

Title: Gravel Road to Paved Local Road Upgrade, Castle Mountain Resort to South of Castle River

Memorandum Date: May 18, 2011

Design Exception Request Date: April 7, 2011

Region: Southern

Approval Status: Approved

Project Location					
Highway	Control Section	At km	From km	To km	Existing AADT
774	02		0.000	11.300	380

Project Type (Mark all that apply with an X)			
Functional Planning:	New Construction:	Reconstruction:	Paving/Surfacing: X
Bridge:	Operations:	Geotechnical:	Environmental:
Other:			

Summary

A request that 3R/4R design guidelines be applied for upgrading the existing gravel road to a paved local instead of the normal new construction standards according to Alberta Transportation's Design Guide.

Rationale for Approval/Rejection

- It was found that by applying 3R/4R standards, the cost would be 70% of the new standard design cost. The savings is about 1.9 million dollars.
- The MD of Pincher Creek No. 9 will take over this road once it has been reclassified as a local road.
- This road section is located in rolling terrain which has many environmental and topographical restraints ie. High mountain slope on one side of the road, while the other side slopes down to a river; an Ecological Reserve area is located within the project limits.
- The proposed pavement structure will have a 75mm GBC and a 120mm ACP. During construction the existing 300mm of gravel material will be scarified, re-graded and re-compacted. A minimum of 300mm of gravel will be maintained as part of the road base.
- If soft areas are identified during construction they will either be re-worked to a 600mm depth to achieve the desired compaction or sub-cut and the unsuitable material removed and replaced.

Additional Mitigation Required

No mitigation is required.

Key Words

3R/4R, Gravel Road, Local Road, Paved, Rolling Terrain, Ecological Reserve

DESIGN STANDARDS/PRACTICE EXCEPTION REQUEST SUMMARY

Photograph/Diagram (If Available)

