LEGEND

PROPOSED	DESC.	EXISTING
	CULVERT	
	CURB	
	CURB & GUTTER	
	DRY CURB & GUTTER	
	PAVEMENT	
	CONCRETE	
	PAVED DITCH	
9"	DITCH	
	PROPERTY CORNER	
	EARTH DITCH	
	BORING	9
	BENCH MARK	BM #1 NAIL IN PP BM #1 NAIL IN PP
	EXISTING TREE LINE	
	CLEARING LIMITS	
200	CONTOUR	200
240.55	PROPOSED SPOT ELEVATION TC DENOTES TOP/CURB PV DENOTES PAVEMENT OR CONCRETE	240.55
OHP	OVERHEAD POWER LINE AND POWER POLE	OHP
UGP	UNDERGROUND POWER LINE	UGP
FFO	UNDERGROUND FIBER OPTIC LINE	FFO
FO	UNDERGROUND FIBER OPTIC LINE	FO
TELU	UNDERGROUND TELEPHONE LINE	TELU
TELO	OVERHEAD TELEPHONE LINE	TELO
CATV	CABLE TV LINE	CATV
TC	TRAFFIC CONTROL LINE	TC
DBS	DUCT BANK SYSTEM	DBS
G	GAS LINE	G
	FENCE LINE	
	CONSTRUCTION EASEMENT LINE	
	PERMANENT EASEMENT LINE	
	PROPERTY LINE	
	CREEK LINE	
	CREEK LINE	
	SANITARY SEWER	
1 STA 0+64.86 N 2010.34 E 30022.52	M.H. NUMBER w/ COORDINATE LOCATION	EX
W	WATER LINE	W
	VALVE	
	REDUCER	
	PLUG	
	CROSS	
	TEE	
	FIRE HYDRANT ASSEMBLY (INCLUDES 6" LINE, TEE, 6" VALVE AND HYDRANT)	
	AIR RELEASE VALVE, COMBINATION AIR VALVE	
	SWAMP/WETLANDS	

SF		SILT FENCE	
CD		CHECK DAM	3.20
OP		OUTLET PROTECTION	3.18
B/M		SOIL STABILIZATION MAT	3.36
RR		RIP RAP	3.19
CIP		CULVERT INLET PROTECTION	3.08
IP		INLET PROTECTION	3.07
TP		TREE PROTECTION	3.38

* VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK SPECIFICATION NUMBER, THIRD EDITION, 1992.

ABBREVIATIONS:

A.B.O.	– AIR BLOW OFF	MIN.	– MINIMUM
ACCMP	– ASPHALT COATED CORRUGATED METAL PIPE	MJ	– MECHANICAL JOINT
		N.I.C.	– NOT IN CONTRACT
ASS'Y	– ASSEMBLY	PC	– POINT OF CURVATURE
B	– BELL JOINT	PE	– PLAIN END
BIT. CON.	– BITUMINOUS CONCRETE	PI	– POINT OF INTERSECTION
B.O.	– BLOW OFF	PT	– POINT OF TANGENT
C/L	– CENTERLINE	R/W	– RIGHT-OF-WAY
CL	– CLASS	R	– RESTRAINED JOINT
CMP	– CORRUGATED METAL PIPE	REQ'D	– REQUIRED
CONC.	– CONCRETE	RCP	– REINFORCED CONCRETE PIPE
C.Y.	– CUBIC YARD	RT.	– RIGHT
DATR	– DEEMED ACCURATE TO RECORD	SAN	– SANITARY SEWER
		SF	– SILT FENCE
DBC	– DIRECT BURIED CABLE	SFM	– SEWER FORCE MAIN
D.I.	– DUCTILE IRON	SD	– STORM DRAIN
DR.	– DRIVE	SS	– SANITARY SEWER CONNECTION
E	– ELECTRIC	STA.	– STATION
EA.	– EACH	STM	– STORM SEWER
EOI	– ELECTRICAL	STMH	– STORM MANHOLE
E/P	– EDGE OF PAVEMENT	T	– TELEPHONE
E BOX	– ELECTRICAL BOX	TCM	– TELECOMMUNICATIONS MANHOLE
EXIST.	– EXISTING	TH	– TEST HOLE
F	– FLANGE JOINT	THB	– TELEPHONE
G	– GAS	TS&V	– TAPPING SLEEVE AND VALVE

MISS UTILITY OF VIRGINIA:

THE CONTRACTOR SHALL CALL "MISS UTILITY" 48 HOURS PRIOR TO THE START OF EXCAVATION. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF THE LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON THE PLAN, IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON PLAN. THE OWNER SHALL BE RESPONSIBLE FOR THE RELOCATION OF ANY UTILITY WITHIN EXISTING RIGHT OF WAY OR EASEMENTS AS REQUIRED BY THE PROJECT. CONTACT MISS UTILITY OF VIRGINIA: 1-800-552-7001 (TOLL FREE)

GENERAL NOTES:

1. CONTRACTOR SHALL ATTEND A PRE-CONSTRUCTION MEETING WITH PRINCE GEORGE COUNTY PUBLIC UTILITIES, VDOT INSPECTOR, AND ENGINEER PRIOR TO STARTING ANY WORK ON THIS PROJECT.
2. THE CONTRACTOR SHALL PAY FOR AND OBTAIN ALL REQUIRED PERMITS AND DELIVER COPIES TO PRINCE GEORGE COUNTY PUBLIC UTILITIES AND THE ENGINEER AT THE PRE-CONSTRUCTION MEETING.
3. CONTRACTOR SHALL NOTIFY PROPERTY OWNERS (IN WRITING) OF ANY WORK SCHEDULED ADJACENT TO OR THROUGH THEIR PROPERTY A MINIMUM OF TWO WEEKS IN ADVANCE PRIOR TO THE COMMENCEMENT OF ANY STAKING OR CONSTRUCTION ACTIVITY.
4. HORIZONTAL DATUM: NAD 83, VERTICAL DATUM: NAVD 88
5. STAKING FOR CONSTRUCTION, TO ASSURE PROPER LOCATION OF PROJECT COMPONENTS SHALL BE PERFORMED BY A CERTIFIED LAND SURVEYOR.
6. ALL EXISTING PROPERTY MARKERS ARE TO REMAIN UNDISTURBED. IF DISTURBANCE OCCURS, REPLACEMENT MUST BE PERFORMED BY A CERTIFIED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.
7. PREVIOUSLY ARRANGED ACCESS EASEMENTS, STAGING AREAS, STORAGE AREAS, ETC., IF ANY, ARE SHOWN ON THE DRAWINGS. ADDITIONAL LAND USE RIGHTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
8. WORK AREAS SHALL BE KEPT FREE OF DEBRIS AND HAZARDOUS MATERIAL AT ALL TIMES.
9. THE CONTRACTOR SHALL COORDINATE STORAGE OF MATERIALS, PARKING OF VEHICLES, AND RESTRICTIONS OF WORK WITH THE PRINCE GEORGE COUNTY PUBLIC UTILITIES AND VDOT INSPECTORS.
10. CONTRACTOR IS RESPONSIBLE FOR RESTORATION OF ALL EXISTING FEATURES, SUCH AS GUARDRAIL, SIDEWALKS, BRICKWORK, CULVERTS, FENCES, SHRUBS, PLANTERS, ETC. TO THEIR ORIGINAL LOCATION AND CONDITION WHICH EXISTED PRIOR TO CONSTRUCTION. TOTAL REPLACEMENT MAY BE NECESSARY.
11. THE LOCATION OF EXISTING UTILITIES ACROSS OR ALONG THE ROUTE OF THE PROPOSED WORK IS NOT NECESSARILY SHOWN ON THE PLANS, AND WHEN SHOWN, IS ONLY APPROXIMATELY CORRECT. IN ADDITION TO CONTACTING MISS UTILITY PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL, LOCATE ALL EXISTING UNDERGROUND LINES, FACILITIES, AND STRUCTURES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY UNDERGROUND LINES, FACILITIES, AND STRUCTURES DAMAGED.
12. CONTRACTOR SHALL COORDINATE WITH THE LOCAL UTILITY COMPANIES PRIOR TO CONSTRUCTING PORTIONS OF WORK IMMEDIATELY ADJACENT TO UTILITY STRUCTURES. THE COSTS OF POLE AND/OR OTHER STRUCTURE STABILIZATION DURING WORK SHALL BE BORNE BY THE CONTRACTOR.
13. ALL WORK SHALL BE SUBJECT TO INSPECTION BY VDOT AND PRINCE GEORGE COUNTY INSPECTORS.
14. FINAL ACCEPTANCE BY PRINCE GEORGE COUNTY AND STATE WILL NOT BE MADE UNTIL ALL WORK SHOWN ON THE APPROVED CONTRACT DOCUMENTS IS COMPLETED, INCLUDING PAVING, GRADING AND ALL ADJUSTMENTS.
15. FORCE MAIN SHALL BE HDPE 3408 DR-17 (DUCTILE IRON PIPE SIZE) EXCEPT WHERE OTHERWISE CALLED OUT ON THE DRAWINGS.
16. ALL FORCE MAIN PIPE SHALL HAVE A MINIMUM OF 3.5' OF COVER.
17. GRAVITY SEWER LINES, MANHOLES AND SEWER FORCE MAIN SHALL BE TESTED IN ACCORDANCE WITH SPECIFICATION SECTION 02530 – "SANITARY SEWER".
18. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE EXISTING RIGHT-OF-WAY MONUMENTS. CERTIFIED BY LAND SURVEYOR.
19. EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE OWNER AND/OR AS SHOWN ON THE EROSION CONTROL PLAN.
20. NO MORE THAN 500' OF TRENCH SHALL BE OPEN AT ONE TIME. ALL TRENCHES SHALL BE CLOSED AT THE END OF THE WORKDAY.
21. LAND DISTURBANCE WITHIN VDOT RIGHT-OF-WAY SHALL BE DRESSED UP, SEEDED AND MULCHED AT THE END OF EACH DAY AS WORK PROGRESSES.
24. CONTRACTOR TO SUPPLY WATER AS REQUIRED FOR ALL TESTING AND FLUSHING.
25. CONTRACTOR SHALL PROVIDE A CERTIFIED LAND DISTURBER FOR THE PROJECT CONSTRUCTION.
26. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST PRINCE GEORGE COUNTY SPECIFICATIONS.
27. ALL BALL CENTRIC VALVES TO BE MANUFACTURED BY CLOW VALVE COMPANY.

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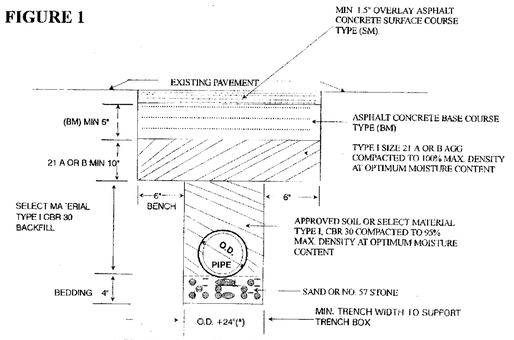
COMMONWEALTH OF VIRGINIA – DEPARTMENT OF TRANSPORTATION

LAND USE PERMIT (LUP-OC)
SPECIAL PROVISIONS FOR OPEN CUTS

1. ALL PATCHES ARE TO BE REPLACED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS AND AS SHOWN IN FIGURE 1 BELOW.
2. ALL EXCAVATIONS OR OPEN CUTS SHALL COMPLY WITH OSHA TECHNICAL MANUAL, CHAPTER 2, TITLE EXCAVATION: HAZARD RECOGNITION IN TRENCHING AND SHORING.
3. THE PERMIT PROPRIETOR WILL BE REQUIRED TO REPLACE THE SURFACE AND BASE OF THE ROADS INCLUDED UNDER THIS PERMIT IN ACCORDANCE WITH THE ROAD AND BRIDGE SPECIFICATIONS AND THIS SPECIAL PROVISION.
4. BACKFILL MATERIAL SHALL INCLUDE A MINIMUM OF FOUR (4") INCHES BEDDING MATERIALS, SAND OR STONE. THE BALANCE OF THE BACKFILL SHALL BE APPROVED SOIL COMPACTED TO THE BOTTOM OF SUBBASE LAYER (TYPE I, SIZE 21 A OR 21 B). THE ENTIRE BACKFILL SHALL BE FREE FROM WOOD, DECAYING MATERIAL, ASPHALT, CONCRETE, ICE, FROST, LARGE CLODS, STONE AND DEBRIS.
5. BACKFILL MATERIAL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE THEORETICAL MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT, AS DETERMINE BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION TESTING PROCEDURES, USE MECHANICAL TAMPING THROUGHOUT THE DEPTH OF THE TRENCH IN SIX (6") LAYERS TO INSURE THAT ADEQUATE SUPPORT IS PROVIDED FOR THE SUBBASE LAYER (TYPE I, SIZE 21 A OR 21 B).
6. IT SHALL BE THE DECISION OF THE RESIDENT ENGINEER TO REQUEST AND REVIEW THE BACKFILL COMPACTION TEST RESULTS AND/OR AUTHORIZE AN INSPECTOR TO MONITOR THE COMPACTION.
7. CUTS IN ROADS WITH SURFACE COURSE (SM) AND ASPHALT CONCRETE BASE (BM) SHALL BE REPLACED WITH TEN (10") INCHES OF TYPE I , SIZE 21 A OR 21 B AGGREGATE COMPACTED TO 100 PERCENT OF THE THEORETICAL MAXIMUM DENSITY AT OPTIMUM MOISTURE CONTENT COVERING THE ENTIRE TRENCH WIDTH IN ADDITION TO A BENCH OF SIX (6") INCHES MINIMUM THICKNESS OR MATCH THE EXISTING BASE THICKNESS, SHALL BE PLACED OVER THE SUB-BASE. A SURFACE ASPHALT CONCRETE COURSE OF A MINIMUM OF 1.5" INCHES (SM) SHALL BE PLACED ON TOP OF THE BASE (BM) COVERING THE TRENCH WIDTH. THE ASPHALT CONCRETE SURFACE COURSE SHALL BE SLIGHTLY HIGHER (1/8" TO ¼") THAN THE EXISTING SURFACE TO PROVIDE A SMOOTH GRADE INTO THE EXISTING PAVEMENT SURFACE.
8. CUTS IN SURFACE TREATED ROADS WITH AGGREGATE BASE COURSE SHALL BE REPLACED WITH THE SAME LAYERS AS ROADS WITH ASPHALT BASE (BM) EXCEPT THE SUB-BASE LAYER (TYPE I, SIZE 21 A OR 21 B) IS REDUCED TO SIX (6") INCHES AND THE (BM) LAYER TO FOUR (4") INCHES BUT STILL KEEPING A SIX BENCH. THE SURFACE COURSE SHALL BE A SURFACE TREATMENT MATCHING THE EXISTING SURFACE.
9. THE CUT TO BE BACK FILLED SHALL BE MADE AS DRY AS PRACTICABLE AT THE TIME OF BACK FILLING BY PUMPING, BAILING, DRAINING, OR OTHER APPROVED DEWATERING.
10. ALL SIDES CUTS SHALL BE TRIMMED TO NEAT STRAIGHT LINES AND A TACK COAT SHALL BE APPLIED AT A RATE OF 0.05 TO 0.15 GALLON PER SQUARE YARD OF RC-250 OR CAE-2 BEFORE PLACING THE PLANT MIX.
11. REPLACEMENT OF PAVEMENT SHALL BE FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT EXCEPT WHEN INDIVIDUAL CUTS ARE MADE AND NOT COVERING THE ENTIRE WIDTH OF THE PAVEMENT.
12. REPLACEMENT OF ALL ASPHALT CONCRETE AND SURFACE TREATED COURSES SHALL BE ROLLED WHERE POSSIBLE WITH A UNIT HAVING A MANUFACTURER'S RATING OF TEN (10) TONS, AND ROLLED UNTIL THE AGGREGATE IS KEYED INTO THE BITUMEN. WHERE ROLLING IS NOT POSSIBLE, A MECHANICAL TAMP WILL BE USED. IN ALL CUTS STONE IS TO BE PLACED IN THE TRENCH DAILY UP TO MAXIMUM LENGTH OF 500 FEET, AT WHICH TIME THE PAVEMENT SHALL BE COVERED WITH A TEMPORARY OR PERMANENT ASPHALT PATCH. IF THE APPLICATION OF THE BITUMINOUS LAYER IS DELAYED FOR ADVERSE WEATHER CONDITIONS, THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A BASE COURSE THAT IS ACCEPTABLE TO THE VDOT UNTIL SUCH TIME AS THE APPROPRIATE PAVEMENT PATCH CAN BE APPLIED AND COMPLETION OF THE INSTALLATION OF THE GAS, SEWER, AND WATER LINES, CONTRACTOR SHALL RESTORE PAVEMENT IN THE MANNER PRESCRIBED ON THE VDOT PERMIT WITHIN (10) DAYS.
13. CONTRACTOR WILL BE RESPONSIBLE FOR ANY DEPRESSION GRATER THAN ¼" THAT OCCURS WITHIN THREE YEARS OF COMPLETION OF PATCHING. CORRECTION SHALL CONSIST OF MILLING AND REPLACING 1.5" OF SURFACE COURSE MIX (SM).

FIGURE 1



* FOR PIPE LESS THAN 12" THE TRENCH WIDTH MAY BE 36" MAXIMUM.
SEE UB-1 (ROAD AND BRIDGE STANDARDS VOLUME II)

CUT REPLACEMENT IN ROADS WITH ASPHALT CONCRETE BASE AND SURFACE

FINAL

COMMONWEALTH OF VIRGINIA
AL R. WILLIAMS
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2/25/08
PROFESSIONAL ENGINEER

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SCALE	AS SHOWN

TIMMONS GROUP

NORTH ELEMENTARY SCHOOL PUMPING STATION & FORCE MAIN

PRINCE GEORGE COUNTY, VIRGINIA

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