

Sec. 30-14. Design manual.

~~(a) *Intent; adoption of manual.*—The City of Gainesville Engineering Design & Construction Manual (design manual) is intended to provide detailed design guidelines and specifications for the construction of physical improvements in the city. The design manual shall be adopted by resolution ordinance of the eCity eCommission and kept on file in the pPublic wWorks dDepartment. The design manual shall address the following:~~

- ~~(1) Selection of environmentally sound practices for the management of stormwater and control of erosion and sedimentation;~~
- ~~(2) Construction specifications for stormwater management facilities, streets, bridges, bikeways, sidewalks, and other physical improvements;~~
- ~~(3) Design criteria for wet and dry detention basins; and~~
- ~~(4) Local rainfall information.~~

~~(b) The appropriate reviewing board may approve modifications from the terms of the design manual when such modifications are not contrary to the public interest or where, owing to special conditions, a literal enforcement of the provisions of the design manual would result in unnecessary hardship. Furthermore, modifications shall not be approved unless and until:~~

- ~~(1) A written application for modification is submitted along with the plat or development plan demonstrating that:

 - ~~a. Special conditions and circumstances exist which are peculiar to the land, structures or required subdivision improvements involved and which are not applicable to other lands, structures or required subdivision improvements; and~~
 - ~~b. Special conditions and circumstances do not result from the actions of the developer, owner, subdivider or recent predecessor in title;~~~~
- ~~(2) The appropriate reviewing board makes a finding that the requirements of this section have been met;~~
- ~~(3) The appropriate reviewing board makes a finding that the reasons set forth in the application justify the granting of the modification and the modification will make possible reasonable use of the land, buildings and other improvements; and~~
- ~~(4) The appropriate reviewing board further finds that the granting of the modification would be in harmony with the general intent and purpose of the land development code and the comprehensive plan, would not be injurious to surrounding properties, and would not otherwise be detrimental to the public health and welfare.~~

Subsection 30-192(c) of the City of Gainesville Land Development Code is amended as follows.

- ~~(c) *Criteria for modification of standards.* The appropriate reviewing board may recommend and the city commission may approve modifications from the terms of this article and the design manual when such modifications will promote the intent of this~~

article and not be contrary to the public interest and where, owing to special conditions, a literal enforcement of the provisions of this article would result in unnecessary hardship. Furthermore, the modifications shall not be recommended for approval by the development review board unless and until:

- (1) A written application for modification is submitted along with the design plat demonstrating:
 - a. That special conditions and circumstances exist which are peculiar to the land, structures or required subdivision improvements involved and which are not applicable to other lands, structures or required subdivision improvements; and
 - b. That the special conditions and circumstances do not result from the actions of the subdivider or recent predecessors in title;
- (2) The development review board makes a finding that the requirements of this section have been met;
- (3) The development review board further makes a finding that the reasons set forth in the application justify the granting of the modification that would make possible the reasonable use of the land, buildings and other improvements; and
- (4) The development review board further finds that the granting of the modification would be in harmony with the general purpose and intent of these regulations, will not be injurious to surrounding properties, and would not otherwise be detrimental to the public health and welfare.

Article VIII, Division 2, Subdivision II. – *Stormwater Management* of the City of Gainesville Land Development Code is deleted in its entirety.

• ~~Subdivision II. – Stormwater Management~~

• ~~Sec. 30-270. – Stormwater management generally; erosion and sedimentation control; design and maintenance of facilities.~~

(a) ~~Prohibitions.~~

- (1) ~~No person shall change, or allow to be changed, the contour, topography, use or vegetation cover of land unless the stormwater runoff and sedimentation generated thereby are controlled in accordance with this article, except as follows:~~
 - a. ~~Property in actual agricultural use, excluding silviculture.~~
 - b. ~~Accessory home gardening and customary routine landscape maintenance.~~
 - e. ~~Removal of individual trees in accordance with the landscape and tree management sections of this article.~~

~~(2) No person shall discharge or alter the discharge of stormwater runoff or sedimentation from development activity into creeks, watercourses or water bodies without the consent of the applicable governmental authority.~~

~~(b) Design and maintenance standards for stormwater facilities.~~

~~(1) Design manual. Stormwater management facilities shall be designed and constructed in accordance with this article and the design manual.~~

~~(2) Design standards.~~

~~a. General standards.~~

~~1. All drainage facilities shall provide a positive outfall to existing watercourses, water bodies, wetlands or storm sewer systems unless it can be proven that it is a closed system.~~

~~2. The property owner is fully responsible for compliance with all rules, regulations and requirements of the county, the applicable water management district, the state department of environmental protection, the U.S. Army Corps of Engineers, and the United States Environmental Protection Agency.~~

~~3. All basins designed to be dry shall drain completely within 72 hours of the storm event. Designs providing for longer drainage periods require approval by the city manager or designee.~~

~~4. All development must provide on-site stormwater quality treatment for the first one inch of stormwater runoff, except as provided in subsection e. of this section. Infill residential development within improved residential areas or subdivisions existing prior to November 18, 1991, must ensure that its post-development runoff will not contribute pollutants which will cause the runoff from the entire improved area or subdivision to degrade receiving water bodies and their water quality.~~

~~5. All development must have on-site stormwater quantity control designed for the 100-year critical duration storm, except as provided in subsections (b)(2)d. and e. of this section. A detention system shall be provided which will permit a controlled outlet to receiving watercourses. The system shall be designed so that the peak flow of stormwater off of the site, assuming full development, shall not exceed the natural flow from the lands prior to the subdivision and/or any development, based on the 100-year critical duration storm.~~

~~6. The type, intensity and structural design of any development proposed for a site shall be appropriate to the existing natural topographic characteristics of the site, while recognizing that minimal grade changes are essential to site development. Avoid disturbing steep slopes. Use terracing and diversions when disturbance of slopes is unavoidable. Slopes created by fill for other than landscape or buffering purposes shall be not steeper than three to one and must be stabilized by vegetation or other approved methods. Excessive erosion of any cut or fill slope shall require remediation by the property owner.~~

~~7. Drainage facilities designed within a closed system shall be evaluated on a site-specific basis with the minimum design criteria being the 100-year critical duration storm event.~~

~~b. *Erosion and sedimentation control.* The city may require the developer to limit clearing and grubbing outside the proposed developed area to the site, control erosion and sedimentation during and after construction, stabilize cleared areas, limit stockpiles, protect stormwater inlets during construction, control construction access routes, remove temporary control systems after construction, and limit the placement of gutters and drains. The developer shall comply with the requirements of article VIII of this chapter and the design manual. Wherever construction vehicle access routes intersect paved public roads, provisions shall be made to minimize the transport of sediment (mud), concrete and other construction materials onto the paved surface (through runoff or vehicle tracking). Materials reaching the paved surface shall be removed from the paved surface at the end of each day. Removal shall be by shoveling or sweeping, and the materials shall be transported to a sediment-controlled disposal area.~~

~~c. *Hogtown Creek Basin; additional standards.*~~

~~1. Within the Hogtown Creek Basin, systems must be designed to retain any increase in volume of runoff over the predevelopment volume for a 72-hour period.~~

~~2. The state department of transportation, Standards for Road and Bridge Construction, latest edition, and the state department of transportation, Roadway and Traffic Design Standards for Design, Construction, Maintenance and Utility Operations for Streets and Highways on State Maintained Systems, latest edition, shall be applied where standards are not specifically addressed in this chapter or in the design manual.~~

~~d. *Requirements for master stormwater basins.* The requirements for stormwater quantity and quality as listed above may be satisfied by a master stormwater plan serving several properties. An easement must be provided between participating landowners. The easement shall be recorded in the public records of the county and submitted to the planning and development services department and to the public works department prior to the issuance of any development permit. Any development proposed for consideration utilizing an existing or planned master stormwater basin shall provide the calculations and documentation necessary to establish the right to use the facility and that the contribution of stormwater runoff of the proposed development will be within the design parameters of the master basin. A maintenance agreement among all the property owners that conforms to the provisions of this section shall be executed subject to the approval of the city attorney as to form and legality and recorded in the public records of the county.~~

~~e. *Off-site stormwater management facilities.* A development may use an off-site stormwater management facility to meet the applicable stormwater quality and/or quantity standards required by the public works design manual.~~

~~f. *Design standards for redevelopment of vehicular use area or building.* For the purposes of this section, redevelopment is any demolition and/or reconstruction of the vehicular use area (excluding resurfacing and restriping) or building. Any proposal for a~~

site on which the proposed redevelopment of building(s) or vehicular use area involves the demolition and reconstruction of more than 80 percent of the area devoted to existing building and vehicular use area shall be considered new development, and shall be required to meet the standards for new development. This determination shall be made by the city manager or designee.

Redevelopment shall conform to the following standards with regard to required facilities:

1. Any redevelopment of existing impervious surfaces of a site, of less than 4,000 square feet, shall only require the continued maintenance of existing facilities, including natural areas that provide storage. No additional stormwater management shall be required, except that all development must be in compliance with all state and water management district requirements. All redevelopment of a particular lot or site governed by a final development order shall be cumulative from June 10, 1992, and shall not exceed 4,000 square feet unless the provisions of subsection (b)(2)e.2. of this section are met.

2. Any redevelopment of existing impervious surface of 4,000 square feet or more shall be designed to accommodate stormwater quality treatment for the first one-half inch of runoff from the proposed improvements in the disturbed area. The city manager or designee may allow the design engineer to retain the first one-half inch of runoff from an area of equal size as the disturbed area provided that it can be proven that there would be greater water quality benefits to the receiving surface water of equal size. Stormwater management facilities, including natural areas that provide storage, shall continue to be provided. All development must be in compliance with all state and water management district requirements.

g. Design standards for the subdivision of property.

1. *Generally.* A complete stormwater system in conformance with the flood control provisions of this article shall be provided for all areas of the subdivision for managing stormwater runoff and providing water quality treatment within or across subdivision lands. Soil borings shall be taken to establish soil type and percolation rate. The design manual shall provide guidelines for determining the appropriate number and location of soil borings. Full development shall be assumed for selection of proper runoff coefficients. The system shall be designed in accordance with the design manual of the public works department, to accomplish the following results:

i. *Closed conduits.* A system of closed conduits (except where open ditches are specifically permitted by the city commission) shall be provided to collect and channel stormwater in such a fashion as to permit the unimpeded use of public roads during a rainstorm of the maximum intensity predicted for the city area at ten-year intervals.

ii. *Flood routing.* A route for stormwater runoff shall also be provided which will function, when the system designed to handle the ten-year, 24-hour storm has reached its capacity, so as to prevent flooding (water over the curb level) and ensure access for emergency vehicles during a ten-year, 24-hour storm event.

~~iii. *Detention/retention system.* A detention/retention system shall be provided which will permit a controlled outlet to receiving watercourses. The system shall be designed so that the peak flow of stormwater from the subdivided lands, assuming full development, shall not exceed the natural flow from the lands prior to the subdivision and any associated development based on the 100-year critical duration storm.~~

~~2. *Roadside swales.* Roadside swales may be provided in lieu of curb and gutter as long as all the specific requirements of this article, article VII, and the public works design manual can be met.~~

~~3. *Open drainageways.* Open drainageways (ditches) will not be permitted in or within 100 feet of any land designated a residential district as defined in section 30-41 and any land in actual use or zoned for use as a school, unless it can be established to the satisfaction of the city commission that the open drainageway will appear and function as a natural watercourse and will not require significant maintenance. Any permitted open drainageway shall be designed so as to present no unreasonable hazard to life, the health of the public and nearby property residents and so as to be protected against scour and erosion.~~

~~(3) *Acceptance of facilities.* Acceptance of facilities for dedication to the public shall be in accordance with the conditions and procedures in article VII, pertaining to subdivision review.~~

~~(4) *Intergovernmental coordination.* Copies of all water management district, state department of transportation, state department of environmental protection, and county permits and permits of any other agency with jurisdiction shall be required prior to issuance of any development permit.~~

~~(c) *Requirements for plan submittal.* See article VII, pertaining to development review process, of this chapter.~~

~~(d) *Construction design requirements.*~~

~~(1) The public works design manual shall contain all construction design requirements.~~

~~(2) All stormwater basins shall be landscaped in such a manner as to promote safety and to integrate the basin with the overall design of the site.~~

~~(3) Insofar as possible, the contour of retention and detention basins should promote aesthetically pleasing site design and increased wildlife habitat.~~

~~(4) The public works design manual shall include guidelines for the design and operation of facilities that discourage the breeding of mosquitoes.~~

~~(5) The design of retention and detention basins shall promote joint uses for habitat, open space, passive recreation, and the establishment and integration of trails.~~

~~(6) Stormwater management facilities shall be designed to minimize the need for maintenance in accordance with the public works design manual.~~

~~(e) Inspections:~~

~~(1) The engineer of record shall file as-built plans with the public works department upon completion of any improvements for which changes have been approved during the construction process.~~

~~(2) The city shall periodically inspect stormwater control facilities and shall inspect upon complaint to determine that such facilities are operating and being maintained as designed.~~

Subsection 30-336(5) of the City of Gainesville Land Development Code is amended as follows.

(5) Specifications generally; costs for city-maintained roadways.

a. The public works design manual shall provide ~~department shall prepare, maintain and update a design manual which provides~~ design and construction specifications for driveways, curb cuts, curbs and other pavement on city-maintained roadways and rights-of-way. ~~The design manual shall be adopted by administrative rule. In those instances where a party chooses to deviate from the design manual, it shall be the responsibility of that party to demonstrate that the deviation is not inconsistent with best engineering practice and the principles of this article.~~

b. All driveways shall be hard-surfaced in conformance with the standards and specifications adopted by the city commission by resolution and on file in the office of the city engineer.

c. Driveways shall cross the sidewalk area at the sidewalk grade established by the city engineer.

d. Driveways shall be constructed as nearly to a right angle to the street or roadway as possible.

e. Where special pedestrian and vehicular hazards may be encountered, driveways may be restricted to a one-way operation. Proper signs giving notice to the restricted use of driveways shall be erected and maintained by the person having control over the driveways. Failure to erect such signs and failure to use such driveways in accordance with the proper signs shall be a violation of this article.

f. All costs of any change proposed in any physical improvements originally installed by the city and all costs of the installation of any driveway or necessary signing shall be borne by the property owner.

g. All costs and responsibilities for maintenance and/or repair of any driveway or related signing shall be borne by the property owner.