COMPUTED BY: VT DATE: 3-15-11
CHECKED BY: LJ DATE: 3-15-11

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

| PROJECT REFERENCE NO. | SHEET NO. |
|---|---|
| W-5601D | 3A |

NOTE: Invert Elevations 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" & UNDER)

| STATION / SIZE / THICKNESS OR GAUGE | LOCATION (LT,RT, OR CL) | STRUCTURE NO. FROM | STRUCTURE NO. TO | TOP ELEVATION | INVERT ELEVATION | INVERT ELEVATION | SLOPE CRITICAL | DRAINAGE PIPE (RCP, CSP, CAAP, HDPE, or PVC) 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | DO NOT USE RCP | DO NOT USE CSP | DO NOT USE CAAP | DO NOT USE HDPE | CORRUGATED ALUMINUM ALLOY PIPE 12" | 15" | 18" | 24" | 36" | 42" | 48" | .064 | .064 | .064 | .064 | .079 | .109 | .109 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -L- 14+53.75 | LT | 401 | | | 23.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 14+49.39 | RT | 402 | | | 22.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 14+61.68 | LT | 403 | | | 23.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 18+00.00 | LT | 404 | | 31.20 | 25.45 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 20+00.00 | LT | 405 | | 33.60 | 27.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 22+00.00 | LT | 406 | | 35.00 | 29.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | LT | 407 | | 35.37 | 29.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+60.20 | LT | 408 | | | 32.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | RT | 409 | | | 32.60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | LT | 410 | | | 33.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 14+48.14 | CL | 401 | 402 | | 23.30 | 22.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | 48 |
| -L- 14+54.91 | CL | 401 | 402 | | 23.30 | 22.30 | | | | | | | | | | | | | | | | | | | | | | | | | | | 48 |
| -L- 16+30.84 | LT | 404 | 403 | | 25.45 | 23.80 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 19+00.00 | LT | 405 | 404 | | 27.85 | 25.45 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 21+00.00 | LT | 406 | 405 | | 29.25 | 27.85 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | LT | 407 | 406 | | 29.62 | 29.25 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+42.60 | LT | 408 | 407 | | 32.80 | 29.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | CL | 409 | 407 | | 32.60 | 29.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 23+25.00 | LT | 410 | 407 | | 33.80 | 29.62 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 11+12.09 | RT | 1 | | | 27.30 | 27.20 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 12+41.38 | RT | 2 | | | 26.70 | 26.55 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 18+60.16 | RT | 3 | | | 30.95 | 30.40 | | | | 36 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 19+43.18 | RT | 4 | | | 32.20 | 31.90 | | | | 20 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 22+64.14 | RT | 5 | | | 35.10 | 35.00 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 24+78.35 | RT | 6 | | | 34.40 | 34.20 | | | | | 24 | | | | | | | | | | | | | | | | | | | | | | |
| -L- 27+26.07 | LT | 7 | | | 34.80 | 35.00 | | | | | 28 | | | | | | | | | | | | | | | | | | | | | | |
| -L- 28+57.93 | LT | 8 | | | 36.00 | 35.85 | | | | | 40 | | | | | | | | | | | | | | | | | | | | | | |
| -L- 30+12.13 | LT | 9 | | | 36.30 | 36.20 | | | | 40 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 30+62.01 | RT | 10 | | | 37.60 | 37.50 | | | | | 24 | | | | | | | | | | | | | | | | | | | | | | |
| -L- 31+14.88 | LT | 11 | | | 36.60 | 36.50 | | | | 32 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 31+83.46 | RT | 12 | | | 37.75 | 37.60 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 32+28.66 | RT | 13 | | | 38.20 | 38.10 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| -L- 33+39.10 | RT | 14 | | | 38.50 | 38.40 | | | | 24 | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | 272 | 116 | | | | | | | | | | | | | | | | | | | | | | 96 |

| STATION / SIZE / THICKNESS OR GAUGE | R.C. PIPE (CLASS III) 15" | 18" | 24" | 30" | 36" | 42" | 48" | R.C. PIPE (CLASS IV) 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | *** R.C. PIPE (CLASS V) | *** R.C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE | *** R.C. PIPE CULVERTS, CONTRACTOR DESIGN PIPE | 15" SIDE DRAIN PIPE | 18" SIDE DRAIN PIPE | ENDWALLS STD. 838.01, STD. 838.11 OR STD. 838.80 (UNLESS NOTED OTHERWISE) CU. YDS. R.C.P. | C.S.P. | QUANTITIES FOR DRAINAGE STRUCTURES * TOTAL L.F. FOR PAY QUANTITY SHALL BE COL. 'A' + (1.3 X COL. 'B') PER EACH (0' THRU 5.0') | LIN. FT. A 5.0' THRU 10.0' | B 10.0' AND ABOVE | C.B. STD. 840.01 OR STD. 840.02 | FRAME, GRATES AND HOOD STANDARD 840.03 TYPE OF GRATE E | F | G | CONCRETE TRANSITIONAL SECTION CATCH BASIN | DROP INLET | G.D.I. TYPE "A" STD. 840.17 OR 840.26 | G.D.I. FRAME WITH TWO GRATES STD. 840.22 | G.D.I. (N.S.) FRAME WITH GRATE STD. 840.29 | G.D.I. (N.S.) FRAME WITH TWO GRATES STD. 840.24 | T.B.D.I. STD. 840.35 | CORR. STEEL ELBOWS NO. & SIZE | CONC. COLLARS CL. "B" C.Y. STD. 840.72 | CONC. HEADWALL /ENDWALL /WINGWALL C.Y. | PIPE REMOVAL LIN.FT. | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -L- 14+53.75 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 14+49.39 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 14+61.68 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 18+00.00 | | | | | | | | | | | | | | | | | | | | | | | 1 | 0.75 | | | | | | | | 1 | 1 | | | | | | | | G.D.I. TYPE "A" (NO CONCRETE APRON REQUIRED) |
| -L- 20+00.00 | | | | | | | | | | | | | | | | | | | | | | | 1 | 0.75 | | | | | | | | 1 | 1 | | | | | | | | G.D.I. TYPE "A" (NO CONCRETE APRON REQUIRED) |
| -L- 22+00.00 | | | | | | | | | | | | | | | | | | | | | | | 1 | 0.75 | | | | | | | | 1 | 1 | | | | | | | | G.D.I. TYPE "A" (NO CONCRETE APRON REQUIRED) |
| -L- 23+25.00 | | | | | | | | | | | | | | | | | | | | | | | 1 | 0.75 | | | | | | | | 1 | 1 | | | | | | | | G.D.I. TYPE "A" (NO CONCRETE APRON REQUIRED) |
| -L- 23+60.20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 23+25.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 23+25.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | OUTLET |
| -L- 14+48.14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | 48" CAAP |
| -L- 14+54.91 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 4 | | 48" CAAP |
| -L- 16+30.84 | | | | 340 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3.5 | | 36" RCP CLASS III |
| -L- 19+00.00 | | | | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36" RCP CLASS III |
| -L- 21+00.00 | | | | 200 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36" RCP CLASS III |
| -L- 23+25.00 | | | | 125 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36" RCP CLASS III |
| -L- 23+42.60 | | | | 36 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 34 | 30" RCP CLASS III |
| -L- 23+25.00 | | | | | | | | | | | | 48 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 48 | 30" RCP CLASS IV |
| -L- 23+25.00 | | | | | | | | | 8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 15" RCP CLASS IV |
| -L- 11+12.09 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 20 | 18" DRAINAGE PIPE |
| -L- 12+41.38 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 21 | 18" DRAINAGE PIPE |
| -L- 18+60.16 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 32 | 18" DRAINAGE PIPE |
| -L- 19+43.18 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 17 | 18" DRAINAGE PIPE |
| -L- 22+64.14 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 21 | 18" DRAINAGE PIPE |
| -L- 24+78.35 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 21 | 24" DRAINAGE PIPE |
| -L- 27+26.07 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 25 | 24" DRAINAGE PIPE |
| -L- 28+57.93 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 35 | 24" DRAINAGE PIPE |
| -L- 30+12.13 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 36 | 18" DRAINAGE PIPE |
| -L- 30+62.01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | 24" DRAINAGE PIPE |
| -L- 31+14.88 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 30 | 18" DRAINAGE PIPE |
| -L- 31+83.46 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | 18" DRAINAGE PIPE |
| -L- 32+28.66 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | 18" DRAINAGE PIPE |
| -L- 33+39.10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 22 | 18" DRAINAGE PIPE |
| | | | | 36 | 865 | | | | 8 | | | 48 | | | | | | | | | | | 4 | 3 | | | | | | | | 4 | 4 | | | | | | | 17.5 | 428 | |

## ABBREVIATIONS

| | |
|---|---|
| C.B. | CATCH BASIN |
| N.D.I. | NARROW DROP INLET |
| D.I. | DROP INLET |
| G.D.I. | GRATED DROP INLET |
| G.D.I. (N.S.) | GRATED 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 JUNCTION BOX |

# SUMMARY OF EARTHWORK
## IN CUBIC YARDS

| LOCATION | UNCLASSIFIED EXCAVATION | UNDERCUT | EMBT+% | BORROW | WASTE |
|---|---|---|---|---|---|
| -L- 10+00.00 - 38+00.00 | 743 | 0 | 3520 | 2777 | 0 |
| -L- 39+60.00 - 42+00.00 | 21 | 0 | 15 | -6 | 0 |
| SUB TOTAL | 764 | 0 | 3535 | 2771 | 0 |
| | | | | | |
| SAY | 770 | 0 | 3545 | 2775 | 0 |

NOTE:
APPROXIMATE QUANTITIES ONLY, UNCLASSIFIED EXCAVATION, BORROW EXCAVATION, FINE GRADING, CLEARING AND GRUBBING, BREAKING OF EXISTING PAVEMENT AND REMOVAL OF EXISTING PAVEMENT WILL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR "GRADING."

4/04/06
16-MAR-2015 13:58
G:\PROJECTS\JONES\NC41_70 toTrenton\NC41_ddc2_psh3a.dgn
$$$$USERNAME$$$$