

| Section                                 | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                          | 13-2             | 1 of 6     |
|   |                  |            |
| Policy Title                            | Date:            | Motion No. |
| Transportation Grader/Gravel            | October 13, 2020 | [Category] |
| ServicesRoad Maintenance Program13-2    |                  |            |
| Grader Gravel Services 2024 Review.docx |                  |            |

# Purpose:

To establish Transportations grading/gravel services that will facilitate the acquisition, guidelinesguidelines, and standards of Kneehill County's (the County) road network in a reasonable, safe, timely, cost-effective, manner.

### **Policy Guidelines:**

• The County recognizes its responsibility for maintaining <u>the</u> roads <u>which are</u> under <del>the</del> its direction, control, and management in a reasonable state of repair, as <u>providedspecified</u> in the *Municipal Government Act*.

The County's road network consists of a diverse inventory of rural and urban road classifications that requires a variety of maintenance strategies to meet the needs of all users.

The County does not provide snow clearing or grading services on privately owned property. The provision of these services remains the responsibility of the individual landowners.

### **Regulation**

The goal of winter maintenance for paved roads is to remove snow and ice from the road surface as guickly as possible. Supervisory staff will determine the appropriate use of equipment and materials to achieve this result. Timeframes will vary depending on the severity and duration of the weather event.

• <u>The goal of winter maintenance for gravel roads is to remove snow from the road</u> <u>surface after snowfall events. Gravel road snow removal will be undertaken under the direction of the</u> <u>supervisory staff with the goal of minimizing the amount of gravel that ends up in the ditch.</u>

## Paved and Oil Roads

# Summer Maintenance (April to September)

- Potholes on paved or oiled roads will be repaired as soon as possible in consideration of the time of year and the availability of crews and materials.
- On an annual basis a program to seal cracks will be undertaken either by contract or by County forces. The crack sealing program is to prevent water from entering the road structure and causing premature failure.
- Patching of select areas will be undertaken to prevent premature failure of the surface of the road and to provide a higher quality driving surface for the public.
- Line painting of paved roads will be done as needed but generally every two years.

### Winter Maintenance (October to March)

• The County will endeavour to undertake snow and ice removal activities on paved or chip-seal roads in



| Section                                   | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                            | 13-2             | 2 of 6     |
|   |                  |            |
| Policy Title                              | Date:            | Motion No. |
| Transportation Grader/Gravel ServicesRoad | October 13, 2020 | [Category] |
| Maintenance Program13-2 Grader Gravel     |                  |            |
| Services 2024 Review.docx                 |                  |            |

a manner that promotes efficiency and reduces the level of "high-blading" travel.

 Snow and ice clearing activities will focus on the highest impacted area of the County first, and respond to lesser impacted areas based on priority.

### **GradersGravel Roads**

#### **Summer Maintenance**

- Gravel Roads will be graded on an average of two six rotations per year.
- Gravel roads within the County's maintenance jurisdiction will be graded based on road condition, traffic intensity and weather, as determined by the supervisor.
- High traffic volume (Arterial and Collector) roads will be graded more often.
- Landowners wishing private driveways to be graded by County machinery must complete and sign a Grading/Snowplowing Agreement – Appendix A prior to the work being commenced. Payment will be required prior to any snowplowing/grading being commenced. Snowplowing and/or Grading rate will be set as per Master Rates Bylaw.
- Roads will be graded in an orderly fashion to maximize efficiency and to avoid "high-blading".
- <u>Road maintenance will be undertaken in accordance with existing</u> Intermunicipal Collaboration Framework (ICF) agreements with the Urban municipalities.

## List of Priorities for Summer Maintenance:

- 1. Local Roads
- 2. Hamlets
- 3. Dirt Trails

| Priority | Location           | Goals  |  |
|----------|--------------------|--|--|
| 1        | Local Roads/Gravel | Bladed a minimum on an average of two rotations per year, with some roads          |  |
|          | Roads              | requiring six or more rotations. Maximum rotation will be at the discretion of the |  |
|          |                    | Road Supervisor on a case-by-case basis. six rotations per year                    |  |
| 2        | Hamlets/ Alleys    | Bladed on an average of once per year To be determined by Road Supervisor          |  |
| 3        | Road Repairs       | To be determined by Road Program Supervisor  |  |
| 5        | Private Driveways  | To be determined by Road Supervisor and Grader Agreement.                          |  |
| 6        | Dirt Roads         | Bladed a minimum of twice a year as time and the condition of the road allows.     |  |



| Section                                   | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                            | 13-2             | 3 of 6     |
|   |                  |            |
| Policy Title                              | Date:            | Motion No. |
| Transportation Grader/Gravel ServicesRoad | October 13, 2020 | [Category] |
| Maintenance Program13-2 Grader Gravel     |                  |            |
| Services 2024 Review.docx                 |                  |            |

### Winter Maintenance (October to March)

- When deemed necessary by the CAO or designate, snow removal coverage will be provided 7 days a week to address a significant or extreme snow event.
- At the discretion of the supervisor, operators may provide basic snow clearing operations during high wind or unsettled conditions to ensure travelling lanes remain open.
- If the weather is severe and the operators are at risk, Kneehill County will halt plowing operations.
- <u>Grader operators will exercise "winging" of the ditches where possible to ensure adequate snow</u> <u>drifting storage is available.</u>
- Snowplowing of County road allowances will not <u>necessarily</u> follow the School Bus Routes, <u>but will</u> respond to the highest impacted areas first.
- Windrows created on driveways as a result of this snow clearing operations are the landowner's responsibility. However, every effort will be made to reduce a windrow left while plowing.
- Landowners wishing private driveways to be plowed by County machinery must complete and sign a Grading/Snowplowing Agreement – Appendix A prior to the work being commenced. Payment will be required prior to any snowplowing/grading being commenced. Snowplowing and/or Grading rate will be set as per Master Rates Bylaw.
- The Landowner will contact the County office in order to receive service. Snowplowing/ grading will
  be completed at the discretion of the Municipality and shall not in any way interfere with the regular
  supply of services and maintenance to the municipality at large.
- Snow fence County road crews <u>may</u> install snow fencing in the late fall months to help reduce drifting snow onto <u>eC</u>ounty roads only. The County is permitted under the provincial *Public Highways Development Act* to enter private property to install and maintain snow fencing as required. Crews will not enter lands where obvious farming is underway, for example, active pasture land with grazing livestock or fields with a crop waiting to be harvested. Every effort-is will be made to contact affected landowners in advance of the installation.

### List of Priorities for Winter Maintenance:

- 1. Local Roads
- 2. Hamlets
- 3. Country Residential Subdivisions
- 4. Transfer Sites
- 5. Reservoir Sites

| Location | Locat | Trigger | Goals |  |
|----------|-------|---------|-------|--|
|          |       |         |       |  |
|          |       |         |       |  |
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|          |       |         |       |  |

| Section                                   | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                            | 13-2             | 4 of 6     |
|   |                  |            |
| Policy Title                              | Date:            | Motion No. |
| Transportation Grader/Gravel ServicesRoad | October 13, 2020 | [Category] |
| Maintenance Program13-2 Grader Gravel     |                  |            |
| Services 2024 Review.docx                 |                  |            |

| 1 | Hardsurface<br>Paved/Chipsealed<br>Roadways | A minimum of 5cm <del>/2"</del> of Surface<br>accumulation or icy Road<br>Conditions due to weather  | To be opened within 24 hours of snow event.                       |
|---|---|--|---|
| 2 | Local Roads/Gravel<br>Roads                 | A minimum of 10cm or more accumulation on road.  | To be opened within 24-120 hours of snow event.                   |
| 3 | Hamlets                                     | -Hamlets with Emergency<br>Services will be done_completed<br>first.<br>A minimum of 10cm or more<br>accumulation on road.<br>Snow is piled on boulevards and<br>areas available will be removed<br>as-deemed necessary. | To be opened within 24-120 hours of snow event                    |
| 4 | Country Residential<br>Subdivisions         | A minimum of 10cm or more accumulation on road.  | To be opened within 24-120 hours of snow event                    |
| 5 | Reservoir Sites                             | As deemed necessary  | To be opened within 24-120 hours of snow event                    |
| 6 | Transfer Sites                              | As deemed necessary  | To be opened within 24-120 hours of snow event                    |
| 7 | Private Driveways                           | Request after completing<br>Grading/Snowplow Agreement.  | To be determined by Road Supervisor on<br>proximity of equipment. |

# **Dirt Trail Maintenance**

- Administration will maintain signage at the beginning and end of each dirt trail road allowance stating "Road Allowance May Be Impassable"
- Existing Dirt trail road allowance will be bladed a minimum of twice a year. Additional maintenance will be completed at the Road Supervisors discretion, as time and conditions of the road allows.
- Dirt trail road allowances are considered field access only and Kneehill County is not obligated to
  provide physical access to adjacent landowners. The County is not obligated to ensure access to
  grain bins/bags placed on Dirt trail road allowance; producers do so at their own risk.
- Industry and Ratepayers may be allowed, at the discretion of the CAO or designate, to provide graders/snowplows or minor maintenance of Dirt trail road allowance leading to leases, bins, haystacks and corrals after signing a Save Harmless Agreement/ Liability Release with Kneehill <u>County.</u>
- Snowplowing of Dirt trail road allowance may be requested by a ratepayer or industry, and will be completed at no cost at the discretion of the CAO or designate. Snow plowing of a Dirt trail road allowance will take place only after all other Kneehill County roads have been cleared as per winter priority list



Commented [BH1]: I think this should be changed to physical access. Legal access is already provided through the road grid system. An undeveloped road is still legal access - but likely not physical.

| Section                                   | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                            | 13-2             | 5 of 6     |
|   |                  |            |
| Policy Title                              | Date:            | Motion No. |
| Transportation Grader/Gravel ServicesRoad | October 13, 2020 | [Category] |
| Maintenance Program13-2 Grader Gravel     |                  |            |
| Services 2024 Review.docx                 |                  |            |

 Criteria for assessing regular maintenance or upgrades to Dirt trial road allowance will be at the discretion of the CAO or designate and will generally be based on the following order of priorities

- Trails experiencing high weight and high volumes of traffic on a regular basis that present maintenance concerns.
  - Trails that provide connectivity to an existing developed road network
- o Trails with chronic maintenance concerns
- Trails that are landlocked or dead-end trails, where other alternate travel routes are available
- o Traials with crossings ( Pipelines, water)

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## Gravel

- The Road Program Support Supervisor will assess all gravel roadways.
- Kneehill County should re-gravels on average 485640 Km a year.
- Depending on the condition of the road, every gravel roadways should be re-graveled every two to seven years.
- Depending on the width and condition of the roadway, when re-graveling, two hundred and thirty (230) to four hundred (400) tonnes of gravel should be spread per mile.

# **Dust Control on Municipal Haul Routes**

- Kneehill County The Transportation Department may, at its' discretion and at no charge, apply dust
  abatement material on a-municipal roads used by the County forces as gravel haul roads. The need to
  apply dust control will be based on the heavy truck traffic volume threshold of twenty (20) trips per day or
  if the haul is more than five (5) consecutive days; whichever occurs first.
- The application rate, the length of the treated area and type of dust abatement material will be done on an as needed basis at the discretion of the Director <u>Transportation of Infrastructure</u>. Typically, the areas that will be treated are <u>in front of adjacent to</u> residences and <u>at</u> high volume intersections.
- The Municipality retains the right to perform work on the road scheduled for dust control product applications either prior to or after such application.

### **Gravel Specifications**

- Transportation 2010 Standard Specifications for Highway Construction are to be used for base course Asphalt Aggregate and Chip Seal Coat Aggregate.
- Road Gravel (3/4") 4-20 or (1") 4-25 shall be a modified spec set by Kneehill County.

**Commented [CV2]:** Is this the correct name? Can you just say Kneehill County



| Section                                   | Policy No.       | Page       |
|---|------------------|------------|
| TRANSPORTATION                            | 13-2             | 6 of 6     |
|   |                  |            |
| Policy Title                              | Date:            | Motion No. |
| Transportation Grader/Gravel ServicesRoad | October 13, 2020 | [Category] |
| Maintenance Program13-2 Grader Gravel     |                  |            |
| Services 2024 Review.docx                 |                  |            |

| TYPE                                      | DESIGNATION | <u>CLASS</u>  |
|---|-------------|---------------|
| Road Gravel:                              |             |               |
| <u>¾″ (20mm)</u>                          | 4           | <del>20</del> |
| <del>% (201111)</del>                     | +           | 20            |
| <del>1″ (25mm)</del>                      | 4           | <del>25</del> |
| Base Course:                              |             |               |
| <del>¾" (20mm)</del>                      | 2           | <del>20</del> |
| <del>1" (25m)</del>                       | 2           | 25            |
| <del>1 ½" (40 mm)</del>                   | 2           | <del>40</del> |
| Asphalt Aggregate:                        |             |               |
| <u><sup>1</sup>/<sub>2</sub> (12.5mm)</u> | 3           | <del>16</del> |
| Chip Seal Coat Aggregate:                 |             |               |
| ,   |             |               |
| <del>½" ( 12.5mm)</del>                   | 3           | <del>16</del> |

Jerry Wittstock, Reeve Mike Haugen, CAO

Approved:October 13, 2020[Category]Review Date:Date four years from last approval date

