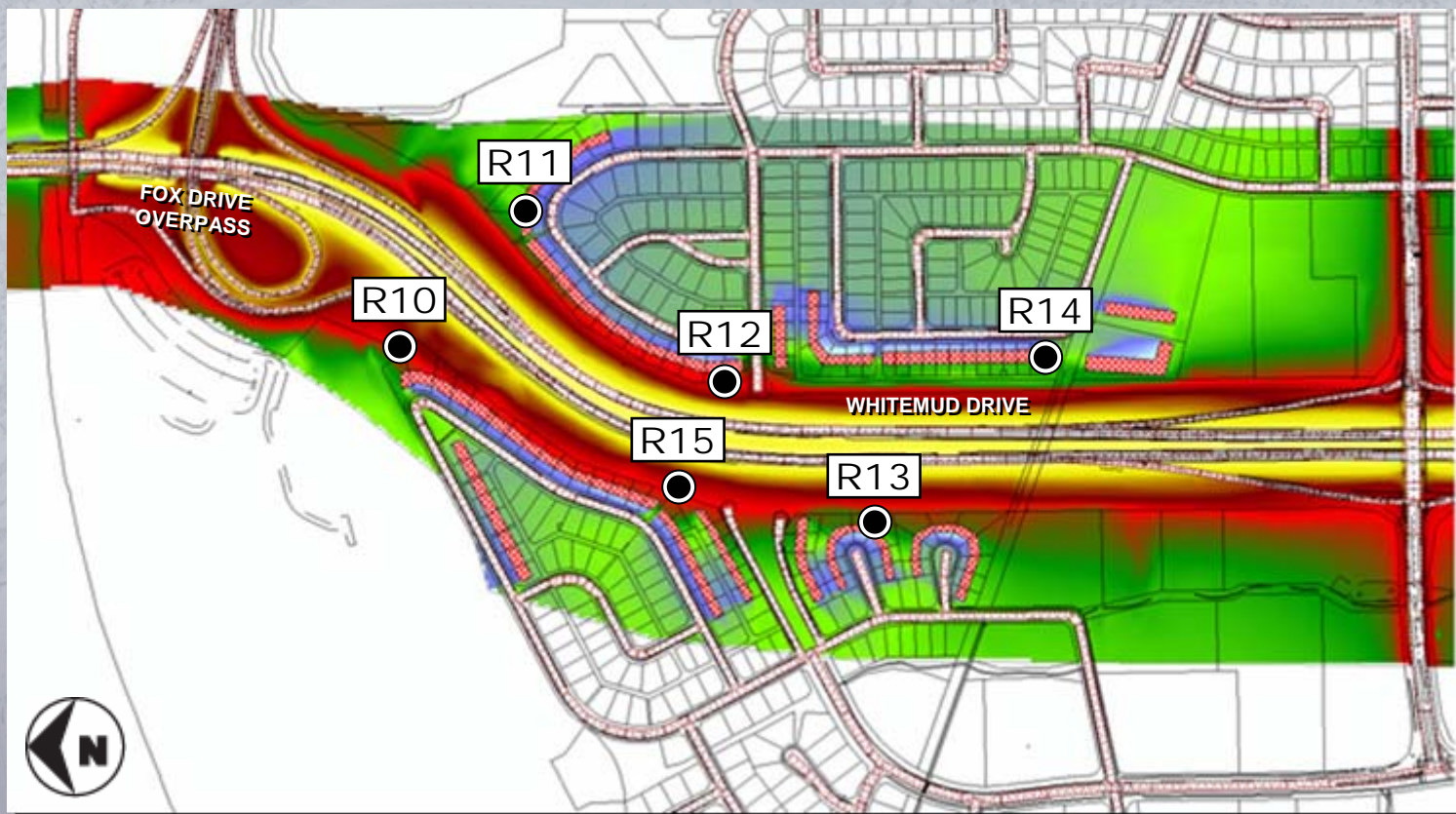
Existing Noise Levels

South Side 2007 Noise Levels

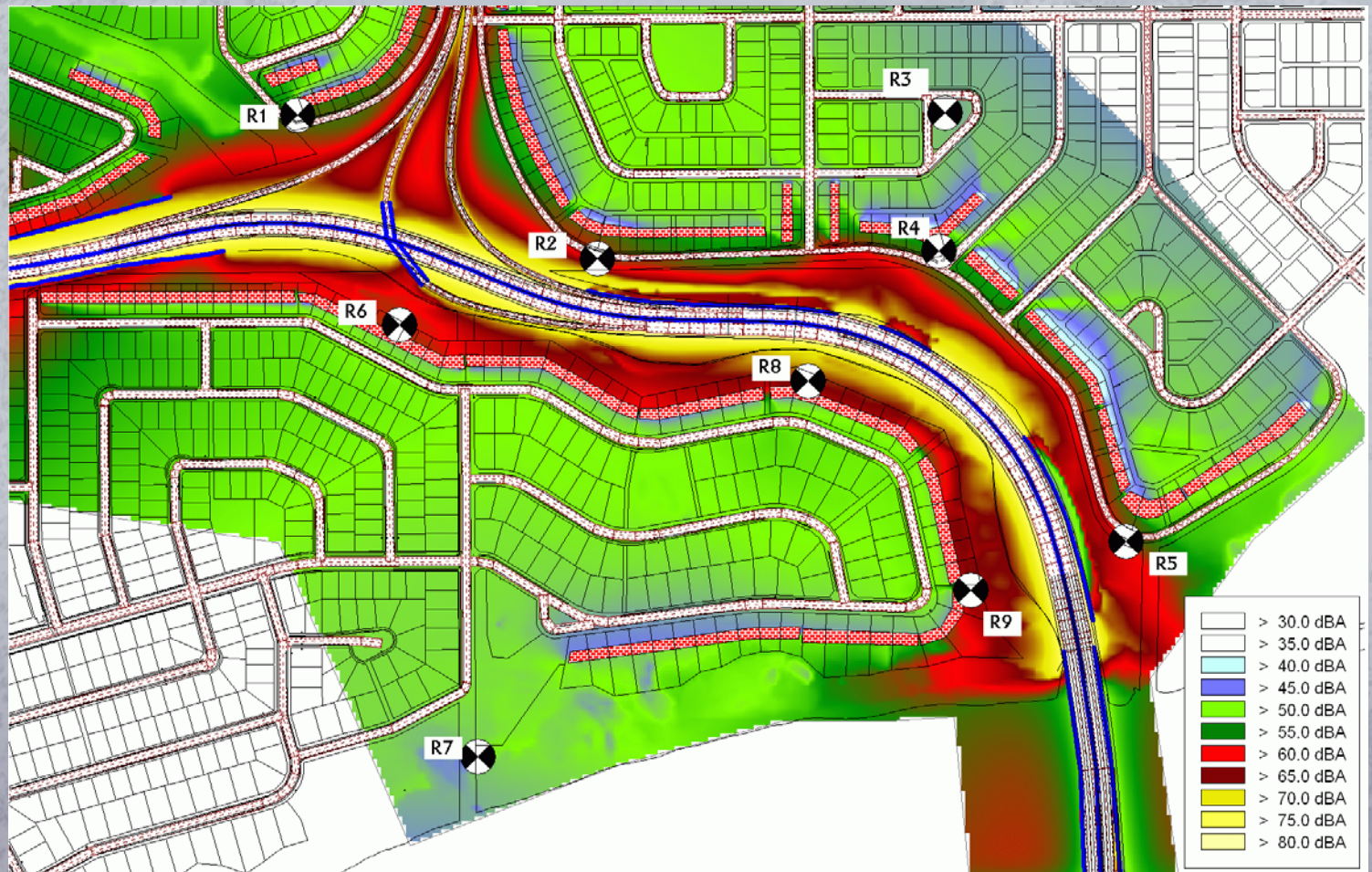
Key

- > 30.0 dBA
- > 35.0 dBA
- > 40.0 dBA
- > 45.0 dBA
- > 50.0 dBA
- > 55.0 dBA
- > 60.0 dBA
- > 65.0 dBA
- > 70.0 dBA
- > 75.0 dBA
- > 80.0 dBA

R3 Receptor Location
(noise data
collection points)



Future Unmitigated Noise Levels North of the Quesnell Bridge (2027)



Future Unmitigated Noise Levels South of the Quesnell Bridge (2027)





City of Edmonton's Urban Traffic Noise Policy

Purpose of City's Urban Traffic Noise Policy

- Seek to ensure that the negative impacts associated with the ongoing exposure to excessive traffic noise is mitigated in the City of Edmonton.
- Assign the responsibility for traffic noise mitigation to the developers of new residential land uses as appropriate.
- Assign the responsibility for traffic noise mitigation to the City of Edmonton where major transportation facilities are proposed or upgraded, subject to funding availability.
- Govern the application of the City of Edmonton's "retrofit noise attenuation program", subject to funding availability.



City of Edmonton's Urban Traffic Noise Policy

Under the City of Edmonton's Urban Traffic Noise Policy, the City will seek to achieve a projected noise level below 65 dBA L_{eq24} , or as low as technically, administratively, and economically practical, with an objective of achieving a noise level of 60 dBA L_{eq24} 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.



Recommended Noise Attenuation Strategy

- The Department does not recommend the provision of noise attenuation for the Quesnell Heights area based on the significant geotechnical and constructability risks.
- Proceed with proposed noise attenuation along Laurier Drive, pending results of direct consultation following the June 7, 2008 information session and greater than 60% approval of residents.
- Proceed with proposed noise attenuation south of the river, with the exception of the 9.0m wall at the tip of Brander Gardens, pending results of direct consultation following the June 7, 2008 information session and greater than 60% approval of residents.