CURB INLET DI- EACH			ESTIMAT			Barra -
DECEMBER		QUANTITY	·····	UNIT PRICE	COST	HUNDABLE
DESCRIPTION		260			,	
CAPE PRICE DI-		200			•	
COUNTY CANADACT	EMBARANCMI		•			
### COPY CANADA C	CHIDA INDET DI-		FACH			
MASSPEE MS. SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME SAME	1 · · · · · · · · · · · · · · · · · · ·					
MARKECULE MN - NO DOXORDETE MNY, CLASS IX - NO CULCENT - NO C	CORD TALE! DI-				<u> </u>	
SAOK	me.					<u> </u>
SAOK	MANUSOL E ARES		FACH		* * * * * * * * * * * * * * * * * * * *	"宝"
				:	7	71
	VIANHULE MH-		EACH 2			
						
	W CONCOURTE DIDC CLASS III		LINE ET			
N. C.W. OLLVERT CO. COLDERT LIN FT AXEC DITCH LIN FT IPRAP - CLASS SEF SODOED SWALE -BL DOKORETE ENDWALL EW- EA. -BL DOKORETE ERDWALL EW- EA. -BL DOKORETE ENDWALL EW- EA. -BL DOKORETE EG. LIN FT -BL DOKORETE EG. -BL DOKORETE EG	-IN CONCRETE PIPE, CEASS IV		LINFI			
C. COUCERT C. COU						
C. COUCERT C. COU						
ON OUNCEST ON OUNCEST ON OUNCEST ONE COLUMENT LIM FT AMED DITCH LIM FT OTDOED SWALE		·				
ANCE OUTCH LIMP SUM ANCE OUTCH LIM FT APPRAP - CLASS SF SCOOD SWALE RI CONCRETE ENDWALL EW- RI EA. -						
ANEC DITCH APPRAP - CLASS SPF SODDED SWALE - BL CONCRETE ENDWALL EW- EA. -INLEAD SECTION ES- SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE LINLET SAMYL SIDE BUTTER GS . LINLET SAMYL SIDEWAL STORM ST	IN CM CULVERT		LIN FI			
AVEC DITCH -IPARAP - CLASS SP SP -IPARAP - CLASS SP -IN, CONORETE ENDWALL EW- EA. -IN, END SECTION ES- SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE LIN, FT -IRAC - FT FT						
ANEC DITCH APPRAP - CLASS SPF SODDED SWALE - BL CONCRETE ENDWALL EW- EA. -INLEAD SECTION ES- SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE LINLET SAMYL SIDE BUTTER GS . LINLET SAMYL SIDEWAL STORM ST					ļ 	
ANEC DITCH APPRAP - CLASS SPF SODDED SWALE - BL CONCRETE ENDWALL EW- EA. -INLEAD SECTION ES- SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE SIDEWALK, -FT WIDE LINLET SAMYL SIDE BUTTER GS . LINLET SAMYL SIDEWAL STORM ST						
SOURCE SWALE	HOX CULVERT		LUMP SUM			
GIOGED SWALE -BL CONCRETE ENDWALL EW- -BL CONCRETE EDWALL EW- -BL CONCRETE EDWALL EW- -BL CONCRETE EW- -BL		· · · · · · · · · · · · · · · · · · ·			<u> </u>	
SODOED SWALE	· AVEC DITCH		LIN FT			
SCOORD SWALE			·			<u> </u>
-IN, CONCRETE ENDWALL EW- -IN, END SECTION EG- EA. -IN, END SECTION EG- EA. -IN, END SECTION EG- EACH SIDEWALK, -FT WIDE LIN, FT INN, WATER LINE B-IN, GATE WALVES WWAULT, FRAME B COVER INN, FT INN,	RIPRAP - CLASS		ŻŁ		<u> </u>	
-IN, CONCRETE ENDWALL EW- -IN, END SECTION EG- EA. -IN, END SECTION EG- EA. -IN, END SECTION EG- EACH SIDEWALK, -FT WIDE LIN, FT INN, WATER LINE B-IN, GATE WALVES WWAULT, FRAME B COVER INN, FT INN,		•				
-INLEND SECTION EST— BAL CRUVENAY, ENTRANCE TYPE	SONDED SWALE	· · · · · · · · · · · · · · · · · · ·	Ş, Y,			
-INLEND SECTION EST— BAL CRUVENAY, ENTRANCE TYPE		·····				
-NALEND SECTION ES- -NALEND SECTION ES- -NALEND SECTION ES- -EAA -EACH -EACH -EACH -EACH -EACH -FY WIDE -LIN.FT -EAA -FY WIDE -LIN.FT -EAA -EACH -E	- IN. CONCRETE ENDWALL EW-		EA.			
ORIVEWAY, ENTRANCE TYPE EACH SIDEWALK, -FT WIDE LIN.FT TRAIL, -FT WIDE LIN.FT -FARRY DURB & QUTTER CG . LIN FT LIN FT LIN FT LIN FT LIN FT LIN FT SURB & CUTTER CG . LIN FT EACH SALLY GUTTER GRA-EL SHOULDER SOUND SY SURFACE TREATMENT SY A IN BIT CONC TYPE S . SY SIDEWALK AND SY N BIT CONC TYPE S . SY SY SERVER GARRIAGE IN SUBBASE MATERIAL LIN BY TREET SIGNS EACH LIN FT SUBBASE MATERIAL LIN FT EACH MONUMENTS AS SHOWN ON PLAT EACH IG-IN WATER LINE 30 LIN, FT, B IN WATER LINE 30 LIN, FT, SERVICE CONNECTIONS EACH LIN FT EACH LIN FT LIN GATE WALVES WYAULT, FRAME & COVER B IN, FT LIN FT -IN SAN SEWER LIN FT -IN S						
DRIVEWAY, ENTRANCE TYPE SIDEWALK, FT WIDE LIN. FT TRAIL, FT WIDE LIN. FT		 				
SIDEWALX, -FT WIDE THAIL, FT WATER LINE THAIL, FT WIDE THAIL, THAIL, THAIL THAIL, THAIL, THAIL THAIL, THAIL, THAIL, THAIL THAIL, THAIL, THAIL, THAIL THAIL,	-IN. END SECTION ES-		EA.			
SIDEWALX, -FT WIDE THAIL, FT WATER LINE THAIL, FT WIDE THAIL, THAIL, THAIL THAIL, THAIL, THAIL THAIL, THAIL, THAIL, THAIL THAIL, THAIL, THAIL, THAIL THAIL,						
SIDEWALK, -FT WIDE						
SIDEWALK FT WIDE	DRIVEWAY, ENTRANCE TYPE		EACH '			
TRAIL						
TRAIL	SIDEWALKFT WIDE		LIN. FT			
LIN FT L			LIN. FT			
LIN FT		- 				
LIN FT	HEADER CURB & GUTTER CG -		LIN FT			
GRAVEL SHOULDER						
STATE SASE						
STATE SHOULDER SY SY SY SY SY SY SY S			SY			
SY	BRAVCE SASE					
SURFACE TREATMENT 4 N BIT CONC TYPE B 180 SY N BIT CONC TYPE S-SY O N BASE MATERIAL 180 CY IN SUBBASE MATERIAL 180 CY IN SUBBASE MATERIAL 180 CY TREET SIGNS EA PAPES AS SHOWN ON PLAT GAMMUMENTS AS SHOWN ON PLAT IG-IN WATER LINE 450 LIN. FT. 12-IN WATER LINE 4845 LIN. FT. 12-IN WATER LINE 30 LIN. FT. BION OFFS WYWAULT, FRAME B COVER 2 EA. IZ-N. GATE VALVES WYWAULT, FRAME B COVER 1 EA. SERVICE CONNECTIONS EA. STD. MANHOLE W/ FRAME B COVER LIN. FT. -IN SAN SEWER LIN. FT. STD. MANHOLE W/ FRAME B COVER EA. SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS LUMP SUM AS-BUILT PLANS LUMP SUM LUMP	CDA: E. CHOLI DED	300	8 7		<u> </u>	
4 - IN BIT CONC TYPE B-		300				
IN BIT CONC TYPE S- 6 IN BASE MATERIAL IN SUBBASE MATERIAL IN SUBBASE MATERIAL TREET SIGNS TRAFFIC BARRICADE PIPES AS SHOWN ON PLAT MONUMENTS AS SHOWN ON PLAT IS - IN WATER LINE 18 - IN WATER LINE 450 LIN. FT. 8 - IN WATER LINE 4845 LIN. FT. 8 - IN WATER LINE 30 LIN. FT. FIRE HYDRANT ASSEMBLIES 6 EA IL - IN FT. SL-IN GATE VALVES W/VAULT, FRAME B COVER 8 - IN GATE VALVES W/VAULT, FRAME B COVER 1 EA SERVICE CONNECTIONS EA. FITTING S (VARIOUS) IS EA. STD. MANHOLE W/FRAME B COVER EA. SERVICE CONNECTIONS SERVICE CONNECTIONS EA. STD. MANHOLE W/FRAME B COVER EA. SERVICE CONNECTIONS EA. LIN. FT - IN SAN SEWER LIN. FT - IN SAN SEWER LIN. FT STD. MANHOLE W/FRAME B COVER EA. SERVICE CONNECTIONS W/ CLEANOUTS EA. LIN. FT - IN SAN SEWER LIN. FT - IN SAN		180				
6 IN BASE MATERIAL 180 CY 1N SUBBASE MATERIAL CTREET SIGNS EA PIPES AS SHOWN ON PLAT PIPES AS SHOWN ON PLAT IG-IN WATER LINE 16-IN WATER LINE 12-IN WATER LINE 18-IN WATER LINE 18-IN WATER LINE 19-IN GATE WALVES WYWAULT, FRAME 8 COVER 19-IN GATE WALVES WYWAULT, FRAME 8 COVER 10-IN GATE WALVES WYWAULT, FRAME 8 COVER 11-IN SAN SEWER 1					 	
TREET SIGNS TRAFFIC BARRICADE PIPES AS SHOWN ON PLAT IG-IN WATER LINE 16-IN WATER LINE 18-IN WATER LINE 19-IN GATE VALVES WYAULT, FRAME 8 COVER 19-IN SAN SEWER 19-IN SAN SEWER 10-IN SAN S		180				
TREET SIGNS IRAFFIC BARRICADE PIPES AS SHOWN ON PLAT EA MCNUMENTS AS SHOWN ON PLAT IG-IN WATER LINE IS-IN WATER LINE B-IN GATE VALVES W/VAULT, FRAME & COVER B-IN GATE VALVES W/VAULT, FRAME & COVER IB-IN GATE VALVES W/VAULT, FRAME & COVER B-IN SAN SEWER LIN FT -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS B-A. SERVICE CONNECTIONS W/ CLEANOUTS LUMP SUM AS-BUILT PLANS LUMP SUM LUMP SUM LUMP SUM		180				
IRAFFIC BARRICADE PIPES AS SHOWN ON PLAT EA MONUMENTS AS SHOWN ON PLAT IG - IN WATER LINE 16 - IN WATER LINE 12 - IN WATER LINE 450 LIN, FT. 12 - IN WATER LINE 30 LIN, FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/WAULT, FRAME 8 COVER 12 - IN GATE VALVES W/VAULT, FRAME 8 COVER 4 EA 13 - IN GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER FITTINGS (VARIOUS) 15 EA - IN SAN SEWER LIN FT - IN SAN SEWER LIN FT - IN SAN SEWER LIN FT STD. MANHOLE W/FRAME 8 COVER AS-BUILT PLANS LUMP SUM LUMP SUM LUMP SUM LUMP SUM LUMP SUM LUMP SUM	-IN SUBBASE MATERIAL		0.1			
IRAFFIC BARRICADE PIPES AS SHOWN ON PLAT EA MONUMENTS AS SHOWN ON PLAT IG - IN WATER LINE 16 - IN WATER LINE 12 - IN WATER LINE 450 LIN, FT. 12 - IN WATER LINE 30 LIN, FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/WAULT, FRAME 8 COVER 12 - IN GATE VALVES W/VAULT, FRAME 8 COVER 4 EA 13 - IN GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER FITTINGS (VARIOUS) 15 EA - IN SAN SEWER LIN FT - IN SAN SEWER LIN FT - IN SAN SEWER LIN FT STD. MANHOLE W/FRAME 8 COVER AS-BUILT PLANS LUMP SUM LUMP SUM LUMP SUM LUMP SUM LUMP SUM LUMP SUM						
PIPES AS SHOWN ON PLAT PIPES AS SHOWN ON PLAT BA MONUMENTS AS SHOWN ON PLAT BA BA BIOW MATER LINE BIOW OFFS W/WALLT, FRAME B COVER BIOW ATER WALVES W/WALLT, FRAME B COVER BIOW ATER WALVES W/WALLT, FRAME B COVER BIOW OFFS W/WALLT, FRAM					 	
MONUMENTS AS SHOWN ON PLAT I6 - IN WATER LINE 12 - IN WATER LINE 4845 LIN. FT. 8 - IN WATER LINE 50 LIN. FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/VAULT, FRAME 8 COVER 12 - IN GATE VALVES W/VAULT, FRAME 8 COVER 8 - IN. GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER 5ERVICE CONNECTIONS FITTINGS (VARIOUS) 15 EA. - IN SAN SEWER - IN SAN SEWER	TRAFFIC BARRICADE	<u> </u>	ta.		<u> </u>	<u> </u>
MONUMENTS AS SHOWN ON PLAT I6 - IN WATER LINE 12 - IN WATER LINE 4845 LIN. FT. 8 - IN WATER LINE 50 LIN. FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/VAULT, FRAME 8 COVER 12 - IN GATE VALVES W/VAULT, FRAME 8 COVER 8 - IN. GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER - IN GATE VALVES W/VAULT, FRAME 8 COVER 5ERVICE CONNECTIONS FITTINGS (VARIOUS) 15 EA. - IN SAN SEWER - IN SAN SEWER					ļ	
16 - IN WATER LINE						
12 - IN WATER LINE 8 - IN WATER LINE 130 LIN. FT. 8 - IN WATER LINE 130 LIN. FT. 148 - IN WATER LINE 150 LIN. FT. 160 LIN. FT. 170 LIN. FT. 181 LIN. FT. 181 LIN. FT. 182 LIN. FT. 183 LIN. FT. 184 LIN. FT. 185 LIN	MONUMENTS AS SHOWN ON PLAT		EA.	<u> </u>		
12 - IN WATER LINE 4845 LIN. FT. B - IN WATER LINE 30 LIN. FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/VAULT, FRAME 8 COVER 2 EA. 12 - IN. GATE VALVES W/VAULT, FRAME 8 COVER 4 EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER 1 EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN GATE VALVES W/VAULT, FRAME 8 COVER EA. - IN SAN SEWER LIN. FT - IN SAN SEWER LIN. FT - IN SAN SEWER LIN. FT - IN SAN SEWER EA. STD. MANHOLE W/FRAME 8 COVER EA. SERVICE CONNECTIONS W/ CLEANOUTS EA. - SERVICE CONNECTIONS W/ CLEANOUTS EA. - SERVICE CONNECTIONS W/ CLEANOUTS LUMP SUM - STORM WATER MANAGEMENT LUMP SUM		ļ		<u> </u>	<u> </u>	
B - IN WATER LINE 8 - IN WATER LINE 50 LIN. FT. FIRE HYDRANT ASSEMBLIES 6 EA BLOW OFFS W/VAULT, FRAME & COVER 2 EA. 12 - IN GATE VALVES W/VAULT, FRAME & COVER 8 - IN, GATE VALVES W/VAULT, FRAME & COVER 1 EA - IN GATE VALVES W/VAULT, FRAME & COVER 5 EA. SERVICE CONNECTIONS FA. - IN SAN SEWER - IN SAN SE		 			3	
FIRE HYDRANT ASSEMBLIES BLOW OFFS W/VAULT, FRAME & COVER 12 -IN, GATE VALVES W/VAULT, FRAME & COVER 8 -IN, GATE VALVES W/VAULT, FRAME & COVER 1						<u> </u>
BLOW OFFS W/VAULT, FRAME & COVER 12-IN. GATE VALVES W/VAULT, FRAME & COVER 8-IN. GATE VALVES W/VAULT, FRAME & COVER 1 EA -IN GATE VALVES W/VAULT, FRAME & COVER SERVICE CONNECTIONS FITTINGS (VARIOUS) 15 EA. -IN SAN SEWER -I	8 - IN WATER LINE	30	LIN. FT.			
BLOW OFFS W/VAULT, FRAME & COVER 12-IN. GATE VALVES W/VAULT, FRAME & COVER 8-IN. GATE VALVES W/VAULT, FRAME & COVER 1 EA -IN GATE VALVES W/VAULT, FRAME & COVER SERVICE CONNECTIONS FITTINGS (VARIOUS) 15 EA. -IN SAN SEWER -IN		<u> </u>	<u> </u>	<u> </u>	 	
12 -IN GATE VALVES W/VAULT, FRAME & COVER 8 -IN GATE VALVES W/VAULT, FRAME & COVER -IN GATE VALVES W/VAULT, FRAME & COVER SERVICE CONNECTIONS FITTINGS (VARIOUS) 15 EA. -IN SAN SEWER -IN SAN SEWER -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS LUMP SUM LUMP SUM LUMP SUM LUMP SUM		 		<u> </u>		
B -IN GATE VALVES W/VAULT, FRAME & COVER -IN GATE VALVES W/VAULT, FRAME & COVER SERVICE CONNECTIONS FITTINGS (VARIOUS) IS EA. -IN SAN SEWER -IN SAN SEWER -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/ FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM LUMP SUM			 			
-IN GATE VALVES W/VAULT, FRAME & COVER SERVICE CONNECTIONS FITTINGS (VARIOUS) IS EA. -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT LUMP SUM					 	
SERVICE CONNECTIONS FITTINGS (VARIOUS) IS EA. -IN SAN SEWER -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM LUMP SUM		1				
FITTINGS (VARIOUS) 15 EA. -IN SAN SEWER -IN SAN SEWER -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME 8 COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM					<u> </u>	
-IN SAN SEWER LIN FT -IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER EA. SERVICE CONNECTIONS W/ CLEANOUTS . EA. AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT LUMP SUM	SERVICE CONNECTIONS		EA.	<u></u>	<u> </u>	<u> </u>
-IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM LUMP SUM LUMP SUM	FITTINGS (VARIOUS)	15	EA.			
-IN SAN SEWER LIN FT -IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM LUMP SUM LUMP SUM						
- IN SAN SEWER LIN FT STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT LUMP SUM LUMP SUM	-IN SAN SEWER		LIN. FT			
STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT EA. LUMP SUM	-IN. SAN SEWER		LIN FT			
STD. MANHOLE W/FRAME & COVER SERVICE CONNECTIONS W/ CLEANOUTS AS-BUILT PLANS STORM WATER MANAGEMENT EA. LUMP SUM LUMP SUM	- IN SAN SEWER		LIN FT			
SERVICE CONNECTIONS W/ CLEANOUTS EA. AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT LUMP SUM						
SERVICE CONNECTIONS W/ CLEANOUTS EA. AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT LUMP SUM	STD. MANHOLE W/ FRAME & COVER		EA.			
AS-BUILT PLANS LUMP SUM STORM WATER MANAGEMENT LUMP SUM						
STORM WATER MANAGEMENT LUMP SUM						
STORM WATER MANAGEMENT LUMP SUM					-	
STORM WATER MANAGEMENT LUMP SUM	AS-RUILT PLANS		EEIMP SIIM			
				 		
ESTIMATED TOTAL	J. Oner Berth Bengedening		LOIM JUNI			
23 HIMATED IDIAL		 				
	ECTIMATED TOTAL	Ł	_	I	1	

GENERAL NOTES

All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County and/or The Virginia Department of Highways and Transportation.

The contractor or developer is required to notify the Roanoke County Engineering Division in writing at least three (3) days prior to any construction, including but not limited to the following: A. Installation of approved erasion 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
- I Placing any roadway surface

J Installing water lines K instailing sanitary sewer lines

A preconstruction conference should be scheduled with the Roanoke County Engineering Division, to be held at least one day prior to any construction

Measures to control erosion and siltation must be provided for prior to plan approval. Plan approval in no way relieves the developer or contractor of the responsibilities contained in erosion and silitation

A permit must be obtained from the VDH &T. Residency Office, Roanoke County, prior to construction in the highway Right of Way

Plan approval does not guarantee issuance of any permits by VDH &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 on plans

All unsuitable material shall be removed from the construction limits of the roadway before placing embankment

Pavement sections on approved plans are based on a min CBR of IO CBR tests are to be performed by the engineer and submitted to the VDHST 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% shall be paved with cement concrete to the limits 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 the V.D.H. & T.

All springs shall be capped and piped to the hearest storm sewer or natural water course. The pipe shall be 6" min. dia. and conform to V.D.H.& T standard S8-1.

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 receptable 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.

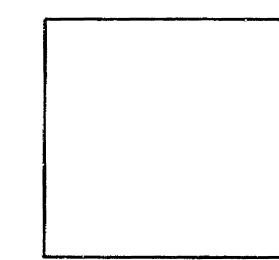
The developer and/or contractor shall supply all utility companies with copies of approved plans. advising them that all grading and installation shall conform to approved plans.

SURVEY INFORMATION

All elevations must	be referenced to the	ne National	Geodetic V	/ertical Da	itum of	1929. 5	SEE BELOV
Source of topographi	ic mapping is <u>*</u>						·
dated OCT 26 1	987		_				

The professional seal and the signature below certifies the boundary survey and topographic mapping to be accurate and correct.

*BENCH MARK USED WAS AN IRON ROD SET BY T.P. PARKER & SON FOR THE APCO GOT AD SERVICE CENTER SITE SURVEY OF LEVI A. HUFFMAN ES-TATE DATED DEC. 2, 1985 (REV 3 4 86). ELEV = 1147.46 ROD IS LOCATED ON THE WEST SIDE OF RT. 419 OPPOSITE THE ENTRANCE TO THE APCO SITE (SEE SHT. 6)



PROFESSIONAL SEAL AND SIGNATURE

8"SAN. _____ 8"SAN. _____

1045

SEWER NOTES

WATER NOTES

Contractor shall be responsible for locating and uncovering valve vaults after paying

All existing utilities may not be shown or may not be shown the exact location. The

contractor shall comply with State Water Works Regulations, Section 12 05.03, where

All trenches in existing or future highway right of wers shall be compacted according to

A minimum cover of Three (3) feet is required over proposed lines.

and adjustment to final grade if necessary.

Lines shall be staked prior to construction

Water mains shall be class 50 mm., ductile iron pipe

V.D.H. & T. standards.

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 if necessary.

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

House connections are to be made with 4" pipe installed on a minimum grade of 1/4 inch to I foot in R/W

Laterals from manholes shall be RMC 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 highway right of ways shall be compacted according to V.D.H. & T. standards.

1938	

Prop confour

COUNTY OF ROANOKE

NAME OF DEVELOPMENT	WATERLINE	EXTENSION: ROUTE	311 : HANGING ROCK VICINITY
---------------------	-----------	-------------------------	-----------------------------

MAGISTERIAL DISTRICT(S) SALEM

OWNER (name, address, telephone)

DEVELOPER (name, address, telephone)

CLEAN WATER ENGINEERS, INC. PO BOX 218, FINCASTLE, VA. 24090 (703) 473-2122 ENGINEER, ARCHITECT OR SURVEYOR (name, add/ess, phone)