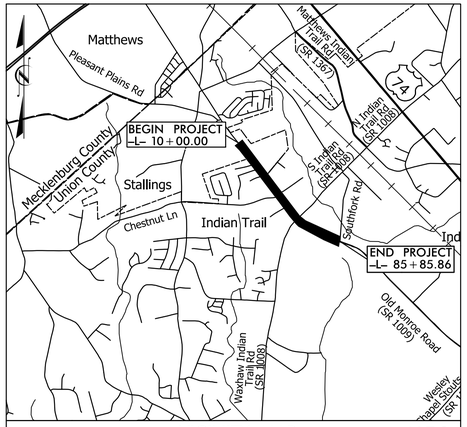
TIP PROJECT: U–4714BA



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-4714BA	EC-1	25

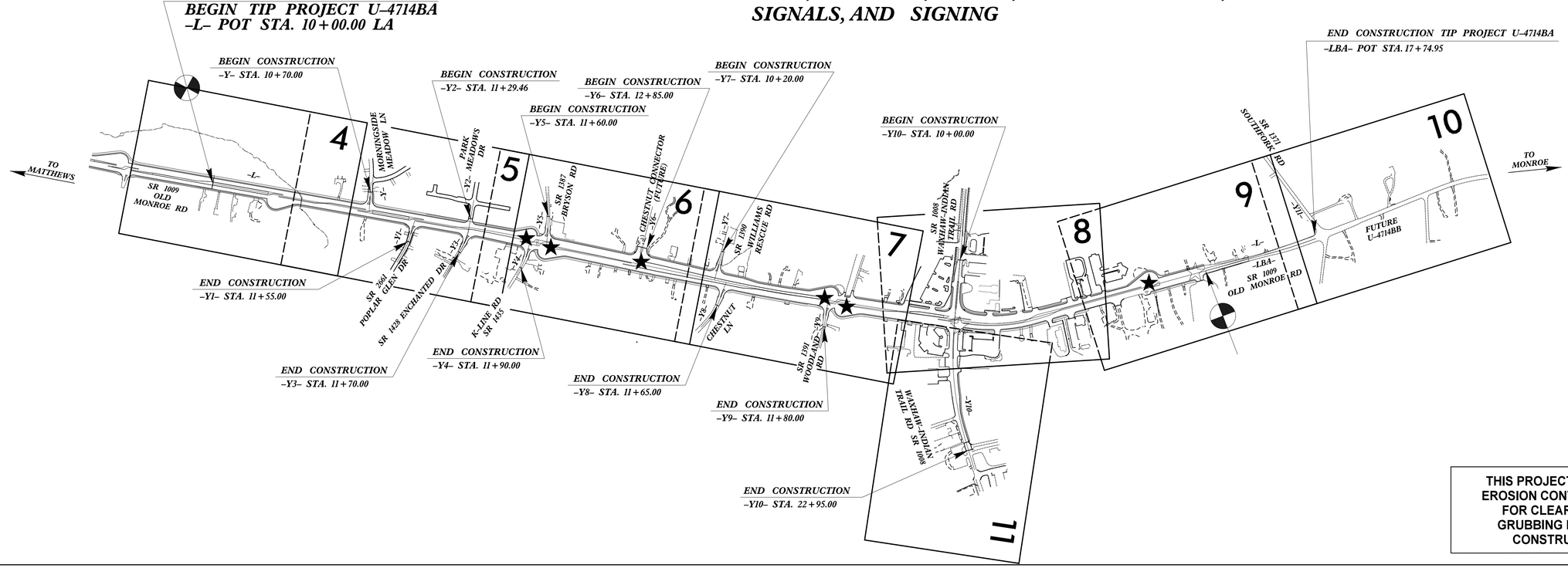
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
39078.1.6	STPDA–1009(18)	PE
39078.2.6	STPDA–1009(18)	R/W
39078.2.11	STPDA–1009(18)	UTIL
39078.3.6	STPDA–1009(18)	CONSTRUCTION

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL

UNION COUNTY

LOCATION: SR 1009 (OLD MONROE ROAD) FROM WEST OF MORNINGSIDE MEADOW LANE TO SR 1371 (SOUTHFORK RD)
TYPE OF WORK: GRADING, DRAINAGE, PAVING, RETAINING WALLS, SIGNALS, AND SIGNING



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

GRAPHIC SCALE

50 25 0 50 100
PLANS

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE APPLICABLE REGULATIONS SET FORTH BY THE NCG–010000 GENERAL STORMWATER CONSTRUCTION PERMIT ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY DIVISION OF ENERGY, MINERAL, AND LAND RESOURCES.

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F–0991

Prepared in the Office of:

STV ENGINEERS, INC.
2151 HAWKINS STREET, SUITE 1400
CHARLOTTE, NC 28203

Designed by:

JOY SADDLER, PE ***4143***
NAME *LEVEL III CERTIFICATION NO.*

Roadway Standard Drawings

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.

4/27/2026
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ScottM

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-1A

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

EROSION & SEDIMENT CONTROL LEGEND

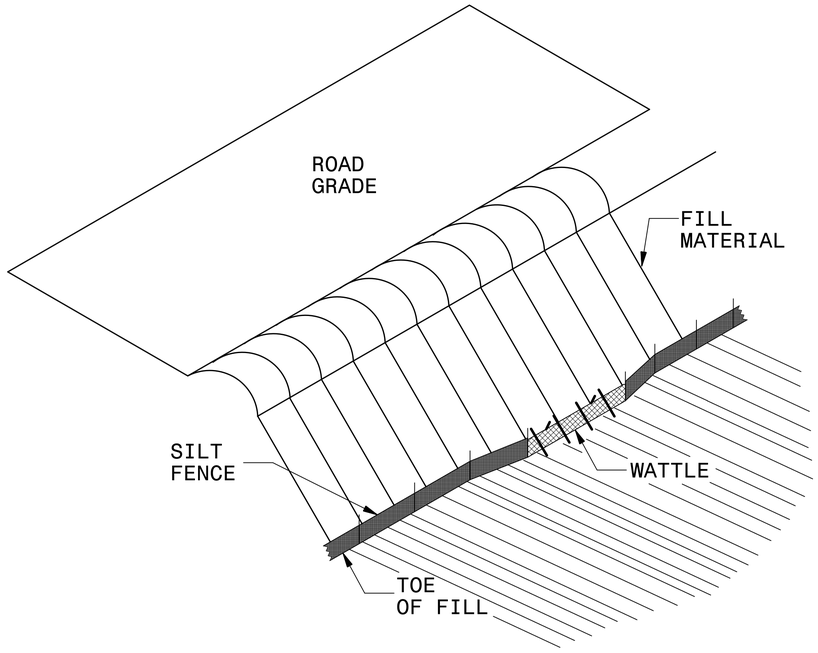
Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.04	Stilling Basin	
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1630.07	Skimmer Basin	
1630.08	Tiered Skimmer Basin	
1630.09	Earthen Dam with Skimmer	
	Infiltration Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	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	A
1635.02	Rock Pipe Inlet Sediment Trap Type B	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	EW
	Silt Fence Coir Fiber Wattle Break	CFW
1636.03	Excelsior Wattle Barrier	EW EW EW
1636.03	Coir Fiber Wattle Barrier	CFW CFW CFW

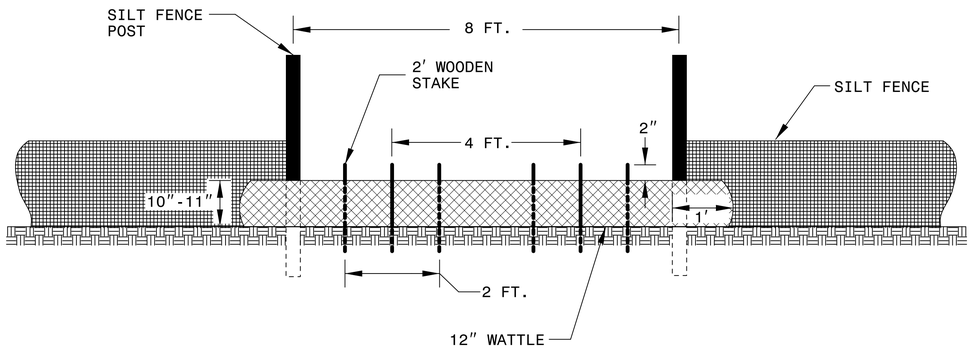
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-2

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SILT FENCE COIR FIBER WATTLE BREAK DETAIL



ISOMETRIC VIEW



VIEW FROM SLOPE

NOTES:

USE MINIMUM 12 IN. DIAMETER COIR FIBER (COCONUT FIBER) WATTLE AND LENGTH OF 10 FT.

EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.

DO NOT PLACE WATTLE ON TOE OF SLOPE.

USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.

INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.

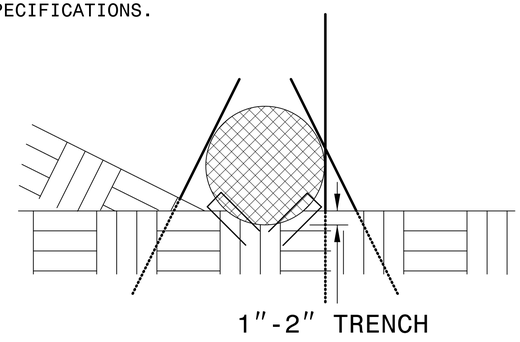
PROVIDE STAPLES MADE OF 11 GUAGE STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 6" IN LENGTH.

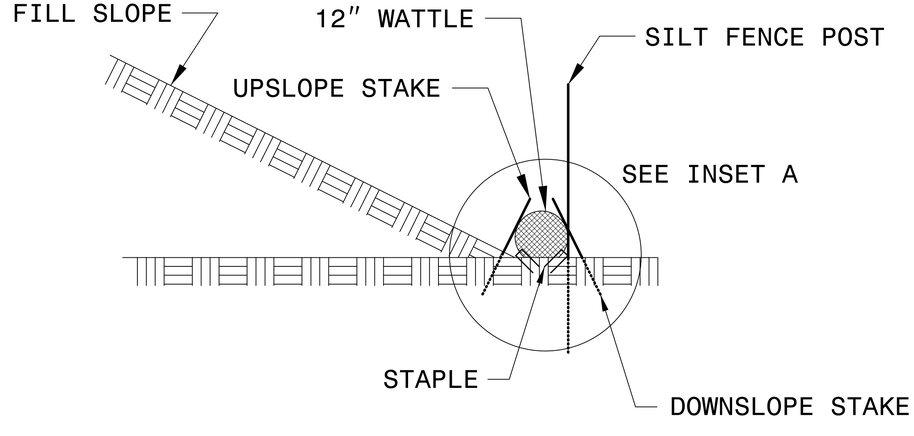
INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.

INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

INSET A



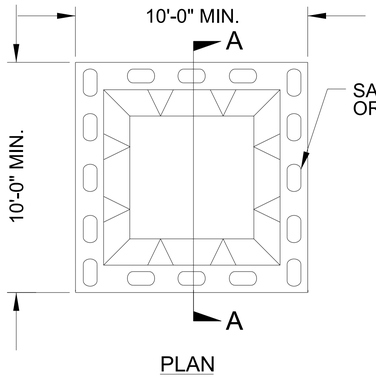


SIDE VIEW

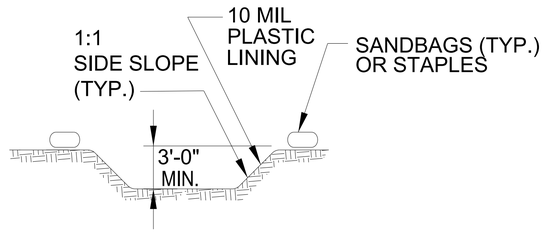
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-2A

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ONSITE CONCRETE WASHOUT STRUCTURE WITH LINER



PLAN



SECTION A-A



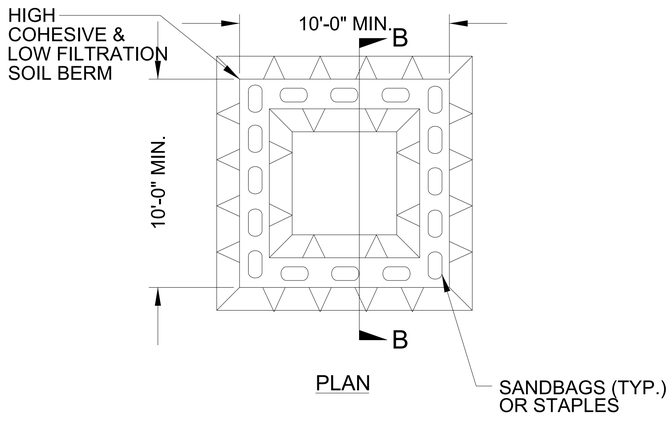
NOTES:
1. ACTUAL LOCATION DETERMINED IN FIELD

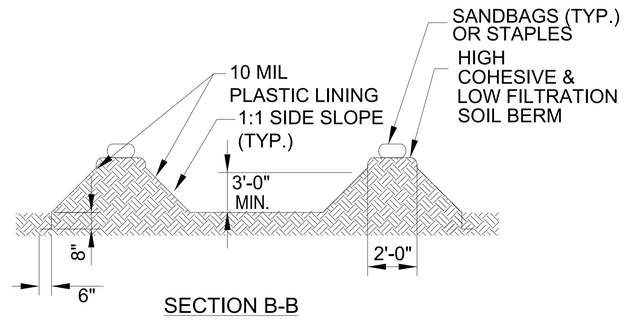
2. THE CONCRETE WASHOUT STRUCTURES SHALL BE MAINTAINED WHEN THE LIQUID AND/OR SOLID REACHES 75% OF THE STRUCTURES CAPACITY TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM 12 INCHES OF FREEBOARD.

3.CONCRETE WASHOUT STRUCTURE NEEDS TO BE CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

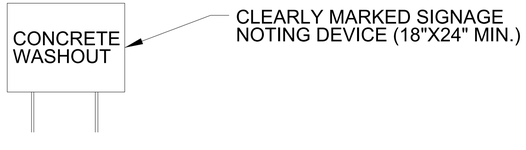
BELOW GRADE WASHOUT STRUCTURE

NOT TO SCALE





SECTION B-B



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 CLEARLY MARKED WITH SIGNAGE NOTING DEVICE.

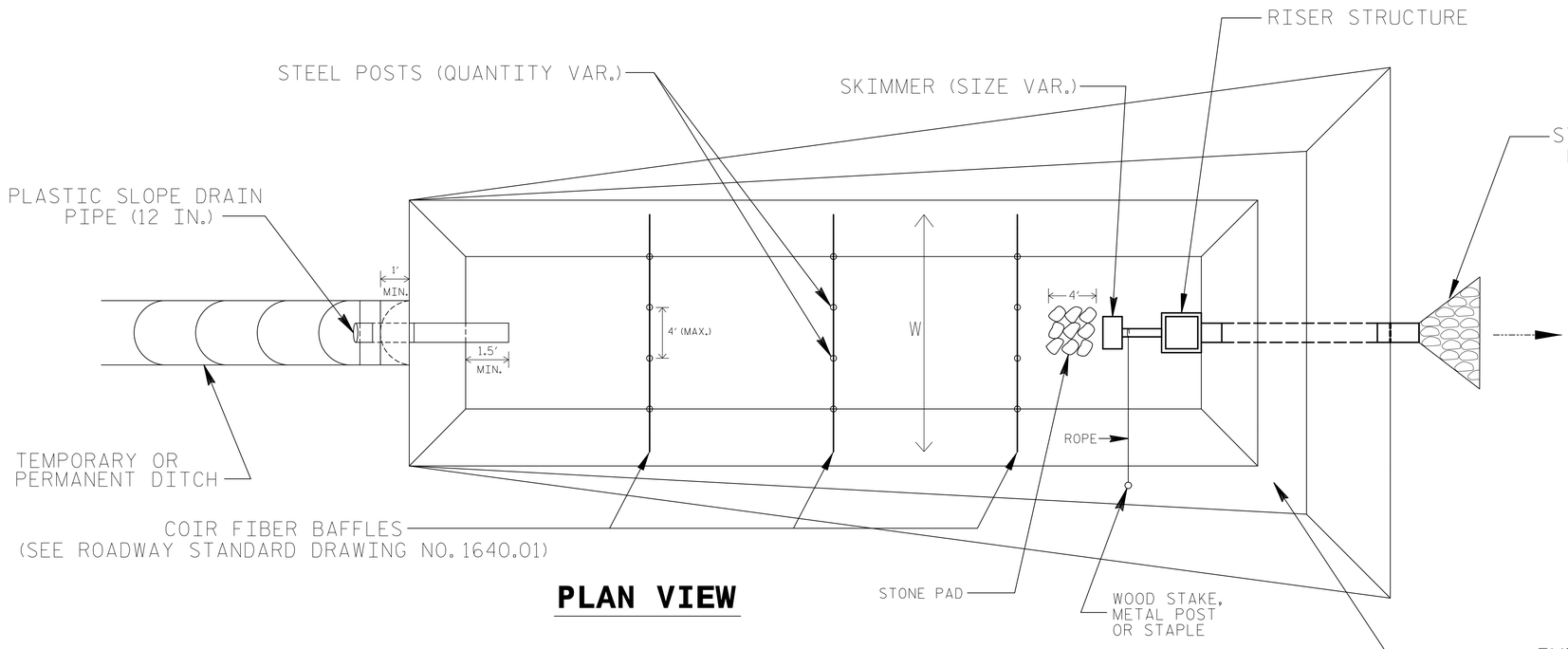
ABOVE GRADE WASHOUT STRUCTURE

NOT TO SCALE

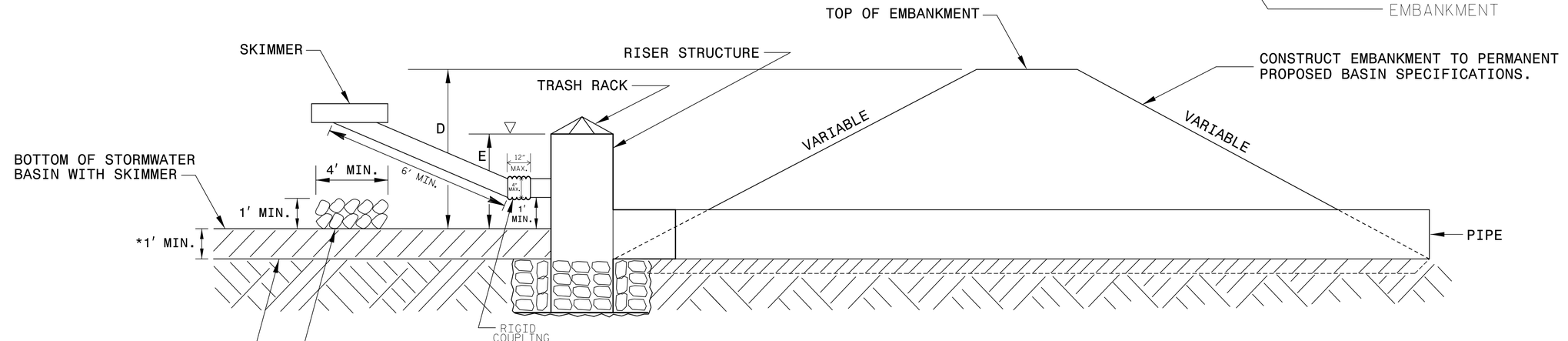
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-2B

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STORMWATER BASIN WITH SKIMMER



PLAN VIEW



SECTIONAL VIEW

*GRADE THE BOTTOM OF THE BASIN TO A MINIMUM OF 1 FT. ABOVE THE PROPOSED FINAL ELEVATION OF THE PERMANENT STORMWATER BASIN. THIS WILL ALLOW FOR 1 FT. OF UNSUITABLE SOIL TO BE REMOVED AFTER THE PROJECT IS STABILIZED.

NOTES

1. SEED AND PLACE MATTING FOR EROSION CONTROL ON INTERIOR AND EXTERIOR SIDESLOPES.
2. INSTALL A MINIMUM OF 3 COIR FIBER BAFFLES IN ACCORDANCE WITH ROADWAY STD. DRAWING 1640.01.
3. INSTALL SKIMMER AND COUPLING TO RISER STRUCTURE OR DIRECTLY INTO EMBANKMENT 1 FT. FROM BOTTOM OF BASIN.
4. THE ARM PIPE SHALL HAVE A MINIMUM LENGTH OF 6 FT. BETWEEN THE SKIMMER AND COUPLING.
5. PLASTIC SLOPE DRAIN PIPE AT INLET OF BASIN MAY BE REPLACED BY FILTRATION GEOTEXTILE AS DIRECTED.
6. THE DIFFERENCE BETWEEN LENGTHS "D" AND "E" REPRESENT THE FREEBOARD AND SHOULD BE 1 FT. MINIMUM.

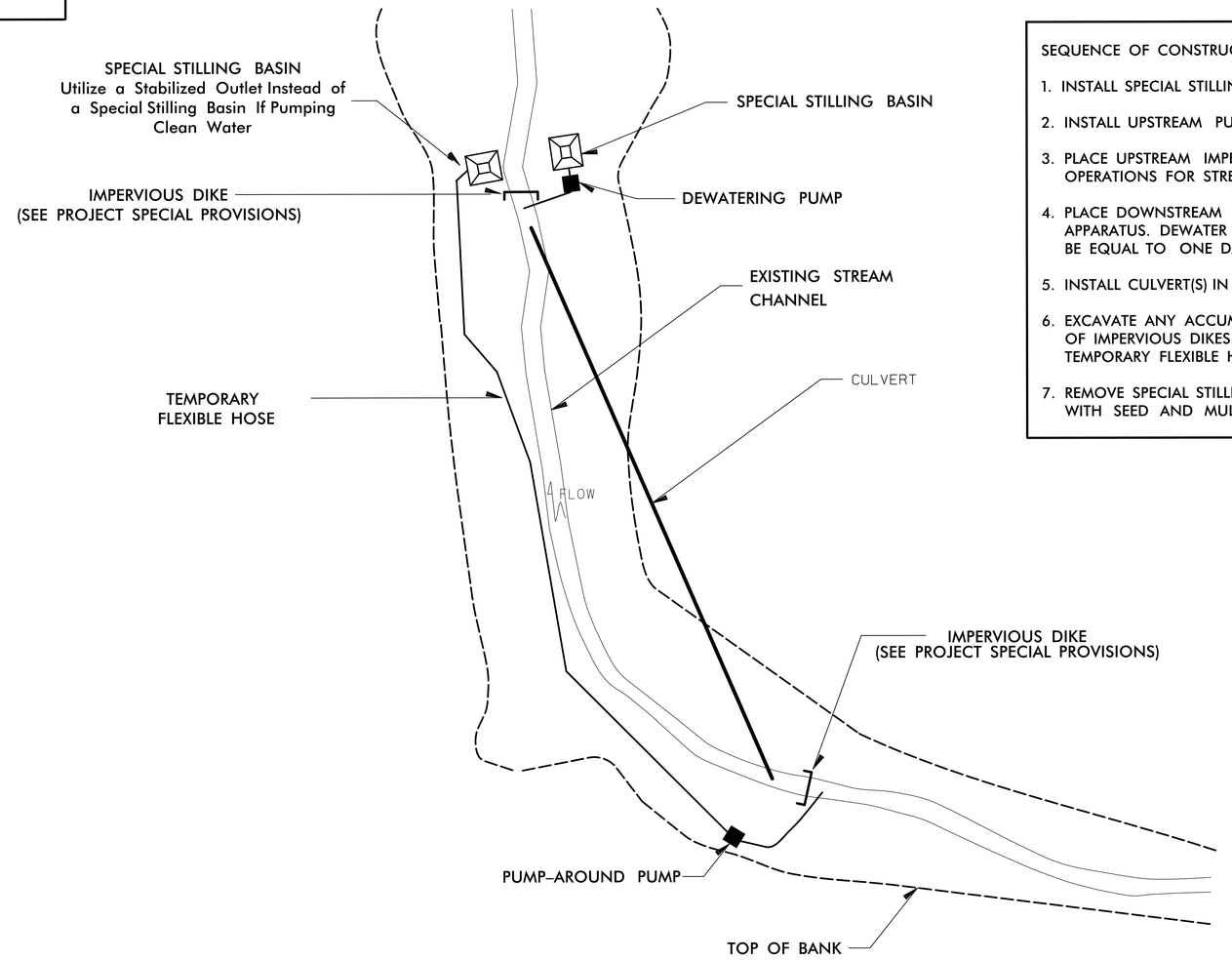
NOT TO SCALE

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-2C

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EXAMPLE OF PUMP–AROUND OPERATION

NOTES:
1) All excavation shall be performed in only dry or isolated areas of the work zone.
2) Impervious dikes are to be used to isolate work from stream flow when necessary.
3) Maintenance of stream flow operations shall be incidental to the work. This includes polyethylene sheeting, diversion pipes, pumps and hoses.
4) Pumps and hoses shall be of sufficient size to dewater the work area.



SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA

1. INSTALL SPECIAL STILLING BASIN(S).
2. INSTALL UPSTREAM PUMP AND TEMPORARY FLEXIBLE HOSE.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER ENTRAPPED AREA. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL CULVERT(S) IN ACCORDANCE WITH THE PLANS.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, AND TEMPORARY FLEXIBLE HOSE. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN(S) AND BACKFILL. STABILIZE DISTURBED AREA WITH SEED AND MULCH.

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-3

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DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SOIL STABILIZATION SUMMARY SHEET

STRAW MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	15+20	16+00	LT	95
4	-L-	16+00	17+00	LT	115
5	-L-	17+00	18+40	LT	165
9	-L-	77+99	79+48	RT	225
9	-L-	79+48	84+00	RT	905
10	-L-	84+00	85+89	RT	380
11	-Y10-	19+70	20+50	RT	85
		SUBTOTAL STRAW MATTING			1970

EXCELSIOR MATTING FOR EROSION CONTROL

CONST SHEET NO.	LINE	FROM STATION	TO STATION	SIDE	ESTIMATE (SY)
4	-L-	14+27	14+53	LT	20
4	-L-	15+28	16+27	RT	90
6	-L-	37+77	37+90	LT	50
7	-Y8-	11+15	12+90	RT	325
7	-L-	53+18	53+38	LT	65
10	-Y11-	10+50	11+50	RT	155
	SUBTOTAL EXCELSIOR MATTING				705
	SUBTOTAL DITCHLINE MATTING				2675
MISCELLANEOUS MATTING TO BE INSTALLED AS DIRECTED BY THE ENGINEER					2590
				TOTAL	5265

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-3A

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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

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-4/CONST 4

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NAD 83/NA 2011

SHENITA DEBERRY AND
DANIEL DEBERRY
DB 3836 PG 464
PB A PG 50B
LOT 16

DAVID AARON FREED
AND WIFE STEPHANIE FREED
DB 3744 PG 322
PB A PG 50B
LOT 15

FREDERICK M. BUNICK
AND WIFE
PATRICIA G. GABRIEL-BURNICK
DB 1639 PG 0293
PB A PG 50B
LOT 14

PHIFER BRENDA E
DB N/F PG N/F
PB A PG 50B
LOT 13

RUSSELL DANNY K
AND VIRGINIA
DB N/F PG N/F
PB A PG 50B
LOT 12

LUKENS JUDY E
DB 6706 PG 257
PB A PG 50B
LOT 11

SIKES VAN HENERY
AND LYNETTE G
PB A PG 50B
LOT 10

ERIK K ROWLETT
AND WIFE
ISABEL RUEDA ABAD
DB 6005 PG 222

ROBERT M. SULLIVAN
AND WIFE
SHARON L. SULLIVAN
DB 1653 PG 327

I5

SITE 1

2 RICHARD W BROOME & SADIE C
DB N/F PG N/F

END TIP PROJECT U-4714AC
-L- POT STA. 193+50.61 LB=
BEGIN TIP PROJECT U-4714BA
-L- POT STA. 10+00.00 LA

1 GUYNELLE B BROOME HEIRS
DB 132 PG 407

MATCHLINE -L- STA 17+00 (SHEET EC-5)

TIMOTHY L. SHERIN
DB 3025 PG 664
PB 4 PG 189
LOT 1

TIMOTHY L. SHERIN
DB 3025 PG 664
PB 4 PG 189
LOT 2

TIMOTHY L. SHERIN
DB 3025 PG 664
PB 4 PG 189
LOT 3

ALEXANDER J. POLITES
DB 6781 PG 554
PB 7 PG 37A
LOT 6

TIMOTHY L. SHERIN
AND WIFE
DAWN M. SHERIN
DB 0916 PG 792
PB 7 PG 37A
LOT 5

DAWN M. SHERIN
DB 4555 PG 131
PB 7 PG 37A
LOT 4

317 PROPERTIES, LLC
DB 5887 PG 181
PB 7 PG 37A
LOT 3

4 POLE HELENA B.
DB N/F PG N/F
PB 7 PG 37A
LOT 2

5 DANNY F. DUNN
AND WIFE
JENNIFER J. DUNN
DB 4142 PG 876
PB 7 PG 37A
LOT 1

6 JAMES HAMILTON TURNER, JR
DB 3524 PG 722

7 ANTONIOS K. PANOU
DB 911 PG 697

8 ANTONIOS K. PANOU
DB 858 PG 500

8Z

BRUCE R. MARX
AND SPOUSE, LINDA L MARX
DB 5944 PG 570

DAMON S. BUTCHER
AND WIFE, TIFFANY M. BUTCHER
DB 1349 PG 699

EDWARD R. BENVENUTI, JR.
& WIFE DIANA K. BENVENUTI
DB 5164 PG 730

WILLIAM LARRY ALEXANDER
DB 3771 PG 446

LINA M. ALEXANDER
DB 1169 PG 823

BENJAMIN A. GUTHRIE AND SPOUSE,
KATHRYN E. GUTHRIE
DB 6767 PG 593

HAZEL FOSTER
DB N/F PG N/F

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

4/27/2026
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Scott M

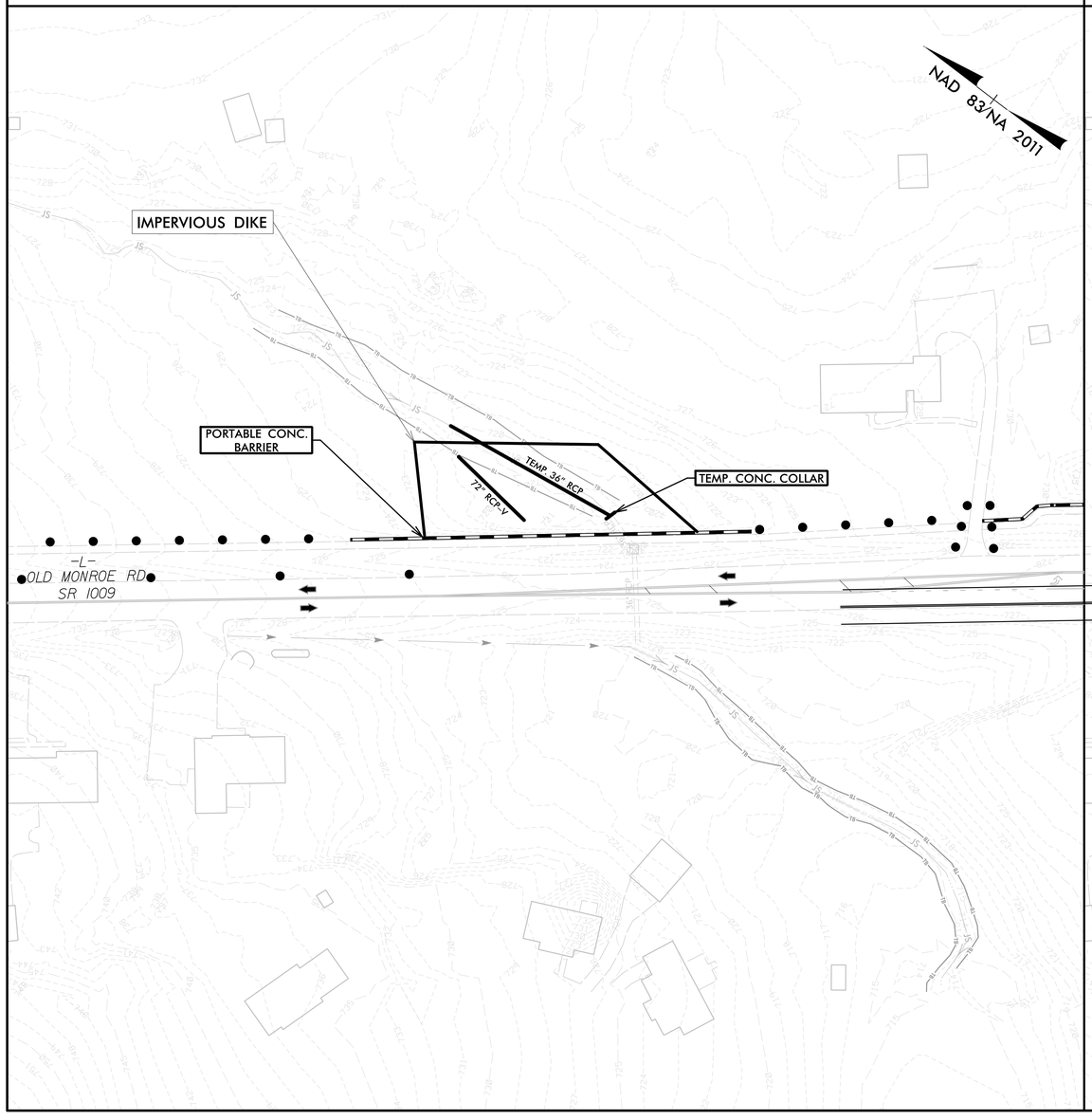
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-4A/CONST 4

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CULVERT CONSTRUCTION SEQUENCE STA. 15+58 –L–

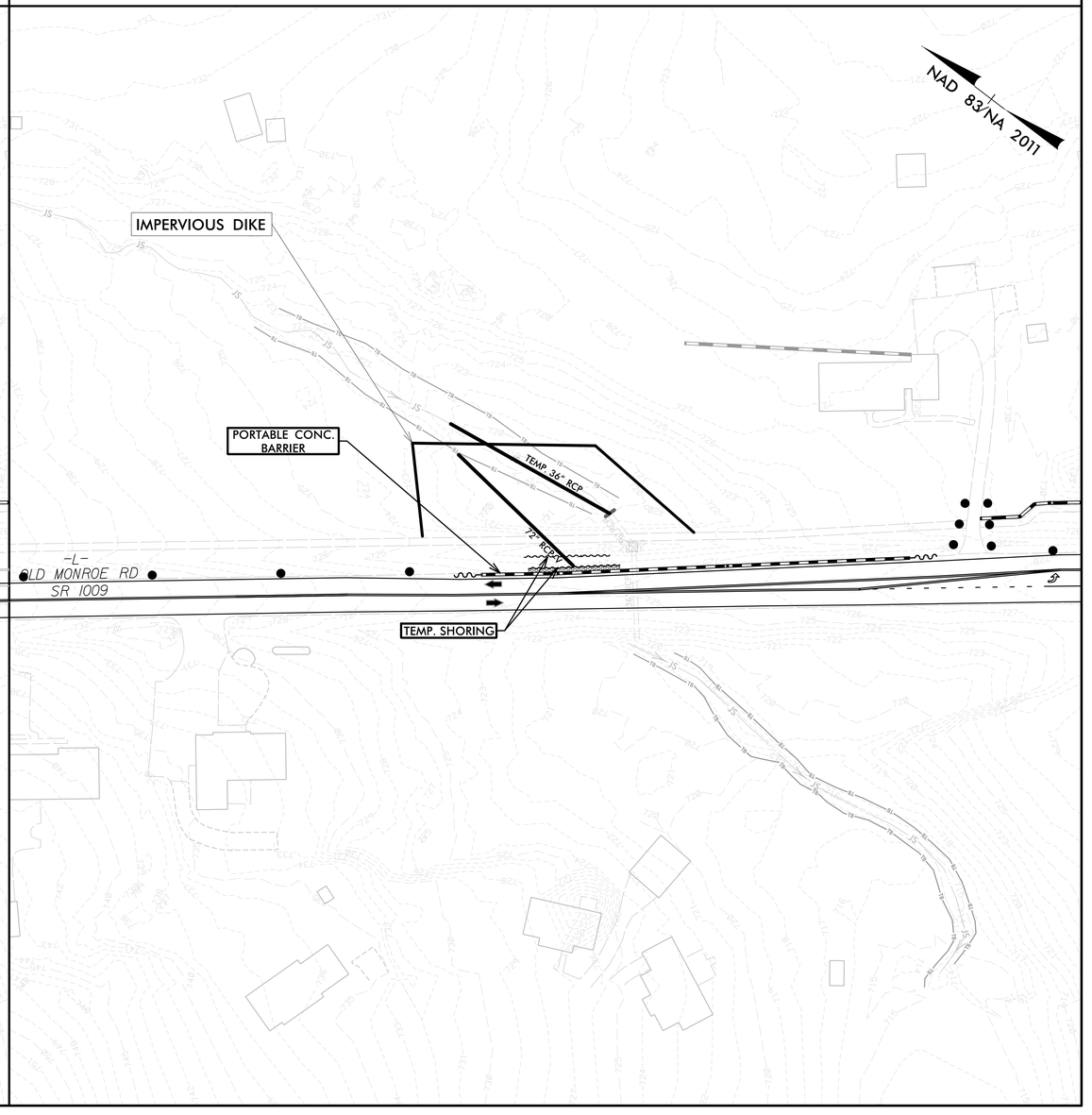
PHASE I

1. INSTALL TEMP. 36" PIPE, AND TEMP. CONCRETE COLLAR TO MAINTAIN FLOW THROUGH EXIST 36" RCP.
2. INSTALL PORTABLE CONCRETE BARRIER ALONG BACKSIDE OF EXISTING SIDEWALK TO MAINTAIN PEDESTRIAN ACCESS.
3. INSTALL IMPERVIOUS DIKE WHILE MAINTAINING EXISTING TRAFFIC PATTERN.
4. DEWATER PROPOSED CULVERT CONSTRUCTION AREA.



PHASE II

1. RELOCATE PORTABLE CONCRETE BARRIER AS SHOWN BELOW
2. INSTALL TEMPORARY SHORING.
3. SHIFT TRAFFIC AWAY FROM NORTHBOUND SHOULDER AND INSTALL PHASE 2 PORTION OF PROPOSED 72" RCP.
4. GRADE DITCH AREA PER TRAFFIC CONTROL PLANS. SEE SHEET TMP–11, SECTION CUT A–A.



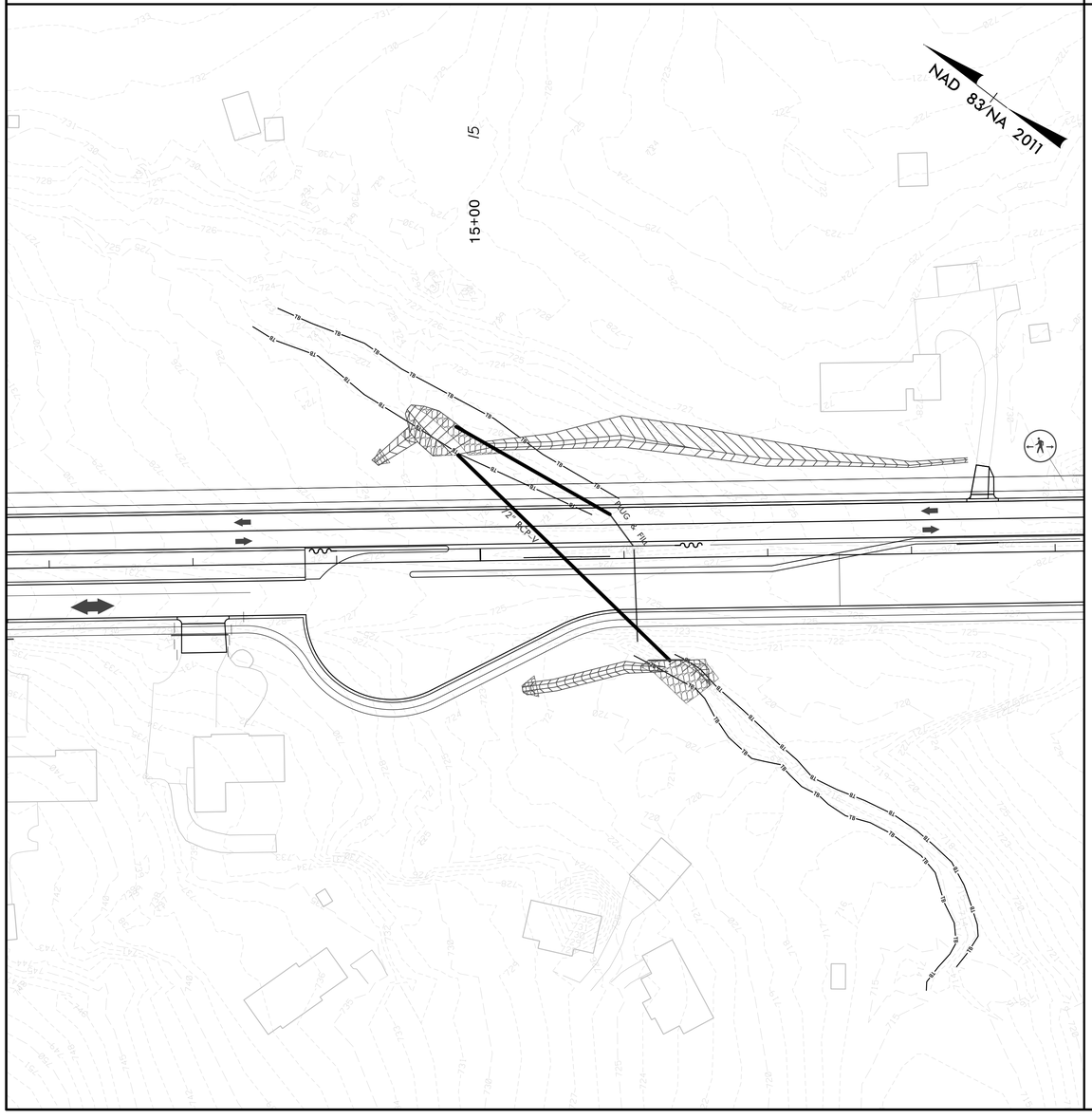
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-4B/CONST 4

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Charlotte, NC 28203
NC License Number F-0991

CULVERT CONSTRUCTION SEQUENCE STA. 15+58 –L–

PHASE III

1. COMPLETE CHANNEL EXCAVATION AND RIP RAP EMBANKMENTS ON UPSTREAM AND DOWNSTREAM ENDS.
2. COMPLETE ROADWAY PER TRAFFIC CONTROL PLANS AND INSTALL DOWNSTREAM SECTION OF 72" RCP–V.
3. REMOVE AS MUCH AS POSSIBLE OF THE EXISTING AND TEMPORARY 36" RCP WITHOUT DAMAGING ANY PERMANENT CONSTRUCTION. PLUG & FILL REMAINING PORTION OF EXISTING 36" RCP, TEMPORARY 36" PIPE.
4. REMOVE IMPERVIOUS DIKE, SPECIAL STILLING BASINS AND ANY OTHER TEMPORARY DRAINAGE.
5. STABILIZE DISTURBED AREAS.



NOTES:
UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT CULVERT CONSTRUCTION.
UTILIZE PUMP AROUND OPERATION AS NEEDED FOR INSTALLATION OF TEMPORARY PIPES DURING CULVERT CONSTRUCTION.

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-5/CONST 5

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NC License Number F-0991

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NAD 83/NA 2011

MATCHLINE -L- STA 17+00 (SHEET EC-4)

MATCHLINE -L- STA 29+00 (SHEET EC-6)

MAXIMILLIAN CHESTER
QUENTIN VUURMANS
DB 5117 PG 448
PB F PG 844

2014-IIH BORROWER, LP
DB 6236 PG 590
PB F PG 844
(EXHIBIT A-12)

JOHNATHAN M WILSON
JACQUELINE W WILSON
DB 1583 PG 535
PB F PG 844

JEFFREY A ALRED
DB 3527 PG 548
PB F PG 844

PARK MEADOWS DEVELOPMENT, LLC
DB 6788 PG 279
PB F PG 433

JORNAN JOHNSON
DB 7105 PG 1

10

JACEK RUDZIEWICZ
DANKA RUDZIEWICZ
DB 3792 PG 326
PB F PG 844

2

RICHARD W BROOME & SADIE C
DB N/F PG N/F

DAVID L RAY
SUSAN A RAY
DB 1925 PG 671
PB F PG 844

KORRY L HUMPHREY
DB 6018 PG 858
PB F PG 844

SEAN ERIC WILLIAMS
MALIA WILLIAMS
DB 3763 PG 122
PB F PG 844

POT Sta. 10+00.00

-L- POT Sta. 23+81.89 =
-Y1- POT Sta. 10+00.00

-L- POT Sta. 27+49.21 =
-Y2- POT Sta. 12+00.00
-Y3- POC Sta. 10+00.00

9

MORNINGSIDE MEADOWS
HOMEOWNERS ASSOCIATION, INC
DB 1414 PG 136

CHRISTINE S GOODSON
DAVIS A GOODSON
DB 3187 PG 441
PB F PG 844

11

KIMBERLY A ELSASSER
DB 3681PG 307
PB F PG 844

12

MORNINGSIDE
MEADOWS HOMEOWNERS
ASSOCIATION, INC
DB 1414 PG 136
PB F PG 844
COS

EDNA MAY BROOME
DB 6788 PG 279

NVR INC
DB 7133 PG 718

PARK MEADOWS
DEVELOPMENT, LLC
DB N/F PG N/F
PC Sta. 27+84.31

14

PARK MEADOWS DEVELOPMENT, LLC
DB 6788 PG 279
PB F PG 433

8Z

ANTONIOS K. PANOU
DB 858 PG 500

BRUCE R. MARX
AND SPOUSE, LINDA L MARX
DB 5944 PG 570

DAMON S. BUTCHER
AND WIFE, TIFFANY M. BUTCHER
DB 1349 PG 699

-L- POT Sta. 20+68.26 =
-Y- POT Sta. 12+00.00

16

RICHARD P. BROOME
15

2015A PROPERTY
OWNER LLC
DB 6384 PG 217

17

GERALD ANDERSON
AND BELINDA ANDERSON
DB 4862 PG 513

PC Sta. 11+18.35

TAMARA J. HARLE
DB 5228 PG 034
19

MANTIS BILL
AND ELISAVET H
DB N/F PG N/F
20

SHAWN D. STEAGALL
AND WIFE
MELINDA C.STEAGALL
DB 6262 PG 577
18

ERIC W. GARTON
AND WIFE
TARA A. GARTON
DB 4384 PG 168

MARK O REA
DB N/F PG N/F

PT Sta. 11+42.00

PT Sta. 12+35.50

TAYLOR ARMEN WORTH
DB N/F PG N/F

FULCRUM PROPERTY
MANAGEMENT LLC
DB 4772 PG 275

JOHN H. GRAY
DB 6633 PG 613

POT Sta. 13+15.00

TODD SHANE LAMBERT
DB 4383 PG 049

CLAYTOM A. HAILE AND
WIFE MELANIE S. HAILE
DB 748 PG 242

HUNT FREDRICK G.
AND WIFE CINDI S
DB N/F PG N/F

DANIEL R. HANKINS
AND TABITHA N. HANKINS
DB 5654 PG 477

POT Sta. 13+70.00

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

4/27/2026
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CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-6/CONST 6

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

NAD 83/NA 2011

MATCHLINE -L- STA 29+00 (SHEET EC-5)

MATCHLINE -L- STA 43+00 (SHEET EC-7)

JOHN KENNETH HINSON
DB N/F PG N/F

JAMES EVERETTE HINSON
SUSAN H HINSON
DB 4186 PG 815

ELIZABETH QUILES
IRENE QUILES
DB 5759 PG 740

NELSON O'NEAL & WIFE ANNA
DB 3115 PG 568
PB 4 PG 103

CODY RAY ANDERSEN
SARAH C WADE
DB 6861 PG 861
PB 4 PG 103

MV COMMERCIAL 3901, LLC
DB N/F PG N/F
PB 4 PG 103

WADE BERDETTE WILSON
& WIFE JUDY H WILSON
DB 1138 PG 109

PHONE CARDS R US, INC.
DB 4700 PG 396

JERRY C LANEY HEIRS
DB 183 PG 76

LINDA W STINES
DB 165 PG 369

OSMAN & ROBINSON
DB 7105 PG 1
SYED ADNAN & ASHA MOHAMMED
DB 7104 PG 1

MAHESWARA SURAPUNENI
DB 7101 PG 284

MIGUEL & CABRERA ROMAN
DB 7109 PG 110

LARRY & ELAINE HAYES
DB 7111 PG 427

PARK MEADOWS DEVELOPMENT, LLC
DB 6288 PG 230
PB 1 PG 135

WAYNE PHILLIP COHEN AND
WIFE WENDE E. COREN
DB 7911 PG 477

MANTIS BILL
AND ELISAVET H.
DB N/F PG N/F

WINDEE SANDERSON
DB 5778 PG 295

JAMES L. INNIS
DB 4830 PG 266

JACQUELYN PRIVETTE
DB 5787 PG 192

TOM GIANNIBIS
DB 5551 PG 702

TOM GIANNIBAS
AND WIFE
HRISTOULA G. GIANNIBAS
DB 6704 PG 216

MEGHAN HELMS
DB WI4E PG 135
PB 1 PG 100

TONY A MILLER AND
MARY ALICE
PB 1 PG 100

ROBERT GARY LOVETTE
AND DIANNA K
PB 1 PG 100

DALE S. WALKER
DB 4582 PG 0022

TOWN OF INDIAN TRAIL
DB 6183 PG 55
PB 1 PG 100

JO ANN WEST AND
HUSBAND JAMES W. WEST IV
DB 3463 PG 318

JOHN LEASE
DB 926 PG 697

SKIMMER BAFFLES

SKIMMER APPARATUS

20 x 10 x 3
ID 7.1

120 x 40 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
11 ft. weir
ID 6.1

NOTE:
EXCAVATE BMP BASIN DURING CLEARING AND GRUBBING.

BASIN TO FUNCTION AS TEMPORARY SEDIMENT BASIN.

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

DETAIL
REMOVABLE ORIFICE TRASH RACK
"NOT TO SCALE"

RISER TRASH RACK NOTES:
1. ALL JOINTS SHALL BE FULLY WELDED AROUND JOINT WITH A MINIMUM OF A 1/4" BEAD.
2. 8" BOLTS ARE ANCHORED IN CONCRETE. FOLLOW STD. DWG. 862.03 AND 862.04 FOR ANCHORING PROCEDURE.
3. EYEBOLT FOR CHAIN CLOSURE SHALL BE INSTALLED ON THE OPPOSITE SIDE OF THE SLUICE GATE OPENING.
4. RACK AND HARDWARE SHALL BE ALUMINUM OR REBAR AND GALVANIZED IN ACCORDANCE WITH ASTM A153.
5. PROVIDE OPENING IN TRASH RACK TO ACCOMODATE SLUICE GATE ON THE OUTLET PIPE. ENSURE TRASH RACK OPENS FREELY AND WITHOUT INTERFERENCE WITH SLUICE GATES.

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

OUTLET CONTROL STRUCTURE DETAIL

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

4/27/2026
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PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-7/CONST 7

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

NAD 83/NA 2011

MATCHLINE -L- STA 43+00 (SHEET EC-6)

MATCHLINE -L- STA 57+00 (SHEET EC-8)

EARTHEN BERM
WITH SKIMMER

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
7 ft. weir with
2.5 ft. weir height
ID 7.5

20 x 10 x 3
ID 7.1, 7.2, 7.3

20 x 10 x 3
ID 7.4

GEOFF HAWK
PATRICIA HAWK
DB 6301PG 222

CAROLINAS UNION HEATHCARE, INC.
DB 3282 PG 752
44

45

VIRGINIA C FOARD, TRUSTEE
DB 4522 PG 359
DEED DESCRIPTION INCOMPLETE
46

DAWN MACOMB SCHNEIDER
RANDY SCHNEIDER
DB 6707 PG 706
47

ROBERT L ROLLINS
MARY BETH ROLLINS
DB 902 PG 799
PB 5 PG 190
LOT 6 BLOCK A

MALEK MACARON
DB 6889 PG 125
PB 5 PG 190
LOT 5 BLOCK A

NORMAN E ESTEP
JACQUELYN ESTEP
DB 3472 PG 767
PB 5 PG 190
LOT 4 BLOCK A

TERRY M & NANCY HENDERSON
DB N/F PG N/F
PB 5 PG 190
LOT 4 BLOCK B

DONALD & FRANCIS YELTON
DB N/F PG N/F
PB 5 PG 190
LOT 5 BLOCK B

VANESSA D PARKER
DB 5894 PG 747
PB 5 PG 190
LOT 6 BLOCK B

LINDA W STINES
DB 155 PG 369
31

CSL NORTH CAROLINA SYSTEM, LP
DB 6443 PG 358
44A

DONNA NELSON HAMMOND
DB 1014 PG 756
PB 5 PG 190
LOT 3 BLOCK A
48

MALEK MACARON
DB 6889 PG 127
PB 5 PG 190
LOT 2 BLOCK A
49

JAMES T & ANITA WEBB
DB 5104 PG 356
PB 5 PG 190
LOT 1BLOCK A
50

JERRY EDMOND HARTIS
DOROTHY K HARTIS
DB N/F PG N/F
PB 5 PG 190
LOT 1BLOCK B
51

KENNETH W STILWELL
DB 6489 PG 715
PB 5 PG 190
LOT 2 BLOCK B
52

ESTHER G NARRON
DB N/F PG N/F
PB 5 PG 190
LOT 3 BLOCK B
53

TOWN OF INDIAN TRAIL
DB 6183 PG 55
PB 115 PG 100

TOWN OF INDIAN TRAIL
DB 3284 PG 842
43

ANNE JOHNSON TURBEVILLE & HUSBAND BILL
DB 1361PG 774
CANT DRAW DEED BASE ON GIVEN INFORMATION
55

BILLY F AYCOTH, JR.
DB N/F PG N/F
55A

LARRY J VICKERY
DB 6398 PG 191
56

TRACT 2
GERALD D RIGGINS
DB 3130 PG 618

RONDO ELIZONDO AND
WIFE CHRISTY B. ELIZONDO
DB 645 PG 68
57

STEVE & DONNA CLAYTON
DB 3198 PG 27
PB G PG 824

WAYNE P COHEN
WENDY E COHEN
DB 3108 PG 652
PB G PG 824

LONDA HINSON MAYNOR
JERRY MAYNOR
DB 6514 PG 152
58

STEVE MAYNARD CLAYTON, JR.
DB 1211PG 543
58A

MINH PHAM
LIEN LIEN
DB 6604 PG 204

RICHARD H TOMBERLIN
DB 414 PG 749
59

ALPHA OMEGA LAND
DEVELOPMENT INC
DB 4373 PG 786
60

ALPHA OMEGA LAND
DEVELOPMENT INC
DB 4373 PG 786

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

4/27/2026
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PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-8/CONST 8

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 8

NOTE: ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE: 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.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE: USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NAD 83/NA 2011

JAMES HENRY NANCE & JUNE
DB 1473 PG 786
PB 6 PG 36

LOT 26

LOT 27
JAMES HARRISON

JANICE W PRIVETTE
DB 1665 PG 001
PB 6 PG 36

POT Sta. 8+00.00

RIZAK RETAIL, LLC
DB 5544 PG 865
PB F PG 687

GEORGE ATHANS
DB 684 PG 636
PB 6 PG 36

61 GEORGE ATHANS AND WIFE DENISE P. ATHANS
DB 439 PG 87
PB 6 PG 36

63 SUBHASYS ESTATES LLC
DB 6757 PG 593
PB F PG 687

INDIAN TRAIL PROPERTIES
DB 1309 PG 054
PB F PG 687

66

67 WILLIAMS HARRIS PROPERTIES LLC
DB 5813 PG 892

HENDLEY-BREWER PROPERTIES
DB 773 PG 520

64

65 GREGORY PLAZA LLC
DB 1717 PG 511

53

61 GEORGE ANTHANS AND WIFE DENISE P. ANTHANS
DB 430 PG 831

-L- POT Sta. 60+77.30 =
-Y10- POT Sta. 14+02.85

PC Sta. 61+82.58

PT Sta. 65+99.58

MATCHLINE -L- STA 57+00 (SHEET EC- 7)

MATCHLINE -L- STA 70+00 (SHEET EC-9)

60 ALPHA OMEGA LAND DEVELOPMENT INC
DB 4373 PG 786

60 ALPHA OMEGA LAND DEVELOPMENT INC
DB 4373 PG 786

69 RUSHING CONSTRUCTION
DB 245 PG 434

71

J.J. CLARK, JR.
STEPHEN G. SIMMS
ANTHONY W. WENTZ
DB 1188 PG 728

75 BOULEVARD EAST LLC
DB 4452 PG 042

76 FAMILY TYME LLC
DB 1580 PG 801

74

ALPHA OMEGA LAND DEVELOPMENT INC
DB 4373 PG 786

INDIAN TRAIL PLAZA LLC
DB 5260 PG 305

70

UNION COUNTY PUBLIC WORKS
DB 1457 PG N/F

194

72 TWO COUSINS PROPERTIES, LLC
DB 4362 PG 003

73 CAH HOLDINGS LLC
DB 6614 PG 261

74 CAH HOLDINGS LLC
DB 4356 PG 001

MATCHLINE -Y10- STA 17+00 (SHEET EC-11)

4/27/2026
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Sarah M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-9/CONST 9

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 9

MATCHLINE -L- STA 70+00 (SHEET EC-8)

MATCHLINE -L- STA 84+00 (SHEET EC-10)

-LBA- PC Sta. 14+62.17

NAD 83/NA 2011

67 WILLIAMS HARRIS PROPERTIES LLC
DB 5813 PG 892

77 UNION MEMORIAL HOSPITAL INC
DB 465 PG 758

78 SANDRA E PETERSON
WENDY D EDWARDS
DB 5469 PG 578
PB 4 PG 149

79 SHARON PRICE
JOYCE PRICE
DB 5957 PG 004

80 LOT 2
WALLACE CROWELL
DB N/F PG N/F
PB 4 PG 149

81 LOT 1
BILLIE P CROWELL
DB N/F PG N/F
PB 4 PG 149

75

80

15

PUE PUE DUE DUE DUE DUE TSD TSD TSD TSD

2%

85 80-TY LLC
DB 6508 PG 659

87 STALLINGS VOLUNTEER FIRE DEPARTMENT INC.
DB 1094 PG 701
PB E PG 413

84 JORDAN'S PLACE LLC
DB 5260 PG 303
PB D PG 160

86 TAE KYU PARK
OH SEON PARK
DB 1330 PG 628
PB D PG 160

76 FAMILY TYME LLC
DB 5910 PG 117
PB L PG 810

CREEKSIDE BIBLE CHURCH
DB 5572 PG 280

84 JORDAN'S PLACE LLC
DB 5260 PG 303
PB D PG 160

STALLINGS VOLUNTEER FIRE DEPARTMENT INC.
DB 1094 PG 701
PB E PG 413

88 ROGER MAC HELMS

89 BARBARA HELMS
DB 561PG 448

90 CREEKSIDE BIBLE CHURCH
DB 5572 PG 280

82

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

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Daniel M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-10/CONST 10

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NAD 83/NA 2011

MATCHLINE -L- STA 84+00 (SHEET EC-9)

81
LOT 1
BILLIE P CROWELL
DB N/F PG N/F
PB 4 PG 149

85

POT Sta. 10+00.00

PC Sta. 10+72.61

RAY B KILLOUGH
DB 5106 PG 656

90

92

93
DENISE KILLOUGH WINDHAM
BRIAN NEAL WINDHAM
DB 4031 PG 737

94
RALPH KILLOUGH
DB N/F PG N/F

95

95
RAY BERNARD KILLOUGH
DB 3646 PG 330
REFERENCE MADE TO THIS DEED BUT NO DESCRIPTION FOUND

91
KILLOUGH-ROHLEDER HOLDING CO, LLC
DB 5106 PG 659

PUE

PDE

DUE

TSD

20 x 10 x 3
ID 10.1

-L- POT Sta. 86+03.47 =
-Y11- POC Sta. 13+00.00

PT Sta. 87+58.69

PC Sta. 92+27.62

-L- POC Sta. 93+89.96 =
-Y13- POT Sta. 10+00.00

-L- POC Sta. 86+27.12 =
-Y12- POC Sta. 10+00.00

-L- PT Sta. 86+60.44, OFF 22.29' RT =
-LBA- PT Sta. 18+49.76

CREEKSIDE BIBLE CHURCH
DB 5572 PG 280
90

END CONSTRUCTION
-L- POT STA. 85+85.86=
-LBA- POT STA. 17+74.95

96
WAXHAW VENTURES LLC
DB 6874 PG 706

PT Sta. 11+84.70

97
KENNETH GANTZ
NO INFO FOUND

98
LOT 4
ROBERT E JOHNSON
SALLY H JOHNSON
DB 1105 PG 848
PB B PG 158-B

100
LOT 2
AKN HOLDINGS LLC
PB B PG 158-B

99
LOT 3
JERRY B HUNEYCUTT
PB B PG 158-B

POT Sta. 13+40.00

13+90.00

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

4/27/2026
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Sarah M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-11/CONST 11

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 11

NAD 83/NA 2011

195
TRACT 1
CUBE HHF LIMITED PARTNERSHIP
DB 6148 PG 251

196
TAE KYU PARK AND SPOUSE
OH SEON PARK AND MEE AE PARK
DB 6216 PG 151

JDH MANAGEMENT, LLC
DB 6662 PG 672
PB D PG 893

DAVID WINDELL CUNNINGHAM
DB 6554 PG 347

201
MICHAEL O RADESKY AND WIFE
PAMELA G RADESKY
DB 5161PG 339

200
ROBERT CHARLES MULLIS
ROBIN S MULLIS
DB 1198 PG 740

199
MICHAEL O RADESKY AND WIFE
PAMELA G RADESKY
DB 5161PG 339

70

UNION COUNTY
PUBLIC SCHOOLS
DB N/F PG

SOUTHERN EQUIPMENT COMPANY INC
DB 4467 PG 487

JHN TRACT TWO ACQUISITIONS, LLC
DB 6476 PG 764

PDE

PUE

DUE

MATCHLINE -Y10- STA 17+00 (SHEET EC-8)

ALPHA

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

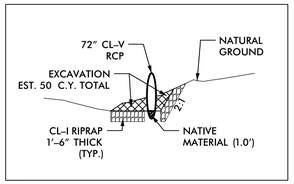
ND DEVELOPMENT INC
373 PG 786

4/27/2026
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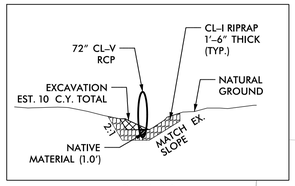
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-12/CONST 4

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

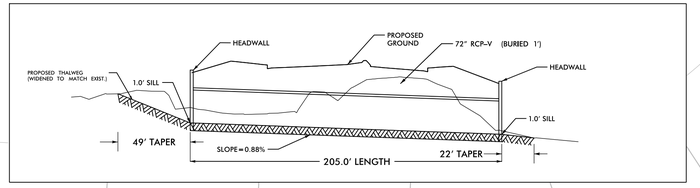
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 4



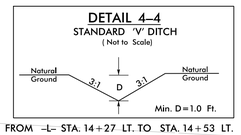
DETAIL 4-1
CULVERT GRADING PLAN
INLET CHANNEL



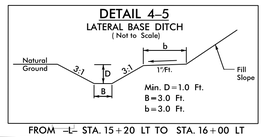
DETAIL 4-2
CULVERT GRADING PLAN
OUTLET CHANNEL



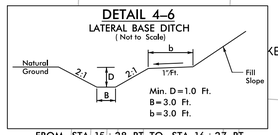
DETAIL 4-3
CULVERT GRADING PLAN
PROPOSED PROFILE



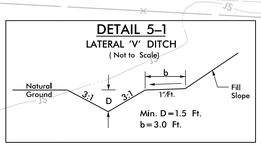
FROM -L- STA. 14+27 LT. TO STA. 14+53 LT.



FROM -L- STA. 15+20 LT TO STA. 16+00 LT



FROM STA. 15+28 RT. TO STA. 16+27 RT.



FROM STA. 16+00 LT. TO STA. 18+40 LT.

END TIP PROJECT U-4714AC
-L- POT STA. 193+50.61 LB=
BEGIN TIP PROJECT U-4714BA
-L- POT STA. 10+00.00 LA

NAD 83/NA 2011

MATCHLINE -L- STA 17+00 (SHEET EC-13)

SHENITA DEBERRY AND
DANIEL DEBERRY

DAVID AARON FREED
AND WIFE STEPHANIE FREED

FREDERICK M. BUNICK
AND WIFE
PATRICIA G. GABRIEL-BURNICK

ERIK K ROWLETT
AND WIFE
ISABEL RUEDA ABAD

ROBERT M. SULLIVAN
AND WIFE
SHARON L. SULLIVAN

KENS JUDY E

RUSSELL DANNY K
AND VIRGINIA

PHIFER BRENDA E

1 GUYNELLE B BROOME HEIRS

2 RICHARD W BROOME & SADIE C

4 POLE HELENA B.

5 DANNY F. DUNN
AND WIFE,
JENNIFER J DUNN

6 JAMES HAMILTON TURNER, JR

7 ANTONIOS K. PANOU

8 ANTONIOS K. PANOU

8Z

TIMOTHY L. SHERIN

TIMOTHY L. SHERIN

TIMOTHY L. SHERIN

ALEXANDER J. POLITES

TIMOTHY L. SHERIN
AND WIFE,
DAWN M. SHERIN

DAWN M. SHERIN

317 PROPERTIES, LLC

BENJAMIN A. GUTHRIE AND SPOUSE,
KATHRYN E. GUTHRIE

LINA M. ALEXANDER

WILLIAM LARRY ALEXANDER

DAMON S. BUTCHER
AND WIFE, TIFFANY M. BUTCHER

EDWARD R. BENVENUTI, JR.
& WIFE DIANA K. BENVENUTI

BRUCE R. MARX
AND SPOUSE, LINDA L MARX

HAZEL FOSTER

TIE TO 15" RCP-IV
TIP PROJ: U-4714AC
DESIGNED BY OTHER

TIE TO 18" RCP-IV
TIP PROJ: U-4714AC
DESIGNED BY OTHER

72" CL-V RCP
BURIED W/CONC. SILL
SKEW=45
(DETAIL 4-3)

CL-I RIP RAP
EST. 40 TONS
100 S.Y. GEOTEXTILE

INLET CHANNEL
(SEE DETAIL 4-1)
EST. 30 C.Y. DDE

STANDARD 'V' DITCH
(SEE DETAIL 4-4)
EST. 12 C.Y. DDE

LATERAL BASE DITCH
(SEE DETAIL 4-5)
EST. 45 C.Y. DDE

LATERAL 'V' DITCH
(SEE DETAIL 5-1)

CL-B RIP RAP
EST. 2 TONS
7 S.Y. GEOTEXTILE

CL-B RIP RAP
EST. 5 TONS
14 S.Y. GEOTEXTILE

CL-B RIP RAP
EST. 8 TONS
21 S.Y. GEOTEXTILE

GRADE TO DRAIN

LATERAL BASE DITCH
(SEE DETAIL 4-6)
EST. 20 C.Y. DDE

HEADWALL

CL-I OUTLET PROTECTION
EST. 55 TONS TOTAL
EST. 145 S.Y. GEOTEXTILE

OUTLET CHANNEL
(SEE DETAIL 4-2)
EST. 15 C.Y. DDE

18" RCP-IV
24" RCP-III
24" RCP-IV
15" RCP-III
15" RCP-IV
30" RCP-III
30" RCP-IV
24" RCP-V
18" RCP-V
15" RCP-V
5" RCP-IV

S 38°12'43.5"E

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

4/27/2026
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Gerald M

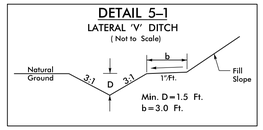
PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-13/CONST 5

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 5

NAD 83/NA 2011

DETAIL 5-1
LATERAL 'V' DITCH
(Not to Scale)



FROM STA. 16+00 LT. TO STA. 18+40 LT.

MATCHLINE -L- STA 17+00 (SHEET EC-12)

MATCHLINE -L- STA 29+00 (SHEET EC-14)

MAXIMILLIAN CHESTER
QUENTIN VUURMANS

2014-IIH BORROWER, LP

JOHNATHAN M WILSON
JACQUELINE W WILSON

JEFFREY A ALRED

PARK MEADOWS DEVELOPMENT, LLC

JACEK RUDZIEWICZ
DANKA RUDZIEWICZ

DAVID L RAY
SUSAN A RAY

RICHARD W BROOME & SADIE C

MORNINGSIDE MEADOWS
HOMEOWNERS ASSOCIATION, INC

KORRY L HUMPHREY

SEAN ERIC WILLIAMS
MALIA WILLIAMS

KIMBERLY A ELSASSER

CHRISTINE S GOODSON
DAVIS A GOODSON

MORNINGSIDE
MEADOWS HOMEOWNERS
ASSOCIATION, INC

EDNA MAY BROOME

NVR INC

JORMAN JOHNSON

PARK MEADOWS
DEVELOPMENT, LLC

LATERAL 'V' DITCH
(SEE DETAIL 5-1)
EST. 85 C.Y. DDE

POT Sta. 10+00.00

S 45° 20' 02" W

-L- POT Sta. 23+81.89 =
-Y1- POT Sta. 10+00.00

-L- POT Sta. 27+49.21 =
-Y2- POT Sta. 12+00.00
-Y3- POC Sta. 10+00.00

S 51° 43' 22" W

PC Sta. 27+84.31

S 38° 12' 43.5" E

-L- POT Sta. 20+68.26 =
-Y- POT Sta. 12+00.00

S 58° 08' 31.8" W

PC Sta. 11+18.35

PT Sta. 11+42.00

S 72° 44' 05" W

PT Sta. 12+35.50

S 72° 52' 28" W

POT Sta. 13+15.00

POT Sta. 13+70.00

ANTONIOS K. PANOU

BRUCE R. MARX
AND SPOUSE, LINDA L MARX

DAMON S. BUTCHER
AND WIFE, TIFFANY M. BUTCHER

RICHARD P. BROOME

2015A PROPERTY
OWNER LLC

ERIC W. GARTON
AND WIFE
TARA A. GARTON

SHAWN D. STEAGALL
AND WIFE
MELINDA C.STEAGALL

GERALD ANDERSON
AND BELINDA ANDERSON

TAMARA J. HARLE

MANTIS BILL
AND ELISAVET H

MARK O REA

FULCRUM PROPERTY
MANAGEMENT LLC

TODD SHANE LAMBERT

JOHN H. GRAY

TAYLOR ARMEN WORTH

CLAYTOM A. HAILE AND
WIFE MELANIE S. HAILE

HUNT FREDRICK G.
AND WIFE CINDI S

DANIEL R. HANKINS
AND TABITHA N. HANKINS

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

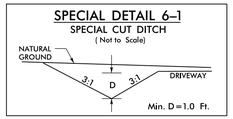
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FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 6

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-14/CONST 6

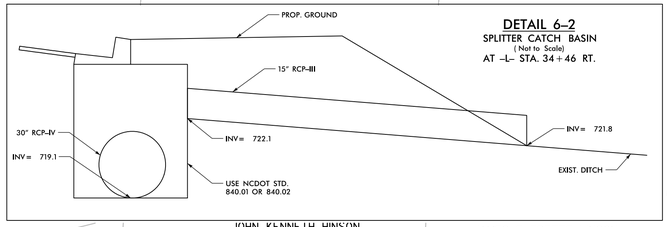
STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

SPECIAL DETAIL 6-1
SPECIAL CUT DITCH
(Not to Scale)



AT -L- STA. 37+90 LT.
EST. LENGTH = 60 L.F.

DETAIL 6-2
SPLITTER CATCH BASIN
(Not to Scale)
AT -L- STA. 34+46 RT.



3 inch Skimmer with 2.75 inch Orifice Diameter ID BMP01.
See Stormwater Basin with Skimmer Detail.

NOTE:
USE BMP BASIN AS SKIMMER BASIN UNTIL DRAINAGE SYSTEM IS OPERATIONAL. REMOVE SKIMMER AND BAFFLES AFTER.

INSTALL BASIN PER CONSTRUCTION PLAN DETAILS

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

4/27/2026
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Seidel M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-15/CONST 7

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Charlotte, NC 28203
NC License Number F-0991

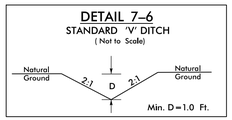
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 7

NAD 83/NA 2011

MATCHLINE -L- STA 43+00 (SHEET EC-14)

MATCHLINE -L- STA 57+00 (SHEET EC-16)

DETAIL 7–6
STANDARD 'V' DITCH
(Not to Scale)



AT –L– STA. 53+18 LT. (KEONEE CR.)
EST. 115 L.F.

EARTHEN BERM
WITH SKIMMER

1.5 inch Skimmer
with 0.375 inch
Orifice Diameter
7 ft. weir with
2.5 ft. weir height
ID 7.5

NOTE: CHANNEL DOES NOT MATCH CONTOURS
(SEE EXIST. DITCH DETAIL E3A)
WIDEN & CLEAN OUT
WHERE APPROPRIATE. (SEE DETAIL E3A)

STANDARD BASE DITCH
(SEE DETAIL 7–4)
CL–I RIP RAP
EST. 30 TONS
70 S.Y. GEOTEXTILE
10 C.Y. DDE

STANDARD BASE DITCH
(SEE DETAIL 7–2)
CL–I RIP RAP
EST. 150 TONS
340 S.Y. GEOTEXTILE
50 C.Y. DDE

STANDARD BASE DITCH
(SEE DETAIL 7–3)
CL–I RIP RAP
EST. 115 TONS
285 S.Y. GEOTEXTILE
80 C.Y. DDE

STANDARD 'V' DITCH
(SEE DETAIL 7–1)
EST. 160 C.Y. DDE

CL–B RIP RAP
EST. 3 TONS
10 S.Y. GEOTEXTILE

STANDARD 'V' DITCH
(SEE DETAIL 7–6)
EST. 25 C.Y. DDE

APPROX. EOP
AREA UNSURVEYED

POT Sta. 10+00.00

PC Sta. 45+75.37

PT Sta. 50+37.86

–L– POT Sta. 44+37.55 =
–Y7– POT Sta. 12+20.00

PC Sta. 11+20.65

–L– POT Sta. 45+17.75=
–Y8– POT Sta. 10+00.00

–L– POT Sta. 52+15.41 =
–Y9– POT Sta. 10+00.00

PC Sta. 11+73.93

PT Sta. 12+80.34

POT Sta. 13+25.00

PT Sta. 13+19.83

POT Sta. 13+50.00

S 55° 49' 34.9" W

S 50° 03' 03.8" W

S 39° 40' 46.7" E

S 50° 19' 13.3" W

S 57° 44' 15.5" W

PROP. SPLITTER
CATCH BASIN

CONTRACTOR
DESIGN
BOX

REMOVE 2
CROSS PIPES

PLUG & FILL

GRADE TO DRAIN

OPEN END PIPE

LINDA W STINES

TOWN OF INDIAN TRAIL

CAROLINAS UNION HEATHCARE, INC.

GEOFF HAWK
PATRICIA HAWK

VIRGINIA C FOARD, TRUSTEE
DEED DESCRIPTION INCOMPLETE

DAWN MACOMB SCHNEIDER
RANDY SCHNEIDER

ROBERT L ROLLINS
MARY BETH ROLLINS

MALEK MACARON

NORMAN E ESTEP
JACQUELYN ESTEP

TERRY M & NANCY
HENDERSON

DONALD &
FRANCIS YELTON

VANESSA D PARKER

DONNA NELSON HAMMOND

MALEK MACARON

JAMES T & ANITA WEBB

JERRY EDMOND HARTIS
DOROTHY K HARTIS

KENNETH W
STILWELL

ESTHER G NARRON

CSL NORTH CAROLINA
SYSTEM, LP

RONDO ELIZONDO AND
WIFE CHRISTY B. ELIZONDO

STEVE & DONNA CLAYTON

LARRY J VICKERY

BILLY F AYCOTH, JR.

ANNE JOHNSON TURBEVILLE & HUSBAND BILL
CANT DRAW DEED BASE ON GIVEN INFORMATION

TRACT 2
GERALD D RIGGINS

WAYNE P COHEN
WENDY E COHEN

LONDA HINSON MAYNOR
JERRY MAYNOR

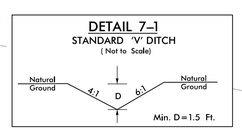
ALPHA OMEGA LAND
DEVELOPMENT INC

STEVE MAYNARD CLAYTON, JR.

MINH PHAM
LIEN LIEN

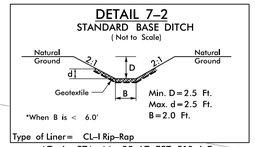
RICHARD H TOMBERLIN

DETAIL 7–1
STANDARD 'V' DITCH
(Not to Scale)



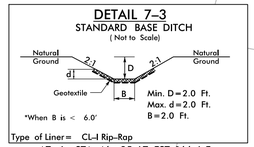
FROM –Y8– STA. 11+15 RT. TO STA. 12+90 RT.

DETAIL 7–2
STANDARD BASE DITCH
(Not to Scale)



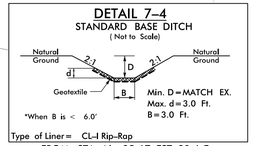
AT –L– STA. 44+83 LT. EST. 210 L.F.

DETAIL 7–3
STANDARD BASE DITCH
(Not to Scale)



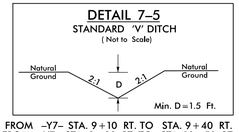
AT –L– STA. 46+35 LT. EST. 166 L.F.

DETAIL 7–4
STANDARD BASE DITCH
(Not to Scale)



FROM STA. 46+35 LT. EST. 30 L.F.

DETAIL 7–5
STANDARD 'V' DITCH
(Not to Scale)



FROM –Y7– STA. 9+10 RT. TO STA. 9+40 RT.
FROM –Y7– STA. 9+90 RT. TO STA. 10+50 RT.

NOTE:
ADD J–HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
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.

4/27/2026
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Gerald M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-16/CONST 8

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Charlotte, NC 28203
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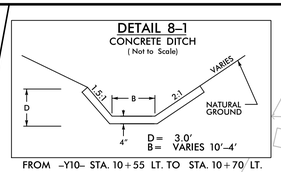
FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 8

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NAD 83 NA 2011

DETAIL 8-1
CONCRETE DITCH
(Not to Scale)



FROM -Y10- STA. 10+55 LT. TO STA. 10+70 LT.

JAMES HENRY NANCE & JUNE
LOT 26
JAMES HARBISON
GAY D PRIVETTE
JANICE W PRIVETTE
POT Sta. 8+00.00
RETAIN
GEORGE ATHANS
RIZAK RETAIL, LLC
INDIAN TRAIL PROPERTIES
61 GEORGE ATHANS AND WIFE DENISE P. ATHANS
63 SUBHASYS ESTATES LLC
66
67 WILLIAMS HARRIS PROPERTIES LLC
REMOVE
2GI
(SPECIAL DESIGN)
RETAIN
10
PUE
60
RETAIN
HENDLEY-BREWER PROPERTIES
64
65 GREGORY PLAZA LLC
55
53
61 GEORGE ANTHANS AND WIFE DENISE P. ANTHANS
-L- POT Sta. 60+77.30 =
-Y10- POT Sta. 14+02.85
PC Sta. 61+82.58
PT Sta. 65+99.58
MATCHLINE -L- STA 57+00 (SHEET EC- 15)
MATCHLINE -L- STA 70+00 (SHEET EC-17)
60 ALPHA OMEGA LAND DEVELOPMENT INC
69 RUSHING CONSTRUCTION
71
72 TWO COUSINS PROPERTIES, LLC
73 CAH HOLDINGS LLC
74 CAH HOLDINGS LLC
75 BOULEVARD EAST LLC
76 FAMILY TYME LLC
INDIAN TRAIL PLAZA LLC
70
UNION COUNTY PUBLIC WORKS
194
742
CL-B RIP RAP
EST. 5 TONS
14 S.Y. GEOTEXTILE
TIE BOX TO EXIST 24"
S 63° 34' 18" E
CHORD
PLUG & FILL

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

MATCHLINE -Y10- STA 17+00 (SHEET EC-19)

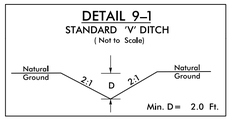
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Selda M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-17/CONST 9

STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 9

DETAIL 9-1
STANDARD 'V' DITCH
(Not to Scale)



FROM -L- STA. 77+99 RT. TO STA. 79+48 RT.

NAD 83/NA 2011

MATCHLINE -L- STA 70+00 (SHEET EC-16)

MATCHLINE -L- STA 84+00 (SHEET EC-18)

-LBA- PC Sta. 14+62.17

67 WILLIAMS HARRIS PROPERTIES LLC

77 UNION MEMORIAL HOSPITAL INC

78 SANDRA E PETERSON
WENDY D EDWARDS

79 SHARON PRICE
JOYCE PRICE

80 LOT 2
WALLACE CROWELL

81 LOT I
BILLIE P CROWELL

75

80

15

S 63° 34' 18.1" E

S 63° 33' 37.8" E

0901 0902 0903 0904 0905 0906 0907 0908 0909 0910 0911 0912 0913 0914 0915 0916 0917 0918 0919 0920 0921 0922 0923 0924 0925 0926 0927 0928 0929 0930 0931

15" RCP-IV
15" RCP-III
18" RCP-IV
DUE
PUE
REMOVE
RETAIN
GRADE TO DRAIN
DTCB
CB
REBUILD CB
DI
TSD
2%

STANDARD 'V' DITCH
(SEE DETAIL 9-1)

83 80-TY LLC

87 STALLINGS VOLUNTEER
FIRE DEPARTMENT INC.

84 JORDAN'S PLACE LLC

86 TAE KYU PARK
OH SEON PARK

76 FAMILY TYME LLC

82

84 JORDAN'S PLACE LLC

STALLINGS VOLUNTEER
FIRE DEPARTMENT INC.

88 ROGER MAC HELMS

89 BARBARA HELMS

90 CREEKSIDE BIBLE CHURCH

CREEKSIDE BIBLE CHURCH

NOTE:
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.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C IN AREAS WHERE WATER MAY POND ON ROADS OPEN TO TRAFFIC OR AS DIRECTED.

NOTE:
USE SPECIAL STILLING BASIN (SILT BAG) FOR ALL TRENCH DEWATERING ACTIVITIES

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

4/27/2026
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Stanley M

PROJECT REFERENCE NO.	SHEET NO.
U-4714BA	EC-18/CONST 10

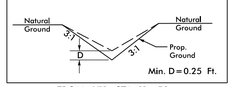
STV Engineers, Inc.
2151 Hawkins Street, Suite 1400
Charlotte, NC 28203
NC License Number F-0991

FINAL GRADING
EROSION CONTROL FOR
CONSTRUCTION SHEET 10

NOTE:
CONTRACTOR TO DETERMINE LOCATION OF SEDIMENT CONTROL FENCE OUTLETS

NOTE:
ADD J-HOOK AT END OF EACH SILT FENCE SECTIONS TO PREVENT RUNOFF BYPASS

DETAIL 10-2
DITCH CLEANOUT
(Not to Scale)



FROM Y11 STA. 11+50

NAD 83/NA 2011

MATCHLINE -L- STA 84+00 (SHEET EC-17)

81 LOT 1 BILLIE P CROWELL

85

POT Sta. 10+00.00

PC Sta. 10+72.61

S 48° 44' 42" W

LATERAL 'V' DITCH (SEE DETAIL 10-1) EST. 50 C.Y. DDE

CL-B RIP RAP EST. 5 TONS 14 S.Y. GEOTEXTILE

20 x 10 x 3
ID 10.1

18" RCP-IV

1004

1001

CREEKSIDE BIBLE CHURCH

90

RAY B KILLOUGH

92

91 KILLOUGH-ROHLEDER HOLDING CO, LLC

-L- POT Sta. 86+03.47 =
-Y11- POC Sta. 13+00.00

PT Sta. 87+58.69

PC Sta. 92+27.62

93 DENISE KILLOUGH WINDHAM
BRIAN NEAL WINDHAM

94 RALPH KILLOUGH

95 RAY BERNARD KILLOUGH
REFERENCE MADE TO THIS DEED BUT NO DESCRIPTION FOUND

-L- POC Sta. 93+89.96 =
-Y13- POT Sta. 10+00.00

-L- POC Sta. 86+27.12 =
-Y12- POC Sta. 10+00.00

-L- PT Sta. 86+60.44, OFF 22.29' RT =
-LBA- PT Sta. 18+49.76

S 70° 20' 57.9" E

S 35° 20' 39.8" W

END CONSTRUCTION
-L- POT STA. 85+85.86=
-LBA- POT STA. 17+74.95

96 WAXHAW VENTURES LLC

PT Sta. 11+84.70

S 48° 47' 42.7" E

97 KENNETH GANTZ
NO INFO FOUND

98 LOT 4
ROBERT E JOHNSON
SALLY H JOHNSON

100 LOT 2

99 LOT 3
JERRY B HUNEYCUTT

POT Sta. 13+40.00

+90.00

NOTE:
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.

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PROJECT REFERENCE NO.	SHEET NO.
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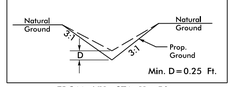
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