

Drainage Report

SHAW ADDITION

Introduction

The subject property is located ¼ mile east of Hoover Road on the north side of Central. The property is currently un-platted and zoned SF-5. A zoning change application to change the proposed use to LC has been filed. The tract of land is about 0.75 acres total. The property is being platted into 1 lot.

Current Conditions

The site is served by City of Wichita utilities. Single family residential abuts the property on the north and east, with commercial development west. The property is undeveloped. The soils are a Type B, with a fairly low runoff coefficient. There are no signs of wetlands and the land is not in a floodplain. The land drains from the northwest to the southeast. The site drains at a slope of about 0.6%.

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

Proposed Improvements

The site will be developed for limited commercial use. The lot will drain from west to east 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 less than 1 acre, a notice-of-intent will not 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.