

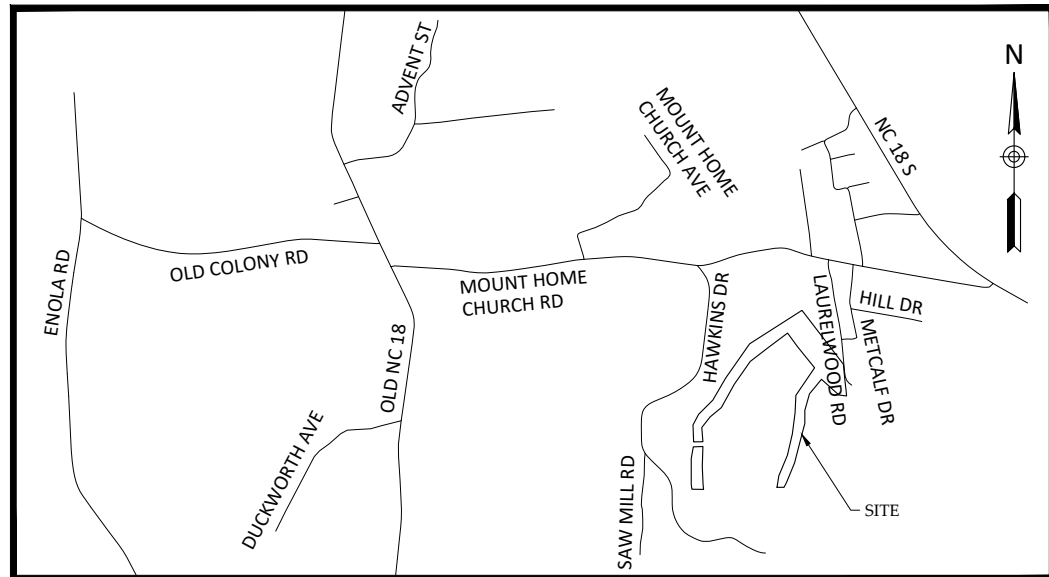
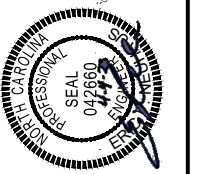
# Laurel Valley Mitigation Site Record Drawing

## Record Drawing

### Burke County, North Carolina

### Catawba River Basin 03050101

for  
NCDEQ  
Division of Mitigation Services



Vicinity Map  
Not to Scale



**RECORD DRAWINGS  
ISSUED: APRIL 4, 2023**

Stream Origins		
Stream	Latitude	Longitude
EAST PRONG HUNTING CREEK	N35° 42' 08.00"	W81° 38' 29.62"
UT1	N35° 41' 57.58"	W81° 38' 48.12"
UT2	N35° 41' 57.72"	W81° 38' 37.66"

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East Prong Hunting Creek	1.1.1 - 1.1.3
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UT2	1.3.1 - 1.3.4
Planting Plan	
Planting Tables	2.1
Planting Plan	2.2 - 2.5
Fencing Plan	3.0

#### Project Directory

<p><b>Engineering:</b> Wildlands Engineering, Inc License No. F-0831 167-B Haywood Rd Asheville, NC 28806 Eric Neuhaus, Project Engineer</p> <p><b>Surveying:</b> Kee Mapping and Surveying, PA P.O. Box 2566 Asheville, NC 28802 Phillip B. Kee, PLS 828-575-9021</p>	<p><b>Owner:</b> NCDEQ 1652 Mail Service Center Raleigh, NC 27699 Harry Tsomides (828) 545-7057</p> <p>DMS Project No. 100140 NCDEQ Contract No. 7575-02</p> <p>USACE Action ID No. SAW-2020-00053 NC DWR No. 20200018</p>
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Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

Title Sheet

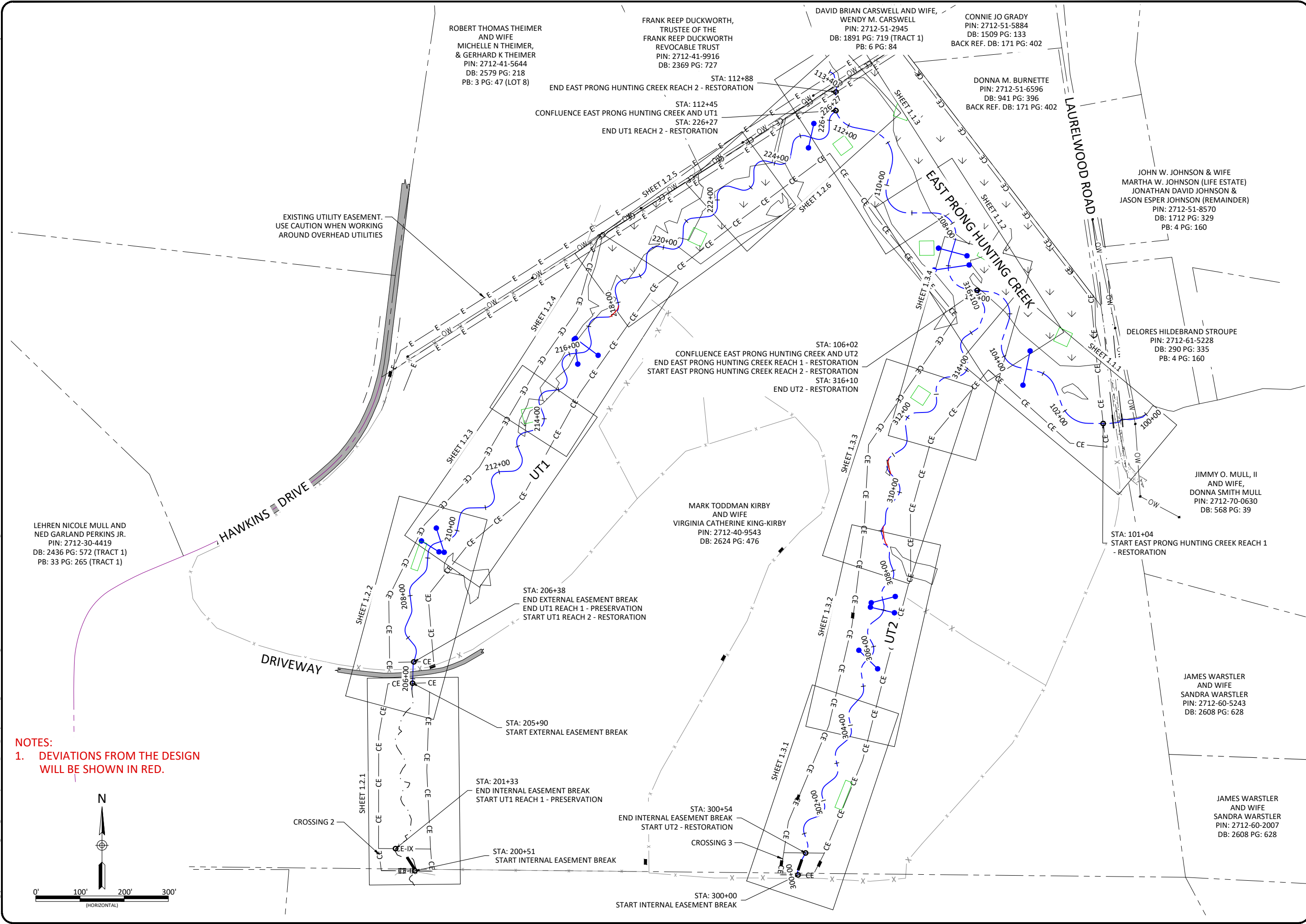
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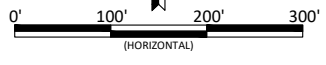
Date: April 4, 2023  
 Job Number: W02187  
 Project Engineer: EN  
 Drawn By: CAW  
 Checked By: IK

0.1

April 4, 2023  
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**NOTES:**  
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.



ROBERT THOMAS THEIMER AND WIFE  
MICHELLE N THEIMER, & GERHARD K THEIMER  
PIN: 2712-41-5644  
DB: 2579 PG: 218  
PB: 3 PG: 47 (LOT 8)

FRANK REEP DUCKWORTH, TRUSTEE OF THE  
FRANK REEP DUCKWORTH REVOCABLE TRUST  
PIN: 2712-41-9916  
DB: 2369 PG: 727

DAVID BRIAN CARSWELL AND WIFE,  
WENDY M. CARSWELL  
PIN: 2712-51-2945  
DB: 1891 PG: 719 (TRACT 1)  
PB: 6 PG: 84

CONNIE JO GRADY  
PIN: 2712-51-5884  
DB: 1509 PG: 133  
BACK REF. DB: 171 PG: 402

DONNA M. BURNETTE  
PIN: 2712-51-6596  
DB: 941 PG: 396  
BACK REF. DB: 171 PG: 402

JOHN W. JOHNSON & WIFE  
MARTHA W. JOHNSON (LIFE ESTATE)  
JONATHAN DAVID JOHNSON &  
JASON ESPER JOHNSON (REMAINDER)  
PIN: 2712-51-8570  
DB: 1712 PG: 329  
PB: 4 PG: 160

DELORES HILDEBRAND STROUPE  
PIN: 2712-61-5228  
DB: 290 PG: 335  
PB: 4 PG: 160

JIMMY O. MULL, II AND WIFE,  
DONNA SMITH MULL  
PIN: 2712-70-0630  
DB: 568 PG: 39

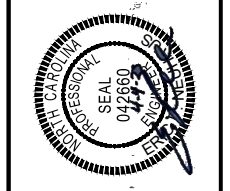
MARK TODDMAN KIRBY AND WIFE  
VIRGINIA CATHERINE KING-KIRBY  
PIN: 2712-40-9543  
DB: 2624 PG: 476

STA: 101+04  
START EAST PRONG HUNTING CREEK REACH 1 - RESTORATION

JAMES WARSTLER AND WIFE  
SANDRA WARSTLER  
PIN: 2712-60-5243  
DB: 2608 PG: 628

JAMES WARSTLER AND WIFE  
SANDRA WARSTLER  
PIN: 2712-60-2007  
DB: 2608 PG: 628

Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina



Revisions:

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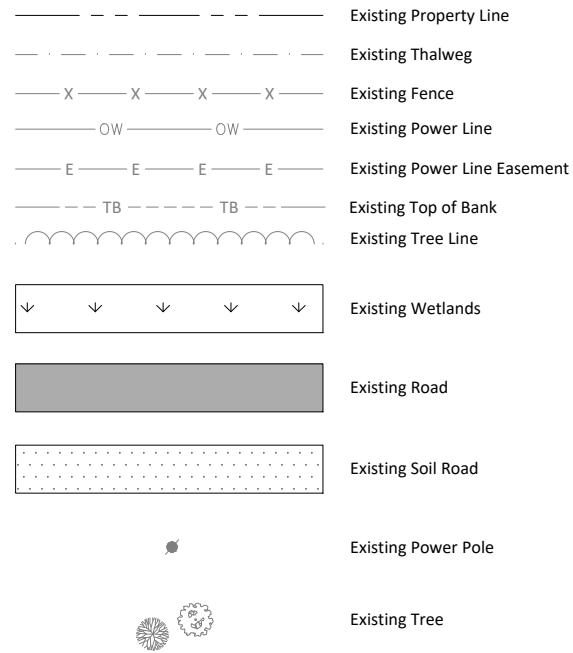
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Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: JK

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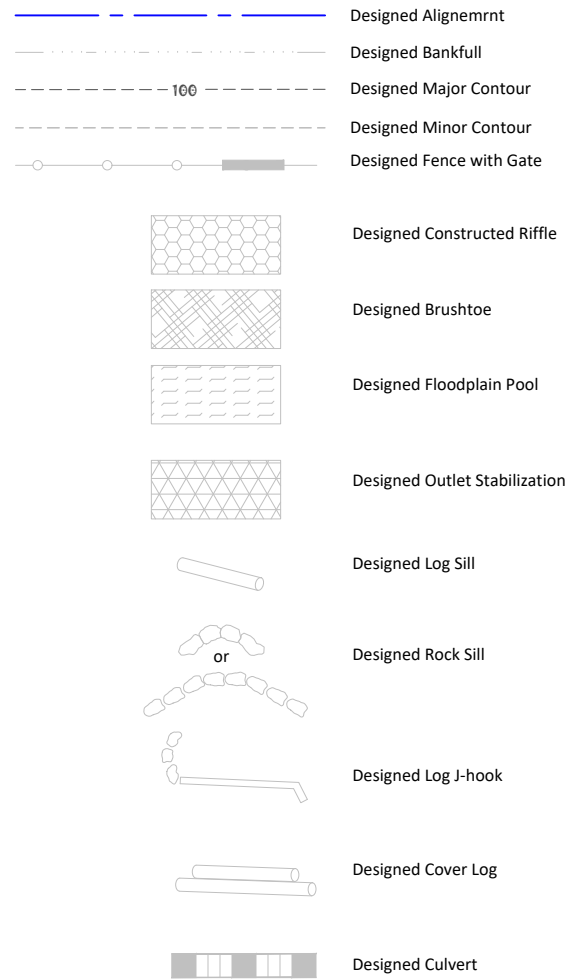
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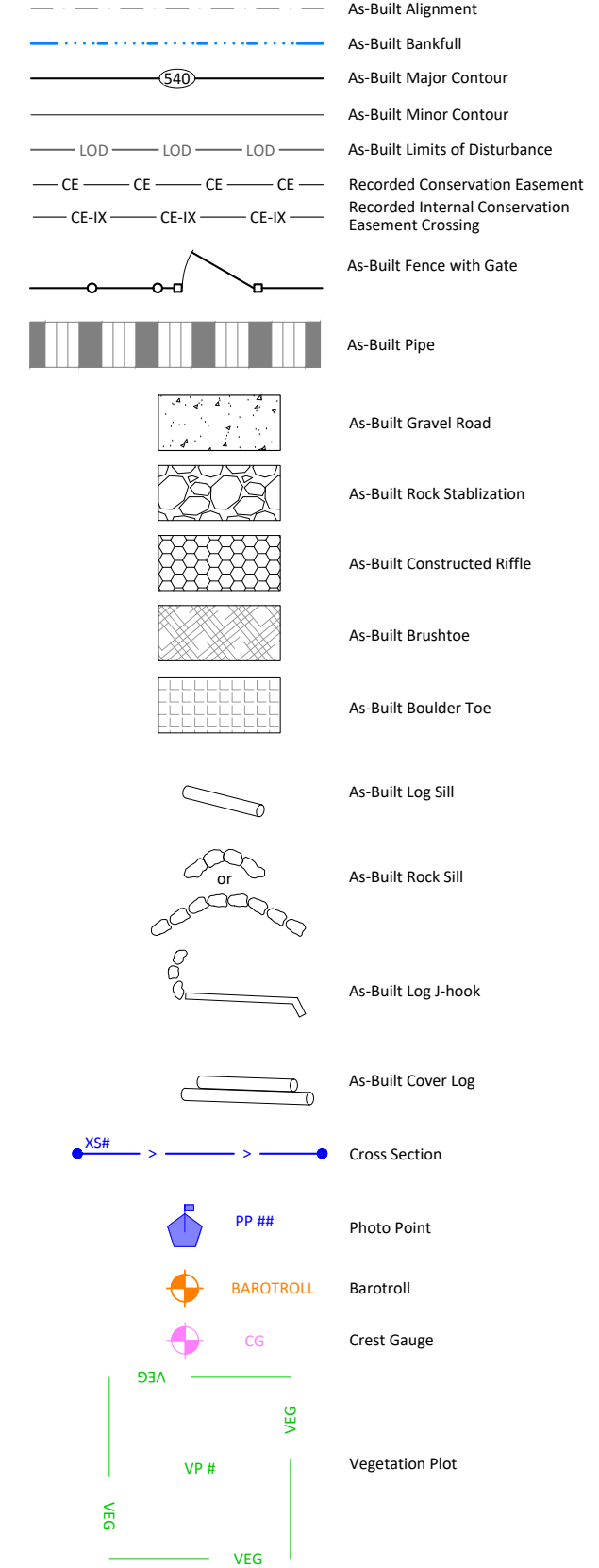
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### Designed Features and Structures



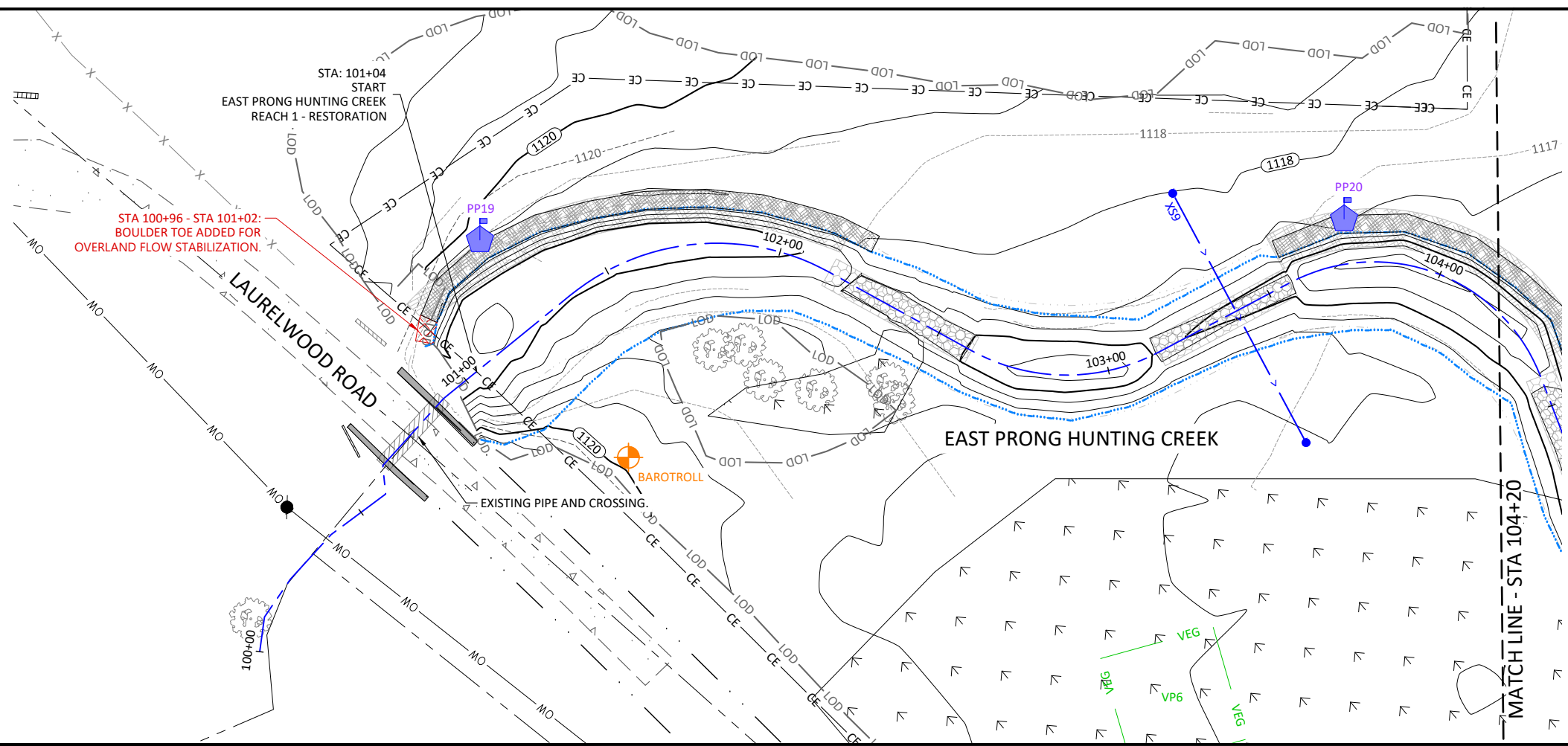
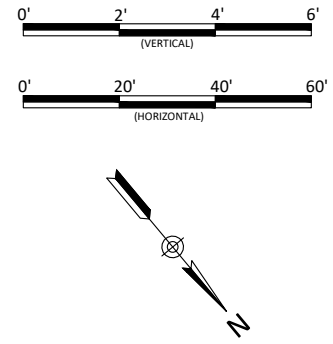
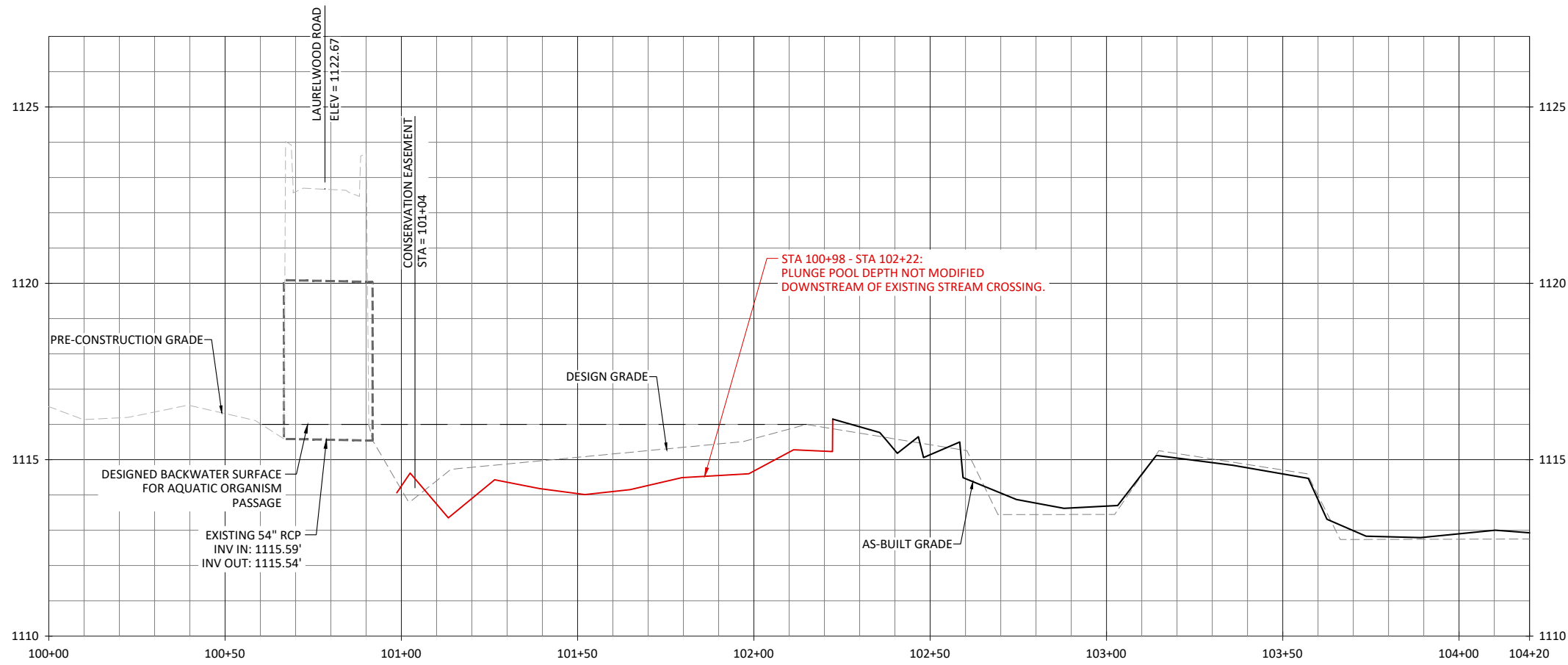
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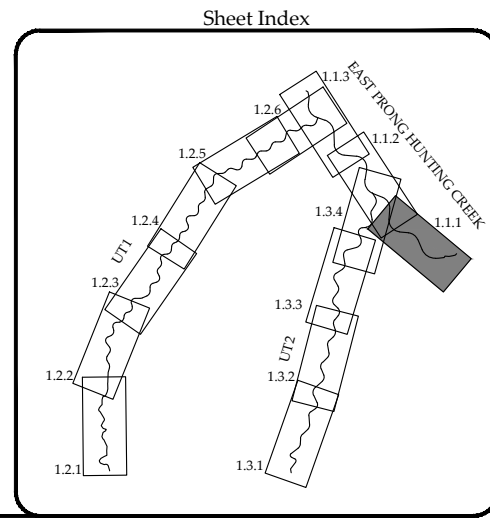
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- Survey Dates:
  - Existing Conditions Survey: 09/2020
  - Boundary Survey: 01/2021
  - As-Built Survey: 10/31/2022 - 1/9/2023
- Easement Reference: "Conservation Easement Survey for the State of North Carolina, Division of Mitigation Services, Project Name: "Laurel Valley Site", SPO File No. 12-EL, DMS Site ID No. 100140", dated 8/30/31, Prepared By Kee Mapping Mapping and Surveying, Recorded in the Burke County North Carolina Register of Deeds on 09/15/2021 in Deed Book 2570, Page 123 and Plat Book 57, Page 69.
- Map Reference: "An As-Built Survey for Wildlands Engineering, Inc., The State Of North Carolina NCDEQ Department of Mitigation Services "Laurel Valley Site", Burke County, North Carolina", surveyed between the dates of 10/31/2022-01/09/2023 and prepared by Kee Mapping and Surveying on February 23, 2023.

**NOTE:**  
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.



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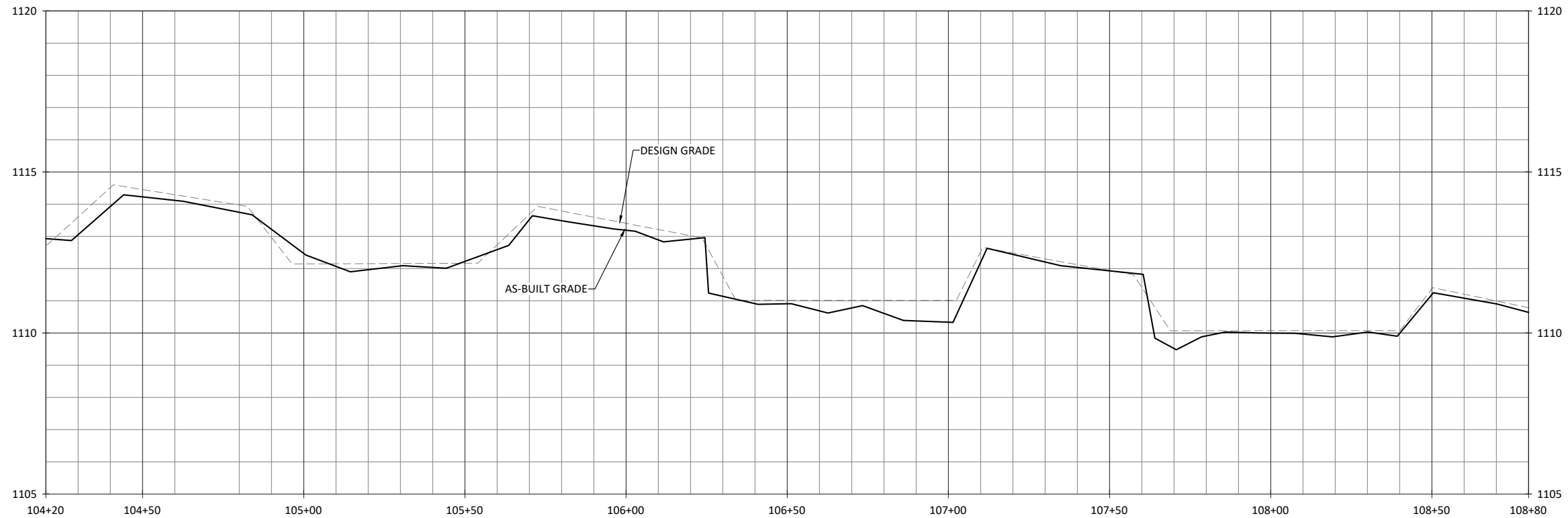
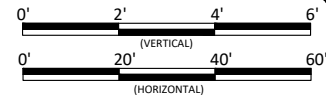
Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina  
East Prong Hunting Creek  
Stream Plan and Profile



Date:	April 4, 2023
Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK
Revisions:	

1.1.1

Sheet

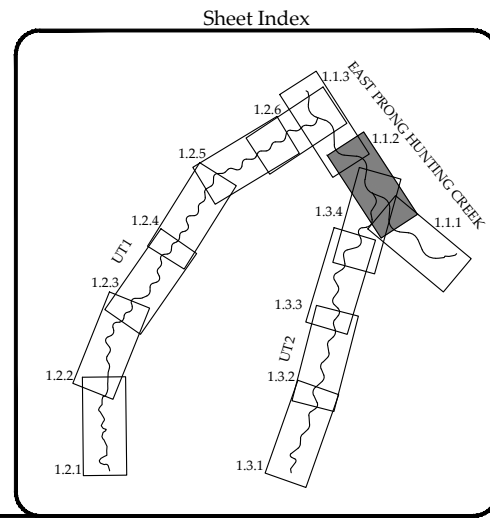
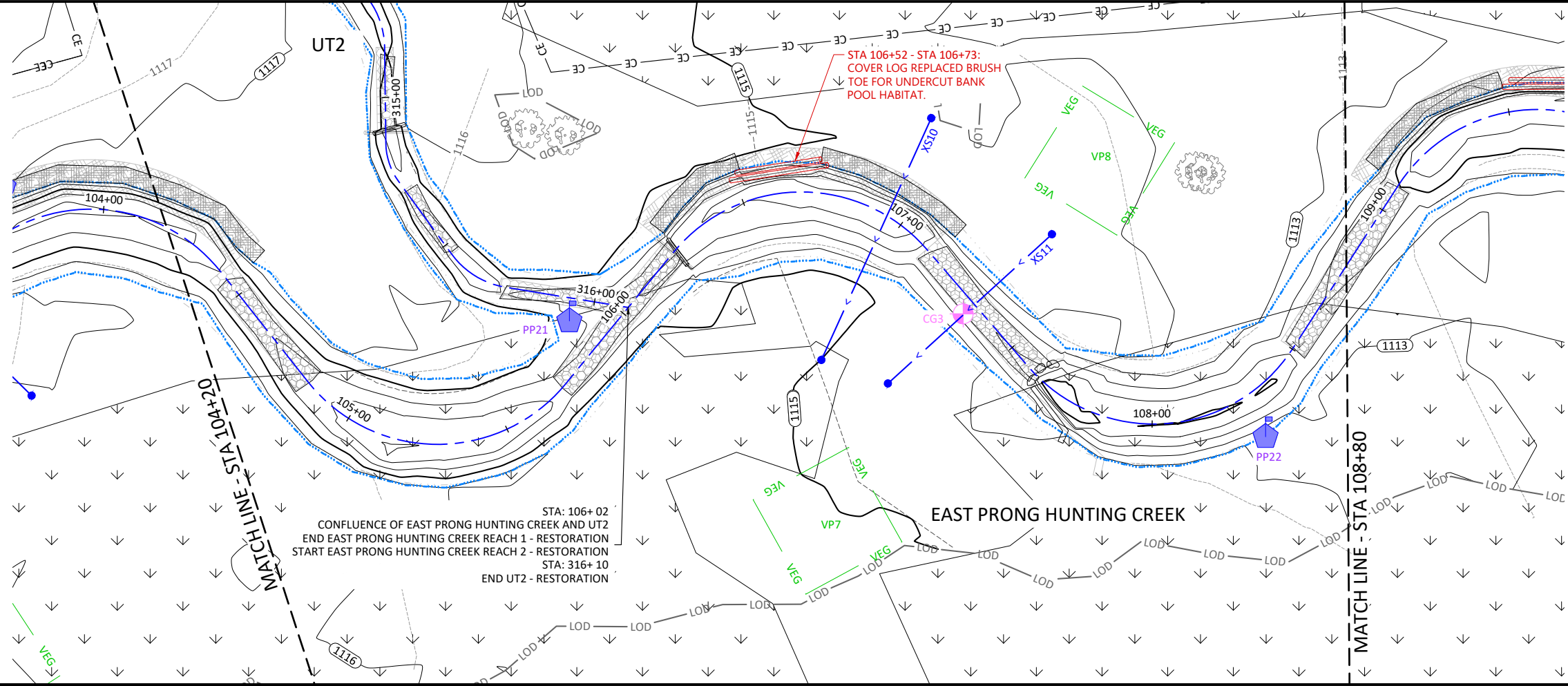


**WILDLANDS**  
ENGINEERING  
167-B Haywood Rd  
Asheville, NC 28806  
Tel: 828.774.5547  
License No. F-0831



Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina  
East Prong Hunting Creek  
Stream Plan and Profile

- NOTES:  
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.  
2. AS-BUILT INFORMATION FOR UT2 IS ADDRESSED ON SHEETS 1.3.1 THROUGH 1.3.4.



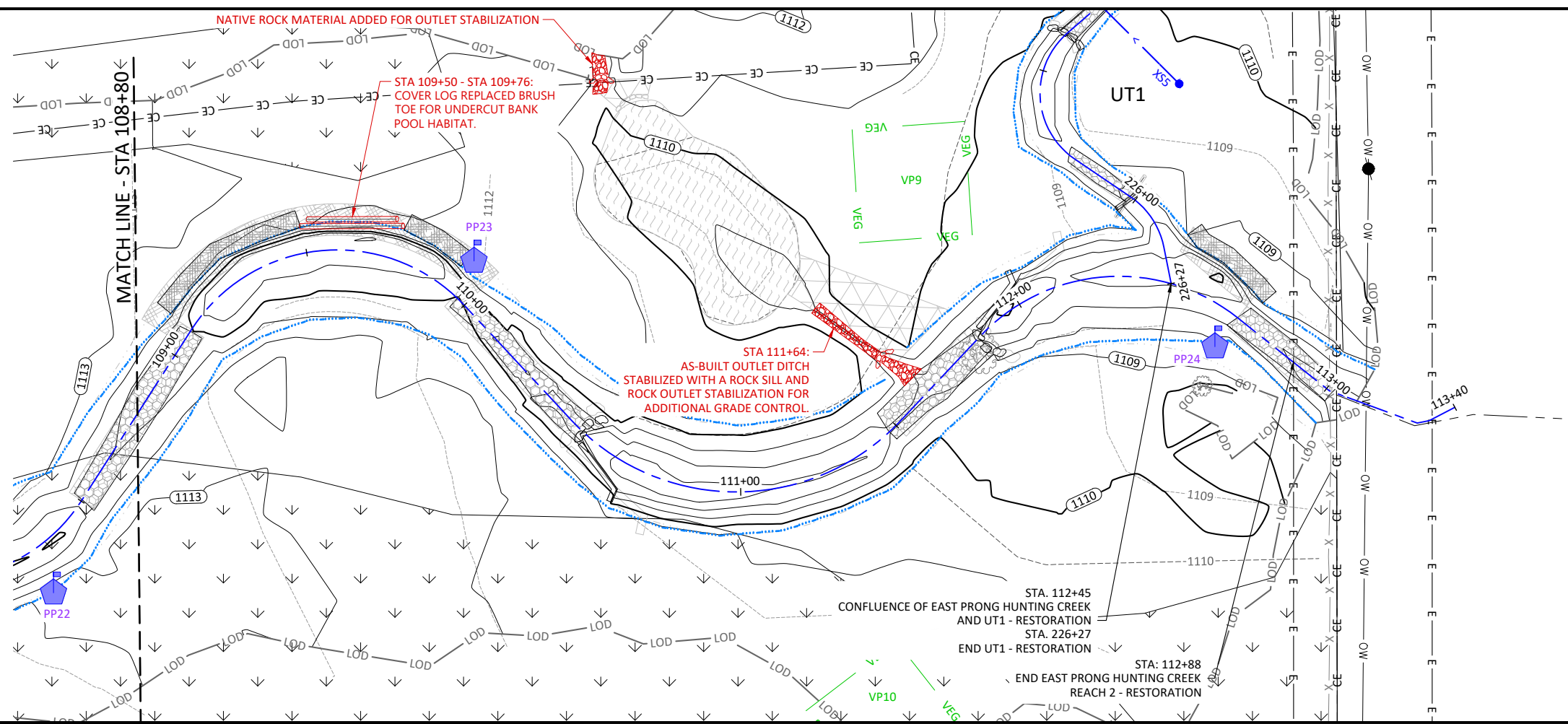
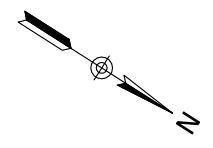
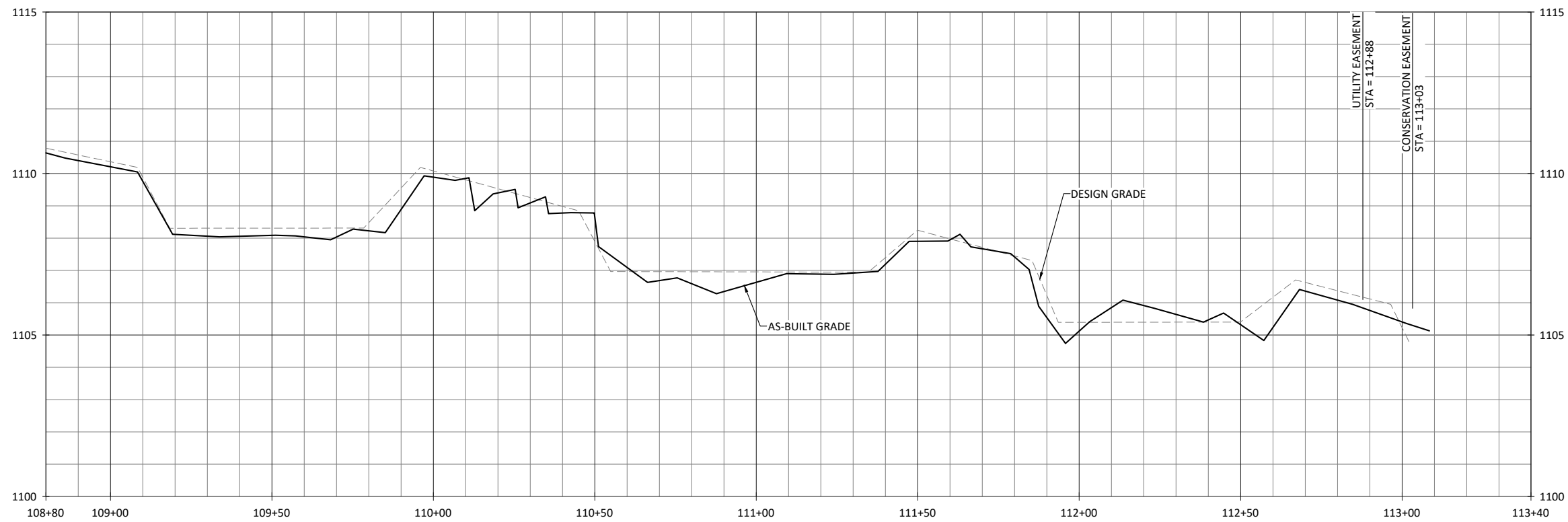
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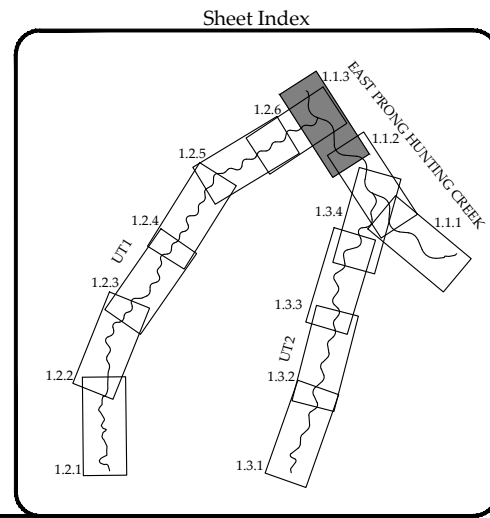
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Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: JK

**1.1.2**

Sheet



- NOTES:  
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 2. AS-BUILT INFORMATION FOR UT1 IS ADDRESSED ON SHEETS 1.2.1 THROUGH 1.2.6.

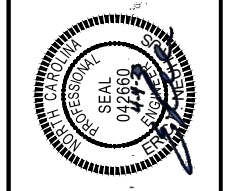


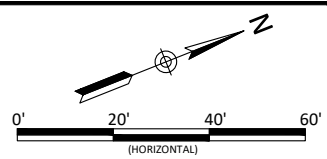
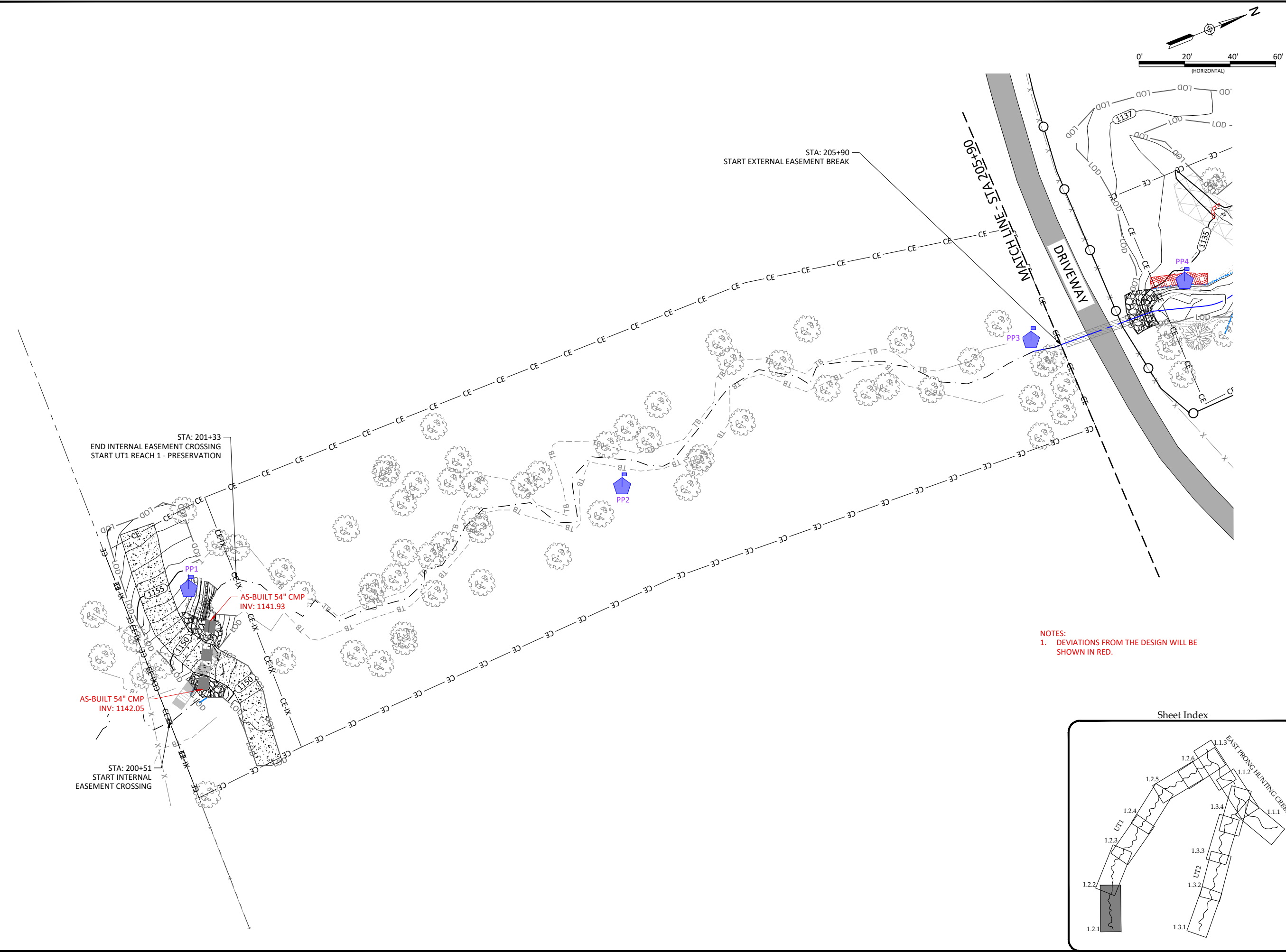
Laurel Valley Mitigation Site Record Drawing  
 Burke County, North Carolina  
 East Prong Hunting Creek  
 Stream Plan and Profile

Date	Job Number	Project Engineer	Drawn By	Checked By
April 4, 2023	W02187	EN	CAW	JK

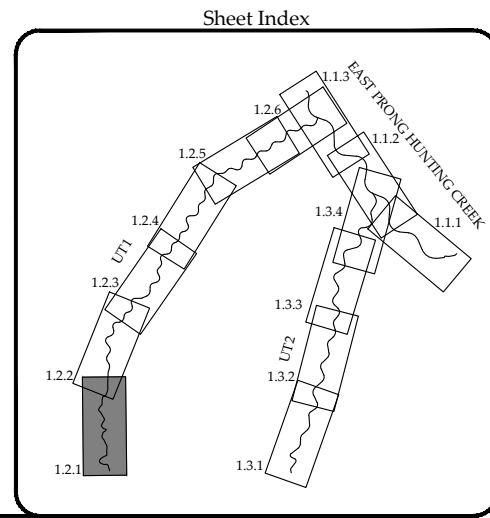
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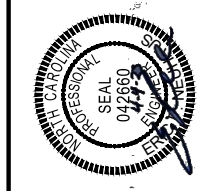
Laurel Valley Mitigation Site Record Drawing  
 Burke County, North Carolina

UT1  
 Stream Plan and Profile

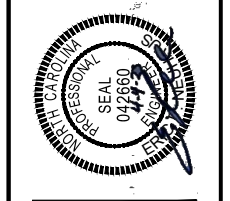
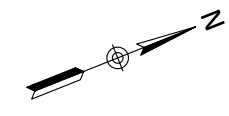
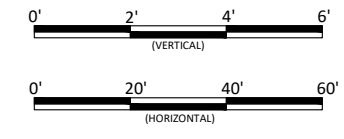
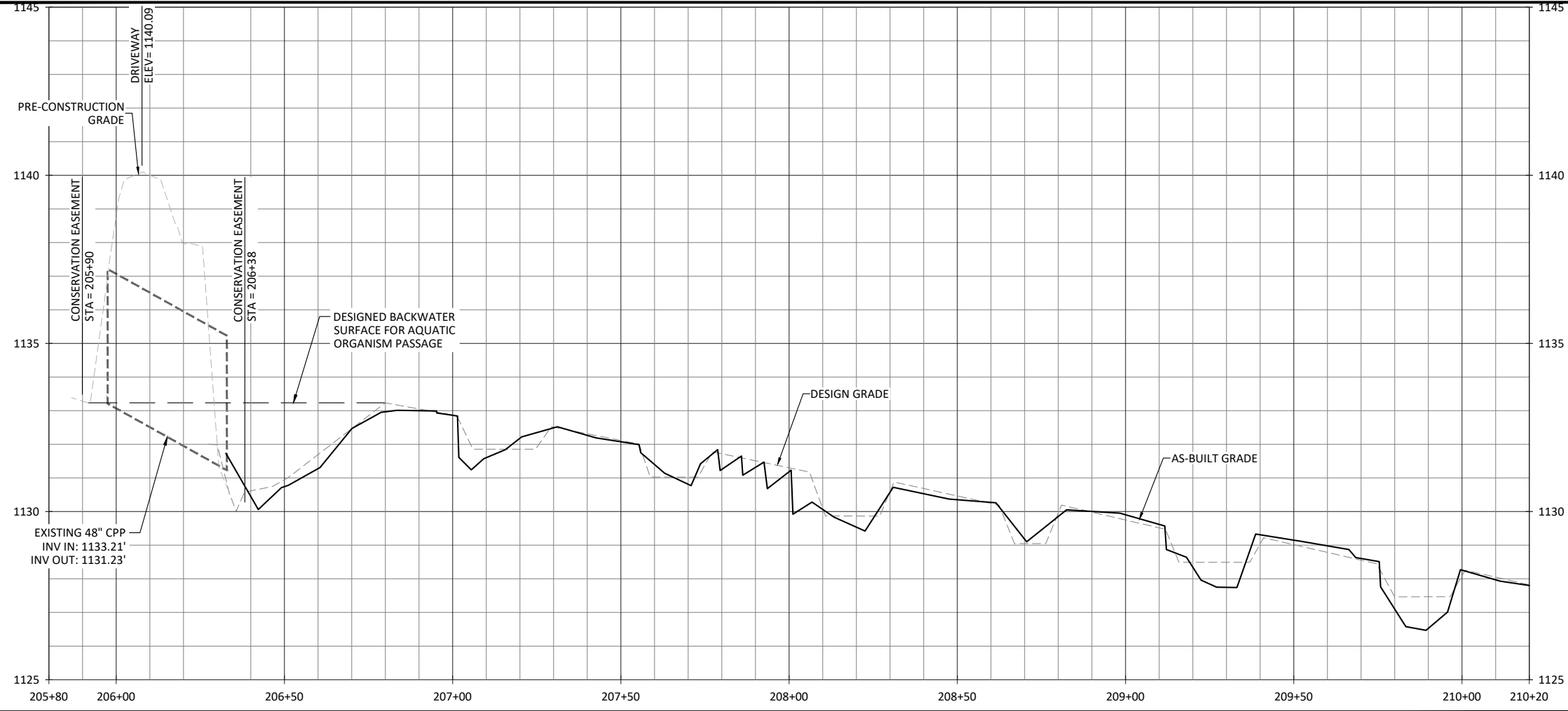
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Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK

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April 4, 2023

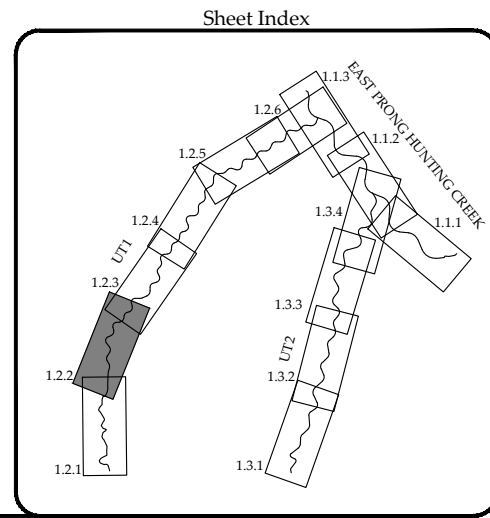
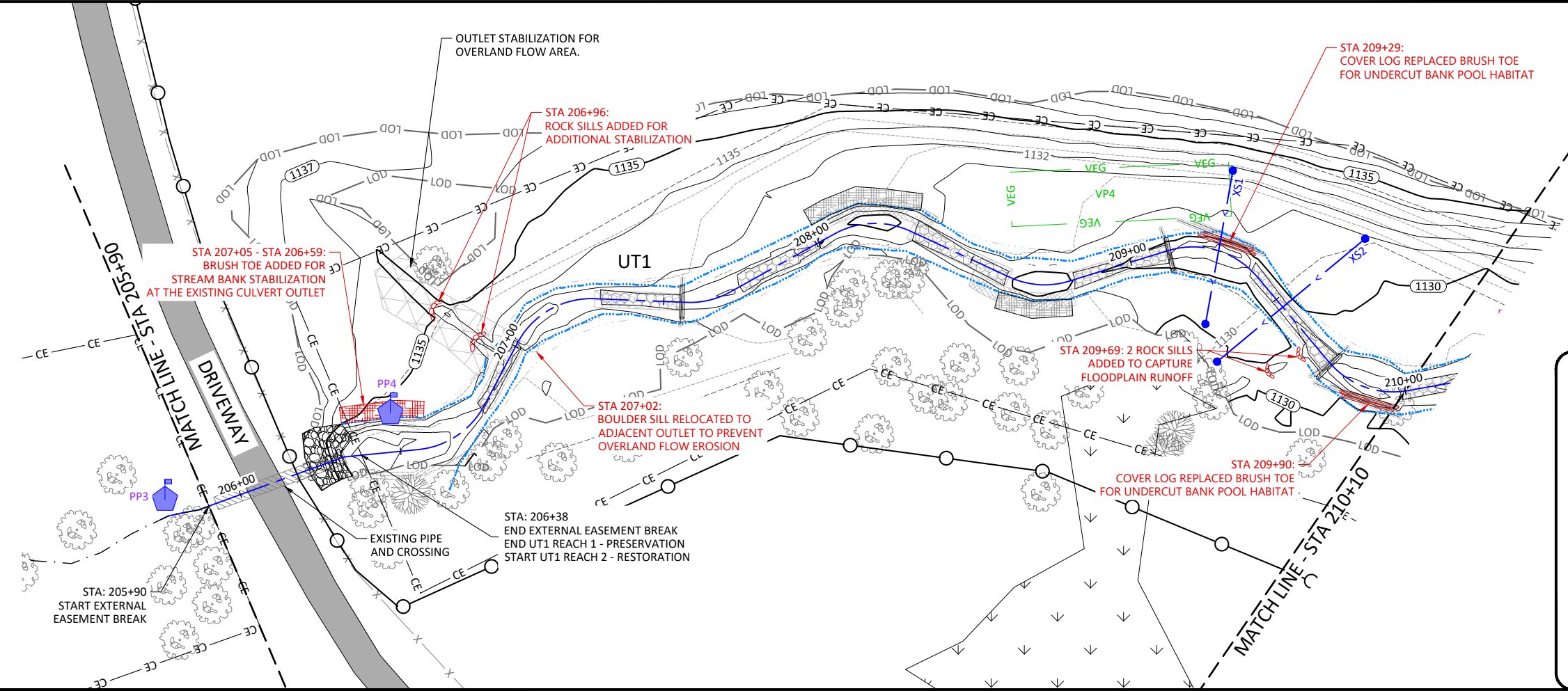


Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

UT1  
Stream Plan and Profile

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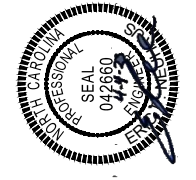
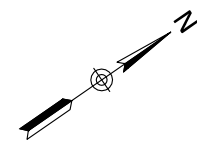
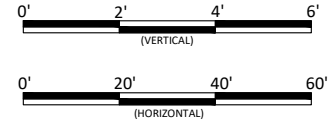
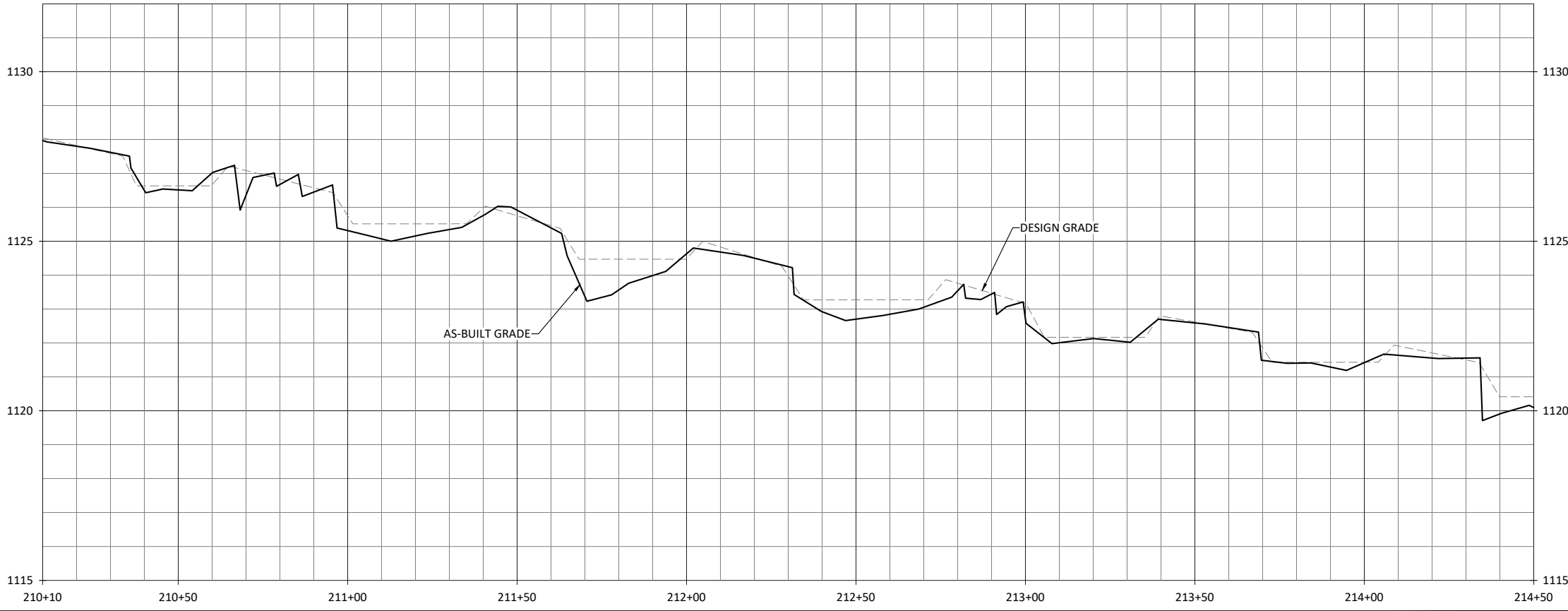


Revisions:


Date: April 4, 2023  
Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: JK

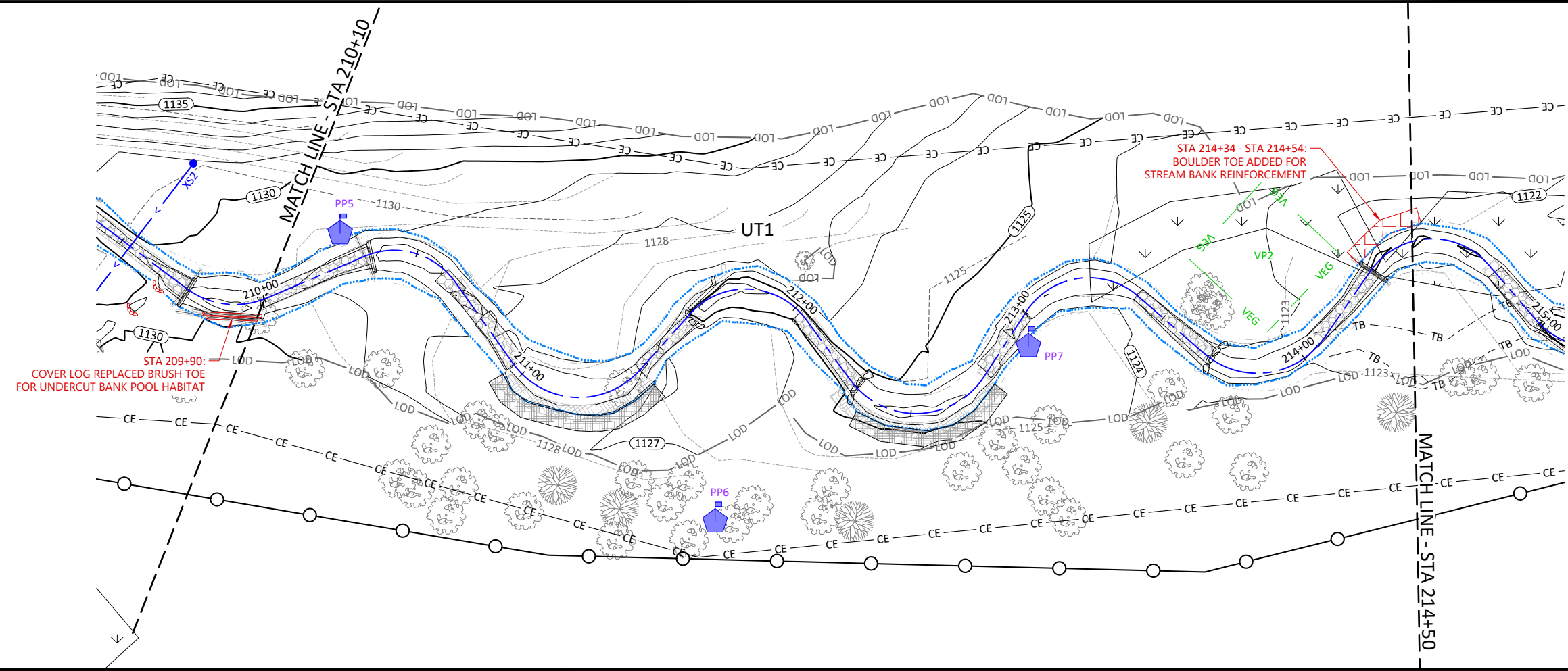
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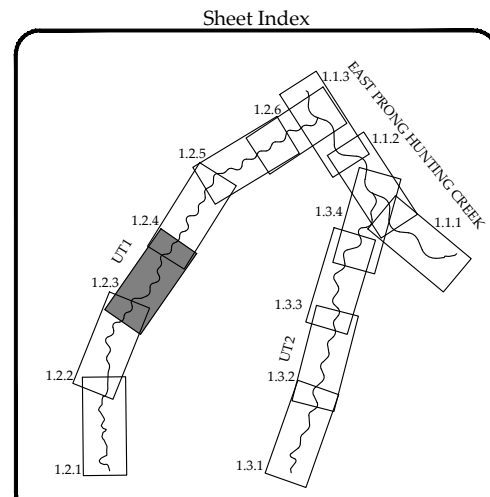


Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

UT1  
Stream Plan and Profile



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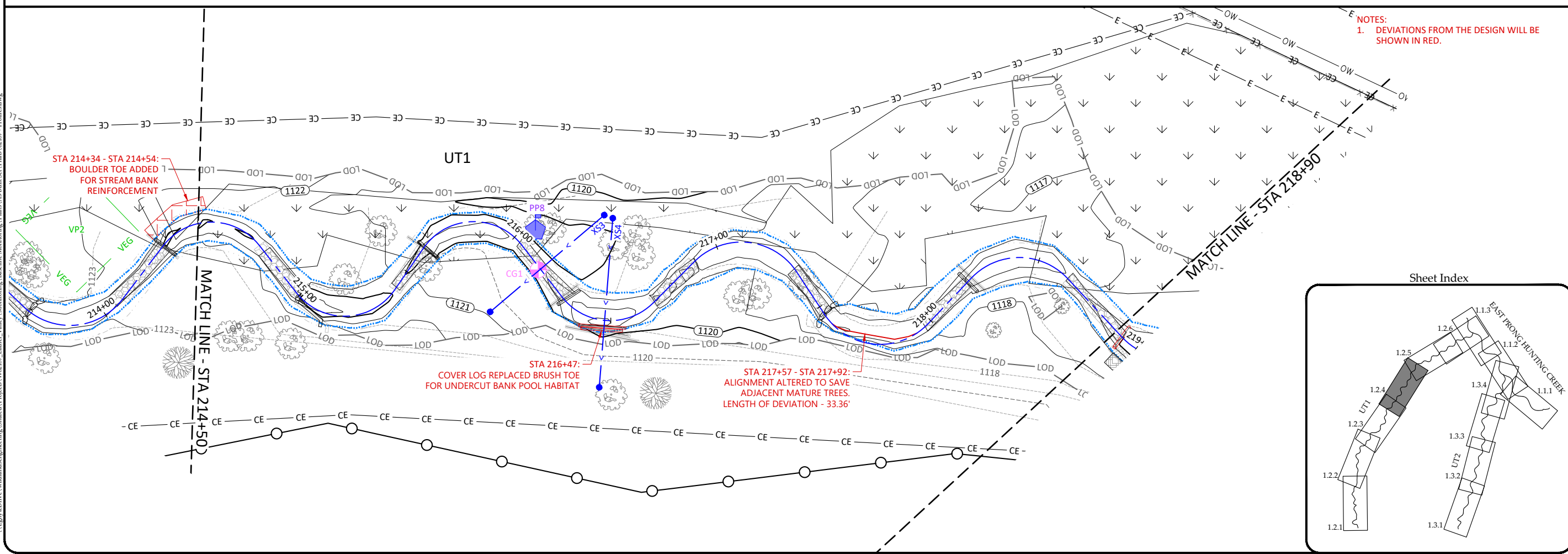
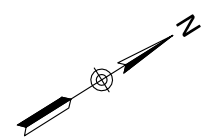
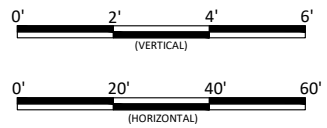
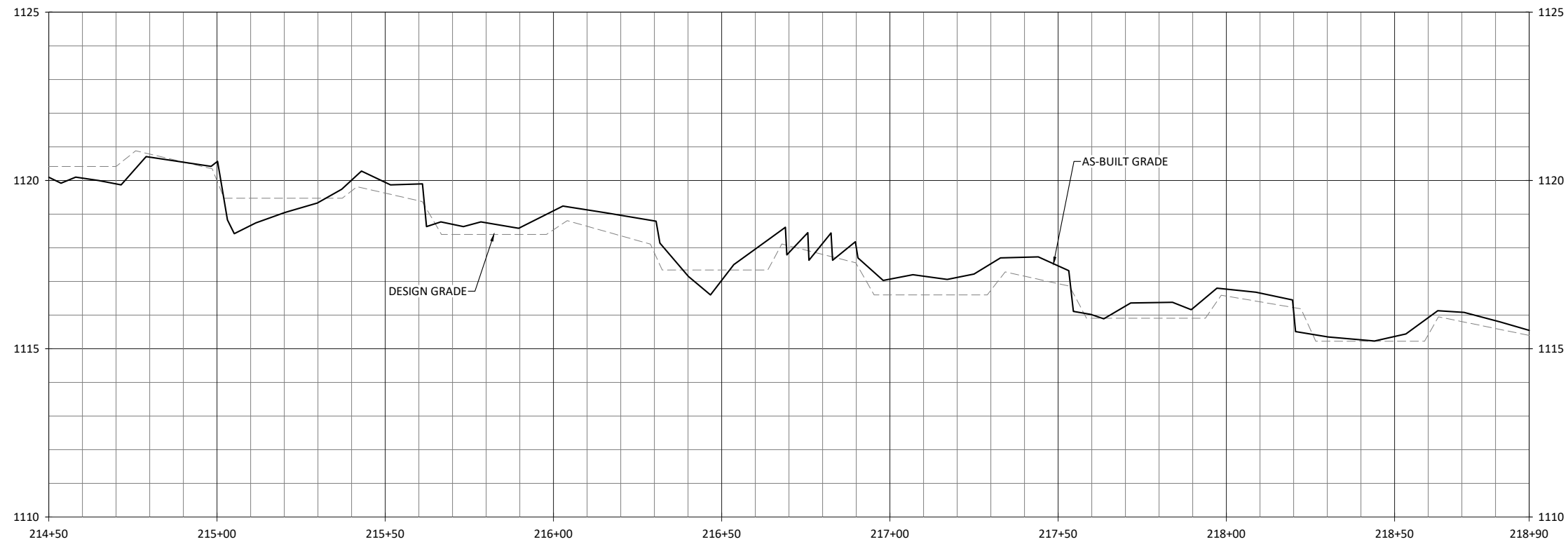
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Date:	April 4, 2023
Job Number:	W02187
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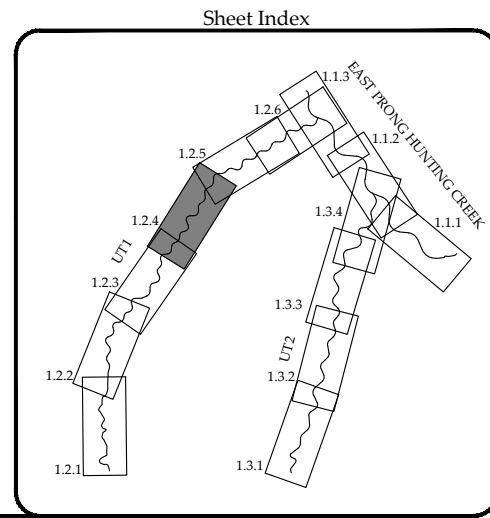
Lowered Profile - 8-18-22

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 April 4, 2023



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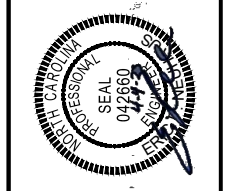


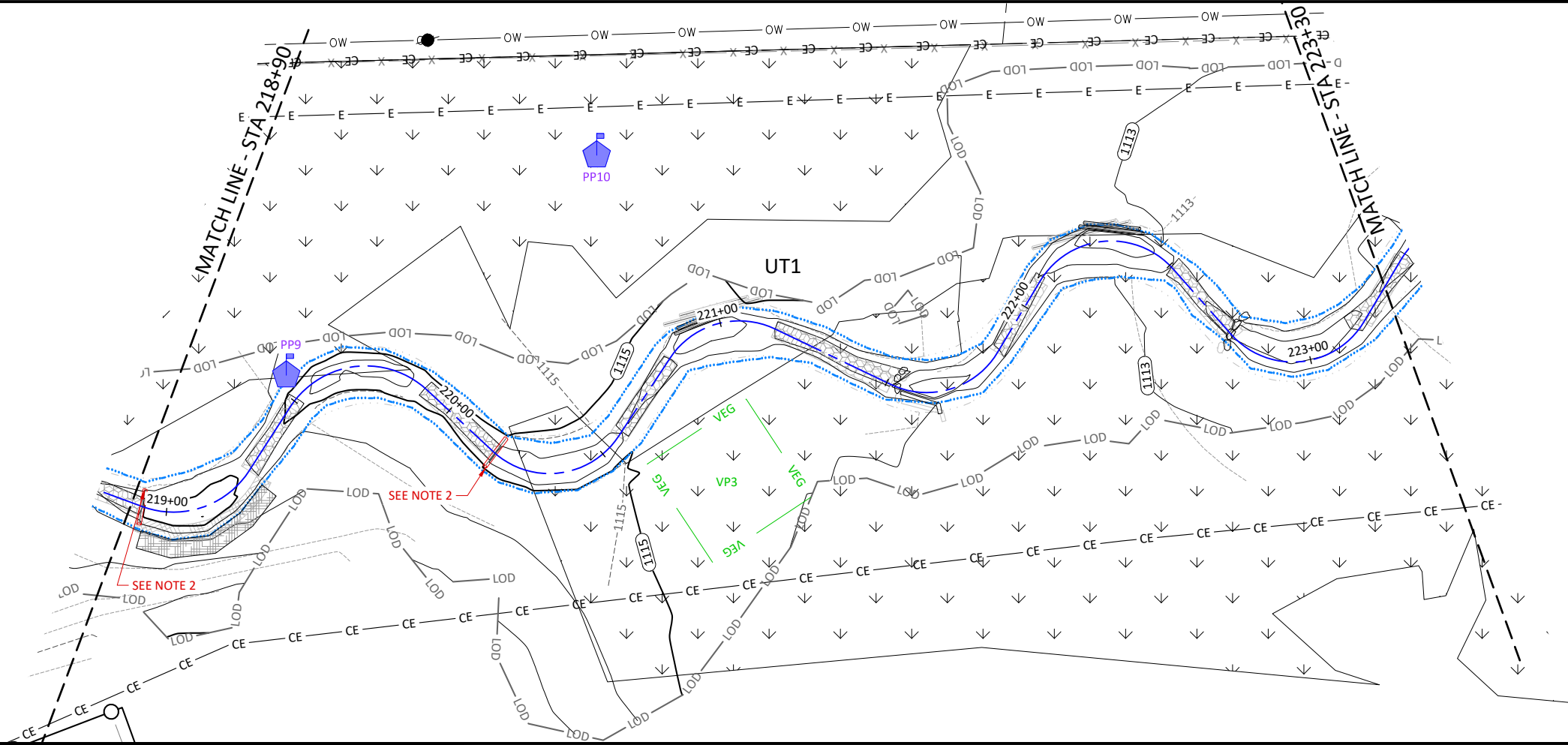
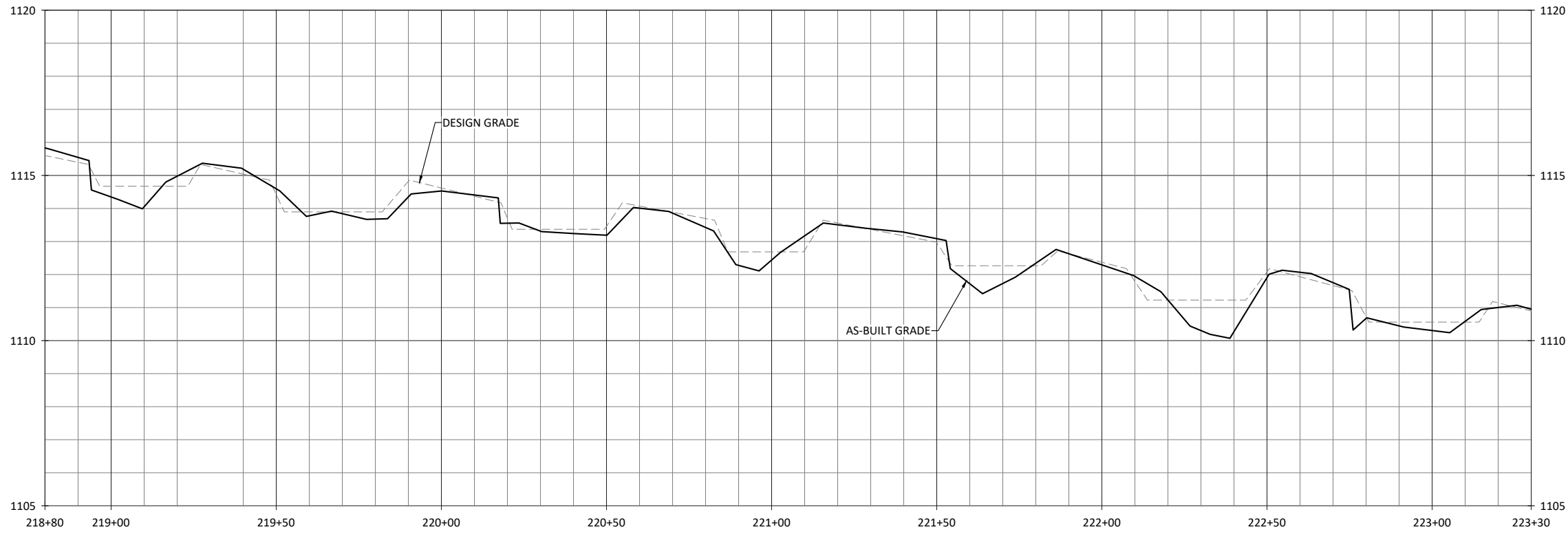
Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

UT1  
Stream Plan and Profile

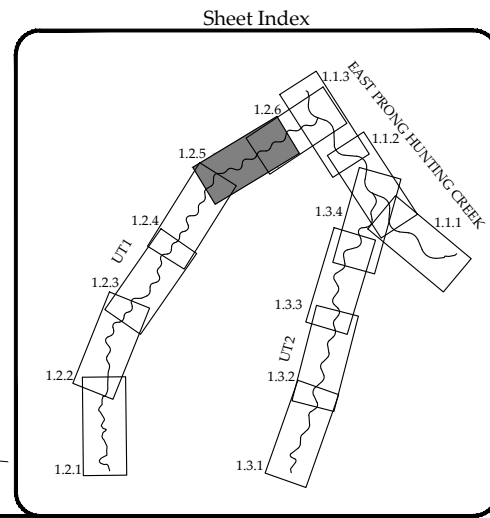
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Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK

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- NOTES:
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. STA 218+94 AND STA 220+17: LOG SILL ADDED FOR BED STABILITY



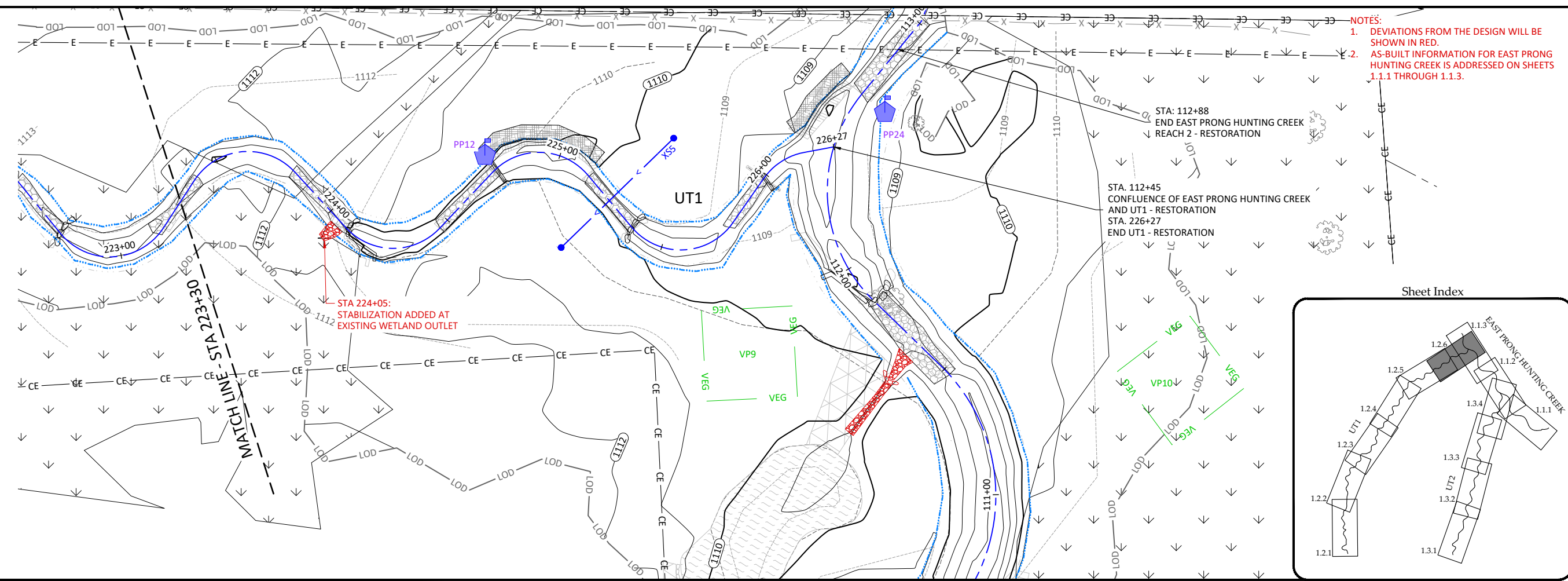
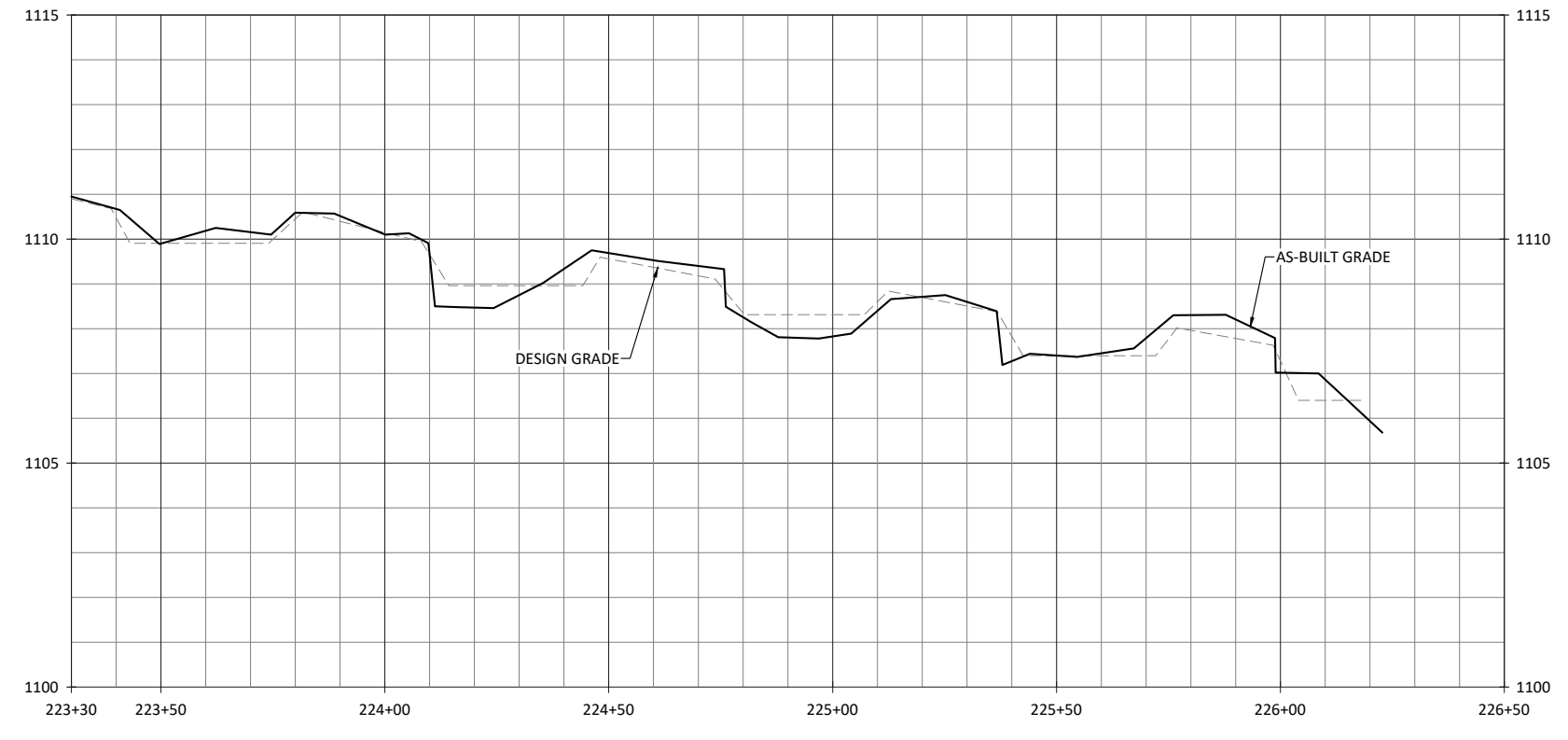
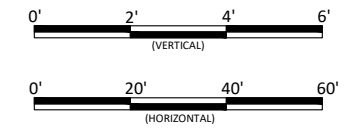
Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

UT1  
Stream Plan and Profile

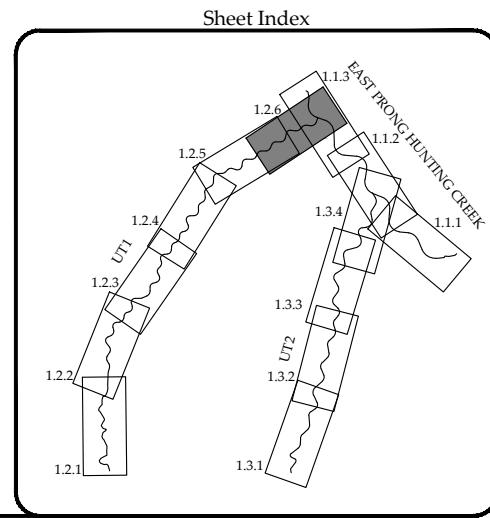


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Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK
Revisions:	Lowered Profile - 8-18-22

1.2.5  
Sheet



- NOTES:**
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. AS-BUILT INFORMATION FOR EAST PRONG HUNTING CREEK IS ADDRESSED ON SHEETS 1.1.1 THROUGH 1.1.3.



**Laurel Valley Mitigation Site Record Drawing**  
**Burke County, North Carolina**

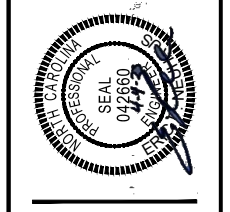
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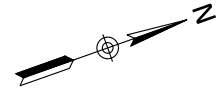
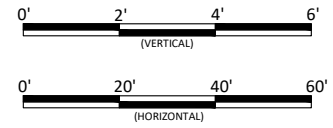
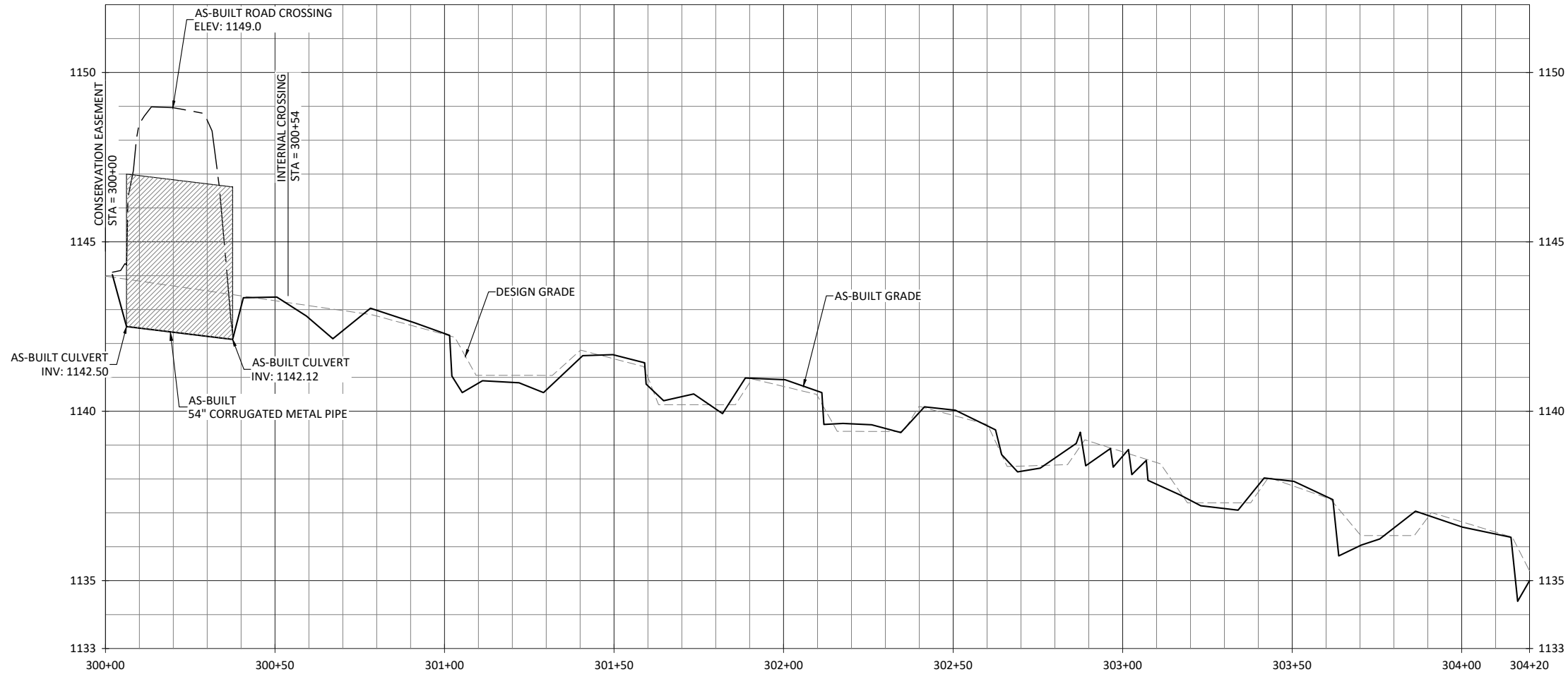
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 Project Engineer: EN  
 Drawn By: CAW  
 Checked By: JK

**1.2.6**

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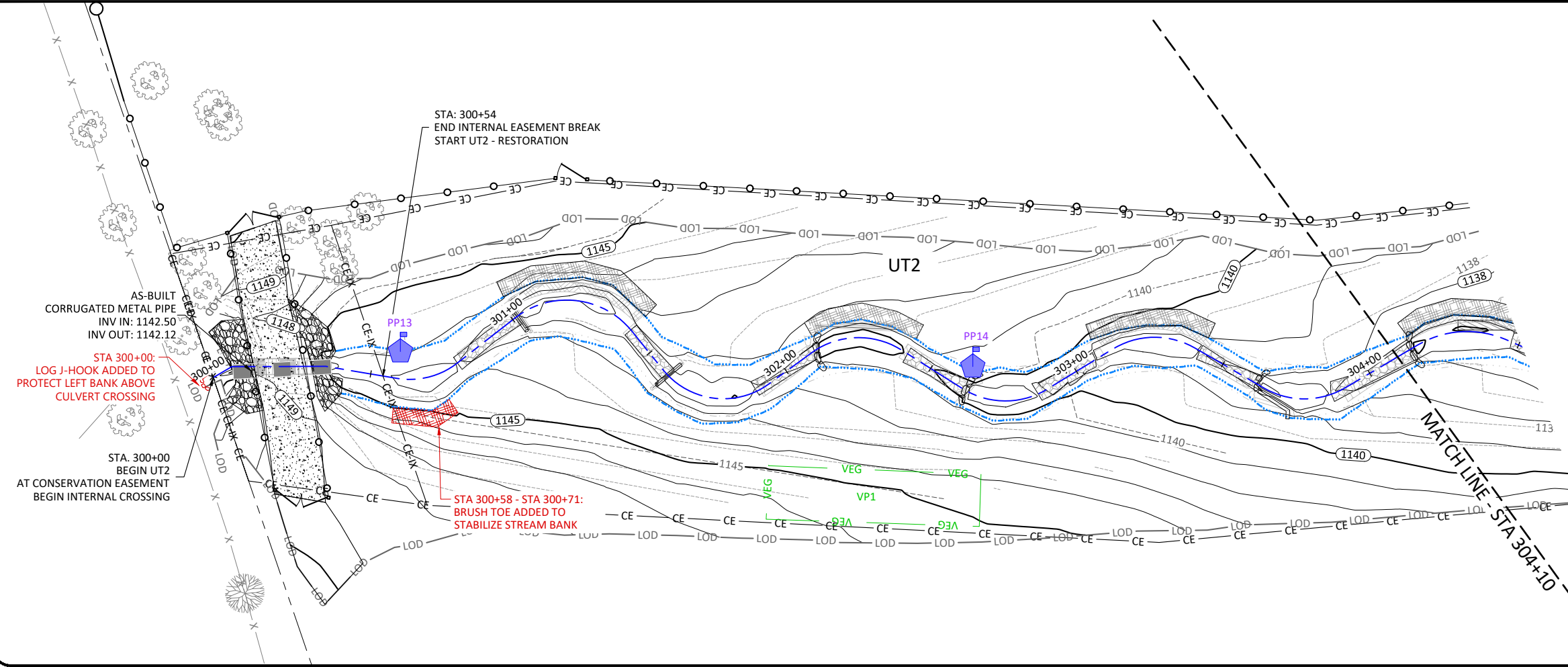
UT1  
 Stream Plan and Profile



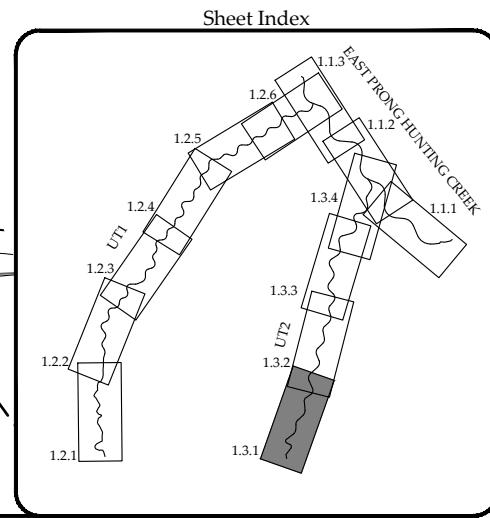


**Laurel Valley Mitigation Site Record Drawing**  
Burke County, North Carolina

UT2  
Stream Plan and Profile



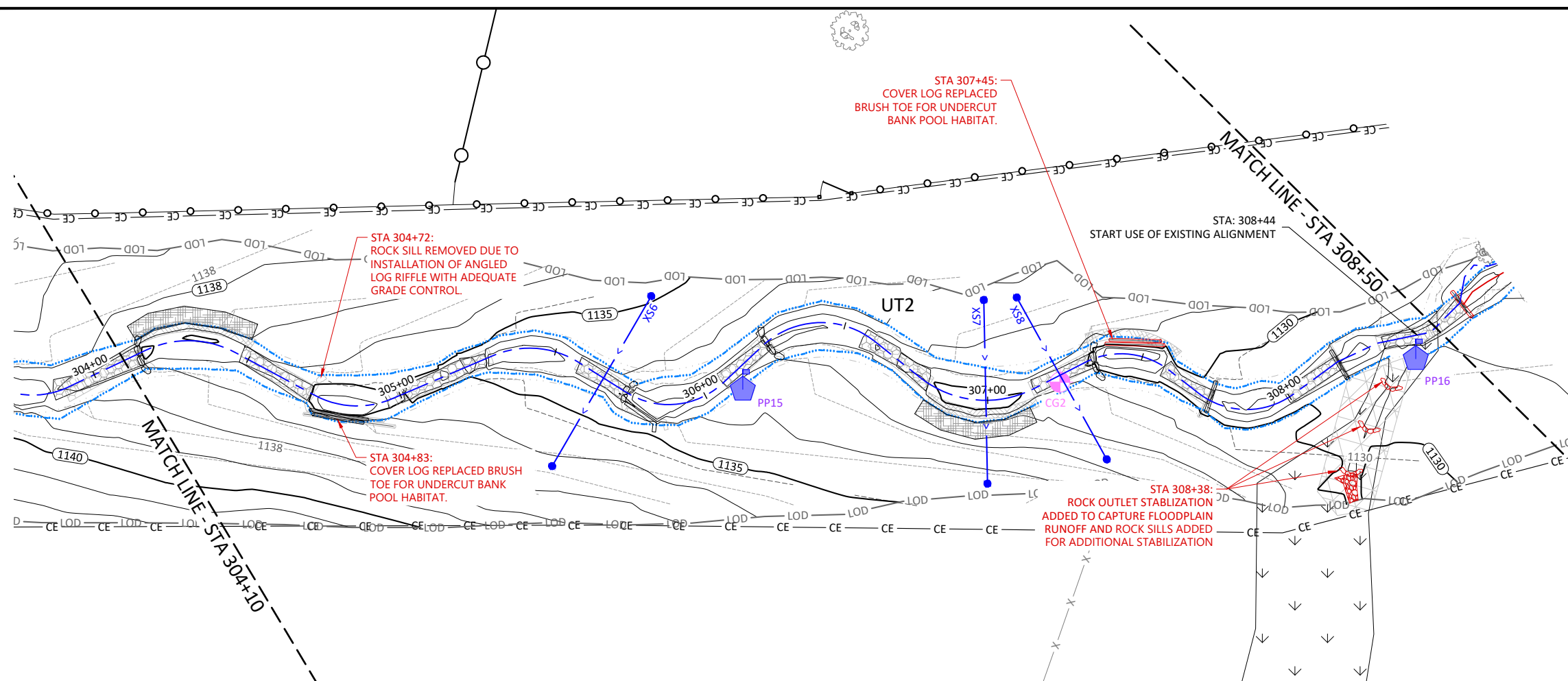
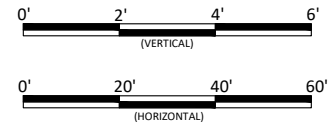
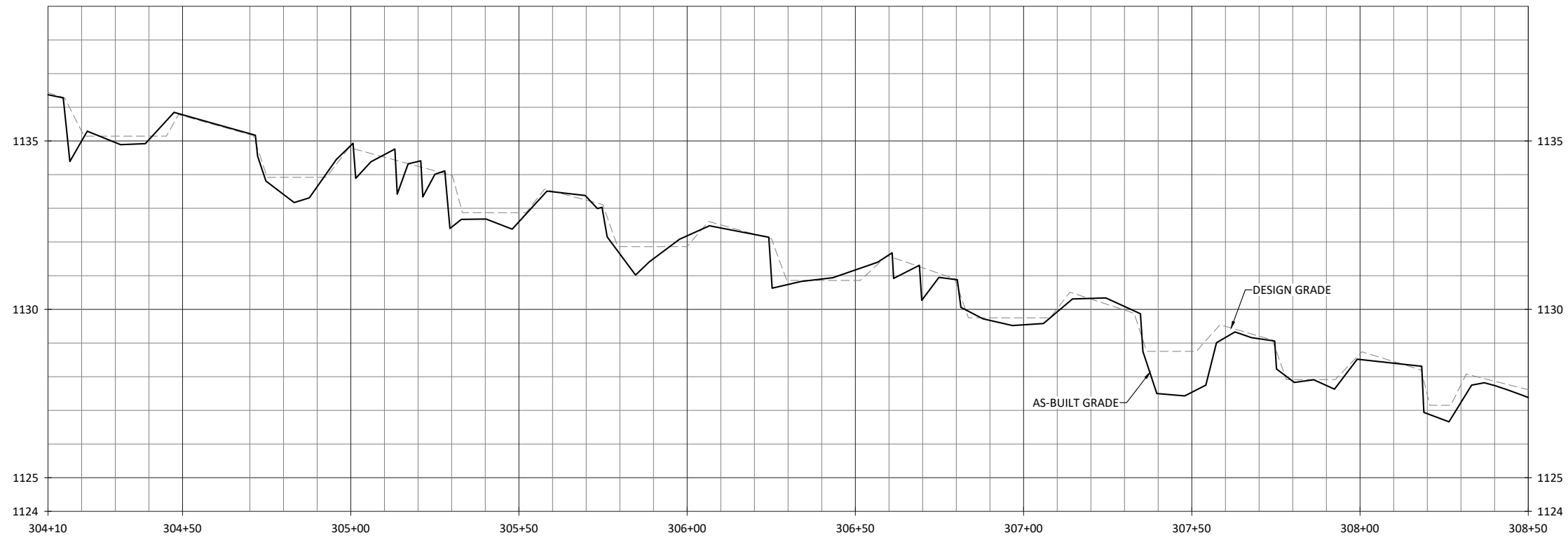
- NOTES:**
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. SEE SHT 3.0, FOR AS-BUILT FENCE ALIGNMENT.



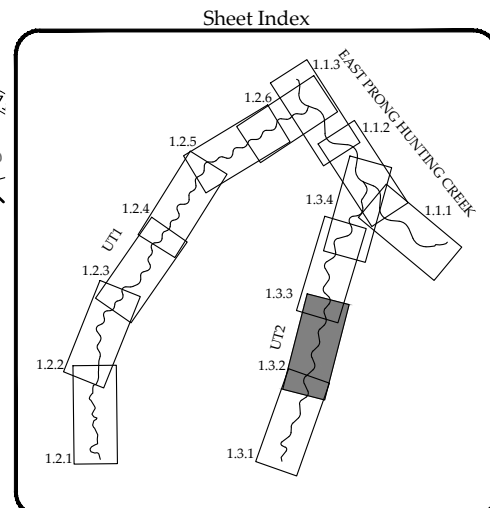
Revisions:

Date: April 4, 2023  
Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: JK

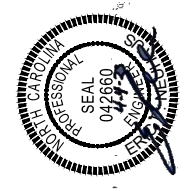
**1.3.1**



- NOTES:
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. SEE SHT 3.0, FOR AS-BUILT FENCE ALIGNMENT.



Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

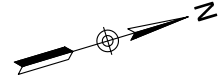
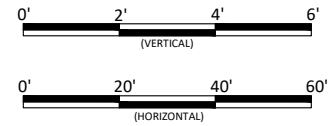
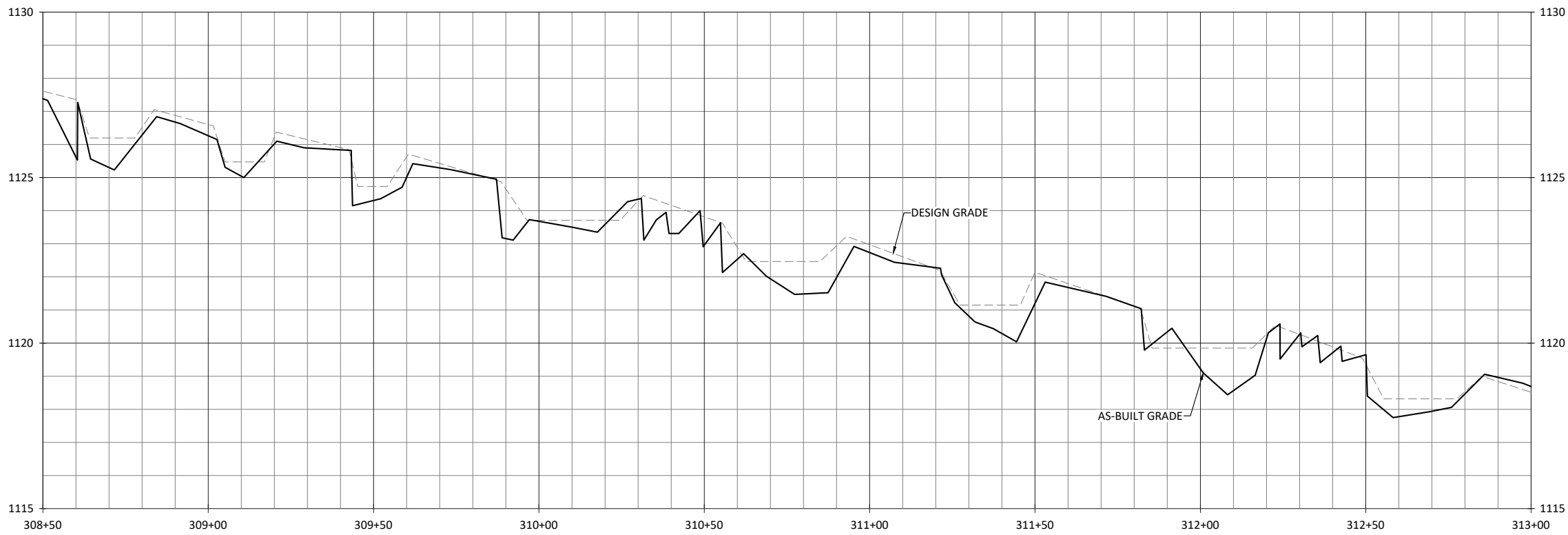


Date:	April 4, 2023
Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK

1.3.2

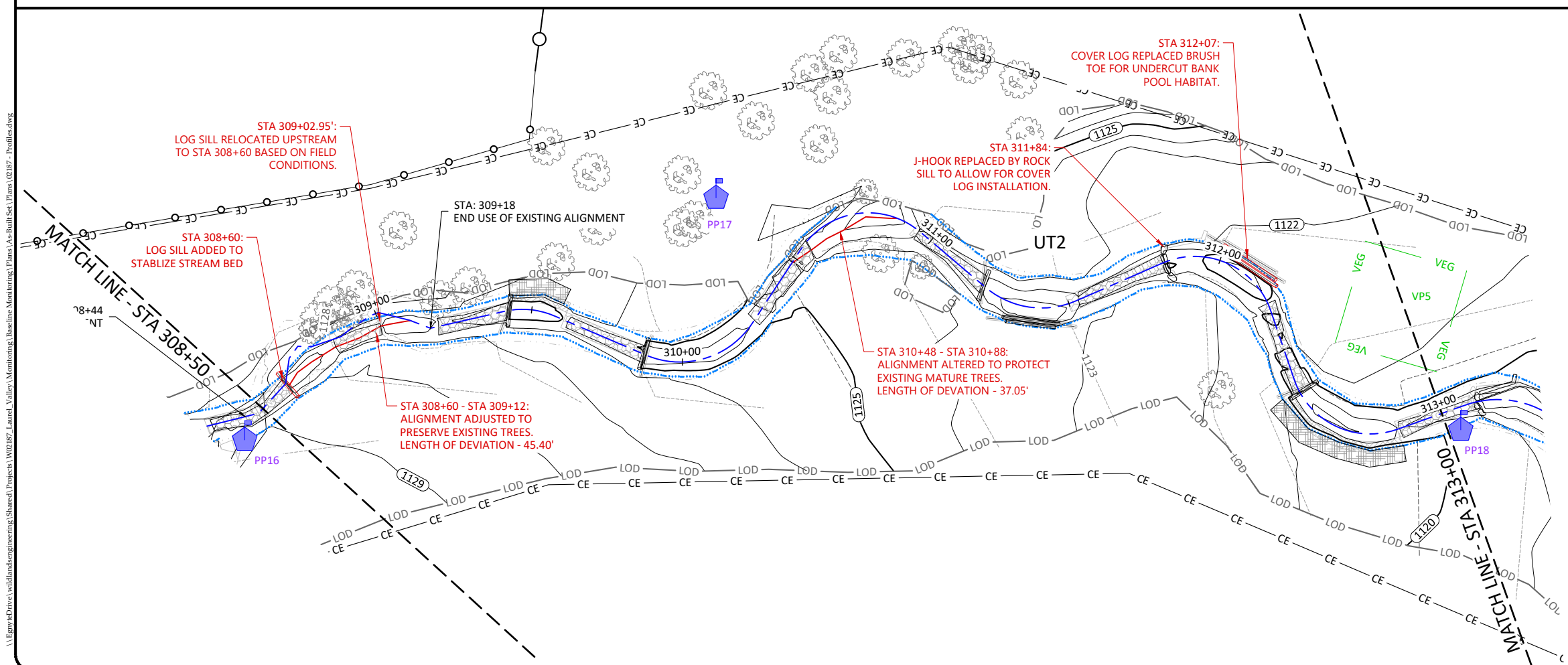
UT2  
Stream Plan and Profile

April 4, 2023

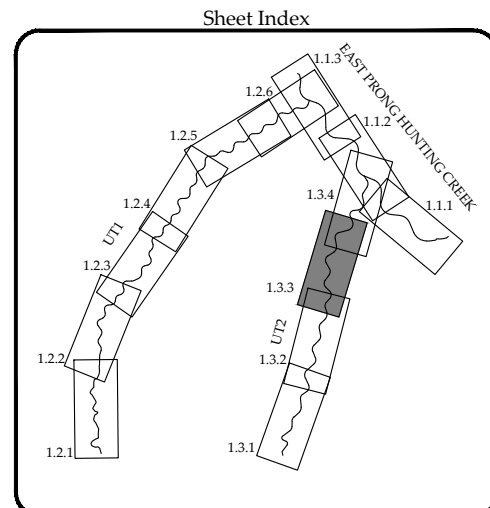


Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

UT2  
Stream Plan and Profile



- NOTES:**
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. SEE SHT 3.0, FOR AS-BUILT FENCE ALIGNMENT.



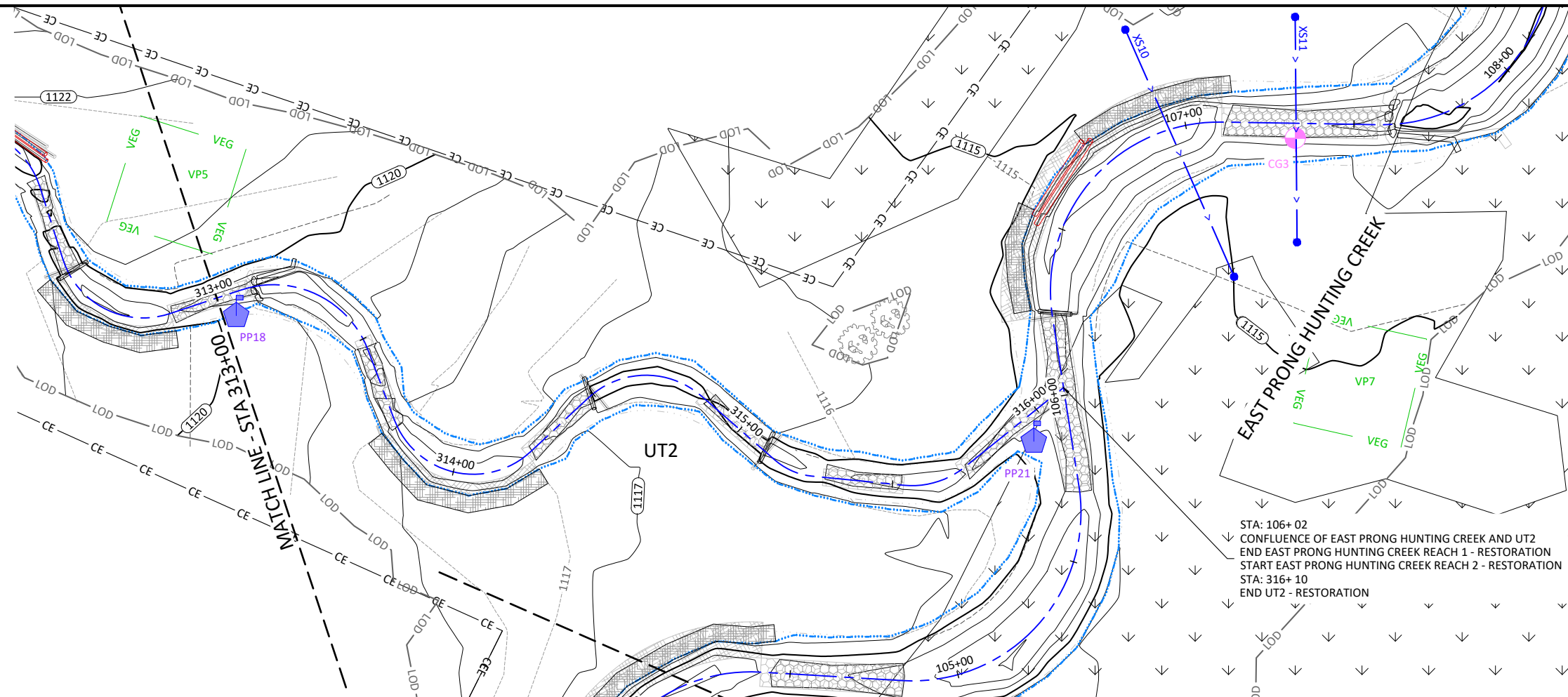
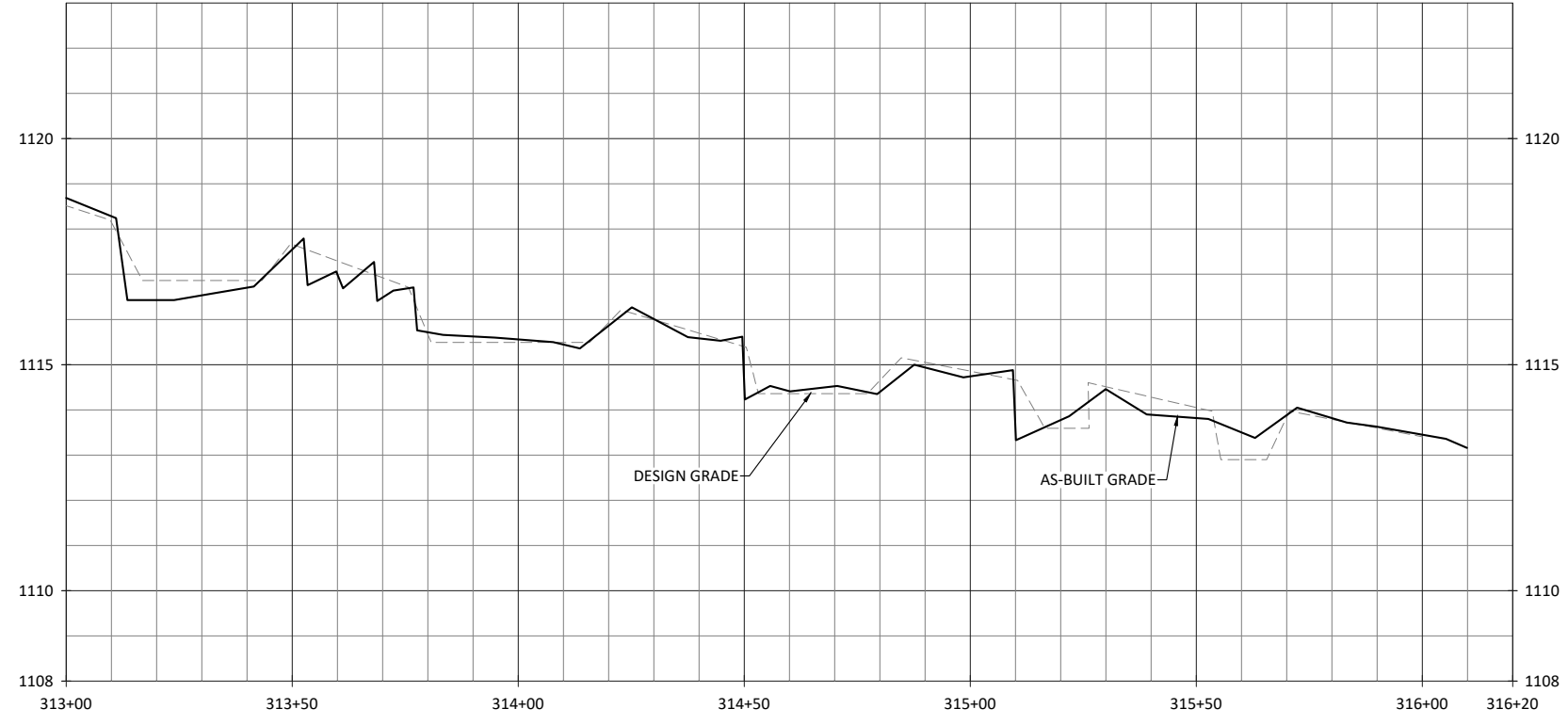
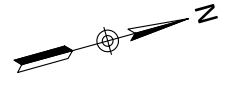
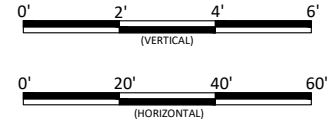
Revisions:


Date: April 4, 2023  
Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: JK

**1.3.3**

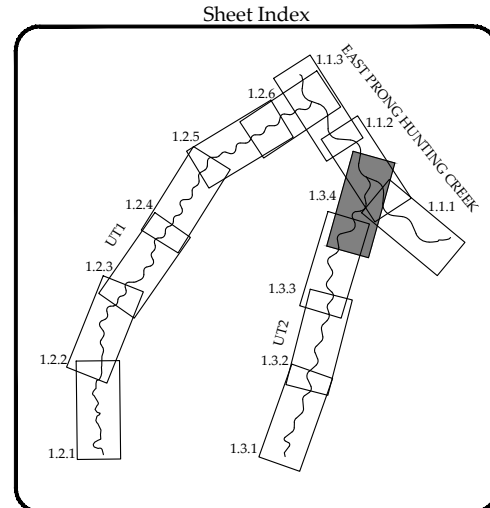
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- NOTES:**
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. AS-BUILT INFORMATION FOR EAST PRONG HUNTING CREEK IS ADDRESSED ON SHEETS 1.1.1 THROUGH 1.1.3.

STA: 106+02  
 CONFLUENCE OF EAST PRONG HUNTING CREEK AND UT2  
 END EAST PRONG HUNTING CREEK REACH 1 - RESTORATION  
 START EAST PRONG HUNTING CREEK REACH 2 - RESTORATION  
 STA: 316+10  
 END UT2 - RESTORATION



Laurel Valley Mitigation Site Record Drawing  
 Burke County, North Carolina



UT2  
 Stream Plan and Profile

Revisions:


Date: April 4, 2023  
 Job Number: W02187  
 Project Engineer: EN  
 Drawn By: CAW  
 Checked By: JK

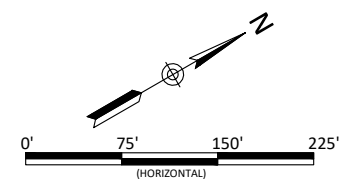
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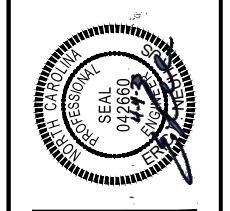


April 4, 2023  
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- OPEN BUFFER PLANTING
- RIPARIAN CORRIDOR PLANTING (STREAM BANKS)
- WETLAND PLANTING
- PARTIALLY VEGETATED BUFFER PLANTING
- UTILITY EASEMENT PLANTING

**NOTES:**  
 1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.



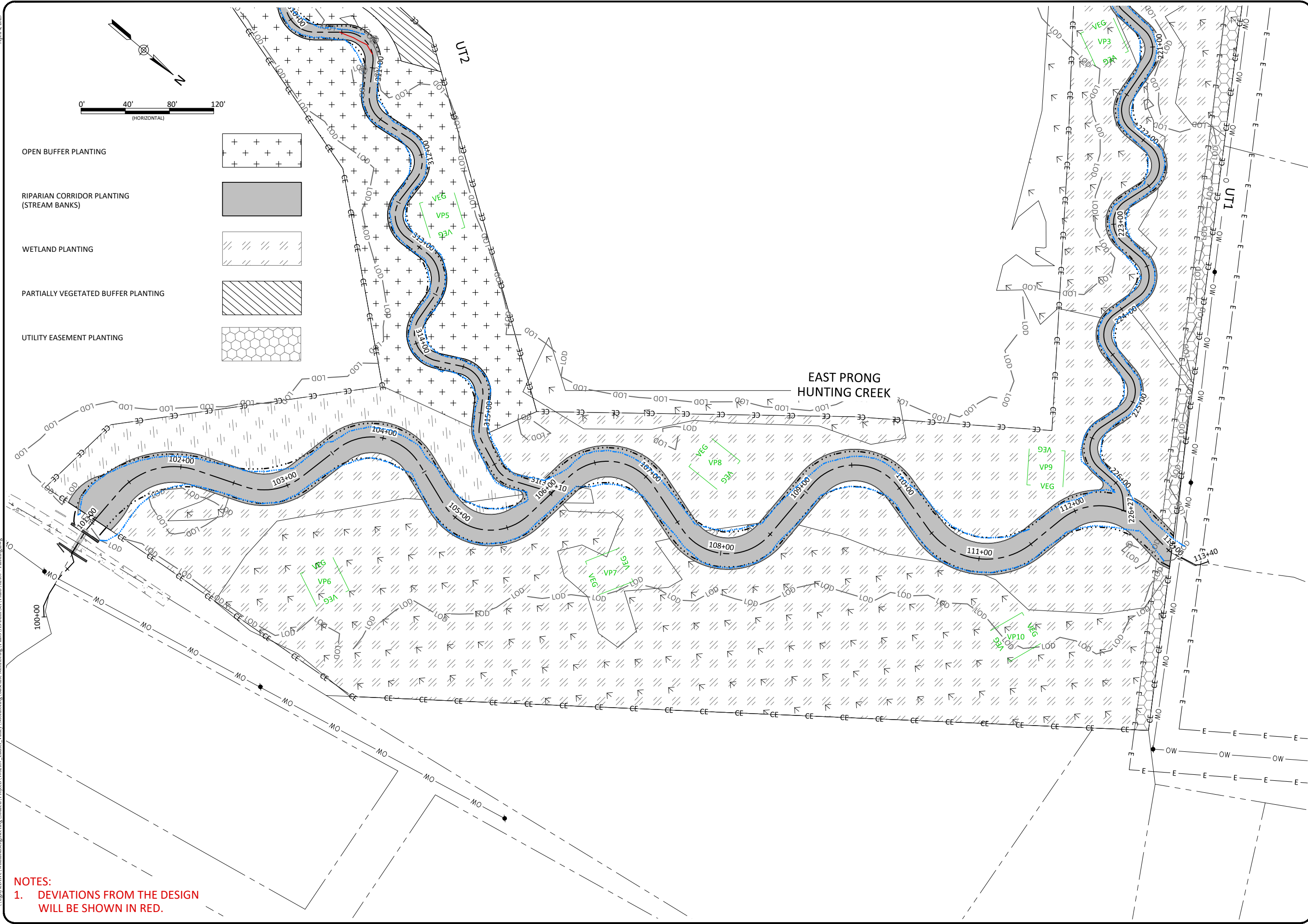
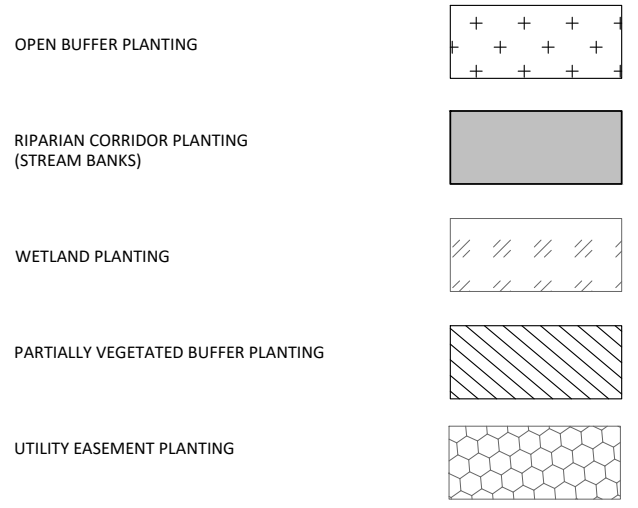
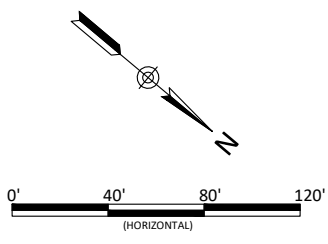
**Laurel Valley Mitigation Site Record Drawing**  
**Burke County, North Carolina**  
 Planting Plan Overview

Date:	Project Engineer:
April 4, 2023	EN
Job Number: W02187	CAW
Drawn By:	JK
Checked By:	

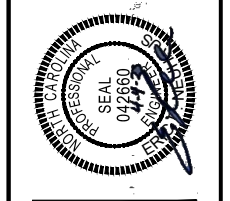
2.2

Sheet

April 4, 2023  
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**NOTES:**  
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.



**Laurel Valley Mitigation Site Record Drawing**  
**Burke County, North Carolina**  
**East Prong Hunting Creek Planting**

Revisions:

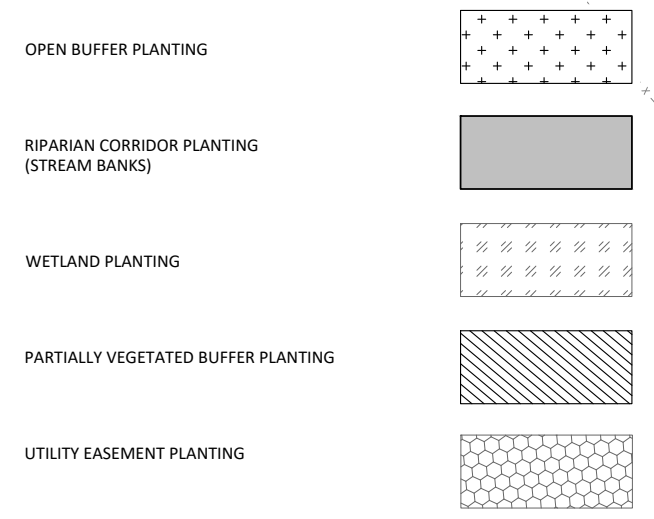
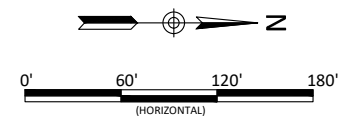

Date: April 4, 2023  
Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: IK

**2.3**

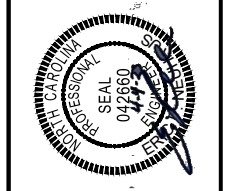
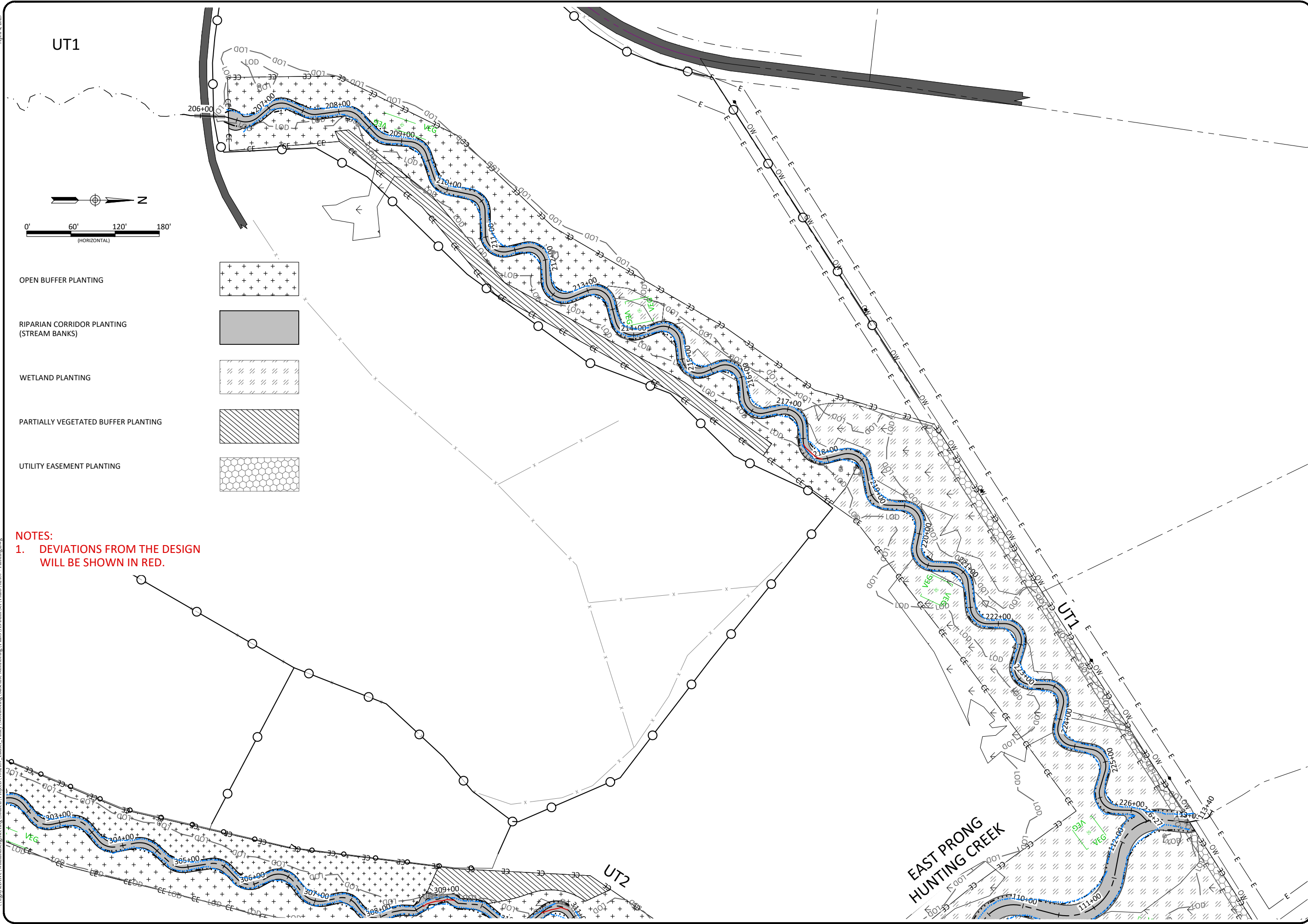
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April 4, 2023  
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UT1



NOTES:  
1. DEVIATIONS FROM THE DESIGN  
WILL BE SHOWN IN RED.



Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina

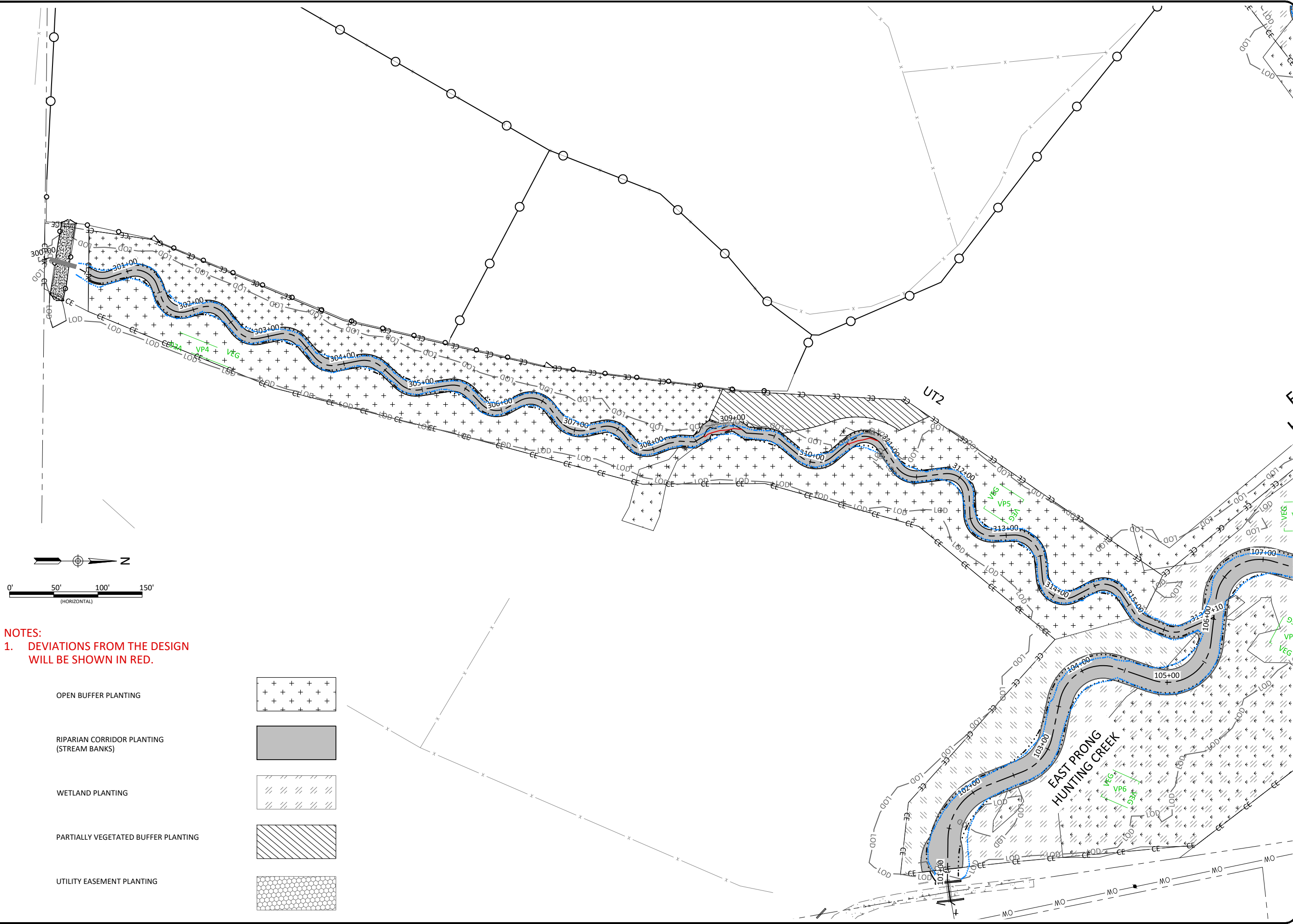
UT1 Planting

Revisions:

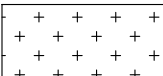





Date: April 4, 2023  
Job Number: W02187  
Project Engineer: EN  
Drawn By: CAW  
Checked By: IK

2.4

Sheet



**NOTES:**  
 1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.

- OPEN BUFFER PLANTING 
- RIPARIAN CORRIDOR PLANTING (STREAM BANKS) 
- WETLAND PLANTING 
- PARTIALLY VEGETATED BUFFER PLANTING 
- UTILITY EASEMENT PLANTING 

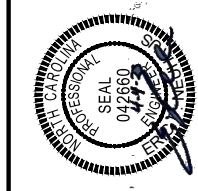
Laurel Valley Mitigation Site Record Drawing  
 Burke County, North Carolina

UT2 Planting

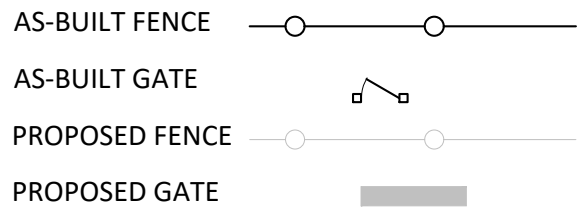
Revisions:	

Date: April 4, 2023  
 Job Number: W02187  
 Project Engineer: EN  
 Drawn By: CAW  
 Checked By: IK

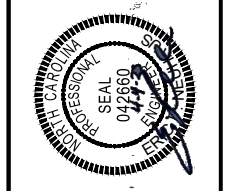
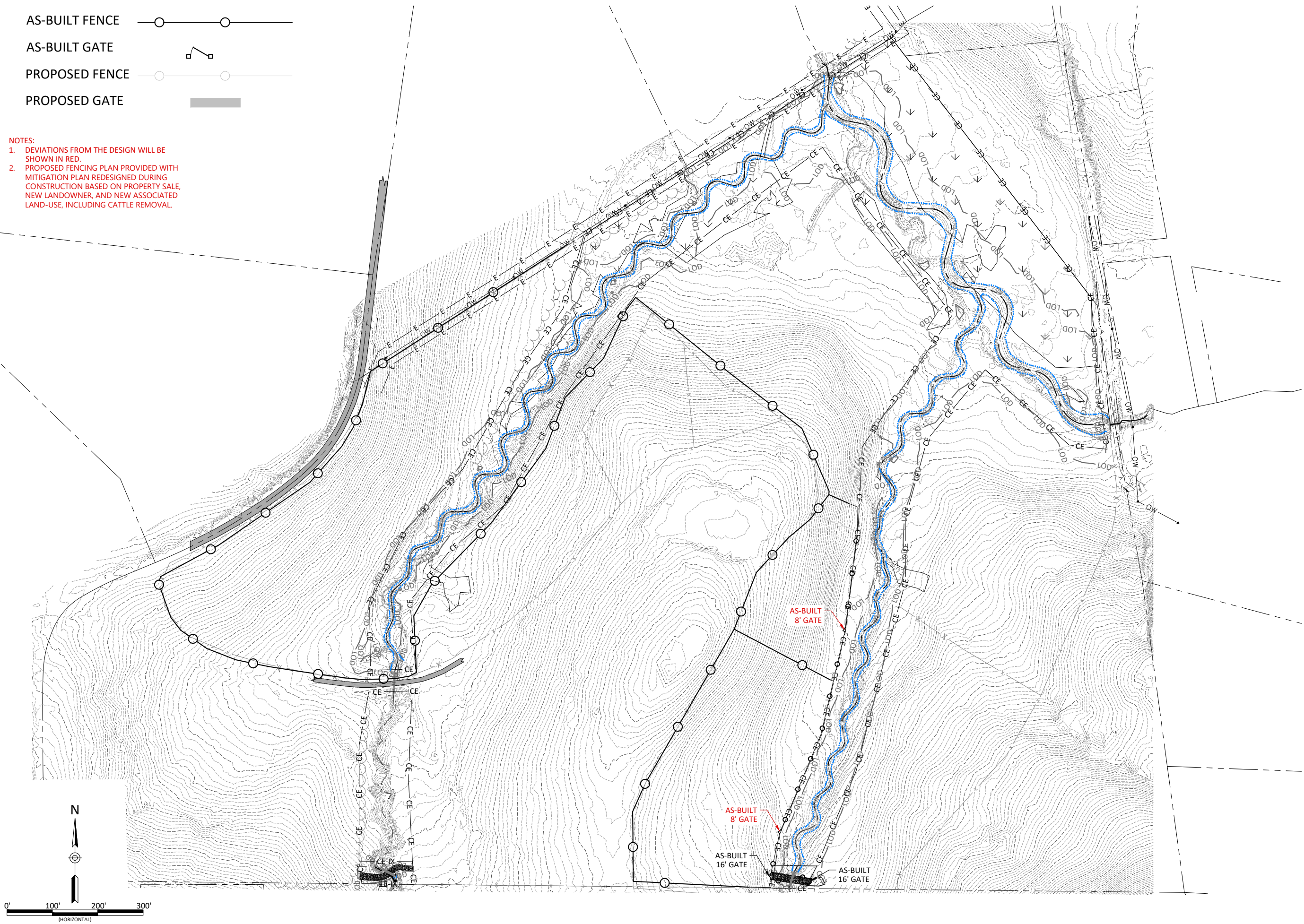
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April 4, 2023  
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- NOTES:
1. DEVIATIONS FROM THE DESIGN WILL BE SHOWN IN RED.
  2. PROPOSED FENCING PLAN PROVIDED WITH MITIGATION PLAN REDESIGNED DURING CONSTRUCTION BASED ON PROPERTY SALE, NEW LANDOWNER, AND NEW ASSOCIATED LAND-USE, INCLUDING CATTLE REMOVAL.



Laurel Valley Mitigation Site Record Drawing  
Burke County, North Carolina  
Fencing Plan  
Farm Plan

Revisions:	

Date:	April 4, 2023
Job Number:	W02187
Project Engineer:	EN
Drawn By:	CAW
Checked By:	JK

3.0

Sheet