

ARTICLE 6

ACCESS AND RIGHT-OF-WAY REQUIREMENTS:

STREET IMPROVEMENT AND CONSTRUCTION REQUIREMENTS

6.1 ACCESS

- 6.1.1 When land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged and designed so as to allow for the opening of future streets and to provide access to those areas not presently served by streets.
- 6.1.2 No subdivision shall be designed so as to completely eliminate street access to adjoining parcels of land. Every development shall be designed to facilitate access to adjoining properties which are developed or anticipated to be developed in a manner substantially similar to the subject property. Locations of inter-parcel access shall be as required by and subject to the approval of the City of Dacula.
- 6.1.3 Any lot required to provide minimum frontage by the zoning district in which the lot is located shall provide vehicular access directly from a public street along the frontage or along any other property line which abuts a public street, except as provided in Section 6.1.5.
- 6.1.4 Private streets as may be approved under the provisions of the Zoning Ordinance and shall be constructed to the roadway construction standards of the City of Dacula, as contained herein.
- 6.1.5 Vehicular access easements may be provided from a public street indirectly via easement in any one or more of the following circumstances:
- A. The property is not required to provide a minimum frontage by the applicable zoning district, provided that the easement shall be in a location and the access driveway shall have a width and alignment acceptable to the City of Dacula.
 - B. The property is a buildable lot of record, as defined herein, but does not meet the minimum frontage requirement of the applicable zoning district. The property must be served by an exclusive access easement which shall be limited to the provision of access to only one principal use or structure.
 - C. The access easement serves a single-family residence on a lot which is otherwise a buildable lot of record, and which is sharing a common driveway.
 - D. The access easement was lawfully established as such under the code, ordinances, or regulations of the City of Dacula prior to the adoption of these Development Regulations.

6.1.5 Vehicular access easements may be provided from a public street indirectly via easement in any one or more of the following circumstances: (Continued)

E. The access easement coincides with a private roadway approved under the Code, Ordinances, or Regulations of the City of Dacula. All new private roadways must be constructed to the roadway standards of these Development Regulations, and their ownership and maintenance responsibility by private party(s) must be clearly established on the Final Plat of the development.

F. The access easement serves a buildable lot of record which meets the minimum frontage requirements of the Zoning Resolution, but at which point the access is not achieved.

6.2 MINIMUM RIGHT-OF-WAY AND STREET IMPROVEMENTS

6.2.1 Right-of-Way and Pavement Widths

A. Right-of-Way for all Public streets, existing and proposed, shall be dedicated in accordance with the street categories as shown on the Thoroughfares Map and Functional Road Classification Map for Gwinnett County and/or the City of Dacula as adopted within the Comprehensive Plan, or as contained in these Regulations adopted by the City of Dacula.

B. Additional street right-of-way width shall be required to be dedicated at intersections or other locations where the property abuts upon where deceleration lanes, 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.

C. If a new street or thoroughfare is proposed by the Thoroughfares Map and Functional Road Classification Map for Gwinnett County and/or the City of Dacula to adjoin or traverse the property, permits shall not be issued until the City Administrator has submitted the project to the City Council for review in order to seek a determination if the City of Dacula should acquire the right-of-way or if a study of alternate routes should be undertaken. The review period by the City shall not exceed 120 days from the date of permit application. If, after the 120 day review, the City Council is unable to reach a decision, there shall not be any further delay of a requested permit for this situation.

Minimum widths for new construction (new streets) shall be as shown on the following Table 6-A.

TABLE 6-A MINIMUM RIGHT-OF-WAY AND ROADWAY WIDTHS FOR NEW STREETS AND PROJECT ACCESS IMPROVEMENTS		
STREET CATEGORY	MINIMUM RIGHT-OF-WAY ⁽¹⁾	MINIMUM NEW ROADWAY ⁽²⁾
<u>PRINCIPAL ARTERIAL</u>	120' TO 150'	UNDIVIDED 67' ----- 100' DIVIDED 2 X 29' ----- 6 LANES
<u>MAJOR ARTERIAL</u>	100' TO 120'	UNDIVIDED 67' ----- 100' DIVIDED 2 X 29' ----- 6 LANES
<u>MINOR ARTERIAL</u>	80' TO 100'	UNDIVIDED 52' TO 67'
<u>MAJOR COLLECTOR</u>	80'	52'
<u>MINOR COLLECTOR</u> NONRESIDENTIAL NONRESIDENTIAL CUL-DE-SAC	80 ⁽³⁾	32' NON-CURB 28'
<u>LOCAL STREET: (COMMERCIAL)</u> NONRESIDENTIAL NONRESIDENTIAL CUL-DE-SAC CUL-DE-SAC	60 ⁽³⁾ ----- 60' RADIUS	32' ----- 50' RADIUS
<u>LOCAL STREET: (RESIDENTIAL)</u> RESIDENTIAL - URBAN RESIDENTIAL - URBAN CUL-DE-SAC CUL-DE-SAC	55' ----- 55' RADIUS	30'' ----- 45' RADIUS
<u>LOCAL STREET: (NON CURB RESIDENTIAL)</u> RESIDENTIAL - RURAL ⁽⁴⁾ RESIDENTIAL - RURAL CUL-DE-SAC ⁽⁴⁾ CUL-DE-SAC	60' ----- 60' RADIUS	24' ----- 40' RADIUS

FOOTNOTES:

(1) The greater right-of-way width shall apply under circumstances as described in Section 6.2.2 (3).

(2) Roadway width dimensions are back-of-curb to back-of-curb except where noted.

(3) Utility easement shall be provided in a location and size as required by the Gwinnett County Dept. of Public Utilities.

6.2.2 Project Access Improvements - Single Family Detached, Single Family Attached, and Duplex Residential Subdivisions.

- A. When property that abuts upon an existing or proposed City road is to be developed or redeveloped as a single family detached or duplex subdivision and the City street will provide access to the property, Project Access Improvements to the City road (deceleration lanes, turn lanes, etc.) shall be provided by the developer as required herein.
- B. A deceleration lane shall be required to be provided at each subdivision street entrance that is provided street access to a Collector Street or Arterial Street. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the subdivision, a left turn lane leading to the median break shall be required to be provided by the developer and shall meet the Standards contained herein.
- C. Deceleration lanes shall have a length of 150 feet, with an additional 50 foot taper length, a pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to the City of Dacula at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required.
- D. Other Project Access Improvements may be required by the City upon the recommendation of the Department of Transportation for Gwinnett County or the State of Georgia in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
- E. The developer shall be responsible for the relocation of public or private utilities and drainage structures, as may be occasioned by the required Project Access Improvements.

6.2.3 Project Access Improvements - Multi-Family and Nonresidential Developments

- A. When property that abuts upon an existing or proposed City road is to be developed or redeveloped for multi-family or nonresidential uses and the City road will provide access to the property, access improvements to the City road (deceleration lanes, turn lanes, etc.) shall be provided by the developer.
- B. A deceleration lane shall be required to be provided at each project driveway or subdivision street entrance, as applicable, that is provided street access to a Collector Street or Arterial Street. In the event a street has an existing or proposed median, and the developer desires to construct a median break to serve the project, a left turn lane leading to the median break shall be required to be provided by the developer and shall meet the standards contained herein.

6.2.3 Project Access Improvements - Multi-Family and Nonresidential Developments (Continued)

- C. Deceleration lanes shall have a length of 200 feet, with an additional 50 foot taper length, pavement width of 12 feet (exclusive of curb and gutter) and shall be provided with curb and gutter. Additional right-of-way to accommodate the deceleration lane and an 11 foot shoulder shall be dedicated by the developer to the City of Dacula at no cost. Associated drainage improvements as deemed necessary by the construction of the deceleration lane shall also be required.
- D. Other Project Access Improvements may be required by the City upon the recommendation of the Department of Transportation for Gwinnett County or the State of Georgia in order to ensure adequate site access, pedestrian access, convenience and safety to the motoring public.
- E. The Developer shall be responsible for the relocation of public or private utilities and drainage structures as may be occasioned by the required Project Access Improvements.

6.2.4 New Streets

All new streets proposed to be constructed in a subdivision or other development, whether to be public or private, shall be designed and constructed in accordance with Section 6.6 of these Development Regulations.

6.2.5 Substandard Streets

- A. In the event that a development has access to a substandard street (i.e., a dirt or gravel road), the following Project Access Improvements shall be required unless otherwise specified in these regulations:
 - 1. If the abutting substandard street provides access to the development and is dirt or gravel, the street shall be upgraded by the developer to a paved roadway from the project entrance to the nearest standard paved road along the route of access.
- B. Off-site Project Access Improvements required under a. (1) above, shall at a minimum, result in a full-section roadway meeting the requirements of a Local Residential Rural roadway (24 feet edge to edge of pavement, with drainage swale ditches as needed). Responsibilities shall be as follows:
 - 1. The Developer shall design the road and provide the labor, equipment, and materials required for roadway improvements and necessary drainage improvements.
 - 2. If the City desires the roadway to be improved to a standard greater than that for a Local Residential Rural roadway, the City shall provide or pay the cost of the additional materials and labor.
 - 3. All right-of-way required for these off-site improvements shall be acquired by the developer at no expense to the City. If the developer is unable to acquire the right-of-way, the City Attorney shall initiate acquisition proceedings, at the expense of the developer, after authorization by the City Council.

6.2.6 Improvements along State Highways

For any development which 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 the Georgia Department of Transportation. A permit for the proposed access or improvements shall be approved by the Georgia D.O.T. and incorporated into the construction drawings for the project prior to issuance of a Development Permit by the City.

6.3 GENERAL LAYOUT REQUIREMENTS

6.3.1 Conformance

The arrangement, character, extent, width, grade, and location of all streets shall conform at a minimum to the Comprehensive Plan and these Regulations.

6.3.2 Local Streets and Minor Collectors

Local streets shall be designed so that their use by through traffic will be discouraged. Minor collectors shall be provided to channel through traffic movements within a development, where appropriate to the design, and a major thoroughfare is not proposed by the Comprehensive Plan. Minor collectors also may be provided as central routes within large residential subdivisions, where appropriate to the design, based on project traffic demands exceeding 2,000 trips per day (ADT).

6.3.3 Cul-de-sac Streets

- A. The use of cul-de-sacs shall be discouraged, except in areas where topography or environmentally sensitive lands or other public resource lands would prevent extension and connection to adjoining and surrounding streets.
- B. When permitted, dead end streets designed to have one end permanently closed shall provide a cul-de-sac turnaround and may be no more than 1,500' in length from the nearest intersection. Additional length necessitated by topography or property configuration may be approved by the City.
- C. Dead end streets of more 1,000' in length, may be required when existing or proposed pedestrian circulation patterns or public gathering places so justify, require pedestrian ways or pedestrian access easements, to provide access to existing and/or future open space areas, public facilities, trails, or adjacent subdivisions.
- D. The length of a cul-de-sac street shall be measured from the center of the cul-de-sac to the center of the intersection with another street, whether a through street or another cul-de-sac or dead-end street.
- E. Eyebrow cul-de-sac (half cul-de-sacs) will be allowed only at "right-angled" intersections having an interior angle between 80 degrees and 100 degrees.
- F. Cul-de-sacs shall conform to the layout and dimensional requirements as shown in the Standard Drawings.

6.3.4 Other Dead End Streets

- A. A dead end street shall be provided to the boundary of a subdivision where necessary to provide access to a land-locked abutting property, for planned continuity of future circulation, for improved access for public safety vehicles, or for the extension of public water or other utilities to neighboring lands. Such dead end streets shall be designed so as to allow their reasonable extension, and shall be located so as to be reasonably incorporated into a street design for the neighboring property. The stub street requirement may be waived by the City.
- B. Dead end streets on abutting property shall be extended into a proposed subdivision and incorporated into the street design of the development. This requirement may be waived by the City Council in cases of serious topographical hardship or dissimilar zoning which would create unacceptable land use conflicts between the two developments. This modification may be conditioned on the provision of easements necessary for the extension of public utilities, the provision of cul-de-sac or other permanent turnaround on the dead end street, or the removal of the dead end street back to its nearest intersection.
- C. A dead end street may be required to provide a temporary vehicular turnaround within the right-of-way. This requirement may be waived if extension of the dead end street is approved and under construction prior to its inclusion in a Final Plat.
- D. Where a street dead ends at the property boundary and the street exceeds 1,000' in length, a permanent cul-de-sac shall be required. In this situation, right-of-way to the property boundary shall be required, but the pavement shall not be extended to the property boundary beyond the edge of the paved cul-de-sac turnaround. In no case shall a dead end street exceed 1,500' in length, unless approved by the City due to unusual topographic conditions or property configuration.

6.3.5 Service Roads

Where a development borders on or contains a railroad right-of-way, or limited access highway right-of-way or major thoroughfare, a public street may be required to be constructed and dedicated within the development approximately parallel to and on each side of such right-of-way.

6.3.6 Half-Streets

Half-streets (new boundary streets having one-half of the minimum required right-of-way or pavement width) shall not be allowed nor access to same be permitted should it exist.

6.3.7 Reserve Strips

Land in private ownership adjacent to public rights-of-way which could control or be intended to control access to streets, alleys, or public lands shall not be permitted unless their control is given to the City under ownership, dedication, or easement conditions approved by the City Attorney. No development shall be designed so as to deny access to abutting properties.

6.3.8 Alleys

Alleys shall not be provided except where the subdivider produces evidence satisfactory to the City the need for same. In the event the City approves a design which proposes alleys, the alley shall be constructed as though it were a local street with the pavement width and right of way established by the City to provide for public health, safety and welfare.

6.3.9 Street Jogs

- A. Street jogs shall either directly align or have offsets of a minimum of 125 feet for residential subdivision streets and a minimum of 200 feet for nonresidential subdivision streets, as measured between centerlines of said streets.
- B. All major thoroughfares as shown on the Thoroughfares Map and Functional Road Classification Map for Gwinnett County and or the City of Dacula as adopted within the Comprehensive Plan, shall provide offsets as required by the City, where alignment is not desirable or feasible, but in no case be spaced less than 600 feet apart as measured between centerlines of said streets.

6.4 TRAFFIC CONTROL DEVICES

6.4.1 Traffic Control Signs

Street signs, traffic control signs, and devices such as striping and signalization, shall be provided through payment of fees to the Gwinnett County Department of Transportation for the installation thereof.

6.4.2 Street Name Signs

Street name signs shall be provided by Gwinnett County. Alternate post material shall be subject to the review and approval of the City. The posts and signs will be furnished and installed by the County at all street intersections. The developer (or homeowners association in the event an alternate signpost is chosen at a later date) shall pay the County's costs.

6.4.3 Traffic Signals and Signs

All traffic signals and signs shall conform to the Manual on Uniform Traffic Control Devices (no decorative traffic control devices will be allowed).

6.4.4 Striping Requirements

All newly constructed streets having 4 or more lanes (including auxiliary lanes) and existing streets being widened with one or more additional lanes shall be striped or the payment of said striping costs shall be required from the Developer by Gwinnett County Department of Transportation prior to the approval of Development Conformance for the project. Striping shall be accomplished with paint meeting Georgia DOT standards conforming to the Manual on Uniform Traffic Control Devices.

6.4.5 Payment of Fees

Payment for materials and installation of street name and traffic control signs in new developments shall be required by the City to the Gwinnett County Department of Transportation prior to a subdivision final plat or a certificate of occupancy.

6.4.6 Street Lights

The installation of all street lighting fixtures within City right-of-way must be approved by the City or the Gwinnett County Department of Transportation prior to such installation.

Street lights shall be required along all interior streets of residential subdivisions. Lights shall be located within the rights-of-way and shall be of the type and spacing approved by the utility company of jurisdiction. Type and spacing shall be approved by the City or Gwinnett County, corresponding to the owner of the right-of-way.

- A. Developers must contract Georgia Power or requisite local power company to install lights for all new developments to the industry standards.
- B. For HOA residential developments, the HOA is responsible for maintenance and costs of operating street light fixtures.

6.5 SPECIFICATIONS

Unless otherwise specifically set forth herein, all of the materials, methods of construction, and workmanship for the work covered in reference to street construction shall conform to the latest specifications of the Georgia Department of Transportation (Georgia DOT).

6.6 NEW STREET CONSTRUCTION SPECIFICATIONS

- A. All new streets proposed to be constructed in a subdivision or other development, whether to be public or private, shall be designed and constructed at least to the standards contained in these Regulations in accordance with the category of said streets.
- B. In residential subdivisions, a dead end ("stub") street required under Section 6.3.4 to provide access to an abutting property may be exempted from construction of roadway improvements and public utilities under the following circumstances:
 - 1. No lot within the proposed subdivision will gain access from the "stub" street.
 - 2. A Concept Plan has not been submitted or approved on the neighboring tract.
 - 3. The "stub" street shall be fully designed as part of the Development Plans. However, the right-of-way shall only be cleared and rough graded in accordance with the approved plans, and all disturbed areas grassed.
 - 4. Connections for future extension of all public utilities shall be constructed as part of the subdivision. Curb returns shall be constructed as part of the subdivision. If a curb is provided, curb returns shall be provided to the future "stub" street roadway location, and curb and gutter shall be installed across the roadway stub at the right-of-way line (extended).

5. The right-of-way for the "stub" street shall be dedicated as part of the Final Plat. Slope easements or construction easements, if required by the street design, shall be shown on the Final Plat.

6.6.1 Sub-grade Preparation for All Streets

- A. Sub-grade preparation shall be in accordance with Georgia DOT specifications and these Regulations.
- B. If any sections of the sub-grade are 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.
- C. Fill shall be placed in uniform, horizontal layers not more than 8" thick (loose measurement). Moisture content shall be adjusted as necessary to compact material to 95% of maximum dry density except for the top 12" which shall be compacted to 100% of maximum dry density.
- D. 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 backfill in all such ditches thoroughly compacted, the sub-grade shall be brought to the lines, grades, and typical roadway section shown on the plans.
- E. **All utility crossings within the right-of-way must be installed prior to subgrade approval. All manhole covers and other utility valve covers must be flush with top of intermediate course if there is a delay in applying the final surface course for the new roadway pavement. Manhole covers and other utility valve covers shall be adjusted flush with final surface course once it is installed.** Utility trenches cut in the sub-grade shall be backfilled as specified herein. Compaction tests at the rate of one per 150 feet of trench shall be provided to verify compaction.
- F. The sub-grade must pass roll testing prior to placement of the base material. **The roll test of the subgrade and base material shall be observed and approved by the City's inspector. With the approval of the City, stone, geo-textile fabric, or geo-grid may be used to stabilize a sub-grade that does not pass proof rolling with recommendation from the developer's Geotechnical Engineer that is selected and paid for by the developer. Developer's Geotechnical Engineer must be present to observe roll test prior to making any subgrade recommendations.**
- G. **If the developer disagrees with analysis of the proof rolling, the developer shall engage their own Geotechnical Engineer to make recommendations to the city, perform testing, and provide two (2) copies of a certificate from a certified laboratory stating that the roadway has been compacted at ninety-eight (98%) percent of maximum density to the City.** The certificate shall cover the areas identified in the dispute.
- H. When the street is to be used for construction traffic before the paving work is completed, a layer of stone (except crusher run) shall be laid as a traffic surface. This

material shall not be used as a part of the base material. It may be worked into the sub-grade, or it shall be removed before the base course is set up for paving.

- I. 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 to side slopes is required, using minimum 4 inch diameter pipe sections.

6.6.2 Project Access Improvement Standards

- A. For widening sections four (4) feet or greater in width, the section shall comply with the construction standards for new streets, in accordance with the street's category (see Section 6.6.4 and Table 6-B). The base course must pass roll testing prior to paving. If a delay in paving is reasonably expected by the Developer or the City, the base shall be primed with 0.25 gallon of R.C. 70 per square yard and cured for 7 days before paving.
- B. For widening sections less than 4 ft. wide, 7 inches of Class "A" concrete base (5 inches on local and minor collector streets) and 1 ½ inches of ~~"E" or "F" topping shall be required~~ **9.5mm Superpave Type II surface course (topping) shall be required. A minimum of 8 inches of Graded Aggregate Base shall be provided below the widening section.**

6.6.3 New Local and Minor Collector Streets

- A. Local Residential and Residential Minor Collector Streets

Where Local and Minor Collector Streets are located within a residential subdivision; the base materials shall be a crushed stone base. The base course shall consist of at least 8 inches of graded aggregate base. After being thoroughly compacted and brought to proper section, 2 inches of **19mm Superpave Type "B"** binder shall be applied. If a delay in paving is reasonably expected by the Developer or the City, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted and cured for 7 days prior to paving. A final **asphaltic surface course of 2" inches of 9.5mm Superpave Type II surface course (topping)** shall be applied after the binder has been installed or the developer has the option **of installing the surface course prior to completion of the project and release of the pavement bonds. ~~applying the wearing course at the 30th month of the maintenance period.~~ Upon final acceptance of the final surface course, a maintenance bond for a period not to exceed 18 months following the date of approval of development conformance shall be required.** Prior to applying **surface** course, a tack coat shall be applied to the binder course at a rate of no less than 0.05 gallons per square yard. Type of tack shall be approved by the city prior to placement.

- B. Local Streets (Non Curb Residential)

Where allowed, Local Streets (Non Curb Residential) do not require curb and gutter. The road base shall be extended 1 foot beyond the edge of pavement, and the shoulders shall extend 8 feet from the edge of pavement to a standard ditch section on each side (see Standard Drawings). Otherwise, the roadway shall comply with the standards for

new residential subdivision streets, above.

C. Local Street (Commercial) and Minor Collector (Commercial)

Where new local and minor collector (**commercial**) streets are constructed in a nonresidential subdivision and/or other nonresidential projects, the base materials shall be a crushed stone base. The base course shall consist of at least **8 inches** of graded aggregate base. After being thoroughly compacted and brought to proper section, **4 inches of 19mm Superpave Type “B” binder** shall be applied. If a delay in paving is reasonably expected by the Developer or the City, the base shall be primed with 0.25 gallon of R.C. 70 per square yard the same day it is compacted and cured for 7 days prior to paving. A final **2” inches of 9.5mm Superpave Type II surface course (topping)** shall be applied after the binder has been installed or the developer has the option of **installing the surface course prior to completion of the project and release of the pavement bonds. at the 30th month of the maintenance period. Upon final acceptance of the final surface course, a maintenance bond for a period not to exceed 18 months following the date of approval of development conformance shall be required.** Prior to applying **surface** course, a tack coat shall be applied to the binder course at a rate of no less than 0.05 gallons per square yard. Type of tack shall be approved by the City prior to placement.

6.6.4 New Major Thoroughfares

Major Collector, Arterial, or Principal Arterial shall be constructed in accordance with designs prepared by the City, Gwinnett County, or Georgia DOT, or, if no design has been prepared, to the following standards as indicated by Table 6-B. Commercial parking lots and private commercial streets are to be constructed as indicated by Table 6-C.

TABLE 6-B

CONSTRUCTION STANDARDS FOR MAJOR THOROUGHFARES

<u>STREET CATEGORY</u>	<u>BASE</u>	<u>BINDER</u>	<u>TOPPING</u>
Arterials	10" GAB	* 6” Superpave	1-1/2” of 9.5mm Type II Superpave
Major Collector	10" GAB	4" of 19mm Superpave	2” of 9.5mm Type II Superpave
Minor Collector	8" GAB	4" of 19mm Superpave	2” of 9.5mm Type II Superpave

* 4 inches of 25mm Superpave and 2 inches of 19mm Superpave

TABLE 6-C

CONSTRUCTION STANDARDS FOR COMMERCIAL PARKING LOTS & STREETS

STREET CATEGORY	BASE	BINDER	TOPPING
*Commercial Drive (Public or Private)	10" GAB	3" of 19mm Superpave	1-1/2" of 9.5mm Type II Superpave
*Parking Areas (Public or Private)	6" GAB	2" of 19mm Superpave	1-1/2" of 9.5mm Type II Superpave

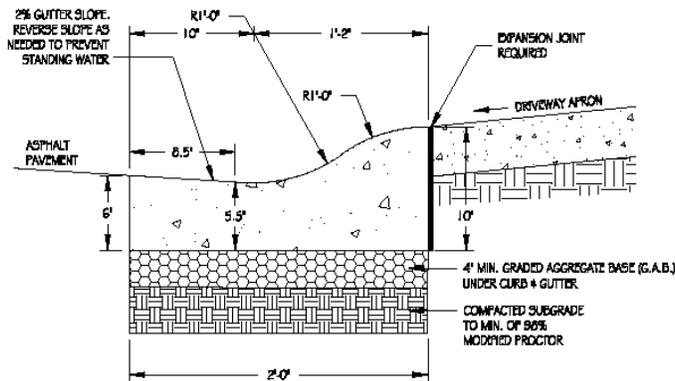
6.7 CURB AND GUTTER

6.7.1 All new streets and Project Access Improvements shall be provided with curb and gutter except in improvements to substandard streets, where swale ditches may be provided in lieu of curb and gutter. All gutters shall drain smoothly with no areas of ponding.

6.7.2 Residential Curbing

Residential curbing shall meet the following requirements:

- A. Concrete shall be Class "A" (as defined by Georgia DOT) and have a minimum strength of 3,000 PSI at 28 days.
- B. Typical minimum section shall be 6" X 24" X 12".
- C. Vertical curbing.
- D. Residential curbing may be vertical curbing or roll-back curbing. Roll-back curbing shall meet the following specification:



NOTE:
1. MAINTAIN 2% MINIMUM CROSS SLOPE FOR DRAINAGE, TYPICAL EDGE OF ROLL CURB & GUTTER, IF DRIVEWAY APRON IS NOT ADJACENT SHOULD BE GRASED SHOULDER OR SIDEWALK WITH MINIMUM 2% CROSS SLOPE TOWARD ROLL CURB & GUTTER.

ROLL BACK CONCRETE CURB AND GUTTER DETAIL
NTS.

6.7.3 Industrial or Commercial Curbing

Industrial or commercial curbing shall meet the following requirements:

- A. Concrete shall be Class "A" (as defined by Georgia DOT) and have a minimum strength of 3,000 PSI at 28 days.
- B. Typical minimum section shall be 8" X 24" X 14".
- C. Vertical curbing only.

6.7.4 Major Arterial Curbing

Principal Arterial and Major Arterial curbing shall meet the following requirements:

- A. Concrete shall be Class "A" (as defined by Georgia DOT) and have a minimum strength of 3,000 PSI at 28 days.
- B. Typical minimum section shall be 8" X 30" X 14".
- C. Vertical curbing only.

6.7.5 Parking Area Curbing

Curbing within parking areas or lots (residential or commercial) shall meet the following requirements:

- A. Concrete shall be Class "A" (as defined by Georgia DOT) and have a minimum strength of 3,000 PSI at 28 days.

6.8 UNDERGROUND UTILITIES

- 6.8.1 All water and sanitary sewer utilities and storm drain facilities within the curbs shall be installed and the ditches backfilled and thoroughly compacted before any pavement or base is installed.
- 6.8.2 Once the base has been placed, all further installation of utilities under the roadway shall be bored or otherwise comply with Section 7.5, Street Cuts.
- 6.8.3 All utility manholes and valve boxes shall be brought flush to the finished grade within the roadway section.
- 6.8.4 All utility locations shall adhere to the details found in the Standard Drawings.

6.9 SIDEWALKS

6.9.1 Sidewalks, When Required

- A. Sidewalks shall be provided within all single family subdivisions.
- B. Sidewalks shall be provided along the street from which a multi-family development has access.
- C. Sidewalks shall be provided along all streets adjoining a non-residential development.

6.9.2 Sidewalks, Location Standards

- A. Sidewalks shall be required adjacent to both sides of internal subdivision streets.
- B. Sidewalks shall also be required adjacent to the perimeter of "eyebrow" turnarounds.
- C. Sidewalks shall not be required adjacent to the perimeter of cul-de-sac turnarounds unless otherwise required.

6.9.3 Sidewalks, Design Standards

Sidewalks shall be constructed in accordance with the Design Standards contained in this Subsection unless a Waiver is granted by the City.

- A. Sidewalks shall be located two (2') feet from the back of curb. Where no curbing exists or proposed road improvements are anticipated, sidewalks shall be placed in a location acceptable to the Department of Transportation.
- B. All new sidewalks shall match and provide a smooth transition to any existing sidewalks with no steps.
- C. Sidewalks shall be constructed of concrete and shall be a minimum of five (5') feet in width and four (4") inches thick. Concrete shall be Class "B" (as defined by Georgia DOT) and have strength of 3,000 PSI at 28 days.
- D. Curb ramps shall be provided at all curb termini or street intersections and shall be a

minimum of five (5') feet in width exclusive of flared sides.

- E. Expansion joints shall be provided at all property lines (extended) and driveway crossings. Control joints shall be provided every ten (10') feet.
- F. Disturbed areas resulting from sidewalk construction shall be backfilled, stabilized, and grassed.

6.9.4 Sidewalks, Installation Deadlines

Sidewalks shall be installed prior to the issuance of a Certificate of Occupancy or Final Plat approval in accordance with this Subsection unless a performance bond is posted. The cost of sidewalk installation may be set aside in escrow where proposed road improvements may impact the location of the sidewalk.

- A. Sidewalks required on residential building lots shall be installed prior to issuance of a Certificate of Occupancy for each individual dwelling.
- B. Sidewalks required on common or recreation areas shall be installed prior to Final Plat approval.
- C. Sidewalks required on other projects shall be installed prior to issuance of a Certificate of Occupancy or Certificate of Completion, as appropriate.

6.9.5 STORMWATER UTILITY

- A. Black chain link fence(s) with restricted gate access shall enclose detention / bioretention ponds. The property owner's association is responsible for the maintenance of the pond(s) and fence(s).
- B. Stormwater maintenance / bioretention areas are encouraged to include practices from the Georgia Stormwater Management Manual green standards. Stormwater bioretention areas may include lower maintenance grass alternatives, such as Blue Star Creeper, Corsican Mint, Micro-Clover, Fescue, or native grasses, native shrubs, and native trees, subject to planning department approval.
- C. Stormwater detention / bioretention ponds with green stormwater and pedestrian infrastructure are permitted as an alternative to black chain link fence(s), as approved by the City Administrator or his / her designee.