

RM of Mervin No. 499			
POLICY TITLE		ADOPTED BY	
Roadway Standards Policy		Council Resolution	106-25 544-18
ORIGIN/AUTHORITY	JURISDICTION	EFFECTIVE DATE:	PAGE #
RM Council	RM of Mervin No. 499	Amended: Feb. 11, 2025 September 25, 2018	1 of 3

Design Specification	Heavy Haul High Volume Municipal Highway	Primary Grid with Potential Surface	Farm and Multi Industrial Use	Single Industrial Use & Residential & Recreation Road Access	Recreation Streets	Internal Camp Ground	Turn Around Residential
Design Speed	110 km/hr	100 km/hr	90 km/hr	70 km/hr	60 km/hr	40 km/hr	30 km/hr
Surface Type	Asphalt Concrete; Strengthened Subgrade	Asphalt Concrete; Sealed Based; Gravel; Strengthened Subgrade	Dust Treated Gravel; Oil Treatment	Dust Treated Gravel; Oil Treatment	Dust Treated Gravel; Oil Treatment	Clay/Gravel	Dust Treated Gravel; Oil Treatment
Road Top Width Min. For future Surface Width	Min. 13.0 Top (8.5-10)	Min. 11.3m Top (8.5-10)	Min. 8.6m	Min. 7.5m	Min. 7.0m	Min. 7.0m	30m Radius
Minimum Radius of Curvature	300m	300m	300m	250m	N/A	N/A	N/A
Maximum Gradient	8% 7% Preferred	9% 7% Preferred	9% 8% Preferred	10% 9% preferred	6%	9%	3%
Stopping sight Distance	220m@ 110km/hr	200m@ 100km/hr	140m@ 80 km/hr	140m@ 80 km/hr	N/A	N/A	N/A
Bridges – Loading Width: MS200	CL-750 8.6m	CL-750 8.6m	CL-750 8.6m	CL-750 7.5m	TBD	TBD	N/A
Right of Way	42-46m	30-42m	30m - 36m	20m-30m	20m	15m	35-40m
Side slopes (min)	4:1	4:1	3:1	3:1	4:1	4:1	4:1
Backslopes (min)	3:1	3:1	2:1 – 4:1	2:1 – 4:1	4:1	5:1	4:1
Ditch Width	3.0 – 6.0m	2.0 – 4.0m	2.0 – 4.0m	1.5-3.0m	1.5-3.0m	N/A	1.5-3.0m
Height Above Surrounding Landscape	0.8m	0.7m	0.6m	0.5m	0.5m	0.2m	0.5m
Subcuts	0.6m	0.6m	0.6m	0.4m	Topsoil removed	Topsoil removed	Topsoil removed
Approaches To Municipal Road	11.0m with flares to 13m	10.0m with flares to 12.0m	9.0m with flares to 11.0m	9.0m with flares to 11.0m	6.5m with flares to 8.0m	6.5m with flares to 8.0m	6.5m with flares to 8.0m
Approach Sideslopes	4:1	4:1	4:1	4:1	4:1	4:1	4:1

<b>Vertical Alignment *</b>	Engineered	Engineered	Engineered	110m	85m	45m	30m
<b>Approach Sight Triangle to Municipal Road</b>	Standard Plan 20640	Standard Plan 20640	Standard Plan 20640	Standard Plan 20640	Standard Plan 20640	Standard Plan 20640	Standard Plan 20640

Vertical Alignment – Distance is measured to an object 0.15m off the ground from an eye level of 1.3m off the ground.

TABLE 1	
THROUGH HIGHWAY	
Design speed (km/h)	X (m)
50	60
60	80
70	105
80	130
90	160
100	190
110	230
120	265
130	290

TABLE 2		
INTERSECTING ROAD		
Type	Y (1) (m)	Y' (2) (m)
Paved <sup>(3)</sup> highway	130	230
Other highway	105	210
Designated municipal roads and urban accesses (greater than 300 m from built up area)	80	130
Other urban access	60	105
Other all weather municipal roads	60	130

**NOTES:**

- For permit requirements and clearing of existing obstructions the X and Y distances are applicable.
- A stop sign is required when new or existing obstructions fall within a triangle formed by using sight distances equal to X and Y'.
- Paved highway means a highway with a sealed granular or structural pavement, as defined in the Surfacing Manual Section 310-03 for Pavement Types, but excludes Thin Membrane Surfaces.
- For roads not listed, for example industrial access roads, use data for the equivalent type of road or highway.
- At proposed interchange sites, development will be permitted only outside the required interchange area.
- The minimum separation from centreline of the intersecting roadways to an approach centerline is 90 m on the through highway and the distance provided for frontage road separation in Standard Plan 20650 on the intersecting roadway.
- This standard does not apply to ungraded municipal roads and farm yard access.
- For additional information please refer to SKS 2.3.3-E and SKS 3.1.1-A.

## SIGHT TRIANGLE AT INTERSECTIONS

ACAD DWG: SKS20640-1  
 LAST REV DATE: 16/02/02

RECOMMENDED BY		DIRECTOR DESIGN & TRAFFIC ENG	DATE	2016-03-30	STANDARD PLAN NO	20640
APPROVED BY		EXECUTIVE DIRECTOR TECHNICAL STANDARDS BRANCH	DATE	Apr 8, 2016	SHEET	1 OF 2