10% CONTINGENCY \$4,664 ESTIMATED TOTAL \$51,308	QUANTITY		· · · · · · · · · · · · · · · · · · ·		<u> </u>
YARD DROP INLET		QUANTITY		UNIT PRICE	COST
CURB INLET DI-3A	EXCAVATION		C.Y.		
CURB INLET DI-3A			<u> </u>		
CURB INLET DI-3C					~~~
OUTLET CONTROL STRUCTURE		ļ	·	1,500	
MANHOLE MH—1 MANHOLE MH—1 IN. CONCRETE PIPE, CLASS IV LIN. FT. 1-15 - IN. CONCRETE PIPE, CLASS III LIN. FT. 20 224 - IN. CONCRETE PIPE, CLASS III LIN. FT. 50 LIN. FT. 40 LIN. FT. 40 RETAINING WALL LIN. FT. 40 REPRAP - CLASS III S.Y. 50 SODDED SWALE S.Y. -IN. CONCRETE ENDWALL EW— EACH -IN. CONCRETE ENDWALL EW— EACH -IN. END SECTION ES— LIN. FT. 6 LIN. FT. 6 LIN. FT. 7 8 LIN. FT. 7 8 LIN. FT. 8 LIN. FT. 12 LIN. FT. 14 LIN. FT. 15 LIN. FT. 16 LIN. FT. 17 LIN. FT. 18 LIN. FT. 19 LIN. FT. 10 LIN		<u> </u>			
MANHOLE MH— —IN. CONCRETE PIPE, CLASS III —15—IN. CONCRETE PIPE, CLASS III —14. C.M. CULVERT —IN. CAL CULVERT —IN. FT. 50 BOX CULVERT —IN. FT. 100 —IR. 900 —IN. FT. 40 —IN. CONCRETE ENDWALL —IN. FT. 40 —IN. CONCRETE ENDWALL EW— —IN. CONCRETE ENDWALL EW— —IN. CONCRETE ENDWALL EW— —IN. FT. 12 —IN. SUBBASE MATERIAL —IN. FT. 12 —IN. SUBBASE MATERIAL —IN. SUBBASE MATERIAL —IN. SUBBASE MATERIAL —IN. FT. 12 —IN. FT. 12 —IN. FT. 13 —IN. FT. 14 —IN. FT. 16 —IN. FT.	OUTLET CONTROL STRUCTURE		EACH	2,500	
MANHOLE MH— —IN. CONCRETE PIPE, CLASS III —15—IN. CONCRETE PIPE, CLASS III —14. C.M. CULVERT —IN. CAL CULVERT —IN. FT. 50 BOX CULVERT —IN. FT. 100 —IR. 900 —IN. FT. 40 —IN. CONCRETE ENDWALL —IN. FT. 40 —IN. CONCRETE ENDWALL EW— —IN. CONCRETE ENDWALL EW— —IN. CONCRETE ENDWALL EW— —IN. FT. 12 —IN. SUBBASE MATERIAL —IN. FT. 12 —IN. SUBBASE MATERIAL —IN. SUBBASE MATERIAL —IN. SUBBASE MATERIAL —IN. FT. 12 —IN. FT. 12 —IN. FT. 13 —IN. FT. 14 —IN. FT. 16 —IN. FT.	MANILOSE MU 1		5400	4 700	
-IN. CONCRETE PIPE, CLASS IV -IS -IN. CONCRETE PIPE, CLASS III -IN. FT24 -IN. CONCRETE PIPE, CLASS III -IN. FT24 -IN. CONCRETE PIPE, CLASS III -IN. FT24 -IN. CONCRETE PIPE, CLASS III -IN. FTIN. CM. CULVERT -IN. FTIN. CM. CULVERT -IN. FTIN. FTI				1,300	
-15IN. CONGRETE PIPE, CLASS III -24IN. CONGRETE PIPE, CLASS III -1N. C.M. CULVERT PAVEMENT PATCH 189			 		
-24 N. CONCRETE PIPE, CLASS III IN. CAM. CULVERT IN. SODDED SWALE IN. CONCRETE ENDWALL EW					
-IN. C.M. CULVERT PAYEMENT PATCH 189 IN. FT. 100 18,900 BOX CULVERT LUMP SUM RETAINING WALL RETAINING WALL REPRAP - CLASS III S.Y. SODDED SWALE -IN. CONCRETE ENDWALL EW- EACH -IN. CONCRETE ENDWALL EW- EACH 18-IN. END SECTION ES- CURB CG-2 LUN. FT. EACH CURB AD GUITER CG-6 LIN. FT. 12 VALLEY GUTTER GRAVEL BASE S.Y. GRAVEL SHOULDER SUPERACE TREATMENT -IN. BIT. CONC: TYPE B- 2-IN. BIT CONC: TYPE B- S.Y. SY. B. SY. B. SY. B. CONC: SIDEWALK S.Y. TE TO EX. WATER 1 EACH 57B LIN. FT. 20 7,560 6" WATER LINE 37B LIN. FT. 10 10 10 10 10 10 10 10 10 1					
PAVEMENT PATCH 189				50	
BOX CULVERT CLIMP SUM		180		100	18.000
RETAINING WALL RIPRAP - CLASS III SOUDED SWALE -IN. CONCRETE ENDWALL EW- -IB-IN. END SECTION ES- EACH 18-IN. END SECTION ES- EACH 18-IN. END SECTION ES- EACH CURB CG-2 LIN. FT. 8 CURB AND GUTTER CG-6 LIN. FT. 12 VALLEY GUTTER GRAVEL BASE S.Y. SURFACE TREATMENT -IN. BIT. CONC.: TYPE B- 2-IN. BIT. CONC.: TYPE B- 2-IN. BIT. CONC.: TYPE SW-ZA S.Y. 6 IN. AGGREGATE MATERIAL CONC. SIDEWALK S.Y. TIE TO EX. WAITER 1 EACH 500 500 8" WATER LINE 1 EACH 500 500 8" WATER LINE 1 EACH 500 600 BLOW OFF W/VAULT, FRAME 4 COVER 8 -IN. GATE VALVES, W/VAULT, FRAME & COVER 1 EACH 1 EACH 500 700 6" SANITARY SEWER 1 EACH 500 700 6" SANITARY SEWER 1 EACH 500 1,500 6" SANITARY SEWER 1 EACH 500 1,500 6" SANITARY SEWER 1 EACH 500 700 700 700 700 700 6" SANITARY SEWER 1 EACH 700 700 700 6" SANITARY SEWER 1 EACH 700 700 700 6" SANITARY SEWER 1 EACH 700 700 700 5" SANITARY SEWER 1 EACH 700 700 700 6" SANITARY SEWER 1 BEACH 1,300 1,300 3,000 3,000 STORMWAIER MANAGEMENT LIUMP SUM 19,360	TAYLING TATAL	103	Lin. F1.	100	18,900
RETAINING WALL RIPRAP - CLASS III S.Y. 50 SODDED SWALE S.Y. 50 -IN. CONCRETE ENDWALL EW- EACH IB-IN. END SECTION ES- EACH 600 CURB CG-2 LIN. FT. 8 CURB AND GUTTER CG-6 LIN. FT. 12 VALLEY GUTTER EACH S.Y. 12 VALLEY GUTTER S.Y. SY. SURFACE REATMENT S.YIN. BIT. CONC.: TYPE B- S.Y. 8 SURFACE REATMENT S.Y. 12 -IN. BIT. CONC.: TYPE SH-ZA S.Y. 8 IN. AGGREGATE MATERIAL S.Y. 12 -IN. SUBBASE MATERIAL C.Y. 20 CONC. SIDEWALK S.Y. 8 TIE TO EX. WAITER 1 EACH 500 500 B' WATER LINE 378 LIN. FT. 20 7,560 6' WATER LINE 25 LIN.FT. 16 400 FIRE HYDRANT ASSEMBLES 1 EACH 500 600 BLOW OFF WYAULT, FRAME 25 LIN.FT. 16 400 TIE TO EX. SANTARY 1 EACH 500 700 BLOW OFF WYAULT, FRAME 1 EACH 500 600 B-IN. GATE VALVES, WYAULT, FRAME 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 C' SANTARY SEWER 13B LIN. FT. 20 5,500 B' SANTARY SEWER 13B LIN. FT. 20 5,500 SAN. SERVICE CONN. W/CLEANOUTS 2 EACH 600 1,600 TIE TO EX. SANTARY 1 EACH 700 700 G' SANTARY SEWER 275 LIN. FT. 20 5,500 SAN. SERVICE CONN. W/CLEANOUTS 2 EACH 600 1,200 STANDARD MANHOLE W/RAME & COVEF 1 EACH 1,300 1,300 STORMWATER MANAGEMENT 1 LIUMP SUM 3,000 3,000 STORMWATER MANAGEMENT 1 LIUMP SUM 19,360 SUBTOTAL 100X CONTINGENCY 1 \$44,644 SUBTOTAL 100X CONTINGENCY 1 \$46,644 ESTIMATED TOTAL 1 \$45,330	BOX CULVERT		LUMP SUM		
RIPRAP - CLASS III S.Y. 50 SODDED SWALE S.Y. 50 -IN. CONCRETE ENDWALL EW- EACH 600 18-IN. END SECTION ES- EACH 600 CURB CG-2 LIN. FT. 12 VALLEY GUTTER EACH S.Y. 12 VALLEY GUTTER EACH S.Y. S.Y. SURFACE TREATMENT S.Y. S.Y. SURFACE TREATMENT S.Y. 12 -IN. BIT. CONC.: TYPE B- S.Y. 8 6 IN. AGGREGATE MATERIAL S.Y. 12 -IN. SUBBASE MATERIAL C.Y. 8 TIE TO EX. WATER 1 EACH 500 500 8" WATER LINE 578 LIN. FT. 16 400 FIRE HYDRANT ASSEMBLIES 1 EACH 1,500 1,500 BLOW OFF W/VAULT, FRAME 1 EACH 600 600 8 -IN. GATE VALVES, WAYAULT, FRAME 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 2" SERVICE CONNECTION 2 EACH 600 1,200 5" SANITARY SEWER 13B LIN. FT. 18 2,484 8" SANITARY SEWER 15B LIN. FT. 18 2,484 8" SANITARY SEWER 15B LIN. FT. 18 2,484 8" SANITARY SEWER 15B LIN. FT. 18 2,484 8" SANITARY SEWER 17B LIN. FT. 18 2,484 8" SANITARY SEWER 18B LIN. FT. 18 2,484 8" SANITARY			201111 00111		
SOUDED SWALE	RETAINING WALL		LIN. FT.	40	
-IN. CONCRETE ENDWALL EW— -IN. CONCRETE ENDWALL EW— -IB-IN. END SECTION ES—	RIPRAP - CLASS III		S.Y.	50	
-IN. CONCRETE ENDWALL EW— -IN. CONCRETE ENDWALL EW— -IN. END SECTION ES— -IN. END SECTION ES— -IN. END SECTION ES— -IN. EACH -IN. FT. 8 -IN. FT. 12 -IN. EACH -IN. EACH -IN. BIT. CONC.: TYPE B— -IN. SURFACE TREATMENT -IN. BIT. CONC.: TYPE B— -IN. SUBBASE MATERIAL -IN. FT. 20 -IN. FT. 20 -IN. FT. 20 -IN. FT. 300					
18-IN. END SECTION ES-	SODDED SWALE		S.Y.		
CURB CG-2 CURB AND GUTTER CG-6 LIN. FT. 12 VALLEY GUTTER GRAVEL BASE S.Y. GRAVEL SHOULDER SURFACE TREATMENT -IN. BIT. CONC.: TYPE B- 2-IN. BIT. CONC.: TYPE B- 2-IN. BIT. CONC.: TYPE M-2A 6 IN. AGGREGATE MATERIAL -IN. SUBBASE MATERIAL C.Y. CONC. SIDEWALK SY. 8 TIE TO EX. WATER 1 EACH 500 500 8" WATER LINE 378 LIN. FT. 20 7,560 6" WATER LINE 1 EACH 1,500 1,500 BLOW OFF W/VAULT, FRAME 2 CONER 8 - IN. GATE VALVES, WYAULT, FRAME & COVER AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 700 701 702 SERVICE CONNECTION 2 EACH 800 1,600 TIE TO EX. SANITARY 1 EACH 700 700 700 701 702 SANITARY SEWER 1 LIMP SUM 3,000 3,000 STORMWATER MANAGEMENT LUMP SUM 19,360 \$46,644 \$51,308 SUBTOTAL \$46,644 \$51,308	-IN. CONCRETE ENDWALL EW-		EACH		
CURB CG-2 CURB AND GUTTER CG-6 LIN. FT. 12 VALLEY GUTTER GRAVEL BASE CRAVEL SHOULDER SURFACE TREATMENT -IN. BIT. CONC.: TYPE B- 2-IN. BIT CONC.: TYPE B- 2-IN. BIT CONC.: TYPE M-ZA 6 IN. AGGREGATE MATERIAL -IN. SUBBASE MATERIAL C.Y. CONC. SIDEWALK S.Y. 1E TO EX. WATER 1 EACH 500 500 8" WATER LINE 378 LIN. FT. 20 7,560 6" WATER LINE 25 LIN.FT. 16 400 FIRE HYDRANT ASSEMBLIES 1 EACH 1,500 1,500 BLOW OFF W/VAULT, FRAME & COVER 8 -IN. GATE VALVES, W/VAULT, FRAME & COVER AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 700 TIE TO EX. SANITARY 1 EACH 700 700 TO T	18-in. End section es-		EACH	600	
CURB AND GUTTER CG-6					
VALLEY GUTTER GRAVEL BASE S.Y. GRAVEL SHOULDER SURFACE TREATMENT -IN. BIT. CONC.: TYPE B— S.Y. 2-IN. BIT CONC.: TYPE SM—2A S.Y. 6 IN. AGGREGATE MATERIAL C.Y. CONC. SIDEWALK TE TO EX. WATER 1 EACH 500 500 8" WATER LINE 378 LIN. FT. 16 400 FIRE HYDRANT ASSEMBLIES 1 EACH 1,500 1,500 B-IN. GATE VALVES, W/VAULT, FRAME 4 COVER 1 EACH 500 700 700 700 2" SERVICE CONNECTION 2 EACH 8" SANITARY SEWER 138 LIN. FT. 20 7,560 6" SANITARY SEWER 1 EACH 700 700 700 700 700 701 TIE TO EX. SANITARY 1 EACH 700 700 700 700 700 700 701 TIE TO EX. SANITARY 1 EACH 700 700 700 700 700 700 701 TIE TO EX. SANITARY 1 EACH 700 700 700 700 701 TIE TO EX. SANITARY 1 EACH 700 700 700 700 700 701 TIE TO EX. SANITARY 1 EACH 700 700 700 700 700 700 700 7			LIN. FT.	8	
S.Y.	CURB AND GUTTER CG-6		LIN. FT.	12	
S.Y.	VALLEY CUTTER				
GRAVEL SHOULDER S.Y. SURFACE TREATMENT -IN. BIT. CONC.: TYPE B- 2-IN. BIT CONC.: TYPE SM-2A 5.Y. 8 6 IN. AGGREGATE MATERIAL C.Y. CONC. SIDEWALK TIE TO EX. WATER 1 EACH 500 500 8" WATER LINE 378 LIN. FT. 10 EACH 1,500 1,50	·		·		
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BLOW OFF W/VAULT, FRAME & COVER 1			Latta 1,		
BLOW OFF W/VAULT, FRAME & COVER 1	FIRE HYDRANT ASSEMBLIES	1	EACH	1.500	1.500
## COVER 1 EACH 700 700	BLOW OFF W/VAULT, FRAME	1			
W/VAULT, FRAME & COVER 1 EACH 700 700 AUTOMATIC AIR RELEASE VALVE 1 EACH 700 700 2" SERVICE CONNECTION 2 EACH 800 1,600 TIE TO EX. SANITARY 1 EACH 700 700 6" SANITARY SEWER 138 LIN. FT. 18 2,484 8" SANITARY SEWER 275 LIN. FT. 20 5,500 SAN. SERVICE CONN. W/CLEANOUTS 2 EACH 600 1,200 STANDARD MANHOLE W/FRAME & COVER 1 EACH 1,300 1,300 AS-BUILT PLANS 1 LUMP SUM 3,000 3,000 STORMWATER MANAGEMENT LUMP SUM 19,360 \$46,644 10% CONTINGENCY \$46,644 \$51,308		<u>'</u>	LAUT	000	000
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TIE TO EX. SANITARY 1		1	EACH	700	700
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8" SANITARY SEWER 275 LIN. FT. 20 5,500 SAN. SERVICE CONN. W/CLEANOUTS 2 EACH 600 1,200 STANDARD MANHOLE W/FRAME & COVER 1 EACH 1,300 1,300 AS—BUILT PLANS 1 LUMP SUM 3,000 3,000 STORMWATER MANAGEMENT LUMP SUM 19,360 SUBTOTAL \$46,644 10% CONTINGENCY \$4,664 ESTIMATED TOTAL \$51,308					 -
SAN. SERVICE CONN. W/CLEANOUTS 2 EACH 600 1,200 STANDARD MANHOLE W/FRAME & COVER 1 EACH 1,300 1,300 AS-BUILT PLANS 1 LUMP SUM 3,000 3,000 STORMWATER MANAGEMENT LUMP SUM 19,360 \$46,644 SUBTOTAL \$4,664 \$4,664 ESTIMATED TOTAL \$51,308					
STANDARD MANHOLE W/FRAME & COVER 1 EACH 1,300 1,300 AS—BUILT PLANS 1 LUMP SUM 3,000 3,000 STORMWATER MANAGEMENT LUMP SUM 19,360 SUBTOTAL \$46,644 10% CONTINGENCY \$4,664 ESTIMATED TOTAL \$51,308			· · · · · · · · · · · · · · · · · · ·		
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\$46,644 10% CONTINGENCY \$4,664 ESTIMATED TOTAL \$51,308	STORMWATER MANAGEMENT		LUMP SUM	19,360	
10% CONTINGENCY \$4,664 ESTIMATED TOTAL \$51,308	CUDTOTAL				
ESTIMATED TOTAL \$51,308					\$46,644
		/	1		
I HEREBY CERTIFY THAT THE FORMOING ASTIMATE BAFFLECTS THE CURRENT-IMPROVEMENT	/ // //	ATUATE OF	FOTO THE SHE		\$51,308

GENERAL NOTES

ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE CONSTRUCTION STANDARDS AND SPECIFICATION OF ROANOKE COUNTY, WESTERN VIRGINIA WATER AUTHORITY (WVWA), AND/OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION.

THE CONTRACTOR OR DEVELOPER IS REQUIRED TO NOTIFY THE ROANOKE COUNTY ENGINEERING DIVISION AND WWWA IN WRITING AT LEAST THREE (3) DAYS PRIOR TO ANY CONSTRUCTION, INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:

A. INSTALLATION OF APPROVED EROSION CONTROL DEVICES

B. CLEARING AND GRUBBING C. SUBGRADE EXCAVATION

D. INSTALLING STORM SEWERS OR CULVERTS

E. SETTING CURB AND GUTTER FORMS F. PLACING CURB AND GUTTER

G. PLACING OTHER CONCRETE

H. PLACING GRAVEL BASE I. PLACING ANY ROADWAY SURFACE

J. INSTALLING WATER LINES K. INSTALLING SANITARY SEWER LINES

A PRE-CONSTRUCTION CONFERENCE SHOULD BE SCHEDULED WITH THE ROANOKE COUNTY ENGINEERING DIVISION AND WVWA, TO BE HELD AT LEAST ONE (1) DAY PRIOR TO

MEASURES TO CONTROL EROSION AND SILTATION MUST BE PROVIDED PRIOR TO PLAN APPROVAL. PLAN APPROVAL IN NO WAY RELIEVES THE DEVELOPER OR CONTRACTOR OF THE RESPONSIBILITIES CONTAINED WITHIN THE EROSION AND SILTATION CONTROL POLICIES.

A PERMIT MUST BE OBTAINED FROM THE V.D.O.T. RESIDENCY OFFICE, ROANOKE COUNTY, PRIOR TO CONSTRUCTION IN THE HIGHWAY RIGHT-OF-WAY.

PLAN APPROVAL DOES NOT GUARANTEE ISSUANCE OF ANY PERMITS BY V.D.O.T.

AN APPROVED SET OF PLANS AND ALL PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE.

FIELD CONSTRUCTION SHALL HONOR PROPOSED DRAINAGE DIVIDES AS SHOWN

OF THE ROADWAY BEFORE PLACING EMBANKMENT.

ALL UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS

PAVEMENT SECTIONS ON APPROVED PLANS ARE BASED ON A MINIMUM CBR OF 10. CBR TESTS ARE TO BE PERFORMED BY THE ENGINEER AND SUBMITTED TO V.D.O.T. AND TO THE ROANOKE COUNTY ENGINEERING DIVISION PRIOR TO PLACEMENT. CBR VALUES < 10 WILL REQUIRE REVISED PAVEMENT SECTIONS.

ALL ROADSIDE DITCHES OR GRADES OF MORE THAN 5 PERCENT SHALL BE PAVED CEMENT CONCRETE TO THE LIMITS AS INDICATED ON THE PLANS AND AS REQUIRED AT THE FIELD INSPECTION.

LOCATION OF GUARD RAILS SHALL BE DETERMINED AT A JOINT FIELD INSPECTION BY THE COUNTY AND V.D.O.T.

ALL SPRINGS SHALL BE CAPPED AND PIPED TO THE NEAREST STORM SEWER OR NATURAL WATERCOURSE. THE PIPE SHALL BE 6 INCH MINIMUM DIAMETER AND CONFORM TO V.D.O.T. STANDARD SB-1.

STANDARD STREET AND TRAFFIC CONTROL SIGNS SHALL BE ERECTED AT EACH INTERSECTION BY THE DEVELOPER PRIOR TO FINAL STREET ACCEPTANCE.

CONSTRUCTION DEBRIS SHALL BE CONTAINERIZED IN ACCORDANCE WITH THE VIRGINIA LITTER CONTROL ACT. NO LESS THAN ONE LITTER RECEPTACLE SHALL BE PROVIDED ON SITE.

THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING PUBLIC STREETS. IT IS THE CONTRACTORS RESPONSIBILITY TO INSURE THAT THE STREETS ARE IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES.

THE DEVELOPER AND/OR CONTRACTOR SHALL SUPPLY ALL UTILITY COMPANIES WITH COPIES OF APPROVED PLANS, ADVISING THEM THAT ALL GRADING AND INSTALLATION SHALL CONFORM TO APPROVED PLANS.

CONTRACTORS SHALL NOTIFY UTILITIES OF PROPOSED CONSTRUCTION AT LEAST TWO (2), BUT NOT MORE THAN TEN (10) WORKING DAYS IN ADVANCE. AREA PUBLIC UTILITIES MAY BE NOTIFIED THRU "MISS UTILITY": 1-800-552-7001.

AS-BUILT PLANS BEFORE FINAL ACCEPTANCE.

DIVISION AND WYWA PRIOR TO SUCH CONSTRUCTION.

ALL WORK SHALL BE SUBJECT TO INSPECTION BY ROANOKE COUNTY, WVWA, AND/OR

THE DEVELOPER OR CONTRACTOR SHALL SUPPLY THE COUNTY AND WYWA WITH CORRECT

V.D.O.T. INSPECTORS. FIELD CORRECTIONS SHALL BE APPROVED BY THE ROANOKE COUNTY ENGINEERING

100 YEAR FLOODWAY AND FLOODPLAIN INFORMATION SHALL BE SHOWN WHERE

GRADE STAKES SHALL BE SET FOR ALL CURB AND GUTTER, CULVERT, SANITARY SEWER AND STORM SEWER.

SEWER NOTES

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING ALL MANHOLES AFTER PAVING. MANHOLE TOPS SHALL BE ADJUSTED TO GRADE

ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.

LATERALS FROM MANHOLES SHALL BE PVC OR DUCTILE IRON OF SUFFICIENT LENGTH TO PROVIDE TWO (2) FEET OF BEARING ON NATURAL GROUND. THE TRANSITION FROM DUCTILE IRON TO ASBESTOS CEMENT OR CONCRETE PIPE SHALL BE MADE WITH AN ADAPTER COUPLING IN R/W.

ALL TRENCHES IN EXISTING OR FUTURE RIGHTS-OF-WAY SHALL BE COMPACTED ACCORDING TO V.D.O.T. STANDARDS.

LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

ALL SEWER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WAVE DESIGN AND CONSTRUCTION STANDARDS.

WATER NOTES

A MINIMUM COVER OF THREE (3) FEET IS REQUIRED OVER PROPOSED LINES.

CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND UNCOVERING VALVE VAULTS AFTER PAVING AND ADJUSTMENT TO FINAL GRADE IF NECESSARY.

ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THE EXACT LOCATION. THE CONTRACTOR SHALL COMPLY WITH THE STATE WATER WORKS REGULATIONS, SECTION 12.05.03, WHERE LINES CROSS.

ALL TRENCHES IN EXISTING OR FUTURE HIGHWAY RIGHT-OF-WAYS SHALL BE COMPACTED ACCORDING TO V.D.O.T. STANDARDS.

LINES SHALL BE STAKED PRIOR TO CONSTRUCTION.

WATER MAIN SHALL BE MINIMUM CLASS 52 DUCTILE IRON IN ACCORDANCE TO AWWA C151 OR DR-14 PVC IN ACCORDANCE WITH AWWA C-900.

AVAILABILITY NUMBER FOR PROJECT: _ CALL JAMIE MORRIS AT 540-853-1588 TO CONFIRM WATER AND SEWER AVAILABILITY AND TO SUBMIT A NEW APPLICATION IF REQUIRED.

ALL WATER FACILITIES ARE TO BE INSTALLED ACCORDING TO THE WYWA DESIGN AND CONSTRUCTION STANDARDS.

SURVEY INFORMATION

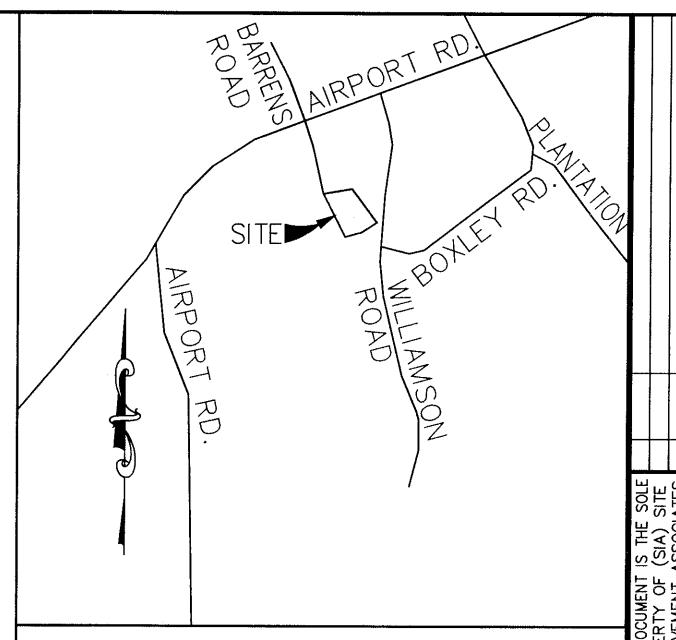
HORIZONTAL AND VERTICAL CONTROL SURVEYS WERE PERFORMED IN (YEAR) 97 BY HORTON AND DODD, P.C.

ALL ELEVATIONS MUST BE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

SOURCE OF TOPOGRAPHIC MAPPING IS ACTUAL FIELD SURVEY DATED JANUARY 1997

BOUNDARY WAS PERFORMED BY HORTON AND DODD, P.C. DATED JANUARY 1997

BENCHMARK: USGS DISK C-369-1959 IN N.W. WALL **BURLINGTON SCHOOL** ELEVATION = 1094.96



VICINITY MAP SCALE : 1" = 1000'

SHEET INDEX

WATER DETAILS

SHEETS TITLE EROSION AND SEDIMENT CONTROL PLAN GRADING PLAN UTILITY PLAN UTILITY PROFILES LANDSCAPE PLAN GENERAL DETAILS AND EROSION AND SEDIMENT CONTROL NARRATIVE EROSION AND SEDIMENT CONTROL DETAILS SEWER DETAILS

VER SHEET
FOR
REEK APARTMENTS
PHASE III
AGISTERIAL DISTRICT
COUNTY, VIRGINIA

S

DEVELOPMENT PLAN APPROVED FOR CONSTRUCTION BY ROANOKE COUNTY

COUNTY OF ROANOKE

NAME OF DEVELOPMENT PETERS CREEK APARTMENTS (PHASE III)

MAGISTERIAL DISTRICT(S) HOLLINS MAGISTERIAL DISTRICT

PETERS CREEK ASSOCIATES, L.P.

OWNER (NAME, ADDRESS, TELEPHONE) 167 WEST LANDING **WILLIAMSBURG, VIRGINIA 23185** CASTLE DEVELOPMENT CORPORATION DEVELOPER (NAME, ADDRESS, TELEPHONE) 167 WEST LANDING

WILLIAMSBURG, VIRGINIA 23185

FAX: (757) 220-6828 PHONE: (757) 220-6628

FAX: (757) 220-6828 SITE IMPROVEMENT ASSOCIATES, INC. ENGINEER, ARCHITECT OR SURVEYOR (NAME, ADDRESS, TELEPHONE) 168 BUSINESS PARK DR.

PHONE: (757) 220-6628

PHONE: (757) 671-9000 FAX: (757) 671-9288

OWNER/DEVELOPER, AM AWARE OF

THE SITE DESIGN REQUIREMENTS IMPOSED BY THIS SITE DEVELOPMENT PLAN AND OTHER APPLICABLE COUNTY CODES. I HEREBY CERTIFY THAT I AGREE TO COMPLY WITH THESE REQUIREMENTS, UNLESS

MODIFIED IN ACCORDANCE WITH LOCAL LAW.

PARCEL NO(S) 13 AND PORTION OF 7

JOB # 05184 OWG FILE: 01-COVER

DATE: 07-24-05 SCALE: AS SHOWN

SHEET NUMBER

VIRGINIA BEACH, VIRGINIA 23462 TAX MAP NO(S) 27-14-2-7.1 BLOCK NO(S) 4 AND 2

<u>1</u> OF <u>11</u>