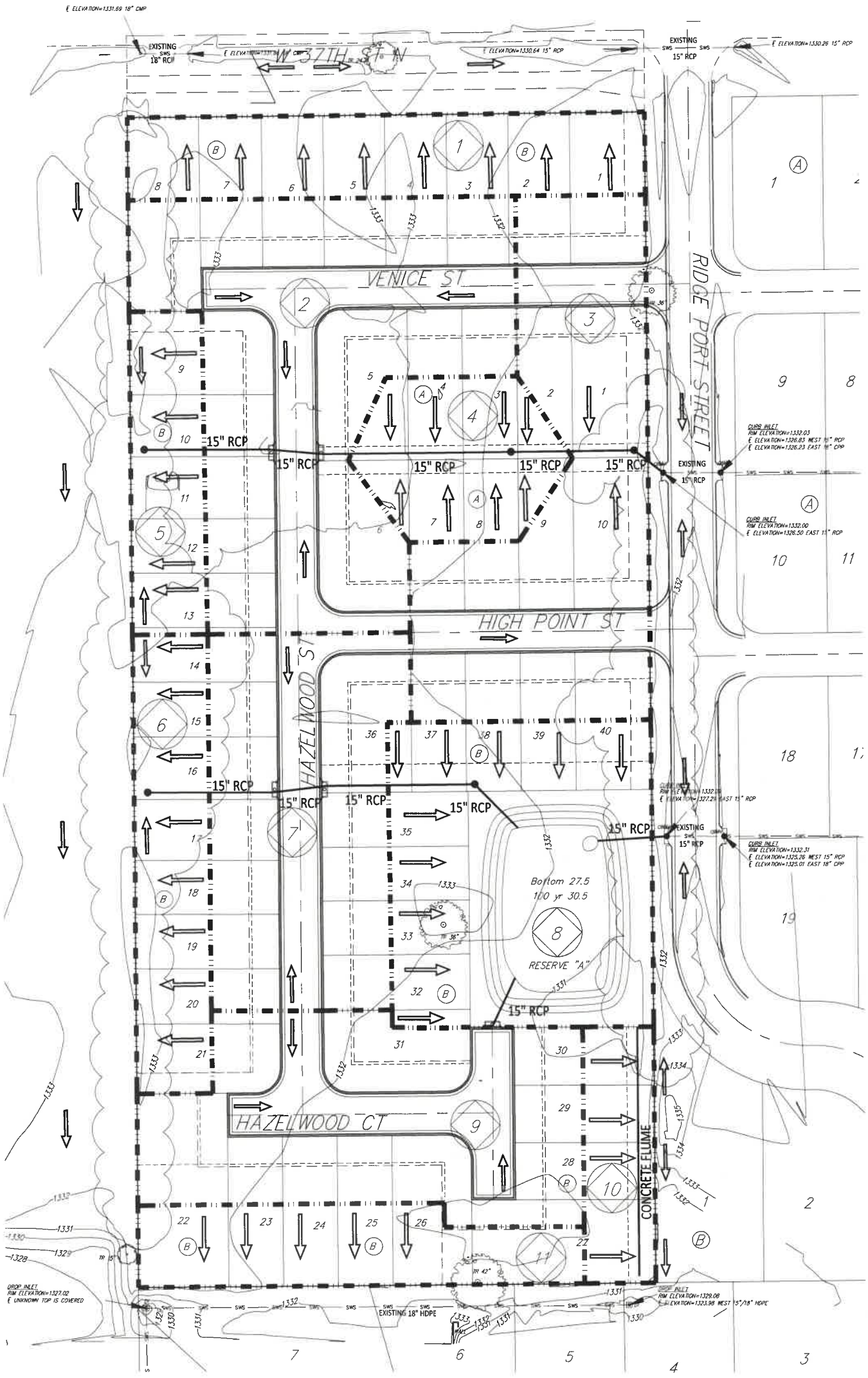

Approved
C.O.W
Tim Yale
7-27-26

DETENTION
This site will provide detention, as shown, in the dry detention to limit developed runoff peak flows to not exceed existing peak flow rates. The proposed dry detention will detain developed runoff.

FEMA
There is no FEMA Floodway or Floodplain on this property.

GRADING
All lots will be graded with a minimum 1% rear cross lot slope and a minimum 0.5% street slope. A minimum of 2' to the lowest opening will be maintained around the proposed detention area. Dry detention side slopes will be at least 5:1. The site will accept all offsite runoff at its boundaries.

STORM WATER SEWER
Storm water sewer is sized for at least the 5-year storm event. The HGL is located underground (under pressure) for the 5-year event throughout the proposed lines.

WATER QUALITY
Water quality is achieved through the offsite BMP program.

DRY DETENTION (Bottom = 1327.5)

STAGE	INFLOW	OUTFLOW	ELEVATION
2 yr	3.9 cfs	1.9 cfs	1328.2
5 yr	8.0 cfs	3.2 cfs	1328.7
10 yr	12 cfs	4.6 cfs	1329.1
25 yr	18 cfs	6.4 cfs	1329.7
100 yr	27 cfs	8.3 cfs	1330.5

DRY DETENTION

STAGE (elev)	TOTAL STORAGE (ac-ft)	DISCHARGE (cfs)
1327.5	0.0	0.0
1328	0.0	1.1
1329	0.2	4.3
1330	0.4	7.2
1331	0.7	9.3
1332	1	11

Outfall: 15" RCP outfall @ 1327.5

TOTAL SITE RUNOFF

EXISTING	PROPOSED
Area = 7.4 acres	Area = 7.4 acres
CN = 80	CN = 84
Tc = 15 min	Tc = 15 min
Q_2 = 6.1 cfs	Q_2 = 6.0 cfs
Q_5 = 14 cfs	Q_5 = 12 cfs
Q_{10} = 21 cfs	Q_{10} = 16 cfs
Q_{25} = 33 cfs	Q_{25} = 25 cfs
Q_{100} = 51 cfs	Q_{100} = 37 cfs
C calculated using a basin slope of 0.8% over a 400' hydraulic length.	Values are post detention and include areas that are undetained.

Proposed peak runoff values are detained dry detention values added to the non detained areas. The overall site will decrease peak flows across all storm events.

Developed	2yr	5yr	100yr
Intensity	3.83	4.5	7.37
Rational C	0.54	0.54	0.54

Basin ID	Area (acres)	Developed Flowrates 2-yr cfs	5-yr cfs	100-yr cfs
1	0.5	1.0	1.2	2.0
2	1.4	2.9	3.4	5.6
3	1.0	2.1	2.4	4.0
4	0.3	0.6	0.7	1.2
5	0.3	0.6	0.7	1.2
6	0.4	0.8	1.0	1.6
7	0.9	1.9	2.2	3.6
8	1.0	2.1	2.4	4.0
9	1.0	2.1	2.4	4.0
10	0.2	0.4	0.5	0.8
11	0.4	0.8	1.0	1.6
TOTAL	7.4	15	18	29

VICINITY MAP
SEC. 34, T26S, R1W

0 40 80
Scale: 1" = 40'

TREVOR R. KURTH
LICENSED
19788
07.16.26
KANSAS
PROFESSIONAL ENGINEER

BAUGHMAN COMPANY
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BaughmanCo.com

RIDGE PORT NORTH
7TH ADDITION

DRAINAGE PLAN

PROJECT NUMBER:

DESIGN: TRK DRAWN: CJH
DATE: Jul. 15, 2026
SHEET 1 OF 1

File: E:\Projects\Ridge Port North 7th Addition_26-03-P\Water Resources\Ridge Port North 7th_DP.dwg