

## ROAD SPECIFICATIONS/PROCEDURE

### I. Road and Street Specifications Grading, Site Work, and Pavement Construction

**Purpose:** In the interest of improving the quality of public road construction and decreasing maintenance requirements, the City of Fairview, Tennessee (hereinafter referred to as the City) has adopted the following specifications for design and construction of public roads.

II. **Scope:** These specifications include minimum criteria for the design and construction of public roads and/or roads which will be later dedicated to the city limits of Fairview, Tennessee. These specifications are limited to site grading and pavement design and do not include criteria for surface drainage and geometric design. The latter surface drainage and geometric design. The latter criteria are a part of the Subdivision Standards and these specifications are intended to be used as a supplement to those criteria. Where there is conflict between the Subdivision Standards and these specifications, these specifications will govern.

### III. General:

A. **Engineer:** The term Engineer as hereinafter used will refer to the Engineers who have been employed by the City to perform design evaluation and construction monitoring and testing for roads and streets.

B. **Developer/Contractor Responsibilities:** The City has employed the Engineer and developed these specifications for its own use. No design requirement or testing and monitoring by the Engineer as outlined herein shall relieve the Developer/Contractor from his responsibility to provide a stable roadway in compliance with the specifications.

It shall be the Developer's/Contractor's responsibility to notify the Engineer at least twenty-four (24) hours in advance of any grading or paving operations to allow for adequate scheduling for inspection. Noncompliance with this notification requirement will be sufficient cause for rejection of the work.

C. **Items not Specifically Covered:** It is the intent of these specifications to conform in general to the "Standard Specifications for Road and Bridge Construction" of the Tennessee Department of Transportation.

### IV. Design Requirements:

A. **Definitions:** Pavement refers to all components of the roadway section above the subgrade. Pavement includes the mineral aggregate base course, if any, and the asphaltic concrete wearing surface.

B. **Subgrade:** Subgrade refers to the earth, soil or rock upon which the pavement section is placed.

C. **Pavement Section Designs:** Minimum pavement thickness designs are specified as follows:

<b><u>Street Designation</u></b>	<b><u>Thickness of Mineral Aggregate Base (Inches)</u></b>	<b><u>Prime Coat (Gallons) per Square Yard</u></b>	<b><u>Bituminous Plant Mix Base (Inches)</u></b>	<b><u>Thickness of Asphaltic Concrete Wearing Surface (Inches)</u></b>
<b>Arterial Streets and Highways</b>	8	<b><u>Required: See X, Prime Coat, - (Deleted by Resolution 2004-3, July 13, 2004) Appendix D, Infra</u></b>	3	2
<b>Collector Streets</b>	8	<b><u>Required: Supra</u></b>	2	2
<b>Minor Residential Streets</b>	8	<b><u>Required: Supra</u></b>	2	2
<b>Marginal Access Streets, and Cul-de-sacs</b>	8	<b><u>Required: Supra</u></b>	2	2
<b>Commercial or Industrial Streets</b>	8	<b><u>Required: Supra</u></b>	3	2

These minimum pavement thicknesses are based on a minimum subgrade CBR<sub>2</sub>, value of six (6) percent. If the actual CBR of the subgrade is less than six (6) percent, an increased thickness will be required. The minimum thicknesses refer to in-place, as built thicknesses of the pavement components. Mineral aggregate base thickness shall be as measured immediately prior to paving.

1. The California Bearing Ratio as determined by ASTM D-1883.

Alternate pavement sections will be considered if supporting computations and engineering design data are submitted. Supporting data shall include information regarding the engineering characteristics of the soil, such as moisture-density relationship, Atterberg limits, California Bearing Ratio, grain size analysis, etc. Thickness designs shall be prepared by a registered professional engineer experienced in designing pavements based on geotechnical engineering data.

- D. **Geologic Hazards:** Any areas which present geologic hazards, such as roads to be constructed on steep slopes, must be investigated by a competent, experienced geotechnical engineer or engineering geologist. If there is a potential for instability, design measures shall be included to minimize the risk.
- V. **Clearing and Grubbing:** All vegetation, topsoil and deleterious or unstable materials must be removed from the road construction areas. All roots, larger than one (1) inch in diameter, must also be grubbed out and removed. Topsoil should be stockpiled at designated areas for re-use in landscaping.
- VI. **Proofrolling:** Immediately before beginning fill placement in areas to be filled, and immediately before applying the aggregate base in cut areas, the subgrade

must be proofrolled using a heavily loaded pneumatic-tired vehicle such as a loaded dump truck. This proofrolling must be observed by the Engineer and any soft or unstable areas delineated thereby must be undercut to stable ground and backfilled with approved fill.

**VII. Fills:** Fill must consist of either soil, rock, or an approved soil/rock mixture free from roots, wood, organic matter, rubble and any other deleterious material.

- A. Soil fill must be free of rock fragments over six (6) inches in maximum dimension and must have a minimum dry density when compacted of ninety-five (95) pounds per cubic foot.

Soil fill must be placed in thin lifts and compacted to at least ninety-five (95) percent of its maximum dry density as determined by ASTM D-698 (Standard Proctor). Soil fill must be stable after compaction, regardless of compaction percentage. Adequate compaction will be verified by in-place density tests and by inspection performed by the Engineer.

- B. Rock filled shall consist of durable, clean, well-graded "shot rock" or crushed stone. The maximum dimension of rock fragments used in the rock fill shall be thirty-six (36) inches and there shall be less than fifteen (15) percent fines (soil and rock fragments passing a U.S. No. 200 sieve) in the mass.

Rock fill shall be placed in lifts not to exceed thirty (30) inches and shall be compacted with heavy steel-wheeled or tracked vehicles. Adequate compaction will be judged in the field by the Engineer based on stability of the fill in place.

- C. An approved soil-rock mixture shall consist of soil interspersed in a well-graded mixture of rock fragments no larger than twelve (12) inches in maximum dimension. The soil-rock mixture shall be placed in lifts not exceeding twelve (12) inches in maximum thickness and compacted with tamping rollers until the soil portion of the mass is compacted to at least ninety-five (95) percent of its maximum dry density as determined by ASTM D-698. The soil portion of the mass shall be within +/- two (2) percent of its optimum moisture content during placement. Compaction will be verified by in-place density tests where possible, but if excessive rock fragments prevent density tests, adequate compaction will be judged by the Engineer based on the stability of the mass under the influence of heavy construction equipment.

The contractor shall furnish samples suitable for determining moisture density relationship of all soil types to be used in fills. These samples shall be furnished at least one (1) week in advance of their use on the project. The contractor shall contact the Engineer to allow inspection of the sampling procedures if the Engineer so desires.

**VIII. Excavations:** If excavations are left exposed to the weather for extended periods of time after they are brought to grade, and/or if deterioration of the subgrade has occurred by either wetting or drying, appropriate corrective actions must be taken. Corrective action shall consist of scarifying and recompacting the subgrade, or by use of other measures as deemed appropriate by the Engineer.

- IX. **Mineral Aggregate Base Course:** The subgrade must be prepared stable and level and be approved by the begins. The mineral aggregate base shall consist of hard, durable crushed limestone. The gradation for mineral aggregate base shall be: Class A aggregate, Grading D, as specified by Section 903.05, of the State of Tennessee "Standard Specifications for Road and Bridge Construction", or other approved material, except that in no case shall the weight of material passing the U.S. No. 200 sieve (wet method) exceed fifteen (15) percent of the mass by weight. The mineral aggregate base shall be spread by a mechanical spreader or other approved method which will prevent segregation. The mineral aggregate shall be spread in layers no greater than six (6) inches in thickness and compacted by appropriate means to at least ninety-eight (98) percent of its maximum dry density as determined by ASTM D-1557.

Any damage to the base course during construction, including gravelling, loss of density, or loss of material due to construction traffic shall be repaired by replacing and recompacting the base.

- X. **Asphaltic Concrete Hot Mix:** (Deleted X, Prime Coat, Renumbered XI, Asphaltic Concrete Hot Mix, to X, etc., by Resolution 2004-3, July 13, 2004)
- A. **Bituminous Plant Mix Base:** The bituminous plant mix base shall comply with Section 307, of the Tennessee Department of Highways "Standard Specifications for Road and Bridge Construction".
- B. **Surface Course:** The pavement surface course shall consist of asphaltic concrete surface (Hot Mix) Grading "D" or "E" in compliance with Section 411, of Tennessee Department of Highways Standard Specifications, except that only Grading "D" may be used where the vertical grades exceed ten (10) percent.
- XI. **Shoulders:** The shoulders of streets shall be constructed of double bituminous surfacing.

**Double Bituminous Treatment** - Upon completion of the asphalt (hot mix) wearing surface, the shoulders of the street shall be surfaced so as to make the shoulders flush with the asphalt (hot mix) wearing surface. The shoulder paving process shall be completed before the street is opened for general use by traffic. The shoulder paving process shall be done as follows:

The first course shall be applied at the rate of four-tenths (4/10) gallon per square yard using Emulsified Asphalt, RS-2 or Cut-back Asphalt, RC-800 or RC-3000, and shall be immediately covered with crushed limestone, Tennessee Specifications Size No. 6, at the uniform rate of forty (40) pounds per square yard. This shall then be broomed and rolled with a three (3) wheel five (5) ton or an eight (8) ton tandem roller. After the first course has been thoroughly rolled and any inequalities in the cross section have been corrected, the second course shall be applied at the rate of thirty-five (35) pounds per square yard. The entire roadway shall be broomed and rolled thoroughly. All work and material included under this section shall be performed in accordance with Section 404, of the Tennessee Department of Transportation Standard Specification (dated March 1, 1981).

**XII. Procedure for Street Acceptance:**

- A. Preparation of preliminary plat according to procedural and design requirements of the subdivision standards of the Fairview Municipal Planning Commission.
- B. Submission of preliminary plat to the planning commission staff fourteen (14) days prior to presentation before the planning commission.
- C. Appearance before planning commission for preliminary plat approval. At this time the developer will:
  - 1. Be notified of design requirements for grading, site work, and pavement construction.
  - 2. Be notified of developer's responsibility to allow for adequate scheduling for inspection.
  - 3. Be allowed variances in pavement section design according to the requirements of Subsection 601.3, Paragraph C, of the Subdivision Standards, such data being submitted to the planning commission staff before final plat approval.
  - 4. Be notified of any conditions for approval.
  - 5. Pay inspection fee if work commences before final plat approval.
- D. **Application for Final Plat Approval:** Submission of final plat to planning commission staff fourteen (14) days prior to presentation before the planning commission.
  - 1. Inspection fee paid by developer.
  - 2. Developer must post performance bond or complete improvements before final plat is signed.
- E. Construction inspection by city officials when developer requests dedication. A warranty letter will be required. Notification of findings of the inspection within thirty (30) days. The city will require a completion report from the designated engineer and show compliance with the road and street specifications for grading, site work, and pavement construction. A favorable inspection results in official dedication. Maintenance bond must be posted before official dedication.
- F. **Acceptance of the Roadway:** Before the expiration of the warranty period, the city shall inspect the roadway for final acceptance. After a final inspection by the city the developer will be notified within thirty (30) days of the findings. Any deficiencies will be noted and must be corrected before acceptance of release of bond by the city. A favorable inspection will result in the final acceptance of the street by the city. If deficiencies are not corrected within sixty (60) days, the bond will be subject to forfeiture.

**XIII. STREET ACCEPTANCE CHECKLIST:**

Name of Subdivision \_\_\_\_\_ Section \_\_\_\_\_

Location \_\_\_\_\_

Street Name and Length (Linear Feet) \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Total Length of Streets in Development \_\_\_\_\_

Owner/Developer \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

1. Preliminary Plat Submitted to Planning Commission Staff:

Date: \_\_\_\_\_

2. Planning Commission Meeting on Preliminary Plat:

Date: \_\_\_\_\_

3. Variances Granted: \_\_\_\_\_

4. Conditions Required: \_\_\_\_\_

5. Inspection Fee Paid: \_\_\_\_\_

(Date)

Amount: \_\_\_\_\_

6. Final Plat Submitted to Planning Commission Staff:

Date: \_\_\_\_\_

7. Planning Commission Meeting on Final Plat:

Date: \_\_\_\_\_

**XIII. STREET ACCEPTANCE CHECK LIST (Continued)**  
**Page 2**

8. **Performance Bond Posted or Improvements Completed:**  
Date: \_\_\_\_\_ Amount: \_\_\_\_\_
9. **To be Released:** \_\_\_\_\_  
(Date)
10. **Signing of Final Plat:** \_\_\_\_\_  
(Date)
11. **Request for Dedication:**  
Construction Inspected By: \_\_\_\_\_  
on \_\_\_\_\_  
(Date)
12. **Completion Report Submitted:** \_\_\_\_\_  
(Date)
13. **Submission of Warranty Letter:** \_\_\_\_\_  
(Date)
14. **Notification of Dedication:** \_\_\_\_\_  
(Date)
15. **Approval:** \_\_\_\_\_ **Disapproval:** \_\_\_\_\_
16. **For Following Reasons:** \_\_\_\_\_  
\_\_\_\_\_
17. **Final Inspection of Acceptance:**  
Inspected by: \_\_\_\_\_
18. **Inspected:** \_\_\_\_\_  
(Date)
19. **Notification of Acceptance:** \_\_\_\_\_  
(Date)
20. **Approval:** \_\_\_\_\_ **Disapproval:** \_\_\_\_\_
21. **For Following Reasons:** \_\_\_\_\_  
\_\_\_\_\_

**XIV. SUBDIVISION RECORD - PRELIMINARY PLAT**

**Name of Subdivision:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Owner:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Agent:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Surveyor:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Submitted for preliminary approval:** \_\_\_\_\_  
(Date)

**CHECKLIST**

\_\_\_ **Copies submitted \_\_\_\_\_ days prior to meeting.**

\_\_\_ **Drawn to a scale of not less than \_\_\_\_\_ inches equals \_\_\_\_\_ feet.**

\_\_\_ **Name, location, owner, and surveyor.**

\_\_\_ **Date, north point, and graphic scale.**

\_\_\_ **Location of all existing physical features on land and nearby properties.**

\_\_\_ **Names, of adjoining property owners and/or subdivisions.**

\_\_\_ **Plans of proposed utility layouts.**

\_\_\_ **Names, locations and dimensions of proposed streets, alleys, easements, pars and reservations, lot lines, etc.**

\_\_\_ **Flood problem checked, flooded areas outlined if applicable.**

\_\_\_ **Profiles of all streets at required scales.**

\_\_\_ **Contours at not more than five (5) foot intervals.**



**XIV. SUBDIVISION RECORD - PRELIMINARY PLAT (Continued)**  
Page 2

\_\_\_ Acreage of land to be subdivided.

\_\_\_ Conforms to general requirements and minimum standards of design.

Approved \_\_\_\_\_ to proceed to final plat.  
(Date)

Subject to following modifications: \_\_\_\_\_

Variances Granted: \_\_\_\_\_

Disapproved: \_\_\_\_\_ for following reasons:  
(Date)

\_\_\_\_\_

Signed: \_\_\_\_\_  
Secretary of Planning Commission

**XV. SUBDIVISION RECORD - FINAL PLAT**

**Name of Subdivision:** \_\_\_\_\_

**Location:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Owner:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Telephone:** \_\_\_\_\_

**Preliminary Approval Granted:** \_\_\_\_\_  
(Date)

**Submitted for FINAL approval:** \_\_\_\_\_  
(Date)

**CHECKLIST**

- \_\_\_ Submitted within 14 days of regular planning commission meeting.
- \_\_\_ Drawn to a scale of 1" equals 100' on sheets not larger than 22" x 24".
- \_\_\_ Location of Sketch Map showing site in relation to area.
- \_\_\_ Date, true north point, graphic scale.
- \_\_\_ The size and location of any water and sewer mains.
- \_\_\_ Any easements for rights of way provided for public services, utilities, and the disposal of surface water.
- \_\_\_ Bearings of property lines and sufficient engineering data to locate all lines including radii, angles, and tangent distances.
- \_\_\_ The limitation and/or dimensions of all easements.
- \_\_\_ Notation of any areas to be dedicated to public use.
- \_\_\_ Lot lines, alleys, building setback lines.
- \_\_\_ Lines and names of all streets and roads.
- \_\_\_ Names, locations of adjoining properties or subdivisions.
- \_\_\_ Dimensions to the nearest 100th of a foot and angles to the nearest minute.
- \_\_\_ Certificate of Ownership and Dedication.

**XV. SUBDIVISION RECORD - FINAL PLAT (Continued)**  
**Page 2**

- Lot numbered in numerical order.
- Certificate of Accuracy.
- Certificate of Approval of Utility Systems:  
Water: \_\_\_\_\_ Sewer: \_\_\_\_\_ Location and description of  
monuments: \_\_\_\_\_.
- Certificate of Approval of Streets.
- Certificate (unsigned) of Approval for Recording.
- Required physical improvements installed or bond posted in the amount of  
\$ \_\_\_\_\_.
- Approved as presented.
- Approved subject to correction of deficiencies noted in the commission  
minutes.
- Variances granted as indicated in the minutes.
- Disapproved for reasons indicated in the minutes.

**XVI. DRAWINGS OF THE STANDARD ROAD SPECIFICATIONS:**

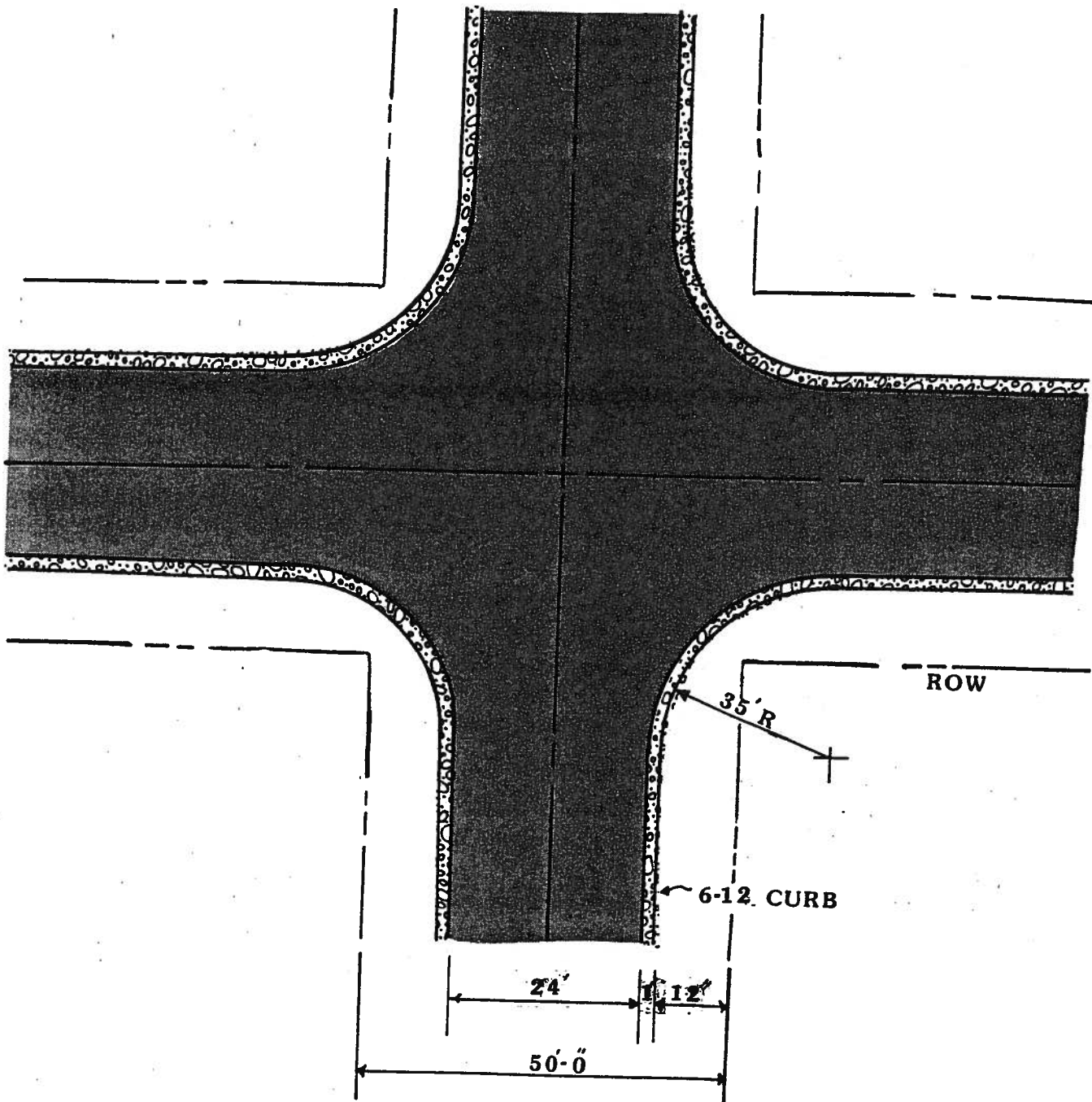
- Drawing No. 1-A Plan for Curbed Minor and Marginal Access Residential Streets**
- Drawing No. 2-A Road Sections for Minor and Marginal Access Residential Streets**
- Drawing No. 3-A Plan for Curbed Arterial and Collector Residential Streets**
- Drawing No. 4-A Road Sections for Arterial and Collector Streets**
- Drawing No. 5-A Plan for Curbed Commercial-Industrial Streets**
- Drawing No. 6-A Road Sections for Commercial-Industrial Streets**
- Drawing No. 7-A Intersection Detail Conventional Section**

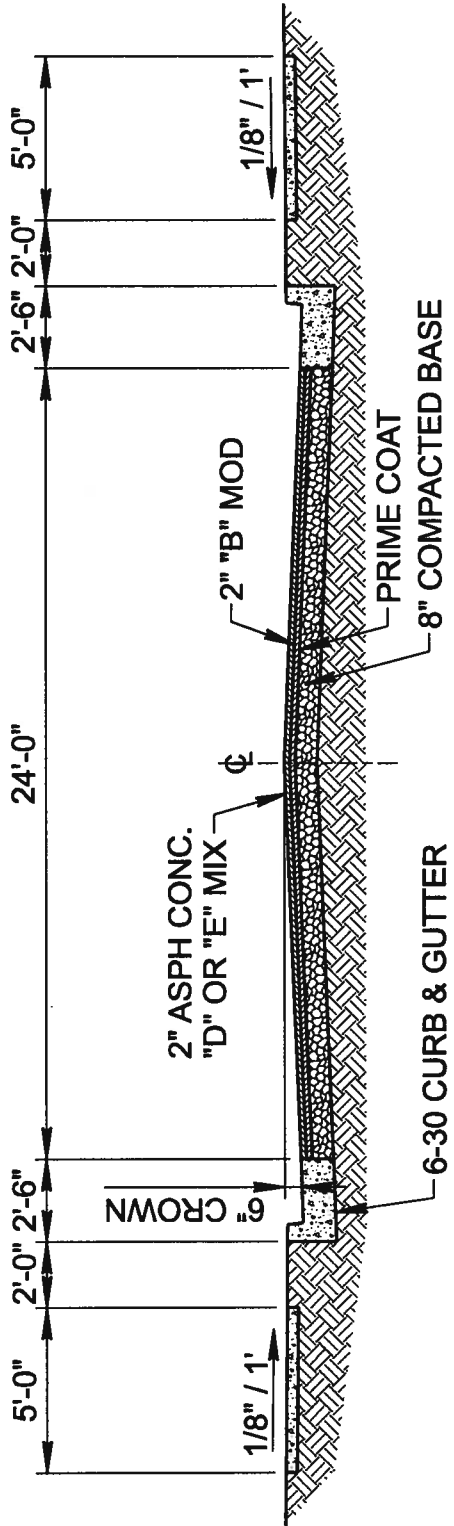
DRAWING NO. 1-A

# PLAN FOR CURBED MINOR AND MARGINAL ACCESS RESIDENTIAL STREETS

## REQUIRED ROAD SECTION

NOT TO SCALE

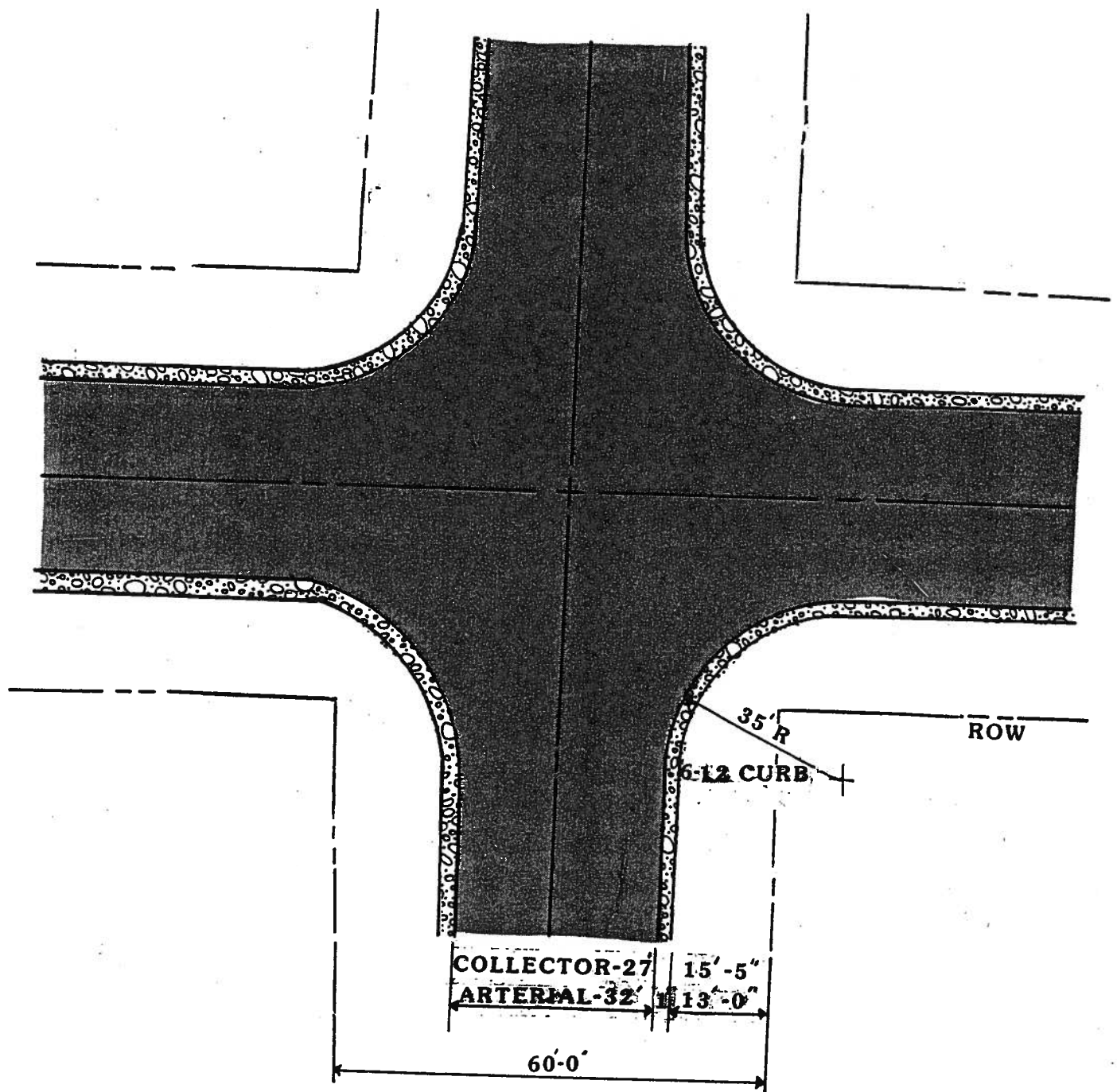


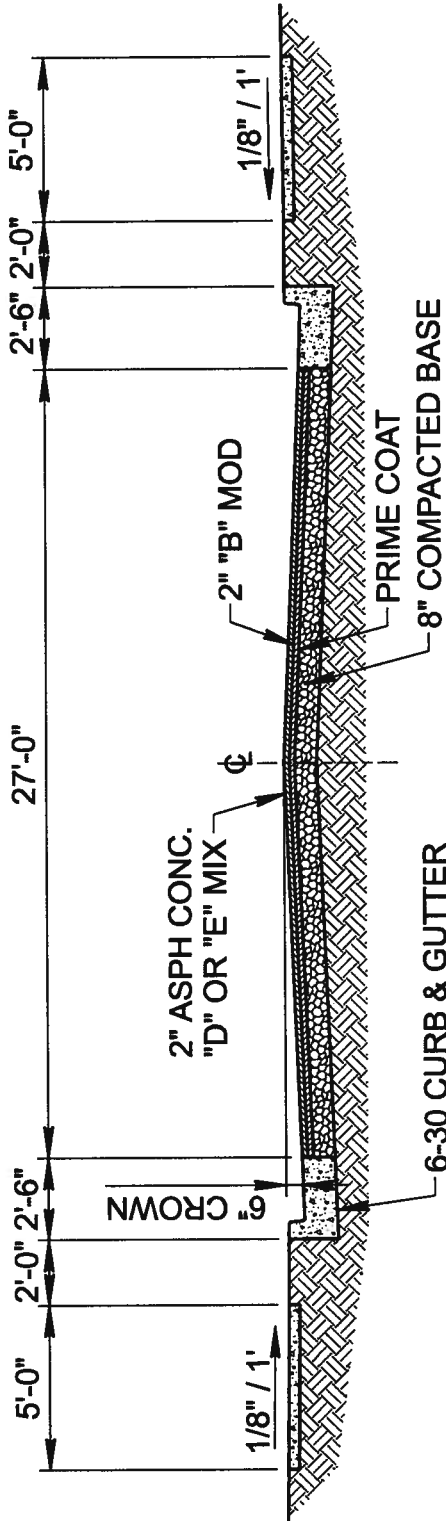


REFER TO PAGE 101  
 PAVEMENT SECTION DESIGNS  
ROAD SECTIONS FOR MINOR AND MARGINAL ACCESS  
RESIDENTIAL STREETS  
 (NOT TO SCALE)

# PLAN FOR CURBED ARTERIAL AND COLLECTOR RESIDENTIAL STREETS REQUIRED ROAD SECTION

NOT TO SCALE





REFER TO PAGE 101  
 PAVEMENT SECTION DESIGNS  
ROAD SECTIONS FOR COLLECTOR  
 RESIDENTIAL STREETS  
 (NOT TO SCALE)



**JAMES CIVIL ENGINEERING**

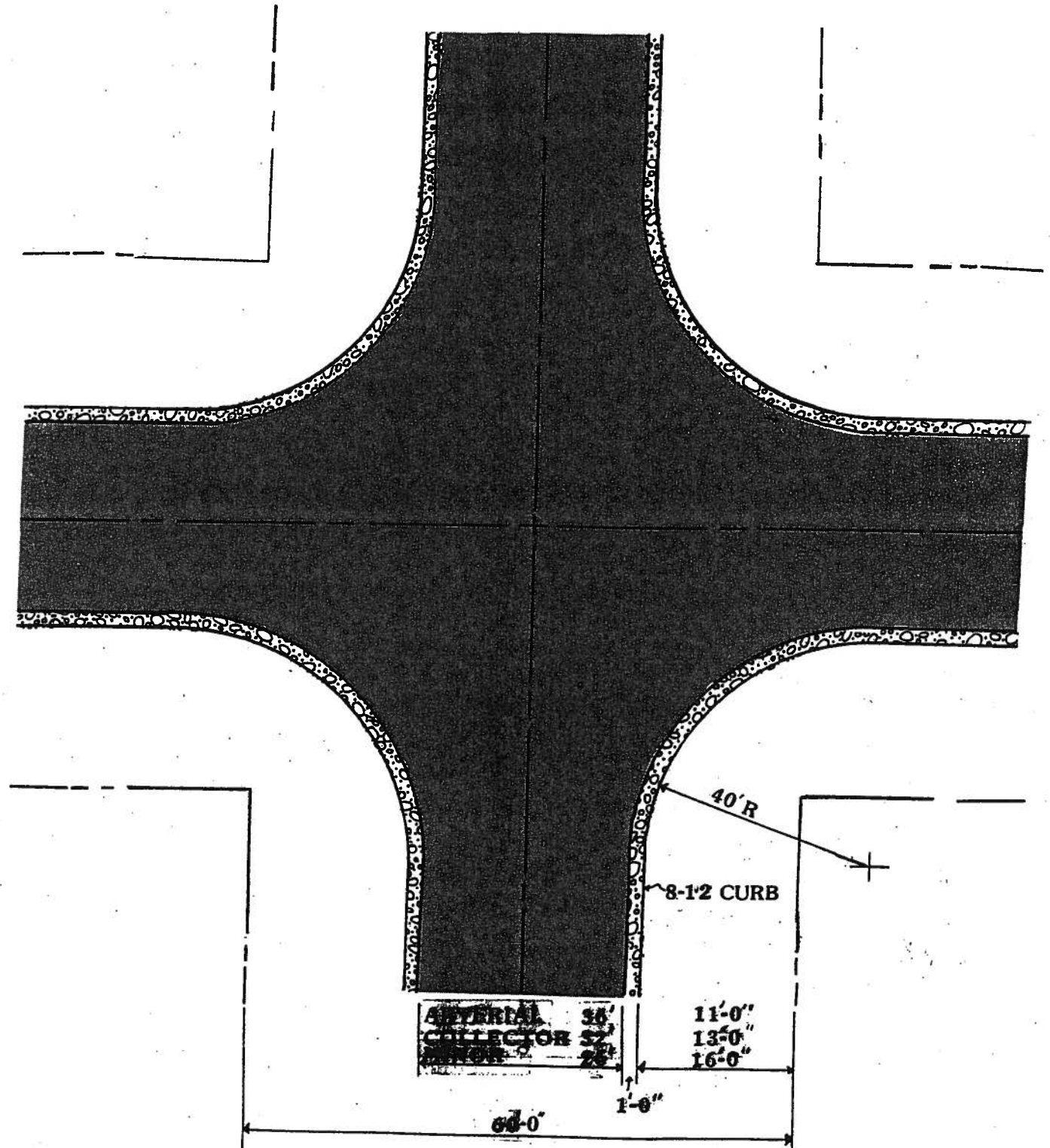
110 MATHIS DRIVE, SUITE 204  
 DICKSON, TENNESSEE 37055  
 615-740-8283

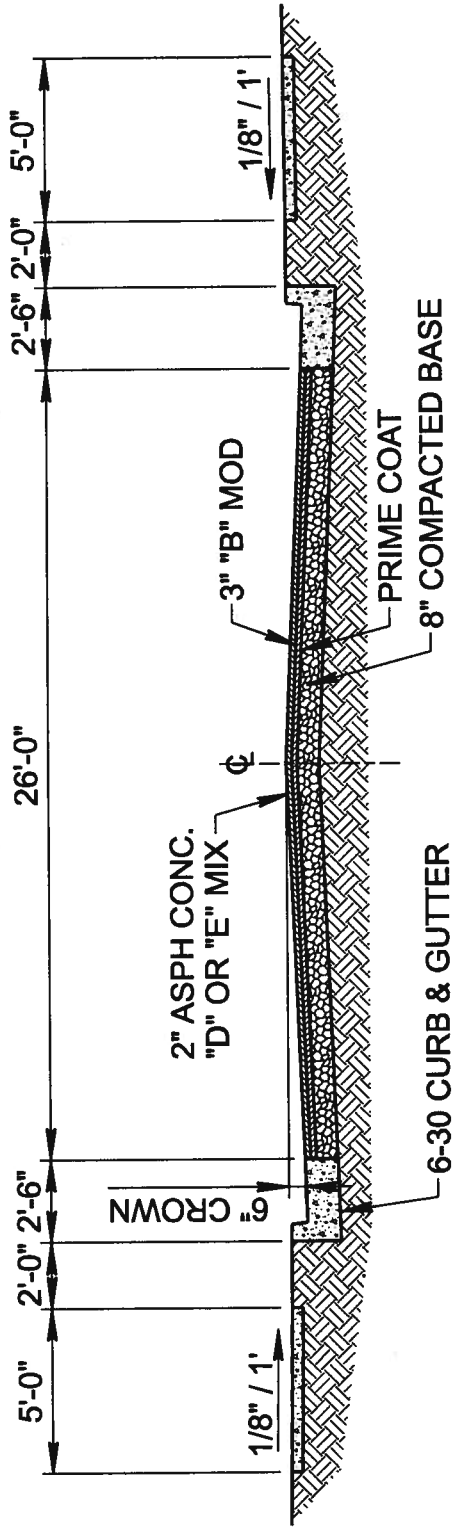
CITY OF FAIRVIEW  
 PLAN FOR CURBED  
 ARTERIAL AND COLLECTOR  
 RESIDENTIAL STREETS



# PLAN FOR CURBED COMMERCIAL - INDUSTRIAL STREETS REQUIRED ROAD SECTION

NOT TO SCALE





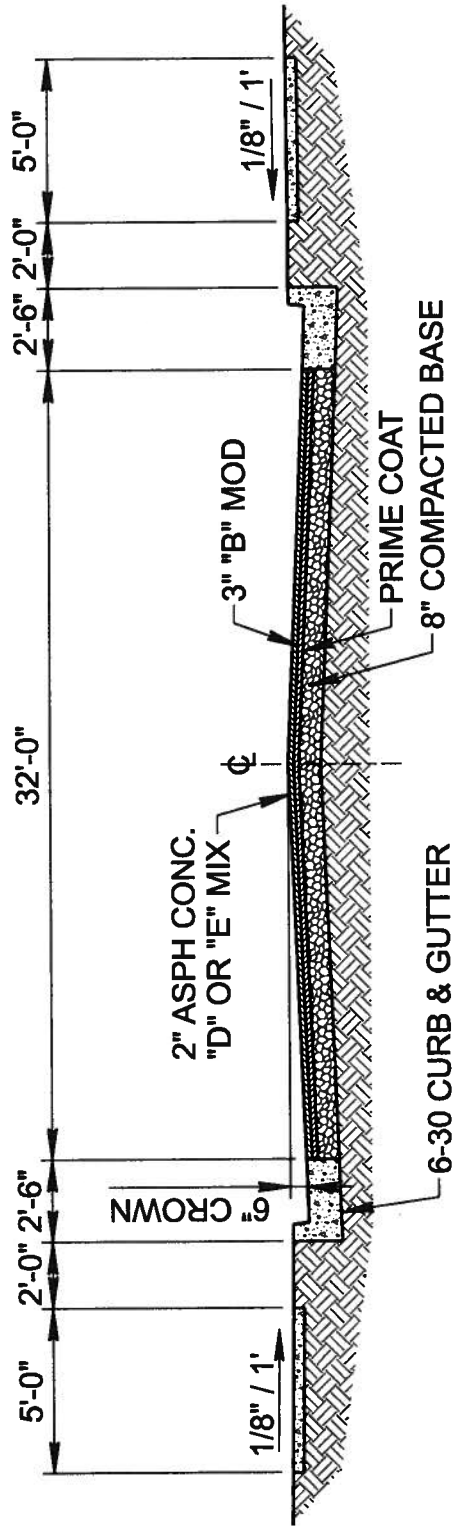
REFER TO PAGE 101  
PAVEMENT SECTION DESIGNS

ROAD SECTIONS FOR COMMERCIAL-INDUSTRIAL  
MINOR STREETS  
(NOT TO SCALE)



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CITY OF FAIRVIEW  
PLAN FOR CURBED  
ARTERIAL AND COLLECTOR  
RESIDENTIAL STREETS



REFER TO PAGE 101  
PAVEMENT SECTION DESIGNS

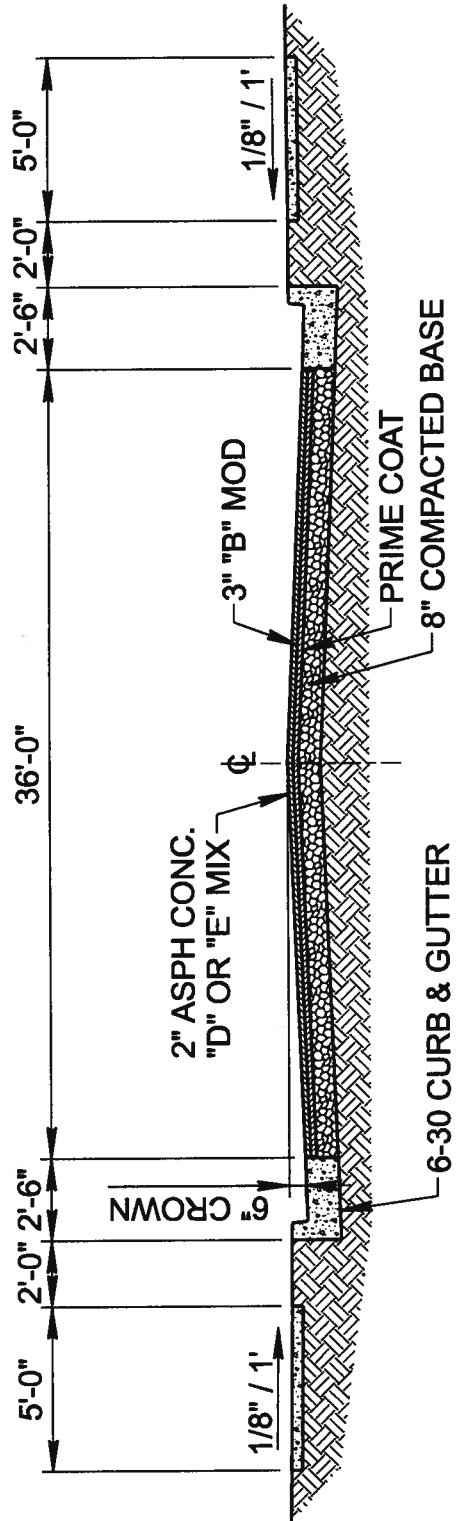
ROAD SECTIONS FOR COMMERCIAL-INDUSTRIAL  
COLLECTOR STREETS  
(NOT TO SCALE)



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CITY OF FAIRVIEW  
PLAN FOR CURBED  
ARTERIAL AND COLLECTOR  
RESIDENTIAL STREETS



REFER TO PAGE 101  
PAVEMENT SECTION DESIGNS

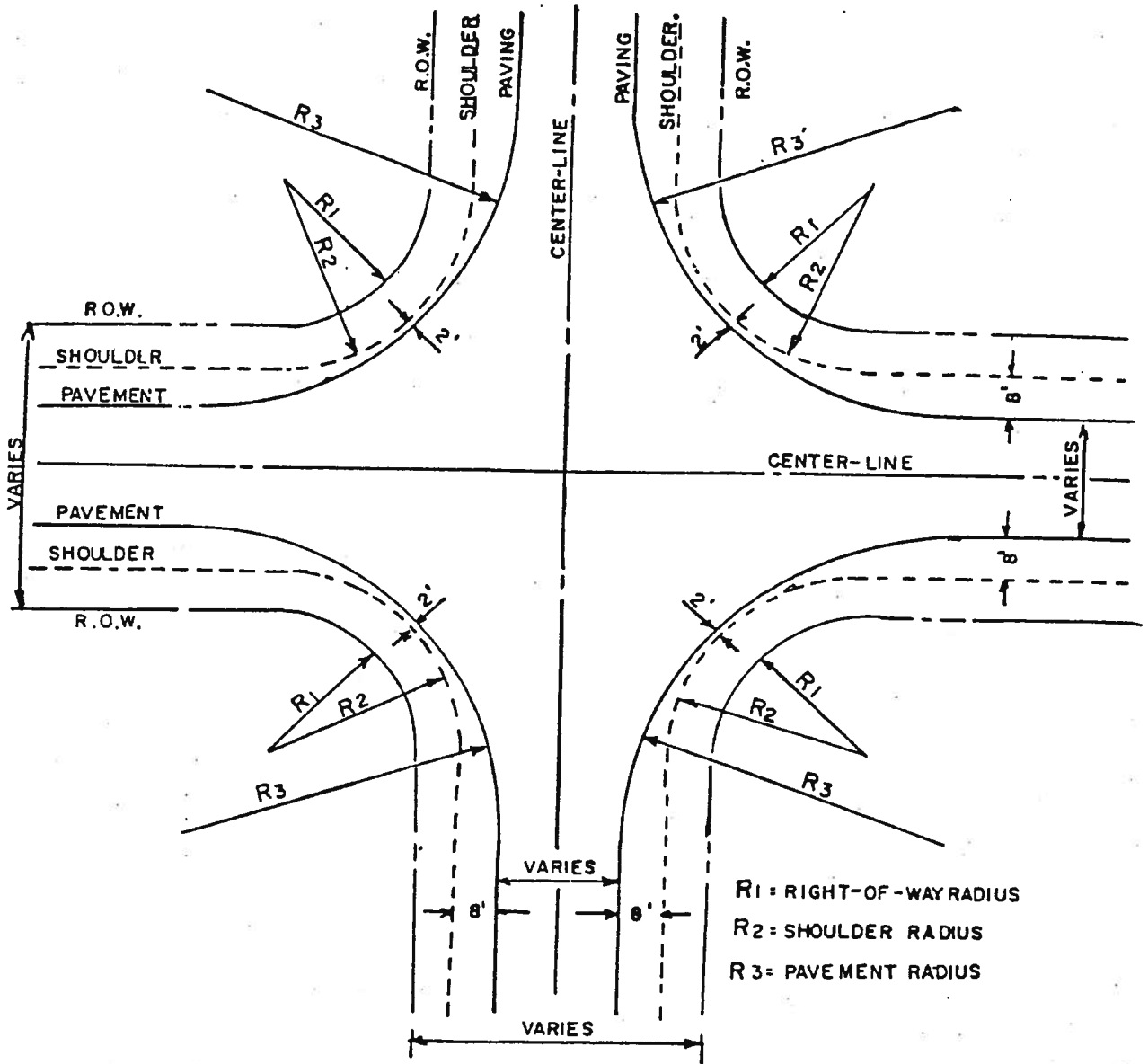
**ROAD SECTIONS FOR COMMERCIAL-INDUSTRIAL  
ARTERIAL STREETS**  
(NOT TO SCALE)



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CITY OF FAIRVIEW  
PLAN FOR CURBED  
ARTERIAL AND COLLECTOR  
RESIDENTIAL STREETS

DRAWING NO. 7-A



TYPE OF INTERSECTION	R <sub>1</sub>	R <sub>2</sub>	R <sub>3</sub>	R.O.W.
RESIDENTIAL	25' MIN.	30'	54.49	50'
COMMERCIAL OR INDUSTRIAL	25' MIN.	38'	58.49	60'
COMBINATION RESIDENTIAL & COLLECTOR OR COMMERCIAL	25'	38'	58.49	50' & 60'

NOTE: FOR A COMBINATION RESIDENTIAL & COLLECTOR STREET INTERSECTION THE RADIUS POINT FOR R.O.W. AND RADIUS POINT FOR EDGE OF SHOULDER WILL NOT BE THE SAME. DISTANCE BETWEEN THE EDGE OF PAVEMENT & EDGE OF SHOULDER AT THE CRITICAL POINT SHALL BE 2 FEET.

INTERSECTION CONVENTIONAL SCALE: NONE	DETAIL SECTION
FAIRVIEW MUNICIPAL PLANNING COMMISSION	

**APPENDIX B**  
**STABILIZATION OF DITCHES/SEEDING/SODDING**

**STABILIZATION OF DITCHES**

All open ditches shall be stabilized in accordance with the following requirements:

<b>Size of Nearest Culvert (Upstream)</b>	<b>Seeding Required</b>	<b>Sod Required</b>	<b>To be Concrete Lined</b>
18"	Grades Less than 3.00%	Grades 3.00%-12.00%	Grades Exceeding 12.00%
21" thru 24"	Grades Less than 1.50%	Grades 1.50%-7.00%	Grades Exceeding 7.00%
30" thru 36"	Grades Less than 1.00%	Grades 1.00%-4.00%	Grades Exceeding 4.00%
42" thru 72"	-----	Grades 2.50% or Less	Grades Exceeding 2.50%

**NOTE:** Where culverts empty into ditches with grades exceeding the grade of the culverts, the minimum requirements set forth above may not be satisfactory. In this case, the treatment shall be specified by the Williamson County Engineer or his representative.

- A. CONCRETE-LINING** - Ditches that require lining with concrete (see Drawing #15-C) shall be lined to a height above the bottom of the ditch no less than one-half (1/2) the diameter of the nearest culvert (upstream). However, in no case shall the lining extend less than one (1) foot above the bottom of the ditch.

Lined ditches shall be constructed of Class "B" concrete (3,000 p.s.i., 28 day strength). The lining shall be firmly bedded and securely attached to adjacent drainage structures. Concrete mixture used will be such as to attain a smooth, monolithic, and reasonably water tight lining, and be placed upon a firm subgrade which will be void of all objectionable matter (grass, roots, etc.).

The finished lined ditch shall conform to designated lines and grades and shall add rather than detract from the appearance of the roadway.

- B. SODDING** - Ditches that require sodding shall be sodded to a height above the bottom of the ditch not less than one-half (1/2 the diameter of the nearest culvert (upstream)). However, in no case shall the sod extend less than one (1) foot above the bottom of the ditch.

The sod shall consist of a live, dense, well-rooted growth of permanent grasses, free from Johnson grass, Nut grass, and other objectionable grasses, and suitable for the soil in which it is to be placed. The sod shall be eight (8) inches wide, not less than eighteen (18) inches long, and have at least three (3) inches in thickness of soil in its roots. The sod shall be placed only when the soil is moist and favorable to growth. No sodding shall be done between **November 1st** and **April 1st**, unless, otherwise, directed by the Fairview City Engineer. The area to be sodded shall be constructed to the designated lines and grade, and the surface loosened to a depth of not less than three (3) inches with a rake or other device. If necessary, it shall be sprinkled until saturated at least one (1) inch in depth and kept moist until the sod is placed thereon. It will not be required, but it is recommended that immediately before placing the sod, commercial fertilizer (6-12-12) shall be uniformly applied at the rate of eighteen (18) pounds per one thousand (1,000) square feet. However, the Fairview City Engineer will hold the developer responsible for an acceptable stand of grass in the ditches for stabilization.

The sod shall be placed on the prepared surface with the edges in close contact and shall be pounded into place with wooden tamps, or other satisfactory equipment. On steep slopes, pinning or pegging will be required to hold the sod in place.

- C. SEEDING** - The area to be seeded shall be constructed to the proper line and grade, and the surface loosened to a depth of not less than three (3) inches with a rake or other device. After the top three (3) inches of soil has been rendered loose, friable, and reasonably free from large clods, rocks, large roots, or other undesirable matter, lime and fertilizer shall be carefully worked into the soil in the following amounts:

**Agricultural Limestone (85% Calcium Carbonate Equivalent, 85% through a 10-mesh screen, 50% through a 40-mesh screen, 3 tons per acre, 140 pounds per 1,000 square feet).**

**Commercial Fertilizer (6-12-12) - 1,000 pounds per acre (30 pounds per 1,000 square feet).**

Seeds shall be uniformly sown on the prepared seedbed in accordance with the following schedule, and raked, drilled or harrowed approximately one-fourth (1/4) inch into the soil.



a. **Seeding Mixtures\***

(1) **August 1 - October 15 (best time for seeding).**

	<u>Rural Areas</u>		<u>Urban Areas</u>	
	% Total Lbs./A		% Total Lbs./A	
Tall Fescue	70	80	70	80
Unhulled Bermuda Grass**	20			20
Creeping Red Fescue		5	5	
White Dutch Clover		5	5	

(2)

**October 15 - May 1**

Tall Fescue		40	120	80
Unhulled Unscarified Serices Lespedeza (March 1 - May 1) Use Scarified Seed	50			
Creeping Red Fescue	5		5	
White Dutch Clover	5		5	

This area shall be mulched with one and one-half (1/2) to two (2) tons per acre of small grain straw, of fescue, orchard grass or native grass hay of less than twenty (20) percent moisture, so that twenty-five (25) to thirty (30) percent of the ground is visible.

The mulched area shall be watered if necessary to maintain a reasonably moist condition until germination and continued growth is insured.

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\* Recommended jointly by Soil Conservation Service, Tennessee Agricultural Extension Service and Tennessee Agricultural Experiment Station.

\*\* Where Bermuda Grass is objectionable, omit it and increase tall fescue to ninety (90) percent.