

SECTION

2

Design and Construction Standards for Streets and General Infrastructure

A. STREET PLAN/PROFILE SHEETS

1. Plan and profile sheets shall be provided for all streets.

- All traffic control devices, signs, signals, and markings (striping) to be used shall conform to the requirements of the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), latest edition.
- A Georgia Department of Transportation Permit may be required on State maintained routes. Provide a copy of the Georgia Department of Transportation approved plan or a letter stating that the permit is not required.

2. The street plan/profile sheets shall contain at a minimum:

- All information required in Section 1 of the City of Austell Design and Construction Standards (unless included elsewhere in the plans);
- Provide plans and profiles for proposed streets including intersections (scale to be 1" = 50' or 100' horizontal and 1" = 10' vertical);
- Show and state percent grade of streets and length of vertical curves;
- Minimum stopping sight distance requirements must be satisfied at all vertical curves;
- Proposed vertical curves must be adequate for grades shown;
- Street intersections shall be within 2% \pm of finished roadway grade elevation;
- Show curve data necessary to reproduce street centerline;
- Show and state design speed;
- Show in table format on plans and on the final plat the length of all proposed roads in linear feet;
- Provide typical roadway cross section and pavement specifications;
- Provide typical cul-de-sac detail which includes right-of-way and pavement radius;
- Provide sidewalks as required by the City of Austell Sidewalk Ordinance, latest revision. Show on plans and include detail;

- Provide handicap ramps (per Section B) at all intersections, driveways, and curb encroachment locations. Show on plans and include detail;
- Show and state all names and right-of-way (existing and proposed) sizes from centerline and pavement widths of all roads, which appear on plans. Designate if any roadways are unpaved or private;
- Provide right-of-way miter with 10-foot legs at all intersections within subdivision. A 20-foot miter is required at major street intersections;
- Developments with roadways requiring acceleration/deceleration lanes or one additional lane widening shall require 1:20 scale construction plans for the intersection approaches;
- Dimension improvements (in feet) from street centerline to back of curb;
- Indicate tapers beyond projected property lines or end of acceleration/deceleration, as appropriate;
- Tapers are not to be curbed (transition curbing down unless tying to existing curb);
- Show all existing and proposed grades and slopes at maximum 2' contour intervals;
- Provide appropriate spot elevations;
- Clearly indicate curb type to be used and indicate transition locations. Show on plan and include detail;
- All markings to be thermoplastic;
- Depending upon the complexity and size of the development, separate roadway signing, marking, and traffic signal plans may be required;
- All traffic signal plans must be submitted to and approved by the City of Austell Public Works Department;
- Show and state right-of-way as measured from centerline to property line;
- Minimum intersection sight distance (ISD) requirements per Section B7. 3 must be satisfied in each direction of any proposed access, driveway, or intersection. Show lines of sight on plan view;
- Provide temporary construction exit/entrance detail and show location of access on plans. Minimum ISD requirements must also be satisfied at this location, before construction can begin;

3. For driveways, the following information shall be shown:

- Show proper widths of all driveways;
- State driveway radius;
- Provide spot elevations from edge of pavement along centerline of proposed drive(s);
- Provide driveway/intersection profiles;
- On one-way drives, show one-way arrows and provide details; and
- Show all streets and non-single family driveways near the proposed access on both sides of the road.

4. Intersection Sight Distance Plan

When an intersection meets or barely exceeds the minimum intersection sight distance, intersection sight distance information is required and shall include the following:

A plan view of the entrance(s) must be prepared at a scale of 1" = 20' and include all details of road widening, acceleration/deceleration lanes, striping, drainage, etc. The plan shall clearly show how the existing drainage can be conveyed through the intersection without draining the runoff through the intersection on the surface. The plan shall clearly show how the water will be directed into the receiving channel downstream. Calculations must be provided to support the design depicted in the plan view. Plan shall clearly show existing width of pavement, right-of-way on both sides of roadway, and define centerline from which improvements will be referred. Roadway cross-slope and super elevation with appropriate design calculations shall be shown on the plat. Notes regarding street lighting requirements for new subdivisions and developments should be shown on the drawings in accordance with the City of Austell Street Lighting Ordinance.

5. General Street Notes

The following notes shall be shown on the street plan/profile drawings. Additional notes will be required to address specific aspects of the individual development, such as street lighting.

- Construction equipment shall not be parked in required right-of-way and must be stored within the site.
- If medians/islands are to be planted, minimum intersection site distance requirements must be satisfied and will be maintained by the Homeowners' Association or the developer. These landscape plans must have verification of a minimum site distance.
- Contractor shall restore roadway shoulders to minimum City of Austell specifications.

- Roadway and driveway crossings shall be bored and cased.

B. STREETS

1. General

The character, width, grade, and location of all public streets shall conform to the standards in these Regulations and shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets. Construction and material specifications for streets shall conform to Georgia Department of Transportation Standard Specifications for Roads, except as may otherwise be stated herein. Specifications and design criteria stated herein are for planning purposes. Design exceptions will be considered on a case-by-case basis and it is the responsibility of the developer and his engineer to identify the exceptions in the concept and preliminary design stages. Exceptions/variances will be subject to approval by the City of Austell Public Works Department.

Thoroughfares in developments shall be planned in conformity with the Comprehensive Plan, and the Major Thoroughfare Plan. These streets classified, or designated to be classified, as an arterial, major collector, or minor collector shall be developed per Section C2.

The proposed development's street layout shall be coordinated with the street system of the surrounding area or with plans for streets in said area on file with the City, if any.

If the developer desires to provide for street access to an adjoining property, proposed streets shall be extended by dedication to the boundary of such property and a temporary paved turn-around provided.

2. Right-of-Way

Additional street right-of-way width may be required to be dedicated at intersections or other locations fronting the property where turning lanes, storage lanes, medians, or realignments are required for traffic safety and minimum right-of-way standards would be inadequate to accommodate the improvements.

MINIMUM RIGHT-OF-WAY PER STREET CLASSIFICATION

STREET CATEGORY	MINIMUM RIGHT-OF WAY	AS MEASURED FROM THE CENTERLINE
Arterial	100'	50'
Major Collector	80'	40'
Minor Collector	60'	30'
Local (Residential Subdivision)	50'	25'
Non-Residential Local	60''	30'

3. Additional Right-of-Way and/or Pavement Widths

- a. Right-of-way for all abutting and internal public streets, existing and proposed, may be dedicated in accordance with the street classifications as shown on the Major Thoroughfare Plan, and as contained in these regulations, or as otherwise required by the City of Austell Mayor and City Council.
- b. On any existing street that abuts a property, one-half of the required width of right-of-way shall be dedicated to the City of Austell as measured from the centerline of the roadway.
- c. Right-of-way miters are required at all intersections to provide area for adequate utility location and maintenance. Twenty foot miters shall be provided at the right-of-way intersection of any major thoroughfare. Ten foot miters shall be provided at the right-of-way intersection of any local and collector roads. If a new street or thoroughfare is funded by the City of Austell or the State of Georgia to adjoin or traverse the property, the proposed road right-of-way shall be incorporated into the development plans of the property in accordance with these regulations. These right-of-way requirements shall govern except where there exists clearly defined plans of the Georgia Department of Transportation or the City of Austell, which require additional right-of-way. In that case, the greater right-of-way requirements shall govern. Any development with property fronting on an existing City or County road for which there exists clearly defined plans by the Georgia Department of Transportation or City of Austell, may be required to provide road improvements associated with the defined plans. In such cases, in lieu of the design and construction, at the discretion of the City of Austell Mayor and City Council, the developer shall escrow the dollar equivalency of required improvements (including curbing, utility relocation, and drainage structures), as estimated by the developer and verified by the City of Austell Public Works Department. These funds shall be deposited in the appropriate road construction account prior to the approval of development improvements or within 30 days of City award of a construction contract, whichever occurs first.

C. ROADWAY/LANE WIDTHS

A minimum of 10-foot travel lanes is required on all streets. Roadway widths and lane assignments are typically based upon the functional classification of said roadway; for Major Thoroughfares see Section T.

Roadway width and design may be variable based upon current and/or proposed operational characteristics of the roadway and is subject to Georgia Department of Transportation and/or the City of Austell review and approval. Median divided roadways may be required with left-run bays and median breaks in lieu of center two way left turn lanes.

D. IMPROVEMENTS ALONG STATE HIGHWAYS

For any development that abuts a state highway or other right-of-way controlled by the State of Georgia, improvements to the roadway and the location and design of any street or driveway providing access from the state highway shall comply with the standards and requirements of Georgia Department of Transportation. A permit for the proposed access or improvements shall be required to have been approved by the Georgia Department of Transportation and incorporated into the construction drawings for the project prior to issuance of a development permit by the City of Austell Public Works Department.

E. SUPERELEVATION AND RUN-OFF

Widening sections along existing streets shall be designed reflecting existing curvature and superelevation, if any, unless the existing street has been included in a specific design by the Georgia Department of Transportation or the City of Austell which calls for different standards, in which case the project will be coordinated with the overall design (excluding local residential streets).

Roadway edge curves shall be provided for tangent run out (bringing edge from a normal crown to centerline elevation) and superelevation runoff (from the end of tangent run out to the point of design superelevation) in accordance with design standards of AASHTO, latest edition.

F. UNIMPROVED ROAD

1. In the event that a subdivision and/or development has access to a substandard street (for example, a dirt or gravel road), the following improvements shall be considered through a Development Agreement:
 - If the abutting substandard street provides the primary means of access to the development and is dirt or gravel, the street shall be upgraded to the classification of the roadway from the end of the improvements required to the nearest standard paved road along the route of primary access.
 - Where lots do not front onto, but the access is other than primary, in addition to the road widening requirements abutting the development access, a drainage ditch, shoulder, and adequate base shall be provided and the roadway paved on the opposite side of the road from the project, minimum of ten feet from centerline to edge of pavement.
 - Where lots do not front onto, but the access is other than primary, in addition to the road Off-site improvements required above, shall at a minimum result in a full-section roadway meeting the requirements of a local residential rural roadway of 24 feet, edge to edge of pavement, with drainage ditches as needed. Responsibilities shall be as follows:

- a. The developer shall design the road and provide the labor, equipment, and materials required for roadway improvements and necessary drainage improvements.
- b. All right-of-ways required for these off-site improvements shall be considered in the Development Agreement.

G. INTERSECTION DESIGN

1. Angle of Intersection

Intersections shall be at right angles and shall not be at an angle of less than 75° for reasons of safety, topography, interference with utilities, or separation from other driveways.

2. Intersection Radius

Intersection radii for all streets shall be measured at the back of curb or edge of pavement, if no curb exists. The minimum roadway radii for the intersection of local and residential collector streets are 25 feet. When a local or residential collector intersects a higher classification of roadway, the radii shall be a minimum of 30 feet. Larger radii may be required for streets intersecting at an angle of less than 90° or when a vehicle and operating circumstances dictate. The radii can be reduced a maximum of five feet for the following reasons:

- Separation from street or
- Removal of obstruction

3. Intersection/Corner Sight Distance

Intersections shall be designed with adequate corner sight distance for each street, which approaches a street of higher street category. Where necessary, back slopes shall be flattened and horizontal or vertical curves lengthened.

The minimum corner sight distance requirement shall be calculated per Detail Standard 401B.

4. Vertical Alignment/Intersection Approaches

For the intersections of local and residential collector streets, a leveling of the street at a grade not exceeding 2% shall be provided for a minimum tangent length of 25 feet. Exemptions are allowed for topographic considerations as determined by the design professional and the City of Austell Public Works Department.

- a. Tangent length is measured from edge of pavement of the intersecting street to the point of curvature in the approaching street.
- b. This grade for the landing may be 1%.

5. Horizontal Alignment/Intersection Approaches

New local streets, which approach an intersection with a street in a higher category on a horizontal curve having a centerline radius less than 240 feet, shall provide a tangent section of roadway at least 30 feet long. The tangent length shall be measured along the centerline of the street from the right-of-way line of the intersecting street extending to the point of tangency with the centerline of the curve section.

Minor and Major Collector classified streets shall provide tangent sections at intersections with streets in equal or higher categories as needed to provide adequate stopping sight distances at their design speeds; see Section B13.

6. Stormwater Design for Intersections

Sheet or concentrated flows of water will not be permitted through the intersection.

7. Refer to Section T.

H. NEW/PROPOSED STREETS

1. General

All proposed new streets shall be designed and constructed to the standards contained in these Regulations in accordance with the classification of said streets.

The arrangement of local streets shall permit practical patterns, shapes, and sizes of development parcels. Street layout must strike a balance with proposed land use so as to not unduly hinder the development of land. Distances between streets, angles of intersections, numbers of streets, and related elements all have a bearing on efficient lot layout of an area.

2. Local Residential Streets

- a. Local residential streets shall be 24 feet wide as measured back of curb to back of curb. This provides for a 10-foot lane in each travel direction. This does not provide for any on-street parking.
- b. Local residential streets shall provide Fire Department access to within 150 feet of all portions of residential structures.

- c. When projects contemplate less than 20 foot separation between units, emergency vehicle access can be accomplished by any of the following methods or combinations of methods:
- Parking spaces as required by zoning in addition to one-half guest parking per unit.
 - Streets shall be designated as fire lanes, appropriately marked/identified in accordance with the City of Austell Fire Safety Ordinance.
- d. All structures except detached single family homes over 30 feet in height measured from the lowest level of Fire Department vehicle access to the ceiling level of the highest occupiable floor shall be provided with approved fire apparatus access roads capable of accommodating Fire Department aerial apparatus. Overhead utility and power lines shall not be located within the aerial fire apparatus access roadway. Aerial apparatus access roads shall have a minimum unobstructed width of 24 feet face of curb to face of curb. The access road shall be located a maximum of 40 feet from the structure and shall be positioned parallel to the long side of the building for its entire length.
- e. Residential townhome style developments may be allowed to increase the 30 foot height requirement to 35 feet if one of the following items is met:
- The structure is built of noncombustible construction.
 - Building built of Type V construction (combustible construction) shall meet one of the following items:
 - Structural members are sprayed with a fire retardant spray meeting a flame spread of 10 or less and smoke development of 450 or less.
 - Structure is protected with a sprinkler system and the attic space is protected with a dry sprinkler system.
 - Each dwelling unit is separated by a two hour masonry fire wall, wall shall extend vertically above the roof a minimum of 30 inches and horizontally past the exterior walls a minimum of 18 inches.
- f. A four foot sidewalk may be used as part of the required 24 feet aerial apparatus lane if all of the following items are met:
- Sidewalk shall be able to support 52,000 pounds or an equivalent in PSI.
 - Sidewalk shall be adjacent to the road.
 - Roll back curb shall be used versus L back curb may be used upon approval by the City of Austell Public Works Department.

- Grass pavers shall not be allowed.
- Decorative hard pavers shall be allowed.

3. Gates

Gates securing fire apparatus access shall be a minimum 14 feet in clear width for a single lane. Double lane gates shall be a minimum of 20 feet in clear width. Gates shall be of the swinging or sliding type. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. Emergency opening devices shall be approved by the City of Austell Fire Chief's Office.

4. Non-Residential Local Streets

Local non-residential streets shall be laid out so that use by through traffic will be discouraged. The functional and operational characteristics of the roadway shall be to provide access to adjacent non-residential lots.

5. Minor and Major Collector Streets

Collector streets shall be provided to channel through traffic movements within a development as part of or in addition to the current thoroughfare network. Actual classification of said roadway will be determined by the City of Austell Public Works Department after review of the functional and operational characteristics of the roadway and adequate traffic study including, but not limited to trip generation data, as provided by the developer.

I. CUL-DE-SACS

- Dead end streets designed to have one end permanently closed shall provide a cul-de-sac turnaround. Cul-de-sacs shall conform to the layout and dimensional requirements as shown in the Standard Details.
- Non-residential cul-de-sacs shall have a 60' paved radius.
- Non-standard cul-de-sacs will be evaluated individually and may be constructed with a landscaped island (subject to approval by the Fire Chief) to be maintained by the Homeowners Association in perpetuity.

J. MINIMUM CENTERLINE OFFSETS AND INTERSECTION SEPARATION

Streets shall either directly align or have offsets of a minimum of 125 feet for intersecting streets on opposite sides of the through street and a minimum of 250 feet for streets on the same side of the through street, as measured between centerlines of said streets.

K. STREET GRADES AND DESIGN SPEEDS

1. Minimum Grades

- a. Minimum grade for all streets shall be 1½%.
- b. Grades of less than 1½% may be approved by the City of Austell Public Works Department, based on adequate engineering designs, where at least 1½% cannot reasonably be achieved due to topographical limitations imposed by the land. In such cases, an as-built drawing and such computations as necessary shall be provided after construction to establish that the street will drain in accordance with these regulations. Street sections where unacceptable pooling, excessive spread at catch basins, or other hazardous conditions occur shall be reconstructed or otherwise improved to eliminate such conditions.

2. Maximum Grades

- a. Maximum grade for all local residential streets shall be 18%. Grades between 14% and 18% shall require an “as graded” survey prior to the installation of the curb or utilities.
- b. Maximum grade on any cul-de-sac turnaround shall be limited by drainage concerns.
- c. Negative grade cul-de-sacs will require vertical face curbing.
- d. Maximum grade in excess of those listed above may be approved by the City of Austell Public Works Department in order to address topographical safety, hydrological, and environmental concerns.

MAXIMUM GRADES

STREET CATEGORY	MAXIMUM GRADE
Arterial	8%
Major Collector	10%
Minor Collector	12%
Local	18%
Non-Residential Local	14%

L. VERTICAL ALIGNMENT

Vertical alignment must be designed in conjunction with the horizontal alignment. All changes in street profile grades having an algebraic difference greater than 1% shall be connected by a parabolic curve.

Minimum safe stopping sight distance is a direct function of the design speed of 25 mph in residential and 35 mph in local, non-residential, and commercial areas. A height of eye of 3½ feet and height of object of ½-foot is used to determine safe stopping sight distance. See Standard Detail 108.

The minimum length of vertical curve required for safe stopping sight distance shall be calculated using AASHTO “Policy on Geometric Design of Highways and Streets”, latest edition.

M. HORIZONTAL ALIGNMENT

HORIZONTAL CURVES

STREET CATEGORY	MINIMUM RADIUS (FT)	MAXIMUM SUPERELEVATION
Local	100	Normal Crown
Non-Residential Local	150	Normal Crown

As a traffic-calming feature, provide a maximum tangent length of 500 feet between slow points such as a curve with a centerline curvature radius between 300 feet and 100 feet. Where this cannot be accomplished, optional traffic calming features will be considered by the City of Austell Public Works Department on a case-by-case basis. Consideration for shape of property, topography, and environmental features will be accepted.

A minimum tangent is required between reverse curves to facilitate steering and control. Between reverse horizontal curves there shall be not less than the minimum centerline tangents shown in the following table. Compound radii curves are prohibited, except local residential streets.

TANGENTS

STREET CATEGORY	MINIMUM TANGENT LENGTH
Local	50 Feet
Minor and Major Collector	100 Feet
Non-Residential Local	75 Feet

N. PAVEMENT SPECIFICATIONS

MINIMUM CONSTRUCTION STANDARDS

STREET CATEGORY	BASE	BINDER	TOPPING
Local	6” GAB	1½” B	1½” E

**** NOTE:** Unless otherwise specified by the City of Austell Public Works Department or the Georgia Department of Transportation.

- Pavement of sections of existing roads of less than 4' in width shall have a minimum of 6" Class "B" concrete base and 1" asphaltic topping.
- For non-residential local streets and industrial park developments the pavement section, shall be 10" of GAB, 4" of asphaltic base, 2" of binder, 1½" type "E" topping, and bituminous tack coat applied per Georgia Department of Transportation specifications.
- Engineers can submit alternate pavement designs.

O. CURBS AND GUTTERS

All new streets or street widening sections shall be provided with curb and gutter except where noted otherwise within these regulations or where not required per zoning, where ditches may be provided in lieu of curbing. All gutters shall drain positively with no areas of ponding.

1. Curbing

- a. Concrete shall be Class "A" (as defined by Georgia Department of Transportation) and have a minimum strength of 3,000 psi at 28 days. Typical minimum section (residential subdivision only) shall be six inch by 24 inch by 12 inch for vertical curb (see Standard Detail 106) unless otherwise specified by the City of Austell Public Works Department or the Georgia Department of Transportation. A six inch by thirty inch by twelve inch section may be required on non-residential local and collector roads.
- b. One half inch expansion joints or pre-molded bituminous expansion joint material shall be provided at all structures and radius points and at intervals not to exceed 250 feet in the remainder of the curb and gutter as shown on Standard Detail 106.
- c. When the development ties into existing curbing, the curb and gutter shall match the existing width.

2. Minimum Grades

- a. Curb and gutter shall be set true to line and the grade of the street, horizontally field staked, and finished to the section shown on the plans. Along the widening section of a road, which the City of Austell Public Works Department has identified for resurfacing within one year of the construction, the grade of the new gutter shall be placed one inch above the widening pavement grade in areas where drainage will not be adversely affected.
- b. Line and grade shall be set by developers' engineer or surveyor.

3. Other Requirements

Inferior workmanship or unprofessional construction methods resulting in unacceptable curb and gutter will be cause for rejection of the finished work. Disturbed areas along all curbing shall be back-filled, stabilized, and grassed.

P. SUBGRADE PREPARATION

Subgrade preparation on all non-local streets shall be in accordance with Georgia Department of Transportation specifications and these regulations. Subgrade preparation for local streets shall meet and pass proof roll testing.

If any section of the subgrade is composed of topsoil, organic, or other unsuitable or unstable material, such material shall be removed and replaced with suitable material and then thoroughly compacted as specified for fill, or stabilized with stone or a geo-textile or geo-grid.

Fill shall be placed in uniform, horizontal layers not more than eight inches thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 95% of maximum dry density except for the top twelve inches, which shall be compacted to 100% of maximum dry density.

After the earthwork has been completed, all storm drainage, water, and sanitary sewer utilities have been installed within the right-of-way as appropriate, and the back-fill in all such ditches thoroughly compacted, the subgrade shall be brought to the lines, grades, and typical roadway section shown on the plans.

Utility trenches cut in the subgrade shall be back-filled as specified herein. Compaction tests at the rate of one per 150 feet of trench shall be provided to verify compaction.

The subgrade must pass proof roll testing regardless of compaction test prior to placement of the base material. With the approval of the City of Austell Public Works Department, a geo-textile or grid may be used to stabilize a subgrade that does not pass proof-rolling. Provisions shall be made to drain low points in the road construction when the final paving is delayed. A break in the berm section is required when the curbing has not been constructed. After installation, drainage under the curb is required.

Q. SIGNING AND STRIPING

Traffic control devices (signs and pavement markings) are normally provided by the City of Austell Public Works Department on local residential streets. On major thoroughfares and for non-residential development, signs and pavement markings are to be provided by the developer. For standard marking and raised pavement marker installations, contact the City of Austell Public Works Department. The traffic control devices must comply with the MUTCD, latest edition, and be approved by the City of Austell Public Works Department. No traffic control devices shall be installed without prior approval by the City of Austell Public Works Department.

R. STREET LIGHTS

Street lights shall be provided by the developers of all new subdivisions or other developers utilizing roads or any combination, unless waived by the Mayor and City Council. The applicable power company will design a lighting layout and submit it to the City of Austell Public Works Department for approval. Upon approval, the developer will pay the power company for all costs associated with the installation. Building permits and water meters will not be issued until this requirement is satisfied.

S. STREET NAMES AND ADDRESSES

1. Street Addressing

Austell Fire and Emergency Services has the responsibility of maintaining the street addressing system throughout City and coordinates with the United States Postal Service. The goal is to ensure that addresses are assigned and properly maintained in a logical, sequential order for the purposes of locating property anywhere in the City. An accurate addressing system facilitates quicker response times for emergency services, and provides efficient mail delivery. Correct property identification is also necessary for locating utilities. Street numbers and addresses shall be assigned, changed, and/or corrected where deemed necessary to assure the health, safety, and welfare of all City of Austell residents and property owners. Street names must be verified by Austell Fire and Emergency Services before a preliminary subdivision plat can be approved. Street numbers shall be posted and maintained in a prominent place on the property (for example, building façade, mail box, signage, etc.), which is visible from the street providing public access. The numbers shall be posted in the following manner:

- a. For residential properties, in figures at least one inch high with a contrasting background; and
- b. For commercial properties, in figures at least two inches high with a contrasting background.

2. Street Numbering Procedures

All property address numbers are assigned by Austell Fire and Emergency Services.

Typically, a property located on the right side of a street is given an even number as numbers increase. Conversely, a property located on the left side of the street is given an odd number as numbers increase. Numbers are always referenced from the address grid base lines. Generally, address numbers will increase sequentially as they move away from the zero point.

3. Street Naming and Selection Procedures

All street names are subject to the approval of Austell Fire and Emergency Services. The following guidelines are used when assigning street names:

- a. Proposed streets that are obviously in alignment with other existing, named streets shall bear the names of such existing streets. Once a name is assigned to any alignment, it may not change anywhere along the extension of that alignment.
- b. A street name combination (primary name/type/suffix) may be used only once and may not be used in any other alignment.
- c. Except within the same project, no proposed street name shall duplicate an existing street name within the City of Austell regardless of the use of any type such as “Avenue”, “Boulevard”, “Court”, “Drive”, “Place”, “Street”, “Way”, or other designation.
- d. All streets shall bear the proper quadrant suffix (for example, NE, NW, SE, SW).
- e. Proposed new names shall be reviewed for correct usage and reasonable meanings consistent with the language used. Such review shall also include correct spelling.
- f. Street names shall not include directional words such as north, south, east or west, or the words “old” or “new”.
- g. A street name should be pleasant sounding, appropriate and easy to read so that the public and children, in particular, can communicate the name in an emergency situation.
- h. Street names tending to be confused as homonyms (similar names spelled differently) are not acceptable.
- i. Names derived from a foreign language are unacceptable.
- j. Names that tend to be slurred, or have pronunciations that run together are unacceptable.
- k. Street names with the same theme (for example, flowers, states, etc.) are suggested for naming streets in an entire subdivision, as means of general identification, rather than duplicating the conventional name differentiated only by the street type (suffix).

4. Addressing For Commercial Properties

- a. A current “Full Site” Land Disturbance Permit (Land Disturbance Permit) for the parcel proposed for development must be issued by the City of Austell Public Works Department. This is required before a request for a street address will be processed. An approved copy of the site plans for the project must be presented at the time of application, or the Land Disturbance Permit number must be made available for reference.

- b. A field check of the property may be necessary if a proper address cannot be established.
- c. Property is typically identified by legal description (for example, land district, land lot and parcel location). The site plans for a project are examined, the property is located on the tax map, and the correct address number range is established. A Street number conforming to sequential order established by the grid system is selected. If the number has not been duplicated anywhere in the City, an official property address is issued to the parcel.

5. Addressing For Residential Properties

For new residential subdivision, street names are determined during the preliminary plat review and approval process. Names are only approved if the street name, including street type (suffix) is unique within the City.

For a single family residential property located outside of a subdivision, the following process will apply:

- a. A site plan based on a recent survey must be provided. The tract must be a legal “lot of record” as recorded by plat in the Office of the Clerk of Superior Court.
- b. The site plan must be approved by the City of Austell Public Works Department for applicable zoning requirements.
- c. The driveway location for the property must be approved by the City of Austell Public Works Department for access onto a minor, major, or arterial road.
- d. Since this type of tract is not typically a candidate for a Land Disturbance Permit and does not come through the formal plan review process, it must be reviewed individually on a case-by-case basis. Each property is unique and may be subject to further review and requirements (for example, City or state stream buffers, floodplain areas, variance stipulations, septic, or sewer approvals, etc.)
- e. A field check of the property may be necessary to ensure that the new street address is in sequence. When appropriate number is determined, an official property address notice is issued.

T. MAJOR THOROUGHFARES

1. Process

- a. Roadways, streets, or highways to be classified as arterials, major collectors, or minor collectors shall conform to this section. Also, new roadways that the City determines to be classified as major thoroughfares shall conform to this section. All roadways proposed for industrial use shall conform to this section.

- b. Because major thoroughfares carry a higher volume of traffic and a higher rate of speed than the lower classified roadways, the planning, design, and construction of these roadways must conform to higher standards.
- c. The plan review process shall be as follows:
 - Concept Plan and Traffic Study
 - Preliminary Engineering
 - Right-of-Way Plans
 - Final Construction Plans (including pavement design)
- d. Plans shall conform to all applicable City of Austell codes and the AASHTO Policy on Geometric Design of Highways and Streets, and the Georgia Department of Transportation Standard Specifications for Construction of Roads and Bridges, latest edition. The design shall utilize the Georgia Department of Transportation construction standards and details.
- e. If the City is to fund, participate, or otherwise share the cost of any part of the construction of the roadway or related infrastructure, the design services must conform to Austell's standard Consultant Services Agreement, latest revision.
- f. If the City is to administer the construction contract (bid the project) the plans shall be prepared in accordance with all applicable City of Austell Codes and all other related documents, latest edition(s).

2. Specifications

Specifications and design criteria stated herein are for planning purposes. Design exceptions will be considered on a case-by-case basis and it is the responsibility of the developer and his engineer to identify the exceptions in the concept and preliminary design stages. Exceptions/variances will be subject to approval by the City of Austell Public Works Department.

3. Right-of-Way

MINIMUM RIGHT-OF-WAY PER ROADWAY CLASSIFICATION

FUNCTIONAL CLASSIFICATION	RIGHT-OF-WAY, TOTAL WIDTH
Arterial - 5 lane	100'
Arterial - 4 lane divided	100'
Major Collector	80'
Minor Collector	60'

- a. Additional right-of-way width may be required to be dedicated at intersections or other locations where turning lanes, medians, traffic signal poles and controllers, or other improvements are required and the minimum right-of-way standard would be inadequate to accommodate the improvements.
- b. For existing roadways being improved or modified where the proposed centerline of the pavement to right-of-way is less than one half the width shown herein, the additional width will be required for all property fronting the roadway.
- c. Right-of-way miters are required at all intersections and are dependent on the size of the intersection curb radii.
- d. Permanent and temporary easements will be required and shall conform to the all applicable sections of the City of Austell's Code of Ordinances.
- e. Deeding of right-of-way is covered in project acceptance in the Administrative procedures of this document.

4. Roadway/Lane Width

- a. Roadway widths, curb, and gutter dimensions are based on the Functional Classification of the Roadway. Lane widths for non-residential roads shall be twelve feet unless otherwise approved by the City of Austell Public Works Department.
- b. If any part of the roadway improvements is within the limits of the Georgia Department of Transportation jurisdiction, the lane widths shall comply with the State's requirements.
- c. For right-of-way and lane width requirements for multi-lane urban section streets, see Standard Details.

5. Intersection Design

- a. Angle of intersection
 - Intersections for new roadways shall not be at an interior angle less than 85° unless the intersection is otherwise warranted and approved for a stop-and-go traffic signal in which case the minimum angle shall be 80°.
 - Intersections of existing roadways shall be reviewed on a case-by-case basis using AASHTO, latest edition guidelines.
- b. Intersection Radii
 - Intersections radii for new roadways shall be: 35' for Minor Collectors; 40' for Major Collectors; 50' for Arterials

- Larger radii will be required if channelized right turn lanes are proposed.
- Larger radii will be required if the intersecting angle of the roadways is less than 85°.

c. Traffic Studies

- Intersections on thoroughfares with another roadway classified as a major thoroughfare shall require a traffic study utilizing Highway Capacity Software and the MUTCD, latest editions, signal warrants. Additional intersections may require a traffic study.

6. Maximum Grades and Superelevation

FUNCTIONAL CLASSIFICATION	SUPERELEVATION (emax)		MAXIMUM GRADE
	URBAN	RURAL	
Arterial	.04	.06	8%
Major Collector	.04	.06	10%
Minor Collector	.04	.06	12%

7. Pavement Sections

(Per Georgia Department of Transportation Specifications)

FUNCTIONAL CLASSIFICATION	STONE BASE	ASPHALT BASE	BINDER	TOPPING E OR F
Arterial or Collectors	10" GAB	4" A. C.	2" B	1 ½"

* Additional structural pavement section may be required.

8. Bikeways

Bikeway paths should be considered and incorporated into the concept stage of the plan preparation. If bikeways are to be provided, three to four feet of additional pavement width on both sides of the roadway will be required. Additional right-of-way may be required. Residential subdivisions shall be excluded.

9. Non-Motorized Accommodation

The City of Austell encourages non-motorized accommodation (for example, bicycle, pedestrians, etc.).

U. GENERAL ACCESS

Driveways provide access to property and are a service to the traveling public. However, vehicles entering or leaving driveways may disrupt the flow of traffic on streets and cause accidents, thereby infringing on the rights of the public to travel the roadway. All driveways should be restricted to locations where movements into and out of them can occur in a safe and orderly manner.

Because of their simple appearance, driveways often do not receive sufficient design consideration. At the least, driveways should always be designed to eliminate or minimize opposite lane encroachment while entering and exiting property.

All driveways are to be designed and constructed to provide turning radii for appropriate design vehicles sufficient to minimize adjacent lane encroachment. For commercial driveway requirements see Standard Detail 116.

All driveways are to be designed and constructed with sidewalk transitions as appropriate.

All driveways are to be considered low volume intersections and to comply with minimum Intersection/Corner Sight Distance requirements of these regulations.

Driveways with access from a roadway controlled by the Georgia Department of Transportation, plans must be submitted to the District office for approval. Upon approval, a copy of the permit must be submitted to the City of Austell Public Works Department.

V. ACCESS FROM THOROUGHFARE STREETS

In order to provide ease and convenience in ingress/egress to private property and the maximum safety with the least interference to the traffic flow on thoroughfares, there shall be the minimum number of access points to adequately serve the development. The number and location of driveways shall be regulated and limited when interparcel access is available and feasible given existing topographic conditions and cooperation of adjoining property owners.

When property frontage is less than 200 feet, one driveway shall be allowed for approval. Additional entrances/exits for property having street frontage in excess of 200 feet may be considered by the City of Austell Public Works Department upon a showing that interparcel access, as encouraged in Section C3 of these standards is not feasible. Applicant must also demonstrate that such additional entrances/exits are needed and would not increase traffic congestion or otherwise reduce the safety and convenience of the traveling public.

To allow for proper corner clearance, the minimum tangent curb length between a driveway radius and an intersection shall be 100 feet.

If the closest intersection is or is likely to be signalized, traffic movements to and from any driveway within 250 feet of an intersection with (as measured from the point of tangency) a collector or an arterial shall be limited to right turns only.

W. ACCESS LIMITATIONS FOR DEVELOPMENT ADJACENT TO THOROUGHFARES

All access points and driveways adjacent to thoroughfares may be subject to further restriction and consideration as may be deemed necessary by the Georgia Department of Transportation and/or the City of Austell Public Works Department to insure safe, functional design and efficient operation of the thoroughfares. Interparcel access easements between adjacent, non-residential properties that access county thoroughfares shall be encouraged. Controlling access and establishing interparcel access easements is desirable for providing safe and efficient movement of traffic, both vehicular and pedestrian, as well as encouraging efficient development plans that enable occupants and clients to fulfill their daily activities through minimal use of vehicles, and through increased use of alternative transportation modes such as public transit, walking and bicycling.

For non-residential developments, improvements to provide a separate left-turn lane shall be considered on a case-by-case basis. Non-residential developments that are adjacent to one another and contain existing or planned exterior property line grades/elevations that are not encumbered by permanent structures and do not differ by more than a manageable vertical separation and where connectivity is mutually agreed to by the connecting property owners, shall be encouraged to provide for and construct (within an agreed upon time frame) interparcel access drives as may be accomplished through a reservation of access, a recorded cross-access easement, establishment of a master condominium or any other legal instrument that would accomplish the same. In order to facilitate an agreement between the contiguous property owners, applicants may request administrative variances when the implementation of these interparcel access connections necessitates design changes in conflict with the zoning ordinance and other development codes and regulations. Administrative variance requests will be considered by the City of Austell Public Works Department except that the variance may equal up to 100 percent of the existing requirements. The use of administrative variances for the implementation of interparcel access drives shall not allow for an increased development density above that permitted by the underlying zoning. Any administrative variance for the implementation of interparcel access drives shall be reported to the City of Austell Mayor and City Council. Applicants (or affected adjacent property owners) may also request permission to erect offsite, directional signage to facilitate eliminating an existing access or establishing an interparcel access connection. Any offsite directional signage must be approved by the City of Austell Mayor and City Council via an agenda item.

A maximum number of 200 residential dwelling units shall be allowed one street outlet on an existing public street. If a second access to an existing public road is not available or, in the opinion of the City of Austell Public Works Department, would encourage non-residential traffic to traverse the development, a single entrance may be allowed if designed with sufficient right-of-way and improvements to provide a protected left-turn lane, subject to the approval of the City of Austell Department of Public Works.

Access to all residential lots shall be from interior subdivision streets or roads where possible. Exceptions are subject to approval from the City of Austell Public Works Department. Subdivisions of three or less lots may be exempted upon approval by the City of Austell Public Works with proper consideration of safety, hydrological, and environmental concerns.

No catch basins will be allowed within access/driveway radii (turning radii).

X. SERVICE DRIVES

Where a development borders on or contains a limited access roadway right-of-way, or arterial road right-of-way, Georgia Department of Transportation and/or the City of Austell Public Works Department may require a service drive or suitable provisions for future service drives approximately parallel to and on each side of such right-of-way, at a distance suitable for the appropriate use of the intervening land. Distances involving rights-of-way shall also be determined with due regard for the requirements of approach grades and future grade separations.

All driveways along designated thoroughfares with existing or planned service roads shall access to such service roads. To gain temporary direct access to the thoroughfare, the developer shall construct the section of the service road adjacent to the development. The service road section shall be located where planned. Any right-of-way not previously dedicated shall be dedicated prior to consideration of a temporary driveway approval providing direct access to the thoroughfare.

Y. MEDIAN OPENINGS

1. Location

Unless the Mayor and City Council or other jurisdictional authority has established a more restrictive policy, no median opening shall be spaced at a distance less than 660 feet from any other median opening (measured from nose to nose) unless specifically approved by the City of Austell Public Works Department on a finding that, given the particular conditions of the proposed development, such determination will not compromise traffic operational and safety standards.

2. Design Criteria

All median openings shall include at least 200 feet storage with 100 foot transition unless otherwise acceptable to the City of Austell Public Works Department based on a traffic study. Increased storage and transition lengths may be required to eliminate disruption of through-traffic flow.

Z. BUILDING SETBACKS ADJACENT TO THOROUGHFARES

Any building constructed along a thoroughfare shall have a minimum setback from the required right-of-way as required by the Zoning Ordinance, and as amended from time to time.

AA.RESIDENTIAL DRIVEWAY STANDARDS

1. Residential Driveways

- a. Residential driveways provide a primary means of access to single-family residential uses.
- b. Along collector and arterial roadways, residential driveways are to be designed and constructed to the following standards. Georgia Department of Transportation Standard 6050 may be substituted, if prior approval is made by the City of Austell Public Works Department.
 - Width: Minimum 12'; Maximum 24' on right-of-way
 - Radii or flare: Minimum 5'
 - Spacing from street intersection: Minimum 50'
 - Angle of intersection with street/roadway: Approximately right angled 80° to 100°
 - Corner/intersection sight distance: To comply with corner/intersection sight distance requirements of roadway intersected with the driveway as per these regulations.
 - Landing grade: Compatible with shoulder grade
 - Length: A minimum of 25' or to the edge of the County or State right-of-way, whichever is greater, shall be paved with a treated hardened surface.
 - Rural residential driveways may be constructed with an asphalt pavement section, if approved by the City of Austell Public Works Department.

2. Driveway Drainage Pipes

- a. A residential driveway constructed at a location along a rural roadway has or should have a ditch along the roadside for the purpose of collecting, channeling, and controlling storm water runoff. In addition to the design and construction requirements, rural residential driveways shall be constructed with culverts to conduct storm water underneath the driveway and shall be:
 - Concrete, corrugated metal pipe, or other type of culvert approved by the City of Austell Public Works Department;
 - Sized to accommodate the 10-year storm, as a minimum;
 - Provided with flare-end sections at the inlet and outlet;

- Of sufficient length to accommodate a minimum of 2-foot shoulders at each end of the driveway with a maximum side slope of 2:1 to the bottom of the ditch line; and,
- Installed in a ditch of minimum 2-foot wide flat bottom with sides sloped at a grade no greater than 2:1 stabilized with acceptable vegetation.

AA. NON-RESIDENTIAL DRIVEWAY STANDARDS

- a. Driveways servicing developments shall provide uninterrupted ingress/egress to and from the site.
- b. The minimum distance required is measured from the street right-of-way line at the ingress/egress to the outer edge of any interior service drive or parking space with direct access to such driveway as measured perpendicularly from the street. The length of the uninterrupted ingress/egress is determined by the maximum peak hour volume of the facility in which the driveway is provided and as shown in the table below. The developer shall provide this information.
- c. Non-residential driveways shall not be designed or marked to allow more than one lane of traffic to exit onto a street simultaneously, unless such driveway is channelized in accordance with traffic engineering design principles as applicable when designing channelized street intersections.

MAXIMUM PEAK HOUR VOLUME	UNINTERRUPTED INGRESS/EGRESS
Up To 50 Vehicles	25'
50 to 200 Vehicles	50'
200 Vehicles and Up	100'

- d. As may be requested, left-turn driveway lanes shall be a minimum of 12 feet wide and provide a minimum 150 feet of storage with a 100 foot transition.
- e. Non-Residential driveways are to be constructed to the following standards:
 - Width: Minimum 24' two way access
 - Maximum 32' two way access Minimum 14' one way access Maximum 18' one way access
 - Radii: Minimum 30' Maximum 50'
 - Spacing from street intersection: Minimum one hundred (100') feet tangent
 - Composition: Shall meet or exceed the same specification as the connecting public roadway

- Drainage: Consistent with existing drainage plan of the connecting public roadway unless other improvements are required for safety, hydrological and environmental considerations
- Angle of intersection with roadway: Approximately right angled 80° to 100°
- Corner/intersection sight distance: To comply with corner/intersection sight distance requirements of roadway intersected with the driveway as per these regulations
- Landing grade: $\pm 2\%$ of intersecting roadway within the right-of-way
- Driveway designs other than as provided within these regulations, for example, median divided or additional lanes, are subject to consideration of the Georgia Department of Transportation and/or the City of Austell Public Works Department.

BB. ACCELERATION/DECELERATION LANE AND ROADWAY IMPROVEMENTS ALONG EXISTING STREETS

The City of Austell Public Works Department may require a deceleration and/or acceleration lane for all developments. Requirements for constructing the lane(s), that will be evaluated by the City of Austell Public Works Department, include (but are not limited to) sight distance, posted speed limit, classification of the existing street, volumes on the existing street, volumes to be generated by the development, vertical curvature, horizontal curvature, length of property road frontage, hydrological, and environmental concerns. During the evaluation of the development's entrance, additional improvements, such as tapers, left turn lanes, by pass lanes, median modification, or other facilities, may be required to enhance safety and operations. The developer should contact the City of Austell Public Works Department at the earliest possible time to request the evaluation so that the appropriate construction plans are prepared and submitted through the plan review process.

CC. Left Turn Lane Design Guidelines

The City of Austell Public Works Department may require a left turn lane for residential and commercial developments on two-lane thoroughfare roads. Requirements for constructing the lanes will be based on roadway classification, posted speed limit of the thoroughfare road, and the size of the development. The design guidelines are generally as follows:

- 35 mph Speed Limit Development size Minimum lane design
- 30 to 45 lots 75 foot storage with 50 foot bay taper*
- 50 to 75 lots 100 foot storage with 50 foot bay taper*
- Over 75 lots 150 foot storage with 50 foot bay taper*
- 45 mph Speed Limit 30 to 45 lots 75 foot storage with 100 foot bay taper*

- 50 to 75 lots 100 foot storage with 100 foot bay taper*
- Over 75 lots 150 foot storage with 100 foot bay taper*

This design does not include the lane transitional taper that may be required. Commercial developments of 10,000 square feet or greater will be reviewed on a case-by-case basis for left turn lane requirements.

- * The taper length can be incorporated into the required length of the transitional taper as defined in the AASHTO Green Book or the Manual on Uniform Traffic Control Devices (MUTCD). Thoroughfare roads having a 30 mph speed limit will be considered on a site specific basis.

Design considerations may be given for significant and unique topography and utility conflicts. Other considerations may be granted on a case-by-case basis.

DD. GENERAL DESIGN REQUIREMENTS FOR OFF-STREET PARKING FACILITIES

1. Street Access

Each building shall be located on a lot or parcel, which abuts a public street for at least 50 feet. Access to a public street by means of a recorded access easement may be permitted if approved by the City of Austell Board of Zoning Appeals or the City of Austell Mayor and City Council.

2. Street Access - Curb Cuts in Other than “R” Districts

Curb cuts for service drives, entrances, exits, and other similar facilities on public streets in other than “R” districts shall not be located within one hundred (100’) feet of any intersection or within 40 feet of another curb cut. A curb cut shall be no greater than 40 feet in width and no closer than 20 feet to any property line.

3. Georgia Department of Transportation Approval

All entrances or exits of any street or drive, public or private, from or to any State highway shall be approved by the Georgia Department of Transportation prior to the construction of such street or drive, or the issuance of any development permit for any improvement to be served by such street or drive, but permit approval shall not be held longer than 30 days.

4. Corner Visibility Clearance

In any district no fence, structure sign, planting, or other obstruction (above a height of three feet) shall be maintained within 15 feet of the intersection of the right-of-way lines extended of two streets or of a street intersection with a railroad right-of-way.

5. Off-Street Automobile Parking

Off-street automobile parking shall be provided in accordance with all applicable provisions of this section.

6. Design Standards

- a. All parking facilities, including entrances, exits, and maneuvering areas shall comply with the following provisions:
 - Shall have access to a public street
 - Shall be graded and paved, including access drive(s), and be curbed when needed for effective drainage control
 - Shall have all spaces marked with paint lines, curbstones, or other similar designations
 - Each space set at a 90° angle shall have not less than 162 square feet and shall not be less than 8 feet 6 inches wide and 19 feet deep, exclusive of passageways, which shall be not less than 24 feet wide
 - Each space set at a 60° angle shall have not less than 176 square feet and shall be not less than 8 feet 6 inches wide and 20 feet 8 inches deep, exclusive of passageways, which shall be not less than 18 feet 6 inches wide; Each space set at a 45° angle shall have not less than 165 square feet and shall be not less than 8 feet 6 inches wide and 19 feet 5 inches deep, exclusive of passageways, which shall be not less than 13 feet 6 inches wide
 - There shall be adequate interior drives to connect each space with a public street
 - Shall be drained to prevent damage to abutting properties or public streets
 - Adequate lighting shall be provided if the facilities are to be used at night. Such lighting shall be arranged and installed not to reflect or cause any glare on abutting properties or roadways and shall be subject to the lighting requirements in Section LL, Standards for Lighting.
 - Any parking areas within the required front yard of any RM or office district shall not be closer than ten feet to any public right-of-way
 - No parking or loading area shall be established in the required front yard of any “R” District except for a single-family residential use; no more than 35% of the required front yard may be used for parking and total impervious surface in such case

- b. The provisions above shall not apply to single-family residential uses where three or less spaces are required, except that it shall have access to a public street.

7. Location

- a. All parking facilities shall be located in accordance with the following provisions:

- The required space shall be provided on the same plot with the use it serves, except as provided herein
- If vehicular parking or storage space required cannot be reasonably provided on the same lot on which the principal use is conducted, the City of Austell Board of Zoning Appeals may permit such space to be provided on other off-street property provided such space lies within 400 feet of the main entrance to such principal use. Such vehicular parking space shall be associated with the permitted use and shall not hereafter be reduced or encroached upon in any manner; and the required parking space for any number of separate uses may be combined in one lot, but the required space assigned to one use may not be assigned to another use at the same time, except that one-half of the parking space required for churches, theaters, or assembly halls whose peak attendance will be at night or on Sunday may be assigned to a use which will be closed at nights or on Sundays.

8. Location and Surface of Parking Areas

The parking of any vehicle on any lot in any district on other than a surface treated and hardened to accommodate such vehicle is prohibited except as provided herein. In addition, parking of vehicles in the front yard or in front of the principal building line in an “R” District shall be prohibited except on a hard-surfaced driveway or in a carport or garage.

9. Required Spaces

The number of parking spaces or area required for a particular use can be located in the City of Austell Zoning Ordinance, as may be amended from time to time.

EE. FUNCTIONAL ELEMENTS OF ON-SITE CIRCULATION SYSTEM

An on-site circulation plan shall be prepared to provide uninterrupted ingress/egress in accordance with the Residential Driveways of this code.

FF. SIDEWALKS AND PATHWAYS

The City of Austell is actively pursuing the continuation of an integrated and multi-modal transportation system that promotes compliance with the federal Clean Air Act by emphasizing the need to create increased pedestrian travel opportunities by expanding the sidewalk network and developing a pathway program. Whenever possible, developers will be encouraged to construct sidewalk along the right-of-way abutting their developments. The pathway program takes pedestrian access one step further by providing safe, convenient access to activity centers such as schools, park, and shopping centers in an effort to encourage pedestrian and non-motorized vehicular travel. The county will support and encourage a viable network of off-street travel routes that can reduce the need for and volume of vehicular traffic throughout the county.

GG. GENERAL SIDEWALK REQUIREMENTS

- a. When a subdivision project abuts a public right-of-way, sidewalks shall be required for a length equal to the distance of the required road improvements along the road frontage. Sidewalks will be required to be constructed on both sides of the road (if development abuts both sides of the road) when the road is classified as an arterial, major collector, or minor collector roadway by the Thoroughfare Plan. Sidewalks shall be constructed on all remaining streets that qualify for such requirements under the Sidewalk Ordinance. Sidewalk location and orientation may be altered under site-specific conditions at the discretion of the City of Austell Public Works Department.
- b. Amenity areas must be accessible by sidewalks from the nearest sidewalk in the subdivision. All sidewalks must be installed prior to the acceptance of the subdivision by the City of Austell unless a performance security or letter of intent is in place at the time of acceptance.
- c. Sidewalks will not be required in subdivisions zoned to an R-80 classification or approved for a rural road classification and will be considered exempt.
- d. Sidewalks will be constructed to the specification as shown on Standard Detail 113 and located a minimum of three feet back of the curb. Sidewalk location can be varied at the discretion of the City of Austell Public Works Department with prior approval.
- e. Sidewalks shall have a minimum width of four (4) feet for interior residential streets, five (5) feet for exterior and non-residential or as required by ADA or the Georgia Accessibility Code.
- f. The concrete shall have a compressive strength of 3,000 pounds per square inch at 28 days and a minimum depth of four inches.
- g. Builders are required to install sidewalks prior to acceptance by the City of Austell.

HH. GENERAL PATHWAY REQUIREMENTS

- a. When a subdivision project includes a creek with associated floodplain, the City of Austell Public Works Department requires the developer convey a twenty foot section of floodplain along the creek as public right-of-way in an effort to develop a network of pathways along the creeks throughout the City of Austell. When a subdivision project includes multiple or long cul-de-sacs, developers are encouraged to convey a twenty foot permanent public access easement between lots; connecting cul-de-sacs to other cul-de-sacs, other subdivisions, and other existing pedestrian access facilities.
- b. The dedicated public right-of-way or permanent public access easement for the pathway will have a width of twenty feet.
- c. Pathways will be constructed to the specification as shown on Standard Detail 120, unless otherwise approved by the City of Austell Public Works Department.
- d. Pathways will not be required to connect right-of-way along which no pedestrian access exists or is planned.

II. ACCESSIBILITY REQUIREMENTS

Georgia law relating to the access to and use of facilities by persons with disabilities is set forth at O.C.G.A. Section 30-3-1, et. seq. The law “is intended to eliminate, insofar as possible, unnecessary physical barriers encountered by individuals with disabilities or other individuals, and whose use of government buildings and facilities by the public is restricted.”

Local governing authorities, including the City of Austell, are responsible for the administration and enforcement of the Code with regard to all government and public buildings and facilities which are not under the jurisdiction of the Safety Fire Commissioner or Board of Regents. O.C.G.A. Section 30-3-7.

JJ. ADOPTION & INCORPORATION BY REFERENCE OF STATE STATUTES.

1. State Statute (O.C.G.A. Section 30-3-1, et seq.)

The Georgia Accessibility Code, O.C.G.A. Section 30-3-1, et seq., is adopted and included, in its entirety, by reference, and made part of the City of Austell Design and Construction Standards. A brief overview is included below for ease of access. Copies of the Georgia law may be found in O.C.G.A.

2. Safety Fire Commissioner Rules and Regulations

The Rules and Regulations of the Georgia Safety Fire Commissioner, authorized pursuant to O.C.G.A. Section 30-3-7 (h) as may be amended from time to time, are also adopted and included in their entirety, by reference, and made part of the City of Austell Design and Construction Standards. An overview is included for ease of access.

KK. SUMMARY OF STATUTORY REQUIREMENTS

1. State Statutes: O.C.G.A. Section 30-3-1, et. seq.

Building Permit Requirements: Architect's Seal Pursuant to the Georgia Accessibility Statute, no building permit for buildings or facilities to be approved by the local governing authority may be approved unless the plans and specifications conform to the requirements of O.C.G.A. Sections 30-3-3 and 30-3-5 and unless the architect or engineer responsible for preparation of the plans and specifications affixes that person's seal such plans. The affixing of the seal of the architect to the plans constitutes a certification that to the best of that person's knowledge, information, and belief, they have been prepared in conformity with Sections 30-3-3 and 30-3-5. (See O.C.G.A. Section 30-3-7 (c))

2. Standards and Specifications

The standards and specifications for compliance as set forth in OCGA 30-3-3 and 30-3-5 are as follows:

- a. O.C.G.A. Section 30-3-3. This section provides that permits for construction or renovation of government buildings, public buildings and other facilities after July 1, 1995 may be approved only if the plans and specifications, at a minimum, comply with ADAAG standards (or more restrictive rules and regulations adopted by the Georgia Safety Fire Commissioner). The section further specifies standards and specifications for buildings permitted prior to July 1, 1995.
- b. O.C.G.A. Section 30-3-5. Specific amenities required to be provided. This section identifies specific amenities required to be provided to make buildings and facilities accessible to and usable by individuals with disabilities, including requirements for accessible parking spaces; accessible entrances; accessible toilet rooms, bathrooms, bathing facilities and shower rooms; and accessible seating, tables, and work surfaces in a reasonable number.
- c. Safety Fire Commissioner Rules and Regulations. Copies of the Fire Safety Rules and Regulations may be obtained from the State Safety Fire Commissioner's Office. A copy is on file in the City of Austell Public Works Department Office

LL. STANDARDS FOR LIGHTING

Lighting plan drawn to scale showing location of all proposed lights and nearby City/County roads. It is recommended that street lights are placed every third lot with two lights in the cul-de-sac. There shall not be any unlit areas.

- arrangement of all poles (with dimensions)
- height of all poles

- number of luminaries per pole
- mounting heights of luminaries
- wattage of proposed lights
- mounting angle of fixtures
- lamp source to be used
- Picture of the light to be utilized must be attached to the final plans. Care must be exercised to control any stray light that might trespass upon roadways.
- These are minimum requirements, based on the City of Austell's Street Lighting Ordinance or as amended from time to time. The City of Austell Public Works Department may require additional information or conditions prior to final approval.

JJ. TREE PRESERVATION AND REPLACEMENT STANDARDS

These standards have been established under the authority of the City of Austell Tree Preservation and Replacement Ordinance.

The Tree Preservation and Replacement Ordinance was enacted to provide standards for the preservation and/or replacement of trees as part of the land development and building construction process. The purpose is to make City of Austell a more attractive place to live, provide a healthy living environment, and better control stormwater runoff, noise, glare and soil erosion.

The intent of these standards is to provide the necessary information to facilitate development project design, plan review, and enforcement processes in order that the provisions of the ordinance are administered in the most effective, efficient and economical manner.

The terms and provisions of the Tree Preservation and Replacement Ordinance and these standards shall apply to any activity, private and/or governmental, on real property that requires the issuance of a land disturbance permit within the City of Austell.

No Land Disturbance Permit shall be issued for full site development by the Public Works Department without a determination that the proposed development is in compliance with the provisions of these regulations.

1. Definitions

Buffer: Water Quality Buffer: A designated area of adequate width to provide for protection of the streambank, channel soils and vegetative cover as determined by the Public Works Department, adjacent to any state waters, water courses, or drainage areas, in which no land disturbing activities shall be undertaken unless approved in the plan.

Such activities may include stream crossings for transportation routes or utilities construction; sewer and water line construction, and minor landscaping or channel improvement activities to stabilize critical areas. A Zoning Buffer is any area required to remain undisturbed or to be planted as a condition of zoning.

Basal Area: The cross-sectional area of a tree trunk at four and one-half feet above the ground or diameter breast-height (dbh) expressed herein in terms of “units” per acre.

Caliper: The standard for trunk measurements of nursery stock. Caliper of the trunk shall be taken at six inches above the ground for trees up to and including four-inch caliper size, and 12 inches above the ground for trees larger than four-inch caliper.

Commercial Development: Any development that is not a single-family residential subdivision.

Construction Permit: A permit issued by the City of Austell Public Works to allow the commencement of any clearing, grubbing and/or grading. This permit is issued only after a Land Disturbance Permit has been issued, and all erosion control and tree protection measures have been installed in accordance with the approved plan.

Critical Root Zone: The minimum area beneath a tree which must be left undisturbed in order to preserve a sufficient root mass to give a tree a reasonable chance for survival. The Critical Root Zone of any given tree shall be represented by a concentric circle with a radius equal to 12 times the diameter of the tree trunk.

Density Factor: A unit of measure used to prescribe the calculated tree coverage on a site.

Diameter: Diameter Breast-Height (DBH): The standard measure of tree size (for trees existing on a site). The tree trunk is measured at a height of four and one-half (4.5) feet above the ground. If a tree splits into multiple trunks below 4.5 feet, measure the trunk at its most narrow point beneath the split.

Director: Director of the Public Works Department or the successor to those duties, by whatever title designated, or the director’s designee.

Hardwood Tree: Any tree that is not coniferous (cone bearing). This definition is based on the colloquialism and does not necessarily reflect any true qualities of the tree.

High Value Forest: A forest composed of mature hardwood trees, or a stand of mature softwood trees that have a critical environmental function such as erosion control on steep slopes, screening or buffering. Only trees in good condition are considered elements of such a forest.

Land Disturbance Permit: The authorization necessary to begin land-disturbing activity. This permit is issued by the City of Austell Public Works.

Land Disturbing Activity: Any land change which may result in soil erosion from water or wind and the movement of sediments into the waters or onto land within the City of Austell, including but not limited to clearing, grubbing, stripping, dredging, grading, excavating, transporting and filling of land.

Overstory Tree: A tree of a species or variety thereof that, under normal forest conditions will compose the top layer or canopy of vegetation and generally will reach a mature height of greater than 40 feet.

Parking Bay: A set of contiguous parking spaces and the adjacent islands and peninsulas devoted to planting trees at either end or interior to said sets of parking spaces.

Protected Zone: All areas of the parcel required to remain in open space, and all designated buffers or tree save areas, or conditions of zoning approval.

Replacement Tree: A new tree planted on a site to meet minimum site density factor requirements (regardless of whether trees existed prior to any development).

Root Zone: The area adjacent to a planted tree in which roots can grow unimpeded.

Softwood Tree: Any coniferous (cone bearing) tree. This definition is based on the colloquialism, and does not necessarily reflect any true qualities of the tree.

Specimen Tree: Any tree which qualifies for special consideration for preservation due to its size, type and condition.

Street Yard: Any area of the site that abuts a public right-of-way (or improved access-way providing access to the interior of a development).

Subdivision: A single-family residential development.

Tree: Any living, self-supporting woody perennial plant which normally obtains a trunk diameter of at least two inches and a height of at least ten feet, and typically has one main stem or trunk and many branches.

Tree Save Area: All areas designated for the purpose of meeting tree density requirements, saving specimen trees, and/or preserving natural buffers.

Understory Tree: A tree of a species or variety thereof that, under normal forest conditions grows to maturity beneath overstory trees and will generally reach a mature height of less than 40 feet.

2. Density Requirements

The tree density required by the Tree Preservation and Replacement Ordinance may be achieved by counting existing trees to be preserved, planting new trees, or some combination of the two as represented by the formula: $SDF = EDF + RDF$ (see below). The tree density requirement must be met whether or not a site had trees prior to development.

- a. Site Density Factor - Site Density Factor (SDF) is the minimum tree density required to be maintained on a developed site (15 units per acre). The SDF is calculated by multiplying the number of site acres by 15. Determine the affected site acreage by starting with the area of the parcel(s) of land on which the project is located. Add the area of any off-site slope easements and subtract the area of any 100-year flood plain, wetland or utility easement.
- b. Existing Density Factor - Existing Density Factor (EDF) is the density of existing trees to be preserved on a site. Trees that exist in any 100-year flood plain, wetland or utility easements cannot be counted toward meeting tree density requirements, unless they are in an undisturbed buffer containing a restrictive covenant in favor of the City of Austell for conservation uses.

**TABLE A
DIAMETER SIZE TO UNIT VALUE
FOR EXISTING TREES TO BE PRESERVED**

SIZE CLASS	DIAMETER	UNIT VALUE
1	1 - 4 inches	0.1
2	5 - 8 inches	0.3
3	9 - 12 inches	0.6
4	13 - 16 inches	1.2
5	17 - 20 inches	1.9
6	21 - 24 inches	2.8
7	25 - 28 inches	3.8
8	29 - 32 inches	5.1
9	33 - 36 inches	6.5
10	37 - 40 inches	8.1

The unit value of any individual tree may be determined by using the formula: $(\text{Diameter})^2 \times .7854 \div 144$

The EDF is calculated by converting the size of individual trees to density factor units. See Table A above.

- c. Replacement Density Factor - Replacement Density Factor (RDF) is the density of new trees to be planted on a site. Calculate the RDF by subtracting the EDF from the SDF. The density factor credit for each size of replacement tree is shown in Tables B-1 through B-3.

Any number or combination of transplantable sized trees can be used as long as the total density factor units will equal or exceed the RDF and the species mix is acceptable to the City of Austell Public Works.

**TABLE B-1
CALIPER SIZE TO UNIT VALUE
FOR DECIDUOUS TREES NORMALLY SOLD
BY CALIPER SIZE**

CALIPER SIZE	UNIT VALUE
1 - 1½ inches	.4
2 - 2½ inches	.5
3 - 3½ inches	.6
4 - 4½ inches	.7
5 - 5½ inches	.9
6 - 6½ inches	1.0
7 - 7½ inches	1.2
8 - 8½ inches	1.3

**TABLE B-2
HEIGHT TO UNIT VALUE
DECIDUOUS TREES NOT NORMALLY
SOLD BY CALIPER SIZE**

HEIGHT	UNIT
6 - 8 feet	.4
10 -12 feet	.5
14 - 16 feet	.6
18 - 20 feet	.7
22 - 24 feet	.9

**TABLE B-3
HEIGHT TO UNIT VALUE
EVERGREEN TREES**

HEIGHT	UNIT
5 - 6 feet	.4
7 - 8 feet	.5
10 - 12 feet	.6
14 - 16 feet	.7
18 - 20 feet	.9

All evergreens other than pines must be a minimum of 5 to 6 feet height at the time of planting. Height rather than caliper size will determine the unit value of evergreens.

If a tree is specified on the plan to be of a size that falls between two size classifications, the lower number will determine the unit value to be assigned. For example:

Willow Oak 3½ - 4 inches .6 unit
River Birch 12 - 14 feet .5 unit
Southern Magnolia 6 - 7 feet .4 unit

3. Unique Density Requirements

a. Subdivision Developments

Every lot in a subdivision shall have a minimum of two units of trees. These trees can be counted as part of the required 15 units per acre, but in no event shall any residential lot have less than 2 units of trees. If trees must be planted on any lot these trees must be a minimum of two (2) inches in caliper, and at least one of the trees must be a minimum of three (3) inches in caliper and planted in the front setback area. This requirement shall apply to the developer or homebuilder, whoever is responsible for obtaining the certificate of occupancy for the individual lot.

The city shall require that improvements be located so as to result in minimal disturbance to the natural topography of the lots and the protection of the maximum number of mature trees on the lot. It is the specific intent of this section to require that damage to mature trees located within setback and required yard areas be minimized to the greatest degree possible under the particular circumstances, as determined by county staff. If a reasonable option has been considered or presented to the county which would preserve the maximum amount of forest cover if not for conflicting with other regulations established by the city code or the city's development standards, the Public Works Director or his/her designee may issue an administrative variance in accordance with the City of Austell Tree Preservation and Replacement Ordinance.

Subdivision developments proposed in areas that are primarily pastureland may meet Tree Ordinance requirements in one of the following ways:

- Plant trees at 15 units per acre based on the area of the subdivision infrastructure (road rights-of-way, utility easements and drainage structures); or,
- Preserve and/or plant trees at 15 units per acre based on the area of the entire subdivision.

Tree preservation areas for subdivisions should all be in common areas, or in buffers required to be undisturbed by zoning or other regulations. If tree preservation areas must be on individual lots, the lots must be of sufficient size to reasonably expect the trees to be preserved at the completion of the building process.

b. Commercial Developments

A sufficient number of trees must be planted in interior portions of parking lots to achieve a ratio of one tree per 1,140 square feet of parking bay area. In addition, every parking space must be within 50 feet of the trunk of a tree to assure uniform distribution of trees throughout the parking area.

Any redevelopment project that results in the removal and replacement of 25 percent or more of an existing parking lot (other than routine maintenance of the parking surface) must retrofit the entire parking lot to meet the tree-planting standard in the previous paragraph.

All street yards shall be planted with one tree for each thirty-five (35) linear feet exclusive of driveways, access ways and sight distance triangles. Trees planted to meet the parking lot and street yard requirements must meet or exceed the minimum standards specified in Section 416.04.

Parking lot or street yard trees can be counted as part of the required 15 units per acre, but they may be an additional requirement if the 15-unit per acre requirement is met elsewhere on the site.

c. Out Parcels to Shopping Centers

These shall meet all Tree Ordinance density requirements separate from the overall shopping center.

d. Subdivision Amenity / Recreation Areas

These shall meet all Tree Ordinance density requirements separate from the overall subdivision.

e. Clearing Only Permits

See The City of Austell Development Standards and Specifications.

f. Grading Only Permits

Grading projects for which no full site plans have been submitted for review by City of Austell staff are subject to the same buffer requirements as clearing operations. The grading plan shall conform to the review requirements listed in the City of Austell's Development Standards and Specifications (Borrow/Fill Permit). An estimated completion date must be noted on the plan.

Buffer areas that must be landscaped shall be planted at the completion of the grading project or postponed to an appropriate planting season provided that appropriate performance security arrangements are made. Planted buffers are subject to maintenance inspection procedures.

Compliance with tree ordinance requirements for speculative grading may be postponed for up to six (6) months provided that appropriate performance security arrangements are made.

g. Additions to Existing Projects

For additions to existing projects, the 15 units per acre density requirement may be met in one of the following ways:

- Calculate the area of any new land disturbance and/or improvements and add replacement trees based on that area (existing trees elsewhere on the site may not be counted with this option); or,
- Base density requirements on the total site area and count any existing trees on the site (subject to all restrictions noted elsewhere in these standards).

h. Phased Projects

Where development will occur in increments, density calculations may be based on a site area defined by an established or estimated phase line or construction limit line. Existing trees to be counted toward meeting the density requirements must be within the phase line or limits of construction.

3. **Tree Preservation Standards**

The following section establishes standards by which plans and field conditions are to be evaluated to determine compliance with the tree preservation intent of the City of Austell Tree Preservation and Replacement Ordinance.

a. Tree Inventories and Surveys

All trees that are to be counted toward meeting density requirements must be inventoried.

Projects over two acres must provide a plan delineating all ground cover-types (including pasture or forest) on the site and a general description of the types of trees and range of tree sizes in each forest cover-type (for example, mixed pines and upland hardwoods 12” to 20” DBH).

Any tree with a trunk diameter of ten (10) inches or greater that has a surveyed location shown on the plan will receive double the normal unit value credit if there is to be no construction activity in that tree's critical root zone (CRZ). These trees must be represented on the plan by a circle the size of the CRZ.

Sampling methods may be used to determine tree densities for large forested areas subject to prior approval by the City of Austell. Written guidelines for performing sample inventories can be obtained from an Arborist.

Specimen trees must be shown on the plan with an indication whether they are to be retained or removed. Surveyed locations are requested when the preservation of a specimen tree is questionable, or when a site design alteration is feasible. Approximate locations are acceptable otherwise.

b. Plan Review Standards

All protected zones must be delineated on the plan along with the location of tree protection devices.

Protected zones must be of sufficient size to reasonably expect the majority of trees growing there to survive the proposed construction impacts. When proposed construction impacts are, in the opinion of the city, likely to cause severe decline and/or death of an affected tree, that tree will not receive credit for meeting tree ordinance requirements.

All buffers with existing trees must be delineated on plans as Tree Save Areas. Land disturbance within any buffer is subject to the Public Works Department approval. The applicant must clearly demonstrate the need for the proposed disturbance. For subdivisions, all buffers shall be delineated on the final plat and identified as preservation easements. Final plats must also identify any individual lots with other tree preservation and/or planting requirements. These lots must be identified on the plat with a symbol and a corresponding note indicating the homebuilder's responsibility for such tree preservation and/or planting requirements.

c. Construction Standards

(1) Purpose of Tree Protection Devices

Tree protection devices are necessary to eliminate activities detrimental to trees including but not limited to:

- Soil compaction in the critical root zone resulting from heavy equipment, vehicular or excessive pedestrian traffic, or storage of equipment or materials;
- Root disturbance due to cuts, fills or trenching; Wounds to exposed roots, trunks or limbs by mechanical equipment; other activities such as chemical storage, cement truck cleaning, fire, etc.

(2) Location and Types of Tree Protection Devices

Tree protection devices are to be installed as shown on the plan or otherwise completely surrounding the critical root zone of all trees to be preserved.

The installation of all tree protection devices will be verified prior to the issuance of the construction permit for clearing and/or grading, and again, prior to the approval of the final plat for subdivisions.

Once protected zones are established and approved, any changes are subject to review by the City of Austell Public Works.

(3) Materials

Tree protection shall consist of chain link, orange laminated plastic, wooden post and rail fencing or other equivalent restraining material. In addition to fencing, where tree trunks are in jeopardy of being damaged by equipment, 2 x 4-inch boards may be requested to be strapped around the trunks of the trees.

(4) Sequence of Installation and Removal

All tree protection devices shall be installed prior to any clearing, grubbing or grading, or at the same time as the installation of erosion and sedimentation control devices. Tree protection must remain in functioning condition throughout all phases of development and construction.

Tree protection fences must be installed in accordance with the approved land disturbance permit. For projects less than two (2) acres, City of Austell staff will verify appropriate tree fence installation. For projects greater than two (2) acres, a professional designer must verify the tree protection fences were installed as shown on the approved plans or in locations that provided better tree preservation potential.

This verification must be submitted to the City of Public Works Department prior to the approval of the final plat for residential subdivisions, or prior to the issuance of building permits for commercial projects.

(5) Other Specifications

Clearing: Where clearing has been approved, trees shall be removed in a manner that does not adversely impact the trees to be preserved. Avoid felling trees into protected zones or disturbing roots inside the protected zones.

When digging near trees, the contractor shall prune all exposed roots one (1) inch in diameter and larger on the side of the trench adjacent to the trees. Pruning shall consist of making a clean cut flush with the side of the trench to promote new root growth. Pruned roots shall be protected from drying and backfilled as soon as possible.

Pruning of tree limbs to provide clearance for equipment and materials or for any other reason shall be done according to standard arboricultural practice (See ANSI A300-2001 Standards for Tree Care Maintenance Operations Part 1 and ANSI Z133.1 American National Standard for Tree Care Operations Safety Requirements).

Erosion and Sedimentation Control: All erosion and sedimentation control measures shall be installed in a manner that will not result in the accumulation of sediment in a protected zone.

Signage: All protected zones shall be designated as such with “Tree Save Area” signs posted visibly on all sides of the fenced-in area. These signs are intended to inform subcontractors of the tree protection process. Signs requesting subcontractor cooperation and compliance with the tree protection standards are recommended for site entrances.

4. Tree Replacement Standards

The following section establishes standards by which plans and field conditions are to be evaluated to determine compliance with the tree replacement intent of the City of Austell Tree Preservation and Replacement Ordinance.

Tree replacement plans should be prepared with appropriate consideration given to the function of trees in the urban landscape. Every effort should be made to maximize the environmental benefits of the plant materials.

a. Planting Specifications

Trees selected for planting must be free from injury, pests, disease, nutritional disorders or root defects, and must be of good vigor in order to assure a reasonable expectation of survivability.

Standards for transplanting shall be in keeping with those established in the International Society of Arboriculture publication, Tree and Shrub Transplanting Manual or similar publication. Reference the American Association of Nurserymen publication American Standard for Nursery Stock (ANSI Z60, 1973) for plant material quality specifications. Reference the Manual of Wood Landscape Plants (Michael Dirr, 1983, Castle Books) or similar publication for information on tree species site requirements.

b. Species

Species selected as replacement trees must be quality specimens, and must be ecologically compatible with the intended growing site. Flowering ornamental species are typically not acceptable for use in meeting density requirements.

When less than 10 trees are shown to be planted on a project, one species of tree may be specified. When 10 to 50 trees are shown, a minimum of three species of trees are required. When more than 50 trees are shown, a minimum of five (5) species of trees are required. When 10 or more trees are to be planted, no single genus shall represent more than 30 percent of the Required Density Factor.

The use of deciduous overstory tree species is required for stream buffer areas and recommended for areas adjacent to building structures to promote energy efficiency.

c. Parking Lots and Street Yards

All root zones must be a minimum of eight (8) feet in width (measured from back-of-curb where curbing is installed or edge of pavement otherwise).

The root zone for overstory trees must be a minimum of 200 square feet. If that area is shared with other trees, add 80 square feet for each additional tree. The root zone for understory trees must be a minimum of 100 square feet. If that area is shared with other trees, add 40 square feet for each additional tree. Parking lot islands, peninsulas and medians must have clean, cultivated soil to a total depth of two and one-half (2½) feet. Native subsoil is acceptable in parking lot islands, peninsulas and medians if the entire area is amended with appropriate soil improvements and thoroughly tilled. Otherwise, loamy topsoil is required. Parking lot islands and medians must be covered with four (4) inches of organic mulch material replaced as needed. To discourage soil compaction from pedestrian traffic, these areas may be planted with low evergreen shrubs. To reduce root zone competition, grass is typically not permitted in these islands and medians. Variances to this requirement (as it relates to the prohibition of grass) shall be reviewed on a case-by-case basis by the City of Austell Public Works Department.

Light poles are prohibited in parking lot islands, peninsulas and medians unless a lighting plan is submitted for review and approval by the City of Public Works Department.

No fastigate (narrow crowned) varieties of trees are permissible in parking lots. Trees planted to meet parking lot and street yard requirements must be a minimum of three (3) inches in caliper.

The use of at-grade planting areas in parking lots to promote stormwater runoff treatment and to supplement irrigation needs is encouraged; provided that the trees planted there will not be adversely impacted and that the system is designed by a licensed, professional civil engineer.

Where street yard trees will be planted within 16 feet of the edge-of-pavement of a public street with a design speed of 45 mph or higher, or in areas beneath overhead utility lines, the use of an understory species is required.

d. Irrigation

Newly planted trees and existing trees subjected to construction impacts typically need supplemental watering when rainfall is inadequate. Commercial project applicants should be prepared to discuss how trees are to be watered during their establishment or transition period, and to possibly note on the plan the proposed method of irrigation.

e. Public Street Rights-of-Way

Trees planted within publicly maintained street rights-of-way cannot be counted toward the tree density requirement for a site unless otherwise approved by the City of Austell Public Works Department. Indemnification and maintenance agreements for commercial properties must be recorded with the City of Austell Public Works Department prior to plan approval.

f. Subdivisions

Trees shown to be planted in common areas within a subdivision (outside of amenity areas) shall be planted by the subdivision developer. These trees must be in place before the final plat is approved, unless fiscal surety is provided and approved by the Public Works Director.

Trees shown to be planted on individual lots must be planted by the homebuilder. These trees must be in place before the certificate of occupancy for the affected lot is approved, unless fiscal surety is provided and approved by the Director of Public Works.

5. Specimen Trees

a. Identification

Some trees on a site warrant special consideration and encouragement for preservation. These trees are referred to as specimen trees. The following criteria are used by the Public Works Department to identify specimen trees. Both the size and condition criteria must be met for a tree to qualify.

Size Criteria:

- Overstory hardwoods: 30-inch diameter or larger
- Overstory softwoods: 36-inch diameter or larger
- Understory trees: 12-inch diameter or larger
- Condition Criteria:
- Life expectancy of greater than 15 years;

- Relatively sound and solid trunk with no extensive decay;
- No more than one major and several minor dead limbs (hardwoods only);
- No major insect or pathological problem.

A report for each tree of specimen size that is shown to be impacted by the proposed development must be submitted to the City of Austell Public Works Department to determine whether that tree meets the condition criteria for specimen status. The report must be prepared and signed by a certified arborist or registered forester. The report must contain a site plan showing an accurate location of the tree (a numbered aluminum tag on the tree that is referenced on the plan is helpful for finding the tree on the site). In addition, the report must contain a narrative describing the tree's species, surrounding conditions, and detailed description of the tree's condition along with digital pictures to illustrate any defects. The final determination of specimen tree status will be made by city staff after reviewing the report.

b. Preservation

In order to encourage the preservation of specimen trees and the incorporation of these trees into the design of projects, additional density credit will be given for specimen trees that are successfully saved by a design feature specifically designated for such purpose. Credit for any specimen tree thus saved would be three (3) times the assigned unit value shown in Table A.

c. Removal, Replacement, and Preservation

If a specimen tree is to be removed, a plan or written documentation indicating the reason for the removal must be submitted to the City of Austell Public Works d. The removal of any specimen tree must be mitigated in one or more of the following manners:

- Replace the removed specimen tree with minimum four-inch caliper trees of comparable species at a rate equal to the unit value of the tree removed. These replacement trees would be in addition to the 15-unit per acre minimum requirement.
- In addition to the minimum 15 unit per acre requirement, preserve stands of high value forest or specimen trees at a rate 3 times the unit value of the removed specimen tree(s). Such areas must be outside of the 100-year flood plain, wetlands and buffers, unless in an undisturbed buffer containing a restrictive covenant in favor of City of Austell for conservation uses. Trees for which recompense credit is given must have surveyed locations and must be shown on the plan with concentric circles representing their Critical Root Zones. Recompense trees shall not receive the extra credit outlined in Section 2 b. Protective fencing must be established at the limits of the CRZ. Such additional tree preservation areas shall be platted as such and go with the land. Live trees cannot be removed from such areas without a permit from the City of Austell Public Works.

Any specimen tree that is removed after being designated for preservation on an approved plan (without the appropriate review and approval of the City of Austell Public Works) must be replaced by trees with a total density equal to three (3) times the unit value of the tree removed, irrespective of the unit per acre minimum requirement. If a tree is removed without approval and there is no evidence of its condition, size alone will determine whether the tree was of specimen quality.

6. Alternative Compliance

The intent of the Tree Preservation and Replacement Ordinance is to insure that a minimum density of trees is maintained on all developed sites. Occasionally, this intent cannot be met because a project site will not bear the required density of trees. To provide some alternatives in such cases, two methods of compliance are acceptable:

1. Planting at a location remote from the project site; or,
2. Contributing to the City of Austell Tree Replacement Fund.

The following standards have been established for administering these alternative compliance methods:

- The City of Austell Public Works Department must review and approve all requests for alternative compliance. In no instance, shall 100 percent of the required site density factor be met through alternative compliance. As many trees as can reasonably be expected to survive must be planted on the site in question.
 - The land disturbance permit will only be issued after the City of Austell Public Works Department has approved the request and received the necessary documentation and/or funds.
- a. Off-Site Planting

If trees are to be planted at another location within City of Austell, the following criteria must be observed:

- The off-site location should be in the same area of the city as the project site.
- A tree replacement plan meeting all applicable standards in these guidelines must be reviewed and approved.

The following note must be shown on the approved plan:

“A tree replacement plan addendum for this project shall be submitted to the City of Austell Public Works Department at least thirty (30) days from the date of this land disturbance permit. This plan shall include the species, size and location of trees to be planted off-site to meet the tree density deficit shown. Release of this project is subject to approval of this plan as well as verification of the installation of the trees.”

b. Municipal Tree Replacement Fund

As another method of alternative compliance, City of Austell will accept donations that will be used for the sole purpose of planting trees on public property.

1. Calculating Contribution Amounts:

Contribution calculations are based on two (2) inch caliper replacement trees with a value of \$220.00, representing the average size and cost of materials, labor and guarantee for trees planted in the City of Austell area.

To determine the appropriate contribution, first calculate the Density Factor Deficit (DFD) or unit value that cannot be planted on the site. Divide the DFD by .5 (the unit value of a 2” caliper replacement tree) and multiply by \$220.00.

EXAMPLE: A 2.2 acre site has a required Site Density Factor (SDF) of 33.0, an Existing Density Factor (EDF) of 21.4, and can only accommodate a Replacement Density Factor (RDF) of 9.0. Determine the Density Factor Deficit (DFD) using the formula: $DFD = SDF - EDF - \text{Approved RDF}$

In this example, $DFD = 33.0 - 21.4 - 9.0 = 2.6$

Determine the acceptable contribution amount as follows:
 $2.6 \div .5 \times \$220.00 = \$1,144.00$

2. Fund Administration:

The City of Austell Tree Replacement Fund will be administered by the City of Austell Finance Department.

c. Parking Lot and Street Yard Requirements

If sufficient cause is demonstrated that the parking lot and street yard planting requirements cannot be met, then the plan must show a method of alternative compliance that is equal to or exceeds the minimum requirements. Sufficient cause is deemed to be when enforcing any of the parking lot or street yard requirements would cause the applicant to violate any state or federal law or any City of Austell ordinance or zoning stipulation specific to the applicant.

7. Tree Preservation and Replacement Plan Requirements

The tree preservation and/or replacement plan shall be submitted as a separate sheet or as part of other site drawings; provided that all required information is legible. The plans for projects over two (2) acres of disturbed area shall be sealed and signed by a registered landscape architect.

a. Full Land Disturbance Permits

The following information must be shown on the plan:

- All items found on the Erosion and Sedimentation Control submittal checklist pertinent to normal plan review.
- Total site area and site area used to determine the Site Density Factor.
- The locations of existing and proposed improvements, including structures, paving, driveways, cut and fill areas, detention areas, etc.
- Calculations showing compliance with the required Site Density Factor using existing trees, replacement trees, and/or contributions to the City of Austell Tree Replacement Fund.
- A narrative to document any alternative compliance arrangements approved by the City of Austell Public Works.
- Parking lot analysis showing the number of required and actual parking spaces, the square footage of all parking bays, and the number of required parking lot trees.
- Street yard analysis showing the linear feet of street yard and the number of required street yard trees
- Locations of all specimen trees showing each tree's Critical Root Zone and an indication whether the tree is to be removed or preserved.
- Locations of all tree protection devices, materials to be used in each area, and detail.
- Location of any state waters with required buffers.
- Location of any buffers required by the City of Austell Comprehensive Zoning Ordinance or by a re-zoning stipulation and a planting plan for those buffers.
- Location of and details for any permanent tree protection devices such as tree wells, aeration systems, retaining walls, etc.
- Locations of all existing and proposed utility lines or easements.

- A plant schedule with columns for the:
 - common name
 - botanical name
 - quantity
 - size
 - individual tree unit value
 - species unit value
 - percent of the species unit value to the total unit value
- The locations of all trees to be planted on the site to meet density requirement.
- For trees to be planted in any publicly maintained street right-of-way, show the shoulder section showing placement of trees in relation to the curb and underground utilities.
- Additional information as required on a case-by-case basis.
- The following notes must be shown on the plan:

All Projects

“Tree protection devices must be installed and inspected prior to any clearing, grubbing or grading. For projects over two (2) acres, a professional designed must verify that the tree protection fences were installed as shown on the approved plans or in locations that provided better tree preservation potential. Submit this verification prior to the approval of the final plat for residential subdivisions or prior to the issuance of the building permit for commercial projects.”

“A pre-construction conference is required prior to the issuance of the on-site construction permit. Contact the City of Austell Public Works at (770) 944-4325 to arrange a meeting at the site.”

“Tree protection and replacement shall be enforced according to City of Austell Design and Construction Standards. Any field adjustments to tree protection device types or locations or substitutions of plant materials shown on the approved plans are subject to the review and approval of the City of Austell buffers must be planted to City of Austell standards where sparsely vegetated or where disturbed for approved utility or access crossings.”

“The density requirements shown on the Tree Preservation and/or Replacement Plan(s) must be verified prior to the issuance of the Certificate of Occupancy or acceptance of the Final Plat. Contact the City of Austell Public Works at (770) 944-4325 for an inspection. A performance bond, letter-of-credit or escrow account will be accepted if plant materials must be installed at a later date.”

Commercial Projects Only

“Parking lot islands, peninsulas and medians must have clean, cultivated soil to a total depth of two and one-half (2½) feet. Native subsoil is acceptable in these areas if the soil is amended with appropriate soil amendments and thoroughly tilled. Otherwise, loamy topsoil is required.”

“Parking lot islands and medians must be covered with four (4) inches of organic mulch material (replaced periodically). To discourage soil compaction from pedestrian traffic, these areas may be planted with low evergreen shrubs, but not with grass.”

“Light poles are not permitted in parking peninsulas, islands and medians without prior approval of the City of Austell Public Works.

“Fiscal surety for maintenance of planted trees must be in place prior to the issuance of the certificate of occupancy. A maintenance inspection will be performed prior to the scheduled release date of the posted fiscal surety to determine the health of the trees planted to meet the requirements of this ordinance as well as any buffer plantings.”

Subdivisions Only

“Tree protection fences for subdivisions shall be installed by the developer at the same time as erosion control devices. The developer is responsible for maintenance of tree protection fences until building commences on a lot. At that time, the building contractor is responsible for maintenance of the fence on the lot.”

8. Inspections

a. Pre-construction Conference

Prior to the issuance of a construction permit, an inspection will be required to verify correct installation of tree protection devices and to discuss any issues with the contractor concerning tree planting.

b. Final Inspection

Prior to the release of the certificate of occupancy or final plat approval, an inspection will be performed to assure compliance with the tree preservation and replacement plan. Any required irrigation must be operational at this time. Hose bibs and other watering devices specified on the plans will be verified, and buffer plantings will be inspected.

c. Maintenance Inspection

Prior to the scheduled release date of the fiscal surety, an inspection will be performed by an Arborist or Landscape Architect to determine the health of all planted trees.

Any planted materials that are dead, missing or in a state of irreversible decline at the time of that inspection must be replaced by the responsible party named on the surety instrument.

The City of Austell Public Works shall provide the responsible party with a written evaluation of what trees need to be replaced and the time frame within which replacement is to occur.

Any trees in a reversible state of decline will be noted and subject to monitoring at later dates. If such trees die after the release of the surety instrument, they will become the responsibility of the current owner to replace.

9. Fiscal Surety

Fiscal surety shall be required as specified in the Tree Preservation and Replacement Ordinance. The amount of the surety shall be 110 percent of the cost of all required plant materials and the cost of the installation and guarantee of those materials. The surety may be in the form of an escrow agreement, letter of credit or maintenance bond. The surety shall be prepared on forms specified by the Public Works Department.

The expiration date of the surety instrument shall be determined as 30 months from the date of the final landscape inspection. For all plant materials that will be irrigated by an automated irrigation system, the surety expiration can be reduced to 18 months.

If the original developer sells, transfers, assigns or conveys in any manner all or a portion of the property prior to the expiration date of the surety instrument, the original developer shall maintain the surety instrument until the expiration date. However, if an alternative surety instrument satisfactory to the City of Austell Public Works is provided by the subsequent owner of the property, the original developer may be partially or totally released from the developer's obligation under the original surety instrument upon receipt of written notification from the City of Austell Public Works accepting the alternative surety instrument. The alternative surety instrument must satisfy all requirements of the tree preservation ordinance and standards and specifications.

All or part of the surety may be called if the conditions of the maintenance inspection letter are not met. This specification covers the material requirements and installation procedures for all pipe, structures and appurtenances to convey, detain or treat stormwater runoff to be accepted into the municipal storm sewer system. However, these specifications do not limit the City's ability to require and/or accept other materials, construction techniques or design practices when deemed appropriate by the City. Any pipes, structures or appurtenances which the City has reason to believe are not in conformance with these specifications shall not be accepted. Where discrepancies may inadvertently occur between this document and the City's Ordinances, the City's Ordinances shall govern.