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6/11/2025
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PROJECT TIP: DF18314.2045377

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING PLAN
HENDERSON COUNTY

LOCATION: EMERGENCY DESIGN FOR SR 1605
(MIDDLE FORK ROAD/TOMS FALLS ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE & RETAINING WALLS

TIP NO.	SHEET NO.
DF18314.2045377	PMP - 1
APPROVED: 6/11/2025 7F5959ACE5B442E Allison C. Drake	
DATE:	
SEAL	
042357 ENGINEER ALLISON C. DRAKE	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

INDEX

SHEET NO.	DESCRIPTION
PMP-1	PAVEMENT MARKING PLAN TITLE AND SCHEDULE SHEET
PMP-2 THRU PMP-5	PAVEMENT MARKING DETAIL

GENERAL NOTES

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

- A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
MIDDLE FORK RD/TOMS FALLS RD	THERMOPLASTIC	CAST IRON

- B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.
C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

ROADWAY STANDARD DRAWING

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2024 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

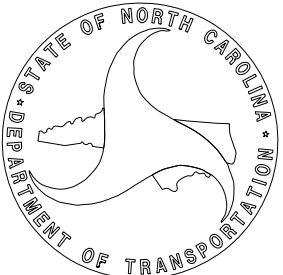
STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES AND OFFSETS
1205.02	PAVEMENT MARKINGS - TWO-LANE AND MULTILANE ROADWAYS
1250D01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY
1261.01	GUARDRAIL AND BARRIER DELINEATORS - INSTALLATION SPACING
1261.02	GUARDRAIL AND BARRIER DELINEATORS - TYPES AND MOUNTING
1262.01	GUARDRAIL END DELINEATION

PAVEMENT MARKING SCHEDULE

T1	WHITE EDGELINE	THERMOPLASTIC (4", 90 MIL)
T13	YELLOW DOUBLE CENTER	THERMOPLASTIC (4", 90 MIL)

PLAN SUBMITTED TO: NCDOT DIVISION 14

BARRY MOSTELLER NCDOT CONTACT

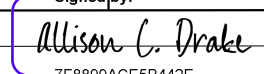


PLAN PREPARED BY: RS&H

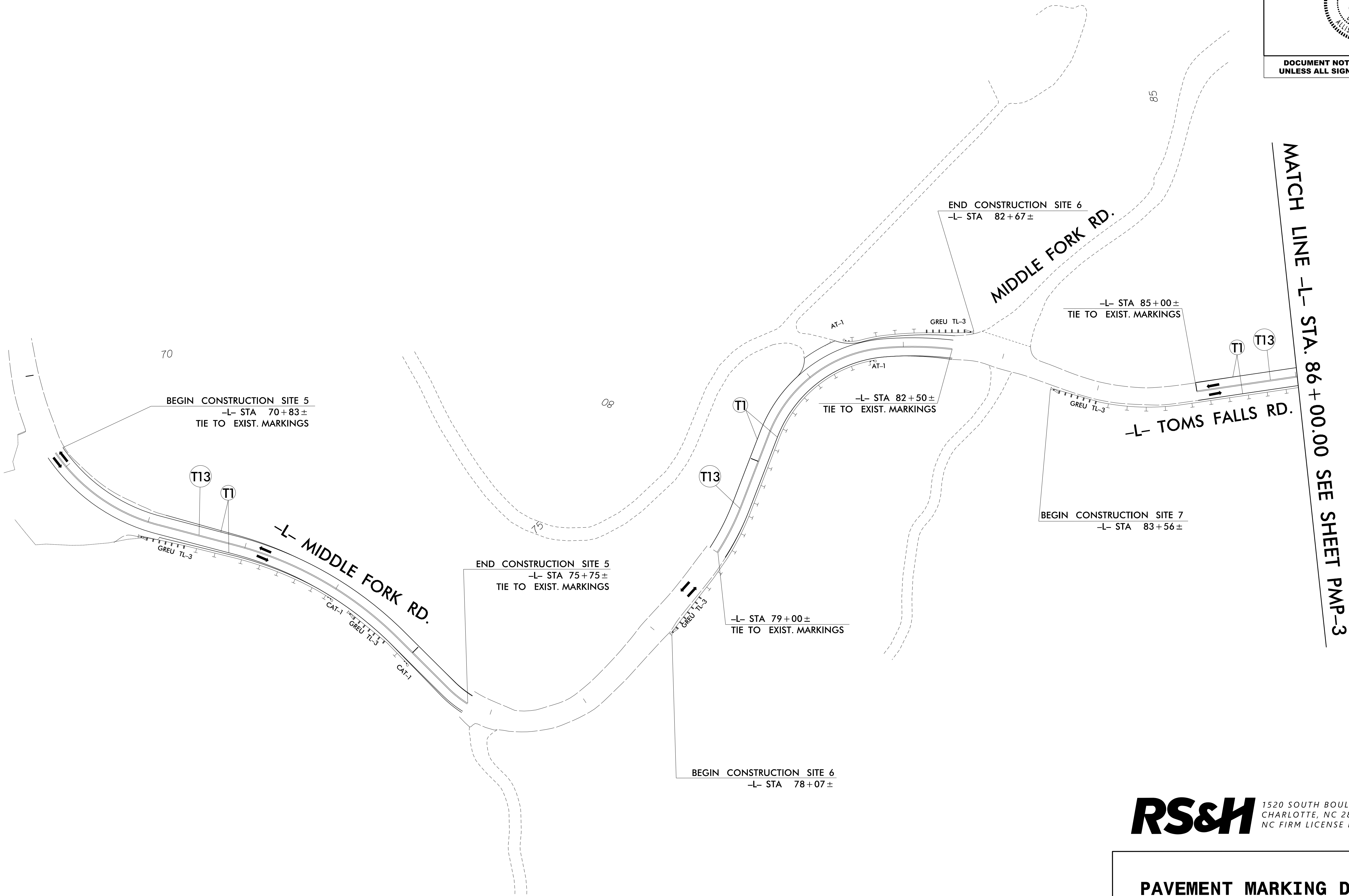
ALLISON C. DRAKE, PE PROJECT ENGINEER
REBECCA E. WRIGHT, PE PROJECT DESIGNER



1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

TIP NO. DF18314.2045380/ DF18314.2045379/ DF18314.2045417	SHEET NO. PMP - 2
APPROVED:  Signed By: 7F8B9BACE58402E	
DATE: 6/11/2025	
SEAL 	
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

NAD 83/NA 2011



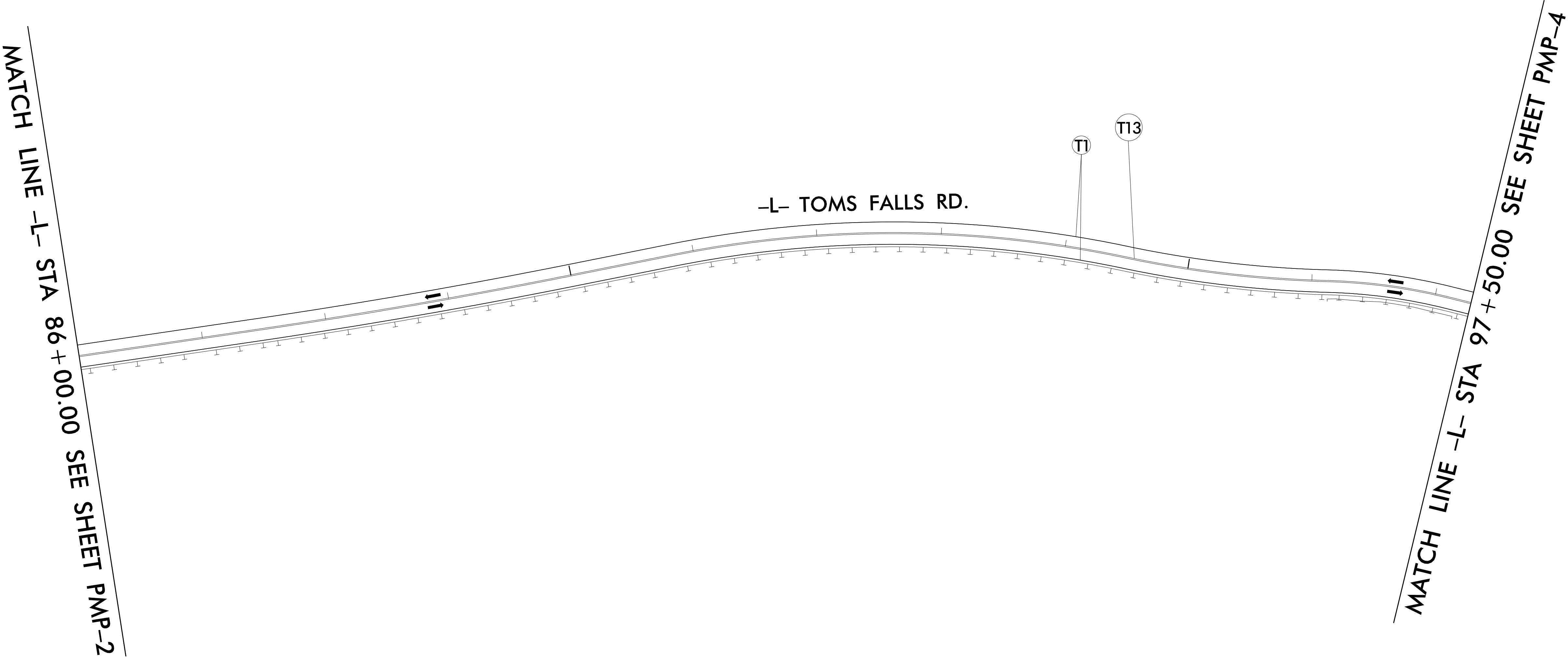
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RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

PAVEMENT MARKING DETAIL

TIP NO.	SHEET NO.
DF18314.2045417	PMP-3
APPROVED: Signature by: Allison C. Drake 7F8099ACB5B442E	
DATE: 6/11/2025	
SEAL	
SEAL 042357 ENGINEER ALLISON C. DRAKE	
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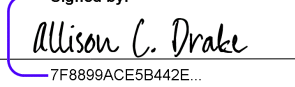
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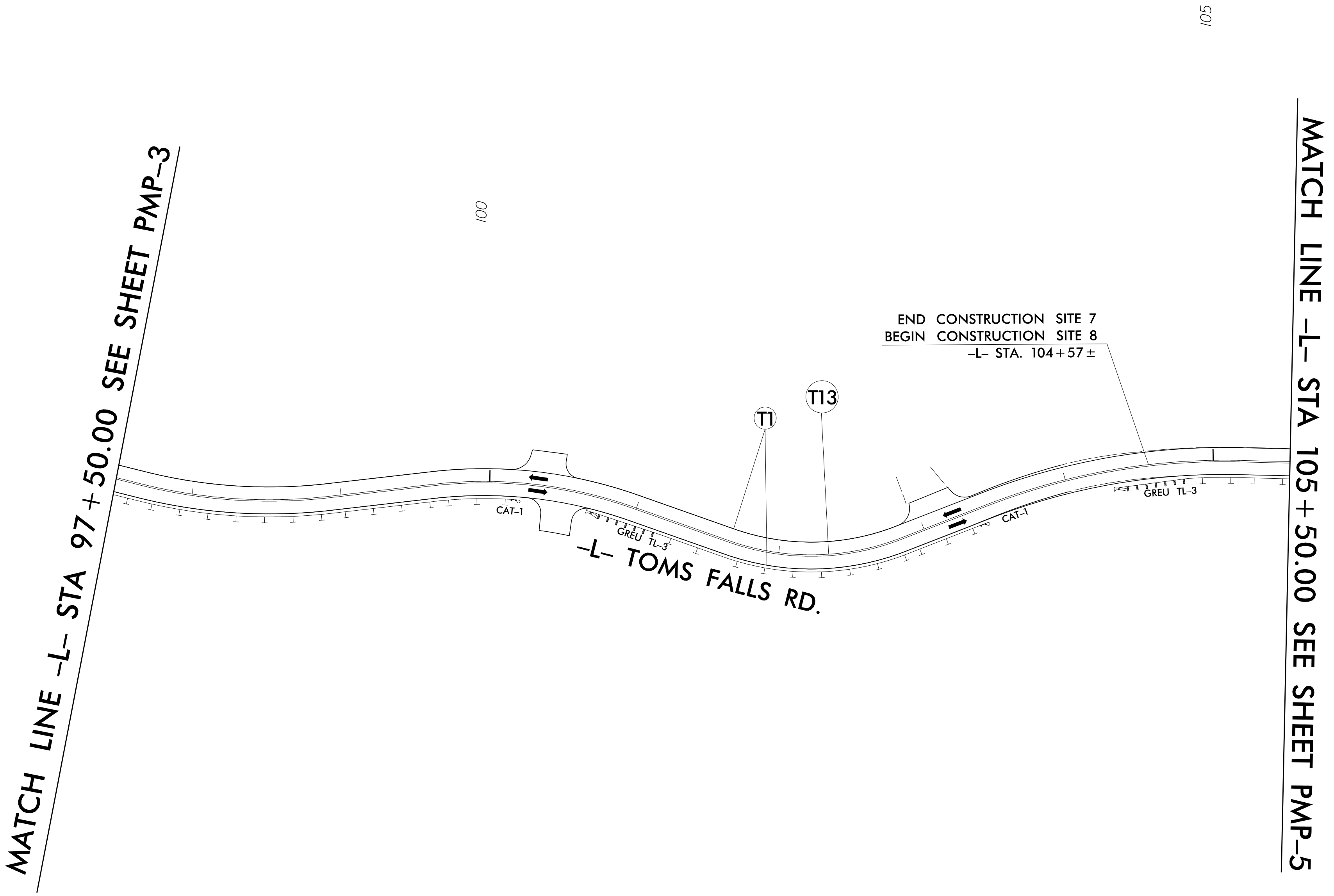
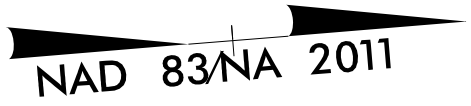


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RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

PAVEMENT MARKING DETAIL

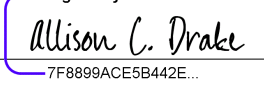
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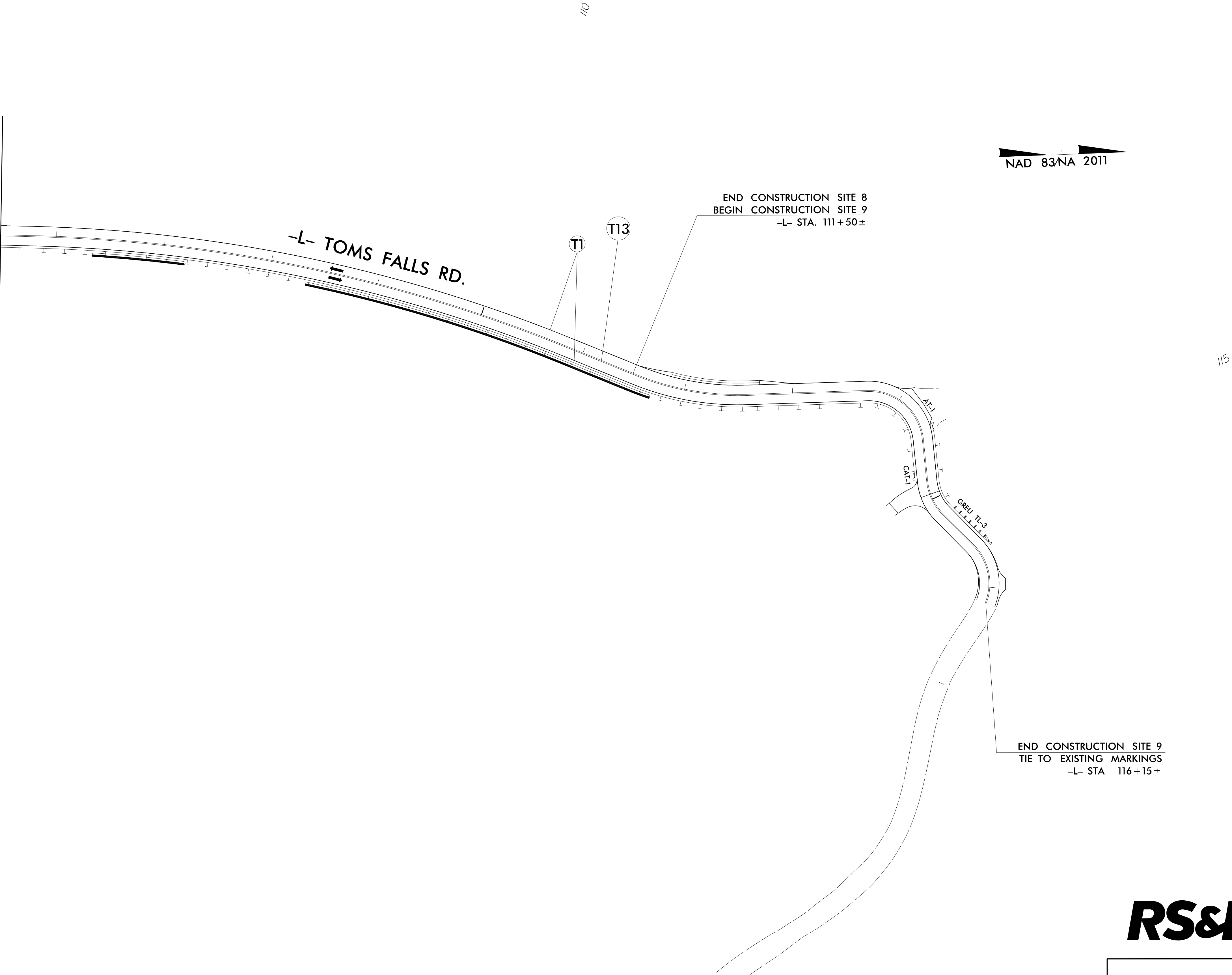
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RS&H 1520 SOUTH BOULEVARD, SUITE 200
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PAVEMENT MARKING DETAIL

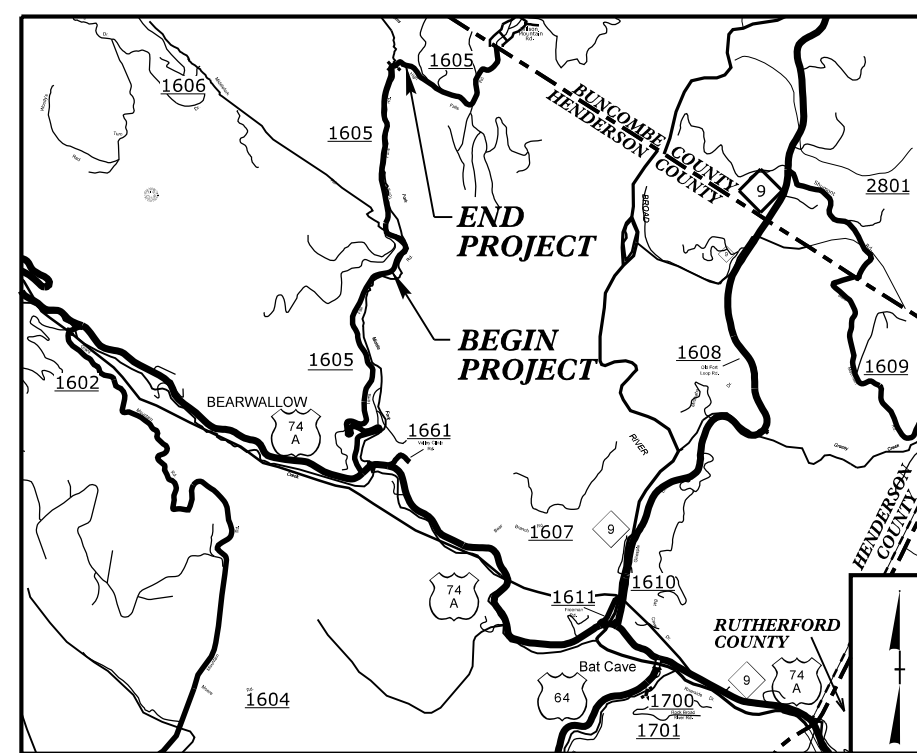
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APPROVED: 	
DATE: 6/11/2025	
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DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED	

MATCH LINE -L- STA 105 + 50.00 SEE SHEET PMP-4



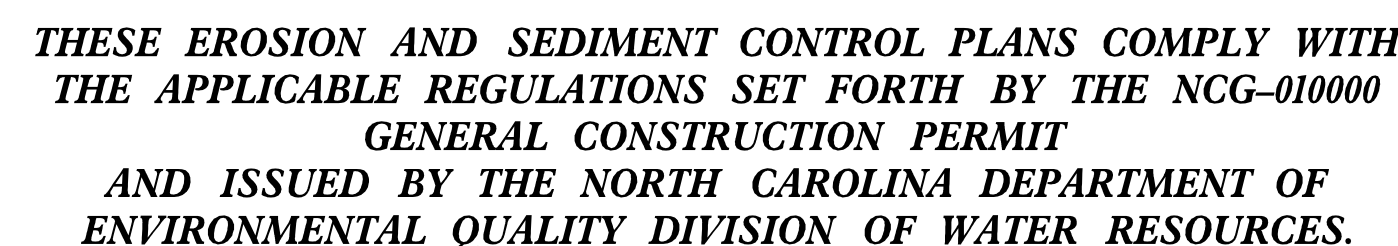
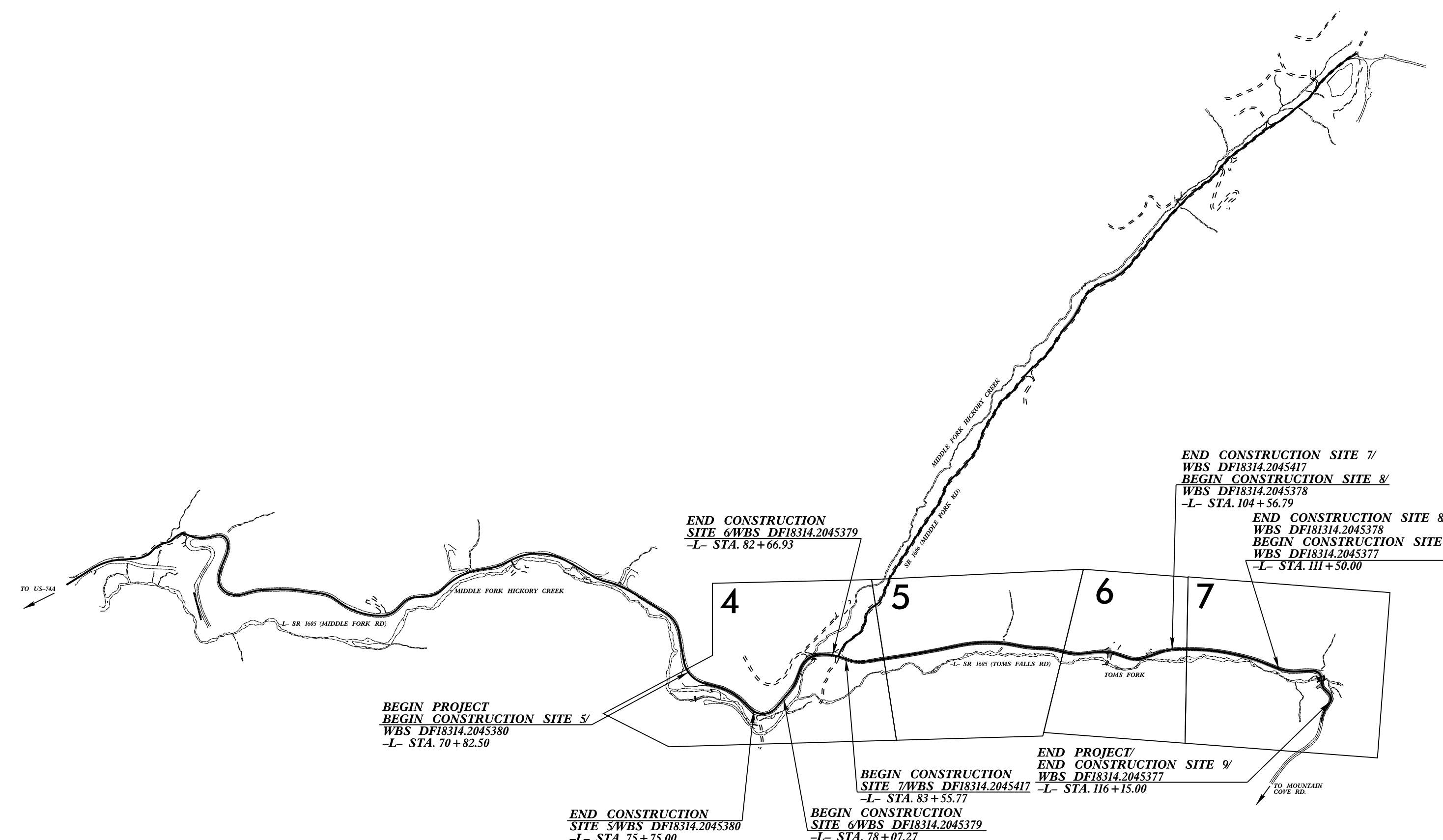
**ENVIRONMENTALLY
SENSITIVE AREA(S) EXIST
ON THIS PROJECT**

**THIS PROJECT CONTAINS
EROSION CONTROL PLANS
FOR CLEARING AND
GRUBBING PHASE OF
CONSTRUCTION.**



LOCATION: EMERGENCY DESIGN FOR SR 1605
(MIDDLE FORK ROAD/TOMS FALLS ROAD)

TYPE OF WORK: GRADING, PAVING, DRAINAGE & RETAINING WALLS

**RS&H**

<i>LILY MCKINNEY</i>	<i>4559</i>
<i>NAME</i>	<i>LEVEL III CERTIFICATION NO.</i>

The "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2024 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

DIVISION OF HIGHWAYS

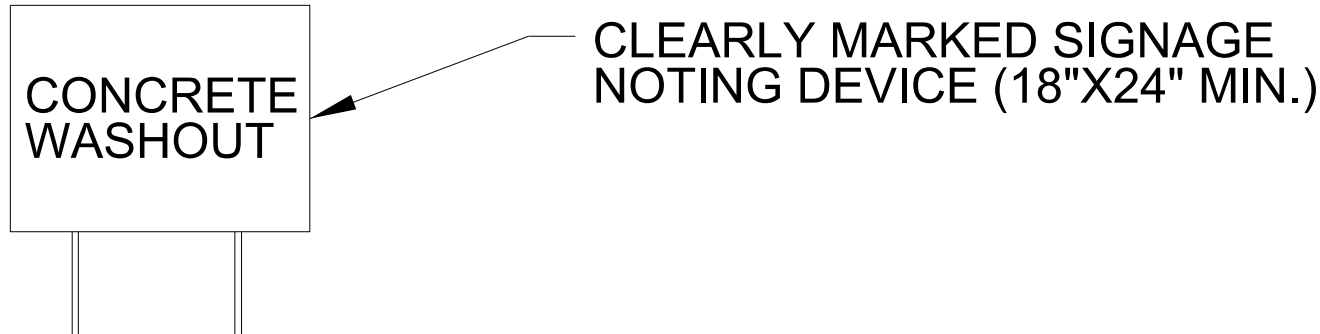
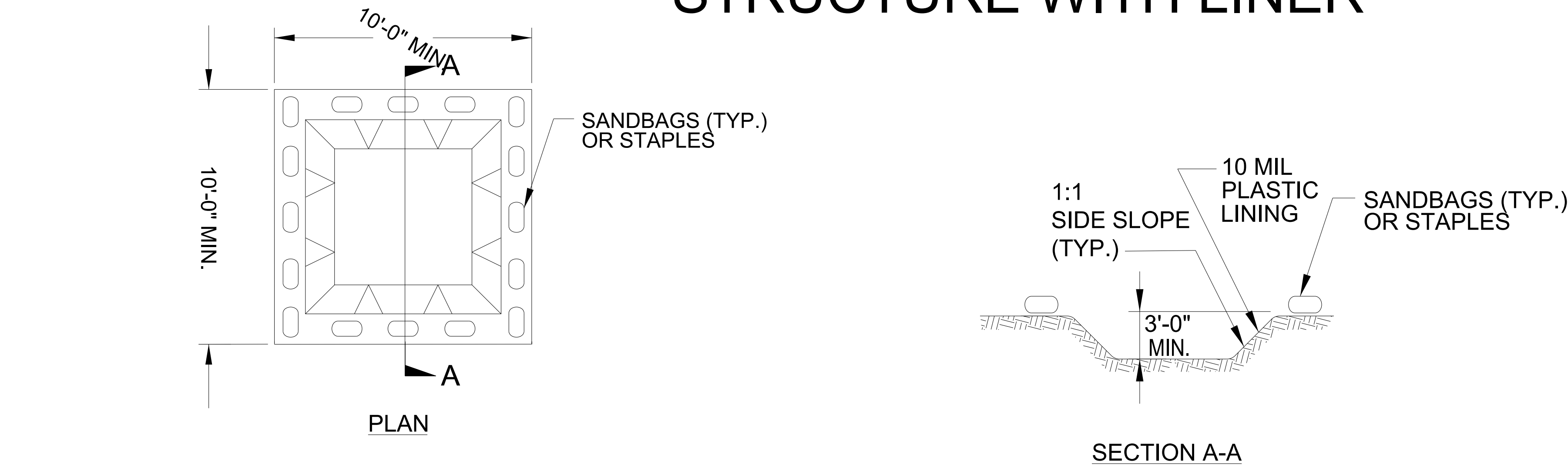
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.04	Stilling Basin	
1630.05	Temporary Diversion	
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	

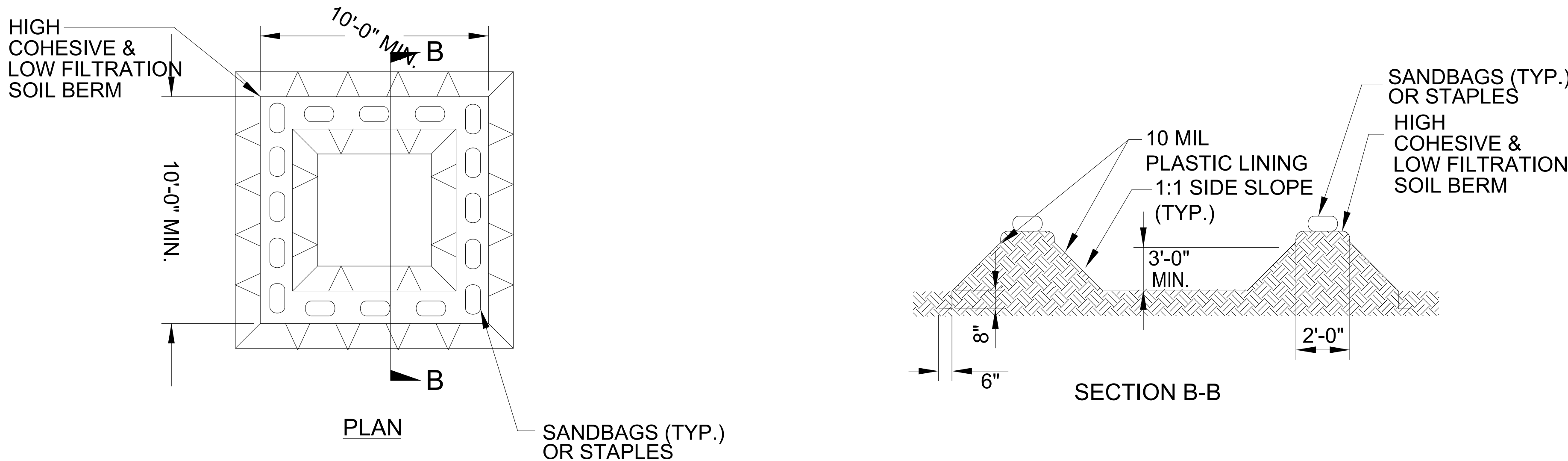
Std. #	Description	Symbol
1633.01	Temporary Rock Silt Check Type A	
1633.02	Temporary Rock Silt Check Type B	
1633.03	Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant	
1634.01	Temporary Rock Sediment Dam Type A	
1634.02	Temporary Rock Sediment Dam Type B	
1635.01	Rock Pipe Inlet Sediment Trap Type A	
1635.02	Rock Pipe Inlet Sediment Trap Type B	
1636.01	Excelsior Wattle Check	
1636.01	Excelsior Wattle Check with Flocculant	
1636.01	Coir Fiber Wattle Check	
1636.01	Coir Fiber Wattle Check with Flocculant	
1636.02	Silt Fence Excelsior Wattle Break	
	Silt Fence Coir Fiber Wattle Break	
1636.03	Excelsior Wattle Barrier	
1636.03	Coir Fiber Wattle Barrier	

ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



BELOW GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.



ABOVE GRADE WASHOUT STRUCTURE
NOT TO SCALE

- NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD
 2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.
 3. CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED WITH SIGNAGE NOTING DEVICE.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10’ OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 TO 4:1	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50’ IN LENGTH WITH SLOPES STEEPER THAN 4:1. 7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	7 DAYS FOR PERIMETER DIKES, SWALES, DITCHES PERIMETER SLOPES, AND HQW ZONES

PROJECT REFERENCE NO.	SHEET NO.
<i>DF18314.2045380 /</i> <i>DF18314.2045379 /</i> <i>DF18314.2045417</i>	<i>EC-4/CONST.4</i>

RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

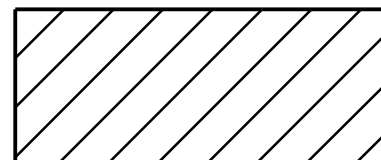
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL
REQUIRE PRIOR APPROVAL BY ENGINEER.

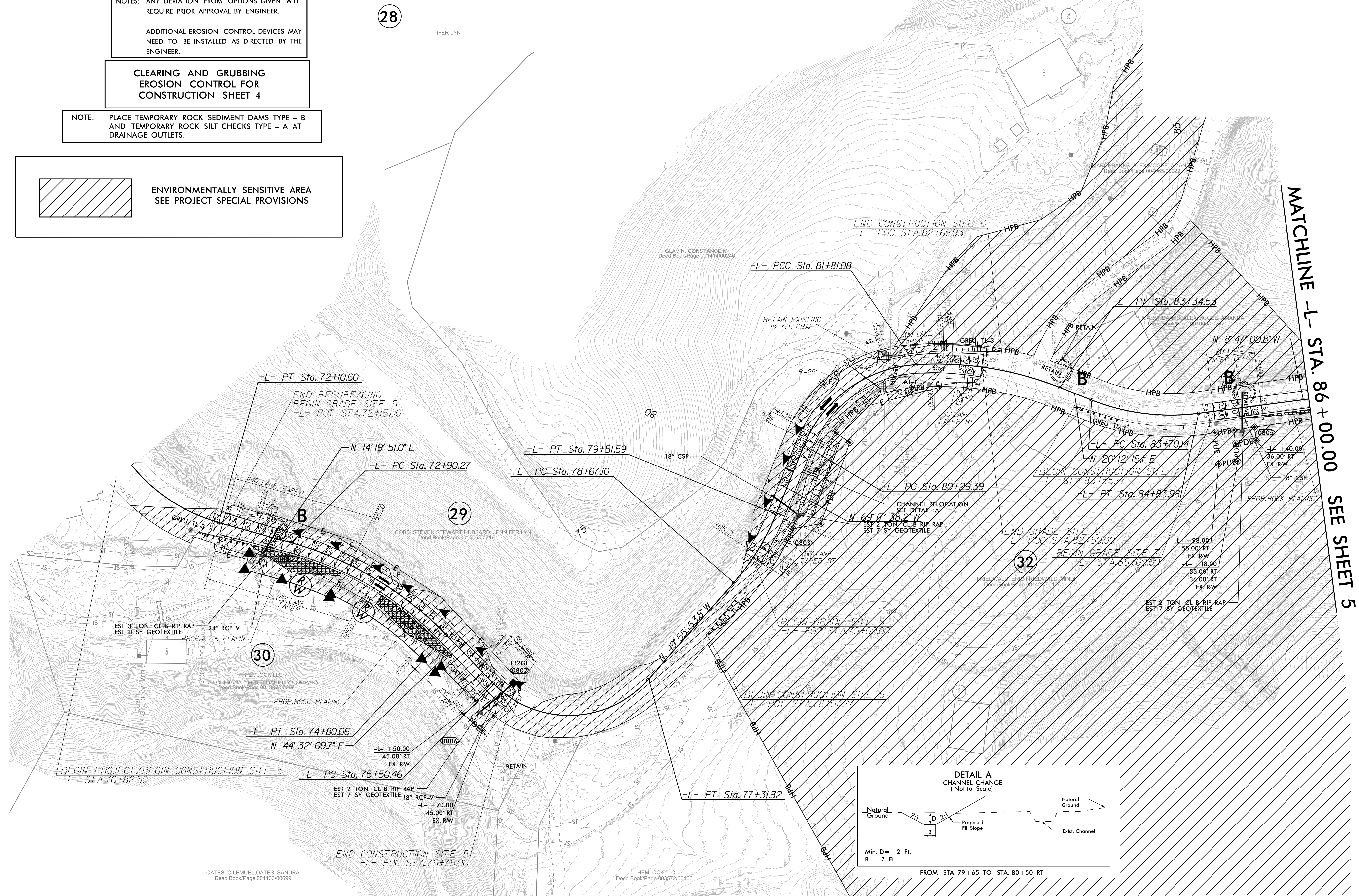
ADDITIONAL EROSION CONTROL DEVICES MAY
NEED TO BE INSTALLED AS DIRECTED BY THE
ENGINEER.

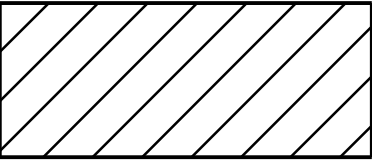
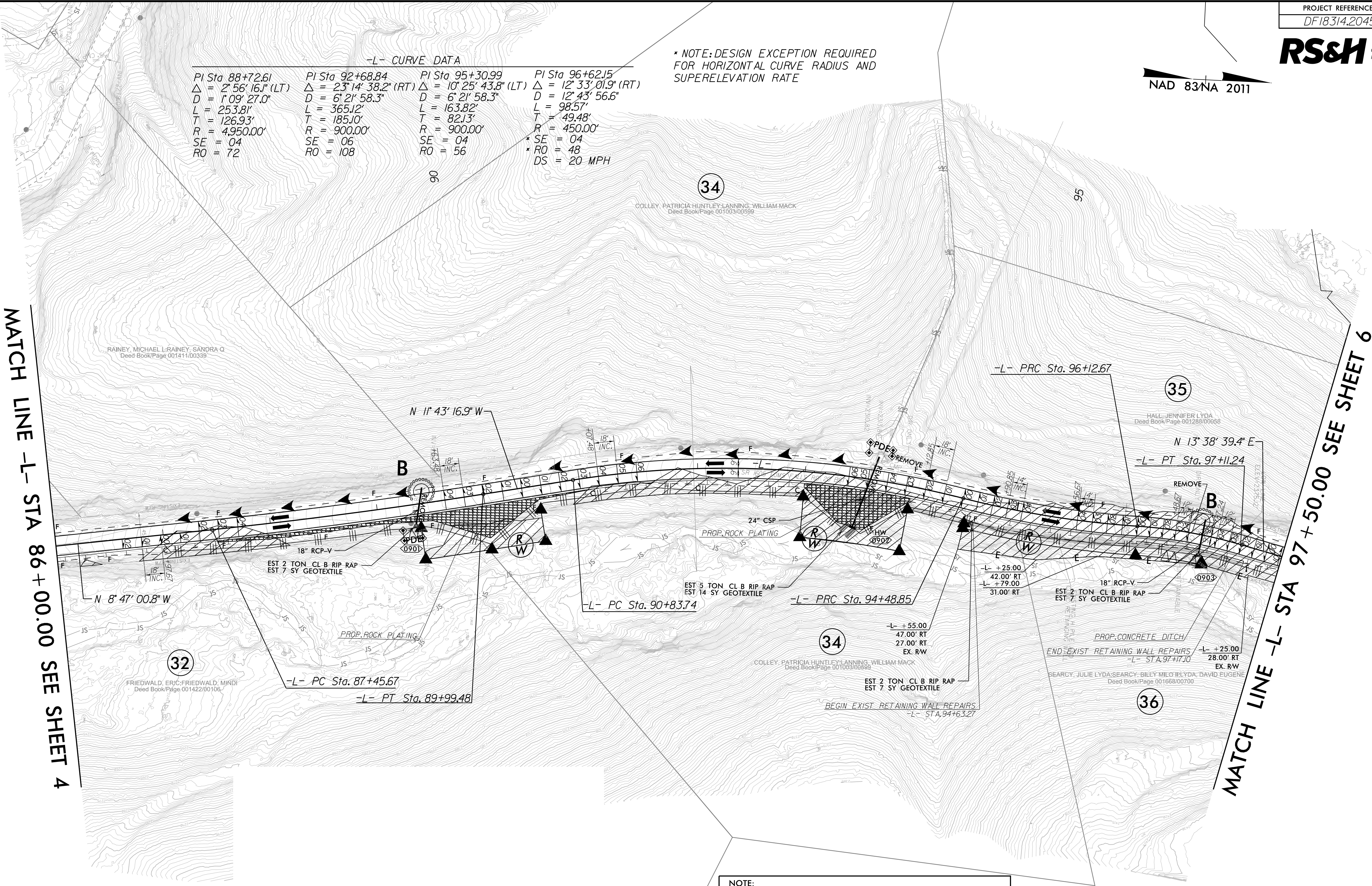
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS





ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION
DEVICES IN LIEU OF ROCK INLET SEDIMENT
TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT
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NEED TO BE INSTALLED AS DIRECTED BY THE
ENGINEER.

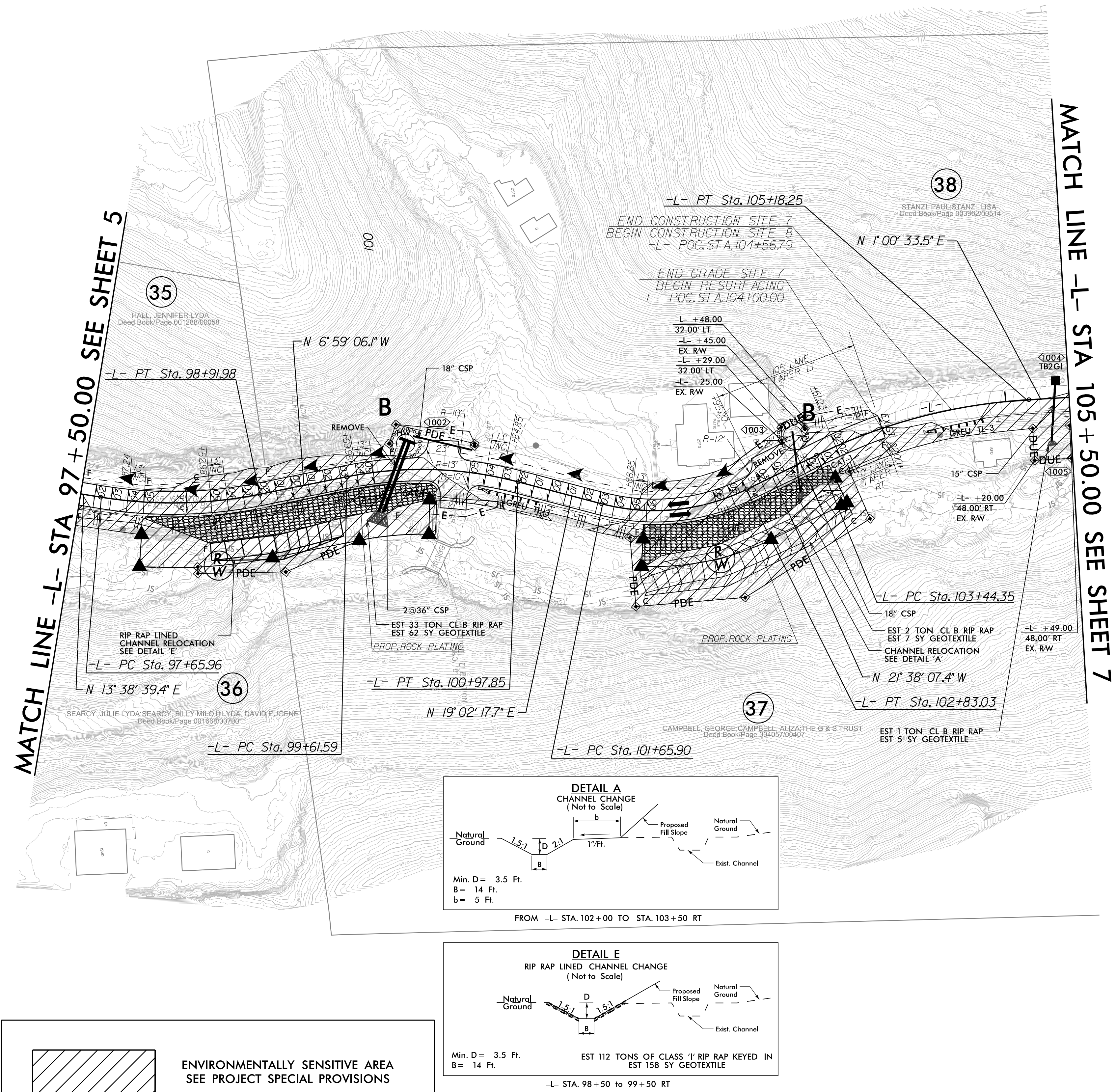
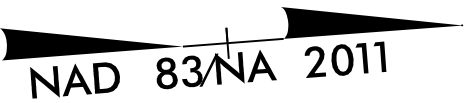
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B
AND TEMPORARY ROCK SILT CHECKS TYPE - A AT
DRAINAGE OUTLETS.

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045417 / DF18314.2045378	EC-6/CONST.6

RS&H

1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493



NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

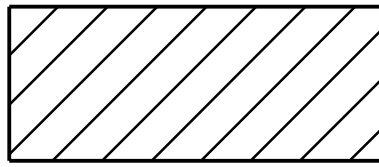
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ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

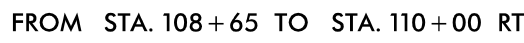
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493



ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS



NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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ENGINEER.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

NOTE:	PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE – B AND TEMPORARY ROCK SILT CHECKS TYPE – A AT DRAINAGE OUTLETS.
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NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION
DEVICES IN LIEU OF ROCK INLET SEDIMENT
TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT
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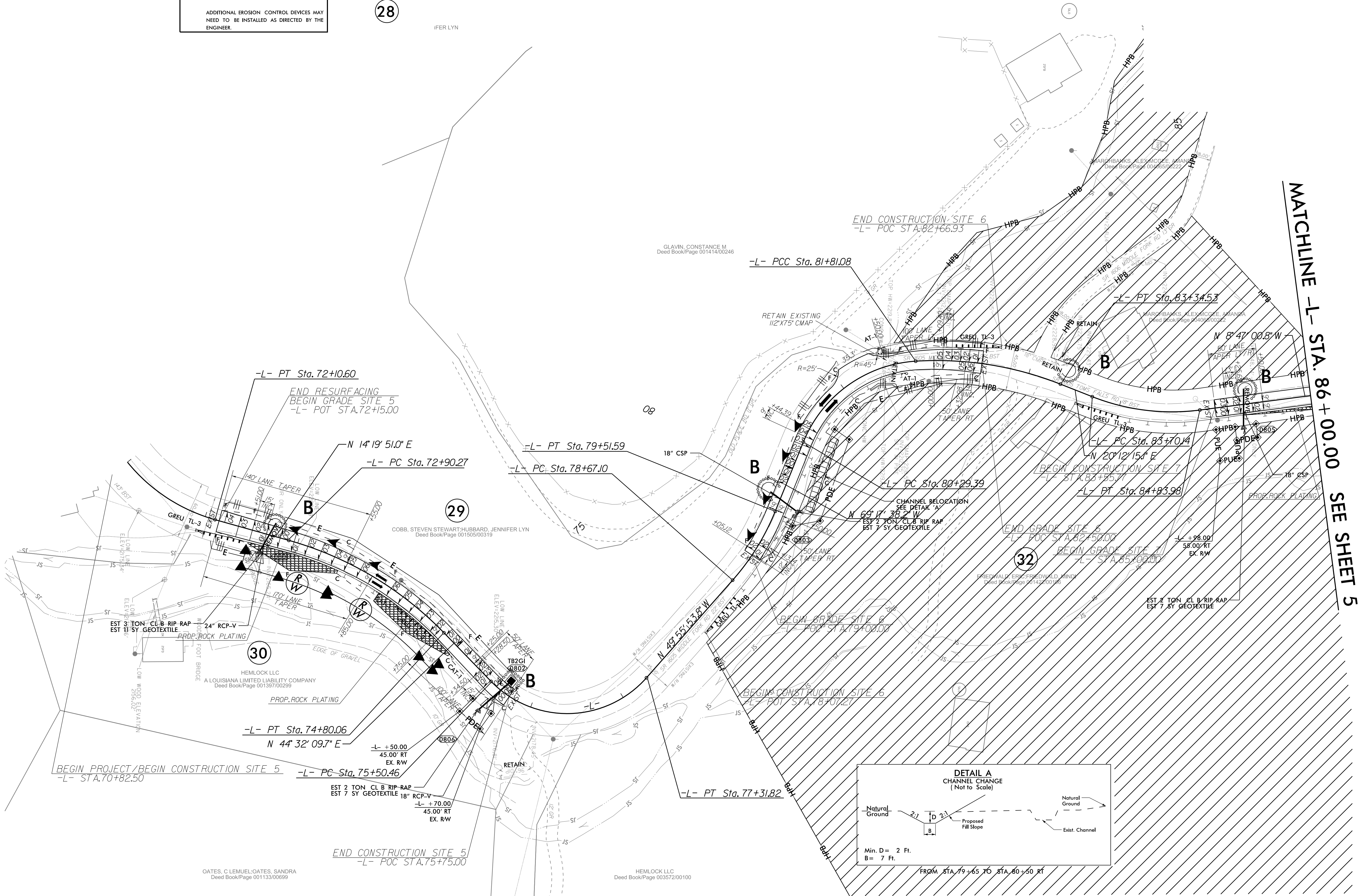
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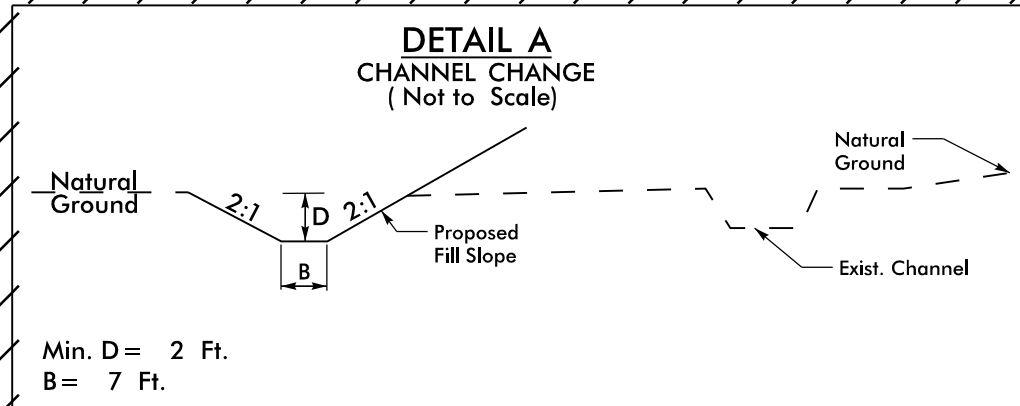
NAD 83/NA 2011

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NC FIRM LICENSE No: F-0493

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045380 / DF18314.2045379 / DF18314.2045417	EC-8/CONST.4



MATCHLINE -L- STA. 86 + 00.00
SEE SHEET 5



OATES, C LEMUEL OATES, SANDRA
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HEMLOCK LLC
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COBB, STEVEN STEWART-HUBBARD, JENNIFER LYN
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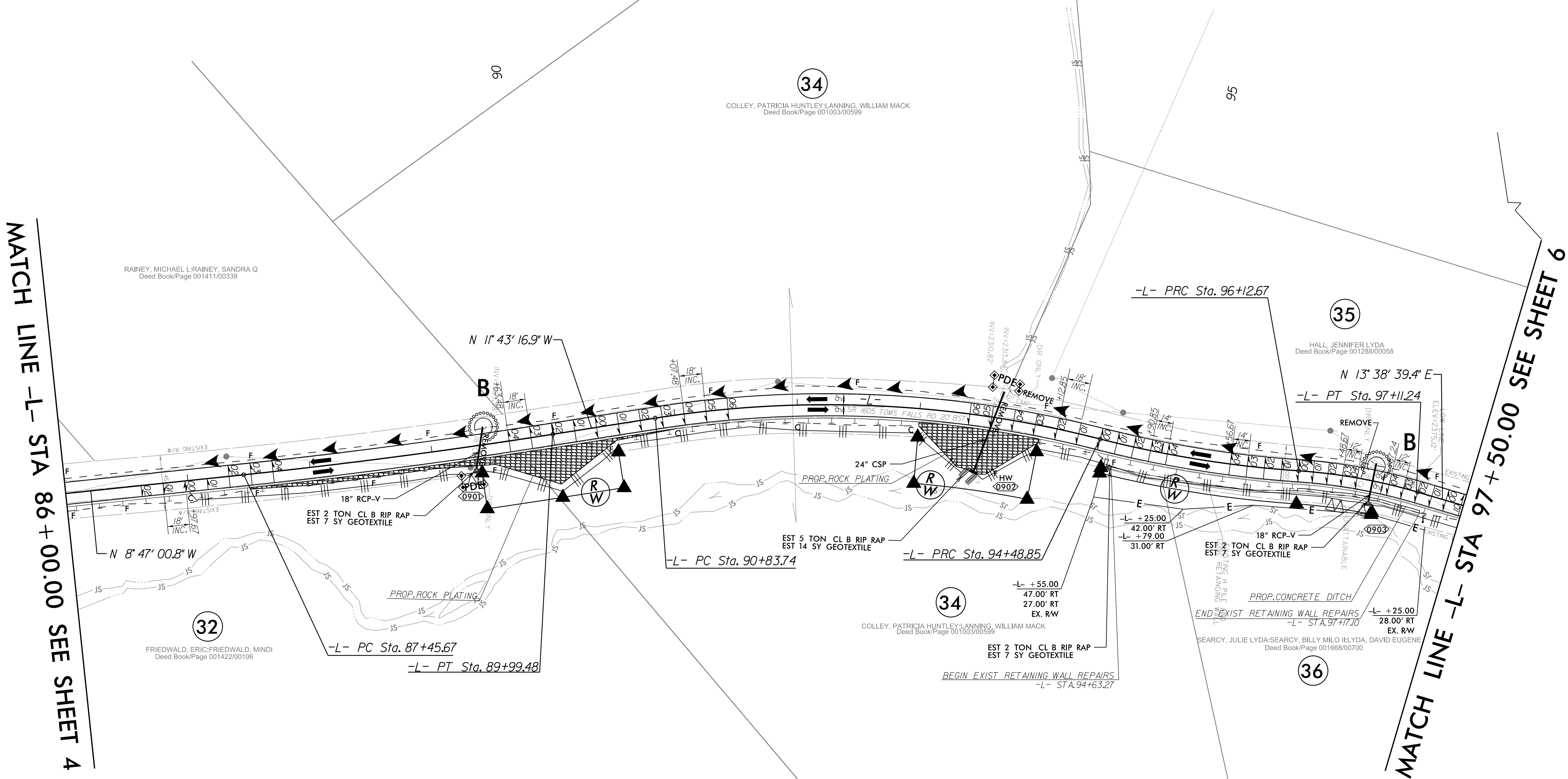
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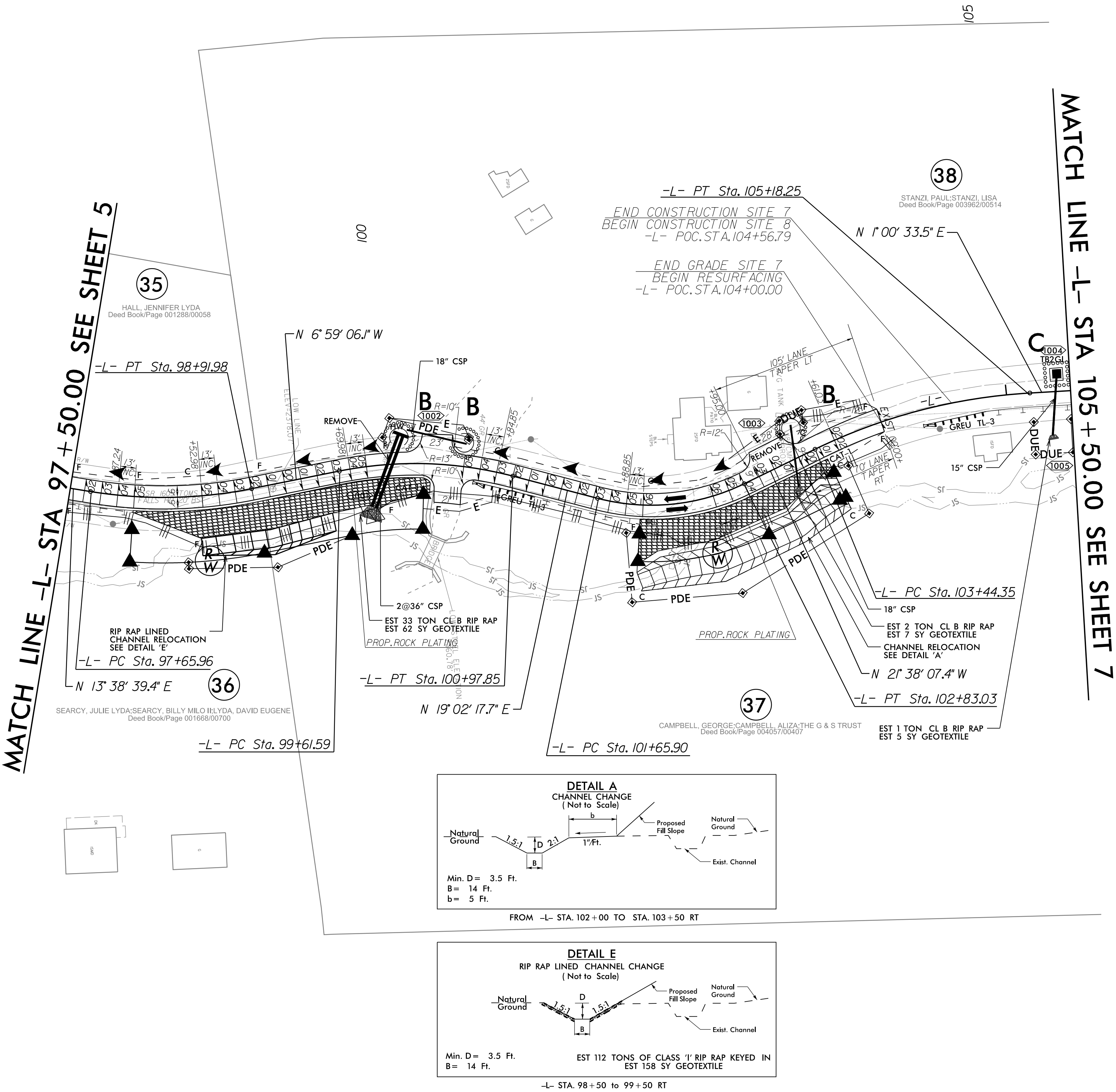
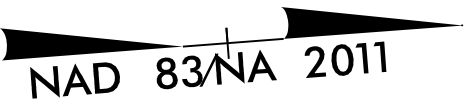
NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

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PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045417 / DF18314.2045378	EC-10/CONST.6

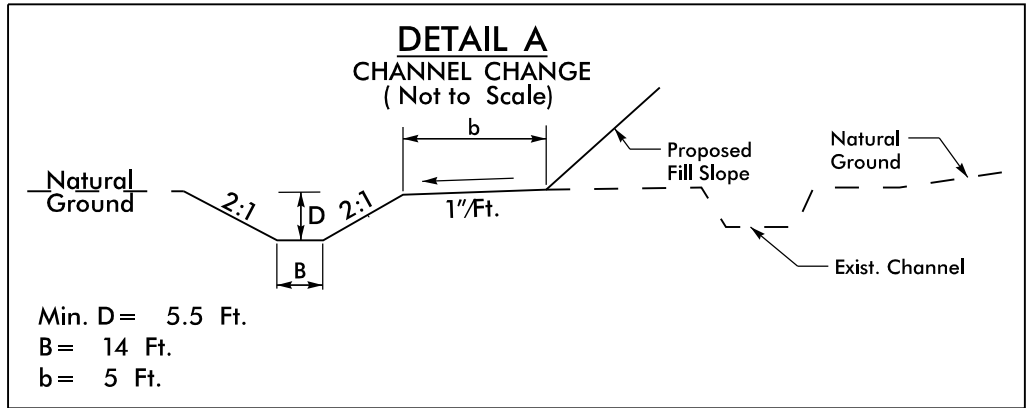
RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
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NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICES IN LIEU OF ROCK INLET SEDIMENT TRAPS, TYPE-C AS DIRECTED TO AVOID IMPOUNDMENT OF RUNOFF IN ROADWAY OPEN TO TRAFFIC.

NOTES: ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

MATCH LINE -L- STA 105 + 50.00 SEE SHEET 6

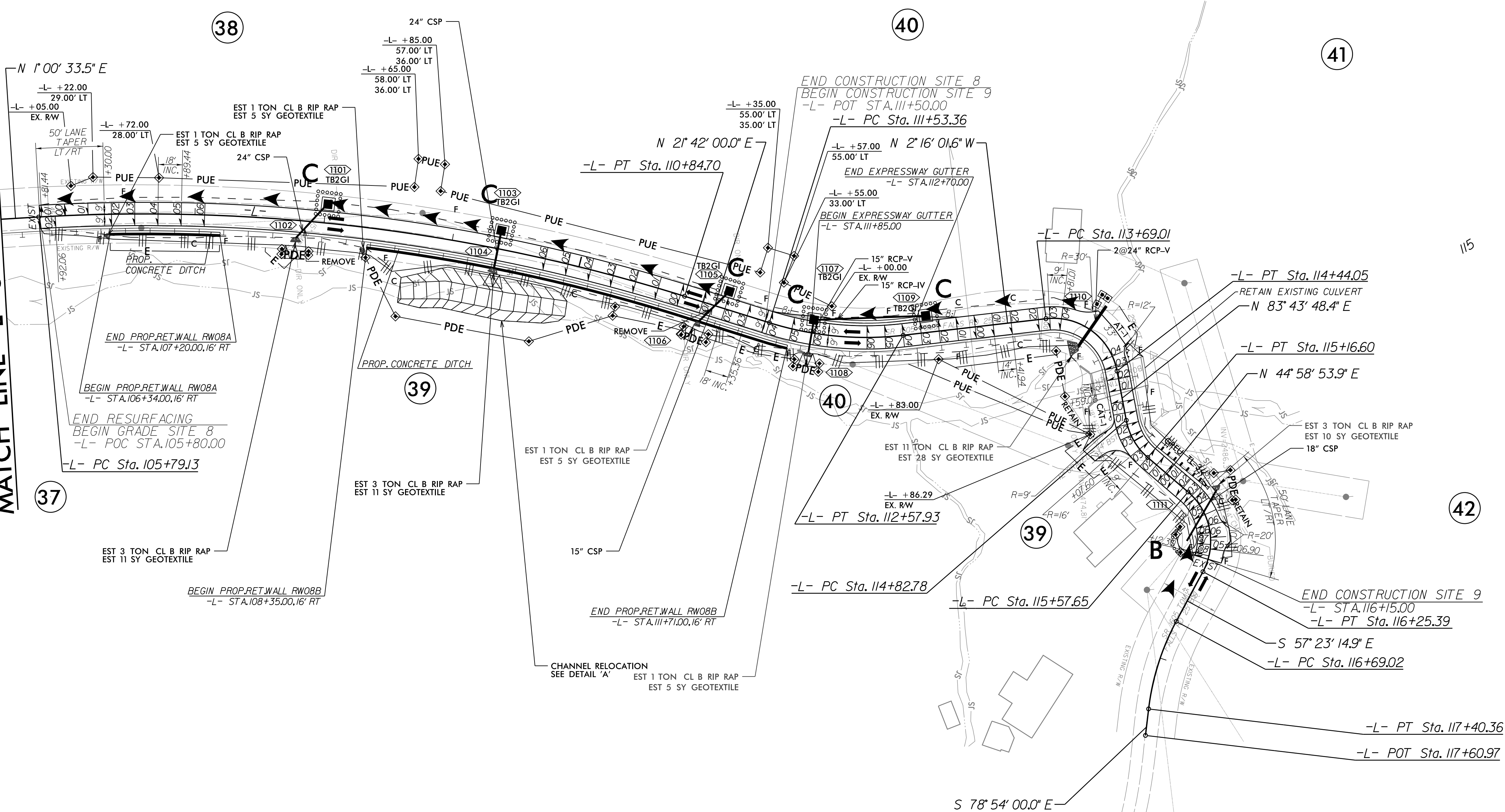


FROM STA. 108+65 TO STA. 110+00 RT

NAD 83 NA 2011

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045378 / DF18314.2045377	EC-II/CONST.7

RS&H1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493



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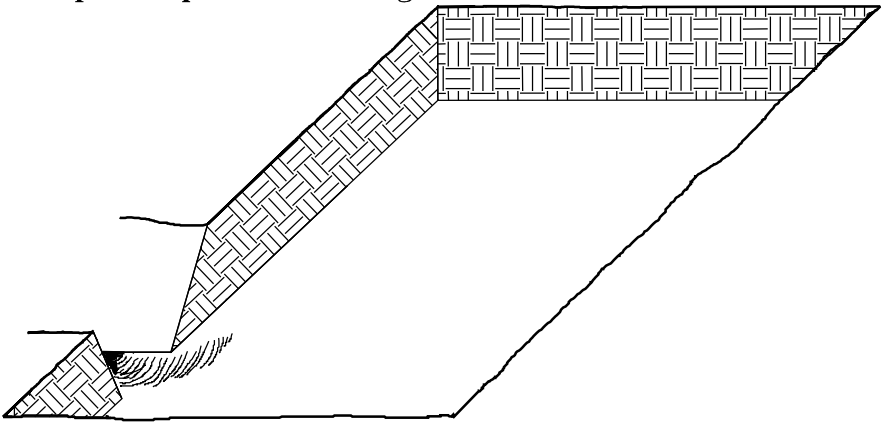
ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	DF18314.2045377	RF-1	
STATE PROJ.NO.	F.A.PROJ.NO.	DESCRIPTION	

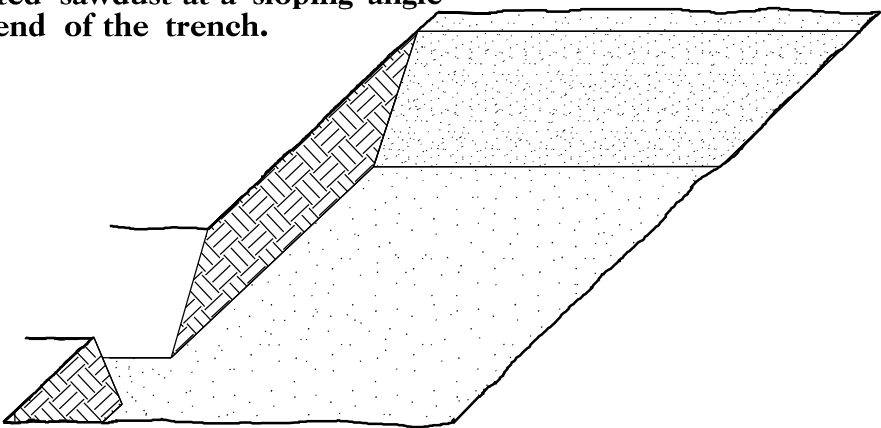
PLANTING DETAILS
SEEDLING / LINER BAREROOT PLANTING DETAIL

HEALING IN

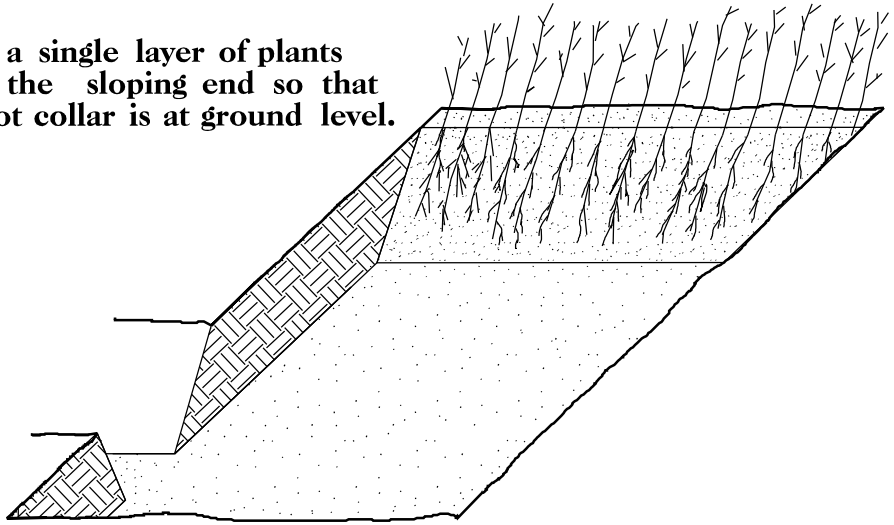
1. Locate a healing-in site in a shady, well protected area.
2. Excavate a flat bottom trench 12 inches deep and provide drainage.



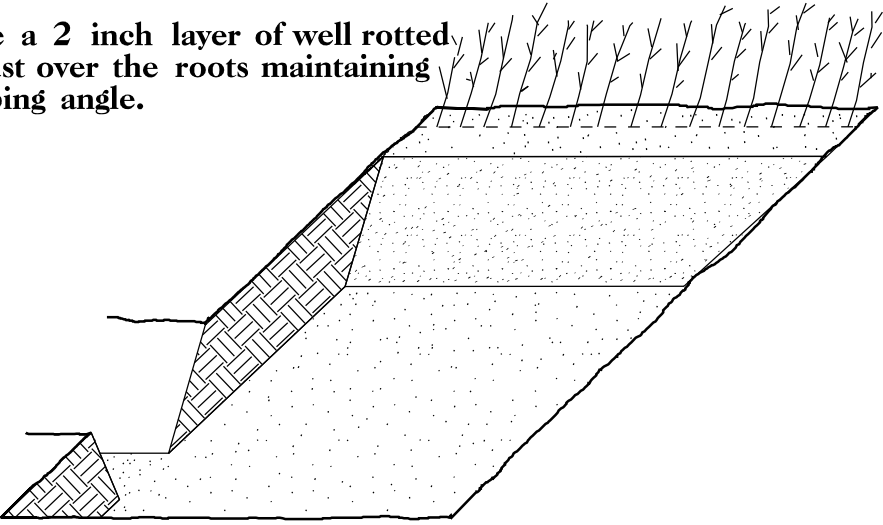
3. Backfill the trench with 2 inches well rotted sawdust. Place a 2 inch layer of well rotted sawdust at a sloping angle at one end of the trench.



4. Place a single layer of plants against the sloping end so that the root collar is at ground level.

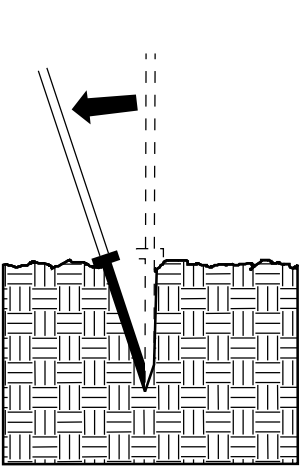


5. Place a 2 inch layer of well rotted sawdust over the roots maintaining a sloping angle.

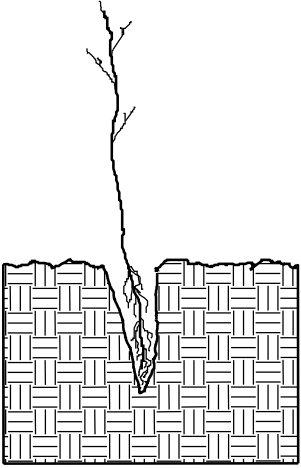


6. Repeat layers of plants and sawdust as necessary and water thoroughly.

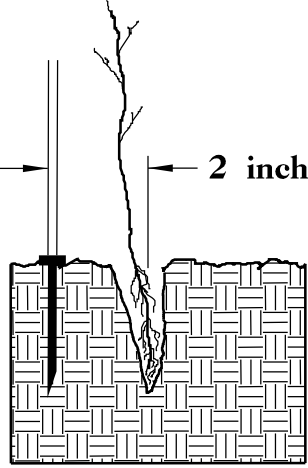
DIBBLE PLANTING METHOD
USING THE KBC PLANTING BAR



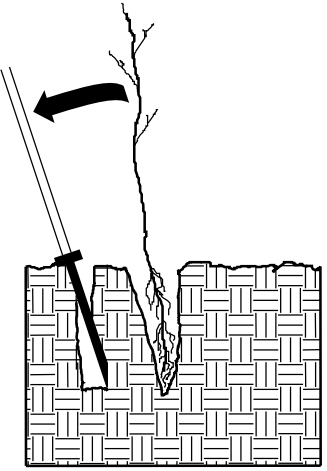
1. Insert planting bar as shown and pull handle toward planter.



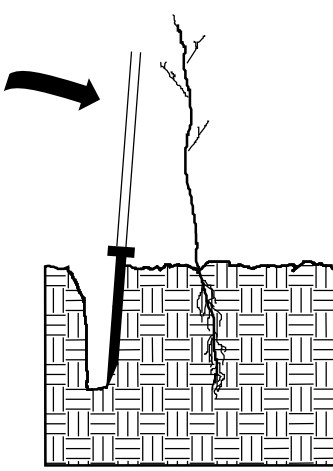
2. Remove planting bar and place seedling at correct depth.



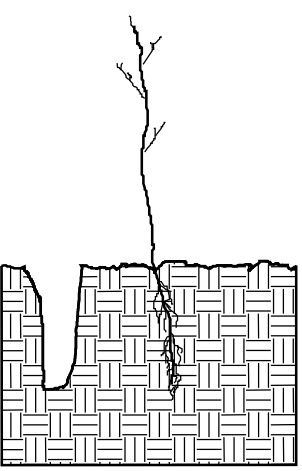
3. Insert planting bar 2 inches toward planter from seedling.



4. Pull handle of bar toward planter, firming soil at bottom.



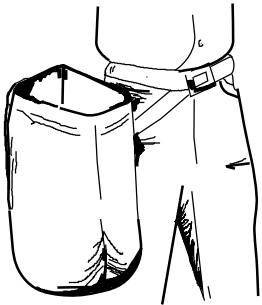
5. Push handle forward firming soil at top.



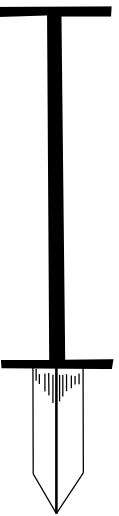
6. Leave compaction hole open. Water thoroughly.

PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

REFORESTATION

- ☐ TREE REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

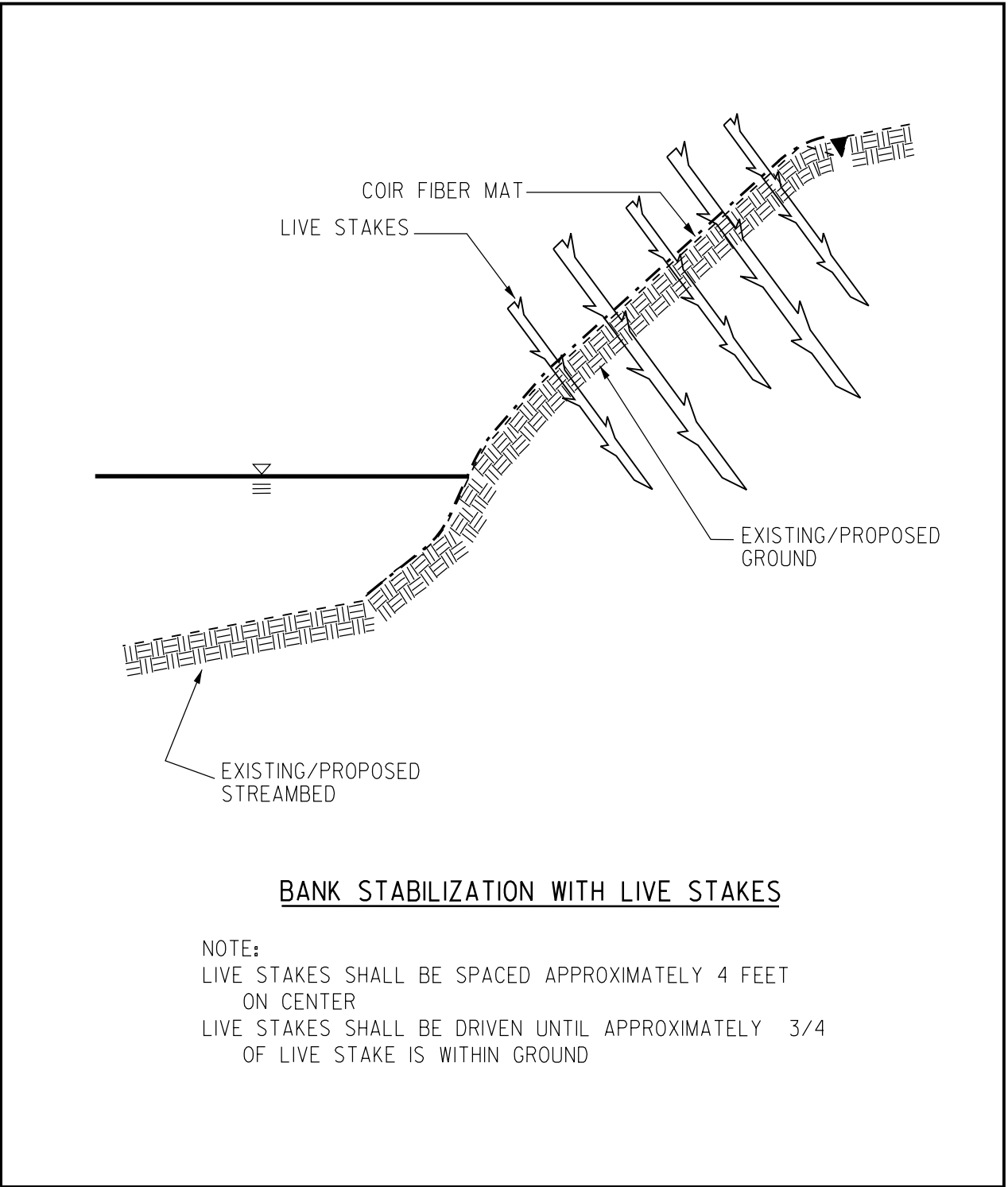
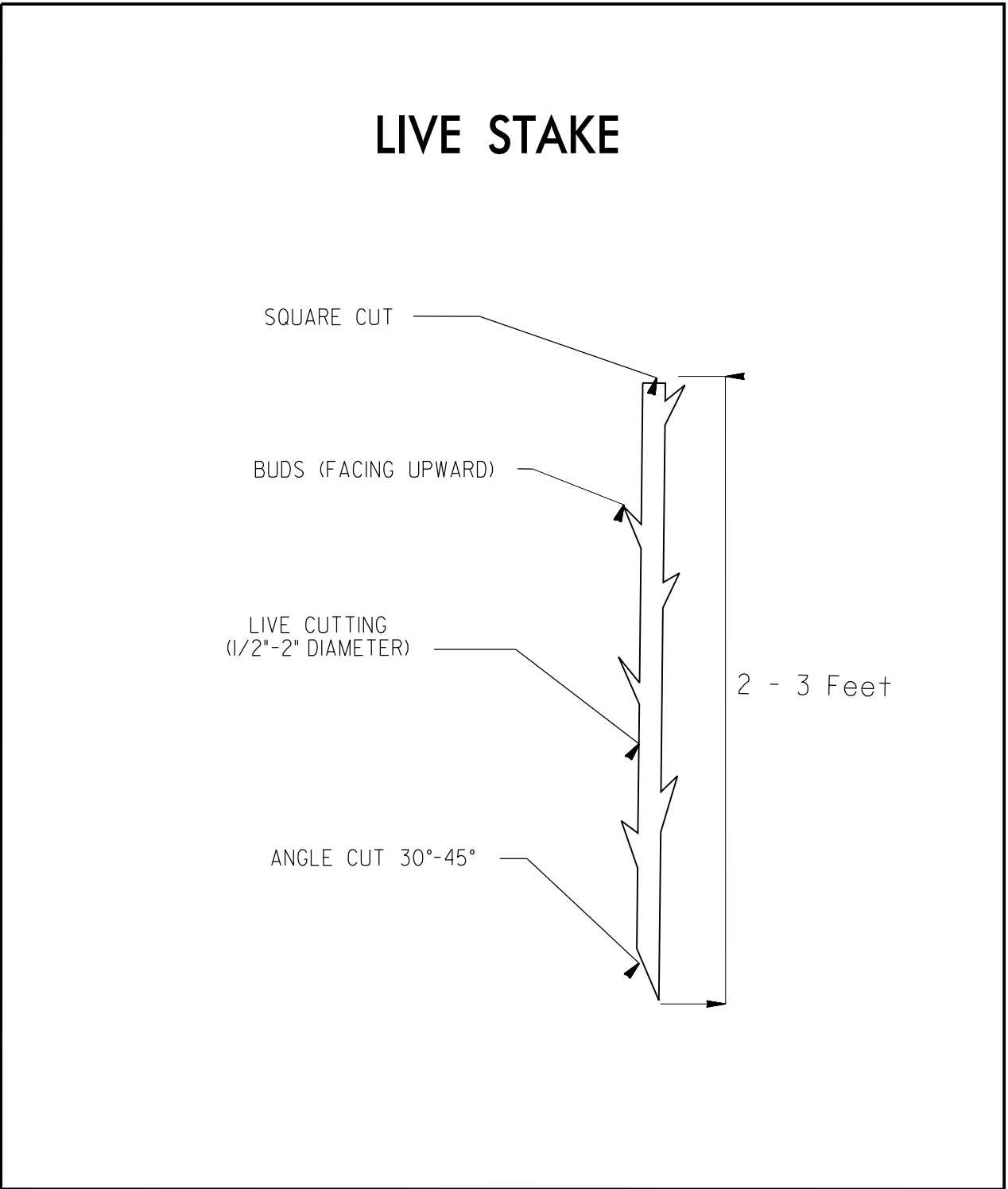
25% LIRIODENDRON TULIPIFERA	TULIP POPLAR	12 in – 18 in BR
25% PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	12 in – 18 in BR
25% FRAXINUS PENNSYLVANICA	GREEN ASH	12 in – 18 in BR
25% BETULA NIGRA	RIVER BIRCH	12 in – 18 in BR

REFORESTATION DETAIL SHEET

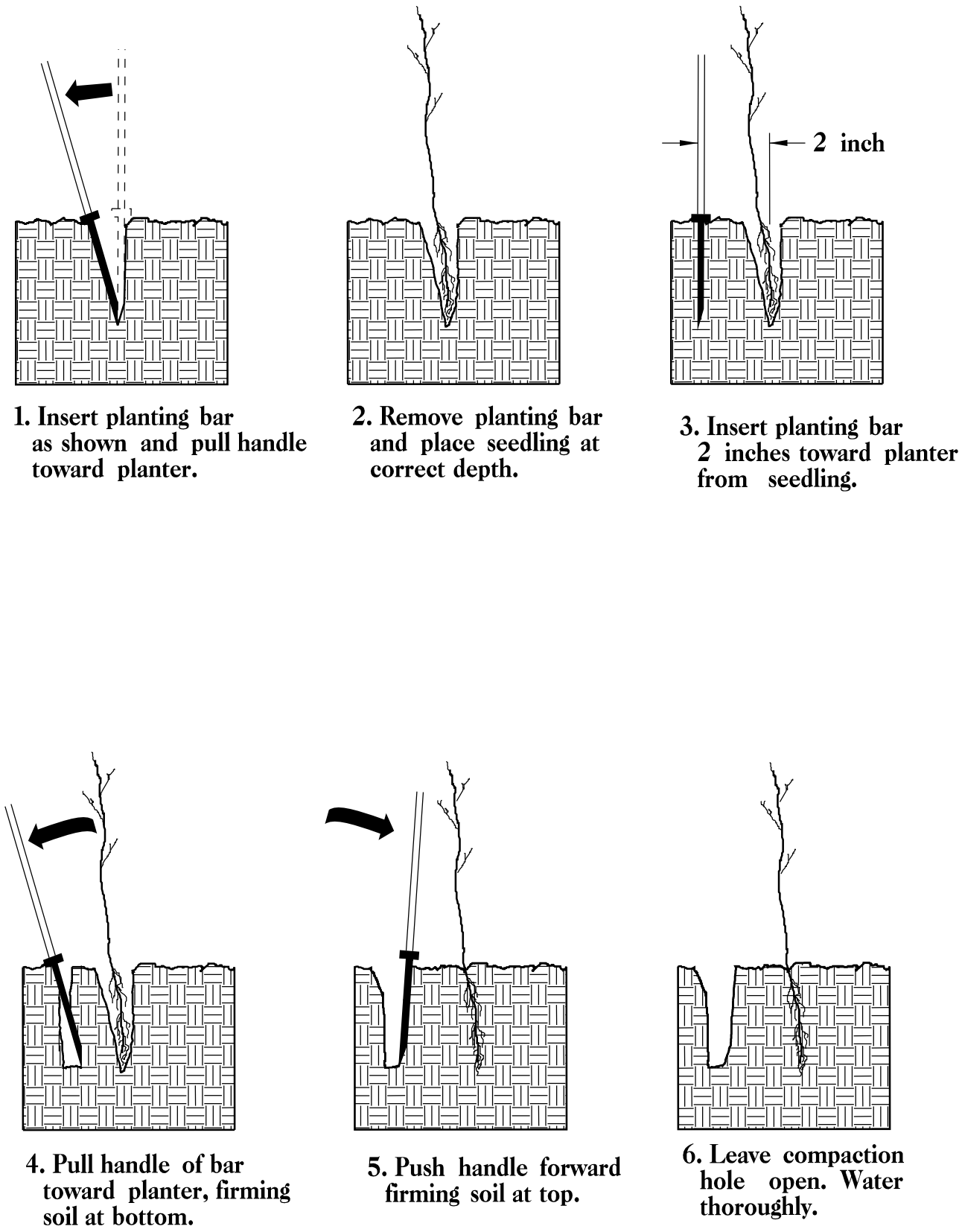
N.C.D.O.T. - ROADSIDE ENVIRONMENTAL UNIT

PLANTING DETAILS

LIVE STAKES PLANTING DETAIL

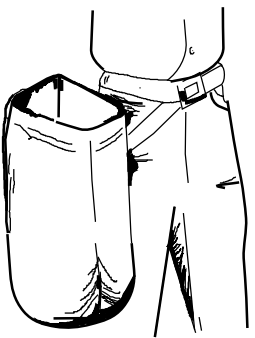


BAREROOT PLANTING DETAIL
DIBBLE PLANTING METHOD
USING THE KBC PLANTING BAR

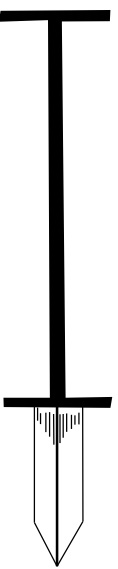


PLANTING NOTES:

PLANTING BAG
During planting, seedlings shall be kept in a moist canvas bag or similar container to prevent the root systems from drying.



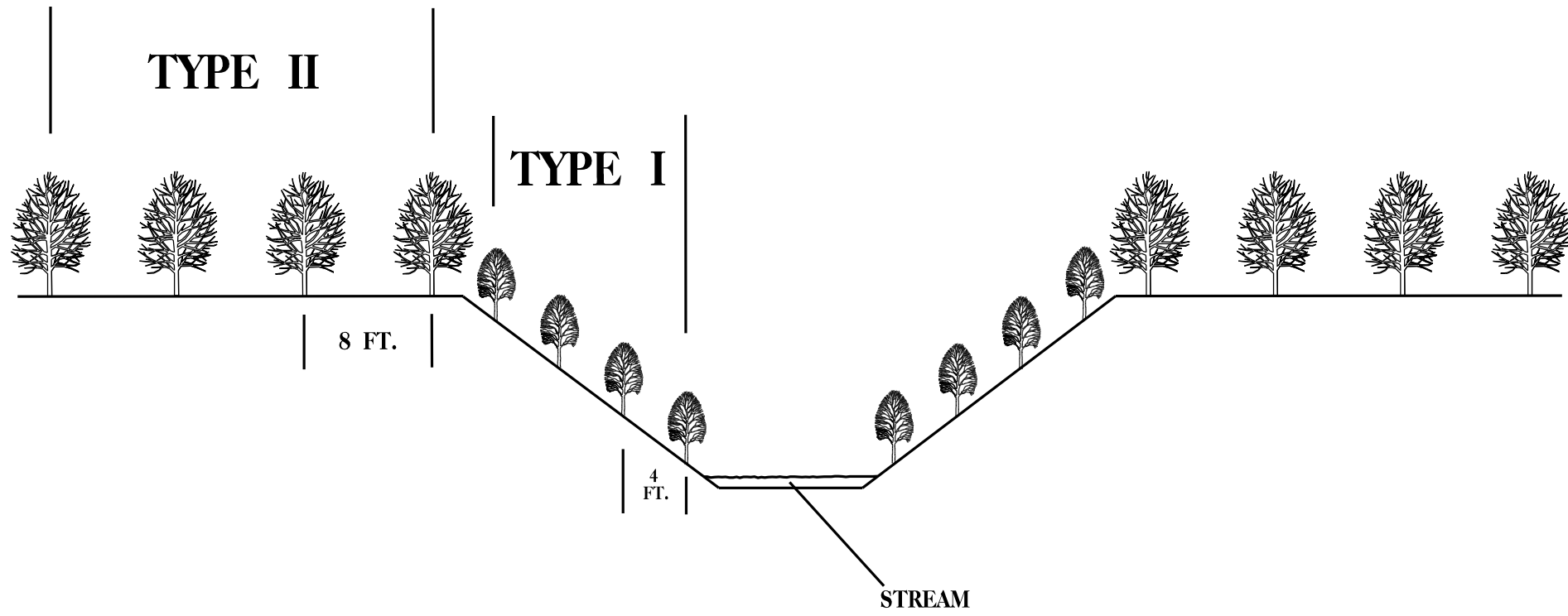
KBC PLANTING BAR
Planting bar shall have a blade with a triangular cross section, and shall be 12 inches long, 4 inches wide and 1 inch thick at center.



ROOT PRUNING
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10 inches below the root collar.

- TYPE 1 STREAMBANK REFORESTATION SHALL BE PLANTED 3 FT. TO 5 FT. ON CENTER, RANDOM SPACING, AVERAGING 4 FT. ON CENTER, APPROXIMATELY 2724 PLANTS PER ACRE.
- TYPE 2 STREAMBANK REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.
- NOTE: TYPE 1 AND TYPE 2 STREAMBANK REFORESTATION SHALL BE PAID FOR AS "STREAMBANK REFORESTATION"

STREAMBANK REFORESTATION TYPICAL



STREAMBANK REFORESTATION

MIXTURE, TYPE, SIZE, AND FURNISH SHALL CONFORM TO THE FOLLOWING:

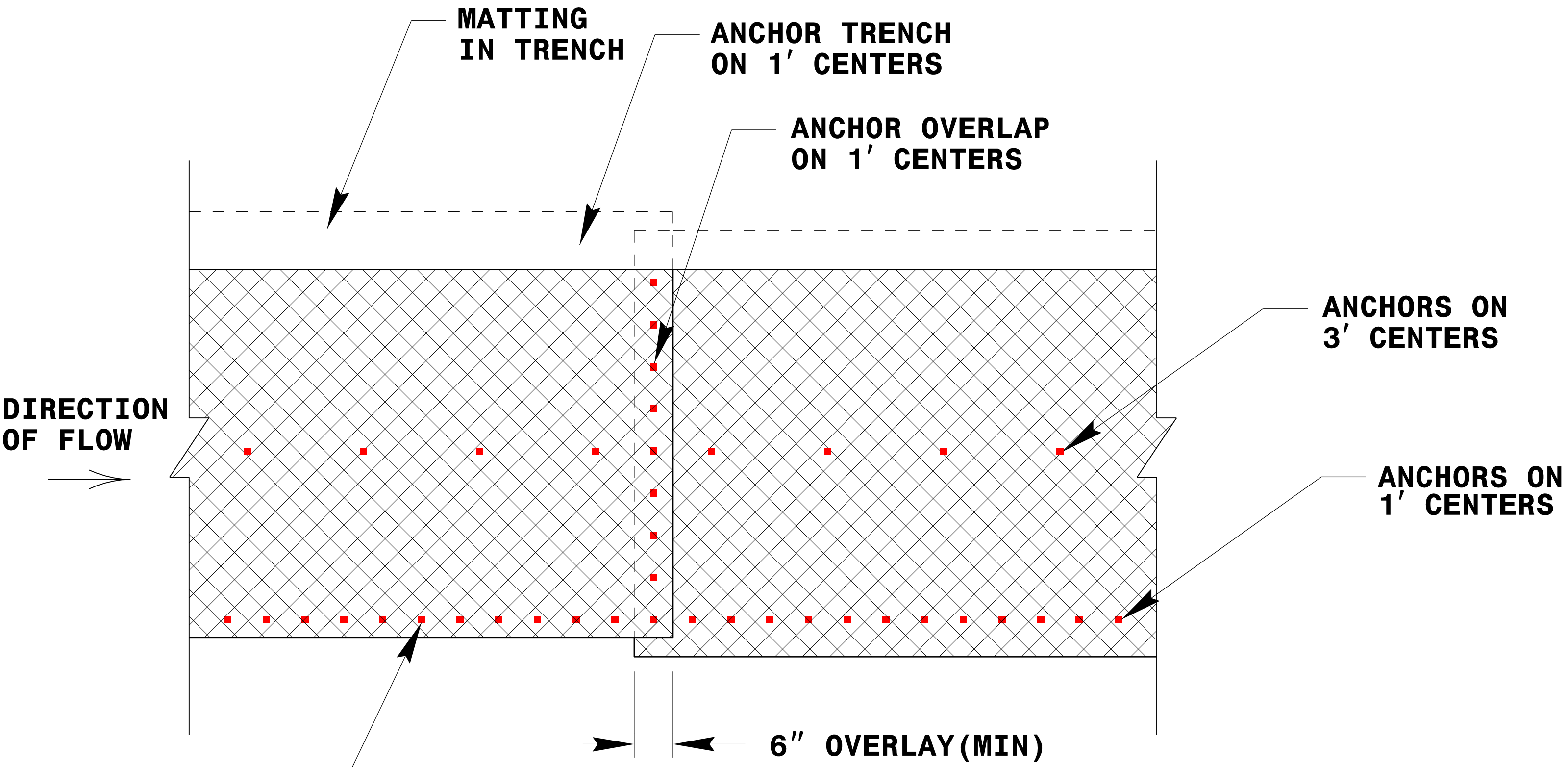
TYPE 1

50% SALIX NIGRA	BLACK WILLOW	2 ft – 3 ft LIVE STAKES
50% CORNUS AMOMUM	SILKY DOGWOOD	2 ft – 3 ft LIVE STAKES

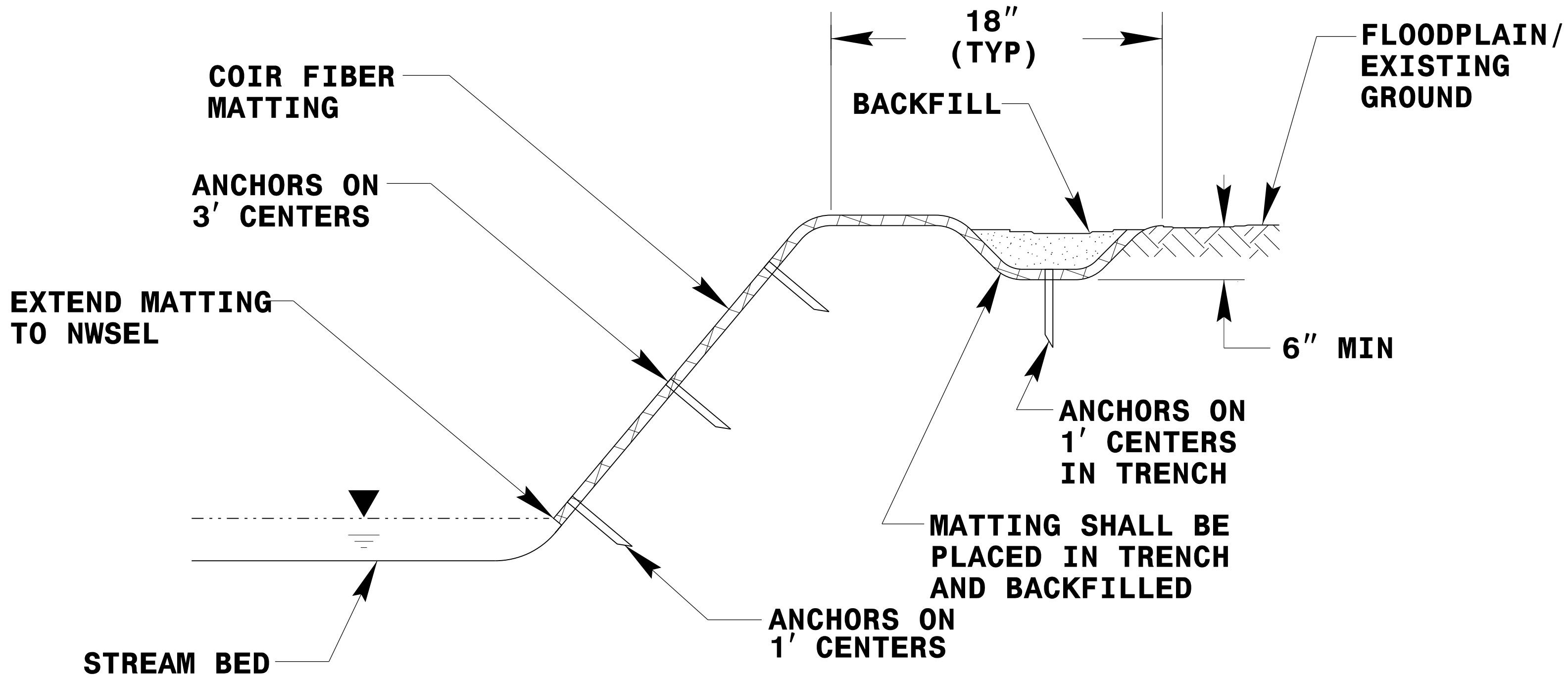
TYPE 2

25% LIRIODENDRON TULIPIFERA	TULIP POPLAR	12 in – 18 in BR
25% PLATANUS OCCIDENTALIS	SYCAMORE	12 in – 18 in BR
25% PRUNUS SEROTINA	BLACK CHERRY	12 in – 18 in BR
25% BETULA NIGRA	RIVER BIRCH	12 in – 18 in BR

- SEE PLAN SHEETS FOR AREAS TO BE PLANTED



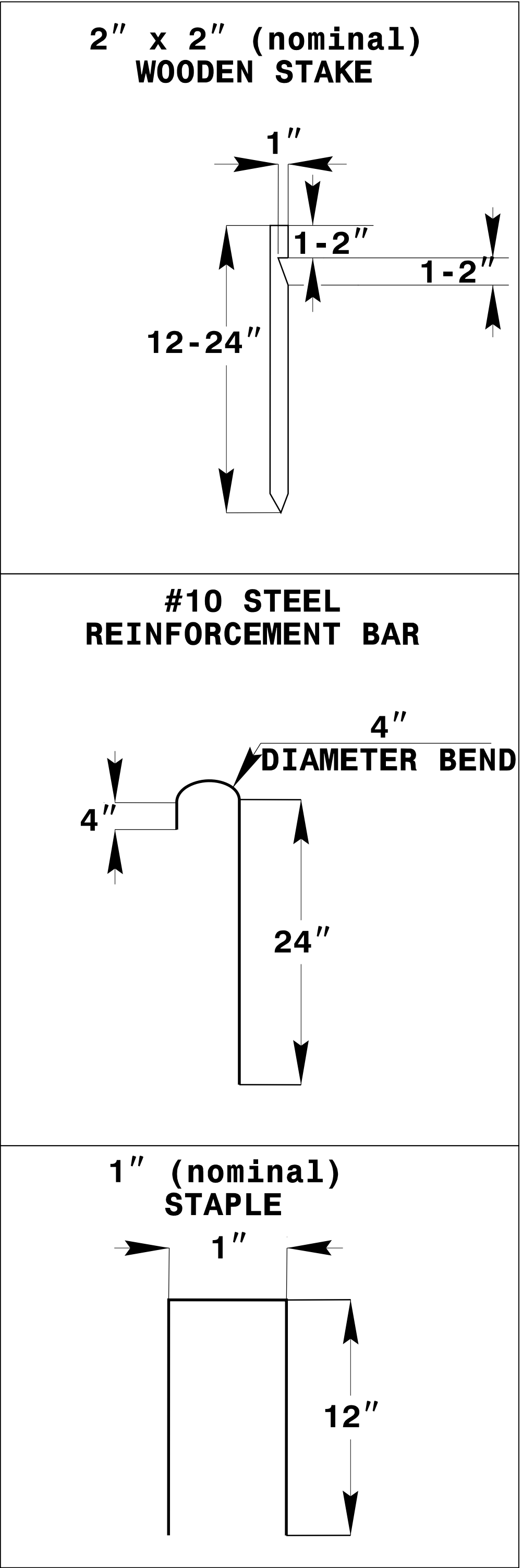
PLAN VIEW



TYPICAL CROSS SECTION

COIR FIBER MATTING DETAIL

NOT TO SCALE



ANCHOR OPTIONS

STREAMBANK REFORESTATION

DETAIL SHEET 2 OF 2

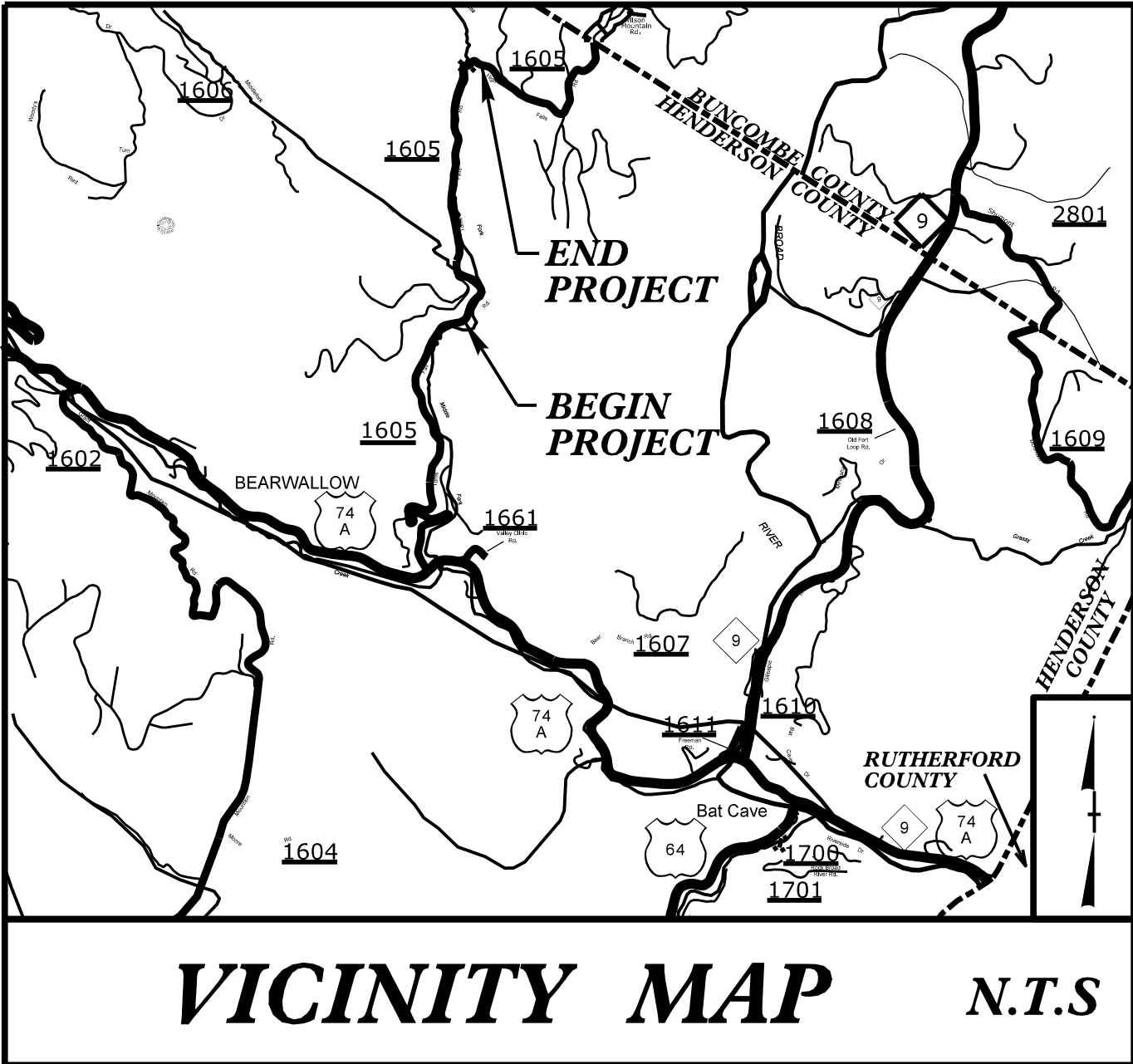
N.C.D.O.T.- ROADSIDE ENVIRONMENTAL UNIT

09/08/2019

6/10/2025
C:\Middle Fork_Rdy_tsh_SegC.dgn
2:43:41 PM

WBS PROJECT:DF18314.2045377

CONTRACT: DN01123

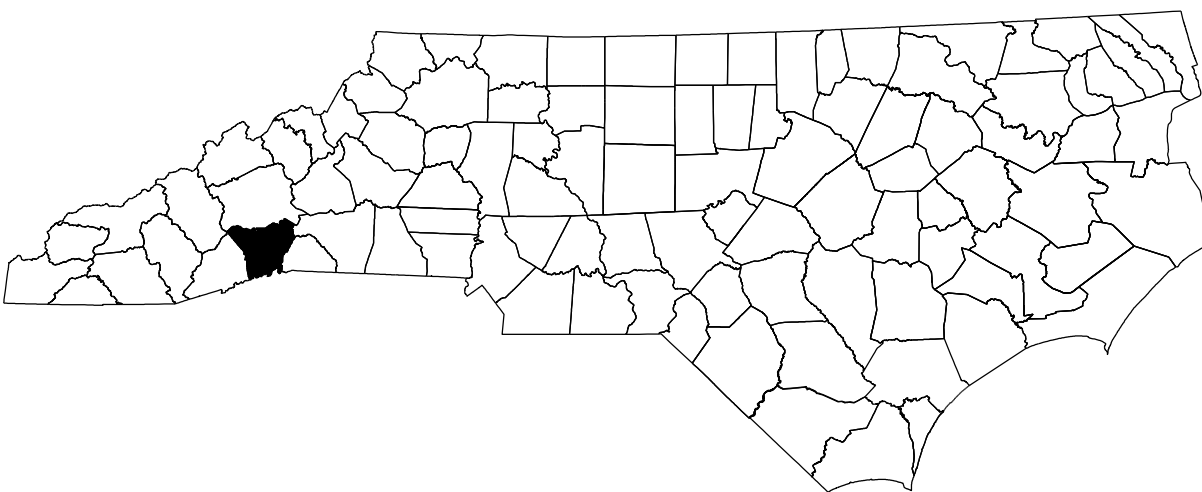


STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

UTILITIES BY OTHERS PLANS
HENDERSON COUNTY

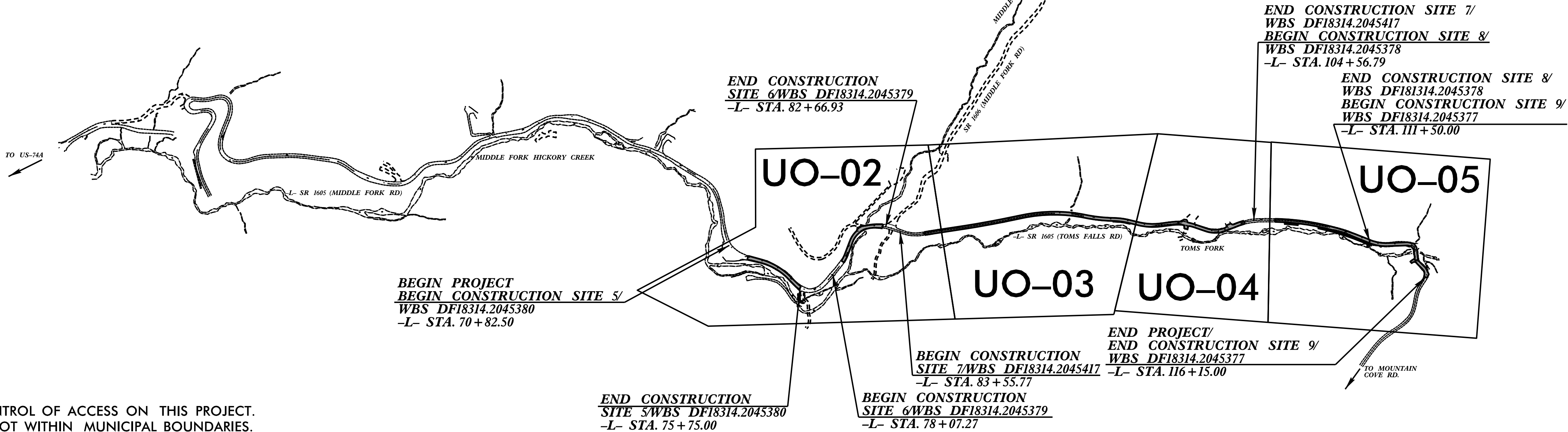
LOCATION: EMERGENCY DESIGN FOR SR 1605
(MIDDLE FORK ROAD/TOMS FALLS ROAD)

TYPE OF WORK: POWER AND COMMUNICATIONS



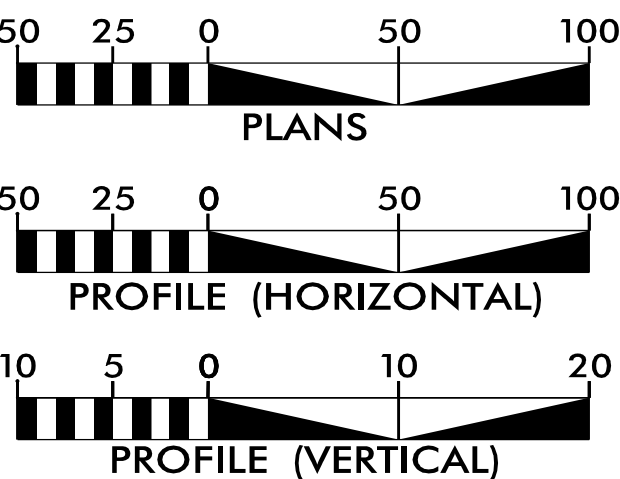
T.I.P. NO.	SHEET NO.
DF18314.2045377	UO-1

NOTE:
ALL UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS.
NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR UTILITY WORK SHOWN ON THIS SHEET.



THERE IS NO CONTROL OF ACCESS ON THIS PROJECT.
THIS PROJECT IS NOT WITHIN MUNICIPAL BOUNDARIES.

GRAPHIC SCALES



INDEX OF SHEETS

SHEET NO.:	DESCRIPTION:
UO-1	TITLE SHEET
UO-02 THRU UO-05	UBO PLAN SHEETS

UTILITY OWNERS WITH CONFLICTS

- (A) POWER - DUKE ENERGY
(B) COMMUNICATIONS - SPECTRUM
(C) COMMUNICATIONS - AT&T

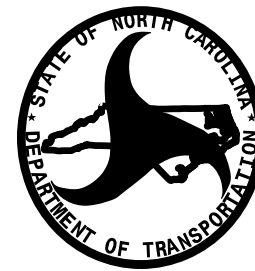
PREPARED IN THE OFFICE OF:

RS&H

1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

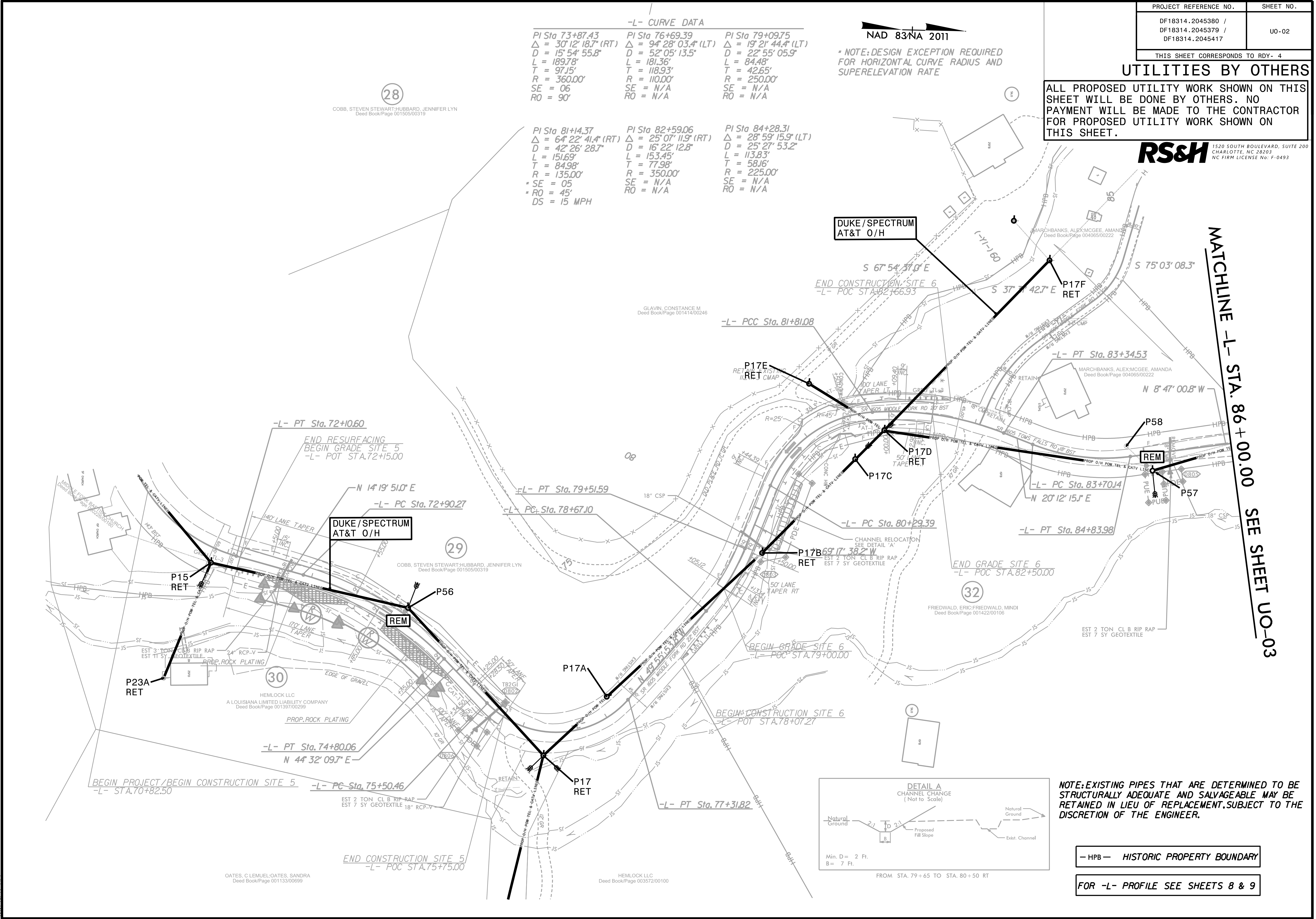
FOR THE NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

Freddie Bunn	UTILITY PROJECT MANAGER
Brian Long	PROJECT UTILITY COORDINATOR



DIVISION OF HIGHWAYS
DIVISION 14
DIV ADDRESS
253 WEBSTER RD.
SYLVIA, NC 28779

Bob Golding	DIVISION UTILITY ENGINEER
Barry Mosteller	DIVISION PROJECT MANAGER
Robert Dyer	ASST. DIVISION UTILITY ENG.



PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045380 / DF18314.2045379 / DF18314.2045417	UO-02

THIS SHEET CORRESPONDS TO RDY- 4

UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.

RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE No: F-0493

DUKE/SPECTRUM
AT&T O/H

P17F
RET

P58

REM

P57

DUKE/SPECTRUM
AT&T O/H

P15
RET

P23A
RET

P56

REM

P17A

P17
RET

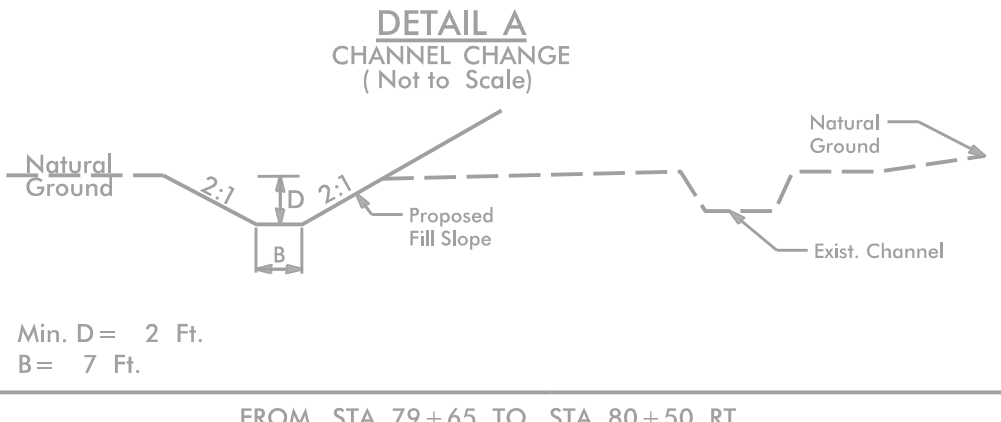
P17B
RET

P17C

P17D
RET

P17E
RET

NOTE: EXISTING PIPES THAT ARE DETERMINED TO BE STRUCTURALLY ADEQUATE AND SALVAGEABLE MAY BE RETAINED IN LIEU OF REPLACEMENT, SUBJECT TO THE DISCRETION OF THE ENGINEER.



— HPB — HISTORIC PROPERTY BOUNDARY

FOR -L- PROFILE SEE SHEETS 8 & 9

8/17/99

6/11/2025 8:33:41 AM Middle Fork Rd-04-00-00 Site 7.dgn

MATCH LINE -L- STA 86 + 00.00 SEE SHEET UO-02

MATCH LINE -L- STA 97 + 50.00 SEE SHEET UO-04

-L- CURVE DATA			
PI Sta 88+72.61	PI Sta 92+68.84	PI Sta 95+30.99	PI Sta 96+62.15
$\Delta = 2^{\circ} 56' 16.1" (LT)$	$\Delta = 23^{\circ} 14' 38.2" (RT)$	$\Delta = 10^{\circ} 25' 43.8" (LT)$	$\Delta = 12^{\circ} 33' 01.9" (RT)$
D = 1'09' 27.0"	D = 6' 21' 58.3"	D = 6' 21' 58.3"	D = 12' 43' 56.6"
L = 253.81'	L = 365.12'	L = 163.82'	L = 98.57'
T = 126.93'	T = 185.10'	T = 82.13'	T = 49.48'
R = 4950.00'	R = 900.00'	R = 900.00'	R = 450.00'
SE = 04	SE = 06	SE = 04	SE = 04
RO = 72	RO = 108	RO = 56	RO = 48
			DS = 20 MPH

* NOTE: DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADIUS AND SUPERELEVATION RATE

NAD 83 NA 2011

PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045417	UO-03
THIS SHEET CORRESPONDS TO RDY- 5	

UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.

RS&H 1520 SOUTH BOULEVARD, SUITE 200
CHARLOTTE, NC 28203
NC FIRM LICENSE NO: F-0493

RAINEY, MICHAEL L-RAINEY, SANDRA Q
Deed Book/Page 001411/00339

FRIEDWALD, ERIC-FRIEDWALD, MINDI
Deed Book/Page 001422/00106

COLLEY, PATRICIA HUNTLEY-LANNING, WILLIAM MACK
Deed Book/Page 001003/00599

HALL, JENNIFER LYDA
Deed Book/Page 001268/00058

SEARCY, JULIE LYDA-SEARCY, BILLY MILO II-LYDA, DAVID EUGENE
Deed Book/Page 001668/00700

NOTE: EXISTING PIPES THAT ARE DETERMINED TO BE STRUCTURALLY ADEQUATE AND SALVAGEABLE MAY BE RETAINED IN LIEU OF REPLACEMENT. SUBJECT TO THE DISCRETION OF THE ENGINEER.

FOR -L- PROFILE SEE SHEET 9

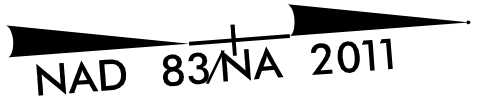
FOR RETAINING WALL REPAIR SEE SHEETS W-1 THRU W-7

- HPB - HISTORIC PROPERTY BOUNDARY

-L- CURVE DATA		
PI Sta 98+29.66	PI Sta 100+30.92	PI Sta 102+27.06
Δ = 20° 37' 45.5" (LT)	Δ = 26° 01' 23.8" (RT)	Δ = 40° 40' 25.2" (LT)
D = 16° 22' 12.8"	D = 19° 05' 54.9"	D = 34° 43' 29.0"
L = 126.02'	L = 136.26'	L = 117.13'
T = 63.70'	T = 69.32'	T = 61.16'
R = 350.00'	R = 300.00'	R = 165.00'
* SE = 05	* SE = 05	* SE = 06
* RO = 65	* RO = 65	* RO = 78
DS = 25 MPH	DS = 25 MPH	DS = 25 MPH

PI Sta 104+32.45	PI Sta 108+34.70
Δ = 22° 38' 41.0" (RT)	Δ = 20° 41' 26.5" (RT)
D = 13° 01' 18.4"	D = 4° 05' 33.2"
L = 173.90'	L = 505.57'
T = 88.10'	T = 255.57'
R = 440.00'	R = 1,400.00'
SE = N/A	SE = 06
RO = N/A	RO = 108'

* NOTE: DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADIUS AND SUPERELEVATION RATE



PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045417/ DF18314.2045378	U0-04
THIS SHEET CORRESPONDS TO RDY- 6	

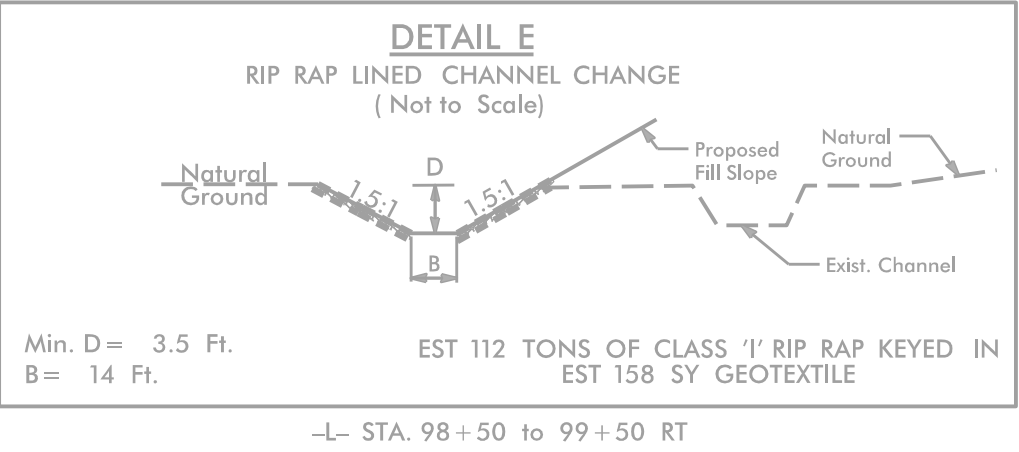
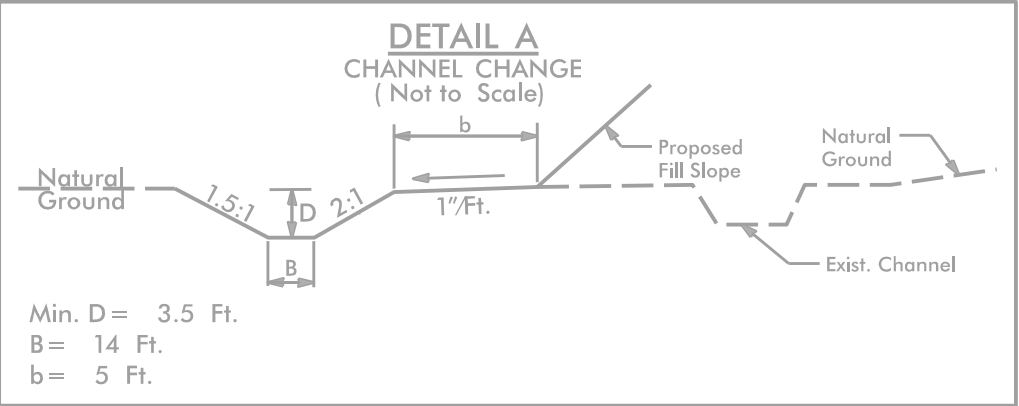
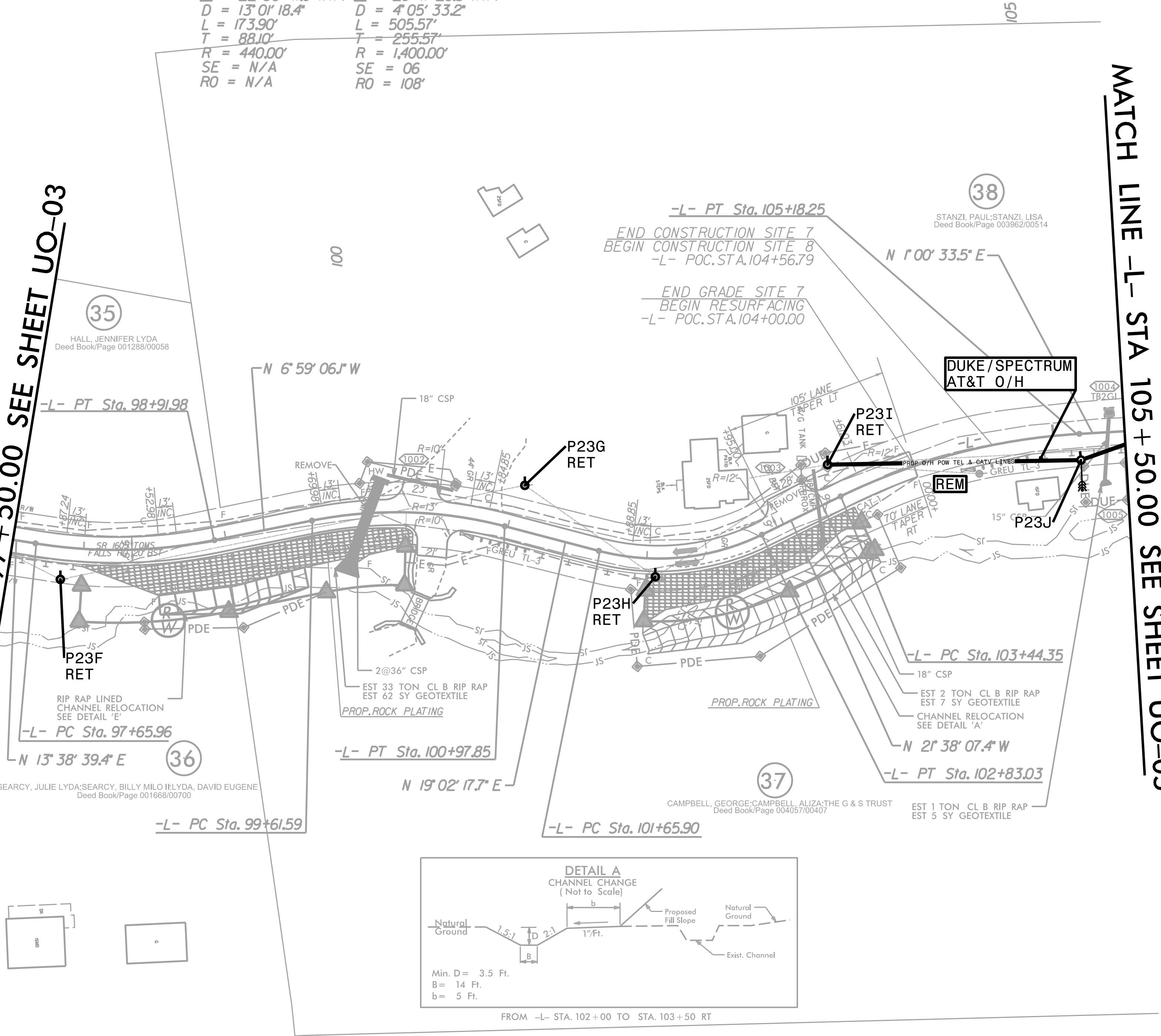
UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.



MATCH LINE -L- STA 97 + 50.00 SEE SHEET UO-03

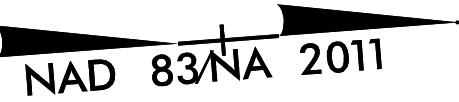
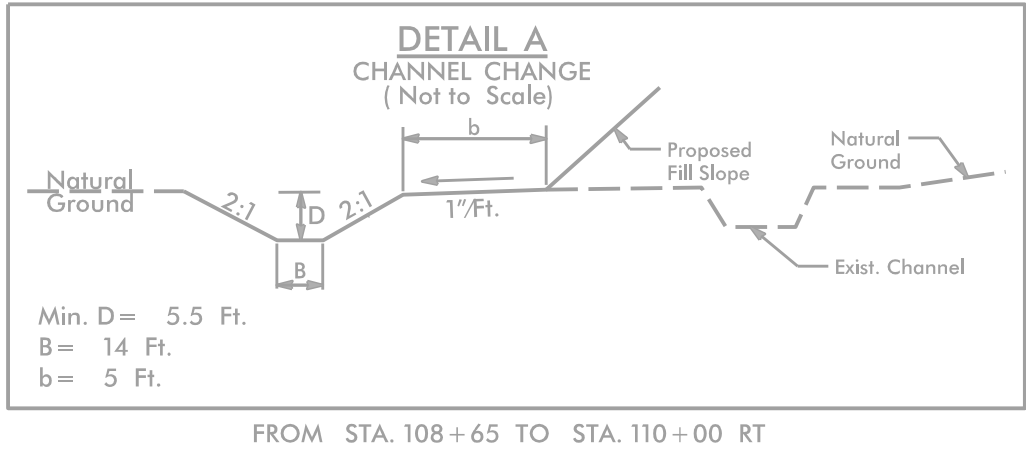
MATCH LINE -L- STA 105 + 50.00 SEE SHEET UO-05



NOTE: EXISTING PIPES THAT ARE DETERMINED TO BE STRUCTURALLY ADEQUATE AND SALVAGEABLE MAY BE RETAINED IN LIEU OF REPLACEMENT, SUBJECT TO THE DISCRETION OF THE ENGINEER.

FOR -L- PROFILE SEE SHEET 9

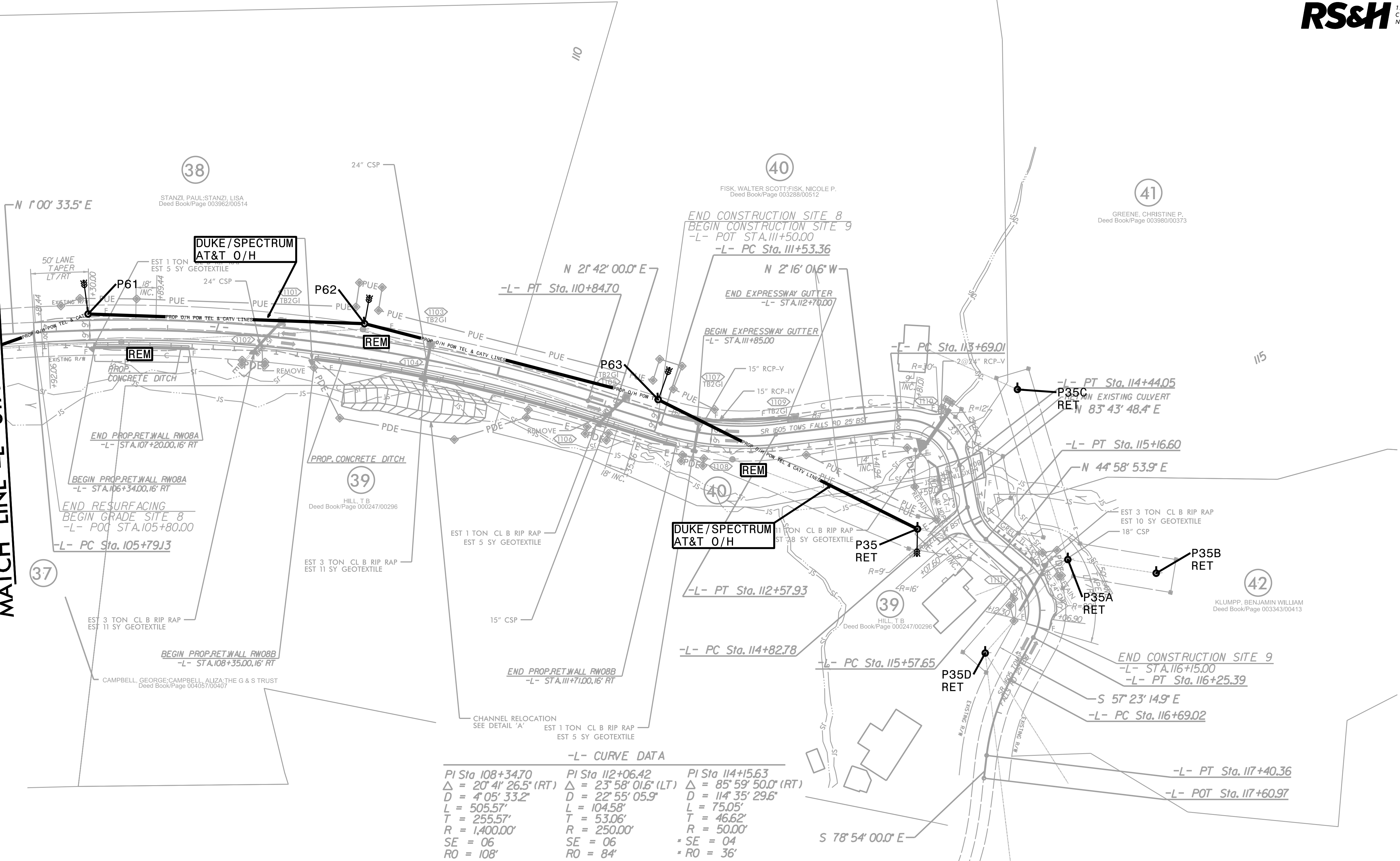
MATCH LINE -L- STA 105 + 50.00 SEE SHEET UO-04



PROJECT REFERENCE NO.	SHEET NO.
DF18314.2045378 DF18314.2045377	U0-05
THIS SHEET CORRESPONDS TO RDY - 7	

UTILITIES BY OTHERS

ALL PROPOSED UTILITY WORK SHOWN ON THIS SHEET WILL BE DONE BY OTHERS. NO PAYMENT WILL BE MADE TO THE CONTRACTOR FOR PROPOSED UTILITY WORK SHOWN ON THIS SHEET.



-L- CURVE DATA		
PI Sta 108+34.70 Δ = 20° 41' 26.5" (RT) D = 4' 05' 33.2" L = 505.57' T = 255.57' R = 1,400.00' SE = 06 RO = 108'	PI Sta 112+06.42 Δ = 23° 58' 01.6" (LT) D = 22' 55' 05.9" L = 104.58' T = 53.06' R = 250.00' SE = 06 RO = 84'	PI Sta 114+15.63 Δ = 85° 59' 50.0" (RT) D = 114' 35' 29.6" L = 75.05' T = 46.62' R = 50.00' SE = 04 RO = 36' DS = <15 MPH
PI Sta 115+00.36 Δ = 38° 44' 54.5" (LT) D = 114' 35' 29.6" L = 33.81' T = 17.58' R = 50.00' SE = 03 RO = 27' DS = <15 MPH	PI Sta 115+97.87 Δ = 77° 37' 51.1" (RT) D = 114' 35' 29.6" L = 67.75' T = 40.22' R = 50.00' SE = 06 RO = 54' DS = <15 MPH	PI Sta 117+05.12 Δ = 21° 30' 45.1" (LT) D = 30' 09' 20.4" L = 71.34' T = 36.09' R = 190.00' SE = N/A RO = N/A

* NOTE: DESIGN EXCEPTION REQUIRED FOR HORIZONTAL CURVE RADIUS AND SUPERELEVATION RATE.

NOTE: EXISTING PIPES THAT ARE DETERMINED TO BE STRUCTURALLY ADEQUATE AND SALVAGEABLE MAY BE RETAINED IN LIEU OF REPLACEMENT, SUBJECT TO THE DISCRETION OF THE ENGINEER.

FOR -L- PROFILE SEE SHEET 10

FOR WALLS RW08A, RW08B SEE SHEETS W-8 THRU W-14