

**COUNTY of SHERIDAN
PLENTYWOOD, MONTANA**

ENCROACHMENT SPECIFICATIONS

1.1 COUNTY ROAD ENCROACHMENTS

All installations of utilities, pipelines, approaches or any other activity within the County Road Right-of-Way shall require the preparation of an Encroachment Permit available from:

Sheridan County Road & Bridge Department
4246 Hwy 16 S
Plentywood, MT 59254

road_dept@usa.com
406-765-1221
Fax 406-765-2609

All such activities shall be reviewed on an individual basis to review construction methods, placement and relative need. Preliminary plans are required for attachment to the Permit. Distance ties to major physical features (buildings, road intersections) or section monuments are required for aid in later recovery efforts. As-built plans are required to be submitted if major construction location changes are made. It is in the Permittee's best interest that the permit contains accurate location information for future reference.

Permits shall be prepared in duplicate for processing with one to be returned after approval. It is the Permittee's responsibility to inform all bidding contractors of these provisions and to ensure that the contractor has in his possession at the job site a copy of the permit and attachments.

1.1a Encroachment Processing Fee

A fee of \$35.00 shall be charged to the Permittee to recover expenses for processing the request.

1.2 ROADWAY SURFACE CROSSINGS (UTILITIES)

BORING: All "improved" roadway surfaces shall be crossed by boring under the roadway utilizing a pre-approved process to prevent damage to the roadway surface. The invert of the pipeline shall be no less than four (4') feet below the elevation of the barrow pit in a cut-section and no less than three (3') feet below the elevation of the toe of a fill section. The bore pit shall be placed sufficient distance from a fill section to prevent any sloughing of the in-slope. Casing and venting may be required on primary collector roadways, mail routes, bus routes, or any other roadways where improvements to surfaces is in long range planning. When venting is required, the vents must be placed on the County Right-of-Way.

OPEN-CUTTING: Roadways that are marginally improved or travelled may be open-cut. The existing gravel surface shall be bladed clear of the excavation activity. All trenches shall be sloped to OSHA standards to prevent any deterioration of residual soil compaction. No excavated soil shall be placed in a manner to impose any undue loading on the roadway section. The road section shall be recompacted to 95% density by an approved method. The road surface shall be rebladed to conform to the original grade and alignment and at least 5 cubic yards of additional crushed gravel hauled in to restore the surface.

UTILITY CASING: Buried utility cables are encouraged to install a casing pipe at common intersections to provide for future installations.

1.3 PARALLEL LINES (UTILITIES)

WITHIN RIGHT-of-WAY: Parallel utilities/pipelines shall be placed as near as practicable to the right-of-way line. Location post/placards shall be placed at least every 500 feet. Depth to the top of the line shall be a minimum of 42".

WITHIN ROADWAY SURFACE: Only in extreme conditions and not as a common practice shall any activities be planned for installation in the roadway surface. All surface gravel shall be bladed clear of any excavation embankment prior to any digging operation. This also applies to all "ditch witch and wheel trencher" operations. All backfilling shall be accomplished by an approved method to attain maximum residual density. The replacement of surface gravel shall be made to conform to existing grade and alignment. To restore surfacing, 5 cubic yards of crushed gravel shall be placed per 100 feet of trench.

1.4 APPROACHES TO COUNTY ROADS

All approaches shall be reviewed for need and frequency along the travelled way. Visual Site Distance shall be noted on the Encroachment Permit along with the extent of the roadway improvement and width. A sketch shall accompany the application showing the approach width, turning radius and drainage direction.

1.4a APPROACH WIDTH

All approaches shall be made wide enough so that the anticipated vehicles may turn into and exit from the approach without entering into the oncoming traffic lane.

1.4b APPROACH GRADE TO COUNTY ROAD

Final grading of gravel surface shall match at the shoulder line, not the centerline. From the County Road shoulder, the new approach must be graded -2% (min) for a distance of 50 feet to eliminate approach road drainage from entering the County Road surface and will maintain the County Road crown. The recommended in-slope of the approach is 5:1 minimum.

1.4c APPROACH CULVERTS

An "annular-corrugation" culvert (18" min) shall be installed at the applicant's expense. No "spiral" culvert is acceptable. The length of the culvert shall be determined based on 5:1 in-slopes of the approach. The diameter size selected and inlet/outlet erosion provisions shall be approved prior to installation.

1.5 COUNTY RIGHT-OF-WAY IMPROVEMENTS (ROADWAY UPGRADE)

Roadways within County R/W are improved and maintained to a level of service as determined by the Board of County Commissioners. If a private party desires to upgrade the current road conditions, an Encroachment Permit must be submitted.

1.5a ROADWAY DESIGN STANDARDS

Width: Twenty eight feet (28') minimum finished surface
In-slopes: 3:1
Back-slopes: 3:1 (minimum)
Ditches: The ditch will have a 10' flat area between the in-slope and back slope and be 36" below the elevation of the road shoulder.

1.5b CATTLEGUARD DESIGN STANDARDS

Width: Twenty eight feet (28') minimum
Base: Concrete plank or concrete abutment (or approved by Road & Bridge Department)
Fences: Except for break-away devices, no wood posts, railroad ties or steel pipe shall be closer than 10' from the road shoulder. Typical steel T-posts can be placed in the 10' clear zone.
Markers: Object markers shall be placed on the opposing right-hand corners of the cattleguard.

1.6 UTILITY/PIPELINE MONUMENTATION

All utility crossings shall be signed on each side of the right-of-way directly above the points where it begins and ends its crossing. The plaque shall contain the following information: 1) type of utility or product 2) name of the company or individual that is responsible for the crossing and 3) phone number and address of the company or individual.

1.7 TRAFFIC CONTROL/SIGNING IN WORK ZONES

Traffic control shall be maintained at all times to provide for public safety. All work shall be timed to ensure the minimum amount of hazards to remain after working hours. Traffic control signing/devices shall conform to the "Manual of Uniform Traffic Control Devices".

1.8 INSPECTION

Notice shall be given to the Public Works Office at least 24 hours in advance of the construction activity. The County inspector shall run tests at the expense of the Permittee as he deems necessary to insure conformance to the Permit.