Sec. 6.13.9. Grading criteria.

- A. Parcels and lots with a County approved individual lot grading plan or part of a multi-lot grading plan. The intent is to demonstrate that Sufficient sufficient grading shall be designed to allow surface water runoff and controlled discharge to be drained to the retention/detentionapproved drainage areas without causing adverse affects ento adjacent property. Each parcel or lot shall have a direct connection to the stormwater system, unless the applicant can clearly demonstrate that there are not adverse impacts to adjacent property. In subdivisions, each lot shall have grading designed to be independent of any other lot unless provisions are made for multi-lot grading at initial phase of development, and/or easements for grading purposes are established. All downstream grading must be at a level of completion to support upstream development prior to or simultaneously with the upstream development. Lot Grading grading plans can shall be prepared by a qualified Florida licensed professional may be demonstrated by the use of flow arrows, spot grades, and other iteration callouts, details, and typical grading depictions, or any combination thereof.
- B. Parcels and lots without a County approved lot grading plan. The intent is to demonstrate that sufficient grading is provided to establish stable slopes and to allow surface water runoff and controlled discharge to be drained without causing adverse effects to adjacent property. Grading may be demonstrated by the use of flow arrows, spot grades, and other iteration callouts, details, and typical grading depictions, or any combination thereof. Unless alternate grading criteria is provided by a lot grading plan, parcels and lots equal to or less than 75 feet in width shall comply with the following grading criteria in addition to all other grading requirements as confirmed by a pre and post development lot grade survey prepared by a Florida licensed Professional Surveyor:
 - 1. Fill shall be limited to the under-roof area of the lot's primary structure, access driveway footprint, and respective tapers to existing grade:
 - 2. The finished floor elevation of the structure shall not exceed 32 inches above lowest existing adjacent lot line elevation unless vertical walls such as stem walls or retaining walls are used to tie into existing grade;
 - 3. The driveway grade shall be no greater than 20% and shall not exceed 10% for a distance of 10 feet from the edge of roadway or shoulder unless a 9-foot minimum vertical curve is provided;
 - 4. There shall be no net change to the average elevation of the existing grade of the lot outside of the underroof area of the lot's primary structure or access driveway footprint and respective taper. Small changes in grade of up to 6 inches is permitted for the purposes of smoothing and evening grade; and
 - 5. Fill shall not encroach into the required side or rear lot setbacks except for the taper out from the slab or access driveway to existing grade provided that an equal volume is removed and a swale is formed. Swale shall be capable of directing surface water runoff without causing adverse effects to adjacent property and shall be sloped at a minimum of 2% if located within 10 feet of the building foundation.
- **BC.** Buildings. All buildings shall have a minimum finished floor elevation 8 inches above finish grade and graded away from the building for stormwater runoff. Exception: porches, patios, carports, garages, screen rooms may be 4 inches above finish grade.
- D. Elevations above base flood. In no case shall finished Finished floor elevations for all buildings except manufactured homes shall be specified below the 12 inches at minimum above the subject property's base flood elevation (BFE) one percent (100 year) flood plain plus one foot. Manufactured homes shall comply with the requirements of Chapter 15C-1, F.A.C. and Sec. 5.3.12. Manufactured homes. The BFE shall be established by the following most current and best available information:
 - 1. The subject property's current applicable FEMA Flood Insurance Rate Map (FIRM) Panel flood elevation;
 2. FEMA approved Letter of Map Change (LOMC);
 - 3. County determined flood prone area as established by a County watershed management plan when the subject property lies within a flood prone area with identified flood elevations and either no FIRM flood

Commented [CJ1]: FBC 1804.4 Site grading.

The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than one unit vertical in 20 units horizontal (5-percent slope) for a minimum distance of 10 feet (3048 mm) measured perpendicular to the face of the wall. If physical obstructions or lot lines prohibit 10 feet (3048 mm) of horizontal distance, a 5-percent slope shall be provided to an approved alternative method of diverting water away from the foundation. Swales used for this purpose shall be sloped a minimum of 2 percent where located within 10 feet (3048 mm) of the building foundation. Impervious surfaces within 10 feet (3048 mm) of the building foundation shall be sloped a minimum of 2 percent away from the building, except as otherwise permitted in Section 1010.1.4 (2% slope for door/floor landings), 1012.3 (2% cross slope for ramps) or 1012.6.1 (2% for landings).

Exception: Where climatic or soil conditions warrant, the slope of the ground away from the building foundation shall be permitted to be reduced to not less than one unit vertical in 48 units horizontal (2-percent slope).

The procedure used to establish the final ground level adjacent to the foundation shall account for additional settlement of the backfill

<u>elevation has been established or the FIRM flood elevation is lower than the flood prone area flood elevation;</u>

- 4. Historic FEMA LOMC or FIRM Panel flood elevation applicable to the subject property as determined by the County Flood Plain Administrator or their designee;
- 5. Other flood elevation data prepared in accordance with currently accepted engineering practices supplied by the applicant that has been reviewed and approved by the County Engineer or their designee and deemed acceptable by the Floodplain Administrator or their designee; or
- 6. No less than 2 feet above Highest Adjacent Grade when BFE is unavailable from all other sources and the available data are deemed by the Floodplain Administrator or their designee to not reasonably reflect flooding conditions or where the available data are known to be scientifically or technically incorrect or otherwise inadequate, provided that there is no evidence indicating flood depths have been or may be greater than 2 feet.

<u>Under no circumstance shall a building permit be issued based on a lower BFE proposed by a LOMC request until the revision has been issued by FEMA.</u>

- CE. Driveways. In the case where roadside swales are the drainage conveyance system, driveway design information shall be included on the plans minimally addressing culvert type, size, invert elevation, and direction of slope of culvert or the placement of ditch block for each at every specific lot. If design is not to be lot-specific, design shall be based on worst-case scenario.
- DF. Affidavit. At time of building application, applicant shall provide an affidavit that the impervious area, lot grading plan, minimum finished floor elevation, and stormwater system complies with the development plan on file with the County. If no development plan is on file, applicant shall provide an affidavit that all drainage is held on-site or directly tied-connected to a recognized drainage system and that the lot grading complies with the requirements of this section of code. If located within a FEMA Special Flood Hazard Area (SFHA) or flood prone area, the affidavit must also indicate that the lot grading complies with the requirements of Sec. 6.13.5. Floodplain storage and conveyance protection. The applicant shall provide a sketch with the building application indicating the drainage intent.
- EG. Construction. All stormwater runoff increase during construction and following must shall be kept on-site or directed to swales, ditches, or piping to approved drainage areas with adequate permitted capacity. Drainage area capacity shall be determined to be adequate by approved development lot impervious ground coverage or approved impervious coverage resulting in additional excess stormwater runoff as accounted by the development's stormwater analysis. If no impervious lot area accounting or stormwater analysis exists for a development, FEMA FIRM or flood prone data may be used to determine adequate drainage area capacity.

(Ord. No. 13-20, § 2, 7-11-2013)