

REF: ROCKWALL_2003120.V.X

BLOCKS: ROCKWALL_2003120.V.X

SCALE: 1"=20'

H:\PROCKWALL_2003120\PLAN-SHEETS\2003120-ST-SEWER-3.DWG

06/23/04 R.L.

| TYPE INLET | DRAINAGE AREA NO. | INLET NUMBER | LOCATION | TOTAL AREA (Acres) | AREA BY 'C' FACTOR | | | TOTAL CA | TIME OF CONCEN. (min) | STORM YEAR | INT. (in/hr) | TOTAL RUNOFF Q _a (cfs) | CARRYOVER | | CARRYOVER | | ADDED CARRY- OVER (cfs) | TOTAL Q _a (cfs) | ROADWAY CROSS SLOPE (ft/ft) | Z | Z/N | GUTTER SLOPE "S" (%) | "Y" CHECK FOR SAG (in) | DEPTH GUT. FLOW Y (ft) | PONDED WIDTH Y * Z (ft) | DROP AT INLET A (ft) | Q _i (cfs/ft) | INLET LENGTH | | L -- L | A -- Y | Q -- Q _a | CARRY- OVER (cfs) | Q Captured by Inlet (cfs) | REMARKS |
|---------------|----------------------|-----------------|-----------------------|--------------------------|---------------------|--------------------|--------------------|-------------|-----------------------------|---------------|-----------------|--|-----------|-----|-----------|-------|----------------------------------|----------------------------------|--------------------------------------|------|------|-------------------------------|---------------------------------|---------------------------------|----------------------------------|-------------------------------|----------------------------|--------------------|---------------------|--------------|--------------|---------------------------|-------------------------|------------------------------------|---------|
| | | | | | RDWY. C= 0.90 | COMM C= 0.99 | RES. C= 0.50 | | | | | | FROM | CFS | FROM | CFS | | | | | | | | | | | | REQD. L (ft) | SELEC. L (ft) | | | | | | |
| CURB | B7 | B7 | MUNSON (NORTH) | 0.72 | 0.72 | | 0.65 | 10.00 | 100 | 9.80 | 6.35 | | | | | 6.35 | 0.0280 | 38 | 2194 | 6.58 | | 0.23 | 8.88 | 0.25 | 0.39 | 16.21 | 20 | 1.23 | 1.08 | 1.00 | - | 6.35 | | | |
| CURB | B8 | B8 | CLARK 14+25 LT | 0.13 | 0.13 | | 0.12 | 10.00 | 100 | 9.80 | 1.15 | B5 | 0.21 | B6 | 1.30 | 1.52 | 2.66 | 0.0260 | 38 | 2194 | 0.50 | | 0.27 | 10.39 | 0.25 | 0.43 | 6.26 | 10 | 1.60 | 0.92 | 1.00 | - | 2.66 | | |
| CURB | B9 | B9 | CLARK 14+83.3 LT | 1.06 | | 1.06 | 0.53 | 10.00 | 100 | 9.80 | 5.19 | | | | | 5.19 | 0.0280 | 38 | 2194 | SAG | 2.30 | 0.19 | 7.36 | 0.25 | 0.91 | 5.73 | 20 | 3.49 | 1.30 | 1.00 | - | 5.19 | SAG INLET | | |
| CURB | B10 | B10 | CLARK 14+85 RT | 0.39 | 0.39 | | 0.35 | 10.00 | 100 | 9.80 | 3.44 | | | | | 3.44 | 0.0260 | 38 | 2194 | SAG | 2.80 | 0.23 | 8.96 | 0.25 | 1.04 | 3.32 | 10 | 3.02 | 1.07 | 1.00 | - | 3.44 | SAG INLET | | |
| CURB | C1 | C1 | CLARK 21+33.1 LT | 1.17 | | 1.17 | 0.59 | 10.00 | 100 | 9.80 | 5.73 | | | | | 5.73 | 0.0260 | 38 | 2194 | 3.00 | | 0.26 | 9.90 | 0.25 | 0.41 | 13.84 | 15 | 1.08 | 0.97 | 1.00 | - | 5.73 | | | |
| CURB | C2 | C2 | CLARK 21+23.1 RT | 0.10 | 0.10 | | 0.09 | 10.00 | 100 | 9.80 | 0.88 | | | | | 0.88 | 0.0260 | 38 | 2194 | 3.00 | | 0.13 | 4.91 | 0.25 | 0.31 | 2.85 | 5 | 1.75 | 1.96 | 1.00 | - | 0.88 | | | |
| CURB | C3 | C3 | W. WASHINGTON (SOUTH) | 0.29 | 0.29 | | 0.26 | 10.00 | 100 | 9.80 | 2.56 | | | | | 2.56 | 0.0260 | 38 | 2194 | 4.58 | | 0.18 | 6.76 | 0.25 | 0.35 | 7.38 | 10 | 1.36 | 1.42 | 1.00 | - | 2.56 | | | |
| CURB | C4 | C4 | W. WASHINGTON (NORTH) | 6.40 | 0.99 | 5.41 | 3.60 | 10.00 | 100 | 9.80 | 35.24 | | | | | 35.24 | 0.0260 | 38 | 2194 | 5.05 | | 0.46 | 17.74 | 0.25 | 0.60 | 58.65 | 20 | 0.34 | 0.54 | 0.50 | 17.57 | 17.67 | | | |
| CURB | C5 | C5 | W. WASHINGTON (NORTH) | 0.10 | 0.10 | | 0.09 | 10.00 | 100 | 9.80 | 0.88 | C4 | 17.57 | | 17.57 | 18.45 | 0.0260 | 38 | 2194 | 5.42 | | 0.36 | 13.74 | 0.25 | 0.50 | 36.73 | 20 | 0.54 | 0.70 | 0.69 | 5.63 | 12.82 | | | |
| CURB | C6 | C6 | CLARK 23+53.7 LT | 1.03 | | 1.03 | 0.52 | 10.00 | 100 | 9.80 | 5.05 | C5 | 5.63 | | 5.63 | 10.68 | 0.0260 | 38 | 2194 | 1.76 | | 0.36 | 13.82 | 0.25 | 0.50 | 21.18 | 20 | 0.94 | 0.69 | 0.97 | 0.27 | 10.40 | | | |
| CURB | D1 | D1 | W. RUSK (SOUTH) | 2.53 | 0.97 | 1.56 | 1.65 | 10.00 | 100 | 9.80 | 16.20 | | | | | 16.20 | 0.0260 | 38 | 2194 | 5.67 | | 0.34 | 12.97 | 0.25 | 0.48 | 33.46 | 20 | 0.60 | 0.74 | 0.74 | 4.25 | 11.95 | | | |
| CURB | D2 | D2 | W. RUSK (NORTH) | 0.26 | 0.26 | | 0.23 | 10.00 | 100 | 9.80 | 2.29 | | | | | 2.29 | 0.0260 | 38 | 2194 | 5.67 | | 0.16 | 6.23 | 0.25 | 0.34 | 6.93 | 10 | 1.47 | 1.54 | 1.00 | - | 2.29 | | | |
| CURB | E1 | E1 | CLARK 28+00 LT | 1.00 | | 1.00 | 0.50 | 10.00 | 100 | 9.80 | 4.90 | | | | | 4.90 | 0.0260 | 38 | 2194 | 5.62 | | 0.22 | 8.30 | 0.25 | 0.38 | 12.92 | 15 | 1.16 | 1.16 | 1.00 | - | 4.90 | | | |
| CURB | E2 | E2 | CLARK 28+00 RT | 0.56 | 0.25 | 0.31 | 0.38 | 10.00 | 100 | 9.80 | 3.72 | | | | | 3.72 | 0.0260 | 38 | 2194 | 5.62 | | 0.19 | 7.49 | 0.25 | 0.36 | 10.29 | 10 | 0.97 | 1.28 | 0.98 | 0.06 | 3.66 | | | |
| Y | E4 | E4 | W. KAUFMAN (SOUTH) | 8.88 | | 8.88 | 4.44 | 10.00 | 100 | 9.80 | 43.51 | | | | | | | | | | | | | | | | | | | | | | | SEE Y INLET CALCULATIONS | |
| CURB | E5 | E5 | CLARK 25+00 LT | 0.92 | | 0.92 | 0.46 | 10.00 | 100 | 9.80 | 4.51 | D1 | 4.25 | C6 | 0.27 | 4.52 | 9.03 | 0.0260 | 38 | 2194 | 1.76 | | 0.34 | 12.97 | 0.25 | 0.48 | 18.64 | 20 | 1.07 | 0.74 | 1.00 | - | 9.03 | | |
| CURB | E6 | E6 | CLARK 25+71 LT | 0.91 | | 0.91 | 0.46 | 10.00 | 100 | 9.80 | 4.46 | | | | | 4.46 | 0.0260 | 38 | 2194 | SAG | 2.10 | 0.18 | 6.72 | 0.25 | 0.86 | 5.21 | 20 | 3.84 | 1.43 | 1.00 | - | 4.46 | SAG INLET | | |
| CURB | E7 | E7 | CLARK 25+71 RT | 0.45 | 0.45 | | 0.41 | 10.00 | 100 | 9.80 | 3.97 | E2 | 0.06 | | 0.06 | 4.03 | 0.0260 | 38 | 2194 | SAG | 2.40 | 0.20 | 7.68 | 0.25 | 0.93 | 4.33 | 15 | 3.47 | 1.25 | 1.00 | - | 4.03 | SAG INLET | | |

"Y" Inlet Calculations

| DRAINAGE AREA NO. | INLET NUMBER | SIZE | LOCATION | Q CFS | LENGTH LF | DEPTH H | REMARKS |
|----------------------|-----------------|---------|----------|----------|--------------|------------|---------|
| B12 | B11 | 2' x 2' | | 0.54 | 8 | 0.08 | |
| E3 | E3 | 6' x 6' | | 35.24 | 24 | 0.62 | |
| E4 | E4 | 6' x 6' | | 43.51 | 24 | 0.71 | |
| E6 | E6 | 3' x 3' | | 6.58 | 8 | 0.42 | |

REVISED TO CONFORM
TO CONSTRUCTION RECORDS
BY M.H. DATE 12/04/2006

THESE DOCUMENTS ARE FOR
BIDDING, CONSTRUCTION,
AND PERMIT PURPOSES.
DATE: 12/04/06



CITY OF ROCKWALL, TEXAS

CLARK STREET
PROPOSED STORM SEWER
CALCULATIONS

BIRKHOFF, HENDRICKS & CONWAY, L.L.P.
CONSULTING ENGINEERS
Dallas, Texas

DESIGNED BY: M.H. PROJECT: 2003-120 SHEET NO. 59A
DRAWN BY: L.B.S. DATE: AUGUST, 2004 OF X SHEETS