DRAINAGE PLAN

FALCON FALLS 5TH ADDITION

WICHITA, SEDGWICK COUNTY, KANSAS

OWNER:
HEIGHTS, LLC, A KANSAS LIMITED LIABILITY COMPANY
ATTN: JAY RUSSELL
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WICHITA, KS 67275-5337
(316) 722-2417

LEGAL DESCRIPTION:
A REPLAT OF ALL OF LOTS 1 AND 2, BLOCK A, FALCON FALLS COMMERCIAL ADDITION, WICHITA, SEDGWICK COUNTY, KANSAS.

BENCHMARK:
"CUT" CUT ON THE EAST HUB/GUARD OF REINFORCED CONCRETE BOX CULVERT, 110' SOUTH OF THE SOUTHEAST CORNER OF THE SOUTHEAST QUARTER OF SECTION 22, TOWNSHIP 26 SOUTH, RANGE 1 EAST.
ELEV. = 1,359.54 NGVD29
1,360.03 NAVD88

RESERVE "A" IS RESERVED FOR OPEN SPACE, LANDSCAPING, SIDEWALKS, FLOODWAY, LAKES, AND DRAINAGE PURPOSES.

RESERVE "B" IS RESERVED FOR OPEN SPACE, LANDSCAPING, SIDEWALKS, FLOODWAY, LAKES, UTILITIES AS CONFINED TO EASEMENTS, AND DRAINAGE PURPOSES.

MINIMUM BUILDING PAD ELEVATIONS FOR LOWEST OPENING TO THE STRUCTURES		
LOT	BLOCK	ELEVATION NAVD88
1	B	1,349.5
1-8, 23-30	A	1,348.5

0 120 240

CONTOUR INTERVAL = 1 FOOT
DATE OF TOPOGRAPHY: SPRING 2017
TOPOGRAPHY BY SEDGWICK COUNTY

= #4 REBAR W/ "BAUGHMAN" CAP (SET)
= 1/2" IRON (FOUND)
= STONE (FOUND)
= #5 REBAR IN THIMBLE (FOUND)
= 1/2" SQUARE BOLT (FOUND)
= 3/4" IRON W/ "BAUGHMAN" CAP (SET)

(M) = MEASURED
(P) = PLATTED
(D) = DESCRIBED
(C) = CALCULATED

ADDITIONAL BUILDING SETBACK REQUIREMENTS PER COMMUNITY UNIT PLAN DP-283

THE LOCATION OF THE FLOODWAY LINE AND FLOODPLAIN BOUNDARY LINE AS SHOWN ON THE FACE OF THE PLAT ARE BASED UPON SCALED LOCATION PER FEMA FIRM MAP 20172C0227H, EFFECTIVE DATE FEB. 2, 2017, REVISION PER LOMR 08-07-0314X, EFFECTIVE DATE FEB. 7, 2008.

Table 4-13 Volumetric Runoff Coefficients by Land Use and Hydrologic Soil Group

Land Use	Hydrologic Soil Group A	B	C	D	Land Use	Hydrologic Soil Group A	B	C	D
Undisturbed	0.02	0.03	0.04	0.05	Undisturbed	55	71	80	84
Turf or Disturbed Soils	0.15	0.20	0.22	0.25	Turf or Disturbed Soils	71	80	84	88
Impervious Cover	0.95	0.95	0.95	0.95	Impervious Cover	98	98	98	98

Weighted Volumetric Runoff Coef. (R_v) (eq. 4-24*)												WQ, R^3
Basin	Undist.	Dist.	Red. Imp	New Imp	Total	U	D	Recive I	I	R_v		eq. 4-25*
#	ft²	ft²	ft²	ft²	Area ft²	%	%	%	%	%		
Total Site	0	487,800	0	269,100	696,900	0.000	0.175	0.000	0.215	0.4888		32,969
												32,969

* Assuming 30% land cover with new development

Pond Volume Below Static Pool						
	Static		Pond Bottom Area		Depth	Volume
Basin	Sq.Ft.	Acre	Sq. Ft.	Acre	Feet	Acre-Ft.
Pond	325000	7.5	275000	6.3	8	55.1
Totals:		7.5		6.3		55.1

Pond Volume > WQv		
Pond	WQv	Check
55.1	0.7	Yes

Pond Volumes were estimated using a depth of 8' of water surface with 3:1 sideslopes below the static water surface. The existing pond volumes far exceed the water quality volume needed for the Falcon Falls 5th Addition. This pond is "offline" from the

Developed	2yr	10yr	100yr
Intensity	3.8	5.19	7.36
Rational C	0.42	0.57	0.68

Basin ID	Area	Developed Flowrates		
	acres	2-yr cfs	10-yr cfs	100-yr cfs
1	4.6	8.4	14	23
2	2.5	4.6	7.4	13
3	0.8	1.5	2.4	4.0
4	0.5	0.9	1.5	2.5
5	1.0	1.8	3.0	5.0
6	1.3	2.4	3.8	6.5
7	3.3	6.0	10	17
8	1.2	2.2	3.5	6.0
9	0.3	0.5	0.9	1.5
10	2.3	4.2	6.8	12
TOTAL	17.8	32.5	52.7	89.1

LEGEND
- Proposed SWS
- Drainage Basin Boundary
- Proposed Flow Direction
- Floodplain Boundary
- Floodway Boundary

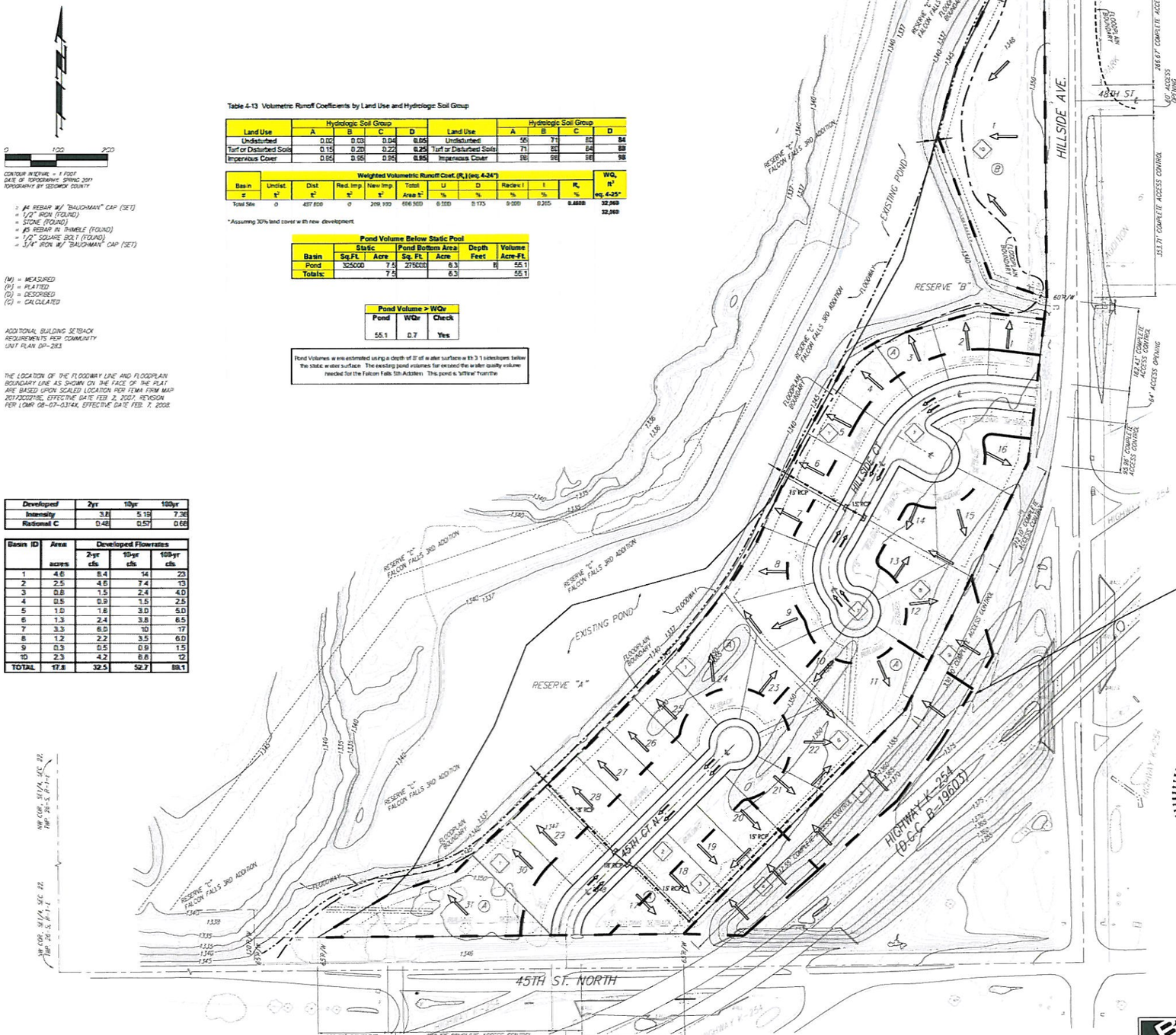
NOTES: FEMA Floodway and Floodplain boundaries are scaled per location per FEMA LOMR 08-07-0314X effective February 7, 2008. If any fill is placed in the floodplain to remove portions of lots a DWR Floodplain fill permit followed by a LOMR-F will be required.

This property was originally platted and Drainage Plan approved as Falcon Falls Commercial Addition. Detention was provided in the adjacent ponds located to the west. This site was configured and filed with the Falcon Falls 2nd & 3rd development.

Water Quality will be provided in the adjacent lake/pond located immediately to the west. See water quality calculations on chart. Water quality provided in the pond system will meet City of Wichita Ordinance 14.32

Downstream channel protection is not provided onsite due to the already constructed pond system adjacent.

VICINITY MAP
SEC. 22, T26S, R1E



TREVOR R. KURTH
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19788
4.16.14
KANSAS
PROFESSIONAL ENGINEER

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FALCON FALLS
5TH ADDITION

Baughman Company, P.A.