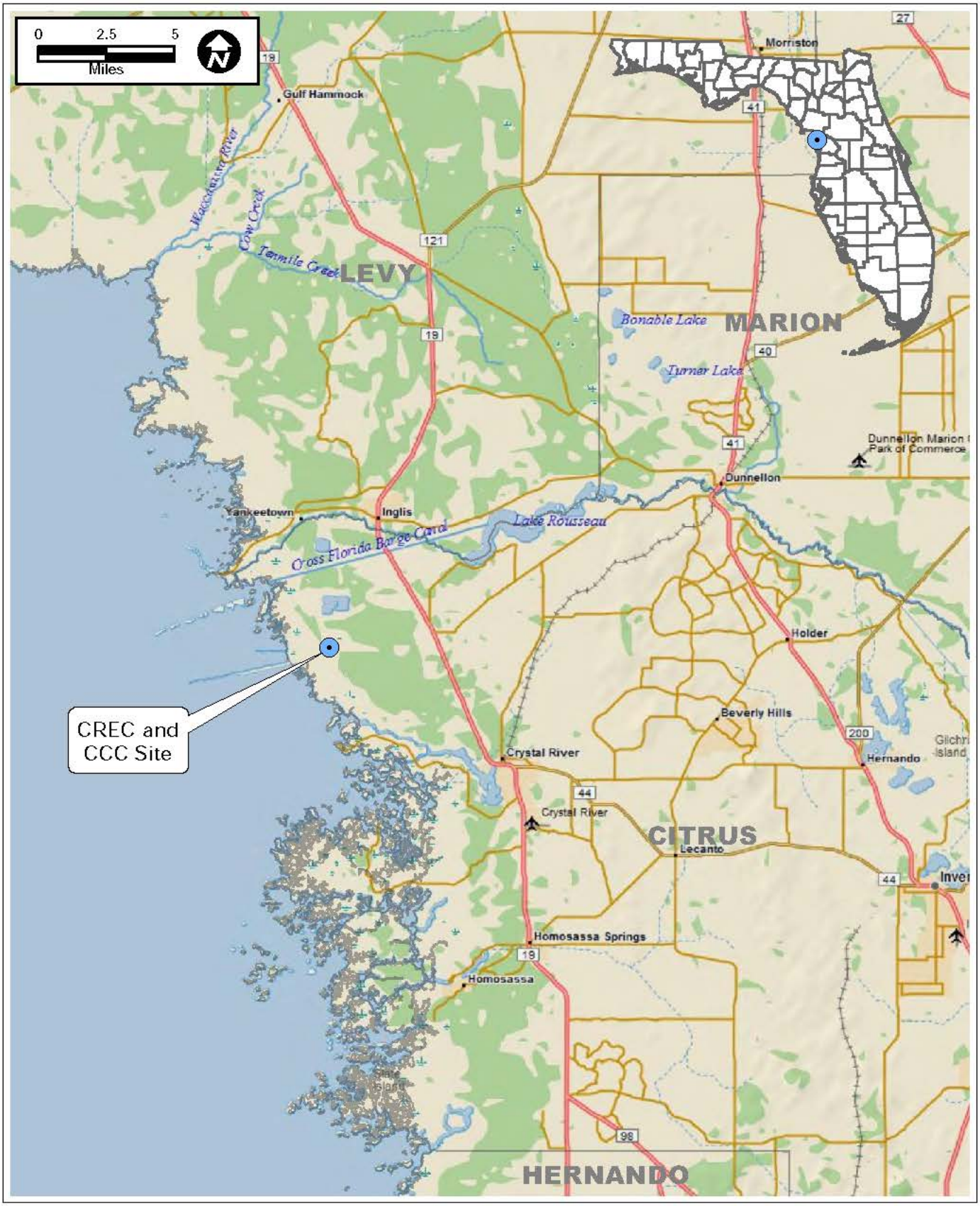

REGIONAL LOCATION OF CREC AND CCC SITE

Sources: DeLorme, 2014; ECT, 2014.

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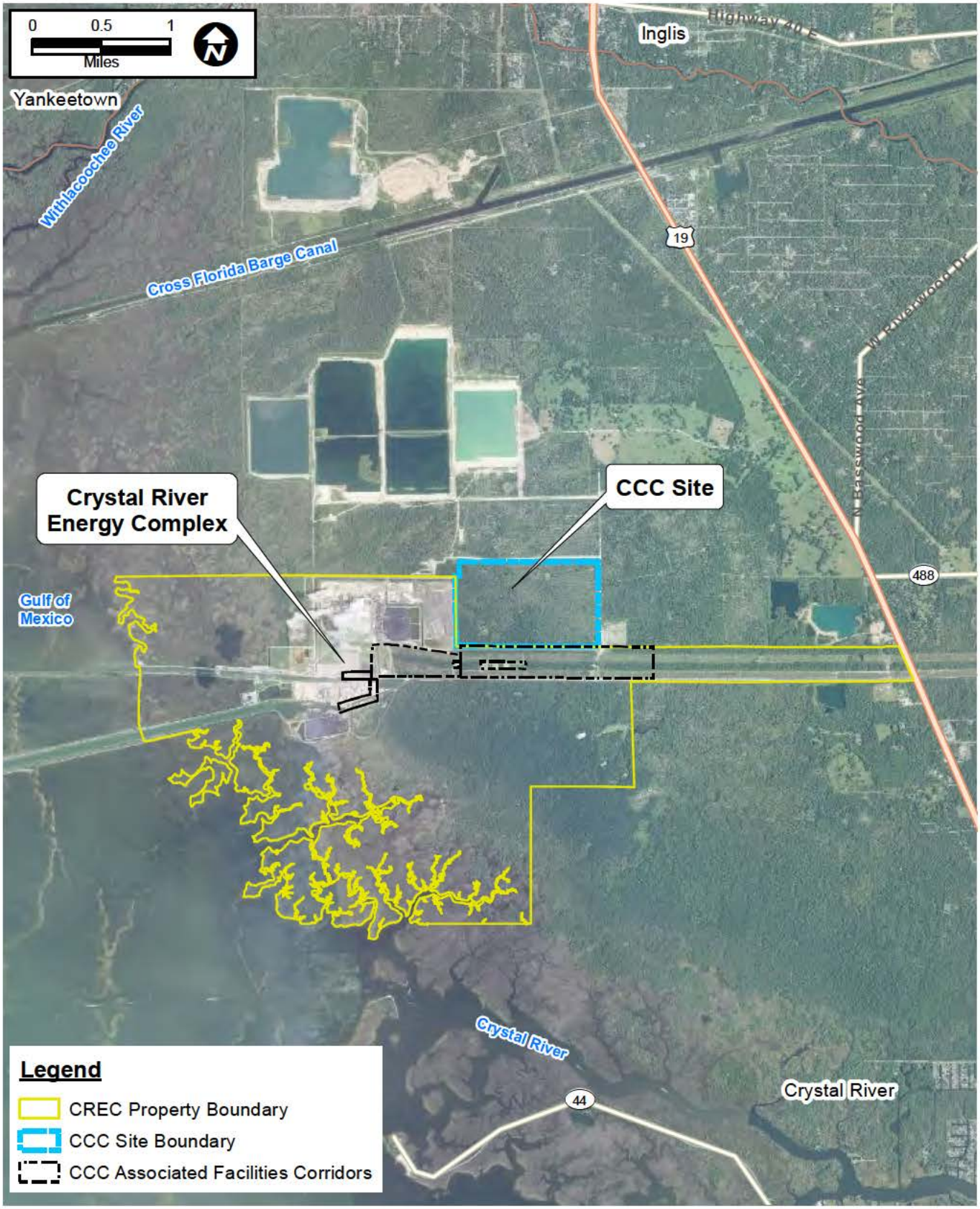

GENERAL VICINITY LOCATION OF CCC SITE

Sources: ESRI, 2013; NAIP, 2013; AMEC, 2013; ECT, 2014.

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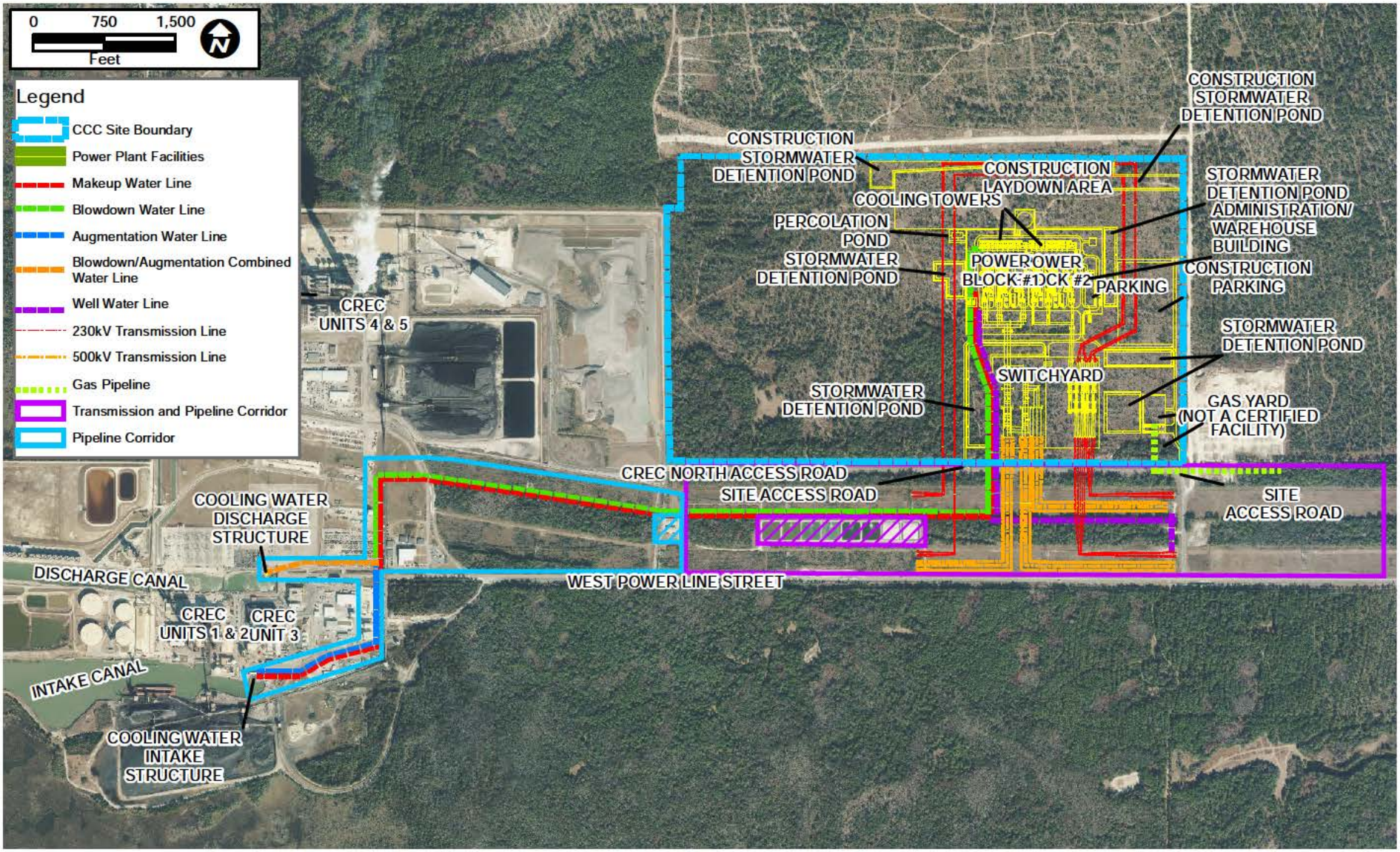

PROPOSED CCC POWER PLANT AND ON-SITE AND OFF-SITE ASSOCIATED FACILITIES

Sources: FDOT, 2011; AMEC, 2013; Burns & McDonell, 2014; ECT, 2014.

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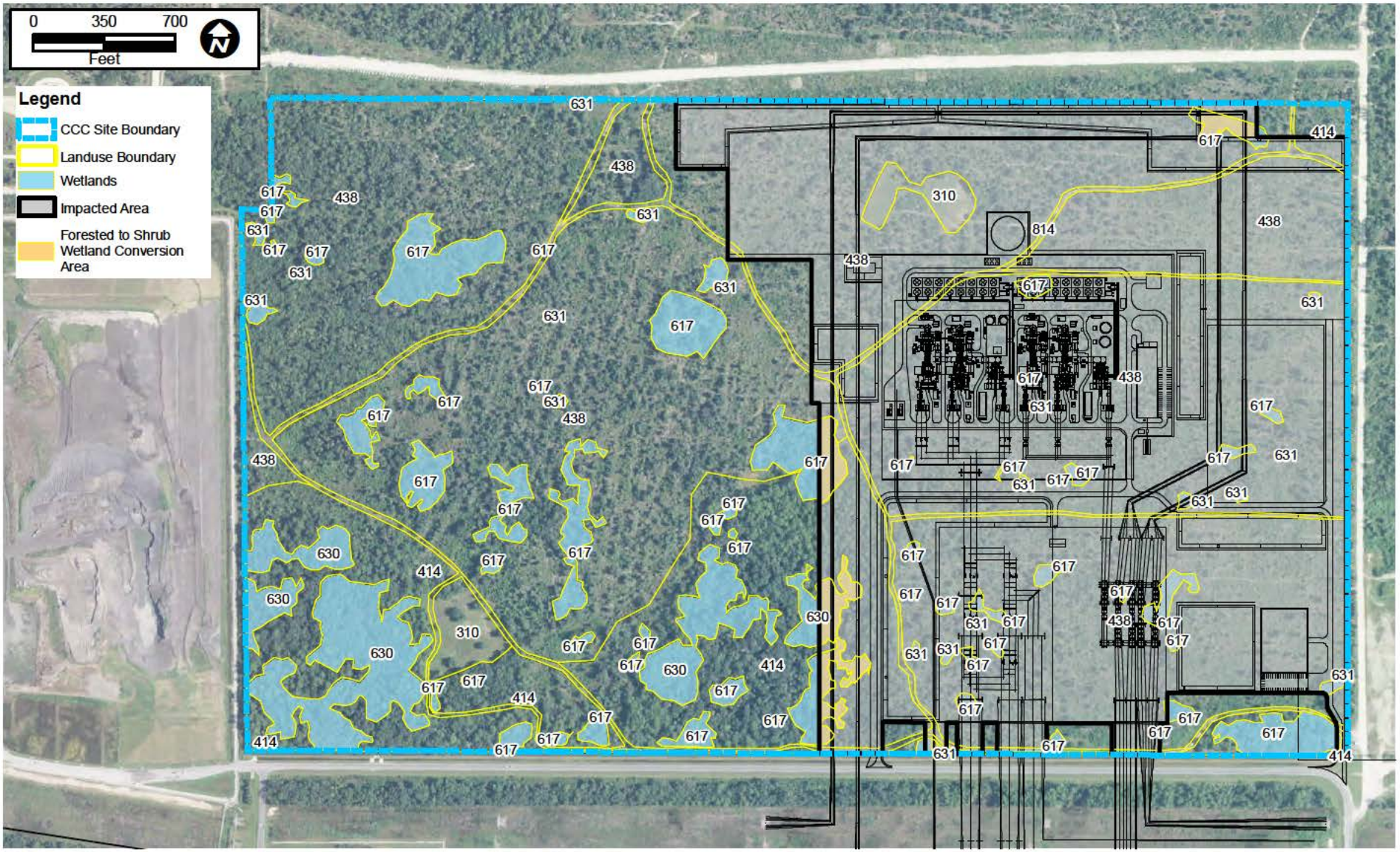

LAND USE CONSTRUCTION IMPACTS

FLUCFCS	Description	Acreage	%	Impacted	%	Remaining	%
310	Herbaceous (Dry Prairie)	4.91	1.2%	2.17	0.5%	2.74	0.7%
414	Pine-Mesic Oak	53.00	13.3%	10.28	2.6%	42.72	10.7%
438	Mixed Hardwoods	286.43	71.6%	168.06	42.0%	118.37	29.6%
814	Road	10.68	2.7%	4.61	1.2%	6.04	1.5%

FLUCFCS	Description	Acreage	%	Converted	%	Impacted	%	Remaining	%
617	Mixed Wetland Hardwoods	23.26	5.8%	-1.46	-0.4%	4.65	1.2%	18.61	4.7%
630	Wetland Forested Mixed	19.9	5.0%	-2.05	-0.5%	2.05	0.5%	17.85	4.5%
631	Wetland Shrub	1.77	0.4%	-0.04	0.0%	0.74 *	0.2%	1.03	0.3%
641	Wetland Herbaceous	0	0.0%	+3.55	+0.9%	0.00	0.0%	0.00	0.0%
TOTALS:		399.95	100%	3.55	0.9%	192.59	48.2%	207.36	51.8%

Sources: NAIP, 2013; AMEC, 2013; Burns & McDonell, 2014; ECT, 2014.

* 0.09 Acres are temporary impact.

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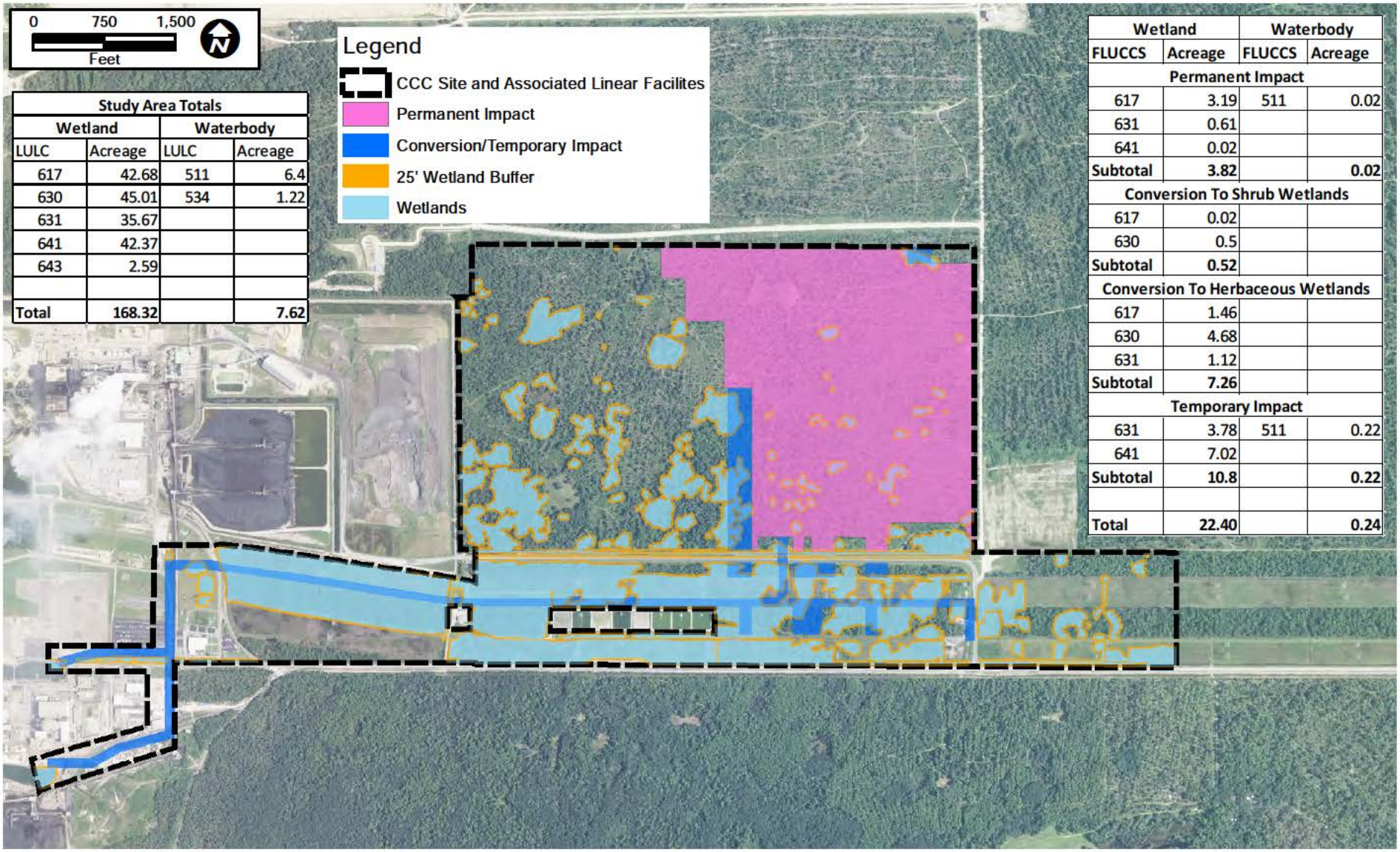

Study Area Totals			
Wetland		Waterbody	
LULC	Acreage	LULC	Acreage
617	42.68	511	6.4
630	45.01	534	1.22
631	35.67		
641	42.37		
643	2.59		
Total	**168.32**		**7.62**

Wetland		Waterbody	
FLUCCS	Acreage	FLUCCS	Acreage
Permanent Impact			
617	3.19	511	0.02
631	0.61		
641	0.02		
Subtotal	**3.82**		**0.02**
Conversion To Shrub Wetlands			
617	0.02		
630	0.5		
Subtotal	**0.52**		
Conversion To Herbaceous Wetlands			
617	1.46		
630	4.68		
631	1.12		
Subtotal	**7.26**		
Temporary Impact			
631	3.78	511	0.22
641	7.02		
Subtotal	**10.8**		**0.22**
Total	**22.40**		**0.24**

POTENTIAL IMPACTS

Sources: AMEC, 2013; Burns & McDonell, 2014; ECT, 2014.

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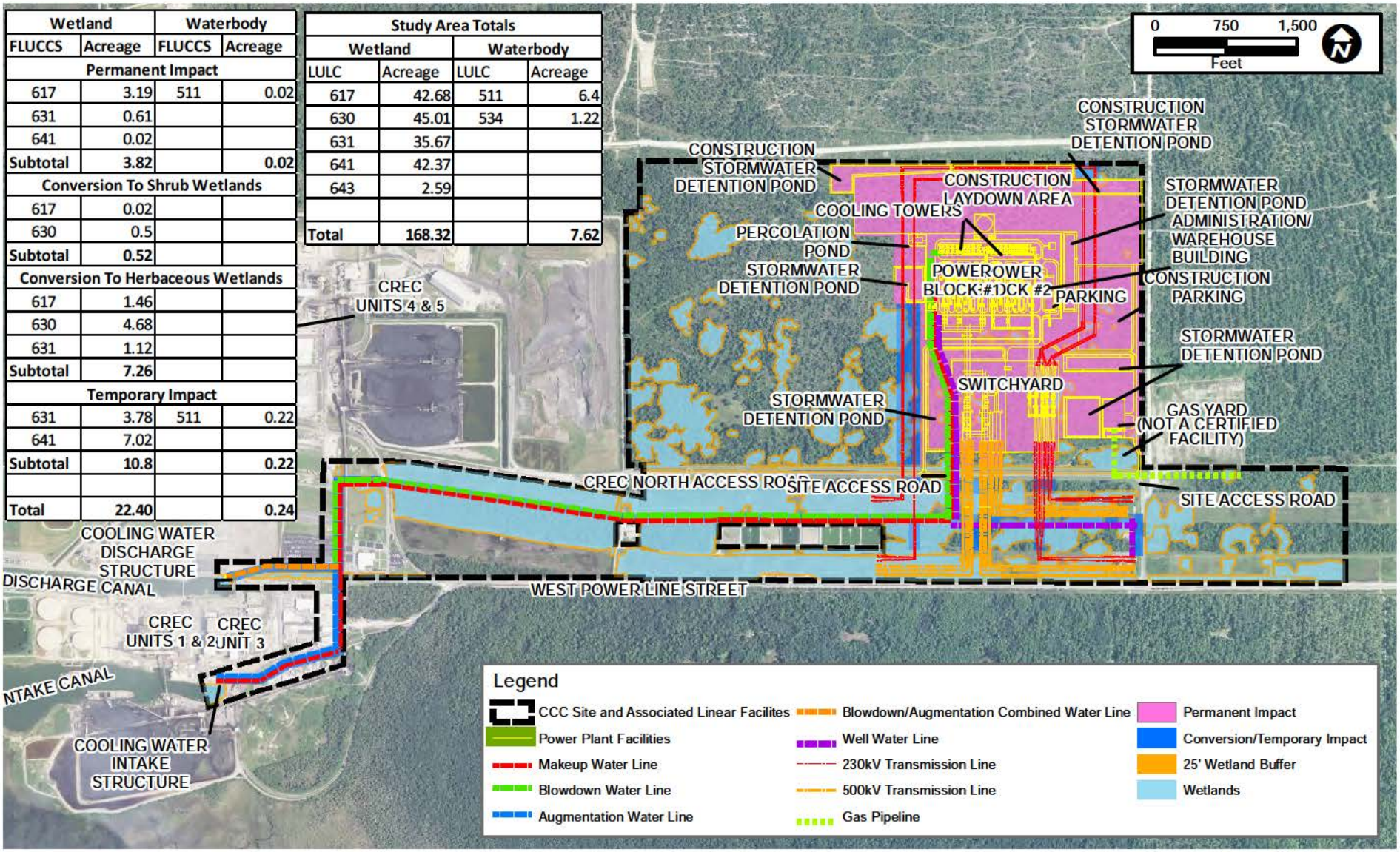
Wetland		Waterbody	
FLUCCS	Acreage	FLUCCS	Acreage
Permanent Impact			
617	3.19	511	0.02
631	0.61		
641	0.02		
Subtotal	**3.82**		**0.02**
Conversion To Shrub Wetlands			
617	0.02		
630	0.5		
Subtotal	**0.52**		
Conversion To Herbaceous Wetlands			
617	1.46		
630	4.68		
631	1.12		
Subtotal	**7.26**		
Temporary Impact			
631	3.78	511	0.22
641	7.02		
Subtotal	**10.8**		**0.22**
Total	**22.40**		**0.24**

Study Area Totals			
Wetland		Waterbody	
LULC	Acreage	LULC	Acreage
617	42.68	511	6.4
630	45.01	534	1.22
631	35.67		
641	42.37		
643	2.59		
Total	**168.32**		**7.62**



SITE LAYOUT AND ASSOCIATED IMPACTS

Sources: AMEC, 2013; Burns & McDonell, 2014; ECT, 2014.

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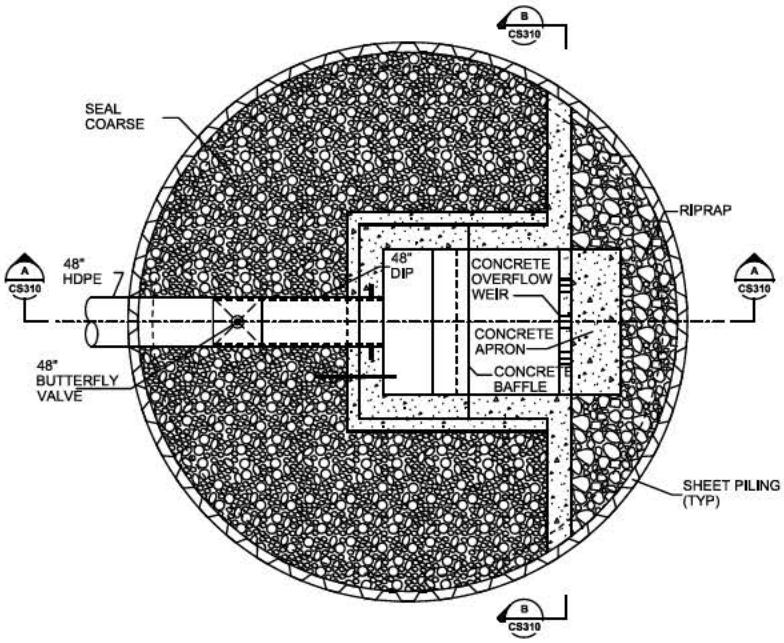
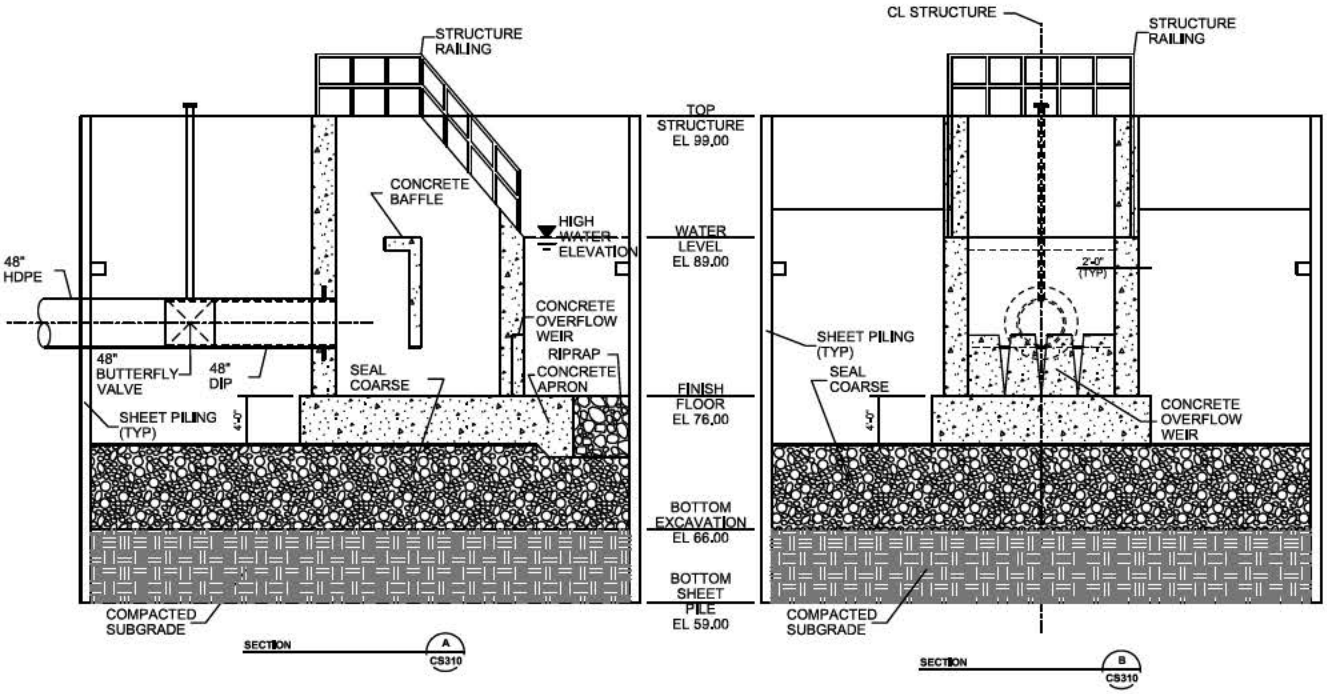


PLAN

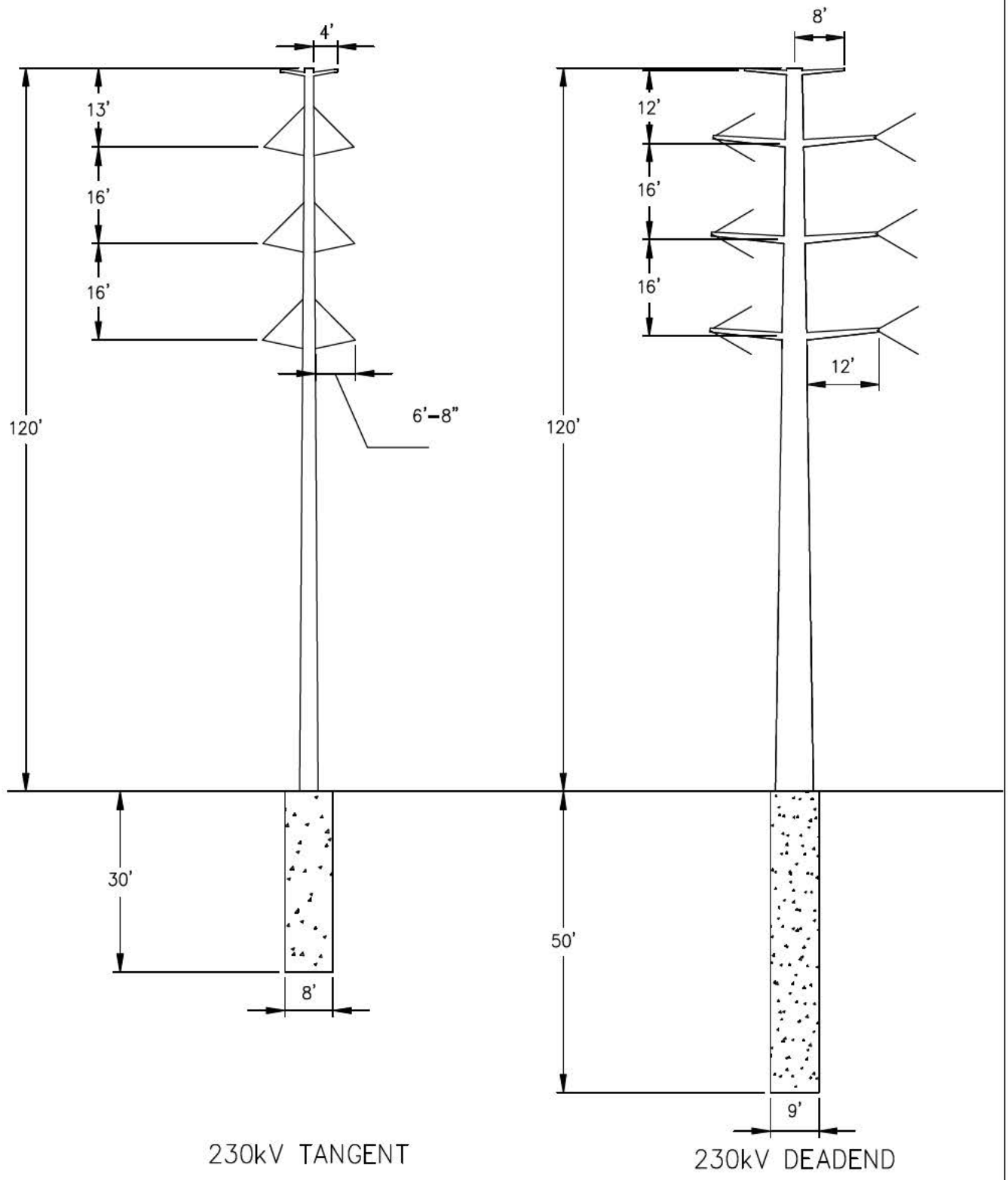


TYPICAL DISCHARGE STRUCTURE DETAIL
NOT TO SCALE

CONCEPTUAL PLAN AND CROSS-SECTION VIEWS OF NEW DISCHARGE STRUCTURE

Source: Burns & McDonnell, 2014; ECT, 2014.

DUKE ENERGY. FLORIDA



TYPICAL 230-kV DOUBT CIRCUIT TANGENT AND DEAD-END STRUCTURES

Sources: Burns & McDonnell, 2014; ECT, 2014.

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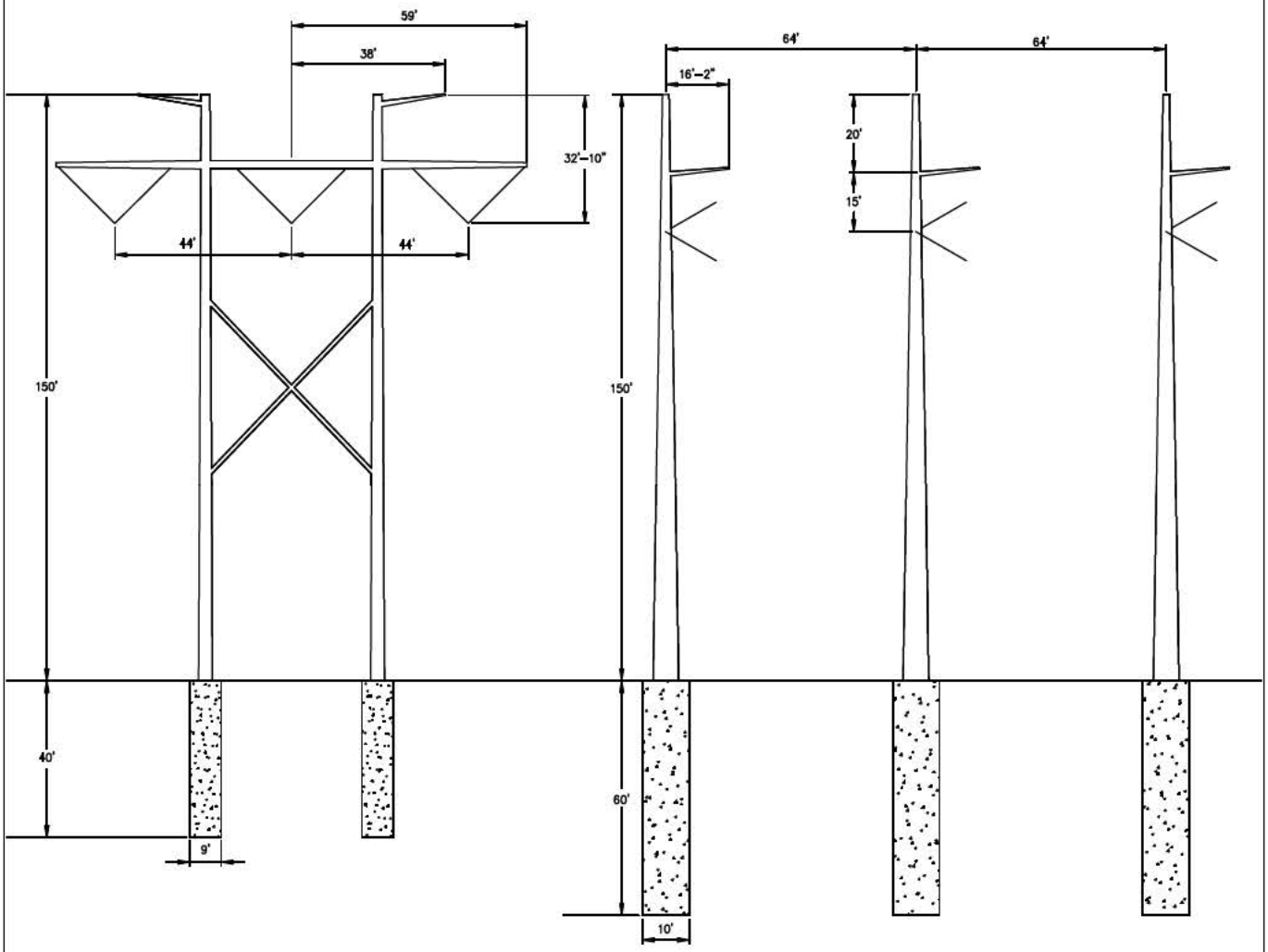

500kV TANGENT

500kV DEADEND

TYPICAL 500-kV DOUBT CIRCUIT TANGENT AND DEAD-END STRUCTURES

Sources: Burns & McDonnell, 2014; ECT, 2014.

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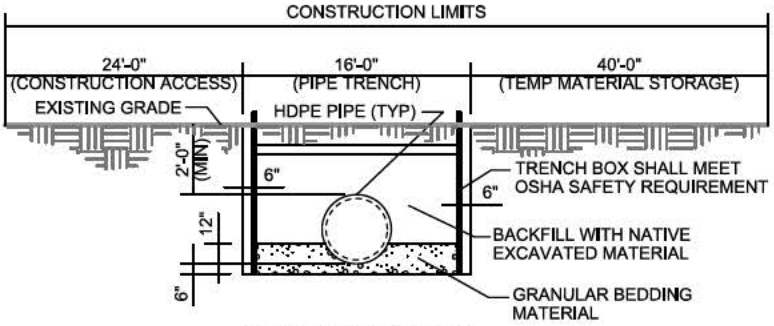
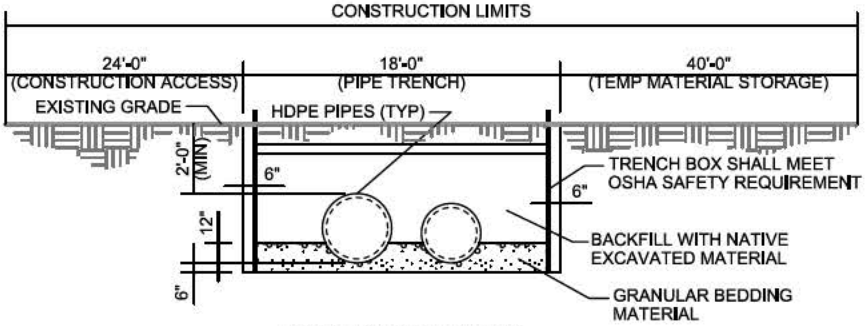
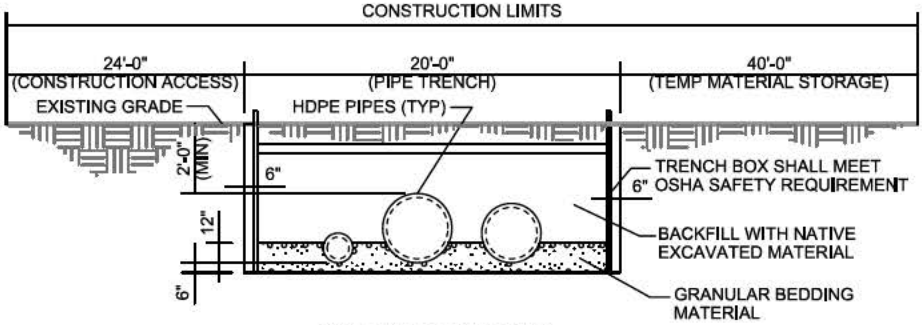


SINGLE PIPE AT WETLAND
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE



DOUBLE PIPE AT WETLAND
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE

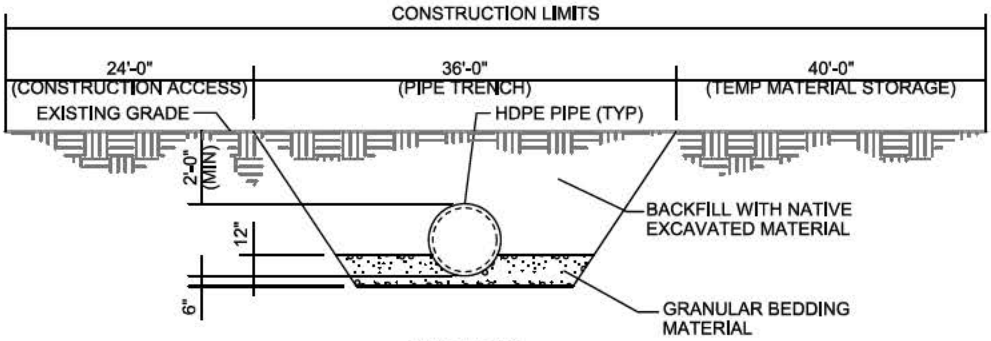


TRIPLE PIPE AT WETLAND
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE

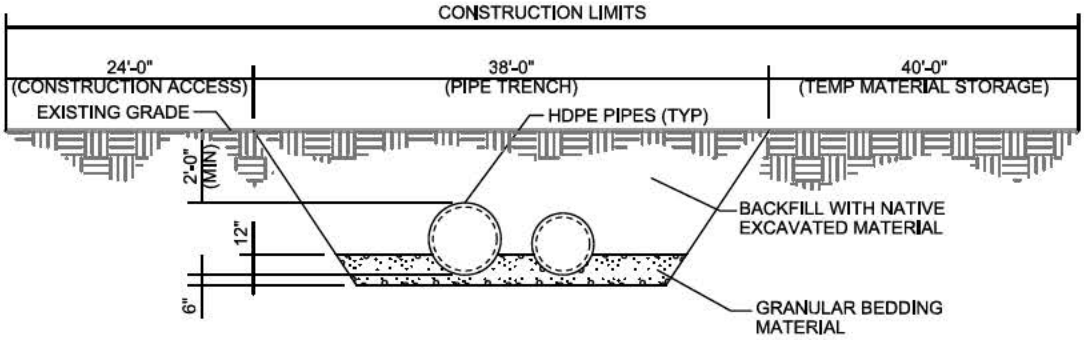
TYPICAL WETLAND CROSS-SECTIONS OF WATER PIPELINE SCENARIOS

Source: Burns & McDonnell, 2014; ECT, 2014.

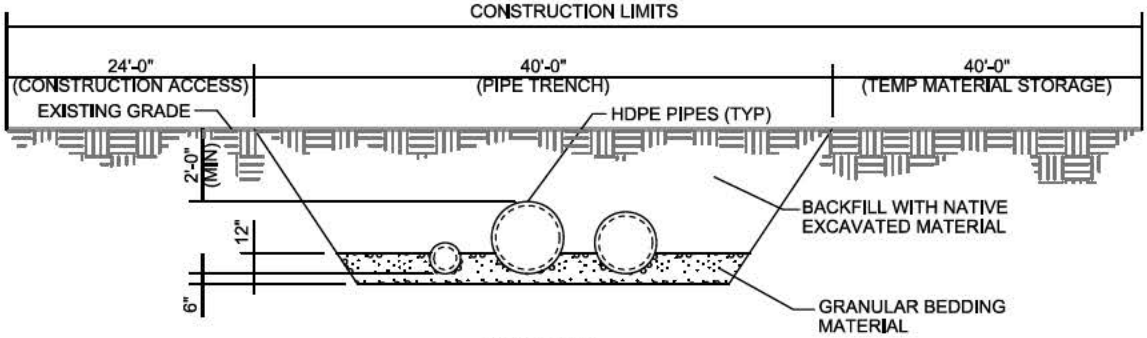
DUKE ENERGY. FLORIDA



SINGLE PIPE
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE



DOUBLE PIPE
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE



TRIPLE PIPE
TYPICAL CONSTRUCTION PIPE TRENCH
NOT TO SCALE

TYPICAL UPLAND CROSS-SECTIONS OF WATER PIPELINE SCENARIOS

Source: Burns & McDonnell, 2014; ECT, 2014.

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