Introduced January 27, 2009, by Councilman Hursey, seconded by Councilman Hicks, (by request of Administration)

## Item No. 09-01-2794

## **ORDINANCE NO. 3525**

An ordinance amending the Code of Ordinances of the City of Slidell, Appendix B.1 Standard Subdivision Specifications, Division II. Technical Provisions to provide for revisions to specifications for fiber reinforced concrete.

NOW THEREFORE BE IT ORDAINED by the Slidell City Council that it does hereby amend the Code of Ordinances of the City of Slidell, Appendix B.1 Standard Subdivision Specifications, Division II. Technical provisions, as follows:

Delete all of the language in "4.3.16 Fiber reinforcing, including (1) and (2)" and replace with the following:

"4.3.16 Fiber reinforcing. All concrete pavements shall contain macro synthetic fiber reinforcement for temperature and shrinkage crack width control. This fiber will be used instead of highway mesh. This fiber shall be as follows:

(1) For all roadway pavements, Fibermesh 650, or approved equal, shall be applied throughout the concrete mixture. Macro synthetic fibers shall provide a minimum Average Residual Strength per ASTM C 1399 of 162 psi at 3 lbs. per cubic yard, and 216 psi at 4 lbs per cubic yard of concrete. Alternate products shall be preapproved by the City Engineer in writing. Fibrillated and self-fibrillating fibers are specifically prohibited from use. Macro fiber dosage rate shall be:

Collector streets at 4.5 lbs per cubic yard of concrete.

Residential (minor streets) at 3 lbs per cubic yard of concrete.

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(2) All sidewalk and driveway pavement shall contain micro polypropylene fibers. These shall be applied to the concrete mixture at the rate of one and one-half (1 1/2) lbs per cubic yard of concrete. Cellulose (treated or untreated), AR Glass, Nylon, and Polyester fibers are specifically prohibited from use."

ADOPTED this 17th day of February, 2009.

Rickey Hursey

President of the Council

Councilman, District B

Mayor

Thomas P. Reeves Council Administrator

Homes & Remed

DELIVERED

2pm. 2 18 09 to the Mayor

RECEIVED

3:40 pm - from the Mayor

free from dirt, scale, rust, paint, oil or other injurious materials and be tied at each bar intersection.

4.3.16 Fiber reinforcing. All concrete pavements shall contain fiber reinforcement for control of curing and shrinkage cracking. This fiber will be used instead of highway mesh. This fiber shall be as follows:

- (1) For all roadway pavements, Novamesh, or approved equal, shall be applied throughout the concrete mixture. Equal products shall be approved by the city engineer in writing. This shall be applied at a rate of one and one-half (1½) bags per cubic yard of concrete. The bag shall be a twenty-one (21) pound bag consisting of twenty (20) pounds steel fibers and one pound (1) polypropylene fibers.
- (2) All sidewalk and driveway pavement shall contain only the polypropylene fibers. These shall be applied to the concrete mixture at the rate of one and one-half (1½) bags per cubic yard of concrete. The bag size shall be one (1) pound.

#### 4.4. Mixing and proportioning:

4.4.01. Ready mix concrete may be used provided it conforms to the requirements set forth herein and ASTM Specification C-94, latest revision.

4.4.02. Concrete shall be so proportioned as to give a minimum 28-day compressive strength of 4,000 psi. Water content shall not exceed the amount recommended by a testing laboratory and approved by the city engineer. Aggregates shall be batched by weight. Cement shall be measured by sacks or by weight and water shall be accurately measured by volume or weight. Slump to be no greater than 5½ inches.

4.4.03. Water will not be added on the job.

4.4.04. Only one brand of Portland cement shall be used throughout the

entire job, unless specifically approved by the city. In no event shall more than one brand be used in the pour of any one day.

## 4.5. Before placing concrete:

4.5.01. Placing shall not be commenced until sufficient subgrade is prepared and forms set. Concrete shall be placed with minimum rehandling and in one layer. The concrete shall be sliced and spaded while being placed. Particular attention shall be given to vibrating adjacent to forms and joints. Over-vibration or manipulation causing segregation shall not be permitted.

4.5.02. When forms have been securely set to grade, the base shall be tested as to cross section and elevations by means of template. The template shall be so constructed and operated to correctly indicate locations where the base does not conform the specified elevation and section. Low areas shall be brought to proper elevation by filling with approved material. Pavement shall not be placed on loose materials or a rutted base.

4.5.03. The base shall be saturated with water the previous night or not less than six hours prior to the placing of concrete. If it subsequently becomes too dry, the subgrade shall be sprinkled, but the method of sprinkling shall not be such as to form mud or pools of water.

4.5.04. Concrete shall not be placed on a frozen subgrade. No concrete shall be mixed while the air temperature is at or below 40 degrees Fahrenheit. Concrete shall not be placed unless the air temperature is at least 40 degrees Fahrenheit and rising. No materials containing frost or lumps of hardened materials shall be used. No concrete shall be placed

# From Appendix B-1, Division II:

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Deleted: of curing and shrinkage cracking

Deleted: Novamesh

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Deleted: Equal products shall be approved by the city engineer in writing. This shall be applied at a rate of one and one-half (1 1/2) bags per cubic yard of concrete. The bag shall be a twenty-one (21) pound bag consisting of twenty (20) pounds steel fibers and one pound (1) polypropylene fibers.¶

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Deleted: only the

Deleted: bags

Deleted: The bag size shall be one (1)