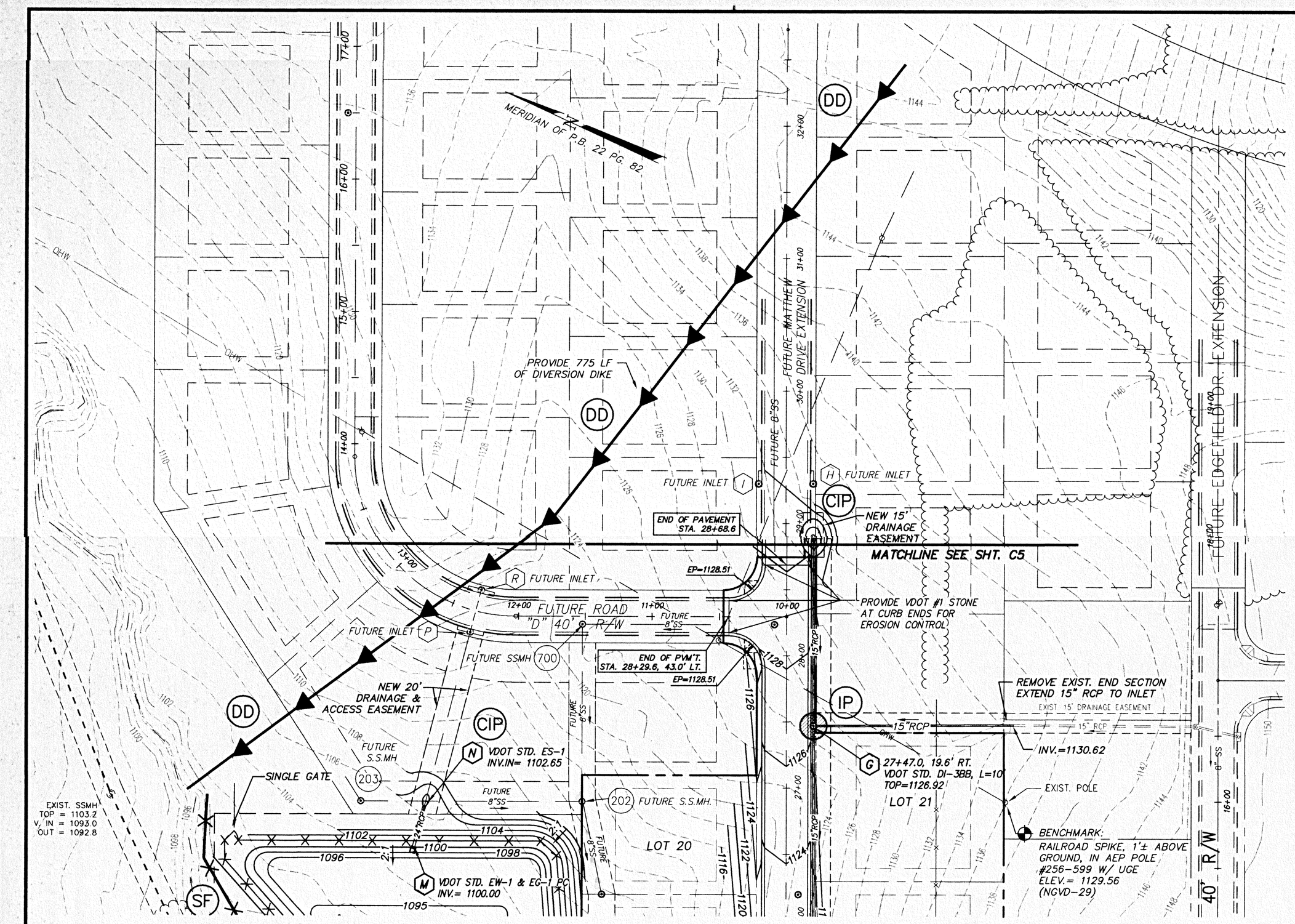


DRAINAGE SUMMARY:

(A) VDOT STD. EW-1, 24" DIA. INV. = 1090.00

B – A : 67.5'– 24" RCP @ 4.44% INV.IN = 1093.00 INV.OUT = 1090.00

(B) VDOT STD. EW-1, 24" DIA. INV. = 1093.00

(C) VDOT STD. EW-1, 24" DIA. INV. = 1096.48

D – C : 140.9'– 24" RCP @ 2.00% INV.IN = 1099.30 INV.OUT = 1096.48

(D) VDOT STD. 48" DIA. BASE w/ MH-2 FRAME & COVER TOP= 1104.00 INV.IN = 1099.80 INV.OUT = 1099.30

E – D : 100.0'– 18" RCP @ 8.02% INV.IN = 1107.82 INV.OUT = 1099.80

(E) VDOT STD. 48" DIA. BASE w/ D.I.-3C TOP, L=20' TOP = 1115.16 INV.IN = 1107.92 (F) INV.IN = 1109.24 (J) INV.OUT = 1107.82

F – E : 40.5'– 18" RCP @ 3.00% INV.IN = 1109.14 INV.OUT = 1107.92

(F) VDOT STD. 48' DIA. BASE w/ D.I.-3C TOP, L=20' TOP = 1115.16 INV.IN = 1109.24 INV.OUT = 1109.14

G – F : 475.0'– 15" RCP @ 2.00% INV.IN= 1118.74 INV.OUT= 1109.24

(G) VDOT STD. 48" DIA. BASE w/ D.I.-3BB TOP, L=10' TOP = 1126.92 INV.IN = 1118.84 (FUTURE H) INV.IN = 1118.84 (PH1 – H) INV.OUT = 1118.74

G – H: 142.1' – 15" RCP @ 4.45% INV.IN = 1125.16 INV.OUT = 1118.84

EX. – G : 148.9' – 15" RCP @ 7.91% INV.IN = 1130.62 (TIE TO EXISTING PIPE) INV.OUT = 1118.84

J – E : 118.5'– 15" RCP @ 1.84% INV.IN = 1111.42 INV.OUT = 1109.24

(J) VDOT STD. 48' DIA. BASE w/ D.I.-3B TOP, L=8' TOP = 1117.26 INV.IN = 1111.52 INV.OUT = 1111.42

K – J : 166.4'– 15" RCP @ 4.71% INV.IN= 1119.36 INV.OUT= 1111.52

(K) VDOT STD. 48" DIA. BASE w/ D.I.-3B TOP, L=8' TOP = 1125.61 INV.IN = 1119.46 INV.OUT = 1119.36

L – K : 46.2' – 15" RCP @ 1.00% INV.IN = 1119.92 INV.OUT = 1119.46

(L) VDOT STD. 48" DIA. BASE w/ D.I.-3B TOP, L=12' TOP = 1126.67 INV.I = 1119.92

ED-K ℄ STA. 12+33.5, 20.5' RT. SDMH TOP= 1116.77 REMOVE ADD VDOT STD. 48" DIA. RISER w/ D.I.-3B TOP, L=20' PROPOSED TOP= 1122.18 INV.IN= 1113.21 (15") NEW INV.IN= 1113.4 (21") INV.OUT= 1113.1 (21")

Z – ED-K : 142.6' – 18" RCP @ 1.50% SLOPE INV.IN = 1115.35 INV.OUT = 1113.21

(Z) VDOT STD. 48" DIA. RISER, w/D.I.-3C TOP, L=20' TOP= 1120.74 INV.IN = 1115.60 (X) INV.IN= 1115.60 (Y) INV.OUT= 1115.35

Z – Y : 41.0' – 15" RCP @ 1.00% INV.IN = 1116.01 INV.OUT = 1115.60

(Y) VDOT STD. 48" DIA RISER, w/ D.I.-3C TOP, L=16' TOP = 1120.74 INV.OUT= 1116.01

X – Z : 134.9' – 15" RCP @ 1.00% SLOPE INV IN = 1116.95 INV OUT = 1115.60

(X) VDOT STD. 48" DIA. RISER, w/ D.I.-3B TOP, L=20' TOP= 1122.18 INV.OUT = 1116.95

(M) VDOT STD. EW-1 & EG-1, PC INV. = 1100.00

M – N : 32.0'– 24" RCP @ 8.30% INV.IN= 1102.65 INV.OUT= 1100.00

(N) VDOT STD. ES-1, 24" DIA. INV.IN = 1102.65

NOT INSTALLED FOR THIS PROJECT

N – P (FUTURE) : 136.3'– 24" RCP @ 8.30% INV.IN= 1113.97 INV.OUT= 1102.65

(FUTURE) (P) VDOT STD. 48" DIA. BASE w/ D.I.-3C TOP, L=20' TOP = 1122.89 INV.IN = 1115.40 INV.OUT = 1113.97

(FUTURE) P – R : 33.0'– 15" RCP @ 1.00% INV.IN= 1115.73 INV.OUT= 1115.40

(FUTURE) (R) VDOT STD. 48" DIA. BASE w/ D.I.-3C TOP, L=20' TOP = 1122.89 INV.OUT = 1115.73

NOT INSTALLED FOR THIS PROJECT

FUTURE H – G : 183.0' (TOTAL)–15"RCP @4.45% 41.0'– 15" RCP @ 4.45% INV.IN = 1126.98 INV.OUT = 1118.84

FUTURE (H) VDOT STD. 48" DIA. BASE w/ D.I.-3B TOP, L=12' TOP = 1132.16 INV.IN = 1127.08 (FUTURE I) INV.OUT= 1126.98

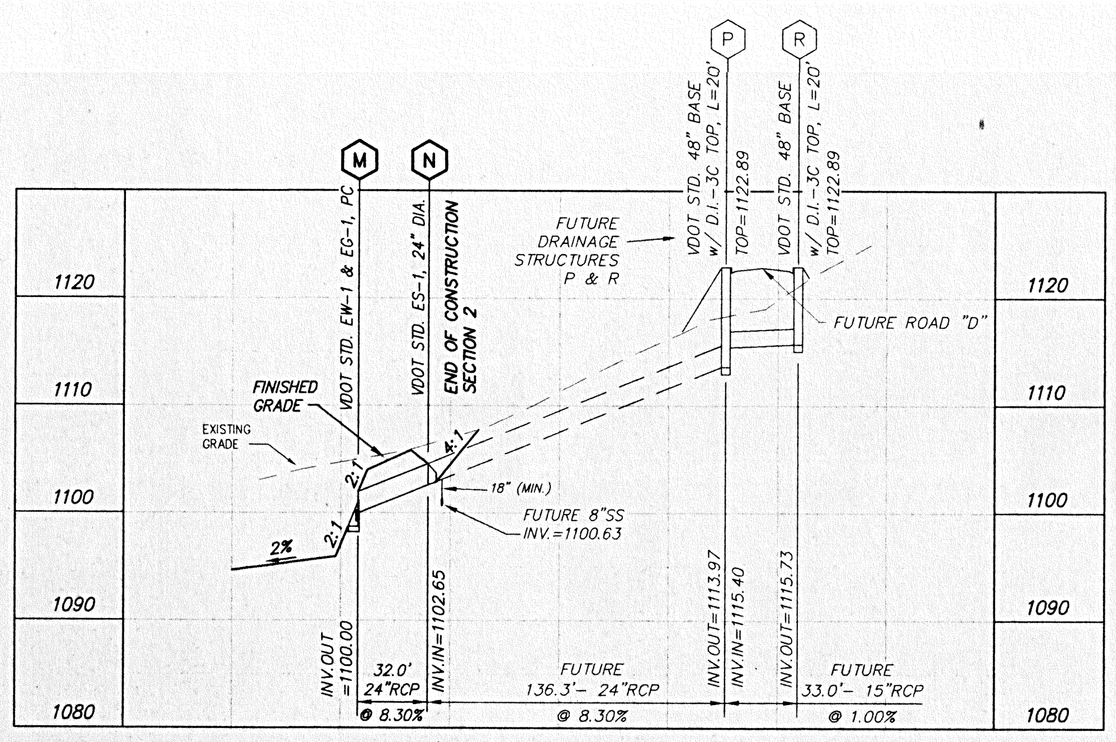
FUTURE I – H : 41.0' – 15" RCP @ 1.00% INV.IN = 1127.49 INV.OUT = 1127.08

FUTURE (I) VDOT STD. 48" DIA. BASE w/ D.I.-3B TOP, L=12' TOP = 1132.16 INV.OUT = 1127.49

ALL DRAINAGE PIPE SHALL BE CLASS III RCP.

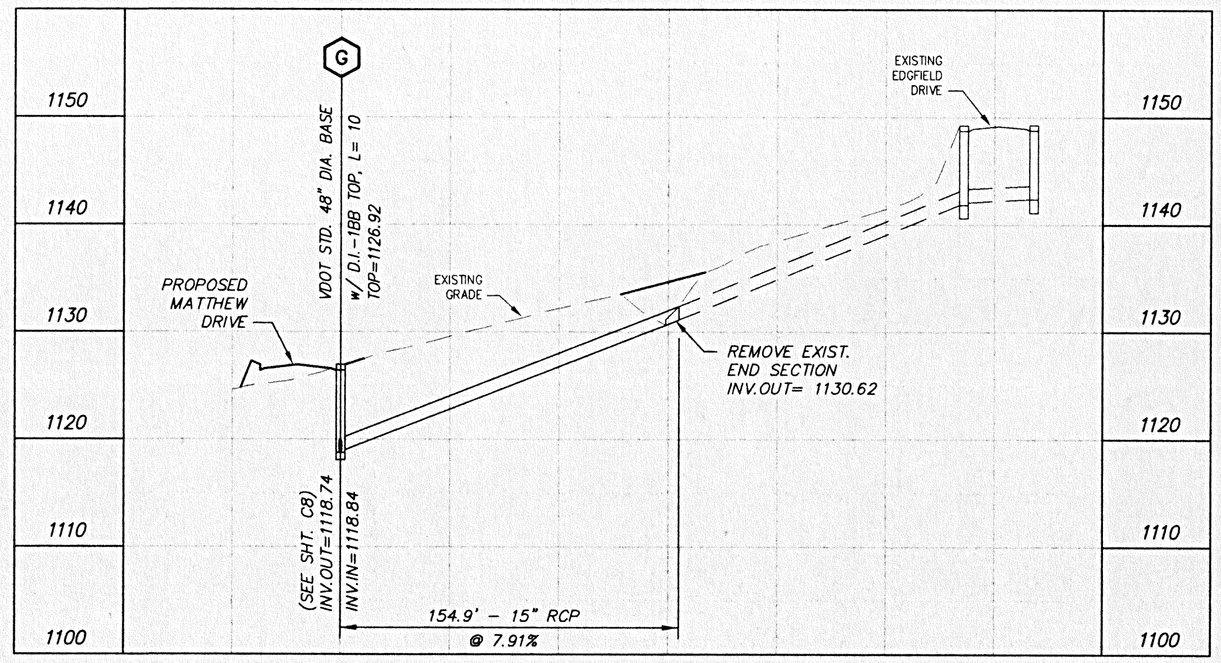
ALL DRAINAGE STRUCTURES TO RECEIVE IS-1, INLET SHAPING PER VDOT SPECIFICATIONS.

REFERENCE IS DIRECTED TO PB-1, INSTALLATION OF PIPE CULVERTS AND STORM SEWERS, CIRCULAR PIPE BEDDING AND BACKFILL – METHOD "A" AS SHOWN IN VDOT DETAIL 107.01.



PROFILE: STORM SEWER M – N – (FUTURE) P – (FUTURE) R

SCALES: 1"= 50' HORIZ. 1"= 10' VERT.



PROFILE: STORM SEWER G TO EXISTING 15" RCP

SCALES: 1"= 50' HORIZ. 1"= 10' VERT.

50' 25' 0' 50' 100' 1" = 50'
GRAPHIC SCALE

COMMONWEALTH OF VIRGINIA
PAUL J. BROWN
CERTIFICATE NO. 036148
PROFESSIONAL ENGINEER

GRADING & ESC PLAN
FOR
"EDGEFIELD", SECTION TWO
SITUATE FOUNTAIN LANE
VINTON MAGISTERIAL DISTRICT
ROANOKE COUNTY, VIRGINIA
PREPARED FOR CHARLES R. SIMPSON, INC.

REVISED: JANUARY 14, 2004
DATE: OCTOBER 13, 2003 SCALE: 1" = 50'

DESIGNED BY JJB, PJB
DRAWN BY JJB
CHECKED BY PJB
W.O. # 00-1188
N.B. GREYSTONE
TAX NO. 61.01-01-02.3

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