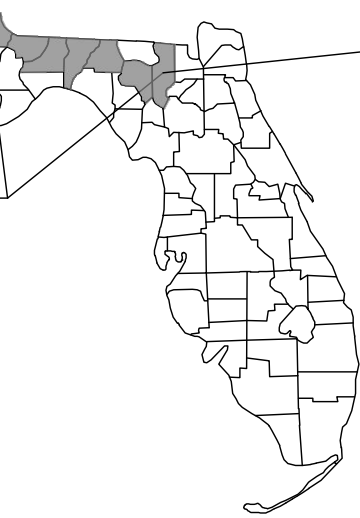
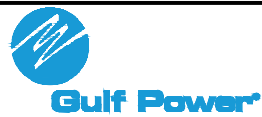


SSL #	Phase	MM	Structure Behind	Structure Ahead	River	County	Distance Shore to Shore (feet)	Wire Stringing Type
1	I	29.6	350	351	Rocky Creek	Suwannee	30	A
2	I / II	51.2	580	601	Suwannee River	Suwannee / Madison	300	B
3	IIA	84.5	913	914	Aucilla River	Jefferson / Madison	150	B
4	IIB	99.4	1132	1133	Cocksey Branch	Jefferson	30	A
5	IIB	111.4	1246	1247	Saint Marks River	Jefferson	30	A
6	IIB	127.1	1395	1395A	Munson Slough	Leon	60	A
7	III	139.7	1618	1619	Ochlocknee River	Gadsden / Leon	210	B
8	III	140.3	1623	1624	Midway Branch	Gadsden	30	A
9	III	142.1	1644	1645	Midway Branch	Gadsden	30	A
10	III	147.5	1695	1696	Little River	Gadsden	120	B
11	III	171.4	1921	1922	Crooked Creek	Gadsden	20	A
12	III	172.8	1938	1939	Apalachicola River	Jackson / Gadsden	700	B
13	III	174.8	1958	1959	Spring Branch	Jackson	30	A

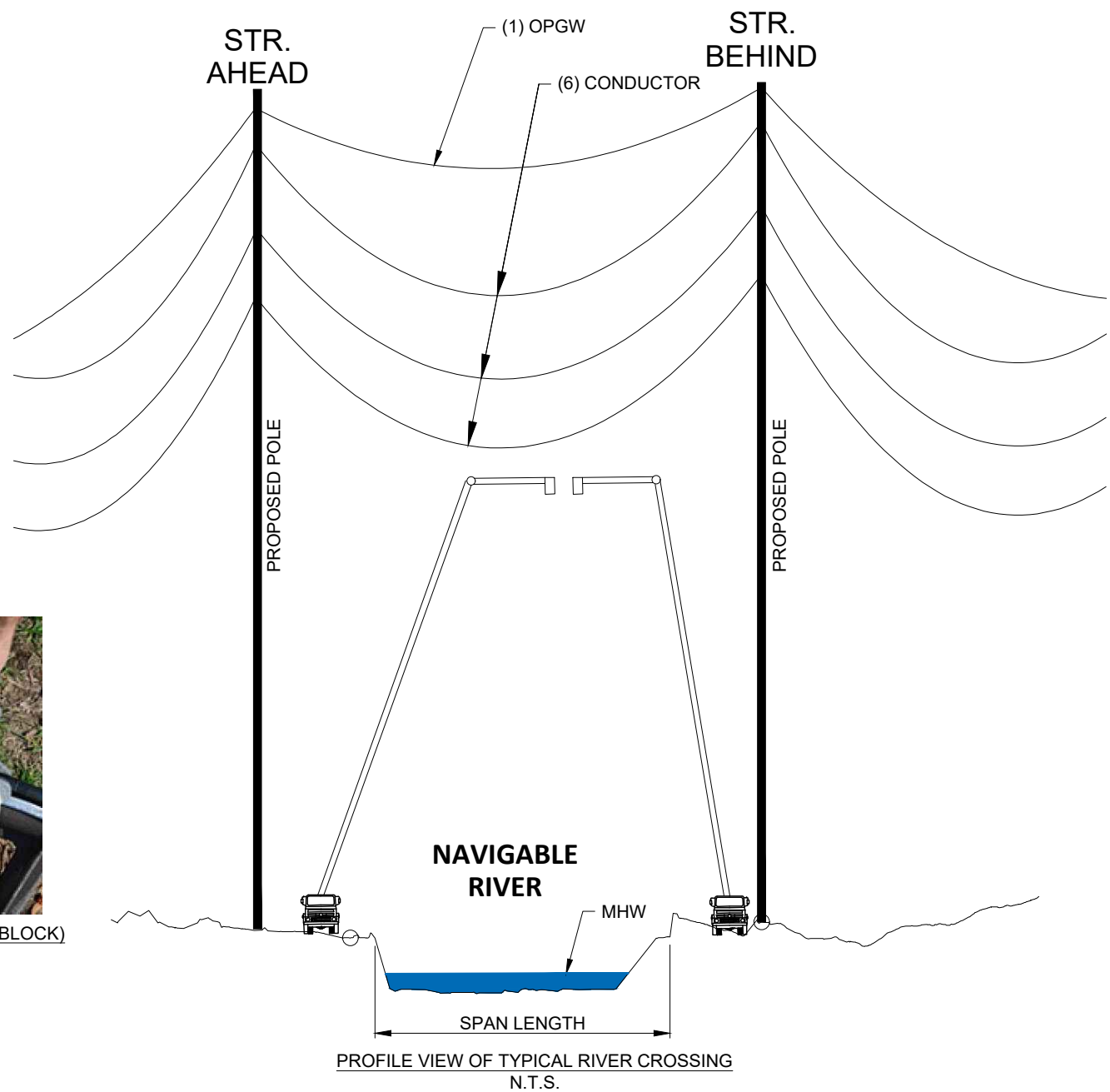
PROJECT LOCATION
 (COLUMBIA COUNTY)
 (SUWANNEE COUNTY)
 (MADISON COUNTY)
 (JEFFERSON COUNTY)
 (LEON COUNTY)
 (GADSDEN COUNTY)
 (JACKSON COUNTY)



0	11/18/19	INITIAL ISSUE	JJB	JJB	MKL
NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP

GULF POWER COMPANY		NORTH FLORIDA RESILIENCY CONNECTION	
SCALE: N.T.S.	ENGINEER: MKL	SECTION: AS SHOWN	
DRAFTER: JJB	CHECKED: JJB	COUNTY: AS SHOWN	
SHEET: 1 OF 2	FILE NAME: NFRS NAV CROSSINGS		
NFRS NAVIGABLE WATER CROSSING EXHIBIT			20210015-EI <small>PL 089561</small>

CAD FILE: D:\Civil 3D\Projects\19-108-1002-Raven-Sinai\161kV Line Detailed Engineering\Drawings\03-crossings.dwg
 PLOT DATE/TIME: 11/19/2019 - 8:09am
 BY: Josh Baker



DETAIL A - ROLLER (BLOCK)



DETAIL E - BUCKET TRUCK
W/ WIRE GUARD (LIFT TURCK)



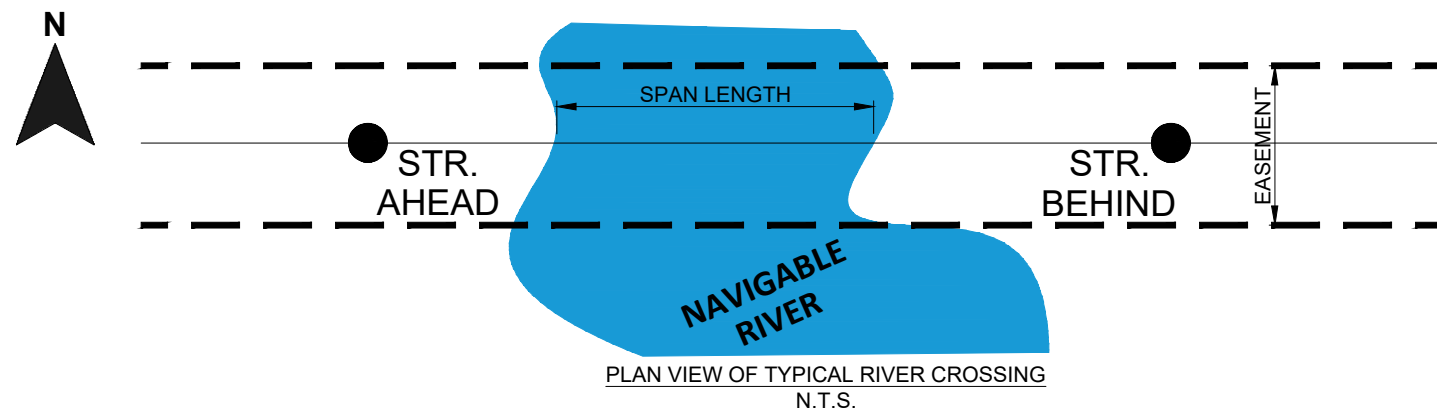
DETAIL F - HELICOPTER WIRE PULL



DETAIL B - P-LINE



DETAIL C - BULL ROPE



Wire Stringing Type A

Eight of the thirteen crossings fall into this category. Since the shore to shore distance is fairly short, 100 feet or less, the p-line can be passed from bucket truck to bucket truck with no impact on the water body to be crossed. Once the p-line is in place in the blocks, the rest of the wire pulling activity is completed in the air with no further impact to the navigability of the crossing.

Wire Stringing Type B

Five of the thirteen crossings fall into this category as further discussed below:

- Suwannee River - 300 foot span
- Aucilla River - 150 foot span
- Ochlocknee River - 210 foot span
- Little River - 120 foot span
- Apalachicola River - 700 foot span

There are three primary methods used to get the p-line across these distances:

- 1) Cross Bow
- 2) John Boat
- 3) Helicopter

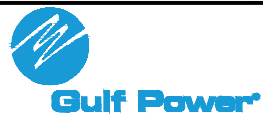
A bit on each...

- 1)The Cross Bow method involves attaching the p-line to an arrow in the cross bow and shooting it across the body of water. This method would work well for spans equal to or less than 300 feet. i.e. four out of five of the crossings.
- 2)Use of a John boat would be an option for the Apalachicola River. This would involve towing the p-line from shore to shore and then lifting it into the rollers.
- 3)A helicopter is often used to pull in the p-line for longer crossings. The helicopter flies along the line and sets the p-line into the roller by use of a mechanical guide. Once the p-line is in the rollers, the rest of the wire stringing will occur as listed in Wire Stringing Type A.



DETAIL D - WIRE PULLING EQUIPMENT

0	11/18/19	INITIAL ISSUE	JJB	JJB	MKL
NO	DATE	REVISIONS AND RECORD OF ISSUE	BY	CHK	APP

GULF POWER COMPANY			NORTH FLORIDA RESILIENCY CONNECTION		
SCALE: N.T.S.	ENGINEER: MKL	SECTION: AS SHOWN			
DRAFTER: JJB	CHECKED: JJB	COUNTY: AS SHOWN			
SHEET: 2 OF 2	FILE NAME: NFRC NAV CROSSINGS				
			NFRC NAVIGABLE WATER CROSSING EXHIBIT PPL 083562 20210015-EI		