GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

6.00 CFS FROM ORIGINAL PROJECT

EX.10'w ESMT.

EX 1 ADJUSTED COMMON GROUND & DETENTION EASEMENT PB. 41, PG. 83 9.53 CFS N/F PROGRESS POINT LOT OWNER'S ASSOCIATION, INC. DB. 2821 PG. 69

DETENTION BASIN (ACCORDING TO APPROVED ENGINEERING DRAWINGS) BY STOCK & ASSOCIATES LAST DATED 5-11-04) 25 YR. H.W.=539.01 100 YR. H.W.=539.39 100 YR. L.F.B. = 541.64 (SPILLWAY)

3.77 CFS

EXISTING ZONING: HTCD
EXISTING USE: DETENTION BASIN

1.55 CFS

EXISTING DATA CENTER BUILDING
19,042 S.F. (Indoor)
Height = 22.0'
F.F. = 553.00'

EXISTING 14,210 SF EXPANSION (10,962 SF DATA CENTER FLOOR + 3,248 SF M/E GALLERY) F.F. = 553.00'

PR. EXPANSION 2,622 SF FF=553.00

EXISTING 2,560 SF YARD EXPANSION (AIR COOLED CHILLERS)

EXISTING YARD AREA 7,372 S.F. (NO ROOF)

UNKNOWN 6" PIPING

6" PIPING

EX. BOLLARD (TYP.)

BOLLARD (TYP.)

CONC. WALK

RELOCATED FIRE LINE

PR. 10"ø PVC ROOF DRAIN @ 2.25% 548.50 549.00

PR. 10"ø PVC ROOF DRAIN 10"x6" WYE W/ CLEANOUT

REPLACE EX. 6"ø PVC W/ PR. 10"ø PVC ROOF DRAIN

PR. D.S. FL=546.0

STORM M.H. TOP=551.19 FL=542.60

STORM M.H. TOP=548.23 FL=540.14

AREA INLET TOP=548.17 FL(in)=542.1

APPROXIMATE LOCATION OF TELEPHONE LINE PER MARKS IN FIELD

GRAVEL

ASPHALT

DETENTION EASEMENT PB. 41, PG. 83 DB. 3932, PG. 480

S27°15'05"E 20.43'

S62°44'55"W 1029.91'

EXPOSED BEDROCK ELEV.=535.55

EXPOSED BEDROCK ELEV.=535.04

EXPOSED BEDROCK ELEV.=535.26

END IRON PIPE

Project name:	Centene Data Center Building Expansion	Calculated By:	J.M.B.	Revisions:
Project number:	4511.10	Checked By:	G.M.S.	
Project Location:	O'Fallon, Missouri	Date:	11/5/2020	

Stormwater Pipe Hydraulics Area Summary

Sub Basin	Tributary Area	% Impervious	15-year Impervious PI Factor	15-year Pervious PI Factor	15-year/20-minute runoff	100-year/20-minute runoff
	(ac)	(%)	(PI)	(PI)	(CFS)	(CFS)
1	0.65	54.00	3.85	1.87	1.91	3.02
2	0.53	53.00	3.85	1.87	1.55	2.44
3	0.54	43.00	3.85	1.87	1.47	2.32
4	1.06	85.00	3.85	1.87	3.77	5.95
5	0.08	0.00	3.85	1.87	0.15	0.24
Total:	2.86			Total:	8.84	13.97

PREPARED BY:
STOCK & ASSOCIATES Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005 PH. (636) 530-9100 FAX (636) 530-9130
e-mail: general@stockassoc.com
Web: www.stockassoc.com

SITE IMPROVEMENT PLANS FOR:

CENTENE DATA CENTER BUILDING EXPANSION

6430 WELDON SPRING ROAD
CITY OF O'FALLON, MISSOURI 63376

STATE OF MISSOURI
GEORGE MICHAEL STOCK
NUMBER PE-25116
PROFESSIONAL ENGINEER

12/28/2020

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

REVISIONS:

1	2020-11-11 – 75% CD SET
2	2020-12-15 – 100% PERMIT/BID SET
3	2020-12-28 – REVISED PER CITY COMMENTS

DRAWN BY: J.M.B.	CHECKED BY: G.M.S.
DATE: 11/6/2020	JOB NO: 209-4511.10
DUCKETT CREEK #: –	BASE MAP #: –
S.C.C. H&T #: –	H&T S.U.P. #: –
M.D.N.R. #: MORA–	

SHEET TITLE:
PROPOSED DRAINAGE AREA MAP (HYDRAULICS)

SHEET NO.:
C8.0

DRAWING FILE: M:\cad\2020\4511\10\Preliminary\4511_HydSP.dwg LAYOUT: C8.0ADAM PLOTTED: Dec 28, 2020 - 2:39pm PLOTTED BY: jonb/adamg