

ADJ TOTAL AREA = 5.24 AC.
OFF-SITE AREA B = 3.31 AC.
REMAINING AREA TRIBUTARY TO DET. BASIN #1 = 1.93 AC.

1.93 AC. AT 80% IMPERVIOUS
1.54 AC. x 3.85 = 5.93 CFS
0.39 AC. x 1.87 = 0.73 CFS
TOTAL Q = 6.66 CFS (15 YR)

**Centene Data Center
STORMWATER RUNOFF CALCULATIONS**

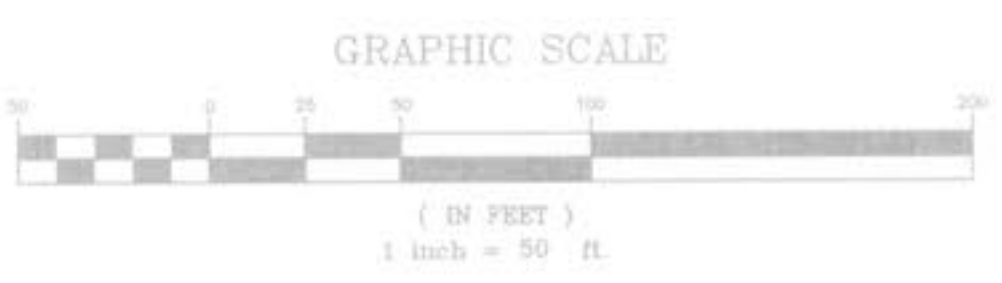
209-4511
May 7, 2010

NOTE: Q(15) 5%=1.87, Q(15) 100%(pavement)=3.85, Q(15) 100%=3.85, Q(15) 100%(roof)=3.85, Q(100) 5%=2.95, Q(100) 100%(pavement)=6.08, Q(100) 100%=6.08, Q(100) 100%(roof)=6.08

SUBAREA	AREA (SQ FT)		TOTAL AREA		Q(15)		Q(100)		TOTAL	
	IMPERVIOUS	PERVIOUS	SQ FT	AC	ACERAGE	Q(15)	ACERAGE	Q(100)	Q(15)	Q(100)
1	8,203	0	8,203	0.19	0.19	0.73	0.00	0.00	0.73	1.18
2	29,875	11,241	41,116	0.94	0.69	2.66	0.26	4.20	0.49	3.15
3	26,799	9,294	36,093	0.83	0.62	2.39	0.21	3.77	0.62	4.39
4	67,082	16,989	84,071	1.93	1.54	5.93	0.39	9.36	0.39	10.51
5	0	3,685	3,685	0.08	0	0	0.08	0	0.24	0.24
TOTAL				3.99					13.47	21.27

Area #2 Impervious quantity accounts for future 17,015 sf.

NOTE
OFF-SITE AREA B CALCULATIONS SHOWN PER
APPROVED STORMWATER MANAGEMENT / DETENTION BASIN REPORT
FOR PROGRESS POINT PHASE II (UPDATE), DATED OCT. 12, 2009



- 5 2010-11-03 FOR PERMIT
- 4 2010-07-21 REVISED PER CITY & PWS COMMENTS
- 3 2010-06-30 REVISED PER CITY COMMENTS
- 2 2010-16-09 PROGRESS PRINTING #2
- 1 2010-05-24 REVISED PER SEWER DISTRICT COMMENTS

PROPOSED DRAINAGE AREA MAP
CENTENE DATA CENTER

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NOV. 3, 2010

STATE OF MISSOURI
GEORGE MICHAEL STOCK
REGISTERED PROFESSIONAL ENGINEER
NUMBER E-25116

GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

DRAWN BY: J.M.B.	DATE: 05/07/10	CHECKED BY: G.M.S.	DATE: 05/07/10	DATE: 05/07/10	JOB NUMBER: 209-4511	SHEET: C17 of 21
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