

CERTIFICATE OF SURVEY AND ACCURACY

I, NOLAN R. CARMACK, CERTIFY THAT THE GROUND TOPOGRAPHIC SURVEY PORTION OF THIS PROJECT WAS COMPLETED UNDER MY DIRECT SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY DIRECT SUPERVISION; THAT THIS SURVEY WAS PERFORMED AT THE 95% CONFIDENCE LEVEL TO MEET THE FEDERAL GEOGRAPHIC DATA COMMITTEE STANDARDS; THAT THIS SURVEY WAS PERFORMED TO THE CLASS A HORIZONTAL AND CLASS C VERTICAL WHERE APPLICABLE; THAT THE ORIGINAL DATA WAS OBTAIN BETWEEN THE DATES OF 5/12/16-6/8/16; THAT THE CONTOURS SHOWN AS BROKEN LINES MAY NOT MEET THE STATED STANDARD AND ALL COORDINATES ARE BASED ON NAD 83 (NSRS 2011) AND ALL ELEVATIONS ARE BASED ON NAVD 88; THAT THE GPS PORTION OF THIS PROJECT WAS TO PERFORM A GRID TIE TO THE NC STATE PLANE COORDINATE SYSTEM AND INFORMATION USED IS SHOWN & NOTED HEREON; THAT THIS MAP MEETS THE SPECIFICATIONS FOR TOPOGRAPHIC SURVEYS AS STATED IN TITLE 21, CHAPTER 56, SECTION .1606; THAT THIS MAP WAS NOT PREPARED IN ACCORDANCE WITH G.S. 47-30, AS AMENDED AND DOES NOT REPRESENT AN OFFICIAL BOUNDARY SURVEY.

GPS METADATA

SEE SURVEY CONTROL MAP FOR ICA ENGINEERING BY KEE MAPPING & SURVEYING, PA (LICENSE # C-3039); SIGNED, SEALED AND DATED ON MAY 1ST, 2014 BY NOLAN R. CARMACK, NC PLS (LICENSE #5076).

WITNESS MY ORIGINAL SIGNATURE, REGISTRATION NUMBER, AND SEAL THIS 17TH DAY OF JUNE, 2016, A.D.



THIS DOCUMENT IS NOT VALID UNLESS SIGNED AND SEALED.

Nolan R. Carmack
NOLAN R. CARMACK, PLS L-5076

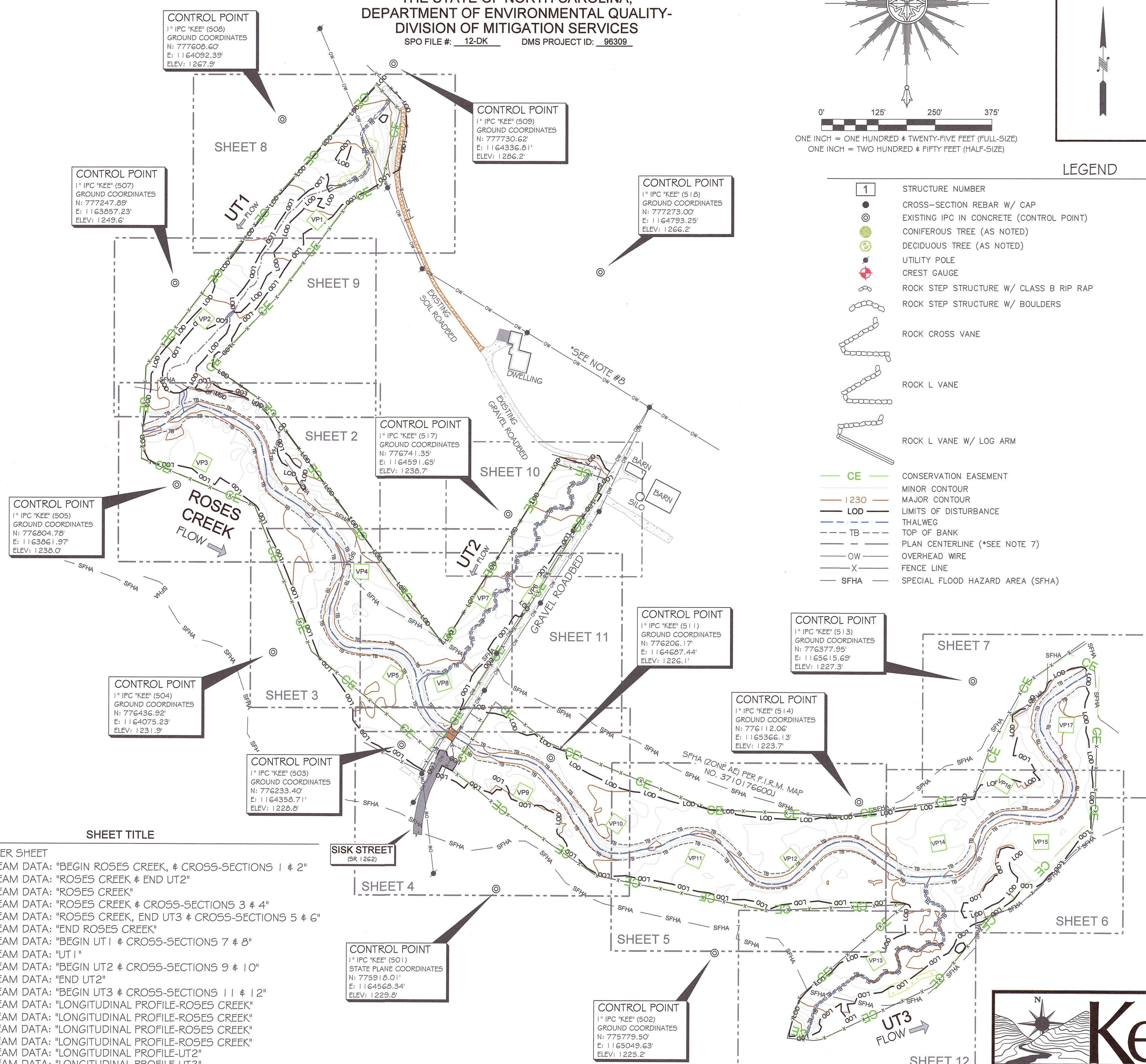
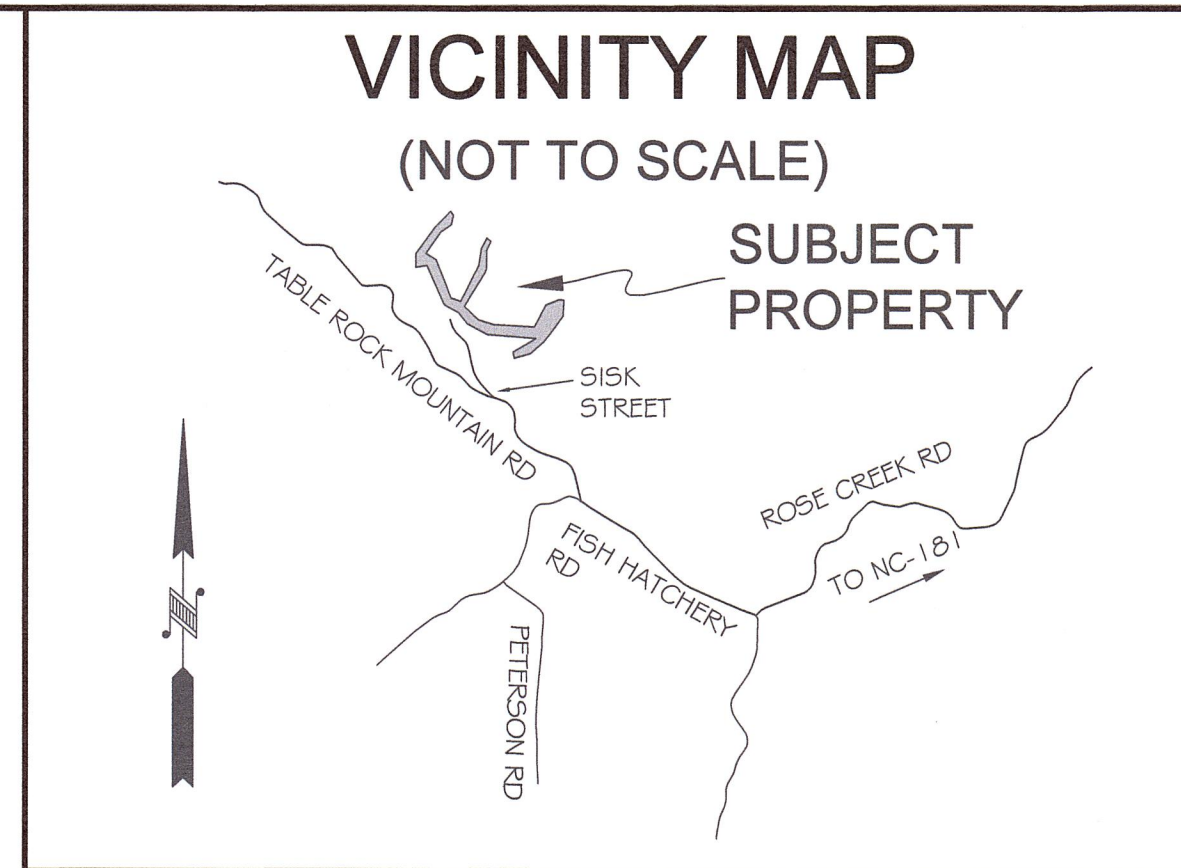
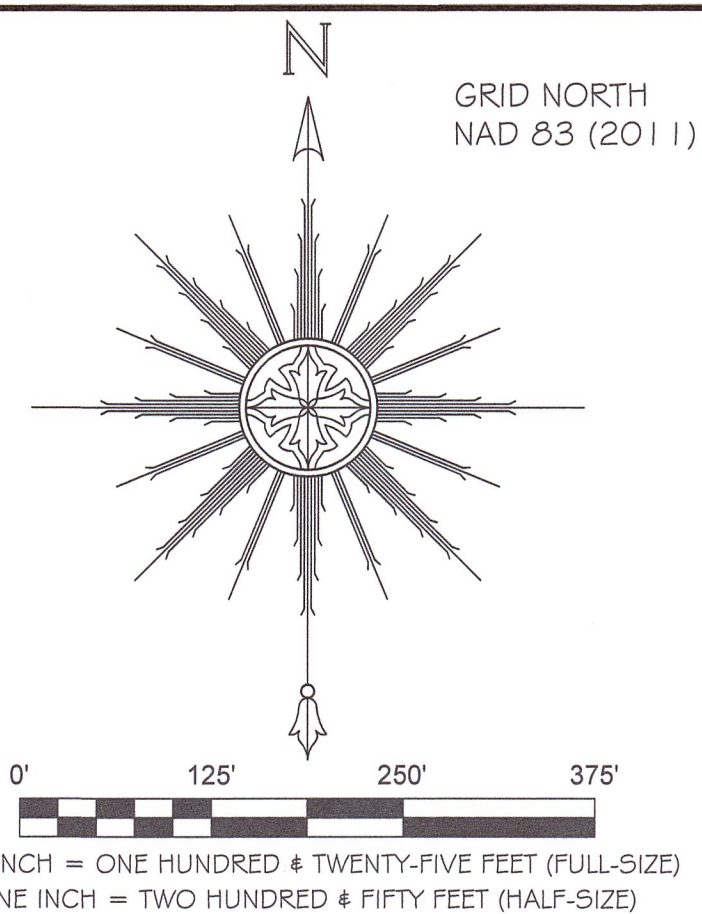
SURVEYOR'S NOTES:

- ALL DISTANCES ARE GROUND MEASUREMENTS IN US SURVEY FEET UNLESS OTHERWISE NOTED.
- PROPERTY SUBJECT TO ALL EASEMENTS, RIGHT OF WAYS AND RESTRICTIONS THAT ARE RECORDED, UNRECORDED, WRITTEN AND UNWRITTEN.
- CONSERVATION EASEMENT BOUNDARIES SHOWN HEREON WERE TAKEN FROM A PLATS OF SURVEY ENTITLED: "A FINAL PLAT OF CONSERVATION EASEMENT SURVEY FOR STATE OF NORTH CAROLINA, DIVISION OF MITIGATION SERVICES, ROSES CREEK MITIGATION SITE", PREPARED BY KEE MAPPING & SURVEYING, AND RECORDED IN PLAT BOOK 44 PAGE 224 IN THE BURKE COUNTY REGISTRY.
- BY GRAPHIC DETERMINATION, A PORTION OF THE SUBJECT PROPERTY APPEARS TO LIE WITHIN A SPECIAL FLOOD HAZARD AREA (SFHA) AS DETERMINED BY THE F.E.M.A. MAP# 3710176600J DATED 09/05/2007.
- STATE PLANE COORDINATES AND ELEVATIONS WERE DERIVED FROM THE EXISTING CONDITIONS TOPOGRAPHIC SURVEY PREPARED BY KEE MAPPING & SURVEYING. THE HORIZONTAL DATUM IS NAD 83 (2011) AND THE VERTICAL DATUM IS NAVD(88). ALL COORDINATES SHOWN HEREON ARE GROUND MEASUREMENTS IN US SURVEY FEET.
- UTILITIES WERE LOCATED BASED ON VISIBLE ABOVE GROUND STRUCTURES, THEREFORE THE LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE OR MAY BE PRESENT AND NOT SHOWN HEREON. CALL 1-800-632-4949 BEFORE DIGGING.
- STATIONING FOR THE STREAM AND PROFILES AS SHOWN HEREON ARE BASED OFF OF THE AS-BUILT AND EXISTING CONDITIONS THALWEG.
- ALL UTILITIES ARE TO BE RE-LOCATED OUTSIDE OF CONSERVATION EASEMENT AREA.
- WETLANDS SHOWN HEREON WERE DELINEATED AND PROVIDED BY ICA ENGINEERING, INC.
- CONTOUR INTERVAL: 1 FOOT
VERTICAL DATUM: NAVD 88
- LIMITS OF DISTURBANCE AREA: 15.23 ACRES

SHEET #	SHEET TITLE
1	COVER SHEET
2	STREAM DATA: "BEGIN ROSES CREEK, # CROSS-SECTIONS 1 # 2"
3	STREAM DATA: "ROSES CREEK # END UT2"
4	STREAM DATA: "ROSES CREEK"
5	STREAM DATA: "ROSES CREEK # CROSS-SECTIONS 3 # 4"
6	STREAM DATA: "ROSES CREEK, END UT3 # CROSS-SECTIONS 5 # 6"
7	STREAM DATA: "END ROSES CREEK"
8	STREAM DATA: "BEGIN UT1 # CROSS-SECTIONS 7 # 8"
9	STREAM DATA: "UT1"
10	STREAM DATA: "BEGIN UT2 # CROSS-SECTIONS 9 # 10"
11	STREAM DATA: "END UT2"
12	STREAM DATA: "BEGIN UT3 # CROSS-SECTIONS 11 # 12"
13	STREAM DATA: "LONGITUDINAL PROFILE-ROSES CREEK"
14	STREAM DATA: "LONGITUDINAL PROFILE-ROSES CREEK"
15	STREAM DATA: "LONGITUDINAL PROFILE-ROSES CREEK"
16	STREAM DATA: "LONGITUDINAL PROFILE-ROSES CREEK"
17	STREAM DATA: "LONGITUDINAL PROFILE-UT2"
18	STREAM DATA: "LONGITUDINAL PROFILE-UT3"

AN AS-BUILT SURVEY FOR: ICA ENGINEERING, INC. "ROSES CREEK STREAM MITIGATION SITE"

THE STATE OF NORTH CAROLINA,
DEPARTMENT OF ENVIRONMENTAL QUALITY-
DIVISION OF MITIGATION SERVICES
SPO FILE #: 12-DK DMS PROJECT ID: 96309



LEGEND

1	STRUCTURE NUMBER	BRUSH TOE
●	CROSS-SECTION REBAR W/ CAP	RIFFLE
⊙	EXISTING IPC IN CONCRETE (CONTROL POINT)	POOL
●	CONIFEROUS TREE (AS NOTED)	EPHEMERAL POOL
●	DECIDUOUS TREE (AS NOTED)	RIPRAP
●	UTILITY POLE	GRAVEL
+	CREST GAUGE	ROCK STEP STRUCTURE W/ CLASS B RIP RAP
+	ROCK STEP STRUCTURE W/ BOULDERS	SOIL ROADBED
+	ROCK CROSS VANE	ASPHALT
+	ROCK L VANE	WETLAND
+	ROCK L VANE W/ LOG ARM	FLOODPLAIN INTERCEPTOR (FPI)
—	CONSERVATION EASEMENT	IPC
—	MINOR CONTOUR	RBC
—	MAJOR CONTOUR	INV
—	LIMITS OF DISTURBANCE	ELEV
—	THALWEG	CMP
—	TOP OF BANK	CPP
—	PLAN CENTERLINE (*SEE NOTE 7)	RCP
—	OVERHEAD WIRE	NAD
—	FENCE LINE	NAVD
—	SPECIAL FLOOD HAZARD AREA (SFHA)	SPC
		VP
		CF
		CC

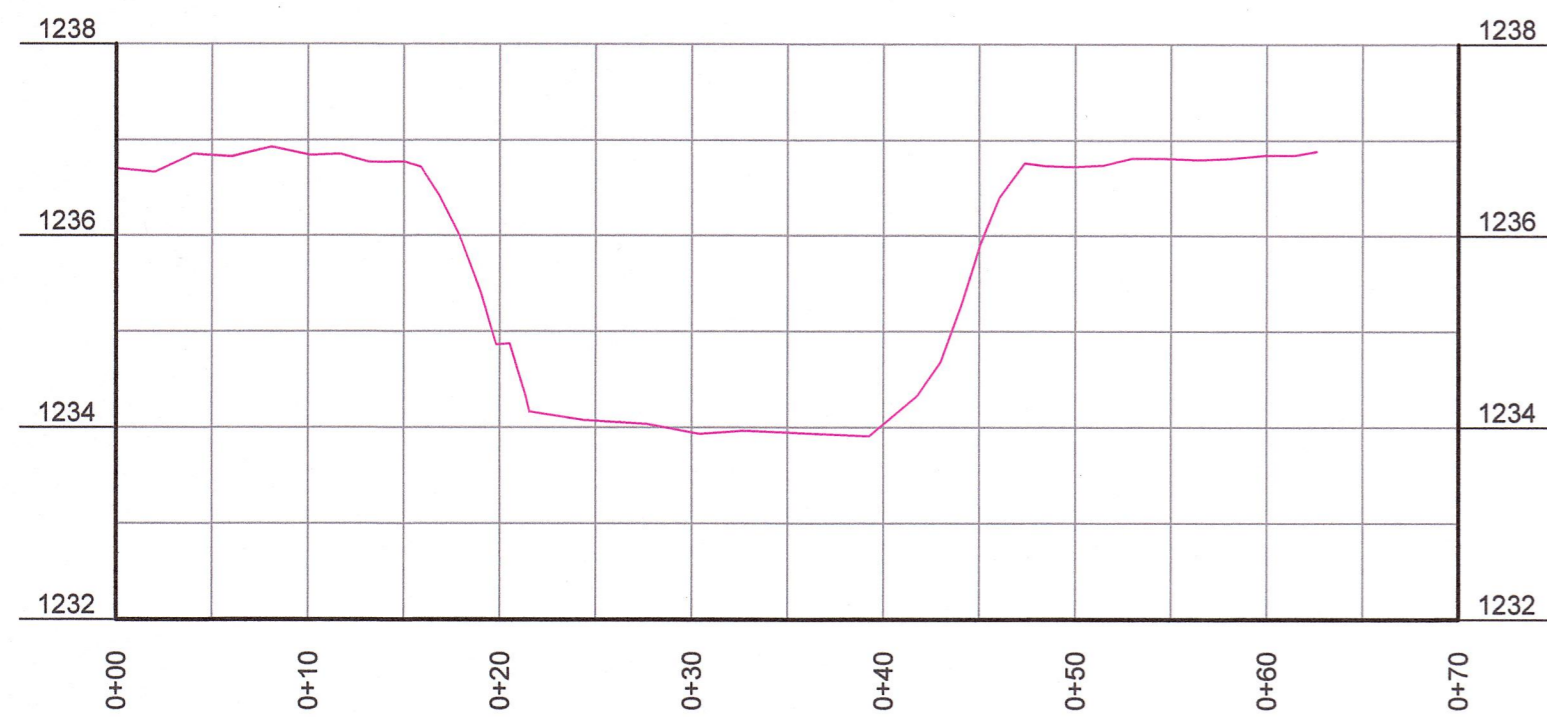
THIS MAP IS NOT FOR RECORDATION, SALES, OR CONVEYANCES AND DOES NOT COMPLY WITH G.S. 47-30 MAPPING REQUIREMENTS.

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11" X 17" HALF-SIZE
22" X 34" FULL-SIZE

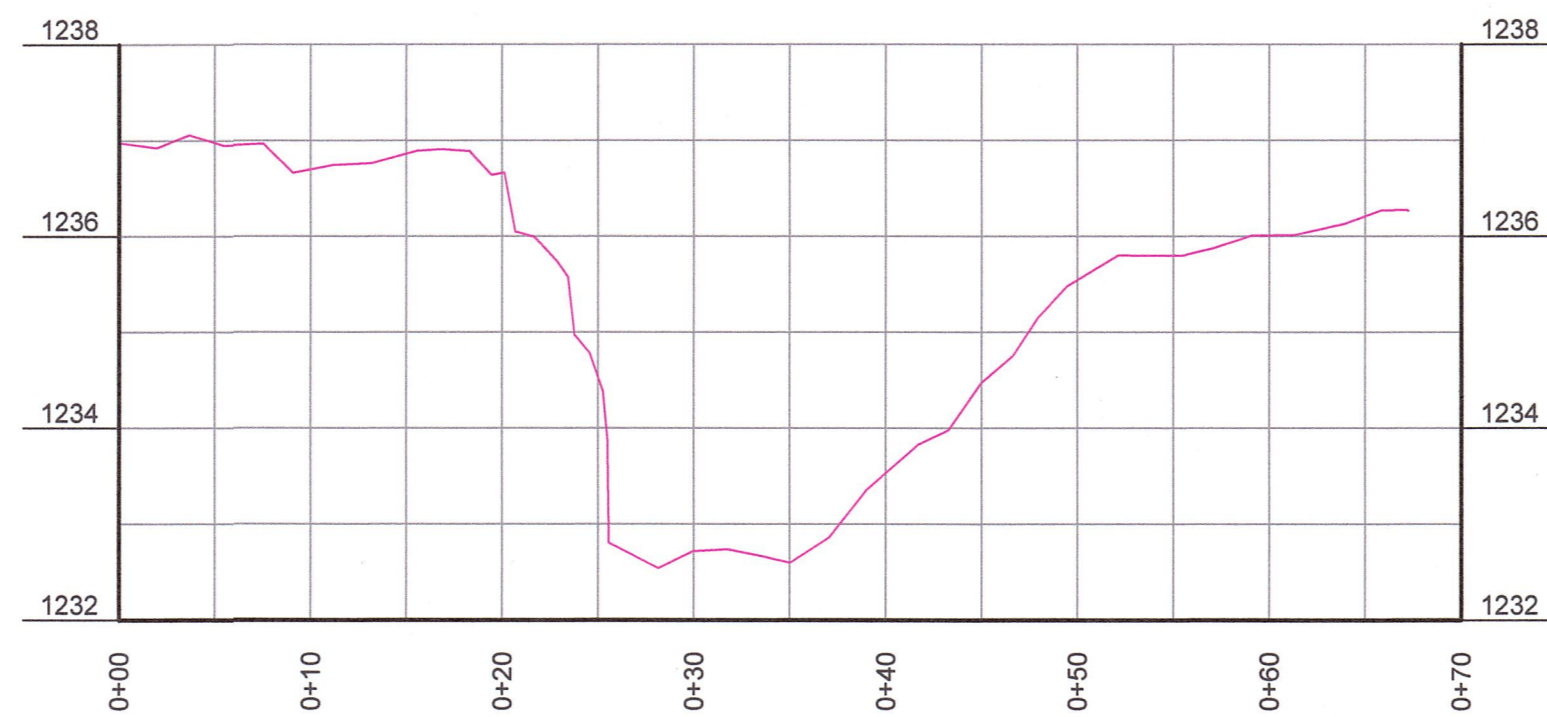
SHEET:
1 OF 18



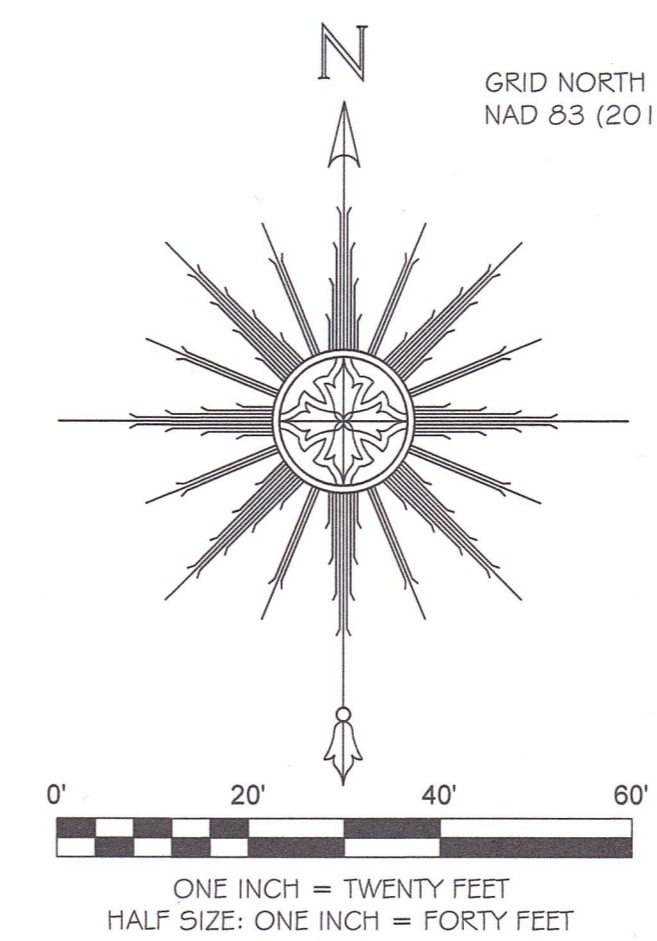
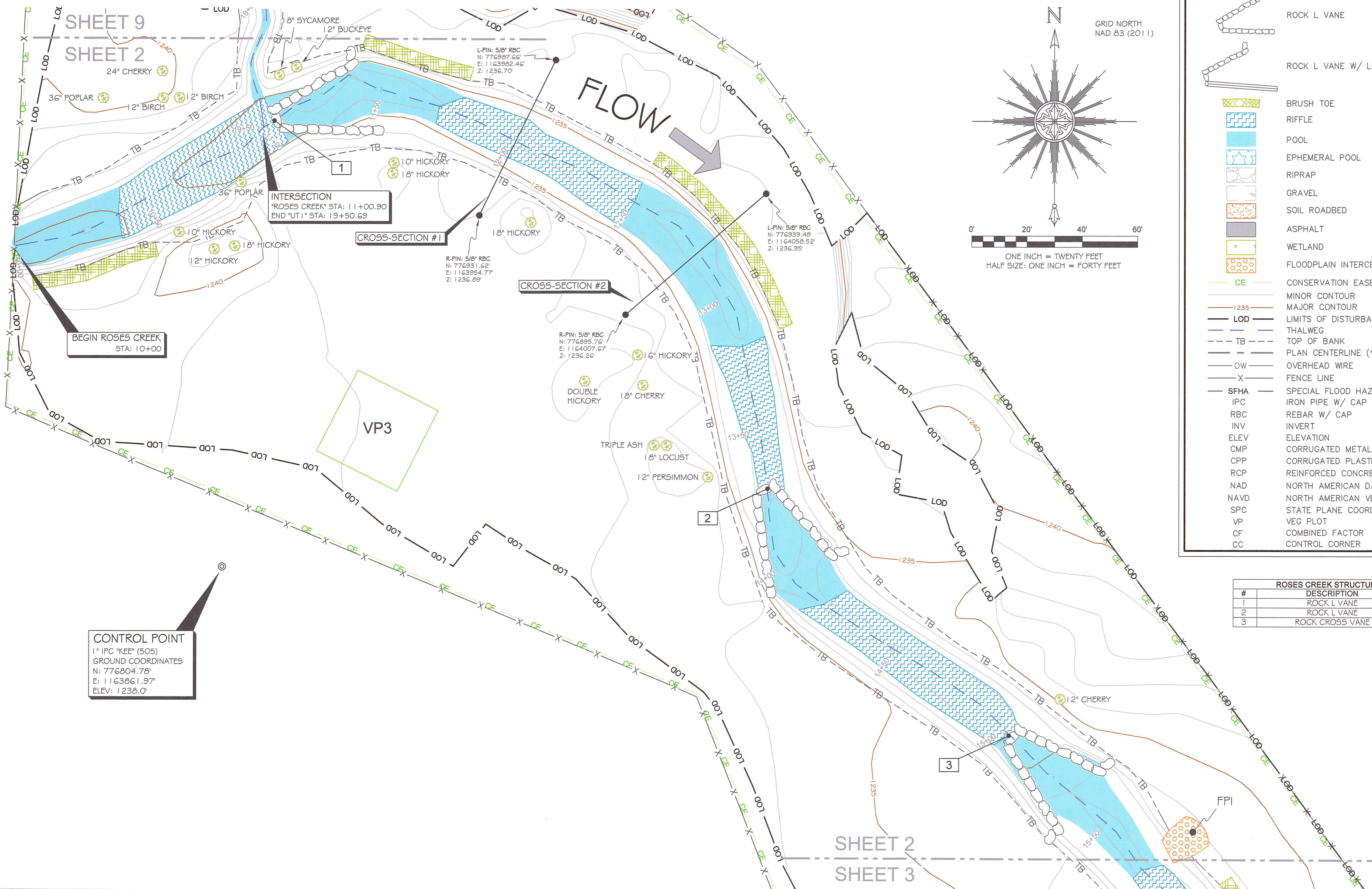
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CROSS-SECTION #1-ROSES CREEK
 HORIZONTAL SCALE: 1" = 10', FULL-SIZE, 1" = 20' HALF-SIZE
 VERTICAL SCALE: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



CROSS-SECTION #2-ROSES CREEK
 HORIZONTAL SCALE: 1" = 10', FULL-SIZE, 1" = 20' HALF-SIZE
 VERTICAL SCALE: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



LEGEND	
1	STRUCTURE NUMBER
●	CROSS-SECTION REBAR W/ CAP
⊙	EXISTING IPC IN CONCRETE (CONTROL CORNER)
●	CONIFEROUS TREE (AS NOTED)
○	DECIDUOUS TREE (AS NOTED)
⊙	UTILITY POLE
⊙	CREST GAUGE
⊙	ROCK STEP STRUCTURE W/ CLASS B RIP RAP
⊙	ROCK STEP STRUCTURE W/ BOULDERS
⊙	ROCK CROSS VANE
⊙	ROCK L VANE
⊙	ROCK L VANE W/ LOG ARM
⊙	BRUSH TOE
⊙	RIFFLE
⊙	POOL
⊙	EPHEMERAL POOL
⊙	RIPRAP
⊙	GRAVEL
⊙	SOIL ROADBED
⊙	ASPHALT
⊙	WETLAND
⊙	FLOODPLAIN INTERCEPTOR (FPI)
CE	CONSERVATION EASEMENT
---	MINOR CONTOUR
---	MAJOR CONTOUR
LOD	LIMITS OF DISTURBANCE
---	THALWEG
TB	TOP OF BANK
---	PLAN CENTERLINE (*SEE NOTE 7)
OW	OVERHEAD WIRE
X	FENCE LINE
SFHA	SPECIAL FLOOD HAZARD AREA (SFHA)
IPC	IRON PIPE W/ CAP
RBC	REBAR W/ CAP
INV	INVERT
ELEV	ELEVATION
CMP	CORRUGATED METAL PIPE
CPP	CORRUGATED PLASTIC PIPE
RCP	REINFORCED CONCRETE PIPE
NAD	NORTH AMERICAN DATUM
NAVd	NORTH AMERICAN VERTICAL DATUM
SPC	STATE PLANE COORDINATES
VP	VEG PLOT
CF	COMBINED FACTOR
CC	CONTROL CORNER

#	DESCRIPTION	ELEV.
1	ROCK L VANE	1234.6
2	ROCK L VANE	1232.5
3	ROCK CROSS VANE	1231.6

SEAL:

PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
 STREAM MITIGATION
 SITE**

SHEET TITLE:
**STREAM DATA:
 BEGIN ROSES CREEK
 &
 CROSS-SECTIONS 1 & 2**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET:
2 OF 18

Kee
 MAPPING & SURVEYING

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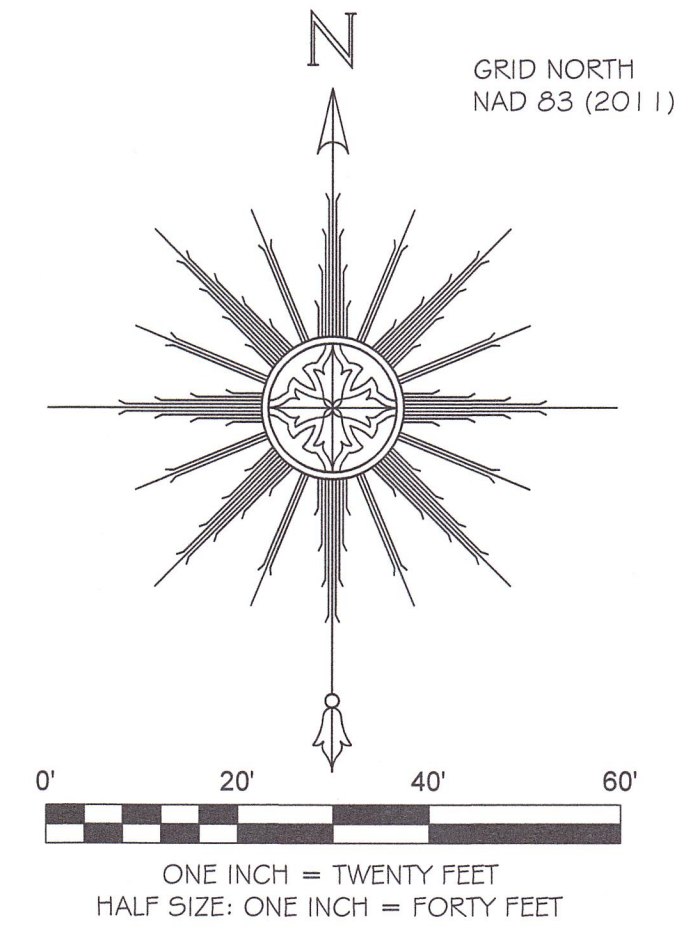
CONTROL POINT
 1" IPC "KEE" (505)
 GROUND COORDINATES
 N: 776804.78'
 E: 1163861.97'
 ELEV: 1238.0'

ROSES CREEK STRUCTURE TABLE		
#	DESCRIPTION	ELEV.
4	ROCK STEP STRUCTURE W/ BOULDERS	1230.2
5	ROCK STEP STRUCTURE W/ BOULDERS	1229.7
6	ROCK L VANE	1229.0
7	ROCK STEP STRUCTURE W/ BOULDERS	1228.4
8	ROCK STEP STRUCTURE W/ BOULDERS	1227.3
9	ROCK STEP STRUCTURE W/ BOULDERS	1227.0
10	ROCK STEP STRUCTURE W/ BOULDERS	1226.0

UT2 STRUCTURE TABLE		
#	DESCRIPTION	ELEV.
47	ROCK STEP STRUCTURE W/ CLASS B	1229.8
48	ROCK STEP STRUCTURE W/ CLASS B	1229.3
49	ROCK STEP STRUCTURE W/ CLASS B	1228.5
50	ROCK STEP STRUCTURE W/ CLASS B	1227.7
51	ROCK STEP STRUCTURE W/ CLASS B	1227.4

LEGEND

- 1** STRUCTURE NUMBER
- CROSS-SECTION REBAR W/ CAP
- ⊙ EXISTING IPC IN CONCRETE (CONTROL CORNER)
- CONIFEROUS TREE (AS NOTED)
- DECIDUOUS TREE (AS NOTED)
- ⊙ UTILITY POLE
- ⊕ CREST GAUGE
- ⊕ ROCK STEP STRUCTURE W/ CLASS B RIP RAP
- ⊕ ROCK STEP STRUCTURE W/ BOULDERS
- ⊕ ROCK CROSS VANE
- ⊕ ROCK L VANE
- ⊕ ROCK L VANE W/ LOG ARM
- BRUSH TOE
- RIFFLE
- POOL
- EPHEMERAL POOL
- RIPRAP
- GRAVEL
- SOIL ROADBED
- ASPHALT
- WETLAND
- FLOODPLAIN INTERCEPTOR (FPI)
- CE CONSERVATION EASEMENT
- MINOR CONTOUR
- MAJOR CONTOUR
- LOD LIMITS OF DISTURBANCE
- THALWEG
- TB TOP OF BANK
- PLAN CENTERLINE (*SEE NOTE 7)
- OW OVERHEAD WIRE
- X FENCE LINE
- SFHA SPECIAL FLOOD HAZARD AREA (SFHA)
- IPC IRON PIPE W/ CAP
- RBC REBAR W/ CAP
- INV INVERT
- ELEV ELEVATION
- CMP CORRUGATED METAL PIPE
- CPP CORRUGATED PLASTIC PIPE
- RCP REINFORCED CONCRETE PIPE
- NAD NORTH AMERICAN DATUM
- NAVD NORTH AMERICAN VERTICAL DATUM
- SPC STATE PLANE COORDINATES
- VP VEG PLOT
- CF COMBINED FACTOR
- CC CONTROL CORNER



SHEET 2
SHEET 3

CONTROL POINT
1" IPC 'KEE' (504)
GROUND COORDINATES
N: 776436.92'
E: 1164075.23'
ELEV: 1231.9'

INTERSECTION
"ROSES CREEK" STA: 20+51.69
END "UT2" STA: 17+10.07

FLOW →

SEAL:

PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
ROSES CREEK STREAM MITIGATION SITE

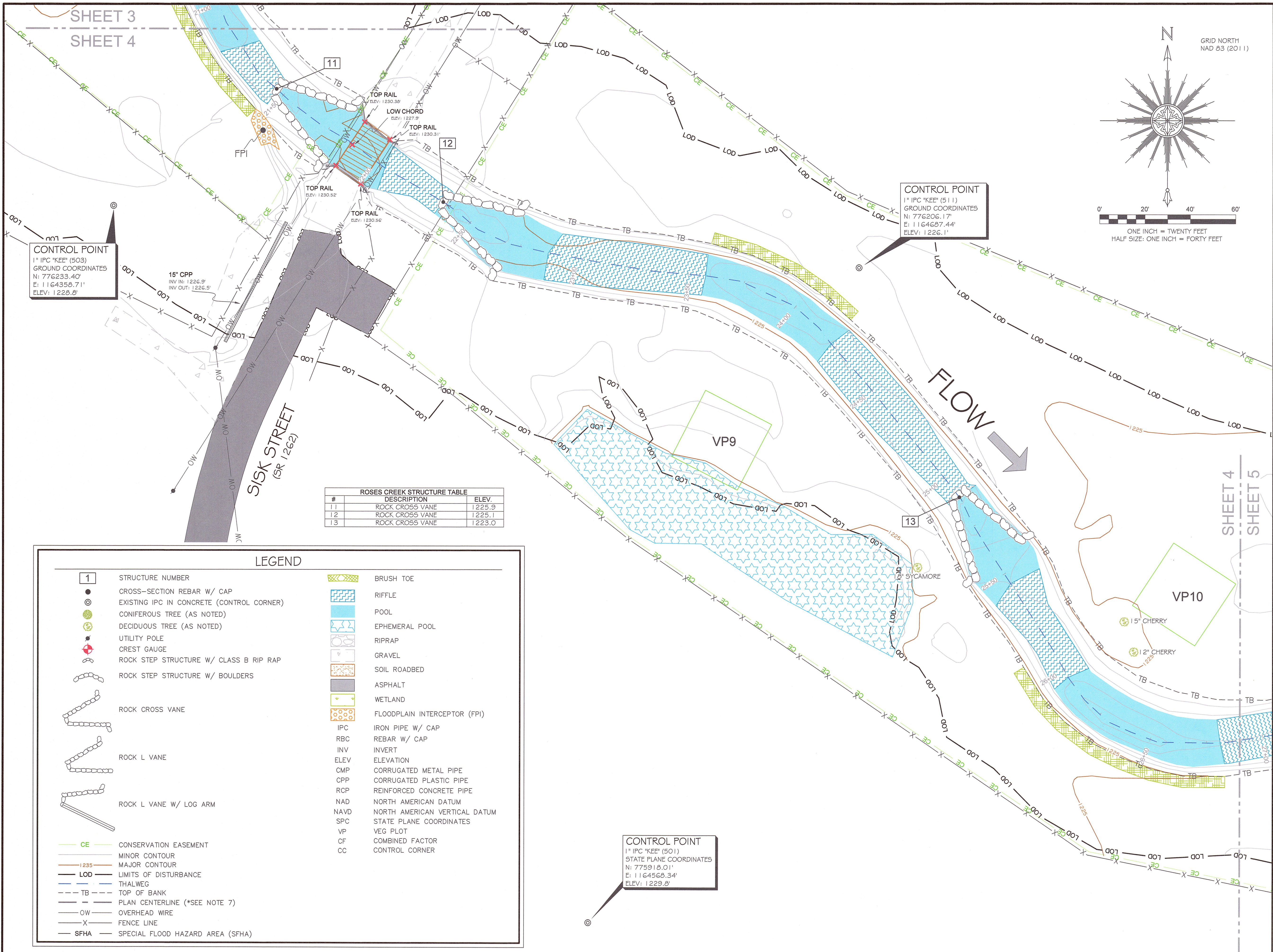
SHEET TITLE:
STREAM DATA: ROSES CREEK & END UT2

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET: **3** OF **18**

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CONTROL POINT
 1" IPC "KEE" (503)
 GROUND COORDINATES
 N: 776233.40'
 E: 1164358.71'
 ELEV: 1228.8'

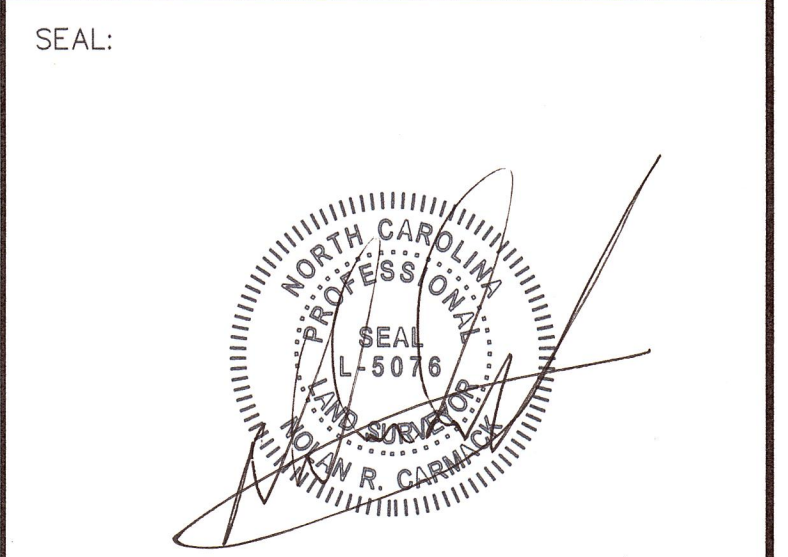
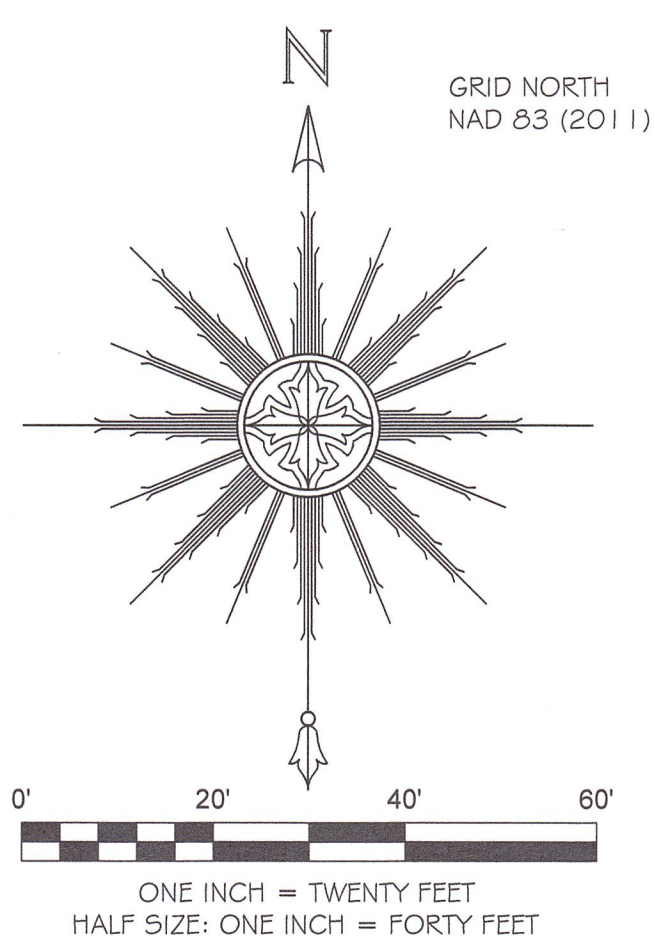
CONTROL POINT
 1" IPC "KEE" (511)
 GROUND COORDINATES
 N: 776206.17'
 E: 1164687.44'
 ELEV: 1226.11'

CONTROL POINT
 1" IPC "KEE" (501)
 STATE PLANE COORDINATES
 N: 775918.01'
 E: 1164568.34'
 ELEV: 1229.8'

#	DESCRIPTION	ELEV.
1	ROCK CROSS VANE	1225.9
2	ROCK CROSS VANE	1225.1
3	ROCK CROSS VANE	1223.0

LEGEND

1	STRUCTURE NUMBER		BRUSH TOE
	CROSS-SECTION REBAR W/ CAP		RIFFLE
	EXISTING IPC IN CONCRETE (CONTROL CORNER)		POOL
	CONIFEROUS TREE (AS NOTED)		EPHEMERAL POOL
	DECIDUOUS TREE (AS NOTED)		RIPRAP
	UTILITY POLE		GRAVEL
	CREST GAUGE		SOIL ROADBED
	ROCK STEP STRUCTURE W/ CLASS B RIP RAP		ASPHALT
	ROCK STEP STRUCTURE W/ BOULDERS		WETLAND
	ROCK CROSS VANE		FLOODPLAIN INTERCEPTOR (FPI)
	ROCK L VANE		IPC IRON PIPE W/ CAP
	ROCK L VANE W/ LOG ARM		RBC REBAR W/ CAP
	CE CONSERVATION EASEMENT		INV INVERT
	MINOR CONTOUR		CMP CORRUGATED METAL PIPE
	MAJOR CONTOUR		CPP CORRUGATED PLASTIC PIPE
	LIMITS OF DISTURBANCE		RCP REINFORCED CONCRETE PIPE
	THALWEG		NAD NORTH AMERICAN DATUM
	TOP OF BANK		NAVD NORTH AMERICAN VERTICAL DATUM
	PLAN CENTERLINE (*SEE NOTE 7)		SPC STATE PLANE COORDINATES
	OW OVERHEAD WIRE		VP VEG PLOT
	X FENCE LINE		CF COMBINED FACTOR
	SFHA SPECIAL FLOOD HAZARD AREA (SFHA)		CC CONTROL CORNER



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION
 NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
 NC DEQ-DIVISION OF
 MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
 STREAM MITIGATION
 SITE**

SHEET TITLE:
**STREAM DATA:
 ROSES CREEK**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA

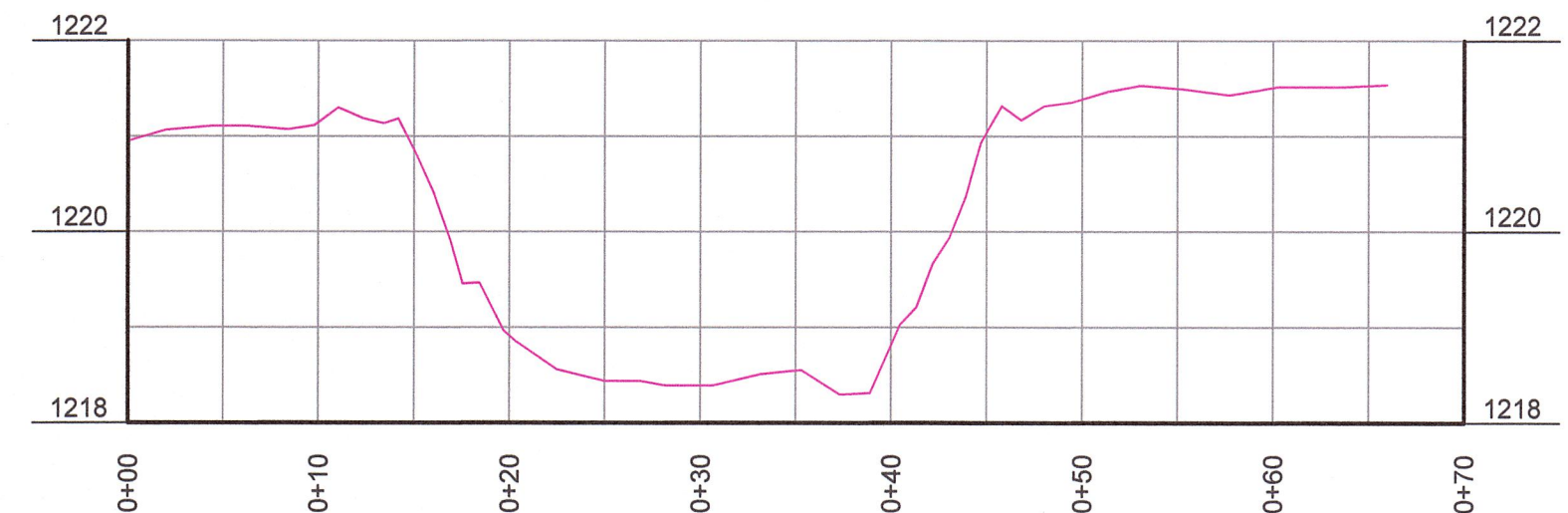
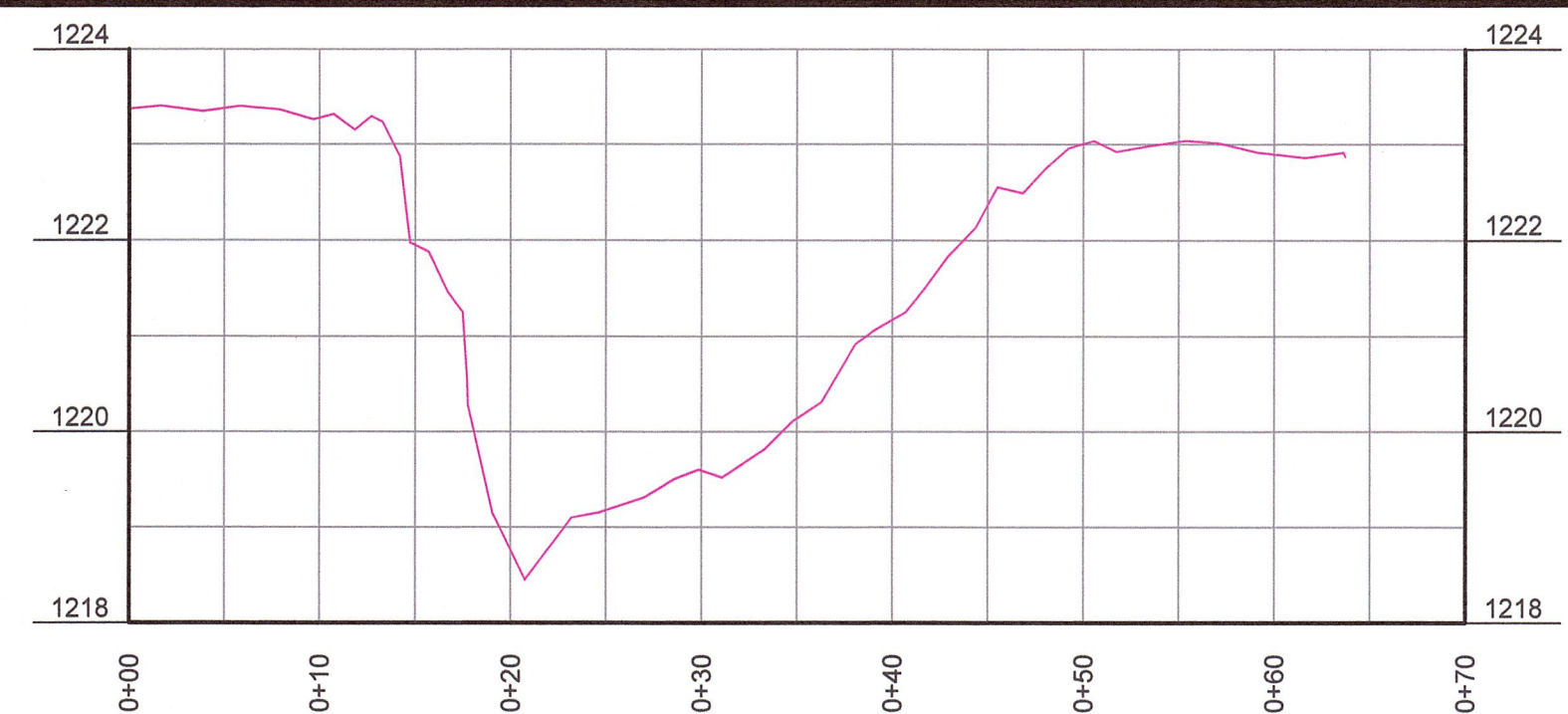
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE

#	DATE	REVISIONS

SHEET:
4 OF 18



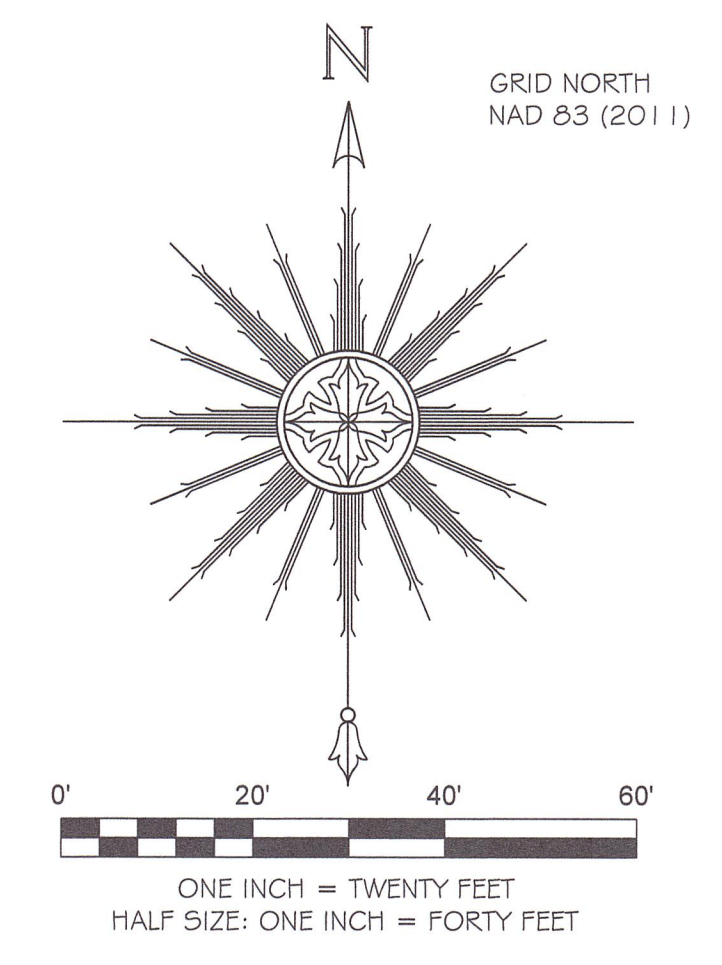
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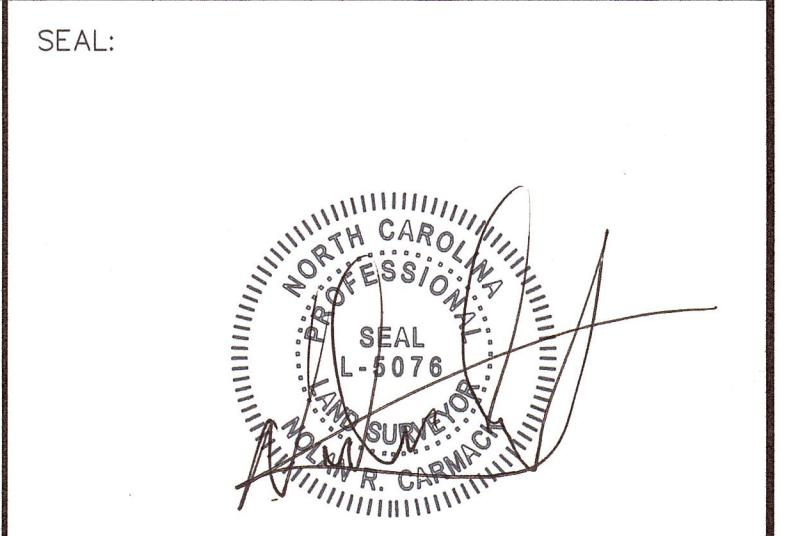
LEGEND

1	STRUCTURE NUMBER		BRUSH TOE
	CROSS-SECTION REBAR W/ CAP		RIFFLE
	EXISTING IPC IN CONCRETE (CONTROL CORNER)		POOL
	CONIFEROUS TREE (AS NOTED)		EPHEMERAL POOL
	DECIDUOUS TREE (AS NOTED)		RIPRAP
	UTILITY POLE		GRAVEL
	CREST GAUGE		SOIL ROADBED
	ROCK STEP STRUCTURE W/ CLASS B RIP RAP		ASPHALT
	ROCK STEP STRUCTURE W/ BOULDERS		WETLAND
	ROCK CROSS VANE		FLOODPLAIN INTERCEPTOR (FPI)
	ROCK L VANE	IPC	IRON PIPE W/ CAP
	ROCK L VANE W/ LOG ARM	RBC	REBAR W/ CAP
	CE CONSERVATION EASEMENT	INV	INVERT
	MINOR CONTOUR	ELEV	ELEVATION
	MAJOR CONTOUR	CMP	CORRUGATED METAL PIPE
	LOD LIMITS OF DISTURBANCE	CPP	CORRUGATED PLASTIC PIPE
	THALWEG	RCP	REINFORCED CONCRETE PIPE
	TOP OF BANK	NAD	NORTH AMERICAN DATUM
	PLAN CENTERLINE (*SEE NOTE 7)	NAVD	NORTH AMERICAN VERTICAL DATUM
	OW OVERHEAD WIRE	SPC	STATE PLANE COORDINATES
	FENCE LINE	VP	VEG PLOT
	SFHA SPECIAL FLOOD HAZARD AREA (SFHA)	CF	COMBINED FACTOR
		CC	CONTROL CORNER

ROSES CREEK STRUCTURE TABLE		
#	DESCRIPTION	ELEV.
14	ROCK CROSS VANE	1221.3



CONTROL POINT
 1" IPC "KEE" (514)
 GROUND COORDINATES
 N: 776112.06'
 E: 1165366.13'
 ELEV: 1223.7'



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION
 NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
ROSES CREEK STREAM MITIGATION SITE

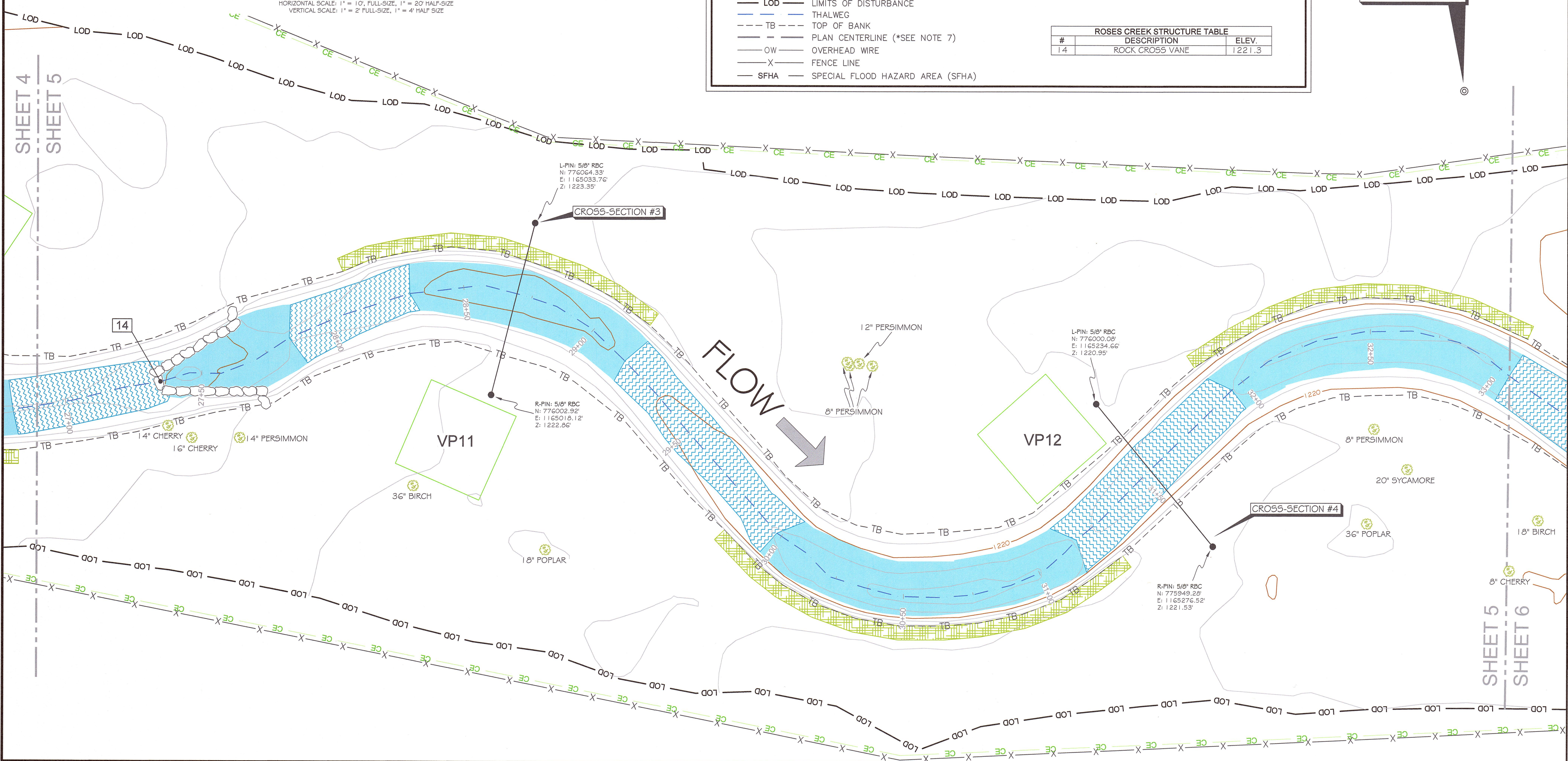
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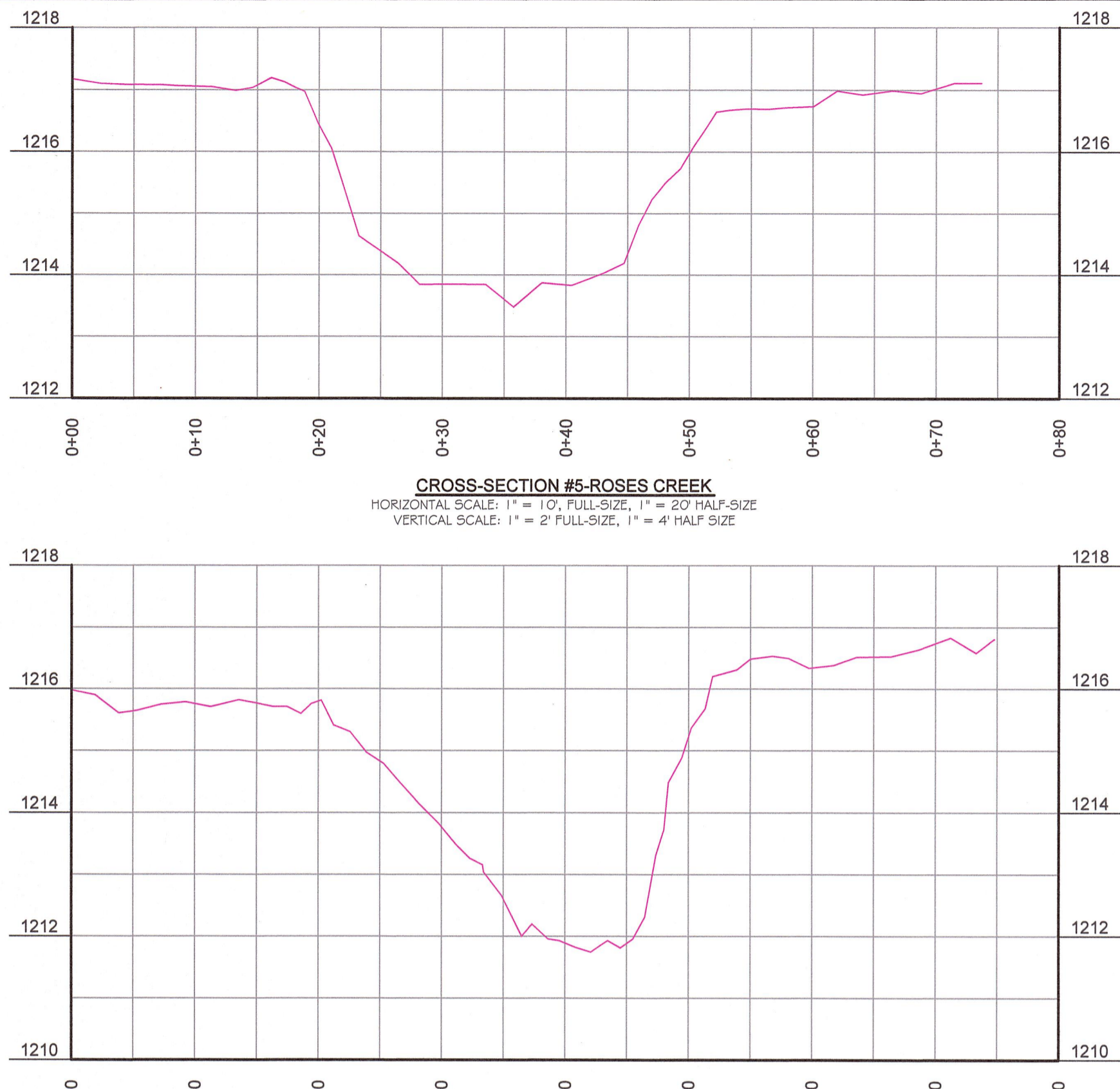
TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET: **5** OF **18**



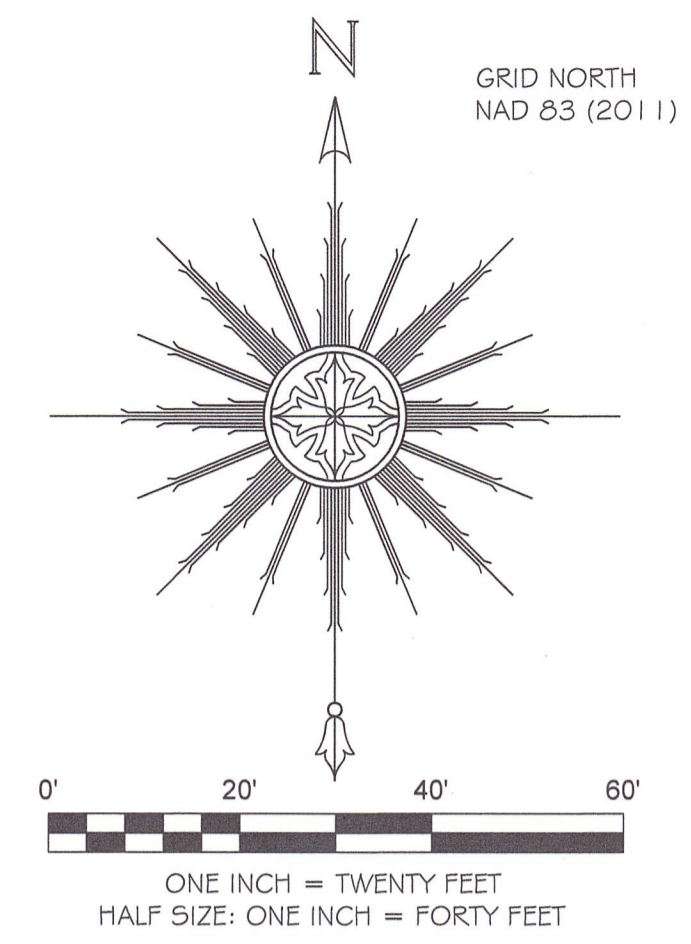
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LEGEND

<ul style="list-style-type: none"> 1 STRUCTURE NUMBER ● CROSS-SECTION REBAR W/ CAP ⊙ EXISTING IPC IN CONCRETE (CONTROL CORNER) ⊙ CONIFEROUS TREE (AS NOTED) ⊙ DECIDUOUS TREE (AS NOTED) ⊙ UTILITY POLE ⊙ CREST GAUGE ⊙ ROCK STEP STRUCTURE W/ CLASS B RIP RAP ⊙ ROCK STEP STRUCTURE W/ BOULDERS ⊙ ROCK CROSS VANE ⊙ ROCK L VANE ⊙ ROCK L VANE W/ LOG ARM — CE CONSERVATION EASEMENT — MINOR CONTOUR — 1235 MAJOR CONTOUR — LOD LIMITS OF DISTURBANCE — THALWEG — TB TOP OF BANK — PLAN CENTERLINE (*SEE NOTE 7) — OW OVERHEAD WIRE — X FENCE LINE — SFHA SPECIAL FLOOD HAZARD AREA (SFHA) 	<ul style="list-style-type: none"> BRUSH TOE RIFFLE POOL EPHEMERAL POOL RIPRAP GRAVEL SOIL ROADBED ASPHALT WETLAND FLOODPLAIN INTERCEPTOR (FPI) IPC IRON PIPE W/ CAP RBC REBAR W/ CAP INV INVERT ELEV ELEVATION CMP CORRUGATED METAL PIPE CPP CORRUGATED PLASTIC PIPE RCP REINFORCED CONCRETE PIPE NAD NORTH AMERICAN DATUM NAVD NORTH AMERICAN VERTICAL DATUM SPC STATE PLANE COORDINATES VP VEG PLOT CF COMBINED FACTOR CC CONTROL CORNER
---	--



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

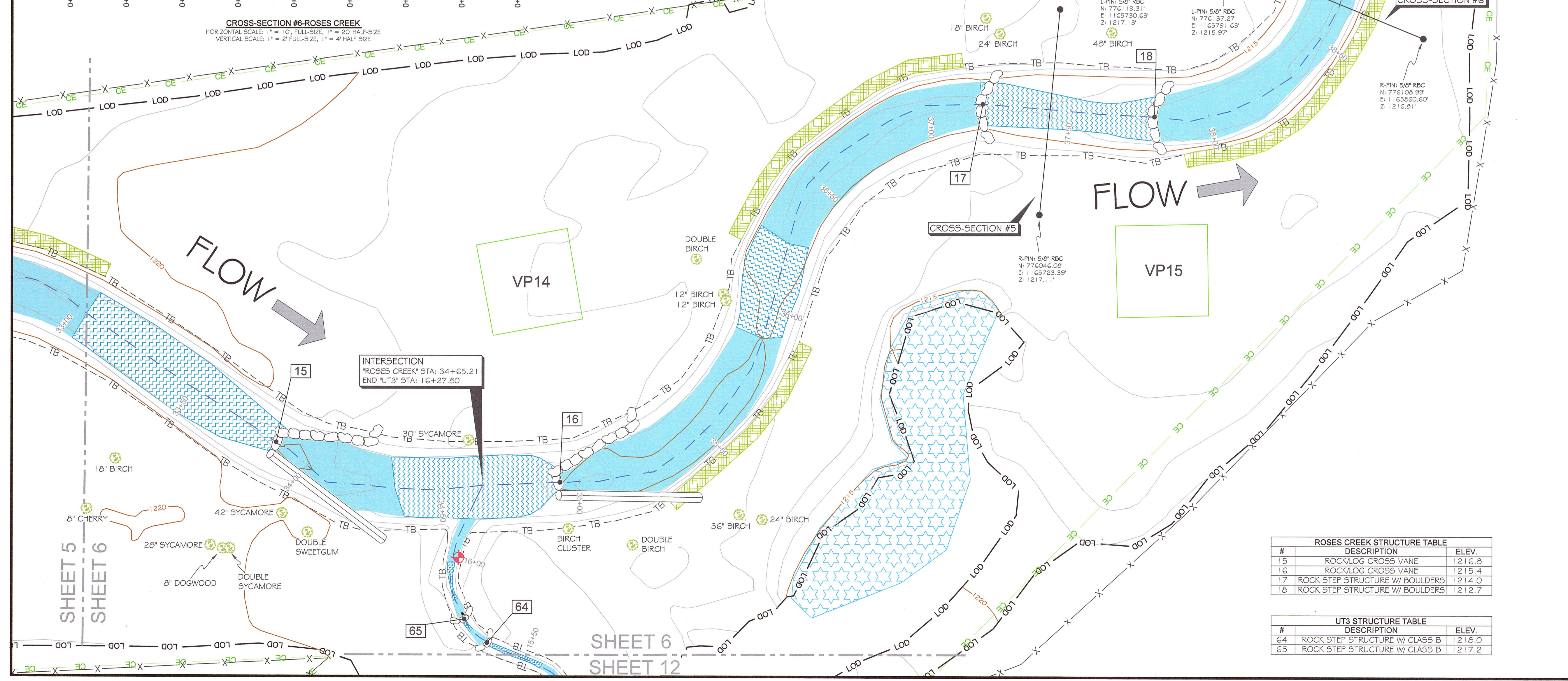
SHEET TITLE:
**STREAM DATA:
ROSES CREEK,
END UT3 &
CROSS-SECTIONS 5 & 6**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET:
6 OF **18**

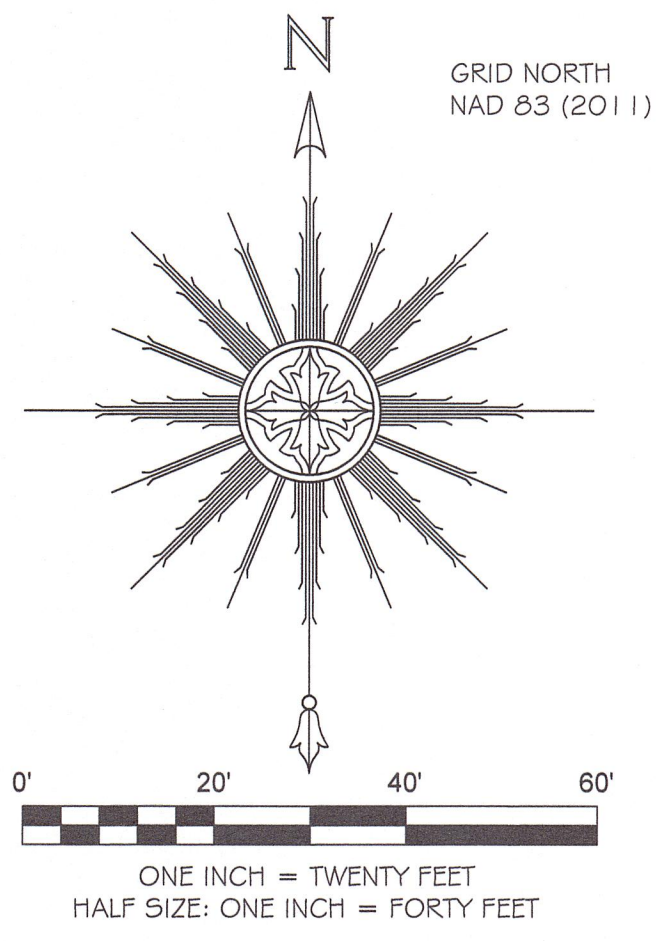


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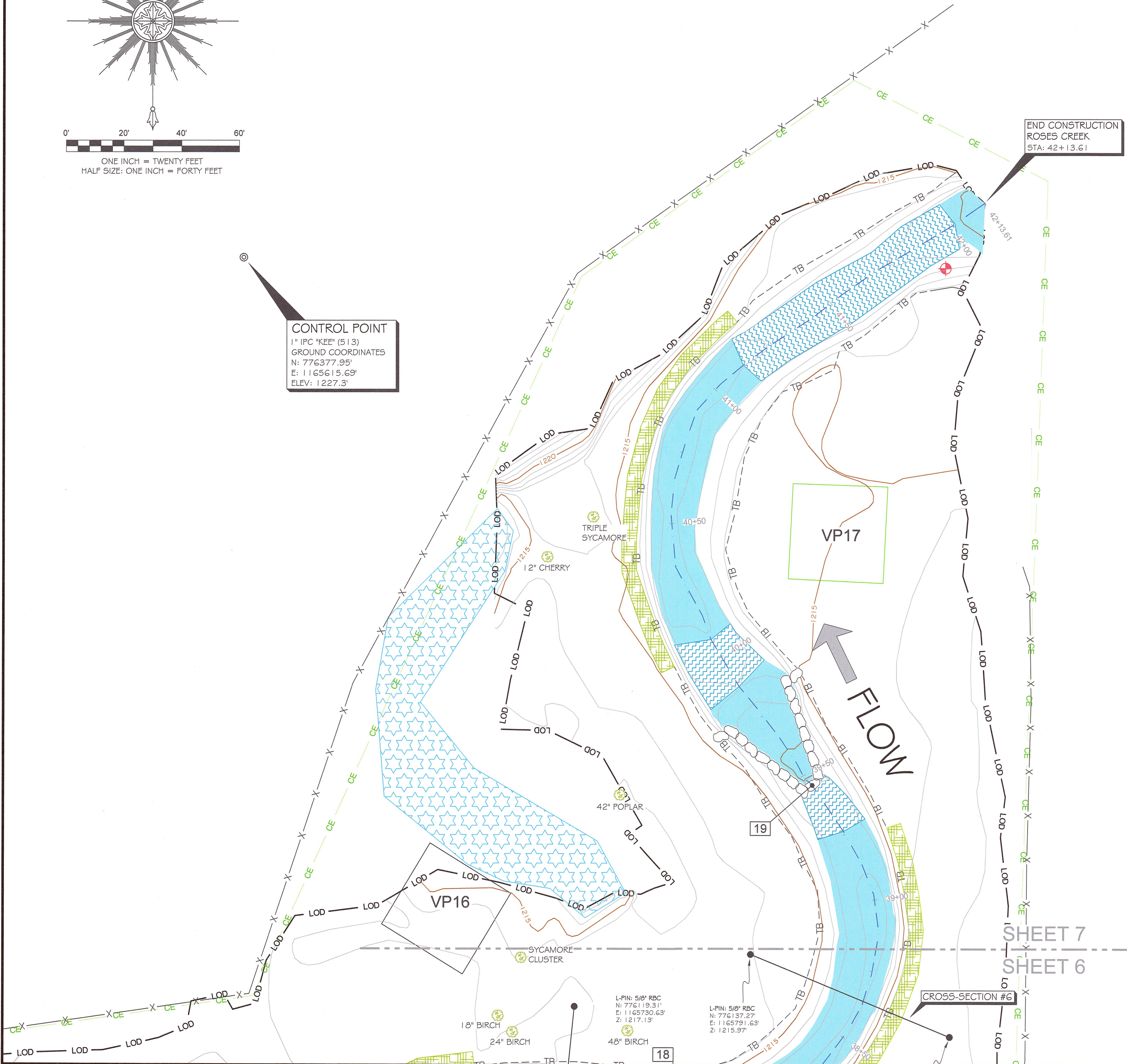
#	DESCRIPTION	ELEV.
15	ROCK/LOG CROSS VANE	1216.8
16	ROCK/LOG CROSS VANE	1215.4
17	ROCK STEP STRUCTURE W/ BOULDERS	1214.0
18	ROCK STEP STRUCTURE W/ BOULDERS	1212.7

#	DESCRIPTION	ELEV.
64	ROCK STEP STRUCTURE W/ CLASS B	1218.0
65	ROCK STEP STRUCTURE W/ CLASS B	1217.2



CONTROL POINT
 1" IPC "KEE" (513)
 GROUND COORDINATES
 N: 776377.95'
 E: 1165615.69'
 ELEV: 1227.3'

**END CONSTRUCTION
 ROSES CREEK
 STA: 42+13.61**



LEGEND	
1	STRUCTURE NUMBER
●	CROSS-SECTION REBAR W/ CAP
⊙	EXISTING IPC IN CONCRETE (CONTROL CORNER)
●	CONIFEROUS TREE (AS NOTED)
●	DECIDUOUS TREE (AS NOTED)
●	UTILITY POLE
+	CREST GAUGE
⌋	ROCK STEP STRUCTURE W/ CLASS B RIP RAP
⌋	ROCK STEP STRUCTURE W/ BOULDERS
⌋	ROCK CROSS VANE
⌋	ROCK L VANE
⌋	ROCK L VANE W/ LOG ARM
▨	BRUSH TOE
▨	RIFLE
▨	POOL
▨	EPHEMERAL POOL
▨	RIPRAP
▨	GRAVEL
▨	SOIL ROADBED
▨	ASPHALT
▨	WETLAND
▨	FLOODPLAIN INTERCEPTOR (FPI)
—	CE CONSERVATION EASEMENT
—	MINOR CONTOUR
—	MAJOR CONTOUR
—	LOD LIMITS OF DISTURBANCE
—	THALWEG
—	TB TOP OF BANK
—	PLAN CENTERLINE (*SEE NOTE 7)
—	OW OVERHEAD WIRE
X	FENCE LINE
—	SFHA SPECIAL FLOOD HAZARD AREA (SFHA)
—	IPC IRON PIPE W/ CAP
—	RBC REBAR W/ CAP
—	INV INVERT
—	ELEV ELEVATION
—	CMP CORRUGATED METAL PIPE
—	CPP CORRUGATED PLASTIC PIPE
—	RCP REINFORCED CONCRETE PIPE
—	NAD NORTH AMERICAN DATUM
—	NAVD NORTH AMERICAN VERTICAL DATUM
—	SPC STATE PLANE COORDINATES
—	VP VEG PLOT
—	CF COMBINED FACTOR
—	CC CONTROL CORNER

ROSES CREEK STRUCTURE TABLE		
#	DESCRIPTION	ELEV.
19	ROCK CROSS VANE	1212.4



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION
 NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
**NC DEQ-DIVISION OF
 MITIGATION SERVICES**

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
 STREAM MITIGATION
 SITE**

SHEET TITLE:
**STREAM DATA:
 END ROSES CREEK**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

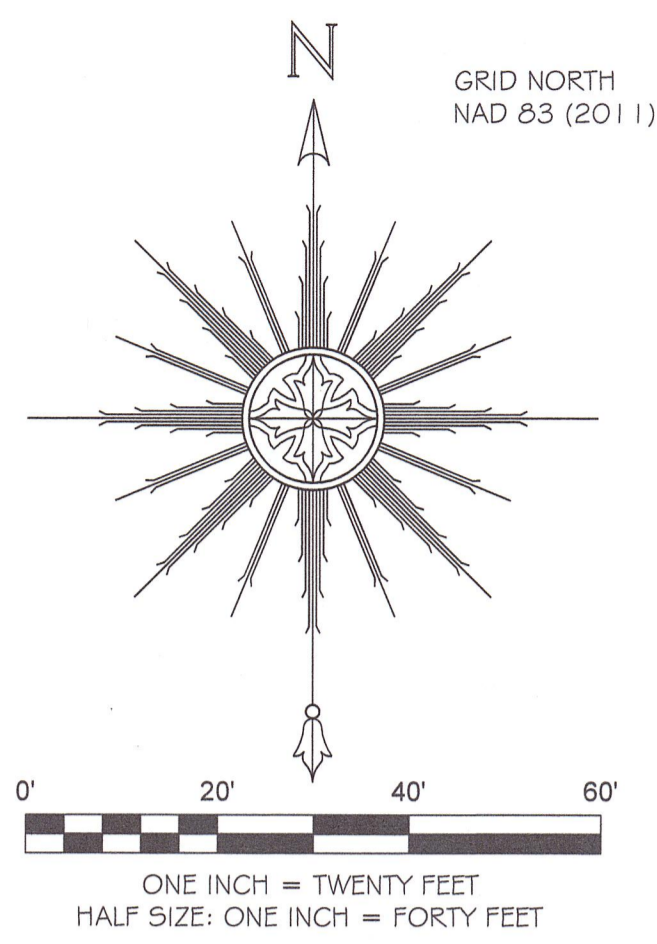
SHEET:
7 OF 18



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LEGEND

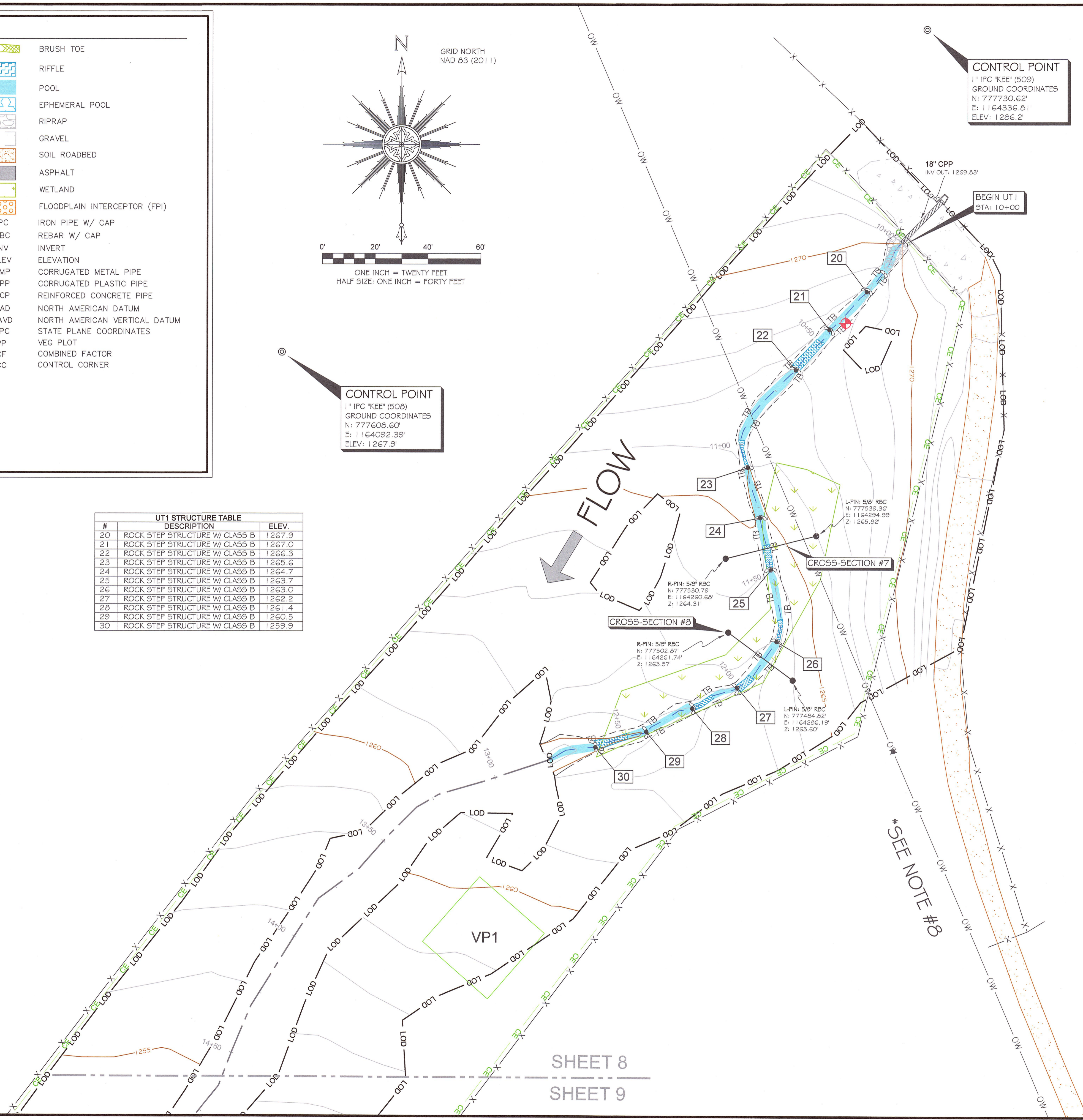
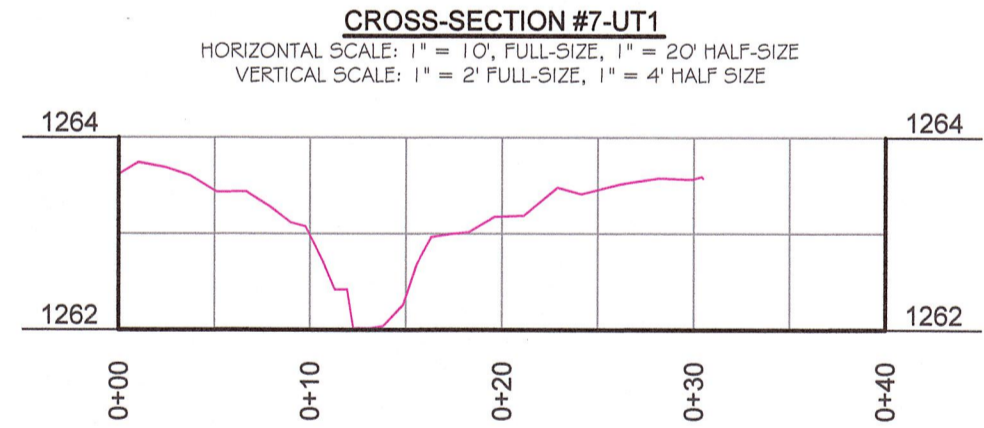
- | | | | |
|---|---|------|-------------------------------|
| 1 | STRUCTURE NUMBER | | BRUSH TOE |
| ● | CROSS-SECTION REBAR W/ CAP | | RIFFLE |
| ⊙ | EXISTING IPC IN CONCRETE (CONTROL CORNER) | | POOL |
| ● | CONIFEROUS TREE (AS NOTED) | | EPHEMERAL POOL |
| ● | DECIDUOUS TREE (AS NOTED) | | RIPRAP |
| ⊙ | UTILITY POLE | | GRAVEL |
| ⊕ | CREST GAUGE | | SOIL ROADBED |
| | ROCK STEP STRUCTURE W/ CLASS B RIP RAP | | ASPHALT |
| | ROCK STEP STRUCTURE W/ BOULDERS | | WETLAND |
| | ROCK CROSS VANE | | FLOODPLAIN INTERCEPTOR (FPI) |
| | ROCK L VANE | IPC | IRON PIPE W/ CAP |
| | ROCK L VANE W/ LOG ARM | RBC | REBAR W/ CAP |
| | CE | INV | INVERT |
| | MINOR CONTOUR | ELEV | ELEVATION |
| | MAJOR CONTOUR | CMP | CORRUGATED METAL PIPE |
| | LOD | CPP | CORRUGATED PLASTIC PIPE |
| | THALWEG | RCP | REINFORCED CONCRETE PIPE |
| | TOP OF BANK | NAD | NORTH AMERICAN DATUM |
| | PLAN CENTERLINE (*SEE NOTE 7) | NAVD | NORTH AMERICAN VERTICAL DATUM |
| | OVERHEAD WIRE | SPC | STATE PLANE COORDINATES |
| | FENCE LINE | VP | VEG PLOT |
| | SFHA | CF | COMBINED FACTOR |
| | | CC | CONTROL CORNER |



CONTROL POINT
1" IPC "KEE" (509)
GROUND COORDINATES
N: 777730.62'
E: 1164336.81'
ELEV: 1266.2'

CONTROL POINT
1" IPC "KEE" (508)
GROUND COORDINATES
N: 777608.60'
E: 1164092.39'
ELEV: 1267.9'

#	DESCRIPTION	ELEV.
20	ROCK STEP STRUCTURE W/ CLASS B	1267.9
21	ROCK STEP STRUCTURE W/ CLASS B	1267.0
22	ROCK STEP STRUCTURE W/ CLASS B	1266.3
23	ROCK STEP STRUCTURE W/ CLASS B	1265.6
24	ROCK STEP STRUCTURE W/ CLASS B	1264.7
25	ROCK STEP STRUCTURE W/ CLASS B	1263.7
26	ROCK STEP STRUCTURE W/ CLASS B	1263.0
27	ROCK STEP STRUCTURE W/ CLASS B	1262.2
28	ROCK STEP STRUCTURE W/ CLASS B	1261.4
29	ROCK STEP STRUCTURE W/ CLASS B	1260.5
30	ROCK STEP STRUCTURE W/ CLASS B	1259.9



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION
NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
ROSES CREEK
STREAM MITIGATION
SITE

SHEET TITLE:
STREAM DATA:
BEGIN UT1
&
CROSS-SECTIONS 7 & 8

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET:
8 OF 18

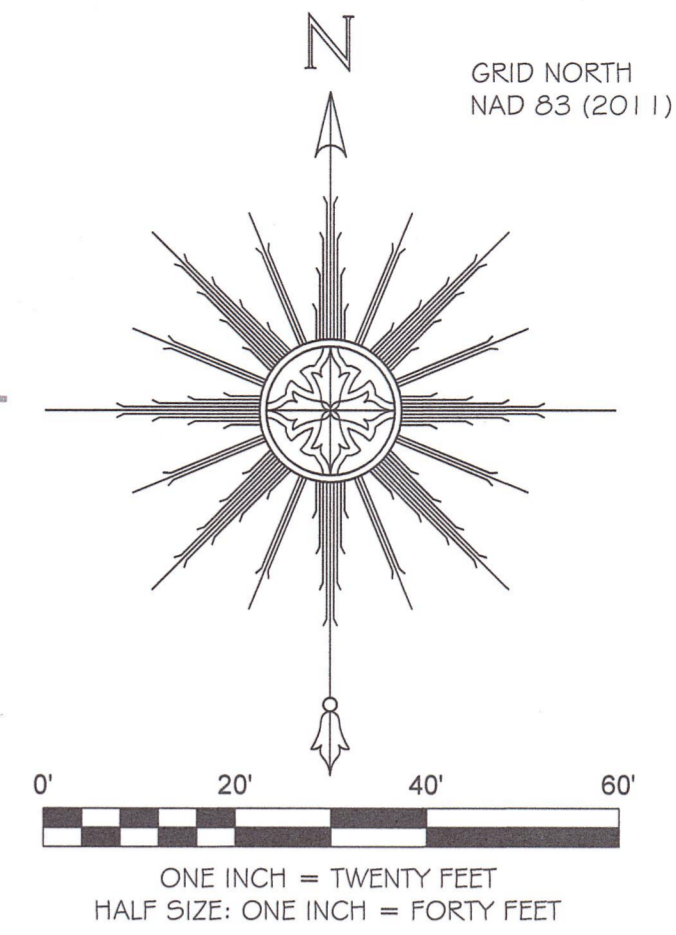


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SHEET 8
SHEET 9

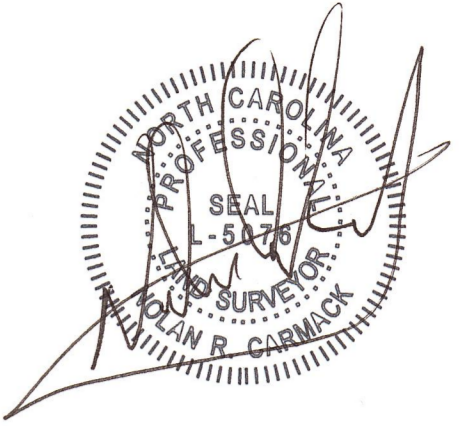
*SEE NOTE #8

CONTROL POINT
 1" IPC "KEE" (507)
 GROUND COORDINATES
 N: 777247.89'
 E: 1163857.23'
 ELEV: 1249.6'



SHEET 8
 SHEET 9

SEAL:



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
 STREAM MITIGATION
 SITE**

SHEET TITLE:
**STREAM DATA:
 UT1**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

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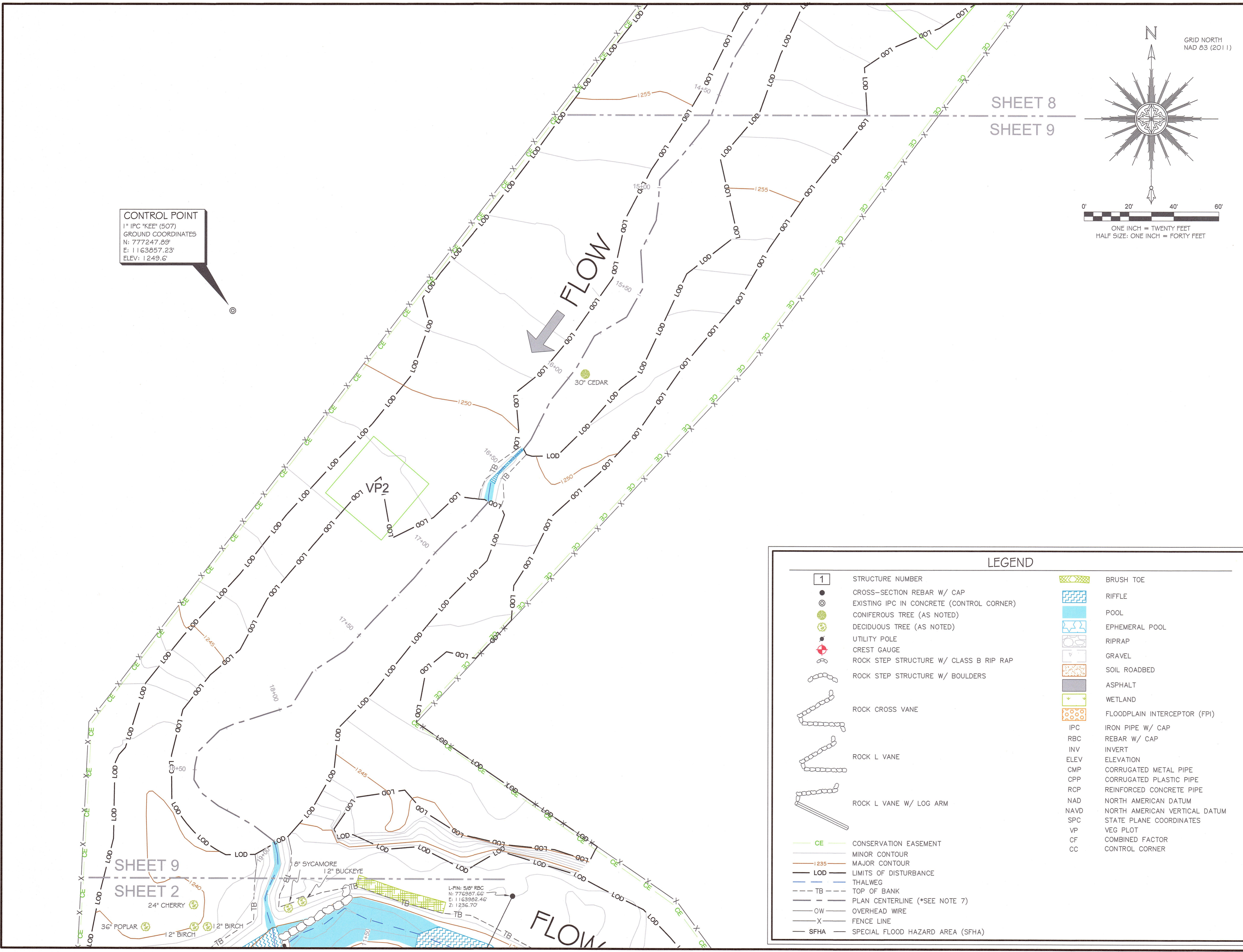
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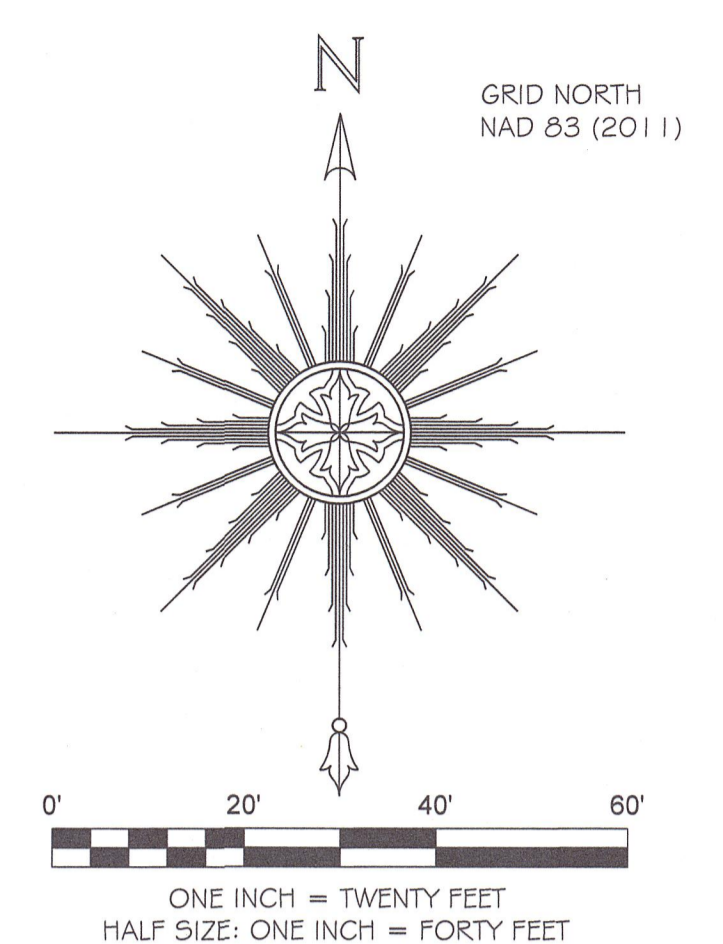
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LEGEND

	STRUCTURE NUMBER		BRUSH TOE
	CROSS-SECTION REBAR W/ CAP		RIFFLE
	EXISTING IPC IN CONCRETE (CONTROL CORNER)		POOL
	CONIFEROUS TREE (AS NOTED)		EPHEMERAL POOL
	DECIDUOUS TREE (AS NOTED)		RIPRAP
	UTILITY POLE		GRAVEL
	CREST GAUGE		SOIL ROADBED
	ROCK STEP STRUCTURE W/ CLASS B RIP RAP		ASPHALT
	ROCK STEP STRUCTURE W/ BOULDERS		WETLAND
	ROCK CROSS VANE		FLOODPLAIN INTERCEPTOR (FPI)
	ROCK L VANE		IPC
	ROCK L VANE W/ LOG ARM		RBC
	CONSERVATION EASEMENT		INV
	MINOR CONTOUR		ELEV
	MAJOR CONTOUR		CMP
	LIMITS OF DISTURBANCE		CPP
	THALWEG		RCP
	TOP OF BANK		NAD
	PLAN CENTERLINE (*SEE NOTE 7)		NAVD
	OVERHEAD WIRE		SPC
	FENCE LINE		VEG PLOT
	SPECIAL FLOOD HAZARD AREA (SFHA)		CF
			CC

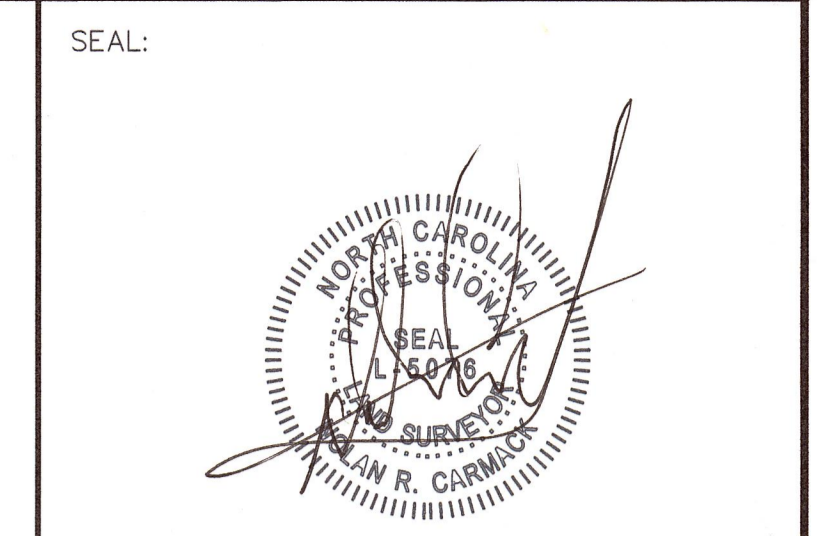
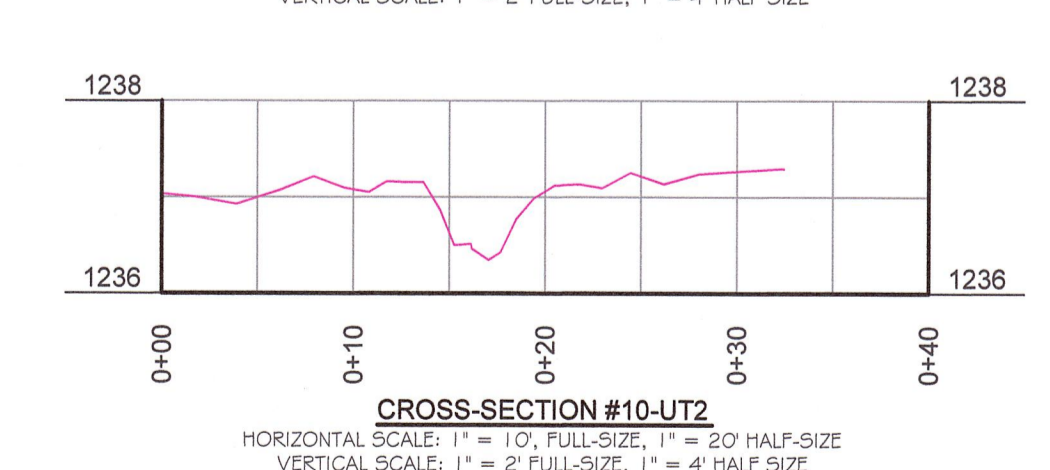
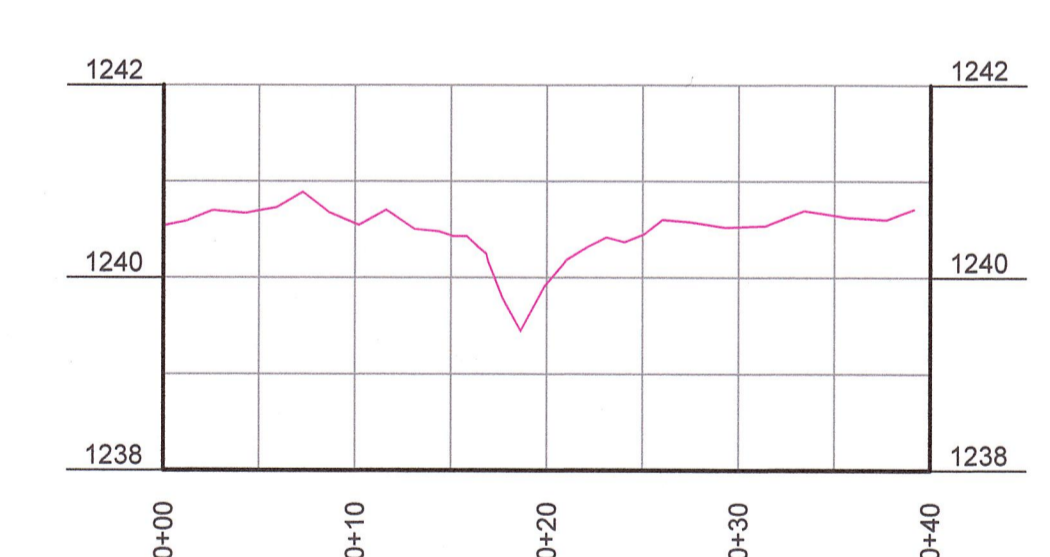


LEGEND	
1	STRUCTURE NUMBER
●	CROSS-SECTION REBAR W/ CAP
⊙	EXISTING IPC IN CONCRETE (CONTROL CORNER)
●	CONIFEROUS TREE (AS NOTED)
●	DECIDUOUS TREE (AS NOTED)
⊙	UTILITY POLE
⊙	CREST GAUGE
⊙	ROCK STEP STRUCTURE W/ CLASS B RIP RAP
⊙	ROCK STEP STRUCTURE W/ BOULDERS
⊙	ROCK CROSS VANE
⊙	ROCK L VANE
⊙	ROCK L VANE W/ LOG ARM
⊙	BRUSH TOE
⊙	RIFFLE
⊙	POOL
⊙	EPHEMERAL POOL
⊙	RIPRAP
⊙	GRAVEL
⊙	SOIL ROADBED
⊙	ASPHALT
⊙	WETLAND
⊙	FLOODPLAIN INTERCEPTOR (FPI)
CE	CONSERVATION EASEMENT
—	MINOR CONTOUR
—	MAJOR CONTOUR
—	LIMITS OF DISTURBANCE
—	THALWEG
—	TOP OF BANK
—	PLAN CENTERLINE (*SEE NOTE 7)
—	OVERHEAD WIRE
X	FENCE LINE
—	SFHA — SPECIAL FLOOD HAZARD AREA (SFHA)
—	IPC — IRON PIPE W/ CAP
—	RBC — REBAR W/ CAP
—	INV — INVERT
—	ELEV — ELEVATION
—	CMP — CORRUGATED METAL PIPE
—	CPP — CORRUGATED PLASTIC PIPE
—	RCP — REINFORCED CONCRETE PIPE
—	NAD — NORTH AMERICAN DATUM
—	NAVD — NORTH AMERICAN VERTICAL DATUM
—	SPC — STATE PLANE COORDINATES
—	VP — VEG PLOT
—	CF — COMBINED FACTOR
—	CC — CONTROL CORNER



CONTROL POINT
 1" IPC "KEE" (517)
 GROUND COORDINATES
 N: 776741.35'
 E: 1164591.65'
 ELEV: 1238.7'

#	DESCRIPTION	ELEV.
31	ROCK STEP STRUCTURE W/ CLASS B	1239.9
32	ROCK STEP STRUCTURE W/ CLASS B	1239.2
33	ROCK STEP STRUCTURE W/ CLASS B	1238.7
34	ROCK STEP STRUCTURE W/ CLASS B	1238.3
35	ROCK STEP STRUCTURE W/ CLASS B	1237.5
36	ROCK STEP STRUCTURE W/ CLASS B	1237.0
37	ROCK STEP STRUCTURE W/ CLASS B	1236.3
38	ROCK STEP STRUCTURE W/ CLASS B	1235.6
39	ROCK STEP STRUCTURE W/ CLASS B	1235.0
40	ROCK STEP STRUCTURE W/ CLASS B	1234.2
41	ROCK STEP STRUCTURE W/ CLASS B	1233.5
42	ROCK STEP STRUCTURE W/ CLASS B	1232.8
43	ROCK STEP STRUCTURE W/ CLASS B	1232.3
44	ROCK STEP STRUCTURE W/ CLASS B	1231.7



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION
 NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
 NC DEQ-DIVISION OF
 MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
 STREAM MITIGATION
 SITE**

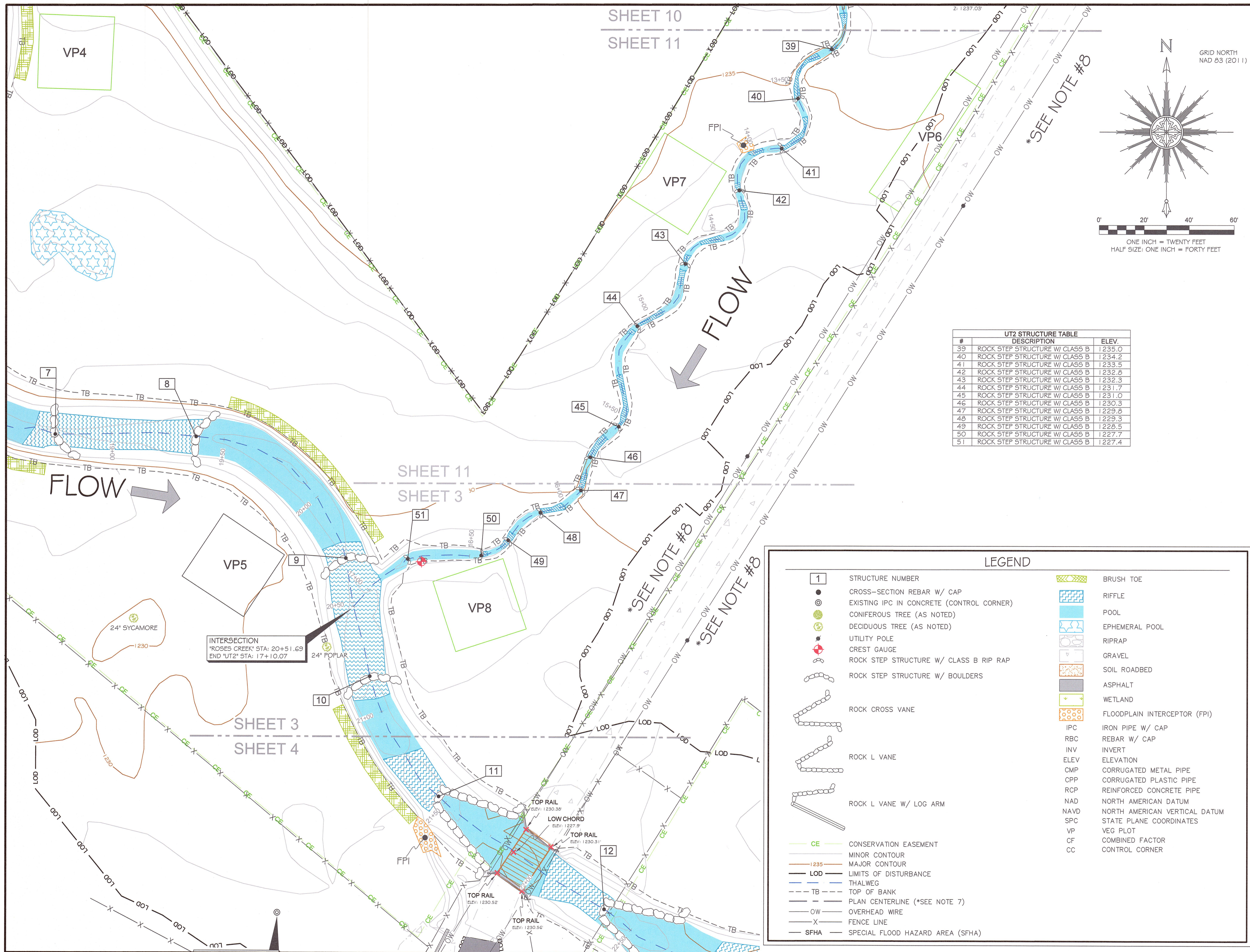
SHEET TITLE:
**STREAM DATA:
 BEGIN UT2
 &
 CROSS-SECTIONS 9 & 10**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

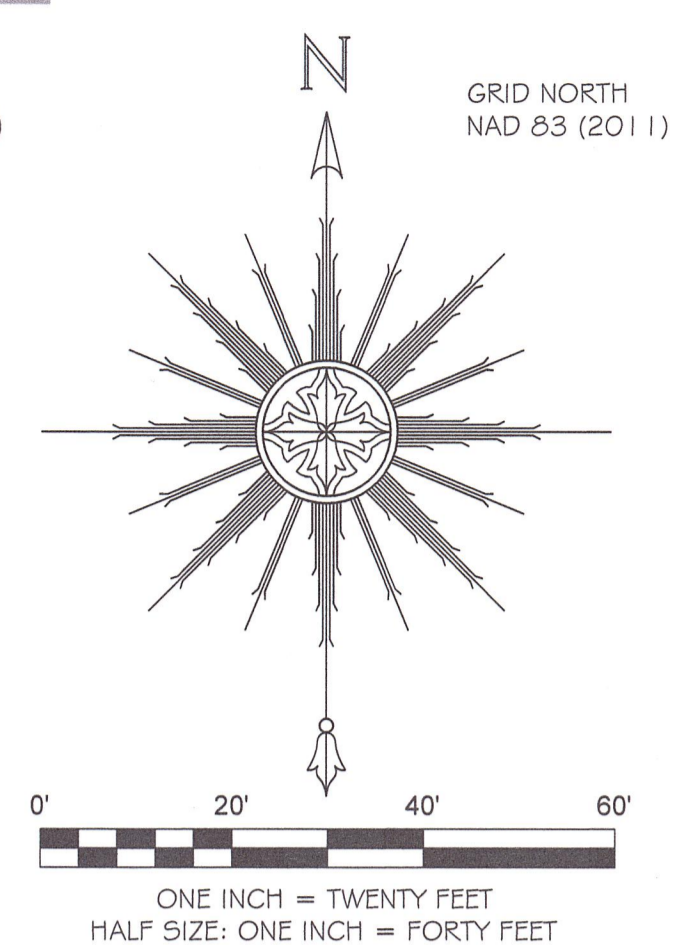
SHEET:
10 OF 18



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SHEET 10
SHEET 11



#	DESCRIPTION	ELEV.
39	ROCK STEP STRUCTURE W/ CLASS B	1235.0
40	ROCK STEP STRUCTURE W/ CLASS B	1234.2
41	ROCK STEP STRUCTURE W/ CLASS B	1233.5
42	ROCK STEP STRUCTURE W/ CLASS B	1232.8
43	ROCK STEP STRUCTURE W/ CLASS B	1232.3
44	ROCK STEP STRUCTURE W/ CLASS B	1231.7
45	ROCK STEP STRUCTURE W/ CLASS B	1231.0
46	ROCK STEP STRUCTURE W/ CLASS B	1230.3
47	ROCK STEP STRUCTURE W/ CLASS B	1229.8
48	ROCK STEP STRUCTURE W/ CLASS B	1229.3
49	ROCK STEP STRUCTURE W/ CLASS B	1228.5
50	ROCK STEP STRUCTURE W/ CLASS B	1227.7
51	ROCK STEP STRUCTURE W/ CLASS B	1227.4

LEGEND	
[1]	STRUCTURE NUMBER
●	CROSS-SECTION REBAR W/ CAP
⊙	EXISTING IPC IN CONCRETE (CONTROL CORNER)
●	CONIFEROUS TREE (AS NOTED)
●	DECIDUOUS TREE (AS NOTED)
●	UTILITY POLE
●	CREST GAUGE
●	ROCK STEP STRUCTURE W/ CLASS B RIP RAP
●	ROCK STEP STRUCTURE W/ BOULDERS
●	ROCK CROSS VANE
●	ROCK L VANE
●	ROCK L VANE W/ LOG ARM
—	CONSERVATION EASEMENT
—	MINOR CONTOUR
—	MAJOR CONTOUR
—	LIMITS OF DISTURBANCE
—	THALWEG
—	TOP OF BANK
—	PLAN CENTERLINE (*SEE NOTE 7)
—	OVERHEAD WIRE
—	FENCE LINE
—	SPECIAL FLOOD HAZARD AREA (SFHA)
■	BRUSH TOE
■	RIFFLE
■	POOL
■	EPHEMERAL POOL
■	RIPRAP
■	GRAVEL
■	SOIL ROADBED
■	ASPHALT
■	WETLAND
■	FLOODPLAIN INTERCEPTOR (FPI)
■	IRON PIPE W/ CAP
■	REBAR W/ CAP
■	INVERT
■	ELEVATION
■	CORRUGATED METAL PIPE
■	CORRUGATED PLASTIC PIPE
■	REINFORCED CONCRETE PIPE
■	NORTH AMERICAN DATUM
■	NORTH AMERICAN VERTICAL DATUM
■	STATE PLANE COORDINATES
■	VEG PLOT
■	COMBINED FACTOR
■	CONTROL CORNER

INTERSECTION
ROSES CREEK STA: 20+51.69
END *UT2* STA: 17+10.07

SEAL:

PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
ROSES CREEK STREAM MITIGATION SITE

SHEET TITLE:
STREAM DATA: END UT2

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET:

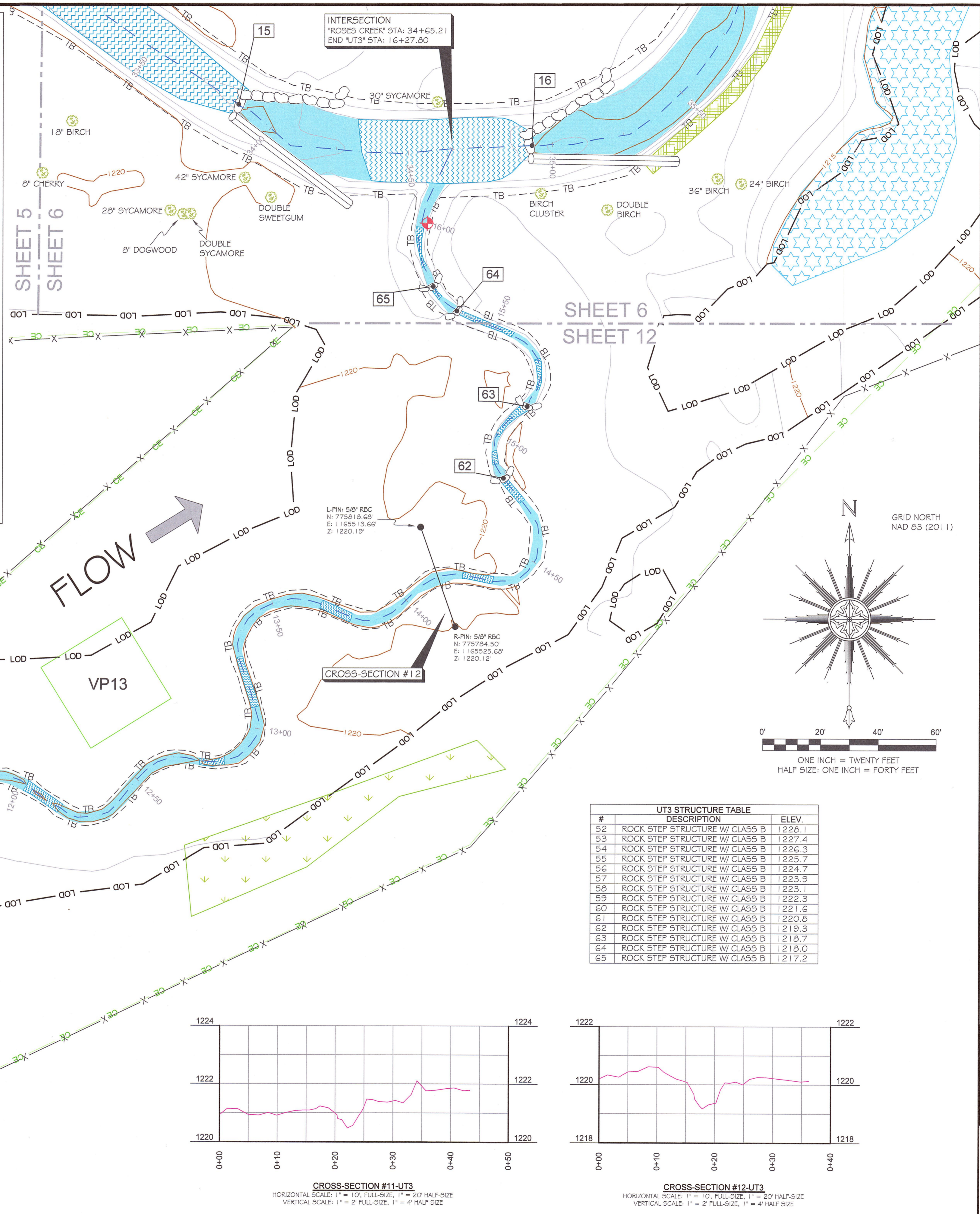
11 OF **18**

Kee
MAPPING & SURVEYING

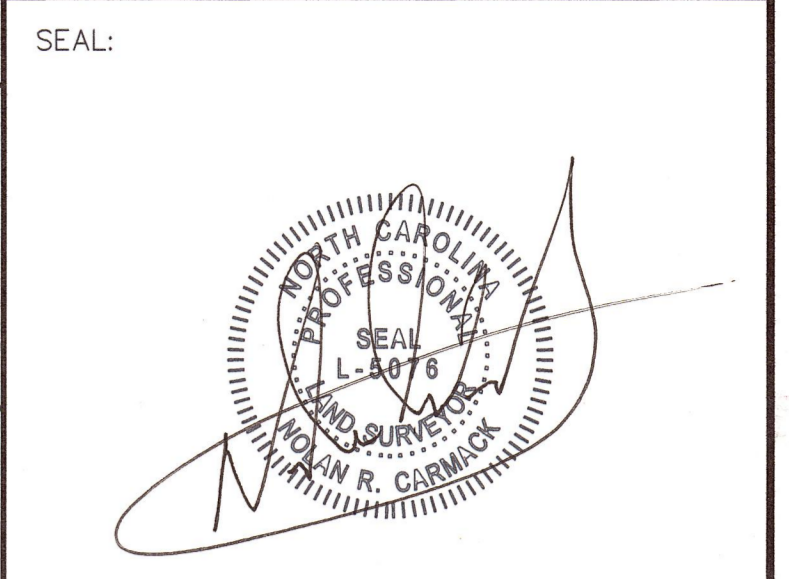
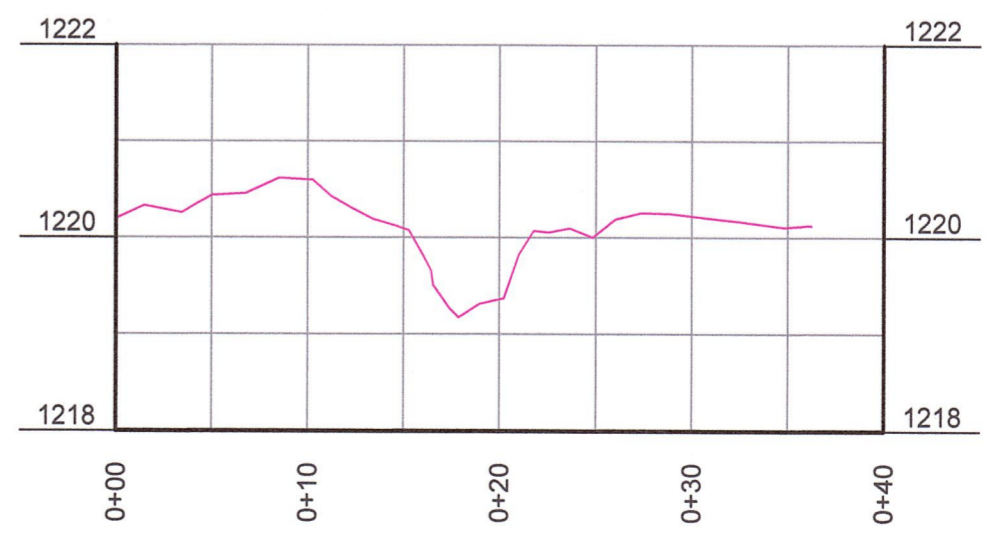
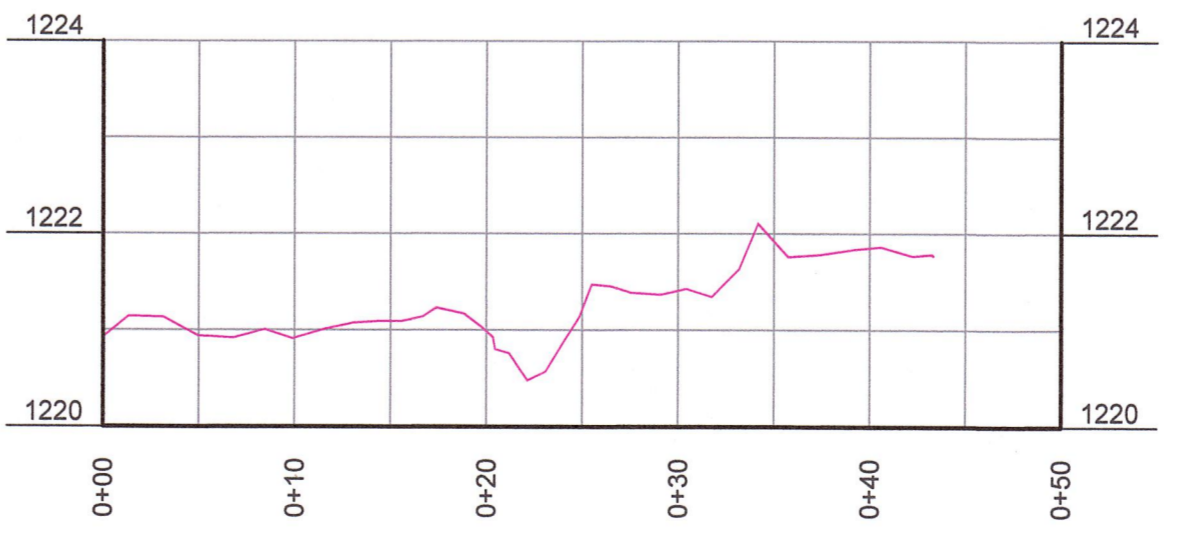
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LEGEND

	STRUCTURE NUMBER		BRUSH TOE
	CROSS-SECTION REBAR W/ CAP		RIFFLE
	EXISTING IPC IN CONCRETE (CONTROL CORNER)		POOL
	CONIFEROUS TREE (AS NOTED)		EPHEMERAL POOL
	DECIDUOUS TREE (AS NOTED)		RIPRAP
	UTILITY POLE		GRAVEL
	CREST GAUGE		SOIL ROADBED
	ROCK STEP STRUCTURE W/ CLASS B RIP RAP		ASPHALT
	ROCK STEP STRUCTURE W/ BOULDERS		WETLAND
	ROCK CROSS VANE		FLOODPLAIN INTERCEPTOR (FPI)
	ROCK L VANE		IPC
	ROCK L VANE W/ LOG ARM		RBC
	CE CONSERVATION EASEMENT		INV
	MINOR CONTOUR		ELEV
	MAJOR CONTOUR		CMP
	LOD LIMITS OF DISTURBANCE		CPP
	THALWEG		RCP
	TOP OF BANK		NAD
	PLAN CENTERLINE (*SEE NOTE 7)		NAVD
	OVERHEAD WIRE		SPC
	FENCE LINE		VEG
	SPECIAL FLOOD HAZARD AREA (SFHA)		CF
			CC



UT3 STRUCTURE TABLE		
#	DESCRIPTION	ELEV.
52	ROCK STEP STRUCTURE W/ CLASS B	1228.1
53	ROCK STEP STRUCTURE W/ CLASS B	1227.4
54	ROCK STEP STRUCTURE W/ CLASS B	1226.3
55	ROCK STEP STRUCTURE W/ CLASS B	1225.7
56	ROCK STEP STRUCTURE W/ CLASS B	1224.7
57	ROCK STEP STRUCTURE W/ CLASS B	1223.9
58	ROCK STEP STRUCTURE W/ CLASS B	1223.1
59	ROCK STEP STRUCTURE W/ CLASS B	1222.3
60	ROCK STEP STRUCTURE W/ CLASS B	1221.6
61	ROCK STEP STRUCTURE W/ CLASS B	1220.8
62	ROCK STEP STRUCTURE W/ CLASS B	1219.3
63	ROCK STEP STRUCTURE W/ CLASS B	1218.7
64	ROCK STEP STRUCTURE W/ CLASS B	1218.0
65	ROCK STEP STRUCTURE W/ CLASS B	1217.2



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NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

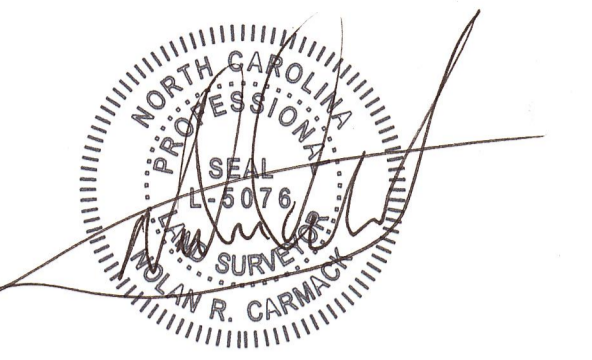
SHEET TITLE:
**STREAM DATA:
BEGIN UT3
&
CROSS-SECTIONS 11 & 12**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

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NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

SHEET TITLE:
**STREAM DATA:
LONGITUDINAL PROFILE:
ROSES CREEK**

TOWNSHIP: UPPER CREEK NH	COUNTY: BURKE NC	STATE: NORTH CAROLINA SURVEY BY: DD, KP, JA
--------------------------------	------------------------	--

SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE

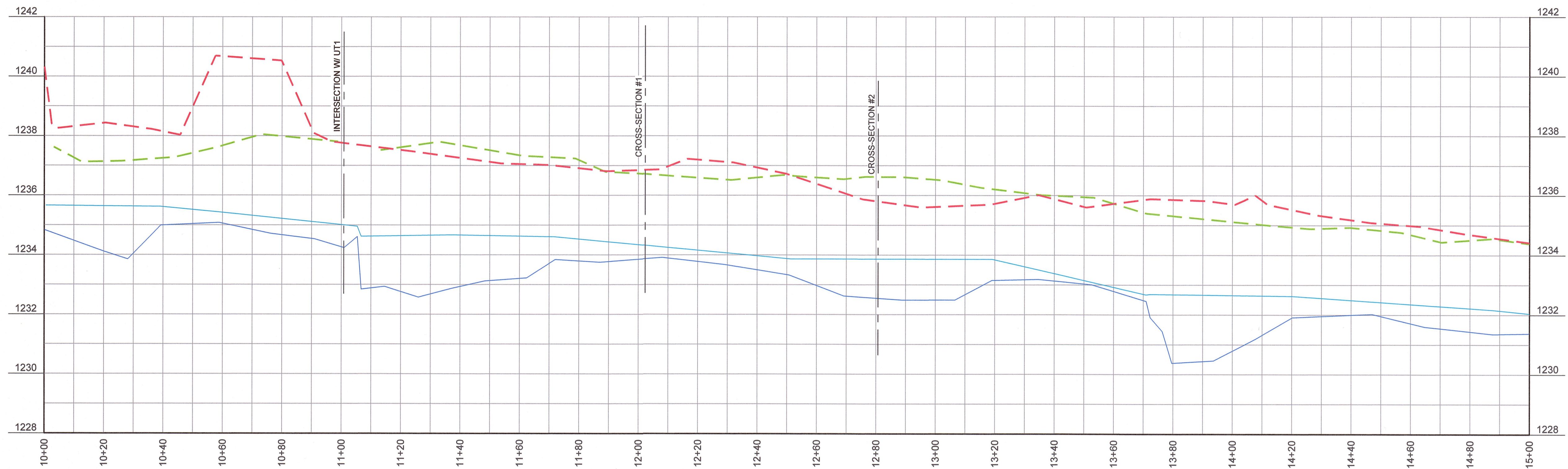
#	DATE	REVISIONS

SHEET:

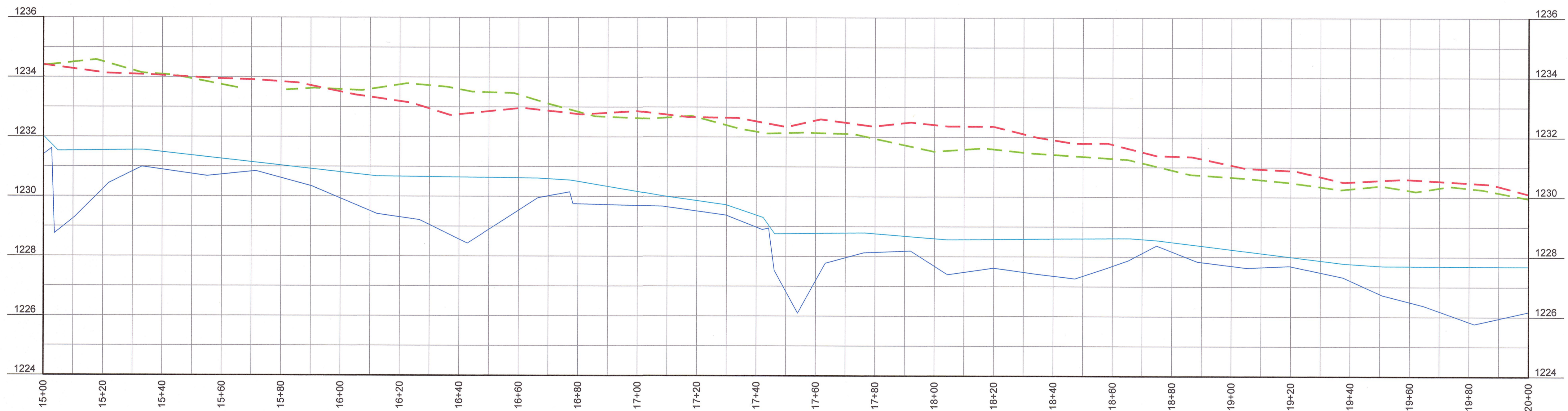
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LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

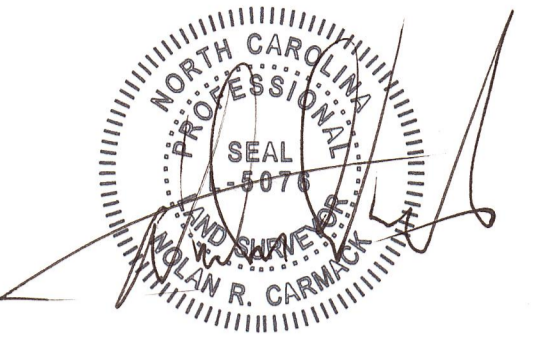


LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

LEGEND

- THALWEG
- - - WATER SURFACE
- - - RIGHT TOP OF BANK
- - - LEFT TOP OF BANK

SEAL:



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

SHEET TITLE:
**STREAM DATA:
LONGITUDINAL PROFILE:
ROSES CREEK**

TOWNSHIP: UPPER CREEK COUNTY: BURKE STATE: NORTH CAROLINA
DRAWN BY: NH CHECKED BY: NC SURVEY BY: DD, KP, JA

SCALE: AS SHOWN SURVEY DATES: 05/12/16 - 06/8/16

JOB: #140323-AB SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE

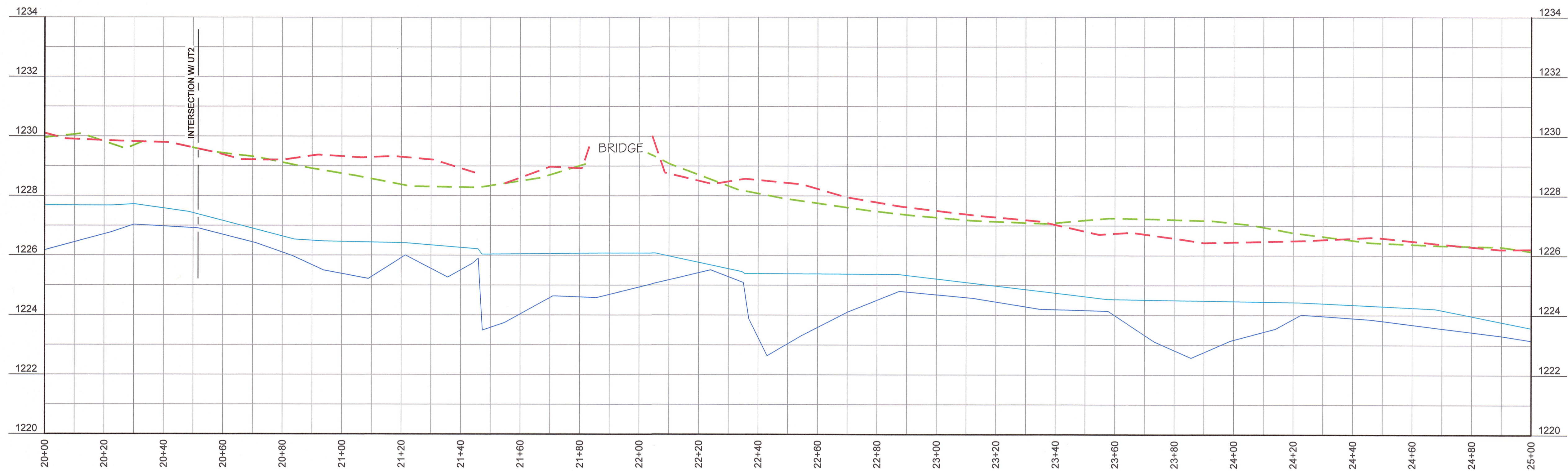
#	DATE	REVISIONS

SHEET:

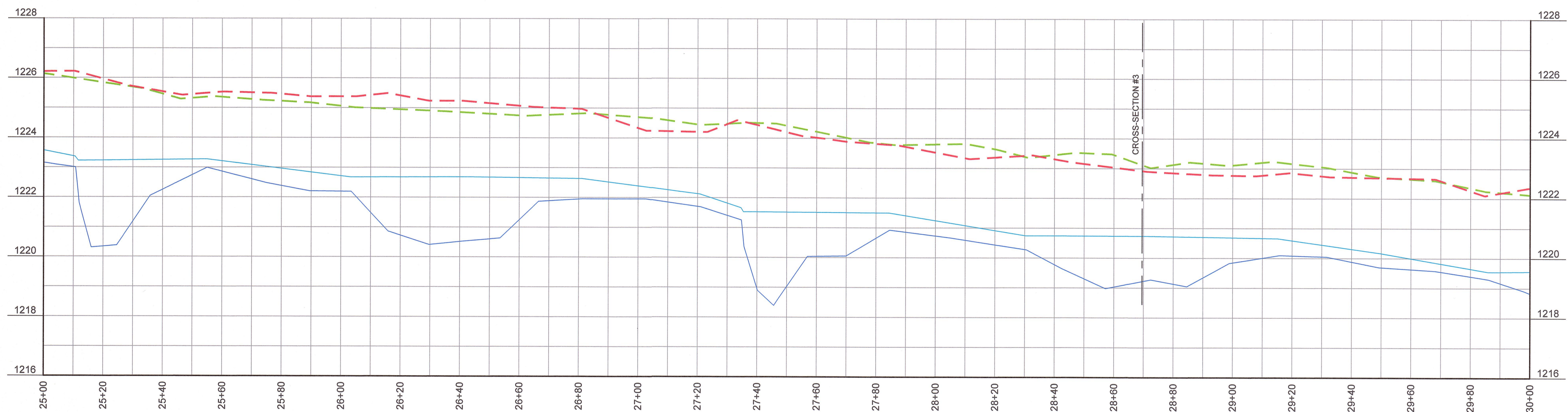
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LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

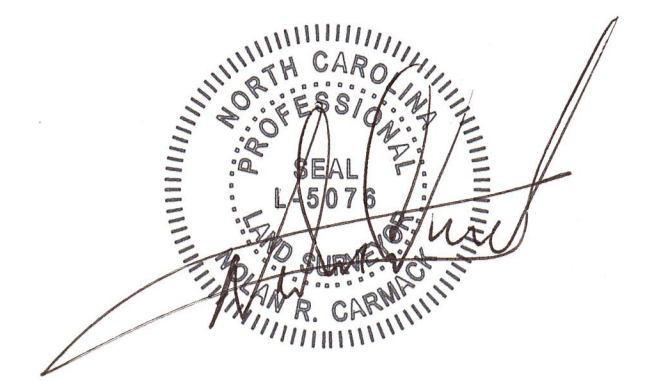


LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

LEGEND

- THALWEG
- WATER SURFACE
- - - RIGHT TOP OF BANK
- - - LEFT TOP OF BANK

SEAL:



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

SHEET TITLE:
**STREAM DATA:
LONGITUDINAL PROFILE:
ROSES CREEK**

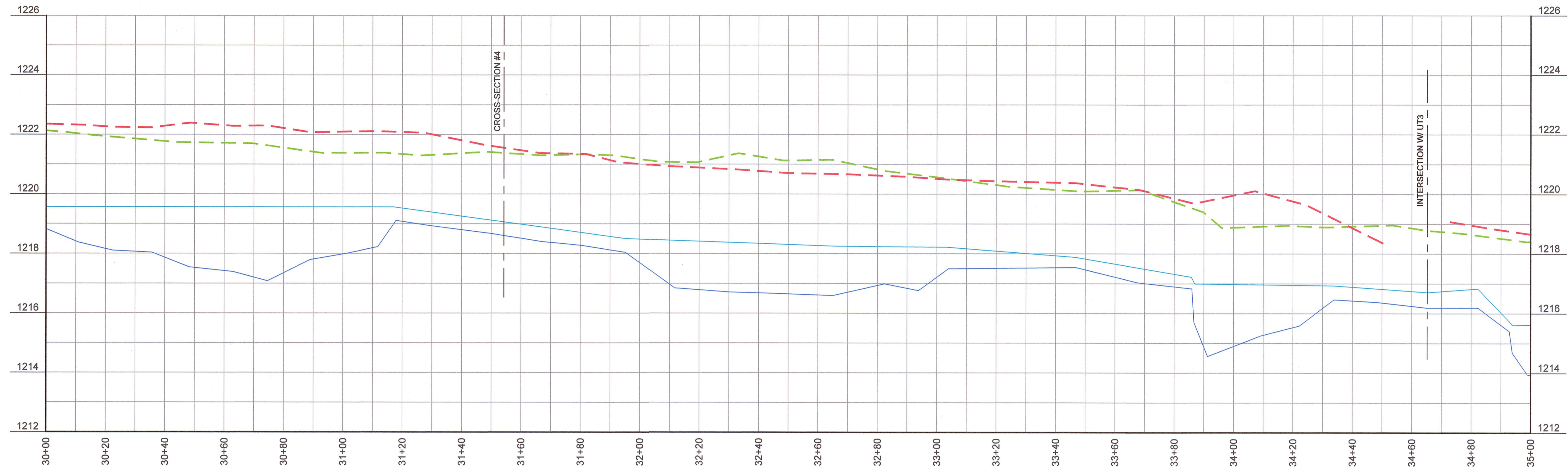
TOWNSHIP: UPPER CREEK NH	COUNTY: BURKE NC	STATE: NORTH CAROLINA
DRAWN BY: AS SHOWN	CHECKED BY: DD, KP, JA	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	

#	DATE	REVISIONS

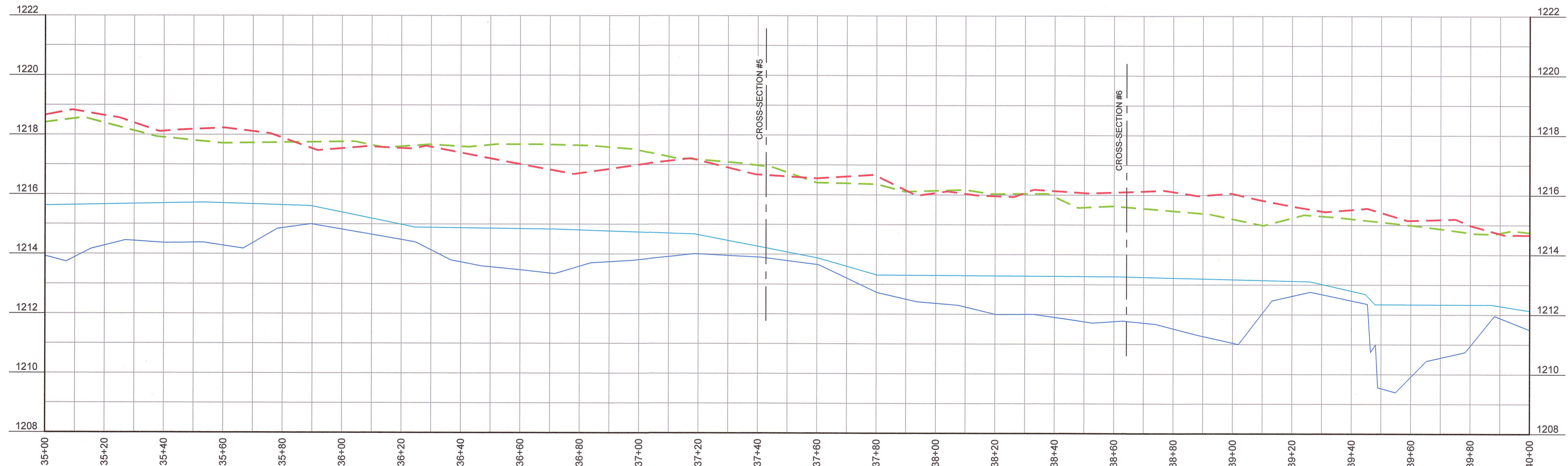
SHEET:
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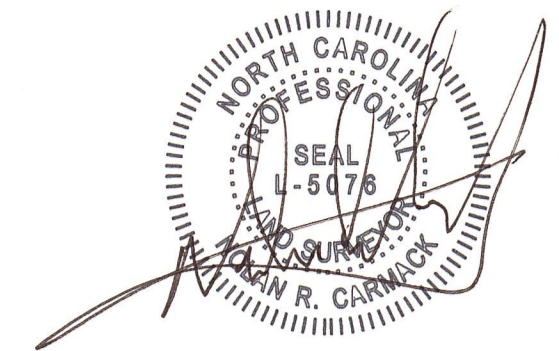
LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

- LEGEND**
- THALWEG
 - - - WATER SURFACE
 - - - RIGHT TOP OF BANK
 - - - LEFT TOP OF BANK

SEAL:



PLEASE REFER TO THE COVERSHEET FOR THE STATEMENT OF CERTIFICATION

NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

SHEET TITLE:
**STREAM DATA:
LONGITUDINAL PROFILE:
END ROSES CREEK
&
UT1**

TOWNSHIP: UPPER CREEK NH	COUNTY: BURKE NC	STATE: NORTH CAROLINA SURVEY BY: DD, KP, JA
--------------------------------	------------------------	--

SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE

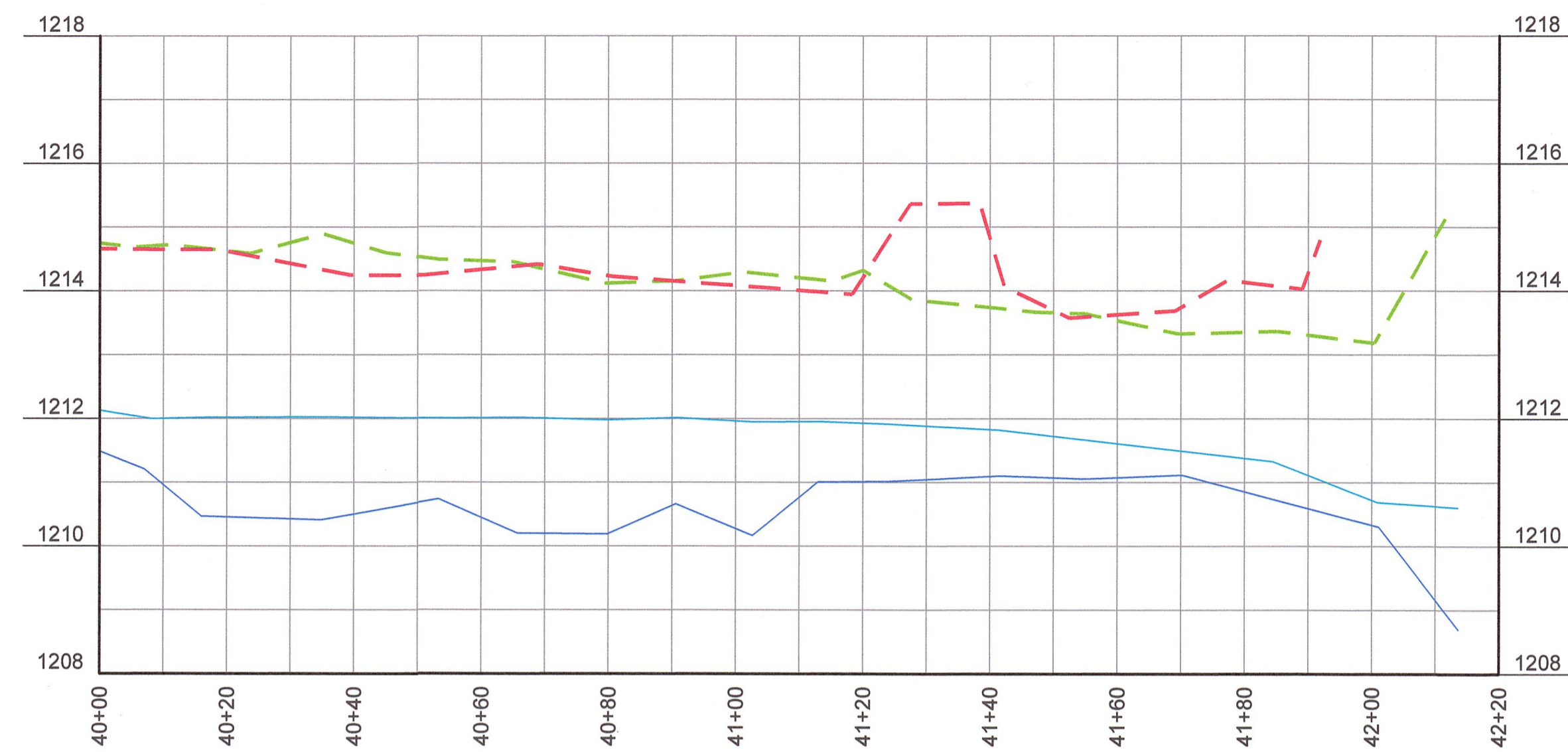
#	DATE	REVISIONS

SHEET:

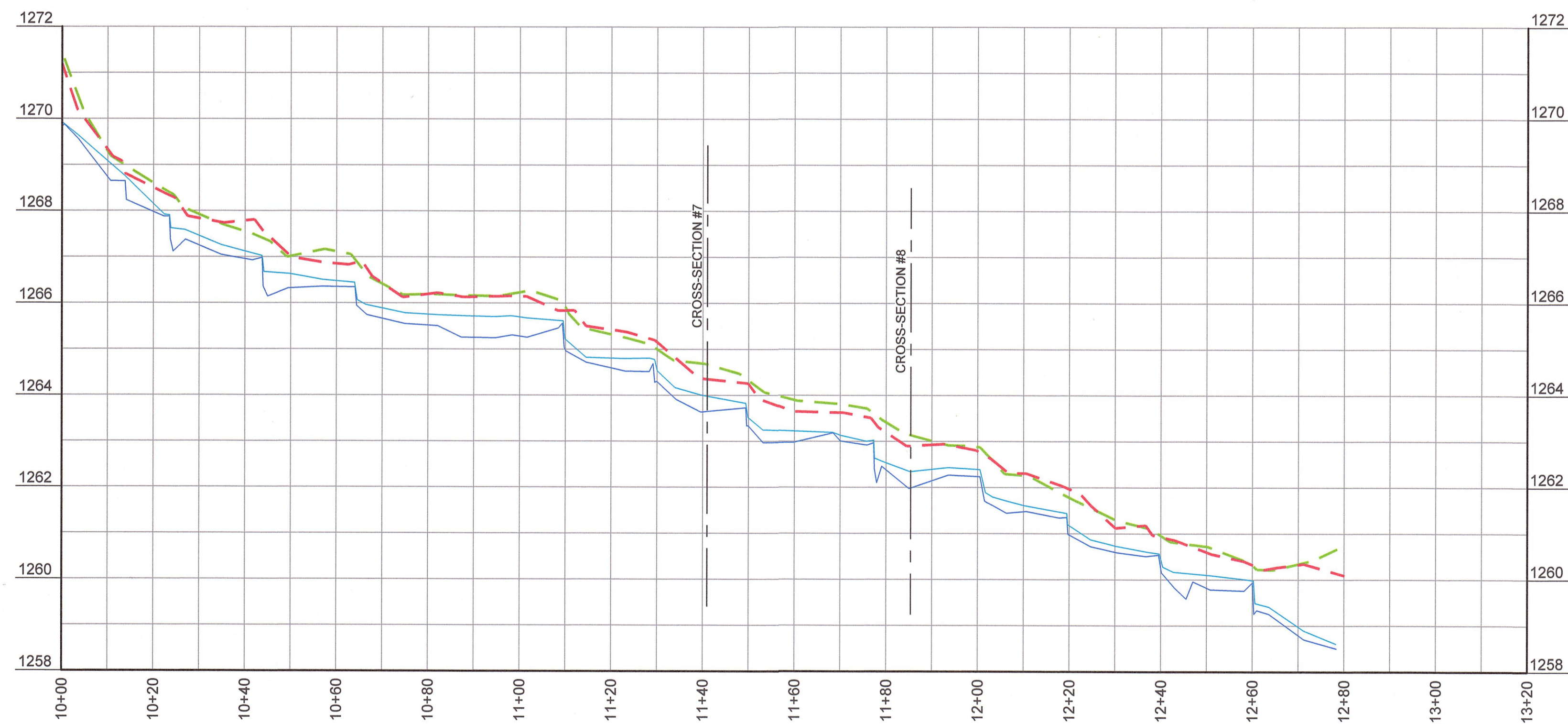
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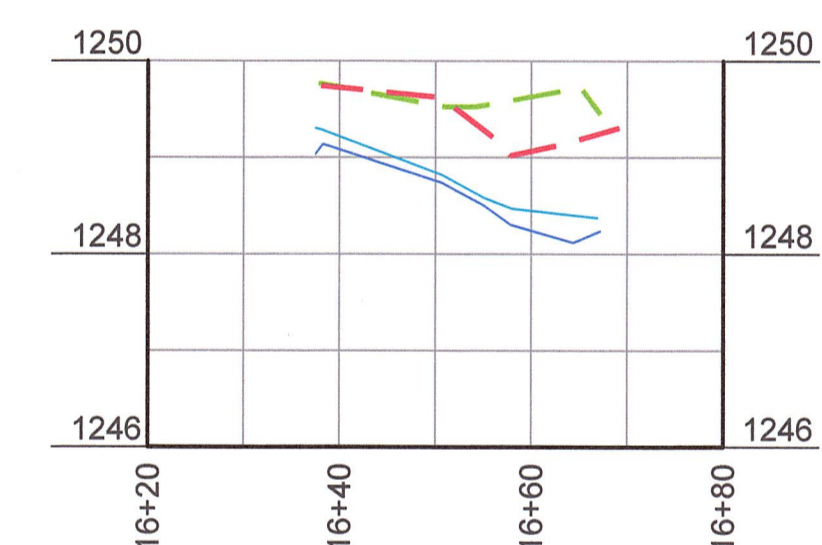
LONGITUDINAL PROFILE-ROSES CREEK
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



LONGITUDINAL PROFILE-UT1
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

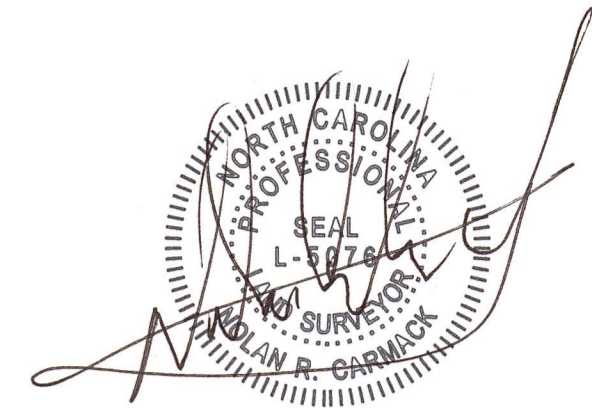
LEGEND

- THALWEG
- WATER SURFACE
- - - RIGHT TOP OF BANK
- - - LEFT TOP OF BANK



LONGITUDINAL PROFILE-UT1
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

SEAL:



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NOTE: SEE SHEET #1 FOR SURVEYOR'S NOTES

ELEVATION DATUM: NAVD 88
CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
NC DEQ-DIVISION OF
MITIGATION SERVICES

SPO FILE #: 12-DK
DMS PROJECT#: 96309

PROJECT:
**ROSES CREEK
STREAM MITIGATION
SITE**

SHEET TITLE:
**STREAM DATA:
LONGITUDINAL PROFILE:
UT2**

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	

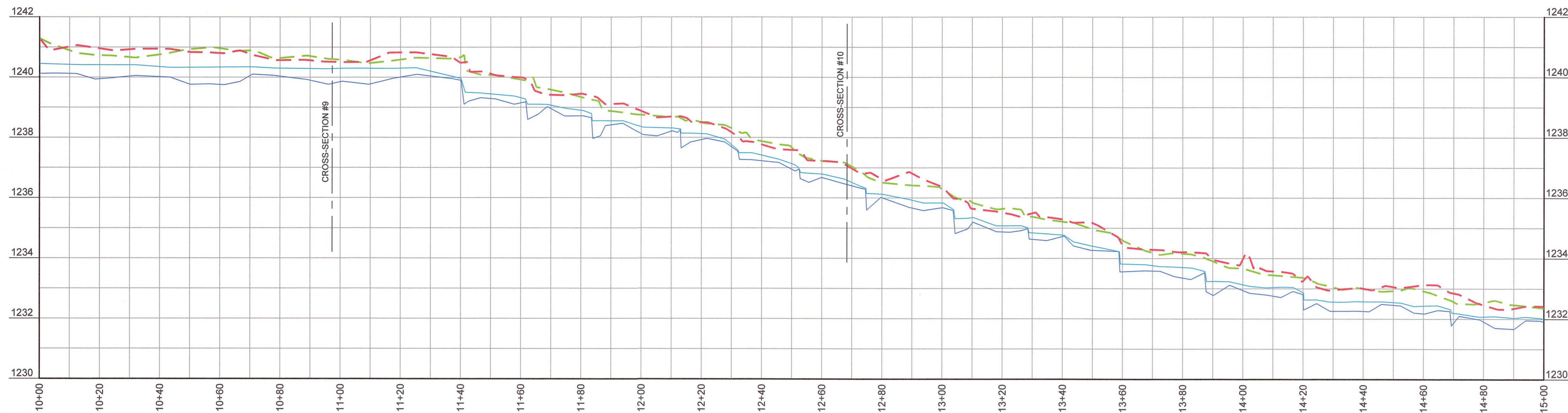
#	DATE	REVISIONS

SHEET:

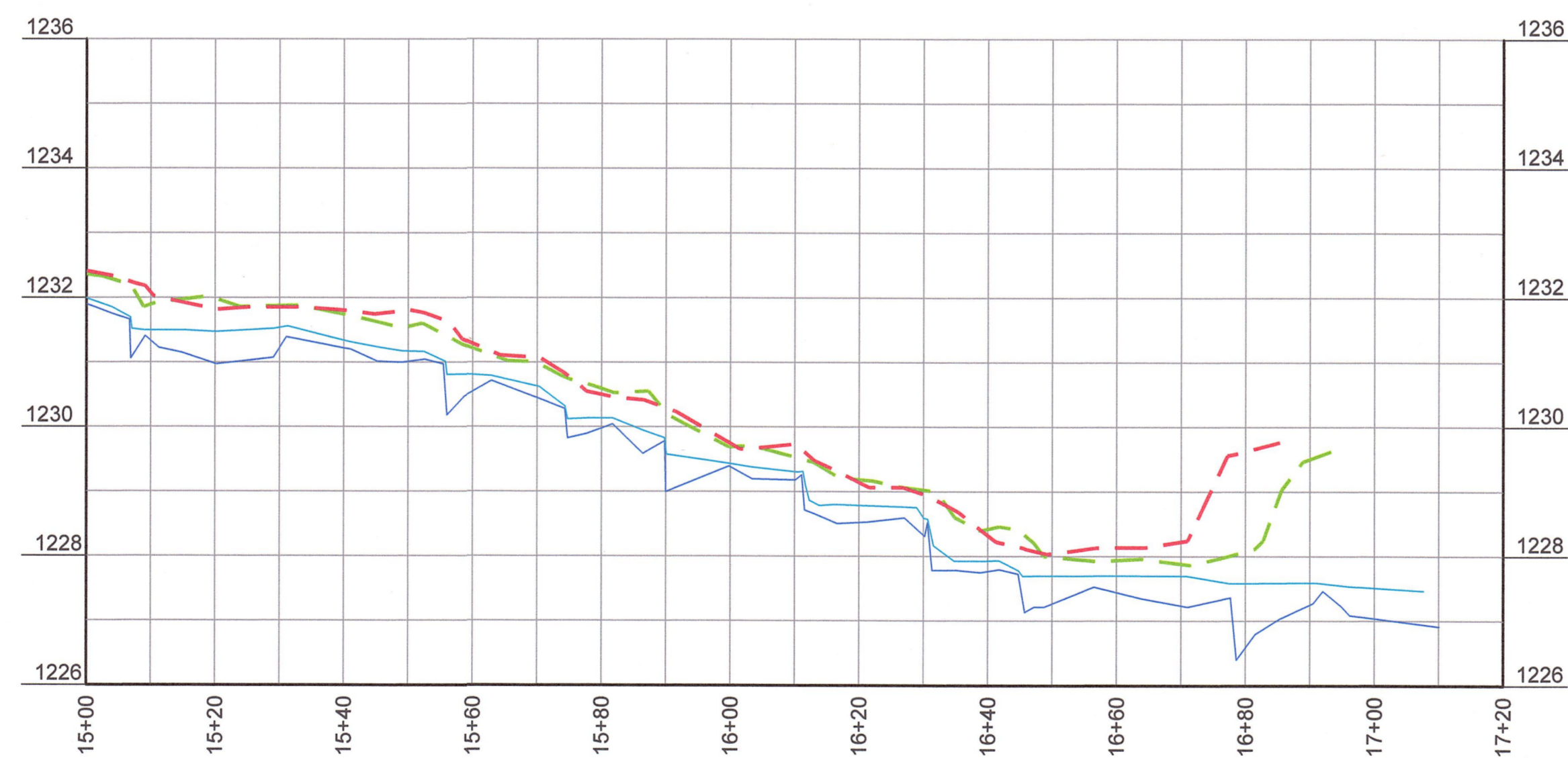
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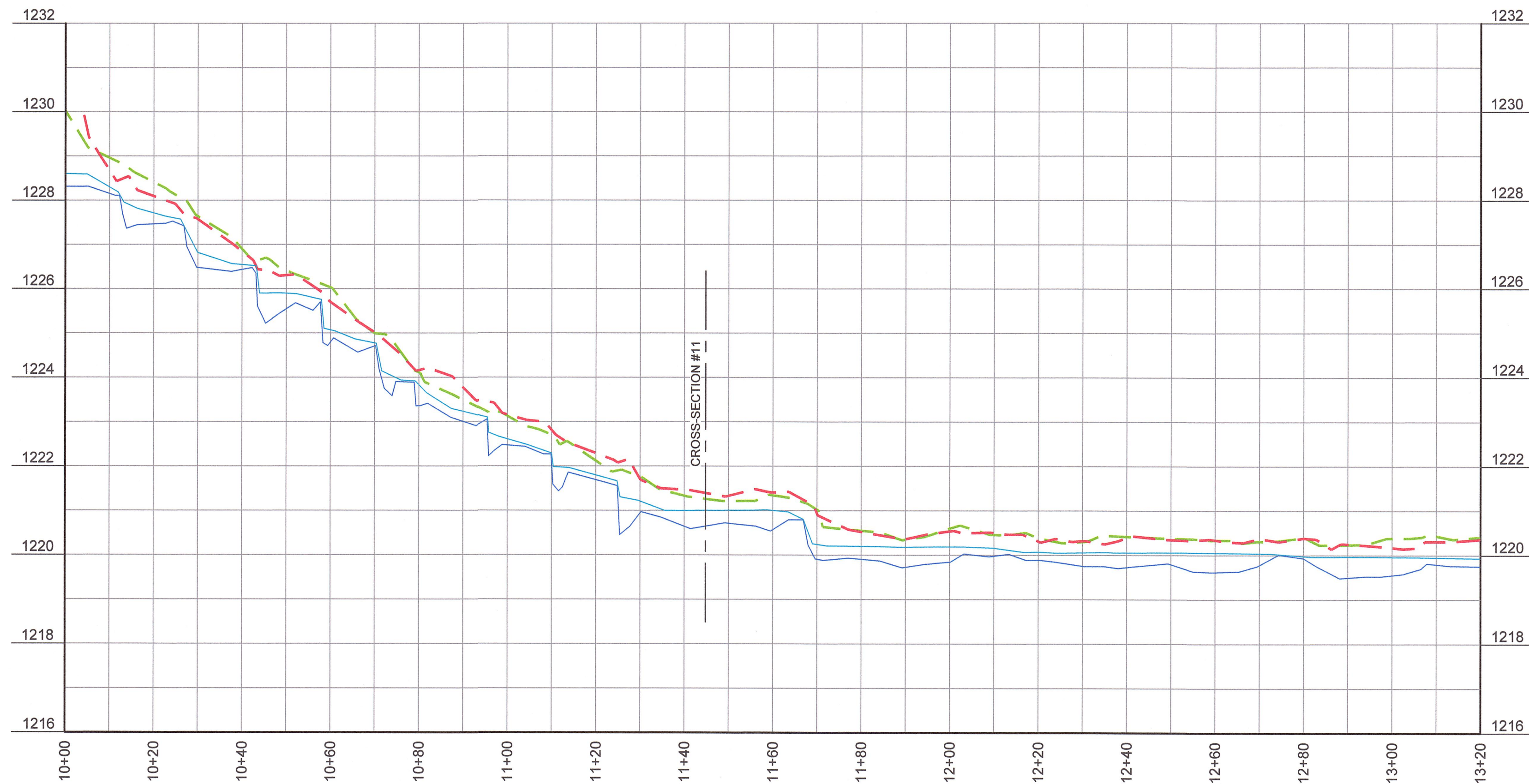
LONGITUDINAL PROFILE-UT2
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



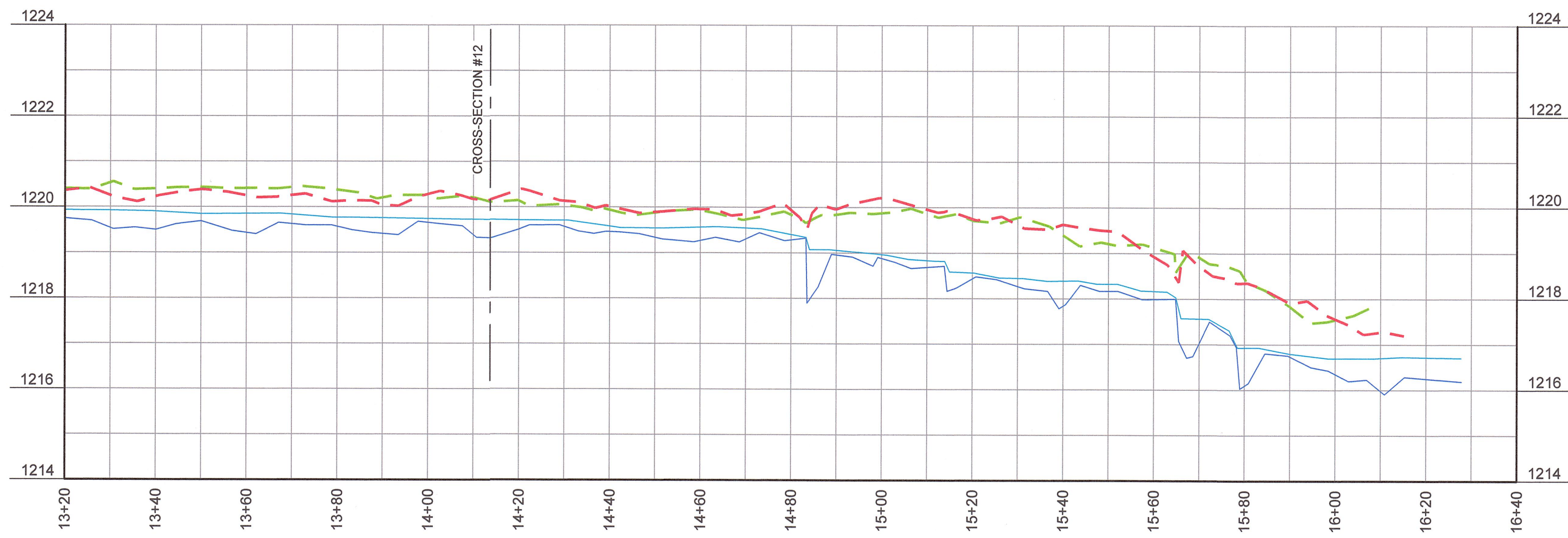
LONGITUDINAL PROFILE-UT2
HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

LEGEND

- THALWEG
- WATER SURFACE
- - - RIGHT TOP OF BANK
- - - LEFT TOP OF BANK



LONGITUDINAL PROFILE-UT3
 HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
 VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE



LONGITUDINAL PROFILE-UT3
 HORIZONTAL: 1" = 20' FULL-SIZE, 1" = 40' HALF-SIZE
 VERTICAL: 1" = 2' FULL-SIZE, 1" = 4' HALF-SIZE

LEGEND

- THALWEG
- WATER SURFACE
- - - RIGHT TOP OF BANK
- - - LEFT TOP OF BANK



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ELEVATION DATUM: NAVD 88
 CONTOUR INTERVAL: 1 FOOT

AN AS-BUILT SURVEY FOR:
 NC DEQ-DIVISION OF
 MITIGATION SERVICES

SPO FILE #: 12-DK
 DMS PROJECT#: 96309

PROJECT:
 ROSES CREEK
 STREAM MITIGATION
 SITE

SHEET TITLE:
 STREAM DATA:
 LONGITUDINAL PROFILE:
 UT3

TOWNSHIP: UPPER CREEK	COUNTY: BURKE	STATE: NORTH CAROLINA
DRAWN BY: NH	CHECKED BY: NC	SURVEY BY: DD, KP, JA
SCALE: AS SHOWN	SURVEY DATES: 05/12/16 - 06/8/16	
JOB: #140323-AB	SHEET SIZE: 11" X 17" HALF-SIZE, 22" X 34" FULL-SIZE	
#	DATE	REVISIONS

SHEET:
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