LOT GRADING

DEFINITION

Lot grading is the reshaping or sloping of the land in such a way that surface drainage from rain runoff is directed away from the buildings and is controlled in a manner that eliminates or minimizes the impact on adjacent properties and county right-of-ways.

LOT GRADING REQUIREMENTS

The following lot grading requirements came into effect on May 1, 2007:

1. On all lots, the finished floor elevations shall be no more than one-tenth (1/10) of one-foot (1') below the approved design elevation.

2. On lots for which the side yard setback is less than seven and a half feet (7½'), finished floor elevations shall be no more than six-tenths (6/10) of one (1') foot above the approved design elevation.

3. On lots for which the side yard setback is seven and a half (7½') feet or more, the finished floor elevation shall be no more then one (1') foot above the approved design elevation.

4. On lots greater than 10,000 square feet, the finished floor elevation may be raised, provided elevations specified for finished grades are maintained.

5. A partial topographic survey preformed by a registered surveyor shall be submitted. (See exhibit "1").

LOT GRADING APPROVAL PROCEDURE

1. For any lot that is located within a subdivision without an approved master lot grading plan and that is greater then ½ acre in size, or any lot that is not located within a subdivision and is greater than ½ acre in size, an individual lot grading plan prepared by the applicant or designee shall be submitted to and approved by the **Development Engineering Division** prior to the issuance of a building permit. The applicant shall submit three (3) copies of the plan signed and sealed by an appropriate Registered Professional. Each copy of the plan shall bear the original signature and seal. These plans must include the following information or they will be returned. The review will be completed WITHIN FOURTEEN DAYS FROM THE DATE OF SUBMITTAL:

    a. Proposed finished floor elevation and building envelope, based on Orange County datum.

    b. Proposed lot grading type "A", "B", or "C". (See Exhibit "2")

    c. Proposed elevation at all lot corners and other significant locations, based on Orange County datum. (Note: The minimum grade shall be 1%).

d. The existing elevation of the centerline of the roadway, based on Orange County datum.

e. Location and cross-sections of any proposed swales.

f. Arrows indicating the anticipated directions of surface drainage flow.

g. If the lot is located adjacent to a lake or conservation area, an environmental swale needs to be shown with a typical section plus elevations, depth and width.

h. If any fill will be placed in the 100 year flood basin, compensating storage shall be provided. Show the 100 year base flood elevation and contour line on the plan. Provide the flood zone type of the site.

i. Submit copy of a Flood Plain Permit if the project is located adjacent to a lake or within a wetland.

j. A location map with directions to the site.

2. For all lots that are located within a subdivision without an approved master lot grading plan and that is ½ acre or less in size, two (2) lot grading plans signed and sealed by a Professional Engineer registered in the State of Florida shall be submitted to the **Building Division** prior to the issuance of a building permit. <u>The plans shall meet the requirements listed in Item 1, above.</u>

3. For any lot that is located within a subdivision with an approved master lot grading plan:

   a. The builder must propose lot grading and a finished floor elevation consistent with the approved master lot grading plan for the subdivision prior to the issuance of a building permit; or

   b. Three copies of the revised master lot grading plan for the entire subdivision shall be submitted to and approved by the **Development Engineering Division** prior to the issuance of a building permit, for a proposal which does not conform to the most recently approved master lot grading plan. Any such revised master lot grading plan for the entire subdivision shall be signed and sealed by and Engineer registered in the State of Florida and either submitted by the Developer of the subdivision or with written authorization from the Developer to allow a revision to the master lot grading plan.

NOTE: Once the lot grading has been approved, it is the property owner's responsibility to maintain the surface grading in perpetuity. The county may, at any time, require maintenance on the surface grading if alterations or settlements result in surface drainage problems.

RAISED FLOOR ELEVATION FOR SEPTIC TANK INSTALLATION

For any lot that is located within a subdivision with an approval master lot grading plan and that requires a finished floor elevation above the approved elevation in order to comply with the Health Department requirements for septic tank installation:

a. The builder must propose an increase in finished floor elevation, which does not modify any of the lot grade elevations, and grade percentages as approved on the master lot grading plan (i.e. The proposed increase in finished floor elevation shall be accomplished with a form of stem-wall construction which does not affect lot grades.) This proposed, along with documentation from the Health Department of the required elevation, shall be submitted to and approved by the **Building Division** prior to the issuance of a building permit. The Building Division shall not approve any such proposal which requires a modification of any of the lot grade elevations and grade percentages as approved on the master lot grading plan; or

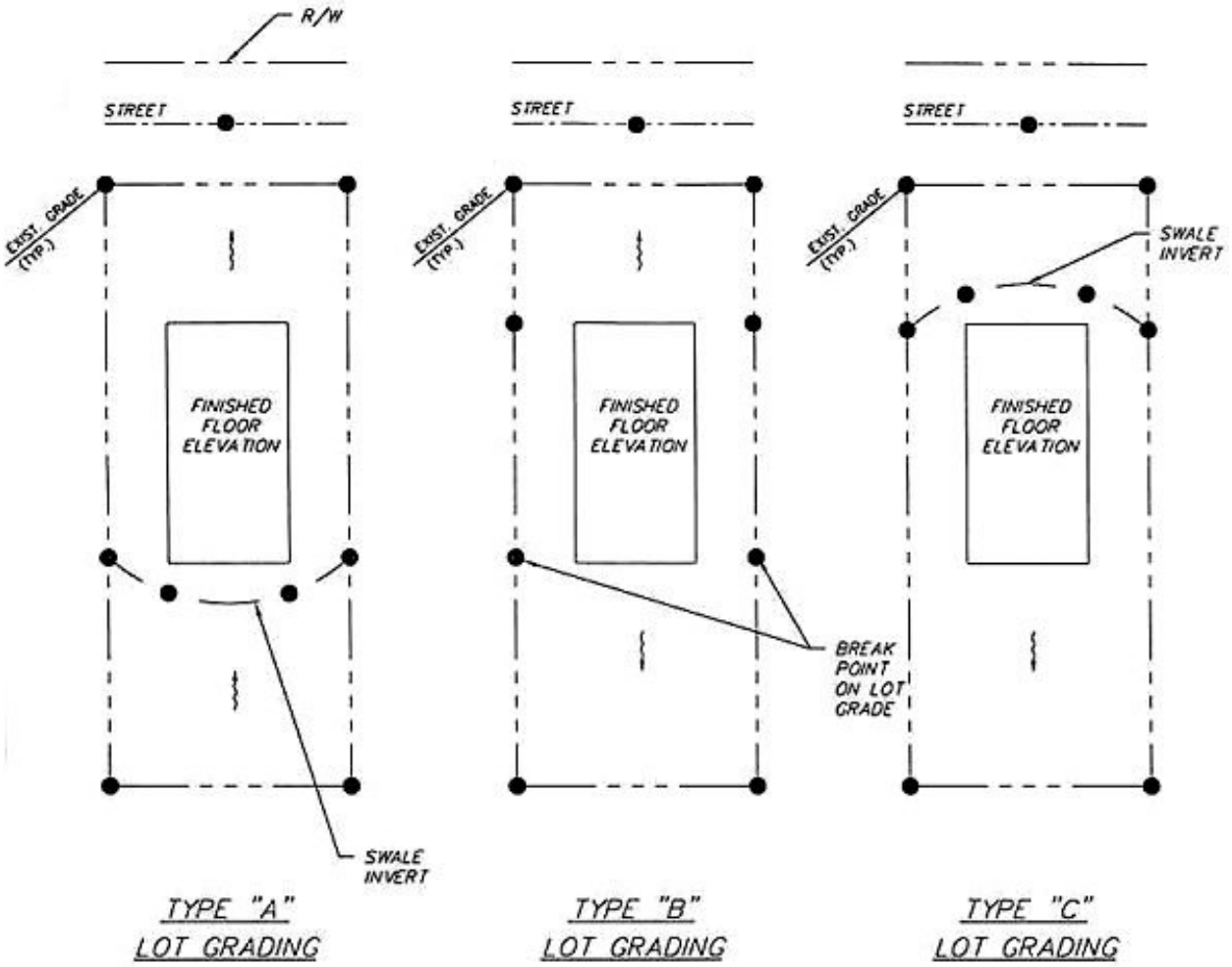
b. A revised master lot grading plan for the entire subdivision shall be submitted to and approved by **Development Engineering Division** prior to the issuance of a building permit. Any such revised master lot grading plans for the entire subdivision shall be signed and sealed by an Engineer registered in the State of Florida and submitted by the Developer of the subdivision or with written authorization from the Developer to allow a revision to the master grading plan.

CONTACT INFORMATION

Building Division 407-836-5760
Development Engineering Division 407-836-9622

EXHIBIT 1

SPOT GRADE PATTERN
FOR FINAL LOT GRADING APPROVAL



NOTE:

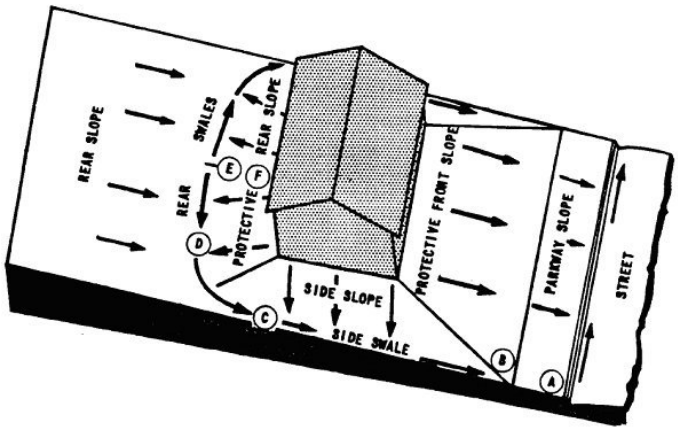
- SPOT GRADES: Four corners, grade break points along side of property, swale, crown of street, and finished floor elevation.

EXHIBIT 2
TYPICAL FHA-HUD LOT GRADING

TYPE "A" LOT GRADING
ALL DRAINAGE TO STREET

Rear yard swales behind the house carry surface water from rear yard to side yard swales (1% minimum) which carry it to street for disposal through the street gutters and the public storm drainage system.

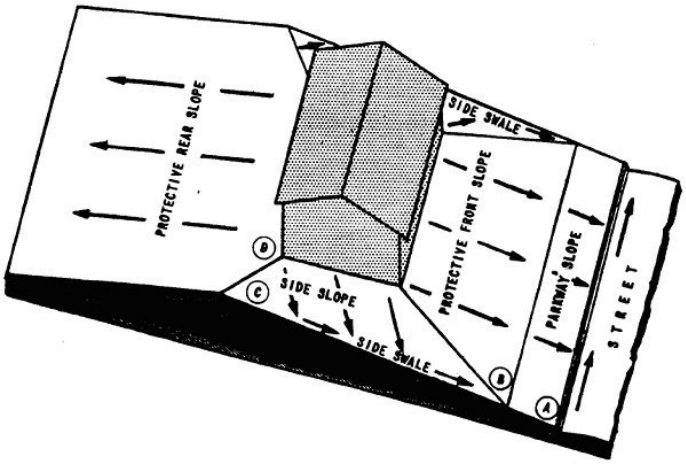
- A Curb-top on lot line extension at highest lot corner.
- A-B Parkway slope
- B-C Side yard swale
- C-D Swale turn with 10' radius
- D-E Rear swale
- E-F Protective rear slope up from high point of swales



TYPE "B" LOT GRADING
DRAINAGE BOTH TO STREET & TO REAR LOT LINE

Only side swales are needed to drain both to the street and to the rear lot line. They should extend back of the line of the rear building wall; then splash blocks from rear roof downspouts should be placed to direct roof water to the side swales for drainage directly to the abutting street. Thus the amount of water carried on the rear slope to easements or other properties is kept as small as possible. This reduces erosion and disposal problems.

- A Curb-top on lot line extension at highest lot corner
- A-B Parkway slope
- B-C Side swale
- C-D Protective side slope at extension of rear wall



TYPE "C" LOT GRADING
ALL DRAINAGE TO REAR LOT LINE

Front swales are essential to carry surface water from the front yard to side-yard swales which carry it to the rear for disposal in easements or across other properties. Proper cross-section of the street gutter, curb and parkway strip are essential to stop street water from flowing onto the lot.

- A Curb-top at high side of driveway near low lot corner
- A-B Parkway slope
- B Driveway grade change from upgrade drive in street to downgrade drive on lot
- C-D Driveway downgrade point out from front of building
- D-E Front swale
- E-F Protective front slope from highpoint of swales