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TRANSMITTAL

December 27, 2000

To: Vicki Huang, P.E.
City of Wichita
455 N. Main, 7th Floor
Wichita, KS 67202

RE: High Point West Drainage Plan

AM No: 00372

We transmit the following:

<input type="checkbox"/> Bluelines	<input checked="" type="checkbox"/> Photocopies	<input type="checkbox"/> Legal Desc.
<input type="checkbox"/> Originals	<input type="checkbox"/> Shop Drawings	<input type="checkbox"/> Application

<u># Copies</u>	<u>Dated</u>	<u>Description</u>
2		Drainage Plan & Cales

Remarks:

AUSTIN MILLER, P.A.


Doug Klassen, I.E.



JOB HIGH POINT WEST DRAINAGE

SHEET NO. 1 OF 2

CALCULATED BY DK DATE 12/21/00

CHECKED BY _____ DATE _____

SCALE _____

TOTAL AREA = 0.07 A_c

SOIL TYPE = B

EXIST. CONDITIONS:

DA-1: C_s = 0.20 C₁₀₀ = 0.39

DA-2: C_s = 0.20 C₁₀₀ = 0.39

DA-3: C_s = 0.20 C₁₀₀ = 0.39

DA-4: C_s = 0.20 C₁₀₀ = 0.39

$$T_c = \frac{120 \text{ ft}}{0.25 \frac{\text{ft}}{\text{sec}}} = \frac{480 \text{ sec}}{60} = 8 \text{ min}$$

(USE 15 min)

$$T_c = \frac{480 \text{ ft}}{0.28 \frac{\text{ft}}{\text{sec}}} = \frac{1714 \text{ sec}}{60} = 29 \text{ min}$$

$$DA-1: Q_s = (0.20)(4.56 \text{ in/hr})(0.61 \text{ A}_c) = 0.56 \text{ cfs}$$

$$Q_{100} = (0.39)(7.37)(0.61) = 1.75 \text{ cfs}$$

$$DA-2: Q_s = (0.20)(4.56)(0.61) = 0.56 \text{ cfs}$$

$$Q_{100} = (0.39)(7.37)(0.61) = 1.75 \text{ cfs}$$

$$DA-3: Q_s = (0.20)(7.30)(2.43) = 1.60 \text{ cfs}$$

$$Q_{100} = (0.39)(5.49)(2.43) = 5.20 \text{ cfs}$$

$$DA-4: Q_s = (0.20)(3.30)(2.43) = 1.60 \text{ cfs}$$

$$Q_{100} = (0.39)(5.49)(2.43) = 5.20 \text{ cfs}$$

DEVELOPED CONDITIONS:

DA-1 & DA-2 C_s = 0.30 C₁₀₀ = 0.47

DA-3 & DA-4 C_s = 0.30 C₁₀₀ = 0.47

T_c = (same as undeveloped)

(T_c = same as above)

$$DA-1 Q_s = (0.30)(4.56)(0.61) = 0.83 \text{ cfs}$$

$$Q_{100} = (0.47)(7.37)(0.61) = 2.11 \text{ cfs}$$

$$DA-2 Q_s = (0.30)(4.56)(0.61) = 0.83 \text{ cfs}$$

$$Q_{100} = (0.47)(7.37)(0.61) = 2.11 \text{ cfs}$$



JOB HIGH POINT WEST DRAINAGE

SHEET NO. 2

OF 2

CALCULATED BY DK

DATE 12/22/00

CHECKED BY _____

DATE _____

SCALE _____

$$DA-3 \quad Q_5 = (0.30)(3.30)(2.43) = 2.41 \text{ cfs}$$

$$Q_{100} = (0.47)(5.49)(2.43) = 6.27 \text{ cfs}$$

$$DA-4 \quad Q_5 = (0.30)(3.30)(2.43) = 2.41 \text{ cfs}$$

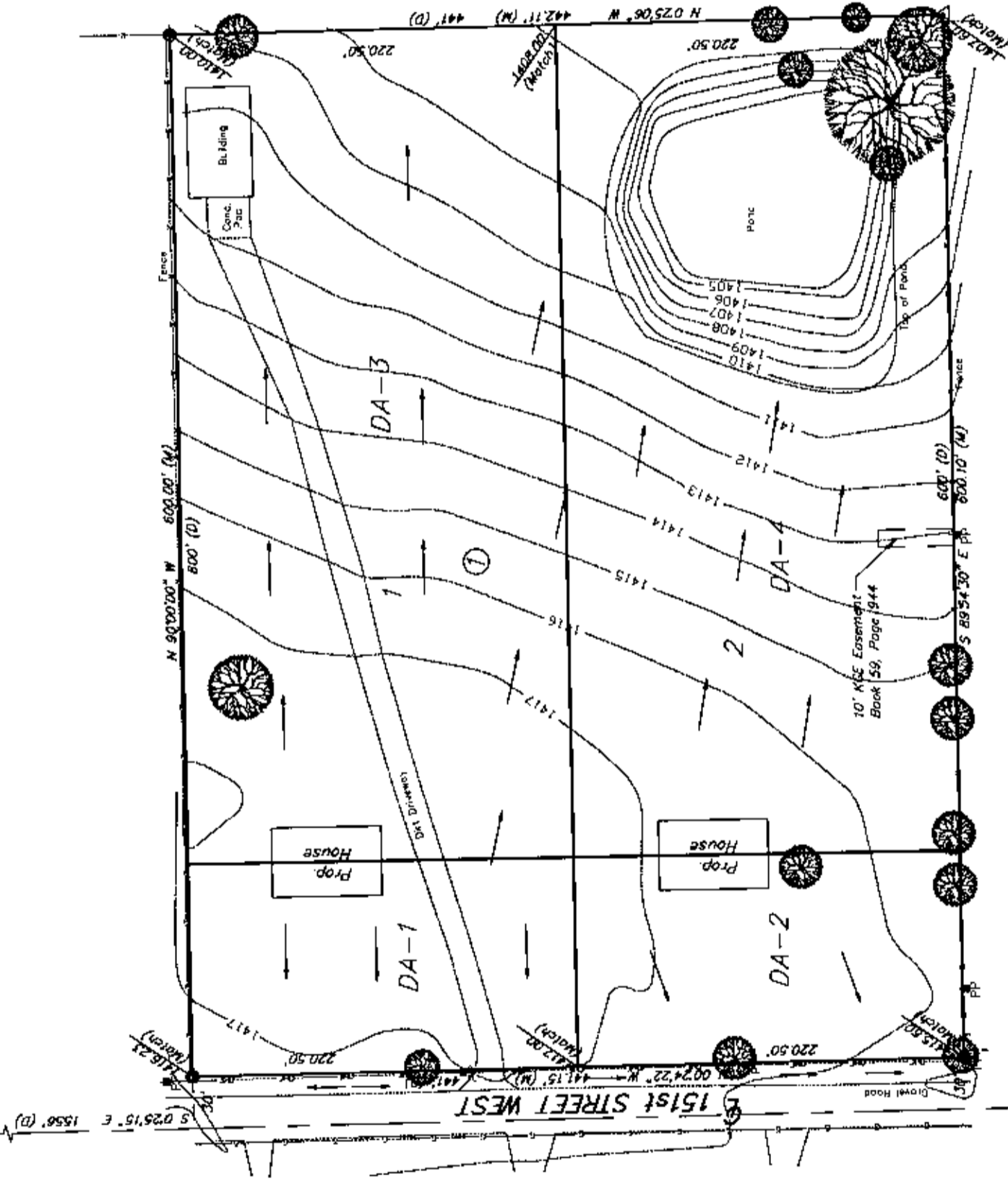
$$Q_{100} = (0.47)(5.49)(2.43) = 6.27 \text{ cfs}$$

DRAINAGE PLAN FOR:
HIGH POINT WEST ADDITION
WICHITA, SEDGWICK COUNTY, KANSAS

NE CORNER NW 1/4
 SEC. 26, T27S, R2W

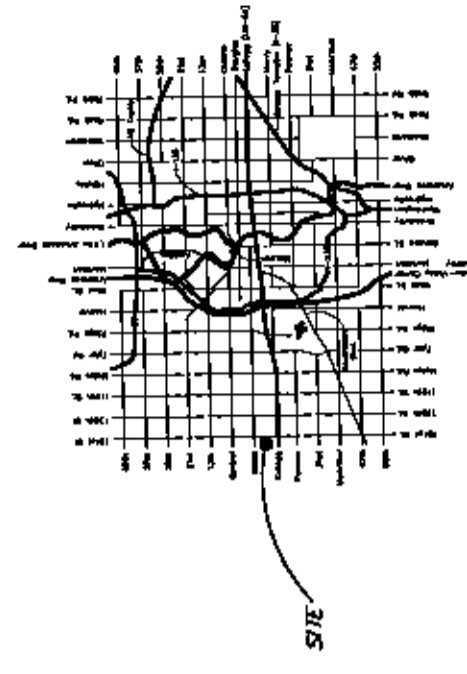
MAPLE STREET
 N 90°00'00" W (Assumed) 2617.61' (M)

NW CORNER NW 1/4
 SEC. 26, T27S, R2W

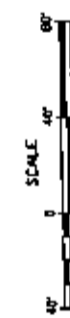


Area #	Area (Ac)	Undeveloped		Developed	
		C_p (in)	C_p (ft)	C_p (in)	C_p (ft)
1	0.81	4.56	7.37	0.6	1.0
2	0.61	4.56	7.37	0.6	1.0
3	2.43	3.30	5.49	1.6	2.4
4	2.43	3.30	5.49	1.6	2.4
TOTAL	6.08			4.4	14.0

- NOTES:**
1. Wetout or viewout construction will be allowed on Lots 1 & 2.
 2. Required minimum elevations are as follows:
 Wetout:
 Lot 1: WD=1413.60' F=1421.60'
 Lot 2: WD=1413.20' F=1421.20'
 Viewout:
 Lot 1: VD=1415.30' F=1418.80'
 Lot 2: VD=1414.90' F=1418.40'
 Buried:
 Lot 1: F=1418.80'
 Lot 2: F=1418.40'
 3. Front and rear elevations shall match exist. elevations.
 4. Increase in runoff due to development will be minimal due to detention provided by existing pond.
 5. House locations shown hereon are subject to change. These changes shall be approved by the appropriate City officials prior to issuing a building permit.



- LEGEND**
- 1/2" Iron Pipe (found)
 - 5/8" Rebar (set) AMPA CLS #104
 - ▲ 5/8" Rebar (found) Armstrong
 - ⊙ 1/2" Iron in Thimble (found)
 - D Deded
 - M Measured
 - Flow Direction



SW CORNER NW 1/4
 SEC. 26, T27S, R2W

ADUSTIN MILLER P.E.
 305 N. WEST ST. 2ND FLOOR
 WICHITA, KANSAS 67202
 TEL: 343-2100 FAX: 343-2101

PROJECT NUMBER: 00272
 DATE: 12/18/00
 SCALE: 1"=30'

Sheet 1 of 1