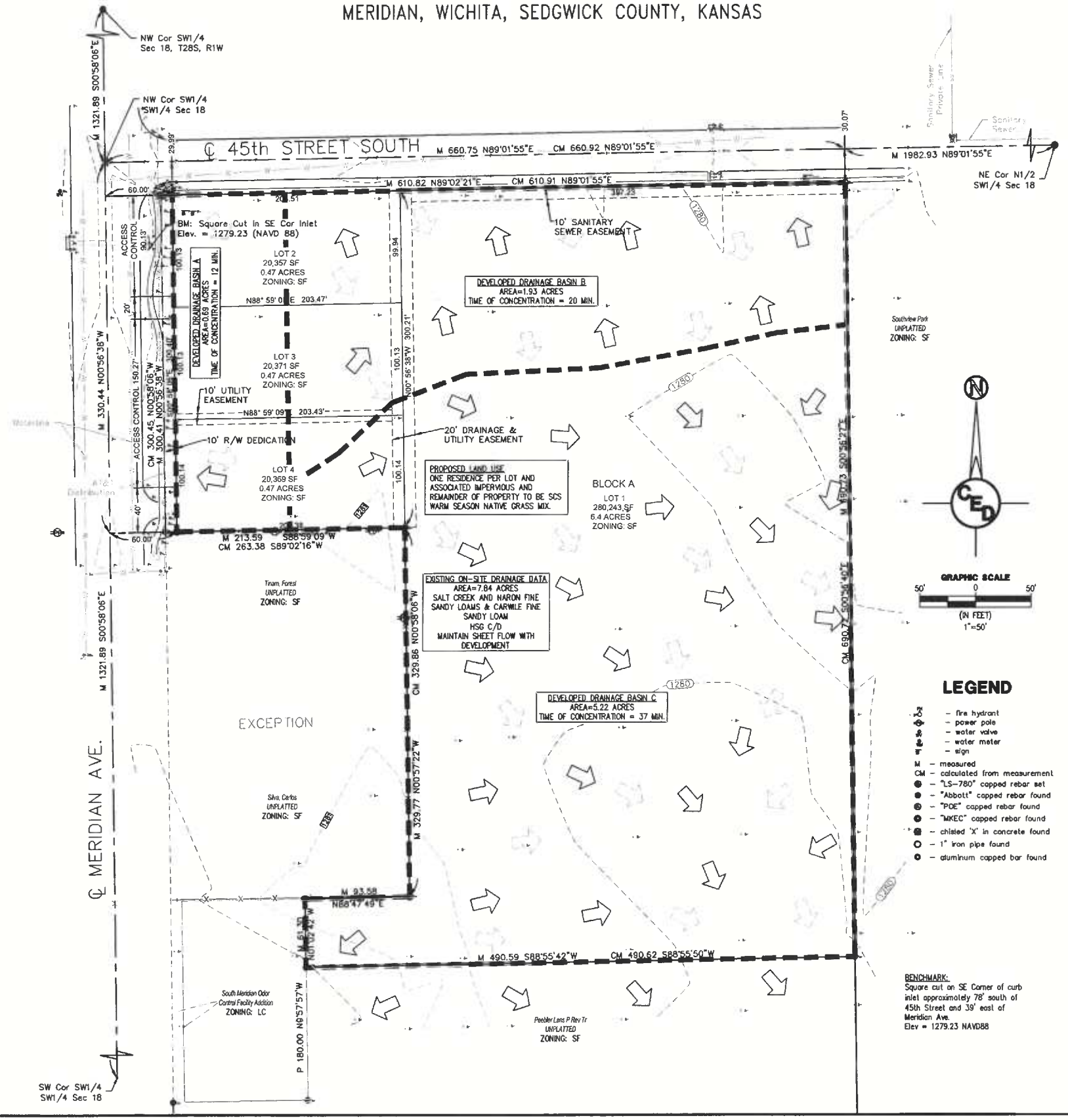
DRAINAGE PLAN FOR PRELIMINARY PLAT

AMR ADDITION

A PORTION OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 28 SOUTH, RANGE 1 EAST OF THE 6TH PRINCIPAL MERIDIAN, WICHITA, SEDGWICK COUNTY, KANSAS



LEGEND

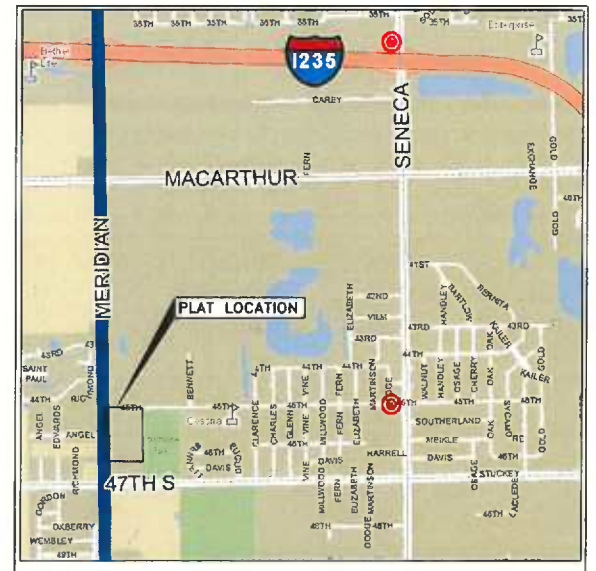
- ⊙ – fire hydrant
- ⊕ – power pole
- ⊗ – water valve
- ⊗ – water meter
- ⚑ – sign
- M – measured
- CM – calculated from measurement
- ● – "LS-780" capped rebar set
- ● – "Abbott" capped rebar found
- ◎ – "POE" capped rebar found
- ● – "MKEC" capped rebar found
- ■ – chisled "X" in concrete found
- ○ – 1" iron pipe found
- ◘ – aluminum capped bar found

BENCHMARK:
Square cut on SE Corner of curb inlet approximately 78' south of 45th Street and 39' east of Meridian Ave.
Elev = 1279.23 NAVD88

LEGAL DESCRIPTION:

THE WEST HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 28 SOUTH, RANGE 1 EAST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS, EXCEPT THE SOUTH 600 FEET THEREOF; AND EXCEPT LOT 1, BLOCK 1, SOUTH MERIDIAN ODOR CONTROL FACILITY ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS, AND EXCEPT THE WEST 263.6 FEET OF THE SOUTH HALF OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 18, TOWNSHIP 28 SOUTH, RANGE 1 EAST OF THE 6TH P.M., SEDGWICK COUNTY, KANSAS; AND EXCEPT THAT PART CONVEYED TO THE CITY OF WICHITA, KANSAS, BY TRUSTEE'S DEED RECORDED AS DOC#/FILM-PG: 29047969; AND EXCEPT THE NORTH 30 FEET OF SAID WEST HALF AND SAID SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER.

GROSS AREA = 344,386.1 SQ. FT., OR 7.906 ACRES MORE OR LESS.
NET AREA = 341,340 SQ. FT., OR 7.836 ACRES



VICINITY MAP
1"=1500'

Developed Drainage Summary Chart - Rational Method

Drainage Basin	Drainage Area	Return Period	Rational C	Tc (min.)	Intensity (in/hr)	Peak Discharge (cfs)
A	0.69	2	0.43	12	3.74	1.11
		5	0.46		4.68	1.49
		10	0.53		5.38	1.97
		25	0.57		6.29	2.47
		50	0.61		6.96	2.93
		100	0.65		7.82	3.42
B	1.93	2	0.35	20	2.85	1.93
		5	0.38		3.58	2.63
		10	0.45		4.13	3.59
		25	0.5		4.85	4.68
		50	0.55		5.38	5.77
		100	0.59		5.91	6.73
C	5.22	2	0.28	37	1.98	2.89
		5	0.29		2.51	3.80
		10	0.37		2.91	5.62
		25	0.42		3.45	7.56
		50	0.48		3.86	9.67
		100	0.53		4.28	11.84

Existing Drainage Summary Chart - Rational Method

Drainage Basin	Drainage Area	Return Period	Rational C	Tc (min.)	Intensity (in/hr)	Peak Discharge (cfs)
A	7.84	2	0.50	57	1.50	5.88
		5	0.50		0.93	3.65
		10	0.50		2.24	8.78
		25	0.55		2.66	11.56
		50	0.58		3.03	13.78
		100	0.60		3.38	15.90

Approved.
C.O.W.
Joe Hucke
4-13-17

ENGINEERING NOTES:

1. THE RATIONAL METHOD EQUATIONS WERE USED TO COMPUTE THE PEAK DISCHARGES FOR ON-SITE DRAINAGE.
2. THE ENTIRE PROPERTY IS LOCATED IN ZONE X ON THE FEMA FLOOD MAP (FIRM #20173C0501G), EFFECTIVE DATE DECEMBER 22, 2016.
3. WATER QUALITY TREATMENT AND DETENTION ARE NOT REQUIRED FOR THIS DEVELOPMENT SINCE THE DISTURBED ACREAGE IS PROJECTED TO BE APPROXIMATELY 0.90 ACRES FOR THE PROPOSED RESIDENTIAL IMPROVEMENTS. PROPOSED IMPERVIOUS AREA IS PROJECTED TO BE UNDER ONE ACRE. ANY CHANGES TO THE RESIDENTIAL IMPROVEMENTS THAT RESULT IN AN INCREASE IN DISTURBED ACREAGE OR IMPERVIOUS AREA OF ONE OR MORE ACRES WILL REQUIRE ADDITIONAL DRAINAGE ANALYSES AND A REDEVELOPED DRAINAGE PLAN INCORPORATING WATER QUALITY AND QUANTITY CONSIDERATIONS.

OWNERS:
LARRY J. GREIDER II AND KIMBERLY R. GREIDER
527 SOUTH SHIRA CIRCLE
HAYSVILLE, KS 67060

SURVEYOR:
ARMSTRONG LAND SURVEY, P.A.
1601 E. HARRY
WICHITA, KANSAS 67211
(316) 263-0082

NOTE: BOUNDARY SURVEY COMPLETED BY ARMSTRONG LAND SURVEY, P.A., ON OR ABOUT MARCH 8, 2017.

LOGAN J. MILLS LICENSED 22468 4-12-17 KANSAS PROFESSIONAL ENGINEER

DRAINAGE LEGEND
- DEVELOPED SHEET FLOW
- EXISTING SHEET FLOW
- DRAINAGE AREA

CIVIL DRAWINGS PREPARED BY:
CERTIFIED ENGINEERING DESIGN, P.A.
1935 WEST MAPLE STREET
WICHITA, KANSAS 67213
PH: (316) 262-8808
FAX: (316) 262-1669

SHEET 1
TOTAL 1

FILE LOCATION S:\Drawing Files\Project A\R\ 10-17-16\Jim Russell Plat\DWG\AMR Addition - DP.dwg TAB NAME:Drainage USER:jmayer SAVED:4/12/2017 11:08 AM PLOTTED:4/12/2017 11:08 AM