QUANTITY & COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE		LTR. OF CRED
LEARING AND GRUBBING	6.95	ACRES	1,500.00	10,425.00	
XCAVATION: CUT		C.Y.			
: FILL		C.Y.	,		
UDD INLET DI		EACH			,
URB INLET DI -					
CURB INLET DI ~		EACH	 	·	
MANHOLE MH;		EACH			
MANHOLE MH -	1	EACH			
	_				,
	,				
IN CONCRETE PIPE, CLASS III	······································	LIN FT.	1	:	
		LIN. FT.			
IN CONCRETE PIPE, CLASS IV		LIN. F I.			
·	<u> </u>				<u> </u>
	٠,			<u></u>	
	,				<u> </u>
- IN C.M. CULVERT		LIN. FT.			
- IN C.M. CULVERT		LIN. FT.			
IN C.M. OCLVEN					<u> </u>
	-				
		-		<u> </u>	
		,			
OX CULVERT		LUMP SUM	,		
]		· ·		
AVED DITCH	<u> </u>	LIN. FT.	, ,		
				•	
PIDRAD-CIASS	 	S.F.	,	<u> </u>	<u> </u>
RIPRAP-CLASS	 	3.5.	 	<u> </u>	<u> </u>
			 	·	
SODDED SWALE	1	S.Y.	, ,		
-IN CONCRETE ENDWALL - EW	l ,	EA.			
and the state of t	· ·				
······································					
IN END SECTION ES	 	EA.	1		<u> </u>
IN END SECTION ES		EA.	 	<u> </u>	
		,			<u> </u>
				f	
RIVEWAY, ENTRANCE TYPE		EACH	1, 1, .		
		-			
SIDEWALK - FT. WIDE		LIN. FT.			
RAIL, FT. WIDE	<u> </u>	LIN, FT.			
T TO WE TANK			1	 	
			 		
HEADER CURB & GUTTER CG-		LIN. FT.	, , , ,		ļ
CURB & GUTTER		LIN. FT.		1.4	
VALLEY GUTTER		EA.		,	,
GRAVEL BASE	,	· S.Y	·	,	
	1.	, ,			
GRAVEL SHOULDER		. S.Y.	-		
SURFACE TREATMENT	` `	S.Y.		 	,
		9.Y.	 	· · · · · · · · · · · · · · · · · · ·	
IN BIL CONDICE E. TITE B					
-IN BIT. CONCRETE: TYPE S-		S.Y.	<u></u>	·	,
-IN BASE MATERIAL		C.Y			
-IN SUBBASE MATERIAL		C.Y.	`	, ,	
				,	
STREET SIGNS	,	.EA.		`	
TRAFFIC BARRICADE		EA.	-		
TRAFFIC BARRICADE		EM.		<u> </u>	
		· · · ·	, , , , , , , , , , , , , , , , , , , ,		
PIPES AS SHOWN ON PLAT		EA.	<u> </u>		<u> </u>
MONUMENTS AS SHOWN ON PLAT	P	EA.	,		
				,	
6 -IN WATER LINE	714	LIN. FT.	13.00	9,282.00	
4 -IN WATER LINE	431	LIN. FT.	11.00	4,741.00	
OUBLE WATER SERVICE METER	7	EA.	300.00		
SINGLE WATER SERVICE METER	6	EA.	200.00	1,200.00	4
	1		1,200.00	 	1
FIRE HYDRANT ASSEMBLIES		EA.		1	
BLOW OFFS W/VAULT, FRAME, & COVER	2	EA	700.00	<u> </u>	<u> </u>
6 -IN GATE VALVES W/ VAULT, FR. & COVER	2	EA.	500.00	1	
4 -IN GATE VALVES W/ VAULT, FR. & COVER	1	EA.	400.00	400.00	
-IN GATE VALVES W/ VAULT, FR.& COVER	-	EA.			
		EA.			,
SERVICE CONNECTIONS	1	LF		}	
	ť	T		!	<u> </u>
DIVERSION DIKE	 	l LF			T
DIVERSION DIKE STRAW BALE BARRIER		LF TO N			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER)		TON			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD		TO N S. Y.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING	- ,	TO N S. Y. 1000 S. F.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD	7	TO N S. Y.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING	,	TO N S. Y. 1000 S. F.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING	- ,	TO N S. Y. 1000 S. F.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN	,	TO N S. Y. 1000 S. F.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN	,	TO N S. Y. 1000 S. F.			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN	7	TO N 9. Y. 1000 S.F. JOB			
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN AS-BUILT PLANS	,	TO N S. Y. 1000 S.F. JOB		500.00	
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN	7	TO N 9. Y. 1000 S.F. JOB		500.00	
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN AS-BUILT PLANS	,	TO N S. Y. 1000 S.F. JOB		 	
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN AS-BUILT PLANS	,	TO N S. Y. 1000 S.F. JOB		 	
DIVERSION DIKE STRAW BALE BARRIER CRUSHED STONE (RIP-RAP/OTHER) SOD SEEDING TEMP. SEDIMENT BASIN AS-BUILT PLANS STORM WATER MANAGEMENT		TO N S. Y. 1000 S.F. JOB		1,000.00	

NOTES GENERAL

I ALL CONSTRUCTION METHODS AND MATERIALS SHALL CONFORM TO THE MOST CURRENT CONSTRUCTION STANDARDS AND SPECIFICATIONS OF FRANKLIN COUNTY AND / OR THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT), WHICHEVER IS MORE STRINGENT. STREETS MUST ALSO CONFORM TO THE MOST CURRENT VDOT SUBDIVISION STREET SPECIFICATIONS / STANDARDS .

2. ALL CONSTRUCTION METHODS -AND MATERIALS MUST BE IN ACCORDANCE WITH JANUARY 1987 VDOT ROAD AND BRIDGE SPECIFICATIONS

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

4. AN ENTRANCE PERMIT MUST BE OBTAINED FROM THE VDOT RESIDENCY OFFICE, FRANKLIN COUNTY, PRIOR TO CONSTRUCTION IN THE HIGHWAY RIGHT - OF - WAY.

5, PLAN APPROVAL DOES NOT GUARANTEE ASSURANCE OF ANY PERMITS BY THE VDOT.

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

7. FIELD CONSTRUCTION SHALL HONOR PROPOSED DRAINAGE DIVIDES AS SHOWN ON PLAT

8. ALL UNSUITABLE MATERIALS SHALL BE REMOVED FROM THE CONSTRUCTION LIMITS OF THE ROADWAY BEFORE PLACING EMBANKMENT

9. ALL SPRINGS SHALL BE CAPPED AND PIPED TO THE NEAREST NATURAL WATERCOURSE. THE PIPE SHALL BE 6" (SIX INCH) MINIMUM DIAMETER AND CONFORM TO VDOT STANDARD SB - 1, UNLESS OTHERWISE STATED IN A REVIEW BY THE VDOT

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

II, A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE WILL BE REQUIRED AT INTERSECTION OF SUBDIVISION STREETS AND PUBLIC STREETS AND HIGHWAYS

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

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

14 CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES SHOWN ON PLANS IN AREAS OF CONSTRUCTION PRIOR TO STARTING WORK, CONTACT ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT SHOWN ON PLAN, IF THERE APPEARS TO BE A CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT SHOWN ON THIS PLAN, CALL "MISS UTILITY" OF CENTRAL VIRGINIA AT 1 - 800 - 552 - 7001.

16, ALL UTILITIES TO BE IN PLACE PRIOR TO LAYING BASE MATERIAL AND SHALL BE ENCASED. THE DEVELOPER IS ENCOURAGED TO UTILIZE, THE P U E. (PUBLIC UTILITY EASEMENT) FOR THE PLACEMENT OF PARALLEL POWER, TELEPHONE, WATER AND SEWER FACILITIES

17. ANY EASEMENTS GRANTED TO A UTILITY COMPANY, PUBLIC OR PRIVATE, FOR PLACEMENT OF UTILITIES MUST BE RELEASED PRIOR TO ACCEPTANCE. IN ORDER TO MEET PUBLIC SERVICE REQUIREMENTS, ALL STREETS MUST SERVE A MINIMUM OF THREE (3) DWELLINGS PRIOR TO ACCEPTANCE.

18. THE DEVELOPER SHALL PROVIDE THE COUNTY & VDOT WITH A LETTER FROM A LISCENSED LAND SURVEYOR CONFIRMING THAT THE STREETS, RIGHTS-OF-WAY, AND EASEMENTS SUBSTANTIALY CONFORM TO THE CONSTRUCTION PLANS & SUBDIVISION PLAT SUFFICENT DEVIATION OF ACTUAL STREET LUCATION FROM PROPOSED CONSTRUCTION PLANS SHALL REQUIRE SUBMITTAL OF AS BUILT PLANS FOR REVIEW B APPROVAL PRIOR TO FINAL ACCEPTANCE FOR ADDITION TO THE VOOT ROAD AND STREET SYSTEM.

19. ALL WORK SHALL BE SUBJECT TO INSPECTION BY FRANKLIN COUNTY AND VDOT INSPECTORS.

IS UTILITY LOCATION SHALL BE SHOWN ON PLAT AND LOCATION APPROVED BY VOOT PRIOR TO PLACEMENT.

20, FIELD CORRECTIONS OR DEVIATIONS FROM PLANS APPROVED "FOR CONSTRUCTION ONLY " SHALL BE APPROVED BY THE VDOT PRIOR TO SUCH CONSTRUCTION

21,100 YEAR FLOODWAY AND FLOOD PLAIN SHALL BE SHOW WHERE APPLICABLE.

22, MINIMUM LOT FRONTAGES SHALL BE IN ACCORDANCE WITH CURRENT FRANKLIN COUNTY SUBDIVISION & ZONING ORDINANCES.

23, ALL ROADSIDE DITCHES SHOWN AS PAVED ON PLANS ARE TO BE PAVED IN ACCORDANCE WITH STANDARD TYPICAL SECTION AS SHOWN ON PLANS UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER IN WRITING ANY ADDITIONAL PAVING OF THE DITCHES, OTHER THAN THOSE SHOWN ON THE ROAD PLANS, WILL BE DETERMINED PRIOR TO ACCEPTANCE OF THE ROADS INTO THE VDOT SECONDARY ROAD SYSTEM.

24. ALL DRAINAGE FACILITIES OR OTHER ROADWAY FACILITIES TO BE MAINTAINED BY THE DEPARTMENT MUST BE CONTAINED WITHIN THE STREET RIGHT-OF-WAY OR WITHIN THE VDOT APPROVED EASEMENT

. 25, ALL DRAINAGE OUTFALL EASEMENTS WILL BE TWENTY (20) FEET WIDE.

26, FIELD REVIEW WILL BE MADE DURING CONSTRUCTION TO DETERMINE THE NEED AND LIMITS OF ADDITIONAL DRAINAGE EASEMENTS MUST BE CUT AND MADE TO FUNCTION TO A NATURAL WATERCOURSE ANY EROSION PROBLEMS ENCOUNTERED IN AN EASEMENT MUST BE CORRECTED BY ANY MEANS NECESSARY PRIOR, TO SUBDIVISION ACCEPTANCE, THE FIELD REVIEW WILL ALSO DETERMINE THE EXTENT OF OUTFALL DITCHES AND ASSOCIATED FASEMENTS, THE NEED OF ADDITIONAL OUTFALL DITCHES AND EASEMENTS, AND THE DIMENSIONS OF SAME

27. CLEARING AND GRUBBING SHALL BE COMPLETED WITHIN THE RIGHTS-OF-WAY AS INDICATED ON THE LAYOUT PLAN.

28. ALL VEGETATION AND OVERBURDEN TO BE REMOVED FROM SHOULDER TO SHOULDER PRIOR TO THE ESTABLISHMENT OF SUBGRADE.

29 EXCESS EXCAVATION TO BE DISPOSED OF AS DIRECTED BY THE ENGINEER.

30, ACTUAL COPIES OF THE CBR REPORTS ARE TO BE SUBMITTED PRIOR TO THE ACCEPTANCE OF THE ROADS INTO THE SECONDARY SYSTEM. IF THE CBR VALUES ARE LESS THAN 10, THE DEVELOPER WILL BE REQUIRED TO SUBMIT FOR OUR APPROVAL HIS PROPOSED METHOD OF CORRECTION ONE CBR TEST PER STREET WILL BE SUBMITTED, OTHERWISE, A CBR TEST WILL BE REQUIRED WHEN THE TYPE OF SUBGRADE MATERIAL CHANGES. NO CONSOLIDATED CBR VALUES WILL BE ACCEPTED ALL CBR REPORTS MUST INDICATE STREET AND STATION NUMBER. CBR TESTS ARE TO BE TAKEN AT SUBGRADE LEVEL BY THE ENGINEERING COMPANY PERFORMING THESE TESTS. THE DESIGN ENGINEER SHALL INCORPORATE THE ACTUAL CBR VALUES IN THE CONSTRUCTION COST ESTIMATE

31 THE SUBGRADE MUST BE APPROVED BY VDOT PRIOR TO PLACEMENT OF THE BASE

32, BASE MUST BE APPROVED BY VDOT PRIOR TO THE PLACEMENT OF THE SURFACE

33, AN INSPECTOR WILL NOT BE FURNISHED EXCEPT FOR PERIODIC PROGRESS INSPECTION, THE ABOVE MENTIONED FIELD REVIEWS AND CHECKING FOR REQUIRED STONE DEPTHS. THE DEVELOPER WILL BE REQUIRED TO POST A SURETY TO GUARANTEE THE ROAD FREE OF DEFECTS FOR ONE (I) YEAR AFTER ACCEPTANCE BY THE DEPARTMENT OF TRANSPORTATION .

34. THE STREETS MUST BE PROPERLY MAINTAINED UNTIL ACCEPTANCE AT SUCH TIME AS ALL REQUIREMENTS HAVE BEEN MET FOR ACCEPTANCE, ANOTHER INSPECTION WILL BE MADE TO DETERMINE THAT THE STREET HAS BEEN PROPERLY MAINTAINED

35. THE CONSTRUCTION OF THE ROADWAY TO STATE STANDARDS DOES NOT MEAN THE ROADWAY WILL EVER BE ACCEPTED INTO THE VDOT SYSTEM. THE SERVICE REQUIREMENT MUST ALSO BE MET.

36, A MINIMUM PAVEMENT RADIUS OF TWENTY-FIVE (25) FEET IS REQUIRED AT ALL STREET INTERSECTIONS

37 ALL ENTRANCE PIPES FOR PRIVATE ENTRANCES WILL BE A MINIMUM DIMENSIONS 24 X 15 " UNLESS A REVIEW BY DEPARTMENTAL REPRESENTATIVES DETERMINES OTHERWISE. CONCRETE OR CORRUGATED METAL PIPE IS RECOMMENDED

38 RADIUS FOR CUL-DE-SAC PAVEMENT AND RIGHT-OF-WAY MUST MEET CURRENT VOOT STANDARDS OR FRANKLIN COUNTY SUBDIVISION, AND ZONING ORDINANCES, WHICHEVER IS GREATER

39. UN SECTIONAL DEVELOPMENTS, THE DEPARTMENT REQUIRES SUBMITTAL OF AN OVERALL DEVELOPMENT SCHEME TO DETERMINE TRAFFIC GENERATION FIGURES AND FLOW.

40, UNLESS DISCUSSED WITH AND APPROVED BY VDOT'S ENGINEERS; ALL CROSSPIPE WILL HAVE A MINIMUM DIAMETER OF EIGHTEEN (18) INCHES

41 INDIVIDUAL SUBDIVISION PLAN SUBMITTED MAY REQUIRE CHANGES ADDITIONS TO THIS LIST, AS DETERMINED BY VDOT REVIEW VDOT APPROVAL OF THESE PLANS EXPIRES THREE (3) YEARS FROM DATE OF SIGNATURES.

42, ALL STREET NAMES ARE TO BE REVIEWED AND APPROVED BY 9-1-1 SERVICES

43. LIMITS OF STREET ROADWAY CATEGORY WILL BE NOTED ON THE SUBDIVISION PLANS FOR EACH STREET, LIMITS WILL BE FROM STREET INTERSECTION TO STREET INTERSECTION

44. STOPPING DISTANCES AT GRADE CHANGES AND CURVES AND SITE DISTANCES AT STREET INTERSECTIONS WILL BE ILLUSTRATED ON THE CONSTRUCTION PLANS AND MUST CONFORM TO VDOT SPECIFICATIONS

45, PRIOR TO ACCEPTANCE FOR THE VDOT ROAD AND STREET SYSTEM, THE DEVELOPER SHALL PROVIDE VDOT WITH FIVE (5) SETS OF CONSTRUCTION PLANS ILLUSTRATING THE LOCATION OF ALL UTILITIES WITHIN THE STREET RIGHTS-OF-WAY (PRIVATE OR PUBLIC TO INCLUDE SEWER LINES RUNNING FROM A PRIVATE RESIDENCE TO A DRAINAGE AREA LOCATED ON A SEPARATE LOT WHERE CROSSING OF A STREET IS REQUIRED | WITH NAMES B ADDRESSES OF THE RESPONSIBLE PUBLIC UTILITY COMPANIES

46 PRIOR TO THE TIME THE STREETS ARE CONSIDERED FOR ADDITION TO THE VDOT ROAD AND STREET SYSTEM, THE DEVELOPER SHALL PROVIDE, BY LETTER, TO VDOT THE DEED BOOK, PAGE, AND DATE OF RECORDATION OF THE SUBDIVISION IN FRANKLIN COUNTY CLERK OF THE CIRCUIT COURT'S OFFICE OF THE STREET RIGHTS-OF-WAY

47 PROPOSED DENSITY (P.D.): SINGLE _____ MULTI ____ FAMILY ____ TRIPS PER DAY ____ TRAFFIC VOLUME PER DAY = ____

SURVEY INFORMATION

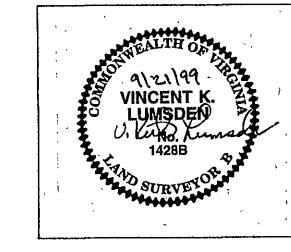
HORIZONTAL AND VERTICAL SURVEYS WERE PERFORMED IN 19 ___ BY_ ALL ELEVATIONS MUST BE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929

THE PROFESSIONAL SEAL AND THE SIGNATURE BELOW CERTIFIES THE BOUNDARY SURVEY AND TOPOGRAPHIC MAPPING TO BE ACCURATE AND CORRECT.

LEGEND

PROPERTY LINE RIGHT - OF - WAY CENTERLINE MINIMUM BUILDING LINE EXISTING WATER MAIN EXISTING CONTOUR PROPOSED CONTOUR PROPOSED DRAINAGE DIVIDE PROPOSED LIMITS OF CLEARING PROPOSED WATER MAIN EXISTING SEWER PROPOSED SEWER DEDICATED EASEMENT CROSSING EASEMENT

PROFESSIONAL SEAL & SIGNATURE



COUNTY OF FRANKLIN

NAME OF DEVELOPMENT VILLAGE GREEN

UNION HALL MAGISTERIAL DISTRICT MAGISTERIAL DISTRICT(S) FRANKLIN COUNTY, VIRGINIA

TAX MAP NO(S).

ZONING CLASSIFICATION

WILLARD CONSTRUCTION OF SMITH MOUNTAIN LAKE, L.L.C. DEVELOPER NAME WILLARD CONSTRUCTION OF SMITH MOUNTAIN LAKE, L.L.C. TELE PHONE

4664 BRAMBLETON AVENUE, S.W. ENGINEER, ARCHITECT, OR SURVEYOR P.O. BOX 20669 LUMSDEN ASSOCIATES, P.C. ROANOKE, VIRGINIA 24018 TELEPHONE ENGINEERS-SURVEYORS-PLANNERS.



COMM: 98-423 SHEET 2 OF