

		STANDARD STRAIN POLES					STANDARD FOUNDATIONS 48" Diameter Drilled Pier Length (L) – Feet				Reinforcement							
			Polo	Base	Reaction	ns at the	Pole Base		Cl	Clay			Sand		Longitudinal		Stirr	rups
		Case No.	Height (Ft.)	BC (In.)	Axial (kip)	Shear (kip)	Moment (ft–kip)	Medium N–Value 4–8	Stiff N–Value 9–15	Very Stiff N–Value 16–30	Hard N–Value >30	Loose N–Value 4–10	Medium N–Value 11–30	Dense N–Value > 30	Bar Size (#)	Quantity (ea.)	Bar Size (#)	Spacing (in.)
W I	L	S26L3	26	25	2	11	270	19	13	10	8	17	14.5	12.5	8	12	4	12
Ñ D	G H	S30L3	30	25	2	11	300	19.5	13.5	10	8	17.5	15	13	8	14	4	12
Z O	T	S35L3	35	25	3	11	320	20	13.5	10.5	8	17.5	15	13	8	14	4	12
N E	H E A	S30H3	30	29	3	16	450	24.5	16	12	9	21	17.5	15	8	16	4	6
1	V Y	S35H3	35	29	4	16	515	26	17	12.5	9.5	22	18.5	16	8	16	4	6
Ņ	L I G H	S26L2	26	23	2	10	245	18	12.5	9.5	8	16.5	14	12	8	12	4	12
L N D		S30L2	30	23	2	10	270	18.5	12.5	10	8	16.5	14	12.5	8	12	4	12
Z	Ť	S35L2	35	23	3	10	300	19.5	13	10	8	17	14.5	13	8	12	4	12
N E	H E △	S30H2	30	29	3	15	415	23	15.5	11.5	9	20	17	14.5	8	16	4	6
2	V Y	S35H2	35	29	4	15	475	25	16.5	12	9.5	21	17.5	15.5	8	16	4	6
N T	L I G H T H E A	S26L2	26	23	2	10	245	18	12.5	9.5	8	16.5	14	12	8	12	4	12
		S30L2	30	23	2	10	270	18.5	12.5	10	8	16.5	14	12.5	8	12	4	12
7		S35L2	35	23	3	10	300	19.5	13	10	8	17	14.5	13	8	12	4	12
		S30H2	30	29	3	15	415	23	15.5	11.5	9	20	17	14.5	8	16	4	6
3	V Y	S35H2	35	29	4	15	475	25	16.5	12	9.5	21	17.5	15.5	8	16	4	6
v	Ļ	S26L1	26	22	2	8	190	16	11.5	8.5	8	15	12.5	11	8	12	4	12
J	G H	S30L1	30	22	2	8	205	16.5	11.5	9	8	15	13	11.5	8	12	4	12
	Ť	S35L1	35	22	3	8	230	17	12	9	8	15.5	13.5	11.5	8	12	4	12
	H E A	S30H1	30	25	3	12	320	20.5	13.5	10.5	8	18	15	13.5	8	16	4	6
4	V Y	S35H1	35	25	4	12	350	21	14	10.5	8.5	18.5	15.5	13.5	8	16	4	6
N I	Ļ	S26L2	26	23	2	10	245	18	12.5	9.5	8	16.5	14	12	8	12	4	12
N D	ц С Н	S30L2	30	23	2	10	270	18.5	12.5	10	8	16.5	14	12.5	8	12	4	12
$\frac{7}{5}$	Ť	S35L2	35	23	3	10	300	19.5	13	10	8	17	14.5	13	8	12	4	12
J E	H E ^	S30H2	30	29	3	15	415	23	15.5	11.5	9	20	17	14.5	8	16	4	6
5	A V V	S35H2	35	29	4	15	475	25	16.5	12	9.5	21	17.5	15.5	8	16	4	6

Prepared In the Offices of: Notifice of the price of the	
"Design So	PLAN
750 N.Greenfield Pkwy,Garner,NC 27529	PREP
SCALE	
U NA	Chang
NONE	

PROJECT	ID.	NO.		
br-0041	_			

SHEET NO.

General Notes:

1. Values shown in the "Reactions at the Pole Base" column represent the minimum acceptable capacity allowed for design using a design CSR of 1.00. 2. Use chairs and spacers to maintain proper clearance. 3. For foundation, always use air-entrain concrete mix.

Foundation Selection:

1. Perform a standard penetration test at each proposed foundation site to determine "N" value. 2. Select the appropriate wind zone from M 1 drawing. 3. Select the soil type (Clay or Sand) that best describes the soil characteristics. 4. Get the appropriate standard pole case number from the plans or from the Engineer. 5. Select the appropriate column under "Standard Foundations" based on soil type and "N" value. Select the appropriate row based on the pole load case. 6. The foundation depth is the value shown in the "Standard Foundations" category where the column and the row intersect. 7. Use Construction Procedures and Design Methods prescribed

by FHWA-NHI-10-016 for Reference Drilled Shafts.

Condition Soil oundation–All ЦĽ ole Δ Strain Standard

St. F					
DATE:	OCTOBER 2017	DESIGNED BY:	С.В.	COGDELL	
RED BY:	N. BITTING	REVIEWED BY:	D.C.	SARKAR	
	REVISIONS		INIT	• DATE	C
ed "Foundation	n Depth" to "Drilled Pier Le	ngth"in Conc. Eqn.	N.B.	7/12/2015	



10/11/2017

DATE

		INSTALL COAX CABLE
	2	INSTALL ETHERNET CABLE
	3	EXISTING ETHERNET (OR COAX) CABLE
	4	INSTALL SMFO CABLE
	5	EXISTING SMFO CABLE
	6	INSTALL FIBER OPTIC DROP CABLE
	7	INSTALL TRACER WIRE
	8	TRENCH
	9	INSTALL PVC CONDUIT
		INSTALL RIGID, GALVANIZED STEEL CONDUIT
		INSTALL RIGID, GALVANIZED STEEL RISER WITH WEATHERHEAD
	(12)	INSTALL RIGID, GALVANIZED STEEL RISER WITH FIBER OPTIC CABLE SEAL
	13	INSTALL OUTER-DUCT POLYETHYLENE CONDUIT
	14	INSTALL POLYETHYLENE CONDUIT
	15	DIRECTIONAL DRILL CONDUIT
	16	BORE AND JACK CONDUIT
	17	INSTALL CABLE(S) IN EXISTING CONDUIT
	18	INSTALL CABLE(S) IN NEW CONDUIT
	19	INSTALL CABLE(S) IN EXISTING RISER
	20	INSTALL CABLE(S) IN NEW RISER
	21	INSTALL CABLE(S) IN EXISTING CONDUIT STUB-OUTS
	22	INSTALL NEW CONDUIT INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB–OUTS WHEN AVAILABLE)
	23	INSTALL NEW RISER INTO EXISTING CABINET BASE (USE EXISTING CONDUIT STUB–OUTS WHEN AVAILABLE)
	24	INSTALL NEW CONDUIT INTO EXISTING POLE MOUNTED CABINET
	25	INSTALL NEW RISER INTO EXISTING POLE MOUNTED CABINET
	26	INSTALL NEW ETHERNET EDGE SWITCH
	27>	INSTALL NEW FIBER OPTIC TRANSCEIVER
	28	INSTALL INTERCONNECT CENTER, PATCH PANEL, JUMPERS AND FUSION SPLICE CABLE IN CABINET
	29	INSTALL UNDERGROUND SPLICE ENCLOSURE
	30	INSTALL AERIAL SPLICE ENCLOSURE
	31	MODIFY EXISTING INTERCONNECT CENTER /SPLICE ENCLOSURE
- iñnni	32	INSTALL POLE MOUNTED SPLICE CABINET
01001-0010	33	INSTALL BASE MOUNTED SPLICE CABINET
Ì		

34	INSTALL CABINET FOUNDATION	
35	INSTALL CCTV CAMERA POLE MOUNTED CABINET	FO FO
36	INSTALL CCTV CAMERA ASSEMBLY	EXI
37	INSTALL CCTV CAMERA WOOD POLE	REM
38	INSTALL CCTV CAMERA METAL POLE AND FOUNDATION	
39	INSTALL JUNCTION BOX	
40A	INSTALL OVERSIZED JUNCTION BOX	
40B	INSTALL SPECIAL OVERSIZED JUNCTION BOX (36" x 24" x 24")	
41	REMOVE EXISTING JUNCTION BOX	
42	INSTALL WOOD POLE	
43	REMOVE EXISTING WOOD POLE	s UNDERG
44	INSTALL AERIAL GUY ASSEMBLY	
45	INSTALL STANDARD GUY ASSEMBLY	
46	INSTALL SIDEWALK GUY ASSEMBLY	(NEW ST
47	INSTALL MESSENGER CABLE	
48A	REMOVE EXISTING COMMUNICATIONS AND MESSENGER CABLE	CONSTRU
48B	REMOVE EXISTING COMMUNICATIONS CABLE	
49	BACK PULL EXISTING COMMUNICATIONS CABLE	
50	INSTALL CELL MODEM AND ANTENNA	
51	INSTALL CABLE STORAGE RACKS (SNOW SHOES) AND STORE 100 FEET OF CABLE	
52	INSTALL DELINEATOR MARKER	OF CABLE(
53A	STORE 20 FEET OF COMMUNICATIONS CABLE	
53B	STORE 50 FEET OF EACH COMMUNICATIONS CABLE	
54	LASH CABLE(S) TO EXISTING COMMUNICATIONS CABLE	
55	LASH CABLE(S) TO EXISTING MESSENGER CABLE	
56	LASH CABLE(S) TO NEW MESSENGER CABLE	OF RISER(S)/CC
57	MODIFY EXISTING ELECTRICAL SERVICE	
58	INSTALL NEW ELECTRICAL SERVICE	
59	INSTALL NEW EQUIPMENT CABINET DISCONNECT	
60	BOND TRACER WIRE TO EQUIPMENT GROUND BUS	
61	DO NOT BOND TRACER WIRE TO EQUIPMENT GROUND BUS	"
62	BOND RISER AND MESSENGER CABLE TO POLE GROUND	F
63	BOND RISER TO POLE GROUND	
64	BOND MESSENGER CABLE TO POLE GROUND	Pro
65	INSTALL HEAT SHRINK TUBING RETROFIT KIT	
66	INSTALL MOLDABLE DUCT SEAL	
67	SLACK SPAN	AECOM
		NC Firm License No.: F-0342 5438 Wade Park Boulevard Suite 200 Raleigh, NC 27607 Phone: 919-461-1100

				PROJECT REFERENCE NO.	SHEET NO.
<u>LE</u> NEW FI	<u>GEND</u> BER OPTIC COMML	JNICATION	S CABLE	вк-0041	567 1
	VISTED PAIR COMM	Δυνιζατιο	NS CABLF		
EXISTING		NS CABLE			
EXISTING		NS CABLE	to be removed		
NEW AE	RIAL GUY ASSEMBL	_Y			
	ONDUIT				
	CONDUIT				
NEW DI	RECTIONAL DRILLED	O CONDUI	Т		
NEW BC	DRED AND JACKED	CONDUI	Т		
JUNCTION BOX	$\bigcirc \bigcirc$	NEW C	ABLE STORAGE RAC	ks (snow shoes)	
IG JUNCTION BOX		EXISTING	G CABLE STORAGE	RACK (SNOW SHOE)	
WOOD POLE		EXISTING	G CONTROLLER AN	D CABINET	
SPLICE ENCLOSURF		NEW C	CTV CABINET		
GROUND SPLICE ENC			STLICE CABINET		
METAL POLE	SP	SIGNAI	POLE		
IG METAL POLE	((()	FLAT PA	NEL ANTENNA (SIN	GLE)	
CCTV ASSEMBLY	- <u>+ -</u>	YAGI AN	ITENNA (DOUBLE) F	OR	
NG CUIV ASSEMBLY STANDARD GUY ASSE		YAGI AN	ITENNA (SINGLE)		
SIDEWALK GUY ASSEM	NBLY (回例)	ΟΜΝΙ Α			
XX-XXXX SIGN/	al Inventory NU	JMBER			
UCIION NO		SOLU	JY KEY		
INDICATES NUMBER	OF CABLES, LO	OPS, ETC	· · ·		
INDICATES NUMBER	OF FIBERS PER	CABLE,			
TWISTED PAIRS PER	CABLE, ETC.	• •••=	• •		
INDICATES NUMBER	COF RISER(S)/CO	UNDUIT(S))		
INDICATES DIAMETE	ER OF RISER(S)/0	CONDUII	(S) (INCH)		
	FIR	NUMB BERS/TWIS	er of Ted Pairs		
.E(S)					
	\ xx)	NFW/FYI	STING CARIF		
		REMOVE	MODIFY CARIF		
		CONDU	II/ KIJEK		
ивек/ DF		F			
CONDUIT(S)	riser(s)/cone	DUIT(S) (IN	NCH)		
ATTACHMEN	NT POINT:				
	ICE ABOVE (II	N)⁄ATTA	CHMENT POIN	г	
YYY REFERE	NCE POINT				
XX"/SS DISTAN	ICE BELOW ((IN)⁄ATTA	ACHMENT POIN	NT	
"SS" REFERENCE	LOCATION				
FS = FRONT S	IDE OF POLE	1			
BS = BACK SI	DE OF POLE				
		_			FINAL
Duchased for a Office of			UNLESS ALL S	IGNATURES COMP	LETED
Prepared for the Offices of:		_		SEAL	·//,
	Cons	tructi	on Notes	LINH CAR	
THOM WILLS		<u> </u>	_	SEAL	
CERTIFICATION SUST	Division 7 PLAN DATE: Jan 2	Rockingh 2023 F	am County Reids EVIEWED BY: A. Ravipa	ville E 034481	
Greenfield Pkwy. , Garner, NC 27529	PREPARED BY: M.P. Ca	venaugh F	EVIEWED BY: H.M. Sur	ti DATE	URINI
				DocuSigned by:	

		ftemang M. Sunti 3/10/2023
		AF12BB0537A5481
	 	CADD Filename:

NOTES:

- 1. ALL NCDOT CABLE ATTACHMENT POINTS ARE 12 INCHES BELOW CATV, FRONT SIDE OF POLE, UNLESS OTHERWISE NOTED.
- 2. FIVE (5) DAYS PRIOR TO BEGINNING WORK ON THE SIGNAL SYSTEM, CONTACT THE DIVISION 7 TRAFFIC ENGINEER AT (336) 487-0175 TO ARRANGE FOR THE DIVISION TO PROGRAM THE NEW FIELD ETHERNET PROJECT IP ADDRESS, DEFAULT GATEWAY, SUBNET MASK AND VLAN ID INFORMATION. NOTIFY THE ENGINEER AFTER ALL WORK IS PERFORMED TO ENSURE THAT ALL FIBER CIRCUITS ARE FUNCTIONING PROPERLY. WORK IS NOT COMPLETE UNTIL THE SIGNAL SYSTEM IS BACK UP AND OPERATIONAL.
- PLANS. IF DISCREPANCIES EXIST, CONTACT THE ENGINEER TO DETERMINE HOW TO PROCEED WITH SUPPLIED SPLICE PLANS.



SWITCHES WITH THE NECESSARY NETWORK CONFIGURATION DATA, INCLUDING BUT NOT LIMITED TO: THE

3. CONTRACTOR TO RECORD EXISTING SPLICE ARRANGEMENT FOR COMPARISON TO THE SUPPLIED SPLICE RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE



1"=50'







SUPPLIED SPLICE PLANS.

RESPLICING. PROVIDE AS-BUILT PLANS TO THE ENGINEER IF FINAL SPLICE ARRANGEMENT DIFFERS FROM THE



	THOSE THEFENEL	JHEET NO.
	B R - 0 0 4 1	SCP 4
	_	
	DOCUMENT NOT CONSIDER	
Prepared for the Offices of:	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C	
Prepared for the Offices of:	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES CONSIDER	
Prepared for the Offices of:	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C	
Prepared for the Offices of: Signal Communication Plans	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C	
Prepared for the Offices of: Signal Communication Plans	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES CON SEAL VIIIIe	RED FINAL OMPLETED
Prepared for the Offices of: Signal Communication Plans Division 7 Rockingham County Reids PLAN DATE: Jan 2023 REVIEWED BY: A. Ravipa	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C SEAL VIIIe ti VIIIE	RED FINAL OMPLETED
Prepared for the Offices of: Signal Communication Plans Division 7 Rockingham County Reids Division 7 Rockingham County Reids Division 7 Rockingham County Reids PHEPARED BY: M.P. Cavenaugh REVIEWED BY: H.M. Sur Consented Press, Game, NC 27520 PHEPARED BY: M.P. Cavenaugh REVIEWED BY: H.M. Sur	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C SEAL VIIIE ti IIIE NGINEER NGINEER	ED FINAL OMPLETED
Prepared for the Offices of: Signal Communication Plans Division 7 Rockingham County Reids Division 7 Rockingham County Reids PLAN DATE: Jan 2023 REVIEWED DY: A. Ravipa OSCILE PROS. Gamer, NC 27529 PREFARED DY: M.P. Cavenaugh REVIEWED DY: H.M. Sur- NT.	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C SEAL VIIIe ti DATE DocuSigned by:	RED FINAL OMPLETED
Prepared for the Offices of: Signal Communication Plans Division 7 Rockingham County Reids PREPARED BY: M.P. Cavenaugh REVIEWED BY: H.M. SUP SCHEFE 50 SCHEFE 50 SCHEFE 50	DOCUMENT NOT CONSIDER NLESS ALL SIGNATURES C VIIIE VIIIE TI DATE DocuSigned by: Humang M. Surfi AE120D062776444	RED FINAL OMPLETED















		DOCUMENT UNLESS ALL	NOT CONSIDERED FINAL SIGNATURES COMPLETED		
pared for the Offices of:	Reidsville Signa Splice Deta	l System ils	SEAL CARO SEAL		
Providencial and the second se	Division 7 Rockingham County PLAN DATE: Jan 2023 REVIEWED	Reidsville ^{BY:} A. Ravinati	034481		
enfield Pkwy., Garner, NC 27529	PREPARED BY: M.P. Cavenaugh REVIEWED	BY: H.M. Surti	ANG M. SURVIV		
O NA	REVISIONS	INIT. DATE	Docusigned by: Hemang M. Swrti 3/10/2023		
N.T.S.			AF12BB0537A5481 CADD Filename:		