COMPUTED BY: BW DATE: 05/04
CHECKED BY: LC DATE: 05/04

# STATE OF NORTH CAROLINA
# DIVISION OF HIGHWAYS

METRIC

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| U-2717 | 3-K |

## LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 1200 mm & UNDER)

| STATION | LOCATION (LT, RT, OR CL) | STRUCTURE NO. FROM | STRUCTURE NO. TO | TOP ELEVATION | INVERT ELEVATION | INVERT ELEVATION | SLOPE CRITICAL | CLASS III R.C. PIPE (UNLESS NOTED OTHERWISE) 300 | 375 | 450 | 600 | 750 | 900 | 1050 | 1200 | C.S. PIPE 150 | BITUMINOUS COATED C.S. PIPE TYPE B (UNLESS NOTED OTHERWISE) 400 | 450 | 600 | SMOOTH STEEL PIPE 900 | 1050 | PVC PIPE 150 | CORRUGATED PLASTIC PIPE 300 | 300mm SIDE DRAIN PIPE | 375mm SIDE DRAIN PIPE | 450mm SIDE DRAIN PIPE | 600mm SIDE DRAIN PIPE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| THICKNESS OR GAUGE | | | | | | | | | | | | | | | | 1.63 | 1.63 | 1.63 | 1.63 | | | | | | | | |
| -LPC- 12+60 | RT | 193 | | 250.32 | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+60 | RT | 193 | 194 | | 249.44 | 249.41 | | | 6 | | | | | | | | | | | | | | | | | | |
| -LPC- 12+85 | RT | 195 | | 250.16 | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+85 | RT | 195 | 195A | | 249.24 | 249.20 | X | | 8.4 | | | | | | | | | | | | | | | | | | |
| -LPC- 12+69 | LT | 196 | | 249.42 | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+69 | CL | 196 | 197 | | 248.61 | 248.46 | X | | 50.4 | | | | | | | | | | | | | | | | | | |
| -Y22- 14+80 | CL | 196 | 196A | | 248.61 | 249.46 | | | 20.4 | | | | | | | | | | | | | | | | | | |
| -Y22- 14+80 | LT | 196A | | 250.27 | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 13+18 | RT | 197 | | 250.48 | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 13+18 | RT | 197 | 198 | | 248.95 | 249.02 | X | | | | 15.6 | | | | | | | | | | | | | | | | |
| -LPC- 13+18 | RT | 197 | 199 | | 248.23 | 248.03 | X | | | | 51.6 | | | | | | | | | | | | | | | | |
| -Y22- 15+84 | RT | 199 | | 250.64 | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 15+84 | RT | 199 | 200 | | 248.03 | 247.80 | | | | | 46.8 | | | | | | | | | | | | | | | | |
| -Y22- 16+30 | RT | 200 | | 250.74 | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 16+30 | RT | 200 | 201 | | 247.02 | 246.80 | | | | | | 18 | | | | | | | | | | | | | | | |
| -RPD- 12+03 | CL | 202 | | | 246.63 | 245.85 | | | | | | | 64.8 | | | | | | | | | | | | | | |
| -Y22- 17+54 | LT | 203 | 204 | | 248.00 | 246.00 | | | | | | | | | | | | | | *21.6 | | | | | | | |
| -Y22- 17+64 | CL | 204 | | 249.10 | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 17+64 | RT | 204 | 205 | | 246.00 | 242.52 | | | | | | | | | | | | | | *51.6 | | | | | | | |
| -RPA- 12+80 | RT | 206 | | 250.80 | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 12+80 | CL | 206 | 207 | | 249.99 | 249.90 | X | | 19.2 | | | | | | | | | | | | | | | | | | |
| -RPA- 12+80 | LT | 207 | | 251.39 | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 12+80 | LT | 207 | 208 | | 249.90 | 249.80 | | | 10.8 | | | | | | | | | | | | | | | | | | |
| -RPA- 12+17 | LT | 209 | | 249.25 | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 12+17 | CL | 209 | 210 | | 248.18 | 247.28 | | | | 30 | | | | | | | | | | | | | | | | | |
| -Y22- 18+80 | LT | 211 | 211A | | 245.80 | 245.05 | | | | | | | | 16.8 | | | | | | | | | | | | | |
| -Y22- 18+80 | LT | 211A | | 246.66 | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 18+80 | CL | 211A | 212 | | 245.05 | 241.70 | | | | | | | | | | | | | | | *76.8 | | | | | | |
| -RPA- 11+31 | LT | 213 | | 250.80 | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 13+31 | CL | 213 | 214 | | 249.59 | 248.17 | | | | 13.2 | | | | | | | | | | | | | | | | | |
| -RPA- 11+34 | RT | 214 | | 249.06 | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 13+34 | RT | 214 | 215 | | 248.17 | 248.00 | X | | | 20.4 | | | | | | | | | | | | | | | | | |
| -L- 42+88 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 42+52 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 43+00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SHEET TOTAL | | | | | | | | | 115.2 | 63.6 | 114 | 18 | 64.8 | 16.8 | | | | | | 73.2 | 76.8 | | | | | | |

| STATION | LOCATION | ENDWALLS STD. 838.01 STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. METERS R.C.P. | C.S.P. | QUANTITIES: STRUCTURES PER EACH (0 THRU 1.50) | FOR DRAINAGE *TOTAL M FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') METERS A 1.50 THRU 3.00 | B 3.00 AND ABOVE | C.B. STD. 840.01 OR 840.02 | FRAME, GRATES, AND HOOD STD. 840.03 TYPE OF GRATE E | F | G | D.I. STD. 840.14 OR STD. 840.15 (EA.) | D.I. FRAME & GRATE STD. 840.16 (EA.) | M.D.I. TYPE "B" STD. 840.18 OR 840.27 (EA.) | M.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24(EA.) | M.D.I. FRAMES AND WIDE SLOT GRATES STD. 840.22(EA.) | J.B. STD. 840.31 OR 840.32 (EA.) | M.H. STD.840.54 (EA.) | J.B. STD. 840.34 (EA.) | DRIVEWAY D.I. STD. 840.30 (EA.) | FRAME & GRATE FOR DRIVEWAY D.I. STD.840.30 (meters) | PARALLEL PIPE END SECTION STD. 310.02 OR 310.04 | CROSS PIPE END SECTION STD. 310.03 OR 310.05 | POLYMER LINE DRAIN W/WIDE SLOT GRATE SEE DETAIL SHEET (2-H) | PVC 150MM ELBOW NO. & SIZE | CORR. STEEL ELBOW NO. & SIZE | CONC. COLLARS, CL. "B" STD.840.72 (m³) | CONC. & BRICK PIPE PLUG (m³) STD.840.71 | PIPE REMOVAL (meters) | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -LPC- 12+60 | RT | | | 1 | | | 1 | | 1 | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+60 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+85 | RT | | | 1 | | | 1 | 1 | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+85 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -LPC- 12+69 | LT | | | 1 | | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -LPC- 12+69 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 14+80 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 14+80 | LT | | | 1 | | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -LPC- 13+18 | RT | | | 1 | 0.75 | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | |
| -LPC- 13+18 | RT | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | |
| -LPC- 13+18 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 15+84 | RT | | | 1 | 1.11 | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | |
| -Y22- 15+84 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 16+30 | RT | | | 1 | 1.5 | 2.22 | | | | | | | | | | | 1 | 1 | | | | | | | | | | | |
| -Y22- 16+30 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -RPD- 12+03 | CL | 2.6 | | | | | | | | | | | | | | | | | | | | | | | | | | 59.2 | |
| -Y22- 17+54 | LT | 2.6 | | | | | | | | | | | | | | | | | | | | | | | | | .05 | 2 | * BORE AND JACK / REM HDWL |
| -Y22- 17+64 | CL | | | 1 | 1.50 | 1.6 | | | | | | | 1 | | 1 | | | | | | | | | | | | .15 | | REM DI |
| -Y22- 17+64 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | * BORE AND JACK |
| -RPA- 12+80 | RT | | | 1 | | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -RPA- 12+80 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 12+80 | LT | | | 1 | | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -RPA- 12+80 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 12+17 | LT | | | 1 | 0.47 | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -RPA- 12+17 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -Y22- 18+80 | LT | 3.4 | | | | | | | | | | | | | | | | | | | | | | | | | | 5 | |
| -Y22- 18+80 | LT | | | 1 | 0.11 | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | |
| -Y22- 18+80 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | .39 | 32 | *BORE AND JACK |
| -RPA- 11+31 | LT | | | 1 | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | |
| -RPA- 13+31 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -RPA- 11+34 | RT | | | 1 | | | | | | | | | 1 | | 1 | | | | | | | | | | | | | | |
| -RPA- 13+34 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 42+88 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | 6.4 | |
| -L- 42+52 | CL | | | | | | | | | | | | | | | | | | | | | | | | | | | 10.4 | |
| -L- 43+00 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | 7.0 | |
| SHEET TOTAL | | 8.6 | | 14 | 5.44 | 3.82 | 2 | 1 | 1 | | | | 7 | | 7 | 1 | 5 | 4 | | | 1 | | | | | | .59 | 122 | |

| ABBREVIATIONS | |
|---|---|
| C.B. | CATCH BASIN |
| N.D.I. | NARROW DROP INLET |
| D.I. | DROP INLET |
| M.D.I. | MEDIAN DROP INLET |
| M.D.I. (N.S.) | MEDIAN DROP INLET (NARROW SLOT) |
| J.B. | JUNCTION BOX |
| M.H. | MANHOLE |
| T.B.D.I. | TRAFFIC BEARING DROP INLET |
| T.B.J.B. | TRAFFIC BEARING JUCTION BOX |

6/20/00

05-AUG-2004 06:55 R:\pro\drainage.sum AT RD196538 BWedeking