Subdivision Regulations

Adopted March 8, 2007

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ARTICLE I

GENERAL PROVISIONS

A. *PURPOSE:*

The purpose of these regulations is to promote the health, safety, morals and general welfare of present and future residents and to effect the coordinated and efficient development of the City of Fairhope, Alabama in accordance with the Comprehensive Plan and all other plans or programs adopted by the City for the physical development of the City of Fairhope and neighboring territory. These regulations shall be implemented to achieve the following goals and purposes:

1. The proper arrangement of streets in relation to other existing and planned streets;
2. The proper arrangement of streets in relation to the Comprehensive Plan;
3. Adequate and convenient open spaces for pedestrian, bicycle, or vehicular traffic;
4. Adequate and convenient open spaces for utilities;
5. Adequate and convenient open spaces for access of fire-fighting apparatus;
6. Adequate and convenient open spaces for recreation, light and air;
7. The avoidance of congestion of population;
8. Proper and timely grading and improvements of streets and other ways;
9. Proper and timely installation of water and sewer and other utility mains, piping, or other facilities.
10. Accomplishing coordinated, adjusted, and harmonious development of the City and neighboring territory;
11. Promoting good civic design and arrangement;
12. Promoting wise expenditure of public funds; and
13. Promoting adequate provision of public utilities and other public requirements.

B. *AUTHORITY:*

The Subdivision Regulations for the City of Fairhope are promulgated under authority of The Code of Alabama, 1975 as set forth in Title 11, Chapter 52, as amended.

C. *JURISDICTION:*

These regulations shall govern the subdivision of lands within the Corporate Limits of the City of Fairhope and all that extra-territorial area lying within five miles of the Corporate Limits; provided further that the jurisdictional line between the City of Fairhope and the City of Daphne shall be determined as provided by statute. Any owner of land within the jurisdiction wishing to subdivide land shall submit to the Planning Commission a plat of the subdivision which shall conform to the minimum requirements set forth in these regulations. No plat of a subdivision lying within the

territory in whole or in part shall be filed or recorded in the Office of the Judge of Probate of Baldwin County without the written approval of the Planning Commission. No sub-divider shall proceed with improvement, transfer or sale of lots within a subdivision until a proper plat of such subdivision shall have been finally approved by the Planning Commission and properly recorded. No plat shall be deemed to have received final approval and no plat shall be recorded until the Secretary of the Planning Commission shall have affixed a signed statement of approval upon the face of the plat.

Appeals of final planning commission decisions, relative to subdivision applications, shall be addressed through the appropriate judicial authority.

ARTICLE II

DEFINITIONS

Abutting/Contiguous property: any property that is immediately adjacent to, touching or separated from such a common border by a right-of-way, alley or easement.

Accessory dwelling unit: a dwelling unit that is incidental and subordinate to the principal dwelling unit on the lot.

Adverse Affect: the potential for harm or damage to downstream areas where receiving systems and facilities are deemed inadequate to satisfactorily accommodate runoff from upstream development.

Agent: a person, firm or corporation who is empowered to act for a principal on matters, which come within the scope of designated activities.

Alley: a public right-of-way primarily designed to service as a secondary access to the side or rear of properties whose principal frontage is on some other street.

Arterial Street: a highway or street of considerable continuity, providing direct and continuous connections to points along its route through various modes of transportation, interrupted only by major community destinations or topographical obstacles.

Avenue: a local street with little continuity, but having design characteristics of an arterial street over its short distance. Avenues support access to non-residential uses when the arterial streets upon which those uses are located are unable to perform that function completely.

Base Flood: the flood caused by a 100-year flood event.

Base Flood Elevation: the storm water elevation caused by a base flood.

Best Management Practices (BMP): are structural and non-structural measures to minimize quantity and maximize quality of runoff from a construction site, including sediment and erosion control BMPs, good housekeeping BMPs, and storm water BMP's.

BMP Treatment train: a technique for progressively selecting various storm water management treatment practices (structural and nonstructural) to address water quality and quantity goals, by which groups of practices may be used to achieve a treatment goal while optimizing effectiveness, maintenance needs and space.

Bike Lane: a paved pathway, either separated from or part of the roadway, dedicated for the use of bicycles.

Block: a division or parcel of land entirely surrounded by public highways, streets, or other rights-of-way, or other boundary as specified in these Regulations.

Boulevard: an arterial street that generally does not include a median, unless approved in specific locations as a traffic-calming device.

Building: any structure attached to the ground and intended for shelter, housing or enclosure for persons, animals, or chattels.

Building Height: the vertical distance measured from the average elevation of the proposed finished grade at the front of the building to the highest point of the roof for flat roofs, to the deck line of mansard roofs, and the mean height between eaves and ridge for gable, hip and gambrel roofs. In XA- flood zones building height will be measured from the lowest finished floor elevation. In V- flood zones, building height will measured from the bottom of the lowest supporting girder.

Building Setback Line: the minimum allowable horizontal distance between the street right-of-way line and the building, except for steps or terraces with no canopy, open fire escapes, roof overhangs, balconies, canopies or cornices projecting no more than two feet beyond the main wall, offset or overlapping projections of second floors that project no more than three feet beyond the main floor of the building.

Building Site: the land occupied or to be occupied by a structure and its accessory structures including opens spaces, required yards and parking.

City: The City of Fairhope, Alabama.

City Council: the governing body of the City of Fairhope, Alabama.

Collector Street: a street of moderate continuity, providing direct and continuous access to points along its route through various modes of transportation, interrupted occasionally by neighborhood destinations or topographical obstacles, and used primarily for access between local streets and arterial streets.

Comprehensive Plan: the plan, adopted by the City, for the physical, systematic, and orderly development of the City and its planning jurisdiction with particular regard to streets, parks, industrial and commercial undertakings, civic beauty and other matters properly within the police power.

Conservation easement: an easement that transfers usage rights which is a legally enforceable land preservation agreement between a landowner and a municipality or qualified land protection organization (often called a land trust) for the purpose of conservation. It restricts real estate development, commercial and industrial uses, and certain other activities on a property to a mutually agreed upon level.

Condominium Development: real estate, portions of which are designated for separate ownership and the remainder of which is designated by common ownership solely by the owners of those portions. The development type is hereby subject to the same development reviews and procedures as a conventional subdivision. Condominium developments shall submit a plat(s) that adhere(s) to the requirements established in this document. Existing buildings as of September 2001 in the City

Limits and ETJ are exempt from these procedures. Additionally, the Central Business District as defined in the Zoning Ordinance is exempt from these procedures.

Corner Lot: a parcel of land abutting upon two or more streets at their intersection.

Crosswalk: a designated transverse right-of-way across a public street for the purpose of protection of pedestrians crossing to the other side of the street.

Cul-de-sac: a local street designed to have one end temporarily and/or permanently closed, the closed end being terminated with a vehicular turnaround

Curb or Curb-line: the vertical face of a concrete curb nearest the center of the street or, where no curb exists, the edge of the traveled way.

DBH: Diameter at Breast Height, or 4.5 feet above the grade. Used to measure all trees.

Dedication: the transfer of property from private to public ownership.

Detention Facility: a storm water management facility which provides temporary storage of storm water runoff in ponds, parking lots, depressed areas, rooftops, buried underground vaults or tanks, etc., for future release, and which is used to delay and attenuate peak flow and volume.

Differential Runoff: the difference between the rate and volume of storm-water runoff from a particular parcel or project in its undeveloped or natural condition and that of the same property after development.

Double Frontage Lot: a lot which abuts a public way on both front and rear, a lot which extends all the way through the block. If a minimum 40-foot greenbelt is provided between the rear lot line and the right of way, the lot shall not be considered double frontage.

Dwelling Unit: one or more rooms of any structure designed, occupied, or intended for occupancy as a separate living quarter for an individual or group of individuals living as a single household.

Easement: a restricted area on privately owned land, the use of which is reserved for a specific purpose or public utility and runs with the land in perpetuity unless the City, by resolution, approves the vacation of the easement upon a finding that there is no public need.

Engineer: one who is licensed to practice as a Professional Engineer in his qualified field of expertise by the Alabama Licensing Board for Engineers and Land Surveyors. A qualified engineer undertaking the design and inspection of construction within subdivisions may be referred to as the Project Engineer.

Engineering Plan: a post-construction record giving details of construction and locations of improvement and utilities as they were built or installed.

Exception: basis for non-application of a particular standard in these regulations, approved at the discretion of the Planning Commission as part of the application process, and based on general circumstances and criteria specified in these regulations.

Final Plat: a plat of a tract of land which meets the requirements of these regulations and is in proper form for recording in the Office of the Probate Judge of Baldwin County, Alabama.

Flood Control Structure: those physical structural works for which funds have been authorized, appropriated, and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the area within the City subject to a "special flood hazard" and water depths associated with flooding. Flood control structures typically include: hurricane tidal barriers, dams, reservoirs, levees or dikes. Typically flood control structures are located perpendicular to a stream and within the stream buffer.

Detention and retention ponds are typically not allowed within Stream Buffers, since they are used to meet water quantity/quality requirements.

Flood Control Volume: the intent of flood control volume control is to provide for public safety; minimize downstream flood impacts on level of service of stream crossings and storm water conveyance systems; flood elevations; and maintain published and existing 100-year floodplain and floodway boundary limits.

Floodway: the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface more than one (1) foot. For the purpose of these regulations, floodways shall be defined as follows:

(a) The floodways as identified or delineated in the Flood Insurance Study for Baldwin County, Alabama.

(b) Along small streams and watercourses. All lands lying within 25 feet of the top of the bank of the channel (measured horizontally), unless the developer demonstrates to the satisfaction of the City of Fairhope Planning Commission that a lessor distance (but not less than 15 feet) is adequate based on the watershed characteristics and probable storm runoff for the base flood.

Graphic, Table, and Commentary Interpretation: graphics, tables, and commentary boxes used in these regulations are to aid interpretation of the text, unless otherwise specifically stated. In the event of a conflict or ambiguity between a graphic, table or commentary and the text, the text shall control.

Highway: a road or street that forms a part of the existing or projected Federal Aid Highway System, the State road system or the County road system.

Impervious Cover: any surface in the urban landscape that cannot effectively absorb or infiltrate water.

Informal Review: review of a plat or development plan by the Planning Commission prior to submission of an applicant for development. Informal review of a plat or plan is intended to enable the Commission and Developer to discuss and evaluate principles and potential problems involved before the applicant has gone to the expense of completing detailed engineering drawings.

Jurisdictional Wetland: a wetland area that is regulated by the U. S. Army Corps of Engineers under Section 404 of the Clean Water Act. It can meet the definitional requirements for wetlands (i.e. hydrphitic vegetation, hydric soils and hydrology) as determined by the U. S. Corps of Engineers, 1987 Federal Wetland Delineation Manual.

Lane: a service street providing primary or secondary vehicle access to abutting property, located on the side or to the rear of the property, and not intended for general through traffic.

Letter of Credit: a Letter of Credit within the meaning of that term given by Article V of Title VII of the Alabama Code (1975), as the same may hereafter be amended, altered or replaced from time to time, in form and substance and issued by a bank acceptable to the Planning Commission.

Local Street: a street used primarily to provide access to abutting property over short distances, generally designed to have little continuity or accommodate minimal volumes of vehicular traffic. Local streets are frequently interrupted by traffic control devices and occasionally interrupted by T-intersections.

Lot: a parcel of land intended as a unit for transfer of ownership or for building development, or both, which fronts upon a public right-of-way, exclusive of any part of the right-of-way.

Lot Width: the horizontal distance between sidelines of the lot when measured parallel to the street right-of-way at the building set back line.

Major Subdivision: a major subdivision not classified as a minor subdivision, including but not limited to subdivisions of five (5) or more lots, including remnant parcels, or any size subdivision requiring any new street, drainage, or other public improvement.

Marginal Access Street: a minor street which is parallel and adjacent to highway and provides protected access to abutting properties.

Master Plan: overall plan for the development.

Minor Subdivision: a subdivision of four (4) or fewer lots where no new streets, right-of-way, or utility mains are required.

Monument: a permanent object which serves to indicate a limit or to mark a boundary.

Official Maps and Plans: the maps and plans prepared as a part of the comprehensive plan.

Owner: any person, group of persons, firm or firms, corporation or corporations, or any other legal entity having legal title to or sufficient proprietary interest in the land sought to be subdivided under these regulations.

Parkway: an arterial street designed with a continuous, vegetated median that forms a part of an existing or proposed Parkway System.

Planning Commission: The Planning and Zoning Commission of the City of Fairhope, Alabama.

Planting Strip: the portion of the street right-of-way between curb and the property line exclusive of the area occupied by sidewalks.

Pre-construction Conference: a meeting held with representatives of the City and appropriate utility and/ or regulatory agencies to review the project and discuss construction processes and procedures.

Preliminary Plat: a tentative plan of the complete proposed subdivision submitted to the County Planning Commission for its consideration.

Record Plat: a plat of a proposed subdivision meeting the conditions of the Final Plat approval, if any; and containing signatures on all of the required certifications and signature blocks.

Re-plat: a subdivision that results in the creation of no additional lots, requires no new streets, right-of-way, or utility mains, and where all lots conform to all applicable ordinances and regulations; i.e. lot line adjustment.

Resources: the following resources were used as an aide in developing these regulations and may be consulted for guidance and support in implementing the goals and purposes of these regulations. However, these resources shall not be used to contradict or conflict with any standards expressed in these regulations. *Traditional Neighborhood Development, Street Design Guidelines,* Institute of Transportation Engineers, October 1999; *Residential Streets,* Third Edition, ULI, HAHB, ASCE, and ITE, 2001; *Traffic Calming: State of the Practice,* ITE & FHWA, August 1999; *Guidelines for the Development of Bicycle Facilities,* AASHTO, 1999; *Implementing Bicycle Improvements as the Local Level,* FHWA Report, 1998.

Retention Facility: a storm water management facility that provides storage of storm water runoff and is designed to eliminate subsequent surface discharges from the property. These facilities are sometimes effective in reducing downstream flooding because they do not allow discharge of storm water runoff to downstream locations except in extreme flood events where the storage volume of the facility is exceeded. Retention facilities can also be effective in reducing surface water storm water pollution since the pollutants contained in storm water are not released downstream.

Right-of-way: a strip of land acquired by the City by reservation, dedication, forced dedication, prescription, or condemnation and intended to be occupied by a street, crosswalk, sidewalk, planting strip, median, bike lanes, railroad, utility transmission lines, and other similar uses for the benefit of the public.

Right-of-way width: the entire right of way, the perpendicular or radial distance between the boundaries of property abutting either side of the right-of-way.

Road: a local or collector street designed to support rural land uses.

Sidewalk: the portion of the right-of-way paved for the use as a walkway for pedestrians.

Specifications, State: shall mean the latest revision of the Alabama Highway Department Specifications for Roads and Bridges.

Streambank Protection Volume: the volume of storm water that a storm water conveyance system can handle when the water elevation is at the top of the channel banks. It is also referred to as bankfull flow. Any increase to the volume of water from a development results in increased frequency and duration of bankfull flow downstream of the development. This increase in frequency and duration of bankfull flow is the primary cause of accelerated erosion and widening of stream channels.

Streamside Buffer (Buffer): an area adjacent to a shoreline, wetland or stream where development is restricted or prohibited; an area of transition between a developed area and a natural resource.

Street: the portion of the right-of-way paved for vehicular traffic, parking, or the shared use of bicycles.

Street Width: the entire width of the traveled right of way dedicated for vehicular traffic, either from the back of the curb or the edge of the traveled surface on each side of such street.

Storm water Quality Volume: the first flush concept is based on the theory that a disproportionate amount of pollutant "removal" from storm water runoff occurs early in each rainfall event. The variable typically used to identify the first flush is a specific rainfall depth. For purposes of these regulations the rainfall depth associated with first flush is 1.8 inches.

Subdivider: a landowner applying for a subdivision, or the landowner's agent.

Subdivision: this term shall have the meaning ascribed to it in § 11-52-1 of the *Alabama Code* (1975), as the same shall hereafter be altered, amended or otherwise replaced.

Subdivision, Major: (See Major Subdivision)

Subdivision, Minor: (See Minor Subdivision)

Surface Drainage: a storm-water drainage system consisting of natural systems and/or constructed elements including berms, swales, gutters, culverts and open channels.

Top of Bank: the uppermost limit of the active channel of the stream containing normal flows usually marked by a break in the slope. If the top of bank is

indistinguishable, an authority designated by the Planning Director or his authorized agent will be assigned to make the official determination.

Waiver: a request for the non-application of a standard contained in these regulations, granted at the discretion of the Planning Commission through a separate procedure, based on criteria unique to the specific site.

Watercourse: any depression serving to give direction to a flow of water, having a bed and well-defined banks and which shall, upon the rule or order of the Planning Commission also include other generally or specifically designated areas where flooding may occur. The flow of water need not be on a continuous basis, but may be intermittent, resulting from the surface runoff of precipitation.

Wetlands: areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions as delineated by the Corps of Engineers. Wetlands generally include swamps, marshes, bogs, and similar areas.

Watershed: the area of land that drains to a particular point on a stream or storm water conveyance system.

Word Interpretation: the word ***may*** is permissive. The word ***shall*** is mandatory. The words ***building*** and ***structure*** are mutually inclusive. Words used in the ***present tense*** include the ***future tense*** and words used in the ***future tense*** include the ***present tense***. Words used in the ***singular*** include the ***plural*** and words used in the ***plural*** include the ***singular***.

ARTICLE III

RESPONSIBILITIES

A. Responsibility of the Sub-divider
B. Responsibility of the City of Fairhope

A. *RESPONSIBILITY OF THE SUBDIVIDER:*

The sub-divider is responsible for providing all engineering services, including plans and specifications in conformity with these regulations and field inspections and construction supervision as is necessary to assure that improvements are installed in conformity with plans, city standards and the requirements of Chapter 19, Code of Ordinances. The sub-divider shall provide the City with all engineering plans required for conformity with any applicable state, federal or local laws or regulations. Where the Commission deems additional or supplemental engineering data to be necessary for the purpose of assuring the City's interests are protected, the cost shall be borne by the sub-divider. The sub-divider shall be responsible for payment of all fees and charges required by these regulations in full.

B. *RESPONSIBILITY OF THE CITY:*

The City shall, after final plat approval and recording and upon receipt of all test reports, maintenance bond, as-built plans and certification and other requirements of the Code of Ordinances and these regulations, by resolution of the City Council accept the streets and utilities within the right-of-way for public maintenance. The City may cause the inspection of any or all parts of the improvements during and after construction and require the correction of any deficiencies found before adoption of such improvements for maintenance.

ARTICLE IV

PROCEDURE FOR PLAT APPROVAL

A. ***GENERAL:***

The plat and preliminary design shall meet the requirements of all applicable codes and laws, shall be prepared in conformity with the standards of professional practice. No plat or description of land subdivided within the jurisdiction of these Regulations shall be filed in the Probate Records until the plat has been finally approved by the Planning Commission, according to these procedures. The procedure for review and approval of a subdivision plat generally consists of three separate steps – pre-application, a preliminary plat, and a final plat.

Commentary

The following is a summary of the various subdivision applications:

Type	*Submittal requirements*	*Approval Body*
Re-plat	*Sketch Plat*	*Director*
Informal Review	*Sketch Plat*	*Planning Commission*
Minor subdivision	*Sketch Plat (optional)* *Preliminary Plat* *Final Plat (may be combined)*	*Planning Commission*
Subdivision	*Sketch Plat (optional)* *Preliminary Plat* *Final Plat*	*Planning Commission*
Village Subdivision	*Sketch Plat* *Site Plan* *Preliminary Plat* *Final Plat*	*Planning Commission*
Waiver	*Sketch Plat* *(if approved, waiver exercised through formal plat application)*	*Planning Commission*

B. ***PRE-APPLICATION AND SKETCH PLAT:***

1. Pre-application Conference and Community Meeting
   a. Pre-Application Conference – All applications for major subdivisions, village subdivisions and Multiple Occupancy Projects must attend a mandatory pre-application conference with City staff prior to making application so the developer may become familiar with the comprehensive plan and other rules which may affect the development. A pre-application conference with the Planning Director and/or his/her authorized agent may be scheduled at the mutual convenience of both parties.
   b. Community Meeting – After the pre-application meeting and prior to making application for a major subdivision, village Subdivisions or Multiple Occupancy Project the applicant must conduct a community meeting to solicit public input.
      (1) Notice of Community Meeting – The applicant shall notify all persons owning property adjacent to any specific property that is the subject of the application stating the date, time, location, nature and subject of the meeting. The location of the meeting shall be at a public facility unless the location of the development makes a public facility impracticable. Names and addresses shall be from the latest records of the county revenue office and accuracy of the list shall be the applicant's responsibility. Where land adjacent to the subject property involves leasehold property, the names and addresses of the landowner and the leasehold improvements shall be notified.

      Upon application for a major subdivision, village subdivisions and Multiple Occupancy Projects, the following community meeting information must be provided:
         i. Copy of notice mailed to neighboring properties for the community meeting stating date, time, location, nature and subject of the meeting.
         ii. Copy of site plan or other descriptive information discussed
         iii. Attendance sign in sheet.
         iv. Meeting minutes
         v. Written comments in lieu of attendance if provided

2. Sketch Plat

   An informal review may be scheduled before the Planning Commission if the item is placed on the agenda of regular or special meeting of the Planning Commission. At the pre-application meeting, the applicant may provide a sketch plat, drawn to a scale of not more than 1:100. A sketch plat shall include the following information:
   a. Name, address, and phone number of the applicant and the agent preparing the sketch plat;
   b. Graphic scale and north arrow;
   c. Proposed land uses;
   d. Proposed name of subdivision;
   e. Current zoning and district lines;
   f. Total acreage of the site;
   g. Proposed lot lines and approximate dimensions;
   h. Proposed utility and street locations with approximate dimensions;
   i. Proposed parcels for open space or public use with approximate dimensions;
   j. Approximate topography;
   k. Any existing facilities on or adjacent to and within 660 feet of the parcel, including streets, utilities, or parks;
   l. Any other information essential to the purpose for which the sketch plat will be used.

C. ***PRELIMINARY PLAT:***

Submission requirements shall be submitted to the Planning Director and/or his/her authorized agent not later than the date and time specified in the commission's official agenda schedule for the particular meeting at which application is to be considered.

1. Submission Requirements – Applications for a preliminary plat shall include the preliminary plat and all plans for staff review demonstrating compliance with these Regulations. Two (2) copies of the preliminary plat and two copies of all plans shall be submitted initially for staff review. Following staff review and comments, formal submission of the preliminary plat shall include eighteen (18) copies of the preliminary plat and one (1) copy of all plans. Submittals shall include the following information, plans, and forms:
   a. The Preliminary Plat application form supplied by the City
   b. The Preliminary Plat including:
      (1) A vicinity map at a scale not less than 1: 9600.
      (2) Name and location of the proposed subdivision, and names and location of any adjacent subdivisions. The name of the proposed subdivision shall not duplicate or closely approximate the name of any other subdivision covered by these regulations. The Commission shall have the final authority to designate the name of the subdivision.
      (3) Names and addresses of owner, designer, applicant and all associated investors and record owners of lands immediately adjacent to subdivision.
      (4) North point, linear and graphic scales, and date
      (5) Contour map at two-foot interval
      (6) Blocks and lots with dimensions and bearings shown for all lot lines and boundaries.
      (7) Building set back lines shall be shown on the plat as required by the zoning ordinance or in absence of zoning, as required by deed restrictions.
      (8) Plan and profiles of all proposed utility with connections to existing utility system and all proposed improvements. Approval of private utility connections for water and sewer shall be subject to the standards of Article VIII, Sections E. and G., respectively of the Fairhope Subdivision Regulations, and Chapter 12 of the Code of Ordinances of the City of Fairhope. The applicant shall submit one copy of utility letters stating availability of service. Utility letters and layout must be submitted from electric, water, sewer, phone, trash provider, and gas (if applicable), stating the property may be adequately served by such utility.
      (9) Location and dimensions of lands to be dedicated or reserved for parks, open space or other public use
      (10) The existing zoning classification of the subdivision and all contiguous lands, where zoning exists. Where there is no zoning in effect, the proposed use of the lots shall be shown on the plat.
      (11) Flow model data submitted to the standards of the City of Fairhope Water Department.
      (12) A street lighting plan.
      (13) Tree protection plan shall be submitted for all required street trees or trees over 24” DBH. Tree protection fences shall be installed prior to land disturbance activities.(See Appendix G)
      (14) Minimum finished floor elevations for every lot.

(15) Submit a topographic survey with an aerial photograph with plat overlay.
(16) Applicant shall submit a pedestrian plan.
(17) Plans shall include a site data box including, but not limited to, the total acreage of the site, the acreage of common area, the number of lots, the square footage for each lot, the site density, and the number of units proposed.
(18) Applicants shall provide site data and all applicable permits relative to items such as soils, wetlands, flooding, drainage, natural features and potential archeological features.
(19)Maximum drawing sizes and scale shall be limited to 24"x 36" and 1:100, respectively.
(20) Applicant shall submit all plans on a digital copy of all plans in an Adobe PDF format.

c. A street plan including but not limited to:
   (1) The location of existing and proposed streets within and adjacent to the subdivision
   (2) Widths and purpose of existing and proposed rights-of-way and easements
   (3) Clear identification of right-of-way and location of any street which is part of the Master Plan
   (4) Indicate proposed curb radii for each street intersection or significant street curves.
   (5) Proposed street names(6) Typical section for proposed streets, centerline profiles of all proposed streets with finish grades, at a scale of: 1"=50' horizontal and 1"=5' vertical, or 1"=100' horizontal and 1"=10' vertical,

d. A drainage plan, prepared by a registered professional engineer, including proposed method of storm water detention and means of controlling erosion during construction. Any portion of the land in the proposed subdivision subject to periodic inundation by storm drainage, overflow or ponding shall be clearly identified on the plat. Lands lying within the flood plain, V or A Zones, shall be clearly identified on the plat. Storm-water detention facilities shall be shown in the plans and calculations provided.
e. Engineering plans. All engineering plans shall be signed and stamped by the registered professional engineer of record.
f. Where a phased development is proposed, the preliminary plat shall include all phase lines and a master plan showing the continuity of development proposed for the entire project. Each phase shall satisfy the requirements of these regulations individually.
g. If any state right-of-way or any improvement thereon is proposed to be changed or modified, a detailed Highway Improvements Plan, with the written approval of the responsible official of the Alabama Highway Department, showing all existing features within the rights-of-way and all proposed changes, including, but not limited to, changes in traffic patterns, markings, signs, curbs and barriers, neutral zones, signals, warnings, plantings and landscaping. There shall be submitted with and as a part of the Plan a written statement setting forth means proposed for traffic control and safety during construction and for restoration of the site. All of the foregoing shall also apply to rights-of-way controlled by the County, except that the County Engineer's approval shall appear on the Plat to be reviewed by the Planning Commission.

h. *Traffic Data and Traffic Study* – Applications shall include trip generation data showing the projected average daily traffic (ADT) in a 24-hour period and projected peak-hour traffic generated by the development in the subdivision application. Peak hour traffic shall generally be the hours between 7 A.M. and 9 A.M. for morning and 4 P.M. and 6 P.M. for the evening and include the consecutive 60 minute segment in which traffic counts are projected to occur. In instances where the proposed application will have peak periods that differ from the general peak periods above, the Planning Commission may require that the analysis be conducted for the alternative peak periods. Trip generation data shall be based on the most recent edition of the Institute of Traffic Engineer's Trip Generation Manual or actual data about similar developments in Alabama with the same types of uses and site conditions. A traffic study shall be required for all applications that will generate an average daily traffic (ADT) count of 1,000 trips or more, or which will generate 50 trips or more during any peak hour period. An agent selected by the City and paid for by the applicant shall perform the traffic study. The traffic study shall be used to determine what on-site and off-site street or traffic improvements may be necessary due to the development. The Planning Commission may condition the approval of the application on the applicant paying for or constructing those improvements or portions of improvements that are needed due to the traffic impact of the application based on all potential land uses. The traffic study shall include the following data along with an analysis of the data:

(1) Estimates of trip generation for the proposed development showing projected inbound and outbound vehicle trips for morning and evening peak periods to identify the maximum combined hourly traffic volume associated with the peaking characteristics of the site development combined with the adjacent street traffic.

(2) Projected traffic impact and trip distribution on existing and planned streets within the development and at major signalized and unsignalized intersections within ½ mile of the project site (study area) areas likely to be impacted by the development. Intersections of particular concern to the City may be added or omitted from the traffic study at the direction of the Planning Director;

(3) Assignment of trips generated by the proposed development on existing and planned streets within the development and areas likely to be impacted by the development and within the project study area;

(4) Intersection turning movements and traffic counts on all existing and planned intersections likely to be impacted by the proposed development. Traffic counts must be less than 3 years old to be used as base volumes for the traffic analysis;

(5) Corresponding intersection levels of services shall be calculated for the peak periods for the intersections within the study area, utilizing the Highway Capacity Software (HCS) latest version, or Synchro traffic software, for the existing conditions and opening year of the project site. Intersections shall be considered deficient if Level of Service (LOS) D is exceeded, and improvements to meet this LOS threshold shall be identified;

(6) Site access volumes and major unsignalized intersections within the study area shall be evaluated using the Manual on Uniform Traffic Control Devices (MUTCD) to demonstrate the need for installation of a traffic control signal,

(7) Auxiliary turn lane requirements shall be evaluated at the site access points to identify if right turn and left turn ingress lanes are needed. Site access points that generate 40 or more right turns in one hour will be required to construct a right turn ingress lane. The need for constructing a left turn ingress lane shall be considered based on the Appendix criteria for left turn lane warrants;

(8) Potential mitigating measures or trip reduction options.

i. List of Name(s) and address(es) of a person to whom notice of a hearing shall be sent, and the names and addresses of all owners of land immediately adjoining the proposed subdivision as their names appear upon the plats in the county tax assessor's office, which will be certified or otherwise verified by the County, on the tax records of the County.

j. The applicant shall post on any specific property, which is the subject of the application, on a sign facing each adjacent public street. The sign shall be furnished by the City at the time of application giving notice of the hearing. The sign shall be posted no later than 15 days prior to the hearing before the Planning Commission. It is the sole responsibility of the applicant to post the sign in accordance with these regulations. Failure to post this sign may result in nullification of the subdivision application and approval.

k. In the case of applications for a preliminary plat outside the City limits but within the jurisdiction of these regulations, the applicant shall be required to submit evidence in writing that plans for the subdivision shall have been received by the County Engineer for his/her review.

l. Filing fee as specified in the City's most recent schedule of fees.

2. Staff review – Applicants for a preliminary plat shall first submit the preliminary plat and plans to the Planning Director and/or his/her authorized agent for staffs review. The Director shall determine if the submittals meet all of the requirements of Section C.1., above. Incomplete, partial, or inaccurate submittals will not be accepted, but will be returned to applicant for re-submission for a later hearing. Staff shall review the application and provide comments to the applicant. Following staff review and comments the applicant shall submit revised drawings for review by staff and the Planning Commission. The revised plans submitted shall reflect staff's initial review comments.

3. Planning Commission Hearing and Review – Complete formal applications will be placed on the next available Planning Commission agenda for submittal to the Planning Commission and a hearing and review by the Planning Commission. Notice shall be sent to the applicant and owners of land immediately adjoining the platted land stating the time and place of the hearing. The applicant shall post on any specific property, which is the subject of the application, on a sign facing each adjacent public street. The sign shall be furnished by the City at the time of application giving notice of the hearing. The sign shall be posted no later than 15 days prior to the hearing before the Planning Commission. It is the sole responsibility of the applicant to post the sign in accordance with these regulations. Failure to post this sign may result in nullification of the subdivision application and approval.

4. Planning Commission Decision –
   a. After review of the proposed preliminary plat by the Planning Commission, the Planning Commission may:
      (1) Approve the preliminary plat;
      (2) Approve the preliminary plat with conditions;
      (3) Deny the preliminary plat with stated reason(s) for denial; or
      (4) Table the application for further study and additional information.
   b. Preliminary plat approval shall not constitute final acceptance of the subdivision and the approval shall not be endorsed upon the plat. As

provided by state law, these regulations require tentative or preliminary approval of a subdivision before installation of streets and utilities.

c. There is no provision for automatic preliminary approval upon the failure or refusal of the commission to act on a preliminary plat. The applicant's alternative in such case is to finalize the plat, post a financial guaranty as provided by law to ensure installation of improvements and then to apply for final plat approval.

d. Upon approval of the preliminary plat, the sub-divider may apply for a Pre-construction Conference and install all required improvements in substantial conformity of all requirements of the regulations, applicable codes, and laws, and apply for final plat approval

e. When the Planning Commission denies a preliminary plat, no further subdivision applications affecting the same parcel or a portion thereof will be considered by the Commission within 180 days from the date of such denial, unless all of the following occur:

(1) A new preliminary plat application is submitted which clearly corrects, resolves, or mitigates all of the design standard deficiencies and/or other reasons which were the basis of the original preliminary plat denial; and

(2) A new, complete application and fees are submitted.

f. Upon the decision rendered by the Planning Commission, the Planning Department will issue a letter to the applicant regarding the official decision of the Planning Commission.

5. Pre-construction Conference – An onsite pre-construction conference with City representatives is required prior to initiation of any land disturbance activities. Construction of said improvements shall in no way obligate the Commission to grant Final Approval of the Plat, nor shall it obligate the City Council to accept such improvements for public maintenance. No owner or developer shall proceed with any site work under authority of preliminary plat approval until the completion of the pre-construction conference.

6. Expiration and Revocation -

a. Any substantial deviation from the approved submittals during construction or failure to provide for traffic control, safety, environmental protection controls and/or best management practices and restoration of the site shall be grounds for the immediate suspension of the Preliminary Plat Approval and/or issuance of a stop work order. The Planning Commission shall have the power to reinstate Preliminary Approval when it is satisfied that conditions resulting in suspension have been mitigated.

b. If a final plat is not submitted within two years or less after preliminary approval has been given, the preliminary approval shall expire and the preliminary plat shall be null, void and of no force or effect.

D. ***FINAL PLAT:***

Prior to expiration of preliminary plat approval, applicant may submit eighteen (18) copies of the Final Plat to the commission staff for review and, if in compliance, placement on the commission agenda.

1. Submission Requirements – The staff shall not place any proposed Final Plat on the agenda for review until staff has received the following items:

a. Either a financial guaranty (in the form of a maintenance bond) in an amount and form acceptable to the City Council as a guarantee for the installation of required improvements or the determination of the City's General Superintendent that all required improvements have been installed to the City's requirements.

b. Final Plat and Final Plans showing all information required by and meeting requirements of Article IV., Section C.1. and the following additional information:
   (1) Location of all blocks and lots with numbers in final numerical order.
   (2) Sufficient data to determine and to reproduce on the ground the location, bearing and length of every road line, block line, boundary line, and building line, whether curved or straight, and including the radius of arc, central angle, length of tangent and length of curve for the centerline of all roads or streets and for all property lines. Dimensions shall be shown to the nearest 1/100 foot and bearings to the nearest 15 seconds.
   (3) Storm-water culverts and appurtenances, their sizes and locations.
   (4) Street Tree Plan shall be submitted showing the location of all planted street trees.
   (5) Final plans and calculations for utility layouts.
   (6) Location and descriptions of monuments at block corners and iron pins at lot corners.
   (7) Delineation on plans or plat of clear sight triangles as required by Article V., Section D.5.b.(5).
   (8) Owner and Lien-holders Certificates of Dedications for Streets or other public use.
   (9) Where streets stubs are provided, said stubs shall provide access to abutting properties. The applicant shall include a note on the plat providing notice that said stub shall provide future access to abutting properties.
   (10) Certificate for Planning Commission Approval.
   (11) Surveyor's Certificate on Plat, Engineer's Seal and Certificate on Plans.
   (12) Provision for Recording Certificate.
   (13) Signature blocks for all utility providers.
   (14) Certificate for County Engineer's approval for extra-territorial plats.
   (15) Plans shall include a site data table box including, but not limited to, the total acreage of the site, the acreage of the common area, the number of lots, the density, the gross floor area for buildings, and the number of units proposed.
   (16) Submission of a digital and/or video image, reflecting a date and time stamp, of the storm drains to ensure drainage structures are undamaged and free of debris and sediment.
   (17) A Maintenance Plan for maintenance of detention facilities during development and documents providing for continued maintenance after completion of development and sale of all lots, such documents running as a covenant with the lands.
   (18) The engineer shall perform the supervision of construction, the final plat shall have the following engineer's certification:

> "ENGINEER'S CERTIFICATE"
>
> "I, the undersigned, a Registered Engineer in the State of Alabama holding Certificate Number _____, hereby certify that I have designed the within improvements in conformity with applicable codes and laws and with the principals of good engineering practice. I further certify that I have observed the

construction of the within improvements, that the same conforms to my design, that the within is a true and accurate representation of improvements as installed and that said improvements are hereby recommended for acceptance by the City of Fairhope, Alabama.

_____
Project Engineer

_____
Date

_____
Name of Project to which the Certificate Applies
Plans which are certified consist of Page _____ thru _____, each of which bears by seal and signature."

(19) All final plans submitted on a digital copy of all plans in an ADOBE PDF format.

2. Phased Plats – A final plat that includes only a portion of the land area of an approved preliminary plat shall correspond to the phase lines on an approved preliminary plat.

3. Staff Review – Applicants for a final plat shall first submit the final plat and plans to the Planning Director and/or his/her authorized agent for staff's review. The Director shall determine if the submittals meet all of the requirements of Section D.1., above. Incomplete, partial, or inaccurate submittals will not be accepted, but will be returned to applicant for re-submission for a later hearing. Staff shall review the application and provide comments to the applicant. Following staff review and comments the applicant shall make a formal application for submittal to and review by the Planning Commission.

4. Final Inspections – Applicants shall submit a letter of verification prepared by the Applicant's engineer certifying that all punch list items from the final inspections have been satisfactorily completed. A fee of $1000.00 will be charged for all re-inspections caused by incomplete punch lists.

5. Planning Commission Submission and Review – Complete applications will be placed on the next available Planning Commission agenda. On the date of the scheduled meeting, the application will be submitted to the Planning Commission for review. Final plats in substantial conformity with an approved preliminary plat may be approved by the Planning Commission.

6. Planning Commission Decision –
   a. After review of the proposed final plat by the Planning Commission, the Planning Commission shall:
      (1) Approve the final plat;
      (2) Approve the final plat with conditions; or
      (3) Deny the final plat with stated reason for denial;
   b. If the plat is disapproved, the reason(s) for such disapproval shall be noted in the minutes of the Commission and a letter shall be transmitted to the applicant stating the reasons for disapproval.
   c. The Planning Commission may table the final plat for further investigation, discussion, and reconsideration.

d. Upon the decision rendered by the planning commission, Planning Department will issue a letter to the applicant regarding the official decision of the planning commission regarding the site proposed.

7. Recording – Applicant is responsible for recording of Plat and approval shall be null and void if the Plat is not recorded within sixty days after the date of final approval; provided, however, that the Commission may, on finding of good cause, extend that sixty day period. The applicant shall provide a copy of the recorded plat; failure to do so shall result in the denial of the issuance of the building permits within the subdivision.

E. ***PROCEDURE EXCEPTIONS:***

1. Minor Subdivisions - For platting of four (4) or fewer lots, where there are no new streets or rights-of-way and no new utility mains required, application for simultaneous preliminary and final approval may be made to the Planning Commission. Submittals shall in all other respects meet the minimum requirements of these regulations.

2. Replat - Lot line adjustments may be approved administratively by a Replat approved by the Planning Director and/or his/her authorized agent without review by the Planning Commission, provided that no new lots are thereby created and that no lot is reduced below the minimum size otherwise required by the provisions herein or by provisions of the Zoning Ordinance. A replat shall require the submission of a sketch plat as specified in Article IV, Section B., except that the location and dimension of lot lines, and existing facilities shall be exact.

F. *VILLAGE SUBDIVISION:*

1. Purpose - The subdivision standards established in these regulations are the minimum required standards to promote the health, safety and welfare of the jurisdiction, promote good civic design, and implement the goals of the Comprehensive Plan. The Village Subdivision regulations in this Section F. are intended to provide an alternative to the standard subdivision regulations. The Village Subdivision regulations in this Section F. encourage imaginative design, planning, and environmental sensitivity based on a comprehensive, site-specific plan, and which enhance the developments ability to implement the Comprehensive Plan. The applicant may elect to apply for these alternative standards at its sole discretion. Use of these alternative standards requires a minimum of three (3) acres of property.

2. Application/Approval Procedures -
   a. The application procedure for a Village Subdivision shall be the same as for any Preliminary or Final Plat. Fees shall be paid accordingly.
   b. A Site Plan that adheres to the requirements below shall be submitted to the Planning Commission for consideration prior to or in conjunction with the Preliminary Plat.
   c. A Site Plan as approved becomes the tool that governs development of the property. Any and all plats of the property must be in substantial conformance with the site plan as determined by the Planning Director and/or his/her authorized agent. A site plan may not be substantially modified after approval without the re-approval of the Planning Commission.

3. Site Plan Required - A Site Plan is required to be submitted. The site plan is the instrument on which the plat for the project is based. All site plans shall provide, in addition to the information on a Preliminary and Final Plat, the following information:
   a. Application form supplied by the City and appropriate fee;
   b. Name and address of the owner, designer, applicant, and all associated investors participating in the preparation of the site plan and record owners of lands immediately adjacent to the subdivision;
   c. North-point, Scale limited to 1:100, Vicinity Map limited to 1:9600, and the date of preparation of the plan;
   d. Existing zoning, if any, and uses of contiguous land;
   e. Size and location of all existing features including trees greater than 24” in diameter, significant tree stands, drainage channels, streams, ponds, lakes, or other natural features;
   f. Classification and mixture or all proposed buildings within the site plan;
   g. Architectural features, including building elevations, exterior material, and roof pitches of all building classifications within the site plan;
   h. Size, location, and sufficient dimensions of all buildings and improvements within the site plan to indicate their size and relationship to all proposed and existing streets, lot lines, and structures and improvements within or contiguous to the site plan;
   i. Covenants and restrictions that will be recorded with the site plan and plat, and will run with the property;
   j. Density in dwelling units per acre for residential uses and Floor Area Ratio for non-residential uses;

k. Location and dimension of all site improvements including sidewalks, pedestrian paths, streets, lanes, driveways, and parking areas;
l. Landscape plan for all private property and common areas within the site plan including the location, landscape elements, lighting, and other public or private amenities;
m. Landscape plan for all public areas, streetscapes, and greenspace, including location, dimensions, landscape elements, lighting and other public amenities;
n. Proposed phases of the site plan, if any, clearly showing phase lines and approximate time frames for construction of each phase;
o. A topographical site plan with an aerial overlay submitted on a digital copy of all plans in an Adobe PDF format.
p. Plans shall include a site data table box including, but not limited to, the total acreage of the site, the acreage of the common area, the number of lots, the density, the gross floor area for buildings, and the number of units proposed.
q. Names and addresses of all contiguous property owners of record;
r. A comprehensive narrative statement describing the proposed uses of all land, structures, and improvements, and explaining the function and operation of the site plan as a whole; and
s. Additional data as the Commission requires.

4. Site Plan Approval - The Site Plan approved by the Planning Commission stands for six months from the date of approval. If the preliminary plat is not submitted for approval within the six months after site plan approval, the approval becomes null and void. Review and re-approval shall be required for any new plan, or the same or similar plan, according to the standards and procedures of this section. Following the review and approval of a Preliminary or Final Plat associated with a Site Plan, the Site Plan shall be valid for the period of the Preliminary or Final Plats validity.

5. Conformity with Subdivision Regulations - Any plat for the Village Subdivision must conform to all procedures and standards of the Subdivision Regulations, except where modification of the design, planning, and public improvements have been approved by the Planning Commission. The Planning Commission may modify the required standards of the subdivision regulations based on clear and convincing proof presented by the applicant, that each alternative standard proposed directly implements goals of the Comprehensive Plan and purposes of these regulations more effectively than the standard regulations.

G. ***TOURISM RESORT DISTRICT EXEMPTIONS:***

1. Purpose – The provisions of this Article IV, Section G shall only apply to real property zoned as a Tourism Resort District ("**TR District**") under the Zoning Ordinance of the City of Fairhope. The TR District zoning classification is intended to encourage the development of land as part of a planned community, encourage flexible and creative development concepts of site planning, preserve the natural amenities on the land by encouraging scenic and functional open space, accomplish a more desirable environment than would be possible through the strict application of zoning and subdivision regulations, and provide a stable environmental character compatible with surrounding areas. Accordingly, this Article IV, Section G provides alternatives to the standard

2. subdivision regulations of the City and further alters, amends and exempts the TR District property from certain provisions of the City's Subdivision Regulations. The provisions of this Article IV, Section G apply to all real property zoned as part of a TR District but do not apply to any other zoned property within the municipal limits of the City or any property located outside the municipal limits of the City but within the City's planning jurisdiction.

3. Specific Development Exemptions – Notwithstanding anything provided to the contrary in these Subdivision Regulations or any other ordinances, regulations or requirements of the City, the following provisions shall apply to all real property (the "**Property**") which is zoned as a TR District within the City:

   a. Private roadways, streets, lanes and alleys shall be allowed within all or any portions of the Property. Subdivisions of any portion of the Property shall be approved if the subdivided lots are accessed by or through private roadways, streets, lanes and alleys or via common green space or open space. Subdivision plats shall indicate whether roadways, streets, lanes and alleys are private. All subdivided lots within the Property which are provided with access via private roadways or alleys shall be granted permanent, non-exclusive access easements over such private roadways pursuant to either separate easements or the restrictive covenants for such lots. Furthermore, the restrictive covenants applicable to subdivided lots within the Property or each subdivision plat for any portion of the Property which is accessed via private roadways will grant access easements over any private streets or roadways within the Property for public emergency vehicles (i.e., police, fire and ambulance), utility vehicles (for maintenance and repair and meter reading, etc.), garbage collection vehicles and all other governmental vehicles and employees in connection with the performance of their required governmental services.

   b. Gates or other controlled access measures shall be allowed in the rights-of-way of any private roadways, streets, lanes and alleys within the Property.

   c. Alleys, bike lanes and lanes may be utilized within any portions of the Property but are not required.

   d. All streets and roadways within the Property shall constitute "local" streets under the Subdivision Regulations; provided, however, that the minimum right-of-way widths for all such streets, roadways and lanes/alleys within the Property shall be as follows:

Primary Access Roadway (to be designated in the TR District Zoning Application submitted by an applicant to the City pursuant to the Tourism Resort District zoning requirements)	50 ft. ROW
Neighborhood Streets (all streets/roadways within Property other than the Primary Access Road or Lanes/Alleys)	40 ft. ROW
Lanes/Alleys	20 ft. ROW

   Street sections reflecting the minimum pavement width and right-of-way width for each of the foregoing shall be set forth in the applicant's TR District Zoning

Application (as required by the TR District zoning provisions of the City's Zoning Ordinance). All streets, roads and alleys/lanes constructed within the Property which satisfy the minimum requirements shown on any street sections attached to an applicant's TR District Zoning Application (once approved by the City) shall be deemed approved by the City.

e. No portion of the Property shall be required to provide access to Abutting/Contiguous property. Reserve strips for controlling access to streets, lanes, alleys and utilities shall be allowed within the Property.

f. Cul-de-sacs shall be allowed throughout the Property without regard to the length of the street or road constituting such cul-de-sac.

g. Planting strips along, and street trees adjacent to, rights-of-way of any streets, roads, alleys or lanes shall be optional but are not required.

h. Curbing and gutters shall not be required for any streets, roads, alleys or lanes within the Property. Alternative storm water and surface water drainage measures shall be acceptable if the same follow best management practices.

i. Bicycle, jogging and similar paths, lanes and crossings may be constructed within the rights-of-way of any private roadways. In addition, street and access lighting (including street lights), irrigation systems, landscaped areas, project identification signage, permanent street and directional signage and decorative walls may be located within the rights-of-way (including medians) of any private roadways within the Property. Any such irrigation systems, landscaped areas, signage and decorative walls shall be maintained by the owners' association established for that portion of the Property served or benefited by the same. Applicant may elect to utilize non-standard traffic signage within any portions of the Property so long as such non-standard signage complies with the minimum requirements of the Manual on Uniform Traffic Control Devices or other regulations of the State of Alabama governing signage.

j. All utilities shall be installed underground and may be located within the rights-of-way of any private roadways immediately adjacent to the pavement (and curbing, if any) in order to minimize clearing, grading or destruction of trees and plant life. The City will operate and maintain all water and sanitary sewer lines, pipes, wiring, conduit, manholes, lift stations and other apparatus installed within the rights-of-way of any public or private roadways or alleys within the Property which provide City-provided water and sanitary sewer services so long as *(i)* such utility lines have been constructed and installed in accordance with all requirements of the City regarding underground utility line installation, including, without limitation, the execution of maintenance agreements and the posting of maintenance bonds for such utilities (which requirements, agreements and bonds shall be the same uniform requirements, agreements and bonds as applied to all other property within the municipal limits of the City) and *(ii)* the City has been granted easements for the installation and maintenance of such utility lines within such rights-of-way.

k. The shoulder of any roadways within the Property may remain at natural grade in order to preserve and save trees and other plant life which may be located or maintained on the shoulder of or adjacent to such roadways.

l. The TR District Zoning Application for any applicant shall set forth street profile criteria for any private roadways, lanes or alleys to be constructed within the Property. Any deviation from the minimum requirements set forth in such street profile criteria attached as part of a TR District Zoning Application must be approved by the City's Planning and Building Director or any other individual employee of the City designated by the City's Planning and Building Director to act on his or her behalf.

m. No public improvements to the Property shall be required and no portions of the Property shall be required to be dedicated or otherwise conveyed to the City for public improvements (*e.g.*, fire and police stations, libraries, schools, etc.).

n. Sidewalks shall not be required within the Property. In lieu thereof, a pedestrian plan (the "Pedestrian Plan") shall be submitted by the applicant as part of the applicant's TR District Zoning Application. The Pedestrian Plan should illustrate applicant's desire to create a pedestrian-connected, walkable community plan within the residential areas of the Property. All future parcel developments will be connected into the network of pedestrian sidewalks and trails thus providing residents of the Property access to the other natural resources and amenities located throughout the Property.

o. Street lights shall not be required within the Property. Any street lights constructed within the rights-of-way of any private roads within the Property will be maintained by one or more owners' associations to be established in connection with the development of the Property. In no event shall the City be obligated to maintain any such street lights constructed within the rights-of-way of any private streets within the Property.

p. As long as any green space and/or open space within the Property is privately owned (whether by applicant, a third party or any owners' association), access to the same may be limited and restricted.

q. Individual mailboxes shall be allowed for each residential lot within the Property (regardless of lot size or width), which mailboxes may be situated within the rights-of-way of any private street abutting such lot.

r. Looped streets of unlimited length will be allowed.

s. Maximum road grades will not exceed twelve percent (12%).

t. Layout of streets in residential subdivisions need not follow the conventional grid and square block system.

u. No minimum lot frontage or area requirements shall apply for public water and public sewage service from the City or any other utility service providers.

v. All drainage facilities within the Property will be designed only taking into account the existing, unimproved condition of upstream watershed areas. No increased

capacity in drainage facilities or upsizing of lines and other drainage improvements for the Property will be required for contemplated future development of any upstream watershed areas.

w. Erosion and sedimentation control measures, structures and devices will provide controls based on the requirements of the Alabama Department of Environmental Management for the issuance of NPDES Permits.

x. Golf carts will be allowed to traverse all private streets within the Property.

y. Buffer strips otherwise required per Article V, Section E, Paragraph 6 of these Subdivision Regulations in residential areas shall not be required in a TR District.

z. Any proposed condominium development must be developed on a subdivided lot. Except for the subdivision of the lot for the proposed condominium development (which subdivision must be approved by the City's Planning and Zoning Commission), no other requirements in the Subdivision Regulations shall apply to the proposed condominium development.

aa. Double frontage lots will be allowed without any minimum greenbelt requirements. Applicant shall designate on any double frontage lots only one (1) front Build-To Line (to be established in the applicant's TR District Zoning Application) and the other lot line which fronts a street or road shall constitute a side lot line and shall be subject to the side Build-To Line limitations established in the applicant's TR District Zoning Application.

bb. The TR District Zoning Application shall designate storm frequency design for any storm water drainage facilities within the Property.

cc. In addition to pavement materials specified in or allowed by the Subdivision Regulations, pavement base may also include any other materials which meet the Alabama Department of Transportation Standards and Specifications for Highway Construction, then current edition.

dd. Signage within the Property shall comply with the City's signage regulations set forth in the City's Zoning Ordinance in effect as of the date of adoption of this amendment to the City's Subdivision Regulations.

ee. Walkways, footpaths, foot bridges, beaches, piers, docks, roads, bridges and utility lines and other apparatus are allowed within any buffer areas required by the City's Zoning Ordinance and Subdivision Regulations for any stream, shoreline, wetland or other waterway banks or areas.

4. Specific Exceptions from Subdivision Regulations -- In addition to the exceptions and exemptions granted pursuant to Paragraph 2 above, the following provisions of the Subdivision Regulations shall not be applicable to the Property and the Property shall be deemed to be exempt from all of the following:

   a. Article II: The definition of "Retention Facility" is changed to read as follows:

"Retention Facility: A storm water management facility providing storage of storm water runoff without subsequent discharge and is commonly used to describe practices that retain a runoff volume (and hence have a permanent pool) until it is displaced in part or in total by the runoff event from the next storm."

b. Article IV: Sections C1b(12), C1b(16) and C1b(18) [in lieu of the submissions required in Section C1b(18), applicant shall provide copies, when available, of all permits received from the United States Army Corps of Engineers and Federal Emergency Management Agency]; Section C1f(2) [the plat will reflect street widths (both pavement and right-of-way; however, compliance with the street sections set forth in an applicant's approved TR District Zoning Application shall be deemed compliance with all City street and lane construction requirements]; Section C1f; Section C1h [the traffic study submitted with this Application shall satisfy these requirements]; Section C2 [last sentence not applicable]; Section C4a(4) [this Section is modified by adding the following phrase at the end of said Section: "; provided, however, that if an application is tabled for more than 30 days, the application shall be deemed to have been approved."]; Sections D1(b)(8), D1(b)(9) and D1(b)(15) [this Section is modified by adding the following phrase at the beginning of said Section: To the extent applicable or known, "]; Section D5 [last sentence, change "may" to "shall"]; Section F; and Section G.

c. Article V: Section A [the provisions of the Subdivision Regulations apply to all of the Property except to the extent modified, amended, excepted or waived by this Application]; Sections B2b and B2e; Section C; Section D1 [this Section shall only apply to the Property but not to any Adjoining/Contiguous property]; Section D2 and Table 5.2 [only local street and lane provisions apply to the Property]; Sections D3a, D3b and D3e; Sections D4a, D4b and D4c; Section D5a; Sections D5b(4)(c); D5b(4)(d), D5b(4)(e) and D5b(4)(f); Table 5.4 [all roads within the Property will have a posted speed limit of 20 mph]; D5c [traffic calming devises are allowed but not required]; Section D5d(2) [this Section is revised to provide that with respect to vertical curves, every changing grade shall be connected by a vertical curve so constructed as to provide a minimum sight distance of 200 feet, measured from a driver's eyes which are assumed to be 3 ½ feet above the pavement surface, to an object 2 feet high on the pavement]; Section D5d(4) [this Section is revised to provide that all references therein to "seven percent" are changed to "ten percent"]; Sections D6 and D7; Sections E2, E3, E5 and E6; Section F8f [this Section is amended to provide that with respect to General Application BMPs, Bioretention Areas shall achieve a 90 percent TSS reduction]; Section F9b [the second sentence of this Section is deleted in its entirety since no public drainage easements will be created on the Property]; and Section G.

d. Article VI: Sections C and D; and Section E5 (third paragraph on page 63 of the Subdivision Regulations) [at the end of the first sentence, add the following: "Less cover may be approved by the City's Planning and Building Director or any other individual employee of the City designated by the City's Planning and Building Director to act on his or her behalf in shallow burial situations."].

e. Appendix A, Table 5.3.

f. Appendix B.

5. Intent – It is the intent that the provisions of this Section G of Article IV apply to all Property which has been zoned as part of a TR District. Accordingly, in the event of any conflict or ambiguity between the terms and provisions of this Section G of Article IV and any of the other sections, articles or provisions of the Subdivision Regulations, the terms and provisions of this Section G of Article IV shall at all times control.

6. Amendments – Following the zoning of any Property as a TR District (as evidenced by the City's approval of a TR District Zoning Application for such Property), no subsequently adopted amendments to or modifications of the Zoning Ordinance (including subsequent modifications to this TR District zoning classification), no amendments to or modifications of the City's Subdivision Regulations and no other ordinances adopted by the City which alter, change, modify or amend any of the matters set forth in this Section G of this Article IV or which are set forth in the approved TR District Zoning Application shall be effective with respect to the real property described in such approved TR District Zoning Application.

H. ***MULTIPLE OCCUPANCY PROJECTS:***

1. Any project that will involve or otherwise result in three (3) or more units (whether contiguous or otherwise) being constructed on real property for occupancy, regardless of the form or type of use of said units, unless otherwise regulated by these Regulations in another Article and/or Section hereof, shall comply with the following terms and conditions of this Section H.

2. The Subdivider shall submit to the Planning Commission via the City of Fairhope Planning Department a site plan for such project, which site plan must, at a minimum, comply with the following requirements:

   (a) Each site plan shall comply with the storm water requirements of Article V, Section F hereof.

   (b) Each site plan shall comply with the traffic requirements of Article IV, Section C 1 (h) hereof.

   (c) Any and all improvements constructed in connection with the project shall be constructed strictly in accordance with Article VI hereof.

   (d) The minimum set back for any building(s) constructed in connection with a project from the property lines shall be twenty feet (20') on all sides for unzoned property. Property within City of Fairhope's corporate limits shall comply with the minimum set back requirements of the City of Fairhope Zoning Ordinance.

   (e) No building or other improvement to be constructed in connection with a project shall exceed thirty-five feet (35') in height for unzoned property. The 20 foot minimum setback requirement may be increased by the Planning Commission based on the size of the building, the location of the driveways, and other factors. Property within the City of Fairhope corporate limits shall comply with the height requirements of the City of Fairhope Zoning Ordinance.

(f) Each site plan shall otherwise conform to the terms of Article I, Section A hereof.

(g) Each site plan shall comply with the greenspace requirements of Article V, Section C. hereof.

3. Each site plan shall be submitted in accordance with the requirements of Section C and Section D of Article IV hereof relating to preliminary and final plat submittals, respectively; provided, however, that a Subdivider may make application for simultaneous preliminary and final plat approval.

4. The filing fee for any project regulated in accordance with this Section H of this Article IV shall be the same as any filing fee assessed against an application for a Minor Subdivision.

ARTICLE V

PLANNING DESIGN STANDARDS

A. *GENERAL APPLICABILITY:*

The provisions of these Regulations shall apply to all land within the City limits of Fairhope, Alabama now or in the future, and to all within the planning jurisdiction of the City of Fairhope, as authorized by the Code of Alabama, Title 11, Chapter 52 and Article I of these regulations. When lands proposed to be subdivided include or abut an existing street, all right-of-way shall be improved to meet the standards and specifications of these Regulations. When lands proposed to be subdivided lie outside the corporate limits of the City, the minimum design standards of Baldwin County shall apply when such standards are more restrictive than those of the City. Applicants shall be required to submit evidence in writing that plans for such subdivision shall have been received by the County Engineer for his review. All approvals of the Commission shall be subject to the more restrictive requirements of Baldwin County and the approval of the County Engineer shall be a condition precedent to approval for construction of improvements.

B. *APPROVAL STANDARDS:*

1. Generally - According to the City of Fairhope Comprehensive Plan, no street, square, park or other public way, ground or open space or public building or structure or public utility, whether publicly or privately owned, shall be constructed or authorized in the municipality or in such planned section and district until the location, character and extent thereof shall have been submitted to and approved by the Commission.

2. Consistency with Plans, Regulations and Laws - The Planning Commission shall not approve the subdivision of land if the Commission makes a finding that such land is not suitable for platting and development as proposed, due to any of the following:
   a. The proposed subdivision is not consistent with the City's Comprehensive Plan, and/or the City's Zoning ordinance, where applicable;
   b. The proposed subdivision is not consistent with the City's Comprehensive Plan or any other plan or program for the physical development of the City including but not limited to a Master Street Plan, a Parks Plan, a Bicycle Plan, a Pedestrian Plan, or the Capital Improvements Program;
   c. The proposed subdivision is not consistent with these Regulations;
   d. The proposed subdivision is not consistent with other applicable state or federal laws and regulations; or
   e. The proposed subdivision otherwise endangers the health, safety, welfare or property within the planning jurisdiction of the City.

C. *GREENSPACE STANDARDS:*

1. Purpose - These greenspace standards shall implement the Comprehensive Plan for the physical development of the City by setting the location, character and extent of playgrounds, squares, parks, and other public grounds and open spaces to promote good civic design and arrangement. This design and arrangement shall ensure adequate and convenient open spaces for recreation.

   These standards shall promote the following goals in the Comprehensive Plan: (a) create focal points for new and existing neighborhoods by providing appropriately located parks, schools, parkways, and other amenities; (b) support

development of recreational opportunities; (c) link village centers to neighborhoods with a parks and trail system; (d) provide public gathering places; and (e) include open spaces (plaza, parks, greenspace) for social activity and recreation in new infill development.

2. Applicability and Requirements - The regulations in this Section C. shall apply to any development as dense or denser than the City R-1 Residential Zoning District, whether or not in the City Limits. Greenspace shall be provided as follows: 10% Greenspace is required.

3. Eligible Greenspace - Greenspace eligible for meeting the requirements of this section shall:
   a. be usable land for public active or passive recreation purposes.
   b. be located in FEMA FIRM map zones AO, A99, D, or VO.
   c. not be located in any wetland areas as defined by the Federal Government.
   d. not include any retention, detention or similar holding basins.
   e. not include any right-of-way.

4. Design Requirements - All eligible greenspace shall conform to the following design requirements:
   a. Maximize public exposure and public access to greenspace.
   b. Streets shall align adjacent to greenspace.
   c. Greenspace land must be contiguous but may be bisected by local streets, sidewalks, and pedestrian paths.
   d. Greenspace must be located at the rear edge or interior of the development.
   e. Greenspace shall not be located adjacent to a collector or arterial street.
   f. Due regard shall be shown for all natural features such as lakes, ponds, water courses, historic sites and other similar features which, if preserved, will add attractiveness and value to the property.

5. Street Design – The following are minimum standards. All construction, radii, and other specifications of the city are required to be met. *<< Figure 5.1 >>*

   a. In those locations that a public street is adjacent to the required greenspace, it is permissible to construct a street according to the following standards:
      (1) ROW: 50 feet
      (2) Paved: 18 feet minimum
      (3) On Street Parking: Posted one side; minimum width of 7 feet for parking; spaces must be painted on the paved surface.
      (4) Signage: The street must be posted as a one-way street.

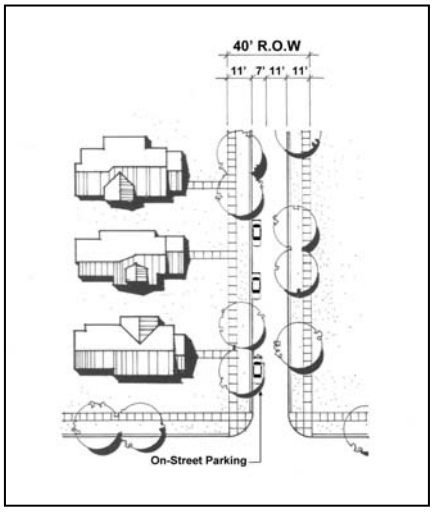


Figure 5.1 – One-way street adjacent to greenspace.

   b. In those instances where it is permissible to construct a smaller street the following design guidelines must be adhered to:
      1) There shall be no cul-de-sac;

2) The street must provide thru access; and
3) Valley gutter, roll down, or saucer type curbs designed and constructed to City standards may be used adjacent to the park area.

6. Phased Project - Where a project is proposed to be phased, all or part of the greenspace areas may be located at the edge of the first phase as long as additional greenspace from future phases will be contiguous and in addition to that required on the first phase. All of the design requirements indicated above shall be applicable to any and all phased development. The percentage of greenspace shall be calculated on a cumulative basis in order to ensure that the greenspace requirement is met. Previously dedicated greenspace shall be subtracted from the minimum total percentage to ensure that the minimum percentage required by City is not exceeded.

7. Greenspace Maintenance - All required greenspace shall be indicated on the recorded plat as a public access and use easement. The plat must also have a note that the property is not dedicated to the City of Fairhope and that the City of Fairhope is not responsible for maintenance of any or all required greenspace. Lakes, ponds, watercourses or similar sites will be accepted for maintenance only if sufficient land is dedicated as a public recreation area, park or open space. Such areas must be approved by the Recreation Board and accepted by the City Council before approval of the plat.

8. Hardship - Where there are unique and inherent characteristics of the land proposed for development, the Planning Commission may, by vote, reduce the greenspace requirements in whole or part. The Commission, however, may not require additional land area as is stated in Section C 2. However, a reduction of the greenspace requirements is totally contingent on the unique qualities of the land that are inherent, not man made, and would deprive a property owner of a reasonable return on the use of the land. It is the sole responsibility of the property owner to portray any and all "hardships" to the Planning Commission for final determination.

Commentary

Block size limits create a pedestrian scale while providing multiple connections for all of the shared users of the street. Streets are to be interconnected by a "modified grid," where arterial and collector streets provide direct and continuous routes for users of the streets and local streets provide multiple indirect connections for residents of the neighborhoods. Local streets should remain connected to the grid yet discourage large volumes of through traffic by incorporating design elements. Additionally, the character of all streets should be transitional rather than hierarchical; street character and design should transition to function appropriately with the adjoining land use rather than establish the character of adjoining land uses in a strip pattern along a hierarchy of streets. Design elements should be incorporated into the street design to insure that function and design speeds for the various streets are maintained and that streets support the adjoining land use. Further, the grid should be "modified" when natural or topographical features worthy of preservation are encountered.

D. ***STREET STANDARDS:***

1. Purpose – These street standards shall implement the Comprehensive Plan for the physical development of the City by setting the location, character and extent of streets, boulevards, parkways, and other public ways to promote good civic design and arrangement. This design and arrangement shall ensure proper arrangement of streets in relation to other existing or planned streets and the Comprehensive Plan.

These standards shall promote the following goals in the Comprehensive Plan: (a) implement compact, walkable neighborhoods; (b) support the development of a comprehensive bicycle and pedestrian network with linkages between residential and commercial areas; (c) provide a pleasant and diverse pedestrian experience; (d) create a defined system of streets that serves the needs of pedestrians and vehicles equitably, providing multiple routes where possible and encourages street and sidewalk connections; (e) connect streets, sidewalks, neighborhoods, and districts both physically and perceptually; (f) guide growth to locations that can be efficiently and effectively served by the City in transportation and infrastructure, and which strengthens the linkage between historic Fairhope and new development; (g) cluster mixed-use, neighborhood village centers at or near the intersections of arterial streets; and (h) ensure that village centers have identifiable centers and edges, and ensure pedestrian accessibility.

2. Street Classification and Function –Streets in all subdivisions shall be classified in one of the following categories. Each category shall serve the specified functions and support the described adjacent land uses.

Table 5.2

Classification	Functions	Adjacent Land Uses
Arterial street	✓ Land access ✓ Pedestrian/bicycle mobility ✓ Parking ✓ Vehicle mobility	✓ Mixed-use village centers, commercial, retail, and office uses only on blocks served by two arterial streets. Blocks within 880 feet of the intersection of two arterial streets and immediately adjacent to a block currently used or planned for such uses, may also be used for mixed-use village centers, commercial, retail, and office uses. ✓ Public and institutional uses ✓ Residential uses
Collector street	✓ Land access ✓ Pedestrian/bicycle mobility ✓ Parking ✓ Vehicle mobility	✓ Public and institutional uses only on blocks served by two streets of a collector classification or higher. ✓ Residential uses
Local street	✓ Land access ✓ Pedestrian/bicycle mobility ✓ Parking	✓ Residential uses
Lane	✓ Land access	✓ Mixed use village centers, commercial, retail and office uses ✓ Public and institutional uses ✓ Residential uses

Commentary

Table 5.2 requires that land uses and the transportation system are integrated. Uses that are attractors of vehicle trips from outside the neighborhood should be accessible by two arterial streets. This ensures proper civic design and the proper arrangement of streets to handle traffic within the overall transportation system. These uses, including commercial, retail, office, and mixed use village centers, shall be located on blocks served by two arterial streets, or in the case of build out of such a block, the immediately adjacent block.

3. Street Layout – Streets in all proposed subdivisions shall be laid out according to the standards in this section. For the purposes of this section, planned, platted, or

existing streets on adjacent lands shall be used to determine that the street layout for the proposed subdivision is in compliance with this section. Distances shall be measured from the centerline of all proposed, planned, platted or existing streets. << *Figure 5.2* >>

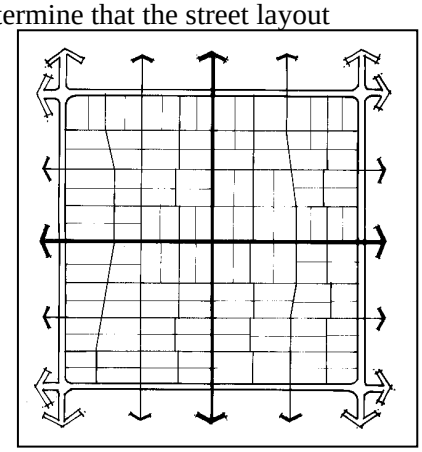


Figure 5.2 – Street layout with less frequent but continuous arterial streets, moderately frequent and moderately continuous collector streets, and frequent but less continuous local streets – all interconnected.

a. *Arterial Streets* – All proposed subdivisions shall have an Arterial Street at least every 1 ¼ miles (6600') but no two non-intersecting arterial streets shall be closer than ¾ mile (3960') from each other at any point. Arterial streets shall be an extension and continuation of any existing arterial streets in adjoining areas.

b. *Collector Streets* - All proposed subdivisions shall have a Collector Street at least every 5/8 mile (3300') but no two non-intersecting collector streets shall be closer than 3/8 mile (1980') at any point. Arterial streets in compliance with section D.2.a. shall count as collector streets for the purposes of this section. Collector streets shall be an extension and continuation of any existing collector streets in adjoining areas

c. *Local Streets* – All proposed subdivisions shall have a Local Street at least every 1/8 mile (660') for residential subdivisions and at least every 1/12 mile (440') for non-residential subdivisions, but no two non-intersecting local streets shall be closer than 220 feet at any point. Arterial streets in compliance with section D.2.a. and collector streets in compliance with section D.2.b. shall count as local streets for the purposes of this section.

d. *Lanes* – Lanes providing only access to lots may be located through the middle of a block, between any two adjacent non-intersecting streets.

e. *Access to Adjacent Property* - Street connections to abutting properties shall be provided at least at intervals not to exceed the maximum block length specified in Section D.4., by extension of a paved street that meets City construction requirements to the boundary of the abutting property. A temporary turnaround shall be provided for those streets subject to the following:

(1) A circular turnaround with a diameter of 30 to 42 feet. If a center island is provide in the turnaround, the outside diameter shall be 45 feet with a 20 to 24 foot lane maintained at all times. Circular turnarounds may be designed to incorporate a future traffic circle or roundabout, as provided in Article V., Section D.5.h., when future streets will intersect at that point. << *Figure 5.3* >>

(2) For extensions serving 5 lots or more, a cul-de-sac shall be required. Permanent dead-end streets shall not exceed 1,320 feet (1/4 mile) in length. Permanent dead-end streets with a pavement width of 20 feet or less shall be provided with a turnaround

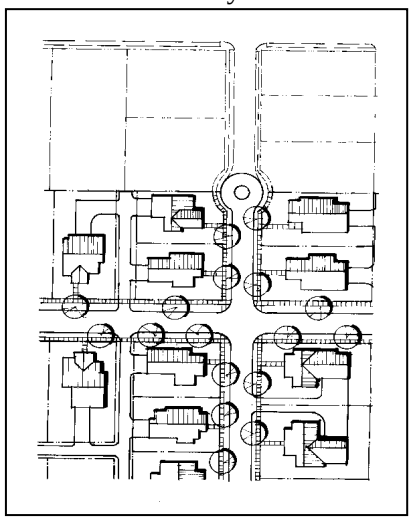


Figure 5.3 – temporary circular turnaround with potential to be incorporated into traffic circle when street is extended

having a roadway diameter of at lease 70 feet and a right-of-way diameter of at least 100 feet. Permanent dead-end streets with a pavement width of more than 20 feet shall be provided with a turnaround having a roadway diameter of at least 80 feet and a right-of-way diameter of at least 100 feet.

At non-permanent dead-end street, provide a temporary turn-around with at least a 70' diameter constructed with an all weather surface.

(3) For street extensions serving four or fewer lots, no temporary turnaround is required.

(4) All access streets to adjacent property that are not connected at the time of the improvements shall be posted with a stop sign blank reading "Future Through Street." The sign shall be posted by the Subdivider.

f. Street lights are to be paid for or installed by the developer at the time of development. Street lights shall be approved by the Planning director and/or his/her authorized agent and the Electrical Superintendent. Pole height shall be no more than 15 feet from finished grade. The type and style of lights and poles will be determined and agreed upon by the developer and the utility provider. All other approvals, including the design layout of street lights, will be granted by the electrical superintendent.

The utility provider shall be responsible for the installation and maintenance of the street lights. Outside the City of Fairhope, the homeowners association will be responsible for the maintenance, if applicable, and energy costs of the lights and this responsibility shall be noted on the plat.

4. Block Design -
   a. *Block Sizes* - The perimeter of any block shall not exceed 1,980 feet, except as authorized in Article V., Section D.7, Exceptions to Street Standards. This distance shall be measured using the centerline of all streets forming the perimeter of the block, not including lanes.
   b. *Block Length* – Block lengths shall not be shorter than 220 feet or longer than 660 feet, except as authorized in Article V., Section D.7., Exception to Street Standards.
   c. *Block Layout* – Blocks shall provide two tiers of lots fronting on a public street. Double frontage lots are prohibited, except in the case where a lot consists of more than 66% of the block.
   d. *Non—residential Blocks* - Blocks used for non-residential purposes, including mixed-use village centers, commercial, retail, or office, shall not be longer than 440 feet and the perimeter shall not exceed 1,540 feet.

Commentary

Shorter blocks promote pedestrian activity by making connections between multiple points more convenient. Residential blocks will be no greater than 660' x 330', or approximately 5 acres. Subdivisions with uses attracting vehicle trips from outside the neighborhood, and generating pedestrian trips from within the neighborhood, such as commercial, office or mixed use villages, shall have a shorter maximum block standard. These blocks will be no larger than 440' x 330', or approximately 3.3 acres. Pedestrian trips that generate either from adjacent neighborhoods or from on- or off-street parking will be encouraged by shorter blocks. This will facilitate more efficient use of the public streets and private property. Exceptions to these standards are specified in Article V., Section D.7.

5. Street Design – All streets shall be designed to support the adjacent land uses and include features as specified in Table 5.3 in Appendix A. In addition to the standards and features specified in Table 5.3, streets shall meet the following design standards.
    a. *Generally* -
        (1) All streets, including lanes, shall have end points at two separate streets. Cul-de-sacs and "loop" streets with endpoints on the same street are prohibited, except as provided in section Article V., Section D.7.a.
        (2) L-shaped streets, with end points at two non-parallel streets, shall not exceed 1000 feet between points of intersection with other streets, provided that all blocks in the subdivision comply with the maximum block size. << *Figure 5.4* >>
        (3) Street Names – Proposed streets in alignment with existing, named streets shall have the name of the existing street. In no case shall duplicate or similar sounding street names be approved, irrespective of the prefix or suffix used. Naming shall be consistent with the general direction of the street. Streets running east and west shall be called Avenues and streets running north and south shall be called Streets.
        (4) Half Streets – Where a dedicated half street or half lane is adjacent to the proposed subdivision, the other half of the street or lane shall be dedicated with the subdivision. No new half streets or lanes shall be platted.
        (5) Private Streets and Reserve Strips – Private streets and reserve strips for controlling access to streets, lanes, or utilities are prohibited. All streets shall meet the standards of this section and be dedicated and open to the public.
        (6) All streets, except lanes, shall provide a curb and gutter meeting City standards on both sides of the streets
        (7) All medians on arterial boulevard or arterial parkway streets shall be separated from the street by a curb and gutter meeting City standards and shall be covered with vegetation, except that any portion of the median may be used for turn lanes at intersections with other streets or for pedestrian crossings at intersections or mid-block.
        (8) Street trees shall be planted on center in all planting strips according to the following:

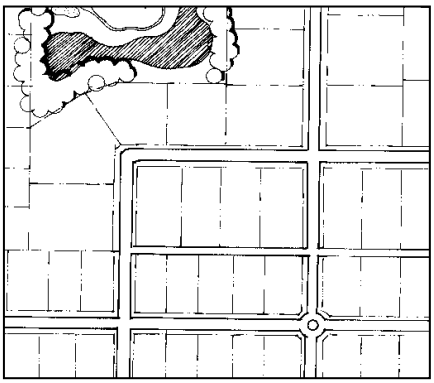


Figure 5.4 – " L-shaped" street with blocks maintaining the maximum size.

Commentary

Streets should be designed to accommodate and balance the needs of several shared uses, including pedestrians, bicycles, parking, and vehicle movement. To accomplish this streets shall include the features specified in Table 5.3. Transitional streets will emphasize different features of the street design within the right-of-way, according to the adjacent land use. For example, an arterial street may transition with the following features along its length: a diagonal parking lane, vehicle lanes, and a large sidewalk along a commercial block; the parking lane may become a dedicated turn lane or a "bulb-out" for pedestrians and landscape elements at intersections; and the street lanes or sidewalk could narrow, the parking lanes could change to parallel, and a planting strip can be added or expanded on residential blocks.

(a) All trees shall be at least 15 gallons and/or 1.5" to 2.5" in diameter when planted;
(b) Trees shall be planted at least every 25 feet from intersections. A tree shall be planted one per lot or at least every 50 feet, but no closer than 10 feet;
(c) Tree species and tree placement shall be approved by the City Horticulturist;
(d) All trees shall be pruned so that no foliage, limbs or other obstructions exist between 2½ and 10 feet from the adjacent street grade;
(e) In areas where planting strips are optional and not provided, sidewalks ten feet or greater shall provide 4' x 4' tree wells along the curb so that trees may be planted in conformance with these requirements.

(9) An inventory of all live trees greater than 24" DBH on site shall be protected and indicated on a tree preservation plan. Said preservation plan shall reflect tree protection in the diagram in Appendix G and verbage below.

Erecting Barriers is essential to protecting trees during construction. The applicant shall provide construction fences around all significant trees. Allow one foot of space from the trunk for each inch of trunk diameter. The intent is not merely to protect the above ground portion of the trees, but also the root systems. The fenced area shall be clear of building materials, waste, and excess soil. No digging, trenching or other soil disturbance shall be allowed in the fenced area.

Fines for not complying with the City of Fairhope's ordinance 1193, tree protection, will be levied in accordance to the City of Fairhope's restitution table.

(10) Developer shall be responsible for watering trees prior to subdivision acceptance and during the 2-year maintenance bond period.

(11) Tree Protection Requirements: The following requirements apply to all properties other than single-family residences:

(a) A significant tree is defined as any living tree (overstory or understory) with a DBH that exceeds twenty-four (24) inches. Significant trees are protected under this Ordinance and cannot be cut or intentionally harmed without expressed written consent of the City Horticulturist.

(b) Any person wishing to remove or relocate a significant tree shall, under the provisions of this section, make written application with the City Horticulturist. The application shall include a landscape plan (as defined above). The City Horticulturist must approve or deny the permit within fourteen (14) working days after receipt of the application.

(c) All tree removal will be at the property owner's expense except for; 1) trees on the City right-of-way which are diseased, injured, in danger of falling close to existing structures, or which create unsafe vision clearance, the removal of which shall be funded by the City; or 2) trees beneath utility lines which threaten to damage the utility line, the removal of which is the duty of the utility company.

(d) Criteria for Issuance of a Tree Removal Permit:

(1) The tree is located in an area where a structure or improvement will be placed according to an approved plan.

(2) The tree is diseased, injured, in danger of falling too close to an existing or proposed structure(s), interferes with existing utility service, creates unsafe vision clearance or conflicts with other ordinance or regulations.

(3) The tree is, or will be after construction, in violation of federal, state, or local laws, including but not limited to, laws and regulations pertaining to government programs for financing the construction.

(4) A permit may be denied if the tree is considered an asset to the natural heritage of the City of Fairhope and/or the Fairhope Tree Committee determines that reasonable alternatives to cutting the tree exist.

(12)No structures, other mail boxes are allowed in the right-of-way in front of lots used for residential purposes. Mailboxes shall be allowed subject to the following:

(a) one community mailbox per block; or

(b) one pole-mounted individual mailbox for lots with a minimum lot frontage of 75 feet; or

(c) one masonry-mounted mailbox for lots with a minimum lot frontage of 100 feet;

(d) lots less than 75 feet in width may have one masonry or one pole-mounted mailbox for every two lots.

b. *Intersections* –

(1) Streets shall be laid out to intersect at right angles insofar as practicable, but no street shall intersect with another street at an angle of less than sixty degrees.

(2) Intersections of three or more streets are prohibited except in the case of local streets where three separate local streets may intersect provided that only two streets continue through the intersection. << *Figure 5.5* >>

(3) Where there is an off-set in the alignment of a street across an intersection, the off-set of the centerlines shall not be less than one-hundred and twenty-five feet.

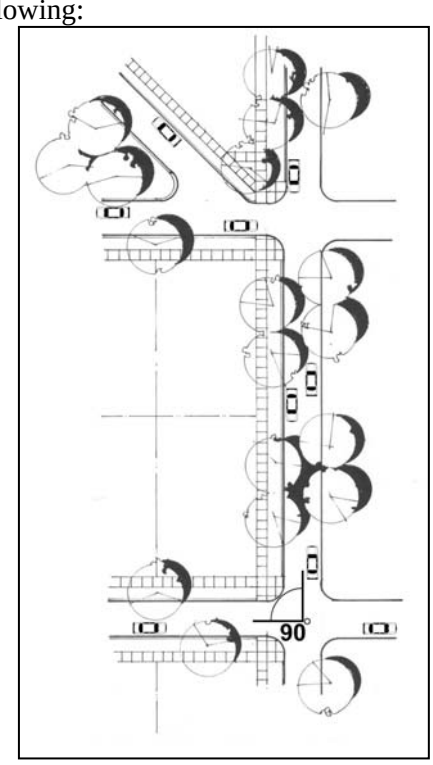


Figure 5.5 – Intersections limited to two streets at approximately 90 degree angles except in the case of local streets.

(4) Curb radii at street intersections shall be:
   (a) 5 to 15 feet for the intersection of two local streets;
   (b) 10 to 15 feet for the intersection of a local street with a collector street;
   (c) 10 to 20 feet for the intersection of two collector streets;
   (d) 15 to 20 feet for the intersection of a local street and an arterial street;
   (e) 20 to 30 feet for the intersection of a collector street and an arterial street; and
   (f) 25 to 30 feet for the intersection of two arterial streets.

   Where the angle of intersection exceeds seventy-five degrees, or where truck traffic and other large vehicles will make frequent turning movements, the Commission may require a greater radius.

Commentary

Large curb radii more easily accommodate right turns for vehicles, but at the expense of pedestrians due to increased vehicle turning speeds and greater pedestrian crossing distances. The curb radius standards balance these two competing concerns with respect to normal-sized vehicles and normal traffic patterns. Intersections used infrequently by large vehicles normally accommodate turning movements by allowing the large vehicle to momentarily swing over the center line, while any oncoming traffic yields. In the case of intersections where frequent traffic by larger vehicles is expected, larger radii may be necessary. In addition, closer to intersections on street parking is typically prohibited. At these locations, "bump-outs" in the curb can allow for shorter pedestrian crossings while still allowing curb radii which accommodate turning movements.

(5) Proper lines of sight shall be maintained at all intersections. Traffic on lower class streets shall stop or yield at intersections with equal or higher-class streets. The proper line of sight shall be an unobstructed view of from the stopping point to all points three feet above the roadway along the centerline of the existing street. The distance of the unobstructed view shall be based on the design speed of the intersecting street as specified in Table 5.4. No building or other type of visual obstruction shall be placed, erected or maintained within such triangle. Street trees are allowed within the sight triangle, provided that they do not have any foliage, limbs or other obstructions between 2 and 7 feet, and are not closer than thirty feet to the intersecting right-of-way line. << *Figure 5.6* >>

Table 5.4

Design Speed (mph)	**Intersection Sight Distance (measured in feet along centerline of intersecting street)**
20	125
25	150
30	200
35	225-250
40	275-325
45	325-400

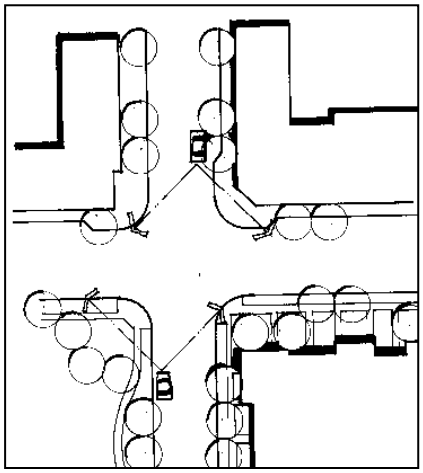


Figure 5.6 – Clear sight lines measured from stopping point along centerline of intersecting street according to Table 5.4.

c. *Traffic Calming* – To maintain design speeds specified in Table 5.3 (in Appendix A) and the function of streets specified in Table 5.2., traffic calming devices may be introduced into the street design. All traffic calming devices shall be based on sound engineering principles and are subject to the approval of the Planning Commission. Traffic calming devices may include, but are not limited to:

(1) Traffic circles – A circular raised island centered in the intersection, around which traffic circulates. Traffic circles require no geometric changes to the intersection and merely alter the flow of traffic through the intersection. << *Figure 5.7* >>

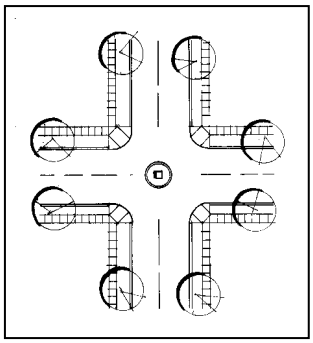


Figure 5.7 - traffic circle

(2) Roundabouts – A circular raised island centered in the intersection. Roundabouts require traffic to circulate counterclockwise around a center island. Unlike traffic circles, roundabouts require geometric alterations to the intersection and are used on higher volume streets to allocate rights-of-way among competing movements. << *Figure 5.8* >>

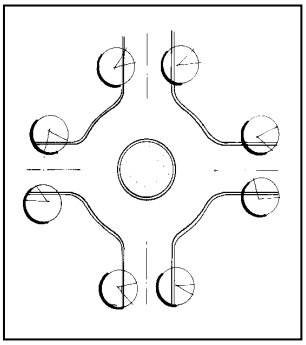


Figure 5.8 - roundabout

(3) Curb projections, neck downs or "bulb-outs" – curb extensions placed at mid-block locations or at intersections which narrow the street to provide visual distinction and to reduce pedestrian crossing distances. These are often used in conjunction with on street parking to define the on-street parallel parking areas. << *Figure 5.9* >>

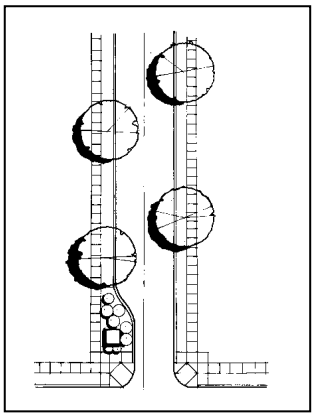


Figure 5.9 - curb projections or "bulb-out."

(4) Medians – raised islands located along the centerline of a street that narrow the street at that location or block through movement of vehicles at a cross streets or driveway access points. << *Figure 5.10* >>

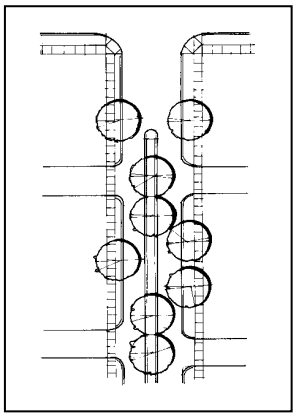


Figure 5.10 - median

(5) Road striping – painted stripes on the road can create the perception of narrow through lanes when a greater width is actually needed to accommodate truck traffic or turning movements.

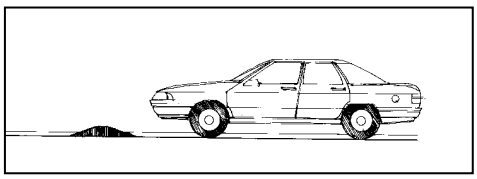


Figure 5.11 – speed hump

(6) Speed humps - Speed humps are rounded raised areas placed across the road. << *Figure 5.11* >>

(7) Speed tables – flat topped speed humps often constructed with brick or other textured materials on the flat section. << *Figure 5.12*>>

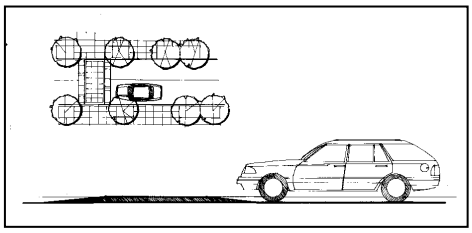


Figure 5.12 – speed table

(8) Chicanes - curb extensions or islands that alternate from one side of the street to the other, forcing traffic into S-shaped curves. << *Figure 5.13*>>

(9) Chokers – curb extensions on both sides of the street that narrow the street at that location. Chokers may be used in conjunction with on-street parking or a mid-block pedestrian crossing. << *Figure 5.14*>>

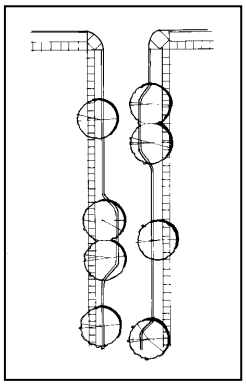


Figure 5.13 - chicane

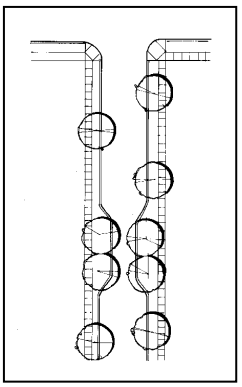


Figure 5.14 - choker

d. *Geometric Design- the geometric design aspects of the streets shall meet the minimum standards as provided in the AASHTO, "A Policy on Geometric Design of Highways and Street."*

1) *Horizontal Curves* - Where a deflection angle occurs in alignment of a street, a horizontal curve shall be introduced and where the magnitude of such angle exceeds ten degrees, a curve of reasonably long radius shall be required as specified in the AASHTO Manual, to meet the design speed in Table 5.3.
2) *Vertical Curves* - Every change in grade shall be connected by a vertical curve so constructed as to provide a minimum sight distance of two hundred feet, measured from a driver's eyes which are assumed to be four and one-half feet above the pavement surface, to an object four inches high on the pavement. Profiles of all streets showing existing and finish grades shall be provided and shall be to scale as required by Article IV, Section C.1.
3) *Tangents* - Where design speeds are such as to require super elevation of roadways in horizontal curves, a tangent not less than one hundred feet long shall be required between reverse curves on all such streets.
4) *Grades* - Except in cases of exceptional topography, and then subject to the approval of the Planning Commission, grades shall not be greater than seven percent or less than one-half percent. Maximum design grades

should not exceed four percent for arterial streets, six percent for collector streets or seven percent for other streets. Grades approaching intersections shall not be greater than five percent for a distance not less than one hundred feet from the center point of the intersection to the point of intersection of the vertical curve leading to the subsequent grade.

6. Pedestrian Area Design Standards – All streets shall include a pedestrian area comprised of a planting strip and a sidewalk, according to the standards in Table 5.3 in Appendix A.

   The developer may have the flexibility to construct the sidewalks within 2 years of final plat approval. A letter of credit guaranteeing the construction for 125% of the engineer's estimate is required. At the end of 2 years, all sidewalks shall be completed by either the developer or City, using the letter of credit.

   The areas in which the sidewalks will be poured shall be graded and compacted at the time the subdivision infrastructure is constructed.

   The pedestrian area shall be designed according to the following minimum standards:

   a. All streets supporting residential land uses shall have a minimum 5-foot wide sidewalk on each side of the street with the back edge of the sidewalk being the edge of the right-of-way.
   b. All streets supporting public institutions and public facilities land uses shall include a minimum 5-foot wide sidewalk and 8-foot wide planting strip on each side of the street.
   c. All streets supporting non-residential land uses including commercial, office, and mixed-use villages, shall have:
      (1) a minimum 15' wide sidewalk, with tree wells according to Article V., Section D.5.a.8.(e) on each side of the street; or
      (2) a minimum 10' wide sidewalk and minimum 6-foot wide planting strip on each side of the street.
   d. Sidewalks shall include curb ramps meeting accessibility requirements of the Americans with Disabilities act at all intersections and any non-grade driveway or land intersecting the sidewalk.
   e. Sidewalks shall be constructed of a minimum 4" concrete surface meeting City construction standards. Where applicable, sidewalk materials shall be used and constructed to encourage maximum tree preservation.
   f. Streets in rural and agricultural subdivisions meeting all

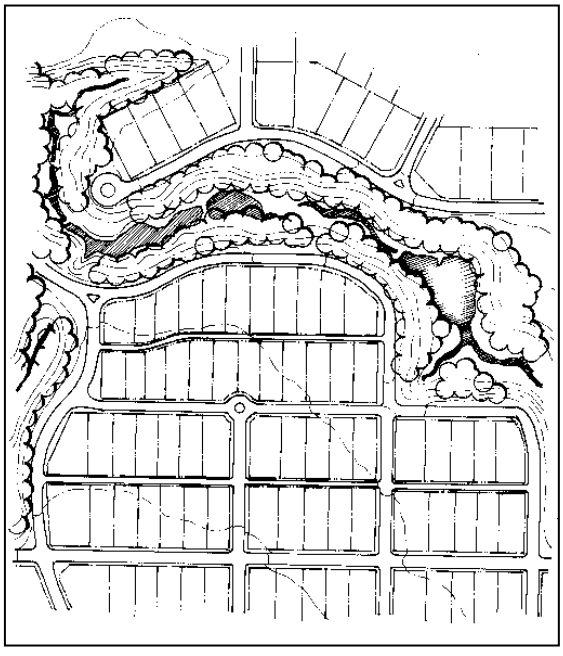


Figure 5.15 – Street layout exception due to natural, topographical, or environmental features causing interruptions in the street network. The exception to the street standard still maintains the street connections and maximum block limits.

requirements of Article V., Section D.7.c. and d. are not required to provide sidewalks.

g. Where applicable, sidewalks shall be configured in a manner that provides for maximum tree preservation.

7. Exceptions to Street Standards – Subdivisions may be approved with exceptions to the standards of Article V., Section D. according to the criteria in this section, at the Planning Commission's discretion. Any plat approved with exceptions may include conditions to assure that the purposes stated in section D.1. are achieved.

   a. *Natural Features* – Blocks abutting natural or topographical features may be approved with exceptions to the blocks and street layout standards of Article V., Section D., subject to all of the following:

      (1) construction of the grid according to the block and street layout standards must be impracticable in that the applicant would incur substantial and unreasonable additional costs in designing streets across the natural or topographical feature or modification of the grid is necessary to preserve important environmental features such as streams, wetlands, animal habitats, or other conservation areas; *<< Figure 5.15>>*

      (2) Modification of the grid shall not alter the minimum block length or block size, except that the distance of the property line along the natural or topographical feature creating the need for the exception shall be omitted when calculating the perimeter of the block. Additionally, public access easements to any natural or topographical features which can be used for active recreation may be used as the perimeter of a block; and

      (3) Cul-de-sacs or "loop" streets may be approved where connections with a through street would intersect with the natural or topographical feature. "Loop" streets are preferred to cul-de-sacs wherever practicable. Cul-de-sacs shall not exceed 660 feet and loop streets shall not exceed 1300 feet.

   b. *Public Facilities and Institutions* - Blocks used wholly or partially for public facilities and institutions such as schools, churches, hospitals or community centers, and blocks used partially for public parks or public open space, may be approved with exceptions to the blocks and street layout standards of Article V., Section D., subject to all of the following:

      (1) Local streets shall be provided at least every 990 feet.

      (2) No block perimeter shall exceed 3960 feet.

      (3) At least 66% of the land area of any block exercising this exception shall be used for the public park, open space or public institution.

      (3) Blocks used wholly for public parks or open space shall have no maximum size.

Commentary

Platting of streets determines the division of land ownership on a large scale, and from this large scale smaller divisions and lots evolve. While the smaller divisions and lots will change over time - in ownership, size, and character – larger divisions effected by the platting of streets will seldom change. (See Traditional Neighborhood Development Street Design Guidelines, Institute of Transportation Engineers, October 1999, p. 20.) Large lot or rural subdivisions must still maintain the ability for streets to be platted in conformance with these regulations in the event that the ownership, character, and size of the smaller divisions and lots changes over time. Any future re-subdivision and street opening under the operation of this section will only be at the landowner's initiation. Sections D.7.c and d. provide exceptions to these subdivision standards while maintaining the opportunity for future re-subdivision in accordance with the standards

c. *Rural subdivisions* – Subdivisions of tracts into large lots, which at some future time could potentially be re-subdivided, shall only be allowed according to this section. The Planning Commission may require that the blocks and lots shall be of a size and shape, and contain building site restrictions, to allow for future extension and opening of streets in conformance with these regulations upon subsequent division of each parcel into lots of smaller size. Subdivisions consisting entirely of large lots may be considered as rural subdivisions and may be approved with exceptions to the blocks and street layout standards in Article V., Section D., subject to all of the following: << *Figure 5.16* >>

(1) The subdivision must be entirely outside of the city limits;

(2) The total area of the subdivision must be greater than 20 acres;

(3) The traffic generated by the uses proposed in the subdivision shall not require any road improvements above the rural Local Road standard established in Table 5.3 in Appendix A;

(4) All right-of-way for streets shall be reserved on the plat for future street construction. Reserved streets shall be in conformance with the standards of this subsection D. The reservation shall state that any future street construction under operation of this section shall only occur upon the re-subdivision of lots, and upon the landowner's initiative. No streets need to be constructed, or improvements made within this reserved right-of-way upon the initial rural subdivision.

(5) All lots within the subdivision shall be a minimum of 5 acres. Lot lines should follow the centerline of the right-of-way platted for future streets wherever possible.

(6) All buildings constructed shall be oriented towards an existing street or the

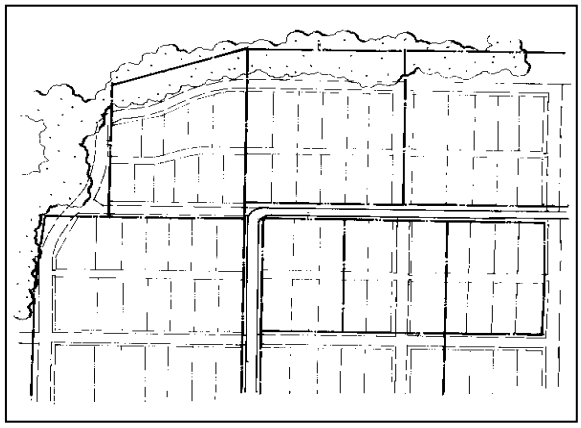


Figure 5.16 – Rural subdivision exception shows larger rural lots, not meeting the block or street standards of Article V., Section D. Rural exception is allowed provided the property could eventually be re-platted in conformance with these regulations without altering the proposed current street and building pattern. Rural lot lines (darker lines) follow potential future streets or lot lines (lighter lines) which are in conformance with block and street standards Article V., Section D., in the event the property is ever to be re-subdivided into smaller lots.

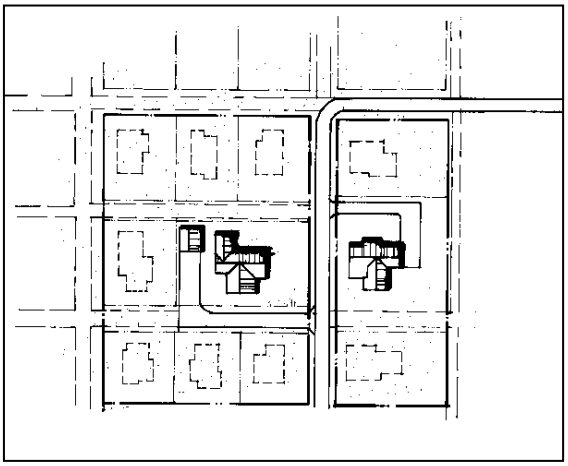


Figure 5.17 – Building placement on rural lots (darker lines), such that any potential re-subdivision of the property would not be limited by proposed current building placement, or require the future demolition of buildings to be constructed in the proposed rural plat. In this example buildings are placed on rural lots such that they can remain on larger corner or mid-block lots of potential future re-subdivision (lighter lines).

reserved right-of-way, so that re-subdivision can occur creating lots in conformance with these regulations. Buildings shall be placed so that future re-subdivision and the construction of streets on the reserved rights-of-way will not produce any double-frontage lots or require destruction of buildings. Buildings placement and orientation options include:

(a) Placement at and orientation towards the end of a block created by existing streets and reserved right-of-way;

(b) Placement at the corner of a block created by existing streets and reserved right-of-way. The building should be placed close enough to the corner of the block so that any future re-subdivision of the lot could create a buildable lot on the adjacent corner of the block; or *<< Figure 5.17 >>*

(c) Placement at the middle of a block created by existing streets and reserved right-of-way. The building should be placed close enough to the existing street or reserved right-of-way so that any future re-subdivision of the lot could create a buildable lot on the opposite side of the block. *<< Figure 5.17>>*

(7) Lot access may be by a common driveway with access to an existing public street. All lots do not have to front existing public streets. Common driveways shall not exceed 660 feet in length. No more than four lots or dwelling units may be accessed by a single common driveway. Common driveways should follow the centerline of the reserved right-of-way wherever possible. No partial public street improvements shall be constructed or accepted to shorten the access by common drive or increase the number of access points to the public street. *<< Figure 5.18 >>*

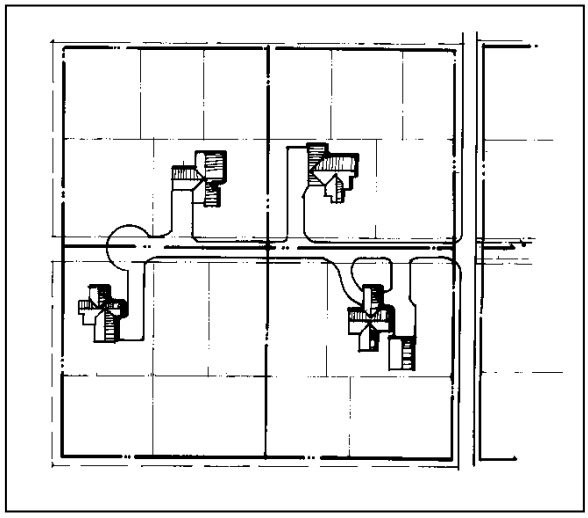


Figure 5.18 – Common driveway in rural subdivision with drive along a potential future public street in the event that property is re-subdivided by property owners.

(8) Any re-subdivision of the lots not in conformance with these standards for rural subdivisions shall require all streets and blocks to be laid out and improved in conformance with the standards Article V., Section D.

d. *Agricultural Subdivisions* – Agricultural Subdivisions do not need to follow any of the block or street standards provided that all lots created shall be a minimum of 20 acres, are used for agricultural purposes, and that no public street or utility improvements are required.

E. ***LOT STANDARDS:***

1. Purpose - These lot standards shall implement the Comprehensive Plan for the physical development of the City by establishing lots to promote good civic design and arrangement. This design and arrangement shall include the avoidance of congestion of population, the adequate provision of light and air, and the location, character, extent, and adequate provision of public utilities.

   These standards shall promote the following goals in the Comprehensive Plan: (a) provide pleasant, diverse pedestrian experience; (b) ensure that village centers have identifiable centers and edges, and ensure pedestrian accessibility; (c) encourage development that supports the scale and character of existing neighborhoods; (d) provide public gathering places; (e) provide compact, walkable neighborhoods; (f) encourage developments with mixtures of housing types, densities, and land uses; and (g) allow buildings that that relate to public streets both functionally and visibly, and a building orientation the respects the orientation of surrounding buildings, pedestrian ways and sidewalks, and surrounding streets.

2. Lot Sizes -
   a. *Land Subject to Zoning* - Where land is subject to zoning all lots shall fully conform to the requirements of the applicable zoning ordinance. The applicant shall furnish to the commission site drawings to demonstrate compliance. Lots not in compliance shall not have building permits issued unless combined with other lots and reconfigured so as to comply with zoning requirements.

   b. *Land not Subject to Zoning* -
      1) Lots not subject to zoning shall have lot areas of not less than 15,000 square feet and a minimum lot width of 100 feet;
      2) Where neither public water nor public sewage is available, lot areas and widths shall conform to the requirements of the public health authorities, but in no case shall be less than 100 feet in width and 20,000 square feet in area.

   c. Insofar as is practicable, side lot lines shall be at right angles or shall be radial to street lines.

   d. Corner lots for residential use shall be designed with additional frontage, greater than is required for interior lot widths. The additional frontage shall be equal to the difference of the minimum front setback and minimum side setback requirements for any applicable zoning district, for the purpose of allowing building orientation and setback from both front and side streets.

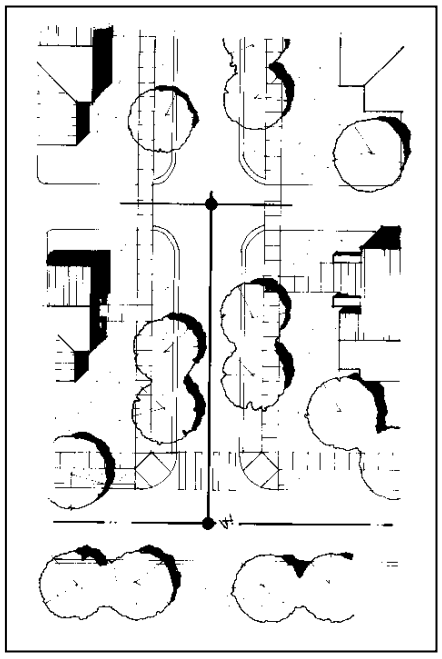


Figure 5.19 – Minimum curb cut separation measured from the center of curb cut to center of curb cut, or from center of curb cut to right-of-way line of intersecting street.

3. Lot Access –
   a. Except as provided in Section D.6., all lots shall

front upon a paved, publicly maintained street. Double frontage lots are prohibited, except where lots consist of more than 66% of a block.

b. *Curb Cuts and Lanes* – Lanes may be required along the rear of lots where, in the opinion of the Commission such lanes are necessary or where greater access than that allowed by curb cuts is desired. Curb cuts for driveway access to lots shall be limited to the following minimum separation distances, measured from the centerline of each driveway or from the centerline of the driveway to the right-of-way line of an intersecting street: *<< Figure 5.19>>*

(1) Arterial Streets - 220 feet between driveways or lanes, and 150 feet between driveways and the right-of-way of an intersecting street.
However, at least one curb cut per block shall always be allowed for a mid-block lane. Access to lots on arterial streets shall primarily be provided by side streets or lanes.

(2) Collector Streets - 110 feet between driveways or lanes, and 100 feet between driveways and the right-of-way of an intersecting street.

(3) Local Streets – no minimum distance is required between curb cuts on local streets. However, to enhance the pedestrian environment by minimizing curb cuts, access to residential lots by lanes or shared driveways is encouraged.

(4) Lanes – lot access points on lanes shall have no limit or minimum separation.

Commentary

Curb cuts to access lots introduce conflicts to pedestrians and the traffic flow on streets. While arterial streets should provide access to property either by on-street parking or shared lot access, these conflicts should be minimized. In these cases, rear lanes are encouraged and may provide additional access. These standards will result in a maximum of 2 curb cuts on an arterial street with a standard maximum block of 660'; 1 curb cut on arterial streets with block lengths shorter than 560'; 5 curb cuts on collector streets with a standard maximum block length of 660'; 2 curb cuts on collector streets with maximum half blocks of 330'. Curb cuts on local streets are not limited, but lanes are still encouraged.

c. *Driveway Access Widths* – driveway access widths shall not exceed the following widths:

(1) Arterial streets serving non-residential lots- 40 feet at the curb cut and 30 feet at the intersection with the sidewalk.

(2) Collector streets serving non-residential lots- 30 feet at the curb cut and 20 feet at the intersection with the sidewalk.

(3) Lanes serving non-residential lots – 25 feet

(4) There is no maximum width for driveway access on streets serving residential lots.

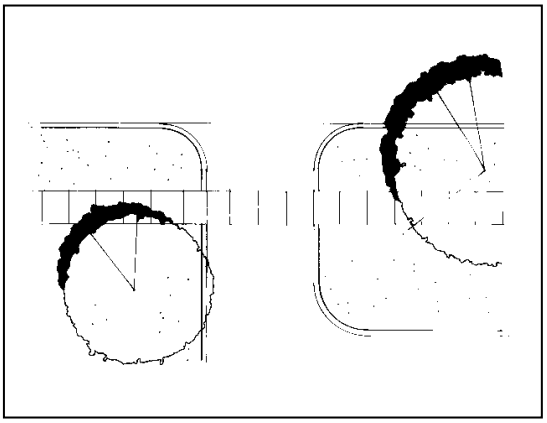


Figure 5.20 – Sidewalk material continuing across driveway curb cuts when the sidewalk is at grade with the driveway.

d. *Driveway and Lane Intersections* - The

lane or driveway material shall not cross pedestrian sidewalks. *<< Figure 5.20>>*

(1) On conventional driveways or lanes, where vehicles cross at grade with the pedestrian sidewalk, the sidewalk surface, material and grade shall continue across the driveway or lane.

(2) On "intersection-type" driveways, where vehicles access the lot at grade with the street, the pedestrian sidewalk material, or other material that differs from the driveway surface in both texture and color, shall continue across driveway surface.

e. *Required Access to Proposed Subdivisions* - Except as provided in Article V., Section D.6.c. and d., no subdivision shall be approved unless the area to be subdivided shall have frontage upon and access from an existing publicly maintained paved street.

4. Building Areas -

a. *Building Setback Line* - The minimum setback from the property lines shall be as specified in the Zoning Ordinance, where applicable.

b. Each lot shall contain a building lot which is not subject to flooding and meet all requirements of City Ordinance number 664, and any subsequent amendments.

c. Lot size, width, arrangement, and orientation shall ensure that each lot contains a buildable area, consistent with all applicable zoning requirements, and any other applicable City, County, State or Federal regulation.

d. Where a parcel of land proposed to be subdivided contains an area of wetlands delineated as jurisdictional by the Army Corps of Engineers, said area shall be subject to Section 404 (b) (1) guidelines concerning fill material into wetlands. Lots may be platted where sufficient upland areas exist to provide a building area for the principal structure and necessary accessory structures. Fill may be used where necessary to provide access to lots where approval for fill has been granted by the Corps of Engineers and any other applicable government agency.

Commentary

The purpose of these regulations is to implement the Comprehensive Plan and provide integration of all land uses, public streets, and other infrastructure, so that conventional development methods and techniques such as separation of uses and buffering are not necessary. This requires design elements orienting all uses to all public streets, and designing the street to support and maintain the character of those uses. This allows the street to become an important public space supporting a variety of uses and modes of transportation. However, in the event that the requisite level of design is not possible due to existing land uses or street design, buffering may be appropriate.

5. Utility Access and Easements -

a. Except where lanes are provided at the rear of lots, easements not less than fifteen feet in width along side and rear lot lines as required for drainage and utilities. On interior lots, the easement may be designed to lie equally on adjacent lots. On perimeter lots, no part of the required easement shall lie outside the platted lands. Easement placement and widths shall be approved by the Planning Commission. No half easements will be approved unless adjacent property owners dedicate the other half of the easement at time of approval.

b. Where a subdivision is traversed by a watercourse, drainage way, natural channel or stream, there shall be provided an easement conforming substantially to the limits of such water course plus additional width as necessary for maintenance and future construction.

c. Lots and easements shall be so arranged as to eliminate unnecessary jogs or off- sets and to facilitate the use of easements for power distribution, telephone service, drainage, water and sewage collection services.

6. Buffer Strips: In residential districts, a buffer strip at least ten feet in width, and in addition to the minimum required lot depth, may be required by Planning Commission adjacent to all existing incompatible uses, such as railroads, limited access highways, arterial streets and commercial/industrial developments. Such buffer shall be a part of the platted lots, but shall be designated on the face of the plat as an easement by imprinting on the plat the following: "This strip is reserved for planting of trees or shrubs by owner; placement of structures hereon is prohibited." *<< Figure 5.21>>*

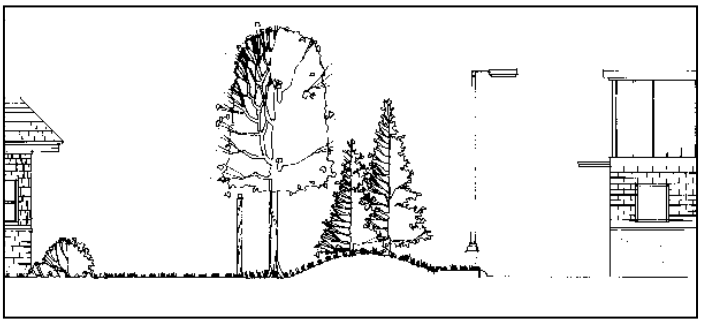


Figure 5.21 – Buffer strip between incompatible uses may be used in the event that existing incompatible uses may not be adequately addressed by the design elements required by these regulations.

F. ***STORM WATER STANDARDS:***

1. Purpose – These storm water standards shall implement the Comprehensive Plan for the physical development of the City by setting the location, character and extent of open spaces and facilities for waterways and storm water runoff, discharge, retention and detention. This design and arrangement shall promote the health, safety and general welfare, and promote safety from inundation and erosion caused by storm water runoff.

   These standards shall promote the following goals in the Comprehensive Plan: (a) plan, provide and maintain efficient and effective infrastructure that promotes orderly growth and environmentally sound practices to meet the future needs of the community and to support land use goals; (b) promote a sustainable future that meets today's needs without compromising the ability of future generations to meet their needs; and (c) encourage and develop connections between environmental quality and economic vitality.

2. Liability - The design criteria herein establishes minimum elements of design which must be implemented with good engineering and good construction practices. Use of information herein for placement of any structure, for use of any land, or any design basis shall not constitute a representation, guaranty, or warranty of any kind by the City of Fairhope or its agents, officers or employees of the practicability, adequacy or safety of design.

3. Submittal Requirements –

a. *Minimum Requirements* - All proposed subdivisions shall demonstrate compliance with this Section F., these Regulations, and all applicable state and federal laws and regulations by submitting a minimum of two (2) hard copies and one (1) electronic copy of the following plans and calculations:
   (1) A Drainage Plan adequate provision for storm and flood water control by channel, conduit or basins, which takes into account the ultimate or saturated development of the tributary area in which the proposed subdivision is to be located, and which includes but shall not be limited to:
      (a) Contour map of proposed development areas, with both existing and finish contours at not greater than two-foot intervals;
      (b) Existing drainage systems, including any structures immediately down stream that may be affected by the project;
      (c) Proposed drainage system, including onsite and offsite drainage areas;
      (d) Structure location, type and size, slope, c.f.s., elevations of inlet and outlet, velocity, headwater elevation, tail-water elevation, etc., relative to the overall subdivision and/or staged phase of the subdivision;
      (e) Differential runoff calculations for pre-development and post-development conditions;
      (f) The effect of the subdivision on existing upstream and downstream facilities outside the area of the subdivision; and
      (g) Other pertinent information necessary for review of the drainage plans as may be required by the Commission.
      (h) A drainage narrative, including but not limited to, the following:
         1. Any and all historical and existing drainage conditions.
         2. Name, location, size of receiving watersheds and any special considerations required by the watershed.
         3. The calculation method and assumptions used.
         4. Discussion of adequacy of volume of retention and drainage design.
         5. Method of discharge.
         6. And how the design takes into account (Section F paragraph 3 b) the potential for *adverse effect.*
   (2) An Erosion and Sediment Control Plan which includes, but shall not be limited to:
      (a) Architectural and engineering drawings, maps, assumptions, calculations, and narrative statements as required to accurately describe the development and measures taken to meet the objectives of storm-water management;
      (b) Data on historical runoff, developed runoff, detention pond details, and method of discharge.
   (3) Operations and Maintenance (O&M) Plan and Agreement for maintenance of detention facilities and other storm water quantity and quality BMPs during development and documents providing for continued inspection and maintenance after completion of development and sale of all lots, such documents running as a covenant with the lands.
      (a) An Operations and Maintenance (O&M) Agreement signed by the developer or owner for any required detention facilities or other storm water quantity and quality BMPs must be submitted with the

proposed plans. The agreement must contain a long-term maintenance plan prepared by the design engineer for each BMP. The maintenance plan must include a description of the storm water conveyance system and its components, inspection priorities, schematics for each BMP, and inspection schedule for each water quantity and quality BMP. The O&M Agreement must be recorded prior to final plans approval. If the final configuration of the storm water system or BMPs differs from the original design on the approved plans, the O&M Agreement must be revised, finalized, and rerecorded. Failure to follow the O&M Agreement could result in enforcement action.

(b) The long-term maintenance plan within the O&M Agreement contains the inspection priorities and schedule for the storm water BMPs. The owner is responsible for inspecting the storm water system and BMPs according to the schedule and submitting reports to the Planning Director or his authorized representative every five (5) years to document that inspections have been completed and necessary maintenance has been performed. The first inspection report is due December 31 of the third year after construction has been completed. Inspection reports are then due by December 31 of every fifth year following submittal of the first report. The Planning Director or his authorized representative must be notified of any change in ownership. Failure to file the five year inspection reports and perform required maintenance activities could result in enforcement action.

(c) Prior to the full release of the performance bond for any new or substantially improved storm water facilities, an Alabama registered engineer shall submit to the Planning Director or his authorized representative certification that the proposed storm water management system and BMPs for the development are complete and functional in accordance with the approved plans and shall also provide as-built drawings for the storm water management systems and BMPs.

(4) Basic Design Data and calculations including routing calculations in legible tabulated form and proof of adequacy of volume of retention and sizing computations for low flow structures.

(5) Copy of notice of coverage and storm water pollution plan for coverage under the Alabama Department of Environmental Management for issuance of NPDES Permit, and permits from any other agency, where required; and,

(6) Any additional engineering information the City of Fairhope staff deems necessary to make a decision on subdivisions and other development where adequacy of drainage is reasonably questioned.

b. *Adverse Effects* - Where it can be reasonably anticipated that additional quantity or velocity of runoff from development of a subdivision will overload existing downstream drainage facilities, approval shall be withheld until there is submitted to the Commission a plan to mitigate damage to downstream property which would or might result from the subdivision under consideration. Downstream drainage structures should be considered when sizing detention outfall structures, with proof of this submitted to the

Commission. The hydraulic elevations resulting from channel detention shall not adversely affect adjacent properties.

c. *Additional Engineering Plans and Calculations* -
   (1) In every case where new streets are to be constructed, and in cases where subdivisions provide frontage only upon existing right-of-way and there exists in the opinion of the Commission the potential for damage from uncontrolled storm-water runoff, the project engineer shall include in his plans the design and calculations required for adequate control of storm-water.
   (2) For projects not exceeding 200 acres, routing calculations shall be in legible tabulated form. Proof of adequacy of volume of retention and sizing computations for low flow structures shall be submitted. For projects exceeding 200 acres, the engineer shall provide detailed, documented verification of adequacy of design.
   (3) No proposals for under-sizing shall be submitted except with plans and profiles of the entire undersized downstream area with convincing evidence that the hydraulic gradients proposed will not adversely affect existing facilities maintained by the City or County.
   (4) A special design drawing shall be submitted for any single drainage structure of 20 square feet in area, or larger.

d. *Certifications and Seals* –
   (1) All plans and design calculations submitted shall bear the seal, original signature, name, address and telephone number and certification of the project engineer, who shall be registered to practice as a Professional Engineer in the State of Alabama and who is qualified by reason of education and experience in the field of storm water design.
   (2) The engineer shall seal and sign each sheet of the plan assembly.
   (3) The engineer shall affix his certification to the first sheet of each plan assembly and design calculation, which certificate shall read substantially as follows:

"ENGINEER'S CERTIFICATE

I, the undersigned, a Registered Professional Engineer in the State of Alabama holding Certificate Number _____, hereby certify that I have reviewed the design herein which was done under my direct control and supervision and that, to the best of my professional knowledge and to the best of my belief, conforms to the requirements of the Fairhope Subdivision Regulations and to all other rules, regulations, laws, and ordinances applicable to my design.

_____
Project Engineer

_____
Date

_____
Name of Project to which this Certificate Applies

Plans which are certified consist of Page _____ thru_____, each of which bears my seal and signature."

(4) The calculations, construction plans, and plat shall have the following statement: "A property owners association (POA) is required to be formed. The POA is required to maintain any and all storm water facilities and structures located outside of the publicly accepted right-of-way.

4. Stream Buffers –
   a. An undisturbed streamside buffer (buffer) is an area along a shoreline, wetland, or stream where development and redevelopment is restricted or prohibited. The primary function of the buffer is to physically protect and separate a stream, lake, bay, or wetland from future disturbance or encroachment. Buffers can provide storm water management and sustain the integrity of stream ecosystems and habitats. Buffers can be applied to new developments and redevelopment by establishing specific preservation areas and providing management of the buffers through easements or homeowner's associations. For existing developed areas, an easement is typically required from adjoining landowners. Waivers in accordance with Article VII may be requested if the developer or landowner can demonstrate hardship or unique circumstances that make compliance with the buffer requirement difficult.
   b. A buffer layer in the City's GIS system has been developed to show buffer limits along streams within the City's planning jurisdiction. The following Buffer widths used to develop the buffer layer for streams, are shown in the following table and are measured from the top of bank as defined in Article II of these subregulations. Buffer widths for ponds, Mobile Bay, jurisdictional wetlands as determined by the Alabama Department of Environmental Management and the Army Corps of Engineers, and any lakes, ponds, and isolated wetlands are also shown in the table. The buffer requirement applies to streams beginning at a point where the drainage area is 100 acres or greater.

Feature	Buffer Width (feet)
Fish River	100
Other Watersheds	50
Mobile Bay	50
Wetlands (Jurisdictional and Isolated)	30
Ponds/Lakes/Isolated wetlands	30

   c. The buffer applies to all properties except those properties that are an existing lot of record and/or included on an approved preliminary subdivision plat (as of appropriate date).
   d. Allowable uses in the buffer include: flood control structures; utility easements as deemed necessary and approved by the Planning Director or his authorized representative; natural footpaths; greenways, paved roadways; pedestrian and bikeway crossings perpendicular to the streamside including approaches, dock and ramp access, and other uses as determined by the Planning Director or his authorized representative. All buffer disturbances associated with allowable uses shall be to the minimal extent practicable and all disturbed areas shall be stabilized as soon as possible.

e. The vegetated target for the buffer shall be undisturbed natural vegetation. Any of the allowable uses shall be designed and constructed to minimize clearing, grading, erosion, and water quality degradation.

f. Land in the buffer shall not be used for principal structures and accessories, such as swimming pools, patios, etc. All new platted lots shall be designed to provide sufficient land outside of the buffer to accommodate primary structures. Buffers should be delineated before streets and lots are laid out to minimize buffer intrusion and to assure adequate buildable area on each platted lot. Land within the buffer can serve to meet the minimum lot requirements.

g. Buffer impacts are inevitable with development. Modification and mitigation of the buffer width are available to landowners or developers of newly platted lots or subdivisions where there are exceptional situations or physical conditions related to the parcel that pose practical difficulty to its development and restrict the application of the buffer requirements. The landowner or his designated representative may prepare and submit for approval a written request and site plan showing the extent of the impact of the buffer on the proposed project and specify a proposed buffer mitigation plan. The Planning Director or his authorized representative will review and render a decision on the buffer encroachment and proposed mitigation within 30 days after receiving the request. In no case shall the reduced width of the buffer be less than 25 feet. Applicants can appeal the decision of the Planning Director or his authorized representative's decision to the Planning Commission.

h. In order to maintain the functional value of the buffer: dead, diseased, or dying trees that are in danger of falling and causing damage to dwellings or other structures may be removed at the discretion of the landowner; debris in the buffer that is a result of storm damage may be removed; and, invasive plant species may be removed if they are replaced by native species. A buffer restoration plan must be approved by the Planning Director or his authorized representative.

i. Stream boundaries including each buffer zone must be clearly delineated on all grading plans, subdivision plats, site plans and any other development plans. The outside limit of the buffer must be clearly marked on-site with permanent signs placed every 100 feet prior to any land disturbing activities. Stream and buffer limits must also be specified on all surveys and recorded plats and noted on individual deeds. Buffer requirements must be referenced in property owner's association documents and shall be labeled on the plat.

j. When a landowner or his representative obtain permits from ADEM or the Army Corps of Engineers that results in impacting the buffer then approved mitigation of these impacts based on the permit conditions supersede the applicable components of the buffer requirements in areas covered by the permit. The buffer requirements for areas not covered by the permit shall be applicable to the remainder of the proposed development site.

5. Flow Control –

a. *Scope of Design* - All subdivisions or other developments shall be provided with adequate storm water drainage facilities. The project engineer shall provide a design adequate to control storm water peak flows, runoff volume and velocity in accordance with paragraph 7 of this section. In general, the project engineer shall use design storm criteria based on the site-specific

conditions that relate to protection of life and property. Culverts shall generally accommodate a 25-year storm frequency under arterial roadways; drainage systems within subdivisions should accommodate a 2 through 25-year storm frequency; bridges shall accommodate a storm frequency of 50 years. When recommended by the City of Fairhope staff, the Planning Commission may require a storm frequency design as great as 100 years.
(1) There shall be no storm water pumps.

b. *Design Standards and Calculations* – The method of determining storm water runoff, plans, and designs shall be based on principles of good engineering practice and the following standards:
(1) Calculations shall be based on the Rational Method (Q=cia) for small basins, up to 100 acres, where:
Q=estimated peak discharge in cubic feet per second
c=coefficient of runoff (from table below)
I=rainfall intensity, inches per hour, for a design storm derived from the time of concentration
t_c = time of concentration in minutes, from figure 4-13 of the Alabama Department of Transportation of Hydraulic Manual, attached as Appendix D.
a=drainage area in acres

Recommended values for "c" may be found in table 4-2 of the Alabama Department of Transportation Hydraulics Manual, attached as Appendix E. It is recommended that the intensity, "I" be obtained from the Intensity-Duration-Frequency curve for Mobile produced by the National Weather Service.
(2) When the proposed development lies within a large watershed where flows from upstream drainage areas are passing through the proposed development, a rainfall-runoff model such as the Soil Conservation Service (SCS) technical release 20 (TR-20) should be used to calculate offsite flow. Flow should calculated using a 25-year, 24-hour rainfall, the depth of which can be obtained from SCS Technical Release 55 (TR-55). This flow shall be taken into account when designing detention outfall structures if the upstream flow passes through the proposed detention pond. The effects of (and on) upstream and downstream ponds in the watershed shall be analyzed.
(3) All proposed conduits or channels shall be of sufficient capacity to accommodate potential runoff from developed area, including the entire upstream drainage area. The project engineer shall include in his submittals evidence that he has included in his design the tributary area/s. If an existing channel runs through a proposed development, the engineer must consider this flow when designing detention and outfall structures.
(4) In general, inlets shall be provided so that surface water is not carried across any intersection, or for a distance of more than 600 feet in the gutter. When calculations indicate that gutter capacities are at maximum, catch basins shall be used to intercept the flow at that point.
(5) Open channels and ditches shall be so designed as not to create a traffic hazard or to cause erosion. The minimum slope for paved ditches shall be 0.5 percent and for non-paved ditches shall be one percent. Maximum

design flow velocities shall conform to the current edition of the Alabama Highway Department Hydraulics Manual.

(6) Cleanout access shall be provided at a maximum spacing of 300 feet for pipes 24 inches or less in diameter and 400 feet for pipes exceeding 24 inches. Cleanouts shall also be provided at each change in line and grade.

(7) Concrete box culverts shall be designed and constructed according to requirements of the Alabama department of Transportation Standard Specifications for Highway Construction, current and the Alabama Department of Transportation Special Standard Highway Drawings.

c. *Site Facilities* –

(1) The developer shall be required to carry away, by pipe or open channel, any spring or surface water existing prior to or as a result of the subdivision. Adequate provisions shall be made within each subdivision for drainage facilities required.

(2) Where a public storm water system is available, the developer shall be required to connect his facilities thereto. If no public outlet exists, the project engineer shall recommend means to adequately dispose of storm water runoff.

(3) The storm and sanitary sewer plans shall be made prior to other utility plans.

(4) The storm water system shall be separate from and independent of any sanitary sewer system.

d. *Conformity with Other Standards* - All drainage facilities shall be constructed in conformity with state specifications and all other state and federal laws and regulations.

e. *Flood Prone Areas* –

(1) Low lying lands along watercourses subject to flooding or overflowing shall be included in the drainage and shall not be available for improvements except as specifically authorized by the City's flood control ordinance.

(2) Low areas subject to periodic inundation and areas subject to excessive erosion shall not be developed or subdivided unless and until the Planning Commission may establish that: The nature of the land use proposed would not tend to be damaged appreciably by water; The area may be filled or improved in such a manner as to prevent periodic inundation; Minimum floor elevations may be established such as to prevent damage to buildings or structures; There is adequate provision to eliminate such flooding.

f. *Lands Outside the City* - Within the extra-territorial jurisdiction of the Fairhope Planning Commission, all engineering plans shall be subject to the more restrictive requirement of these provisions or of Baldwin County's Storm Water Management Plan. In those areas, the County Engineer's review shall be completed and his certificate of review shall accompany all plans submitted to the Commission. The following outline is provided to help insure that certain critical elements of design are in compliance with the objectives of design:

(1) Volume of retention for entire project

(2) Tributary (Q) peak runoff to basin

(3) Balanced maximum outflow rate from low flow structure

(4) Ratios of inflow to outflow (differential rates)

(5) Sizing of overflow facilities

(6) Stability of dikes
(7) Safety features
(8) Maintenance features

6. Erosion Control -
   a. Surface water runoff originating upgrade of exposed areas shall be controlled to reduce erosion and sediment loss during period of exposure. All land disturbing activities shall be planned so as to minimize off: site sedimentation damage.
   b. No grading or earth moving operations shall commence until erosion and sedimentation control measures shall have been implemented.
   c. All disturbed areas shall be stabilized as quickly as is practicable with permanent vegetation and erosion/sediment control measures. The duration of exposure to erosive elements shall be kept to a minimum.
   d. Detention ponds shall be stabilized by means of grassing, sodding, erosion control netting, or a combination thereof. Sediment shall be removed from the pond prior to acceptance, and any disturbed areas shall be regrassed. The use of red clay as a means of stabilizing detention ponds is prohibited.
   e. Temporary vegetation and/or mulching shall be provided protect exposed high-risk erosion areas during development.
   f. When the increase in peak rates and velocity of storm water runoff resulting from a land disturbing activity is likely to cause damaging accelerated erosion of the receiving channel, plans shall include measures to control velocity and rate of release so as to minimize damage to the channel.
   g. No land disturbing activity shall be permitted in proximity to a lake, natural watercourse or adjacent property unless a buffer zone is provided along the boundary thereof to confine visible siltation and to prevent erosion; provided, however, that this prohibition shall not prevent such activity undertaken as a part of the construction of such lake or watercourse channel.
   h. The angle for graded slopes and fills shall not exceed that which can be retained by vegetation cover or other adequate erosion control methods. Provision shall be made for planting or otherwise protecting slopes within the shortest possible time from exposure thereof.
   i. Erosion and sedimentation control measures, structures and devices shall provide control from the calculated post-development peak runoff. Runoff rates and computations may be calculated from procedures contained in the "National Engineering Field Manual for Conservation Practices" and shall be based on rainfall data published by the National Weather Service for the area and/or official local records.
   j. Engineer shall provide for permanent protection of on-site or adjacent stream banks and channels from the erosive effects of increased velocity and volume of storm-water runoff resulting from land disturbing activities.
   k. Erosion and sediment control plans and details shall be based on the current edition of the "Alabama Handbook for Erosion Control, Sediment Control and Storm water Management on Construction Sites and Urban Areas". Erosion control plans shall be prepared by a certified professional in erosion and sediment control such as a Certified Professional in Erosion and Sediment Control (CPESC).

7. Detention and Retention Facilities -

a. The purpose of storm water retention and detention is to protect downstream properties from increases in flood heights due to development. A combination of storage and controlled release of storm water shall be required for road construction, non-residential developments of one acre or more, multi-family residential developments of one acre or more, and single family developments of three acres or more. The requirement for a combination of storage and controlled release of storm water is not required for minor subdivisions; however, if the Planning Commission deems that the intensity of the development could cause off-site storm water flow impacts during or after development, a combination of storage and controlled release shall be required. (The effective acreage for a project is not limited to a fractional part of the total concept; even though developed in phases, it is the total area of the conceptual plans which governs.) Storage and controlled release facilities may be required on smaller projects if it is determined in the Planning Commissions discretion that the intensity of the development could cause off-site storm water flow impacts during or after development. The retention or detention (whenever detention requirements are addressed by these regulations, requirements also apply to retention facilities) facilities must be designed to control peak flow from the outlet of the site such that post-development flows are equal to or less than pre-developed peak flows for the 2-year, 5-year, 10-year, 25-year, 50-year and 100-year design storms. However, detaining the discharge from a site can sometimes exacerbate flooding downstream due to peak flow timing and/or the increased volume of runoff coming from a site. If detention facilities are indiscriminately placed in a watershed and changes to the peak flow timing are not considered, the detention facility may result in an increase of the peak flow downstream. Another impact of new development is an increase in the total runoff volume of flow. Thus, even if the peak flow is effectively attenuated, the longer duration of higher flows due to the increased volume may combine with downstream storm water conveyance systems to increase downstream peak flows. Applicant must demonstrate through hydrologic analyses that the detention facility will not exacerbate flooding downstream.

b. Such facilities shall be owned, operated and maintained by the development entities and shall not be accepted for inspection and maintenance by the City of Fairhope. The burden shall be on the developer and his engineer to provide evidence in support of any proposal to alter or modify the requirement for detention. Storm water runoff from new development or significant redevelopment must not adversely affect downstream properties. In determining whether runoff from the new development or significant redevelopment causes an adverse impact, the following procedures will be used:

(1) Attenuate post-development peak discharges to a level not to exceed the pre-development discharges for the 2-year through 100-year recurrence intervals.

(2) Apply the “ten percent” rule. This rule is based on the premise that at a point downstream of a development site where the drainage area above the development is 10 percent or less than the total drainage area at a point downstream of the development; then impacts related to storm water runoff from the development are minimal from this point downstream. This rule recognizes that in addition to controlling the peak discharge from the outlet of a detention facility, these facilities change the timing of the entire outflow hydrograph for the stream or

river in question. Where required, channel routing calculations must proceed downstream to a confluence point where the drainage area being analyzed represents ten percent or less of the total drainage area. At this point, if the effect of the hydrograph routed through the proposed storage facility on the downstream hydrograph is assessed and shown not to increase flows in downstream hydrographs, detention can be waived. If increased flows are found, then backwater calculations and determination of flood elevations for the areas impacted by increased flows, if any, must be prepared. Where downstream increases in peak flows or flood elevations are shown, detention will be required on site to attenuate storm water runoff from post-development to pre-development rates. In the event that the City has developed a Comprehensive Plan for the area, the recommendations within the Comprehensive Plan will establish the requirements for detention. The City retains the right to require detention in areas of known flooding when detention will not exacerbate downstream flooding.

(3) The release rate from any detention facility should approximate that of the site prior to the proposed development for the 2-year through 100-year storm events, with emergency overflow capable of handling at least the 100-year peak discharge except where waived or altered by the Planning Commission. Design of the detention pond shall be to insure that detention facilities will survive overtopping occurring for any reason, including clogging of controlled outlets for the 100 year storm event. Detention systems must be constructed during the first phase of major developments to eliminate damage to adjacent properties during construction. In this regard, the detention systems shall be designed to function as sediment traps and cleaned out to proper storage volumes before completion. If deposition of sediment has occurred, detention systems must be restored to their design dimensions after construction is complete and certified as part of the as-built submittal.

c. Detention facilities shall be provided with obvious and effective control structures. Plan view, sections and details of the structure shall be included in submittals. Sizing of the low flow pipe shall be by inlet control or hydraulic gradient requirements. Low flow pipe shall be not smaller than eight inches in diameter, except in parking lot and roof retention where the size shall be designed for the particular application as approved by the Commission.

d. The overflow opening or spillway shall be designed to accept the total peak runoff of the improved tributary area. Proper engineering judgment, with 25-year, 50-year or greater storm frequencies considered, shall be exercised in secondary routing of discharge greater than the basic design storm for the protection of downstream properties.

e. Aerators are required for all retention ponds. The Public Works Director shall approve the specifications for said aerator.

8. <u>Post Development Water Quality Best Management Practices</u> –

a. Storm water quality BMPs for new development and significant redevelopment are required for projects that disturb three acres or more or subdivisions with four or more lots. (The effective acreage for a project is not limited to a fractional part of the total concept; even though developed in phases, it is the total area of the conceptual plans which governs). The BMPs must be designed to achieve the goal of removing at least 80% of the average

annual post-construction total suspended solids (TSS) load. The storm water quality BMPs will be considered in compliance with this requirement if;

(1) BMPs are sized to capture and treat the water quality treatment volume, which is defined as the runoff volume resulting from the first 1.8 inches of rainfall from a site; and,

(2) Appropriate structural storm water BMPs are selected, designed, constructed, and maintained.

Storm water quality BMPs may be required on smaller projects if it is determined in the Planning Commission's discretion that the intensity of the development could cause off-site storm water impacts during or after development.

b. The storm water quality treatment goal is designed to capture 85% of the annual storm water runoff. Storm water quality BMPs must be designed to treat the runoff from the first 1.8 inches of rainfall. Each site's storm water quality treatment volume is also based on its percent impervious cover. The treatment standard is the same for all sites unless other secondary pollutant reduction goals are established by ADEM; for instance, through the establishment of Total Maximum Daily Loads (TMDLs). The storm water quality treatment methodology to determine treatment volume is as follows:

$$WQv = P \times Rv \times \frac{A}{12}$$

Where:

WQv = water quality treatment volume, acre-feet
P = rainfall for the 85% storm event (1.8 inches)
Rv = runoff coefficient (see below)
A = drainage area in acres

$$Rv = 0.015 + 0.0092I$$

I = drainage area impervious cover in percent (50% imperviousness would be 50)

c. This storm water quality treatment goal is designed to give the developer flexibility in meeting the 80% TSS reduction goal on each site. BMPs may be selected to meet the storm water quality requirements in numerous ways through the application of low-impact site design and layout, non-structural BMPs, and structural BMPs.

d. The City encourages use of low-impact site design practices that reduce the impact of development on storm water quality and quantity. Low-impact site design practices are meant to:

(1) Minimize the impervious cover on a site,

(2) Preserve the natural infiltration ability of the site,

(3) Route storm water to "micro controls," such as rain barrels, rain gardens, etc. that treat small portions of site storm water from the site, and,

(4) Minimize long-term BMP maintenance by preserving and using natural features of the site.

e. A developer should consider low impact site design practices early in the design process in an effort to reduce the overall water quality treatment volume requirement. These practices tie directly into the storm water quality program, the WQv calculation, and/or the storm water treatment volume. These practices should only be implemented when not in conflict with other City regulations.

f. Structural storm water controls, or Best Management Practices (BMPs), are engineered structures designed to treat storm water or mitigate the impact from storm water runoff. The following table presents a pre-approved listing of structural BMP practices. These BMPs have been assigned a TSS removal capability, based upon existing research, and can be used by developers to meet the pollutant reduction goal of 80% TSS removal. The structural BMPs have been divided into two categories:
   (1) General application BMPs are assumed to achieve the 80% TSS reduction.
   (2) Limited application BMPs which have to be used in combination with other BMPs to achieve the 80% reduction goal. These BMPs may not be applicable for certain sites and require frequent intensive maintenance to function properly.

Pre-Approved BMPs

BMP Removal Efficiency for Total Suspended Solids (TSS)	
Structural Control	**TSS Removal (%)**
General Application BMPs	
Wet Pond	80
Storm water Wetland	80
Bioretention Area	80
Sand Filter	80
Enhanced Swale	80
Limited Application BMPs	
Filter strip	50
Grass Channel	50
Organic Filter	80
Underground Sand Filter	80
Submerged Gravel Wetland	80
Infiltration Trench	80
Gravity (Oil/Grit Separator)	40
Proprietary Structural Control	Varies
Dry Detention Basin	60

g. The increase in the frequency and duration of bankfull flow conditions in stream channels due to development is the primary cause of accelerated streambank erosion and widening and downcutting of stream channels. Therefore, streambank protection criterion applies to all development sites for which there is an increase in the natural flows to downstream feeder streams, channels, ditches, and small streams. On-site or downstream improvements may be required for streambank protection, easements or right-of-entry agreements also may need to be obtained.

h. The developer should determine if existing downstream streambank cover is adequate to convey storm water velocities for post-development conditions.

This can be accomplished by first obtaining post-developed velocities for the "Streambank Protection" 2-year storm event in the downstream conveyance system. These velocities are then compared to the allowable velocity of the downstream receiving system. If the downstream system is designed to handle the increase in velocity as a result of the proposed development, the developer should provide all supporting calculations and/or documentation to demonstrate that the downstream storm water conveyance system will not be compromised as a result of the development.

(1) If the increased velocities are higher than the allowable velocity of the downstream receiving system, then the developer may choose to reinforce/stabilize the downstream conveyance system. The proposed modifications must be designed so that the downstream post-development velocities for the 2-, 5-, 10-, and 25-year storm events are less than or equal to either the allowable velocity of the downstream receiving system or the pre-development velocities, whichever is higher. The developer must provide supporting calculations and/or documentation that downstream velocities do not exceed the allowable range once the downstream modifications are installed.

(2) The developer may use on-site controls to keep downstream post-development discharges at or below allowable velocity limits. The developer must provide supporting calculations and/or documentation that the on-site controls will be designed such that downstream velocities for the three (3) storm events are within an allowable range once the on-site controls are installed.

(3) Another approach to meet the stream bank protection requirement is to provide 24 hours of extended detention on-site, for post-developed storm water runoff generated by the 1-year, 24-hour rainfall event (4.5 inches) to protect downstream channels. The required volume for extended detention is referred to as the Streambank Protection Volume (SPV). The reduction in the frequency and duration of bankfull flows through the controlled release provided by extended detention of the SPV will reduce the bank scour rate and severity.

i. Stormwater BMPs with either a permanent pool of water or that will hold storm water for an extended period of time can potentially provide mosquito-breeding habitat. However, if structural BMPs are properly designed, installed, and maintained, mosquito problems can be minimized. BMPs with open water (such as storm water ponds) shall require aeration for mosquito control. The Public Works Director shall approve the specifications for the aerator.

9. Location and Easements -
   a. Drain-ways, whether conduit or open channel, shall be located within the right-of-way insofar as is practicable~~.~~
   b. Where topography or other conditions render impracticable the inclusion of drainage within road rights-of-way, perpetual unobstructed easements not less than fifteen (15) feet in width shall be provided across the property with access to the road right-of-way. Such easements shall be clearly delineated on the plat as areas dedicated to public use as drainage easements, with provision for maintenance by the landowners. The City shall not maintain such easements.
   c. Off premises drainage easements and improvements lying outside the proposed subdivision may be required of the Owner to handle runoff into a natural drainage channel.

d. Where a subdivision or development is traversed by a watercourse, drainway, channel or stream, there shall be provided a storm-water easement conforming substantially to the lines of such water course and of such width and construction as is adequate for the intended purpose, including maintenance operations.
e. No storm water detention shall be located in public right-of-way for any private development.

10. Maintenance -
    a. Acceptance for maintenance by the public of lakes or ponds which constitute a part of storm water drainage control is generally prohibited by storm water provisions herein. Any decision to the contrary must originate with the City Council.
    b. Maintenance outside the street right-of-way shall be the responsibility of the legal entity established by the developer for the continued maintenance of common areas. No formal acceptance of streets and utilities shall be made by the City Council and no building permits shall be issued until developer has made provisions for continued maintenance of such common areas, including off-street drainage and detention. As part of the final plat submittal, the owner/developer shall verify in writing that a legal entity shall be responsible for continual maintenance. In the extra-territorial jurisdiction where street acceptance is the County's responsibility, the County Engineer may decline to sign approval for recording of plat unless maintenance provisions meet his approval.
    c. All erosion and sedimentation protection facilities shall be regularly maintained as required to insure that they function effectively.
    d. Means for perpetual and periodic maintenance of the facilities shall be established by the owner of the development as a condition prerequisite to approval of the development by the Commission.

11. Required Use of Low Impact Development (LID) Techniques -
    a. The use of the LID techniques is required and is to be determined from an entire site development perspective by the engineer of record for the project. The design and integration of LID techniques shall promote the health, safety, and general welfare of the community and shall be designed to work in a complimentary fashion with the drainage plan for the proposed development. The LID techniques are required within the municipal limits of the City of Fairhope and the planning jurisdiction of the City of Fairhope based on the rain events experienced in the area, geology, slopes, and other natural features. The design engineer is encouraged to submit additional LID based techniques to be utilized in the proposed development.
    b. The use of LID techniques is required in any and all proposed developments where the stormwater regulations apply. The design engineer shall rely on verifiable professional engineering judgment on which LID techniques to deploy in each proposed development based on the particular characteristics of the subject property. The intent of the requirements for the use of LID techniques is that the development shall implement as many LID techniques as practical and appropriate for the development. Plans and calculations shall show the efficacy of each LID technique and include a quantitative analysis of their performance. Plans shall clearly identify each LID technique on a grading and drainage plan with appropriate details and cross-references to the drainage calculations.
    c. If a project, due to the natural characteristics of the property, cannot successfully implement any of the LID techniques the applicant may submit a waiver request for

consideration. The waiver request shall be submitted at the time of the application and provide verifiable engineering documentation that LID techniques cannot be used. The City shall have the right, but not the obligation, to engage such third party engineers, consultants and other professionals as necessary and appropriate to advise the City as to whether a particular application complies with and is otherwise in concert with this subsection 10 (a "Third Party Professional"). In the event the City engages a Third Party Professional in connection with a particular application, the City will forward all application materials to the Third Party Professional along with a request for a cost estimate from the Third Party Professional for his/her role in the review of such application. Upon presentation by the Third Party Professional of a cost estimate to the City, the City shall provide same to the applicant, and the applicant shall deposit with the City a cash sum equal in amount to the cost estimate of the Third Party Professional (the "Cash Deposit"). Upon completion of all work by the Third Party Professional relative to such application and payment by the City of all fees and expenses of the Third Party Professional from the Cash Deposit, if any portion of the Cash Deposit remains, the City shall refund it to the applicant. If the Cash Deposit is insufficient to pay the fees and costs of the Third Party Professional, the applicant shall immediately remit to the City such funds as are necessary to make up any shortfall.

d. The Third Party Professional shall submit a finding report to the City Planning Department. The City Planning Department shall forward a copy of the finding to the applicant or the applicant's agent. The City Planning Department shall include, as part of the application materials to the Planning Commission a recommendation regarding the waiver.

e. The Planning Commission shall consider the waiver, the applicant's documentation, and Third Part Professional finding and City Planning Department recommendation and make a final determination as to the waiver request.

f. The following LID techniques are available for use by applicants given the particular circumstances and characteristics of the proposed subdivision:

(1.) Wet Basins: The City finds the potential benefits of wet basins are, among other items, allowing sedimentation to fall out of stormwater, attenuating flows, assisting in evapotranspiration, and improving the stormwater quality.

Special design considerations are: groundwater elevations, large surface areas are encouraged, special attention should be given in pervious soil, surface area of the basin should take into account nutrient loading from lawns for example in order to treat and improve stormwater quality to the maximum extent possible, ensuring that an adequate base flow is provided to maintain water levels, they are not recommended to be constructed in an in-line facility, utilize low slopes, the use of forbays are recommended, upstream and downstream areas shall be considered in the design in accordance with Fairhope standards.

Recommended characteristics are: The approach slopes should be 4:1 or less around the perimeter, side slopes 3:1 or less (below the water level, beyond the safety bench), safety bench just below water elevation (4' wide, 6"-12" deep), energy is dissipated prior to entering the basin, can be excavated below the ground surface.

(2.) Rain Gardens: The City finds the potential benefits of rain gardens are, among other items, small scale flow attenuation, infiltration, limited

evapotranspiration, allowing sediments to be trapped, and water quality treatment.

Special design considerations are: Typically smaller areas and drainage areas are used for rain garden design, special attention should be given in pervious soils, recommended for use in hydrologic soil groups A and B, not recommended in high swell soils.

Recommended characteristics are: Small scale and frequent use in drainage areas, the choice of landscaping materials, soil mix, and other characteristics are crucial to the success of a rain garden. Rain gardens can be highly visible and utilized as a visual amenity in a proposed development.

(3.) Permeable Pavement Systems: The City finds the potential benefits of permeable pavement systems are, among other items, flow attenuation, infiltration, and filtration of stormwater. There are many products and strategies that can be utilized and the City is open to the use of varied products in accordance with manufacture recommendations. Consultation with the city prior to design of the product to be utilized is suggested.

Special design consideration are: Use in areas with hydrologic soil groups A and B, special attention should be given in pervious conditions, not recommended in areas with high swell soils, ground water tables should not impact the ability of water to infiltrate, the technique works best in low slopes.

(4.) Sand Filter: The City finds that the potential benefits of sand filters are, among other items, flow attenuation, infiltration, reducing sedimentation, and providing filtration of storm water.

Special design considerations are: Best used in small drainage areas, special attention should be given in pervious soils, recommended use in areas with soils with good permeability in hydrological soil groups A and B, not recommended in high swell soils.

(5.) Grass Swales: The City finds that the potential benefits of grass swales are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation.

Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design.

Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered as a significant or a primary means of stormwater conveyance.

(6.) Grass Buffers: The City finds that the potential benefits of grass buffers are, among other items, in straining stormwater, providing limited quality treatments, while providing some moderate flow attenuation.

Special design considerations are: Typically work best in smaller drainage areas where volumes are reduced, special consideration should be given in pervious soils, not recommended with high swell soils, should have low slopes, adjacent areas and layout should be considered in the design.

Suggested characteristics where topography, soils, and slope permit vegetated open channels and spaces should be considered as a significant or a primary means of stormwater conveyance.

(7.) Constructed wetland channels or wetlands: The City finds that the potential benefits of constructed wetland channels or wetlands are, among other items, flow attenuation, buffering of flooding events, evapotranspiration, sedimentation, and treatment of stormwater quality.

Special design considerations are: Not recommended in high swell soils, low slope, forebay is recommended, primary benefit of pollutant removal, not volume reduction, adjacent areas should be considered in the design.

(8.) Step Pool Stormwater Conveyance Structures: The City finds that a step pool stormwater conveyance structure may attenuate stormwater flows, provides evapotranspiration, reduce sediment transport, and water quality treatment.

Special design considerations are: Not recommended in high swell soils. Adjacent areas should be taken into consideration in order to ensure long term viability of step pool structures and adjacent erosion.

(9.) In-line stormwater storage: The City finds that in-line storage may provide for attenuation and limits sedimentation.

Special design considerations are: Designed to be self-cleaning where possible or suitable clean out access is provided and designed into the system, designed to surcharge non-sensitive areas with no flooding in parking lots, structures, or other typically occupied spaces.

(10.) Site design for habitat, wetland, and water body conservation: The City finds that site design that incorporates the natural features of the property can help to minimize erosion and reduce stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas.

Suggested characteristics are: The technique may be used in conjunction with the City's planned unit development or village subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property.

Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extends past property lines or the phases of proposed development.

(11.) Restoration of Habitat or Wetlands and Water Bodies: The city finds that the restoration of habitat or wetland and water bodies can be productive to improve the environment by minimizing erosion and reducing stress on natural water conveyance and attenuation systems by preserving a natural vegetated state of native plants, water courses, and flood prone areas.

Suggested characteristics are: This technique may be used in conjunction with the City's planned unit development or village subdivision processes to propose alternative street layouts and design so that impervious areas and other improvements are sited with due regard to the natural elements of the property. Use only native plants in the development process and take special consideration to restore portions of the site to predevelopment native ecological communities, water bodies or wetlands with more than 10% of the development footprint.

Special design considerations: To consider adjacent areas in the design since important natural features that utilize this LID technique often extend past property lines or the phases of proposed development

(12.) Greenways: The City finds that greenways provide for beneficial use of LID for potentially active and passive recreation opportunities and wildlife corridors. This technique allows for the creative integration into a development proposal that is frequently linked with other natural or recreation systems that extend past the property lines of the proposed development.

Suggested characteristics: Typically greenways are easier to integrate into a development proposal on larger acreages. They are frequently utilized as linear parks and often include sensitive wetland areas, steep slopes, gullies or other natural land forms, creeks, and unique wildlife habitat for protected species.

(13.) Restoring Channel Morphology and Natural Function: The City finds that restoring channel morphology and natural function provides for flow attenuation, infiltration, and reduces sedimentation.

Special considerations are: Typically works most effectively in larger development proposals where a substantial linear footage of channel can be restored. It is important to consider the upstream and downstream current and future characteristics so conversation of land use in accounted for in the design.

(14.) Bio-Retention: The City finds that bio-retention provides for flow attenuation, infiltration, limited evapotranspiration, reduced sedimentation, and stormwater quality treatment.

Suggested characteristics are: To be used as both a stormwater and aesthetic feature frequently throughout developments. Special attention should be given to plant and ground cover considerations given the volume and duration of the designed stormwater.

Special design considerations are: Typically work best in small drainage areas with frequent use and distribution, special attention is required in pervious soils and should be used in areas with high permeable soils (hydrologic soils groups A and B), not recommended in high swell soils.

(15.) Level Spreader: The City finds that level spreaders can be an effective tool to evenly distribute flows and return volumes and velocity to a predevelopment distribution pattern. There are limited stormwater straining and water quality improvements.

Suggested characteristics are: Level spreaders are intended to work in a complimentary fashion with other LID techniques such as, but not limited to, sand filters and grass buffers.

Special design considerations are: Typically level spreaders are used downstream of an outfall and have a low slope with stabilized and vegetated buffers both up and downstream. They typically are installed a suitable distance from the property line (30'-35' is suggested) so that flow energy is dissipated, and predevelopment sheet flow characteristics are generated. Special consideration should be given in areas with highly erodible soils.

(16.) Additional information regarding LID techniques is included in the document *Planning For Stormwater, Developing a Low Impact Solution*, a publication of the Alabama Cooperative Extension Service. This document is available for download from the Alabama Cooperative Extension Service website.

G. ***UPSIZING:***

1. Purpose – These upsizing standards shall implement the Comprehensive Plan for the physical development of the City by setting the location, character and extent of adequate public utilities. This design and arrangement shall promote the wise and efficient expenditure of public funds and establish the extent to which water and sewer and other utility mains, piping or other facilities shall be installed as condition precedent to the approval of the plat.

   These standards shall promote the following goals in the Comprehensive Plan: (a) define priority growth areas that will guide the future extension of public infrastructure; (b) prioritize projects that "pay their way" through covering the cost of necessary support services; (c) require that the location and alignment of infrastructure systems are efficient and cost-effective; and (d) provide for balance between maintenance and reconstruction of existing streets, services or facilities and expansion into new areas.

2. Applicability – Whenever any portion of the required improvements for the subdivision is part of planned future facilities for the City serving an area larger than the subdivision, the Planning Commission may require that the applicant construct the improvements to the capacity of the City plans. The applicant will be responsible for that portion of the costs required to serve the proposed subdivision, and the City shall reimburse the developer for those incremental costs to expand the improvements to the planned capacity. The Planning Commission may condition the approval of the preliminary plat on an agreement

between the City and the applicant as to the equitable apportionment of those costs. The City's participation shall be based on at least three contractor bids comparing the construction costs of the minimum required improvements and construction costs of the improvements as planned by the City. The agreement shall be subject to approval by the City Attorney.

ARTICLE VI

CONSTRUCTION STANDARDS

A. *GENERAL:*

The sub-divider shall be required to install or construct improvements hereinafter described prior to having released bond or other surety which guarantees the installation of such improvements. All improvements required shall be constructed in conformity with these regulations and in conformity with Chapter 19, Streets, Sidewalks, and Other Public Ways, of the Code of Ordinances for the City of Fairhope, as amended. All improvements shall be designed and sealed by a Project Engineer. The Project Engineer shall carry Errors and Omissions Insurance at a minimum coverage of at least $1,000,000.

B. *STREETS AND LANES:*

The sub-divider is required to pave all streets and lanes with a suitable hard surface, all weather type of pavement in compliance with city standards and the requirements of Chapter 19 of the Code of Ordinances, as amended.

1. Sub-grade – All streets, roads and lanes shall be so graded by the sub-divider that pavements, curbs, and sidewalks can be constructed to the required cross: section. Before commencing grading, the entire right: of: way shall be cleared of all stumps, roots, brush, and other objectionable materials as well as trees not intended to be preserved. Stumps, boulders and other obstructions shall be removed to a minimum depth of two feet below finish sub grade. Compaction of sub grade shall be not less than one hundred percent, Modified Proctor Density. Suitable materials from roadway cuts may be used in the construction of fills, approaches or at other locations as required. Fill shall be in layers not exceeding eight inches thickness and shall be compacted to not less than one hundred percent, Modified Proctor Density.

2. Pavement Base – After preparation of the sub grade, the base shall be constructed to a thickness of six inches. Base may be a mixture of sand clay, sand shell or plain shell. Base shall be compacted to one hundred percent Modified Proctor Density.

3. Following establishment and testing of the base, emulsified or cutback asphalt shall be heated or otherwise prepared to insure uniform distribution and a coat thereof sprayed on the prepared base, application rate to be determined by requirements of state specifications.

4. Wearing Surface shall consist of a surface course constructed with asphaltic concrete. It shall be constructed in one layer, not less than an average weight of one hundred fifty pounds per square yards at an average thickness of not less than one and one half inches. Wearing surface shall conform to the lines, grades, and typical cross sections shown on the Plans. A cross slope of not less than one: quarter inch per foot shall be maintained from centerline to curb line. Plant mix shall conform to state specifications for the type work.

C. *CURBS AND GUTTERS:*

Curbs and gutters shall be installed on all streets within the planning jurisdiction of the City of Fairhope, except on those streets which are eligible for the rural design standard expressed in Table 5.3, Appendix A of these regulations. On streets requiring curb and gutter, either valley type or barrier type concrete curb and gutter which meets the City's standards and specifications expressed in Chapter 19 of the Code of Ordinances, as amended shall be installed. Curbs and gutters shall be designed and installed in accordance with good engineering practice. Face of curbs shall be not less than six inches in height. Backfill behind curbs shall slope to the back of the curb for drainage.

Markings shall be added to the curb to indicate the location of water and sewer laterals.

D. *SIDEWALKS:*

Sidewalks shall be installed on all streets within the planning jurisdiction of the City of Fairhope, except on those streets which are eligible for the rural design standard expressed in Table 5.3, Appendix A of these regulations. On streets requiring sidewalks, concrete sidewalks which meet the City's standards and specifications expressed in Chapter 19 of the Code of Ordinances, as amended shall be installed. Sidewalks shall be designed and installed in accordance with good engineering practice.

E. *STORM WATER:*

1. Scope of Work – The scope of work shall consist of furnishing all labor and materials necessary to complete the work as designed and approved. The Work includes, but is not limited to, grading, channel adjustment or relocation, installation of culverts and bridges, construction of retention structures and ponds, erosion and sedimentation protection measures, dikes, diversion of flow, ditch-checks, seeding, sodding, planting, fertilizing, excavation, backfill and general supervision of the Work.

2. Control of the Work – The Work shall at all times be subject to inspection by the project engineer and the representatives of the City and, where applicable, the County Engineer and/ or any other Agency which has jurisdiction or regulatory oversight of the project. Where work is found not in conformity with these regulations, Alabama Department of Transportation Standard Specifications for Highway Constructions, current edition, or applicable law, the work shall be suspended on the written order of the engineer or of the City's representative until work is brought into conformity. All work shall meet the more restrictive requirements of these regulations, the County's regulations or of other applicable rules or laws.

   Persons engaged in performance of the Work shall take all necessary precautions and shall provide adequate safeguards and measures for protection of the Work and of the public and shall save harmless the City, the Engineer and their officers and employees from any and all claims for damages arising or which might arise from the prosecution of the Work.

3. Incidental Work – The contractor shall at all times provide for protection of the public such barricades, signs, lights or other warnings as may be required by conditions of the Work. In the event that a hazardous condition exists and the contractor fails to provide adequate protection, or in an emergency, the City shall take the action necessary to protect the Work and the public and the cost thereof shall be assessed against the developer who holds License to Construct.

   Any disturbed areas within public rights-of-way shall be reconstructed to the condition prevailing before being disturbed. Where connection or other modification to existing publicly maintained structures is necessary, the contractor shall restore such structure to its former condition.

   Riprap shall be placed by the contractor at the upstream and downstream ends of culverts as directed by the Project Engineer.

   All reservoir and open channel areas shall be seeded, fertilized and mulched, sodded, paved, or lined as shown on the plans. The contractor shall employ such measures as are necessary for control of erosion and sediment and the protection of adjacent properties during construction. The contractor shall also maintain all retention ponds and flow control structures during construction so as to protect adjacent properties. General maintenance of the Work shall be the contractor's responsibility until final acceptance thereof.

4. Licenses and Bonds – Contractors shall have appropriate State and local licenses for the type of work he or she will be performing. The contractor shall also obtain a Performance Bond and a Labor and Materials Bond, or provide a letter of credit. A Maintenance Bond in accordance with City Code Section 19-2(f) shall also be furnished.

5. General Specifications – Any item of work not covered by the specifications herein shall conform to the minimum requirements of Alabama Department of Transportation Standard Specifications for Highway Constructions, current edition and any requirements of the Alabama Department of Environmental Management.

Where the plans require open ditches they shall be constructed with a maximum slope of 2:1 unless the plans provide otherwise. Ditches shall have flat bottoms. All roadway cross-drain pipes shall be a minimum diameter of 18 inches and shall be reinforced concrete culvert meeting state specifications. Other culverts shall conform to state specifications.

Culverts shall be placed in excavated trench to the line and grade shown on the plans. The maximum width of the excavated trench shall not exceed the outside diameter of the culvert by more than one- half the diameter on either side of the pipe.

Material for backfill of culvert trenches shall consist of small diameter uniform material and shall be free of large rock or other unsuitable material. Backfill shall be placed in uniform lifts not exceeding eight inches in thickness and shall be compacted to not less than 95% relative density. Backfill shall be placed uniformly on each side of the culvert. All pipes shall be laid in conformity to state specifications.

Not less than 12 inches cover shall be placed over any culvert 48 inches or less in diameter and 24 inches of cover shall be placed over pipes exceeding 48 inches in diameter. When a battery of pipes is used, a clear spacing of one-half the pipe diameter shall be provided between adjacent pipes. Wherever possible, box culverts should be used in lieu of multiple pipes.

Maximum allowable cover, pipe class and strength requirements shall conform to manufacturer's recommendations and state specifications.

No pipe less than 18 inches in diameter shall be used within public roadways or streets.

Headwalls of reinforced concrete shall be constructed on all pipe culverts and shall conform to the plans and state specifications.

In the event that the City or the project engineer determines that significant erosion or sedimentation is occurring because of land disturbing activity, the contractor shall stop all construction and take necessary protective action.

6. Warranty after Completion – All facilities subject to acceptance for maintenance by the public shall be warranted for a period of two years after date of acceptance by the developer. A surety bond guaranteeing such maintenance shall be a condition precedent to acceptance for maintenance by the governing body.

7. Applicability of General Law and Regulations – All plans and the Work shall fully conform to all rules, regulations, codes, laws, and ordinances which may reasonably apply thereto. In the event of conflict between provisions, the most restrictive provision shall apply.

8. As-Built Drawings – A copy of the construction as-built drawings stamped by the engineer shall be submitted to the Commission as verification that the project has been built in accordance with his or her design.

F. ***WATER SYSTEM:***

a. All subdivisions shall have water service. The water service shall be provided by either the Fairhope Public Utilities or an approved water service.

b. Primary water service may be individual well type systems that have been approved by the Baldwin County Health Department and the Fairhope Public Utilities Water Department.

c. All water systems constructed within a subdivision and all water systems constructed outside of a subdivision but servicing a subdivision shall be constructed in accordance with those certain "Standard Specifications for Constructing Sanitary Sewer Facilities and Water Facilities" attached hereto as Appendix F.

d. Water meters shall be placed inside the property line at the start of the utility easement.

G. ***FIRE HYDRANTS:***

Fire Hydrants shall be installed along each street at a maximum interval of four hundred fifty (450) feet, or at the ends and center of each block, or as otherwise required by the fire authority having jurisdiction. Water supply and pressure shall be adequate to provide fire protection and for the future needs of the development.
Blue reflective markers shall be installed at the street line of streets to indicate the location of fire hydrants.

H. ***SANITARY SEWERAGE:***

1. All subdivisions shall have sanitary sewer service. The sewer service shall be provided by either the Fairhope Public Utilities or an approved sewer service.

2. All sanitary sewer systems constructed within a subdivision and all sanitary sewer systems constructed outside of a subdivision but servicing a subdivision shall be constructed in accordance with those certain "Standard Specifications for Constructing Sanitary Sewer Facilities and Water Facilities" which is on file at the City of Fairhope Water & Sewer Department.

3. Individual septic tank type systems that have been approved by the Baldwin Count Health Department and the Fairhope Public Utilities Sewer Department may be utilitized.

I. ***PERMANENT MONUMENTS:***

Concrete monuments four inches in cross section and three feet long, with a flat top shall be set at all points where the exterior boundaries of the subdivision intersect, including points of curvature and points of tangency on curved boundaries. The top of the monument shall have an "X" indented therein to identify the exact point and the top shall be set flush with grade. All interior lot corners shall be marked with a pipe not smaller than three-quarters inch diameter, 24 inches length and shall be driven flush with finish grade.

J. **RESERVED**

K. ***INSPECTION OF IMPROVEMENTS:***

When all required improvements have been installed, the sub-divider shall call for a final inspection. The Planning Director and/or his/her authorized agent and other City Department representatives shall inspect the site to determine if the required improvements are satisfactorily installed according to plans, specifications, standards and applicable laws and ordinances. To determine if the streets are installed to minimum standards, the sub-divider shall select an independent testing laboratory approved by the City to make the necessary tests. Tests shall be conducted at the expense of the sub-divider as required by Chapter 19 of the Fairhope Code of Ordinances.

L. ***REQUIREMENT TO COMPLETE IMPROVEMENTS:***

Sub-divider shall be responsible for providing all required minimum improvements in the subdivision. This may be accomplished either by (1) full installation of such improvements before the Final Plat is submitted to the Planning Commission for approval or (2) after 90% substantial completion of the total cost of the infrastructure the subdivider may provide to the City a financial guarantee of performance in the form of either a performance bond or a Letter of Credit. Any such performance bond shall be in form and substance acceptable to the Planning Commission, with oblige riders in favor of the City in the event the bond issued in the name of the subdivider's contractor, and shall be issued by a surety that is licensed to do business in the State of Alabama and having a Best rating of A- or better. In the event that the subdivision lies within the extra-territorial jurisdiction, such guaranty shall be made jointly payable to the City of Fairhope and Baldwin County, Alabama.

The surety and the form and amount of such financial guaranty shall be subject to approval of the City and/or County.

M. ***UNDERGROUND UTILITIES:***

All utilities in all proposed subdivisions shall be installed underground.

1. The Planning Commission may waive this section in all or part based on evidence that underground installation is not in the best interest of the environment or is financially not feasible.

ARTICLE VII

WAIVERS

A. Waiver Standards
B. Procedure
C. Conditions

A. *WAIVER STANDARDS:*

Waivers may be granted where the Planning Commission finds that the following conditions exist:

1. An extraordinary hardship may result from strict compliance with these regulations due to unusual topographic or other physical conditions of the land or surrounding area not generally applicable to other land areas.
2. The condition is beyond the control of the sub-divider.
3. The requested waiver will not have the effect of nullifying the purpose and intent of the regulations, the Zoning Ordinance, or the Comprehensive Plan.
4. The waiver is the minimum deviation from the required standard necessary to relieve the hardship;
5. The waiver shall not have an adverse effect on adjacent landowners, or future landowners, or the public;
6. The waiver is necessary so that substantial justice is done.

B. *PROCEDURE:*

1. Waivers must be requested in writing at the time of preliminary plat submission. This is required so staff can understand the implications of the waiver. The waiver request will be considered by the Planning Commission at the time the plat is considered.
2. Any waiver granted must be entered upon the minutes stating the grounds for the waiver.
3. Letters to adjacent property owners shall include a description of any waiver requested.

C. *CONDITIONS:*

In granting approval of a subdivision with a waiver, the Planning Commission may in its judgment, require such conditions to secure the objectives and interests of the City and the purposes of these Regulations.

ARTICLE VIII

REMEDY, PENALTY AND ENFORCEMENT

Remedy and Penalty for violation of the subdivision regulations shall be as set forth in Title 11, Chapter 52, Code of Alabama, 1975, as amended. Enforcement shall be by civil action as further prescribed by said Code.

ARTICLE IX

SEPARABILITY AND SEVERABILITY

Should any Article, Section, Subsection or Provision of these Subdivision Regulations be declared by a Court of competent jurisdiction to be invalid or unconstitutional, the remaining Regulations as a whole or any part thereof shall be deemed valid except as to the part so declared to be invalid or unconstitutional.

Appendix A

Table 5.3, Street Classification, Design, and Function

Appendix B

Photographic illustrations of goals, purposes, and regulations

Appendix C

Chapter 19 Code of Ordinances City of Fairhope

Appendix D

Figure 4-13 of the Alabama Department of Transportation Hydraulics Manual

Appendix E

Table 4-2 of the Alabama Department of Transportation Hydraulics Manual

Appendix F

Standard Specifications for Constructing Sanitary Sewer and Water Facilities

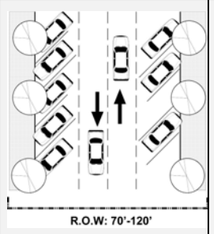
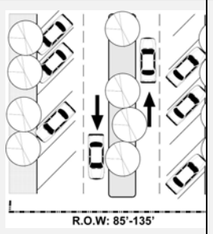
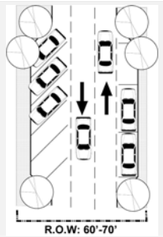
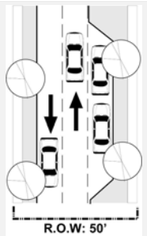
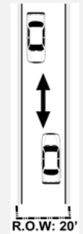
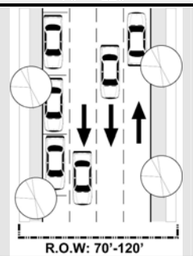
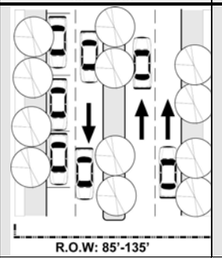
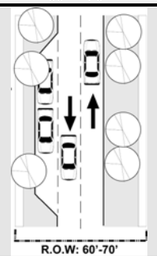
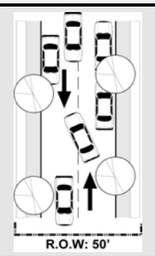
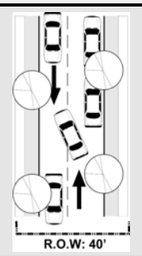
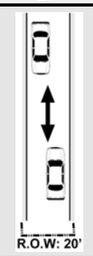
Appendix G

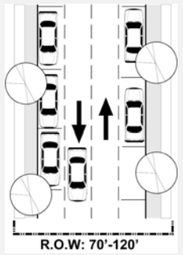
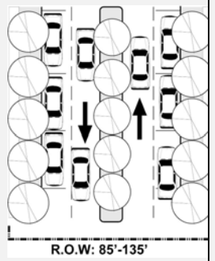
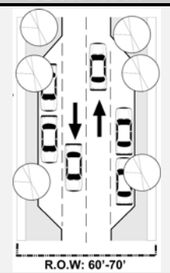
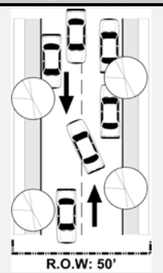
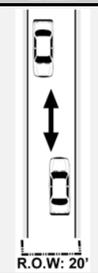
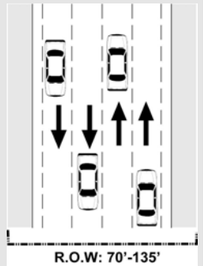
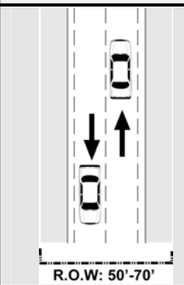
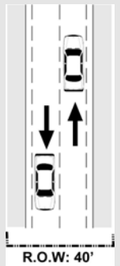
Tree Protection Barricade Detail

Appendix H

Criteria for Left Turn Lane Warrants

APPENDIX A
Table 5.3
Street Classification, Design, and Function

Land Use and Street Characteristics	Arterial Streets			Collector Streets		Local Streets			
	Boulevard / Avenue*	Parkway / Avenue*	Highway	Street –60/70	Road – 50/70	Street - 50	Street - 40	Road-40	Lane
Non-residential Land Use • Office • Commercial/Retail • Mixed-use villages									
Maximum Design Speed	20 mph	20 mph	-	20 mph	-	20 mph	-	-	10 mph
Number of through lanes	2 - 4	2 - 4	-	2	-	2	-	-	1 yield flow [3]
Lane widths	9’ – 10’	9’ – 10’		9’ – 10’		9’	-		12’ – 16’
Parking lane width (each side) [1]	7’ or 18’	7’ or 18’	-	7’ or 18’	-	7’ optional 1 side	-	-	none
Median width	none	15’ – 85’	-	none	-	none	-	-	none
Number of Bike lanes [2]	1 - 2	1 - 2	-	1 - 2	-	none	-	-	none
Curd & gutter (each side)	1’ – 2’	2’ – 4’	-	1’ – 2’	-	1’ – 2’	-	-	none
Total finished street width	38’ – 86’	55’ – 105’	-	34’ – 44’	-	20’ – 27’	-	-	12’ – 16’
Planting strip width (each side)	0’ or 6’	0’ or 6’	-	0’ or 8’	-	0’ or 8’	-	-	none
Sidewalk width (each side)	10’ – 15’	10’ – 15’	-	5’ – 10’	-	5’ – 10’	-	-	none
Total ROW width	70’ – 120’	85’ – 135’	-	60’ – 70’	-	50’	-	-	20’
Public Institutions and Public Facilities Land Use • Schools • Churches • Community centers • Public recreation • Hospitals									
Maximum Design Speed	35 mph	35 mph	-	25-30 mph	-	20 mph	20 mph	-	10 mph
Number of through lanes	2 - 4	2 - 4	-	2	-	1 yield flow [3]	1 - 2	-	1 yield flow [3]
Lane widths	10’ – 11’	10’ – 11’		9’ – 11’		9 -10 ’	9’ – 11’		12’ – 16’
Parking lane width (each side) [1]	7’	7’	-	7’	-	7’	7’ optional 1 side	-	none
Median width	none	15’ – 85’	-	none	-	none	none	-	none
Number of Bike lanes [2]	1 - 2	1 - 2	-	1 - 2	-	none	none	-	none
Curd & gutter (each side)	1’ – 2’	2’ – 4’	-	1’ – 2’	-	1’ – 2’	1’ – 2’	-	none
Total finished street width	40’ – 66’	55’ – 109’	-	34’ – 44’	-	24’	20’	-	12’ – 16’
Planting strip width (each side)	8’ - 15’	8’ – 12’	-	8’	-	8’	5’	-	none
Sidewalk width (each side)	5’ – 10’	5’ – 10’	-	5’ –10’	-	5’	5’	-	none
Total ROW width	70’ – 120’	85’ – 135’		60’ – 70’		50’	40’		20’

Land Use and Street Characteristics	Arterial Streets			Collector Streets		Local Streets			
	Boulevard / Avenue*	Parkway / Avenue*	Highway	Street –60/70	Road – 50/70	Street - 50	Street - 40	Road-40	Lane
Residential Land Use • Single-family • Two-family • Multi-family									
Maximum Design Speed	35 mph	35 mph	-	25 – 30 mph	-	20 mph	-	-	10 mph
Number of through lanes	2 - 4	2 - 4	-	2	-	1 yield flow [3]	-	-	1 yield flow [3]
Lane widths	10’- 11’	10’ – 11’		9’ – 11’		9 -11 ’	-		12’ – 16’
Parking lane width (each side) [1]	7’ optional	7’ optional	-	7’	-	7’	-	-	none
Median width	none	15’ – 85’	-	none	-	none	-	-	none
Number of Bike lanes [2]	1 - 2	1 - 2	-	1 - 2	-	none	-	-	none
Curd & gutter (each side)	1’ – 2’	2’ – 4’	-	1’ – 2’	-	1’ – 2’	-	-	none
Total finished street width	30’ – 66’	45’ – 109’	-	34’ - 44’	-	18-24’	-	-	12’ – 16’
Planting strip width (each side)	8’ – 15’	8’ – 12’	-	8’	-	8’	-	-	none
Sidewalk width (each side)	5’ – 10’	5’ – 10’	-	5’	-	5’	-	-	none
Total ROW Width	70’ – 120’	85’ – 135’	-	60’ – 70’	-	50’	-	-	20’
Rural Land Use • Rural subdivision • Agricultural									
Maximum Design Speed	-	-	35 – 55 mph	-	30 – 35 mph	-	-	20 - 25 mph	-
Number of through lanes	-	-	2 - 4	-	2	-	-	2	-
Lane width	-	-	10’ – 13’	-	10’ – 12’	-	-	9’ – 11’	-
Parking lane width (each side) [1]	-	-	none	-	none	-	-	none	-
Median width	-	-	0’ – 85’	-	none	-	-	none	-
Number of Bike lanes [2]	-	-	none	-	optional	-	-	none	-
Curd & gutter	-	-	5’ shoulder	-	3’- 5’ shoulder	-	-	6” - 3’ shoulder	-
Total finished street width	-	-	30’ – 115’	-	30’ – 40’	-	-	20’ – 28’	-
Planting strip width (each side)	-	-	none	-	none	-	-	none	-
Sidewalk width (each side)	-	-	none	-	none	-	-	none	-
Total ROW width	-	-	70’ – 135’	-	50’ – 70’	-	-	40’	-

* An Avenue is a local street but it may be designed using Parkway or Boulevard Standards. It functions linearly as a local street, with a short distance providing little continuity. However, it shall have the design characteristics of a Boulevard or Parkway, and support access to non-residential uses when the adjacent arterial streets on which those uses are located are unable to perform this function (with regards to vehicle access, pedestrian access, or on-street parking) completely.

[1] Parking lanes shall be 7’ wide for parallel parking and 18’ for angled parking at a 60° angle. Where parking lanes are listed as optional, they may either be dedicated parking lanes, restricted parking lanes which provide through traffic at times and locations where parking is not prohibited in the City’s discretion, or not provided. When optional parking lanes are not provided, additional ROW width shall be used for either expanded planting strips, sidewalks, or bike lanes.

[2] Shared-use or non-striped bike lanes require a 14’ shared-use lane measured from the road edge *exclusive* of the curb and gutter pan; dedicated or striped bike lanes require an 11’ vehicle lane plus a 5’ striped bike lane *including* the 1’ to 2’ curb and gutter pan.

[3] Yield flow lanes are lanes where traffic may pass each direction but two-way traffic is impossible when parked vehicles are present, requiring vehicles to yield to oncoming traffic.

APPENDIX B

PHOTOGRAPHIC ILLUSTRATIONS

The following photographs illustrate, with built examples, the concepts that are to be implemented through the Fairhope Subdivision Regulations. They, along with the explanatory text and section references to the Fairhope Subdivision Regulations, are intended solely as a guide to provide users of the Subdivision Regulations a point of reference from which to begin subdivision design. The photographs and explanatory text shall not create any standards, rights, or duties on behalf of the subdivision applicants or the City. Any conflict or ambiguity between the images and text in this Appendix and the text, tables, or graphics in the regulations, shall be resolved in favor of the text, tables, or graphics in the regulations.

Greenspace - Townhouses fronting on public greenspace.

Section V.C.4.

Greenspace – Single-family homes fronting on public greenspace.

Section V.C.4.

Street function / street design - Arterial street with residential uses fronting on the street. The adjacent land use dictates the design of the street, but it still functions as an arterial street.

Section V.D.2.; Table 5.2

Street function / street design - Arterial street with residential uses; two end-of-block lots and the homes fronting on the street.

Section V.D.2.; Table 5.2; Table 5.3.

Street function / street design - Village center on arterial street with angled parking on one side and parallel parking on the other side.

Section V.D.2.;Table 5.2; Commentary

Street function / street design Village center at the intersection of two arterial streets, using angled and parallel parking and "bulb-outs" for pedestrian crossing.

Section V.D.2.;Table 5.2; Commentary

Street function / street design Arterial street supporting commercial uses with angled parking on each side.

Section V.D.2.;Table 5.2; Commentary

Street layout / street design - Parkway median with intersections at block intervals.

Section V.D.3.; Section V.D.5.a.; Table 5.3

Block design - School located on larger block in residential neighborhood.

Section V.D.4.

Block design - Local street connected to the grid but terminating at a larger block used for a park.

Section V.D.4.

Block design - School located on larger block in residential neighborhood.

Section V.D.4.

Street design - Arterial street residential uses fronting on the street; parkway median in street.

Section V.D.2.; Table 5.2; Table 5.3

Street design / traffic calming - Residential use at the intersection of two arterial streets; roundabout intersection with public art.

Section V.D.2.; Section V.D.5.c.; Table 5.2; Table 5.3

Street design - Local street with 1 yield flow lane and on-street parking on each side.

Section V.D.5.; Table 5.3

Street design - Parkway median with residential uses fronting on parkway.

Section V.D.5.a.;Table 5.3

Street Transition (part 1) - Village center at the intersection of two arterial streets with angled and parallel on-street parking.

Section V.D.5.; Section V.D.6.; Table 5.3; Commentary

Street Transition (part 2) – the same arterial street two hundred feet further up the street supporting an institutional land use. Angled parking has transitioned to parallel parking allowing a more narrow street and the addition of a planting strip and an expanded sidewalk in front of the church.

Section V.D.5.; Section V.D.6.; Table 5.3; Commentary

Street transition (part 3) – the same arterial street two hundred feet further up the street supporting residential land use. Expanded sidewalks and parking lanes have transitioned to expanded planting strips.

Section V.D.5.; Section V.D.6.; Table 5.3; Commentary

Street design - Arterial streets with residential uses; expanded planting strip and sidewalk, and homes fronting on the street.

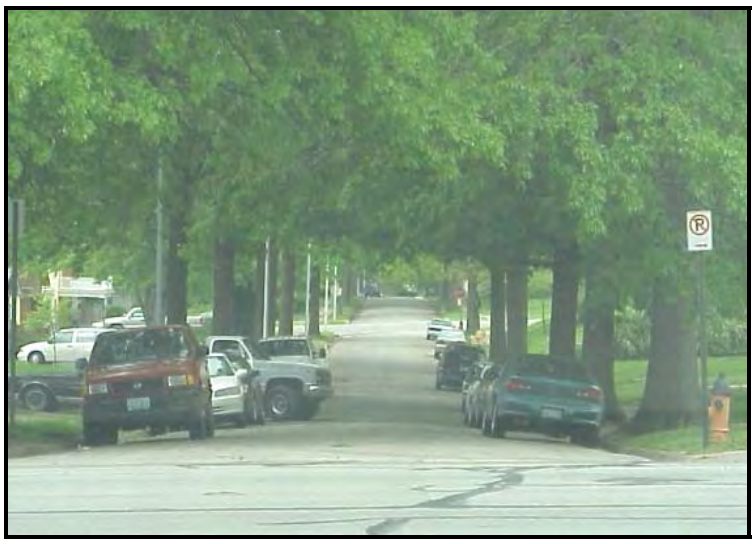
Section V.D.5.; Section V.D.6.; Table 5-3; Commentary

Street design - Residential lane to the rear of property for vehicle access.

Section V.D.5.a.; Table 5.3

Street trees - Street trees in planting strip in residential neighborhood.

Section V.D.5.a.



Street trees - Street trees in residential neighborhood.

Section V.D.5.a.; Table 5-3

Street trees - Street trees in commercial area.

Section V.D.5.a.; Table 5-3

Street trees - Street trees in tree wells in village center.

Section V.D.5.a.; Table 5.3

Intersections - Local street intersection with more than two local streets using 45 degree angle intersection.

Section V.D.5.b.

Intersections - Local street intersection with more than two local streets using median island and a series of 90 degree angle intersections.

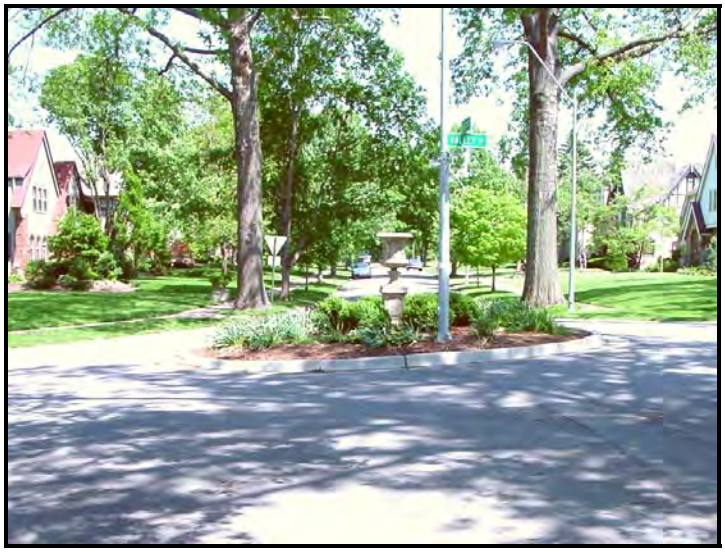
Section V.D.5.b.

Curb radii - Shorter curb radii at the intersection of local streets.

Section V.D.5.b.

Curb radii - Shorter curb radii at the intersection of arterial streets.

Section V.D.5.b.



Traffic calming - Local street intersection with traffic circle.

Section V.D.5.c.

Traffic calming - Local street intersection with traffic circle.

Section V.D.5.c.

Traffic calming - Arterial street with center median.

Section V.D.5.c.

Traffic calming - Local street with center median.

Section V.D.5.c.

Traffic calming – Speed hump on collector street with residential uses fronting on street.

Section V.D.5.c.

Traffic calming – Curb projection or bulb-outs creating space for on-street parking and narrowing the street at pedestrian crossing.

Section V.D.5.c.

Traffic calming – Curb projection or "bump-out" with landscape elements at the intersection of two arterial streets, separating angled parking from the intersection and decreasing pedestrian crossing distance.

Section V.D.5.c.

Lot access – Curb cuts that maintain a continuous sidewalk at the same grade on a residential block.

Section V.E.3.

Lot access – Curb cuts that maintain a continuous sidewalk with a different material than the street and driveway on a commercial block.

Section V.E.3.

APPENDIX C

Chapter 19 Code of Ordinances City of Fairhope

APPENDIX D

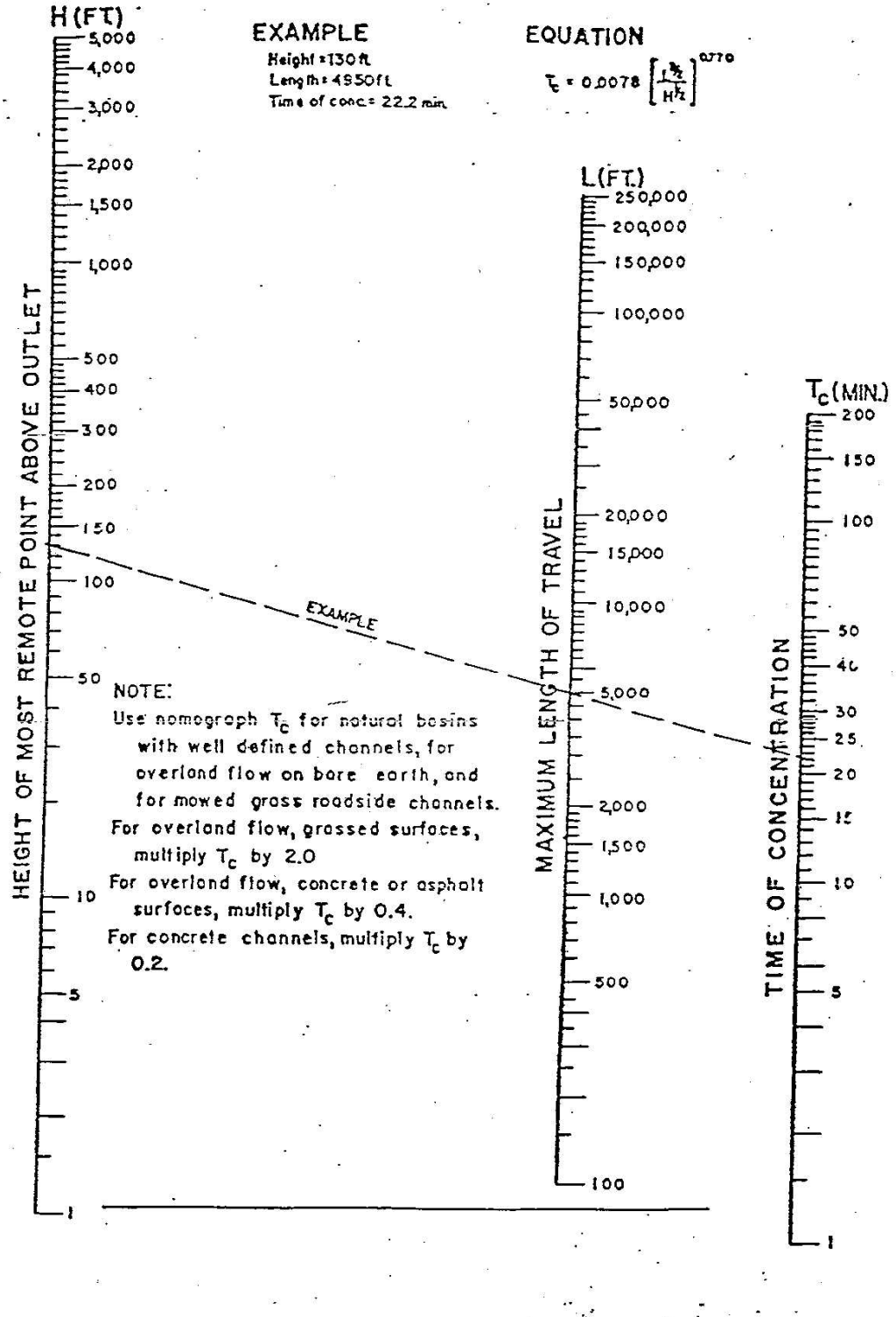


Figure 4-13: Time of Concentration Nomograph.

From Equation Developed By Z. P. Kirpich.

APPENDIX E

TABLE 4-2 – Typical Runoff Coefficients, "C"

ALDOT Hydraulic Manual

Topography and Vegetation	*Soil Texture*		
	Open Sandy Loam	*Clay and Silt Loam*	*Tight Clay*
Woodland			
Flat 0-5% Slope	0.10	0.30	0.40
Rolling 5-10% Slope	0.25	0.35	0.50
Hilly 10-30% Slope	0.30	0.50	0.60
Pasture			
Flat	0.10	0.30	0.40
Rolling	0.16	0.36	0.55
Hilly	0.22	0.42	0.60
Cultivated			
Flat	0.30	0.50	0.60
Rolling	0.40	0.60	0.70
Hilly	0.52	0.72	0.82
Urban Areas	30% of Area Impervious	50% of Area Impervious	70% of Area Impervious
Flat	0.40	0.55	0.65
Rolling	0.50	0.65	0.80

Soil characteristics should be determined through field investigations or by consulting the Soil Conservation Service soil surveys.

All watertight roof surfaces	0.75 – 0.95
Asphalt Pavements	0.80 – 0.95
Concrete Pavements	0.70 – 0.90
Gravel or Macadam Pavements	0.35 – 0.70
Impervious Soils (heavy)*	0.40 – 0.65
Impervious Soils with Turf*	0.30 – 0.55

Slightly Pervious Soils*	0.15 – 0.40
Slightly Pervious Soils with Turf*	0.10 – 0.30
Moderately Pervious Soils*	0.05 – 0.20
Moderately Pervious Soils with Turf*	0.00 – 0.10

**For slopes from 1 to 2 percent*

Densely built up area where streets, walks and yards are paved and the remaining area is practically all roof area as in downtown districts.

Areas adjacent to downtown district where streets and alleys are paved and yards small	0.70
Densely built up residential district where streets are paved and houses are close together	0.65
Ordinary residential areas	0.55 – 0.65
Areas having small yards and medium density of	0.45 – 0.55
Sparsely built up areas or those having large yards	0.35 – 0.45
Suburbs having gardens and large lawns and with paved	0.30
Parks, golf courses, etc., covered with sod and having no	0.20

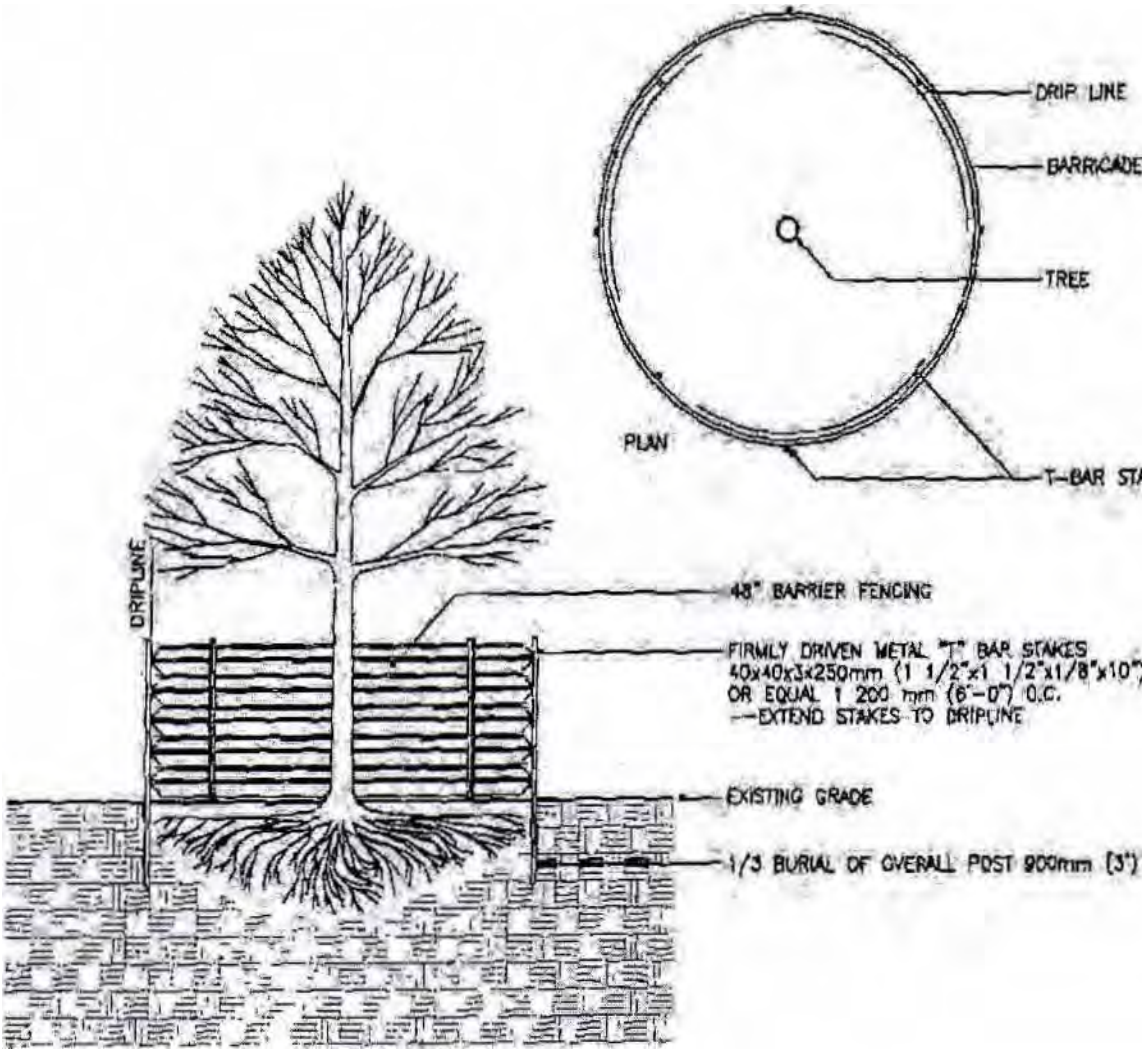
During selection of the above coefficients, consideration is to be given to future

APPENDIX F

Standard Specifications for Constructing Sanitary Sewer and Water Facilities

Appendix G

Tree Protection Barricade Detail



APPENDIX

CRITERIA FOR LEFT TURN LANE WARRANTS

"Aspects of Traffic Control Devices: Volume Warrants for Left-Turn Storage Lanes at Unsignalized Grade Intersections"

(Highway Research Record 211)

M.D. Harmelink

V_O=Volume of traffic in the opposing lane (s), (vph).
V_A=Advancing volume (through, left-turning, and right turning vehicles), (vph).
v=Design Speed, (mph).
V_L=Left turning volume, (vph).

Appendix

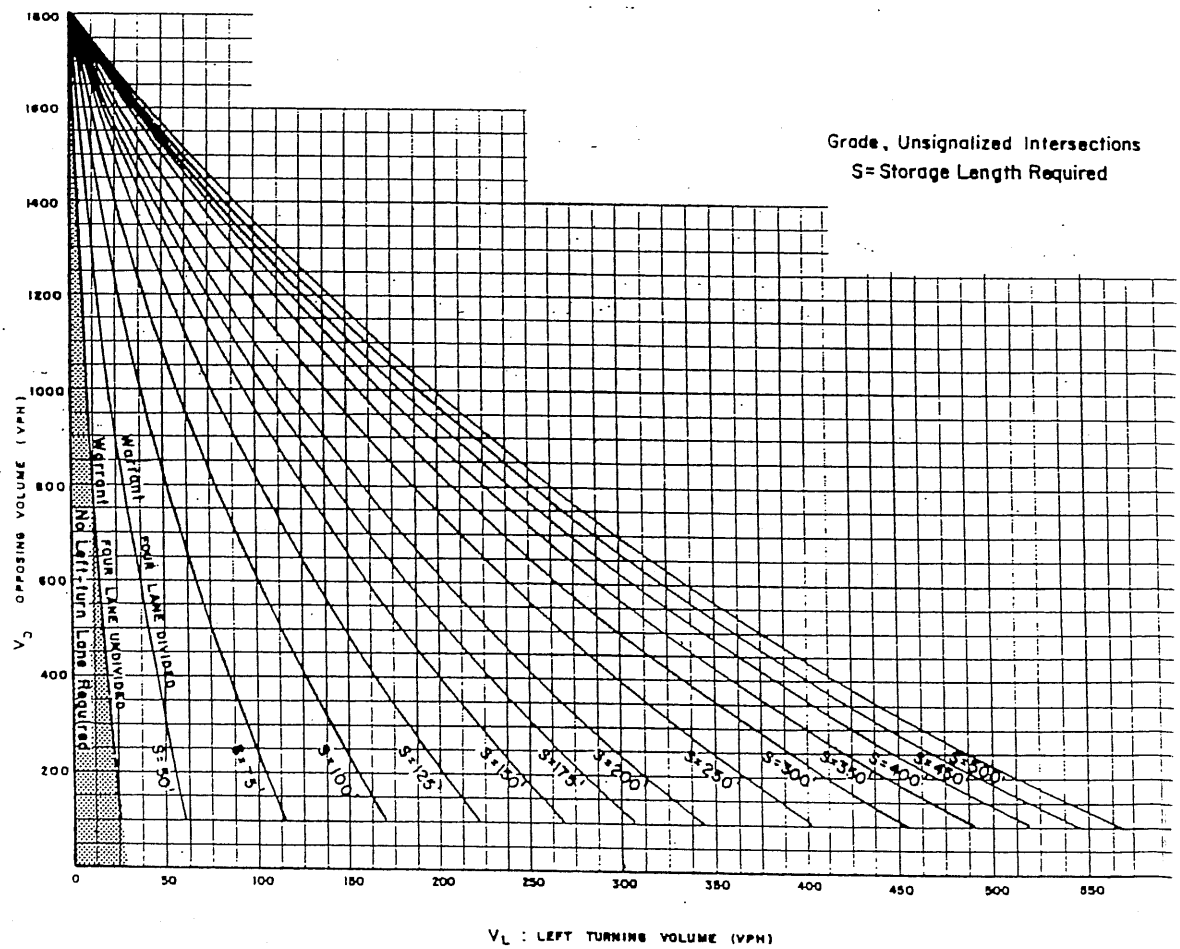


Figure 1. Warrant for left-turn storage lanes on four-lane highways.

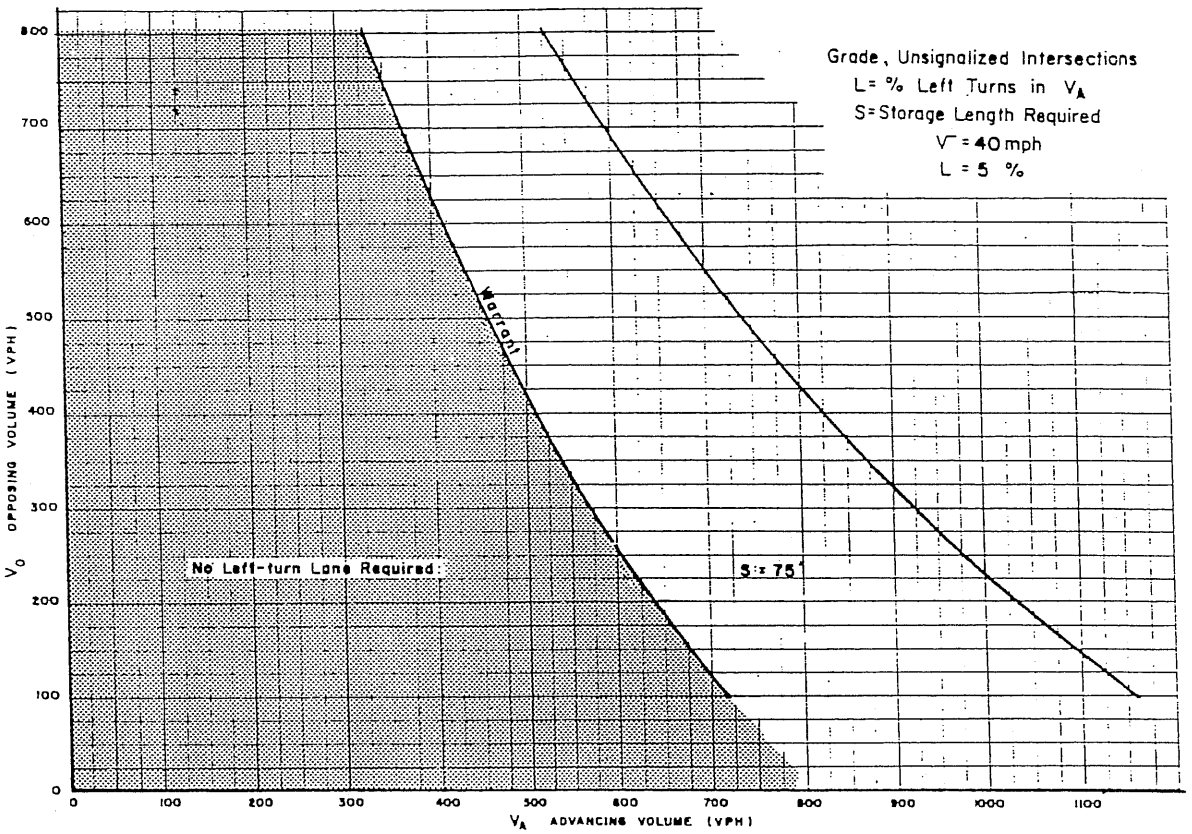


Figure 2. Warrant for left-turn storage lanes on two-lane highways.

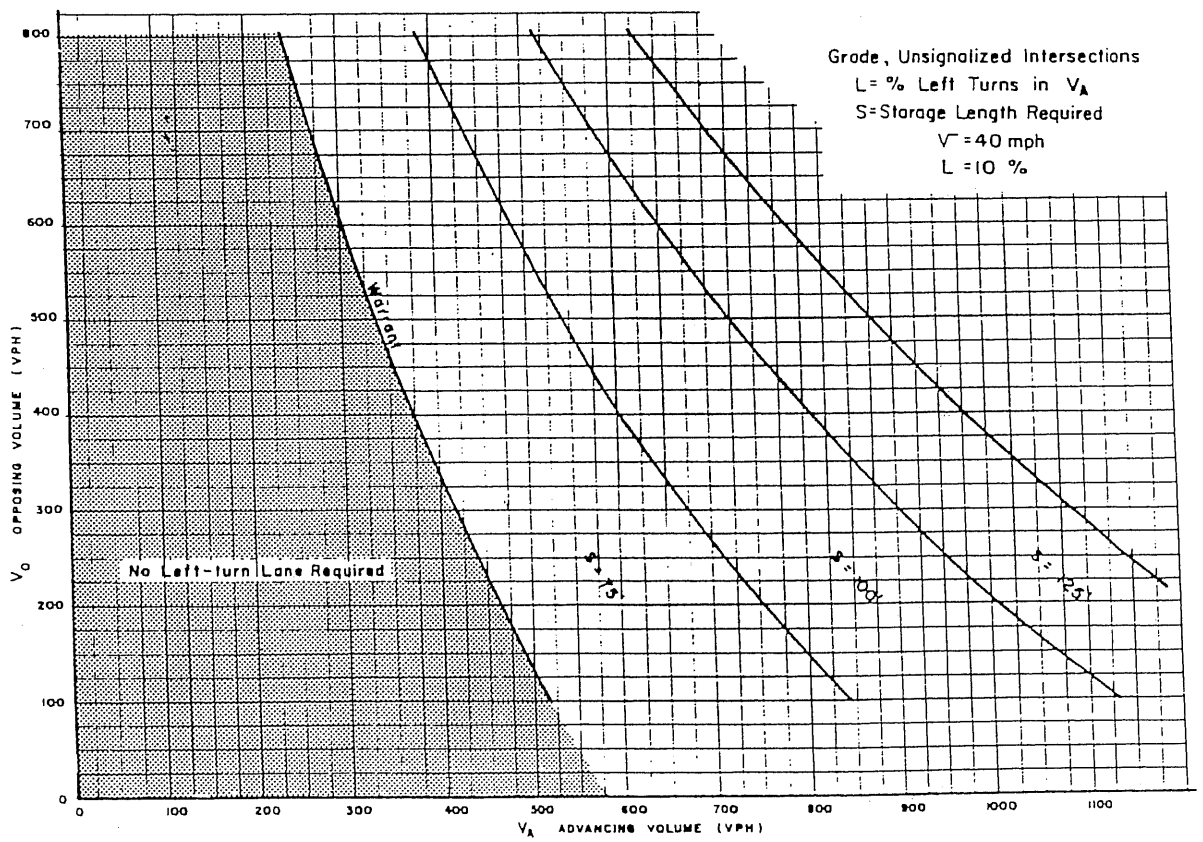


Figure 3. Warrant for left-turn storage lanes on two-lane highways.

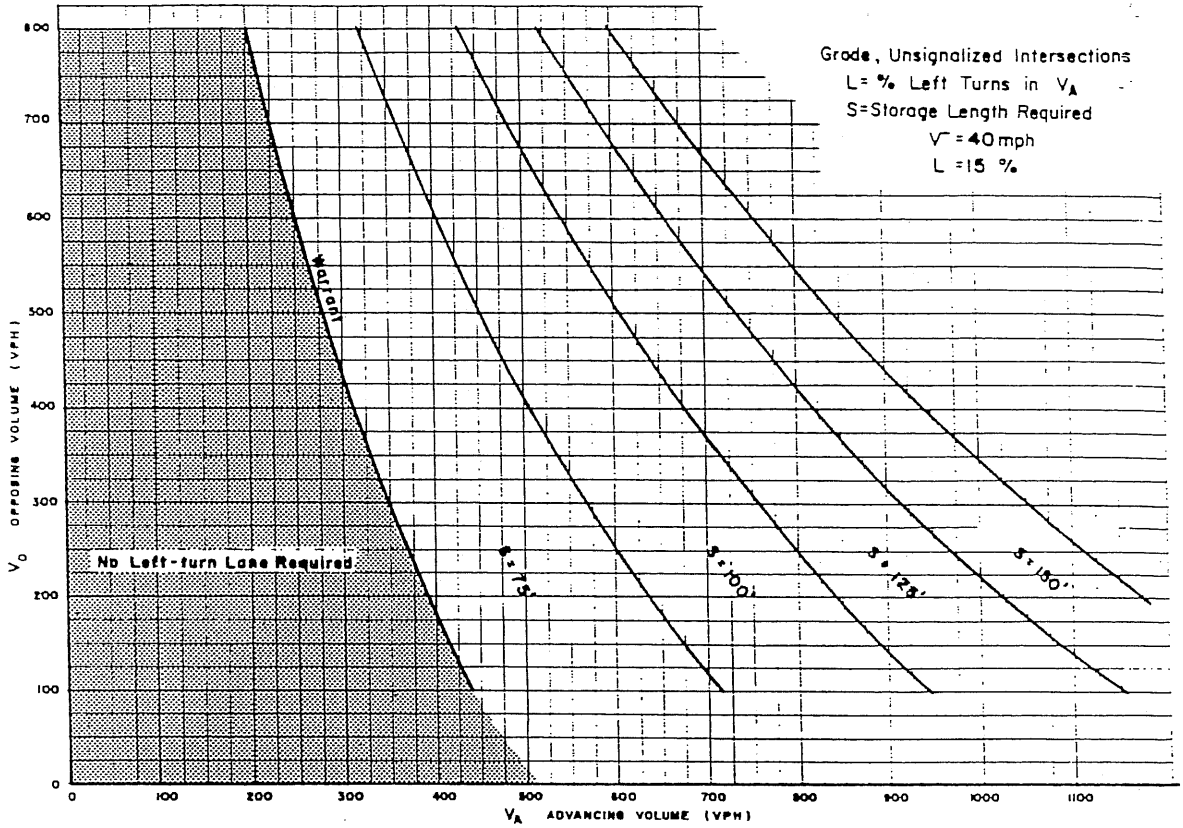


Figure 4. Warrant for left-turn storage lanes on two-lane highways.

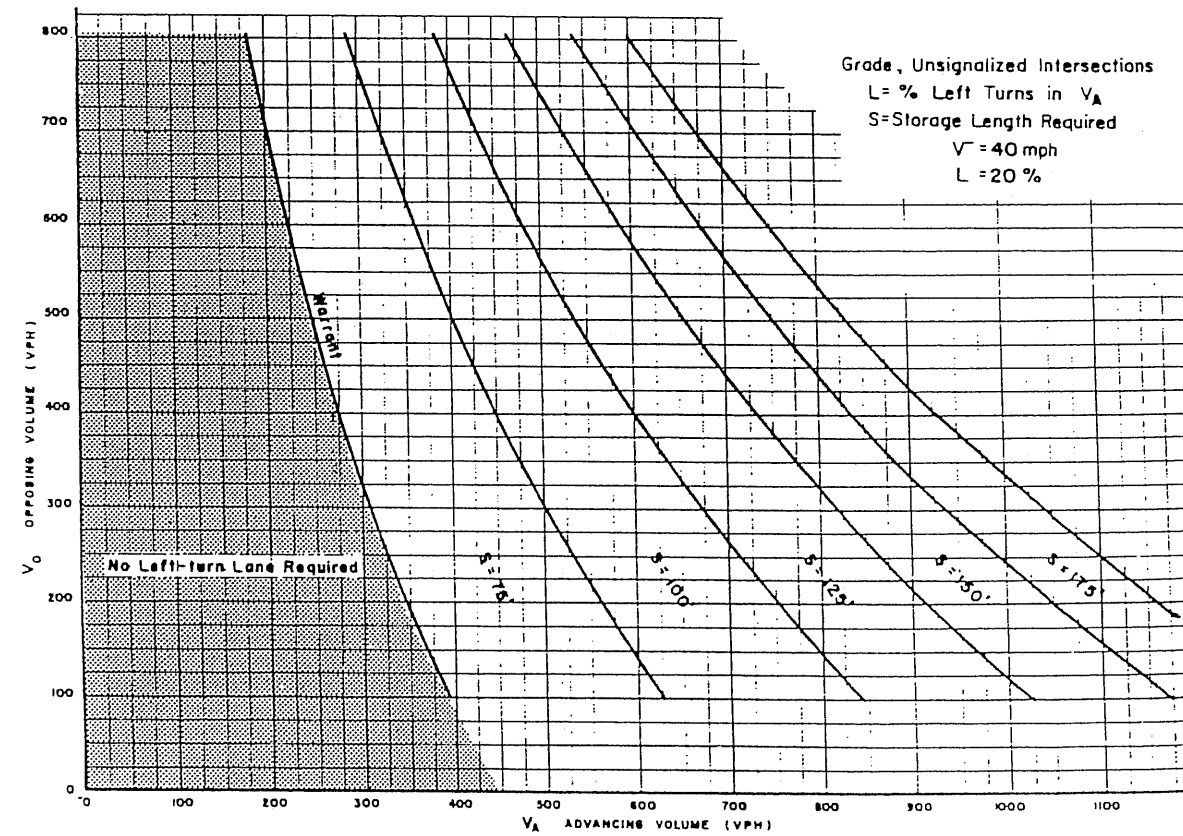


Figure 5. Warrant for left-turn storage lanes on two-lane highways.

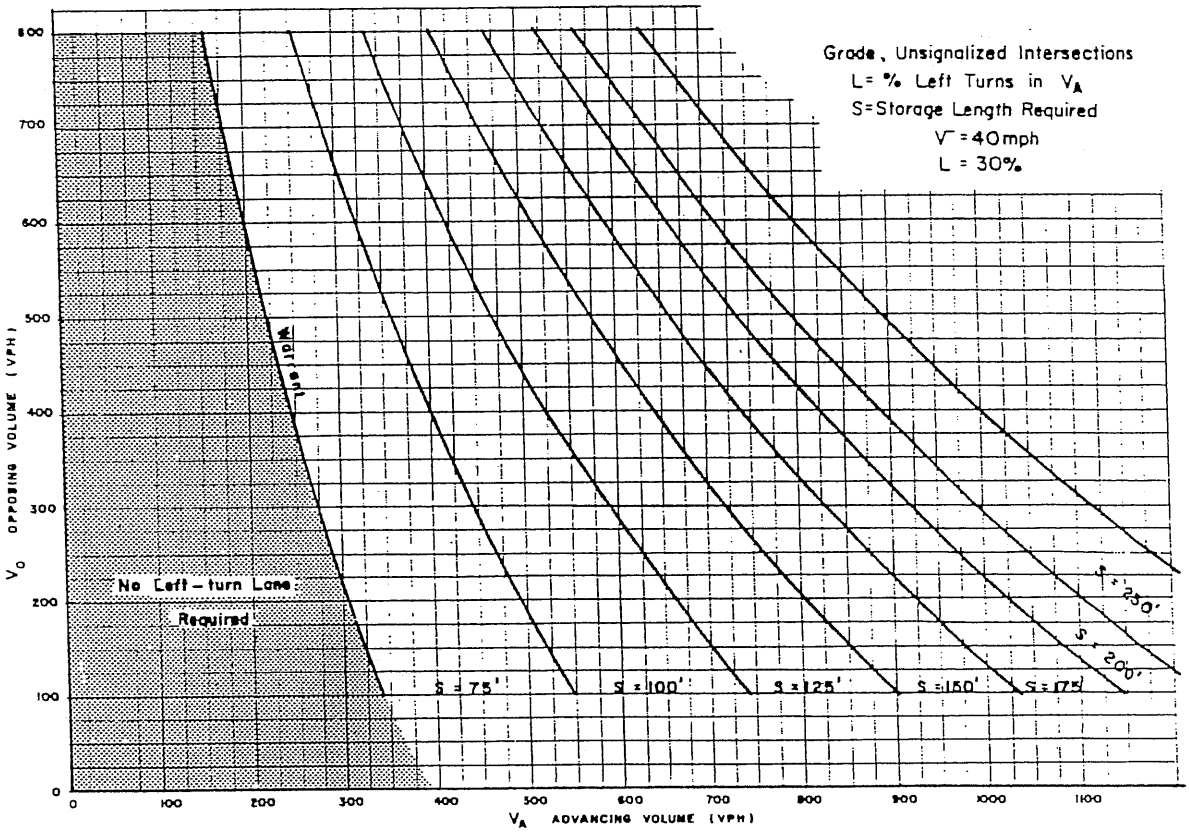


Figure 6. Warrant for left-turn storage lanes on two-lane highways.

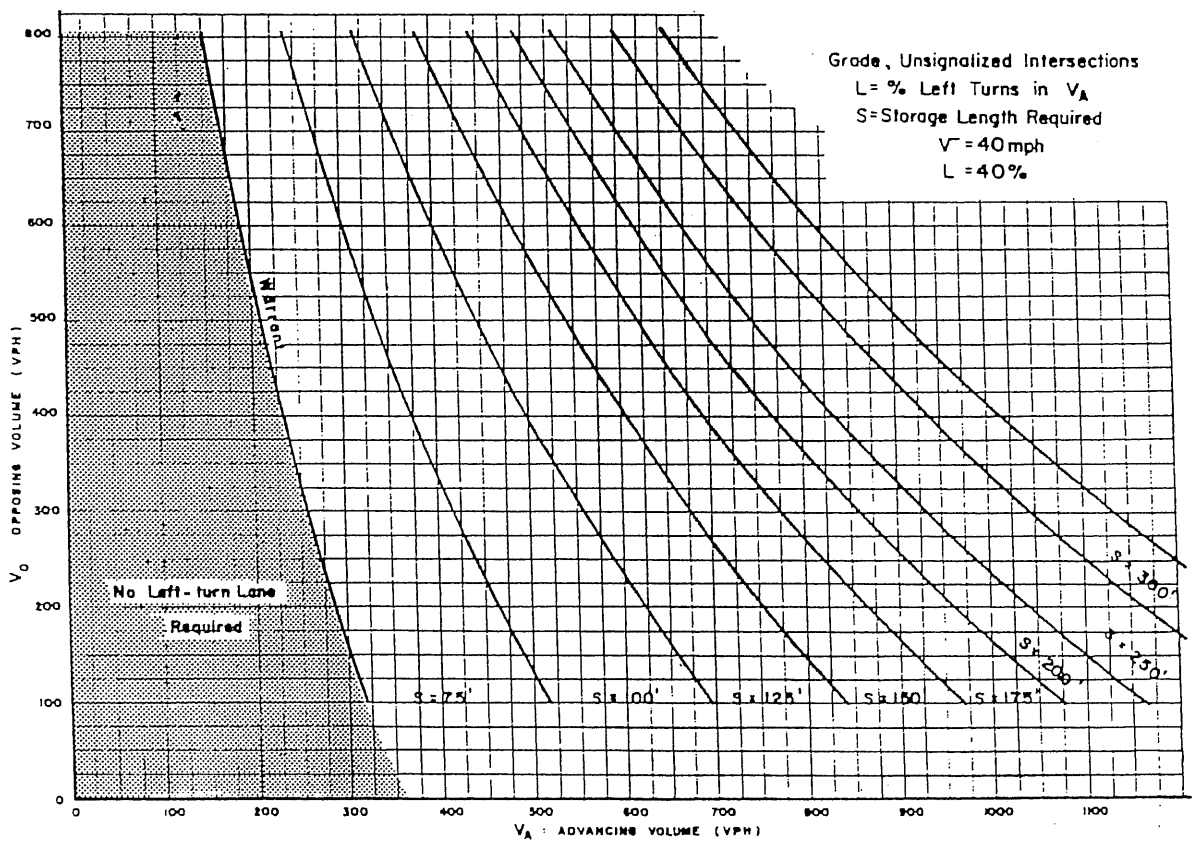


Figure 7. Warrant for left-turn storage lanes on two-lane highways.

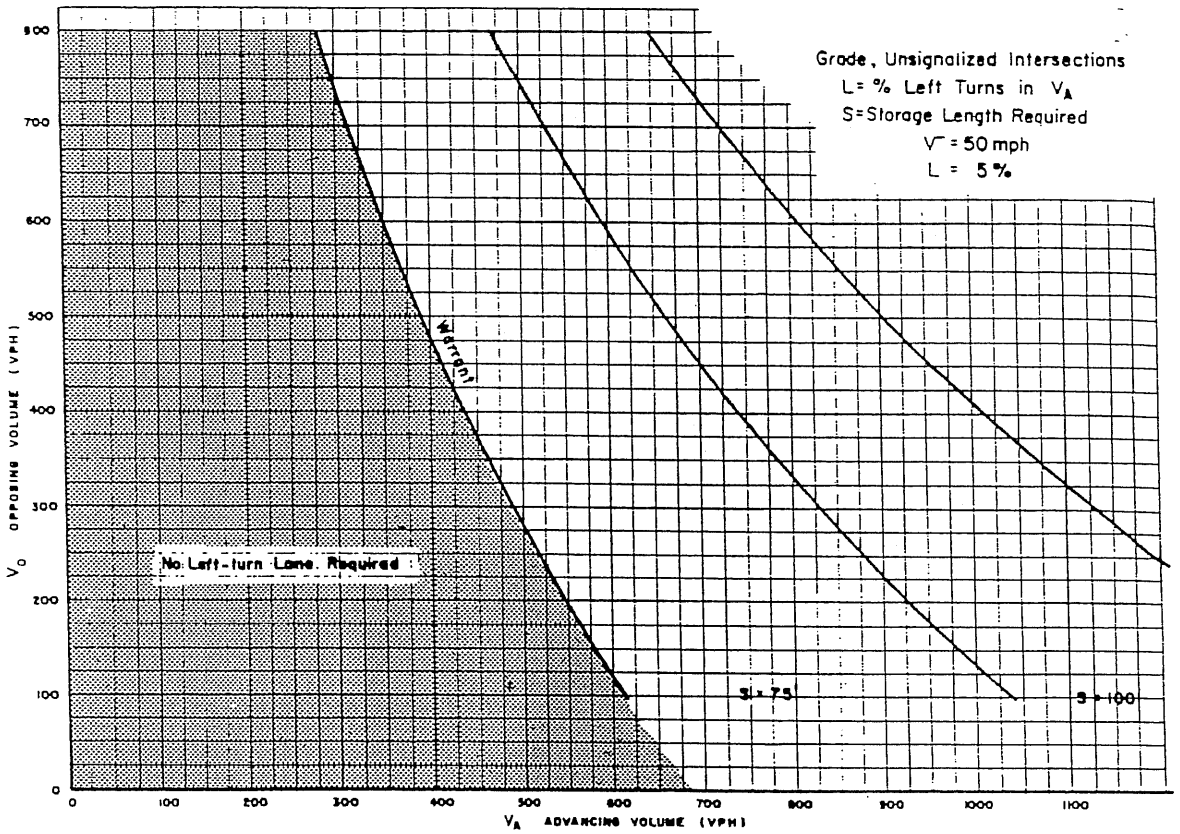


Figure 8. Warrant for left-turn storage lanes on two-lane highways.

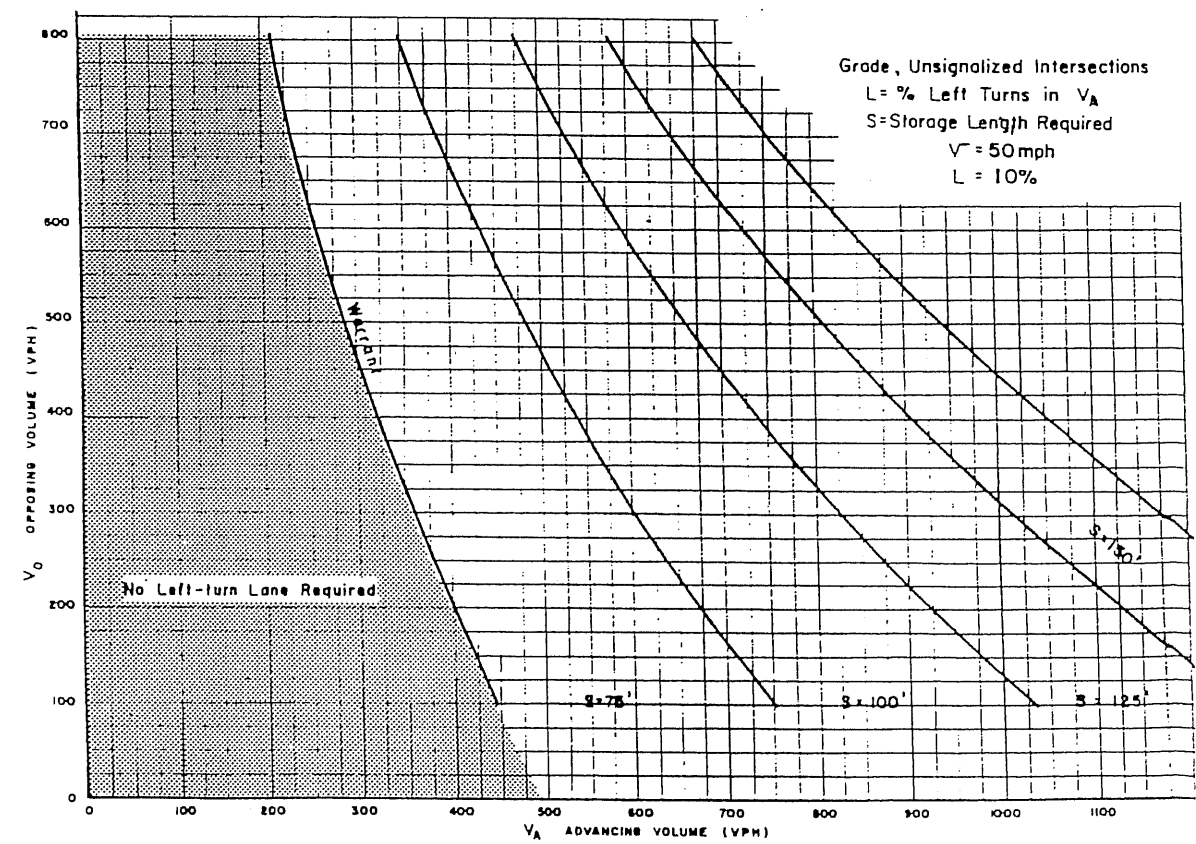


Figure 9. Warrant for left-turn storage lanes on two-lane highways.

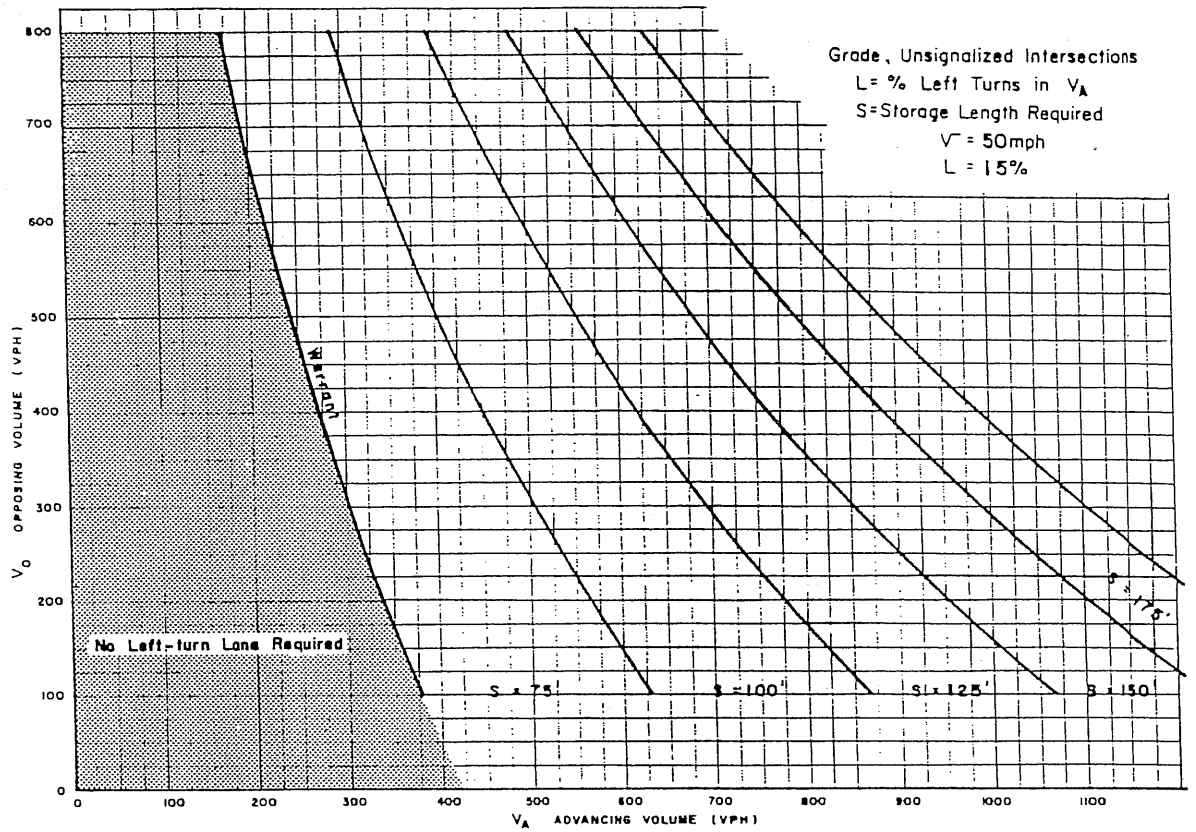


Figure 10. Warrant for left-turn storage lanes on two-lane highways.

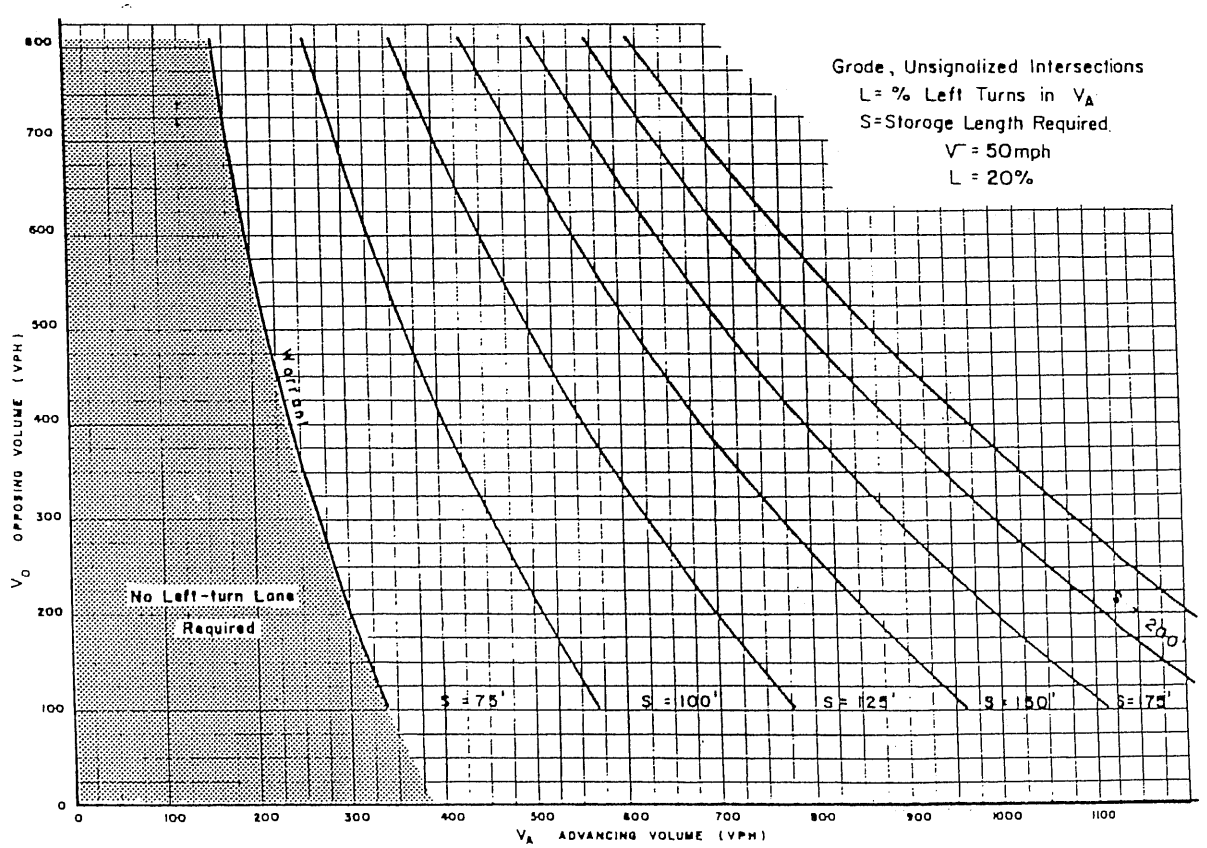


Figure 11. Warrant for left-turn storage lanes on two-lane highways.

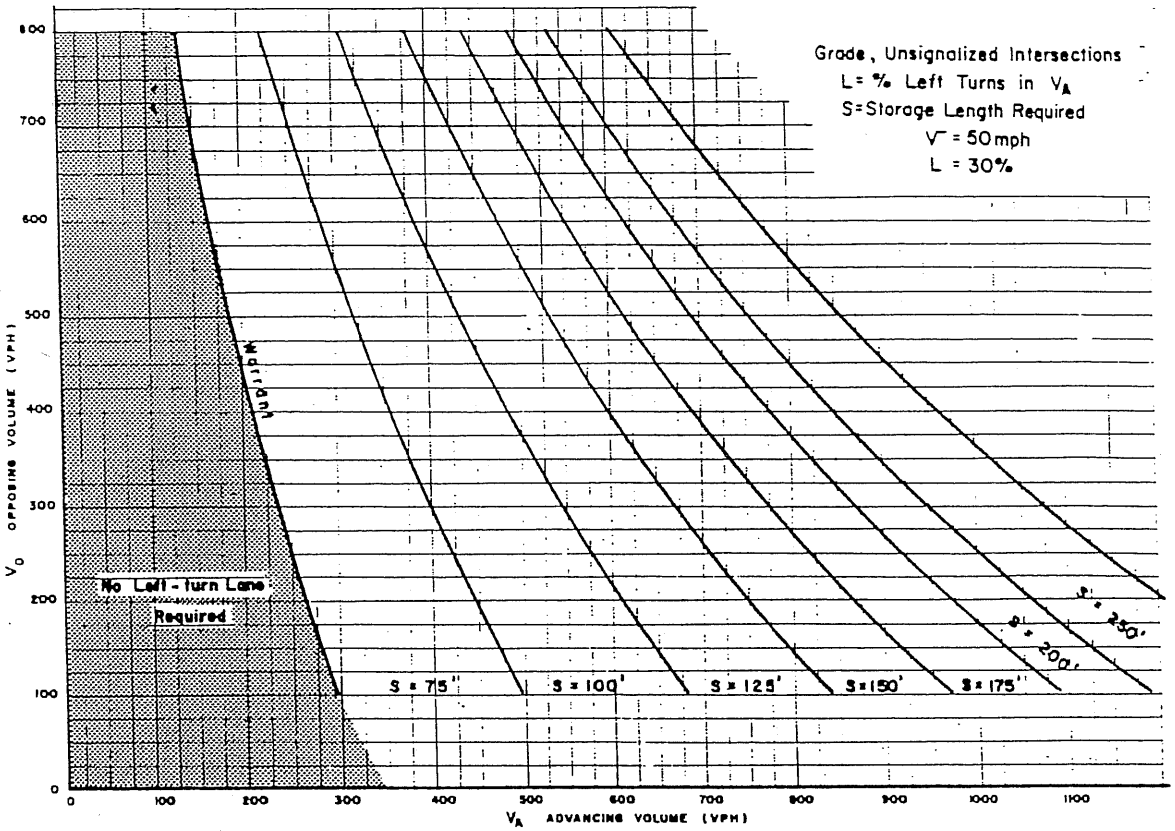


Figure 12. Warrant for left-turn storage lanes on two-lane highways.

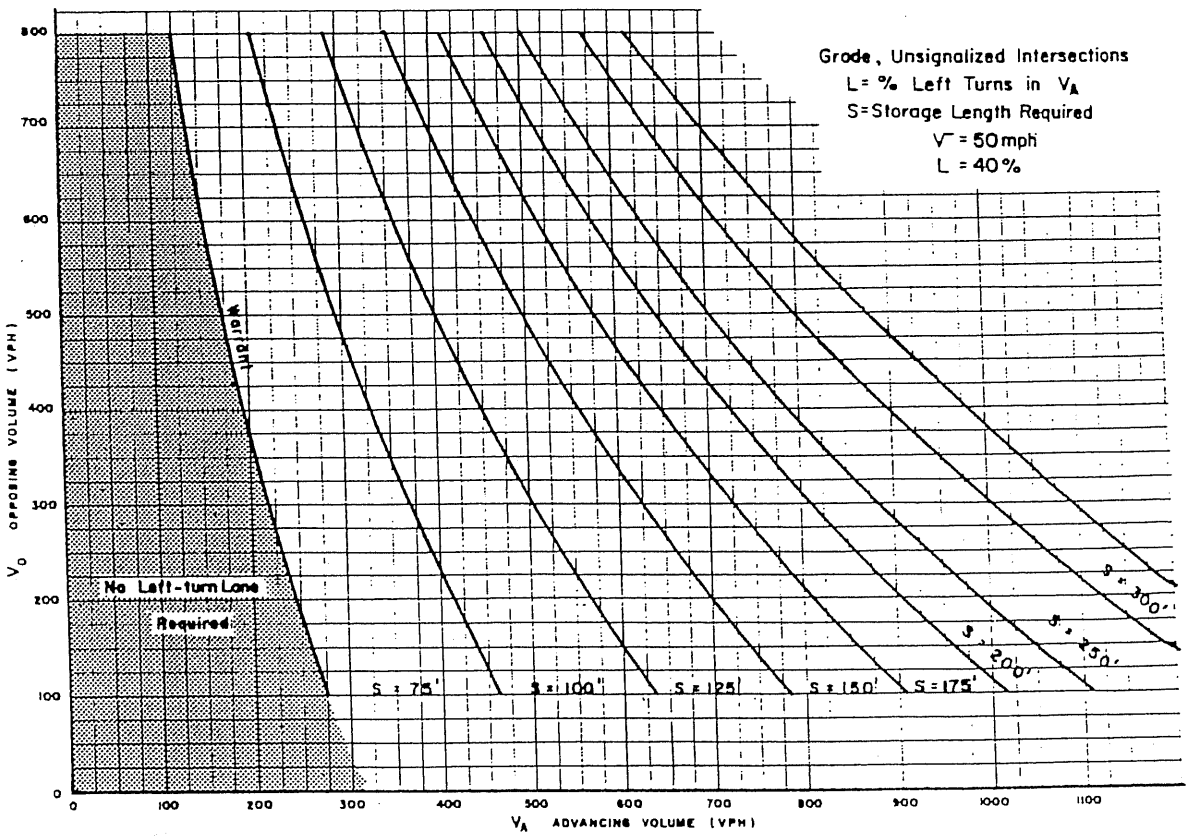


Figure 13. Warrant for left-turn storage lanes on two-lane highways.

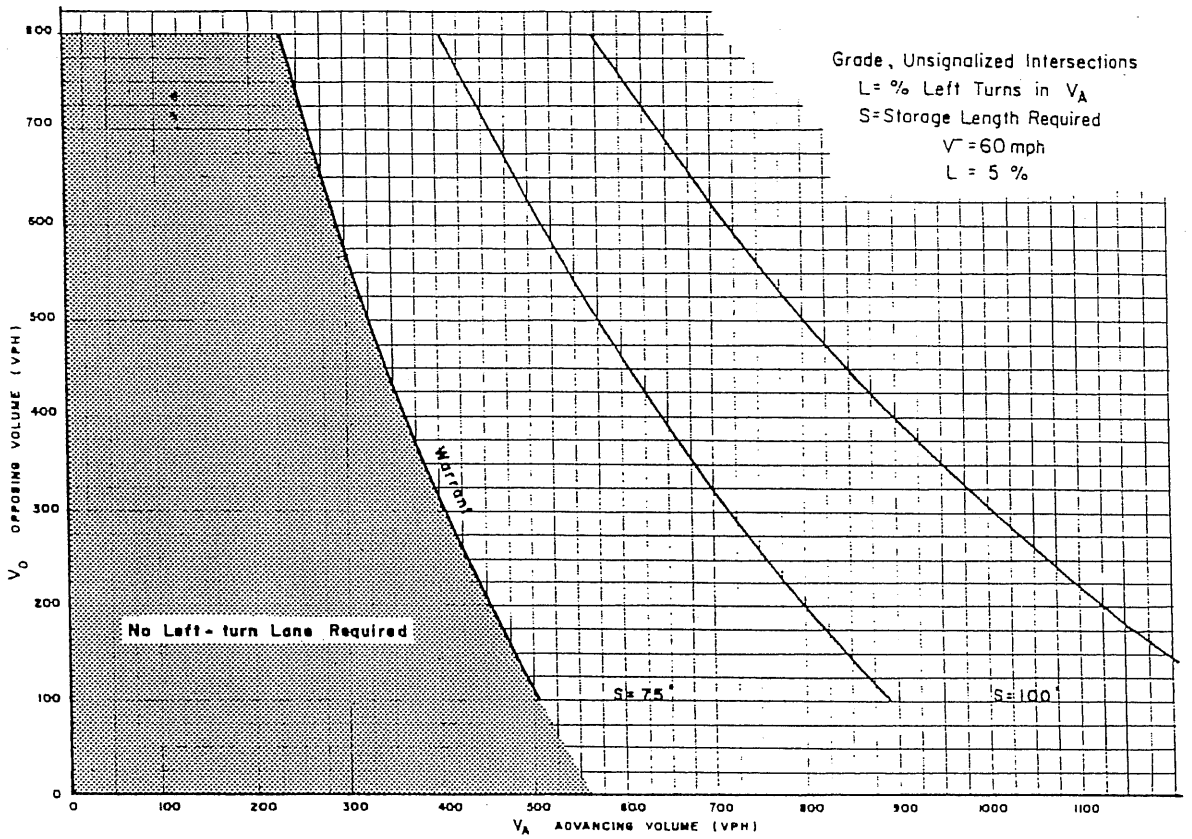


Figure 14. Warrant for left-turn storage lanes on two-lane highways.

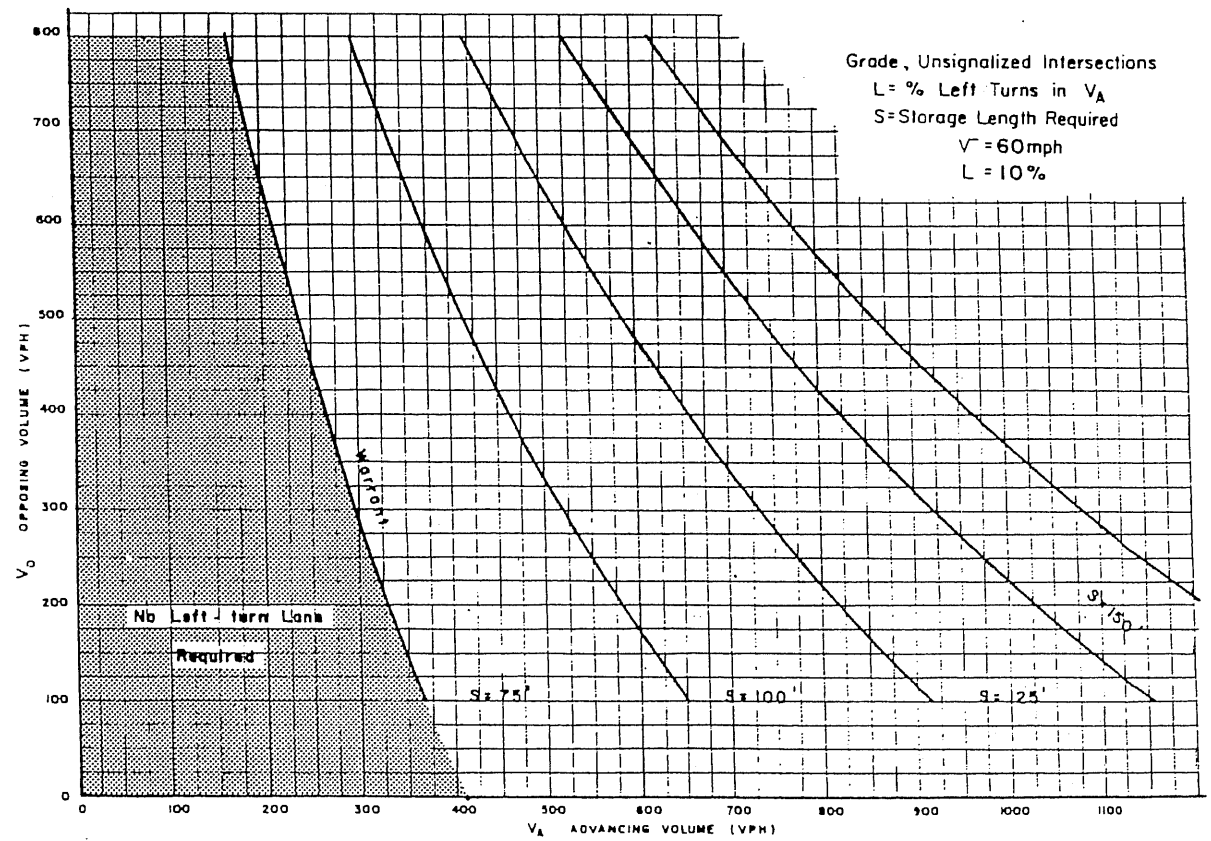


Figure 15. Warrant for left-turn storage lanes on two-lane highways.

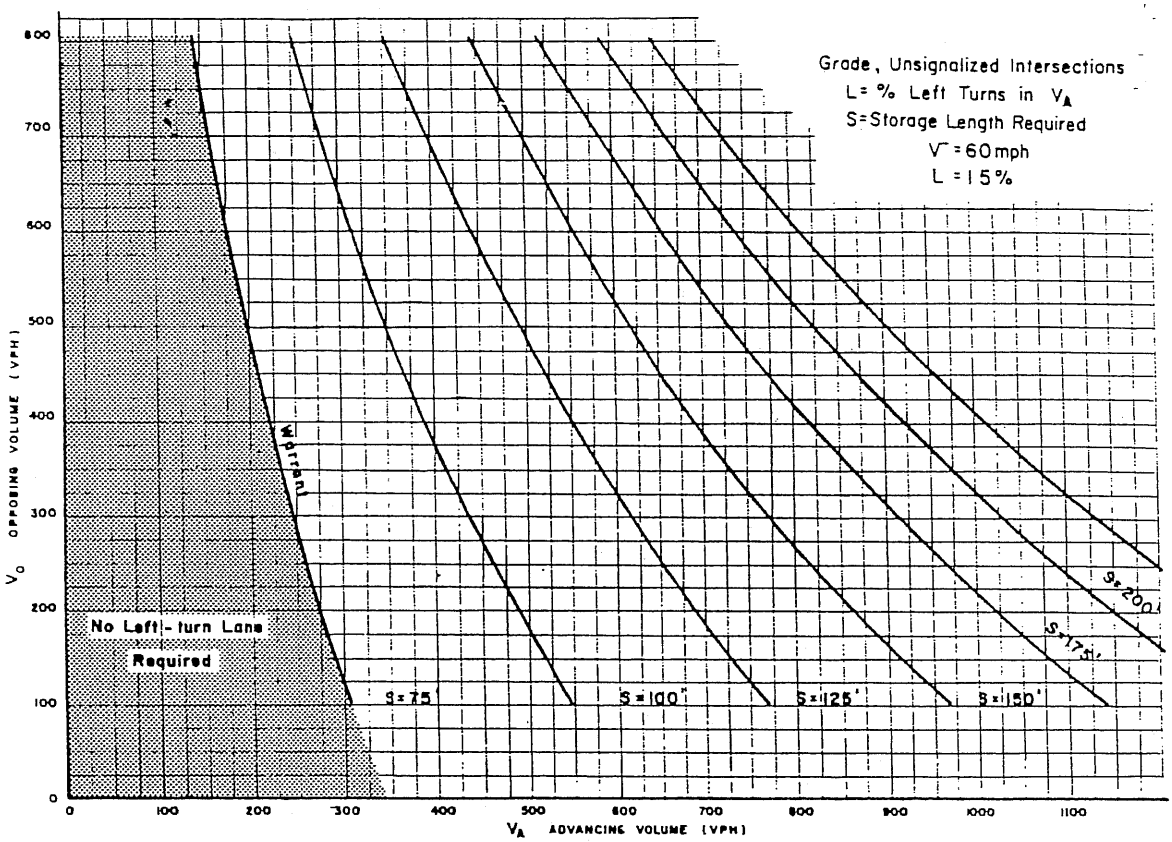


Figure 16. Warrant for left-turn storage lanes on two-lane highways.

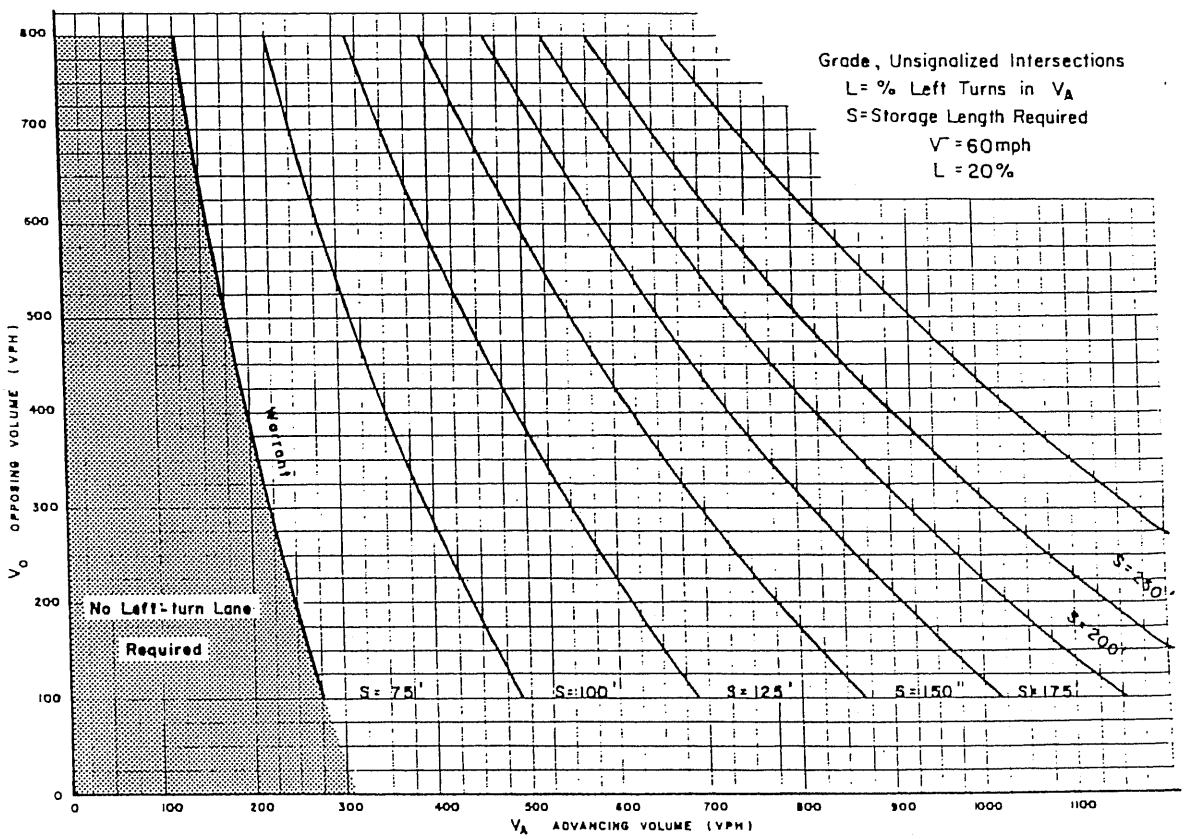


Figure 17. Warrant for left-turn storage lanes on two-lane highways.

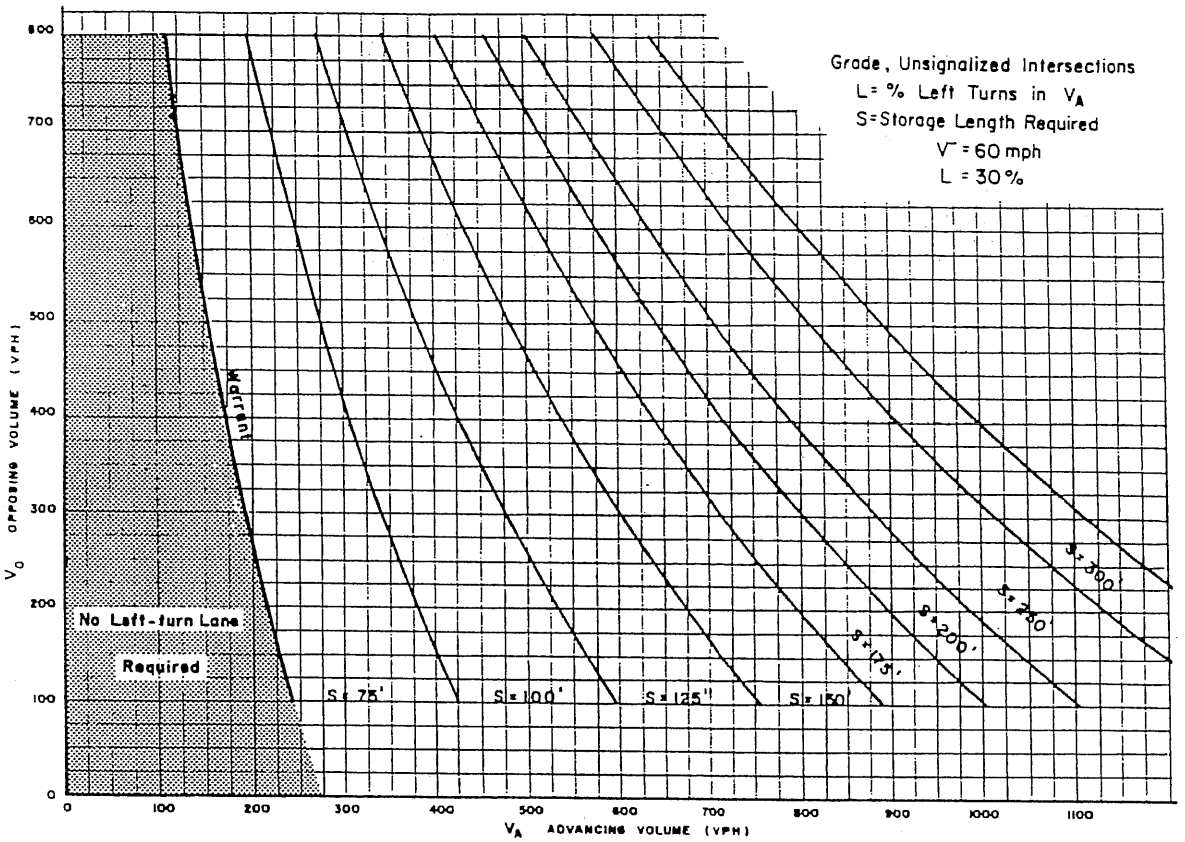


Figure 18. Warrant for left-turn storage lanes on two-lane highways.

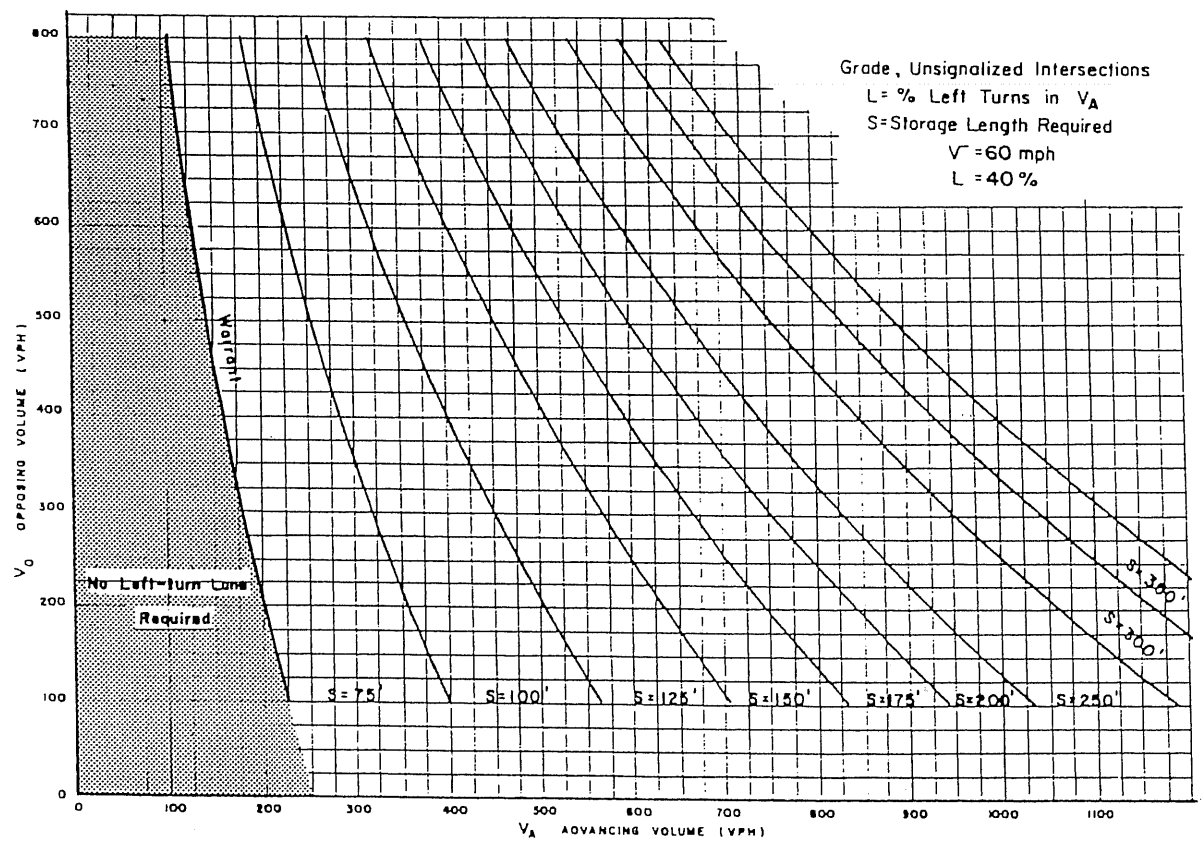


Figure 19. Warrant for left-turn storage lanes on two-lane highways.