SURVEYED BY ....
SUPERVISED BY AAA
DESIGNED BY Dewberry (703) 849-0607

IN PROGRESS 10/22/08
NOT FOR CONSTRUCTION

DRAINAGE SUMMARY

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED		STATE	FEDERAL AID PROJECT	STATE ROUTE	STATE PROJECT	SHEET NO.
7/17/08		VA.		7		2C(13)

PIPE

LOCATION: STRUCTURE NO. TO STRUCTURE NO.	STATION OF UPSTREAM STRUCTURE	CONCRETE PIPE 15	18	24	30	36	42	48	54	60	72		ELIPTICAL PIPE 23x14	30x19	45x29	68x43	76x48	BOX CULVERT (see sheet 2C(16)) 6x4	24x6.67
		DIAMETER (INCHES) — LINEAR FEET																	
EX.8-10 to 8-1		10																	
8-11																			
8-11 to 8-3			36																
8-12 to 8-13			92																
8-13 to 8-24			47																
8-14																			
8-15																			
8-16 to 8-17				132															
8-17 to 8-18				147															
8-18 to 8-19				28															
8-19																			
8-20 to 8-15			41																
8-21 to 8-22								30											
9-1 to 9-2		247																	
9-2 to 9-9		198																	
EX.9-3 to 9-5				151															
SUBTOTAL		455	216	458				30											

LOCATION: STRUCTURE NO. TO STRUCTURE NO.	END SECTIONS ES-1 15	18	END SECTION ES-1 or ES-2 15	18	24	30	36	RADIAL PIPE 15	RADIAL PIPE 60	COVER FT.	MINOR STRUCTURE EXCAVATION C.Y.	%	EROSION CONTROL TREATMENT: EC-3 TYPE B SQY.	EC-1 CLASS AI TYPE A SQY.	EC-1 CLASS I TYPE B SQY.	EC-1 CLASS I
EX.8-10 to 8-1										4.6						
8-11																
8-11 to 8-3										4.0						
8-12 to 8-13										4.8						
8-13 to 8-24										4.8						
8-14					1								6.7			
8-15				1												1
8-16 to 8-17										3.9						
8-17 to 8-18										3.9						
8-18 to 8-19										4.0						
8-19					1										4.0	
8-20 to 8-15																
8-21 to 8-22																
9-1 to 9-2										5.1						
9-2 to 9-9										3.9						
EX.9-3 to 9-5										2.4						
SUBTOTAL				1	2								6.7		4.0	1

LOCATION: STRUCTURE NO. TO STRUCTURE NO.	MISC. STRUCTURES AND MATERIALS: MANHOLE MH-1 OR 2 L.F.	MOD. SWM-1 EA	HDPE PIPE 42"	LEVEL SPREADER EA	JB-1 EA	SPECIAL DESIGN JB EA	PRECAST ARCH LF	EC-2 SY	EC-3 Type A SY	CAST IN PLACE PIPE CULV. CON.: CLASS A-3 CONCRETE CY	REINFORCED STEEL LB	GEOTEXTILE FABRIC SY	CONC. CRADLE: CLASS A3 CONC CY	ENDWALLS: CLASS A-3 CONCRETE CY	REINFORCED STEEL LB	HDPE PIPE 30"	SPECIAL DESIGN EW EA	CLASS A3 CONCRETE FOR JB CY	REINF. STEEL FOR JB LB	BEDDING MATERIAL AGGREGATE No.57 TON	CLASS I BACKFILL MATERIAL TON	CLASS II BACKFILL MATERIAL TON	REMARKS
EX.8-10 to 8-1																							
8-11	5.0																						
8-11 to 8-3																							
8-12 to 8-13																							
8-13 to 8-24																							
8-14																							
8-15																							
8-16 to 8-17																							
8-17 to 8-18																							
8-18 to 8-19																							
8-19																							
8-20 to 8-15																							
8-21 to 8-22												69		5.23						33.7			
9-1 to 9-2																							
9-2 to 9-9																							
EX.9-3 to 9-5																							
SUBTOTAL	5.0											69		5.23						34			

DROP INLETS

LOCATION: STRUCTURE NO.	STATION OF STRUCTURE	STD. DI-3B 4	6	8	10	12	14	16	18	STD. DI-3BB 4	6	8	10	12	14	16	18	STD. T-DI-3C 12	18
13-4																			
13-5																			
13-6																			
13-8				1															
13-9		1																	
13-10			1																
13-11			1																
SUBTOTAL		1	2	1															

LOCATION: STRUCTURE NO.	STD. DI-3C 6	8	10	STD. DI-4B 6	8	10	MOD. DI-4BB 6	8	10	DI-7 EA	DI-3A EA	HEIGHT OF DROP INLET	STD. DI-3E 4	8	STD.DI-4E 8	MOD. EXIST. STR. EA		STD. T-DI-3B 14		STD. T-DI-4B 4	6		MOD. DI-3B 4	6	MOD. DI-3C 6	10	REMARKS
	SLOT LENGTH IN FEET — EACH																										
13-4	1											5.48															
13-5										1		3.04															
13-6	1											4.67															
13-8												3.92															
13-9												4.22															
13-10												3.92															connect 1 St'd UD-4 to Structure
13-11												3.92															connect 1 St'd UD-4 to Structure
SUBTOTAL	2									1																	

COMMONWEALTH OF VIRGINIA
DAVID JOHN MAHONEY
Lic. No. 020798
PROFESSIONAL ENGINEER

PLAN NO.	PROJECT	FILE NO.	SHEET NO.
A			2C(13)