## Environment Act Licence

Manitoba Environment



Licence No.	1552
Issue Date	MAY 6, 1992

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125) THIS LICENCE IS ISSUED TO:

### THE PROVINCE OF MANITOBA REPRESENTED BY THE MINISTER OF HIGHWAYS AND TRANSPORTATION; LICENCEE

subject to the following specifications, limits, terms and conditions for the construction, operation, and maintenance of the northeast portion of the Perimeter Highway (PTH #101) around the City of Winnipeg (the development). The development involves twinning the existing two lane section of PTH #101 between the PTH #1E/101 intersection to the PTH #15/101 intersection and the construction of a four lane section of PTH #101 from the PTH #15/101 intersection to the intersection at PTH #59/101:

#### **DEFINITIONS:**

\*Outdoor Recreational Area: An area defined in the City of Winnipeg " MOTOR VEHICLE NOISE POLICIES AND GUIDELINES " as a ground level outdoor living area adjacent to a residential unit accommodating a variety of individual outdoor activities.

#### \*dBA Ldn:

- dBA
- is a denotation used to indicate a unit of sound measurement.
- dB (decibel) is a dimensionless measure of sound level or sound pressure level.

  Sound level = 20 log10 pressure (actual)

  pressure (reference)
- Leq (Lequivalent) the equivalent A-weight sound level is the intensity (dBA) of the constant or steady sound level that would result in exposure to the same total A-weight energy as would the specified time varying sound, if the constant sound level persisted over an equal time interval. Note: Leq(1) is the equivalent sound level for a 1 hour period, and similarly, the Leq(24) represents the equivalent sound level for a 24 hour period.

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- A-weight sound level is the sound level measured with a sound level meter set on the A-weighting network, a filter designed to approximate the relative sensitivity of the normal human ear to different frequencies of sound.
- Ldn dBA is the day-night average sound level; the 24 hour A-weight equivalent sound level, with a 10 decibel penalty added to the night-time (10:00 p.m. to 7:00 a.m.) levels.

#### SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

- 1. The Licencee shall, prior to beginning any construction of the development, submit an Engineering Report for the approval of the Minister. The Engineering Report shall:
  - a) contain the results of a completed field monitoring program of background noise levels for the residentially zoned areas adjacent to the development between PTH #15/101 intersection and the PTH #59/101 intersection; and
  - b) recommend specific noise attenuation measures to reduce noise to the design noise level of 65 dBA Ldn.\*
- \* The 65 dBA Ldn level shall be based upon the design year traffic volume, and shall be in accordance with the outdoor sound level limits for residential areas adjacent to regional transportation facilities set out in City of Winnipeg's "MOTOR VEHICLE NOISE POLICIES AND GUIDELINES" (The point of reception for determining noise impacts as defined in the City of Winnipeg" MOTOR VEHICLE NOISE POLICIES AND GUIDELINES," shall be at the limit of the outdoor recreational area \* closest to the highway and at a height of 1.2 meters above ground.)
  - 2. The Licencee shall, following the Minister's approval of the Engineering Report described in Clause #1, design and construct, as part of the development, the noise attenuation measures recommended in the approved Engineering Report. This shall be done to reduce noise to the design noise level of 65 dBA Ldn in existing residentially zoned areas.
  - 3. The Licencee shall, no later than 3 years after completion of construction of the development, provide the Minister with a second Engineering Report. This Report shall include a review of the adequacy of the implemented noise attenuation measures described in the approved Engineering Report referred to in Clause #1 of this Environment Act Licence.

J. Glen Cummings

Minister

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