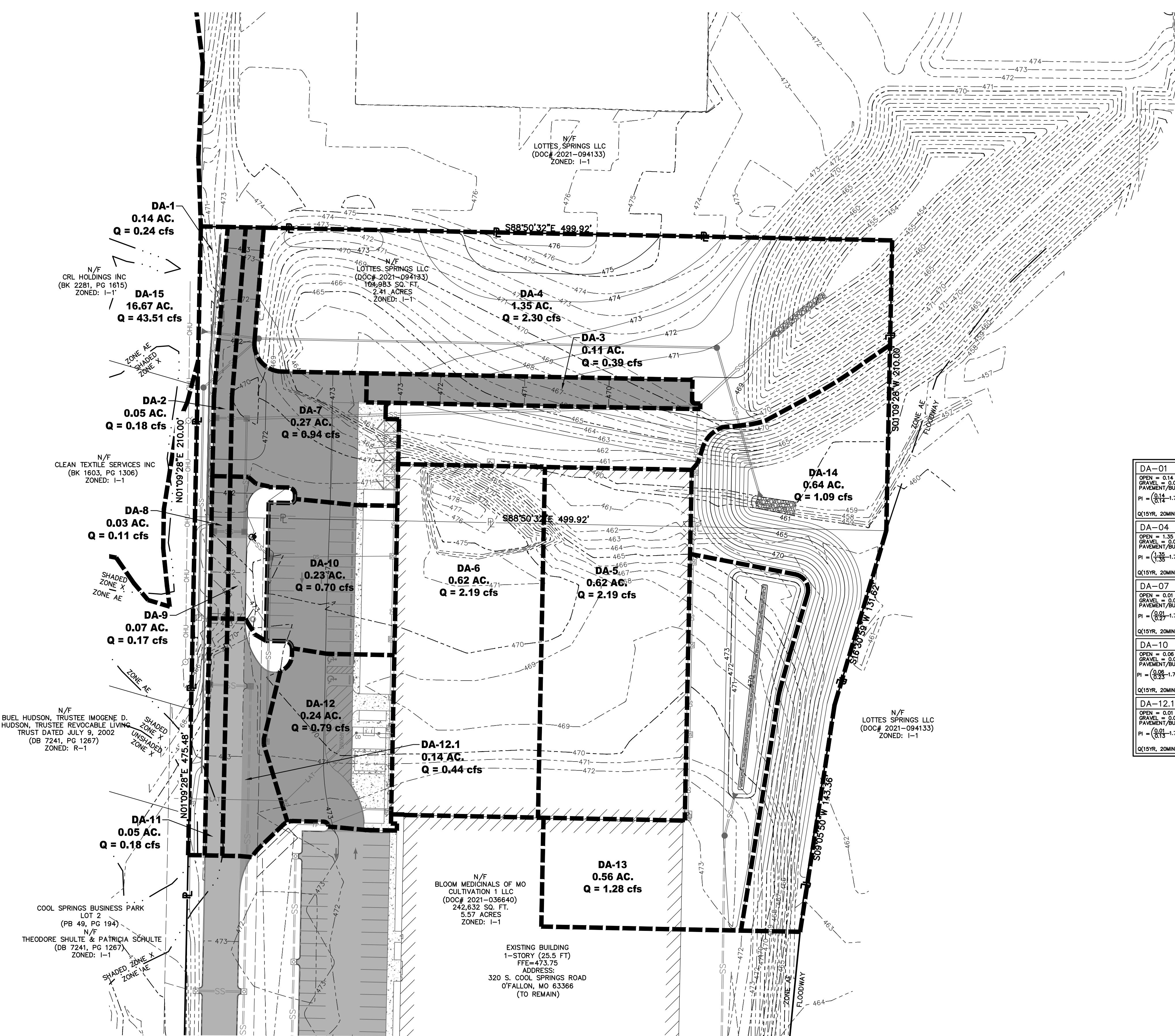
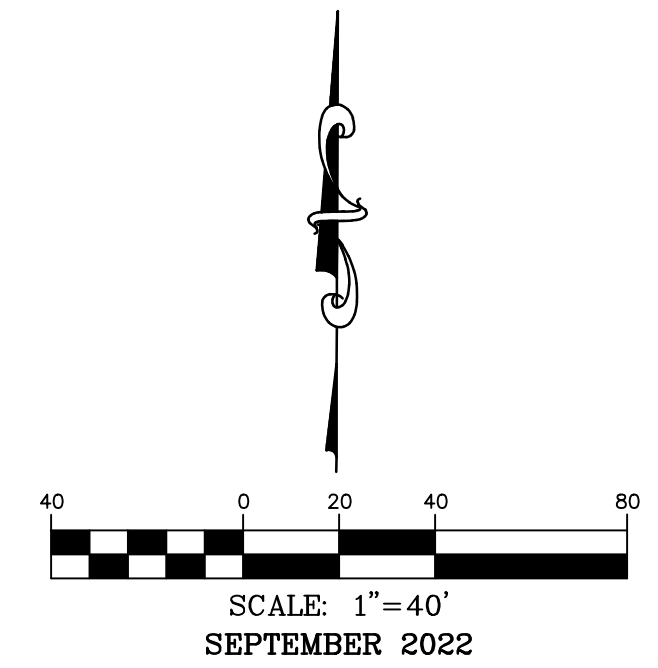


PROPOSED DRAINAGE AREA MAP



ALL AREAS		
PI VALUE OPEN = 1.70		
PI VALUE GRAVEL = 3.36		
PI VALUE PAVEMENT/BUILDING = 3.54		
DA-01 OPEN = 0.14 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.00 ACRES $PI = \frac{(0.14 \cdot 1.70) + (0.00 \cdot 3.36) + (0.00 \cdot 3.54)}{0.14 + 0.00 + 0.00} = 1.70$ $Q(15YR, 20MIN) = API = (0.14)(1.70) = 0.24$	DA-02 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.05 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.05 \cdot 3.54)}{0.00 + 0.00 + 0.05} = 7.08$ $Q(15YR, 20MIN) = API = (0.05)(3.54) = 0.18$	DA-03 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.11 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.11 \cdot 3.54)}{0.00 + 0.00 + 0.11} = 31.91$ $Q(15YR, 20MIN) = API = (0.11)(3.54) = 0.39$
DA-04 OPEN = 1.35 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.00 ACRES $PI = \frac{(1.35 \cdot 1.70) + (0.00 \cdot 3.36) + (0.00 \cdot 3.54)}{1.35 + 0.00 + 0.00} = 1.70$ $Q(15YR, 20MIN) = API = (1.35)(1.70) = 2.30$	DA-05 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.82 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.82 \cdot 3.54)}{0.00 + 0.00 + 0.82} = 4.19$ $Q(15YR, 20MIN) = API = (0.82)(3.54) = 2.91$	DA-06 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.62 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.62 \cdot 3.54)}{0.00 + 0.00 + 0.62} = 5.71$ $Q(15YR, 20MIN) = API = (0.62)(3.54) = 2.19$
DA-07 OPEN = 0.01 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.28 ACRES $PI = \frac{(0.01 \cdot 1.70) + (0.00 \cdot 3.36) + (0.28 \cdot 3.54)}{0.01 + 0.00 + 0.28} = 12.47$ $Q(15YR, 20MIN) = API = (0.27)(3.47) = 0.94$	DA-08 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.03 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.03 \cdot 3.54)}{0.00 + 0.00 + 0.03} = 118.20$ $Q(15YR, 20MIN) = API = (0.03)(3.54) = 0.11$	DA-09 OPEN = 0.04 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.03 ACRES $PI = \frac{(0.04 \cdot 1.70) + (0.00 \cdot 3.36) + (0.03 \cdot 3.54)}{0.04 + 0.00 + 0.03} = 24.49$ $Q(15YR, 20MIN) = API = (0.07)(2.49) = 0.17$
DA-10 OPEN = 0.06 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.17 ACRES $PI = \frac{(0.06 \cdot 1.70) + (0.00 \cdot 3.36) + (0.17 \cdot 3.54)}{0.06 + 0.00 + 0.17} = 10.06$ $Q(15YR, 20MIN) = API = (0.23)(3.06) = 0.70$	DA-11 OPEN = 0.00 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.05 ACRES $PI = \frac{(0.00 \cdot 1.70) + (0.00 \cdot 3.36) + (0.05 \cdot 3.54)}{0.00 + 0.00 + 0.05} = 70.80$ $Q(15YR, 20MIN) = API = (0.05)(3.54) = 0.18$	DA-12 OPEN = 0.03 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.21 ACRES $PI = \frac{(0.03 \cdot 1.70) + (0.00 \cdot 3.36) + (0.21 \cdot 3.54)}{0.03 + 0.00 + 0.21} = 10.31$ $Q(15YR, 20MIN) = API = (0.24)(3.31) = 0.79$
DA-12.1 OPEN = 0.01 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.12 ACRES $PI = \frac{(0.01 \cdot 1.70) + (0.00 \cdot 3.36) + (0.12 \cdot 3.54)}{0.01 + 0.00 + 0.12} = 29.40$ $Q(15YR, 20MIN) = API = (0.13)(3.40) = 0.44$	DA-13 OPEN = 0.38 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.18 ACRES $PI = \frac{(0.38 \cdot 1.70) + (0.00 \cdot 3.36) + (0.18 \cdot 3.54)}{0.38 + 0.00 + 0.18} = 2.29$ $Q(15YR, 20MIN) = API = (0.56)(2.29) = 1.28$	DA-14 OPEN = 0.64 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 0.00 ACRES $PI = \frac{(0.64 \cdot 1.70) + (0.00 \cdot 3.36) + (0.00 \cdot 3.54)}{0.64 + 0.00 + 0.00} = 2.64$ $Q(15YR, 20MIN) = API = (0.64)(1.70) = 1.09$
DA-15 OPEN = 8.41 ACRES GRAVEL = 0.00 ACRES PAVEMENT/BUILDING = 8.28 ACRES $PI = \frac{(8.41 \cdot 1.70) + (0.00 \cdot 3.36) + (8.28 \cdot 3.54)}{8.41 + 0.00 + 8.28} = 2.61$ $Q(15YR, 20MIN) = API = (16.67)(2.61) = 43.51$	TOTAL PROPOSED FLOWS = 56.70 cfs	

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Missouri State Certificate
of Authority Number: 2010000046
Cochran Project No. M20-8003C

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Owner Information
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2082 SOUTH STATE STREET, ANN ARBOR, MI 48104

Proposed Drainage Area Map

DATE

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P+Z No. 22-002935

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