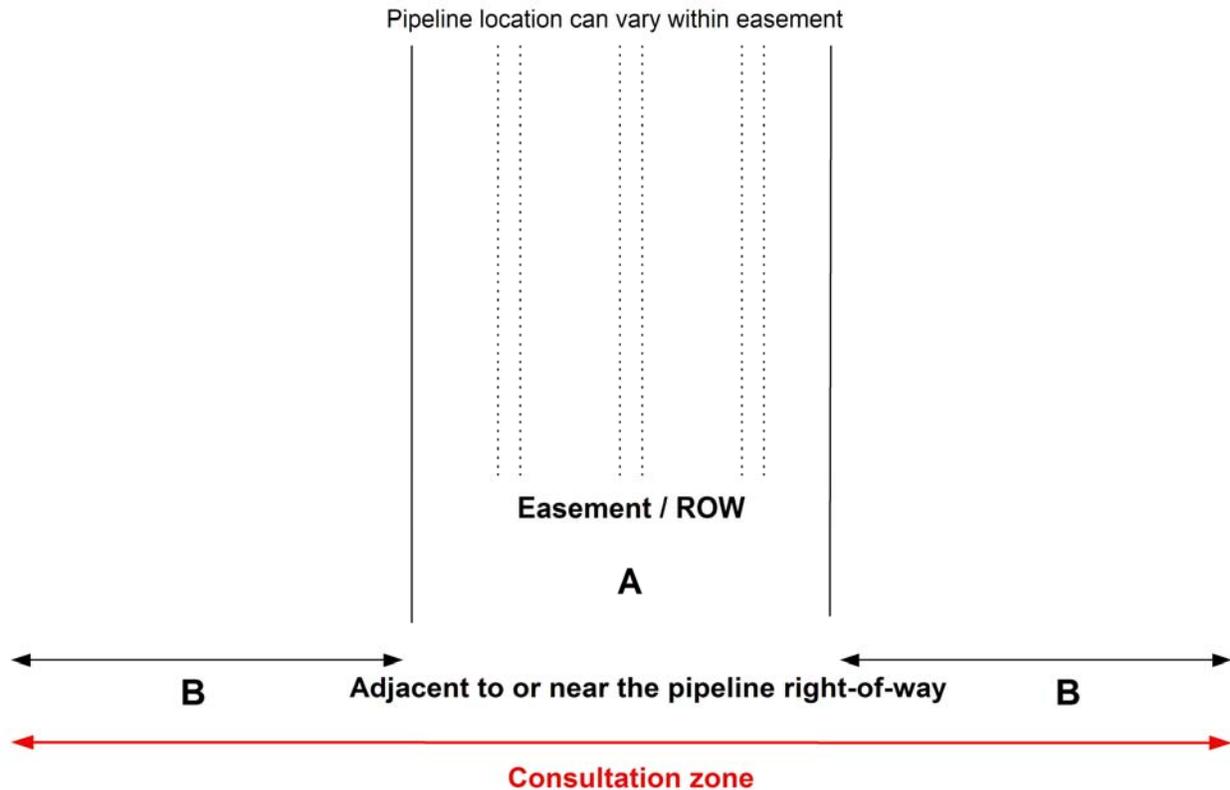


## Rights of Way and Easements

The figure below illustrates the areas in proximity to transmission pipelines addressed in this report. The area marked as “A” is within the pipeline right-of-way or easement and is the subject of this appendix. The areas marked as “B” are areas off the right-of-way close enough to either host an activity which could be a threat to pipeline safety or be threatened by a pipeline failure. (See Appendix C for more about this area.) The two areas together constitute the consultation zone—the zone in which it is advisable to involve the pipeline operator in land use decisions.



A **right-of-way** (ROW) is a defined strip of land on which an operator has the rights to construct, operate, and/or maintain a pipeline. The operator might own the ROW land outright or have acquired an easement from a landowner for specific use of the land. An **easement** is an acquired privilege or right, such as a right-of-way, afforded a person or company to make limited use of another person or company's real property.

The pipeline right-of-way includes a specific width of surface area directly above the pipeline. The right-of-way should be wide enough to permit the pipeline operator reasonable access to maintain the pipeline.

Different types of easements have developed over the years – defined and undefined. The most common is the **defined or specified easement** which has a specific legal description and easement width (typically ranging from 30 to 100 feet).

An **undefined or unspecified open easement** is less common. This type of easement does not define the precise location of the pipeline nor does it specify an easement width.

A typical right-of-way agreement or easement between a pipeline operator and landowner can prohibit certain activities or developments outright or require permission of the pipeline company. There are two primary reasons for restricting certain activities and development on rights-of-way:

1. To limit ground disturbances within pipeline rights-of-way; and
2. To ensure the right-of-way is clear of obstructions for maintenance, and allow for above ground integrity surveys and surveillance.

Two common land use limitations found in pipeline easements are 1) restrictions on structures that may be placed within the easement, and 2) restrictions on changing the depth of cover over the pipeline.

Each pipeline company determines what restrictions are necessary to keep its lines safe and incorporates such restrictions into the easements. Examples of specific land uses or activities prohibited or restricted on pipeline easements in Washington include:

- Erecting buildings or other structures
- Drilling or operating a well
- Constructing a reservoir or other obstruction
- Diminishing or substantially adding to the ground cover over the pipeline
- Installing septic tanks or leach lines

### Management/Control of Land Use Activity in Rights Of Way and Easements

The land uses that may occur on lands traversed by an easement/ ROW are governed first by the local zoning, and then may be further constrained by the terms of the easement, which is a contract entered into by the landowner and the pipeline operator..



Local regulations for development review and permit issuance apply within and outside of an easement or ROW. Exactly which activities and exemptions apply varies among jurisdictions. Activities such as digging or excavation that are not associated with a building permit for a structure or the approval of a subdivision may or may not be regulated. Typically local jurisdictions exempt many types of building projects from permit requirements e.g., agricultural structures and grading, well drilling, accessory buildings of less than a designated size.

While local jurisdictions may want to be more proactive in identifying activities on an easement or ROW which may threaten pipeline safety, the pipeline operator has the primary responsibility for its ROW and easement management and enforcement. Pipeline operators monitor

compliance through regular air and ground patrols, through video surveillance, and through periodic communication with groups most likely to engage in or observe activities on the right of way. Messages regarding the easement, its restrictions and related information are often conveyed as a part of information about the “one call” underground utility locating service. Target recipients include landowners, excavation/blasting contractors, developers, local governments, emergency responders, utilities, and irrigation or improvement districts.

The pipeline operator may seek relief through the courts to eliminate an encroachment or to halt an activity that interferes with its easement rights. Typically, however, operators attempt to resolve encroachment problems outside of court.

**Encroachment** is used to describe a land use or activity that intrudes upon the rights of the pipeline operator as defined in the easement. This usually entails an activity within the easement boundaries.

One approach pipeline operators take in managing easement encroachment issues is to develop standards of land use/pipeline compatibility for land use activities on pipeline easements. A pipeline operator might sort land uses and activities into three basic categories:

- 1) Prohibited without exception (No)
- 2) May be conditionally approved (Yes but consent is required)
- 3) Allowable without approval (Yes)

**Table B1** provides a listing of acceptable and unacceptable activities on pipeline easements and ROW. The nature of this information varies from company to company. The specific information in Table B1 was provided by TransCanada-GTN System and reviewed by other pipeline operators.

### Guidelines for Acceptable Use of Pipeline Company Lands and Easements

*Note: This is an example of one pipeline company's approach (TransCanada, GTN System) and should not be viewed as implying a uniform standard. The document has also been annotated with comments from other pipeline company reviewers.*

Use/Activity	Acceptable	Remarks/Requirements
<b>Agriculture</b>	Yes <u>Consent may be required.</u>	Activities related to the growing of crops or the raising of animals need no consent; provided the activity does not involve installation of permanent structures or an increase or decrease in the cover over the pipeline. Facilities such as underground and overhead irrigation systems must be reviewed for compatibility.  [One company suggested that "crops" be modified to "seasonal agricultural crops" to clarify that orchards or vineyards may in fact be restricted – see "Orchards" below]
<b>Airports - Private</b>	Yes <u>Consent required.</u>	Permission to use the right of way for a flight strip will be granted, provided it is for the private use of the property owner, and does not involve any increase or decrease in the cover over the pipeline or the installation of any permanent structures, including paving, on the right of way.  [One company commented that not every operator might allow this use on its easement].
<b>Airports - Public</b>	No	
<b>All Terrain Vehicle (ATV) Use</b>	No	Casual use of the right of way for recreational ATV driving does not require permission from the Company. However, care should be taken to avoid formal or informal designation of the right of way as an ATV trail. Physical barricades and visual screening of the right of way at access points should be utilized as necessary to discourage such use.
<b>Automobile Wrecking Yards</b>	No	
<b>Boats</b>		See Marinas.
<b>Blasting</b>	No	On easements or fee land where any facilities are installed. Exceptions are for construction of another approved activity, subject to engineering review for technique, size of shots, etc. (See OMI FF-15)
<b>Buildings</b>	No	No type of permanent structure permitted. See also "Structures".

Use/Activity	Acceptable	Remarks/Requirements
<b>Canals</b>	Yes <u>Consent Required.</u>	Canals or ditches may be built across Company easements provided:  1) Adequate precautions are taken to protect company facilities. Plans must be approved by Operations Engineer.  2) Party building the canal will pay the cost of protecting or relocating company facilities.
<b>Cathodic Protection Devices</b>	Yes	Cathodic protection facilities may be installed provided they are coordinated with other utilities, and all interference problems are eliminated. Must be approved by the Manager of Code Compliance and Cathodic Protection.
<b>Campsites</b>	No	
<b>Canopies</b>	No	
<b>Carports</b>	No	
<b>Catch Basins</b>	No	
<b>Christmas Trees</b>		See Tree Farms.
<b>Concrete Slabs</b>	No	Except where they may be installed to provide for pipeline protection - submit plans for review.
<b>Conduits/Fiber Optics</b>		See Utilities.
<b>Construction Equipment</b> (Use)	Yes	Hand dig trenches within 5' of pipeline. Provide for Company supervision while work is in progress. Give 48 hours prior notice before performing work. Call One-Call number for utility locating.
<b>Cross Streets</b>		See Roads.

Use/Activity	Acceptable	Remarks/Requirements
<b>Culverts</b>	Yes <u>Consent required.</u>	Provided 1' separation maintained between pipeline and culvert, with culvert above pipeline. Plans must be approved by Operations Engineer.
<b>Curbs and Gutters</b>		See Roads.
<b>Cuts and Fills</b>	Yes <u>Consent required.</u>	Some cutting and filling may be permitted over pipeline provided:  1) Cover is not reduced below 36".  2) Cover is not increased to the point where pipe exceeds acceptable stress levels. Review with Operations Engineer.
<b>Dams</b>	No	Company facilities that must be relocated will be at the expense of applicant.
<b>Ditches</b>		See Canals.
<b>Docks</b>		See Marinas.
<b>Driveways</b>	Yes <u>Consent Required.</u>	A driveway may be built across Company easements, provided:  1) It is for use of property owner only, and does not provide access for another parcel of property. 2) Clearances are maintained as in Cuts and Fills. 3) Written permission is obtained.
<b>Drains</b>		See Culverts.
<b>Ducts</b>		See Pipelines.
<b>Dumps</b>	No	

Use/Activity	Acceptable	Remarks/Requirements
<b>Electric Lines</b>		See Power Lines.
<b>Equipment</b>		See Construction Equipment.
<b>Erosion Control</b>	Yes <u>Consent</u> <u>required.</u>	Structures or materials to prevent soil erosion due to wind or water may be located on the pipeline right of way provided:  1) They do not interfere with the installation, operation or maintenance of the pipeline. 2) The design has been approved by the engineering and environmental departments. 3) The facilities have taken into account the effect of the environment of the area.
<b>Exploration - Geologic and Geophysical</b>	Yes	Subject to proper indemnification and site cleanup. Must be approved by Operations Engineer. Also see Blasting and Wells.
<b>Fences</b>	Yes	(general) Provided adequate access to and around facilities is maintained. Company retains the right to install a gate in the fence with a corporation lock where necessary to maintain such access. Gates should be at least 12 feet wide. Fence posts must not be installed directly over pipeline. Written permission <u>not</u> required.  <i>[One company noted that one-call notification would be required for post-hole excavation even though a written consent may not be required, and that perhaps the guideline should include such a reminder].</i> See Utilities.
<b>Fiber Optic Cable</b>		
<b>Flammable Material</b>	No	
<b>Flood Control</b>	Yes <u>Consent</u> <u>required.</u>	See Erosion Control, Canals, Dams.
<b>Flooding</b>	No	If there is a possibility of periodic flooding, buoyancy of pipeline must be considered.
<b>Golf Courses</b>	Yes <u>Consent</u> <u>required.</u>	See Landscaping.

<b>Use/Activity</b>	<b>Acceptable</b>	<b>Remarks/Requirements</b>
<b>Grazing</b>		See Agriculture.
<b>Greenbelts</b>		See Landscaping.
<b>Ground Clearance</b>		See Cuts and Fills.
<b>Ground Cover</b>		See Cuts and Fills.
<b>Highways</b>	Yes <u>Consent required.</u>	Easements will be granted for highway construction provided Company is reimbursed for cost of protecting, upgrading or relocating pipeline so that it complies with all applicable regulations and requirements. Where a highway is widened to take in an area where the Company has a prior right of way, the Company shall be reimbursed for that portion of the work that falls in the area where Company has prior rights.  NOTE: Normally these arrangements are covered by applicable State Laws.
<b>Hiking Trails</b>	Yes	Provided reasonable access to facilities is maintained. See also Landscaping and Cuts and Fills.
<b>Horseback Riding Trails</b>	Yes	Provided adequate access to facilities is maintained. See also Cuts and Fills.
<b>Horticulture</b>	Yes	See Agriculture.
<b>Incinerators</b>	No	
<b>Irrigation Lines</b>	Yes <u>Consent required.</u>	See Agriculture and Canals.
<b>Junk Yards</b>	No	
<b>Lakes</b>	No	See Ponds and Dams.
<b>Landscaping</b>	Yes <u>Consent may be required.</u>	Provided reasonable access to facilities is maintained. See Cuts and Fills for earthwork requirements. No trees or deep-rooted shrubs should be planted within 10' of the

<b>Use/Activity</b>	<b>Acceptable</b>	<b>Remarks/Requirements</b>
		pipeline.
<b>Launching Ramps</b>	No	See Marinas.
<b>Lawns</b>	Yes	See Cuts and Fills and Sprinkler Systems.
<b>Leach Fields</b>	No	(General) Leach field would be subject to damage by passage of heavy equipment. Piping leading to leach field may cross Company pipeline (see Pipelines). Entire leach field must be outside of right of way. Before granting permit for piping, owner must show proof of permit that installation will meet all State and local water quality requirements.
<b>Loading Ramps</b>	No	
<b>Mains</b>		See Pipelines.
<b>Marinas</b>	No	Marinas may not be installed on Company right of way at river crossing.
<b>Masonry Work</b>	No	
<b>Mining</b>	No	See Quarries.
<b>Mini Golf Courses</b>	No	May be allowed if no permanent structures are placed on right of way.
<b>Mobile Homes</b>	No	
<b>Mobile Home Parks</b>	No	No mobile home park facilities may be installed on Company right of way. Permission to construct facilities (roads, utilities, etc.) across right of way to service mobile home park on land adjacent to Company right of way will be granted only if owner will pay cost of upgrading and/or protecting Company facilities.

Use/Activity	Acceptable	Remarks/Requirements
<b>Model Airplanes</b>	Yes	Model airplanes may be flown over Company right of way but no permanent facilities may be located on right of way.
<b>Non-Flammable Materials</b>		See Storage.
<b>Orchards</b>	Yes	Trees may not be planted within 10' of pipelines.
<b>Parks</b>	Yes <u>Consent required.</u>	Right of way may be used as part of park area, but permanent structures may not be located on right of way. Specific plan review required.
<b>Parking</b>	Yes <u>Consent required.</u>	A private property owner may park vehicles used in his work (such as farm equipment) on the right of way. However, equipment shall not be parked over pipelines. Use of the easement as a commercial or other publicly used parking lot, whether paved or unpaved, should be discouraged, and shall not be allowed without review by the Operation Services Superintendent and Operations Engineer, and granting of appropriately conditioned consent. The Company shall not accept liability for damages to the parking facility caused by the exercise of its rights under the easement, and shall reserve the right to prohibit vehicular parking on its easement at any time.  <i>[One company noted that the job responsibilities listed in this internal guideline are specific to one operator's organization, rather than universally applicable].</i>
<b>Patios</b>	No	
<b>Pipelines</b>	Yes <u>Consent</u>	Permits will be granted for other pipelines to cross Company right of way, provided:

Use/Activity	Acceptable <u>required.</u>	Remarks/Requirements
		<ol style="list-style-type: none"> <li>1) Crossing is kept as close to a right angle as possible.</li> <li>2) Pipeline maintains at least one-foot clearance above Company pipeline or two feet below Company pipelines. Pipeline crossings above the Company's pipelines should be strongly discouraged.</li> <li>3) Installation makes provisions for future use of Company right of way.</li> <li>4) Precautions are taken to protect both facilities from interference problems due to cathodic protection.</li> <li>5) Pipeline meets all Federal, State and local requirements with respect to safety and environment.</li> <li>6) Parallel encroachments are not allowed. (See "Utilities Parallel")</li> </ol>
<b>Play Equipment</b>	Yes	No permanent structure may be installed on right of way. Play equipment without embedded footings or foundations are allowed.
<b>Playgrounds</b>		See Parks.
<b>Ponds</b>	No	
<b>Porches</b>	No	
<b>Power Lines</b>	Yes <u>Consent</u> <u>required.</u>	<p>Power lines may be installed across Company right of way provided:</p> <ol style="list-style-type: none"> <li>1) Poles or towers are not located on Company right of way.</li> <li>2) Wires have adequate clearance to permit working on pipeline.</li> <li>3) Parallel encroachments of above or below ground power lines are not allowed (See "Utilities – Parallel").</li> <li>4) Power lines are not located within 200 feet of a blow-down stack.</li> <li>5) Buried power lines meet Company standards.</li> </ol>
<b>Private Landowner Crossing of Pipeline</b>	Yes <u>Consent</u> <u>required.</u>	Where a private landowner crosses the company pipeline with a buried structure, a consent letter will be required; however, the minimum clearance of one foot above or two feet below company pipeline shall be maintained across the entire right of way. Two feet below is preferred.

<b>Use/Activity</b>	<b>Acceptable</b>	<b>Remarks/Requirements</b>
<b>Pump Islands</b>	No	
<b>Pumps</b>	No	
<b>Quarries</b>	No	Off right of way quarrying activities in proximity to the right of way should be brought to the attention of an Operations Engineer for assessment of potential impacts to the integrity of the right of way and Company facilities. (See OMI FF-15).
<b>Railroads</b>	Yes <u>Consent required.</u>	Railroad crossings are permitted, provided railroad agrees to pay the cost to upgrade or protect pipeline. Clearances shall be provided as required in Cuts and Fills.
<b>Recreation Areas</b>	Yes (qualified)	Pipeline right of way may be used for general recreation that does not require the use of any permanent structures or facilities. Check with Operation Services Superintendent and Land Supervisor before permitting any section of Company right of way to be designated as a "Recreational Area".
<b>Reservoirs</b>		See Ponds.
<b>Retaining Walls</b>	Yes <u>Consent required.</u>	Provided adequate access to facilities is maintained and Cuts and Fills criteria is maintained. All retaining walls on Company right of way must be approved by Operations Engineer.
<b>Rifle Ranges</b>	No	Limited use may be made of area across Company right of way but no permanent facilities may be located on right of way.
<b>Road - Parallel</b>	Yes <u>Consent required.</u>	Provided that plans are approved by Operations Engineer, and road easement is subordinate to Company's.
<b>Road Crossings - Private</b>	Yes <u>Consent required.</u>	Consent will be granted for private roads across Company right of way provided: <ol style="list-style-type: none"> <li>1) Assurance is given road will remain a private road. It must be so marked and signs must be maintained.</li> <li>2) Road must not be given a hard surface.</li> <li>3) Cut and Fill requirements must be maintained.</li> <li>4) Owner must agree to pay cost of protecting or upgrading pipeline if road should be paved or status is changed to a public road.</li> </ol>

Use/Activity	Acceptable	Remarks/Requirements
<b>Road Crossings- Public</b>	Yes <u>Consent required.</u>	Consent will be granted for a public road or street across Company right of way provided:  1) Developer pays for cost of protecting, upgrading or relocating pipeline. 2) Company retains prior rights on roads dedicated to the state, county or city.
<b>Septic Tanks</b>	No	
<b>Service Stations</b>	No	
<b>Sewer Lines</b>		See Utilities, Septic Tanks and Leach Fields.
<b>Sidewalks</b>		See Roads.
<b>Signs</b>	No	Signs, except pipeline markers, shall not be permitted on Company right of way.
<b>Spoil</b>		See Cuts and Fills.
<b>Sprinkler Systems</b> (underground)	Yes <u>Consent required.</u>	Crossings of pipeline shall be kept to a minimum. Due consideration must be given to cathodic protection interference.
<b>Stock Piles</b>		(means storage of earth) See Cuts and Fills.
<b>Storage</b>	No (qualified)	The pipeline right of way shall not be designated as storage area. However, small amounts of non-combustible materials or equipment may be stored on the right of way by the property owner provided it does not interfere with access to the pipeline.
<b>Storm Drains</b>		See Utilities, Culverts and Catch Basins.
<b>Streets</b>		See Roads.

<b>Use/Activity</b>	<b>Acceptable</b>	<b>Remarks/Requirements</b>
<b>Structures</b>	No	Permanent structures (i.e. any facility or structure, the foundation or any other portion of which lies below the ground surface, or is otherwise not readily moveable) are not allowed. Small outbuildings (e.g. sheds, playhouses) on blocks or without foundations may be permitted on a case by case basis.
<b>Subdivisions</b>	Yes (qualified)	The area over our pipeline right of way may be subdivided, provided: <ol style="list-style-type: none"> <li>1) No permanent structures may be located on pipeline right of way.</li> <li>2) Streets or roads are laid on out to cross pipeline at close to a right angle. Parallel encroachments are not acceptable.</li> <li>3) Subdivider must meet requirements for Road Crossings, either private or public.</li> <li>4) Right of way is not used for utility corridor.</li> <li>5) Subdivider shall submit approved subdivision plans.</li> <li>6) Necessary consents are issued by the Company.</li> </ol>
<b>Swimming Pools (built-in)</b>	No	
<b>Tanks</b>	No	Above or underground.
<b>Telephone Cable, OH and UG</b>		See Utilities.
<b>Tennis Courts</b>	No	
<b>Trails</b>	Yes <u>May require consent.</u>	Provided they are not hard surface and adequate precautions are taken to prevent erosion. See Cuts and Fills.
<b>Trash Burners</b>	No	

Use/Activity	Acceptable	Remarks/Requirements
<b>Tree Farms</b>	Yes (qualified)	Must provide access to pipeline and structures. No planting within 10 feet of pipeline.
<b>Trees, Shrubs (ornamental)</b>	Yes	See Tree Farms.
<b>TV Cable, OH and UG</b>	Yes	See Utilities.
<b>Utilities - Parallel</b>	No	Parallel encroachment of any utilities, either overhead or underground may be allowed in some cases for short distances. In general, parallel encroachments are to be strongly discouraged. It should be noted, however, that standard Company easements may not allow us to absolutely prohibit such encroachments.
<b>Utilities - Crossing</b>	Yes <u>Requires Consent.</u>	<p>Consent to common use will be granted for crossings of overhead or underground utilities provided:</p> <ol style="list-style-type: none"> <li>1) Overhead lines must provide adequate clearance for working on pipeline. Poles, anchors or supports may not be located on right of way.</li> <li>2) All underground lines must be installed with minimum one foot of clearance between pipeline and utility if crossing is above pipeline and two feet of clearance if crossing is below pipeline and must be at same depth completely across right of way. Crossings above our pipeline shall be strongly discouraged. Underground electric lines of less than 600 volts and all buried telephone lines, must be encased in plastic conduit across the entire width of the right of way. Underground electric lines of over 600 volts must be encased in rigid steel pipe across the entire width of the right of way.</li> <li>3) Utility requesting Permit must pay for any protection or upgrading of Company facilities, and a temporary relocation clause may be inserted in the Permit to allow construction or maintenance of our pipeline.</li> <li>4) Utility crossings must be designed to meet all applicable federal, state and local codes and requirements and assurance shall be given that due consideration has been given to the effect of the project on the surrounding area.</li> </ol>

Use/Activity	Acceptable	Remarks/Requirements
<b>Utility Crossings on Public Roads</b>	Yes <u>Consent</u> <u>Required.</u>	Where a utility facility crosses the Company pipeline on a public road, the utility normally has equal rights with the Company facility. However, every effort shall be made to work with the Company installing the facility to provide a minimum of one foot of clearance between the utility and the pipeline, if the utility crosses above the Company line or two feet if the utility crosses below the pipeline, and that the same depth be maintained completely across what would normally be the Company right of way. Two feet below is preferred. The same criteria for underground electric lines as set forth in "Utilities – Crossing" should also be requested. Engineering review is required even if no Consent is issued.
<b>Utilities Crossing Company Land</b>	Yes <u>Consent</u> <u>Required.</u>	Company will grant rights of way for utilities across lands provided: <ol style="list-style-type: none"> <li>1) Easement will not interfere with present or future use of land by Company.</li> <li>2) Company retains right to have utility relocate at its own expense at a future date, if such relocation becomes necessary to permit utilization of land by Company.</li> <li>3) Utilities must be installed and maintained in accordance with all applicable codes and requirements.</li> <li>4) Adequate consideration must have been given to effect of utility on the environment of the area.</li> </ol>
<b>Underground Structure</b>	No	Other than pipelines and related facilities.
<b>Vaults</b>	No	
<b>Vehicles</b>		See Parking.
<b>Wading Pools</b>	No	

Use/Activity	Acceptable	Remarks/Requirements
<b>Water Pipelines</b>		See Utilities or Agriculture
<b>Weighing Stations</b>	No	
<b>Wells</b>	No	
<b>Wrecking Yards</b>	No	

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