

DRAINAGE PLAN
EASY CREDIT AUTO
2ND ADDITION
TO
WICHITA, SEDGWICK COUNTY, KANSAS

PREPARED BY



29 JUNE 2010



DRAINAGE PLAN EASY CREDIT AUTO 2ND ADDITION

FINAL REPORT

Prepared by Baughman Company, P.A.
29 June 2010

By Trevor R. Kurth, P.E., CFM
N. Brent Wooten, P.E., L.S.

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PROJECT NARRATIVE

EXISTING CONDITIONS

The site is located on the west side of Broadway Avenue just north of 31st Street South, in Wichita, Sedgwick County, Kansas. The entire site is currently paved with asphalt and includes 2 buildings near the northern portion of the site. There are tree rows along the perimeter on all sides except the Broadway frontage. A sanitary sewer and associated easement divides the site into 4 sections. The site is relatively flat, although it appears the site currently sheet flows in all directions to the surrounding properties and to the Broadway and Old Lawrence Road ROW. There is a low lying ponding area in the center of the site near the sanitary sewer manhole that appears to hold water.

PROPOSED CONDITIONS

The property is expected to remain as existing conditions with no additional grading or improvements. The site is currently used as a storage/car lot and is expected to continue in that aspect. All grades, internal and perimeter, are expected to remain as existing.

If the site is razed and major improvements are constructed in the future, the drainage paths / grading may need to be altered away from surrounding properties and to the Broadway and Old Lawrence ROWs, respectively. For a half-scale copy of the Plat, see Exhibit 3.

OFFSITE CONDITIONS

There does not appear to be any offsite drainage encroaching this property. This property sheet drains to the surrounding properties. The surrounding properties are currently developed. There is stormwater sewer in the Broadway ROW that drains this area. There are also open ditch sections along Old Lawrence Road that drain this area.

The USGS Quadrangle Sheet can be seen with the site location plotted as Exhibit 1. The Aerial for this area can be viewed as Exhibit 2.

EXISTING CONDITIONS RUNOFF CALCULATIONS

DRAINAGE METHODS & STANDARDS

The following methods and standards, although not a complete list, were used in calculating the existing conditions runoff values.

Ø STORM SERIES

- 24-hour; 2-yr, 5-yr, 10-yr, 25-yr, 100-yr Storm Events Modeled
- 2-yr Rainfall Depth = 3.5 in
- 10-yr Rainfall Depth = 5.3 in
- 100-yr Rainfall Depth = 7.9 in

Ø FLOW DATA

- Areas per LIDAR data, USGS Quadrangle Sheet, Aerial Photos, and Site Visits
- Rational Method used for Existing Flows ('C' = 0.93)
- Time of Concentration: Lag Method (minimum 15 min)

SITE CHARACTERISTICS

The current site consists of approximately 6.5 acres and is currently a paved car lot or storage area with associated out-buildings. The site is completely paved and is generally flat. It appears the site sheet flows to the surrounding developed areas to the south and north.

The existing site characteristics can be seen from the aerial exhibit (Exhibit 2).

EXISTING CONDITIONS HYDROLOGIC ANALYSIS

The site was analyzed for pre-development conditions using the hydrograph method for the 2, 10, and 100 year storm events. A rational 'c' coefficient of 0.93 was used for commercial/industrial areas with paved surfaces. The time of concentration was calculated using Lag Method with a minimum time of concentration of 15 minutes.

The site will produce approximately 45 cfs in the 100-year storm event.

DOWNSTREAM DRAINAGE CAPACITY

The site sheet flows in all directions to the surrounding properties and to the adjacent street ROW's. We are not aware of any major flooding in this area as of this report. There are storm water sewers in the Broadway Avenue ROW, as well as in the 31st Street ROW to the south. The surrounding areas are mostly paved and have been previously developed.

POST-DEVELOPMENT HYDROLOGIC ANALYSIS

DRAINAGE METHODS & STANDARDS

The following methods and standards, although not a complete list, were used in developing the drainage and grading plans.

- Ø STORM SERIES
 - 24-hour; 2-yr,10-yr,100-yr Storm Events Modeled
 - Rational Method used for proposed flows
 - 'C' factor = 0.93 (Paved Commercial/Industrial Impervious Area)
 - Time of Concentration; Lag Method, minimum Tc = 15min

- Ø GRADING CONSTRAINTS
 - All lot grades matched and existing structures to remain

DETENTION FACILITIES

There is no detention proposed on this site at this time. The site is expected to remain as it is existing and is currently paved. No razing of the site is expected at this time.

DISCHARGE POINTS SUMMARY

The site sheet flows to the north and south and onto existing developed properties. It appears these areas then drain to the Broadway and 31st St ROWs. There does not appear to be any defined 'discharge point' on these adjoining properties. The site also sheet flows to the east and west and into existing ROWs.

POTENTIAL UPSTREAM/DOWNSTREAM IMPACTS

Due to the site remaining as existing with no grade changes, there are not any potential impacts expected with the platting of this property.

FLOODPLAIN SUBMITTAL

SOURCE OF FLOODPLAIN INFORMATION

The site lies within a FEMA Zone X - Shaded. The location of the property, on FEMA FIRM Panel 365 of 700 for Sedgwick County, Kansas, effective February 2, 2007, is attached as Exhibit 5.

FEDERAL, STATE, & LOCAL PERMITTING

US ARMY CORPS OF ENGINEERS

There does not appear to be any jurisdictional waters of the US on this site.

KANSAS DEPT OF AGRICULTURE –DWR PERMITTING

There does not appear to be any DWR permitting needed on the proposed site at this time.

FEMA

There is no mapped floodplain located upon the proposed site. Therefore, no FEMA permitting is expected at this time.

KANSAS DEPT OF TRANSPORTATION

There does not appear to be any KDOT permitting needed on the proposed project.

SEDGWICK COUNTY PERMITTING

There does not appear to be any Sedgwick County permitting needed at this time.

- EXHIBIT 1: Site Location Map
- EXHIBIT 2: Aerial Photo Exhibit with Hand Topography
- EXHIBIT 3: Plat –Half Scale
- EXHIBIT 4: Drainage & Grading Plan –Half Scale
- EXHIBIT 5: Floodplain Location (FIRM)

SITE LOCATION EXHIBIT
EASY CREDIT AUTO 2ND ADDITION
 WICHITA, SEDGWICK COUNTY, KANSAS

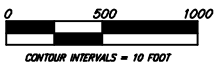
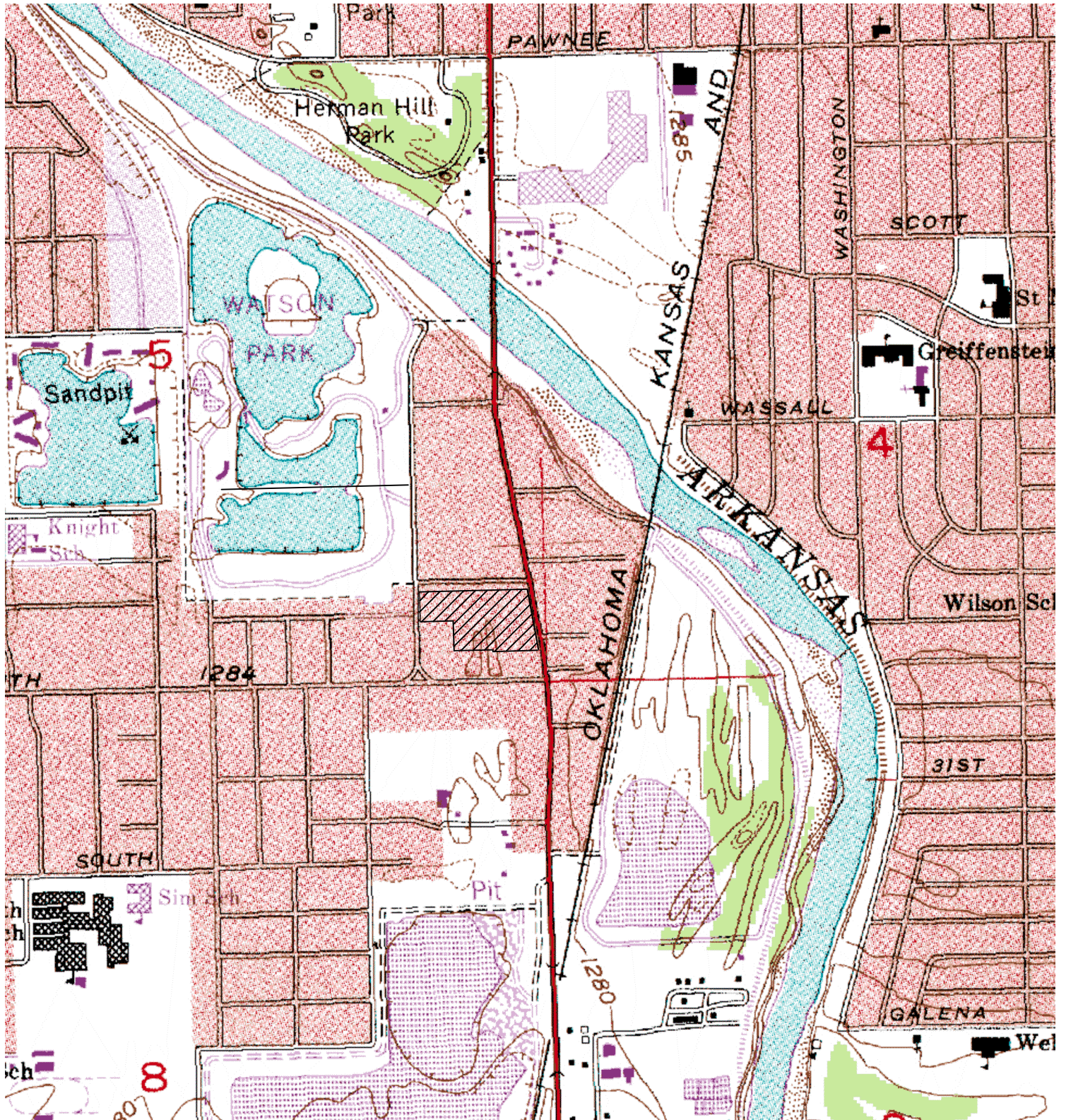


EXHIBIT 1
EASY CREDIT AUTO 2ND ADDITION

29 June 2010


Baughman Company, P.A.
 316 E. St. Wichita, KS 67201 P: 316.267.7271 F: 316.262.0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE

AERIAL EXHIBIT
EASY CREDIT AUTO 2ND ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

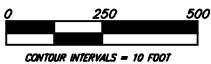


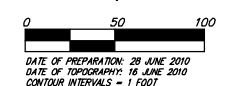
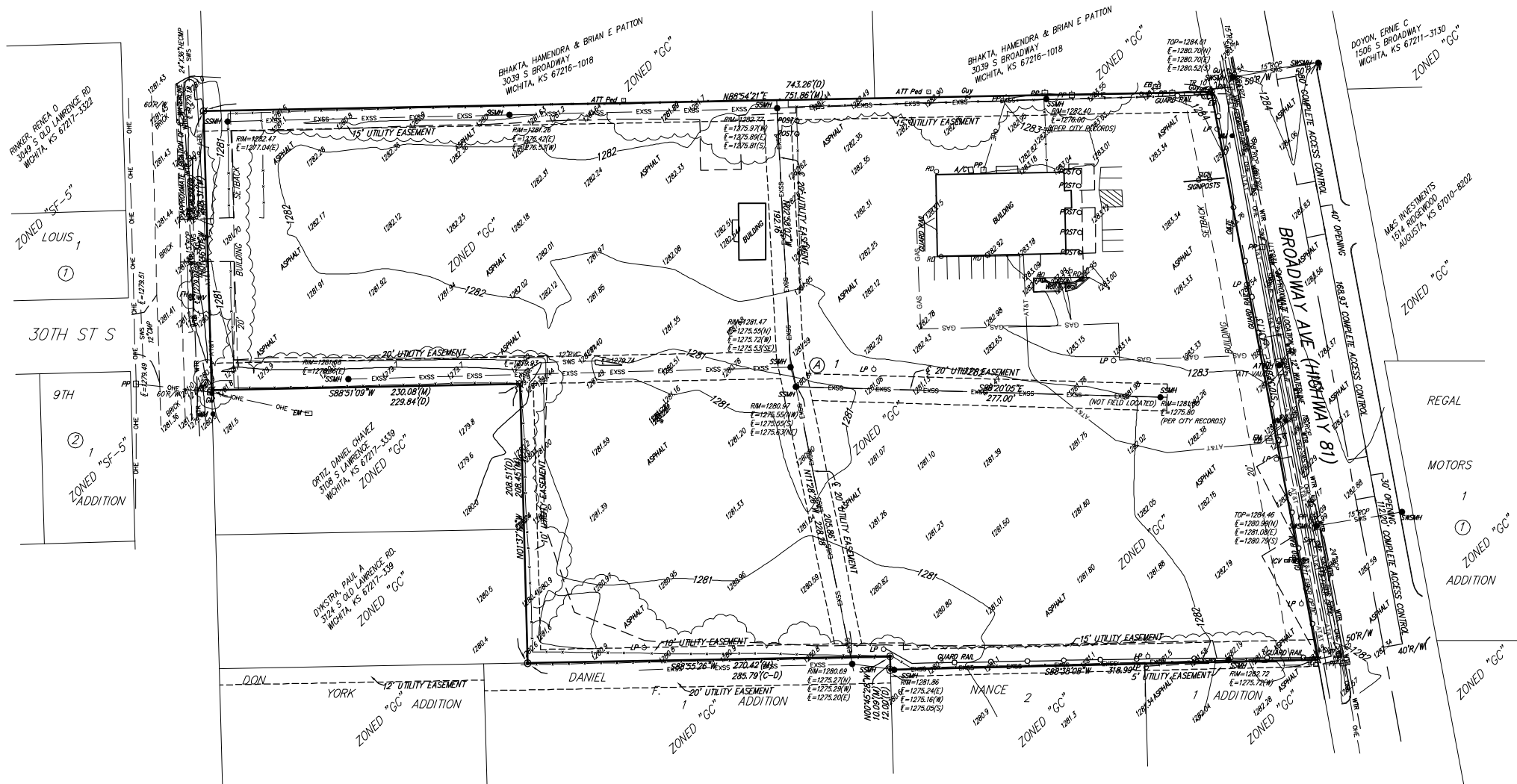
EXHIBIT 3
EASY CREDIT AUTO 2ND ADDITION

29 June 2010

ONE-STEP FINAL PLAT

EASY CREDIT AUTO 2ND ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

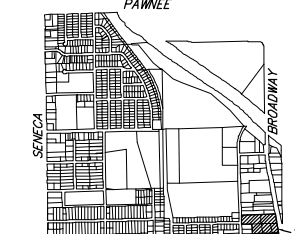


DATE OF PREPARATION: 28 JUNE 2010
 DATE OF TOPOGRAPHY: 16 JUNE 2010
 CONTOUR INTERVALS: 1 FOOT

OWNER:
 EASY CREDIT AUTO SALES, INC.
 333 S. EMPORIA
 WICHITA, KS 67202
 316-393-1360

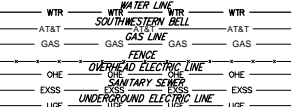
BENCHMARK:
 CROSS CUT ON CONCRETE BASE OF
 LIGHT POLE 152' NORTH AND 3 1/2'
 EAST OF SE CORNER OF THE PLAT.
 ELEVATION = 1284.63 NAVD83

- # = #4 REBAR (FOUND)
- # = #4 REBAR W/ "BAUGHMAN" CAP (SET)
- ⊙ = #4 REBAR (FOUND)
- ⊗ = AXEL (FOUND)
- ⊖ = 5/4" IRON (FOUND)
- II = CROSS (FOUND)
- (M) = MEASURED
- (D) = DESCRIBED
- (P) = PLATTED
- (C) = CALCULATED



VICINITY MAP
 SEC. 5, T28S, R1E

- EB □ = Electric Box
- FH ⊕ = Fire Hydrant
- GM ⊕ = Gas Meter
- Guy ⊕ = Guy Anchor
- ICV □ = Irrigation Control Valve - Valve Box
- LP ⊙ = Light Pole
- PP ⊕ = Power Pole
- Sign ⊕ = Sign
- SSMH ⊕ = Sanitary Sewer Manhole
- ATTMH ⊕ = ATT Manhole
- ATT Ped ⊕ = ATT Pedestal
- SSSMH ⊕ = Stormwater Sewer Manhole
- T ⊕ = Tree
- WM ⊕ = Water Meter
- WV ⊕ = Water Valve



State of Kansas) SS We, Baughman Company, P.A., Surveyors in
 Sedgwick County) aforesaid county and state do hereby certify that we have surveyed and
 platted "EASY CREDIT AUTO 2ND ADDITION", Wichita, Sedgwick County,
 Kansas and that the accompanying plat is a true and correct exhibit of
 the property surveyed, described as a tract in the Southeast Quarter of
 Section 5, Township 28 South, Range 1 East of the 6th Principal Meridian,
 Sedgwick County, Kansas described as follows: Beginning at a point in the west
 line of New U.S. Highway No. 81, said point being 476.5 feet north and 125.465
 feet west of the southeast corner of said Section 5; thence west parallel with
 the south line of said Section 5, a distance of 350 feet; thence north 208.5
 feet; thence east 314.42 feet to a point in the west line of said Highway No.
 81; thence southeasterly along the west line of said Highway a distance of
 211.51 feet to the point of beginning, together with a tract in the Southeast
 Quarter of Section 5, Township 28 South, Range 1 East of the 6th Principal
 Meridian, Sedgwick County, Kansas described as follows: Beginning 268 feet north
 and 437.885 feet west of the southeast corner of said Southeast Quarter;
 thence west 466.415 feet; thence north 208.5 feet; thence east to a point
 473.465 feet west and 476.5 feet north of the southeast corner of Section 5;
 thence southeasterly 211.51 feet to the place of beginning, EXCEPT the west
 229.835 feet thereof, together with a tract in the Southeast Quarter of Section
 5, Township 28 South, Range 1 East of the 6th Principal Meridian, Sedgwick
 County, Kansas described as follows: Beginning at a point 476.5 feet north and
 404.3 feet west of the southwest corner of Section 4, Township 28 South, Range
 1 East; thence north 208.5 feet; thence east 428.835 feet; thence south
 208.5 feet; thence west to the place of beginning, together with a tract of
 land described as follows: beginning at a point in the west line of the New U.S.
 Highway No. 81, which is 268 feet north and 89.885 feet west of the southeast
 corner of Section 5, Township 28 South, Range 1 East of the 6th Principal
 Meridian, Sedgwick County, Kansas; thence west parallel with the south line
 of said Section 5, a distance of 140 feet; thence northwesterly and parallel with
 the west line of said Highway No. 81, a distance of 211.51 feet; thence east
 140 feet to a point in the west line of said Highway No. 81, said point being
 125.465 feet west and 476.5 feet north of the southeast corner of said Section
 5; thence southeasterly along the west line of said Highway No. 81, a distance
 of 211.51 feet to the point of beginning, together with a tract of land described
 as follows: beginning at a point 268 feet north and 229.885 feet west of the
 southeast corner of Section 5, Township 28 South, Range 1 East of the 6th
 Principal Meridian, Sedgwick County, Kansas; thence west parallel with the
 south line of said Section 5, a distance of 208 feet; thence northwesterly 211.51
 feet to a point 476.5 feet north and 473.465 feet west of the southeast corner
 of said Section 5; thence east parallel to the south line of said Section 5, a
 distance of 208 feet; thence southeasterly 211.51 feet to the point of beginning,
 together with a tract of land described as follows: beginning at a point 256 feet
 north of the southeast corner of Section 5, Township 28 South, Range 1 East of
 the 6th Principal Meridian, Sedgwick County, Kansas; thence west parallel with
 the south line of said Section 5, a distance of 407 feet; thence north parallel
 with the east line of said Section 5, a distance of 12 feet; thence east parallel
 with the south line of said Section 5, a distance of 407 feet; thence south
 along the east line of said Section 5, a distance of 12 feet to the place of
 beginning, EXCEPT that part taken for highway as established in District Court
 Condemnation Case No. 75694.

Existing public easements and dedications
 being vacated by virtue of K.S.A. 12-512(b).
 Baughman Company, P.A.

_____, Surveyor
 Michael G. Conrey

Know all men by these presents that we,
 the undersigned, have caused the land in the surveyors certificate to be
 platted into a Lot and a Block, to be known as "EASY CREDIT AUTO 2ND
 ADDITION", Wichita, Sedgwick County, Kansas. The utility easements are
 hereby granted as indicated for the construction and maintenance of all
 public utilities. Access controls shall be as depicted on the face of the
 plat and are hereby granted to the City of Wichita, Kansas. The
 permitted opening locations shall be as determined by the City Engineer
 of the City of Wichita, Kansas.

Easy Credit Auto Sales, Inc., a Kansas corporation

_____, President
 Sam Hudson

State of Kansas) SS The foregoing instrument acknowledged before
 Sedgwick County) me, this _____ day of _____, 2010, by Sam Hudson, President of
 Easy Credit Auto Sales, Inc., a Kansas corporation, on behalf of the
 corporation.
 _____ Notary Public

My App't. Exp. _____

This plat of "EASY CREDIT AUTO 2ND
 ADDITION", Wichita, Sedgwick County, Kansas has been submitted to and
 approved by the Wichita-Sedgwick County Metropolitan Area Planning
 Commission, Wichita, Kansas.

Dated this _____ day of _____, 2010.
 Wichita-Sedgwick County Metropolitan Area Planning Commission

_____, Chair
 G. Nelson Van Fleet

_____, Secretary
 John L. Schlegel

This plat approved and all dedications
 shown hereon accepted by the City Council of the City of Wichita,
 Kansas, this _____ day of _____, 2010.

_____, Mayor
 Carl Brewer

_____, City Clerk
 Karen Sublett

Entered on transfer record this _____ day
 of _____, 2010.

_____, County Clerk
 Kelly B. Arnold

State of Kansas) SS This is to certify that this plat has been
 Sedgwick County) filed for record in the office of the Register of Deeds, this _____ day
 of _____, 2010 at _____ o'clock _____ M; and is duly recorded.

_____, Register of Deeds
 Bill Meek

_____, Deputy
 Tonya Buckingham

Reviewed in accordance with K.S.A. 58-2005
 on this _____ day of _____, 2010.

Tricia L. Robello, L.S. #1246
 Deputy County Surveyor
 Sedgwick County, Kansas

NOTE:
 A drainage plan has been developed for this subdivision and is on file with
 the City of Wichita, Kansas. Drainage intent shall remain as depicted or as
 modified with the approval of the City Engineer of the City of Wichita,
 Kansas. No obstructions which impede the flow of this drainage plan shall
 be allowed.

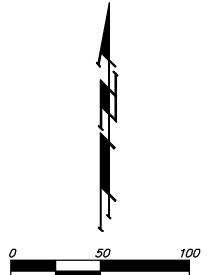
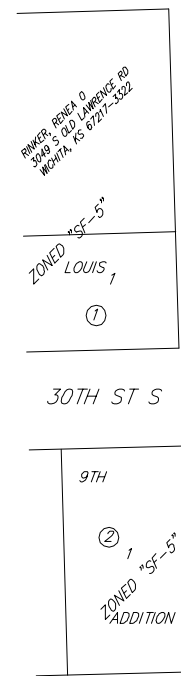
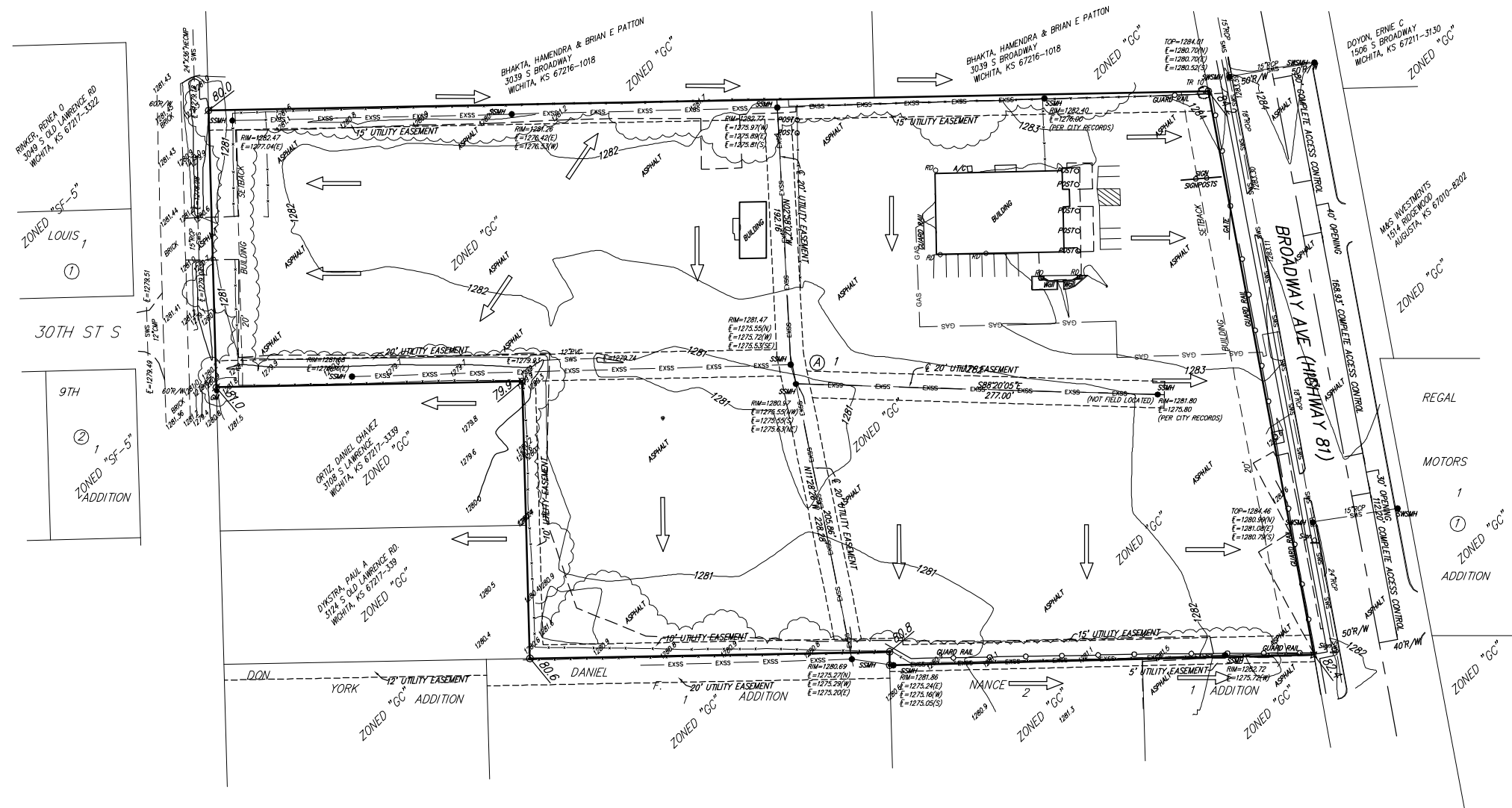
EASY CREDIT AUTO 2ND ADDITION

28 JUNE 2010

Baughman Company, P.A.
 315 ELLIS ST. WICHITA, KS 67211 P 316-262-7271 F 316-262-0149
 ENGINEERING | SURVEYING | PLANNING | LANDSCAPE ARCHITECTURE
 E:\PROJECTS\EASYCREDITAUTO2NDADDITION\EASYCREDIT2ND_OSF.DWG:RKR

EASY CREDIT AUTO 2ND ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

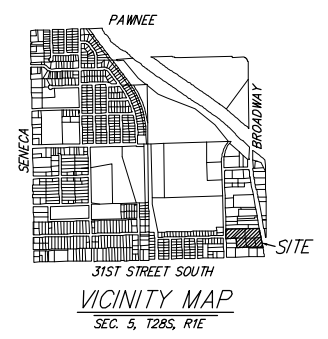


DATE OF PREPARATION: 28 JUNE 2010
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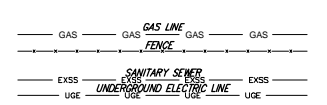
OWNER:
 EASY CREDIT AUTO SALES, INC.
 333 S. EMPORIA
 WICHITA, KS 67202
 316-393-1360

BENCHMARK:
 CROSS CUT ON CONCRETE BASE OF
 LIGHT POLE 152'± NORTH AND 3'±
 EAST OF SE CORNER OF THE PLAT.
 ELEVATION = 1284.63 NAVD88

- #4 REBAR (FOUND)
- #4 REBAR W/ "BAUGHMAN" CAP (SET)
- #4 REBAR (FOUND)
- AXEL (FOUND)
- 3/4" IRON (FOUND)
- CROSS (FOUND)



- EB □ = Electric Box
- GM ● = Gas Meter
- Sign □ = Sign
- SSM ● = Sanitary Sewer Manhole
- SSSM ● = Stormwater Sewer Manhole
- T ● = Tree



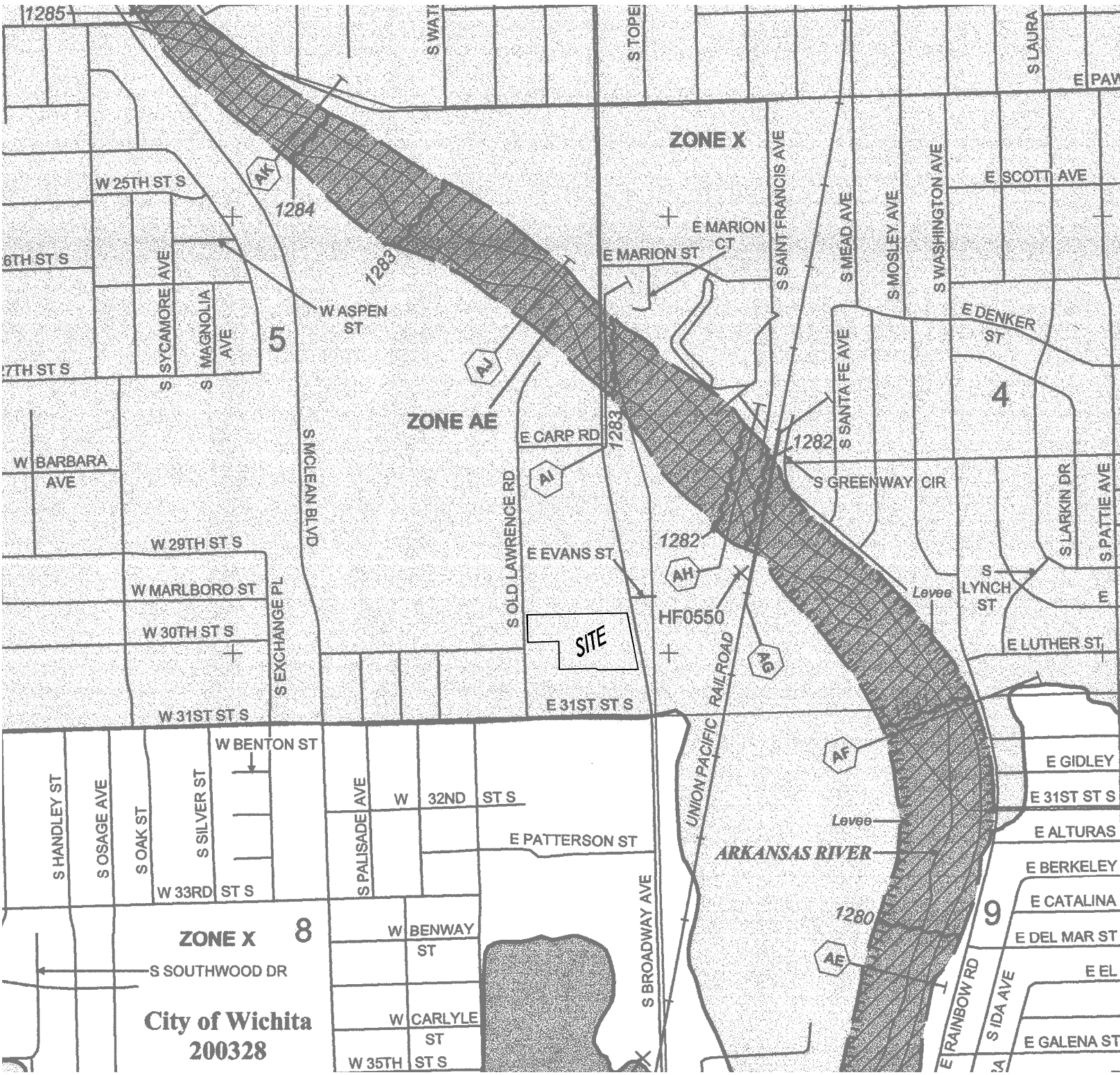
Existing = Proposed
Area = 6.5 acres
Tc = 15 min
C' = 0.93
Q ₂ = 23 cfs
Q ₅ = 28 cfs
Q ₁₀ = 32 cfs
Q ₂₅ = 37 cfs
Q ₁₀₀ = 45 cfs

NOTE: The entire site is currently paved (asphalt) with associated buildings and utilities. The existing conditions of this site are expected to remain with this plat and Drainage Plan.

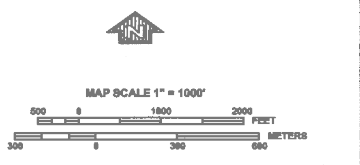
The site lies within Zone X Shaded FEMA SFHA as of this date based on FEMA FIRM Panel 365 or 700 for Sedgwick County, Kansas; effective February 2, 2007.

DRAINAGE & GRADING PLAN

EASY CREDIT AUTO 2ND ADDITION



City of Wichita
200328



NFIP PANEL 0365E

FIRM
FLOOD INSURANCE RATE MAP

SEDGWICK COUNTY,
KANSAS
AND INCORPORATED AREAS

PANEL 365 OF 700
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

COMMUNITY	NUMBER	PANEL	SUFFIX
SEDGWICK COUNTY	200321	0365	E
WICHITA, CITY OF	200328	0365	E

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER
20173C0365E

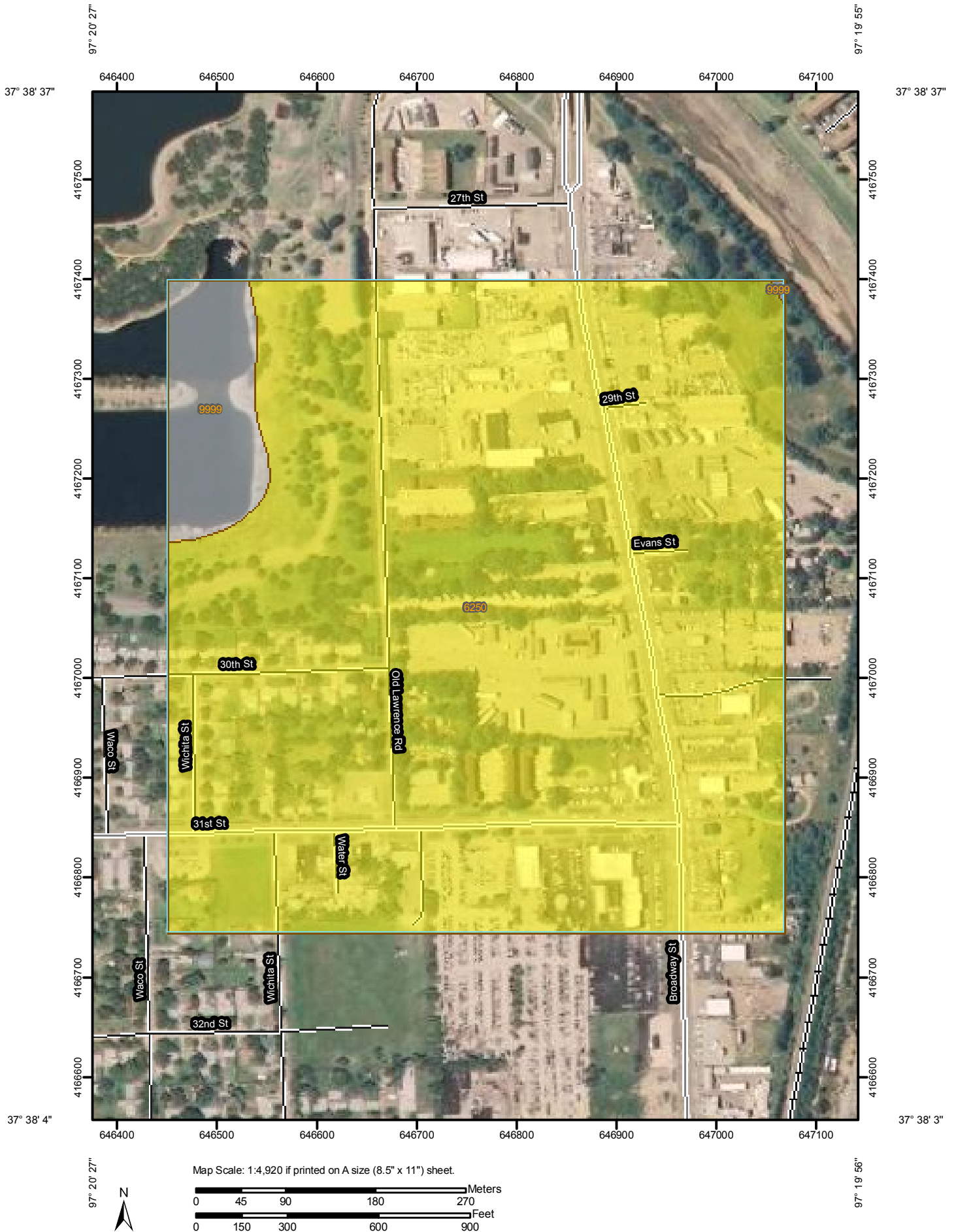
EFFECTIVE DATE
FEBRUARY 2, 2007

Federal Emergency Management Agency

SUPPORTING CALCULATIONS


APPENDIX A: USGS Soils Survey

USGS Soils Survey



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Units



Soil Ratings

-  Excessively drained
-  Somewhat excessively drained
-  Well drained
-  Moderately well drained
-  Somewhat poorly drained
-  Poorly drained
-  Very poorly drained
-  Not rated or not available






Political Features

 Cities

Water Features

-  Oceans
-  Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

MAP INFORMATION

Map Scale: 1:4,920 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 14N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Sedgwick County, Kansas
Survey Area Data: Version 6, Dec 22, 2009

Date(s) aerial images were photographed: 6/20/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Drainage Class

Drainage Class— Summary by Map Unit — Sedgwick County, Kansas				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6250	Urban land-Canadian complex, 0 to 3 percent slopes	Well drained	94.0	94.3%
9999	Water		5.7	5.7%
Totals for Area of Interest			99.7	100.0%

Description

"Drainage class (natural)" refers to the frequency and duration of wet periods under conditions similar to those under which the soil formed. Alterations of the water regime by human activities, either through drainage or irrigation, are not a consideration unless they have significantly changed the morphology of the soil. Seven classes of natural soil drainage are recognized—excessively drained, somewhat excessively drained, well drained, moderately well drained, somewhat poorly drained, poorly drained, and very poorly drained. These classes are defined in the "Soil Survey Manual."

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher