

DEPARTMENT OF ENVIRONMENTAL QUALITY - DIVISION OF MITIGATION SERVICES

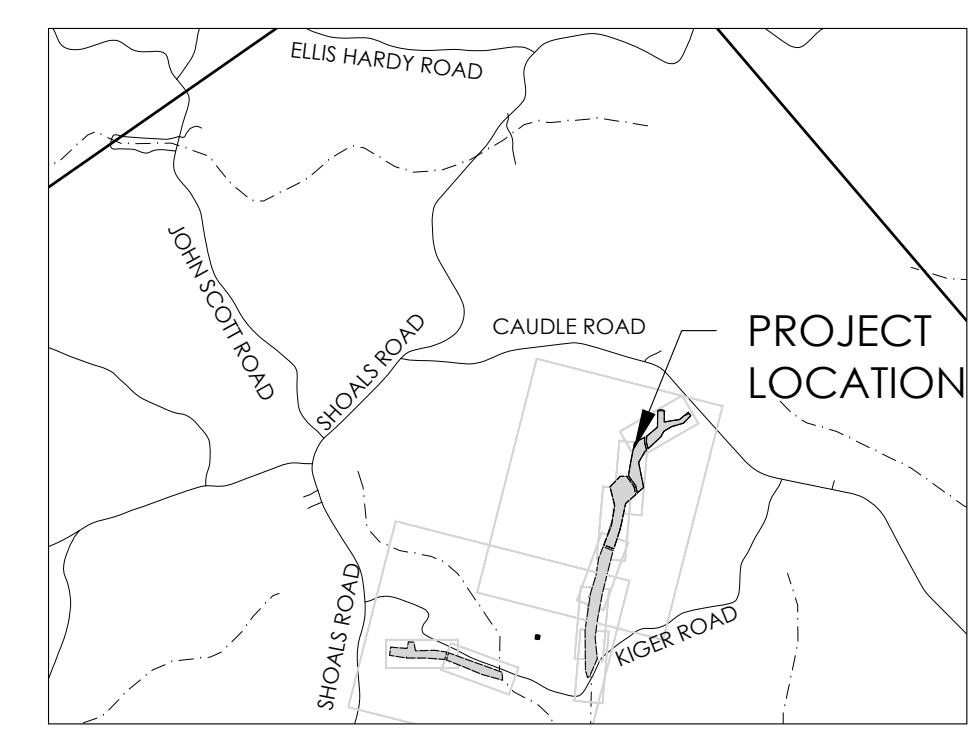
HORNE CREEK TRIBUTARIES MITIGATION PROJECT

SURRY COUNTY, NORTH CAROLINA
 NCDEQ - DMS PROJECT ID # 100026
 NCDEQ - DMS CONTRACT #7181 UNDER RFP 16-006993
 YADKIN RIVER BASIN (CU 03040101)
 USACE ACTION ID # SAW-2017-01510
 TYPE OF WORK : STREAM MITIGATION

SHEET INDEX

1	COVER SHEET
2	LEGEND
3-10	PLAN AND PROFILE
11-12	MONITORING PLAN

VICINITY MAP N.T.S.



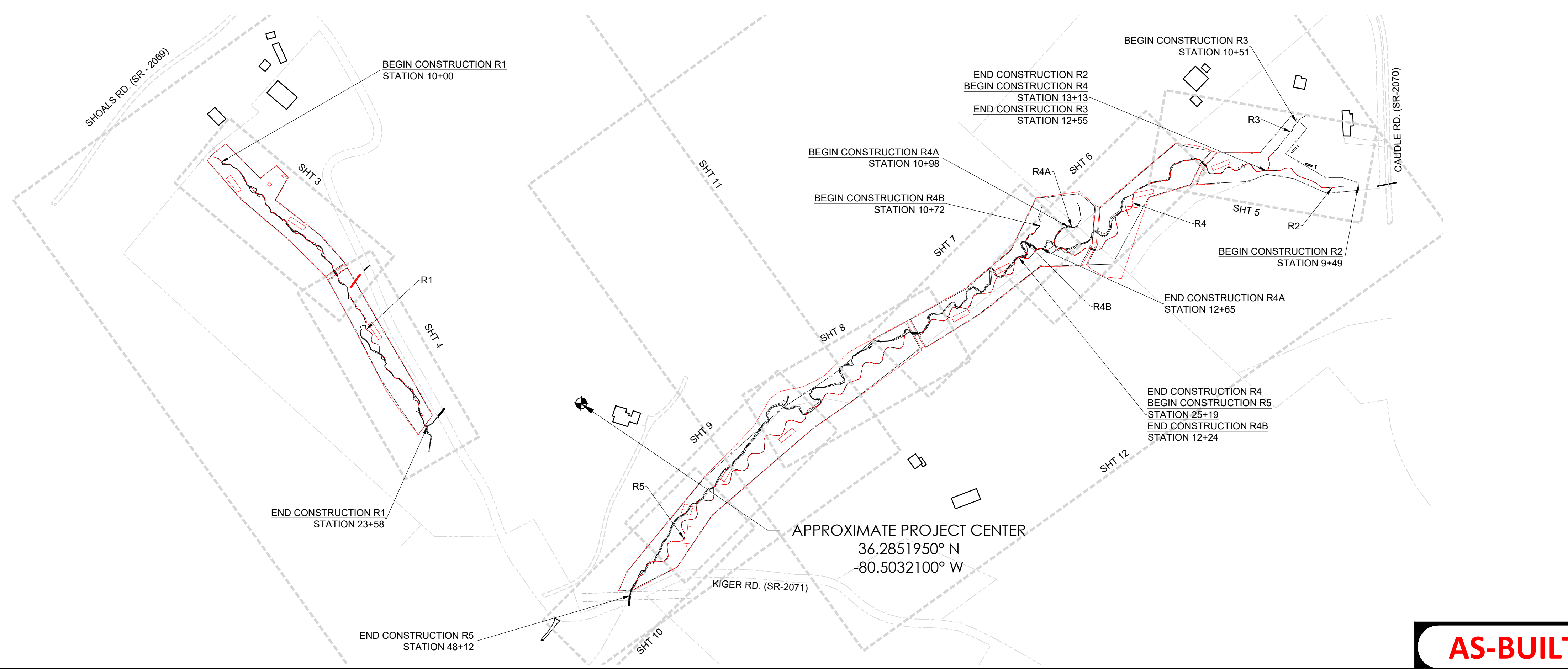
CERTIFICATE OF AS-BUILT SURVEY AND ACCURACY
 I, CHRISTOPHER L. COLE, CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION AND THAT THIS GROUND SURVEY WAS PERFORMED AT THE 90% CONFIDENCE LEVEL TO MEET FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO MEET THE REQUIREMENTS FOR A TOPOGRAPHIC/PLANIMETRIC SURVEY TO THE ACCURACY OF CLASS "A" AND VERTICAL ACCURACY WHEN APPLICABLE TO THE CLASS "A" STANDARD, AND THAT THE ORIGINAL DATA WAS OBTAINED BEFORE 6/27/2020; THAT THE SURVEY WAS COMPLETED BEFORE 6/27/2020; THAT CONTOURS SHOWN AS (BROKEN LINES) MAY NOT MEET THE STATED STANDARD; AND ALL COORDINATES ARE BASED ON 'NAD 83/2011 AND ELEVATIONS ARE BASED ON NAVD88/GEOD 12A.

(1) CLASS OF SURVEY: A
 (2) POSITIONAL ACCURACY: 0.07'
 (3) TYPE OF GPS FIELD PROCEDURE: RTK/VRS
 (4) DATES OF SURVEY: 6/27/2020
 (5) DATUM/EPOCH: NAD83/2011
 (6) GEOD: 12A
 (7) COMBINED GRID FACTOR: 0.99999453
 (8) UNITS: US SURVEY FEET
 (9) CORS STATION: NCNW NCST DOBS

WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER, AND SEAL THIS THE 4th DAY OF August



Christopher L. Cole
 CHRISTOPHER L. COLE, NCPLS L-5008



WATER & LAND SOLUTIONS
 7721 Six Fork Rd., Suite 130
 Raleigh, NC 27614
 (919)614-5111
 waterlandsolutions.com

PROJECT ENGINEER

ENGINEERING SERVICES BY
 WLS ENGINEERING, PLLC
 FIRM LICENSE NO. P-1480

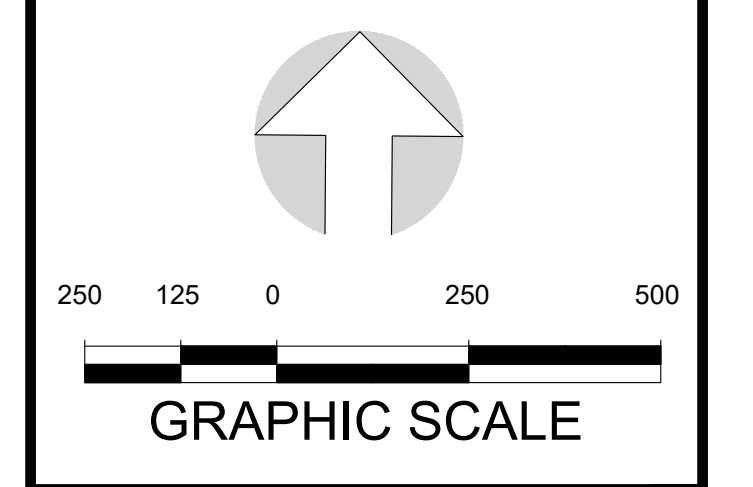
REVISIONS

NO.	DATE	DESCRIPTION
A	12-13-18	DRAFT MIT PLAN
B	5-8-19	DRAFT FINAL MIT PLAN
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E	7-2-20	AS-BUILT PLANS (FOR REVIEW ONLY)
F	8-3-20	FINAL AS-BUILT PLAN

PROJECT NAME
HORNE CREEK TRIBUTARIES MITIGATION PROJECT
 SURRY COUNTY, NC

DRAWING INFORMATION

PROJECT NO. :	100026
FILENAME :	ASB_01_HORNE CREEK COVER.DWG
DESIGNED BY :	CAT
DRAWN BY :	APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 500'
VERT. SCALE :	N/A





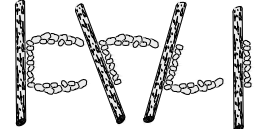
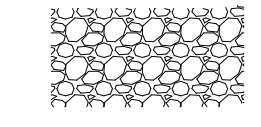

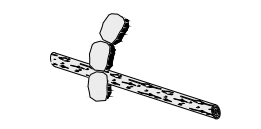

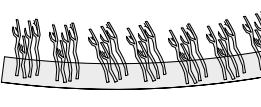
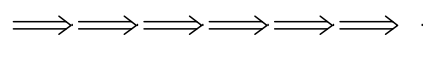

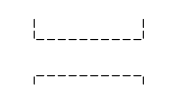
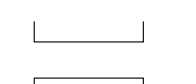
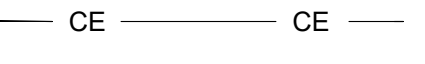

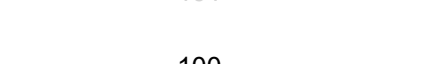
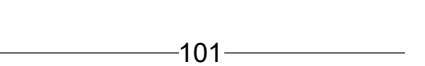

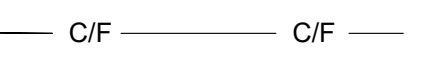




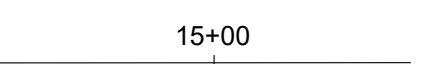
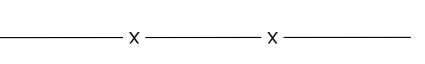
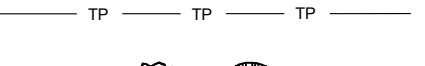

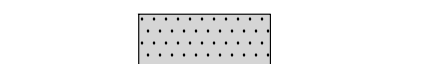
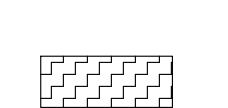
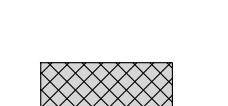

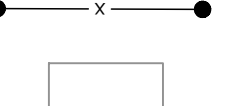





SHEET NAME
COVER SHEET

SHEET NUMBER
1

AS-BUILT

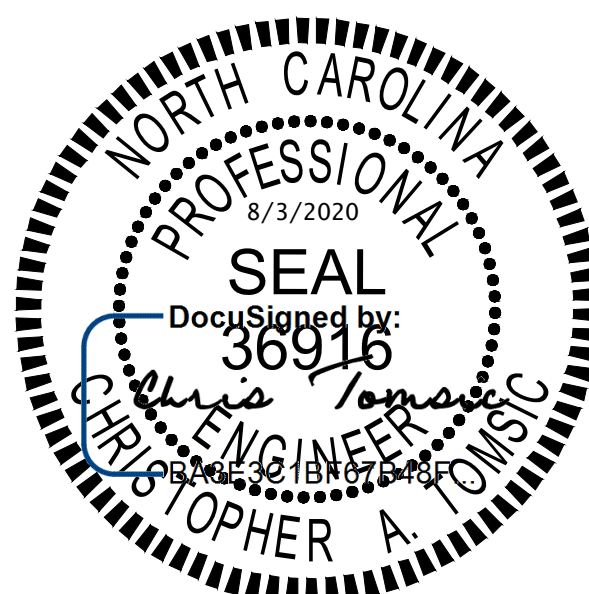
LEGEND

-  ROOTWAD
-  LOG VANE
-  LOG WEIR
-  LOG STEP-POOL
-  STONE AND LOG STEP-POOL
-  CONSTRUCTED STONE RIFFLE
-  CONSTRUCTED LOG RIFFLE
-  GRADE CONTROL LOG J-HOOK VANE
-  BOULDER STEP POOL
-  GEOLIFT W/ TOEWOOD
-  PROPOSED OUTLET CHANNEL
-  OHE EXISTING OVERHEAD ELECTRIC
-  TEMPORARY STREAM CROSSING
-  PERMANENT STREAM CROSSING
-  CE CE PROPOSED CONSERVATION EASEMENT BOUNDARY
-  -100- EXISTING MAJOR CONTOUR
-  -101- EXISTING MINOR CONTOUR
-  -100- PROPOSED MAJOR CONTOUR
-  -101- PROPOSED MINOR CONTOUR
-  LD LD LIMITS OF DISTURBANCE
-  C/F C/F CUT/FILL LIMITS
-  WLB WLB EXISTING WETLAND BOUNDARY
-  EXISTING WOODLINE
-  PROPOSED TOP OF STREAM BANK
-  EXISTING PROPERTY BOUNDARY
-  EXISTING FENCE
-  15+00 PROPOSED CENTERLINE (THALWEG)
-  x x PROPOSED FIELD FENCE
-  TP TP PROPOSED TREE PROTECTION FENCE
-  EXISTING TREE
-  PROPOSED WATER QUALITY TREATMENT FEATURE
-  PROPOSED FLOODPLAIN POOL
-  CHANNEL BLOCK
-  CHANNEL FILL
-  x PROPOSED GATE
-  EXISTING STRUCTURE
- EXISTING WETLAND AREA



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PROJECT ENGINEER



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PROJECT NAME
**HORNE CREEK
 TRIBUTARIES
 MITIGATION
 PROJECT**
 SURRY COUNTY, NC

DRAWING INFORMATION	
PROJECT NO. :	100026
FILENAME :	ASB_02_HORNE CREEK_SYMBOLS.DWG
DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	N/A
VERT. SCALE :	N/A

SHEET NAME

LEGEND


SHEET NUMBER
2

AS-BUILT



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PROJECT ENGINEER



DocuSigned by:
 Christopher A. Cole
 36916

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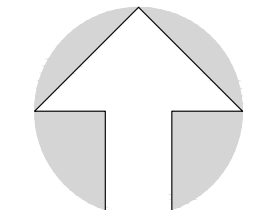

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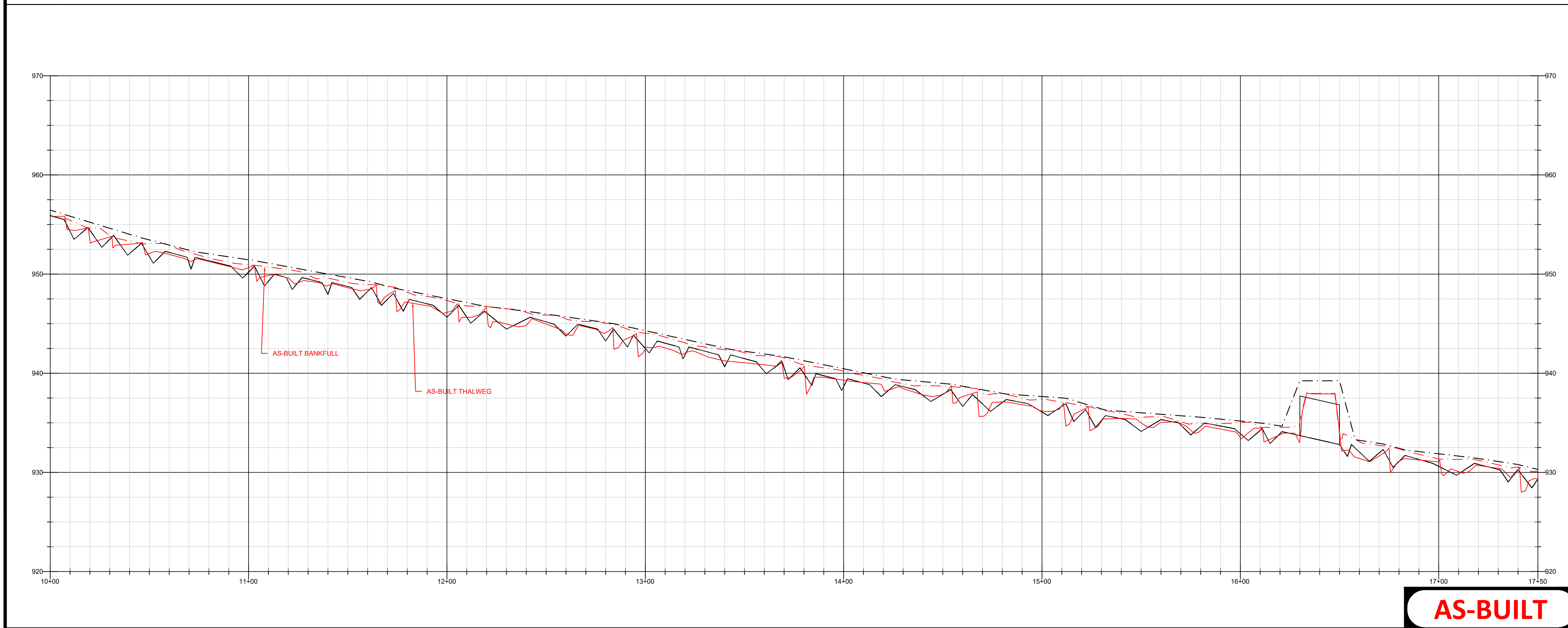
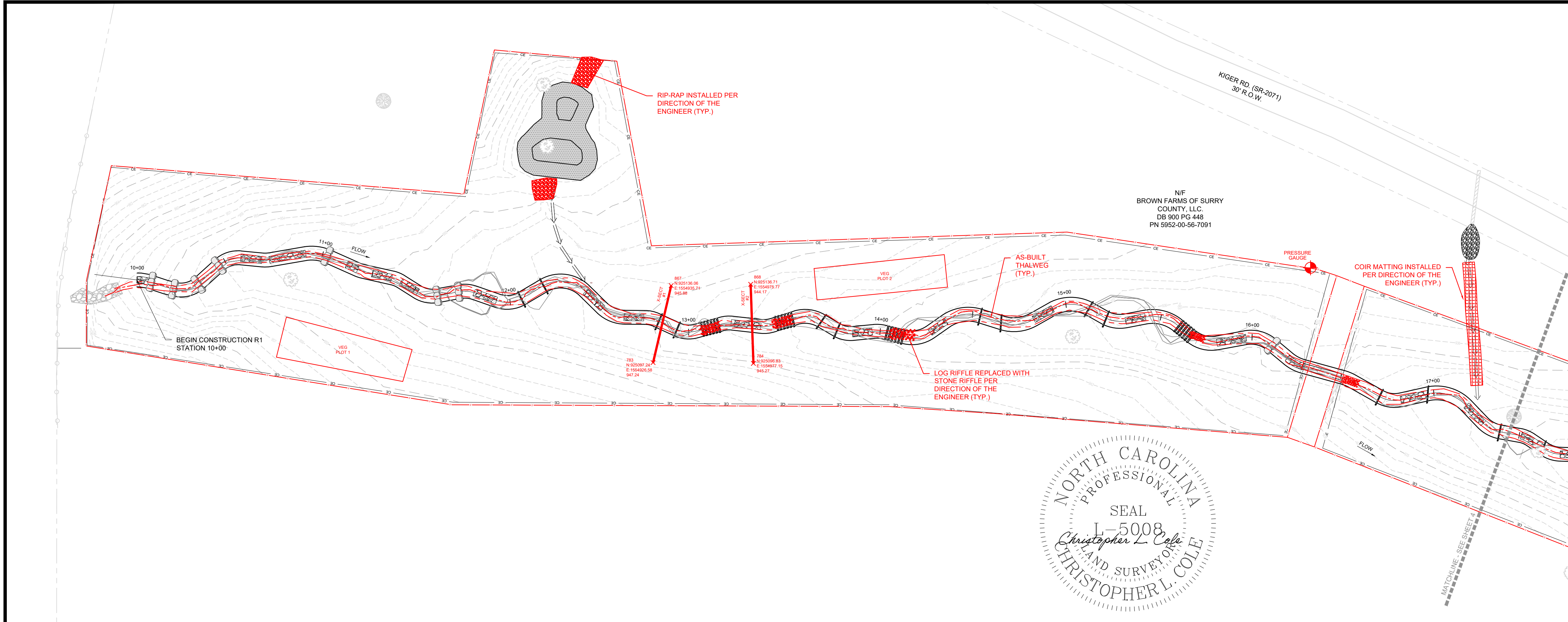
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DRAWN BY :	CAT/APL
DATE :	8-3-20
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VERT. SCALE :	1" = 12'

GRAPHIC SCALE

SHEET NAME
PLAN AND PROFILE

SHEET NUMBER
3

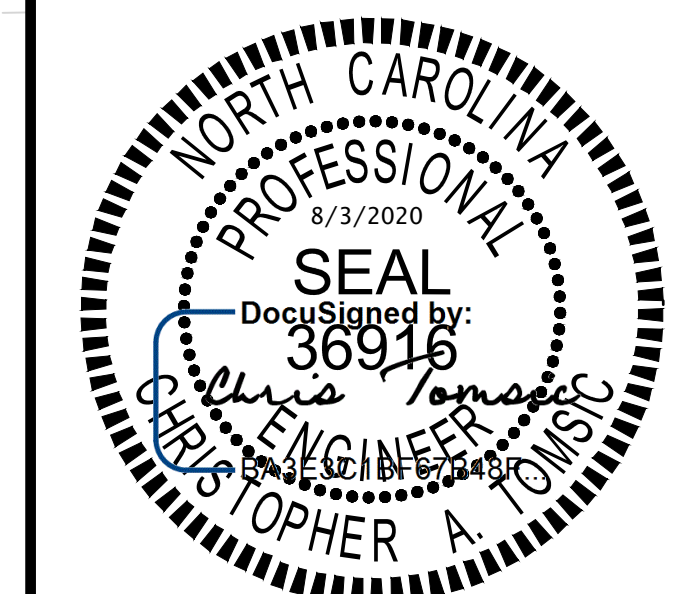


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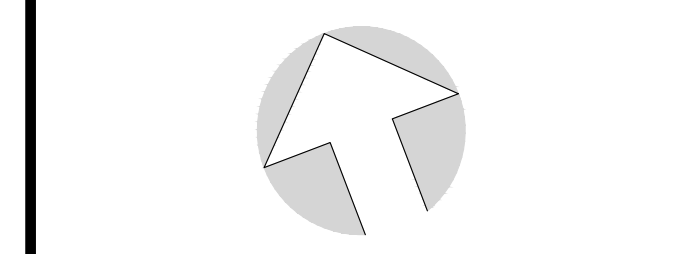
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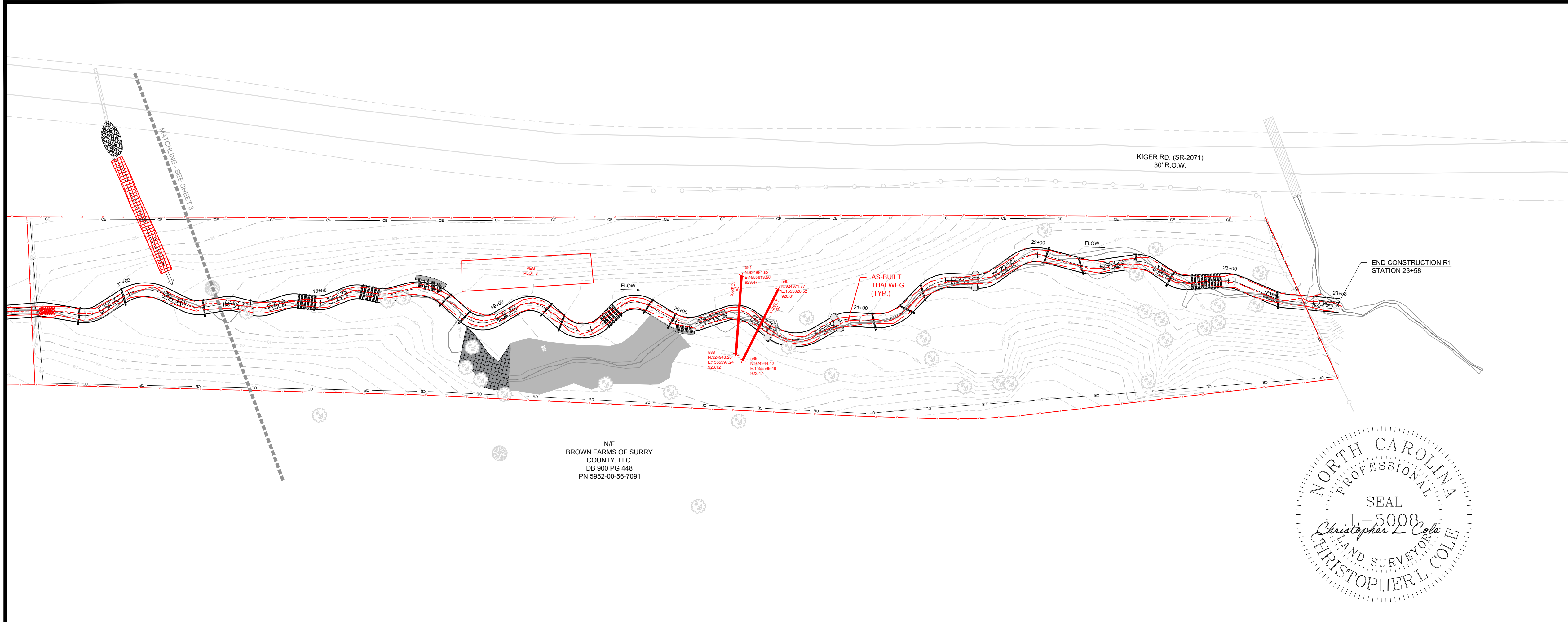
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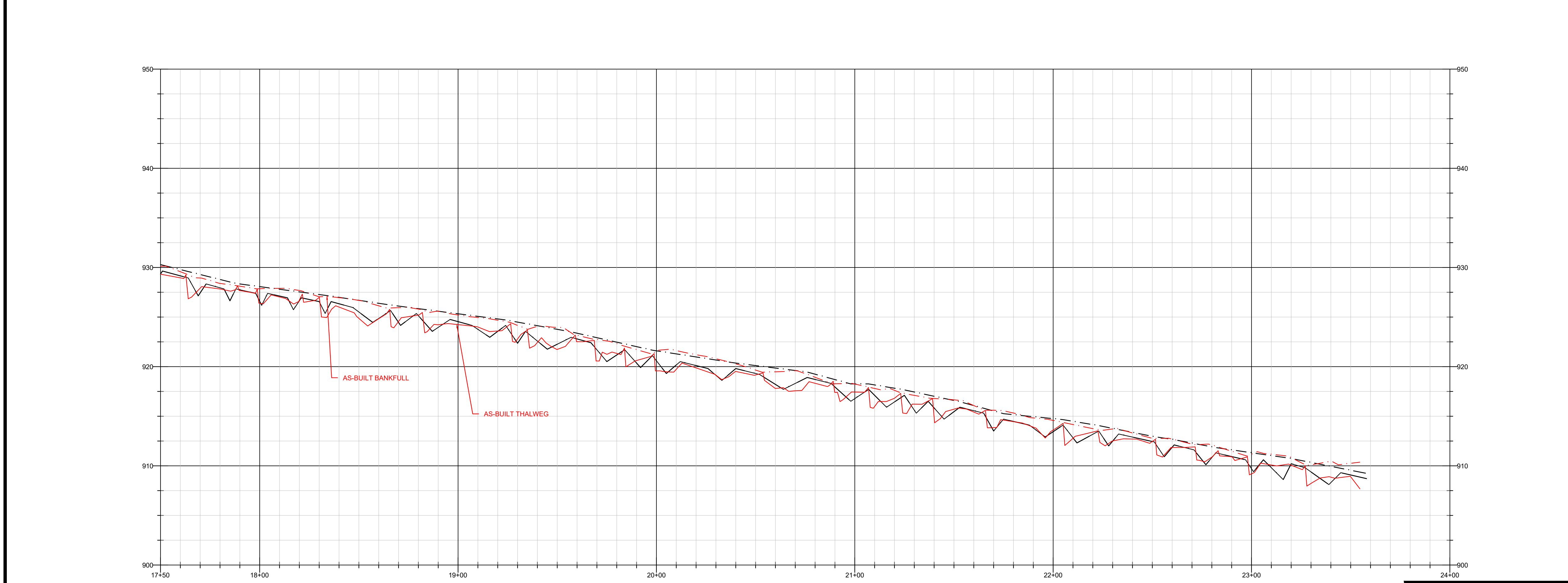
PLAN AND PROFILE

SHEET NUMBER

4



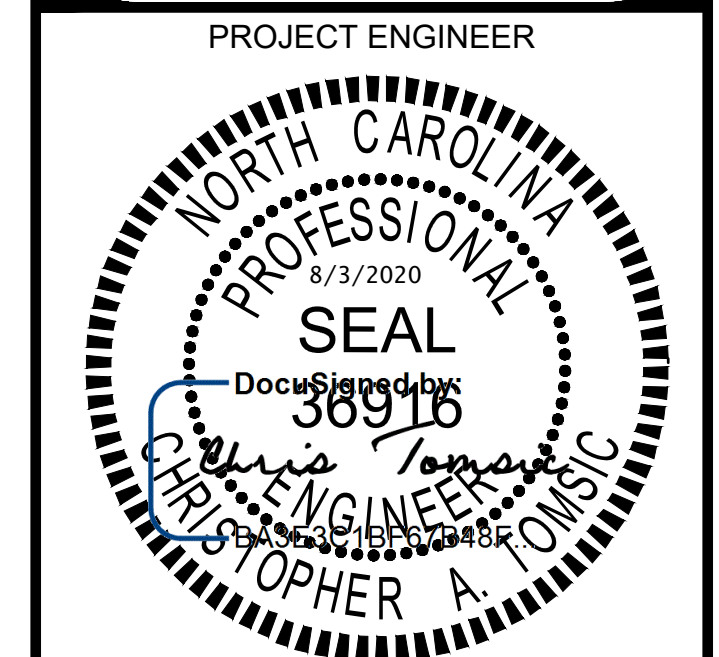
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 BROWN FARMS OF SURRY COUNTY, LLC.
 DB 900 PG 448
 PN 5952-00-56-7091



AS-BUILT



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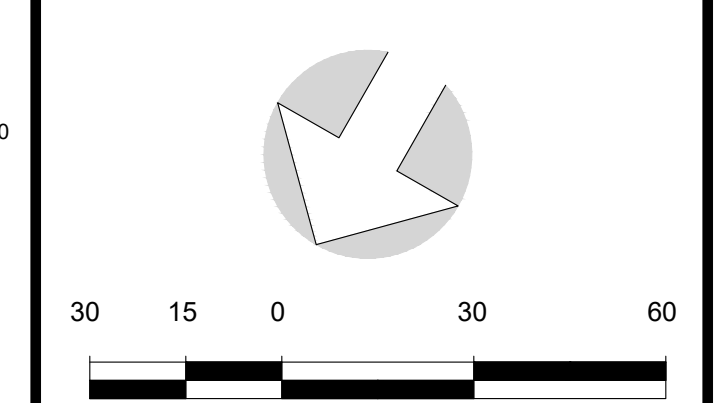


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PROJECT NAME
**HORNE CREEK
TRIBUTARIES
MITIGATION
PROJECT**
SURRY COUNTY, NC

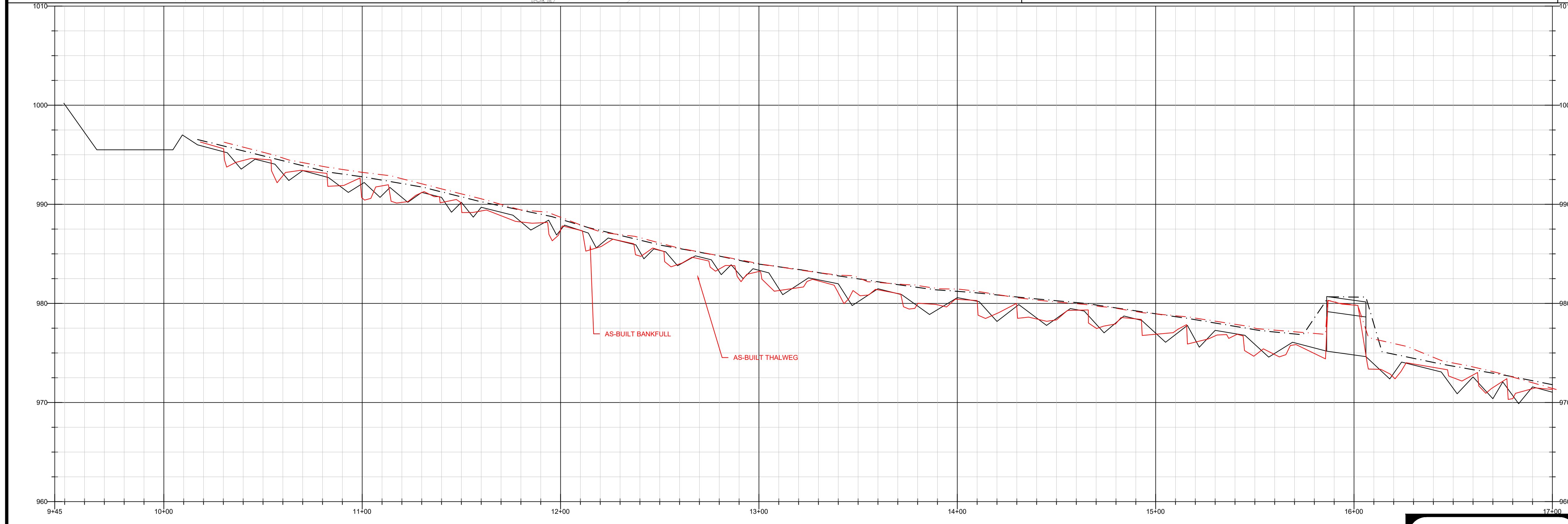
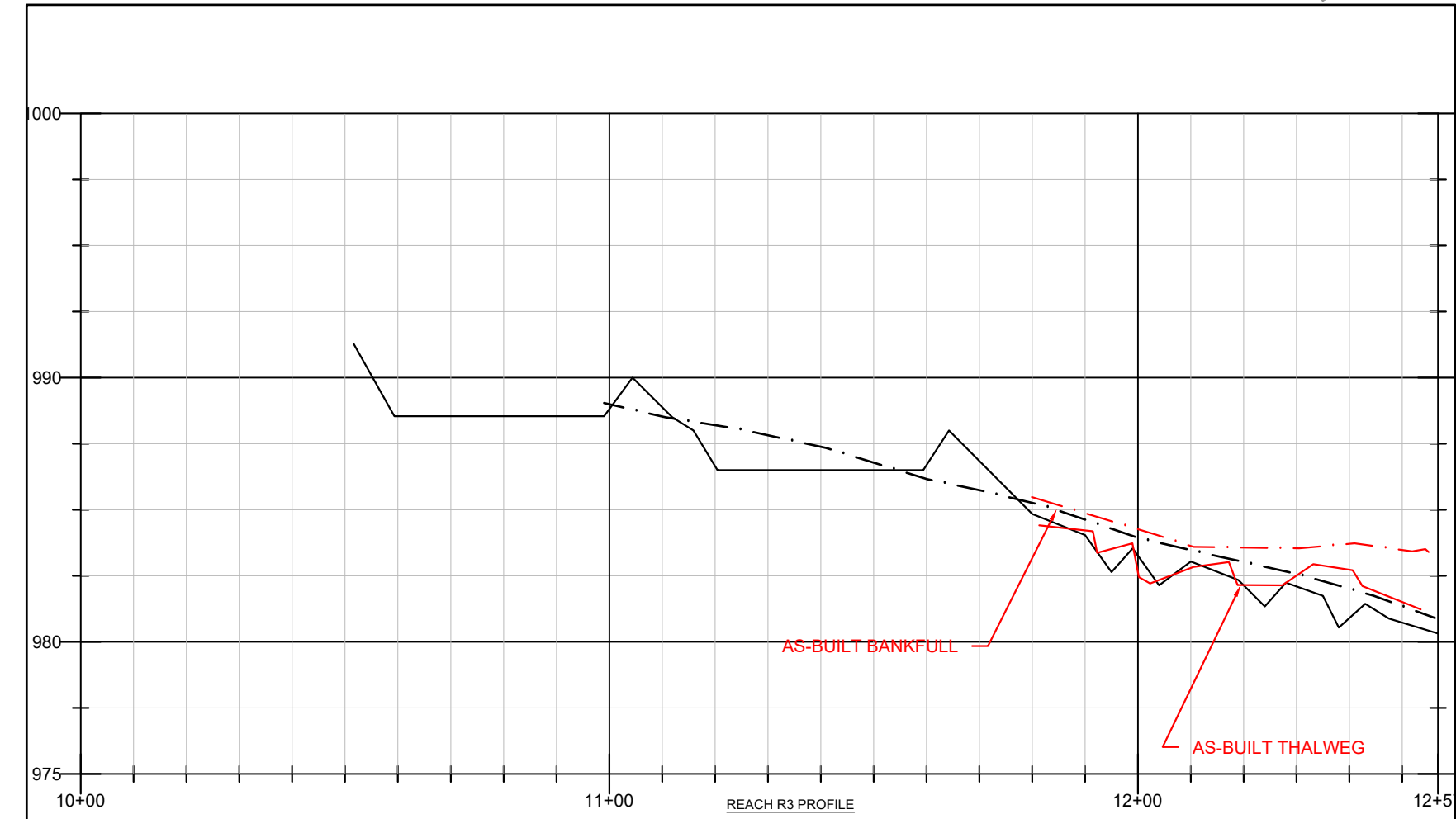
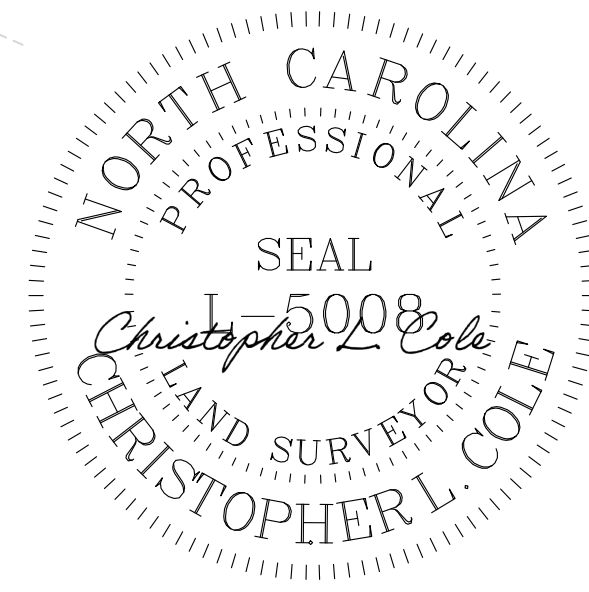
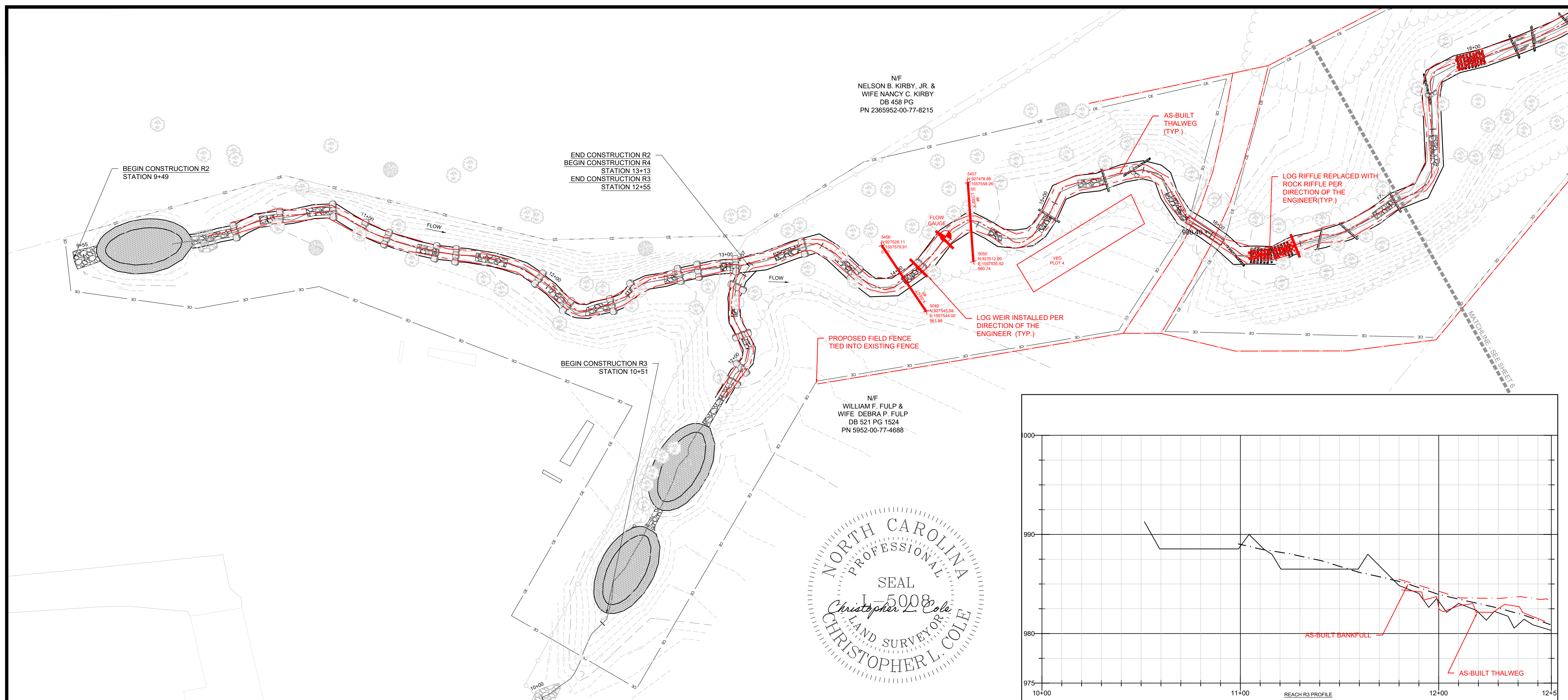
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DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 60'
VERT. SCALE :	1" = 12'



SHEET NAME

**PLAN AND
PROFILE**

SHEET NUMBER
5



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PROJECT ENGINEER

DocuSigned by:
36916
Christopher A. Tomasek
Professional Engineer, State of NC

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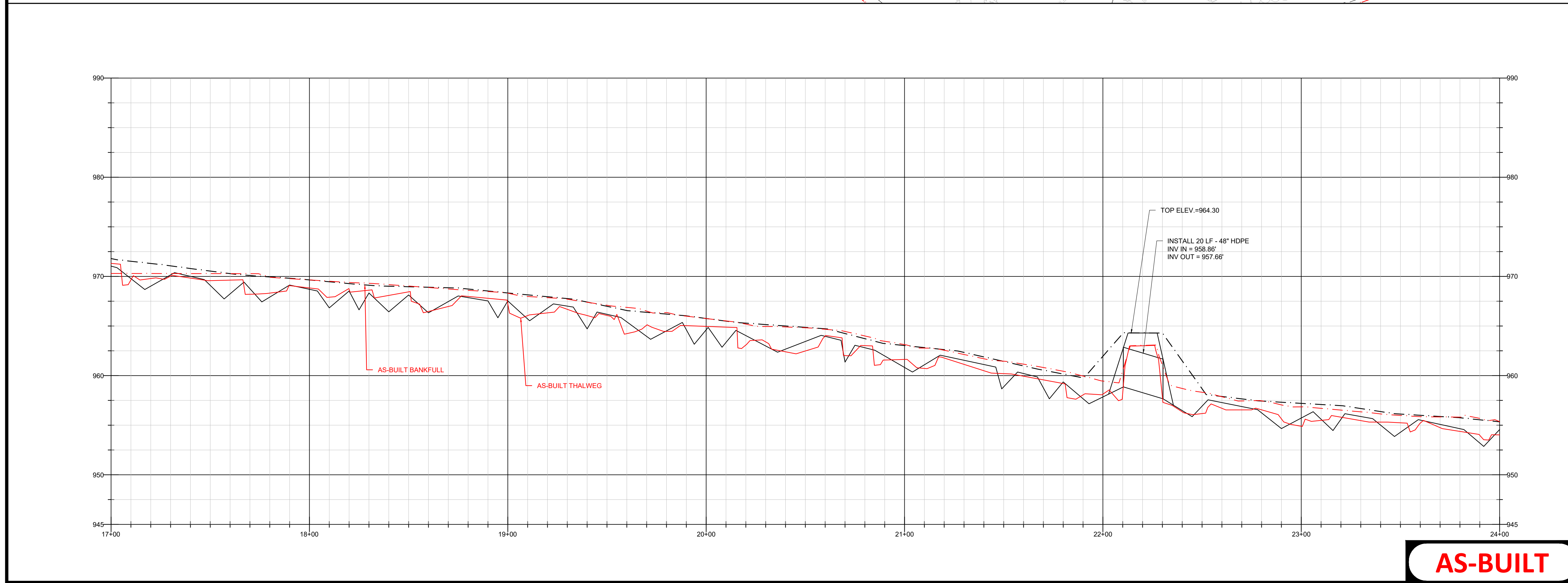
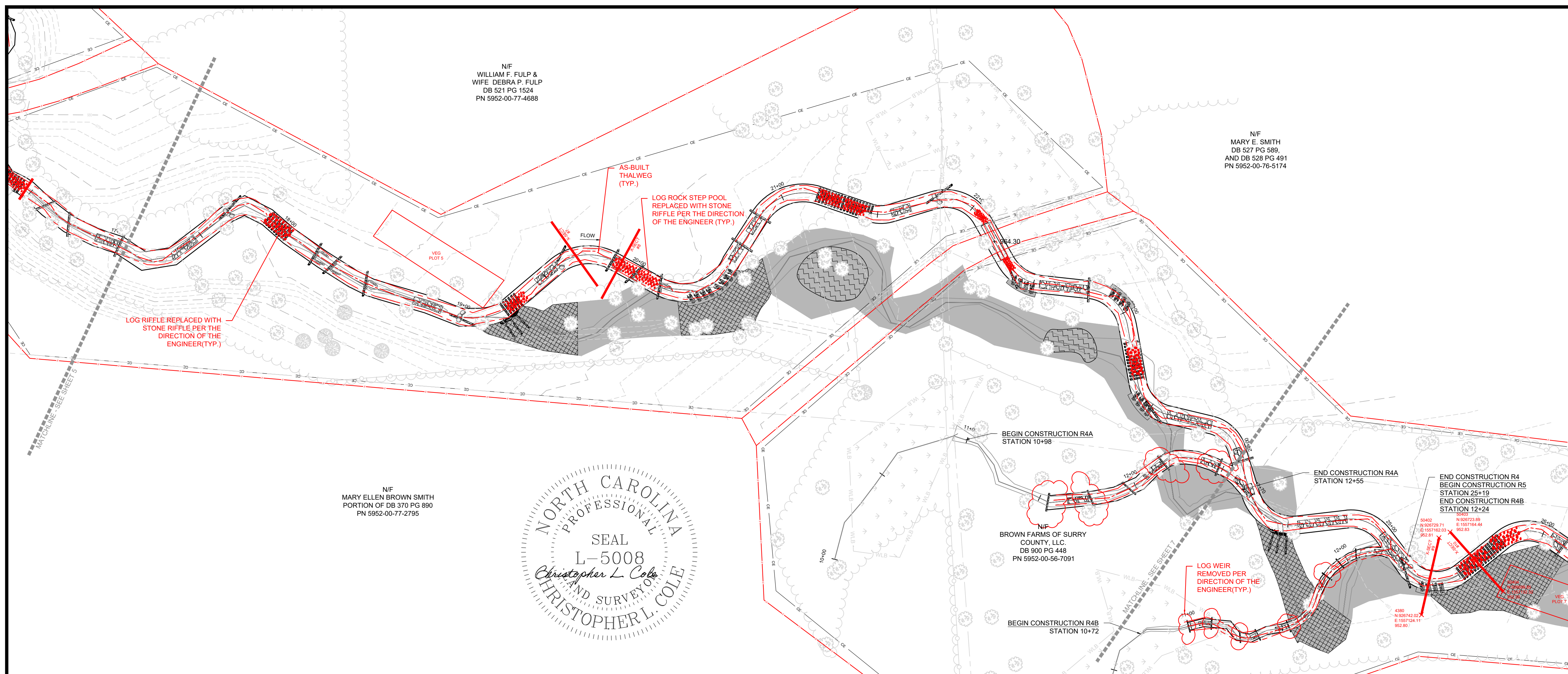
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GRAPHIC SCALE

SHEET NAME
PLAN AND PROFILE

SHEET NUMBER
6

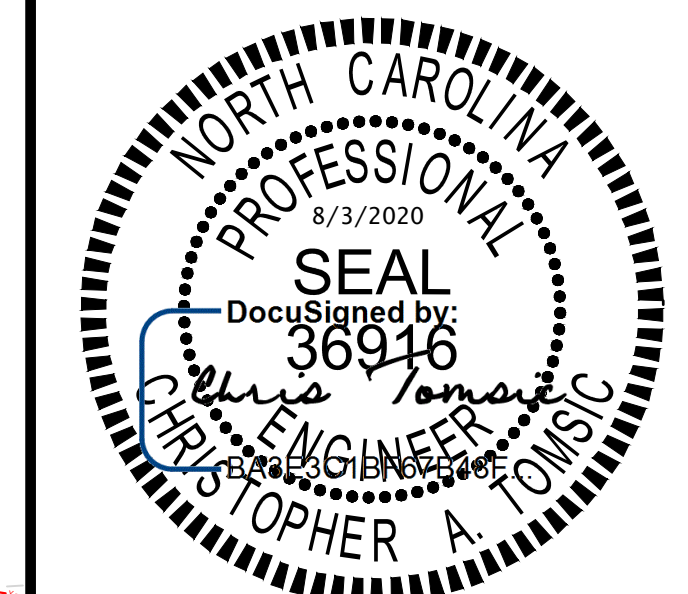


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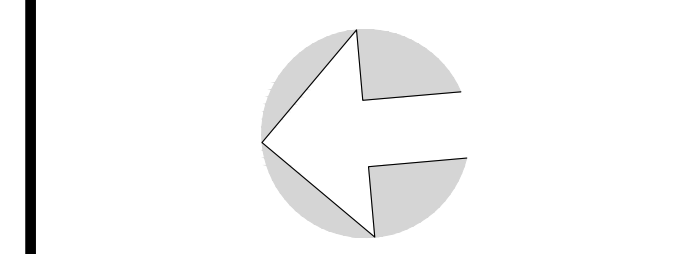
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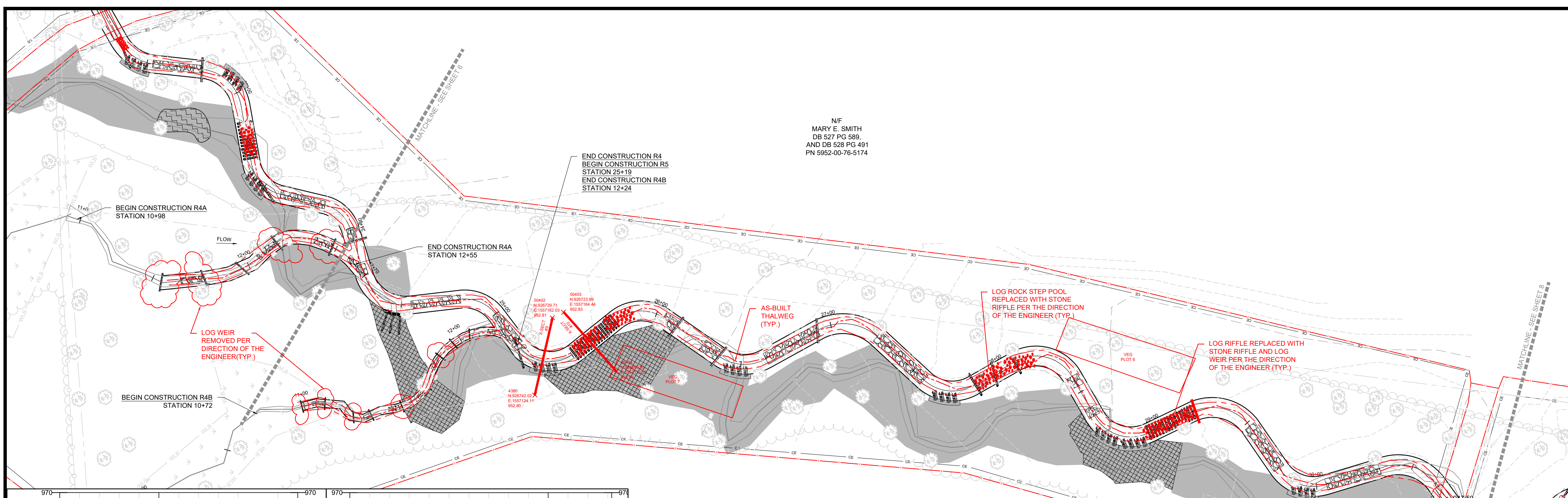
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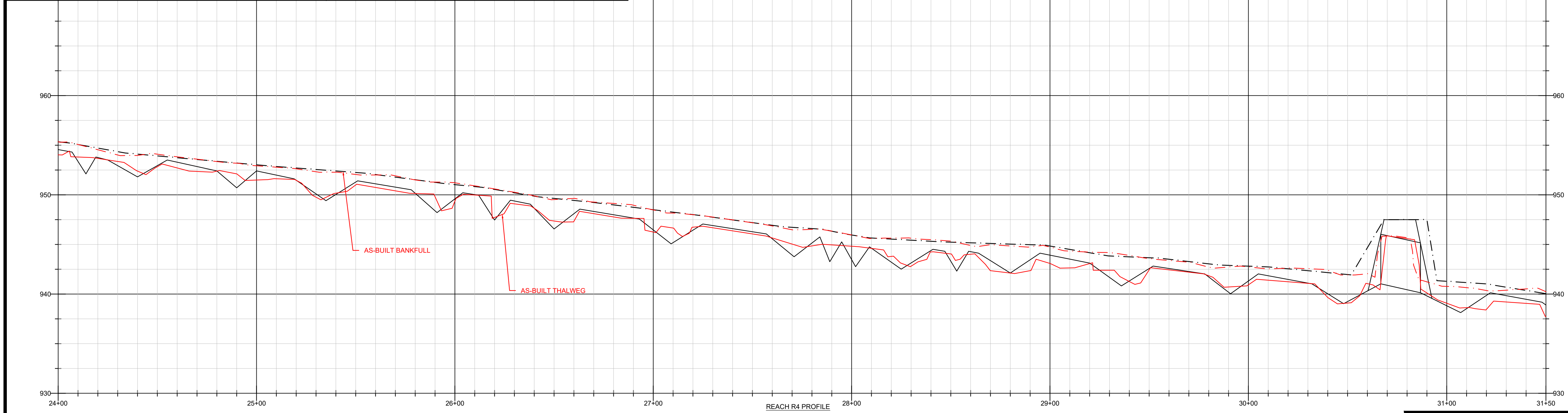
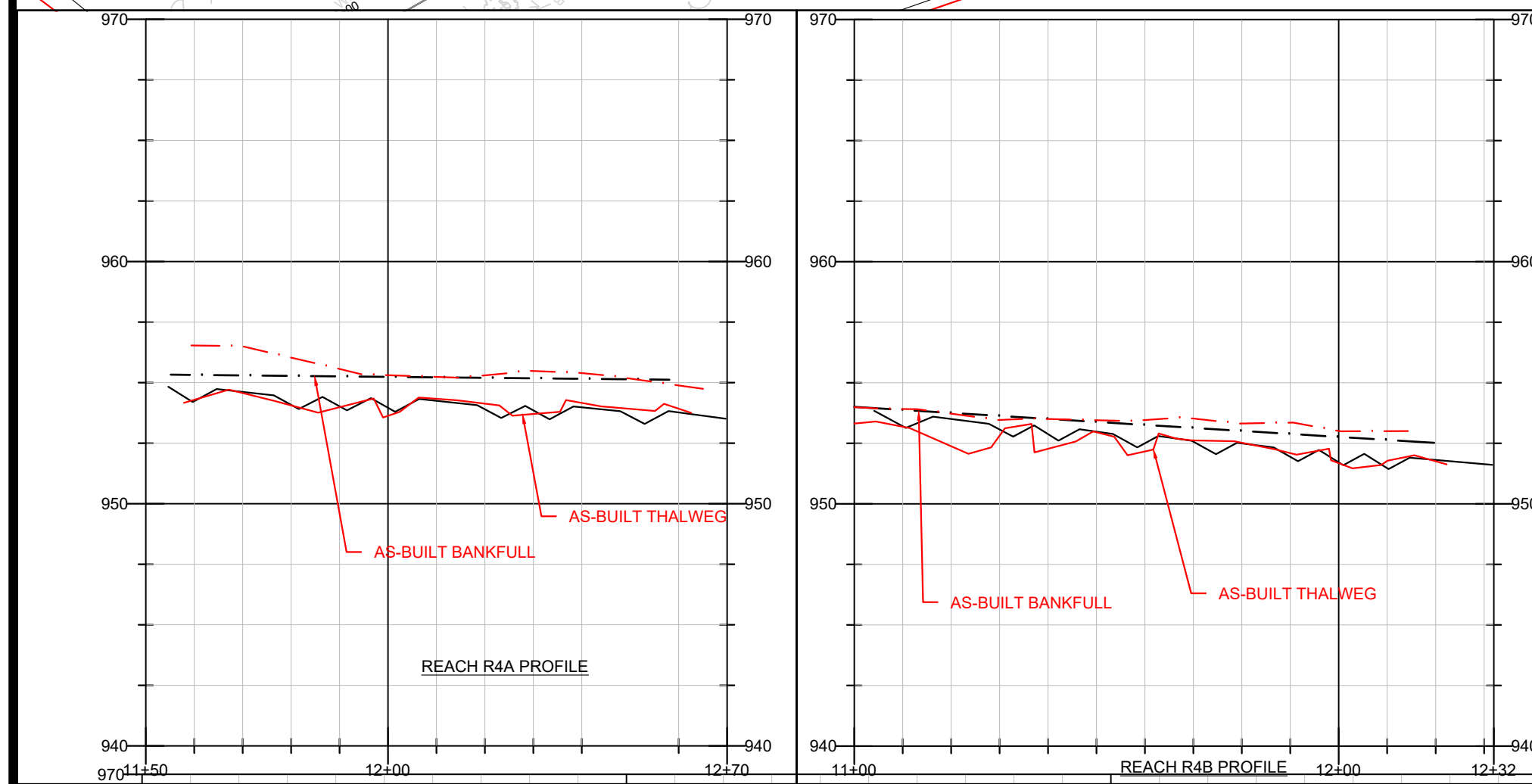
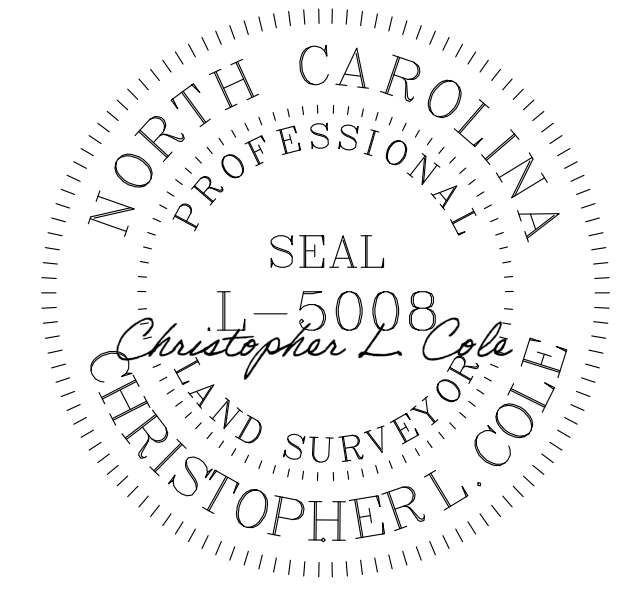
SHEET NUMBER

7



NF
 MARY E. SMITH
 DB 527 PG 589,
 AND DB 528 PG 491
 PN 5952-00-76-5174

NF
 BROWN FARMS OF SURRY COUNTY, LLC
 DB 900 PG 448
 PN 5952-00-56-7091



AS-BUILT



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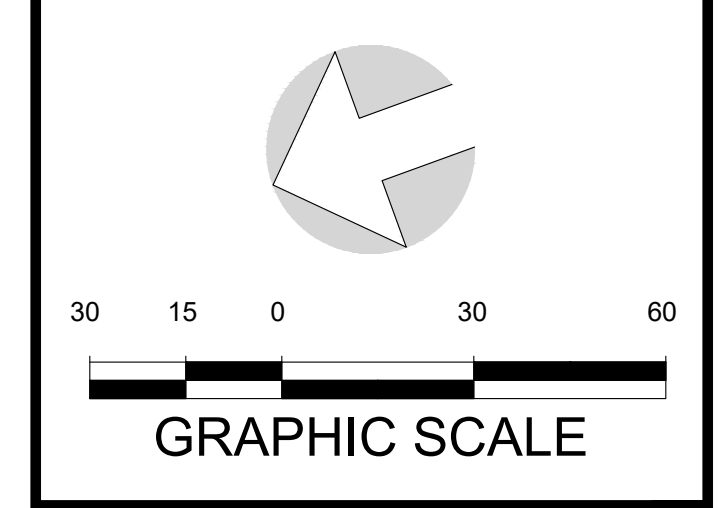
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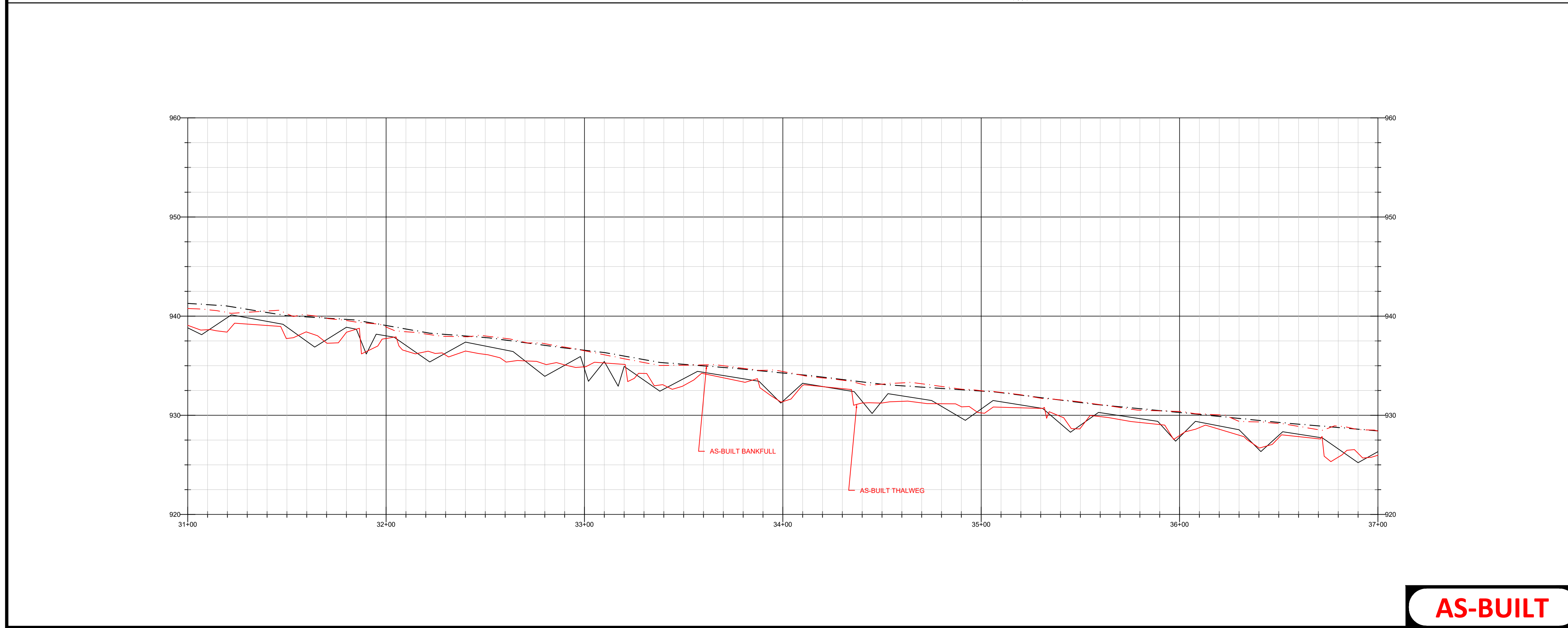
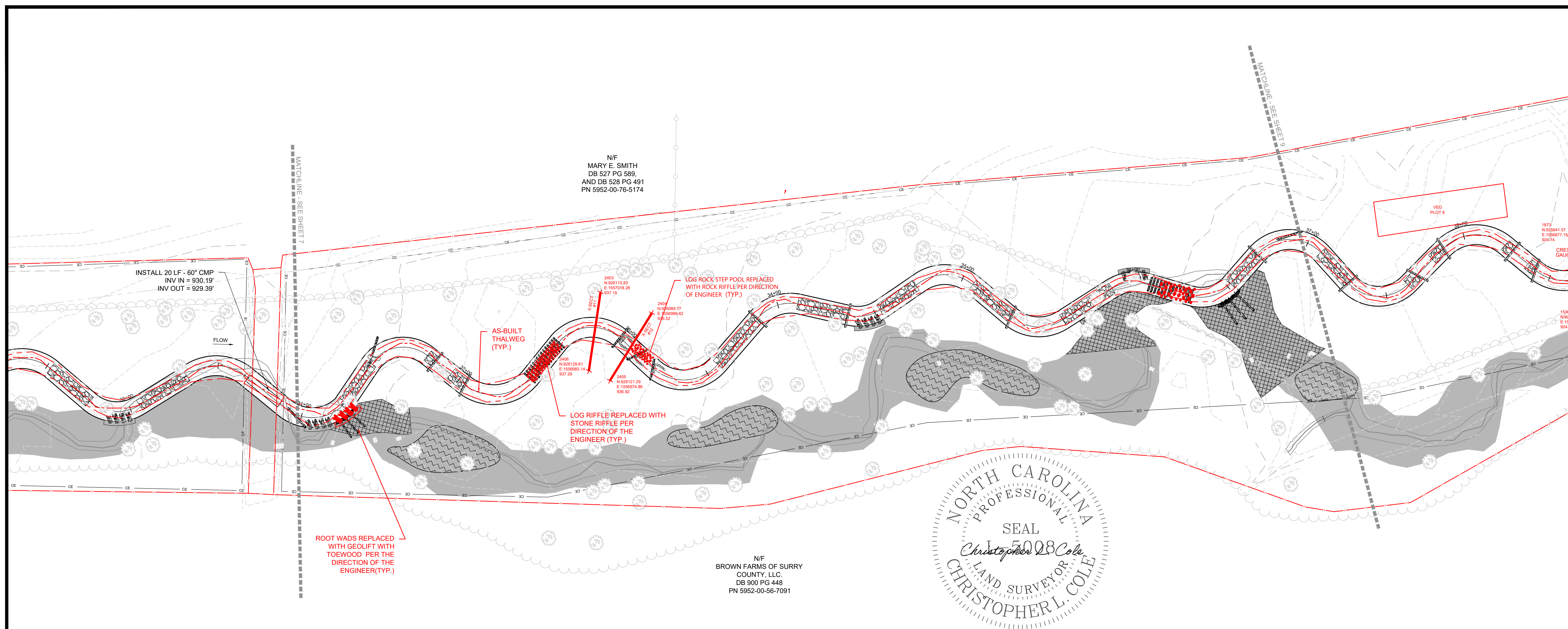
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SHEET NAME
**PLAN AND
PROFILE**

SHEET NUMBER
8

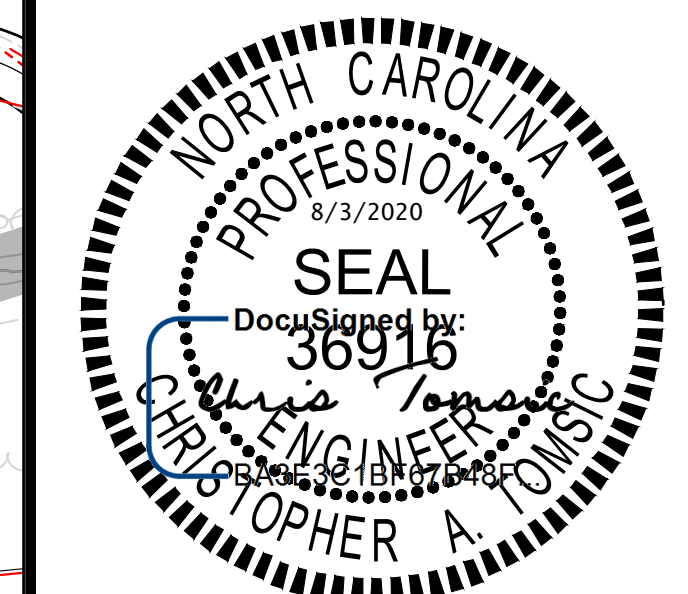


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 FIRM LICENSE NO. P-1480

REVISIONS

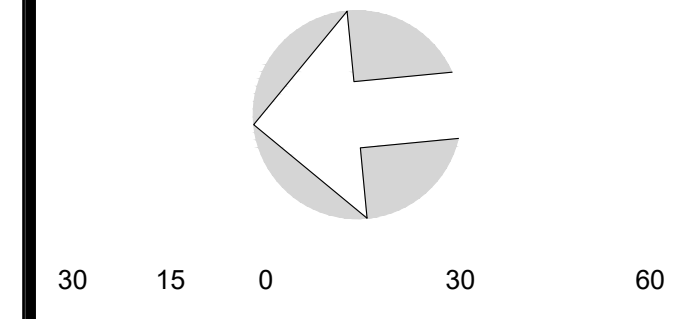
NO.	DATE	DESCRIPTION
A	12-13-18	DRAFT MIT PLAN
B	5-8-19	DRAFT FINAL MIT PLAN
C	7-26-19	FINAL MIT PLAN
D	2-2-20	IFC PLANS
E	7-2-20	AS-BUILT PLANS (FOR REVIEW ONLY)
F	8-3-20	FINAL AS-BUILT PLAN

PROJECT NAME

HORNE CREEK TRIBUTARIES MITIGATION PROJECT
 SURRY COUNTY, NC

DRAWING INFORMATION

PROJECT NO. :	100026
FILENAME :	ASB_03-10_HORNE CREEK_PP_SHEETS.DWG
DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 60'
VERT. SCALE :	1" = 12'



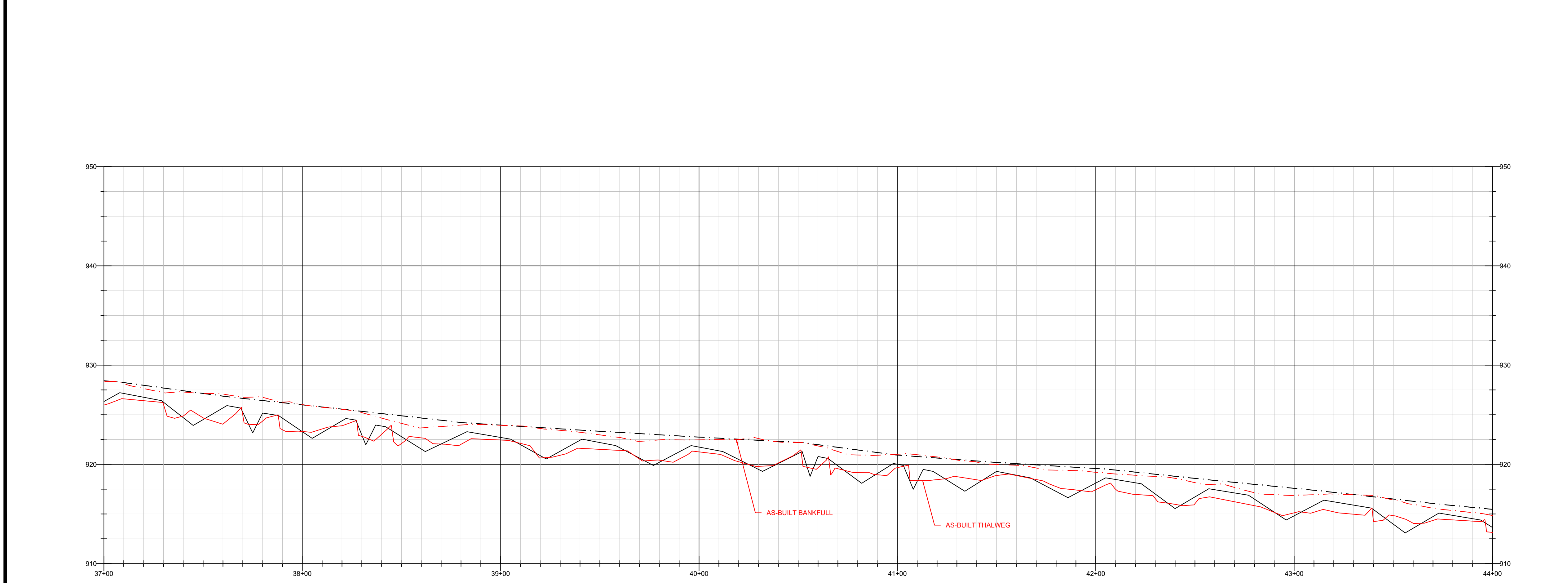
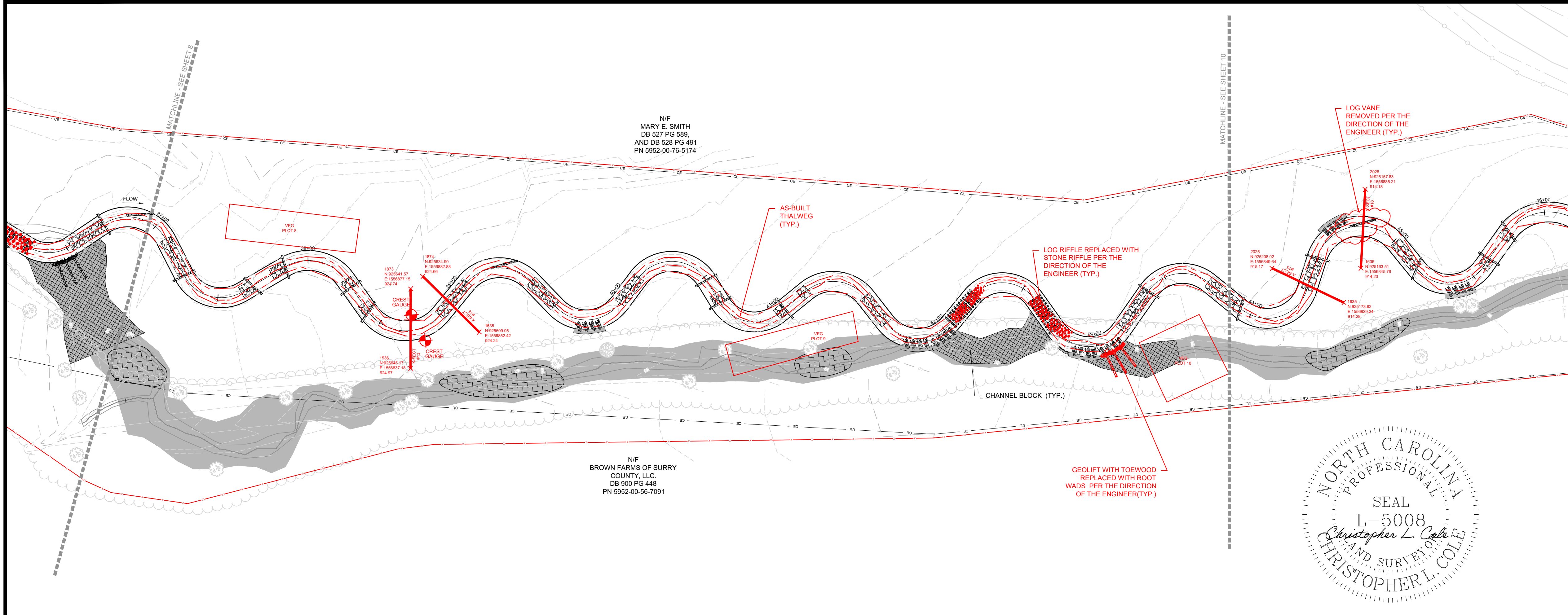
GRAPHIC SCALE

SHEET NAME

PLAN AND PROFILE

SHEET NUMBER

9

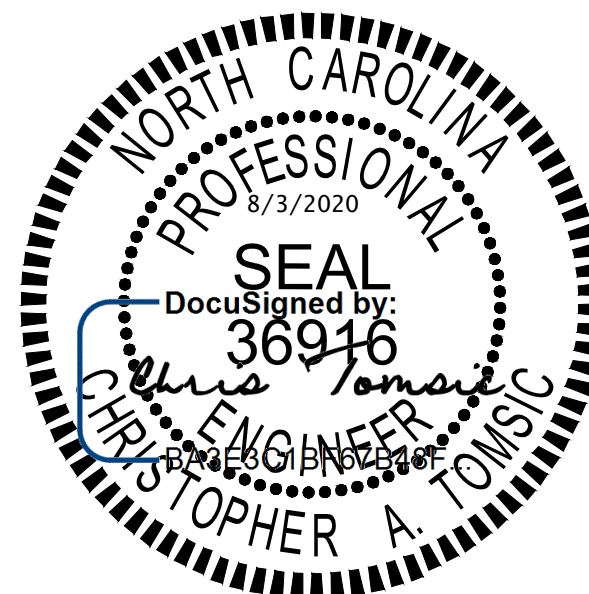


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36916
 Christopher L. Cole
 PROFESSIONAL ENGINEER
 STATE OF NORTH CAROLINA

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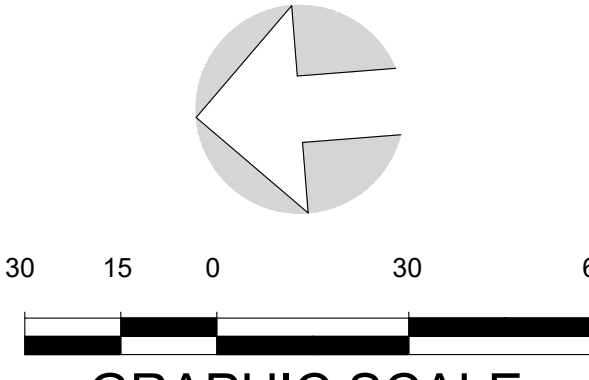
REVISIONS

NO.	DESCRIPTION	DATE
A	DRAFT MIT PLAN	12-13-18
B	DRAFT FINAL MIT PLAN	5-8-19
C	FINAL MIT PLAN	7-26-19
D	IFC PLANS	2-2-20
E	AS-BUILT PLANS(FOR REVIEW ONLY)	7-2-20
F	FINAL AS-BUILT PLAN	8-3-20

PROJECT NAME
HORNE CREEK TRIBUTARIES MITIGATION PROJECT
 SURRY COUNTY, NC

DRAWING INFORMATION

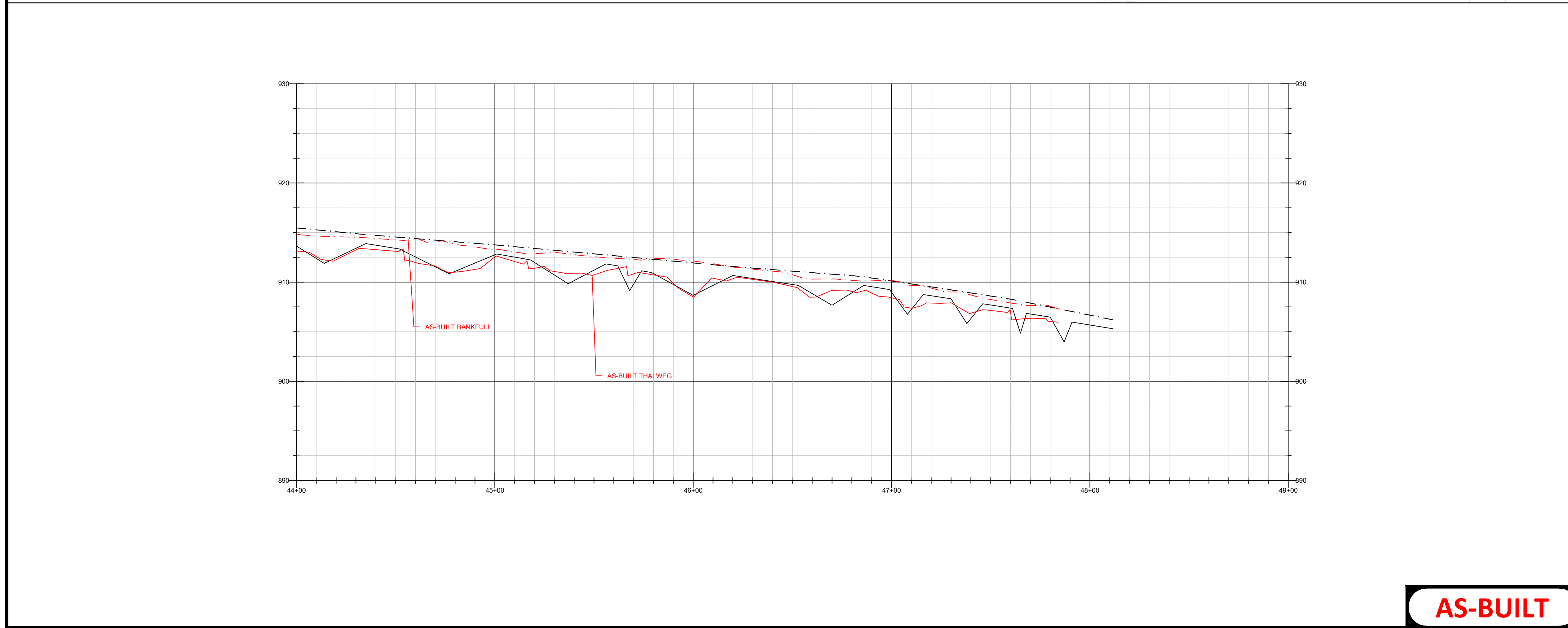
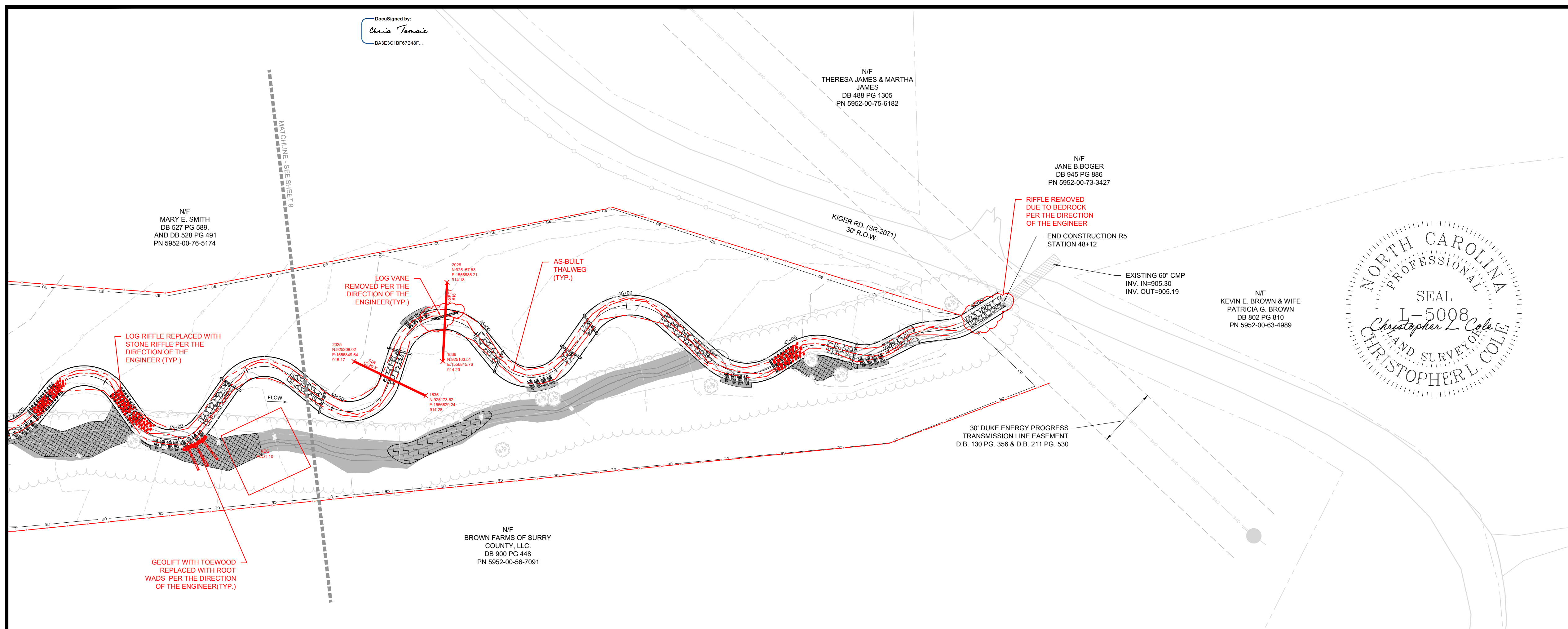
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FILENAME :	ASB_03-10_HORNE CREEK_PP_SHEETS.DWG
DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 60'
VERT. SCALE :	1" = 12'



GRAPHIC SCALE

SHEET NAME
PLAN AND PROFILE

SHEET NUMBER
10

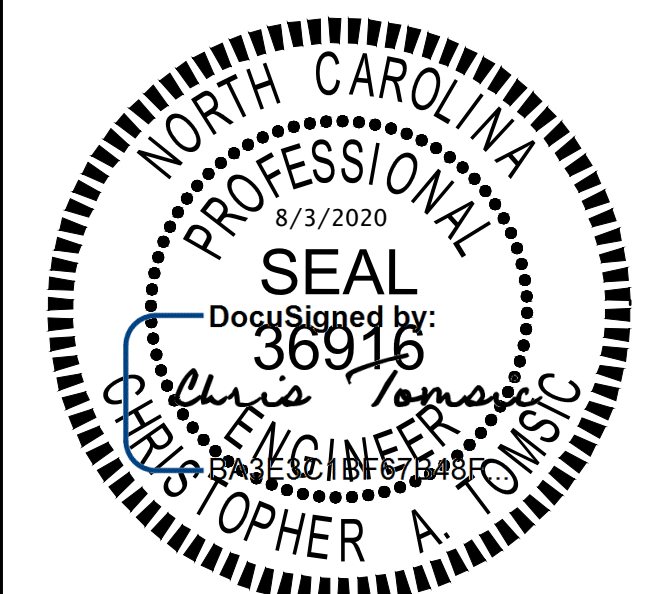


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 ENGINEER
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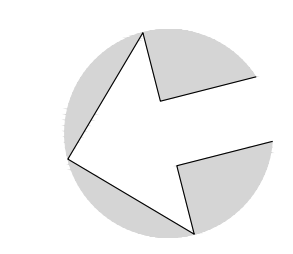
NO.	DESCRIPTION	DATE
A	DRAFT MIT PLAN	12-13-18
B	DRAFT FINAL MIT PLAN	5-8-19
C	FINAL MIT PLAN	7-26-19
D	IFC PLANS	2-2-20
E	AS-BUILT PLANS(FOR REVIEW ONLY)	7-2-20
F	FINAL AS-BUILT PLAN	8-3-20

PROJECT NAME

**HORNE CREEK
 TRIBUTARIES
 MITIGATION
 PROJECT**
 SURRY COUNTY, NC

DRAWING INFORMATION

PROJECT NO. :	100026
FILENAME :	ASB_11_HORNE_CREEK_MONITORING.PLAN.DWG
DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 100'
VERT. SCALE :	N/A



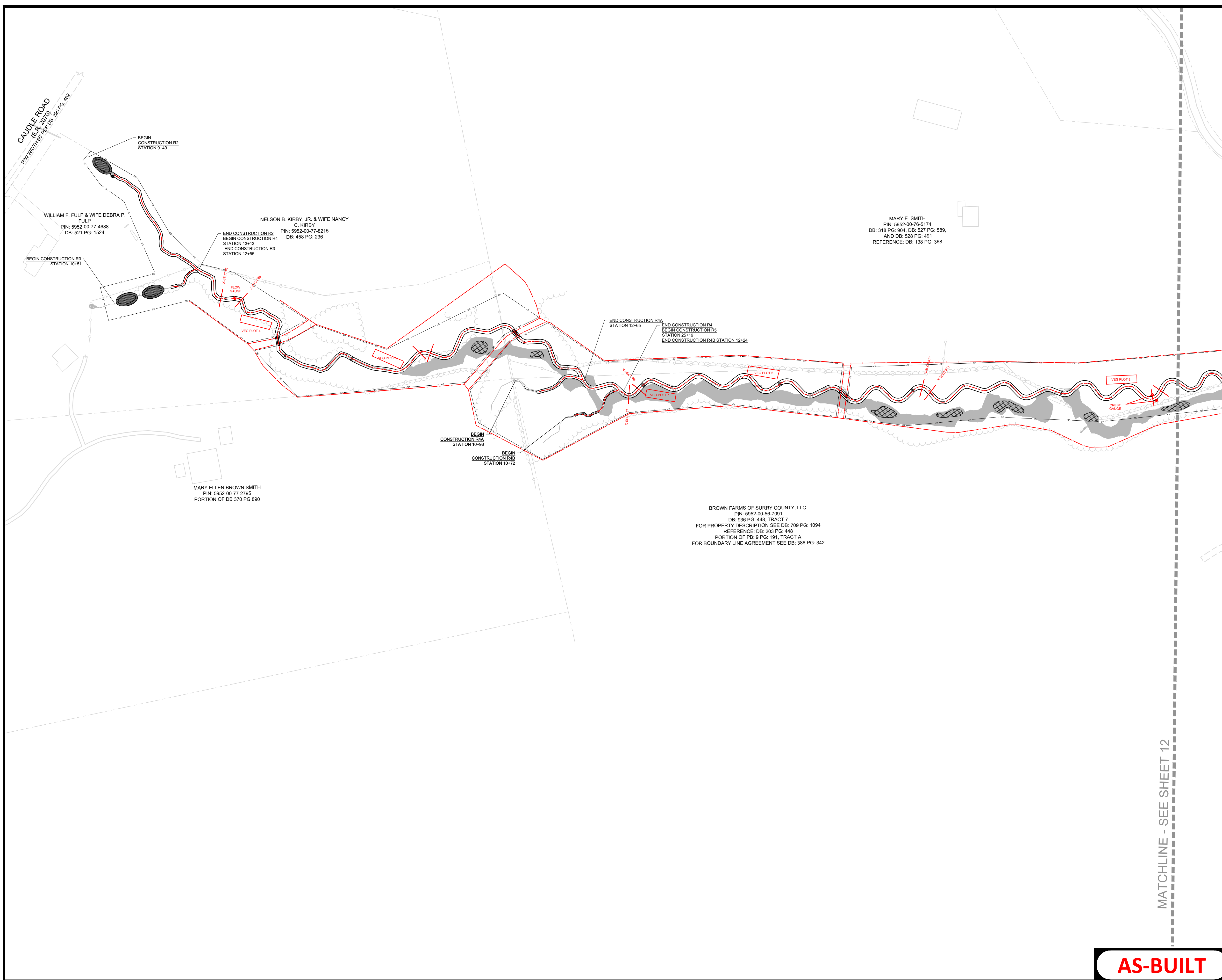
GRAPHIC SCALE

SHEET NAME

**MONITORING
 PLAN**

SHEET NUMBER

11

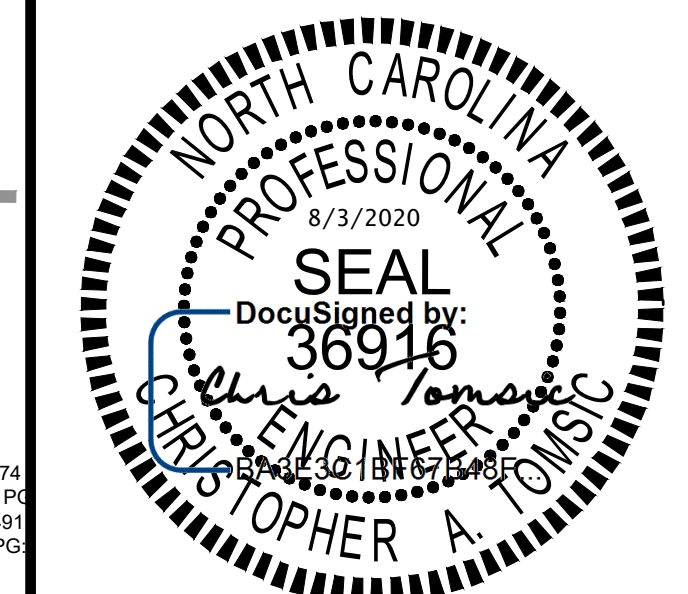


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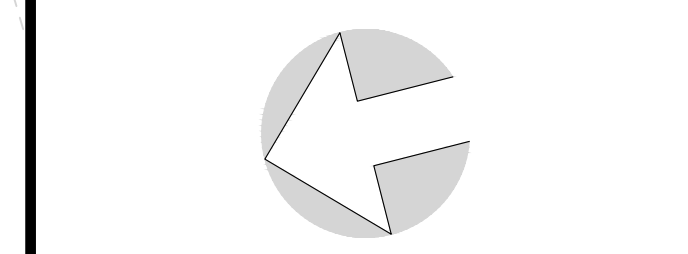
NO.	DATE
A	12-13-18
B	5-8-19
C	7-26-19
D	2-2-20
E	7-2-20
F	8-3-20

PROJECT NAME

**HORNE CREEK
TRIBUTARIES
MITIGATION
PROJECT**
SURRY COUNTY, NC

DRAWING INFORMATION

PROJECT NO. :	100026
FILENAME :	ASB_11_HORNE_CREEK_MONITORING.PLAN.DWG
DESIGNED BY :	CAT
DRAWN BY :	CAT/APL
DATE :	8-3-20
HORIZ. SCALE :	1" = 150'
VERT. SCALE :	N/A



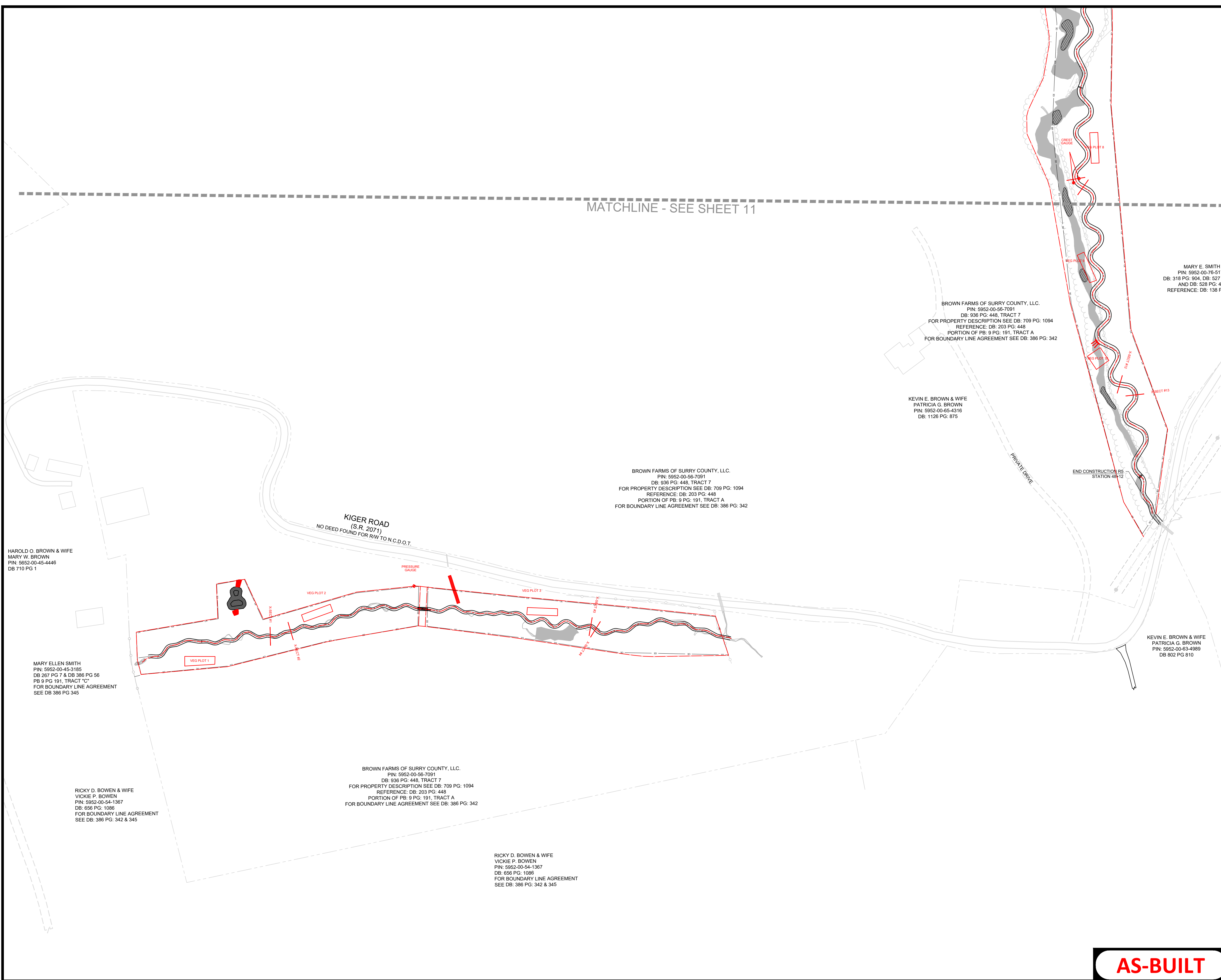
GRAPHIC SCALE

SHEET NAME

**MONITORING
PLAN**

SHEET NUMBER

12



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