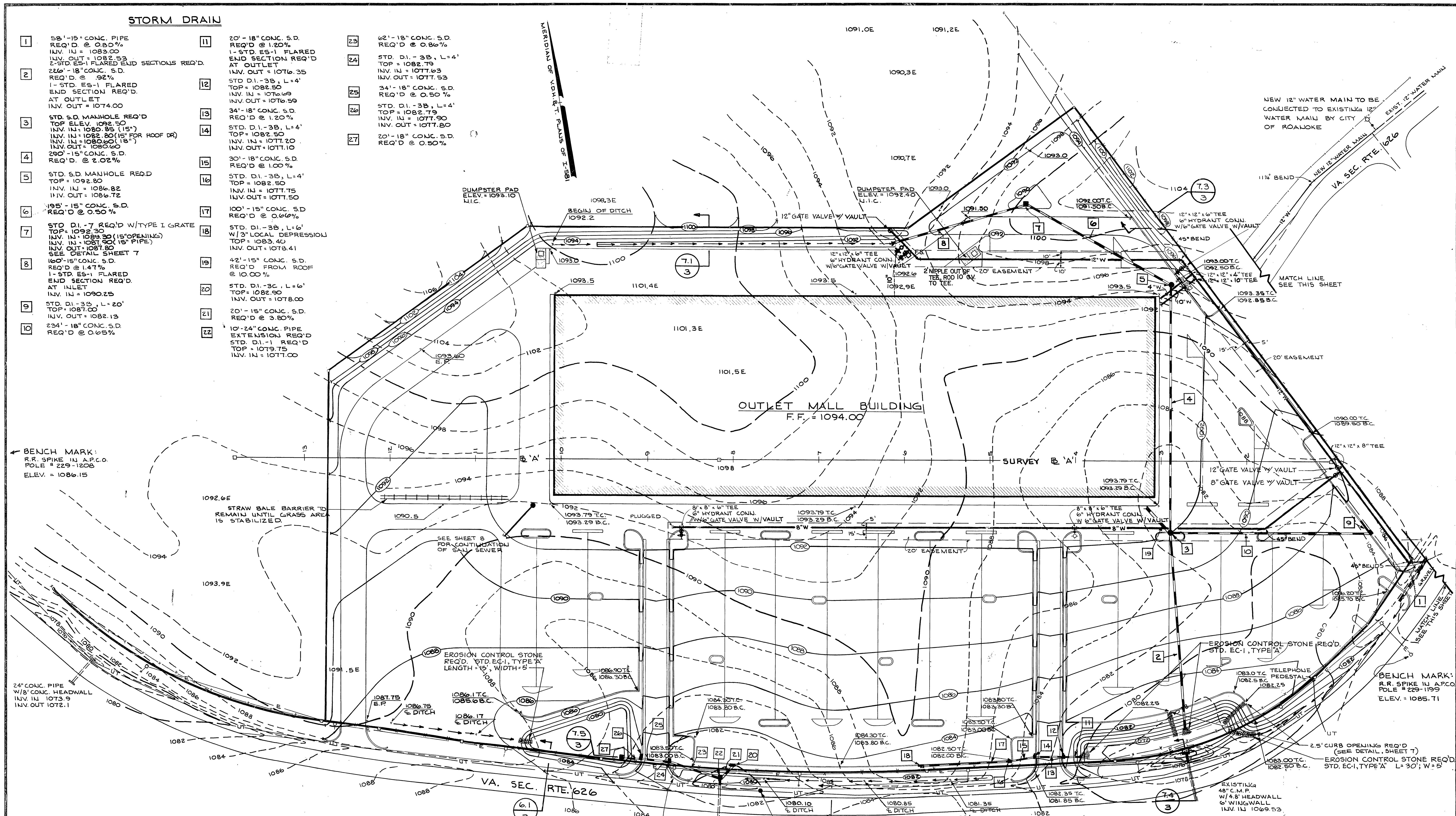


STORM DRAIN

- 1 58'-15" CONC. PIPE
REQ'D @ 0.80%
INV. IN = 1083.00
INV. OUT = 1082.53
2-STD. ES-1 FLARED END SECTIONS REQ'D
- 2 22'-18" CONC. S.D.
REQ'D @ 0.92%
1-STD. ES-1 FLARED
END SECTION REQ'D
AT OUTLET
INV. OUT = 1074.00
- 3 STD. S.D. MANHOLE REQ'D
TOP ELEV. 1092.50
INV. IN = 1080.85 (15")
INV. IN = 1082.80 (15" FOR ROOF DR)
INV. IN = 1080.80 (15")
INV. OUT = 1080.20
- 4 29'-15" CONC. S.D.
REQ'D @ 2.02%
- 5 STD. S.D. MANHOLE REQ'D
TOP = 1092.80
INV. IN = 1086.82
INV. OUT = 1086.72
- 6 195'-15" CONC. S.D.
REQ'D @ 0.50%
- 7 STD. D.I. - 7 REQ'D W/TYPE I GRATE
TOP = 1092.30
INV. IN = 1083.30 (15" OPENING)
INV. IN = 1081.50 (15" PIPE)
INV. OUT = 1081.80
SEE DETAIL SHEET 7
- 8 160'-15" CONC. S.D.
REQ'D @ 1.47%
1-STD. ES-1 FLARED
END SECTION REQ'D
AT INLET
INV. IN = 1090.25
- 9 STD. D.I. - 3B, L = 20'
TOP = 1087.00
INV. OUT = 1082.13
- 10 234'-18" CONC. S.D.
REQ'D @ 0.65%

- 11 20'-18" CONC. S.D.
REQ'D @ 1.20%
1-STD. ES-1 FLARED
END SECTION REQ'D
AT OUTLET
INV. OUT = 1076.35
- 12 STD. D.I. - 3B, L = 4'
TOP = 1082.50
INV. IN = 1076.59
INV. OUT = 1076.59
- 13 34'-18" CONC. S.D.
REQ'D @ 1.20%
STD. D.I. - 3B, L = 4'
TOP = 1082.50
INV. IN = 1077.20
INV. OUT = 1077.10
- 14 30'-18" CONC. S.D.
REQ'D @ 1.00%
- 15 STD. D.I. - 3B, L = 4'
TOP = 1082.50
INV. IN = 1077.75
INV. OUT = 1077.50
- 16 100'-15" CONC. S.D.
REQ'D @ 0.60%
- 17 STD. D.I. - 3B, L = 6'
W/3" LOCAL DEPRESSION
TOP = 1083.40
INV. OUT = 1078.41
- 18 42'-15" CONC. S.D.
REQ'D FROM ROOF
@ 10.00%
- 19 STD. D.I. - 3B, L = 6'
TOP = 1082.90
INV. OUT = 1078.00
- 20 20'-15" CONC. S.D.
REQ'D @ 3.80%
- 21 10'-24" CONC. PIPE
EXTENSION REQ'D
STD. D.I. - 1 REQ'D
TOP = 1079.75
INV. IN = 1077.00
- 22

- 23 62'-18" CONC. S.D.
REQ'D @ 0.86%
- 24 STD. D.I. - 3B, L = 4'
TOP = 1082.79
INV. IN = 1077.63
INV. OUT = 1077.53
- 25 34'-18" CONC. S.D.
REQ'D @ 0.50%
- 26 STD. D.I. - 3B, L = 4'
TOP = 1082.79
INV. IN = 1077.90
INV. OUT = 1077.80
- 27 20'-18" CONC. S.D.
REQ'D @ 0.50%

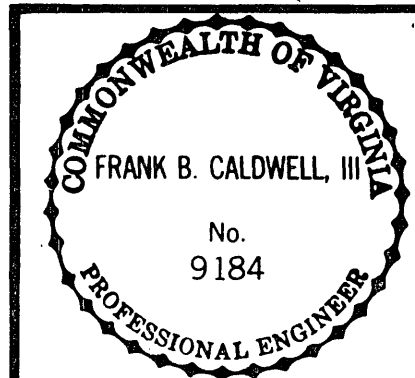


BENCH MARK:
R.R. SPIKE IN A.P.C.O.
POLE # 229-1208
ELEV. = 1086.15

BENCH MARK:
R.R. SPIKE IN A.P.C.O.
POLE # 229-1204
ELEV. = 1081.96

BENCH MARK:
R.R. SPIKE IN A.P.C.O.
POLE # 229-1199
ELEV. = 1085.71

APPROVED: *Frank B. Caldwell, III*
DIRECTOR OF UTILITIES AND OPERATIONS.
10 APR 84
CITY ENGINEER OF ROANOKE, VIRGINIA.
Director of Public Works.



GRADING & UTILITIES PLAN ROANOKE OUTLET MALL FOR AREA CORPORATION SITUATE VA. SEC. RTE. 626, ROANOKE, VA. SCALE: 1"=50' AS-BUILT - WATER NOV. 3, 1983						
REVISIONS DATE 12-13-83 6 JAN 84 2-2-84	BY J.V.J. J.S. J.M.B. T.T.	DESIGNED BY J.V.J.	DRAWN BY J.V.J.	CHECKED BY T.T.	W.O. # 0883	N.B. AREA # 8

T. P. PARKER & SON
 engineers & surveyors, ltd.
 TELEPHONE (703) 387-1153
 R.O. DRAWER 473, SALEM, VIRGINIA 24153

CITY OF ROANOKE WATER DEPARTMENT PLAN NO. 84-03 DATE: 4-8-84