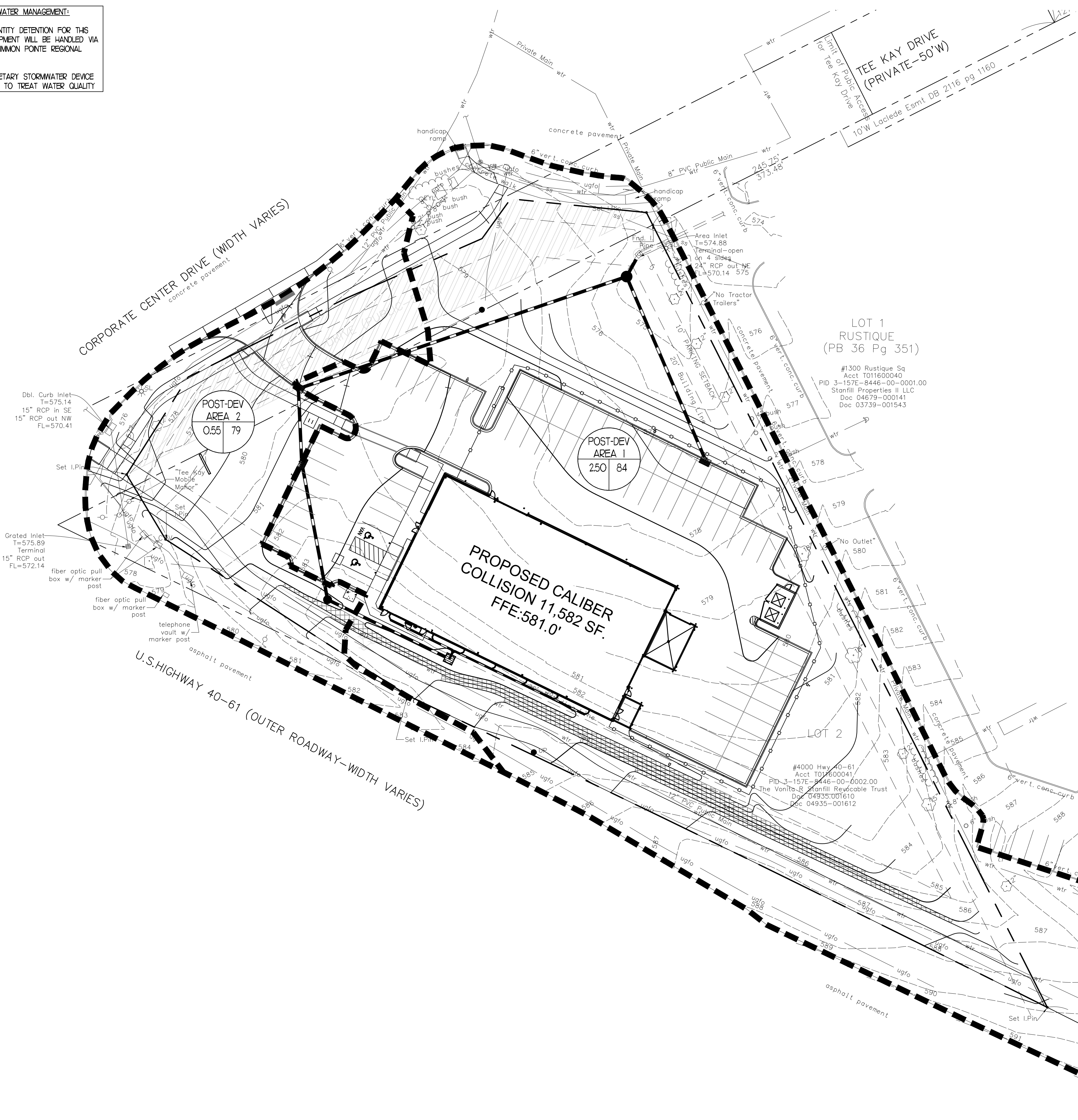
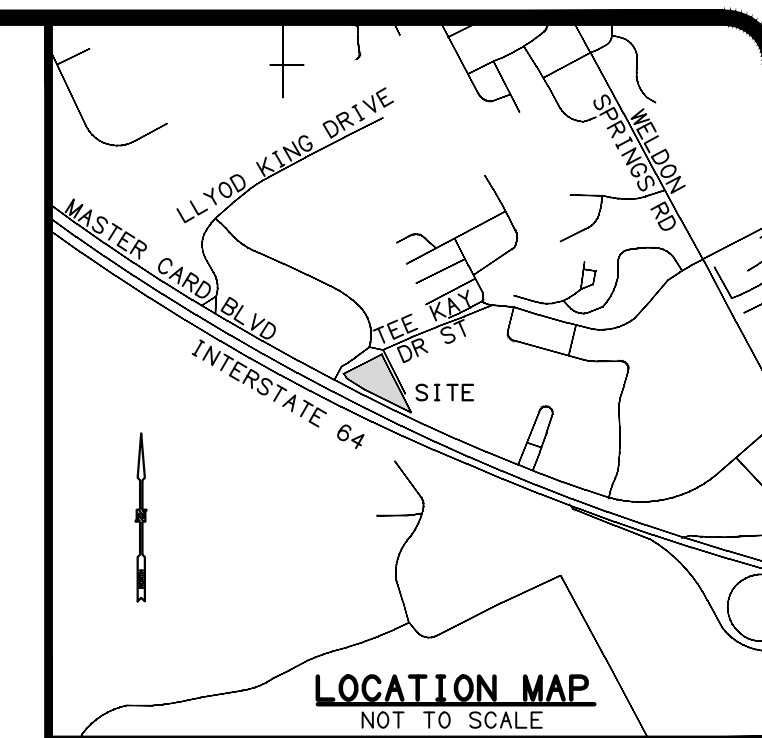


PROPOSED STORMWATER MANAGEMENT:
 STORMWATER QUANTITY DETENTION FOR THIS PROPOSED DEVELOPMENT WILL BE HANDLED VIA THE EXISTING PERSIMMON POINTE REGIONAL DETENTION BASIN.
 AN ONSITE PROPRIETARY STORMWATER DEVICE WILL BE INSTALLED TO TREAT WATER QUALITY



LEGEND

DESCRIPTION	
A	A = BASIN DESIGNATION
B	B = AREA IN ACRES
C	C = RUNOFF COEFFICIENT
■■■■■ DRAINAGE BASIN BOUNDARY	



RAINFALL DISTRIBUTION FOR O'FALLON, MISSOURI

STORM EVENT	2-YR	10-YR	25-YR	50-YR	100-YR
RAINFALL (INCHES)	3.16	4.53	5.54	6.40	7.33

ASSUMES TIME OF CONCENTRATION OF 5 MINUTES

DEVELOPED CONDITIONS RUNOFF CURVE NUMBER SUMMARY TABLE

DRAINAGE AREA	TOTAL AREA (AC.)	OPEN SPACE - GOOD CONDITION (AC.)	IMPERVIOUS AREA (AC.)	WEIGHTED CN VALUE
DEVELOPED CONDITIONS AREA 1	2.50	1.45	1.05	84
DEVELOPED CONDITIONS AREA 2	0.55	0.44	0.11	79

- ACCORDING TO THE NRCS SOIL SURVEY FOR ST. CHARLES COUNTY, MISSOURI, THE SITE'S SOILS ARE USDA MAP UNIT SYMBOL 60124: HARVESTER-URBAN LAND COMPLEX 2 TO 9 PERCENT SLOPES (HYDROLOGIC SOIL GROUP C)
- CN VALUE = 74 = OPEN SPACE - GRASS (GOOD CONDITION)
- CN VALUE = 98 = IMPERVIOUS AREA (ROOFS/PAVEMENT)
- TIME OF CONCENTRATION ASSUMED TO BE MINIMUM OF 5 MINUTES

DEVELOPED CONDITIONS DRAINAGE BASIN SUMMARY

AREA ID	DRAINS TO:	AREA (AC.)	TC (MIN.)	CN VALUE	Q2 (CFS)	Q10 (CFS)	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
DEVELOPED CONDITIONS AREA 1	REGIONAL DETENTION BASIN	2.50	5.0	84	6.94	11.79	15.43	18.54	21.89
DEVELOPED CONDITIONS AREA 2	REGIONAL DETENTION BASIN	0.55	5.0	79	1.22	2.22	3.01	3.68	4.42

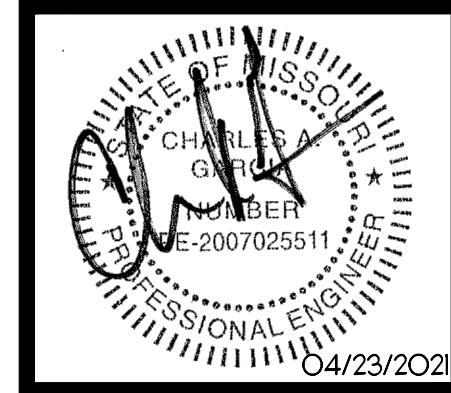
ALLOWABLE & POST DEVELOPMENT COMPARISON TABLE

AREA ID	DRAINS TO:	Q2 (CFS)	Q10 (CFS)	Q25 (CFS)	Q50 (CFS)	Q100 (CFS)
ALLOWABLE CONDITIONS AREA 1	REGIONAL DETENTION BASIN	8.95	13.67	17.11	20.02	23.16
DEVELOPED CONDITIONS AREA 1	REGIONAL DETENTION BASIN	6.94	11.79	15.43	18.54	21.89
ALLOWABLE CONDITIONS AREA 2	REGIONAL DETENTION BASIN	2.04	3.32	4.27	5.07	5.94
DEVELOPED CONDITIONS AREA 2	REGIONAL DETENTION BASIN	1.22	2.22	3.01	3.68	4.42

NOTE: WATER QUALITY FOR THE 1/4" FIRST FLUSH AND 80% TSS ARE MITIGATED BY A MECHANICAL DEVICE
 AREAS A-2, A-3, A-5 AND B1 TREATED BY A CONTECH CASCADE CS-5 SEPARATOR - SEE DETAILS

REVISIONS BY

PLANS PREPARED BY:
 Charles A. Garcia, P.E.
 Missouri Professional Engineer License #2007025511
 209 West Stone Avenue
 Greenville, South Carolina 29609
 864-233-5497



CALIBER COLLISION
 700 CORPORATE CENTRE DRIVE
 O'FALLON, MO 63368
 CROSS DEVELOPMENT CO. O'FALLON, LLC.
 4388 MARSH RIDGE ROAD
 CARROLLTON, TX 75010
 TEL: (214) 614-8252

DRAWN BAC
 CHECKED TMB
 DATE 03/19/2021
 SCALE

DRAWING
 16

DEVELOPED CONDITIONS MAP

