# Storm Sewer Inventory Report

SCM 1A 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 52.749 | -0.892 | DrGrt | 0.00 | 0.26 | 0.60 | 10.0 | 349.00 | 7.20 | 352.80 | 30 | Cir | 0.013 | 1.15 | 358.45 | Pipe - (444) |
| 2 | 1 | 125.000 | -46.452 | DrGrt | 0.00 | 0.40 | 0.60 | 10.0 | 353.00 | 0.56 | 353.70 | 30 | Cir | 0.013 | 0.86 | 361.06 | Pipe - (443) |
| 3 | 2 | 177.766 | 31.266 | DrGrt | 0.00 | 0.33 | 0.60 | 10.0 | 353.90 | 0.51 | 354.80 | 30 | Cir | 0.013 | 0.50 | 362.54 | Pipe - (442) |
| 4 | 3 | 260.092 | 0.417 | DrGrt | 0.00 | 0.47 | 0.60 | 10.0 | 355.00 | 0.50 | 356.30 | 30 | Cir | 0.013 | 0.54 | 362.99 | Pipe - (441) |
| 5 | 4 | 155.941 | 18.185 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 356.50 | 0.50 | 357.28 | 30 | Cir | 0.013 | 2.02 | 362.55 | Pipe - (440) |
| 6 | 5 | 86.389 | 90.703 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 357.83 | 2.95 | 360.38 | 24 | Cir | 0.013 | 1.13 | 365.47 | Pipe - (447) |
| 7 | 6 | 43.841 | 45.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 360.58 | 0.50 | 360.80 | 24 | Cir | 0.013 | 1.13 | 367.61 | Pipe - (446) |
| 8 | 7 | 28.000 | -45.000 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 361.00 | 0.64 | 361.18 | 24 | Cir | 0.013 | 1.13 | 367.61 | Pipe - (453) |
| 9 | 8 | 43.841 | -45.000 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 361.37 | 0.52 | 361.60 | 24 | Cir | 0.013 | 1.62 | 367.82 | Pipe - (452) |
| 10 | 9 | 28.018 | -47.046 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 362.56 | 0.50 | 362.70 | 18 | Cir | 0.013 | 1.11 | 367.79 | Pipe - (24) |
| 11 | 10 | 43.139 | -43.893 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 362.90 | 0.51 | 363.12 | 18 | Cir | 0.013 | 1.61 | 367.57 | Pipe - (15) |
| 12 | 11 | 106.050 | 45.939 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 363.40 | 0.50 | 363.93 | 18 | Cir | 0.013 | 0.75 | 369.08 | Pipe - (14) |
| 13 | 12 | 60.787 | 26.463 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 364.20 | 0.51 | 364.51 | 15 | Cir | 0.013 | 1.00 | 370.30 | Pipe - (11) (1) |
| 14 | 13 | 57.233 | -1.964 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 366.48 | 1.15 | 367.14 | 15 | Cir | 0.013 | 1.41 | 371.16 | Pipe - (11) |
| 15 | 14 | 26.000 | -63.106 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 367.34 | 0.96 | 367.59 | 15 | Cir | 0.013 | 1.00 | 371.41 | Pipe - (67) |
| 16 | 14 | 161.000 | 35.067 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 367.34 | 4.36 | 374.36 | 15 | Cir | 0.013 | 1.00 | 378.18 | Pipe - (489) |
| 17 | 9 | 111.287 | 42.545 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 361.80 | 0.50 | 362.36 | 24 | Cir | 0.013 | 1.50 | 372.84 | Pipe - (451) |
| 18 | 17 | 28.000 | -97.237 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 362.56 | 0.50 | 362.70 | 24 | Cir | 0.013 | 0.50 | 372.72 | Pipe - (445) |
| 19 | 18 | 76.222 | -6.841 | DrGrt | 0.00 | 1.40 | 0.60 | 10.0 | 363.51 | 0.51 | 363.90 | 15 | Cir | 0.013 | 1.00 | 367.36 | Pipe - (476) |
| 20 | 13 | 31.121 | 85.999 | DrGrt | 0.00 | 0.14 | 0.60 | 10.0 | 364.71 | 0.51 | 364.87 | 15 | Cir | 0.013 | 1.00 | 368.69 | Pipe - (477) |
| 21 | 11 | 26.015 | -41.858 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 363.56 | 0.50 | 363.69 | 15 | Cir | 0.013 | 1.00 | 367.51 | Pipe - (68) |
| 22 | 5 | 28.000 | 0.703 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 358.59 | 0.50 | 358.73 | 15 | Cir | 0.013 | 1.00 | 362.55 | Pipe - (439) |
| 23 | End | 158.125 | 14.099 | Comb | 0.00 | 0.30 | 0.60 | 10.0 | 347.00 | 4.23 | 353.69 | 30 | Cir | 0.013 | 2.02 | 361.92 | Pipe - (71) |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1A 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 102.646 | 78.324 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 354.24 | 0.50 | 354.75 | 24 | Cir | 0.013 | 1.68 | 363.01 | Pipe - (77) |
| 25 | 24 | 28.000 | -90.230 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 358.83 | 1.29 | 359.19 | 18 | Cir | 0.013 | 1.13 | 363.01 | Pipe - (115) |
| 26 | 25 | 43.841 | 45.001 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 359.39 | 0.50 | 359.61 | 18 | Cir | 0.013 | 1.11 | 364.28 | Pipe - (76) |
| 27 | 26 | 28.006 | 43.837 | Comb | 0.00 | 0.40 | 0.60 | 10.0 | 359.81 | 0.50 | 359.95 | 18 | Cir | 0.013 | 1.50 | 364.29 | Pipe - (75) |
| 28 | 27 | 238.741 | -95.835 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 360.15 | 3.41 | 368.30 | 18 | Cir | 0.013 | 1.03 | 372.43 | Pipe - (101) |
| 29 | 28 | 45.226 | -39.872 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 368.57 | 2.83 | 369.85 | 15 | Cir | 0.013 | 1.00 | 373.68 | Pipe - (103) |
| 30 | 23 | 28.983 | 5.477 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 354.77 | 0.86 | 355.02 | 24 | Cir | 0.013 | 1.50 | 361.89 | Pipe - (70) |
| 31 | 30 | 81.813 | -18.633 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 355.22 | 0.51 | 355.64 | 24 | Cir | 0.013 | 0.43 | 363.66 | Pipe - (510) |
| 32 | 31 | 72.154 | -22.294 | DrGrt | 0.00 | 0.59 | 0.60 | 10.0 | 356.18 | 0.51 | 356.55 | 18 | Cir | 0.013 | 0.50 | 360.46 | Pipe - (509) |
| 33 | 32 | 96.135 | -1.660 | DrGrt | 0.00 | 0.94 | 0.60 | 10.0 | 356.75 | 1.19 | 357.89 | 18 | Cir | 0.013 | 0.50 | 361.60 | Pipe - (508) |
| 34 | 33 | 202.630 | 10.144 | DrGrt | 0.00 | 0.81 | 0.60 | 10.0 | 358.16 | 1.65 | 361.50 | 15 | Cir | 0.013 | 1.00 | 364.94 | Pipe - (507) |
| 35 | 30 | 88.766 | -94.067 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 357.75 | 0.77 | 358.43 | 15 | Cir | 0.013 | 0.79 | 362.45 | Pipe - (69) |
| 36 | 35 | 121.131 | 28.141 | Comb | 0.00 | 0.38 | 0.60 | 10.0 | 358.63 | 0.95 | 359.78 | 15 | Cir | 0.013 | 1.21 | 363.80 | Pipe - (61) |
| 37 | 36 | 30.909 | -46.977 | Comb | 0.00 | 0.43 | 0.60 | 10.0 | 359.98 | 0.87 | 360.25 | 15 | Cir | 0.013 | 1.00 | 364.07 | Pipe - (72) |
| 38 | 36 | 217.760 | 28.893 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 359.98 | 1.08 | 362.34 | 15 | Cir | 0.013 | 1.00 | 366.16 | Pipe - (536) |
| 39 | 24 | 43.841 | 44.771 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 355.57 | 0.50 | 355.79 | 15 | Cir | 0.013 | 1.14 | 363.10 | Pipe - (105) |
| 40 | 39 | 28.003 | -45.813 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 355.99 | 0.50 | 356.13 | 15 | Cir | 0.013 | 1.50 | 363.11 | Pipe - (116) |
| 41 | 40 | 111.664 | 90.556 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 356.33 | 0.50 | 356.89 | 15 | Cir | 0.013 | 1.50 | 361.19 | Pipe - (104) |
| 42 | 41 | 28.509 | 88.780 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 357.09 | 0.53 | 357.24 | 15 | Cir | 0.013 | 1.00 | 361.06 | Pipe - (79) |
| 43 | 28 | 211.860 | -2.905 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 368.57 | 2.87 | 374.66 | 15 | Cir | 0.013 | 0.34 | 379.28 | Pipe - (590) |
| 44 | 43 | 146.606 | -16.815 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 374.86 | 0.50 | 375.60 | 15 | Cir | 0.013 | 1.50 | 379.82 | Pipe - (589) |
| 45 | 44 | 45.582 | 38.390 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 376.00 | 3.42 | 377.56 | 15 | Cir | 0.013 | 1.10 | 381.73 | Pipe - (588) |
| 46 | 45 | 28.000 | -43.358 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 377.76 | 0.50 | 377.90 | 15 | Cir | 0.013 | 1.00 | 381.73 | Pipe - (587) |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1A 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 44 | 28.000 | -91.856 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 375.80 | 0.71 | 376.00 | 15 | Cir | 0.013 | 1.00 | 379.82 | Pipe - (592) |

# Structure Report



SCM 1A 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 121 | DropGrate | 358.45 | Rect | 3.00 | 3.00 | 30 | Cir | 352.80 | 30 | Cir | 353.00 |
| 2 | YI 122 | DropGrate | 361.06 | Rect | 3.00 | 3.00 | 30 | Cir | 353.70 | 30 | Cir | 353.90 |
| 3 | YI 123 | DropGrate | 362.54 | Rect | 3.00 | 3.00 | 30 | Cir | 354.80 | 30 | Cir | 355.00 |
| 4 | YI 124 | DropGrate | 362.99 | Rect | 3.00 | 3.00 | 30 | Cir | 356.30 | 30 | Cir | 356.50 |
| 5 | CB 125 | Combination | 362.55 | Rect | 4.00 | 4.00 | 30 | Cir | 357.28 | 24<br>15 | Cir<br>Cir | 357.83<br>358.59 |
| 6 | CB 126 | Combination | 365.47 | Rect | 4.00 | 4.00 | 24 | Cir | 360.38 | 24 | Cir | 360.58 |
| 7 | CB 127 | Combination | 367.61 | Rect | 4.00 | 4.00 | 24 | Cir | 360.80 | 24 | Cir | 361.00 |
| 8 | CB 128 | Combination | 367.61 | Rect | 4.00 | 4.00 | 24 | Cir | 361.18 | 24 | Cir | 361.37 |
| 9 | CB 129 | Combination | 367.82 | Rect | 4.00 | 4.00 | 24 | Cir | 361.60 | 18<br>24 | Cir<br>Cir | 362.56<br>361.80 |
| 10 | CB 130 | Combination | 367.79 | Rect | 4.00 | 4.00 | 18 | Cir | 362.70 | 18 | Cir | 362.90 |
| 11 | CB 131 | Combination | 367.57 | Rect | 4.00 | 4.00 | 18 | Cir | 363.12 | 18<br>15 | Cir<br>Cir | 363.40<br>363.56 |
| 12 | CB 132 | Combination | 369.08 | Rect | 4.00 | 4.00 | 18 | Cir | 363.93 | 15 | Cir | 364.20 |
| 13 | JB 133 | Manhole | 370.30 | Cir | 4.00 | 4.00 | 15 | Cir | 364.51 | 15<br>15 | Cir<br>Cir | 366.48<br>364.71 |
| 14 | CB 134 | Combination | 371.16 | Rect | 4.00 | 4.00 | 15 | Cir | 367.14 | 15<br>15 | Cir<br>Cir | 367.34<br>367.34 |
| 15 | CB 134A | Combination | 371.41 | Rect | 4.00 | 4.00 | 15 | Cir | 367.59 | | | |
| 16 | CB 135 | Combination | 378.18 | Rect | 4.00 | 4.00 | 15 | Cir | 374.36 | | | |
| 17 | CB 136 | Combination | 372.84 | Rect | 4.00 | 4.00 | 24 | Cir | 362.36 | 24 | Cir | 362.56 |
| 18 | CB 136A | Combination | 372.72 | Rect | 4.00 | 4.00 | 24 | Cir | 362.70 | 15 | Cir | 363.51 |
| 19 | YI 136B | DropGrate | 367.36 | Rect | 3.00 | 3.00 | 15 | Cir | 363.90 | | | |
| 20 | YI 133A | DropGrate | 368.69 | Rect | 3.00 | 3.00 | 15 | Cir | 364.87 | | | |

# Structure Report



SCM 1A 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 131A | Combination | 367.51 | Rect | 4.00 | 4.00 | 15 | Cir | 363.69 | | | |
| 22 | CB 125A | Combination | 362.55 | Rect | 4.00 | 4.00 | 15 | Cir | 358.73 | | | |
| 23 | CB 101 | Combination | 361.92 | Rect | 4.00 | 4.00 | 30 | Cir | 353.69 | 24<br>24 | Cir<br>Cir | 354.24<br>354.77 |
| 24 | CB 102 | Combination | 363.01 | Rect | 4.00 | 4.00 | 24 | Cir | 354.75 | 18<br>15 | Cir<br>Cir | 358.83<br>355.57 |
| 25 | CB 106 | Combination | 363.01 | Rect | 4.00 | 4.00 | 18 | Cir | 359.19 | 18 | Cir | 359.39 |
| 26 | CB 107 | Combination | 364.28 | Rect | 4.00 | 4.00 | 18 | Cir | 359.61 | 18 | Cir | 359.81 |
| 27 | CB 108 | Combination | 364.29 | Rect | 4.00 | 4.00 | 18 | Cir | 359.95 | 18 | Cir | 360.15 |
| 28 | CB 109 | Combination | 372.43 | Rect | 4.00 | 4.00 | 18 | Cir | 368.30 | 15<br>15 | Cir<br>Cir | 368.57<br>368.57 |
| 29 | CB 109A | Combination | 373.68 | Rect | 4.00 | 4.00 | 15 | Cir | 369.85 | | | |
| 30 | CB 113 | Combination | 361.89 | Cir | 4.00 | 4.00 | 24 | Cir | 355.02 | 24<br>15 | Cir<br>Cir | 355.22<br>357.75 |
| 31 | JB 113A | Manhole | 363.66 | Rect | 4.00 | 4.00 | 24 | Cir | 355.64 | 18 | Cir | 356.18 |
| 32 | YI 113B | DropGrate | 360.46 | Rect | 3.00 | 3.00 | 18 | Cir | 356.55 | 18 | Cir | 356.75 |
| 33 | YI 113C | DropGrate | 361.60 | Rect | 3.00 | 3.00 | 18 | Cir | 357.89 | 15 | Cir | 358.16 |
| 34 | YI 113D | DropGrate | 364.94 | Rect | 3.00 | 3.00 | 15 | Cir | 361.50 | | | |
| 35 | CB 114 | Combination | 362.45 | Rect | 4.00 | 4.00 | 15 | Cir | 358.43 | 15 | Cir | 358.63 |
| 36 | CB 115 | Combination | 363.80 | Rect | 4.00 | 4.00 | 15 | Cir | 359.78 | 15<br>15 | Cir<br>Cir | 359.98<br>359.98 |
| 37 | CB 115A | Combination | 364.07 | Rect | 4.00 | 4.00 | 15 | Cir | 360.25 | | | |
| 38 | CB 116 | Combination | 366.16 | Rect | 4.00 | 4.00 | 15 | Cir | 362.34 | | | |
| 39 | CB 103 | Combination | 363.10 | Rect | 4.00 | 4.00 | 15 | Cir | 355.79 | 15 | Cir | 355.99 |
| 40 | CB 104 | Combination | 363.11 | Rect | 4.00 | 4.00 | 15 | Cir | 356.13 | 15 | Cir | 356.33 |

# Structure Report

SCM 1A 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 41 | CB 105 | Combination | 361.19 | Rect | 4.00 | 4.00 | 15 | Cir | 356.89 | 15 | Cir | 357.09 |
| 42 | CB 105A | Combination | 361.06 | Rect | 4.00 | 4.00 | 15 | Cir | 357.24 | | | |
| 43 | JB 110 | Manhole | 379.28 | Cir | 4.00 | 4.00 | 15 | Cir | 374.66 | 15 | Cir | 374.86 |
| 44 | CB 111 | Combination | 379.82 | Rect | 4.00 | 4.00 | 15 | Cir | 375.60 | 15<br>15 | Cir<br>Cir | 376.00<br>375.80 |
| 45 | CB 112 | Combination | 381.73 | Rect | 4.00 | 4.00 | 15 | Cir | 377.56 | 15 | Cir | 377.76 |
| 46 | CB 112A | Combination | 381.73 | Rect | 4.00 | 4.00 | 15 | Cir | 377.90 | | | |
| 47 | CB 111A | Combination | 379.82 | Rect | 4.00 | 4.00 | 15 | Cir | 376.00 | | | |

Project File: SCM 1A Storm Network.stm | Number of Structures: 47 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 1A 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (444) | 15.86 | 30 | Cir | 52.749 | 349.00 | 352.80 | 7.204 | 351.50 | 354.14 | n/a | 354.14 j | End | DropGrate |
| 2 | Pipe - (443) | 15.23 | 30 | Cir | 125.000 | 353.00 | 353.70 | 0.560 | 354.24 | 355.02 | n/a | 355.02 | 1 | DropGrate |
| 3 | Pipe - (442) | 14.24 | 30 | Cir | 177.766 | 353.90 | 354.80 | 0.506 | 355.13 | 356.07 | n/a | 356.07 | 2 | DropGrate |
| 4 | Pipe - (441) | 13.54 | 30 | Cir | 260.092 | 355.00 | 356.30 | 0.500 | 356.20 | 357.54 | 0.26 | 357.54 | 3 | DropGrate |
| 5 | Pipe - (440) | 12.24 | 30 | Cir | 155.941 | 356.50 | 357.28 | 0.500 | 357.63 | 358.45 | 0.92 | 358.45 | 4 | Combination |
| 6 | Pipe - (447) | 11.44 | 24 | Cir | 86.389 | 357.83 | 360.38 | 2.952 | 358.57 | 361.59 | n/a | 361.59 | 5 | Combination |
| 7 | Pipe - (446) | 11.33 | 24 | Cir | 43.841 | 360.58 | 360.80 | 0.502 | 361.82 | 362.04 | 0.54 | 362.58 | 6 | Combination |
| 8 | Pipe - (453) | 11.20 | 24 | Cir | 28.000 | 361.00 | 361.18 | 0.643 | 362.58 | 362.38 | n/a | 362.38 | 7 | Combination |
| 9 | Pipe - (452) | 10.96 | 24 | Cir | 43.841 | 361.37 | 361.60 | 0.525 | 362.57 | 362.80 | 0.79 | 363.58 | 8 | Combination |
| 10 | Pipe - (24) | 4.72 | 18 | Cir | 28.018 | 362.56 | 362.70 | 0.500 | 363.58 | 363.63 | 0.29 | 363.92 | 9 | Combination |
| 11 | Pipe - (15) | 4.49 | 18 | Cir | 43.139 | 362.90 | 363.12 | 0.510 | 363.92 | 364.00 | 0.44 | 364.43 | 10 | Combination |
| 12 | Pipe - (14) | 2.71 | 18 | Cir | 106.050 | 363.40 | 363.93 | 0.500 | 364.43 | 364.58 | 0.16 | 364.74 | 11 | Combination |
| 13 | Pipe - (11) (1) | 2.49 | 15 | Cir | 60.787 | 364.20 | 364.51 | 0.510 | 364.86 | 365.16 | 0.23 | 365.39 | 12 | Manhole |
| 14 | Pipe - (11) | 2.04 | 15 | Cir | 57.233 | 366.48 | 367.14 | 1.153 | 366.94 | 367.71 | 0.31 | 367.71 | 13 | Combination |
| 15 | Pipe - (67) | 0.74 | 15 | Cir | 26.000 | 367.34 | 367.59 | 0.962 | 367.71 | 367.93 | n/a | 367.93 j | 14 | Combination |
| 16 | Pipe - (489) | 0.70 | 15 | Cir | 161.000 | 367.34 | 374.36 | 4.360 | 367.71 | 374.69 | n/a | 374.69 j | 14 | Combination |
| 17 | Pipe - (451) | 6.15 | 24 | Cir | 111.287 | 361.80 | 362.36 | 0.503 | 363.58 | 363.24 | n/a | 363.24 | 9 | Combination |
| 18 | Pipe - (445) | 5.26 | 24 | Cir | 28.000 | 362.56 | 362.70 | 0.500 | 363.35 | 363.51 | n/a | 363.51 | 17 | Combination |
| 19 | Pipe - (476) | 4.93 | 15 | Cir | 76.222 | 363.51 | 363.90 | 0.512 | 364.64 | 365.03 | 0.28 | 365.31 | 18 | DropGrate |
| 20 | Pipe - (477) | 0.49 | 15 | Cir | 31.121 | 364.71 | 364.87 | 0.514 | 365.39 | 365.39 | 0.02 | 365.41 | 13 | DropGrate |
| 21 | Pipe - (68) | 0.88 | 15 | Cir | 26.015 | 363.56 | 363.69 | 0.500 | 364.43 | 364.44 | 0.02 | 364.46 | 11 | Combination |
| 22 | Pipe - (439) | 0.56 | 15 | Cir | 28.000 | 358.59 | 358.73 | 0.500 | 358.89 | 359.03 | 0.10 | 359.13 | 5 | Combination |
| 23 | Pipe - (71) | 21.40 | 30 | Cir | 158.125 | 347.00 | 353.69 | 4.231 | 349.50 | 355.26 | n/a | 355.26 j | End | Combination |
| 24 | Pipe - (77) | 7.91 | 24 | Cir | 102.646 | 354.24 | 354.75 | 0.497 | 355.26 | 355.75 | n/a | 355.75 j | 23 | Combination |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 1A 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (115) | 6.33 | 18 | Cir | 28.000 | 358.83 | 359.19 | 1.286 | 359.61 | 360.16 | n/a | 360.16 | 24 | Combination |
| 26 | Pipe - (76) | 6.20 | 18 | Cir | 43.841 | 359.39 | 359.61 | 0.502 | 360.44 | 360.66 | 0.38 | 361.04 | 25 | Combination |
| 27 | Pipe - (75) | 5.15 | 18 | Cir | 28.006 | 359.81 | 359.95 | 0.500 | 361.04 | 361.08 | 0.30 | 361.38 | 26 | Combination |
| 28 | Pipe - (101) | 4.03 | 18 | Cir | 238.741 | 360.15 | 368.30 | 3.414 | 361.38 | 369.07 | n/a | 369.07 j | 27 | Combination |
| 29 | Pipe - (103) | 0.95 | 15 | Cir | 45.226 | 368.57 | 369.85 | 2.830 | 369.07 | 370.23 | n/a | 370.23 j | 28 | Combination |
| 30 | Pipe - (70) | 13.34 | 24 | Cir | 28.983 | 354.77 | 355.02 | 0.863 | 355.93 | 356.33 | 0.87 | 356.33 | 23 | Combination |
| 31 | Pipe - (510) | 7.85 | 24 | Cir | 81.813 | 355.22 | 355.64 | 0.513 | 356.33 | 356.64 | n/a | 356.64 j | 30 | Manhole |
| 32 | Pipe - (509) | 7.92 | 18 | Cir | 72.154 | 356.18 | 356.55 | 0.513 | 357.50 | 357.87 | 0.18 | 358.05 | 31 | DropGrate |
| 33 | Pipe - (508) | 6.00 | 18 | Cir | 96.135 | 356.75 | 357.89 | 1.186 | 358.05 | 358.83 | n/a | 358.83 j | 32 | DropGrate |
| 34 | Pipe - (507) | 2.85 | 15 | Cir | 202.630 | 358.16 | 361.50 | 1.648 | 358.83 | 362.18 | n/a | 362.18 | 33 | DropGrate |
| 35 | Pipe - (69) | 4.22 | 15 | Cir | 88.766 | 357.75 | 358.43 | 0.766 | 358.55 | 359.26 | 0.29 | 359.26 | 30 | Combination |
| 36 | Pipe - (61) | 3.57 | 15 | Cir | 121.131 | 358.63 | 359.78 | 0.949 | 359.30 | 360.54 | 0.39 | 360.54 | 35 | Combination |
| 37 | Pipe - (72) | 1.52 | 15 | Cir | 30.909 | 359.98 | 360.25 | 0.874 | 360.54 | 360.74 | n/a | 360.74 j | 36 | Combination |
| 38 | Pipe - (536) | 0.92 | 15 | Cir | 217.760 | 359.98 | 362.34 | 1.084 | 360.54 | 362.72 | n/a | 362.72 j | 36 | Combination |
| 39 | Pipe - (105) | 1.66 | 15 | Cir | 43.841 | 355.57 | 355.79 | 0.502 | 356.09 | 356.31 | n/a | 356.52 j | 24 | Combination |
| 40 | Pipe - (116) | 1.60 | 15 | Cir | 28.003 | 355.99 | 356.13 | 0.500 | 356.52 | 356.63 | 0.28 | 356.91 | 39 | Combination |
| 41 | Pipe - (104) | 1.15 | 15 | Cir | 111.664 | 356.33 | 356.89 | 0.502 | 356.91 | 357.31 | n/a | 357.31 j | 40 | Combination |
| 42 | Pipe - (79) | 0.46 | 15 | Cir | 28.509 | 357.09 | 357.24 | 0.526 | 357.35 | 357.51 | n/a | 357.60 j | 41 | Combination |
| 43 | Pipe - (590) | 1.86 | 15 | Cir | 211.860 | 368.57 | 374.66 | 2.875 | 369.07 | 375.20 | 0.07 | 375.20 | 28 | Manhole |
| 44 | Pipe - (589) | 1.90 | 15 | Cir | 146.606 | 374.86 | 375.60 | 0.505 | 375.42 | 376.16 | 0.30 | 376.46 | 43 | Combination |
| 45 | Pipe - (588) | 0.74 | 15 | Cir | 45.582 | 376.00 | 377.56 | 3.422 | 376.46 | 377.90 | n/a | 377.90 j | 44 | Combination |
| 46 | Pipe - (587) | 0.56 | 15 | Cir | 28.000 | 377.76 | 377.90 | 0.500 | 378.06 | 378.20 | 0.10 | 378.30 | 45 | Combination |
| 47 | Pipe - (592) | 0.18 | 15 | Cir | 28.000 | 375.80 | 376.00 | 0.714 | 376.46 | 376.16 | n/a | 376.16 | 44 | Combination |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 1A 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 121 | 0.92 | 0.00 | 0.43 | 0.49 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.09 | 11.10 | 0.09 | 11.10 | 0.0 | Off |
| 2 | YI 122 | 1.41 | 0.66 | 2.06 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.19 | 21.47 | 0.19 | 21.47 | 0.0 | Off |
| 3 | YI 123 | 1.16 | 0.00 | 0.51 | 0.66 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.10 | 12.10 | 0.10 | 12.10 | 0.0 | 2 |
| 4 | YI 124 | 1.66 | 0.00 | 1.66 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.17 | 18.81 | 0.17 | 18.81 | 0.0 | 3 |
| 5 | CB 125 | 0.39 | 0.00 | 0.38 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.03 | 0.03 | 0.44 | 0.0 | Off |
| 6 | CB 126 | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.75 | 0.00 | 0.00 | 0.0 | 5 |
| 7 | CB 127 | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.75 | 0.00 | 0.00 | 0.0 | 6 |
| 8 | CB 128 | 0.32 | 0.00 | 0.32 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.63 | 0.13 | 2.63 | 0.0 | Off |
| 9 | CB 129 | 0.56 | 0.17 | 0.67 | 0.07 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.68 | 0.07 | 1.21 | 0.0 | Off |
| 10 | CB 130 | 0.28 | 0.01 | 0.29 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.33 | 0.00 | 0.00 | 0.0 | 11 |
| 11 | CB 131 | 1.09 | 0.00 | 0.92 | 0.18 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.84 | 0.11 | 1.75 | 0.0 | 22 |
| 12 | CB 132 | 0.25 | 0.06 | 0.31 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.50 | 0.01 | 0.19 | 0.0 | 11 |
| 13 | JB 133 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 14 | CB 134 | 0.67 | 0.06 | 0.66 | 0.06 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.67 | 0.07 | 1.20 | 0.0 | 12 |
| 15 | CB 134A | 0.74 | 0.00 | 0.67 | 0.07 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.72 | 0.07 | 1.22 | 0.0 | 21 |
| 16 | CB 135 | 0.70 | 0.00 | 0.65 | 0.06 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.58 | 0.07 | 1.16 | 0.0 | 14 |
| 17 | CB 136 | 0.92 | 0.15 | 0.90 | 0.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.77 | 0.10 | 1.72 | 0.0 | 9 |
| 18 | CB 136A | 0.39 | 0.03 | 0.41 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.21 | 0.03 | 0.53 | 0.0 | 10 |
| 19 | YI 136B | 4.93 | 0.00 | 4.93 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.35 | 36.81 | 0.35 | 36.81 | 0.0 | Off |
| 20 | YI 133A | 0.49 | 0.00 | 0.49 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.07 | 9.49 | 0.07 | 9.49 | 0.0 | Off |
| 21 | CB 131A | 0.88 | 0.07 | 0.82 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.42 | 0.09 | 1.55 | 0.0 | 22 |
| 22 | CB 125A | 0.56 | 0.30 | 0.76 | 0.10 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.16 | 0.09 | 1.43 | 0.0 | Off |
| 23 | CB 101 | 1.06 | 0.34 | 1.40 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.51 | 0.21 | 6.51 | 0.0 | Off |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1A 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 102 | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.24 | 0.00 | 0.00 | 0.0 | 23 |
| 25 | CB 106 | 0.18 | 0.26 | 0.43 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.34 | 0.04 | 0.60 | 0.0 | 30 |
| 26 | CB 107 | 1.20 | 0.13 | 1.06 | 0.26 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.45 | 0.12 | 2.10 | 0.0 | 25 |
| 27 | CB 108 | 1.41 | 0.31 | 1.29 | 0.43 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.30 | 0.15 | 3.28 | 0.0 | 40 |
| 28 | CB 109 | 1.44 | 0.00 | 1.13 | 0.31 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.72 | 0.13 | 2.50 | 0.0 | 27 |
| 29 | CB 109A | 0.95 | 0.00 | 0.82 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.43 | 0.09 | 1.56 | 0.0 | 26 |
| 30 | CB 113 | 1.66 | 0.17 | 1.83 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.99 | 0.24 | 7.99 | 0.0 | Off |
| 31 | JB 113A | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 32 | YI 113B | 2.08 | 3.78 | 5.85 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.39 | 41.02 | 0.39 | 41.02 | 0.0 | Off |
| 33 | YI 113C | 3.31 | 1.89 | 1.43 | 3.78 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.19 | 21.10 | 0.19 | 21.10 | 0.0 | 32 |
| 34 | YI 113D | 2.85 | 0.00 | 0.96 | 1.89 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.15 | 17.10 | 0.15 | 17.10 | 0.0 | 33 |
| 35 | CB 114 | 0.74 | 0.32 | 0.89 | 0.16 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.74 | 0.10 | 1.70 | 0.0 | 30 |
| 36 | CB 115 | 1.34 | 0.12 | 1.14 | 0.32 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.75 | 0.13 | 2.53 | 0.0 | 35 |
| 37 | CB 115A | 1.52 | 0.00 | 1.18 | 0.34 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.88 | 0.13 | 2.71 | 0.0 | 23 |
| 38 | CB 116 | 0.92 | 0.00 | 0.80 | 0.12 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.32 | 0.09 | 1.51 | 0.0 | 36 |
| 39 | CB 103 | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.24 | 0.00 | 0.00 | 0.0 | 42 |
| 40 | CB 104 | 0.49 | 0.43 | 0.80 | 0.12 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.34 | 0.09 | 1.52 | 0.0 | 41 |
| 41 | CB 105 | 0.70 | 0.12 | 0.73 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.02 | 0.08 | 1.36 | 0.0 | Off |
| 42 | CB 105A | 0.46 | 0.00 | 0.45 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.45 | 0.04 | 0.64 | 0.0 | Off |
| 43 | JB 110 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 44 | CB 111 | 1.02 | 0.00 | 0.87 | 0.15 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.64 | 0.10 | 1.65 | 0.0 | 17 |
| 45 | CB 112 | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.75 | 0.00 | 0.00 | 0.0 | 44 |
| 46 | CB 112A | 0.56 | 0.00 | 0.54 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.98 | 0.05 | 0.89 | 0.0 | 18 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1A 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 111A | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.75 | 0.00 | 0.00 | 0.0 | 17 |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 1A 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 30 | 15.86 | 349.00 | 351.50 | 2.50 | 2.69 | 3.23 | 0.16 | 351.66 | 0.150 | 52.749 | 352.80 | 354.14 j | 1.34** | 2.69 | 5.90 | 0.54 | 354.68 | 0.470 | 0.310 | n/a | 1.15 | 0.62 |
| 2 | 30 | 15.23 | 353.00 | 354.24 | 1.24* | 2.44 | 6.24 | 0.53 | 354.77 | 0.000 | 125.000 | 353.70 | 355.02 | 1.32** | 2.62 | 5.82 | 0.53 | 355.54 | 0.000 | 0.000 | n/a | 0.86 | n/a |
| 3 | 30 | 14.24 | 353.90 | 355.13 | 1.23* | 2.41 | 5.90 | 0.50 | 355.64 | 0.000 | 177.766 | 354.80 | 356.07 | 1.27** | 2.50 | 5.69 | 0.50 | 356.57 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 4 | 30 | 13.54 | 355.00 | 356.20 | 1.20* | 2.33 | 5.80 | 0.49 | 356.69 | 0.000 | 260.092 | 356.30 | 357.54 | 1.24** | 2.42 | 5.59 | 0.49 | 358.02 | 0.000 | 0.000 | n/a | 0.54 | 0.26 |
| 5 | 30 | 12.24 | 356.50 | 357.63 | 1.13* | 2.16 | 5.66 | 0.46 | 358.09 | 0.000 | 155.941 | 357.28 | 358.45 | 1.17** | 2.26 | 5.41 | 0.46 | 358.91 | 0.000 | 0.000 | n/a | 2.02 | 0.92 |
| 6 | 24 | 11.44 | 357.83 | 358.57 | 0.74* | 1.06 | 10.75 | 0.51 | 359.09 | 0.000 | 86.389 | 360.38 | 361.59 | 1.21** | 1.99 | 5.74 | 0.51 | 362.11 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 7 | 24 | 11.33 | 360.58 | 361.82 | 1.24* | 2.05 | 5.53 | 0.48 | 362.30 | 0.501 | 43.841 | 360.80 | 362.04 | 1.24 | 2.05 | 5.53 | 0.48 | 362.52 | 0.502 | 0.502 | 0.220 | 1.13 | 0.54 |
| 8 | 24 | 11.20 | 361.00 | 362.58 | 1.58 | 1.97 | 4.21 | 0.50 | 363.08 | 0.000 | 28.000 | 361.18 | 362.38 | 1.20** | 1.97 | 5.69 | 0.50 | 362.88 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 9 | 24 | 10.96 | 361.37 | 362.57 | 1.20* | 1.94 | 5.58 | 0.48 | 363.05 | 0.524 | 43.841 | 361.60 | 362.80 | 1.20** | 1.96 | 5.59 | 0.49 | 363.28 | 0.525 | 0.525 | 0.230 | 1.62 | 0.79 |
| 10 | 18 | 4.72 | 362.56 | 363.58 | 1.02 | 1.28 | 3.68 | 0.21 | 363.79 | 0.309 | 28.018 | 362.70 | 363.63 | 0.93 | 1.16 | 4.08 | 0.26 | 363.89 | 0.401 | 0.355 | 0.099 | 1.11 | 0.29 |
| 11 | 18 | 4.49 | 362.90 | 363.92 | 1.02 | 1.28 | 3.50 | 0.19 | 364.11 | 0.280 | 43.139 | 363.12 | 364.00 | 0.88 | 1.07 | 4.19 | 0.27 | 364.27 | 0.441 | 0.361 | 0.156 | 1.61 | 0.44 |
| 12 | 18 | 2.71 | 363.40 | 364.43 | 1.03 | 1.30 | 2.08 | 0.07 | 364.50 | 0.098 | 106.050 | 363.93 | 364.58 | 0.65 | 0.73 | 3.72 | 0.21 | 364.79 | 0.448 | 0.273 | 0.290 | 0.75 | 0.16 |
| 13 | 15 | 2.49 | 364.20 | 364.86 | 0.66* | 0.65 | 3.83 | 0.23 | 365.08 | 0.510 | 60.787 | 364.51 | 365.16 | 0.65 | 0.65 | 3.84 | 0.23 | 365.39 | 0.513 | 0.511 | 0.311 | 1.00 | 0.23 |
| 14 | 15 | 2.04 | 366.48 | 366.94 | 0.46* | 0.42 | 4.91 | 0.22 | 367.16 | 0.000 | 57.233 | 367.14 | 367.71 | 0.57** | 0.54 | 3.75 | 0.22 | 367.93 | 0.000 | 0.000 | n/a | 1.41 | 0.31 |
| 15 | 15 | 0.74 | 367.34 | 367.71 | 0.37 | 0.27 | 2.45 | 0.12 | 367.83 | 0.000 | 26.000 | 367.59 | 367.93 j | 0.34** | 0.27 | 2.78 | 0.12 | 368.05 | 0.000 | 0.000 | n/a | 1.00 | 0.12 |
| 16 | 15 | 0.70 | 367.34 | 367.71 | 0.37 | 0.26 | 2.33 | 0.12 | 367.83 | 0.000 | 161.000 | 374.36 | 374.69 j | 0.33** | 0.26 | 2.74 | 0.12 | 374.81 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 17 | 24 | 6.15 | 361.80 | 363.58 | 1.78 | 1.32 | 2.08 | 0.34 | 363.92 | 0.000 | 111.287 | 362.36 | 363.24 | 0.88** | 1.32 | 4.64 | 0.34 | 363.57 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 18 | 24 | 5.26 | 362.56 | 363.35 | 0.79* | 1.15 | 4.56 | 0.30 | 363.65 | 0.000 | 28.000 | 362.70 | 363.51 | 0.81** | 1.19 | 4.42 | 0.30 | 363.81 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 19 | 15 | 4.93 | 363.51 | 364.64 | 1.13* | 1.17 | 4.22 | 0.28 | 364.92 | 0.512 | 76.222 | 363.90 | 365.03 | 1.13 | 1.17 | 4.22 | 0.28 | 365.31 | 0.511 | 0.512 | 0.390 | 1.00 | 0.28 |
| 20 | 15 | 0.49 | 364.71 | 365.39 | 0.68 | 0.69 | 0.72 | 0.01 | 365.40 | 0.017 | 31.121 | 364.87 | 365.39 | 0.52 | 0.49 | 1.01 | 0.02 | 365.41 | 0.043 | 0.030 | 0.009 | 1.00 | 0.02 |
| 21 | 15 | 0.88 | 363.56 | 364.43 | 0.87 | 0.92 | 0.96 | 0.01 | 364.45 | 0.027 | 26.015 | 363.69 | 364.44 | 0.75 | 0.76 | 1.15 | 0.02 | 364.46 | 0.042 | 0.034 | 0.009 | 1.00 | 0.02 |
| 22 | 15 | 0.56 | 358.59 | 358.89 | 0.30* | 0.22 | 2.53 | 0.10 | 358.99 | 0.499 | 28.000 | 358.73 | 359.03 | 0.30** | 0.22 | 2.55 | 0.10 | 359.13 | 0.509 | 0.504 | 0.141 | 1.00 | 0.10 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1A 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 30 | 21.40 | 347.00 | 349.50 | 2.50* | 3.25 | 4.36 | 0.30 | 349.80 | 0.272 | 158.125 | 353.69 | 355.26 j | 1.57** | 3.25 | 6.59 | 0.68 | 355.94 | 0.525 | 0.399 | n/a | 2.02 | 1.36 |
| 24 | 24 | 7.91 | 354.24 | 355.26 | 1.02 | 1.57 | 4.90 | 0.39 | 355.66 | 0.000 | 102.646 | 354.75 | 355.75 j | 1.00** | 1.57 | 5.04 | 0.39 | 356.14 | 0.000 | 0.000 | n/a | 1.68 | 0.66 |
| 25 | 18 | 6.33 | 358.83 | 359.61 | 0.78* | 0.93 | 6.84 | 0.42 | 360.03 | 0.000 | 28.000 | 359.19 | 360.16 | 0.97** | 1.21 | 5.22 | 0.42 | 360.59 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 26 | 18 | 6.20 | 359.39 | 360.44 | 1.05* | 1.32 | 4.71 | 0.34 | 360.78 | 0.502 | 43.841 | 359.61 | 360.66 | 1.05 | 1.32 | 4.71 | 0.35 | 361.00 | 0.502 | 0.502 | 0.220 | 1.11 | 0.38 |
| 27 | 18 | 5.15 | 359.81 | 361.04 | 1.23 | 1.55 | 3.32 | 0.17 | 361.21 | 0.241 | 28.006 | 359.95 | 361.08 | 1.13 | 1.43 | 3.60 | 0.20 | 361.28 | 0.285 | 0.263 | 0.074 | 1.50 | 0.30 |
| 28 | 18 | 4.03 | 360.15 | 361.38 | 1.23 | 0.91 | 2.59 | 0.30 | 361.69 | 0.000 | 238.741 | 368.30 | 369.07 j | 0.77** | 0.91 | 4.43 | 0.30 | 369.37 | 0.000 | 0.000 | n/a | 1.03 | n/a |
| 29 | 15 | 0.95 | 368.57 | 369.07 | 0.50 | 0.32 | 2.09 | 0.14 | 369.21 | 0.000 | 45.226 | 369.85 | 370.23 j | 0.38** | 0.32 | 2.99 | 0.14 | 370.37 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 30 | 24 | 13.34 | 354.77 | 355.93 | 1.16* | 1.88 | 7.08 | 0.58 | 356.51 | 0.000 | 28.983 | 355.02 | 356.33 | 1.31** | 2.19 | 6.10 | 0.58 | 356.91 | 0.000 | 0.000 | n/a | 1.50 | 0.87 |
| 31 | 24 | 7.85 | 355.22 | 356.33 | 1.11 | 1.56 | 4.37 | 0.39 | 356.73 | 0.000 | 81.813 | 355.64 | 356.64 j | 1.00** | 1.56 | 5.02 | 0.39 | 357.03 | 0.000 | 0.000 | n/a | 0.43 | 0.17 |
| 32 | 18 | 7.92 | 356.18 | 357.50 | 1.32* | 1.64 | 4.82 | 0.36 | 357.86 | 0.513 | 72.154 | 356.55 | 357.87 | 1.32 | 1.65 | 4.81 | 0.36 | 358.23 | 0.512 | 0.513 | 0.370 | 0.50 | 0.18 |
| 33 | 18 | 6.00 | 356.75 | 358.05 | 1.30 | 1.17 | 3.69 | 0.41 | 358.45 | 0.000 | 96.135 | 357.89 | 358.83 j | 0.94** | 1.17 | 5.11 | 0.41 | 359.24 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 34 | 15 | 2.85 | 358.16 | 358.83 | 0.67 | 0.68 | 4.22 | 0.27 | 359.11 | 0.000 | 202.630 | 361.50 | 362.18 | 0.68** | 0.68 | 4.20 | 0.27 | 362.45 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 35 | 15 | 4.22 | 357.75 | 358.55 | 0.80* | 0.84 | 5.05 | 0.37 | 358.92 | 0.000 | 88.766 | 358.43 | 359.26 | 0.83** | 0.87 | 4.87 | 0.37 | 359.63 | 0.000 | 0.000 | n/a | 0.79 | 0.29 |
| 36 | 15 | 3.57 | 358.63 | 359.30 | 0.67* | 0.68 | 5.29 | 0.32 | 359.63 | 0.000 | 121.131 | 359.78 | 360.54 | 0.76** | 0.78 | 4.56 | 0.32 | 360.87 | 0.000 | 0.000 | n/a | 1.21 | 0.39 |
| 37 | 15 | 1.52 | 359.98 | 360.54 | 0.56 | 0.44 | 2.83 | 0.18 | 360.72 | 0.000 | 30.909 | 360.25 | 360.74 j | 0.49** | 0.44 | 3.42 | 0.18 | 360.92 | 0.000 | 0.000 | n/a | 1.00 | 0.18 |
| 38 | 15 | 0.92 | 359.98 | 360.54 | 0.56 | 0.31 | 1.71 | 0.14 | 360.68 | 0.000 | 217.760 | 362.34 | 362.72 j | 0.38** | 0.31 | 2.95 | 0.14 | 362.85 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 39 | 15 | 1.66 | 355.57 | 356.09 | 0.52* | 0.47 | 3.43 | 0.18 | 356.27 | 0.501 | 43.841 | 355.79 | 356.31 j | 0.52** | 0.48 | 3.44 | 0.18 | 356.49 | 0.505 | 0.503 | 0.221 | 1.14 | 0.21 |
| 40 | 15 | 1.60 | 355.99 | 356.52 | 0.53 | 0.46 | 3.23 | 0.16 | 356.68 | 0.438 | 28.003 | 356.13 | 356.63 | 0.50** | 0.46 | 3.45 | 0.19 | 356.82 | 0.524 | 0.481 | 0.135 | 1.50 | 0.28 |
| 41 | 15 | 1.15 | 356.33 | 356.91 | 0.58 | 0.37 | 2.06 | 0.07 | 356.98 | 0.162 | 111.664 | 356.89 | 357.31 j | 0.42** | 0.37 | 3.16 | 0.15 | 357.47 | 0.525 | 0.344 | n/a | 1.50 | 0.23 |
| 42 | 15 | 0.46 | 357.09 | 357.35 | 0.26* | 0.19 | 2.42 | 0.09 | 357.45 | 0.525 | 28.509 | 357.24 | 357.51 j | 0.27** | 0.19 | 2.41 | 0.09 | 357.60 | 0.515 | 0.520 | 0.148 | 1.00 | 0.09 |
| 43 | 15 | 1.86 | 368.57 | 369.07 | 0.50 | 0.46 | 4.08 | 0.21 | 369.27 | 0.000 | 211.860 | 374.66 | 375.20 | 0.54** | 0.51 | 3.64 | 0.21 | 375.41 | 0.000 | 0.000 | n/a | 0.34 | 0.07 |
| 44 | 15 | 1.90 | 374.86 | 375.42 | 0.56* | 0.53 | 3.56 | 0.20 | 375.62 | 0.504 | 146.606 | 375.60 | 376.16 | 0.56 | 0.53 | 3.57 | 0.20 | 376.36 | 0.506 | 0.505 | 0.740 | 1.50 | 0.30 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1A 10-YEAR

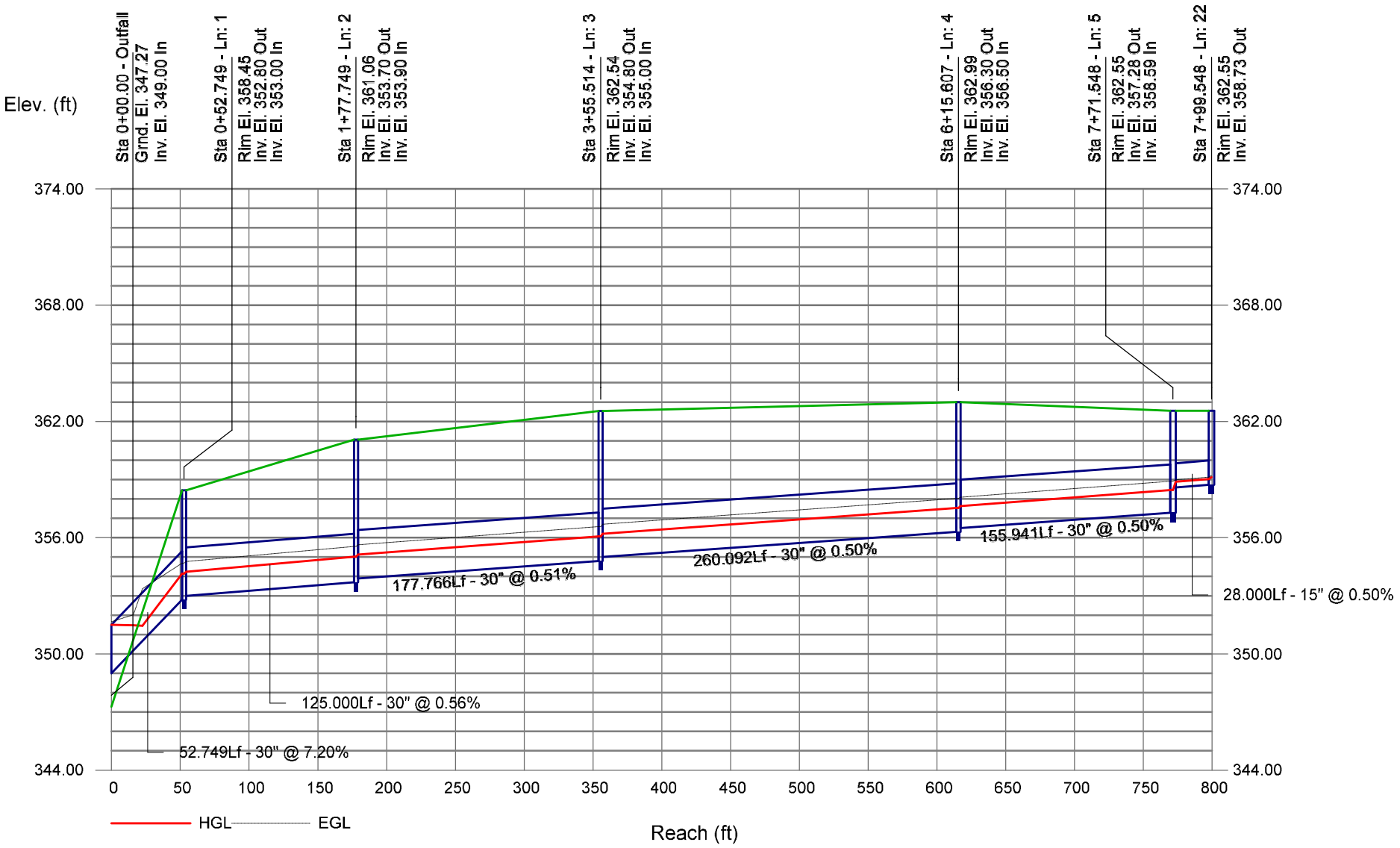
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 0.74 | 376.00 | 376.46 | 0.46 | 0.26 | 1.81 | 0.12 | 376.58 | 0.000 | 45.582 | 377.56 | 377.90 j | 0.34** | 0.26 | 2.78 | 0.12 | 378.02 | 0.000 | 0.000 | n/a | 1.10 | n/a |
| 46 | 15 | 0.56 | 377.76 | 378.06 | 0.30* | 0.22 | 2.53 | 0.10 | 378.16 | 0.499 | 28.000 | 377.90 | 378.20 | 0.30** | 0.22 | 2.55 | 0.10 | 378.30 | 0.509 | 0.504 | 0.141 | 1.00 | 0.10 |
| 47 | 15 | 0.18 | 375.80 | 376.46 | 0.66 | 0.09 | 0.27 | 0.06 | 376.51 | 0.000 | 28.000 | 376.00 | 376.16 | 0.16** | 0.09 | 1.89 | 0.06 | 376.22 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

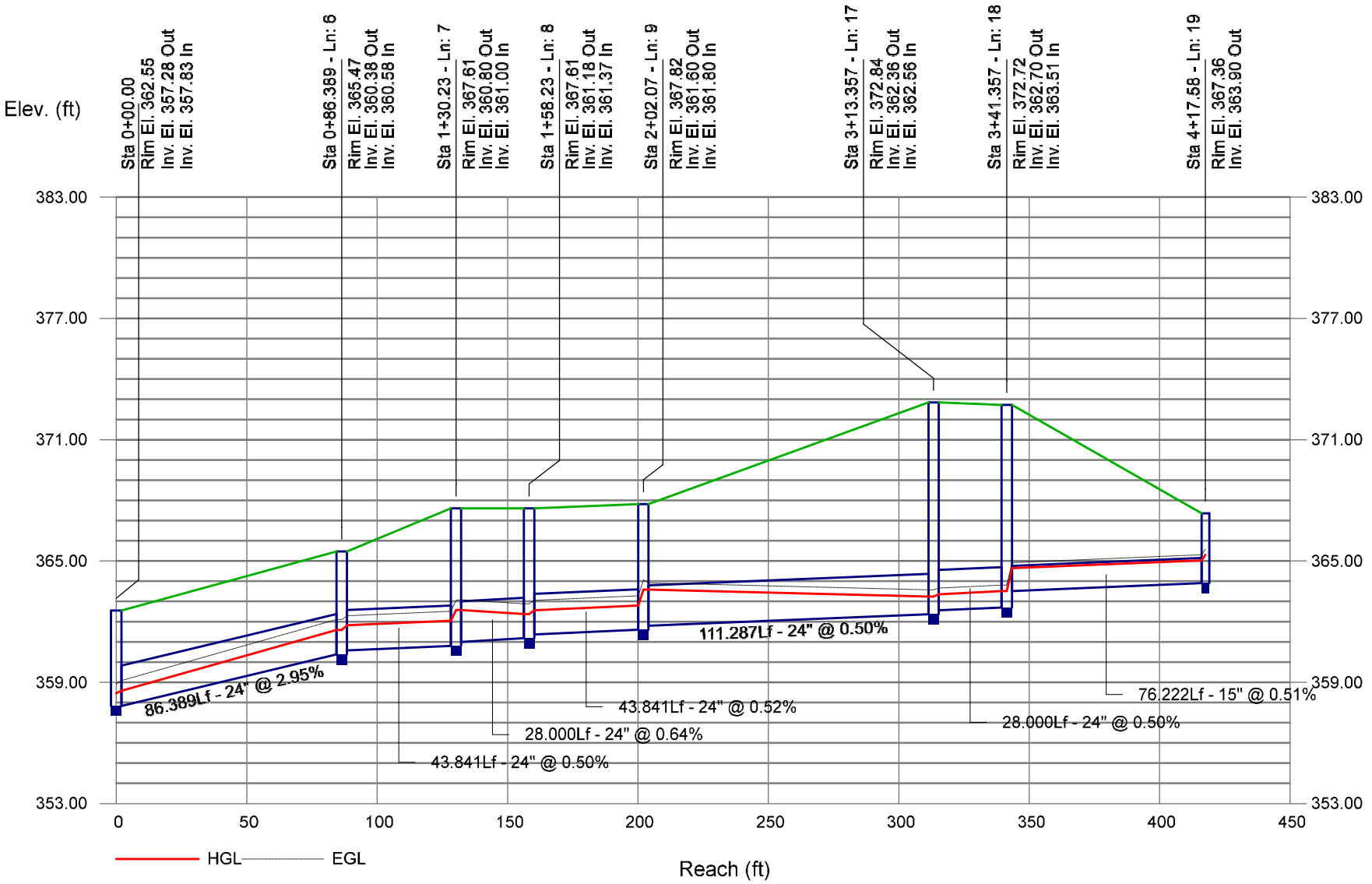
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 1-22 Proj. file: SCM 1A Storm Network.stm



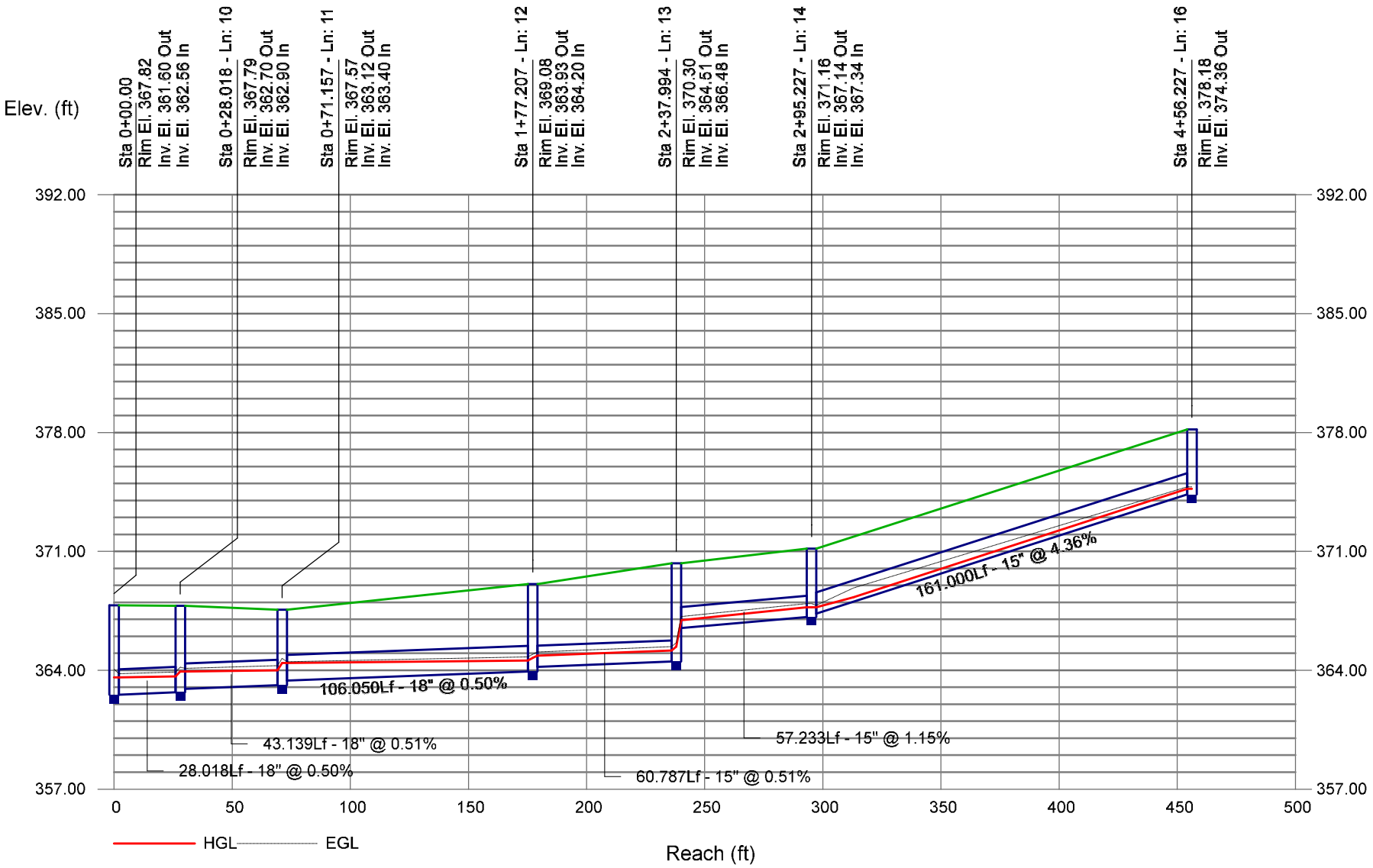
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 6-19 Proj. file: SCM 1A Storm Network.stm



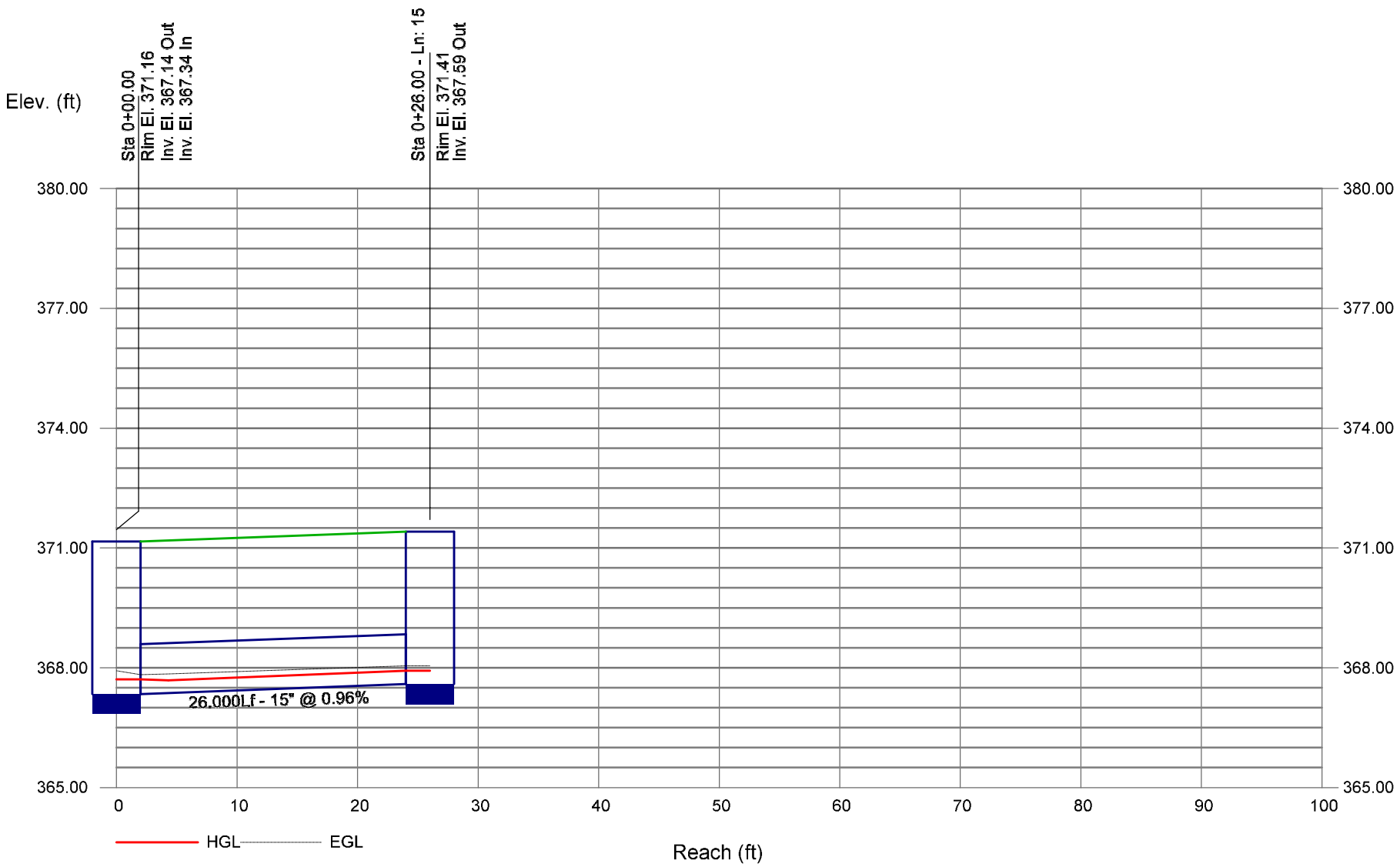
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 10-16 Proj. file: SCM 1A Storm Network.stm



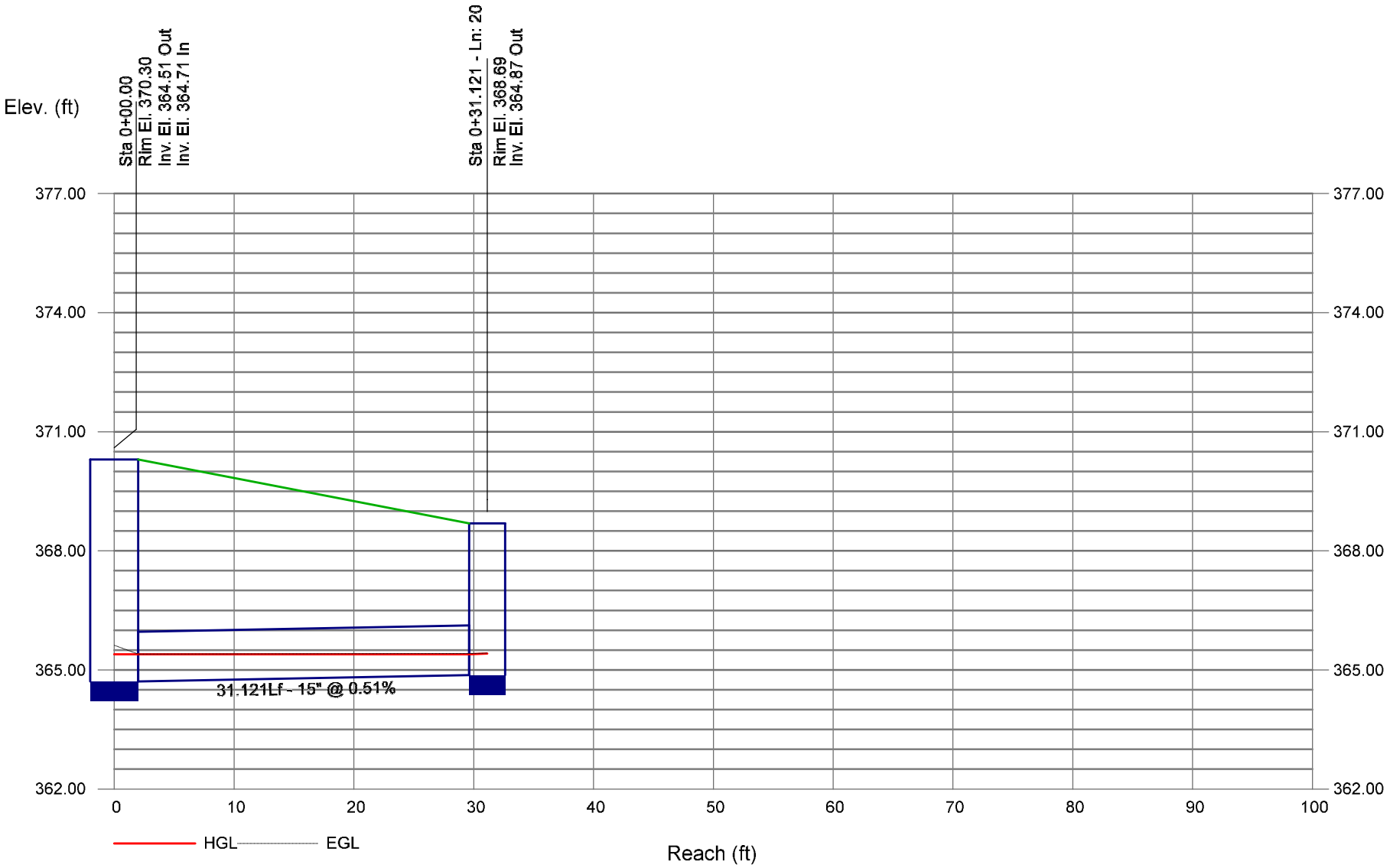
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 15-15 Proj. file: SCM 1A Storm Network.stm



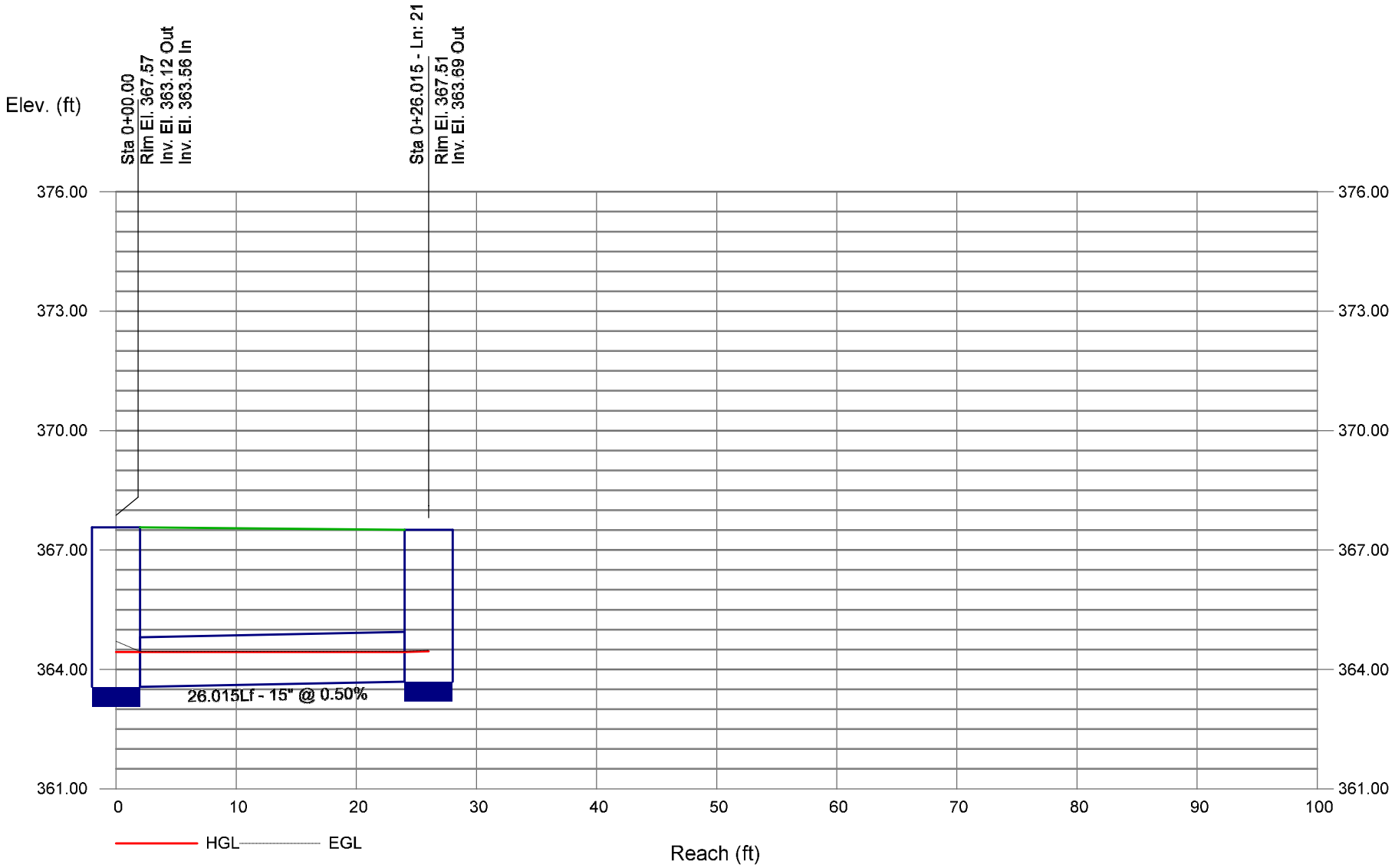
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 20-20 Proj. file: SCM 1A Storm Network.stm



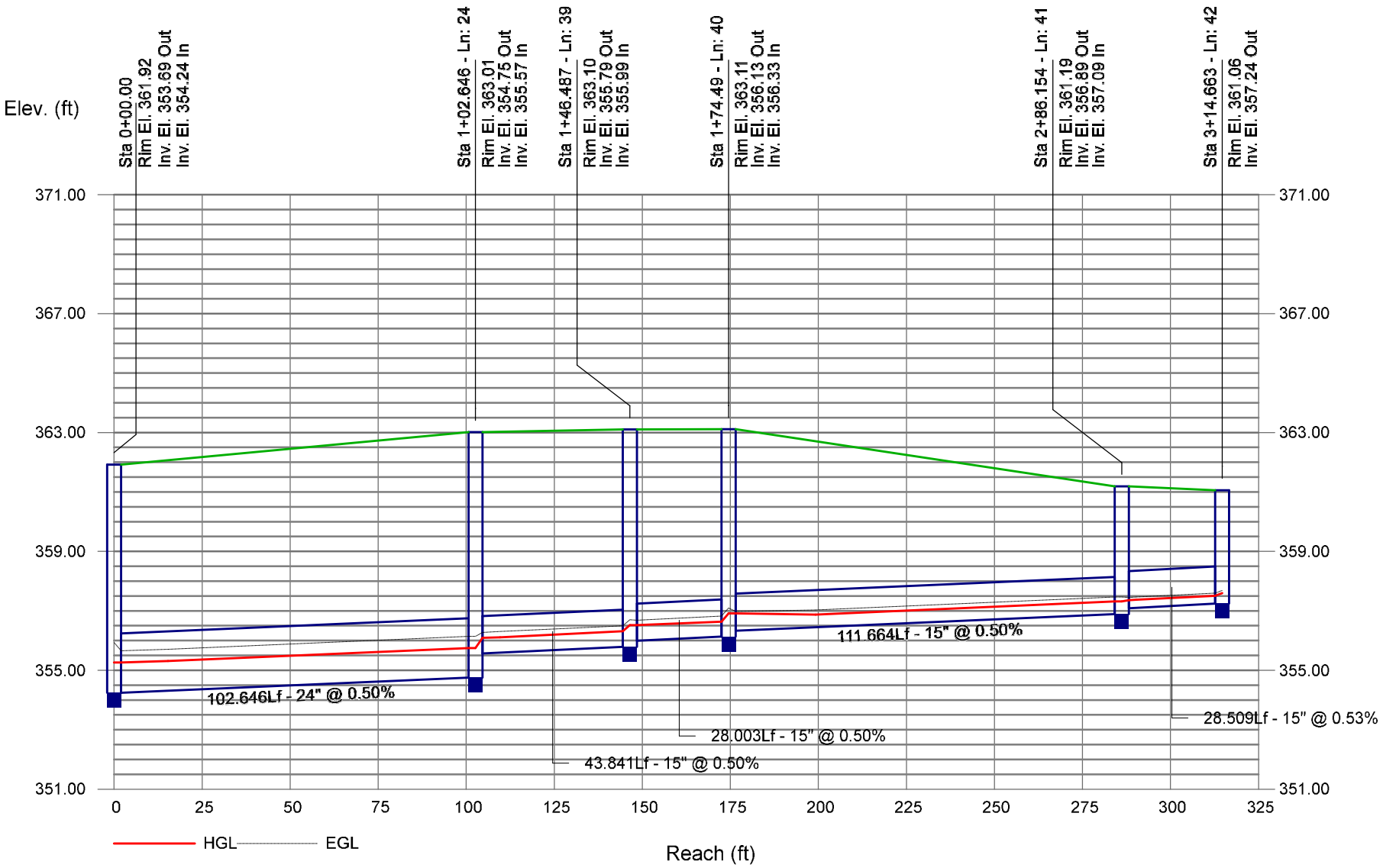
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 21-21 Proj. file: SCM 1A Storm Network.stm



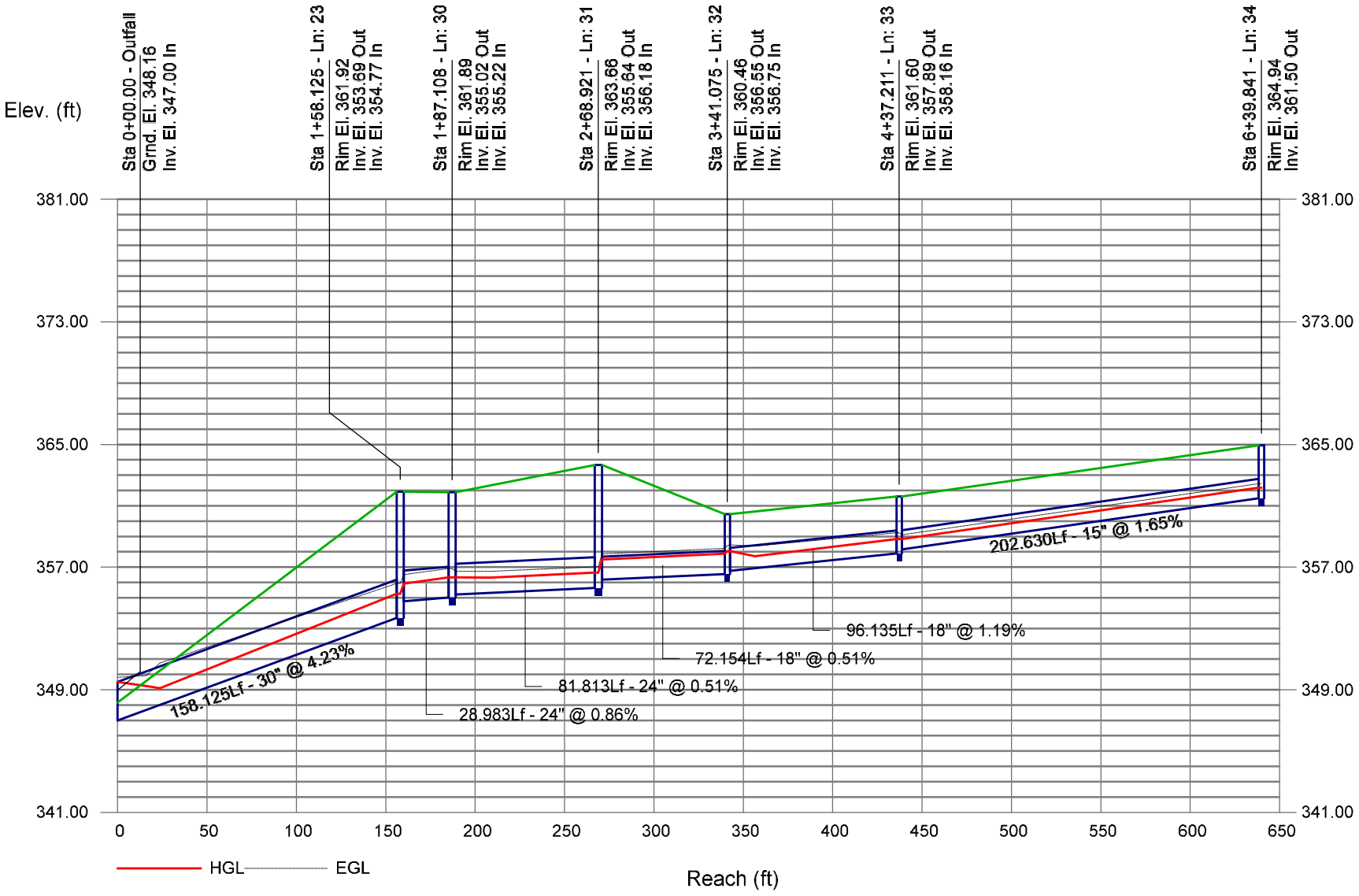
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 23-34 Proj. file: SCM 1A Storm Network.stm



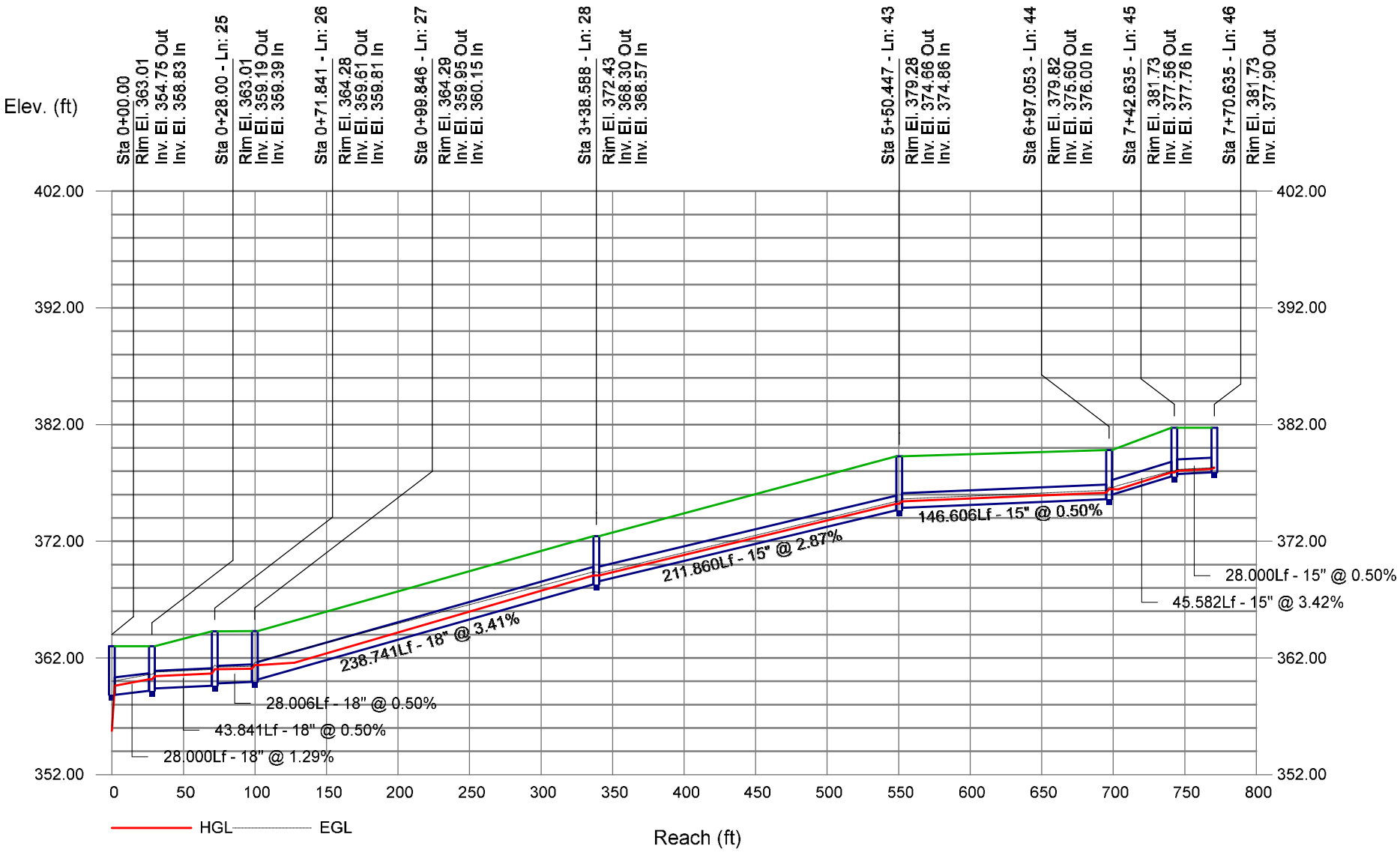
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 24-42 Proj. file: SCM 1A Storm Network.stm



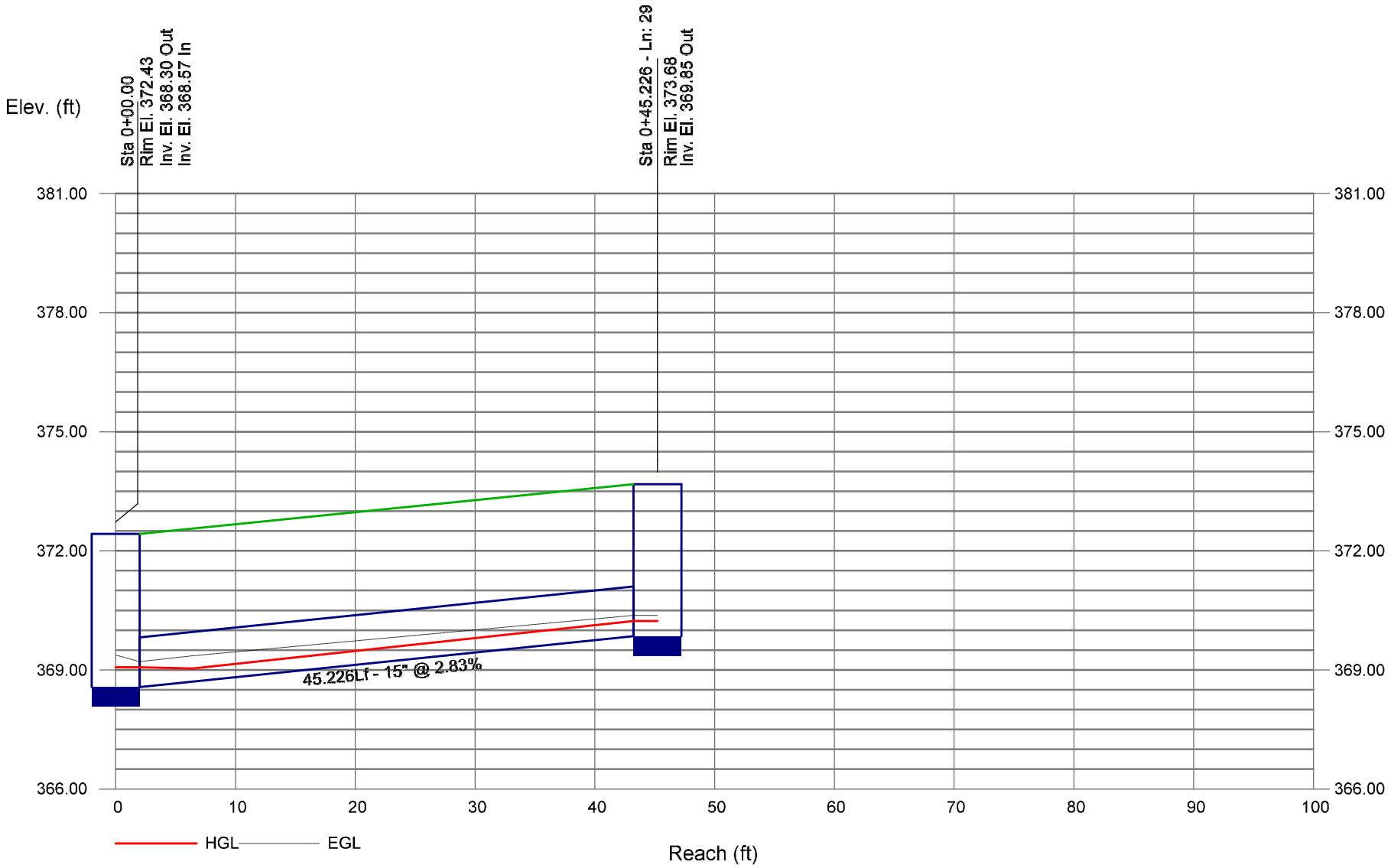
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 25-46 Proj. file: SCM 1A Storm Network.stm



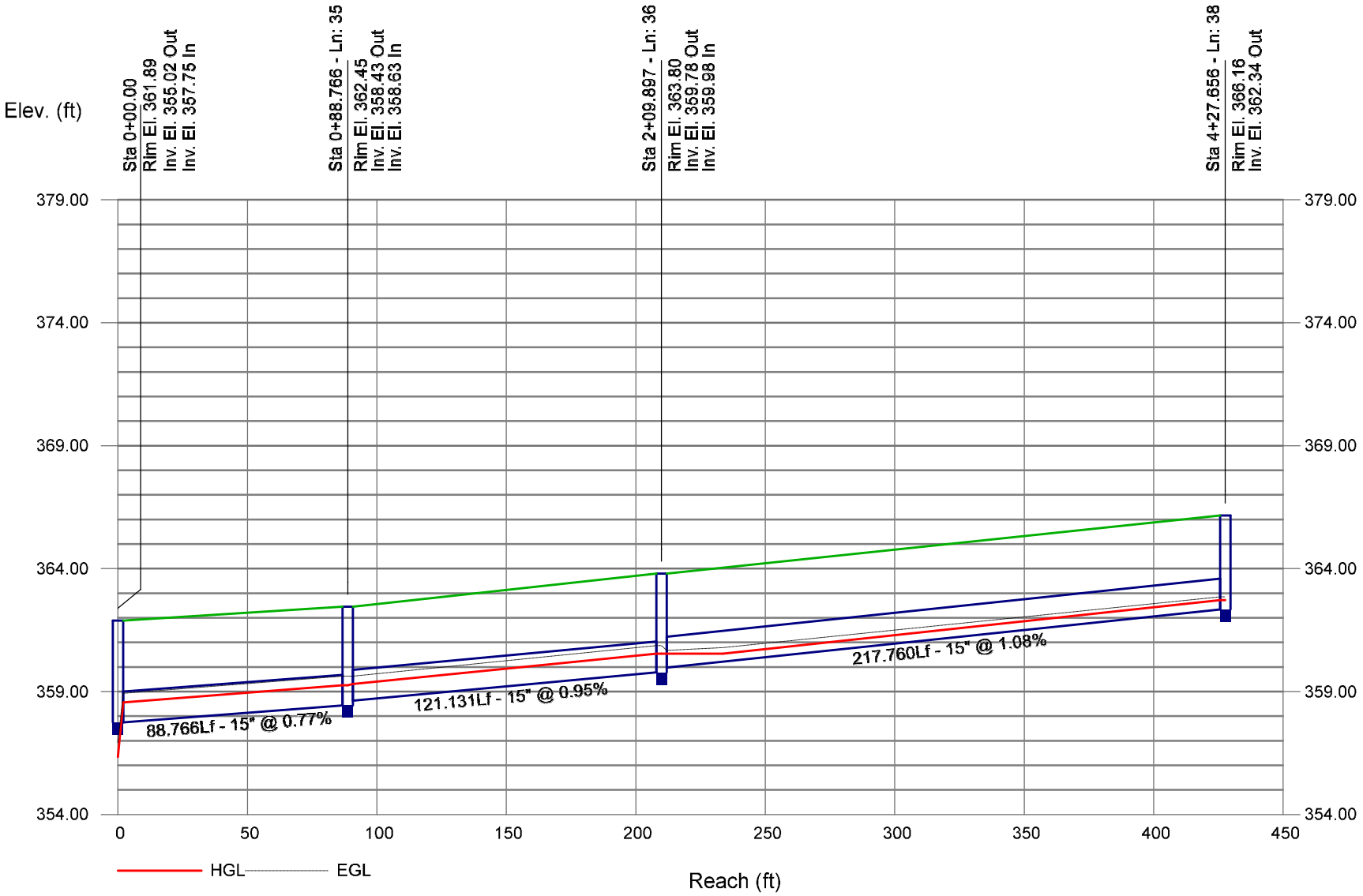
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 29-29 Proj. file: SCM 1A Storm Network.stm



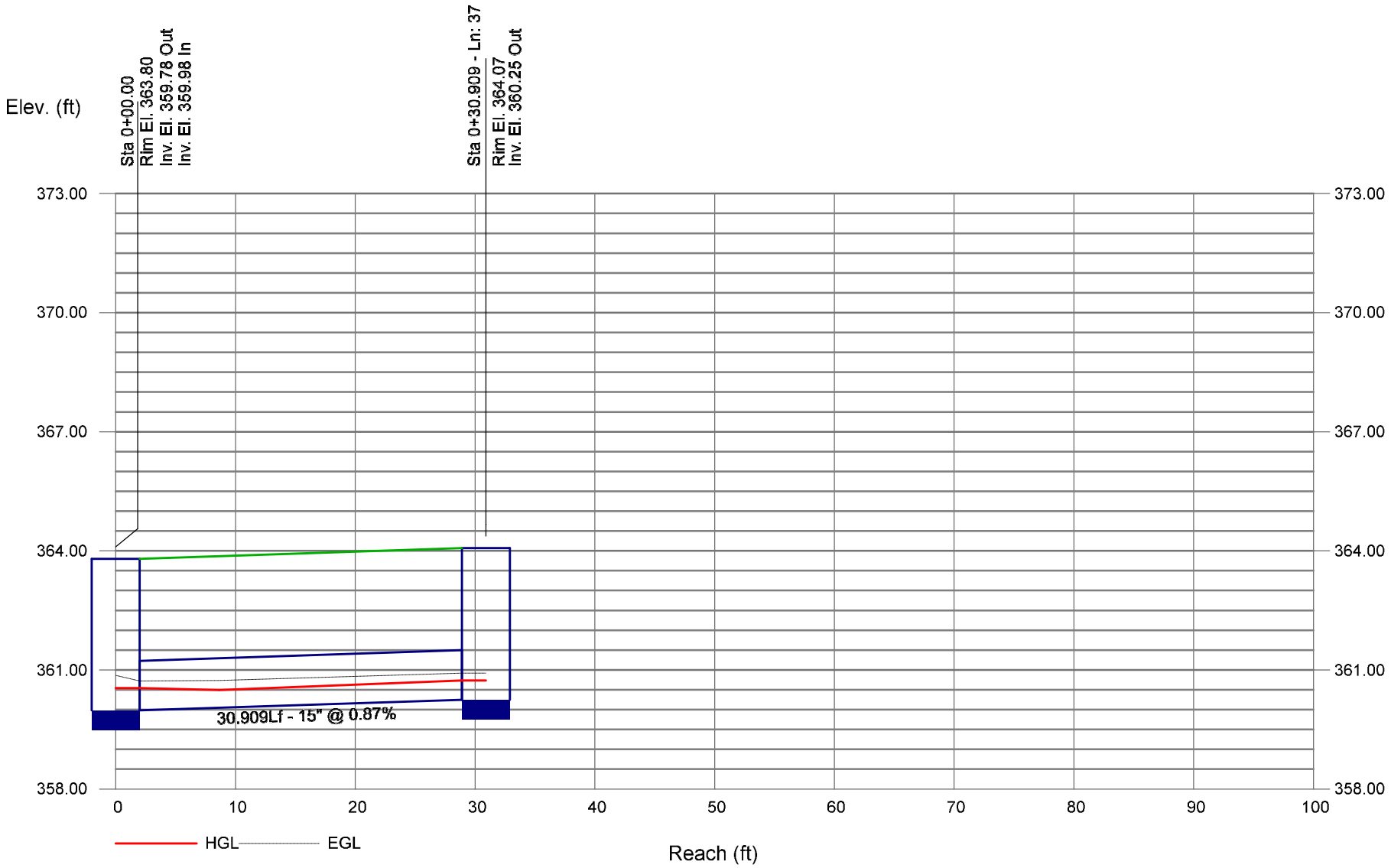
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 35-38 Proj. file: SCM 1A Storm Network.stm



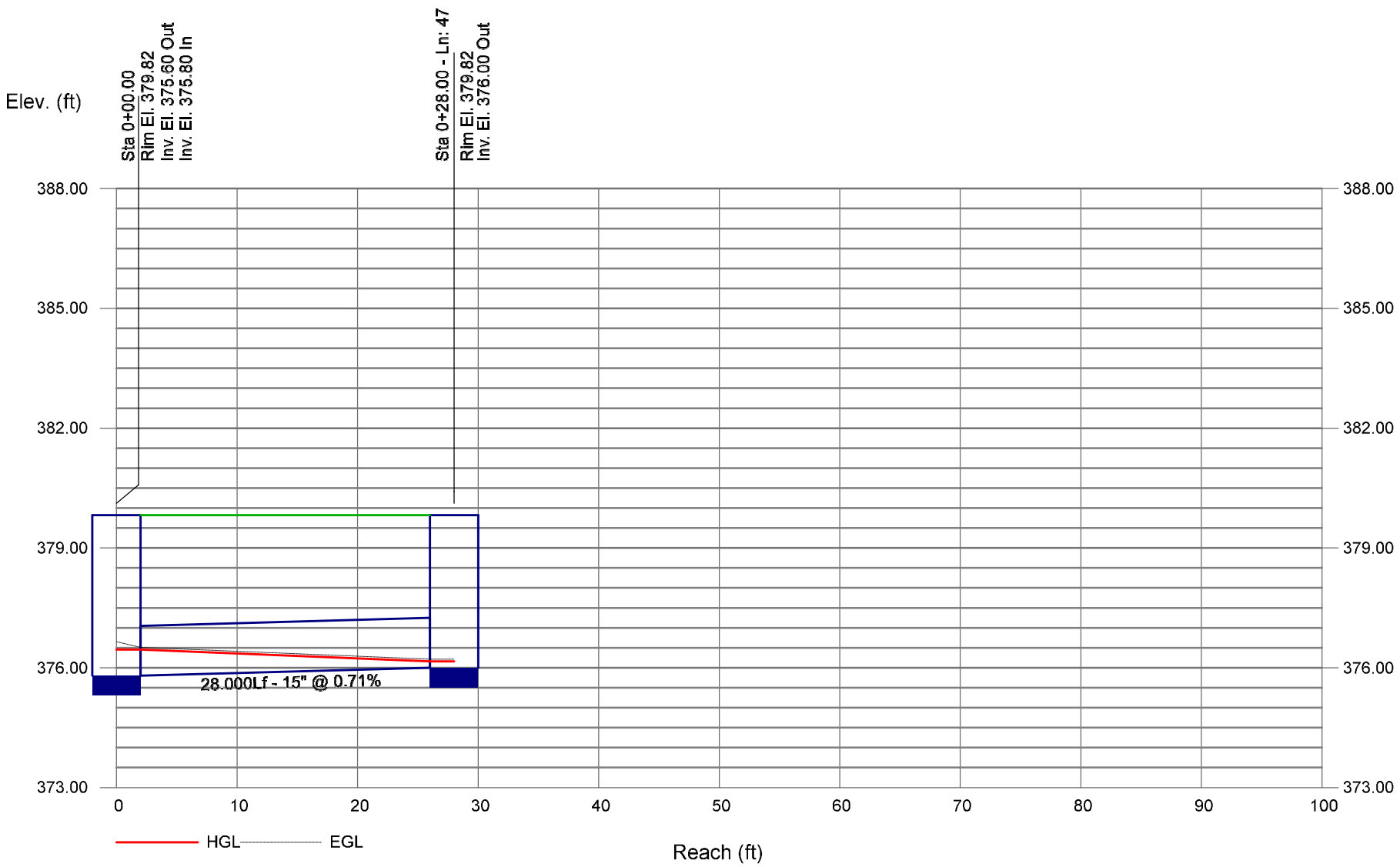
# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 37-37 Proj. file: SCM 1A Storm Network.stm

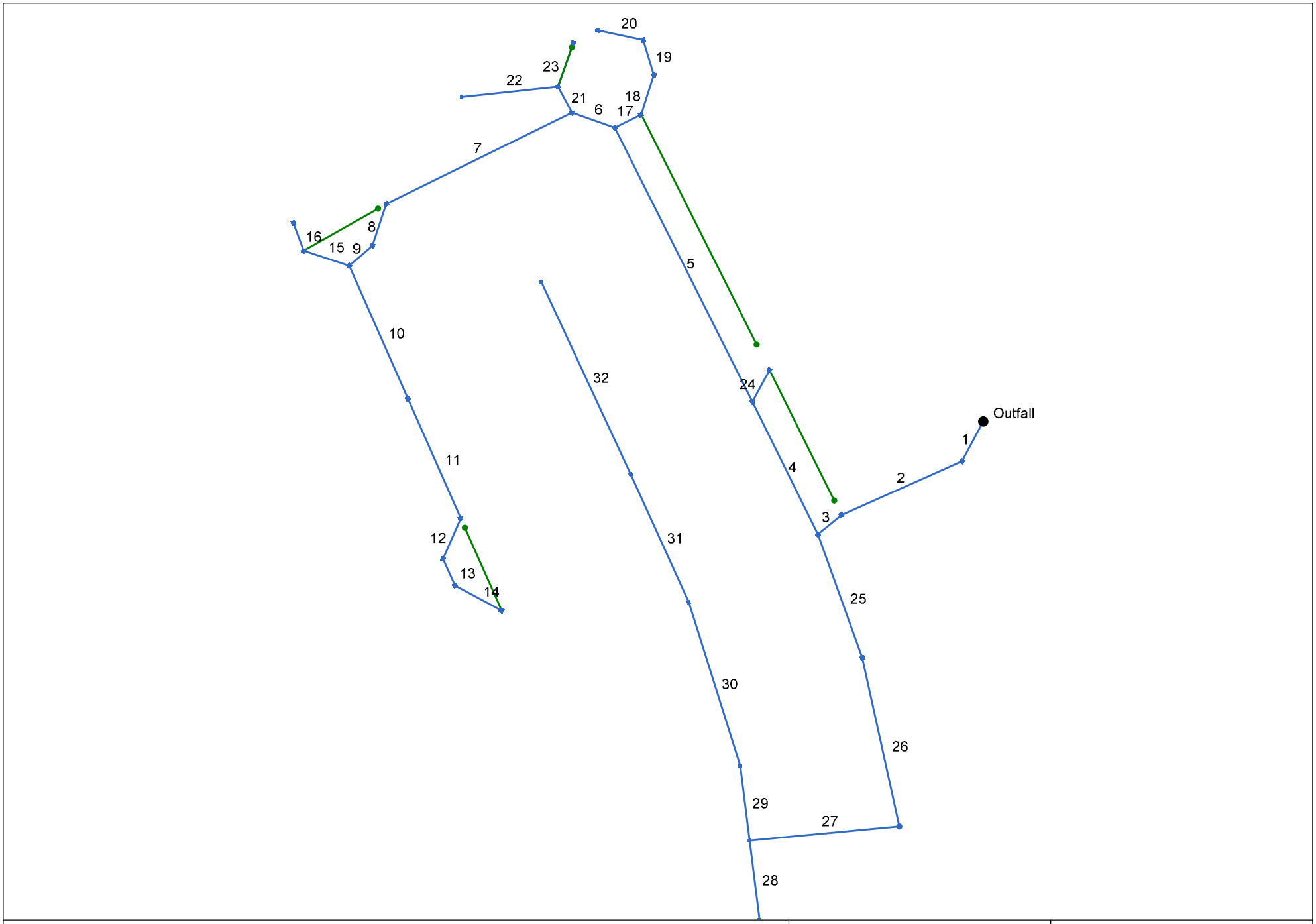


# Storm Sewer Profile

SCM 1A 10-YEAR PROFILE 47-47 Proj. file: SCM 1A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 1B 10-YEAR




| Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 1B 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 43.038 | 117.996 | DrGrt | 0.00 | 0.20 | 0.60 | 10.0 | 372.05 | 0.51 | 372.27 | 36 | Cir | 0.013 | 1.00 | 382.34 | Pipe - (402) |
| 2 | 1 | 125.580 | 37.891 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 372.47 | 0.50 | 373.10 | 36 | Cir | 0.013 | 0.50 | 383.51 | Pipe - (401) |
| 3 | 2 | 29.057 | -15.437 | Comb | 0.00 | 0.42 | 0.60 | 10.0 | 373.30 | 0.52 | 373.45 | 36 | Cir | 0.013 | 2.14 | 383.49 | Pipe - (400) |
| 4 | 3 | 141.000 | 103.390 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 374.00 | 0.53 | 374.75 | 30 | Cir | 0.013 | 1.26 | 384.29 | Pipe - (398) |
| 5 | 4 | 292.665 | -0.424 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 374.95 | 0.50 | 376.42 | 30 | Cir | 0.013 | 1.50 | 386.55 | Pipe - (397) |
| 6 | 5 | 43.286 | -44.139 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 376.62 | 0.51 | 376.84 | 30 | Cir | 0.013 | 1.63 | 386.36 | Pipe - (185) |
| 7 | 6 | 196.769 | -45.581 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 381.66 | 0.50 | 382.64 | 24 | Cir | 0.013 | 1.13 | 388.05 | Pipe - (198) |
| 8 | 7 | 41.948 | -45.324 | Comb | 0.00 | 0.72 | 0.60 | 10.0 | 382.84 | 0.50 | 383.05 | 24 | Cir | 0.013 | 0.85 | 388.86 | Pipe - (197) |
| 9 | 8 | 29.270 | 30.927 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 383.25 | 0.51 | 383.40 | 24 | Cir | 0.013 | 1.98 | 388.98 | Pipe - (199) |
| 10 | 9 | 138.408 | -73.063 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 385.13 | 0.69 | 386.08 | 18 | Cir | 0.013 | 0.50 | 390.20 | Pipe - (196) |
| 11 | 10 | 125.150 | 0.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 386.36 | 0.52 | 387.01 | 15 | Cir | 0.013 | 1.16 | 391.31 | Pipe - (194) |
| 12 | 11 | 42.068 | 47.353 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 387.20 | 0.52 | 387.42 | 15 | Cir | 0.013 | 1.17 | 391.78 | Pipe - (193) |
| 13 | 12 | 28.000 | -47.644 | Comb | 0.00 | 0.39 | 0.60 | 10.0 | 387.62 | 0.50 | 387.76 | 15 | Cir | 0.013 | 0.99 | 391.78 | Pipe - (526) |
| 14 | 13 | 50.224 | -37.536 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 387.96 | 0.80 | 388.36 | 15 | Cir | 0.013 | 1.00 | 392.18 | Pipe - (527) |
| 15 | 9 | 45.621 | 59.076 | Comb | 0.00 | 0.93 | 0.60 | 10.0 | 383.94 | 1.12 | 384.45 | 18 | Cir | 0.013 | 1.22 | 388.67 | Pipe - (428) |
| 16 | 15 | 28.355 | 51.210 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 384.65 | 0.53 | 384.80 | 18 | Cir | 0.013 | 1.00 | 388.63 | Pipe - (427) |
| 17 | 5 | 28.000 | 90.133 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 379.84 | 0.50 | 379.98 | 15 | Cir | 0.013 | 1.14 | 386.55 | Pipe - (396) |
| 18 | 17 | 39.908 | -45.826 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.18 | 0.50 | 380.38 | 15 | Cir | 0.013 | 0.94 | 385.10 | Pipe - (430) |
| 19 | 18 | 34.848 | -35.110 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.58 | 0.52 | 380.76 | 15 | Cir | 0.013 | 1.34 | 384.78 | Pipe - (429) |
| 20 | 19 | 44.136 | -60.527 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.96 | 1.52 | 381.63 | 15 | Cir | 0.013 | 1.00 | 385.45 | Pipe - (431) |
| 21 | 6 | 28.043 | 42.691 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 378.20 | 0.50 | 378.34 | 15 | Cir | 0.013 | 1.74 | 386.37 | Pipe - (184) |
| 22 | 21 | 92.236 | -68.074 | DrGrt | 0.00 | 0.34 | 0.60 | 10.0 | 378.54 | 0.50 | 379.00 | 15 | Cir | 0.013 | 1.00 | 382.52 | Pipe - (190) |
| 23 | 21 | 44.388 | 47.309 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 381.44 | 0.50 | 381.66 | 15 | Cir | 0.013 | 1.00 | 385.48 | Pipe - (183) |

Project File: SCM 1B Storm Network.stm

Number of lines: 32

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1B 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 4 | 34.361 | 54.152 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 380.42 | 0.52 | 380.60 | 15 | Cir | 0.013 | 1.00 | 384.45 | Pipe - (399) |
| 25 | 3 | 125.103 | -70.202 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 374.00 | 0.54 | 374.67 | 30 | Cir | 0.013 | 0.50 | 384.63 | Pipe - (208) |
| 26 | 25 | 164.842 | 7.361 | MH | 0.00 | 0.00 | 0.60 | 10.0 | 374.87 | 0.50 | 375.69 | 30 | Cir | 0.013 | 1.00 | 385.61 | Pipe - (597) |
| 27 | 26 | 143.185 | 96.958 | DrGrt | 0.00 | 0.50 | 0.60 | 10.0 | 375.89 | 0.50 | 376.61 | 30 | Cir | 0.013 | 2.25 | 381.83 | Pipe - (596) |
| 28 | 27 | 76.394 | -91.693 | DrGrt | 0.00 | 0.94 | 0.60 | 10.0 | 379.15 | 0.51 | 379.54 | 15 | Cir | 0.013 | 1.00 | 382.98 | Pipe - (218) |
| 29 | 27 | 71.757 | 88.307 | DrGrt | 0.00 | 0.58 | 0.60 | 10.0 | 377.15 | 1.37 | 378.13 | 24 | Cir | 0.013 | 0.50 | 384.13 | Pipe - (601) |
| 30 | 29 | 163.784 | -10.225 | DrGrt | 0.00 | 0.63 | 0.60 | 10.0 | 378.67 | 0.50 | 379.49 | 18 | Cir | 0.013 | 0.50 | 384.33 | Pipe - (600) |
| 31 | 30 | 134.085 | -7.068 | DrGrt | 0.00 | 0.56 | 0.60 | 10.0 | 379.76 | 0.50 | 380.43 | 15 | Cir | 0.013 | 0.50 | 384.64 | Pipe - (599) |
| 32 | 31 | 202.660 | -0.446 | DrGrt | 0.00 | 0.52 | 0.60 | 10.0 | 380.63 | 0.50 | 381.65 | 15 | Cir | 0.013 | 1.00 | 385.09 | Pipe - (598) |

Project File: SCM 1B Storm Network.stm

Number of lines: 32

Date: 4/11/2025

# Structure Report



SCM 1B 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 141 | DropGrate | 382.34 | Rect | 4.00 | 4.00 | 36 | Cir | 372.27 | 36 | Cir | 372.47 |
| 2 | CB 142 | Combination | 383.51 | Rect | 4.00 | 4.00 | 36 | Cir | 373.10 | 36 | Cir | 373.30 |
| 3 | CB 143 | Combination | 383.49 | Rect | 4.00 | 4.00 | 36 | Cir | 373.45 | 30<br>30 | Cir<br>Cir | 374.00<br>374.00 |
| 4 | CB 144 | Combination | 384.29 | Rect | 4.00 | 4.00 | 30 | Cir | 374.75 | 30<br>15 | Cir<br>Cir | 374.95<br>380.42 |
| 5 | CB 145 | Combination | 386.55 | Rect | 4.00 | 4.00 | 30 | Cir | 376.42 | 30<br>15 | Cir<br>Cir | 376.62<br>379.84 |
| 6 | CB 146 | Combination | 386.36 | Rect | 4.00 | 4.00 | 30 | Cir | 376.84 | 24<br>15 | Cir<br>Cir | 381.66<br>378.20 |
| 7 | CB 148 | Combination | 388.05 | Rect | 4.00 | 4.00 | 24 | Cir | 382.64 | 24 | Cir | 382.84 |
| 8 | CB 149 | Combination | 388.86 | Rect | 4.00 | 4.00 | 24 | Cir | 383.05 | 24 | Cir | 383.25 |
| 9 | CB 150 | Combination | 388.98 | Rect | 4.00 | 4.00 | 24 | Cir | 383.40 | 18<br>18 | Cir<br>Cir | 385.13<br>383.94 |
| 10 | CB 151 | Combination | 390.20 | Rect | 4.00 | 4.00 | 18 | Cir | 386.08 | 15 | Cir | 386.36 |
| 11 | CB 152 | Combination | 391.31 | Rect | 4.00 | 4.00 | 15 | Cir | 387.01 | 15 | Cir | 387.20 |
| 12 | CB 153 | Combination | 391.78 | Rect | 4.00 | 4.00 | 15 | Cir | 387.42 | 15 | Cir | 387.62 |
| 13 | CB 154 | Combination | 391.78 | Rect | 4.00 | 4.00 | 15 | Cir | 387.76 | 15 | Cir | 387.96 |
| 14 | CB 154A | Combination | 392.18 | Rect | 4.00 | 4.00 | 15 | Cir | 388.36 | | | |
| 15 | CB 150A | Combination | 388.67 | Rect | 4.00 | 4.00 | 18 | Cir | 384.45 | 18 | Cir | 384.65 |
| 16 | CB 150B | Combination | 388.63 | Rect | 4.00 | 4.00 | 18 | Cir | 384.80 | | | |
| 17 | CB 145A | Combination | 386.55 | Rect | 4.00 | 4.00 | 15 | Cir | 379.98 | 15 | Cir | 380.18 |
| 18 | CB 145B | Combination | 385.10 | Rect | 4.00 | 4.00 | 15 | Cir | 380.38 | 15 | Cir | 380.58 |
| 19 | CB 145C | Combination | 384.78 | Rect | 4.00 | 4.00 | 15 | Cir | 380.76 | 15 | Cir | 380.96 |
| 20 | CB 145D | Combination | 385.45 | Rect | 4.00 | 4.00 | 15 | Cir | 381.63 | | | |

Project File: SCM 1B Storm Network.stm | Number of Structures: 32 | Run Date: 4/11/2025

# Structure Report

SCM 1B 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 146A | Combination | 386.37 | Rect | 4.00 | 4.00 | 15 | Cir | 378.34 | 15<br>15 | Cir<br>Cir | 378.54<br>381.44 |
| 22 | FES 146C | DropGrate | 382.52 | Rect | 3.00 | 3.00 | 15 | Cir | 379.00 | | | |
| 23 | CB 146B | Combination | 385.48 | Rect | 4.00 | 4.00 | 15 | Cir | 381.66 | | | |
| 24 | CB 144A | Combination | 384.45 | Rect | 4.00 | 4.00 | 15 | Cir | 380.60 | | | |
| 25 | CB 143A | Combination | 384.63 | Rect | 4.00 | 4.00 | 30 | Cir | 374.67 | 30 | Cir | 374.87 |
| 26 | JB-147 | Manhole | 385.61 | Cir | 4.00 | 4.00 | 30 | Cir | 375.69 | 30 | Cir | 375.89 |
| 27 | YI 158A | DropGrate | 381.83 | Rect | 3.00 | 3.00 | 30 | Cir | 376.61 | 15<br>24 | Cir<br>Cir | 379.15<br>377.15 |
| 28 | YI 159 | DropGrate | 382.98 | Rect | 3.00 | 3.00 | 15 | Cir | 379.54 | | | |
| 29 | YI 158 | DropGrate | 384.13 | Rect | 3.00 | 3.00 | 24 | Cir | 378.13 | 18 | Cir | 378.67 |
| 30 | YI 157 | DropGrate | 384.33 | Rect | 3.00 | 3.00 | 18 | Cir | 379.49 | 15 | Cir | 379.76 |
| 31 | YI 156 | DropGrate | 384.64 | Rect | 3.00 | 3.00 | 15 | Cir | 380.43 | 15 | Cir | 380.63 |
| 32 | YI 155 | DropGrate | 385.09 | Rect | 3.00 | 3.00 | 15 | Cir | 381.65 | | | |

Project File: SCM 1B Storm Network.stm | Number of Structures: 32 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 1B 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (402) | 28.79 | 36 | Cir | 43.038 | 372.05 | 372.27 | 0.511 | 375.05 | 375.12 | 0.27 | 375.38 | End | DropGrate |
| 2 | Pipe - (401) | 28.51 | 36 | Cir | 125.580 | 372.47 | 373.10 | 0.502 | 375.38 | 374.83 | n/a | 374.83 | 1 | Combination |
| 3 | Pipe - (400) | 27.07 | 36 | Cir | 29.057 | 373.30 | 373.45 | 0.516 | 374.91 | 375.13 | 1.47 | 375.13 | 2 | Combination |
| 4 | Pipe - (398) | 13.94 | 30 | Cir | 141.000 | 374.00 | 374.75 | 0.532 | 375.20 | 376.01 | n/a | 376.01 | 3 | Combination |
| 5 | Pipe - (397) | 11.97 | 30 | Cir | 292.665 | 374.95 | 376.42 | 0.502 | 376.07 | 377.58 | 0.67 | 377.58 | 4 | Combination |
| 6 | Pipe - (185) | 11.67 | 30 | Cir | 43.286 | 376.62 | 376.84 | 0.508 | 377.72 | 377.98 | n/a | 377.98 | 5 | Combination |
| 7 | Pipe - (198) | 9.52 | 24 | Cir | 196.769 | 381.66 | 382.64 | 0.498 | 382.77 | 383.75 | 0.49 | 384.25 | 6 | Combination |
| 8 | Pipe - (197) | 9.37 | 24 | Cir | 41.948 | 382.84 | 383.05 | 0.501 | 384.25 | 384.29 | 0.28 | 384.57 | 7 | Combination |
| 9 | Pipe - (199) | 7.04 | 24 | Cir | 29.270 | 383.25 | 383.40 | 0.512 | 384.57 | 384.34 | 0.72 | 384.34 | 8 | Combination |
| 10 | Pipe - (196) | 2.55 | 18 | Cir | 138.408 | 385.13 | 386.08 | 0.686 | 385.69 | 386.68 | 0.11 | 386.68 | 9 | Combination |
| 11 | Pipe - (194) | 2.15 | 15 | Cir | 125.150 | 386.36 | 387.01 | 0.519 | 386.96 | 387.61 | 0.25 | 387.86 | 10 | Combination |
| 12 | Pipe - (193) | 2.00 | 15 | Cir | 42.068 | 387.20 | 387.42 | 0.523 | 387.86 | 387.99 | 0.25 | 388.23 | 11 | Combination |
| 13 | Pipe - (526) | 1.76 | 15 | Cir | 28.000 | 387.62 | 387.76 | 0.500 | 388.23 | 388.29 | n/a | 388.49 j | 12 | Combination |
| 14 | Pipe - (527) | 0.42 | 15 | Cir | 50.224 | 387.96 | 388.36 | 0.796 | 388.49 | 388.61 | n/a | 388.61 j | 13 | Combination |
| 15 | Pipe - (428) | 3.88 | 18 | Cir | 45.621 | 383.94 | 384.45 | 1.118 | 384.55 | 385.20 | n/a | 385.20 | 9 | Combination |
| 16 | Pipe - (427) | 0.63 | 18 | Cir | 28.355 | 384.65 | 384.80 | 0.529 | 385.20 | 385.10 | 0.10 | 385.10 | 15 | Combination |
| 17 | Pipe - (396) | 0.27 | 15 | Cir | 28.000 | 379.84 | 379.98 | 0.500 | 380.05 | 380.19 | n/a | 380.26 j | 5 | Combination |
| 18 | Pipe - (430) | 0.21 | 15 | Cir | 39.908 | 380.18 | 380.38 | 0.501 | 380.36 | 380.56 | n/a | 380.61 j | 17 | Combination |
| 19 | Pipe - (429) | 0.14 | 15 | Cir | 34.848 | 380.58 | 380.76 | 0.517 | 380.73 | 380.91 | 0.06 | 380.97 | 18 | Combination |
| 20 | Pipe - (431) | 0.07 | 15 | Cir | 44.136 | 380.96 | 381.63 | 1.518 | 381.04 | 381.73 | n/a | 381.73 | 19 | Combination |
| 21 | Pipe - (184) | 1.86 | 15 | Cir | 28.043 | 378.20 | 378.34 | 0.499 | 378.76 | 378.89 | 0.34 | 379.23 | 6 | Combination |
| 22 | Pipe - (190) | 1.20 | 15 | Cir | 92.236 | 378.54 | 379.00 | 0.499 | 379.23 | 379.43 | 0.16 | 379.59 | 21 | DropGrate |
| 23 | Pipe - (183) | 0.25 | 15 | Cir | 44.388 | 381.44 | 381.66 | 0.496 | 381.64 | 381.86 | 0.06 | 381.92 | 21 | Combination |
| 24 | Pipe - (399) | 0.88 | 15 | Cir | 34.361 | 380.42 | 380.60 | 0.524 | 380.79 | 380.97 | 0.13 | 381.10 | 4 | Combination |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 1B 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (208) | 12.36 | 30 | Cir | 125.103 | 374.00 | 374.67 | 0.536 | 375.13 | 375.85 | n/a | 375.85 | 3 | Combination |
| 26 | Pipe - (597) | 11.92 | 30 | Cir | 164.842 | 374.87 | 375.69 | 0.497 | 375.99 | 376.85 | 0.45 | 376.85 | 25 | Manhole |
| 27 | Pipe - (596) | 12.09 | 30 | Cir | 143.185 | 375.89 | 376.61 | 0.503 | 377.01 | 377.78 | n/a | 377.78 | 26 | DropGrate |
| 28 | Pipe - (218) | 3.31 | 15 | Cir | 76.394 | 379.15 | 379.54 | 0.511 | 379.93 | 380.32 | 0.26 | 380.58 | 27 | DropGrate |
| 29 | Pipe - (601) | 7.47 | 24 | Cir | 71.757 | 377.15 | 378.13 | 1.366 | 377.88 | 379.10 | n/a | 379.10 | 27 | DropGrate |
| 30 | Pipe - (600) | 5.69 | 18 | Cir | 163.784 | 378.67 | 379.49 | 0.501 | 379.65 | 380.47 | 0.17 | 380.64 | 29 | DropGrate |
| 31 | Pipe - (599) | 3.66 | 15 | Cir | 134.085 | 379.76 | 380.43 | 0.500 | 380.64 | 381.26 | 0.14 | 381.40 | 30 | DropGrate |
| 32 | Pipe - (598) | 1.83 | 15 | Cir | 202.660 | 380.63 | 381.65 | 0.503 | 381.40 | 382.19 | n/a | 382.19 j | 31 | DropGrate |

Project File: SCM 1B Storm Network.stm

Number of lines: 32

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 1B 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 141 | 0.70 | 0.00 | 0.34 | 0.37 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.07 | 9.10 | 0.07 | 9.10 | 0.0 | Off |
| 2 | CB 142 | 1.73 | 0.06 | 1.79 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.87 | 0.24 | 7.87 | 0.0 | Off |
| 3 | CB 143 | 1.48 | 0.38 | 1.86 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.09 | 0.24 | 8.09 | 0.0 | Off |
| 4 | CB 144 | 1.73 | 0.00 | 1.38 | 0.35 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.18 | 0.12 | 1.99 | 0.0 | 3 |
| 5 | CB 145 | 0.11 | 0.14 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.75 | 0.00 | 0.00 | 0.0 | 4 |
| 6 | CB 146 | 0.67 | 0.49 | 1.02 | 0.14 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.00 | 0.08 | 1.42 | 0.0 | 5 |
| 7 | CB 148 | 0.21 | 1.83 | 1.55 | 0.49 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.71 | 0.13 | 2.74 | 0.0 | 6 |
| 8 | CB 149 | 2.54 | 0.00 | 1.82 | 0.72 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.45 | 0.15 | 3.72 | 0.0 | 7 |
| 9 | CB 150 | 0.95 | 0.00 | 0.87 | 0.08 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.46 | 0.07 | 1.16 | 0.0 | Off |
| 10 | CB 151 | 0.46 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.59 | 0.02 | 0.27 | 0.0 | 9 |
| 11 | CB 152 | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.54 | 0.00 | 0.00 | 0.0 | 10 |
| 12 | CB 153 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.75 | 0.00 | 0.00 | 0.0 | 11 |
| 13 | CB 154 | 1.37 | 0.00 | 1.16 | 0.21 | Comb | 4.0 | 3.00 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.49 | 0.10 | 1.66 | 0.0 | Off |
| 14 | CB 154A | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.40 | 0.01 | 0.17 | 0.0 | 11 |
| 15 | CB 150A | 3.28 | 0.00 | 2.17 | 1.11 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.37 | 0.18 | 4.87 | 0.0 | 7 |
| 16 | CB 150B | 0.63 | 0.00 | 0.62 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.39 | 0.04 | 0.65 | 0.0 | Off |
| 17 | CB 145A | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | 24 |
| 18 | CB 145B | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | Off |
| 19 | CB 145C | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | Off |
| 20 | CB 145D | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | Off |
| 21 | CB 146A | 0.46 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.59 | 0.02 | 0.27 | 0.0 | 23 |
| 22 | FES 146C | 1.20 | 0.00 | 1.20 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 15.54 | 0.14 | 15.54 | 0.0 | Off |
| 23 | CB 146B | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.75 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1B 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 144A | 0.88 | 0.00 | 0.82 | 0.06 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.25 | 0.06 | 1.06 | 0.0 | 2 |
| 25 | CB 143A | 0.70 | 0.00 | 0.68 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.66 | 0.05 | 0.78 | 0.0 | 3 |
| 26 | JB-147 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 27 | YI 158A | 1.76 | 6.18 | 7.94 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.48 | 49.82 | 0.48 | 49.82 | 0.0 | Off |
| 28 | YI 159 | 3.31 | 0.00 | 1.00 | 2.31 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | 27 |
| 29 | YI 158 | 2.04 | 3.19 | 1.37 | 3.87 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.17 | 19.10 | 0.17 | 19.10 | 0.0 | 27 |
| 30 | YI 157 | 2.22 | 2.18 | 1.20 | 3.19 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.15 | 17.10 | 0.15 | 17.10 | 0.0 | 29 |
| 31 | YI 156 | 1.97 | 1.16 | 0.96 | 2.18 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.13 | 15.10 | 0.13 | 15.10 | 0.0 | 30 |
| 32 | YI 155 | 1.83 | 0.00 | 0.67 | 1.16 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.10 | 0.11 | 13.10 | 0.0 | 31 |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 1B 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 36 | 28.79 | 372.05 | 375.05 | 3.00 | 7.07 | 4.07 | 0.26 | 375.31 | 0.186 | 43.038 | 372.27 | 375.12 | 2.85 | 6.93 | 4.15 | 0.27 | 375.38 | 0.161 | 0.174 | 0.075 | 1.00 | 0.27 |
| 2 | 36 | 28.51 | 372.47 | 375.38 | 2.91 | 4.21 | 4.07 | 0.71 | 376.10 | 0.000 | 125.580 | 373.10 | 374.83 | 1.73** | 4.21 | 6.77 | 0.71 | 375.54 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 3 | 36 | 27.07 | 373.30 | 374.91 | 1.61* | 3.88 | 6.98 | 0.69 | 375.60 | 0.000 | 29.057 | 373.45 | 375.13 | 1.68** | 4.07 | 6.64 | 0.69 | 375.82 | 0.000 | 0.000 | n/a | 2.14 | 1.47 |
| 4 | 30 | 13.94 | 374.00 | 375.20 | 1.20* | 2.33 | 5.98 | 0.50 | 375.70 | 0.000 | 141.000 | 374.75 | 376.01 | 1.26** | 2.47 | 5.65 | 0.50 | 376.50 | 0.000 | 0.000 | n/a | 1.26 | n/a |
| 5 | 30 | 11.97 | 374.95 | 376.07 | 1.12* | 2.12 | 5.63 | 0.45 | 376.52 | 0.000 | 292.665 | 376.42 | 377.58 | 1.16** | 2.23 | 5.37 | 0.45 | 378.03 | 0.000 | 0.000 | n/a | 1.50 | 0.67 |
| 6 | 30 | 11.67 | 376.62 | 377.72 | 1.10* | 2.08 | 5.62 | 0.44 | 378.16 | 0.000 | 43.286 | 376.84 | 377.98 | 1.14** | 2.19 | 5.33 | 0.44 | 378.43 | 0.000 | 0.000 | n/a | 1.63 | n/a |
| 7 | 24 | 9.52 | 381.66 | 382.77 | 1.11* | 1.77 | 5.30 | 0.44 | 383.21 | 0.497 | 196.769 | 382.64 | 383.75 | 1.11** | 1.79 | 5.31 | 0.44 | 384.19 | 0.499 | 0.498 | 0.980 | 1.13 | 0.49 |
| 8 | 24 | 9.37 | 382.84 | 384.25 | 1.41 | 2.36 | 3.97 | 0.25 | 384.49 | 0.242 | 41.948 | 383.05 | 384.29 | 1.24 | 2.04 | 4.60 | 0.33 | 384.61 | 0.348 | 0.295 | 0.124 | 0.85 | 0.28 |
| 9 | 24 | 7.04 | 383.25 | 384.57 | 1.32 | 1.45 | 3.21 | 0.37 | 384.93 | 0.000 | 29.270 | 383.40 | 384.34 | 0.94** | 1.45 | 4.85 | 0.37 | 384.71 | 0.000 | 0.000 | n/a | 1.98 | 0.72 |
| 10 | 18 | 2.55 | 385.13 | 385.69 | 0.56* | 0.60 | 4.28 | 0.23 | 385.91 | 0.000 | 138.408 | 386.08 | 386.68 | 0.60** | 0.67 | 3.82 | 0.23 | 386.91 | 0.000 | 0.000 | n/a | 0.50 | 0.11 |
| 11 | 15 | 2.15 | 386.36 | 386.96 | 0.60* | 0.58 | 3.72 | 0.21 | 387.17 | 0.519 | 125.150 | 387.01 | 387.61 | 0.60 | 0.58 | 3.72 | 0.21 | 387.82 | 0.519 | 0.519 | 0.649 | 1.16 | 0.25 |
| 12 | 15 | 2.00 | 387.20 | 387.86 | 0.66 | 0.54 | 3.06 | 0.15 | 388.00 | 0.324 | 42.068 | 387.42 | 387.99 | 0.57** | 0.54 | 3.70 | 0.21 | 388.20 | 0.541 | 0.432 | 0.182 | 1.17 | 0.25 |
| 13 | 15 | 1.76 | 387.62 | 388.23 | 0.61 | 0.49 | 2.94 | 0.13 | 388.37 | 0.316 | 28.000 | 387.76 | 388.29 j | 0.53** | 0.50 | 3.56 | 0.20 | 388.49 | 0.531 | 0.423 | 0.119 | 0.99 | 0.19 |
| 14 | 15 | 0.42 | 387.96 | 388.49 | 0.53 | 0.18 | 0.86 | 0.09 | 388.57 | 0.000 | 50.224 | 388.36 | 388.61 j | 0.25** | 0.18 | 2.39 | 0.09 | 388.70 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 15 | 18 | 3.88 | 383.94 | 384.55 | 0.61* | 0.68 | 5.72 | 0.30 | 384.85 | 0.000 | 45.621 | 384.45 | 385.20 | 0.75** | 0.89 | 4.37 | 0.30 | 385.50 | 0.000 | 0.000 | n/a | 1.22 | n/a |
| 16 | 18 | 0.63 | 384.65 | 385.20 | 0.55 | 0.25 | 1.07 | 0.10 | 385.31 | 0.000 | 28.355 | 384.80 | 385.10 | 0.30** | 0.25 | 2.58 | 0.10 | 385.20 | 0.000 | 0.000 | n/a | 1.00 | 0.10 |
| 17 | 15 | 0.27 | 379.84 | 380.05 | 0.21* | 0.13 | 2.04 | 0.06 | 380.11 | 0.500 | 28.000 | 379.98 | 380.19 j | 0.21** | 0.13 | 2.05 | 0.07 | 380.25 | 0.507 | 0.503 | 0.141 | 1.14 | 0.07 |
| 18 | 15 | 0.21 | 380.18 | 380.36 | 0.18* | 0.10 | 1.88 | 0.05 | 380.42 | 0.499 | 39.908 | 380.38 | 380.56 j | 0.18** | 0.11 | 1.87 | 0.05 | 380.62 | 0.492 | 0.495 | 0.198 | 0.94 | 0.05 |
| 19 | 15 | 0.14 | 380.58 | 380.73 | 0.15* | 0.08 | 1.69 | 0.04 | 380.77 | 0.515 | 34.848 | 380.76 | 380.91 | 0.15** | 0.08 | 1.71 | 0.05 | 380.95 | 0.533 | 0.524 | 0.182 | 1.34 | 0.06 |
| 20 | 15 | 0.07 | 380.96 | 381.04 | 0.08* | 0.04 | 2.00 | 0.03 | 381.08 | 0.000 | 44.136 | 381.63 | 381.73 | 0.10** | 0.05 | 1.49 | 0.03 | 381.77 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 21 | 15 | 1.86 | 378.20 | 378.76 | 0.56* | 0.53 | 3.53 | 0.19 | 378.95 | 0.498 | 28.043 | 378.34 | 378.89 | 0.55 | 0.53 | 3.54 | 0.19 | 379.09 | 0.503 | 0.501 | 0.140 | 1.74 | 0.34 |
| 22 | 15 | 1.20 | 378.54 | 379.23 | 0.69 | 0.38 | 1.71 | 0.05 | 379.28 | 0.098 | 92.236 | 379.00 | 379.43 | 0.43** | 0.38 | 3.16 | 0.16 | 379.59 | 0.513 | 0.305 | 0.281 | 1.00 | 0.16 |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1B 10-YEAR

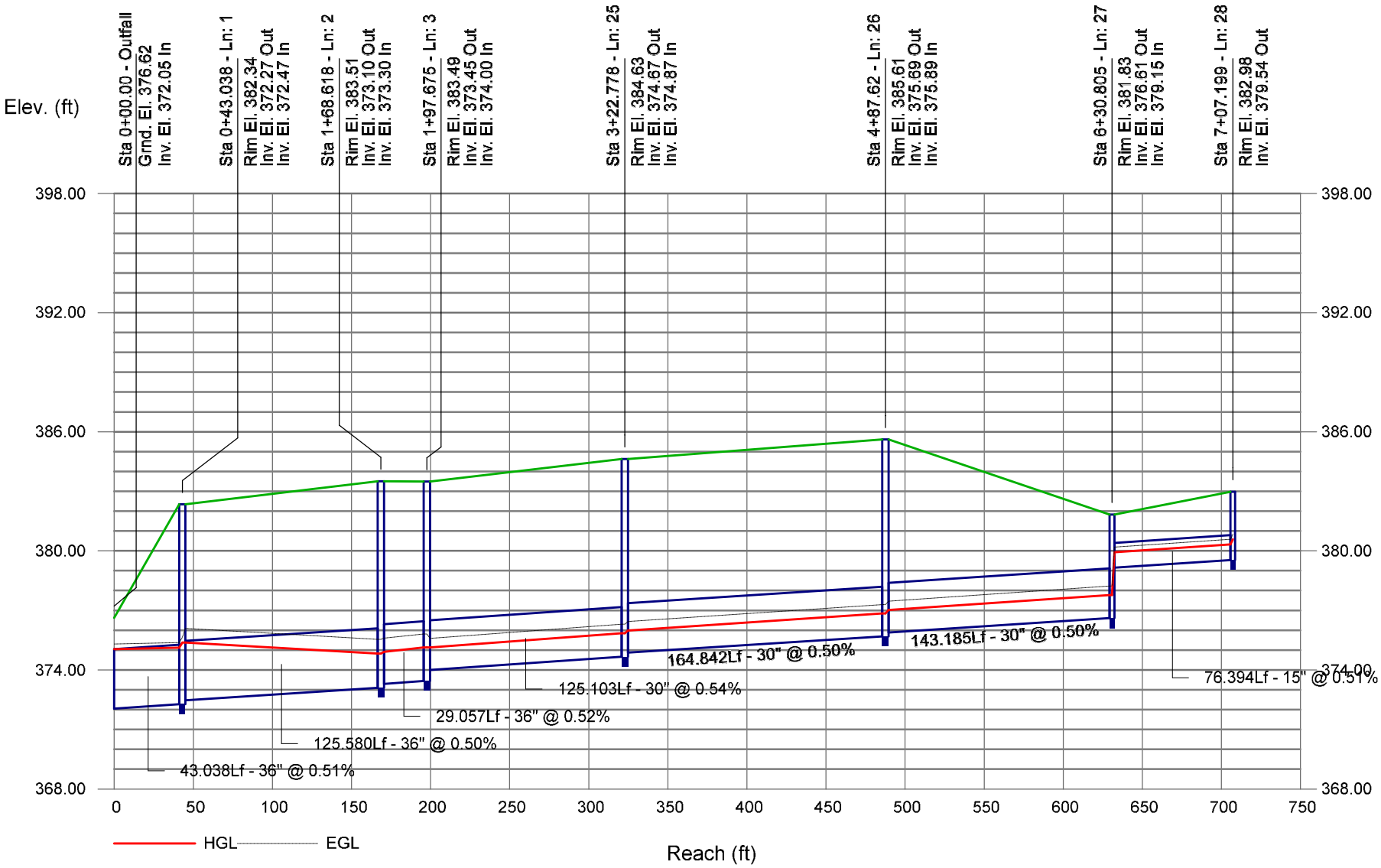
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 15 | 0.25 | 381.44 | 381.64 | 0.20* | 0.12 | 1.98 | 0.06 | 381.70 | 0.494 | 44.388 | 381.66 | 381.86 | 0.20** | 0.13 | 1.97 | 0.06 | 381.92 | 0.487 | 0.491 | 0.218 | 1.00 | 0.06 |
| 24 | 15 | 0.88 | 380.42 | 380.79 | 0.37* | 0.30 | 2.92 | 0.13 | 380.92 | 0.522 | 34.361 | 380.60 | 380.97 | 0.37** | 0.30 | 2.89 | 0.13 | 381.10 | 0.507 | 0.515 | 0.177 | 1.00 | 0.13 |
| 25 | 30 | 12.36 | 374.00 | 375.13 | 1.13 | 2.16 | 5.73 | 0.46 | 375.59 | 0.000 | 125.103 | 374.67 | 375.85 | 1.18** | 2.28 | 5.43 | 0.46 | 376.31 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 26 | 30 | 11.92 | 374.87 | 375.99 | 1.12* | 2.13 | 5.61 | 0.45 | 376.44 | 0.000 | 164.842 | 375.69 | 376.85 | 1.16** | 2.22 | 5.36 | 0.45 | 377.29 | 0.000 | 0.000 | n/a | 1.00 | 0.45 |
| 27 | 30 | 12.09 | 375.89 | 377.01 | 1.12* | 2.14 | 5.65 | 0.45 | 377.47 | 0.000 | 143.185 | 376.61 | 377.78 | 1.17** | 2.24 | 5.39 | 0.45 | 378.23 | 0.000 | 0.000 | n/a | 2.25 | n/a |
| 28 | 15 | 3.31 | 379.15 | 379.93 | 0.78* | 0.81 | 4.09 | 0.26 | 380.19 | 0.510 | 76.394 | 379.54 | 380.32 | 0.78 | 0.81 | 4.08 | 0.26 | 380.58 | 0.508 | 0.509 | 0.389 | 1.00 | 0.26 |
| 29 | 24 | 7.47 | 377.15 | 377.88 | 0.73* | 1.03 | 7.23 | 0.38 | 378.26 | 0.000 | 71.757 | 378.13 | 379.10 | 0.97** | 1.51 | 4.94 | 0.38 | 379.48 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 30 | 18 | 5.69 | 378.67 | 379.65 | 0.98* | 1.23 | 4.63 | 0.33 | 379.99 | 0.500 | 163.784 | 379.49 | 380.47 | 0.98 | 1.23 | 4.63 | 0.33 | 380.81 | 0.499 | 0.500 | 0.818 | 0.50 | 0.17 |
| 31 | 15 | 3.66 | 379.76 | 380.64 | 0.88 | 0.92 | 3.96 | 0.24 | 380.88 | 0.450 | 134.085 | 380.43 | 381.26 | 0.83 | 0.87 | 4.22 | 0.28 | 381.54 | 0.525 | 0.488 | 0.654 | 0.50 | 0.14 |
| 32 | 15 | 1.83 | 380.63 | 381.40 | 0.77 | 0.51 | 2.31 | 0.08 | 381.48 | 0.165 | 202.660 | 381.65 | 382.19 j | 0.54** | 0.51 | 3.63 | 0.20 | 382.39 | 0.544 | 0.354 | n/a | 1.00 | n/a |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

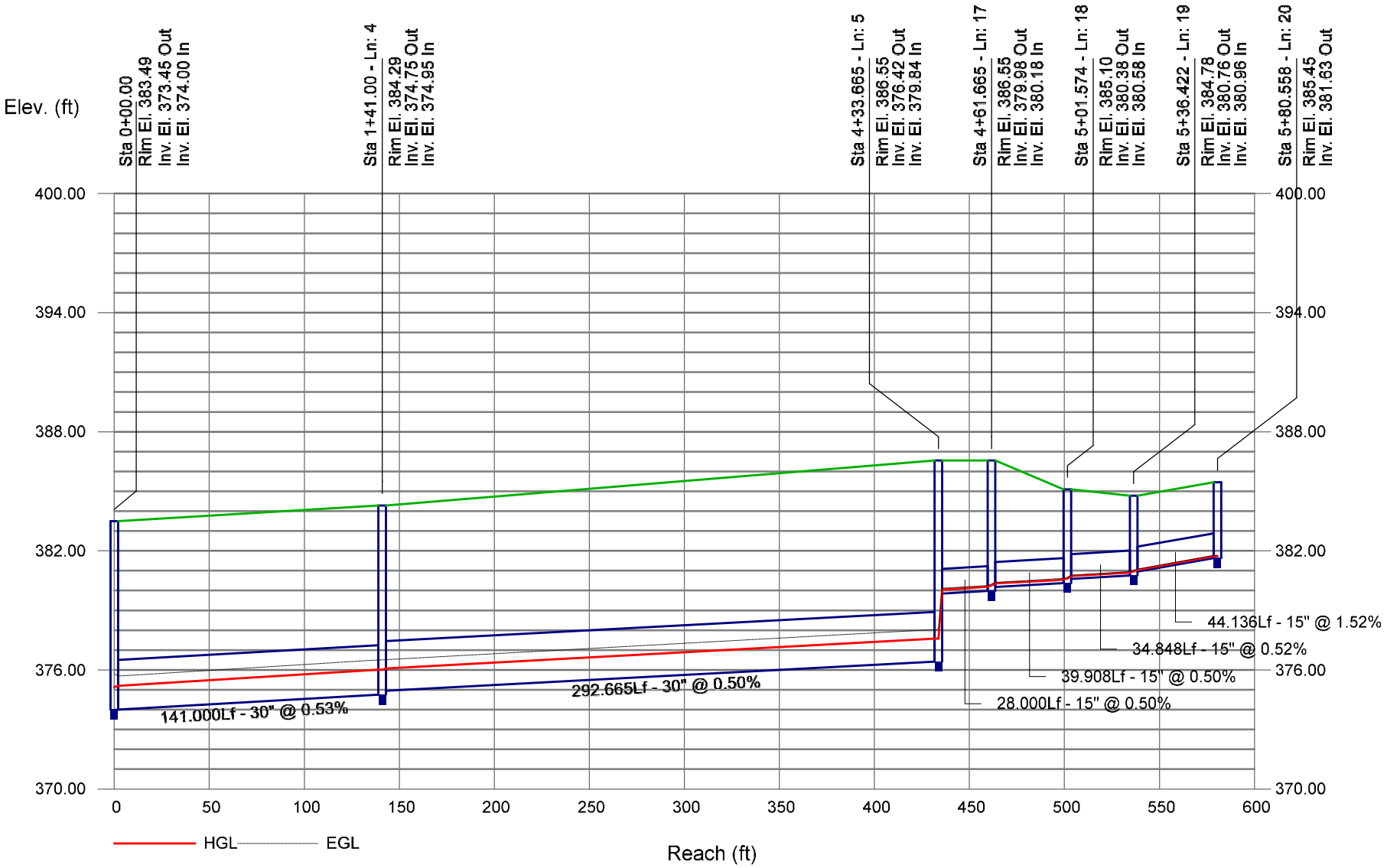
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 1-28 Proj. file: SCM 1B Storm Network.stm



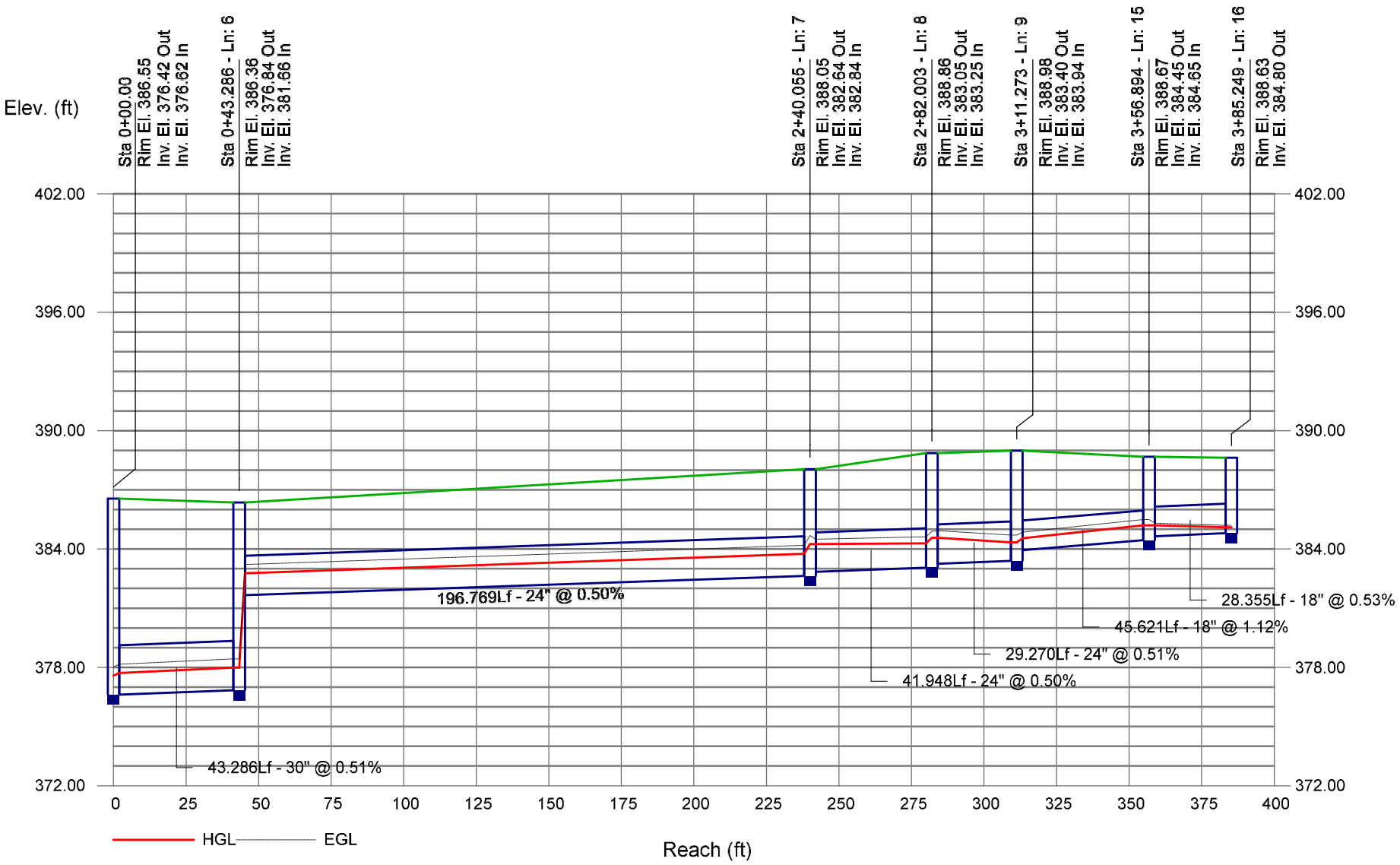
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 4-20 Proj. file: SCM 1B Storm Network.stm



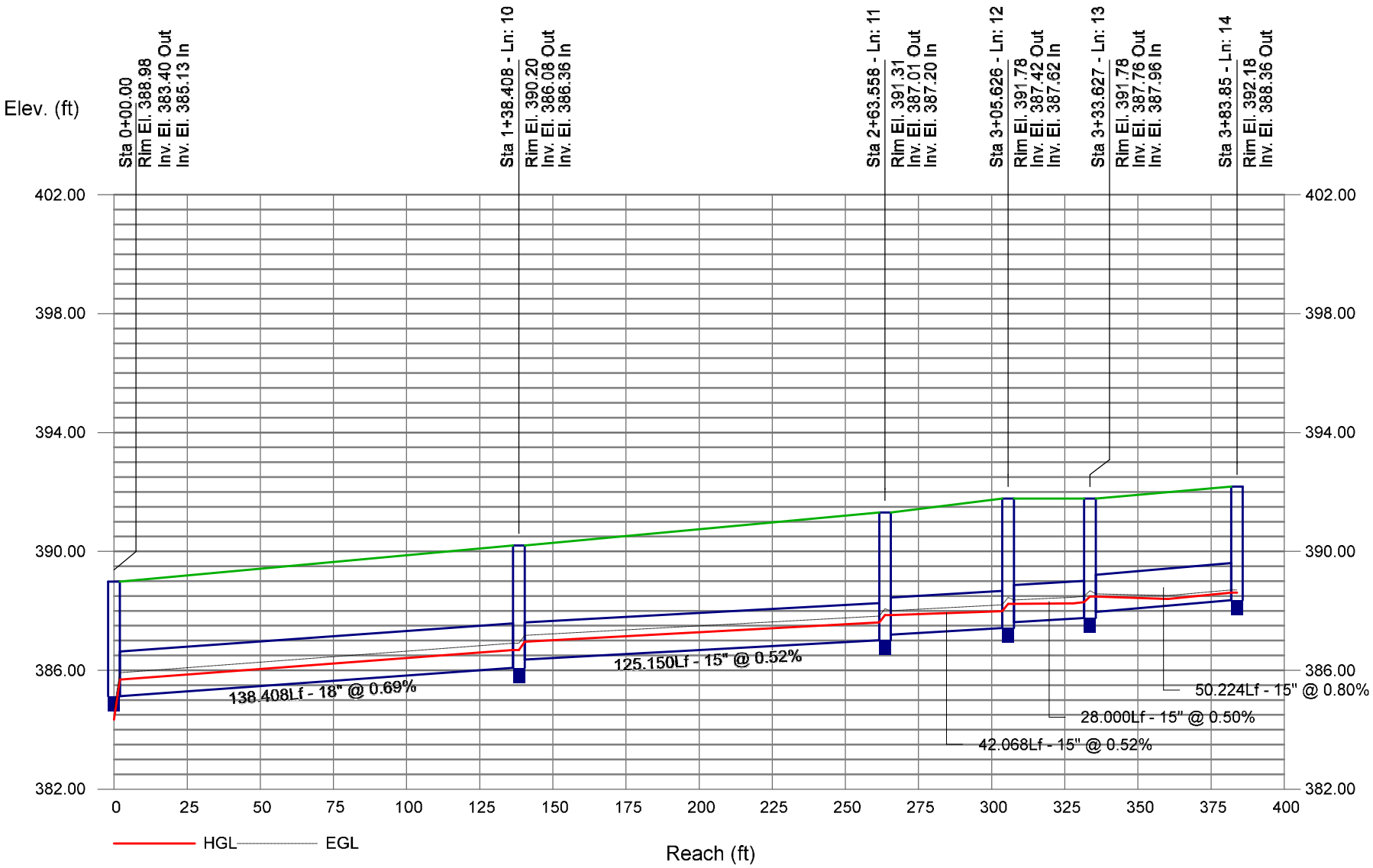
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 6-16 Proj. file: SCM 1B Storm Network.stm



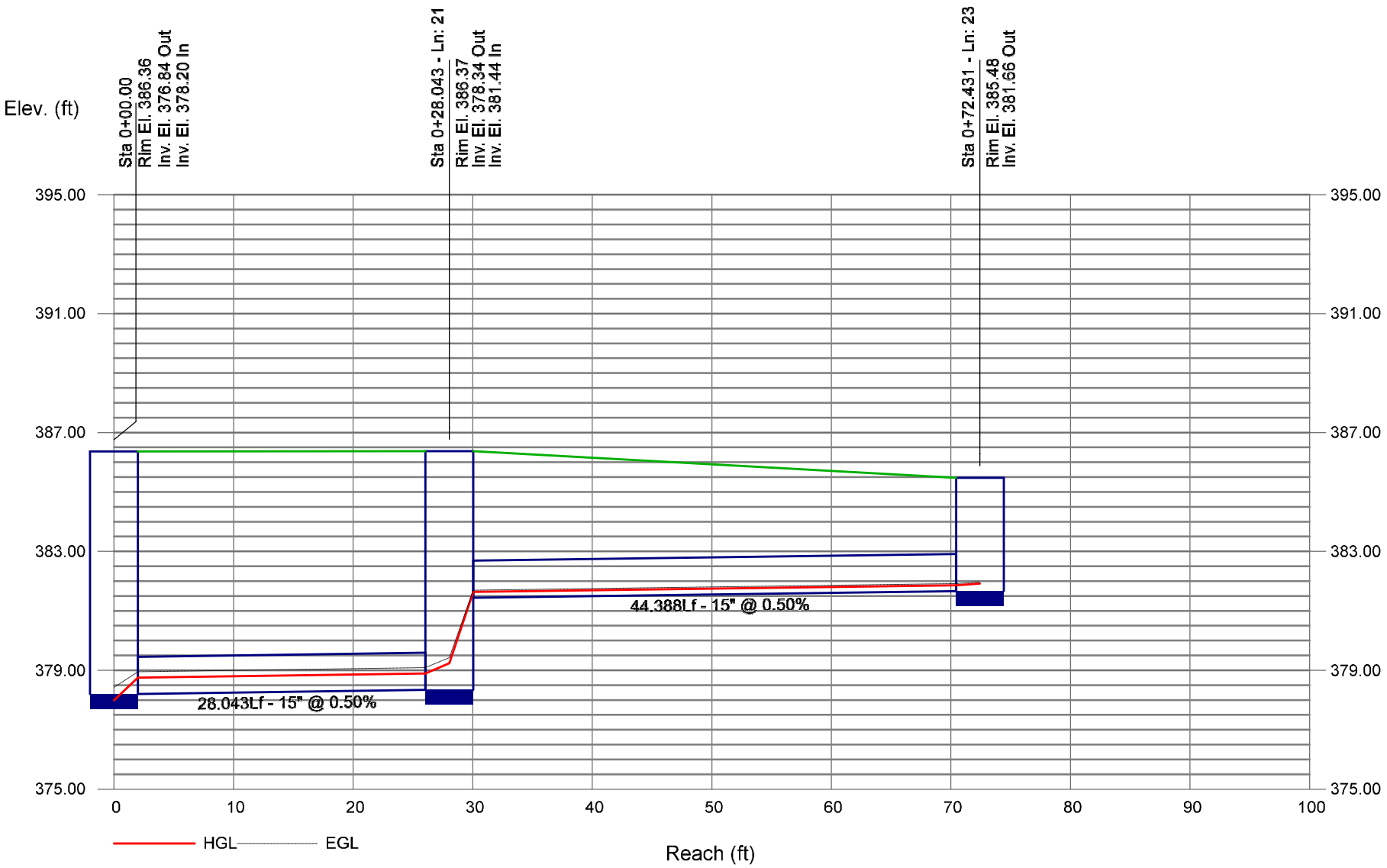
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 10-14 Proj. file: SCM 1B Storm Network.stm



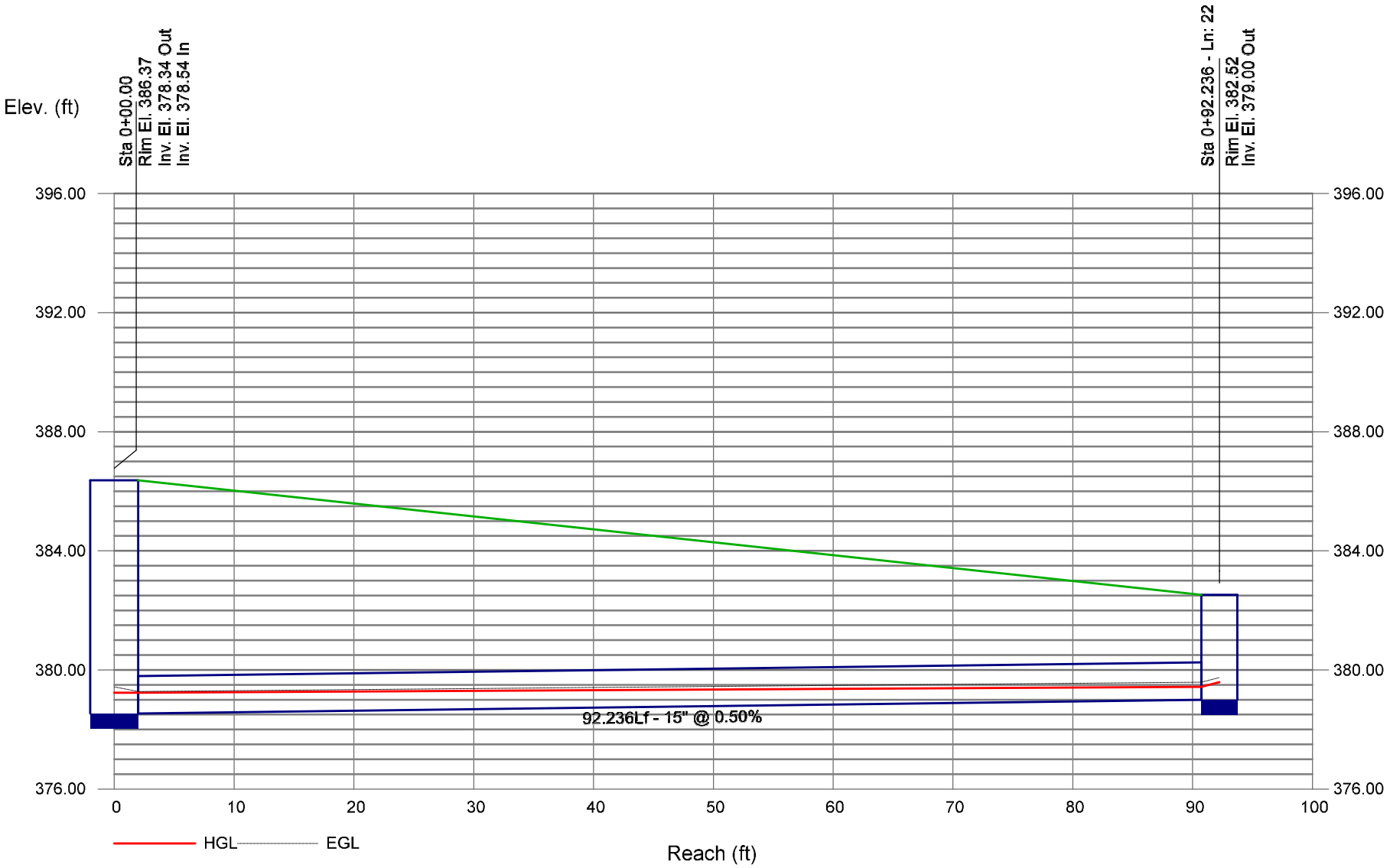
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 21-23 Proj. file: SCM 1B Storm Network.stm



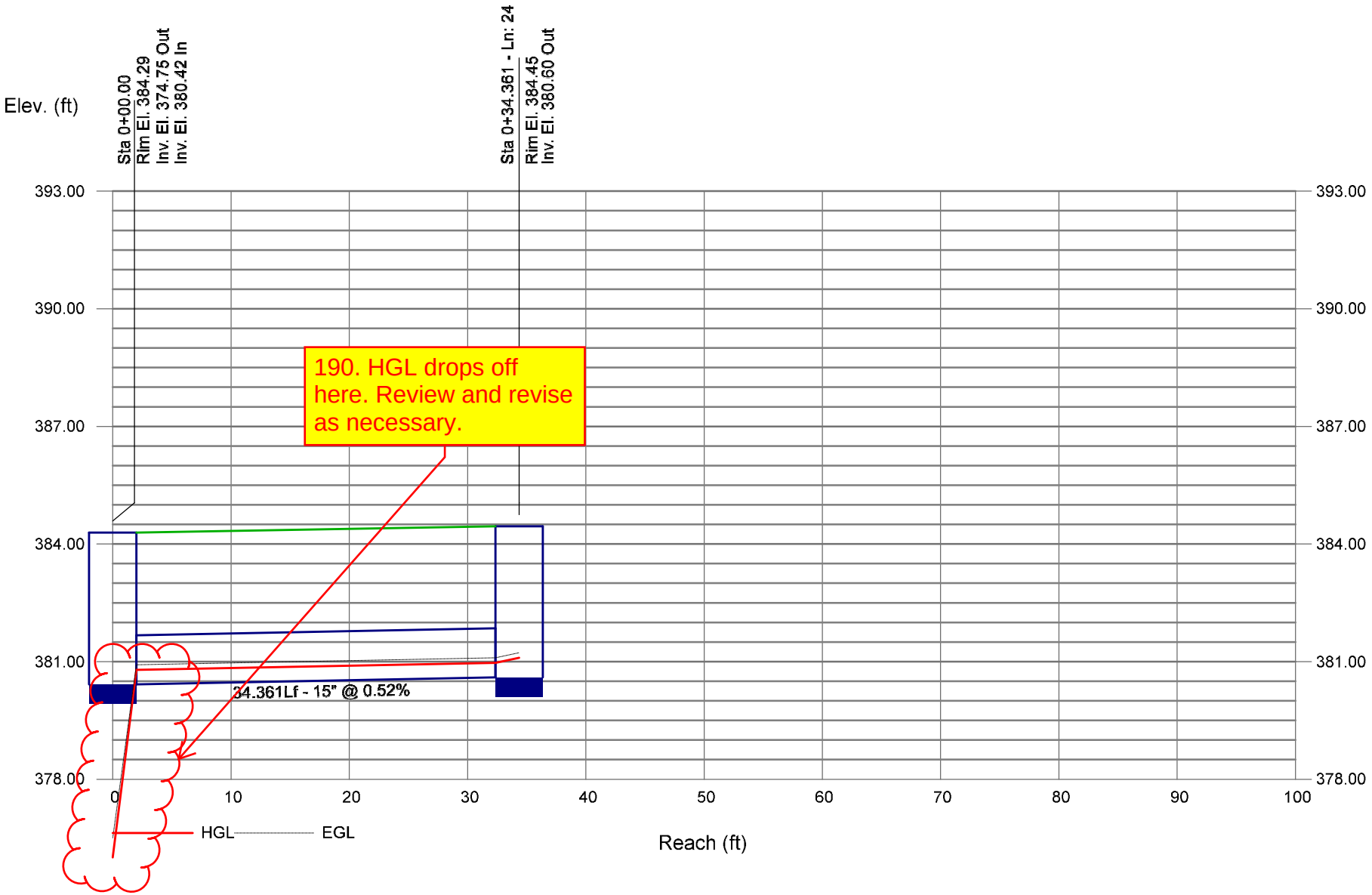
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 22-22 Proj. file: SCM 1B Storm Network.stm



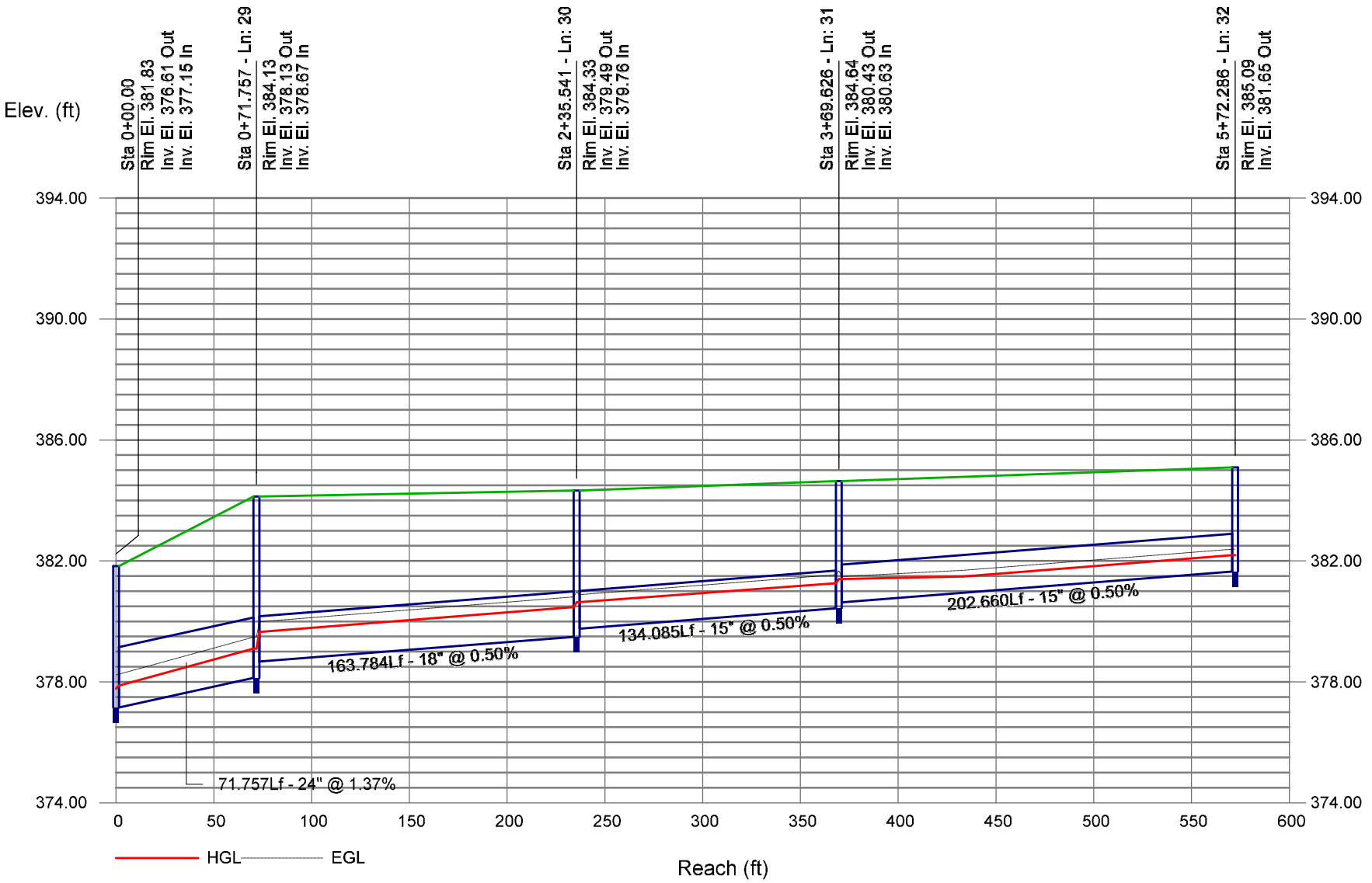
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 24-24 Proj. file: SCM 1B Storm Network.stm



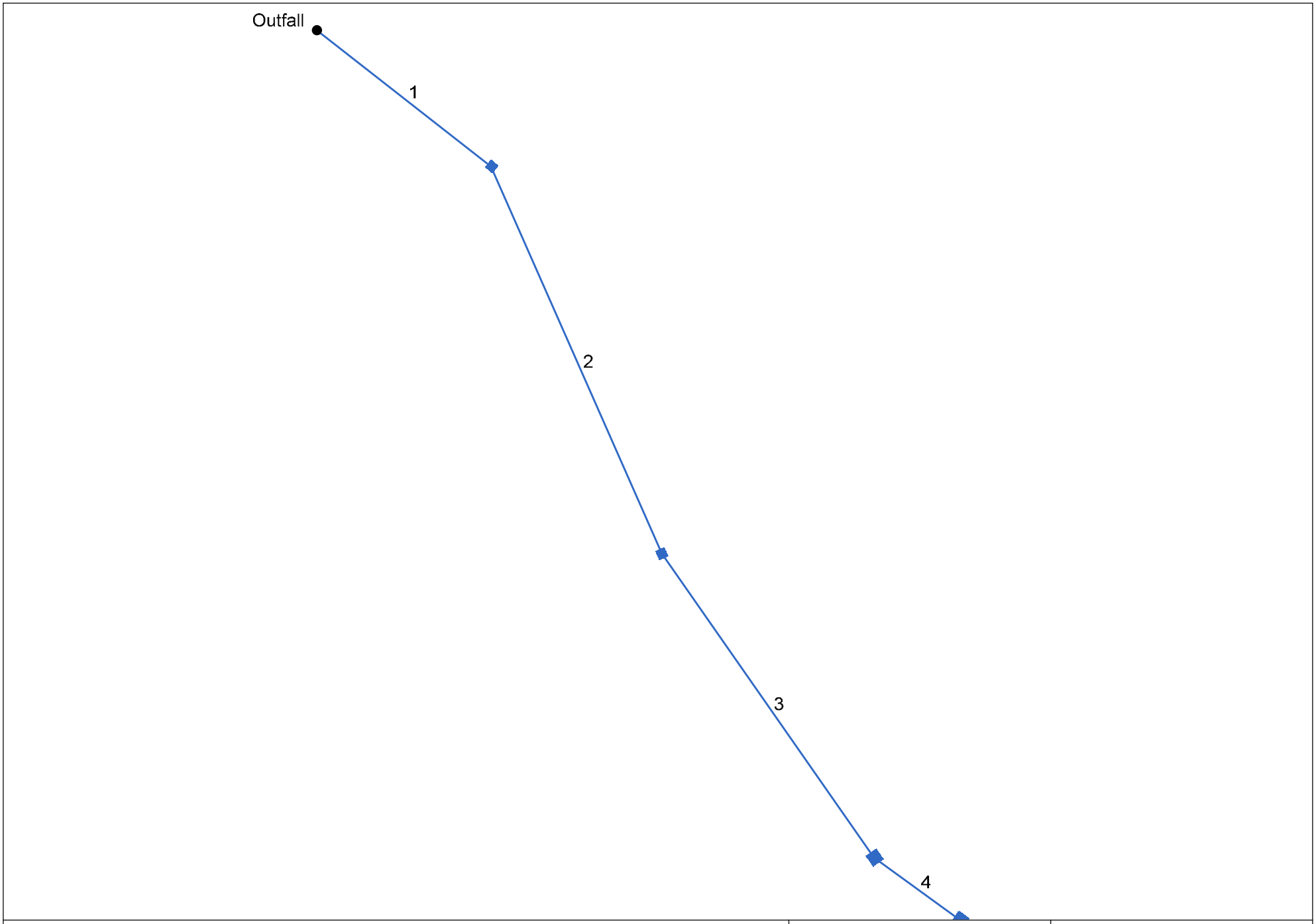
# Storm Sewer Profile

SCM 1B 10-YEAR PROFILE 29-32 Proj. file: SCM 1B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan

SCM 1C 10-YEAR




| | | |
|---|---|---|
| Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Date: 4/11/2025 |

# Storm Sewer Inventory Report

SCM 1C 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 70.981 | 38.145 | DrGrt | 0.00 | 0.39 | 0.60 | 10.0 | 358.50 | 6.68 | 363.24 | 15 | Cir | 0.013 | 0.79 | 371.16 | Pipe - (570) |
| 2 | 1 | 136.000 | 28.168 | DrGrt | 0.00 | 0.16 | 0.60 | 10.0 | 363.50 | 5.51 | 371.00 | 15 | Cir | 0.013 | 0.50 | 378.82 | Pipe - (569) |
| 3 | 2 | 119.127 | -11.154 | Comb | 0.00 | 0.33 | 0.60 | 10.0 | 371.20 | 0.92 | 372.30 | 15 | Cir | 0.013 | 0.57 | 380.11 | Pipe - (568) |
| 4 | 3 | 34.000 | -19.075 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 372.56 | 1.00 | 372.90 | 15 | Cir | 0.013 | 1.00 | 380.85 | Pipe - (567) |

Project File: SCM 1C Storm Network.stm

Number of lines: 4

Date: 4/11/2025

# Structure Report



SCM 1C 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 161 | DropGrate | 371.16 | Rect | 3.00 | 3.00 | 15 | Cir | 363.24 | 15 | Cir | 363.50 |
| 2 | YI 162 | DropGrate | 378.82 | Rect | 3.00 | 3.00 | 15 | Cir | 371.00 | 15 | Cir | 371.20 |
| 3 | CB 163 | Combination | 380.11 | Rect | 4.00 | 4.00 | 15 | Cir | 372.30 | 15 | Cir | 372.56 |
| 4 | CB 164 | Combination | 380.85 | Rect | 4.00 | 4.00 | 15 | Cir | 372.90 | | | |

Project File: SCM 1C Storm Network.stm | Number of Structures: 4 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 1C 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (570) | 4.14 | 15 | Cir | 70.981 | 358.50 | 363.24 | 6.678 | 359.75 | 364.06 | n/a | 364.06 j | End | DropGrate |
| 2 | Pipe - (569) | 2.86 | 15 | Cir | 136.000 | 363.50 | 371.00 | 5.515 | 364.06 | 371.68 | 0.14 | 371.68 | 1 | DropGrate |
| 3 | Pipe - (568) | 2.35 | 15 | Cir | 119.127 | 371.20 | 372.30 | 0.923 | 371.73 | 372.91 | 0.14 | 372.91 | 2 | Combination |
| 4 | Pipe - (567) | 1.20 | 15 | Cir | 34.000 | 372.56 | 372.90 | 1.000 | 372.92 | 373.33 | n/a | 373.33 | 3 | Combination |

Project File: SCM 1C Storm Network.stm

Number of lines: 4

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 1C 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 161 | 1.37 | 0.00 | 1.37 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.15 | 16.84 | 0.15 | 16.84 | 0.0 | Off |
| 2 | YI 162 | 0.56 | 0.00 | 0.56 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.08 | 10.19 | 0.08 | 10.19 | 0.0 | Off |
| 3 | CB 163 | 1.16 | 0.00 | 1.16 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.65 | 0.19 | 5.65 | 0.0 | Off |
| 4 | CB 164 | 1.20 | 0.00 | 1.20 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.78 | 0.20 | 5.78 | 0.0 | Off |

Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 1C 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 15 | 4.14 | 358.50 | 359.75 | 1.25 | 0.86 | 3.37 | 0.18 | 359.93 | 0.411 | 70.981 | 363.24 | 364.06 j | 0.82** | 0.86 | 4.83 | 0.36 | 364.43 | 0.692 | 0.552 | n/a | 0.79 | n/a |
| 2 | 15 | 2.86 | 363.50 | 364.06 | 0.56 | 0.54 | 5.34 | 0.27 | 364.34 | 0.000 | 136.000 | 371.00 | 371.68 | 0.68** | 0.68 | 4.20 | 0.27 | 371.95 | 0.000 | 0.000 | n/a | 0.50 | 0.14 |
| 3 | 15 | 2.35 | 371.20 | 371.73 | 0.53* | 0.50 | 4.70 | 0.24 | 371.97 | 0.000 | 119.127 | 372.30 | 372.91 | 0.61** | 0.60 | 3.93 | 0.24 | 373.15 | 0.000 | 0.000 | n/a | 0.57 | 0.14 |
| 4 | 15 | 1.20 | 372.56 | 372.92 | 0.36* | 0.30 | 4.02 | 0.16 | 373.08 | 0.000 | 34.000 | 372.90 | 373.33 | 0.43** | 0.38 | 3.19 | 0.16 | 373.49 | 0.000 | 0.000 | n/a | 1.00 | n/a |

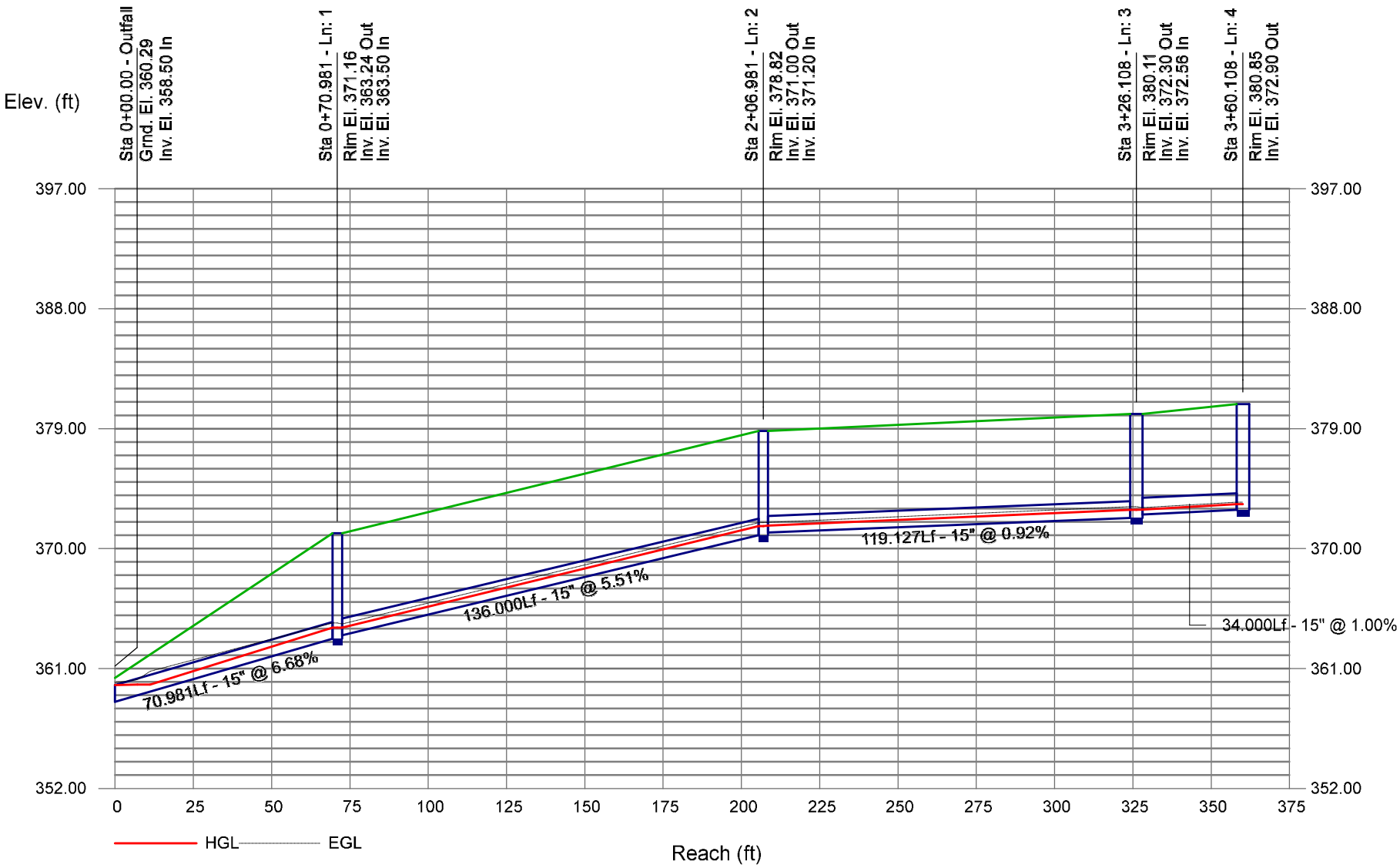
Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

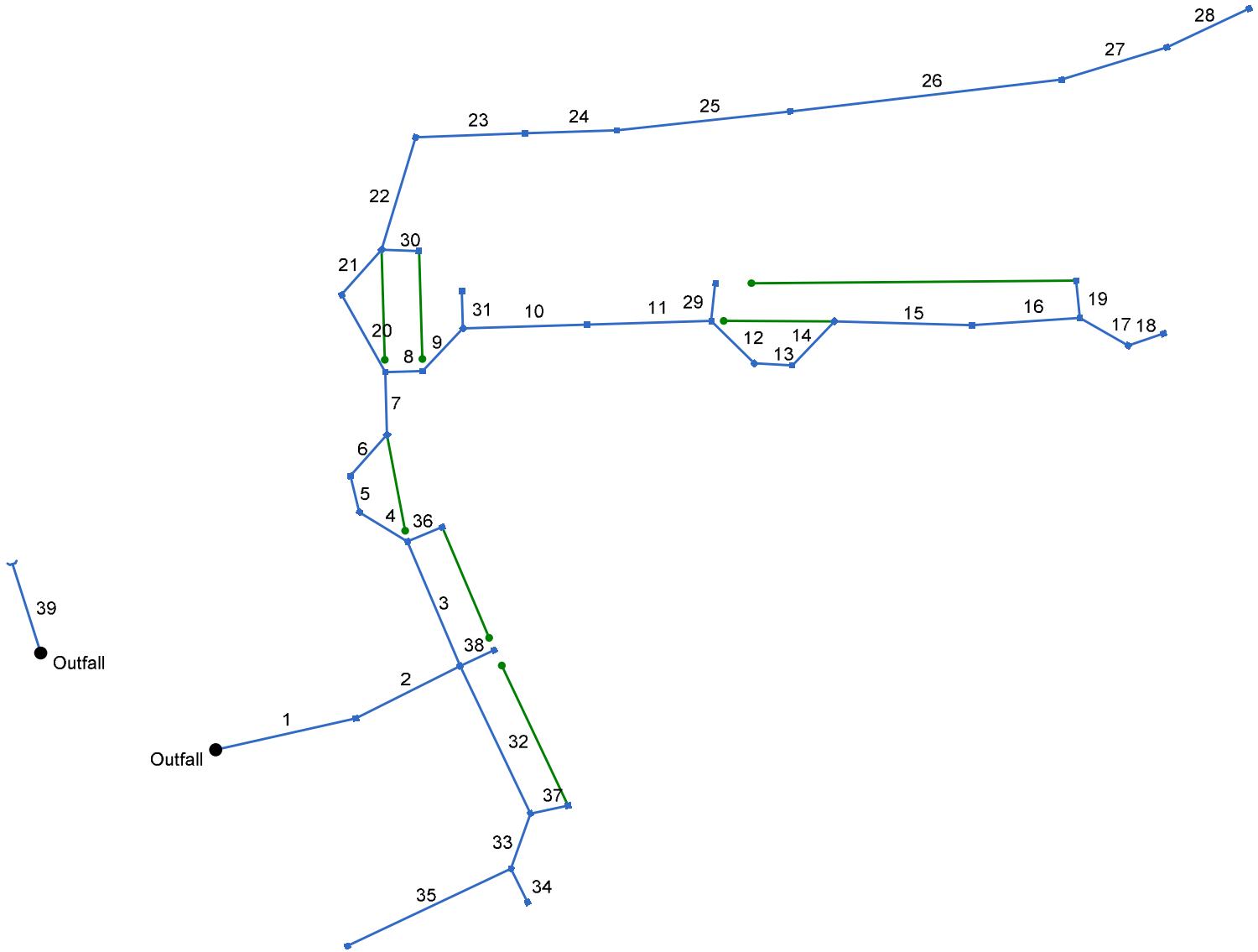
# Storm Sewer Profile

SCM 1C 10-YEAR PROFILE 1-4

Proj. file: SCM 1C Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 2 10-YEAR




| Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 2 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 107.012 | -12.687 | DrGrt | 0.00 | 0.41 | 0.60 | 10.0 | 349.02 | 0.86 | 349.94 | 30 | Cir | 0.013 | 0.50 | 357.33 | Pipe - (137) |
| 2 | 1 | 87.460 | -14.066 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 350.14 | 0.75 | 350.80 | 30 | Cir | 0.013 | 1.50 | 358.63 | Pipe - (135) |
| 3 | 2 | 101.407 | -86.284 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 351.00 | 1.58 | 352.60 | 30 | Cir | 0.013 | 1.50 | 360.21 | Pipe - (131) |
| 4 | 3 | 41.788 | -35.260 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 352.80 | 1.01 | 353.22 | 30 | Cir | 0.013 | 1.11 | 361.27 | Pipe - (172) |
| 5 | 4 | 28.013 | 44.313 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 353.40 | 0.50 | 353.54 | 30 | Cir | 0.013 | 1.28 | 361.29 | Pipe - (171) |
| 6 | 5 | 41.080 | 55.403 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 353.64 | 1.00 | 354.05 | 30 | Cir | 0.013 | 1.09 | 361.89 | Pipe - (123) |
| 7 | 6 | 46.931 | -42.881 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 354.25 | 0.60 | 354.53 | 30 | Cir | 0.013 | 1.77 | 362.70 | Pipe - (520) |
| 8 | 7 | 28.000 | 89.726 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 354.70 | 0.50 | 354.84 | 24 | Cir | 0.013 | 1.13 | 362.70 | Pipe - (521) |
| 9 | 8 | 43.841 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 355.00 | 1.00 | 355.44 | 24 | Cir | 0.013 | 1.69 | 364.05 | Pipe - (122) |
| 10 | 9 | 92.661 | 45.000 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 355.60 | 4.92 | 360.16 | 18 | Cir | 0.013 | 0.50 | 368.49 | Pipe - (157) (1) |
| 11 | 10 | 92.660 | 0.008 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 360.40 | 5.84 | 365.81 | 18 | Cir | 0.013 | 1.49 | 373.41 | Pipe - (157) |
| 12 | 11 | 45.242 | 46.481 | Comb | 0.00 | 0.77 | 0.60 | 10.0 | 366.00 | 4.42 | 368.00 | 18 | Cir | 0.013 | 1.07 | 376.09 | Pipe - (160) |
| 13 | 12 | 28.241 | -41.708 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 368.20 | 0.50 | 368.34 | 18 | Cir | 0.013 | 1.19 | 376.18 | Pipe - (162) |
| 14 | 13 | 45.687 | -49.362 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 368.60 | 4.82 | 370.80 | 18 | Cir | 0.013 | 1.17 | 378.35 | Pipe - (168) |
| 15 | 14 | 102.568 | 47.993 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 371.00 | 3.90 | 375.00 | 15 | Cir | 0.013 | 0.50 | 383.79 | Pipe - (156) |
| 16 | 15 | 80.723 | -5.560 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 375.20 | 4.83 | 379.10 | 15 | Cir | 0.013 | 1.50 | 387.61 | Pipe - (143) |
| 17 | 16 | 41.477 | 33.735 | Comb | 0.00 | 0.59 | 0.60 | 10.0 | 379.30 | 4.10 | 381.00 | 15 | Cir | 0.013 | 1.18 | 389.05 | Pipe - (138) |
| 18 | 17 | 28.000 | -48.574 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 381.18 | 0.93 | 381.44 | 15 | Cir | 0.013 | 1.00 | 389.06 | Pipe - (158) |
| 19 | 16 | 28.132 | -91.952 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 379.30 | 0.50 | 379.44 | 15 | Cir | 0.013 | 1.00 | 387.71 | Pipe - (167) |
| 20 | 7 | 66.604 | -27.920 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 354.70 | 1.01 | 355.37 | 18 | Cir | 0.013 | 1.43 | 363.67 | Pipe - (524) |
| 21 | 20 | 45.065 | 70.943 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 355.60 | 1.00 | 356.05 | 18 | Cir | 0.013 | 1.21 | 364.41 | Pipe - (522) |
| 22 | 21 | 87.915 | -24.725 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 356.25 | 1.00 | 357.13 | 18 | Cir | 0.013 | 1.43 | 364.79 | Pipe - (238) |
| 23 | 22 | 81.372 | 70.991 | DrGrt | 0.00 | 0.32 | 0.60 | 10.0 | 357.40 | 3.20 | 360.00 | 18 | Cir | 0.013 | 0.50 | 364.50 | Pipe - (237) |

Project File: SCM 2 Storm Network.stm

Number of lines: 39

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 2 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 68.903 | 0.438 | DrGrt | 0.00 | 0.59 | 0.60 | 10.0 | 360.20 | 2.61 | 362.00 | 18 | Cir | 0.013 | 0.50 | 366.02 | Pipe - (216) |
| 25 | 24 | 130.000 | -4.566 | DrGrt | 0.00 | 0.77 | 0.60 | 10.0 | 362.20 | 3.54 | 366.80 | 18 | Cir | 0.013 | 0.50 | 371.38 | Pipe - (217) |
| 26 | 25 | 203.727 | -0.399 | DrGrt | 0.00 | 0.43 | 0.60 | 10.0 | 367.00 | 3.19 | 373.50 | 15 | Cir | 0.013 | 0.50 | 378.55 | Pipe - (217) (1) |
| 27 | 26 | 82.351 | -10.355 | DrGrt | 0.00 | 0.11 | 0.60 | 10.0 | 373.70 | 0.97 | 374.50 | 15 | Cir | 0.013 | 0.50 | 380.13 | Pipe - (580) |
| 28 | 27 | 68.005 | -8.335 | DrGrt | 0.00 | 0.41 | 0.60 | 10.0 | 374.70 | 1.00 | 375.38 | 15 | Cir | 0.013 | 1.00 | 380.18 | Pipe - (579) |
| 29 | 11 | 28.251 | -82.160 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 366.00 | 0.50 | 366.14 | 15 | Cir | 0.013 | 1.00 | 373.62 | Pipe - (161) |
| 30 | 21 | 28.058 | 50.378 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 356.25 | 1.00 | 356.53 | 15 | Cir | 0.013 | 1.00 | 364.41 | Pipe - (523) |
| 31 | 9 | 28.000 | -45.000 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 356.04 | 0.50 | 356.18 | 15 | Cir | 0.013 | 1.00 | 364.21 | Pipe - (121) |
| 32 | 2 | 122.425 | 91.449 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 351.00 | 0.98 | 352.20 | 24 | Cir | 0.013 | 1.47 | 359.75 | Pipe - (180) |
| 33 | 32 | 43.844 | 44.996 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 352.40 | 3.19 | 353.80 | 15 | Cir | 0.013 | 1.69 | 361.35 | Pipe - (178) |
| 34 | 33 | 28.005 | -46.494 | Comb | 0.00 | 0.24 | 0.60 | 10.0 | 354.00 | -0.54 | 353.85 | 15 | Cir | 0.013 | 1.00 | 361.34 | Pipe - (556) |
| 35 | 33 | 135.019 | 44.904 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 354.00 | 2.89 | 357.90 | 15 | Cir | 0.013 | 1.00 | 365.23 | Pipe - (177) |
| 36 | 3 | 28.141 | 90.727 | Comb | 0.00 | 0.36 | 0.60 | 10.0 | 353.30 | 0.50 | 353.44 | 15 | Cir | 0.013 | 1.00 | 360.26 | Pipe - (173) |
| 37 | 32 | 28.755 | -76.842 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 352.40 | 1.67 | 352.88 | 15 | Cir | 0.013 | 1.00 | 359.93 | Pipe - (179) |
| 38 | 2 | 28.000 | 1.449 | Comb | 0.00 | 0.69 | 0.60 | 10.0 | 352.00 | 0.50 | 352.14 | 15 | Cir | 0.013 | 1.00 | 358.63 | Pipe - (132) |
| 39 | End | 69.863 | -107.397 | Hdwl | 0.00 | 1.33 | 0.60 | 10.0 | 350.00 | 2.15 | 351.50 | 18 | Cir | 0.013 | 1.00 | -2.92 | Pipe - (581) |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Date: 4/11/2025

# Structure Report



SCM 2 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 201 | DropGrate | 357.33 | Rect | 4.00 | 4.00 | 30 | Cir | 349.94 | 30 | Cir | 350.14 |
| 2 | CB 202 | Combination | 358.63 | Rect | 4.00 | 4.00 | 30 | Cir | 350.80 | 30<br>24<br>15 | Cir<br>Cir<br>Cir | 351.00<br>351.00<br>352.00 |
| 3 | CB 203 | Combination | 360.21 | Rect | 4.00 | 4.00 | 30 | Cir | 352.60 | 30<br>15 | Cir<br>Cir | 352.80<br>353.30 |
| 4 | CB 204 | Combination | 361.27 | Rect | 4.00 | 4.00 | 30 | Cir | 353.22 | 30 | Cir | 353.40 |
| 5 | CB 205 | Combination | 361.29 | Rect | 4.00 | 4.00 | 30 | Cir | 353.54 | 30 | Cir | 353.64 |
| 6 | CB 206 | Combination | 361.89 | Rect | 4.00 | 4.00 | 30 | Cir | 354.05 | 30 | Cir | 354.25 |
| 7 | CB 207 | Combination | 362.70 | Rect | 4.00 | 4.00 | 30 | Cir | 354.53 | 24<br>18 | Cir<br>Cir | 354.70<br>354.70 |
| 8 | CB 208 | Combination | 362.70 | Rect | 4.00 | 4.00 | 24 | Cir | 354.84 | 24 | Cir | 355.00 |
| 9 | CB 209 | Combination | 364.05 | Rect | 4.00 | 4.00 | 24 | Cir | 355.44 | 18<br>15 | Cir<br>Cir | 355.60<br>356.04 |
| 10 | CB 210 | Combination | 368.49 | Rect | 4.00 | 4.00 | 18 | Cir | 360.16 | 18 | Cir | 360.40 |
| 11 | CB 211 | Combination | 373.41 | Rect | 4.00 | 4.00 | 18 | Cir | 365.81 | 18<br>15 | Cir<br>Cir | 366.00<br>366.00 |
| 12 | CB 212 | Combination | 376.09 | Rect | 4.00 | 4.00 | 18 | Cir | 368.00 | 18 | Cir | 368.20 |
| 13 | CB 213 | Combination | 376.18 | Rect | 4.00 | 4.00 | 18 | Cir | 368.34 | 18 | Cir | 368.60 |
| 14 | CB 214 | Combination | 378.35 | Rect | 4.00 | 4.00 | 18 | Cir | 370.80 | 15 | Cir | 371.00 |
| 15 | CB 215 | Combination | 383.79 | Rect | 4.00 | 4.00 | 15 | Cir | 375.00 | 15 | Cir | 375.20 |
| 16 | CB 216 | Combination | 387.61 | Rect | 4.00 | 4.00 | 15 | Cir | 379.10 | 15<br>15 | Cir<br>Cir | 379.30<br>379.30 |
| 17 | CB 217 | Combination | 389.05 | Rect | 4.00 | 4.00 | 15 | Cir | 381.00 | 15 | Cir | 381.18 |
| 18 | CB 217A | Combination | 389.06 | Rect | 4.00 | 4.00 | 15 | Cir | 381.44 | | | |
| 19 | CB 216A | Combination | 387.71 | Rect | 4.00 | 4.00 | 15 | Cir | 379.44 | | | |

# Structure Report

SCM 2 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 20 | CB 226 | Combination | 363.67 | Rect | 4.00 | 4.00 | 18 | Cir | 355.37 | 18 | Cir | 355.60 |
| 21 | CB 227 | Combination | 364.41 | Rect | 4.00 | 4.00 | 18 | Cir | 356.05 | 18<br>15 | Cir<br>Cir | 356.25<br>356.25 |
| 22 | CB 228 | Combination | 364.79 | Rect | 4.00 | 4.00 | 18 | Cir | 357.13 | 18 | Cir | 357.40 |
| 23 | YI 229 | DropGrate | 364.50 | Rect | 4.00 | 4.00 | 18 | Cir | 360.00 | 18 | Cir | 360.20 |
| 24 | YI 230 | DropGrate | 366.02 | Rect | 4.00 | 4.00 | 18 | Cir | 362.00 | 18 | Cir | 362.20 |
| 25 | YI 231 | DropGrate | 371.38 | Rect | 4.00 | 4.00 | 18 | Cir | 366.80 | 15 | Cir | 367.00 |
| 26 | YI 232 | DropGrate | 378.55 | Rect | 4.00 | 4.00 | 15 | Cir | 373.50 | 15 | Cir | 373.70 |
| 27 | YI 233 | DropGrate | 380.13 | Rect | 4.00 | 4.00 | 15 | Cir | 374.50 | 15 | Cir | 374.70 |
| 28 | YI 234 | DropGrate | 380.18 | Rect | 4.00 | 4.00 | 15 | Cir | 375.38 | | | |
| 29 | CB 211A | Combination | 373.62 | Rect | 4.00 | 4.00 | 15 | Cir | 366.14 | | | |
| 30 | CB 227A | Combination | 364.41 | Rect | 4.00 | 4.00 | 15 | Cir | 356.53 | | | |
| 31 | CB 209A | Combination | 364.21 | Rect | 4.00 | 4.00 | 15 | Cir | 356.18 | | | |
| 32 | CB 223 | Combination | 359.75 | Rect | 4.00 | 4.00 | 24 | Cir | 352.20 | 15<br>15 | Cir<br>Cir | 352.40<br>352.40 |
| 33 | CB 224 | Combination | 361.35 | Rect | 4.00 | 4.00 | 15 | Cir | 353.80 | 15<br>15 | Cir<br>Cir | 354.00<br>354.00 |
| 34 | CB 224A | Combination | 361.34 | Rect | 4.00 | 4.00 | 15 | Cir | 353.85 | | | |
| 35 | CB 225 | Combination | 365.23 | Rect | 4.00 | 4.00 | 15 | Cir | 357.90 | | | |
| 36 | CB 203A | Combination | 360.26 | Rect | 4.00 | 4.00 | 15 | Cir | 353.44 | | | |
| 37 | CB 223A | Combination | 359.93 | Rect | 4.00 | 4.00 | 15 | Cir | 352.88 | | | |
| 38 | CB 202A | Combination | 358.63 | Rect | 4.00 | 4.00 | 15 | Cir | 352.14 | | | |
| 39 | FES 240 | OpenHeadwall | -2.92 | n/a | n/a | n/a | 18 | Cir | 351.50 | | | |

Project File: SCM 2 Storm Network.stm | Number of Structures: 39 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 2 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (137) | 32.44 | 30 | Cir | 107.012 | 349.02 | 349.94 | 0.860 | 351.52 | 351.98 | 0.44 | 352.43 | End | DropGrate |
| 2 | Pipe - (135) | 31.36 | 30 | Cir | 87.460 | 350.14 | 350.80 | 0.755 | 352.43 | 352.71 | n/a | 352.71 j | 1 | Combination |
| 3 | Pipe - (131) | 25.13 | 30 | Cir | 101.407 | 351.00 | 352.60 | 1.578 | 352.71 | 354.31 | n/a | 354.31 | 2 | Combination |
| 4 | Pipe - (172) | 23.77 | 30 | Cir | 41.788 | 352.80 | 353.22 | 1.005 | 354.31 | 354.88 | n/a | 354.88 | 3 | Combination |
| 5 | Pipe - (171) | 22.84 | 30 | Cir | 28.013 | 353.40 | 353.54 | 0.500 | 355.07 | 355.21 | 0.85 | 356.06 | 4 | Combination |
| 6 | Pipe - (123) | 22.00 | 30 | Cir | 41.080 | 353.64 | 354.05 | 0.998 | 356.06 | 355.64 | 0.75 | 355.64 | 5 | Combination |
| 7 | Pipe - (520) | 21.99 | 30 | Cir | 46.931 | 354.25 | 354.53 | 0.597 | 355.78 | 356.12 | n/a | 356.12 | 6 | Combination |
| 8 | Pipe - (521) | 12.20 | 24 | Cir | 28.000 | 354.70 | 354.84 | 0.500 | 356.12 | 356.20 | 0.51 | 356.71 | 7 | Combination |
| 9 | Pipe - (122) | 12.06 | 24 | Cir | 43.841 | 355.00 | 355.44 | 1.004 | 356.71 | 356.69 | n/a | 356.69 j | 8 | Combination |
| 10 | Pipe - (157) (1) | 11.18 | 18 | Cir | 92.661 | 355.60 | 360.16 | 4.921 | 356.69 | 361.44 | 0.38 | 361.44 | 9 | Combination |
| 11 | Pipe - (157) | 10.62 | 18 | Cir | 92.660 | 360.40 | 365.81 | 5.839 | 361.44 | 367.06 | n/a | 367.06 | 10 | Combination |
| 12 | Pipe - (160) | 9.62 | 18 | Cir | 45.242 | 366.00 | 368.00 | 4.421 | 367.06 | 369.20 | n/a | 369.20 | 11 | Combination |
| 13 | Pipe - (162) | 7.05 | 18 | Cir | 28.241 | 368.20 | 368.34 | 0.496 | 369.37 | 369.51 | 0.42 | 369.93 | 12 | Combination |
| 14 | Pipe - (168) | 5.03 | 18 | Cir | 45.687 | 368.60 | 370.80 | 4.815 | 369.93 | 371.66 | n/a | 371.66 j | 13 | Combination |
| 15 | Pipe - (156) | 4.43 | 15 | Cir | 102.568 | 371.00 | 375.00 | 3.900 | 371.66 | 375.85 | 0.19 | 375.85 | 14 | Combination |
| 16 | Pipe - (143) | 4.12 | 15 | Cir | 80.723 | 375.20 | 379.10 | 4.831 | 375.85 | 379.92 | n/a | 379.92 | 15 | Combination |
| 17 | Pipe - (138) | 3.29 | 15 | Cir | 41.477 | 379.30 | 381.00 | 4.099 | 379.92 | 381.73 | n/a | 381.73 | 16 | Combination |
| 18 | Pipe - (158) | 1.23 | 15 | Cir | 28.000 | 381.18 | 381.44 | 0.929 | 381.73 | 381.88 | n/a | 381.88 j | 17 | Combination |
| 19 | Pipe - (167) | 0.46 | 15 | Cir | 28.132 | 379.30 | 379.44 | 0.498 | 379.92 | 379.92 | 0.02 | 379.94 | 16 | Combination |
| 20 | Pipe - (524) | 9.69 | 18 | Cir | 66.604 | 354.70 | 355.37 | 1.006 | 356.12 | 356.57 | n/a | 356.57 j | 7 | Combination |
| 21 | Pipe - (522) | 9.37 | 18 | Cir | 45.065 | 355.60 | 356.05 | 0.999 | 356.71 | 357.23 | 0.74 | 357.23 | 20 | Combination |
| 22 | Pipe - (238) | 8.85 | 18 | Cir | 87.915 | 356.25 | 357.13 | 1.001 | 357.30 | 358.28 | 0.82 | 358.28 | 21 | Combination |
| 23 | Pipe - (237) | 8.64 | 18 | Cir | 81.372 | 357.40 | 360.00 | 3.195 | 358.28 | 361.14 | n/a | 361.14 | 22 | DropGrate |
| 24 | Pipe - (216) | 7.64 | 18 | Cir | 68.903 | 360.20 | 362.00 | 2.612 | 361.14 | 363.07 | n/a | 363.07 | 23 | DropGrate |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 2 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (217) | 5.77 | 18 | Cir | 130.000 | 362.20 | 366.80 | 3.538 | 363.07 | 367.73 | n/a | 367.73 | 24 | DropGrate |
| 26 | Pipe - (217) (1) | 3.27 | 15 | Cir | 203.727 | 367.00 | 373.50 | 3.191 | 367.73 | 374.23 | n/a | 374.23 | 25 | DropGrate |
| 27 | Pipe - (580) | 1.81 | 15 | Cir | 82.351 | 373.70 | 374.50 | 0.971 | 374.23 | 375.03 | 0.10 | 375.03 | 26 | DropGrate |
| 28 | Pipe - (579) | 1.44 | 15 | Cir | 68.005 | 374.70 | 375.38 | 1.000 | 375.10 | 375.86 | n/a | 375.86 | 27 | DropGrate |
| 29 | Pipe - (161) | 0.95 | 15 | Cir | 28.251 | 366.00 | 366.14 | 0.496 | 367.06 | 367.06 | 0.01 | 367.08 | 11 | Combination |
| 30 | Pipe - (523) | 0.39 | 15 | Cir | 28.058 | 356.25 | 356.53 | 0.998 | 357.23 | 356.77 | 0.08 | 356.77 | 21 | Combination |
| 31 | Pipe - (121) | 0.78 | 15 | Cir | 28.000 | 356.04 | 356.18 | 0.500 | 356.69 | 356.69 | 0.04 | 356.73 | 9 | Combination |
| 32 | Pipe - (180) | 3.78 | 24 | Cir | 122.425 | 351.00 | 352.20 | 0.980 | 352.71 | 352.88 | n/a | 352.88 j | 2 | Combination |
| 33 | Pipe - (178) | 1.63 | 15 | Cir | 43.844 | 352.40 | 353.80 | 3.193 | 352.88 | 354.31 | 0.32 | 354.31 | 32 | Combination |
| 34 | Pipe - (556) | 0.85 | 15 | Cir | 28.005 | 354.00 | 353.85 | -0.536 | 354.36 | 354.55 | 0.02 | 354.57 | 33 | Combination |
| 35 | Pipe - (177) | 0.42 | 15 | Cir | 135.019 | 354.00 | 357.90 | 2.888 | 354.31 | 358.15 | n/a | 358.15 j | 33 | Combination |
| 36 | Pipe - (173) | 1.27 | 15 | Cir | 28.141 | 353.30 | 353.44 | 0.498 | 354.31 | 354.31 | 0.03 | 354.34 | 3 | Combination |
| 37 | Pipe - (179) | 1.44 | 15 | Cir | 28.755 | 352.40 | 352.88 | 1.669 | 352.88 | 353.36 | n/a | 353.36 j | 32 | Combination |
| 38 | Pipe - (132) | 2.43 | 15 | Cir | 28.000 | 352.00 | 352.14 | 0.500 | 352.71 | 352.79 | 0.23 | 353.01 | 2 | Combination |
| 39 | Pipe - (581) | 4.70 | 18 | Cir | 69.863 | 350.00 | 351.50 | 2.147 | 351.50 | 352.33 | n/a | 352.33 j | End | OpenHeadwall |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 2 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 201 | 1.44 | 0.00 | 1.44 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.12 | 14.91 | 0.12 | 14.91 | 0.0 | Off |
| 2 | CB 202 | 0.81 | 0.04 | 0.75 | 0.10 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.09 | 0.08 | 1.40 | 0.0 | Off |
| 3 | CB 203 | 0.32 | 0.00 | 0.32 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.92 | 0.00 | 0.00 | 0.0 | 2 |
| 4 | CB 204 | 1.09 | 0.00 | 1.09 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.38 | 0.19 | 5.38 | 0.0 | Off |
| 5 | CB 205 | 1.02 | 0.00 | 1.02 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.10 | 0.18 | 5.10 | 0.0 | Off |
| 6 | CB 206 | 0.11 | 0.00 | 0.11 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.29 | 0.00 | 0.00 | 0.0 | 3 |
| 7 | CB 207 | 0.49 | 0.01 | 0.50 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.85 | 0.02 | 0.37 | 0.0 | 6 |
| 8 | CB 208 | 0.21 | 0.00 | 0.21 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.65 | 0.00 | 0.00 | 0.0 | Off |
| 9 | CB 209 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.54 | 0.00 | 0.00 | 0.0 | 8 |
| 10 | CB 210 | 0.67 | 0.03 | 0.70 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.78 | 0.02 | 0.35 | 0.0 | 9 |
| 11 | CB 211 | 0.14 | 0.86 | 0.97 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.40 | 0.04 | 0.67 | 0.0 | 10 |
| 12 | CB 212 | 2.71 | 0.00 | 1.85 | 0.86 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.20 | 0.17 | 4.58 | 0.0 | 11 |
| 13 | CB 213 | 2.15 | 0.00 | 2.15 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 9.01 | 0.26 | 9.01 | 0.0 | Off |
| 14 | CB 214 | 0.67 | 0.00 | 0.67 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.41 | 0.01 | 0.14 | 0.0 | 11 |
| 15 | CB 215 | 0.35 | 0.05 | 0.40 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.77 | 0.00 | 0.00 | 0.0 | 14 |
| 16 | CB 216 | 0.42 | 0.55 | 0.92 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.84 | 0.05 | 0.88 | 0.0 | 15 |
| 17 | CB 217 | 2.08 | 0.00 | 1.53 | 0.55 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.26 | 0.15 | 3.39 | 0.0 | 16 |
| 18 | CB 217A | 1.23 | 0.00 | 1.23 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.92 | 0.20 | 5.92 | 0.0 | Off |
| 19 | CB 216A | 0.46 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.01 | 0.00 | 0.00 | 0.0 | 29 |
| 20 | CB 226 | 0.39 | 0.00 | 0.37 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.91 | 0.05 | 0.79 | 0.0 | 7 |
| 21 | CB 227 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.91 | 0.00 | 0.00 | 0.0 | 7 |
| 22 | CB 228 | 0.28 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.10 | 0.03 | 0.45 | 0.0 | Off |
| 23 | YI 229 | 1.13 | 0.00 | 1.13 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.02 | 0.11 | 13.02 | 0.0 | Off |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report

SCM 2 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | YI 230 | 2.08 | 0.00 | 2.08 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.16 | 18.32 | 0.16 | 18.32 | 0.0 | Off |
| 25 | YI 231 | 2.71 | 0.00 | 2.71 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.19 | 21.39 | 0.19 | 21.39 | 0.0 | Off |
| 26 | YI 232 | 1.52 | 0.00 | 1.52 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.13 | 15.31 | 0.13 | 15.31 | 0.0 | Off |
| 27 | YI 233 | 0.39 | 0.00 | 0.39 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.05 | 7.66 | 0.05 | 7.66 | 0.0 | Off |
| 28 | YI 234 | 1.44 | 0.00 | 1.44 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.12 | 14.91 | 0.12 | 14.91 | 0.0 | Off |
| 29 | CB 211A | 0.95 | 0.00 | 0.93 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.26 | 0.04 | 0.61 | 0.0 | Off |
| 30 | CB 227A | 0.39 | 0.00 | 0.39 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.76 | 0.02 | 0.33 | 0.0 | 8 |
| 31 | CB 209A | 0.78 | 0.00 | 0.78 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.08 | 0.16 | 4.08 | 0.0 | Off |
| 32 | CB 223 | 0.81 | 0.00 | 0.77 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.74 | 0.05 | 0.82 | 0.0 | 2 |
| 33 | CB 224 | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.14 | 0.00 | 0.00 | 0.0 | 32 |
| 34 | CB 224A | 0.85 | 0.00 | 0.85 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.38 | 0.17 | 4.38 | 0.0 | Off |
| 35 | CB 225 | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | 33 |
| 36 | CB 203A | 1.27 | 0.00 | 1.09 | 0.18 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.26 | 0.09 | 1.54 | 0.0 | 38 |
| 37 | CB 223A | 1.44 | 0.00 | 1.23 | 0.21 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.31 | 0.10 | 1.59 | 0.0 | 38 |
| 38 | CB 202A | 2.43 | 0.39 | 1.84 | 0.98 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 9.13 | 0.19 | 5.51 | 0.0 | Off |
| 39 | FES 240 | 4.70 | 0.00 | 4.70 | 0.00 | Hdwl | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 2 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 30 | 32.44 | 349.02 | 351.52 | 2.50 | 4.91 | 6.61 | 0.68 | 352.20 | 0.626 | 107.012 | 349.94 | 351.98 | 2.04 | 4.30 | 7.55 | 0.89 | 352.87 | 0.629 | 0.628 | 0.672 | 0.50 | 0.44 |
| 2 | 30 | 31.36 | 350.14 | 352.43 | 2.29 | 4.02 | 6.66 | 0.95 | 353.37 | 0.000 | 87.460 | 350.80 | 352.71 j | 1.91** | 4.02 | 7.81 | 0.95 | 353.65 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 3 | 30 | 25.13 | 351.00 | 352.71 | 1.71 | 3.57 | 7.04 | 0.77 | 353.48 | 0.000 | 101.407 | 352.60 | 354.31 | 1.71** | 3.57 | 7.04 | 0.77 | 355.08 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 4 | 30 | 23.77 | 352.80 | 354.31 | 1.51 | 3.09 | 7.69 | 0.73 | 355.04 | 0.000 | 41.788 | 353.22 | 354.88 | 1.66** | 3.46 | 6.88 | 0.73 | 355.61 | 0.000 | 0.000 | n/a | 1.11 | n/a |
| 5 | 30 | 22.84 | 353.40 | 355.07 | 1.67* | 3.49 | 6.54 | 0.67 | 355.74 | 0.500 | 28.013 | 353.54 | 355.21 | 1.67 | 3.49 | 6.54 | 0.67 | 355.88 | 0.500 | 0.500 | 0.140 | 1.28 | 0.85 |
| 6 | 30 | 22.00 | 353.64 | 356.06 | 2.42 | 3.30 | 4.52 | 0.69 | 356.75 | 0.000 | 41.080 | 354.05 | 355.64 | 1.59** | 3.30 | 6.66 | 0.69 | 356.33 | 0.000 | 0.000 | n/a | 1.09 | 0.75 |
| 7 | 30 | 21.99 | 354.25 | 355.78 | 1.53* | 3.16 | 6.97 | 0.69 | 356.47 | 0.000 | 46.931 | 354.53 | 356.12 | 1.59** | 3.30 | 6.66 | 0.69 | 356.81 | 0.000 | 0.000 | n/a | 1.77 | n/a |
| 8 | 24 | 12.20 | 354.70 | 356.12 | 1.42 | 2.39 | 5.10 | 0.40 | 356.53 | 0.398 | 28.000 | 354.84 | 356.20 | 1.36 | 2.27 | 5.37 | 0.45 | 356.65 | 0.449 | 0.424 | 0.119 | 1.13 | 0.51 |
| 9 | 24 | 12.06 | 355.00 | 356.71 | 1.71 | 2.06 | 4.23 | 0.53 | 357.24 | 0.000 | 43.841 | 355.44 | 356.69 j | 1.25** | 2.06 | 5.86 | 0.53 | 357.22 | 0.000 | 0.000 | n/a | 1.69 | n/a |
| 10 | 18 | 11.18 | 355.60 | 356.69 | 1.09 | 1.37 | 8.15 | 0.76 | 357.44 | 0.000 | 92.661 | 360.16 | 361.44 | 1.28** | 1.60 | 6.97 | 0.76 | 362.19 | 0.000 | 0.000 | n/a | 0.50 | 0.38 |
| 11 | 18 | 10.62 | 360.40 | 361.44 | 1.04 | 1.30 | 8.14 | 0.71 | 362.15 | 0.000 | 92.660 | 365.81 | 367.06 | 1.25** | 1.57 | 6.75 | 0.71 | 367.77 | 0.000 | 0.000 | n/a | 1.49 | n/a |
| 12 | 18 | 9.62 | 366.00 | 367.06 | 1.06 | 1.34 | 7.20 | 0.63 | 367.69 | 0.000 | 45.242 | 368.00 | 369.20 | 1.20** | 1.51 | 6.36 | 0.63 | 369.83 | 0.000 | 0.000 | n/a | 1.07 | n/a |
| 13 | 18 | 7.05 | 368.20 | 369.37 | 1.17* | 1.48 | 4.76 | 0.35 | 369.72 | 0.495 | 28.241 | 368.34 | 369.51 | 1.17 | 1.48 | 4.76 | 0.35 | 369.86 | 0.495 | 0.495 | 0.140 | 1.19 | 0.42 |
| 14 | 18 | 5.03 | 368.60 | 369.93 | 1.33 | 1.05 | 3.03 | 0.36 | 370.29 | 0.000 | 45.687 | 370.80 | 371.66 j | 0.86** | 1.05 | 4.78 | 0.36 | 372.02 | 0.000 | 0.000 | n/a | 1.17 | 0.42 |
| 15 | 15 | 4.43 | 371.00 | 371.66 | 0.66 | 0.66 | 6.71 | 0.38 | 372.05 | 0.000 | 102.568 | 375.00 | 375.85 | 0.85** | 0.89 | 4.97 | 0.38 | 376.24 | 0.000 | 0.000 | n/a | 0.50 | 0.19 |
| 16 | 15 | 4.12 | 375.20 | 375.85 | 0.65 | 0.65 | 6.36 | 0.36 | 376.21 | 0.000 | 80.723 | 379.10 | 379.92 | 0.82** | 0.85 | 4.82 | 0.36 | 380.28 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 17 | 15 | 3.29 | 379.30 | 379.92 | 0.62 | 0.61 | 5.42 | 0.30 | 380.22 | 0.000 | 41.477 | 381.00 | 381.73 | 0.73** | 0.75 | 4.42 | 0.30 | 382.03 | 0.000 | 0.000 | n/a | 1.18 | n/a |
| 18 | 15 | 1.23 | 381.18 | 381.73 | 0.55 | 0.38 | 2.37 | 0.16 | 381.89 | 0.000 | 28.000 | 381.44 | 381.88 j | 0.44** | 0.38 | 3.22 | 0.16 | 382.04 | 0.000 | 0.000 | n/a | 1.00 | 0.16 |
| 19 | 15 | 0.46 | 379.30 | 379.92 | 0.62 | 0.61 | 0.75 | 0.01 | 379.93 | 0.021 | 28.132 | 379.44 | 379.92 | 0.48 | 0.43 | 1.05 | 0.02 | 379.94 | 0.051 | 0.036 | 0.010 | 1.00 | 0.02 |
| 20 | 18 | 9.69 | 354.70 | 356.12 | 1.42 | 1.52 | 5.59 | 0.63 | 356.76 | 0.000 | 66.604 | 355.37 | 356.57 j | 1.20** | 1.52 | 6.39 | 0.63 | 357.21 | 0.000 | 0.000 | n/a | 1.43 | n/a |
| 21 | 18 | 9.37 | 355.60 | 356.71 | 1.11* | 1.40 | 6.71 | 0.61 | 357.32 | 0.000 | 45.065 | 356.05 | 357.23 | 1.18** | 1.49 | 6.27 | 0.61 | 357.84 | 0.000 | 0.000 | n/a | 1.21 | 0.74 |
| 22 | 18 | 8.85 | 356.25 | 357.30 | 1.05* | 1.33 | 6.66 | 0.58 | 357.88 | 0.000 | 87.915 | 357.13 | 358.28 | 1.15** | 1.45 | 6.08 | 0.58 | 358.86 | 0.000 | 0.000 | n/a | 1.43 | 0.82 |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 2 10-YEAR

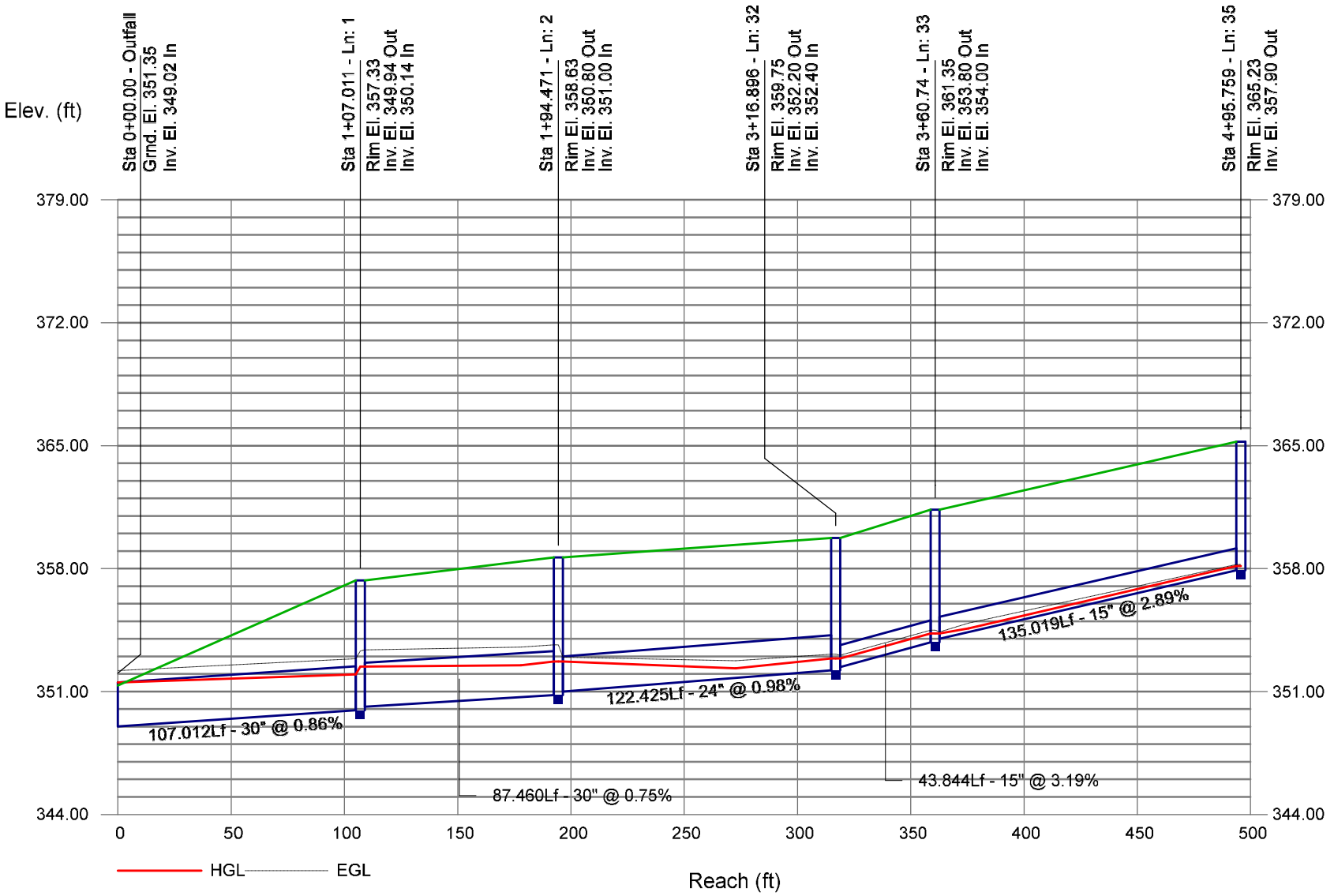
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 18 | 8.64 | 357.40 | 358.28 | 0.88 | 1.08 | 8.01 | 0.56 | 358.84 | 0.000 | 81.372 | 360.00 | 361.14 | 1.14** | 1.44 | 6.01 | 0.56 | 361.70 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 24 | 18 | 7.64 | 360.20 | 361.14 | 0.94 | 1.16 | 6.57 | 0.50 | 361.64 | 0.000 | 68.903 | 362.00 | 363.07 | 1.07** | 1.35 | 5.67 | 0.50 | 363.57 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 25 | 18 | 5.77 | 362.20 | 363.07 | 0.87 | 1.06 | 5.43 | 0.39 | 363.46 | 0.000 | 130.000 | 366.80 | 367.73 | 0.93** | 1.14 | 5.04 | 0.39 | 368.12 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 26 | 15 | 3.27 | 367.00 | 367.73 | 0.73 | 0.74 | 4.42 | 0.30 | 368.03 | 0.000 | 203.727 | 373.50 | 374.23 | 0.73** | 0.74 | 4.41 | 0.30 | 374.53 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 27 | 15 | 1.81 | 373.70 | 374.23 | 0.53 | 0.49 | 3.68 | 0.20 | 374.43 | 0.000 | 82.351 | 374.50 | 375.03 | 0.53** | 0.50 | 3.62 | 0.20 | 375.24 | 0.000 | 0.000 | n/a | 0.50 | 0.10 |
| 28 | 15 | 1.44 | 374.70 | 375.10 | 0.40* | 0.34 | 4.24 | 0.18 | 375.28 | 0.000 | 68.005 | 375.38 | 375.86 | 0.48** | 0.43 | 3.38 | 0.18 | 376.03 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 29 | 15 | 0.95 | 366.00 | 367.06 | 1.06 | 1.11 | 0.86 | 0.01 | 367.07 | 0.021 | 28.251 | 366.14 | 367.06 | 0.92 | 0.97 | 0.98 | 0.01 | 367.08 | 0.027 | 0.024 | 0.007 | 1.00 | 0.01 |
| 30 | 15 | 0.39 | 356.25 | 357.23 | 0.98 | 0.17 | 0.37 | 0.08 | 357.32 | 0.000 | 28.058 | 356.53 | 356.77 | 0.24** | 0.17 | 2.33 | 0.08 | 356.86 | 0.000 | 0.000 | n/a | 1.00 | 0.08 |
| 31 | 15 | 0.78 | 356.04 | 356.69 | 0.65 | 0.64 | 1.21 | 0.02 | 356.71 | 0.051 | 28.000 | 356.18 | 356.69 | 0.51 | 0.47 | 1.65 | 0.04 | 356.73 | 0.118 | 0.085 | 0.024 | 1.00 | 0.04 |
| 32 | 24 | 3.78 | 351.00 | 352.71 | 1.71 | 0.94 | 1.32 | 0.25 | 352.96 | 0.000 | 122.425 | 352.20 | 352.88 j | 0.68** | 0.94 | 4.01 | 0.25 | 353.13 | 0.000 | 0.000 | n/a | 1.47 | 0.37 |
| 33 | 15 | 1.63 | 352.40 | 352.88 | 0.48 | 0.43 | 3.75 | 0.19 | 353.07 | 0.000 | 43.844 | 353.80 | 354.31 | 0.51** | 0.47 | 3.50 | 0.19 | 354.50 | 0.000 | 0.000 | n/a | 1.69 | 0.32 |
| 34 | 15 | 0.85 | 354.00 | 354.36 | 0.36* | 0.29 | 2.89 | 0.13 | 354.49 | 0.522 | 28.005 | 353.85 | 354.55 | 0.70 | 0.71 | 1.20 | 0.02 | 354.57 | 0.048 | 0.285 | 0.080 | 1.00 | 0.02 |
| 35 | 15 | 0.42 | 354.00 | 354.31 | 0.31 | 0.18 | 1.82 | 0.09 | 354.39 | 0.000 | 135.019 | 357.90 | 358.15 j | 0.25** | 0.18 | 2.39 | 0.09 | 358.24 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 36 | 15 | 1.27 | 353.30 | 354.31 | 1.01 | 1.06 | 1.20 | 0.02 | 354.33 | 0.040 | 28.141 | 353.44 | 354.31 | 0.87 | 0.91 | 1.39 | 0.03 | 354.34 | 0.056 | 0.048 | 0.013 | 1.00 | 0.03 |
| 37 | 15 | 1.44 | 352.40 | 352.88 | 0.48 | 0.43 | 3.33 | 0.18 | 353.06 | 0.000 | 28.755 | 352.88 | 353.36 j | 0.48** | 0.43 | 3.38 | 0.18 | 353.53 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 38 | 15 | 2.43 | 352.00 | 352.71 | 0.71 | 0.71 | 3.40 | 0.18 | 352.89 | 0.379 | 28.000 | 352.14 | 352.79 | 0.65 | 0.64 | 3.80 | 0.23 | 353.01 | 0.509 | 0.444 | 0.124 | 1.00 | 0.23 |
| 39 | 18 | 4.70 | 350.00 | 351.50 | 1.50* | 1.01 | 2.66 | 0.11 | 351.61 | 0.201 | 69.863 | 351.50 | 352.33 j | 0.83** | 1.01 | 4.67 | 0.34 | 352.67 | 0.568 | 0.384 | n/a | 1.00 | n/a |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

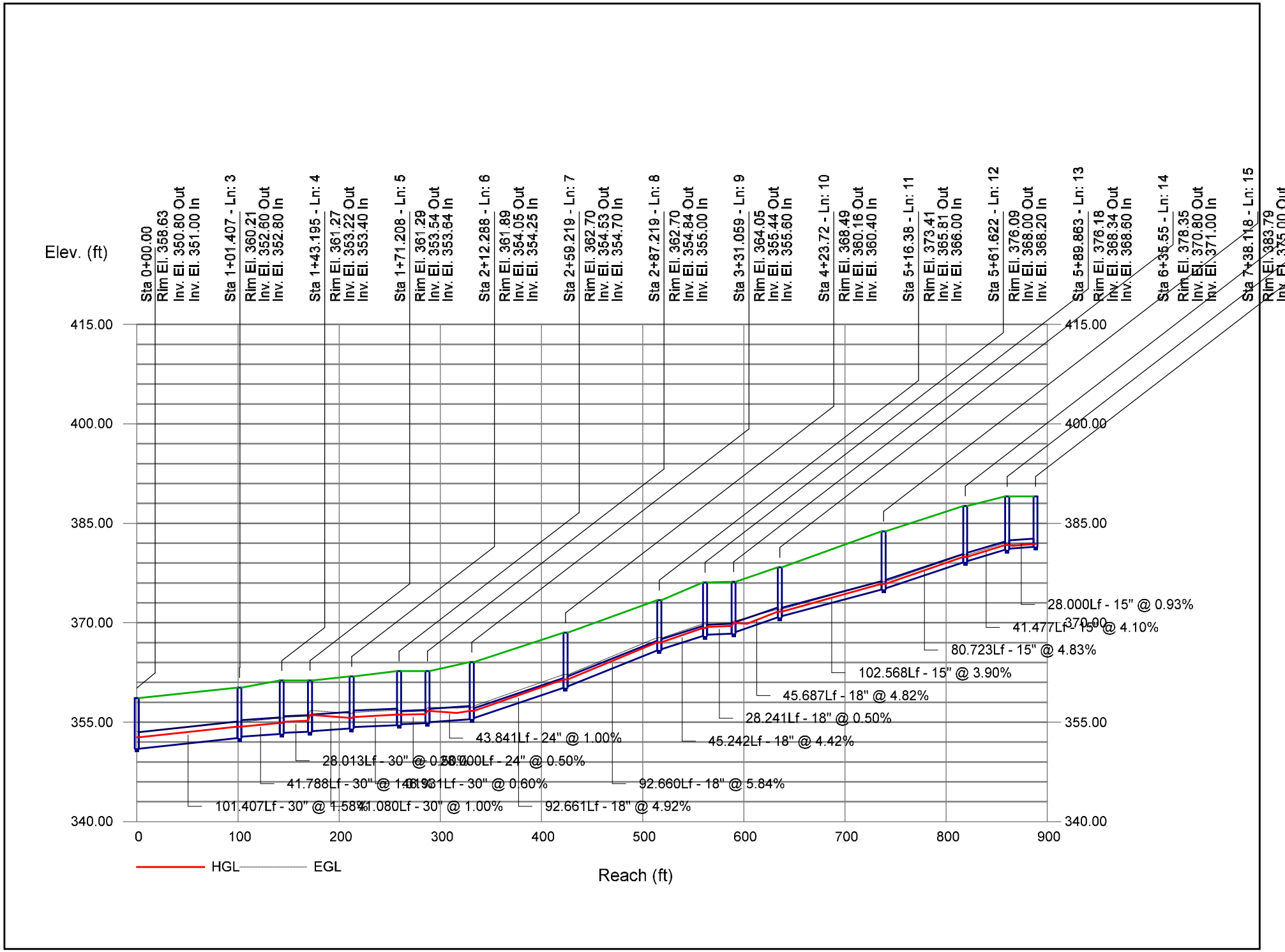
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 1-35 Proj. file: SCM 2 Storm Network.stm



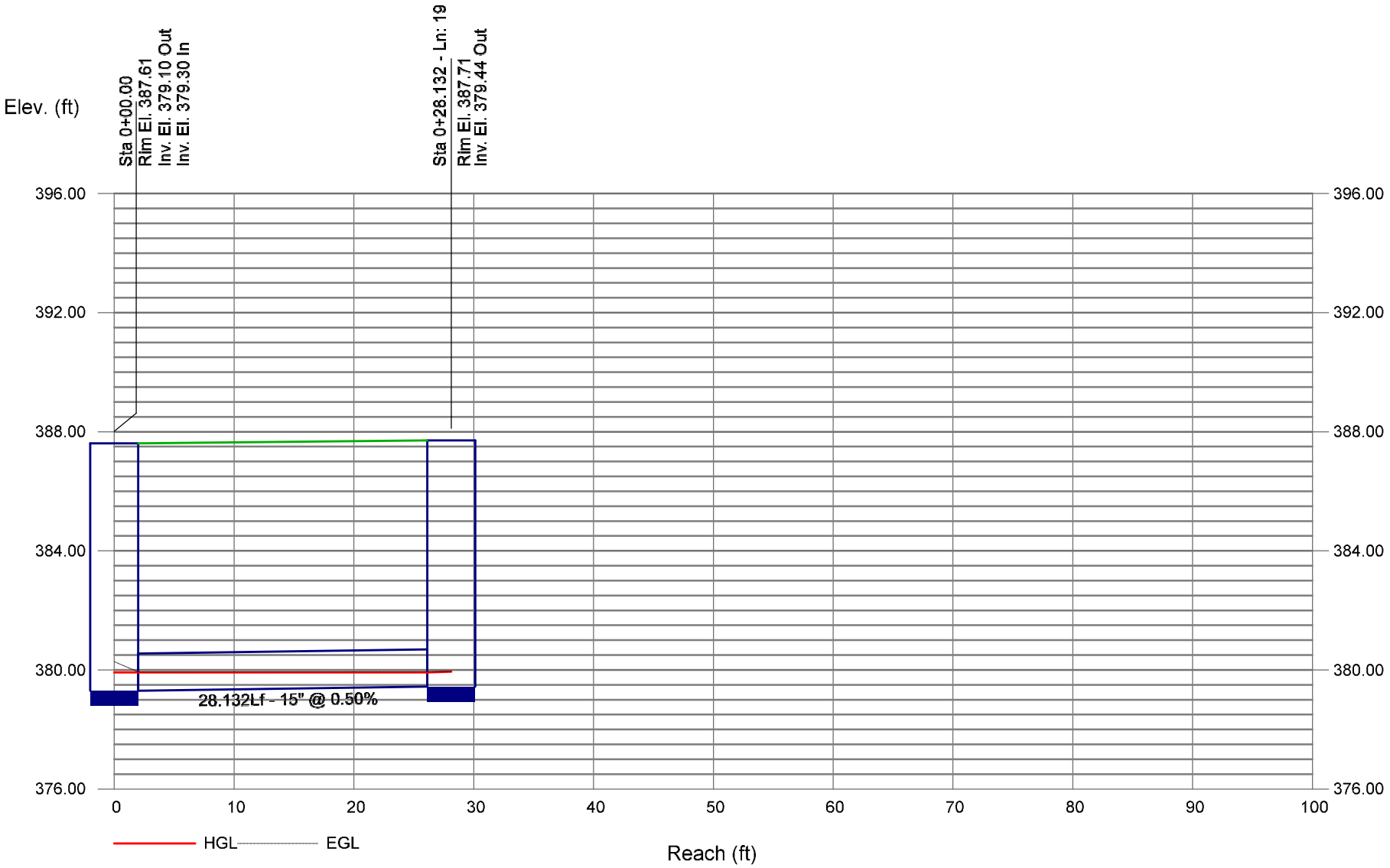
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 3-18 Proj. file: SCM 2 Storm Network.stm



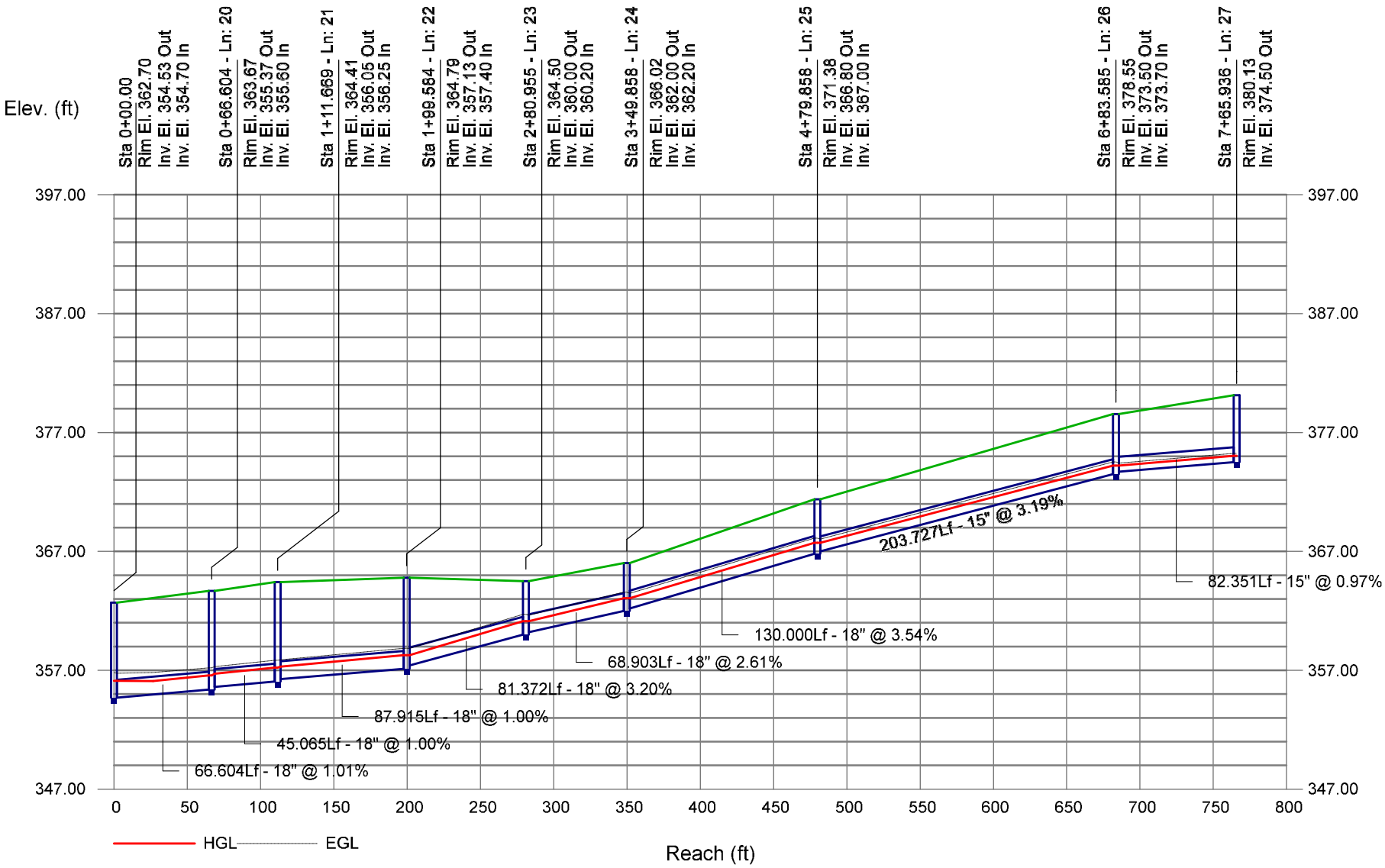
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 19-19 Proj. file: SCM 2 Storm Network.stm



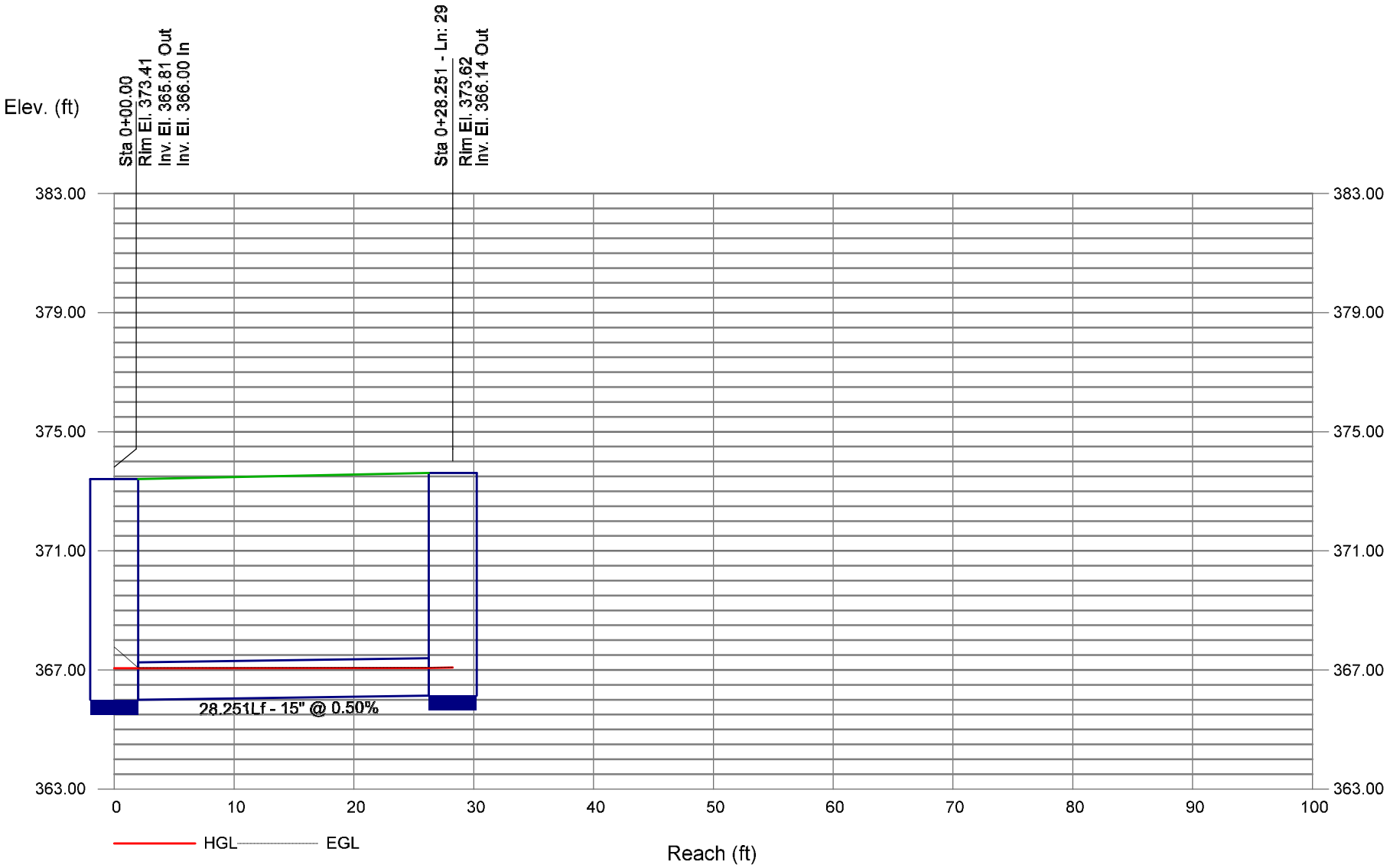
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 20-28 Proj. file: SCM 2 Storm Network.stm



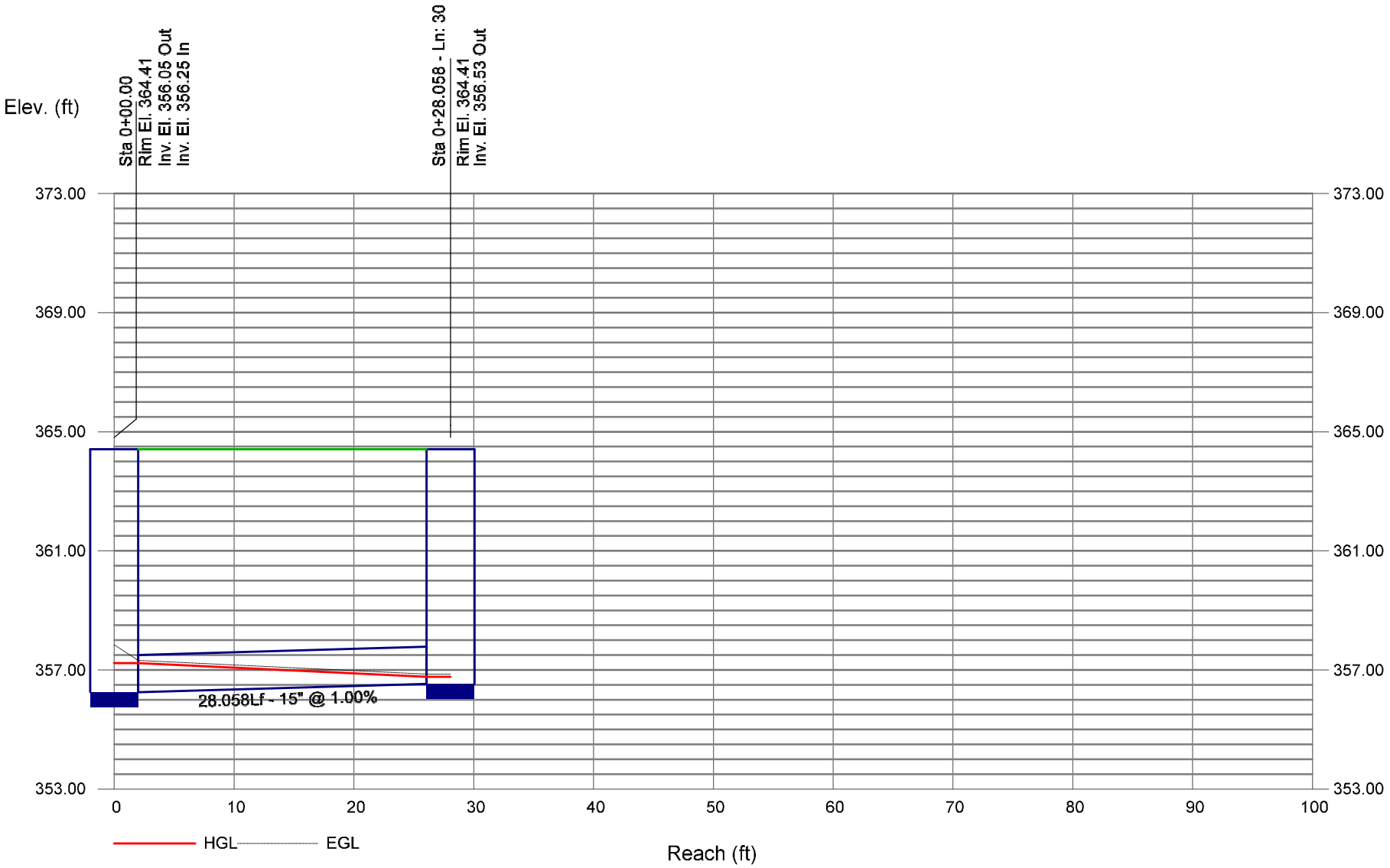
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 29-29 Proj. file: SCM 2 Storm Network.stm



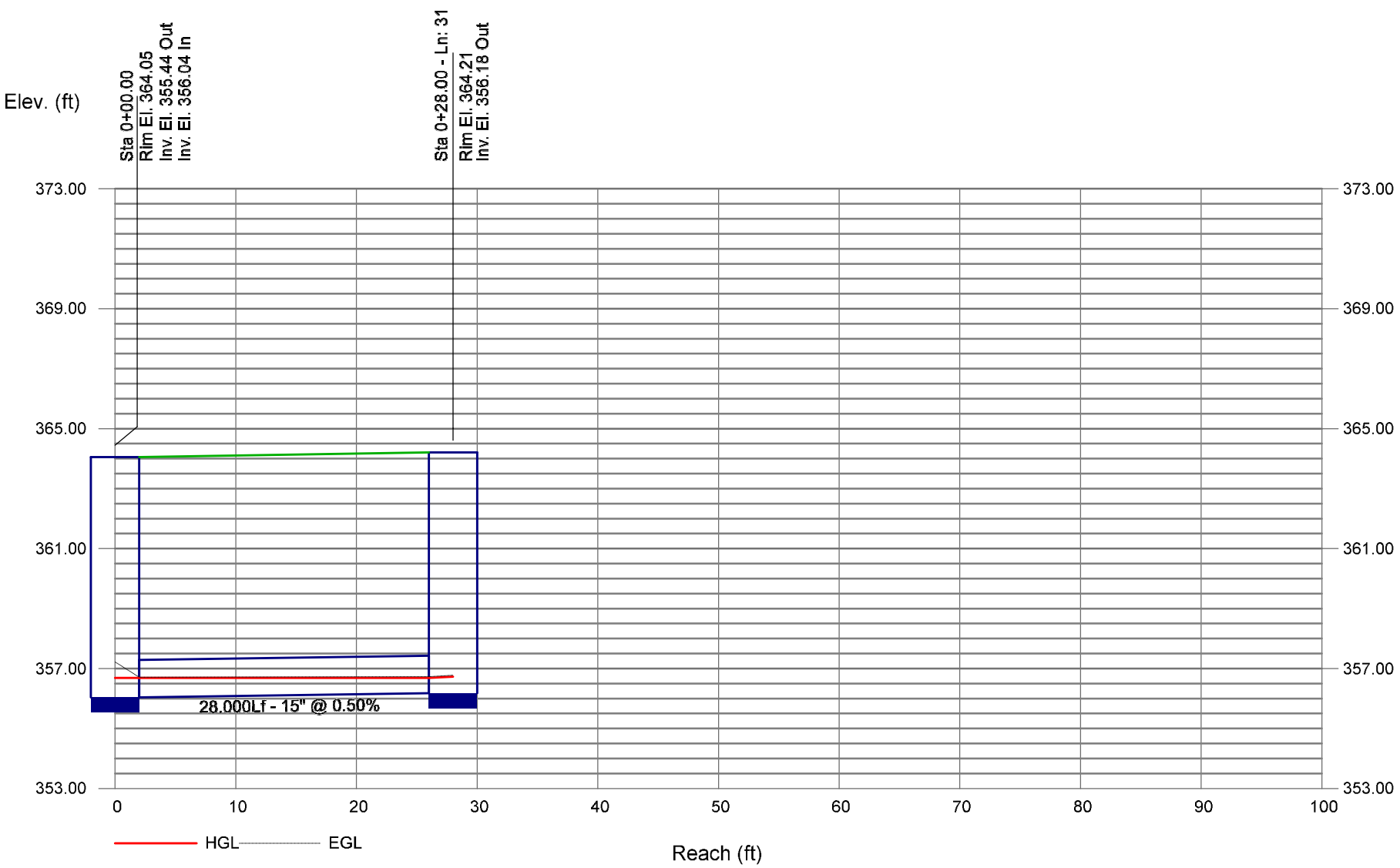
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 30-30 Proj. file: SCM 2 Storm Network.stm



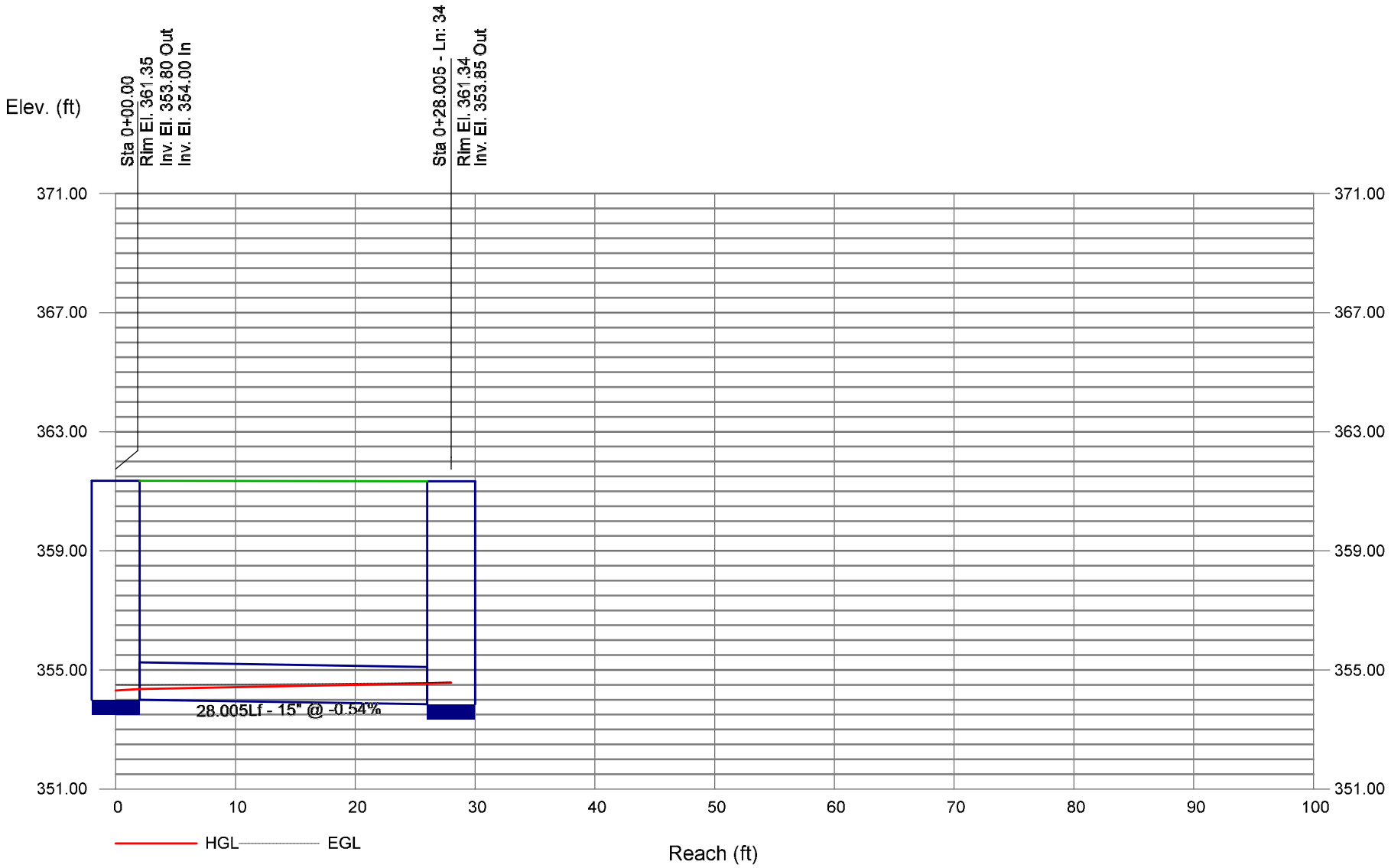
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 31-31 Proj. file: SCM 2 Storm Network.stm



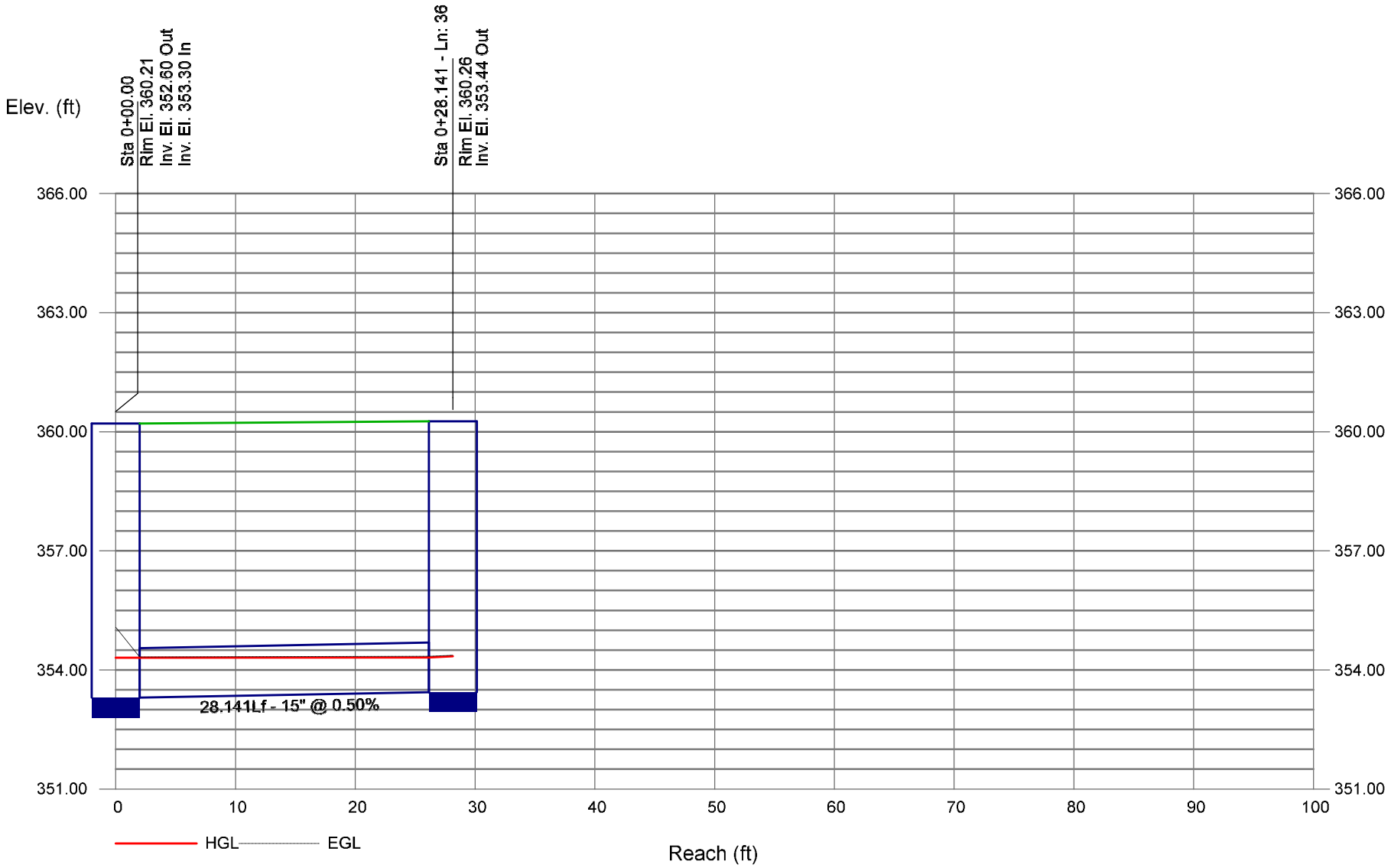
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 34-34 Proj. file: SCM 2 Storm Network.stm



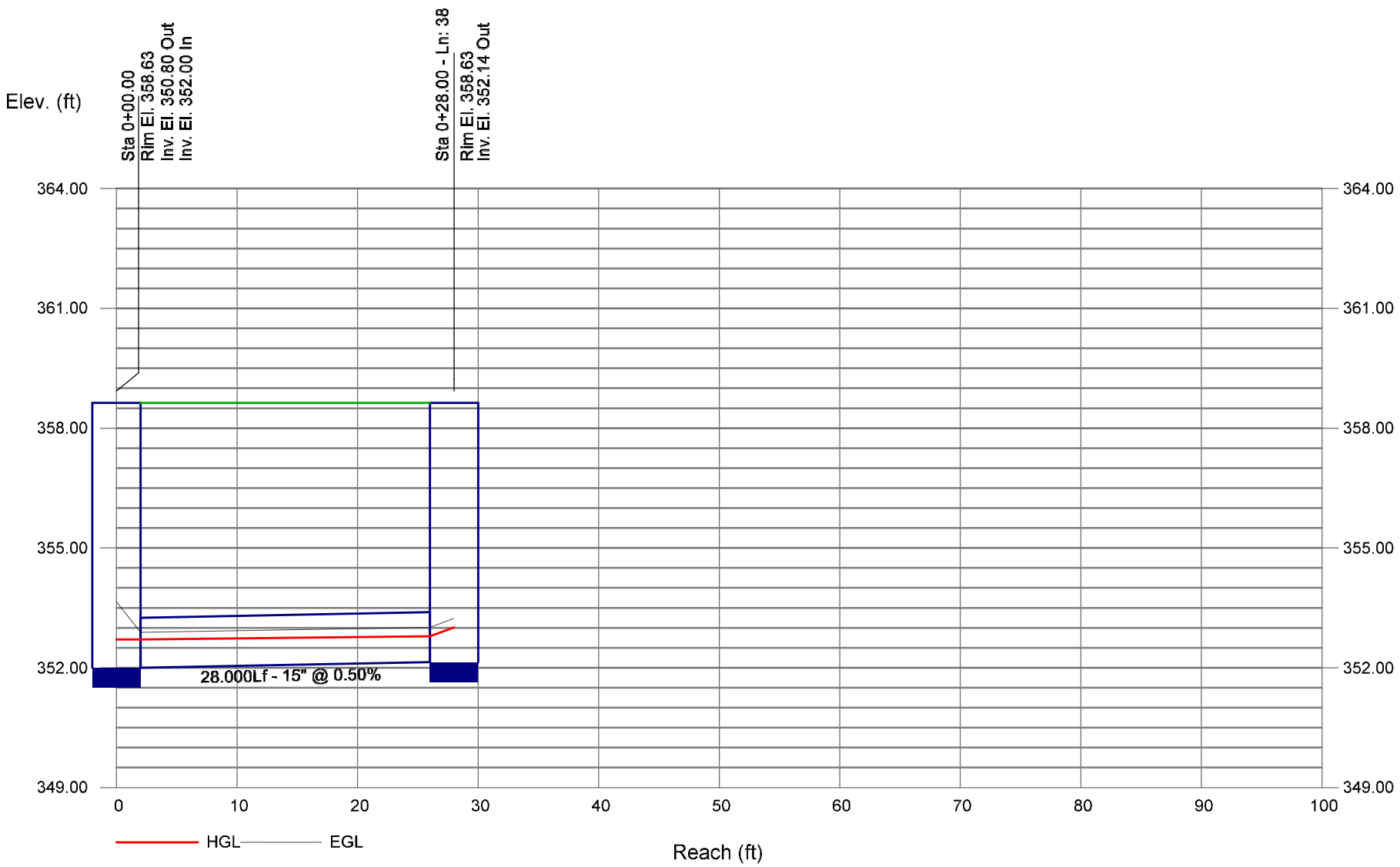
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 36-36 Proj. file: SCM 2 Storm Network.stm



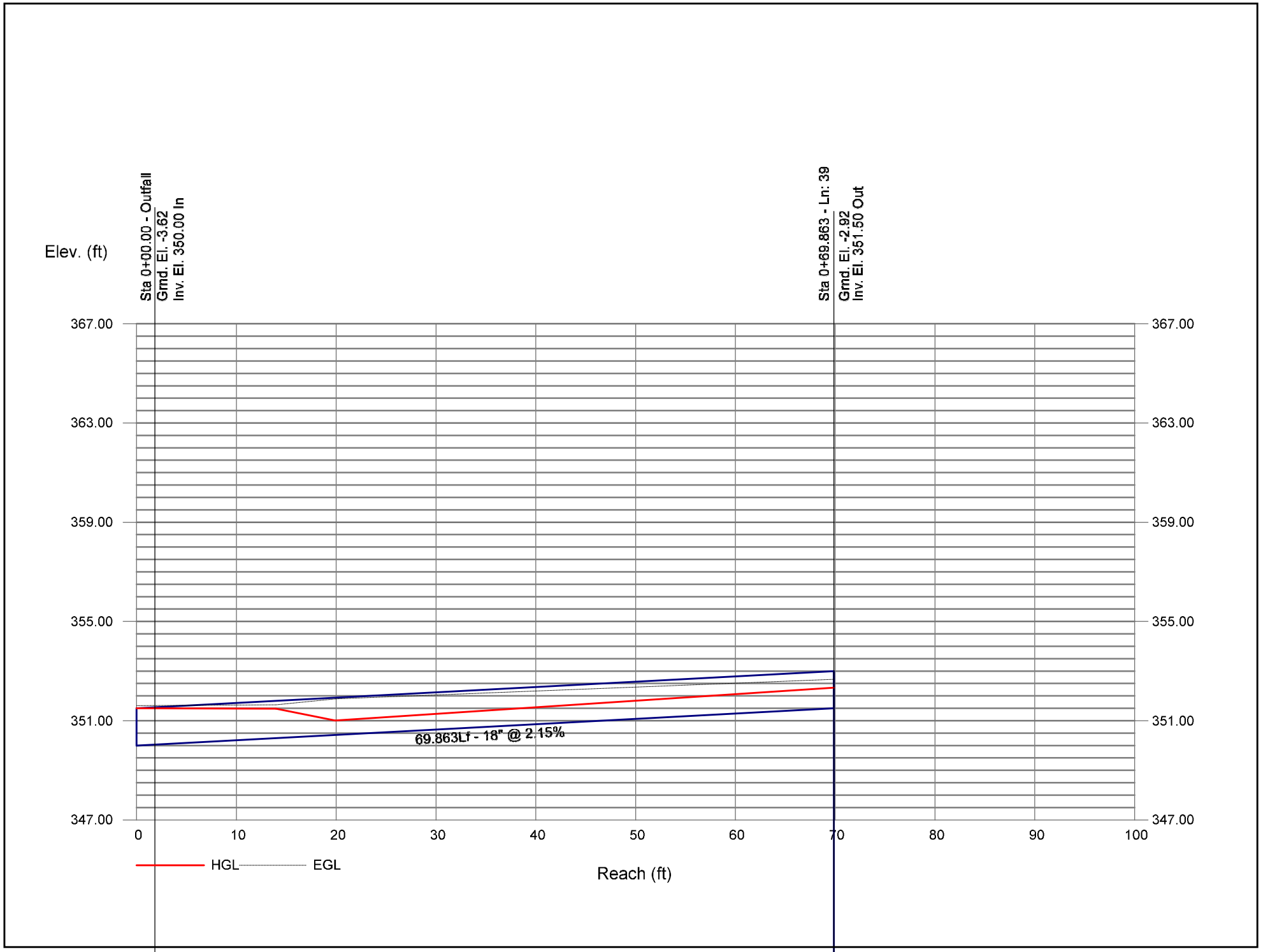
# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 38-38 Proj. file: SCM 2 Storm Network.stm

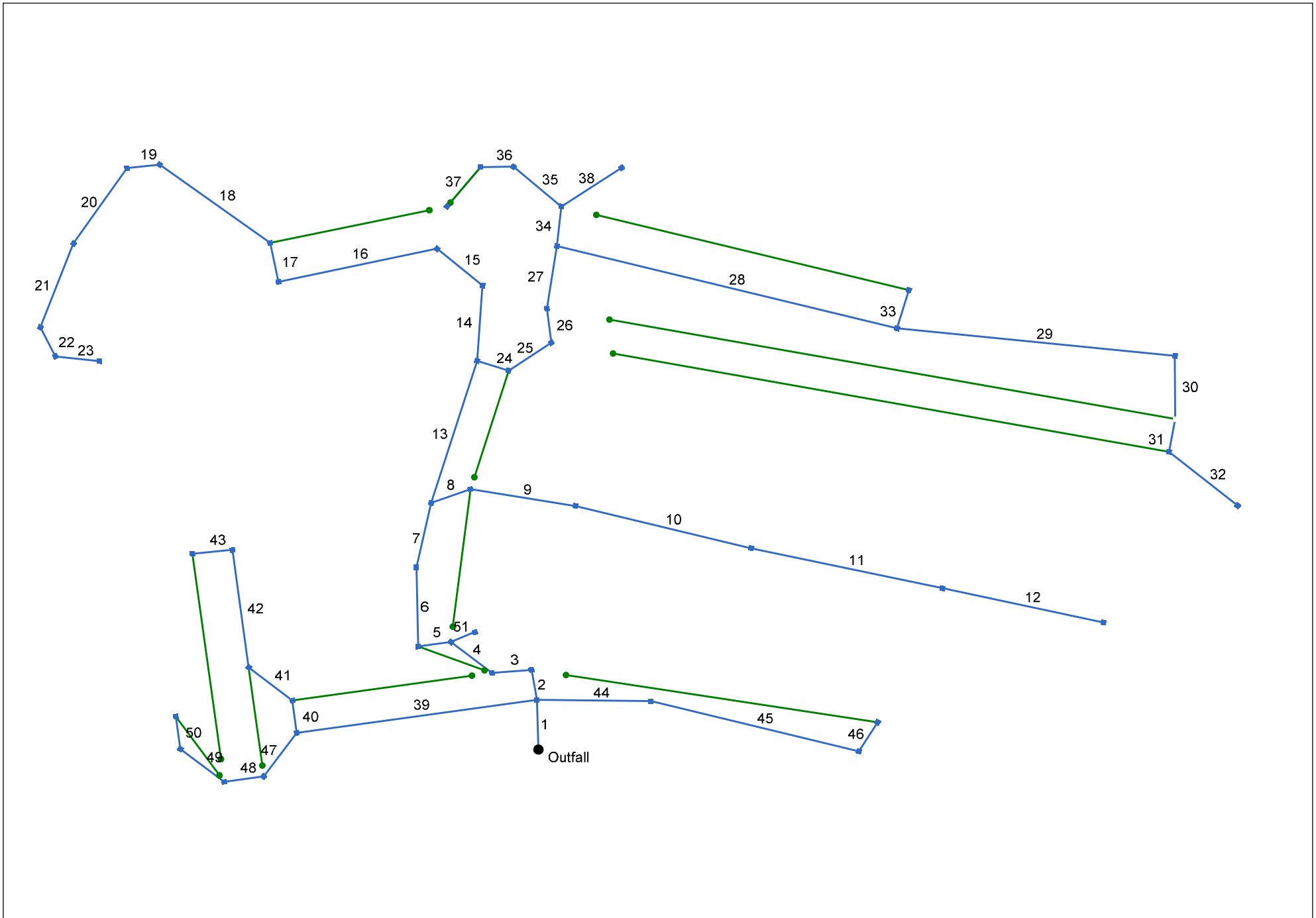


# Storm Sewer Profile

SCM 2 10-YEAR PROFILE 39-39 Proj. file: SCM 2 Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 4 10-YEAR




| Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report



SCM 4 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 42.566 | -91.634 | Comb | 0.00 | 0.37 | 0.60 | 10.0 | 362.50 | 0.82 | 362.85 | 36 | Cir | 0.013 | 2.25 | 370.55 | Pipe - (418) |
| 2 | 1 | 26.017 | -8.311 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 363.05 | 0.58 | 363.20 | 36 | Cir | 0.013 | 1.49 | 370.31 | Pipe - (417) |
| 3 | 2 | 33.736 | -84.541 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 363.40 | 0.89 | 363.70 | 30 | Cir | 0.013 | 1.07 | 370.74 | Pipe - (416) |
| 4 | 3 | 43.841 | 41.601 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 363.90 | 1.37 | 364.50 | 30 | Cir | 0.013 | 1.50 | 371.99 | Pipe - (368) |
| 5 | 4 | 28.000 | -45.000 | Comb | 0.00 | 1.08 | 0.60 | 10.0 | 364.70 | 1.00 | 364.98 | 30 | Cir | 0.013 | 1.50 | 371.99 | Pipe - (380) |
| 6 | 5 | 67.788 | 96.424 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 365.20 | 1.00 | 365.88 | 30 | Cir | 0.013 | 0.50 | 373.69 | Pipe - (367) (1) ( |
| 7 | 6 | 56.317 | 14.470 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 366.10 | 1.95 | 367.20 | 30 | Cir | 0.013 | 1.80 | 375.08 | Pipe - (367) (1) |
| 8 | 7 | 35.477 | 57.582 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 367.76 | 0.99 | 368.11 | 18 | Cir | 0.013 | 0.80 | 375.64 | Pipe - (374) (1) |
| 9 | 8 | 90.608 | 28.606 | DrGrt | 0.00 | 0.78 | 0.60 | 10.0 | 368.31 | 6.66 | 374.34 | 18 | Cir | 0.013 | 0.50 | 376.04 | Pipe - (374) |
| 10 | 9 | 153.369 | 4.369 | DrGrt | 0.00 | 0.56 | 0.60 | 10.0 | 374.60 | 2.22 | 378.00 | 18 | Cir | 0.013 | 0.50 | 379.64 | Pipe - (373) |
| 11 | 10 | 166.305 | -1.713 | DrGrt | 0.00 | 0.62 | 0.60 | 10.0 | 378.20 | 1.20 | 380.20 | 15 | Cir | 0.013 | 0.50 | 381.64 | Pipe - (372) |
| 12 | 11 | 140.121 | 0.243 | DrGrt | 0.00 | 0.34 | 0.60 | 10.0 | 380.40 | 2.00 | 383.20 | 15 | Cir | 0.013 | 1.00 | 384.64 | Pipe - (490) |
| 13 | 7 | 127.504 | 4.879 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 367.40 | 2.43 | 370.50 | 24 | Cir | 0.013 | 1.50 | 378.43 | Pipe - (366) |
| 14 | 13 | 64.616 | -13.839 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 370.70 | 2.94 | 372.60 | 18 | Cir | 0.013 | 1.27 | 380.23 | Pipe - (409) |
| 15 | 14 | 49.983 | -55.102 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 372.80 | 3.00 | 374.30 | 18 | Cir | 0.013 | 1.22 | 382.08 | Pipe - (408) |
| 16 | 15 | 137.706 | -50.808 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 374.50 | 0.58 | 375.30 | 18 | Cir | 0.013 | 1.50 | 384.96 | Pipe - (432) |
| 17 | 16 | 34.000 | 90.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 375.50 | 0.59 | 375.70 | 18 | Cir | 0.013 | 1.08 | 384.52 | Pipe - (438) |
| 18 | 17 | 115.233 | -42.654 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 375.90 | 0.61 | 376.60 | 15 | Cir | 0.013 | 1.07 | 384.70 | Pipe - (437) |
| 19 | 18 | 28.000 | -41.665 | Comb | 0.00 | 0.85 | 0.60 | 10.0 | 376.80 | 0.71 | 377.00 | 15 | Cir | 0.013 | 1.18 | 384.67 | Pipe - (436) |
| 20 | 19 | 78.850 | -48.424 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 377.20 | 0.60 | 377.67 | 15 | Cir | 0.013 | 0.50 | 384.57 | Pipe - (435) |
| 21 | 20 | 76.953 | -14.049 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 377.90 | 0.60 | 378.36 | 15 | Cir | 0.013 | 1.18 | 385.58 | Pipe - (434) |
| 22 | 21 | 28.000 | -48.252 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 378.60 | 0.61 | 378.77 | 15 | Cir | 0.013 | 1.30 | 385.58 | Pipe - (433) |
| 23 | 22 | 37.369 | -57.113 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 379.00 | 0.59 | 379.22 | 15 | Cir | 0.013 | 1.00 | 386.00 | Pipe - (535) |

Project File: SCM 4 Storm Network.stm

Number of lines: 51

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 4 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 13 | 28.099 | 89.385 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 370.70 | 0.60 | 370.87 | 24 | Cir | 0.013 | 1.21 | 378.40 | Pipe - (367) |
| 25 | 24 | 43.416 | -50.732 | Comb | 0.00 | 0.83 | 0.60 | 10.0 | 371.10 | 0.92 | 371.50 | 24 | Cir | 0.013 | 1.38 | 379.57 | Pipe - (379) |
| 26 | 25 | 29.427 | -64.132 | Comb | 0.00 | 0.76 | 0.60 | 10.0 | 371.70 | 0.99 | 371.99 | 18 | Cir | 0.013 | 0.51 | 379.48 | Pipe - (364) |
| 27 | 26 | 54.011 | 16.712 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 372.20 | 2.00 | 373.28 | 18 | Cir | 0.013 | 2.16 | 381.78 | Pipe - (363) |
| 28 | 27 | 297.666 | 94.522 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 373.50 | 0.60 | 375.29 | 15 | Cir | 0.013 | 1.50 | 385.53 | Pipe - (412) |
| 29 | 28 | 237.368 | -7.963 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 375.50 | 0.60 | 376.92 | 15 | Cir | 0.013 | 1.49 | 387.38 | Pipe - (411) |
| 30 | 29 | 54.000 | 84.067 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 377.20 | 0.59 | 377.52 | 15 | Cir | 0.013 | 0.50 | 385.70 | Pipe - (415) |
| 31 | 30 | 28.507 | 10.831 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 377.75 | 0.60 | 377.92 | 15 | Cir | 0.013 | 1.36 | 385.54 | Pipe - (414) |
| 32 | 31 | 74.490 | -62.309 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 378.20 | 0.60 | 378.65 | 15 | Cir | 0.013 | 1.00 | 384.81 | Pipe - (413) |
| 33 | 28 | 34.065 | -86.348 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 375.50 | 1.00 | 375.84 | 18 | Cir | 0.013 | 1.00 | 384.81 | Pipe - (534) |
| 34 | 27 | 34.020 | -2.563 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 373.50 | 0.59 | 373.70 | 18 | Cir | 0.013 | 1.82 | 381.93 | Pipe - (362) |
| 35 | 34 | 53.159 | -56.631 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 373.90 | 0.60 | 374.22 | 15 | Cir | 0.013 | 1.05 | 381.95 | Pipe - (371) |
| 36 | 35 | 28.000 | -40.898 | Comb | 0.00 | 0.24 | 0.60 | 10.0 | 374.40 | 0.71 | 374.60 | 15 | Cir | 0.013 | 1.18 | 381.69 | Pipe - (394) |
| 37 | 36 | 44.039 | -48.688 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 374.80 | 4.00 | 376.56 | 15 | Cir | 0.013 | 1.00 | 382.03 | Pipe - (410) |
| 38 | 34 | 60.892 | 50.531 | DrGrt | 0.00 | 0.28 | 0.60 | 10.0 | 373.90 | 1.00 | 374.51 | 15 | Cir | 0.013 | 1.00 | 381.93 | Pipe - (584) |
| 39 | 1 | 206.011 | -96.251 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 363.05 | 0.50 | 364.08 | 24 | Cir | 0.013 | 1.69 | 372.10 | Pipe - (384) |
| 40 | 39 | 28.000 | 90.000 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 364.30 | 0.71 | 364.50 | 15 | Cir | 0.013 | 1.13 | 372.42 | Pipe - (386) |
| 41 | 40 | 46.669 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 364.70 | 5.79 | 367.40 | 15 | Cir | 0.013 | 1.13 | 374.82 | Pipe - (421) |
| 42 | 41 | 101.483 | 45.000 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 367.60 | 4.14 | 371.80 | 15 | Cir | 0.013 | 1.50 | 379.86 | Pipe - (420) |
| 43 | 42 | 34.024 | -87.851 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 372.00 | 0.59 | 372.20 | 15 | Cir | 0.013 | 1.00 | 380.67 | Pipe - (419) |
| 44 | 1 | 97.083 | 92.316 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 364.00 | 0.52 | 364.50 | 18 | Cir | 0.013 | 0.50 | 371.84 | Pipe - (388) |
| 45 | 44 | 181.821 | 12.960 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 364.70 | 3.74 | 371.50 | 15 | Cir | 0.013 | 1.43 | 379.68 | Pipe - (387) |
| 46 | 45 | 29.575 | -71.057 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 371.70 | 0.51 | 371.85 | 15 | Cir | 0.013 | 1.00 | 380.12 | Pipe - (389) |

# Storm Sewer Inventory Report

SCM 4 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 39 | 46.669 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 364.30 | 0.49 | 364.53 | 15 | Cir | 0.013 | 1.13 | 370.15 | Pipe - (422) |
| 48 | 47 | 34.000 | 45.000 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 364.75 | 0.50 | 364.92 | 15 | Cir | 0.013 | 1.13 | 370.89 | Pipe - (383) |
| 49 | 48 | 46.669 | 45.000 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 365.15 | 0.49 | 365.38 | 15 | Cir | 0.013 | 1.13 | 373.17 | Pipe - (382) |
| 50 | 49 | 28.000 | 45.000 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 365.60 | 0.50 | 365.74 | 15 | Cir | 0.013 | 1.00 | 373.41 | Pipe - (381) |
| 51 | 4 | 21.891 | 119.979 | DrGrt | 0.00 | 0.07 | 0.60 | 10.0 | 365.70 | 1.00 | 365.92 | 15 | Cir | 0.013 | 1.00 | 370.85 | Pipe - (585) |

# Structure Report



SCM 4 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | CB 401 | Combination | 370.55 | Rect | 4.00 | 4.00 | 36 | Cir | 362.85 | 36<br>24<br>18 | Cir<br>Cir<br>Cir | 363.05<br>363.05<br>364.00 |
| 2 | CB 402 | Combination | 370.31 | Rect | 4.00 | 4.00 | 36 | Cir | 363.20 | 30 | Cir | 363.40 |
| 3 | CB 403 | Combination | 370.74 | Rect | 4.00 | 4.00 | 30 | Cir | 363.70 | 30 | Cir | 363.90 |
| 4 | CB 404 | Combination | 371.99 | Rect | 4.00 | 4.00 | 30 | Cir | 364.50 | 30<br>15 | Cir<br>Cir | 364.70<br>365.70 |
| 5 | CB 405 | Combination | 371.99 | Rect | 4.00 | 4.00 | 30 | Cir | 364.98 | 30 | Cir | 365.20 |
| 6 | CB 406 | Combination | 373.69 | Rect | 4.00 | 4.00 | 30 | Cir | 365.88 | 30 | Cir | 366.10 |
| 7 | CB 407 | Combination | 375.08 | Rect | 4.00 | 4.00 | 30 | Cir | 367.20 | 18<br>24 | Cir<br>Cir | 367.76<br>367.40 |
| 8 | CB 407A | Combination | 375.64 | Rect | 4.00 | 4.00 | 18 | Cir | 368.11 | 18 | Cir | 368.31 |
| 9 | YI 407B | DropGrate | 376.04 | Rect | 4.00 | 4.00 | 18 | Cir | 374.34 | 18 | Cir | 374.60 |
| 10 | YI 407C | DropGrate | 379.64 | Rect | 4.00 | 4.00 | 18 | Cir | 378.00 | 15 | Cir | 378.20 |
| 11 | YI 407D | DropGrate | 381.64 | Rect | 4.00 | 4.00 | 15 | Cir | 380.20 | 15 | Cir | 380.40 |
| 12 | YI 407E | DropGrate | 384.64 | Rect | 4.00 | 4.00 | 15 | Cir | 383.20 | | | |
| 13 | CB 408 | Combination | 378.43 | Rect | 4.00 | 4.00 | 24 | Cir | 370.50 | 18<br>24 | Cir<br>Cir | 370.70<br>370.70 |
| 14 | CB 409 | Combination | 380.23 | Rect | 4.00 | 4.00 | 18 | Cir | 372.60 | 18 | Cir | 372.80 |
| 15 | CB 410 | Combination | 382.08 | Rect | 4.00 | 4.00 | 18 | Cir | 374.30 | 18 | Cir | 374.50 |
| 16 | CB 411 | Combination | 384.96 | Rect | 4.00 | 4.00 | 18 | Cir | 375.30 | 18 | Cir | 375.50 |
| 17 | CB 412 | Combination | 384.52 | Rect | 4.00 | 4.00 | 18 | Cir | 375.70 | 15 | Cir | 375.90 |
| 18 | CB 413 | Combination | 384.70 | Rect | 4.00 | 4.00 | 15 | Cir | 376.60 | 15 | Cir | 376.80 |
| 19 | CB 414 | Combination | 384.67 | Rect | 4.00 | 4.00 | 15 | Cir | 377.00 | 15 | Cir | 377.20 |
| 20 | CB 415 | Combination | 384.57 | Rect | 4.00 | 4.00 | 15 | Cir | 377.67 | 15 | Cir | 377.90 |

# Structure Report



SCM 4 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 416 | Combination | 385.58 | Rect | 4.00 | 4.00 | 15 | Cir | 378.36 | 15 | Cir | 378.60 |
| 22 | CB 417 | Combination | 385.58 | Rect | 4.00 | 4.00 | 15 | Cir | 378.77 | 15 | Cir | 379.00 |
| 23 | CB 418 | Combination | 386.00 | Rect | 4.00 | 4.00 | 15 | Cir | 379.22 | | | |
| 24 | CB 419 | Combination | 378.40 | Rect | 4.00 | 4.00 | 24 | Cir | 370.87 | 24 | Cir | 371.10 |
| 25 | CB 420 | Combination | 379.57 | Rect | 4.00 | 4.00 | 24 | Cir | 371.50 | 18 | Cir | 371.70 |
| 26 | CB 421 | Combination | 379.48 | Rect | 4.00 | 4.00 | 18 | Cir | 371.99 | 18 | Cir | 372.20 |
| 27 | CB 422 | Combination | 381.78 | Rect | 4.00 | 4.00 | 18 | Cir | 373.28 | 15<br>18 | Cir<br>Cir | 373.50<br>373.50 |
| 28 | CB 423 | Combination | 385.53 | Rect | 4.00 | 4.00 | 15 | Cir | 375.29 | 15<br>18 | Cir<br>Cir | 375.50<br>375.50 |
| 29 | CB 424 | Combination | 387.38 | Rect | 4.00 | 4.00 | 15 | Cir | 376.92 | 15 | Cir | 377.20 |
| 30 | CB 425 | Combination | 385.70 | Rect | 4.00 | 4.00 | 15 | Cir | 377.52 | 15 | Cir | 377.75 |
| 31 | CB 426 | Combination | 385.54 | Rect | 4.00 | 4.00 | 15 | Cir | 377.92 | 15 | Cir | 378.20 |
| 32 | CB 427 | Combination | 384.81 | Rect | 4.00 | 4.00 | 15 | Cir | 378.65 | | | |
| 33 | CB 423A | Combination | 384.81 | Rect | 4.00 | 4.00 | 18 | Cir | 375.84 | | | |
| 34 | CB 422A | Combination | 381.93 | Rect | 4.00 | 4.00 | 18 | Cir | 373.70 | 15<br>15 | Cir<br>Cir | 373.90<br>373.90 |
| 35 | CB 422C | Combination | 381.95 | Rect | 4.00 | 4.00 | 15 | Cir | 374.22 | 15 | Cir | 374.40 |
| 36 | CB 422D | Combination | 381.69 | Rect | 4.00 | 4.00 | 15 | Cir | 374.60 | 15 | Cir | 374.80 |
| 37 | CB 422E | Combination | 382.03 | Rect | 4.00 | 4.00 | 15 | Cir | 376.56 | | | |
| 38 | YI 422B | DropGrate | 381.93 | Rect | 4.00 | 4.00 | 15 | Cir | 374.51 | | | |
| 39 | CB 430 | Combination | 372.10 | Rect | 4.00 | 4.00 | 24 | Cir | 364.08 | 15<br>15 | Cir<br>Cir | 364.30<br>364.30 |
| 40 | CB 431 | Combination | 372.42 | Rect | 4.00 | 4.00 | 15 | Cir | 364.50 | 15 | Cir | 364.70 |
| 41 | CB 432 | Combination | 374.82 | Rect | 4.00 | 4.00 | 15 | Cir | 367.40 | 15 | Cir | 367.60 |

# Structure Report

SCM 4 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 42 | CB 433 | Combination | 379.86 | Rect | 4.00 | 4.00 | 15 | Cir | 371.80 | 15 | Cir | 372.00 |
| 43 | CB 433A | Combination | 380.67 | Rect | 4.00 | 4.00 | 15 | Cir | 372.20 | | | |
| 44 | CB 428 | Combination | 371.84 | Rect | 4.00 | 4.00 | 18 | Cir | 364.50 | 15 | Cir | 364.70 |
| 45 | CB 429 | Combination | 379.68 | Rect | 4.00 | 4.00 | 15 | Cir | 371.50 | 15 | Cir | 371.70 |
| 46 | CB 429A | Combination | 380.12 | Rect | 4.00 | 4.00 | 15 | Cir | 371.85 | | | |
| 47 | CB 434 | Combination | 370.15 | Rect | 4.00 | 4.00 | 15 | Cir | 364.53 | 15 | Cir | 364.75 |
| 48 | CB 435 | Combination | 370.89 | Rect | 4.00 | 4.00 | 15 | Cir | 364.92 | 15 | Cir | 365.15 |
| 49 | CB 436 | Combination | 373.17 | Rect | 4.00 | 4.00 | 15 | Cir | 365.38 | 15 | Cir | 365.60 |
| 50 | CB 436A | Combination | 373.41 | Rect | 4.00 | 4.00 | 15 | Cir | 365.74 | | | |
| 51 | YI 404A | DropGrate | 370.85 | Rect | 4.00 | 4.00 | 15 | Cir | 365.92 | | | |

# Storm Sewer Summary Report



SCM 4 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (418) | 39.29 | 36 | Cir | 42.566 | 362.50 | 362.85 | 0.822 | 365.02 | 364.89 | 2.06 | 364.89 | End | Combination |
| 2 | Pipe - (417) | 33.18 | 36 | Cir | 26.017 | 363.05 | 363.20 | 0.577 | 364.89 | 365.07 | 1.19 | 365.07 | 1 | Combination |
| 3 | Pipe - (416) | 32.18 | 30 | Cir | 33.736 | 363.40 | 363.70 | 0.889 | 365.14 | 365.63 | n/a | 365.63 | 2 | Combination |
| 4 | Pipe - (368) | 31.80 | 30 | Cir | 43.841 | 363.90 | 364.50 | 1.369 | 365.63 | 366.42 | n/a | 366.42 | 3 | Combination |
| 5 | Pipe - (380) | 31.52 | 30 | Cir | 28.000 | 364.70 | 364.98 | 1.000 | 366.42 | 366.89 | n/a | 366.89 | 4 | Combination |
| 6 | Pipe - (367) (1) (1) | 28.32 | 30 | Cir | 67.788 | 365.20 | 365.88 | 1.003 | 366.89 | 367.69 | 0.43 | 367.69 | 5 | Combination |
| 7 | Pipe - (367) (1) | 28.14 | 30 | Cir | 56.317 | 366.10 | 367.20 | 1.953 | 367.69 | 369.01 | 1.53 | 369.01 | 6 | Combination |
| 8 | Pipe - (374) (1) | 8.05 | 18 | Cir | 35.477 | 367.76 | 368.11 | 0.986 | 369.01 | 369.21 | n/a | 369.21 j | 7 | Combination |
| 9 | Pipe - (374) | 7.58 | 18 | Cir | 90.608 | 368.31 | 374.34 | 6.655 | 369.21 | 375.41 | 0.25 | 375.41 | 8 | DropGrate |
| 10 | Pipe - (373) | 5.10 | 18 | Cir | 153.369 | 374.60 | 378.00 | 2.217 | 375.41 | 378.87 | 0.18 | 378.87 | 9 | DropGrate |
| 11 | Pipe - (372) | 3.29 | 15 | Cir | 166.305 | 378.20 | 380.20 | 1.203 | 378.87 | 380.93 | 0.15 | 380.93 | 10 | DropGrate |
| 12 | Pipe - (490) | 1.20 | 15 | Cir | 140.121 | 380.40 | 383.20 | 1.998 | 380.93 | 383.63 | n/a | 383.63 j | 11 | DropGrate |
| 13 | Pipe - (366) | 20.00 | 24 | Cir | 127.504 | 367.40 | 370.50 | 2.431 | 369.01 | 372.10 | n/a | 372.10 j | 7 | Combination |
| 14 | Pipe - (409) | 5.75 | 18 | Cir | 64.616 | 370.70 | 372.60 | 2.940 | 372.10 | 373.52 | n/a | 373.52 j | 13 | Combination |
| 15 | Pipe - (408) | 5.56 | 18 | Cir | 49.983 | 372.80 | 374.30 | 3.001 | 373.52 | 375.21 | n/a | 375.21 | 14 | Combination |
| 16 | Pipe - (432) | 5.35 | 18 | Cir | 137.706 | 374.50 | 375.30 | 0.581 | 375.40 | 376.20 | 0.55 | 376.75 | 15 | Combination |
| 17 | Pipe - (438) | 5.14 | 18 | Cir | 34.000 | 375.50 | 375.70 | 0.588 | 376.75 | 376.57 | n/a | 376.57 | 16 | Combination |
| 18 | Pipe - (437) | 4.98 | 15 | Cir | 115.233 | 375.90 | 376.60 | 0.607 | 376.91 | 377.61 | 0.36 | 377.98 | 17 | Combination |
| 19 | Pipe - (436) | 3.63 | 15 | Cir | 28.000 | 376.80 | 377.00 | 0.714 | 377.98 | 377.77 | n/a | 377.77 | 18 | Combination |
| 20 | Pipe - (435) | 0.82 | 15 | Cir | 78.850 | 377.20 | 377.67 | 0.596 | 377.77 | 378.02 | n/a | 378.02 | 19 | Combination |
| 21 | Pipe - (434) | 0.48 | 15 | Cir | 76.953 | 377.90 | 378.36 | 0.598 | 378.16 | 378.63 | n/a | 378.63 | 20 | Combination |
| 22 | Pipe - (433) | 0.38 | 15 | Cir | 28.000 | 378.60 | 378.77 | 0.607 | 378.83 | 379.01 | n/a | 379.01 | 21 | Combination |
| 23 | Pipe - (535) | 0.25 | 15 | Cir | 37.369 | 379.00 | 379.22 | 0.589 | 379.19 | 379.41 | n/a | 379.41 | 22 | Combination |
| 24 | Pipe - (367) | 14.06 | 24 | Cir | 28.099 | 370.70 | 370.87 | 0.605 | 372.10 | 372.22 | 0.73 | 372.95 | 13 | Combination |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report



SCM 4 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (379) | 13.71 | 24 | Cir | 43.416 | 371.10 | 371.50 | 0.921 | 372.95 | 372.83 | 0.82 | 372.83 | 24 | Combination |
| 26 | Pipe - (364) | 11.12 | 18 | Cir | 29.427 | 371.70 | 371.99 | 0.985 | 373.05 | 373.34 | 0.35 | 373.69 | 25 | Combination |
| 27 | Pipe - (363) | 8.76 | 18 | Cir | 54.011 | 372.20 | 373.28 | 2.000 | 373.69 | 374.42 | n/a | 374.42 j | 26 | Combination |
| 28 | Pipe - (412) | 4.24 | 15 | Cir | 297.666 | 373.50 | 375.29 | 0.601 | 374.42 | 376.14 | 0.53 | 376.67 | 27 | Combination |
| 29 | Pipe - (411) | 2.31 | 15 | Cir | 237.368 | 375.50 | 376.92 | 0.598 | 376.67 | 377.53 | n/a | 377.53 | 28 | Combination |
| 30 | Pipe - (415) | 2.25 | 15 | Cir | 54.000 | 377.20 | 377.52 | 0.593 | 377.79 | 378.12 | n/a | 378.12 | 29 | Combination |
| 31 | Pipe - (414) | 2.16 | 15 | Cir | 28.507 | 377.75 | 377.92 | 0.596 | 378.33 | 378.51 | 0.31 | 378.51 | 30 | Combination |
| 32 | Pipe - (413) | 2.15 | 15 | Cir | 74.490 | 378.20 | 378.65 | 0.604 | 378.77 | 379.23 | 0.23 | 379.23 | 31 | Combination |
| 33 | Pipe - (534) | 1.66 | 18 | Cir | 34.065 | 375.50 | 375.84 | 0.998 | 376.67 | 376.32 | n/a | 376.32 | 28 | Combination |
| 34 | Pipe - (362) | 4.39 | 18 | Cir | 34.020 | 373.50 | 373.70 | 0.588 | 374.42 | 374.50 | n/a | 374.50 j | 27 | Combination |
| 35 | Pipe - (371) | 2.33 | 15 | Cir | 53.159 | 373.90 | 374.22 | 0.602 | 374.50 | 374.83 | n/a | 374.83 | 34 | Combination |
| 36 | Pipe - (394) | 1.75 | 15 | Cir | 28.000 | 374.40 | 374.60 | 0.714 | 374.89 | 375.12 | 0.23 | 375.12 | 35 | Combination |
| 37 | Pipe - (410) | 0.92 | 15 | Cir | 44.039 | 374.80 | 376.56 | 3.997 | 375.12 | 376.94 | 0.14 | 376.94 | 36 | Combination |
| 38 | Pipe - (584) | 0.99 | 15 | Cir | 60.892 | 373.90 | 374.51 | 1.002 | 374.50 | 374.90 | n/a | 374.90 j | 34 | DropGrate |
| 39 | Pipe - (384) | 3.65 | 24 | Cir | 206.011 | 363.05 | 364.08 | 0.500 | 364.89 | 364.75 | 0.41 | 364.75 | 1 | Combination |
| 40 | Pipe - (386) | 1.24 | 15 | Cir | 28.000 | 364.30 | 364.50 | 0.714 | 364.75 | 364.94 | n/a | 364.94 j | 39 | Combination |
| 41 | Pipe - (421) | 1.17 | 15 | Cir | 46.669 | 364.70 | 367.40 | 5.785 | 364.94 | 367.83 | 0.18 | 367.83 | 40 | Combination |
| 42 | Pipe - (420) | 0.94 | 15 | Cir | 101.483 | 367.60 | 371.80 | 4.139 | 367.83 | 372.18 | 0.21 | 372.18 | 41 | Combination |
| 43 | Pipe - (419) | 0.46 | 15 | Cir | 34.024 | 372.00 | 372.20 | 0.588 | 372.26 | 372.46 | n/a | 372.46 | 42 | Combination |
| 44 | Pipe - (388) | 1.98 | 18 | Cir | 97.083 | 364.00 | 364.50 | 0.515 | 364.89 | 365.03 | 0.10 | 365.03 | 1 | Combination |
| 45 | Pipe - (387) | 1.37 | 15 | Cir | 181.821 | 364.70 | 371.50 | 3.740 | 365.03 | 371.96 | n/a | 371.96 | 44 | Combination |
| 46 | Pipe - (389) | 0.63 | 15 | Cir | 29.575 | 371.70 | 371.85 | 0.507 | 372.01 | 372.16 | 0.11 | 372.27 | 45 | Combination |
| 47 | Pipe - (422) | 2.42 | 15 | Cir | 46.669 | 364.30 | 364.53 | 0.493 | 364.95 | 365.18 | 0.25 | 365.43 | 39 | Combination |
| 48 | Pipe - (383) | 2.19 | 15 | Cir | 34.000 | 364.75 | 364.92 | 0.500 | 365.43 | 365.52 | n/a | 365.77 j | 47 | Combination |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 4 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | Pipe - (382) | 1.82 | 15 | Cir | 46.669 | 365.15 | 365.38 | 0.493 | 365.77 | 365.92 | 0.23 | 366.15 | 48 | Combination |
| 50 | Pipe - (381) | 1.09 | 15 | Cir | 28.000 | 365.60 | 365.74 | 0.500 | 366.15 | 366.17 | 0.13 | 366.30 | 49 | Combination |
| 51 | Pipe - (585) | 0.25 | 15 | Cir | 21.891 | 365.70 | 365.92 | 1.005 | 366.42 | 366.11 | n/a | 366.11 | 4 | DropGrate |

Project File: SCM 4 Storm Network.stm

Number of lines: 51

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 4 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | CB 401 | 1.30 | 0.01 | 1.31 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.20 | 0.20 | 6.20 | 0.0 | Off |
| 2 | CB 402 | 1.23 | 0.50 | 1.73 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.67 | 0.23 | 7.67 | 0.0 | Off |
| 3 | CB 403 | 0.53 | 1.34 | 1.37 | 0.50 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.59 | 0.15 | 3.66 | 0.0 | 2 |
| 4 | CB 404 | 0.14 | 0.08 | 0.22 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.60 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 405 | 3.81 | 0.00 | 2.46 | 1.34 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.51 | 0.18 | 5.10 | 0.0 | 3 |
| 6 | CB 406 | 0.32 | 0.03 | 0.35 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.90 | 0.00 | 0.00 | 0.0 | 5 |
| 7 | CB 407 | 0.78 | 0.00 | 0.75 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.62 | 0.05 | 0.76 | 0.0 | 6 |
| 8 | CB 407A | 0.56 | 0.43 | 0.92 | 0.08 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.28 | 0.07 | 1.08 | 0.0 | 4 |
| 9 | YI 407B | 2.75 | 0.00 | 2.75 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.19 | 21.56 | 0.19 | 21.56 | 0.0 | Off |
| 10 | YI 407C | 1.97 | 0.00 | 1.97 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.15 | 17.78 | 0.15 | 17.78 | 0.0 | Off |
| 11 | YI 407D | 2.18 | 0.00 | 2.18 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.16 | 18.85 | 0.16 | 18.85 | 0.0 | Off |
| 12 | YI 407E | 1.20 | 0.00 | 1.20 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.45 | 0.11 | 13.45 | 0.0 | Off |
| 13 | CB 408 | 0.39 | 0.00 | 0.39 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | 7 |
| 14 | CB 409 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.67 | 0.00 | 0.00 | 0.0 | 13 |
| 15 | CB 410 | 0.32 | 0.00 | 0.32 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.28 | 0.00 | 0.00 | 0.0 | 14 |
| 16 | CB 411 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.75 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 412 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.75 | 0.00 | 0.00 | 0.0 | 37 |
| 18 | CB 413 | 1.44 | 0.00 | 1.44 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.69 | 0.21 | 6.69 | 0.0 | Off |
| 19 | CB 414 | 3.00 | 0.00 | 3.00 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.31 | 11.51 | 0.31 | 11.51 | 0.0 | Off |
| 20 | CB 415 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.15 | 0.03 | 0.48 | 0.0 | 19 |
| 21 | CB 416 | 0.11 | 0.00 | 0.11 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.65 | 0.00 | 0.00 | 0.0 | Off |
| 22 | CB 417 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.83 | 0.00 | 0.00 | 0.0 | Off |
| 23 | CB 418 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.19 | 0.12 | 2.19 | 0.0 | Off |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



SCM 4 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 419 | 0.46 | 1.55 | 1.57 | 0.43 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.30 | 0.12 | 2.20 | 0.0 | 8 |
| 25 | CB 420 | 2.92 | 0.90 | 2.28 | 1.55 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.39 | 0.22 | 6.94 | 0.0 | 24 |
| 26 | CB 421 | 2.68 | 0.00 | 1.78 | 0.90 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.92 | 0.19 | 5.27 | 0.0 | 25 |
| 27 | CB 422 | 0.70 | 0.03 | 0.74 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.90 | 0.16 | 3.90 | 0.0 | Off |
| 28 | CB 423 | 0.53 | 0.00 | 0.50 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.19 | 0.06 | 0.96 | 0.0 | 27 |
| 29 | CB 424 | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.42 | 0.00 | 0.00 | 0.0 | 28 |
| 30 | CB 425 | 0.11 | 0.00 | 0.11 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.38 | 0.00 | 0.00 | 0.0 | 26 |
| 31 | CB 426 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.05 | 0.91 | 0.00 | 0.00 | 0.0 | 25 |
| 32 | CB 427 | 2.15 | 0.00 | 2.15 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 9.01 | 0.26 | 9.01 | 0.0 | Off |
| 33 | CB 423A | 1.66 | 0.00 | 1.23 | 0.42 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.67 | 0.15 | 3.61 | 0.0 | 34 |
| 34 | CB 422A | 1.13 | 0.42 | 1.55 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.06 | 0.22 | 7.06 | 0.0 | Off |
| 35 | CB 422C | 0.60 | 0.00 | 0.60 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.28 | 0.15 | 3.28 | 0.0 | Off |
| 36 | CB 422D | 0.85 | 0.00 | 0.85 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.38 | 0.17 | 4.38 | 0.0 | 37 |
| 37 | CB 422E | 0.92 | 0.00 | 0.92 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.67 | 0.17 | 4.67 | 0.0 | Off |
| 38 | YI 422B | 0.99 | 0.00 | 0.99 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.10 | 12.12 | 0.10 | 12.12 | 0.0 | Off |
| 39 | CB 430 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.05 | 0.84 | 0.00 | 0.00 | 0.0 | 1 |
| 40 | CB 431 | 0.07 | 0.00 | 0.07 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | 3 |
| 41 | CB 432 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.47 | 0.00 | 0.00 | 0.0 | 47 |
| 42 | CB 433 | 0.49 | 0.00 | 0.49 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.91 | 0.00 | 0.00 | 0.0 | 41 |
| 43 | CB 433A | 0.46 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.85 | 0.00 | 0.00 | 0.0 | 48 |
| 44 | CB 428 | 0.67 | 0.01 | 0.67 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.93 | 0.03 | 0.43 | 0.0 | 1 |
| 45 | CB 429 | 0.74 | 0.00 | 0.73 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.77 | 0.02 | 0.36 | 0.0 | 44 |
| 46 | CB 429A | 0.63 | 0.00 | 0.63 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.40 | 0.01 | 0.18 | 0.0 | 2 |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



SCM 4 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 434 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.47 | 0.00 | 0.00 | 0.0 | Off |
| 48 | CB 435 | 0.39 | 0.16 | 0.54 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | Off |
| 49 | CB 436 | 0.74 | 0.00 | 0.71 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.79 | 0.05 | 0.84 | 0.0 | 48 |
| 50 | CB 436A | 1.09 | 0.00 | 0.97 | 0.12 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.83 | 0.08 | 1.34 | 0.0 | 48 |
| 51 | YI 404A | 0.25 | 0.00 | 0.25 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.04 | 6.32 | 0.04 | 6.32 | 0.0 | Off |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 4 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 36 | 39.29 | 362.50 | 365.02 | 2.52 | 5.11 | 6.20 | 0.92 | 365.94 | 0.000 | 42.566 | 362.85 | 364.89 | 2.04** | 5.11 | 7.68 | 0.92 | 365.81 | 0.000 | 0.000 | n/a | 2.25 | 2.06 |
| 2 | 36 | 33.18 | 363.05 | 364.89 | 1.84 | 4.54 | 7.31 | 0.80 | 365.69 | 0.000 | 26.017 | 363.20 | 365.07 | 1.87** | 4.63 | 7.17 | 0.80 | 365.87 | 0.000 | 0.000 | n/a | 1.49 | 1.19 |
| 3 | 30 | 32.18 | 363.40 | 365.14 | 1.74* | 3.65 | 8.81 | 0.97 | 366.12 | 0.000 | 33.736 | 363.70 | 365.63 | 1.93** | 4.07 | 7.91 | 0.97 | 366.60 | 0.000 | 0.000 | n/a | 1.07 | n/a |
| 4 | 30 | 31.80 | 363.90 | 365.63 | 1.73 | 3.62 | 8.78 | 0.96 | 366.59 | 0.000 | 43.841 | 364.50 | 366.42 | 1.92** | 4.04 | 7.86 | 0.96 | 367.38 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 5 | 30 | 31.52 | 364.70 | 366.42 | 1.72 | 3.60 | 8.76 | 0.95 | 367.37 | 0.000 | 28.000 | 364.98 | 366.89 | 1.91** | 4.03 | 7.83 | 0.95 | 367.84 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 6 | 30 | 28.32 | 365.20 | 366.89 | 1.69 | 3.53 | 8.01 | 0.86 | 367.75 | 0.000 | 67.788 | 365.88 | 367.69 | 1.81** | 3.81 | 7.43 | 0.86 | 368.55 | 0.000 | 0.000 | n/a | 0.50 | 0.43 |
| 7 | 30 | 28.14 | 366.10 | 367.69 | 1.59 | 3.30 | 8.53 | 0.85 | 368.55 | 0.000 | 56.317 | 367.20 | 369.01 | 1.81** | 3.80 | 7.41 | 0.85 | 369.86 | 0.000 | 0.000 | n/a | 1.80 | 1.53 |
| 8 | 18 | 8.05 | 367.76 | 369.01 | 1.25 | 1.39 | 5.12 | 0.52 | 369.53 | 0.000 | 35.477 | 368.11 | 369.21 j | 1.10** | 1.39 | 5.81 | 0.52 | 369.73 | 0.000 | 0.000 | n/a | 0.80 | n/a |
| 9 | 18 | 7.58 | 368.31 | 369.21 | 0.90 | 1.10 | 6.87 | 0.50 | 369.70 | 0.000 | 90.608 | 374.34 | 375.41 | 1.07** | 1.34 | 5.65 | 0.50 | 375.90 | 0.000 | 0.000 | n/a | 0.50 | 0.25 |
| 10 | 18 | 5.10 | 374.60 | 375.41 | 0.81 | 0.97 | 5.27 | 0.36 | 375.77 | 0.000 | 153.369 | 378.00 | 378.87 | 0.87** | 1.06 | 4.81 | 0.36 | 379.23 | 0.000 | 0.000 | n/a | 0.50 | 0.18 |
| 11 | 15 | 3.29 | 378.20 | 378.87 | 0.67 | 0.67 | 4.92 | 0.30 | 379.17 | 0.000 | 166.305 | 380.20 | 380.93 | 0.73** | 0.74 | 4.42 | 0.30 | 381.23 | 0.000 | 0.000 | n/a | 0.50 | 0.15 |
| 12 | 15 | 1.20 | 380.40 | 380.93 | 0.53 | 0.38 | 2.42 | 0.16 | 381.09 | 0.000 | 140.121 | 383.20 | 383.63 j | 0.43** | 0.38 | 3.19 | 0.16 | 383.79 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 13 | 24 | 20.00 | 367.40 | 369.01 | 1.61 | 2.70 | 7.39 | 0.85 | 369.86 | 0.000 | 127.504 | 370.50 | 372.10 j | 1.60** | 2.70 | 7.40 | 0.85 | 372.96 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 14 | 18 | 5.75 | 370.70 | 372.10 | 1.40 | 1.14 | 3.34 | 0.39 | 372.50 | 0.000 | 64.616 | 372.60 | 373.52 j | 0.92** | 1.14 | 5.03 | 0.39 | 373.92 | 0.000 | 0.000 | n/a | 1.27 | n/a |
| 15 | 18 | 5.56 | 372.80 | 373.52 | 0.72 | 0.85 | 6.57 | 0.38 | 373.91 | 0.000 | 49.983 | 374.30 | 375.21 | 0.91** | 1.12 | 4.96 | 0.38 | 375.59 | 0.000 | 0.000 | n/a | 1.22 | n/a |
| 16 | 18 | 5.35 | 374.50 | 375.40 | 0.90* | 1.09 | 4.85 | 0.37 | 375.76 | 0.581 | 137.706 | 375.30 | 376.20 | 0.90** | 1.10 | 4.85 | 0.37 | 376.56 | 0.579 | 0.580 | 0.798 | 1.50 | 0.55 |
| 17 | 18 | 5.14 | 375.50 | 376.75 | 1.25 | 1.07 | 3.28 | 0.36 | 377.11 | 0.000 | 34.000 | 375.70 | 376.57 | 0.87** | 1.07 | 4.82 | 0.36 | 376.93 | 0.000 | 0.000 | n/a | 1.08 | n/a |
| 18 | 15 | 4.98 | 375.90 | 376.91 | 1.01* | 1.07 | 4.68 | 0.34 | 377.25 | 0.607 | 115.233 | 376.60 | 377.61 | 1.01 | 1.06 | 4.68 | 0.34 | 377.95 | 0.608 | 0.608 | 0.700 | 1.07 | 0.36 |
| 19 | 15 | 3.63 | 376.80 | 377.98 | 1.18 | 0.79 | 3.03 | 0.33 | 378.30 | 0.000 | 28.000 | 377.00 | 377.77 | 0.77** | 0.79 | 4.59 | 0.33 | 378.10 | 0.000 | 0.000 | n/a | 1.18 | n/a |
| 20 | 15 | 0.82 | 377.20 | 377.77 | 0.57 | 0.29 | 1.50 | 0.13 | 377.90 | 0.000 | 78.850 | 377.67 | 378.02 | 0.35** | 0.29 | 2.86 | 0.13 | 378.15 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 21 | 15 | 0.48 | 377.90 | 378.16 | 0.26* | 0.19 | 2.58 | 0.10 | 378.26 | 0.000 | 76.953 | 378.36 | 378.63 | 0.27** | 0.20 | 2.48 | 0.10 | 378.73 | 0.000 | 0.000 | n/a | 1.18 | n/a |
| 22 | 15 | 0.38 | 378.60 | 378.83 | 0.23* | 0.16 | 2.42 | 0.08 | 378.92 | 0.000 | 28.000 | 378.77 | 379.01 | 0.24** | 0.16 | 2.32 | 0.08 | 379.09 | 0.000 | 0.000 | n/a | 1.30 | n/a |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 4 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 15 | 0.25 | 379.00 | 379.19 | 0.19* | 0.12 | 2.10 | 0.07 | 379.26 | 0.000 | 37.369 | 379.22 | 379.41 | 0.19** | 0.12 | 2.07 | 0.07 | 379.48 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 24 | 24 | 14.06 | 370.70 | 372.10 | 1.40 | 2.25 | 5.96 | 0.55 | 372.66 | 0.546 | 28.099 | 370.87 | 372.22 | 1.35** | 2.26 | 6.21 | 0.60 | 372.82 | 0.603 | 0.574 | 0.161 | 1.21 | 0.73 |
| 25 | 24 | 13.71 | 371.10 | 372.95 | 1.85 | 2.22 | 4.52 | 0.59 | 373.54 | 0.000 | 43.416 | 371.50 | 372.83 | 1.33** | 2.22 | 6.17 | 0.59 | 373.42 | 0.000 | 0.000 | n/a | 1.38 | 0.82 |
| 26 | 18 | 11.12 | 371.70 | 373.05 | 1.35* | 1.68 | 6.63 | 0.68 | 373.74 | 0.985 | 29.427 | 371.99 | 373.34 | 1.35 | 1.68 | 6.63 | 0.68 | 374.02 | 0.986 | 0.986 | 0.290 | 0.51 | 0.35 |
| 27 | 18 | 8.76 | 372.20 | 373.69 | 1.49 | 1.45 | 4.96 | 0.57 | 374.26 | 0.000 | 54.011 | 373.28 | 374.42 j | 1.14** | 1.45 | 6.05 | 0.57 | 374.99 | 0.000 | 0.000 | n/a | 2.16 | n/a |
| 28 | 15 | 4.24 | 373.50 | 374.42 | 0.92 | 0.97 | 4.36 | 0.30 | 374.72 | 0.536 | 297.666 | 375.29 | 376.14 | 0.85 | 0.89 | 4.75 | 0.35 | 376.49 | 0.657 | 0.596 | 1.775 | 1.50 | 0.53 |
| 29 | 15 | 2.31 | 375.50 | 376.67 | 1.17 | 0.59 | 1.93 | 0.24 | 376.91 | 0.000 | 237.368 | 376.92 | 377.53 | 0.61** | 0.59 | 3.91 | 0.24 | 377.76 | 0.000 | 0.000 | n/a | 1.49 | n/a |
| 30 | 15 | 2.25 | 377.20 | 377.79 | 0.59* | 0.57 | 3.95 | 0.23 | 378.02 | 0.000 | 54.000 | 377.52 | 378.12 | 0.60** | 0.58 | 3.88 | 0.23 | 378.35 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 31 | 15 | 2.16 | 377.75 | 378.33 | 0.58* | 0.55 | 3.92 | 0.23 | 378.55 | 0.000 | 28.507 | 377.92 | 378.51 | 0.59** | 0.56 | 3.82 | 0.23 | 378.73 | 0.000 | 0.000 | n/a | 1.36 | 0.31 |
| 32 | 15 | 2.15 | 378.20 | 378.77 | 0.57* | 0.55 | 3.93 | 0.23 | 379.00 | 0.000 | 74.490 | 378.65 | 379.23 | 0.58** | 0.56 | 3.82 | 0.23 | 379.46 | 0.000 | 0.000 | n/a | 1.00 | 0.23 |
| 33 | 18 | 1.66 | 375.50 | 376.67 | 1.17 | 0.49 | 1.12 | 0.18 | 376.85 | 0.000 | 34.065 | 375.84 | 376.32 | 0.48** | 0.49 | 3.37 | 0.18 | 376.50 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 34 | 18 | 4.39 | 373.50 | 374.42 | 0.92 | 0.96 | 3.84 | 0.32 | 374.75 | 0.000 | 34.020 | 373.70 | 374.50 j | 0.80** | 0.96 | 4.56 | 0.32 | 374.83 | 0.000 | 0.000 | n/a | 1.82 | n/a |
| 35 | 15 | 2.33 | 373.90 | 374.50 | 0.60 | 0.59 | 3.98 | 0.24 | 374.74 | 0.000 | 53.159 | 374.22 | 374.83 | 0.61** | 0.59 | 3.92 | 0.24 | 375.07 | 0.000 | 0.000 | n/a | 1.05 | n/a |
| 36 | 15 | 1.75 | 374.40 | 374.89 | 0.49* | 0.44 | 3.95 | 0.20 | 375.09 | 0.000 | 28.000 | 374.60 | 375.12 | 0.52** | 0.49 | 3.58 | 0.20 | 375.32 | 0.000 | 0.000 | n/a | 1.18 | 0.23 |
| 37 | 15 | 0.92 | 374.80 | 375.12 | 0.32 | 0.25 | 3.62 | 0.14 | 375.26 | 0.000 | 44.039 | 376.56 | 376.94 | 0.38** | 0.31 | 2.95 | 0.14 | 377.07 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 38 | 15 | 0.99 | 373.90 | 374.50 | 0.60 | 0.33 | 1.68 | 0.14 | 374.64 | 0.000 | 60.892 | 374.51 | 374.90 j | 0.39** | 0.33 | 3.02 | 0.14 | 375.04 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 39 | 24 | 3.65 | 363.05 | 364.89 | 1.84 | 0.92 | 1.21 | 0.24 | 365.13 | 0.000 | 206.011 | 364.08 | 364.75 | 0.67** | 0.92 | 3.97 | 0.24 | 364.99 | 0.000 | 0.000 | n/a | 1.69 | 0.41 |
| 40 | 15 | 1.24 | 364.30 | 364.75 | 0.45 | 0.38 | 3.12 | 0.16 | 364.91 | 0.000 | 28.000 | 364.50 | 364.94 j | 0.44** | 0.38 | 3.22 | 0.16 | 365.10 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 41 | 15 | 1.17 | 364.70 | 364.94 | 0.24 | 0.16 | 7.20 | 0.16 | 365.09 | 0.000 | 46.669 | 367.40 | 367.83 | 0.43** | 0.37 | 3.17 | 0.16 | 367.98 | 0.000 | 0.000 | n/a | 1.13 | 0.18 |
| 42 | 15 | 0.94 | 367.60 | 367.83 | 0.23* | 0.15 | 6.20 | 0.14 | 367.97 | 0.000 | 101.483 | 371.80 | 372.18 | 0.38** | 0.32 | 2.98 | 0.14 | 372.32 | 0.000 | 0.000 | n/a | 1.50 | 0.21 |
| 43 | 15 | 0.46 | 372.00 | 372.26 | 0.26* | 0.18 | 2.52 | 0.09 | 372.35 | 0.000 | 34.024 | 372.20 | 372.46 | 0.26** | 0.19 | 2.44 | 0.09 | 372.56 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 44 | 18 | 1.98 | 364.00 | 364.89 | 0.89 | 0.56 | 1.82 | 0.20 | 365.08 | 0.000 | 97.083 | 364.50 | 365.03 | 0.53** | 0.56 | 3.54 | 0.20 | 365.23 | 0.000 | 0.000 | n/a | 0.50 | 0.10 |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 4 10-YEAR

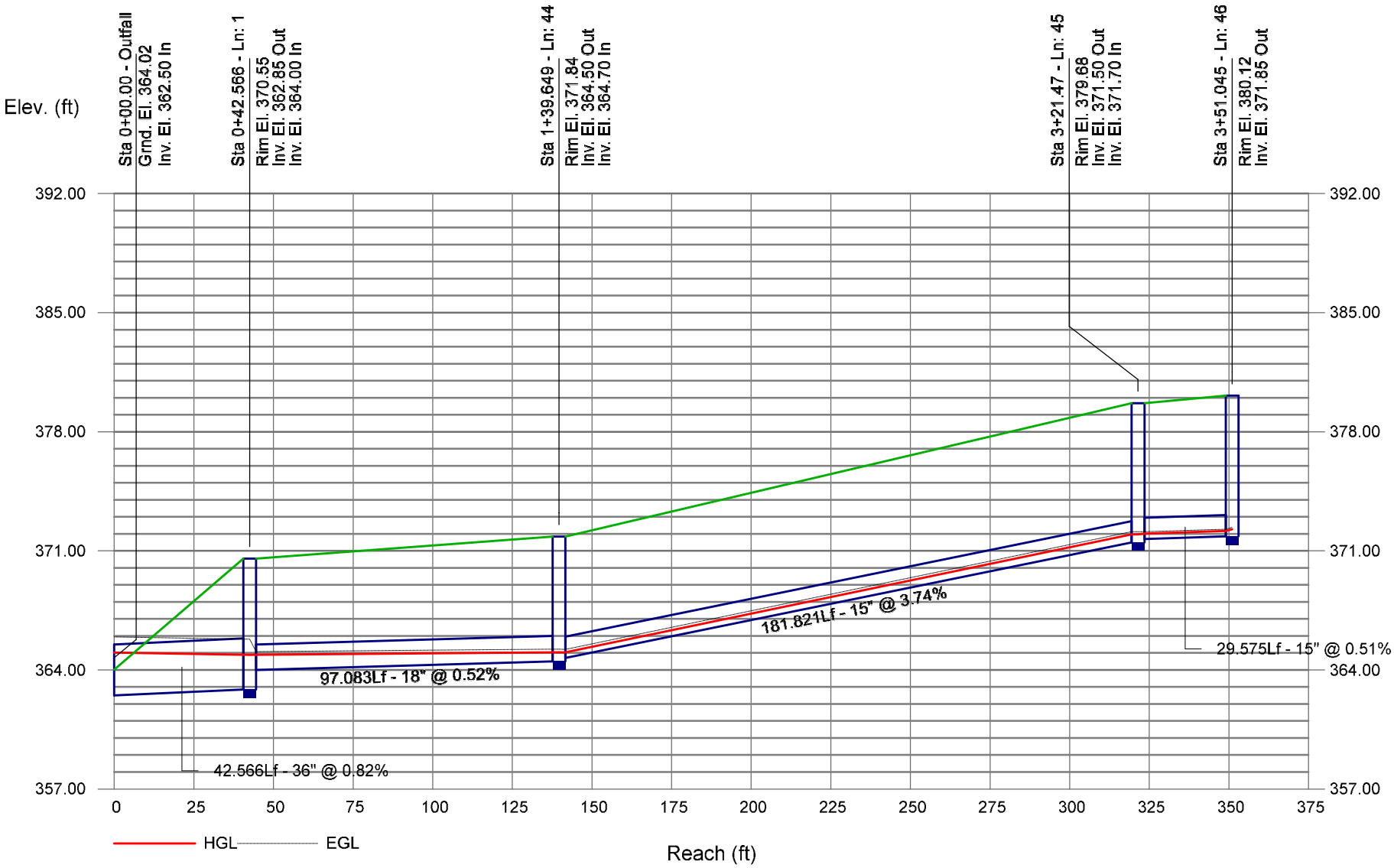
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 1.37 | 364.70 | 365.03 | 0.33 | 0.26 | 5.26 | 0.17 | 365.20 | 0.000 | 181.821 | 371.50 | 371.96 | 0.46** | 0.41 | 3.32 | 0.17 | 372.13 | 0.000 | 0.000 | n/a | 1.43 | n/a |
| 46 | 15 | 0.63 | 371.70 | 372.01 | 0.31* | 0.24 | 2.63 | 0.11 | 372.12 | 0.506 | 29.575 | 371.85 | 372.16 | 0.31** | 0.24 | 2.63 | 0.11 | 372.27 | 0.508 | 0.507 | 0.150 | 1.00 | 0.11 |
| 47 | 15 | 2.42 | 364.30 | 364.95 | 0.65* | 0.64 | 3.75 | 0.22 | 365.17 | 0.492 | 46.669 | 364.53 | 365.18 | 0.65 | 0.64 | 3.75 | 0.22 | 365.40 | 0.492 | 0.492 | 0.230 | 1.13 | 0.25 |
| 48 | 15 | 2.19 | 364.75 | 365.43 | 0.68 | 0.57 | 3.23 | 0.16 | 365.59 | 0.352 | 34.000 | 364.92 | 365.52 j | 0.60** | 0.58 | 3.76 | 0.22 | 365.74 | 0.530 | 0.441 | 0.150 | 1.13 | 0.25 |
| 49 | 15 | 1.82 | 365.15 | 365.77 | 0.62 | 0.50 | 3.01 | 0.14 | 365.91 | 0.331 | 46.669 | 365.38 | 365.92 | 0.54** | 0.51 | 3.59 | 0.20 | 366.12 | 0.533 | 0.432 | 0.201 | 1.13 | 0.23 |
| 50 | 15 | 1.09 | 365.60 | 366.15 | 0.55 | 0.52 | 2.12 | 0.07 | 366.22 | 0.183 | 28.000 | 365.74 | 366.17 | 0.43 | 0.38 | 2.91 | 0.13 | 366.30 | 0.435 | 0.309 | 0.087 | 1.00 | 0.13 |
| 51 | 15 | 0.25 | 365.70 | 366.42 | 0.72 | 0.12 | 0.34 | 0.07 | 366.49 | 0.000 | 21.891 | 365.92 | 366.11 | 0.19** | 0.12 | 2.07 | 0.07 | 366.18 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

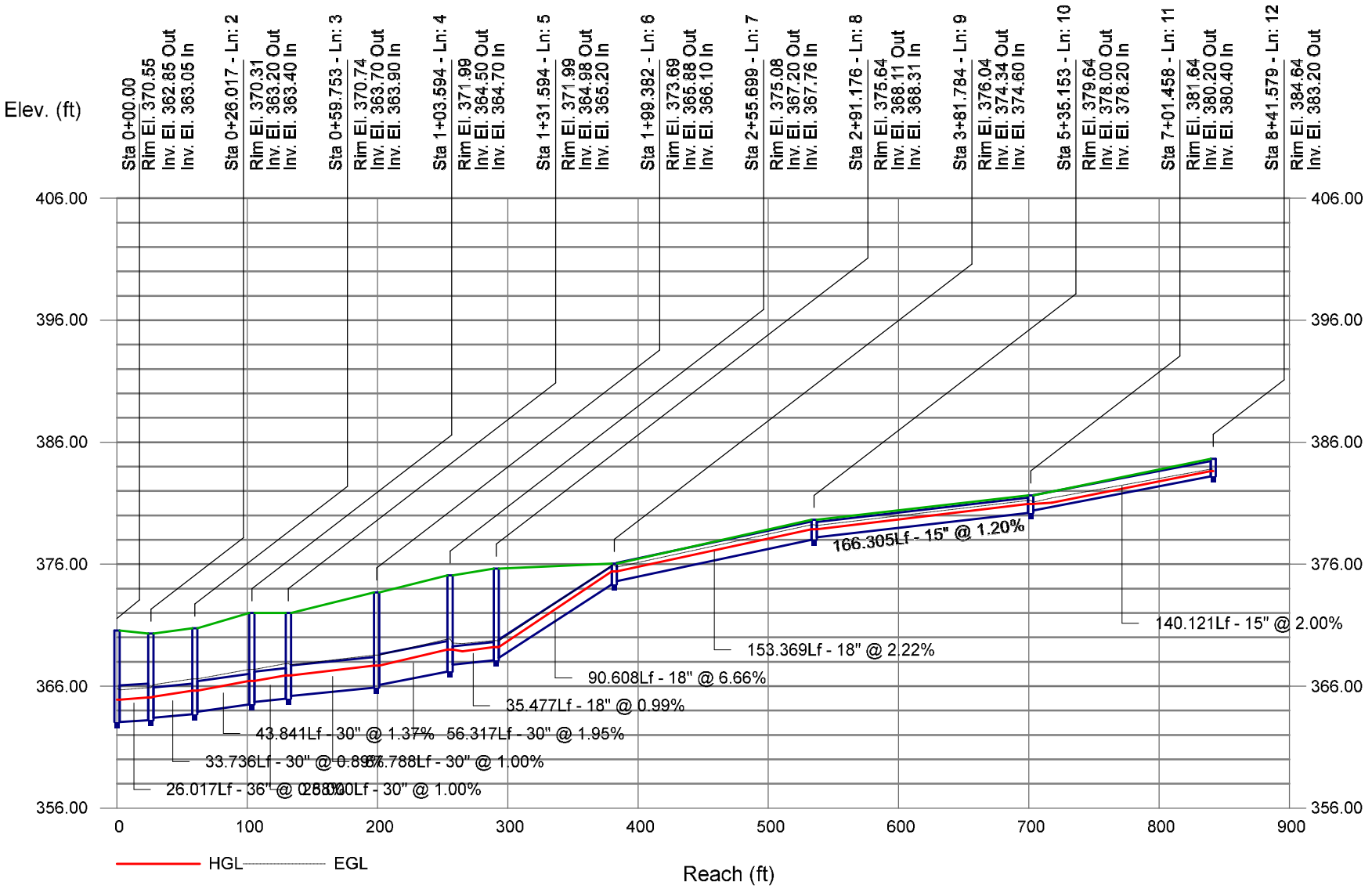
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 1-46 Proj. file: SCM 4 Storm Network.stm



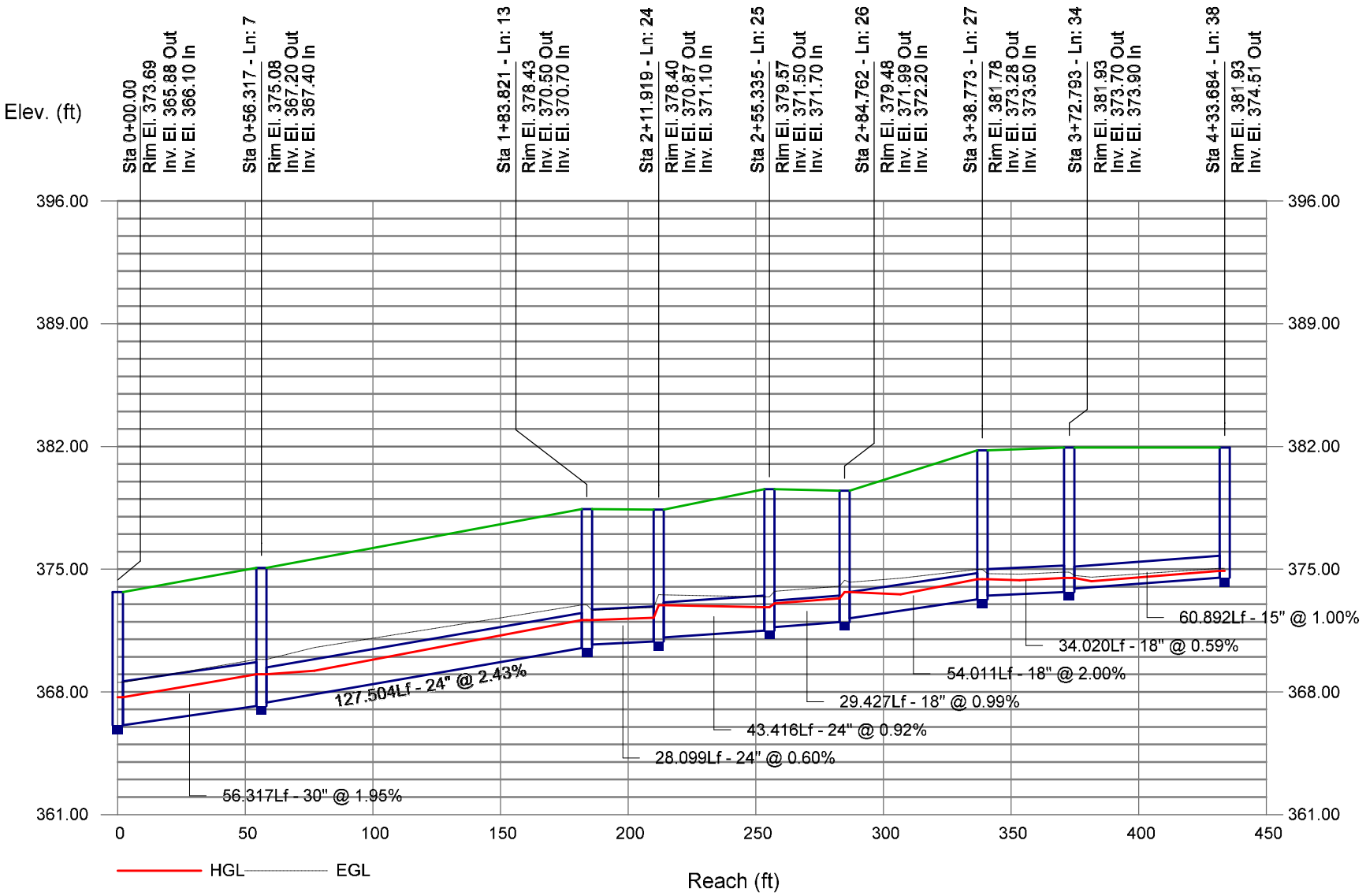
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 2-12 Proj. file: SCM 4 Storm Network.stm



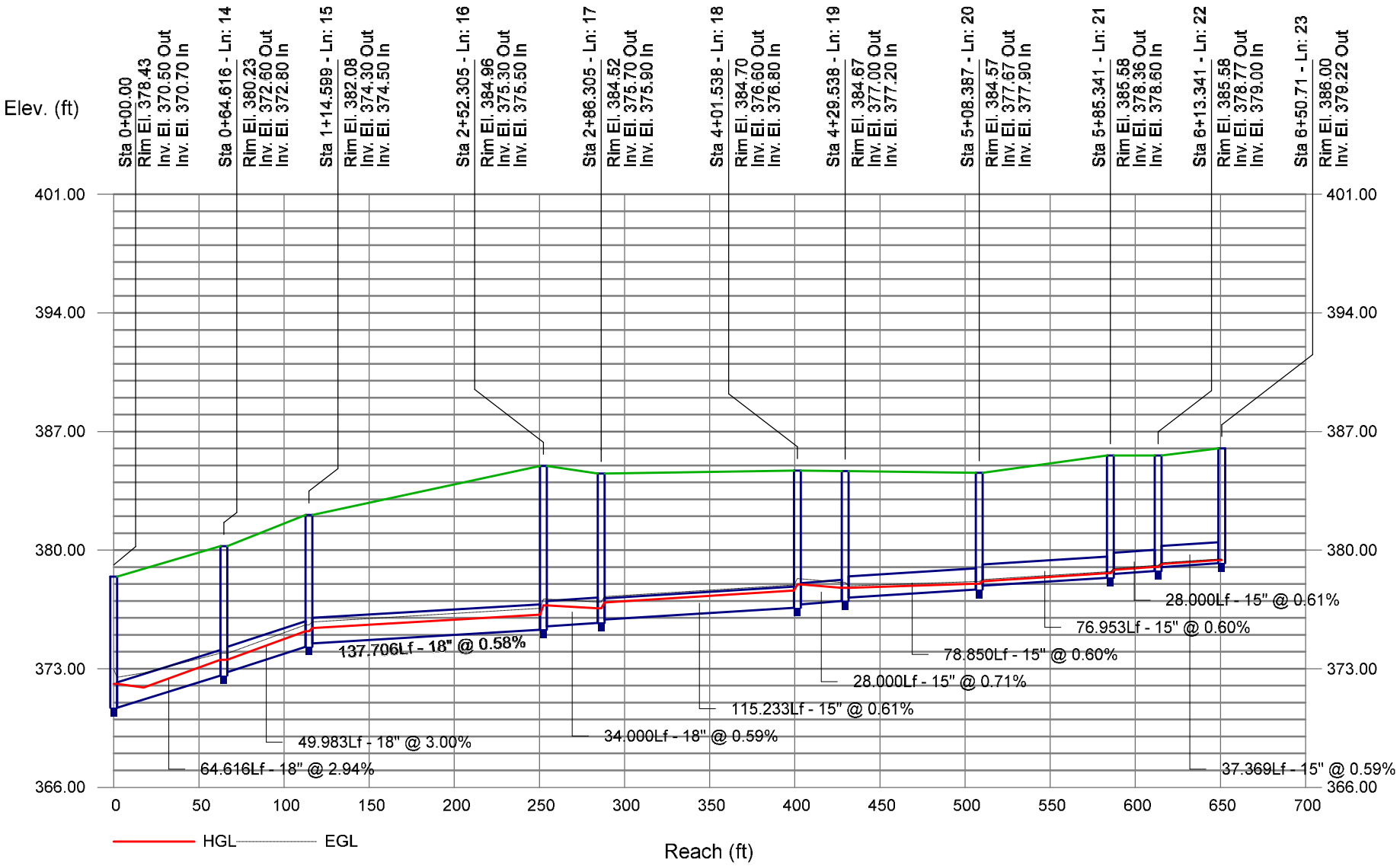
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 13-38 Proj. file: SCM 4 Storm Network.stm



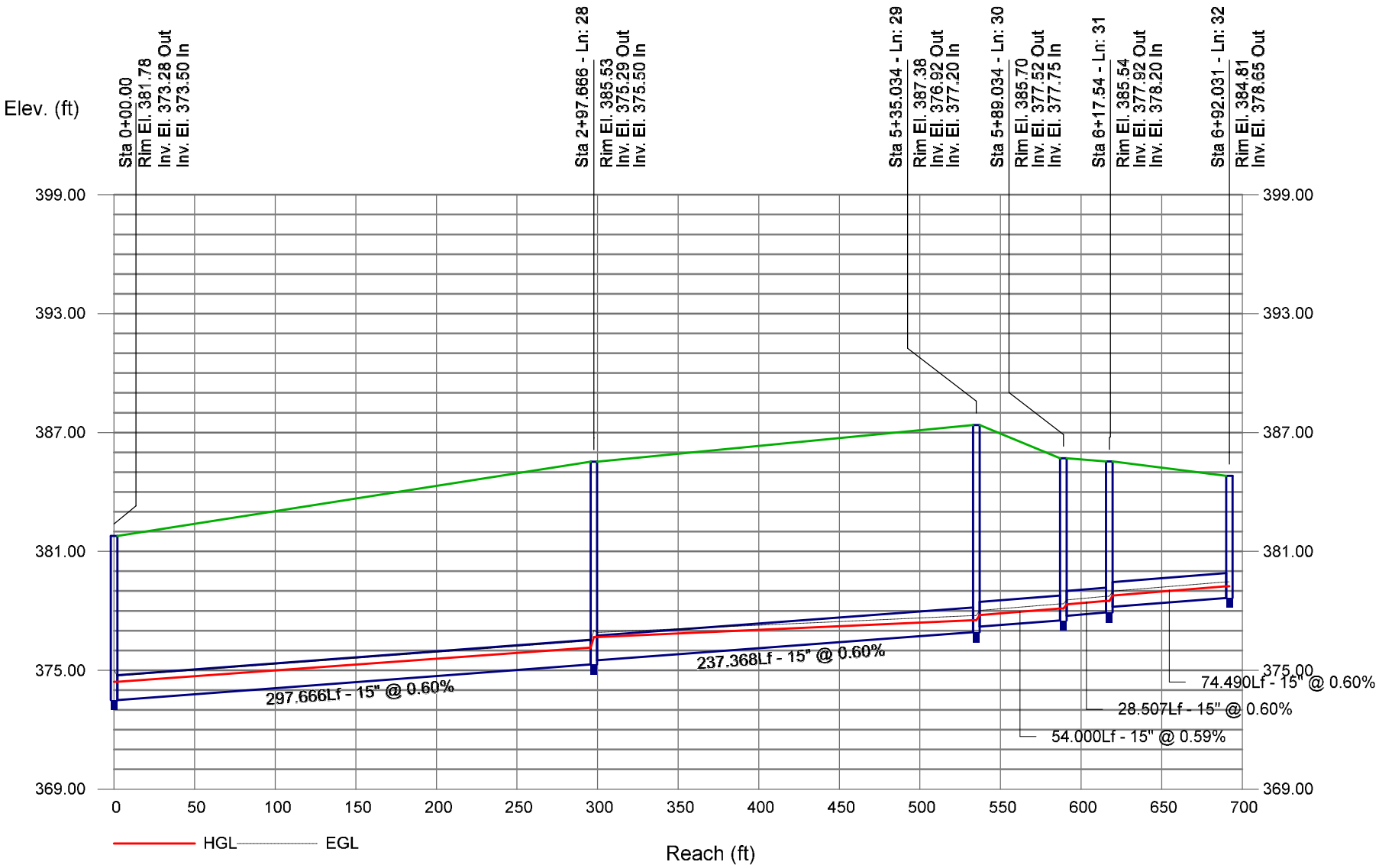
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 14-23 Proj. file: SCM 4 Storm Network.stm



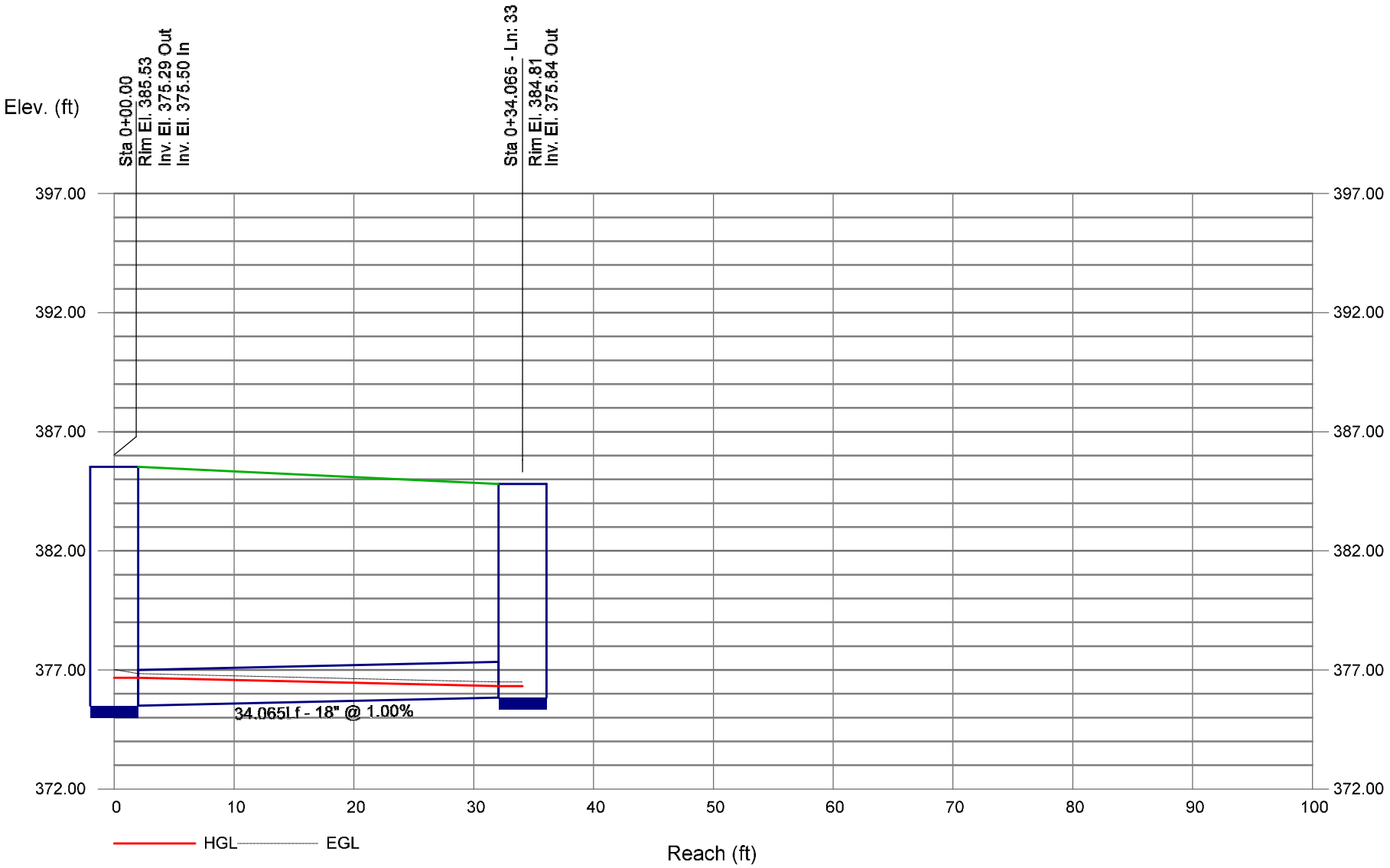
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 28-32 Proj. file: SCM 4 Storm Network.stm



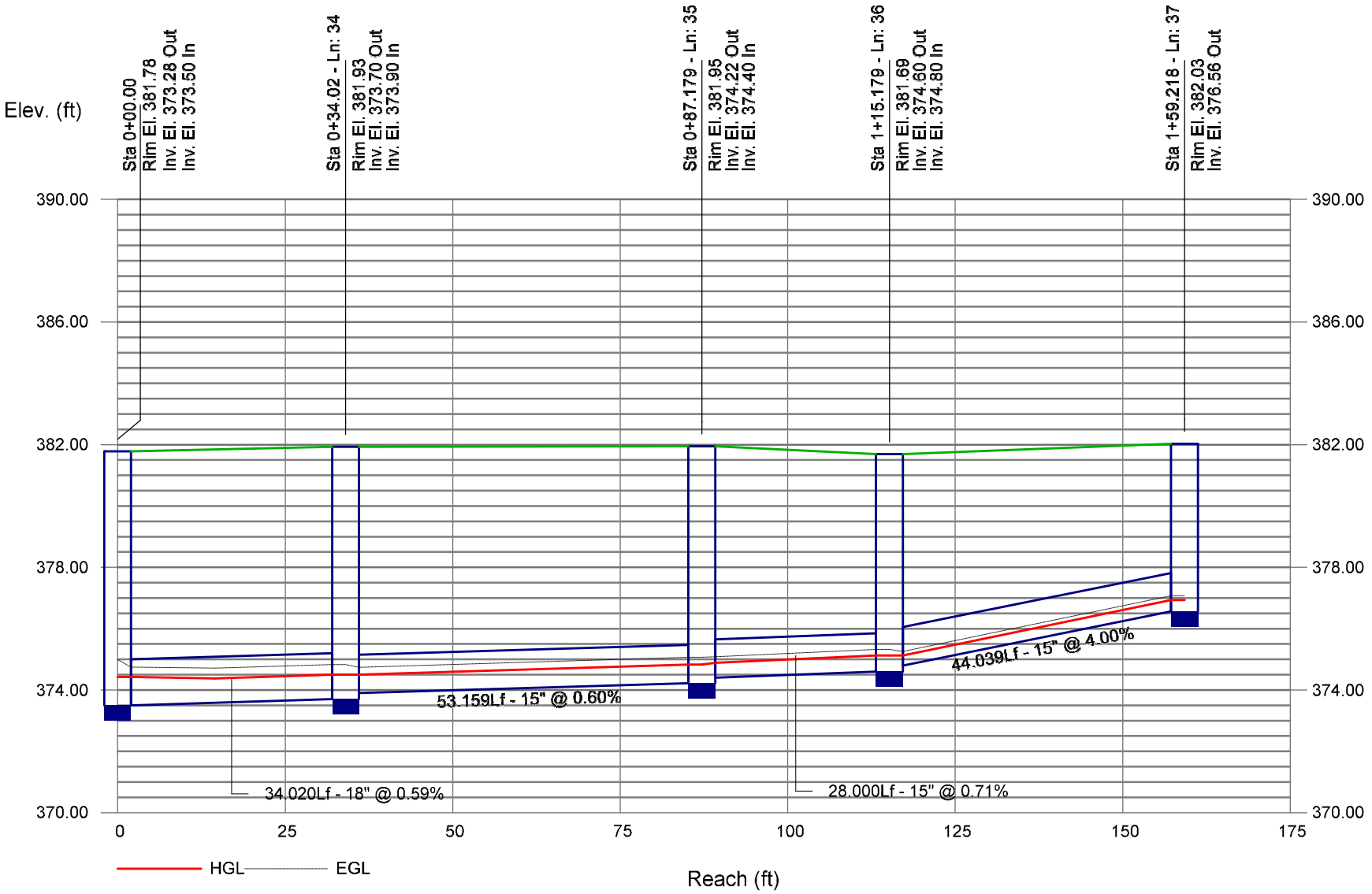
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 33-33 Proj. file: SCM 4 Storm Network.stm



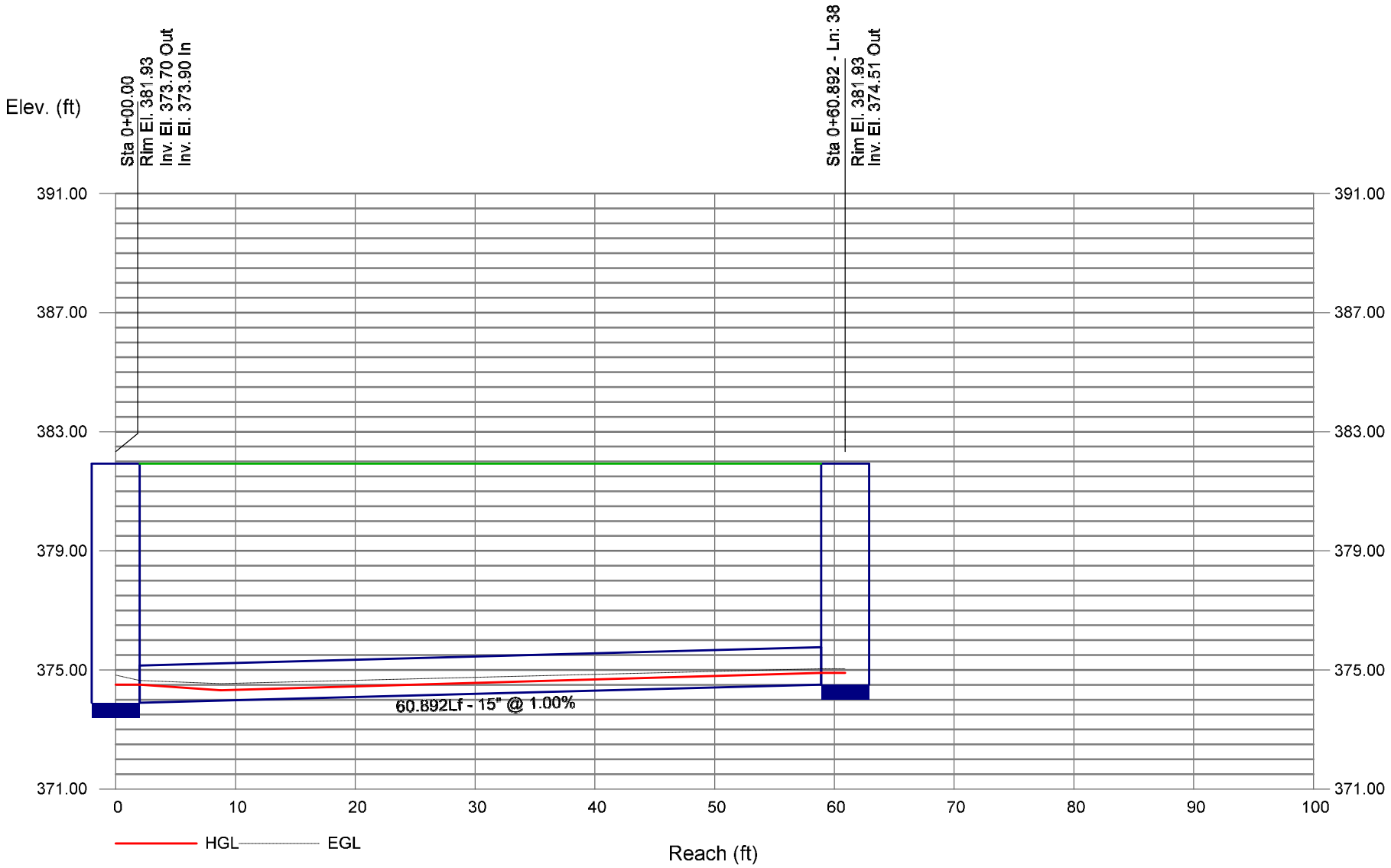
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 34-37 Proj. file: SCM 4 Storm Network.stm



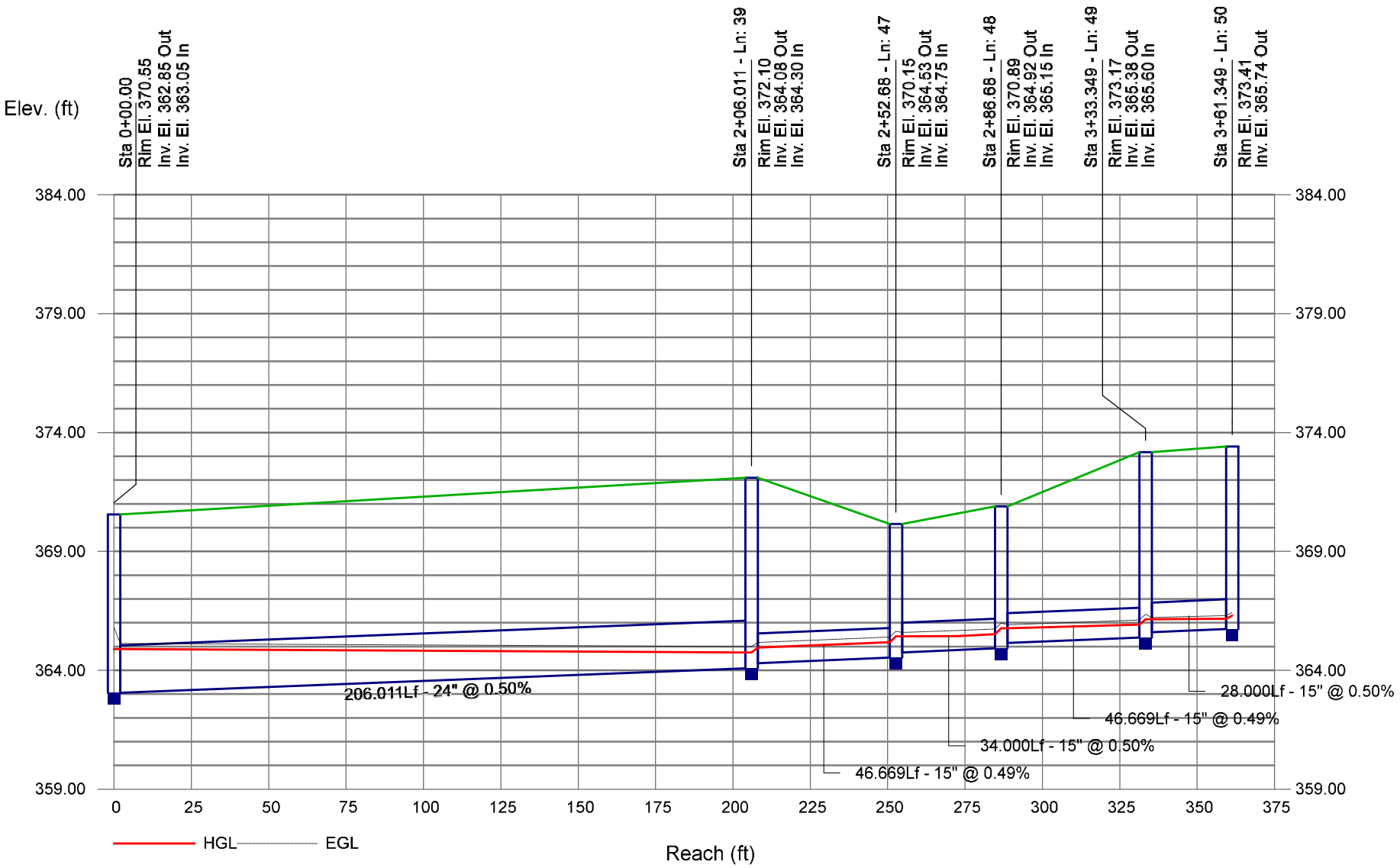
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 38-38 Proj. file: SCM 4 Storm Network.stm



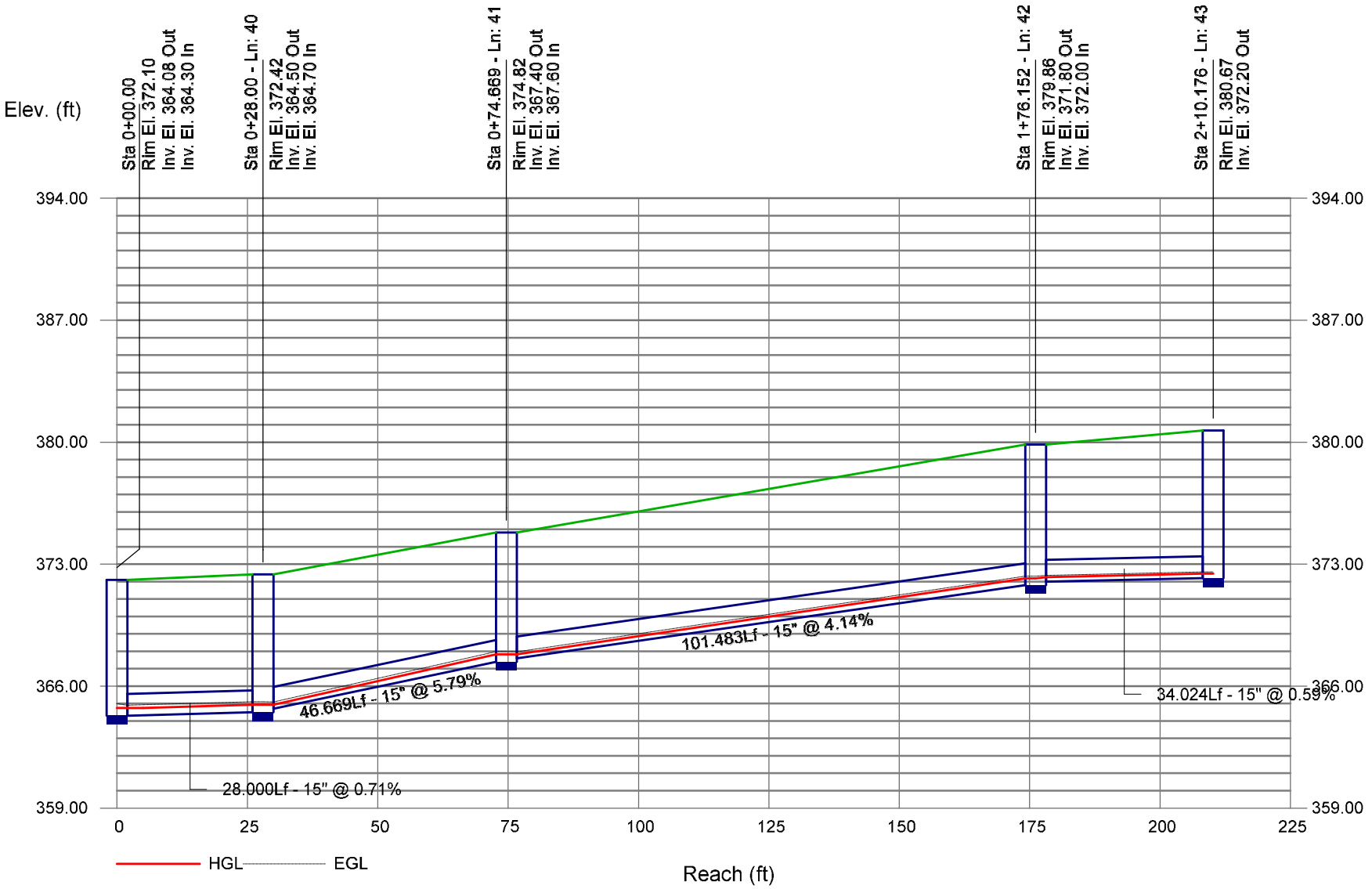
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 39-50 Proj. file: SCM 4 Storm Network.stm



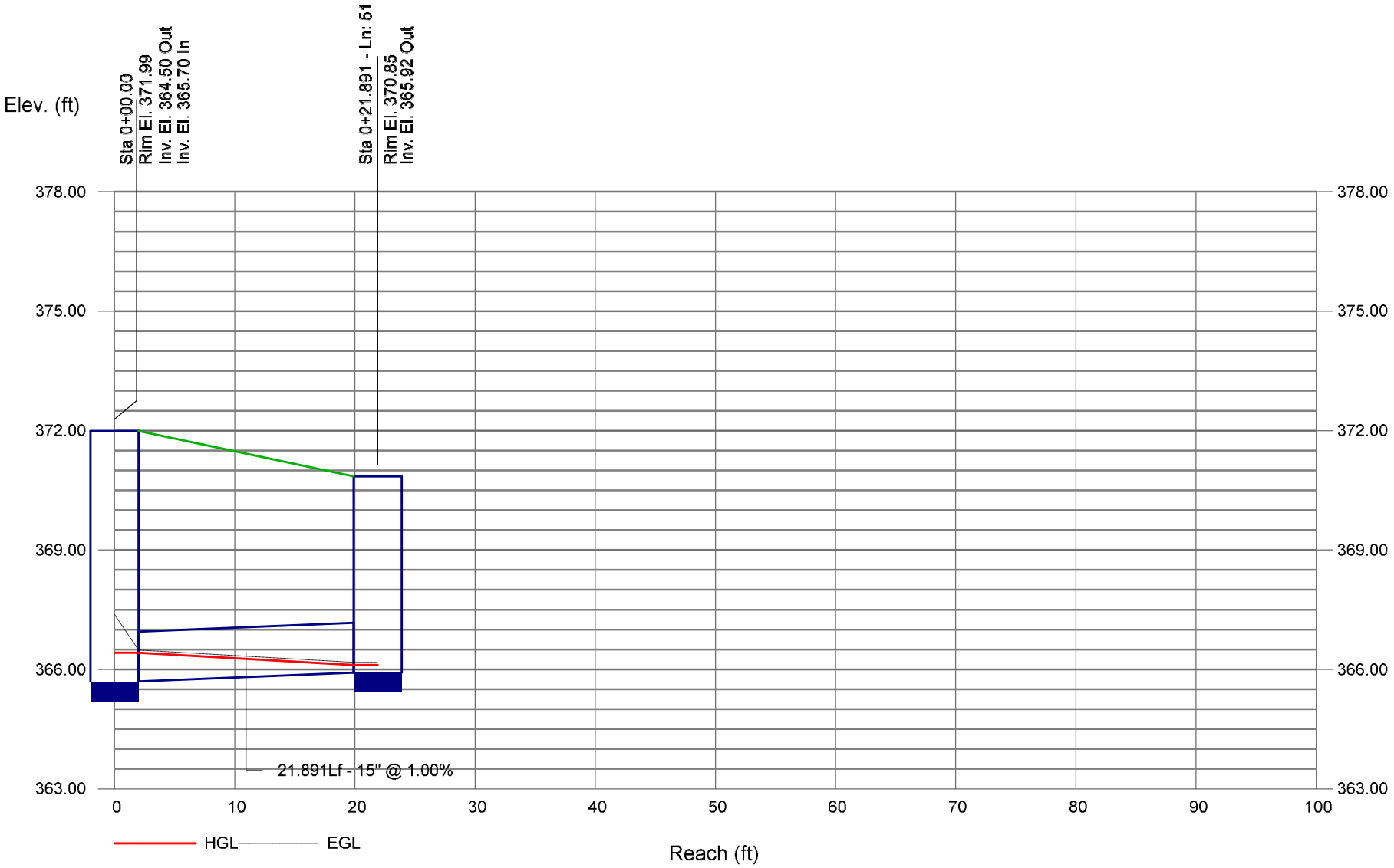
# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 40-43 Proj. file: SCM 4 Storm Network.stm

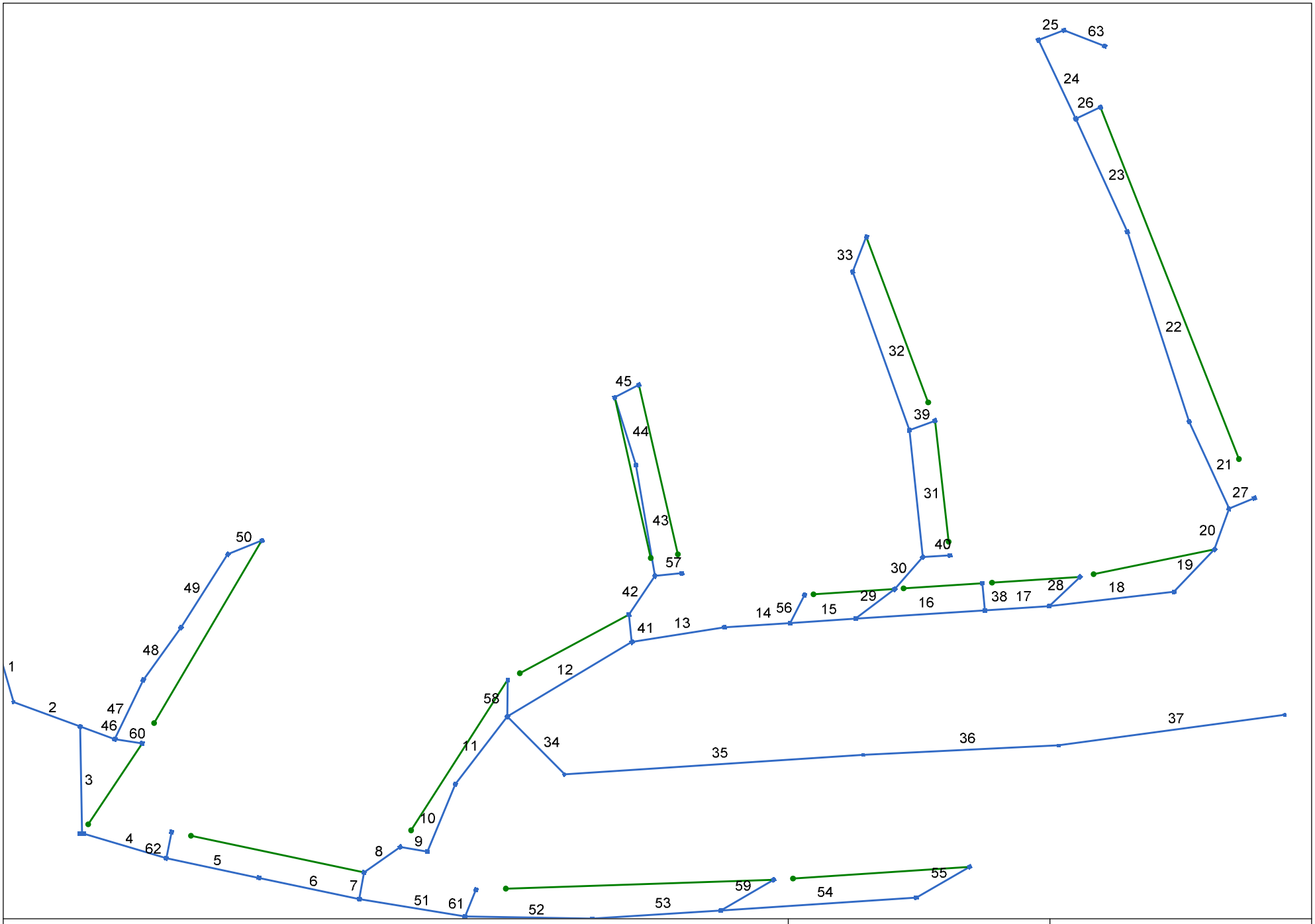


# Storm Sewer Profile

SCM 4 10-YEAR PROFILE 51-51 Proj. file: SCM 4 Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 5A 10-YEAR




| Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 5A 10-YEAR



| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 83.000 | 73.899 | DrGrt | 0.00 | 0.03 | 0.60 | 10.0 | 321.50 | 0.60 | 322.00 | 48 | Cir | 0.013 | 1.26 | 339.40 | Pipe - (292) |
| 2 | 1 | 72.832 | -53.727 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 322.25 | 0.49 | 322.61 | 42 | Cir | 0.013 | 0.94 | 339.83 | Pipe - (291) (1) |
| 3 | 2 | 110.092 | 68.821 | Comb | 0.00 | 0.28 | 0.60 | 10.0 | 322.90 | 0.64 | 323.60 | 42 | Cir | 0.013 | 1.44 | 331.20 | Pipe - (515) |
| 4 | 3 | 90.197 | -72.396 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 323.86 | 0.60 | 324.40 | 42 | Cir | 0.013 | 1.50 | 332.41 | Pipe - (287) |
| 5 | 4 | 96.914 | -4.581 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 324.40 | 0.62 | 325.00 | 42 | Cir | 0.013 | 0.50 | 333.37 | Pipe - (236) (1) |
| 6 | 5 | 105.502 | 0.000 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 325.50 | 1.10 | 326.66 | 42 | Cir | 0.013 | 2.23 | 334.42 | Pipe - (425) |
| 7 | 6 | 28.011 | -91.609 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 326.90 | 0.61 | 327.07 | 42 | Cir | 0.013 | 1.12 | 334.42 | Pipe - (236) |
| 8 | 7 | 45.483 | 44.496 | Comb | 0.00 | 0.80 | 0.60 | 10.0 | 327.30 | 0.59 | 327.57 | 42 | Cir | 0.013 | 1.12 | 335.29 | Pipe - (517) |
| 9 | 8 | 28.154 | 44.548 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 327.80 | 0.60 | 327.97 | 42 | Cir | 0.013 | 1.47 | 335.38 | Pipe - (518) |
| 10 | 9 | 75.321 | -76.898 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 328.20 | 3.00 | 330.46 | 36 | Cir | 0.013 | 0.50 | 338.20 | Pipe - (265) |
| 11 | 10 | 87.576 | 14.810 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 330.65 | 4.00 | 334.15 | 36 | Cir | 0.013 | 2.19 | 341.67 | Pipe - (266) |
| 12 | 11 | 149.169 | 21.617 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 334.40 | 3.50 | 339.62 | 30 | Cir | 0.013 | 1.39 | 347.55 | Pipe - (232) |
| 13 | 12 | 96.000 | 21.905 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 339.80 | 3.99 | 343.63 | 24 | Cir | 0.013 | 0.50 | 351.50 | Pipe - (533) |
| 14 | 13 | 67.783 | 5.437 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 343.85 | 5.00 | 347.24 | 24 | Cir | 0.013 | 1.32 | 355.16 | Pipe - (274) |
| 15 | 14 | 67.241 | -0.093 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 347.50 | 5.95 | 351.50 | 24 | Cir | 0.013 | 0.91 | 359.75 | Pipe - (260) |
| 16 | 15 | 133.104 | 0.043 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 351.70 | 6.99 | 361.00 | 24 | Cir | 0.013 | 1.50 | 369.34 | Pipe - (532) |
| 17 | 16 | 66.111 | 0.014 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 361.20 | 8.02 | 366.50 | 24 | Cir | 0.013 | 1.03 | 374.10 | Pipe - (272) |
| 18 | 17 | 129.000 | -2.881 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 366.70 | 5.66 | 374.00 | 18 | Cir | 0.013 | 1.04 | 381.92 | Pipe - (227) |
| 19 | 18 | 60.236 | -39.930 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 374.20 | 2.49 | 375.70 | 18 | Cir | 0.013 | 0.69 | 383.94 | Pipe - (530) |
| 20 | 19 | 44.832 | -23.761 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 375.90 | 1.49 | 376.57 | 18 | Cir | 0.013 | 1.17 | 385.18 | Pipe - (226) |
| 21 | 20 | 98.443 | -44.465 | Comb | 0.00 | 0.66 | 0.60 | 10.0 | 376.80 | 1.00 | 377.78 | 15 | Cir | 0.013 | 0.50 | 386.14 | Pipe - (225) (1) |
| 22 | 21 | 205.640 | 6.883 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 378.00 | 1.02 | 380.10 | 15 | Cir | 0.013 | 0.50 | 388.20 | Pipe - (225) |
| 23 | 22 | 128.177 | -6.601 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 380.30 | 1.00 | 381.58 | 15 | Cir | 0.013 | 1.50 | 389.50 | Pipe - (224) |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Date: 4/11/2025

# Storm Sewer Inventory Report



| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 89.745 | -0.806 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 381.80 | 1.00 | 382.70 | 15 | Cir | 0.013 | 1.50 | 390.40 | Pipe - (223) (1) |
| 25 | 24 | 28.070 | 94.057 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 382.90 | 0.50 | 383.04 | 15 | Cir | 0.013 | 1.08 | 390.38 | Pipe - (528) |
| 26 | 23 | 28.048 | 89.194 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 381.80 | 1.00 | 382.08 | 15 | Cir | 0.013 | 1.00 | 389.54 | Pipe - (245) |
| 27 | 20 | 28.090 | 47.998 | Comb | 0.00 | 1.40 | 0.60 | 10.0 | 376.80 | 1.00 | 377.08 | 15 | Cir | 0.013 | 1.00 | 385.16 | Pipe - (529) |
| 28 | 17 | 43.790 | -39.748 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 366.70 | 2.01 | 367.58 | 15 | Cir | 0.013 | 1.00 | 376.51 | Pipe - (255) |
| 29 | 15 | 50.671 | -33.471 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 351.70 | 5.53 | 354.50 | 18 | Cir | 0.013 | 0.50 | 362.79 | Pipe - (531) |
| 30 | 29 | 43.841 | -11.501 | Comb | 0.00 | 0.39 | 0.60 | 10.0 | 354.70 | 8.44 | 358.40 | 18 | Cir | 0.013 | 1.69 | 366.34 | Pipe - (259) |
| 31 | 30 | 131.638 | -47.350 | Comb | 0.00 | 0.46 | 0.60 | 10.0 | 358.60 | 1.82 | 361.00 | 15 | Cir | 0.013 | 1.46 | 368.50 | Pipe - (258) |
| 32 | 31 | 173.316 | -13.483 | Comb | 0.00 | 0.75 | 0.60 | 10.0 | 361.20 | 2.77 | 366.00 | 15 | Cir | 0.013 | 1.05 | 373.98 | Pipe - (257) |
| 33 | 32 | 38.552 | 40.848 | Comb | 0.00 | 0.67 | 0.60 | 10.0 | 366.20 | 3.53 | 367.56 | 15 | Cir | 0.013 | 1.00 | 375.06 | Pipe - (256) |
| 34 | 11 | 83.727 | 97.965 | DrGrt | 0.00 | 0.80 | 0.60 | 10.0 | 334.40 | 0.50 | 334.82 | 30 | Cir | 0.013 | 1.19 | 336.44 | Pipe - (285) |
| 35 | 34 | 306.989 | -49.069 | DrGrt | 0.00 | 1.85 | 0.60 | 10.0 | 335.00 | 4.14 | 347.71 | 24 | Cir | 0.013 | 0.50 | 352.12 | Pipe - (284) |
| 36 | 35 | 200.863 | 0.954 | DrGrt | 0.00 | 1.37 | 0.60 | 10.0 | 348.00 | 7.97 | 364.00 | 18 | Cir | 0.013 | 0.50 | 367.82 | Pipe - (283) |
| 37 | 36 | 234.000 | -4.972 | DrGrt | 0.00 | 1.22 | 0.60 | 10.0 | 364.20 | 1.00 | 366.54 | 15 | Cir | 0.013 | 1.00 | 375.19 | Pipe - (282) |
| 38 | 16 | 28.013 | -91.754 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 361.20 | 1.00 | 361.48 | 15 | Cir | 0.013 | 1.00 | 369.28 | Pipe - (273) |
| 39 | 31 | 28.090 | 76.190 | Comb | 0.00 | 0.70 | 0.60 | 10.0 | 361.20 | 1.00 | 361.48 | 15 | Cir | 0.013 | 1.00 | 368.61 | Pipe - (261) |
| 40 | 30 | 28.000 | 45.000 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 358.60 | 1.00 | 358.88 | 15 | Cir | 0.013 | 1.00 | 366.34 | Pipe - (262) |
| 41 | 12 | 28.499 | -65.141 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 339.80 | 1.05 | 340.10 | 24 | Cir | 0.013 | 1.04 | 347.86 | Pipe - (242) |
| 42 | 41 | 47.998 | 39.967 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 340.30 | 4.58 | 342.50 | 18 | Cir | 0.013 | 1.21 | 349.90 | Pipe - (241) |
| 43 | 42 | 115.718 | -43.449 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 342.70 | 5.10 | 348.60 | 15 | Cir | 0.013 | 0.16 | 356.76 | Pipe - (240) (1) |
| 44 | 43 | 73.254 | -7.668 | Comb | 0.00 | 0.46 | 0.60 | 10.0 | 348.80 | 4.37 | 352.00 | 15 | Cir | 0.013 | 1.48 | 360.25 | Pipe - (240) |
| 45 | 44 | 27.894 | 79.953 | Comb | 0.00 | 0.43 | 0.60 | 10.0 | 352.20 | 2.40 | 352.87 | 15 | Cir | 0.013 | 1.00 | 360.47 | Pipe - (243) |
| 46 | 2 | 37.830 | 0.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 325.00 | 7.96 | 328.01 | 18 | Cir | 0.013 | 1.49 | 339.56 | Pipe - (291) |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Date: 4/11/2025

# Storm Sewer Inventory Report



| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 46 | 67.669 | -84.535 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 328.20 | 10.00 | 334.97 | 15 | Cir | 0.013 | 0.50 | 345.00 | Pipe - (297) |
| 48 | 47 | 66.501 | 9.954 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 335.20 | 10.00 | 341.85 | 15 | Cir | 0.013 | 0.50 | 350.54 | Pipe - (299) |
| 49 | 48 | 89.618 | -3.183 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 342.10 | 10.00 | 351.06 | 15 | Cir | 0.013 | 0.95 | 358.40 | Pipe - (296) |
| 50 | 49 | 37.668 | 35.517 | Comb | 0.00 | 1.14 | 0.60 | 10.0 | 351.30 | 3.42 | 352.59 | 18 | Cir | 0.013 | 1.00 | 360.60 | Pipe - (519) |
| 51 | 6 | 110.218 | -2.645 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 326.90 | 0.50 | 327.45 | 24 | Cir | 0.013 | 1.47 | 335.41 | Pipe - (235) |
| 52 | 51 | 130.561 | -8.424 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 327.65 | 0.57 | 328.40 | 24 | Cir | 0.013 | 0.50 | 336.55 | Pipe - (270) |
| 53 | 52 | 132.413 | -4.628 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 328.60 | 3.32 | 333.00 | 18 | Cir | 0.013 | 0.76 | 341.27 | Pipe - (269) |
| 54 | 53 | 201.000 | -0.061 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 333.20 | 7.50 | 348.28 | 15 | Cir | 0.013 | 0.75 | 356.93 | Pipe - (268) |
| 55 | 54 | 63.000 | -26.471 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 348.50 | 7.98 | 353.53 | 15 | Cir | 0.013 | 1.00 | 361.96 | Pipe - (277) |
| 56 | 14 | 32.603 | -59.248 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 347.80 | 1.01 | 348.13 | 15 | Cir | 0.013 | 1.00 | 356.22 | Pipe - (263) |
| 57 | 42 | 27.998 | 50.565 | Comb | 0.00 | 0.62 | 0.60 | 10.0 | 342.70 | 1.00 | 342.98 | 15 | Cir | 0.013 | 1.00 | 350.07 | Pipe - (244) |
| 58 | 11 | 38.000 | -36.753 | Comb | 0.00 | 0.42 | 0.60 | 10.0 | 335.40 | 1.00 | 335.78 | 15 | Cir | 0.013 | 1.00 | 342.73 | Pipe - (286) |
| 59 | 53 | 62.439 | -26.705 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 333.20 | 4.96 | 336.30 | 15 | Cir | 0.013 | 1.00 | 344.70 | Pipe - (278) |
| 60 | 46 | 28.384 | -11.463 | Comb | 0.00 | 0.73 | 0.60 | 10.0 | 328.20 | 5.67 | 329.81 | 15 | Cir | 0.013 | 1.00 | 339.81 | Pipe - (288) |
| 61 | 51 | 30.000 | -77.524 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 327.85 | 1.00 | 328.15 | 15 | Cir | 0.013 | 1.00 | 335.57 | Pipe - (271) |
| 62 | 4 | 28.000 | -95.287 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 325.60 | 0.93 | 325.86 | 15 | Cir | 0.013 | 1.00 | 332.65 | Pipe - (281) |
| 63 | 25 | 45.000 | 42.659 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 383.24 | 0.58 | 383.50 | 15 | Cir | 0.013 | 1.00 | 0.00 | Pipe - (593) |

# Structure Report

SCM 5A 10-YEAR



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 501 | DropGrate | 339.40 | Rect | 3.00 | 3.00 | 48 | Cir | 322.00 | 42 | Cir | 322.25 |
| 2 | JB 502 | Manhole | 339.83 | Rect | 4.00 | 4.00 | 42 | Cir | 322.61 | 42<br>18 | Cir<br>Cir | 322.90<br>325.00 |
| 3 | CB 503 | Combination | 331.20 | Rect | 4.00 | 8.00 | 42 | Cir | 323.60 | 42 | Cir | 323.86 |
| 4 | CB 504 | Combination | 332.41 | Rect | 4.00 | 4.00 | 42 | Cir | 324.40 | 42<br>15 | Cir<br>Cir | 324.40<br>325.60 |
| 5 | CB 505 | Combination | 333.37 | Rect | 4.00 | 4.00 | 42 | Cir | 325.00 | 42 | Cir | 325.50 |
| 6 | CB 506 | Combination | 334.42 | Rect | 4.00 | 4.00 | 42 | Cir | 326.66 | 42<br>24 | Cir<br>Cir | 326.90<br>326.90 |
| 7 | CB 515 | Combination | 334.42 | Rect | 4.00 | 4.00 | 42 | Cir | 327.07 | 42 | Cir | 327.30 |
| 8 | CB 516 | Combination | 335.29 | Rect | 4.00 | 4.00 | 42 | Cir | 327.57 | 42 | Cir | 327.80 |
| 9 | CB 517 | Combination | 335.38 | Rect | 4.00 | 4.00 | 42 | Cir | 327.97 | 36 | Cir | 328.20 |
| 10 | CB 518 | Combination | 338.20 | Rect | 4.00 | 4.00 | 36 | Cir | 330.46 | 36 | Cir | 330.65 |
| 11 | CB 519 | Combination | 341.67 | Rect | 4.00 | 4.00 | 36 | Cir | 334.15 | 30<br>30<br>15 | Cir<br>Cir<br>Cir | 334.40<br>334.40<br>335.40 |
| 12 | CB 520 | Combination | 347.55 | Rect | 4.00 | 4.00 | 30 | Cir | 339.62 | 24<br>24 | Cir<br>Cir | 339.80<br>339.80 |
| 13 | CB 521 | Combination | 351.50 | Rect | 4.00 | 4.00 | 24 | Cir | 343.63 | 24 | Cir | 343.85 |
| 14 | CB 522 | Combination | 355.16 | Rect | 4.00 | 4.00 | 24 | Cir | 347.24 | 24<br>15 | Cir<br>Cir | 347.50<br>347.80 |
| 15 | CB 523 | Combination | 359.75 | Rect | 4.00 | 4.00 | 24 | Cir | 351.50 | 24<br>18 | Cir<br>Cir | 351.70<br>351.70 |
| 16 | CB 524 | Combination | 369.34 | Rect | 4.00 | 4.00 | 24 | Cir | 361.00 | 24<br>15 | Cir<br>Cir | 361.20<br>361.20 |
| 17 | CB 525 | Combination | 374.10 | Rect | 4.00 | 4.00 | 24 | Cir | 366.50 | 18<br>15 | Cir<br>Cir | 366.70<br>366.70 |
| 18 | CB 526 | Combination | 381.92 | Rect | 4.00 | 4.00 | 18 | Cir | 374.00 | 18 | Cir | 374.20 |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 19 | CB 527 | Combination | 383.94 | Rect | 4.00 | 4.00 | 18 | Cir | 375.70 | 18 | Cir | 375.90 |
| 20 | CB 528 | Combination | 385.18 | Rect | 4.00 | 4.00 | 18 | Cir | 376.57 | 15<br>15 | Cir<br>Cir | 376.80<br>376.80 |
| 21 | CB 529 | Combination | 386.14 | Rect | 4.00 | 4.00 | 15 | Cir | 377.78 | 15 | Cir | 378.00 |
| 22 | CB 530 | Combination | 388.20 | Rect | 4.00 | 4.00 | 15 | Cir | 380.10 | 15 | Cir | 380.30 |
| 23 | CB 531 | Combination | 389.50 | Rect | 4.00 | 4.00 | 15 | Cir | 381.58 | 15<br>15 | Cir<br>Cir | 381.80<br>381.80 |
| 24 | CB 532 | Combination | 390.40 | Rect | 4.00 | 4.00 | 15 | Cir | 382.70 | 15 | Cir | 382.90 |
| 25 | CB 532A | Combination | 390.38 | Rect | 4.00 | 4.00 | 15 | Cir | 383.04 | 15 | Cir | 383.24 |
| 26 | CB 531A | Combination | 389.54 | Rect | 4.00 | 4.00 | 15 | Cir | 382.08 | | | |
| 27 | CB 528A | Combination | 385.16 | Rect | 4.00 | 4.00 | 15 | Cir | 377.08 | | | |
| 28 | CB 525A | Combination | 376.51 | Rect | 4.00 | 4.00 | 15 | Cir | 367.58 | | | |
| 29 | CB 534 | Combination | 362.79 | Rect | 4.00 | 4.00 | 18 | Cir | 354.50 | 18 | Cir | 354.70 |
| 30 | CB 535 | Combination | 366.34 | Rect | 4.00 | 4.00 | 18 | Cir | 358.40 | 15<br>15 | Cir<br>Cir | 358.60<br>358.60 |
| 31 | CB 536 | Combination | 368.50 | Rect | 4.00 | 4.00 | 15 | Cir | 361.00 | 15<br>15 | Cir<br>Cir | 361.20<br>361.20 |
| 32 | CB 537 | Combination | 373.98 | Rect | 4.00 | 4.00 | 15 | Cir | 366.00 | 15 | Cir | 366.20 |
| 33 | CB 537A | Combination | 375.06 | Rect | 4.00 | 4.00 | 15 | Cir | 367.56 | | | |
| 34 | YI 519B | DropGrate | 336.44 | Rect | 3.00 | 3.00 | 30 | Cir | 334.82 | 24 | Cir | 335.00 |
| 35 | YI 519C | DropGrate | 352.12 | Rect | 3.00 | 3.00 | 24 | Cir | 347.71 | 18 | Cir | 348.00 |
| 36 | YI 519D | DropGrate | 367.82 | Rect | 3.00 | 3.00 | 18 | Cir | 364.00 | 15 | Cir | 364.20 |
| 37 | YI 519E | DropGrate | 375.19 | Rect | 3.00 | 3.00 | 15 | Cir | 366.54 | | | |
| 38 | CB 524A | Combination | 369.28 | Rect | 4.00 | 4.00 | 15 | Cir | 361.48 | | | |
| 39 | CB 536A | Combination | 368.61 | Rect | 4.00 | 4.00 | 15 | Cir | 361.48 | | | |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 40 | CB 535A | Combination | 366.34 | Rect | 4.00 | 4.00 | 15 | Cir | 358.88 | | | |
| 41 | CB 538 | Combination | 347.86 | Rect | 4.00 | 4.00 | 24 | Cir | 340.10 | 18 | Cir | 340.30 |
| 42 | CB 539 | Combination | 349.90 | Rect | 4.00 | 4.00 | 18 | Cir | 342.50 | 15<br>15 | Cir<br>Cir | 342.70<br>342.70 |
| 43 | JB 540 | Manhole | 356.76 | Rect | 4.00 | 4.00 | 15 | Cir | 348.60 | 15 | Cir | 348.80 |
| 44 | CB 541 | Combination | 360.25 | Rect | 4.00 | 4.00 | 15 | Cir | 352.00 | 15 | Cir | 352.20 |
| 45 | CB 541A | Combination | 360.47 | Rect | 4.00 | 4.00 | 15 | Cir | 352.87 | | | |
| 46 | CB 511 | Combination | 339.56 | Rect | 4.00 | 4.00 | 18 | Cir | 328.01 | 15<br>15 | Cir<br>Cir | 328.20<br>328.20 |
| 47 | CB 512 | Combination | 345.00 | Rect | 4.00 | 4.00 | 15 | Cir | 334.97 | 15 | Cir | 335.20 |
| 48 | CB 513 | Combination | 350.54 | Rect | 4.00 | 4.00 | 15 | Cir | 341.85 | 15 | Cir | 342.10 |
| 49 | CB 514 | Combination | 358.40 | Rect | 4.00 | 4.00 | 15 | Cir | 351.06 | 18 | Cir | 351.30 |
| 50 | CB 514A | Combination | 360.60 | Rect | 4.00 | 4.00 | 18 | Cir | 352.59 | | | |
| 51 | CB 507 | Combination | 335.41 | Rect | 4.00 | 4.00 | 24 | Cir | 327.45 | 24<br>15 | Cir<br>Cir | 327.65<br>327.85 |
| 52 | CB 508 | Combination | 336.55 | Rect | 4.00 | 4.00 | 24 | Cir | 328.40 | 18 | Cir | 328.60 |
| 53 | CB 509 | Combination | 341.27 | Rect | 4.00 | 4.00 | 18 | Cir | 333.00 | 15<br>15 | Cir<br>Cir | 333.20<br>333.20 |
| 54 | CB 510 | Combination | 356.93 | Rect | 4.00 | 4.00 | 15 | Cir | 348.28 | 15 | Cir | 348.50 |
| 55 | CB 510A | Combination | 361.96 | Rect | 4.00 | 4.00 | 15 | Cir | 353.53 | | | |
| 56 | CB 522A | Combination | 356.22 | Rect | 4.00 | 4.00 | 15 | Cir | 348.13 | | | |
| 57 | CB 539A | Combination | 350.07 | Rect | 4.00 | 4.00 | 15 | Cir | 342.98 | | | |
| 58 | CB 519A | Combination | 342.73 | Rect | 4.00 | 4.00 | 15 | Cir | 335.78 | | | |
| 59 | CB 509A | Combination | 344.70 | Rect | 4.00 | 4.00 | 15 | Cir | 336.30 | | | |
| 60 | CB 511A | Combination | 339.81 | Rect | 4.00 | 4.00 | 15 | Cir | 329.81 | | | |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 61 | CB 507A | Combination | 335.57 | Rect | 4.00 | 4.00 | 15 | Cir | 328.15 | | | |
| 62 | CB 504A | Combination | 332.65 | Rect | 4.00 | 4.00 | 15 | Cir | 325.86 | | | |
| 63 | CB 533 | Combination | 0.00 | Rect | 4.00 | 4.00 | 15 | Cir | 383.50 | | | |

# Storm Sewer Summary Report

SCM 5A 10-YEAR



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (292) | 65.25 | 48 | Cir | 83.000 | 321.50 | 322.00 | 0.602 | 324.72 | 324.44 | n/a | 324.44 | End | DropGrate |
| 2 | Pipe - (291) (1) | 65.44 | 42 | Cir | 72.832 | 322.25 | 322.61 | 0.494 | 324.91 | 325.27 | 1.02 | 326.29 | 1 | Manhole |
| 3 | Pipe - (515) | 59.26 | 42 | Cir | 110.092 | 322.90 | 323.60 | 0.636 | 326.29 | 326.01 | 1.58 | 326.01 | 2 | Combination |
| 4 | Pipe - (287) | 58.73 | 42 | Cir | 90.197 | 323.86 | 324.40 | 0.599 | 326.13 | 326.80 | 1.63 | 326.80 | 3 | Combination |
| 5 | Pipe - (236) (1) | 57.41 | 42 | Cir | 96.914 | 324.40 | 325.00 | 0.619 | 326.80 | 327.37 | n/a | 327.37 | 4 | Combination |
| 6 | Pipe - (425) | 57.45 | 42 | Cir | 105.502 | 325.50 | 326.66 | 1.100 | 327.37 | 329.03 | n/a | 329.03 | 5 | Combination |
| 7 | Pipe - (236) | 53.20 | 42 | Cir | 28.011 | 326.90 | 327.07 | 0.607 | 329.03 | 329.35 | n/a | 329.35 | 6 | Combination |
| 8 | Pipe - (517) | 52.89 | 42 | Cir | 45.483 | 327.30 | 327.57 | 0.594 | 329.42 | 329.84 | 1.11 | 329.84 | 7 | Combination |
| 9 | Pipe - (518) | 50.54 | 42 | Cir | 28.154 | 327.80 | 327.97 | 0.604 | 329.85 | 330.19 | 1.41 | 330.19 | 8 | Combination |
| 10 | Pipe - (265) | 50.47 | 36 | Cir | 75.321 | 328.20 | 330.46 | 3.000 | 330.19 | 332.77 | 0.58 | 332.77 | 9 | Combination |
| 11 | Pipe - (266) | 50.47 | 36 | Cir | 87.576 | 330.65 | 334.15 | 3.997 | 332.77 | 336.46 | 2.54 | 336.46 | 10 | Combination |
| 12 | Pipe - (232) | 33.00 | 30 | Cir | 149.169 | 334.40 | 339.62 | 3.499 | 336.46 | 341.57 | n/a | 341.57 j | 11 | Combination |
| 13 | Pipe - (533) | 25.56 | 24 | Cir | 96.000 | 339.80 | 343.63 | 3.990 | 341.57 | 345.40 | 0.58 | 345.40 | 12 | Combination |
| 14 | Pipe - (274) | 25.53 | 24 | Cir | 67.783 | 343.85 | 347.24 | 5.001 | 345.40 | 349.01 | 1.54 | 349.01 | 13 | Combination |
| 15 | Pipe - (260) | 24.97 | 24 | Cir | 67.241 | 347.50 | 351.50 | 5.949 | 349.01 | 353.26 | 1.03 | 353.26 | 14 | Combination |
| 16 | Pipe - (532) | 13.77 | 24 | Cir | 133.104 | 351.70 | 361.00 | 6.987 | 353.26 | 362.34 | n/a | 362.34 j | 15 | Combination |
| 17 | Pipe - (272) | 13.30 | 24 | Cir | 66.111 | 361.20 | 366.50 | 8.017 | 362.34 | 367.81 | 0.59 | 367.81 | 16 | Combination |
| 18 | Pipe - (227) | 12.47 | 18 | Cir | 129.000 | 366.70 | 374.00 | 5.659 | 367.81 | 375.33 | n/a | 375.33 | 17 | Combination |
| 19 | Pipe - (530) | 12.29 | 18 | Cir | 60.236 | 374.20 | 375.70 | 2.490 | 375.33 | 377.03 | n/a | 377.03 | 18 | Combination |
| 20 | Pipe - (226) | 12.14 | 18 | Cir | 44.832 | 375.90 | 376.57 | 1.494 | 377.06 | 377.89 | 0.99 | 377.89 | 19 | Combination |
| 21 | Pipe - (225) (1) | 6.70 | 15 | Cir | 98.443 | 376.80 | 377.78 | 0.996 | 377.89 | 378.85 | 0.28 | 379.13 | 20 | Combination |
| 22 | Pipe - (225) | 4.65 | 15 | Cir | 205.640 | 378.00 | 380.10 | 1.021 | 379.13 | 380.97 | n/a | 380.97 j | 21 | Combination |
| 23 | Pipe - (224) | 3.52 | 15 | Cir | 128.177 | 380.30 | 381.58 | 0.999 | 380.97 | 382.34 | 0.48 | 382.34 | 22 | Combination |
| 24 | Pipe - (223) (1) | 1.94 | 15 | Cir | 89.745 | 381.80 | 382.70 | 1.003 | 382.34 | 383.25 | n/a | 383.25 | 23 | Combination |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (528) | 1.15 | 15 | Cir | 28.070 | 382.90 | 383.04 | 0.499 | 383.33 | 383.47 | n/a | 383.63 j | 24 | Combination |
| 26 | Pipe - (245) | 0.53 | 15 | Cir | 28.048 | 381.80 | 382.08 | 0.998 | 382.34 | 382.36 | n/a | 382.36 j | 23 | Combination |
| 27 | Pipe - (529) | 4.93 | 15 | Cir | 28.090 | 376.80 | 377.08 | 0.997 | 377.89 | 377.98 | n/a | 377.98 j | 20 | Combination |
| 28 | Pipe - (255) | 0.78 | 15 | Cir | 43.790 | 366.70 | 367.58 | 2.010 | 367.81 | 367.92 | n/a | 367.92 j | 17 | Combination |
| 29 | Pipe - (531) | 11.96 | 18 | Cir | 50.671 | 351.70 | 354.50 | 5.526 | 353.26 | 355.81 | n/a | 355.81 j | 15 | Combination |
| 30 | Pipe - (259) | 11.69 | 18 | Cir | 43.841 | 354.70 | 358.40 | 8.440 | 355.81 | 359.70 | 1.36 | 359.70 | 29 | Combination |
| 31 | Pipe - (258) | 8.86 | 15 | Cir | 131.638 | 358.60 | 361.00 | 1.823 | 359.70 | 362.15 | n/a | 362.15 | 30 | Combination |
| 32 | Pipe - (257) | 4.97 | 15 | Cir | 173.316 | 361.20 | 366.00 | 2.770 | 362.15 | 366.90 | n/a | 366.90 j | 31 | Combination |
| 33 | Pipe - (256) | 2.36 | 15 | Cir | 38.552 | 366.20 | 367.56 | 3.528 | 366.90 | 368.17 | n/a | 368.17 j | 32 | Combination |
| 34 | Pipe - (285) | 17.17 | 30 | Cir | 83.727 | 334.40 | 334.82 | 0.502 | 336.46 | 336.22 | 0.68 | 336.22 | 11 | DropGrate |
| 35 | Pipe - (284) | 14.91 | 24 | Cir | 306.989 | 335.00 | 347.71 | 4.140 | 336.22 | 349.10 | n/a | 349.10 | 34 | DropGrate |
| 36 | Pipe - (283) | 8.86 | 18 | Cir | 200.863 | 348.00 | 364.00 | 7.966 | 349.10 | 365.15 | 0.29 | 365.15 | 35 | DropGrate |
| 37 | Pipe - (282) | 4.30 | 15 | Cir | 234.000 | 364.20 | 366.54 | 1.000 | 365.15 | 367.38 | n/a | 367.38 j | 36 | DropGrate |
| 38 | Pipe - (273) | 0.46 | 15 | Cir | 28.013 | 361.20 | 361.48 | 1.000 | 362.34 | 361.74 | n/a | 361.74 | 16 | Combination |
| 39 | Pipe - (261) | 2.47 | 15 | Cir | 28.090 | 361.20 | 361.48 | 0.997 | 362.15 | 362.11 | n/a | 362.11 j | 31 | Combination |
| 40 | Pipe - (262) | 1.66 | 15 | Cir | 28.000 | 358.60 | 358.88 | 1.000 | 359.70 | 359.39 | 0.19 | 359.39 | 30 | Combination |
| 41 | Pipe - (242) | 8.10 | 24 | Cir | 28.499 | 339.80 | 340.10 | 1.053 | 341.57 | 341.11 | n/a | 341.11 | 12 | Combination |
| 42 | Pipe - (241) | 7.25 | 18 | Cir | 47.998 | 340.30 | 342.50 | 4.584 | 341.11 | 343.54 | n/a | 343.54 | 41 | Combination |
| 43 | Pipe - (240) (1) | 3.10 | 15 | Cir | 115.718 | 342.70 | 348.60 | 5.099 | 343.54 | 349.31 | n/a | 349.31 j | 42 | Manhole |
| 44 | Pipe - (240) | 3.12 | 15 | Cir | 73.254 | 348.80 | 352.00 | 4.368 | 349.31 | 352.71 | n/a | 352.71 | 43 | Combination |
| 45 | Pipe - (243) | 1.52 | 15 | Cir | 27.894 | 352.20 | 352.87 | 2.402 | 352.71 | 353.36 | n/a | 353.36 j | 44 | Combination |
| 46 | Pipe - (291) | 7.65 | 18 | Cir | 37.830 | 325.00 | 328.01 | 7.957 | 326.29 | 329.08 | n/a | 329.08 j | 2 | Combination |
| 47 | Pipe - (297) | 5.01 | 15 | Cir | 67.669 | 328.20 | 334.97 | 10.005 | 329.08 | 335.88 | n/a | 335.88 | 46 | Combination |
| 48 | Pipe - (299) | 4.90 | 15 | Cir | 66.501 | 335.20 | 341.85 | 10.000 | 335.88 | 342.75 | n/a | 342.75 | 47 | Combination |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | Pipe - (296) | 4.74 | 15 | Cir | 89.618 | 342.10 | 351.06 | 9.998 | 342.75 | 351.94 | 0.39 | 351.94 | 48 | Combination |
| 50 | Pipe - (519) | 4.02 | 18 | Cir | 37.668 | 351.30 | 352.59 | 3.425 | 351.94 | 353.36 | n/a | 353.36 | 49 | Combination |
| 51 | Pipe - (235) | 4.25 | 24 | Cir | 110.218 | 326.90 | 327.45 | 0.499 | 329.03 | 329.06 | 0.06 | 329.12 | 6 | Combination |
| 52 | Pipe - (270) | 3.34 | 24 | Cir | 130.561 | 327.65 | 328.40 | 0.574 | 329.12 | 329.04 | 0.12 | 329.04 | 51 | Combination |
| 53 | Pipe - (269) | 2.91 | 18 | Cir | 132.413 | 328.60 | 333.00 | 3.323 | 329.04 | 333.65 | n/a | 333.65 | 52 | Combination |
| 54 | Pipe - (268) | 1.88 | 15 | Cir | 201.000 | 333.20 | 348.28 | 7.502 | 333.65 | 348.82 | n/a | 348.82 | 53 | Combination |
| 55 | Pipe - (277) | 0.70 | 15 | Cir | 63.000 | 348.50 | 353.53 | 7.984 | 348.82 | 353.86 | n/a | 353.86 | 54 | Combination |
| 56 | Pipe - (263) | 0.60 | 15 | Cir | 32.603 | 347.80 | 348.13 | 1.012 | 349.01 | 348.43 | n/a | 348.43 | 14 | Combination |
| 57 | Pipe - (244) | 2.18 | 15 | Cir | 27.998 | 342.70 | 342.98 | 1.000 | 343.54 | 343.57 | n/a | 343.57 j | 42 | Combination |
| 58 | Pipe - (286) | 1.48 | 15 | Cir | 38.000 | 335.40 | 335.78 | 1.000 | 336.46 | 336.26 | n/a | 336.26 | 11 | Combination |
| 59 | Pipe - (278) | 0.39 | 15 | Cir | 62.439 | 333.20 | 336.30 | 4.965 | 333.65 | 336.54 | n/a | 336.54 j | 53 | Combination |
| 60 | Pipe - (288) | 2.57 | 15 | Cir | 28.384 | 328.20 | 329.81 | 5.672 | 329.08 | 330.45 | n/a | 330.45 j | 46 | Combination |
| 61 | Pipe - (271) | 0.60 | 15 | Cir | 30.000 | 327.85 | 328.15 | 1.000 | 329.12 | 329.12 | 0.01 | 329.13 | 51 | Combination |
| 62 | Pipe - (281) | 1.73 | 15 | Cir | 28.000 | 325.60 | 325.86 | 0.928 | 326.80 | 326.38 | 0.20 | 326.38 | 4 | Combination |
| 63 | Pipe - (593) | 0.63 | 15 | Cir | 45.000 | 383.24 | 383.50 | 0.578 | 383.63 | 383.81 | 0.11 | 383.81 | 25 | Combination |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report

SCM 5A 10-YEAR



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 501 | 0.11 | 0.00 | 0.11 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.03 | 4.68 | 0.03 | 4.68 | 0.0 | Off |
| 2 | JB 502 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 503 | 0.99 | 0.85 | 1.84 | 0.00 | Comb | 6.0 | 6.00 | 15.00 | 6.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.30 | 0.21 | 6.30 | 0.0 | Off |
| 4 | CB 504 | 0.21 | 0.00 | 0.21 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.88 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 505 | 0.32 | 0.01 | 0.32 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.60 | 0.01 | 0.24 | 0.0 | 4 |
| 6 | CB 506 | 0.42 | 0.00 | 0.42 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.25 | 0.03 | 0.54 | 0.0 | 5 |
| 7 | CB 515 | 0.53 | 0.82 | 1.08 | 0.27 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.49 | 0.12 | 2.18 | 0.0 | 62 |
| 8 | CB 516 | 2.82 | 0.17 | 2.17 | 0.82 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.035 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.06 | 0.15 | 3.33 | 0.0 | 7 |
| 9 | CB 517 | 0.32 | 0.00 | 0.32 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.63 | 0.13 | 2.63 | 0.0 | Off |
| 10 | CB 518 | 0.28 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.61 | 0.00 | 0.00 | 0.0 | 9 |
| 11 | CB 519 | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.88 | 0.00 | 0.00 | 0.0 | 10 |
| 12 | CB 520 | 0.21 | 0.00 | 0.21 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.45 | 0.00 | 0.00 | 0.0 | 11 |
| 13 | CB 521 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.19 | 0.00 | 0.00 | 0.0 | 12 |
| 14 | CB 522 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.12 | 0.00 | 0.00 | 0.0 | 13 |
| 15 | CB 523 | 0.28 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.45 | 0.00 | 0.00 | 0.0 | 14 |
| 16 | CB 524 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.12 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 525 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.38 | 0.00 | 0.00 | 0.0 | 16 |
| 18 | CB 526 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.50 | 0.00 | 0.00 | 0.0 | 17 |
| 19 | CB 527 | 0.21 | 0.51 | 0.70 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.45 | 0.04 | 0.68 | 0.0 | 28 |
| 20 | CB 528 | 1.02 | 0.88 | 1.39 | 0.51 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.65 | 0.15 | 3.74 | 0.0 | 19 |
| 21 | CB 529 | 2.33 | 0.32 | 1.76 | 0.88 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.87 | 0.18 | 5.21 | 0.0 | 20 |
| 22 | CB 530 | 1.23 | 0.23 | 1.14 | 0.32 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.75 | 0.13 | 2.54 | 0.0 | 21 |
| 23 | CB 531 | 1.13 | 0.10 | 1.00 | 0.23 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.20 | 0.12 | 1.92 | 0.0 | 22 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 532 | 0.81 | 0.00 | 0.71 | 0.10 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.38 | 0.09 | 1.50 | 0.0 | 23 |
| 25 | CB 532A | 0.53 | 0.00 | 0.53 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.93 | 0.14 | 2.93 | 0.0 | Off |
| 26 | CB 531A | 0.53 | 0.00 | 0.51 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.81 | 0.05 | 0.81 | 0.0 | 27 |
| 27 | CB 528A | 4.93 | 0.02 | 4.96 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.41 | 16.47 | 0.41 | 16.47 | 0.0 | Off |
| 28 | CB 525A | 0.78 | 0.02 | 0.80 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.42 | 0.01 | 0.16 | 0.0 | 38 |
| 29 | CB 534 | 0.32 | 0.88 | 1.16 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.43 | 0.04 | 0.69 | 0.0 | 56 |
| 30 | CB 535 | 1.37 | 1.38 | 1.87 | 0.88 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.26 | 0.17 | 4.65 | 0.0 | 29 |
| 31 | CB 536 | 1.62 | 0.62 | 1.66 | 0.58 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.02 | 0.14 | 3.16 | 0.0 | 30 |
| 32 | CB 537 | 2.64 | 0.00 | 2.02 | 0.62 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.43 | 0.13 | 2.49 | 0.0 | 31 |
| 33 | CB 537A | 2.36 | 0.00 | 1.87 | 0.49 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.08 | 0.12 | 1.99 | 0.0 | 39 |
| 34 | YI 519B | 2.82 | 0.00 | 2.82 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.24 | 25.97 | 0.24 | 25.97 | 0.0 | Off |
| 35 | YI 519C | 6.52 | 0.00 | 6.52 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.42 | 43.92 | 0.42 | 43.92 | 0.0 | Off |
| 36 | YI 519D | 4.83 | 0.00 | 4.83 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.34 | 36.31 | 0.34 | 36.31 | 0.0 | Off |
| 37 | YI 519E | 4.30 | 0.00 | 4.30 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.32 | 33.76 | 0.32 | 33.76 | 0.0 | Off |
| 38 | CB 524A | 0.46 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.74 | 0.00 | 0.00 | 0.0 | 29 |
| 39 | CB 536A | 2.47 | 0.49 | 2.02 | 0.94 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.99 | 0.17 | 4.42 | 0.0 | 40 |
| 40 | CB 535A | 1.66 | 0.94 | 1.79 | 0.80 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.04 | 0.17 | 4.38 | 0.0 | 30 |
| 41 | CB 538 | 0.92 | 0.00 | 0.89 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.45 | 0.04 | 0.70 | 0.0 | 58 |
| 42 | CB 539 | 2.15 | 0.23 | 2.38 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.73 | 0.27 | 9.73 | 0.0 | Off |
| 43 | JB 540 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 44 | CB 541 | 1.62 | 0.00 | 1.39 | 0.23 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.034 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.20 | 0.09 | 1.55 | 0.0 | 42 |
| 45 | CB 541A | 1.52 | 0.00 | 1.32 | 0.20 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.034 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.01 | 0.09 | 1.45 | 0.0 | 57 |
| 46 | CB 511 | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.19 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 512 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.09 | 0.00 | 0.00 | 0.0 | 46 |
| 48 | CB 513 | 0.21 | 0.00 | 0.21 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.27 | 0.00 | 0.00 | 0.0 | 47 |
| 49 | CB 514 | 0.74 | 0.00 | 0.74 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.09 | 0.00 | 0.00 | 0.0 | 48 |
| 50 | CB 514A | 4.02 | 0.00 | 2.98 | 1.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.66 | 0.14 | 2.90 | 0.0 | 60 |
| 51 | CB 507 | 0.49 | 0.00 | 0.49 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.76 | 0.14 | 2.76 | 0.0 | Off |
| 52 | CB 508 | 0.49 | 0.00 | 0.49 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.51 | 0.01 | 0.20 | 0.0 | 51 |
| 53 | CB 509 | 0.74 | 0.02 | 0.76 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.32 | 0.01 | 0.13 | 0.0 | 52 |
| 54 | CB 510 | 1.20 | 0.00 | 1.18 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.090 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.10 | 0.03 | 0.54 | 0.0 | 53 |
| 55 | CB 510A | 0.70 | 0.00 | 0.70 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.090 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.95 | 0.00 | 0.00 | 0.0 | 59 |
| 56 | CB 522A | 0.60 | 0.04 | 0.64 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.97 | 0.00 | 0.00 | 0.0 | Off |
| 57 | CB 539A | 2.18 | 0.20 | 2.38 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.73 | 0.27 | 9.73 | 0.0 | Off |
| 58 | CB 519A | 1.48 | 0.03 | 1.34 | 0.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.77 | 0.08 | 1.34 | 0.0 | 8 |
| 59 | CB 509A | 0.39 | 0.00 | 0.39 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.63 | 0.00 | 0.00 | 0.0 | 61 |
| 60 | CB 511A | 2.57 | 1.04 | 2.76 | 0.85 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.32 | 0.13 | 2.42 | 0.0 | 3 |
| 61 | CB 507A | 0.60 | 0.00 | 0.60 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.28 | 0.15 | 3.28 | 0.0 | Off |
| 62 | CB 504A | 1.73 | 0.27 | 2.00 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.54 | 0.25 | 8.54 | 0.0 | Off |
| 63 | CB 533 | 0.63 | 0.00 | 0.63 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.44 | 0.15 | 3.44 | 0.0 | Off |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 5A 10-YEAR



| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 48 | 65.25 | 321.50 | 324.72 | 3.22 | 8.01 | 6.02 | 1.03 | 325.75 | 0.000 | 83.000 | 322.00 | 324.44 | 2.44** | 8.01 | 8.14 | 1.03 | 325.47 | 0.000 | 0.000 | n/a | 1.26 | n/a |
| 2 | 42 | 65.44 | 322.25 | 324.91 | 2.66* | 7.84 | 8.35 | 1.08 | 325.99 | 0.494 | 72.832 | 322.61 | 325.27 | 2.66 | 7.83 | 8.35 | 1.08 | 326.35 | 0.495 | 0.495 | 0.360 | 0.94 | 1.02 |
| 3 | 42 | 59.26 | 322.90 | 326.29 | 3.39 | 7.06 | 6.22 | 1.09 | 327.38 | 0.000 | 110.092 | 323.60 | 326.01 | 2.41** | 7.06 | 8.39 | 1.09 | 327.10 | 0.000 | 0.000 | n/a | 1.44 | 1.58 |
| 4 | 42 | 58.73 | 323.86 | 326.13 | 2.27* | 6.61 | 8.89 | 1.09 | 327.22 | 0.000 | 90.197 | 324.40 | 326.80 | 2.40** | 7.03 | 8.36 | 1.09 | 327.88 | 0.000 | 0.000 | n/a | 1.50 | 1.63 |
| 5 | 42 | 57.41 | 324.40 | 326.80 | 2.40 | 6.94 | 8.17 | 1.06 | 327.86 | 0.000 | 96.914 | 325.00 | 327.37 | 2.37** | 6.94 | 8.28 | 1.06 | 328.44 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 6 | 42 | 57.45 | 325.50 | 327.37 | 1.87 | 5.23 | 10.98 | 1.07 | 328.44 | 0.000 | 105.502 | 326.66 | 329.03 | 2.37** | 6.94 | 8.28 | 1.07 | 330.10 | 0.000 | 0.000 | n/a | 2.23 | n/a |
| 7 | 42 | 53.20 | 326.90 | 329.03 | 2.13 | 6.14 | 8.67 | 1.00 | 330.03 | 0.000 | 28.011 | 327.07 | 329.35 | 2.28** | 6.64 | 8.02 | 1.00 | 330.35 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 8 | 42 | 52.89 | 327.30 | 329.42 | 2.12* | 6.10 | 8.67 | 0.99 | 330.42 | 0.000 | 45.483 | 327.57 | 329.84 | 2.27** | 6.61 | 8.00 | 0.99 | 330.84 | 0.000 | 0.000 | n/a | 1.12 | 1.11 |
| 9 | 42 | 50.54 | 327.80 | 329.85 | 2.05* | 5.85 | 8.64 | 0.96 | 330.81 | 0.000 | 28.154 | 327.97 | 330.19 | 2.22** | 6.44 | 7.85 | 0.96 | 331.15 | 0.000 | 0.000 | n/a | 1.47 | 1.41 |
| 10 | 36 | 50.47 | 328.20 | 330.19 | 1.99 | 4.98 | 10.14 | 1.16 | 331.35 | 0.000 | 75.321 | 330.46 | 332.77 | 2.31** | 5.84 | 8.64 | 1.16 | 333.93 | 0.000 | 0.000 | n/a | 0.50 | 0.58 |
| 11 | 36 | 50.47 | 330.65 | 332.77 | 2.12 | 5.34 | 9.45 | 1.16 | 333.93 | 0.000 | 87.576 | 334.15 | 336.46 | 2.31** | 5.84 | 8.64 | 1.16 | 337.62 | 0.000 | 0.000 | n/a | 2.19 | 2.54 |
| 12 | 30 | 33.00 | 334.40 | 336.46 | 2.06 | 4.11 | 7.63 | 1.00 | 337.46 | 0.000 | 149.169 | 339.62 | 341.57 j | 1.95** | 4.11 | 8.02 | 1.00 | 342.57 | 0.000 | 0.000 | n/a | 1.39 | 1.39 |
| 13 | 24 | 25.56 | 339.80 | 341.57 | 1.77 | 2.95 | 8.68 | 1.17 | 342.74 | 0.000 | 96.000 | 343.63 | 345.40 | 1.77** | 2.95 | 8.67 | 1.17 | 346.57 | 0.000 | 0.000 | n/a | 0.50 | 0.58 |
| 14 | 24 | 25.53 | 343.85 | 345.40 | 1.55 | 2.62 | 9.74 | 1.17 | 346.57 | 0.000 | 67.783 | 347.24 | 349.01 | 1.77** | 2.95 | 8.67 | 1.17 | 350.18 | 0.000 | 0.000 | n/a | 1.32 | 1.54 |
| 15 | 24 | 24.97 | 347.50 | 349.01 | 1.51 | 2.55 | 9.79 | 1.13 | 350.14 | 0.000 | 67.241 | 351.50 | 353.26 | 1.76** | 2.93 | 8.53 | 1.13 | 354.39 | 0.000 | 0.000 | n/a | 0.91 | 1.03 |
| 16 | 24 | 13.77 | 351.70 | 353.26 | 1.56 | 2.23 | 5.24 | 0.59 | 353.85 | 0.000 | 133.104 | 361.00 | 362.34 j | 1.34** | 2.23 | 6.18 | 0.59 | 362.93 | 0.000 | 0.000 | n/a | 1.50 | 0.89 |
| 17 | 24 | 13.30 | 361.20 | 362.34 | 1.14 | 1.84 | 7.23 | 0.58 | 362.91 | 0.000 | 66.111 | 366.50 | 367.81 | 1.31** | 2.18 | 6.09 | 0.58 | 368.39 | 0.000 | 0.000 | n/a | 1.03 | 0.59 |
| 18 | 18 | 12.47 | 366.70 | 367.81 | 1.11 | 1.40 | 8.88 | 0.88 | 368.69 | 0.000 | 129.000 | 374.00 | 375.33 | 1.33** | 1.66 | 7.52 | 0.88 | 376.21 | 0.000 | 0.000 | n/a | 1.04 | n/a |
| 19 | 18 | 12.29 | 374.20 | 375.33 | 1.13 | 1.43 | 8.60 | 0.86 | 376.19 | 0.000 | 60.236 | 375.70 | 377.03 | 1.32** | 1.65 | 7.44 | 0.86 | 377.89 | 0.000 | 0.000 | n/a | 0.69 | n/a |
| 20 | 18 | 12.14 | 375.90 | 377.06 | 1.16* | 1.47 | 8.26 | 0.85 | 377.91 | 0.000 | 44.832 | 376.57 | 377.89 | 1.32** | 1.65 | 7.37 | 0.85 | 378.73 | 0.000 | 0.000 | n/a | 1.17 | 0.99 |
| 21 | 15 | 6.70 | 376.80 | 377.89 | 1.09 | 1.13 | 5.90 | 0.54 | 378.43 | 0.980 | 98.443 | 377.78 | 378.85 | 1.07 | 1.12 | 5.99 | 0.56 | 379.41 | 1.004 | 0.992 | 0.976 | 0.50 | 0.28 |
| 22 | 15 | 4.65 | 378.00 | 379.13 | 1.13 | 0.92 | 3.99 | 0.40 | 379.53 | 0.000 | 205.640 | 380.10 | 380.97 j | 0.87** | 0.92 | 5.08 | 0.40 | 381.37 | 0.000 | 0.000 | n/a | 0.50 | 0.20 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations



| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (in) | (cfs) | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | (ft) | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | Ave Sf (%) | Enrgy loss (ft) | (K) | (ft) |
| 23 | 15 | 3.52 | 380.30 | 380.97 | 0.67 | 0.67 | 5.23 | 0.32 | 381.29 | 0.000 | 128.177 | 381.58 | 382.34 | 0.76** | 0.78 | 4.53 | 0.32 | 382.66 | 0.000 | 0.000 | n/a | 1.50 | 0.48 |
| 24 | 15 | 1.94 | 381.80 | 382.34 | 0.54 | 0.50 | 3.85 | 0.21 | 382.55 | 0.000 | 89.745 | 382.70 | 383.25 | 0.55** | 0.53 | 3.70 | 0.21 | 383.47 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 25 | 15 | 1.15 | 382.90 | 383.33 | 0.43* | 0.36 | 3.10 | 0.15 | 383.48 | 0.498 | 28.070 | 383.04 | 383.47 j | 0.43** | 0.37 | 3.10 | 0.15 | 383.62 | 0.498 | 0.498 | 0.140 | 1.08 | 0.16 |
| 26 | 15 | 0.53 | 381.80 | 382.34 | 0.54 | 0.21 | 1.05 | 0.10 | 382.44 | 0.000 | 28.048 | 382.08 | 382.36 j | 0.28** | 0.21 | 2.54 | 0.10 | 382.46 | 0.000 | 0.000 | n/a | 1.00 | 0.10 |
| 27 | 15 | 4.93 | 376.80 | 377.89 | 1.09 | 0.95 | 4.35 | 0.42 | 378.31 | 0.000 | 28.090 | 377.08 | 377.98 j | 0.90** | 0.95 | 5.22 | 0.42 | 378.40 | 0.000 | 0.000 | n/a | 1.00 | 0.42 |
| 28 | 15 | 0.78 | 366.70 | 367.81 | 1.11 | 0.27 | 0.67 | 0.12 | 367.94 | 0.000 | 43.790 | 367.58 | 367.92 j | 0.34** | 0.27 | 2.82 | 0.12 | 368.05 | 0.000 | 0.000 | n/a | 1.00 | 0.12 |
| 29 | 18 | 11.96 | 351.70 | 353.26 | 1.50 | 1.64 | 6.77 | 0.71 | 353.97 | 1.298 | 50.671 | 354.50 | 355.81 j | 1.31** | 1.64 | 7.30 | 0.83 | 356.64 | 1.176 | 1.237 | n/a | 0.50 | 0.41 |
| 30 | 18 | 11.69 | 354.70 | 355.81 | 1.11 | 1.40 | 8.33 | 0.80 | 356.61 | 0.000 | 43.841 | 358.40 | 359.70 | 1.30** | 1.63 | 7.18 | 0.80 | 360.50 | 0.000 | 0.000 | n/a | 1.69 | 1.36 |
| 31 | 15 | 8.86 | 358.60 | 359.70 | 1.10 | 1.14 | 7.74 | 0.87 | 360.57 | 0.000 | 131.638 | 361.00 | 362.15 | 1.15** | 1.18 | 7.50 | 0.87 | 363.02 | 0.000 | 0.000 | n/a | 1.46 | n/a |
| 32 | 15 | 4.97 | 361.20 | 362.15 | 0.95 | 0.95 | 4.97 | 0.43 | 362.58 | 0.000 | 173.316 | 366.00 | 366.90 j | 0.90** | 0.95 | 5.24 | 0.43 | 367.33 | 0.000 | 0.000 | n/a | 1.05 | n/a |
| 33 | 15 | 2.36 | 366.20 | 366.90 | 0.70 | 0.60 | 3.32 | 0.24 | 367.14 | 0.000 | 38.552 | 367.56 | 368.17 j | 0.61** | 0.60 | 3.94 | 0.24 | 368.41 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 34 | 30 | 17.17 | 334.40 | 336.46 | 2.06 | 2.83 | 3.97 | 0.57 | 337.03 | 0.000 | 83.727 | 334.82 | 336.22 | 1.40** | 2.83 | 6.07 | 0.57 | 336.79 | 0.000 | 0.000 | n/a | 1.19 | 0.68 |
| 35 | 24 | 14.91 | 335.00 | 336.22 | 1.22 | 2.01 | 7.43 | 0.64 | 336.86 | 0.000 | 306.989 | 347.71 | 349.10 | 1.39** | 2.33 | 6.40 | 0.64 | 349.74 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 36 | 18 | 8.86 | 348.00 | 349.10 | 1.10 | 1.39 | 6.38 | 0.58 | 349.68 | 0.000 | 200.863 | 364.00 | 365.15 | 1.15** | 1.46 | 6.09 | 0.58 | 365.73 | 0.000 | 0.000 | n/a | 0.50 | 0.29 |
| 37 | 15 | 4.30 | 364.20 | 365.15 | 0.95 | 0.88 | 4.29 | 0.37 | 365.53 | 0.000 | 234.000 | 366.54 | 367.38 j | 0.84** | 0.88 | 4.91 | 0.37 | 367.75 | 0.000 | 0.000 | n/a | 1.00 | 0.37 |
| 38 | 15 | 0.46 | 361.20 | 362.34 | 1.14 | 0.19 | 0.39 | 0.09 | 362.43 | 0.000 | 28.013 | 361.48 | 361.74 | 0.26** | 0.19 | 2.44 | 0.09 | 361.84 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 39 | 15 | 2.47 | 361.20 | 362.15 | 0.95 | 0.62 | 2.47 | 0.25 | 362.40 | 0.000 | 28.090 | 361.48 | 362.11 j | 0.63** | 0.62 | 3.99 | 0.25 | 362.36 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 40 | 15 | 1.66 | 358.60 | 359.70 | 1.10 | 0.47 | 1.45 | 0.19 | 359.89 | 0.000 | 28.000 | 358.88 | 359.39 | 0.51** | 0.47 | 3.52 | 0.19 | 359.58 | 0.000 | 0.000 | n/a | 1.00 | 0.19 |
| 41 | 24 | 8.10 | 339.80 | 341.57 | 1.77 | 1.60 | 2.75 | 0.40 | 341.97 | 0.000 | 28.499 | 340.10 | 341.11 | 1.01** | 1.60 | 5.08 | 0.40 | 341.51 | 0.000 | 0.000 | n/a | 1.04 | n/a |
| 42 | 18 | 7.25 | 340.30 | 341.11 | 0.81 | 0.98 | 7.42 | 0.48 | 341.59 | 0.000 | 47.998 | 342.50 | 343.54 | 1.04** | 1.31 | 5.53 | 0.48 | 344.02 | 0.000 | 0.000 | n/a | 1.21 | n/a |
| 43 | 15 | 3.10 | 342.70 | 343.54 | 0.84 | 0.72 | 3.52 | 0.29 | 343.83 | 0.000 | 115.718 | 348.60 | 349.31 j | 0.71** | 0.72 | 4.32 | 0.29 | 349.60 | 0.000 | 0.000 | n/a | 0.16 | n/a |
| 44 | 15 | 3.12 | 348.80 | 349.31 | 0.51 | 0.47 | 6.67 | 0.29 | 349.60 | 0.000 | 73.254 | 352.00 | 352.71 | 0.71** | 0.72 | 4.33 | 0.29 | 353.00 | 0.000 | 0.000 | n/a | 1.48 | n/a |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 5A 10-YEAR



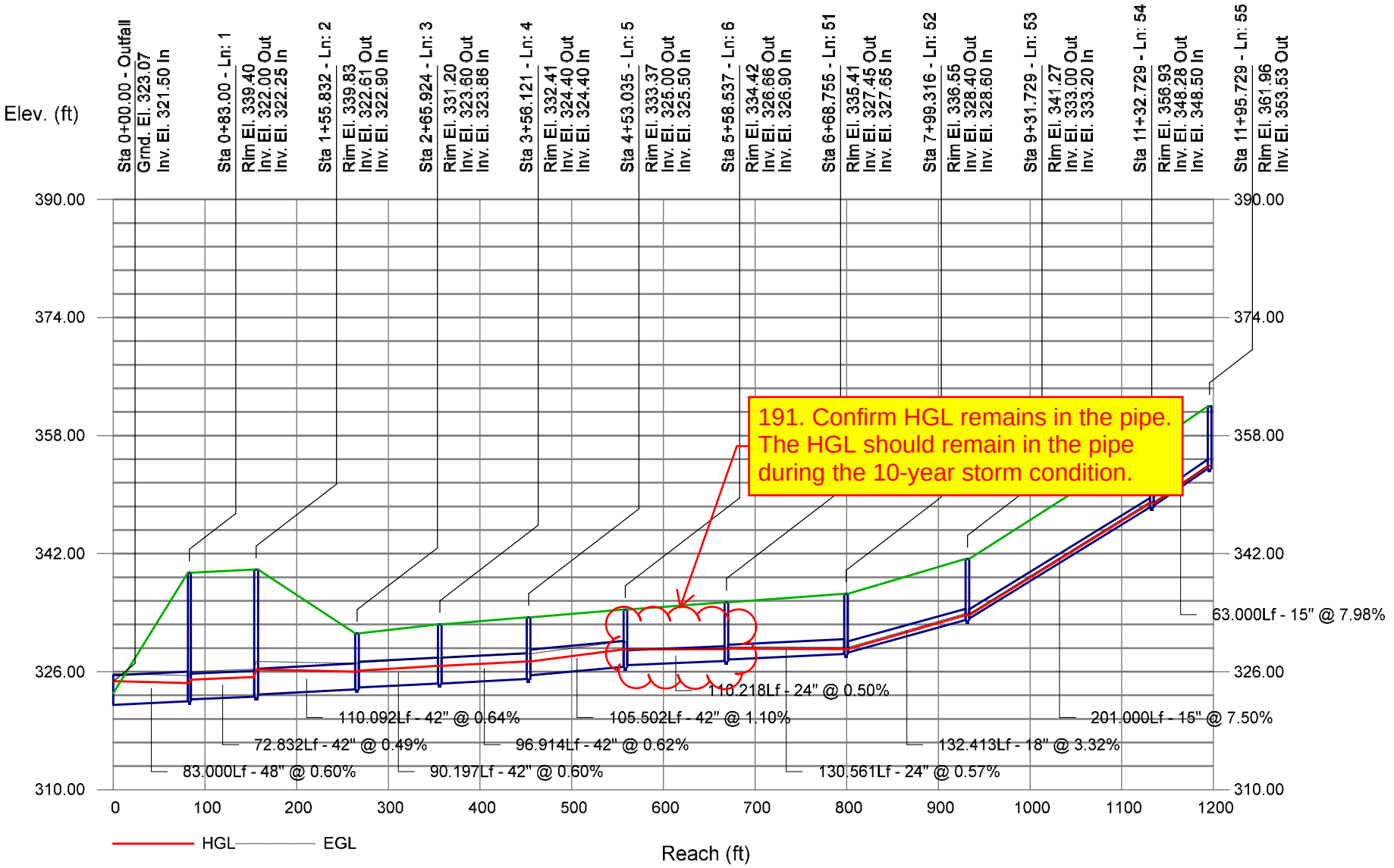
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 1.52 | 352.20 | 352.71 | 0.51 | 0.44 | 3.22 | 0.18 | 352.89 | 0.000 | 27.894 | 352.87 | 353.36 j | 0.49** | 0.44 | 3.42 | 0.18 | 353.54 | 0.000 | 0.000 | n/a | 1.00 | 0.18 |
| 46 | 18 | 7.65 | 325.00 | 326.29 | 1.29 | 1.35 | 4.75 | 0.50 | 326.79 | 0.000 | 37.830 | 328.01 | 329.08 j | 1.07** | 1.35 | 5.67 | 0.50 | 329.58 | 0.000 | 0.000 | n/a | 1.49 | 0.74 |
| 47 | 15 | 5.01 | 328.20 | 329.08 | 0.88 | 0.92 | 5.42 | 0.43 | 329.51 | 0.000 | 67.669 | 334.97 | 335.88 | 0.91** | 0.95 | 5.26 | 0.43 | 336.31 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 48 | 15 | 4.90 | 335.20 | 335.88 | 0.68 | 0.68 | 7.23 | 0.42 | 336.30 | 0.000 | 66.501 | 341.85 | 342.75 | 0.90** | 0.94 | 5.20 | 0.42 | 343.17 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 49 | 15 | 4.74 | 342.10 | 342.75 | 0.65 | 0.64 | 7.38 | 0.41 | 343.15 | 0.000 | 89.618 | 351.06 | 351.94 | 0.88** | 0.93 | 5.12 | 0.41 | 352.35 | 0.000 | 0.000 | n/a | 0.95 | 0.39 |
| 50 | 18 | 4.02 | 351.30 | 351.94 | 0.64 | 0.72 | 5.57 | 0.30 | 352.25 | 0.000 | 37.668 | 352.59 | 353.36 | 0.77** | 0.91 | 4.42 | 0.30 | 353.66 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 51 | 24 | 4.25 | 326.90 | 329.03 | 2.00 | 3.14 | 1.35 | 0.03 | 329.06 | 0.035 | 110.218 | 327.45 | 329.06 | 1.61 | 2.71 | 1.57 | 0.04 | 329.10 | 0.036 | 0.036 | 0.040 | 1.47 | 0.06 |
| 52 | 24 | 3.34 | 327.65 | 329.12 | 1.47 | 0.86 | 1.35 | 0.23 | 329.35 | 0.000 | 130.561 | 328.40 | 329.04 | 0.64** | 0.86 | 3.86 | 0.23 | 329.27 | 0.000 | 0.000 | n/a | 0.50 | 0.12 |
| 53 | 18 | 2.91 | 328.60 | 329.04 | 0.44 | 0.43 | 6.77 | 0.25 | 329.28 | 0.000 | 132.413 | 333.00 | 333.65 | 0.65** | 0.73 | 3.98 | 0.25 | 333.89 | 0.000 | 0.000 | n/a | 0.76 | n/a |
| 54 | 15 | 1.88 | 333.20 | 333.65 | 0.45 | 0.39 | 4.76 | 0.21 | 333.86 | 0.000 | 201.000 | 348.28 | 348.82 | 0.54** | 0.51 | 3.66 | 0.21 | 349.03 | 0.000 | 0.000 | n/a | 0.75 | n/a |
| 55 | 15 | 0.70 | 348.50 | 348.82 | 0.32 | 0.25 | 2.78 | 0.12 | 348.94 | 0.000 | 63.000 | 353.53 | 353.86 | 0.33** | 0.26 | 2.74 | 0.12 | 353.98 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 56 | 15 | 0.60 | 347.80 | 349.01 | 1.21 | 0.23 | 0.49 | 0.11 | 349.12 | 0.000 | 32.603 | 348.13 | 348.43 | 0.30** | 0.23 | 2.62 | 0.11 | 348.54 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 57 | 15 | 2.18 | 342.70 | 343.54 | 0.84 | 0.57 | 2.49 | 0.23 | 343.77 | 0.000 | 27.998 | 342.98 | 343.57 j | 0.59** | 0.57 | 3.84 | 0.23 | 343.80 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 58 | 15 | 1.48 | 335.40 | 336.46 | 1.06 | 0.44 | 1.33 | 0.18 | 336.64 | 0.000 | 38.000 | 335.78 | 336.26 | 0.48** | 0.44 | 3.40 | 0.18 | 336.44 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 59 | 15 | 0.39 | 333.20 | 333.65 | 0.45 | 0.17 | 0.98 | 0.08 | 333.73 | 0.000 | 62.439 | 336.30 | 336.54 j | 0.24** | 0.17 | 2.33 | 0.08 | 336.63 | 0.000 | 0.000 | n/a | 1.00 | 0.08 |
| 60 | 15 | 2.57 | 328.20 | 329.08 | 0.88 | 0.64 | 2.78 | 0.25 | 329.34 | 0.000 | 28.384 | 329.81 | 330.45 j | 0.64** | 0.64 | 4.05 | 0.25 | 330.71 | 0.000 | 0.000 | n/a | 1.00 | 0.25 |
| 61 | 15 | 0.60 | 327.85 | 329.12 | 1.25 | 1.23 | 0.49 | 0.00 | 329.12 | 0.009 | 30.000 | 328.15 | 329.12 | 0.97 | 1.02 | 0.59 | 0.01 | 329.13 | 0.010 | 0.009 | 0.003 | 1.00 | 0.01 |
| 62 | 15 | 1.73 | 325.60 | 326.80 | 1.20 | 0.48 | 1.43 | 0.20 | 327.00 | 0.000 | 28.000 | 325.86 | 326.38 | 0.52** | 0.48 | 3.56 | 0.20 | 326.58 | 0.000 | 0.000 | n/a | 1.00 | 0.20 |
| 63 | 15 | 0.63 | 383.24 | 383.63 | 0.39 | 0.24 | 1.95 | 0.11 | 383.74 | 0.000 | 45.000 | 383.50 | 383.81 | 0.31** | 0.24 | 2.66 | 0.11 | 383.92 | 0.000 | 0.000 | n/a | 1.00 | 0.11 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

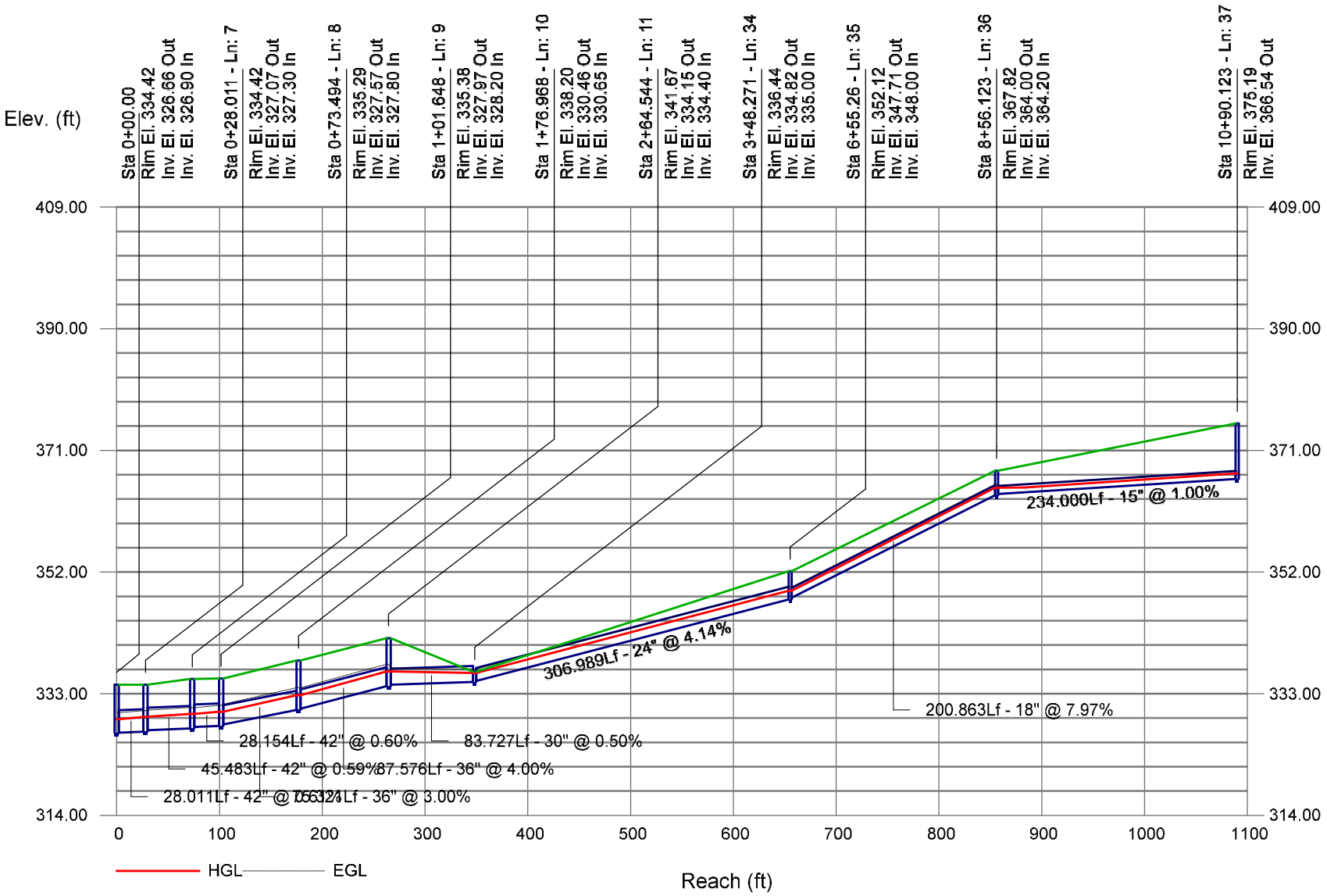
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 1-55 Proj. file: SCM 5A Storm Network.stm



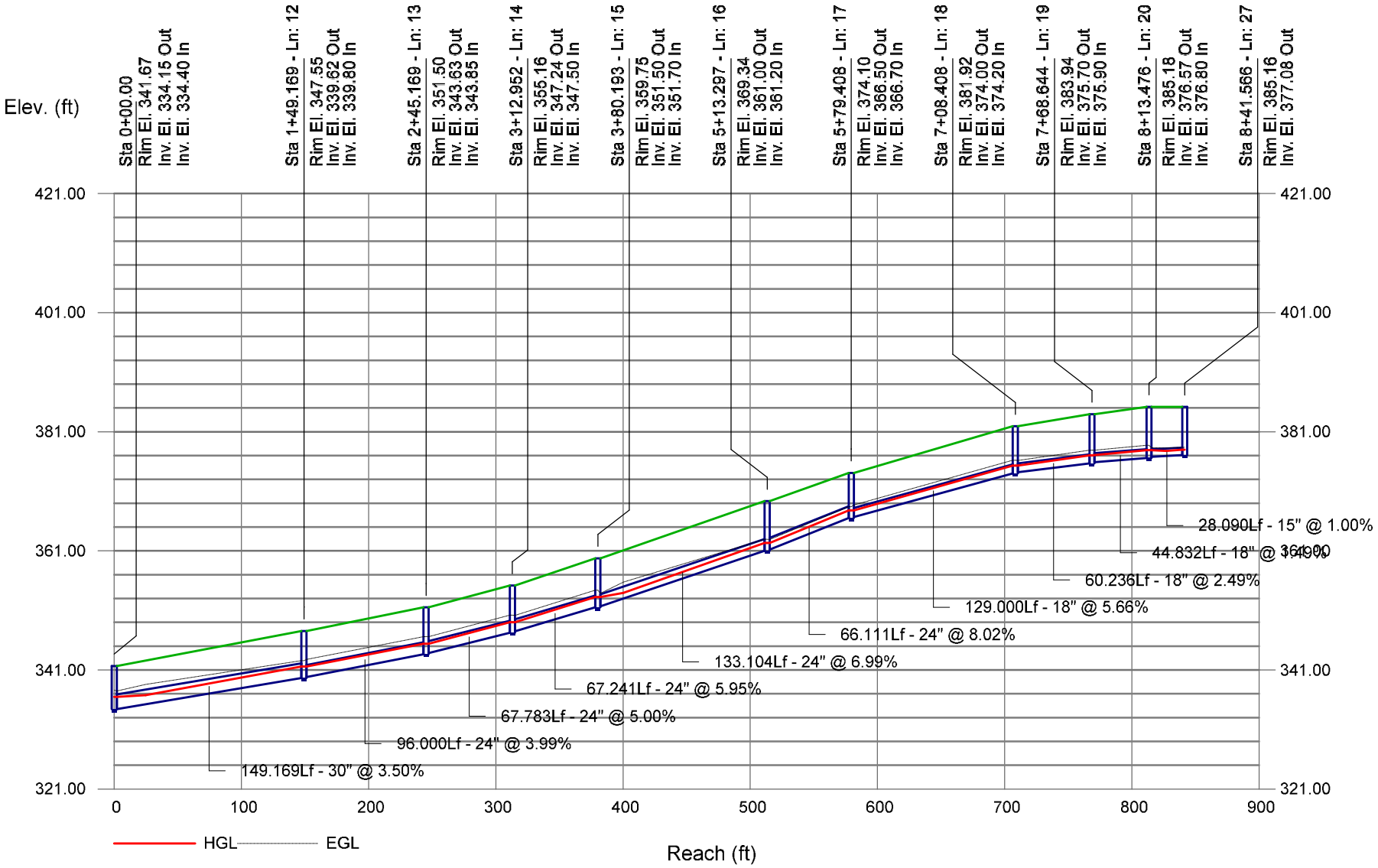
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 7-37 Proj. file: SCM 5A Storm Network.stm



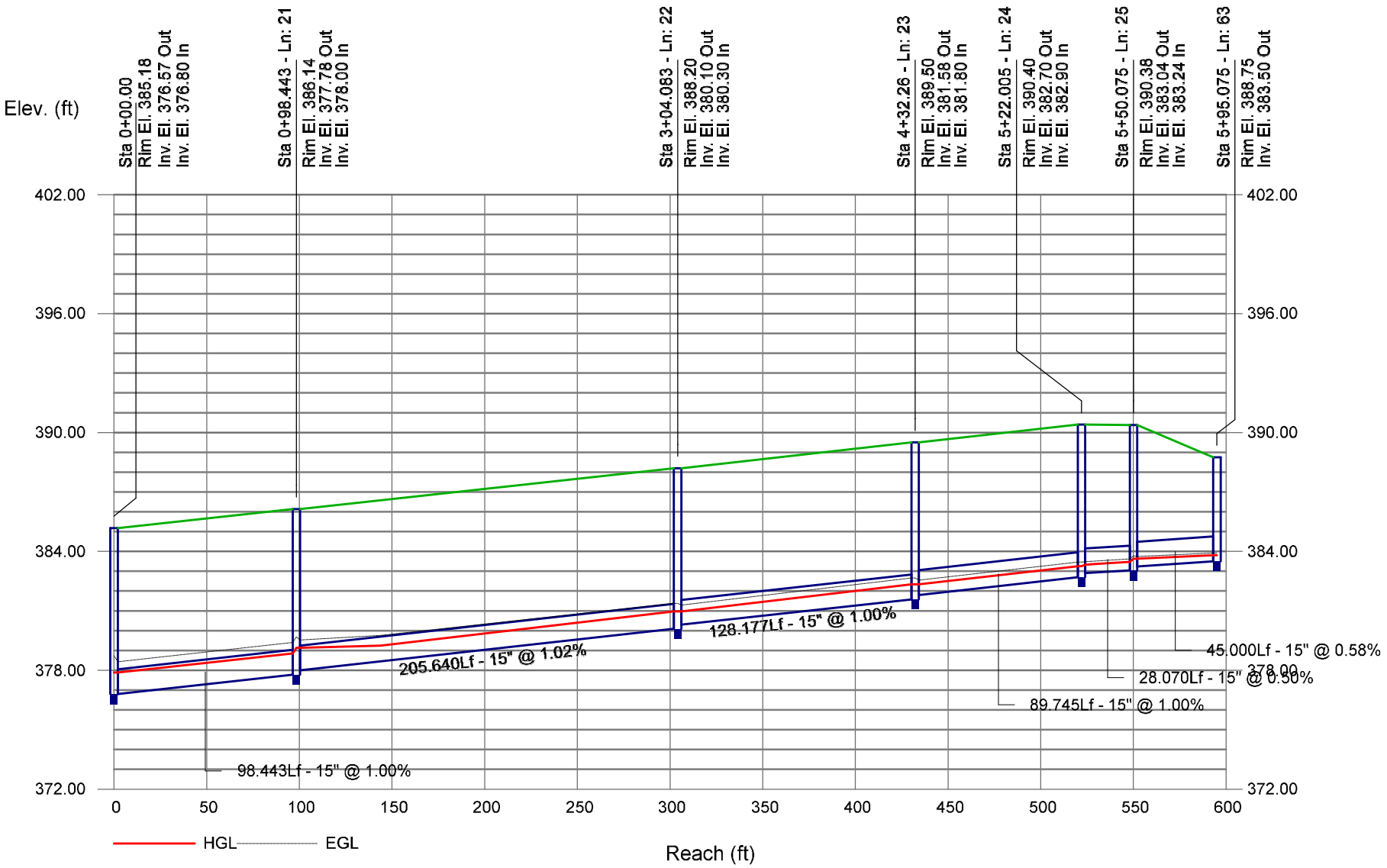
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 12-27 Proj. file: SCM 5A Storm Network.stm



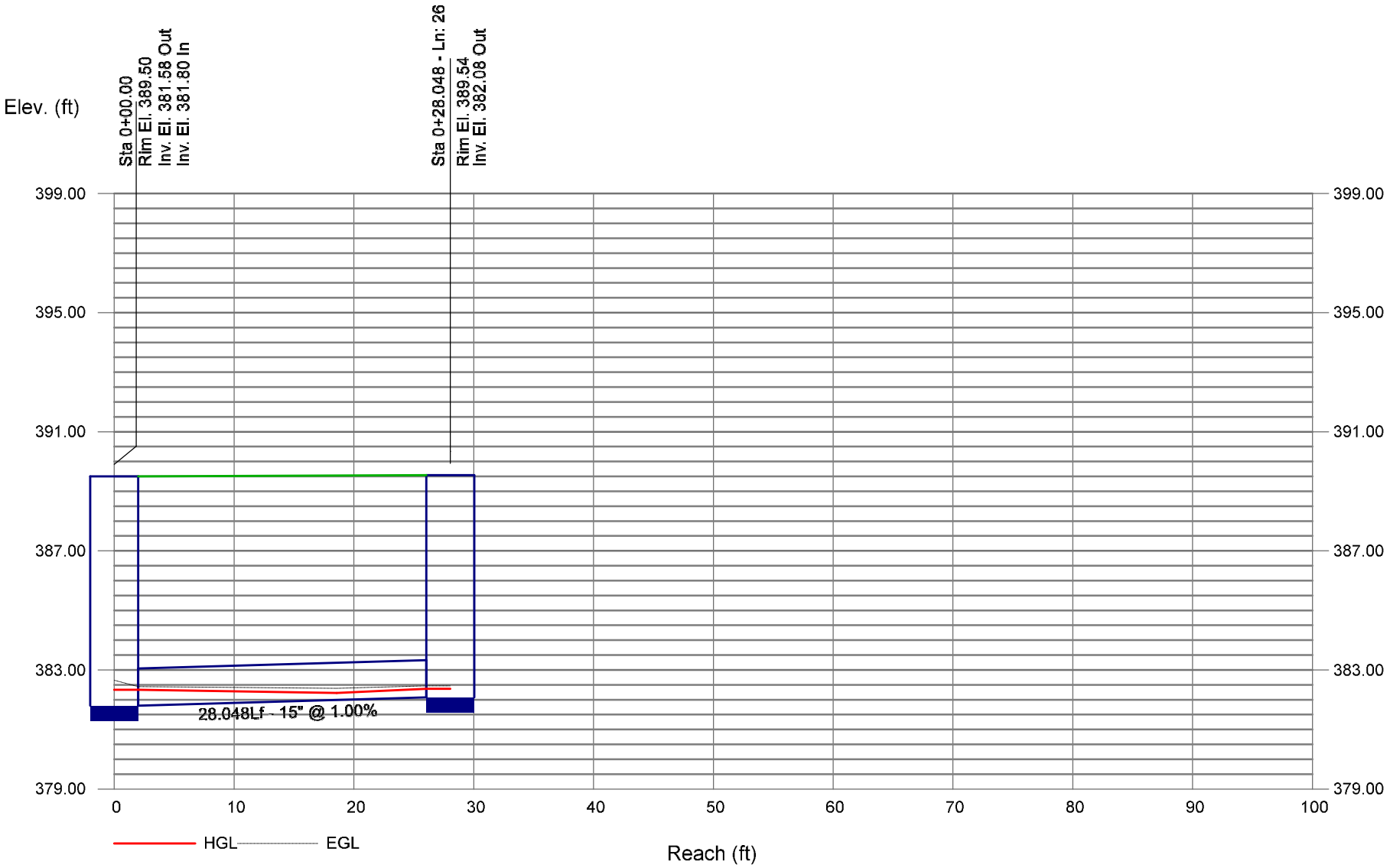
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 21-63 Proj. file: SCM 5A Storm Network.stm



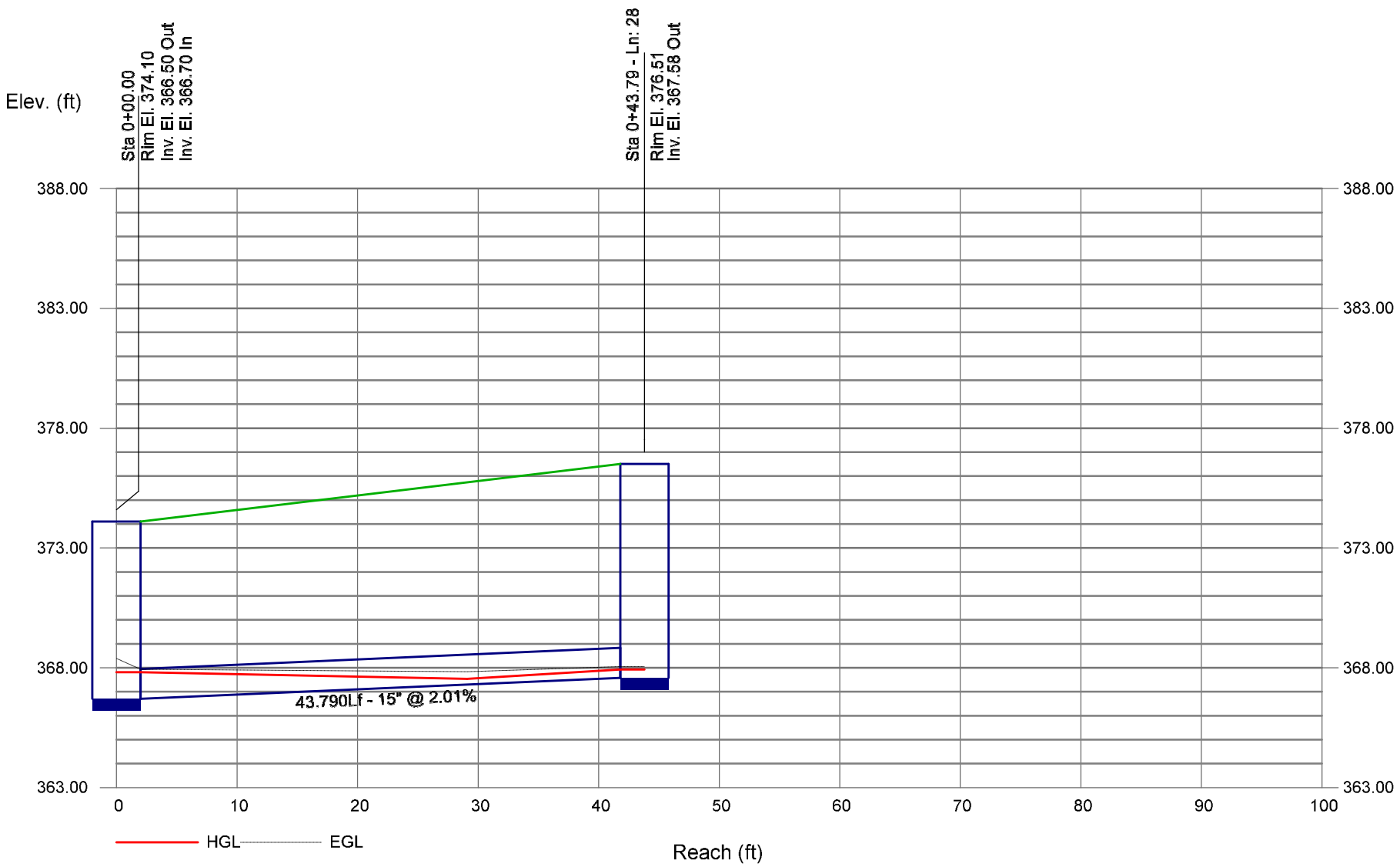
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 26-26 Proj. file: SCM 5A Storm Network.stm



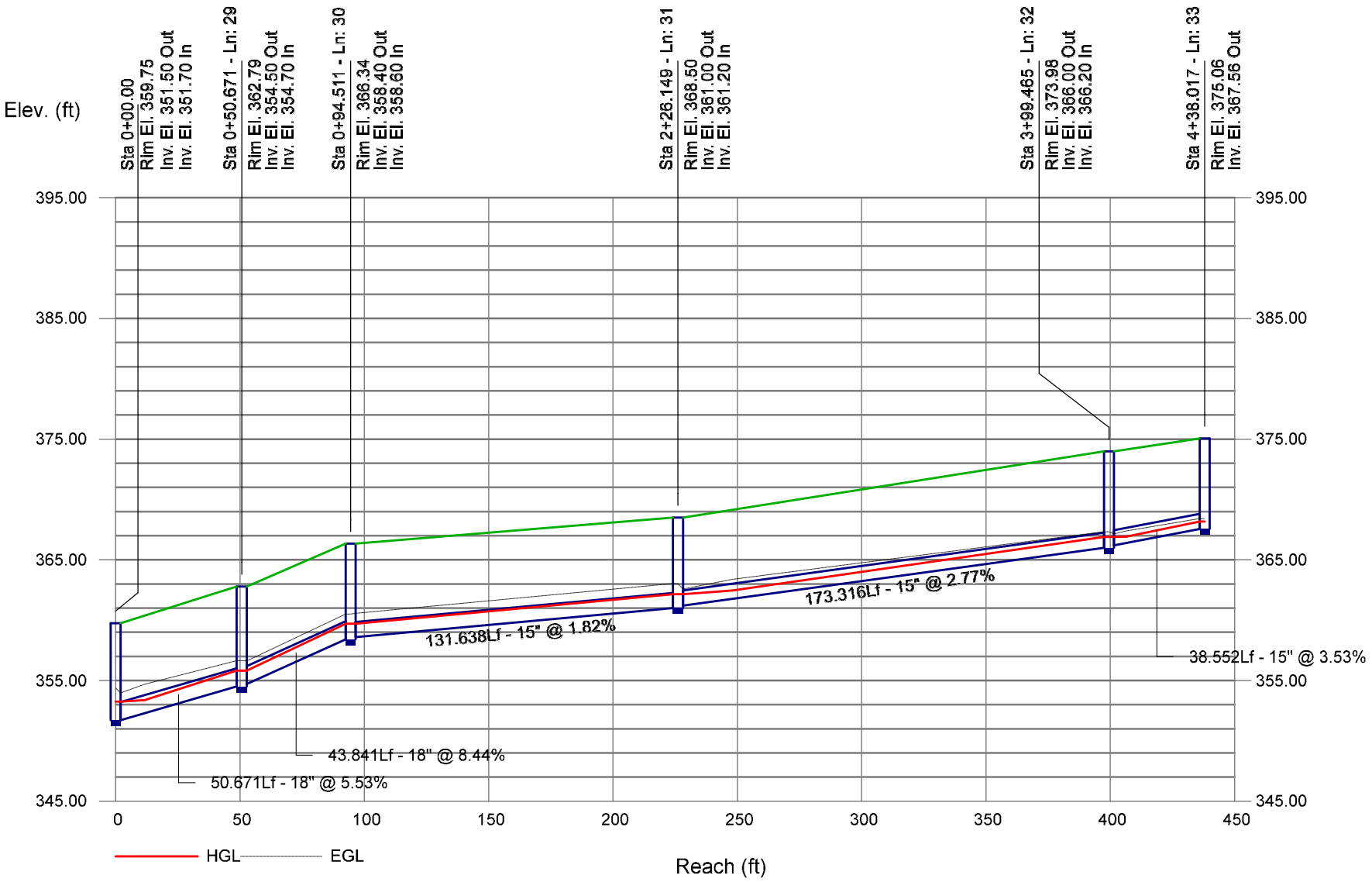
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 28-28 Proj. file: SCM 5A Storm Network.stm



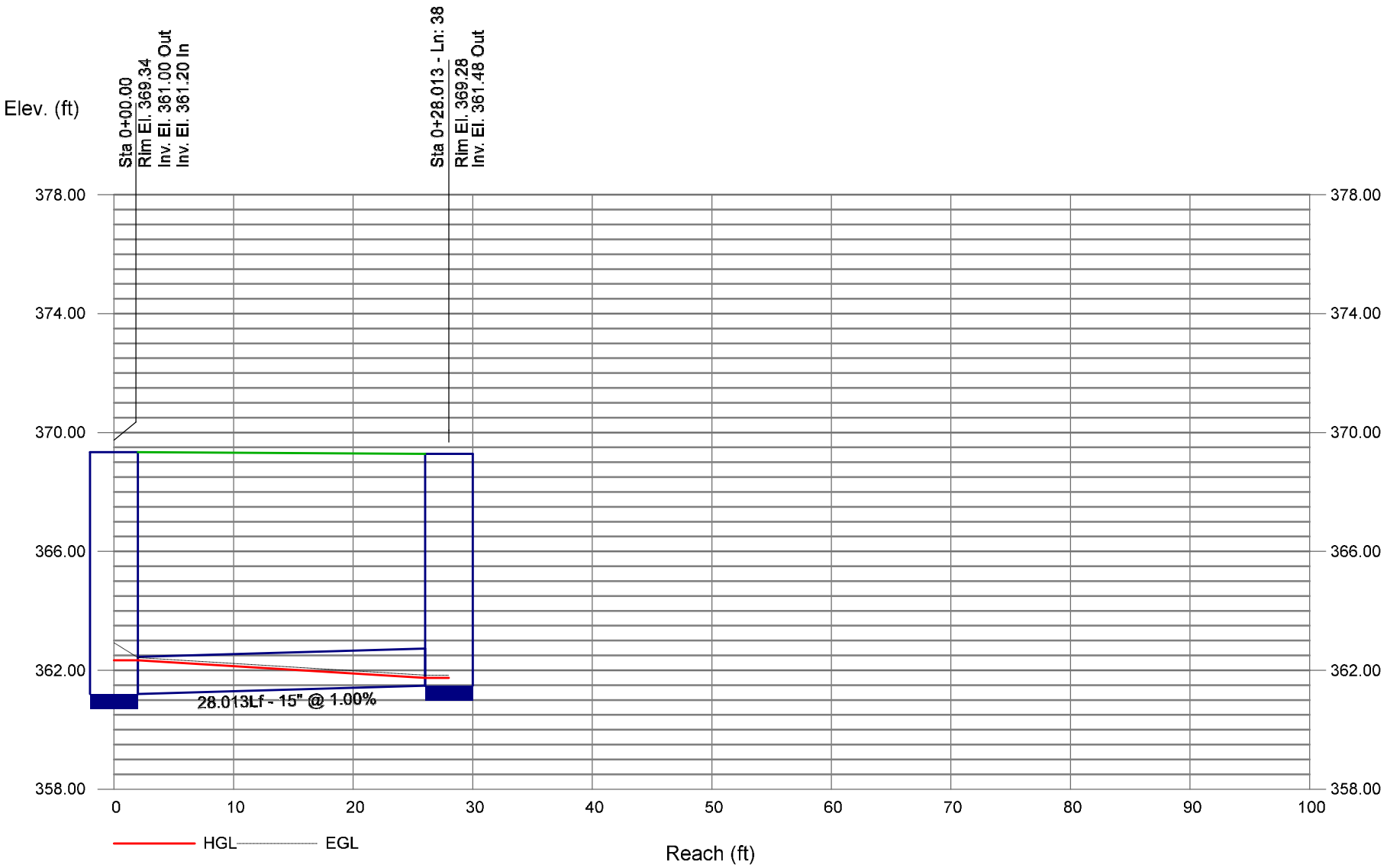
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 29-33 Proj. file: SCM 5A Storm Network.stm



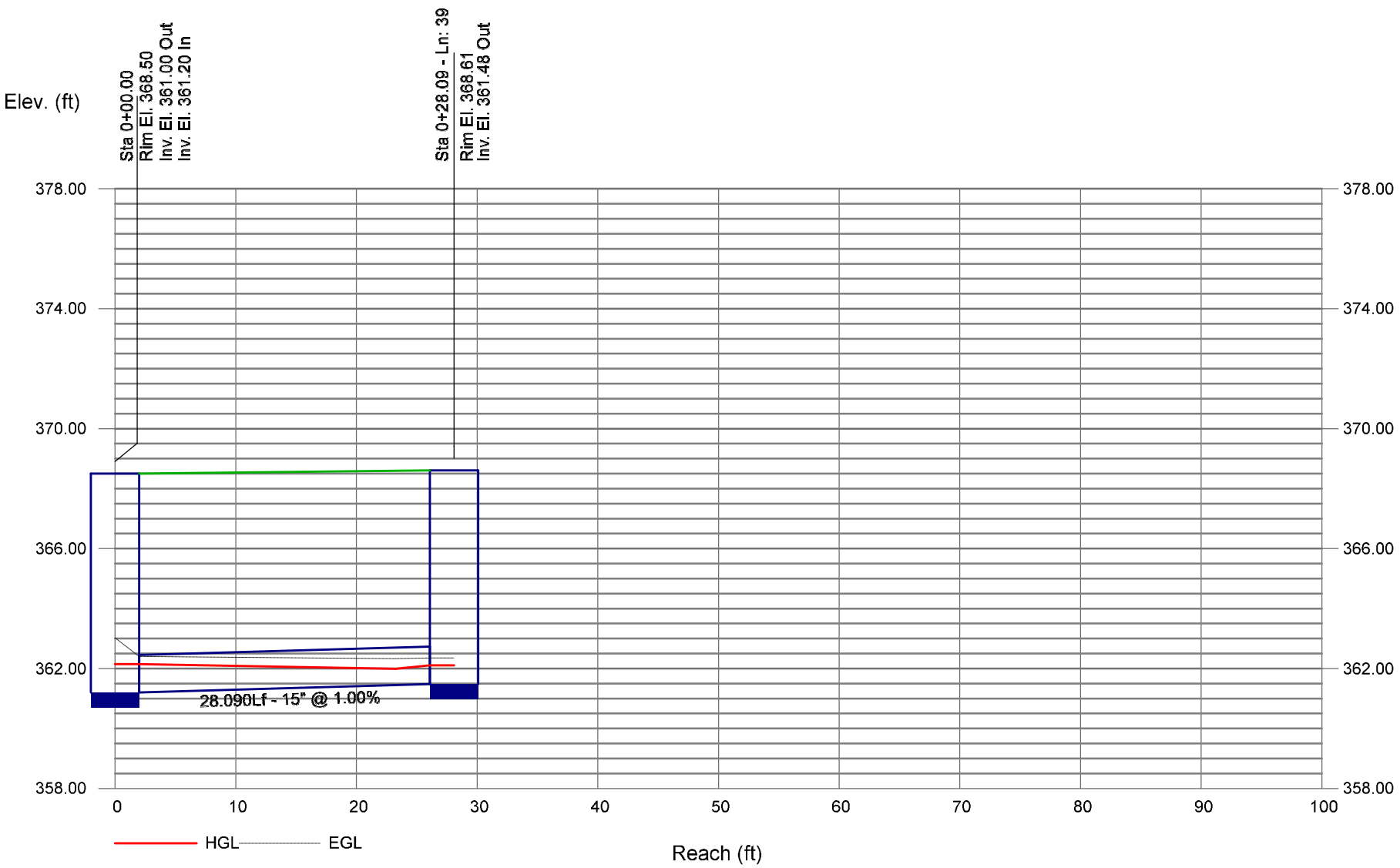
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 38-38 Proj. file: SCM 5A Storm Network.stm



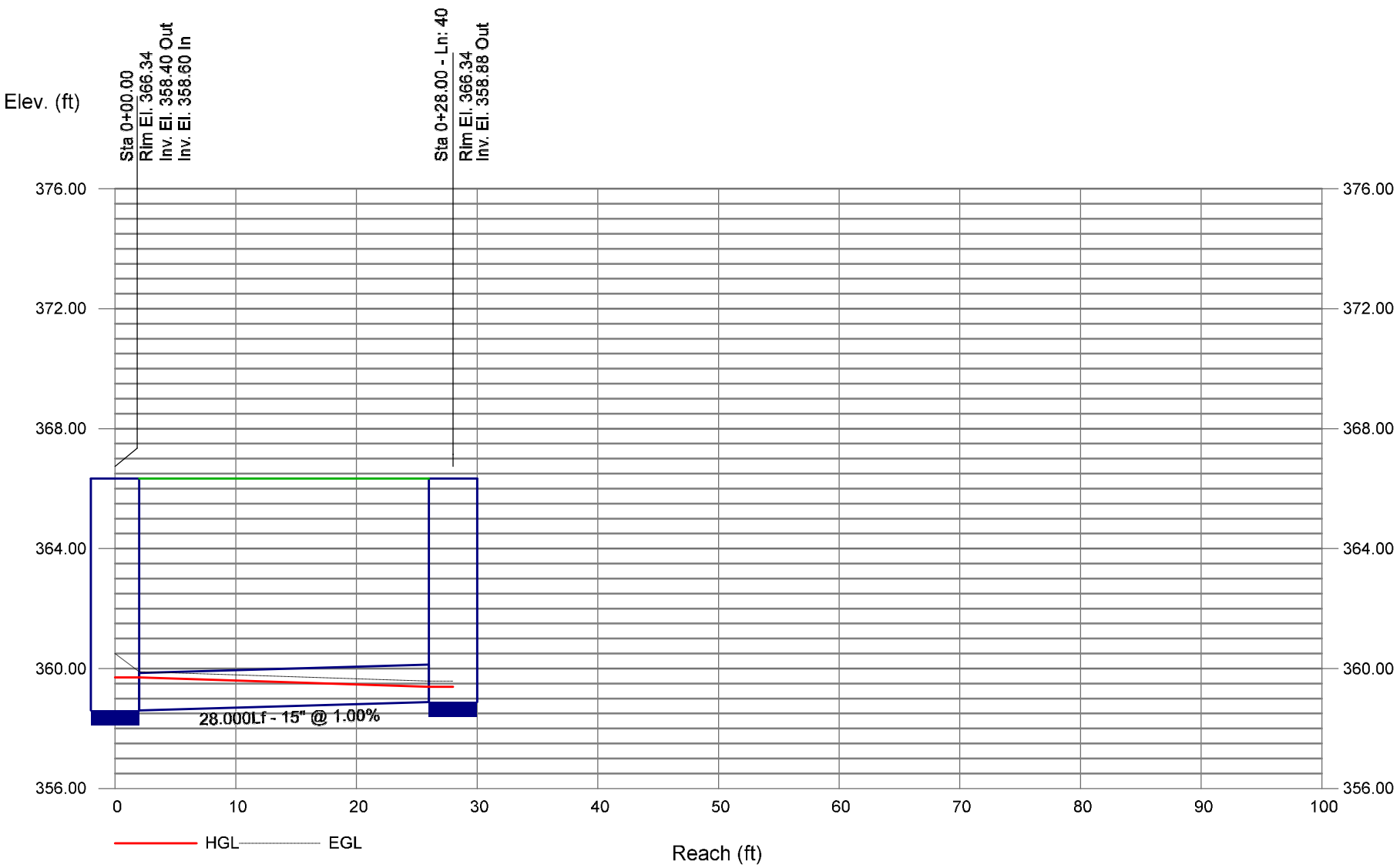
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 39-39 Proj. file: SCM 5A Storm Network.stm



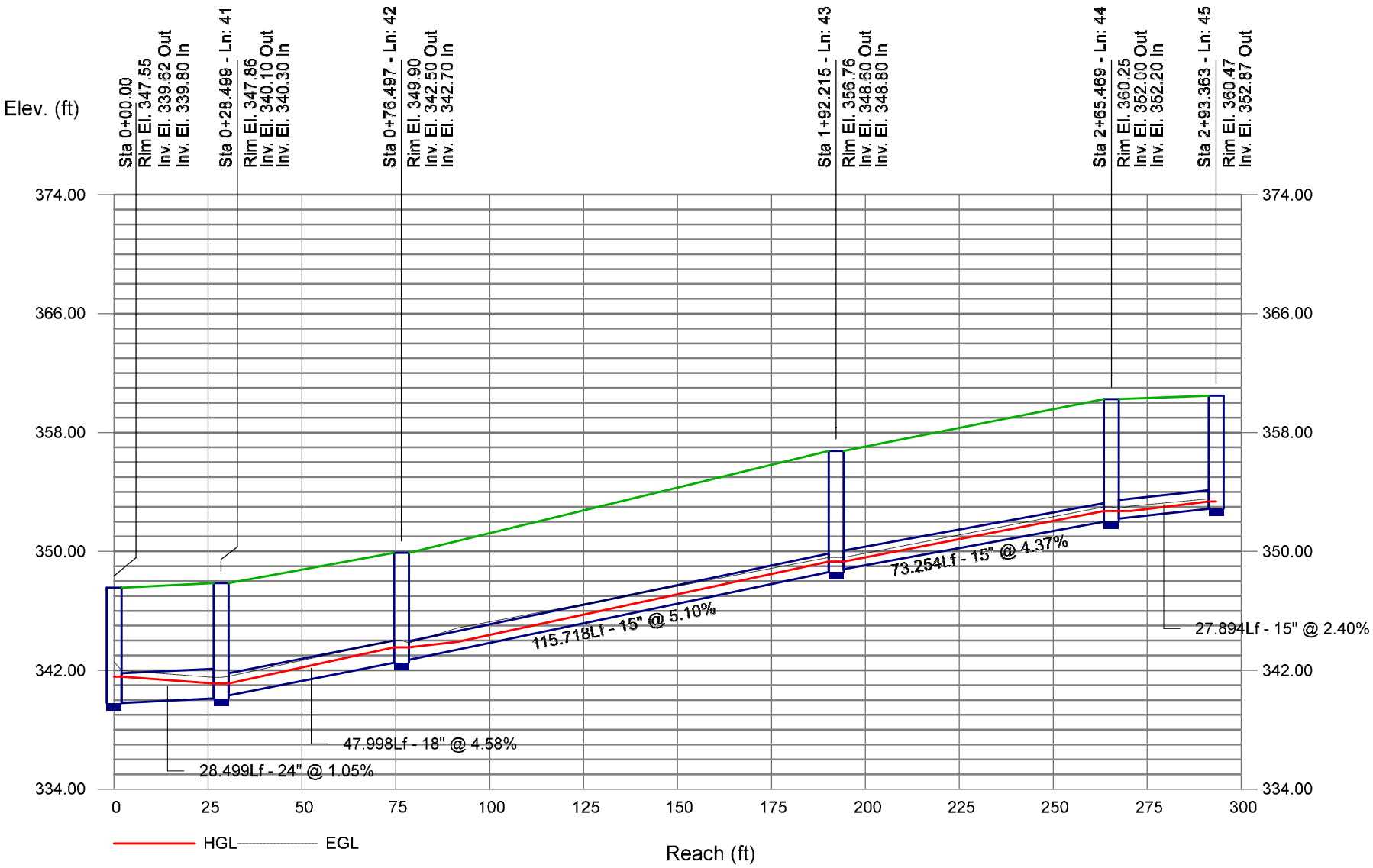
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 40-40 Proj. file: SCM 5A Storm Network.stm



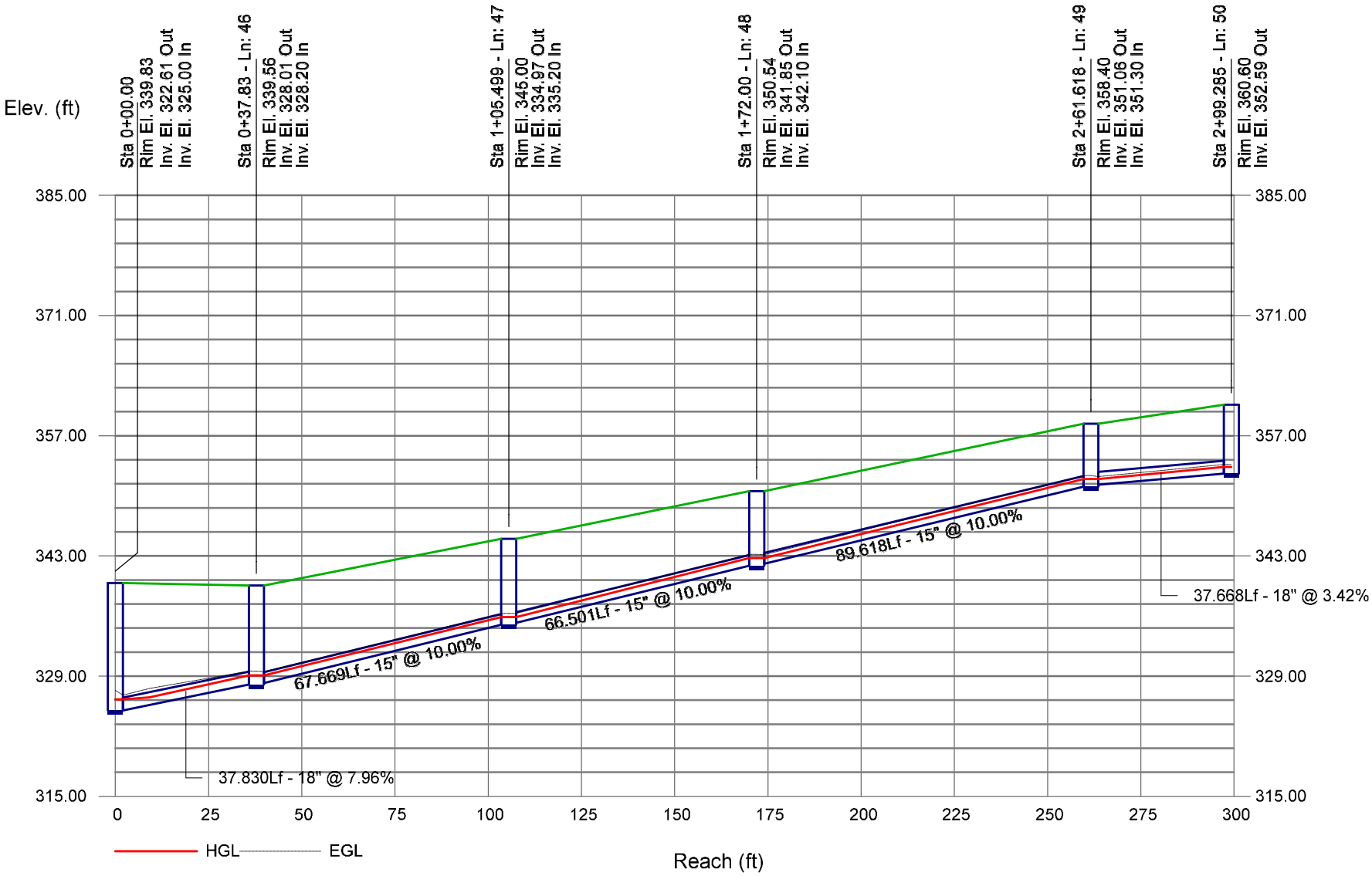
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 41-45 Proj. file: SCM 5A Storm Network.stm



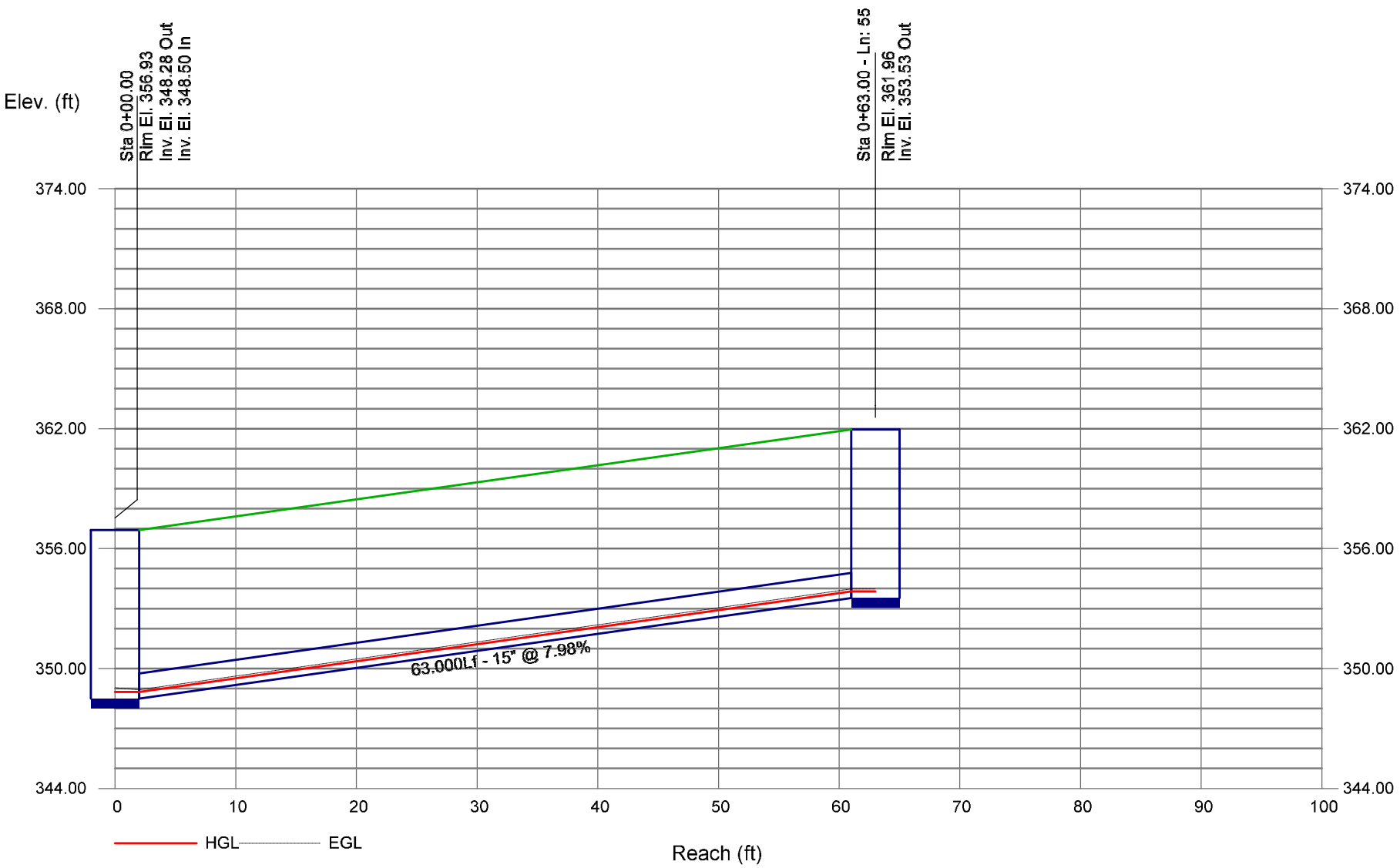
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 46-50 Proj. file: SCM 5A Storm Network.stm



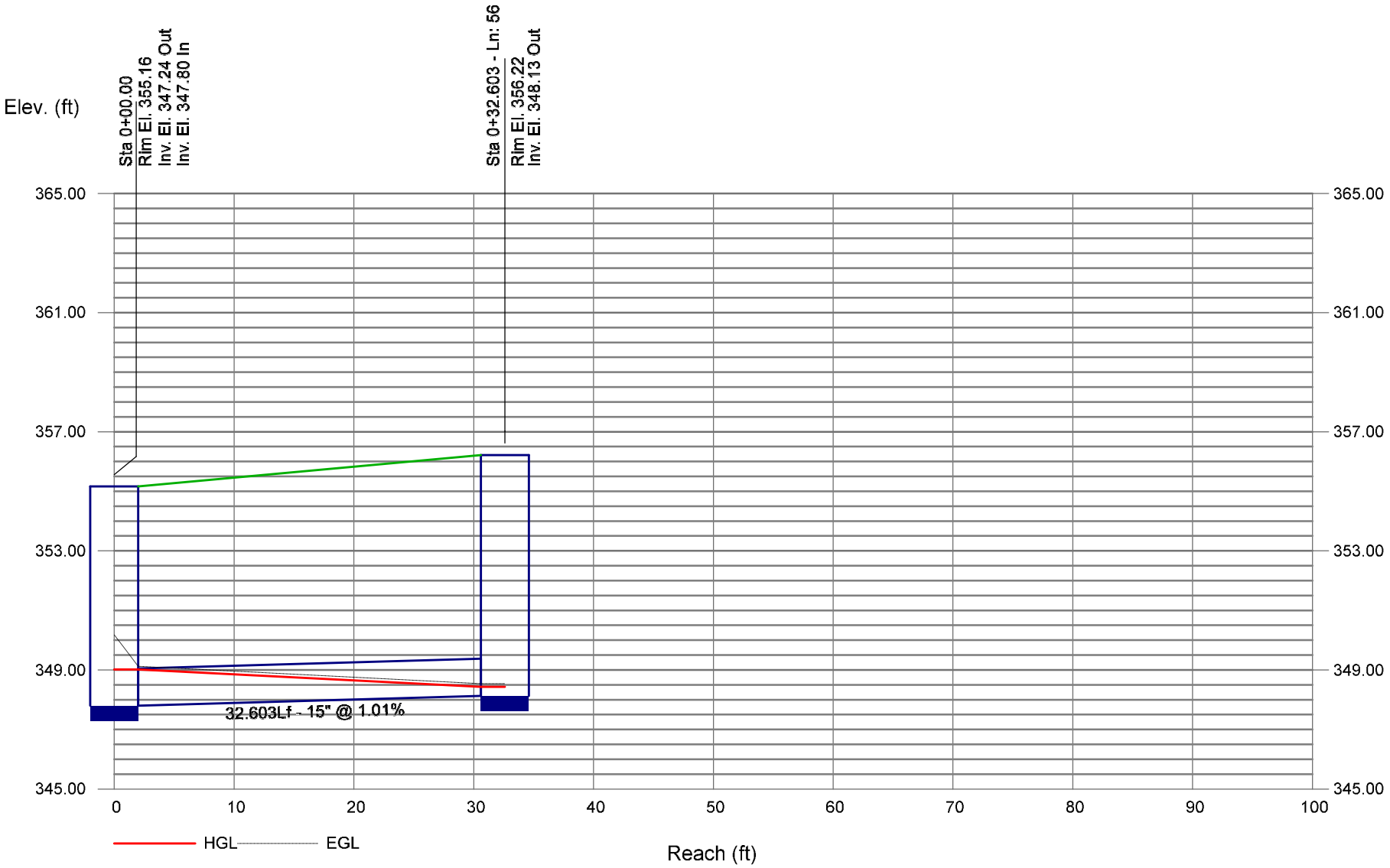
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 55-55 Proj. file: SCM 5A Storm Network.stm



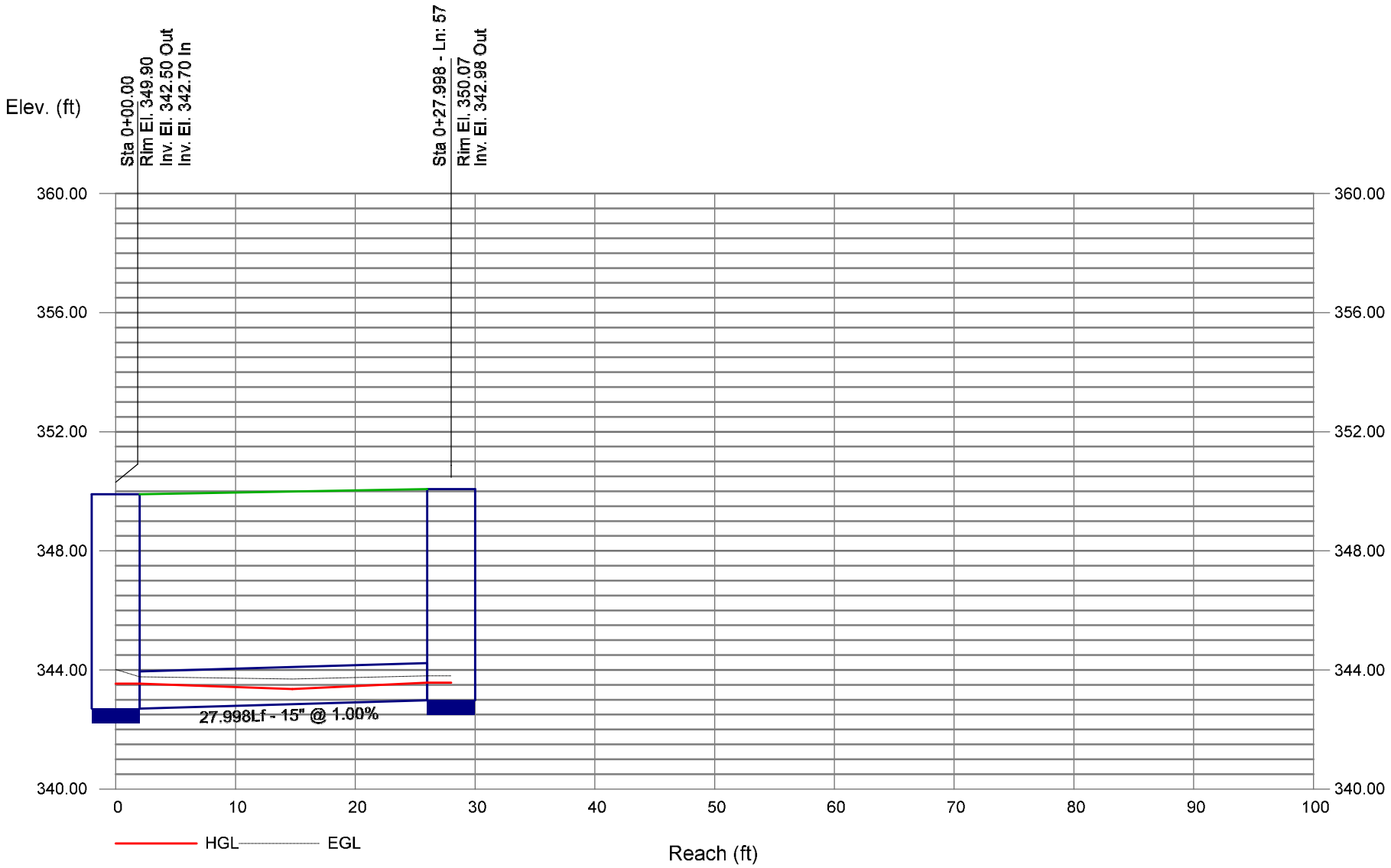
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 56-56 Proj. file: SCM 5A Storm Network.stm



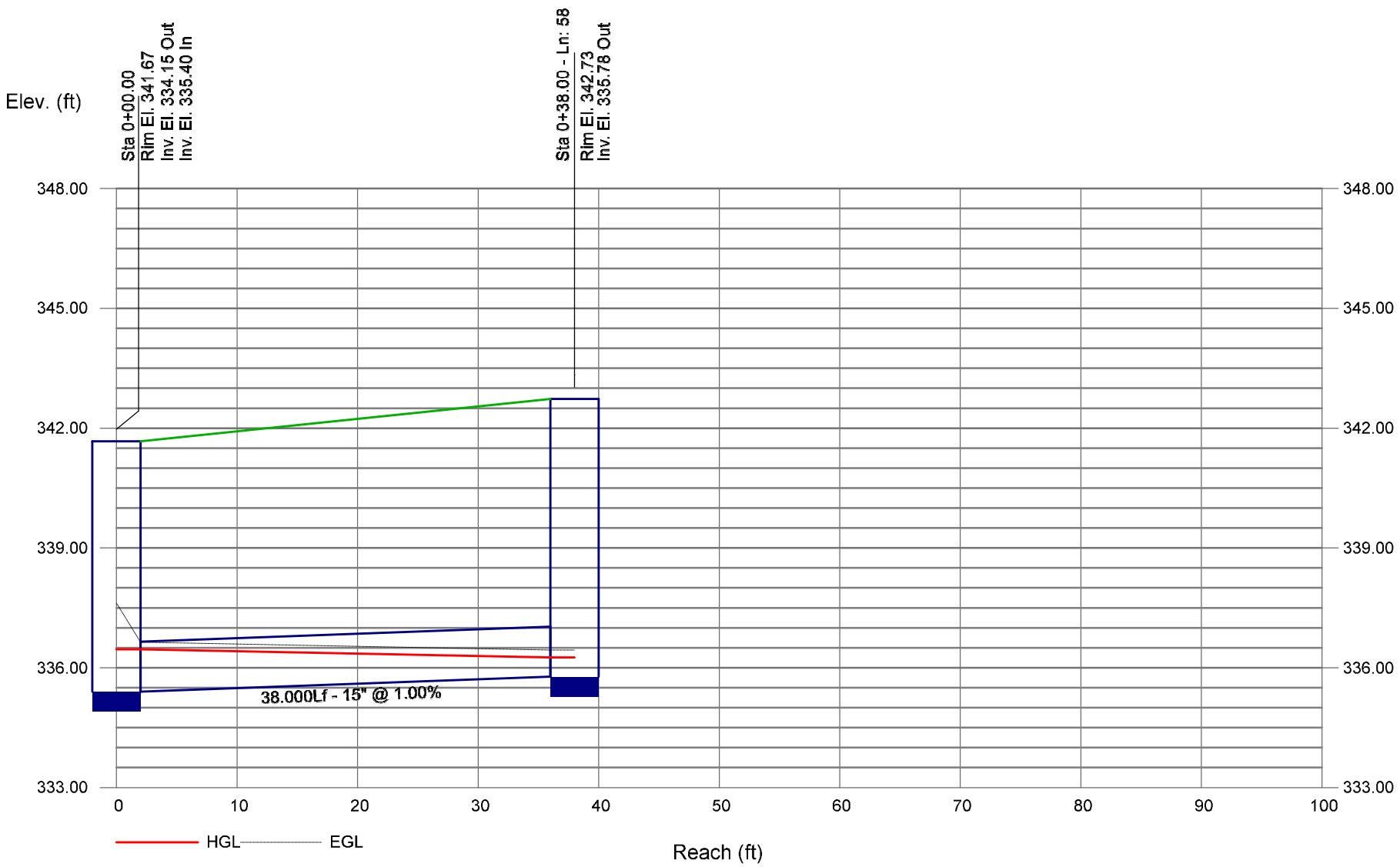
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 57-57 Proj. file: SCM 5A Storm Network.stm



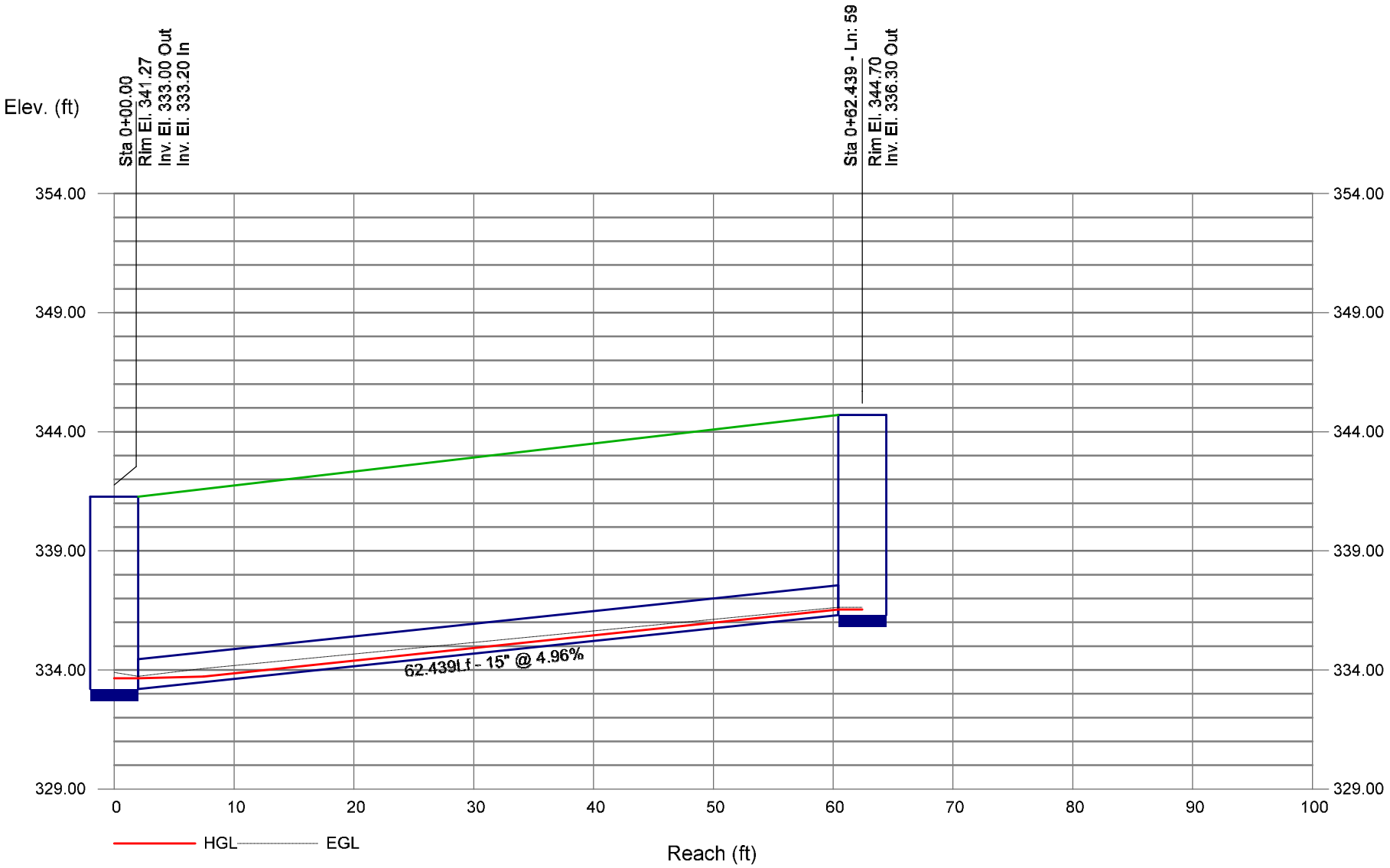
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 58-58 Proj. file: SCM 5A Storm Network.stm



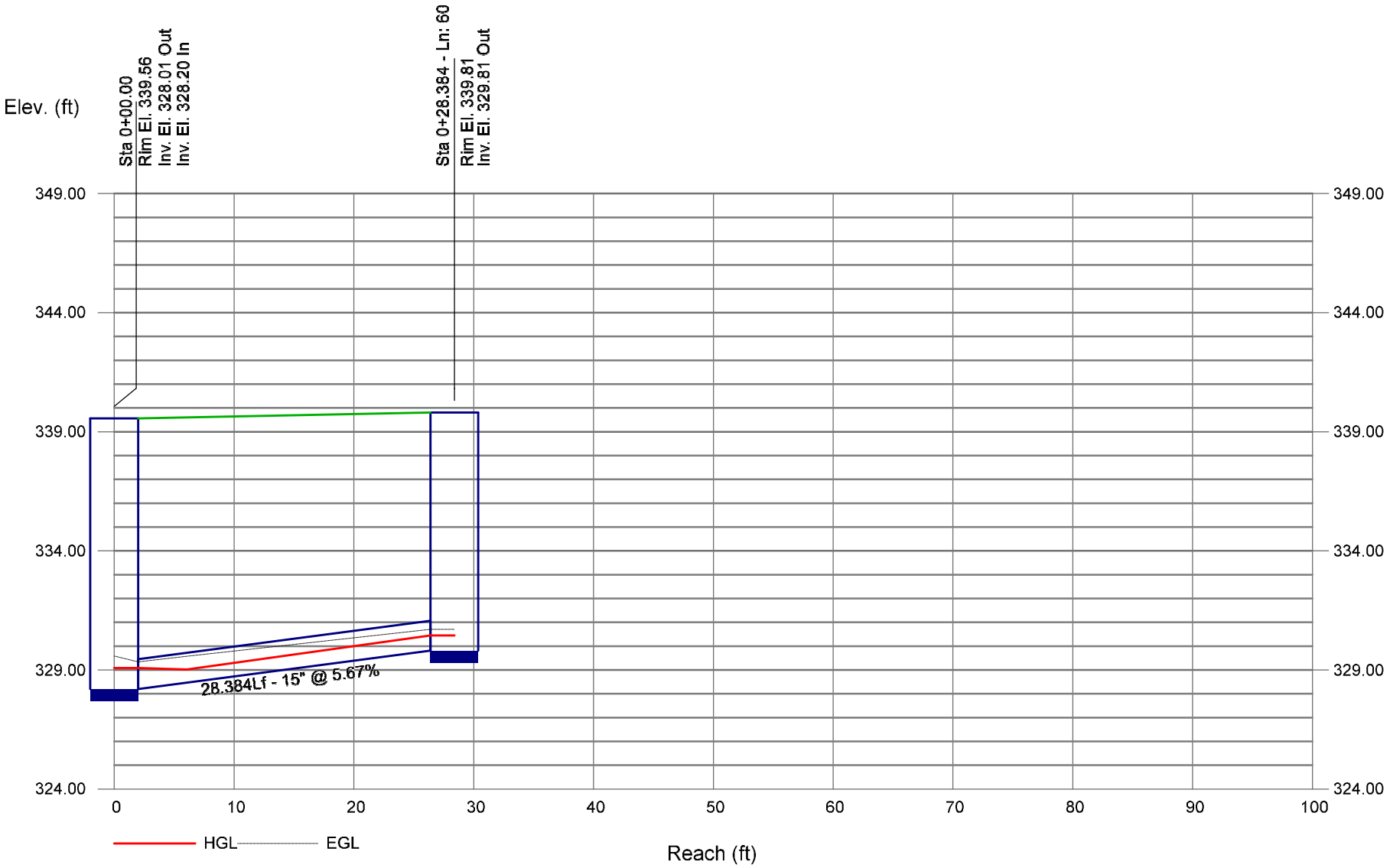
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 59-59 Proj. file: SCM 5A Storm Network.stm



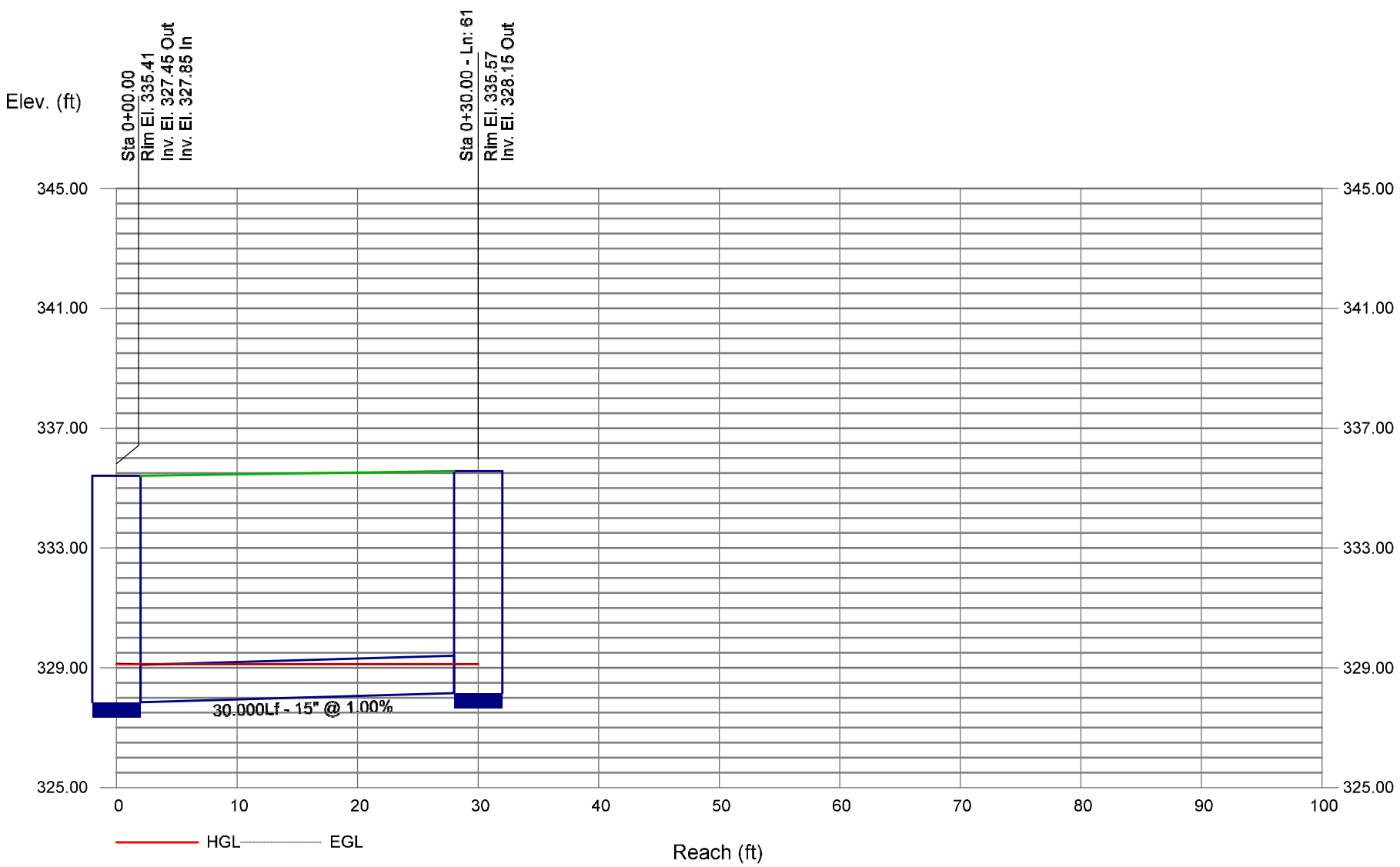
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 60-60 Proj. file: SCM 5A Storm Network.stm



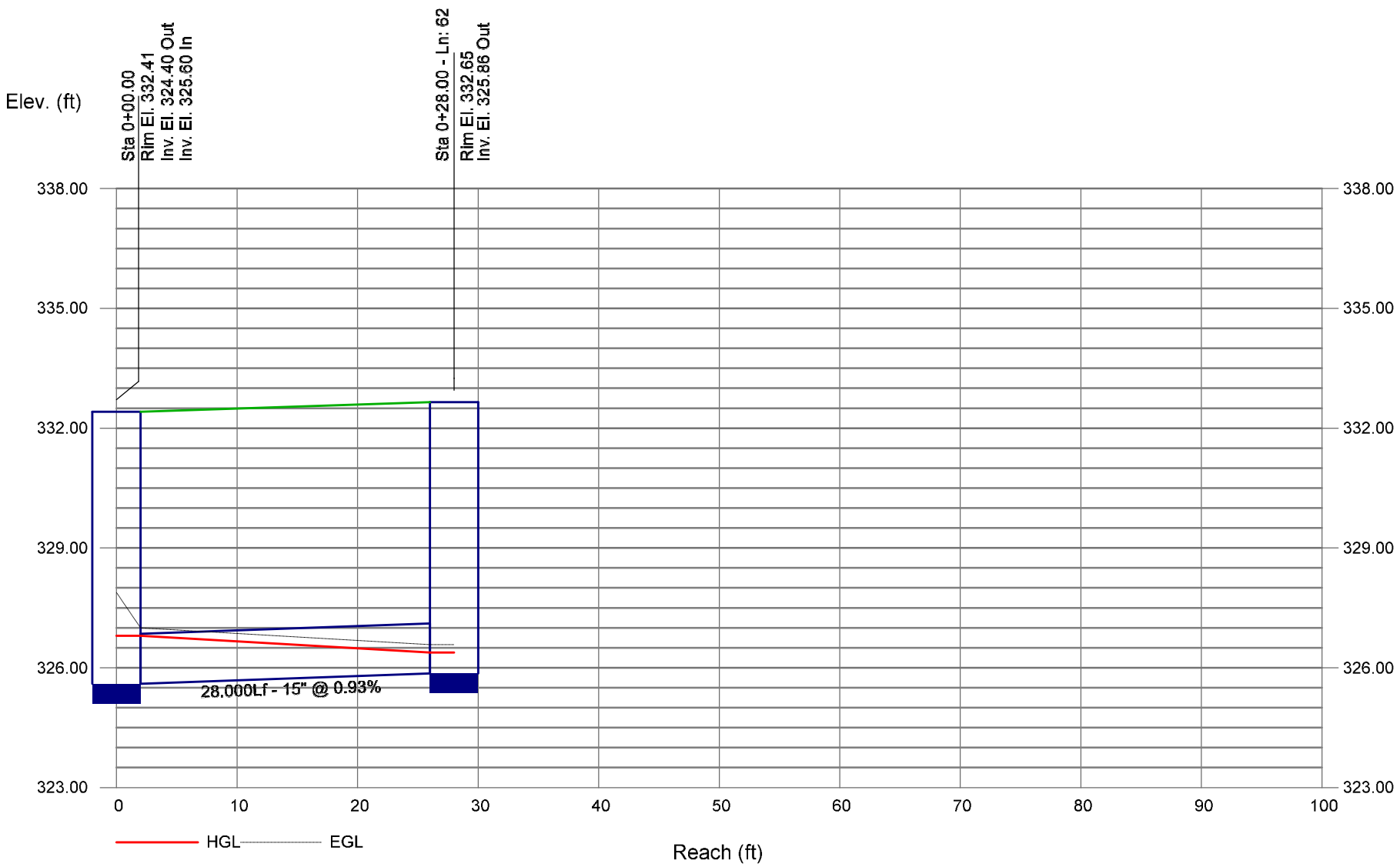
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 61-61 Proj. file: SCM 5A Storm Network.stm



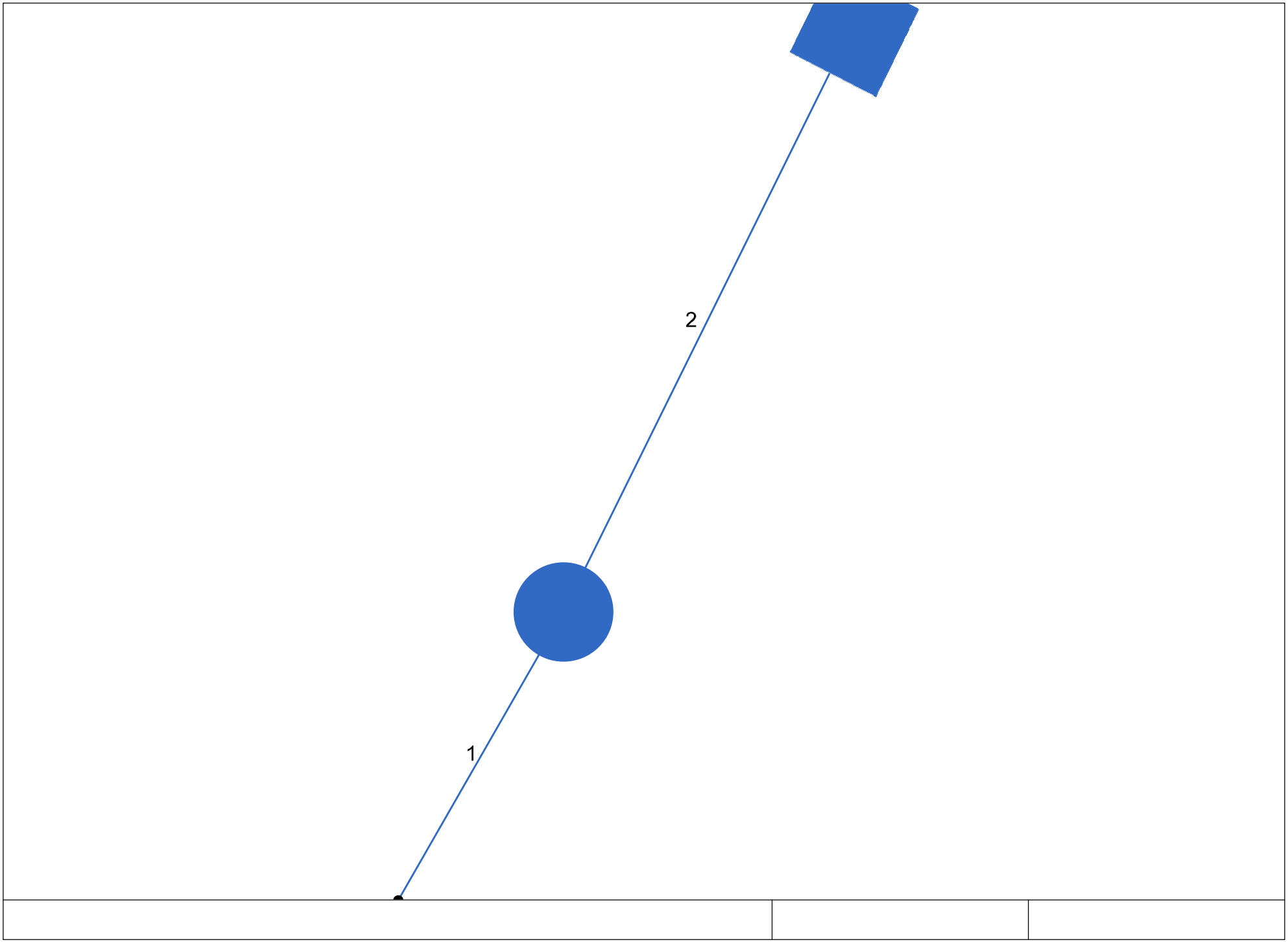
# Storm Sewer Profile

SCM 5A 10-YEAR PROFILE 62-62 Proj. file: SCM 5A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan

SCM 5B 10-YEAR



# Storm Sewer Inventory Report



SCM 5B 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 13.497 | -60.670 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 315.00 | 7.41 | 316.00 | 18 | Cir | 0.013 | 0.15 | 332.61 | Pipe - (595) |
| 2 | 1 | 26.561 | -2.687 | Comb | 20.00 | 0.00 | 0.00 | 0.0 | 322.34 | 10.01 | 325.00 | 18 | Cir | 0.013 | 1.00 | 333.37 | Pipe - (594) |

Project File: SCM 5B Storm Network.stm

Number of lines: 2

Date: 4/11/2025

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | JB 551 | Manhole | 332.61 | Cir | 4.00 | 4.00 | 18 | Cir | 316.00 | 18 | Cir | 322.34 |
| 2 | CB 505 | Combination | 333.37 | Rect | 4.00 | 4.00 | 18 | Cir | 325.00 | | | |

Project File: SCM 5B Storm Network.stm | Number of Structures: 2 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 5B 10-YEAR



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (595) | 20.00 | 18 | Cir | 13.497 | 315.00 | 316.00 | 7.409 | 316.47 | 317.47 | n/a | 317.47 | End | Manhole |
| 2 | Pipe - (594) | 20.00 | 18 | Cir | 26.561 | 322.34 | 325.00 | 10.015 | 323.18 | 326.47 | n/a | 326.47 | 1 | Combination |

Project File: SCM 5B Storm Network.stm

Number of lines: 2

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs.

# Inlet Report



SCM 5B 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | JB 551 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 2.00 | 0.00 | 2.00 | 0.00 | 0.000 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 2 | CB 505 | 20.00* | 0.00 | 6.81 | 13.19 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.48 | 20.18 | 0.42 | 17.15 | 0.0 | Off |

Project File: SCM 5B Storm Network.stm

Number of lines: 2

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 5B 10-YEAR



| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 18 | 20.00 | 315.00 | 316.47 | 1.47 | 1.76 | 11.38 | 2.01 | 318.48 | 0.000 | 13.497 | 316.00 | 317.47 | 1.47** | 1.76 | 11.38 | 2.01 | 319.48 | 0.000 | 0.000 | n/a | 0.15 | n/a |
| 2 | 18 | 20.00 | 322.34 | 323.18 | 0.84* | 1.02 | 19.67 | 2.01 | 325.19 | 0.000 | 26.561 | 325.00 | 326.47 | 1.47** | 1.76 | 11.38 | 2.01 | 328.48 | 0.000 | 0.000 | n/a | 1.00 | n/a |

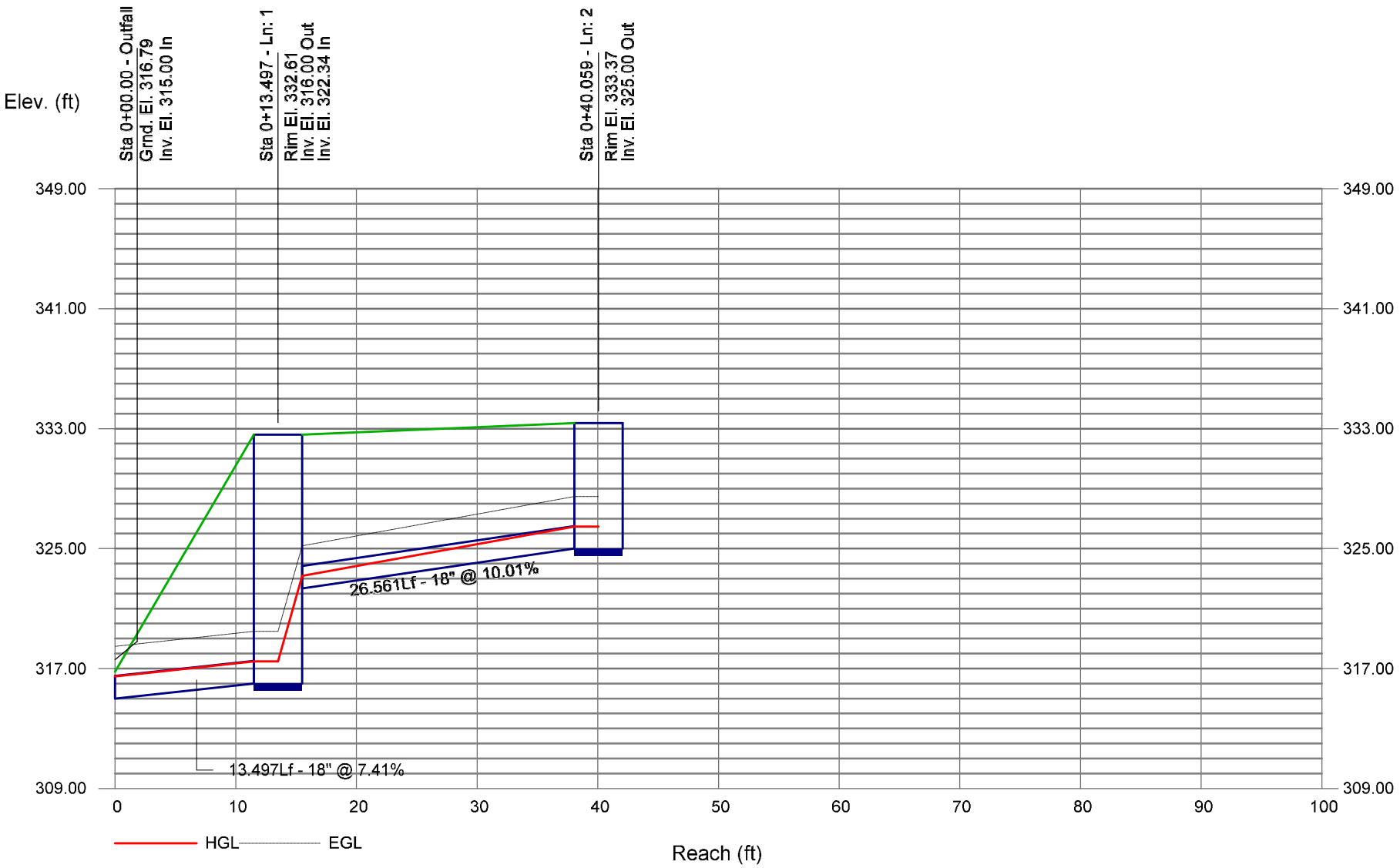
Project File: SCM 5B Storm Network.stm | Number of lines: 2 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth. ; c = cir e = ellip b = box

# Storm Sewer Profile

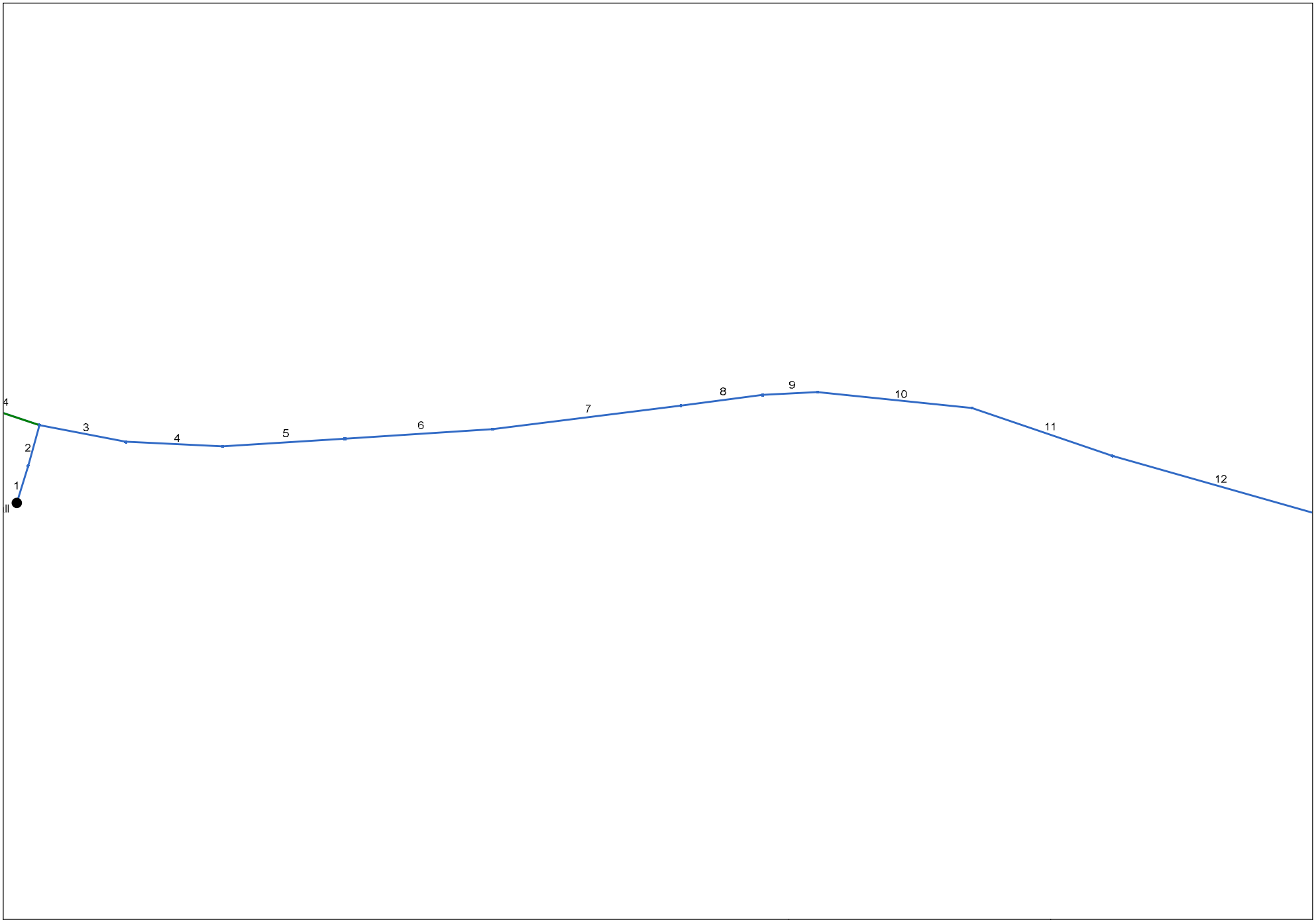
SCM 5B 10-YEAR PROFILE 1-2

Proj. file: SCM 5B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan

SCM 5C 10-YEAR




| | | |
|---|---|---|
| Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Date: 4/11/2025 |

# Storm Sewer Inventory Report

SCM 5C 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 72.475 | -73.012 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 291.50 | 7.30 | 296.79 | 30 | Cir | 0.013 | 0.15 | 306.95 | Pipe - (547) |
| 2 | 1 | 79.000 | -1.713 | Comb | 0.00 | 0.64 | 0.72 | 10.0 | 300.71 | 1.00 | 301.50 | 30 | Cir | 0.013 | 1.50 | 313.00 | Pipe - (548) |
| 3 | 2 | 163.563 | 85.653 | Comb | 0.00 | 0.68 | 0.72 | 10.0 | 301.80 | 4.65 | 309.40 | 24 | Cir | 0.013 | 0.50 | 317.91 | Pipe - (550) |
| 4 | 3 | 180.720 | -8.188 | Comb | 0.00 | 1.04 | 0.72 | 10.0 | 309.62 | 4.75 | 318.20 | 24 | Cir | 0.013 | 0.50 | 326.00 | Pipe - (551) |
| 5 | 4 | 228.426 | -6.317 | Comb | 0.00 | 1.16 | 0.72 | 10.0 | 318.44 | 5.50 | 331.00 | 24 | Cir | 0.013 | 0.50 | 340.00 | Pipe - (552) |
| 6 | 5 | 275.660 | -0.168 | Comb | 0.00 | 1.34 | 0.72 | 10.0 | 332.20 | 5.30 | 346.80 | 24 | Cir | 0.013 | 0.50 | 355.00 | Pipe - (553) |
| 7 | 6 | 353.411 | -3.412 | Comb | 0.00 | 0.80 | 0.72 | 10.0 | 347.05 | 2.25 | 355.00 | 18 | Cir | 0.013 | 0.50 | 363.95 | Pipe - (554) |
| 8 | 7 | 153.914 | -0.315 | Comb | 0.00 | 0.27 | 0.72 | 10.0 | 355.22 | 2.00 | 358.30 | 15 | Cir | 0.013 | 0.50 | 366.74 | Pipe - (562) |
| 9 | 8 | 101.668 | 4.365 | Comb | 0.00 | 0.62 | 0.72 | 10.0 | 358.57 | 2.00 | 360.60 | 15 | Cir | 0.013 | 0.50 | 369.33 | Pipe - (561) |
| 10 | 9 | 289.580 | 9.059 | Comb | 0.00 | 0.70 | 0.72 | 10.0 | 360.86 | 3.50 | 371.00 | 15 | Cir | 0.013 | 0.50 | 379.86 | Pipe - (560) |
| 11 | 10 | 276.541 | 12.894 | Comb | 0.00 | 0.24 | 0.72 | 10.0 | 371.25 | 1.50 | 375.40 | 15 | Cir | 0.013 | 0.50 | 386.85 | Pipe - (559) |
| 12 | 11 | 389.260 | -2.936 | Comb | 0.00 | 0.27 | 0.72 | 10.0 | 375.65 | 0.50 | 377.60 | 15 | Cir | 0.013 | 1.29 | 386.53 | Pipe - (558) |
| 13 | 12 | 86.959 | 56.108 | Comb | 0.00 | 0.16 | 0.72 | 10.0 | 377.80 | 2.99 | 380.40 | 15 | Cir | 0.013 | 1.00 | 385.00 | Pipe - (557) |
| 14 | 2 | 176.320 | -86.677 | Comb | 0.00 | 0.24 | 0.72 | 10.0 | 301.80 | 1.03 | 303.62 | 18 | Cir | 0.013 | 1.00 | 311.00 | Pipe - (549) |

Project File: SCM 5C Storm Network.stm

Number of lines: 14

Date: 4/11/2025

# Structure Report



SCM 5C 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | JB 561 | Manhole | 306.95 | Rect | 4.00 | 4.00 | 30 | Cir | 296.79 | 30 | Cir | 300.71 |
| 2 | CB 562 | Combination | 313.00 | Rect | 4.00 | 4.00 | 30 | Cir | 301.50 | 24<br>18 | Cir<br>Cir | 301.80<br>301.80 |
| 3 | CB 563 | Combination | 317.91 | Rect | 4.00 | 4.00 | 24 | Cir | 309.40 | 24 | Cir | 309.62 |
| 4 | CB 564 | Combination | 326.00 | Rect | 4.00 | 4.00 | 24 | Cir | 318.20 | 24 | Cir | 318.44 |
| 5 | CB 565 | Combination | 340.00 | Rect | 4.00 | 4.00 | 24 | Cir | 331.00 | 24 | Cir | 332.20 |
| 6 | CB 566 | Combination | 355.00 | Rect | 4.00 | 4.00 | 24 | Cir | 346.80 | 18 | Cir | 347.05 |
| 7 | CB 567 | Combination | 363.95 | Rect | 4.00 | 4.00 | 18 | Cir | 355.00 | 15 | Cir | 355.22 |
| 8 | CB 568 | Combination | 366.74 | Rect | 4.00 | 4.00 | 15 | Cir | 358.30 | 15 | Cir | 358.57 |
| 9 | CB 569 | Combination | 369.33 | Rect | 4.00 | 4.00 | 15 | Cir | 360.60 | 15 | Cir | 360.86 |
| 10 | CB 570 | Combination | 379.86 | Rect | 4.00 | 4.00 | 15 | Cir | 371.00 | 15 | Cir | 371.25 |
| 11 | CB 571 | Combination | 386.85 | Rect | 4.00 | 4.00 | 15 | Cir | 375.40 | 15 | Cir | 375.65 |
| 12 | CB 572 | Combination | 386.53 | Rect | 4.00 | 4.00 | 15 | Cir | 377.60 | 15 | Cir | 377.80 |
| 13 | CB 572A | Combination | 385.00 | Rect | 4.00 | 4.00 | 15 | Cir | 380.40 | | | |
| 14 | CB 562A | Combination | 311.00 | Rect | 4.00 | 4.00 | 18 | Cir | 303.62 | | | |

Project File: SCM 5C Storm Network.stm | Number of Structures: 14 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 5C 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (547) | 27.15 | 30 | Cir | 72.475 | 291.50 | 296.79 | 7.299 | 294.00 | 298.56 | n/a | 298.56 j | End | Manhole |
| 2 | Pipe - (548) | 27.26 | 30 | Cir | 79.000 | 300.71 | 301.50 | 1.000 | 302.20 | 303.28 | n/a | 303.28 | 1 | Combination |
| 3 | Pipe - (550) | 24.52 | 24 | Cir | 163.563 | 301.80 | 309.40 | 4.647 | 303.28 | 311.15 | n/a | 311.15 | 2 | Combination |
| 4 | Pipe - (551) | 22.45 | 24 | Cir | 180.720 | 309.62 | 318.20 | 4.748 | 311.15 | 319.89 | 0.49 | 319.89 | 3 | Combination |
| 5 | Pipe - (552) | 19.17 | 24 | Cir | 228.426 | 318.44 | 331.00 | 5.498 | 319.89 | 332.57 | n/a | 332.57 | 4 | Combination |
| 6 | Pipe - (553) | 15.36 | 24 | Cir | 275.660 | 332.20 | 346.80 | 5.296 | 332.94 | 348.21 | 0.33 | 348.21 | 5 | Combination |
| 7 | Pipe - (554) | 10.93 | 18 | Cir | 353.411 | 347.05 | 355.00 | 2.250 | 348.21 | 356.27 | n/a | 356.27 | 6 | Combination |
| 8 | Pipe - (562) | 8.16 | 15 | Cir | 153.914 | 355.22 | 358.30 | 2.001 | 356.27 | 359.42 | n/a | 359.42 | 7 | Combination |
| 9 | Pipe - (561) | 7.23 | 15 | Cir | 101.668 | 358.57 | 360.60 | 1.997 | 359.42 | 361.67 | n/a | 361.67 | 8 | Combination |
| 10 | Pipe - (560) | 5.10 | 15 | Cir | 289.580 | 360.86 | 371.00 | 3.502 | 361.67 | 371.92 | n/a | 371.92 | 9 | Combination |
| 11 | Pipe - (559) | 2.58 | 15 | Cir | 276.541 | 371.25 | 375.40 | 1.501 | 371.92 | 376.04 | n/a | 376.04 j | 10 | Combination |
| 12 | Pipe - (558) | 1.76 | 15 | Cir | 389.260 | 375.65 | 377.60 | 0.500 | 376.19 | 378.14 | 0.24 | 378.38 | 11 | Combination |
| 13 | Pipe - (557) | 0.67 | 15 | Cir | 86.959 | 377.80 | 380.40 | 2.995 | 378.38 | 380.72 | n/a | 380.72 j | 12 | Combination |
| 14 | Pipe - (549) | 1.01 | 18 | Cir | 176.320 | 301.80 | 303.62 | 1.032 | 303.28 | 304.00 | n/a | 304.00 j | 2 | Combination |

Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 5C 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | JB 561 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 2 | CB 562 | 2.71 | 2.89 | 3.11 | 2.48 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.54 | 0.23 | 7.37 | 0.0 | 14 |
| 3 | CB 563 | 2.88 | 3.61 | 3.59 | 2.89 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.30 | 0.22 | 7.20 | 0.0 | 2 |
| 4 | CB 564 | 4.40 | 3.43 | 4.21 | 3.61 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.49 | 0.23 | 7.47 | 0.0 | 3 |
| 5 | CB 565 | 4.91 | 3.03 | 4.50 | 3.43 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.060 | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.69 | 0.21 | 6.62 | 0.0 | 4 |
| 6 | CB 566 | 5.67 | 1.25 | 3.89 | 3.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.28 | 9.96 | 0.22 | 6.87 | 0.0 | 5 |
| 7 | CB 567 | 3.38 | 0.52 | 2.65 | 1.25 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.74 | 0.17 | 4.25 | 0.0 | 6 |
| 8 | CB 568 | 1.14 | 1.13 | 1.75 | 0.52 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.41 | 0.13 | 2.41 | 0.0 | 7 |
| 9 | CB 569 | 2.62 | 0.89 | 2.38 | 1.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.88 | 0.17 | 4.37 | 0.0 | 8 |
| 10 | CB 570 | 2.96 | 0.10 | 2.17 | 0.89 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.39 | 0.16 | 3.75 | 0.0 | 9 |
| 11 | CB 571 | 1.01 | 0.00 | 0.92 | 0.10 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.63 | 0.07 | 1.24 | 0.0 | 10 |
| 12 | CB 572 | 1.13 | 0.00 | 1.00 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.94 | 0.08 | 1.39 | 0.0 | Off |
| 13 | CB 572A | 0.67 | 0.00 | 0.65 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.54 | 0.04 | 0.72 | 0.0 | Off |
| 14 | CB 562A | 1.01 | 2.48 | 3.50 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.34 | 12.85 | 0.34 | 12.85 | 0.0 | Off |

Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 5C 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 30 | 27.15 | 291.50 | 294.00 | 2.50 | 3.73 | 5.53 | 0.48 | 294.48 | 0.438 | 72.475 | 296.79 | 298.56 j | 1.77** | 3.73 | 7.28 | 0.83 | 299.39 | 0.603 | 0.521 | n/a | 0.15 | n/a |
| 2 | 30 | 27.26 | 300.71 | 302.20 | 1.49* | 3.05 | 8.94 | 0.83 | 303.03 | 0.000 | 79.000 | 301.50 | 303.28 | 1.78** | 3.74 | 7.30 | 0.83 | 304.11 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 3 | 24 | 24.52 | 301.80 | 303.28 | 1.48 | 2.49 | 9.85 | 1.10 | 304.38 | 0.000 | 163.563 | 309.40 | 311.15 | 1.75** | 2.91 | 8.42 | 1.10 | 312.25 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 4 | 24 | 22.45 | 309.62 | 311.15 | 1.53 | 2.58 | 8.72 | 0.98 | 312.13 | 0.000 | 180.720 | 318.20 | 319.89 | 1.69** | 2.83 | 7.94 | 0.98 | 320.87 | 0.000 | 0.000 | n/a | 0.50 | 0.49 |
| 5 | 24 | 19.17 | 318.44 | 319.89 | 1.45 | 2.44 | 7.87 | 0.81 | 320.70 | 0.000 | 228.426 | 331.00 | 332.57 | 1.57** | 2.65 | 7.23 | 0.81 | 333.39 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 6 | 24 | 15.36 | 332.20 | 332.94 | 0.74* | 1.07 | 14.41 | 0.65 | 333.60 | 0.000 | 275.660 | 346.80 | 348.21 | 1.41** | 2.37 | 6.48 | 0.65 | 348.86 | 0.000 | 0.000 | n/a | 0.50 | 0.33 |
| 7 | 18 | 10.93 | 347.05 | 348.21 | 1.16 | 1.47 | 7.45 | 0.73 | 348.95 | 0.000 | 353.411 | 355.00 | 356.27 | 1.27** | 1.59 | 6.87 | 0.73 | 357.00 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 8 | 15 | 8.16 | 355.22 | 356.27 | 1.05 | 1.10 | 7.44 | 0.77 | 357.03 | 0.000 | 153.914 | 358.30 | 359.42 | 1.12** | 1.16 | 7.03 | 0.77 | 360.19 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 9 | 15 | 7.23 | 358.57 | 359.42 | 0.85 | 0.89 | 8.12 | 0.65 | 360.07 | 0.000 | 101.668 | 360.60 | 361.67 | 1.07** | 1.12 | 6.45 | 0.65 | 362.32 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 10 | 15 | 5.10 | 360.86 | 361.67 | 0.81 | 0.85 | 6.04 | 0.44 | 362.11 | 0.000 | 289.580 | 371.00 | 371.92 | 0.92** | 0.96 | 5.30 | 0.44 | 372.35 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 11 | 15 | 2.58 | 371.25 | 371.92 | 0.67 | 0.64 | 3.89 | 0.26 | 372.17 | 0.000 | 276.541 | 375.40 | 376.04 j | 0.64** | 0.64 | 4.06 | 0.26 | 376.30 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 12 | 15 | 1.76 | 375.65 | 376.19 | 0.54* | 0.51 | 3.48 | 0.19 | 376.38 | 0.499 | 389.260 | 377.60 | 378.14 | 0.54 | 0.51 | 3.47 | 0.19 | 378.33 | 0.498 | 0.499 | 1.942 | 1.29 | 0.24 |
| 13 | 15 | 0.67 | 377.80 | 378.38 | 0.58 | 0.25 | 1.20 | 0.11 | 378.50 | 0.000 | 86.959 | 380.40 | 380.72 j | 0.32** | 0.25 | 2.71 | 0.11 | 380.84 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 14 | 18 | 1.01 | 301.80 | 303.28 | 1.48 | 0.35 | 0.58 | 0.13 | 303.41 | 0.000 | 176.320 | 303.62 | 304.00 j | 0.38** | 0.35 | 2.93 | 0.13 | 304.13 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 5C Storm Network.stm

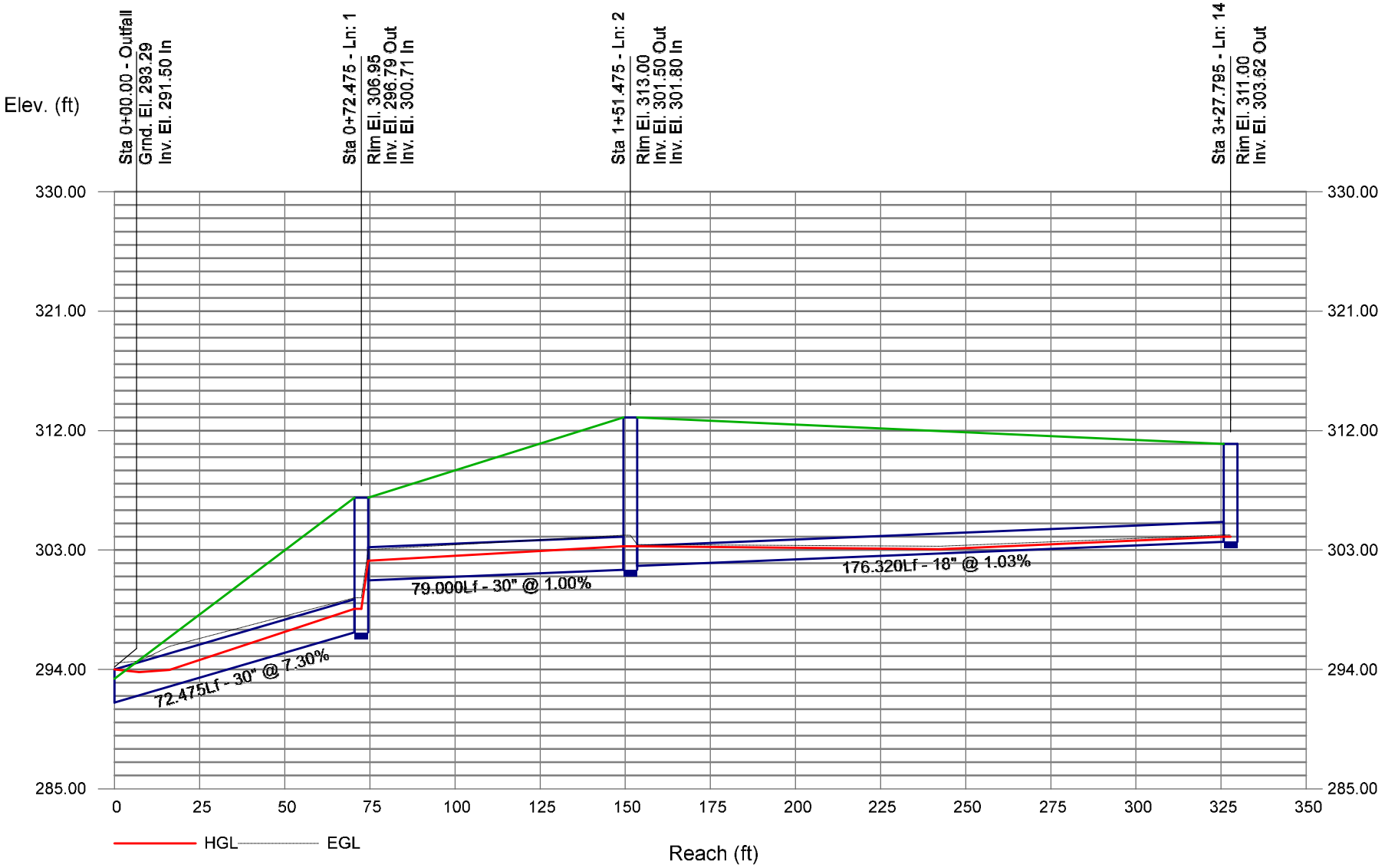
Number of lines: 14

Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

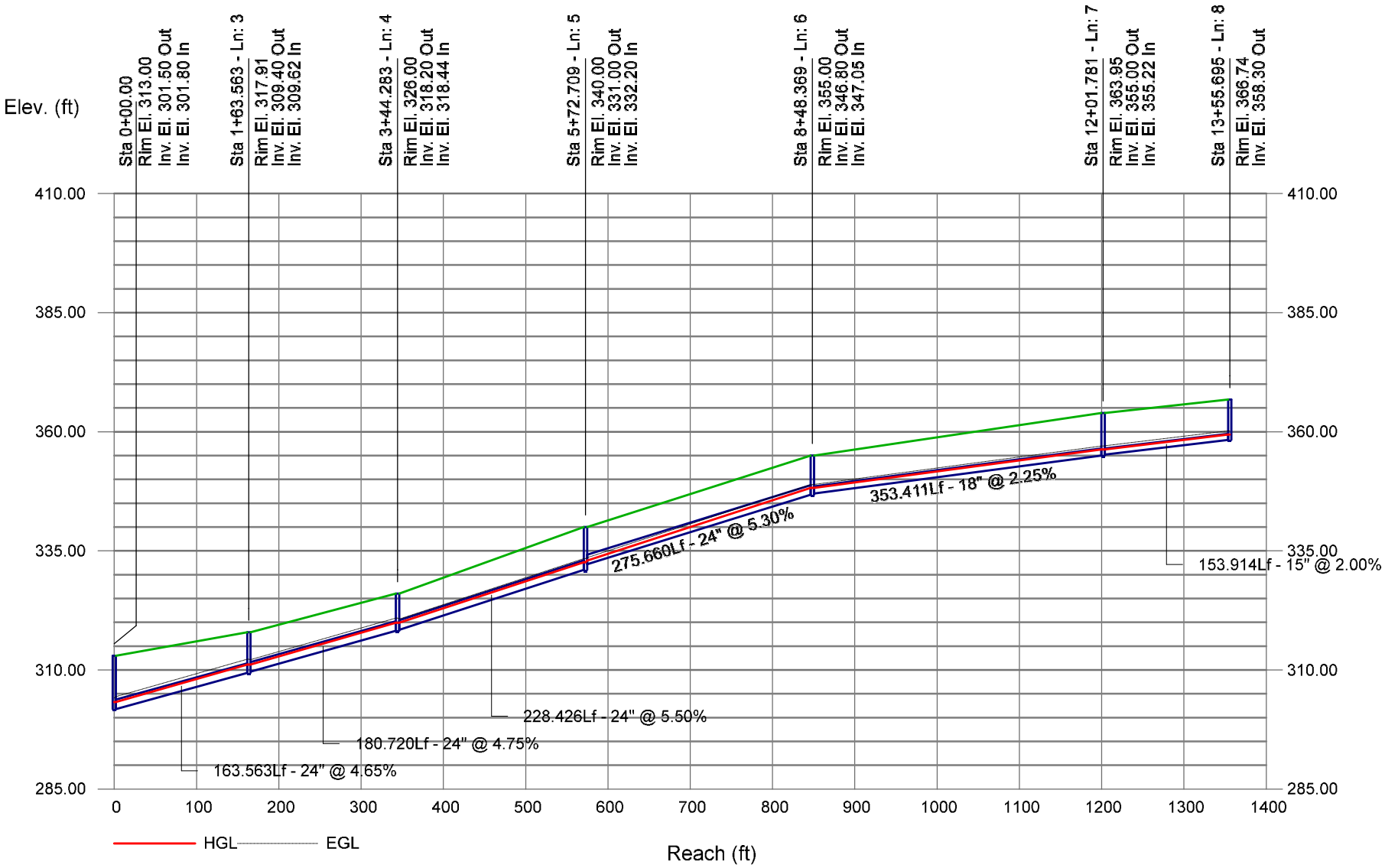
# Storm Sewer Profile

SCM 5C 10-YEAR PROFILE 1-14 Proj. file: SCM 5C Storm Network.stm



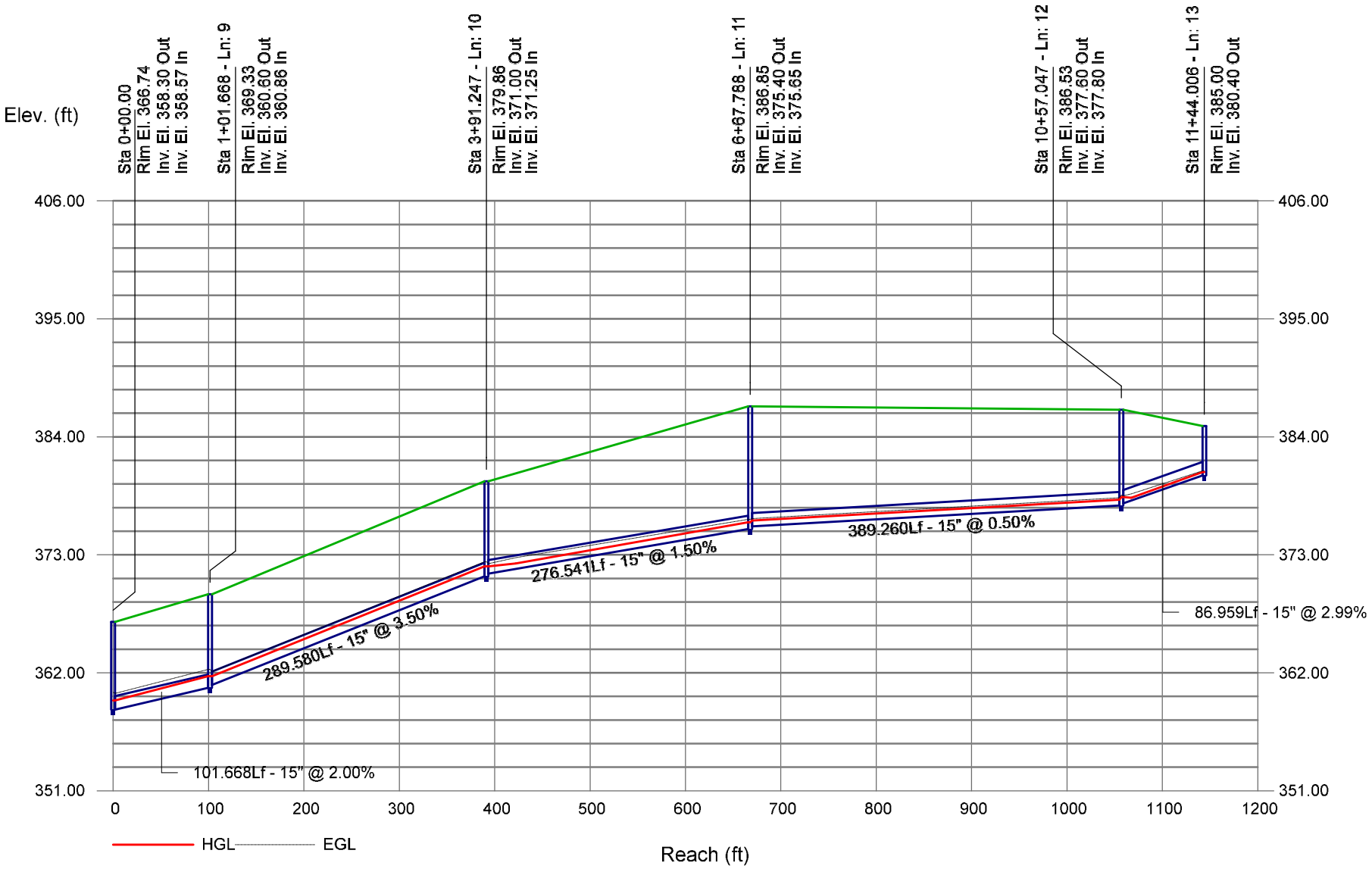
# Storm Sewer Profile

SCM 5C 10-YEAR PROFILE 3-8 Proj. file: SCM 5C Storm Network.stm



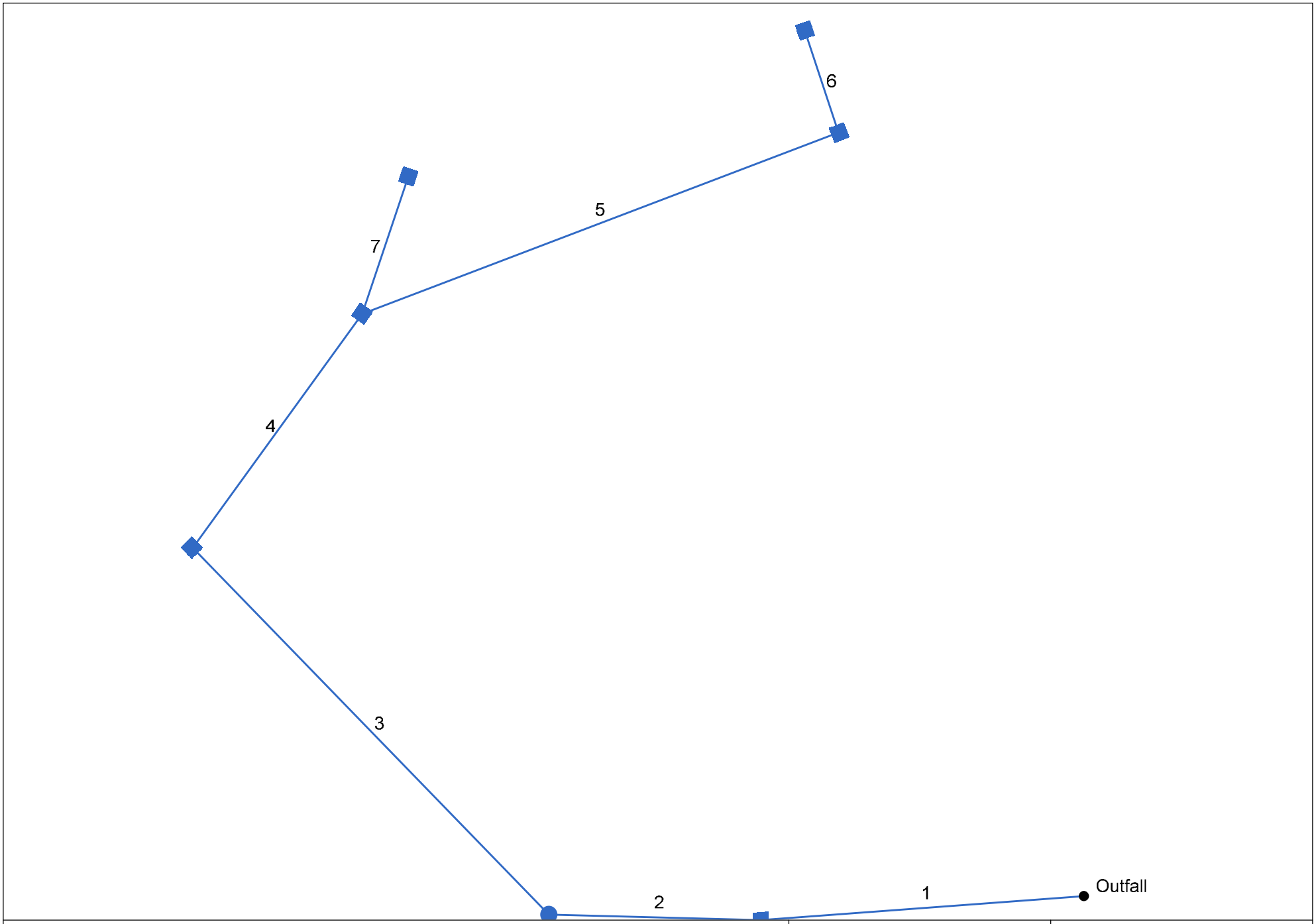
# Storm Sewer Profile

SCM 5C 10-YEAR PROFILE 9-13 Proj. file: SCM 5C Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan

SCM 6A 10-YEAR




| | | |
|---|---|---|
| Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Date: 4/11/2025 |

# Storm Sewer Inventory Report

SCM 6A 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 84.216 | 175.714 | DrGrt | 0.00 | 0.44 | 0.60 | 10.0 | 296.61 | 2.84 | 299.00 | 15 | Cir | 0.013 | 0.50 | 303.92 | Pipe - (495) |
| 2 | 1 | 55.122 | 5.798 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 299.20 | 3.81 | 301.30 | 15 | Cir | 0.013 | 0.74 | 306.41 | Pipe - (494) |
| 3 | 2 | 133.087 | 44.423 | Comb | 0.00 | 0.91 | 0.60 | 10.0 | 301.50 | 1.20 | 303.10 | 15 | Cir | 0.013 | 1.48 | 310.62 | Pipe - (493) |
| 4 | 3 | 75.218 | 79.870 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 303.30 | 6.91 | 308.50 | 15 | Cir | 0.013 | 0.91 | 316.23 | Pipe - (492) |
| 5 | 4 | 132.556 | 33.318 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 308.70 | 7.17 | 318.20 | 15 | Cir | 0.013 | 1.50 | 326.22 | Pipe - (491) |
| 6 | 5 | 28.021 | -87.190 | Comb | 0.00 | 0.51 | 0.60 | 10.0 | 318.40 | 1.00 | 318.68 | 15 | Cir | 0.013 | 1.00 | 326.30 | Pipe - (496) |
| 7 | 4 | 37.852 | -17.053 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 308.70 | 2.08 | 309.49 | 18 | Cir | 0.013 | 1.00 | 318.16 | Pipe - (512) |

Project File: SCM 6A Storm Network.stm

Number of lines: 7

Date: 4/11/2025

# Structure Report

SCM 6A 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 601 | DropGrate | 303.92 | Rect | 4.00 | 4.00 | 15 | Cir | 299.00 | 15 | Cir | 299.20 |
| 2 | JB 602 | Manhole | 306.41 | Cir | 4.00 | 4.00 | 15 | Cir | 301.30 | 15 | Cir | 301.50 |
| 3 | CB 603 | Combination | 310.62 | Rect | 4.00 | 4.00 | 15 | Cir | 303.10 | 15 | Cir | 303.30 |
| 4 | CB 604 | Combination | 316.23 | Rect | 4.00 | 4.00 | 15 | Cir | 308.50 | 15<br>18 | Cir<br>Cir | 308.70<br>308.70 |
| 5 | CB 605 | Combination | 326.22 | Rect | 4.00 | 4.00 | 15 | Cir | 318.20 | 15 | Cir | 318.40 |
| 6 | CB 605A | Combination | 326.30 | Rect | 4.00 | 4.00 | 15 | Cir | 318.68 | | | |
| 7 | CB 604A | Combination | 318.16 | Rect | 4.00 | 4.00 | 18 | Cir | 309.49 | | | |

Project File: SCM 6A Storm Network.stm | Number of Structures: 7 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 6A 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (495) | 8.30 | 15 | Cir | 84.216 | 296.61 | 299.00 | 2.838 | 297.86 | 300.13 | n/a | 300.13 j | End | DropGrate |
| 2 | Pipe - (494) | 6.79 | 15 | Cir | 55.122 | 299.20 | 301.30 | 3.810 | 300.13 | 302.35 | n/a | 302.35 | 1 | Manhole |
| 3 | Pipe - (493) | 6.87 | 15 | Cir | 133.087 | 301.50 | 303.10 | 1.202 | 302.49 | 304.15 | n/a | 304.15 | 2 | Combination |
| 4 | Pipe - (492) | 3.69 | 15 | Cir | 75.218 | 303.30 | 308.50 | 6.913 | 304.15 | 309.28 | n/a | 309.28 j | 3 | Combination |
| 5 | Pipe - (491) | 2.16 | 15 | Cir | 132.556 | 308.70 | 318.20 | 7.167 | 309.28 | 318.79 | n/a | 318.79 | 4 | Combination |
| 6 | Pipe - (496) | 1.85 | 15 | Cir | 28.021 | 318.40 | 318.68 | 0.999 | 318.86 | 319.22 | n/a | 319.22 | 5 | Combination |
| 7 | Pipe - (512) | 1.26 | 18 | Cir | 37.852 | 308.70 | 309.49 | 2.084 | 309.28 | 309.91 | n/a | 309.91 j | 4 | Combination |

Project File: SCM 6A Storm Network.stm

Number of lines: 7

Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report

SCM 6A 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 601 | 1.60 | 0.00 | 1.23 | 0.37 | DrGrt | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 15.10 | 0.13 | 15.10 | 0.0 | Off |
| 2 | JB 602 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 603 | 3.31 | 0.00 | 2.19 | 1.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.41 | 0.18 | 4.92 | 0.0 | Off |
| 4 | CB 604 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | Off |
| 5 | CB 605 | 0.32 | 0.00 | 0.32 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.92 | 0.00 | 0.00 | 0.0 | Off |
| 6 | CB 605A | 1.85 | 0.00 | 1.45 | 0.40 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.40 | 0.13 | 2.29 | 0.0 | Off |
| 7 | CB 604A | 1.26 | 0.00 | 1.09 | 0.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.24 | 0.09 | 1.53 | 0.0 | Off |

Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 88.24 / (Inlet time + 15.50) ^ 0.83; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 6A 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 15 | 8.30 | 296.61 | 297.86 | 1.25 | 1.17 | 6.76 | 0.71 | 298.57 | 1.651 | 84.216 | 299.00 | 300.13 j | 1.13** | 1.17 | 7.12 | 0.79 | 300.92 | 1.450 | 1.551 | n/a | 0.50 | n/a |
| 2 | 15 | 6.79 | 299.20 | 300.13 | 0.93 | 0.98 | 6.96 | 0.60 | 300.72 | 0.000 | 55.122 | 301.30 | 302.35 | 1.05** | 1.10 | 6.19 | 0.60 | 302.94 | 0.000 | 0.000 | n/a | 0.74 | n/a |
| 3 | 15 | 6.87 | 301.50 | 302.49 | 0.99* | 1.04 | 6.57 | 0.60 | 303.10 | 0.000 | 133.087 | 303.10 | 304.15 | 1.05** | 1.10 | 6.24 | 0.60 | 304.76 | 0.000 | 0.000 | n/a | 1.48 | n/a |
| 4 | 15 | 3.69 | 303.30 | 304.15 | 0.85 | 0.80 | 4.15 | 0.33 | 304.48 | 0.000 | 75.218 | 308.50 | 309.28 j | 0.78** | 0.80 | 4.61 | 0.33 | 309.61 | 0.000 | 0.000 | n/a | 0.91 | n/a |
| 5 | 15 | 2.16 | 308.70 | 309.28 | 0.58 | 0.55 | 3.91 | 0.23 | 309.50 | 0.000 | 132.556 | 318.20 | 318.79 | 0.59** | 0.56 | 3.82 | 0.23 | 319.01 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 6 | 15 | 1.85 | 318.40 | 318.86 | 0.46* | 0.41 | 4.54 | 0.21 | 319.06 | 0.000 | 28.021 | 318.68 | 319.22 | 0.54** | 0.51 | 3.64 | 0.21 | 319.43 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 7 | 18 | 1.26 | 308.70 | 309.28 | 0.58 | 0.40 | 2.02 | 0.15 | 309.43 | 0.000 | 37.852 | 309.49 | 309.91 j | 0.42** | 0.40 | 3.11 | 0.15 | 310.06 | 0.000 | 0.000 | n/a | 1.00 | n/a |

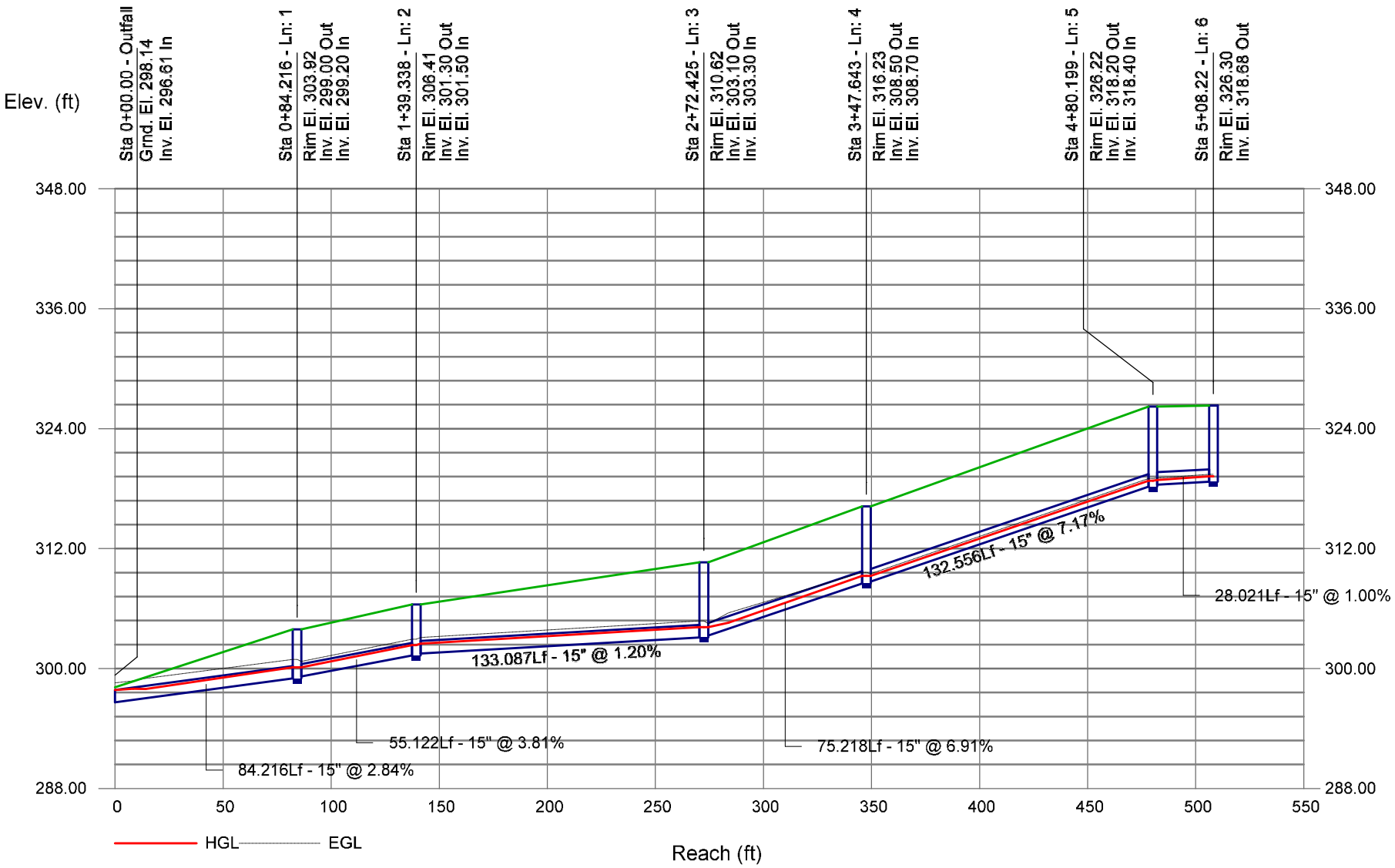
Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Storm Sewer Profile

SCM 6A 10-YEAR PROFILE 1-6

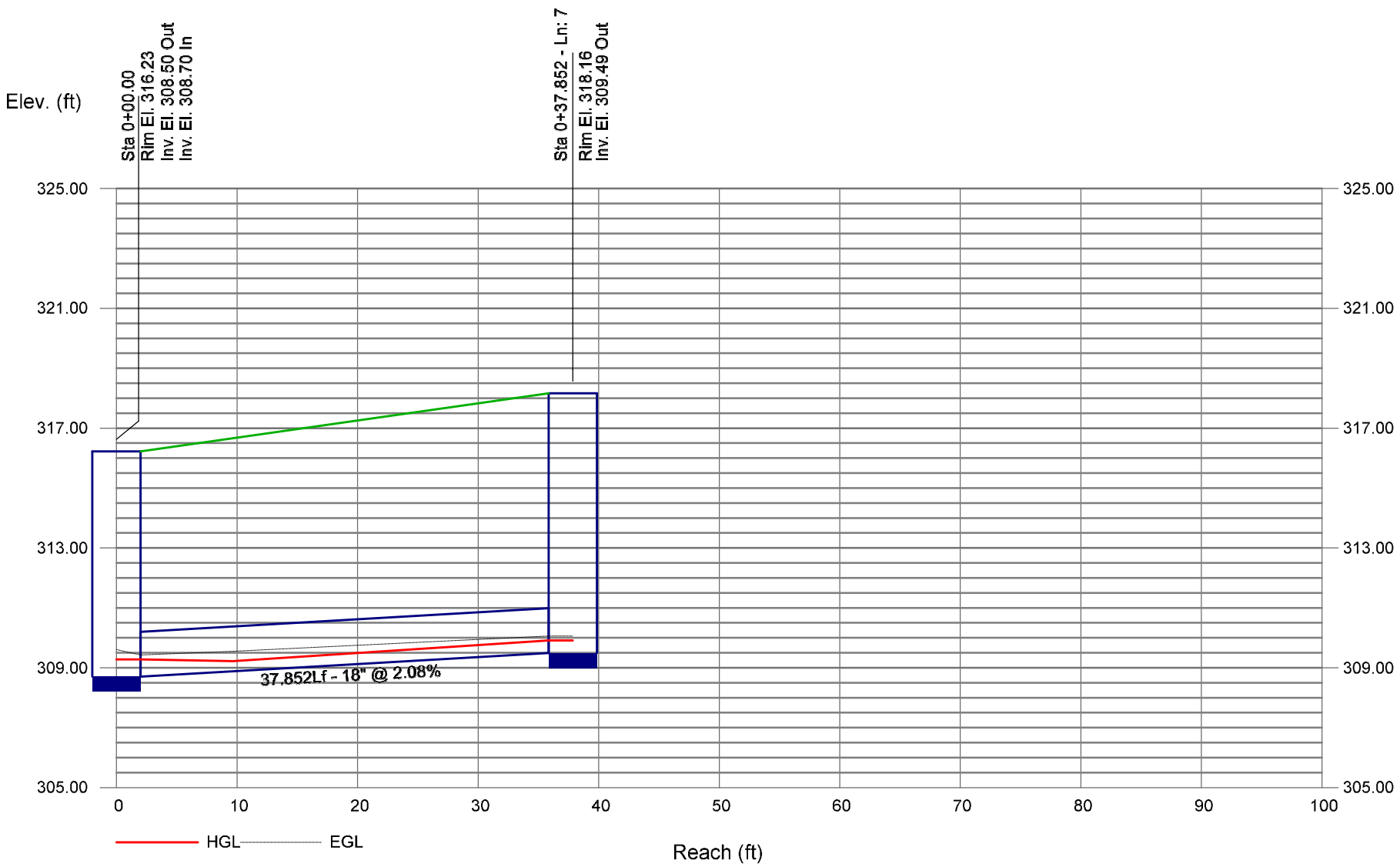
Proj. file: SCM 6A Storm Network.stm



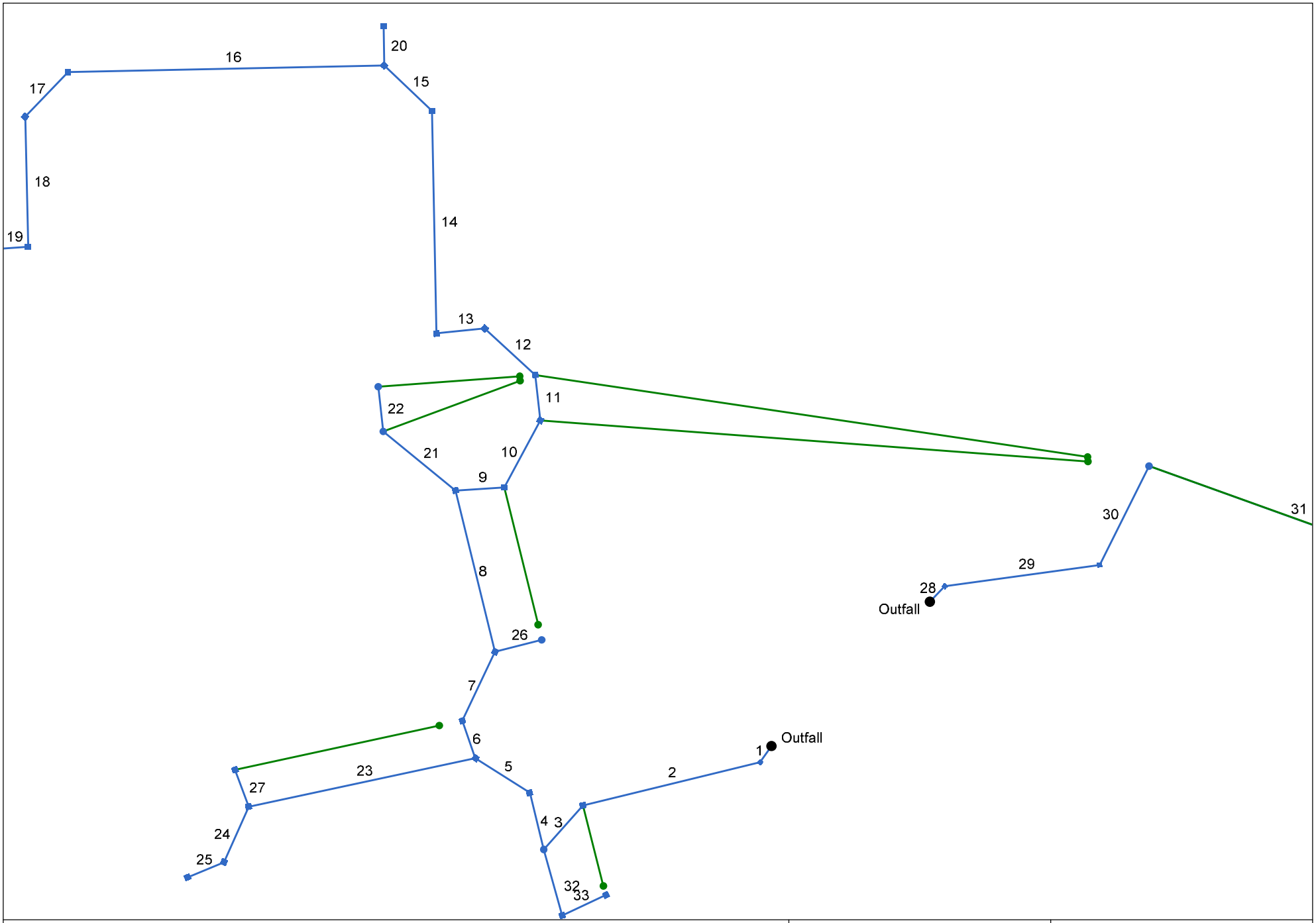
# Storm Sewer Profile

SCM 6A 10-YEAR PROFILE 7-7

Proj. file: SCM 6A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 6B 10-YEAR




| Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 6B 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 14.076 | 124.693 | DrGrt | 0.00 | 0.73 | 0.60 | 10.0 | 297.31 | 4.90 | 298.00 | 24 | Cir | 0.013 | 1.07 | 312.44 | Pipe - (466) |
| 2 | 1 | 129.199 | 41.569 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 298.20 | 2.17 | 301.00 | 24 | Cir | 0.013 | 0.93 | 318.02 | Pipe - (465) |
| 3 | 2 | 41.927 | -34.580 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 301.28 | 1.00 | 301.70 | 24 | Cir | 0.013 | 1.95 | 315.00 | Pipe - (546) |
| 4 | 3 | 41.516 | 124.607 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 301.90 | 10.00 | 306.05 | 24 | Cir | 0.013 | 1.10 | 319.55 | Pipe - (514) |
| 5 | 4 | 45.778 | -43.754 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 306.25 | 9.94 | 310.80 | 24 | Cir | 0.013 | 1.12 | 324.12 | Pipe - (460) |
| 6 | 5 | 28.278 | 38.229 | Comb | 0.00 | 0.54 | 0.60 | 10.0 | 311.00 | 9.90 | 313.80 | 24 | Cir | 0.013 | 1.12 | 324.70 | Pipe - (321) |
| 7 | 6 | 54.257 | 44.766 | Comb | 0.00 | 0.53 | 0.60 | 10.0 | 314.00 | 9.95 | 319.40 | 24 | Cir | 0.013 | 1.21 | 331.00 | Pipe - (459) |
| 8 | 7 | 118.068 | -39.263 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 319.60 | 6.27 | 327.00 | 24 | Cir | 0.013 | 2.20 | 336.57 | Pipe - (513) |
| 9 | 8 | 34.519 | 99.944 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 327.20 | 0.61 | 327.41 | 18 | Cir | 0.013 | 1.31 | 337.18 | Pipe - (463) |
| 10 | 9 | 54.019 | -58.028 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 327.60 | 0.74 | 328.00 | 18 | Cir | 0.013 | 0.92 | 334.59 | Pipe - (310) |
| 11 | 10 | 32.394 | -34.234 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 328.20 | 0.62 | 328.40 | 18 | Cir | 0.013 | 1.06 | 333.35 | Pipe - (309) |
| 12 | 11 | 49.141 | -41.395 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 328.60 | 1.02 | 329.10 | 18 | Cir | 0.013 | 1.18 | 337.00 | Pipe - (308) |
| 13 | 12 | 34.087 | -48.578 | Comb | 0.00 | 0.95 | 0.60 | 10.0 | 329.30 | 0.88 | 329.60 | 18 | Cir | 0.013 | 1.50 | 337.00 | Pipe - (307) |
| 14 | 13 | 158.245 | 94.812 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 329.80 | 3.73 | 335.70 | 15 | Cir | 0.013 | 1.12 | 344.52 | Pipe - (301) |
| 15 | 14 | 46.667 | -44.997 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 335.90 | 4.50 | 338.00 | 15 | Cir | 0.013 | 1.69 | 345.87 | Pipe - (300) |
| 16 | 15 | 224.015 | -44.997 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 338.20 | 2.72 | 344.30 | 15 | Cir | 0.013 | 1.13 | 352.48 | Pipe - (486) |
| 17 | 16 | 43.823 | -45.023 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 344.50 | 0.91 | 344.90 | 15 | Cir | 0.013 | 1.12 | 352.51 | Pipe - (485) |
| 18 | 17 | 92.623 | -44.977 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 345.10 | 1.25 | 346.26 | 15 | Cir | 0.013 | 1.50 | 354.03 | Pipe - (502) |
| 19 | 18 | 28.029 | 87.415 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 346.50 | 0.61 | 346.67 | 15 | Cir | 0.013 | 1.00 | 354.08 | Pipe - (503) |
| 20 | 15 | 27.999 | 44.982 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 338.20 | 1.00 | 338.48 | 15 | Cir | 0.013 | 1.00 | 345.85 | Pipe - (305) |
| 21 | 8 | 66.408 | -37.002 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 327.20 | 6.63 | 331.60 | 15 | Cir | 0.013 | 1.12 | 340.36 | Pipe - (537) |
| 22 | 21 | 32.002 | 44.457 | Comb | 0.00 | 0.51 | 0.60 | 10.0 | 331.80 | 0.59 | 331.99 | 15 | Cir | 0.013 | 1.00 | 340.43 | Pipe - (538) |
| 23 | 5 | 164.315 | -44.670 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 311.00 | 4.75 | 318.80 | 18 | Cir | 0.013 | 1.49 | 326.34 | Pipe - (315) |

Project File: SCM 6B Storm Network.stm

Number of lines: 33

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 6B 10-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 43.094 | -54.143 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 319.00 | 1.39 | 319.60 | 15 | Cir | 0.013 | 1.10 | 327.22 | Pipe - (499) |
| 25 | 24 | 28.022 | 43.733 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 319.80 | 0.61 | 319.97 | 15 | Cir | 0.013 | 1.00 | 327.23 | Pipe - (498) |
| 26 | 7 | 33.996 | 50.101 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 319.60 | 10.00 | 323.00 | 15 | Cir | 0.013 | 1.00 | 331.00 | Pipe - (545) |
| 27 | 23 | 28.000 | 81.868 | Comb | 0.00 | 0.70 | 0.60 | 10.0 | 319.00 | 1.00 | 319.28 | 15 | Cir | 0.013 | 1.00 | 326.31 | Pipe - (320) |
| 28 | End | 15.198 | -46.442 | DrGrt | 0.00 | 1.01 | 0.60 | 10.0 | 293.69 | 2.04 | 294.00 | 18 | Cir | 0.013 | 1.01 | 309.92 | Pipe - (539) |
| 29 | 28 | 110.638 | 38.584 | DrGrt | 0.00 | 0.11 | 0.60 | 10.0 | 294.20 | 6.87 | 301.80 | 15 | Cir | 0.013 | 1.28 | 315.26 | Pipe - (540) |
| 30 | 29 | 78.569 | -55.641 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 302.00 | 0.89 | 302.70 | 15 | Cir | 0.013 | 1.49 | 313.86 | Pipe - (541) |
| 31 | 30 | 208.966 | 83.346 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 302.90 | 1.00 | 305.00 | 15 | Cir | 0.013 | 1.00 | 311.00 | Pipe - (542) |
| 32 | 3 | 48.735 | -57.114 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 301.91 | 0.60 | 302.20 | 18 | Cir | 0.013 | 1.50 | 310.31 | Pipe - (462) |
| 33 | 32 | 34.300 | -99.882 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 302.40 | 0.70 | 302.64 | 15 | Cir | 0.013 | 1.00 | 310.04 | Pipe - (464) |

Project File: SCM 6B Storm Network.stm

Number of lines: 33

Date: 4/11/2025

# Structure Report



SCM 6B 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | CB 611 | DropGrate | 312.44 | Rect | 3.00 | 3.00 | 24 | Cir | 298.00 | 24 | Cir | 298.20 |
| 2 | CB 612 | Combination | 318.02 | Rect | 4.00 | 4.00 | 24 | Cir | 301.00 | 24 | Cir | 301.28 |
| 3 | CB 613 | Combination | 315.00 | Cir | 4.00 | 4.00 | 24 | Cir | 301.70 | 24<br>18 | Cir<br>Cir | 301.90<br>301.91 |
| 4 | CB 614 | Combination | 319.55 | Rect | 4.00 | 4.00 | 24 | Cir | 306.05 | 24 | Cir | 306.25 |
| 5 | CB 615 | Combination | 324.12 | Rect | 4.00 | 4.00 | 24 | Cir | 310.80 | 24<br>18 | Cir<br>Cir | 311.00<br>311.00 |
| 6 | CB 616 | Combination | 324.70 | Rect | 4.00 | 4.00 | 24 | Cir | 313.80 | 24 | Cir | 314.00 |
| 7 | CB 617 | Combination | 331.00 | Rect | 4.00 | 4.00 | 24 | Cir | 319.40 | 24<br>15 | Cir<br>Cir | 319.60<br>319.60 |
| 8 | CB 618 | Combination | 336.57 | Rect | 4.00 | 4.00 | 24 | Cir | 327.00 | 18<br>15 | Cir<br>Cir | 327.20<br>327.20 |
| 9 | CB 619 | Combination | 337.18 | Rect | 4.00 | 4.00 | 18 | Cir | 327.41 | 18 | Cir | 327.60 |
| 10 | CB 620 | Combination | 334.59 | Rect | 4.00 | 4.00 | 18 | Cir | 328.00 | 18 | Cir | 328.20 |
| 11 | CB 621 | Combination | 333.35 | Rect | 4.00 | 4.00 | 18 | Cir | 328.40 | 18 | Cir | 328.60 |
| 12 | CB 622 | Combination | 337.00 | Rect | 4.00 | 4.00 | 18 | Cir | 329.10 | 18 | Cir | 329.30 |
| 13 | CB 623 | Combination | 337.00 | Rect | 4.00 | 4.00 | 18 | Cir | 329.60 | 15 | Cir | 329.80 |
| 14 | CB 624 | Combination | 344.52 | Rect | 4.00 | 4.00 | 15 | Cir | 335.70 | 15 | Cir | 335.90 |
| 15 | CB 625 | Combination | 345.87 | Rect | 4.00 | 4.00 | 15 | Cir | 338.00 | 15<br>15 | Cir<br>Cir | 338.20<br>338.20 |
| 16 | CB 626 | Combination | 352.48 | Rect | 4.00 | 4.00 | 15 | Cir | 344.30 | 15 | Cir | 344.50 |
| 17 | CB 627 | Combination | 352.51 | Rect | 4.00 | 4.00 | 15 | Cir | 344.90 | 15 | Cir | 345.10 |
| 18 | CB 628 | Combination | 354.03 | Rect | 4.00 | 4.00 | 15 | Cir | 346.26 | 15 | Cir | 346.50 |
| 19 | CB 628A | Combination | 354.08 | Rect | 4.00 | 4.00 | 15 | Cir | 346.67 | | | |
| 20 | CB 625A | Combination | 345.85 | Rect | 4.00 | 4.00 | 15 | Cir | 338.48 | | | |

Project File: SCM 6B Storm Network.stm | Number of Structures: 33 | Run Date: 4/11/2025

# Structure Report

SCM 6B 10-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 618A | Combination | 340.36 | Cir | 4.00 | 4.00 | 15 | Cir | 331.60 | 15 | Cir | 331.80 |
| 22 | CB 618B | Combination | 340.43 | Cir | 4.00 | 4.00 | 15 | Cir | 331.99 | | | |
| 23 | CB 615A | Combination | 326.34 | Rect | 4.00 | 4.00 | 18 | Cir | 318.80 | 15<br>15 | Cir<br>Cir | 319.00<br>319.00 |
| 24 | CB 615C | Combination | 327.22 | Rect | 4.00 | 4.00 | 15 | Cir | 319.60 | 15 | Cir | 319.80 |
| 25 | CB 615D | Combination | 327.23 | Rect | 4.00 | 4.00 | 15 | Cir | 319.97 | | | |
| 26 | CB 617A | Combination | 331.00 | Cir | 4.00 | 4.00 | 15 | Cir | 323.00 | | | |
| 27 | CB 615B | Combination | 326.31 | Rect | 4.00 | 4.00 | 15 | Cir | 319.28 | | | |
| 28 | YI 631 | DropGrate | 309.92 | Rect | 3.00 | 3.00 | 18 | Cir | 294.00 | 15 | Cir | 294.20 |
| 29 | YI 632 | DropGrate | 315.26 | Rect | 3.00 | 3.00 | 15 | Cir | 301.80 | 15 | Cir | 302.00 |
| 30 | CB 633 | Combination | 313.86 | Cir | 4.00 | 4.00 | 15 | Cir | 302.70 | 15 | Cir | 302.90 |
| 31 | CB 634 | Combination | 311.00 | Cir | 4.00 | 4.00 | 15 | Cir | 305.00 | | | |
| 32 | CB 613A | Combination | 310.31 | Rect | 4.00 | 4.00 | 18 | Cir | 302.20 | 15 | Cir | 302.40 |
| 33 | CB 613B | Combination | 310.04 | Rect | 4.00 | 4.00 | 15 | Cir | 302.64 | | | |

# Storm Sewer Summary Report



SCM 6B 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (466) | 22.14 | 24 | Cir | 14.076 | 297.31 | 298.00 | 4.902 | 299.31 | 299.68 | n/a | 299.68 j | End | DropGrate |
| 2 | Pipe - (465) | 20.11 | 24 | Cir | 129.199 | 298.20 | 301.00 | 2.167 | 299.68 | 302.61 | n/a | 302.61 | 1 | Combination |
| 3 | Pipe - (546) | 19.92 | 24 | Cir | 41.927 | 301.28 | 301.70 | 1.002 | 302.74 | 303.30 | 1.65 | 303.30 | 2 | Combination |
| 4 | Pipe - (514) | 18.21 | 24 | Cir | 41.516 | 301.90 | 306.05 | 9.996 | 303.30 | 307.59 | n/a | 307.59 | 3 | Combination |
| 5 | Pipe - (460) | 17.84 | 24 | Cir | 45.778 | 306.25 | 310.80 | 9.939 | 307.59 | 312.32 | n/a | 312.32 | 4 | Combination |
| 6 | Pipe - (321) | 12.74 | 24 | Cir | 28.278 | 311.00 | 313.80 | 9.902 | 312.32 | 315.08 | n/a | 315.08 j | 5 | Combination |
| 7 | Pipe - (459) | 11.13 | 24 | Cir | 54.257 | 314.00 | 319.40 | 9.953 | 315.08 | 320.60 | 0.61 | 320.60 | 6 | Combination |
| 8 | Pipe - (513) | 9.36 | 24 | Cir | 118.068 | 319.60 | 327.00 | 6.268 | 320.60 | 328.09 | n/a | 328.09 | 7 | Combination |
| 9 | Pipe - (463) | 7.55 | 18 | Cir | 34.519 | 327.20 | 327.41 | 0.608 | 328.34 | 328.55 | 0.56 | 329.11 | 8 | Combination |
| 10 | Pipe - (310) | 7.56 | 18 | Cir | 54.019 | 327.60 | 328.00 | 0.740 | 329.11 | 329.34 | 0.30 | 329.63 | 9 | Combination |
| 11 | Pipe - (309) | 7.50 | 18 | Cir | 32.394 | 328.20 | 328.40 | 0.617 | 329.63 | 329.76 | 0.33 | 330.08 | 10 | Combination |
| 12 | Pipe - (308) | 6.94 | 18 | Cir | 49.141 | 328.60 | 329.10 | 1.017 | 330.08 | 330.12 | n/a | 330.12 j | 11 | Combination |
| 13 | Pipe - (307) | 6.36 | 18 | Cir | 34.087 | 329.30 | 329.60 | 0.880 | 330.18 | 330.57 | 0.64 | 330.57 | 12 | Combination |
| 14 | Pipe - (301) | 3.40 | 15 | Cir | 158.245 | 329.80 | 335.70 | 3.728 | 330.57 | 336.44 | n/a | 336.44 j | 13 | Combination |
| 15 | Pipe - (300) | 2.93 | 15 | Cir | 46.667 | 335.90 | 338.00 | 4.500 | 336.44 | 338.69 | n/a | 338.69 | 14 | Combination |
| 16 | Pipe - (486) | 1.02 | 15 | Cir | 224.015 | 338.20 | 344.30 | 2.723 | 338.69 | 344.70 | n/a | 344.70 j | 15 | Combination |
| 17 | Pipe - (485) | 0.89 | 15 | Cir | 43.823 | 344.50 | 344.90 | 0.913 | 344.82 | 345.27 | n/a | 345.27 | 16 | Combination |
| 18 | Pipe - (502) | 0.66 | 15 | Cir | 92.623 | 345.10 | 346.26 | 1.252 | 345.36 | 346.58 | 0.17 | 346.58 | 17 | Combination |
| 19 | Pipe - (503) | 0.25 | 15 | Cir | 28.029 | 346.50 | 346.67 | 0.607 | 346.69 | 346.86 | n/a | 346.86 | 18 | Combination |
| 20 | Pipe - (305) | 1.23 | 15 | Cir | 27.999 | 338.20 | 338.48 | 1.000 | 338.69 | 338.92 | n/a | 338.92 j | 15 | Combination |
| 21 | Pipe - (537) | 1.96 | 15 | Cir | 66.408 | 327.20 | 331.60 | 6.626 | 328.09 | 332.16 | n/a | 332.16 j | 8 | Combination |
| 22 | Pipe - (538) | 1.80 | 15 | Cir | 32.002 | 331.80 | 331.99 | 0.594 | 332.32 | 332.52 | 0.20 | 332.52 | 21 | Combination |
| 23 | Pipe - (315) | 5.43 | 18 | Cir | 164.315 | 311.00 | 318.80 | 4.747 | 312.32 | 319.70 | n/a | 319.70 j | 5 | Combination |
| 24 | Pipe - (499) | 2.21 | 15 | Cir | 43.094 | 319.00 | 319.60 | 1.392 | 319.70 | 320.19 | n/a | 320.19 j | 23 | Combination |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 6B 10-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (498) | 1.13 | 15 | Cir | 28.022 | 319.80 | 319.97 | 0.607 | 320.20 | 320.39 | 0.15 | 320.39 | 24 | Combination |
| 26 | Pipe - (545) | 0.28 | 15 | Cir | 33.996 | 319.60 | 323.00 | 10.001 | 320.60 | 323.21 | n/a | 323.21 j | 7 | Combination |
| 27 | Pipe - (320) | 2.47 | 15 | Cir | 28.000 | 319.00 | 319.28 | 1.000 | 319.70 | 319.91 | n/a | 319.91 j | 23 | Combination |
| 28 | Pipe - (539) | 6.23 | 18 | Cir | 15.198 | 293.69 | 294.00 | 2.040 | 295.19 | 295.16 | 0.28 | 295.44 | End | DropGrate |
| 29 | Pipe - (540) | 2.97 | 15 | Cir | 110.638 | 294.20 | 301.80 | 6.869 | 295.44 | 302.49 | n/a | 302.49 j | 28 | DropGrate |
| 30 | Pipe - (541) | 2.63 | 15 | Cir | 78.569 | 302.00 | 302.70 | 0.891 | 302.57 | 303.35 | 0.39 | 303.35 | 29 | Combination |
| 31 | Pipe - (542) | 1.02 | 15 | Cir | 208.966 | 302.90 | 305.00 | 1.005 | 303.35 | 305.40 | n/a | 305.40 j | 30 | Combination |
| 32 | Pipe - (462) | 1.12 | 18 | Cir | 48.735 | 301.91 | 302.20 | 0.595 | 303.30 | 302.59 | 0.21 | 302.59 | 3 | Combination |
| 33 | Pipe - (464) | 0.42 | 15 | Cir | 34.300 | 302.40 | 302.64 | 0.700 | 302.64 | 302.89 | n/a | 302.89 | 32 | Combination |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 6B 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | CB 611 | 2.57 | 0.00 | 2.57 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.23 | 24.55 | 0.23 | 24.55 | 0.0 | Off |
| 2 | CB 612 | 0.28 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.36 | 0.00 | 0.00 | 0.0 | 33 |
| 3 | CB 613 | 0.92 | 0.00 | 0.92 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.33 | 0.01 | 0.16 | 0.0 | Off |
| 4 | CB 614 | 0.49 | 0.00 | 0.49 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.67 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 615 | 0.42 | 0.11 | 0.53 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.95 | 0.14 | 2.95 | 0.0 | Off |
| 6 | CB 616 | 1.90 | 0.85 | 2.76 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.30 | 10.82 | 0.30 | 10.82 | 0.0 | Off |
| 7 | CB 617 | 1.87 | 0.00 | 1.73 | 0.14 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.11 | 0.06 | 1.03 | 0.0 | 6 |
| 8 | CB 618 | 0.11 | 0.00 | 0.11 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.022 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.25 | 0.00 | 0.00 | 0.0 | 7 |
| 9 | CB 619 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.022 | 2.00 | 0.060 | 0.020 | 0.013 | 0.05 | 0.83 | 0.00 | 0.00 | 0.0 | 26 |
| 10 | CB 620 | 0.11 | 0.00 | 0.11 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.062 | 2.00 | 0.060 | 0.020 | 0.013 | 0.06 | 1.03 | 0.00 | 0.00 | 0.0 | 30 |
| 11 | CB 621 | 0.67 | 0.23 | 0.89 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.062 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.85 | 0.02 | 0.39 | 0.0 | 30 |
| 12 | CB 622 | 0.67 | 0.00 | 0.67 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.60 | 0.15 | 3.60 | 0.0 | Off |
| 13 | CB 623 | 3.35 | 0.00 | 3.35 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.33 | 12.45 | 0.33 | 12.45 | 0.0 | Off |
| 14 | CB 624 | 0.53 | 0.05 | 0.57 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.31 | 0.01 | 0.14 | 0.0 | Off |
| 15 | CB 625 | 0.88 | 0.00 | 0.84 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.027 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.85 | 0.05 | 0.88 | 0.0 | 14 |
| 16 | CB 626 | 0.14 | 0.00 | 0.14 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.83 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 627 | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.83 | 0.00 | 0.00 | 0.0 | 16 |
| 18 | CB 628 | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.67 | 0.02 | 0.31 | 0.0 | 17 |
| 19 | CB 628A | 0.25 | 0.00 | 0.25 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | Off |
| 20 | CB 625A | 1.23 | 0.00 | 1.23 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.92 | 0.20 | 5.92 | 0.0 | Off |
| 21 | CB 618A | 0.18 | 0.00 | 0.18 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.052 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.29 | 0.00 | 0.00 | 0.0 | 11 |
| 22 | CB 618B | 1.80 | 0.00 | 1.57 | 0.23 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.052 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.89 | 0.08 | 1.41 | 0.0 | 11 |
| 23 | CB 615A | 0.81 | 0.19 | 0.90 | 0.11 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.017 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.83 | 0.08 | 1.32 | 0.0 | 5 |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report

SCM 6B 10-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 615C | 1.09 | 0.00 | 0.90 | 0.19 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.28 | 0.11 | 1.91 | 0.0 | 23 |
| 25 | CB 615D | 1.13 | 0.00 | 1.13 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.52 | 0.19 | 5.52 | 0.0 | Off |
| 26 | CB 617A | 0.28 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.36 | 0.00 | 0.00 | 0.0 | Off |
| 27 | CB 615B | 2.47 | 0.00 | 1.75 | 0.72 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.017 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.63 | 0.16 | 3.91 | 0.0 | 6 |
| 28 | YI 631 | 3.56 | 0.00 | 3.56 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.28 | 30.00 | 0.28 | 30.00 | 0.0 | Off |
| 29 | YI 632 | 0.39 | 0.00 | 0.39 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.06 | 8.38 | 0.06 | 8.38 | 0.0 | Off |
| 30 | CB 633 | 1.73 | 0.01 | 1.41 | 0.32 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.85 | 0.11 | 1.85 | 0.0 | 31 |
| 31 | CB 634 | 1.02 | 0.32 | 1.04 | 0.31 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.65 | 0.15 | 3.32 | 0.0 | Off |
| 32 | CB 613A | 0.70 | 0.00 | 0.70 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.91 | 0.00 | 0.00 | 0.0 | Off |
| 33 | CB 613B | 0.42 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.58 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 6B 10-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 24 | 22.14 | 297.31 | 299.31 | 2.00 | 2.81 | 7.05 | 0.77 | 300.08 | 0.958 | 14.076 | 298.00 | 299.68 j | 1.68** | 2.81 | 7.87 | 0.96 | 300.64 | 0.920 | 0.939 | n/a | 1.07 | 1.03 |
| 2 | 24 | 20.11 | 298.20 | 299.68 | 1.48 | 2.49 | 8.08 | 0.86 | 300.54 | 0.000 | 129.199 | 301.00 | 302.61 | 1.61** | 2.71 | 7.42 | 0.86 | 303.47 | 0.000 | 0.000 | n/a | 0.93 | n/a |
| 3 | 24 | 19.92 | 301.28 | 302.74 | 1.46* | 2.45 | 8.13 | 0.85 | 303.58 | 0.000 | 41.927 | 301.70 | 303.30 | 1.60** | 2.70 | 7.39 | 0.85 | 304.15 | 0.000 | 0.000 | n/a | 1.95 | 1.65 |
| 4 | 24 | 18.21 | 301.90 | 303.30 | 1.40 | 2.35 | 7.74 | 0.77 | 304.07 | 0.000 | 41.516 | 306.05 | 307.59 | 1.54** | 2.59 | 7.04 | 0.77 | 308.36 | 0.000 | 0.000 | n/a | 1.10 | n/a |
| 5 | 24 | 17.84 | 306.25 | 307.59 | 1.34 | 2.23 | 8.00 | 0.75 | 308.34 | 0.000 | 45.778 | 310.80 | 312.32 | 1.52** | 2.56 | 6.96 | 0.75 | 313.07 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 6 | 24 | 12.74 | 311.00 | 312.32 | 1.32 | 2.13 | 5.79 | 0.56 | 312.88 | 0.000 | 28.278 | 313.80 | 315.08 j | 1.28** | 2.13 | 5.99 | 0.56 | 315.64 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 7 | 24 | 11.13 | 314.00 | 315.08 | 1.08 | 1.74 | 6.42 | 0.50 | 315.58 | 0.000 | 54.257 | 319.40 | 320.60 | 1.20** | 1.96 | 5.68 | 0.50 | 321.10 | 0.000 | 0.000 | n/a | 1.21 | 0.61 |
| 8 | 24 | 9.36 | 319.60 | 320.60 | 1.00 | 1.56 | 5.99 | 0.44 | 321.04 | 0.000 | 118.068 | 327.00 | 328.09 | 1.09** | 1.75 | 5.33 | 0.44 | 328.53 | 0.000 | 0.000 | n/a | 2.20 | n/a |
| 9 | 18 | 7.55 | 327.20 | 328.34 | 1.14* | 1.44 | 5.26 | 0.43 | 328.77 | 0.608 | 34.519 | 327.41 | 328.55 | 1.14 | 1.44 | 5.25 | 0.43 | 328.98 | 0.607 | 0.608 | 0.210 | 1.31 | 0.56 |
| 10 | 18 | 7.56 | 327.60 | 329.11 | 1.50 | 1.77 | 4.28 | 0.28 | 329.39 | 0.519 | 54.019 | 328.00 | 329.34 | 1.34 | 1.66 | 4.55 | 0.32 | 329.66 | 0.461 | 0.490 | 0.265 | 0.92 | 0.30 |
| 11 | 18 | 7.50 | 328.20 | 329.63 | 1.43 | 1.74 | 4.31 | 0.29 | 329.92 | 0.443 | 32.394 | 328.40 | 329.76 | 1.36 | 1.68 | 4.46 | 0.31 | 330.07 | 0.447 | 0.445 | 0.144 | 1.06 | 0.33 |
| 12 | 18 | 6.94 | 328.60 | 330.08 | 1.48 | 1.28 | 3.93 | 0.46 | 330.54 | 0.000 | 49.141 | 329.10 | 330.12 j | 1.02** | 1.28 | 5.43 | 0.46 | 330.58 | 0.000 | 0.000 | n/a | 1.18 | 0.54 |
| 13 | 18 | 6.36 | 329.30 | 330.18 | 0.88* | 1.07 | 5.92 | 0.43 | 330.60 | 0.000 | 34.087 | 329.60 | 330.57 | 0.97** | 1.21 | 5.23 | 0.43 | 331.00 | 0.000 | 0.000 | n/a | 1.50 | 0.64 |
| 14 | 15 | 3.40 | 329.80 | 330.57 | 0.77 | 0.76 | 4.26 | 0.31 | 330.89 | 0.000 | 158.245 | 335.70 | 336.44 j | 0.74** | 0.76 | 4.47 | 0.31 | 336.75 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 15 | 15 | 2.93 | 335.90 | 336.44 | 0.54 | 0.51 | 5.73 | 0.28 | 336.72 | 0.000 | 46.667 | 338.00 | 338.69 | 0.69** | 0.69 | 4.24 | 0.28 | 338.97 | 0.000 | 0.000 | n/a | 1.69 | n/a |
| 16 | 15 | 1.02 | 338.20 | 338.69 | 0.49 | 0.34 | 2.31 | 0.14 | 338.83 | 0.000 | 224.015 | 344.30 | 344.70 j | 0.40** | 0.34 | 3.05 | 0.14 | 344.84 | 0.000 | 0.000 | n/a | 1.13 | 0.16 |
| 17 | 15 | 0.89 | 344.50 | 344.82 | 0.32* | 0.25 | 3.58 | 0.13 | 344.96 | 0.000 | 43.823 | 344.90 | 345.27 | 0.37** | 0.30 | 2.93 | 0.13 | 345.40 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 18 | 15 | 0.66 | 345.10 | 345.36 | 0.26* | 0.18 | 3.67 | 0.11 | 345.47 | 0.000 | 92.623 | 346.26 | 346.58 | 0.32** | 0.25 | 2.70 | 0.11 | 346.69 | 0.000 | 0.000 | n/a | 1.50 | 0.17 |
| 19 | 15 | 0.25 | 346.50 | 346.69 | 0.19* | 0.12 | 2.12 | 0.07 | 346.75 | 0.000 | 28.029 | 346.67 | 346.86 | 0.19** | 0.12 | 2.07 | 0.07 | 346.93 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 20 | 15 | 1.23 | 338.20 | 338.69 | 0.49 | 0.38 | 2.78 | 0.16 | 338.85 | 0.000 | 27.999 | 338.48 | 338.92 j | 0.44** | 0.38 | 3.22 | 0.16 | 339.08 | 0.000 | 0.000 | n/a | 1.00 | 0.16 |
| 21 | 15 | 1.96 | 327.20 | 328.09 | 0.89 | 0.53 | 2.10 | 0.21 | 328.31 | 0.000 | 66.408 | 331.60 | 332.16 j | 0.56** | 0.53 | 3.71 | 0.21 | 332.37 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 22 | 15 | 1.80 | 331.80 | 332.32 | 0.52* | 0.48 | 3.72 | 0.20 | 332.52 | 0.000 | 32.002 | 331.99 | 332.52 | 0.53** | 0.50 | 3.61 | 0.20 | 332.72 | 0.000 | 0.000 | n/a | 1.00 | 0.20 |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 6B 10-YEAR

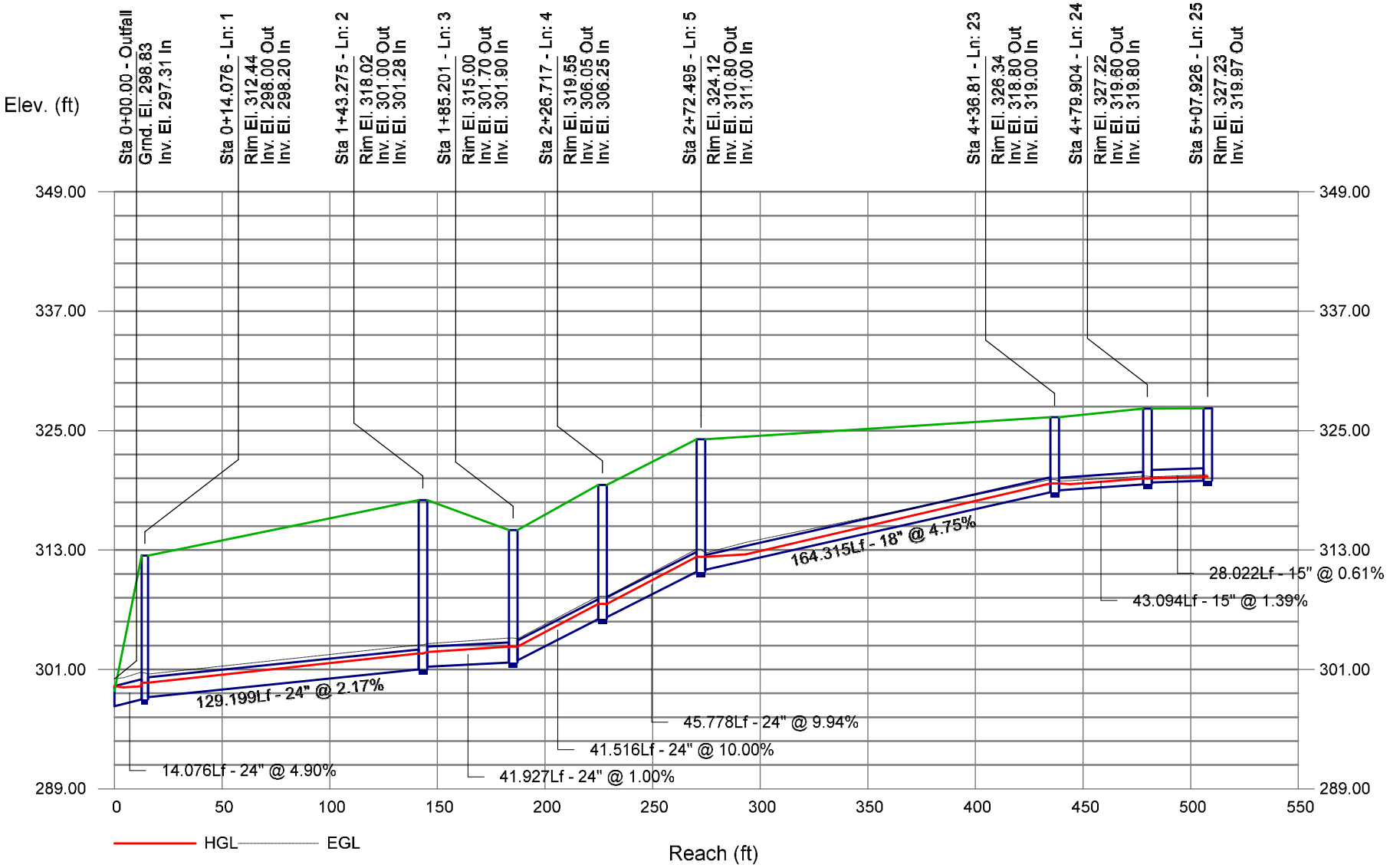
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 18 | 5.43 | 311.00 | 312.32 | 1.32 | 1.10 | 3.30 | 0.38 | 312.70 | 0.000 | 164.315 | 318.80 | 319.70 j | 0.90** | 1.10 | 4.92 | 0.38 | 320.07 | 0.000 | 0.000 | n/a | 1.49 | n/a |
| 24 | 15 | 2.21 | 319.00 | 319.70 | 0.70 | 0.57 | 3.14 | 0.23 | 319.93 | 0.000 | 43.094 | 319.60 | 320.19 j | 0.59** | 0.57 | 3.85 | 0.23 | 320.42 | 0.000 | 0.000 | n/a | 1.10 | 0.25 |
| 25 | 15 | 1.13 | 319.80 | 320.20 | 0.40* | 0.34 | 3.30 | 0.15 | 320.36 | 0.000 | 28.022 | 319.97 | 320.39 | 0.42** | 0.36 | 3.14 | 0.15 | 320.54 | 0.000 | 0.000 | n/a | 1.00 | 0.15 |
| 26 | 15 | 0.28 | 319.60 | 320.60 | 1.00 | 0.13 | 0.27 | 0.07 | 320.67 | 0.000 | 33.996 | 323.00 | 323.21 j | 0.21** | 0.13 | 2.14 | 0.07 | 323.28 | 0.000 | 0.000 | n/a | 1.00 | 0.07 |
| 27 | 15 | 2.47 | 319.00 | 319.70 | 0.70 | 0.62 | 3.51 | 0.25 | 319.95 | 0.000 | 28.000 | 319.28 | 319.91 j | 0.63** | 0.62 | 3.99 | 0.25 | 320.16 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 28 | 18 | 6.23 | 293.69 | 295.19 | 1.50* | 1.77 | 3.53 | 0.19 | 295.38 | 0.353 | 15.198 | 294.00 | 295.16 | 1.16 | 1.46 | 4.26 | 0.28 | 295.44 | 0.397 | 0.375 | 0.057 | 1.01 | 0.28 |
| 29 | 15 | 2.97 | 294.20 | 295.44 | 1.24 | 0.70 | 2.43 | 0.28 | 295.72 | 0.000 | 110.638 | 301.80 | 302.49 j | 0.69** | 0.70 | 4.26 | 0.28 | 302.77 | 0.000 | 0.000 | n/a | 1.28 | n/a |
| 30 | 15 | 2.63 | 302.00 | 302.57 | 0.57* | 0.55 | 4.78 | 0.26 | 302.83 | 0.000 | 78.569 | 302.70 | 303.35 | 0.65** | 0.64 | 4.08 | 0.26 | 303.61 | 0.000 | 0.000 | n/a | 1.49 | 0.39 |
| 31 | 15 | 1.02 | 302.90 | 303.35 | 0.45 | 0.34 | 2.57 | 0.14 | 303.49 | 0.000 | 208.966 | 305.00 | 305.40 j | 0.40** | 0.34 | 3.05 | 0.14 | 305.54 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 32 | 18 | 1.12 | 301.91 | 303.30 | 1.39 | 0.37 | 0.65 | 0.14 | 303.44 | 0.000 | 48.735 | 302.20 | 302.59 | 0.39** | 0.37 | 3.01 | 0.14 | 302.74 | 0.000 | 0.000 | n/a | 1.50 | 0.21 |
| 33 | 15 | 0.42 | 302.40 | 302.64 | 0.24* | 0.16 | 2.62 | 0.09 | 302.73 | 0.000 | 34.300 | 302.64 | 302.89 | 0.25** | 0.18 | 2.39 | 0.09 | 302.98 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

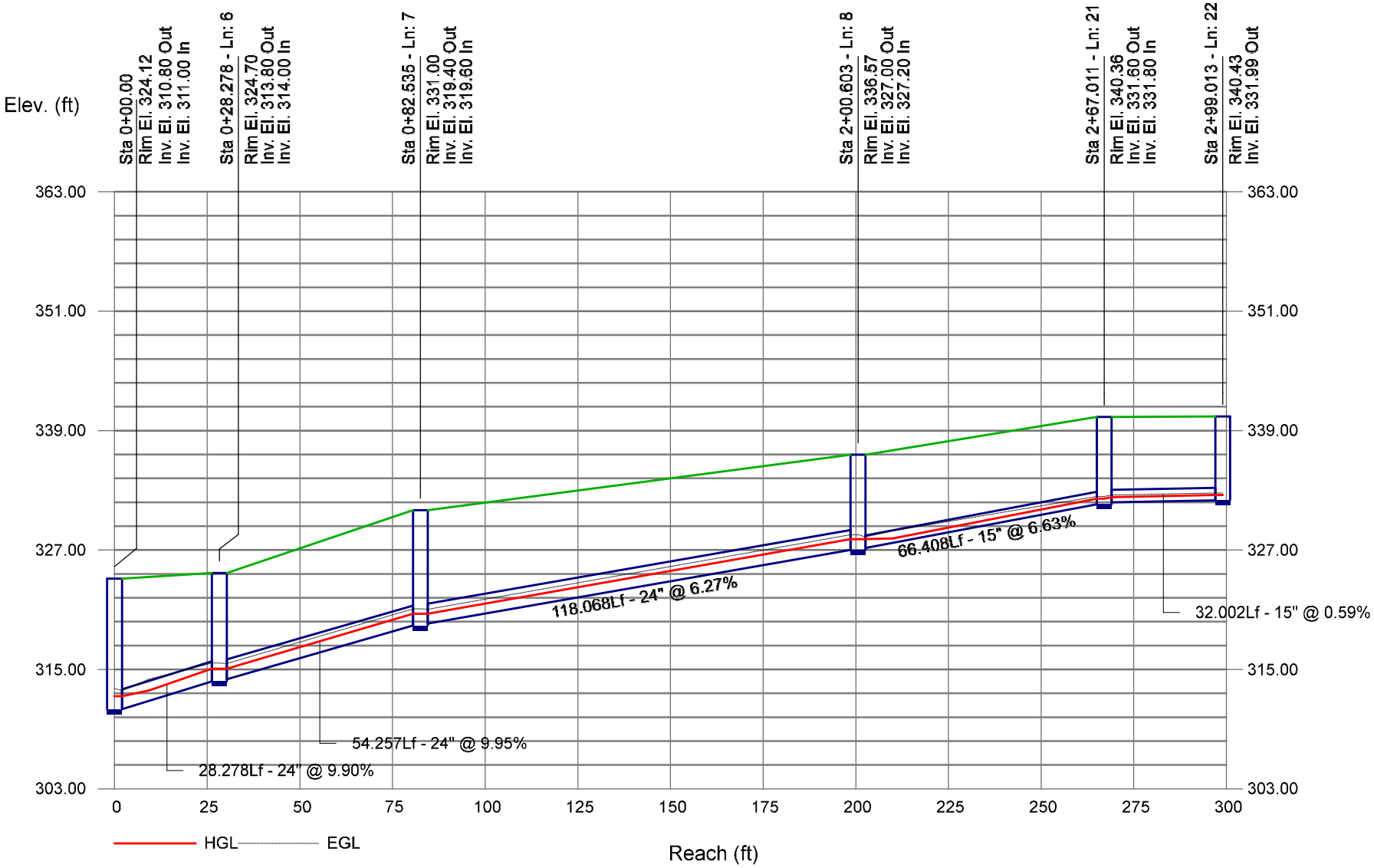
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 1-25 Proj. file: SCM 6B Storm Network.stm



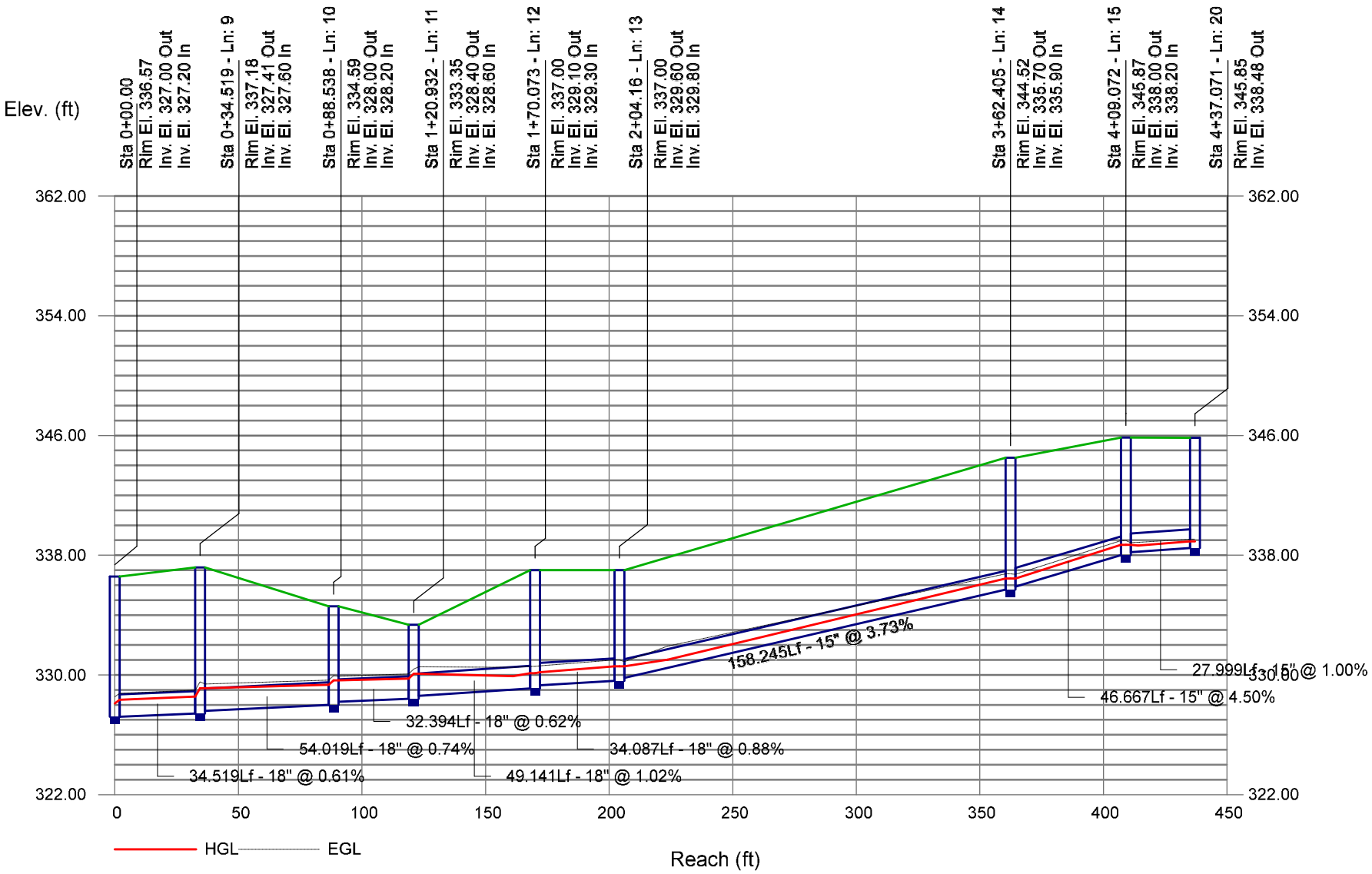
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 6-22 Proj. file: SCM 6B Storm Network.stm



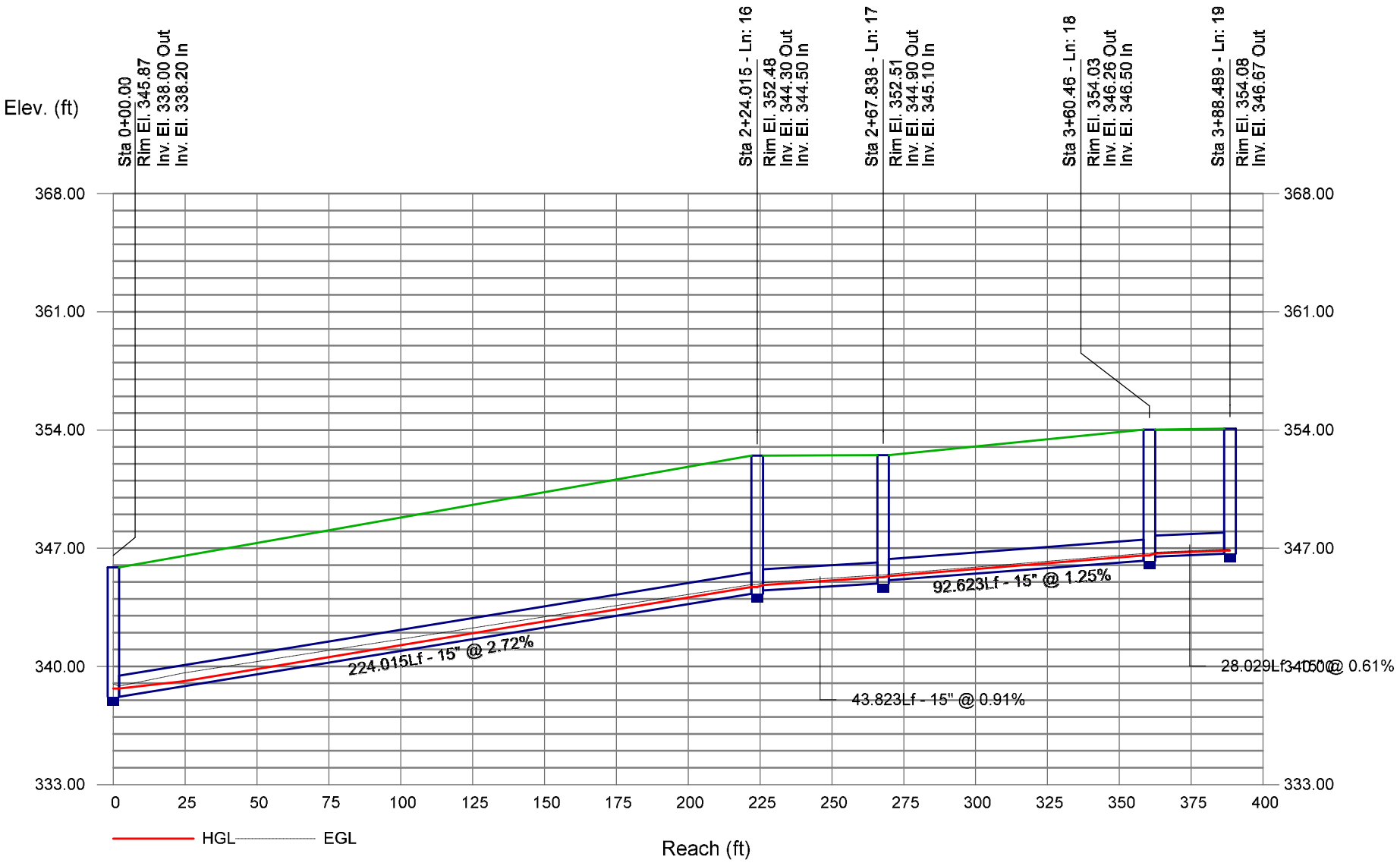
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 9-20 Proj. file: SCM 6B Storm Network.stm



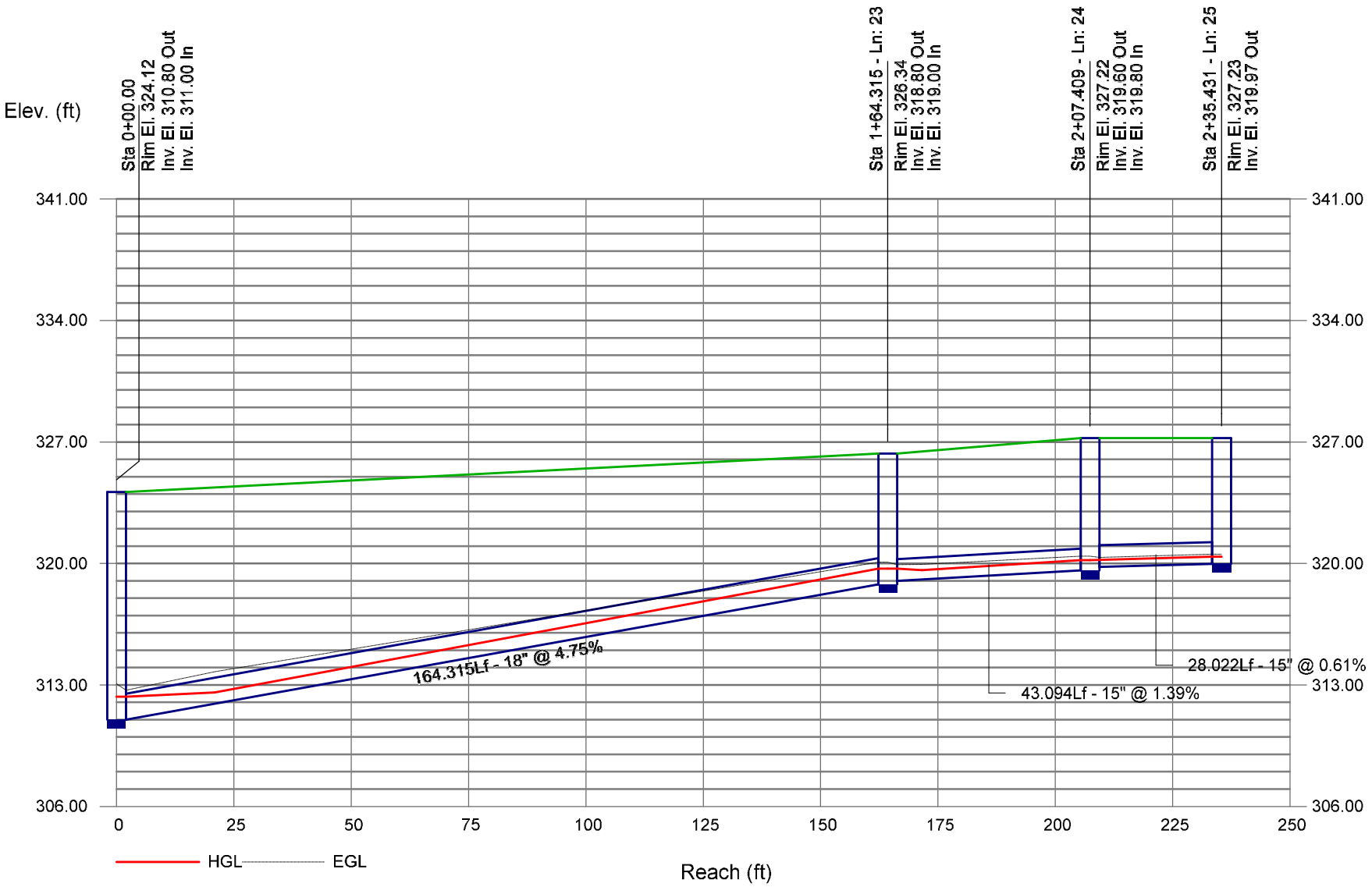
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 16-19 Proj. file: SCM 6B Storm Network.stm



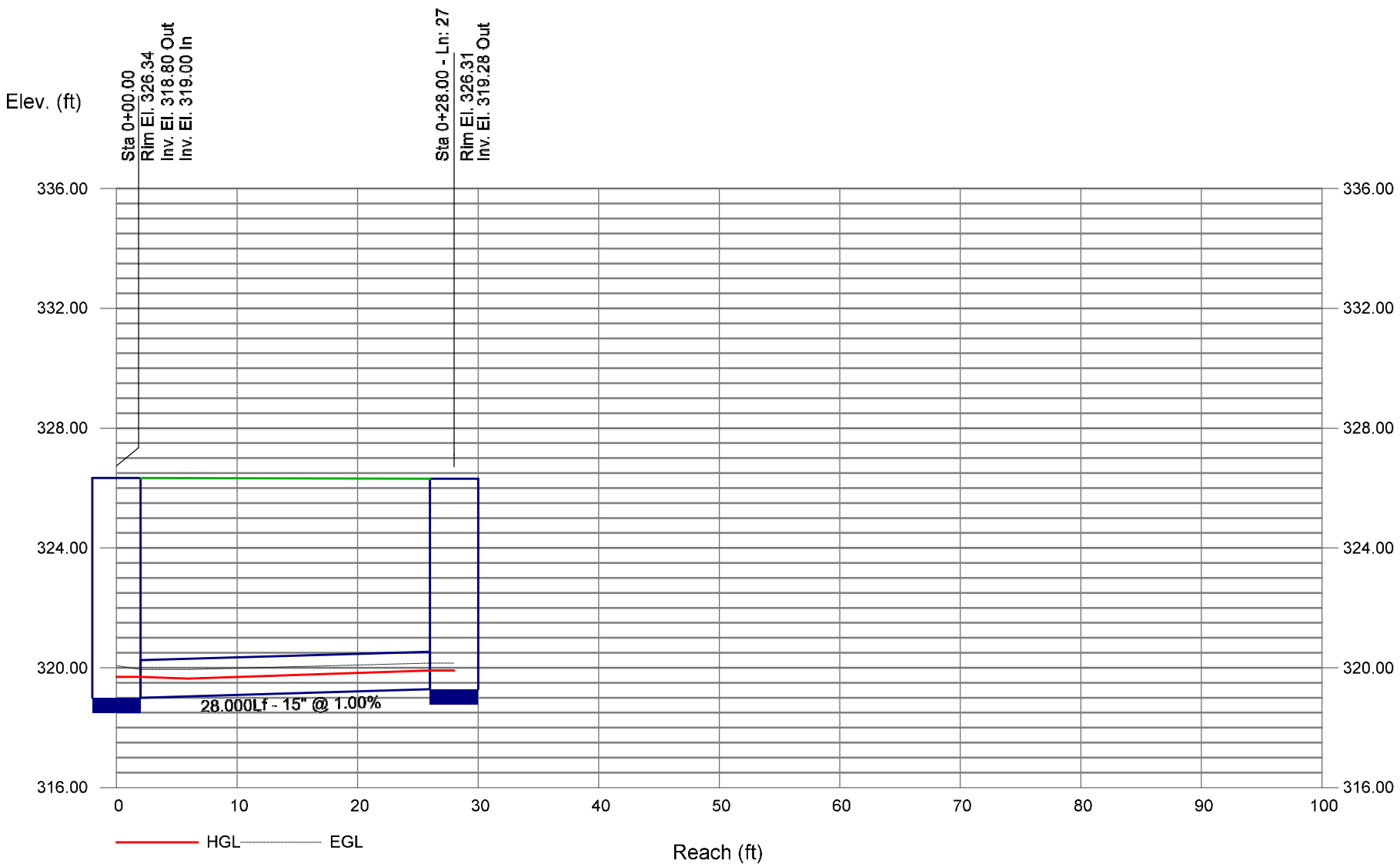
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 23-25 Proj. file: SCM 6B Storm Network.stm



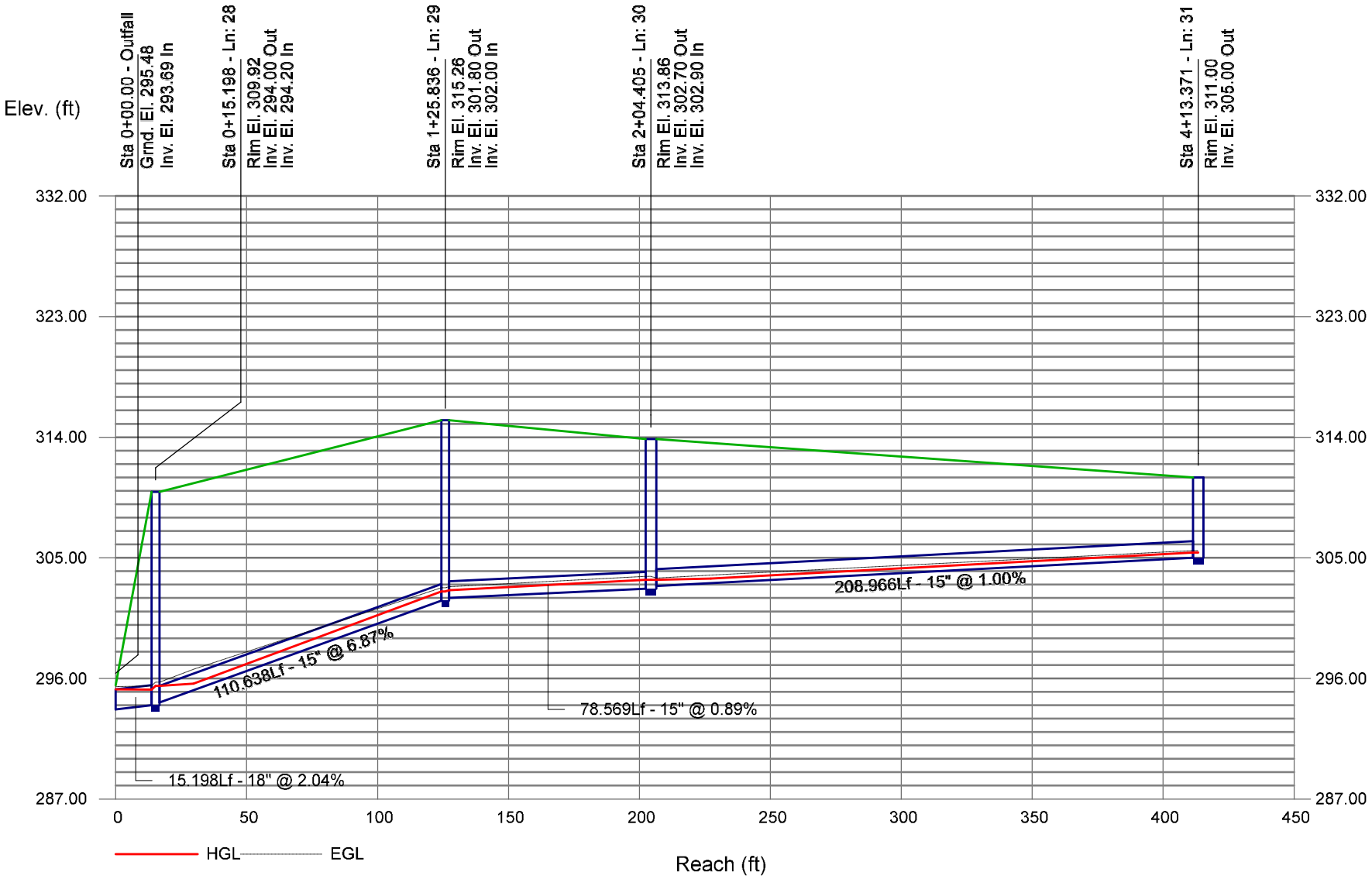
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 27-27 Proj. file: SCM 6B Storm Network.stm



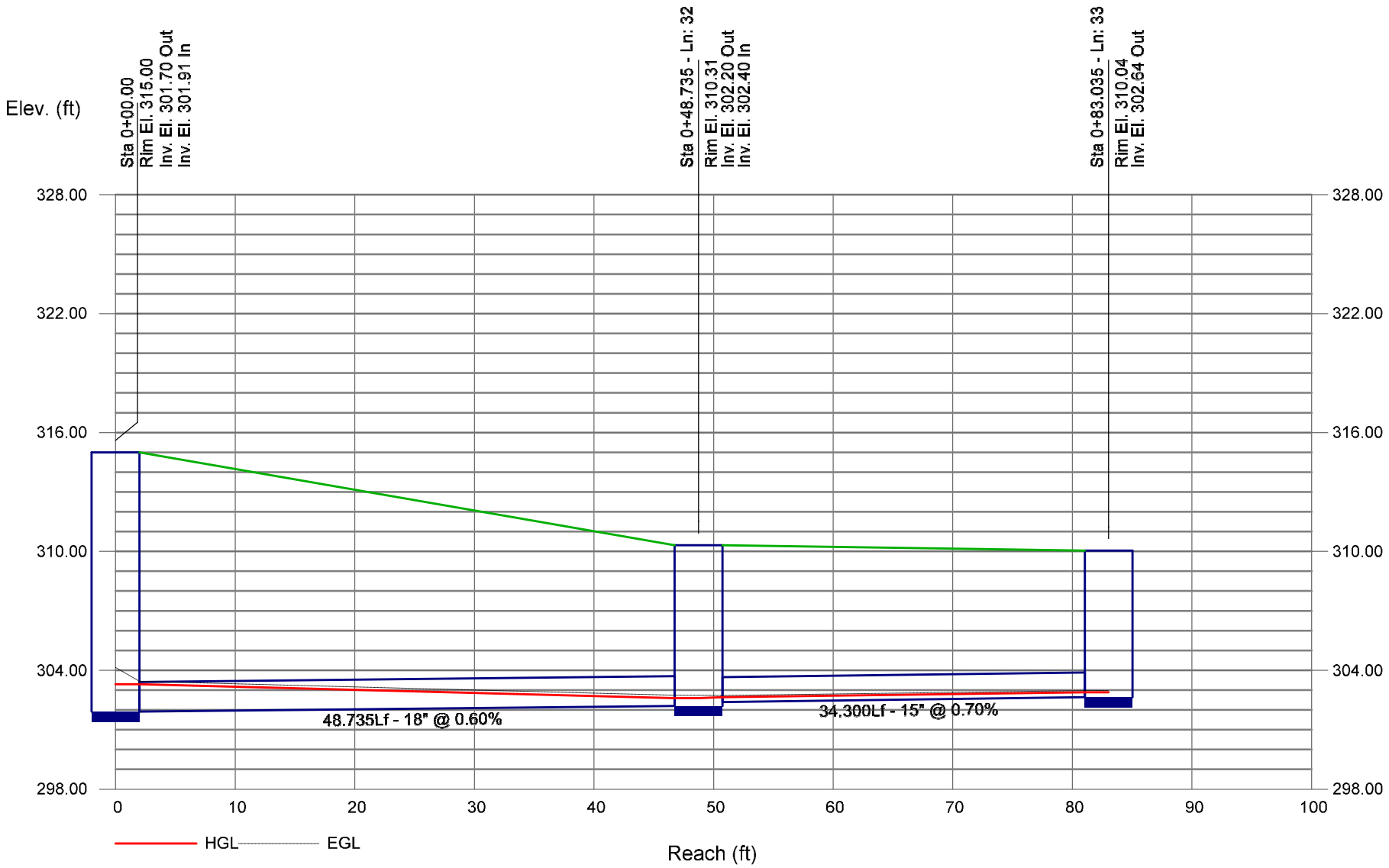
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 28-31 Proj. file: SCM 6B Storm Network.stm



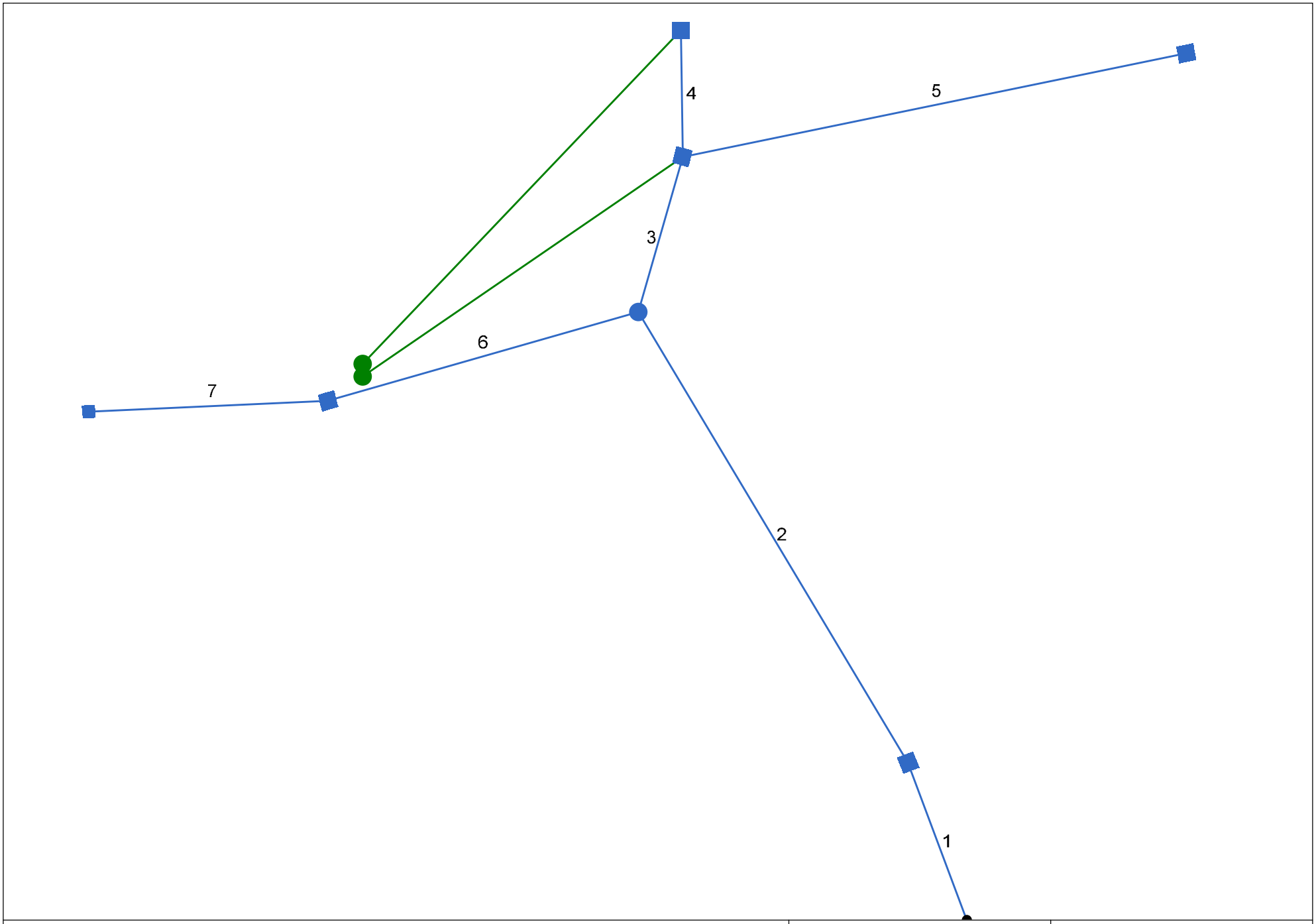
# Storm Sewer Profile

SCM 6B 10-YEAR PROFILE 32-33 Proj. file: SCM 6B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan

SCM 7 10-YEAR




| Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report



| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 40.704 | -110.457 | DrGrt | 0.00 | 0.65 | 0.60 | 10.0 | 317.86 | 0.52 | 318.07 | 24 | Cir | 0.013 | 0.50 | 330.60 | Pipe - (505) |
| 2 | 1 | 126.978 | -10.287 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 318.27 | 0.50 | 318.90 | 24 | Cir | 0.013 | 0.97 | 331.65 | Pipe - (504) |
| 3 | 2 | 39.048 | 46.583 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 327.83 | 2.38 | 328.76 | 15 | Cir | 0.013 | 1.36 | 332.78 | Pipe - (480) |
| 4 | 3 | 30.684 | -16.910 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 328.96 | 3.39 | 330.00 | 15 | Cir | 0.013 | 1.00 | 333.86 | Pipe - (487) |
| 5 | 3 | 124.068 | 62.476 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 328.96 | 7.49 | 338.25 | 15 | Cir | 0.013 | 1.00 | 342.10 | Pipe - (481) |
| 6 | 2 | 78.082 | -75.262 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 319.45 | 0.50 | 319.84 | 18 | Cir | 0.013 | 0.50 | 328.75 | Pipe - (506) |
| 7 | 6 | 57.520 | 13.408 | DrGrt | 0.00 | 1.34 | 0.60 | 10.0 | 320.11 | 0.50 | 320.40 | 15 | Cir | 0.013 | 1.00 | 323.85 | Pipe - (586) |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Date: 4/11/2025

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 701 | DropGrate | 330.60 | Rect | 4.00 | 4.00 | 24 | Cir | 318.07 | 24 | Cir | 318.27 |
| 2 | JB 702 | Manhole | 331.65 | Cir | 4.00 | 4.00 | 24 | Cir | 318.90 | 15<br>18 | Cir<br>Cir | 327.83<br>319.45 |
| 3 | CB 703 | Combination | 332.78 | Rect | 4.00 | 4.00 | 15 | Cir | 328.76 | 15<br>15 | Cir<br>Cir | 328.96<br>328.96 |
| 4 | CB 703A | Combination | 333.86 | Rect | 4.00 | 4.00 | 15 | Cir | 330.00 | | | |
| 5 | CB 704 | Combination | 342.10 | Rect | 4.00 | 4.00 | 15 | Cir | 338.25 | | | |
| 6 | CB 702A | Combination | 328.75 | Rect | 4.00 | 4.00 | 18 | Cir | 319.84 | 15 | Cir | 320.11 |
| 7 | YI 702B | DropGrate | 323.85 | Rect | 3.00 | 3.00 | 15 | Cir | 320.40 | | | |

Project File: SCM 7 Storm Network.stm | Number of Structures: 7 | Run Date: 4/11/2025

# Storm Sewer Summary Report



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (505) | 10.53 | 24 | Cir | 40.704 | 317.86 | 318.07 | 0.516 | 319.86 | 319.93 | 0.09 | 320.02 | End | DropGrate |
| 2 | Pipe - (504) | 8.53 | 24 | Cir | 126.978 | 318.27 | 318.90 | 0.496 | 320.02 | 320.15 | 0.26 | 320.41 | 1 | Manhole |
| 3 | Pipe - (480) | 2.91 | 15 | Cir | 39.048 | 327.83 | 328.76 | 2.382 | 328.29 | 329.45 | 0.38 | 329.45 | 2 | Combination |
| 4 | Pipe - (487) | 1.44 | 15 | Cir | 30.684 | 328.96 | 330.00 | 3.389 | 329.45 | 330.48 | n/a | 330.48 j | 3 | Combination |
| 5 | Pipe - (481) | 0.92 | 15 | Cir | 124.068 | 328.96 | 338.25 | 7.488 | 329.45 | 338.63 | n/a | 338.63 j | 3 | Combination |
| 6 | Pipe - (506) | 5.77 | 18 | Cir | 78.082 | 319.45 | 319.84 | 0.499 | 320.44 | 320.83 | 0.17 | 321.00 | 2 | Combination |
| 7 | Pipe - (586) | 4.72 | 15 | Cir | 57.520 | 320.11 | 320.40 | 0.504 | 321.17 | 321.46 | 0.28 | 321.74 | 6 | DropGrate |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Return period = 10 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 701 | 2.29 | 0.00 | 1.24 | 1.05 | DrGrt | 0.0 | 0.00 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | Off |
| 2 | JB 702 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 703 | 0.63 | 0.01 | 0.64 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.97 | 0.00 | 0.00 | 0.0 | 6 |
| 4 | CB 703A | 1.44 | 0.00 | 1.36 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.90 | 0.06 | 0.93 | 0.0 | 6 |
| 5 | CB 704 | 0.92 | 0.00 | 0.91 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.75 | 0.02 | 0.37 | 0.0 | 3 |
| 6 | CB 702A | 1.09 | 0.09 | 1.18 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.71 | 0.19 | 5.71 | 0.0 | Off |
| 7 | YI 702B | 4.72 | 0.00 | 1.33 | 3.39 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.18 | 20.10 | 0.18 | 20.10 | 0.0 | Off |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 72.00 / (Inlet time + 12.50) ^ 0.80; Return period = 10 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 24 | 10.53 | 317.86 | 319.86 | 2.00 | 3.14 | 3.35 | 0.17 | 320.03 | 0.217 | 40.704 | 318.07 | 319.93 | 1.86 | 3.05 | 3.46 | 0.19 | 320.12 | 0.187 | 0.202 | 0.082 | 0.50 | 0.09 |
| 2 | 24 | 8.53 | 318.27 | 320.02 | 1.75 | 2.92 | 2.92 | 0.13 | 320.16 | 0.128 | 126.978 | 318.90 | 320.15 | 1.25 | 2.06 | 4.14 | 0.27 | 320.41 | 0.280 | 0.204 | 0.259 | 0.97 | 0.26 |
| 3 | 15 | 2.91 | 327.83 | 328.29 | 0.46* | 0.41 | 7.04 | 0.28 | 328.57 | 0.000 | 39.048 | 328.76 | 329.45 | 0.69** | 0.69 | 4.23 | 0.28 | 329.72 | 0.000 | 0.000 | n/a | 1.36 | 0.38 |
| 4 | 15 | 1.44 | 328.96 | 329.45 | 0.49 | 0.43 | 3.28 | 0.18 | 329.62 | 0.000 | 30.684 | 330.00 | 330.48 j | 0.48** | 0.43 | 3.38 | 0.18 | 330.65 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 5 | 15 | 0.92 | 328.96 | 329.45 | 0.49 | 0.31 | 2.08 | 0.14 | 329.58 | 0.000 | 124.068 | 338.25 | 338.63 j | 0.38** | 0.31 | 2.95 | 0.14 | 338.76 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 6 | 18 | 5.77 | 319.45 | 320.44 | 0.99* | 1.24 | 4.64 | 0.33 | 320.78 | 0.499 | 78.082 | 319.84 | 320.83 | 0.99 | 1.24 | 4.64 | 0.33 | 321.17 | 0.498 | 0.499 | 0.389 | 0.50 | 0.17 |
| 7 | 15 | 4.72 | 320.11 | 321.17 | 1.06* | 1.11 | 4.25 | 0.28 | 321.45 | 0.504 | 57.520 | 320.40 | 321.46 | 1.06 | 1.11 | 4.25 | 0.28 | 321.74 | 0.503 | 0.504 | 0.290 | 1.00 | 0.28 |

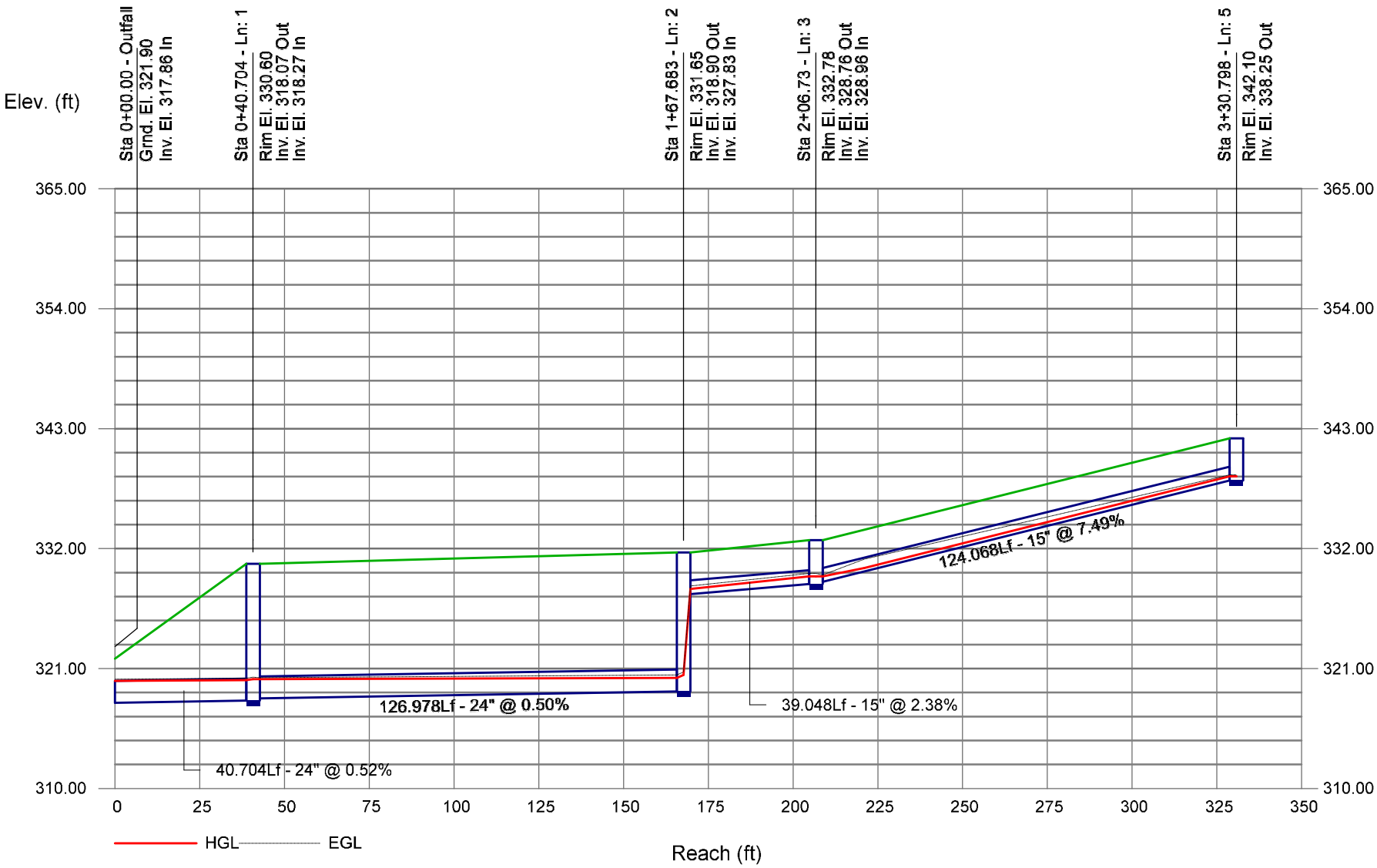
Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Storm Sewer Profile

SCM 7 10-YEAR PROFILE 1-5

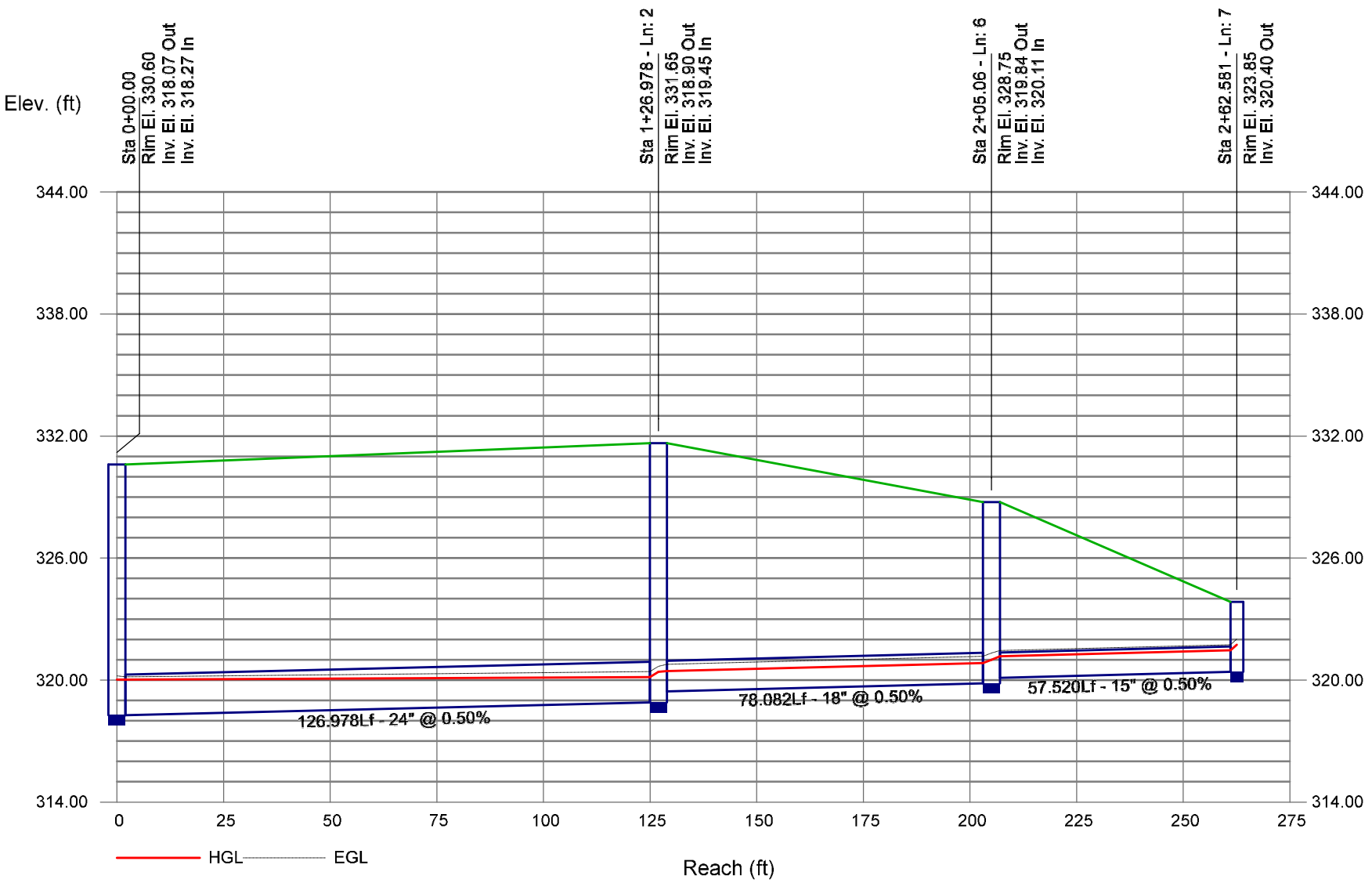
Proj. file: SCM 7 Storm Network.stm



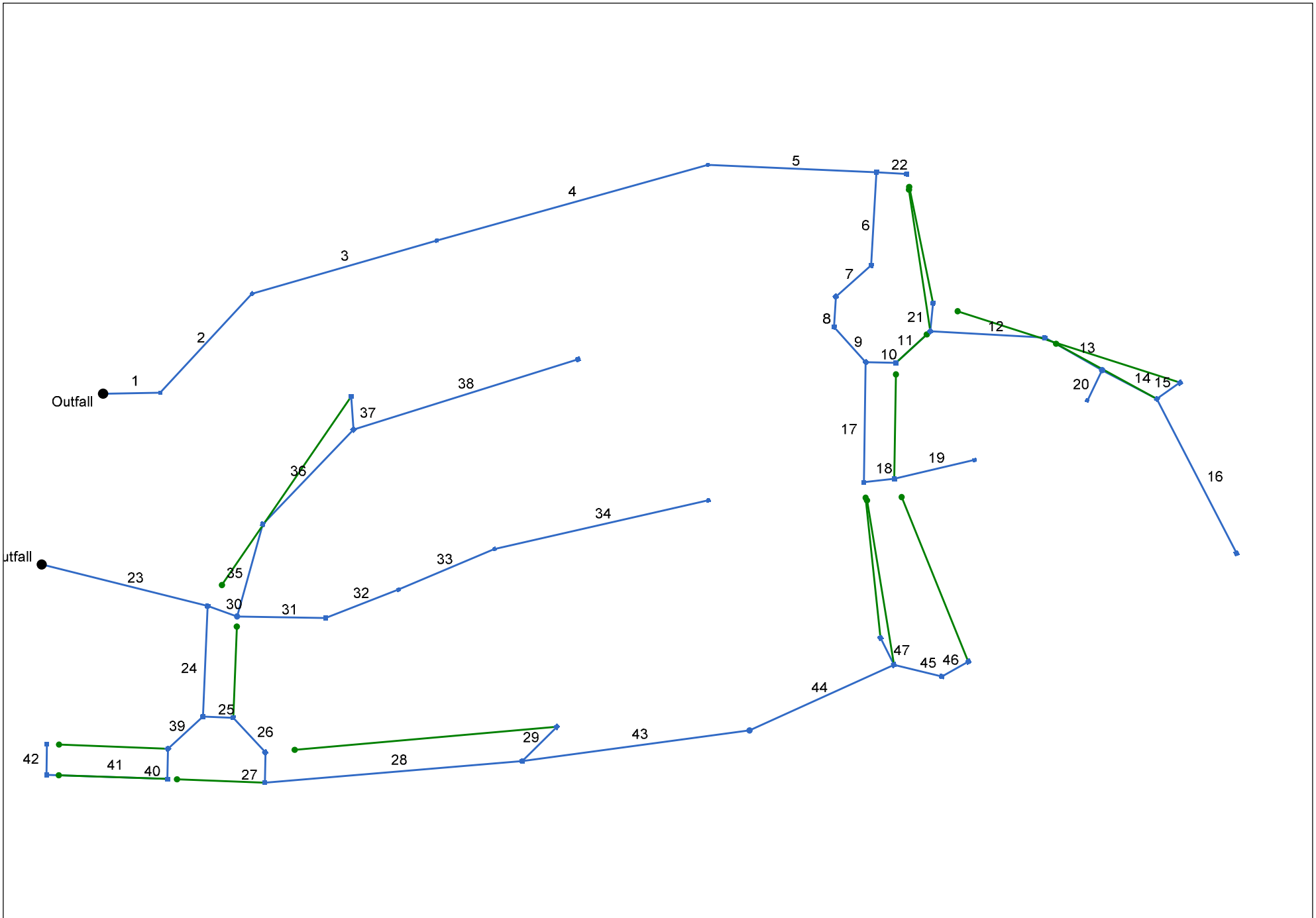
# Storm Sewer Profile

SCM 7 10-YEAR PROFILE 4-7

Proj. file: SCM 7 Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 1A 25-YEAR




| Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 1A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 52.749 | -0.892 | DrGrt | 0.00 | 0.26 | 0.60 | 10.0 | 349.00 | 7.20 | 352.80 | 30 | Cir | 0.013 | 1.15 | 358.45 | Pipe - (444) |
| 2 | 1 | 125.000 | -46.452 | DrGrt | 0.00 | 0.40 | 0.60 | 10.0 | 353.00 | 0.56 | 353.70 | 30 | Cir | 0.013 | 0.86 | 361.06 | Pipe - (443) |
| 3 | 2 | 177.766 | 31.266 | DrGrt | 0.00 | 0.33 | 0.60 | 10.0 | 353.90 | 0.51 | 354.80 | 30 | Cir | 0.013 | 0.50 | 362.54 | Pipe - (442) |
| 4 | 3 | 260.092 | 0.417 | DrGrt | 0.00 | 0.47 | 0.60 | 10.0 | 355.00 | 0.50 | 356.30 | 30 | Cir | 0.013 | 0.54 | 362.99 | Pipe - (441) |
| 5 | 4 | 155.941 | 18.185 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 356.50 | 0.50 | 357.28 | 30 | Cir | 0.013 | 2.02 | 362.55 | Pipe - (440) |
| 6 | 5 | 86.389 | 90.703 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 357.83 | 2.95 | 360.38 | 24 | Cir | 0.013 | 1.13 | 365.47 | Pipe - (447) |
| 7 | 6 | 43.841 | 45.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 360.58 | 0.50 | 360.80 | 24 | Cir | 0.013 | 1.13 | 367.61 | Pipe - (446) |
| 8 | 7 | 28.000 | -45.000 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 361.00 | 0.64 | 361.18 | 24 | Cir | 0.013 | 1.13 | 367.61 | Pipe - (453) |
| 9 | 8 | 43.841 | -45.000 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 361.37 | 0.52 | 361.60 | 24 | Cir | 0.013 | 1.62 | 367.82 | Pipe - (452) |
| 10 | 9 | 28.018 | -47.046 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 362.56 | 0.50 | 362.70 | 18 | Cir | 0.013 | 1.11 | 367.79 | Pipe - (24) |
| 11 | 10 | 43.139 | -43.893 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 362.90 | 0.51 | 363.12 | 18 | Cir | 0.013 | 1.61 | 367.57 | Pipe - (15) |
| 12 | 11 | 106.050 | 45.939 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 363.40 | 0.50 | 363.93 | 18 | Cir | 0.013 | 0.75 | 369.08 | Pipe - (14) |
| 13 | 12 | 60.787 | 26.463 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 364.20 | 0.51 | 364.51 | 15 | Cir | 0.013 | 1.00 | 370.30 | Pipe - (11) (1) |
| 14 | 13 | 57.233 | -1.964 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 366.48 | 1.15 | 367.14 | 15 | Cir | 0.013 | 1.41 | 371.16 | Pipe - (11) |
| 15 | 14 | 26.000 | -63.106 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 367.34 | 0.96 | 367.59 | 15 | Cir | 0.013 | 1.00 | 371.41 | Pipe - (67) |
| 16 | 14 | 161.000 | 35.067 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 367.34 | 4.36 | 374.36 | 15 | Cir | 0.013 | 1.00 | 378.18 | Pipe - (489) |
| 17 | 9 | 111.287 | 42.545 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 361.80 | 0.50 | 362.36 | 24 | Cir | 0.013 | 1.50 | 372.84 | Pipe - (451) |
| 18 | 17 | 28.000 | -97.237 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 362.56 | 0.50 | 362.70 | 24 | Cir | 0.013 | 0.50 | 372.72 | Pipe - (445) |
| 19 | 18 | 76.222 | -6.841 | DrGrt | 0.00 | 1.40 | 0.60 | 10.0 | 363.51 | 0.51 | 363.90 | 15 | Cir | 0.013 | 1.00 | 367.36 | Pipe - (476) |
| 20 | 13 | 31.121 | 85.999 | DrGrt | 0.00 | 0.14 | 0.60 | 10.0 | 364.71 | 0.51 | 364.87 | 15 | Cir | 0.013 | 1.00 | 368.69 | Pipe - (477) |
| 21 | 11 | 26.015 | -41.858 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 363.56 | 0.50 | 363.69 | 15 | Cir | 0.013 | 1.00 | 367.51 | Pipe - (68) |
| 22 | 5 | 28.000 | 0.703 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 358.59 | 0.50 | 358.73 | 15 | Cir | 0.013 | 1.00 | 362.55 | Pipe - (439) |
| 23 | End | 158.125 | 14.099 | Comb | 0.00 | 0.30 | 0.60 | 10.0 | 347.00 | 4.23 | 353.69 | 30 | Cir | 0.013 | 2.02 | 361.92 | Pipe - (71) |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 102.646 | 78.324 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 354.24 | 0.50 | 354.75 | 24 | Cir | 0.013 | 1.68 | 363.01 | Pipe - (77) |
| 25 | 24 | 28.000 | -90.230 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 358.83 | 1.29 | 359.19 | 18 | Cir | 0.013 | 1.13 | 363.01 | Pipe - (115) |
| 26 | 25 | 43.841 | 45.001 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 359.39 | 0.50 | 359.61 | 18 | Cir | 0.013 | 1.11 | 364.28 | Pipe - (76) |
| 27 | 26 | 28.006 | 43.837 | Comb | 0.00 | 0.40 | 0.60 | 10.0 | 359.81 | 0.50 | 359.95 | 18 | Cir | 0.013 | 1.50 | 364.29 | Pipe - (75) |
| 28 | 27 | 238.741 | -95.835 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 360.15 | 3.41 | 368.30 | 18 | Cir | 0.013 | 1.03 | 372.43 | Pipe - (101) |
| 29 | 28 | 45.226 | -39.872 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 368.57 | 2.83 | 369.85 | 15 | Cir | 0.013 | 1.00 | 373.68 | Pipe - (103) |
| 30 | 23 | 28.983 | 5.477 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 354.77 | 0.86 | 355.02 | 24 | Cir | 0.013 | 1.50 | 361.89 | Pipe - (70) |
| 31 | 30 | 81.813 | -18.633 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 355.22 | 0.51 | 355.64 | 24 | Cir | 0.013 | 0.43 | 363.66 | Pipe - (510) |
| 32 | 31 | 72.154 | -22.294 | DrGrt | 0.00 | 0.59 | 0.60 | 10.0 | 356.18 | 0.51 | 356.55 | 18 | Cir | 0.013 | 0.50 | 360.46 | Pipe - (509) |
| 33 | 32 | 96.135 | -1.660 | DrGrt | 0.00 | 0.94 | 0.60 | 10.0 | 356.75 | 1.19 | 357.89 | 18 | Cir | 0.013 | 0.50 | 361.60 | Pipe - (508) |
| 34 | 33 | 202.630 | 10.144 | DrGrt | 0.00 | 0.81 | 0.60 | 10.0 | 358.16 | 1.65 | 361.50 | 15 | Cir | 0.013 | 1.00 | 364.94 | Pipe - (507) |
| 35 | 30 | 88.766 | -94.067 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 357.75 | 0.77 | 358.43 | 15 | Cir | 0.013 | 0.79 | 362.45 | Pipe - (69) |
| 36 | 35 | 121.131 | 28.141 | Comb | 0.00 | 0.38 | 0.60 | 10.0 | 358.63 | 0.95 | 359.78 | 15 | Cir | 0.013 | 1.21 | 363.80 | Pipe - (61) |
| 37 | 36 | 30.909 | -46.977 | Comb | 0.00 | 0.43 | 0.60 | 10.0 | 359.98 | 0.87 | 360.25 | 15 | Cir | 0.013 | 1.00 | 364.07 | Pipe - (72) |
| 38 | 36 | 217.760 | 28.893 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 359.98 | 1.08 | 362.34 | 15 | Cir | 0.013 | 1.00 | 366.16 | Pipe - (536) |
| 39 | 24 | 43.841 | 44.771 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 355.57 | 0.50 | 355.79 | 15 | Cir | 0.013 | 1.14 | 363.10 | Pipe - (105) |
| 40 | 39 | 28.003 | -45.813 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 355.99 | 0.50 | 356.13 | 15 | Cir | 0.013 | 1.50 | 363.11 | Pipe - (116) |
| 41 | 40 | 111.664 | 90.556 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 356.33 | 0.50 | 356.89 | 15 | Cir | 0.013 | 1.50 | 361.19 | Pipe - (104) |
| 42 | 41 | 28.509 | 88.780 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 357.09 | 0.53 | 357.24 | 15 | Cir | 0.013 | 1.00 | 361.06 | Pipe - (79) |
| 43 | 28 | 211.860 | -2.905 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 368.57 | 2.87 | 374.66 | 15 | Cir | 0.013 | 0.34 | 379.28 | Pipe - (590) |
| 44 | 43 | 146.606 | -16.815 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 374.86 | 0.50 | 375.60 | 15 | Cir | 0.013 | 1.50 | 379.82 | Pipe - (589) |
| 45 | 44 | 45.582 | 38.390 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 376.00 | 3.42 | 377.56 | 15 | Cir | 0.013 | 1.10 | 381.73 | Pipe - (588) |
| 46 | 45 | 28.000 | -43.358 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 377.76 | 0.50 | 377.90 | 15 | Cir | 0.013 | 1.00 | 381.73 | Pipe - (587) |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 44 | 28.000 | -91.856 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 375.80 | 0.71 | 376.00 | 15 | Cir | 0.013 | 1.00 | 379.82 | Pipe - (592) |

# Structure Report



SCM 1A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 121 | DropGrate | 358.45 | Rect | 3.00 | 3.00 | 30 | Cir | 352.80 | 30 | Cir | 353.00 |
| 2 | YI 122 | DropGrate | 361.06 | Rect | 3.00 | 3.00 | 30 | Cir | 353.70 | 30 | Cir | 353.90 |
| 3 | YI 123 | DropGrate | 362.54 | Rect | 3.00 | 3.00 | 30 | Cir | 354.80 | 30 | Cir | 355.00 |
| 4 | YI 124 | DropGrate | 362.99 | Rect | 3.00 | 3.00 | 30 | Cir | 356.30 | 30 | Cir | 356.50 |
| 5 | CB 125 | Combination | 362.55 | Rect | 4.00 | 4.00 | 30 | Cir | 357.28 | 24<br>15 | Cir<br>Cir | 357.83<br>358.59 |
| 6 | CB 126 | Combination | 365.47 | Rect | 4.00 | 4.00 | 24 | Cir | 360.38 | 24 | Cir | 360.58 |
| 7 | CB 127 | Combination | 367.61 | Rect | 4.00 | 4.00 | 24 | Cir | 360.80 | 24 | Cir | 361.00 |
| 8 | CB 128 | Combination | 367.61 | Rect | 4.00 | 4.00 | 24 | Cir | 361.18 | 24 | Cir | 361.37 |
| 9 | CB 129 | Combination | 367.82 | Rect | 4.00 | 4.00 | 24 | Cir | 361.60 | 18<br>24 | Cir<br>Cir | 362.56<br>361.80 |
| 10 | CB 130 | Combination | 367.79 | Rect | 4.00 | 4.00 | 18 | Cir | 362.70 | 18 | Cir | 362.90 |
| 11 | CB 131 | Combination | 367.57 | Rect | 4.00 | 4.00 | 18 | Cir | 363.12 | 18<br>15 | Cir<br>Cir | 363.40<br>363.56 |
| 12 | CB 132 | Combination | 369.08 | Rect | 4.00 | 4.00 | 18 | Cir | 363.93 | 15 | Cir | 364.20 |
| 13 | JB 133 | Manhole | 370.30 | Cir | 4.00 | 4.00 | 15 | Cir | 364.51 | 15<br>15 | Cir<br>Cir | 366.48<br>364.71 |
| 14 | CB 134 | Combination | 371.16 | Rect | 4.00 | 4.00 | 15 | Cir | 367.14 | 15<br>15 | Cir<br>Cir | 367.34<br>367.34 |
| 15 | CB 134A | Combination | 371.41 | Rect | 4.00 | 4.00 | 15 | Cir | 367.59 | | | |
| 16 | CB 135 | Combination | 378.18 | Rect | 4.00 | 4.00 | 15 | Cir | 374.36 | | | |
| 17 | CB 136 | Combination | 372.84 | Rect | 4.00 | 4.00 | 24 | Cir | 362.36 | 24 | Cir | 362.56 |
| 18 | CB 136A | Combination | 372.72 | Rect | 4.00 | 4.00 | 24 | Cir | 362.70 | 15 | Cir | 363.51 |
| 19 | YI 136B | DropGrate | 367.36 | Rect | 3.00 | 3.00 | 15 | Cir | 363.90 | | | |
| 20 | YI 133A | DropGrate | 368.69 | Rect | 3.00 | 3.00 | 15 | Cir | 364.87 | | | |

# Structure Report



SCM 1A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 131A | Combination | 367.51 | Rect | 4.00 | 4.00 | 15 | Cir | 363.69 | | | |
| 22 | CB 125A | Combination | 362.55 | Rect | 4.00 | 4.00 | 15 | Cir | 358.73 | | | |
| 23 | CB 101 | Combination | 361.92 | Rect | 4.00 | 4.00 | 30 | Cir | 353.69 | 24<br>24 | Cir<br>Cir | 354.24<br>354.77 |
| 24 | CB 102 | Combination | 363.01 | Rect | 4.00 | 4.00 | 24 | Cir | 354.75 | 18<br>15 | Cir<br>Cir | 358.83<br>355.57 |
| 25 | CB 106 | Combination | 363.01 | Rect | 4.00 | 4.00 | 18 | Cir | 359.19 | 18 | Cir | 359.39 |
| 26 | CB 107 | Combination | 364.28 | Rect | 4.00 | 4.00 | 18 | Cir | 359.61 | 18 | Cir | 359.81 |
| 27 | CB 108 | Combination | 364.29 | Rect | 4.00 | 4.00 | 18 | Cir | 359.95 | 18 | Cir | 360.15 |
| 28 | CB 109 | Combination | 372.43 | Rect | 4.00 | 4.00 | 18 | Cir | 368.30 | 15<br>15 | Cir<br>Cir | 368.57<br>368.57 |
| 29 | CB 109A | Combination | 373.68 | Rect | 4.00 | 4.00 | 15 | Cir | 369.85 | | | |
| 30 | CB 113 | Combination | 361.89 | Cir | 4.00 | 4.00 | 24 | Cir | 355.02 | 24<br>15 | Cir<br>Cir | 355.22<br>357.75 |
| 31 | JB 113A | Manhole | 363.66 | Rect | 4.00 | 4.00 | 24 | Cir | 355.64 | 18 | Cir | 356.18 |
| 32 | YI 113B | DropGrate | 360.46 | Rect | 3.00 | 3.00 | 18 | Cir | 356.55 | 18 | Cir | 356.75 |
| 33 | YI 113C | DropGrate | 361.60 | Rect | 3.00 | 3.00 | 18 | Cir | 357.89 | 15 | Cir | 358.16 |
| 34 | YI 113D | DropGrate | 364.94 | Rect | 3.00 | 3.00 | 15 | Cir | 361.50 | | | |
| 35 | CB 114 | Combination | 362.45 | Rect | 4.00 | 4.00 | 15 | Cir | 358.43 | 15 | Cir | 358.63 |
| 36 | CB 115 | Combination | 363.80 | Rect | 4.00 | 4.00 | 15 | Cir | 359.78 | 15<br>15 | Cir<br>Cir | 359.98<br>359.98 |
| 37 | CB 115A | Combination | 364.07 | Rect | 4.00 | 4.00 | 15 | Cir | 360.25 | | | |
| 38 | CB 116 | Combination | 366.16 | Rect | 4.00 | 4.00 | 15 | Cir | 362.34 | | | |
| 39 | CB 103 | Combination | 363.10 | Rect | 4.00 | 4.00 | 15 | Cir | 355.79 | 15 | Cir | 355.99 |
| 40 | CB 104 | Combination | 363.11 | Rect | 4.00 | 4.00 | 15 | Cir | 356.13 | 15 | Cir | 356.33 |

# Structure Report

SCM 1A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 41 | CB 105 | Combination | 361.19 | Rect | 4.00 | 4.00 | 15 | Cir | 356.89 | 15 | Cir | 357.09 |
| 42 | CB 105A | Combination | 361.06 | Rect | 4.00 | 4.00 | 15 | Cir | 357.24 | | | |
| 43 | JB 110 | Manhole | 379.28 | Cir | 4.00 | 4.00 | 15 | Cir | 374.66 | 15 | Cir | 374.86 |
| 44 | CB 111 | Combination | 379.82 | Rect | 4.00 | 4.00 | 15 | Cir | 375.60 | 15<br>15 | Cir<br>Cir | 376.00<br>375.80 |
| 45 | CB 112 | Combination | 381.73 | Rect | 4.00 | 4.00 | 15 | Cir | 377.56 | 15 | Cir | 377.76 |
| 46 | CB 112A | Combination | 381.73 | Rect | 4.00 | 4.00 | 15 | Cir | 377.90 | | | |
| 47 | CB 111A | Combination | 379.82 | Rect | 4.00 | 4.00 | 15 | Cir | 376.00 | | | |

Project File: SCM 1A Storm Network.stm | Number of Structures: 47 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 1A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (444) | 17.64 | 30 | Cir | 52.749 | 349.00 | 352.80 | 7.204 | 351.50 | 354.22 | n/a | 354.22 j | End | DropGrate |
| 2 | Pipe - (443) | 16.94 | 30 | Cir | 125.000 | 353.00 | 353.70 | 0.560 | 354.33 | 355.09 | n/a | 355.09 | 1 | DropGrate |
| 3 | Pipe - (442) | 15.81 | 30 | Cir | 177.766 | 353.90 | 354.80 | 0.506 | 355.21 | 356.14 | 0.27 | 356.14 | 2 | DropGrate |
| 4 | Pipe - (441) | 15.01 | 30 | Cir | 260.092 | 355.00 | 356.30 | 0.500 | 356.28 | 357.61 | 0.28 | 357.61 | 3 | DropGrate |
| 5 | Pipe - (440) | 13.55 | 30 | Cir | 155.941 | 356.50 | 357.28 | 0.500 | 357.70 | 358.52 | n/a | 358.52 | 4 | Combination |
| 6 | Pipe - (447) | 12.66 | 24 | Cir | 86.389 | 357.83 | 360.38 | 2.952 | 358.62 | 361.66 | 0.63 | 361.66 | 5 | Combination |
| 7 | Pipe - (446) | 12.53 | 24 | Cir | 43.841 | 360.58 | 360.80 | 0.502 | 361.91 | 362.13 | 0.56 | 362.69 | 6 | Combination |
| 8 | Pipe - (453) | 12.39 | 24 | Cir | 28.000 | 361.00 | 361.18 | 0.643 | 362.69 | 362.44 | n/a | 362.44 | 7 | Combination |
| 9 | Pipe - (452) | 12.12 | 24 | Cir | 43.841 | 361.37 | 361.60 | 0.525 | 362.65 | 362.88 | 0.82 | 363.70 | 8 | Combination |
| 10 | Pipe - (24) | 5.22 | 18 | Cir | 28.018 | 362.56 | 362.70 | 0.500 | 363.70 | 363.75 | 0.27 | 364.02 | 9 | Combination |
| 11 | Pipe - (15) | 4.96 | 18 | Cir | 43.139 | 362.90 | 363.12 | 0.510 | 364.02 | 364.09 | 0.42 | 364.51 | 10 | Combination |
| 12 | Pipe - (14) | 2.99 | 18 | Cir | 106.050 | 363.40 | 363.93 | 0.500 | 364.51 | 364.64 | 0.15 | 364.79 | 11 | Combination |
| 13 | Pipe - (11) (1) | 2.75 | 15 | Cir | 60.787 | 364.20 | 364.51 | 0.510 | 364.90 | 365.21 | 0.24 | 365.45 | 12 | Manhole |
| 14 | Pipe - (11) | 2.25 | 15 | Cir | 57.233 | 366.48 | 367.14 | 1.153 | 366.97 | 367.74 | n/a | 367.74 | 13 | Combination |
| 15 | Pipe - (67) | 0.81 | 15 | Cir | 26.000 | 367.34 | 367.59 | 0.962 | 367.74 | 367.94 | n/a | 367.94 j | 14 | Combination |
| 16 | Pipe - (489) | 0.78 | 15 | Cir | 161.000 | 367.34 | 374.36 | 4.360 | 367.74 | 374.70 | n/a | 374.70 j | 14 | Combination |
| 17 | Pipe - (451) | 6.78 | 24 | Cir | 111.287 | 361.80 | 362.36 | 0.503 | 363.70 | 363.28 | 0.53 | 363.28 | 9 | Combination |
| 18 | Pipe - (445) | 5.80 | 24 | Cir | 28.000 | 362.56 | 362.70 | 0.500 | 363.39 | 363.55 | n/a | 363.55 | 17 | Combination |
| 19 | Pipe - (476) | 5.43 | 15 | Cir | 76.222 | 363.51 | 363.90 | 0.512 | 364.76* | 365.30* | 0.30 | 365.60 | 18 | DropGrate |
| 20 | Pipe - (477) | 0.54 | 15 | Cir | 31.121 | 364.71 | 364.87 | 0.514 | 365.45 | 365.45 | 0.01 | 365.46 | 13 | DropGrate |
| 21 | Pipe - (68) | 0.97 | 15 | Cir | 26.015 | 363.56 | 363.69 | 0.500 | 364.51 | 364.51 | 0.02 | 364.53 | 11 | Combination |
| 22 | Pipe - (439) | 0.62 | 15 | Cir | 28.000 | 358.59 | 358.73 | 0.500 | 358.90 | 359.04 | 0.11 | 359.15 | 5 | Combination |
| 23 | Pipe - (71) | 23.77 | 30 | Cir | 158.125 | 347.00 | 353.69 | 4.231 | 349.50 | 355.35 | n/a | 355.35 j | End | Combination |
| 24 | Pipe - (77) | 8.78 | 24 | Cir | 102.646 | 354.24 | 354.75 | 0.497 | 355.35 | 355.81 | 0.70 | 356.51 | 23 | Combination |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 1A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (115) | 7.02 | 18 | Cir | 28.000 | 358.83 | 359.19 | 1.286 | 359.66 | 360.22 | n/a | 360.22 | 24 | Combination |
| 26 | Pipe - (76) | 6.88 | 18 | Cir | 43.841 | 359.39 | 359.61 | 0.502 | 360.53 | 360.75 | 0.39 | 361.14 | 25 | Combination |
| 27 | Pipe - (75) | 5.71 | 18 | Cir | 28.006 | 359.81 | 359.95 | 0.500 | 361.14 | 361.20 | 0.31 | 361.51 | 26 | Combination |
| 28 | Pipe - (101) | 4.46 | 18 | Cir | 238.741 | 360.15 | 368.30 | 3.414 | 361.51 | 369.11 | n/a | 369.11 j | 27 | Combination |
| 29 | Pipe - (103) | 1.05 | 15 | Cir | 45.226 | 368.57 | 369.85 | 2.830 | 369.11 | 370.25 | n/a | 370.25 j | 28 | Combination |
| 30 | Pipe - (70) | 14.77 | 24 | Cir | 28.983 | 354.77 | 355.02 | 0.863 | 356.01 | 356.40 | 0.95 | 356.40 | 23 | Combination |
| 31 | Pipe - (510) | 8.67 | 24 | Cir | 81.813 | 355.22 | 355.64 | 0.513 | 356.40 | 356.69 | 0.18 | 356.69 | 30 | Manhole |
| 32 | Pipe - (509) | 8.74 | 18 | Cir | 72.154 | 356.18 | 356.55 | 0.513 | 357.68* | 358.18* | 0.19 | 358.37 | 31 | DropGrate |
| 33 | Pipe - (508) | 6.61 | 18 | Cir | 96.135 | 356.75 | 357.89 | 1.186 | 358.37 | 358.88 | n/a | 358.88 j | 32 | DropGrate |
| 34 | Pipe - (507) | 3.14 | 15 | Cir | 202.630 | 358.16 | 361.50 | 1.648 | 358.88 | 362.21 | n/a | 362.21 j | 33 | DropGrate |
| 35 | Pipe - (69) | 4.66 | 15 | Cir | 88.766 | 357.75 | 358.43 | 0.766 | 358.62 | 359.30 | n/a | 359.30 | 30 | Combination |
| 36 | Pipe - (61) | 3.95 | 15 | Cir | 121.131 | 358.63 | 359.78 | 0.949 | 359.35 | 360.58 | 0.42 | 360.58 | 35 | Combination |
| 37 | Pipe - (72) | 1.67 | 15 | Cir | 30.909 | 359.98 | 360.25 | 0.874 | 360.58 | 360.76 | n/a | 360.76 j | 36 | Combination |
| 38 | Pipe - (536) | 1.01 | 15 | Cir | 217.760 | 359.98 | 362.34 | 1.084 | 360.58 | 362.73 | n/a | 362.73 j | 36 | Combination |
| 39 | Pipe - (105) | 1.84 | 15 | Cir | 43.841 | 355.57 | 355.79 | 0.502 | 356.51 | 356.54 | 0.10 | 356.64 | 24 | Combination |
| 40 | Pipe - (116) | 1.77 | 15 | Cir | 28.003 | 355.99 | 356.13 | 0.500 | 356.64 | 356.68 | 0.27 | 356.95 | 39 | Combination |
| 41 | Pipe - (104) | 1.27 | 15 | Cir | 111.664 | 356.33 | 356.89 | 0.502 | 356.95 | 357.33 | 0.25 | 357.33 | 40 | Combination |
| 42 | Pipe - (79) | 0.50 | 15 | Cir | 28.509 | 357.09 | 357.24 | 0.526 | 357.37 | 357.52 | n/a | 357.61 j | 41 | Combination |
| 43 | Pipe - (590) | 2.05 | 15 | Cir | 211.860 | 368.57 | 374.66 | 2.875 | 369.11 | 375.23 | n/a | 375.23 | 28 | Manhole |
| 44 | Pipe - (589) | 2.10 | 15 | Cir | 146.606 | 374.86 | 375.60 | 0.505 | 375.45 | 376.19 | 0.31 | 376.50 | 43 | Combination |
| 45 | Pipe - (588) | 0.81 | 15 | Cir | 45.582 | 376.00 | 377.56 | 3.422 | 376.50 | 377.91 | n/a | 377.91 j | 44 | Combination |
| 46 | Pipe - (587) | 0.62 | 15 | Cir | 28.000 | 377.76 | 377.90 | 0.500 | 378.07 | 378.21 | 0.11 | 378.32 | 45 | Combination |
| 47 | Pipe - (592) | 0.19 | 15 | Cir | 28.000 | 375.80 | 376.00 | 0.714 | 376.50 | 376.17 | n/a | 376.17 | 44 | Combination |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report



SCM 1A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 121 | 1.01 | 0.00 | 0.47 | 0.53 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.10 | 12.10 | 0.10 | 12.10 | 0.0 | Off |
| 2 | YI 122 | 1.55 | 0.72 | 2.27 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.21 | 22.75 | 0.21 | 22.75 | 0.0 | Off |
| 3 | YI 123 | 1.28 | 0.00 | 0.56 | 0.72 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.10 | 0.11 | 13.10 | 0.0 | 2 |
| 4 | YI 124 | 1.82 | 0.00 | 1.82 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.18 | 19.92 | 0.18 | 19.92 | 0.0 | 3 |
| 5 | CB 125 | 0.43 | 0.00 | 0.42 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.27 | 0.03 | 0.56 | 0.0 | Off |
| 6 | CB 126 | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | 5 |
| 7 | CB 127 | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | 6 |
| 8 | CB 128 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.75 | 0.14 | 2.75 | 0.0 | Off |
| 9 | CB 129 | 0.62 | 0.21 | 0.74 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.05 | 0.08 | 1.38 | 0.0 | Off |
| 10 | CB 130 | 0.31 | 0.01 | 0.32 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.59 | 0.01 | 0.22 | 0.0 | 11 |
| 11 | CB 131 | 1.20 | 0.00 | 0.99 | 0.22 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.14 | 0.11 | 1.89 | 0.0 | 22 |
| 12 | CB 132 | 0.27 | 0.09 | 0.36 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.84 | 0.02 | 0.35 | 0.0 | 11 |
| 13 | JB 133 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 14 | CB 134 | 0.74 | 0.08 | 0.73 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.98 | 0.08 | 1.35 | 0.0 | 12 |
| 15 | CB 134A | 0.81 | 0.00 | 0.73 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.98 | 0.08 | 1.35 | 0.0 | 21 |
| 16 | CB 135 | 0.78 | 0.00 | 0.70 | 0.08 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.85 | 0.08 | 1.28 | 0.0 | 14 |
| 17 | CB 136 | 1.01 | 0.19 | 0.98 | 0.21 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.12 | 0.11 | 1.88 | 0.0 | 9 |
| 18 | CB 136A | 0.43 | 0.04 | 0.45 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.49 | 0.04 | 0.66 | 0.0 | 10 |
| 19 | YI 136B | 5.43 | 0.00 | 5.43 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.37 | 39.11 | 0.37 | 39.11 | 0.0 | Off |
| 20 | YI 133A | 0.54 | 0.00 | 0.54 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.08 | 9.99 | 0.08 | 9.99 | 0.0 | Off |
| 21 | CB 131A | 0.97 | 0.09 | 0.89 | 0.16 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.74 | 0.10 | 1.70 | 0.0 | 22 |
| 22 | CB 125A | 0.62 | 0.38 | 0.86 | 0.14 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.58 | 0.10 | 1.63 | 0.0 | Off |
| 23 | CB 101 | 1.16 | 0.41 | 1.57 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.12 | 0.22 | 7.12 | 0.0 | Off |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 102 | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.29 | 0.00 | 0.00 | 0.0 | 23 |
| 25 | CB 106 | 0.19 | 0.32 | 0.50 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.76 | 0.05 | 0.79 | 0.0 | 30 |
| 26 | CB 107 | 1.32 | 0.16 | 1.15 | 0.32 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.80 | 0.13 | 2.60 | 0.0 | 25 |
| 27 | CB 108 | 1.55 | 0.37 | 1.40 | 0.52 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.69 | 0.16 | 3.78 | 0.0 | 40 |
| 28 | CB 109 | 1.59 | 0.00 | 1.22 | 0.37 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.04 | 0.14 | 2.93 | 0.0 | 27 |
| 29 | CB 109A | 1.05 | 0.00 | 0.89 | 0.16 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.71 | 0.10 | 1.69 | 0.0 | 26 |
| 30 | CB 113 | 1.82 | 0.24 | 2.06 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.73 | 0.25 | 8.73 | 0.0 | Off |
| 31 | JB 113A | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 32 | YI 113B | 2.29 | 4.24 | 6.53 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.42 | 43.98 | 0.42 | 43.98 | 0.0 | Off |
| 33 | YI 113C | 3.65 | 2.14 | 1.54 | 4.24 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.20 | 22.10 | 0.20 | 22.10 | 0.0 | 32 |
| 34 | YI 113D | 3.14 | 0.00 | 1.00 | 2.14 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.15 | 17.10 | 0.15 | 17.10 | 0.0 | 33 |
| 35 | CB 114 | 0.81 | 0.39 | 0.99 | 0.21 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.13 | 0.11 | 1.89 | 0.0 | 30 |
| 36 | CB 115 | 1.47 | 0.15 | 1.24 | 0.39 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.10 | 0.14 | 3.02 | 0.0 | 35 |
| 37 | CB 115A | 1.67 | 0.00 | 1.26 | 0.41 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.20 | 0.14 | 3.14 | 0.0 | 23 |
| 38 | CB 116 | 1.01 | 0.00 | 0.86 | 0.15 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.60 | 0.10 | 1.64 | 0.0 | 36 |
| 39 | CB 103 | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.29 | 0.00 | 0.00 | 0.0 | 42 |
| 40 | CB 104 | 0.54 | 0.52 | 0.90 | 0.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.76 | 0.10 | 1.72 | 0.0 | 41 |
| 41 | CB 105 | 0.78 | 0.17 | 0.82 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.40 | 0.09 | 1.54 | 0.0 | Off |
| 42 | CB 105A | 0.50 | 0.00 | 0.49 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.69 | 0.05 | 0.75 | 0.0 | Off |
| 43 | JB 110 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 44 | CB 111 | 1.12 | 0.00 | 0.94 | 0.19 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.93 | 0.11 | 1.79 | 0.0 | 17 |
| 45 | CB 112 | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | 44 |
| 46 | CB 112A | 0.62 | 0.00 | 0.58 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.24 | 0.06 | 1.00 | 0.0 | 18 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 111A | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | 17 |

Project File: SCM 1A Storm Network.stm

Number of lines: 47

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 1A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 30 | 17.64 | 349.00 | 351.50 | 2.50 | 2.88 | 3.60 | 0.20 | 351.70 | 0.185 | 52.749 | 352.80 | 354.22 j | 1.42** | 2.88 | 6.13 | 0.58 | 354.80 | 0.486 | 0.336 | n/a | 1.15 | 0.67 |
| 2 | 30 | 16.94 | 353.00 | 354.33 | 1.33* | 2.65 | 6.40 | 0.57 | 354.89 | 0.000 | 125.000 | 353.70 | 355.09 | 1.39** | 2.80 | 6.04 | 0.57 | 355.66 | 0.000 | 0.000 | n/a | 0.86 | n/a |
| 3 | 30 | 15.81 | 353.90 | 355.21 | 1.31* | 2.61 | 6.06 | 0.54 | 355.75 | 0.000 | 177.766 | 354.80 | 356.14 | 1.34** | 2.68 | 5.89 | 0.54 | 356.68 | 0.000 | 0.000 | n/a | 0.50 | 0.27 |
| 4 | 30 | 15.01 | 355.00 | 356.28 | 1.28* | 2.52 | 5.96 | 0.52 | 356.80 | 0.000 | 260.092 | 356.30 | 357.61 | 1.31** | 2.59 | 5.79 | 0.52 | 358.13 | 0.000 | 0.000 | n/a | 0.54 | 0.28 |
| 5 | 30 | 13.55 | 356.50 | 357.70 | 1.20* | 2.33 | 5.81 | 0.49 | 358.19 | 0.000 | 155.941 | 357.28 | 358.52 | 1.24** | 2.42 | 5.60 | 0.49 | 359.00 | 0.000 | 0.000 | n/a | 2.02 | n/a |
| 6 | 24 | 12.66 | 357.83 | 358.62 | 0.79* | 1.15 | 11.05 | 0.55 | 359.17 | 0.000 | 86.389 | 360.38 | 361.66 | 1.28** | 2.12 | 5.97 | 0.55 | 362.21 | 0.000 | 0.000 | n/a | 1.13 | 0.63 |
| 7 | 24 | 12.53 | 360.58 | 361.91 | 1.33* | 2.22 | 5.64 | 0.49 | 362.41 | 0.501 | 43.841 | 360.80 | 362.13 | 1.33 | 2.23 | 5.63 | 0.49 | 362.63 | 0.500 | 0.501 | 0.219 | 1.13 | 0.56 |
| 8 | 24 | 12.39 | 361.00 | 362.69 | 1.69 | 2.09 | 4.37 | 0.54 | 363.24 | 0.000 | 28.000 | 361.18 | 362.44 | 1.26** | 2.09 | 5.92 | 0.54 | 362.99 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 9 | 24 | 12.12 | 361.37 | 362.65 | 1.28* | 2.12 | 5.71 | 0.51 | 363.16 | 0.525 | 43.841 | 361.60 | 362.88 | 1.28 | 2.12 | 5.71 | 0.51 | 363.39 | 0.526 | 0.525 | 0.230 | 1.62 | 0.82 |
| 10 | 18 | 5.22 | 362.56 | 363.70 | 1.14 | 1.44 | 3.62 | 0.20 | 363.90 | 0.287 | 28.018 | 362.70 | 363.75 | 1.05 | 1.32 | 3.95 | 0.24 | 363.99 | 0.351 | 0.319 | 0.090 | 1.11 | 0.27 |
| 11 | 18 | 4.96 | 362.90 | 364.02 | 1.12 | 1.41 | 3.51 | 0.19 | 364.21 | 0.271 | 43.139 | 363.12 | 364.09 | 0.97 | 1.21 | 4.09 | 0.26 | 364.35 | 0.392 | 0.332 | 0.143 | 1.61 | 0.42 |
| 12 | 18 | 2.99 | 363.40 | 364.51 | 1.11 | 1.40 | 2.13 | 0.07 | 364.58 | 0.100 | 106.050 | 363.93 | 364.64 | 0.71 | 0.82 | 3.64 | 0.21 | 364.84 | 0.393 | 0.247 | 0.262 | 0.75 | 0.15 |
| 13 | 15 | 2.75 | 364.20 | 364.90 | 0.70* | 0.70 | 3.92 | 0.24 | 365.14 | 0.510 | 60.787 | 364.51 | 365.21 | 0.70 | 0.70 | 3.92 | 0.24 | 365.45 | 0.508 | 0.509 | 0.309 | 1.00 | 0.24 |
| 14 | 15 | 2.25 | 366.48 | 366.97 | 0.49* | 0.45 | 5.04 | 0.23 | 367.20 | 0.000 | 57.233 | 367.14 | 367.74 | 0.60** | 0.58 | 3.87 | 0.23 | 367.97 | 0.000 | 0.000 | n/a | 1.41 | n/a |
| 15 | 15 | 0.81 | 367.34 | 367.74 | 0.40 | 0.28 | 2.42 | 0.13 | 367.87 | 0.000 | 26.000 | 367.59 | 367.94 j | 0.35** | 0.28 | 2.86 | 0.13 | 368.07 | 0.000 | 0.000 | n/a | 1.00 | 0.13 |
| 16 | 15 | 0.78 | 367.34 | 367.74 | 0.40 | 0.28 | 2.31 | 0.12 | 367.86 | 0.000 | 161.000 | 374.36 | 374.70 j | 0.34** | 0.28 | 2.82 | 0.12 | 374.83 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 17 | 24 | 6.78 | 361.80 | 363.70 | 1.90 | 1.42 | 2.20 | 0.36 | 364.06 | 0.000 | 111.287 | 362.36 | 363.28 | 0.92** | 1.42 | 4.79 | 0.36 | 363.64 | 0.000 | 0.000 | n/a | 1.50 | 0.53 |
| 18 | 24 | 5.80 | 362.56 | 363.39 | 0.83* | 1.24 | 4.68 | 0.32 | 363.72 | 0.000 | 28.000 | 362.70 | 363.55 | 0.85** | 1.27 | 4.56 | 0.32 | 363.87 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 19 | 15 | 5.43 | 363.51 | 364.76 | 1.25* | 1.23 | 4.43 | 0.30 | 365.06 | 0.707 | 76.222 | 363.90 | 365.30 | 1.25 | 1.23 | 4.42 | 0.30 | 365.60 | 0.707 | 0.707 | 0.539 | 1.00 | 0.30 |
| 20 | 15 | 0.54 | 364.71 | 365.45 | 0.74 | 0.75 | 0.72 | 0.01 | 365.45 | 0.017 | 31.121 | 364.87 | 365.45 | 0.58 | 0.55 | 0.98 | 0.01 | 365.46 | 0.037 | 0.027 | 0.008 | 1.00 | 0.01 |
| 21 | 15 | 0.97 | 363.56 | 364.51 | 0.95 | 1.00 | 0.97 | 0.01 | 364.53 | 0.026 | 26.015 | 363.69 | 364.51 | 0.82 | 0.86 | 1.13 | 0.02 | 364.53 | 0.038 | 0.032 | 0.008 | 1.00 | 0.02 |
| 22 | 15 | 0.62 | 358.59 | 358.90 | 0.31* | 0.23 | 2.60 | 0.11 | 359.01 | 0.500 | 28.000 | 358.73 | 359.04 | 0.31** | 0.24 | 2.62 | 0.11 | 359.15 | 0.509 | 0.504 | 0.141 | 1.00 | 0.11 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 30 | 23.77 | 347.00 | 349.50 | 2.50* | 3.46 | 4.84 | 0.36 | 349.86 | 0.336 | 158.125 | 353.69 | 355.35 j | 1.66** | 3.46 | 6.87 | 0.73 | 356.08 | 0.554 | 0.445 | n/a | 2.02 | n/a |
| 24 | 24 | 8.78 | 354.24 | 355.35 | 1.11 | 1.68 | 4.91 | 0.37 | 355.72 | 0.428 | 102.646 | 354.75 | 355.81 | 1.06** | 1.69 | 5.18 | 0.42 | 356.23 | 0.494 | 0.461 | 0.473 | 1.68 | 0.70 |
| 25 | 18 | 7.02 | 358.83 | 359.66 | 0.83* | 1.00 | 7.01 | 0.46 | 360.12 | 0.000 | 28.000 | 359.19 | 360.22 | 1.03** | 1.29 | 5.46 | 0.46 | 360.68 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 26 | 18 | 6.88 | 359.39 | 360.53 | 1.14* | 1.44 | 4.78 | 0.35 | 360.88 | 0.502 | 43.841 | 359.61 | 360.75 | 1.14 | 1.44 | 4.78 | 0.36 | 361.10 | 0.502 | 0.502 | 0.220 | 1.11 | 0.39 |
| 27 | 18 | 5.71 | 359.81 | 361.14 | 1.33 | 1.66 | 3.44 | 0.18 | 361.33 | 0.264 | 28.006 | 359.95 | 361.20 | 1.25 | 1.57 | 3.63 | 0.20 | 361.41 | 0.288 | 0.276 | 0.077 | 1.50 | 0.31 |
| 28 | 18 | 4.46 | 360.15 | 361.51 | 1.36 | 0.97 | 2.65 | 0.33 | 361.83 | 0.000 | 238.741 | 368.30 | 369.11 j | 0.81** | 0.97 | 4.58 | 0.33 | 369.44 | 0.000 | 0.000 | n/a | 1.03 | n/a |
| 29 | 15 | 1.05 | 368.57 | 369.11 | 0.54 | 0.34 | 2.06 | 0.15 | 369.26 | 0.000 | 45.226 | 369.85 | 370.25 j | 0.40** | 0.34 | 3.07 | 0.15 | 370.40 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 30 | 24 | 14.77 | 354.77 | 356.01 | 1.24* | 2.04 | 7.24 | 0.63 | 356.64 | 0.000 | 28.983 | 355.02 | 356.40 | 1.38** | 2.32 | 6.37 | 0.63 | 357.03 | 0.000 | 0.000 | n/a | 1.50 | 0.95 |
| 31 | 24 | 8.67 | 355.22 | 356.40 | 1.18 | 1.67 | 4.48 | 0.42 | 356.82 | 0.000 | 81.813 | 355.64 | 356.69 | 1.05** | 1.67 | 5.20 | 0.42 | 357.11 | 0.000 | 0.000 | n/a | 0.43 | 0.18 |
| 32 | 18 | 8.74 | 356.18 | 357.68 | 1.50* | 1.77 | 4.95 | 0.38 | 358.06 | 0.693 | 72.154 | 356.55 | 358.18 | 1.50 | 1.77 | 4.95 | 0.38 | 358.56 | 0.693 | 0.693 | 0.500 | 0.50 | 0.19 |
| 33 | 18 | 6.61 | 356.75 | 358.37 | 1.50 | 1.24 | 3.74 | 0.22 | 358.59 | 0.397 | 96.135 | 357.89 | 358.88 j | 0.99** | 1.24 | 5.32 | 0.44 | 359.32 | 0.656 | 0.527 | n/a | 0.50 | 0.22 |
| 34 | 15 | 3.14 | 358.16 | 358.88 | 0.72 | 0.72 | 4.26 | 0.29 | 359.18 | 0.000 | 202.630 | 361.50 | 362.21 j | 0.71** | 0.72 | 4.34 | 0.29 | 362.51 | 0.000 | 0.000 | n/a | 1.00 | 0.29 |
| 35 | 15 | 4.66 | 357.75 | 358.62 | 0.87* | 0.91 | 5.14 | 0.40 | 359.02 | 0.000 | 88.766 | 358.43 | 359.30 | 0.87** | 0.92 | 5.08 | 0.40 | 359.71 | 0.000 | 0.000 | n/a | 0.79 | n/a |
| 36 | 15 | 3.95 | 358.63 | 359.35 | 0.72* | 0.73 | 5.41 | 0.35 | 359.70 | 0.000 | 121.131 | 359.78 | 360.58 | 0.80** | 0.83 | 4.74 | 0.35 | 360.93 | 0.000 | 0.000 | n/a | 1.21 | 0.42 |
| 37 | 15 | 1.67 | 359.98 | 360.58 | 0.60 | 0.47 | 2.85 | 0.19 | 360.78 | 0.000 | 30.909 | 360.25 | 360.76 j | 0.51** | 0.47 | 3.53 | 0.19 | 360.96 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 38 | 15 | 1.01 | 359.98 | 360.58 | 0.60 | 0.33 | 1.72 | 0.14 | 360.73 | 0.000 | 217.760 | 362.34 | 362.73 j | 0.39** | 0.33 | 3.04 | 0.14 | 362.88 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 39 | 15 | 1.84 | 355.57 | 356.51 | 0.94 | 0.99 | 1.85 | 0.05 | 356.57 | 0.096 | 43.841 | 355.79 | 356.54 | 0.75 | 0.76 | 2.40 | 0.09 | 356.63 | 0.182 | 0.139 | 0.061 | 1.14 | 0.10 |
| 40 | 15 | 1.77 | 355.99 | 356.64 | 0.65 | 0.64 | 2.75 | 0.12 | 356.76 | 0.265 | 28.003 | 356.13 | 356.68 | 0.55 | 0.52 | 3.41 | 0.18 | 356.86 | 0.470 | 0.367 | 0.103 | 1.50 | 0.27 |
| 41 | 15 | 1.27 | 356.33 | 356.95 | 0.62 | 0.39 | 2.09 | 0.07 | 357.02 | 0.159 | 111.664 | 356.89 | 357.33 | 0.44** | 0.39 | 3.25 | 0.16 | 357.50 | 0.528 | 0.344 | n/a | 1.50 | 0.25 |
| 42 | 15 | 0.50 | 357.09 | 357.37 | 0.28* | 0.20 | 2.49 | 0.10 | 357.46 | 0.525 | 28.509 | 357.24 | 357.52 j | 0.28** | 0.20 | 2.47 | 0.09 | 357.61 | 0.513 | 0.519 | 0.148 | 1.00 | 0.09 |
| 43 | 15 | 2.05 | 368.57 | 369.11 | 0.54 | 0.51 | 4.04 | 0.22 | 369.33 | 0.000 | 211.860 | 374.66 | 375.23 | 0.57** | 0.55 | 3.76 | 0.22 | 375.45 | 0.000 | 0.000 | n/a | 0.34 | n/a |
| 44 | 15 | 2.10 | 374.86 | 375.45 | 0.59* | 0.57 | 3.65 | 0.21 | 375.66 | 0.505 | 146.606 | 375.60 | 376.19 | 0.59 | 0.57 | 3.66 | 0.21 | 376.40 | 0.506 | 0.505 | 0.741 | 1.50 | 0.31 |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1A 25-YEAR

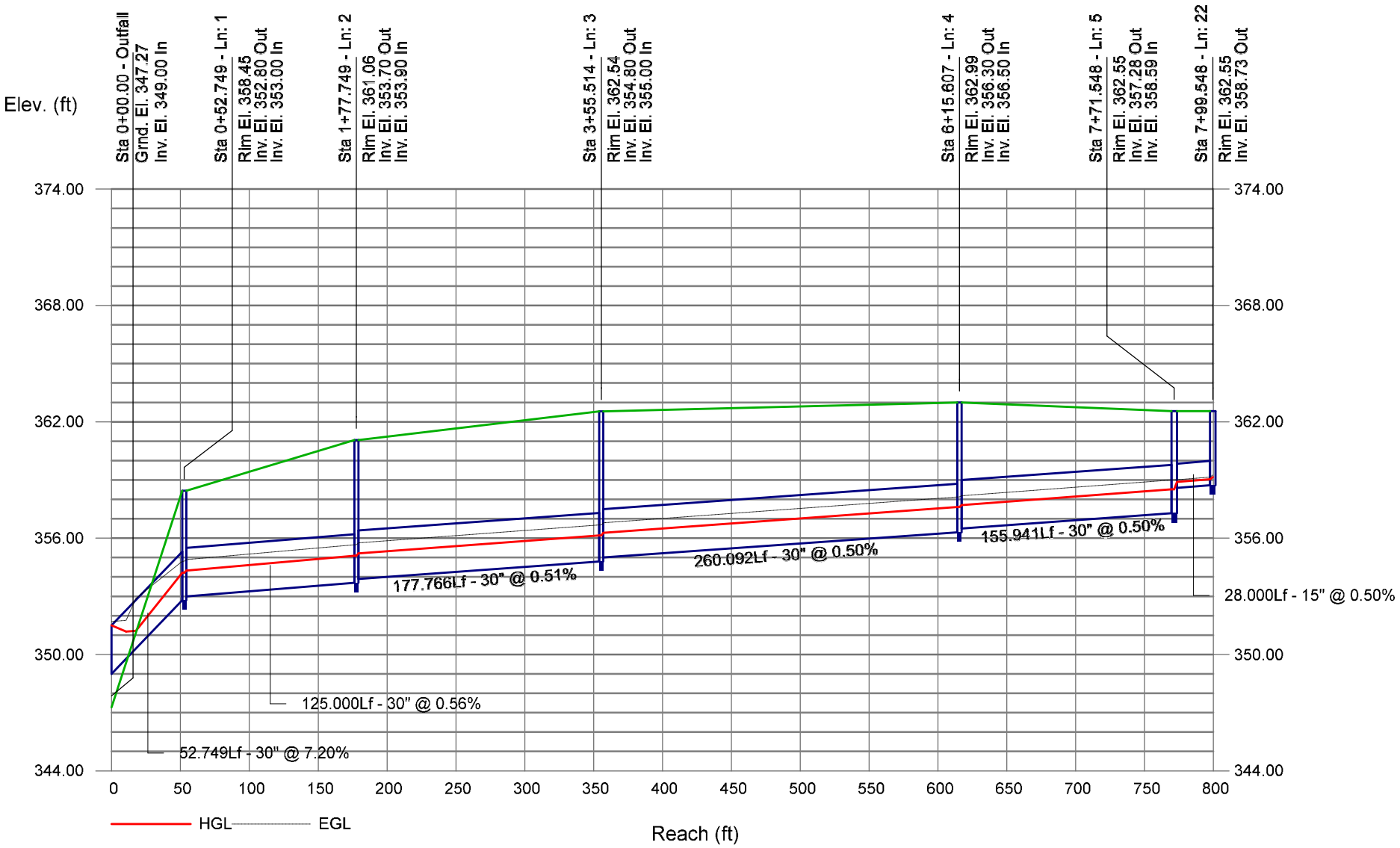
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 0.81 | 376.00 | 376.50 | 0.50 | 0.28 | 1.74 | 0.13 | 376.63 | 0.000 | 45.582 | 377.56 | 377.91 j | 0.35** | 0.28 | 2.85 | 0.13 | 378.04 | 0.000 | 0.000 | n/a | 1.10 | 0.14 |
| 46 | 15 | 0.62 | 377.76 | 378.07 | 0.31* | 0.23 | 2.60 | 0.11 | 378.18 | 0.500 | 28.000 | 377.90 | 378.21 | 0.31** | 0.24 | 2.62 | 0.11 | 378.32 | 0.509 | 0.504 | 0.141 | 1.00 | 0.11 |
| 47 | 15 | 0.19 | 375.80 | 376.50 | 0.70 | 0.10 | 0.27 | 0.06 | 376.56 | 0.000 | 28.000 | 376.00 | 376.17 | 0.17** | 0.10 | 1.94 | 0.06 | 376.23 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 1A Storm Network.stm | Number of lines: 47 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

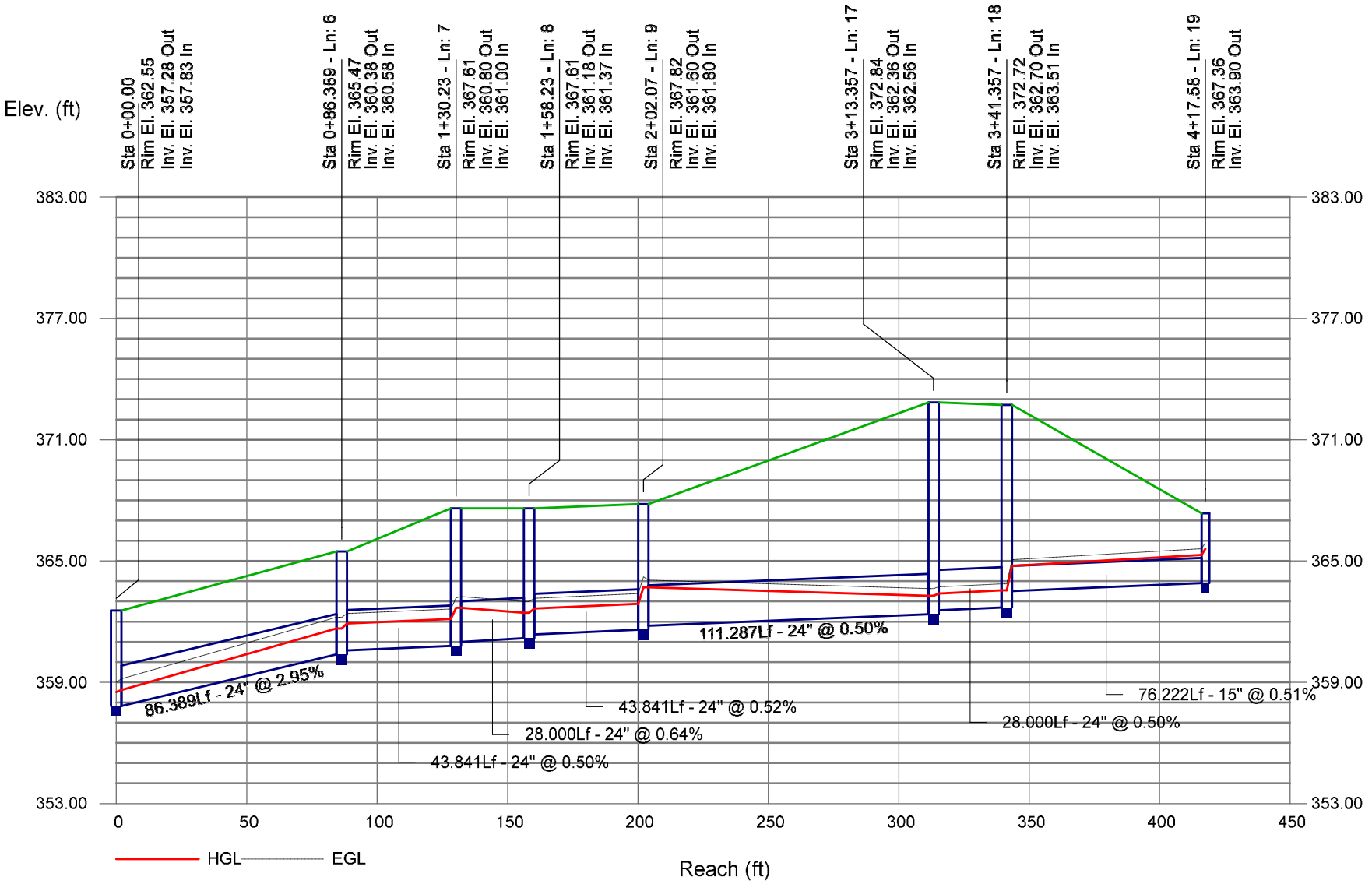
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 1-22 Proj. file: SCM 1A Storm Network.stm



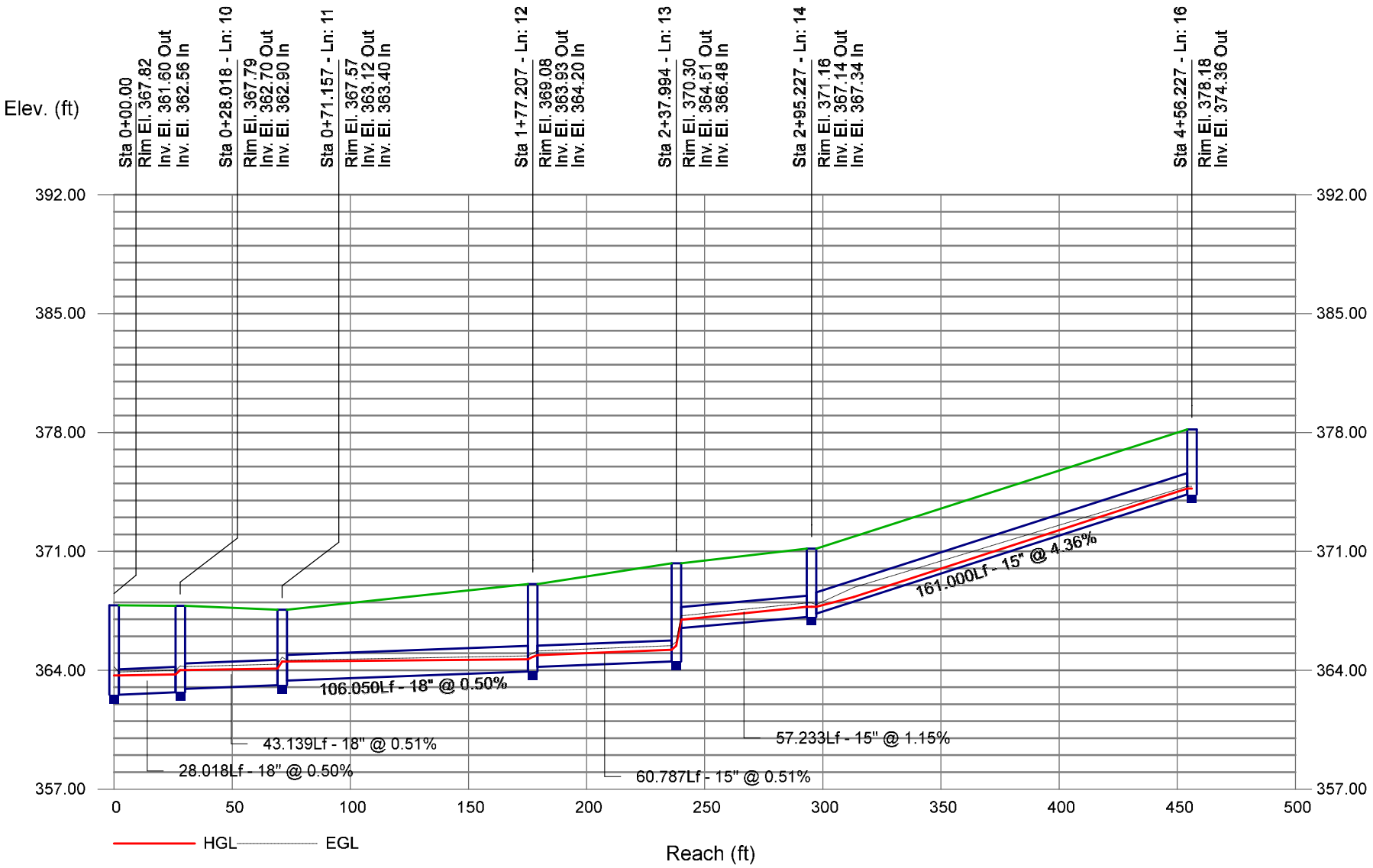
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 6-19 Proj. file: SCM 1A Storm Network.stm



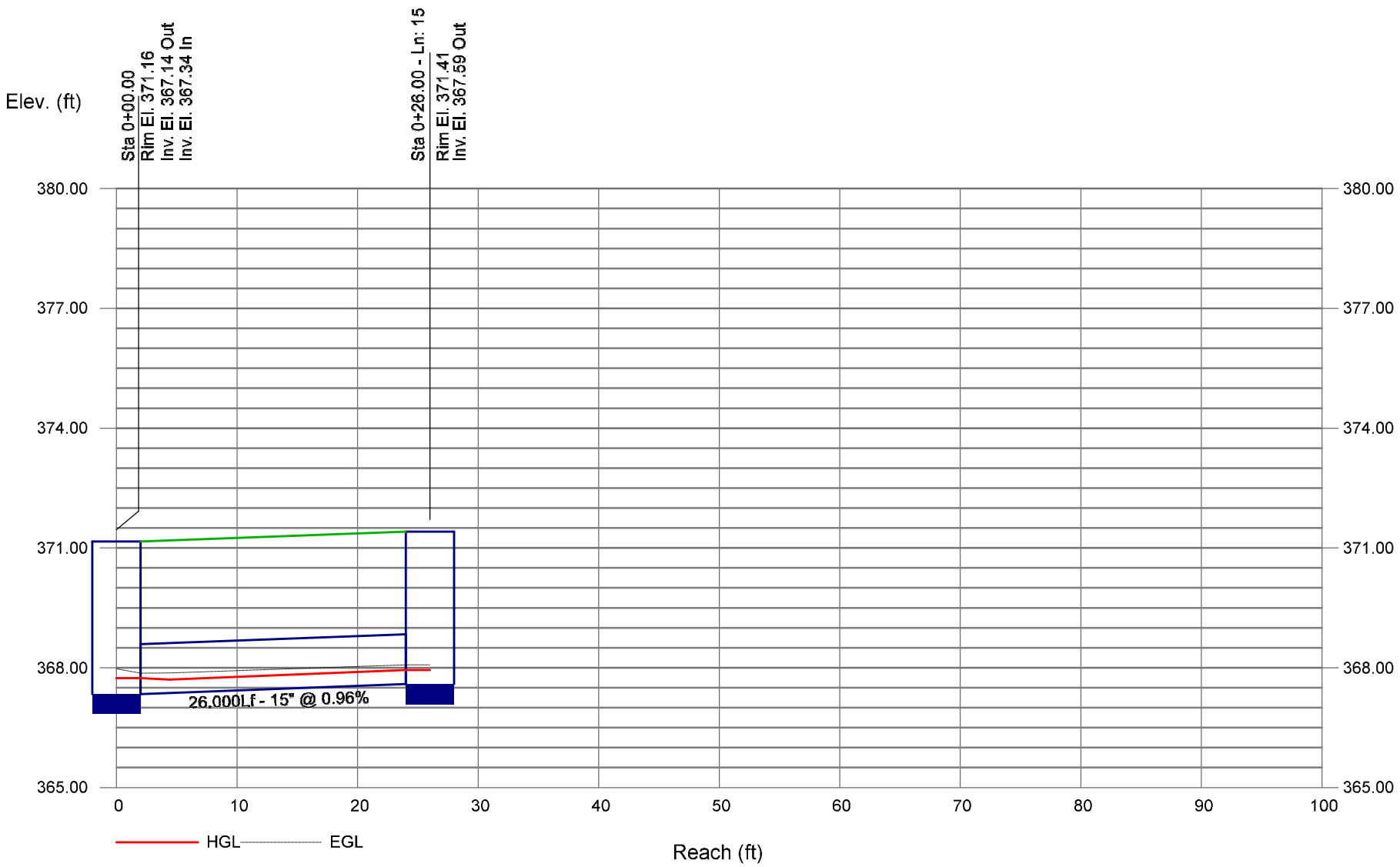
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 10-16 Proj. file: SCM 1A Storm Network.stm



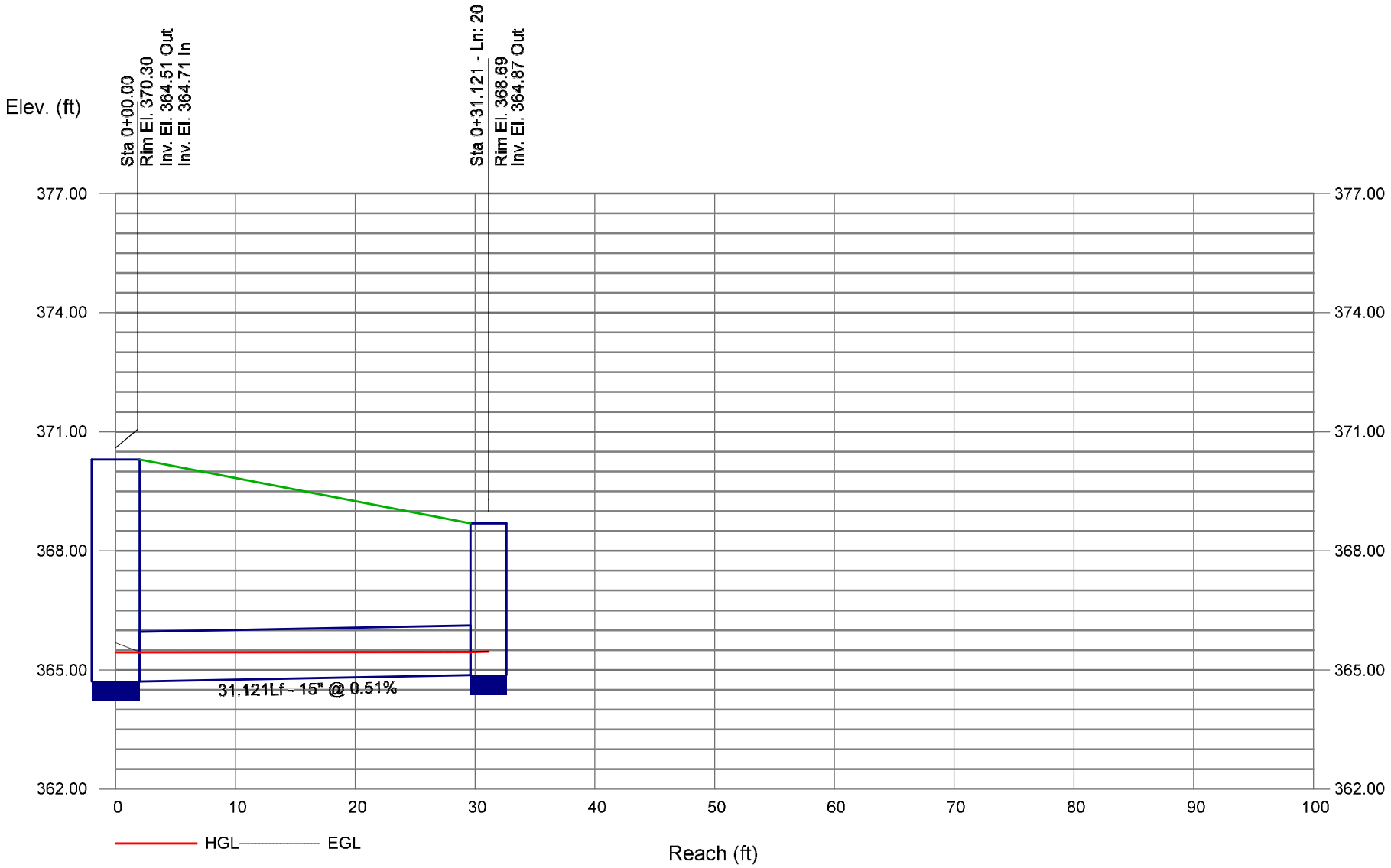
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 15-15 Proj. file: SCM 1A Storm Network.stm



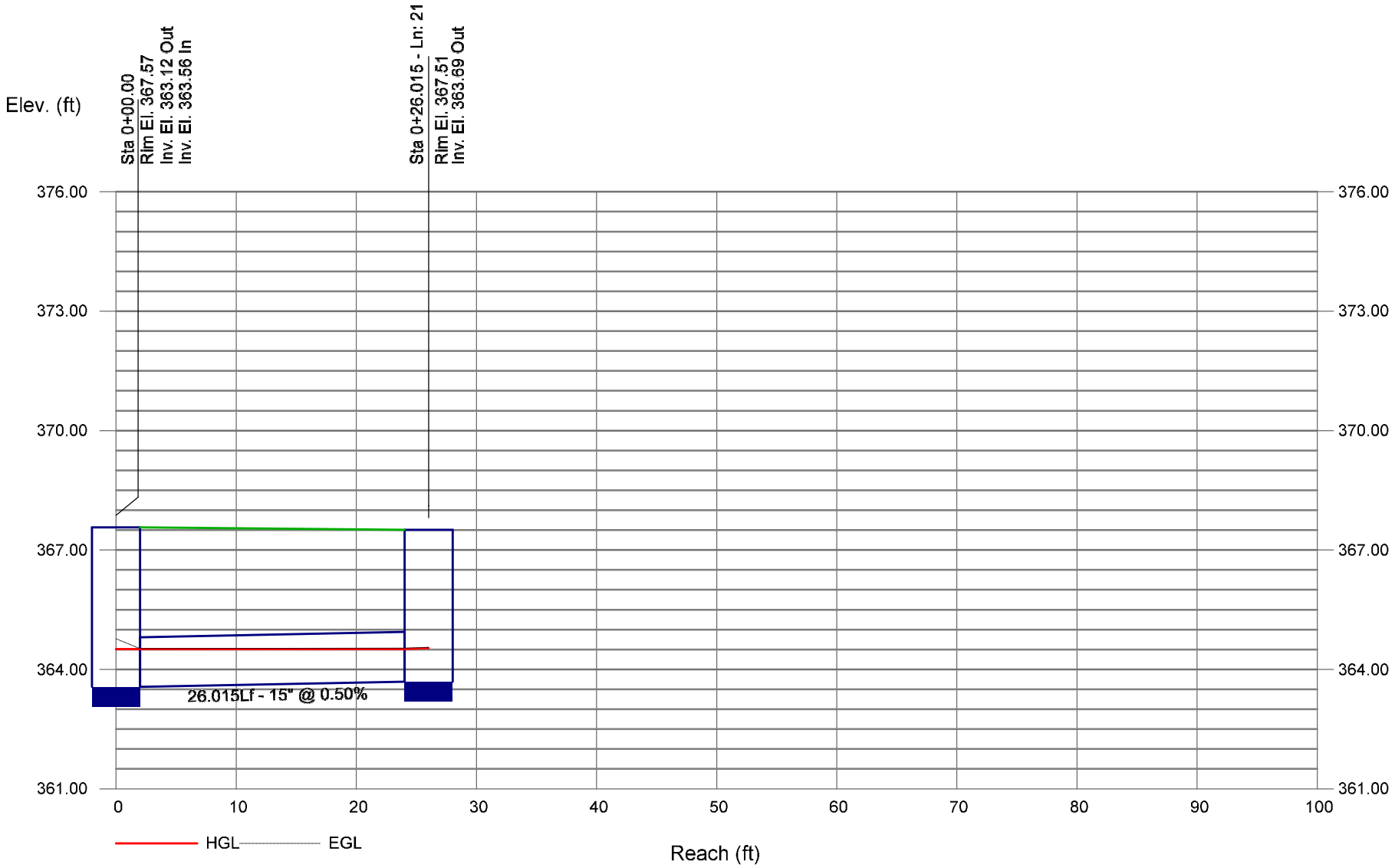
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 20-20 Proj. file: SCM 1A Storm Network.stm



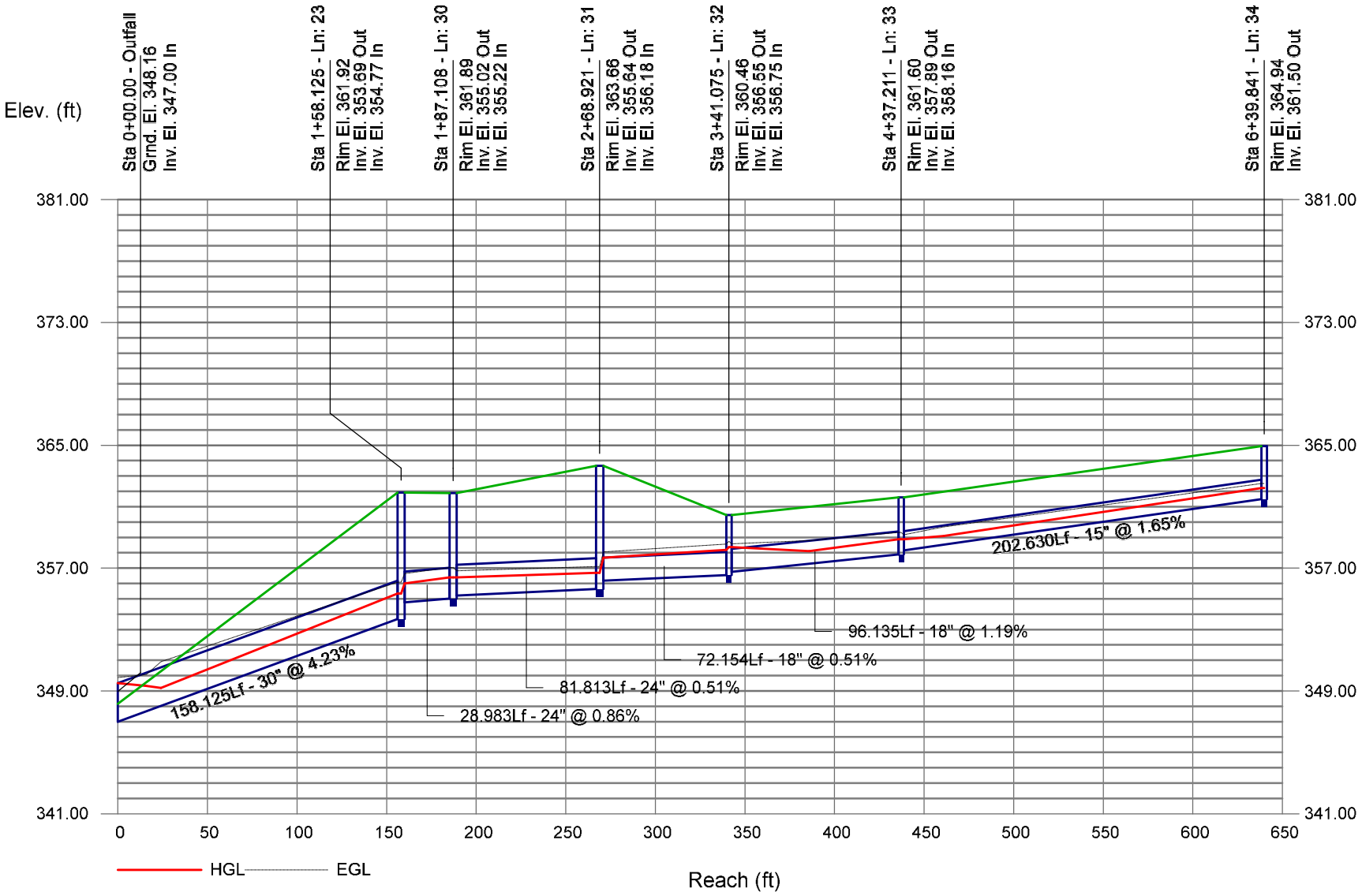
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 21-21 Proj. file: SCM 1A Storm Network.stm



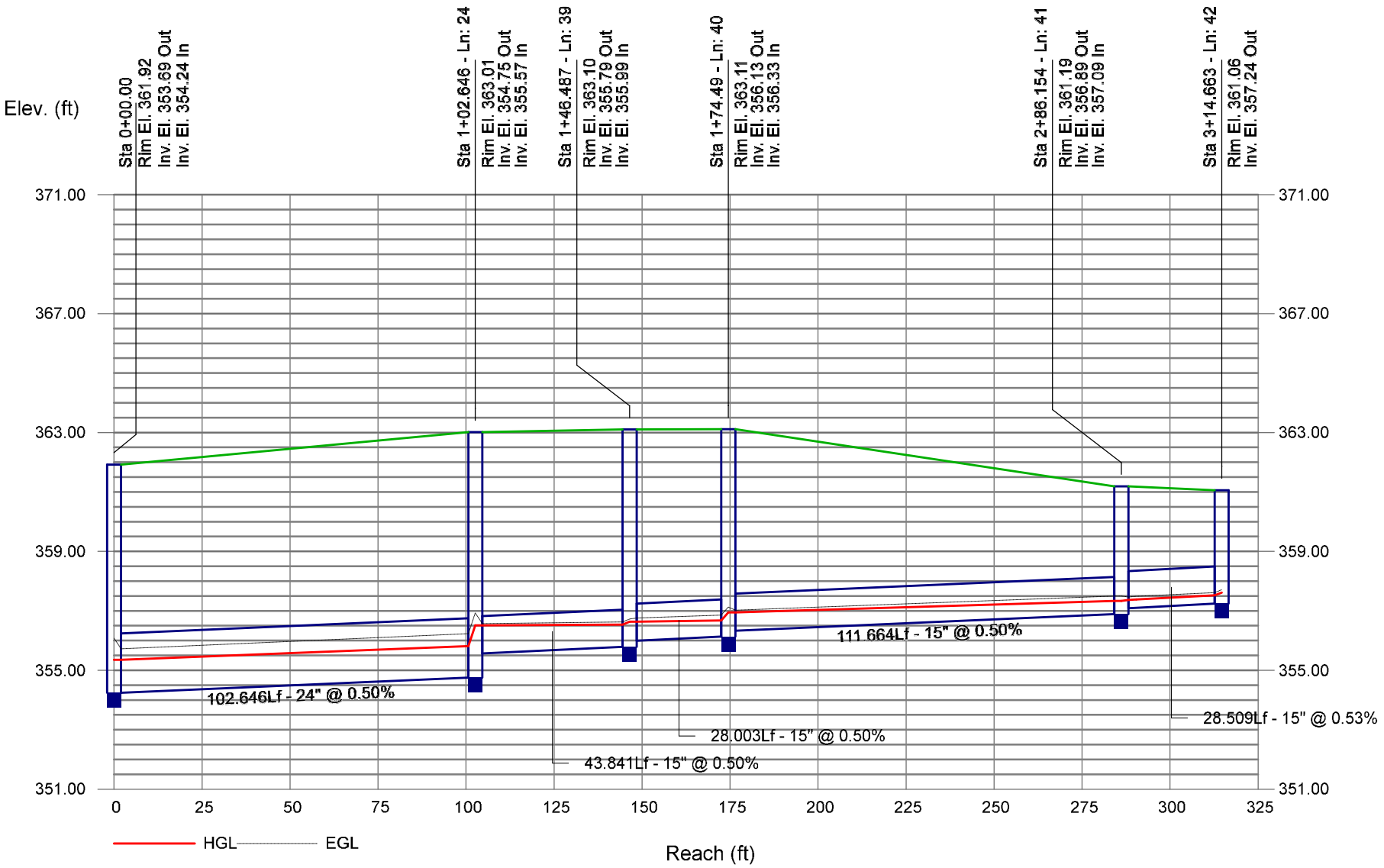
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 23-34 Proj. file: SCM 1A Storm Network.stm



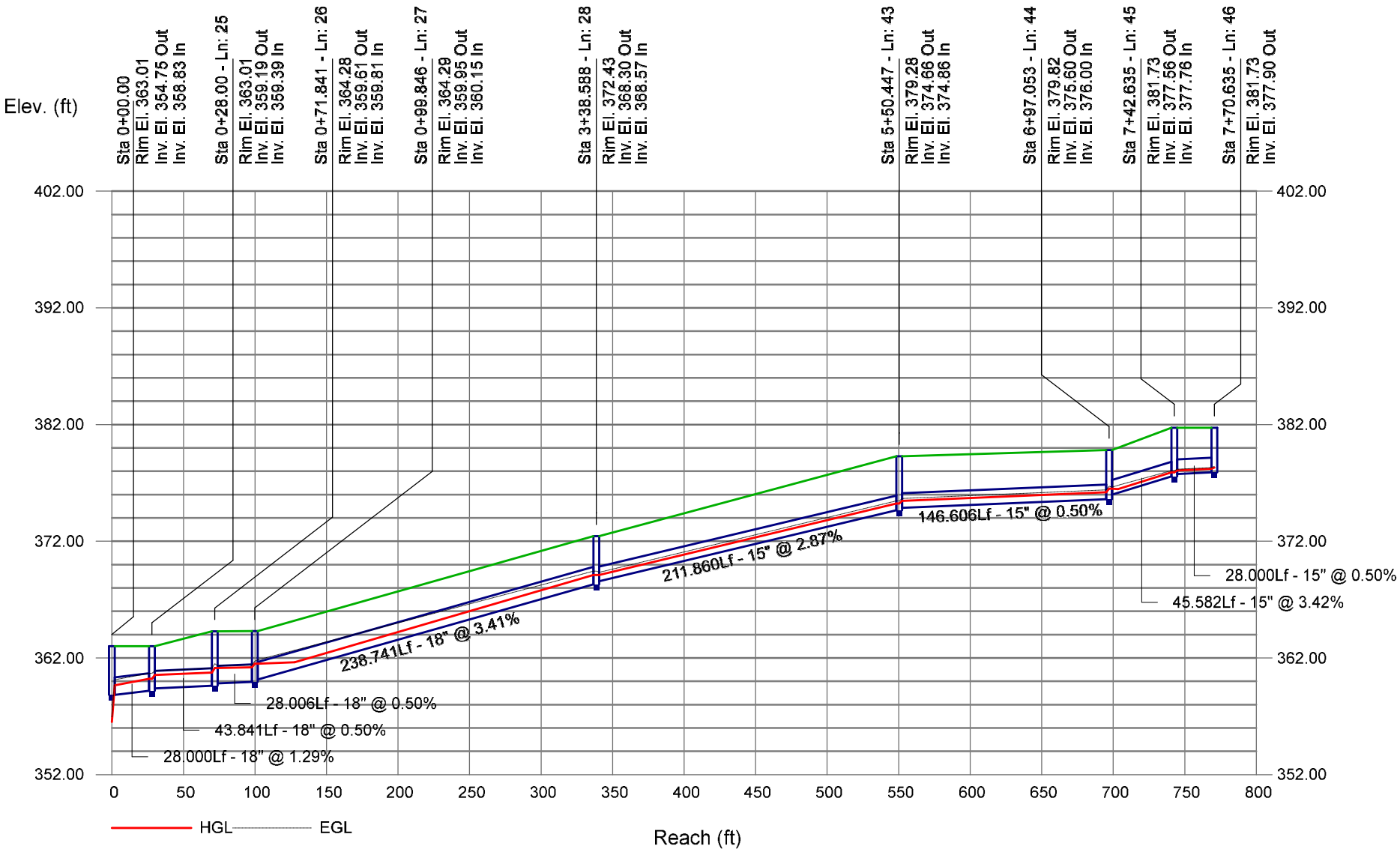
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 24-42 Proj. file: SCM 1A Storm Network.stm



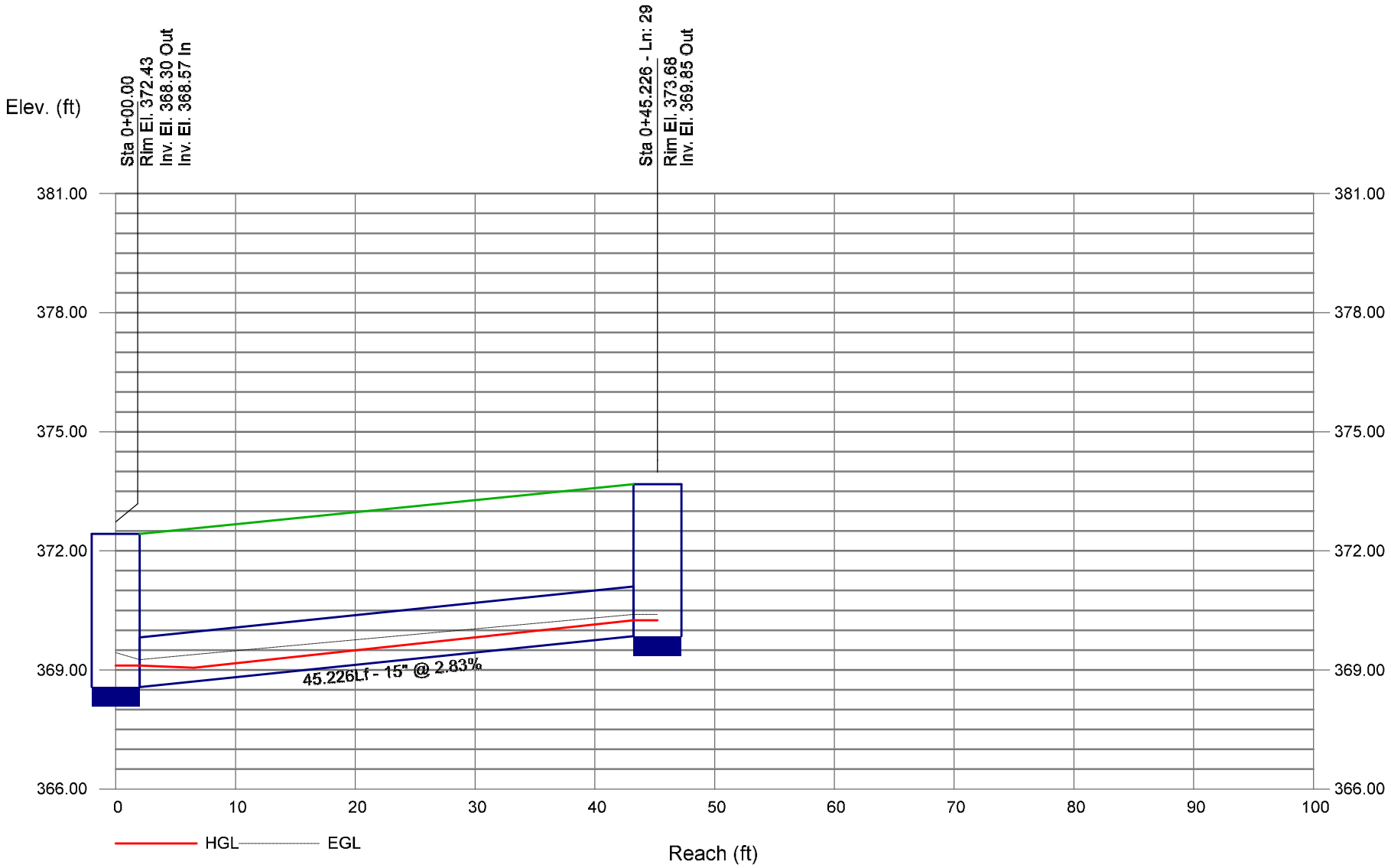
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 25-46 Proj. file: SCM 1A Storm Network.stm



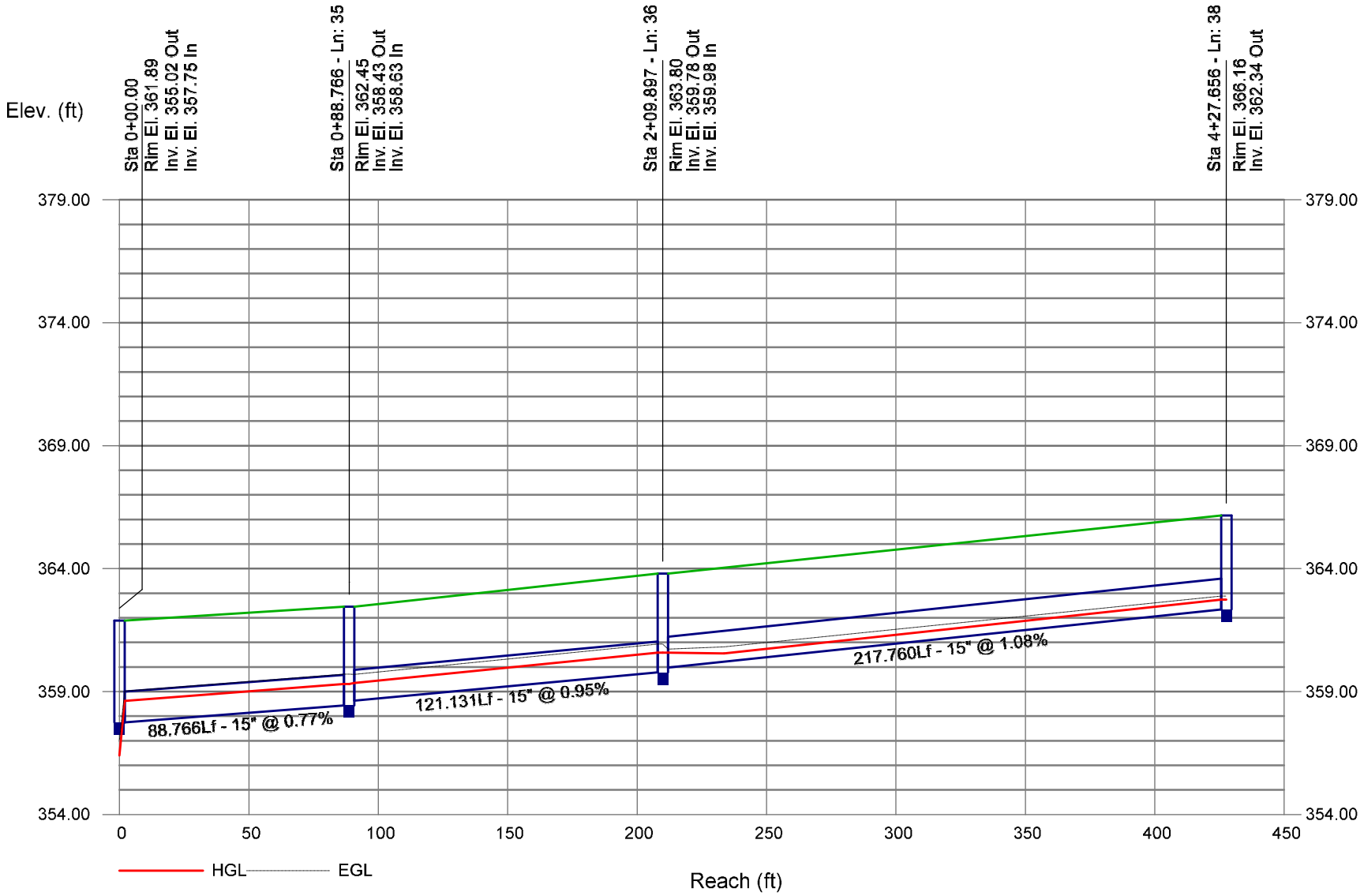
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 29-29 Proj. file: SCM 1A Storm Network.stm



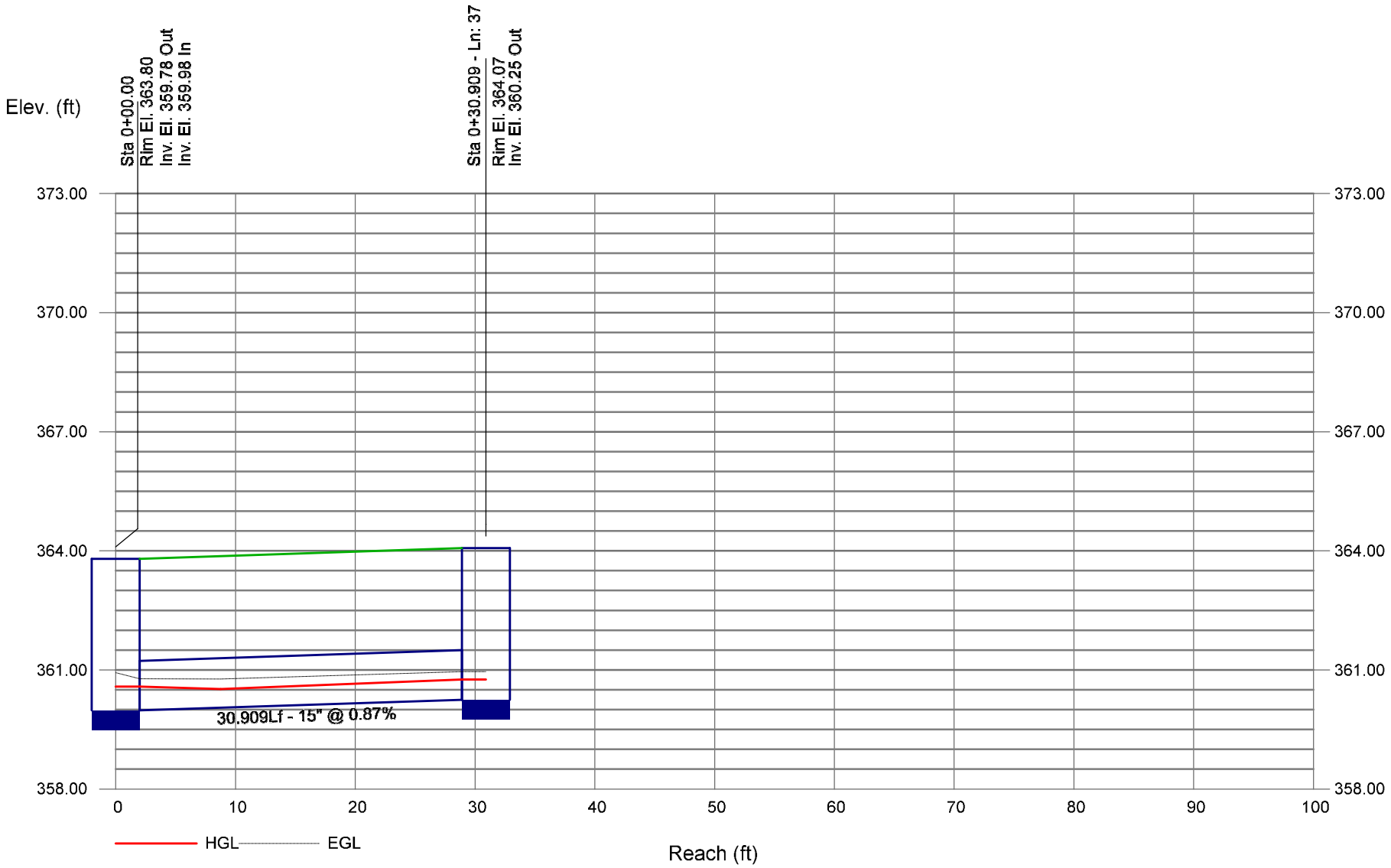
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 35-38 Proj. file: SCM 1A Storm Network.stm



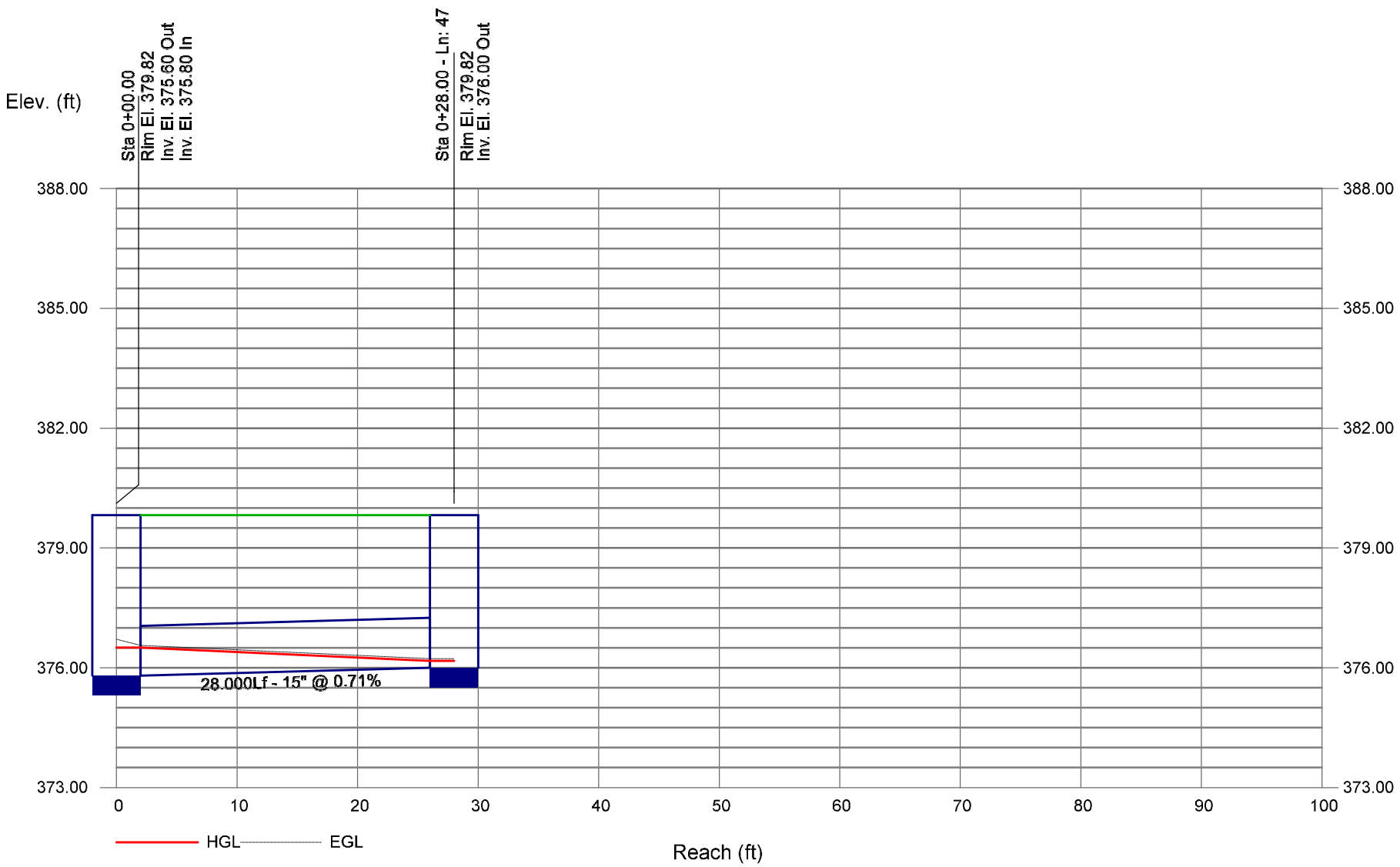
# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 37-37 Proj. file: SCM 1A Storm Network.stm

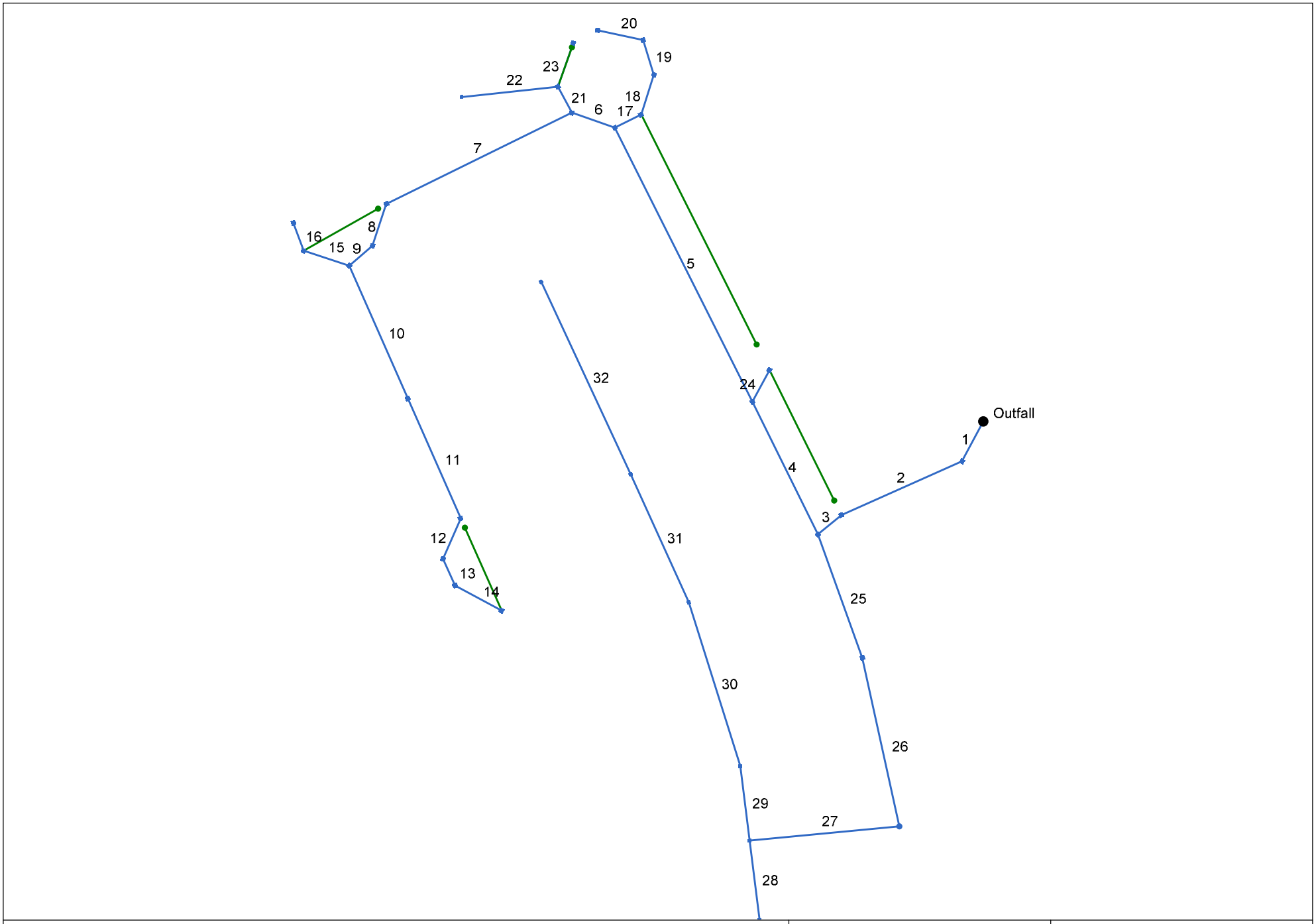


# Storm Sewer Profile

SCM 1A 25-YEAR PROFILE 47-47 Proj. file: SCM 1A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 1B 25-YEAR




| Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 1B 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 43.038 | 117.996 | DrGrt | 0.00 | 0.20 | 0.60 | 10.0 | 372.05 | 0.51 | 372.27 | 36 | Cir | 0.013 | 1.00 | 382.34 | Pipe - (402) |
| 2 | 1 | 125.580 | 37.891 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 372.47 | 0.50 | 373.10 | 36 | Cir | 0.013 | 0.50 | 383.51 | Pipe - (401) |
| 3 | 2 | 29.057 | -15.437 | Comb | 0.00 | 0.42 | 0.60 | 10.0 | 373.30 | 0.52 | 373.45 | 36 | Cir | 0.013 | 2.14 | 383.49 | Pipe - (400) |
| 4 | 3 | 141.000 | 103.390 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 374.00 | 0.53 | 374.75 | 30 | Cir | 0.013 | 1.26 | 384.29 | Pipe - (398) |
| 5 | 4 | 292.665 | -0.424 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 374.95 | 0.50 | 376.42 | 30 | Cir | 0.013 | 1.50 | 386.55 | Pipe - (397) |
| 6 | 5 | 43.286 | -44.139 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 376.62 | 0.51 | 376.84 | 30 | Cir | 0.013 | 1.63 | 386.36 | Pipe - (185) |
| 7 | 6 | 196.769 | -45.581 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 381.66 | 0.50 | 382.64 | 24 | Cir | 0.013 | 1.13 | 388.05 | Pipe - (198) |
| 8 | 7 | 41.948 | -45.324 | Comb | 0.00 | 0.72 | 0.60 | 10.0 | 382.84 | 0.50 | 383.05 | 24 | Cir | 0.013 | 0.85 | 388.86 | Pipe - (197) |
| 9 | 8 | 29.270 | 30.927 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 383.25 | 0.51 | 383.40 | 24 | Cir | 0.013 | 1.98 | 388.98 | Pipe - (199) |
| 10 | 9 | 138.408 | -73.063 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 385.13 | 0.69 | 386.08 | 18 | Cir | 0.013 | 0.50 | 390.20 | Pipe - (196) |
| 11 | 10 | 125.150 | 0.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 386.36 | 0.52 | 387.01 | 15 | Cir | 0.013 | 1.16 | 391.31 | Pipe - (194) |
| 12 | 11 | 42.068 | 47.353 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 387.20 | 0.52 | 387.42 | 15 | Cir | 0.013 | 1.17 | 391.78 | Pipe - (193) |
| 13 | 12 | 28.000 | -47.644 | Comb | 0.00 | 0.39 | 0.60 | 10.0 | 387.62 | 0.50 | 387.76 | 15 | Cir | 0.013 | 0.99 | 391.78 | Pipe - (526) |
| 14 | 13 | 50.224 | -37.536 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 387.96 | 0.80 | 388.36 | 15 | Cir | 0.013 | 1.00 | 392.18 | Pipe - (527) |
| 15 | 9 | 45.621 | 59.076 | Comb | 0.00 | 0.93 | 0.60 | 10.0 | 383.94 | 1.12 | 384.45 | 18 | Cir | 0.013 | 1.22 | 388.67 | Pipe - (428) |
| 16 | 15 | 28.355 | 51.210 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 384.65 | 0.53 | 384.80 | 18 | Cir | 0.013 | 1.00 | 388.63 | Pipe - (427) |
| 17 | 5 | 28.000 | 90.133 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 379.84 | 0.50 | 379.98 | 15 | Cir | 0.013 | 1.14 | 386.55 | Pipe - (396) |
| 18 | 17 | 39.908 | -45.826 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.18 | 0.50 | 380.38 | 15 | Cir | 0.013 | 0.94 | 385.10 | Pipe - (430) |
| 19 | 18 | 34.848 | -35.110 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.58 | 0.52 | 380.76 | 15 | Cir | 0.013 | 1.34 | 384.78 | Pipe - (429) |
| 20 | 19 | 44.136 | -60.527 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 380.96 | 1.52 | 381.63 | 15 | Cir | 0.013 | 1.00 | 385.45 | Pipe - (431) |
| 21 | 6 | 28.043 | 42.691 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 378.20 | 0.50 | 378.34 | 15 | Cir | 0.013 | 1.74 | 386.37 | Pipe - (184) |
| 22 | 21 | 92.236 | -68.074 | DrGrt | 0.00 | 0.34 | 0.60 | 10.0 | 378.54 | 0.50 | 379.00 | 15 | Cir | 0.013 | 1.00 | 382.52 | Pipe - (190) |
| 23 | 21 | 44.388 | 47.309 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 381.44 | 0.50 | 381.66 | 15 | Cir | 0.013 | 1.00 | 385.48 | Pipe - (183) |

Project File: SCM 1B Storm Network.stm

Number of lines: 32

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 1B 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 4 | 34.361 | 54.152 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 380.42 | 0.52 | 380.60 | 15 | Cir | 0.013 | 1.00 | 384.45 | Pipe - (399) |
| 25 | 3 | 125.103 | -70.202 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 374.00 | 0.54 | 374.67 | 30 | Cir | 0.013 | 0.50 | 384.63 | Pipe - (208) |
| 26 | 25 | 164.842 | 7.361 | MH | 0.00 | 0.00 | 0.60 | 10.0 | 374.87 | 0.50 | 375.69 | 30 | Cir | 0.013 | 1.00 | 385.61 | Pipe - (597) |
| 27 | 26 | 143.185 | 96.958 | DrGrt | 0.00 | 0.50 | 0.60 | 10.0 | 375.89 | 0.50 | 376.61 | 30 | Cir | 0.013 | 2.25 | 381.83 | Pipe - (596) |
| 28 | 27 | 76.394 | -91.693 | DrGrt | 0.00 | 0.94 | 0.60 | 10.0 | 379.15 | 0.51 | 379.54 | 15 | Cir | 0.013 | 1.00 | 382.98 | Pipe - (218) |
| 29 | 27 | 71.757 | 88.307 | DrGrt | 0.00 | 0.58 | 0.60 | 10.0 | 377.15 | 1.37 | 378.13 | 24 | Cir | 0.013 | 0.50 | 384.13 | Pipe - (601) |
| 30 | 29 | 163.784 | -10.225 | DrGrt | 0.00 | 0.63 | 0.60 | 10.0 | 378.67 | 0.50 | 379.49 | 18 | Cir | 0.013 | 0.50 | 384.33 | Pipe - (600) |
| 31 | 30 | 134.085 | -7.068 | DrGrt | 0.00 | 0.56 | 0.60 | 10.0 | 379.76 | 0.50 | 380.43 | 15 | Cir | 0.013 | 0.50 | 384.64 | Pipe - (599) |
| 32 | 31 | 202.660 | -0.446 | DrGrt | 0.00 | 0.52 | 0.60 | 10.0 | 380.63 | 0.50 | 381.65 | 15 | Cir | 0.013 | 1.00 | 385.09 | Pipe - (598) |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Date: 4/11/2025

# Structure Report



SCM 1B 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 141 | DropGrate | 382.34 | Rect | 4.00 | 4.00 | 36 | Cir | 372.27 | 36 | Cir | 372.47 |
| 2 | CB 142 | Combination | 383.51 | Rect | 4.00 | 4.00 | 36 | Cir | 373.10 | 36 | Cir | 373.30 |
| 3 | CB 143 | Combination | 383.49 | Rect | 4.00 | 4.00 | 36 | Cir | 373.45 | 30<br>30 | Cir<br>Cir | 374.00<br>374.00 |
| 4 | CB 144 | Combination | 384.29 | Rect | 4.00 | 4.00 | 30 | Cir | 374.75 | 30<br>15 | Cir<br>Cir | 374.95<br>380.42 |
| 5 | CB 145 | Combination | 386.55 | Rect | 4.00 | 4.00 | 30 | Cir | 376.42 | 30<br>15 | Cir<br>Cir | 376.62<br>379.84 |
| 6 | CB 146 | Combination | 386.36 | Rect | 4.00 | 4.00 | 30 | Cir | 376.84 | 24<br>15 | Cir<br>Cir | 381.66<br>378.20 |
| 7 | CB 148 | Combination | 388.05 | Rect | 4.00 | 4.00 | 24 | Cir | 382.64 | 24 | Cir | 382.84 |
| 8 | CB 149 | Combination | 388.86 | Rect | 4.00 | 4.00 | 24 | Cir | 383.05 | 24 | Cir | 383.25 |
| 9 | CB 150 | Combination | 388.98 | Rect | 4.00 | 4.00 | 24 | Cir | 383.40 | 18<br>18 | Cir<br>Cir | 385.13<br>383.94 |
| 10 | CB 151 | Combination | 390.20 | Rect | 4.00 | 4.00 | 18 | Cir | 386.08 | 15 | Cir | 386.36 |
| 11 | CB 152 | Combination | 391.31 | Rect | 4.00 | 4.00 | 15 | Cir | 387.01 | 15 | Cir | 387.20 |
| 12 | CB 153 | Combination | 391.78 | Rect | 4.00 | 4.00 | 15 | Cir | 387.42 | 15 | Cir | 387.62 |
| 13 | CB 154 | Combination | 391.78 | Rect | 4.00 | 4.00 | 15 | Cir | 387.76 | 15 | Cir | 387.96 |
| 14 | CB 154A | Combination | 392.18 | Rect | 4.00 | 4.00 | 15 | Cir | 388.36 | | | |
| 15 | CB 150A | Combination | 388.67 | Rect | 4.00 | 4.00 | 18 | Cir | 384.45 | 18 | Cir | 384.65 |
| 16 | CB 150B | Combination | 388.63 | Rect | 4.00 | 4.00 | 18 | Cir | 384.80 | | | |
| 17 | CB 145A | Combination | 386.55 | Rect | 4.00 | 4.00 | 15 | Cir | 379.98 | 15 | Cir | 380.18 |
| 18 | CB 145B | Combination | 385.10 | Rect | 4.00 | 4.00 | 15 | Cir | 380.38 | 15 | Cir | 380.58 |
| 19 | CB 145C | Combination | 384.78 | Rect | 4.00 | 4.00 | 15 | Cir | 380.76 | 15 | Cir | 380.96 |
| 20 | CB 145D | Combination | 385.45 | Rect | 4.00 | 4.00 | 15 | Cir | 381.63 | | | |

Project File: SCM 1B Storm Network.stm | Number of Structures: 32 | Run Date: 4/11/2025

# Structure Report

SCM 1B 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 146A | Combination | 386.37 | Rect | 4.00 | 4.00 | 15 | Cir | 378.34 | 15<br>15 | Cir<br>Cir | 378.54<br>381.44 |
| 22 | FES 146C | DropGrate | 382.52 | Rect | 3.00 | 3.00 | 15 | Cir | 379.00 | | | |
| 23 | CB 146B | Combination | 385.48 | Rect | 4.00 | 4.00 | 15 | Cir | 381.66 | | | |
| 24 | CB 144A | Combination | 384.45 | Rect | 4.00 | 4.00 | 15 | Cir | 380.60 | | | |
| 25 | CB 143A | Combination | 384.63 | Rect | 4.00 | 4.00 | 30 | Cir | 374.67 | 30 | Cir | 374.87 |
| 26 | JB-147 | Manhole | 385.61 | Cir | 4.00 | 4.00 | 30 | Cir | 375.69 | 30 | Cir | 375.89 |
| 27 | YI 158A | DropGrate | 381.83 | Rect | 3.00 | 3.00 | 30 | Cir | 376.61 | 15<br>24 | Cir<br>Cir | 379.15<br>377.15 |
| 28 | YI 159 | DropGrate | 382.98 | Rect | 3.00 | 3.00 | 15 | Cir | 379.54 | | | |
| 29 | YI 158 | DropGrate | 384.13 | Rect | 3.00 | 3.00 | 24 | Cir | 378.13 | 18 | Cir | 378.67 |
| 30 | YI 157 | DropGrate | 384.33 | Rect | 3.00 | 3.00 | 18 | Cir | 379.49 | 15 | Cir | 379.76 |
| 31 | YI 156 | DropGrate | 384.64 | Rect | 3.00 | 3.00 | 15 | Cir | 380.43 | 15 | Cir | 380.63 |
| 32 | YI 155 | DropGrate | 385.09 | Rect | 3.00 | 3.00 | 15 | Cir | 381.65 | | | |

Project File: SCM 1B Storm Network.stm | Number of Structures: 32 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 1B 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (402) | 32.06 | 36 | Cir | 43.038 | 372.05 | 372.27 | 0.511 | 375.05 | 375.13 | 0.33 | 375.46 | End | DropGrate |
| 2 | Pipe - (401) | 31.71 | 36 | Cir | 125.580 | 372.47 | 373.10 | 0.502 | 375.46 | 374.92 | n/a | 374.92 | 1 | Combination |
| 3 | Pipe - (400) | 30.11 | 36 | Cir | 29.057 | 373.30 | 373.45 | 0.516 | 375.02 | 375.23 | n/a | 375.23 | 2 | Combination |
| 4 | Pipe - (398) | 15.48 | 30 | Cir | 141.000 | 374.00 | 374.75 | 0.532 | 375.28 | 376.08 | n/a | 376.08 | 3 | Combination |
| 5 | Pipe - (397) | 13.27 | 30 | Cir | 292.665 | 374.95 | 376.42 | 0.502 | 376.14 | 377.64 | n/a | 377.64 | 4 | Combination |
| 6 | Pipe - (185) | 12.93 | 30 | Cir | 43.286 | 376.62 | 376.84 | 0.508 | 377.78 | 378.05 | 0.77 | 378.05 | 5 | Combination |
| 7 | Pipe - (198) | 10.54 | 24 | Cir | 196.769 | 381.66 | 382.64 | 0.498 | 382.85 | 383.83 | 0.52 | 384.34 | 6 | Combination |
| 8 | Pipe - (197) | 10.37 | 24 | Cir | 41.948 | 382.84 | 383.05 | 0.501 | 384.34 | 384.40 | 0.28 | 384.68 | 7 | Combination |
| 9 | Pipe - (199) | 7.79 | 24 | Cir | 29.270 | 383.25 | 383.40 | 0.512 | 384.68 | 384.39 | 0.77 | 384.39 | 8 | Combination |
| 10 | Pipe - (196) | 2.82 | 18 | Cir | 138.408 | 385.13 | 386.08 | 0.686 | 385.72 | 386.72 | n/a | 386.72 | 9 | Combination |
| 11 | Pipe - (194) | 2.38 | 15 | Cir | 125.150 | 386.36 | 387.01 | 0.519 | 386.99 | 387.64 | 0.26 | 387.90 | 10 | Combination |
| 12 | Pipe - (193) | 2.20 | 15 | Cir | 42.068 | 387.20 | 387.42 | 0.523 | 387.90 | 388.02 | n/a | 388.28 j | 11 | Combination |
| 13 | Pipe - (526) | 1.94 | 15 | Cir | 28.000 | 387.62 | 387.76 | 0.500 | 388.28 | 388.33 | 0.20 | 388.53 | 12 | Combination |
| 14 | Pipe - (527) | 0.47 | 15 | Cir | 50.224 | 387.96 | 388.36 | 0.796 | 388.53 | 388.63 | n/a | 388.63 j | 13 | Combination |
| 15 | Pipe - (428) | 4.27 | 18 | Cir | 45.621 | 383.94 | 384.45 | 1.118 | 384.59 | 385.24 | n/a | 385.24 | 9 | Combination |
| 16 | Pipe - (427) | 0.70 | 18 | Cir | 28.355 | 384.65 | 384.80 | 0.529 | 385.24 | 385.11 | n/a | 385.11 | 15 | Combination |
| 17 | Pipe - (396) | 0.30 | 15 | Cir | 28.000 | 379.84 | 379.98 | 0.500 | 380.06 | 380.20 | n/a | 380.28 j | 5 | Combination |
| 18 | Pipe - (430) | 0.23 | 15 | Cir | 39.908 | 380.18 | 380.38 | 0.501 | 380.37 | 380.57 | 0.06 | 380.62 | 17 | Combination |
| 19 | Pipe - (429) | 0.15 | 15 | Cir | 34.848 | 380.58 | 380.76 | 0.517 | 380.74 | 380.91 | n/a | 380.98 j | 18 | Combination |
| 20 | Pipe - (431) | 0.08 | 15 | Cir | 44.136 | 380.96 | 381.63 | 1.518 | 381.05 | 381.74 | n/a | 381.74 | 19 | Combination |
| 21 | Pipe - (184) | 2.05 | 15 | Cir | 28.043 | 378.20 | 378.34 | 0.499 | 378.79 | 378.93 | 0.36 | 379.28 | 6 | Combination |
| 22 | Pipe - (190) | 1.32 | 15 | Cir | 92.236 | 378.54 | 379.00 | 0.499 | 379.28 | 379.46 | 0.16 | 379.62 | 21 | DropGrate |
| 23 | Pipe - (183) | 0.27 | 15 | Cir | 44.388 | 381.44 | 381.66 | 0.496 | 381.65 | 381.87 | 0.06 | 381.93 | 21 | Combination |
| 24 | Pipe - (399) | 0.97 | 15 | Cir | 34.361 | 380.42 | 380.60 | 0.524 | 380.81 | 380.99 | 0.14 | 381.13 | 4 | Combination |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 1B 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (208) | 13.72 | 30 | Cir | 125.103 | 374.00 | 374.67 | 0.536 | 375.23 | 375.92 | 0.25 | 375.92 | 3 | Combination |
| 26 | Pipe - (597) | 13.21 | 30 | Cir | 164.842 | 374.87 | 375.69 | 0.497 | 376.06 | 376.91 | n/a | 376.91 | 25 | Manhole |
| 27 | Pipe - (596) | 13.38 | 30 | Cir | 143.185 | 375.89 | 376.61 | 0.503 | 377.08 | 377.84 | n/a | 377.84 | 26 | DropGrate |
| 28 | Pipe - (218) | 3.65 | 15 | Cir | 76.394 | 379.15 | 379.54 | 0.511 | 379.99 | 380.38 | 0.27 | 380.65 | 27 | DropGrate |
| 29 | Pipe - (601) | 8.26 | 24 | Cir | 71.757 | 377.15 | 378.13 | 1.366 | 377.92 | 379.15 | n/a | 379.15 | 27 | DropGrate |
| 30 | Pipe - (600) | 6.28 | 18 | Cir | 163.784 | 378.67 | 379.49 | 0.501 | 379.73 | 380.55 | 0.17 | 380.72 | 29 | DropGrate |
| 31 | Pipe - (599) | 4.04 | 15 | Cir | 134.085 | 379.76 | 380.43 | 0.500 | 380.72 | 381.33 | 0.14 | 381.47 | 30 | DropGrate |
| 32 | Pipe - (598) | 2.02 | 15 | Cir | 202.660 | 380.63 | 381.65 | 0.503 | 381.47 | 382.22 | n/a | 382.22 j | 31 | DropGrate |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 1B 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 141 | 0.78 | 0.00 | 0.36 | 0.42 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.07 | 9.10 | 0.07 | 9.10 | 0.0 | Off |
| 2 | CB 142 | 1.90 | 0.09 | 1.99 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.50 | 0.25 | 8.50 | 0.0 | Off |
| 3 | CB 143 | 1.63 | 0.47 | 2.09 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.84 | 0.26 | 8.84 | 0.0 | Off |
| 4 | CB 144 | 1.90 | 0.00 | 1.48 | 0.42 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.49 | 0.13 | 2.41 | 0.0 | 3 |
| 5 | CB 145 | 0.12 | 0.22 | 0.33 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.95 | 0.00 | 0.00 | 0.0 | 4 |
| 6 | CB 146 | 0.74 | 0.64 | 1.16 | 0.22 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.50 | 0.10 | 1.66 | 0.0 | 5 |
| 7 | CB 148 | 0.23 | 2.14 | 1.73 | 0.64 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.22 | 0.15 | 3.43 | 0.0 | 6 |
| 8 | CB 149 | 2.79 | 0.00 | 1.94 | 0.85 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.78 | 0.16 | 4.16 | 0.0 | 7 |
| 9 | CB 150 | 1.05 | 0.00 | 0.94 | 0.11 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.73 | 0.08 | 1.29 | 0.0 | Off |
| 10 | CB 151 | 0.50 | 0.00 | 0.50 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.83 | 0.02 | 0.36 | 0.0 | 9 |
| 11 | CB 152 | 0.19 | 0.00 | 0.20 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.60 | 0.00 | 0.00 | 0.0 | 10 |
| 12 | CB 153 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.81 | 0.00 | 0.00 | 0.0 | 11 |
| 13 | CB 154 | 1.51 | 0.00 | 1.25 | 0.27 | Comb | 4.0 | 3.00 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.78 | 0.11 | 1.79 | 0.0 | Off |
| 14 | CB 154A | 0.47 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.63 | 0.02 | 0.27 | 0.0 | 11 |
| 15 | CB 150A | 3.61 | 0.00 | 2.32 | 1.29 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.73 | 0.19 | 5.31 | 0.0 | 7 |
| 16 | CB 150B | 0.70 | 0.00 | 0.67 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.64 | 0.05 | 0.77 | 0.0 | Off |
| 17 | CB 145A | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | 24 |
| 18 | CB 145B | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | Off |
| 19 | CB 145C | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | Off |
| 20 | CB 145D | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | Off |
| 21 | CB 146A | 0.50 | 0.00 | 0.50 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.83 | 0.02 | 0.36 | 0.0 | 23 |
| 22 | FES 146C | 1.32 | 0.00 | 1.32 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.44 | 0.14 | 16.44 | 0.0 | Off |
| 23 | CB 146B | 0.27 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.82 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Inlet Report

SCM 1B 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 144A | 0.97 | 0.00 | 0.88 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.51 | 0.07 | 1.18 | 0.0 | 2 |
| 25 | CB 143A | 0.78 | 0.00 | 0.73 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.91 | 0.05 | 0.89 | 0.0 | 3 |
| 26 | JB-147 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 27 | YI 158A | 1.94 | 6.97 | 8.91 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.52 | 53.64 | 0.52 | 53.64 | 0.0 | Off |
| 28 | YI 159 | 3.65 | 0.00 | 1.06 | 2.58 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | 27 |
| 29 | YI 158 | 2.25 | 3.59 | 1.46 | 4.39 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.17 | 19.10 | 0.17 | 19.10 | 0.0 | 27 |
| 30 | YI 157 | 2.44 | 2.45 | 1.30 | 3.59 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.16 | 18.10 | 0.16 | 18.10 | 0.0 | 29 |
| 31 | YI 156 | 2.17 | 1.31 | 1.03 | 2.45 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | 30 |
| 32 | YI 155 | 2.02 | 0.00 | 0.71 | 1.31 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.020 | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.10 | 0.11 | 13.10 | 0.0 | 31 |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 1B 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 36 | 32.06 | 372.05 | 375.05 | 3.00 | 7.07 | 4.54 | 0.32 | 375.37 | 0.231 | 43.038 | 372.27 | 375.13 | 2.86 | 6.95 | 4.61 | 0.33 | 375.46 | 0.201 | 0.216 | 0.093 | 1.00 | 0.33 |
| 2 | 36 | 31.71 | 372.47 | 375.46 | 2.99 | 4.50 | 4.49 | 0.77 | 376.24 | 0.000 | 125.580 | 373.10 | 374.92 | 1.82** | 4.50 | 7.05 | 0.77 | 375.70 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 3 | 36 | 30.11 | 373.30 | 375.02 | 1.72* | 4.20 | 7.16 | 0.74 | 375.77 | 0.000 | 29.057 | 373.45 | 375.23 | 1.78** | 4.36 | 6.91 | 0.74 | 375.97 | 0.000 | 0.000 | n/a | 2.14 | n/a |
| 4 | 30 | 15.48 | 374.00 | 375.28 | 1.28* | 2.52 | 6.14 | 0.53 | 375.81 | 0.000 | 141.000 | 374.75 | 376.08 | 1.33** | 2.65 | 5.85 | 0.53 | 376.61 | 0.000 | 0.000 | n/a | 1.26 | n/a |
| 5 | 30 | 13.27 | 374.95 | 376.14 | 1.19* | 2.29 | 5.78 | 0.48 | 376.62 | 0.000 | 292.665 | 376.42 | 377.64 | 1.22** | 2.39 | 5.55 | 0.48 | 378.12 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 6 | 30 | 12.93 | 376.62 | 377.78 | 1.16* | 2.24 | 5.77 | 0.47 | 378.26 | 0.000 | 43.286 | 376.84 | 378.05 | 1.21** | 2.35 | 5.51 | 0.47 | 378.52 | 0.000 | 0.000 | n/a | 1.63 | 0.77 |
| 7 | 24 | 10.54 | 381.66 | 382.85 | 1.19* | 1.94 | 5.43 | 0.46 | 383.30 | 0.498 | 196.769 | 382.64 | 383.83 | 1.19 | 1.94 | 5.43 | 0.46 | 384.28 | 0.498 | 0.498 | 0.980 | 1.13 | 0.52 |
| 8 | 24 | 10.37 | 382.84 | 384.34 | 1.50 | 2.53 | 4.09 | 0.26 | 384.60 | 0.251 | 41.948 | 383.05 | 384.40 | 1.35 | 2.25 | 4.61 | 0.33 | 384.73 | 0.333 | 0.292 | 0.123 | 0.85 | 0.28 |
| 9 | 24 | 7.79 | 383.25 | 384.68 | 1.43 | 1.56 | 3.25 | 0.39 | 385.07 | 0.000 | 29.270 | 383.40 | 384.39 | 0.99** | 1.56 | 5.01 | 0.39 | 384.78 | 0.000 | 0.000 | n/a | 1.98 | 0.77 |
| 10 | 18 | 2.82 | 385.13 | 385.72 | 0.59* | 0.64 | 4.39 | 0.24 | 385.96 | 0.000 | 138.408 | 386.08 | 386.72 | 0.64** | 0.71 | 3.94 | 0.24 | 386.96 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 11 | 15 | 2.38 | 386.36 | 386.99 | 0.63* | 0.62 | 3.81 | 0.23 | 387.22 | 0.519 | 125.150 | 387.01 | 387.64 | 0.63 | 0.62 | 3.82 | 0.23 | 387.87 | 0.523 | 0.521 | 0.652 | 1.16 | 0.26 |
| 12 | 15 | 2.20 | 387.20 | 387.90 | 0.70 | 0.57 | 3.09 | 0.15 | 388.05 | 0.313 | 42.068 | 387.42 | 388.02 j | 0.60** | 0.58 | 3.82 | 0.23 | 388.24 | 0.550 | 0.431 | 0.181 | 1.17 | 0.27 |
| 13 | 15 | 1.94 | 387.62 | 388.28 | 0.66 | 0.66 | 2.96 | 0.14 | 388.42 | 0.301 | 28.000 | 387.76 | 388.33 | 0.57 | 0.55 | 3.57 | 0.20 | 388.53 | 0.498 | 0.400 | 0.112 | 0.99 | 0.20 |
| 14 | 15 | 0.47 | 387.96 | 388.53 | 0.57 | 0.19 | 0.86 | 0.09 | 388.62 | 0.000 | 50.224 | 388.36 | 388.63 j | 0.27** | 0.19 | 2.45 | 0.09 | 388.72 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 15 | 18 | 4.27 | 383.94 | 384.59 | 0.65* | 0.73 | 5.87 | 0.32 | 384.90 | 0.000 | 45.621 | 384.45 | 385.24 | 0.79** | 0.95 | 4.51 | 0.32 | 385.56 | 0.000 | 0.000 | n/a | 1.22 | n/a |
| 16 | 18 | 0.70 | 384.65 | 385.24 | 0.59 | 0.26 | 1.08 | 0.11 | 385.35 | 0.000 | 28.355 | 384.80 | 385.11 | 0.31** | 0.26 | 2.65 | 0.11 | 385.22 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 17 | 15 | 0.30 | 379.84 | 380.06 | 0.22* | 0.14 | 2.10 | 0.07 | 380.13 | 0.499 | 28.000 | 379.98 | 380.20 j | 0.22** | 0.14 | 2.11 | 0.07 | 380.27 | 0.504 | 0.501 | 0.140 | 1.14 | 0.08 |
| 18 | 15 | 0.23 | 380.18 | 380.37 | 0.19* | 0.11 | 1.94 | 0.06 | 380.43 | 0.500 | 39.908 | 380.38 | 380.57 | 0.19** | 0.12 | 1.95 | 0.06 | 380.63 | 0.513 | 0.506 | 0.202 | 0.94 | 0.06 |
| 19 | 15 | 0.15 | 380.58 | 380.74 | 0.16* | 0.08 | 1.74 | 0.05 | 380.78 | 0.516 | 34.848 | 380.76 | 380.91 j | 0.15** | 0.09 | 1.75 | 0.05 | 380.96 | 0.528 | 0.522 | 0.182 | 1.34 | 0.06 |
| 20 | 15 | 0.08 | 380.96 | 381.05 | 0.09* | 0.04 | 2.06 | 0.04 | 381.08 | 0.000 | 44.136 | 381.63 | 381.74 | 0.11** | 0.05 | 1.53 | 0.04 | 381.77 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 21 | 15 | 2.05 | 378.20 | 378.79 | 0.59* | 0.57 | 3.62 | 0.20 | 378.99 | 0.498 | 28.043 | 378.34 | 378.93 | 0.59 | 0.56 | 3.63 | 0.21 | 379.13 | 0.504 | 0.501 | 0.141 | 1.74 | 0.36 |
| 22 | 15 | 1.32 | 378.54 | 379.28 | 0.74 | 0.40 | 1.74 | 0.05 | 379.33 | 0.095 | 92.236 | 379.00 | 379.46 | 0.46** | 0.41 | 3.25 | 0.16 | 379.62 | 0.515 | 0.305 | 0.281 | 1.00 | 0.16 |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 1B 25-YEAR

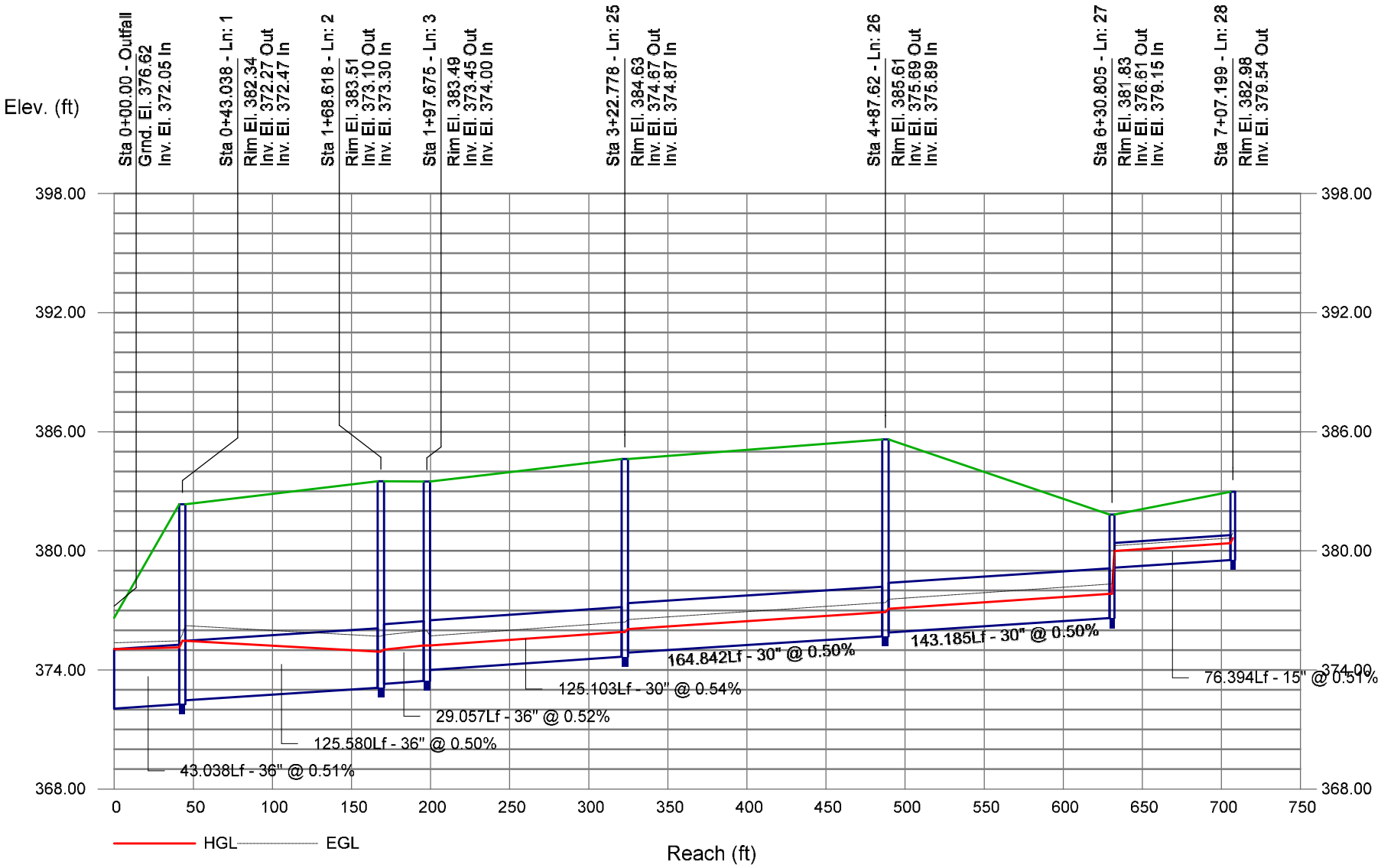
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 15 | 0.27 | 381.44 | 381.65 | 0.21* | 0.13 | 2.03 | 0.06 | 381.71 | 0.495 | 44.388 | 381.66 | 381.87 | 0.21** | 0.13 | 2.02 | 0.06 | 381.93 | 0.485 | 0.490 | 0.217 | 1.00 | 0.06 |
| 24 | 15 | 0.97 | 380.42 | 380.81 | 0.39* | 0.32 | 3.00 | 0.14 | 380.95 | 0.523 | 34.361 | 380.60 | 380.99 | 0.39** | 0.33 | 2.97 | 0.14 | 381.13 | 0.508 | 0.515 | 0.177 | 1.00 | 0.14 |
| 25 | 30 | 13.72 | 374.00 | 375.23 | 1.23 | 2.39 | 5.73 | 0.49 | 375.72 | 0.000 | 125.103 | 374.67 | 375.92 | 1.25** | 2.44 | 5.62 | 0.49 | 376.41 | 0.000 | 0.000 | n/a | 0.50 | 0.25 |
| 26 | 30 | 13.21 | 374.87 | 376.06 | 1.19* | 2.29 | 5.76 | 0.48 | 376.53 | 0.000 | 164.842 | 375.69 | 376.91 | 1.22** | 2.38 | 5.55 | 0.48 | 377.39 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 27 | 30 | 13.38 | 375.89 | 377.08 | 1.19* | 2.31 | 5.80 | 0.48 | 377.56 | 0.000 | 143.185 | 376.61 | 377.84 | 1.23** | 2.40 | 5.57 | 0.48 | 378.32 | 0.000 | 0.000 | n/a | 2.25 | n/a |
| 28 | 15 | 3.65 | 379.15 | 379.99 | 0.84* | 0.87 | 4.17 | 0.27 | 380.26 | 0.510 | 76.394 | 379.54 | 380.38 | 0.84 | 0.88 | 4.16 | 0.27 | 380.65 | 0.508 | 0.509 | 0.389 | 1.00 | 0.27 |
| 29 | 24 | 8.26 | 377.15 | 377.92 | 0.77* | 1.11 | 7.43 | 0.41 | 378.32 | 0.000 | 71.757 | 378.13 | 379.15 | 1.02** | 1.62 | 5.11 | 0.41 | 379.56 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 30 | 18 | 6.28 | 378.67 | 379.73 | 1.06* | 1.33 | 4.72 | 0.35 | 380.07 | 0.500 | 163.784 | 379.49 | 380.55 | 1.06 | 1.33 | 4.71 | 0.34 | 380.89 | 0.499 | 0.500 | 0.819 | 0.50 | 0.17 |
| 31 | 15 | 4.04 | 379.76 | 380.72 | 0.96 | 1.01 | 3.99 | 0.25 | 380.97 | 0.444 | 134.085 | 380.43 | 381.33 | 0.90 | 0.94 | 4.27 | 0.28 | 381.61 | 0.520 | 0.482 | 0.646 | 0.50 | 0.14 |
| 32 | 15 | 2.02 | 380.63 | 381.47 | 0.84 | 0.54 | 2.30 | 0.08 | 381.55 | 0.155 | 202.660 | 381.65 | 382.22 j | 0.57** | 0.54 | 3.74 | 0.22 | 382.43 | 0.552 | 0.353 | n/a | 1.00 | 0.22 |

Project File: SCM 1B Storm Network.stm | Number of lines: 32 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

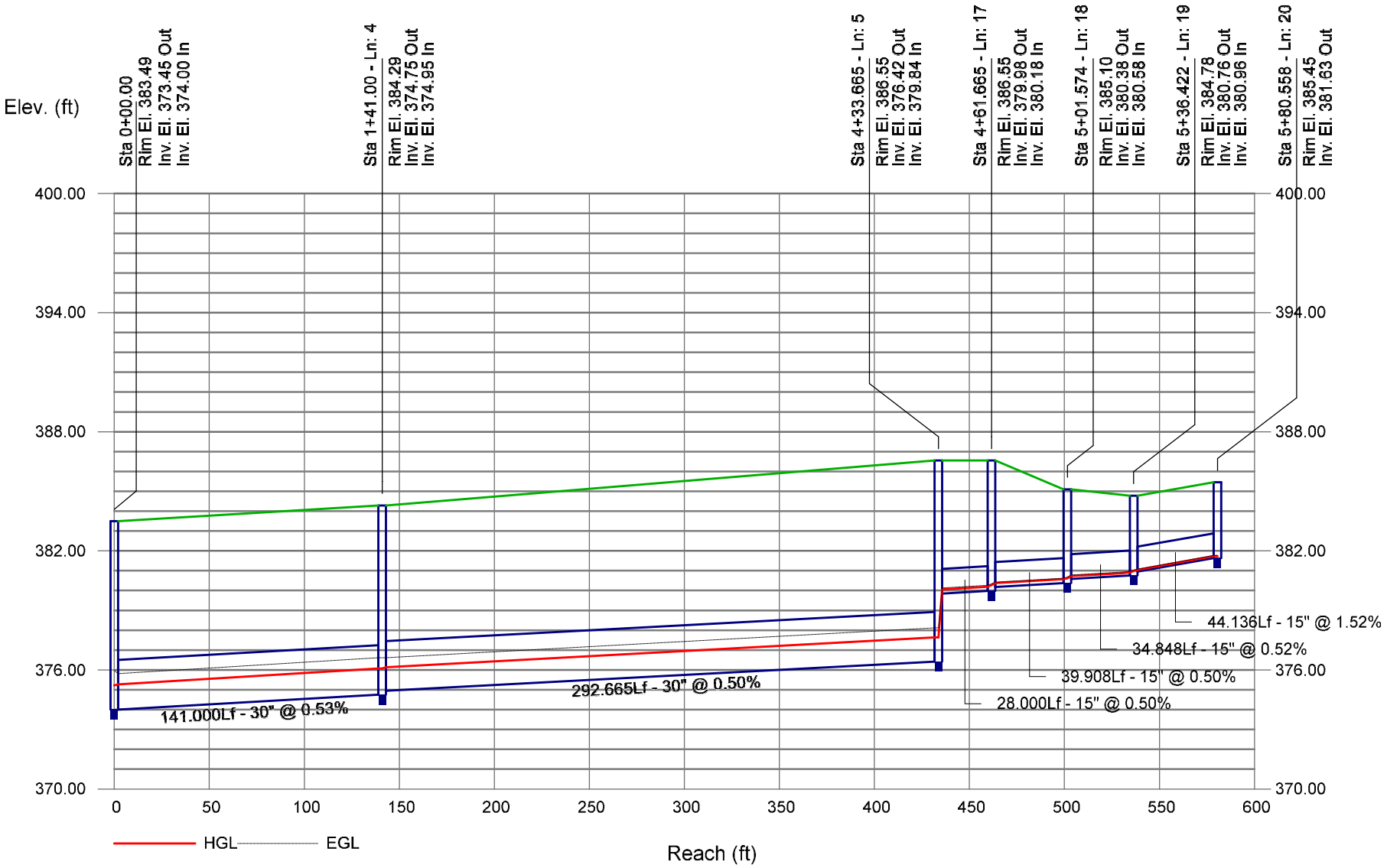
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 1-28 Proj. file: SCM 1B Storm Network.stm



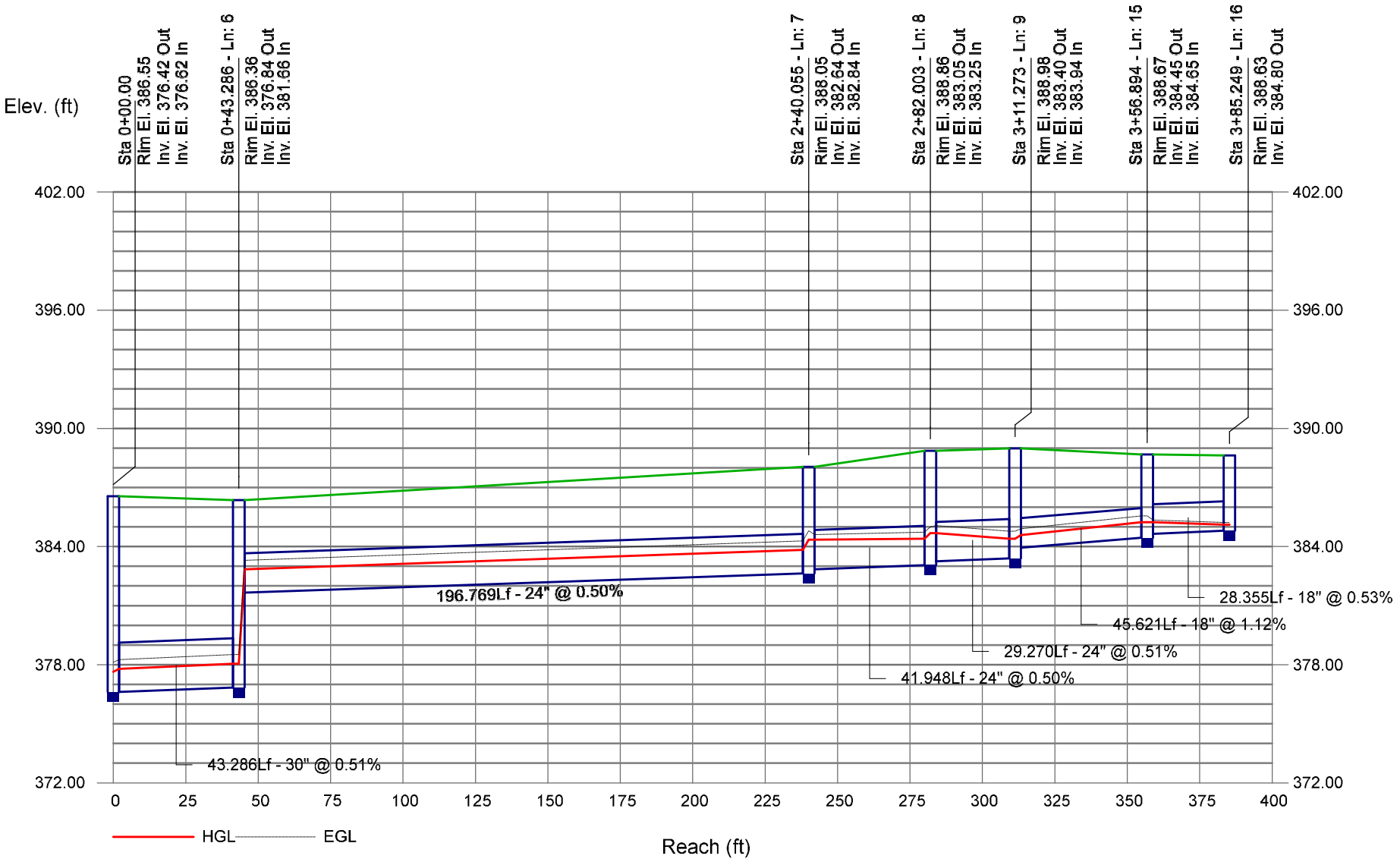
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 4-20 Proj. file: SCM 1B Storm Network.stm



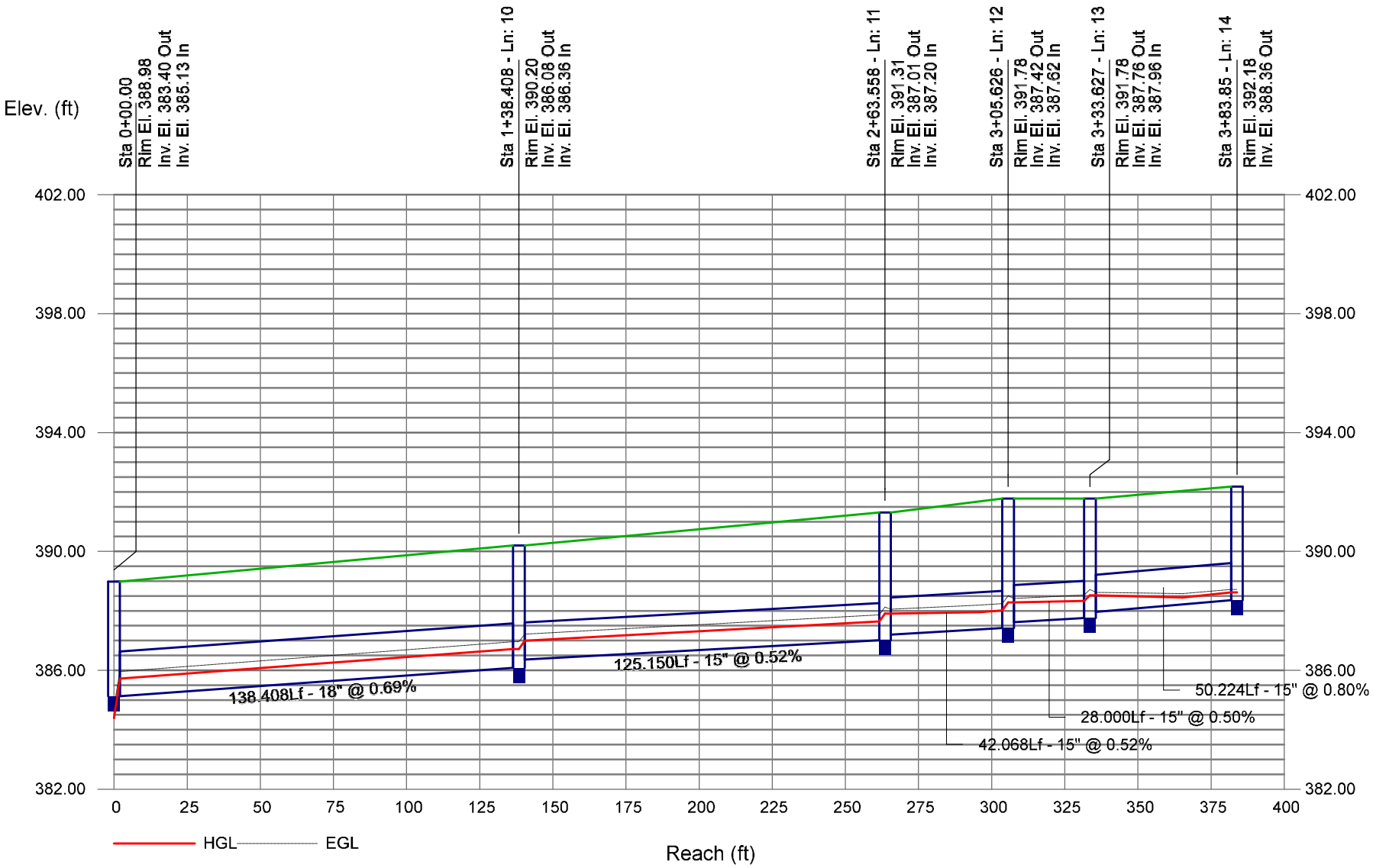
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 6-16 Proj. file: SCM 1B Storm Network.stm



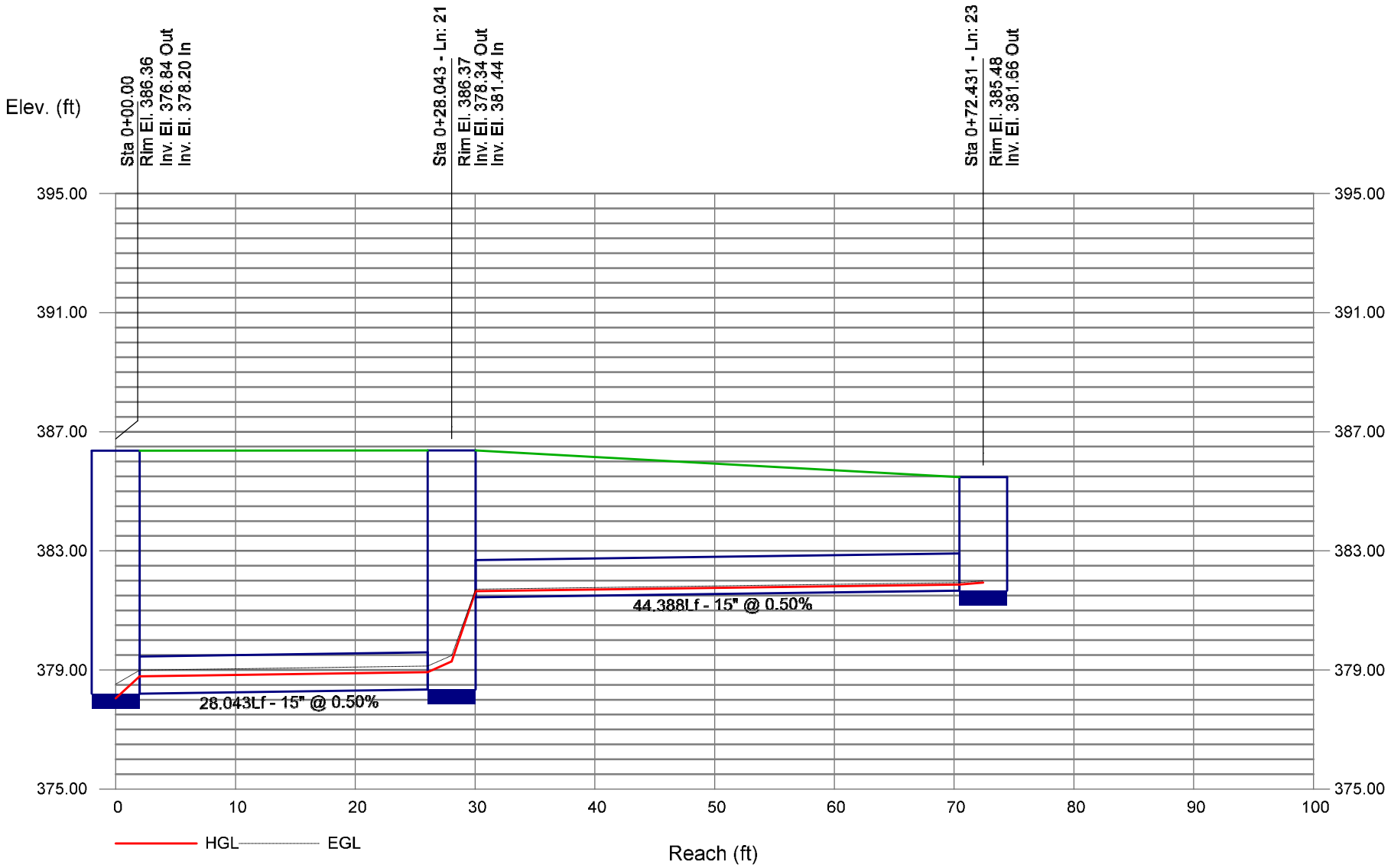
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 10-14 Proj. file: SCM 1B Storm Network.stm



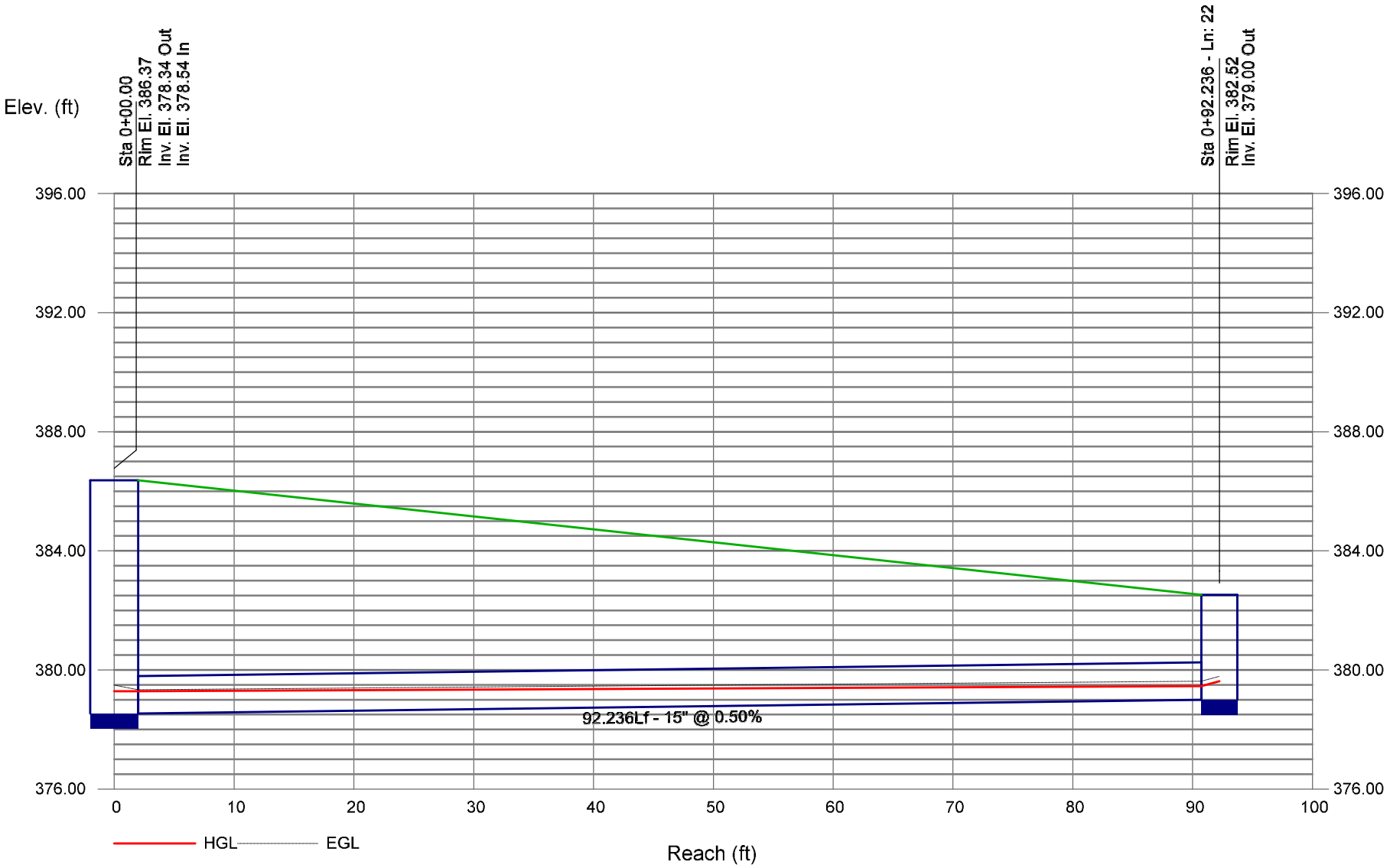
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 21-23 Proj. file: SCM 1B Storm Network.stm



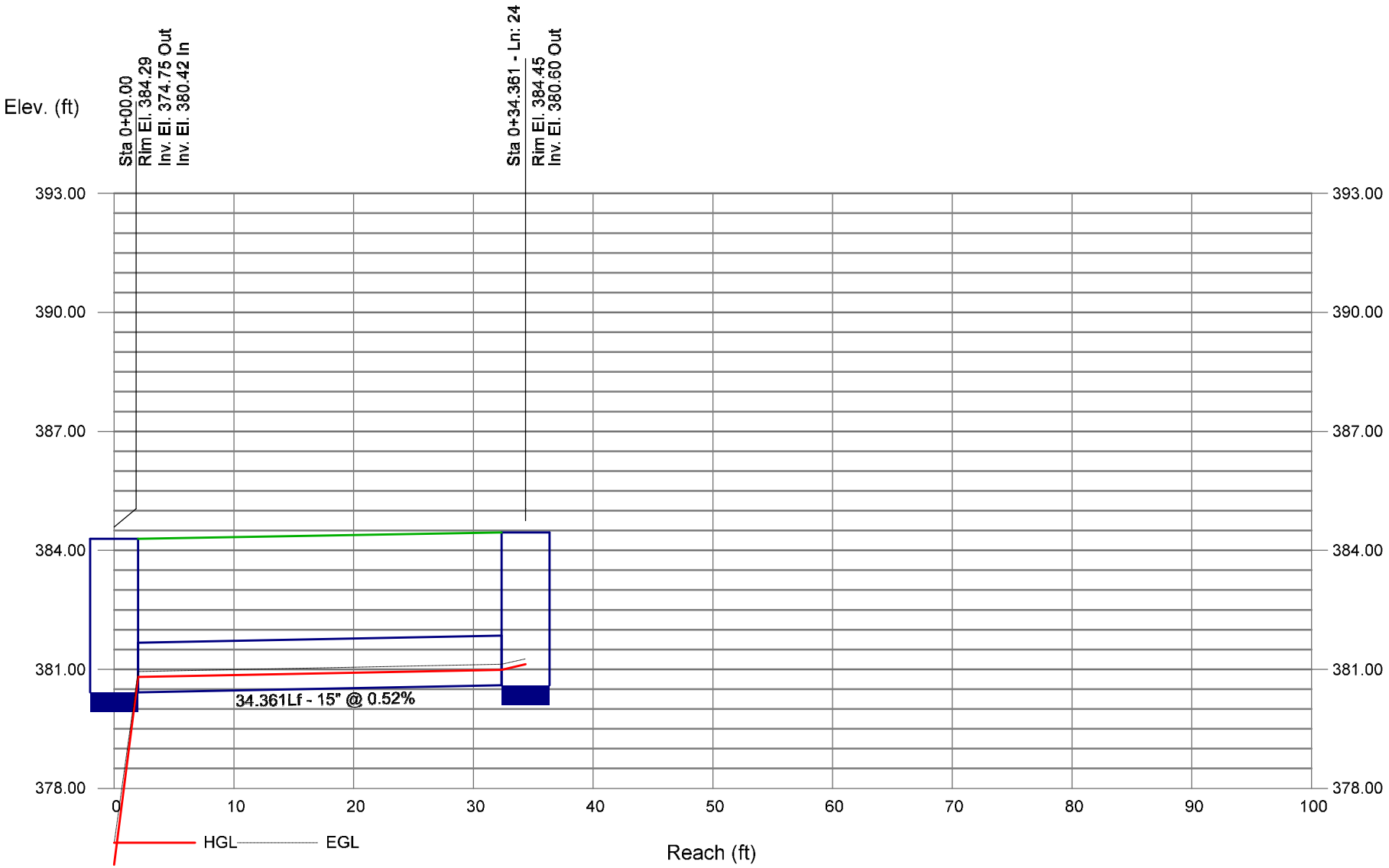
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 22-22 Proj. file: SCM 1B Storm Network.stm



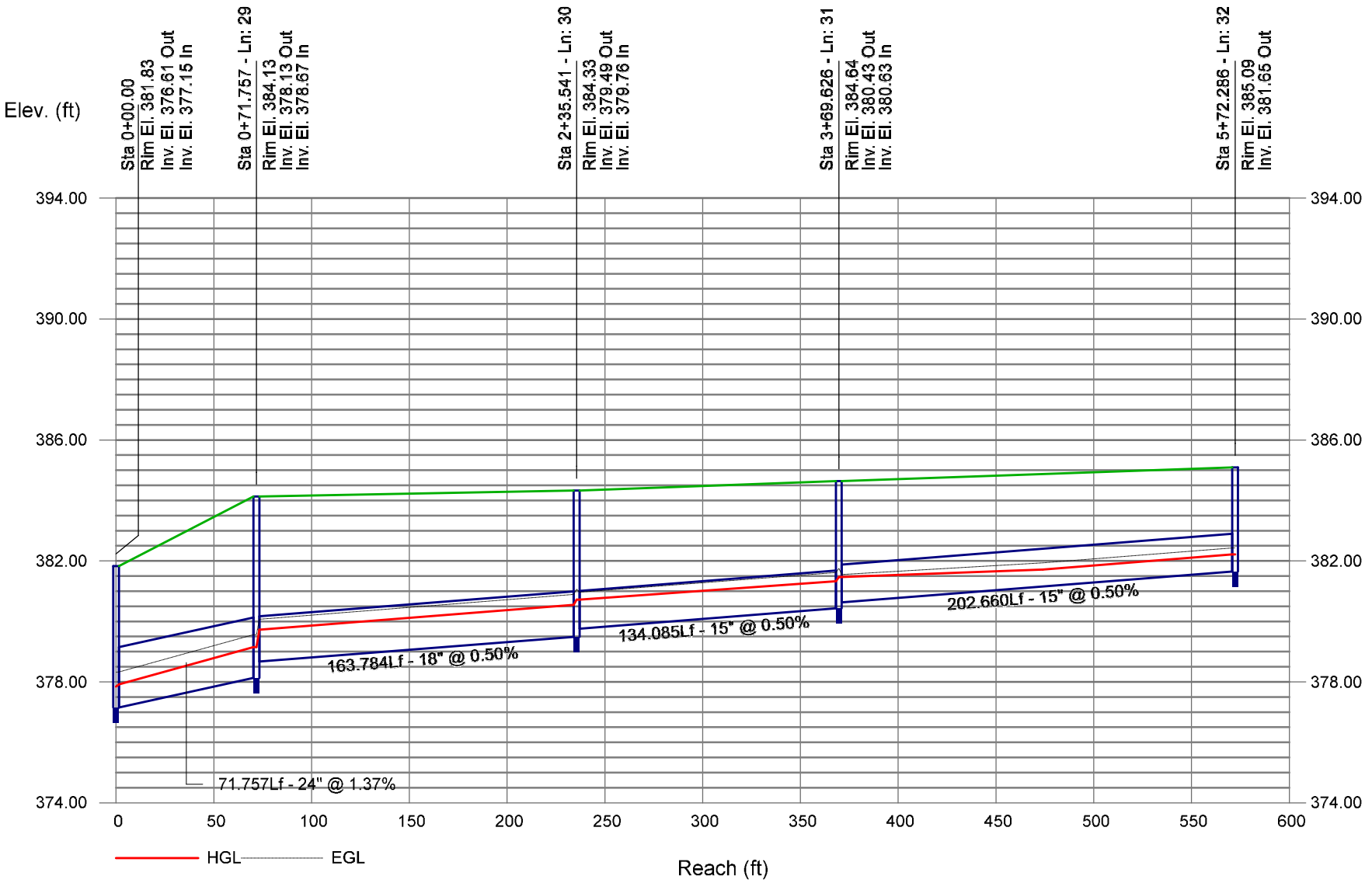
# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 24-24 Proj. file: SCM 1B Storm Network.stm

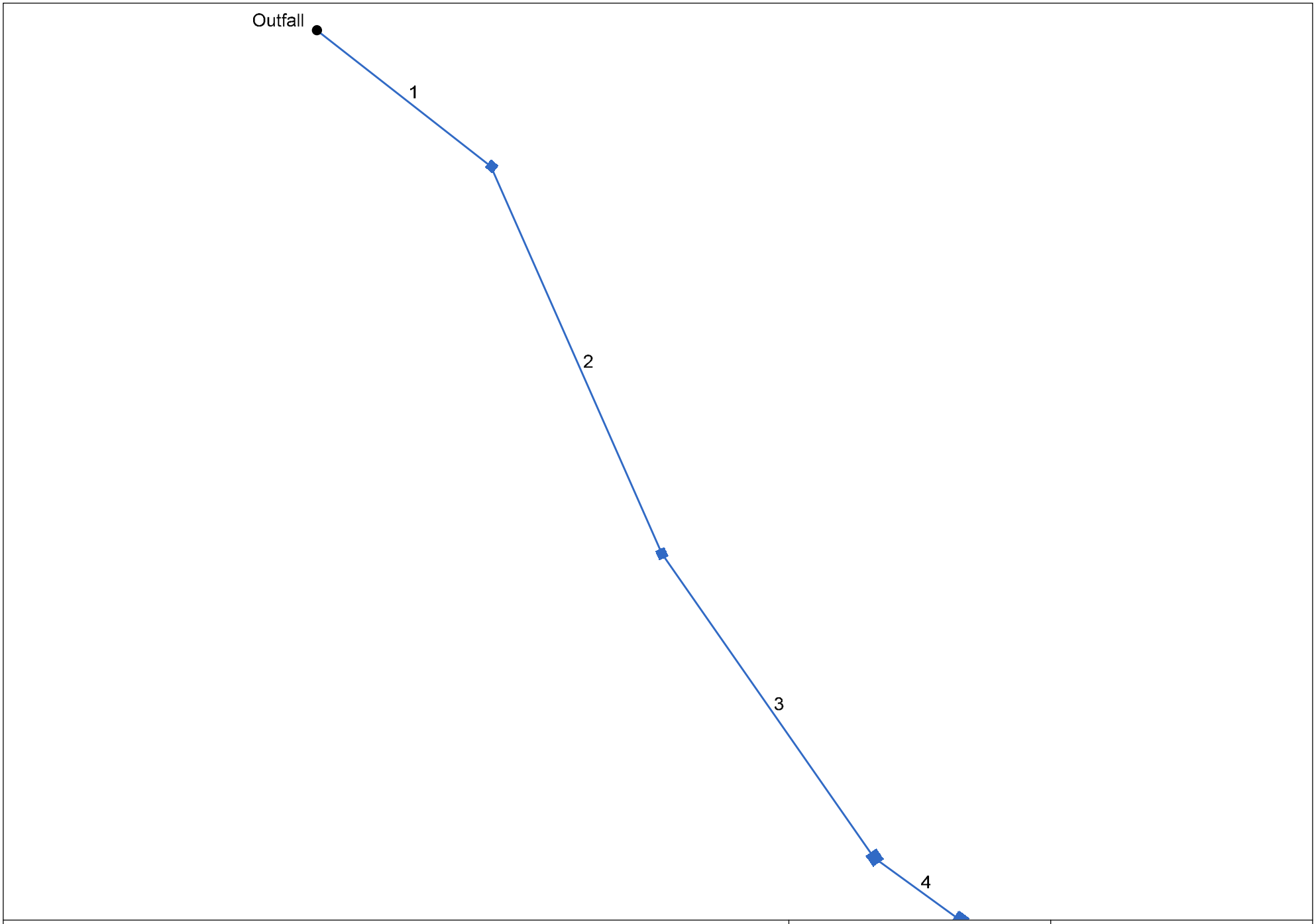


# Storm Sewer Profile

SCM 1B 25-YEAR PROFILE 29-32 Proj. file: SCM 1B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 1C 25-YEAR




| | | |
|---|---|---|
| Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Date: 4/11/2025 |

# Storm Sewer Inventory Report

SCM 1C 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 70.981 | 38.145 | DrGrt | 0.00 | 0.39 | 0.60 | 10.0 | 358.50 | 6.68 | 363.24 | 15 | Cir | 0.013 | 0.79 | 371.16 | Pipe - (570) |
| 2 | 1 | 136.000 | 28.168 | DrGrt | 0.00 | 0.16 | 0.60 | 10.0 | 363.50 | 5.51 | 371.00 | 15 | Cir | 0.013 | 0.50 | 378.82 | Pipe - (569) |
| 3 | 2 | 119.127 | -11.154 | Comb | 0.00 | 0.33 | 0.60 | 10.0 | 371.20 | 0.92 | 372.30 | 15 | Cir | 0.013 | 0.57 | 380.11 | Pipe - (568) |
| 4 | 3 | 34.000 | -19.075 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 372.56 | 1.00 | 372.90 | 15 | Cir | 0.013 | 1.00 | 380.85 | Pipe - (567) |

Project File: SCM 1C Storm Network.stm

Number of lines: 4

Date: 4/11/2025

# Structure Report



SCM 1C 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 161 | DropGrate | 371.16 | Rect | 3.00 | 3.00 | 15 | Cir | 363.24 | 15 | Cir | 363.50 |
| 2 | YI 162 | DropGrate | 378.82 | Rect | 3.00 | 3.00 | 15 | Cir | 371.00 | 15 | Cir | 371.20 |
| 3 | CB 163 | Combination | 380.11 | Rect | 4.00 | 4.00 | 15 | Cir | 372.30 | 15 | Cir | 372.56 |
| 4 | CB 164 | Combination | 380.85 | Rect | 4.00 | 4.00 | 15 | Cir | 372.90 | | | |

Project File: SCM 1C Storm Network.stm | Number of Structures: 4 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 1C 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (570) | 4.57 | 15 | Cir | 70.981 | 358.50 | 363.24 | 6.678 | 359.75 | 364.11 | n/a | 364.11 j | End | DropGrate |
| 2 | Pipe - (569) | 3.16 | 15 | Cir | 136.000 | 363.50 | 371.00 | 5.515 | 364.11 | 371.71 | n/a | 371.71 | 1 | DropGrate |
| 3 | Pipe - (568) | 2.59 | 15 | Cir | 119.127 | 371.20 | 372.30 | 0.923 | 371.76 | 372.94 | 0.15 | 372.94 | 2 | Combination |
| 4 | Pipe - (567) | 1.32 | 15 | Cir | 34.000 | 372.56 | 372.90 | 1.000 | 372.94 | 373.35 | 0.17 | 373.35 | 3 | Combination |

Project File: SCM 1C Storm Network.stm

Number of lines: 4

Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 1C 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 161 | 1.51 | 0.00 | 1.51 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.16 | 17.82 | 0.16 | 17.82 | 0.0 | Off |
| 2 | YI 162 | 0.62 | 0.00 | 0.62 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.09 | 10.73 | 0.09 | 10.73 | 0.0 | Off |
| 3 | CB 163 | 1.28 | 0.00 | 1.28 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.09 | 0.20 | 6.09 | 0.0 | Off |
| 4 | CB 164 | 1.32 | 0.00 | 1.32 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.23 | 0.20 | 6.23 | 0.0 | Off |

Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 1C 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 15 | 4.57 | 358.50 | 359.75 | 1.25 | 0.91 | 3.72 | 0.22 | 359.97 | 0.501 | 70.981 | 363.24 | 364.11 j | 0.87** | 0.91 | 5.04 | 0.39 | 364.50 | 0.734 | 0.617 | n/a | 0.79 | 0.31 |
| 2 | 15 | 3.16 | 363.50 | 364.11 | 0.61 | 0.59 | 5.35 | 0.29 | 364.40 | 0.000 | 136.000 | 371.00 | 371.71 | 0.71** | 0.73 | 4.35 | 0.29 | 372.01 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 3 | 15 | 2.59 | 371.20 | 371.76 | 0.56* | 0.54 | 4.82 | 0.26 | 372.02 | 0.000 | 119.127 | 372.30 | 372.94 | 0.64** | 0.64 | 4.06 | 0.26 | 373.20 | 0.000 | 0.000 | n/a | 0.57 | 0.15 |
| 4 | 15 | 1.32 | 372.56 | 372.94 | 0.38 | 0.32 | 4.12 | 0.17 | 373.11 | 0.000 | 34.000 | 372.90 | 373.35 | 0.45** | 0.40 | 3.28 | 0.17 | 373.52 | 0.000 | 0.000 | n/a | 1.00 | 0.17 |

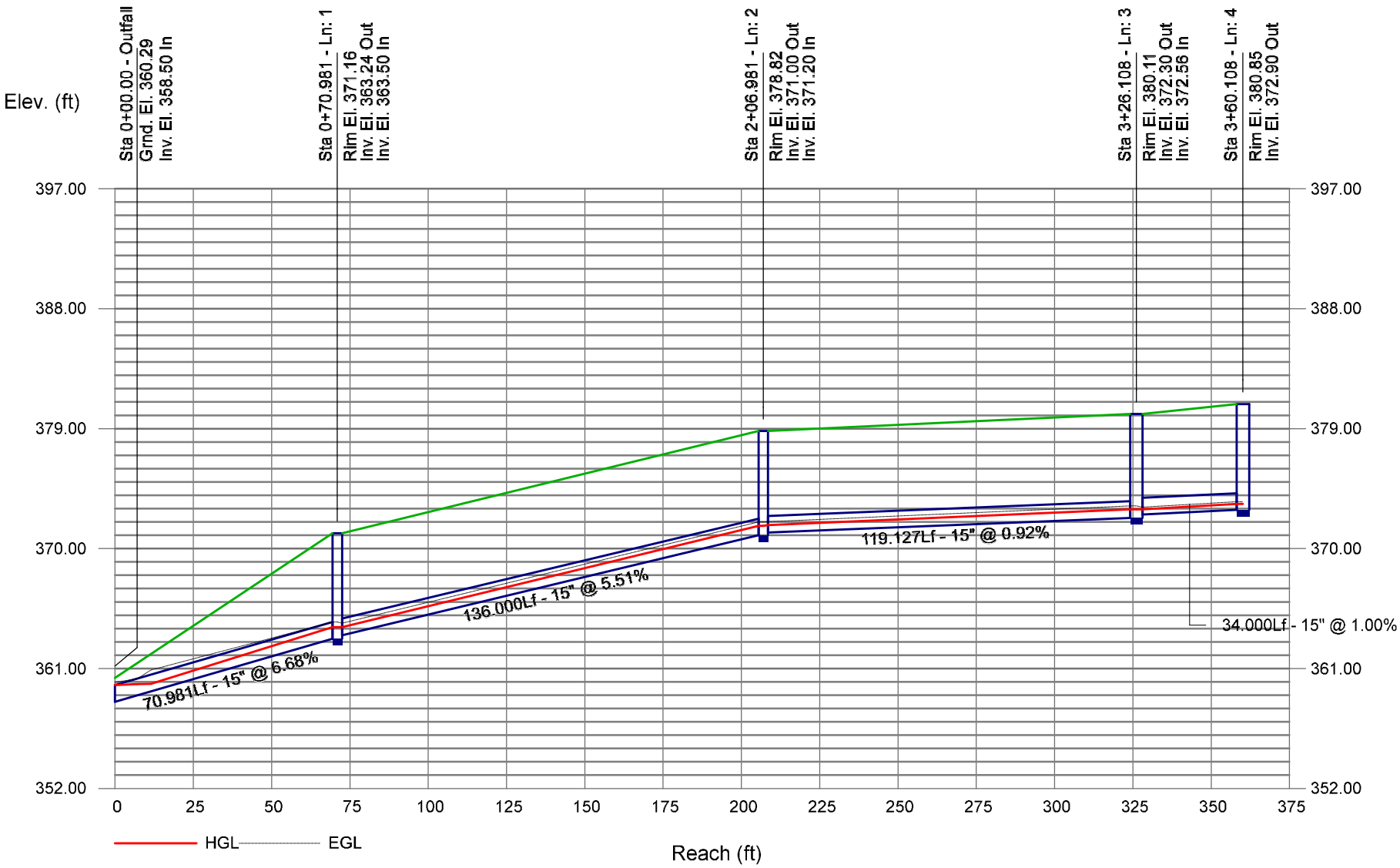
Project File: SCM 1C Storm Network.stm | Number of lines: 4 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

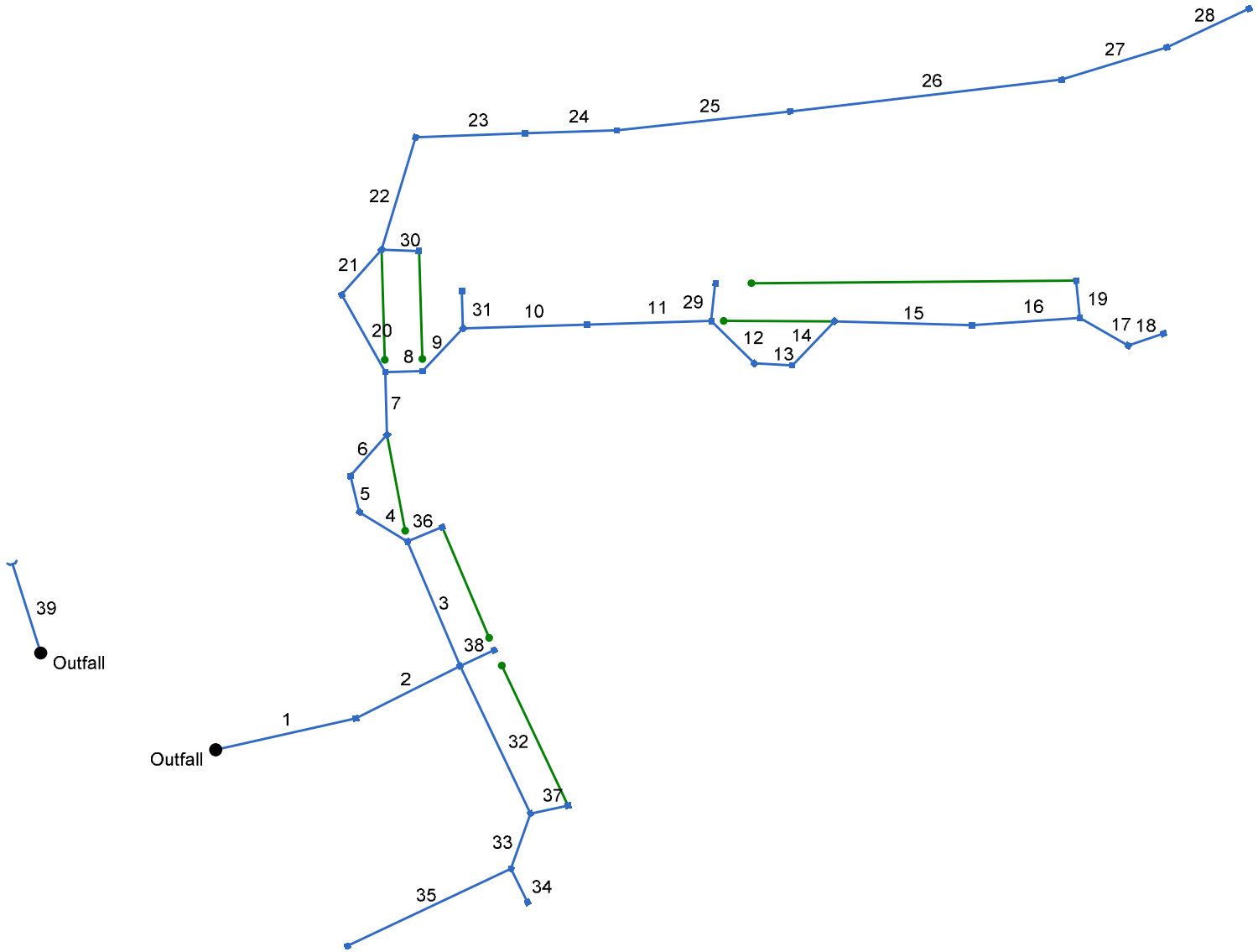
# Storm Sewer Profile

SCM 1C 25-YEAR PROFILE 1-4

Proj. file: SCM 1C Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 2 25-YEAR




| Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 2 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 107.012 | -12.687 | DrGrt | 0.00 | 0.41 | 0.60 | 10.0 | 349.02 | 0.86 | 349.94 | 30 | Cir | 0.013 | 0.50 | 357.33 | Pipe - (137) |
| 2 | 1 | 87.460 | -14.066 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 350.14 | 0.75 | 350.80 | 30 | Cir | 0.013 | 1.50 | 358.63 | Pipe - (135) |
| 3 | 2 | 101.407 | -86.284 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 351.00 | 1.58 | 352.60 | 30 | Cir | 0.013 | 1.50 | 360.21 | Pipe - (131) |
| 4 | 3 | 41.788 | -35.260 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 352.80 | 1.01 | 353.22 | 30 | Cir | 0.013 | 1.11 | 361.27 | Pipe - (172) |
| 5 | 4 | 28.013 | 44.313 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 353.40 | 0.50 | 353.54 | 30 | Cir | 0.013 | 1.28 | 361.29 | Pipe - (171) |
| 6 | 5 | 41.080 | 55.403 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 353.64 | 1.00 | 354.05 | 30 | Cir | 0.013 | 1.09 | 361.89 | Pipe - (123) |
| 7 | 6 | 46.931 | -42.881 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 354.25 | 0.60 | 354.53 | 30 | Cir | 0.013 | 1.77 | 362.70 | Pipe - (520) |
| 8 | 7 | 28.000 | 89.726 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 354.70 | 0.50 | 354.84 | 24 | Cir | 0.013 | 1.13 | 362.70 | Pipe - (521) |
| 9 | 8 | 43.841 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 355.00 | 1.00 | 355.44 | 24 | Cir | 0.013 | 1.69 | 364.05 | Pipe - (122) |
| 10 | 9 | 92.661 | 45.000 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 355.60 | 4.92 | 360.16 | 18 | Cir | 0.013 | 0.50 | 368.49 | Pipe - (157) (1) |
| 11 | 10 | 92.660 | 0.008 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 360.40 | 5.84 | 365.81 | 18 | Cir | 0.013 | 1.49 | 373.41 | Pipe - (157) |
| 12 | 11 | 45.242 | 46.481 | Comb | 0.00 | 0.77 | 0.60 | 10.0 | 366.00 | 4.42 | 368.00 | 18 | Cir | 0.013 | 1.07 | 376.09 | Pipe - (160) |
| 13 | 12 | 28.241 | -41.708 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 368.20 | 0.50 | 368.34 | 18 | Cir | 0.013 | 1.19 | 376.18 | Pipe - (162) |
| 14 | 13 | 45.687 | -49.362 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 368.60 | 4.82 | 370.80 | 18 | Cir | 0.013 | 1.17 | 378.35 | Pipe - (168) |
| 15 | 14 | 102.568 | 47.993 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 371.00 | 3.90 | 375.00 | 15 | Cir | 0.013 | 0.50 | 383.79 | Pipe - (156) |
| 16 | 15 | 80.723 | -5.560 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 375.20 | 4.83 | 379.10 | 15 | Cir | 0.013 | 1.50 | 387.61 | Pipe - (143) |
| 17 | 16 | 41.477 | 33.735 | Comb | 0.00 | 0.59 | 0.60 | 10.0 | 379.30 | 4.10 | 381.00 | 15 | Cir | 0.013 | 1.18 | 389.05 | Pipe - (138) |
| 18 | 17 | 28.000 | -48.574 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 381.18 | 0.93 | 381.44 | 15 | Cir | 0.013 | 1.00 | 389.06 | Pipe - (158) |
| 19 | 16 | 28.132 | -91.952 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 379.30 | 0.50 | 379.44 | 15 | Cir | 0.013 | 1.00 | 387.71 | Pipe - (167) |
| 20 | 7 | 66.604 | -27.920 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 354.70 | 1.01 | 355.37 | 18 | Cir | 0.013 | 1.43 | 363.67 | Pipe - (524) |
| 21 | 20 | 45.065 | 70.943 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 355.60 | 1.00 | 356.05 | 18 | Cir | 0.013 | 1.21 | 364.41 | Pipe - (522) |
| 22 | 21 | 87.915 | -24.725 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 356.25 | 1.00 | 357.13 | 18 | Cir | 0.013 | 1.43 | 364.79 | Pipe - (238) |
| 23 | 22 | 81.372 | 70.991 | DrGrt | 0.00 | 0.32 | 0.60 | 10.0 | 357.40 | 3.20 | 360.00 | 18 | Cir | 0.013 | 0.50 | 364.50 | Pipe - (237) |

Project File: SCM 2 Storm Network.stm

Number of lines: 39

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 2 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 68.903 | 0.438 | DrGrt | 0.00 | 0.59 | 0.60 | 10.0 | 360.20 | 2.61 | 362.00 | 18 | Cir | 0.013 | 0.50 | 366.02 | Pipe - (216) |
| 25 | 24 | 130.000 | -4.566 | DrGrt | 0.00 | 0.77 | 0.60 | 10.0 | 362.20 | 3.54 | 366.80 | 18 | Cir | 0.013 | 0.50 | 371.38 | Pipe - (217) |
| 26 | 25 | 203.727 | -0.399 | DrGrt | 0.00 | 0.43 | 0.60 | 10.0 | 367.00 | 3.19 | 373.50 | 15 | Cir | 0.013 | 0.50 | 378.55 | Pipe - (217) (1) |
| 27 | 26 | 82.351 | -10.355 | DrGrt | 0.00 | 0.11 | 0.60 | 10.0 | 373.70 | 0.97 | 374.50 | 15 | Cir | 0.013 | 0.50 | 380.13 | Pipe - (580) |
| 28 | 27 | 68.005 | -8.335 | DrGrt | 0.00 | 0.41 | 0.60 | 10.0 | 374.70 | 1.00 | 375.38 | 15 | Cir | 0.013 | 1.00 | 380.18 | Pipe - (579) |
| 29 | 11 | 28.251 | -82.160 | Comb | 0.00 | 0.27 | 0.60 | 10.0 | 366.00 | 0.50 | 366.14 | 15 | Cir | 0.013 | 1.00 | 373.62 | Pipe - (161) |
| 30 | 21 | 28.058 | 50.378 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 356.25 | 1.00 | 356.53 | 15 | Cir | 0.013 | 1.00 | 364.41 | Pipe - (523) |
| 31 | 9 | 28.000 | -45.000 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 356.04 | 0.50 | 356.18 | 15 | Cir | 0.013 | 1.00 | 364.21 | Pipe - (121) |
| 32 | 2 | 122.425 | 91.449 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 351.00 | 0.98 | 352.20 | 24 | Cir | 0.013 | 1.47 | 359.75 | Pipe - (180) |
| 33 | 32 | 43.844 | 44.996 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 352.40 | 3.19 | 353.80 | 15 | Cir | 0.013 | 1.69 | 361.35 | Pipe - (178) |
| 34 | 33 | 28.005 | -46.494 | Comb | 0.00 | 0.24 | 0.60 | 10.0 | 354.00 | -0.54 | 353.85 | 15 | Cir | 0.013 | 1.00 | 361.34 | Pipe - (556) |
| 35 | 33 | 135.019 | 44.904 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 354.00 | 2.89 | 357.90 | 15 | Cir | 0.013 | 1.00 | 365.23 | Pipe - (177) |
| 36 | 3 | 28.141 | 90.727 | Comb | 0.00 | 0.36 | 0.60 | 10.0 | 353.30 | 0.50 | 353.44 | 15 | Cir | 0.013 | 1.00 | 360.26 | Pipe - (173) |
| 37 | 32 | 28.755 | -76.842 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 352.40 | 1.67 | 352.88 | 15 | Cir | 0.013 | 1.00 | 359.93 | Pipe - (179) |
| 38 | 2 | 28.000 | 1.449 | Comb | 0.00 | 0.69 | 0.60 | 10.0 | 352.00 | 0.50 | 352.14 | 15 | Cir | 0.013 | 1.00 | 358.63 | Pipe - (132) |
| 39 | End | 69.863 | -107.397 | Hdwl | 0.00 | 1.33 | 0.60 | 10.0 | 350.00 | 2.15 | 351.50 | 18 | Cir | 0.013 | 1.00 | -2.92 | Pipe - (581) |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Date: 4/11/2025

# Structure Report



SCM 2 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 201 | DropGrate | 357.33 | Rect | 4.00 | 4.00 | 30 | Cir | 349.94 | 30 | Cir | 350.14 |
| 2 | CB 202 | Combination | 358.63 | Rect | 4.00 | 4.00 | 30 | Cir | 350.80 | 30<br>24<br>15 | Cir<br>Cir<br>Cir | 351.00<br>351.00<br>352.00 |
| 3 | CB 203 | Combination | 360.21 | Rect | 4.00 | 4.00 | 30 | Cir | 352.60 | 30<br>15 | Cir<br>Cir | 352.80<br>353.30 |
| 4 | CB 204 | Combination | 361.27 | Rect | 4.00 | 4.00 | 30 | Cir | 353.22 | 30 | Cir | 353.40 |
| 5 | CB 205 | Combination | 361.29 | Rect | 4.00 | 4.00 | 30 | Cir | 353.54 | 30 | Cir | 353.64 |
| 6 | CB 206 | Combination | 361.89 | Rect | 4.00 | 4.00 | 30 | Cir | 354.05 | 30 | Cir | 354.25 |
| 7 | CB 207 | Combination | 362.70 | Rect | 4.00 | 4.00 | 30 | Cir | 354.53 | 24<br>18 | Cir<br>Cir | 354.70<br>354.70 |
| 8 | CB 208 | Combination | 362.70 | Rect | 4.00 | 4.00 | 24 | Cir | 354.84 | 24 | Cir | 355.00 |
| 9 | CB 209 | Combination | 364.05 | Rect | 4.00 | 4.00 | 24 | Cir | 355.44 | 18<br>15 | Cir<br>Cir | 355.60<br>356.04 |
| 10 | CB 210 | Combination | 368.49 | Rect | 4.00 | 4.00 | 18 | Cir | 360.16 | 18 | Cir | 360.40 |
| 11 | CB 211 | Combination | 373.41 | Rect | 4.00 | 4.00 | 18 | Cir | 365.81 | 18<br>15 | Cir<br>Cir | 366.00<br>366.00 |
| 12 | CB 212 | Combination | 376.09 | Rect | 4.00 | 4.00 | 18 | Cir | 368.00 | 18 | Cir | 368.20 |
| 13 | CB 213 | Combination | 376.18 | Rect | 4.00 | 4.00 | 18 | Cir | 368.34 | 18 | Cir | 368.60 |
| 14 | CB 214 | Combination | 378.35 | Rect | 4.00 | 4.00 | 18 | Cir | 370.80 | 15 | Cir | 371.00 |
| 15 | CB 215 | Combination | 383.79 | Rect | 4.00 | 4.00 | 15 | Cir | 375.00 | 15 | Cir | 375.20 |
| 16 | CB 216 | Combination | 387.61 | Rect | 4.00 | 4.00 | 15 | Cir | 379.10 | 15<br>15 | Cir<br>Cir | 379.30<br>379.30 |
| 17 | CB 217 | Combination | 389.05 | Rect | 4.00 | 4.00 | 15 | Cir | 381.00 | 15 | Cir | 381.18 |
| 18 | CB 217A | Combination | 389.06 | Rect | 4.00 | 4.00 | 15 | Cir | 381.44 | | | |
| 19 | CB 216A | Combination | 387.71 | Rect | 4.00 | 4.00 | 15 | Cir | 379.44 | | | |

# Structure Report

SCM 2 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 20 | CB 226 | Combination | 363.67 | Rect | 4.00 | 4.00 | 18 | Cir | 355.37 | 18 | Cir | 355.60 |
| 21 | CB 227 | Combination | 364.41 | Rect | 4.00 | 4.00 | 18 | Cir | 356.05 | 18<br>15 | Cir<br>Cir | 356.25<br>356.25 |
| 22 | CB 228 | Combination | 364.79 | Rect | 4.00 | 4.00 | 18 | Cir | 357.13 | 18 | Cir | 357.40 |
| 23 | YI 229 | DropGrate | 364.50 | Rect | 4.00 | 4.00 | 18 | Cir | 360.00 | 18 | Cir | 360.20 |
| 24 | YI 230 | DropGrate | 366.02 | Rect | 4.00 | 4.00 | 18 | Cir | 362.00 | 18 | Cir | 362.20 |
| 25 | YI 231 | DropGrate | 371.38 | Rect | 4.00 | 4.00 | 18 | Cir | 366.80 | 15 | Cir | 367.00 |
| 26 | YI 232 | DropGrate | 378.55 | Rect | 4.00 | 4.00 | 15 | Cir | 373.50 | 15 | Cir | 373.70 |
| 27 | YI 233 | DropGrate | 380.13 | Rect | 4.00 | 4.00 | 15 | Cir | 374.50 | 15 | Cir | 374.70 |
| 28 | YI 234 | DropGrate | 380.18 | Rect | 4.00 | 4.00 | 15 | Cir | 375.38 | | | |
| 29 | CB 211A | Combination | 373.62 | Rect | 4.00 | 4.00 | 15 | Cir | 366.14 | | | |
| 30 | CB 227A | Combination | 364.41 | Rect | 4.00 | 4.00 | 15 | Cir | 356.53 | | | |
| 31 | CB 209A | Combination | 364.21 | Rect | 4.00 | 4.00 | 15 | Cir | 356.18 | | | |
| 32 | CB 223 | Combination | 359.75 | Rect | 4.00 | 4.00 | 24 | Cir | 352.20 | 15<br>15 | Cir<br>Cir | 352.40<br>352.40 |
| 33 | CB 224 | Combination | 361.35 | Rect | 4.00 | 4.00 | 15 | Cir | 353.80 | 15<br>15 | Cir<br>Cir | 354.00<br>354.00 |
| 34 | CB 224A | Combination | 361.34 | Rect | 4.00 | 4.00 | 15 | Cir | 353.85 | | | |
| 35 | CB 225 | Combination | 365.23 | Rect | 4.00 | 4.00 | 15 | Cir | 357.90 | | | |
| 36 | CB 203A | Combination | 360.26 | Rect | 4.00 | 4.00 | 15 | Cir | 353.44 | | | |
| 37 | CB 223A | Combination | 359.93 | Rect | 4.00 | 4.00 | 15 | Cir | 352.88 | | | |
| 38 | CB 202A | Combination | 358.63 | Rect | 4.00 | 4.00 | 15 | Cir | 352.14 | | | |
| 39 | FES 240 | OpenHeadwall | -2.92 | n/a | n/a | n/a | 18 | Cir | 351.50 | | | |

Project File: SCM 2 Storm Network.stm | Number of Structures: 39 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 2 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (137) | 35.56 | 30 | Cir | 107.012 | 349.02 | 349.94 | 0.860 | 351.52 | 352.18 | 0.46 | 352.64 | End | DropGrate |
| 2 | Pipe - (135) | 34.36 | 30 | Cir | 87.460 | 350.14 | 350.80 | 0.755 | 352.64 | 352.79 | n/a | 352.79 | 1 | Combination |
| 3 | Pipe - (131) | 27.56 | 30 | Cir | 101.407 | 351.00 | 352.60 | 1.578 | 352.79 | 354.39 | n/a | 354.39 j | 2 | Combination |
| 4 | Pipe - (172) | 26.10 | 30 | Cir | 41.788 | 352.80 | 353.22 | 1.005 | 354.39 | 354.96 | 0.88 | 354.96 | 3 | Combination |
| 5 | Pipe - (171) | 25.08 | 30 | Cir | 28.013 | 353.40 | 353.54 | 0.500 | 355.20 | 355.34 | 0.88 | 356.21 | 4 | Combination |
| 6 | Pipe - (123) | 24.17 | 30 | Cir | 41.080 | 353.64 | 354.05 | 0.998 | 356.21 | 356.31 | 0.45 | 356.76 | 5 | Combination |
| 7 | Pipe - (520) | 24.18 | 30 | Cir | 46.931 | 354.25 | 354.53 | 0.597 | 356.76 | 356.90 | 0.69 | 357.59 | 6 | Combination |
| 8 | Pipe - (521) | 13.48 | 24 | Cir | 28.000 | 354.70 | 354.84 | 0.500 | 357.59* | 357.69* | 0.32 | 358.02 | 7 | Combination |
| 9 | Pipe - (122) | 13.33 | 24 | Cir | 43.841 | 355.00 | 355.44 | 1.004 | 358.02* | 358.17* | 0.47 | 358.64 | 8 | Combination |
| 10 | Pipe - (157) (1) | 12.36 | 18 | Cir | 92.661 | 355.60 | 360.16 | 4.921 | 358.64 | 361.49 | n/a | 361.49 j | 9 | Combination |
| 11 | Pipe - (157) | 11.73 | 18 | Cir | 92.660 | 360.40 | 365.81 | 5.839 | 361.49 | 367.11 | 1.20 | 367.11 | 10 | Combination |
| 12 | Pipe - (160) | 10.62 | 18 | Cir | 45.242 | 366.00 | 368.00 | 4.421 | 367.11 | 369.25 | n/a | 369.25 | 11 | Combination |
| 13 | Pipe - (162) | 7.78 | 18 | Cir | 28.241 | 368.20 | 368.34 | 0.496 | 369.52 | 369.66 | 0.42 | 370.07 | 12 | Combination |
| 14 | Pipe - (168) | 5.55 | 18 | Cir | 45.687 | 368.60 | 370.80 | 4.815 | 370.07 | 371.71 | n/a | 371.71 j | 13 | Combination |
| 15 | Pipe - (156) | 4.88 | 15 | Cir | 102.568 | 371.00 | 375.00 | 3.900 | 371.71 | 375.90 | n/a | 375.90 | 14 | Combination |
| 16 | Pipe - (143) | 4.54 | 15 | Cir | 80.723 | 375.20 | 379.10 | 4.831 | 375.90 | 379.96 | 0.59 | 379.96 | 15 | Combination |
| 17 | Pipe - (138) | 3.63 | 15 | Cir | 41.477 | 379.30 | 381.00 | 4.099 | 379.96 | 381.77 | n/a | 381.77 | 16 | Combination |
| 18 | Pipe - (158) | 1.36 | 15 | Cir | 28.000 | 381.18 | 381.44 | 0.929 | 381.77 | 381.90 | n/a | 381.90 j | 17 | Combination |
| 19 | Pipe - (167) | 0.50 | 15 | Cir | 28.132 | 379.30 | 379.44 | 0.498 | 379.96 | 379.96 | 0.02 | 379.98 | 16 | Combination |
| 20 | Pipe - (524) | 10.65 | 18 | Cir | 66.604 | 354.70 | 355.37 | 1.006 | 357.59* | 358.28* | 0.81 | 359.09 | 7 | Combination |
| 21 | Pipe - (522) | 10.30 | 18 | Cir | 45.065 | 355.60 | 356.05 | 0.999 | 359.09* | 359.52* | 0.64 | 360.16 | 20 | Combination |
| 22 | Pipe - (238) | 9.73 | 18 | Cir | 87.915 | 356.25 | 357.13 | 1.001 | 360.16* | 360.91* | 0.67 | 361.59 | 21 | Combination |
| 23 | Pipe - (237) | 9.52 | 18 | Cir | 81.372 | 357.40 | 360.00 | 3.195 | 361.59* | 362.26* | 0.23 | 362.48 | 22 | DropGrate |
| 24 | Pipe - (216) | 8.42 | 18 | Cir | 68.903 | 360.20 | 362.00 | 2.612 | 362.48 | 363.12 | n/a | 363.12 j | 23 | DropGrate |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 2 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (217) | 6.37 | 18 | Cir | 130.000 | 362.20 | 366.80 | 3.538 | 363.12 | 367.78 | n/a | 367.78 | 24 | DropGrate |
| 26 | Pipe - (217) (1) | 3.60 | 15 | Cir | 203.727 | 367.00 | 373.50 | 3.191 | 367.78 | 374.27 | n/a | 374.27 j | 25 | DropGrate |
| 27 | Pipe - (580) | 2.00 | 15 | Cir | 82.351 | 373.70 | 374.50 | 0.971 | 374.27 | 375.06 | n/a | 375.06 j | 26 | DropGrate |
| 28 | Pipe - (579) | 1.59 | 15 | Cir | 68.005 | 374.70 | 375.38 | 1.000 | 375.12 | 375.88 | n/a | 375.88 | 27 | DropGrate |
| 29 | Pipe - (161) | 1.05 | 15 | Cir | 28.251 | 366.00 | 366.14 | 0.496 | 367.11 | 367.12 | 0.02 | 367.13 | 11 | Combination |
| 30 | Pipe - (523) | 0.43 | 15 | Cir | 28.058 | 356.25 | 356.53 | 0.998 | 360.16* | 360.16* | 0.00 | 360.16 | 21 | Combination |
| 31 | Pipe - (121) | 0.85 | 15 | Cir | 28.000 | 356.04 | 356.18 | 0.500 | 358.64* | 358.65* | 0.01 | 358.66 | 9 | Combination |
| 32 | Pipe - (180) | 4.09 | 24 | Cir | 122.425 | 351.00 | 352.20 | 0.980 | 352.79 | 352.91 | n/a | 352.91 j | 2 | Combination |
| 33 | Pipe - (178) | 1.78 | 15 | Cir | 43.844 | 352.40 | 353.80 | 3.193 | 352.91 | 354.33 | n/a | 354.33 | 32 | Combination |
| 34 | Pipe - (556) | 0.93 | 15 | Cir | 28.005 | 354.00 | 353.85 | -0.536 | 354.38 | 354.57 | 0.03 | 354.60 | 33 | Combination |
| 35 | Pipe - (177) | 0.47 | 15 | Cir | 135.019 | 354.00 | 357.90 | 2.888 | 354.33 | 358.17 | n/a | 358.17 j | 33 | Combination |
| 36 | Pipe - (173) | 1.40 | 15 | Cir | 28.141 | 353.30 | 353.44 | 0.498 | 354.39 | 354.40 | 0.03 | 354.43 | 3 | Combination |
| 37 | Pipe - (179) | 1.59 | 15 | Cir | 28.755 | 352.40 | 352.88 | 1.669 | 352.91 | 353.38 | n/a | 353.38 j | 32 | Combination |
| 38 | Pipe - (132) | 2.68 | 15 | Cir | 28.000 | 352.00 | 352.14 | 0.500 | 352.79 | 352.85 | 0.21 | 353.07 | 2 | Combination |
| 39 | Pipe - (581) | 5.18 | 18 | Cir | 69.863 | 350.00 | 351.50 | 2.147 | 351.50 | 352.38 | n/a | 352.38 j | End | OpenHeadwall |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report



SCM 2 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 201 | 1.59 | 0.00 | 1.59 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.13 | 15.73 | 0.13 | 15.73 | 0.0 | Off |
| 2 | CB 202 | 0.89 | 0.05 | 0.82 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.41 | 0.09 | 1.55 | 0.0 | Off |
| 3 | CB 203 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.99 | 0.00 | 0.00 | 0.0 | 2 |
| 4 | CB 204 | 1.20 | 0.00 | 1.20 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.80 | 0.20 | 5.80 | 0.0 | Off |
| 5 | CB 205 | 1.12 | 0.00 | 1.12 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.50 | 0.19 | 5.50 | 0.0 | Off |
| 6 | CB 206 | 0.12 | 0.01 | 0.13 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.35 | 0.00 | 0.00 | 0.0 | 3 |
| 7 | CB 207 | 0.54 | 0.02 | 0.56 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.10 | 0.03 | 0.50 | 0.0 | 6 |
| 8 | CB 208 | 0.23 | 0.00 | 0.24 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.72 | 0.00 | 0.00 | 0.0 | Off |
| 9 | CB 209 | 0.27 | 0.01 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.62 | 0.00 | 0.00 | 0.0 | 8 |
| 10 | CB 210 | 0.74 | 0.06 | 0.78 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.10 | 0.03 | 0.51 | 0.0 | 9 |
| 11 | CB 211 | 0.16 | 1.01 | 1.11 | 0.06 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.78 | 0.05 | 0.86 | 0.0 | 10 |
| 12 | CB 212 | 2.99 | 0.00 | 1.98 | 1.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.56 | 0.18 | 5.01 | 0.0 | 11 |
| 13 | CB 213 | 2.37 | 0.00 | 2.37 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.68 | 0.27 | 9.68 | 0.0 | Off |
| 14 | CB 214 | 0.74 | 0.00 | 0.73 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.64 | 0.02 | 0.27 | 0.0 | 11 |
| 15 | CB 215 | 0.39 | 0.08 | 0.47 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.87 | 0.00 | 0.00 | 0.0 | 14 |
| 16 | CB 216 | 0.47 | 0.65 | 1.03 | 0.08 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.20 | 0.06 | 1.06 | 0.0 | 15 |
| 17 | CB 217 | 2.29 | 0.00 | 1.64 | 0.65 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.59 | 0.16 | 3.82 | 0.0 | 16 |
| 18 | CB 217A | 1.36 | 0.00 | 1.36 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.37 | 0.21 | 6.37 | 0.0 | Off |
| 19 | CB 216A | 0.50 | 0.00 | 0.50 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.23 | 0.00 | 0.00 | 0.0 | 29 |
| 20 | CB 226 | 0.43 | 0.00 | 0.41 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.16 | 0.05 | 0.90 | 0.0 | 7 |
| 21 | CB 227 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | 7 |
| 22 | CB 228 | 0.31 | 0.00 | 0.30 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.34 | 0.03 | 0.55 | 0.0 | Off |
| 23 | YI 229 | 1.24 | 0.00 | 1.24 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.11 | 13.71 | 0.11 | 13.71 | 0.0 | Off |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report

SCM 2 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | YI 230 | 2.29 | 0.00 | 2.29 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.17 | 19.36 | 0.17 | 19.36 | 0.0 | Off |
| 25 | YI 231 | 2.99 | 0.00 | 2.99 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.20 | 22.64 | 0.20 | 22.64 | 0.0 | Off |
| 26 | YI 232 | 1.67 | 0.00 | 1.67 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.16 | 0.14 | 16.16 | 0.0 | Off |
| 27 | YI 233 | 0.43 | 0.00 | 0.43 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.06 | 8.00 | 0.06 | 8.00 | 0.0 | Off |
| 28 | YI 234 | 1.59 | 0.00 | 1.59 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.13 | 15.73 | 0.13 | 15.73 | 0.0 | Off |
| 29 | CB 211A | 1.05 | 0.00 | 1.01 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.50 | 0.04 | 0.73 | 0.0 | Off |
| 30 | CB 227A | 0.43 | 0.00 | 0.42 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.99 | 0.03 | 0.44 | 0.0 | 8 |
| 31 | CB 209A | 0.85 | 0.00 | 0.85 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.41 | 0.17 | 4.41 | 0.0 | Off |
| 32 | CB 223 | 0.89 | 0.00 | 0.84 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.99 | 0.06 | 0.94 | 0.0 | 2 |
| 33 | CB 224 | 0.47 | 0.00 | 0.47 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.37 | 0.01 | 0.09 | 0.0 | 32 |
| 34 | CB 224A | 0.93 | 0.00 | 0.93 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.73 | 0.17 | 4.73 | 0.0 | Off |
| 35 | CB 225 | 0.47 | 0.00 | 0.47 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.16 | 0.00 | 0.00 | 0.0 | 33 |
| 36 | CB 203A | 1.40 | 0.00 | 1.17 | 0.22 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.54 | 0.10 | 1.68 | 0.0 | 38 |
| 37 | CB 223A | 1.59 | 0.00 | 1.32 | 0.27 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.59 | 0.10 | 1.72 | 0.0 | 38 |
| 38 | CB 202A | 2.68 | 0.49 | 2.00 | 1.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.59 | 0.20 | 6.04 | 0.0 | Off |
| 39 | FES 240 | 5.18 | 0.00 | 5.18 | 0.00 | Hdwl | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 2 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 30 | 35.56 | 349.02 | 351.52 | 2.50 | 4.91 | 7.25 | 0.82 | 352.34 | 0.752 | 107.012 | 349.94 | 352.18 | 2.24 | 4.64 | 7.66 | 0.91 | 353.09 | 0.664 | 0.708 | 0.758 | 0.50 | 0.46 |
| 2 | 30 | 34.36 | 350.14 | 352.64 | 2.50 | 4.19 | 7.00 | 1.05 | 353.68 | 0.721 | 87.460 | 350.80 | 352.79 | 1.99** | 4.19 | 8.20 | 1.05 | 353.84 | 0.714 | 0.717 | n/a | 1.50 | n/a |
| 3 | 30 | 27.56 | 351.00 | 352.79 | 1.79 | 3.76 | 7.33 | 0.84 | 353.63 | 0.462 | 101.407 | 352.60 | 354.39 j | 1.79** | 3.76 | 7.34 | 0.84 | 355.22 | 0.405 | 0.434 | n/a | 1.50 | n/a |
| 4 | 30 | 26.10 | 352.80 | 354.39 | 1.59 | 3.29 | 7.93 | 0.80 | 355.18 | 0.414 | 41.788 | 353.22 | 354.96 | 1.74** | 3.65 | 7.16 | 0.80 | 355.76 | 0.413 | 0.414 | n/a | 1.11 | 0.88 |
| 5 | 30 | 25.08 | 353.40 | 355.20 | 1.80* | 3.77 | 6.65 | 0.69 | 355.88 | 0.500 | 28.013 | 353.54 | 355.34 | 1.80 | 3.78 | 6.64 | 0.69 | 356.02 | 0.499 | 0.499 | 0.140 | 1.28 | 0.88 |
| 6 | 30 | 24.17 | 353.64 | 356.21 | 2.50 | 4.91 | 4.92 | 0.38 | 356.59 | 0.347 | 41.080 | 354.05 | 356.31 | 2.26 | 4.67 | 5.18 | 0.42 | 356.73 | 0.305 | 0.326 | 0.134 | 1.09 | 0.45 |
| 7 | 30 | 24.18 | 354.25 | 356.76 | 2.50 | 4.91 | 4.93 | 0.38 | 357.14 | 0.348 | 46.931 | 354.53 | 356.90 | 2.37 | 4.81 | 5.02 | 0.39 | 357.29 | 0.301 | 0.324 | 0.152 | 1.77 | 0.69 |
| 8 | 24 | 13.48 | 354.70 | 357.59 | 2.00 | 3.14 | 4.29 | 0.29 | 357.88 | 0.355 | 28.000 | 354.84 | 357.69 | 2.00 | 3.14 | 4.29 | 0.29 | 357.98 | 0.355 | 0.355 | 0.099 | 1.13 | 0.32 |
| 9 | 24 | 13.33 | 355.00 | 358.02 | 2.00 | 3.14 | 4.24 | 0.28 | 358.30 | 0.348 | 43.841 | 355.44 | 358.17 | 2.00 | 3.14 | 4.24 | 0.28 | 358.45 | 0.347 | 0.348 | 0.152 | 1.69 | 0.47 |
| 10 | 18 | 12.36 | 355.60 | 358.64 | 1.50 | 1.65 | 6.99 | 0.76 | 359.40 | 1.385 | 92.661 | 360.16 | 361.49 j | 1.33** | 1.65 | 7.47 | 0.87 | 362.35 | 1.238 | 1.312 | n/a | 0.50 | n/a |
| 11 | 18 | 11.73 | 360.40 | 361.49 | 1.09 | 1.37 | 8.55 | 0.81 | 362.29 | 0.000 | 92.660 | 365.81 | 367.11 | 1.30** | 1.63 | 7.20 | 0.81 | 367.92 | 0.000 | 0.000 | n/a | 1.49 | 1.20 |
| 12 | 18 | 10.62 | 366.00 | 367.11 | 1.11 | 1.40 | 7.56 | 0.71 | 367.82 | 0.000 | 45.242 | 368.00 | 369.25 | 1.25** | 1.57 | 6.75 | 0.71 | 369.96 | 0.000 | 0.000 | n/a | 1.07 | n/a |
| 13 | 18 | 7.78 | 368.20 | 369.52 | 1.32* | 1.64 | 4.73 | 0.35 | 369.87 | 0.496 | 28.241 | 368.34 | 369.66 | 1.32 | 1.64 | 4.74 | 0.35 | 370.01 | 0.496 | 0.496 | 0.140 | 1.19 | 0.42 |
| 14 | 18 | 5.55 | 368.60 | 370.07 | 1.47 | 1.12 | 3.15 | 0.38 | 370.45 | 0.000 | 45.687 | 370.80 | 371.71 j | 0.91** | 1.12 | 4.96 | 0.38 | 372.09 | 0.000 | 0.000 | n/a | 1.17 | n/a |
| 15 | 15 | 4.88 | 371.00 | 371.71 | 0.71 | 0.72 | 6.81 | 0.42 | 372.13 | 0.000 | 102.568 | 375.00 | 375.90 | 0.89** | 0.94 | 5.19 | 0.42 | 376.31 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 16 | 15 | 4.54 | 375.20 | 375.90 | 0.69 | 0.70 | 6.47 | 0.39 | 376.29 | 0.000 | 80.723 | 379.10 | 379.96 | 0.86** | 0.90 | 5.02 | 0.39 | 380.35 | 0.000 | 0.000 | n/a | 1.50 | 0.59 |
| 17 | 15 | 3.63 | 379.30 | 379.96 | 0.66 | 0.66 | 5.49 | 0.33 | 380.29 | 0.000 | 41.477 | 381.00 | 381.77 | 0.77** | 0.79 | 4.58 | 0.33 | 382.09 | 0.000 | 0.000 | n/a | 1.18 | n/a |
| 18 | 15 | 1.36 | 381.18 | 381.77 | 0.59 | 0.41 | 2.39 | 0.17 | 381.94 | 0.000 | 28.000 | 381.44 | 381.90 j | 0.46** | 0.41 | 3.31 | 0.17 | 382.07 | 0.000 | 0.000 | n/a | 1.00 | 0.17 |
| 19 | 15 | 0.50 | 379.30 | 379.96 | 0.66 | 0.66 | 0.76 | 0.01 | 379.97 | 0.020 | 28.132 | 379.44 | 379.96 | 0.52 | 0.49 | 1.03 | 0.02 | 379.98 | 0.045 | 0.033 | 0.009 | 1.00 | 0.02 |
| 20 | 18 | 10.65 | 354.70 | 357.59 | 1.50 | 1.77 | 6.03 | 0.56 | 358.16 | 1.028 | 66.604 | 355.37 | 358.28 | 1.50 | 1.77 | 6.02 | 0.56 | 358.84 | 1.028 | 1.028 | 0.685 | 1.43 | 0.81 |
| 21 | 18 | 10.30 | 355.60 | 359.09 | 1.50 | 1.77 | 5.83 | 0.53 | 359.61 | 0.962 | 45.065 | 356.05 | 359.52 | 1.50 | 1.77 | 5.83 | 0.53 | 360.05 | 0.961 | 0.961 | 0.433 | 1.21 | 0.64 |
| 22 | 18 | 9.73 | 356.25 | 360.16 | 1.50 | 1.77 | 5.51 | 0.47 | 360.63 | 0.859 | 87.915 | 357.13 | 360.91 | 1.50 | 1.77 | 5.51 | 0.47 | 361.39 | 0.859 | 0.859 | 0.755 | 1.43 | 0.67 |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 2 25-YEAR

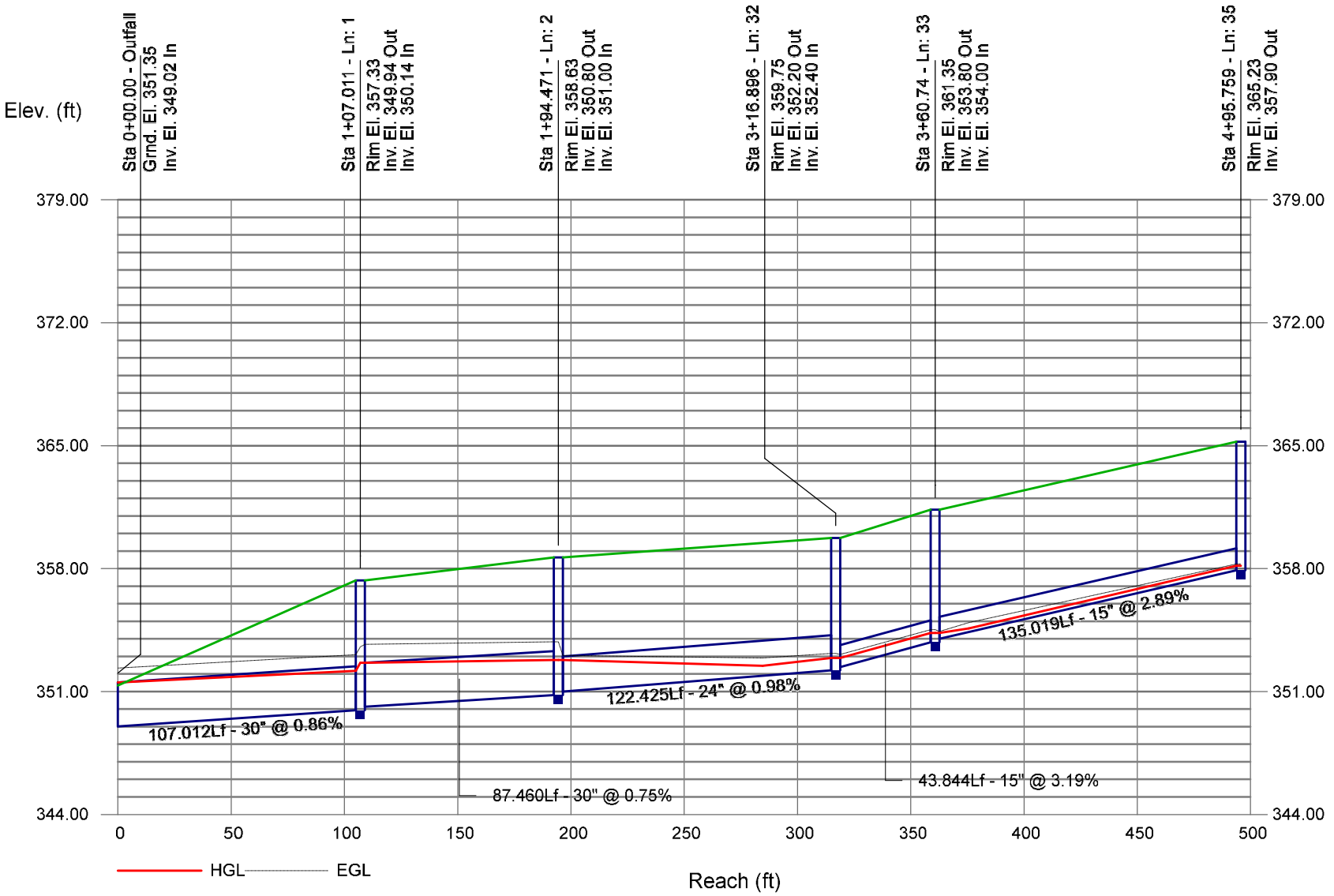
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 18 | 9.52 | 357.40 | 361.59 | 1.50 | 1.77 | 5.39 | 0.45 | 362.04 | 0.822 | 81.372 | 360.00 | 362.26 | 1.50 | 1.77 | 5.39 | 0.45 | 362.71 | 0.822 | 0.822 | 0.669 | 0.50 | 0.23 |
| 24 | 18 | 8.42 | 360.20 | 362.48 | 1.50 | 1.42 | 4.77 | 0.35 | 362.84 | 0.644 | 68.903 | 362.00 | 363.12 j | 1.12** | 1.42 | 5.94 | 0.55 | 363.67 | 0.777 | 0.710 | n/a | 0.50 | n/a |
| 25 | 18 | 6.37 | 362.20 | 363.12 | 0.92 | 1.14 | 5.58 | 0.43 | 363.55 | 0.368 | 130.000 | 366.80 | 367.78 | 0.97** | 1.22 | 5.24 | 0.43 | 368.20 | 0.643 | 0.506 | n/a | 0.50 | n/a |
| 26 | 15 | 3.60 | 367.00 | 367.78 | 0.77 | 0.79 | 4.51 | 0.32 | 368.10 | 0.000 | 203.727 | 373.50 | 374.27 j | 0.77** | 0.79 | 4.57 | 0.32 | 374.59 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 27 | 15 | 2.00 | 373.70 | 374.27 | 0.57 | 0.54 | 3.70 | 0.22 | 374.48 | 0.000 | 82.351 | 374.50 | 375.06 j | 0.56** | 0.54 | 3.73 | 0.22 | 375.28 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 28 | 15 | 1.59 | 374.70 | 375.12 | 0.42* | 0.37 | 4.35 | 0.19 | 375.31 | 0.000 | 68.005 | 375.38 | 375.88 | 0.50** | 0.46 | 3.47 | 0.19 | 376.07 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 29 | 15 | 1.05 | 366.00 | 367.11 | 1.11 | 1.15 | 0.91 | 0.01 | 367.12 | 0.023 | 28.251 | 366.14 | 367.12 | 0.98 | 1.03 | 1.02 | 0.02 | 367.13 | 0.029 | 0.026 | 0.007 | 1.00 | 0.02 |
| 30 | 15 | 0.43 | 356.25 | 360.16 | 1.25 | 1.23 | 0.35 | 0.00 | 360.16 | 0.004 | 28.058 | 356.53 | 360.16 | 1.25 | 1.23 | 0.35 | 0.00 | 360.16 | 0.004 | 0.004 | 0.001 | 1.00 | 0.00 |
| 31 | 15 | 0.85 | 356.04 | 358.64 | 1.25 | 1.23 | 0.70 | 0.01 | 358.65 | 0.017 | 28.000 | 356.18 | 358.65 | 1.25 | 1.23 | 0.70 | 0.01 | 358.66 | 0.017 | 0.017 | 0.005 | 1.00 | 0.01 |
| 32 | 24 | 4.09 | 351.00 | 352.79 | 1.79 | 1.00 | 1.38 | 0.26 | 353.05 | 0.034 | 122.425 | 352.20 | 352.91 j | 0.71** | 1.00 | 4.10 | 0.26 | 353.17 | 0.034 | 0.034 | n/a | 1.47 | 0.38 |
| 33 | 15 | 1.78 | 352.40 | 352.91 | 0.51 | 0.47 | 3.78 | 0.20 | 353.11 | 0.077 | 43.844 | 353.80 | 354.33 | 0.53** | 0.49 | 3.59 | 0.20 | 354.53 | 0.165 | 0.121 | n/a | 1.69 | n/a |
| 34 | 15 | 0.93 | 354.00 | 354.38 | 0.38* | 0.31 | 2.97 | 0.14 | 354.52 | 0.523 | 28.005 | 353.85 | 354.57 | 0.72 | 0.73 | 1.27 | 0.03 | 354.60 | 0.052 | 0.287 | 0.080 | 1.00 | 0.03 |
| 35 | 15 | 0.47 | 354.00 | 354.33 | 0.33 | 0.19 | 1.81 | 0.09 | 354.42 | 0.000 | 135.019 | 357.90 | 358.17 j | 0.27** | 0.19 | 2.45 | 0.09 | 358.26 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 36 | 15 | 1.40 | 353.30 | 354.39 | 1.09 | 1.13 | 1.23 | 0.02 | 354.41 | 0.043 | 28.141 | 353.44 | 354.40 | 0.96 | 1.01 | 1.39 | 0.03 | 354.43 | 0.054 | 0.048 | 0.014 | 1.00 | 0.03 |
| 37 | 15 | 1.59 | 352.40 | 352.91 | 0.51 | 0.46 | 3.39 | 0.19 | 353.10 | 0.061 | 28.755 | 352.88 | 353.38 j | 0.50** | 0.46 | 3.47 | 0.19 | 353.57 | 0.061 | 0.061 | n/a | 1.00 | n/a |
| 38 | 15 | 2.68 | 352.00 | 352.79 | 0.79 | 0.82 | 3.27 | 0.17 | 352.96 | 0.325 | 28.000 | 352.14 | 352.85 | 0.71 | 0.72 | 3.71 | 0.21 | 353.07 | 0.448 | 0.387 | 0.108 | 1.00 | 0.21 |
| 39 | 18 | 5.18 | 350.00 | 351.50 | 1.50* | 1.07 | 2.93 | 0.13 | 351.63 | 0.243 | 69.863 | 351.50 | 352.38 j | 0.88** | 1.07 | 4.84 | 0.36 | 352.74 | 0.587 | 0.415 | n/a | 1.00 | n/a |

Project File: SCM 2 Storm Network.stm | Number of lines: 39 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

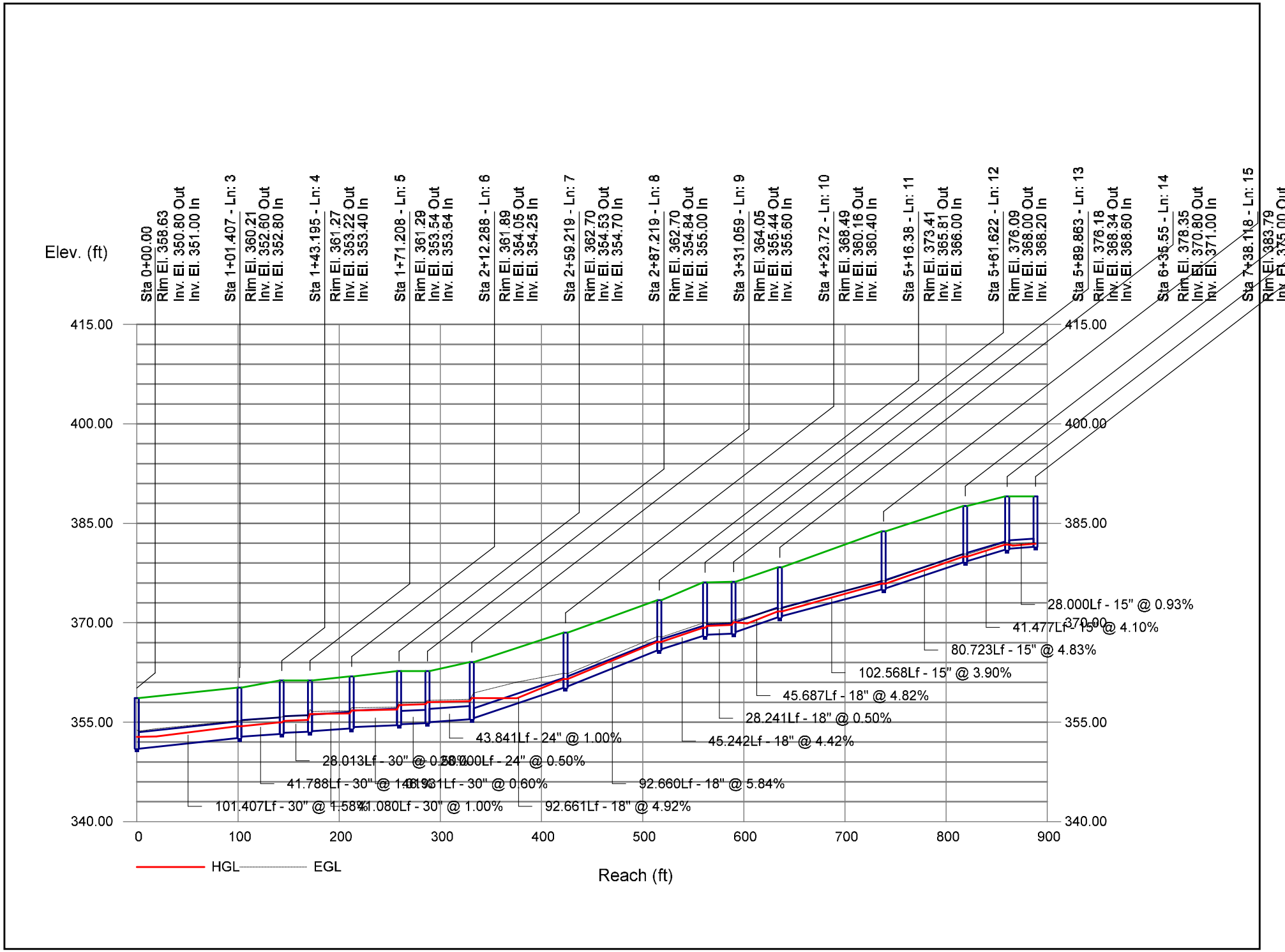
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 1-35 Proj. file: SCM 2 Storm Network.stm



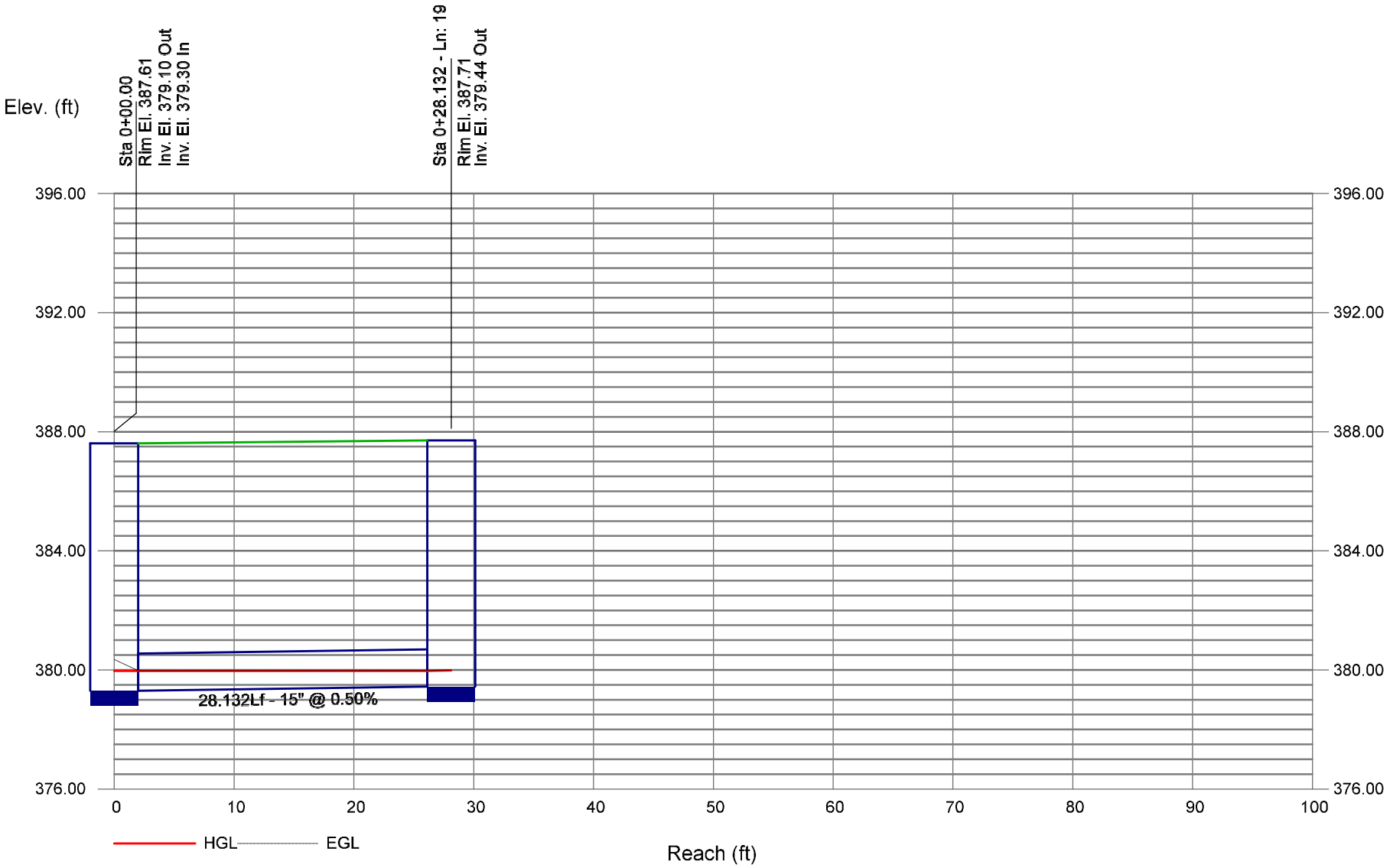
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 3-18 Proj. file: SCM 2 Storm Network.stm



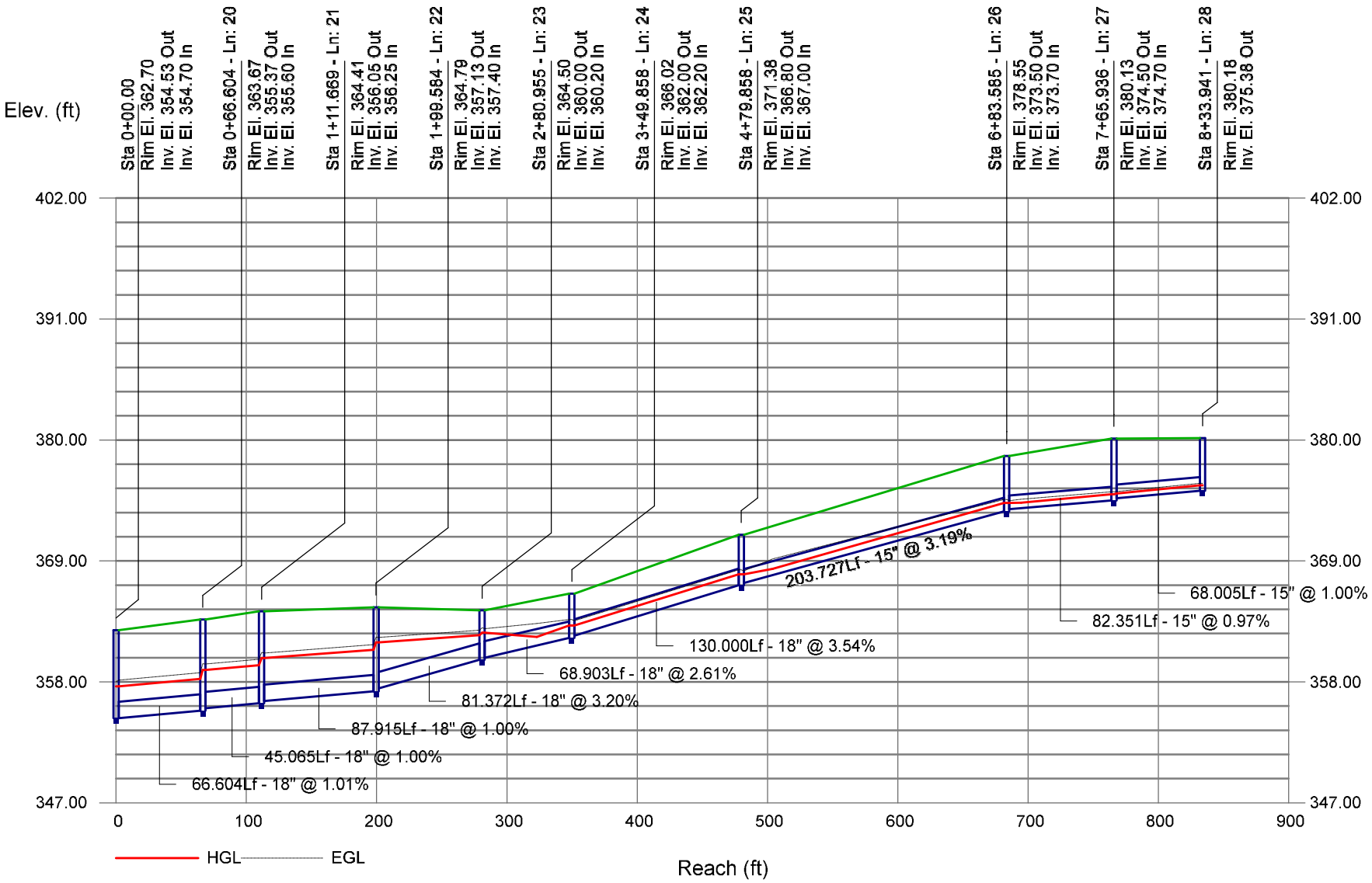
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 19-19 Proj. file: SCM 2 Storm Network.stm



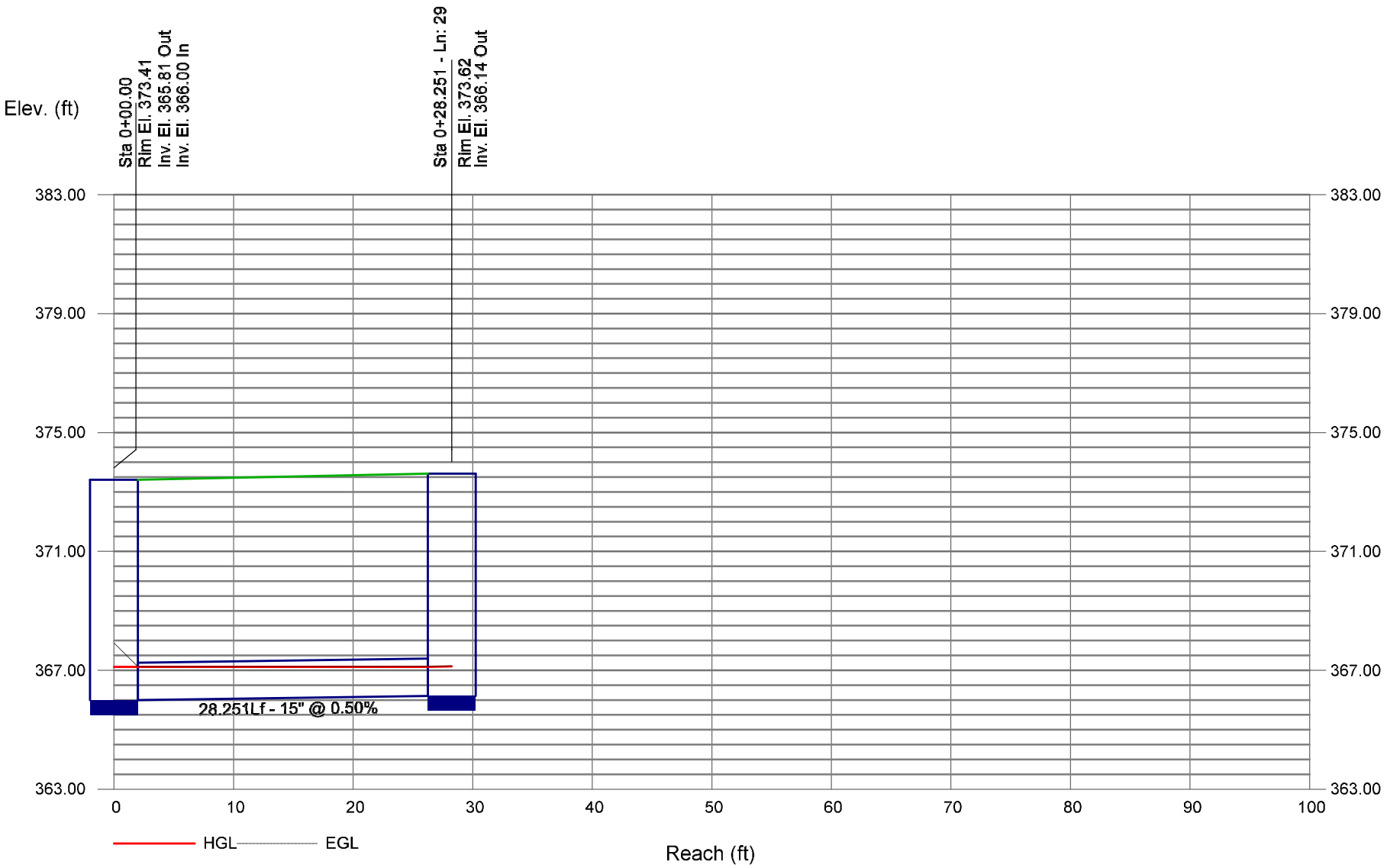
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 20-28 Proj. file: SCM 2 Storm Network.stm



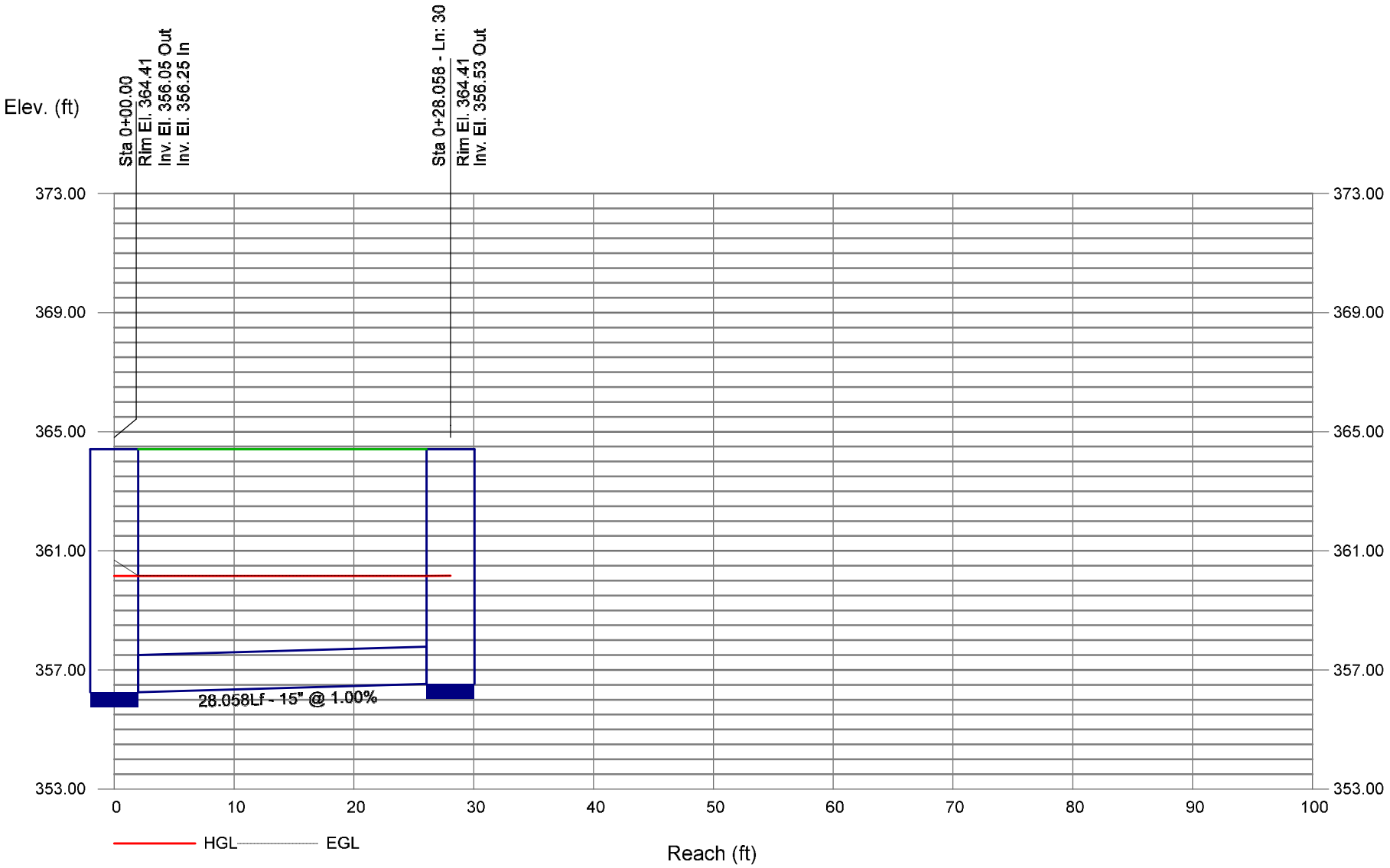
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 29-29 Proj. file: SCM 2 Storm Network.stm



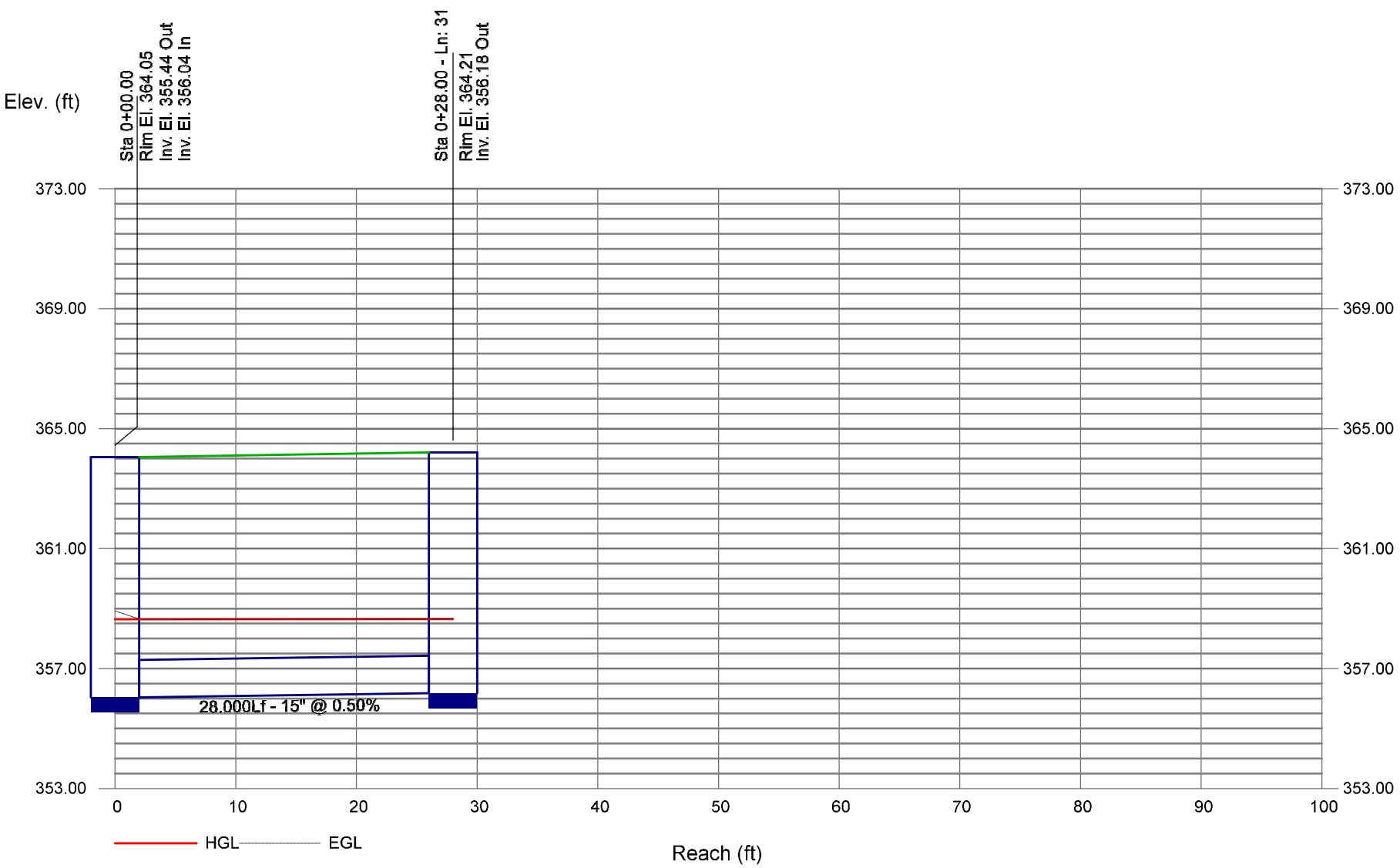
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 30-30 Proj. file: SCM 2 Storm Network.stm



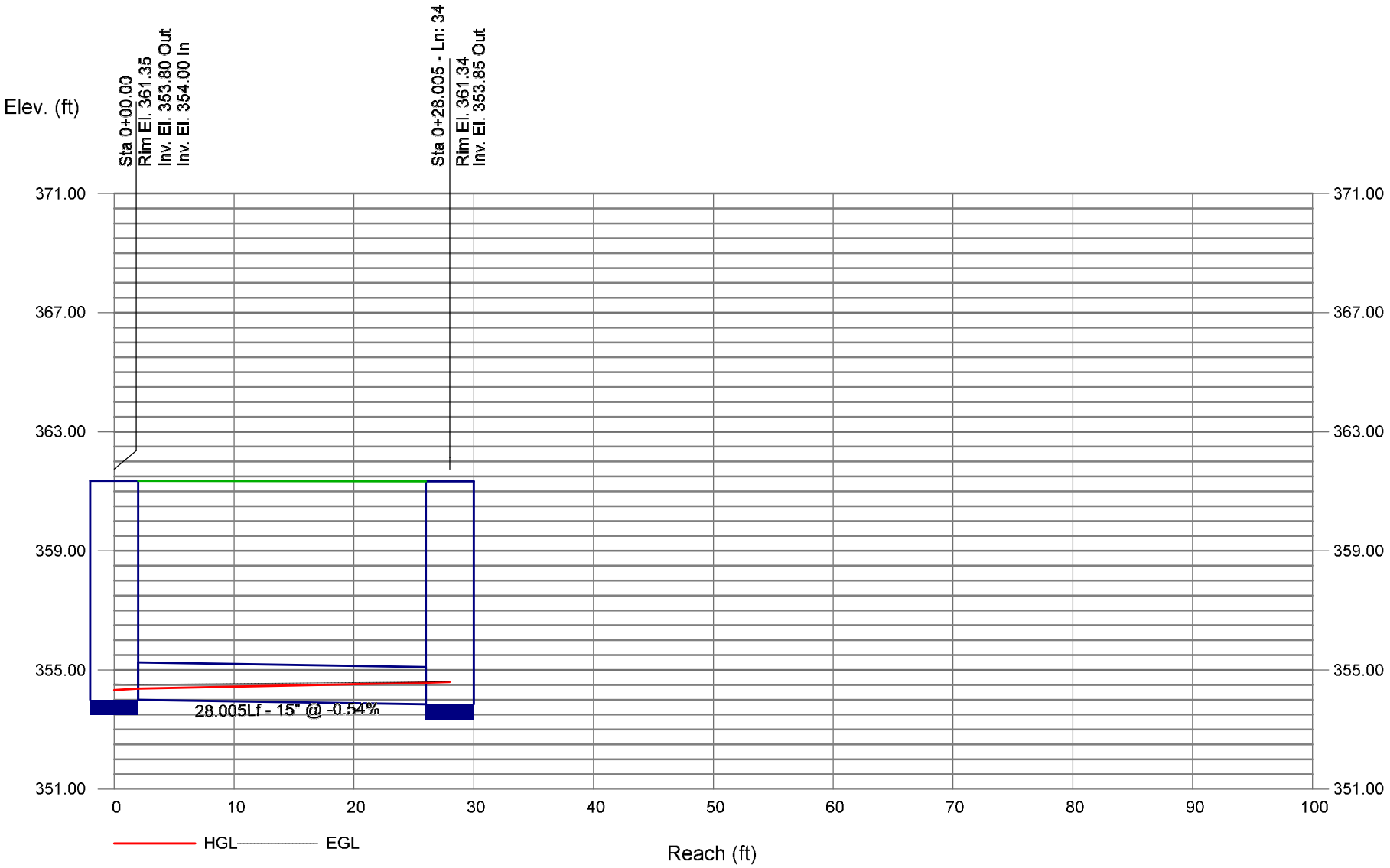
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 31-31 Proj. file: SCM 2 Storm Network.stm



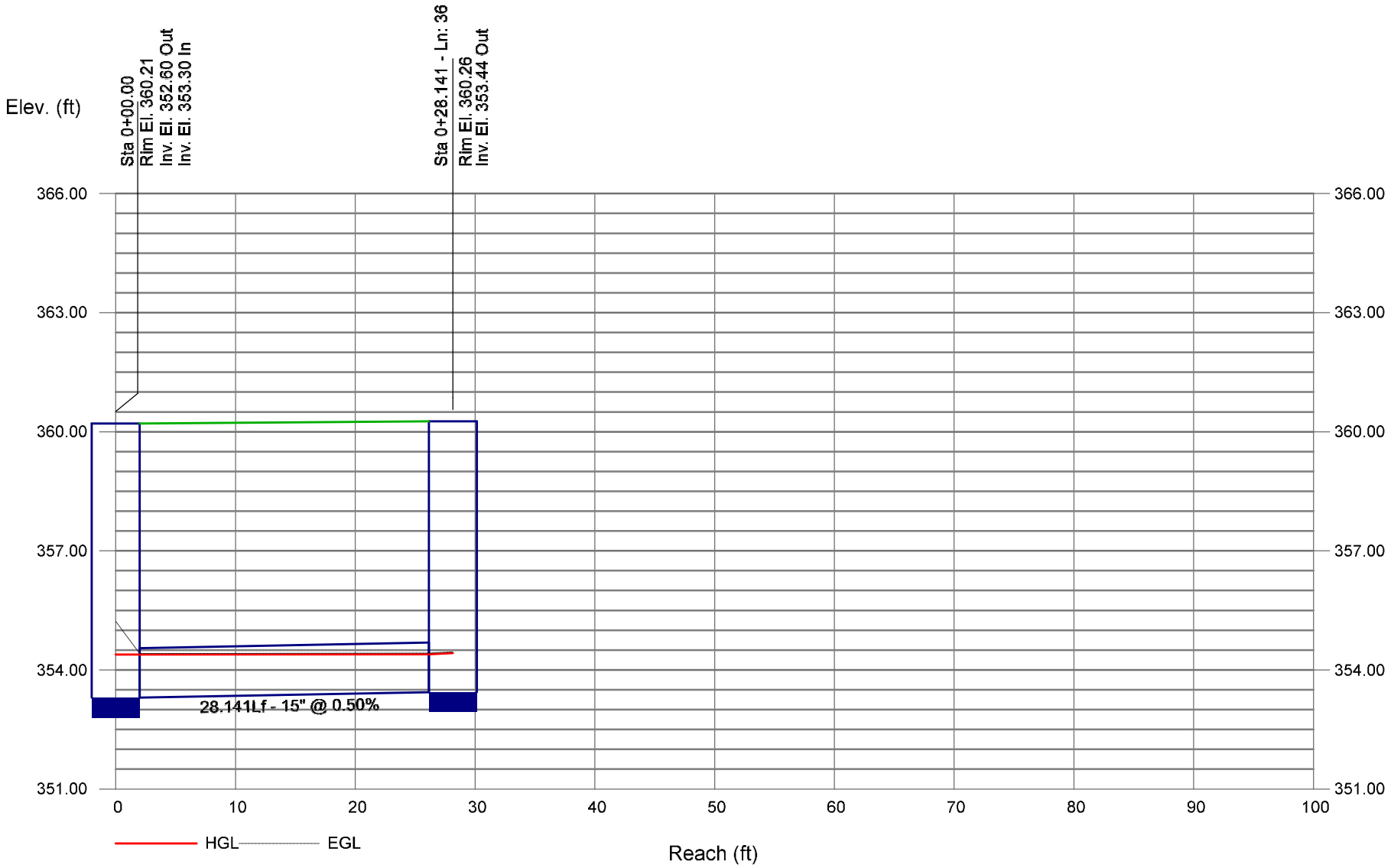
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 34-34 Proj. file: SCM 2 Storm Network.stm



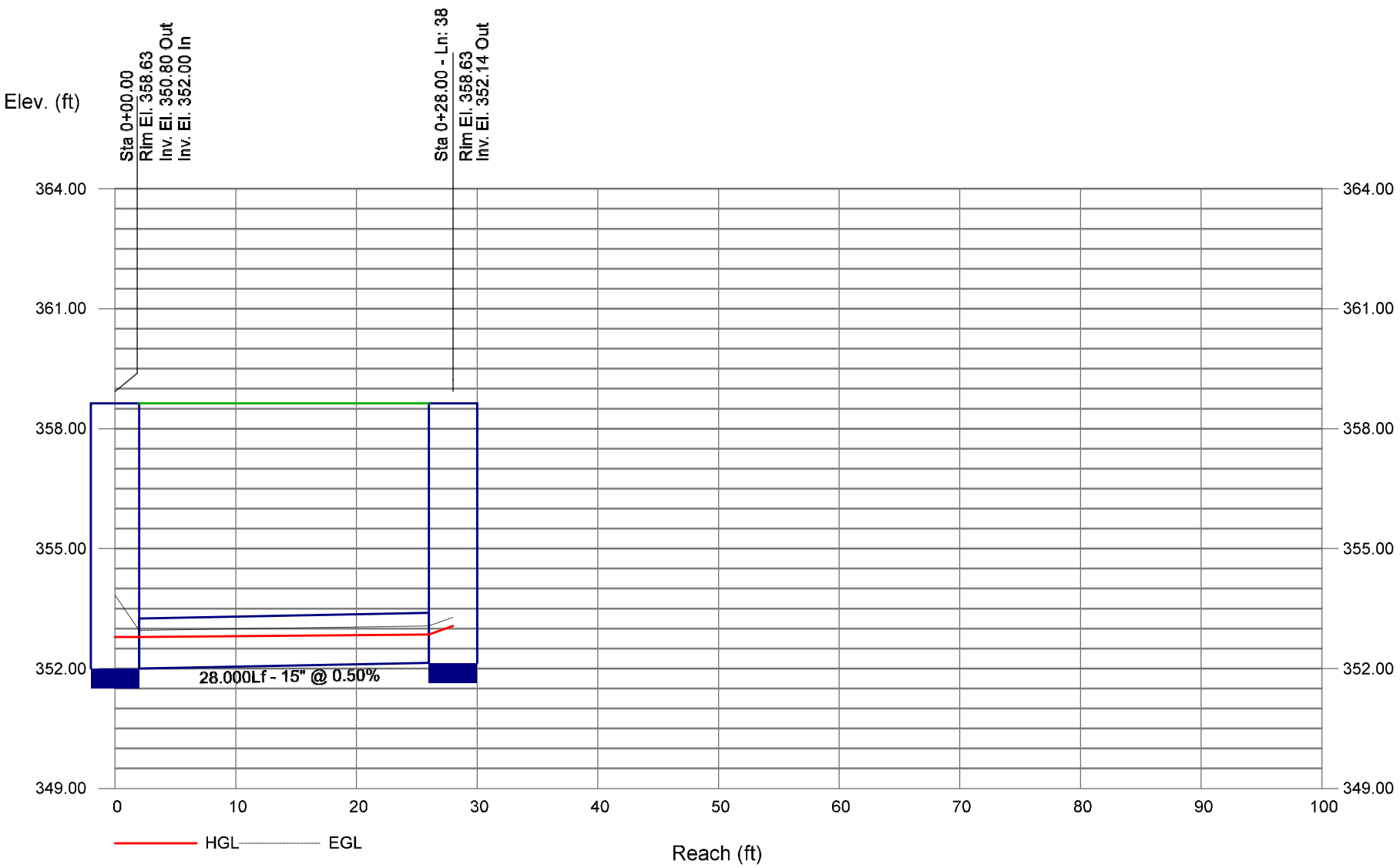
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 36-36 Proj. file: SCM 2 Storm Network.stm



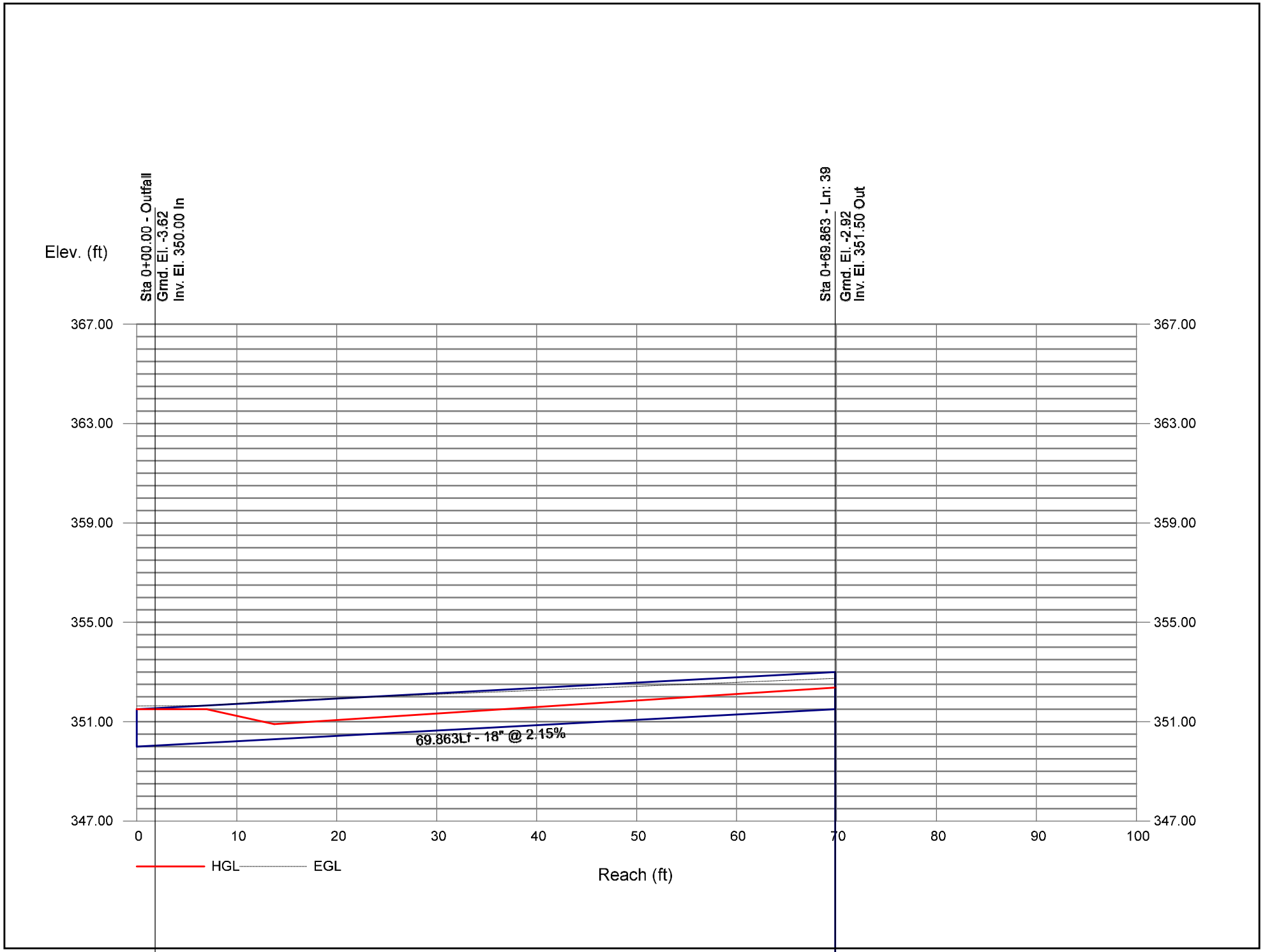
# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 38-38 Proj. file: SCM 2 Storm Network.stm

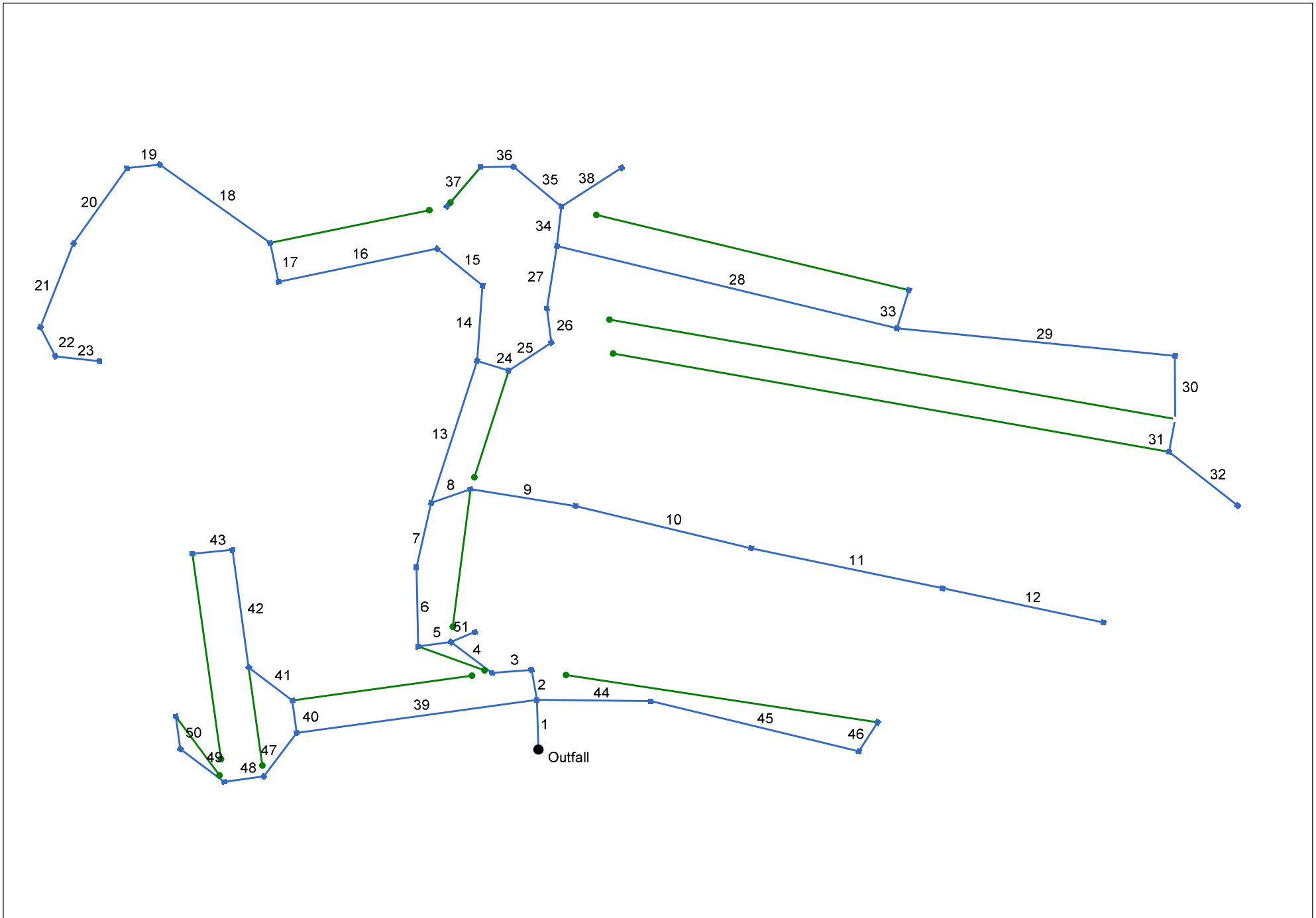


# Storm Sewer Profile

SCM 2 25-YEAR PROFILE 39-39 Proj. file: SCM 2 Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 4 25-YEAR




| Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report



| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 42.566 | -91.634 | Comb | 0.00 | 0.37 | 0.60 | 10.0 | 362.50 | 0.82 | 362.85 | 36 | Cir | 0.013 | 2.25 | 370.55 | Pipe - (418) |
| 2 | 1 | 26.017 | -8.311 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 363.05 | 0.58 | 363.20 | 36 | Cir | 0.013 | 1.49 | 370.31 | Pipe - (417) |
| 3 | 2 | 33.736 | -84.541 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 363.40 | 0.89 | 363.70 | 30 | Cir | 0.013 | 1.07 | 370.74 | Pipe - (416) |
| 4 | 3 | 43.841 | 41.601 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 363.90 | 1.37 | 364.50 | 30 | Cir | 0.013 | 1.50 | 371.99 | Pipe - (368) |
| 5 | 4 | 28.000 | -45.000 | Comb | 0.00 | 1.08 | 0.60 | 10.0 | 364.70 | 1.00 | 364.98 | 30 | Cir | 0.013 | 1.50 | 371.99 | Pipe - (380) |
| 6 | 5 | 67.788 | 96.424 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 365.20 | 1.00 | 365.88 | 30 | Cir | 0.013 | 0.50 | 373.69 | Pipe - (367) (1) ( |
| 7 | 6 | 56.317 | 14.470 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 366.10 | 1.95 | 367.20 | 30 | Cir | 0.013 | 1.80 | 375.08 | Pipe - (367) (1) |
| 8 | 7 | 35.477 | 57.582 | Comb | 0.00 | 0.16 | 0.60 | 10.0 | 367.76 | 0.99 | 368.11 | 18 | Cir | 0.013 | 0.80 | 375.64 | Pipe - (374) (1) |
| 9 | 8 | 90.608 | 28.606 | DrGrt | 0.00 | 0.78 | 0.60 | 10.0 | 368.31 | 6.66 | 374.34 | 18 | Cir | 0.013 | 0.50 | 376.04 | Pipe - (374) |
| 10 | 9 | 153.369 | 4.369 | DrGrt | 0.00 | 0.56 | 0.60 | 10.0 | 374.60 | 2.22 | 378.00 | 18 | Cir | 0.013 | 0.50 | 379.64 | Pipe - (373) |
| 11 | 10 | 166.305 | -1.713 | DrGrt | 0.00 | 0.62 | 0.60 | 10.0 | 378.20 | 1.20 | 380.20 | 15 | Cir | 0.013 | 0.50 | 381.64 | Pipe - (372) |
| 12 | 11 | 140.121 | 0.243 | DrGrt | 0.00 | 0.34 | 0.60 | 10.0 | 380.40 | 2.00 | 383.20 | 15 | Cir | 0.013 | 1.00 | 384.64 | Pipe - (490) |
| 13 | 7 | 127.504 | 4.879 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 367.40 | 2.43 | 370.50 | 24 | Cir | 0.013 | 1.50 | 378.43 | Pipe - (366) |
| 14 | 13 | 64.616 | -13.839 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 370.70 | 2.94 | 372.60 | 18 | Cir | 0.013 | 1.27 | 380.23 | Pipe - (409) |
| 15 | 14 | 49.983 | -55.102 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 372.80 | 3.00 | 374.30 | 18 | Cir | 0.013 | 1.22 | 382.08 | Pipe - (408) |
| 16 | 15 | 137.706 | -50.808 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 374.50 | 0.58 | 375.30 | 18 | Cir | 0.013 | 1.50 | 384.96 | Pipe - (432) |
| 17 | 16 | 34.000 | 90.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 375.50 | 0.59 | 375.70 | 18 | Cir | 0.013 | 1.08 | 384.52 | Pipe - (438) |
| 18 | 17 | 115.233 | -42.654 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 375.90 | 0.61 | 376.60 | 15 | Cir | 0.013 | 1.07 | 384.70 | Pipe - (437) |
| 19 | 18 | 28.000 | -41.665 | Comb | 0.00 | 0.85 | 0.60 | 10.0 | 376.80 | 0.71 | 377.00 | 15 | Cir | 0.013 | 1.18 | 384.67 | Pipe - (436) |
| 20 | 19 | 78.850 | -48.424 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 377.20 | 0.60 | 377.67 | 15 | Cir | 0.013 | 0.50 | 384.57 | Pipe - (435) |
| 21 | 20 | 76.953 | -14.049 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 377.90 | 0.60 | 378.36 | 15 | Cir | 0.013 | 1.18 | 385.58 | Pipe - (434) |
| 22 | 21 | 28.000 | -48.252 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 378.60 | 0.61 | 378.77 | 15 | Cir | 0.013 | 1.30 | 385.58 | Pipe - (433) |
| 23 | 22 | 37.369 | -57.113 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 379.00 | 0.59 | 379.22 | 15 | Cir | 0.013 | 1.00 | 386.00 | Pipe - (535) |

# Storm Sewer Inventory Report

SCM 4 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 13 | 28.099 | 89.385 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 370.70 | 0.60 | 370.87 | 24 | Cir | 0.013 | 1.21 | 378.40 | Pipe - (367) |
| 25 | 24 | 43.416 | -50.732 | Comb | 0.00 | 0.83 | 0.60 | 10.0 | 371.10 | 0.92 | 371.50 | 24 | Cir | 0.013 | 1.38 | 379.57 | Pipe - (379) |
| 26 | 25 | 29.427 | -64.132 | Comb | 0.00 | 0.76 | 0.60 | 10.0 | 371.70 | 0.99 | 371.99 | 18 | Cir | 0.013 | 0.51 | 379.48 | Pipe - (364) |
| 27 | 26 | 54.011 | 16.712 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 372.20 | 2.00 | 373.28 | 18 | Cir | 0.013 | 2.16 | 381.78 | Pipe - (363) |
| 28 | 27 | 297.666 | 94.522 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 373.50 | 0.60 | 375.29 | 15 | Cir | 0.013 | 1.50 | 385.53 | Pipe - (412) |
| 29 | 28 | 237.368 | -7.963 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 375.50 | 0.60 | 376.92 | 15 | Cir | 0.013 | 1.49 | 387.38 | Pipe - (411) |
| 30 | 29 | 54.000 | 84.067 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 377.20 | 0.59 | 377.52 | 15 | Cir | 0.013 | 0.50 | 385.70 | Pipe - (415) |
| 31 | 30 | 28.507 | 10.831 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 377.75 | 0.60 | 377.92 | 15 | Cir | 0.013 | 1.36 | 385.54 | Pipe - (414) |
| 32 | 31 | 74.490 | -62.309 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 378.20 | 0.60 | 378.65 | 15 | Cir | 0.013 | 1.00 | 384.81 | Pipe - (413) |
| 33 | 28 | 34.065 | -86.348 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 375.50 | 1.00 | 375.84 | 18 | Cir | 0.013 | 1.00 | 384.81 | Pipe - (534) |
| 34 | 27 | 34.020 | -2.563 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 373.50 | 0.59 | 373.70 | 18 | Cir | 0.013 | 1.82 | 381.93 | Pipe - (362) |
| 35 | 34 | 53.159 | -56.631 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 373.90 | 0.60 | 374.22 | 15 | Cir | 0.013 | 1.05 | 381.95 | Pipe - (371) |
| 36 | 35 | 28.000 | -40.898 | Comb | 0.00 | 0.24 | 0.60 | 10.0 | 374.40 | 0.71 | 374.60 | 15 | Cir | 0.013 | 1.18 | 381.69 | Pipe - (394) |
| 37 | 36 | 44.039 | -48.688 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 374.80 | 4.00 | 376.56 | 15 | Cir | 0.013 | 1.00 | 382.03 | Pipe - (410) |
| 38 | 34 | 60.892 | 50.531 | DrGrt | 0.00 | 0.28 | 0.60 | 10.0 | 373.90 | 1.00 | 374.51 | 15 | Cir | 0.013 | 1.00 | 381.93 | Pipe - (584) |
| 39 | 1 | 206.011 | -96.251 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 363.05 | 0.50 | 364.08 | 24 | Cir | 0.013 | 1.69 | 372.10 | Pipe - (384) |
| 40 | 39 | 28.000 | 90.000 | Comb | 0.00 | 0.02 | 0.60 | 10.0 | 364.30 | 0.71 | 364.50 | 15 | Cir | 0.013 | 1.13 | 372.42 | Pipe - (386) |
| 41 | 40 | 46.669 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 364.70 | 5.79 | 367.40 | 15 | Cir | 0.013 | 1.13 | 374.82 | Pipe - (421) |
| 42 | 41 | 101.483 | 45.000 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 367.60 | 4.14 | 371.80 | 15 | Cir | 0.013 | 1.50 | 379.86 | Pipe - (420) |
| 43 | 42 | 34.024 | -87.851 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 372.00 | 0.59 | 372.20 | 15 | Cir | 0.013 | 1.00 | 380.67 | Pipe - (419) |
| 44 | 1 | 97.083 | 92.316 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 364.00 | 0.52 | 364.50 | 18 | Cir | 0.013 | 0.50 | 371.84 | Pipe - (388) |
| 45 | 44 | 181.821 | 12.960 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 364.70 | 3.74 | 371.50 | 15 | Cir | 0.013 | 1.43 | 379.68 | Pipe - (387) |
| 46 | 45 | 29.575 | -71.057 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 371.70 | 0.51 | 371.85 | 15 | Cir | 0.013 | 1.00 | 380.12 | Pipe - (389) |

# Storm Sewer Inventory Report

SCM 4 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 39 | 46.669 | -45.000 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 364.30 | 0.49 | 364.53 | 15 | Cir | 0.013 | 1.13 | 370.15 | Pipe - (422) |
| 48 | 47 | 34.000 | 45.000 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 364.75 | 0.50 | 364.92 | 15 | Cir | 0.013 | 1.13 | 370.89 | Pipe - (383) |
| 49 | 48 | 46.669 | 45.000 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 365.15 | 0.49 | 365.38 | 15 | Cir | 0.013 | 1.13 | 373.17 | Pipe - (382) |
| 50 | 49 | 28.000 | 45.000 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 365.60 | 0.50 | 365.74 | 15 | Cir | 0.013 | 1.00 | 373.41 | Pipe - (381) |
| 51 | 4 | 21.891 | 119.979 | DrGrt | 0.00 | 0.07 | 0.60 | 10.0 | 365.70 | 1.00 | 365.92 | 15 | Cir | 0.013 | 1.00 | 370.85 | Pipe - (585) |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | CB 401 | Combination | 370.55 | Rect | 4.00 | 4.00 | 36 | Cir | 362.85 | 36<br>24<br>18 | Cir<br>Cir<br>Cir | 363.05<br>363.05<br>364.00 |
| 2 | CB 402 | Combination | 370.31 | Rect | 4.00 | 4.00 | 36 | Cir | 363.20 | 30 | Cir | 363.40 |
| 3 | CB 403 | Combination | 370.74 | Rect | 4.00 | 4.00 | 30 | Cir | 363.70 | 30 | Cir | 363.90 |
| 4 | CB 404 | Combination | 371.99 | Rect | 4.00 | 4.00 | 30 | Cir | 364.50 | 30<br>15 | Cir<br>Cir | 364.70<br>365.70 |
| 5 | CB 405 | Combination | 371.99 | Rect | 4.00 | 4.00 | 30 | Cir | 364.98 | 30 | Cir | 365.20 |
| 6 | CB 406 | Combination | 373.69 | Rect | 4.00 | 4.00 | 30 | Cir | 365.88 | 30 | Cir | 366.10 |
| 7 | CB 407 | Combination | 375.08 | Rect | 4.00 | 4.00 | 30 | Cir | 367.20 | 18<br>24 | Cir<br>Cir | 367.76<br>367.40 |
| 8 | CB 407A | Combination | 375.64 | Rect | 4.00 | 4.00 | 18 | Cir | 368.11 | 18 | Cir | 368.31 |
| 9 | YI 407B | DropGrate | 376.04 | Rect | 4.00 | 4.00 | 18 | Cir | 374.34 | 18 | Cir | 374.60 |
| 10 | YI 407C | DropGrate | 379.64 | Rect | 4.00 | 4.00 | 18 | Cir | 378.00 | 15 | Cir | 378.20 |
| 11 | YI 407D | DropGrate | 381.64 | Rect | 4.00 | 4.00 | 15 | Cir | 380.20 | 15 | Cir | 380.40 |
| 12 | YI 407E | DropGrate | 384.64 | Rect | 4.00 | 4.00 | 15 | Cir | 383.20 | | | |
| 13 | CB 408 | Combination | 378.43 | Rect | 4.00 | 4.00 | 24 | Cir | 370.50 | 18<br>24 | Cir<br>Cir | 370.70<br>370.70 |
| 14 | CB 409 | Combination | 380.23 | Rect | 4.00 | 4.00 | 18 | Cir | 372.60 | 18 | Cir | 372.80 |
| 15 | CB 410 | Combination | 382.08 | Rect | 4.00 | 4.00 | 18 | Cir | 374.30 | 18 | Cir | 374.50 |
| 16 | CB 411 | Combination | 384.96 | Rect | 4.00 | 4.00 | 18 | Cir | 375.30 | 18 | Cir | 375.50 |
| 17 | CB 412 | Combination | 384.52 | Rect | 4.00 | 4.00 | 18 | Cir | 375.70 | 15 | Cir | 375.90 |
| 18 | CB 413 | Combination | 384.70 | Rect | 4.00 | 4.00 | 15 | Cir | 376.60 | 15 | Cir | 376.80 |
| 19 | CB 414 | Combination | 384.67 | Rect | 4.00 | 4.00 | 15 | Cir | 377.00 | 15 | Cir | 377.20 |
| 20 | CB 415 | Combination | 384.57 | Rect | 4.00 | 4.00 | 15 | Cir | 377.67 | 15 | Cir | 377.90 |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 416 | Combination | 385.58 | Rect | 4.00 | 4.00 | 15 | Cir | 378.36 | 15 | Cir | 378.60 |
| 22 | CB 417 | Combination | 385.58 | Rect | 4.00 | 4.00 | 15 | Cir | 378.77 | 15 | Cir | 379.00 |
| 23 | CB 418 | Combination | 386.00 | Rect | 4.00 | 4.00 | 15 | Cir | 379.22 | | | |
| 24 | CB 419 | Combination | 378.40 | Rect | 4.00 | 4.00 | 24 | Cir | 370.87 | 24 | Cir | 371.10 |
| 25 | CB 420 | Combination | 379.57 | Rect | 4.00 | 4.00 | 24 | Cir | 371.50 | 18 | Cir | 371.70 |
| 26 | CB 421 | Combination | 379.48 | Rect | 4.00 | 4.00 | 18 | Cir | 371.99 | 18 | Cir | 372.20 |
| 27 | CB 422 | Combination | 381.78 | Rect | 4.00 | 4.00 | 18 | Cir | 373.28 | 15<br>18 | Cir<br>Cir | 373.50<br>373.50 |
| 28 | CB 423 | Combination | 385.53 | Rect | 4.00 | 4.00 | 15 | Cir | 375.29 | 15<br>18 | Cir<br>Cir | 375.50<br>375.50 |
| 29 | CB 424 | Combination | 387.38 | Rect | 4.00 | 4.00 | 15 | Cir | 376.92 | 15 | Cir | 377.20 |
| 30 | CB 425 | Combination | 385.70 | Rect | 4.00 | 4.00 | 15 | Cir | 377.52 | 15 | Cir | 377.75 |
| 31 | CB 426 | Combination | 385.54 | Rect | 4.00 | 4.00 | 15 | Cir | 377.92 | 15 | Cir | 378.20 |
| 32 | CB 427 | Combination | 384.81 | Rect | 4.00 | 4.00 | 15 | Cir | 378.65 | | | |
| 33 | CB 423A | Combination | 384.81 | Rect | 4.00 | 4.00 | 18 | Cir | 375.84 | | | |
| 34 | CB 422A | Combination | 381.93 | Rect | 4.00 | 4.00 | 18 | Cir | 373.70 | 15<br>15 | Cir<br>Cir | 373.90<br>373.90 |
| 35 | CB 422C | Combination | 381.95 | Rect | 4.00 | 4.00 | 15 | Cir | 374.22 | 15 | Cir | 374.40 |
| 36 | CB 422D | Combination | 381.69 | Rect | 4.00 | 4.00 | 15 | Cir | 374.60 | 15 | Cir | 374.80 |
| 37 | CB 422E | Combination | 382.03 | Rect | 4.00 | 4.00 | 15 | Cir | 376.56 | | | |
| 38 | YI 422B | DropGrate | 381.93 | Rect | 4.00 | 4.00 | 15 | Cir | 374.51 | | | |
| 39 | CB 430 | Combination | 372.10 | Rect | 4.00 | 4.00 | 24 | Cir | 364.08 | 15<br>15 | Cir<br>Cir | 364.30<br>364.30 |
| 40 | CB 431 | Combination | 372.42 | Rect | 4.00 | 4.00 | 15 | Cir | 364.50 | 15 | Cir | 364.70 |
| 41 | CB 432 | Combination | 374.82 | Rect | 4.00 | 4.00 | 15 | Cir | 367.40 | 15 | Cir | 367.60 |

# Structure Report



| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 42 | CB 433 | Combination | 379.86 | Rect | 4.00 | 4.00 | 15 | Cir | 371.80 | 15 | Cir | 372.00 |
| 43 | CB 433A | Combination | 380.67 | Rect | 4.00 | 4.00 | 15 | Cir | 372.20 | | | |
| 44 | CB 428 | Combination | 371.84 | Rect | 4.00 | 4.00 | 18 | Cir | 364.50 | 15 | Cir | 364.70 |
| 45 | CB 429 | Combination | 379.68 | Rect | 4.00 | 4.00 | 15 | Cir | 371.50 | 15 | Cir | 371.70 |
| 46 | CB 429A | Combination | 380.12 | Rect | 4.00 | 4.00 | 15 | Cir | 371.85 | | | |
| 47 | CB 434 | Combination | 370.15 | Rect | 4.00 | 4.00 | 15 | Cir | 364.53 | 15 | Cir | 364.75 |
| 48 | CB 435 | Combination | 370.89 | Rect | 4.00 | 4.00 | 15 | Cir | 364.92 | 15 | Cir | 365.15 |
| 49 | CB 436 | Combination | 373.17 | Rect | 4.00 | 4.00 | 15 | Cir | 365.38 | 15 | Cir | 365.60 |
| 50 | CB 436A | Combination | 373.41 | Rect | 4.00 | 4.00 | 15 | Cir | 365.74 | | | |
| 51 | YI 404A | DropGrate | 370.85 | Rect | 4.00 | 4.00 | 15 | Cir | 365.92 | | | |

# Storm Sewer Summary Report

SCM 4 25-YEAR



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (418) | 43.75 | 36 | Cir | 42.566 | 362.50 | 362.85 | 0.822 | 365.08 | 365.00 | n/a | 365.00 | End | Combination |
| 2 | Pipe - (417) | 36.95 | 36 | Cir | 26.017 | 363.05 | 363.20 | 0.577 | 365.00 | 365.18 | 1.30 | 365.18 | 1 | Combination |
| 3 | Pipe - (416) | 35.82 | 30 | Cir | 33.736 | 363.40 | 363.70 | 0.889 | 365.30 | 365.73 | n/a | 365.73 | 2 | Combination |
| 4 | Pipe - (368) | 35.40 | 30 | Cir | 43.841 | 363.90 | 364.50 | 1.369 | 365.73 | 366.52 | n/a | 366.52 | 3 | Combination |
| 5 | Pipe - (380) | 35.08 | 30 | Cir | 28.000 | 364.70 | 364.98 | 1.000 | 366.52 | 366.99 | n/a | 366.99 | 4 | Combination |
| 6 | Pipe - (367) (1) (1) | 31.51 | 30 | Cir | 67.788 | 365.20 | 365.88 | 1.003 | 366.99 | 367.79 | 0.48 | 367.79 | 5 | Combination |
| 7 | Pipe - (367) (1) | 31.30 | 30 | Cir | 56.317 | 366.10 | 367.20 | 1.953 | 367.79 | 369.10 | n/a | 369.10 | 6 | Combination |
| 8 | Pipe - (374) (1) | 8.91 | 18 | Cir | 35.477 | 367.76 | 368.11 | 0.986 | 369.10 | 369.26 | n/a | 369.26 j | 7 | Combination |
| 9 | Pipe - (374) | 8.39 | 18 | Cir | 90.608 | 368.31 | 374.34 | 6.655 | 369.26 | 375.46 | n/a | 375.46 | 8 | DropGrate |
| 10 | Pipe - (373) | 5.63 | 18 | Cir | 153.369 | 374.60 | 378.00 | 2.217 | 375.46 | 378.91 | n/a | 378.91 | 9 | DropGrate |
| 11 | Pipe - (372) | 3.62 | 15 | Cir | 166.305 | 378.20 | 380.20 | 1.203 | 378.91 | 380.97 | n/a | 380.97 | 10 | DropGrate |
| 12 | Pipe - (490) | 1.32 | 15 | Cir | 140.121 | 380.40 | 383.20 | 1.998 | 380.97 | 383.65 | n/a | 383.65 j | 11 | DropGrate |
| 13 | Pipe - (366) | 22.23 | 24 | Cir | 127.504 | 367.40 | 370.50 | 2.431 | 369.10 | 372.18 | n/a | 372.18 j | 7 | Combination |
| 14 | Pipe - (409) | 6.34 | 18 | Cir | 64.616 | 370.70 | 372.60 | 2.940 | 372.18 | 373.57 | n/a | 373.57 j | 13 | Combination |
| 15 | Pipe - (408) | 6.12 | 18 | Cir | 49.983 | 372.80 | 374.30 | 3.001 | 373.57 | 375.25 | 0.50 | 375.25 | 14 | Combination |
| 16 | Pipe - (432) | 5.88 | 18 | Cir | 137.706 | 374.50 | 375.30 | 0.581 | 375.46 | 376.26 | 0.57 | 376.83 | 15 | Combination |
| 17 | Pipe - (438) | 5.66 | 18 | Cir | 34.000 | 375.50 | 375.70 | 0.588 | 376.83 | 376.88 | 0.24 | 377.12 | 16 | Combination |
| 18 | Pipe - (437) | 5.48 | 15 | Cir | 115.233 | 375.90 | 376.60 | 0.607 | 377.15* | 377.98* | 0.33 | 378.31 | 17 | Combination |
| 19 | Pipe - (436) | 4.00 | 15 | Cir | 28.000 | 376.80 | 377.00 | 0.714 | 378.31* | 378.42* | 0.19 | 378.61 | 18 | Combination |
| 20 | Pipe - (435) | 0.90 | 15 | Cir | 78.850 | 377.20 | 377.67 | 0.596 | 378.61 | 378.63 | 0.01 | 378.63 | 19 | Combination |
| 21 | Pipe - (434) | 0.53 | 15 | Cir | 76.953 | 377.90 | 378.36 | 0.598 | 378.63 | 378.64 | n/a | 378.64 j | 20 | Combination |
| 22 | Pipe - (433) | 0.42 | 15 | Cir | 28.000 | 378.60 | 378.77 | 0.607 | 378.85 | 379.02 | n/a | 379.02 | 21 | Combination |
| 23 | Pipe - (535) | 0.27 | 15 | Cir | 37.369 | 379.00 | 379.22 | 0.589 | 379.20 | 379.42 | n/a | 379.42 | 22 | Combination |
| 24 | Pipe - (367) | 15.62 | 24 | Cir | 28.099 | 370.70 | 370.87 | 0.605 | 372.18 | 372.34 | 0.75 | 373.09 | 13 | Combination |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report



| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (379) | 15.22 | 24 | Cir | 43.416 | 371.10 | 371.50 | 0.921 | 373.09 | 372.91 | n/a | 372.91 | 24 | Combination |
| 26 | Pipe - (364) | 12.34 | 18 | Cir | 29.427 | 371.70 | 371.99 | 0.985 | 373.20* | 373.61* | 0.39 | 373.99 | 25 | Combination |
| 27 | Pipe - (363) | 9.72 | 18 | Cir | 54.011 | 372.20 | 373.28 | 2.000 | 373.99 | 374.48 | n/a | 374.48 j | 26 | Combination |
| 28 | Pipe - (412) | 4.70 | 15 | Cir | 297.666 | 373.50 | 375.29 | 0.601 | 374.48 | 376.24 | 0.52 | 376.75 | 27 | Combination |
| 29 | Pipe - (411) | 2.54 | 15 | Cir | 237.368 | 375.50 | 376.92 | 0.598 | 376.75 | 377.56 | n/a | 377.56 j | 28 | Combination |
| 30 | Pipe - (415) | 2.48 | 15 | Cir | 54.000 | 377.20 | 377.52 | 0.593 | 377.83 | 378.15 | n/a | 378.15 | 29 | Combination |
| 31 | Pipe - (414) | 2.38 | 15 | Cir | 28.507 | 377.75 | 377.92 | 0.596 | 378.36 | 378.54 | n/a | 378.54 | 30 | Combination |
| 32 | Pipe - (413) | 2.37 | 15 | Cir | 74.490 | 378.20 | 378.65 | 0.604 | 378.80 | 379.26 | 0.24 | 379.26 | 31 | Combination |
| 33 | Pipe - (534) | 1.82 | 18 | Cir | 34.065 | 375.50 | 375.84 | 0.998 | 376.75 | 376.35 | n/a | 376.35 | 28 | Combination |
| 34 | Pipe - (362) | 4.83 | 18 | Cir | 34.020 | 373.50 | 373.70 | 0.588 | 374.48 | 374.54 | 0.63 | 374.54 | 27 | Combination |
| 35 | Pipe - (371) | 2.57 | 15 | Cir | 53.159 | 373.90 | 374.22 | 0.602 | 374.54 | 374.86 | n/a | 374.86 | 34 | Combination |
| 36 | Pipe - (394) | 1.92 | 15 | Cir | 28.000 | 374.40 | 374.60 | 0.714 | 374.91 | 375.15 | 0.25 | 375.15 | 35 | Combination |
| 37 | Pipe - (410) | 1.01 | 15 | Cir | 44.039 | 374.80 | 376.56 | 3.997 | 375.15 | 376.95 | 0.14 | 376.95 | 36 | Combination |
| 38 | Pipe - (584) | 1.09 | 15 | Cir | 60.892 | 373.90 | 374.51 | 1.002 | 374.54 | 374.92 | n/a | 374.92 j | 34 | DropGrate |
| 39 | Pipe - (384) | 4.03 | 24 | Cir | 206.011 | 363.05 | 364.08 | 0.500 | 365.00 | 364.78 | n/a | 364.78 | 1 | Combination |
| 40 | Pipe - (386) | 1.36 | 15 | Cir | 28.000 | 364.30 | 364.50 | 0.714 | 364.78 | 364.96 | n/a | 364.96 j | 39 | Combination |
| 41 | Pipe - (421) | 1.29 | 15 | Cir | 46.669 | 364.70 | 367.40 | 5.785 | 364.96 | 367.85 | n/a | 367.85 | 40 | Combination |
| 42 | Pipe - (420) | 1.04 | 15 | Cir | 101.483 | 367.60 | 371.80 | 4.139 | 367.85 | 372.20 | 0.22 | 372.20 | 41 | Combination |
| 43 | Pipe - (419) | 0.50 | 15 | Cir | 34.024 | 372.00 | 372.20 | 0.588 | 372.27 | 372.48 | 0.10 | 372.48 | 42 | Combination |
| 44 | Pipe - (388) | 2.18 | 18 | Cir | 97.083 | 364.00 | 364.50 | 0.515 | 365.00 | 365.06 | n/a | 365.06 j | 1 | Combination |
| 45 | Pipe - (387) | 1.50 | 15 | Cir | 181.821 | 364.70 | 371.50 | 3.740 | 365.06 | 371.99 | 0.26 | 371.99 | 44 | Combination |
| 46 | Pipe - (389) | 0.70 | 15 | Cir | 29.575 | 371.70 | 371.85 | 0.507 | 372.03 | 372.18 | n/a | 372.29 j | 45 | Combination |
| 47 | Pipe - (422) | 2.66 | 15 | Cir | 46.669 | 364.30 | 364.53 | 0.493 | 364.99 | 365.22 | 0.26 | 365.48 | 39 | Combination |
| 48 | Pipe - (383) | 2.41 | 15 | Cir | 34.000 | 364.75 | 364.92 | 0.500 | 365.48 | 365.56 | 0.25 | 365.82 | 47 | Combination |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 4 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | Pipe - (382) | 2.00 | 15 | Cir | 46.669 | 365.15 | 365.38 | 0.493 | 365.82 | 365.95 | 0.24 | 366.19 | 48 | Combination |
| 50 | Pipe - (381) | 1.20 | 15 | Cir | 28.000 | 365.60 | 365.74 | 0.500 | 366.19 | 366.21 | 0.13 | 366.34 | 49 | Combination |
| 51 | Pipe - (585) | 0.27 | 15 | Cir | 21.891 | 365.70 | 365.92 | 1.005 | 366.52 | 366.12 | n/a | 366.12 | 4 | DropGrate |

Project File: SCM 4 Storm Network.stm

Number of lines: 51

Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report

SCM 4 25-YEAR



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | CB 401 | 1.44 | 0.01 | 1.45 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.70 | 0.21 | 6.70 | 0.0 | Off |
| 2 | CB 402 | 1.36 | 0.63 | 1.99 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.51 | 0.25 | 8.51 | 0.0 | Off |
| 3 | CB 403 | 0.58 | 1.56 | 1.52 | 0.63 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.08 | 0.17 | 4.27 | 0.0 | 2 |
| 4 | CB 404 | 0.16 | 0.13 | 0.29 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.77 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 405 | 4.19 | 0.00 | 2.63 | 1.56 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.88 | 0.19 | 5.54 | 0.0 | 3 |
| 6 | CB 406 | 0.35 | 0.05 | 0.39 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.00 | 0.00 | 0.00 | 0.0 | 5 |
| 7 | CB 407 | 0.85 | 0.00 | 0.81 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.87 | 0.05 | 0.89 | 0.0 | 6 |
| 8 | CB 407A | 0.62 | 0.57 | 1.06 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.76 | 0.08 | 1.32 | 0.0 | 4 |
| 9 | YI 407B | 3.03 | 0.00 | 3.03 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.20 | 22.82 | 0.20 | 22.82 | 0.0 | Off |
| 10 | YI 407C | 2.17 | 0.00 | 2.17 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.16 | 18.79 | 0.16 | 18.79 | 0.0 | Off |
| 11 | YI 407D | 2.40 | 0.00 | 2.40 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.17 | 19.93 | 0.17 | 19.93 | 0.0 | Off |
| 12 | YI 407E | 1.32 | 0.00 | 1.32 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.12 | 14.18 | 0.12 | 14.18 | 0.0 | Off |
| 13 | CB 408 | 0.43 | 0.00 | 0.43 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.16 | 0.00 | 0.07 | 0.0 | 7 |
| 14 | CB 409 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.74 | 0.00 | 0.00 | 0.0 | 13 |
| 15 | CB 410 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.51 | 0.01 | 0.18 | 0.0 | 14 |
| 16 | CB 411 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.81 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 412 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.81 | 0.00 | 0.00 | 0.0 | 37 |
| 18 | CB 413 | 1.59 | 0.00 | 1.59 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.19 | 0.22 | 7.19 | 0.0 | Off |
| 19 | CB 414 | 3.30 | 0.01 | 3.31 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.33 | 12.34 | 0.33 | 12.34 | 0.0 | Off |
| 20 | CB 415 | 0.39 | 0.00 | 0.38 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.39 | 0.04 | 0.59 | 0.0 | 19 |
| 21 | CB 416 | 0.12 | 0.00 | 0.12 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.71 | 0.00 | 0.00 | 0.0 | Off |
| 22 | CB 417 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.90 | 0.00 | 0.00 | 0.0 | Off |
| 23 | CB 418 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.35 | 0.13 | 2.35 | 0.0 | Off |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 419 | 0.50 | 1.81 | 1.74 | 0.57 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.76 | 0.14 | 2.86 | 0.0 | 8 |
| 25 | CB 420 | 3.22 | 1.05 | 2.46 | 1.81 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.30 | 10.88 | 0.23 | 7.47 | 0.0 | 24 |
| 26 | CB 421 | 2.95 | 0.00 | 1.90 | 1.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.30 | 0.19 | 5.71 | 0.0 | 25 |
| 27 | CB 422 | 0.78 | 0.04 | 0.82 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.26 | 0.17 | 4.26 | 0.0 | Off |
| 28 | CB 423 | 0.58 | 0.00 | 0.54 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.45 | 0.06 | 1.07 | 0.0 | 27 |
| 29 | CB 424 | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.47 | 0.00 | 0.00 | 0.0 | 28 |
| 30 | CB 425 | 0.12 | 0.00 | 0.12 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.43 | 0.00 | 0.00 | 0.0 | 26 |
| 31 | CB 426 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.013 | 2.00 | 0.060 | 0.020 | 0.013 | 0.06 | 0.95 | 0.00 | 0.00 | 0.0 | 25 |
| 32 | CB 427 | 2.37 | 0.00 | 2.37 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.68 | 0.27 | 9.68 | 0.0 | Off |
| 33 | CB 423A | 1.82 | 0.00 | 1.32 | 0.50 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.01 | 0.16 | 4.04 | 0.0 | 34 |
| 34 | CB 422A | 1.24 | 0.50 | 1.74 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.70 | 0.23 | 7.70 | 0.0 | Off |
| 35 | CB 422C | 0.66 | 0.00 | 0.66 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.56 | 0.15 | 3.56 | 0.0 | Off |
| 36 | CB 422D | 0.93 | 0.00 | 0.93 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.73 | 0.17 | 4.73 | 0.0 | 37 |
| 37 | CB 422E | 1.01 | 0.00 | 1.01 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.05 | 0.18 | 5.05 | 0.0 | Off |
| 38 | YI 422B | 1.09 | 0.00 | 1.09 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.10 | 12.76 | 0.10 | 12.76 | 0.0 | Off |
| 39 | CB 430 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.05 | 0.87 | 0.00 | 0.00 | 0.0 | 1 |
| 40 | CB 431 | 0.08 | 0.00 | 0.08 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | 3 |
| 41 | CB 432 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.52 | 0.00 | 0.00 | 0.0 | 47 |
| 42 | CB 433 | 0.54 | 0.00 | 0.54 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | 41 |
| 43 | CB 433A | 0.50 | 0.00 | 0.50 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.92 | 0.00 | 0.00 | 0.0 | 48 |
| 44 | CB 428 | 0.74 | 0.01 | 0.73 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.033 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.18 | 0.03 | 0.56 | 0.0 | 1 |
| 45 | CB 429 | 0.81 | 0.00 | 0.80 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.01 | 0.03 | 0.47 | 0.0 | 44 |
| 46 | CB 429A | 0.70 | 0.00 | 0.70 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.63 | 0.02 | 0.28 | 0.0 | 2 |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 434 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.52 | 0.00 | 0.00 | 0.0 | Off |
| 48 | CB 435 | 0.43 | 0.21 | 0.63 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.28 | 0.00 | 0.00 | 0.0 | Off |
| 49 | CB 436 | 0.81 | 0.00 | 0.76 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.04 | 0.06 | 0.96 | 0.0 | 48 |
| 50 | CB 436A | 1.20 | 0.00 | 1.05 | 0.16 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.10 | 0.09 | 1.47 | 0.0 | 48 |
| 51 | YI 404A | 0.27 | 0.00 | 0.27 | 0.00 | DrGrt | 0.0 | 0.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.04 | 6.57 | 0.04 | 6.57 | 0.0 | Off |

Project File: SCM 4 Storm Network.stm

Number of lines: 51

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 4 25-YEAR



| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 36 | 43.75 | 362.50 | 365.08 | 2.58 | 5.43 | 6.77 | 1.01 | 366.09 | 0.000 | 42.566 | 362.85 | 365.00 | 2.15** | 5.43 | 8.06 | 1.01 | 366.01 | 0.000 | 0.000 | n/a | 2.25 | n/a |
| 2 | 36 | 36.95 | 363.05 | 365.00 | 1.95 | 4.87 | 7.58 | 0.87 | 365.87 | 0.000 | 26.017 | 363.20 | 365.18 | 1.98** | 4.94 | 7.48 | 0.87 | 366.05 | 0.000 | 0.000 | n/a | 1.49 | 1.30 |
| 3 | 30 | 35.82 | 363.40 | 365.30 | 1.90* | 4.00 | 8.95 | 1.10 | 366.40 | 0.000 | 33.736 | 363.70 | 365.73 | 2.03** | 4.27 | 8.40 | 1.10 | 366.82 | 0.000 | 0.000 | n/a | 1.07 | n/a |
| 4 | 30 | 35.40 | 363.90 | 365.73 | 1.83 | 3.85 | 9.20 | 1.08 | 366.81 | 0.000 | 43.841 | 364.50 | 366.52 | 2.02** | 4.25 | 8.34 | 1.08 | 367.60 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 5 | 30 | 35.08 | 364.70 | 366.52 | 1.82 | 3.82 | 9.17 | 1.07 | 367.59 | 0.000 | 28.000 | 364.98 | 366.99 | 2.01** | 4.23 | 8.29 | 1.07 | 368.06 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 6 | 30 | 31.51 | 365.20 | 366.99 | 1.79 | 3.76 | 8.38 | 0.95 | 367.94 | 0.000 | 67.788 | 365.88 | 367.79 | 1.91** | 4.03 | 7.83 | 0.95 | 368.74 | 0.000 | 0.000 | n/a | 0.50 | 0.48 |
| 7 | 30 | 31.30 | 366.10 | 367.79 | 1.69 | 3.53 | 8.86 | 0.95 | 368.74 | 0.000 | 56.317 | 367.20 | 369.10 | 1.90** | 4.01 | 7.80 | 0.95 | 370.05 | 0.000 | 0.000 | n/a | 1.80 | n/a |
| 8 | 18 | 8.91 | 367.76 | 369.10 | 1.34 | 1.46 | 5.33 | 0.58 | 369.68 | 0.000 | 35.477 | 368.11 | 369.26 j | 1.15** | 1.46 | 6.11 | 0.58 | 369.84 | 0.000 | 0.000 | n/a | 0.80 | 0.46 |
| 9 | 18 | 8.39 | 368.31 | 369.26 | 0.95 | 1.19 | 7.08 | 0.55 | 369.81 | 0.000 | 90.608 | 374.34 | 375.46 | 1.12** | 1.42 | 5.92 | 0.55 | 376.01 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 10 | 18 | 5.63 | 374.60 | 375.46 | 0.86 | 1.05 | 5.37 | 0.39 | 375.85 | 0.000 | 153.369 | 378.00 | 378.91 | 0.91** | 1.13 | 4.99 | 0.39 | 379.30 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 11 | 15 | 3.62 | 378.20 | 378.91 | 0.71 | 0.73 | 5.00 | 0.33 | 379.24 | 0.000 | 166.305 | 380.20 | 380.97 | 0.77** | 0.79 | 4.58 | 0.33 | 381.29 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 12 | 15 | 1.32 | 380.40 | 380.97 | 0.57 | 0.40 | 2.43 | 0.17 | 381.14 | 0.000 | 140.121 | 383.20 | 383.65 j | 0.45** | 0.40 | 3.28 | 0.17 | 383.82 | 0.000 | 0.000 | n/a | 1.00 | 0.17 |
| 13 | 24 | 22.23 | 367.40 | 369.10 | 1.70 | 2.82 | 7.79 | 0.97 | 370.07 | 0.000 | 127.504 | 370.50 | 372.18 j | 1.68** | 2.82 | 7.89 | 0.97 | 373.15 | 0.000 | 0.000 | n/a | 1.50 | 1.45 |
| 14 | 18 | 6.34 | 370.70 | 372.18 | 1.48 | 1.21 | 3.60 | 0.43 | 372.61 | 0.000 | 64.616 | 372.60 | 373.57 j | 0.97** | 1.21 | 5.23 | 0.43 | 374.00 | 0.000 | 0.000 | n/a | 1.27 | 0.54 |
| 15 | 18 | 6.12 | 372.80 | 373.57 | 0.77 | 0.92 | 6.67 | 0.41 | 373.99 | 0.000 | 49.983 | 374.30 | 375.25 | 0.95** | 1.19 | 5.15 | 0.41 | 375.67 | 0.000 | 0.000 | n/a | 1.22 | 0.50 |
| 16 | 18 | 5.88 | 374.50 | 375.46 | 0.96* | 1.19 | 4.95 | 0.38 | 375.84 | 0.581 | 137.706 | 375.30 | 376.26 | 0.96 | 1.19 | 4.94 | 0.38 | 376.64 | 0.578 | 0.579 | 0.798 | 1.50 | 0.57 |
| 17 | 18 | 5.66 | 375.50 | 376.83 | 1.33 | 1.65 | 3.42 | 0.18 | 377.01 | 0.260 | 34.000 | 375.70 | 376.88 | 1.18 | 1.49 | 3.79 | 0.22 | 377.11 | 0.313 | 0.286 | 0.097 | 1.08 | 0.24 |
| 18 | 15 | 5.48 | 375.90 | 377.15 | 1.25* | 1.23 | 4.47 | 0.31 | 377.46 | 0.720 | 115.233 | 376.60 | 377.98 | 1.25 | 1.23 | 4.47 | 0.31 | 378.29 | 0.720 | 0.720 | 0.830 | 1.07 | 0.33 |
| 19 | 15 | 4.00 | 376.80 | 378.31 | 1.25 | 1.23 | 3.26 | 0.17 | 378.48 | 0.384 | 28.000 | 377.00 | 378.42 | 1.25 | 1.23 | 3.26 | 0.17 | 378.58 | 0.384 | 0.384 | 0.107 | 1.18 | 0.19 |
| 20 | 15 | 0.90 | 377.20 | 378.61 | 1.25 | 1.23 | 0.73 | 0.01 | 378.62 | 0.019 | 78.850 | 377.67 | 378.63 | 0.96 | 1.01 | 0.89 | 0.01 | 378.64 | 0.022 | 0.021 | 0.017 | 0.50 | 0.01 |
| 21 | 15 | 0.53 | 377.90 | 378.63 | 0.73 | 0.21 | 0.71 | 0.10 | 378.73 | 0.000 | 76.953 | 378.36 | 378.64 j | 0.28** | 0.21 | 2.54 | 0.10 | 378.75 | 0.000 | 0.000 | n/a | 1.18 | n/a |
| 22 | 15 | 0.42 | 378.60 | 378.85 | 0.25* | 0.17 | 2.49 | 0.09 | 378.93 | 0.000 | 28.000 | 378.77 | 379.02 | 0.25** | 0.18 | 2.39 | 0.09 | 379.11 | 0.000 | 0.000 | n/a | 1.30 | n/a |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 4 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 15 | 0.27 | 379.00 | 379.20 | 0.20* | 0.13 | 2.16 | 0.07 | 379.27 | 0.000 | 37.369 | 379.22 | 379.42 | 0.20** | 0.13 | 2.12 | 0.07 | 379.49 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 24 | 24 | 15.62 | 370.70 | 372.18 | 1.48 | 2.49 | 6.26 | 0.61 | 372.79 | 0.591 | 28.099 | 370.87 | 372.34 | 1.47 | 2.47 | 6.32 | 0.62 | 372.96 | 0.603 | 0.597 | 0.168 | 1.21 | 0.75 |
| 25 | 24 | 15.22 | 371.10 | 373.09 | 1.99 | 2.36 | 4.85 | 0.65 | 373.74 | 0.000 | 43.416 | 371.50 | 372.91 | 1.41** | 2.36 | 6.46 | 0.65 | 373.55 | 0.000 | 0.000 | n/a | 1.38 | n/a |
| 26 | 18 | 12.34 | 371.70 | 373.20 | 1.50* | 1.77 | 6.99 | 0.76 | 373.96 | 1.382 | 29.427 | 371.99 | 373.61 | 1.50 | 1.77 | 6.99 | 0.76 | 374.37 | 1.382 | 1.382 | 0.407 | 0.51 | 0.39 |
| 27 | 18 | 9.72 | 372.20 | 373.99 | 1.50 | 1.52 | 5.50 | 0.47 | 374.46 | 0.858 | 54.011 | 373.28 | 374.48 j | 1.20** | 1.52 | 6.40 | 0.64 | 375.12 | 0.894 | 0.876 | n/a | 2.16 | 1.38 |
| 28 | 15 | 4.70 | 373.50 | 374.48 | 0.98 | 1.03 | 4.54 | 0.32 | 374.80 | 0.574 | 297.666 | 375.29 | 376.24 | 0.95 | 1.00 | 4.71 | 0.34 | 376.58 | 0.621 | 0.597 | 1.779 | 1.50 | 0.52 |
| 29 | 15 | 2.54 | 375.50 | 376.75 | 1.25 | 0.63 | 2.07 | 0.07 | 376.82 | 0.155 | 237.368 | 376.92 | 377.56 j | 0.64** | 0.63 | 4.03 | 0.25 | 377.81 | 0.578 | 0.366 | n/a | 1.49 | 0.38 |
| 30 | 15 | 2.48 | 377.20 | 377.83 | 0.63* | 0.61 | 4.05 | 0.25 | 378.07 | 0.000 | 54.000 | 377.52 | 378.15 | 0.63** | 0.62 | 4.00 | 0.25 | 378.40 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 31 | 15 | 2.38 | 377.75 | 378.36 | 0.61* | 0.59 | 4.02 | 0.24 | 378.60 | 0.000 | 28.507 | 377.92 | 378.54 | 0.62** | 0.60 | 3.95 | 0.24 | 378.78 | 0.000 | 0.000 | n/a | 1.36 | n/a |
| 32 | 15 | 2.37 | 378.20 | 378.80 | 0.60* | 0.59 | 4.03 | 0.24 | 379.05 | 0.000 | 74.490 | 378.65 | 379.26 | 0.61** | 0.60 | 3.94 | 0.24 | 379.51 | 0.000 | 0.000 | n/a | 1.00 | 0.24 |
| 33 | 18 | 1.82 | 375.50 | 376.75 | 1.25 | 0.53 | 1.16 | 0.19 | 376.94 | 0.000 | 34.065 | 375.84 | 376.35 | 0.51** | 0.53 | 3.46 | 0.19 | 376.53 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 34 | 18 | 4.83 | 373.50 | 374.48 | 0.98 | 1.02 | 3.94 | 0.35 | 374.83 | 0.000 | 34.020 | 373.70 | 374.54 | 0.84** | 1.02 | 4.72 | 0.35 | 374.89 | 0.000 | 0.000 | n/a | 1.82 | 0.63 |
| 35 | 15 | 2.57 | 373.90 | 374.54 | 0.64 | 0.63 | 4.03 | 0.25 | 374.80 | 0.000 | 53.159 | 374.22 | 374.86 | 0.64** | 0.63 | 4.05 | 0.25 | 375.12 | 0.000 | 0.000 | n/a | 1.05 | n/a |
| 36 | 15 | 1.92 | 374.40 | 374.91 | 0.51* | 0.47 | 4.06 | 0.21 | 375.12 | 0.000 | 28.000 | 374.60 | 375.15 | 0.55** | 0.52 | 3.68 | 0.21 | 375.36 | 0.000 | 0.000 | n/a | 1.18 | 0.25 |
| 37 | 15 | 1.01 | 374.80 | 375.15 | 0.35 | 0.28 | 3.56 | 0.14 | 375.30 | 0.000 | 44.039 | 376.56 | 376.95 | 0.39** | 0.33 | 3.04 | 0.14 | 377.10 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 38 | 15 | 1.09 | 373.90 | 374.54 | 0.64 | 0.35 | 1.70 | 0.15 | 374.69 | 0.000 | 60.892 | 374.51 | 374.92 j | 0.41** | 0.35 | 3.10 | 0.15 | 375.07 | 0.000 | 0.000 | n/a | 1.00 | 0.15 |
| 39 | 24 | 4.03 | 363.05 | 365.00 | 1.95 | 0.99 | 1.29 | 0.26 | 365.26 | 0.000 | 206.011 | 364.08 | 364.78 | 0.70** | 0.99 | 4.08 | 0.26 | 365.04 | 0.000 | 0.000 | n/a | 1.69 | n/a |
| 40 | 15 | 1.36 | 364.30 | 364.78 | 0.48 | 0.41 | 3.11 | 0.17 | 364.95 | 0.000 | 28.000 | 364.50 | 364.96 j | 0.46** | 0.41 | 3.32 | 0.17 | 365.13 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 41 | 15 | 1.29 | 364.70 | 364.96 | 0.26 | 0.19 | 6.96 | 0.17 | 365.13 | 0.000 | 46.669 | 367.40 | 367.85 | 0.45** | 0.40 | 3.27 | 0.17 | 368.01 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 42 | 15 | 1.04 | 367.60 | 367.85 | 0.25 | 0.17 | 6.00 | 0.15 | 367.99 | 0.000 | 101.483 | 371.80 | 372.20 | 0.40** | 0.34 | 3.06 | 0.15 | 372.35 | 0.000 | 0.000 | n/a | 1.50 | 0.22 |
| 43 | 15 | 0.50 | 372.00 | 372.27 | 0.27* | 0.19 | 2.59 | 0.10 | 372.37 | 0.000 | 34.024 | 372.20 | 372.48 | 0.28** | 0.20 | 2.50 | 0.10 | 372.57 | 0.000 | 0.000 | n/a | 1.00 | 0.10 |
| 44 | 18 | 2.18 | 364.00 | 365.00 | 1.00 | 0.60 | 1.74 | 0.21 | 365.21 | 0.000 | 97.083 | 364.50 | 365.06 j | 0.56** | 0.60 | 3.65 | 0.21 | 365.26 | 0.000 | 0.000 | n/a | 0.50 | 0.10 |

Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 4 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 1.50 | 364.70 | 365.06 | 0.36 | 0.29 | 5.19 | 0.18 | 365.24 | 0.000 | 181.821 | 371.50 | 371.99 | 0.49** | 0.44 | 3.42 | 0.18 | 372.17 | 0.000 | 0.000 | n/a | 1.43 | 0.26 |
| 46 | 15 | 0.70 | 371.70 | 372.03 | 0.33* | 0.25 | 2.70 | 0.11 | 372.14 | 0.507 | 29.575 | 371.85 | 372.18 j | 0.33** | 0.26 | 2.71 | 0.11 | 372.29 | 0.508 | 0.507 | 0.150 | 1.00 | 0.11 |
| 47 | 15 | 2.66 | 364.30 | 364.99 | 0.69* | 0.69 | 3.84 | 0.23 | 365.22 | 0.493 | 46.669 | 364.53 | 365.22 | 0.69 | 0.69 | 3.85 | 0.23 | 365.45 | 0.494 | 0.494 | 0.230 | 1.13 | 0.26 |
| 48 | 15 | 2.41 | 364.75 | 365.48 | 0.73 | 0.74 | 3.25 | 0.16 | 365.64 | 0.338 | 34.000 | 364.92 | 365.56 | 0.64 | 0.64 | 3.79 | 0.22 | 365.79 | 0.508 | 0.423 | 0.144 | 1.13 | 0.25 |
| 49 | 15 | 2.00 | 365.15 | 365.82 | 0.67 | 0.54 | 3.02 | 0.14 | 365.96 | 0.313 | 46.669 | 365.38 | 365.95 | 0.57** | 0.54 | 3.71 | 0.21 | 366.16 | 0.541 | 0.427 | 0.199 | 1.13 | 0.24 |
| 50 | 15 | 1.20 | 365.60 | 366.19 | 0.59 | 0.57 | 2.12 | 0.07 | 366.26 | 0.171 | 28.000 | 365.74 | 366.21 | 0.47 | 0.42 | 2.87 | 0.13 | 366.34 | 0.389 | 0.280 | 0.078 | 1.00 | 0.13 |
| 51 | 15 | 0.27 | 365.70 | 366.52 | 0.82 | 0.13 | 0.32 | 0.07 | 366.59 | 0.000 | 21.891 | 365.92 | 366.12 | 0.20** | 0.13 | 2.12 | 0.07 | 366.19 | 0.000 | 0.000 | n/a | 1.00 | n/a |

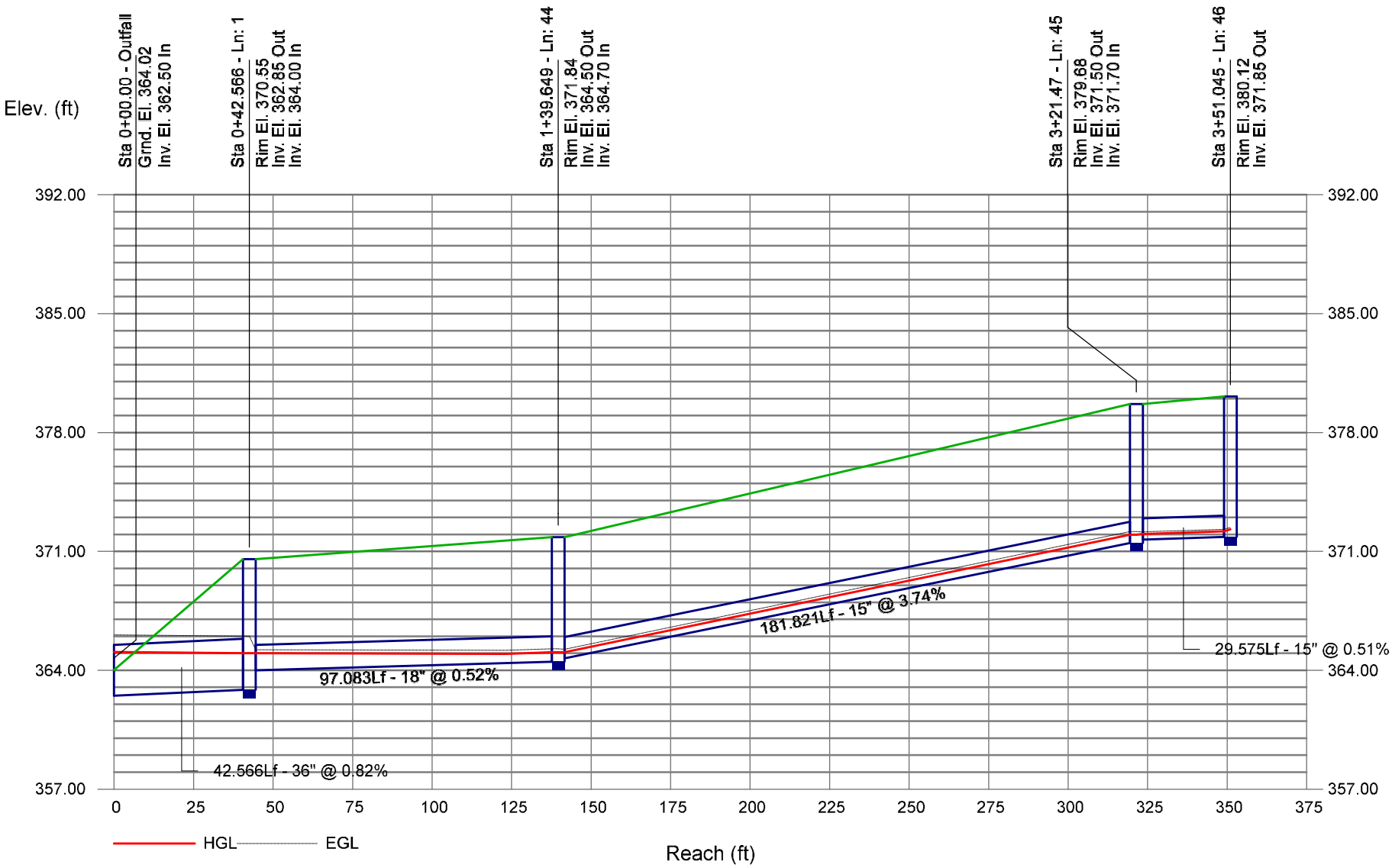
Project File: SCM 4 Storm Network.stm | Number of lines: 51 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 1-46

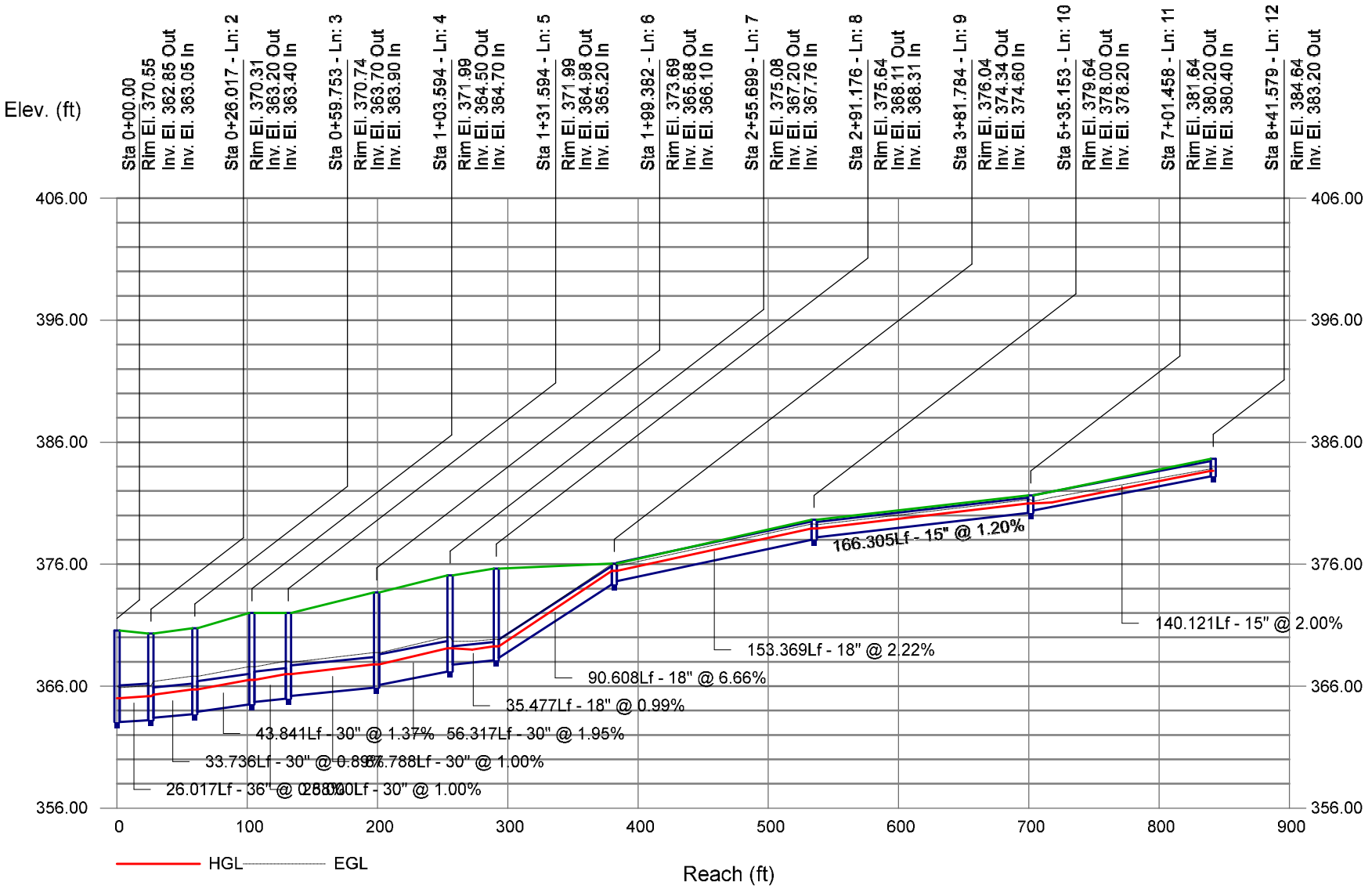
Proj. file: SCM 4 Storm Network.stm



# Storm Sewer Profile

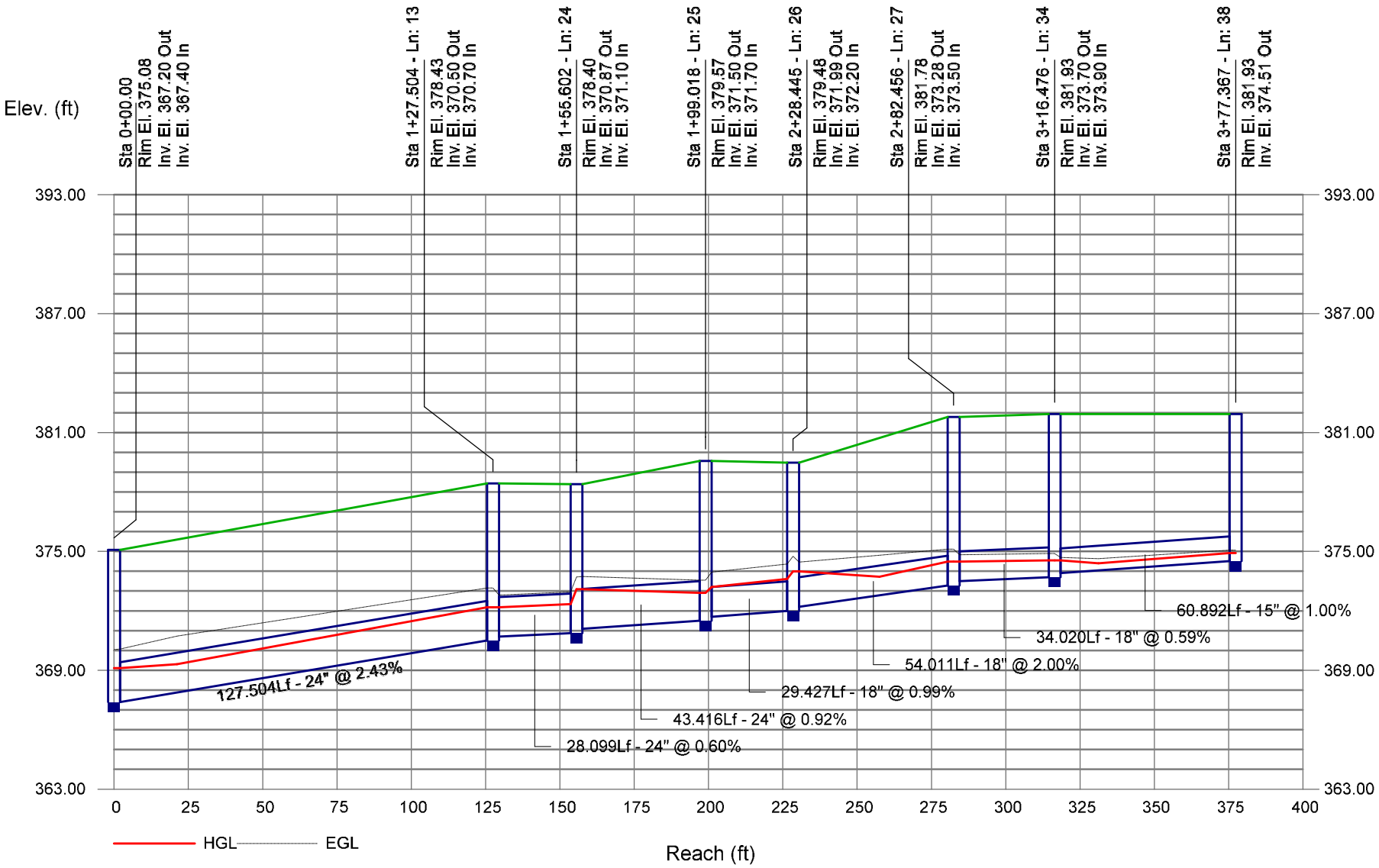
SCM 4 25-YEAR PROFILE 2-12

Proj. file: SCM 4 Storm Network.stm



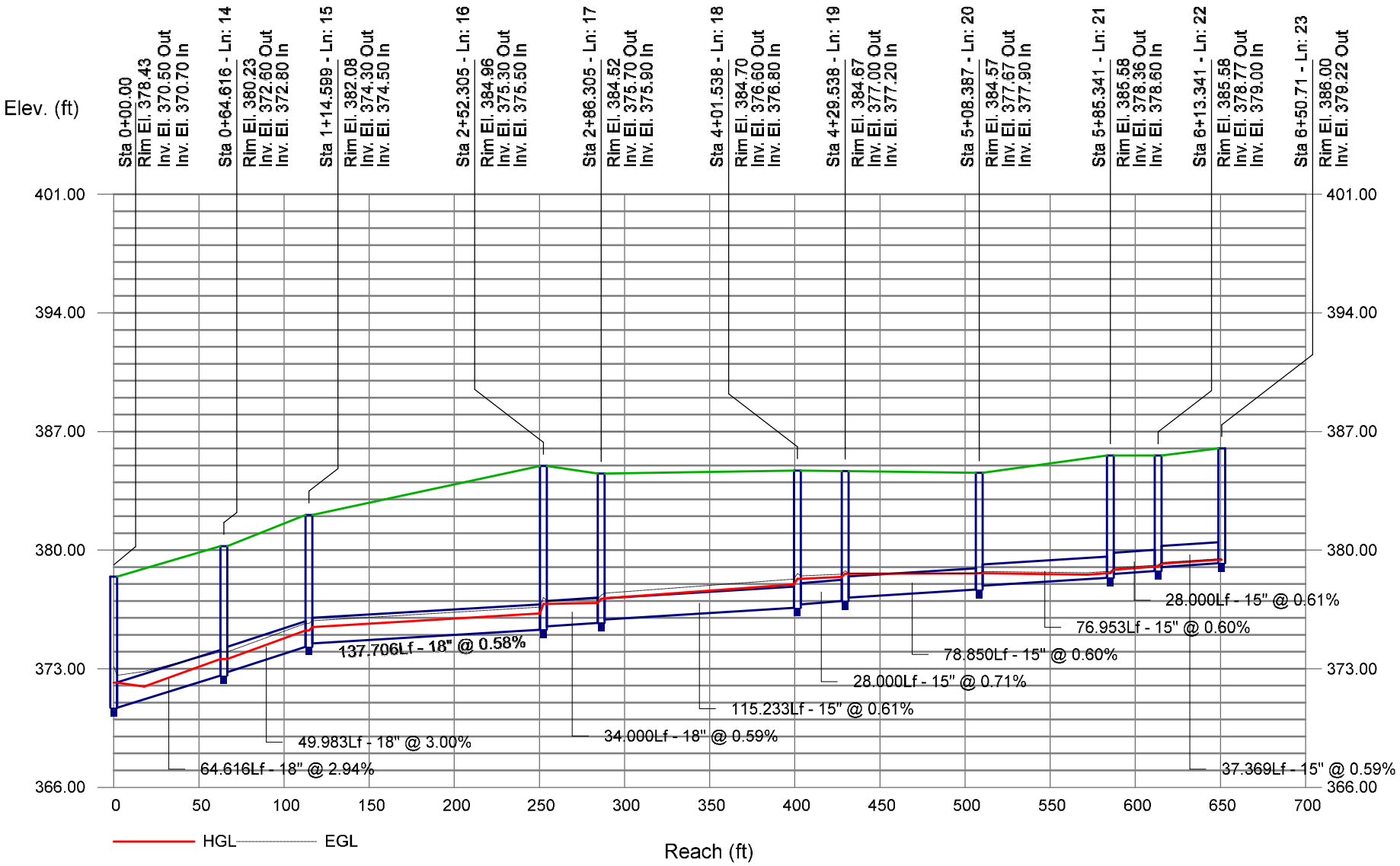
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 13-38 Proj. file: SCM 4 Storm Network.stm



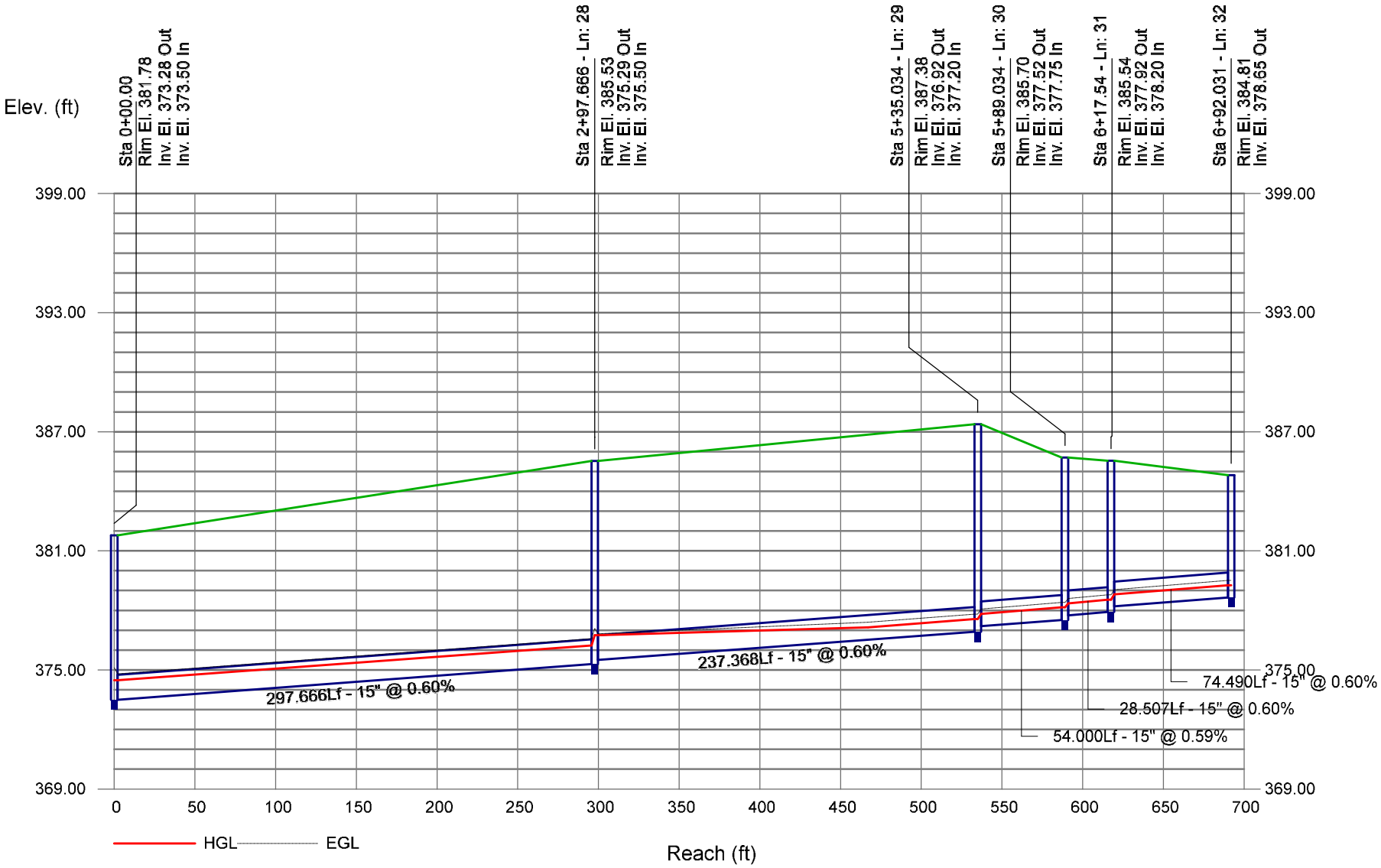
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 14-23 Proj. file: SCM 4 Storm Network.stm



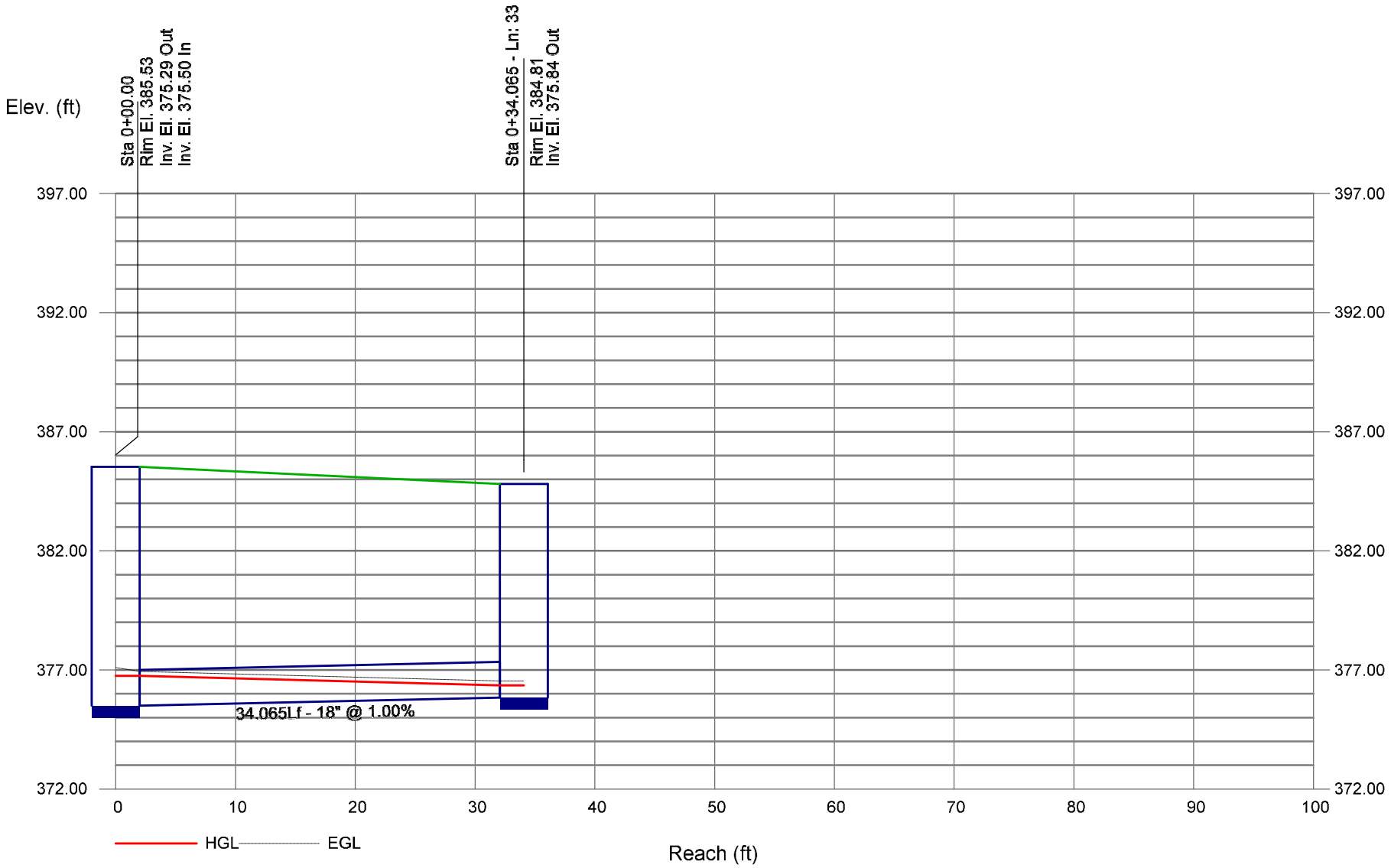
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 28-32 Proj. file: SCM 4 Storm Network.stm



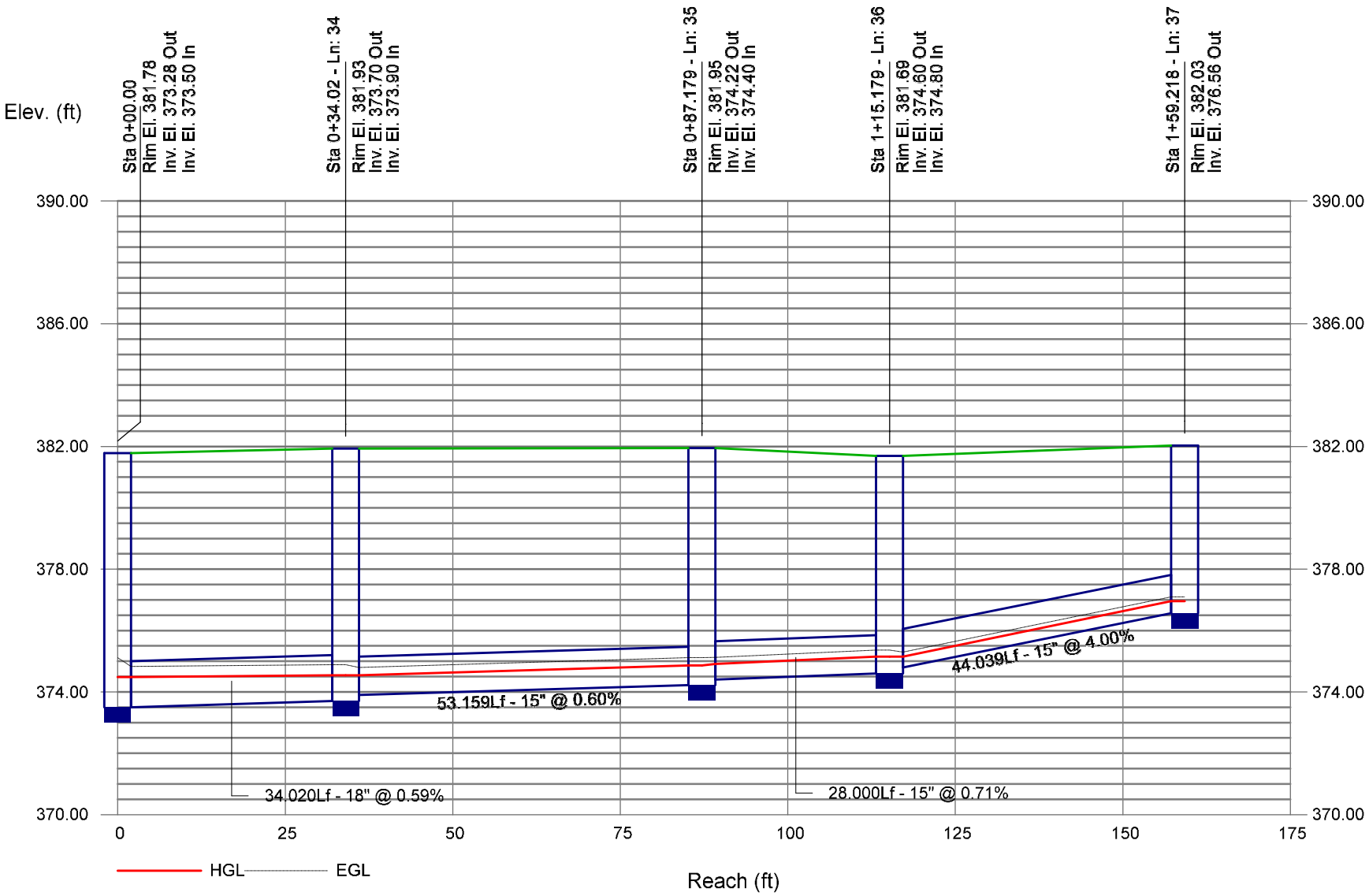
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 33-33 Proj. file: SCM 4 Storm Network.stm



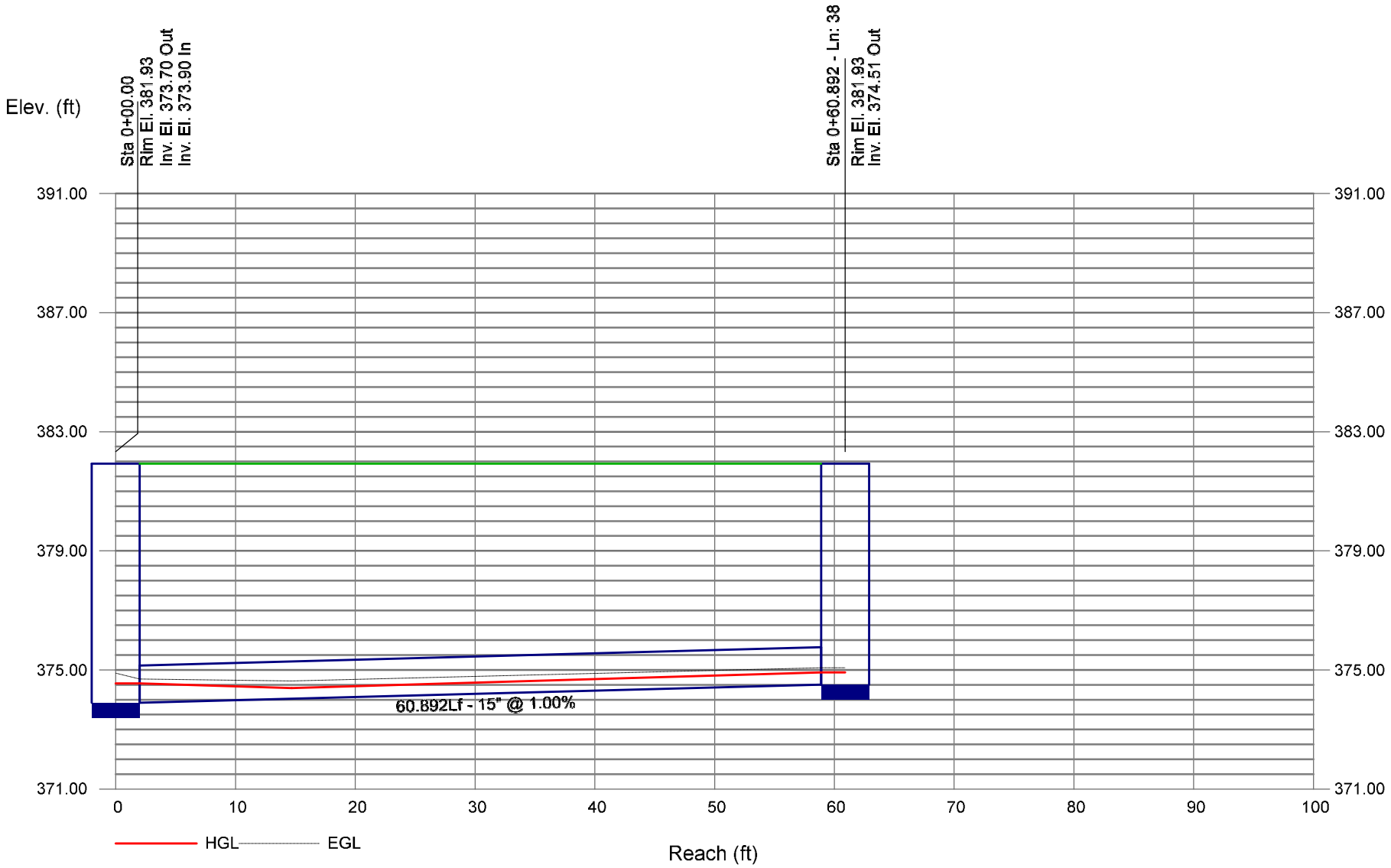
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 34-37 Proj. file: SCM 4 Storm Network.stm



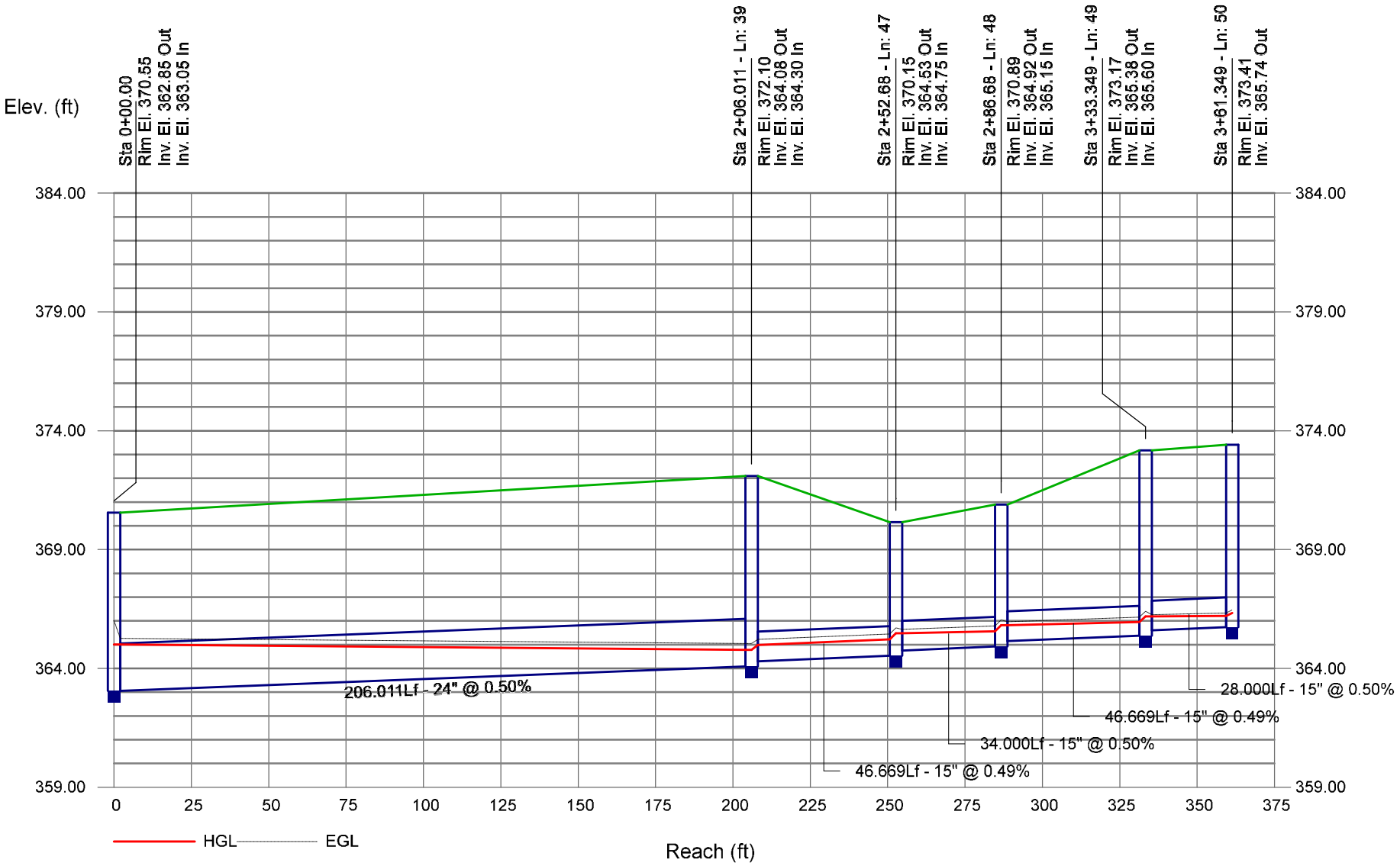
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 38-38 Proj. file: SCM 4 Storm Network.stm



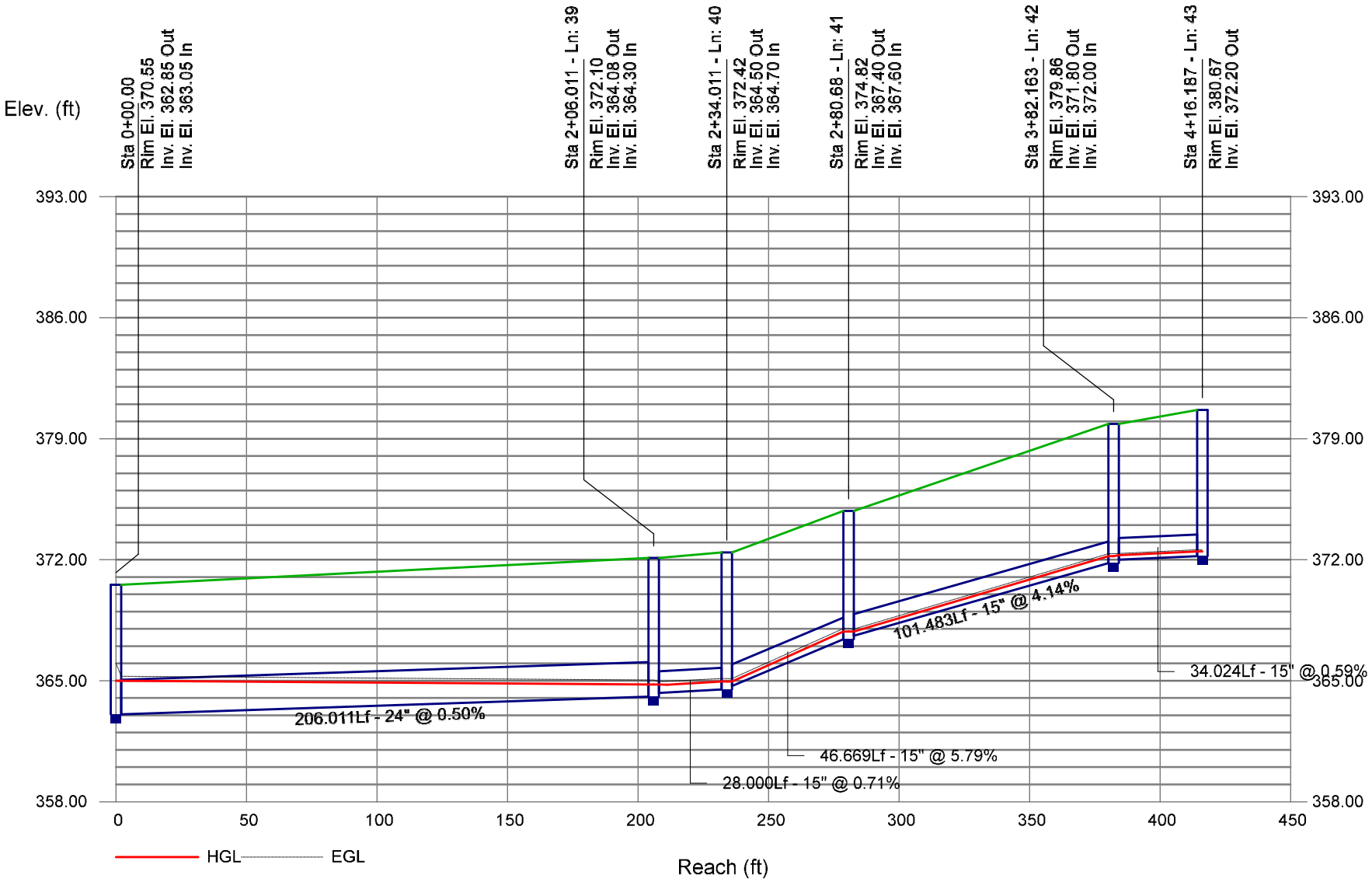
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 39-50 Proj. file: SCM 4 Storm Network.stm



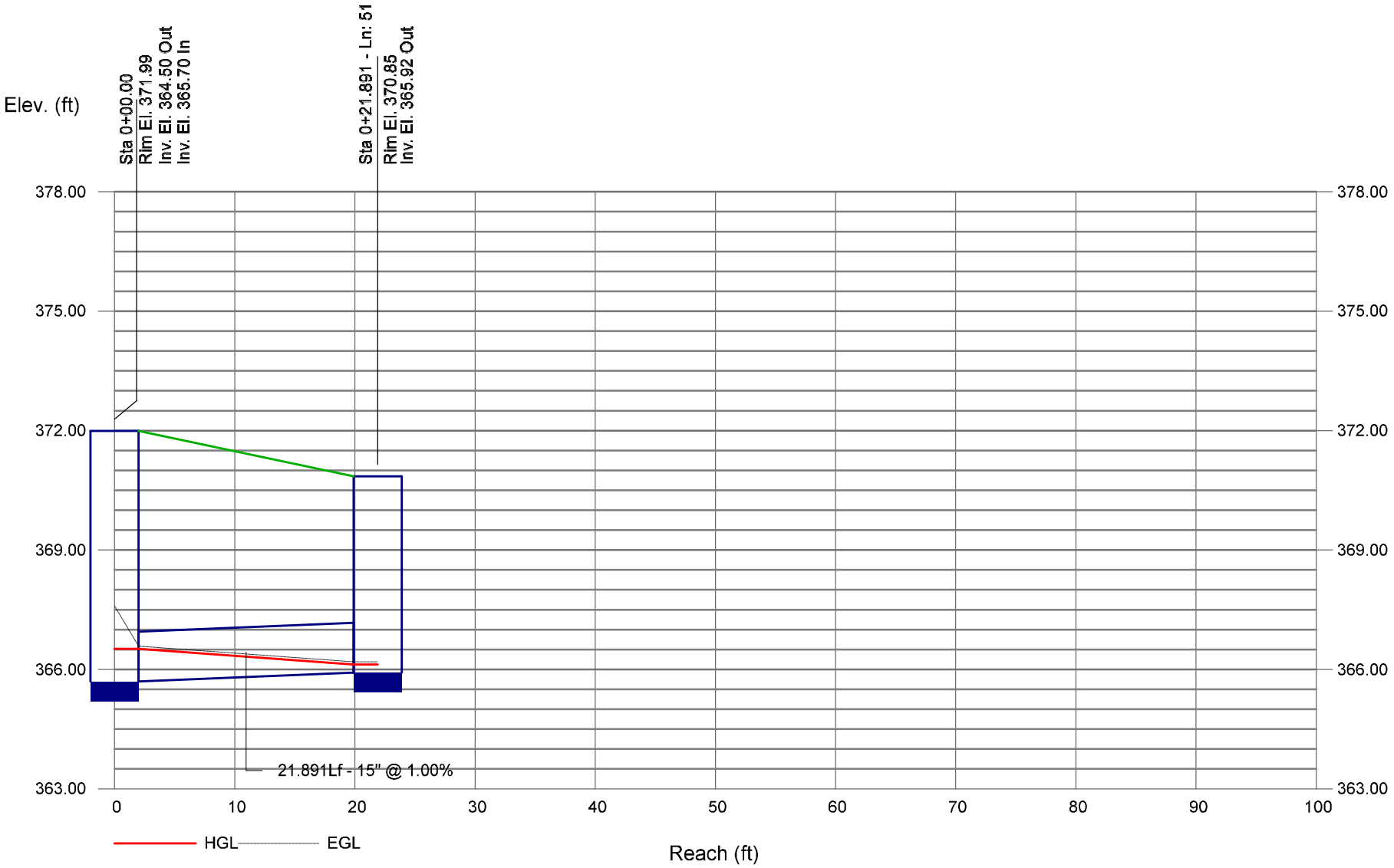
# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 40-43 Proj. file: SCM 4 Storm Network.stm

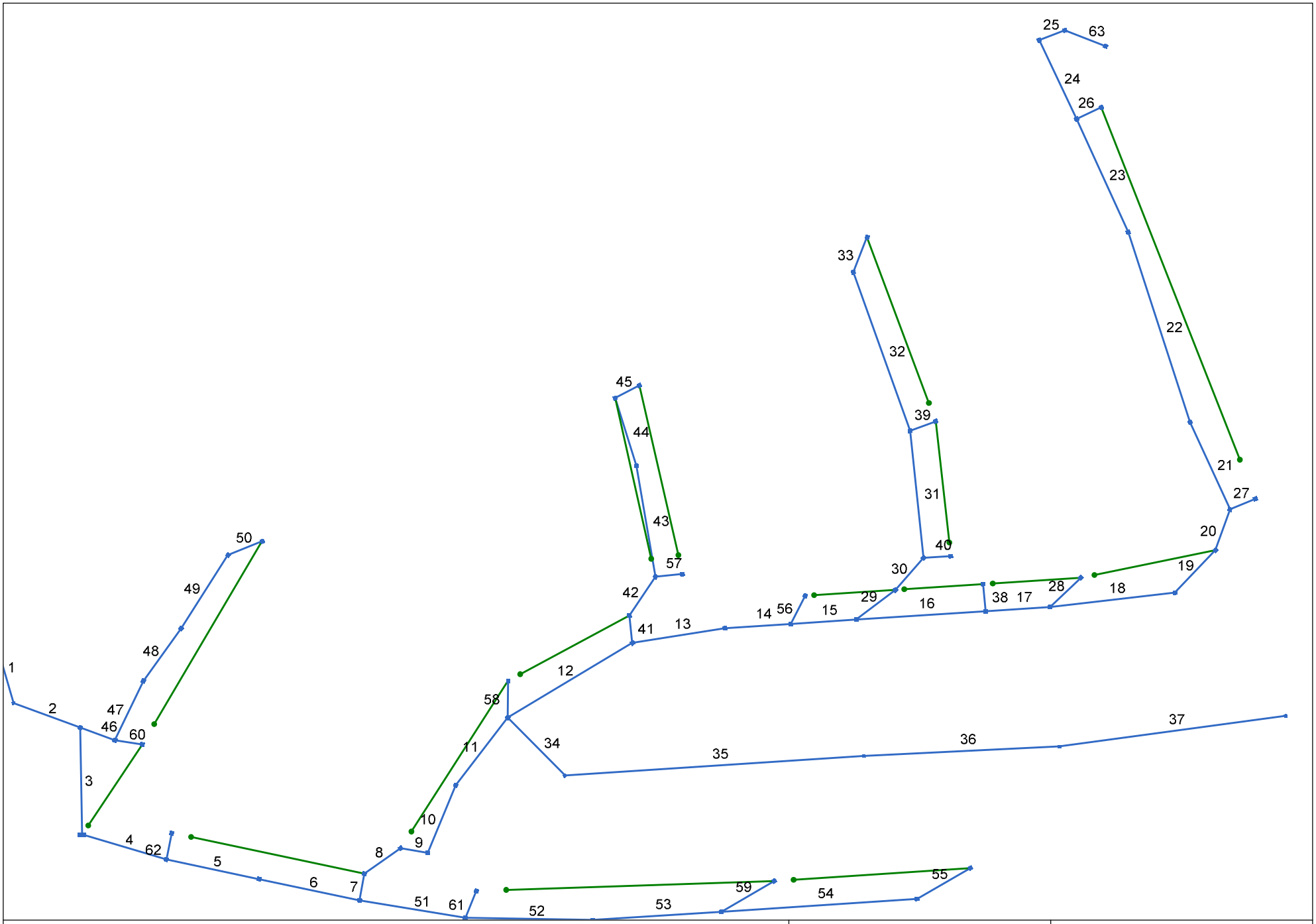


# Storm Sewer Profile

SCM 4 25-YEAR PROFILE 51-51 Proj. file: SCM 4 Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 5A 25-YEAR




| Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 5A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 83.000 | 73.899 | DrGrt | 0.00 | 0.03 | 0.60 | 10.0 | 321.50 | 0.60 | 322.00 | 48 | Cir | 0.013 | 1.26 | 339.40 | Pipe - (292) |
| 2 | 1 | 72.832 | -53.727 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 322.25 | 0.49 | 322.61 | 42 | Cir | 0.013 | 0.94 | 339.83 | Pipe - (291) (1) |
| 3 | 2 | 110.092 | 68.821 | Comb | 0.00 | 0.28 | 0.60 | 10.0 | 322.90 | 0.64 | 323.60 | 42 | Cir | 0.013 | 1.44 | 331.20 | Pipe - (515) |
| 4 | 3 | 90.197 | -72.396 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 323.86 | 0.60 | 324.40 | 42 | Cir | 0.013 | 1.50 | 332.41 | Pipe - (287) |
| 5 | 4 | 96.914 | -4.581 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 324.40 | 0.62 | 325.00 | 42 | Cir | 0.013 | 0.50 | 333.37 | Pipe - (236) (1) |
| 6 | 5 | 105.502 | 0.000 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 325.50 | 1.10 | 326.66 | 42 | Cir | 0.013 | 2.23 | 334.42 | Pipe - (425) |
| 7 | 6 | 28.011 | -91.609 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 326.90 | 0.61 | 327.07 | 42 | Cir | 0.013 | 1.12 | 334.42 | Pipe - (236) |
| 8 | 7 | 45.483 | 44.496 | Comb | 0.00 | 0.80 | 0.60 | 10.0 | 327.30 | 0.59 | 327.57 | 42 | Cir | 0.013 | 1.12 | 335.29 | Pipe - (517) |
| 9 | 8 | 28.154 | 44.548 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 327.80 | 0.60 | 327.97 | 42 | Cir | 0.013 | 1.47 | 335.38 | Pipe - (518) |
| 10 | 9 | 75.321 | -76.898 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 328.20 | 3.00 | 330.46 | 36 | Cir | 0.013 | 0.50 | 338.20 | Pipe - (265) |
| 11 | 10 | 87.576 | 14.810 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 330.65 | 4.00 | 334.15 | 36 | Cir | 0.013 | 2.19 | 341.67 | Pipe - (266) |
| 12 | 11 | 149.169 | 21.617 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 334.40 | 3.50 | 339.62 | 30 | Cir | 0.013 | 1.39 | 347.55 | Pipe - (232) |
| 13 | 12 | 96.000 | 21.905 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 339.80 | 3.99 | 343.63 | 24 | Cir | 0.013 | 0.50 | 351.50 | Pipe - (533) |
| 14 | 13 | 67.783 | 5.437 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 343.85 | 5.00 | 347.24 | 24 | Cir | 0.013 | 1.32 | 355.16 | Pipe - (274) |
| 15 | 14 | 67.241 | -0.093 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 347.50 | 5.95 | 351.50 | 24 | Cir | 0.013 | 0.91 | 359.75 | Pipe - (260) |
| 16 | 15 | 133.104 | 0.043 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 351.70 | 6.99 | 361.00 | 24 | Cir | 0.013 | 1.50 | 369.34 | Pipe - (532) |
| 17 | 16 | 66.111 | 0.014 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 361.20 | 8.02 | 366.50 | 24 | Cir | 0.013 | 1.03 | 374.10 | Pipe - (272) |
| 18 | 17 | 129.000 | -2.881 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 366.70 | 5.66 | 374.00 | 18 | Cir | 0.013 | 1.04 | 381.92 | Pipe - (227) |
| 19 | 18 | 60.236 | -39.930 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 374.20 | 2.49 | 375.70 | 18 | Cir | 0.013 | 0.69 | 383.94 | Pipe - (530) |
| 20 | 19 | 44.832 | -23.761 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 375.90 | 1.49 | 376.57 | 18 | Cir | 0.013 | 1.17 | 385.18 | Pipe - (226) |
| 21 | 20 | 98.443 | -44.465 | Comb | 0.00 | 0.66 | 0.60 | 10.0 | 376.80 | 1.00 | 377.78 | 15 | Cir | 0.013 | 0.50 | 386.14 | Pipe - (225) (1) |
| 22 | 21 | 205.640 | 6.883 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 378.00 | 1.02 | 380.10 | 15 | Cir | 0.013 | 0.50 | 388.20 | Pipe - (225) |
| 23 | 22 | 128.177 | -6.601 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 380.30 | 1.00 | 381.58 | 15 | Cir | 0.013 | 1.50 | 389.50 | Pipe - (224) |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 5A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 89.745 | -0.806 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 381.80 | 1.00 | 382.70 | 15 | Cir | 0.013 | 1.50 | 390.40 | Pipe - (223) (1) |
| 25 | 24 | 28.070 | 94.057 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 382.90 | 0.50 | 383.04 | 15 | Cir | 0.013 | 1.08 | 390.38 | Pipe - (528) |
| 26 | 23 | 28.048 | 89.194 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 381.80 | 1.00 | 382.08 | 15 | Cir | 0.013 | 1.00 | 389.54 | Pipe - (245) |
| 27 | 20 | 28.090 | 47.998 | Comb | 0.00 | 1.40 | 0.60 | 10.0 | 376.80 | 1.00 | 377.08 | 15 | Cir | 0.013 | 1.00 | 385.16 | Pipe - (529) |
| 28 | 17 | 43.790 | -39.748 | Comb | 0.00 | 0.22 | 0.60 | 10.0 | 366.70 | 2.01 | 367.58 | 15 | Cir | 0.013 | 1.00 | 376.51 | Pipe - (255) |
| 29 | 15 | 50.671 | -33.471 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 351.70 | 5.53 | 354.50 | 18 | Cir | 0.013 | 0.50 | 362.79 | Pipe - (531) |
| 30 | 29 | 43.841 | -11.501 | Comb | 0.00 | 0.39 | 0.60 | 10.0 | 354.70 | 8.44 | 358.40 | 18 | Cir | 0.013 | 1.69 | 366.34 | Pipe - (259) |
| 31 | 30 | 131.638 | -47.350 | Comb | 0.00 | 0.46 | 0.60 | 10.0 | 358.60 | 1.82 | 361.00 | 15 | Cir | 0.013 | 1.46 | 368.50 | Pipe - (258) |
| 32 | 31 | 173.316 | -13.483 | Comb | 0.00 | 0.75 | 0.60 | 10.0 | 361.20 | 2.77 | 366.00 | 15 | Cir | 0.013 | 1.05 | 373.98 | Pipe - (257) |
| 33 | 32 | 38.552 | 40.848 | Comb | 0.00 | 0.67 | 0.60 | 10.0 | 366.20 | 3.53 | 367.56 | 15 | Cir | 0.013 | 1.00 | 375.06 | Pipe - (256) |
| 34 | 11 | 83.727 | 97.965 | DrGrt | 0.00 | 0.80 | 0.60 | 10.0 | 334.40 | 0.50 | 334.82 | 30 | Cir | 0.013 | 1.19 | 336.44 | Pipe - (285) |
| 35 | 34 | 306.989 | -49.069 | DrGrt | 0.00 | 1.85 | 0.60 | 10.0 | 335.00 | 4.14 | 347.71 | 24 | Cir | 0.013 | 0.50 | 352.12 | Pipe - (284) |
| 36 | 35 | 200.863 | 0.954 | DrGrt | 0.00 | 1.37 | 0.60 | 10.0 | 348.00 | 7.97 | 364.00 | 18 | Cir | 0.013 | 0.50 | 367.82 | Pipe - (283) |
| 37 | 36 | 234.000 | -4.972 | DrGrt | 0.00 | 1.22 | 0.60 | 10.0 | 364.20 | 1.00 | 366.54 | 15 | Cir | 0.013 | 1.00 | 375.19 | Pipe - (282) |
| 38 | 16 | 28.013 | -91.754 | Comb | 0.00 | 0.13 | 0.60 | 10.0 | 361.20 | 1.00 | 361.48 | 15 | Cir | 0.013 | 1.00 | 369.28 | Pipe - (273) |
| 39 | 31 | 28.090 | 76.190 | Comb | 0.00 | 0.70 | 0.60 | 10.0 | 361.20 | 1.00 | 361.48 | 15 | Cir | 0.013 | 1.00 | 368.61 | Pipe - (261) |
| 40 | 30 | 28.000 | 45.000 | Comb | 0.00 | 0.47 | 0.60 | 10.0 | 358.60 | 1.00 | 358.88 | 15 | Cir | 0.013 | 1.00 | 366.34 | Pipe - (262) |
| 41 | 12 | 28.499 | -65.141 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 339.80 | 1.05 | 340.10 | 24 | Cir | 0.013 | 1.04 | 347.86 | Pipe - (242) |
| 42 | 41 | 47.998 | 39.967 | Comb | 0.00 | 0.61 | 0.60 | 10.0 | 340.30 | 4.58 | 342.50 | 18 | Cir | 0.013 | 1.21 | 349.90 | Pipe - (241) |
| 43 | 42 | 115.718 | -43.449 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 342.70 | 5.10 | 348.60 | 15 | Cir | 0.013 | 0.16 | 356.76 | Pipe - (240) (1) |
| 44 | 43 | 73.254 | -7.668 | Comb | 0.00 | 0.46 | 0.60 | 10.0 | 348.80 | 4.37 | 352.00 | 15 | Cir | 0.013 | 1.48 | 360.25 | Pipe - (240) |
| 45 | 44 | 27.894 | 79.953 | Comb | 0.00 | 0.43 | 0.60 | 10.0 | 352.20 | 2.40 | 352.87 | 15 | Cir | 0.013 | 1.00 | 360.47 | Pipe - (243) |
| 46 | 2 | 37.830 | 0.000 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 325.00 | 7.96 | 328.01 | 18 | Cir | 0.013 | 1.49 | 339.56 | Pipe - (291) |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 5A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 47 | 46 | 67.669 | -84.535 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 328.20 | 10.00 | 334.97 | 15 | Cir | 0.013 | 0.50 | 345.00 | Pipe - (297) |
| 48 | 47 | 66.501 | 9.954 | Comb | 0.00 | 0.06 | 0.60 | 10.0 | 335.20 | 10.00 | 341.85 | 15 | Cir | 0.013 | 0.50 | 350.54 | Pipe - (299) |
| 49 | 48 | 89.618 | -3.183 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 342.10 | 10.00 | 351.06 | 15 | Cir | 0.013 | 0.95 | 358.40 | Pipe - (296) |
| 50 | 49 | 37.668 | 35.517 | Comb | 0.00 | 1.14 | 0.60 | 10.0 | 351.30 | 3.42 | 352.59 | 18 | Cir | 0.013 | 1.00 | 360.60 | Pipe - (519) |
| 51 | 6 | 110.218 | -2.645 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 326.90 | 0.50 | 327.45 | 24 | Cir | 0.013 | 1.47 | 335.41 | Pipe - (235) |
| 52 | 51 | 130.561 | -8.424 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 327.65 | 0.57 | 328.40 | 24 | Cir | 0.013 | 0.50 | 336.55 | Pipe - (270) |
| 53 | 52 | 132.413 | -4.628 | Comb | 0.00 | 0.21 | 0.60 | 10.0 | 328.60 | 3.32 | 333.00 | 18 | Cir | 0.013 | 0.76 | 341.27 | Pipe - (269) |
| 54 | 53 | 201.000 | -0.061 | Comb | 0.00 | 0.34 | 0.60 | 10.0 | 333.20 | 7.50 | 348.28 | 15 | Cir | 0.013 | 0.75 | 356.93 | Pipe - (268) |
| 55 | 54 | 63.000 | -26.471 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 348.50 | 7.98 | 353.53 | 15 | Cir | 0.013 | 1.00 | 361.96 | Pipe - (277) |
| 56 | 14 | 32.603 | -59.248 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 347.80 | 1.01 | 348.13 | 15 | Cir | 0.013 | 1.00 | 356.22 | Pipe - (263) |
| 57 | 42 | 27.998 | 50.565 | Comb | 0.00 | 0.62 | 0.60 | 10.0 | 342.70 | 1.00 | 342.98 | 15 | Cir | 0.013 | 1.00 | 350.07 | Pipe - (244) |
| 58 | 11 | 38.000 | -36.753 | Comb | 0.00 | 0.42 | 0.60 | 10.0 | 335.40 | 1.00 | 335.78 | 15 | Cir | 0.013 | 1.00 | 342.73 | Pipe - (286) |
| 59 | 53 | 62.439 | -26.705 | Comb | 0.00 | 0.11 | 0.60 | 10.0 | 333.20 | 4.96 | 336.30 | 15 | Cir | 0.013 | 1.00 | 344.70 | Pipe - (278) |
| 60 | 46 | 28.384 | -11.463 | Comb | 0.00 | 0.73 | 0.60 | 10.0 | 328.20 | 5.67 | 329.81 | 15 | Cir | 0.013 | 1.00 | 339.81 | Pipe - (288) |
| 61 | 51 | 30.000 | -77.524 | Comb | 0.00 | 0.17 | 0.60 | 10.0 | 327.85 | 1.00 | 328.15 | 15 | Cir | 0.013 | 1.00 | 335.57 | Pipe - (271) |
| 62 | 4 | 28.000 | -95.287 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 325.60 | 0.93 | 325.86 | 15 | Cir | 0.013 | 1.00 | 332.65 | Pipe - (281) |
| 63 | 25 | 45.000 | 42.659 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 383.24 | 0.58 | 383.50 | 15 | Cir | 0.013 | 1.00 | 0.00 | Pipe - (593) |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Date: 4/11/2025

# Structure Report



SCM 5A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 501 | DropGrate | 339.40 | Rect | 3.00 | 3.00 | 48 | Cir | 322.00 | 42 | Cir | 322.25 |
| 2 | JB 502 | Manhole | 339.83 | Rect | 4.00 | 4.00 | 42 | Cir | 322.61 | 42<br>18 | Cir<br>Cir | 322.90<br>325.00 |
| 3 | CB 503 | Combination | 331.20 | Rect | 4.00 | 8.00 | 42 | Cir | 323.60 | 42 | Cir | 323.86 |
| 4 | CB 504 | Combination | 332.41 | Rect | 4.00 | 4.00 | 42 | Cir | 324.40 | 42<br>15 | Cir<br>Cir | 324.40<br>325.60 |
| 5 | CB 505 | Combination | 333.37 | Rect | 4.00 | 4.00 | 42 | Cir | 325.00 | 42 | Cir | 325.50 |
| 6 | CB 506 | Combination | 334.42 | Rect | 4.00 | 4.00 | 42 | Cir | 326.66 | 42<br>24 | Cir<br>Cir | 326.90<br>326.90 |
| 7 | CB 515 | Combination | 334.42 | Rect | 4.00 | 4.00 | 42 | Cir | 327.07 | 42 | Cir | 327.30 |
| 8 | CB 516 | Combination | 335.29 | Rect | 4.00 | 4.00 | 42 | Cir | 327.57 | 42 | Cir | 327.80 |
| 9 | CB 517 | Combination | 335.38 | Rect | 4.00 | 4.00 | 42 | Cir | 327.97 | 36 | Cir | 328.20 |
| 10 | CB 518 | Combination | 338.20 | Rect | 4.00 | 4.00 | 36 | Cir | 330.46 | 36 | Cir | 330.65 |
| 11 | CB 519 | Combination | 341.67 | Rect | 4.00 | 4.00 | 36 | Cir | 334.15 | 30<br>30<br>15 | Cir<br>Cir<br>Cir | 334.40<br>334.40<br>335.40 |
| 12 | CB 520 | Combination | 347.55 | Rect | 4.00 | 4.00 | 30 | Cir | 339.62 | 24<br>24 | Cir<br>Cir | 339.80<br>339.80 |
| 13 | CB 521 | Combination | 351.50 | Rect | 4.00 | 4.00 | 24 | Cir | 343.63 | 24 | Cir | 343.85 |
| 14 | CB 522 | Combination | 355.16 | Rect | 4.00 | 4.00 | 24 | Cir | 347.24 | 24<br>15 | Cir<br>Cir | 347.50<br>347.80 |
| 15 | CB 523 | Combination | 359.75 | Rect | 4.00 | 4.00 | 24 | Cir | 351.50 | 24<br>18 | Cir<br>Cir | 351.70<br>351.70 |
| 16 | CB 524 | Combination | 369.34 | Rect | 4.00 | 4.00 | 24 | Cir | 361.00 | 24<br>15 | Cir<br>Cir | 361.20<br>361.20 |
| 17 | CB 525 | Combination | 374.10 | Rect | 4.00 | 4.00 | 24 | Cir | 366.50 | 18<br>15 | Cir<br>Cir | 366.70<br>366.70 |
| 18 | CB 526 | Combination | 381.92 | Rect | 4.00 | 4.00 | 18 | Cir | 374.00 | 18 | Cir | 374.20 |

# Structure Report

SCM 5A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 19 | CB 527 | Combination | 383.94 | Rect | 4.00 | 4.00 | 18 | Cir | 375.70 | 18 | Cir | 375.90 |
| 20 | CB 528 | Combination | 385.18 | Rect | 4.00 | 4.00 | 18 | Cir | 376.57 | 15<br>15 | Cir<br>Cir | 376.80<br>376.80 |
| 21 | CB 529 | Combination | 386.14 | Rect | 4.00 | 4.00 | 15 | Cir | 377.78 | 15 | Cir | 378.00 |
| 22 | CB 530 | Combination | 388.20 | Rect | 4.00 | 4.00 | 15 | Cir | 380.10 | 15 | Cir | 380.30 |
| 23 | CB 531 | Combination | 389.50 | Rect | 4.00 | 4.00 | 15 | Cir | 381.58 | 15<br>15 | Cir<br>Cir | 381.80<br>381.80 |
| 24 | CB 532 | Combination | 390.40 | Rect | 4.00 | 4.00 | 15 | Cir | 382.70 | 15 | Cir | 382.90 |
| 25 | CB 532A | Combination | 390.38 | Rect | 4.00 | 4.00 | 15 | Cir | 383.04 | 15 | Cir | 383.24 |
| 26 | CB 531A | Combination | 389.54 | Rect | 4.00 | 4.00 | 15 | Cir | 382.08 | | | |
| 27 | CB 528A | Combination | 385.16 | Rect | 4.00 | 4.00 | 15 | Cir | 377.08 | | | |
| 28 | CB 525A | Combination | 376.51 | Rect | 4.00 | 4.00 | 15 | Cir | 367.58 | | | |
| 29 | CB 534 | Combination | 362.79 | Rect | 4.00 | 4.00 | 18 | Cir | 354.50 | 18 | Cir | 354.70 |
| 30 | CB 535 | Combination | 366.34 | Rect | 4.00 | 4.00 | 18 | Cir | 358.40 | 15<br>15 | Cir<br>Cir | 358.60<br>358.60 |
| 31 | CB 536 | Combination | 368.50 | Rect | 4.00 | 4.00 | 15 | Cir | 361.00 | 15<br>15 | Cir<br>Cir | 361.20<br>361.20 |
| 32 | CB 537 | Combination | 373.98 | Rect | 4.00 | 4.00 | 15 | Cir | 366.00 | 15 | Cir | 366.20 |
| 33 | CB 537A | Combination | 375.06 | Rect | 4.00 | 4.00 | 15 | Cir | 367.56 | | | |
| 34 | YI 519B | DropGrate | 336.44 | Rect | 3.00 | 3.00 | 30 | Cir | 334.82 | 24 | Cir | 335.00 |
| 35 | YI 519C | DropGrate | 352.12 | Rect | 3.00 | 3.00 | 24 | Cir | 347.71 | 18 | Cir | 348.00 |
| 36 | YI 519D | DropGrate | 367.82 | Rect | 3.00 | 3.00 | 18 | Cir | 364.00 | 15 | Cir | 364.20 |
| 37 | YI 519E | DropGrate | 375.19 | Rect | 3.00 | 3.00 | 15 | Cir | 366.54 | | | |
| 38 | CB 524A | Combination | 369.28 | Rect | 4.00 | 4.00 | 15 | Cir | 361.48 | | | |
| 39 | CB 536A | Combination | 368.61 | Rect | 4.00 | 4.00 | 15 | Cir | 361.48 | | | |

# Structure Report

SCM 5A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 40 | CB 535A | Combination | 366.34 | Rect | 4.00 | 4.00 | 15 | Cir | 358.88 | | | |
| 41 | CB 538 | Combination | 347.86 | Rect | 4.00 | 4.00 | 24 | Cir | 340.10 | 18 | Cir | 340.30 |
| 42 | CB 539 | Combination | 349.90 | Rect | 4.00 | 4.00 | 18 | Cir | 342.50 | 15<br>15 | Cir<br>Cir | 342.70<br>342.70 |
| 43 | JB 540 | Manhole | 356.76 | Rect | 4.00 | 4.00 | 15 | Cir | 348.60 | 15 | Cir | 348.80 |
| 44 | CB 541 | Combination | 360.25 | Rect | 4.00 | 4.00 | 15 | Cir | 352.00 | 15 | Cir | 352.20 |
| 45 | CB 541A | Combination | 360.47 | Rect | 4.00 | 4.00 | 15 | Cir | 352.87 | | | |
| 46 | CB 511 | Combination | 339.56 | Rect | 4.00 | 4.00 | 18 | Cir | 328.01 | 15<br>15 | Cir<br>Cir | 328.20<br>328.20 |
| 47 | CB 512 | Combination | 345.00 | Rect | 4.00 | 4.00 | 15 | Cir | 334.97 | 15 | Cir | 335.20 |
| 48 | CB 513 | Combination | 350.54 | Rect | 4.00 | 4.00 | 15 | Cir | 341.85 | 15 | Cir | 342.10 |
| 49 | CB 514 | Combination | 358.40 | Rect | 4.00 | 4.00 | 15 | Cir | 351.06 | 18 | Cir | 351.30 |
| 50 | CB 514A | Combination | 360.60 | Rect | 4.00 | 4.00 | 18 | Cir | 352.59 | | | |
| 51 | CB 507 | Combination | 335.41 | Rect | 4.00 | 4.00 | 24 | Cir | 327.45 | 24<br>15 | Cir<br>Cir | 327.65<br>327.85 |
| 52 | CB 508 | Combination | 336.55 | Rect | 4.00 | 4.00 | 24 | Cir | 328.40 | 18 | Cir | 328.60 |
| 53 | CB 509 | Combination | 341.27 | Rect | 4.00 | 4.00 | 18 | Cir | 333.00 | 15<br>15 | Cir<br>Cir | 333.20<br>333.20 |
| 54 | CB 510 | Combination | 356.93 | Rect | 4.00 | 4.00 | 15 | Cir | 348.28 | 15 | Cir | 348.50 |
| 55 | CB 510A | Combination | 361.96 | Rect | 4.00 | 4.00 | 15 | Cir | 353.53 | | | |
| 56 | CB 522A | Combination | 356.22 | Rect | 4.00 | 4.00 | 15 | Cir | 348.13 | | | |
| 57 | CB 539A | Combination | 350.07 | Rect | 4.00 | 4.00 | 15 | Cir | 342.98 | | | |
| 58 | CB 519A | Combination | 342.73 | Rect | 4.00 | 4.00 | 15 | Cir | 335.78 | | | |
| 59 | CB 509A | Combination | 344.70 | Rect | 4.00 | 4.00 | 15 | Cir | 336.30 | | | |
| 60 | CB 511A | Combination | 339.81 | Rect | 4.00 | 4.00 | 15 | Cir | 329.81 | | | |

# Structure Report

SCM 5A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 61 | CB 507A | Combination | 335.57 | Rect | 4.00 | 4.00 | 15 | Cir | 328.15 | | | |
| 62 | CB 504A | Combination | 332.65 | Rect | 4.00 | 4.00 | 15 | Cir | 325.86 | | | |
| 63 | CB 533 | Combination | 0.00 | Rect | 4.00 | 4.00 | 15 | Cir | 383.50 | | | |

# Storm Sewer Summary Report

SCM 5A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (292) | 71.41 | 48 | Cir | 83.000 | 321.50 | 322.00 | 0.602 | 324.78 | 324.55 | n/a | 324.55 | End | DropGrate |
| 2 | Pipe - (291) (1) | 71.59 | 42 | Cir | 72.832 | 322.25 | 322.61 | 0.494 | 325.16 | 325.52 | 1.03 | 326.54 | 1 | Manhole |
| 3 | Pipe - (515) | 64.83 | 42 | Cir | 110.092 | 322.90 | 323.60 | 0.636 | 326.54 | 326.95 | 1.05 | 328.00 | 2 | Combination |
| 4 | Pipe - (287) | 64.30 | 42 | Cir | 90.197 | 323.86 | 324.40 | 0.599 | 328.00* | 328.37* | 1.04 | 329.41 | 3 | Combination |
| 5 | Pipe - (236) (1) | 62.92 | 42 | Cir | 96.914 | 324.40 | 325.00 | 0.619 | 329.41* | 329.79* | 0.33 | 330.12 | 4 | Combination |
| 6 | Pipe - (425) | 63.08 | 42 | Cir | 105.502 | 325.50 | 326.66 | 1.100 | 330.12* | 330.54* | 1.49 | 332.03 | 5 | Combination |
| 7 | Pipe - (236) | 59.14 | 42 | Cir | 28.011 | 326.90 | 327.07 | 0.607 | 332.03* | 332.12* | 0.66 | 332.78 | 6 | Combination |
| 8 | Pipe - (517) | 58.84 | 42 | Cir | 45.483 | 327.30 | 327.57 | 0.594 | 332.78* | 332.94* | 0.65 | 333.59 | 7 | Combination |
| 9 | Pipe - (518) | 56.26 | 42 | Cir | 28.154 | 327.80 | 327.97 | 0.604 | 333.59* | 333.68* | 0.78 | 334.46 | 8 | Combination |
| 10 | Pipe - (265) | 56.20 | 36 | Cir | 75.321 | 328.20 | 330.46 | 3.000 | 334.46* | 334.99* | 0.49 | 335.49 | 9 | Combination |
| 11 | Pipe - (266) | 56.21 | 36 | Cir | 87.576 | 330.65 | 334.15 | 3.997 | 335.49 | 336.58 | n/a | 336.58 | 10 | Combination |
| 12 | Pipe - (232) | 36.72 | 30 | Cir | 149.169 | 334.40 | 339.62 | 3.499 | 336.58 | 341.67 | n/a | 341.67 j | 11 | Combination |
| 13 | Pipe - (533) | 28.42 | 24 | Cir | 96.000 | 339.80 | 343.63 | 3.990 | 341.67 | 345.47 | n/a | 345.47 j | 12 | Combination |
| 14 | Pipe - (274) | 28.38 | 24 | Cir | 67.783 | 343.85 | 347.24 | 5.001 | 345.47 | 349.07 | 1.81 | 349.07 | 13 | Combination |
| 15 | Pipe - (260) | 27.74 | 24 | Cir | 67.241 | 347.50 | 351.50 | 5.949 | 349.07 | 353.32 | n/a | 353.32 | 14 | Combination |
| 16 | Pipe - (532) | 15.28 | 24 | Cir | 133.104 | 351.70 | 361.00 | 6.987 | 353.32 | 362.41 | n/a | 362.41 j | 15 | Combination |
| 17 | Pipe - (272) | 14.75 | 24 | Cir | 66.111 | 361.20 | 366.50 | 8.017 | 362.41 | 367.88 | n/a | 367.88 | 16 | Combination |
| 18 | Pipe - (227) | 13.82 | 18 | Cir | 129.000 | 366.70 | 374.00 | 5.659 | 367.88 | 375.38 | n/a | 375.38 | 17 | Combination |
| 19 | Pipe - (530) | 13.62 | 18 | Cir | 60.236 | 374.20 | 375.70 | 2.490 | 375.38 | 377.07 | 0.69 | 377.07 | 18 | Combination |
| 20 | Pipe - (226) | 13.44 | 18 | Cir | 44.832 | 375.90 | 376.57 | 1.494 | 377.21 | 377.93 | n/a | 377.93 | 19 | Combination |
| 21 | Pipe - (225) (1) | 7.41 | 15 | Cir | 98.443 | 376.80 | 377.78 | 0.996 | 378.05* | 379.35* | 0.28 | 379.63 | 20 | Combination |
| 22 | Pipe - (225) | 5.13 | 15 | Cir | 205.640 | 378.00 | 380.10 | 1.021 | 379.63 | 381.02 | n/a | 381.02 j | 21 | Combination |
| 23 | Pipe - (224) | 3.88 | 15 | Cir | 128.177 | 380.30 | 381.58 | 0.999 | 381.02 | 382.38 | 0.52 | 382.38 | 22 | Combination |
| 24 | Pipe - (223) (1) | 2.14 | 15 | Cir | 89.745 | 381.80 | 382.70 | 1.003 | 382.38 | 383.28 | n/a | 383.28 | 23 | Combination |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 5A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (528) | 1.27 | 15 | Cir | 28.070 | 382.90 | 383.04 | 0.499 | 383.35 | 383.49 | 0.17 | 383.66 | 24 | Combination |
| 26 | Pipe - (245) | 0.58 | 15 | Cir | 28.048 | 381.80 | 382.08 | 0.998 | 382.38 | 382.38 | n/a | 382.38 j | 23 | Combination |
| 27 | Pipe - (529) | 5.43 | 15 | Cir | 28.090 | 376.80 | 377.08 | 0.997 | 377.93 | 378.02 | n/a | 378.02 j | 20 | Combination |
| 28 | Pipe - (255) | 0.85 | 15 | Cir | 43.790 | 366.70 | 367.58 | 2.010 | 367.88 | 367.94 | n/a | 367.94 j | 17 | Combination |
| 29 | Pipe - (531) | 13.19 | 18 | Cir | 50.671 | 351.70 | 354.50 | 5.526 | 353.32 | 355.86 | n/a | 355.86 j | 15 | Combination |
| 30 | Pipe - (259) | 12.89 | 18 | Cir | 43.841 | 354.70 | 358.40 | 8.440 | 355.86 | 359.75 | n/a | 359.75 | 29 | Combination |
| 31 | Pipe - (258) | 9.76 | 15 | Cir | 131.638 | 358.60 | 361.00 | 1.823 | 359.85* | 362.86* | 1.44 | 364.29 | 30 | Combination |
| 32 | Pipe - (257) | 5.48 | 15 | Cir | 173.316 | 361.20 | 366.00 | 2.770 | 364.29 | 366.95 | n/a | 366.95 j | 31 | Combination |
| 33 | Pipe - (256) | 2.60 | 15 | Cir | 38.552 | 366.20 | 367.56 | 3.528 | 366.95 | 368.21 | n/a | 368.21 j | 32 | Combination |
| 34 | Pipe - (285) | 19.02 | 30 | Cir | 83.727 | 334.40 | 334.82 | 0.502 | 336.58 | 336.30 | 0.73 | 336.30 | 11 | DropGrate |
| 35 | Pipe - (284) | 16.48 | 24 | Cir | 306.989 | 335.00 | 347.71 | 4.140 | 336.30 | 349.17 | n/a | 349.17 | 34 | DropGrate |
| 36 | Pipe - (283) | 9.78 | 18 | Cir | 200.863 | 348.00 | 364.00 | 7.966 | 349.17 | 365.21 | 0.32 | 365.21 | 35 | DropGrate |
| 37 | Pipe - (282) | 4.73 | 15 | Cir | 234.000 | 364.20 | 366.54 | 1.000 | 365.21 | 367.42 | n/a | 367.42 j | 36 | DropGrate |
| 38 | Pipe - (273) | 0.50 | 15 | Cir | 28.013 | 361.20 | 361.48 | 1.000 | 362.41 | 361.76 | 0.10 | 361.76 | 16 | Combination |
| 39 | Pipe - (261) | 2.72 | 15 | Cir | 28.090 | 361.20 | 361.48 | 0.997 | 364.29* | 364.34* | 0.08 | 364.42 | 31 | Combination |
| 40 | Pipe - (262) | 1.82 | 15 | Cir | 28.000 | 358.60 | 358.88 | 1.000 | 359.75 | 359.42 | n/a | 359.42 | 30 | Combination |
| 41 | Pipe - (242) | 8.94 | 24 | Cir | 28.499 | 339.80 | 340.10 | 1.053 | 341.67 | 341.17 | n/a | 341.17 | 12 | Combination |
| 42 | Pipe - (241) | 8.00 | 18 | Cir | 47.998 | 340.30 | 342.50 | 4.584 | 341.17 | 343.59 | n/a | 343.59 | 41 | Combination |
| 43 | Pipe - (240) (1) | 3.41 | 15 | Cir | 115.718 | 342.70 | 348.60 | 5.099 | 343.59 | 349.34 | n/a | 349.34 j | 42 | Manhole |
| 44 | Pipe - (240) | 3.44 | 15 | Cir | 73.254 | 348.80 | 352.00 | 4.368 | 349.34 | 352.75 | 0.46 | 352.75 | 43 | Combination |
| 45 | Pipe - (243) | 1.67 | 15 | Cir | 27.894 | 352.20 | 352.87 | 2.402 | 352.75 | 353.38 | n/a | 353.38 j | 44 | Combination |
| 46 | Pipe - (291) | 8.44 | 18 | Cir | 37.830 | 325.00 | 328.01 | 7.957 | 326.54 | 329.13 | n/a | 329.13 j | 2 | Combination |
| 47 | Pipe - (297) | 5.53 | 15 | Cir | 67.669 | 328.20 | 334.97 | 10.005 | 329.13 | 335.92 | n/a | 335.92 | 46 | Combination |
| 48 | Pipe - (299) | 5.40 | 15 | Cir | 66.501 | 335.20 | 341.85 | 10.000 | 335.92 | 342.79 | 0.23 | 342.79 | 47 | Combination |

Project File: SCM 5A Storm Network.stm

Number of lines: 63

Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 5A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 49 | Pipe - (296) | 5.21 | 15 | Cir | 89.618 | 342.10 | 351.06 | 9.998 | 342.79 | 351.99 | n/a | 351.99 | 48 | Combination |
| 50 | Pipe - (519) | 4.42 | 18 | Cir | 37.668 | 351.30 | 352.59 | 3.425 | 351.99 | 353.40 | 0.32 | 353.40 | 49 | Combination |
| 51 | Pipe - (235) | 4.51 | 24 | Cir | 110.218 | 326.90 | 327.45 | 0.499 | 332.03* | 332.07* | 0.05 | 332.12 | 6 | Combination |
| 52 | Pipe - (270) | 3.64 | 24 | Cir | 130.561 | 327.65 | 328.40 | 0.574 | 332.12* | 332.15* | 0.01 | 332.16 | 51 | Combination |
| 53 | Pipe - (269) | 3.21 | 18 | Cir | 132.413 | 328.60 | 333.00 | 3.323 | 332.16 | 333.68 | n/a | 333.68 j | 52 | Combination |
| 54 | Pipe - (268) | 2.07 | 15 | Cir | 201.000 | 333.20 | 348.28 | 7.502 | 333.68 | 348.85 | 0.17 | 348.85 | 53 | Combination |
| 55 | Pipe - (277) | 0.78 | 15 | Cir | 63.000 | 348.50 | 353.53 | 7.984 | 348.85 | 353.87 | n/a | 353.87 j | 54 | Combination |
| 56 | Pipe - (263) | 0.66 | 15 | Cir | 32.603 | 347.80 | 348.13 | 1.012 | 349.07 | 349.08 | 0.01 | 349.08 | 14 | Combination |
| 57 | Pipe - (244) | 2.40 | 15 | Cir | 27.998 | 342.70 | 342.98 | 1.000 | 343.59 | 343.60 | n/a | 343.60 j | 42 | Combination |
| 58 | Pipe - (286) | 1.63 | 15 | Cir | 38.000 | 335.40 | 335.78 | 1.000 | 336.58 | 336.29 | 0.19 | 336.29 | 11 | Combination |
| 59 | Pipe - (278) | 0.43 | 15 | Cir | 62.439 | 333.20 | 336.30 | 4.965 | 333.68 | 336.55 | n/a | 336.55 j | 53 | Combination |
| 60 | Pipe - (288) | 2.83 | 15 | Cir | 28.384 | 328.20 | 329.81 | 5.672 | 329.13 | 330.49 | n/a | 330.49 j | 46 | Combination |
| 61 | Pipe - (271) | 0.66 | 15 | Cir | 30.000 | 327.85 | 328.15 | 1.000 | 332.12* | 332.12* | 0.00 | 332.13 | 51 | Combination |
| 62 | Pipe - (281) | 1.90 | 15 | Cir | 28.000 | 325.60 | 325.86 | 0.928 | 329.41* | 329.43* | 0.04 | 329.47 | 4 | Combination |
| 63 | Pipe - (593) | 0.70 | 15 | Cir | 45.000 | 383.24 | 383.50 | 0.578 | 383.66 | 383.83 | n/a | 383.83 j | 25 | Combination |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report



SCM 5A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 501 | 0.12 | 0.00 | 0.12 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.03 | 4.86 | 0.03 | 4.86 | 0.0 | Off |
| 2 | JB 502 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 503 | 1.09 | 1.07 | 2.15 | 0.00 | Comb | 6.0 | 6.00 | 15.00 | 6.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.11 | 0.22 | 7.11 | 0.0 | Off |
| 4 | CB 504 | 0.23 | 0.00 | 0.24 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.95 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 505 | 0.35 | 0.01 | 0.36 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.86 | 0.02 | 0.38 | 0.0 | 4 |
| 6 | CB 506 | 0.47 | 0.00 | 0.45 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.49 | 0.04 | 0.66 | 0.0 | 5 |
| 7 | CB 515 | 0.58 | 0.99 | 1.21 | 0.36 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.00 | 0.14 | 2.88 | 0.0 | 62 |
| 8 | CB 516 | 3.10 | 0.23 | 2.34 | 0.99 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.035 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.42 | 0.16 | 3.82 | 0.0 | 7 |
| 9 | CB 517 | 0.35 | 0.00 | 0.35 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.75 | 0.14 | 2.75 | 0.0 | Off |
| 10 | CB 518 | 0.31 | 0.00 | 0.31 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.67 | 0.00 | 0.00 | 0.0 | 9 |
| 11 | CB 519 | 0.47 | 0.00 | 0.47 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.94 | 0.00 | 0.00 | 0.0 | 10 |
| 12 | CB 520 | 0.23 | 0.00 | 0.23 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.50 | 0.00 | 0.00 | 0.0 | 11 |
| 13 | CB 521 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.050 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.24 | 0.00 | 0.00 | 0.0 | 12 |
| 14 | CB 522 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.16 | 0.00 | 0.00 | 0.0 | 13 |
| 15 | CB 523 | 0.31 | 0.00 | 0.31 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.50 | 0.00 | 0.00 | 0.0 | 14 |
| 16 | CB 524 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.16 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 525 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.43 | 0.00 | 0.00 | 0.0 | 16 |
| 18 | CB 526 | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.045 | 2.00 | 0.060 | 0.020 | 0.013 | 0.09 | 1.55 | 0.00 | 0.00 | 0.0 | 17 |
| 19 | CB 527 | 0.23 | 0.64 | 0.83 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.93 | 0.06 | 0.92 | 0.0 | 28 |
| 20 | CB 528 | 1.12 | 1.05 | 1.53 | 0.64 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.13 | 0.17 | 4.33 | 0.0 | 19 |
| 21 | CB 529 | 2.56 | 0.39 | 1.90 | 1.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.31 | 0.19 | 5.72 | 0.0 | 20 |
| 22 | CB 530 | 1.36 | 0.28 | 1.24 | 0.39 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 7.13 | 0.14 | 3.06 | 0.0 | 21 |
| 23 | CB 531 | 1.24 | 0.13 | 1.09 | 0.28 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.54 | 0.12 | 2.24 | 0.0 | 22 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report



SCM 5A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 532 | 0.89 | 0.00 | 0.77 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.66 | 0.10 | 1.63 | 0.0 | 23 |
| 25 | CB 532A | 0.58 | 0.00 | 0.58 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.19 | 0.14 | 3.19 | 0.0 | Off |
| 26 | CB 531A | 0.58 | 0.00 | 0.55 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.07 | 0.06 | 0.92 | 0.0 | 27 |
| 27 | CB 528A | 5.43 | 0.03 | 5.46 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.43 | 17.64 | 0.43 | 17.64 | 0.0 | Off |
| 28 | CB 525A | 0.85 | 0.05 | 0.90 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.72 | 0.02 | 0.32 | 0.0 | 38 |
| 29 | CB 534 | 0.35 | 1.13 | 1.39 | 0.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.97 | 0.06 | 0.96 | 0.0 | 56 |
| 30 | CB 535 | 1.51 | 1.71 | 2.08 | 1.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.85 | 0.19 | 5.35 | 0.0 | 29 |
| 31 | CB 536 | 1.78 | 0.74 | 1.81 | 0.72 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.43 | 0.15 | 3.71 | 0.0 | 30 |
| 32 | CB 537 | 2.91 | 0.00 | 2.17 | 0.74 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.74 | 0.14 | 2.92 | 0.0 | 31 |
| 33 | CB 537A | 2.60 | 0.00 | 2.00 | 0.60 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.38 | 0.13 | 2.41 | 0.0 | 39 |
| 34 | YI 519B | 3.10 | 0.00 | 3.10 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.26 | 27.55 | 0.26 | 27.55 | 0.0 | Off |
| 35 | YI 519C | 7.18 | 0.00 | 7.18 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.45 | 46.69 | 0.45 | 46.69 | 0.0 | Off |
| 36 | YI 519D | 5.31 | 0.00 | 5.31 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.37 | 38.58 | 0.37 | 38.58 | 0.0 | Off |
| 37 | YI 519E | 4.73 | 0.00 | 4.73 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.34 | 35.86 | 0.34 | 35.86 | 0.0 | Off |
| 38 | CB 524A | 0.50 | 0.01 | 0.51 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.81 | 0.00 | 0.00 | 0.0 | 29 |
| 39 | CB 536A | 2.72 | 0.60 | 2.19 | 1.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.41 | 0.18 | 4.93 | 0.0 | 40 |
| 40 | CB 535A | 1.82 | 1.13 | 1.96 | 0.99 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.015 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.52 | 0.18 | 4.96 | 0.0 | 30 |
| 41 | CB 538 | 1.01 | 0.00 | 0.96 | 0.05 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.69 | 0.05 | 0.82 | 0.0 | 58 |
| 42 | CB 539 | 2.37 | 0.29 | 2.66 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.54 | 0.29 | 10.54 | 0.0 | Off |
| 43 | JB 540 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 44 | CB 541 | 1.78 | 0.00 | 1.49 | 0.29 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.034 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.48 | 0.10 | 1.69 | 0.0 | 42 |
| 45 | CB 541A | 1.67 | 0.00 | 1.42 | 0.25 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.034 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.28 | 0.10 | 1.59 | 0.0 | 57 |
| 46 | CB 511 | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.23 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report

SCM 5A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 47 | CB 512 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.07 | 1.13 | 0.00 | 0.00 | 0.0 | 46 |
| 48 | CB 513 | 0.23 | 0.00 | 0.23 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.32 | 0.00 | 0.00 | 0.0 | 47 |
| 49 | CB 514 | 0.81 | 0.00 | 0.81 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.32 | 0.00 | 0.00 | 0.0 | 48 |
| 50 | CB 514A | 4.42 | 0.00 | 3.18 | 1.24 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.98 | 0.15 | 3.34 | 0.0 | 60 |
| 51 | CB 507 | 0.54 | 0.00 | 0.55 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.02 | 0.14 | 3.02 | 0.0 | Off |
| 52 | CB 508 | 0.54 | 0.00 | 0.54 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.75 | 0.02 | 0.35 | 0.0 | 51 |
| 53 | CB 509 | 0.81 | 0.04 | 0.85 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.58 | 0.02 | 0.27 | 0.0 | 52 |
| 54 | CB 510 | 1.32 | 0.00 | 1.28 | 0.04 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.090 | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.34 | 0.04 | 0.66 | 0.0 | 53 |
| 55 | CB 510A | 0.78 | 0.00 | 0.78 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.090 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.07 | 0.00 | 0.00 | 0.0 | 59 |
| 56 | CB 522A | 0.66 | 0.09 | 0.75 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.29 | 0.00 | 0.00 | 0.0 | Off |
| 57 | CB 539A | 2.40 | 0.25 | 2.66 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.53 | 0.29 | 10.53 | 0.0 | Off |
| 58 | CB 519A | 1.63 | 0.05 | 1.45 | 0.23 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.06 | 0.09 | 1.49 | 0.0 | 8 |
| 59 | CB 509A | 0.43 | 0.00 | 0.43 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.69 | 0.00 | 0.00 | 0.0 | 61 |
| 60 | CB 511A | 2.83 | 1.24 | 3.00 | 1.07 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.080 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.71 | 0.14 | 2.97 | 0.0 | 3 |
| 61 | CB 507A | 0.66 | 0.00 | 0.66 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.56 | 0.15 | 3.56 | 0.0 | Off |
| 62 | CB 504A | 1.90 | 0.36 | 2.26 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.27 | 9.37 | 0.27 | 9.37 | 0.0 | Off |
| 63 | CB 533 | 0.70 | 0.00 | 0.70 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.73 | 0.15 | 3.73 | 0.0 | Off |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations



SCM 5A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 48 | 71.41 | 321.50 | 324.78 | 3.28 | 8.47 | 6.48 | 1.11 | 325.88 | 0.000 | 83.000 | 322.00 | 324.55 | 2.55** | 8.47 | 8.43 | 1.11 | 325.66 | 0.000 | 0.000 | n/a | 1.26 | n/a |
| 2 | 42 | 71.59 | 322.25 | 325.16 | 2.91* | 8.55 | 8.38 | 1.09 | 326.25 | 0.494 | 72.832 | 322.61 | 325.52 | 2.91 | 8.55 | 8.38 | 1.09 | 326.61 | 0.494 | 0.494 | 0.360 | 0.94 | 1.03 |
| 3 | 42 | 64.83 | 322.90 | 326.54 | 3.50 | 9.62 | 6.74 | 0.71 | 327.25 | 0.415 | 110.092 | 323.60 | 326.95 | 3.35 | 9.48 | 6.84 | 0.73 | 327.68 | 0.361 | 0.388 | 0.427 | 1.44 | 1.05 |
| 4 | 42 | 64.30 | 323.86 | 328.00 | 3.50 | 9.62 | 6.68 | 0.69 | 328.69 | 0.409 | 90.197 | 324.40 | 328.37 | 3.50 | 9.62 | 6.68 | 0.69 | 329.06 | 0.409 | 0.409 | 0.369 | 1.50 | 1.04 |
| 5 | 42 | 62.92 | 324.40 | 329.41 | 3.50 | 9.62 | 6.54 | 0.67 | 330.07 | 0.391 | 96.914 | 325.00 | 329.79 | 3.50 | 9.62 | 6.54 | 0.66 | 330.45 | 0.391 | 0.391 | 0.379 | 0.50 | 0.33 |
| 6 | 42 | 63.08 | 325.50 | 330.12 | 3.50 | 9.62 | 6.56 | 0.67 | 330.79 | 0.393 | 105.502 | 326.66 | 330.54 | 3.50 | 9.62 | 6.56 | 0.67 | 331.20 | 0.393 | 0.393 | 0.415 | 2.23 | 1.49 |
| 7 | 42 | 59.14 | 326.90 | 332.03 | 3.50 | 9.62 | 6.15 | 0.59 | 332.61 | 0.346 | 28.011 | 327.07 | 332.12 | 3.50 | 9.62 | 6.15 | 0.59 | 332.71 | 0.346 | 0.346 | 0.097 | 1.12 | 0.66 |
| 8 | 42 | 58.84 | 327.30 | 332.78 | 3.50 | 9.62 | 6.12 | 0.58 | 333.36 | 0.342 | 45.483 | 327.57 | 332.94 | 3.50 | 9.62 | 6.12 | 0.58 | 333.52 | 0.342 | 0.342 | 0.156 | 1.12 | 0.65 |
| 9 | 42 | 56.26 | 327.80 | 333.59 | 3.50 | 9.62 | 5.85 | 0.53 | 334.12 | 0.313 | 28.154 | 327.97 | 333.68 | 3.50 | 9.62 | 5.85 | 0.53 | 334.21 | 0.313 | 0.313 | 0.088 | 1.47 | 0.78 |
| 10 | 36 | 56.20 | 328.20 | 334.46 | 3.00 | 7.07 | 7.95 | 0.98 | 335.44 | 0.710 | 75.321 | 330.46 | 334.99 | 3.00 | 7.07 | 7.95 | 0.98 | 335.98 | 0.710 | 0.710 | 0.535 | 0.50 | 0.49 |
| 11 | 36 | 56.21 | 330.65 | 335.49 | 3.00 | 6.13 | 7.95 | 0.98 | 336.47 | 0.711 | 87.576 | 334.15 | 336.58 | 2.43** | 6.13 | 9.17 | 1.31 | 337.89 | 0.727 | 0.719 | n/a | 2.19 | n/a |
| 12 | 30 | 36.72 | 334.40 | 336.58 | 2.18 | 4.31 | 8.09 | 1.13 | 337.71 | 0.000 | 149.169 | 339.62 | 341.67 j | 2.05** | 4.31 | 8.52 | 1.13 | 342.80 | 0.000 | 0.000 | n/a | 1.39 | n/a |
| 13 | 24 | 28.42 | 339.80 | 341.67 | 1.87 | 3.02 | 9.30 | 1.38 | 343.05 | 0.000 | 96.000 | 343.63 | 345.47 j | 1.84** | 3.02 | 9.42 | 1.38 | 346.84 | 0.000 | 0.000 | n/a | 0.50 | 0.69 |
| 14 | 24 | 28.38 | 343.85 | 345.47 | 1.62 | 2.72 | 10.44 | 1.37 | 346.84 | 0.000 | 67.783 | 347.24 | 349.07 | 1.83** | 3.02 | 9.40 | 1.37 | 350.45 | 0.000 | 0.000 | n/a | 1.32 | 1.81 |
| 15 | 24 | 27.74 | 347.50 | 349.07 | 1.57 | 2.65 | 10.46 | 1.33 | 350.40 | 0.000 | 67.241 | 351.50 | 353.32 | 1.82** | 3.00 | 9.23 | 1.33 | 354.65 | 0.000 | 0.000 | n/a | 0.91 | n/a |
| 16 | 24 | 15.28 | 351.70 | 353.32 | 1.62 | 2.36 | 5.60 | 0.65 | 353.97 | 0.000 | 133.104 | 361.00 | 362.41 j | 1.41** | 2.36 | 6.46 | 0.65 | 363.06 | 0.000 | 0.000 | n/a | 1.50 | 0.97 |
| 17 | 24 | 14.75 | 361.20 | 362.41 | 1.21 | 1.98 | 7.43 | 0.63 | 363.04 | 0.000 | 66.111 | 366.50 | 367.88 | 1.38** | 2.32 | 6.37 | 0.63 | 368.51 | 0.000 | 0.000 | n/a | 1.03 | n/a |
| 18 | 18 | 13.82 | 366.70 | 367.88 | 1.18 | 1.49 | 9.25 | 1.03 | 368.91 | 0.000 | 129.000 | 374.00 | 375.38 | 1.38** | 1.70 | 8.14 | 1.03 | 376.41 | 0.000 | 0.000 | n/a | 1.04 | n/a |
| 19 | 18 | 13.62 | 374.20 | 375.38 | 1.18 | 1.49 | 9.17 | 1.01 | 376.38 | 0.000 | 60.236 | 375.70 | 377.07 | 1.37** | 1.69 | 8.05 | 1.01 | 378.08 | 0.000 | 0.000 | n/a | 0.69 | 0.69 |
| 20 | 18 | 13.44 | 375.90 | 377.21 | 1.31* | 1.63 | 8.24 | 0.99 | 378.19 | 0.000 | 44.832 | 376.57 | 377.93 | 1.36** | 1.69 | 7.96 | 0.99 | 378.92 | 0.000 | 0.000 | n/a | 1.17 | n/a |
| 21 | 15 | 7.41 | 376.80 | 378.05 | 1.25* | 1.23 | 6.04 | 0.57 | 378.62 | 1.318 | 98.443 | 377.78 | 379.35 | 1.25 | 1.23 | 6.04 | 0.57 | 379.92 | 1.318 | 1.318 | 1.298 | 0.50 | 0.28 |
| 22 | 15 | 5.13 | 378.00 | 379.63 | 1.25 | 0.97 | 4.18 | 0.27 | 379.90 | 0.632 | 205.640 | 380.10 | 381.02 j | 0.92** | 0.97 | 5.31 | 0.44 | 381.46 | 0.799 | 0.715 | n/a | 0.50 | 0.22 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 5A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 15 | 3.88 | 380.30 | 381.02 | 0.72 | 0.73 | 5.33 | 0.34 | 381.36 | 0.000 | 128.177 | 381.58 | 382.38 | 0.80** | 0.82 | 4.71 | 0.34 | 382.72 | 0.000 | 0.000 | n/a | 1.50 | 0.52 |
| 24 | 15 | 2.14 | 381.80 | 382.38 | 0.58 | 0.55 | 3.87 | 0.23 | 382.60 | 0.000 | 89.745 | 382.70 | 383.28 | 0.58** | 0.56 | 3.81 | 0.23 | 383.51 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 25 | 15 | 1.27 | 382.90 | 383.35 | 0.45* | 0.39 | 3.18 | 0.16 | 383.51 | 0.498 | 28.070 | 383.04 | 383.49 | 0.45** | 0.40 | 3.19 | 0.16 | 383.65 | 0.502 | 0.500 | 0.140 | 1.08 | 0.17 |
| 26 | 15 | 0.58 | 381.80 | 382.38 | 0.58 | 0.22 | 1.05 | 0.11 | 382.48 | 0.000 | 28.048 | 382.08 | 382.38 j | 0.30** | 0.22 | 2.60 | 0.11 | 382.48 | 0.000 | 0.000 | n/a | 1.00 | 0.11 |
| 27 | 15 | 5.43 | 376.80 | 377.93 | 1.13 | 0.99 | 4.64 | 0.46 | 378.40 | 0.000 | 28.090 | 377.08 | 378.02 j | 0.94** | 0.99 | 5.46 | 0.46 | 378.49 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 28 | 15 | 0.85 | 366.70 | 367.88 | 1.18 | 0.29 | 0.71 | 0.13 | 368.01 | 0.000 | 43.790 | 367.58 | 367.94 j | 0.36** | 0.29 | 2.90 | 0.13 | 368.07 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 29 | 18 | 13.19 | 351.70 | 353.32 | 1.50 | 1.68 | 7.47 | 0.87 | 354.19 | 1.579 | 50.671 | 354.50 | 355.86 j | 1.36** | 1.68 | 7.85 | 0.96 | 356.81 | 1.384 | 1.482 | n/a | 0.50 | n/a |
| 30 | 18 | 12.89 | 354.70 | 355.86 | 1.16 | 1.46 | 8.82 | 0.92 | 356.78 | 0.000 | 43.841 | 358.40 | 359.75 | 1.35** | 1.67 | 7.71 | 0.92 | 360.67 | 0.000 | 0.000 | n/a | 1.69 | n/a |
| 31 | 15 | 9.76 | 358.60 | 359.85 | 1.25* | 1.23 | 7.95 | 0.98 | 360.83 | 2.285 | 131.638 | 361.00 | 362.86 | 1.25 | 1.23 | 7.95 | 0.98 | 363.84 | 2.284 | 2.284 | 3.007 | 1.46 | 1.44 |
| 32 | 15 | 5.48 | 361.20 | 364.29 | 1.25 | 1.00 | 4.46 | 0.31 | 364.60 | 0.719 | 173.316 | 366.00 | 366.95 j | 0.95** | 1.00 | 5.49 | 0.47 | 367.42 | 0.844 | 0.782 | n/a | 1.05 | n/a |
| 33 | 15 | 2.60 | 366.20 | 366.95 | 0.75 | 0.64 | 3.39 | 0.26 | 367.20 | 0.000 | 38.552 | 367.56 | 368.21 j | 0.65** | 0.64 | 4.07 | 0.26 | 368.46 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 34 | 30 | 19.02 | 334.40 | 336.58 | 2.18 | 3.02 | 4.19 | 0.62 | 337.20 | 0.000 | 83.727 | 334.82 | 336.30 | 1.48** | 3.02 | 6.30 | 0.62 | 336.91 | 0.000 | 0.000 | n/a | 1.19 | 0.73 |
| 35 | 24 | 16.48 | 335.00 | 336.30 | 1.30 | 2.16 | 7.64 | 0.70 | 337.00 | 0.000 | 306.989 | 347.71 | 349.17 | 1.46** | 2.46 | 6.70 | 0.70 | 349.87 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 36 | 18 | 9.78 | 348.00 | 349.17 | 1.17 | 1.48 | 6.60 | 0.64 | 349.81 | 0.000 | 200.863 | 364.00 | 365.21 | 1.21** | 1.52 | 6.42 | 0.64 | 365.85 | 0.000 | 0.000 | n/a | 0.50 | 0.32 |
| 37 | 15 | 4.73 | 364.20 | 365.21 | 1.01 | 0.92 | 4.47 | 0.41 | 365.61 | 0.000 | 234.000 | 366.54 | 367.42 j | 0.88** | 0.92 | 5.12 | 0.41 | 367.83 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 38 | 15 | 0.50 | 361.20 | 362.41 | 1.21 | 0.20 | 0.42 | 0.10 | 362.51 | 0.000 | 28.013 | 361.48 | 361.76 | 0.28** | 0.20 | 2.50 | 0.10 | 361.85 | 0.000 | 0.000 | n/a | 1.00 | 0.10 |
| 39 | 15 | 2.72 | 361.20 | 364.29 | 1.25 | 1.23 | 2.21 | 0.08 | 364.37 | 0.177 | 28.090 | 361.48 | 364.34 | 1.25 | 1.23 | 2.21 | 0.08 | 364.42 | 0.177 | 0.177 | 0.050 | 1.00 | 0.08 |
| 40 | 15 | 1.82 | 358.60 | 359.75 | 1.15 | 0.50 | 1.55 | 0.20 | 359.95 | 0.000 | 28.000 | 358.88 | 359.42 | 0.54** | 0.50 | 3.62 | 0.20 | 359.62 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 41 | 24 | 8.94 | 339.80 | 341.67 | 1.87 | 1.70 | 2.93 | 0.43 | 342.10 | 0.000 | 28.499 | 340.10 | 341.17 | 1.07** | 1.70 | 5.25 | 0.43 | 341.60 | 0.000 | 0.000 | n/a | 1.04 | n/a |
| 42 | 18 | 8.00 | 340.30 | 341.17 | 0.87 | 1.06 | 7.56 | 0.52 | 341.69 | 0.000 | 47.998 | 342.50 | 343.59 | 1.09** | 1.38 | 5.79 | 0.52 | 344.12 | 0.000 | 0.000 | n/a | 1.21 | n/a |
| 43 | 15 | 3.41 | 342.70 | 343.59 | 0.89 | 0.76 | 3.63 | 0.31 | 343.91 | 0.000 | 115.718 | 348.60 | 349.34 j | 0.74** | 0.76 | 4.48 | 0.31 | 349.66 | 0.000 | 0.000 | n/a | 0.16 | n/a |
| 44 | 15 | 3.44 | 348.80 | 349.34 | 0.54 | 0.51 | 6.70 | 0.31 | 349.66 | 0.000 | 73.254 | 352.00 | 352.75 | 0.75** | 0.77 | 4.49 | 0.31 | 353.06 | 0.000 | 0.000 | n/a | 1.48 | 0.46 |

Project File: SCM 5A Storm Network.stm | Number of lines: 63 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 5A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 45 | 15 | 1.67 | 352.20 | 352.75 | 0.55 | 0.47 | 3.23 | 0.19 | 352.94 | 0.000 | 27.894 | 352.87 | 353.38 j | 0.51** | 0.47 | 3.53 | 0.19 | 353.58 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 46 | 18 | 8.44 | 325.00 | 326.54 | 1.50 | 1.42 | 4.78 | 0.35 | 326.90 | 0.646 | 37.830 | 328.01 | 329.13 j | 1.12** | 1.42 | 5.94 | 0.55 | 329.68 | 0.778 | 0.712 | n/a | 1.49 | 0.82 |
| 47 | 15 | 5.53 | 328.20 | 329.13 | 0.93 | 0.98 | 5.62 | 0.47 | 329.61 | 0.000 | 67.669 | 334.97 | 335.92 | 0.95** | 1.00 | 5.51 | 0.47 | 336.39 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 48 | 15 | 5.40 | 335.20 | 335.92 | 0.72 | 0.73 | 7.37 | 0.46 | 336.38 | 0.000 | 66.501 | 341.85 | 342.79 | 0.94** | 0.99 | 5.45 | 0.46 | 343.25 | 0.000 | 0.000 | n/a | 0.50 | 0.23 |
| 49 | 15 | 5.21 | 342.10 | 342.79 | 0.69 | 0.70 | 7.49 | 0.45 | 343.24 | 0.000 | 89.618 | 351.06 | 351.99 | 0.92** | 0.97 | 5.36 | 0.45 | 352.43 | 0.000 | 0.000 | n/a | 0.95 | n/a |
| 50 | 18 | 4.42 | 351.30 | 351.99 | 0.68 | 0.79 | 5.62 | 0.32 | 352.31 | 0.000 | 37.668 | 352.59 | 353.40 | 0.81** | 0.97 | 4.57 | 0.32 | 353.72 | 0.000 | 0.000 | n/a | 1.00 | 0.32 |
| 51 | 24 | 4.51 | 326.90 | 332.03 | 2.00 | 3.14 | 1.44 | 0.03 | 332.06 | 0.040 | 110.218 | 327.45 | 332.07 | 2.00 | 3.14 | 1.44 | 0.03 | 332.10 | 0.040 | 0.040 | 0.044 | 1.47 | 0.05 |
| 52 | 24 | 3.64 | 327.65 | 332.12 | 2.00 | 3.14 | 1.16 | 0.02 | 332.14 | 0.026 | 130.561 | 328.40 | 332.15 | 2.00 | 3.14 | 1.16 | 0.02 | 332.17 | 0.026 | 0.026 | 0.034 | 0.50 | 0.01 |
| 53 | 18 | 3.21 | 328.60 | 332.16 | 1.50 | 0.78 | 1.82 | 0.05 | 332.21 | 0.093 | 132.413 | 333.00 | 333.68 j | 0.68** | 0.78 | 4.11 | 0.26 | 333.94 | 0.520 | 0.307 | n/a | 0.76 | n/a |
| 54 | 15 | 2.07 | 333.20 | 333.68 | 0.48 | 0.44 | 4.74 | 0.22 | 333.90 | 0.000 | 201.000 | 348.28 | 348.85 | 0.57** | 0.55 | 3.77 | 0.22 | 349.07 | 0.000 | 0.000 | n/a | 0.75 | 0.17 |
| 55 | 15 | 0.78 | 348.50 | 348.85 | 0.35 | 0.28 | 2.73 | 0.12 | 348.98 | 0.000 | 63.000 | 353.53 | 353.87 j | 0.34** | 0.28 | 2.82 | 0.12 | 354.00 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 56 | 15 | 0.66 | 347.80 | 349.07 | 1.25 | 1.23 | 0.54 | 0.00 | 349.08 | 0.010 | 32.603 | 348.13 | 349.08 | 0.95 | 1.00 | 0.66 | 0.01 | 349.08 | 0.012 | 0.011 | 0.004 | 1.00 | 0.01 |
| 57 | 15 | 2.40 | 342.70 | 343.59 | 0.89 | 0.61 | 2.56 | 0.24 | 343.84 | 0.000 | 27.998 | 342.98 | 343.60 j | 0.62** | 0.61 | 3.96 | 0.24 | 343.84 | 0.000 | 0.000 | n/a | 1.00 | 0.24 |
| 58 | 15 | 1.63 | 335.40 | 336.58 | 1.18 | 0.47 | 1.36 | 0.19 | 336.77 | 0.000 | 38.000 | 335.78 | 336.29 | 0.51** | 0.47 | 3.50 | 0.19 | 336.48 | 0.000 | 0.000 | n/a | 1.00 | 0.19 |
| 59 | 15 | 0.43 | 333.20 | 333.68 | 0.48 | 0.18 | 0.98 | 0.09 | 333.77 | 0.000 | 62.439 | 336.30 | 336.55 j | 0.25** | 0.18 | 2.39 | 0.09 | 336.64 | 0.000 | 0.000 | n/a | 1.00 | 0.09 |
| 60 | 15 | 2.83 | 328.20 | 329.13 | 0.93 | 0.68 | 2.88 | 0.27 | 329.41 | 0.000 | 28.384 | 329.81 | 330.49 j | 0.68** | 0.68 | 4.19 | 0.27 | 330.76 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 61 | 15 | 0.66 | 327.85 | 332.12 | 1.25 | 1.23 | 0.54 | 0.00 | 332.12 | 0.010 | 30.000 | 328.15 | 332.12 | 1.25 | 1.23 | 0.54 | 0.00 | 332.13 | 0.010 | 0.010 | 0.003 | 1.00 | 0.00 |
| 62 | 15 | 1.90 | 325.60 | 329.41 | 1.25 | 1.23 | 1.55 | 0.04 | 329.45 | 0.087 | 28.000 | 325.86 | 329.43 | 1.25 | 1.23 | 1.55 | 0.04 | 329.47 | 0.087 | 0.087 | 0.024 | 1.00 | 0.04 |
| 63 | 15 | 0.70 | 383.24 | 383.66 | 0.42 | 0.25 | 1.93 | 0.12 | 383.78 | 0.000 | 45.000 | 383.50 | 383.83 j | 0.33** | 0.25 | 2.74 | 0.12 | 383.94 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 5A Storm Network.stm

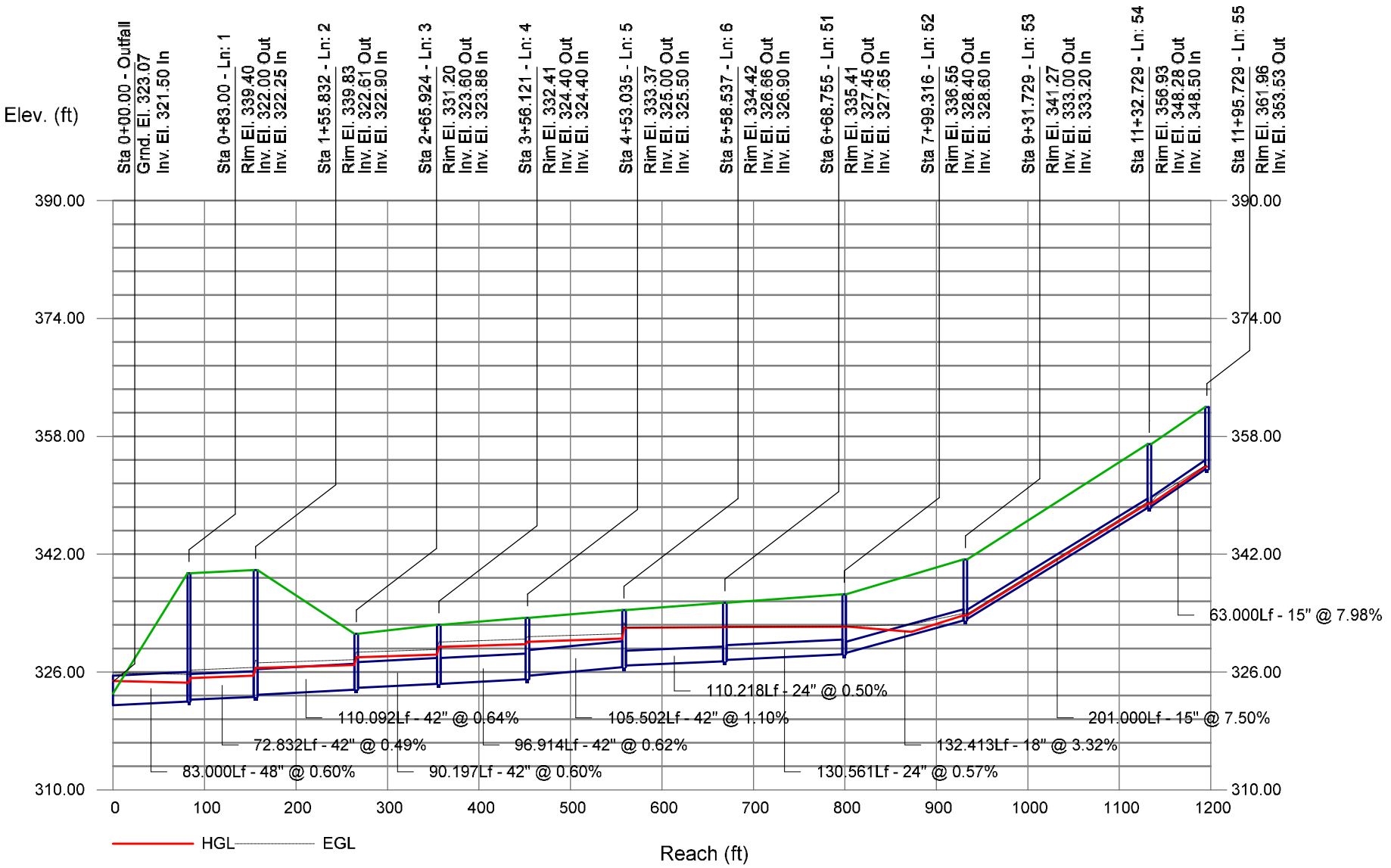
Number of lines: 63

Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

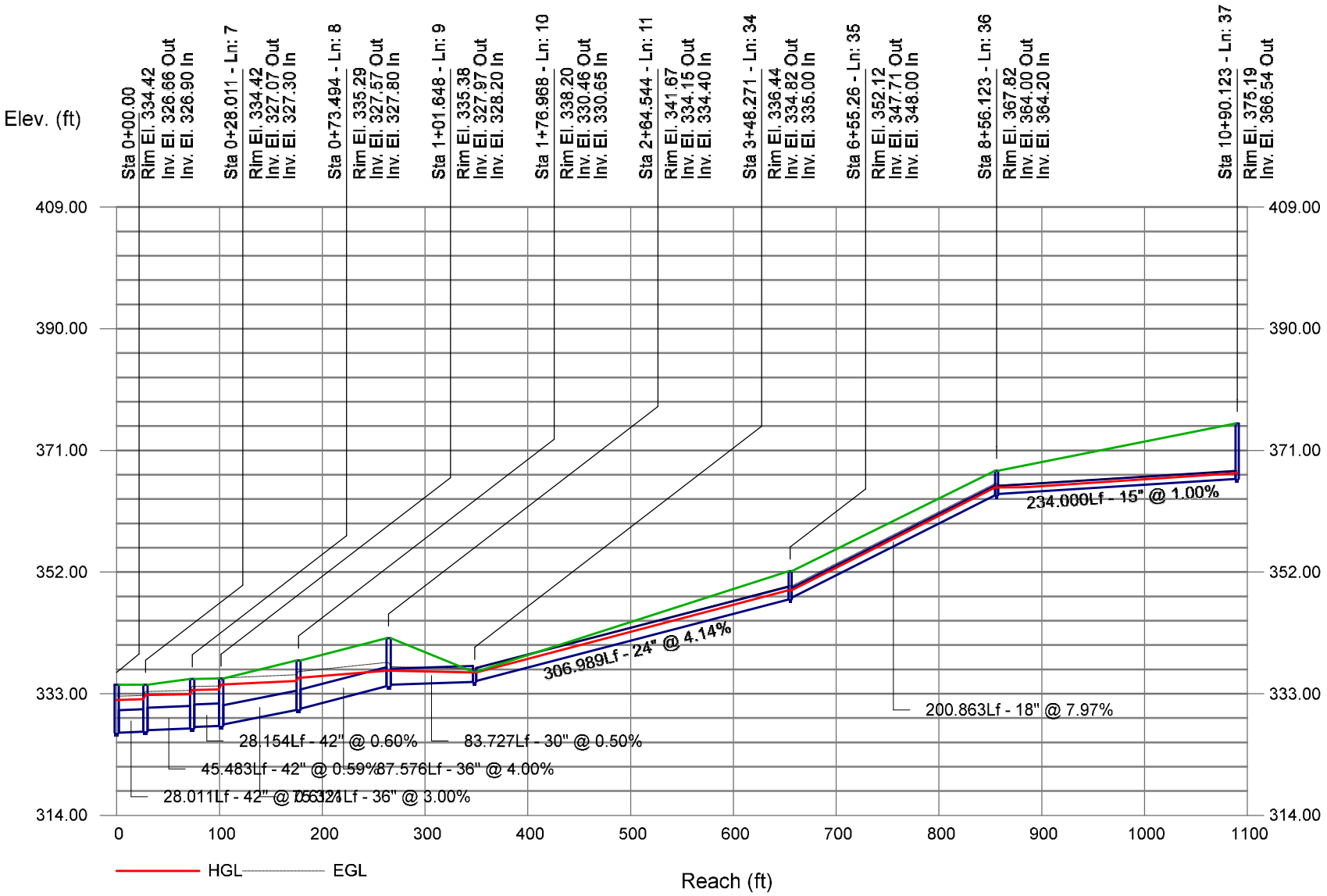
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 1-55 Proj. file: SCM 5A Storm Network.stm



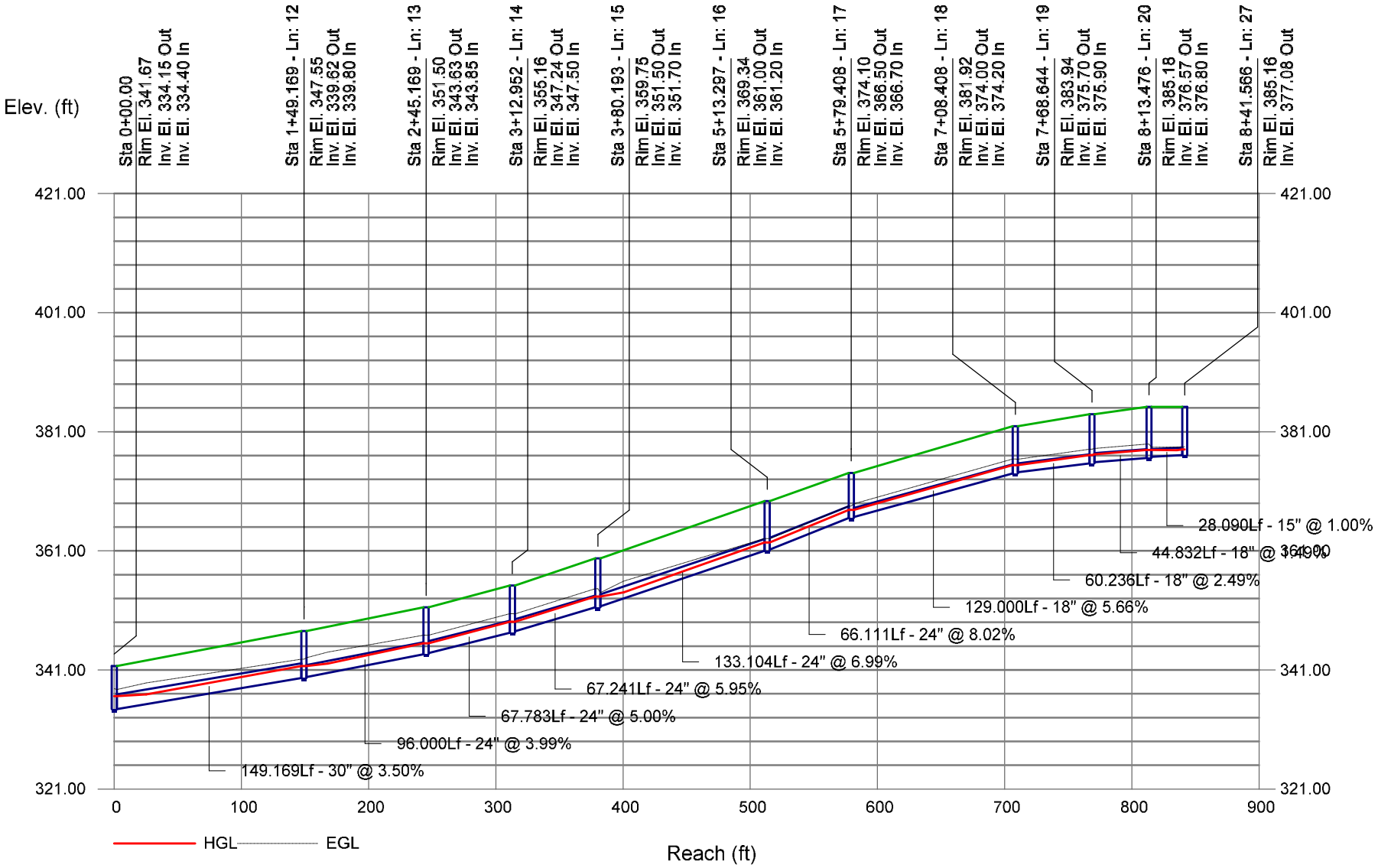
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 7-37 Proj. file: SCM 5A Storm Network.stm



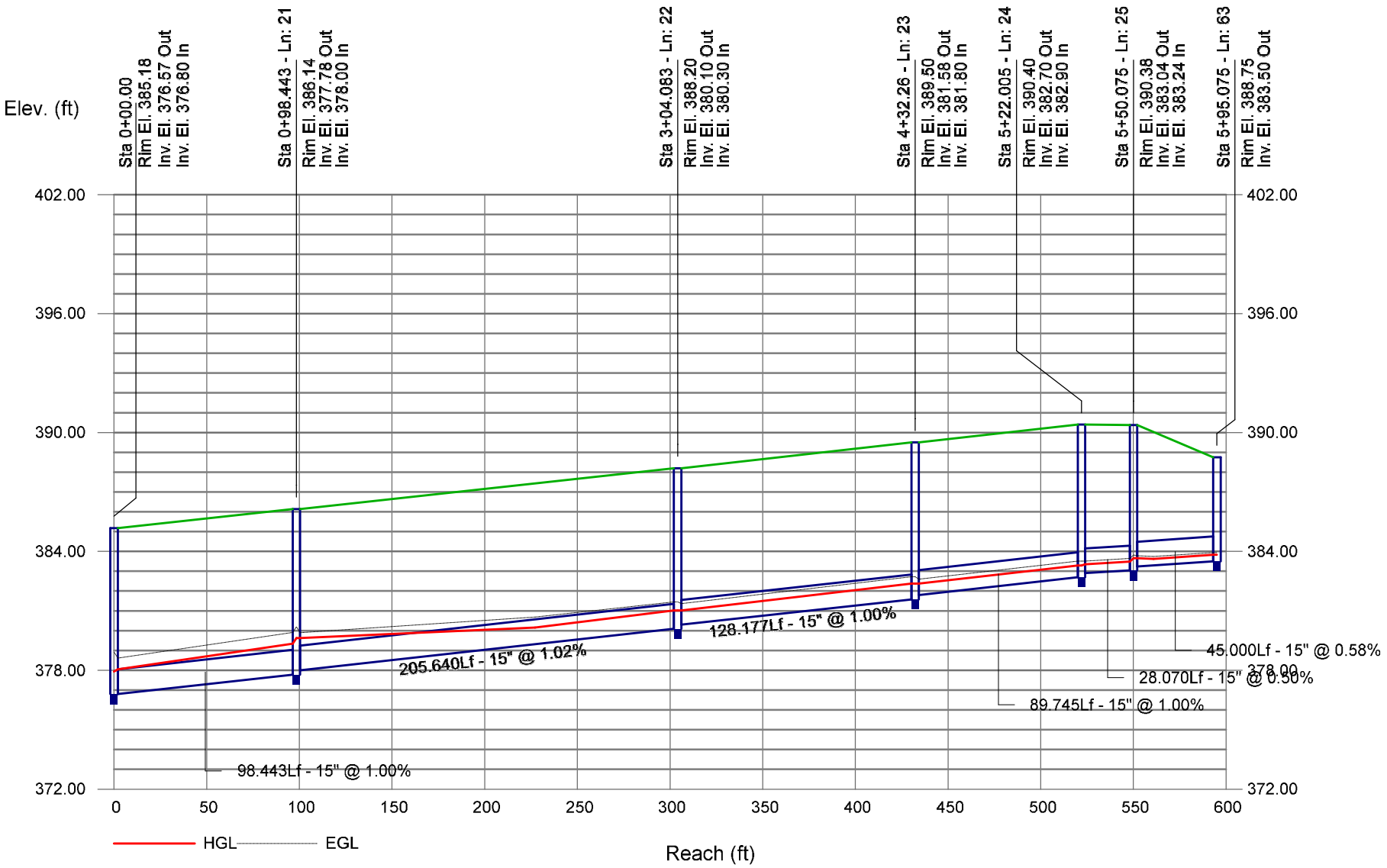
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 12-27 Proj. file: SCM 5A Storm Network.stm



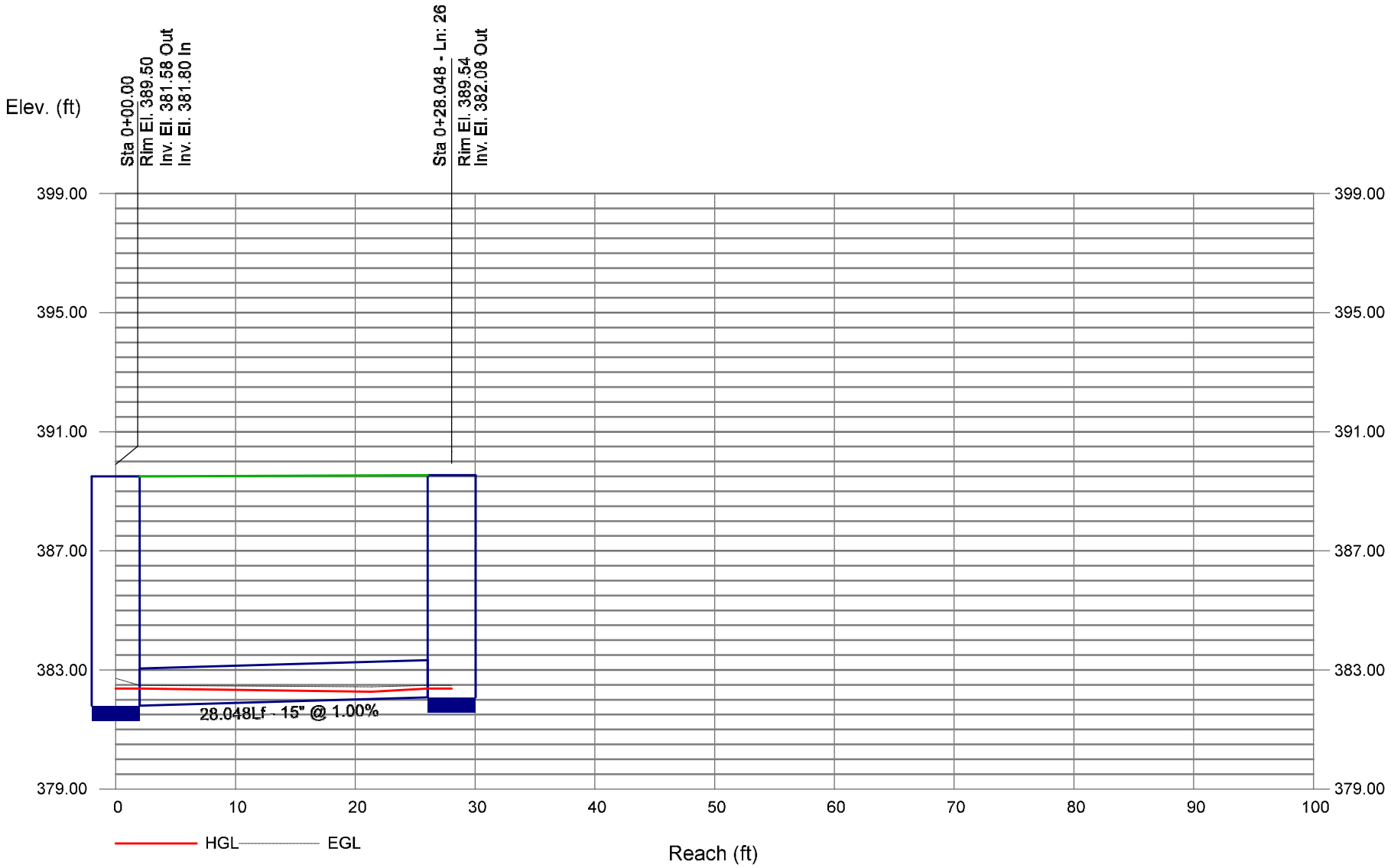
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 21-63 Proj. file: SCM 5A Storm Network.stm



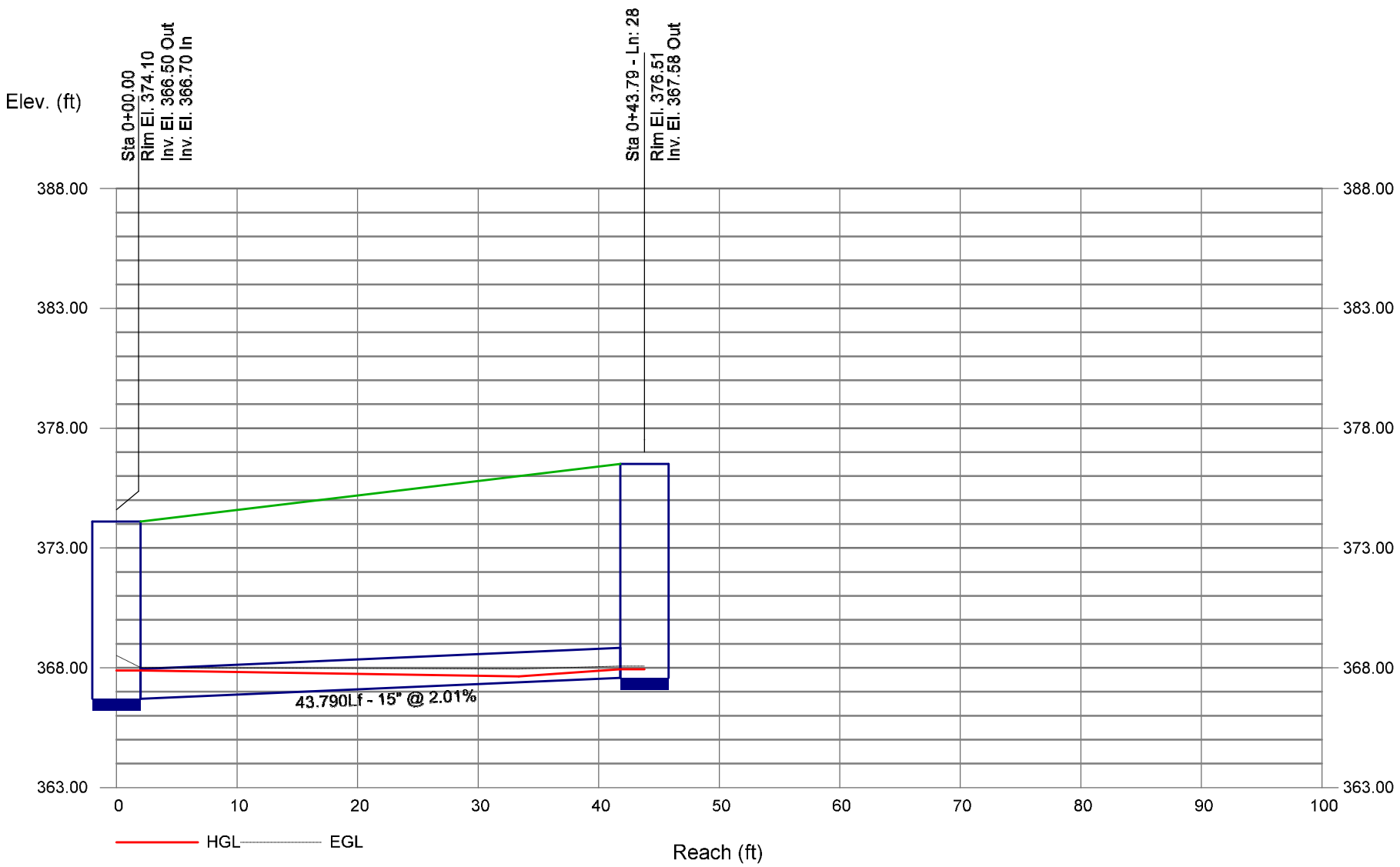
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 26-26 Proj. file: SCM 5A Storm Network.stm



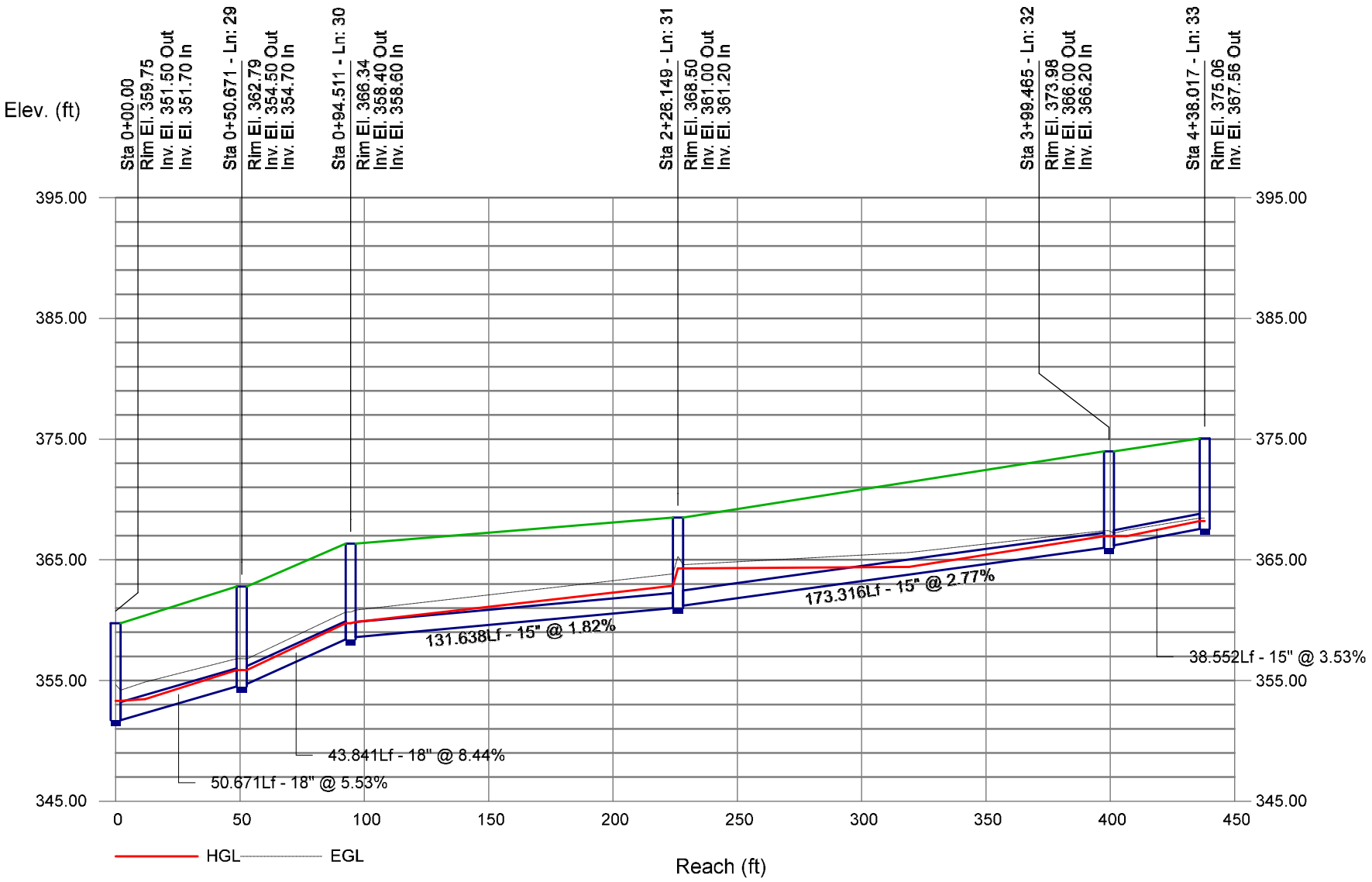
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 28-28 Proj. file: SCM 5A Storm Network.stm



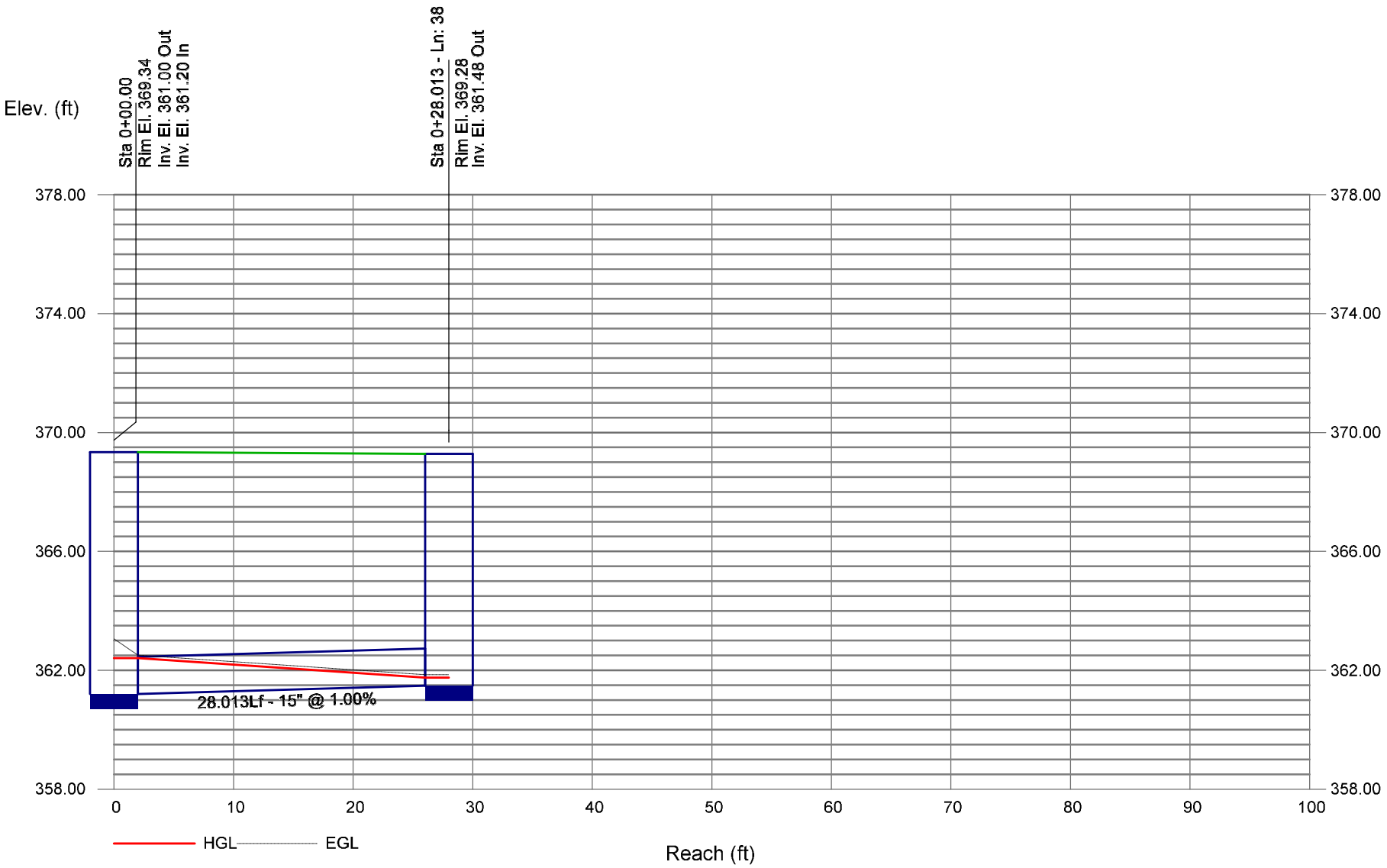
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 29-33 Proj. file: SCM 5A Storm Network.stm



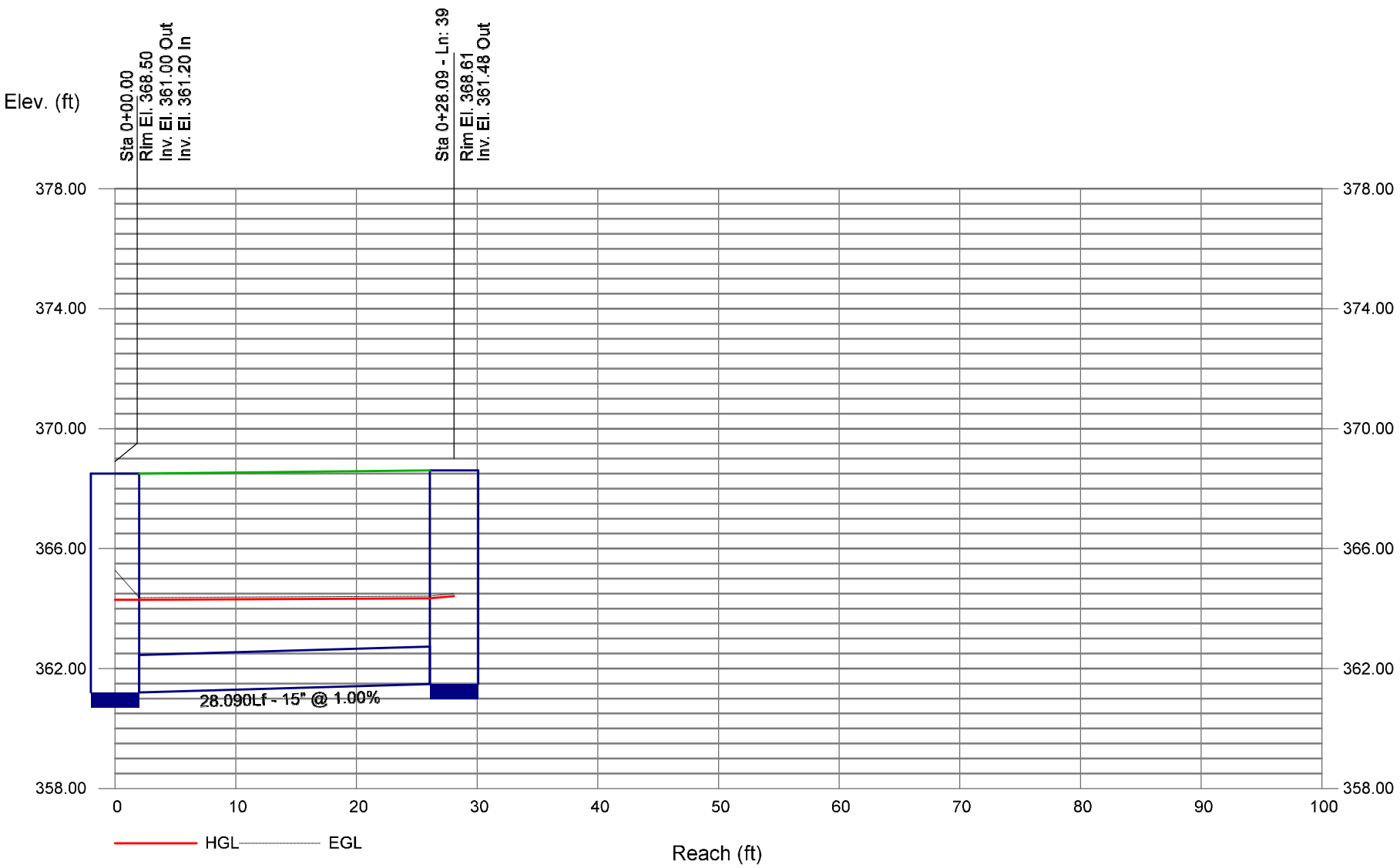
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 38-38 Proj. file: SCM 5A Storm Network.stm



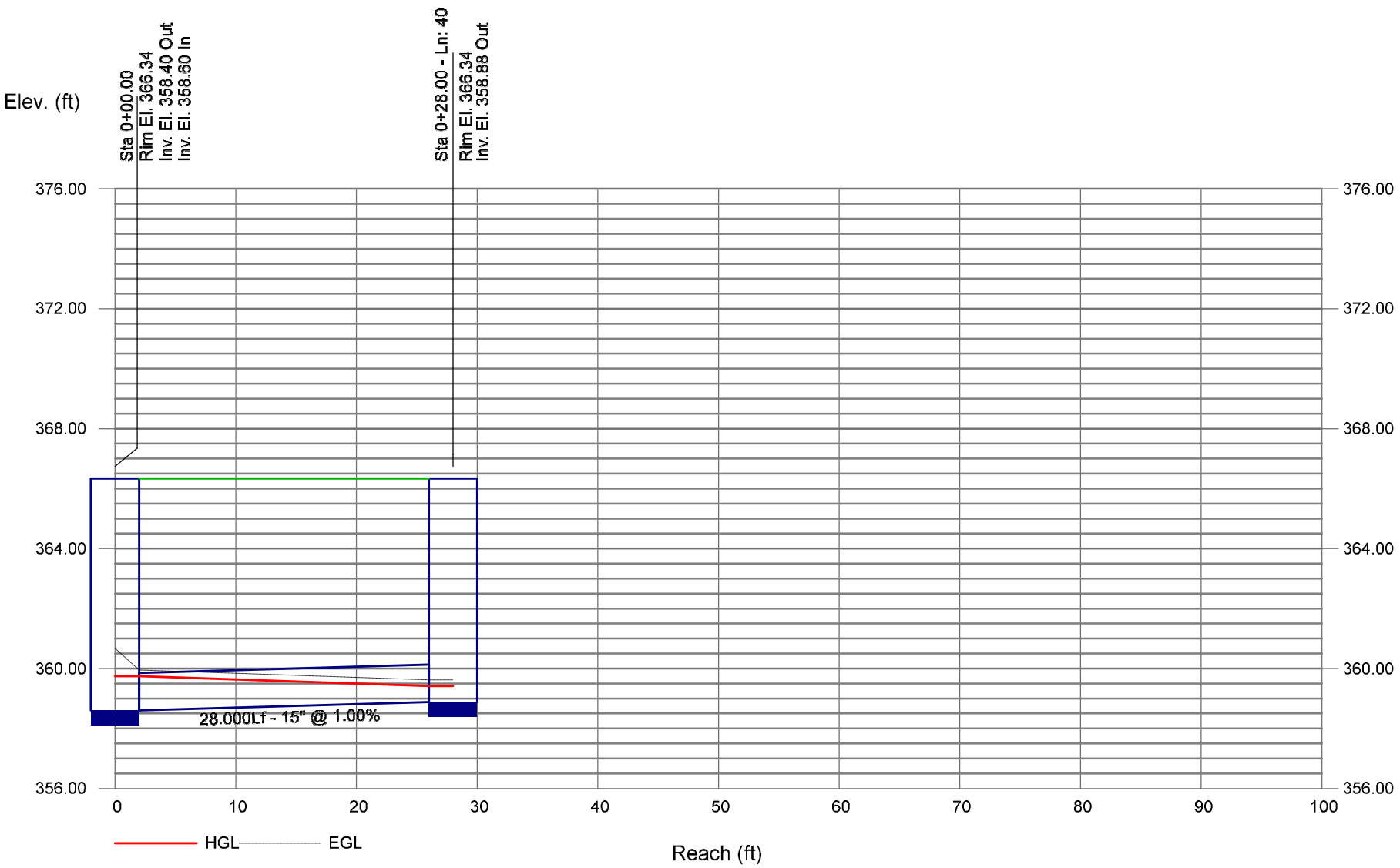
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 39-39 Proj. file: SCM 5A Storm Network.stm



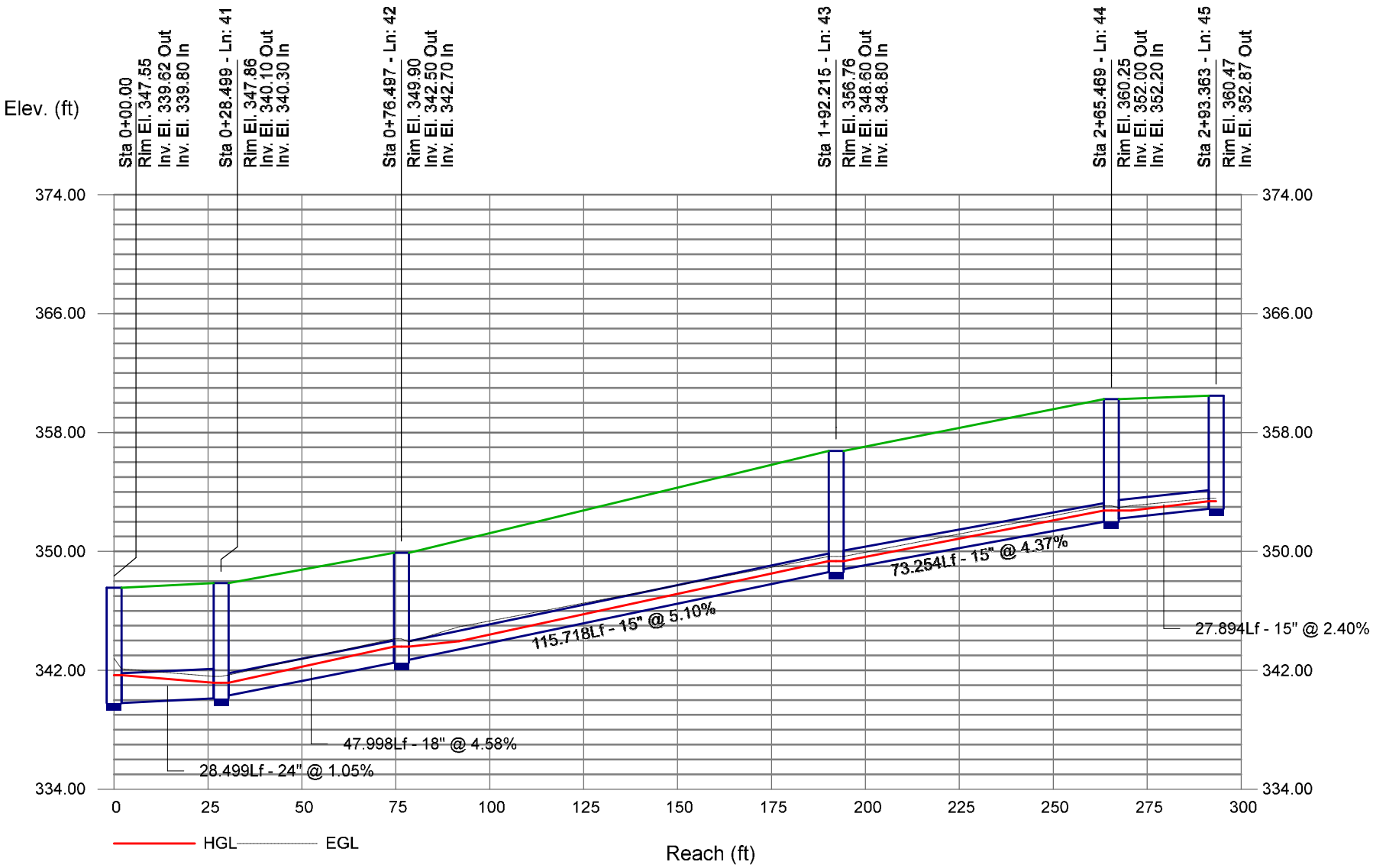
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 40-40 Proj. file: SCM 5A Storm Network.stm



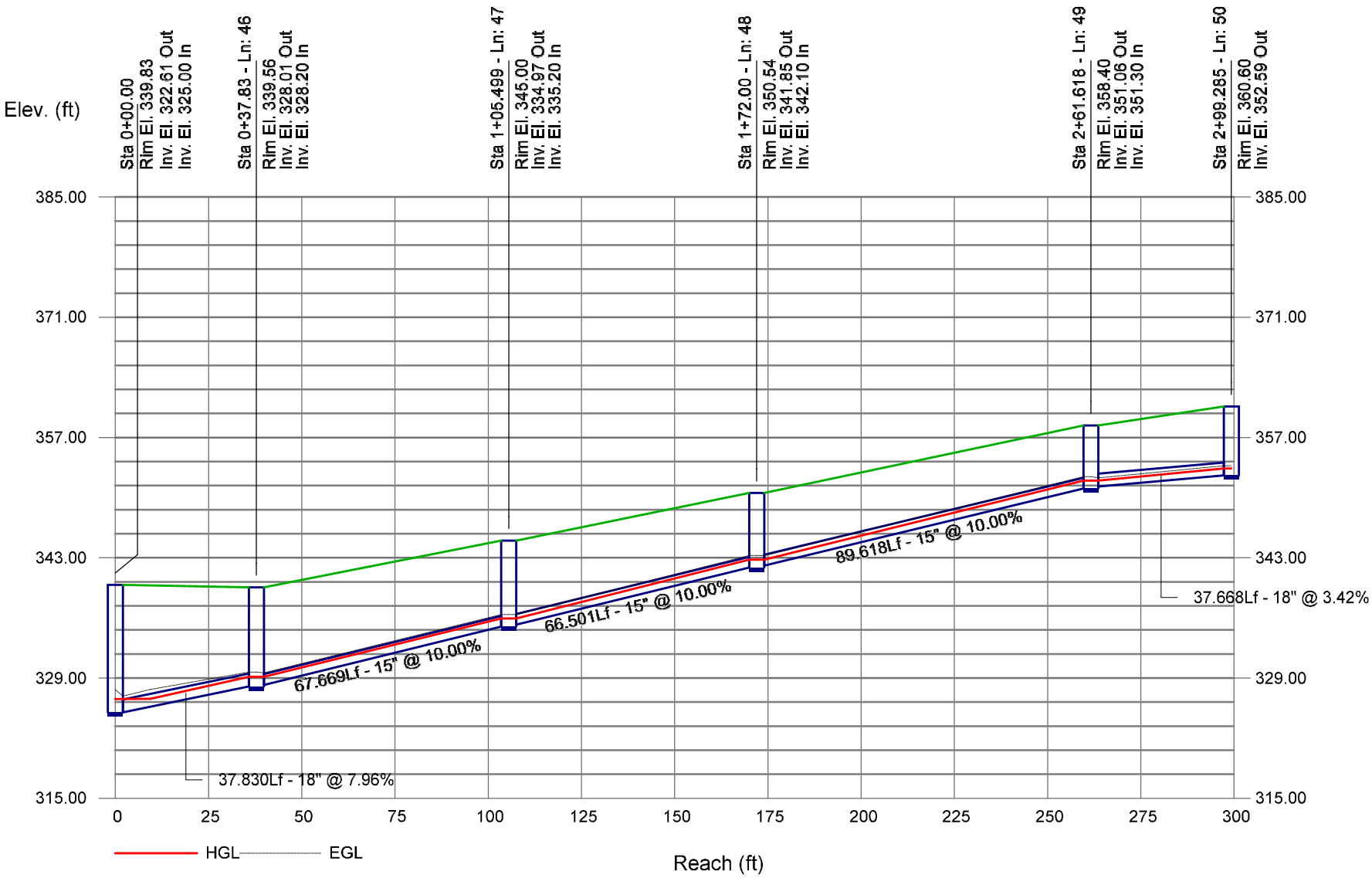
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 41-45 Proj. file: SCM 5A Storm Network.stm



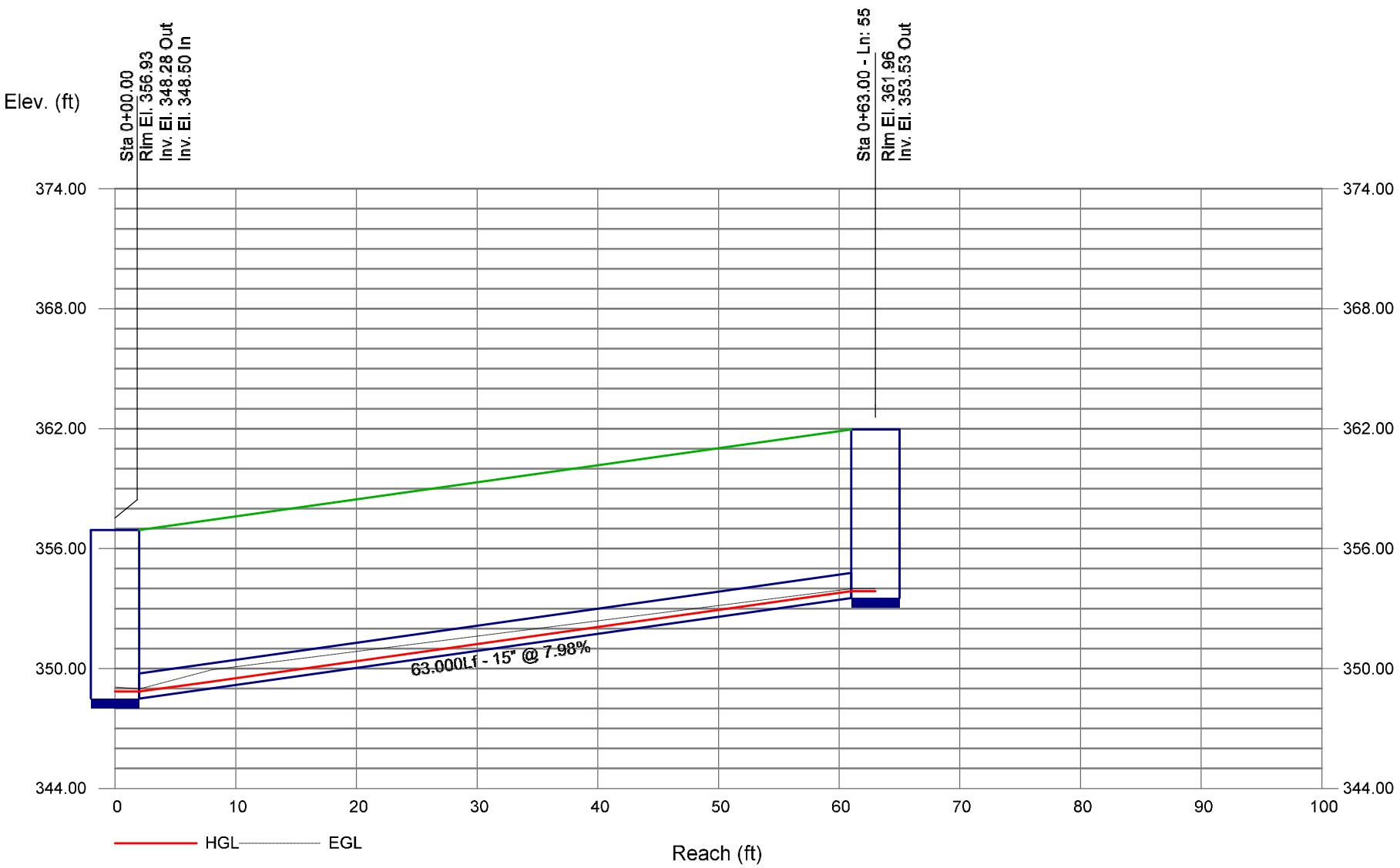
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 46-50 Proj. file: SCM 5A Storm Network.stm



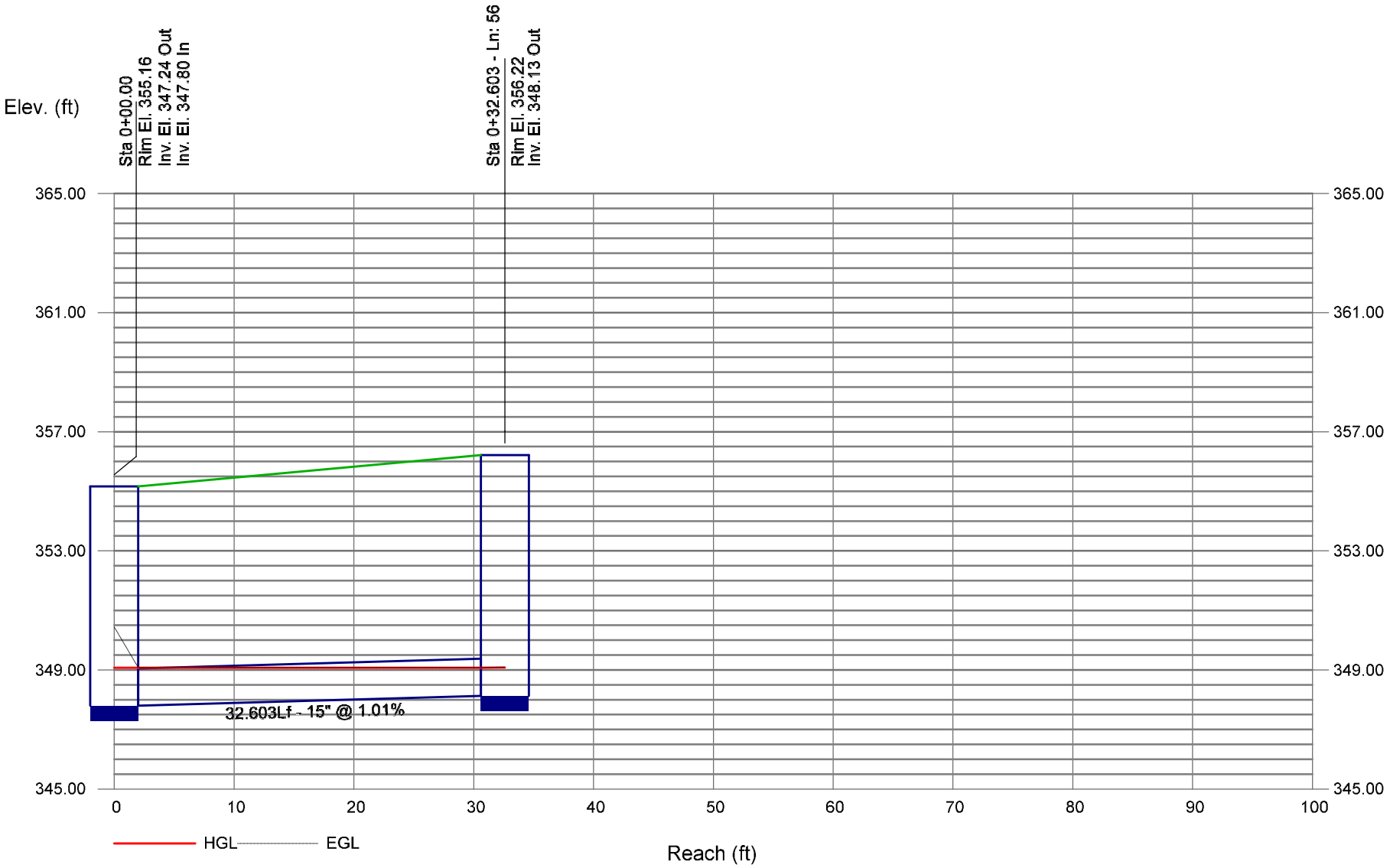
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 55-55 Proj. file: SCM 5A Storm Network.stm



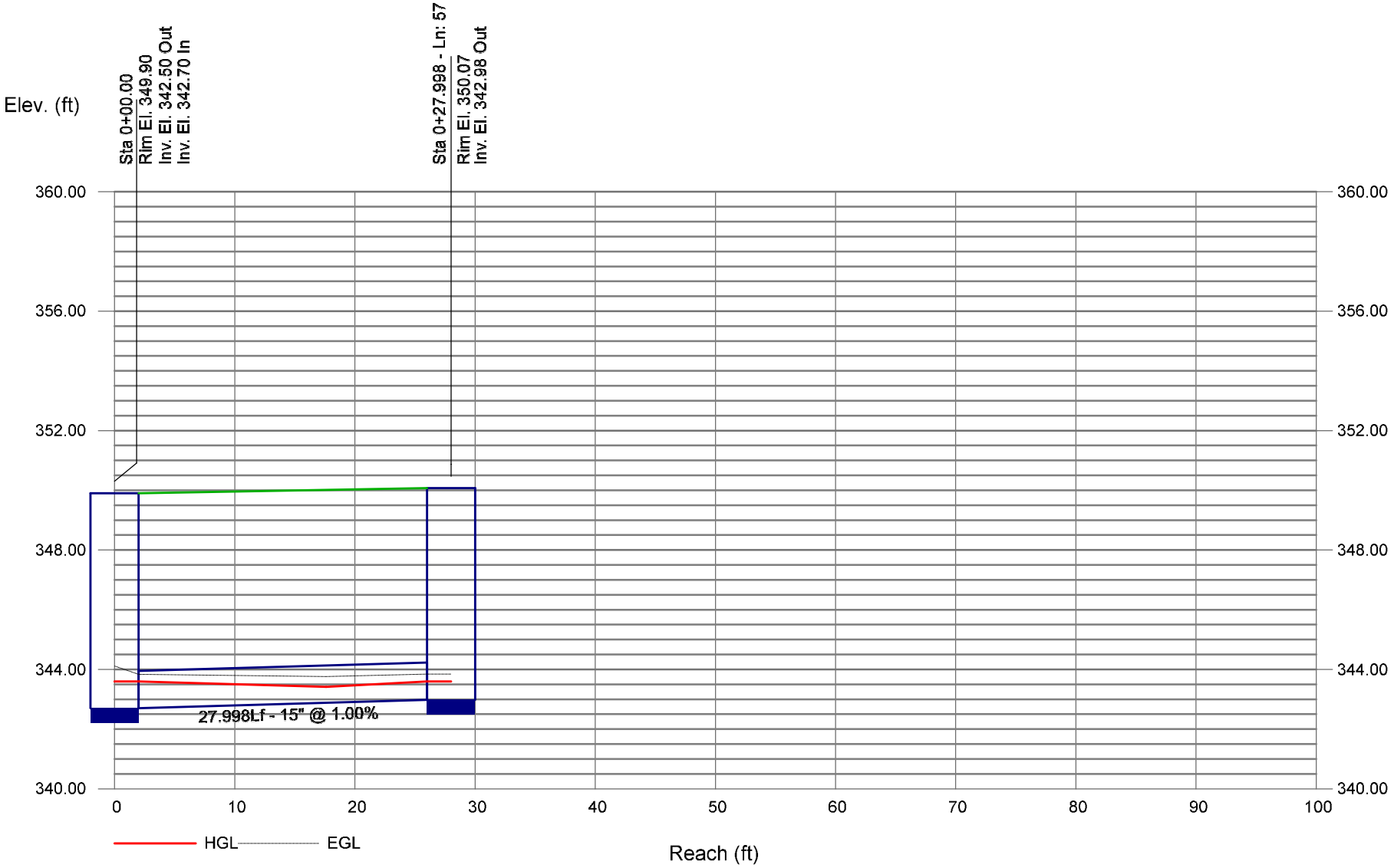
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 56-56 Proj. file: SCM 5A Storm Network.stm



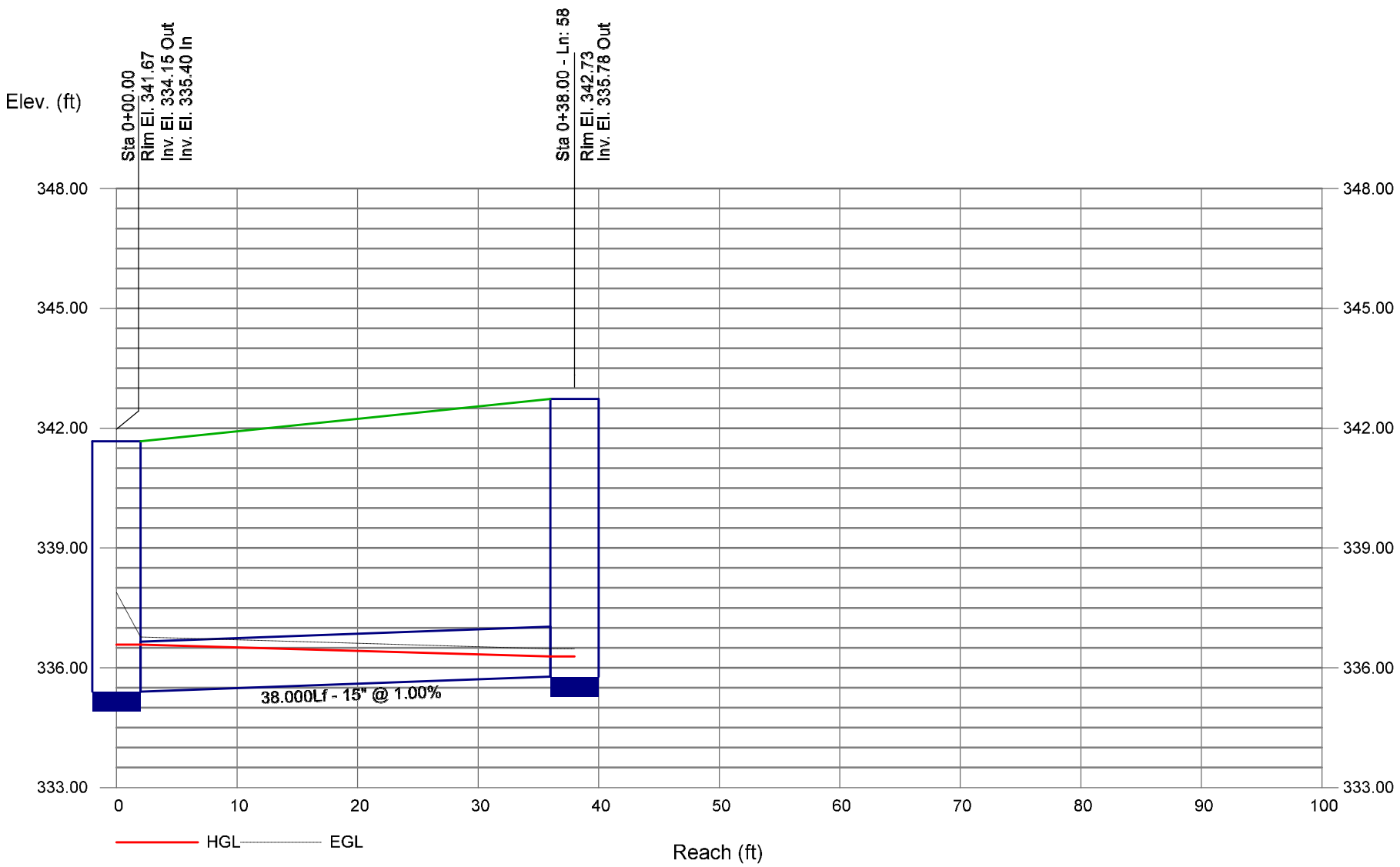
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 57-57 Proj. file: SCM 5A Storm Network.stm



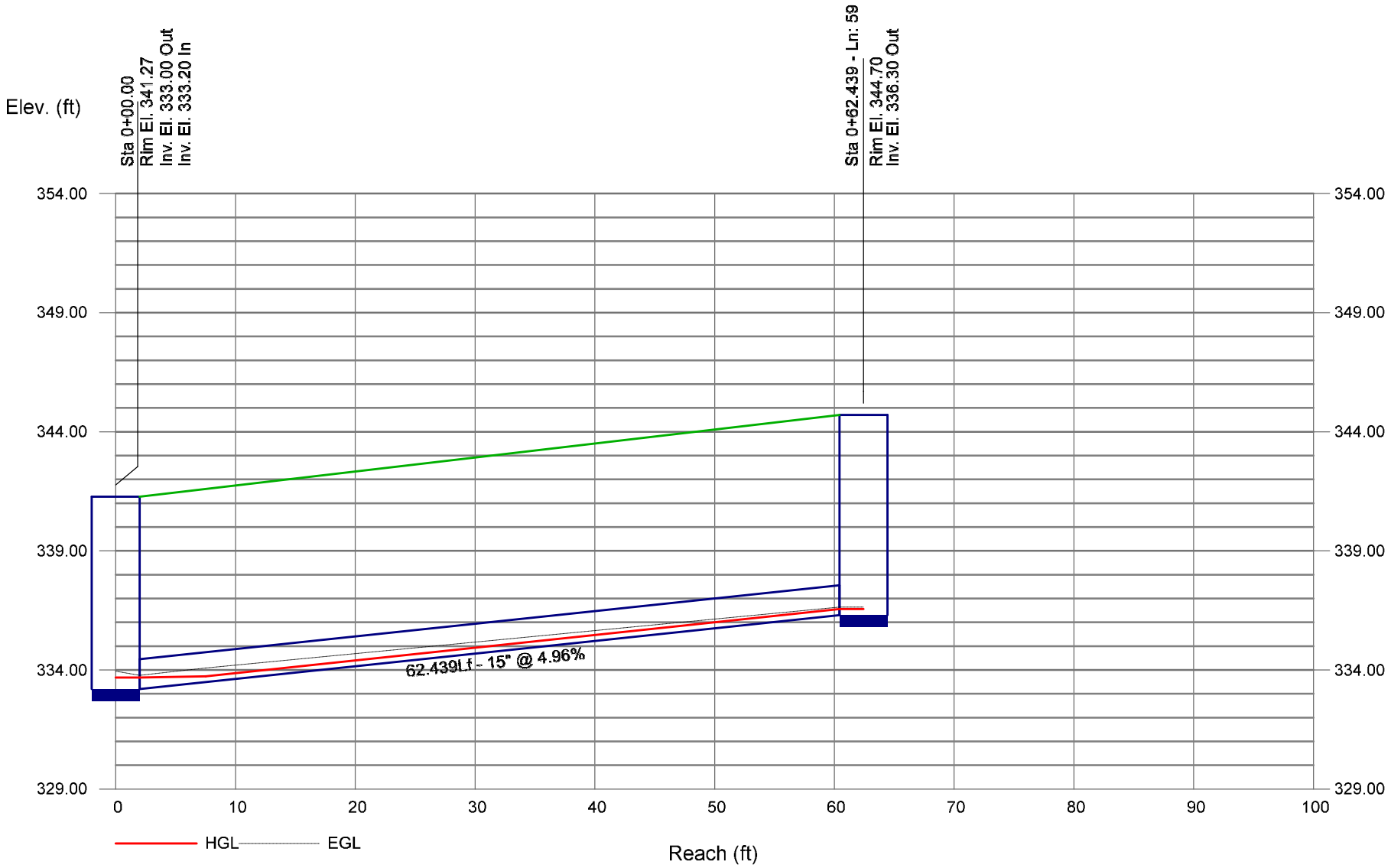
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 58-58 Proj. file: SCM 5A Storm Network.stm



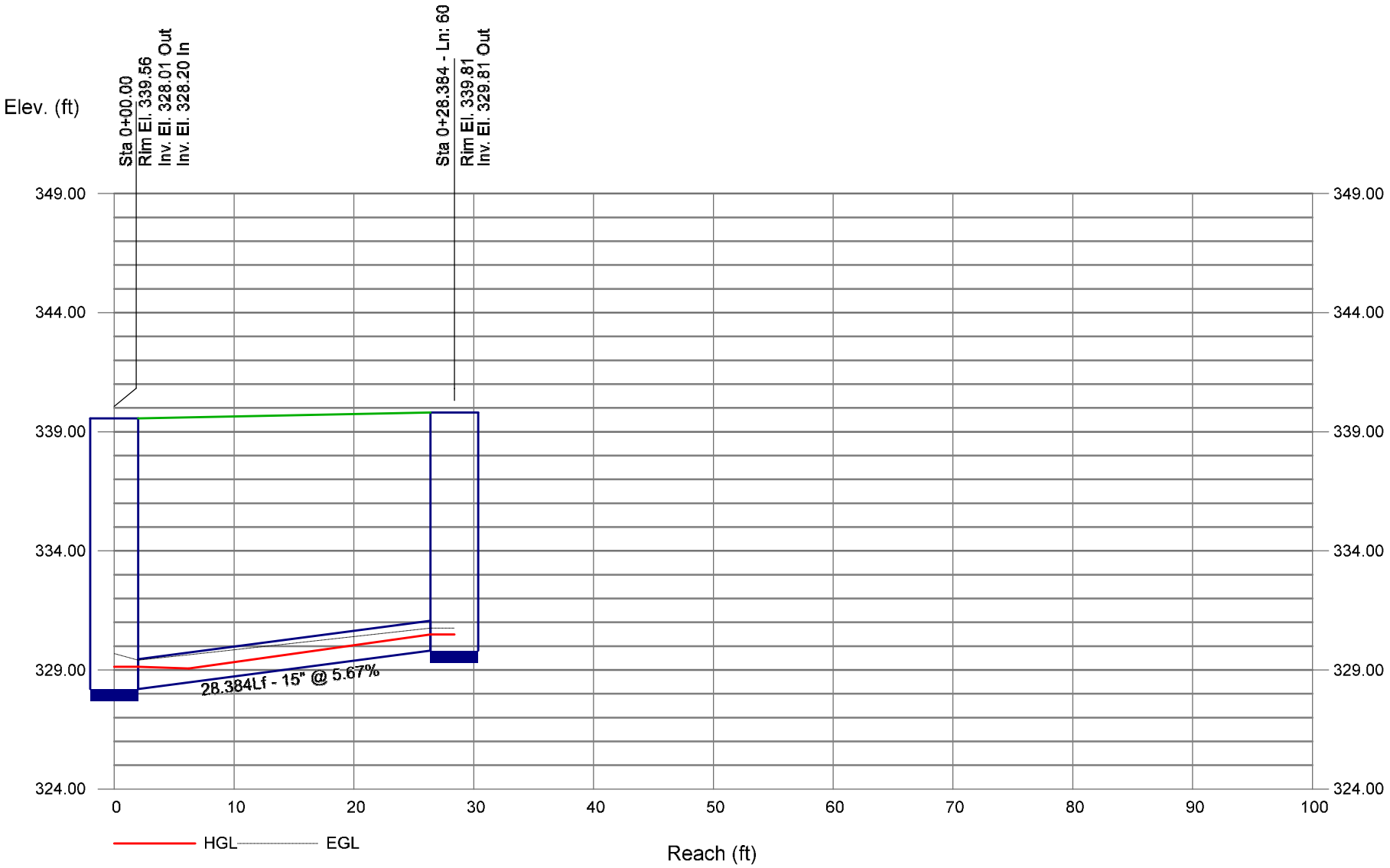
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 59-59 Proj. file: SCM 5A Storm Network.stm



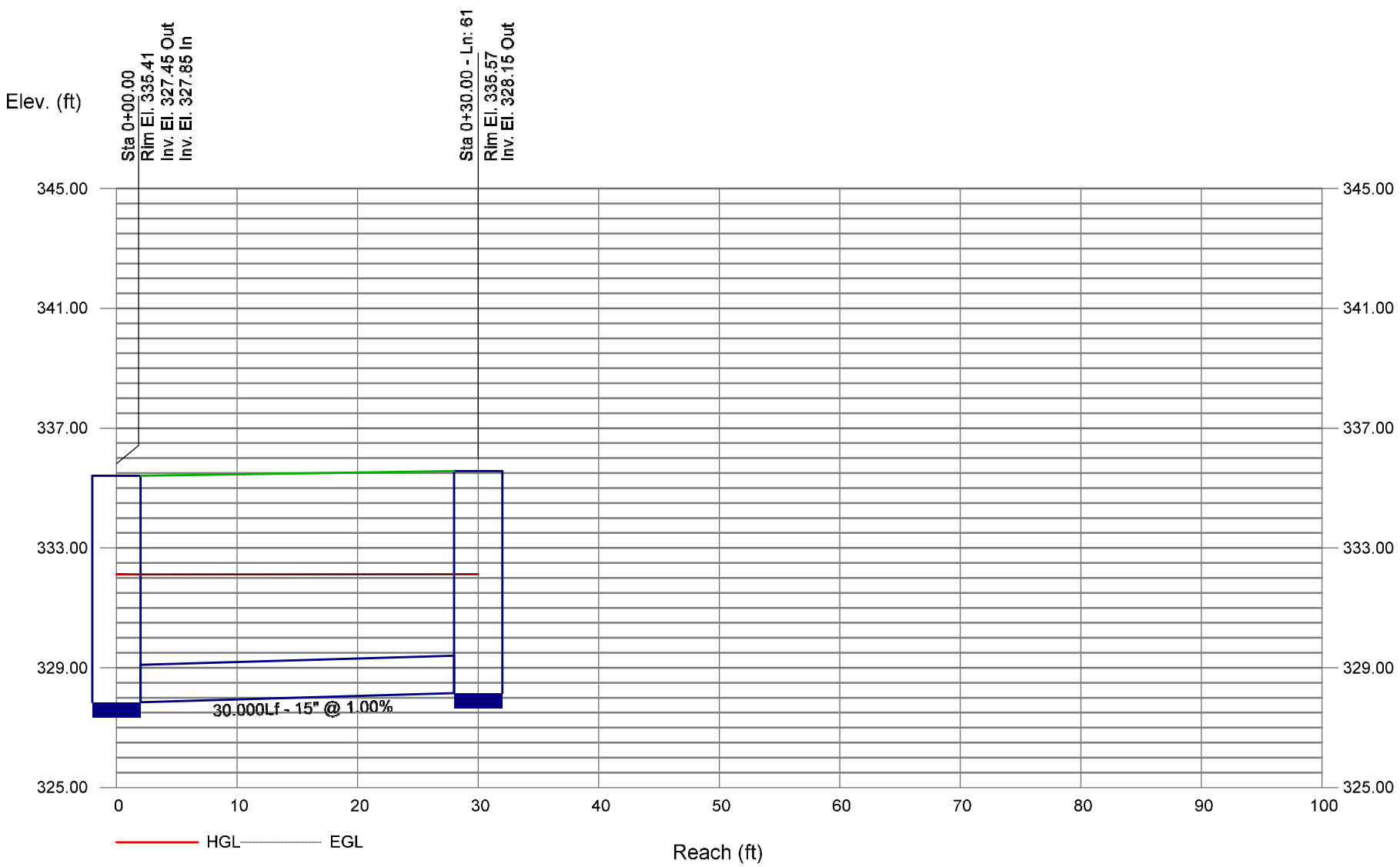
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 60-60 Proj. file: SCM 5A Storm Network.stm



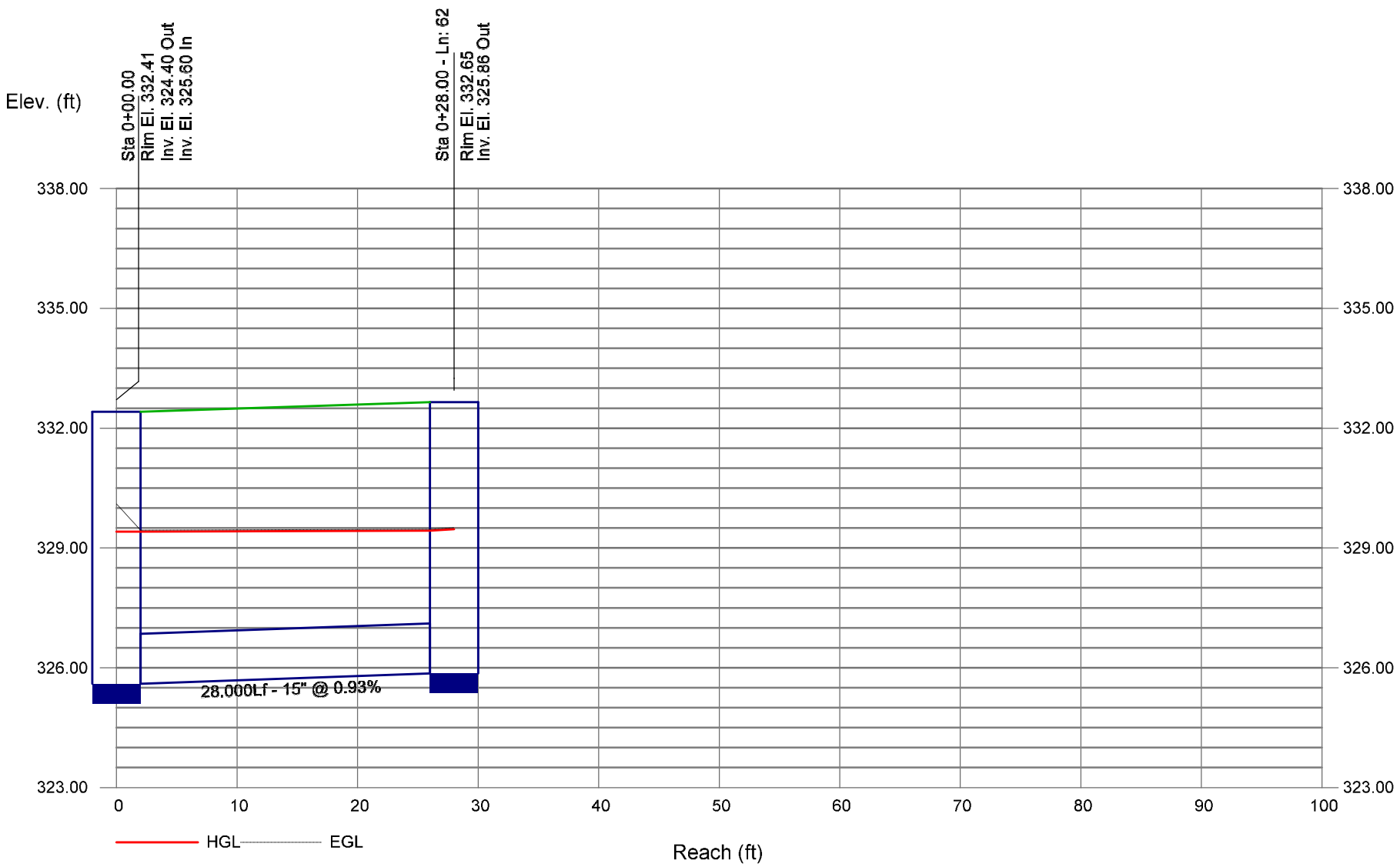
# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 61-61 Proj. file: SCM 5A Storm Network.stm

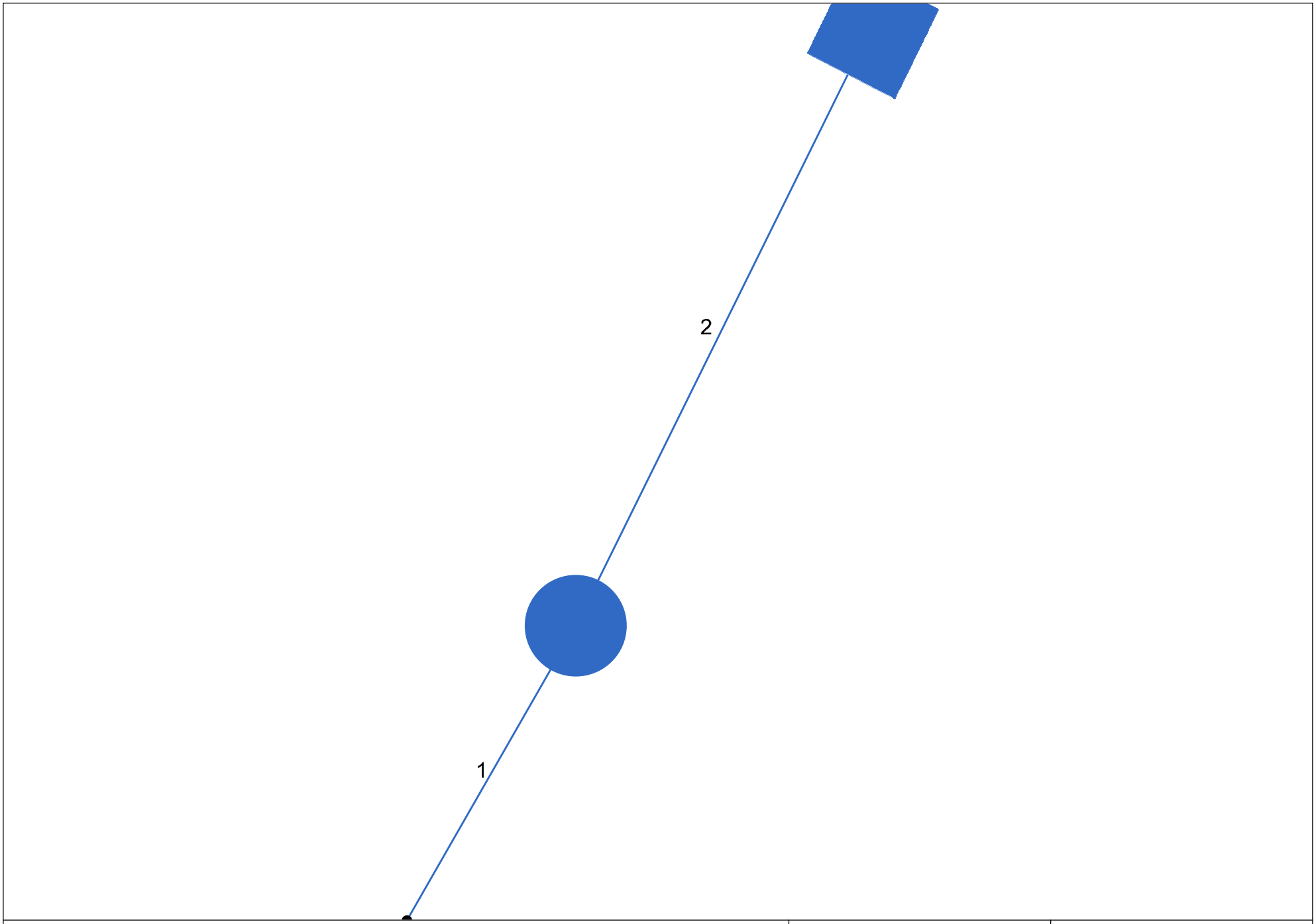


# Storm Sewer Profile

SCM 5A 25-YEAR PROFILE 62-62 Proj. file: SCM 5A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 5B 25-YEAR




| Project File: SCM 5B Storm Network.stm | Number of lines: 2 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 5B 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 13.497 | -60.670 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 315.00 | 7.41 | 316.00 | 18 | Cir | 0.013 | 0.15 | 332.61 | Pipe - (595) |
| 2 | 1 | 26.561 | -2.687 | Comb | 22.50 | 0.00 | 0.00 | 0.0 | 322.34 | 10.01 | 325.00 | 18 | Cir | 0.013 | 1.00 | 333.37 | Pipe - (594) |

Project File: SCM 5B Storm Network.stm

Number of lines: 2

Date: 4/11/2025

# Structure Report



SCM 5B 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | JB 551 | Manhole | 332.61 | Cir | 4.00 | 4.00 | 18 | Cir | 316.00 | 18 | Cir | 322.34 |
| 2 | CB 505 | Combination | 333.37 | Rect | 4.00 | 4.00 | 18 | Cir | 325.00 | | | |

Project File: SCM 5B Storm Network.stm | Number of Structures: 2 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 5B 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (595) | 22.50 | 18 | Cir | 13.497 | 315.00 | 316.00 | 7.409 | 316.47 | 317.48 | n/a | 317.48 | End | Manhole |
| 2 | Pipe - (594) | 22.50 | 18 | Cir | 26.561 | 322.34 | 325.00 | 10.015 | 323.24 | 326.48 | n/a | 326.48 | 1 | Combination |

Project File: SCM 5B Storm Network.stm

Number of lines: 2

Run Date: 4/11/2025

NOTES: Return period = 25 Yrs.

# Inlet Report



SCM 5B 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | JB 551 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 2.00 | 0.00 | 2.00 | 0.00 | 0.000 | 0.00 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 2 | CB 505 | 22.50* | 0.00 | 7.34 | 15.16 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.060 | 0.020 | 0.013 | 0.50 | 21.12 | 0.44 | 18.11 | 0.0 | Off |

Project File: SCM 5B Storm Network.stm | Number of lines: 2 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 5B 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 18 | 22.50 | 315.00 | 316.47 | 1.47 | 1.76 | 12.79 | 2.53 | 319.00 | 0.000 | 13.497 | 316.00 | 317.48 | 1.48** | 1.76 | 12.77 | 2.53 | 320.01 | 0.000 | 0.000 | n/a | 0.15 | n/a |
| 2 | 18 | 22.50 | 322.34 | 323.24 | 0.90* | 1.11 | 20.20 | 2.53 | 325.78 | 0.000 | 26.561 | 325.00 | 326.48 | 1.48** | 1.76 | 12.77 | 2.53 | 329.01 | 0.000 | 0.000 | n/a | 1.00 | n/a |

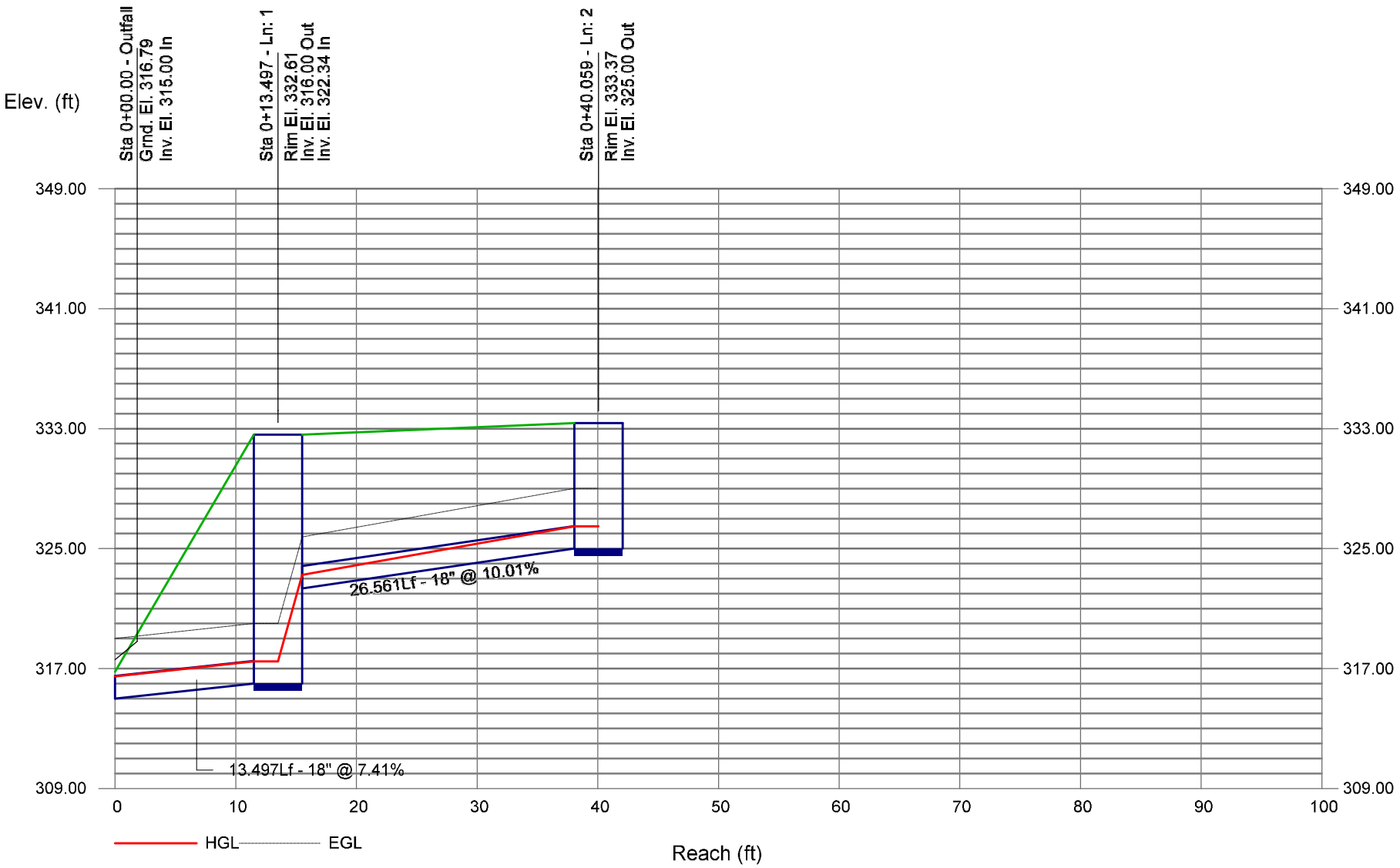
Project File: SCM 5B Storm Network.stm | Number of lines: 2 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth. ; c = cir e = ellip b = box

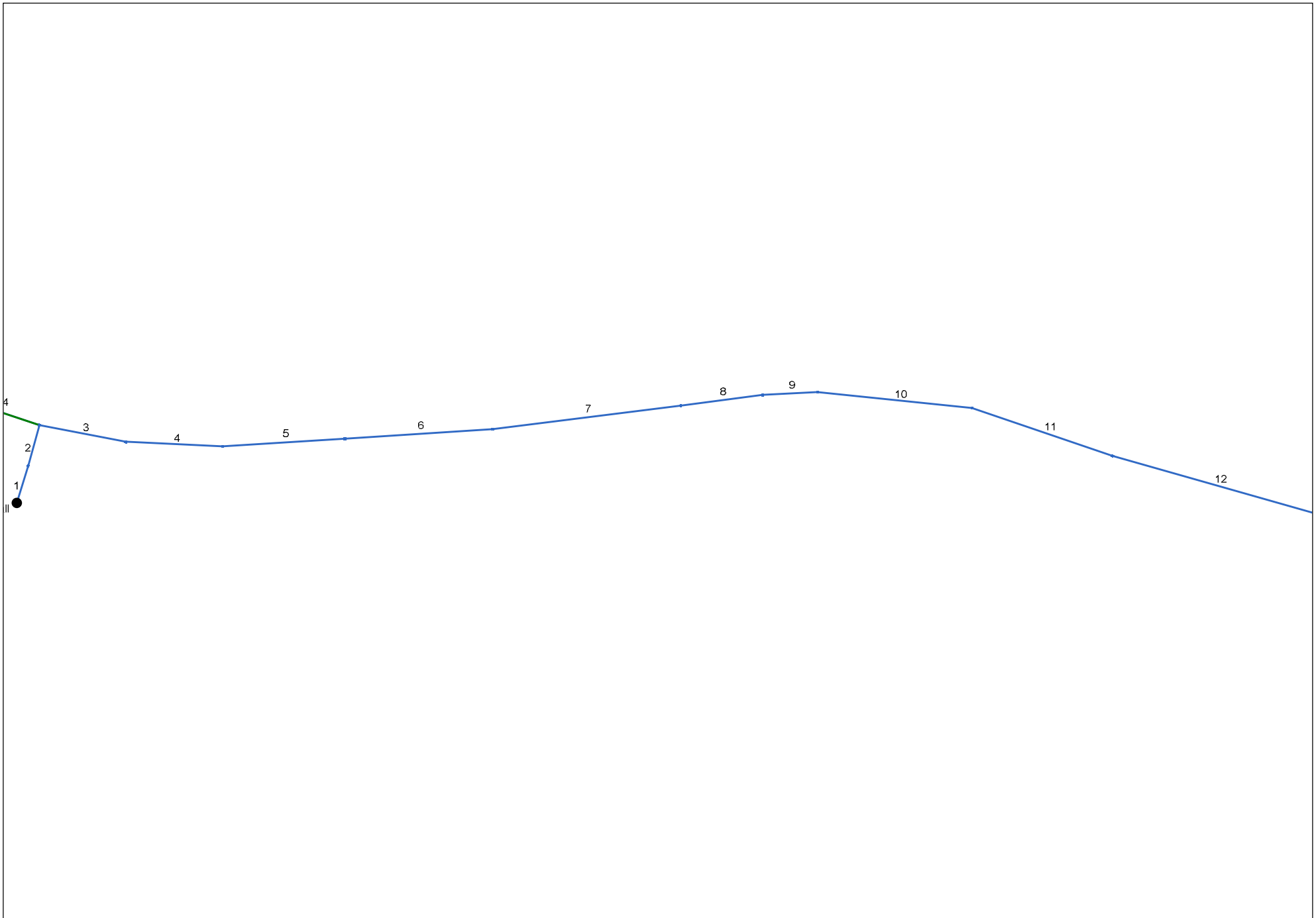
# Storm Sewer Profile

SCM 5B 25-YEAR PROFILE 1-2

Proj. file: SCM 5B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 5C 25-YEAR




| | | |
|---|---|---|
| Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Date: 4/11/2025 |

# Storm Sewer Inventory Report

SCM 5C 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 72.475 | -73.012 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 291.50 | 7.30 | 296.79 | 30 | Cir | 0.013 | 0.15 | 306.95 | Pipe - (547) |
| 2 | 1 | 79.000 | -1.713 | Comb | 0.00 | 0.64 | 0.72 | 10.0 | 300.71 | 1.00 | 301.50 | 30 | Cir | 0.013 | 1.50 | 313.00 | Pipe - (548) |
| 3 | 2 | 163.563 | 85.653 | Comb | 0.00 | 0.68 | 0.72 | 10.0 | 301.80 | 4.65 | 309.40 | 24 | Cir | 0.013 | 0.50 | 317.91 | Pipe - (550) |
| 4 | 3 | 180.720 | -8.188 | Comb | 0.00 | 1.04 | 0.72 | 10.0 | 309.62 | 4.75 | 318.20 | 24 | Cir | 0.013 | 0.50 | 326.00 | Pipe - (551) |
| 5 | 4 | 228.426 | -6.317 | Comb | 0.00 | 1.16 | 0.72 | 10.0 | 318.44 | 5.50 | 331.00 | 24 | Cir | 0.013 | 0.50 | 340.00 | Pipe - (552) |
| 6 | 5 | 275.660 | -0.168 | Comb | 0.00 | 1.34 | 0.72 | 10.0 | 332.20 | 5.30 | 346.80 | 24 | Cir | 0.013 | 0.50 | 355.00 | Pipe - (553) |
| 7 | 6 | 353.411 | -3.412 | Comb | 0.00 | 0.80 | 0.72 | 10.0 | 347.05 | 2.25 | 355.00 | 18 | Cir | 0.013 | 0.50 | 363.95 | Pipe - (554) |
| 8 | 7 | 153.914 | -0.315 | Comb | 0.00 | 0.27 | 0.72 | 10.0 | 355.22 | 2.00 | 358.30 | 15 | Cir | 0.013 | 0.50 | 366.74 | Pipe - (562) |
| 9 | 8 | 101.668 | 4.365 | Comb | 0.00 | 0.62 | 0.72 | 10.0 | 358.57 | 2.00 | 360.60 | 15 | Cir | 0.013 | 0.50 | 369.33 | Pipe - (561) |
| 10 | 9 | 289.580 | 9.059 | Comb | 0.00 | 0.70 | 0.72 | 10.0 | 360.86 | 3.50 | 371.00 | 15 | Cir | 0.013 | 0.50 | 379.86 | Pipe - (560) |
| 11 | 10 | 276.541 | 12.894 | Comb | 0.00 | 0.24 | 0.72 | 10.0 | 371.25 | 1.50 | 375.40 | 15 | Cir | 0.013 | 0.50 | 386.85 | Pipe - (559) |
| 12 | 11 | 389.260 | -2.936 | Comb | 0.00 | 0.27 | 0.72 | 10.0 | 375.65 | 0.50 | 377.60 | 15 | Cir | 0.013 | 1.29 | 386.53 | Pipe - (558) |
| 13 | 12 | 86.959 | 56.108 | Comb | 0.00 | 0.16 | 0.72 | 10.0 | 377.80 | 2.99 | 380.40 | 15 | Cir | 0.013 | 1.00 | 385.00 | Pipe - (557) |
| 14 | 2 | 176.320 | -86.677 | Comb | 0.00 | 0.24 | 0.72 | 10.0 | 301.80 | 1.03 | 303.62 | 18 | Cir | 0.013 | 1.00 | 311.00 | Pipe - (549) |

Project File: SCM 5C Storm Network.stm

Number of lines: 14

Date: 4/11/2025

# Structure Report



SCM 5C 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | JB 561 | Manhole | 306.95 | Rect | 4.00 | 4.00 | 30 | Cir | 296.79 | 30 | Cir | 300.71 |
| 2 | CB 562 | Combination | 313.00 | Rect | 4.00 | 4.00 | 30 | Cir | 301.50 | 24<br>18 | Cir<br>Cir | 301.80<br>301.80 |
| 3 | CB 563 | Combination | 317.91 | Rect | 4.00 | 4.00 | 24 | Cir | 309.40 | 24 | Cir | 309.62 |
| 4 | CB 564 | Combination | 326.00 | Rect | 4.00 | 4.00 | 24 | Cir | 318.20 | 24 | Cir | 318.44 |
| 5 | CB 565 | Combination | 340.00 | Rect | 4.00 | 4.00 | 24 | Cir | 331.00 | 24 | Cir | 332.20 |
| 6 | CB 566 | Combination | 355.00 | Rect | 4.00 | 4.00 | 24 | Cir | 346.80 | 18 | Cir | 347.05 |
| 7 | CB 567 | Combination | 363.95 | Rect | 4.00 | 4.00 | 18 | Cir | 355.00 | 15 | Cir | 355.22 |
| 8 | CB 568 | Combination | 366.74 | Rect | 4.00 | 4.00 | 15 | Cir | 358.30 | 15 | Cir | 358.57 |
| 9 | CB 569 | Combination | 369.33 | Rect | 4.00 | 4.00 | 15 | Cir | 360.60 | 15 | Cir | 360.86 |
| 10 | CB 570 | Combination | 379.86 | Rect | 4.00 | 4.00 | 15 | Cir | 371.00 | 15 | Cir | 371.25 |
| 11 | CB 571 | Combination | 386.85 | Rect | 4.00 | 4.00 | 15 | Cir | 375.40 | 15 | Cir | 375.65 |
| 12 | CB 572 | Combination | 386.53 | Rect | 4.00 | 4.00 | 15 | Cir | 377.60 | 15 | Cir | 377.80 |
| 13 | CB 572A | Combination | 385.00 | Rect | 4.00 | 4.00 | 15 | Cir | 380.40 | | | |
| 14 | CB 562A | Combination | 311.00 | Rect | 4.00 | 4.00 | 18 | Cir | 303.62 | | | |

Project File: SCM 5C Storm Network.stm | Number of Structures: 14 | Run Date: 4/11/2025

# Storm Sewer Summary Report



SCM 5C 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (547) | 30.50 | 30 | Cir | 72.475 | 291.50 | 296.79 | 7.299 | 294.00 | 298.67 | n/a | 298.67 j | End | Manhole |
| 2 | Pipe - (548) | 30.62 | 30 | Cir | 79.000 | 300.71 | 301.50 | 1.000 | 302.32 | 303.38 | n/a | 303.38 | 1 | Combination |
| 3 | Pipe - (550) | 27.51 | 24 | Cir | 163.563 | 301.80 | 309.40 | 4.647 | 303.38 | 311.22 | n/a | 311.22 | 2 | Combination |
| 4 | Pipe - (551) | 25.16 | 24 | Cir | 180.720 | 309.62 | 318.20 | 4.748 | 311.22 | 319.96 | 0.57 | 319.96 | 3 | Combination |
| 5 | Pipe - (552) | 21.46 | 24 | Cir | 228.426 | 318.44 | 331.00 | 5.498 | 319.96 | 332.66 | 0.46 | 332.66 | 4 | Combination |
| 6 | Pipe - (553) | 17.17 | 24 | Cir | 275.660 | 332.20 | 346.80 | 5.296 | 332.99 | 348.29 | n/a | 348.29 | 5 | Combination |
| 7 | Pipe - (554) | 12.20 | 18 | Cir | 353.411 | 347.05 | 355.00 | 2.250 | 348.29 | 356.32 | 0.43 | 356.32 | 6 | Combination |
| 8 | Pipe - (562) | 9.09 | 15 | Cir | 153.914 | 355.22 | 358.30 | 2.001 | 356.32 | 359.46 | 0.46 | 359.46 | 7 | Combination |
| 9 | Pipe - (561) | 8.05 | 15 | Cir | 101.668 | 358.57 | 360.60 | 1.997 | 359.48 | 361.72 | n/a | 361.72 | 8 | Combination |
| 10 | Pipe - (560) | 5.67 | 15 | Cir | 289.580 | 360.86 | 371.00 | 3.502 | 361.72 | 371.96 | 0.24 | 371.96 | 9 | Combination |
| 11 | Pipe - (559) | 2.86 | 15 | Cir | 276.541 | 371.25 | 375.40 | 1.501 | 371.96 | 376.08 | n/a | 376.08 j | 10 | Combination |
| 12 | Pipe - (558) | 1.94 | 15 | Cir | 389.260 | 375.65 | 377.60 | 0.500 | 376.22 | 378.17 | 0.25 | 378.42 | 11 | Combination |
| 13 | Pipe - (557) | 0.74 | 15 | Cir | 86.959 | 377.80 | 380.40 | 2.995 | 378.42 | 380.74 | n/a | 380.74 j | 12 | Combination |
| 14 | Pipe - (549) | 1.12 | 18 | Cir | 176.320 | 301.80 | 303.62 | 1.032 | 303.38 | 304.01 | n/a | 304.01 j | 2 | Combination |

Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; j - Line contains hyd. jump.

# Inlet Report



SCM 5C 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | JB 561 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 2 | CB 562 | 2.98 | 3.55 | 3.45 | 3.08 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.30 | 11.25 | 0.24 | 8.14 | 0.0 | 14 |
| 3 | CB 563 | 3.17 | 4.34 | 3.95 | 3.55 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.30 | 10.95 | 0.24 | 7.92 | 0.0 | 2 |
| 4 | CB 564 | 4.84 | 4.09 | 4.59 | 4.34 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.30 | 11.09 | 0.24 | 8.12 | 0.0 | 3 |
| 5 | CB 565 | 5.40 | 3.57 | 4.88 | 4.09 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.060 | 2.00 | 0.060 | 0.020 | 0.013 | 0.28 | 10.20 | 0.22 | 7.20 | 0.0 | 4 |
| 6 | CB 566 | 6.24 | 1.52 | 4.19 | 3.57 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.29 | 10.46 | 0.23 | 7.42 | 0.0 | 5 |
| 7 | CB 567 | 3.72 | 0.68 | 2.88 | 1.52 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.18 | 0.18 | 4.79 | 0.0 | 6 |
| 8 | CB 568 | 1.26 | 1.37 | 1.95 | 0.68 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.88 | 0.14 | 3.06 | 0.0 | 7 |
| 9 | CB 569 | 2.89 | 1.06 | 2.58 | 1.37 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.25 | 8.31 | 0.18 | 4.90 | 0.0 | 8 |
| 10 | CB 570 | 3.26 | 0.13 | 2.32 | 1.06 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.030 | 2.00 | 0.060 | 0.020 | 0.013 | 0.23 | 7.75 | 0.16 | 4.21 | 0.0 | 9 |
| 11 | CB 571 | 1.12 | 0.00 | 0.99 | 0.13 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 4.90 | 0.08 | 1.37 | 0.0 | 10 |
| 12 | CB 572 | 1.25 | 0.00 | 1.08 | 0.17 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.21 | 0.09 | 1.52 | 0.0 | Off |
| 13 | CB 572A | 0.74 | 0.00 | 0.70 | 0.03 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.78 | 0.05 | 0.84 | 0.0 | Off |
| 14 | CB 562A | 1.12 | 3.08 | 4.20 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.37 | 14.63 | 0.37 | 14.63 | 0.0 | Off |

Project File: SCM 5C Storm Network.stm

Number of lines: 14

Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 5C 25-YEAR

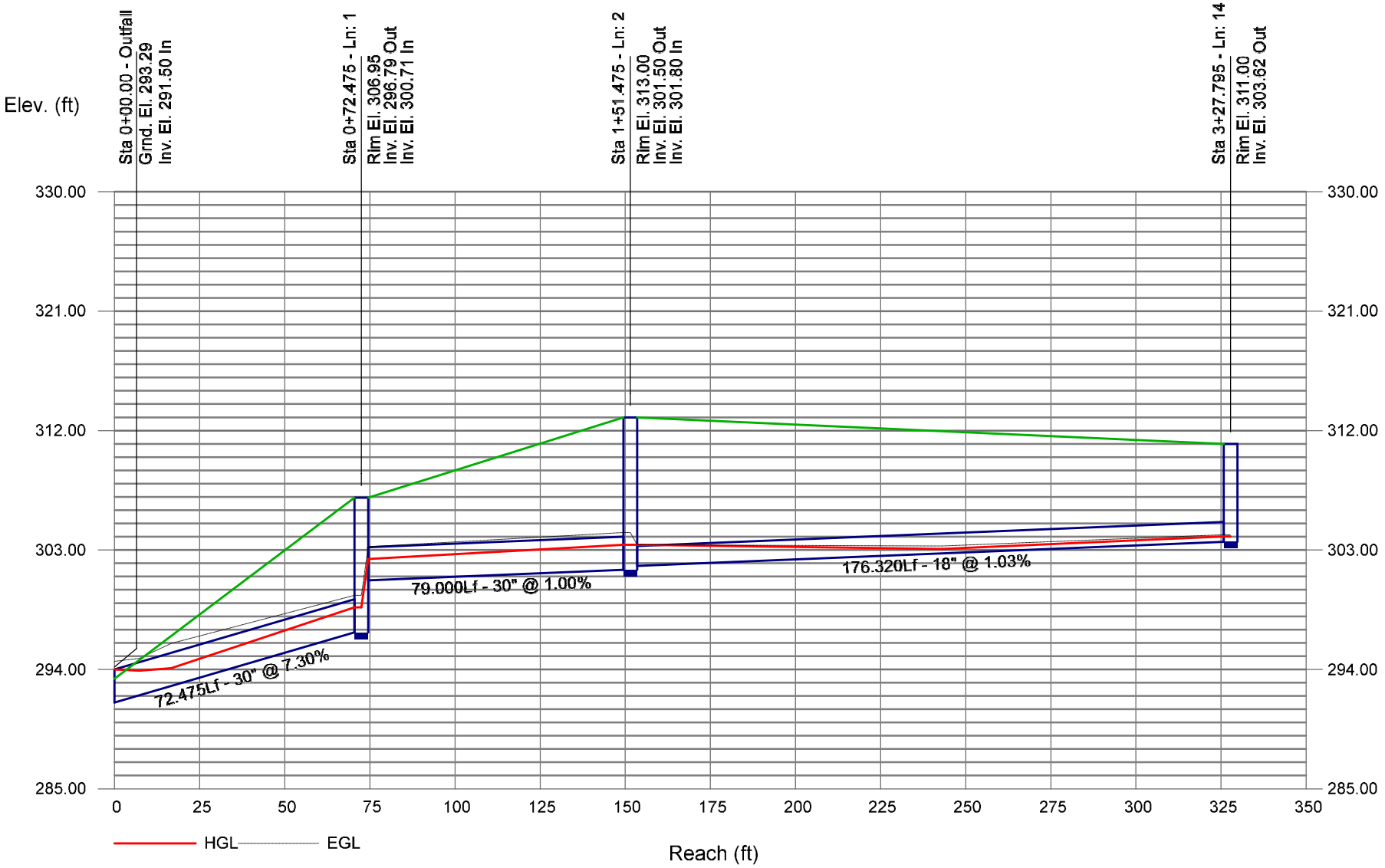
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (in) | (cfs) | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | (ft) | Invert elev (ft) | HGL elev (ft) | Depth (ft) | Area (sqft) | Vel (ft/s) | Vel head (ft) | EGL elev (ft) | Sf (%) | Ave Sf (%) | Enrgy loss (ft) | (K) | (ft) |
| 1 | 30 | 30.50 | 291.50 | 294.00 | 2.50 | 3.96 | 6.21 | 0.60 | 294.60 | 0.553 | 72.475 | 296.79 | 298.67 j | 1.88** | 3.96 | 7.70 | 0.92 | 299.59 | 0.660 | 0.607 | n/a | 0.15 | 0.14 |
| 2 | 30 | 30.62 | 300.71 | 302.32 | 1.61* | 3.34 | 9.16 | 0.93 | 303.25 | 0.000 | 79.000 | 301.50 | 303.38 | 1.88** | 3.97 | 7.71 | 0.93 | 304.31 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 3 | 24 | 27.51 | 301.80 | 303.38 | 1.58 | 2.67 | 10.31 | 1.31 | 304.69 | 0.000 | 163.563 | 309.40 | 311.22 | 1.82** | 3.00 | 9.17 | 1.31 | 312.53 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 4 | 24 | 25.16 | 309.62 | 311.22 | 1.60 | 2.69 | 9.35 | 1.14 | 312.36 | 0.000 | 180.720 | 318.20 | 319.96 | 1.76** | 2.93 | 8.57 | 1.14 | 321.11 | 0.000 | 0.000 | n/a | 0.50 | 0.57 |
| 5 | 24 | 21.46 | 318.44 | 319.96 | 1.52 | 2.57 | 8.35 | 0.93 | 320.89 | 0.000 | 228.426 | 331.00 | 332.66 | 1.66** | 2.78 | 7.71 | 0.93 | 333.58 | 0.000 | 0.000 | n/a | 0.50 | 0.46 |
| 6 | 24 | 17.17 | 332.20 | 332.99 | 0.79* | 1.16 | 14.85 | 0.73 | 333.72 | 0.000 | 275.660 | 346.80 | 348.29 | 1.49** | 2.51 | 6.83 | 0.73 | 349.02 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 7 | 18 | 12.20 | 347.05 | 348.29 | 1.24 | 1.56 | 7.79 | 0.85 | 349.14 | 0.000 | 353.411 | 355.00 | 356.32 | 1.32** | 1.65 | 7.40 | 0.85 | 357.17 | 0.000 | 0.000 | n/a | 0.50 | 0.43 |
| 8 | 15 | 9.09 | 355.22 | 356.32 | 1.10 | 1.14 | 7.94 | 0.91 | 357.23 | 0.000 | 153.914 | 358.30 | 359.46 | 1.16** | 1.19 | 7.66 | 0.91 | 360.37 | 0.000 | 0.000 | n/a | 0.50 | 0.46 |
| 9 | 15 | 8.05 | 358.57 | 359.48 | 0.91* | 0.96 | 8.39 | 0.75 | 360.23 | 0.000 | 101.668 | 360.60 | 361.72 | 1.12** | 1.16 | 6.96 | 0.75 | 362.47 | 0.000 | 0.000 | n/a | 0.50 | n/a |
| 10 | 15 | 5.67 | 360.86 | 361.72 | 0.86 | 0.90 | 6.32 | 0.48 | 362.20 | 0.000 | 289.580 | 371.00 | 371.96 | 0.96** | 1.01 | 5.58 | 0.48 | 372.45 | 0.000 | 0.000 | n/a | 0.50 | 0.24 |
| 11 | 15 | 2.86 | 371.25 | 371.96 | 0.71 | 0.68 | 3.95 | 0.27 | 372.24 | 0.000 | 276.541 | 375.40 | 376.08 j | 0.68** | 0.68 | 4.20 | 0.27 | 376.35 | 0.000 | 0.000 | n/a | 0.50 | 0.14 |
| 12 | 15 | 1.94 | 375.65 | 376.22 | 0.57* | 0.54 | 3.57 | 0.20 | 376.42 | 0.499 | 389.260 | 377.60 | 378.17 | 0.57 | 0.54 | 3.56 | 0.20 | 378.37 | 0.498 | 0.499 | 1.941 | 1.29 | 0.25 |
| 13 | 15 | 0.74 | 377.80 | 378.42 | 0.62 | 0.27 | 1.21 | 0.12 | 378.54 | 0.000 | 86.959 | 380.40 | 380.74 j | 0.34** | 0.27 | 2.78 | 0.12 | 380.86 | 0.000 | 0.000 | n/a | 1.00 | 0.12 |
| 14 | 18 | 1.12 | 301.80 | 303.38 | 1.50 | 0.37 | 0.63 | 0.01 | 303.39 | 0.011 | 176.320 | 303.62 | 304.01 j | 0.39** | 0.37 | 3.01 | 0.14 | 304.16 | 0.494 | 0.252 | n/a | 1.00 | 0.14 |

Project File: SCM 5C Storm Network.stm | Number of lines: 14 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

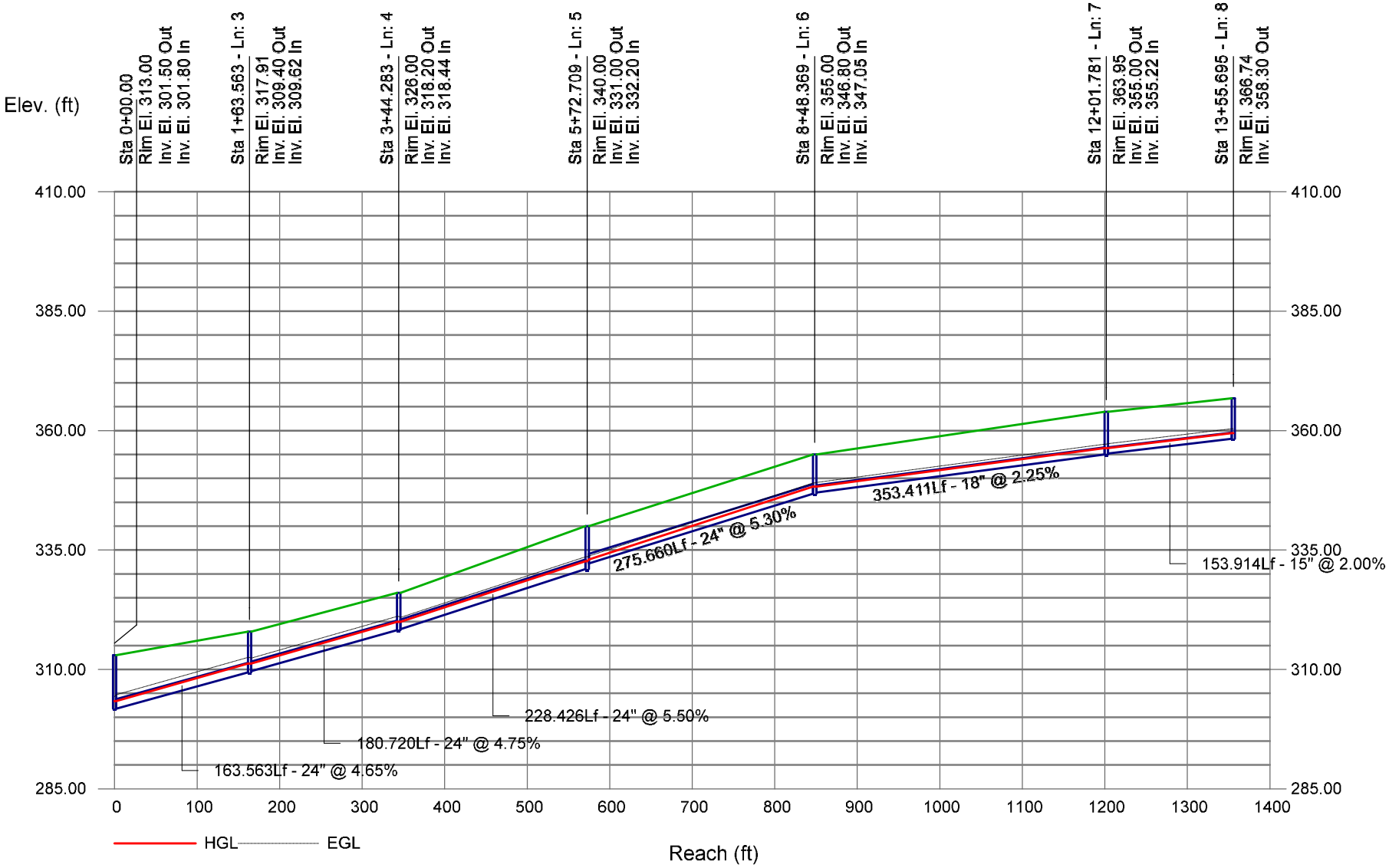
# Storm Sewer Profile

SCM 5C 25-YEAR PROFILE 1-14 Proj. file: SCM 5C Storm Network.stm



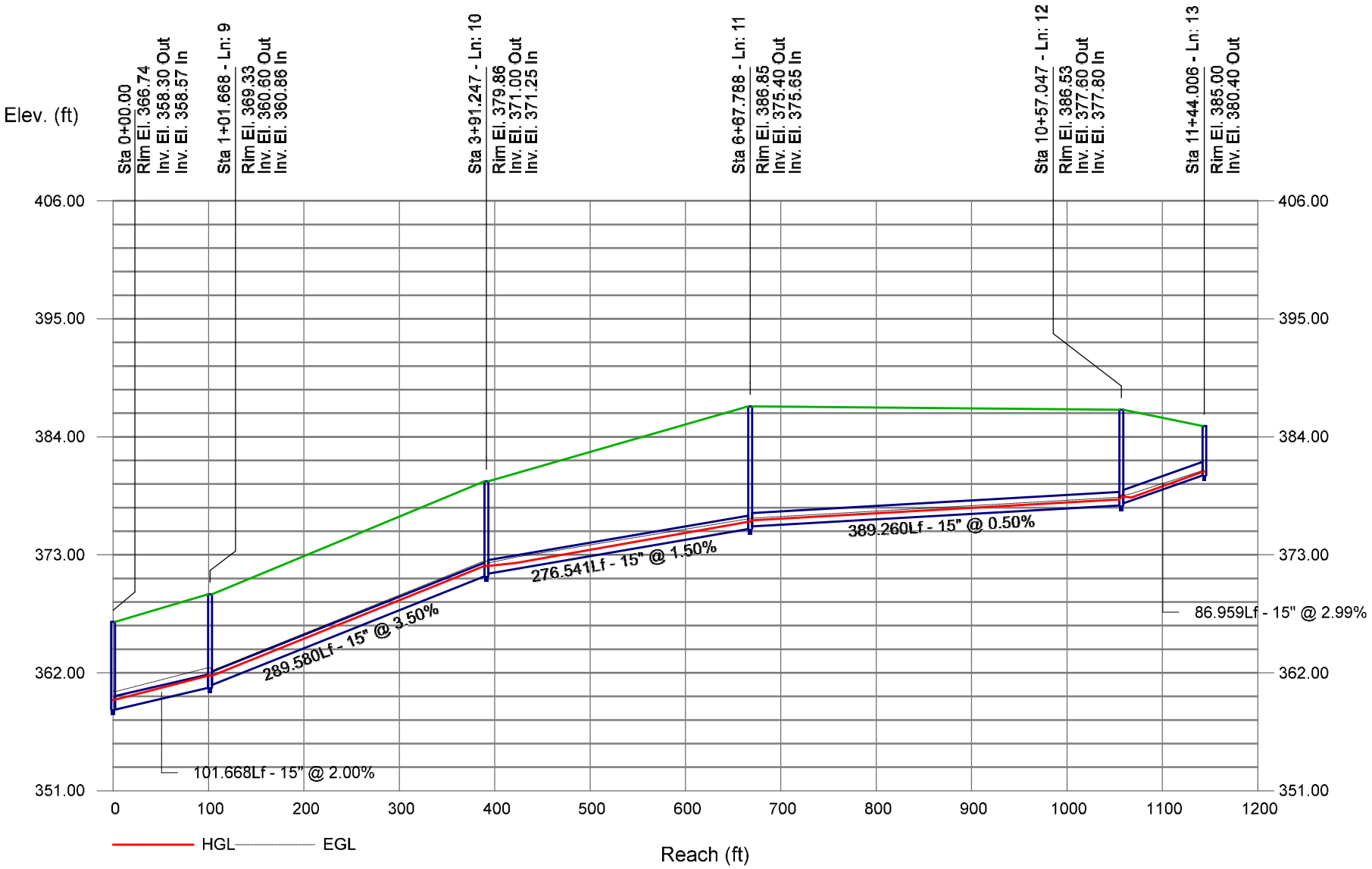
# Storm Sewer Profile

SCM 5C 25-YEAR PROFILE 3-8 Proj. file: SCM 5C Storm Network.stm

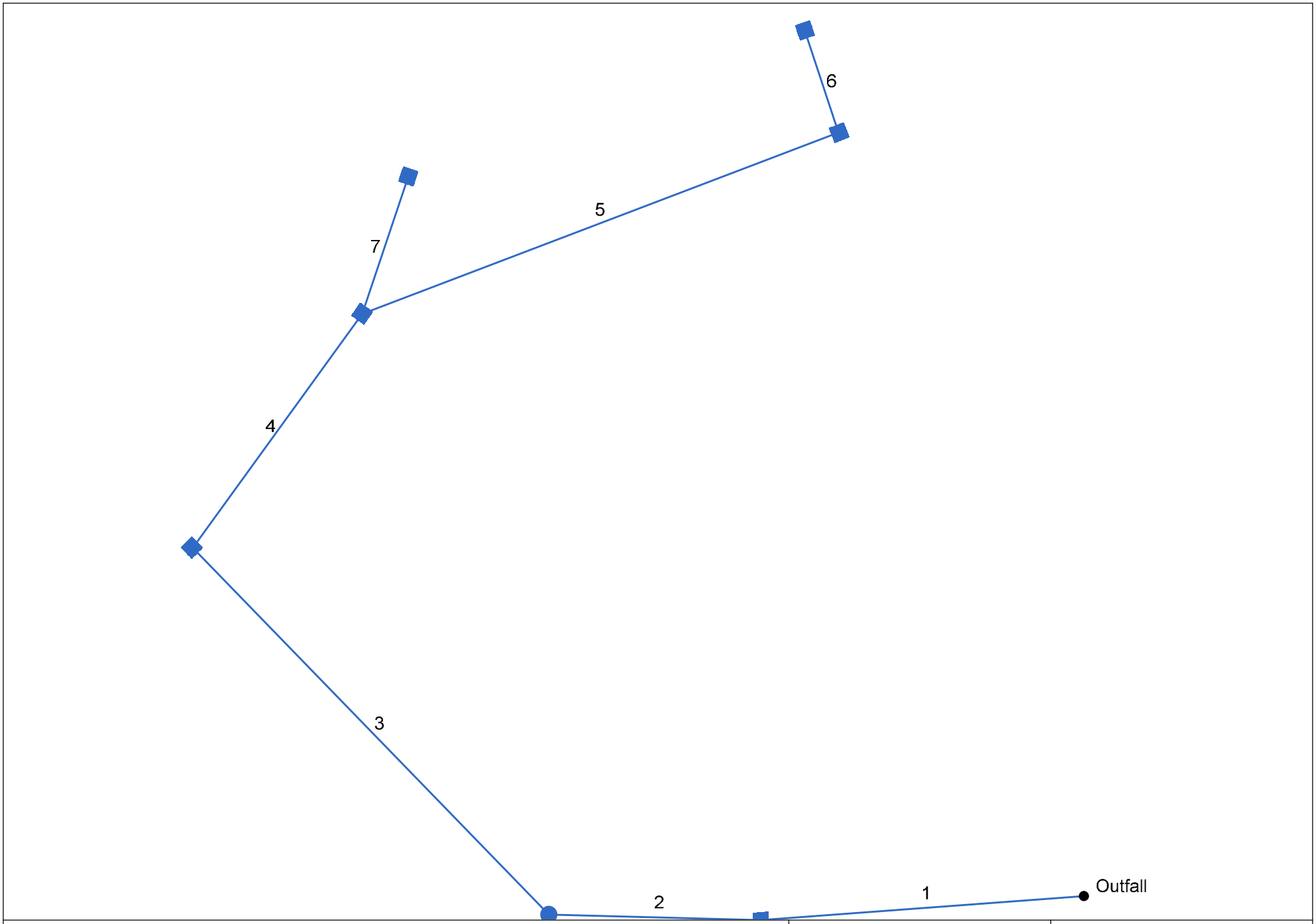


# Storm Sewer Profile

SCM 5C 25-YEAR PROFILE 9-13 Proj. file: SCM 5C Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 6A 25-YEAR




| | | |
|---|---|---|
| Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Date: 4/11/2025 |

# Storm Sewer Inventory Report



SCM 6A 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 84.216 | 175.714 | DrGrt | 0.00 | 0.44 | 0.60 | 10.0 | 296.61 | 2.84 | 299.00 | 15 | Cir | 0.013 | 0.50 | 303.92 | Pipe - (495) |
| 2 | 1 | 55.122 | 5.798 | MH | 0.00 | 0.00 | 0.00 | 0.0 | 299.20 | 3.81 | 301.30 | 15 | Cir | 0.013 | 0.74 | 306.41 | Pipe - (494) |
| 3 | 2 | 133.087 | 44.423 | Comb | 0.00 | 0.91 | 0.60 | 10.0 | 301.50 | 1.20 | 303.10 | 15 | Cir | 0.013 | 1.48 | 310.62 | Pipe - (493) |
| 4 | 3 | 75.218 | 79.870 | Comb | 0.00 | 0.10 | 0.60 | 10.0 | 303.30 | 6.91 | 308.50 | 15 | Cir | 0.013 | 0.91 | 316.23 | Pipe - (492) |
| 5 | 4 | 132.556 | 33.318 | Comb | 0.00 | 0.09 | 0.60 | 10.0 | 308.70 | 7.17 | 318.20 | 15 | Cir | 0.013 | 1.50 | 326.22 | Pipe - (491) |
| 6 | 5 | 28.021 | -87.190 | Comb | 0.00 | 0.51 | 0.60 | 10.0 | 318.40 | 1.00 | 318.68 | 15 | Cir | 0.013 | 1.00 | 326.30 | Pipe - (496) |
| 7 | 4 | 37.852 | -17.053 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 308.70 | 2.08 | 309.49 | 18 | Cir | 0.013 | 1.00 | 318.16 | Pipe - (512) |

Project File: SCM 6A Storm Network.stm

Number of lines: 7

Date: 4/11/2025

# Structure Report



SCM 6A 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 601 | DropGrate | 303.92 | Rect | 4.00 | 4.00 | 15 | Cir | 299.00 | 15 | Cir | 299.20 |
| 2 | JB 602 | Manhole | 306.41 | Cir | 4.00 | 4.00 | 15 | Cir | 301.30 | 15 | Cir | 301.50 |
| 3 | CB 603 | Combination | 310.62 | Rect | 4.00 | 4.00 | 15 | Cir | 303.10 | 15 | Cir | 303.30 |
| 4 | CB 604 | Combination | 316.23 | Rect | 4.00 | 4.00 | 15 | Cir | 308.50 | 15<br>18 | Cir<br>Cir | 308.70<br>308.70 |
| 5 | CB 605 | Combination | 326.22 | Rect | 4.00 | 4.00 | 15 | Cir | 318.20 | 15 | Cir | 318.40 |
| 6 | CB 605A | Combination | 326.30 | Rect | 4.00 | 4.00 | 15 | Cir | 318.68 | | | |
| 7 | CB 604A | Combination | 318.16 | Rect | 4.00 | 4.00 | 18 | Cir | 309.49 | | | |

Project File: SCM 6A Storm Network.stm | Number of Structures: 7 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 6A 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (495) | 9.56 | 15 | Cir | 84.216 | 296.61 | 299.00 | 2.838 | 297.86 | 300.17 | n/a | 300.17 j | End | DropGrate |
| 2 | Pipe - (494) | 7.83 | 15 | Cir | 55.122 | 299.20 | 301.30 | 3.810 | 300.17 | 302.41 | 0.53 | 302.41 | 1 | Manhole |
| 3 | Pipe - (493) | 7.91 | 15 | Cir | 133.087 | 301.50 | 303.10 | 1.202 | 302.75* | 304.75* | 0.96 | 305.70 | 2 | Combination |
| 4 | Pipe - (492) | 4.25 | 15 | Cir | 75.218 | 303.30 | 308.50 | 6.913 | 305.70 | 309.33 | n/a | 309.33 j | 3 | Combination |
| 5 | Pipe - (491) | 2.48 | 15 | Cir | 132.556 | 308.70 | 318.20 | 7.167 | 309.33 | 318.83 | n/a | 318.83 j | 4 | Combination |
| 6 | Pipe - (496) | 2.13 | 15 | Cir | 28.021 | 318.40 | 318.68 | 0.999 | 318.89 | 319.26 | n/a | 319.26 | 5 | Combination |
| 7 | Pipe - (512) | 1.45 | 18 | Cir | 37.852 | 308.70 | 309.49 | 2.084 | 309.33 | 309.94 | n/a | 309.94 j | 4 | Combination |

Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report



SCM 6A 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 601 | 1.84 | 0.00 | 1.38 | 0.46 | DrGrt | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | Off |
| 2 | JB 602 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 603 | 3.81 | 0.00 | 2.40 | 1.40 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.26 | 8.94 | 0.19 | 5.55 | 0.0 | Off |
| 4 | CB 604 | 0.40 | 0.00 | 0.40 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.26 | 0.00 | 0.00 | 0.0 | Off |
| 5 | CB 605 | 0.37 | 0.00 | 0.37 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.06 | 0.00 | 0.00 | 0.0 | Off |
| 6 | CB 605A | 2.13 | 0.00 | 1.60 | 0.53 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.22 | 6.85 | 0.14 | 2.93 | 0.0 | Off |
| 7 | CB 604A | 1.45 | 0.00 | 1.21 | 0.24 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.020 | 2.00 | 0.060 | 0.020 | 0.013 | 0.19 | 5.65 | 0.10 | 1.73 | 0.0 | Off |

Project File: SCM 6A Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 102.61 / (Inlet time + 16.50) ^ 0.82; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations



SCM 6A 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 15 | 9.56 | 296.61 | 297.86 | 1.25 | 1.20 | 7.79 | 0.94 | 298.80 | 2.194 | 84.216 | 299.00 | 300.17 j | 1.17** | 1.20 | 8.00 | 0.99 | 301.17 | 1.895 | 2.045 | n/a | 0.50 | 0.50 |
| 2 | 15 | 7.83 | 299.20 | 300.17 | 0.97 | 1.02 | 7.64 | 0.72 | 300.89 | 0.000 | 55.122 | 301.30 | 302.41 | 1.11** | 1.15 | 6.81 | 0.72 | 303.13 | 0.000 | 0.000 | n/a | 0.74 | 0.53 |
| 3 | 15 | 7.91 | 301.50 | 302.75 | 1.25* | 1.23 | 6.44 | 0.65 | 303.40 | 1.500 | 133.087 | 303.10 | 304.75 | 1.25 | 1.23 | 6.44 | 0.65 | 305.39 | 1.499 | 1.500 | 1.996 | 1.48 | 0.96 |
| 4 | 15 | 4.25 | 303.30 | 305.70 | 1.25 | 0.87 | 3.46 | 0.19 | 305.89 | 0.433 | 75.218 | 308.50 | 309.33 j | 0.83** | 0.87 | 4.88 | 0.37 | 309.71 | 0.703 | 0.568 | n/a | 0.91 | n/a |
| 5 | 15 | 2.48 | 308.70 | 309.33 | 0.63 | 0.62 | 3.97 | 0.25 | 309.58 | 0.000 | 132.556 | 318.20 | 318.83 j | 0.63** | 0.62 | 4.00 | 0.25 | 319.08 | 0.000 | 0.000 | n/a | 1.50 | 0.37 |
| 6 | 15 | 2.13 | 318.40 | 318.89 | 0.49* | 0.45 | 4.71 | 0.22 | 319.12 | 0.000 | 28.021 | 318.68 | 319.26 | 0.58** | 0.56 | 3.80 | 0.22 | 319.49 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 7 | 18 | 1.45 | 308.70 | 309.33 | 0.63 | 0.45 | 2.04 | 0.16 | 309.50 | 0.000 | 37.852 | 309.49 | 309.94 j | 0.45** | 0.45 | 3.24 | 0.16 | 310.10 | 0.000 | 0.000 | n/a | 1.00 | 0.16 |

Project File: SCM 6A Storm Network.stm

Number of lines: 7

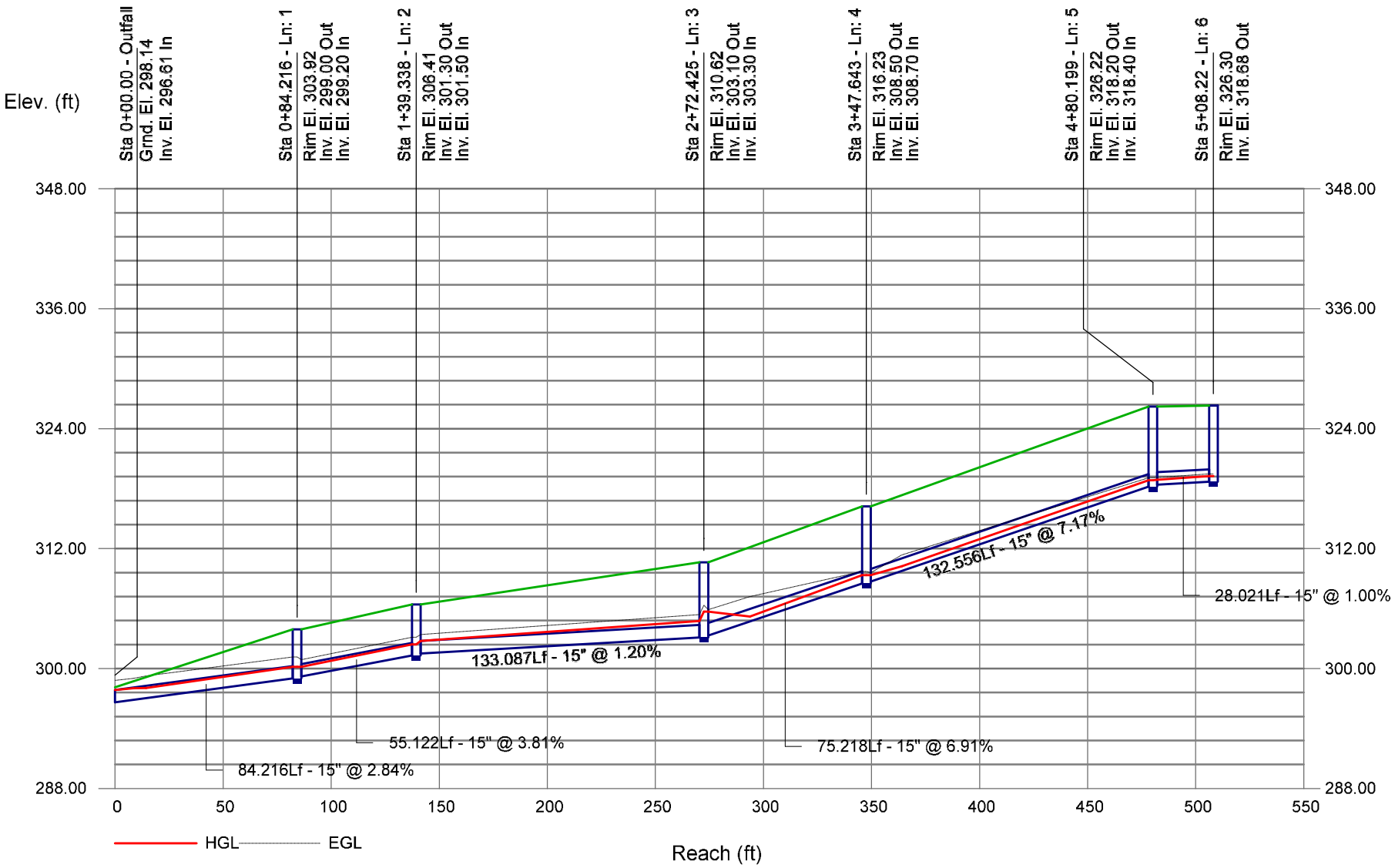
Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Storm Sewer Profile

SCM 6A 25-YEAR PROFILE 1-6

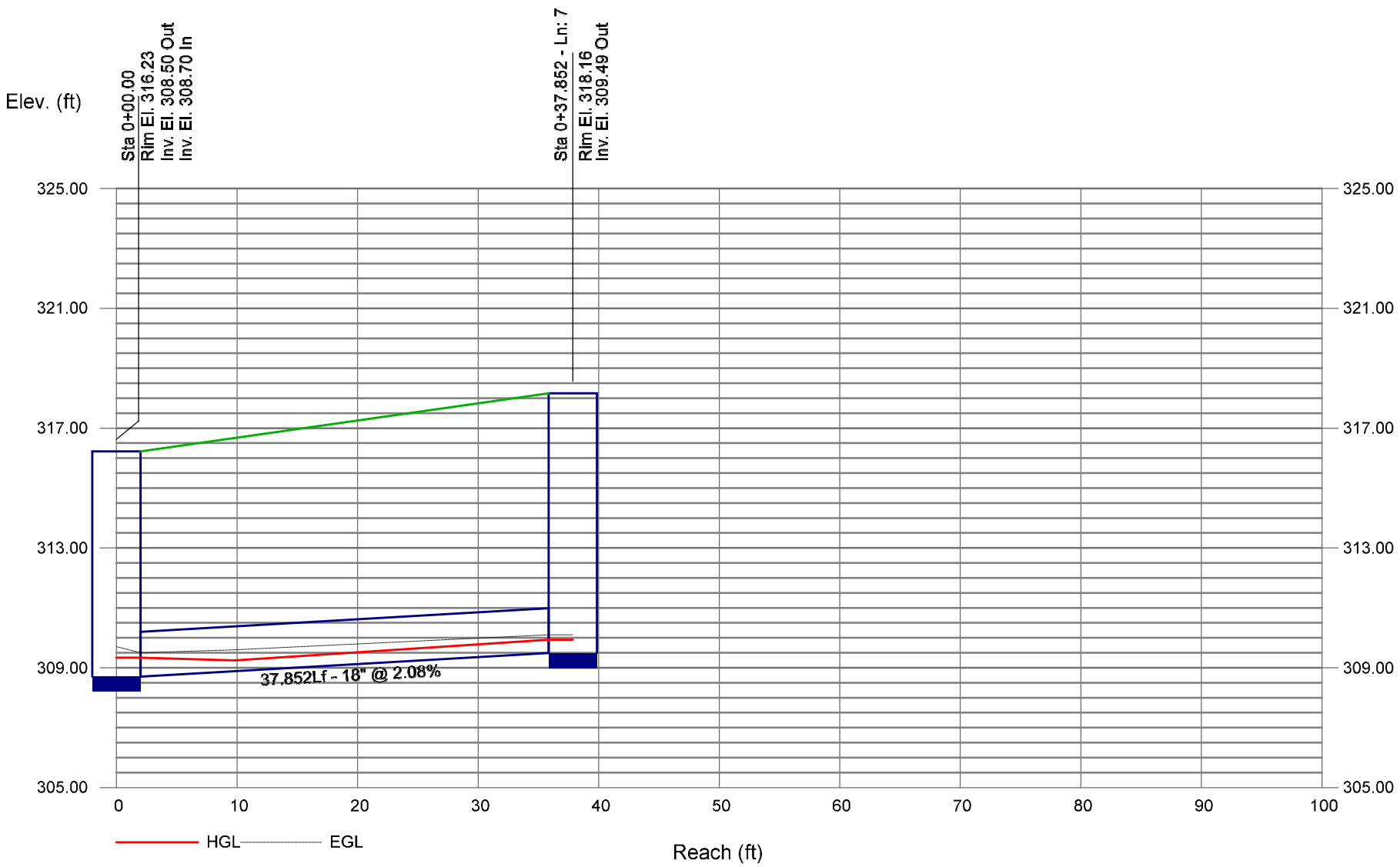
Proj. file: SCM 6A Storm Network.stm



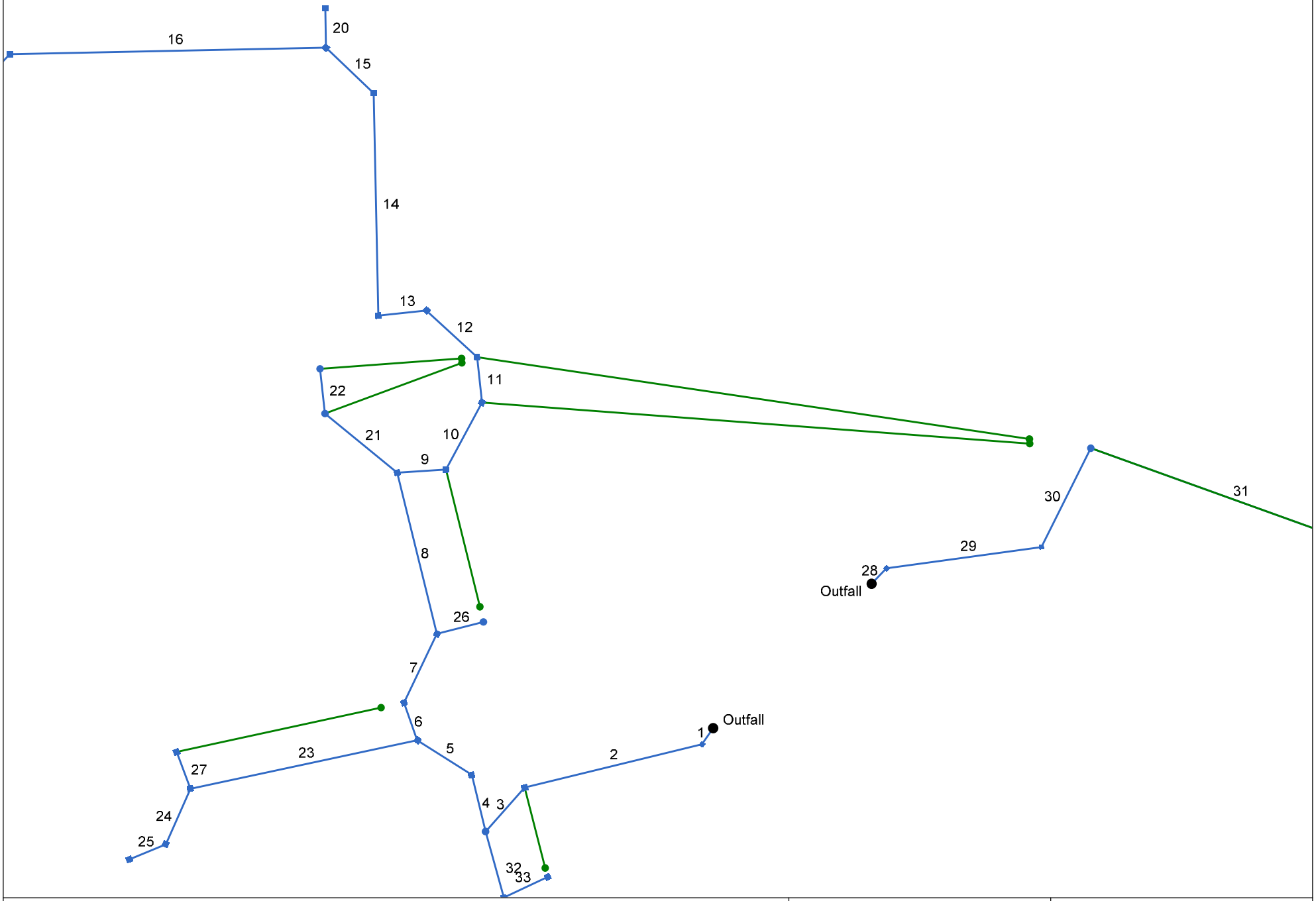
# Storm Sewer Profile

SCM 6A 25-YEAR PROFILE 7-7

Proj. file: SCM 6A Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 6B 25-YEAR




| Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 6B 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 14.076 | 124.693 | DrGrt | 0.00 | 0.73 | 0.60 | 10.0 | 297.31 | 4.90 | 298.00 | 24 | Cir | 0.013 | 1.07 | 312.44 | Pipe - (466) |
| 2 | 1 | 129.199 | 41.569 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 298.20 | 2.17 | 301.00 | 24 | Cir | 0.013 | 0.93 | 318.02 | Pipe - (465) |
| 3 | 2 | 41.927 | -34.580 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 301.28 | 1.00 | 301.70 | 24 | Cir | 0.013 | 1.95 | 315.00 | Pipe - (546) |
| 4 | 3 | 41.516 | 124.607 | Comb | 0.00 | 0.14 | 0.60 | 10.0 | 301.90 | 10.00 | 306.05 | 24 | Cir | 0.013 | 1.10 | 319.55 | Pipe - (514) |
| 5 | 4 | 45.778 | -43.754 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 306.25 | 9.94 | 310.80 | 24 | Cir | 0.013 | 1.12 | 324.12 | Pipe - (460) |
| 6 | 5 | 28.278 | 38.229 | Comb | 0.00 | 0.54 | 0.60 | 10.0 | 311.00 | 9.90 | 313.80 | 24 | Cir | 0.013 | 1.12 | 324.70 | Pipe - (321) |
| 7 | 6 | 54.257 | 44.766 | Comb | 0.00 | 0.53 | 0.60 | 10.0 | 314.00 | 9.95 | 319.40 | 24 | Cir | 0.013 | 1.21 | 331.00 | Pipe - (459) |
| 8 | 7 | 118.068 | -39.263 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 319.60 | 6.27 | 327.00 | 24 | Cir | 0.013 | 2.20 | 336.57 | Pipe - (513) |
| 9 | 8 | 34.519 | 99.944 | Comb | 0.00 | 0.01 | 0.60 | 10.0 | 327.20 | 0.61 | 327.41 | 18 | Cir | 0.013 | 1.31 | 337.18 | Pipe - (463) |
| 10 | 9 | 54.019 | -58.028 | Comb | 0.00 | 0.03 | 0.60 | 10.0 | 327.60 | 0.74 | 328.00 | 18 | Cir | 0.013 | 0.92 | 334.59 | Pipe - (310) |
| 11 | 10 | 32.394 | -34.234 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 328.20 | 0.62 | 328.40 | 18 | Cir | 0.013 | 1.06 | 333.35 | Pipe - (309) |
| 12 | 11 | 49.141 | -41.395 | Comb | 0.00 | 0.19 | 0.60 | 10.0 | 328.60 | 1.02 | 329.10 | 18 | Cir | 0.013 | 1.18 | 337.00 | Pipe - (308) |
| 13 | 12 | 34.087 | -48.578 | Comb | 0.00 | 0.95 | 0.60 | 10.0 | 329.30 | 0.88 | 329.60 | 18 | Cir | 0.013 | 1.50 | 337.00 | Pipe - (307) |
| 14 | 13 | 158.245 | 94.812 | Comb | 0.00 | 0.15 | 0.60 | 10.0 | 329.80 | 3.73 | 335.70 | 15 | Cir | 0.013 | 1.12 | 344.52 | Pipe - (301) |
| 15 | 14 | 46.667 | -44.997 | Comb | 0.00 | 0.25 | 0.60 | 10.0 | 335.90 | 4.50 | 338.00 | 15 | Cir | 0.013 | 1.69 | 345.87 | Pipe - (300) |
| 16 | 15 | 224.015 | -44.997 | Comb | 0.00 | 0.04 | 0.60 | 10.0 | 338.20 | 2.72 | 344.30 | 15 | Cir | 0.013 | 1.13 | 352.48 | Pipe - (486) |
| 17 | 16 | 43.823 | -45.023 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 344.50 | 0.91 | 344.90 | 15 | Cir | 0.013 | 1.12 | 352.51 | Pipe - (485) |
| 18 | 17 | 92.623 | -44.977 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 345.10 | 1.25 | 346.26 | 15 | Cir | 0.013 | 1.50 | 354.03 | Pipe - (502) |
| 19 | 18 | 28.029 | 87.415 | Comb | 0.00 | 0.07 | 0.60 | 10.0 | 346.50 | 0.61 | 346.67 | 15 | Cir | 0.013 | 1.00 | 354.08 | Pipe - (503) |
| 20 | 15 | 27.999 | 44.982 | Comb | 0.00 | 0.35 | 0.60 | 10.0 | 338.20 | 1.00 | 338.48 | 15 | Cir | 0.013 | 1.00 | 345.85 | Pipe - (305) |
| 21 | 8 | 66.408 | -37.002 | Comb | 0.00 | 0.05 | 0.60 | 10.0 | 327.20 | 6.63 | 331.60 | 15 | Cir | 0.013 | 1.12 | 340.36 | Pipe - (537) |
| 22 | 21 | 32.002 | 44.457 | Comb | 0.00 | 0.51 | 0.60 | 10.0 | 331.80 | 0.59 | 331.99 | 15 | Cir | 0.013 | 1.00 | 340.43 | Pipe - (538) |
| 23 | 5 | 164.315 | -44.670 | Comb | 0.00 | 0.23 | 0.60 | 10.0 | 311.00 | 4.75 | 318.80 | 18 | Cir | 0.013 | 1.49 | 326.34 | Pipe - (315) |

Project File: SCM 6B Storm Network.stm

Number of lines: 33

Date: 4/11/2025

# Storm Sewer Inventory Report

SCM 6B 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 24 | 23 | 43.094 | -54.143 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 319.00 | 1.39 | 319.60 | 15 | Cir | 0.013 | 1.10 | 327.22 | Pipe - (499) |
| 25 | 24 | 28.022 | 43.733 | Comb | 0.00 | 0.32 | 0.60 | 10.0 | 319.80 | 0.61 | 319.97 | 15 | Cir | 0.013 | 1.00 | 327.23 | Pipe - (498) |
| 26 | 7 | 33.996 | 50.101 | Comb | 0.00 | 0.08 | 0.60 | 10.0 | 319.60 | 10.00 | 323.00 | 15 | Cir | 0.013 | 1.00 | 331.00 | Pipe - (545) |
| 27 | 23 | 28.000 | 81.868 | Comb | 0.00 | 0.70 | 0.60 | 10.0 | 319.00 | 1.00 | 319.28 | 15 | Cir | 0.013 | 1.00 | 326.31 | Pipe - (320) |
| 28 | End | 15.198 | -46.442 | DrGrt | 0.00 | 1.01 | 0.60 | 10.0 | 293.69 | 2.04 | 294.00 | 18 | Cir | 0.013 | 1.01 | 309.92 | Pipe - (539) |
| 29 | 28 | 110.638 | 38.584 | DrGrt | 0.00 | 0.11 | 0.60 | 10.0 | 294.20 | 6.87 | 301.80 | 15 | Cir | 0.013 | 1.28 | 315.26 | Pipe - (540) |
| 30 | 29 | 78.569 | -55.641 | Comb | 0.00 | 0.49 | 0.60 | 10.0 | 302.00 | 0.89 | 302.70 | 15 | Cir | 0.013 | 1.49 | 313.86 | Pipe - (541) |
| 31 | 30 | 208.966 | 83.346 | Comb | 0.00 | 0.29 | 0.60 | 10.0 | 302.90 | 1.00 | 305.00 | 15 | Cir | 0.013 | 1.00 | 311.00 | Pipe - (542) |
| 32 | 3 | 48.735 | -57.114 | Comb | 0.00 | 0.20 | 0.60 | 10.0 | 301.91 | 0.60 | 302.20 | 18 | Cir | 0.013 | 1.50 | 310.31 | Pipe - (462) |
| 33 | 32 | 34.300 | -99.882 | Comb | 0.00 | 0.12 | 0.60 | 10.0 | 302.40 | 0.70 | 302.64 | 15 | Cir | 0.013 | 1.00 | 310.04 | Pipe - (464) |

Project File: SCM 6B Storm Network.stm

Number of lines: 33

Date: 4/11/2025

# Structure Report



SCM 6B 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | CB 611 | DropGrate | 312.44 | Rect | 3.00 | 3.00 | 24 | Cir | 298.00 | 24 | Cir | 298.20 |
| 2 | CB 612 | Combination | 318.02 | Rect | 4.00 | 4.00 | 24 | Cir | 301.00 | 24 | Cir | 301.28 |
| 3 | CB 613 | Combination | 315.00 | Cir | 4.00 | 4.00 | 24 | Cir | 301.70 | 24<br>18 | Cir<br>Cir | 301.90<br>301.91 |
| 4 | CB 614 | Combination | 319.55 | Rect | 4.00 | 4.00 | 24 | Cir | 306.05 | 24 | Cir | 306.25 |
| 5 | CB 615 | Combination | 324.12 | Rect | 4.00 | 4.00 | 24 | Cir | 310.80 | 24<br>18 | Cir<br>Cir | 311.00<br>311.00 |
| 6 | CB 616 | Combination | 324.70 | Rect | 4.00 | 4.00 | 24 | Cir | 313.80 | 24 | Cir | 314.00 |
| 7 | CB 617 | Combination | 331.00 | Rect | 4.00 | 4.00 | 24 | Cir | 319.40 | 24<br>15 | Cir<br>Cir | 319.60<br>319.60 |
| 8 | CB 618 | Combination | 336.57 | Rect | 4.00 | 4.00 | 24 | Cir | 327.00 | 18<br>15 | Cir<br>Cir | 327.20<br>327.20 |
| 9 | CB 619 | Combination | 337.18 | Rect | 4.00 | 4.00 | 18 | Cir | 327.41 | 18 | Cir | 327.60 |
| 10 | CB 620 | Combination | 334.59 | Rect | 4.00 | 4.00 | 18 | Cir | 328.00 | 18 | Cir | 328.20 |
| 11 | CB 621 | Combination | 333.35 | Rect | 4.00 | 4.00 | 18 | Cir | 328.40 | 18 | Cir | 328.60 |
| 12 | CB 622 | Combination | 337.00 | Rect | 4.00 | 4.00 | 18 | Cir | 329.10 | 18 | Cir | 329.30 |
| 13 | CB 623 | Combination | 337.00 | Rect | 4.00 | 4.00 | 18 | Cir | 329.60 | 15 | Cir | 329.80 |
| 14 | CB 624 | Combination | 344.52 | Rect | 4.00 | 4.00 | 15 | Cir | 335.70 | 15 | Cir | 335.90 |
| 15 | CB 625 | Combination | 345.87 | Rect | 4.00 | 4.00 | 15 | Cir | 338.00 | 15<br>15 | Cir<br>Cir | 338.20<br>338.20 |
| 16 | CB 626 | Combination | 352.48 | Rect | 4.00 | 4.00 | 15 | Cir | 344.30 | 15 | Cir | 344.50 |
| 17 | CB 627 | Combination | 352.51 | Rect | 4.00 | 4.00 | 15 | Cir | 344.90 | 15 | Cir | 345.10 |
| 18 | CB 628 | Combination | 354.03 | Rect | 4.00 | 4.00 | 15 | Cir | 346.26 | 15 | Cir | 346.50 |
| 19 | CB 628A | Combination | 354.08 | Rect | 4.00 | 4.00 | 15 | Cir | 346.67 | | | |
| 20 | CB 625A | Combination | 345.85 | Rect | 4.00 | 4.00 | 15 | Cir | 338.48 | | | |

Project File: SCM 6B Storm Network.stm | Number of Structures: 33 | Run Date: 4/11/2025

# Structure Report

SCM 6B 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 21 | CB 618A | Combination | 340.36 | Cir | 4.00 | 4.00 | 15 | Cir | 331.60 | 15 | Cir | 331.80 |
| 22 | CB 618B | Combination | 340.43 | Cir | 4.00 | 4.00 | 15 | Cir | 331.99 | | | |
| 23 | CB 615A | Combination | 326.34 | Rect | 4.00 | 4.00 | 18 | Cir | 318.80 | 15<br>15 | Cir<br>Cir | 319.00<br>319.00 |
| 24 | CB 615C | Combination | 327.22 | Rect | 4.00 | 4.00 | 15 | Cir | 319.60 | 15 | Cir | 319.80 |
| 25 | CB 615D | Combination | 327.23 | Rect | 4.00 | 4.00 | 15 | Cir | 319.97 | | | |
| 26 | CB 617A | Combination | 331.00 | Cir | 4.00 | 4.00 | 15 | Cir | 323.00 | | | |
| 27 | CB 615B | Combination | 326.31 | Rect | 4.00 | 4.00 | 15 | Cir | 319.28 | | | |
| 28 | YI 631 | DropGrate | 309.92 | Rect | 3.00 | 3.00 | 18 | Cir | 294.00 | 15 | Cir | 294.20 |
| 29 | YI 632 | DropGrate | 315.26 | Rect | 3.00 | 3.00 | 15 | Cir | 301.80 | 15 | Cir | 302.00 |
| 30 | CB 633 | Combination | 313.86 | Cir | 4.00 | 4.00 | 15 | Cir | 302.70 | 15 | Cir | 302.90 |
| 31 | CB 634 | Combination | 311.00 | Cir | 4.00 | 4.00 | 15 | Cir | 305.00 | | | |
| 32 | CB 613A | Combination | 310.31 | Rect | 4.00 | 4.00 | 18 | Cir | 302.20 | 15 | Cir | 302.40 |
| 33 | CB 613B | Combination | 310.04 | Rect | 4.00 | 4.00 | 15 | Cir | 302.64 | | | |

# Storm Sewer Summary Report



SCM 6B 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (466) | 24.56 | 24 | Cir | 14.076 | 297.31 | 298.00 | 4.902 | 299.31 | 299.75 | n/a | 299.75 j | End | DropGrate |
| 2 | Pipe - (465) | 22.29 | 24 | Cir | 129.199 | 298.20 | 301.00 | 2.167 | 299.75 | 302.68 | 0.90 | 302.68 | 1 | Combination |
| 3 | Pipe - (546) | 22.07 | 24 | Cir | 41.927 | 301.28 | 301.70 | 1.002 | 302.88 | 303.38 | 1.87 | 303.38 | 2 | Combination |
| 4 | Pipe - (514) | 20.17 | 24 | Cir | 41.516 | 301.90 | 306.05 | 9.996 | 303.38 | 307.66 | n/a | 307.66 | 3 | Combination |
| 5 | Pipe - (460) | 19.75 | 24 | Cir | 45.778 | 306.25 | 310.80 | 9.939 | 307.66 | 312.40 | 0.94 | 312.40 | 4 | Combination |
| 6 | Pipe - (321) | 14.10 | 24 | Cir | 28.278 | 311.00 | 313.80 | 9.902 | 312.40 | 315.15 | n/a | 315.15 j | 5 | Combination |
| 7 | Pipe - (459) | 12.32 | 24 | Cir | 54.257 | 314.00 | 319.40 | 9.953 | 315.15 | 320.66 | 0.66 | 320.66 | 6 | Combination |
| 8 | Pipe - (513) | 10.35 | 24 | Cir | 118.068 | 319.60 | 327.00 | 6.268 | 320.66 | 328.15 | 1.05 | 328.15 | 7 | Combination |
| 9 | Pipe - (463) | 8.34 | 18 | Cir | 34.519 | 327.20 | 327.41 | 0.608 | 328.46 | 328.67 | 0.57 | 329.23 | 8 | Combination |
| 10 | Pipe - (310) | 8.36 | 18 | Cir | 54.019 | 327.60 | 328.00 | 0.740 | 329.23* | 329.58* | 0.32 | 329.90 | 9 | Combination |
| 11 | Pipe - (309) | 8.28 | 18 | Cir | 32.394 | 328.20 | 328.40 | 0.617 | 329.90* | 330.10* | 0.36 | 330.46 | 10 | Combination |
| 12 | Pipe - (308) | 7.66 | 18 | Cir | 49.141 | 328.60 | 329.10 | 1.017 | 330.46* | 330.72* | 0.34 | 331.07 | 11 | Combination |
| 13 | Pipe - (307) | 7.03 | 18 | Cir | 34.087 | 329.30 | 329.60 | 0.880 | 331.07* | 331.22* | 0.37 | 331.59 | 12 | Combination |
| 14 | Pipe - (301) | 3.77 | 15 | Cir | 158.245 | 329.80 | 335.70 | 3.728 | 331.59 | 336.48 | n/a | 336.48 j | 13 | Combination |
| 15 | Pipe - (300) | 3.24 | 15 | Cir | 46.667 | 335.90 | 338.00 | 4.500 | 336.48 | 338.73 | n/a | 338.73 | 14 | Combination |
| 16 | Pipe - (486) | 1.13 | 15 | Cir | 224.015 | 338.20 | 344.30 | 2.723 | 338.73 | 344.72 | n/a | 344.72 j | 15 | Combination |
| 17 | Pipe - (485) | 0.99 | 15 | Cir | 43.823 | 344.50 | 344.90 | 0.913 | 344.84 | 345.29 | 0.16 | 345.29 | 16 | Combination |
| 18 | Pipe - (502) | 0.73 | 15 | Cir | 92.623 | 345.10 | 346.26 | 1.252 | 345.37 | 346.59 | n/a | 346.59 | 17 | Combination |
| 19 | Pipe - (503) | 0.27 | 15 | Cir | 28.029 | 346.50 | 346.67 | 0.607 | 346.70 | 346.87 | n/a | 346.87 | 18 | Combination |
| 20 | Pipe - (305) | 1.36 | 15 | Cir | 27.999 | 338.20 | 338.48 | 1.000 | 338.73 | 338.94 | n/a | 338.94 j | 15 | Combination |
| 21 | Pipe - (537) | 2.16 | 15 | Cir | 66.408 | 327.20 | 331.60 | 6.626 | 328.15 | 332.19 | n/a | 332.19 j | 8 | Combination |
| 22 | Pipe - (538) | 1.98 | 15 | Cir | 32.002 | 331.80 | 331.99 | 0.594 | 332.35 | 332.55 | n/a | 332.55 | 21 | Combination |
| 23 | Pipe - (315) | 5.98 | 18 | Cir | 164.315 | 311.00 | 318.80 | 4.747 | 312.40 | 319.74 | n/a | 319.74 j | 5 | Combination |
| 24 | Pipe - (499) | 2.43 | 15 | Cir | 43.094 | 319.00 | 319.60 | 1.392 | 319.74 | 320.22 | n/a | 320.22 j | 23 | Combination |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Storm Sewer Summary Report

SCM 6B 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 25 | Pipe - (498) | 1.24 | 15 | Cir | 28.022 | 319.80 | 319.97 | 0.607 | 320.22 | 320.41 | 0.16 | 320.41 | 24 | Combination |
| 26 | Pipe - (545) | 0.31 | 15 | Cir | 33.996 | 319.60 | 323.00 | 10.001 | 320.66 | 323.22 | n/a | 323.22 j | 7 | Combination |
| 27 | Pipe - (320) | 2.72 | 15 | Cir | 28.000 | 319.00 | 319.28 | 1.000 | 319.74 | 319.94 | n/a | 319.94 j | 23 | Combination |
| 28 | Pipe - (539) | 6.90 | 18 | Cir | 15.198 | 293.69 | 294.00 | 2.040 | 295.19 | 295.14 | 0.36 | 295.50 | End | DropGrate |
| 29 | Pipe - (540) | 3.29 | 15 | Cir | 110.638 | 294.20 | 301.80 | 6.869 | 295.50 | 302.53 | n/a | 302.53 j | 28 | DropGrate |
| 30 | Pipe - (541) | 2.91 | 15 | Cir | 78.569 | 302.00 | 302.70 | 0.891 | 302.61 | 303.38 | n/a | 303.38 | 29 | Combination |
| 31 | Pipe - (542) | 1.12 | 15 | Cir | 208.966 | 302.90 | 305.00 | 1.005 | 303.38 | 305.42 | n/a | 305.42 j | 30 | Combination |
| 32 | Pipe - (462) | 1.23 | 18 | Cir | 48.735 | 301.91 | 302.20 | 0.595 | 303.38 | 302.61 | n/a | 302.61 | 3 | Combination |
| 33 | Pipe - (464) | 0.47 | 15 | Cir | 34.300 | 302.40 | 302.64 | 0.700 | 302.65 | 302.91 | n/a | 302.91 | 32 | Combination |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report



SCM 6B 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | CB 611 | 2.83 | 0.00 | 2.83 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.24 | 26.04 | 0.24 | 26.04 | 0.0 | Off |
| 2 | CB 612 | 0.31 | 0.00 | 0.31 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.41 | 0.00 | 0.00 | 0.0 | 33 |
| 3 | CB 613 | 1.01 | 0.00 | 1.01 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.56 | 0.01 | 0.24 | 0.0 | Off |
| 4 | CB 614 | 0.54 | 0.00 | 0.54 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.73 | 0.00 | 0.00 | 0.0 | 3 |
| 5 | CB 615 | 0.47 | 0.15 | 0.61 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.15 | 3.33 | 0.15 | 3.33 | 0.0 | Off |
| 6 | CB 616 | 2.09 | 1.03 | 3.12 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.32 | 11.85 | 0.32 | 11.85 | 0.0 | Off |
| 7 | CB 617 | 2.06 | 0.00 | 1.87 | 0.19 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.17 | 4.36 | 0.07 | 1.16 | 0.0 | 6 |
| 8 | CB 618 | 0.12 | 0.00 | 0.12 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.022 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.29 | 0.00 | 0.00 | 0.0 | 7 |
| 9 | CB 619 | 0.04 | 0.00 | 0.04 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.022 | 2.00 | 0.060 | 0.020 | 0.013 | 0.05 | 0.86 | 0.00 | 0.00 | 0.0 | 26 |
| 10 | CB 620 | 0.12 | 0.00 | 0.12 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.062 | 2.00 | 0.060 | 0.020 | 0.013 | 0.06 | 1.07 | 0.00 | 0.00 | 0.0 | 30 |
| 11 | CB 621 | 0.74 | 0.29 | 1.00 | 0.02 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.062 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 3.18 | 0.03 | 0.56 | 0.0 | 30 |
| 12 | CB 622 | 0.74 | 0.00 | 0.74 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 3.91 | 0.16 | 3.91 | 0.0 | Off |
| 13 | CB 623 | 3.68 | 0.00 | 3.68 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.35 | 13.34 | 0.35 | 13.34 | 0.0 | Off |
| 14 | CB 624 | 0.58 | 0.07 | 0.65 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.040 | 2.00 | 0.060 | 0.020 | 0.013 | 0.13 | 2.59 | 0.01 | 0.25 | 0.0 | Off |
| 15 | CB 625 | 0.97 | 0.00 | 0.90 | 0.07 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.027 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.10 | 0.06 | 1.00 | 0.0 | 14 |
| 16 | CB 626 | 0.16 | 0.00 | 0.16 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.90 | 0.00 | 0.00 | 0.0 | 15 |
| 17 | CB 627 | 0.27 | 0.00 | 0.28 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.90 | 0.00 | 0.00 | 0.0 | 16 |
| 18 | CB 628 | 0.47 | 0.00 | 0.46 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.90 | 0.02 | 0.40 | 0.0 | 17 |
| 19 | CB 628A | 0.27 | 0.00 | 0.27 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.016 | 2.00 | 0.060 | 0.020 | 0.013 | 0.11 | 1.89 | 0.00 | 0.00 | 0.0 | Off |
| 20 | CB 625A | 1.36 | 0.00 | 1.36 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.37 | 0.21 | 6.37 | 0.0 | Off |
| 21 | CB 618A | 0.19 | 0.00 | 0.19 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.052 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.33 | 0.00 | 0.00 | 0.0 | 11 |
| 22 | CB 618B | 1.98 | 0.00 | 1.69 | 0.29 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.052 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.16 | 0.09 | 1.55 | 0.0 | 11 |
| 23 | CB 615A | 0.89 | 0.23 | 0.98 | 0.15 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.017 | 2.00 | 0.060 | 0.020 | 0.013 | 0.18 | 5.15 | 0.09 | 1.48 | 0.0 | 5 |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Inlet Report

SCM 6B 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 24 | CB 615C | 1.20 | 0.00 | 0.97 | 0.23 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.008 | 2.00 | 0.060 | 0.020 | 0.013 | 0.21 | 6.59 | 0.12 | 2.17 | 0.0 | 23 |
| 25 | CB 615D | 1.24 | 0.00 | 1.24 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 5.95 | 0.20 | 5.95 | 0.0 | Off |
| 26 | CB 617A | 0.31 | 0.00 | 0.31 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.08 | 1.41 | 0.00 | 0.00 | 0.0 | Off |
| 27 | CB 615B | 2.72 | 0.00 | 1.87 | 0.84 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.017 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 7.97 | 0.17 | 4.35 | 0.0 | 6 |
| 28 | YI 631 | 3.92 | 0.00 | 3.92 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.30 | 31.85 | 0.30 | 31.85 | 0.0 | Off |
| 29 | YI 632 | 0.43 | 0.00 | 0.43 | 0.00 | DrGrt | 0.0 | 0.00 | 4.00 | 2.00 | 2.00 | Sag | 2.00 | 0.020 | 0.020 | 0.013 | 0.07 | 8.80 | 0.07 | 8.80 | 0.0 | Off |
| 30 | CB 633 | 1.90 | 0.02 | 1.52 | 0.40 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.025 | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.17 | 0.12 | 2.01 | 0.0 | 31 |
| 31 | CB 634 | 1.12 | 0.40 | 1.14 | 0.38 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.005 | 2.00 | 0.060 | 0.020 | 0.013 | 0.24 | 8.10 | 0.16 | 3.88 | 0.0 | Off |
| 32 | CB 613A | 0.78 | 0.00 | 0.78 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 1.98 | 0.00 | 0.00 | 0.0 | Off |
| 33 | CB 613B | 0.47 | 0.00 | 0.47 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.100 | 2.00 | 0.060 | 0.020 | 0.013 | 0.10 | 1.64 | 0.00 | 0.00 | 0.0 | Off |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are throat.

# Hydraulic Grade Line Computations

SCM 6B 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 24 | 24.56 | 297.31 | 299.31 | 2.00 | 2.91 | 7.82 | 0.95 | 300.26 | 1.179 | 14.076 | 298.00 | 299.75 j | 1.75** | 2.91 | 8.43 | 1.10 | 300.85 | 1.068 | 1.124 | n/a | 1.07 | 1.18 |
| 2 | 24 | 22.29 | 298.20 | 299.75 | 1.55 | 2.61 | 8.54 | 0.97 | 300.72 | 0.000 | 129.199 | 301.00 | 302.68 | 1.68** | 2.82 | 7.90 | 0.97 | 303.65 | 0.000 | 0.000 | n/a | 0.93 | 0.90 |
| 3 | 24 | 22.07 | 301.28 | 302.88 | 1.60* | 2.69 | 8.21 | 0.96 | 303.83 | 0.000 | 41.927 | 301.70 | 303.38 | 1.68** | 2.81 | 7.85 | 0.96 | 304.33 | 0.000 | 0.000 | n/a | 1.95 | 1.87 |
| 4 | 24 | 20.17 | 301.90 | 303.38 | 1.48 | 2.49 | 8.11 | 0.86 | 304.24 | 0.000 | 41.516 | 306.05 | 307.66 | 1.61** | 2.71 | 7.44 | 0.86 | 308.52 | 0.000 | 0.000 | n/a | 1.10 | n/a |
| 5 | 24 | 19.75 | 306.25 | 307.66 | 1.41 | 2.37 | 8.34 | 0.84 | 308.50 | 0.000 | 45.778 | 310.80 | 312.40 | 1.60** | 2.69 | 7.35 | 0.84 | 313.24 | 0.000 | 0.000 | n/a | 1.12 | 0.94 |
| 6 | 24 | 14.10 | 311.00 | 312.40 | 1.40 | 2.26 | 6.02 | 0.61 | 313.00 | 0.000 | 28.278 | 313.80 | 315.15 j | 1.35** | 2.26 | 6.24 | 0.61 | 315.76 | 0.000 | 0.000 | n/a | 1.12 | n/a |
| 7 | 24 | 12.32 | 314.00 | 315.15 | 1.15 | 1.87 | 6.58 | 0.54 | 315.69 | 0.000 | 54.257 | 319.40 | 320.66 | 1.26** | 2.09 | 5.91 | 0.54 | 321.20 | 0.000 | 0.000 | n/a | 1.21 | 0.66 |
| 8 | 24 | 10.35 | 319.60 | 320.66 | 1.06 | 1.69 | 6.11 | 0.48 | 321.14 | 0.000 | 118.068 | 327.00 | 328.15 | 1.15** | 1.87 | 5.53 | 0.48 | 328.63 | 0.000 | 0.000 | n/a | 2.20 | 1.05 |
| 9 | 18 | 8.34 | 327.20 | 328.46 | 1.26* | 1.58 | 5.28 | 0.43 | 328.89 | 0.608 | 34.519 | 327.41 | 328.67 | 1.26 | 1.58 | 5.28 | 0.43 | 329.10 | 0.608 | 0.608 | 0.210 | 1.31 | 0.57 |
| 10 | 18 | 8.36 | 327.60 | 329.23 | 1.50 | 1.77 | 4.73 | 0.35 | 329.58 | 0.633 | 54.019 | 328.00 | 329.58 | 1.50 | 1.77 | 4.73 | 0.35 | 329.92 | 0.633 | 0.633 | 0.342 | 0.92 | 0.32 |
| 11 | 18 | 8.28 | 328.20 | 329.90 | 1.50 | 1.77 | 4.69 | 0.34 | 330.24 | 0.622 | 32.394 | 328.40 | 330.10 | 1.50 | 1.77 | 4.69 | 0.34 | 330.44 | 0.622 | 0.622 | 0.201 | 1.06 | 0.36 |
| 12 | 18 | 7.66 | 328.60 | 330.46 | 1.50 | 1.77 | 4.34 | 0.29 | 330.75 | 0.533 | 49.141 | 329.10 | 330.72 | 1.50 | 1.77 | 4.34 | 0.29 | 331.01 | 0.532 | 0.532 | 0.262 | 1.18 | 0.34 |
| 13 | 18 | 7.03 | 329.30 | 331.07 | 1.50 | 1.77 | 3.98 | 0.25 | 331.31 | 0.448 | 34.087 | 329.60 | 331.22 | 1.50 | 1.77 | 3.98 | 0.25 | 331.46 | 0.448 | 0.448 | 0.153 | 1.50 | 0.37 |
| 14 | 15 | 3.77 | 329.80 | 331.59 | 1.25 | 0.81 | 3.07 | 0.15 | 331.73 | 0.340 | 158.245 | 335.70 | 336.48 j | 0.78** | 0.81 | 4.65 | 0.34 | 336.82 | 0.660 | 0.500 | n/a | 1.12 | 0.38 |
| 15 | 15 | 3.24 | 335.90 | 336.48 | 0.58 | 0.56 | 5.77 | 0.30 | 336.78 | 0.000 | 46.667 | 338.00 | 338.73 | 0.72** | 0.74 | 4.39 | 0.30 | 339.03 | 0.000 | 0.000 | n/a | 1.69 | n/a |
| 16 | 15 | 1.13 | 338.20 | 338.73 | 0.52 | 0.36 | 2.31 | 0.15 | 338.88 | 0.000 | 224.015 | 344.30 | 344.72 j | 0.42** | 0.36 | 3.14 | 0.15 | 344.87 | 0.000 | 0.000 | n/a | 1.13 | n/a |
| 17 | 15 | 0.99 | 344.50 | 344.84 | 0.34* | 0.27 | 3.68 | 0.14 | 344.98 | 0.000 | 43.823 | 344.90 | 345.29 | 0.39** | 0.33 | 3.02 | 0.14 | 345.43 | 0.000 | 0.000 | n/a | 1.12 | 0.16 |
| 18 | 15 | 0.73 | 345.10 | 345.37 | 0.27* | 0.19 | 3.77 | 0.12 | 345.49 | 0.000 | 92.623 | 346.26 | 346.59 | 0.33** | 0.26 | 2.77 | 0.12 | 346.71 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 19 | 15 | 0.27 | 346.50 | 346.70 | 0.20* | 0.12 | 2.18 | 0.07 | 346.77 | 0.000 | 28.029 | 346.67 | 346.87 | 0.20** | 0.13 | 2.12 | 0.07 | 346.94 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 20 | 15 | 1.36 | 338.20 | 338.73 | 0.52 | 0.41 | 2.78 | 0.17 | 338.90 | 0.000 | 27.999 | 338.48 | 338.94 j | 0.46** | 0.41 | 3.31 | 0.17 | 339.11 | 0.000 | 0.000 | n/a | 1.00 | 0.17 |
| 21 | 15 | 2.16 | 327.20 | 328.15 | 0.95 | 0.57 | 2.16 | 0.23 | 328.38 | 0.000 | 66.408 | 331.60 | 332.19 j | 0.59** | 0.57 | 3.82 | 0.23 | 332.41 | 0.000 | 0.000 | n/a | 1.12 | 0.25 |
| 22 | 15 | 1.98 | 331.80 | 332.35 | 0.55* | 0.52 | 3.82 | 0.21 | 332.56 | 0.000 | 32.002 | 331.99 | 332.55 | 0.56** | 0.53 | 3.72 | 0.21 | 332.76 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Hydraulic Grade Line Computations

SCM 6B 25-YEAR

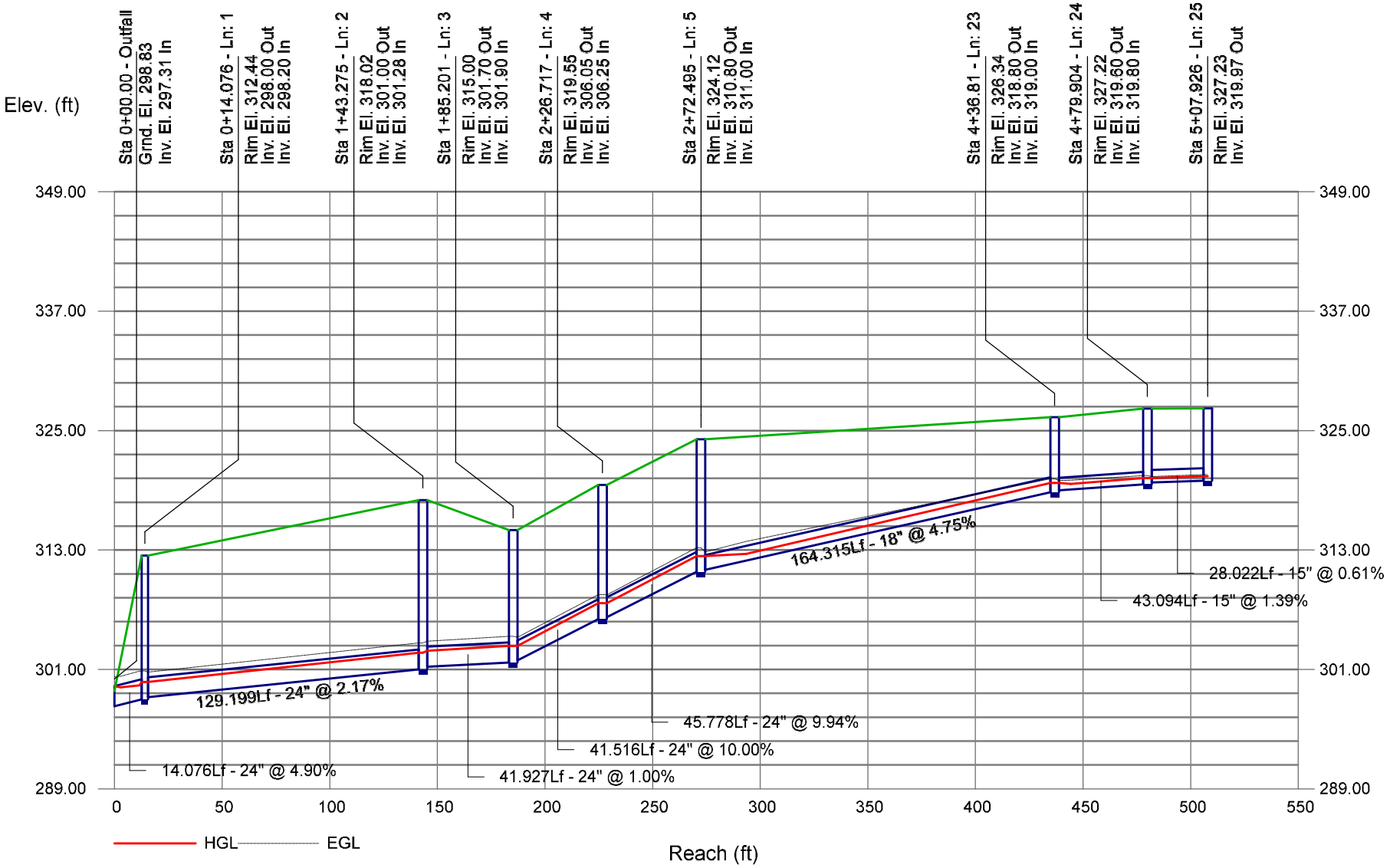
| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 23 | 18 | 5.98 | 311.00 | 312.40 | 1.40 | 1.17 | 3.49 | 0.41 | 312.80 | 0.000 | 164.315 | 318.80 | 319.74 j | 0.94** | 1.17 | 5.11 | 0.41 | 320.15 | 0.000 | 0.000 | n/a | 1.49 | 0.60 |
| 24 | 15 | 2.43 | 319.00 | 319.74 | 0.74 | 0.61 | 3.20 | 0.25 | 319.99 | 0.000 | 43.094 | 319.60 | 320.22 j | 0.62** | 0.61 | 3.98 | 0.25 | 320.47 | 0.000 | 0.000 | n/a | 1.10 | 0.27 |
| 25 | 15 | 1.24 | 319.80 | 320.22 | 0.42 | 0.37 | 3.39 | 0.16 | 320.39 | 0.000 | 28.022 | 319.97 | 320.41 | 0.44** | 0.38 | 3.23 | 0.16 | 320.57 | 0.000 | 0.000 | n/a | 1.00 | 0.16 |
| 26 | 15 | 0.31 | 319.60 | 320.66 | 1.06 | 0.14 | 0.28 | 0.08 | 320.74 | 0.000 | 33.996 | 323.00 | 323.22 j | 0.22** | 0.14 | 2.20 | 0.08 | 323.29 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 27 | 15 | 2.72 | 319.00 | 319.74 | 0.74 | 0.66 | 3.57 | 0.26 | 320.01 | 0.000 | 28.000 | 319.28 | 319.94 j | 0.66** | 0.66 | 4.13 | 0.26 | 320.21 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 28 | 18 | 6.90 | 293.69 | 295.19 | 1.50* | 1.77 | 3.90 | 0.24 | 295.43 | 0.432 | 15.198 | 294.00 | 295.14 | 1.14 | 1.45 | 4.77 | 0.35 | 295.50 | 0.500 | 0.466 | 0.071 | 1.01 | 0.36 |
| 29 | 15 | 3.29 | 294.20 | 295.50 | 1.25 | 0.74 | 2.68 | 0.11 | 295.61 | 0.259 | 110.638 | 301.80 | 302.53 j | 0.73** | 0.74 | 4.41 | 0.30 | 302.83 | 0.624 | 0.441 | n/a | 1.28 | 0.39 |
| 30 | 15 | 2.91 | 302.00 | 302.61 | 0.61* | 0.59 | 4.91 | 0.28 | 302.89 | 0.000 | 78.569 | 302.70 | 303.38 | 0.68** | 0.69 | 4.22 | 0.28 | 303.66 | 0.000 | 0.000 | n/a | 1.49 | n/a |
| 31 | 15 | 1.12 | 302.90 | 303.38 | 0.48 | 0.36 | 2.56 | 0.15 | 303.54 | 0.000 | 208.966 | 305.00 | 305.42 j | 0.42** | 0.36 | 3.14 | 0.15 | 305.57 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 32 | 18 | 1.23 | 301.91 | 303.38 | 1.47 | 0.40 | 0.70 | 0.15 | 303.53 | 0.000 | 48.735 | 302.20 | 302.61 | 0.41** | 0.40 | 3.09 | 0.15 | 302.76 | 0.000 | 0.000 | n/a | 1.50 | n/a |
| 33 | 15 | 0.47 | 302.40 | 302.65 | 0.25* | 0.17 | 2.69 | 0.09 | 302.74 | 0.000 | 34.300 | 302.64 | 302.91 | 0.27** | 0.19 | 2.45 | 0.09 | 303.00 | 0.000 | 0.000 | n/a | 1.00 | n/a |

Project File: SCM 6B Storm Network.stm | Number of lines: 33 | Run Date: 4/11/2025

Notes: * depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

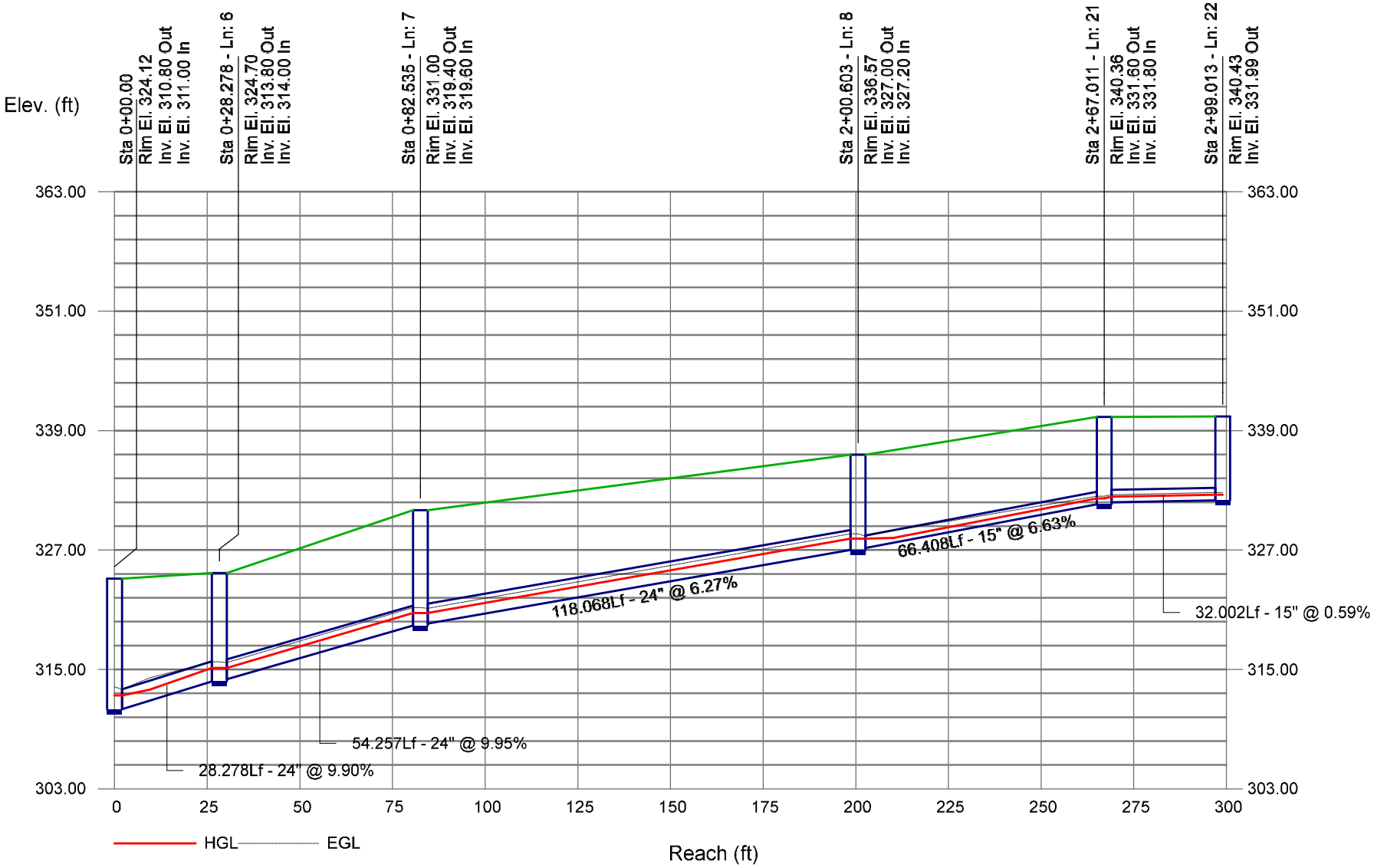
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 1-25 Proj. file: SCM 6B Storm Network.stm



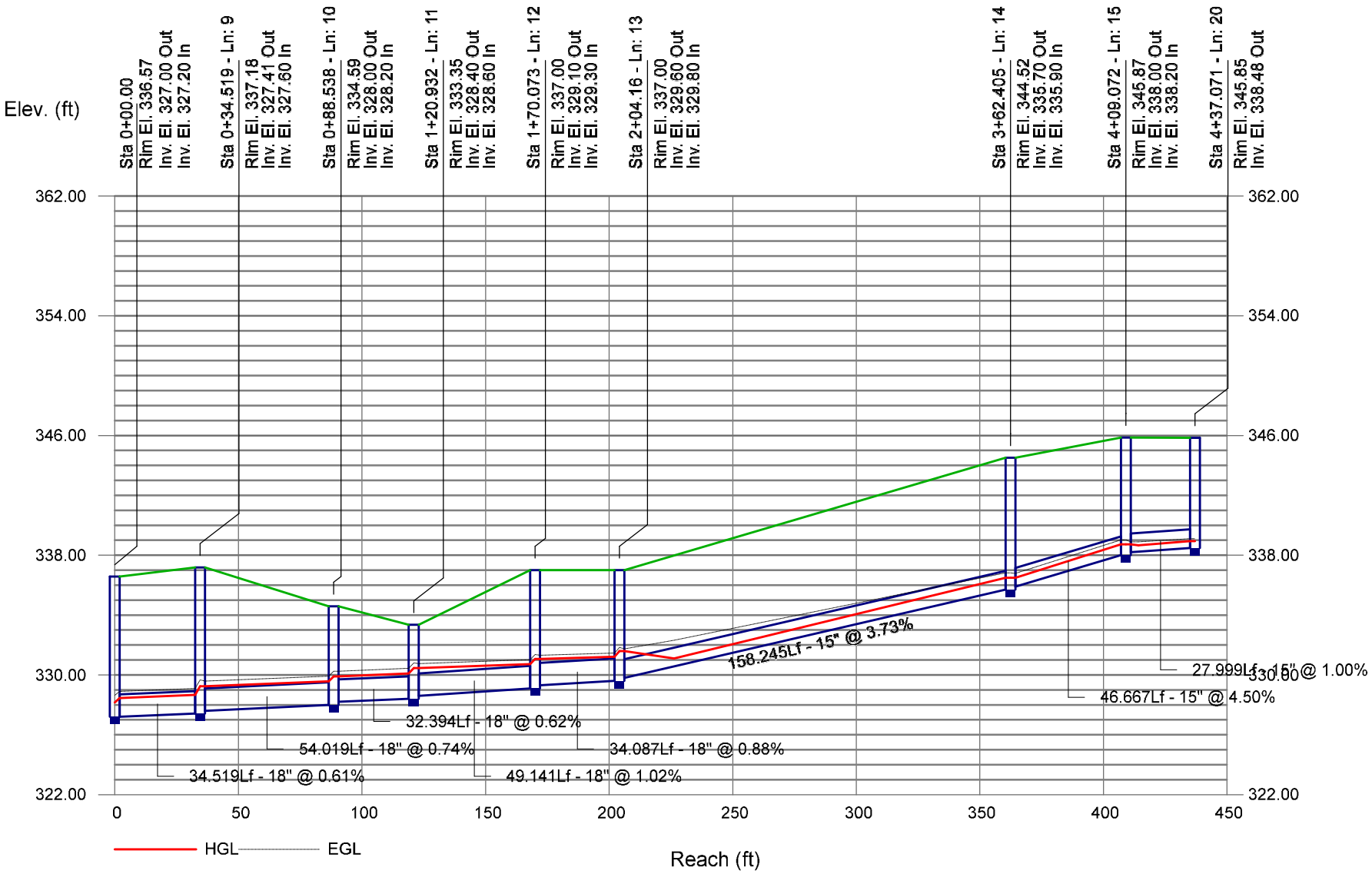
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 6-22 Proj. file: SCM 6B Storm Network.stm



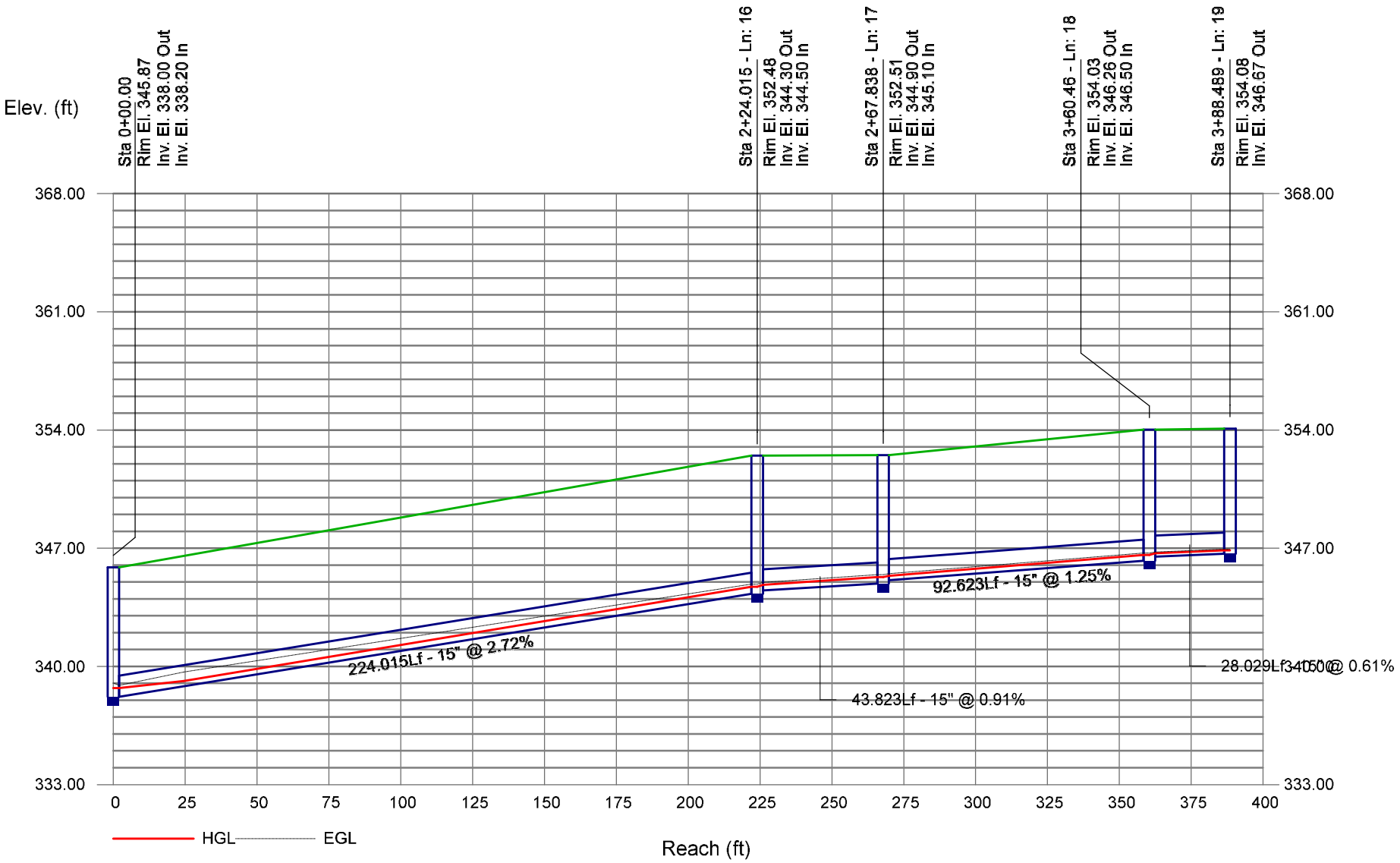
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 9-20 Proj. file: SCM 6B Storm Network.stm



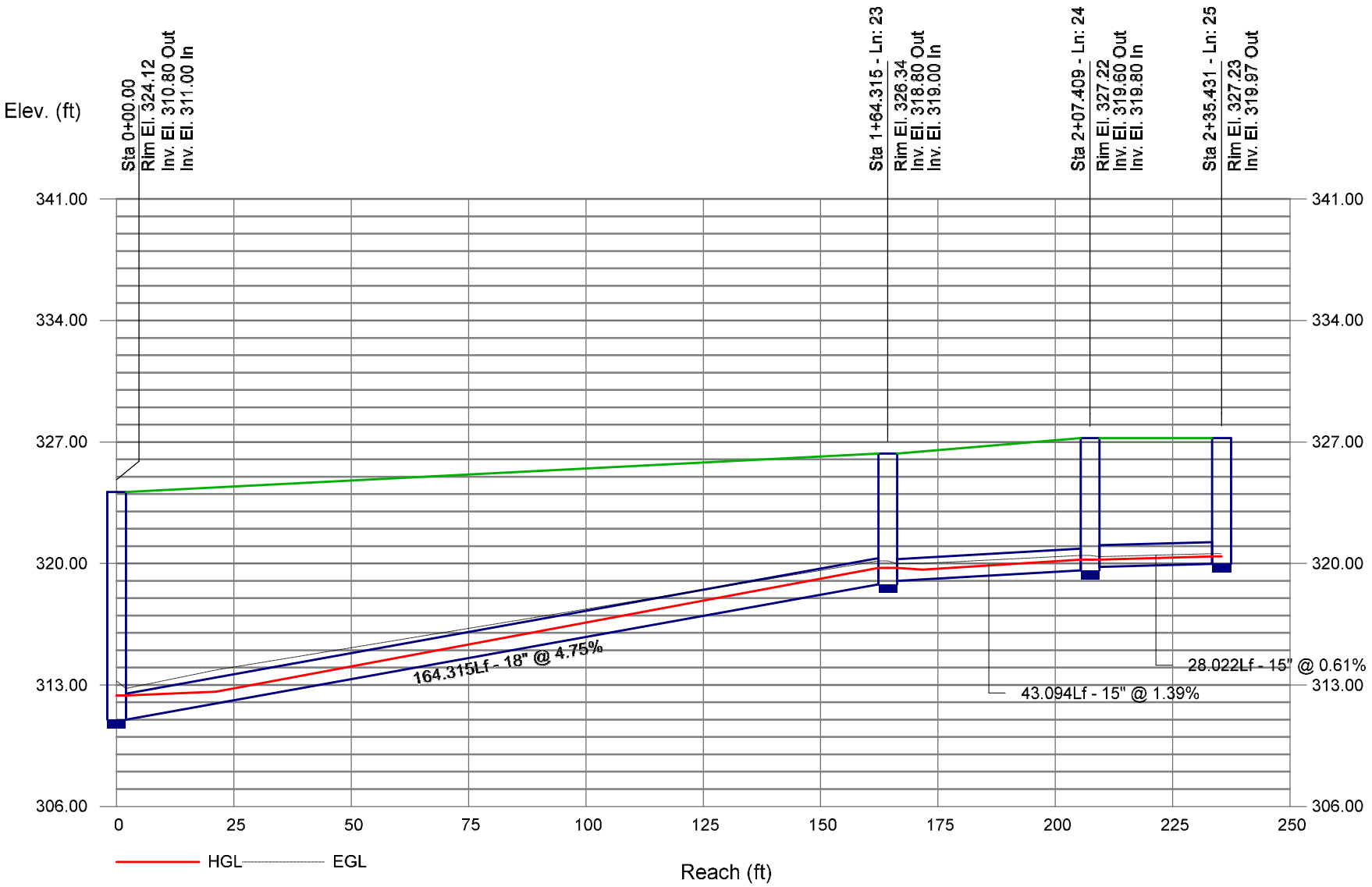
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 16-19 Proj. file: SCM 6B Storm Network.stm



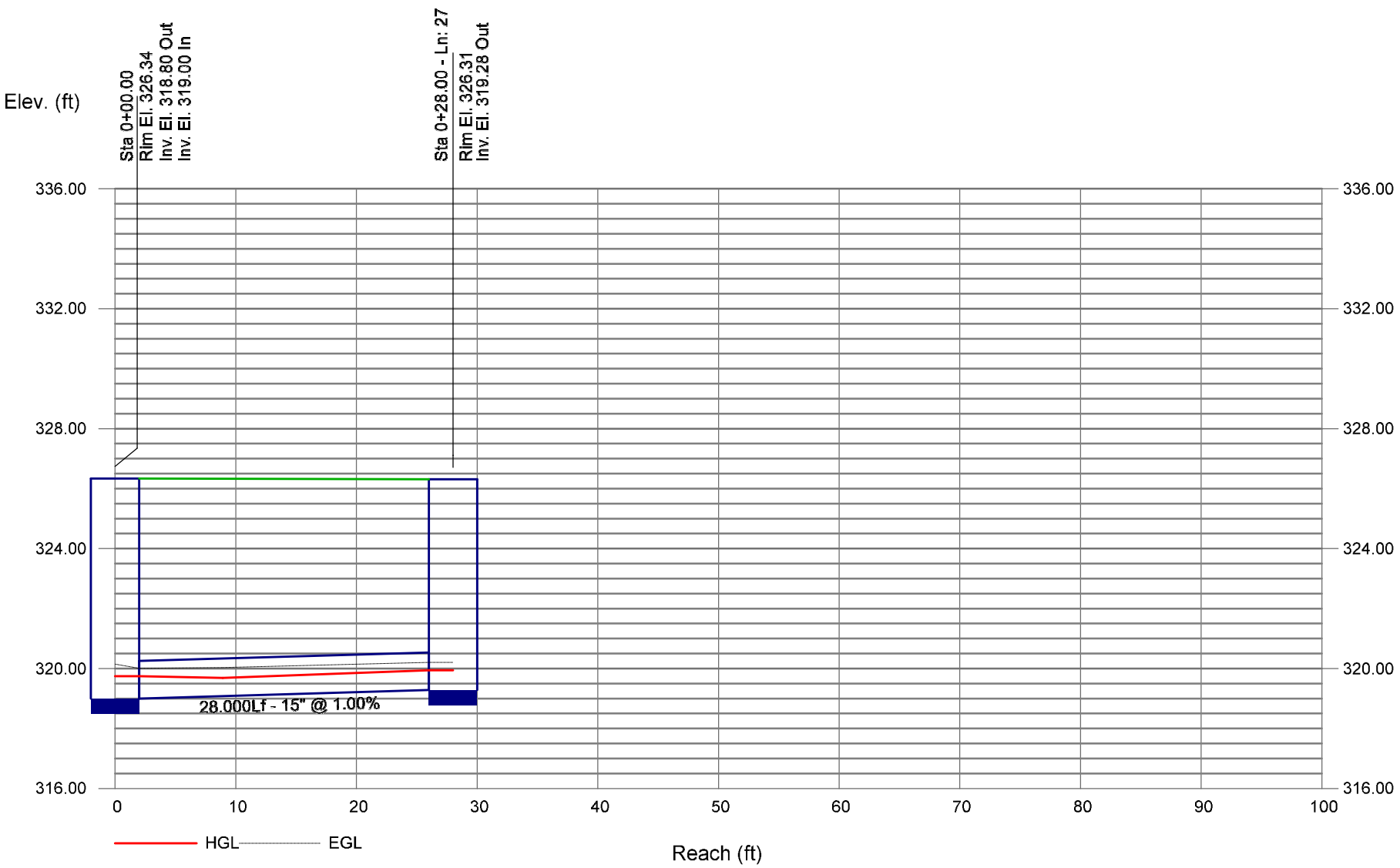
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 23-25 Proj. file: SCM 6B Storm Network.stm



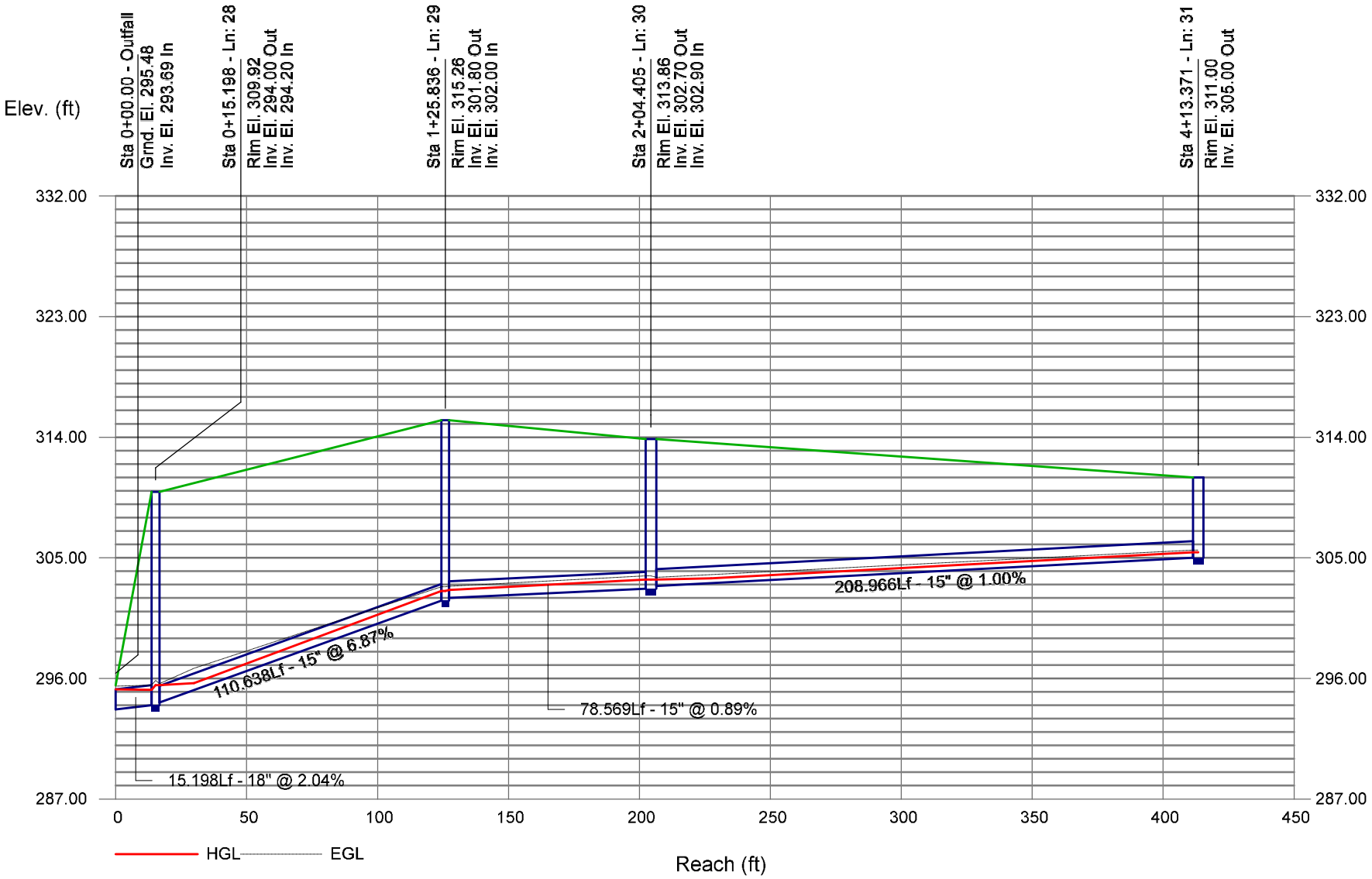
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 27-27 Proj. file: SCM 6B Storm Network.stm



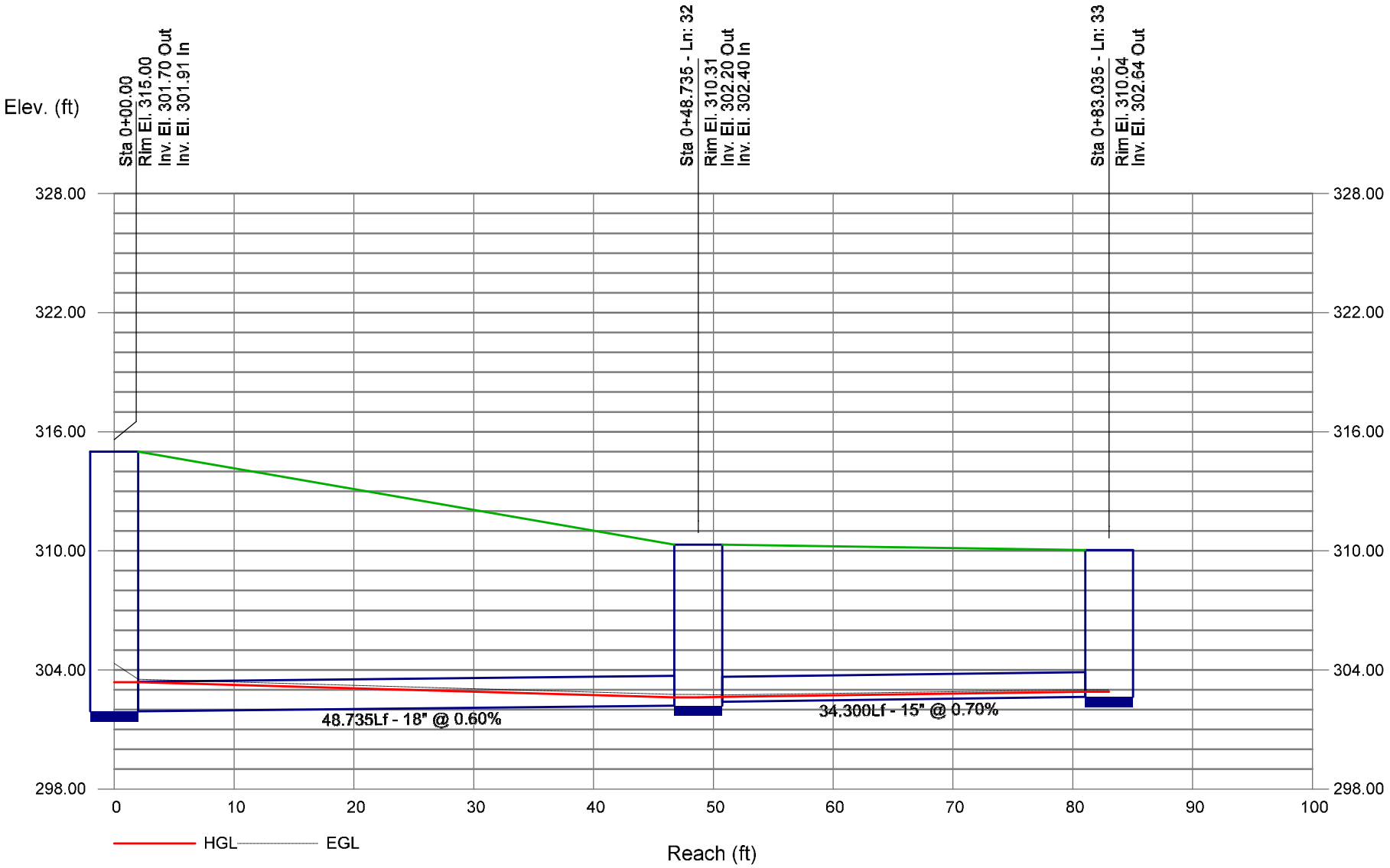
# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 28-31 Proj. file: SCM 6B Storm Network.stm

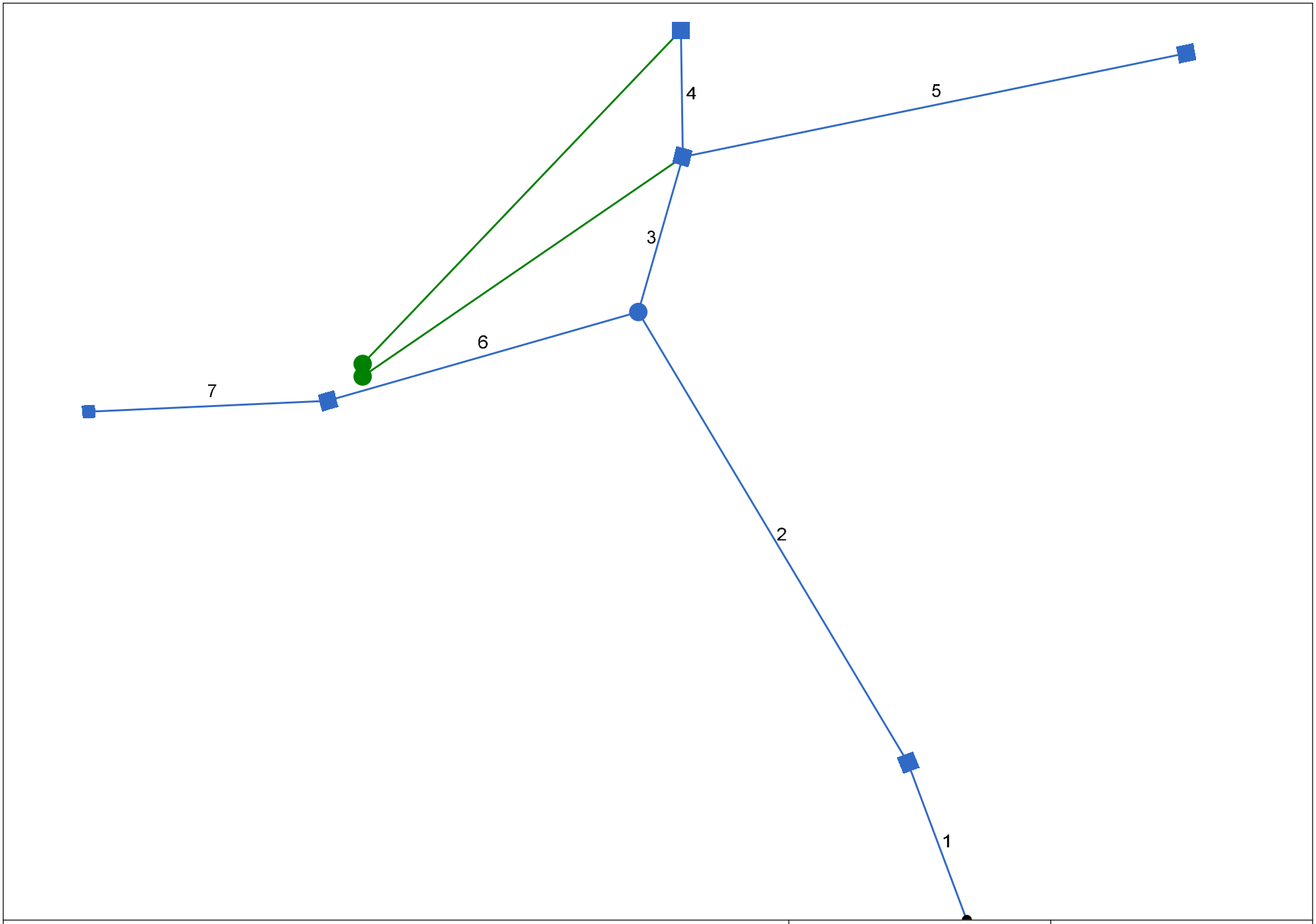


# Storm Sewer Profile

SCM 6B 25-YEAR PROFILE 32-33 Proj. file: SCM 6B Storm Network.stm



# Hydraflow Storm Sewers Extension for Autodesk® Civil 3D® Plan SCM 7 25-YEAR




| Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Date: 4/11/2025 |
|---|---|---|

# Storm Sewer Inventory Report

SCM 7 25-YEAR

| Line No. | Alignment | | | | Flow Data | | | | Physical Data | | | | | | | | Line ID |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dnstr Line No. | Line Length (ft) | Defl angle (deg) | Junc Type | Known Q (cfs) | Drng Area (ac) | Runoff Coeff (C) | Inlet Time (min) | Invert El Dn (ft) | Line Slope (%) | Invert El Up (ft) | Line Size (in) | Line Shape | N Value (n) | J-Loss Coeff (K) | Inlet/ Rim El (ft) | |
| 1 | End | 40.704 | -110.457 | DrGrt | 0.00 | 0.65 | 0.60 | 10.0 | 317.86 | 0.52 | 318.07 | 24 | Cir | 0.013 | 0.50 | 330.60 | Pipe - (505) |
| 2 | 1 | 126.978 | -10.287 | MH | 0.00 | 0.00 | 0.00 | 10.0 | 318.27 | 0.50 | 318.90 | 24 | Cir | 0.013 | 0.97 | 331.65 | Pipe - (504) |
| 3 | 2 | 39.048 | 46.583 | Comb | 0.00 | 0.18 | 0.60 | 10.0 | 327.83 | 2.38 | 328.76 | 15 | Cir | 0.013 | 1.36 | 332.78 | Pipe - (480) |
| 4 | 3 | 30.684 | -16.910 | Comb | 0.00 | 0.41 | 0.60 | 10.0 | 328.96 | 3.39 | 330.00 | 15 | Cir | 0.013 | 1.00 | 333.86 | Pipe - (487) |
| 5 | 3 | 124.068 | 62.476 | Comb | 0.00 | 0.26 | 0.60 | 10.0 | 328.96 | 7.49 | 338.25 | 15 | Cir | 0.013 | 1.00 | 342.10 | Pipe - (481) |
| 6 | 2 | 78.082 | -75.262 | Comb | 0.00 | 0.31 | 0.60 | 10.0 | 319.45 | 0.50 | 319.84 | 18 | Cir | 0.013 | 0.50 | 328.75 | Pipe - (506) |
| 7 | 6 | 57.520 | 13.408 | DrGrt | 0.00 | 1.34 | 0.60 | 10.0 | 320.11 | 0.50 | 320.40 | 15 | Cir | 0.013 | 1.00 | 323.85 | Pipe - (586) |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Date: 4/11/2025

# Structure Report

SCM 7 25-YEAR

| Struct No. | Structure ID | Junction Type | Rim Elev (ft) | Structure | | | Line Out | | | Line In | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Shape | Length (ft) | Width (ft) | Size (in) | Shape | Invert (ft) | Size (in) | Shape | Invert (ft) |
| 1 | YI 701 | DropGrate | 330.60 | Rect | 4.00 | 4.00 | 24 | Cir | 318.07 | 24 | Cir | 318.27 |
| 2 | JB 702 | Manhole | 331.65 | Cir | 4.00 | 4.00 | 24 | Cir | 318.90 | 15<br>18 | Cir<br>Cir | 327.83<br>319.45 |
| 3 | CB 703 | Combination | 332.78 | Rect | 4.00 | 4.00 | 15 | Cir | 328.76 | 15<br>15 | Cir<br>Cir | 328.96<br>328.96 |
| 4 | CB 703A | Combination | 333.86 | Rect | 4.00 | 4.00 | 15 | Cir | 330.00 | | | |
| 5 | CB 704 | Combination | 342.10 | Rect | 4.00 | 4.00 | 15 | Cir | 338.25 | | | |
| 6 | CB 702A | Combination | 328.75 | Rect | 4.00 | 4.00 | 18 | Cir | 319.84 | 15 | Cir | 320.11 |
| 7 | YI 702B | DropGrate | 323.85 | Rect | 3.00 | 3.00 | 15 | Cir | 320.40 | | | |

Project File: SCM 7 Storm Network.stm | Number of Structures: 7 | Run Date: 4/11/2025

# Storm Sewer Summary Report

SCM 7 25-YEAR

| Line No. | Line ID | Flow rate (cfs) | Line Size (in) | Line shape | Line length (ft) | Invert EL Dn (ft) | Invert EL Up (ft) | Line Slope (%) | HGL Down (ft) | HGL Up (ft) | Minor loss (ft) | HGL Junct (ft) | Dns Line No. | Junction Type |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Pipe - (505) | 11.64 | 24 | Cir | 40.704 | 317.86 | 318.07 | 0.516 | 319.86 | 319.95 | 0.11 | 320.06 | End | DropGrate |
| 2 | Pipe - (504) | 9.40 | 24 | Cir | 126.978 | 318.27 | 318.90 | 0.496 | 320.06 | 320.21 | 0.28 | 320.49 | 1 | Manhole |
| 3 | Pipe - (480) | 3.21 | 15 | Cir | 39.048 | 327.83 | 328.76 | 2.382 | 328.32 | 329.48 | 0.41 | 329.48 | 2 | Combination |
| 4 | Pipe - (487) | 1.59 | 15 | Cir | 30.684 | 328.96 | 330.00 | 3.389 | 329.48 | 330.50 | n/a | 330.50 j | 3 | Combination |
| 5 | Pipe - (481) | 1.01 | 15 | Cir | 124.068 | 328.96 | 338.25 | 7.488 | 329.48 | 338.64 | n/a | 338.64 j | 3 | Combination |
| 6 | Pipe - (506) | 6.35 | 18 | Cir | 78.082 | 319.45 | 319.84 | 0.499 | 320.52 | 320.91 | 0.17 | 321.08 | 2 | Combination |
| 7 | Pipe - (586) | 5.20 | 15 | Cir | 57.520 | 320.11 | 320.40 | 0.504 | 321.36* | 321.73* | 0.28 | 322.01 | 6 | DropGrate |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown). ; j - Line contains hyd. jump.

# Inlet Report

SCM 7 25-YEAR

| Line No | Inlet ID | Q = CIA (cfs) | Q carry (cfs) | Q capt (cfs) | Q Byp (cfs) | Junc Type | Curb Inlet | | Grate Inlet | | | Gutter | | | | | | | Inlet | | | Byp Line No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Ht (in) | L (ft) | Area (sqft) | L (ft) | W (ft) | So (ft/ft) | W (ft) | Sw (ft/ft) | Sx (ft/ft) | n | Depth (ft) | Spread (ft) | Depth (ft) | Spread (ft) | Depr (in) | |
| 1 | YI 701 | 2.52 | 0.00 | 1.30 | 1.22 | DrGrt | 0.0 | 0.00 | 0.00 | 3.00 | 2.50 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.14 | 16.10 | 0.14 | 16.10 | 0.0 | Off |
| 2 | JB 702 | 0.00 | 0.00 | 0.00 | 0.00 | MH | 0.0 | 0.00 | 0.00 | 0.00 | 0.00 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.00 | 0.00 | 0.00 | 0.00 | 0.0 | Off |
| 3 | CB 703 | 0.70 | 0.01 | 0.71 | 0.00 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.12 | 2.16 | 0.00 | 0.00 | 0.0 | 6 |
| 4 | CB 703A | 1.59 | 0.00 | 1.47 | 0.12 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.16 | 4.15 | 0.06 | 1.05 | 0.0 | 6 |
| 5 | CB 704 | 1.01 | 0.00 | 0.99 | 0.01 | Comb | 6.0 | 1.50 | 0.00 | 3.00 | 2.50 | 0.070 | 2.00 | 0.060 | 0.020 | 0.013 | 0.14 | 2.99 | 0.03 | 0.48 | 0.0 | 3 |
| 6 | CB 702A | 1.20 | 0.12 | 1.32 | 0.00 | Comb | 6.0 | 3.00 | 7.50 | 3.00 | 2.50 | Sag | 2.00 | 0.060 | 0.020 | 0.013 | 0.20 | 6.25 | 0.20 | 6.25 | 0.0 | Off |
| 7 | YI 702B | 5.20 | 0.00 | 1.43 | 3.77 | DrGrt | 0.0 | 0.00 | 0.00 | 2.00 | 2.00 | 0.010 | 2.00 | 0.020 | 0.020 | 0.013 | 0.19 | 21.10 | 0.19 | 21.10 | 0.0 | Off |

Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

NOTES: Inlet N-Values = 0.016; Intensity = 68.69 / (Inlet time + 12.40) ^ 0.76; Return period = 25 Yrs. ; * Indicates Known Q added. All curb inlets are Horiz throat.

# Hydraulic Grade Line Computations

SCM 7 25-YEAR

| Line | Size | Q | Downstream | | | | | | | | Len | Upstream | | | | | | | | Check | | JL coeff | Minor loss |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | | Invert elev | HGL elev | Depth | Area | Vel | Vel head | EGL elev | Sf | Ave Sf | Enrgy loss | | |
| | (in) | (cfs) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (ft) | (ft) | (ft) | (ft) | (sqft) | (ft/s) | (ft) | (ft) | (%) | (%) | (ft) | (K) | (ft) |
| 1 | 24 | 11.64 | 317.86 | 319.86 | 2.00 | 3.14 | 3.70 | 0.21 | 320.07 | 0.265 | 40.704 | 318.07 | 319.95 | 1.88 | 3.06 | 3.80 | 0.22 | 320.17 | 0.229 | 0.247 | 0.100 | 0.50 | 0.11 |
| 2 | 24 | 9.40 | 318.27 | 320.06 | 1.79 | 2.97 | 3.17 | 0.16 | 320.22 | 0.153 | 126.978 | 318.90 | 320.21 | 1.31 | 2.19 | 4.29 | 0.29 | 320.50 | 0.293 | 0.223 | 0.283 | 0.97 | 0.28 |
| 3 | 15 | 3.21 | 327.83 | 328.32 | 0.49* | 0.44 | 7.24 | 0.30 | 328.62 | 0.000 | 39.048 | 328.76 | 329.48 | 0.72** | 0.73 | 4.38 | 0.30 | 329.78 | 0.000 | 0.000 | n/a | 1.36 | 0.41 |
| 4 | 15 | 1.59 | 328.96 | 329.48 | 0.52 | 0.46 | 3.28 | 0.19 | 329.67 | 0.000 | 30.684 | 330.00 | 330.50 j | 0.50** | 0.46 | 3.47 | 0.19 | 330.69 | 0.000 | 0.000 | n/a | 1.00 | n/a |
| 5 | 15 | 1.01 | 328.96 | 329.48 | 0.52 | 0.33 | 2.08 | 0.14 | 329.62 | 0.000 | 124.068 | 338.25 | 338.64 j | 0.39** | 0.33 | 3.04 | 0.14 | 338.79 | 0.000 | 0.000 | n/a | 1.00 | 0.14 |
| 6 | 18 | 6.35 | 319.45 | 320.52 | 1.07* | 1.35 | 4.72 | 0.35 | 320.86 | 0.499 | 78.082 | 319.84 | 320.91 | 1.07 | 1.35 | 4.72 | 0.35 | 321.25 | 0.500 | 0.499 | 0.390 | 0.50 | 0.17 |
| 7 | 15 | 5.20 | 320.11 | 321.36 | 1.25* | 1.23 | 4.24 | 0.28 | 321.64 | 0.648 | 57.520 | 320.40 | 321.73 | 1.25 | 1.23 | 4.24 | 0.28 | 322.01 | 0.648 | 0.648 | 0.373 | 1.00 | 0.28 |

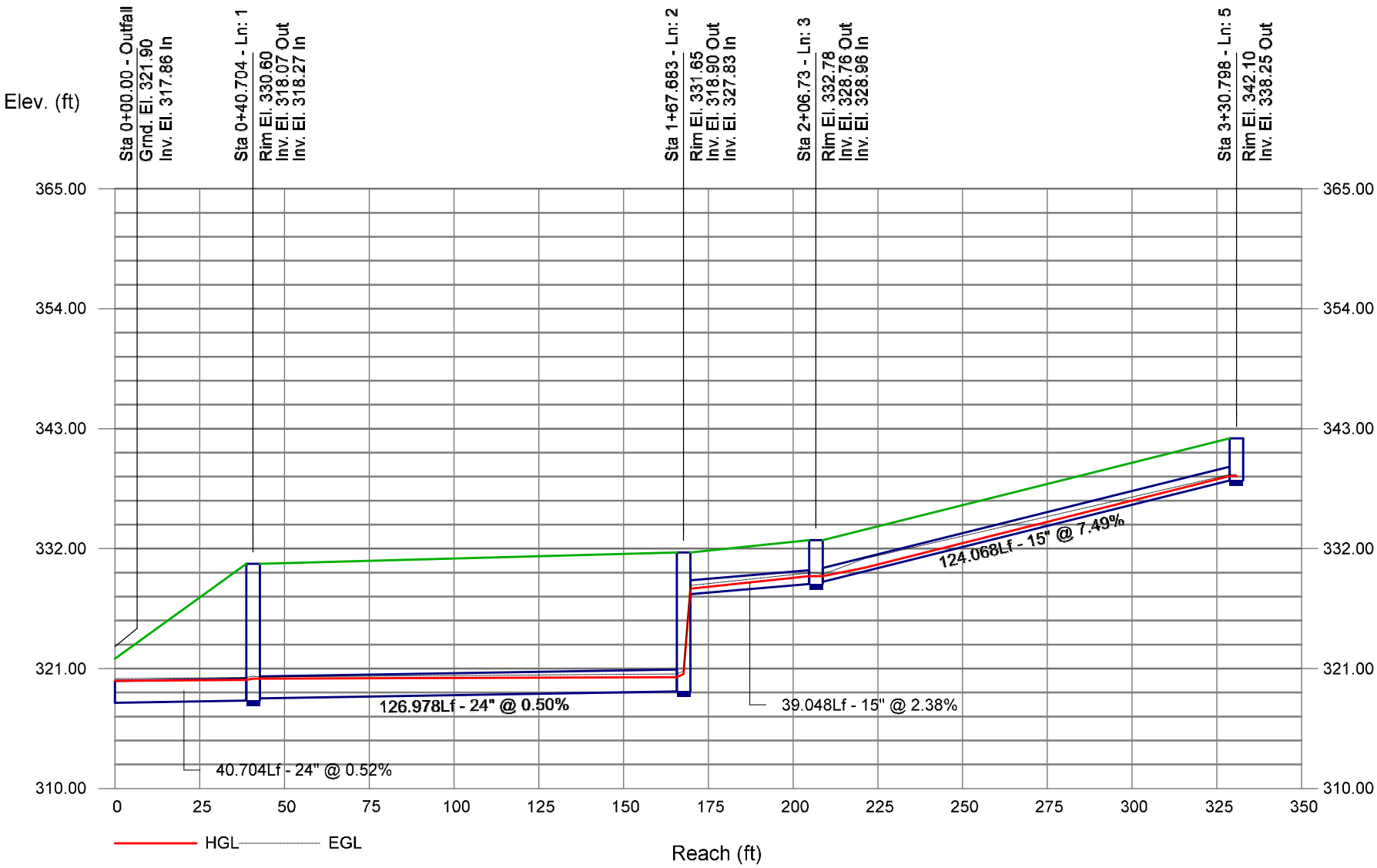
Project File: SCM 7 Storm Network.stm | Number of lines: 7 | Run Date: 4/11/2025

Notes: * Normal depth assumed; ** Critical depth.; j-Line contains hyd. jump ; c = cir e = ellip b = box

# Storm Sewer Profile

SCM 7 25-YEAR PROFILE 1-5

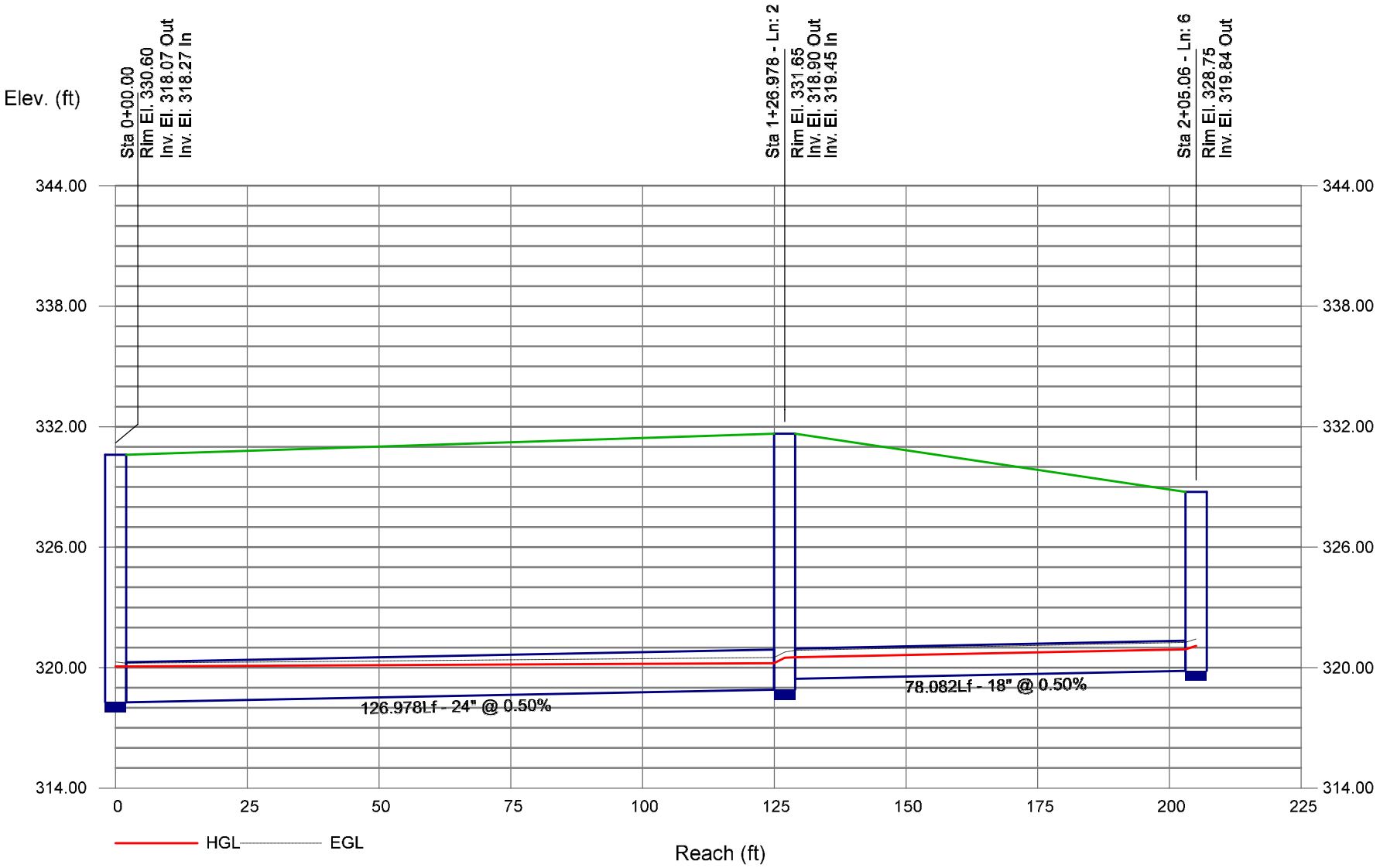
Proj. file: SCM 7 Storm Network.stm



# Storm Sewer Profile

SCM 7 25-YEAR PROFILE 4-7

Proj. file: SCM 7 Storm Network.stm



Rip-Rap Calculations

AMERICAN Engineering

4020 Westchase Boulevard Suite 450 Raleigh, NC 27607
OFFICE: 919.469.1101 | **AMERICAN-EA.COM**

**Project Name:** Merritt
**Project Number** 23-0004
**Date:** 4/14/25
**Calculated By:** RC
**Checked By:** JK

## Rip Rap Dissipater Calculations 10-Year Storm

| Outlet ID | Pipe Diameter (in) | Stone Class | Stone Depth (in) | Stone Material (tons) | Geo-Textile (SY) | Start Width (ft) | End Width (ft) | Length (ft) |
|---|---|---|---|---|---|---|---|---|
| FES 100 | 30 | B | 18 | 5 | 16 | 5 | 15 | 10 |
| FES 120 | 30 | B | 18 | 5 | 16 | 5 | 15 | 10 |
| FES 139 | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES OS 1A | 30 | B | 18 | 5 | 16 | 5 | 15 | 10 |
| FES 140 | 36 | B | 18 | 7 | 22 | 6 | 18 | 12 |
| FES OS 1B | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 160 | 15 | B | 12 | 1 | 5 | 2.5 | 7.5 | 5 |
| FES 0S 1C | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 200 | 30 | B | 18 | 5 | 16 | 5 | 15 | 10 |
| FES 250 | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES OS 2 | 24 | B | 15 | 3 | 11 | 4 | 12 | 8 |
| FES 400 | 36 | B | 18 | 7 | 22 | 6 | 18 | 12 |
| FES OS 4 | 36 | B | 18 | 7 | 22 | 6 | 18 | 12 |
| FES 500 | 48 | I | 24 | 17 | 38 | 8 | 24 | 16 |
| FES OS 5A | 24 | B | 15 | 3 | 11 | 4 | 12 | 8 |
| FES 550 | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES OS 5B | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 560 | 30 | B | 18 | 5 | 16 | 5 | 15 | 10 |
| FES OS 5C | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 600 | 15 | B | 12 | 1 | 5 | 2.5 | 7.5 | 5 |
| FES OS 6A | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 610 | 24 | B | 15 | 3 | 11 | 4 | 12 | 8 |
| FES 630 | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES OS 6B | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| FES 700 | 24 | B | 15 | 3 | 11 | 4 | 12 | 8 |
| FES 0S 7 | 18 | B | 12 | 2 | 7 | 3 | 9 | 6 |
| GRNWY 100 | 15 | B | 12 | 1 | 5 | 2.5 | 7.5 | 5 |
| GRNWY 110 | 15 | B | 12 | 1 | 5 | 2.5 | 7.5 | 5 |
| GRNWY 120 | 15 | B | 12 | 1 | 5 | 2.5 | 7.5 | 5 |
| EW 11 | 60 (DBL) | I | 30 | 26 | 56 | 18 | 18 | 36 |
| EW 21 | 42 | B | 24 | 10 | 28 | 7 | 21 | 14 |
| EW 31 | 60 | I | 30 | 26 | 56 | 18 | 18 | 36 |

Calculations were determined from NCDOT Detail 876.02 *Guide for Rip Rap at Pipe Outlets*
Values shown in table above are minimum quantities and dimensions
DBL is double barell pipe

Sediment Basin Calculations

NOTE:

1. SILT FENCE OUTLETS ARE IMPLEMENTED FOR SEDIMENT CONTROL MEASURES IN DISTURBED AREAS NOT WITHIN SCM AREA. CONTRIBUTING AREAS TO SILT FENCE OUTLETS ARE A MAXIMUM OF 0.25 ACRES.

2. THIS EXHIBIT IS TO WORK IN TANDEM WITH SEDIMENT BASIN SIZING WORKSHEETS SEEN WITHIN THE PROJECT E&SC REPORT.

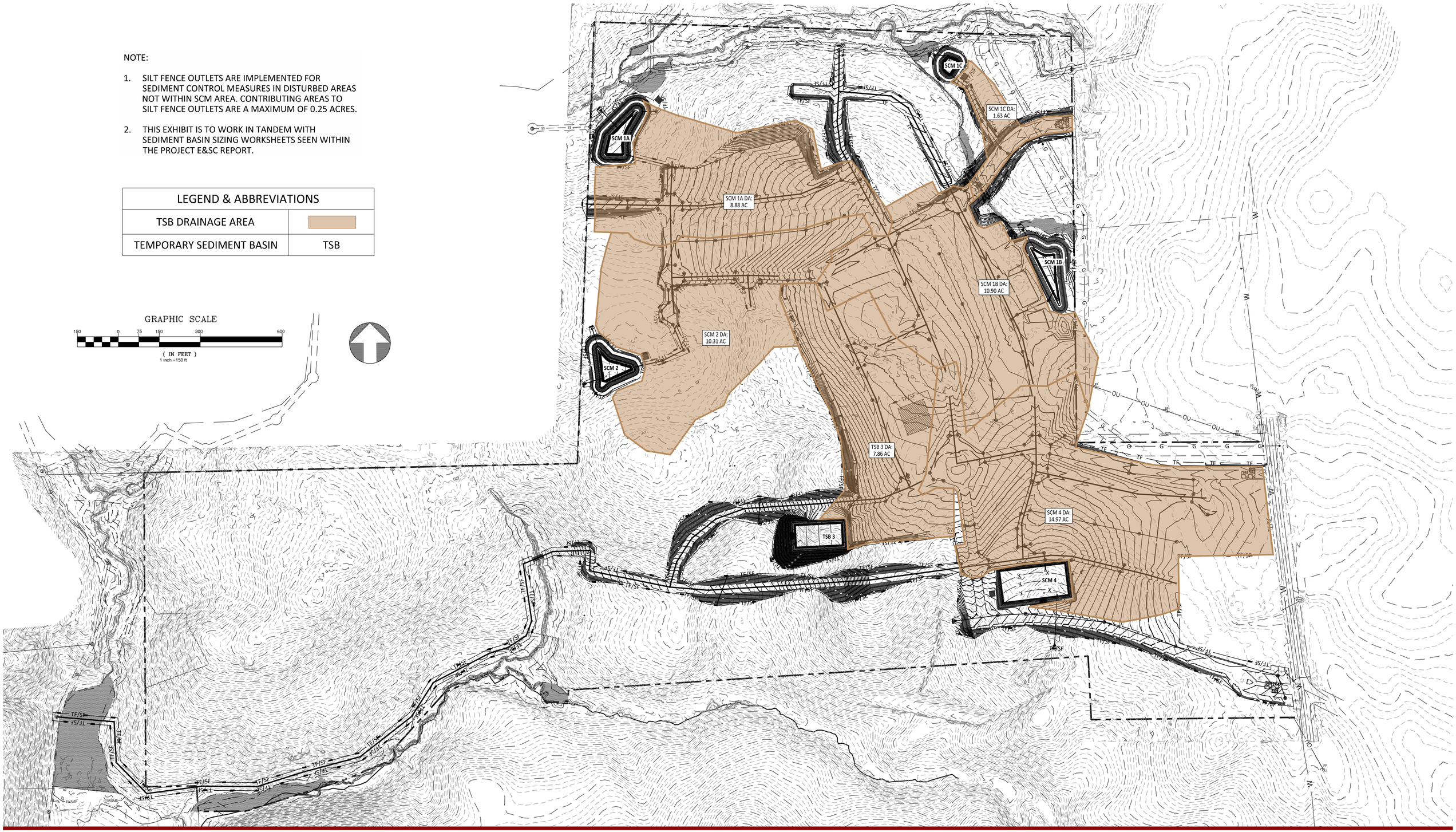
| LEGEND & ABBREVIATIONS | |
|---|---|
| TSB DRAINAGE AREA | |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch = 150 ft




# TEMPORARY SEDIMENT BASIN DRAINAGE AREAS - PH1 STG2


AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA



COPYRIGHT @2024 AMERICAN ENGINEERING


PROJECT # 230004

**MERRITT RESERVE**

ROLESVILLE, NC

April 11, 2025

NOTE:

1. SILT FENCE OUTLETS ARE IMPLEMENTED FOR SEDIMENT CONTROL MEASURES IN DISTURBED AREAS NOT WITHIN SCM AREA. CONTRIBUTING AREAS TO SILT FENCE OUTLETS ARE A MAXIMUM OF 0.25 ACRES.
2. THIS EXHIBIT IS TO WORK IN TANDEM WITH SEDIMENT BASIN SIZING WORKSHEETS SEEN WITHIN THE PROJECT E&SC REPORT.

| LEGEND & ABBREVIATIONS | |
|---|---|
| TSB DRAINAGE AREA | |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch = 150 ft




# TEMPORARY SEDIMENT BASIN DRAINAGE AREAS - PH2 & 3 STG1


AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA



COPYRIGHT @2024 AMERICAN ENGINEERING


PROJECT # 230004

**MERRITT RESERVE**

ROLESVILLE, NC

April 13, 2025

NOTE:

1. SILT FENCE OUTLETS ARE IMPLEMENTED FOR SEDIMENT CONTROL MEASURES IN DISTURBED AREAS NOT WITHIN SCM AREA. CONTRIBUTING AREAS TO SILT FENCE OUTLETS ARE A MAXIMUM OF 0.25 ACRES.

2. THIS EXHIBIT IS TO WORK IN TANDEM WITH SEDIMENT BASIN SIZING WORKSHEETS SEEN WITHIN THE PROJECT E&SC REPORT.

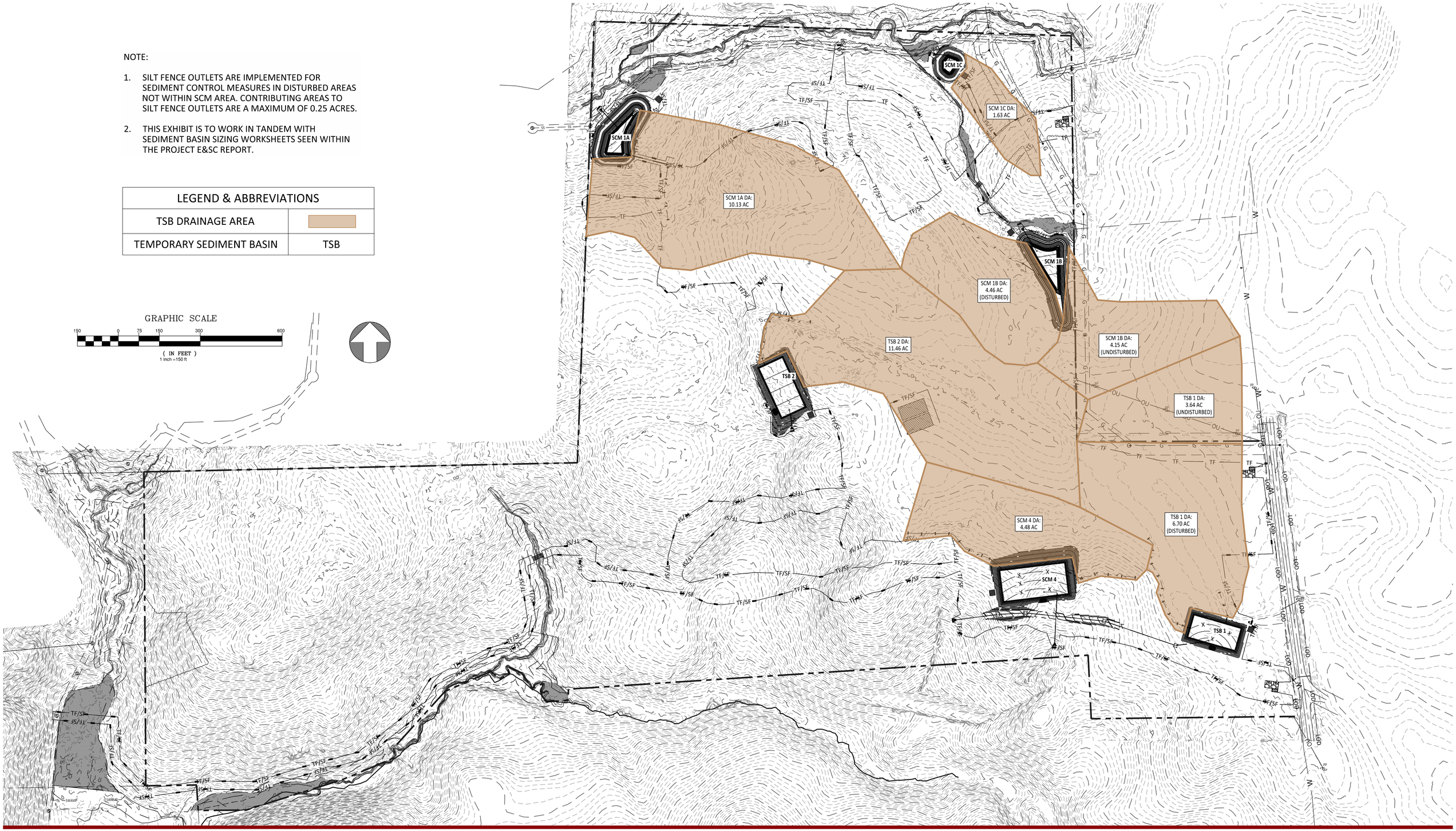
| LEGEND & ABBREVIATIONS | |
|---|---|
| TSB DRAINAGE AREA | |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch = 150 ft




# TEMPORARY SEDIMENT BASIN DRAINAGE AREAS - PH1 STG1


AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA



COPYRIGHT @2024 AMERICAN ENGINEERING


PROJECT # 230004

**MERRITT RESERVE**

ROLESVILLE, NC

April 11, 2025

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 10.13 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 1A**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 10.13 | Disturbed Area (Acres) |
| 44.10 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 441059 | 0 | 0 | 0.60 | 7.20 | 10.13 | 10.13 | 44.10 |

Total Area (SF) 441059

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 43.74 cfs

# Temporary Sediment Basin

**Okay**

**SCM 1A**

| | |
|---|---|
| 10.13 | Drainage Area (Acres) |
| 44.10 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 18225.58 | Required Volume $ft^3$ |
| 19212 | Required Surface Area $ft^2$ |
| 98.0 | Suggested Width ft |
| 196.0 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 200 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft | (2 to 13 feet above grade) |
| 84 | Bottom Width ft | |
| 184 | Bottom Length ft | |
| 15456 | Bottom Area $ft^2$ | |
| 70741 | Actual Volume $ft^3$ | **Okay** |
| 20000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 3.94 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 8.61 | Total Drainage Area | | User entry | **SCM 1B** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/11/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 4.46 | Disturbed Area (Acres) | | | |
| 31.27 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 180863 | 194332 | 0 | 0 | 0.50 | 7.20 | 8.61 | 4.46 | 31.27 |

Total Area (SF) 375195

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 31.01 cfs

# Temporary Sediment Basin

**Okay**

**SCM 1B**

| | |
|---|---|
| 8.61 | Drainage Area (Acres) |
| 31.27 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 15503.93 | Required Volume $ft^3$ |
| 13619 | Required Surface Area $ft^2$ |
| 82.5 | Suggested Width ft |
| 165.0 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 210 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft | (2 to 13 feet above grade) |
| 84 | Bottom Width ft | |
| 194 | Bottom Length ft | |
| 16296 | Bottom Area $ft^2$ | |
| 74421 | Actual Volume $ft^3$ | **Okay** |
| 21000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 3.36 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 1.63 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 1C**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Okay | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 1.63 | Disturbed Area (Acres) |
| 7.09 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 70873 | 0 | 0 | 0.60 | 7.20 | 1.63 | 1.63 | 7.09 |

Total Area (SF) 70873

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

| | | |
|---|---|---|
| i10 = | 7.20 | in/hr |
| Q = | 7.03 | cfs |

# Temporary Sediment Basin

**Okay**

**SCM 1C**

| | |
|---|---|
| 1.63 | Drainage Area (Acres) |
| 7.09 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 2928.636 | Required Volume $ft^3$ |
| 3087 | Required Surface Area $ft^2$ |
| 39.3 | Suggested Width ft |
| 78.6 | Suggested Length ft |

| | | |
|---|---|---|
| 50 | Trial Top Width at Spillway Invert ft | |
| 66 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 38 | Bottom Width ft | |
| 54 | Bottom Length ft | |
| 2052 | Bottom Area $ft^2$ | |
| 7956 | Actual Volume $ft^3$ | **Okay** |
| 3300 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 2 | Skimmer Size (inches) |
| 0.167 | Head on Skimmer (feet) |
| 1 | Orifice Size (1/4 inch increments) |
| 3.10 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 5.15 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 4**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Okay | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 5.15 | Disturbed Area (Acres) |
| 22.44 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 224436 | 0 | 0 | 0.60 | 7.20 | 5.15 | 5.15 | 22.44 |

Total Area (SF) 224436

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

| | | |
|---|---|---|
| i10 = | 7.20 | in/hr |
| Q = | 22.26 | cfs |

# Temporary Sediment Basin

**Okay**

**SCM 4**

| | |
|---|---|
| 5.15 | Drainage Area (Acres) |
| 22.44 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 9274.215 | Required Volume $ft^3$ |
| 9776 | Required Surface Area $ft^2$ |
| 69.9 | Suggested Width ft |
| 139.8 | Suggested Length ft |

| | | |
|---|---|---|
| 125 | Trial Top Width at Spillway Invert ft | |
| 250 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 113 | Bottom Width ft | |
| 238 | Bottom Length ft | |
| 26894 | Bottom Area $ft^2$ | |
| 87144 | Actual Volume $ft^3$ | **Okay** |
| 31250 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 2 | Skimmer Size (inches) |
| 0.167 | Head on Skimmer (feet) |
| 1.75 | Orifice Size (1/4 inch increments) |
| 3.21 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 10.32 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**TSB 1**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 6.70 | Disturbed Area (Acres) |
| 37.47 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 157598 | 292045 | 0 | 0 | 0.50 | 7.20 | 10.32 | 6.70 | 37.47 |

Total Area (SF) 449643

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 37.16 cfs

# Temporary Sediment Basin

**Okay**

**TSB 1**

| | | |
|---|---|---|
| 10.32 | Drainage Area (Acres) | |
| 37.47 | Peak Flow from 10-year Storm (cfs) | 4/11/25 |

| | | |
|---|---|---|
| 18580.29 | Required Volume $ft^3$ | |
| 16322 | Required Surface Area $ft^2$ | |
| 90.3 | Suggested Width ft | |
| 180.7 | Suggested Length ft | |

| | | |
|---|---|---|
| 95 | Trial Top Width at Spillway Invert ft | |
| 190 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 83 | Bottom Width ft | |
| 178 | Bottom Length ft | |
| 14774 | Bottom Area $ft^2$ | |
| 49164 | Actual Volume $ft^3$ | **Okay** |
| 18050 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 3.18 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 11.49 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**TSB 2**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 11.49 | Disturbed Area (Acres) |
| 50.06 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| Undisturbed* (SF) | Disturbed (SF) | Off-site (SF) | Impervious (SF) | Rational C Factor | i(10) (in./hr.) | Tot. D. A. (AC) | Disturbed (AC) | Q(10) (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 500572 | 0 | 0 | 0.60 | 7.20 | 11.49 | 11.49 | 50.06 |

Total Area (SF) 500572

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 49.64 cfs

# Temporary Sediment Basin

**Okay**

**TSB 2**

| | |
|---|---|
| 11.49 | Drainage Area (Acres) |
| 50.06 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 20684.79 | Required Volume $ft^3$ |
| 21804 | Required Surface Area $ft^2$ |
| 104.4 | Suggested Width ft |
| 208.8 | Suggested Length ft |

| | | |
|---|---|---|
| 105 | Trial Top Width at Spillway Invert ft | |
| 210 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 93 | Bottom Width ft | |
| 198 | Bottom Length ft | |
| 18414 | Bottom Area $ft^2$ | |
| 60624 | Actual Volume $ft^3$ | **Okay** |
| 22050 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 3.54 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 8.88 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 1A**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Okay | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 8.88 | Disturbed Area (Acres) |
| 38.67 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 386708 | 0 | 0 | 0.60 | 7.20 | 8.88 | 8.88 | 38.67 |

Total Area (SF) 386708

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

| | | |
|---|---|---|
| i10 = | 7.20 | in/hr |
| Q = | 38.35 | cfs |

# Temporary Sediment Basin

**Okay**

**SCM 1A**

| | |
|---|---|
| 8.88 | Drainage Area (Acres) |
| 38.67 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 15979.67 | Required Volume $ft^3$ |
| 16844 | Required Surface Area $ft^2$ |
| 91.8 | Suggested Width ft |
| 183.5 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 200 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 84 | Bottom Width ft | |
| 184 | Bottom Length ft | |
| 15456 | Bottom Area $ft^2$ | |
| 70741 | Actual Volume $ft^3$ | **Okay** |
| 20000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 3.46 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 10.90 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 1B**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 10.90 | Disturbed Area (Acres) |
| 47.46 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| Undisturbed* (SF) | Disturbed (SF) | Off-site (SF) | Impervious (SF) | Rational C Factor | i(10) (in./hr.) | Tot. D. A. (AC) | Disturbed (AC) | Q(10) (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 474620 | 0 | 0 | 0.60 | 7.20 | 10.90 | 10.90 | 47.46 |

Total Area (SF) 474620

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 47.07 cfs

# Temporary Sediment Basin

**Okay**

**SCM 1B**

| | |
|---|---|
| 10.90 | Drainage Area (Acres) |
| 47.46 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 19612.4 | Required Volume $ft^3$ |
| 20674 | Required Surface Area $ft^2$ |
| 101.7 | Suggested Width ft |
| 203.3 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 210 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft | (2 to 13 feet above grade) |
| 84 | Bottom Width ft | |
| 194 | Bottom Length ft | |
| 16296 | Bottom Area $ft^2$ | |
| 74421 | Actual Volume $ft^3$ | **Okay** |
| 21000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 4.25 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 1.63 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 1C**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Okay | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 1.63 | Disturbed Area (Acres) |
| 7.09 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 70910 | 0 | 0 | 0.60 | 7.20 | 1.63 | 1.63 | 7.09 |

Total Area (SF) 70910

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

| | | |
|---|---|---|
| i10 = | 7.20 | in/hr |
| Q = | 7.03 | cfs |

# Temporary Sediment Basin

**Okay**

**SCM 1C**

| | |
|---|---|
| 1.63 | Drainage Area (Acres) |
| 7.09 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 2930.165 | Required Volume $ft^3$ |
| 3089 | Required Surface Area $ft^2$ |
| 39.3 | Suggested Width ft |
| 78.6 | Suggested Length ft |

| | | |
|---|---|---|
| 50 | Trial Top Width at Spillway Invert ft | |
| 66 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 38 | Bottom Width ft | |
| 54 | Bottom Length ft | |
| 2052 | Bottom Area $ft^2$ | |
| 7956 | Actual Volume $ft^3$ | **Okay** |
| 3300 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 2 | Skimmer Size (inches) |
| 0.167 | Head on Skimmer (feet) |
| 1 | Orifice Size (1/4 inch increments) |
| 3.10 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 10.31 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 2**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 3.00 | Disturbed Area (Acres) |
| 29.90 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 318561 | 130675 | 0 | 0 | 0.50 | 5.75 | 10.31 | 3.00 | 29.90 |

Total Area (SF) 449236

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 5.75 in/hr

Q = 29.65 cfs

# Temporary Sediment Basin

**Okay**

**SCM 2**

| | |
|---|---|
| 10.31 | Drainage Area (Acres) |
| 29.90 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 18563.47 | Required Volume $ft^3$ |
| 13023 | Required Surface Area $ft^2$ |
| 80.7 | Suggested Width ft |
| 161.4 | Suggested Length ft |

| | | |
|---|---|---|
| 90 | Trial Top Width at Spillway Invert ft | |
| 145 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft | (2 to 13 feet above grade) |
| 74 | Bottom Width ft | |
| 129 | Bottom Length ft | |
| 9546 | Bottom Area $ft^2$ | |
| 45021 | Actual Volume $ft^3$ | **Okay** |
| 13050 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 3.17 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 15.37 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**SCM 4**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Do Not Use | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 15.37 | Disturbed Area (Acres) |
| 66.96 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 669666 | 0 | 0 | 0.60 | 7.20 | 15.37 | 15.37 | 66.96 |

Total Area (SF) 669666

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 66.41 cfs

# Temporary Sediment Basin

**Okay**

**SCM 4**

| | |
|---|---|
| 15.37 | Drainage Area (Acres) |
| 66.96 | Peak Flow from 10-year Storm (cfs) |

4/11/25

| | |
|---|---|
| 27672.15 | Required Volume $ft^3$ |
| 29170 | Required Surface Area $ft^2$ |
| 120.8 | Suggested Width ft |
| 241.5 | Suggested Length ft |

| | | |
|---|---|---|
| 125 | Trial Top Width at Spillway Invert ft | |
| 250 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 113 | Bottom Width ft | |
| 238 | Bottom Length ft | |
| 26894 | Bottom Area $ft^2$ | |
| 87144 | Actual Volume $ft^3$ | **Okay** |
| 31250 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 4 | Skimmer Size (inches) |
| 0.333 | Head on Skimmer (feet) |
| 2.5 | Orifice Size (1/4 inch increments) |
| 3.32 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | |
|---|---|---|---|
| 7.86 | Total Drainage Area | | User entry |
| | | | Calculated Value |

**TSB 3**

4/11/25

| | |
|---|---|
| Do Not Use | Temporary Sediment Trap |
| Okay | Skimmer Sediment Basin |
| Okay | Temporary Sediment Basin |

| | |
|---|---|
| 7.86 | Disturbed Area (Acres) |
| 34.26 | Peak Flow from 10-year Storm (cfs) |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 342565 | 0 | 0 | 0.60 | 7.20 | 7.86 | 7.86 | 34.26 |

Total Area (SF) 342565

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

| | | |
|---|---|---|
| i10 = | 7.20 | in/hr |
| Q = | 33.97 | cfs |

# Temporary Sediment Basin

**Okay**

**TSB 3**

| | | |
|---|---|---|
| 7.86 | Drainage Area (Acres) | |
| 34.26 | Peak Flow from 10-year Storm (cfs) | 4/11/25 |

| | | |
|---|---|---|
| 14155.58 | Required Volume $ft^3$ | |
| 14922 | Required Surface Area $ft^2$ | |
| 86.4 | Suggested Width ft | |
| 172.8 | Suggested Length ft | |

| | | |
|---|---|---|
| 90 | Trial Top Width at Spillway Invert ft | |
| 180 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3 | Trial Depth ft | (2 to 13 feet above grade) |
| 78 | Bottom Width ft | |
| 168 | Bottom Length ft | |
| 13104 | Bottom Area $ft^2$ | |
| 43884 | Actual Volume $ft^3$ | **Okay** |
| 16200 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 3.06 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 10.46 | Total Drainage Area | | User entry | **SCM 1A** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Do Not Use | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 10.46 | Disturbed Area (Acres) | | | |
| 45.54 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 455463 | 0 | 0 | 0.60 | 7.20 | 10.46 | 10.46 | 45.54 |

Total Area (SF) 455463

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 7.20 in/hr
Q = 45.17 cfs

# Temporary Sediment Basin

**Okay**

**SCM 1A**

| | |
|---|---|
| 10.46 | Drainage Area (Acres) |
| 45.54 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 18820.79 | Required Volume $ft^3$ |
| 19839 | Required Surface Area $ft^2$ |
| 99.6 | Suggested Width ft |
| 199.2 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 200 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 84 | Bottom Width ft | |
| 184 | Bottom Length ft | |
| 15456 | Bottom Area $ft^2$ | |
| 70741 | Actual Volume $ft^3$ | **Okay** |
| 20000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 3.22 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 8.91 | Total Drainage Area | | User entry | **SCM 2** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 8.91 | Disturbed Area (Acres) | | | |
| 30.99 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 388094 | 0 | 0 | 0.60 | 5.75 | 8.91 | 8.91 | 30.99 |

Total Area (SF) 388094

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 5.75 in/hr
Q = 30.74 cfs

# Temporary Sediment Basin

**Okay**

**SCM 2**

| | |
|---|---|
| 8.91 | Drainage Area (Acres) |
| 30.99 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 16036.94 | Required Volume $ft^3$ |
| 13500 | Required Surface Area $ft^2$ |
| 82.2 | Suggested Width ft |
| 164.3 | Suggested Length ft |

| | | |
|---|---|---|
| 95 | Trial Top Width at Spillway Invert ft | |
| 145 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 79 | Bottom Width ft | |
| 129 | Bottom Length ft | |
| 10191 | Bottom Area $ft^2$ | |
| 47761 | Actual Volume $ft^3$ | **Okay** |
| 13775 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2 | Orifice Size (1/4 inch increments) |
| 3.47 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 3.72 | Total Drainage Area | | User entry | **SCM 5A** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 3.01 | Disturbed Area (Acres) | | | |
| 14.23 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 31074 | 130908 | 0 | 0 | 0.53 | 7.20 | 3.72 | 3.01 | 14.23 |

Total Area (SF) 161982

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 7.20 in/hr
Q = 14.11 cfs

# Temporary Sediment Basin

**Okay**

**SCM 5A**

| | |
|---|---|
| 3.72 | Drainage Area (Acres) |
| 14.23 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 6693.471 | Required Volume $ft^3$ |
| 6198 | Required Surface Area $ft^2$ |
| 55.7 | Suggested Width ft |
| 111.3 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 200 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 84 | Bottom Width ft | |
| 184 | Bottom Length ft | |
| 15456 | Bottom Area $ft^2$ | |
| 70741 | Actual Volume $ft^3$ | **Okay** |
| 20000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 1.14 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 0.89 | Total Drainage Area | | User entry | **SCM 5B** |
| Okay | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 0.89 | Disturbed Area (Acres) | | | |
| 3.88 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 38826 | 0 | 0 | 0.60 | 7.20 | 0.89 | 0.89 | 3.88 |

Total Area (SF) 38826

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 3.85 cfs

# Temporary Sediment Basin

**Okay**

**SCM 5B**

| | |
|---|---|
| 0.89 | Drainage Area (Acres) |
| 3.88 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 1604.38 | Required Volume $ft^3$ |
| 1691 | Required Surface Area $ft^2$ |
| 29.1 | Suggested Width ft |
| 58.2 | Suggested Length ft |

| | | |
|---|---|---|
| 94 | Trial Top Width at Spillway Invert ft | |
| 188 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 78 | Bottom Width ft | |
| 172 | Bottom Length ft | |
| 13416 | Bottom Area $ft^2$ | |
| 62005 | Actual Volume $ft^3$ | **Okay** |
| 17672 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 0.27 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 4.98 | Total Drainage Area | | User entry | **SCM 5C** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 4.98 | Disturbed Area (Acres) | | | |
| 21.70 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 217045 | 0 | 0 | 0.60 | 7.20 | 4.98 | 4.98 | 21.70 |

Total Area (SF) 217045

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 7.20 in/hr
Q = 21.53 cfs

# Temporary Sediment Basin

**Okay**

**SCM 5C**

| | |
|---|---|
| 4.98 | Drainage Area (Acres) |
| 21.70 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 8968.802 | Required Volume $ft^3$ |
| 9454 | Required Surface Area $ft^2$ |
| 68.8 | Suggested Width ft |
| 137.5 | Suggested Length ft |

| | | |
|---|---|---|
| 100 | Trial Top Width at Spillway Invert ft | |
| 200 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 84 | Bottom Width ft | |
| 184 | Bottom Length ft | |
| 15456 | Bottom Area $ft^2$ | |
| 70741 | Actual Volume $ft^3$ | **Okay** |
| 20000 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 2.5 | Skimmer Size (inches) |
| 0.208 | Head on Skimmer (feet) |
| 1.5 | Orifice Size (1/4 inch increments) |
| 3.78 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 2.32 | Total Drainage Area | | User entry | **SCM 6A** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 2.32 | Disturbed Area (Acres) | | | |
| 10.11 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 101139 | 0 | 0 | 0.60 | 7.20 | 2.32 | 2.32 | 10.11 |

Total Area (SF) 101139

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 7.20 in/hr
Q = 10.03 cfs

# Temporary Sediment Basin

**Okay**

**SCM 6A**

| | |
|---|---|
| 2.32 | Drainage Area (Acres) |
| 10.11 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 4179.298 | Required Volume $ft^3$ |
| 4405 | Required Surface Area $ft^2$ |
| 46.9 | Suggested Width ft |
| 93.9 | Suggested Length ft |

| | | |
|---|---|---|
| 94 | Trial Top Width at Spillway Invert ft | |
| 188 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 78 | Bottom Width ft | |
| 172 | Bottom Length ft | |
| 13416 | Bottom Area $ft^2$ | |
| 62005 | Actual Volume $ft^3$ | **Okay** |
| 17672 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 0.71 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 1.49 | Total Drainage Area | | User entry | **SCM 6B** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 1.49 | Disturbed Area (Acres) | | | |
| 6.48 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 64847 | 0 | 0 | 0.60 | 7.20 | 1.49 | 1.49 | 6.48 |

Total Area (SF) 64847

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 6.43 cfs

# Temporary Sediment Basin

**Okay**

**SCM 6B**

| | |
|---|---|
| 1.49 | Drainage Area (Acres) |
| 6.48 | Peak Flow from 10-year Storm (cfs) |

4/13/25

| | |
|---|---|
| 2679.628 | Required Volume $ft^3$ |
| 2825 | Required Surface Area $ft^2$ |
| 37.6 | Suggested Width ft |
| 75.2 | Suggested Length ft |

| | | |
|---|---|---|
| 94 | Trial Top Width at Spillway Invert ft | |
| 188 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 4 | Trial Depth ft (2 to 13 feet above grade) | |
| 78 | Bottom Width ft | |
| 172 | Bottom Length ft | |
| 13416 | Bottom Area $ft^2$ | |
| 62005 | Actual Volume $ft^3$ | **Okay** |
| 17672 | Actual Surface Area $ft^2$ | **Okay** |

**Use Spillway Capacity Sheet to Size Primary and Emergency Spillways**

| | |
|---|---|
| 3 | Skimmer Size (inches) |
| 0.25 | Head on Skimmer (feet) |
| 2.25 | Orifice Size (1/4 inch increments) |
| 0.46 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 5.58 | Total Drainage Area | | User entry | **TSB 4** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 5.58 | Disturbed Area (Acres) | | | |
| 24.30 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 243022 | 0 | 0 | 0.60 | 7.20 | 5.58 | 5.58 | 24.30 |

Total Area (SF) 243022

*Assumes woods or grass

Slope Drain (Q=C*i10*A)
i10 = 7.20 in/hr
Q = 24.10 cfs

## Skimmer Basin

TSB 4

**Okay** 4/13/25

| | | |
|---|---|---|
| 5.579017 | Disturbed Area (Acres) | |
| 24.3014 | Peak Flow from 10-year Storm (cfs) | |
| | | |
| 10042.23 | Required Volume $ft^3$ | |
| 7898 | Required Surface Area $ft^2$ | |
| 62.8 | Suggested Width ft | |
| 125.7 | Suggested Length ft | |
| | | |
| 65 | Trial Top Width at Spillway Invert ft | |
| 130 | Trial Top Length at Spillway Invert ft | |
| 2 | Trial Side Slope Ratio Z:1 | |
| 3.5 | Trial Depth ft (2 to 3.5 feet above grade) | |
| 51 | Bottom Width ft | |
| 116 | Bottom Length ft | |
| 5916 | Bottom Area $ft^2$ | |
| 25026 | Actual Volume $ft^3$ | **Okay** |
| 8450 | Actual Surface Area $ft^2$ | **Okay** |
| | | |
| 10 | Trial Weir Length ft | |
| 1 | Trial Depth of Flow ft | |
| 30.0 | Spillway Capacity cfs | **Okay** |
| | | |
| 2.5 | Skimmer Size (inches) | |
| 0.208 | Head on Skimmer (feet) | |
| 1.75 | Orifice Size (1/4 inch increments) | |
| 3.11 | Dewatering Time (days) | |
| | Suggest about 3 days | |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

not selected

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 2.03 | Total Drainage Area | | User entry | **TSB 5** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 2.03 | Disturbed Area (Acres) | | | |
| 8.85 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 88527 | 0 | 0 | 0.60 | 7.20 | 2.03 | 2.03 | 8.85 |

Total Area (SF) 88527

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 8.78 cfs

## Skimmer Basin

TSB 5

**Okay** 4/13/25

| | |
|---|---|
| 2.0323 | Disturbed Area (Acres) |
| 8.852407 | Peak Flow from 10-year Storm (cfs) |
| 3658.14 | Required Volume $ft^3$ |
| 2877 | Required Surface Area $ft^2$ |
| 37.9 | Suggested Width ft |
| 75.9 | Suggested Length ft |
| 40 | Trial Top Width at Spillway Invert ft |
| 80 | Trial Top Length at Spillway Invert ft |
| 2 | Trial Side Slope Ratio Z:1 |
| 3.5 | Trial Depth ft (2 to 3.5 feet above grade) |
| 26 | Bottom Width ft |
| 66 | Bottom Length ft |
| 1716 | Bottom Area $ft^2$ |
| 8489 | Actual Volume $ft^3$ **Okay** |
| 3200 | Actual Surface Area $ft^2$ **Okay** |
| 10 | Trial Weir Length ft |
| 1 | Trial Depth of Flow ft |
| 30.0 | Spillway Capacity cfs **Okay** |
| 2 | Skimmer Size (inches) |
| 0.167 | Head on Skimmer (feet) |
| 1 | Orifice Size (1/4 inch increments) |
| 3.88 | Dewatering Time (days) |

Suggest about 3 days

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

not selected

## Selection of Sediment Control Measure

| | | | | |
|---|---|---|---|---|
| 1.51 | Total Drainage Area | | User entry | **SCM 6** |
| Do Not Use | Temporary Sediment Trap | | Calculated Value | 4/13/25 |
| Okay | Skimmer Sediment Basin | | | |
| Okay | Temporary Sediment Basin | | | |
| 1.51 | Disturbed Area (Acres) | | | |
| 6.56 | Peak Flow from 10-year Storm (cfs) | | | |

Items below added by Jakob P. Klein, P.E.

| C Factors | Undisturbed* | Disturbed | Off-site | Impervious |
|---|---|---|---|---|
| | 0.22 | 0.6 | 0.3 | 0.9 |

| **Undisturbed*** (SF) | **Disturbed** (SF) | **Off-site** (SF) | **Impervious** (SF) | **Rational C Factor** | **i(10)** (in./hr.) | **Tot. D. A.** (AC) | **Disturbed** (AC) | **Q(10)** (CFS) |
|---|---|---|---|---|---|---|---|---|
| 0 | 65642 | 0 | 0 | 0.60 | 7.20 | 1.51 | 1.51 | 6.56 |

Total Area (SF) 65642

*Assumes woods or grass

Slope Drain (Q=C*i10*A)

i10 = 7.20 in/hr

Q = 6.51 cfs

## Skimmer Basin

SCM 6

**Okay** 4/13/25

| | |
|---|---|
| 1.506933 | Disturbed Area (Acres) |
| 6.563983 | Peak Flow from 10-year Storm (cfs) |
| 2712.479 | Required Volume $ft^3$ |
| 2133 | Required Surface Area $ft^2$ |
| 32.7 | Suggested Width ft |
| 65.3 | Suggested Length ft |
| 60 | Trial Top Width at Spillway Invert ft |
| 120 | Trial Top Length at Spillway Invert ft |
| 2 | Trial Side Slope Ratio Z:1 |
| 3.5 | Trial Depth ft (2 to 3.5 feet above grade) |
| 46 | Bottom Width ft |
| 106 | Bottom Length ft |
| 4876 | Bottom Area $ft^2$ |
| 21019 | Actual Volume $ft^3$ **Okay** |
| 7200 | Actual Surface Area $ft^2$ **Okay** |
| 10 | Trial Weir Length ft |
| 1 | Trial Depth of Flow ft |
| 30.0 | Spillway Capacity cfs **Okay** |
| 1.5 | Skimmer Size (inches) |
| 0.125 | Head on Skimmer (feet) |
| 1.25 | Orifice Size (1/4 inch increments) |
| 2.13 | Dewatering Time (days) |
| | Suggest about 3 days |

| Skimmer Size (Inches) |
|---|
| 1.5 |
| 2 |
| 2.5 |
| 3 |
| 4 |
| 5 |
| 6 |
| 8 |

not selected

Drainage Swale Calculations

NOTE:

1. SEE PROJECT SCHEDULE SHEETS IN CID PLAN SET FOR TDD CALCULATIONS AND RECOMMENDATIONS.
2. AREAS NOT CONTRIBUTING TO DITCHES ARE EITHER CONVEYED VIA STORMWATER INFRASTRUCTURE TO TSB'S OR TO SILT FENCE OUTLETS.

| LEGEND & ABBREVIATIONS | |
|---|---|
| TDD DRAINAGE AREA | |
| TEMPORARY DIVERSION DITCH | TDD |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch =150 ft




# RUNOFF CONTROL MEASURE DRAINAGE AREAS - PH1 STG1


AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA



COPYRIGHT @2024 AMERICAN ENGINEERING


PROJECT # 230004

**MERRITT RESERVE**

ROLESVILLE, NC

April 11, 2025

NOTE:

1. SEE PROJECT SCHEDULE SHEETS IN CID PLAN SET FOR TDD CALCULATIONS AND RECOMMENDATIONS.
2. AREAS NOT CONTRIBUTING TO DITCHES ARE EITHER CONVEYED VIA STORMWATER INFRASTRUCTURE TO TSB'S OR TO SILT FENCE OUTLETS.

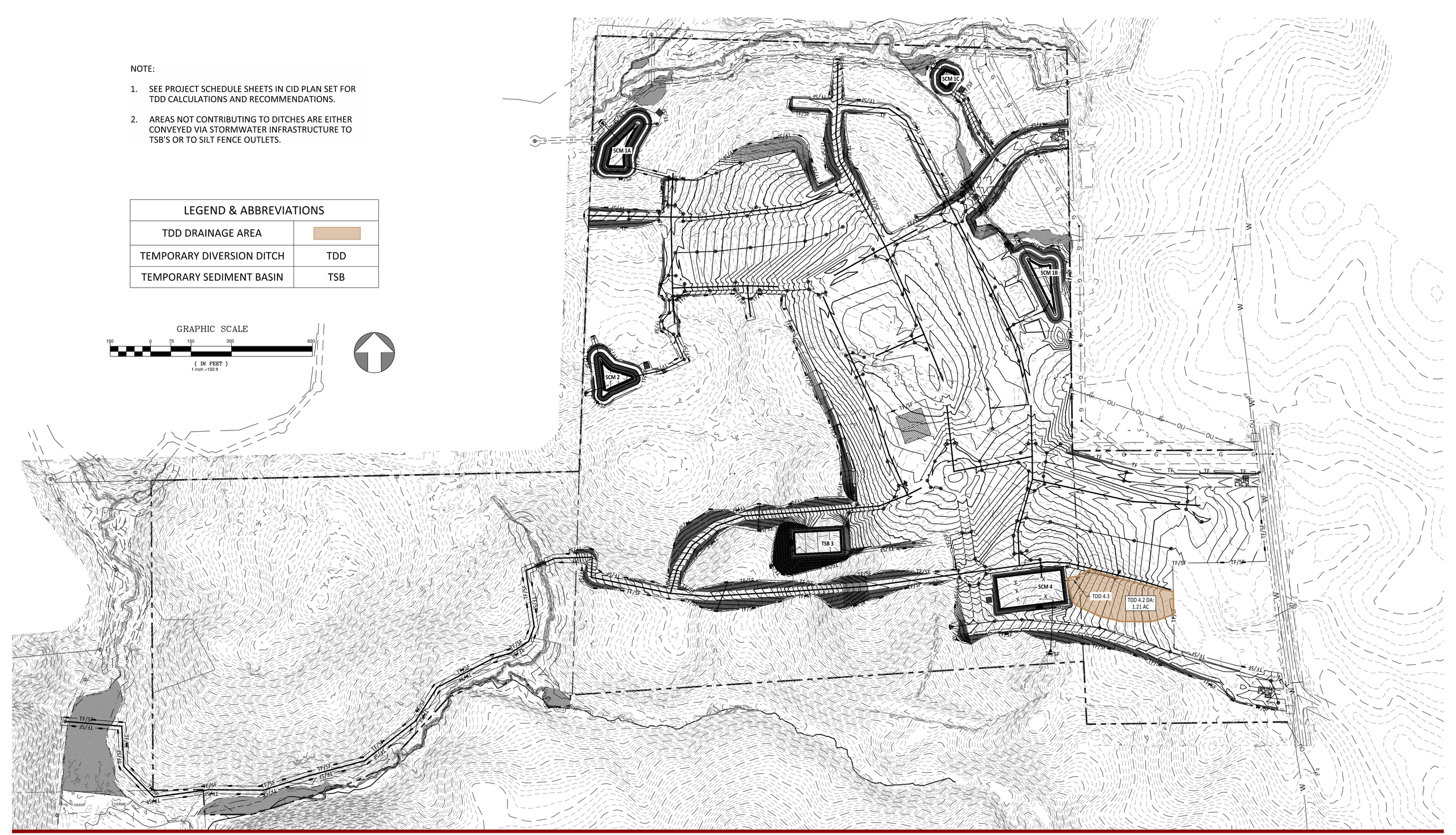
| LEGEND & ABBREVIATIONS | |
|---|---|
| TDD DRAINAGE AREA | |
| TEMPORARY DIVERSION DITCH | TDD |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch =150 ft




# RUNOFF CONTROL MEASURE DRAINAGE AREAS - PH1 STG2


AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA



COPYRIGHT @2024 AMERICAN ENGINEERING


PROJECT # 230004

**MERRITT RESERVE**

ROLESVILLE, NC

April 11, 2025

NOTE:

1. SEE PROJECT SCHEDULE SHEETS IN CID PLAN SET FOR TDD CALCULATIONS AND RECOMMENDATIONS.
2. AREAS NOT CONTRIBUTING TO DITCHES ARE EITHER CONVEYED VIA STORMWATER INFRASTRUCTURE TO TSB'S OR TO SILT FENCE OUTLETS.

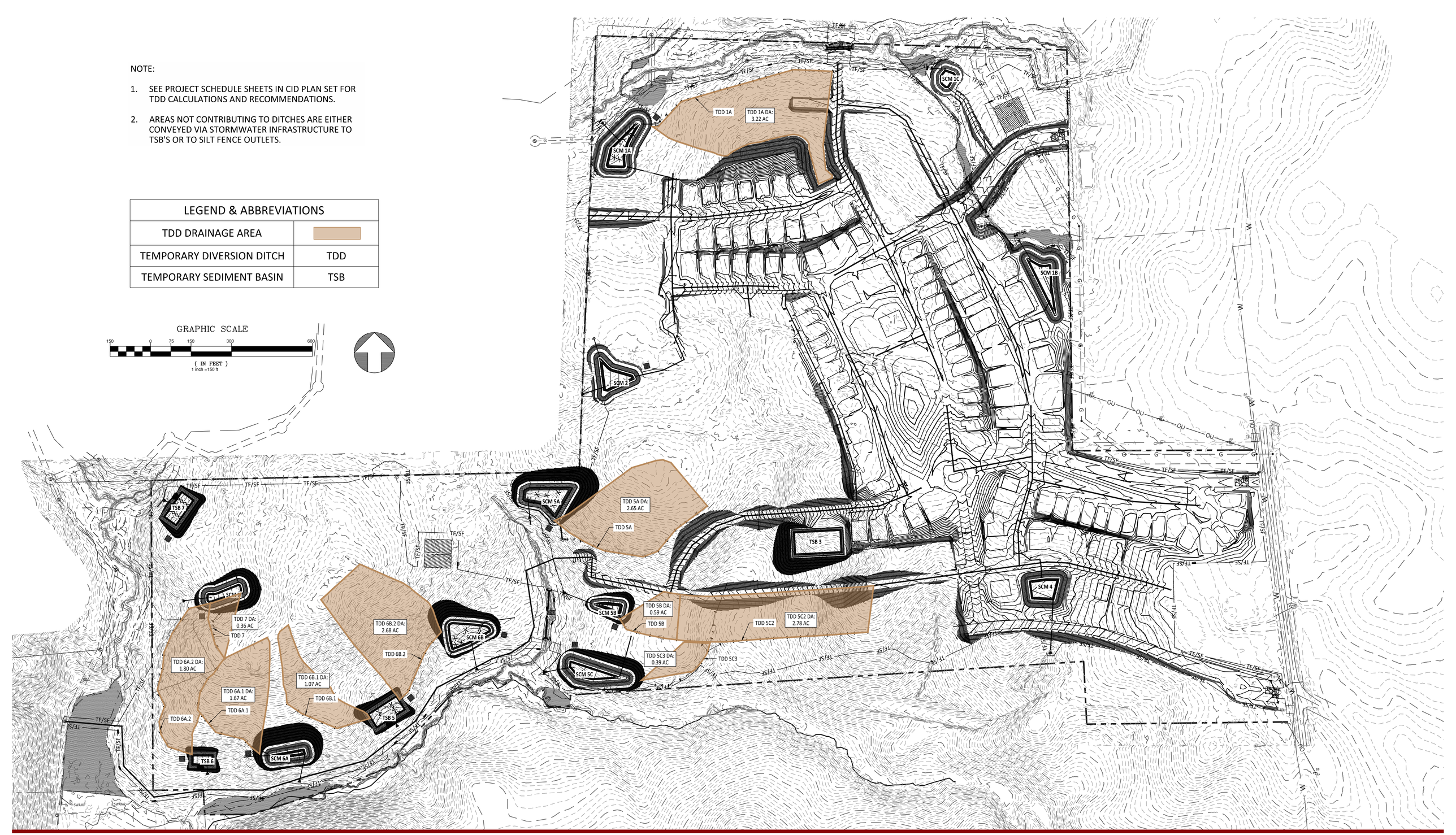
| LEGEND & ABBREVIATIONS | |
|---|---|
| TDD DRAINAGE AREA | |
| TEMPORARY DIVERSION DITCH | TDD |
| TEMPORARY SEDIMENT BASIN | TSB |

GRAPHIC SCALE

150 0 75 150 300 600

( IN FEET )

1 inch =150 ft




# RUNOFF CONTROL MEASURE DRAINAGE AREAS - PH2 & 3 STG1

AMERICAN Engineering

RALEIGH NC | CHARLOTTE NC | CHESAPEAKE VA

COPYRIGHT @2024 AMERICAN ENGINEERING
PROJECT # 230004

**MERRITT RESERVE**

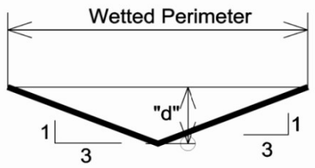
ROLESVILLE, NC

April 13, 2025

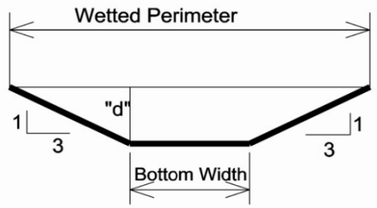
# Merritt Reserve - Phase 1

Rev. 110421

Corrected Wetted Perimeter Equation




Ditch Section (For Bottom Width = 0)
(Not To Scale)




Trapezoidal Ditch / Swale Section
(Not To Scale)

## TEMPORARY - TRIANGULAR SWALE DRAINAGE CHART - MERRIT RESERVE PHASE 1

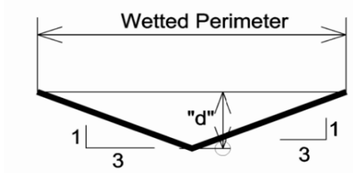
| Ditch I.D. | D.A., Ac. | C | $i_{10}$, in/hr | $Q_{10}$, cfs | Left Side Slope, Z Z:1 | Right Side Slope, Z Z:1 | Avg. Ditch Slope, % | Bottom Width | Ditch Lining* | Manning, n | $Q_{10}$ Flow Depth, ft | Flow Velocity V10, fps | Calc.Shear Stress, psf |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TDD 1.1** | 4.84 | 0.60 | 7.20 | **20.91** | 2.00 | 2.00 | 3.50 | 0.00 | **Geocoir/Dekowe; 400** | 0.033 | **1.33** | **5.93** | 2.90 |
| **TDD 1.2** | 3.01 | 0.60 | 7.20 | **13.00** | 2.00 | 2.00 | 0.92 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **1.43** | **3.19** | 0.82 |
| **TDD 1.3** | 0.44 | 0.60 | 7.20 | **1.90** | 2.00 | 2.00 | 0.50 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **0.78** | **1.56** | 0.24 |
| **TDD 1.4** | 6.25 | 0.60 | 7.20 | **27.00** | 2.00 | 2.00 | 0.25 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **2.39** | **2.36** | 0.37 |
| **TDD 2.1** | 11.49 | 0.60 | 7.20 | **49.64** | 2.00 | 2.00 | 1.00 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **2.32** | **4.62** | 1.45 |
| **TDD 4.1** | 2.64 | 0.60 | 7.20 | **11.40** | 2.00 | 2.00 | 1.84 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **1.19** | **4.00** | 1.37 |
| **TDD 4.2** | 1.15 | 0.60 | 7.20 | **4.97** | 2.00 | 2.00 | 2.46 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **0.83** | **3.62** | 1.27 |
| **TDD 4.3** | 1.21 | 0.60 | 7.20 | **5.23** | 2.00 | 2.00 | 2.47 | 0.00 | **Geocoir/Dekowe; Coconut, RSC-4** | 0.033 | **0.84** | **3.67** | 1.30 |

*Alternate lining may be used if it is an approved equal to the one listed

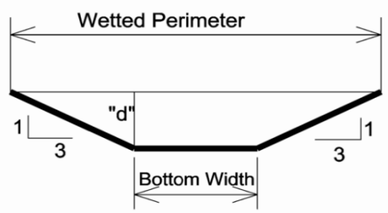
# Merritt Reserve - Phase 2 and 3

Rev. 110421

Corrected Wetted Perimeter Equation




Ditch Section (For Bottom Width = 0)
(Not To Scale)




Trapezoidal Ditch / Swale Section
(Not To Scale)

## TEMPORARY - TRIANGULAR SWALE DRAINAGE CHART - MERRIT RESERVE PHASE 2 & 3

| Ditch I.D. | D.A., Ac. | C | $i_{10}$, in/hr | $Q_{10}$, cfs | Left Side Slope, Z Z:1 | Right Side Slope, Z Z:1 | Avg. Ditch Slope, % | Bottom Width | Ditch Lining* | Manning, n | $Q_{10}$ Flow Depth, ft | Flow Velocity V10, fps | Calc.Shear Stress, psf |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TDD 1A** | 3.22 | 0.60 | 7.20 | **13.91** | 2.00 | 2.00 | 1.50 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **1.34** | **3.90** | 1.25 |
| **TDD 2** | 2.64 | 0.60 | 7.20 | **11.40** | 2.00 | 2.00 | 4.91 | 0.00 | **Geocoir/Dekowe; 400** | 0.033 | **0.99** | **5.78** | 3.04 |
| **TDD 5A** | 2.65 | 0.60 | 7.20 | **11.45** | 2.00 | 2.00 | 6.47 | 0.00 | **Geocoir/Dekowe; 700** | 0.033 | **0.95** | **6.41** | 3.82 |
| **TDD 5B** | 0.59 | 0.60 | 7.20 | **2.55** | 2.00 | 2.00 | 4.81 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **0.57** | **3.93** | 1.71 |
| **TDD 5C2** | 2.78 | 0.60 | 7.20 | **12.01** | 2.00 | 2.00 | 16.03 | 0.00 | **N. Am. Green; C350; Vegetated** | 0.033 | **0.81** | **9.11** | 8.12 |
| **TDD 5C3** | 0.39 | 0.60 | 7.20 | **1.68** | 2.00 | 2.00 | 0.90 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **0.67** | **1.89** | 0.37 |
| **TDD 6A.1** | 1.67 | 0.60 | 7.20 | **7.21** | 2.00 | 2.00 | 8.72 | 0.00 | **Geocoir/Dekowe; 700** | 0.033 | **0.75** | **6.38** | 4.09 |
| **TDD 6A.2** | 1.80 | 0.60 | 7.20 | **7.78** | 2.00 | 2.00 | 2.91 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **0.95** | **4.31** | 1.72 |
| **TDD 6B.1** | 1.07 | 0.60 | 7.20 | **4.62** | 2.00 | 2.00 | 7.44 | 0.00 | **Geocoir/Dekowe; 400** | 0.033 | **0.66** | **5.37** | 3.05 |
| **TDD 6B.2** | 2.68 | 0.60 | 7.20 | **11.58** | 2.00 | 2.00 | 3.00 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **1.10** | **4.82** | 2.05 |
| **TDD 7** | 0.36 | 0.60 | 7.20 | **1.56** | 2.00 | 2.00 | 7.61 | 0.00 | **N. Am. Green; Coconut; double net** | 0.033 | **0.44** | **4.11** | 2.07 |

*Alternate lining may be used if it is an approved equal to the one listed

Culvert Calculations

# Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Apr 14 2025

## Fowler Road Culvert (#3)

| | | |
|---|---|---|
| Invert Elev Dn (ft) | = | 284.50 |
| Pipe Length (ft) | = | 165.00 |
| Slope (%) | = | 2.42 |
| Invert Elev Up (ft) | = | 288.50 |
| Rise (in) | = | 54.0 |
| Shape | = | Circular |
| Span (in) | = | 54.0 |
| No. Barrels | = | 1 |
| n-Value | = | 0.012 |
| Culvert Type | = | Circular Concrete |
| Culvert Entrance | = | Square edge w/headwall (C) |
| Coeff. K,M,c,Y,k | = | 0.0098, 2, 0.0398, 0.67, 0.5 |

**Embankment**

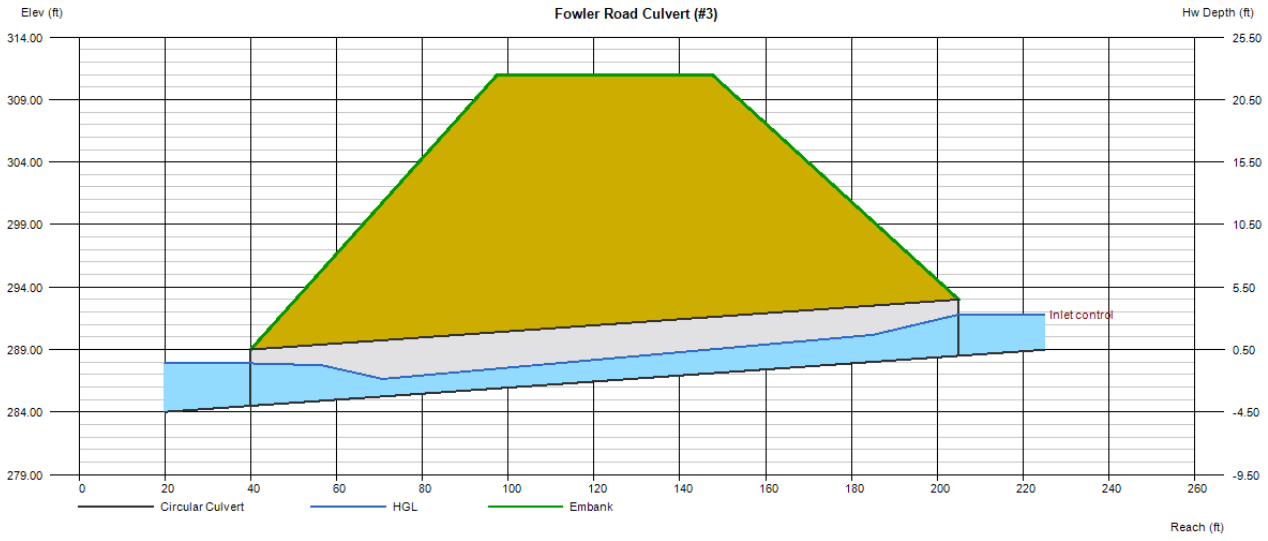
| | | |
|---|---|---|
| Top Elevation (ft) | = | 311.00 |
| Top Width (ft) | = | 50.00 |
| Crest Width (ft) | = | 20.00 |

**Calculations**

| | | |
|---|---|---|
| Qmin (cfs) | = | 62.20 |
| Qmax (cfs) | = | 62.20 |
| Tailwater Elev (ft) | = | (dc+D)/2 |

**Highlighted**

| | | |
|---|---|---|
| Qtotal (cfs) | = | 62.20 |
| Qpipe (cfs) | = | 62.20 |
| Qovertop (cfs) | = | 0.00 |
| Veloc Dn (ft/s) | = | 4.83 |
| Veloc Up (ft/s) | = | 7.64 |
| HGL Dn (ft) | = | 287.90 |
| HGL Up (ft) | = | 290.79 |
| Hw Elev (ft) | = | 291.79 |
| Hw/D (ft) | = | 0.73 |
| Flow Regime | = | Inlet Control |



# Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Apr 14 2025

## Jocund Street Culvert (#2)

| | | |
|---|---|---|
| Invert Elev Dn (ft) | = | 349.30 |
| Pipe Length (ft) | = | 95.00 |
| Slope (%) | = | 1.26 |
| Invert Elev Up (ft) | = | 350.50 |
| Rise (in) | = | 54.0 |
| Shape | = | Circular |
| Span (in) | = | 54.0 |
| No. Barrels | = | 2 |
| n-Value | = | 0.012 |
| Culvert Type | = | Circular Concrete |
| Culvert Entrance | = | Square edge w/headwall (C) |
| Coeff. K,M,c,Y,k | = | 0.0098, 2, 0.0398, 0.67, 0.5 |

**Embankment**

| | | |
|---|---|---|
| Top Elevation (ft) | = | 362.00 |
| Top Width (ft) | = | 50.00 |
| Crest Width (ft) | = | 20.00 |

**Calculations**

| | | |
|---|---|---|
| Qmin (cfs) | = | 160.00 |
| Qmax (cfs) | = | 160.00 |
| Tailwater Elev (ft) | = | (dc+D)/2 |

**Highlighted**

| | | |
|---|---|---|
| Qtotal (cfs) | = | 160.00 |
| Qpipe (cfs) | = | 160.00 |
| Qovertop (cfs) | = | 0.00 |
| Veloc Dn (ft/s) | = | 5.93 |
| Veloc Up (ft/s) | = | 8.35 |
| HGL Dn (ft) | = | 352.86 |
| HGL Up (ft) | = | 353.11 |
| Hw Elev (ft) | = | 354.42 |
| Hw/D (ft) | = | 0.87 |
| Flow Regime | = | Inlet Control |



# Culvert Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Monday, Apr 14 2025

## Strips Drive Culvert (#1)

| | | |
|---|---|---|
| Invert Elev Dn (ft) | = | 369.90 |
| Pipe Length (ft) | = | 75.00 |
| Slope (%) | = | 1.33 |
| Invert Elev Up (ft) | = | 370.90 |
| Rise (in) | = | 33.6 |
| Shape | = | Circular |
| Span (in) | = | 33.6 |
| No. Barrels | = | 1 |
| n-Value | = | 0.012 |
| Culvert Type | = | Circular Concrete |
| Culvert Entrance | = | Square edge w/headwall (C) |
| Coeff. K,M,c,Y,k | = | 0.0098, 2, 0.0398, 0.67, 0.5 |

**Embankment**

| | | |
|---|---|---|
| Top Elevation (ft) | = | 379.40 |
| Top Width (ft) | = | 50.00 |
| Crest Width (ft) | = | 20.00 |

**Calculations**

| | | |
|---|---|---|
| Qmin (cfs) | = | 27.60 |
| Qmax (cfs) | = | 27.60 |
| Tailwater Elev (ft) | = | (dc+D)/2 |

**Highlighted**

| | | |
|---|---|---|
| Qtotal (cfs) | = | 27.60 |
| Qpipe (cfs) | = | 27.60 |
| Qovertop (cfs) | = | 0.00 |
| Veloc Dn (ft/s) | = | 5.17 |
| Veloc Up (ft/s) | = | 6.90 |
| HGL Dn (ft) | = | 372.17 |
| HGL Up (ft) | = | 372.63 |
| Hw Elev (ft) | = | 373.55 |
| Hw/D (ft) | = | 0.95 |
| Flow Regime | = | Inlet Control |

