WKST1

COMPUTED BY:	RBR	DATE:	6/15/2018
CHECKED BY:	ECOLOGICAL ENGINEERING, LLP	DATE:	6/15/2018

PROJECT NO.	SHEET NO.
U-4405	3D-30

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)

Column headings: LINE & STATION / SIZE / THICKNESS OR GAUGE; OFFSET; STRUCTURE NUMBER (FROM, TO); TOP ELEVATION (FT.); INVERT ELEVATION (FT.); INVERT ELEVATION (FT.); MINIMUM REQUIRED SLOPE (%); 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, DO NOT USE PVC; C. S. PIPE: 12 (.064), 15 (.064), 18 (.064); R. C. PIPE CLASS III: 12, 15, 48; R. C. PIPE CLASS IV: 12, 15, 18, 24, 30, 36, 42, 48; 30" WELDED STEEL PIPE 0.5" THICK, GRADE B IN SOIL; 30" WELDED STEEL PIPE 0.5" THICK, GRADE B NOT IN SOIL; 36" WELDED STEEL PIPE 0.5" THICK, GRADE B IN SOIL; 36" WELDED STEEL PIPE 0.5" THICK, GRADE B NOT IN SOIL; 15" SIDE DRAIN PIPE; ENDWALLS STD. 838.01 OR STD. 838.11 (UNLESS NOTED OTHERWISE) (CY); QUANTITIES FOR DRAINAGE STRUCTURES (NOTE: TOTAL LIN. FT. FOR PAY QUANTITY SHALL BE A + (1.3 X B)): 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; OPEN THROAT C.B. STD. 840.04 OR STD. 840.05; D.I. STD. 840.14 OR STD. 840.15; D.I. FRAME AND GRATES STD. 840.16; G.D.I. TYPE "A" STD. 840.17 OR STD. 840.26; G.D.I. TYPE "B" STD. 840.18 OR STD. 840.27; G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28; G.D.I. (N.S. SAG) FRAME W/ 2 GRATES STD. 840.24; G.D.I. (N.S. FLAT) FRAME W/ 2 GRATES STD. 840.29; 15" SLOTTED DRAIN; FRAME W/ GRATE FOR DRIVEWAY STD. 840.30; J.B. STD. 840.31 OR STD. 840.32; T.B.G.D.I. TYPE "D" STD. 840.19 OR STD. 840.28; T.B.J.B. STD. 840.34; T.B.D.I. STD. 840.35; M.H. STD. 840.51, STD. 840.52, OR STD. 840.53; M.H. FRAME AND COVER STD. 840.54; CONVERT EXISTING C.B. TO J.B.; CONVERT EXISTING D.I. TO J.B.; ADJUST C.B.; ADJUST D.I.; ADJUST JB W/MH; 15" C.S. ELBOW; 18" C.S. ELBOW; 12" DRAINAGE PIPE ELBOW; 15" DRAINAGE PIPE ELBOW; 24" DRAINAGE PIPE ELBOW; 30" DRAINAGE PIPE ELBOWS; 48" DRAINAGE PIPE ELBOW; PIPE CLEAN OUT (CY); FLOWABLE FILL (CY); CONCRETE COLLARS CL. "B" STD. 840.72 (CY); CONCRETE AND BRICK PIPE PLUG STD. 840.71 (CY); PIPE REMOVAL (LIN. FT.); REMARKS. (All columns not shown below are empty.)

LINE & STATION	OFFSET		STRUCTURE NUMBER FROM	TO	FLOWABLE FILL CY	PIPE REMOVAL LIN. FT.	REMARKS
L 227+52	31	RT	0000			296	
L 222+98	68	RT	0000			22	
L 229+00	41	RT	0000			17	
L 230+96	30	RT	0000			383	
L 229+38	39	RT	0000			24	
L 229+40	55	RT	0000			37	
L 231+20	38	RT	0000			330	
L 232+97	38	RT	0000			15	
L 234+58	38	RT	0000			298	
L 229+13	13	LT	0000			81	
L 230+02	75	RT	0000			11	
L 221+05	100	LT	0000			25	
L 233+20	59	RT	0000			33	
L 233+07	44	RT	0000			8	
L 233+04	4	LT	0000		3		
L 234+50	30	RT	0000			314	
L 233+18	42	LT	0000			6	
L 236+14	41	LT	0000			17	
L 237+69	30	RT	0000			317	
L 237+13	37	RT	0000			205	
L 236+09	34	RT	0000			4	
L 236+06	46	RT	0000			17	
L 238+16	44	RT	0000			12	
L 238+22	37	RT	0000			5	
L 238+74	37	RT	0000			93	
L 239+26	37	RT	0000			5	
L 240+04	92	RT	0000			20	
L 239+51	50	RT	0000			50	
L 240+19	37	RT	0000			175	
L 240+21	30	RT	0000			178	
L 239+30	34	RT	0000			4	
L 239+30	4	LT	0000		3		
L 236+08	4	LT	0000		3		
L 242+08	30	RT	0000			187	
L 241+09	46	RT	0000			16	
L 241+13	34	RT	0000			4	
L 242+07	37	RT	0000			184	
L 243+09	51	RT	0000			25	
L 243+05	37	RT	0000			5	
L 243+02	34	RT	0000			5	
L 244+90	30	RT	0000			368	
L 243+24	37	RT	0000			29	
L 243+18	5	LT	0000		2		
L 243+37	38	LT	0000			4	
L 247+49	65	LT	0000			7	
L 247+04	42	RT	0000			92	
L 247+12	30	RT	0000			68	
L 247+56	44	RT	0000			19	
L 248+15	32	RT	0000			127	
L 248+16	36	RT	0000			125	
SHEET TOTALS					11	4267	

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