

RUNOFF COMPUTATIONS

| DRAINAGE AREA | TOTAL AREA | PAVEMENT | INDUSTRIAL | BUSINESS | APARTMENT | SM BUS/ROW | RESIDENTIAL | CEM/PARK | Composite C | Composite CA | To CAL (min) | To USED (min) | DES FREQ (yr) | I _s (in/hr) | Q _s (cfs) |
|---------------|------------|----------|------------|----------|-----------|------------|-------------|----------|-------------|--------------|--------------|---------------|---------------|------------------------|----------------------|
| AREA ID | (acre) | C = 0.90 | C = 0.85 | C = 0.80 | C = 0.76 | C = 0.7 | C = 0.55 | C = 0.25 | | | | | | | |
| AA2 | 0.48 | 0.246 | | 0.236 | | | | | 0.851 | 0.410 | 7.00 | 10.00 | 5 | 6.93 | 2.84 |
| AA3 | 0.69 | 0.202 | | 0.484 | | 0.001 | 0.001 | | 0.829 | 0.570 | 7.00 | 10.00 | 5 | 6.93 | 3.95 |
| AA4 | 0.44 | 0.125 | | 0.318 | | | | | 0.828 | 0.366 | 6.50 | 10.00 | 5 | 6.93 | 2.53 |
| AA5 | 0.36 | 0.162 | | 0.190 | | | 0.003 | | 0.844 | 0.300 | 7.00 | 10.00 | 5 | 6.93 | 2.08 |
| AA6 | 0.44 | 0.170 | | 0.268 | | | 0.005 | | 0.835 | 0.370 | 7.00 | 10.00 | 5 | 6.93 | 2.56 |
| AA7 | 0.86 | 0.267 | | 0.464 | | 0.130 | 0.001 | | 0.816 | 0.703 | 15.20 | 15.20 | 5 | 5.72 | 4.02 |
| AA8 | 0.26 | 0.043 | | | | 0.211 | 0.001 | | 0.734 | 0.187 | 8.00 | 10.00 | 5 | 6.93 | 1.30 |
| AA9 | 0.38 | 0.058 | | | | 0.321 | 0.004 | | 0.729 | 0.277 | 10.60 | 10.60 | 5 | 6.76 | 1.87 |
| BB1 | 1.49 | 0.118 | | | | | 1.372 | | 0.578 | 0.861 | 12.00 | 12.00 | 5 | 6.40 | 5.51 |
| BB2 | 0.13 | 0.062 | | | | | 0.066 | | 0.720 | 0.092 | 1.00 | 10.00 | 5 | 6.93 | 0.64 |
| CC1 | 0.56 | 0.286 | | 0.271 | | | | | 0.851 | 0.474 | 10.80 | 10.80 | 5 | 6.70 | 3.18 |
| CC2 | 0.44 | 0.347 | | 0.087 | | | | | 0.880 | 0.383 | 10.00 | 10.00 | 5 | 6.93 | 2.65 |
| CC3 | 0.29 | 0.247 | | 0.018 | | 0.024 | | | 0.878 | 0.253 | 10.00 | 10.00 | 5 | 6.93 | 1.75 |
| CC4 | 0.57 | 0.162 | | | | 0.245 | 0.160 | | 0.715 | 0.405 | 10.65 | 10.65 | 5 | 6.75 | 2.74 |
| CC5 | 0.37 | 0.200 | | | | 0.165 | 0.001 | | 0.809 | 0.296 | 8.00 | 10.00 | 5 | 6.93 | 2.05 |
| DD1 | 0.52 | 0.292 | | 0.224 | | | | | 0.857 | 0.443 | 5.00 | 10.00 | 5 | 6.93 | 3.07 |
| DD2 | 0.34 | 0.150 | | 0.188 | | | | | 0.844 | 0.284 | 8.00 | 10.00 | 5 | 6.93 | 1.97 |
| DD3 | 0.46 | 0.271 | | 0.188 | | | | | 0.859 | 0.393 | 6.00 | 10.00 | 5 | 6.93 | 2.73 |
| DD4 | 0.48 | 0.321 | | 0.040 | | 0.118 | | | 0.842 | 0.403 | 8.00 | 10.00 | 5 | 6.93 | 2.79 |
| DD5 | 0.23 | 0.227 | | | | 0.005 | | | 0.896 | 0.208 | 3.00 | 10.00 | 5 | 6.93 | 1.44 |
| EE1 | 0.42 | 0.213 | | 0.203 | | | | | 0.851 | 0.354 | 4.00 | 10.00 | 5 | 6.93 | 2.45 |
| EE2 | 0.62 | 0.235 | | 0.382 | | | | | 0.838 | 0.517 | 4.00 | 10.00 | 5 | 6.93 | 3.58 |
| EE3 | 0.82 | 0.142 | | 0.676 | | | | | 0.817 | 0.668 | 6.00 | 10.00 | 5 | 6.93 | 4.63 |
| EE4 | 0.55 | 0.001 | | 0.416 | | 0.133 | | | 0.776 | 0.427 | 8.00 | 10.00 | 5 | 6.93 | 2.96 |
| EE5 | 0.77 | 0.339 | | 0.352 | | 0.080 | | | 0.834 | 0.643 | 8.00 | 10.00 | 5 | 6.93 | 4.45 |
| EE6 | 0.28 | 0.276 | | 0.003 | | 0.001 | | | 0.898 | 0.251 | 5.00 | 10.00 | 5 | 6.93 | 1.74 |
| FF1 | 0.90 | 0.364 | | | | 0.536 | | | 0.781 | 0.703 | 10.00 | 10.00 | 5 | 6.93 | 4.87 |
| FF2 | 3.17 | 0.469 | | | | 2.700 | | | 0.730 | 2.313 | 16.00 | 16.00 | 5 | 5.58 | 12.89 |
| FF3 | 0.22 | 0.189 | | | | 0.031 | | | 0.872 | 0.191 | 5.00 | 10.00 | 5 | 6.93 | 1.33 |
| FF4 | 0.38 | 0.258 | | | | 0.126 | | | 0.834 | 0.320 | 8.00 | 10.00 | 5 | 6.93 | 2.22 |
| GG1 | 0.41 | 0.179 | | 0.227 | | | | | 0.844 | 0.343 | 6.00 | 10.00 | 5 | 6.93 | 2.38 |
| GG2 | 0.77 | 0.045 | | 0.721 | | | | | 0.806 | 0.617 | 9.00 | 10.00 | 5 | 6.93 | 4.28 |
| GG3 | 0.68 | 0.327 | | 0.348 | | | | | 0.848 | 0.572 | 9.00 | 10.00 | 5 | 6.93 | 3.97 |
| GG4 | 0.69 | 0.432 | | 0.254 | | | | | 0.863 | 0.592 | 9.00 | 10.00 | 5 | 6.93 | 4.10 |
| HH1 | 0.29 | 0.286 | | | | | | | 0.900 | 0.257 | 5.00 | 10.00 | 5 | 6.93 | 1.78 |
| HH2 | 0.20 | 0.196 | | | | | | | 0.900 | 0.176 | 3.00 | 10.00 | 5 | 6.93 | 1.22 |
| HH3 | 0.14 | 0.139 | | | | | | | 0.900 | 0.125 | 5.00 | 10.00 | 5 | 6.93 | 0.86 |
| JJ1 | 0.82 | | | 0.819 | | | | | 0.800 | 0.655 | 10.80 | 10.80 | 5 | 6.70 | 4.40 |
| JJ1A | 0.55 | | | 0.548 | | | | | 0.800 | 0.438 | 7.00 | 10.00 | 5 | 6.93 | 3.04 |
| JJ1B | 0.20 | 0.196 | | | | | | | 0.900 | 0.176 | 5.00 | 10.00 | 5 | 6.93 | 1.22 |
| JJ2A | 1.04 | | | 1.038 | | | | | 0.800 | 0.830 | 7.00 | 10.00 | 5 | 6.93 | 5.75 |
| JJ2B | 0.25 | 0.148 | | 0.106 | | | | | 0.858 | 0.218 | 5.00 | 10.00 | 5 | 6.93 | 1.51 |
| JJ2C | 0.82 | 0.001 | | 0.819 | | | | | 0.800 | 0.655 | 4.00 | 10.00 | 5 | 6.93 | 4.54 |
| JJ3 | 0.03 | 0.032 | | | | | | | 0.900 | 0.029 | 1.00 | 10.00 | 5 | 6.93 | 0.20 |
| JJ4 | 0.12 | 0.116 | | | | | | | 0.900 | 0.104 | 3.00 | 10.00 | 5 | 6.93 | 0.72 |
| JJ5 | 0.08 | 0.076 | | | | | | | 0.900 | 0.068 | 2.00 | 10.00 | 5 | 6.93 | 0.47 |
| KK1 | 0.11 | 0.106 | | | | | | | 0.900 | 0.095 | 4.00 | 10.00 | 5 | 6.93 | 0.66 |
| KK2 | 0.22 | 0.220 | | | | 0.004 | | | 0.897 | 0.201 | 7.00 | 10.00 | 5 | 6.93 | 1.39 |
| KK3 | 0.33 | 0.188 | | | 0.139 | | | | 0.840 | 0.275 | 4.00 | 10.00 | 5 | 6.93 | 1.91 |
| LL1 | 0.26 | 0.139 | | | 0.119 | | | | 0.835 | 0.215 | 5.00 | 10.00 | 5 | 6.93 | 1.49 |
| LL1A | 0.51 | | | | 0.508 | | | | 0.760 | 0.386 | 5.00 | 10.00 | 5 | 6.93 | 2.67 |
| LL2A | 0.03 | 0.034 | | | | | | | 0.900 | 0.031 | 1.00 | 10.00 | 5 | 6.93 | 0.21 |
| LL2B | 0.04 | 0.038 | | | | | | | 0.900 | 0.034 | 1.00 | 10.00 | 5 | 6.93 | 0.24 |
| LL2C | 0.04 | 0.039 | | | | | | | 0.899 | 0.035 | 1.00 | 10.00 | 5 | 6.93 | 0.24 |
| LL3 | 0.04 | 0.039 | | | | | | | 0.900 | 0.035 | 1.00 | 10.00 | 5 | 6.93 | 0.24 |
| LL4 | 0.60 | 0.158 | | | 0.437 | | | | 0.797 | 0.474 | 10.00 | 10.00 | 5 | 6.93 | 3.28 |
| LL5 | 0.89 | | | 0.885 | | | | | 0.800 | 0.708 | 11.00 | 11.00 | 5 | 6.65 | 4.71 |



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Texas Department of Transportation
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SH 205

HYDRAULIC COMPUTATION SHEET

SHEET 3 OF 13

| | | |
|----------------|-------------------------|-------------|
| FED. DIST. NO. | FEDERAL AID PROJECT NO. | HIGHWAY NO. |
| 6 | (SEE TITLE SHEET) | SH 205 |
| STATE | DIST. | COUNTY |
| TEXAS | DALLAS | ROCKWALL |
| CONT. | SECT. | JOB |
| 0451 | 01 | 032. ETC |

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