ORDINANCE NO. 425

AN ORDINANCE ESTABLISHING THE CONSTRUCTION STANDARDS FOR ALL STREETS AND ROADS IN THE CITY OF HEBER SPRINGS, ARKANSAS AND ESTABLISHING PENALTIES FOR VIOLATIONS THEREOF, DECLARING AN EMERGENCY AND OTHER PUROPSES.

BE IT ORDAINED BY THE TOWN COUNCIL OF THE INCORPORATED TOWN OF HEBER SPRINGS, ARKANSAS, THAT THE FOLLOWING CONSTRUCTION STANDARDS FOR ALL STREETS AND ROADS IN THE CITY OF HEBER SPRINGS, ARKANSAS SHALL HEREBY BE ESTABLISHED AS FOLLOWS:

1. Monuments:

- a. Concrete monuments four (4) inches in diameter or square two (2) feet long with a flat top, shall be set at all street corners, at all points where the street lines intersect the exterior boundaries of the subdivision, and at angle points of curve in each street. The top of the monuments shall have an indented cross to identify properly the location and shall be set flush with the finished grade.
- b. All other lot corners shall be marked with iron pipe or steel rod not less than one-half (½) inches in diameter and twenty four (24) inches long and drive so as to be flush with the finished grade.

2. Grade:

- a. All streets and roads shall be graded to their full width by the sub dividers where necessary so that the area between the outer edge of the drainage ditch and the right of way line will be suitable for mowing by adjacent home owners, and the pavements be constructed on the same level plane. Due to special topographical conditions, deviation from the above will be allowed only with prior approval of the Planning Commission.
- b. Streets with potential heavy traffic which requite a wider paved area shall be approved by the Planning Commission before work is started.
- c. <u>Preparation</u>: Before grading is started the entire right of way area shall be first cleared of all stumps, roots, brush, trees, and other objectionable materials.
- d. Attached as exhibit A is a drawing of a street showing the width, the space between right of way line and drainage ditch, the drainage ditch, the space between the drainage ditch and the edge of the pavement, the pavement and its width.

- e. <u>Cuts</u>: All tree stumps, soft and unstable materials and other obstructions shall be removed to the bottom of the sub grade. Shale rock and sand, when encountered, shall be scarified to the sub grade.
- f. Fill: All suitable material from roadway cuts may be used in the construction of full, approaches or other places as needed. Excess materials, including organic materials, soft clays, etc shall be spread inlayers not to exceed twelve (12) inches loose and compacted by a sheep's foot roller. If a sheep's foot roller is not used the fill shall be spread in layers not exceeding two (2) inches. The filling of utility trenches and other places not accessible to a roller shall be mechanically tamped, but where water is used to assist compaction, the water content shall not exceed the optimum of moisture.
- g. Storm Drainage: No section of street over 300 feet in length shall be permitted without storm drainage. An adequate drainage system, including necessary open ditches, pipes, culverts, intersectional drains, drop inlets, bridges, etc shall be provided for the proper drainage of all surface water. Ditches shall not be deeper than necessary to drain the road No ditch slopes shall be steeper than 2:1 except in stable rock. Minimum grades for streets shall be .5%. Intersections shall be graded so that no water will be left standing. Cross drains shall be provided to accommodate all natural water flow and shall be of sufficient length to permit full width roadway and the requited slopes. The size openings to be provided shall be determined by the Building Inspector, but in no case shall the pipe be less than ten (10) inches. Cross drains shall be built on straight line and grade, and shall be laid on a firm base but not on rock.
- h. In designing a drainage system the sub divider shall be guided by the following standards:
- 1. All streets shall be provided with an adequate storm drainage system consisting of side ditches and culverts as determined by the Planning Commission
- 2. Street drainage should serve as the primary drainage system and it should be designed to carry at least the street, adjacent land, and buildings storm water drainage. In order to insure that the maintenance of a properly designed and installed drainage system the following shall be considered:

Drainage swales, (ditches) along dedicated roadways and within the right of way, or on the dedicated drainage easements, shall not be altered; dig out, filled in, tiled or otherwise changed. Property owners may maintain these swales as sodded grassways, or other non eroding surfaces. Water from roofs and parking areas should be contained on the property long enough so that side drainage swales or ditches will not be damaged by such water. Driveways may be constructed over these swales or ditches only when appropriate sixes culvers or other approved structures are provided. Culvers shall be protected at the ends by head wall s or metal sections, and if damaged enough to retard the water flow, shall be replaced.

- i. When side ditches are used for storm drainage they shall comply with the following:
 - 1. The street side shall begin six (6) feet from the edge of the pavement.

- 2. There must be a minimum of twelve (12) inches at the lowest point and not more than twenty (20) inches at the deepest point.
- 3. The width of the side ditch shall be a minimum of four (4) feet across and a maximum of six (6) feet across.
- j. When a home owner wants to fill in the drainage ditch in front of his property he may do so only with the approval of the Building Inspector, and must comply with the following:
- 1. Use plastic, galvanized concrete or steel culvert, with the size to be determined by the Building Inspector.
- 2. Completely cover the ditch in front of his property level with the surrounding grade.
- 3. When the length of the covered ditch is 100 feet or less and greater than 50 feet, a clean out 2 foot by 2 foot shall be placed in the center of the covered area.
- 4. If the covered area is more than 100 feet, but less than 150 feet then a 2 foot by 2 foot clean out shall be required every 50 feet or 1/3 the distance from each end, whichever is less.
- k. When Curb and Gutter type of storm drain is requested by the developer or required by the Planning Commission for good and valid reason, then the specifications and requirements contained in item 3 Curbs and Gutters, shall be followed:
- 1. When a street has a grade of 15% or more then curb and gutter shall be required with a minimum 20 foot paved street between the gutters.
- 3. <u>Curbs and Gutters</u>: Except on rural streets, the sub divider shall provide permanent four (4) inch concrete roll curbs with a minimum of eighteen (18) inch interval concrete gutters or standard rolled curb and gutters.
- a. <u>Description</u>: This item shall consist of the construction of concrete combination curb and gutter in accordance with these construction standards and in conformity with the locations, lines, and grades as shown on the plans or as directed by the Building Inspector and the Planning Commission.
- b. <u>Excavation</u>: The sub grade shall be excavated to the required depth. All soft yielding material shall be removed and replaced with suitable material and the entire sub grade shall be thoroughly compacted.
- c. <u>Forms</u>: Forms shall be metal or wood free from warp and of sufficient strength to resist springs during the process of depositing concrete. They shall be secured, staked, braced, set and held firmly to the required line and grade. All forms shall be cleaned and oiled before concrete is placed against them. Curb and gutter shall be poured at the same time and shall be thoroughly spaded and tamped to insure proper bond and density.
- d. Expansion Joints: Expansion joints of one-half ($\frac{1}{2}$) inch premoulded joint filler shall be installed on not more than forty (40'-0") foot center in continuous runs of curbs, and at all intersections of other rigid construction. The edges of joints shall have a tooled finish to a one-fourth ($\frac{1}{4}$) inch radius. Dowell bars shall be installed at all expansion joints as shown on details.
- e. <u>Finish</u>: Forms shall be removed as promptly as practicable. All defective spots shall be repaired immediately by patching with cement mortar. All concrete surfaces to

be exposed shall be wood float finished. Plastering of surfaces shall not be permitted. Edged and joints shall be finished with a suitable edging tool.

- f. <u>Curing</u>: Curb and gutter shall be cured by keeping moist for a period of twenty four (24) hours. Certain patented types of curing are acceptable, but must meet with the approval of the Building Inspector. Where curbs and gutters are constructed on tangent grades, it shall be the Contractor's responsibility to check the grade of the cubs and gutters with a string line at fifty (50) feet intervals to determine that there are no appreciable sags or depressions in the curbs or in the completed curbs or gutters. Where completed subs and gutters are not found to be in accordance with the true grade, or where they are not in proper alignment, the Contractor shall immediately correct these deficiencies at no expense to the owner. All adjacent road ditches which empty unto the new gutter grades shall be properly shaped and dressed to a satisfactory slope for continuous flow of incoming water.
- g. <u>Backfilling</u>: After the concrete has set sufficiently the space behind the curb shall be refilled to the required elevation with suitable material which shall be thoroughly compacted and neatly graded.

4. <u>Preparation of the Sub Grade:</u>

- a. Sanitary sewer service lines and all water service lines shall be stubbed out from under streets in new subdivisions before construction of street. Boring shall not be permitted without prior approval by the Building Inspector.
- b. The sub grade shall be fine graded to conform to the typical section in the approved plans. It shall be true to line and grades established by the Engineer. All soft yielding material shall be removed from the surface and shall be replaced with suitable material and the entire sub grade shall be thoroughly compacted. The compaction shall be accomplished with any equipment suitable for obtaining a smooth, hard compacted surface.
- 5. <u>Roadway Base</u>: After preparation of the sub grade, the road bed shall be surfaced with material of no lower classification than crush rock, stone or gravel. The size of the crushed rock or stone shall be that generally known as "crushed rock, stone" from 2 ½ inches down including dust. The compacted thickness of the stone roadway shall be no less than six (6) inches.
- a. The crushed stone shall be placed on the sub grade and spread uniformly to such depth and lines that when compacted it will have the thickness, width and cross section shown on the plans, herein. When the compacted depth of the base course as shown on the plans if six (6) inches, or more, the depth of the base course as shown on the plans if six (6) inches, or more, the material shall be placed in courses of approximately one half (½) depth and each course shall be constructed and consolidated as prescribed herein and independently of the other.
- b. The spreading shall be done the same day that the material is hauled, and it shall be performed in such manner that no segregation of course and find particles nor nests or hard areas caused by dumping the crushed stone on the sub grade will exist. To ensure proper mixing the crushed stone shall be bladed entirely across the road bed before bringing spread. Care must be taken to prevent mixing of sub grade or shoulder material with the base course material in the blading and spreading operation.

Compaction of the crushed stone will be brought about by the use of vibrating rollers. The required crown and grade shall be maintained by blading so that the base will form a smooth and uniform surface. The following are acceptable:

GRAVEL or CRUSHED STONE AHDGB 203 AHD SB -2 OR 3 FHA Date Sheet SK 101-201

6. Prime Coat Application:

- a. <u>Materials</u>: All materials shall meet the requirements for MC-30 asphalt as provided in Section 510, part 5, Arkansas Sate Highway Department Standard Specifications for Roads and Bridges; except that the type of asphalt (MC-30) may be changed at the option of the Planning Commission if weather conditions are such that a different type of material will be more practical.
- b. <u>Application of Bituminous Material</u>: After the surface to be treated has been prepared in accordance with the specifications outlined above, the bituminous material for the prime coat shall be sprayed uniformly over the surface by means of an approved type of mechanical pressure distributor at the rate of two-tenths (2/10) to four-tenths (4/10) gallon per square yard.
- 7. <u>Hot Mix</u>: Hot mix shall be laid in one course to a compacted thickness of two (2) inches or 220 lbs. per square yard. The minimum compaction shall be not less than 92% thermal density.
- a. <u>Seasonal Limits</u>: No asphalt material shall be laid when the temperature of the air is fifty (50°) degrees Fahrenheit and falling or during unfavorable weather conditions.
- 8. <u>Street Construction Work Inspection and Approval</u>: Street construction work must be inspected and approved by the Building Inspector as follows:
- a. After curbs and gutters have been constructed and sub grade has been prepared for base gravel, when curb and gutters are required.
 - b. After base gravel has been laid and compacted.
- c. Sidewalks when provided shall be placed one foot from the property line to prevent interference or encroachment by fencing, wall, hedges, or other planting or structures placed on the property at a later date. In single family residential areas, concrete, or bituminous sidewalks shall be four (4) feet wide and four (4) inches thick.
- 9. <u>Installation of Utilities</u>: After grading is completed and approved and before any base is applied, all of the underground work, including, but not limited to water mains, sewers gas main, etc. and all service connections shall be installed completely and approved throughout the length of the road and across the flat section. Boring shall not be permitted without approval of the Building Inspector. All driveways for houses to be built by the developer shall be cut and drained.

- 10. <u>Backfilling Utility Ditches</u>: When a sanitary sewer main line or service line has been installed in or across a City street whether a new street in a new subdivision or in an existing street, the backfill shall be made in the following manner to secure good compaction.
- a. Backfilling may be done with soil removed from ditch if it is suitable for compaction otherwise sand or other suitable material must be used. Compaction on main lines must be done from the bottom up by a mechanical tamper of by jet type water pressure, under the direction of the Building Inspector. Backfilling with loose dirt and compacting on top shall not be permitted.
- b. All service lines, water, sewer, or gas must be compacted with a mechanical tamper, beginning at the bottom of the ditch, compacting in layers; if existing material is not suited for backfill then sand or find graded material must be used.
- 11. <u>Repair of Street Cuts:</u> All street cuts for utility lines, etc, shall be approved by the Building Inspector, according to standards equal to those from which the street was built.
- 12. <u>Trees and Shrubs</u>: No trees and shrubs shall be planted on public right of way, without prior approval of the Planning Commission. No private signs or other obstructions shall be placed on public right of way.
- 13. <u>Street Name Signs:</u> Street name signs shall_be placed on one corner of each intersection. Signs shall be placed on posts at least seven (7) feet above the grade and within ten (10) feet of the curb. These signs in new subdivisions shall be erected by the Developer to conform with other street signs and shall be at the expense of the Developer.
- 14. <u>Penalties</u>: Any person violating any provision or any part of the foregoing Ordinance or who shall fail to comply with any order thereunder shall be guilty of a misdemeanor and punishable by a fine of neo less than twenty five (\$25) dollars and not to exceed on hundred (\$100) dollars, for each offense, and each day such violation exists shall constitute a separate offense.
- 15. <u>Approval</u>: All above construction work must be approved by the Building Inspector, or in his absence the City will provide and inspector.
- 16. Emergency Clause: Emergency: it is hereby found and determined by the City Council of Heber Springs that no required minimum standards for construction of streets and roads in the City of Heber Springs exists, and that properly constructed streets and rods are vital to the health, safety, and welfare of the people of this City. Therefore, an emergency is declared to exist and this Ordinance being necessary for the protection of the public peace, health, and safety shall be in full force and effect from and after its passage and publication.

Raymond Robus

Raymond Robus, Mayor

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Dated: 6-14-83