

Drainage Report

VILLAFLORES ADDITION

Introduction

The subject property is located ¼ mile east of Arkansas on the north side of 27th Street North. The property is currently zoned TF-3, two family. The tract of land is about 2.5 acres total. The property is being platted into 12 lots.

Current Conditions

The site is served by City of Wichita utilities. Residential abuts the property in all directions. The soils are a Type C, with a somewhat high runoff coefficient. There are no signs of wetlands and the land is in flood zone X. The land drains to the northeast into the drainage channel and south into a public storm sewer system. The site drains at a slope of about 1.0%.

The attached plat with topography shows existing features including contours and utilities, including proposed easements.

Proposed Improvements

The site will be developed for residential use. The drainage patterns will follow the existing patterns as shown on the attached grading plan.

Best management practices for erosion control will include seeding disturbed areas and installing city approved measures for industrial uses. Since the total disturbed area is more than 1 acre, a notice-of-intent will be filed with KDHE. The attached calculations show the existing and developed peak runoffs, including assumed coefficients and conditions.

Site Hydrological Analysis

Existing and proposed site conditions have been modeled using the rational method. The Values for Rainfall Intensity and Runoff Coefficients were established using the *Drainage and Storm Sewer Policy for Design Criteria and Documentation, City of Wichita, Kansas*. A time of concentration of 15 minutes was used as it is the minimum inlet time. A proposed time of concentration of 15 minutes was also used.

Future Development

There will be no future development of this plat after the lots are built.