



## MINIMUM ROAD CONSTRUCTION CROW WING TOWNSHIP

1. Right-of-way shall be a minimum of 66 feet.
2. Roadbed shall be constructed in the center of the platted or defined right-of-way.
3. Roadbed shall be 28 feet wide, shoulder-to-shoulder for a 24 foot wide driving surface; it shall be adequately crowned to drain surface water laterally to prevent standing water from saturating the roadbed.
4. Side ditch and embankment construction shall provide adequate roadbed drainage, including installation of centerline culverts as required. In-slope shall not be constructed steeper than 4 feet horizontally to 1 foot vertically (4:1), except in extremely high fill sections where a 3:1 slope may be acceptable. Backslopes shall not be constructed steeper than 3 feet horizontally to 1 foot vertically (3:1), and the top of the backslope shall be blended into the natural groundline. The ditch shall be flat within the in-slope and backslope area.
5. Horizontal and vertical alignment shall be coordinated. Centerline grades shall not exceed 15%, unless extenuating circumstances dictate a steeper grade. Centerline grades shall not be constructed flatter than 1.5% wherever possible. Sharp curves shall not result at the crest or the foot of a steep grade.
6. Sufficient grubbing and clearing shall be done to provide adequate snow area. Generally, the entire right-of-way shall be cleared except to save desirable timber and other vegetation. Stumps and debris shall be properly disposed of outside the limits of the roadbed and all rocks larger than 3 inches shall be disposed of by burial outside the roadbed limits. No rocks larger than 6 inches in diameter are to be used in the subgrade.
7. Selection of soils used in embankments shall be done with care, using the best material for the upper portion. Unsuitable soils, such as swamp materials, shall be disposed of outside the roadbed shoulder lines. Embankments shall be constructed using compaction where necessary and over low, wet areas, shall be elevated at least 3 feet above the water elevation before

proceeding with the surface layer construction. An alternate construction may consist of geotextile installed according to the manufacturer's specifications.

8. Adequate surfacing shall be provided which shall be shaped and compacted to the extent that it will not rut under normal conditions. A minimum of 5 inches deep and 28 feet wide top coat surface shall be used consisting of either No. 1 or No. 5 clay mix as chosen by the Town Board or designee or otherwise specified. An accounting of quantity and quality of materials used in top surface on each section of road shall be filed with the Town Clerk.

9. All graded areas as a result of road construction shall be protected from erosion to prevent destruction of the roadbed. Topsoil and seeding shall be provided to prevent erosion and shall be applied in accordance with State road specifications.

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10. The Town Board or designee may inspect work in progress, may halt construction is unacceptable or otherwise intervene in order to assure that these specifications are adhered to.

11. In cut areas, a minimum of 2 feet ditches will be provided.

12. Cul de sacs are the only approved termination for a road within a plat and must have a minimum of a 160 foot diameter right of way with a minimum of 100 feet in diameter being paved.

13. Bituminous surfacing shall be required on all new roads and shall be 2 inches compacted on all 7 ton roads and 2-1/2 inches compacted on 9 ton roads.

14. Culverts shall be installed as needed and shall be constructed of galvanized steel, not plastic. Culverts under driveways shall be 15 inches in diameter and aprons are required.

15. All bituminous surfacing shall be done using a 10 ton or larger roller. Township Minimum Road Requirements are revised and modified from time to time.

The above is a version of the Road Specifications of 10-3-80 and was adopted by the Crow Wing Township Board of Supervisors on 5-16-05. Item 15 was added by the board on 4-8-06 and Item 12 was modified on 12-15-06. Item 14 was modified on 7-31-07. Item 4 was modified on 5-5-08.