ORDINANCE STELLA TOWN ROAD REQUIREMENTS

DEFINITIONS: In order to clarify this ordinance the following definitions are applicable:

- A. Base Course-The supporting base material of the roadway including shoulder.
- B. <u>Drainage</u>-The gradual drying of road by system of ditches, trenches, channels, etc.
- C. **Grade-** The rate of ascent or descent of road.
- D. <u>Highway</u>-A Public way for the purpose of vehicular travel, including the entire area within the right of way.
- E. Right-of way-Land or property to be acquired or used for highway or road purposes.
- F. Road- Either a public highway or private road.
- G. <u>Road bed</u>- the graded portion of a highway prepared as the foundation for the pavement structure and shoulders.
- H. Roadway- That portion of a road within the limits of construction.
- Standard Specifications-State of Wisconsin Department of Transportation
 Standard Specifications for Highways and Structures Construction, 1996 edition
- J. <u>Subbase</u>- The layer or layers of specified or selected material of designated thickness placed on a subgrade to support a base course.
- K. <u>Subgrade</u>- The top surface of a roadbed upon which the pavement structure and shoulder are constructed.
- L. Surface Course- The top layer of the traveled portion of the roadway.

APPLICABILITY

This section shall be applicable to all new roads laid out by the Town Board, any roads in land divisions and condominium, and any other roads being accepted by the town as public roads.

PUBLIC WORKS

- All private and easements roads serving two to four lots shall have a 66' right-of-way, a
 driving surface of 20' and adequate turnaround for emergency vehicles. Private and
 easements roads serving five or more lots shall be built to town road standards but do not
 require blacktop surface if they are to remain private roads.
- Existing town roads. Supervisors acknowledge that several existing town roads do not
 comply with the road standards. Due to the excessive cost that would be involved in bringing
 such roads up to the design standards the town hereby declares all existing town
 roads are exempt from the road designs standards of this section. Any reconstruction of
 said town roads is also exempt from road design standards in this section.

ROAD DESIGN STANDARD

It is in the public interest for the Town of Stella, Oneida County to establish minimum road design standards for traffic and afford satisfactory access to police, firefighting,

snow removal, sanitation, and road maintenance equipment;. The following minimum design standards shall apply under this ordinance. The classification of all roads under this ordinance shall be within the complete discretion of the town board considering such factors as traffic count, character of anticipated traffic, and relation of road to traffic patterns within the town and other road systems. Driveways along public roads require a driveway permit and shall be inspected by a member of the Town Board or designee.

ROAD RIGHT-OF-WAY

- The minimum width for any road right-of-way shall not be less than 66' centered on the roadway. Cul de sacs shall have 60' radius.
- Minimum desired length of road accepted into the town road system shall be over 500 feet.
 Through roads are most desirable.
- The Town Board may require that the developer provide engineered road plans and profiles showing existing ground surface, proposed and established road.

ROADWAY

- The Town Board may require that borings and soundings be made in specific areas of roadway to ascertain subsurface soil, rock and water conditions will support a road.
- Clearing and grubbing of all trees, stumps and brush shall be to a minimum width of 50'. In cut and fill sections which extend beyond the 50 foot minimum clearing width, the road way is to be cleared 5 feet beyond the cut or fill slope intercept.
- No trees, stumps, brush, or large rocks shall be disposed of within the road right-of way.
- Topsoil shall be spread at a consistent thickness of 2" from the edge of the gravel shoulders
 to the clearing limits. All topsoil shall be free from roots, rocks, and other debris.
- All disturbed areas outside of the gravel shoulder, shall be seeded with # 20 seed at a sowing rate of 2.75 lbs per 100 square yard. After the area has been seeded, mulch is to be spread on all seeded areas.
- All cut and fill areas along the road right-of-way shall have no less than a two-to-one grade without the installation of a retaining device, or slope stabilizing material.

ROAD INTERSECTIONS

- The intersection of the proposed road or highway with another road or highway shall be at an angle of 80-100 degrees. Radius lengths shall be determined by referring to a Wis. DOT type C intersection.
- The number of roads converging at one intersection shall be reduced to a minimum,
 preferable not more than two.
- The number of intersections along arterial roads and highways shall be held to a minimum.
 Wherever practicable, the distance between such intersections shall not be less than 1,000 feet.
- Intersections shall be at least 300 feet apart on local roads and 500 feet apart on collector roads measured from the center lines of the two roads.

- Local roads shall not necessarily continue across arterial or collector roads, but if the center
 lines of such local roads approach the major roads from opposite sides within 300 feet of
 each other, measured along the center line of the arterial or collector road, then the location
 shall be so adjusted that the enjoinment across the arterial or collector road is continuous,
 and a jog is avoided.
- Intersections for private driveways shall be more than 50 feet between drives.
- Minimum radius of horizontal curve:

Local 100 feet Collector 200 feet Arterial 300 feet

- The maximum grade on the proposed road shall be 8.0%, unless the town board states otherwise. Roadbed shall have a 2.5 % crown.
- All dead end roads shall have a cul de sac at the end of the road. Cul de sacs shall be totally cleared to a minimum radius of 55 feet.
- No more than 3 driveway entrances shall be permitted on a cul-de-sac unless deemed appropriate by the Town Board
- Ditches shall be constructed where needed to provide adequate drainage of roadway.

ROADBED

- All marsh, swamp, muck, and peat material shall be removed from the areas of the
 proposed roadway to ensure a stable foundation for the roadway fill. In certain areas, type
 marsh stabilization (Type MS) geotextile fabric may be laid under fill to avoid removing all
 marsh, swamp, muck and peat material. The Town must approve this alternative option.
- The roadbed shall be constructed in a manner that allows for drainage from the roadway to the ditches. This may require the use of borrow material or fill. The roadbed fill shall be free of large rocks, muck, peat, and other organic material, and shall be compacted in 8" lifts.
- Compactions shall be to a minimum of 93% of the maximum dry density as determined by ASTM D 1557. A sample of the proposed subbase material shall be delivered to the Town for approval and testing prior to backfilling operations.
- Drainage structures of proper size shall be installed to ensure proper drainage and to
 prevent the flooding of roadbed or adjacent property. The Town shall approve size and type
 of drainage structures. The minimum length of any culvert installed in a roadbed shall be at
 least five feet greater than the base course width. Metal apron end walls shall be used.
- The minimum width of the road bed shall be 30'.
- Prior to placement of base course material, the roadbed shall be proof rolled with a fully
 loaded tandem-axle Dump Truck. Any areas exhibiting excessive deflection shall be
 corrected. The town shall be notified a minimum of 2 days prior to proof rolling operations so
 that an inspection can be scheduled.

CRUSHED AGGREGATE BASE COURSE

- Crushed aggregate for the base course shall be placed to a minimum compacted depth of 6 inches, and shall conform to the requirements of gradation # 2 of section 304.2.6 in the "Wisconsin Standard Specifications for Highway and Structure Construction" 1996 edition. Where trucks comprise a significant portion of expected traffic, the compacted base course depth shall be a minimum of 8 inches.
- The crushed aggregate base course shall be placed to a minimum width of 26 feet, with a maximum of 3:1 slope beyond 26 feet.
- Minimum acceptable density shall be 95% of maximum density of crushed aggregate base course. A sample of the proposed base course material shall be delivered to the Town for approval and testing prior to placement. The town shall be notified a minimum of 2 days prior to placement so that an inspection can be scheduled.
- Crushed aggregate base course shoulders shall be placed with a shouldering machine specifically designed for placing shoulders. Shoulders are to be placed a minimum of 3 feet in width. After placement, shoulders are to be properly compacted.

SURFACE COURSE (HOT MIX ASPHALT)

- Bituminous pavement shall be placed to a minimum compacted depth of 2 inches and a minimum width of 20 feet.
- The bituminous material used in the mix shall be type A.C. with a PG grading asphalt designation of 58-28. The asphalt content in the mix shall be within the range of 5.4% to 6.4%. The aggregate used in the mix shall be gradation #3, section 407.3.3 of the supplemental specifications. The mix produced shall be Type E-3 mix shall be designed with an air void content of 3.0%
- Hot mix asphalt is to be compacted according to table 407.5.1.5 in the "Wisconsin Standard Specification for highway and structure Construction" 1996 edition.
- All cul de sacs shall have a paved radius of 40' with 5' crushed aggregate base course shoulders. Paving shall not be performed between October 15 and May 15 without prior approval of the Town board or their engineering representation.

APPLICATION AND INSPECTION

Applicants shall make an application in writing to the Town Board giving location and description of the proposed road including the proposed amount and type of traffic expected. The application must be delivered to the town clerk at least 10 days prior to the meeting at which it will be considered. Upon receipt of the application and payment of inspection fees, if applicable, the Town will proceed to examine the proposed route of road. The Town Board may require egineered plans. If approval is received and inspection fees paid, the road may proceed to be built under the supervision of the Town Board or their designee. All roads shall be inspected and

approved by Town Board or designee, at each of the following phases of construction, if deemed necessary:

- Before preliminary bulldozing, filling, ditching and grading;
- After preliminary bulldozing, filling, ditching and grading;
- After crushed aggregate base course is laid to roadway width and compacted, and before roadway surface is laid;
- During application of bituminous pavement for road surface.

The Town shall be notified a minimum of 2 days prior to inspections so that inspections can be scheduled. Should it become necessary for the town to engage the services of an engineering firm to verify compliance with the Town of Stella's road specifications, the developer will be responsible for the cost of those services, and payment will be due prior to the Town Board issuing a permit for the new road and/or land division involved.

LIEN WAIVERS & PERFORMANCE BOND

A performance bond is required in an amount to be determined by the Town Board. The developer is required to provide lien waivers from contractors doing the work showing full payment for all services performed and materials provided in construction of the road.

AUTHORITY FOR HIGHER STANDARDS

The road design standards in this ordinance as stated above are intended to be minimum design standards. The Town Board shall have the discretion to impose higher design standards where in the opinion of the Town Board local conditions require higher standards or anticipated traffic in quantity or quality will require higher standards.

TOWN OF STELLA