



| BASE LINE TABLE |          |          |              |              |                        |
|-----------------|----------|----------|--------------|--------------|------------------------|
| POINT NUMBER    | STATION  | OFFSET   | NORTHING     | EASTING      | DESC                   |
| 99              | 39+77.28 | 0.00' RL | 1696599.7724 | 1656244.6055 | 17th BL                |
| 100             | 49+43.75 | 0.00' RL | 1696619.0486 | 1657110.8554 | BL 17TH BEGN           |
| 101             | 49+99.65 | 0.00' RL | 1696622.5169 | 1657266.7201 | BL 17TH & GROVE        |
| 102             | 43+29.28 | 0.00' RL | 1696629.8502 | 1657596.2701 | BL 17TH & POPLAR S     |
| 103             | 53+35.19 | 0.00' RL | 1696629.9832 | 1657602.1800 | BL 17TH & POPLAR N     |
| 104             | 56+60.56 | 0.00' RL | 1696637.3081 | 1657927.4620 | BL 17TH & GREEN S      |
| 105             | 56+65.25 | 0.00' RL | 1696637.4138 | 1657932.1543 | BL 17TH & GREEN N      |
| 106             | 59+89.37 | 0.00' LL | 1696644.7106 | 1658256.1867 | BL 17TH & ESTELLE S    |
| 107             | 59+95.09 | 0.00' LL | 1696644.8395 | 1658261.9080 | BL 17TH & ESTELLE N    |
| 108             | 63+19.42 | 0.00' LL | 1696652.1411 | 1658586.1531 | BL 17TH & VOLUTSIA S   |
| 109             | 63+20.95 | 0.00' RL | 1696652.1756 | 1658587.6880 | BL 17TH & VOLUTSIA N   |
| 110             | 66+44.68 | 0.00' RL | 1696659.4637 | 1658911.3322 | BL 17TH & ERIE         |
| 111             | 69+74.40 | 0.00' LL | 1696666.8869 | 1659240.9744 | BL 17TH & CHAUTAUQUA S |
| 112             | 69+75.63 | 0.00' LL | 1696666.9144 | 1659242.1973 | BL 17TH & CHAUTAUQUA N |
| 113             | 73+04.56 | 0.00' RL | 1696674.3197 | 1659571.0491 | BL 17TH & LORRAINE S   |
| 114             | 73+05.79 | 0.00' LL | 1696674.3475 | 1659572.2815 | BL 17TH & LORRAINE N   |
| 115             | 76+39.80 | 0.00' RL | 1696681.8670 | 1659906.2030 | BL 17TH & HILLSIDE     |
| 116             | 79+99.94 | 0.00' LL | 1696689.7735 | 1660266.2604 | BL 17TH & HOLVOKE      |
| 117             | 81+32.18 | 0.00' RL | 1696692.6766 | 1660398.4644 | BL 17TH STREET         |
| 118             | 43+45.26 | 0.00' RL | 1695967.8300 | 1657274.5000 | BL GROVE               |
| 119             | 57+38.05 | 0.00' RL | 1697360.5134 | 1657257.3471 | BL GROVE               |
| 120             | 40+00.00 | 0.00' RL | 1695681.9863 | 1659921.6500 | BL HILLSIDE            |
| 121             | 49+00.00 | 0.00' RL | 1696581.8790 | 1659907.7477 | BL HILLSIDE 49+00      |
| 122             | 51+00.00 | 0.00' RL | 1696781.8583 | 1659904.8812 | BL HILLSIDE 51+00      |
| 123             | 60+00.00 | 0.00' LL | 1697681.7797 | 1659892.9850 | BL HILLSIDE 60+00      |

| CONTROL TABLE |                   |            |              |              |                 |
|---------------|-------------------|------------|--------------|--------------|-----------------|
| POINT NUMBER  | STATION           | OFFSET     | NORTHING     | EASTING      | DESC            |
| 1             | 66+25.28          | 37.93' RL  | 1658892.7940 | 1696621.1030 | SDM0            |
| 3             | 59+71.42          | 43.05' RL  | 1658239.2130 | 1696601.2700 | SDM0            |
| 4             | 62+95.88          | 50.54' LL  | 1658561.5110 | 1696702.1340 | SD 1/2"SRB      |
| 6             | 56+90.53          | 50.08' RL  | 1657958.5800 | 1696587.9200 | SD 3/4"PIPE     |
| 7             | 56+61.09          | .11' LL    | 1657927.9890 | 1696637.4290 | SD 3/4"PIPE     |
| 8             | 53+29.72          | 0.00' RL   | 1657596.7130 | 1696629.8620 | SD 3/4"PIPE     |
| 9             | 49+70.13          | 50.08' LL  | 1657237.2110 | 1696571.7800 | SD 3/4"PIPE     |
| 17            | 79+04.36          | 27.15' RL  | 1660171.3100 | 1696660.5300 | SDM0            |
| 18            | 75+87.49          | 24.02' RL  | 1659853.3900 | 1696704.7000 | SDM0            |
| 56            | 56+84.12          | 78.82' RL  | 1659973.8400 | 1697366.7000 | SDM0            |
| 57            | 55+36.82          | 30.34' LL  | 1659868.7900 | 1697218.2400 | SDM0            |
| 124           | 43+22.12          | 36.57' RL  | 1696570.8857 | 1656590.1744 | BM 17TH 43+22   |
| 125           | 50+24.19          | 43.89' LL  | 1696666.9242 | 1657290.2817 | BM #8           |
| 126           | 56+80.85          | 61.02' LL  | 1696698.7661 | 1657946.3788 | BM #6           |
| 128           | 60+10.49          | 50.01' LL  | 1696695.1832 | 1658276.1769 | BM #5           |
| 129           | 63+05.54          | 70.22' LL  | 1696722.0276 | 1658570.6958 | BM #4           |
| 131           | 69+60.30          | 70.00' LL  | 1696736.5526 | 1659225.2980 | BM #3           |
| 132           | 72+90.34          | 69.07' LL  | 1696743.0518 | 1659555.2743 | BM #2           |
| 134           | 76+07.38          | 43.35' RL  | 1696637.8018 | 1659874.7650 | BM #1           |
| 136           | 80+12.54          | 96.22' RL  | 1696593.8582 | 1660280.9670 | BM #10          |
| 137           | Outside Alignment | Parameters | 1696597.6228 | 1660644.6469 | BM #11          |
| 142           | 53+20.04          | 89.73' LL  | 1696719.0549 | 1657585.0365 | BM #7           |
| 1000          | 70+00.64          | 50.93' LL  | 1659585.6500 | 1696724.9600 | SD 1/2"PIPE     |
| 1001          | 73+30.50          | 50.07' LL  | 1659266.0800 | 1696718.3900 | SD 1/2"PIPE     |
| 1002          | 73+29.76          | 49.66' RL  | 1659597.3800 | 1696625.2400 | SD 1"PIPE       |
| 3142          | 62+94.48          | 49.94' RL  | 1658562.3580 | 1696601.6590 | SD 3/4"PIPE     |
| 3279          | 60+20.09          | 49.68' LL  | 1658285.8030 | 1696695.0690 | SD 5/8"ACLS     |
| 4335          | 49+70.13          | 50.08' LL  | 1657236.0960 | 1696671.9120 | SD 5/8"BAR      |
| 4424          | 46+39.15          | 50.03' LL  | 1658905.1970 | 1696664.5160 | SD 1"PIPE       |
| 4441          | 46+38.21          | 50.00' RL  | 1658906.4820 | 1696564.5200 | +CUT            |
| 4512          | 43+07.36          | 50.07' RL  | 1658575.7190 | 1696557.0570 | SD 3/4"PIPE     |
| 4513          | 43+67.30          | 49.90' RL  | 1658635.6560 | 1696558.5600 | SD 1"PIPE       |
| 4525          | 46+98.20          | 50.20' RL  | 1658966.4640 | 1696565.6240 | SD 1/2"BAUGHMAN |
| 4560          | 40+17.71          | 40.00' LL  | 1658373.4100 | 1696651.0730 | SD 1"PIPE       |

| WATER TABLE  |          |           |              |              |                         |
|--------------|----------|-----------|--------------|--------------|-------------------------|
| POINT NUMBER | STATION  | OFFSET    | NORTHING     | EASTING      | DESC                    |
| 70000        | 50+41.31 | 22.67' LL | 1696663.5450 | 1657243.5294 | L1 Top Sleeve & Valve   |
| 70001        | 49+65.19 | 22.54' LL | 1696587.4476 | 1657244.5932 | L1 Tee                  |
| 70002        | 49+65.16 | 34.54' LL | 1696587.2798 | 1657232.5944 | L1 Fire hydrant         |
| 70003        | 47+60.69 | 22.11' LL | 1696382.9707 | 1657247.4518 | L1 Tee & Valve/Blow off |
| 70004        | 47+60.74 | 8.70' LL  | 1696383.1785 | 1657260.8644 | L1 Connect to Exist     |
| 70005        | 47+54.69 | 22.10' LL | 1696376.9713 | 1657247.5357 | L1 Blowoff              |
| 70006        | 53+10.39 | 33.66' LL | 1696663.0857 | 1657576.6334 | Fire Hydrant W Valve    |
| 70007        | 53+01.85 | 33.81' LL | 1696663.0456 | 1657568.0918 | Fire Hydrant            |
| 70008        | 56+62.13 | 61.45' LL | 1696698.7806 | 1657927.6487 | L2 Connect to Exist     |
| 70009        | 56+57.61 | 61.50' LL | 1696698.7261 | 1657923.1300 | L2 90' Bend             |
| 70010        | 56+57.55 | 55.50' LL | 1696692.7265 | 1657923.2024 | L2 Tee                  |
| 70011        | 56+57.35 | 36.39' LL | 1696673.6113 | 1657923.4329 | L2 Tee                  |
| 70012        | 56+57.31 | 32.49' LL | 1696669.7113 | 1657923.4799 | L2 45' Bend             |
| 70013        | 56+57.27 | 29.04' LL | 1696666.2615 | 1657923.5215 | L2 45' Bend             |
| 70014        | 56+57.21 | 23.04' LL | 1696660.2619 | 1657923.5939 | L2 45' Bend             |
| 70015        | 56+57.13 | 19.75' LL | 1696656.9712 | 1657923.5939 | L2 45' Bend             |
| 70016        | 56+56.55 | 40.22' RL | 1696597.0065 | 1657924.3566 | L2 Tee                  |
| 70017        | 56+33.55 | 39.98' RL | 1696596.7292 | 1657901.3583 | L2 FH Assy              |
| 70018        | 56+56.39 | 55.50' RL | 1696581.7281 | 1657924.5408 | L2 Tee                  |
| 70019        | 56+42.93 | 55.36' RL | 1696581.5656 | 1657911.0820 | L2 Ex Wtr               |
| 70020        | 56+56.32 | 61.50' RL | 1696575.7294 | 1657924.6132 | L2 Blowoff              |
| 70021        | 69+74.57 | 61.17' LL | 1696728.0422 | 1659239.7632 | L3 Ex Wtr               |
| 70022        | 69+70.05 | 61.25' LL | 1696728.0233 | 1659235.2441 | L3 90' Bend             |
| 70023        | 69+69.95 | 55.96' LL | 1696722.7333 | 1659235.2663 | L3 Tee                  |
| 70024        | 69+69.59 | 39.98' LL | 1696702.7478 | 1659235.3500 | L3 Tee to L4            |
| 70025        | 69+50.26 | 36.33' LL | 1696702.6668 | 1659216.0176 | L4 Tee                  |
| 70026        | 69+50.32 | 39.83' LL | 1696706.1668 | 1659216.0030 | L4 FH Assy              |
| 70027        | 69+69.55 | 34.10' LL | 1696700.8734 | 1659235.3579 | L3 45' Bend             |
| 70028        | 69+69.46 | 29.25' LL | 1696696.0134 | 1659235.3782 | L3 45' Bend             |
| 70029        | 69+69.28 | 19.25' LL | 1696686.0128 | 1659235.4201 | L3 45' Bend             |
| 70030        | 69+69.21 | 15.33' LL | 1696682.0936 | 1659235.4365 | L3 45' Bend             |
| 70031        | 69+67.92 | 55.21' RL | 1696611.5442 | 1659235.7321 | L3 Tee                  |
| 70032        | 69+62.93 | 55.12' RL | 1696611.5233 | 1659230.7441 | L3 Ex Wtr               |
| 70033        | 69+67.82 | 60.50' RL | 1696606.2542 | 1659235.7543 | L3 Wtr Blowoff          |
| 70034        | 76+14.89 | 17.94' RL | 1696683.3698 | 1659881.7079 | L5 Ex Wtr               |
| 70035        | 79+16.67 | 18.01' RL | 1696669.9416 | 1660183.4045 | L5 Tee                  |
| 70036        | 80+05.41 | 18.00' RL | 1696671.8936 | 1660272.1202 | L5 Tee to L6            |
| 70037        | 81+33.18 | 18.00' RL | 1696674.7046 | 1660399.8593 | L4 Tee                  |
| 70038        | 81+33.18 | 22.79' RL | 1696669.9165 | 1660399.9646 | L5 Ex Wtr               |
| 70039        | 81+38.16 | 18.00' RL | 1696674.8141 | 1660404.8376 | L5 Blowoff              |
| 70040        | 80+05.41 | 43.00' RL | 1696646.8999 | 1660272.6690 | L6 90' Bend             |
| 70041        | 80+15.81 | 43.00' RL | 1696647.1282 | 1660283.0667 | L6 Ex Wtr               |
| 70042        | 80+05.41 | 55.44' RL | 1696634.4692 | 1660272.9420 | L6 Blowoff              |
| 70043        | 56+52.55 | 55.55' LL | 1696692.6653 | 1657918.2026 | L2 Ex Wtr               |
| 70044        | 69+65.05 | 56.00' LL | 1696722.6588 | 1659230.3600 | L3 Ex Wtr               |
| 70045        | 75+94.58 | 30.29' LL | 1696711.1308 | 1659860.3078 | Hillside FH             |
| 70046        | 75+84.50 | 30.32' LL | 1696710.9367 | 1659850.2232 | 90' Bend                |
| 70047        | 75+84.50 | 36.23' LL | 1696716.8453 | 1659850.1015 | Hillside FH Assy        |

**17th STREET  
FROM GROVE TO HILLSIDE**

**STORM SEWER  
BUBBLE MAP**

SHEET TITLE  
87 N-0349-01  
PROJECT NUMBER

JRA  
DESIGN BY  
JSB  
DRAWN BY  
JRA  
CHECKED BY

ISSUED  
May 28, 2009

REVISED

SHEET NO.  
60 of 133

PLOTFILE: Thursday, May 28, 2009 @ 10:44AM

J:\CIVIL\04179\DWG\WATER\04179-WTR-BUBBLE1.DWG