

## **Chapter 21**

### **TOWN ROAD SPECIFICATIONS**

March 29, 2005

#### **SECTION 21.1 PAYMENT OF CONSTRUCTION EXPENSES.**

All expenses involved in the preparation, construction and dedication involved in highway construction under this Chapter shall be borne by the applicant(s).

#### **SECTION 21.2 PRELIMINARY INSPECTION.**

Prior to the design, preparation and construction of any roadway to be dedicated to the Town of Dodgeville, the applicant shall notify the Town Chairperson or Town Clerk. Before any plans preparation begins, an on-site meeting will then be arranged to be attended by the Town Board the Town Engineer and the Applicant to review the project and assist in directing the applicant on the approval process.

Before any construction begins, plans and specifications must be provided to the Town in order for the Town Engineer to check the Town Road Specifications, Design and the Drainage. All costs for the work completed by the Town Engineer will be the responsibility of the Applicant.

#### **SECTION 21.3 LETTER OF CREDIT**

As detailed in the Development Agreement, the applicant(s) shall install highway and drainage improvements according to the requirements of these ordinances. The applicant shall provide an irrevocable Letter of Credit which would enable the Town to finish the improvements in case of default by the applicant(s).

The Letter of Credit shall be equal to one and one-quarter (1¼) times the Town Engineer's estimated cost of the required improvements. The Letter of Credit is required to run until one year beyond initial acceptance of the improvements. If outstanding items are not completed in that time frame as determined by the Town Board or Town Engineer, the Town will request an extension to the Letter of Credit, or if necessary, the Town may draw on the Letter of Credit to complete the work.

## SECTION 21.4 ROADWAY SPECIFICATIONS.

### (a) General Requirements.

- (1) Construction Standards. All roadway construction and materials used shall be performed in accordance with the construction methods as listed in the appropriate current sections of the “State of Wisconsin Department of Transportation Standard Specifications for Highway and Structure Construction,” and its supplements, or in accordance with Town-approved plans, profiles and cross sections and specifications, if such specifications are requested by the Town Board or Town Engineer. No construction shall be started until such plans, profiles and cross sections have been approved by the Town Engineer or Town Board.
- (2) Project Costs. All roadway surveys, dedications, plans and specifications and construction will be at the expense of the applicant or applicants. This includes any expense incurred by the Town in preparation of plans and review and inspection of plans and construction.
- (3) Material Slips. Copies of material slips for all materials furnished for the road construction projects shall be delivered to the Town before the Town approves the final construction.
- (4) Required Inspections. The contractor shall notify the Town Chairperson, Town Engineer, or Town Clerk, as directed by the Town Board, prior to the start of construction and when each stage of construction is ready for inspection. Any deficiencies found by the Town Chairperson, Town Board or Town engineer shall be corrected before proceeding to the next phase of construction. Inspections will be required at the completion of the following stages:
  - a. Subbase grading;
  - b. Crushed aggregate course;
  - c. Bituminous surface course;
  - d. Shouldering;
  - e. Erosion control measures, such as soil stabilization and stormwater retention/detention measures;
  - f. Culverts and drainage structures and devices;
  - g. Final inspection to include all incidental items of construction as shown on the plans or in the specifications.

Any deficiencies found by the Town Chairperson, Town Board or Town Engineer shall be corrected before proceeding to the next phase of construction.

The inspections and the reports and findings issued after the inspections are not intended as, nor are they to be construed as, a guarantee. In order to so advise the owners and other interested persons, the following disclaimer shall be applicable to all inspections.

These findings of inspections contained herein are intended to report conditions of non-compliance with standards that are readily apparent at the time of the inspection.

- (5) Test of Materials. The Town reserves the right to obtain a sample of the roadway base material prior to placement on the roadway for purpose of determining whether the material needs gradation and soundness requirements.
  - (6) Pavement Samples. Samples of material may be required to be taken by the Town at the contractor's expense during pavement construction operations for purposes of determining that the material meets specifications.
  - (7) Town Board Approval. The finished roadway must meet the approval of the Town Board, upon the recommendation of the Town Engineer, since the Town will include this road work in their annual request for highway aid.
- (b) **Construction Standards.** All streets and highways constructed in the Town shall fully comply with the following construction standards, with the construction at the applicant's expense:
- (1) Topsoil Removal. All topsoil shall be first removed. In addition, all subsoils which have a high shrink-swell potential, low-bearing capacity when wet or are highly elastic shall be removed and used outside of the right-of-way.
  - (2) Minimum Right-of-way Width. A minimum road right-of-way width of sixty-six (66) feet is required, except that if the road ends in a cul-de-sac or dead end a one hundred twenty (120) foot turnaround radius is required.
  - (3) Roadway Alignment Details. Roadway alignment shall be in the center of the road right-of-way.

- (4) Roadway Grading; Ditches. Roads shall be graded to their full width in accordance with approved plans, plus an additional distance necessary to establish proper ditch slopes. The roadway shall be compacted and graded to subgrade using, where necessary, approved fill material in accordance with Wisconsin Department of Transportation standards. Roadside ditches shall be minimum of thirty-two (32) inches below the finished roadway centerline elevation, or as approved by the Town board, upon the town Engineer's recommendation. Debris may not be buried in the designated road right-of-way. Roadway ditches shall have a normal slope ratio of four (4) to one (1) from the edge of the shoulder to the bottom of the ditch and three (3) to one (1) on the back slope.
- (5) Roadway Grades. Roads shall have a maximum grade of ten percent (10%) unless a different maximum grade is recommended by the Town Engineer and approved by the Town Board. For local streets, no street shall have a grade in excess of four (4) percent within seventy-five (75) feet of an intersection. Longer areas of four (4) percent or less grade may be required as determined by the Town Engineer for collector or arterial streets or local streets where special conditions exist.
- (6) Roadway Width. Roadways shall either have a base width a minimum of Twenty-eight (28) feet or wider of full depth gravel, or follow the requirements of the "Town Road Standards" noted in Section 82.50, Wis. Stats., or by the Town Subdivision Ordinance, the more restrictive of which shall apply.

The minimum width shall be increased to thirty-two (32) feet when two (2) multi-modal lanes (for bikes, etc.) adjacent to vehicle travel lanes are required by the Town Board, and thirty (30) feet where one multi-modal lane adjacent to the travel lane is required.

- (7) Roadway Base Thickness
- a. Residential and rural roads and streets shall have a minimum roadway base thickness of fourteen (14) inches. Eight (8) inches of compacted in-place crushed aggregate base course of gradation No. 2 in the top layer and six (6) inches of compacted breaker run stone (3" or less in one dimension) in the lower level.

- b. In the case of commercial, arterial or other heavy-use roads, the Town Board may, in the alternative to the above standards, have the Town Engineer provide specifications for placing base on such roads with a greater thickness after researching the sites(s) and conducting a soil analysis. In any case, the Town Board shall have the sole discretion in determining the use and construction classification to be adhered to.
- c. In any case, the Town Board shall have the sole discretion in determining the use and construction classification to be adhered to.
- d. In all cases, the base course shall be compacted to the extent necessary to produce a condition so there will be no appreciable displacement of material laterally and longitudinally under traffic and shall conform to line, grades and shape shown on the approved plans, profiles and cross sections.

(8) Pavement Width.

Roads shall have a minimum pavement width of twenty-two (22) feet or wider when required by the “Town Road Standards” as noted in section 82.50 Wis. Stats., or by the Town Subdivision Ordinance, if applicable, the more restrictive shall apply. The minimum width shall be twenty-six (26) feet if one (1) multi-modal lane (for bikes, etc.) adjacent to vehicle travel lanes is required by the Town Board, or thirty (30) feet if two (2) multi-modal lanes are required. The pavement radii on permanent cul-de-sacs shall be forty-five (45) feet or wider, except that the pavement radii on a temporary cul-de-sac shall be a minimum of thirty-six (36) feet.

Temporary dead-ends can be tee turnarounds if 4 lots or less are served by the dead-end and the dead-end is less than 500’ long measured from the last intersection to the end of a lot being improved.

If only two corner lots are served by a temporary dead-end, and the dead-end is less than 250’ long, a temporary turn around may be required.

If order for an improved lot to receive a building permit, the streets must be completed across its entire lot frontage. For corner lots, streets must be improved for the entire frontage length on both streets.

- (9) Pavement Thickness. Roads shall have a minimum of three and one-half (3 ½) inches of bituminous concrete pavement, placed in two (2) layers – a binder course of two (2) inches thick and a surface course on one and one-half (1 ½) inches thick. The finish layer of asphalt should not be placed until 2 years after the binder course and the developer is responsible for repairing the binder and obtaining the permission of the Town Engineer before applying the finish layer of asphalt. In the case of commercial, arterial or other heavy-use roads, the Town Board may, in the alternative to the above standards, have the Town Engineer provide specifications for paving such roads with a greater thickness after researching the sites(s) and conducting a soil analysis. In any case, the Town Board shall have the sole discretion in determining the use and construction classification to be adhered to. After binder construction and again after final surface course placement, shoulder width shouldering shall be brought even to grade with the bituminous mat.
- (10) Shoulder Width. A shoulder minimum of three (3) feet wide on each side of the road is required and wider when required by the “Town Road Standards” as noted in Sec. 82.50, Wis. Stats. The shoulder shall extend one (1) foot beyond paved multi-modal lanes (for bikes, etc.) adjacent to vehicle travel lanes when required by the Town Board.
- (11) Shoulder Thickness. Road shoulders shall have a minimum thickness of three and one-half (3 ½) inches of compacted in-place crushed state-approved aggregate base course, over a minimum fourteen (14) inches of compacted in-place crushed state-approved aggregate base course, except that shoulder thickness shall match the grade of the pavement.
- (12) Roadway Culverts and Bridges; Surface Drainage. Roadway culverts and bridges shall be constructed as directed by the Town Board and sized utilizing the TR 55 Standards listed in Chapter 13 of the manual entitled “Drainage” of the “Facilities Development manual” of the Wisconsin Department of Transportation. The developer shall provide adequate facilities to provide surface water drainage as well as free flow outlets for subsurface drain tile where they are required. Where drainage facilities will aid in road construction and the stabilization of the road’s subgrade, drainage facilities shall be installed before road construction is started. Existing condition status shall be based on a maximum Runoff Curve Number (RCN) of sixty eight (68).

- (13) Topsoil, Grass, Seed, Fertilizer, and Mulch. All disturbed areas (ditches, backslopes) within the road right-of-way not provided with pavement and shouldering material and all disturbed areas outside the right-of-way including barrow and waste sites shall be restored utilizing six (6) inches of topsoil and good-quality seed, fertilizer, and mulch, in accordance with the seeding requirements prescribed in Wisconsin Department of Transportation standards. Ditches along the roadway shall be protected by necessary erosion control materials such as hay bales, sod, erosion control mats, rip rap, etc., as prescribed by the engineering design for the ditches as approved by the Town Engineer.
- (14) Signs. All roads constructed in the Town of Dodgeville shall have all street signs installed by the subdivider, as determined by the Town Board or its designee, prior to acceptance of the road and issuance of building permits.
- (15) Extra Turn Surface. The minimum pavement radii between intersecting streets shall be forty (40) feet for minor/local roads.
- (16) Radii of Curvatures. When a continuous street centerline deflects at any one (1) point by more than 10 (10) degrees, a circular curve shall be introduced having a radius of curvature on said centerline of not less than the following:
- |                                |                                 |
|--------------------------------|---------------------------------|
| Arterial streets and highways: | three hundred fifty (350) feet. |
| Collector streets:             | two hundred (200) feet.         |
| Minor streets:                 | one hundred fifty (150) feet    |
- (17) Vertical Curves. All minor road centerlines shall have a minimum “k factor” of 20 for crest curves and 30 for sag curves. Minimum “k factor” for collector and arterial roads shall be as recommended by the Town Engineer.
- (18) Existing Trees. All existing trees should be removed from street right of ways, and drainage, recreation path and utility easement areas when directed by the Town Board.

(c) **Statutory Requirements.** The laying out of highways and roads shall be provided in chapters 82 and 86, Wis.Stats., except that, in the case of subdivisions and certified surveys, the provision of chapter 236, Wis Stats., shall apply.

- (d) **Easements.** The applicant shall provide the Town with a deed to road and easements for all drainage facilities not within the road right-of-way. Where required, the applicant shall also furnish to the Town any special deed or easement, such as, but not limited to, sight easements, slope easements, pedestrian ways, sewer easements and such.
- (e) **Variances.** Where the Town Board finds that unnecessary hardship may result from strict compliance with these standards, it may vary the regulations so that substantial justice may be done; provided that public interest is secured and that such variation will not have the effect of nullifying the intent and purpose of these standards.

Any modifications or variance thus granted shall be entered in the minutes of the Town Board, setting forth the reasons which, in the judgment of the Town Board and/or the Town Engineer, justified the modification or variance.

**SECTION 21.5 FINAL INSPECTION.**

Upon completion of the proposed highway, the applicant shall request in writing for Final Inspection. The Town Engineer will proceed to make final inspection, accepting or rejecting the road as the case may be. After all of the provisions of the Chapter have been complied with, the roadway or easement will be inspected by the Town officials and, at that time, proof will be made by the presenting of waivers of liens of receipted bills from contractors, engineers and surveyors for all work that have been done and has been paid for or arrangements have been made for the payment through written instrument by the sub-divider. If the road is rejected, corrections shall be made as recommended by Town Board, upon the Town Engineer's recommendation, before final inspection can then be made again. If final acceptance is then made, the owner or owners shall turn over to the Town the deed of all land necessary for the road as previously mentioned.

Adopted by the Dodgeville Town Board this 29<sup>th</sup> day of March, 2005

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Curt Peterson, Town of Dodgeville, Chairman

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Patti Dettman, Town of Dodgeville, Clerk/Treasurer

Date Posted: \_\_\_\_\_