

APPENDIX

Appendix A – Submittal Requirements

<input checked="" type="checkbox"/> Required <input type="checkbox"/> Required, as conditions warrant	MINOR SUBDIVISION	PARCEL SPLIT RESUBDIVISION OR RESURVEY	PLAT CORRECTION	MASTER PLAN- CONVEN/CONSERV	MASTER PLAN- FBD	PRELIMINARY PLAT	FINAL PLAT
Introductory Information							
Graphic and written scale at 1" = 100' or greater	X	X	X	X	X	X	X
Quarter section, section, Cityship, and range with approximate ties to all existing quarter section or section corners within or in the vicinity of the proposed subdivision	X	X	X		X	X	X
Date of preparation, including latest revisions	X	X	X	X	X	X	X
North arrow	X	X	X	X	X	X	X
Name, address, and phone number of persons responsible for preparing application	X	X	X	X	X	X	X
General information section indicating number of sheets,				X	X	X	
Blank space (4"x6") on lower right of title sheet reserved for administrative use.	X	X	X	X	X	X	X
Name of subdivision	X	X	X	X	X	X	X
Name, address, and contact information of legal property owner(s)	X	X	X	X	X	X	X
General Property Information							
Current zoning of the property	X	X	X	X	X	X	X
General vicinity map at a scale of no smaller than 1" = 1000'	X	X	X	X	X	X	X
Legal description	X	X	X	X	X	X	X
Table of Statistics							
Total area of subject property	X	X	X	X	X	X	X
Area of each lot (standards for Master Plan)	X	X	X	*	X	X	X
Total number of dwelling units and lots (and by phase where applicable) (Master Plan – approximate number)				X	X	X	X

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Total number of each different lot type (and by phase where applicable) (Master Plan Conv/Conserv– approximate number)				X	X	X	X
Net and gross density by total project, by phase, and by block				X	X	X	X
Average, smallest and largest block sizes by length and by perimeter, including indication of specific block numbers of the largest and smallest.				*	*		
Area of open space (broken into categories in Section 5.03 (B)) for total project, phase, and block.				X	X	X	X
Topographic Information / Existing Conditions							
Existing contours based on USGS or US Coast and Geodetic Survey sea level datum: 1' intervals for 5percent slopes or less; 2' intervals for 5percent - 10percent; 5' intervals for over 10percent (@avail USGS interval for PUD Master Plan & specified intervals if avail w/o specific on-site engineering)	*	*	*	X	X	X	
General depiction of all significant natural features including large trees, large stands of trees or other important vegetation and habitats, or any other similar features. (identification of large trees not required for PUD Master Plan if tree standards included in code accompanying Plan)	X			X	X	X	X
Soil types						X	
Location of all streams and identification of stream characteristics	X			X	X	X	X
100-year flood plain	X	X	X	X	X	X	X
Any jurisdictional wetlands (as defined by the U.S. EPA and by U.S. Army Corps of Engineers)	X			X	X	X	X
Any other existing water features (bodies of water, intermittent drainage channels, or streams)	X			X	X	X	X

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Existing utility easements, utility facilities, or any other existing structures	X	X	X	*	*	X	X
Proposed Development Information							
Typical cross-sections for all rights-of-way including dimensions of all street elements identified in Articles 3 or 4						X	
Typical intersection dimensions including crosswalks, curb-radii, and site lines						X	
Identification of all rights-of-way, easements, utilities, open space, or other common use parcels. (utilities N/A for PUD Master Plan with statement of availability and standards)	X	X	X	X	X	X	X
All street names and locations of proposed street signs (statement of compliance with County and municipal regulations and 911 requirements)	X	X	X	*	*	X	X
Lot dimensions and standards as established by these regulations and/or the applicable zoning standards	X	X	X	*	□	X	X
Location, size, and type of all street lights						X	
Layout, location, and identification of all proposed lots and blocks, including location and sight distance of all access points to all lots	X	X	X	*	*	X	X
Street construction specifications including proposed cut and fill, construction details for paved surfaces and street edges, and horizontal and vertical sight distances at intersections (standards for PUDs)						X	
A sheet of all proposed waivers or modifications, specifically stating the standard sought to be waived or modified and all location(s) where the waiver or modification will be applied. (to extent then known for PUD Master Plan)	X	X	X	X	X	X	X
Where a development will be constructed in phases, all phase lines and a schedule showing the order of construction and approximate completion date of each phase.				X	X	X	

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A landscape plan and standards for all rights-of-way and open spaces, as applicable				X	X		X
Drainage Plan, including calculations of pre and post development flows, profile and location of proposed stormwater facilities, evidence of all necessary approvals and permits and a Best Management Practices report.						X	
Location of any proposed public facilities				X	X	*	*
Proposed final grade of all areas at 2' intervals.						X	
Site Design Information							
A narrative statement on how the development conforms to the Comprehensive Plan, and any specific plan or program officially approved under the guidance of the Comprehensive Plan				X	X		
A regulating site map, accompanying code indicating use characteristics, lot types, building types, and engineering, thoroughfare, dimensional, architecture, and urban design standards for buildings, streets, and open spaces				*	X		
Renderings and illustrations of typical open spaces, streets, blocks, lots, and buildings				*	X		
Adjacent Property Information							
Name and mailing address of owners of adjacent lands	X			X	X	X	
Current zoning of property or “unzoned” where no zoning applies	X	X	X	X	X	X	X
Topographic information within 100' of boundaries in 5' intervals				X	X	X	
Topographic information for extensions of any stub streets up to 300' from boundary in 2' intervals						X	
Name and location of all streets and pedestrian facilities within 200' of the parcel boundary				*		X	

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Location of all easements and utility facilities within 200' of the parcel boundaries	*	*	*	*	*	*	*
Location and use of all buildings on the subject property	X	X	X	X	X	X	X
Reference to recorded subdivision plats of abutting platted land by map, book, volume, and page, or designated as "unplatted"	X	X	X	X	X	X	X
Certifications and Signatures							
Notarized signature of property owner or agent of landowner	X	X	X	X	X	X	X
Standard signature block for all County and municipal approvals	X	X	X	X	X	X	X
Certification statement of the owners consent to dedication of any public rights-of-way or other public easements, where appropriate	X						X
Certification and description of all other easements, covenants, or common use areas	X	X	X			X	X
Certification or approval from State and/or County Health Department for proposed water supply and sanitary facilities	X	X	X			X	X
Other required Certifications and Notes	*	*	*	*	*	*	*
Surveyor's certification, if applicable	X	X	X	X	X	X	X
Engineer's certification if applicable	X	X	X	X	X	X	X
Articles of Incorporation for Homeowner's Association	*						*

APPENDIX B – OFFICIAL INTERPRETATIONS

(To be inserted as applicable.)

APPENDIX C: ENGINEERING STANDARDS

SECTION 1.	GENERAL
SECTION 2.	ACCESS
SECTION 3.	LOTS
SECTION 4.	RIGHT-OF-WAY
SECTION 5.	EASEMENTS
SECTION 6.	STREET DESIGN
SECTION 7.	STREET DRAINAGE FEATURES
SECTION 8.	SIDEWALKS
SECTION 9.	UTILITIES
SECTION 10.	DRAINAGE IMPROVEMENTS
SECTION 11.	STORMWATER DETENTION
SECTION 12.	MISCELLANEOUS
SECTION 13.	INSPECTION
SECTION 14.	BONDS
SECTION 15.	ACCEPTANCE OF STREETS
SECTION 16.	DESIGN AND CONSTRUCTION
SECTION 17.	VACATIONS
SECTION 18.	STANDARD DRAWINGS AND DETAILS

APPENDIX C: ENGINEERING STANDARDS

All property to be developed and/or any subdivision of land, shall comply with the Subdivision Regulations and City of Montevallo Engineering Standards.

Section 1. General

- A. The applicant shall furnish the Planning Commission all plans and information necessary for engineering considerations and approval for the construction of the required improvements. Such plans and information shall be furnished separately or with preliminary plat and vicinity sketch and shall be certified by a Registered Professional Engineer licensed to practice in the State of Alabama. All improvements required shall be constructed in accordance with the standards set forth in these regulations and under the inspection of the City Engineer or his duly authorized representative and the engineering department of the respective utility.
- B. The arrangement, character, extent, location and grade of all streets shall be laid out according to good engineering land planning principals and shall be integrated with all existing and planned streets. Land abutting a proposed subdivision shall not be land-locked by the proposed subdivision.
- C. Plan/Profiles of all streets showing natural and finished grades, location of all head walls, and the location and size of all culverts shall be furnished as a part of the preliminary plat.
- D. For survey information used to support street design, stormwater design, grading design, and any and all other elements of engineering design, certification must be made that the survey data used meets Minimum Technical Standards of Land Surveying.
- E. Prior to commencing construction of any improvements, plans must be approved in writing by the City Engineer.
- F. The Preliminary Plat shall contain the following engineering drawings as a minimum:
 - 1. Site Plan
 - a) Topography must be shown. Topography must be based on U.S. Geological Survey, or U.S. Coast and Geodetic Survey sea level datum. On grades of five percent or less, contours shall be shown at one foot intervals. On grades between five percent and ten percent, contours shall be shown at two foot intervals. On grades greater than ten percent, contours shall be shown at five foot intervals.
 - b) Provide Quarter section, Section, Township, and Range with approximate ties to all existing quarter section or section corners within or in the vicinity of the proposed subdivision.
 - c) The site plan shall include a plan view of all streets and a Drainage Plan including all proposed drainage structures.
 - 2. Street Plan & Profiles
 - 3. Drainage Plan & Profiles
 - 4. Construction Details
 - 5. Access Design (When improvements are required by the City Engineer)
 - a) Proposed improvements to existing streets which are being accessed
 - b) Striping Plan

- c) Traffic Control Plan
6. The final plat shall be submitted on 24 x 36 inch double matte mylar. All corrections must be made in ink. No paste-up is allowed.
 7. The following notes are required on all final plats:
 - a) All easements on this map are for public utilities, sanitary sewers, storm sewers, storm ditches, and may be used for such purposes to serve the property both within and without the subdivision. Neither the City of Montevallo nor Shelby County is responsible for the maintenance of any easements shown on this plat outside of the public right-of-way.
 - b) Contractor and/or developer are responsible for providing building sites free of drainage problems.
 - c) No further subdivision of any parcel shown hereon shall be allowed without the prior approval of the City of Montevallo Planning Commission.
 - d) Driveways shall be restricted to the locations as shown on this plat. Driveway access permit required prior to installation of driveway(s). Contact the City of Montevallo at 665-2555 to obtain access permit.
 - e) This entire property is located in Flood Zone _____ as shown on the latest Federal Insurance Rate Maps (Panel Number _____), dated _____.
 - f) Maintenance of detention ponds and all associated structures and appurtenances are the responsibility of the Homeowners Association.
 - g) Any construction or encroachment in a designated flood plain must comply with the City of Montevallo Flood Damage Prevention Ordinance.
 - h) No encroachments, including structures or fill material, shall be placed within a designated flood plain unless and until a Flood Plain Development Permit has been submitted and approved by the City Engineer. All development within a designated flood plain must comply with the City of Montevallo Flood Damage Prevention Ordinance.
 - i) The City of Montevallo or Shelby County are not now, nor will be in the future, responsible for the maintenance of private roads or easements shown on this plat.
 8. Include the following notes on plat if appropriate:
 - a) Sink hole note:

The subdivision shown hereon, including lots and streets, lies in an area where natural lime sinks have occurred. Lime sinks, as located and shown on the above plat, were found but not repaired, unless otherwise noted on the plat. City of Montevallo, the City of Montevallo Engineer, the City of Montevallo Planning Commission and the individual members thereof, and all other agents, servants, or employees of the City of Montevallo, Alabama, make no representations whatsoever that the subdivision lots and streets are safe or suitable for residential construction, or for any other purposes whatsoever.
 - b) No lots shall have direct access to _____ Road.
 9. Failure to Comply

Construction shall not commence on any improvement unless and until engineering drawings have been approved in writing by the City Engineer. Construction must be performed in a workmanlike manner to usual construction tolerances, in conformance with approved engineering drawings. Failure to comply may prevent recording of final plat and the subsequent transfer of lots.

Section 2. Access

- A. The platting of any land for the purpose of denying access to public rights-of-way is prohibited, except as otherwise provided herein. Spite strips are prohibited.
- B. If, in the opinion of the City of Montevillo Planning Commission, it is desirable to provide street access to an adjoining property, said street shall extend to the boundary of such property. A temporary turnaround, as shown herein, (see Standard Drawings for street cul-de-sac) shall be provided. Local streets shall be laid out such that their use by through-traffic in the subdivision will be discouraged.
- C. Where subdivision streets, driveways, or easements (where allowed) make intersection with public roads, the intersection shall be made at a point on the public road that will provide an acceptable sight distance. The sight distance must be measured using current American Association of State Highway and Transportation Officials (AASHTO) guidelines and recorded on the construction plans.
- D. The means of ingress and egress to a public street, other than a local residential street, shall minimize traffic congestion by limiting the number of ingress and egress points to the public street. Methods such as shared drives and recorded common access points to the public street shall be used in order to minimize the number of curb cuts along such roads and highways.
- E. All streets that provide for the continuation or appropriate projection of principal streets in surrounding areas and all streets that provide reasonable means of ingress and egress for surrounding acreage tracts shall be constructed to the subdivision limits as required by the Planning Commission.
- F. The public road that is being accessed may require improvements. All costs associated with these improvements must be borne by the entity desiring access.
- G. All lots shall access roads that are internal to the proposed development. No direct access to existing public roads is allowed without the approval of the City Engineer.
- H. Where there are streets adjacent to the subject property which will be accessed by the development which are proposed or required to be retained, the City Engineer may require the street to be upgraded consistent with its proposed use.
- I. With the exception of Family or Rural Subdivisions, access to a public road via an easement is not acceptable for the subdivision of property or for development purposes.

Section 3. Lots

- A. Each lot shall front a paved public street. Lots shall not be platted where the only means of ingress and egress is by way of an easement. Exceptions to this requirement include:
 - 1. Lots subdivided as a part of a Family Subdivision, which have not been transferred to someone who is not an immediate family member.
 - 2. Lots that access private roads which have been approved by the Planning Commission and which have been constructed to subdivision standards.

- 3. Lots that have been approved by the City of Montevallo Planning Commission to be subdivided as a Rural Subdivision.
- B. Double frontage and reverse frontage lots shall be avoided, except where essential to provide separation of residential development from traffic arteries, or to overcome specific disadvantages of topography and orientation.
- C. Side lot lines should normally be at right angles to streets, except on curves where they should be radial.
- D. Flag Lots require a minimum road frontage (flag) of 30 feet.

Section 4. Right of Way

A. Minimum Right-of-Way radius

The minimum right-of-way radius shall be 25 feet. When a proposed street intersects a Collector or an Arterial street, right-of-way sufficient to provide an adequate sight triangle may be required by the City Engineer.

B. Minimum street right-of-way widths

- 1. The City Engineer shall determine the classification of all streets. The widths of rights-of-way for the various streets are indicated below. Widths shall be not less than as follows:

<i>Street Type</i>	<i>Minimum Right-of-Way Width (feet)</i>
Neighborhood Street (Local)	60
Neighborhood Street (Collector)	62
Rural Drive	60
Rural Parkway (Two Lane)	90
Rural Parkway (Multi Lane)	*
Main Street (Two Lane)	82
Main Street (Four Lane)	105
Boulevard (Two Lane)	84
Boulevard (Four Lane)	105

** Consult with City Engineer*

- 2. Design of Arterial Streets, where appropriate, will be controlled by the City Engineer. The width of the right-of-way will be determined by the design.
- C. Accessibility – Where a proposed subdivision has no frontage on an existing public road, or right-of-way, the subdivider must provide a suitable right-of-way for ingress and egress. The connecting road shall become a part of the street system of the proposed subdivision and is subject to all Subdivision Regulations. Subdividing or development of property shall not be allowed to land lock adjacent property.
- D. Half-streets – Where there exists a dedicated or platted half-street adjacent to the tract to be subdivided, the other half shall be platted. New half-streets shall be prohibited.

- E. Additional width on existing roads – Subdivisions that adjoin existing roads with inadequate right-of-way (less than 60 feet) must adhere to the following:
 - 1. The entire right-of-way (60 feet) shall be provided where any part of the subdivision is on both sides of the existing road. Said right-of-way measured 30 feet each side of and parallel to the centerline of the existing road.
 - 2. When the subdivision is located on only one side of an existing road, one-half of the required right-of-way (30 feet), measured from the centerline of the existing roadway, shall be provided.
- F. Cul-de-sacs – The minimum right-of-way radius is 55 feet. A larger radius may be required at the discretion of the City Engineer.

Section 5. Easements

- A. Drainage easements are required to allow water to traverse across property without trespassing. City of Montevallo will not maintain any easements which are outside of the public road right-of-way. A note on the record plat is required as follows:

All easements on this map are for public utilities, sanitary sewers, storm sewers, storm ditches, and may be used for such purposes to serve the property both within and without the subdivision. City of Montevallo is not responsible for the maintenance of any easements shown on this plat outside of the public right-of-way.
- B. Easements across lots or centered on rear or side lot lines shall be provided for utilities and drainage where necessary, and shall not be less than a total of 15 feet wide, unless otherwise approved by the City Engineer.
- C. Where a subdivision is traversed by an existing or proposed watercourse, drainage way, channel or stream, there shall be provided a storm drainage easement or right-of-way conforming substantially to the lines of such existing or planned drainage way. The width of such drainage easement or right-of-way shall be sufficient to contain the ultimate channel and maintenance way for the tributary area upstream.
- D. Lots and easements shall be arranged in such a manner as to eliminate unnecessary easement jogs or off-sets, and to facilitate the use of easements.
- E. Easements for shared and common access drives which serve two residential properties shall be a minimum of 20 feet wide.
- F. Private Access Easements which serve more than two residential properties shall be a minimum of 22 feet wide.
- G. Private Access Easements which serve commercial or mixed use properties shall be a minimum of 25 feet wide.

Section 6. Street Design

- A. All streets shall be platted along contour elevations which will result in minimum grades and greatest visibility wherever practicable with consideration given to the anticipated uses of the land.
- B. The proposed street layout shall be made according to good land planning for the type of development proposed. All streets must provide for the continuation or appropriate projection of principal streets in surrounding areas and provide reasonable means of ingress and egress for surrounding tracts.

- C. The proposed street system shall be coordinated with the street system of the surrounding area. However, the number of streets converging upon any one point which would tend to promote congestion shall be held to a minimum. The street pattern shall be in conformity with a plan for the most advantageous development of the entire community.
- D. All streets shall be designed in accordance with the engineering standards contained herein. The materials used must be approved by the City Engineer.

E. Street Plan & Profile

Street Plan & Profile for each proposed street must be submitted for review and consideration. These drawings must include:

- 1. Location of all existing and proposed streets within the subdivision and adjacent to it.
- 2. Widths of existing and proposed rights-of-way.
- 3. Clear identification of right-of-way location and width for any street which is considered part of the street plan.
- 4. Proposed street signage.
- 5. Street names, which are subject to City of Montevallo approval.
- 6. Plan & Profile views of all streets.
- 7. Typical cross-section of proposed streets.
- 8. Complete horizontal and vertical curve data for the centerline of each street. The minimum radius of horizontal curves, and minimum length of vertical curves, shall be based on design speed and sight distance.
- 9. Sidewalks.

F. Design speeds

- 1. Proposed design speeds shall be designated by the developer's engineer on the Plan & Profile sheets. Design speeds should generally not be less than 25 miles per hour (mph). The City Engineer may dictate the design speed for all streets.
- 2. The following minimum design speeds shall be utilized as follows:
 - a) Neighborhood Street
 - Local Street - 25 mph
 - Collector Street - 35 mph
 - b) Pedestrian Street - 25 mph
 - c) Rural Drive
 - Local Street - 25 mph
 - Collector Street - 35 mph
 - d) Rural Parkway
 - Arterial – Design to be provided by the City Engineer.
 - Collector - 35 mph
 - e) Main Street
 - Arterial – Design to be provided by the City Engineer.
 - Collector - 35 mph

f) Boulevard

Arterial – Design to be provided by the City Engineer.
Collector - 35 mph

g) Private Access Easement

Generally, the design engineer shall provide sufficient information to ensure proper drainage function and to provide radius information sufficient for use by the intended vehicles

G. Shoulders

1. Minimum shoulder widths are shown on the Example Street Cross Sections (Section 18, Standard Drawings and Details).
2. Shoulders shall be graded to provide positive drainage to the drainage collection system.
3. Minimum grade to be one-half-inch per foot.
4. Maximum grade to be one inch per foot. In the core areas of Form Based Development, care must be exercised to provide for positive drainage away from building structures without making pedestrian travel difficult.

H. Minimum pavement widths

Minimum pavement widths are shown on the Example Street Cross Sections within the Subdivision Regulations.

I. Street grades

1. Grades of all roads shall comply with accepted engineering practice. Road grades shall not exceed 15 percent or be less than one percent. Where maximum or near maximum grades are used, they should not run continuously for a distance of more than 400 feet.
2. Grades approaching intersections on the minor street shall not exceed five percent equivalent elevation for a distance of not less than 100 feet from the centerline of said intersection.
3. All roads shall be crowned in the center and have a one-fourth-inch per foot cross slope.
4. Grades of cul-de-sacs shall not be more than five percent or less than two percent for the last 100 feet of paving.
5. Intermediate turnarounds shall be designed at a maximum eight percent grade.

J. Horizontal & Vertical Alignment

1. Minimum radii of horizontal curves shall be not less than the following:

Design Speed (mph)	Radius (feet)
20	100
25	180
30	300
35	470

2. Minimum k values for vertical curves shall be not less than the following:

Design Speed	k (crest)	k (sag)
20	7	17
25	12	26
30	19	37
35	29	49

3. There shall be a minimum tangent of 100 feet provided between all reverse curves.

K. Intersections

1. Roads shall intersect as nearly at right angles as possible and in no case at an angle of less than 75 degrees.
2. Street intersections with centerline offsets of less than 150 feet shall not be permitted.
3. The minimum curb radius at all intersections shall comply with the following chart:

Intersection Curb Radii (feet)			
Intersection Type	Conservation Subdivision	Form Based Subdivision	Conventional Subdivision
Local/Local	10 to 15	10 to 15	20
Local/Collector	15 to 20	15 to 20	20
Local/Arterial	15 to 25	15 to 25	20
Collector/Collector	15 to 25	15 to 25	20
Collector/Arterial	45 (entry) 25 (exit)	45 (entry) 25 (exit)	45 (entry) 25 (exit)
Private Access Easement/Local	10	10	10
Private Access Easement	10	10	10

L. Roundabouts

1. Roundabouts should conform to The Federal Highway Administration’s “Roundabouts: An Informational Guide” (Publication No. FHWA-RD-00-067).
2. Roundabouts are limited to the Rural Single Lane design (where possible), as shown in the FHWA guide.
3. Each proposed roundabout must utilize pedestrian-friendly splitter islands at each proposed entry.

4. Roundabouts shall be located at a high point to provide positive drainage (in all directions) away from the central island.
5. Roundabout design must include all horizontal and vertical geometry, drainage, pedestrian facilities, striping and signage. The horizontal geometry of proposed roundabouts must be accurately depicted within all plan views.

M. Sub base and Base material (minimum standards) -

1. Soil Analysis – The developer or contractor shall furnish the City Engineer with the results of an Atterberg Limit Test, a Sieve Analysis, and a C.B.R. of the subject property performed by a geotechnical engineer licensed to practice in the State of Alabama. The presence of poor and unsuitable soils (e.g., Townley, or soils containing greater than 70 percent of material finer than the No. 200 sieve) may require:
 - a) Stabilization of the road bed per ALDOT specification (Section 232);
 - b) Alternative pavement design; or,
 - c) Additional subgrade preparation, base, or asphalt buildup.
2. Sub base - Developer or Contractor shall be required to furnish compaction test results on the road sub base, according to the following requirements:
 - a) Finished grade shall conform to the lines, grades and cross-section as shown on the approved plan.
 - b) The top two feet of sub base shall be shaped and compacted to 100 percent of Standard Proctor Density as determined by AASHTO T-180 and T-310 test methods.
 - c) Depths greater than two feet below sub base, compaction is required to 95 percent Standard Proctor Density as determined by AASHTO T-180 and T-310 test methods.
3. Proof Roll Test – Sub Base shall be Proof Rolled in the presence of the City Engineer, or his representative, prior to any subdivision base or paving materials. Particularly:
 - a) Proof Roll shall be performed only after all underground infrastructure has been installed.
 - a) Test shall be conducted using a three-axle truck loaded to 25 tons (*documented*) and lifting the third axle – resulting in 12 ½ tons per axle.
4. Aggregate Base - Base material (Alabama Department of Transportation (ALDOT) 825, Type B) consisting of crushed rock, stone particles, or slag shall contain an approved filler of sand or other fine mineral filler. Required six inch base of this material shall be spread without segregation and may be placed and compacted to full depth in one layer. Required base layer of greater than six inches shall be placed in approximately equal layers. Compaction shall be by vibratory, steel wheel rollers or other approved rollers to obtain 100 percent of the Laboratory Vibrated Density (LVD) as determined by ALDOT 140, 210 and 222 test methods.
 - a) A minimum of six inches of compacted graded aggregate shall be required on all roadbeds. Additional depth of base material may be required due to anticipated traffic.
 - b) Eight inches of compacted graded aggregate shall be required for commercial collector streets and on existing county highways.

5. Black Base - Black Base may be substituted for aggregate base at the City Engineer's discretion. The substitution rate is fifty percent of the required aggregate base thickness (Example: three inch Black Base substituted for six inch aggregate base).
 - a) All asphalt shall be installed per ALDOT specifications (Section 429).
 - b) Black Base (ALDOT 429C) shall be applied at a minimum rate of 110 pounds per square yard per compacted inch of thickness.

N. Pavement (minimum standards)

1. All asphalt shall be installed per ALDOT specifications (Section 424).
2. The minimum pavement thickness for the various classifications of city streets shall be as follows:
 - a) Binder (ALDOT 424B) shall be applied at the minimum rate of 220 lbs/SY. This represents a compacted thickness of approximately two inches.
 - b) Seal (ALDOT 424B) shall be applied at the minimum rate of 125 lbs/SY. This represents a compacted thickness of approximately one inch.
3. The City Engineer may require a geotechnical engineering report, including a specific pavement design, or may require additional subgrade preparation, base, or asphalt buildup.

COMMENTARY. The City of Montevallo relies upon the quality and longevity of the local streets that are built as a part of residential development. In the interest of avoiding damage to newly constructed streets it is the policy of the City Council that all pavement shall be sealed with a final wear surface no later than two (2) years after completion of the binder pavement surface, or as may otherwise be approved by the City Council. Such agreements shall be subject to the execution of an appropriate bond agreement with the applicant and shall state that the remaining improvements are to be installed and constructed within the specified length of time as determined by the City Council at the recommendation of the City Engineer. The applicant shall not be released from said bond agreement except by a release in writing from the City Engineer and shall be subject to the established administrative procedures.

If the City Engineer determines that that subject street has not experienced sufficient traffic, the City of Montevallo reserves the right to require developer to post additional bond for another seal coat and milling after an additional period of time.

O. Fill Within Road Right-Of-Way

When fill material is placed within the right-of-way but not a part of sub base preparation, compaction to 95% Standard Proctor Density as determined by AASHTO T-99 and T-310 test methods is required.

P. Dead End Streets

1. Dead End Streets longer than 200 feet, as measured from the centerline of intersection, must be designed with an appropriate cul-de-sac (circle).
2. Dead End Streets which are stubbed for future development shall have the appropriate signage erected ("This street may be extended for future development.").

3. Cul-de-sacs shall terminate with a property line radius of not less than 55 feet and an outside gutter radius of not less than 40 feet. Circles to accommodate school buses or other large vehicles may be required and shall terminate with a property line radius of not less than 66 feet and outside gutter radius of not less than 50 feet.

Section 7. Street Drainage Features

A. Culverts

1. All pipes and culverts must be Class III reinforced concrete pipe.
2. A special design drawing will be required for any drainage structure having a required end area of 20 square feet or more. Reinforced concrete drainage structures shall be constructed in accordance with standard drawings and specifications approved by the City Engineer. The standard drawings for many minor structures may be obtained through the ALDOT or some concrete companies. All drawings must bear the seal and signature of a Registered Professional Engineer licensed to practice in the state of Alabama.

B. Headwalls

Headwall with wing walls and end walls shall be installed on pipe culverts. Headwalls shall be shown on the approved plans.

C. Curb and Gutter

1. All curb and gutter and valley gutter shall be constructed in accordance with the standard drawings contained in Section 18 (Standard Drawings and Details). Where all lots are three acres or larger and acceptable drainage plan is submitted and approved the requirement to install curb and gutter may be waived.
2. Combination curb and gutter, valley gutter, and sidewalks shall be constructed of Portland cement concrete which has a compressive strength of 3000 PSI at 28 days. Installation shall be on a prepared subgrade and conform to the cross-section shown on the plans. The surface finish of the concrete shall have a light broomed or burlap drag texture. The edges shall be smoothed with a radius type tool.
3. Transverse contraction joints shall be constructed at intervals not exceeding twenty 20 feet in combination curb and gutter and valley gutter. Joint depth shall be no less than one-fifth of the cross-section of concrete. Sawed contraction joints shall be done early after the concrete has set to prevent the formation of uncontrolled cracking. Expansion joints shall be constructed at immovable structures and at points of curvature for short radius curves. Filler material for expansion joints shall be approved by the City Engineer. Construction joints may be either expansion or butt-type joints.
4. No combination curb and gutter, valley gutter or sidewalk shall be placed on frozen or soft earth or when other unsuitable conditions exist.
5. Valley gutter may be substituted for combination curb and gutter, subject to the following conditions being satisfied:
 - a) Streets designed to a 25 mile per hour design speed.
 - b) Streets must have an anticipated Average Daily Trips (ADT) of less than 2500 vehicles per day.
 - c) Street grades must not exceed twelve percent.

6. Combination curb and gutter shall be constructed on grades over 12 percent.
7. Combination curb and gutter shall be constructed on cul-de-sacs with descending grades.

D. Inlets

1. All street inlets to be "Type S" per ALDOT standards.
 2. Inlet box design for installation on 18 inch through 42 inch pipe shall be approved by the City Engineer. Depth for this type inlet shall not exceed ten feet from invert of inlet throat to invert of discharge pipe. Storm drain inlet shall not be supported by the storm drain pipe. Special design drawings for inlet boxes will be required for pipes larger than 42 inches in diameter. This design must be submitted with the Street Drainage Plan for approval by the City Engineer.
 3. Catch basins and drop inlets shall be constructed if deemed necessary by the City Engineer.
 4. Combination curb and gutter shall 24 inches wide.
 5. Valley gutter shall be 30 inches wide.
 6. All yard inlets shall be constructed per ALDOT standards.
- E. Water will not be permitted to run down the street more than 400 feet without proper drainage structures to intercept surface water.
- F. Reinforced concrete pipe and reinforced arch pipe installation shall be in accordance with current specifications of the ALDOT. All concrete piping shall at a minimum be Class III reinforced concrete pipe and a minimum size of 18 inches.

Section 8. Sidewalks

- A. Sidewalks may be required by the Subdivision Regulations in commercial or residential subdivisions. All such sidewalks shall be constructed in accordance with Section 18, Standard Drawings and Details.
- B. Sidewalks may be required where deemed necessary for public safety.
- C. Sidewalks shall not be required along the radius of a cul-de-sac and shall not be required along cul-de-sac streets that are less than 300 feet in length.
- D. Where sidewalks are required along one side of the street, the City Engineer shall determine the appropriate side.
- E. Sidewalks located within a public or private street right-of-way shall comply with the following minimum standards:
1. Sidewalks shall be a minimum five feet wide.
 2. Sidewalks shall be constructed of Portland cement concrete with a minimum 28 day compressive strength of 3,000 psi.
 3. Sidewalks shall be at least four inches thick and be built upon a sub-grade compacted to a minimum 95 percent Standard Proctor Density. Where the sidewalk is a part of a driveway, thickness shall be increased to six inches.
 4. Sidewalk installation shall be on an unfrozen prepared sub-grade and conform to the typical cross-section.

5. Sidewalks shall be broom finished. Contraction joints shall be tooled to a minimum depth of one and one-half-inch. Sidewalks shall have expansion joints every 25 feet and at all concrete to concrete connections, such as driveways, curbs curb ramps, and private sidewalks. Five foot wide sidewalks shall have contraction joints every five feet. Wider sidewalks shall have contraction joints at a distance equal to the width of the sidewalk.
6. The cross slope of a sidewalk shall be a maximum of one-quarter inch per foot and sloping to the drainage collection system. In cases of extreme topography, the City Engineer may permit greater cross slopes. Adjustments to the cross slope should be gradual to avoid abrupt grade changes.
7. The following chart should be used as a guide in the design of grass strip cross slopes for various street profiles. The purpose of the steeper cross slope is to minimize erosion behind the curb on steep segments.

Centerline Grade of Street	1 to 4%	Greater than 4%
Grass Strip Cross Slope	One-half inch per foot	One inch per foot

8. Pedestrian ramps are required at all intersections. Intersections with standing curb shall have curb ramps that meet ADA standards. These ramps shall be installed prior to final plat approval.
- F. Sidewalks within a public or private street right-of-way shall be constructed subject to the following:
1. The shoulders shall be graded in preparation for the proposed sidewalks prior to Final Plat approval.
 2. American Disabilities Act (ADA) compliant ramps shall be constructed at all intersections prior to Final Plat approval.
 3. Developer shall Bond 100 percent of the proposed sidewalks prior to Final Plat approval.
 4. Construction of sidewalks shall be completed on each lot by the builder. Completion of the sidewalk is required in order to receive a Certificate of Occupancy.
 5. The Developer is required to repair damaged sidewalks and complete the installation along all unimproved lots within two years of the Final Plat.
 6. Builders which construct after the total installation of sidewalks shall repair all sidewalks damaged during home construction. Repairs to the sidewalk are required to receive a Certificate of Occupancy.

- G. City of Montevallo shall not accept maintenance of any public street unless and until all required sidewalks along said street have been constructed to county specifications. However, the Homeowners Association will have the responsibility to perpetually maintain all sidewalks.

Section 9. Utilities

- A. Public utilities shall be installed prior to Final Plat approval.
- B. All utilities shall be installed as necessary to prevent the future cutting of the pavement of any street, sidewalk or other public improvement.
- C. Water mains.
- D. The design and specifications of the distribution system shall meet the applicable public water system requirements.
- E. Sanitary sewers
- F. Sanitary sewers shall be installed in each subdivision and approved by The Alabama Department of Public Health. Septic tanks may be permitted by the Alabama Department of Public Health in lieu of sanitary sewer lines.

Section 10. Drainage Improvements

A. General

1. The increase in stormwater runoff which occurs as a result of development has the potential to have detrimental effects on adjacent property, particularly those downstream of the development. The engineer should take this into consideration during the design of the drainage plan. A properly designed drainage plan should have no adverse effects on adjacent or downstream properties. Thus, the engineer must submit a letter with the preliminary plat which contains the following statement:

“The drainage plan for <insert project name> has been designed such that when constructed according to the plans and specifications, within usual construction tolerances, there will be no adverse effects to adjacent or downstream properties.”
2. All subdivisions shall be provided with adequate storm drainage facilities. Any areas subject to periodic flooding caused by poor drainage facilities will not be accepted by the Planning Commission unless the Developer makes necessary provisions to eliminate such flooding. A diversion of watershed from one drainage basin into another will not be allowed for any subdivision or development.
3. All construction within the special Flood Zones (as determined by Federal Emergency Management Agency), must adhere to City of Montevallo’s “Flood Damage Prevention Ordinance” (Appendix D).
4. Drainage facilities shall be designed for a 25 year rainfall event. Design calculations shall be based on future probable development of the entire drainage area to be served or developed
5. A complete drainage plan and contour map showing the pipe size, their locations and the areas to be drained, shall be submitted along with the profile grades and typical roadway section for approval.
6. All existing drainage structures shall be shown on the preliminary plat.

7. All off-site drainage, draining onto the subdivision, shall be shown on contour maps showing the areas in acres that the subdivision will have to accommodate.
8. Drainage area and peak flow estimates must be provided for each drainage facility, as well as profiles for all new storm sewers and open ditches, with outlet velocities. Storm drainage facilities shall be designed by a Registered Professional Engineer licensed to practice in the state of Alabama. The engineer's seal and signature shall be on all drawings.
9. Structural capabilities for all new culverts and storm sewer pipe shall be provided. Reinforced concrete pipe shall be required for all proposed storm sewers within public easements and rights-of-way.
10. If outlet velocities are greater than five feet per second, some type of energy dissipation will be required. If rip-rap is used, a minimum of 20 linear feet of ALDOT Class II rip-rap is required for 18 inch and 24 inch diameter pipes. Energy dissipation for larger culverts must be designed by the engineer.
11. Typical sections of all open ditches and swales shall be provided.
12. Any new culvert or storm sewer pipe under the jurisdiction of the ALDOT must be approved by ALDOT. Copies of this approval shall be provided at the time of submittal.

B. Drainage and Inundations

1. A drainage plan shall be made for each subdivision by the owner's engineer, which plan shall take into consideration the ultimate or saturated development of the tributary area in which the proposed subdivision is located. On-site stormwater detention measures may be required by the City Engineer.
2. The storm and sanitary sewer plans shall be worked out prior to the development of the other utility plans. Engineering considerations shall give preferential treatment to these gravity flow improvements, as opposed to other utilities and improvements. Off-premise drainage easements and improvements may be required to handle the runoff of the subdivision into a natural drainage channel. But under no condition shall storage drainage be emptied into the sanitary sewer system—or vice versa.
3. The City Engineer may require whatever additional engineering information he deems necessary to make a decision on subdivisions and other development which contains an area of questionable drainage
4. All development in the city shall be in compliance with the City of Montevallo's "Flood Damage Prevention Ordinance". The applicant is urged to contact the City Engineer for a preliminary discussion on this matter prior to plan submittal.
5. The city will not allow a diversion of watershed from one drainage basin to another for any subdivision or development of land within its jurisdiction.

Section 11. Stormwater Detention/Retention

- A. All development in the city subject to stormwater detention shall meet the minimum design requirements set forth in this Section.
- B. Detention facilities shall be designed for a 25 year, one hour rainfall at a minimum. Rainfall amounts shall be based on the latest available information.
- C. Each detention facility shall provide for an emergency spillway designed to convey the 100 year rainfall event.
- D. The minimum information submitted for a detention pond design shall be as follows:
 - 1. Existing drainage area and peak flow to the facility.
 - 2. Proposed drainage area and peak flow to the facility.
 - 3. Inflow hydrograph.
 - 4. Outflow hydrograph.
 - 5. Storage-elevation plot.
 - 6. Required storage volume, in acre-feet or cubic feet.
 - 7. 100 year peak rainfall flow to the emergency spillway.
 - 8. Statement of methodology used for detention facility design. In general all detention facilities will be checked using the storage indication method. Other methodologies are acceptable.
 - 9. Underground detention is not acceptable.
 - 10. Provide for low flow ditch in reservoir.
 - 11. Sides shall be grassed or paved.
 - 12. Primary spillways must be equipped with a trash rack. Maximum opening between bars shall not exceed four inches.
 - 13. Overflow sections, such as emergency spillways, shall be sodded or paved.
 - 14. Requirements for detention facilities are as follows:
 - a) Maximum water depth in pond for design storm – Four feet.
 - b) Maximum water depth in emergency spillway – One foot.
 - c) Minimum (cut and fill section) dam width at the top – Five feet.
 - d) Maximum side slope steepness – 3:1.
 - e) Geotechnical design of dam or embankment structures may be required by the City Engineer.
 - 15. All detention facilities shall be enclosed with a minimum five foot high black, vinyl coated chain link fence. In areas highly visible from public right-of-way, the pond will be screened from view with landscape planting as referenced in Article 23, Landscape and Buffer Requirements of the City of Montevillo Zoning Ordinance.
- E. Requirements for retention facilities (permanent lakes) shall be as follows:
 - 1. Due to the potential for major property damage and potential loss of life in case of failure of a dam or spillway structure, extreme care must be used in the design and construction

of these features. Prior to commencing the design or construction of any of these elements, consultation with the City Engineer is required in order to establish acceptable hydrologic, hydraulic, and geotechnical design parameters. Quality control measures, designed to ensure the construction of each of these elements according to the approved plans must be specified and rigidly adhered to by the developer and contractor.

2. Geotechnical design of dam embankment structure or stability analysis of existing dam may be required by the City Engineer.
 3. Primary and Emergency spillways shall be designed and located to provide maximum safety to the public.
 4. Primary spillways must be equipped with a trash rack. Maximum opening between bars shall not exceed four inches.
 5. Where lakes are used for storm water detention, maximum fluctuation between permanent pond level and maximum pond level shall be three feet.
- F. Certain facilities such as Detention/retention pond calculations must bear the seal and signature of a Registered Professional Engineer licensed to practice in the state of Alabama.
- G. Maintenance responsibility of non-public improvements:

Certain facilities such as storm water drainage systems, which are not within the road right-of-way, such as detention ponds, or other storm water management facilities, ditches, sidewalks, street lights, community landscaping, etc., require on-going perpetual maintenance. The responsibility to properly maintain these improvements lies with the affected property owners and/or the development's required Homeowners Association.

H. Miscellaneous

1. Names

- a) No street name shall be used which will duplicate by spelling or sound otherwise be confused with the name of existing streets. Street names are subject of approval by City of Montevallo.
- b) Subdivision names and other development names shall not duplicate or be confused with existing names. Subdivision and other development names are subject to approval by City of Montevallo.

I. Street Signage

In order to insure that streets are signed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) and to use the highest quality materials, the City will be responsible for signing streets. The developer will be required to pay for each sign according to Appendix D – Municipal Fees – Montevallo, Alabama, Code of Ordinances. Required signage includes, but is not limited to, stop signs, speed limit signs, street name signs, and stub street signs.

Section 12. Inspection

- A. The City Engineer shall regularly inspect construction to ensure that improvements are being constructed in accordance with the approved plans and that there are no defects in materials or workmanship. If the City Engineer determines that any of the required improvements

have not been properly constructed, the developer shall be responsible for correcting any defects.

- B. Before construction of any street or drainage facility the City Engineer shall be notified no less than 48 hours in advance of any phase of operation to be started.
- C. No drainage structure will be covered up until approval is given by the City Engineer.
- D. No base material shall be installed until compaction test reports have been reviewed and approved by the City Engineer.
- E. The base shall be installed and inspected under the direction of the City Engineer.
- F. No paving shall be installed until the base course is approved by the City Engineer. Care must be exercised in the grading of base course to assure the appropriate crown of road.

Section 13. Bond

- A. Prior to the approval of the Final Plat the developer shall have installed or constructed the required improvements, or posted bond as provided for in this Section.
- B. Bond and Surety – Amount and Release
 - 1. In the event the Planning Commission may consider that the requirements need not immediately be met by the subdivider, the requirements may be modified by the execution of a bond agreement with the subdivider. Such agreement shall state that the remaining improvements are to be installed and constructed within a specified length of time as determined by the Department of Development Services and/or the City Engineer. All grubbing, clearing, grading, and storm drainage structures shall be constructed prior to execution of a bond agreement. A bond shall be required to insure the fulfillment of such agreement and shall be by an irrevocable letter of credit, certificate of deposit or a certified check, hereafter referred to as “bond”. The applicant shall not be released from said bond except by a release in writing from the City Engineer and shall be subject to the administrative procedures established by the Departments of Development Services on behalf of the City of Montevallo. Said release shall obligate the developer to a one year warranty as described in Section 13.B.3 on all materials, workmanship and maintenance insured by the bond.
 - 2. Bond amount shall be set at 150 percent of the estimated cost of the remaining improvements. A schedule of estimated costs for all items to be bonded shall be submitted by a Registered Professional Engineer licensed to practice in the state of Alabama, or a written contractor’s estimate, for review by the City Engineer. This schedule shall clearly describe the items, quantities, unit cost and total cost of the remaining improvements. Bond shall also cover any repairs to improvements previously installed.
 - 3. Maintenance – As a condition of the release of a bond, Development Services shall secure from all developers an agreement in which said developer shall agree to maintain all improvements for a period of one year after the acceptance of such improvements by the City of Montevallo.
 - 4. Inspection and Acceptance – The City Engineer shall regularly inspect construction to ensure that improvements are being constructed in accordance with the approved plans and that there are no defects in materials or workmanship. If the City Engineer determines that any of the required improvements have not been properly constructed, the developer shall be responsible for correcting any defects. Wherever a bond covers the

cost of improvements, the subdivider shall be liable for completing the improvements according to the approved plans and specifications. Upon completion of the improvements, the subdivider shall file with the Planning Commission/Department of Development Services a statement stipulating the following:

- a) That all required improvements are complete;
- b) That the improvements are in compliance with the minimum standards specified by the City of Montevallo for their construction;
- c) That the developer knows of no defects from any cause in those improvements; and
- d) That the improvements are free and clear of any encumbrance or lien.

Section 14. Acceptance of Streets

Release of bond and subsequent acceptable maintenance warranty shall constitute acceptance of a street into the inventory for public maintenance. No street will be accepted for maintenance unless approved by the City Engineer.

Section 15. Design and Construction Exceptions

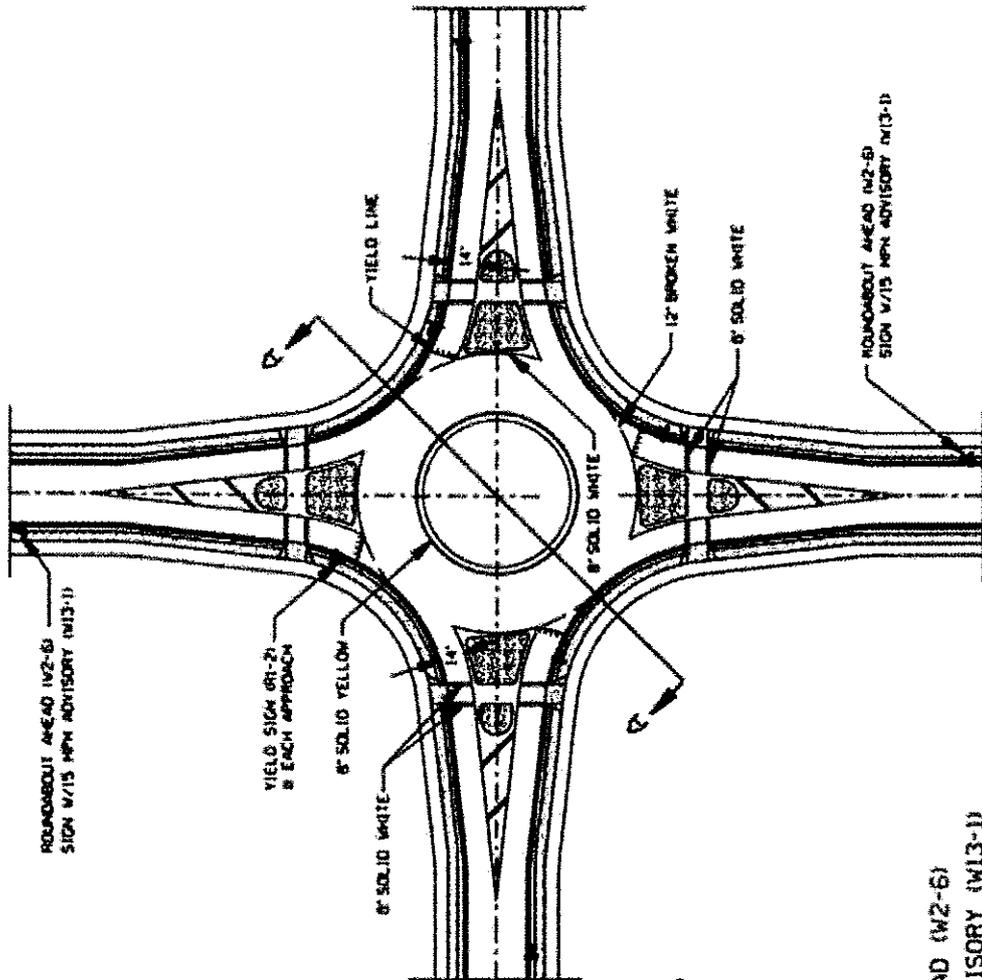
Any request to deviate or modify any of the engineering or construction requirements contained herein must be addressed to the City Engineer in writing. The request must clearly state the reason(s) that the request is being made. Any data or information that is used to support the request must be submitted in writing. The City Engineer has the sole authority to approve or deny the request. The City Engineer will respond in writing by approving or denying the request.

Section 16. Vacations

- A. Where an existing road or other right-of-way falls within a proposed subdivision tract and the developer proposes to vacate this right-of-way, the City Engineer shall review the proposed vacation to assess its potential effect on neighboring properties, and forward recommendations to the Planning Commission for consideration, where applicable.
- B. The Developer is solely responsible for compliance with Alabama State Law regarding the vacation of streets, alleys, and easements.
- C. No street or easement may be vacated unless such action is recommended by the City Engineer to the City Council.
- D. Where a street or alley has been vacated, a note shall be shown on the plat indicating such and referring to the recorded instrument or vacation by deed book and page number.

Section 17. Standard Drawings and Details

- A. The State of Alabama Special & Standard Highway Drawings shall be utilized as a minimum design standard for all construction not covered within these appendices.
- B. The following drawings represent the minimum standards accepted by the City of Montevallo. In the event of conflict between these drawings and the State of Alabama Special & Standard Highway Drawings, the City Engineer will determine the appropriate treatment.



ROUNDABOUT AHEAD (W2-6)
SIGN W/15 MPH ADVISORY (W13-1)

YIELD SIGN (R1-2)
@ EACH APPROACH

6" SOLID YELLOW

6" SOLID WHITE

6" SOLID WHITE

12" BROKEN WHITE

6" SOLID WHITE

ROUNDABOUT AHEAD (W2-6)
SIGN W/15 MPH ADVISORY (W13-1)

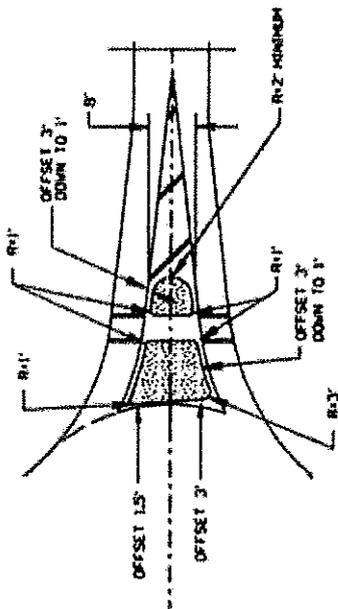


ROUNDABOUT AHEAD (W2-6)
SIGN W/15 MPH ADVISORY (W13-1)

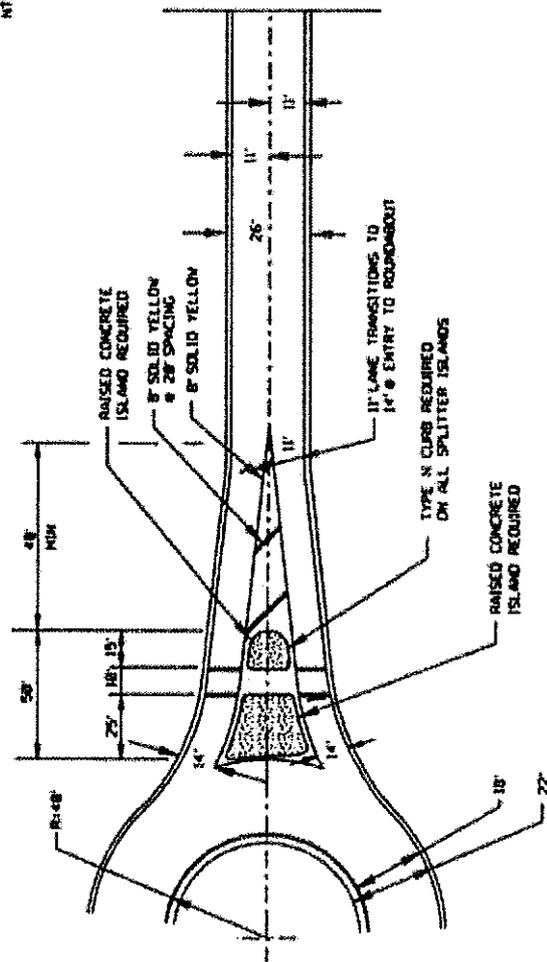
STRIPING AND SIGNAGE

NTS

DRAWING NO. 14	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 05-20-86	8		



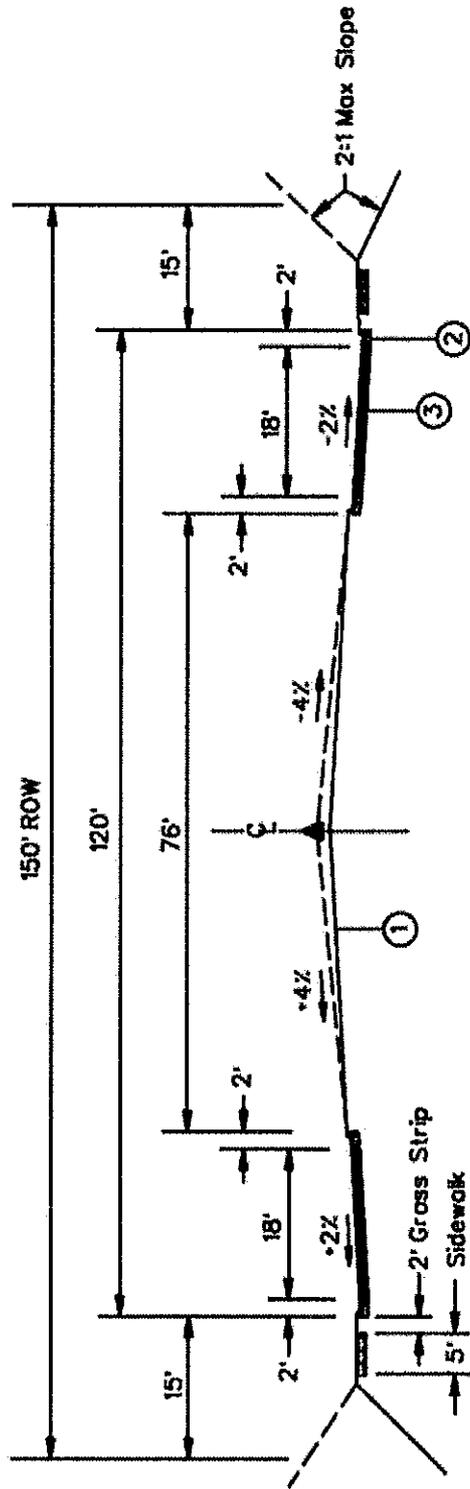
SPLITTER ISLAND NOSE RADIUS AND OFFSETS
NTS



NOTE:
SPLITTER ISLAND DESIGNED
TANGENT TO CENTER ISLAND

SPLITTER ISLAND DETAIL
NTS

DRAWING NO. 18 DATE: 8-28-86	REVISION NO. #	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
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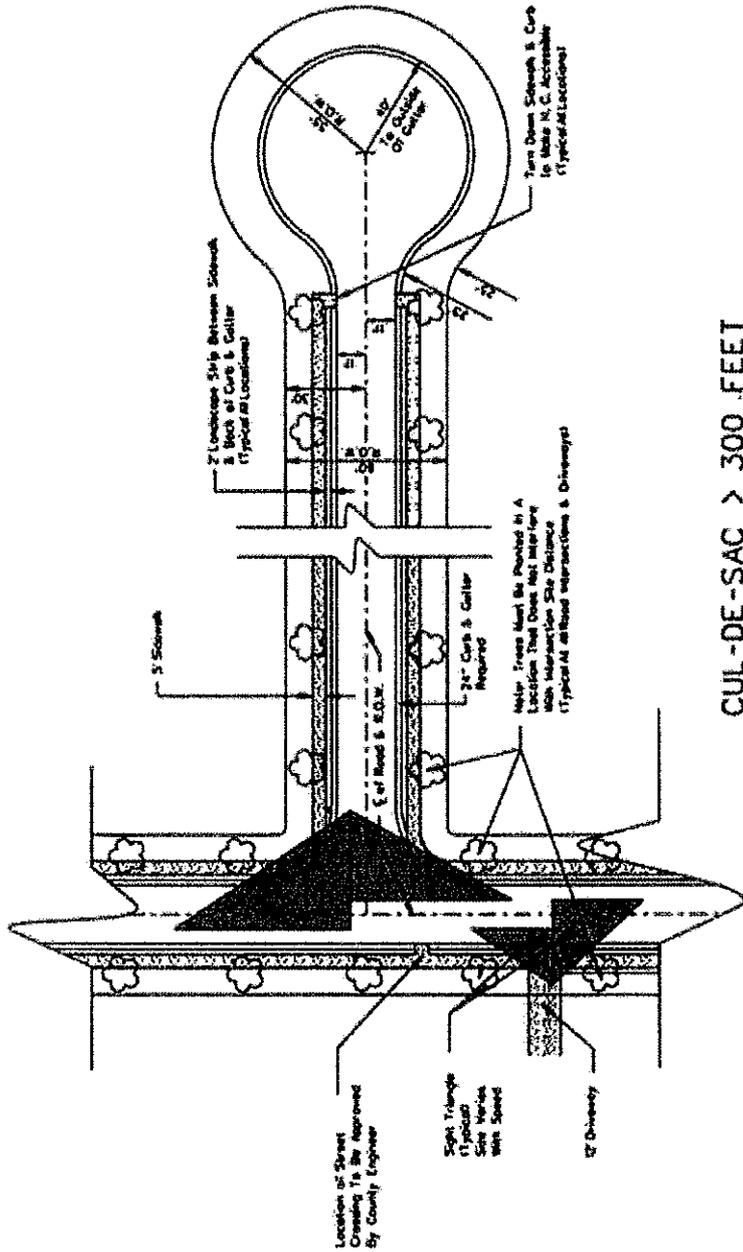


- ① Vegetation within Central Island Cannot Interfere with Roundabout Sight Distance
- ② 24" Curb & Gutter
- ③ Asphalt Buildup Per Engineering Standards (Section 6.15)

TYPICAL ROUNDABOUT SECTION A-A

NTS

DRAWING NO. 1C DATE: 01-10-09	REVISION NO. 1	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
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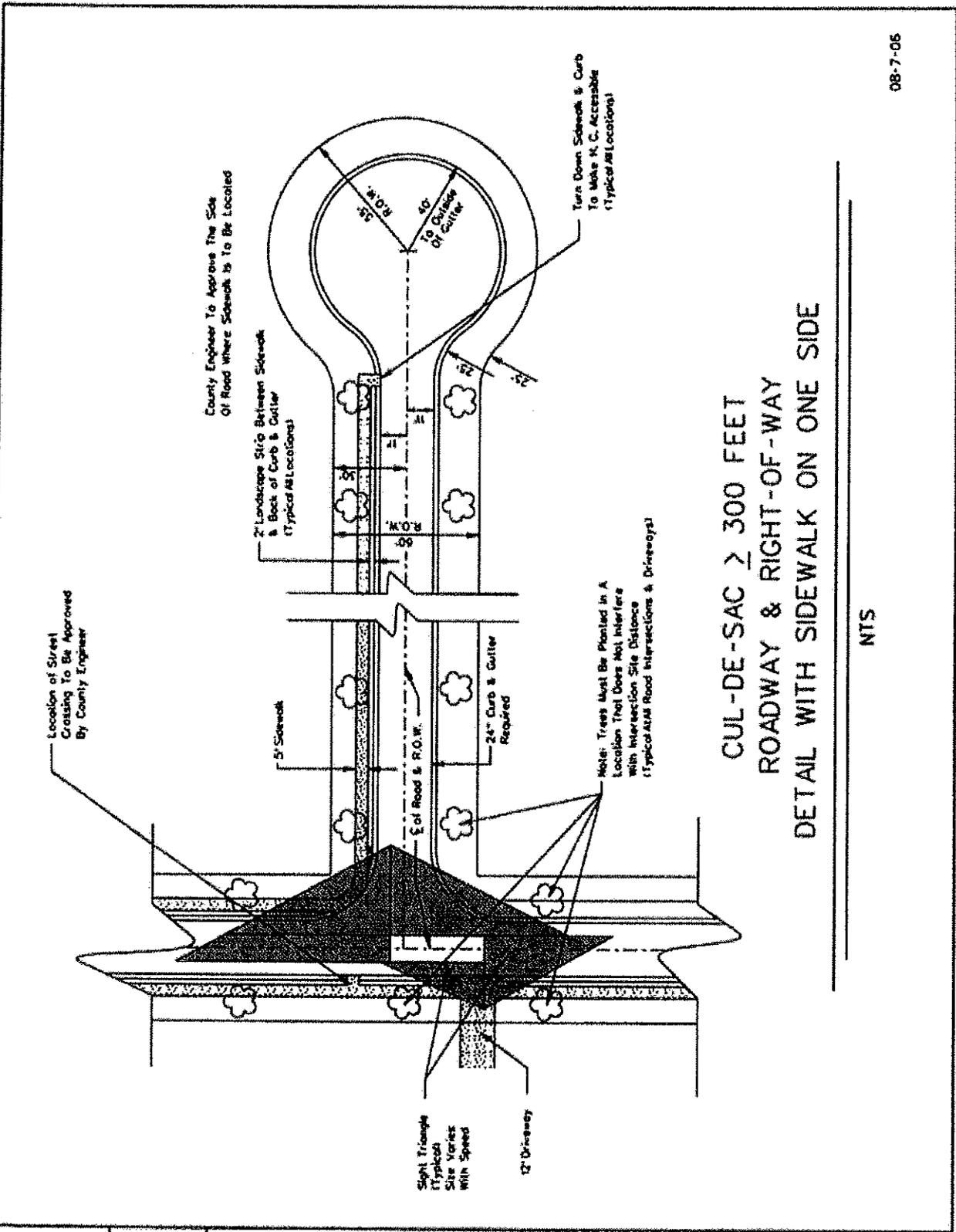


CUL-DE-SAC > 300 FEET
 ROADWAY & RIGHT-OF-WAY
 DETAIL WITH SIDEWALK ON BOTH SIDES

NTS

84-14

DRAWING NO. 24	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 04-28-86	8		

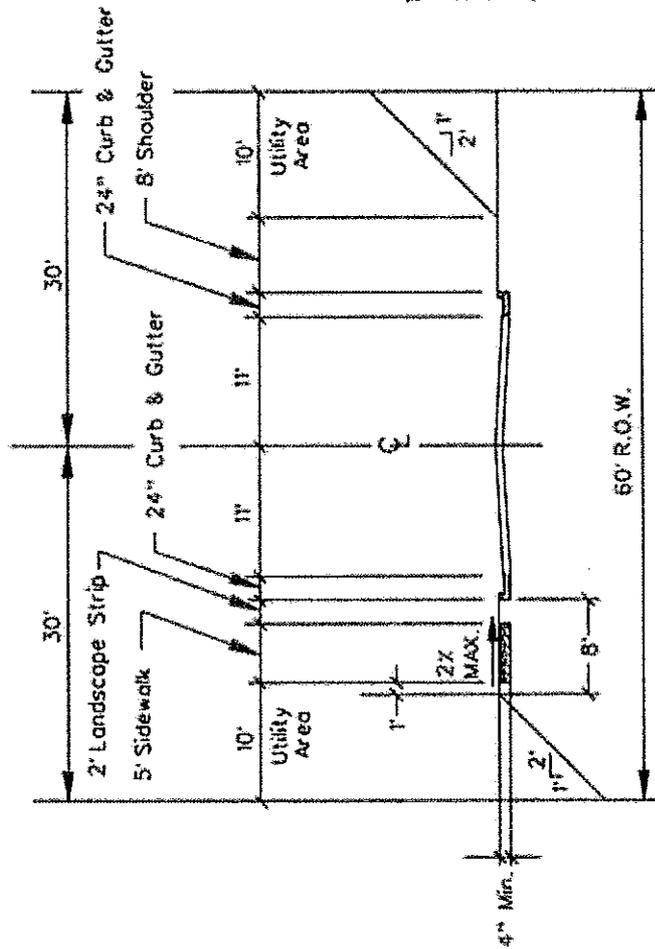


CUL-DE-SAC > 300 FEET
 ROADWAY & RIGHT-OF-WAY
 DETAIL WITH SIDEWALK ON ONE SIDE

NTS

08-7-05

DRAWING NO. 3A	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 07-28-85	8		



Notes:

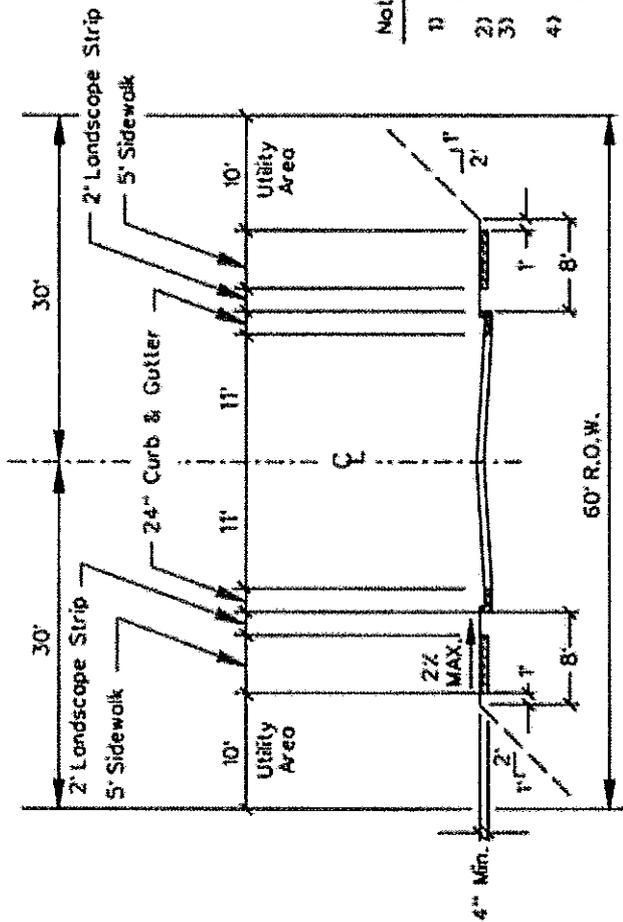
- 1) Sidewalk construction must adhere to ALDOT Standards Section 518
- 2) 3000 lb Concrete
- 3) Subgrade compacted to 95% Standard Proctor Density
- 4) Seed and mulch all cut/fill slopes per ALDOT Specifications (Typ)

TYPICAL SECTION WITH SIDEWALK ON ONE SIDE

NTS

08-7-06

DRAWING NO. 38	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 07-20-06	0		



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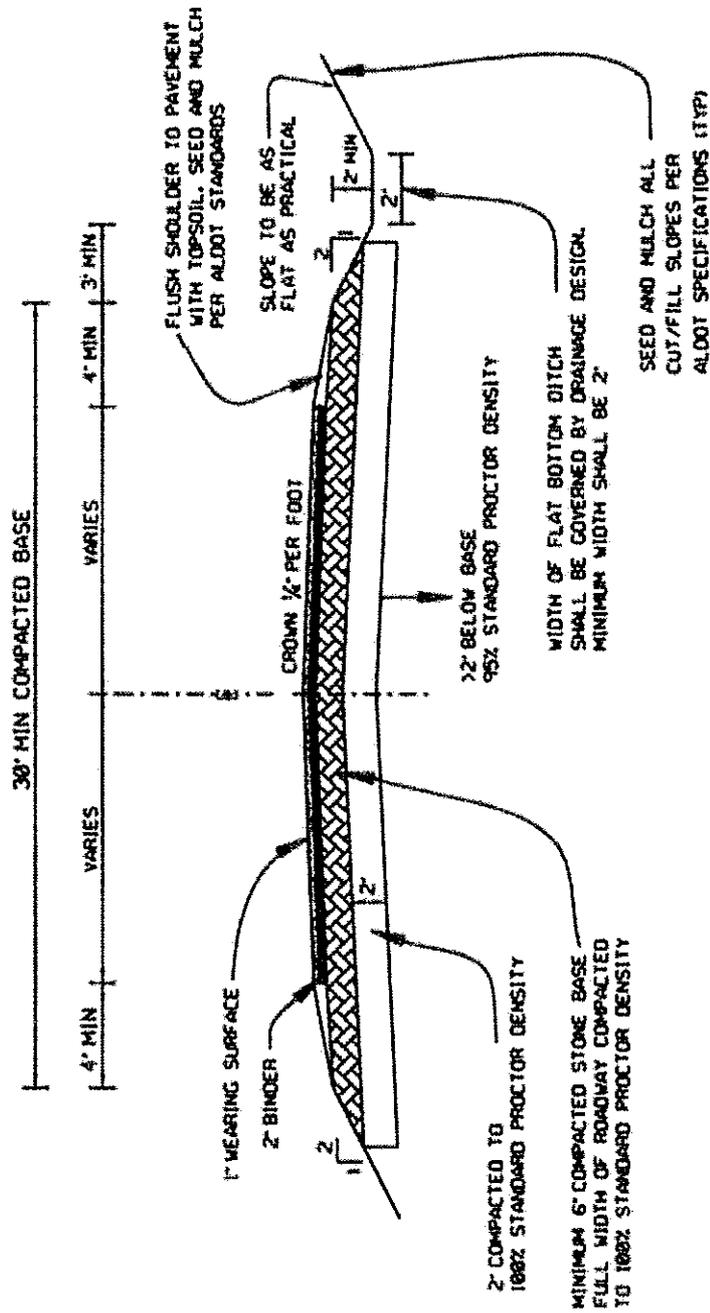
- 1) Sidewalk construction must adhere to ALDOT Standards Section 618
- 2) 3000 lb Concrete
- 3) Subgrade compacted to 95% Standard Proctor Density
- 4) Seed and mulch all cut/fill slopes per ALDOT Specifications (Typ)

TYPICAL SECTION WITH SIDEWALK ON BOTH SIDES

NTS

08-7-06

DRAWING NO. 78	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 01-28-95	8		



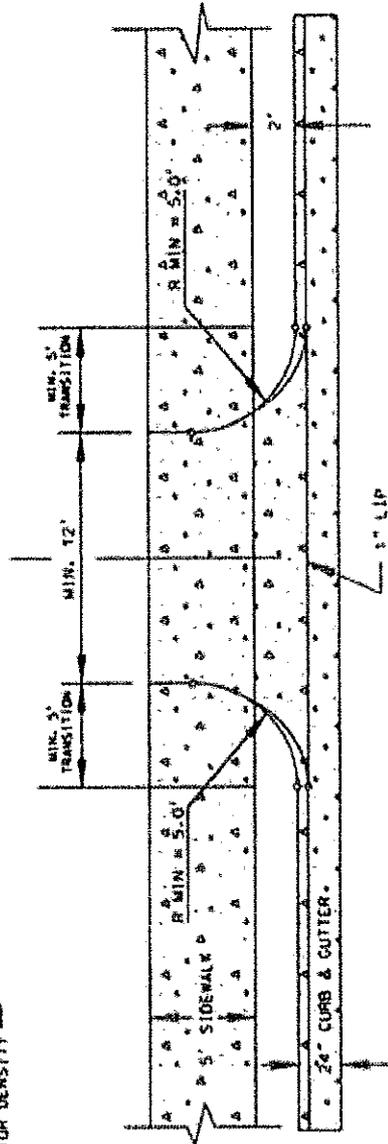
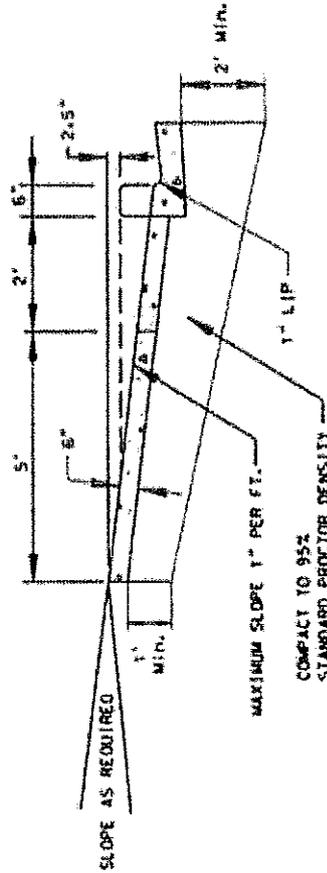
RURAL DRIVE WITHOUT CURB AND GUTTER

NTS

DRAWING NO. 4	REVISION NO.	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 07-20-06	8		

NOTES:

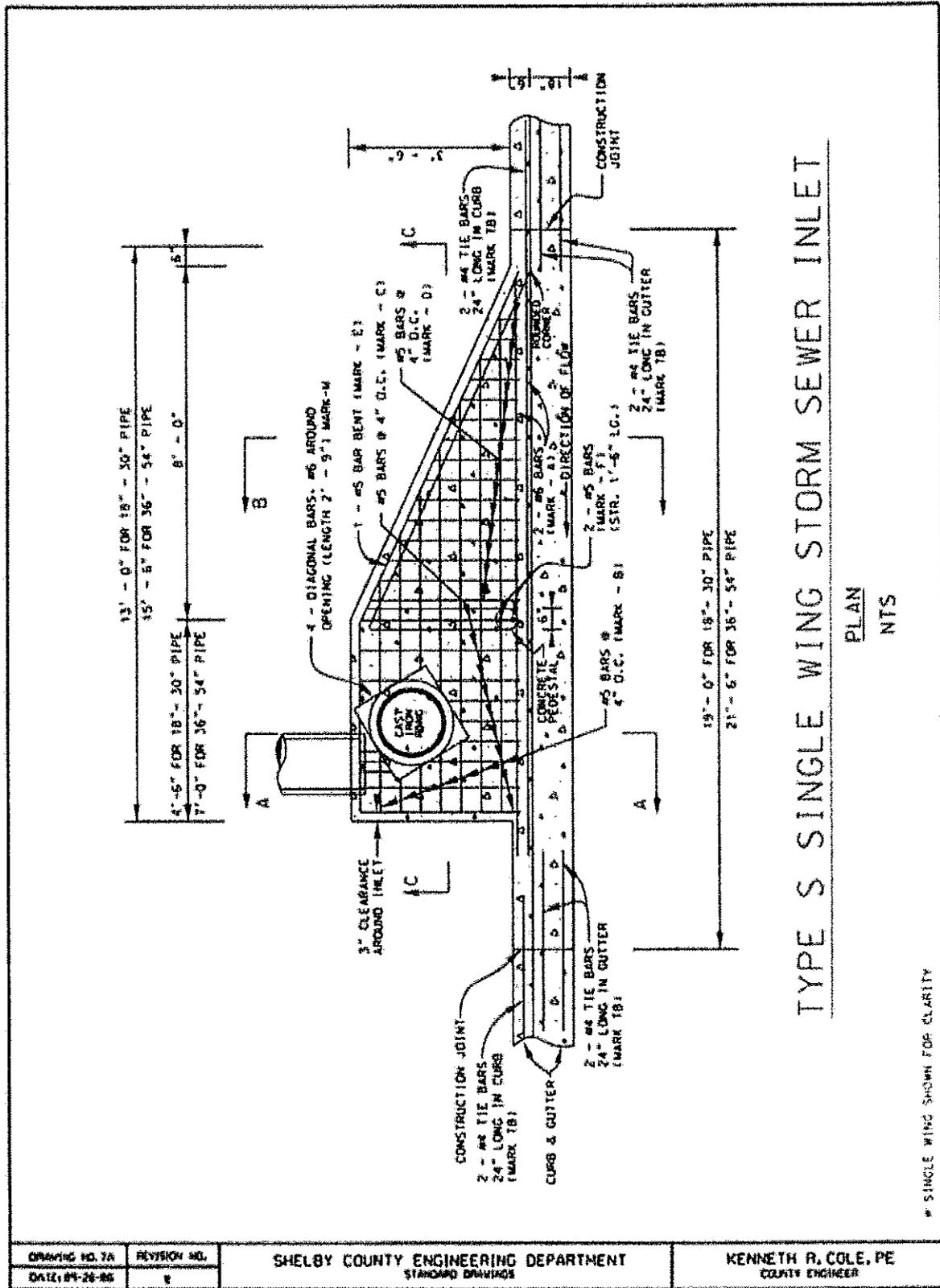
- 1.1 MAXIMUM DRIVEWAY SLOPE SHALL BE 1" PER FOOT FOR A DISTANCE OF 7' BEHIND BACK OF CURB.
- 2.1 ALL DRIVEWAYS SHALL BE CONSTRUCTED A MINIMUM OF SIX INCHES THICK WITH A COMPRESSIVE STRENGTH OF 3000 PSI. FOR DRIVEWAYS ANTICIPATING HEAVY TRAFFIC, A MINIMUM EIGHT INCHES WILL BE REQUIRED.



STANDARD DRIVEWAY

NTS

DRAWING NO. 11	REVISION NO. 1	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 09-29-06	#		

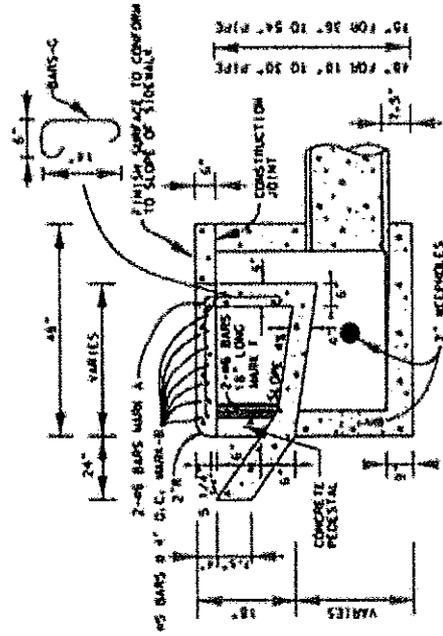


TYPE S SINGLE WING STORM SEWER INLET

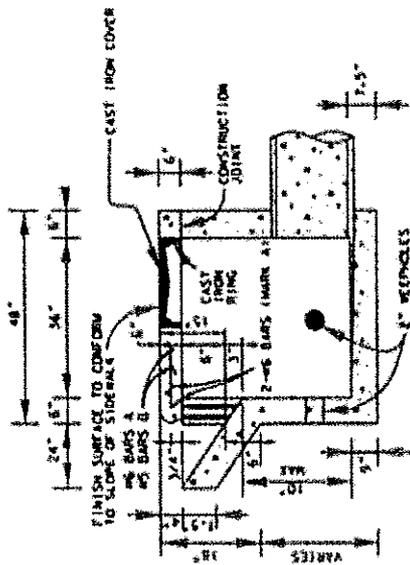
PLAN
NTS

* SINGLE WING SHOWN FOR CLARITY

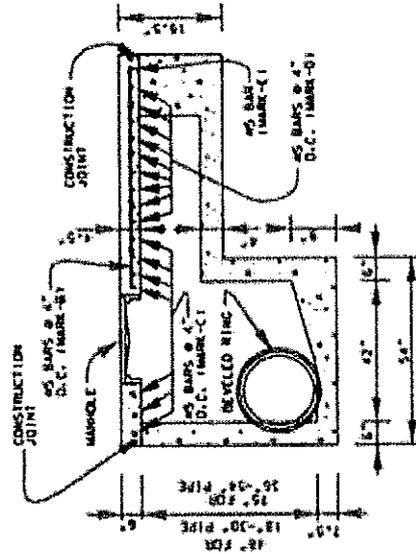
DRAWING NO. 7A DATE: 01-26-86	REVISION NO. 1	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
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SECTION "AA"
NTS



SECTION "BB"
NTS



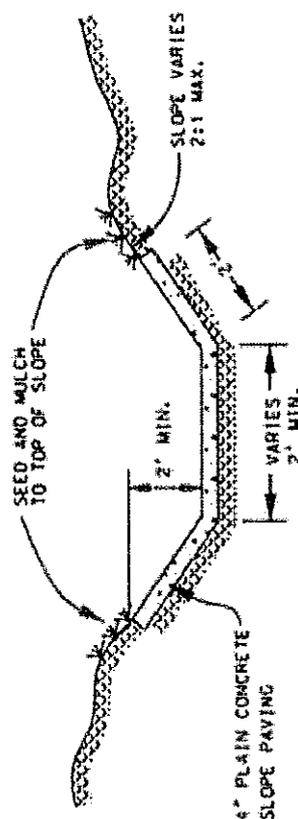
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DRAWING NO. 78
DATE: 05-28-88

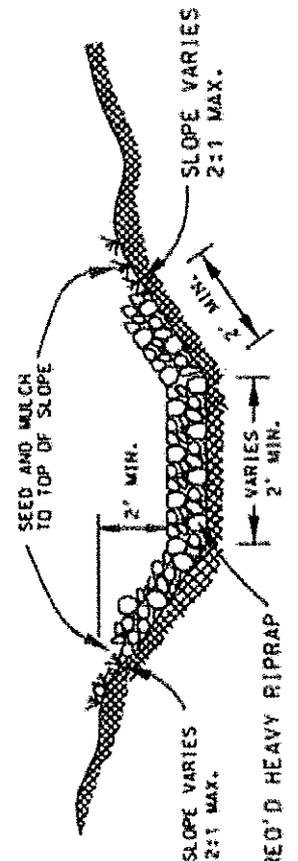
REVISION NO.
#

SHELBY COUNTY ENGINEERING DEPARTMENT
STANDARD DRAWINGS

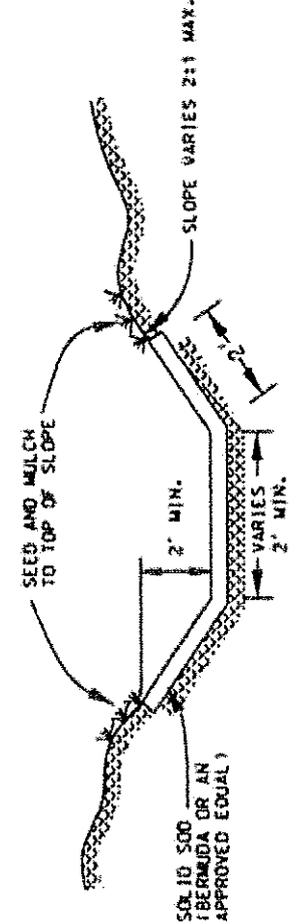
KENNETH R. COLE, PE
COUNTY ENGINEER



TYPE III
SLOPE PAVED DITCH
NTS



TYPE II
RIP-RAP DITCH
NTS

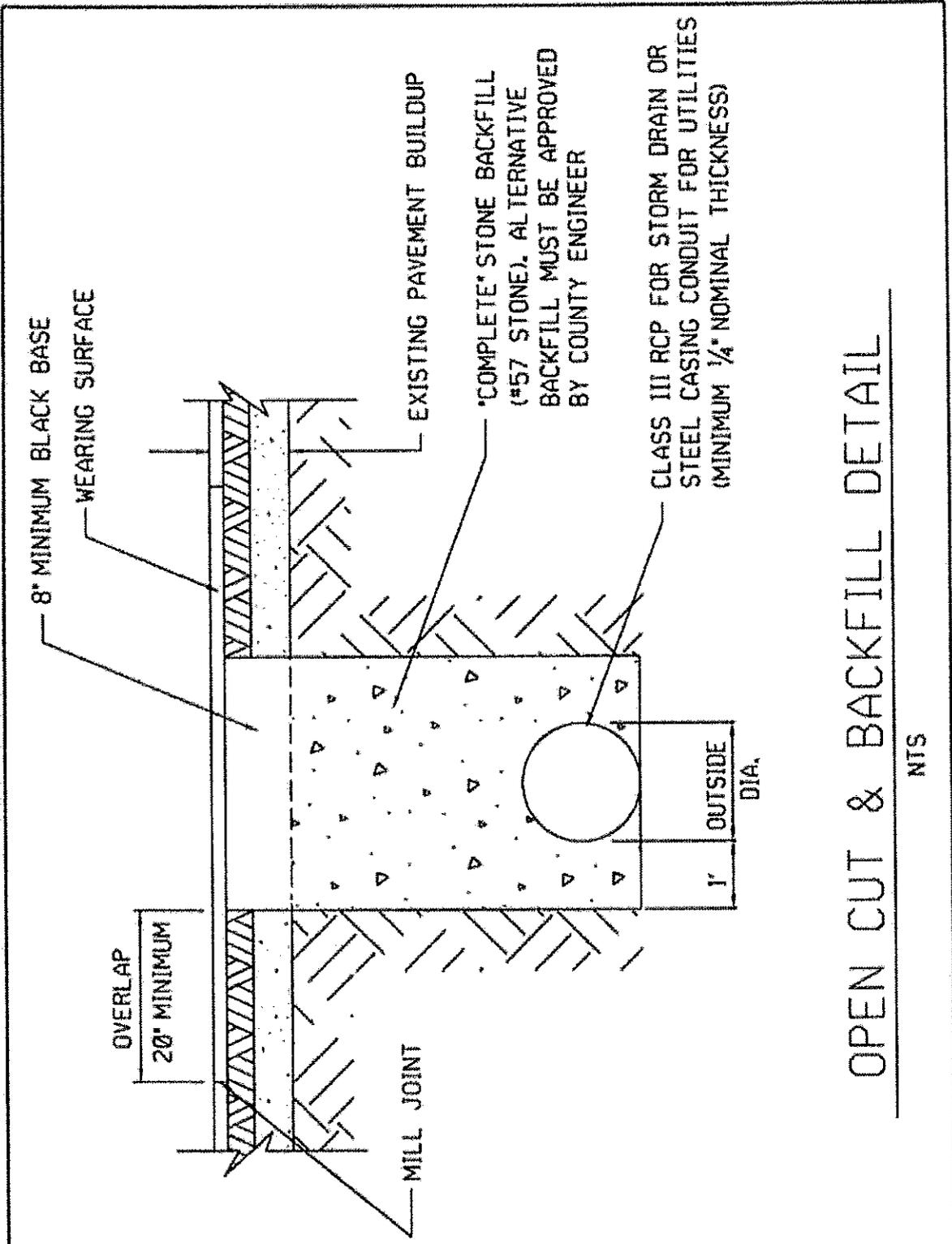


TYPE I
SOLID SOD DITCH
NTS

1. DITCH SIDE SLOPES SHALL BE A MAXIMUM OF 2:1 H:V.
2. RIPRAP SHALL BE CLASS II.
3. CONCRETE FOR SLOPE PAVING SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
4. SOLID SOD DITCHES AND SLOPE PAVED DITCHES SHALL BE USED AS DIRECTED BY THE COUNTY ENGINEER.
5. VELOCITIES MUST BE SHOWN FOR ALL PROPOSED DITCHES.

TYPICAL DITCH SECTIONS

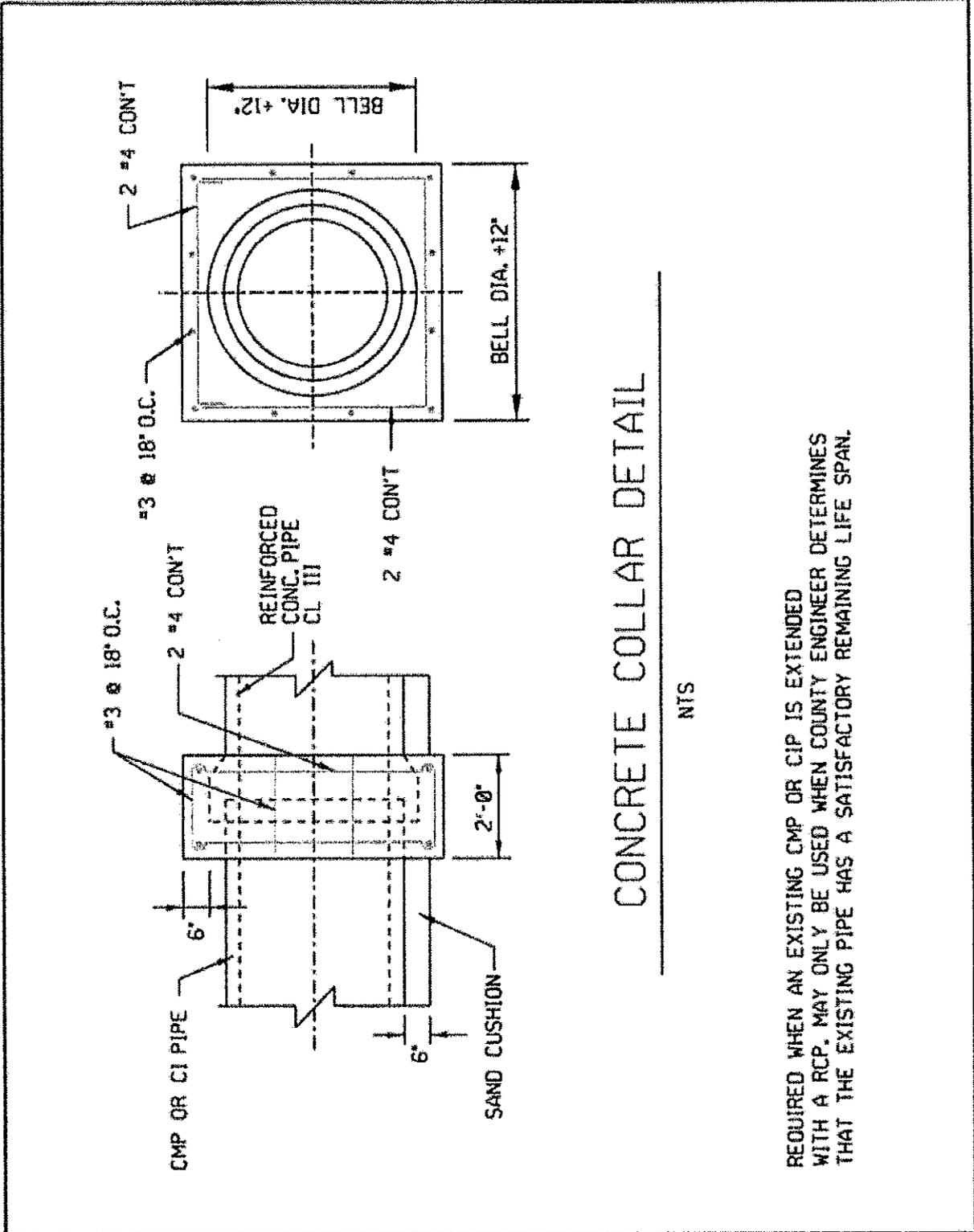
DRAWING NO. 8	REVISION NO. 8	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
DATE: 01-28-26			



OPEN CUT & BACKFILL DETAIL

NTS

DRAWING NO. 1 DATE: 09-28-86	REVISION NO. 5	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
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CONCRETE COLLAR DETAIL

NTS

REQUIRED WHEN AN EXISTING CMP OR CIP IS EXTENDED WITH A RCP. MAY ONLY BE USED WHEN COUNTY ENGINEER DETERMINES THAT THE EXISTING PIPE HAS A SATISFACTORY REMAINING LIFE SPAN.

DRAWING NO. 18 DATE: 07-28-06	REVISION NO. #	SHELBY COUNTY ENGINEERING DEPARTMENT STANDARD DRAWINGS	KENNETH R. COLE, PE COUNTY ENGINEER
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Adopted on this the 21st day of February 2013.



By: Donnie Norris, Chairman
Planning Commission



Attest: Herman Lehman,
City Clerk