

QUANTITY + COST ESTIMATE

ITEM	QUANTITY	UNIT	UNIT PRICE	COST	BONDABLE
CLEARING AND GRUBBING		ACRES			
EXCAVATION		C.Y.			
EMBANKMENT		C.Y.			
CURB INLET DI-		EACH			
CURB INLET DI-		EACH			
MANHOLE MH-		EACH			
MANHOLE MH-		EACH			
-IN. CONCRETE PIPE, CLASS III		LIN. FT.			
-IN. CONCRETE PIPE, CLASS IV		LIN. FT.			
-IN. C.M. CULVERT		LIN. FT.			
-IN. C.M. CULVERT		LIN. FT.			
BOX CULVERT		LUMP SUM			
PAVED DITCH		LIN. FT.			
RIPRAP - CLASS		S.F.			
SODDED SWALE		S.Y.			
-IN. CONCRETE ENDWALL EW-		EACH			
-IN. END SECTION ES-		EACH			
HEADER CURB & GUTTER CG-		LIN. FT.			
CURB & GUTTER CG-		LIN. FT.			
VALLEY GUTTER		EACH			
GRAVEL BASE		S.Y.			
GRAVEL SHOULDER		S.Y.			
SURFACE TREATMENT		S.Y.			
-IN. BIT. CONC. TYPE B-		S.Y.			
-IN. BIT. CONC. TYPE S-		S.Y.			
-IN. BASE MATERIAL		C.Y.			
-IN. SUBBASE MATERIAL		C.Y.			
TRAFFIC BARRICADE		EACH			
8" WATER LINE		LIN. FT.			
6" WATER LINE		LIN. FT.			
FIRE HYDRANT ASSEMBLIES		EACH			
BLOW OFFS W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
-IN. GATE VALVES, W/VAULT, FRAME & COVER		EACH			
8" SANITARY SEWER		LIN. FT.			
STANDARD MANHOLE W/FRAME & COVER		EACH			
SAMPLING MANHOLE/PORT		EACH			
AS-BUILT PLANS		LUMP SUM			
STORMWATER MANAGEMENT		LUMP SUM			
10% CONTINGENCY					
ESTIMATED TOTAL					
I HEREBY CERTIFY THAT THE FOREGOING ESTIMATE REFLECTS THE CURRENT IMPROVEMENT COSTS OF THIS PROJECT.					
SIGNED:		DATE:			

GENERAL NOTES

All construction methods and materials shall conform to the Construction Standards and Specifications of Roanoke County, Western Virginia Water Authority, and/or the Virginia Department of Transportation (V.D.O.T.).

The contractor or developer is required to notify the Roanoke County Engineering Division, Western Virginia Water Authority in writing at least three (3) days prior to any construction, including, but not limited to the following:

- Installation of approved erosion control devices
- Clearing and grubbing
- Subgrade excavation
- Installing storm sewers or culverts
- Setting curb and gutter forms
- Placing curb and gutter
- Placing other concrete
- Placing gravel base
- Placing any roadway surface
- Installing water lines
- Installing sanitary sewer lines

A pre-construction conference should be scheduled with the Roanoke County Engineering Division, and Western Virginia Water Authority to be held at least one (1) day prior to any construction.

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 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 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 with 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 through "Miss Utility": 1-800-552-7001.

The developer or contractor shall supply Roanoke County and the Western Virginia Water Authority with correct As-Built plans before final acceptance.

All work shall be subject to inspection by Roanoke County, Western Virginia Water Authority and/or V.D.O.T. inspectors.

Field corrections shall be approved by the Roanoke County Engineering Division, and the Western Virginia Water Authority prior to such construction.

100 year floodway and flood plain information shall be shown where applicable.

Grade stakes shall be set for all curb and gutter, culvert, sanitary sewer and storm sewer.

Site lighting design shall conform to Roanoke County standards.

A separate "sign" permit is required by Roanoke County. Prior to construction of the proposed sign, design criteria etc. shall be reviewed and approved by the County.

All Pipe Culverts located in VDOT Right of Way and Easements shall conform to 2001 VDOT Roadway and Bridge Standards.

Contractor shall repair or replace any existing structures damaged during connection to the structure or other work in VDOT Right of Way.

VDOT approval of these plans expires (3) three years from date of approval.

INDEX

C000	COVER SHEET
C001	EXISTING CONDITIONS AND DEMOLITION PLAN
C100	SITE PLAN
C101	GRADING PLAN
C102	EROSION AND SEDIMENT CONTROL PLAN
C103	UTILITY PLAN
C200	MAINTENANCE AND PROTECTION OF TRAFFIC CONTROL PLAN
C201	COVE ROAD IMPROVEMENTS PLAN AND PROFILE
C202	SANITARY SEWER PLAN AND PROFILE
C203	STORM WATER SEWER PROFILE
C204	WATER LINE RELOCATION PLAN AND PROFILE
C205	4" DIP WATER LINE RELOCATION PLAN AND PROFILE
C300	EROSION AND SEDIMENT CONTROL DETAIL SHEET
C301	SITE AND UTILITY DETAIL SHEET
C302	ROANOKE COUNTY EROSION AND SEDIMENT CONTROL DETAIL SHEET
C303	WESTERN VIRGINIA WATER AUTHORITY SEWER DETAIL SHEET
C304	WESTERN VIRGINIA WATER AUTHORITY WATER DETAIL SHEET
L100	LANDSCAPE PLAN

SEWER NOTES

All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction 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 lines cross.

House connections are to be made with 4" pipe installed at a minimum grade of 1/4 inch to 1 foot in Right of Way (R/W).

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 sanitary sewer connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority.

WATER NOTES

All water and sanitary sewer facilities are to be installed according to the Western Virginia Water Authority Design and Construction Standards.

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.

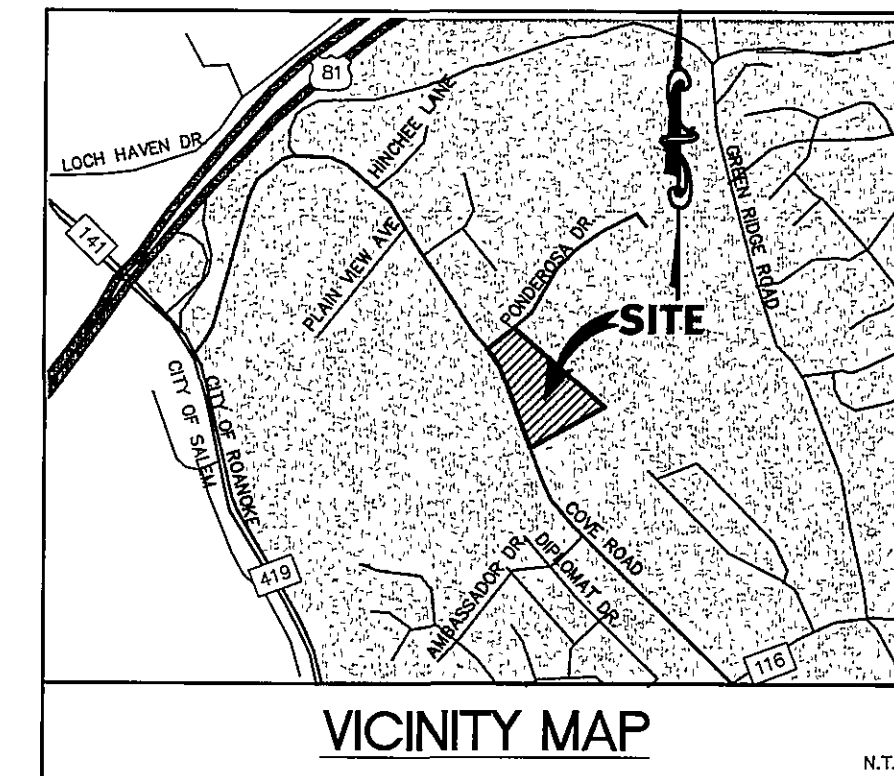
Water main shall be minimum Class 52 Ductile Iron in accordance to AWWA C151 or DR-14 PVC in accordance with AWWA C-900.

All water connections to existing lines shall be coordinated with and performed by the Western Virginia Water Authority.

Availability number: 05-192

LEGEND

Property Line	---
Right-of-way	--- R/W ---
Centerline	---
Minimum Building Line	--- M.B.L. ---
Existing Storm Sewer	18" S.D. --- 18" S.D. ---
Existing Sanitary Sewer	8" SAN. --- 8" SAN. ---
Existing Water Main	4" W --- 4" W ---
Existing Contour	1045 --- 1045 ---
Proposed Contour	1045 --- 1045 ---
Proposed Drainage Divide	← --- →
Proposed Limits of Clearing	24' S.D. ---
Proposed Storm Sewer	8" S.D. ---
Proposed Sanitary Sewer	8" M.H. ---
Proposed Water Main	HYDRANT --- VALVE --- BLOWOFF



SURVEY INFORMATION

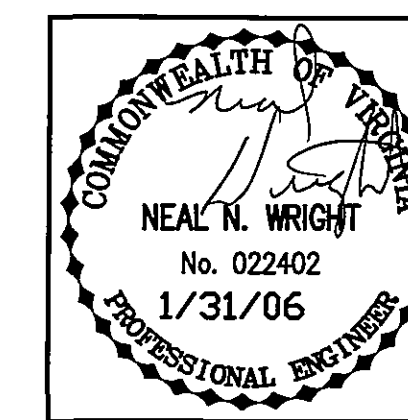
Horizontal and vertical control surveys were performed in 2004 by HURTT & PROFFITT, INC. IN 2004.

All elevations must be referenced to the National Geodetic Vertical Datum of 1929.

Source of topographic mapping is AERIAL TOPOGRAPHICAL INFORMATION ROANOKE COUNTY AND FIELD SURVEY PERFORMED BY HURTT & PROFFITT, INC. dated DEC. 29, 2004.

Boundary was performed by HURTT & PROFFITT, INC. dated revised 12/29/04.

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



PROFESSIONAL ENGINEER
SEAL AND SIGNATURE

COUNTY OF ROANOKE

<p>SITE PLAN FOR ROANOKE COUNTY PUBLIC SAFETY BUILDING</p>		<p>I, <u>DAN O'DONNELL</u> 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.</p>
<p>MAGISTERIAL DISTRICT(S): <u>CATAWBA DISTRICT</u></p>		
<p>OWNER (name, address, telephone): ROANOKE COUNTY BOARD OF SUPERVISORS, 5925 COVE ROAD, ROANOKE, VIRGINIA (540) 772-2065</p>		
<p>DEVELOPER (name, address, telephone): ROANOKE COUNTY, DAN O'DONNELL, 5204 BERNARD DRIVE, ROANOKE, VIRGINIA 24018 (540) 772-2065</p>		
<p>ENGINEER, ARCHITECT OR SURVEYOR (name, address, telephone): HURTT & PROFFITT, INC., 2524 LANGHORNE RD., LYNCHBURG VIRGINIA, 24501. 800-242-4906 TOLL FREE, MAIN:(434)-847-7796, FAX:(434)-847-0047</p>		
TAX MAP NO(S)	036.16-01-11.01-0000	PARCEL NO(S) N/A

DEVELOPMENT PLAN APPROVED FOR CONSTRUCTION BY ROANOKE COUNTY	
Department	Date
Development Review	
Engineering	2/4/06
Water & Sewer	2/2/06
Planning & Zoning	

