NEAR SIDE/CONTROL HOUSE CONDUIT SCHEDULE

COND NO.	FROM EQUIPMENT	TO EQUIPMENT	NO. AND SIZE OF CABLE	GROUND COND.	SPARE	FILL (SQ. IN)	TRADE SIZE
C1	MEDIUM VOLTAGE TRANSFORMER	AUTOMATIC TRANSFER SWITCH	3 - NO. 4	1 - NO. 6	NONE	0.303	1"
C2	AUTOMATIC TRANSFER SWITCH	GENERATOR	3 - NO. 4, 2 - NO. 12	1 - NO. 6	NONE	0.339	1"
C3	AUTOMATIC TRANSFER SWITCH	MOTOR CONTROL CENTER	3 - NO. 4	1 - NO. 6	NONE	0.303	1"
C4	MOTOR CONTROL CENTER	MAIN TERMINAL CABINET	3 - NO. 6, 9 - NO. 8	1 - NO. 6	NONE	0.629	1 1/2"
C5	MOTOR CONTROL CENTER	MAIN TERMINAL CABINET	27 - NO. 10, 2 - #14 TSP	1 - NO. 10	NONE	0.736	1 1/2"
C6	MOTOR CONTROL CENTER	MAIN TERMINAL CABINET	2 - ETHERNET	-	NONE	-	1"
C7	MAIN PLC	MAIN TERMINAL CABINET	3 - ETHERNET, 1 - FIBER OPTIC	-	NONE	-	1"
C8	MAIN PLC	MAIN TERMINAL CABINET (ROADWAY CONTROLS)	105 - NO. 12	1 - NO .8	NONE	1.944	3"
C9	MAIN PLC	GENERATOR	4 - NO. 12	1 - NO. 12	NONE	0.091	1"
C10	MAIN PLC	ATS	12 - NO. 12	1 - NO. 12	NONE	0.235	1"
C11	MAIN TERMINAL CABINET	LIGHTING TRANSFORMER	3 - NO. 8	1 - NO. 8	NONE	0.175	3/4"
C12	LIGHTING TRANSFORMER	LIGHTING PANEL	3 - NO. 4	1 - NO. 4	NONE	0.326	1"
C13	LIGHTING PANEL	MAIN TERMINAL CABINET (CKT 5,7,9,11,13,15)	16 - NO. 12	1 - NO. 12	NONE	0.308	1"
C14	LIGHTING PANEL	MAIN TERMINAL CABINET (CKT 6,10,12,14,16,18,20)	16 - NO. 12	1 - NO. 12	NONE	0.308	1"
C15	LIGHTING PANEL	HVAC UNIT (CKT 1,3)	3 - NO. 10	1 - NO. 10	NONE	0.097	3/4"
C16	LIGHTING PANEL	WATER PUMP (CKT 17)	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C17	LIGHTING PANEL	EMERGENCY LIGHTS (CKT 19)	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C18	LIGHTING PANEL	FIRST FLOOR LIGHTS AND RECEPTACLES (CKT 2)	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C19	LIGHTING PANEL	SECOND FLOOR LIGHTS AND RECEPTACLES (CKT 4)	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C20	LIGHTING PANEL	CCTV EQUIPMENT	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C21	LIGHTING PANEL	GENERATOR	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C22	MAIN TERMINAL CABINET	CONTROL DESK	1 - ETHERNET	-	NONE	-	1"
C23	MAIN TERMINAL CABINET	CONTROL DESK	4 - NO. 12	1 - NO. 12	NONE	0.091	3/4"
C24	MAIN TERMINAL CABINET (ROADWAY CONTROLS)	NEAR SIDE ROADWAY JUNCTION BOX	49 - NO. 12, 9 - NO.10	1 - NO. 12	NONE	1.124	2"
C25	NEAR SIDE ROADWAY JUNCTION BOX	NEAR SIDE BARRIER GATE	19 - NO. 12, 3 - NO.10	1 - NO. 12	NONE	0.435	1 1/4"
C26	NEAR SIDE ROADWAY JUNCTION BOX	NEAR SIDE ONCOMING WARNING GATE	11 - NO. 12, 3 - NO. 10	1 - NO. 12	NONE	0.290	1"
C27	NEAR SIDE ROADWAY JUNCTION BOX	NEAR SIDE OFFGOING WARNING GATE	11 - NO. 12, 3 - NO. 10	1 - NO. 12	NONE	0.290	1"
C28	NEAR SIDE ROADWAY JUNCTION BOX	NEAR SIDE GONG	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C29	NEAR SIDE ROADWAY JUNCTION BOX	TRAFFIC LIGHT	4 - NO. 12	1 - NO. 12	NONE	0.091	3/4"
C30	MAIN TERMINAL CABINET	NEAR SIDE JUNCTION BOX	5 - NO. 12	1 - NO. 12	NONE	0.102	3/4"
C31	NEAR SIDE JUNCTION BOX	FULLY CLOSED OVERTRAVEL LIMIT SWITCH	3 - NO. 12	1 - NO. 12	NONE	0.072	3/4"
C32	NEAR SIDE JUNCTION BOX	FULLY CLOSED PROXIMITY SWITCH	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"
C33	MOTOR CONTROL CENTER	MAIN PLC	29 - NO. 12	1 - NO. 12	NONE	0.543	1"
C34	CONTROL DESK	SIREN	3 - NO. 12	1 - NO. 12	NONE	0.072	3/4"
C35	MPLC	WASTE WATER FLOAT SWITCH	2 - NO. 12	1 - NO. 12	NONE	0.054	3/4"

NOTES:

1. THE CONDUIT SCHEMATICS AND SCHEDULES SHOW MINIMUM DESIGN QUANTITIES OF PULL, TERMINAL AND JUNCTION BOXES THAT MAY BE REQUIRED FOR THE PROPOSED INSTALLATION. THE CONTRACTOR SHALL FURNISH ANY ADDITIONAL NECESSARY BOXES REQUIRED FOR THE ACTUAL LAYOUT AT NO ADDITIONAL COST TO NORTH CAROLINA DEPARTMENT OF TRANSPORTATION.
2. THE NUMBER AND SIZES OF CONDUCTORS SHOWN IN CONDUITS ARE BASED ON THE CONTRACT WIRING DIAGRAMS AND ARE THE MINIMUM PERMISSIBLE. THE CONTRACTOR SHALL PROVIDE CONDUCTORS OF SUFFICIENT NUMBER AND SIZE, INCLUDING SPARES, AS MAY BE REQUIRED FOR THE INSTALLATION IN ACCORDANCE WITH THE FINAL WIRING DIAGRAMS ON THE APPROVED WORKING DRAWINGS. THE CONTRACTOR SHALL NUMBER AND TAG SPARE CONDUCTORS AS SUCH AND SPARE CONDUCTORS SHALL BE SHOWN ON ALL SHOP AND RECORD DRAWINGS.
3. ALL WIRE SHALL BE TYPE XHHW UNLESS OTHERWISE SPECIFIED.
4. ALL CONDUIT SHALL BE GALVANIZED RIGID STEEL CONDUIT.
5. FILL (SQ IN.) CALCULATE ARE CALCULATED BY SUMMING THE "NO. AND SIZE OF CABLE" AND THE GROUND CONDUCTOR. (THE SPARES ARE INCLUDED IN THE "NO. AND SIZE OF CABLE" COUNT).
6. SEPARATE ALL LOW VOLTAGE AND DC CONDUCTORS AND TERMINALS FROM AC WIRING IN TERMINAL BOXES. DO NOT TERMINATE SIGNAL AND COMMUNICATION CABLES IN THE TERMINAL BOXES.
7. SEPARATE ALL 480VAC CONDUCTORS AND TERMINALS FROM 120VAC WIRING IN TERMINAL BOXES. ALL 480VAC CONDUCTORS SHALL BE PROVIDED COVERS FOR MAINTENANCE PROTECTION. PROVIDE WARNINGS ON ALL TERMINAL BOXES WITH 480VAC CONDUCTORS THAT 480VAC CONDUCTORS ARE PRESENT IN THE BOX.

PROJECT NO. B-5936

TYRRELL COUNTY

BRIDGE NO: 7

Hardesty & Hanover
engineering that moves you

DocuSigned by: Scott Reynolds
BFEC5720FBF14B0...
11/10/2016

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036065 SCOTT A. REYNOLDS

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH

CONDUIT SIZE & FILL SCHEDULE 1

ALLIGATOR RIVER SWING SPAN

REVISIONS						SHEET NO.
NO.	BY:	DATE:	NO.	BY:	DATE:	E-45
1			3			TOTAL SHEETS
2			4			51

DRAWN BY: OIV DATE : 8/8/2016
CHECKED BY: MJT DATE : 8/8/2016
DESIGN ENGINEER OF RECORD: CHS DATE : 8/8/2016

DWG NUMBER 61 | TOTAL DWGS 90

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED