

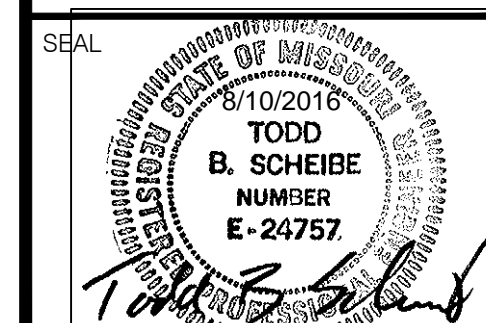


ADDITION & RENOVATION FOR  
**O'FALLON CASTING**  
600 CANNONBALL LANE O'FALLON, MISSOURI 63366  
EXISTING DRAINAGE AREA MAP

REVISIONS

NO.	DATE
3	08/10/2016

ISSUE DATE: MAY 26, 2016  
PROJECT NO.: 15-187  
DRAWN BY: GAS  
CHECKED BY: TBS



SEAL

SHEET  
**C7.01**  
EXISTING DRAINAGE AREA MAP

EXISTING SITE AREAS:

SITE COVERAGES	AREA	PERCENTAGE
BUILDING	46,298sf	13.6%
PAVEMENT	98,052sf	29.0%
GREENSPACE	194,111sf	57.4%

TOTAL IMPERVIOUS = 144,350sf (3.31 AC)  
TOTAL GREENSPACE = 194,111sf (4.46 AC)

EXISTING SITE RUNOFF:

2 YEAR STORM  
Q = 3.31(2.39) + 4.46(1.15) = 13.04 CFS

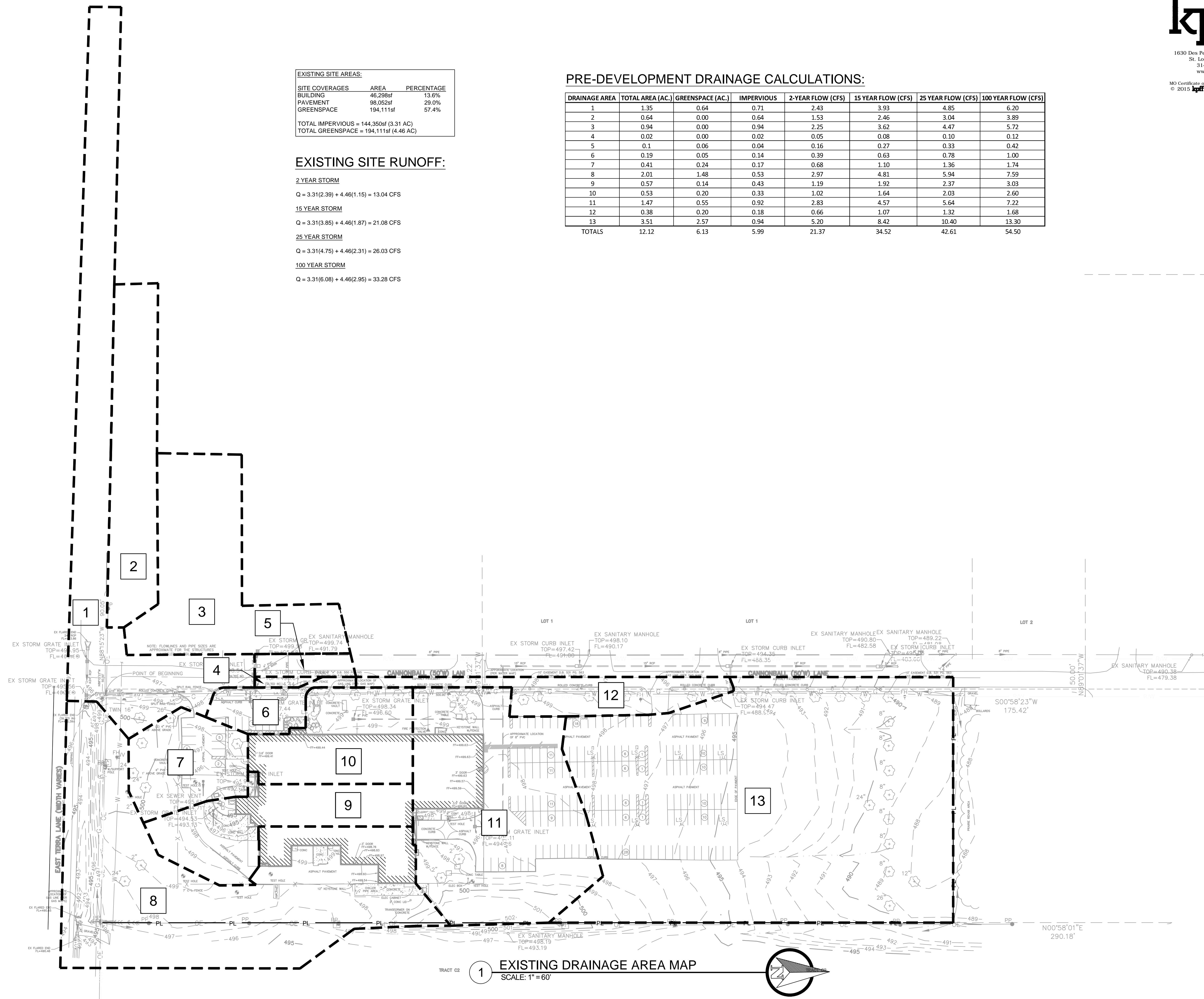
15 YEAR STORM  
Q = 3.31(3.85) + 4.46(1.87) = 21.08 CFS

25 YEAR STORM  
Q = 3.31(4.75) + 4.46(2.31) = 26.03 CFS

100 YEAR STORM  
Q = 3.31(6.08) + 4.46(2.95) = 33.28 CFS

PRE-DEVELOPMENT DRAINAGE CALCULATIONS:

DRAINAGE AREA	TOTAL AREA (AC.)	GREENSPACE (AC.)	IMPERVIOUS	2-YEAR FLOW (CFS)	15 YEAR FLOW (CFS)	25 YEAR FLOW (CFS)	100 YEAR FLOW (CFS)
1	1.35	0.64	0.71	2.43	3.93	4.85	6.20
2	0.64	0.00	0.64	1.53	2.46	3.04	3.89
3	0.94	0.00	0.94	2.25	3.62	4.47	5.72
4	0.02	0.00	0.02	0.05	0.08	0.10	0.12
5	0.1	0.06	0.04	0.16	0.27	0.33	0.42
6	0.19	0.05	0.14	0.39	0.63	0.78	1.00
7	0.41	0.24	0.17	0.68	1.10	1.36	1.74
8	2.01	1.48	0.53	2.97	4.81	5.94	7.59
9	0.57	0.14	0.43	1.19	1.92	2.37	3.03
10	0.53	0.20	0.33	1.02	1.64	2.03	2.60
11	1.47	0.55	0.92	2.83	4.57	5.64	7.22
12	0.38	0.20	0.18	0.66	1.07	1.32	1.68
13	3.51	2.57	0.94	5.20	8.42	10.40	13.30
TOTALS	12.12	6.13	5.99	21.37	34.52	42.61	54.50



1 EXISTING DRAINAGE AREA MAP  
SCALE: 1"=60'

