R1/2/86102

| COMPUTED BY: | M. Kelly | DATE: | 2/13/15 |
|---|---|---|---|
| CHECKED BY: | TRB | DATE: | 12/03/15 |

| PROJECT NO. | SHEET NO. |
|---|---|
| B-5344 | 3D-1 |

# NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
# DIVISION OF HIGHWAYS

**Note: Invert Elevations indicated are for Bid Purposes only and shall not be used for project construction stakeout. See "Standard Specifications For Roads and Structures, Section 300-5".**

## *LIST OF PIPES, ENDWALLS, ETC. (FOR PIPES 48 INCHES & UNDER)*

| LINE & STATION | OFFSET | STRUCTURE NUMBER FROM | STRUCTURE NUMBER TO | TOP ELEVATION FT. | INVERT ELEVATION FT. | INVERT ELEVATION FT. | MINIMUM REQUIRED SLOPE % | Drainage Pipe (RCP, CSP, CAAP, HDPE, or PVC) SIZE | THICKNESS OR GAUGE | DO NOT USE RCP | DO NOT USE CSP | DO NOT USE CAAP | DO NOT USE HDPE | DO NOT USE PVC | C. S. PIPE SIZE | THICKNESS OR GAUGE | R. C. PIPE CLASS III SIZE | R. C. PIPE CLASS IV SIZE | R. C. PIPE CLASS V SIZE | 15" SIDE DRAIN PIPE | 18" SIDE DRAIN PIPE | 24" SIDE DRAIN PIPE | ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) CY | REINFORCED ENDWALLS CY | DRAINAGE STRUCTURE MASONRY CY | QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)) A 0' THRU 5' EACH | A 5' THRU 10' LIN. FT. | B 10' AND ABOVE LIN. FT. | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES, AND HOOD STD. 840.03 GRATE TYPE E | F | G | CONCRETE TRANSITIONAL SECTION D.I. STD. 852.04 OR STD. 852.06 | C.B. STD. 852.05 | G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.29 | T.B.D.I. STD. 840.35 | 15" DRAINAGE PIPE ELBOW | CONCRETE COLLARS CL. "B" STD. 840.72 CY | CONCRETE AND BRICK PIPE PLUG STD. 840.71 CY | PIPE REMOVAL LIN. FT. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 12 | | | | | | | 12 | | 12 | 12 | 12 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 15 | | | | | | | 15 | .064 | 15 | 15 | 15 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 18 | | | | | | | 18 | .064 | 18 | 18 | 18 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 24 | | | | | | | 24 | .064 | 24 | 24 | 24 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 30 | | | | | | | 30 | .079 | 30 | 30 | 30 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 36 | | | | | | | 36 | .079 | 36 | 36 | 36 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 42 | | | | | | | 42 | .109 | 42 | 42 | 42 | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | 48 | | | | | | | 48 | .109 | 48 | 48 | 48 | | | | | | | | | | | | | | | | | | | | | | | | |
| L 16+38 | 15 RT | 0401 | | 678.5 | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 | 1 | | | | | | | |
| | | 0401 | 0402 | | 675.7 | 675.6 | | | | | | | | | | | | 28 | | | | | | | | | | | | | | | | | | | | | | | | |
| L 16+38 | 15 LT | 0402 | | 678.5 | | | | | | | | | | | | | | | | | | | | | | 1 | | | | | | | | 1 | 1 | | | | | | | |
| | | 0402 | 0403 | | 675.6 | 671.0 | | 20 | | X | | | | | | | | | | | | | | | | | | | | | | | | | | 2 | | | | | | |
| L 13+97 | 22 LT | 0404 | | | | | | | | | | | | | | | | | 28 | | | | | | | | | | | | | | | | | | | | | | | | |
| SHEET TOTALS | | | | | | | | 20 | | | | | | | | | | 28 | 28 | | | | | | | 2 | | | | | | | | 2 | 2 | 2 | | | | | | |
| PROJECT TOTALS | | | | | | | | 20 | | | | | | | | | | 28 | 28 | | | | | | | 2 | | | | | | | | 2 | 2 | 2 | | | | | | |

**ABBREVIATIONS**

| | |
|---|---|
| C.A.A. | CORRUGATED ALUMINIUM ALLOY |
| C.B. | CATCH BASIN |
| C.S. | CORRUGATED STEEL |
| D.I. | DROP INLET |
| G.D.I. | GRATED DROP INLET |
| H.D.P.E. | HIGH DENSITY POLYETHYLENE |
| J.B. | JUNCTION BOX |
| M.H. | MANHOLE |
| N.S. | NARROW SLOT |
| P.V.C. | POLYVINYL CHLORIDE |
| R.C. | REINFORCED CONCRETE |
| T.B.D.I. | TRAFFIC BEARING DROP INLET |
| T.B.J.B. | TRAFFIC BEARING JUNCTION BOX |
| W.S. | WIDE SLOT |