

**STORM SEWER COMPUTATIONS
 FOR
 EATON S BLDG EXPANSION**

DESIGN DATA

| County: Milwaukee | | Design Storm: 100 yr | | Storm Duration: 10 min | | DESIGN INTENSITY (I): 7.6 in/hr | | | | Intensity calculated using SEWRPC IDF equations. | | | | | | | | | |
|-------------------|----------------------------|----------------------|--|--------------------------|-------------------------|---------------------------------|-------------|---------------|-----------|--|---|------------------|------------------|-----------------------|---------------------|------------|-----------|-------------|-------|
| STRUCTURE DATA | | | DRAINAGE AREA AND FLOW DATA | | | | PIPE DATA | | | | PIPE CAPACITY INFORMATION | | | | | ELEVATIONS | | | |
| Notes | Upstream Structure | Downstream Structure | Flow is determined by Rational Method Q = CIA | | | | Length (ft) | Diameter (in) | Slope (%) | Manning Coefficient | Pipe capacity is determined by Manning's Equation Q = 1.486/n AR ^{2/3} S ^{1/2} | | | | | Rim/Toc Up | Invert Up | Invert Down | |
| | | | Individual Acres A | Individual Coefficient C | Individual Flow Q (cfs) | Cumulative Flow (cfs) | | | | | Required Drop (ft) | Actual Drop (ft) | Percent Full (%) | Actual Velocity (fps) | Max. Capacity (cfs) | | | | |
| | CB 3.0 | CB 2.0 | 0.51 | 0.88 | 3.41 | 3.41 | 109.80 | 10 | 2.25 | 0.012 | 2.27 | 2.47 | 84% | 7.43 | 3.83 | 35.75 | 30.86 | 28.39 | |
| | CB 2.0 | ES 1.0 | 0.63 | 0.88 | 4.21 | 4.21 | 150.70 | 12 | 2.25 | 0.012 | 1.80 | 3.39 | 67% | 8.04 | 6.23 | 35.05 | 28.39 | 25.00 | |
| | TD 27.0 | MH 26.0 | 0.12 | 0.90 | 0.82 | 0.82 | 108.00 | 10 | 1.00 | 0.012 | 0.13 | 1.08 | 38% | 3.95 | 2.55 | 34.90 | 29.81 | 28.73 | |
| | MH 26.0 | ES 25.0 | 0.00 | 0.00 | 0.00 | 4.91 | 86.30 | 12 | 2.00 | 0.012 | 1.40 | 1.73 | 80% | 7.86 | 5.87 | 35.50 | 28.73 | 27.00 | |
| | INFILTRATION BASIN 2B FLOW | | | | 4.09 | 4.09 | | | | | | | | | | | | 31.91 | 29.62 |