

Heard & Katz, LLC

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4/15/2024

Ross McCall, PE
Waller County Engineer
775 Business 290 East
Hempstead, TX 77445

Subject: Floodplain Variance

On behalf of my client Sprint Sand & Clay, LLC I am requesting a variance to the Waller County Flood Damage Prevention Ordinance (FDPO) as it relates to the development of a proposed sand pit operation. This soil processing facility will be initiated on 46 acres of predominantly undisturbed pasture that sits approximately 2-4' below the determined base flood elevation (BFE) of 115.6' msl.

The requested variance is to allow a pad to be placed as proposed in lieu of building a structure to hoist the office 2' above the projected 500 yr flood as required by the FDPO.

The Waller County FDPO tracks closely and references the National Flood Insurance Program (NFIP) regulations contained in Title 44 CFR Part 60.1-6. FDPO Article 4, Section D provides procedures for requesting variances from the requirements of this County ordinance. Similar Federal language is found in 44 CFR 60.6.

The Problem – The FDPO has language that restricts a solution that NFIP allows. The Federal rules allow for filling in the floodplain with compensatory mitigation which this project will provide in spades.

FDPO Article 4, Section D (10) (a) and (b) - Prerequisites for granting variances:

- (a) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard to afford relief.
- (b) Variances shall only be issued upon:
 - (i) showing a good and sufficient cause;
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and
 - (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

Waller County FDPO Article 5, Section A(9) - No structural fill is allowed within special flood hazard areas and/or moderate flood hazard areas. Only open foundation systems (e.g. pier and beam, etc.) will be permitted.

Federal 44 CFR 60.6(c)(2)(iii) - Have the area surrounding the structure on all sides filled to or above the elevation of the base flood. Fill must be compacted with slopes protected by vegetative cover;

The Texas Legislature adopted the Federal language in the **Texas Water Code Section 16.315** with an opening statement " All political subdivisions are hereby authorized to take all necessary and reasonable actions that are not less stringent than the requirements and criteria of the National Flood Insurance Program."

The reason the ordinance was established is to have developments and public buildings conform to standards that take into account the potential damage caused by flooding. This noble cause weaves insurance issues into Federal funding of disaster relief by regulating development in flood prone areas. The ordinances particularly focus on residential and commercial developments that are financed and insured. This project has no public accommodations that will be financed or insured for flooding. This project will also provide flood storage that could become an asset to the public as many Sprint facilities have evolved into.

Pad Volume - A ticket office that will sit above the BFE on a pad that is proposed to be approximately 0.12 acres (5,400 sf). Assuming a 4' fill, the volume of compacted soil to build the pad will be 727 cy (0.45 ac-ft).

Pit Volume - Assuming a cut sloop of 1:1 (assumed angle of repose for sand) a 10' cut in the pit will yield 334 ac-ft. A completely depleted pit at 40' will yield 1,264 ac-ft. Assuming the pad is built from soil taken from the pit area this operation will have somewhere between zero impact upon opening day to a potential 1,000 ac-ft addition to flood storage in the immediate area.

Please consider this variance in your assessment of this project.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dan L. Harris".

Dan L. Harris, PE

Heard & Katz, LLC

TBPE F26203