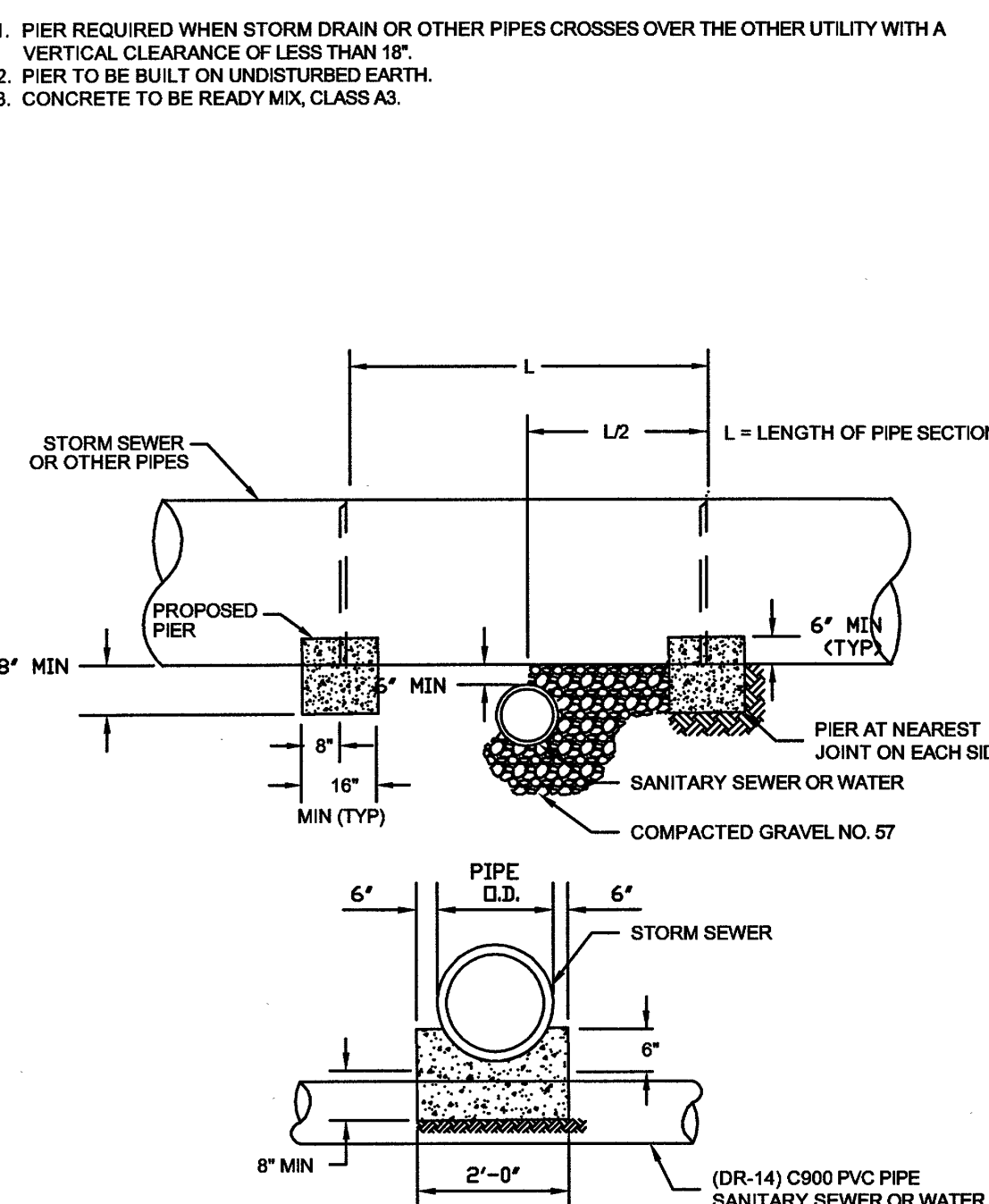


WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

SINGLE RESIDENTIAL  
WATER SERVICE  
(REPLACEMENT OF EXISTING SERVICE)

01/01/12

W-2



WESTERN VIRGINIA REGIONAL - CONSTRUCTION DETAIL

CONCRETE PIER

01/01/14

G-8

## GENERAL NOTES

- THE BOUNDARY IS THE DIRECT RESULT OF A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C.
- TOPOGRAPHY DATA BASED ON A FIELD SURVEY BY LUMSDEN ASSOCIATES, P.C.
- A TITLE REPORT WAS NOT FURNISHED FOR THIS PROJECT.
- NO CONSTRUCTION/FIELD REVISIONS ARE ALLOWED WITHOUT THE APPROVAL OF THE CONSULTING ENGINEER, THE CITY OF ROANOKE, AND/OR THE WESTERN VIRGINIA WATER AUTHORITY.
- IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO CLEAN OUT THE EXISTING STORM SEWER SYSTEM WITHIN EXISTING DEVELOPMENTS SHOULD THESE SYSTEMS BECOME SILENT OR BLOCKED IN ANY WAY DUE TO THE CONSTRUCTION OF THIS PROPOSED DEVELOPMENT.
- THIS PROPERTY IS NOT LOCATED WITHIN THE LIMITS OF A 100 YEAR FLOOD BOUNDARY AS DESIGNATED BY FEMA. THIS OPINION IS BASED ON AN INSPECTION OF THE FLOOD INSURANCE RATE MAP AND HAS NOT BEEN VERIFIED IN THE FIELD. SEE COMMUNITY PANEL NO. 510130 0161 G, MAP NUMBER 51161C0161 G, DATED 9-28-07.
- SEE CONTRACT DOCUMENTS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

## CONSTRUCTION NOTES

- GRADES AND LOCATIONS OF EXISTING SANITARY SEWER LATERALS ARE UNKNOWN. GRADES AND LOCATIONS SHOWN ARE ASSUMED. THE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- THE DEPTH OF WATER LINES, GAS LINES, AND TELEPHONE DUCTS ARE UNKNOWN. THEIR DEPTH HAS BEEN ASSUMED WHERE SHOWN IN PROFILE. THE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- ALL EXISTING UTILITIES MAY NOT BE SHOWN OR MAY NOT BE SHOWN IN THEIR EXACT LOCATION. THE CONTRACTOR SHALL CONTACT PUBLIC UTILITIES COMPANIES THROUGH MISS UTILITY (1-800-552-7001) TO HAVE EXISTING UTILITIES LOCATED. THE CONTRACTOR SHALL VERIFY THE DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
- FOR THE RELOCATION OR REPLACEMENT OF ANY EXISTING WATER OR SANITARY SEWER FACILITIES, CONTACT CHRIS CAREY AT THE WESTERN VIRGINIA WATER AUTHORITY (853-5637) A MINIMUM OF 48 HOURS PRIOR TO CONSTRUCTION. ALL STREETS TO BE MAINTAINED FOR ONE WAY TRAFFIC AND OPENED TO TWO WAY TRAFFIC DURING PEAK TRAFFIC HOURS. FOR ANY CLOSURES REQUIRED, CONTACT ROANOKE CITY TRAFFIC ENGINEERING (853-2673) A MINIMUM OF TWO WEEKS PRIOR TO CLOSING.
- ACCESS TO ADJOINING PROPERTIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. COORDINATE ACCESS WITH EACH PROPERTY OWNER.
- THE CONTRACTOR SHALL VISIT AND VERIFY EXISTING CONDITIONS PRIOR TO STARTING CONSTRUCTION. CONTACT OWNER AND ENGINEER WITH ANY VARIATIONS.
- ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROANOKE STANDARDS AND SPECIFICATIONS AND THE CURRENT EDITION OF VDOT'S ROAD AND BRIDGE STANDARDS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE OWNER AND THE ENGINEER OF ANY CHANGES OR CONDITIONS ATTACHED TO PERMITS OBTAINED FROM ANY AUTHORITY ISSUING PERMITS.
- ALL WATER CONNECTIONS TO EXISTING LINES SHALL BE COORDINATED WITH AND PERFORMED BY THE WESTERN VIRGINIA WATER AUTHORITY.
- ALL SANITARY SEWER CONNECTIONS TO EXISTING LINES SHALL BE PERFORMED BY THE CONTRACTOR WITH A WESTERN VIRGINIA WATER AUTHORITY INSPECTOR ON-SITE.
- MAINTAIN A MINIMUM OF 18" CLEARANCE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE AT ALL WATER, SANITARY SEWER, AND STORM DRAIN CROSSINGS. WHERE THIS CLEARANCE CAN NOT BE ACHIEVED, CONCRETE PIERS SHALL BE UTILIZED IN ACCORDANCE WITH THE WESTERN VIRGINIA WATER AUTHORITY'S WATER AND SANITARY SEWER STANDARDS. SEE VDOT ROAD AND BRIDGE STANDARDS FOR CONCRETE CURB AND STORM DRAINAGE DETAILS.
- THE CONTRACTOR AND OR OWNER SHALL PROVIDE A STORAGE CONTAINER FOR TEMPORARY STORAGE AND DISPOSAL OF LAND CLEARANCE DEBRIS AND BUILDING MATERIALS. ON-SITE BURIAL OF MATERIAL SHALL NOT BE PERMITTED.

## GRADING NOTES

- AREAS TO BE GRADED SHALL BE CLEARED OF ALL VEGETATION, STRUCTURES, AND OTHER PHYSICAL FEATURES IN PREPARATION OF GRADING.
- TOPSOIL SHALL BE REMOVED FROM THE CLEARED AREA AND STOCKPILED FOR FUTURE USE. A SEPARATE E & S PLAN MAY BE REQUIRED FOR OFFSITE STOCKPILES.
- FILL MATERIAL SHALL BE FREE FROM ORGANIC MATTER AND ROCKS LARGER THAN 6 INCHES IN DIAMETER.
- FILL MATERIAL SHALL BE PLACED AND COMPACTED IN EIGHT (8) INCH LOOSE LIFTS AND COMPACTED TO AT LEAST NINETY-FIVE (95) PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, STANDARD PROCTOR. MAINTAIN MOISTURE CONTENT OF FILL MATERIAL WITHIN THREE (3) PERCENT OF OPTIMUM TO ATTAIN REQUIRED COMPACTION DENSITY.
- A QUALIFIED GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF VIRGINIA, SHOULD BE CONSULTED CONCERNING SOIL STABILITY, SLOPE STABILIZATION, SOIL COMPACTION, TESTING, AND OTHER SOIL CHARACTERISTICS. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING FROM SAME.

## Utilities Marked per Miss Utility Ticket #A324200844-00A

Company	Contact	Phone Number	Damage Contact Phone Number
Appalachian Power	USIC Locating Service	(800) 778-9140	(800) 956-4237
Cox Communications	Lisa Gill	(757) 944-0638	(540) 915-2603
Roanoke Gas Company	USIC Locating Service	(800) 778-9140	(800) 777-4427
Verizon	Dean Roamussen	(434) 942-8192	(877) 562-2253
Western VA Water Authority	Rachel Taylor	(540) 853-5641	(540) 853-2792

STORM DRAIN STRUCTURE  
COORDINATE CHART

STRUCTURE	NORTHING	EASTING
EX	3635626.6789	11053729.0206
A	3635533.5449	11053649.2941
A1	3635531.6486	11053696.2162
B	3635818.5199	11053504.9179
C	3635910.7648	11053281.1814
D	3636033.3368	11053218.0900
D1	3636124.3175	11053241.6824
D2	3636268.2222	11053409.2539
D3	3636300.7719	11053459.6239
D4	3636355.8669	11053503.9137
D5	3636473.5992	11053357.4590
D6	3636535.1562	11053274.7066
D7	3636321.9750	11053560.2558
D8	3636291.3091	11053597.0882
E	3636242.3236	11053003.8777
F	3636339.3690	11053089.5225
G	3636472.8174	11052931.2648
G1	3636524.2228	11052920.2023
H	3636481.5354	11052879.0194
I	3636395.4194	11052795.9381
I1	3636370.8902	11052772.2733
I2	3636360.1581	11052761.9194
I3	3636332.8801	11052735.6025
J	3636358.8608	11052799.5743

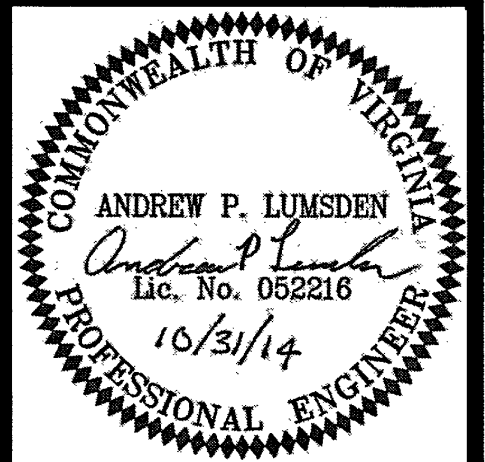
## LEGEND

ITEM	EXISTING	PROPOSED
Pavement	---	---
Curb and Gutter	---	---
Curb	---	---
Storm Drain Line	---EX. 24" RCP---	---24" RCP---
Sanitary Sewer Manhole	---	---
Sanitary Sewer Line	---EXIST. 8" SS---	---
Waterline	---EXIST. 8" W---	---
Hydrant	---	---
Overhead Utility Line	---	---
Underground Comm. Line	---	---
Underground Gas Line	---	---
Utility Pole	---	---
Fence	---	---
Water Meter	---	---
Gas Valve	---	---
Water Valve	---	---
Contours	---1216---	---1216---
Pavement	---	---
Gravel	---	---
Concrete	---	---

APPROVED  
JUL 19 2014

STORMWATER DRAINAGE IMPROVEMENTS  
FOR  
PHASE 1  
FRESNO STREET / ASPEN STREET, N.W.  
PREPARED FOR  
THE CITY OF ROANOKE, VIRGINIA

LUMSDEN ASSOCIATES, P.C.  
ENGINEERS-SURVEYORS-PLANNERS  
ROANOKE, VIRGINIA



## NOTES &amp; INDEX MAP

REVISIONS	NO.	DATE	DESCRIPTION
	1		
	2		
	3		
	4		
	5		

DATE: October 31, 2014  
SCALE: 1" = 80'  
COMMISSION NO: 13-162  
SHEET 2 OF 12

PHONE (540) 774-4411  
FAX (540) 773-9441  
E-MAIL: MAIL@LUMSDENPC.COM

4664 BRIMLEY AVENUE  
ROANOKE, VIRGINIA 24018