

Sec. 26-61. - Storm drainage.

(a) (1) When deemed necessary by any department, commission, or the governing body, a drainage system in a design prepared by a registered professional engineer may be required which will include detailed construction plans, supportive calculations and any additional information related or required therewith.

(2) For all new nonresidential developments and residential subdivisions, the town shall not issue a development permit prior to receipt of the following:

- a. For developments meeting Southwest Florida Water Management District thresholds for surface water and/or stormwater permitting, the developer shall provide a copy of the appropriate approved permit from the Southwest Florida Water Management District.
- b. For developments which are exempt from Southwest Florida Water Management District permitting requirements, the applicant shall provide documentation from those agencies that no permit is needed.

(b) The engineer's attention is further directed to the following:

- (1) Where drainage runoff comes from outside the limits of the subdivision, it shall be included in the design;
- (2) Post-development runoff shall not exceed predevelopment runoff rates. Design storm density/frequency data shall be taken from the state DOT drainage manual for this zone or may be taken from storm intensity/frequency data published by another governmental agency if approved prior to use;
- (3) New development. All new development and redevelopment shall conform to the following level of service standards:

- a. All single-family, duplex, triplex and quadruplex residential units, which are not part of a larger development, and do not otherwise require compliance with SWFWMD permitting rules, shall meet the following standards:
  1. Lots shall provide on-site retention equivalent to three-fourths of an inch of depth over the entire site.
  2. Impervious surface rations shall be limited to 30 percent.
  3. Erosion and sediment control, such as staked straw bales or fabric silt fences, shall be used during construction to prevent transportation of soil or sediment off-site.
  5. 4. In the conservation area, all development shall provide on-site retention volume equivalent to three-fourths of an inch of depth over the entire lot or site; grassed swales may be used, as long as equivalent storage is provided.
  6. 5. In the conservation area, clearing of native vegetation for all development shall be limited to ten percent of the total site.

Redevelopment shall be defined as projects where the estimated value of construction exceeds 50 percent of the appraised value of the existing improvements on the property.

- b. All other development and redevelopment, not described in subsection (b)(3)a of this section, shall meet the following standards:
  1. Water quantity.
    - (i) Conveyance systems. All drainage swales and ditches shall be designed to convey the runoff generated from a 25-year, 24-hour storm event.
    - (ii) On collector roads, culverts and cross-drains shall convey the runoff from a ten-year, 24-hour storm.
    - (iii) On local roads and internal subdivision roads, culverts and cross-drains shall be designed to convey the runoff from a ten-year, 24-hour storm.
  2. Water quality.
    - (i) Stormwater management systems. Stormwater management systems shall be designed to either retain on-site the runoff generated by a 25-year, 24-hour storm at peak discharge rates which do not exceed pre-development rates.
    - (ii) Water quality treatment, in general, shall be provided for a volume equivalent to three-fourths of an inch of depth over the entire site or the runoff from the first 1½ inches of rainfall on the entire site, consistent with chapter 62-302.700 FAC, Design Criteria for Outstanding Florida Waters.
    - (iii) Site-specific conditions may require other design criteria to be satisfied in order to obtain water management district construction permits. To ensure compliance with those requirements, a copy of a valid water management district permit or exemption letter shall be presented before building permits or development approvals are granted.
  3. The study shall include the effect of the subdivision on all downstream owners;
  4. Special consideration shall be given to avoid problems from concentration on all downstream properties.
- c. Land subject to flooding (floodprone area) or land deemed by the governing body to be unsuitable for development shall not be platted for residential occupancy, nor for such other uses as may increase danger to health, life or property, or aggravate the flood hazard, but such land within the plat shall be set aside for such uses as shall not be endangered by periodic or occasional inundation or improved in a manner satisfactory to the governing body to remedy said hazardous conditions.

4. To minimize neighborhood flooding from normal daily rainfall, a fill permit must be obtained from city when fill material is to be placed on lots that would raise the elevation more than an average of 6 inches above adjoining lots. The fill permit application must show normal rainfall will have an opportunity to infiltrate into the ground within the existing lot.

Gutters and downspouts that collect rainwater must discharge into exfiltration trenches (French drains), or into a subsurface drainfield that meets the construction standards of F.A.C. 64E

6.014(5) (the percolation, depth, location, and setback standards for drainfields need not be met), or onto substantially flat and porous surfaces such as

- a. Sodded lawns.
- b. Clean (washed) gravel or sand over a well-drained base.
- c. Porous (pervious) paving.

Roof areas not served by gutters and downspouts must not drain to impervious surfaces, and must not drain to pervious surfaces that are sloped in excess of five percent. Surfaces meeting these requirements must be designed to detain or deflect rainfall, for instance through the use of earthen ridges, curbs, or retaining walls that prevent average rainfall from running onto adjoining lots or streets.