Town of Thompson's Station Roadway Design Specifications



THESE SPECIFICATIONS AND DETAILS ARE ESTABLISHED AND REQUIRED FOR ALL DEVELOPMENT WITHIN THE TOWN RIGHT-OF-WAY FOR ALL STREETS AND ROADS PER TITLE 16, SECTION 16-202 OF THE TOWN CODE.

THE SPECIFICATION AND DETAILS LISTED BELOW ARE MINIMUM STANDARDS. ALL SPECIFICATIONS SHALL BE FOLLOWED UNLESS A DEVIATION FROM THESE STANDARDS IS PROVIDED IN WRITING FROM TOWN STAFF FOR A SPECIFIC AND UNIQUE ENGINEERING REASON.

1) ROAD DETAIL:

- a) 8" minimum mineral aggregate base shall be required on all roadways
- b) Base stone shall extend 6" minimum behind the curb.
- c) The asphalt temperature installment shall be at least 50 degrees and rising.
- d) The binder thickness shall be 3".
- e) 1.5" thickness of bituminous surface course shall be applied
- f) See Detail Section: Road Detail Section
- g) Density test on binder and topping shall be required. Testing results shall be emailed to the Town after each course is applied.

2) ROAD PATCHING AND ROW CUTS

- a) Any encroachment, excavations, or cuts into a roadway or ROW shall require a ROW Permit, per Town Code.
- b) The Town of Thompson's Station shall not permit open cuts on existing roadways. Installation of utilities across a ROW shall be through jacking or boring under the roadway.
- c) See Detail Section: <u>Trench and Road Patch Section</u>

3) CURB AND GUTTER DETAIL:

- a) Curb and gutter shall be permitted according to Town approved roadway cross-sections.
- b) Minimum of 3 ¼" of base stone under curb and gutter shall be required.
- c) Curb or concrete flatwork may be installed at 40 degrees and rising temperature.
- d) See Detail Section: <u>Town Curb Standards</u>

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4) UTILITIES:

- a) All utilities shall have a 16" minimum of cover from subgrade elevation.
- b) All utilities casting shall be set to the slope of the roadway.
- c) All utilities shall be even with the binder course. At surface course a 1.5" adjustment ring will be added to the utilities.
- d) All utilities shall be installed before subgrade proof roll.
- e) Utilities in roadway shall be backfilled with specified material within 6" of top of subgrade then capped with a crush stone.

5) PROOF ROLL COMPACTION:

- a) Proof rolls shall be performed by a loaded tandem axle dump truck. (20 tons minimum)
- b) A loaded dump truck with a ticket shall be required before proof roll starts.
- c) Roadways shall be required to be compacted around all utility structures.
- d) There shall be NO debris or uncompacted material on the roadway at the time of proof roll. (compaction shall be 1' minimum behind the curb)
- e) Roadways shall have the required amount of roller time to reach material compaction level.
- f) If the proof roll has less than 3 issues, the contractor may repair areas with proper material and advance to the next course placement.
- g) If a roadway has more than 4 issue areas during a proof roll, it may continue, but the contractor must stabilize material in roadway and another proof roll date will be set.
- h) No additional course placement shall be allowed until the survey section is passed.

6) SURVEY:

- a) A survey shall be performed before a subgrade proof roll date will be set.
- b) The survey shall ensure that subgrade and utilities are at elevations and placement, per approved plans.
- c) The survey shall include 2' OS behind curb and every 50'-centerline grade elevations.

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- d) All survey information shall be emailed to Town inspectors prior to setting a date for any proof roll.
- e) The proof rolled section shall be established by survey information.

(7) STORMWATER PIPE AND STRUCTURES:

- (a) All stormwater utilities shall be inspected by the Town inspector.
- (b) TDOT standards specifications for road and bridge construction and Town standards shall apply.
- (c) RCP storm pipe shall be the only permitted pipe, per Town standard.
- (d) Structures have a minimum of 4500 psi (TDOT ASTM STANDARDS)
- (e) Poured in place structures shall be approved by Town Staff and Town Engineer
- (f) Storm pipe shall be concrete mortar applied inside and outside to seal off structure.

ADDITIONAL REGULATIONS & NOTES:

- a) For roadways, proof roll may be canceled, and a new date set, if any of the Town Roadway
 Design Specifications included in this document are not met.
- b) The Town shall not recommend any reduction or acceptance of any roadway public improvement that does strictly comply with the Town Roadway Design Specifications included in this document.
- c) For all roadways, the binder course shall be installed, drainage infrastructure inspected, and utilities tested before any building permits shall be issued to builders
- d) All roadways shall conform to the approved and stamped Construction Plans for each project.
- e) Field changes shall not be permitted without express approval of Town Staff and shall not be considered valid until revised Construction Plans are submitted and accepted by Town Staff.

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