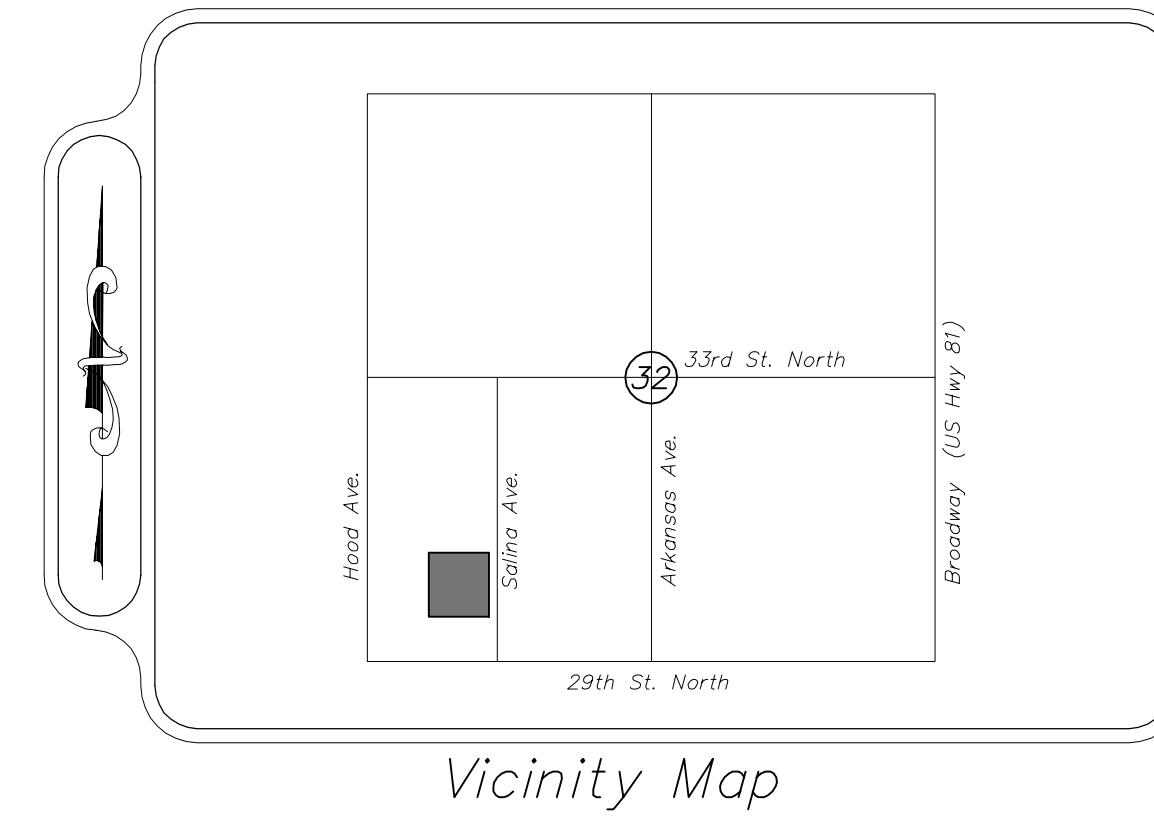
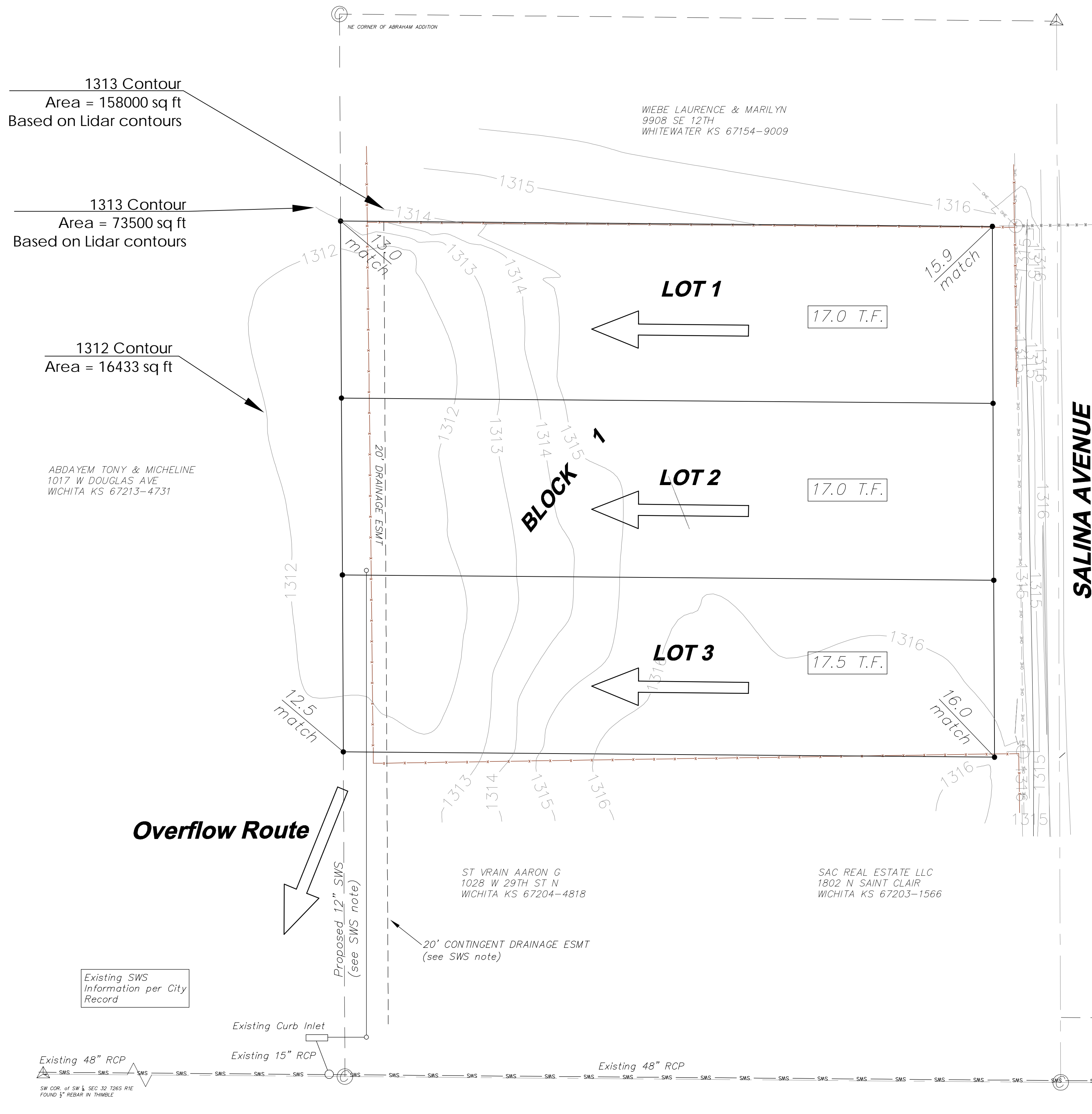


# DRAINAGE PLAN PRELIMINARY GRADING PLAN SOLIS ADDITION WICHITA, SEDGWICK COUNTY, KANSAS



Ponding occurs on this site at elevation 1312. At higher elevations the ponding spreads to the west and south before overtopping into 29th Street. Areas are conservative per lidar contouring. The majority of ponding volume, before overtopping, is at elevation 1313 which encompasses a majority of the west property. The contributing basin to this ponding area, when modeled, does not produce overflow to the south based on elevation.

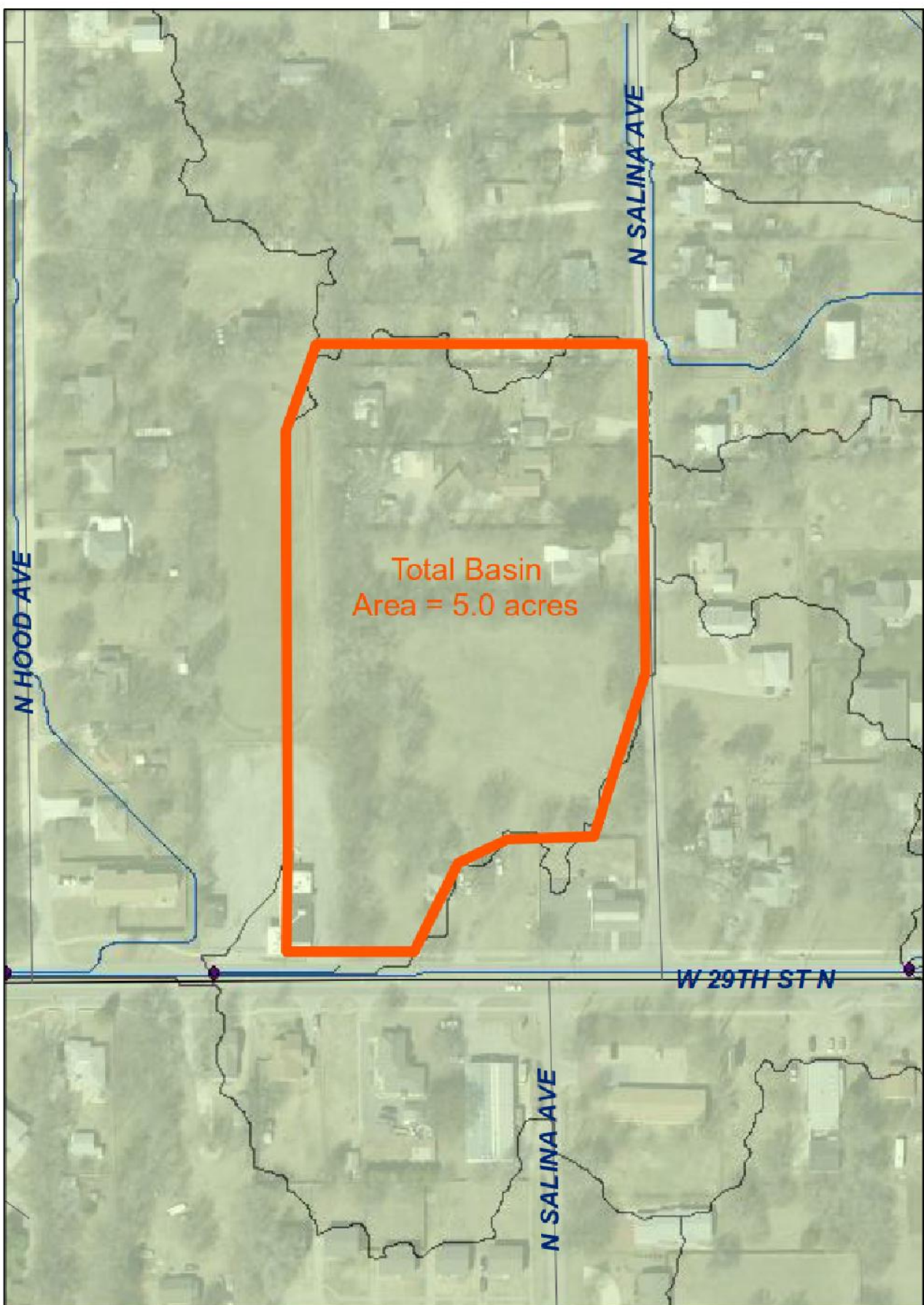
Based on conversations with local residents, this area infiltrates rather quickly in the rear area at the west of the lots. The ponding area model assumed no infiltration.

STAGE	INFLOW	OUTFLOW	ELEVATION
2 yr	6.4 cfs	0 cfs	1312.5
10 yr	14 cfs	0 cfs	1313.0
100 yr	28 cfs	0 cfs	1313.3

ELEVATION	TOTAL STORAGE (ac ft)
1340	0.0
1341	0.64
1342	1.37
1343	2.2
1344	3.1

Basin modeled assuming no outfall. When modeled with 12" SWS, 100-yr WSE decreases to elevation 1313.0 with an outflow of 2.5 cfs. Area will drain in approximately 6-8 hours after the peak rainfall event.

SWS NOTE: This 12" SWS is sized to clean up nuisance runoff and will carry the 2 year event with little ponding on the property. Larger storm events will still pond in this rear portion, as it does today, but will drain via the SWS to the existing system in 29th Street. This system will not be installed, nor the offsite 20' Drainage Agreement will be executed, unless the homeowners of this plat or the adjoining neighbors request the installation to the governing body. At that time, a more detailed engineering design and accompanying survey will need to be performed.



**BASIN MAP**  
Area per COW Hydrogeodatabase

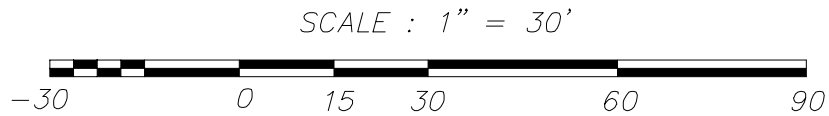
NOTES: This site is not expected to disturb more than 1 acre of ground surface and will not require water quality treatment. In the event that this overall development disturbs one acre or more, water quality treatment will need to be provided as part of the site development package.

Due to the site being under 5 total acres, and under 1 acre of disturbance, no detention or downstream channel protection is being provided.

This site lies within a FEMA SFHA Zone X-Shaded per FEMA FIRM Panel 355 of 700 for Wichita, Sedgwick County, Kansas; effective February 2, 2007.

**GRADING IS PRELIMINARY  
NOT FOR CONSTRUCTION**

Due to the size/depth of the proposed lots, each lot should have an individual lot grading plan prior to construction.



**Offsite Flow All Directions**  
Area = 3.3 acres  
CN = 71\*  
Tc = 15 min\*\*  
Q<sub>2</sub> = 4.2 cfs  
Q<sub>5</sub> = 7.1 cfs  
Q<sub>10</sub> = 9.4 cfs  
Q<sub>25</sub> = 12 cfs  
Q<sub>100</sub> = 18 cfs

\* Existing conditions in Soil Type B  
\*\* Minimum. This is conservative due to the land slope and cover type.

**EXISTING = PROPOSED**  
Area = 1.7 acres  
CN = 71  
Tc = 15 min  
Q<sub>2</sub> = 2.7 cfs  
Q<sub>5</sub> = 3.1 cfs  
Q<sub>10</sub> = 4.8 cfs  
Q<sub>25</sub> = 6.4 cfs  
Q<sub>100</sub> = 9.5 cfs



**DRAINAGE PLAN  
PRE-GRADE PLAN  
SOLIS ADDITION**

**Baughman Company, P.A.**  
315 Ellis St. Wichita, KS 67211 P 316.262.1271 F 316.262.0149  
ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

**JOB DESCRIPTION:**  
PRELIMINARY PLAT

**PREPARED FOR:**  
Jose Solis  
2918 N. Wellington Place  
Wichita, KS 67204

**JOB LOCATION:**  
29th St. North & Salina Ave.

**DATE OF PREPARATION:**  
08-11-2014

**JOB NUMBER:**  
A13182

**SHEET 1 OF 1**

**DRAWN BY:** AMP **CHECKED BY:** CBS

**Abbott and Survey**

520 S. Holland, Ste. 103 Wichita, KS 67209  
Ph. 316.262.2262 Fax 316.262.2268  
surveyors@benchmarks.net