

TO: ALL BUILDING DIVISION PERSONNEL
FROM: DOUG WISE
BUILDING DIVISION DIRECTOR
PREPARED BY: BUILDING DIVISION
SUBJECT: REGULATION OF LOT FILLING AND GRADING ACTIVITY
PPM #: PB-O-128

ISSUE DATE
August 17, 2018

EFFECTIVE DATE
November 26, 2019

PURPOSE:

To preserve existing and historical compliant drainage conveyance on developed and undeveloped lots of record outside of platted subdivisions with a master storm water management system. The regulations also serve to prevent adverse impacts and loss of storage capacity caused by unregulated fill activities, to protect the quality of the county's surface water resources, and preserve existing natural resources. To establish policy and procedure to allow reasonable on-site fill in compliance with Federal, State and County regulations.

UPDATES:

Future updates to this PPM are the responsibility of the Director of the Building Division, Deputy Building Official, Assistant Deputy Building Official, or Codes Product & Training Supervisor, under the authority of the Director of the Building Division.

AUTHORITY:

- Palm Beach County Amendments to the Florida Building Code, Building Volume, Chapter 1, Administration, Section 105.1 and 110.9 (PBC Building), as amended.
- ULDC Art. 11 – Subdivision, Platting and Required Improvements (PBC Land Development)
- ULDC Art. 14 - Environmental Standards (PBC ERM)
- ULDC Art. 15 – Health Regulations (FL DOH)
- ULDC Art. 18 – Flood Damage Prevention (PBC Building)
- Palm Beach County Code of Ordinances Section 27 Article VII – Storm Water Pollution Prevention - NPDES (PBC ERM & FL DEP)
- Water Resources – Florida Statutes Chapter 373 Part IV – Management and Storage of Surface Waters (SFWMD & FL DEP)
- Code of Federal Regulations (CFR) Parts 59 & 60 - NFIP (PBC Building)
- Section 404 of the United States Clean Water Act – US EPA (US ACOE)
- Local Water Control District Regulations (Various)

DEFINITIONS:

Minor Fill – a maximum of 20 cubic yards per 1 acre lot size placed during any 24 month period for developed property maintenance.

Site Development Permit – a permit issued by the Building Division to facilitate compliant floodplain alterations, lot fill, or other infrastructure intended to facilitate future development.

Developed Property Maintenance – landscaping, gardening, driveway maintenance, walkways, and recreational equipment.

Clean Fill – clean fill includes brick, concrete, dirt, top soil, gravel, sand, rubble, and cement. Clean fill does not include: Organic or biological waste including food or yard waste, Metals, Plastics, Cardboard, contaminated soil, asphaltic materials, glass, fiberglass, hazardous household waste such as but not limited to chemicals, appliances, tires, or electronics. Clean fill shall not contain any permitted materials larger than 3 inches in any dimension and the resulting aggregate shall be differentiated so as to result in a uniform soil matrix capable of supporting a building foundation.

POLICY:

Placement of fill shall be strictly limited to:

1. Fill needed to facilitate the construction of a new structure placed subsequent to the issuance of a building permit by the Building Division.
2. Fill authorized under a valid site development permit issued by the Building Division.
3. Minor fill being placed for developed property maintenance purposes, i.e., landscaping, gardening, existing driveway maintenance, exclusive of drainage easements or designated wetlands.
4. Fill being placed pursuant to an approved Drainage Review by the Palm Beach County Land Development Division (Article 11, ULDC)
5. Fill being placed in accordance with an approved South Florida Water Management District Permit (SWFMD) or other Local Drainage District permit.
6. Fill being placed in accordance with an approved permit from the US Army Corps of Engineers (USACOE), a Florida Department of Transportation project, or a federal project located on federal or state lands.
7. Fill being placed in accordance with an approved permit from the Florida Department of Environmental Protection (DEP) or the Palm Beach County Environmental Resource Management Division (ERM).

PROCEDURE:

No property filling operation shall take place except as authorized in the Policy section of this PPM. Minor fill as defined in definitions and as listed in the policy section shall be exempt from review and permitting by the Building Division, but shall consist entirely of clean fill (as defined above)

and shall not include new lot improvements or new development activity. All other filling operations, including pond filling shall require a site development permit prior to placement of fill. All site development permits shall require in progress and final inspections to ensure compliance with all applicable regulations.

Permits for fill activities may be required by multiple agencies having jurisdiction over the site and project in question. For example, Palm Beach County Building Division takes primary jurisdiction on all fill activities on single parcels less than 10 acres in size, and Palm Beach County Environmental Resource Management takes jurisdiction on all clearing and site fill activities on parcels over 10 acres in size. SFWMD also takes jurisdiction on projects greater than 10 acres in size, but may elect to take jurisdiction on smaller sites. FL DEP takes jurisdiction on designated wetlands and requires NPDES compliance on all projects that disturb more than one (1) acre of soils. Local water management districts may elect to regulate activities within their jurisdictional boundaries, and Palm Beach County Land Development Division takes jurisdiction for permitting all new subdivisions and for Drainage Review on commercial projects permitted by the Building Division.

In addition, all fill operations affecting more than one acre shall also comply with National Pollutant Discharge Elimination System (NPDES) regulations (Section 27, Article VII, PBC Code).

1. Application Procedure:

- a. Property Owners intending to fill portions of individual lots less than ten acres in size shall file appropriate documentation with the Building Division and obtain a Site Development permit.
 - i. If the fill is in conjunction with an issued Building permit for a commercial project which has received an approved Drainage Review by the Land Development Division no other action is required.
 - ii. If the fill is in conjunction with an issued Building Permit for a residential property, and is being placed in compliance with the approved plan on file with the Building Division no other action is required.
 - iii. All applications filed with the Division shall contain documentation sufficient to demonstrate the proposed fill activity will satisfy all criteria set forth in the policy section, will not detrimentally impact surrounding properties, and will satisfy all Federal, State and County Regulations. This may require signed and sealed engineering drawings as well as associated storm water calculations confirming the activity will not adversely impact the adjacent properties.
 - iv. Applications filed for fill activity sited in a Special Flood Hazard Area (SFHA) shall be required to provide stage storage calculations and engineered analyses to demonstrate no detrimental impact to surrounding properties
- b. For those fill projects involving new subdivision development with an engineered master storm water system, a Land Development permit shall be required prior to commencement.
 - i. This is in addition to any SFWMD permit and/or local drainage district permit which may also be required

- ii. New subdivision development located within a Special Flood Hazard Area (SFHA) shall also require review and approval by the County Floodplain Administrator and must comply with Article 18 ULDC and CFR 60.
- c. Prior to commencement of any site work a Notice of Intent shall be filed with the Florida Department of Environmental Protection for all projects that will disturb one (1) acre or more of soil. Larger projects must meet additional criteria as established by Federal and FL DEP rule.
- d. All applicants should contact their local water control district prior to commencement of any filling activities, to ascertain their specific permitting requirements and rules, if any.
- e. For those fill projects involving designated wetlands, FL DEP authorization is required in advance. All parties shall contact FL DEP to identify designated wetland areas.

2. Inspection and Certification Procedure for Building Division Fill Permits:

- a. All projects permitted by the Building Division shall require inspection and/or certification to confirm that proposed fill has been placed in accordance with the approved documentation filed with the permit.
- b. County staff may require as-built certifications, topographical surveys, grade stakes, or other means as necessary to verify conformance with all applicable regulations and the approved plans.
- c. County staff may also require “in-progress” inspections as necessary to verify the fill materials being placed fully comply with the definition of clean fill (above). Any fill material that is placed prior to inspection that is found not in compliance may be ordered to be removed from the site.
- d. At the time of final inspection, if applicable, Palm Beach County staff will also require proof of acceptance of the completed work from all other regulatory agencies governing the project, including, but not limited to Land Development, SFWMD, DEP, USACOE, and local water control districts.

3. Violation Procedure:

- a. Violations of this policy may be subject to Code Enforcement citation under Florida Statute 162 for violations of Section 105.1, 110.9 and Article 18 of the ULDC, and Code Enforcement PPM # PE-O-020 in addition to any other enforcement actions available to the County and other agencies having jurisdiction.



DOUG WISE
BUILDING DIVISION DIRECTOR

Supersession History

- 1. PPM# PB-O-128, issued 8/17/18
- 2. PPM# PB-O-128, effective 5/19
- 3. PPM# PB-O-128, effective 11/19

SELECTED CODE REFERENCES:

Florida Building Code 6th Edition (2017) Chapter 1 excerpts:

105.1 Required. Any contractor, owner or owner's authorized agent in accordance with Florida Statute Chapter 489 who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building, tenancy or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any impact-resistant coverings, electrical, gas, mechanical or plumbing, fire protection systems, accessible elements, flood resistant elements, site drainage elements, the installation of which is regulated by this code or Article 18 of the ULDC, or to cause any such work to be done, shall first make application to the building official and obtain the required permit.

110.9 Impact of construction: All construction activity regulated by this code shall be performed in a manner so as not to adversely impact the condition of adjacent property, unless such activity is permitted to affect said property pursuant to a consent granted by the applicable property owner, under terms or conditions agreeable to the applicable property owner. This includes, but is not limited to, the control of dust, noise, water or drainage runoffs, debris, and the storage of construction materials. New construction activity shall not adversely impact legal historic surface water drainage flows serving adjacent properties, and may require special drainage design complying with engineering standards to preserve the positive drainage patterns of the affected sites. Accordingly, developers, contractors and owners of all new residential development, including additions, pools, patios, driveways, decks or similar items, on existing properties resulting in a significant decrease of permeable land area on any parcel or has altered the drainage flow on the developed property shall, as a permit condition, provide a professionally prepared drainage plan clearly indicating compliance with this paragraph. Upon completion of the improvement, a certification from a licensed professional, as appropriate under Florida law, shall be submitted to the inspector in order to receive approval of the final inspection.

Article 1 ULDC Definitions excerpts:

Special Flood Hazard Area (SFHA) – for the purposes of Art. 18, the land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30. . [Ord. 2004-013] [Ord. 2017-026]

Flood Hazard Area - for the purposes of Art. 18, the greatest of the following three areas: [Ord. 2017-026]

- a. The area within a floodplain subject to a one-percent or greater chance of flooding in any year. [Ord. 2017-026]
- b. The area designated as a Flood Hazard Area on the community's flood hazard map, or otherwise legally designated. [Ord. 2017-026]
- c. The area developed into Building sites without a master-engineered storm water drainage plan. [Ord. 2017-026]

Article 18 excerpts (applies to all sites not located within a Master Storm Water Drainage System, not just Special Flood Hazard Areas):

Chapter D, Section 5A - Grading and Earth Fill

1. Grading

On all new, permitted construction, regardless of flood-zone designation, grading shall keep all rainfall and runoff flow on the Building site, until discharged into the roadway drainage system or to public drainage ways adjacent to the property lines. Berms shall be constructed along lot lines, if

necessary, to prevent storm water flow directly onto adjacent properties. Erosion sedimentation off the Building site shall be controlled until vegetative cover is established. The Floodplain Administrator may require grading plans showing pre-construction and proposed finish earth grades.

2. Earth Fill

On all New Construction, earth fill brought onto the site of construction from another site shall be minimized to maximize existing floodwater storage capacity. Maximum volume of imported fill shall be limited to that necessary to raise an earth pad to elevate the slab-on-grade not more than six inches above minimum floor elevation set in this Article, with side slopes of the pad of 1:5 to 1V:3H starting ten feet from the slab edges.

3. Fill in Zone V

Structure fill shall not be utilized in Coastal High Hazard Areas (Zone V).

Chapter H, Section 8 – Nonstructural Fill in Coastal High Hazard Areas (Zone V). In Coastal High Hazard Areas:

A. Minor grading and the placement of minor quantities of nonstructural fill shall be permitted for landscaping and for drainage purposes under and around Buildings.

B. Nonstructural fill with finished slopes that are steeper than one unit vertical to five units horizontal shall be permitted only if an analysis prepared by a qualified, registered design professional demonstrates no harmful diversion of floodwaters or wave runup and wave reflection that would increase damage to adjacent Buildings and Structures.

C. Where authorized by the Florida Department of Environmental Protection or applicable local approval, sand dune construction and restoration of Sand Dunes under or around elevated Buildings are permitted without additional engineering analysis or certification of the diversion of floodwater or wave runup and wave reflection if the scale and location of the dune work is consistent with local beach-dune morphology and the vertical clearance is maintained between the top of the sand dune and the lowest horizontal structural member of the Building.

4. Lot and Building Site Drainage

Site grading immediately adjacent to the perimeter of each Building constructed as slab-on-grade shall be sloped so as to drain or direct water away from the Structure.

5. Exceptions from the Requirements in this Section

- a. Only on Building sites requiring raised septic mounds to PBC Health Department minimum elevations, will additional volume of fill be allowed to construct the mound;
- b. Earth fill dug from an on-site excavation shall be unregulated if in accordance with the regulations in the ULDC, and provided finish grade directs lot drainage back into the excavation;
- c. Any volume of fill for placement inside the perimeter foundation walls to raise an interior concrete slab to any higher elevation shall be allowed;
- d. Fill shall be permitted to raise earthen berms on side property lines to prevent drainage onto adjacent lots, provided said berms have side slopes of 1:5 to 1:3, with a triangular cross section;
- e. Fill shall be allowed inside retaining walls for Building access ramps or driveway ramps required by the American Disabilities Act (ADA);
- f. Fill necessary to direct on-site drainage to the public roadway or drainage system may also be permitted;
- g. Minimum fill for sites that have sloping topography that do not store floodwater shall be permitted. Any fill in excess of this minimum grading requirement shall be subject to approval of the Flood Damage Prevention Board as a Variance;
- h. Fill necessary for critical facilities and public service Buildings; and

i. Areas included within a South Florida Water Management District permit shall be filled and graded in accordance with the fill and grading design conditions identified in said permit even when elevations are more than six inches above the minimum floor elevation set in Art.18.D.5.A.2.

RESPONSIBLE AGENCY CONTACT INFORMATION:

Local Drainage Districts:

Lake Worth Drainage District 561-498-5363
Indian Trail Improvement District 561-793-0874
Northern Palm Beach County Improvement District 561-624-7830
South Indian River Water Control District 561-747-0550

Other Regulatory Agencies:

Florida Department of Environmental Protection 850-245-2465
Florida Department of Health 850-245-4444
South Florida Water Management District 561-686-8800
United States Army Corps of Engineers 561-683-0498

Palm Beach County Agencies:

Environmental Resource Management 561-233-2400
Land Development Division 561-684-4090
Building Division 561-233-5000