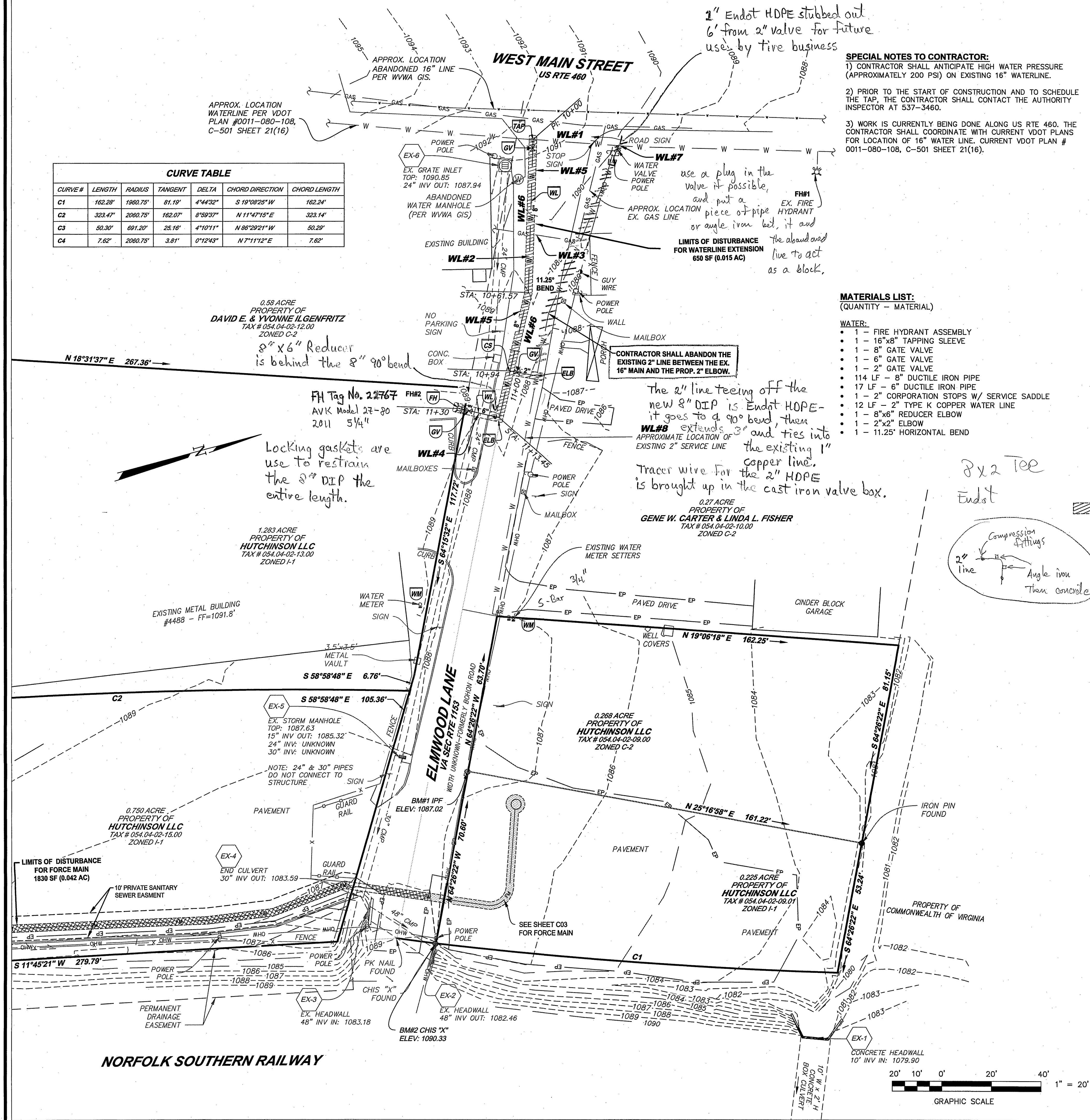


CURVE TABLE					
CURVE #	LENGTH	RADIUS	TANGENT	CHORD DIRECTION	CHORD LENGTH
C1	162.28'	1960.75'	81.19'	S 10°08'28" W	162.24'
C2	323.47'	2060.75'	162.07'	N 11°47'15" E	323.14'
C3	50.30'	691.20'	25.16'	N 86°29'21" W	50.29'
C4	7.62'	2060.75'	3.81'	N 7°11'12" E	7.62'



**GENERAL NOTES:**

1. THIS PLAN WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT. THEREFORE, THERE MAY EXIST ENCUMBRANCES NOT SHOWN HEREON.
2. THE SUBJECT PROPERTY IS WITHIN THE LIMITS OF FLOOD ZONE X, AS SHOWN ON THE FEMA FLOOD INSURANCE RATE MAP 51161C0119G DATED SEPTEMBER 28, 2007. THIS DETERMINATION IS BASED ON SAID MAP AND HAS NOT BEEN VERIFIED BY ACTUAL FIELD ELEVATIONS.
3. THIS PLAN WAS PREPARED FROM A TOPOGRAPHIC FIELD SURVEY CONDUCTED BY PARKER DESIGN GROUP IN JULY 2012.
4. THIS PARTIAL TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF ALAN CLEMONS, FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JULY 7, 2012 AND THAT THIS PLAN, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS THE MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.
5. THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS BASED UPON FIELD SURVEY, AVAILABLE RECORDS, OR AS LOCATED BY A UTILITY MARKING COMPANY AND SHOULD BE CONSIDERED APPROXIMATE. THERE MAY BE UTILITIES WHICH AFFECT THE PROPERTY NOT SHOWN HEREON. CONTRACTOR SHALL CALL "MISS UTILITY" TO VERIFY LOCATION OF ANY UNDERGROUND UTILITIES PRIOR TO ANY CONSTRUCTION.
6. BENCHMARKS ARE AS SHOWN ON PLANS. ELEVATIONS SHOWN ARE ON NAVD83 DATUM. CONTOURS ARE ON ONE FOOT INTERVALS.
7. DEVELOPMENT WITHIN THE FLOODPLAIN SHALL BE PER SECTION 30-74 FLOODPLAIN OVERLAY DISTRICT OF THE ROANOKE COUNTY ZONING ORDINANCE.

**SPECIAL NOTES TO CONTRACTOR:**

- 1) CONTRACTOR SHALL ANTICIPATE HIGH WATER PRESSURE (APPROXIMATELY 200 PSI) ON EXISTING 16" WATERLINE.
- 2) PRIOR TO THE START OF CONSTRUCTION AND TO SCHEDULE THE TAP, THE CONTRACTOR SHALL CONTACT THE AUTHORITY INSPECTOR AT 537-3460.
- 3) WORK IS CURRENTLY BEING DONE ALONG US RTE 460. THE CONTRACTOR SHALL COORDINATE WITH CURRENT VDOT PLANS FOR LOCATION OF 16" WATER LINE. CURRENT VDOT PLAN # 0011-080-108, C-501 SHEET 21(16).

**GENERAL CONSTRUCTION NOTES:**

- 1) THE CONTRACTOR SHALL PROVIDE AT LEAST THE FOLLOWING PROTECTIONS AT THE JOB SITE: MAKE ARRANGEMENTS, BEFORE INITIATING CONSTRUCTION, FOR RELOCATING, ABANDONING, OR SIMILAR ACTION AS MAY BE REQUIRED RELATIVE TO UTILITIES TO PERMIT WORK TO PROCEED WITHOUT DELAY. ARRANGEMENTS SHALL BE MADE IN ACCORDANCE WITH REGULATIONS OF AUTHORITIES OF UTILITIES MENTIONED, SUCH AS OVERHEAD AND UNDERGROUND ELECTRIC, TELEPHONE, GAS, WATER, ETC.
- 2) ENSURE SAFE PASSAGE OF PERSONS AROUND ALL AREAS OF CONSTRUCTION. CONDUCT OPERATIONS TO PREVENT DAMAGE TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES, OR INJURY TO PERSONS.
- 3) PROMPTLY REPAIR DAMAGES CAUSED TO ADJACENT FACILITIES BY CONSTRUCTION OPERATIONS AT NO COSTS TO THE OWNER(S).
- 4) MAINTAIN EXISTING UTILITIES INDICATED TO REMAIN, KEEP IN SERVICE, AND PROTECT AGAINST DAMAGE DURING CONSTRUCTION OPERATIONS, PREVENT INTERRUPTION OF SERVICES. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES AS ACCEPTABLE TO GOVERNING AUTHORITIES.
- 5) USE WATER SPRINKLING AND OTHER SUITABLE METHODS TO LIMIT DUST AND DIRT POLLUTION TO THE LOWEST PRACTICAL LEVEL.
- 6) COMPLY WITH GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
- 7) RETURN ADJACENT AREAS TO EXISTING CONDITIONS PRIOR TO THE COMPLETION OF WORK.
- 8) PERMITS, FEES, AND LICENSES SHALL BE SECURED AND PAID FOR BY THE CONTRACTOR, INCLUDING DISPOSAL CHARGES AS REQUIRED.

**SITE SPECIFIC WATERLINE CONSTRUCTION NOTES:**

**WL#1** CONTRACTOR SHALL PROVIDE TAP AND PROTECT REMAINING LINE.

**WL#2** PROVIDE MINIMUM 3.0' COVER ON PROPOSED WATERLINE.

**WL#3** CONTRACTOR SHALL PROTECT EXISTING GAS LINE.

**WL#4** CONTRACTOR SHALL PROTECT EXISTING STORM STRUCTURES AND/OR PIPE. 6" WATERLINE TO BE INSTALLED UNDER STORM PIPE.

**WL#5** MINIMUM TRENCH WIDTH OF 3.0' SHOWN. CONTRACTOR SHALL REMOVE AND REPLACE EXISTING PAVEMENT AND/OR CURB PER WWA DETAIL G-13 OR G-14.

**WL#6** CONTRACTOR SHALL PROVIDE NEAT, VERTICAL SAWCUT AS REQUIRED TO ALLOW FOR TRENCHING AND PAVEMENT REPLACEMENT.

**WL#7** ONCE THE CONNECTION BETWEEN THE PROPOSED 8" WATERLINE AND EXISTING 2" IS COMPLETE AND MADE OPERATIONAL, THE 2" SERVICE AT THE 16" MAIN SHALL BE TERMINATED.

**WL#8** PLAN SHOWS EXISTING 2" LINE. THERE IS A DISCREPANCY IN RECORDS ON ACTUAL SIZE. CONTRACTOR SHALL VERIFY SIZE PRIOR TO CONSTRUCTION AND/OR ORDERING 2" PARTS. CONTRACTOR SHALL MATCH EXISTING PIPE SIZE AND MATERIALS.

**MATERIALS LIST:**  
(QUANTITY - MATERIAL)

**WATER:**

- 1 - FIRE HYDRANT ASSEMBLY
- 1 - 16" x 8" TAPPING SLEEVE
- 1 - 8" GATE VALVE
- 1 - 6" GATE VALVE
- 1 - 2" GATE VALVE
- 114 LF - 8" DUCTILE IRON PIPE
- 17 LF - 6" DUCTILE IRON PIPE
- 1 - 2" CORPORATION STOPS W/ SERVICE SADDLE
- 12 LF - 2" TYPE K COPPER WATER LINE
- 1 - 8"x6" REDUCER ELBOW
- 1 - 2"x2" ELBOW
- 1 - 11.25' HORIZONTAL BEND

**SITE WATER LEGEND**

**WM** EXISTING WATER METER SETTINGS TO BE PROTECTED & UTILIZED.

**WL** PROPOSED WATER LINE. 8" DUCTILE IRON, 6" DUCTILE IRON OR 2" TYPE "K" COPPER. SEE PLAN FOR SIZE.

**FH** PROPOSED FIRE HYDRANT. SEE FIRE HYDRANT ASSEMBLY DETAIL W-18.

**GV** PROPOSED GATE VALVES. SEE PLAN FOR SIZE. SEE DETAIL W-08.

**TAP** 16" x 8" TAPPING SLEEVE & VALVE. SEE DETAIL W-23.

**CS** 2" CORPORATION STOP WITH SERVICE SADDLE.

**ELB** 8" x 6" REDUCER ELBOW OR 2" x 2" ELBOW. SEE PLAN FOR SIZE.

**SITE SPECIFIC FIRE NOTES:**

**FM#1:** FLOW INFORMATION IS UNAVAILABLE ON THE WWA GIS FOR THE EXISTING HYDRANT:

**FIRE HYDRANT #1:**  
ALONG WEST MAIN STREET  
FARTHEST DISTANCE: 475' FOLLOWING THE R/W (SEE VALLEY DISTRIBUTING SITE PLAN FOR BUILDING LOCATION)  
WWA HYDRANT ID 22727 (HYD-005987)

**FM#2:** NEW HYDRANT TO BE INSTALLED WITHIN 350' OF PROPOSED BUILDING TO MEET REQUIREMENT. SEE VALLEY DISTRIBUTING SITE PLAN FOR BUILDING LOCATION.

**FIRE HYDRANT #2:**  
PROPOSED HYDRANT AT SITE  
FARTHEST DISTANCE: 295' ALONG THE ROAD  
ANTICIPATED STATIC PRESSURE: 200 PSI

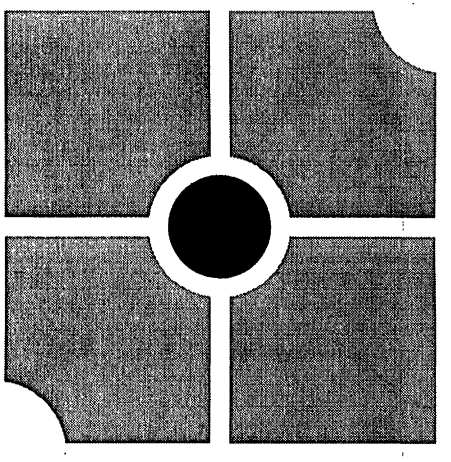
PER EMAIL FROM JOHN SWEENEY, FIRE INSPECTOR, THE FLOW ALONG MAIN STREET IS SUFFICIENT TO MEET REQUIREMENTS.

**STORMWATER CONSIDERATIONS:**

- 1) TOTAL LAND DISTURBANCE FOR THIS PROJECT IS 2,480 SF. PER SECTION 23-1.3(A)(5) OF THE ROANOKE COUNTY STORMWATER MANAGE ORDINANCE, STORMWATER MANAGEMENT IS NOT REQUIRED FOR THIS PROJECT.

**EROSION & SEDIMENT CONROL CONSIDERATIONS:**

- 1) TOTAL LAND DISTURBANCE FOR THIS PROJECT IS LESS THAN 5,000 SF, THEREFORE AN E&S PLAN IS NOT REQUIRED.
- 2) CONTRACTOR SHALL INSTALL UTILITY LINES IN ACCORDANCE WITH MS-16.
- 3) CONTRACTOR SHALL PROVIDE PERMANENT SEEDING IN ANY GRASSED AREAS THAT ARE DISTURBED.
- 4) THE DEVELOPER UNDERSTANDS AND AGREES TO IMPLEMENT ANY EROSION SEDIMENT CONTROL MEASURES AS SET FORTH IN THE VIRGINIA EROSION SEDIMENT CONTROL HANDBOOK (VESCH) OR DEEMED NECESSARY BY ROANOKE COUNTY REPRESENTATIVES TO PROVIDE ADEQUATE CONTROL OF EROSION AND SEDIMENTATION ON OR RESULTING FROM THIS PROJECT.



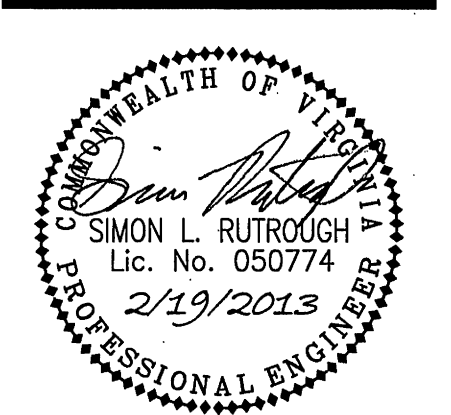
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**Valley Distributing Offsite Utility Plan**  
**4479 Elmwood Lane**  
**Prepared for Interactive Design Group**  
Tax No. 054.04-02-09.00 & 054.04-02-09.01  
Catowba Magisterial District: Roanoke County, Virginia

**REVISIONS:**

NO.	DATE	DESCRIPTION
1	19 February 2013	Per County, WWA & VDOT Comments

**DESIGNED BY:** SLR

**DRAWN BY:** SLR

**CHECKED BY:** SRB

**SCALE:** 1" = 20'

**DATE:** 18 January 2013

**SHEET TITLE:**

**Waterline Extension**

**C02**  
02 OF 06  
PROJECT NUMBER:  
12-0079-03

As-Builts 11.5.13 K. Winslow