

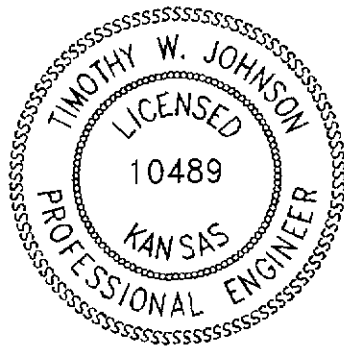
**Preliminary  
DRAINAGE CALCULATIONS**

TO SERVE

***WATERWALK ADDITION***  
***South of Waterman Street***  
***West of Main Street***

LOCATED IN

**Wichita, Kansas**



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Prepared by:



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# **REPORT SUMMARY**

## **GENERAL SCOPE**

This report will cover the preliminary drainage calculations for the proposed Waterwalk Addition. The site is currently a undeveloped tract of land located at the southwest corner of the intersection of Waterman Street and Main Street in Wichita, KS, a part of the Southeast Quarter (SE/4) of Section Twenty (20), Township Twenty-seven (27), Range One (1) East. This report presents the preliminary supporting calculations and exhibits for the storm sewer improvements.

## **HISTORIC CONDITIONS**

The proposed site historically was an industrial and commercial building area of Wichita. Street location appears to be the same general location as the present layout. With the close proximity of the Arkansas River, one can assume that stormwater runoff flowed directly to the river via sheet flow in the streets and any underground storm sewer systems that were in place at the time.

## **PRESENT CONDITIONS**

The existing site currently consists of sparsely grassed vacant city lots. Rainwater sheet flows in an easterly direction to various area drain inlets and street curb inlets located in Wichita Street, Lewis Street and Waterman. Runoff is collected and piped underground through existing 60 inch, 42 inch and 36 inch storm sewer pipes. These pipes flow westerly through the proposed site and discharge into the Arkansas River.

## **DRAINAGE SUMMARY**

The proposed Waterwalk Addition will be constructed so that surface runoff from the building sites will be collected and piped underground for eventual discharge to the Arkansas River. The existing storm sewer system in Lewis Street will generally be abandoned and replaced by a new system that will follow the layout of the proposed streets. The existing system underneath the Kellogg Street flyover will remain in place and not be altered. by the existing storm sewer system.

