Design and Landscaping Guidelines
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Kinder Morgan Canada (KMC), operates the Trans Mountain, Trans Mountain Jet Fuel and Puget Sound pipelines. This brochure will provide you with important safety information for landscaping on or near our pipelines or facilities.

Government Regulations

The Trans Mountain Pipeline is regulated federally by the National Energy Board, the Trans Mountain Jet Fuel Pipeline is regulated provincially by the BC Oil and Gas Commission and the Trans Mountain Puget Sound Pipeline is regulated by the US Department of Transportation Pipeline and Hazardous Materials Safety Administration. Any individual or organization conducting a ground disturbance activity on or near our pipelines or facilities must adhere to all applicable regulations.

You can find more information on the regulator websites:

- National Energy Board: neb-one.gc.ca
- BC Oil and Gas Commission: bcogc.ca
- US Department of Transportation Pipeline Hazardous Materials Safety Administration: phmsa.dot.gov
Call or Click Before You Dig

Before beginning any landscaping work, contact your local One Call centre. If your proposed work is near our pipeline, we will contact you to discuss your proposed work and, if required, meet with you onsite to determine the exact location of the pipeline. This service is typically provided at no cost to you.

Permits

All landscaping activity within 30 metres (100 feet) from the centre of the pipe requires written permission from KMC in the form of a 30 Metre (100 Foot) Ground Disturbance Safety Permit. The permit must be completed onsite by a KMC representative before any landscaping begins.

If your proposed project requires installing anything of permanent nature within the pipeline right-of-way, such as a fence or post, then a Proximity (Crossing) Permit will also be required. Contact the local One Call number and our 24-Hour Emergency Notification Line.

Locating the Pipeline

Our pipelines are found in a road allowance or right-of-way, which is a narrow stretch of land that provides safe access for monitoring and maintenance.

Pipeline markers provide important safety information such as the type of product carried, the local One Call number and KMC’s 24-Hour Emergency Notification Number.

Although markers identify that a pipeline is in the area, they do not give the exact location or depth – only a qualified KMC representative can do so.
Permit Process

• Contact us at least three business days (two in the United States) prior to beginning any landscaping work

• We will contact you within three business days to:
  » Verify the location of your work
  » Determine permitting requirements

• Once the appropriate permit has been determined and obtained, a KMC representative will:
  » Meet with you onsite
  » Hold a safety meeting
  » Mark the pipeline
  » Mark the 7.5 metres (25 feet) Safety Zone

Work can not begin until the permits are in place, the pipeline has been marked and, where required, a KMC representative is onsite.
Getting Started

Start with a scale drawing of your property. Using a ruler and grid paper or a copy of the plan, draw the basic elements of your property to scale. This will help you position the main features of the property.

Features to include:

- Property lines and lengths
- Position and dimensions of your house
- Right-of-way and pipeline location (see Permit Process on page 5)
- Permanent structures such as driveways, sheds, fences and walkways
- Utilities servicing the property such as power lines, gas lines, water lines, irrigation system, drains, septic fields and wells
- Existing landscaping features such as trees, gardens, retaining walls and drainage ditches

Helpful Tips:

- Make a few photocopies of your original scale drawing before filling in the details
- Use a pencil; once the field drawing is done, transfer the information into ink and photocopy
- Establish ‘North’ and mark the direction on your drawing
Parameters

Working Within the Limitations of the Property

**Items permitted on the right-of-way:**

We need access to the right-of-way for pipeline monitoring and maintenance. To ensure the safety of the public, the pipeline and the environment, the following items are not permitted on the right-of-way:

- Flower beds
- Vegetable gardens
- Lawns

**Items not permitted on the right-of-way:**

KMC needs access to the pipeline for monitoring and maintenance. To ensure the safety of the public, the pipeline, and the environment, the following items are not permitted on the right-of-way:

- Sheds
- Concrete patios
- Pools
- Hot tubs
- Decks
- Ponds
- Overhangs
- Other permanent structures
- Deep rooted trees or shrubs

**Items that require a permit:**

- Fences
- Retaining walls
- Low shrubbery
- Ditches and swales
- Paved and gravel walkways
Proportion

The right proportions give balance to your landscape. To achieve this, select a feature such as an entranceway or deck area, translate the size of this feature into a grid and place the grid over your drawing. This will help you to better determine the location and size of other features.

Design Features

There may be some features on your drawing that should be removed. There may also be features that you would like to add. These features can be laid out in a proportional design with the help of a scale drawing and your grid.

Maximum Vegetation Heights on the Right-of-way

Do not plant tall growing vegetation on the right-of-way. Tree canopies overhanging the right-of-way restrict aerial inspection, right-of-way identity and operational pipeline access. They are considered to be within the right-of-way, even if the trunk is outside the boundary.

The mature growth height of vegetation must not exceed 1 metre (3 feet) within 3 metres (10 feet) of the pipeline and 1.8 metres (6 feet) on remaining portions of the right-of-way.

Fences

If you plan on constructing a fence on your property you will need a 30 Metre (100 Foot) Ground Disturbance Safety Permit and a Proximity (Crossing) Permit. Fences may cross over the pipeline, but should not run parallel to it. The distance from the centerline of the pipe to the centerline of a post should be at least 2 metres (6.5 feet).
Suitable Plants on Right-of-way

Dividing your property into plant growth areas will help you plan the types of vegetation and their location on your property, while ensuring vegetation compatibility with the right-of-way.

Low Growth Area
- Directly over and within 3 metres (10 feet) of the pipeline
- The mature plant height restrictions is 1 metre (3 feet) high

Mid Growth Area
- Right-of-way areas not within 3 metres (10 feet) of the pipeline
- The mature plant height restriction is 1 to 1.8 metres (3 to 6 feet) high

Tall Growth Areas
- Outside of and not overhanging the right-of-way
Site Conditions and Plant Characteristics

The following section provides examples of plants suitable for growing on the right-of-way.

Plant Suggestions for Low Growth Area

Ground Covers

- Kinnikinnick
- Cotoneaster
- Juniper ‘Blue Carpet’
- Creeping Mahonia
Lingonberry or Foxberry

Arctic Willow

Salal

Wintercreeper
<table>
<thead>
<tr>
<th>Low Growing Shrubs</th>
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<tbody>
<tr>
<td>Potentilla</td>
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<td>Nest Spruce</td>
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<td>Heathers</td>
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<td>Falsebox</td>
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<td>Rose Daphne</td>
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<td>Spirea</td>
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<td>Silver Sagebrush</td>
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Plant Suggestions for the Mid Growth Area

**Shrubs**

- **Roses**
- **Dwarf Mugo Pine**
- **Flowering Current**
- **Weigela**
Plant Suggestions for the Tall Growth Area

For areas adjacent to the right-of-way, it is important to select shrubs and trees that will not cause problems by outgrowing the space available. Avoid planting too close to the right-of-way as you may be required to remove improper vegetation that extends over the pipeline. Please contact our Pipeline Protection Department with any questions before planting.

- Avoid planting too close to the right-of-way
- When purchasing fruit trees, ask about the root stock and range of sizes available
- As you may be required to remove improper vegetation that extends over the right-of-way, please contact us with any questions before planting
Other Ideas for Colour and Texture

Ornamental Grass

There is a wide variety of clump-forming grasses that can add height, texture and colour to the planted area of your garden. Some suggestions: Fountain Grass, Porcupine Grass and Pine Grass. Grasses planted in combination with Rudbeckia, Daisies, Sunflowers, Asters Day-Lilies and Sedums make a spectacular, easy-care display.

Flowers Native to your Growth Area

The flowers native to your growth area can provide a wide range of colours and textures with very little maintenance. The following are suggestions for different growth areas.
Prairie Areas
- Milk Vetches
- Sunflowers
- Prairie Asters
- Cone Flowers
- Yellow Evening Primrose

Montane Areas
- Lupines
- Yarrow
- Hareballs
- Smooth Blue Beardtounge

Interior Rangeland
- Mariposa Lily
- Brown-eyed Susan
- Scarlet Gilia
- Indian Paintbrush
- Buckwheat
- Hawkeed

Coastal Meadows
- Camas
- Fawn Lilies
- Shootingstars
- Violets
- Red Columbine
- Western Trillum

More Plants for Shaded Areas
- Mosses
- Ferns
- Sedges
- Lilies
- Hostas
- Ajuga
- Saxifrage
- Bergenia
- Primrose
- Mint
- Spring Buls
- Annuals such as Impatiens and Begonias

More Plants for Full Sun
- Sedums
- Thyme
- Yucca
- Pinks
- Sunflowers
- Clarkia
- Salvia
- Bearded Iris
- Annuals such as Geraniums and Petunias
About Kinder Morgan Canada

Kinder Morgan Canada (KMC), operates the Trans Mountain Pipeline system. The Trans Mountain Pipeline transports crude oil and refined petroleum products from Edmonton, Alberta to Burnaby, British Columbia and into Whatcom and Skagit Counties in Washington State. The Trans Mountain Jet Fuel Pipeline transports jet fuel from Burnaby to the Vancouver International Airport. We are committed to safe, reliable and efficient operations of our pipelines.
This brochure contains important pipeline safety information. Please have it translated. If you have questions, email pipelinesafety@kindermorgan.com.
Damage prevention is a shared responsibility.

Prior approval is required from us for any ground disturbance activity within 30 metres (100 feet) from the centre of our pipe.

For more information, please contact our Pipeline Protection Department:

Phone: 1.888.767.0304
E-mail: pipelinesafety@kindermorgan.com
Website: kindermorgan.com/pipelinesafety

Call or Click Before You Dig

BC One Call: 1.800.474.6886
Alberta One-Call: 1.800.242.3447
clickbeforeyoudig.com

Washington State: 811
callbeforeyoudig.org

If you suspect a pipeline emergency, immediately call our 24-Hour Emergency Notification Line: 1.888.876.6711

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