

MEMORANDUM Development Services Department

TO:	A. Jerome Fletcher II, ICMA-CM, MPA, City Manager
CC:	Jason Yarborough, ICMA-CM, Assistant City Manager
FROM:	Alaina Ray, AICP, Development Services Director
DATE:	October 6, 2023
SUBJECT:	Erosion Control Measures and Geotechnical Reports

This purpose of this memorandum is to summarize two recent issues relating to requirements for erosion control measures and geotechnical report submission for single-family construction.

Erosion Control

The Unified Land Development Code (ULDC) includes the following applicable regulations for the placement and containment of stockpiled fill and materials. In addition to the ULDC requirements, every Building Permit must include Best Management Practices (BMPs) committing to containing all materials onsite and preventing materials from washing into the City's swales and right-of-way (ROW).

ULDC Sec. 14-20. - Stockpiling.

Stockpiling is intended to allow for temporary storage of materials for future use in a construction project to be located on the same property and shall be monitored for compliance with the following criteria through an approved development order:

A. Stockpiles must be placed to minimize nuisance to the public, with consideration given to storm water drainage routing, dust control, safety, and aesthetic appearance.

B. Stockpile material shall consist of clean earth fill (Type A), free of construction debris, vegetation, and other deleterious materials not suitable for fills.

C. BMPs must be in place around all stock piles to prevent silt runoff and erosion control.

ULDC Sec. 17-61. - Limitations on placement of fill.

Subject to the limitations of this ordinance, fill shall be designed to be stable under conditions of flooding including rapid rise and rapid drawdown of floodwaters, prolonged inundation, and protection against flood-related erosion and scour. In addition to these requirements, if intended to support buildings and structures (Zone A only), fill shall comply with the requirements of the Florida Building Code.



MEMORANDUM

Development Services Department

Unfortunately, many builders have not been adhering to their BMPs and have allowed their materials to infiltrate the City's swales and ROW due to the lack of silt fencing and/or other appropriate erosion control measures. Some builders have even appropriated these areas for use as their stockpiling locations. This lack of erosion control has allowed sediment runoff from these construction sites to choke the City's swales, block the flow of stormwater, and contribute to and/or cause significant flooding events in certain neighborhoods. Examples of the lack of erosion control measures and the results can be seen in the following photographs. Flooding occurred on these streets, preventing residents from being able to leave or return to their homes.







MEMORANDUM

Development Services Department

To correct an immediate threat to life, health, and safety of the public due to the significant neglect of erosion control measures, an email was sent to all contractors with email addresses on record with the Building Division reiterating their responsibility to maintain their materials onsite. This email included a diagram of BMPs, a note that alternate measures could be considered if presented to the Building Division, and notice that Stop Work Orders would be issued for noncompliance in accordance with the ULDC and the Florida Building Code (FBC). The Building Division is working individually with builders to discuss BMPs that will meet specific onsite needs, and only two Stop Work Orders have been issued due to egregious violations and immediate threat to life, health, and safety of neighbors.

Geotechnical Reports

When more than 12 inches of fill is brought onto a site for building foundations to be constructed on, a geotechnical report is required per the FBC. These reports are also required when fill is not being used if the foundations will include piers or borings. Geotechnical reports may not be required if building slab-on-grade foundations on undisturbed ground of a soil type that is not prone to shifting, expansion and contraction, depression, or other movement. These reports include the following:

- Description of the type of soil onsite and verification that it is of a type that will support the load of the proposed structure;
- The type and quality of fill brought onto the site, with observed absence of vegetation, rock, or other material that could compromise the integrity of the foundation and underground pipes;
- A grading plan with recommended grading for the site; and
- Description and results of a compaction test.

These reports are routinely submitted with every building permit application for single-family homes being constructed by the larger builders in North Port (Lennar, Pulte, etc.). However, it recently came to the attention of the Chief Building Official (CBO) that these reports were not being submitted by some builders constructing homes on individual preplatted lots, even though as much as four feet of fill material is now routinely used on these lots due to flood requirements and other grading issues. Instead, these builders were only submitting compaction tests which alone do not provide adequate assurance that the foundation will be properly supported. Failure to conduct the analysis required in the reports can result in cracked foundations and ruptured plumbing in the event vegetation was previously buried onsite, large tree root systems were not removed, substandard fill material is used, vegetation or rocks were mixed with the fill material, or the grading is not performed correctly. These issues could have long-term ramifications for the value and structural integrity of these homes.

It is unknown to the CBO as to why these reports were not being submitted by some builders, but once the CBO is aware of the issue there is an obligation to correct it, otherwise the CBO's State license may be jeopardized. To rectify this issue, the CBO sent a notice to all contractors on record with the City that a geotechnical report would be required beginning October 1. This notice was sent five to six weeks prior to October 1 to provide builders time to have their engineers prepare the reports. Even with advance notice, however, the Building Division is aware that some builders may have difficulty securing reports in a timely manner. Therefore, the Building Division is working to provide flexibility on the timing of submission and will communicate this to the affected builders.