WELCOME

NORTHEAST ANTHONY HENDAY DRIVE
FUNCTIONAL PLANNING STUDY
PUBLIC INFORMATION SESSION

The purpose of the Public Information Session is:

- To inform interested residents and businesses about:
  - the potential changes to the section of the NEAHD functional plan at the 2 rail crossings between 153 Avenue and Manning Drive.
  - the overall recommended functional plan

- To present information regarding the history and background of the corridor development.

Please talk with the project representatives in attendance about any of your questions or comments regarding the project.

Thank you for your interest.

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PURPOSE OF THE FUNCTIONAL PLANNING STUDY

OBJECTIVES COMPLETED TO DATE INCLUDE:

- Reviewed previous plans.
- Identified roadway requirements for future Edmonton regional populations of 1.6 million (approx. year 2040) and 2.5 million (Long Term Stage). Both stages will be free flow (no traffic signals) on Anthony Henday Drive.
- Forecasted noise levels based on the 1.6 million population (Stage 1) road network.
- Public consultation program.
- Storm water management plan.
- Updated roadway and utility requirements within the corridor.
- Functional roadway plans.
- Environmental Assessments.
- Documented all findings.

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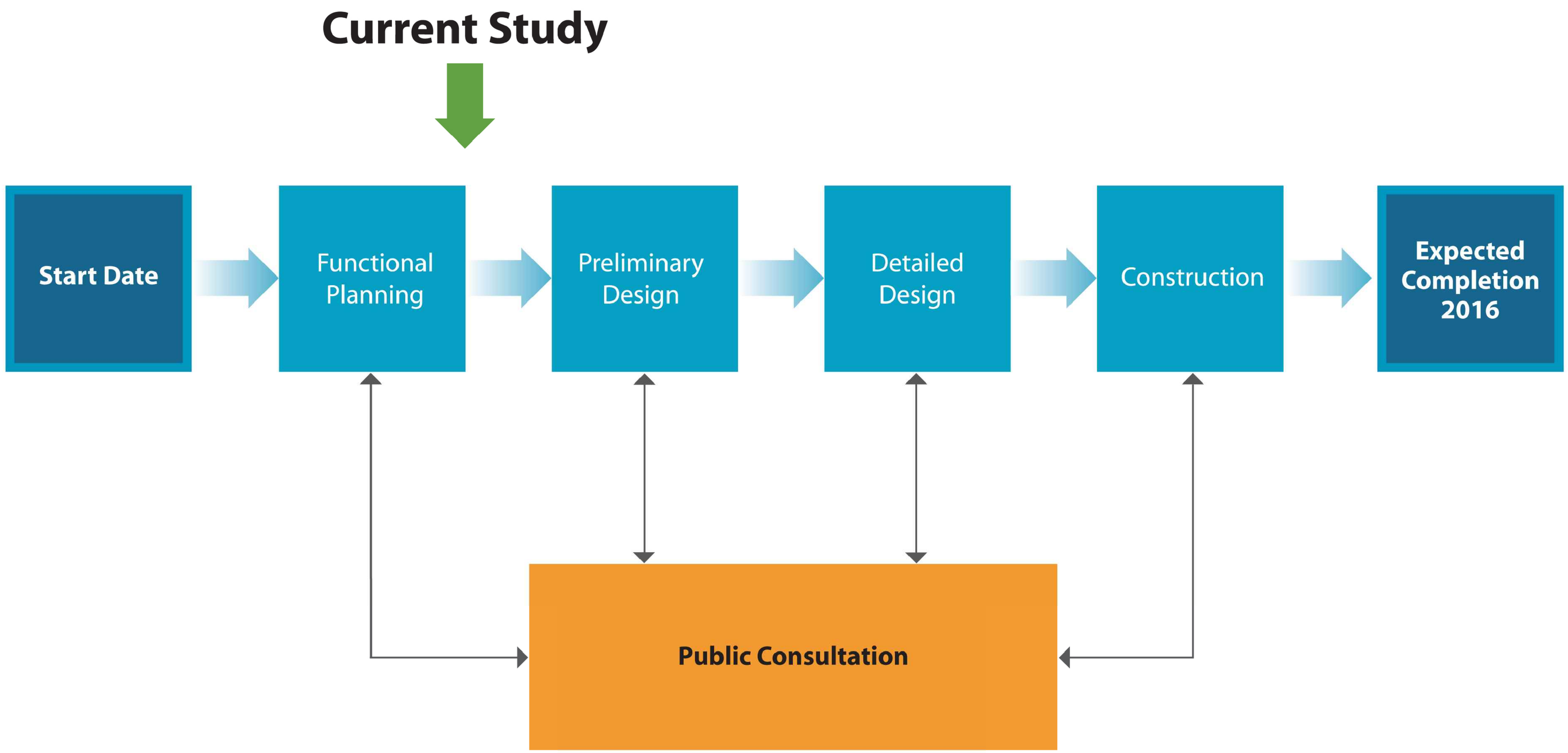

PROJECT STAGES

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Alberta Transportation Website For Anthony Henday Drive
www.transportation.alberta.ca/1701.htm

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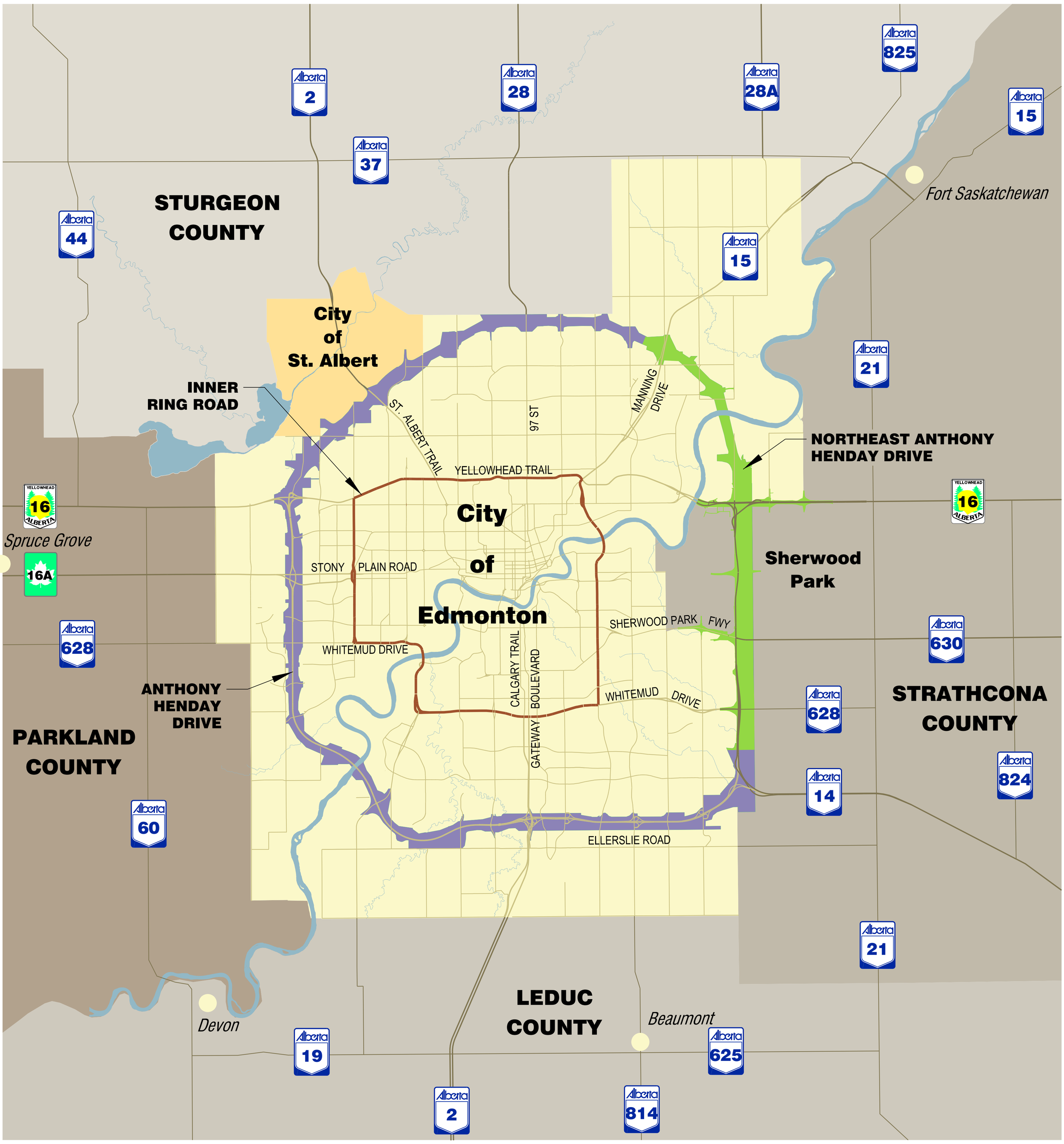

Regional Context

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TRANSPORTATION & UTILITY CORRIDOR (TUC)

BACKGROUND

In the mid 1970s, the Government of Alberta established the Restricted Development Area (RDA) around Edmonton. The lands included in the RDA were designated for Transportation and Utility Corridor (TUC) uses, being the high standard Ring Road, major power lines, pipelines and linear municipal utilities.

Land acquisition for the TUC program commenced in 1974. To date the Province has acquired approximately 99% of the RDA Corridor requirements in Edmonton.

More information on the TUC can be found at: http://infrastructure.alberta.ca/518.htm

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TRANSPORTATION UTILITY CORRIDOR (TUC)

USES WITHIN THE TUC:

- Primary Uses - Include Ring Road and associated interchanges and stormwater management facilities, petroleum pipelines, power transmission lines, telecommunications lines, and municipal regional water, sanitary and storm sewer lines.

- Secondary Uses - These usually occur adjacent to roadways, above underground pipelines, below power lines or on parcels that are awaiting the development of an initial primary use. They are compatible with Primary Uses and typically involve permitting leasing of the land for re-established agricultural, recreational and various limited commercial purposes. These uses may last a long time but the Province has taken care to ensure that they can be easily altered, reduced or completely displaced to accommodate Primary Uses.

More information on the TUC can be found at: http://infrastructure.alberta.ca/518.htm

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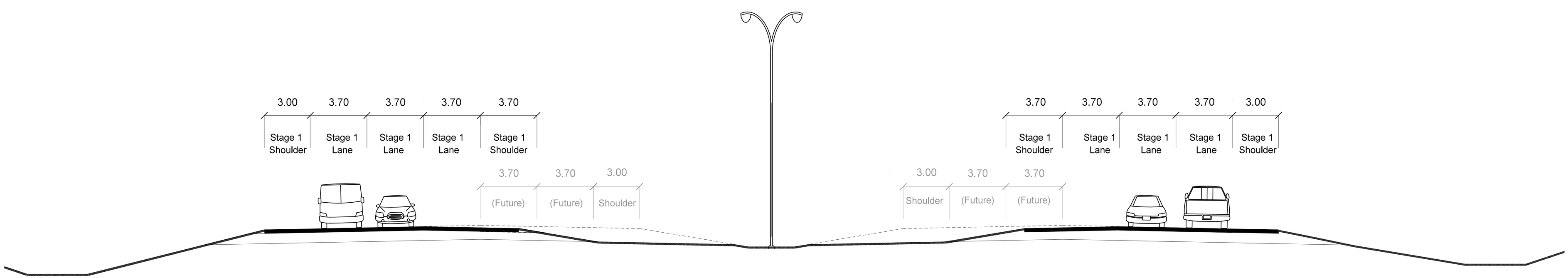

Roadway Cross Section

SCALE NTS

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6-Lane Stage 1 Construction/Paving with
Pre-Grading for 10-Lane Ultimate Stage
(Future Pavement Widening toward Median)

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ENVIRONMENTAL ASSESSMENT

- As a matter of policy, Alberta Transportation undertakes environmental assessments for its roadway construction projects.

- An environmental assessment was completed for the section from Manning Drive to Yellowhead Trail, including the proposed North Saskatchewan River crossing in 2007. An environmental assessment was completed for the section from Manning Drive to Whitemud Drive, including the North Saskatchewan River, and the section of Yellowhead Trail between 17 Street and Highway 21 in 2010.

- As the project will require federal permits, an environmental impact assessment document has been prepared for the project area as all of it will likely be subject to the Canadian Environmental Assessment Act.

- The environmental assessment focused on the subjects of soils, vegetation, wildlife and wildlife habitat, hydrology and fisheries.

- To identify ways that the proposed project could affect biophysical and socio-economic resources, the following Valued Ecosystem Components (VECs) have been assessed: soils, geology, geomorphology, hydrology and surface water quality, vegetation, wildlife, fish and aquatic resources, air quality, noise, and historical resources.

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ENVIRONMENTAL ASSESSMENT

Tasks completed to-date:

- Vegetation: rare plant survey and data analysis.
- Wetlands: wetland identification and classification in support of possible Alberta Water Act approval and data analysis.
- Wildlife: amphibian and breeding bird surveys and winter tracking.
- Fish and Aquatic Resources: fisheries and water quality assessment for selected water bodies and watercourses and data analysis in support of confirmation of requirements under the federal Fisheries Act.
- Air Quality: air quality assessment.
- Noise: noise assessment.
- Historical Resources: historical impact assessment.

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NOISE ATTENUATION GUIDELINES FOR PROVINCIAL HIGHWAYS UNDER PROVINCIAL JURISDICTION WITHIN CITIES AND URBAN AREAS

Definition:

Noise is defined as the sounds generated by vehicles operating on the highway. It includes but is not limited to engine / exhaust sounds and road contact sounds.

Guidelines:

- For construction or improvements of highways through cities and urban areas, Alberta Transportation will adopt a noise level of 65 dBA Leq 24* measured 1.2 metres above ground level and 2 metres inside the property line (outside the highway right-of-way). The measurements should be adjusted to the 10 year planning horizon value, as a threshold to consider noise mitigation measures.

- The mitigation of noise issues could include constructing noise walls and / or berms. The decision to implement noise mitigation must consider whether mitigation is cost-effective, technically practical, broadly supported by the affected landowners, and fits into overall provincial priorities.

- Any accepted noise mitigation measures consistent with this guideline will be the responsibility of Alberta Transportation. Where established local noise mitigation policies are more stringent than this guideline, the local policy may be considered on a shared responsibility basis.

- Alberta Transportation will be responsible for noise attenuation, in accordance with this guideline, in areas where Alberta Transportation is undertaking widening (by at least one lane width) or major realignment of an existing road or constructing a new road adjacent to an existing residential development.

- In areas where a residential subdivision is constructed adjacent to an existing roadway, the development proponent will be responsible for noise attenuation consistent with these guidelines.

- In areas where a residential subdivision is constructed adjacent to a designated highway that has not been constructed, Alberta Transportation will request that the development proponent and approving authority address future noise concerns consistent with these guidelines.

** Noise level expressed in decibels (dB) is taken to mean the A-weighted 24-hour equivalent sound level.*

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NORTHEAST ANTHONY HENDAY DRIVE

PREDICTED TRAFFIC SOUND LEVELS

Traffic noise predictions for Northeast Anthony Henday Drive were calculated by computer noise modeling using Cadna/A, an environmental noise prediction software program. The model was used to calculate average 24-hour sound level values for road traffic noise within about 1 km of the highway. The predicted sound levels are based on forecasted Anthony Henday Drive traffic volumes for 2041.

Figure 1 - Option Going Under Railway Crossings:

- For this option the highway elevation will be about 10 m below grade at the lowest point between the two rail crossings, requiring a cut in the terrain between 153 Ave and Manning Drive. The predicted traffic sound levels at the TUC boundary are generally lower than 65 dBA Leq (24-hour), except for two areas on the southwest boundary near 153 Ave where sound levels up to about 66 dBA Leq (24-hour) are predicted.

- Along the below-grade segment of the highway there will be a slight build-up of reflected sound, similar to but weaker than the sound build-up that would occur in a tunnel. This results in moderately higher sound levels near the highway and moderately lower sound levels away from the highway, as compared to the sound levels for an at-grade road.

Figure 2 - Option Going Over Railway Crossings:

- For this option the highway elevation will be about 10 m higher than grade at the highest point between the two rail crossings, requiring a fill in a large segment of terrain between 153 Ave and Manning Drive. The predicted traffic sound levels at the TUC boundary are generally lower than 65 dBA Leq (24-hour), except for a segment along the southwest boundary between 153 Ave and Manning Drive.

- The highway elevation between the two railway crossings is well above grade level. This results in relatively lower sound levels close to the highway and moderately higher sound levels away from the highway, as compared to the sound levels for an at-grade road.

Sound Level Difference

- The change in predicted sound levels from the Under Railway Crossings option to the Over Railway Crossings option was reviewed. The largest change is a moderate increase of less than 2 dB in a zone that extends from about 150 m to 400 m from the highway. Beyond this zone, the sound level change gradually diminishes with increasing distance to less than +0.5 dB. Within about 100 m of the highway, there is a decrease in traffic sound levels.

- When comparing sound level values, the following rule of thumb may be used:
  - a change in sound level of 3 dB is barely perceptible
  - a change of 5 dB is noticeable
  - a change of 10 dB corresponds to a halving or doubling in perceived loudness

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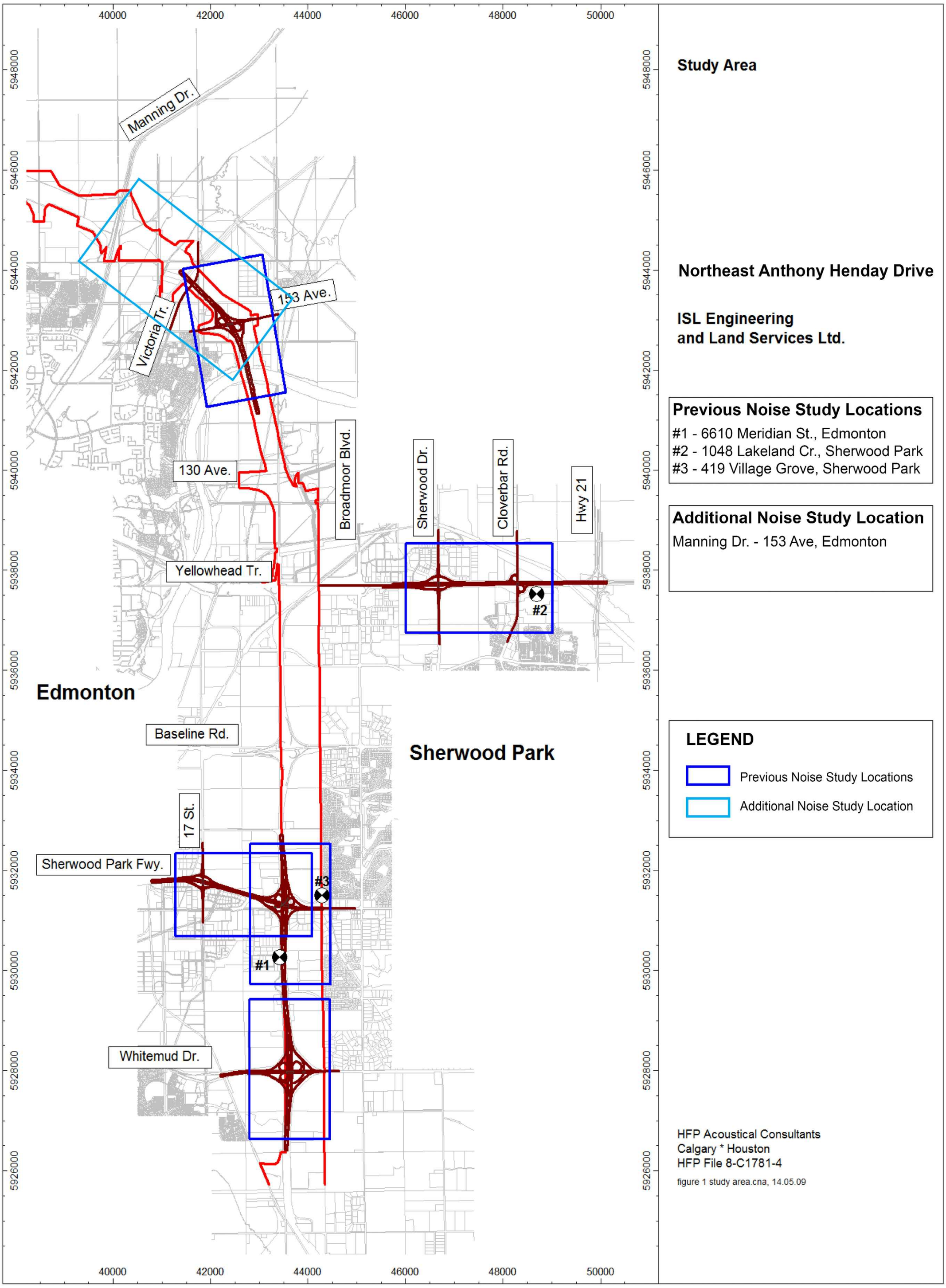

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Predicted Noise Contours
Study Area

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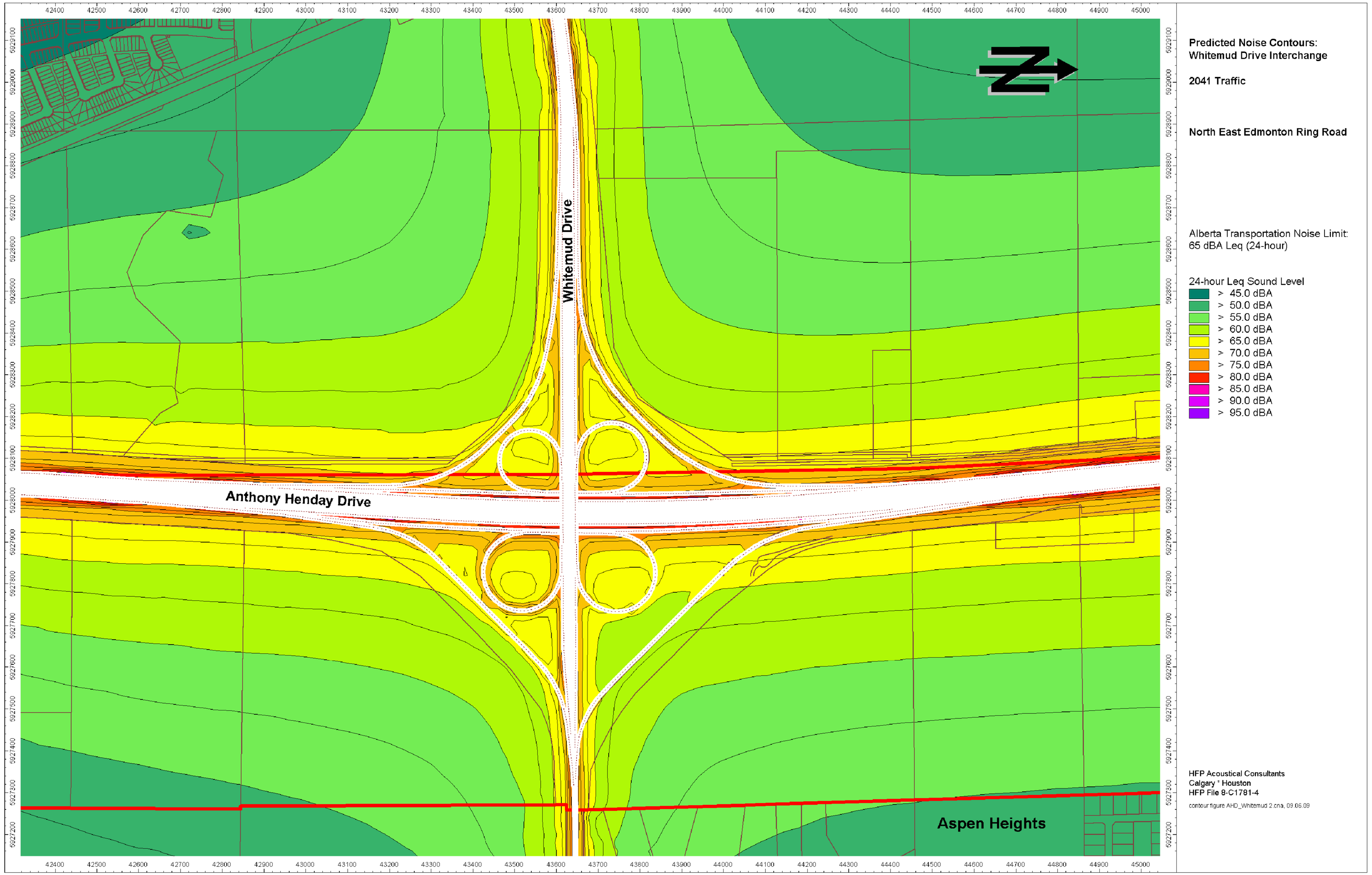

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Predicted Noise Contours
Whitemud Drive - Anthony Henday Drive

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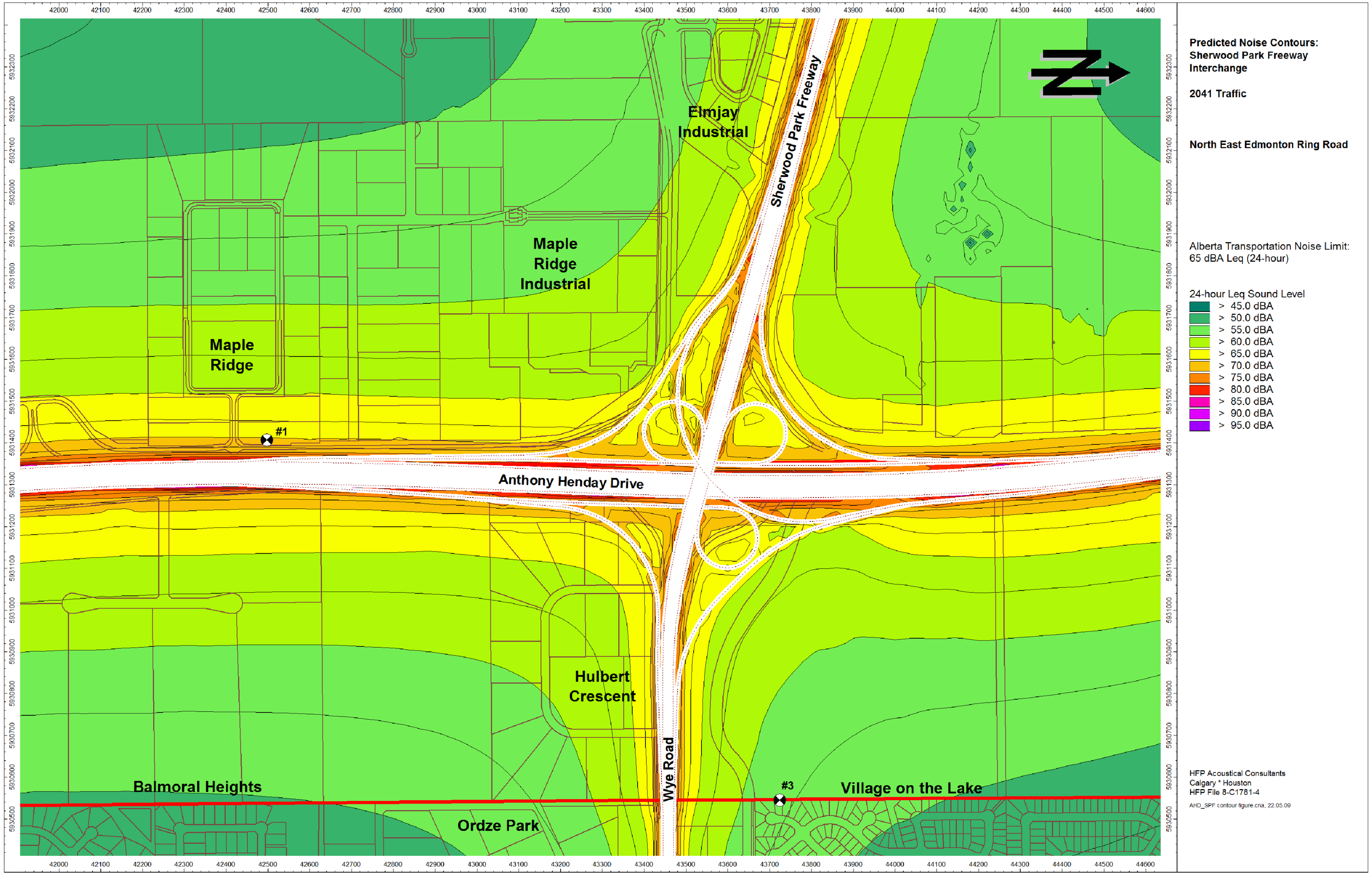

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Predicted Noise Contours
Sherwood Park Freeway - Anthony Henday Drive

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