

DEVELOPMENT PLAN SHOWING

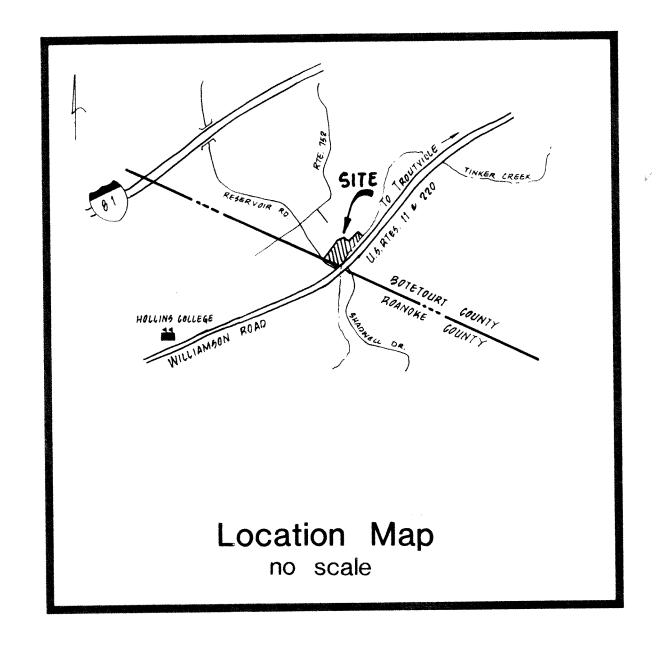
PROPOSED IMPROVEMENTS

FOR

VIRGINIA TRUCK CENTER, INC.

VALLEY MAGISTERIAL DISTRICT BOTETOURT COUNTY, VIRGINIA

29 SEPTEMBER 1994



INDEX OF DRAWINGS

SHEET No.

DESCRIPTION

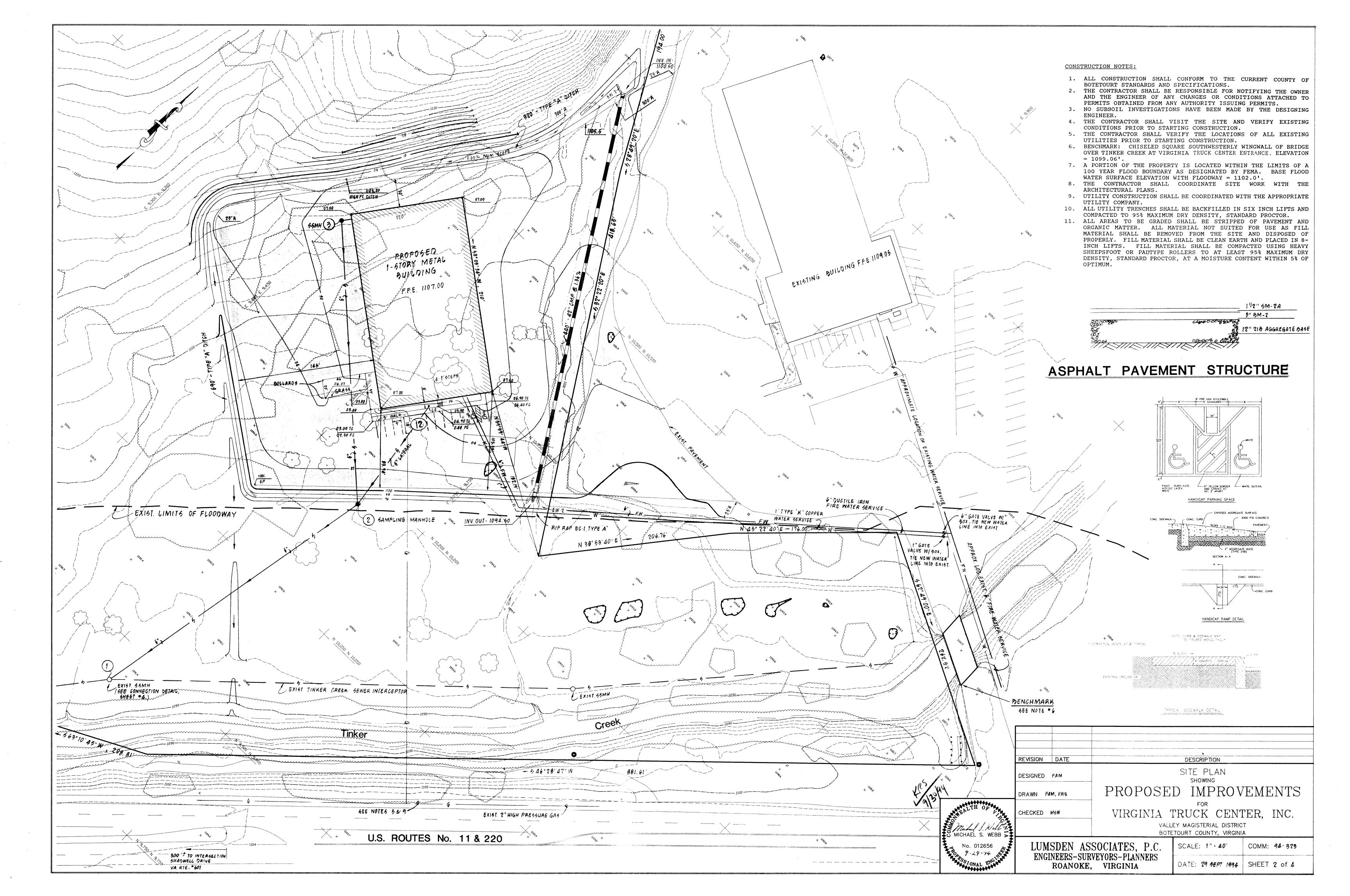
- 1. LUMSDEN ASSOCIATES COVER SHEET
- 2. SITE PLAN
- 3. EROSION CONTROL PLAN
- 4. EROSION CONTROL DETAIL SHEET

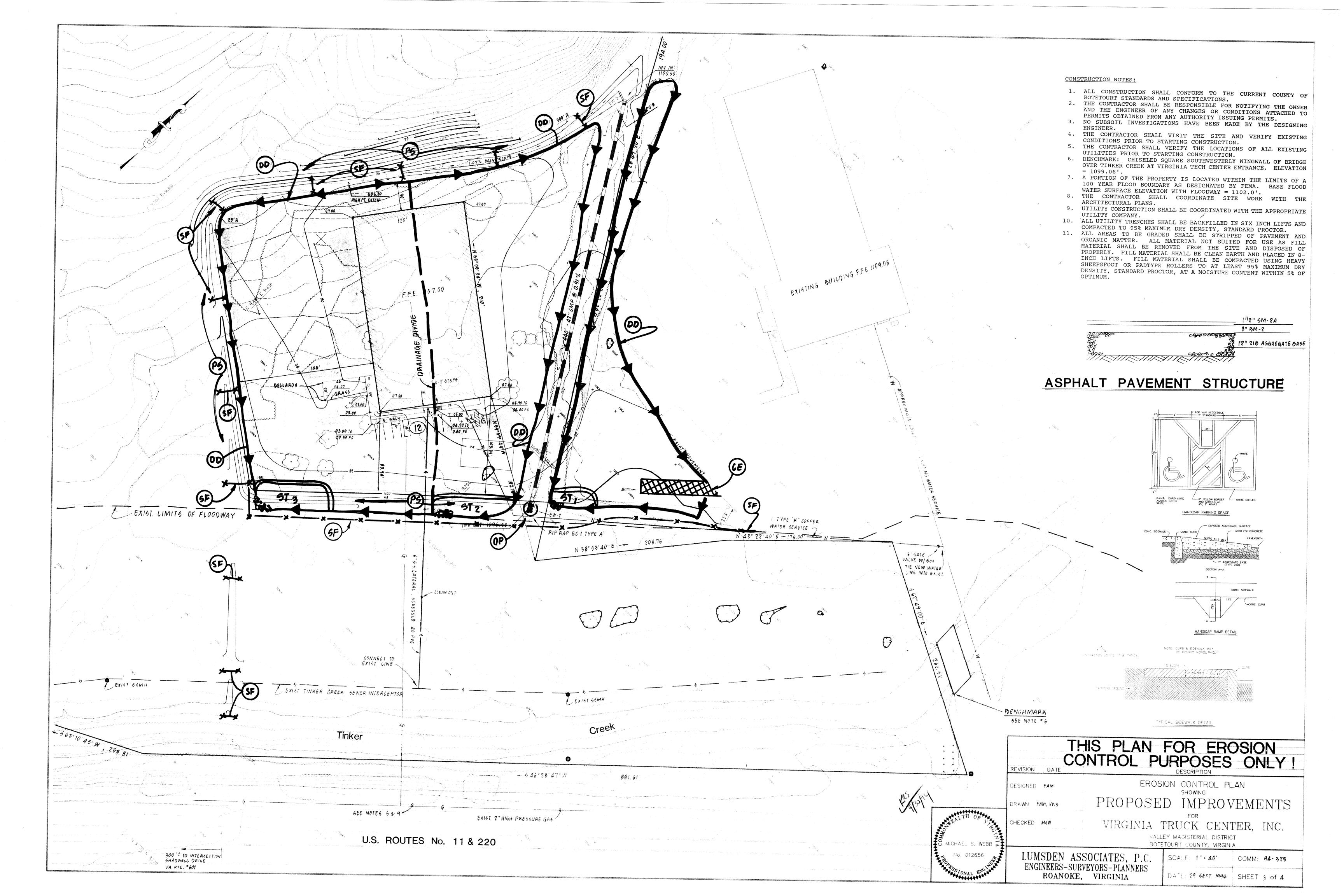


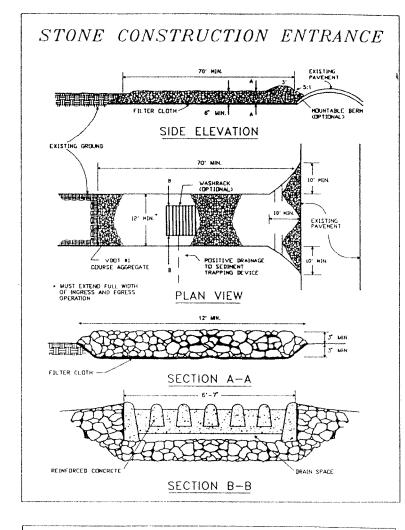
LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA

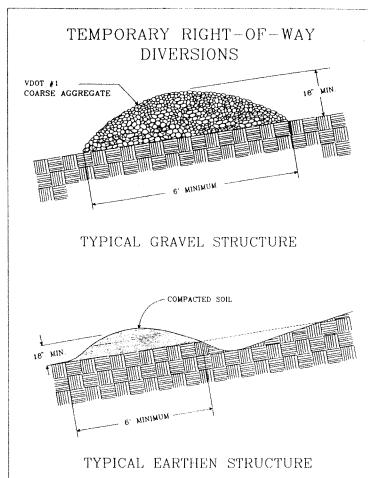


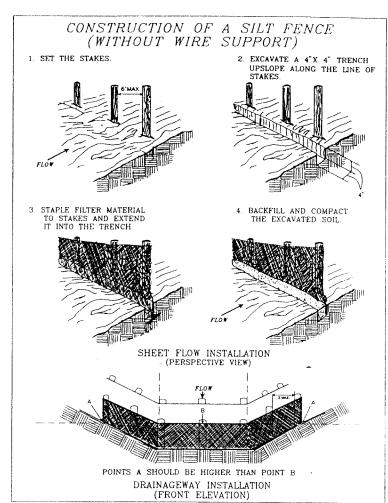
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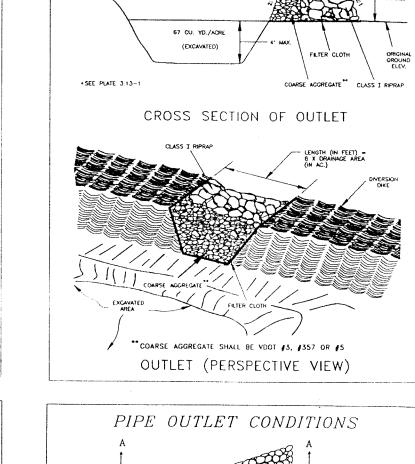


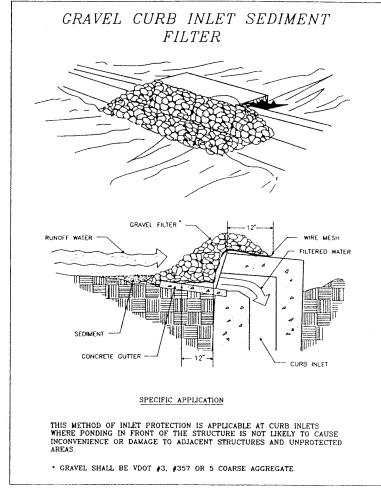


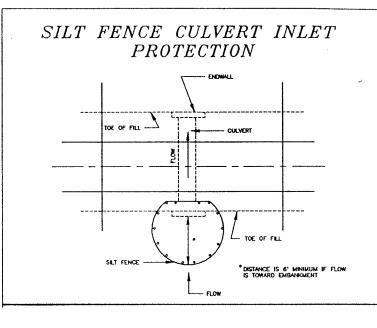


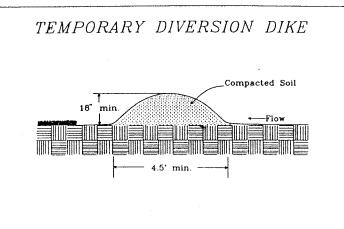




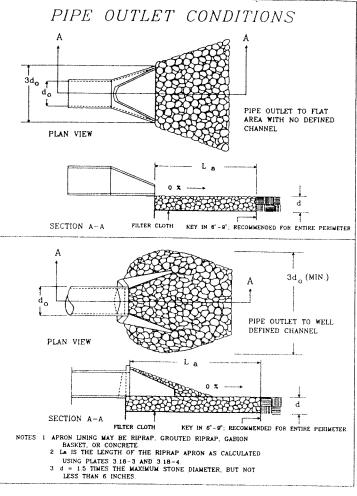




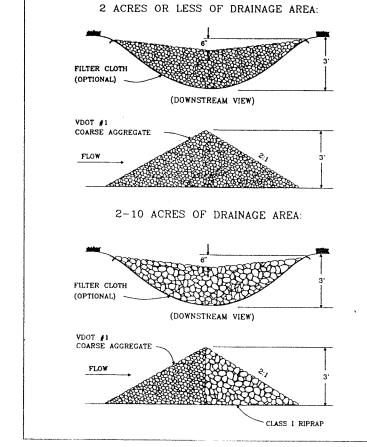




TEMPORARY SEDIMENT TRAP 67 CU. YD./ACRE



ROCK CHECK DAM



EROSION CONTROL NARRATIVE

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK

MANAGEMENT STRATEGIES

- 1. CONSTRUCTION SHOULD BE SEQUENCED SO THAT GRADING OPERATIONS CAN BEGIN AND END AS QUICKLY AS POSSIBLE.
- 2. SEDIMENT TRAPPING MEASURES SHALL BE INSTALLED AS A FIRST STEP IN GRADING AND SHALL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING INSTALLATION.
- 3. TEMPORARY SEEDING OR OTHER STABILIZATION SHALL FOLLOW IMMEDIATELY AFTER GRADING.
- 4. AREAS WHICH ARE NOT TO BE DISTURBED SHALL BE CLEARLY MARKED.
- 5. FIELD INSPECTIONS DURING CONSTRUCTION MAY REQUIRE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES.
- 6. THE DEVELOPER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL PRACTICES.

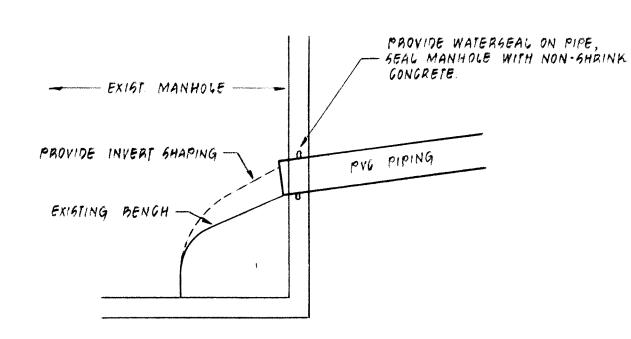
PERMANENT STABILIZATION

ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING WITHIN 7 DAYS OR IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING WILL BE DONE ACCORDING TO STANDARD AND SPECIFICATION 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. PERMANENTLY SEEDED AREAS SHALL BE PROTECTED DURING ESTABLISHMENT WITH STRAW MULCH.

MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- 1. ALL SEDIMENT TRAPPINGS WILL BE CHECKED REGULARLY FOR NECESSARY SEDIMENT REMOVAL.
- 2. ALL STORM DRAIN INLETS AND OUTLETS WILL BE CHECKED REGULARLY
- 3. ALL SILT BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING OR DETERIORATION.



MANHOLE CONNECTION DETAIL

FINIGHED GRADE -

SANITARY SEWER PROFILES

FINISHED GRADE

66ALE: 1" | = 40' HORIZ.

1" = 10' VERT

EXISTING GRADE

EXISTING GRADE

321'-6"@ 1.00%

NOT TO GCALE

1110

1090

PERMANENT STABILIZATION

ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING WITHIN 7 DAYS OR IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING WILL BE DONE ACCORDING TO STANDARD AND SPECIFICATION 3.32 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. PERMANENTLY SEEDED AREAS SHALL BE PROTECTED DURING ESTABLISHMENT WITH STRAW MULCH.

MAINTENANCE

IN GENERAL, ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL. THE FOLLOWING ITEMS WILL BE CHECKED IN PARTICULAR:

- 1. ALL SEDIMENT TRAPPINGS WILL BE CHECKED REGULARLY FOR NECESSARY SEDIMENT REMOVAL.
- 2. ALL STORM DRAIN INLETS AND OUTLETS WILL BE CHECKED REGULARLY FOR SEDIMENT BUILDUP.
- 3. ALL SILT BARRIERS WILL BE CHECKED REGULARLY FOR UNDERMINING
- 4. ALL SEEDED AREAS WILL BE CHECKED REGULARLY TO SEE THAT GOOD STABILIZATION IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.

EROSION CONTROL NOTES:

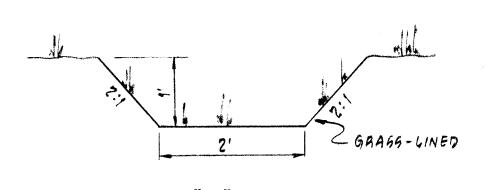
- 1. EROSION CONTROL DEVICES TO BE IN PLACE PRIOR TO ANY GRADING OPERATIONS.
- 2. REGULAR MAINTENANCE IS TO BE PERFORMED AS NEEDED FOLLOWING EACH RAINFALL.
- 3. ALL CUT AND FILL SLOPES TO BE SEEDED AND MULCHED AS SOON AS POSSIBLE AFTER GRADING OF LOTS.
- 4. EROSION CONTROL DEVICES TO REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE ADEQUATE GROUND COVER.
- 5. THIS PLAN TO BE APPROVED AND LAND DISTURBANCE PERMIT TO BE OBTAINED PRIOR TO GRADING OF LOTS.
- 6. UPON INSPECTION OF THE EROSION CONTROL DEVICES THE COUNTY ENGINEER MAY REQUIRE THAT FURTHER STEPS BE TAKEN TO CONTROL SILT.
- 7. REFERENCES TO STANDARD DRAWINGS REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION, 1992.

GENERAL NOTES:

1100

1090

- 1. ALL EROSION & SEDIMENT CONTROL PRACTICES & PROCEDURES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK.
- 2. OWNER/DEVELOPER GRANTS RIGHT OF ENTRY TO COUNTY PERSONNEL FOR THE PURPOSE OF MONITORING COMPLIANCE WITH THE CODE OF VIRGINIA, EROSION & SEDIMENT CONTROL LAW (TITLE 21, CHAPTER 1,
- 3. BUILDING PERMITS WILL NOT BE ISSUED UNTIL THE INITIAL EROSION & SEDIMENT CONTROL MEASURES REFLECTED IN THE APPROVED PLANS HAVE BEEN PROPERLY INSTALLED.
- 4. EROSION & SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL AND DAILY DURING PERIODS OF PROLONGED RAINFALL. MAINTENANCE IS THE RESPONSIBILITY OF THE DEVELOPER.
- 5. ALL SILTATION CONTROLS SHALL BE IN PLACE PRIOR TO CLEARING. STRIPPING OF TOPSOIL, OR GRADING.
- 6. ALL DETAILS ARE FROM THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. THE HANDBOOK SHALL SUPPLANT THIS SHEET SHOULD A DISCREPANCY EXIST.



TYPE "A" DITCH NOT TO SCALE

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA.	1	\$ 400.00	\$ 400.00
SILT FENCE	L.F.	800	3,00	2,400.00
STORM DRAIN INLET PROTECTION	EA.			
CULVERT INLET PROTECTION	EA.			
TEMPORARY DIVERSION DIKE	L.F.	2960	1.50	4,440.00
TEMPORARY RIGHT-OF-WAY DIVERSION	L.F			
TEMPORARY SEDIMENT TRAP	EA.	3	1,000.00	3,000.00
TEMPORARY SEDIMENT BASIN	EA.			
OUTLET PROTECTION	EA.	1	100.00	100.00
ROCK CHECK DAMS	EA.			
PERMANENT SEEDING	AC.	1.2	1,000.00	1,200.00
SUBTOTAL				11,540.0
20% CONTINGENCY				2,308.0
TOTAL				\$ 13,848.0

STRUCTURE	DRAINAGE	STORAGE					EMBANKMENT		OUTLET	
	AREA	WET/DRY VOL. REQUIRED	WIDTH	LENGTH	WET DEPTH	DRY DEPTH	HEIGHT	TOP WIDTH	HEIGHT	LENGTH
ST1	0.9	60	21	40	3	2	3	2.5	2	6
ST2	1.9	127	22	80	3	2	3	2.5	2	12
ST3	2.5	168	30	80	3	2	3	2.5	2	15

EROSION CONTROL LEGEND

NO.	KEY	DESCRIPTION	SYMBOL
3.02	CE	CONSTRUCTION ENTRANCE	
3.05	SF	SILT FENCE	x x
3.07	IP	STORM DRAIN INLET PROTECTION	③
3.08	CIP	CULVERT INLET PROTECTION	
3.09	DD	TEMPORARY DIVERSION DIKE	
3.11	RWD	TEMPORARY RIGHT-OF-WAY DIVERSION	
3.13	TST	TEMPORARY SEDIMENT TRAP	 :
3.14	SB	TEMPORARY SEDIMENT BASIN	##
3.18	OP	OUTLET PROTECTION	
3.20	CD	ROCK CHECK DAMS	
3.32	PS	PERMANENT SEEDING	2/95/2-

COMM: # 94-373

