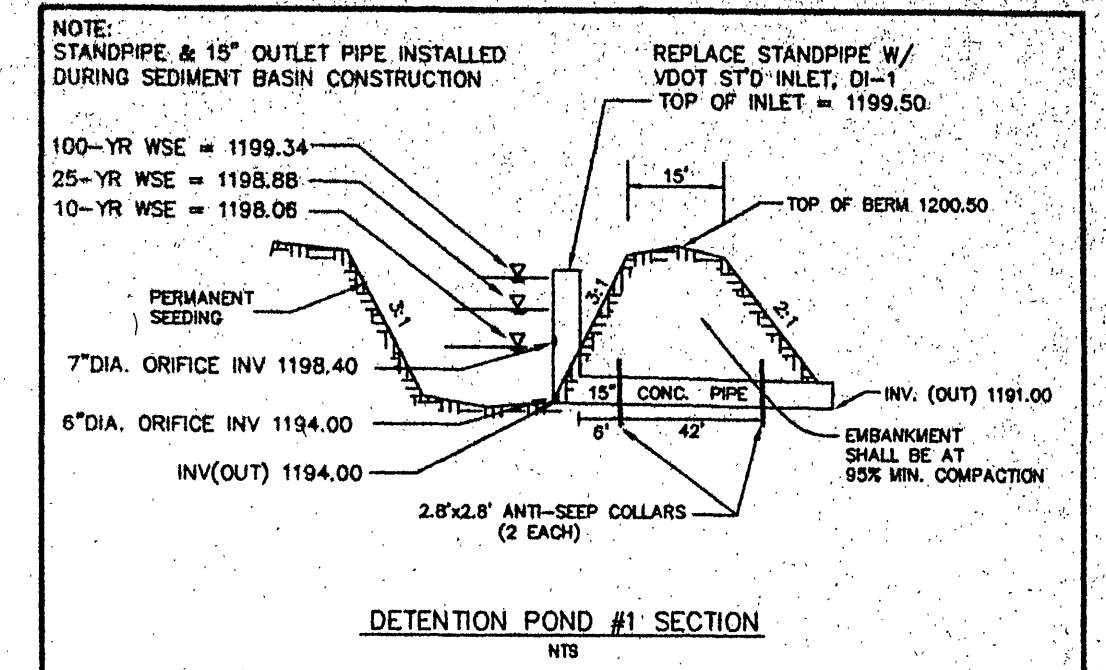
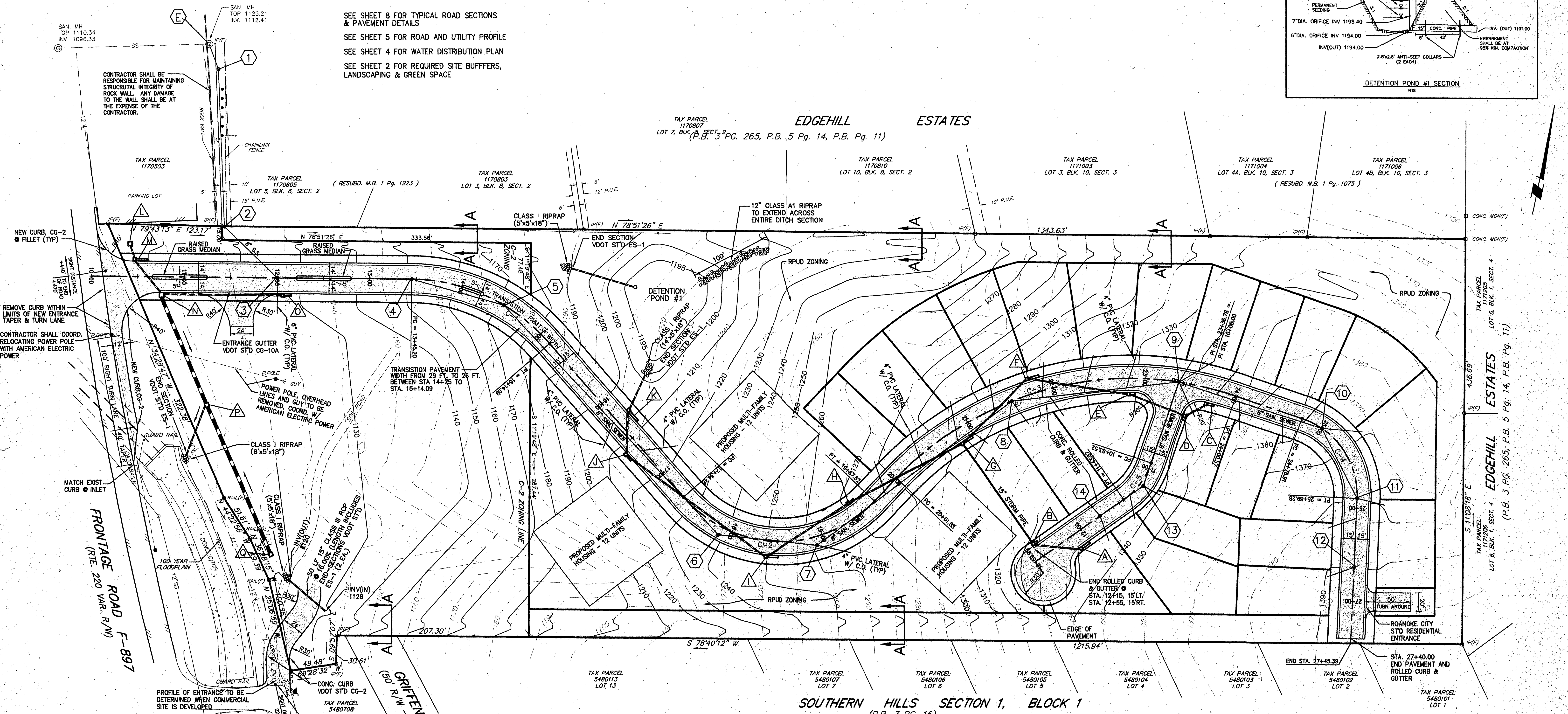




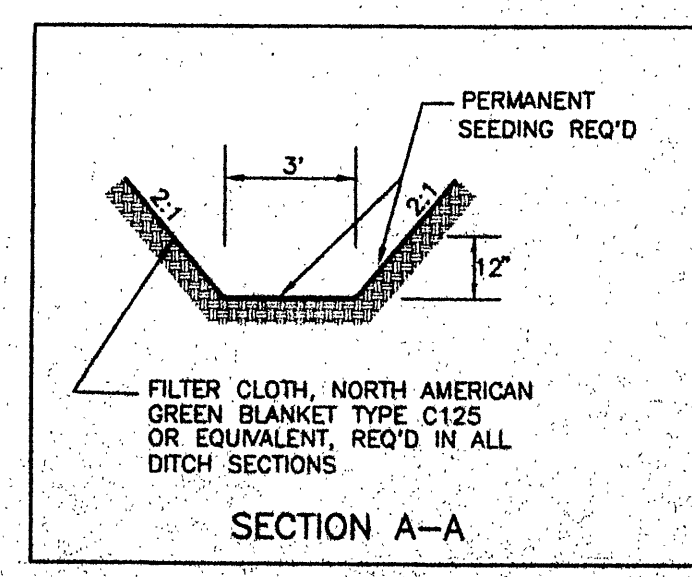
SEE SHEET 8 FOR TYPICAL ROAD SECTIONS & PAVEMENT DETAILS
 SEE SHEET 5 FOR ROAD AND UTILITY PROFILE
 SEE SHEET 4 FOR WATER DISTRIBUTION PLAN
 SEE SHEET 2 FOR REQUIRED SITE BUFFERS, LANDSCAPING & GREEN SPACE



CURVE DATA

C-1	C-2	C-3
Δ = 48°23'06"	Δ = 95°23'00"	Δ = 65°16'16"
R = 200.00'	R = 140.00'	R = 350.00'
T = 89.85'	T = 153.81'	T = 224.14'
L = 168.90'	L = 233.07'	L = 398.72'

C-4	C-5
Δ = 73°49'05"	Δ = 36°03'35"
R = 88.00'	R = 80.00'
T = 66.09'	T = 26.04'
L = 113.38'	L = 50.35'



DRAINAGE STRUCTURE DATA

INLET	TYPE & SIZE	STATION & TOP ELEVATION
A	VDOT STD' DI-3B, LENGTH=12'	STA. 12+00.68, ELEV 1337.17
B	VDOT STD' DI-3B, LENGTH= 6'	STA. 12+46.16, ELEV 1335.33
C	VDOT STD' DI-3B, LENGTH=10'	STA. 23+69.62, ELEV 1338.11
D	VDOT STD' DI-3B, LENGTH= 6'	STA. 10+31.16, ELEV 1333.27
E	VDOT STD' DI-3B, LENGTH= 8'	STA. 22+80.27, ELEV 1323.15
F	VDOT STD' DI-3B, LENGTH=14'	STA. 21+75.00, ELEV 1305.51
G	VDOT STD' DI-3B, LENGTH=14'	STA. 20+81.44, ELEV 1289.84
H	VDOT STD' DI-3B, LENGTH= 8'	STA. 19+41.99, ELEV 1266.25
I	VDOT STD' DI-3B, LENGTH=14'	STA. 18+38.26, ELEV 1247.31
J	VDOT STD' DI-3B, LENGTH=10'	STA. 16+57.52, ELEV 1212.17
K	VDOT STD' DI-3B, LENGTH=16'	STA. 16+22.98, ELEV 1205.43
L	VDOT STD' DI-7, TYPE I GRATE	STA. 10+41.50, 35'LT, ELEV 1108.50
M	VDOT STD' DI-3B, LENGTH=14'	STA. 10+45.29, ELEV 1108.94
N	VDOT STD' DI-4BB, LENGTH= 6'	STA. 10+73.77, ELEV 1110.61
O	VDOT STD' DI-3B, LENGTH=10'	STA. 12+04.84, ELEV 1126.76
P	VDOT STD' DI-7, TYPE III GRATE	TOP ELEV 1107.00
Q	VDOT STD' DI-7, TYPE III GRATE	TOP ELEV 1116.00

STORM PIPE DATA

FROM INLET	TO INLET	PIPE SIZE, TYPE, LENGTH & SLOPE	INV.(OUT)	INV.(IN)
A	B	50 LF 15" CLASS III RCP @ 3.50%	1332.25	1330.50
B	G	130 LF 15" CONC. PIPE @ 3.492%	1330.40	1285.00
C	D	25 LF 15" CLASS III RCP @ 18.40%	1333.65	1329.05
D	E	62 LF 15" CLASS III RCP @ 16.85%	1328.95	1318.50
E	F	108 LF 15" CLASS III RCP @ 15.93%	1318.40	1301.20
F	G	97 LF 15" CLASS III RCP @ 16.70%	1301.10	1284.90
G	H	137 LF 15" CLASS III RCP @ 16.68%	1284.80	1261.95
H	I	104 LF 15" CLASS III RCP @ 18.27%	1261.85	1242.85
I	J	185 LF 15" CLASS III RCP @ 19.22%	1207.20	1207.20
J	K	47 LF 18" CLASS III RCP @ 13.62%	1207.10	1200.70
K	POND #1	41 LF 18" CLASS III RCP @ 1.95%	1200.60	1199.80
FROM POND #1		70 LF 15" CONC. PIPE @ 4.28%	1194.00	1191.00
L	M	15 LF 15" CONC. PIPE @ 5.33%	1105.60	1104.80
M	N	45 LF 15" CLASS III RCP @ 1.33%	1104.70	1104.10
O	N	127 LF 15" CLASS III RCP @ 13.03%	1122.55	1106.00
N	P	124 LF 42" 16 GAUGE CMP @ 0.73%	1102.65	1101.75
Q	P	173 LF 42" 16 GAUGE CMP @ 0.52%	1102.65	1101.75
P	TO OUTFALL	58 LF 24" CONC. PIPE @ 1.00%	1101.75	1101.17

(LENGTH OF PIPE SHOWN INCLUDES END-SECTIONS WHERE END-SECTIONS ARE INDICATED)

SHEET 3 OF 11

SHANKS ASSOCIATES, P.C.
 ENGINEERS - SURVEYORS - PLANNERS
 313 LUCK AVENUE
 ROANOKE, VIRGINIA 24016
 (540) 343-6685

SPRINGWOOD ASSOCIATES
 ROAD DEVELOPMENT PLANS WITH
 DRAINAGE & SANITARY SEWER

DATE: 10/17/96 SCALE: 1"=50'

DESIGN BY: WMW DRAWN BY: WMW

CHECKED BY: FOS JOB NO.: 696020

REVISION DATE: 08/08/97