

ESTIMATE OF QUANTITIES & COST

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	SUB-TOTAL
EXCAVATION		CU. YDS.			
EMBANKMENT		CU. YDS.			
STORM INLETS VDOT STD. DI-1		EACH			
STORM INLETS VDOT STD. DI-2		EACH			
STORM INLETS VDOT STD. DI-3		EACH			
STORM INLETS VDOT STD. DI-5		EACH			
STORM INLETS VDOT STD. DI-7		EACH			
STORM MANHOLE MH-1		EACH			
STORM MANHOLE MH-2		EACH			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" CONCRETE PIPE CLASS ___		LIN. FT.			
" PLASTIC PIPE (HDPE, ETC.)		LIN. FT.			
" PLASTIC PIPE (HDPE, ETC.)		LIN. FT.			
" PLASTIC PIPE (HDPE, ETC.)		LIN. FT.			
" PLASTIC PIPE (HDPE, ETC.)		LIN. FT.			
BOX CULVERTS		LUMP SUM			
PAVED DITCH PG-2		LIN. FT.			
PAVED DITCH PG-5		LIN. FT.			
SODDED SWALE		SQ. YDS.			
SPLASH APRON		EACH			
RIP RAP		SQ. FT.			
" CONCRETE END SECTION		EACH			
" CONCRETE END SECTION		EACH			
" CONCRETE END SECTION		EACH			
" CONCRETE ENDWALL		EACH			
" CONCRETE ENDWALL		EACH			
" CONCRETE ENDWALL		EACH			
DRIVEWAY ENTRANCE TYPE ___		EACH			
SIDEWALK (4' WIDE)		LIN. FT.			
SIDEWALK (5' WIDE)		LIN. FT.			
HANDICAP RAMPS VDOT STD. CG-12		EACH			
CONC. MEDIANS VDOT STD. MS-1/MS-1A		LIN. FT.			
HEADER CURB VDOT STD. CG-2		LIN. FT.			
CURB & GUTTER VDOT STD. CG-6		LIN. FT.			
" BITUMINOUS ASPH. (SURFACE) TYPE ___		SQ. YDS.			
" BITUMINOUS ASPH. (BASE) TYPE ___		SQ. YDS.			
" INTERMEDIATE COURSE TYPE ___		SQ. YDS.			
" AGGREGATE BASE TYPE ___		SQ. YDS.			
ASPHALT TRAIL (___' WIDE) w/4" AGGR. BASE		SQ. YDS.			
ASPHALT MILLING		SQ. YDS.			
PAVEMENT RESTORATION (UTILITY CUT)		EACH			
STREET SIGNS		EACH			
TRAFFIC BARRICADE		EACH			
SCREENING		LIN. FT.			
WATER LINE 6" or smaller w/TRACER WIRE		LIN. FT.			
WATER LINE 8" w/TRACER WIRE		LIN. FT.			
WATER LINE 10" w/TRACER WIRE		LIN. FT.			
WATER LINE 12" w/TRACER WIRE		LIN. FT.			
FIRE HYDRANTS		EACH			
WET TAP		EACH			
POLYETHYLENE WRAP		LIN. FT.			
SANITARY SEWER MAINS (8" Min.) w/TRACER WIRE		LIN. FT.			
SANITARY SEWER MANHOLES		EACH			
CORE-BORE CONNECTION TO EX. MANHOLE		EACH			
POLYETHYLENE WRAP		LIN. FT.			
STREET LIGHTS		EACH			
TRAFFIC SIGNAL (PER INTERSECTION)		LUMP SUM			
LOT CORNER PINS AS SHOWN ON PLAT		EACH			
MONUMENTS AS SHOWN ON PLAT		EACH			
IMPROVEMENT COST TOTAL					
IMPROVEMENT BOND					
15% ADMINISTRATIVE COST					
ESTIMATED TOTAL					
I HEREBY CERTIFY THAT THE FOREGOING IS MY BEST ESTIMATE OF THE QUANTITIES OF IMPROVEMENTS IN THIS SUBDIVISION / SITE PLAN.					
SIGNATURE					DATE
USE APPROVED COSTS FROM DCSM APPENDIX B					

GENERAL NOTES

ALL CONSTRUCTION WITHIN EXISTING AND/OR PROPOSED R/W IS TO CONFORM TO THE LATEST VDOT STANDARDS AND SPECIFICATIONS, THE CURRENT EDITION OF THE CITY OF MANASSAS DESIGN AND CONSTRUCTION STANDARDS MANUAL (DCSM), MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE VIRGINIA WORK AREA PROTECTION MANUAL (VWAPM), UNLESS OTHERWISE NOTED.

Methods and materials used in the construction of the improvements herein shall conform to the current edition of the City of Manassas Design and Construction Standards Manual (DCSM) and Virginia Department of Transportation Standards and Specifications.

THE DEVELOPER SHALL BE RESPONSIBLE FOR COSTS INCURRED FOR THE RELOCATION OF OR DAMAGE TO ANY PUBLIC UTILITIES DUE TO CONSTRUCTION.

Measures to control erosion and siltation must be provided and installed according to Article 4 of the City of Manassas DCSM and/or the current edition of the Virginia Erosion and Sediment Control Handbook. The approval of these plans in no way relieves the developer or agent of the responsibilities contained in the siltation and erosion control policy.

The contractor or developer is required to schedule a preconstruction meeting with the Development Services Site Inspections Division prior to any land disturbing activities (703-257-8278 or 703-257-8267).

BEFORE BURNING, BLASTING, TRANSPORTATION OR STORAGE OF EXPLOSIVES in the City of Manassas a permit shall be obtained from the Fire Marshal's Office.

Prior to any land disturbing activities, all necessary permits shall be obtained (703-257-8278) and/or (703-257-8267).

A permit will be required for all advertising signs. This permit can be secured from the City of Manassas Development Services.

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

All streets shall be compacted to a density of not less than 95% of maximum density determined in conformity with VTM-1 method. The subdivider shall use mechanical means to achieve the required compaction.

The developer shall provide to the City of Manassas, third party geotechnical testing results.

All storm sewer systems shall be reinforced concrete pipe. All concrete pipe to be placed within the dedicated right-of-way shall conform to ASTM Specification C76-65T class IV.

All City of Manassas standard pavement designs are based on a minimum CBR value of 10.

A smooth grade shall be maintained from centerline of existing road to proposed curb and gutter to preclude the forming of false gutters and/ or the ponding of any water on the roadway.

A spring shall be capped and piped to the nearest storm sewer manhole or curb inlet. The pipe shall be a minimum 6" diameter and conform to VDOT Section 501.

Wells shall be abandoned per State Health Department regulations.

The developer shall grade slopes no steeper than 3:1 on returns at intersections to provide adequate sight distance.

Standard street signs shall be installed at each intersection by the City of Manassas and are to be paid for by the developer.

All underground utilities must be placed from the utility main to the right-of-way line for each lot and all underground utility mains and connections must be installed and tested in-place prior to the application of any bituminous materials or base stone.

All underground utility pipe and conduit will have tracer wire installed.

The developer shall be responsible for determining the location of all existing underground utilities prior to beginning any construction. Call before you dig 1-800-552-7001.

It is the intention of these plans that all areas shall be graded in detail so as to provide positive surface drainage and to prevent the ponding of water.

The contractor shall provide adequate means of cleaning trucks and/ or other equipment of mud prior to entering public streets, and it is the contractor's responsibility to clean streets, alley dust, and to take whatever measures are necessary to insure that the road is maintained in a clean, mud and dust free condition at all times.

The developer and/or contractor shall be responsible for supplying all utility companies (Gas, Electric, Telephone, Etc.) with copies of plans that have been approved by the City of Manassas and advising them that all grading shall conform to the approved plans and further that the Utility Companies shall be responsible for honoring these plans and the finish grades in the installation of the their utility lines.

SANITARY SEWER

All sanitary sewer pipe shall be PVC SDR-35 conforming to ASTM Specification 3034-[7-17], PVC conforming to AWWA Specification C900, or Ductile Iron Pipe conforming to ASTM Specification A21.51 or latest revision.

Aerial sewer shall be ductile iron mechanical joint pipe conforming to ASTM Specification A21.51 or latest revision.

An Exfiltration or Infiltration Test shall be conducted on all new sanitary sewer lines which are 8 inches or larger and a vacuum test shall be conducted to the top of the casting on all manholes. These tests shall be witnessed by the City Site Inspector and must be approved by the City Public Works Department.

At all points of sewer main connection or abandonment to existing manholes, manholes shall be replaced at the developers expense, unless otherwise directed by the city engineer.

All Ductile Iron Pipe sanitary sewer shall be polyethylene encased per current DIPRA standards. Minimum 8mm or approved equal.

WATER

All water mains shall have a minimum cover of 3.5'. Cover shall be maintained unless otherwise designated by Public Works Department.

All water main construction shall be either push-on-joint or mechanical joint lined ductile iron pipe conforming to ASTM Specification A21.51 or latest revision.

Containment backflow prevention shall be installed downstream of the meter and upstream of all plumbing splits at all public, commercial and industrial facilities and at all properties where lawn sprinkler systems are planned.

All new water mains shall be polyethylene encased per current DIPRA standards. Minimum 8mm or approved equal.

All new water mains shall be a minimum of 8" in diameter.

All new water services shall be a minimum of 1" in diameter to the meter.

SURVEYING AND MAPPING INFORMATION

- Elevation datum USC & GS Mean Sea Level as established from the following bench marks _____ OR is not USC & GS MSL but is _____ and the relation of this datum to MSL (IF ACCURATELY KNOWN) is _____
- Horizontal and vertical control surveys were run on the ground by the following firm _____ in the year of _____
- Topographic mapping shown hereon was performed by the following firm _____ in the year of _____ using (field instrument surveys) (aerial photogrammetry with ground control (Using other methods as described as _____)
- The meridian for survey bearings shown hereon is (TRUE) (MAGNETIC) (VA. N. ZONE P.C.S.) (OTHER _____) and was established as follows _____
- Coordinates of points or monuments, if shown hereon, are coordinates of the Va. North Zone Plane Coordinate System established as follows _____
- Topographic mapping is certified by (Signed) _____ (Name) Registration No. _____
- Label two (2) property corners on the site plan with Va. State Coordinates (VCS 1983).

PLAN SHEET INDEX

VICINITY MAP

SCALE: 1" = _____

Responsible Land Disturber (RLD) means an individual holding a certificate of competence issued by DCR who will be in charge of and responsible for carrying out the land-disturbing activity in accordance with the approved plan. The RLD may be the owner, applicant, permittee, designer, superintendent, project manager, contractor, or any other project or development team member. The RLD must be designated as a prerequisite for obtaining City permit and prior to any land disturbing activities. Ref VESCH

MISS UTILITY 1-800-552-7001

E&S Bond Amount : _____

Cash Contributions / Proffered Amounts	
SWM Pro-Rata :	_____
Transportation :	_____
Schools :	_____
Parks / Recreation :	_____
Fire / Rescue :	_____
Other :	_____

Previous City Approvals Relevant To This Development

PLAN NAME : _____ PLAN # _____ APPROVED _____ DATES _____

PLAN NAME : _____ PLAN # _____ APPROVED _____

PLAN NAME : _____ PLAN # _____ APPROVED _____

REZONING : _____ RZ # _____ APPROVED _____

REZONING : _____ RZ # _____ APPROVED _____

PROFFERED PLAN

YES/NO

Official Approved Plan The City of Manassas

The following endorsement hereby represent that this plan has been reviewed by all of the appropriate departments and agencies, using the City of Manassas Code of Ordinances and the City DCSM; and based upon the affirmative recommendation of those departments and agencies has been found to be consistent with the regulations, ordinances, conditions and provisions related to the development and use of this parcel and may be Approved as the Official Plan.

Development Services Manager _____ Date _____

ANY DEVIATION OR CHANGE IN THESE PLANS MUST BE APPROVED BY THE DEVELOPMENT SERVICES MANAGER PRIOR TO CONSTRUCTION.

SITE PLAN # _____ SUBDIVISION # _____

CITY OF MANASSAS	
STANDARD PLAN COVER SHEET	
SUBDIVISION NAME OR SITE PLAN NAME	
PARCEL ADDRESS	
OWNER	ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NO.
DEVELOPER	ADDRESS, INCLUDE ZIP CODE AND TELEPHONE NO.
NAME, ADDRESS & TELEPHONE NO. OF CERTIFIED ENGINEER, ARCHITECT OR SURVEYOR SUBMITTING PLAN	PHONE
TAX MAP SECTION NUMBER: _____ DOUBLE CIRCLE NUMBER: _____ PARCEL NUMBER: _____ PRESENT ZONING: _____ TOTAL SITE AREA: _____	
TOTAL DISTURBED AREA: _____	TOTAL NO. DWELLING UNITS: _____ TOTAL SQ. FT. OF STRUCTURES: _____
REVISIONS:	
SHEET	OF SHEETS

ENGINEER'S SEAL & SIGNATURE