ORDINANCE NO. A-363

AN ORDINANCE CREATING MINIMUM STANDARDS FOR THE CONSTRUCTION OF STREETS, CURBS, GUTTERS, AND OTHER IMPROVEMENTS WITHIN THE AREA OF JURISDICTION OF THE CITY OF CONWAY, ARKANSAS AND THE PLANNING COMMISSION OF SAID CITY WHICH HAVE NOT BEEN HERETO-FORE ACCEPTED BY SAID CITY FOR MAINTENANCE AND UPKEEP, INCLUDING STREETS, CURBS, CUTTERS AND IMPROVEMENTS CONSTRUCTED BY IMPROVEMENT DISTRICTS: PROVIDING FOR MINIMUM STANDARDS OF DESIGN, APPROVALS, MATERIAL, CONSTRUCTION MATERIAL, CONSTRUCTION METHODS AND MAINTENANCE, DECLARING AN EMERGENCY AND FOR OTHER PURPOSES.

BE IT ORDAINED BY THE CITY COUNBIL OF THE CITY OF CONWAY, ARKANSAS:

SECTION ONE (1). It is hereby declared to be the policy of the City of Conway, Arkansas to require the employment of sound engineer. ing procedures and the use of proper materials in the construction of streets and appurtenant' structures and improvements within the area^{$\sqrt{1}}$ </sup> of jurisdiction of said City and the planning jurisdiction of the planning commission of said City. In keeping with and in furtherance of said policy the following minimum specifications and designs are hereby declared to be the minimum standards which shall be employed in the construction of streets within the aforesaid jurisdiction or Jurisdictions which have not been heretofore accepted by said City for maintenance and upkeep.

SECTION TWO (2). ENGINEERING AND SUPERVISION, All grading, curb and gutter, and pavement work shall be designed, layed out and supervised by a Registered Professional Engineer. Said engineer shall submit to the City and/or planning commission complete sets and plans and specifications of the proposed project for approval before work of any kind commences. In the absence of either a City engineer or planning commission to pass on the validity of said plans and specifications, the engineer shall submit to the City a certificate stating that all designs have met the minimum standards and specifications, before proceeding with the work.

SECTION THREE (3). <u>CITY ACCEPTANCE OF WORK</u>, Hereafter, no street not now accepted by the City for maintenance and upkeep shall be so accepted by the City until it has been curbed and guttered on both sides of the street from intersection to intersection, or for a minimum distance of 300 lineal feet centerline, and such street paved, all to be done in accordance with the standards set out hereafter,

SECTION FOUR (4). <u>SUBGRADES</u>. The subgrade for new pavement shall be free from all organic matter, roots, brush, and vegetable matter and shall be rolled or compacted until firm and able to support without displacement the construction equipment and the compaction specified for the several types of pavements. Soft or yielding subgrade! shall be corrected and made stable before construction proceeds,

SECTION FIVE (5). <u>TABLE OF THICKNESS</u>. The following table has been incorporated in these specifications as a basis of standardizing the paving requirements in and around the City of **Conway**, Arkansas:

Wheel Loads	Type _C qf	<u>Grave</u> Dbl. Seal	el or Stone 2' Hot Asphalt	Dbl.	Cement 1½"Hot Asphalt	Portland Cement Concrete
		Base Thickness				
4,000# or less	Residential	811	7"	611	5"	5"
6,000" or less	Residential Feeder	9 "	8"	6 "	6"	5"
8,000" or less	Commercial	יינו	1 O ^{¥†}	7"	6"	6"
10,000# or less	Route Highway	13"	12"	8"	811	7"
Over 10,000#	Special desi	gn shoul	ld be mads,			

Note: The above thicknesses are based on a subgrada that would be classified as a medium compressible clay with some sand and silt, which is a poor subgrade,

Thicknesses of both flexible and rigid type Pavements may be determined from soils tests and bearing tests run by a reputable testing laboratory, The soils tests shall include soils analysis with identifying soils groups and subgrade Modulus "K" for Rigid Type Pavements and soils analysis with identifying soils groups and CBR fectors for Flexible Type Pavements.

When the above tests are not run by a reputable testing laboratory, above thicknesses shall be **used** without deviation whatsoever.

In no case shall there be less than $\$_{\frac{1}{2}}^{\frac{1}{2}}$ inches in thickness of pavement, including the surface for a flexible type pavement; $6\frac{1}{2}$ inches of soil-cement including the surface; or 5 inches of Portland cement

concrete.

SECTION SIX (6). MATERIALS AND METHODS FOR CONSTRUCTING RIGID PAVEMENTS. Rigid bases shall be construed as bases in which:

- Sand and gravel or stone aggregates are used with Portland cement to make Portland cement concrete and;
- 2. Portland cement is used to stabilize the in-lace or selected soils to make soil-cement.

Portland cement concrete shall have a 28 day compressive strength of not less than 3,000# per square inch, a slump of not more than 3 inches and contain a minimum of 5.5 sacks of cement per cubic yard of concrete,

Jointing, reinforcing, forming, placing, finishing and curing shall be in accordance with the recommendations of the engineer and/or the Portland Cement Association.

Soil-cement materials shall be tested and soil-cement shall be constructed in accordance with the recommendationg of the Portland Cement Association and/or the consulting engineerr

SECTION SEVEN (7). MATERIALS AND METHODS FOR CONSTRUCTING FLEXIBLE BASE, The term flexible base shall be used to describe bases that are constructed of clay gravel, crushed stone, sandy clay gravel, and other granular bases and sealed with asphaltic cement. The gradation of the base materials other than stone shall conform to Class GB-2 of the State of Arkansas Specifications and shall meet all other requirements as set forth for those Materials and Construction Methods set out in Section 202.

The gradation of the base materials for crushed stone shall conform to Class SB-2 of the State of Arkansas Specifications for Crushed Stone **Bases**, and shall meet all other requirements **as** set forth in Section 203 for those Materials and Construction Methods,

SECTION ETGHT (8). <u>SURFACES</u>. The surfaces included in these specifications shall be applied to the flexible and soil-cement base courses.

(a) <u>Double Seal Coat</u>, This surface shall consist of two applications of bituminous materials and mineral aggregates.
The first application shall be at the rate of 0.30 to 0.50
gallons of medium or rapid curing asphalt per square yard applied

evenly with a pressure distributor, followed by an even application 30 to 50 pounds of mineral aggregate per square yard, rolled and broomed. Nineral aggregates shall conform to State of Arkansas Specifications Section 506 for Bituminous Surface Courses, Class No, 8, The second application will be at the rate of 0.30 to 0.50 gallons asphalt per square yard with following application of 30 to 50 pounds of mineral aggregate per square! yard, rolled and broomeh, The second application mineral aggregates shall meet Class No. 9 of the Arkansas Highway Specifications for Bituminous Surface Courses Section 506, The roller shall have a weight of not less than 200 pounds per inch of tread.

(b) Hot Asphaltic Concrete. The hot asphaltic concrete shall meet and conform to specifications as outlined in the State of Arkansas Specifications 605 Asphaltic Concrete Hot Mix Surface Course and Mineral Aggregates meeting Type 3 Specifications. Section 607 on Material and Equipment for Hot Mix Surface Courses shall also be strictly adhered to,

(c) <u>Resurfacing</u>. Existing Streets. There shall be no resurfacing of existing paved streets, except concrete dr brick, until

thicknesses. Said engineer or testing laboratory will make thickness test of not less than 9 test holes uniformly staggered per 300 foot block to obtain a true picture of existing base.

The integral or lip type of curb shall be used with Portland cement concrete pavement.

All curb and gutters shall be of 3,000# compressive strength Portland cement concrete at 28 days, One inch contraction joints shall be every 18 feet and expansion joints every 72 feet. Should crushed stone aggregates be used, the spacing may be 20 and 80 feet respectively,, Curing shall be done with white pigmented membrane or wet burlap for seven days, and started immediately after the concrete has received its initial set.

All curb and gutters shall be muled and finished with a broom finish and backfilled as soon as possible after forms are removed to prevent undermining.

SECTION TEN (10). TESTS AND SPECIFICATIONS,

(a) <u>Concrete Pavement</u>. The engineer shall make all necessary daily tests such as slump, air content, thickness and surface variation, All daily compression test cylinders shall be tested by a reputable testing laboratory and charged to the contractor.

X (b) Soil-Cement Pavement, The engineer shall make daily density and field density, thickness and surface variation tests,
Only current ASTM or State Highway methods shall be employed,

(c) <u>Flexible Pavements</u>. Tests of all materials in the base and wearing surface shall be made during and after the paving is completed in order to control and determine the quantity, quality and thickness of the various materials used. Testing shall be done by a reputable testing laboratory and at the contractors expense, or by the engineer. Only current **ASIM** or State Highway methods shall be employed, At least one test for every 1,000 square yards of base shall be tested for density and thickness of base course; and for each 300 tons of asphaltic surface material, but not less than one test per day, SECTION ELEVEN (**11**) <u>BONDS AND INSURANCE</u>,

(a) <u>Public Liability and Property Damage Insurance</u>, The Contractor shall furnish public liability insurance in an amount of not less than \$50,000.00 for injuries, including accidental death to any one person, and subject to the same limit for each person, and for an amount not less than \$100,000.00 for any one accident. Property damage insurance shall be in an amount of not less than \$10,000.00 to \$20,000.00. (b) <u>Performance Bond</u>. This bond shall be optional except with improvement districts. This bond shall be in accordance with the State of Arkansas Legislature Act No. 351 of 1953; must be made by a satisfactory surety company, organized in conformity with the laws and/or doing business in the State of Arkansas. The bond shall be in an amount of 100% of the contract price as surety for the faithful performance of all work done under the . contract, and for the payment of all persons performing labor and/or furnishing materials in connection with the work.

(c) <u>Maintenance Bonds</u>, The contractor shall furnish the City with a five year maintenance bond in the amount of 50 per cent of all pavement items, which shall go into full force and effect from the date of the City's acceptance of the project in full,, The City and/or the engineer shall make periodic inspections of the project and shall notify the contractor of any failures that require immediate replacement. Prior to the end of the five year period covered by the maintenance bond, the City officials with the engineer shall make an inspection of the work and shall notify the contractor of all defects which must be corrected and accepted by the City **Before** releasing the contractor from his bond and acceptance by the City for future maintenance. SECTION TWELVE (12). **PENALTY**. Should any project willfully be

started by a person, firm, organization or engineer before receiving approval from the City, said person, firm, organization or engineer shall be subject to a find of not less than 4500.00 nor more than \$1,000.00 for each offense and said project stopped until officially approved*

SECTION THIRTEEN (13). VALIDITY AND SEPARABILITY. If any clause or section, sentence, or phrase of this ordinance is for any reason held to be invalid or unconstitutional by the courts, such decision or decisions shall not effect the validity or constitutionality of the remaining portions of this ordinance.

SECTION FOURTEEN (14). It has been determined that the lack of standards and specifications for streets, curb and gutters, and other

improvements within the area of jurisdiction of the City of Conway, Arkansas, including improvement districts, covering design, approvals, materials, construction materials, construction methods, and maintenance of streets creates a condition hazardous to the public, health and aafety of the citizenry of this City; that this ordinance will correct the evil, therefore an emergency is hereby declared to exist and this ordinance being necessary for the public peace. health an safety, shall in full force and effect from and after its passage and approval and all ordinances and parts of ordinances in conflict herewith are hereby repealed.

Passed. 3-2861- Walt APPROVED:

<u>Edgar B. Parker</u> Mayor

ATTEST: <u>Walter Dunaway</u> City Clerk

4-27 dile