UTILITY OWNERS:

TICKET: A534300241 REV: 00A TAKEN: 12/09/15 08:15 AM STATE: VA CNTY: ROANOKE CITY PLACE: ADDRESS: ELM AVE SW RESPONSES DUE BY: 01/04/16 07:00 AM RESPONSE MARKING DESCRIPTION

APPALACHIAN POWER (AEP111) 12/30/15 08:48 AM 10 FIELD CONTACT: USIC LOCATING SERVICE (800) 778-9140 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 956-4237

COMCAST (CMC250) NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: S & N (804) 608-5640 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 441-6917 EXT OPT 1

COMCAST (CMC251) NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: S & N (804) 608-5640 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 441-6917 EXT OPT 1

COX COMMUNICATIONS (COX268) NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: LISA OLSEN (757) 951-7211 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 915-2603

LUMOS NETWORK (LMS546) 12/31/15 12:48 PM 30 NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: S & N (804) 608-5640 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (800) 441-6930

LEVEL 3 COMMUNICATIONS (LTC903) NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: CALL CENTER (877) 366-8344

IN THE EVENT OF DAMAGE TO A FACILITY CALL: (877) 366-8344 ROANOKE GAS (RGC162) 12/31/15 12:48 PM 10

FIELD CONTACT: S & N (804) 608-5640 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 777-4427

ROANOKE CITY-SIGNAL (ROA853) 12/09/15 02:28 PM 30 NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: BOB SWAIN (540) 853-2691

VERIZON (VZN804) 12/27/15 04:50 PM 10 FIELD CONTACT: UTILIQUEST (703) 754-2116

IN THE EVENT OF DAMAGE TO A FACILITY CALL: (877) 562-2253

IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 537-8496

WESTERN VA - WATER & SEWE (WVW853) 12/16/15 02:17 PM 12 FIELD CONTACT: YVONNE DOOLITTLE (540) 853-2596

IN THE EVENT OF DAMAGE TO A FACILITY CALL: (540) 853-2792

WINDSTREAM KDL (WXN456) 12/30/15 08:48 AM 30 NO CONFLICT; UTILITY IS OUSIDE OF STATED WORK AREA. FIELD CONTACT: DAMAGE PREVENTION GROUP (888) 599-3166 IN THE EVENT OF DAMAGE TO A FACILITY CALL: (804) 400-9744

TICKET: A534300251 REV: 00A TAKEN: 12/09/15 08:22 AM

ADDRESS: ELM AVE SW RESPONSES DUE BY: 01/04/16 07:00 AM

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SURVEY NOTES:

THIS LOCTION SURVEY OF ELM AVENUE WATER MAIN REPLACEMENT (PHASE I) WAS COMPETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF TIMOTHY W. CALDWELL, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION: THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON DECEMBER 21 - 31, 2015; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

2. HORIZONTAL (NAD 83/2011) AND VERTICAL (NAVD88) CONTROL WAS ESTABLISHED BY STATIC GPS SURVEY COMPLETED ON NOVEMBER 30, 2015 BY TIMOTHY W. CALDWELL, L.S. USING NATIONAL GEODETIC SURVEY CORS MONUMENT "LSO4".

3. CONTOURS SHOWN HEREON ARE AT 1 FOOT INTERVALS.

4. UNDERGROUND UTILITIES LOCATIONS BASED ON DESIGNATION BY MISS UTILITY TICKET A534300241 REV: 00A TAKEN 12/09/15 08:15 AM, AND TICKET A534300251 REV: 00A TAKEN 12/09/15 08:22 AM.

<u>SURVEY CONTROL</u>

PT #1: N: 3623858.18\$2 E: 11062030.7550 ELEV: 962.984' BEARING: N 81° 04' 43" E HDIST: 454.67' PT #2: N: 3623928.6940 E: 11062479.9246 ELEV: 982.555' BEARING: S 85' 23' 37" E HDIST: 382.61' PT #3: N: 3623897.9657 E: 11062861.2983 ELEV: 1012.813' BEARING: N 89' 46' 30" E HDIST: 291.14' PT #4: N: 3623899.1097 E: 11063152.4375 ELEV: 992.662' BEARING: N 81° 20′ 48" E HDIST: 464.78'

PT #5: N: 3623969.0395 E: 11063611.9262 ELEV: 955.939'

CHISELED SQUARE ON S. E. CORNER OF CONCRETE PAD FOR SIGNAL CABINET AT THE INTERSECTION OF ELM AVE SW. AND FRANKLIN RD. SW.

BENCHMARK #2
CHISELED SQUARE ON S. E. CORNER OF CURB INLET LOCATED ON S.W. SIDE OF THE INTERSECTION OF ELM AVE. SW AND JEFFERSON ST. SW. ELEVATION = 957.02

SURVEY LEGEND:

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CONC CONCRETE OCO CLEANOUT ENTR. ENTRANCE FIBER OPTIC MANHOLE FIBER OPTIC HANDHOLE -O-FH FIRE HYDRANT GV GAS VALVE OGP GUY POLE > GUY WIRE □□□ LIGHT POLE PIPE STUB

BM BENCHMARK

POWER POLE S SANITARY SEWER MANHOLE **(** STORM DRAIN MANHOLE TRAFFIC CONTROL CABINET TRAFFIC LIGHT POLE TRAFFIC HANDHOLE TRAFFIC MANHOLE

WATER MANHOLE WATER METER ----- G ----- GAS MAIN OR SERVICE LINE ----- C ------ OVERHEAD COMMUNICATION LINE E — OVERHEAD ELECTRIC LINE ———E/C——— OVERHEAD ELECTRIC\COMMUNICATION LINE

----- S ------ SANITARY SEWER LINE ----- SD ----- STORM DRAIN LINE — — — UE — UNDERGROUND ELECTRIC LINE ---FO-U- UNDERGROUND FIBER OPTIC LINE

TREE

------ W ------ WATER MAIN OR SERVICE LINE PROPOSED WATER LINE PROPOSED VALVE PROPOSED WATER METER PROPOSED FIRE HYDRANT PROPOSED AIR RELEASE OR BLOW OFF VALVE

D1 Curb Inlet (DI-3) Top Rim = 963.32' inv. Out 15" RCP = 959.12'

D2 Curb inlet (DI-3) Top Rim = 961.59' inv. In 24" RCP = 954.94' Inv. Out 24" RCP = 954.71' Storm Sewer Manhole

D3 Top Rim = 959.92' Inv. in 18" RCP = 954.32' (From D2) Inv. In 20" RCP = 951.58' inv. Out 20" RCP = 951.18'

D4 Curb Inlet (DI-2) Top of Grate = 956.41' Inv. In 24" RCP = 949.00' (From D3) inv. In 24" RCP = 947.51' Inv. Out 24" RCP = 947.43' (D5) Storm Sewer Manhole Top Rim = 957.66'

Inv. In 24" RCP = 951.66'

Inv. Out 24" RCP = 951.61' D6 Storm Sewer Manhole Paved Over Top Rim = 959.97

(D7) Curb Inlet (DI-3) Top Rim = 962.78'Inv. In 15" RCP = 956.43' inv. Out 15" RCP = 956.28'

D8 Curb Inlet (DI-3)
Top Rim = 964.58' Inv. In 15" RCP = 959.93" Inv. In 24" RCP = 957.91' inv. Out 24" RCP = 957.58' D9 Curb Inlet (DI-2) Top Grate = 963.21'

Inv. Out 18" RCP = 954.36' D10 Curb Inlet (DI-3) Top Rim = 963.40'Inv. In 15" RCP = 958.60' Inv. Out 15" RCP = 955.88'

D11 Curb Inlet (DI-3) Top Rim = 970.18'inv. In 24" RCP = 965.63' Inv. in 24" RCP = 965.13' Inv. Out 15" RCP = 961.63'

D12 Curb inlet (DI-3) Top Rim = 963.66' inv. Out 15" RCP = 955.66' (D13) Curb Inlet

Top Rim = 1012.76'Full of Debris D14 Storm Sewer Manhole (System Abandon)
Top Rim = 989.61' lnv. ln = 986.98'

Inv. Out = 986.31D15 Catch Basin Top Grate = 971.48' Inv. Out 4" = D16 Curb Inlet (DI-3) Top Rim = 958.67

Inv. ln = 986.33'

Inv. Out 15" Out = 955.33' D17 Storm Sewer Manhole Top Rim = 957.31' Inv. In 15" RCP = 954.36' (From D20) Inv. In 15" RCP = 953.64' inv. Out 15" RCP = 953.62'

D18 Storm Sewer Manhole Top Rim = 956.49' inv. in 10" RCP = 953.95' (From D20) Inv. In 12" RCP = 953.79' (From D22) inv. in 15" RCP = 952.11' (From D17) inv. Out 15" CMP = 951.56'

D19 Curb Inlet (DI-3) Top Rim = 954.49' Inv. In 15" CMP = 951.19" Curb Inlet (DI-3) D20 Top Rim = 957.97' inv. in 8" PVC = 956.12' (From Church)

inv. Out 15" RCP = 955.63'

D21 Curb Inlet (DI-3) Top Rim = 956.99' inv. Out 10" RCP = 954.34'

D22 Catch Basin Top Grate = 956.19' Inv. Out 12" RCP = 953.92'

(D23) Storm Drain Manhole (System Abandon) Top Rim = 989.20'Flow = 986.50'

D24 Storm Drain Manhole (System Abandon)
Top Rim = 988.50'

D25 Curb Inlet (DI-3) Top Rim = 965.60' Inv in 24" RCP = 958.66' Inv. Out 24" RCP = 958.59'

Flow = 983.15'

D26 Curb Inlet (DI-2) Top Grate = 954.00' inv. In 18" RCP = 949.57" Inv. Out 18" RCP = 949.35'

D27 Catch Basin Top Grate = 958.69' Inv. Out 15" RCP = 964.19' S1 Sanitary Sewer Manhole Top Rim = 954.02' 8" Flow = 548.61'

S2 Sanitary Sewer Manhole Top Rim = 954.15' 12" Flow = 948.91' S3 Sanitary Sewer Manhole Top Rim = 961.35'

12" Flow = 955.40' Sanitary Sewer Manhole
Top Rim = 961.90' 12" Flow = 956.30'S5 Sanitary Sewer Manhole Top Rim = 971.10'

12" Flow = 964.40' Sanitary Sewer Manhole
Top Rim = 968.93' 8" Flow = 963.92'

Sanitary Sewer Manhole
Top Rim = 971.23' 8" Flow = 965.50'

S8 Sanitary Sewer Manhole Paved Over S9 Sanitary Sewer Manhole Top Rim = 983.07' 8" Flow = 976.51"

S10 Sanitary Sewer Manhole Top Rim = 993.89' 8" Flow = 990.44' (S11) Sanitary Sewer Manhole Top Rim = 1012.54

8" Flow = 1008.64' S12 Sanitary Sewer Manhole Top Rim = 991.19'

8" Flow = 985.39' S13 Sanitary Sewer Manhole Top Rim = 988.64' 8" Flow = 986.57'

S14 Sanitary Sewer Manhole Top Rim = 971.61' 12° Flow = 964.25'

S15 Sanitary Sewer Manhole Top Rim = 957.56' Inv. In = 953.16' (Lat. From Church) 12" Inv. In = 953.16' 12" Inv. Out = 952.76'

Sanitary Sewer Manhole
Top Rim = 954.81'

Sanitary Sewer Manhole Top Rim = 958.49' 8" Inv. in = 951.61' 12" lnv. ln = 951.42'15" inv. Out = 949.78' Sanitary Sewer Manhole S18 Top Rim = 954.47'

S19 Sanitary Sewer Manhole Top Rim = 994.26' 8" Flow = 991.76'

W1 Water Manhole Top Rim = 961.69'Top of Nut = 959.49'

(W2) Water Manhole Water Meter Top Rim = 960.99'(W3) Water Manhole

Top Rim = 961.37'Top of Nut = 958.20' (W4) Water Manhole Top Rim = 961.02'Top of Nut = 958.34'

(W5) Water Manhole Top Rim = 959.84'Top of Nut = 954.68' (W6) Water Manhole Top Rim = 961.21'Top of Nut = 959.99'

(W7) Water Manhole Top Rim = 960.87'Top of Nut = 960.15W8 Water Manhole Water Meter

Top Rim = 971.14'W9 Water Manhole Water Meter Top Rim = 971.63'

(W10) Water Manhole Top Rim = 981.73'Top of Nut = 979.81' (W11) Water Manhole Top Rim = 982.32'Top of Nut = 980.78'

W12 Water Manhole Top Rim = 983.69'Top of Nut = 980.99' W13 Water Manhole Water Meter

Top Rim = 1008.35'(W14) Water Manhole --- Water Meter Top Rim = 1008.80'

W15) Water Manhole Top Rim = 1010.39'Top of Nut = 1008.89(W16) Water Manhole

Top Rim = 1010.78Top of Nut = 1008.68' W17 Water Manhole Top Rim = 1012.24Top of Nut = 1010.14(W18) Water Manhole

Top Rim = 1012.67Top of Nut = 1009.72'W19 Water Manhole Water Meter Top Rim = 1008.77

W20 Water Manhole Water Meter Top Rim = 1008.09W21 Water Manhole Top Rim = 990.18' Top of Nut = 987.85'

(W22) Water Manhole Top Rim = 990.27Top of Nut = 988.57(W23) Water Manhole Top Rim = 990.78

> (W24) Water Manhole Water Meter Top Rim = 982.73'(W25) Water Manhole

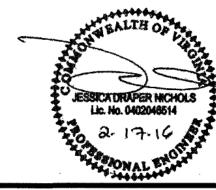
Top of Nut = 989.24'

Top Rim = 966.15'(W26) Water Manhole Top Rim = 966.31'Top of Nut = 963.97'

(W27) Water Manhole

Top Rim = 956.37Top of Nut = 952.64(W28) Water Manhole Top Rim = 954.19Top of Nut = 950.96'

(W29) Water Manhole Top Rim = 953.91'Top of Nut = 952.46'





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DOCUMENT NO.