APPENDIX A

CLASS 7 - NON-STANDARD ROADS

A non-standard road is any roadway that does not meet the applicable design, construction, or safety standards established by authorities such as Alberta Transportation and Economic Corridors, Transportation Association of Canada (TAC), or the MD's municipal servicing standards adopted in this document and or MD Policy.

A non-standard road may be permitted or accepted within the MD where full compliance is impractical, cost-prohibitive, or unnecessary due to context, provided that appropriate risk mitigation (i.e., maintenance) and legal obligations are in place.

Key Characteristics and Implications of Non-Standard Roads

- 1. Geometric Deficiencies
 - a. Lane Widths

Narrower or wider than the prescribed minimums. Narrow roadways reduce maneuverability and increase the risk of side-swipe collisions.

b. Horizontal and Vertical Alignment

Sharp horizontal curves without sufficient turning radii, inadequate superelevation (banking) on curves, and or steep vertical grades or sudden changes in elevation without proper transition curves.

- c. <u>Sight Distance</u> Limited stopping or passing sight distances due to curves, hills, vegetation, or structures. Dangerous for overtaking or reacting to sudden hazards.
- 2. Pavement and Surface Quality
 - a. <u>Materials</u>

Use of substandard or locally available materials not intended for long-term performance (i.e., compacted earth or gravel instead of asphalt pavement).

- b. <u>Surface Deficiencies</u> Uneven surfaces, potholes, rutting, or alligator cracking, poor skid resistance, especially in wet conditions, and or insufficient compaction leading to premature failure.
- 3. Roadside Features and Safety Infrastructure
 - a. <u>Shoulders</u>

Absence of shoulders or shoulders made of unsuitable materials (i.e., grass or loose gravel) and or narrow shoulders that cannot accommodate stopped vehicles or provide a recovery area.

- <u>Guardrails and Barriers</u>
 Missing or inadequately installed barriers at hazardous locations like embankments, curves, or near bodies of water.
- c. <u>Signage and Markings</u> Lack of regulatory, warning, or directional signs and or faded, missing, or incorrect road markings.

d. <u>Drainage</u>

Inadequate or non-existent drainage systems and or surface water accumulation leading to erosion or pavement damage.

- 4. Functional and Operational Issues
 - a. <u>Traffic Volume and Capacity</u>

Not designed for the actual volume or type of traffic it carries and or overloaded or mixed-use traffic (i.e., heavy trucks on a road intended for light vehicles).

- b. <u>Intersections and Access Points</u>
 Poorly designed or irregular intersections and or unsafe or uncontrolled access from adjoining properties or minor roads.
- c. <u>Lighting and Visibility</u> Lack of street lighting, especially in populated or accident-prone areas and or visual obstructions from vegetation or informal structures.
- 5. Legal and Planning Nonconformance
 - a. <u>Non-Compliance with Zoning or Land Use Plans</u> Built without following urban or rural development regulations.
 - b. <u>Informal or Unauthorized Construction</u> Constructed by private entities or communities without government approval and may lack documentation, maintenance responsibility, or future upgrade plans.
- 6. Safety and Maintenance Challenges
 - a. <u>Accident Risk</u> Higher crash rates due to poor geometry, visibility, or surface quality.
 - b. <u>Maintenance Burden</u> Require more frequent and intensive maintenance interventions and may often neglected in public maintenance schedules due to unclear jurisdiction or limited resources.
 - c. <u>Emergency and Service Access</u> Difficult for emergency vehicles to navigate and or may become impassable in adverse weather conditions.

Examples of Non-Standard Roads

- Rural access roads in developing regions with dirt surfaces and no signage.
- Rural access roads that dead-end at private group-owned or individual-owned land.
- Rural backroads or service lanes built without adherence to rural planning norms.
- Hillside roads with sharp, unbanked curves and no guardrails.
- Private industrial roads used for heavy vehicles but lacking proper pavement design.

Circumstances Considered Acceptable for Non-Standard Roads in the MD

A non-standard road may be deemed acceptable and permitted in the MD under one or more of the following circumstances:

- <u>Geographical and Environmental Constraints</u> Non-standard road is situated in a topographically or environmentally constrained area (i.e., coulee, river valley, flood plain) where standard road geometry or materials cannot feasibly be applied.
- 2. <u>Limited-Use or Local Service Function</u> Non-standard road serves a specific, limited-access purpose, such as access to a farmstead, oil and gas site, or recreational land, and is not intended for high-volume or high-speed traffic.
- 3. <u>Legacy Roads or Grandfathered Infrastructure</u> Non-standard road predates current municipal standards and has been in continuous use without posing known safety risks, and has not been previously dedicated as a municipal road allowance.
- 4. <u>Indigenous, Private, or Resource-Based Roads</u> Non-standard road is located within Indigenous lands, or serves a private industrial or resource-based development, and is constructed and maintained to a standard acceptable to the relevant authority having jurisdiction (i.e., Band Council, Energy Regulator, private entity).
- 5. <u>Context-Sensitive or Phased Development</u> Non-standard road forms part of a phased development (i.e., country residential ASP) and will be upgraded as part of a future servicing agreement or development sequence under a development agreement or subdivision condition.

Acceptance Criteria for a Non-Standard Road in the MD

For a non-standard road to be accepted by the MD, the following conditions are required:

- <u>Safety and Visibility Measures</u> Non-standard road, if practical and economical, may incorporate appropriate warning signage, delineation, culverts, and speed controls to mitigate hazards arising from substandard width, curvature, or surface conditions.
- 2. <u>Maintenance Responsibility</u> Clear assignment of maintenance obligations must be established through:
 - Development Agreements,
 - Private Road Maintenance Agreements with ownership of maintenance on owner or lessee of the land in which the non-standard road is located, and
 - Indemnity or "Hold Harmless" Agreements in favour of the MD.
- Disclosure and Public Notification Where a road is not maintained or owned by the MD, it must be clearly marked as such (i.e., "Not a Municipally Maintained Road" signage).