

# Design and Construction Guidelines

## for Third-Party Activities in Proximity to or Crossing NOVA Chemicals'-Operated Pipelines<sup>1</sup> and Rights-of-Way

November 2019

**The following guidelines have been developed to assist in assessing consent applications in a timely fashion. Exceptions to these guidelines may also be accepted upon more in-depth analysis of the particulars of the crossing / construction activity.**

### General Requirements

- The crossing shall occur as close to 90 degrees as possible.
- The crossing shall not occur at a bend in NOVA Chemicals' operated pipelines.
- No pre-load or surcharge will be allowed within the pipeline right-of-way or its projected limits. Pre-loading adjacent to a right-of-way is subject to review and approval by NOVA Chemicals.

### General Requirements for Roads (highways and private roads) and Railways

- The road shall be constructed so that travelling surface is at least 1.8 m above the top of the pipeline.
- The bottom of the ditches adjacent to the road shall be at least 1.4 m above the top of the pipeline.
- Minimum cover for railway crossings (below base of rail) is 3.05 m above the top of the pipeline for uncased pipe.

### General Requirements for Utilities

- Wherever possible, NOVA Chemicals shall retain the upper position in the crossing area. By exception, cases may necessitate the utility crossing above NOVA Chemicals' pipelines.
- When open-cut excavations are approved, minimum separation for buried facilities shall be 1.0 m. NOVA Chemicals prefers horizontal directional drill methods. The minimum separation for HDD shall be 1.5 m unless

otherwise directed. NOVA Chemicals' pipelines must be daylighted with a slot trench 600 mm below the bottom of the lowest pipeline while the directional bore is taking place.

- Utility depth shall be maintained for the entire width of the right-of-way.
- The utility shall have no bends within the right-of-way.
- The utility shall have no joints, splices, or other connections within the right-of-way.
- Pipeline crossings shall not be placed within 7 m of a NOVA Chemicals pipeline bend.

### General Conditions for Pathways and Landscaping

- Trees must not obscure the overhead view of the pipeline right-of-way or prevent access to fenced facilities.
- Tree roots must not interfere with the pipeline.
- Landscaping must not block vehicle access along the pipeline right-of-way.
- Mature vegetation shall not exceed 1 m in height within 3 m of the pipeline, and shall not exceed 1.8 m in height on the remaining portions of the right-of-way.
- Materials shall not be stored on pipeline right-of-way unless specifically agreed upon.
- The minimum horizontal dimension from the outer edge of the pipe to the nearest edge of a post or sign shall be 2 m.

<sup>1</sup>NOVA Chemicals also operates CER-regulated pipelines on behalf of Genesis Pipeline Canada Ltd. in Ontario.