

**Clearwater County****POLICY****POLICY TITLE: Road Design Standards****Effective Date: August 10, 2010****SECTION: Public Works****POLICY STATEMENT:**

The purpose of this policy is to provide direction regarding the classification of road ways within Clearwater County and the design criteria associated with each classification. The road standards identified within this policy reflect generally accepted design standards and construction practices of the transportation and road building industry. However, due to the wide varying topography within Clearwater County, Council recognizes that site specific design criteria may be required to suit the road design requirements for commercial, industrial and public traffic needs in site specific areas of the County.

**General:**

All new road construction, rehabilitation, upgrades and surfacing must be evaluated, classified and designed to suit its intended purpose taking into account the possibility of future development. The following policy will provide a definition of the County's existing road inventory and a general form of design criteria for roads throughout Clearwater County. Further detailed design specifications can be found in the latest edition of Alberta Transportation's Standard Specifications for Highway Construction, Transportation Association of Canada manual and relevant existing policies.

Recognizing the varying topography within Clearwater County, Council authorizes the Director of Public Works, or his designate, to vary standards to meet site specific requirements while addressing the safety of the traveling public and safe access and egress to public roads.

**Definitions:**

**Local Roads** - Local roads are rural roads which serve local traffic. They are not generally used for long distance travel and, typically, have traffic volumes less than 150 vehicles per day. Typically, local roads have a gravel surface.

**Collector Roads** – A collector road funnels local traffic to primary and secondary highways, arterial roads or communities. Traffic volumes are usually in excess of 150 vehicles per day. Collector roads typically have an asphalt driving surface.

**Resource Roads** – The purpose of resource roads is primarily used for industrial traffic. They typically accommodate higher than average heavy truck traffic (3 ton or larger). Although the daily traffic volumes may be low, the design criteria, reflects the design needs of traffic volumes during peak activity.

**Residential Subdivision Roads** – These roads supply access to a single or multi lot development .New subdivisions require legal access which is defined as a municipal standard road and approach to property. The developer is responsible for all cost associated with the development of the residential subdivision road(s).

**Mountainous Residential Subdivision Roads** – These roads generally supply access to local residents in the West Country and fall under the same criteria as the industrial and commercial multi lot subdivision roads. Due to the extreme topography encountered in a mountainous subdivision some design criteria may be relaxed while ensuring safe access and egress to public roads.

**Industrial Commercial Subdivision Roads** – The purpose of these roads are to accommodate industrial or commercial multi lot subdivisions, taking into consideration the need for potential future growth.

**Industrial Access Road (on road allowance)** - Industrial access roads provide access for industry. These roads are constructed to accommodate heavy traffic for a short period of time (e.g. 6 months) then sustain minimal traffic. They can be built on a temporary or permanent basis with the sole cost of construction and maintenance at the industry users' expense.

**Isolated Residential Access Roads** – These roads supply access to a single residence or property at the sole cost of the developer. These roads are generally below municipal standard and are maintained by the developer or subsequent landowner.

### Design Criteria:

**Table 1 - Road Design Standards**

Road Designation	Surface Width	Min. Side Slope	Min.Back Slope	Road Grade elevation	Max. Grade	Approach Grade	Curve Radius	Surface Type	Base Course	Asphalt Thickness
Local Roads	7.3 M	3:1	2:1	1 M	6%	2%	300 M	Gravel		
Collector Roads	8.0 M	3:1	2:1	1 M	6%	2%	300 M	Gravel		
Collector Roads	8.3M	3:1	2:1	1 M	6%	2%	440 M	Paved	300	125
Resource Roads	9.0 M	3:1	2:1	1 M	6%	2%	440 M	Gravel or Paved	300	130
Residential Subdivision Roads	7.3 M	3:1	2:1	1 M	6%	2%	125 M	Gravel		
Residential Subdivision Roads	7.3 M	3:1	2:1	1 M	6%	2%	125 M	Paved	300	125
Mountainous Residential Subdivision Roads	7.3 M	3:1	2:1	1 M	8%	4%	125 M	Gravel		
Mountainous Residential Subdivision Roads	7.3 M	3:1	2:1	1 M	8%	4%	125 M	Paved	300	125

<b>Industrial And Commercial Subdivision Roads</b>	8 M	3:1	2:1	1 M	6%	2%	125 M	Gravel or Paved	300	130
<b>Industrial Access Roads</b>	6.0 M	3:1	2:1	1 M	6%	2%	125 M	Gravel		
<b>Isolated Residential Access Roads</b>	Various	3:1	2:1	Various	14%	2%	Various	Gravel		

These standards are meant to complement individual design requirements laid out in the following Policies.

- a) Access Roads Policy
- b) Residential Subdivision Standards Policy
- c) Industrial Subdivision Standards Policy
- d) Isolated Residential Access Road Policy