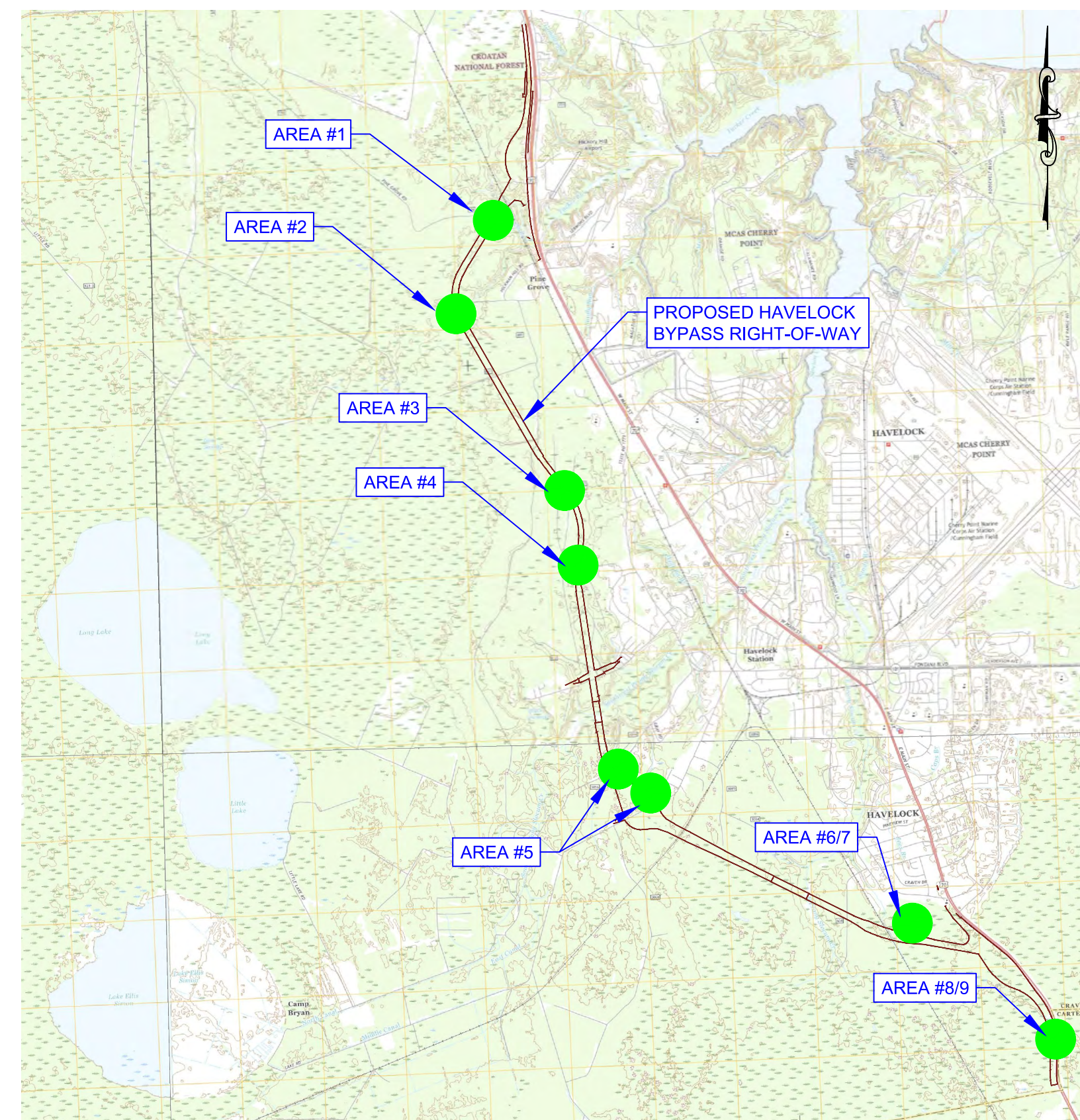


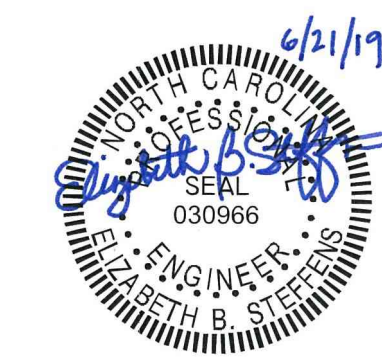
NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9) CRAVEN & CARTERET COUNTIES, NORTH CAROLINA

EROSION AND SEDIMENT CONTROL AND ACCESS PLAN



- SHEET LIST:
- COVER SHEET
 - OVERALL PROJECT LAYOUT & GENERAL NOTES
 - EROSION CONTROL MEASURE QUANTITIES
 - EROSION & SEDIMENT CONTROL PLAN - AREA #1
 - EROSION & SEDIMENT CONTROL PLAN - AREA #2
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 - DETAILS
 - SITE ACCESS ROUTES
 - SITE ACCESS ROUTES

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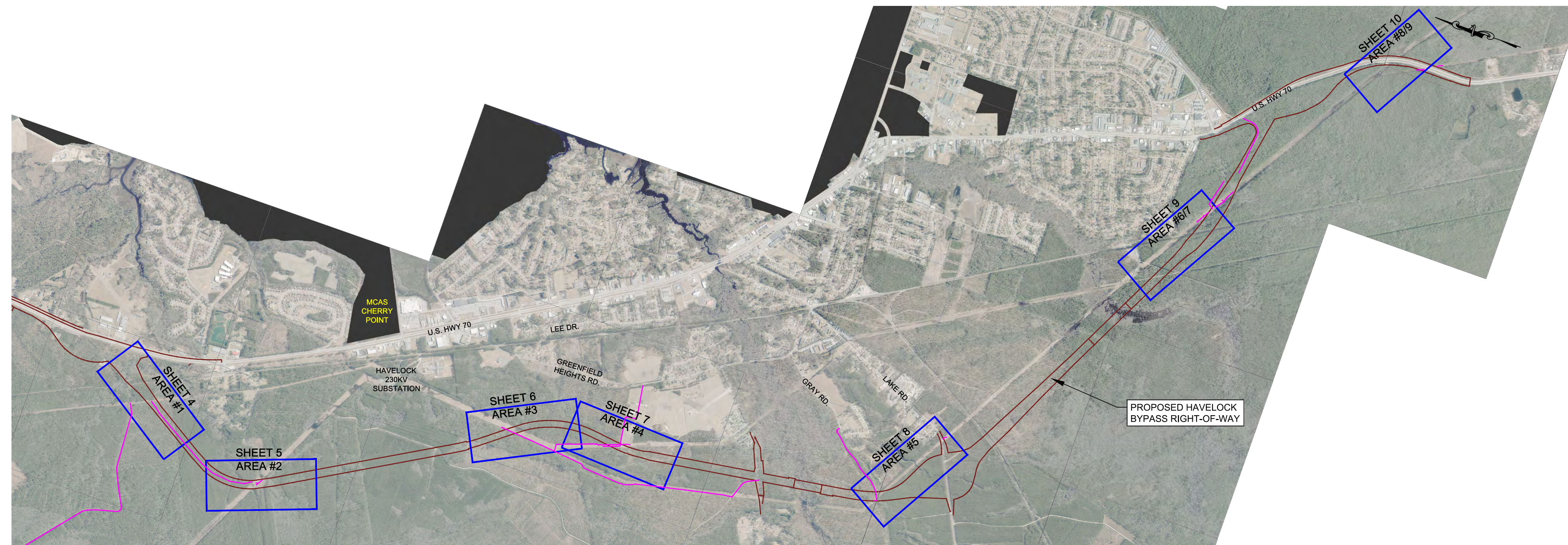


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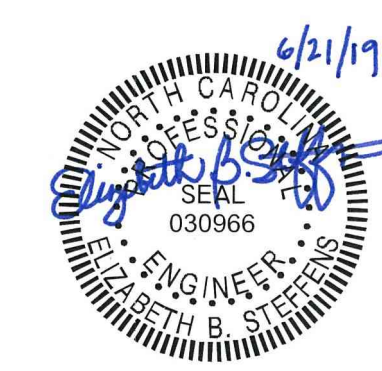
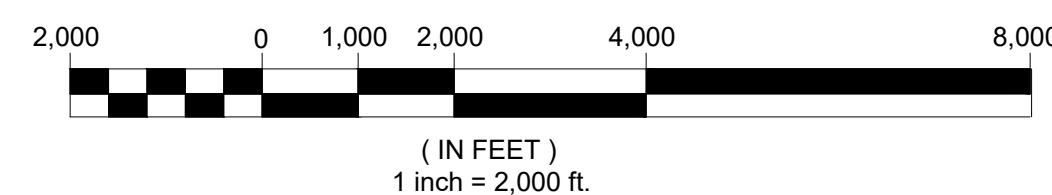
TITLE: NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)
COVER SHEET
D DRAWING CT-71796 SHEET 1 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)



GENERAL NOTES:

1. APPROXIMATE STRUCTURE LOCATIONS WERE PROVIDED TO DEWBERRY ENGINEERS INC. BY DUKE ENERGY PROGRESS, LLC (DEP) AND ARE FOR REFERENCE ONLY. THESE DRAWINGS SHALL NOT BE USED FOR LINE CONSTRUCTION.
2. BASE DRAWINGS WERE CREATED BY GIS DATA OBTAINED FROM VARIOUS SOURCES. AERIAL PHOTOGRAPHY WAS OBTAINED FROM STATE AGENCIES. THE 100 YEAR FLOODPLAIN GIS DATA WAS OBTAINED FRIS (FLOOD RISK INFORMATION SYSTEM).
3. THE LOCATION OF JURISDICTIONAL FEATURES ARE FROM NCDOT'S NATURAL RESOURCES TECHNICAL REPORT FOR THE US 70 HAVELOCK BYPASS DRAFT ENVIRONMENTAL IMPACT STATEMENT, CRAVEN AND CARTERET COUNTIES, NC DATED MAY 2007.
4. NOT ALL EXISTING UTILITIES ARE SHOWN. LOCATIONS SHOWN ARE APPROXIMATE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCURATELY LOCATE, BOTH VERTICAL AND HORIZONTAL, EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY NC 811 PRIOR TO EXCAVATION. CONTRACTOR SHALL NOTIFY DEP IMMEDIATELY IN THE EVENT OF ENCOUNTERING ANY UNDERGROUND OBSTACLE REQUIRING DEVIATION FROM THE PLAN. COST TO REPAIR DAMAGED UTILITIES SHALL BE BORNE BY THE CONTRACTOR.
5. ALL UTILITIES SHALL BE PROTECTED AND REMAIN ACTIVE UNLESS OTHERWISE NOTED. CONTRACTOR SHALL NOT DISTURB UTILITY POLES, GUYS WIRES, OR ANCHORS WITHOUT PERMISSION FROM DEP.
6. PROJECT IS LOCATED IN THE NEUSE RIVER BASIN. THE PROJECT IS SUBJECT TO STATE-REGULATED BUFFER REQUIREMENTS. DEP INTERNAL BUFFERS INCLUDE A 20-FOOT BUFFER ON ALL WETLANDS AND A 30-BUFFER ON ALL STREAMS/SURFACE WATERS NOT SUBJECT TO STATE-REGULATED BUFFERS AS SHOWN ON THE PLAN.
7. SENSITIVE AREAS WILL BE MARKED PRIOR TO CLEARING, ACCESS, OR CONSTRUCTION AS PART OF AVOIDANCE AND MINIMIZATION EFFORTS. SPE SHALL BE NOTIFIED TWO (2) WEEKS PRIOR TO START OF CLEARING OR CONSTRUCTION FOR SENSITIVE AREA MARKING.
8. SEE SHEET 11 FOR EROSION AND SEDIMENTATION CONTROL SEQUENCE AND SEEDING SCHEDULE.
9. SEE SHEET 11 FOR TEMPORARY BRIDGING AND TEMPORARY CROSSING REQUIREMENTS. AS BEST AS POSSIBLE, ALL BRIDGES SHALL BE INSTALLED PERPENDICULAR TO THE CHANNEL.
10. THE ACCESS PLAN DEPICTS BRIDGES ASSOCIATED WITH ACCESS OVER STREAMS, DITCHES AND DRAINAGE CHANNELS. ACCESS TO EACH STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. STREAMS/WETLANDS EXTEND BEYOND THE RIGHT-OF-WAY. APPROPRIATE BRIDGING AND MATTING OF THESE FEATURES IS REQUIRED SHOULD THE CONTRACTOR USE ANY ACCESS ROUTES LOCATED OUTSIDE OF THE RIGHT-OF-WAY.
12. ANY ALTERNATE ACCESS PLANNED BY THE CONTRACTOR SHALL BE APPROVED BY DEP SITING, PERMITTING AND ENGAGEMENT (SPE) PRIOR TO USE.
13. CONSTRUCTION ENTRANCES ARE SHOWN FOR REFERENCE ONLY. HEAVY MATS MAY BE USED IN LIEU OF ROCK CONSTRUCTION ENTRANCES IF DEEMED SUFFICIENT BY DEP REPRESENTATIVE.
14. ACCESS LOCATIONS WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON THE FEASIBILITY AND WEATHER CONDITIONS. WHEN MATS ARE REQUIRED, 2 ROWS OF MATS MAY BE INSTALLED IN PARALLEL TO COVER THE 28' ACCESS ROAD WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY. ACCESS OUTSIDE OF THE TRANSMISSION LINE ROW IS LIMITED TO 14' UNLESS OTHERWISE PERMITTED AND APPROVED BY DEP SPE AND NCDEQ.
15. WETLAND MATTING SHALL BE COMPOSITE AND/OR HEAVY DUTY TIMBER/"CRANE" MATS. NO LATTICE OR TWO-PLY MATTING SHALL BE USED IN JURISDICTIONAL WETLANDS AND/OR STREAMS.
16. NO FILL IN WETLANDS MAY OCCUR. ALL EXCESS SOILS FROM STRUCTURE INSTALLATIONS IN WETLAND AREAS SHALL BE DISPOSED OF IN PERMITTED UPLAND AREAS AND STABILIZED. NO SLURRY MAY BE DISPOSED OF WITHIN THE RIGHT-OF-WAY. SLURRY MUST BE DISPOSED OF IN A PERMITTED LANDFILL.
17. NO OIL/FUEL-FILLED EQUIPMENT SHALL BE STORED OVERNIGHT WITHIN 125 FEET OF WETLANDS OR SURFACE WATER WITHOUT CONTAINMENT.
18. SITE SHOULD BE "STORM READY" AT THE END OF EACH WORK DAY/WEEK.



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DUKE ENERGY
PROGRESS

TITLE: NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)
OVERALL PROJECT LAYOUT AND GENERAL NOTES
SIZE: D DRAWING: CT-71796 SHEET: 2 OF 13

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NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

MATTING SCHEDULE		
MAT ID	Area # /Sheet#	MAT LENGTH (LF)
MAT W70	Area 1 / SHT 4	810
MAT W67	Area 2 / SHT 5	640
MAT W50	Area 3 / SHT 6	1010
MAT W13	Area 5 / SHT 8	130
MAT W10	Area 5 / SHT 8	220
MAT W3	Area 6/7 / SHT 9	710
MAT W2	Area 6/7 / SHT 9	1680
MAT W2	Area 8/9 / SHT 10	1740
MAT W90	Area 8/9 / SHT 10	1760
TOTAL		8,700

BRIDGE SCHEDULE		
BRIDGE ID	Area # /Sheet#	BRIDGE LENGTH* (LF)
DITCH-1	Area 3 / SHT 6	10
DITCH-2	Area 3 / SHT 6	10
DITCH-3	Area 3 / SHT 6	10
DITCH-4	Area 3 / SHT 6	10
DITCH-5	Area 3 / SHT 6	10
DITCH-6	Area 4 / SHT 7	10
DITCH-7	Area 5 / SHT 8	10
STREAM-1	Area 5 / SHT 8	10
DITCH-8	Area 8/9 / SHT 10	10
DITCH-9	Area 8/9 / SHT 10	10
TOTAL BRIDGING		100

* Bridge length is approximate. Construction to verify actual bridge length.

CONSTRUCTION ENTRANCES(CE)/ ROADSIDE DITCH CROSSINGS (Estimate: 6 mats per CE/Crossing)	
Area # /Sheet #	EA
Area 1 / SHT 4	1
Area 4 / SHT 7	1
Area 5 / SHT 8	2
Area 8/9 / SHT 10	4
SHT 11	1
TOTAL CE/CROSSINGS	9
TOTAL MATS	54
GRAVEL (CY)	144

WETLAND WORK PAD Estimate: 3234 SF of Matting (33 Mats) Per Structure		
STRUCTURE	Area # / Sheet #	SF
STR 201-1	Area 1 / SHT 4	3234
STR 202 (remove)	Area 1 / SHT 4	3234
STR 202 (new)	Area 1 / SHT 4	3234
STR 280 (new)	Area 2 / SHT 5	3234
STR 280 (remove)	Area 2 / SHT 5	3234
STR 281 (new)	Area 2 / SHT 5	3234
STR 281 (remove)	Area 2 / SHT 5	3234
STR 356 (remove)	Area 3 / SHT 6	3234
STR 356 (new)	Area 3 / SHT 6	3234
STR 8 (remove)	Area 3 / SHT 6	3234
STR 8 (new)	Area 3 / SHT 6	3234
STR 10 (remove)	Area 3 / SHT 6	3234
STR 10 (new)	Area 3 / SHT 6	3234
STR 357 (remove)	Area 3 / SHT 6	3234
STR 357 (new)	Area 3 / SHT 6	3234
STR 7 (remove)	Area 3 / SHT 6	3234
STR 7 (new)	Area 3 / SHT 6	3234
STR 9 (remove)	Area 3 / SHT 6	3234
STR 9 (new)	Area 3 / SHT 6	3234
STR 352 (new)	Area 4 / SHT 7	3234
STR 27-1 (new)	Area 5 / SHT 8	3234
STR 31 (remove)	Area 5 / SHT 8	3234
STR 31 (new)	Area 5 / SHT 8	3234
STR 43 (new)	Area 6/7 / SHT 9	3234
STR 50-1 (new)	Area 6/7 / SHT 9	3234
STR 45 (remove)	Area 6/7 / SHT 9	3234
STR 45 (new)	Area 6/7 / SHT 9	3234
STR 49 (new)	Area 6/7 / SHT 9	3234
STR 49 (remove)	Area 6/7 / SHT 9	3234
STR 50 (new)	Area 6/7 / SHT 9	3234
STR 51 (remove)	Area 6/7 / SHT 9	3234
STR 51 (new)	Area 6/7 / SHT 9	3234
STR 46 (remove)	Area 6/7 / SHT 9	3234
STR 46 (new)	Area 6/7 / SHT 9	3234
STR 52 (replace)	Area 6/7 / SHT 9	3234
STR 54 (new)	Area 8/9 / SHT 10	3234
STR 54 (remove)	Area 8/9 / SHT 10	3234
STR 55 (replace)	Area 8/9 / SHT 10	3234
TOTAL		122,892

WATTLES		
STRUCTURE/ FEATURE	Area # / Sheet #	LF
STR 182 (new)	Area 2 / SHT 5	100
STR 182 (remove)	Area 2 / SHT 5	100
W67	Area 2 / SHT 5	440
STR 352 (remove)	Area 4 / SHT 7	100
STR 12 (new)	Area 4 / SHT 7	100
STR 12 (remove)	Area 4 / SHT 7	100
STR 28 (remove)	Area 5 / SHT 8	100
STR 28 (new)	Area 5 / SHT 8	100
STR 32 (new)	Area 5 / SHT 8	100
STR 32 (remove)	Area 5 / SHT 8	100
W10	Area 5 / SHT 8	190
STR 43 (remove)	Area 6/7 / SHT 9	100
STR 50 (remove)	Area 6/7 / SHT 9	100
W3	Area 6/7 / SHT 9	950
W2	Area 6/7 / SHT 9	550
APPROACH WATTLES	SHT 4 - SHT 10	315
TOTAL		3,545

CLEARING SCHEDULE FOR DEP RIGHT-OF-WAY AND DANGER TREES (OUTSIDE OF NCDOT RIGHT-OF-WAY)				
Area # / Sheet #	DEP Right-of-way Clearing (AC)		Danger Tree Clearing* (AC)	
	Machine Clear	Low Impact / Sensitive Clear	Machine Clear	Low Impact / Sensitive Clear
Area 6/7 / SHT 9	3.3	2.5	1.6	2.1
TOTAL CLEARING (AC.)	9.5			

*Only clear trees that meet danger tree specifications as defined by DEP.

ACCESS AND STRUCTURE WORK LIMITS OF DISTURBANCE CALCULATION (OUTSIDE OF NCDOT RIGHT-OF-WAY)					
Area # / Sheet #	Access Length Outside of NCDOT and DEP ROW ^a (LF)	Access Area Outside NCDOT ROW and Inside Ex. DEP ROW (AC)	Total Access (no clearing/grading) LOD (AC)	Structures Removed/Installed (EA)	Structure Work ^b LOD (AC)
Area 1 / SHT 4	0	0.8	0.8	3	0.002
Area 2 / SHT 5 & Inset A, SHT 11	0	1.4	1.4	8	0.005
Area 3 / SHT 6 & Inset B, SHT 11	5,780	5.3	7.2	12	0.007
Area 4 / SHT 7	2,100	2.5	3.2	8	0.005
Area 5 / SHT 8 & Inset C, SHT 12	2,240	2.0	2.7	7	0.004
Area 6/7 / SHT 9	0	10.2	10.2	17	0.010
Area 8/9 / SHT 10	0	0.7	0.7	2	0.001
Subtotal	10,120	22.1	26.2	57	0.034
TOTAL LOD (no clearing/grading)			26.2	TOTAL LOD (structure work)	0.034

^a Access Road Width = 14' wide outside of right-of-way
^b 4-FT diameter vibratory caisson foundation per/pole (no discharge in wetlands); 2 poles for H-frame (26 SF of disturbance per Structure; 13 SF of disturbance per Pole)

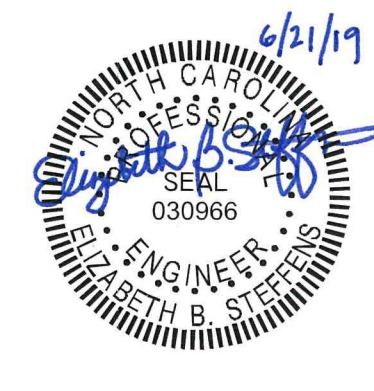
QUANTITY ESTIMATE NOTES

- QUANTITIES LISTED ARE ESTIMATES ONLY AND SHALL BE CONFIRMED BY THE CONTRACTOR AND APPROVED BY DEP PRIOR TO CONSTRUCTION. THE WETLAND LOCATIONS AND OTHER JURISDICTIONAL FEATURES WERE DELINEATED BY ESI, INC. THE LOCATIONS WERE LOCATED BY GPS AND WERE NOT SURVEYED. LOCATIONS SHOWN ARE APPROXIMATE AND NEED TO BE CONFIRMED IN THE FIELD.
- CALCULATIONS ASSUME THAT MATS ARE 7' X 14' COMPOSITE MATS; 7' X 14' = 98 SQ. FT.
- LINEAR FEET CALCULATION ASSUMES MATS ARE LAID WITH 14' AS THE WIDTH AND 7' AS THE LENGTH.
- 'MATTING FOR ACCESS' QUANTITY ESTIMATE INCLUDES MATTING FOR ACCESS ROADS. WHEN MATS ARE REQUIRED, TWO (2) ROWS OF MATS SHALL BE INSTALLED IN PARALLEL TO COVER THE ACCESS ROAD WIDTH OF 28 FEET.
- 'WETLAND WORK PAD' QUANTITY ESTIMATE INCLUDES MATTING FOR WORK ON STRUCTURES LOCATED IN WETLANDS. ESTIMATE OF 33 MATS (3234 SQUARE FEET OF MATTING) PER STRUCTURE.
- ROADSIDE DITCH CROSSINGS AND WORK PADS ARE NOT SHOWN TO SCALE. REFER TO TABLE FOR APPROXIMATE SIZE AND LOCATION.
- WETLAND MATTING SHOULD BE COMPOSITE AND/OR HEAVY DUTY TIMBER/"CRANE" MATS. NO LATTICE OR TWO-PLY MATTING SHALL BE USED IN JURISDICTIONAL WETLANDS AND/OR STREAMS.
- MATTING AND BRIDGE LENGTHS ARE LIMITED TO LINEAR FEET FOR ACCESSING THROUGH AND/OR OVER STREAMS, WETLANDS, AND DITCHES. WETLAND WORK PADS ARE LIMITED TO 3234 SQUARE FEET OF MATTING.
- ESTIMATES DO NOT INCLUDE QUANTITIES FOR WORK PADS GREATER THAN 3234 SQUARE FEET PER STRUCTURE, ADDITIONAL NON-WETLAND ACCESS, AND/OR ADDITIONAL MATTING NEEDED TO CROSS WETLANDS WITH MORE THAN 6 INCHES OF STANDING WATER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ESTIMATE AREAS OF ADDITIONAL MATTING NEEDS AND OBTAIN PRIOR APPROVAL FROM DEP SITING, PERMITTING AND ENGAGEMENT (SPE).
- MATTING ESTIMATES DO NOT ACCOUNT FOR STACKING OF MATS.
- WATTLES ARE SHOWN FOR GRAPHICAL DEPICTION OF LOCATIONS. ESTIMATES OF MINIMUM NUMBER OF LINEAR FEET ANTICIPATED CAN BE FOUND IN THE TABLES ON THIS SHEET.
- THE EROSION CONTROL MEASURES DEPICTED ON THE PLANS ARE TO BE INSTALLED AS NEEDED TO KEEP ALL SEDIMENT ON SITE AND OUT OF STREAMS AND WETLANDS. ADDITIONAL EROSION CONTROL MEASURES (THOSE NOT DEPICTED ON THE PLANS) MAY BE REQUIRED IN ORDER TO KEEP ALL SEDIMENT ON SITE AND OUT OF STREAMS AND WETLANDS.
- THE INSTALLATION OF APPROPRIATE EROSION CONTROL MEASURES ARE AT THE DISCRETION OF THE ON-SITE DEP INSPECTOR.
- THE ACCESS ROADS ARE A MAXIMUM OF 28-FT WIDE. THE 28-FT WIDTH WAS USED IN THE LIMITS OF DISTURBANCE CALCULATION. THE CONTRACTOR IS LIMITED TO AN ACCESS ROAD WIDTH OF 28 FEET.
- THERE HAS BEEN NO ALLOWANCE FOR GRADING OF ACCESS ROADS, CRANE PADS, ETC. GRADING OF ANY KIND WILL NEED PRIOR APPROVAL FROM SITING, PERMITTING AND ENGAGEMENT. ADDITIONAL AREAS OF DISTURBANCE WILL NEED TO BE SUBMITTED TO NCDOT FOR REVIEW.
- ACCESS LOCATIONS WITHIN THE TRANSMISSION RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON FEASIBILITY AND WEATHER CONDITIONS.
- ALL LAND DISTURBANCE WITHIN THE NCDOT RIGHT-OF-WAY HAS BEEN OMITTED FROM THIS PLAN BECAUSE IT HAS BEEN PERMITTED BY NCDOT.
- THE LIMITS OF DISTURBANCES OUTSIDE OF NCDOT RIGHT-OF-WAY INCLUDE:
 - 26.2 ACRES FOR ACCESS (NO CLEARING OR GRADING)
 - 9.5 ACRES FOR CLEARING (NO GRADING)
 - 0.034 ACRES FOR STRUCTURE WORK

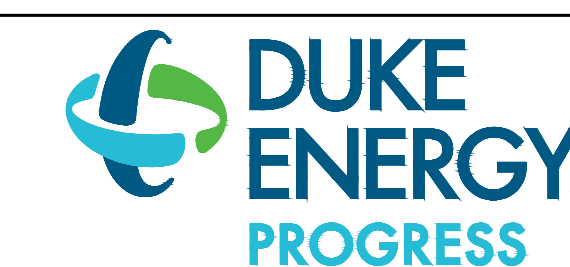
TOTAL LIMITS OF DISTURBANCE = 35.8 ACRES

ESTIMATED QUANTITIES				
	LINEAR FEET	SQUARE FEET	NO. OF MATS	CUBIC YARDS
MATTING FOR ACCESS	8,700	243,600	2,486	-
BRIDGING	100	-	-	-
CONSTRUCTION ENTRANCES (MAT)	-	-	54	-
CONSTRUCTION ENTRANCES (GRAVEL)	-	-	-	144
WETLAND WORK PAD MATTING	-	122,892	1,254	-
WATTLES	3,545	-	-	-

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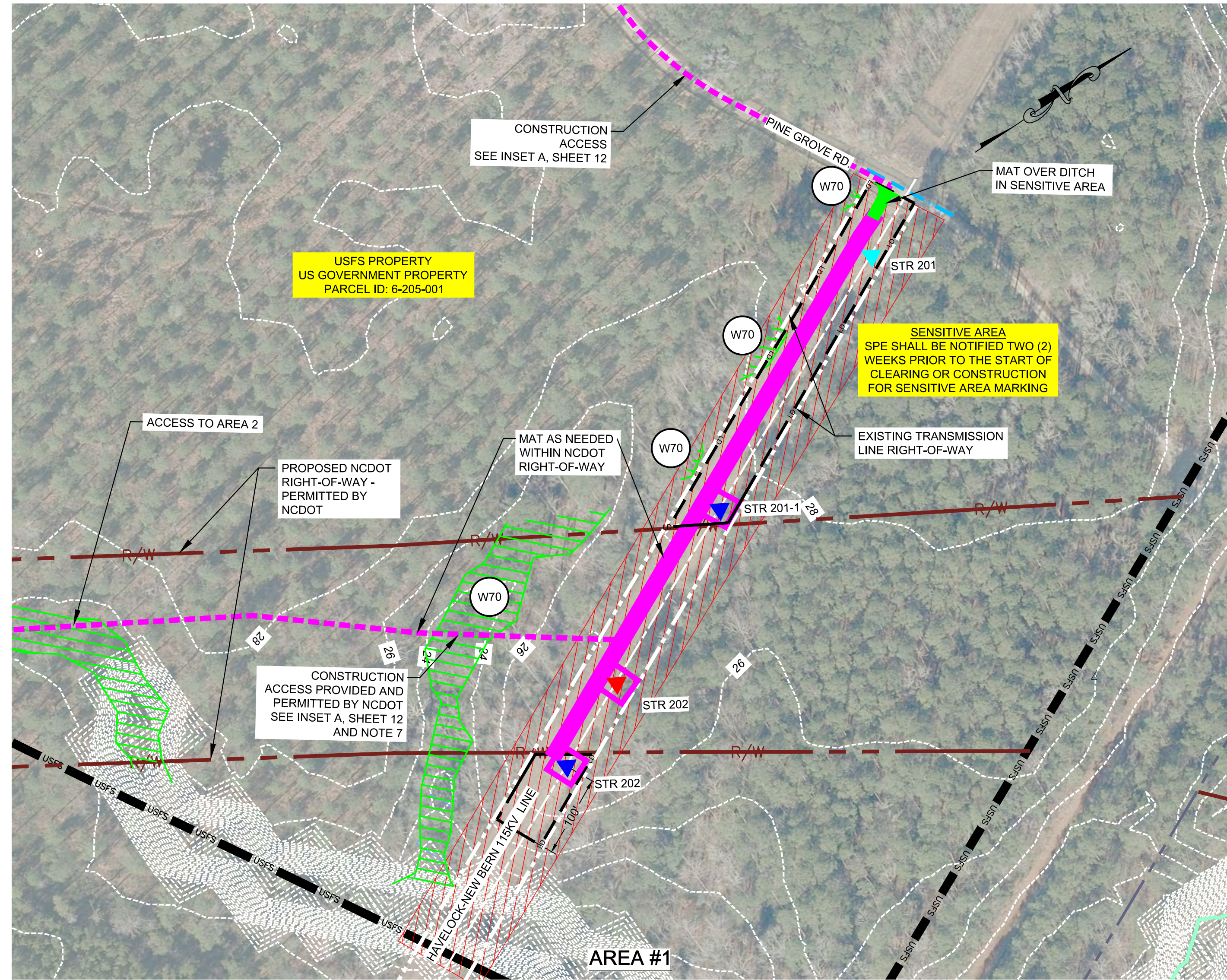


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TITLE: NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)
EROSION CONTROL MEASURE QUANTITIES
SIZE: D DRAWING: CT-71796 SHEET: 3 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

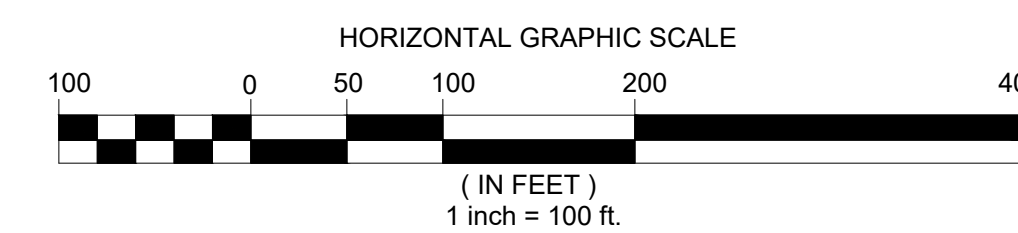
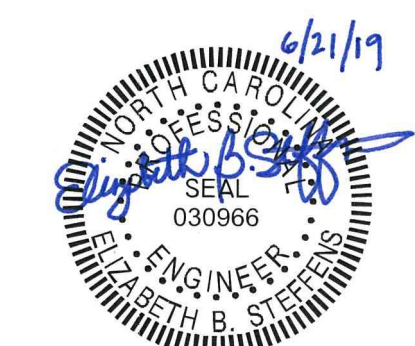


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE	
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA					
DANGER TREE ZONE AREA					

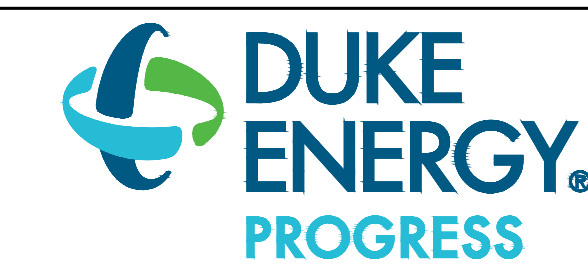
NOTES:

- ALL SITE ACCESS AND CONSTRUCTION PADS THROUGH WETLANDS OR OVER STREAMS SHALL BE VIA COMMERCIALY-MADE COMPOSITE OR HEAVY DUTY TIMBER/"CRANE" MATS OR DEP APPROVED LOW GROUND PRESSURE TRACK VEHICLES. LATTICE AND TWO-PLAY MATTING SHALL NOT BE USED IN JURISDICTIONAL WETLANDS, STREAMS OR BUFFERS. THERE SHALL BE NO GRADING WITHIN WETLAND AREAS. SEE DETAIL SHEET FOR MATTING AND CROSSING DETAILS.
- WETLAND WORK PADS AND WATTLES AT MATTING/BRIDGE APPROACHES AND EXITS ARE NOT SHOWN TO SCALE. REFER TO TABLE ON SHEET 3 AND THE DETAILS SHEET.
- WATTLES ARE SHOWN FOR GRAPHICAL DEPICTION OF LOCATIONS. WATTLES ARE TO BE PLACED ON THE DOWNSLOPE SIDE OF THE LAND DISTURBANCES TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING WETLANDS/STREAMS. ESTIMATES ARE MINIMUM NUMBER OF LINEAR FEET ANTICIPATED. SEE DETAIL SHEET. ADDITIONAL WATTLES SHALL BE UTILIZED AS NECESSARY TO KEEP SEDIMENT OUT OF WETLANDS/STREAMS AND WITHIN ROW LIMITS.
- ACCESS LOCATIONS WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON THE FEASIBILITY AND WEATHER CONDITIONS. WHEN MATS ARE REQUIRED, 2 ROWS OF MATS MAY BE INSTALLED IN PARALLEL TO COVER THE 28' ACCESS ROAD WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY. ACCESS OUTSIDE OF THE TRANSMISSION LINE ROW IS LIMITED TO 14' UNLESS OTHERWISE PERMITTED AND APPROVED BY DEP SITING, PERMITTING AND ENGAGEMENT (SPE) AND NCDEQ.
- SEED SLOPES 3:1 OR FLATTER. SLOPES STEEPER THAN 3:1 SHALL BE MATTED.
- LOW IMPACT/SENSITIVE CLEARING - LOW IMPACT SENSITIVE CLEARING SHALL COMPLY WITH THE SAME REQUIREMENTS AS "HAND CLEARING" IN THE DEP TRANSMISSION ROW CLEARING SPECIFICATIONS. LOW IMPACT/SENSITIVE CLEARING INVOLVES MACHINE CLEARING FROM MATS WITHIN 4" OF THE GROUND SURFACE. THERE WILL BE NO GRUBBING, GRADING, STUMPING, AND NO DISTURBANCE TO ROOT MAT.
- NCDOT IS RESPONSIBLE FOR ACCESS THROUGH NCDOT RIGHT-OF-WAY. NCDOT WILL CLEAR, BUILD, AND PERMIT ROAD FOR ACCESS.
- EXCESS SOIL MUST BE PLACED ON MATS AND REMOVED FROM WETLANDS AND SENSITIVE AREAS.



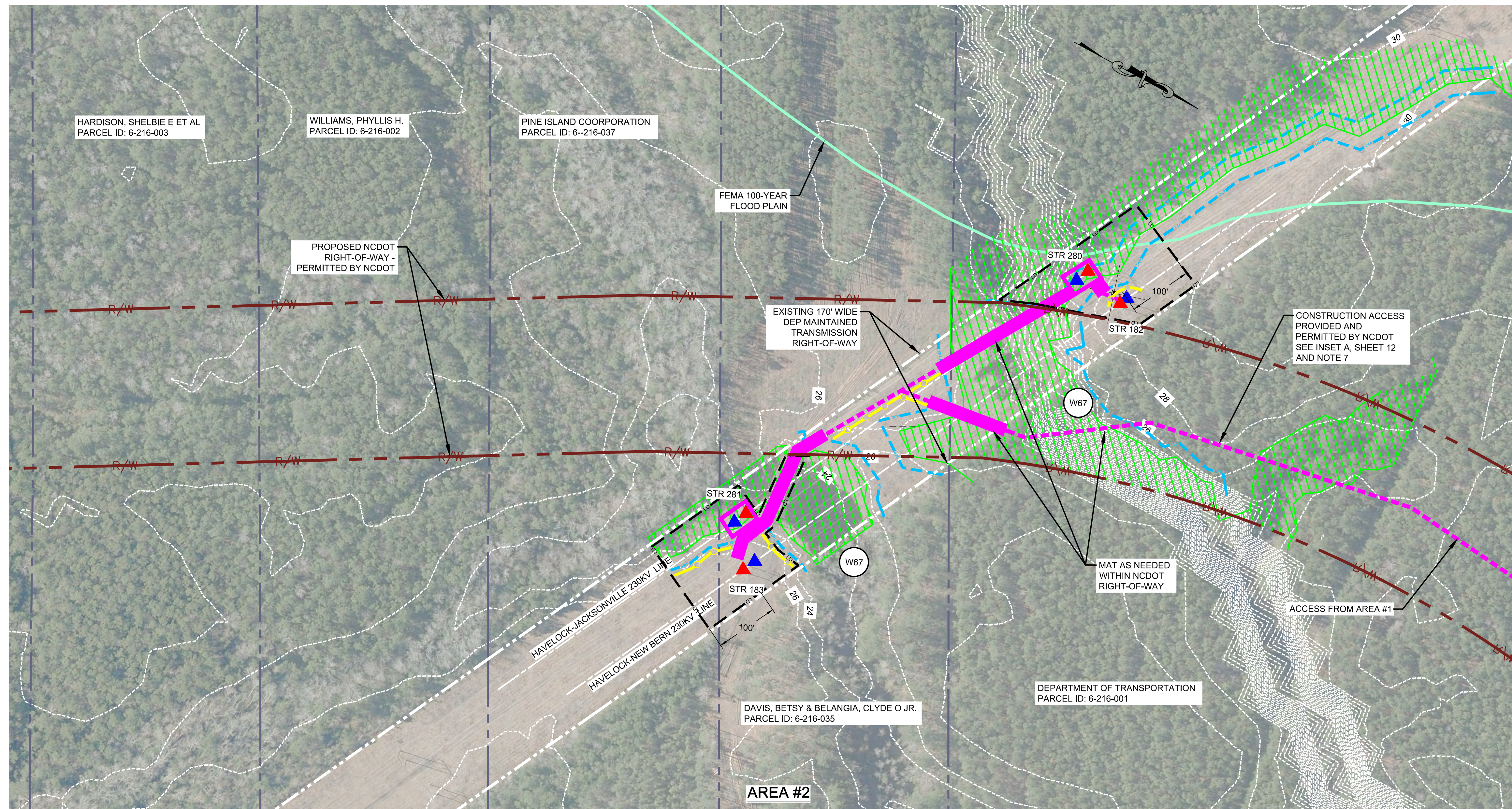
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TITLE NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)		
EROSION & SEDIMENT CONTROL PLAN AREA #1		
SIZE D	DRAWING CT-71796	SHEET 4 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

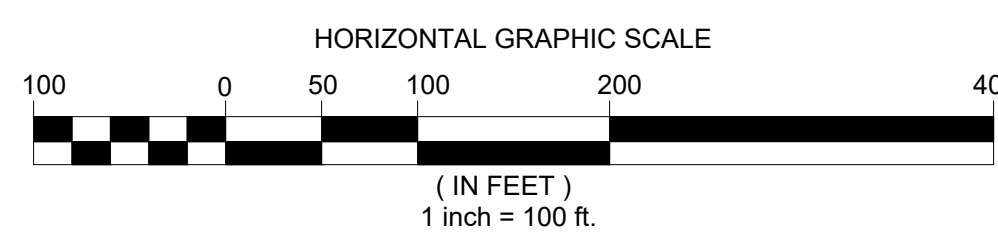


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND	WX	NEW STRUCTURE	STR X
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	USFS
STREAM/CHANNEL	SX	LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	10'
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA					
DANGER TREE ZONE AREA					

NOTES:

- ALL SITE ACCESS AND CONSTRUCTION PADS THROUGH WETLANDS OR OVER STREAMS SHALL BE VIA COMMERCIALY-MADE COMPOSITE OR HEAVY DUTY TIMBER/"CRANE" MATS OR DEP APPROVED LOW GROUND PRESSURE TRACK VEHICLES. LATTICE AND TWO-PLAY MATTING SHALL NOT BE USED IN JURISDICTIONAL WETLANDS, STREAMS OR BUFFERS. THERE SHALL BE NO GRADING WITHIN WETLAND AREAS. SEE DETAIL SHEET FOR MATTING AND CROSSING DETAILS.
- WETLAND WORK PADS AND WATTLES AT MATTING/BRIDGE APPROACHES AND EXITS ARE NOT SHOWN TO SCALE. REFER TO TABLE ON SHEET 3 AND THE DETAILS SHEET.
- WATTLES ARE SHOWN FOR GRAPHICAL DEPICTION OF LOCATIONS. WATTLES ARE TO BE PLACED ON THE DOWNSLOPE SIDE OF THE LAND DISTURBANCES TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING WETLANDS/STREAMS. ESTIMATES ARE MINIMUM NUMBER OF LINEAR FEET ANTICIPATED. SEE DETAIL SHEET. ADDITIONAL WATTLES SHALL BE UTILIZED AS NECESSARY TO KEEP SEDIMENT OUT OF WETLANDS/STREAMS AND WITHIN ROW LIMITS.
- ACCESS LOCATIONS WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON THE FEASIBILITY AND WEATHER CONDITIONS. WHEN MATS ARE REQUIRED, 2 ROWS OF MATS MAY BE INSTALLED IN PARALLEL TO COVER THE 28' ACCESS ROAD WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY. ACCESS OUTSIDE OF THE TRANSMISSION LINE ROW IS LIMITED TO 14' UNLESS OTHERWISE PERMITTED AND APPROVED BY DEP SITING, PERMITTING AND ENGAGEMENT (SPE) AND NCDOT.
- SEED SLOPES 3:1 OR FLATTER. SLOPES STEEPER THAN 3:1 SHALL BE MATTED.
- LOW IMPACT/SENSITIVE CLEARING - LOW IMPACT SENSITIVE CLEARING SHALL COMPLY WITH THE SAME REQUIREMENTS AS "HAND CLEARING" IN THE DEP TRANSMISSION ROW CLEARING SPECIFICATIONS. LOW IMPACT/SENSITIVE CLEARING INVOLVES MACHINE CLEARING FROM MATS WITHIN 4" OF THE GROUND SURFACE. THERE WILL BE NO GRUBBING, GRADING, STUMPING, AND NO DISTURBANCE TO ROOT MAT.
- NCDOT IS RESPONSIBLE FOR ACCESS THROUGH NCDOT RIGHT-OF-WAY. NCDOT WILL CLEAR, BUILD, AND PERMIT ROAD FOR ACCESS.
- EXCESS SOIL MUST BE PLACED ON MATS AND REMOVED FROM WETLANDS AND SENSITIVE AREAS.



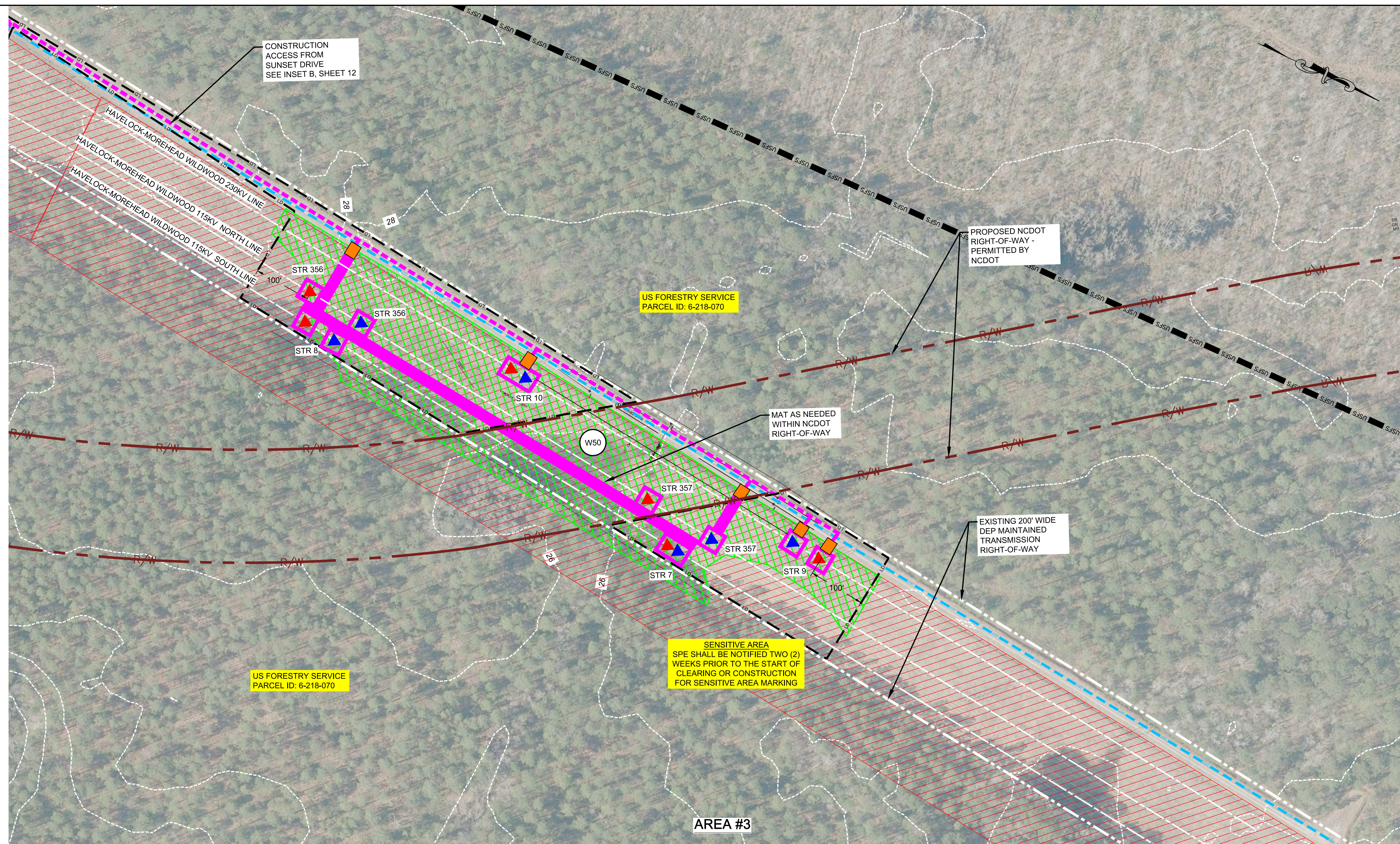
0	CT-71798	06/21/2019	ISSUED FOR CONSTRUCTION	RKB	EBS	EBS
REV	FILE NO.	DATE	REVISION	DRAWN	CHECKED	APPROVED

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DUKE ENERGY
PROGRESS

TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)	
	EROSION & SEDIMENT CONTROL PLAN AREA #2	
SIZE	DRAWING	SHEET
D	CT-71796	5 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

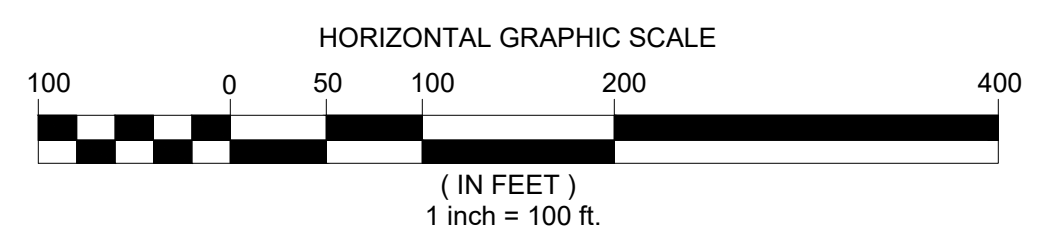
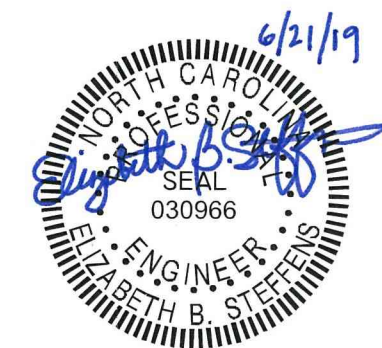


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS		STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE		STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE		STR X
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE		USFS
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE		USFS
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS		10'
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN		
SENSITIVE AREA						
DANGER TREE ZONE AREA						

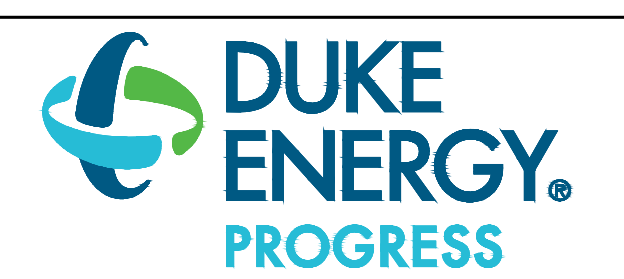
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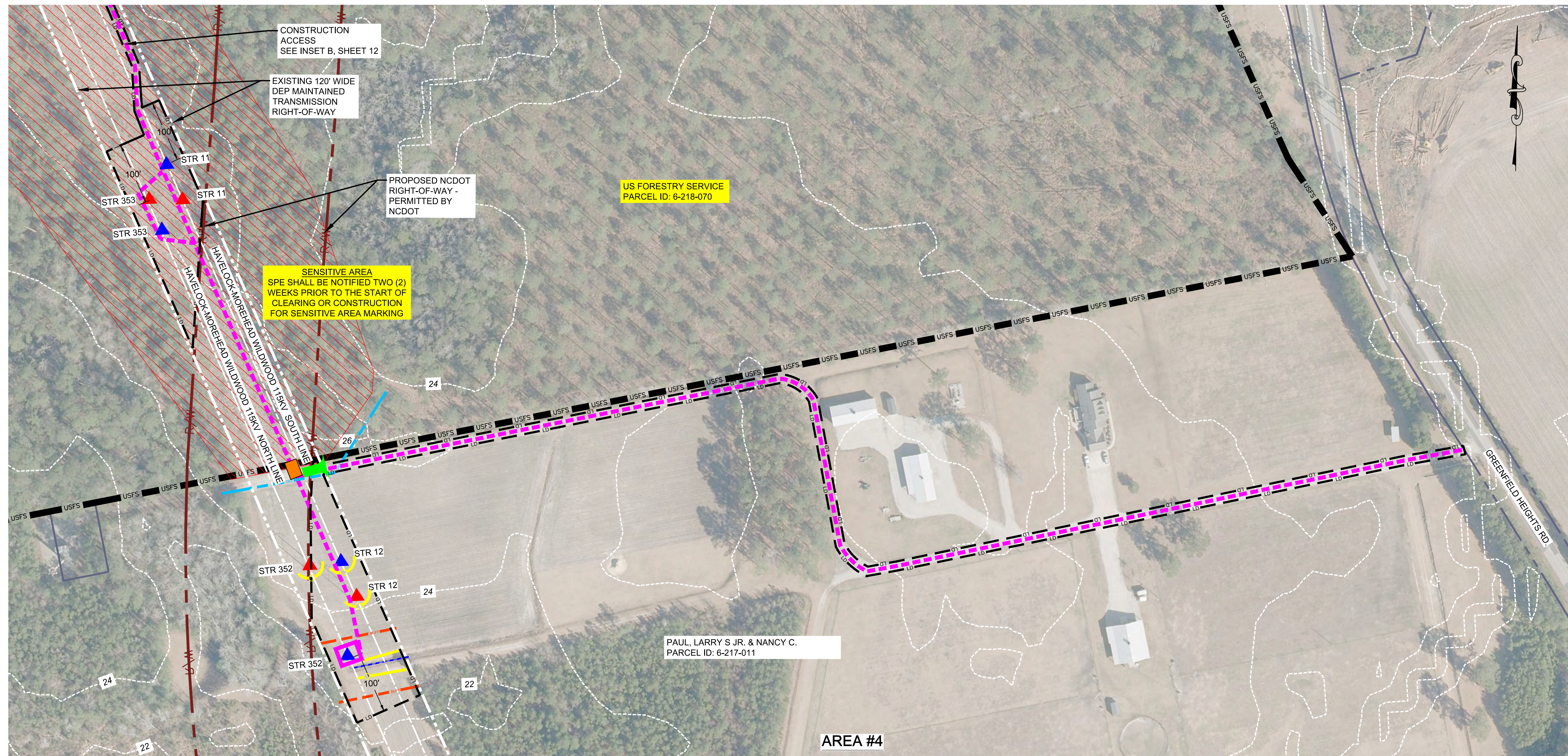
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TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)		
	EROSION & SEDIMENT CONTROL PLAN AREA #3		
SIZE	DRAWING	CT-71796	SHEET 6 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

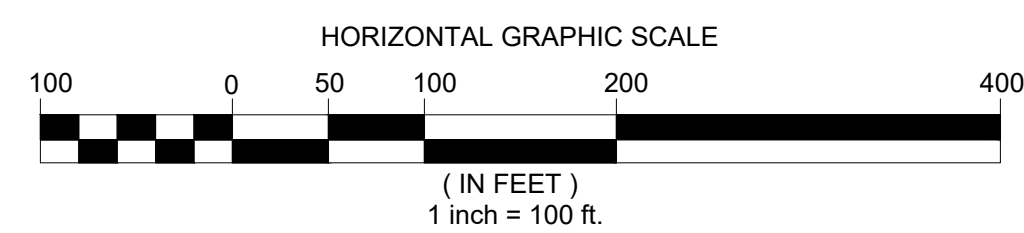


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS		STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALLY MADE MAT		REMOVE STRUCTURE		STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE		STR X
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE		USFS USFS
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE		USFS USFS
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS		10'
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN		
SENSITIVE AREA						
DANGER TREE ZONE AREA						

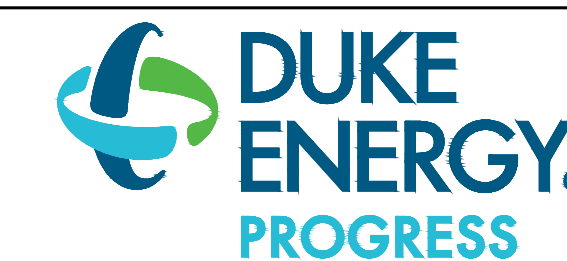
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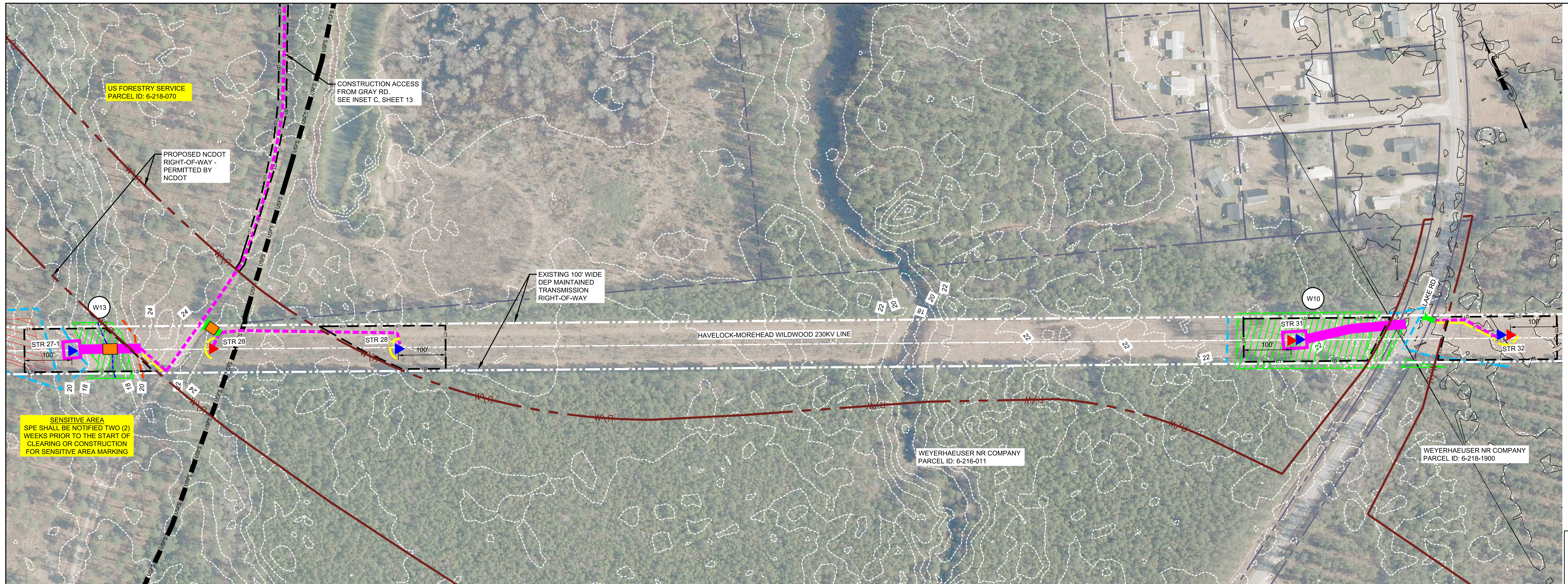
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TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)		
AREA #	EROSION & SEDIMENT CONTROL PLAN AREA #4		
SIZE	DRAWING	CT-71796	SHEET 7 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)



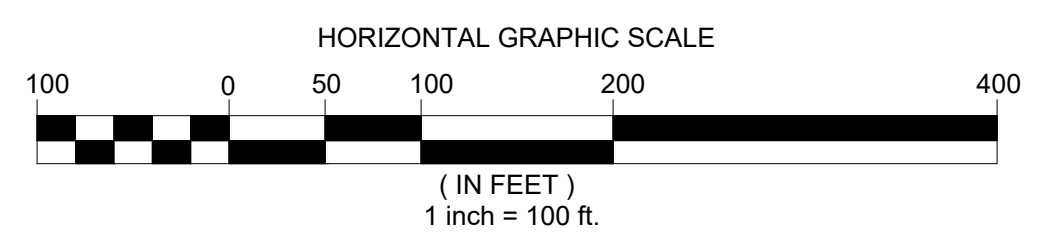
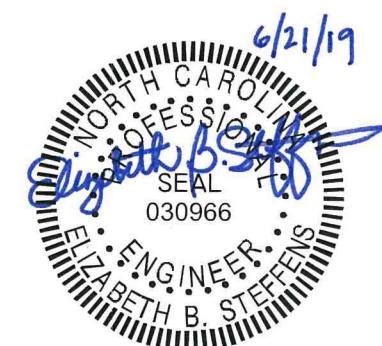
AREA #5

LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS		STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE		STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE		STR X
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE		
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE		
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS		
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN		
SENSITIVE AREA						
DANGER TREE ZONE AREA						

NOTES:

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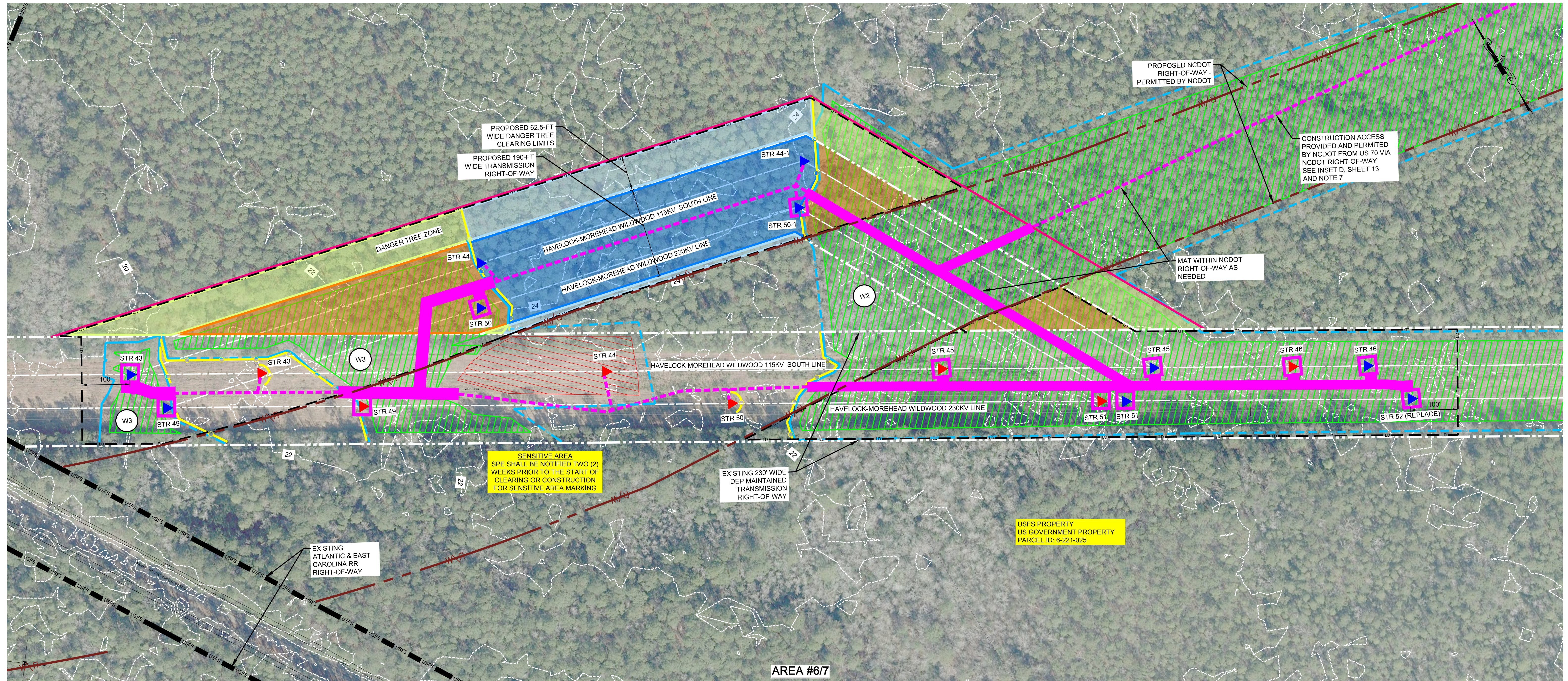
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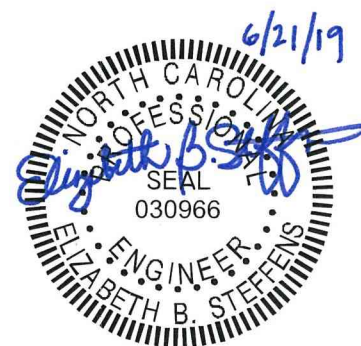
TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)		
	EROSION & SEDIMENT CONTROL PLAN AREA #5		
SIZE	DRAWING	CT-71796	SHEET 8 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)



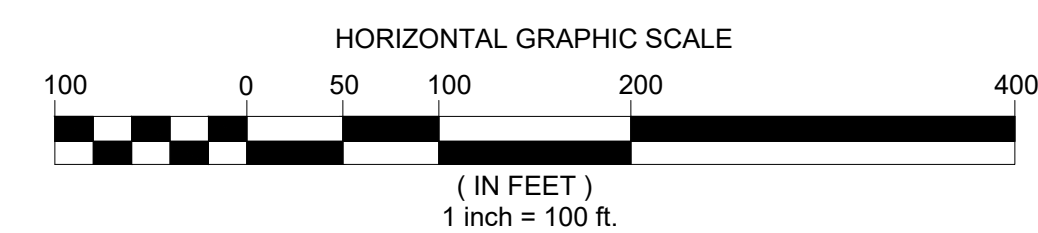
LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE	
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA				MACHINE CLEAR, NO GRUB: ROW	
DANGER TREE ZONE AREA				MACHINE CLEAR, NO GRUB: DANGER TREE ZONE	
				LOW IMPACT/SENSITIVE CLEARING, NO GRUB: ROW	
				LOW IMPACT/SENSITIVE CLEARING, NO GRUB: DANGER TREE ZONE	



NOTES:

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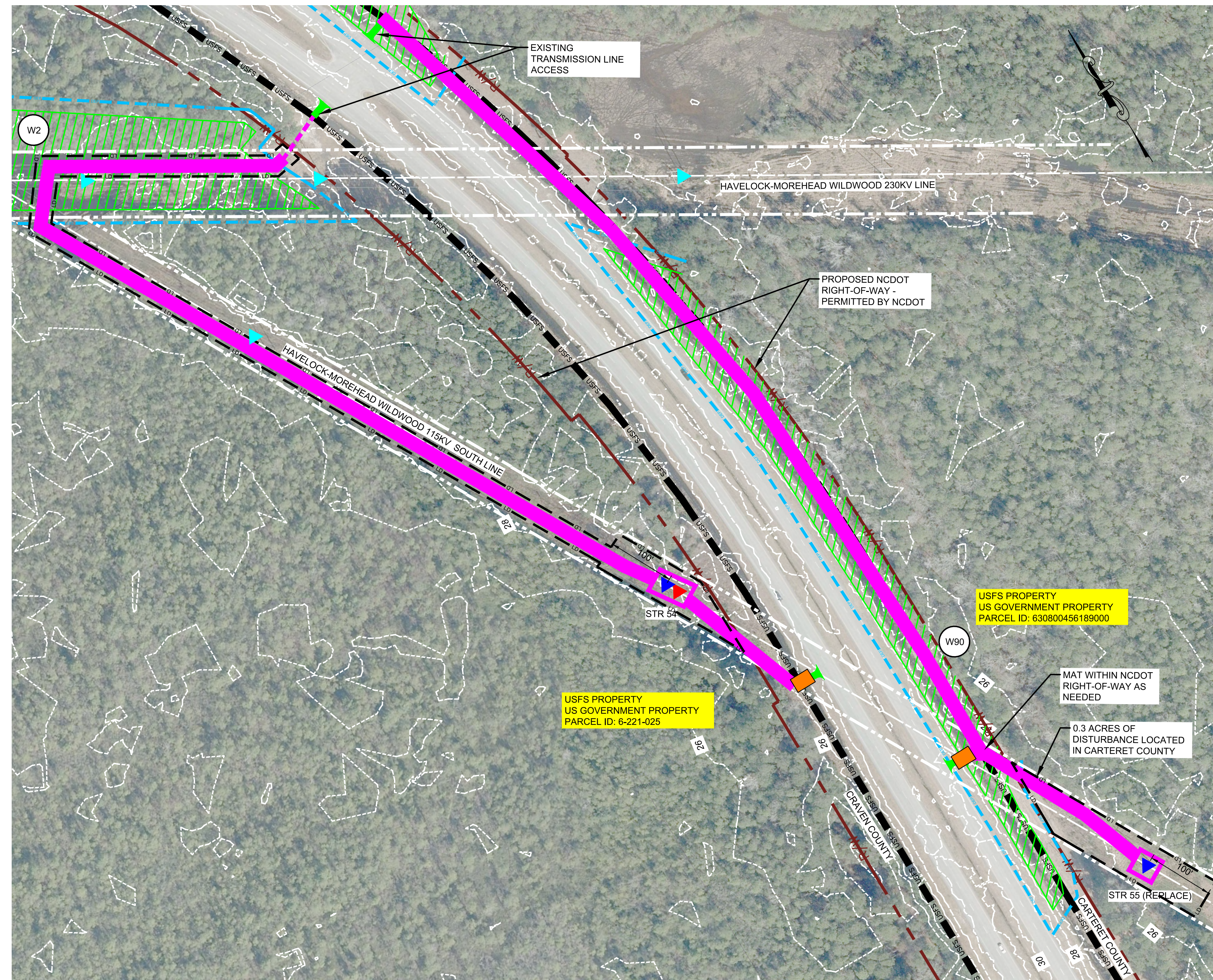
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DUKE ENERGY
PROGRESS

TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)	
SIZE	DRAWING	SHEET
D	CT-71796	9 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)



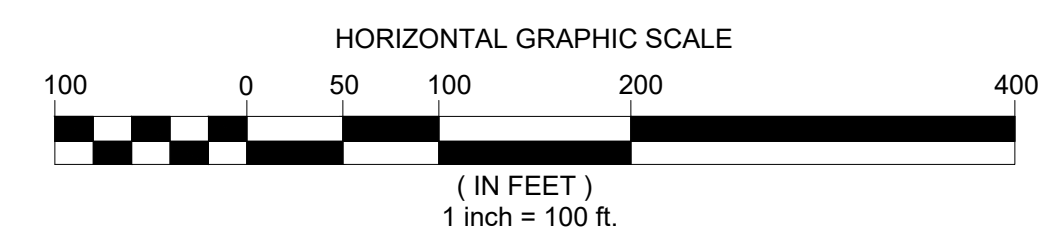
AREA #8/9

LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE	STR X
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA					
DANGER TREE ZONE AREA					

NOTES:

- ALL SITE ACCESS AND CONSTRUCTION PADS THROUGH WETLANDS OR OVER STREAMS SHALL BE VIA COMMERCIALY-MADE COMPOSITE OR HEAVY DUTY TIMBER/"CRANE" MATS OR DEP APPROVED LOW GROUND PRESSURE TRACK VEHICLES. LATTICE AND TWO-PLAY MATTING SHALL NOT BE USED IN JURISDICTIONAL WETLANDS, STREAMS OR BUFFERS. THERE SHALL BE NO GRADING WITHIN WETLAND AREAS. SEE DETAIL SHEET FOR MATTING AND CROSSING DETAILS.
- WETLAND WORK PADS AND WATTLES AT MATTING/BRIDGE APPROACHES AND EXITS ARE NOT SHOWN TO SCALE. REFER TO TABLE ON SHEET 3 AND THE DETAILS SHEET.
- WATTLES ARE SHOWN FOR GRAPHICAL DEPICTION OF LOCATIONS. WATTLES ARE TO BE PLACED ON THE DOWNSLOPE SIDE OF THE LAND DISTURBANCES TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING WETLANDS/STREAMS. ESTIMATES ARE MINIMUM NUMBER OF LINEAR FEET ANTICIPATED. SEE DETAIL SHEET. ADDITIONAL WATTLES SHALL BE UTILIZED AS NECESSARY TO KEEP SEDIMENT OUT OF WETLANDS/STREAMS AND WITHIN ROW LIMITS.
- ACCESS LOCATIONS WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON THE FEASIBILITY AND WEATHER CONDITIONS. WHEN MATS ARE REQUIRED, 2 ROWS OF MATS MAY BE INSTALLED IN PARALLEL TO COVER THE 28' ACCESS ROAD WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY. ACCESS OUTSIDE OF THE TRANSMISSION LINE ROW IS LIMITED TO 14' UNLESS OTHERWISE PERMITTED AND APPROVED BY DEP SITING, PERMITTING AND ENGAGEMENT (SPE) AND NCDEQ.
- SEED SLOPES 3:1 OR FLATTER. SLOPES STEEPER THAN 3:1 SHALL BE MATTED.
- LOW IMPACT/SENSITIVE CLEARING - LOW IMPACT SENSITIVE CLEARING SHALL COMPLY WITH THE SAME REQUIREMENTS AS "HAND CLEARING" IN THE DEP TRANSMISSION ROW CLEARING SPECIFICATIONS. LOW IMPACT/SENSITIVE CLEARING INVOLVES MACHINE CLEARING FROM MATS WITHIN 4" OF THE GROUND SURFACE. THERE WILL BE NO GRUBBING, GRADING, STUMPING, AND NO DISTURBANCE TO ROOT MAT.
- NCDOT IS RESPONSIBLE FOR ACCESS THROUGH NCDOT RIGHT-OF-WAY. NCDOT WILL CLEAR, BUILD, AND PERMIT ROAD FOR ACCESS.
- EXCESS SOIL MUST BE PLACED ON MATS AND REMOVED FROM WETLANDS AND SENSITIVE AREAS.



REV	FILE NO.	DATE	REVISION	DRAWN	CHECKED	APPROVED
0	CT-71798	06/21/2019	ISSUED FOR CONSTRUCTION	RKB	EBS	EBS

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DUKE ENERGY
PROGRESS

TITLE	NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)	
SIZE	DRAWING	SHEET
D	CT-71796	10 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

EROSION AND SEDIMENTATION CONTROL CONSTRUCTION SEQUENCE NOTES

- DEP REPRESENTATIVE SHALL OBTAIN AND/OR CONFIRM ALL APPLICABLE PERMITS HAVE BEEN OBTAINED AND KEEP HARD-COPIES ON-SITE IN THE PERMITS BOX OR POST ON SITE. ANY PROJECT REVISIONS THAT RESULT IN ADDITIONAL LAND DISTURBANCE OR CHANGE IN DRAINAGE PATTERNS SHALL BE SUBMITTED TO DUKE ENERGY PROGRESS FOR APPROVAL AND NCDEQ FOR PERMIT MODIFICATION.
- NO LAND DISTURBING ACTIVITIES SHALL TAKE PLACE OUTSIDE THE PROJECT LIMITS WITHOUT NCDEQ AND DUKE ENERGY PROGRESS SITING, PERMITTING AND ENGAGEMENT (DEP SPE) APPROVAL.
- NO DEMOLITION, CONSTRUCTION, OR LAND DISTURBANCE ACTIVITIES SHALL BEGIN UNTIL ALL APPLICABLE EROSION CONTROL MEASURES HAVE BEEN INSTALLED. IF CLEARING IS REQUIRED FOR INSTALLATION OF A GIVEN MEASURE, ALL OTHER MEASURES SHALL BE INSTALLED FIRST. THE NECESSARY LAND DISTURBANCE ACTIVITIES REQUIRED FOR INSTALLATION OF THE GIVEN MEASURE MAY THEN PROCEED.
- NOTIFY THE STATE DEQ-DEMUR OFFICE AT THE WILMINGTON REGIONAL OFFICE AT 910-796-7215 AT LEAST 72 HOURS PRIOR TO BEGINNING CONSTRUCTION ACTIVITIES.
- UTILITIES SHOWN IN APPROXIMATE MANNER ONLY. CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING UTILITIES PRIOR TO BEGINNING DEMOLITION, CONSTRUCTION OR LAND DISTURBING ACTIVITIES.
- SENSITIVE AREA BUFFERS INCLUDING WETLANDS, STREAMS, AND RARE PLANTS SHALL BE MARKED IN BLUE FLAGGING PRIOR TO START OF CLEARING/CONSTRUCTION.
- INSTALL CONSTRUCTION ENTRANCES, MATTING, WATTLES AND ANY OTHER NECESSARY EROSION CONTROL MEASURES PER PLAN DETAILS AND NCDEQ REQUIREMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO KEEP ALL DIRT OFF PAVED ROADS AND OUT OF STREAMS/WETLANDS. HEAVY MATS MAY BE USED IN LIEU OF ROCK CONSTRUCTION ENTRANCES AS DETERMINED BY THE ON-SITE INSPECTOR.
- BEGIN TRANSMISSION LINE WORK.
- SITE SHOULD BE "STORM READY" AT THE END OF EACH WORK DAY/WEEK.
- PROVIDE TEMPORARY SEEDING TO ALL DENUDED AREAS AFTER CLEARING OPERATIONS AS SOON AS FEASIBLE BUT NOT LONGER THAN 7 CALENDAR DAYS. PROVIDE PERMANENT GROUND COVER WITHIN 14 CALENDAR DAYS. MULCHING CAN BE USED FOR INSTANT STABILIZATION ON NEW LINE PROJECTS THAT REQUIRE CLEARING. TEMPORARY AND PERMANENT SEEDING WILL BE REQUIRED IN AREAS WHERE MULCHING IS INSUFFICIENT FOR INSTANT STABILIZATION. NO MULCHING ALLOWED ON USFS PROPERTY, IN WETLAND AREAS, OR IN SENSITIVE AREAS.
- ANY EXCESS SPOILS FROM WETLAND AREAS OR SENSITIVE AREAS SHALL BE TRANSPORTED TO NON-USFS PROPERTY UPLAND AREAS AND STABILIZED.
- WETLAND AREAS AND SENSITIVE AREAS WILL BE ALLOWED TO NATURALLY RE-VEGETATE UNLESS OTHERWISE SPECIFIED/REQUIRED BY THE ENVIRONMENTAL INSPECTOR.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED ONCE CONSTRUCTION IS COMPLETE AND THE SITE HAS BEEN STABILIZED.
- DEP ENVIRONMENTAL REPRESENTATIVE SHALL CONDUCT PROJECT INSPECTIONS OF EROSION CONTROL MEASURES AND STORMWATER OUTFALLS WEEKLY AND AFTER EVERY RAIN EVENT $\frac{1}{2}$ " OR GREATER. ALL CONTROL DEVICES SHALL BE MAINTAINED AS SPECIFIED BY THE CONTRACT DOCUMENTS. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE TO FACILITATE RAINFALL MONITORING. THE DEP ENVIRONMENTAL REPRESENTATIVE SHALL MAINTAIN THESE RECORDS AT THE ON-SITE OFFICE FOR AUDIT BY DEQ. INSPECTIONS ARE REQUIRED UNTIL PROJECT STABILIZATION IS EVIDENT BY 80% VEGETATIVE GROWTH FOR AREAS PROVIDED SEEDING, AT SUCH TIME THE CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROL DEVICES. ADDITIONALLY, THE DEP ENVIRONMENTAL REPRESENTATIVE SHALL BE RESPONSIBLE FOR CONDUCTING "SELF-INSPECTIONS" INDICATING THE DATE DEVICES ARE INSTALLED AND STABILIZATION MEASURES ARE INITIATED. THE "SELF-INSPECTION" REPORTS SHALL BE MAINTAINED AND SUBMITTED TO DUKE ENERGY PROGRESS ONCE STABILIZATION OF THE PROJECT HAS BEEN ACCOMPLISHED AND THE TEMPORARY MEASURES HAVE BEEN REMOVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF SEDIMENT ON-SITE. IF THE APPROVED EROSION AND SEDIMENTATION CONTROL MEASURES PROVE INSUFFICIENT, THE CONTRACTOR MUST TAKE ADDITIONAL STEPS NECESSARY TO STOP SEDIMENT FROM LEAVING THE SITE WITH PRIOR APPROVAL FROM THE DEP REPRESENTATIVE.
- ANY BORROW MATERIAL BROUGHT ONTO THIS SITE SHALL BE FROM A LEGALLY OPERATED MINE OR APPROVED SOURCE. A SINGLE USE BORROW SITE OR AN AREA TO WASTE MATERIAL IS ONLY PERMISSIBLE IF IT IS OPERATED UNDER THE TOTAL CONTROL OF THE FINANCIALLY RESPONSIBLE PERSON OR FIRM WHO IS DEVELOPING THE SITE AND HAS BEEN SEPARATELY PERMITTED AND INCORPORATED AS PART OF THIS PLAN MEETING ALL THE REQUIREMENTS OF NC GENERAL STATUTE 74-49(7)F.
- CONTRACTOR SHALL MAINTAIN COMPLIANCE WITH ALL PERMITS AND PLANS. ANY CHANGES SHALL BE APPROVED BY NCDEQ AND DEP SPE PRIOR TO EXECUTION. A COPY OF ALL PERMITS SHALL BE MAINTAINED BY THE CONTRACTOR ON-SITE AT ALL TIMES.
- PURSUANT TO NC GENERAL STATUTE 113A-54.1(E), THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF EROSION CONTROL DEVICES AT COMPLETION OF EACH CONSTRUCTION PHASE AND DOCUMENT SUCH INSPECTIONS AS OUTLINE IN 5A NCAC 048.0131. FOR INSPECTION AND MONITORING RECORDS THE ACTIVITIES UNDER STORMWATER GENERAL PERMIT NG010000 AND SELF-INSPECTION RECORDS FOR LAND DISTURBING ACTIVITIES PER GENERAL STATUTE 113A.54.1 FORMS SEE "://DEQ.NC.GOV/ABOUT/DIVISIONS/ENERGY-MINERALS-LAND-RESOURCES/EROSION-SEDIMENT-CONTROL/FORMS".
- AFTER SITE IS STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES, AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE.
- USFS WILL PROVIDE SPECIFIC SEED MIX FOR USFS PROPERTY.

SEEDING SCHEDULE IS FOR PRIVATE PROPERTY ONLY (USFS WILL PROVIDE SPECIFIC SEED MIX FOR USFS PROPERTY)

TYPICAL SEEDING SCHEDULE FOR PIEDMONT AND COASTAL AREAS (EXCEPT BEACH DUNES)

- LIME, SEED, AND FERTILIZER SHALL BE APPLIED WITH NECESSARY EQUIPMENT TO GIVE UNIFORM DISTRIBUTION OF THESE MATERIALS. THE KINDS OF MATERIALS TO BE APPLIED PER ACRE:

TEMPORARY SEEDING	DATE	TYPE	PLANTING RATE	FERTILIZER** TO 10-10 BLEND	LIMESTONE**	STRAW MULCH
	MAR. 1- AUG. 31	GERMAN OR BROWNROOT MULLET	50 LBS/ACRE	800 LBS/ACRE	4000 LBS/ACRE	4000 LBS/ACRE
	SEP. 1- FEB. 28	RYE GRASS	100 LBS/ACRE	800 LBS/ACRE	4000 LBS/ACRE	4000 LBS/ACRE

PERMANENT SEEDING	DATE	TYPE	PLANTING RATE	FERTILIZER** TO 10-10 BLEND	LIMESTONE**	STRAW MULCH
	MAR. 1- AUG. 31	TALL FESCUE HILLED BERMAUDA GRASS CENTPEDE	100 LBS/ACRE 25 LBS/ACRE 10 LBS/ACRE	800 LBS/ACRE	4000 LBS/ACRE	4000 LBS/ACRE
	SEP. 1- FEB. 28	TALL FESCUE HILLED BERMAUDA GRASS CENTPEDE RYE GRASS	100 LBS/ACRE 35 LBS/ACRE 10 LBS/ACRE 15 LBS/ACRE	800 LBS/ACRE	4000 LBS/ACRE	4000 LBS/ACRE

**FOR 2:1 SLOPES OR STEEPER, ADD 20 LBS/ACRE SERICIA LESPEDeza YEAR ROUND.
 AT THE ENVIRONMENTAL OVERSIGHT INSPECTOR'S REQUEST, 50 LBS/ACRE PENNSYLVANIA BAHAGRASS MAY BE ADDED OR SUBSTITUTED TO THE SEED MIX.
 THE SURFACE SHALL BE MADE SMOOTH AND TRUE TO GRADE. THE AREAS SHALL BE PREPARED BY MEANS OF GRADING AND CROSS GRADING, HARROWING, OR OTHER APPROVED METHOD OF PREPARATION SHALL BE CONTINUED UNTIL A FRIABLE AND THOROUGHLY PULVERIZED FOUR-INCH DEEP SEEDBED IS OBTAINED. CARE SHALL BE EXERCISED IN PREPARATION OF SEEDBEDS ON SLOPES TO KEEP LOOSE SOIL IN PLACE RATHER THAN PERMIT IT TO ACCUMULATE AT THE FOOT OF THE SLOPE. SEEDBEDS SHALL BE APPROVED PRIOR TO PLANTING THE SEED. PRIOR TO THE ACT, TILLAGE OPERATION, LIME AND FERTILIZER SHALL BE BROADCAST WITH AN APPROVED SPREADER OVER THE SEEDBED IN ACCORDANCE WITH THE SCHEDULE.

- AFTER THE SEEDBEDS HAVE BEEN PREPARED AND APPROVED, THE MIXTURE OF GRASS SEED, AS SPECIFIED, SHALL BE SOWN BY MEANS OF AN APPROVED SEEDER AT THE APPROPRIATE RATE, THE SEED WORKED INTO THE SOIL TO A DEPTH APPROXIMATELY 1/2 INCH AND THEN COMPACTED BY MEANS OF A CULTIVATOR ROLLER OR OTHER APPROVED EQUIPMENT.
- GRAIN STRAW SHALL BE APPLIED OVER SEEDBED AREAS AS A MULCH WITHIN 24 HOURS OF THE INITIAL SEEDING OPERATION. NO BARE GROUND SHALL BE VISIBLE WHEN WINDS BY A MULCHING AREA IF PROPER APPLICATIONS ARE ACHIEVED. THICK CLUMPS OF STRAW ARE NOT PERMISSIBLE AS A UNIFORM COVERAGE IS EXPECTED.
- STRAW MULCH AREAS SHALL BE TACKED WITH ASPHALT (APPLICATION RATE OF 10 GALLONS PER SQUARE YARD) OR GALLONS PER 1000 SQ. FT. / 438 GALLONS PER ACRE) ROYAL, OR NETTING, ON STEEP SLOPES, NETTING IS PREFERRED.
- ROLLED EROSION CONTROL PRODUCTS SHALL BE USED AS DITCH TREATMENT OR ON SLOPES AS SPECIFIED ON THE PLANS.
- AT COMPLETION OF ANY PHASE OF GRADING ACTIVITIES OR WHERE CONSTRUCTION WILL TEMPORARILY CEASE, SEEDING SHALL BE COMPLETED IN ALL DISTURBED AREAS AS SPECIFIED IN THE STABILIZATION TIMEFRAME TABLE BELOW AS A MINIMUM.
- QUANTITY OF FERTILIZER AND LIME SHALL BE CONFIRMED BY SOILS TEST. COMPOST OR SOIL TESTS SHALL BE APPLIED AT THE DISCRETION OF THE DEP REPRESENTATIVE.

DATE	REVISION	BY	CHK.	APP.
08-27-2013	INITIAL RELEASE	SFP	DEP	SFP
08-28-2013	REVISION	SFP	DEP	SFP
08-28-2013	REVISION	SFP	DEP	SFP
08-28-2013	REVISION	SFP	DEP	SFP

SEDIMENT AND EROSION CONTROL DETAILS
 TRANSMISSION ENGINEERING
 WATTLES AND BRIDGE MATS
 SCALE: P 1" = 4' SCALE: SH 1" = 10' DATE: 05-06-13 DWG. NO. CT-65382 SH 1 OF 1

TYPICAL 80' CONSTRUCTION ENTRANCE (TEMPORARY) NTS

NOTES:
 CONSTRUCTION ENTRANCE DETAIL IS SHOWN FOR REFERENCE ONLY. CONSTRUCTION ENTRANCES SHALL BE USED WHERE HEAVY MATS ARE DEEMED INSUFFICIENT BY DUKE ENERGY PROGRESS AND ITS REPRESENTATIVES.
 WASHING - IF CONDITIONS AT THE SITE ARE SUCH THAT MOST OF THE MUD AND SEDIMENT WILL NOT BE REMOVED BY VEHICLES TRAVELING OVER THE GRAVEL, THE TRES SHOULD BE WASHED. WASHING SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO A SEDIMENT TRAP ON OTHER SUITABLE DISPOSAL AREA. A WASH RACK MAY ALSO BE USED TO MAKE WASHING MORE CONVENIENT AND EFFECTIVE.

CONSTRUCTION SPECIFICATIONS:
 1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBSTRUCTIONAL MATERIAL. PREPARE TO GRADE.
 2. ALWAYS USE GEOTEXTILE FABRIC TO IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE UNLESS OTHERWISE DIRECTED BY THE REPRESENTATION REPRESENTATIVE OF DUKE ENERGY PROGRESS.
 3. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS AND SMOOTH IT.
 4. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.

MAINTENANCE:
 MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EVERY RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. REMOVE ALL COLLECTION MATERIALS (SPILLS, WASHING, OR TRACKED ONTO PUBLIC ROADWAYS) BY BRUSHING OR SWEEPING IMMEDIATELY. WASH OR REPLACE STONE AS NEEDED.

**SEDIMENT AND EROSION CONTROL DETAILS
 TRANSMISSION ENGINEERING
 80' CONSTRUCTION ENTRANCE
 SCALE: P 1" = 4' SCALE: SH 1" = 10' DATE: 05-06-13 DWG. NO. CT-65382 SH 1 OF 1**

WATTLE DETAIL (TEMPORARY) NTS

NOTES:
 1. USE MINIMUM 12" DIAMETER EXCELSIOR WATTLE (LARGER WATTLES MAY BE REQUIRED TO KEEP SEDIMENT ON SITE).
 2. USE 2" WOODEN STAKES WITH A 2" NOMINAL CROSS SECTION.
 3. INSTALL A MINIMUM OF 2 UP SLOPE STAKES AND 4 DOWN SLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO EXISTING GRADE.
 4. PROVIDE STAPLES OF 0.125" DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 8" IN LENGTH.
 5. INSTALL STAPLES APPROXIMATELY EVERY 1' LINEAR FOOT ON THE UP SLOPE SIDE OF THE WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

MAINTENANCE:
 WATTLES SHOULD BE CHECKED AND CLEARED OF ACCUMULATED DEBRIS AND SEDIMENT. REPLACE AS REQUIRED.

**SEDIMENT AND EROSION CONTROL DETAILS
 TRANSMISSION ENGINEERING
 WATTLE DETAIL
 SCALE: P 1" = 4' SCALE: SH 1" = 10' DATE: 05-06-13 DWG. NO. CT-65382 SH 1 OF 1**

TEMPORARY TRIBUTARY CROSSING DETAIL NTS

NOTES:
 1. BRIDGE STRUCTURE SHALL BE CONSTRUCTED AT OR ABOVE BANK ELEVATION TO PREVENT ENTRAPMENT OF FLOATING MATERIALS AND DEBRIS.
 2. IF REQUIRED, BRIDGE ABUTMENTS SHALL BE INSTALLED PARALLEL TO AND ON STABLE BANKS, (NOT SHOWN IN THE FIGURE), THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING SUCH ABUTMENTS.
 3. BRIDGE SPANS SHALL BE CONSTRUCTED TO SPAN THE ENTIRE CHANNEL WITH NO GAPS BETWEEN PANELS. WATTLES SHALL BE USED ON OUTER EDGES OF BRIDGE TO PROTECT WATER FEATURE FROM DIRT AND DEBRIS.
 4. UPON REMOVAL OF THE BRIDGE, ALL DISTURBED AREAS SHALL BE SEEDED AND COVERED WITH SEED, STRAW AND TACK, OR EXCELSIOR MATTING FOR STABILIZATION.
 5. AS BEST AS POSSIBLE, ALL BRIDGES SHALL BE INSTALLED PERPENDICULAR TO STREAM CHANNELS.
 6. PER APPROVAL OF OWNER/ENGINEER, COMMERCIALLY AVAILABLE TYPED MATS MAY BE SUBSTITUTED FOR FIBERGLASS/COMPOSITE MATS.
 7. PORTABLE BRIDGES MAY BE USED IN PLACE OF TEMPORARY BRIDGES WHERE STREAM BANK TO STREAM BANK IS LESS THAN 4 FEET.

MAINTENANCE:
 MAINTAIN THE BRIDGE AND WATTLES TO KEEP DIRT FROM COLLECTING ON THE BRIDGE AND TO KEEP SEDIMENT FROM ENTERING THE STREAM.

**SEDIMENT AND EROSION CONTROL DETAILS
 TRANSMISSION ENGINEERING
 TEMPORARY TRIBUTARY CROSSING DETAIL
 SCALE: P 1" = 4' SCALE: SH 1" = 10' DATE: 05-06-13 DWG. NO. CT-65382 SH 1 OF 1**

INTERLOCKING FIBERGLASS/COMPOSITE MATS

NOTES:
 MAINTAIN MATTING AND WATTLES TO KEEP SEDIMENT FROM COLLECTING ON THE MATTING AND FROM ENTERING THE WETLAND AND BUFFER AREAS.

NOTES/DETAILS:
 1. COMPOSITE MAT MATERIAL IS HIGH DENSITY POLYETHYLENE OR EQUIVALENT.
 2. MAT DIMENSIONS ARE 7' X 14' X 4" (4").
 3. MATS INTERLOCK WITH INSTALLATION.

"NOTE: PER APPROVAL OF OWNER/ENGINEER, COMMERCIALY AVAILABLE HEAVY DUTY TYPED "CRANE MATS" MAY BE SUBSTITUTED FOR FIBERGLASS/COMPOSITE MATS.

"LATTICE AND/OR TWO PLY MATTING SHALL NOT BE USED IN WETLANDS.

**COMMERCIALY MADE COMPOSITE MAT APPLICATIONS
 NTS**

**SEDIMENT AND EROSION CONTROL DETAILS
 TRANSMISSION ENGINEERING
 COMPOSITE MATTING DETAIL
 SCALE: P 1" = 4' SCALE: SH 1" = 10' DATE: 05-06-13 DWG. NO. CT-65382 SH 1 OF 1**

NEW STABILIZATION TIMEFRAMES (Effective Aug. 3, 2011)		NCDEQ/Division of Water Quality	
SITE AREA DESCRIPTION	STABILIZATION	TIMEFRAME EXCEPTIONS	
Perimeter dikes, canals, ditches, slopes	7 days	None	
High Quality Water (HQW) Zones	7 days	None	
Slopes steeper than 3:1	7 days	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.	
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 50' in length.	
All other areas with slopes flatter than 4:1	14 days	None, except for perimeters and HQW Zones.	

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				DRAWN	CHECKED	APPROVED

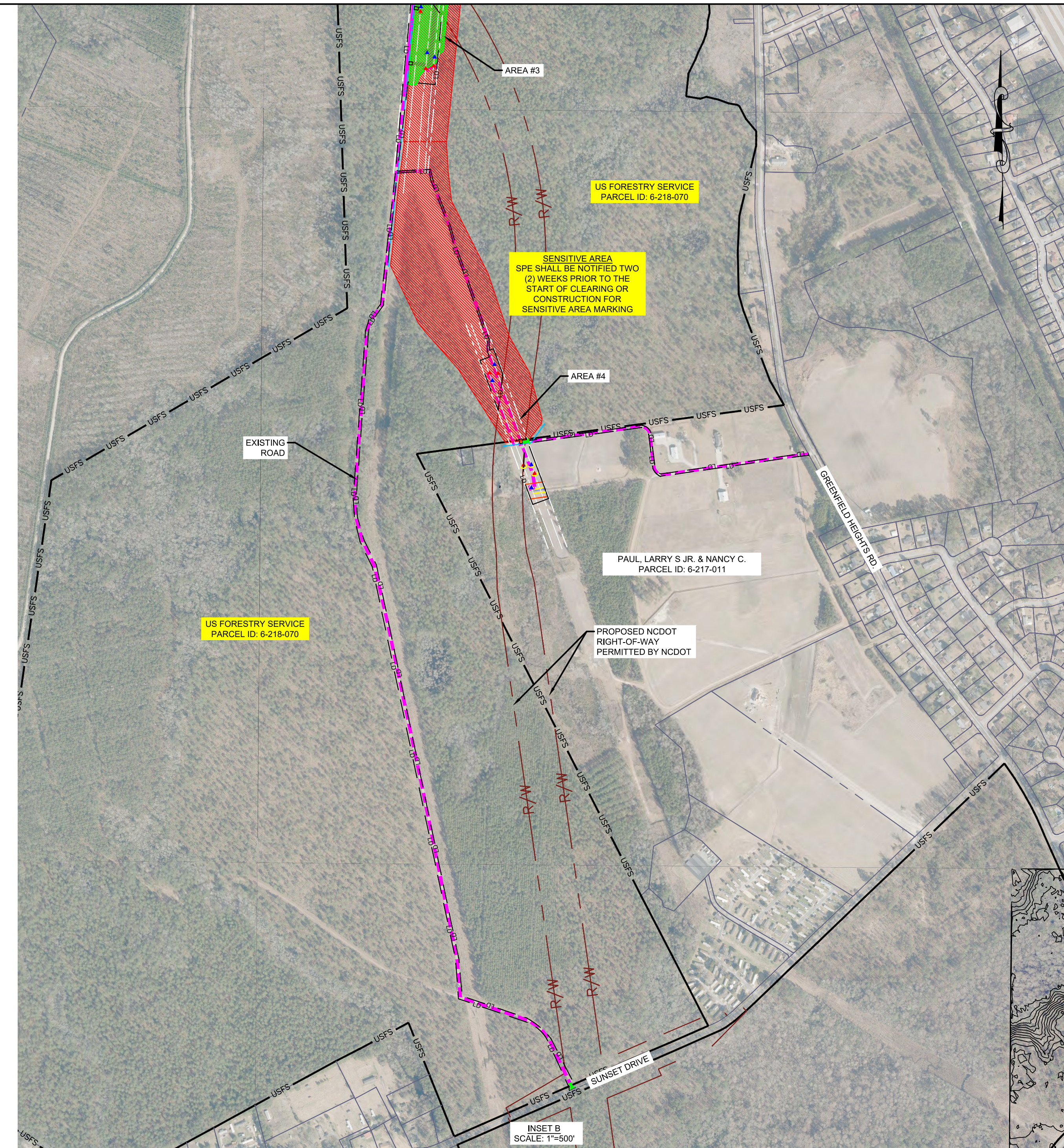
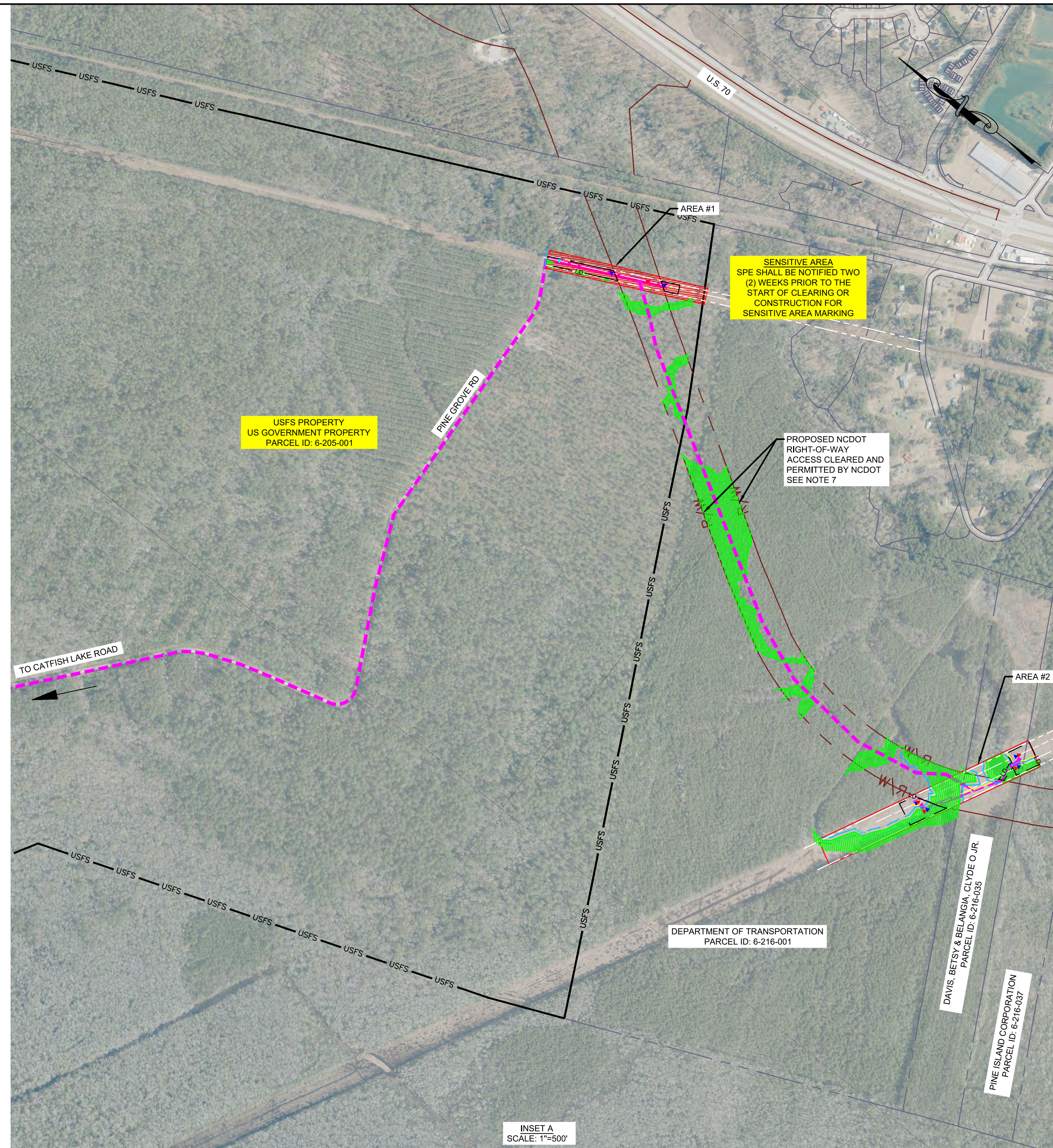


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DUKE ENERGY
 PROGRESS

TITLE NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)			
DETAILS			
SIZE	DRAWING	SHEET	OF
D	CT-71796	11	13

HIGHEST STR. (AREAS #1-9)
 ONE LINE NO.
 LOWEST STR.

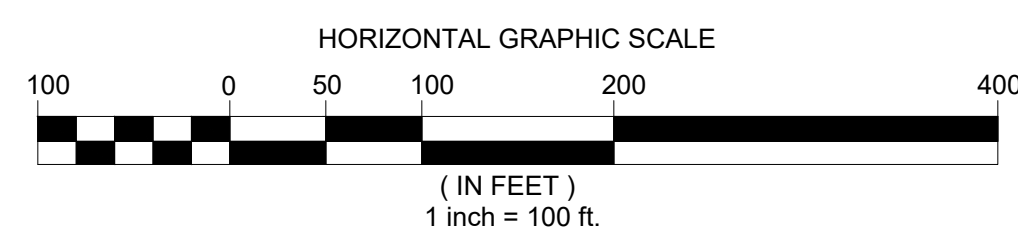


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND		NEW STRUCTURE	
PROPOSED NCDOT RIGHT-OF-WAY		DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	
STREAM/CHANNEL		LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA					
DANGER TREE ZONE AREA					

NOTES:

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- SEED SLOPES 3:1 OR FLATTER. SLOPES STEEPER THAN 3:1 SHALL BE MATTED.
- LOW IMPACT/SENSITIVE CLEARING - LOW IMPACT SENSITIVE CLEARING SHALL COMPLY WITH THE SAME REQUIREMENTS AS "HAND CLEARING" IN THE DEP TRANSMISSION ROW CLEARING SPECIFICATIONS. LOW IMPACT/SENSITIVE CLEARING INVOLVES MACHINE CLEARING FROM MATS WITHIN 4" OF THE GROUND SURFACE. THERE WILL BE NO GRUBBING, GRADING, STUMPING, AND NO DISTURBANCE TO ROOT MAT.
- NCDOT IS RESPONSIBLE FOR ACCESS THROUGH NCDOT RIGHT-OF-WAY. NCDOT WILL CLEAR, BUILD, AND PERMIT ROAD FOR ACCESS.
- EXCESS SOIL MUST BE PLACED ON MATS AND REMOVED FROM WETLANDS AND SENSITIVE AREAS.



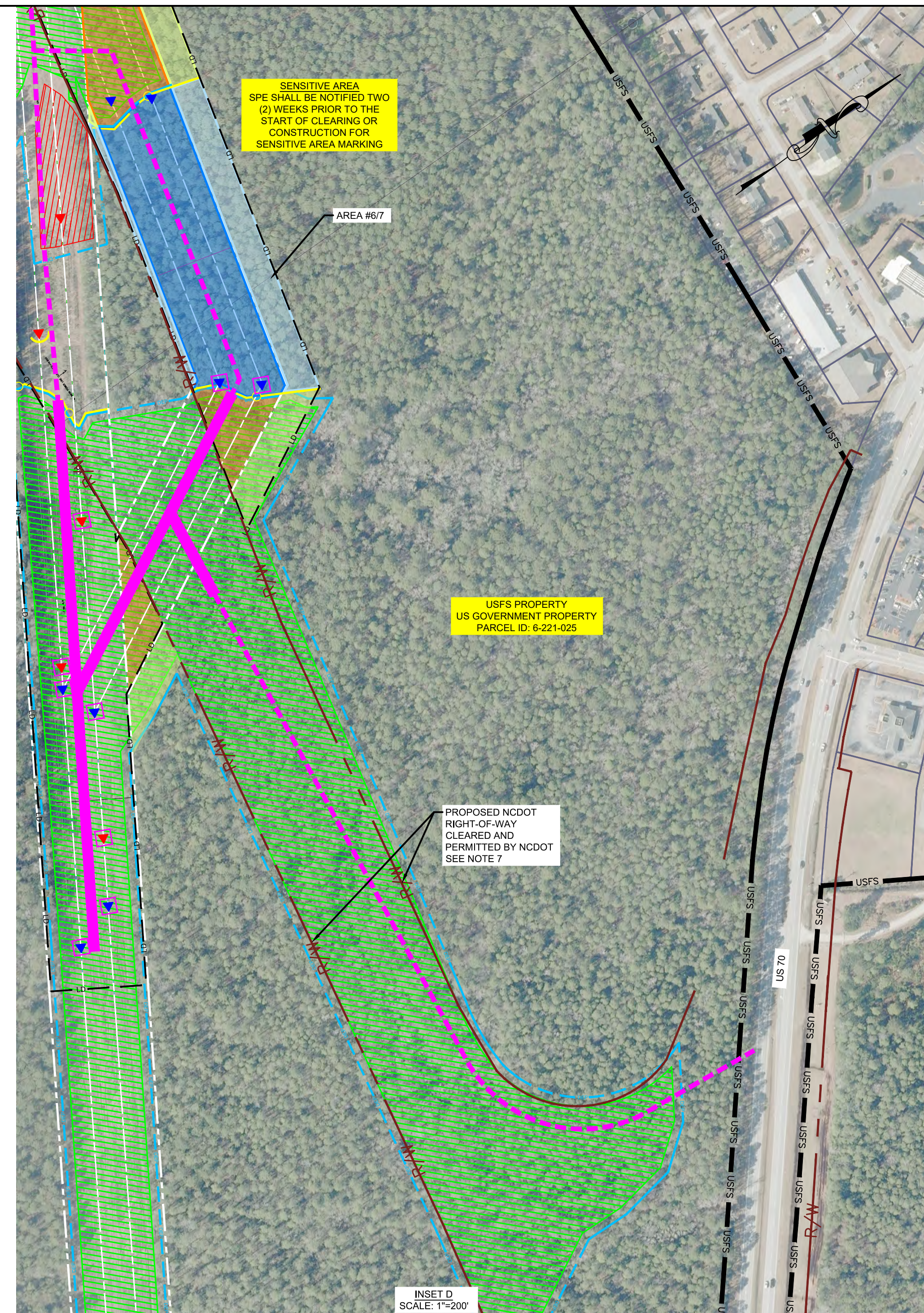
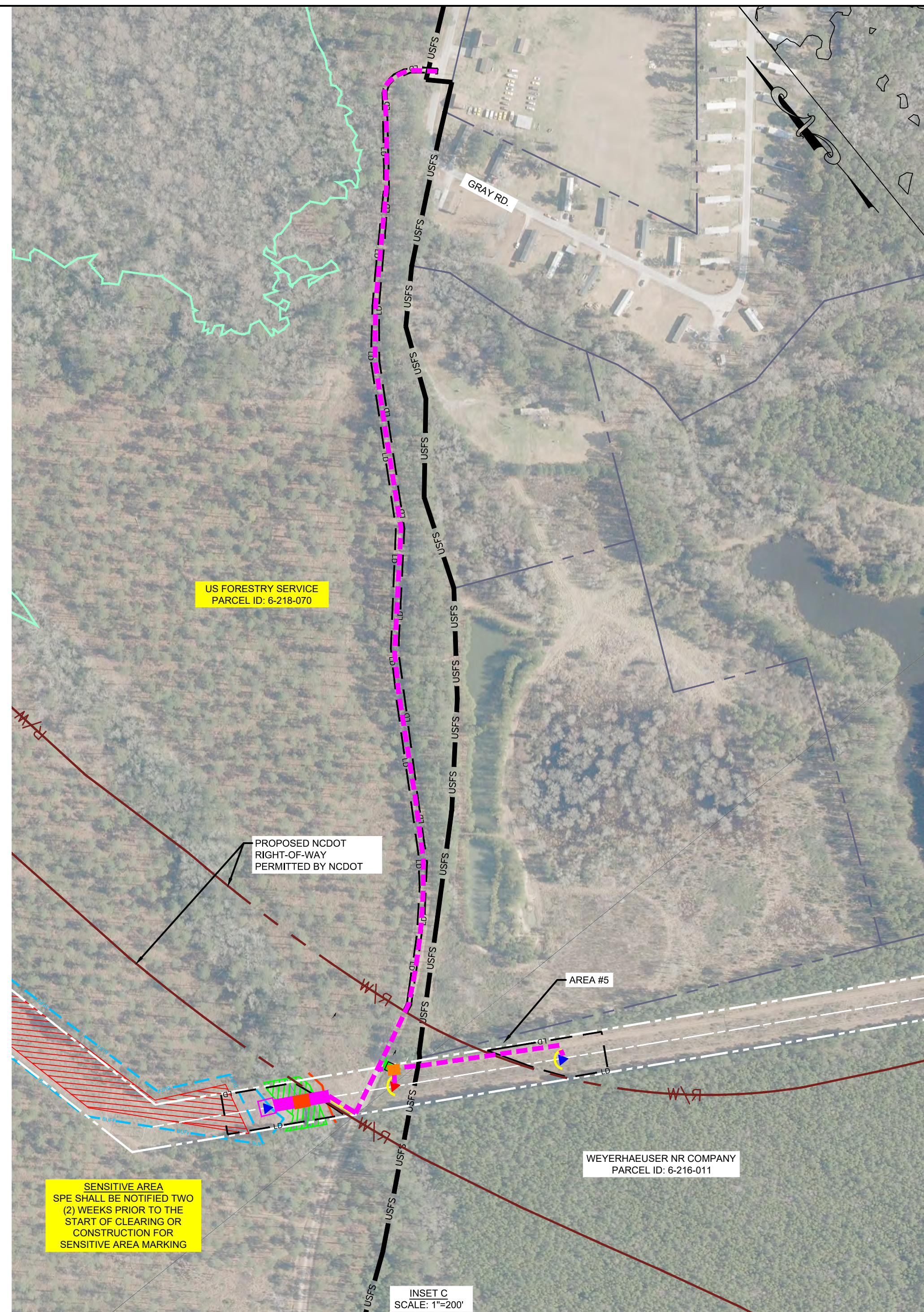
0	CT-71798	06/21/2019	ISSUED FOR CONSTRUCTION	RKB	EBS	EBS
REV	FILE NO.	DATE	REVISION	DRAWN	CHECKED	APPROVED

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DUKE ENERGY
PROGRESS

TITLE: NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)
SITE ACCESS ROUTES
SIZE: D DRAWING: CT-71796 SHEET: 12 OF 13

NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)

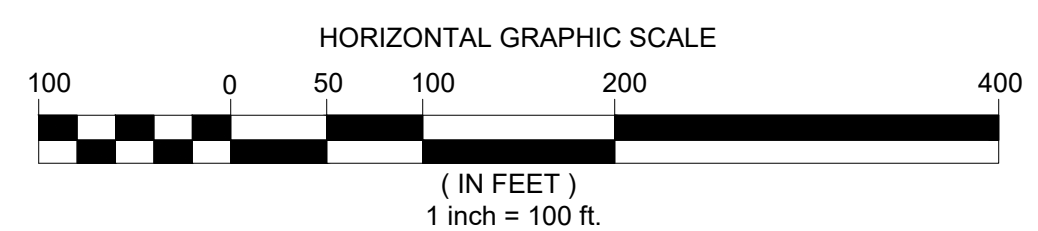


LEGEND:

EXISTING TRANSMISSION LINE RIGHT-OF-WAY		TEMPORARY BRIDGE		EXISTING STRUCTURE TO REMAIN AS-IS	STR X
EXISTING TRANSMISSION RIGHT-OF-WAY CENTERLINE		COMMERCIALY MADE MAT		REMOVE STRUCTURE	STR X
PROPOSED CONSTRUCTION ACCESS		JURISDICTIONAL WETLAND	WX	NEW STRUCTURE	STR X
PROPOSED NCDOT RIGHT-OF-WAY	RAW	DEP PROTECTIVE BUFFER (20' FROM WETLANDS, 30' BUFFER FROM STREAMS, TRIBUTARIES, AND SURFACE WATERS)		PROPERTY LINE	
CONSTRUCTION ENTRANCE (ROCK OR MAT AS APPROPRIATE AS DETERMINED BY DEP OVERSIGHT INSPECTOR)		STATE BUFFER (50' FROM STREAMS)		UNITED STATES FORESTRY SERVICE (USFS) PROPERTY LINE	USFS USFS
STREAM/CHANNEL	SX	LIMITS OF DISTURBANCE		EXISTING 2' CONTOURS	10'
LINEAR WATTLES (NOT TO SCALE)		WETLAND WORK PAD (NOT TO SCALE)		FEMA 100-YEAR FLOODPLAIN	
SENSITIVE AREA					
DANGER TREE ZONE AREA					

NOTES:

- ALL SITE ACCESS AND CONSTRUCTION PADS THROUGH WETLANDS OR OVER STREAMS SHALL BE VIA COMMERCIALY-MADE COMPOSITE OR HEAVY DUTY TIMBER/"CRANE" MATS OR DEP APPROVED LOW GROUND PRESSURE TRACK VEHICLES. LATTICE AND TWO-PLAY MATTING SHALL NOT BE USED IN JURISDICTIONAL WETLANDS, STREAMS OR BUFFERS. THERE SHALL BE NO GRADING WITHIN WETLAND AREAS. SEE DETAIL SHEET FOR MATTING AND CROSSING DETAILS.
- WETLAND WORK PADS AND WATTLES AT MATTING/BRIDGE APPROACHES AND EXITS ARE NOT SHOWN TO SCALE. REFER TO TABLE ON SHEET 3 AND THE DETAILS SHEET.
- WATTLES ARE SHOWN FOR GRAPHICAL DEPICTION OF LOCATIONS. WATTLES ARE TO BE PLACED ON THE DOWNSLOPE SIDE OF THE LAND DISTURBANCES TO PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING WETLANDS/STREAMS. ESTIMATES ARE MINIMUM NUMBER OF LINEAR FEET ANTICIPATED. SEE DETAIL SHEET. ADDITIONAL WATTLES SHALL BE UTILIZED AS NECESSARY TO KEEP SEDIMENT OUT OF WETLANDS/STREAMS AND WITHIN ROW LIMITS.
- ACCESS LOCATIONS WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY ARE APPROXIMATE. ACTUAL LOCATION MAY VARY BASED ON THE FEASIBILITY AND WEATHER CONDITIONS. WHEN MATS ARE REQUIRED, 2 ROWS OF MATS MAY BE INSTALLED IN PARALLEL TO COVER THE 28' ACCESS ROAD WITHIN THE TRANSMISSION LINE RIGHT-OF-WAY. ACCESS OUTSIDE OF THE TRANSMISSION LINE ROW IS LIMITED TO 14' UNLESS OTHERWISE PERMITTED AND APPROVED BY DEP SITING, PERMITTING AND ENGAGEMENT (SPE) AND NCDOT.
- SEED SLOPES 3:1 OR FLATTER. SLOPES STEEPER THAN 3:1 SHALL BE MATTED.
- LOW IMPACT/SENSITIVE CLEARING - LOW IMPACT SENSITIVE CLEARING SHALL COMPLY WITH THE SAME REQUIREMENTS AS "HAND CLEARING" IN THE DEP TRANSMISSION ROW CLEARING SPECIFICATIONS. LOW IMPACT/SENSITIVE CLEARING INVOLVES MACHINE CLEARING FROM MATS WITHIN 4" OF THE GROUND SURFACE. THERE WILL BE NO GRUBBING, GRADING, STUMPING, AND NO DISTURBANCE TO ROOT MAT.
- NCDOT IS RESPONSIBLE FOR ACCESS THROUGH NCDOT RIGHT-OF-WAY. NCDOT WILL CLEAR, BUILD, AND PERMIT ROAD FOR ACCESS.
- EXCESS SOIL MUST BE PLACED ON MATS AND REMOVED FROM WETLANDS AND SENSITIVE AREAS.



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NCDOT US 70 HAVELOCK BYPASS EXISTING LINE IMPROVEMENTS PROJECT (AREAS #1-9)