

**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**

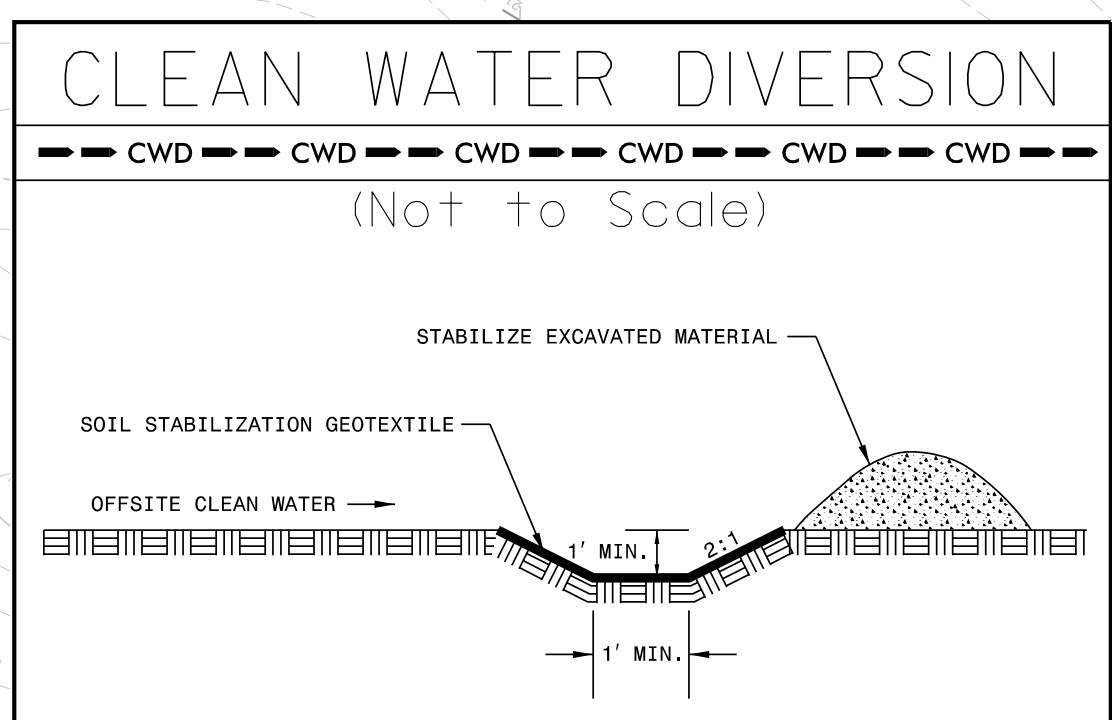
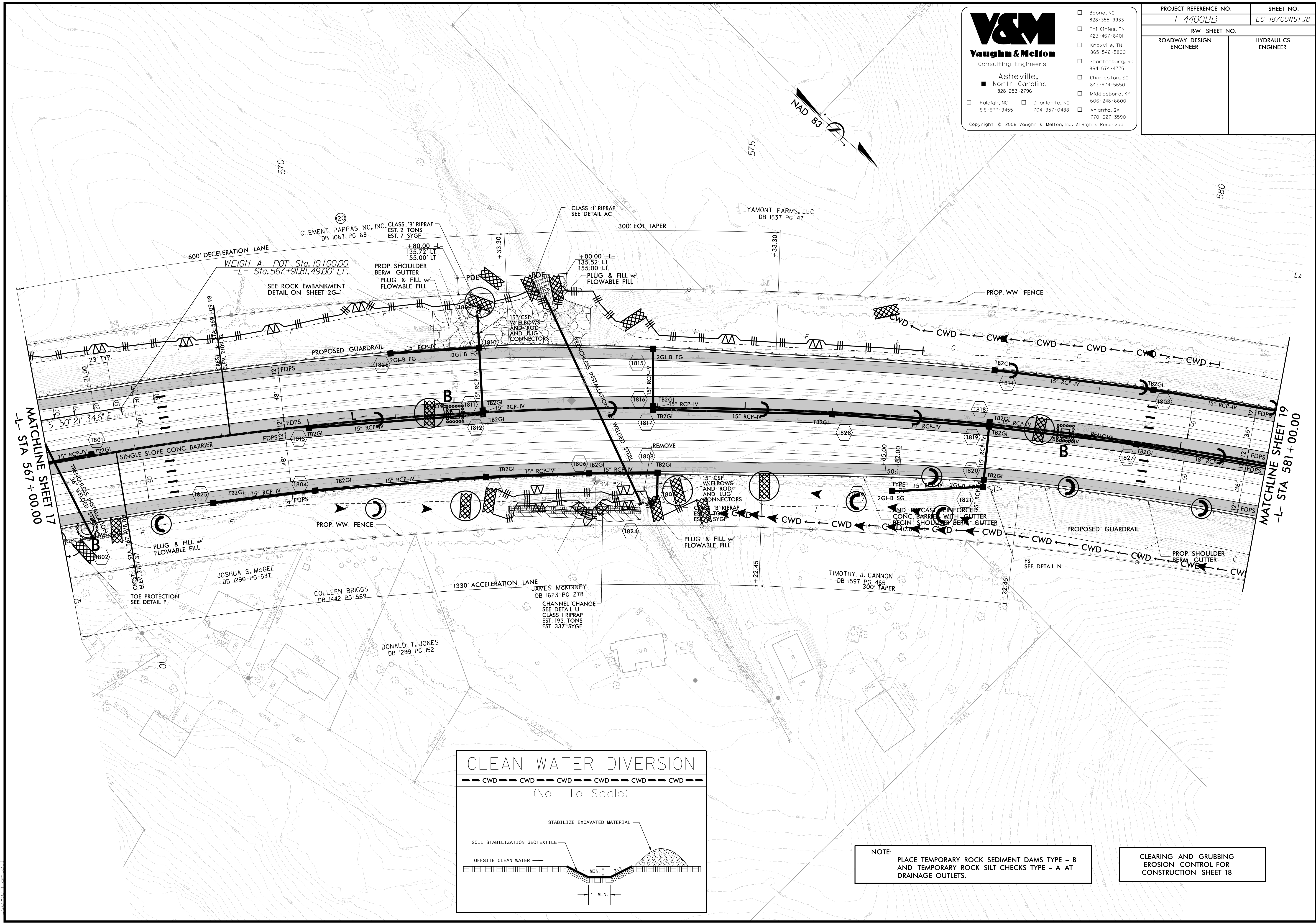
V&M
Vaughn & Melton
 Consulting Engineers

Asheville,
 North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-18/CONST.18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 18

6/3/2019 2:45:10 PM
 V:\Asheville\transportation\1-4400BB\Erosion Control\Sheets\14400BB_Env_EC-18.dgn
 User: jmelton

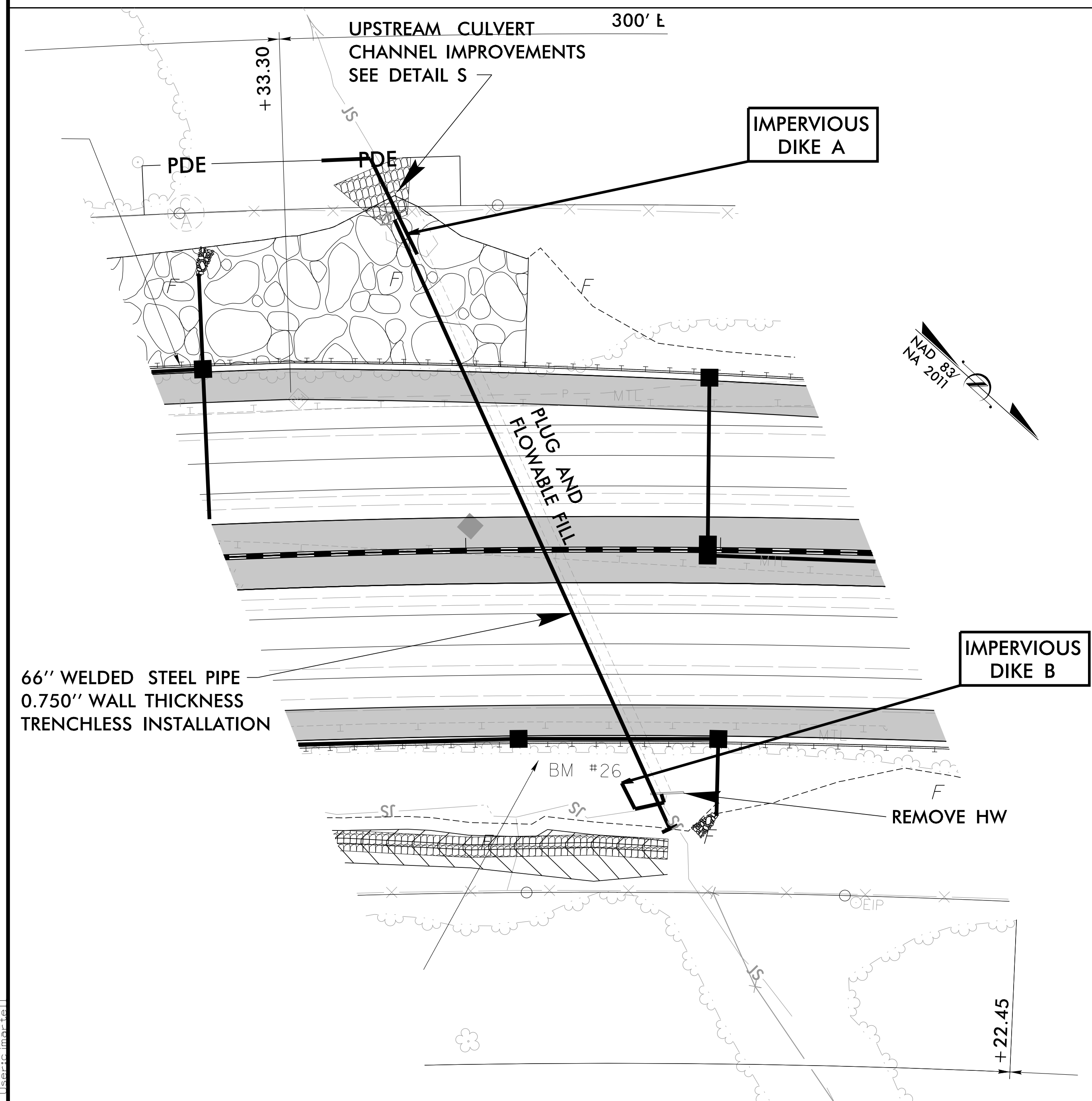
6/17/2019 10:08:11 AM
 V:\Reference\Information\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-18A.dgn
 I:\sps\im\im\14400BB_Env_EC-18A.dgn

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-18A/CONST.18
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 573+30 -L-

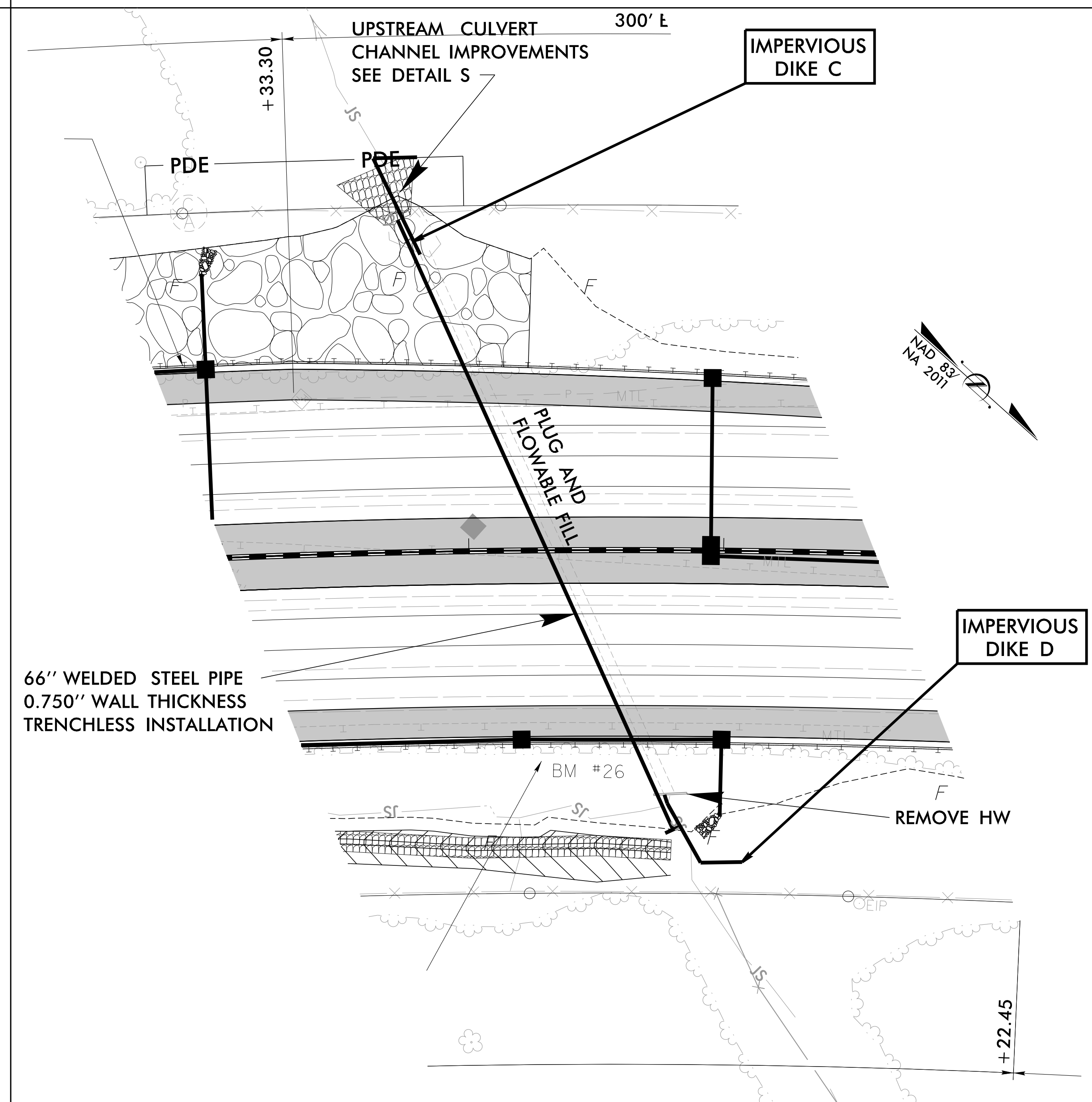
PHASE I

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED DURING CULVERT CONSTRUCTION.
2. INSTALL IMPERVIOUS DIKES A AND B AS SHOWN.
3. INSTALL PROPOSED 66" WSP WITH HEADWALL.
4. INSTALL PORTION OF UPSTREAM AND DOWNSTREAM CULVERT CHANNEL IMPROVEMENTS



PHASE II

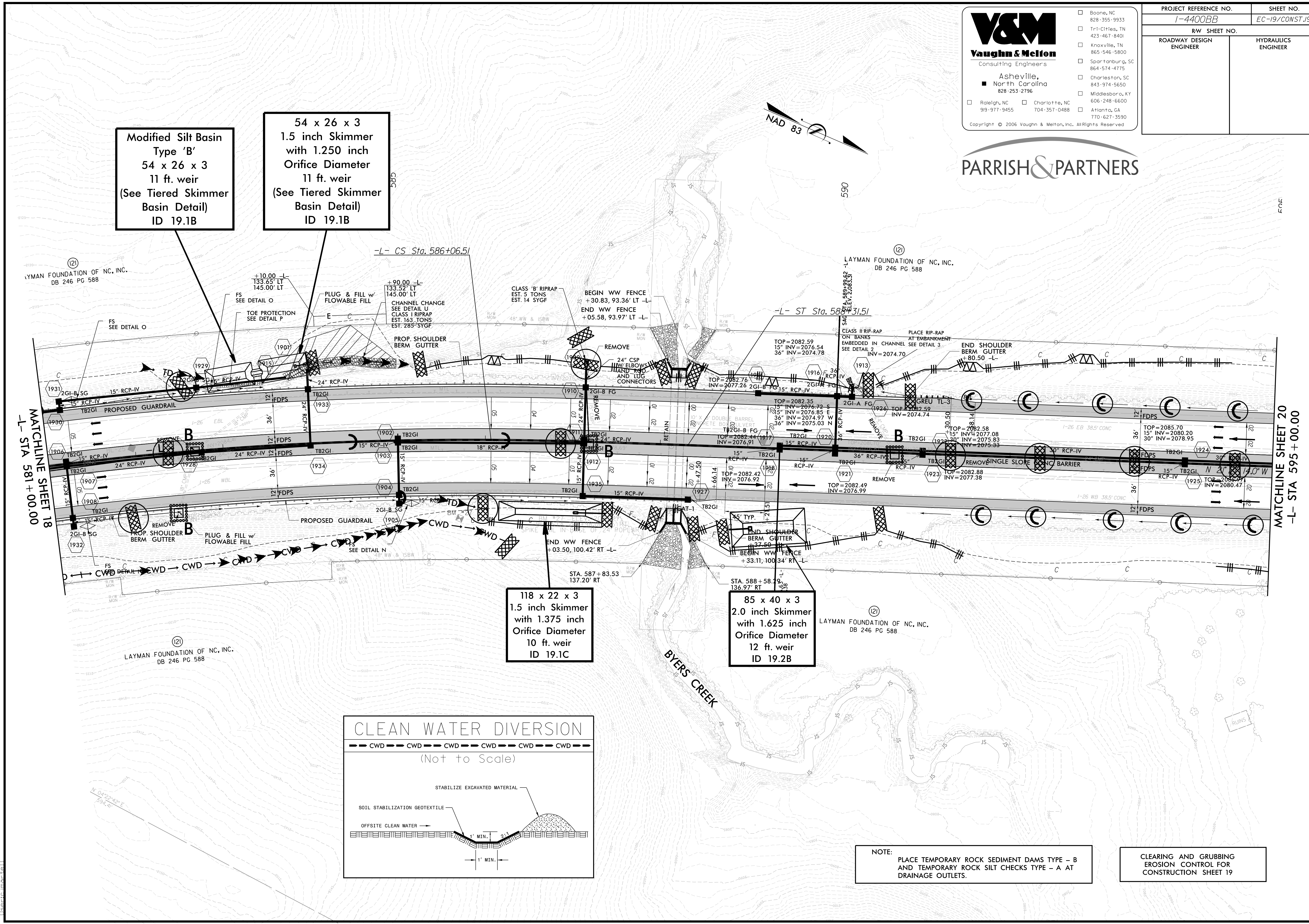
1. REMOVE IMPERVIOUS DIKES A AND B.
2. INSTALL IMPERVIOUS DIKES C AND D AS SHOWN.
3. INSTALL REST OF UPSTREAM AND DOWNSTREAM CULVERT CHANNEL IMPROVEMENTS.
4. REMOVE IMPERVIOUS DIKES AND ANY REMAINING SPECIAL STILLING BASIN(S).
5. COMPLETE FILL SLOPE.



V&M
Vaughn & Melton
 Consulting Engineers
 Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590
 Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved.

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-19/CONST.19
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

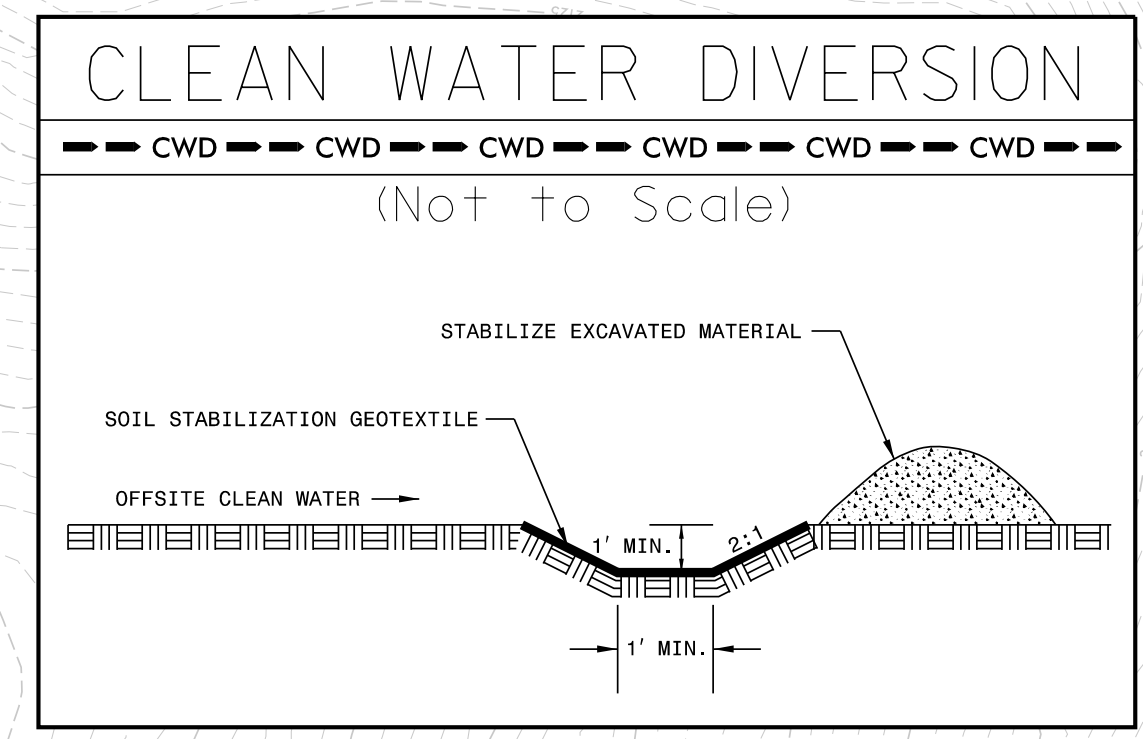


Modified Silt Basin
 Type 'B'
 54 x 26 x 3
 11 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 19.1B

54 x 26 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 11 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 19.1B

118 x 22 x 3
 1.5 inch Skimmer
 with 1.375 inch
 Orifice Diameter
 10 ft. weir
 ID 19.1C

85 x 40 x 3
 2.0 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 12 ft. weir
 ID 19.2B



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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 19

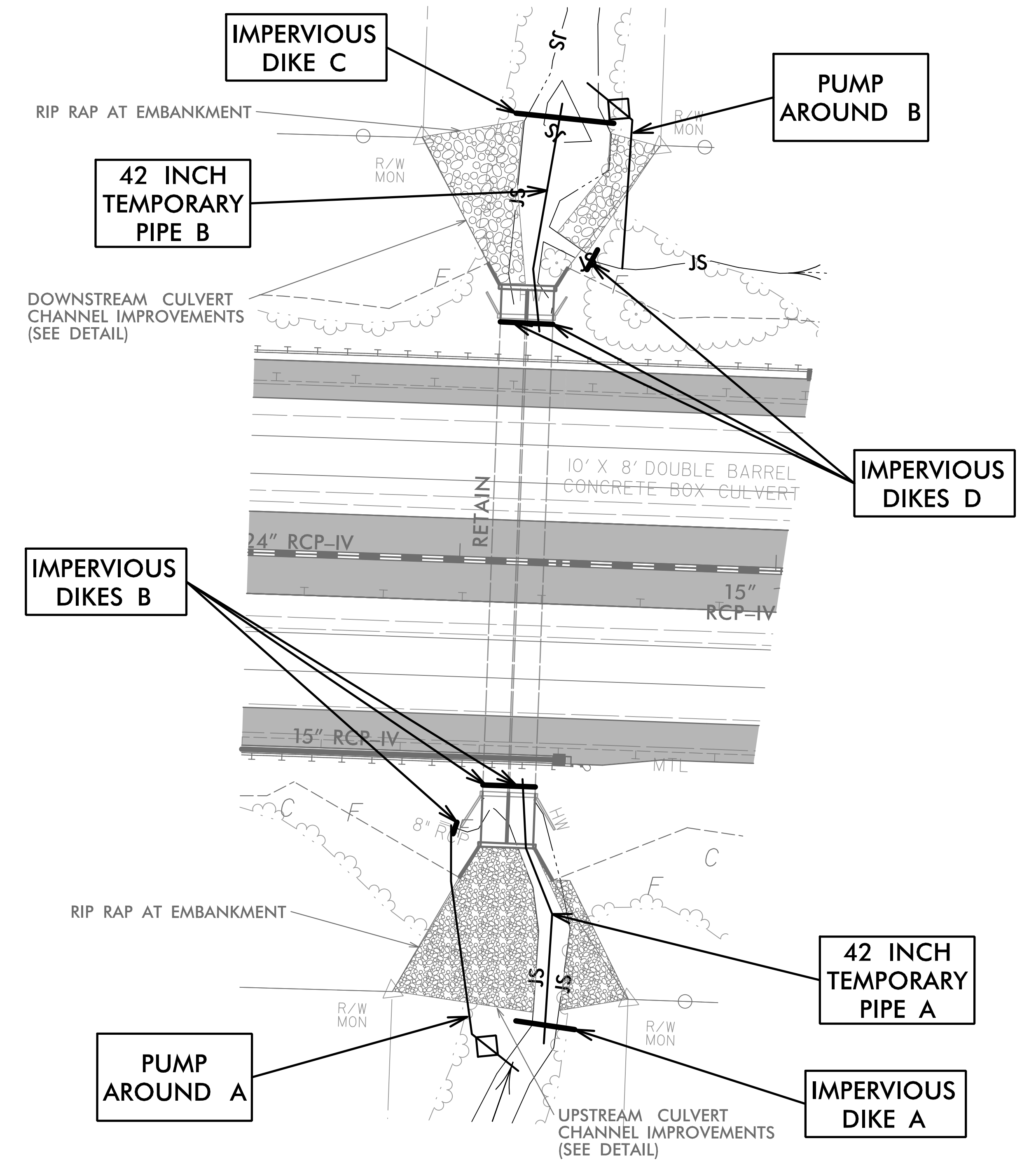
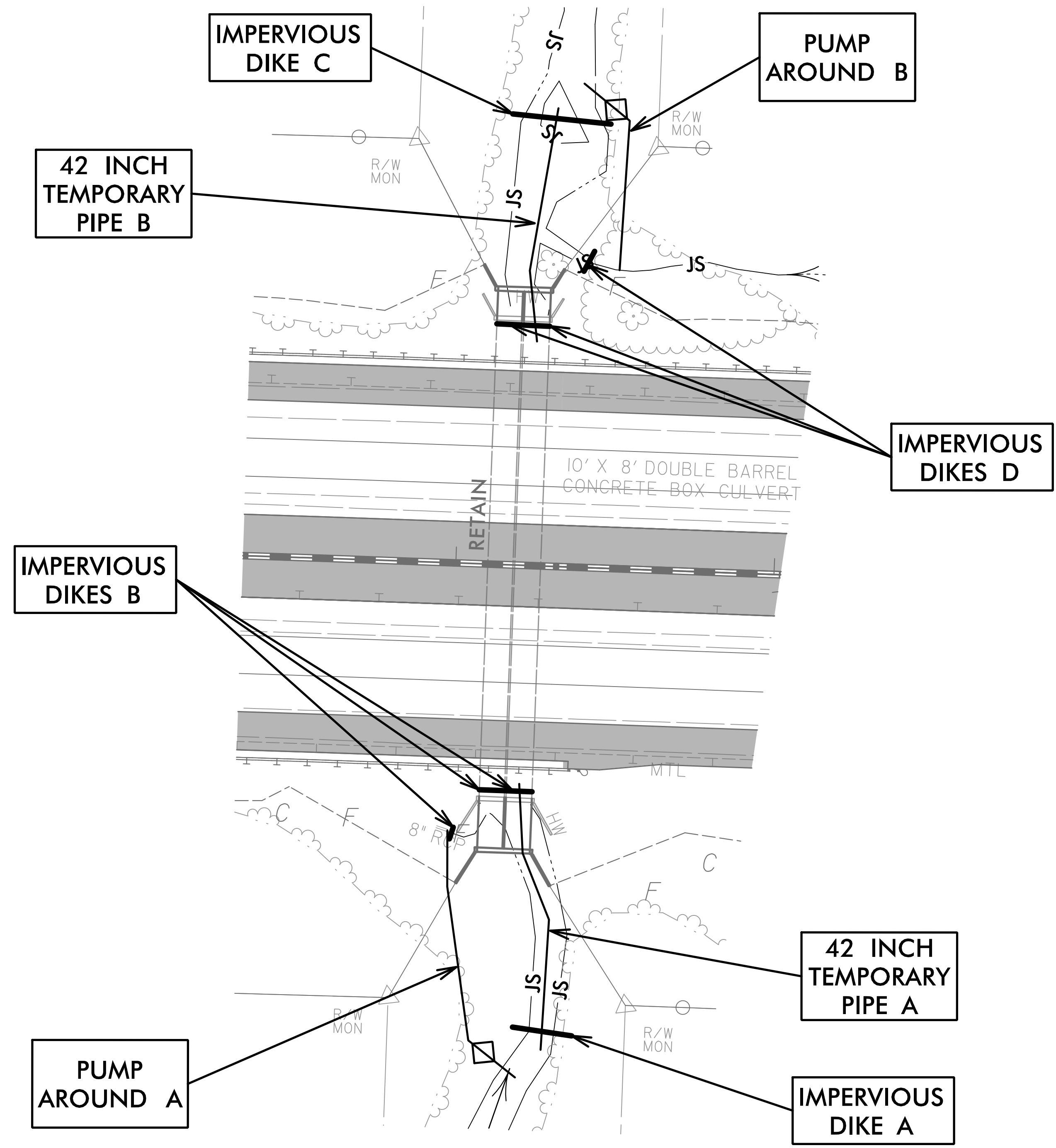
6/11/2016 1:45:23 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-19.dgn
 User: jmelton

CULVERT CONSTRUCTION SEQUENCE STA. 588+18 -L-

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-19A/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

1. UTILIZE SPECIAL STILLING BASIN(S) THROUGHOUT CULVERT CONSTRUCTION.
2. INSTALL IMPERVIOUS DIKES A, B, C, AND D.
3. INSTALL 42" TEMPORARY PIPES A AND B AND DIVERT FLOW INTO NEWLY INSTALLED TEMPORARY PIPES.
4. INSTALL PUMP AROUND OPERATIONS A AND B.
5. INSTALL PROPOSED UPSTREAM AND DOWNSTREAM CULVERT EXTENSIONS AND WING WALLS.

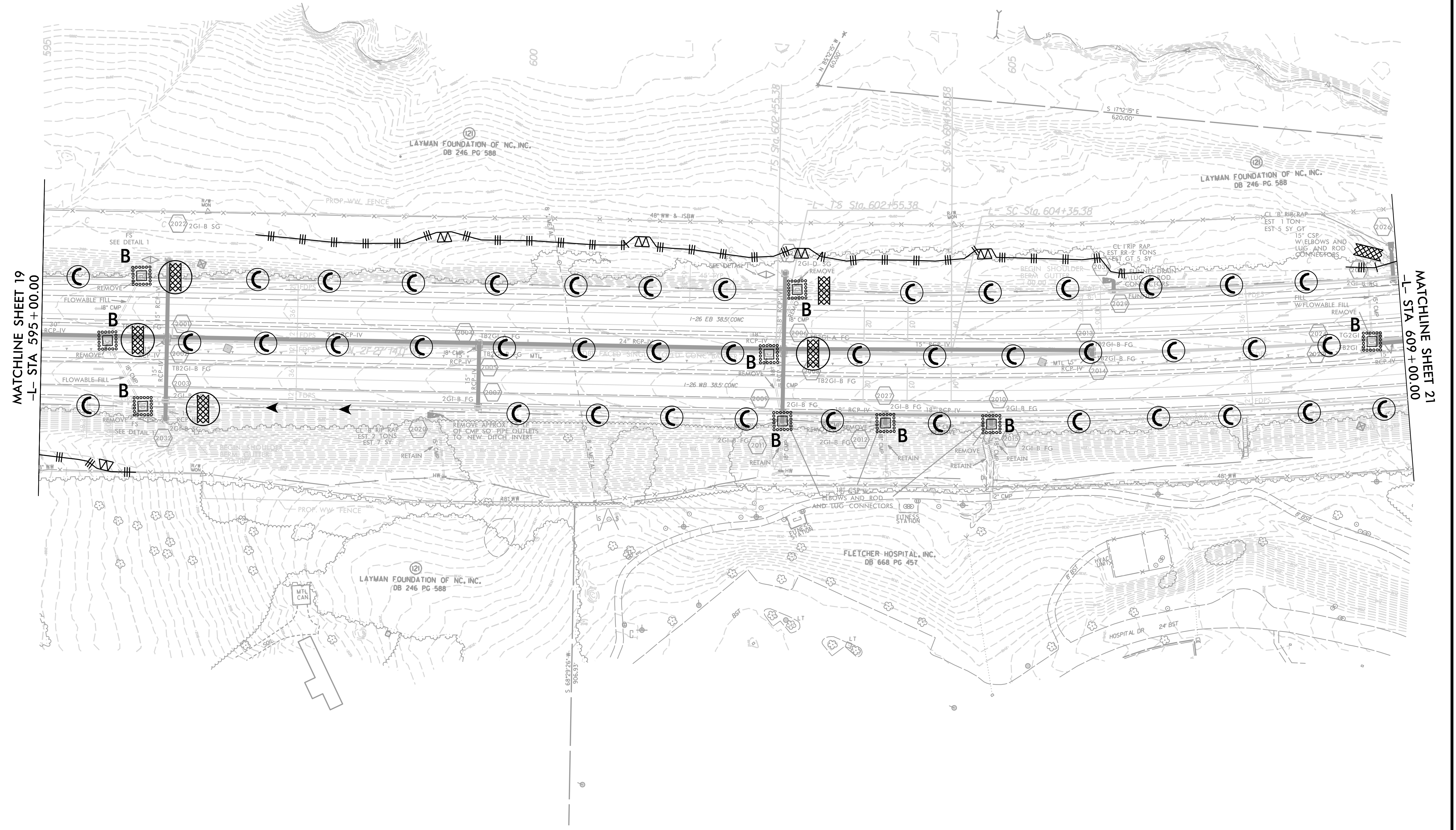
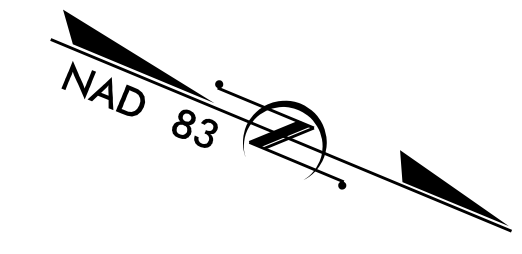
6. INSTALL PROPOSED UPSTREAM AND DOWNSTREAM CULVERT CHANNEL IMPROVEMENTS.
7. REMOVE IMPERVIOUS DIKES, TEMPORARY PIPES AND PUMP AROUND OPERATIONS.
8. REMOVE ANY REMAINING SPECIAL STILLING BASIN(S).
9. COMPLETE FILL SLOPE.



PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-20/CONST.20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 20

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

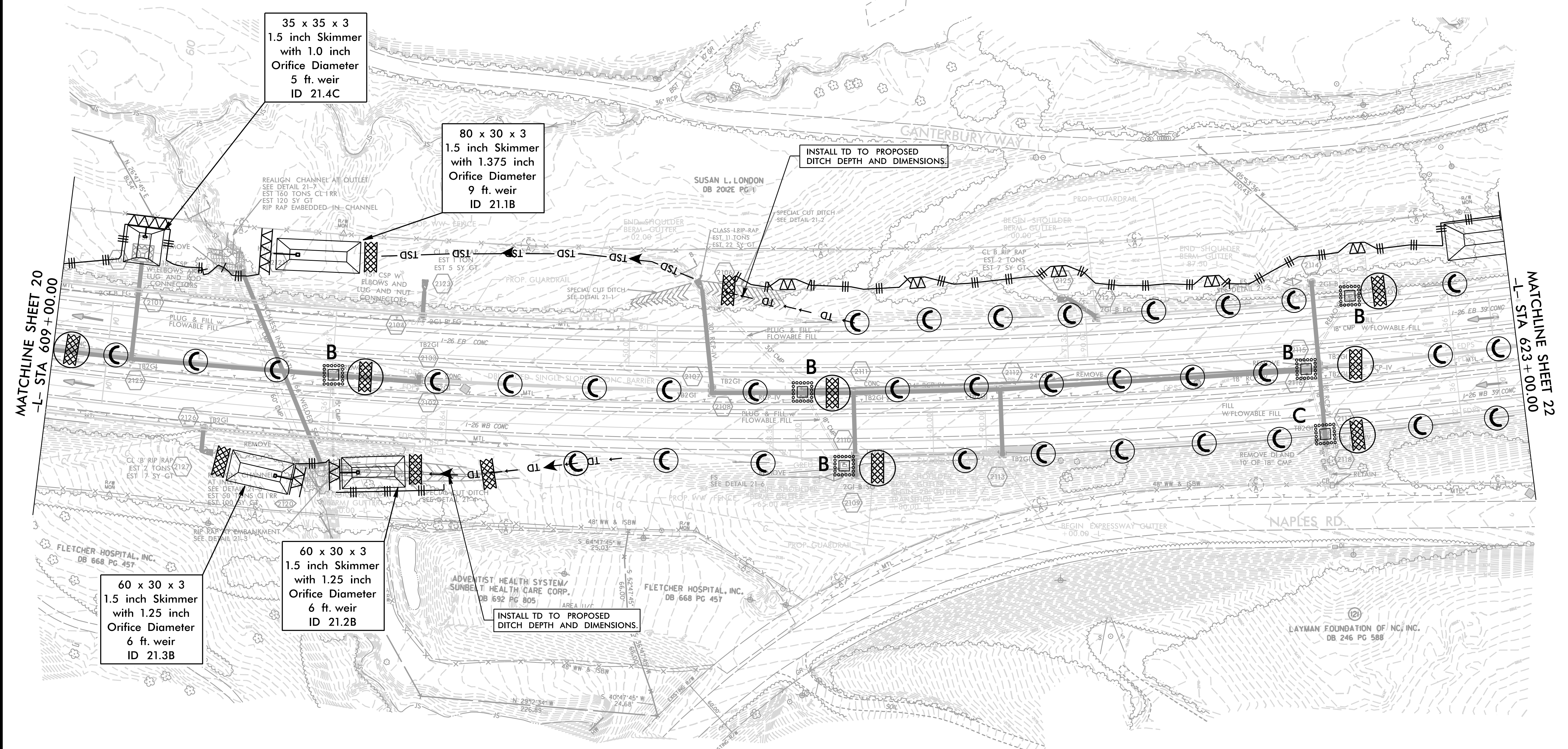
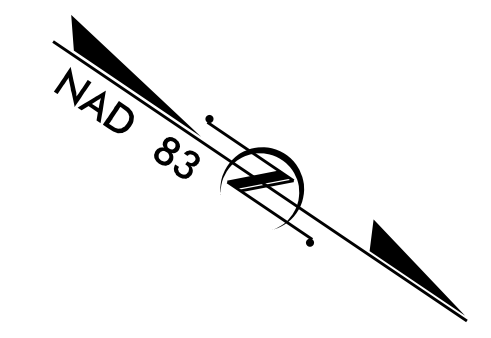


\$\$\$SYTIME\$\$\$
\$\$\$USERNAME\$\$\$
\$\$\$SCALE\$\$\$
\$\$\$ENVIRONMENT\$\$\$

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-21/CONST.21
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 21

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

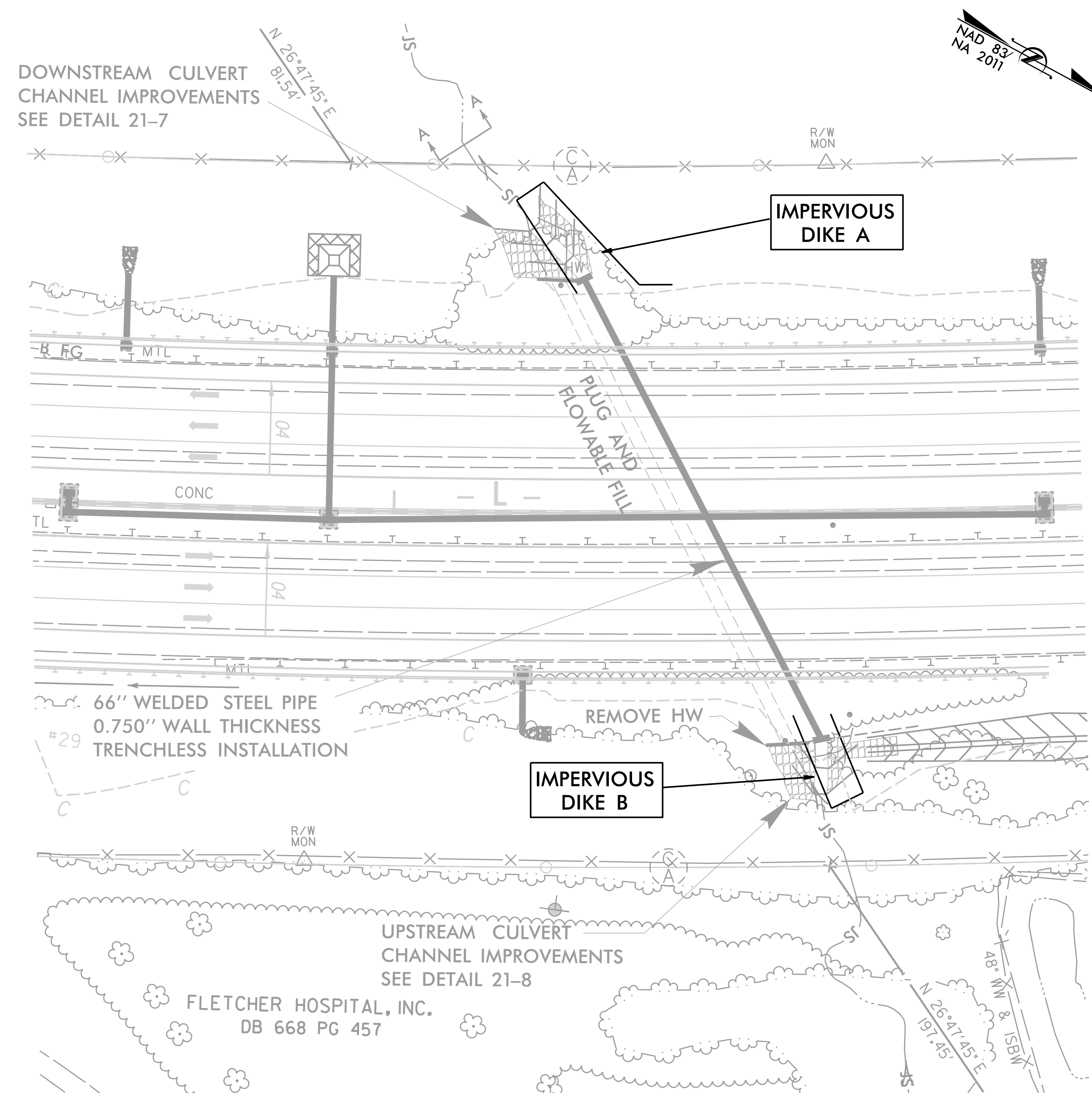


\$\$\$SYTIME\$\$\$
 \$\$\$USERNAME\$\$\$
 \$\$\$SCALE\$\$\$
 \$\$\$ENVIRONMENT\$\$\$

CONSTRUCTION SEQUENCE STA. 611+00 -L-

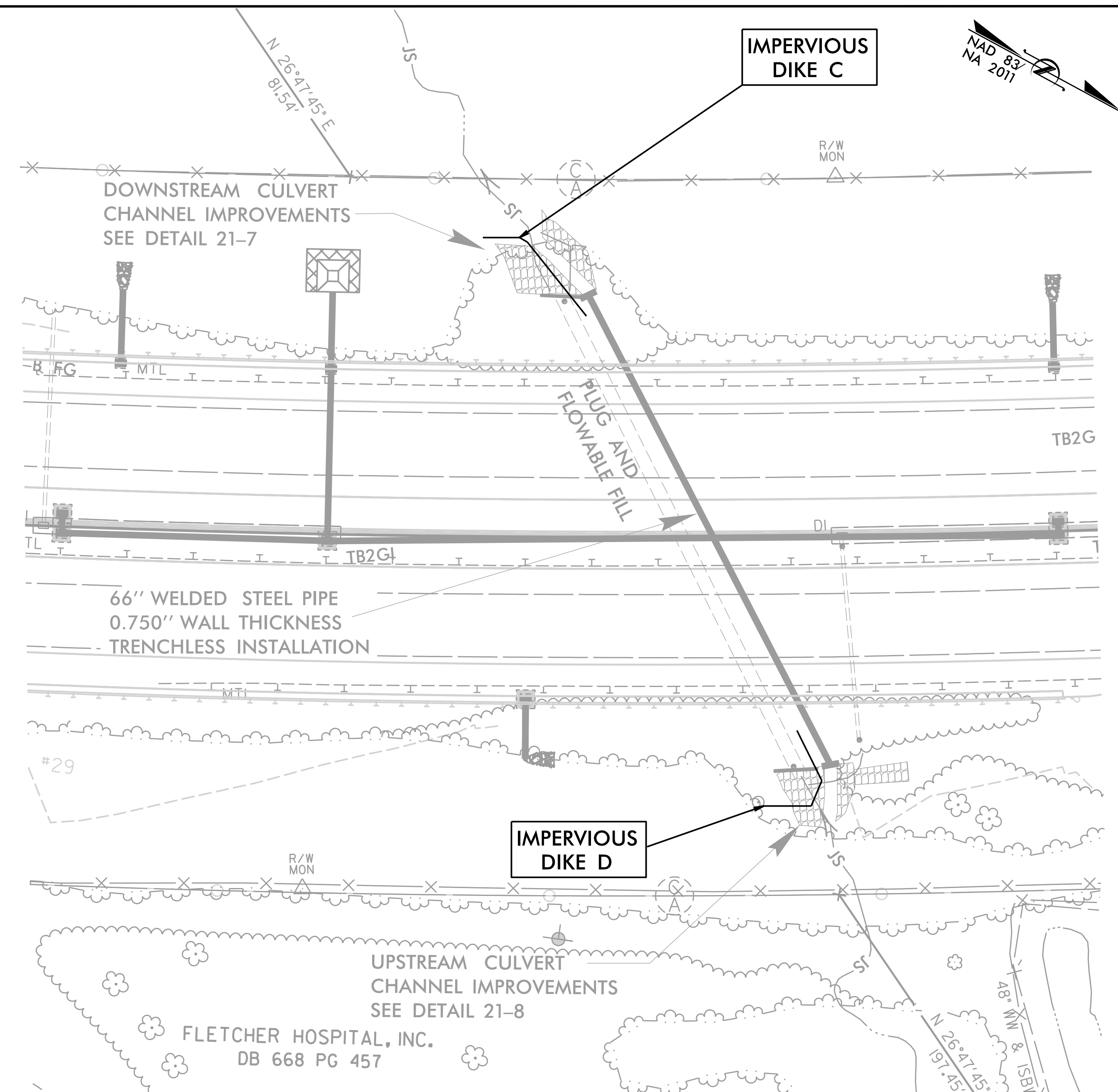
PHASE I

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED DURING CULVERT CONSTRUCTION.
2. INSTALL IMPERVIOUS DIKES A AND B AS SHOWN.
3. INSTALL PROPOSED 66" WSP WITH HEADWALL.
4. INSTALL PORTION OF UPSTREAM AND DOWNSTREAM CULVERT CHANNEL IMPROVEMENTS



PHASE II

1. REMOVE IMPERVIOUS DIKES A AND B.
2. INSTALL IMPERVIOUS DIKES C AND D AS SHOWN.
3. INSTALL REST OF UPSTREAM AND DOWNSTREAM CULVERT CHANNEL IMPROVEMENTS.
4. REMOVE IMPERVIOUS DIKES AND ANY REMAINING SPECIAL STILLING BASIN(S).
5. COMPLETE FILL SLOPE.

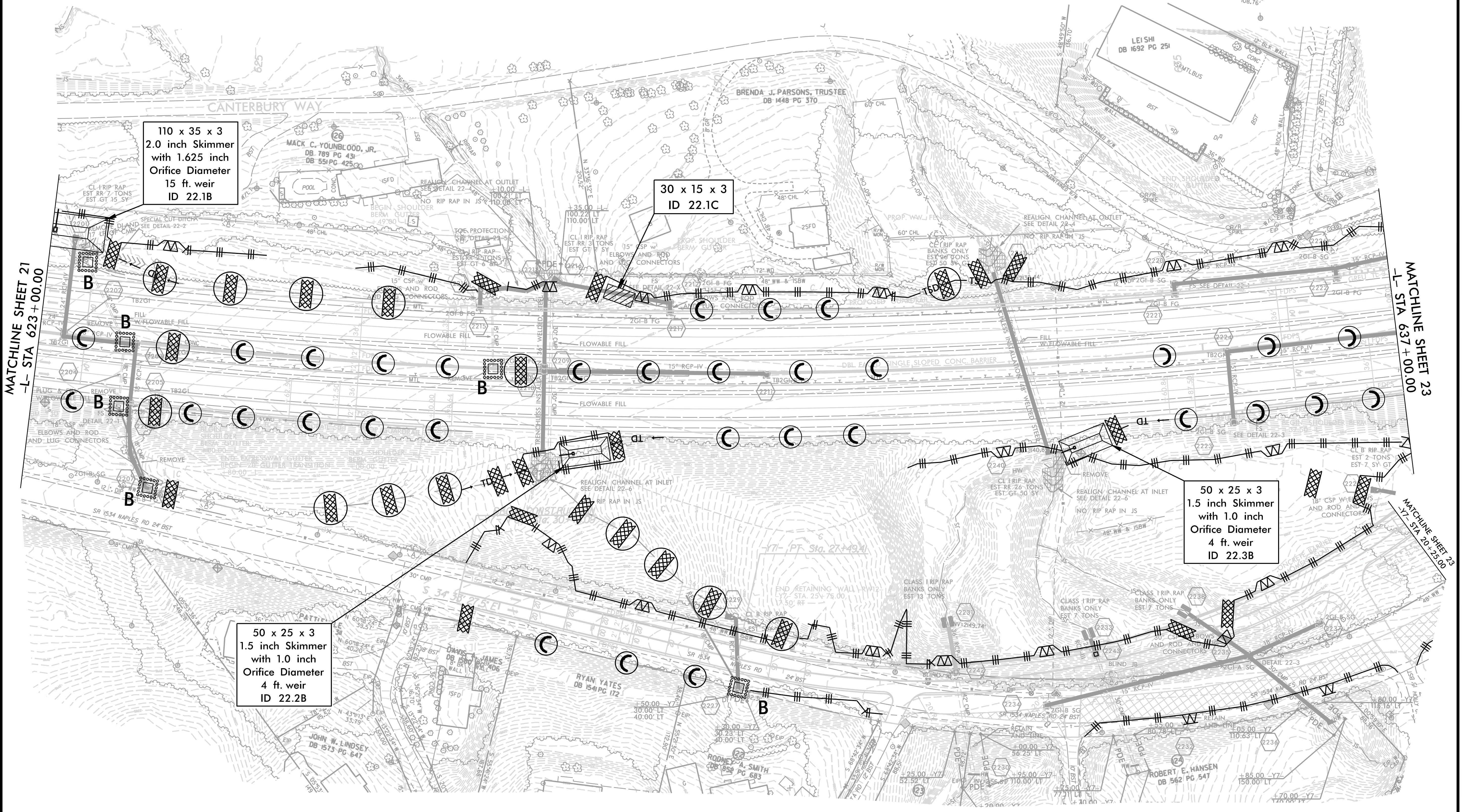
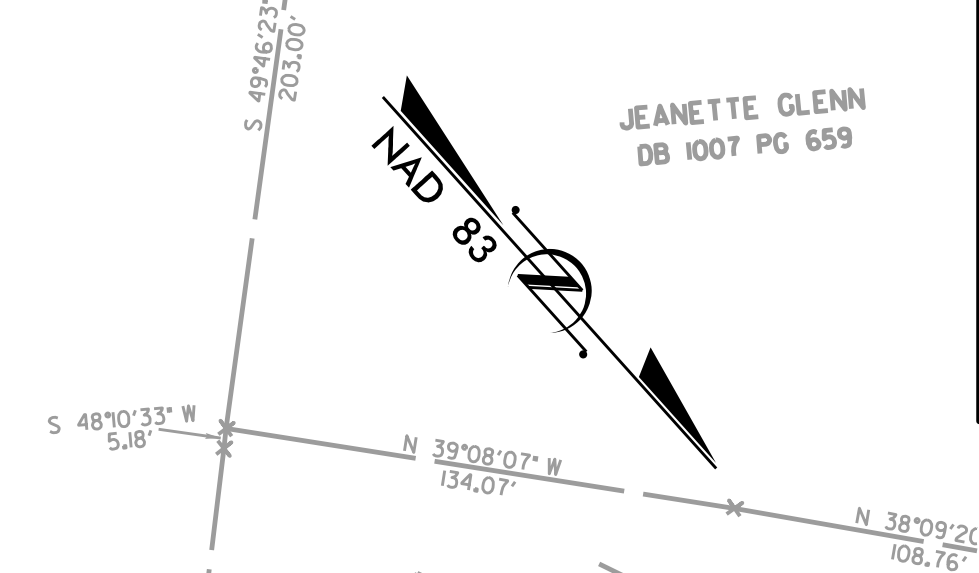


PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-22/CONST.22
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 22

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

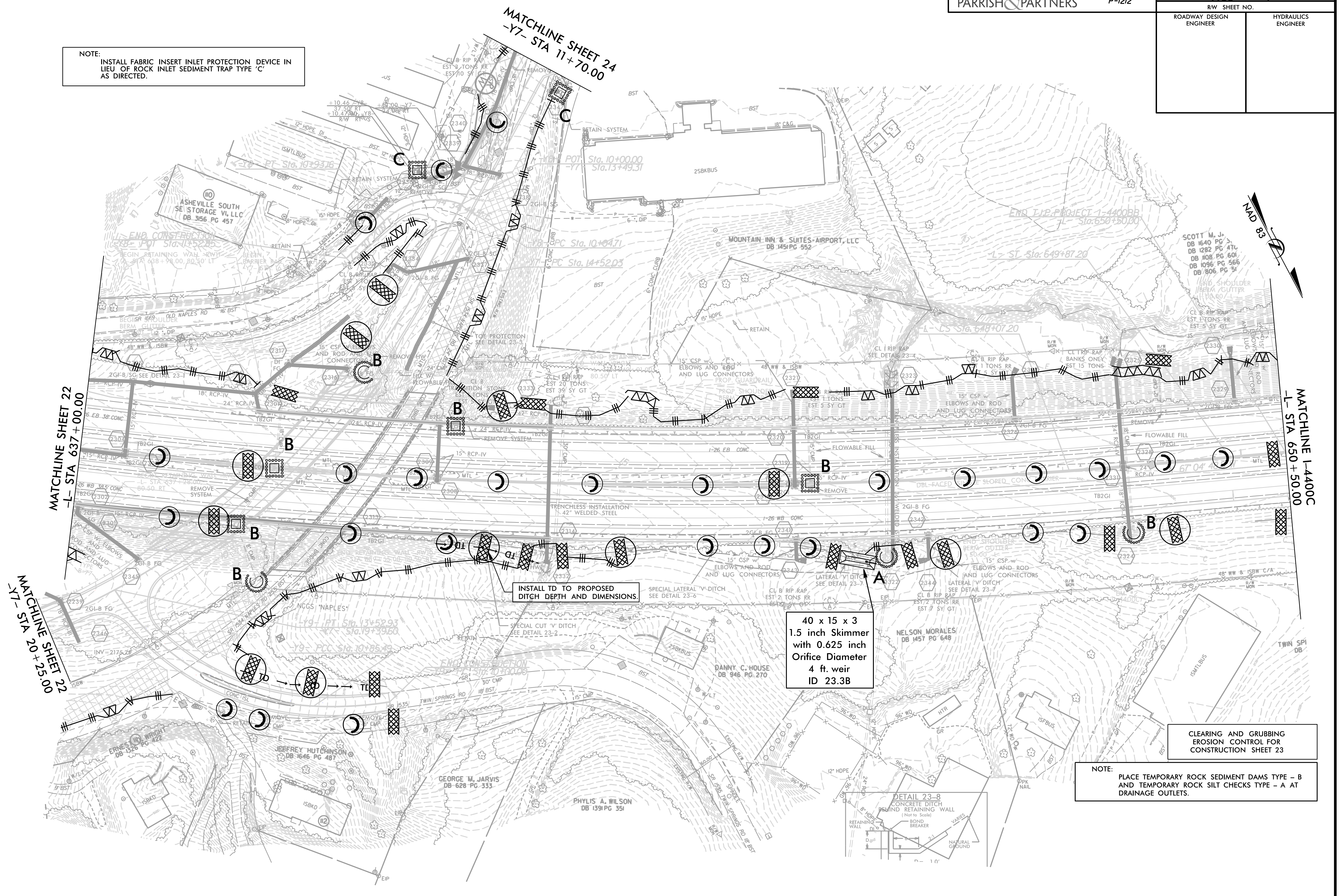
INSTALL PIPE(S) IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNTIL
AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT
PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



\$\$\$SYTIME\$\$\$
 \$\$\$USER\$\$\$
 \$\$\$SCALE\$\$\$
 \$\$\$ENVIRONMENT\$\$\$

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-23/CONST.23
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE:
INSTALL FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE 'C' AS DIRECTED.

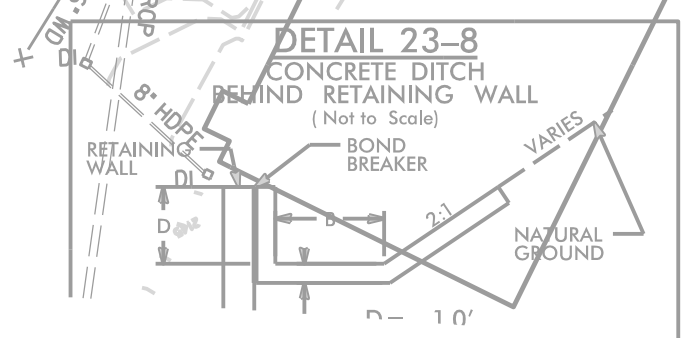


INSTALL TD TO PROPOSED DITCH DEPTH AND DIMENSIONS.

40 x 15 x 3
1.5 inch Skimmer
with 0.625 inch
Orifice Diameter
4 ft. weir
ID 23.3B

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 23

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

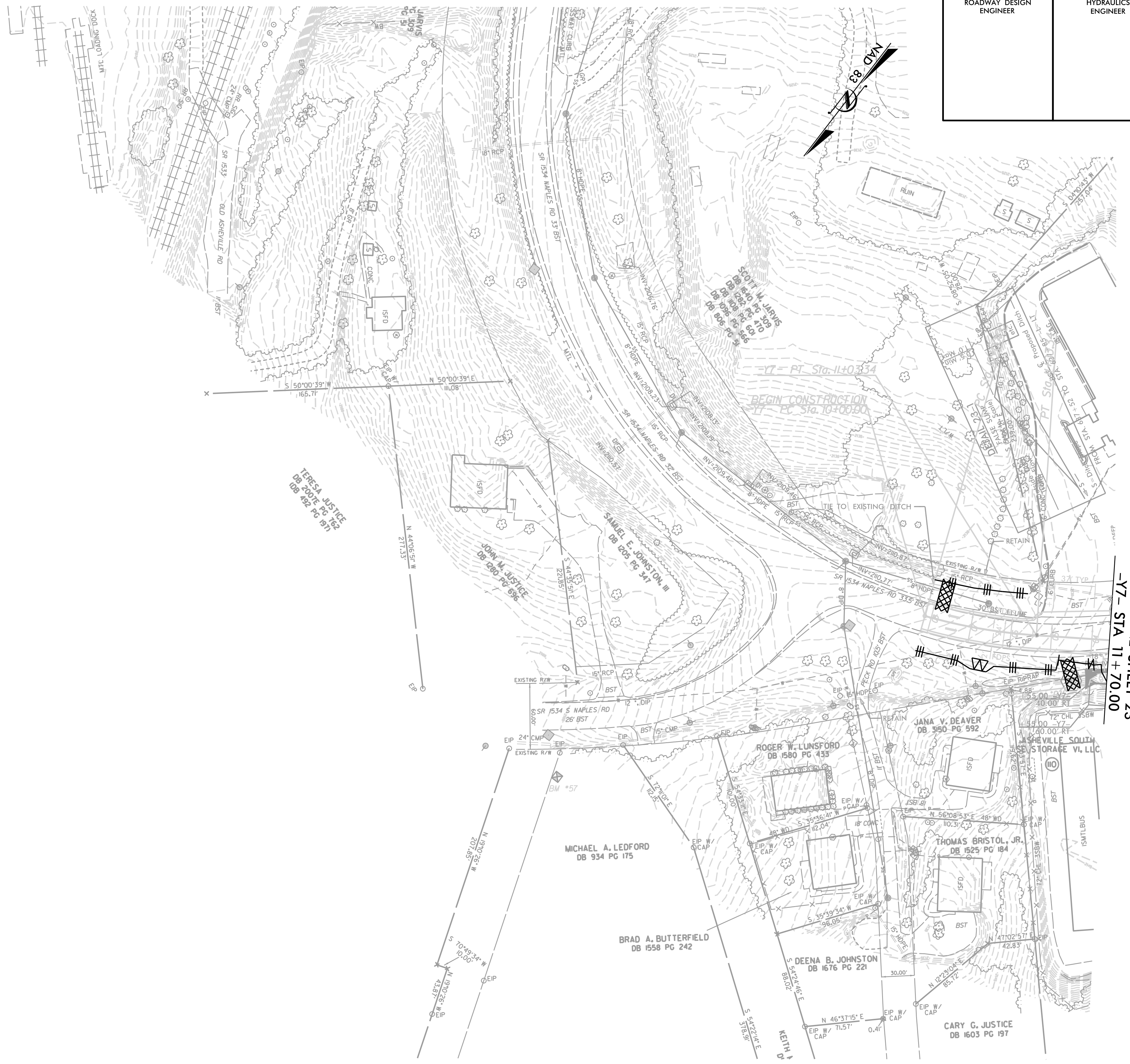


\$\$\$SYTIME\$\$\$
\$\$\$LDATE\$\$\$
\$\$\$USERNAME\$\$\$
\$\$\$SCALE\$\$\$
\$\$\$ENVIRONMENT\$\$\$

PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-24/CONST.24
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 24

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



MATCHLINE SHEET 23
-Y7- STA 11 + 70.00

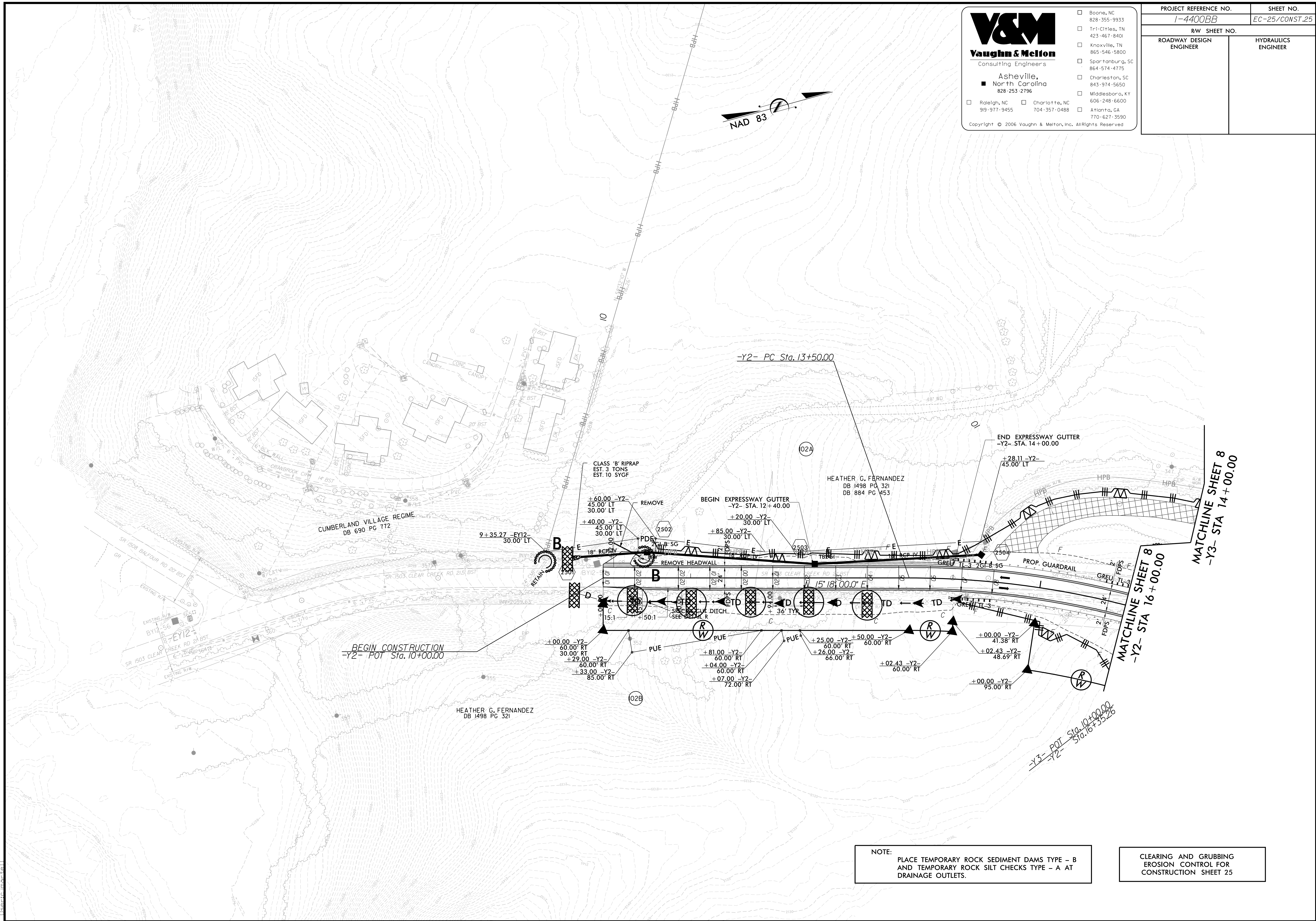
\$\$\$SYTIME\$\$\$
\$\$\$USERNAME\$\$\$
\$\$\$SCALE\$\$\$
\$\$\$ENVIRONMENT\$\$\$

F:\1\2019 9:55:40 AM
 V:\Asheville\Information\31834-01\1-4400BB\Erosion Control\Sheets\14400BB_Env_EC-20.dgn
 (Isoplot)

V&M
Vaughn & Melton
 Consulting Engineers
 Asheville,
 North Carolina
 828-253-2796

□ Boone, NC 828-355-9933
 □ Tri-Cities, TN 423-467-8401
 □ Knoxville, TN 865-546-5800
 □ Spartanburg, SC 864-574-4775
 □ Charleston, SC 843-974-5650
 □ Middlesboro, KY 606-248-6600
 □ Raleigh, NC 919-977-9455
 □ Charlotte, NC 704-357-0488
 □ Atlanta, GA 770-627-3590
 Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-25/CONST.25
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

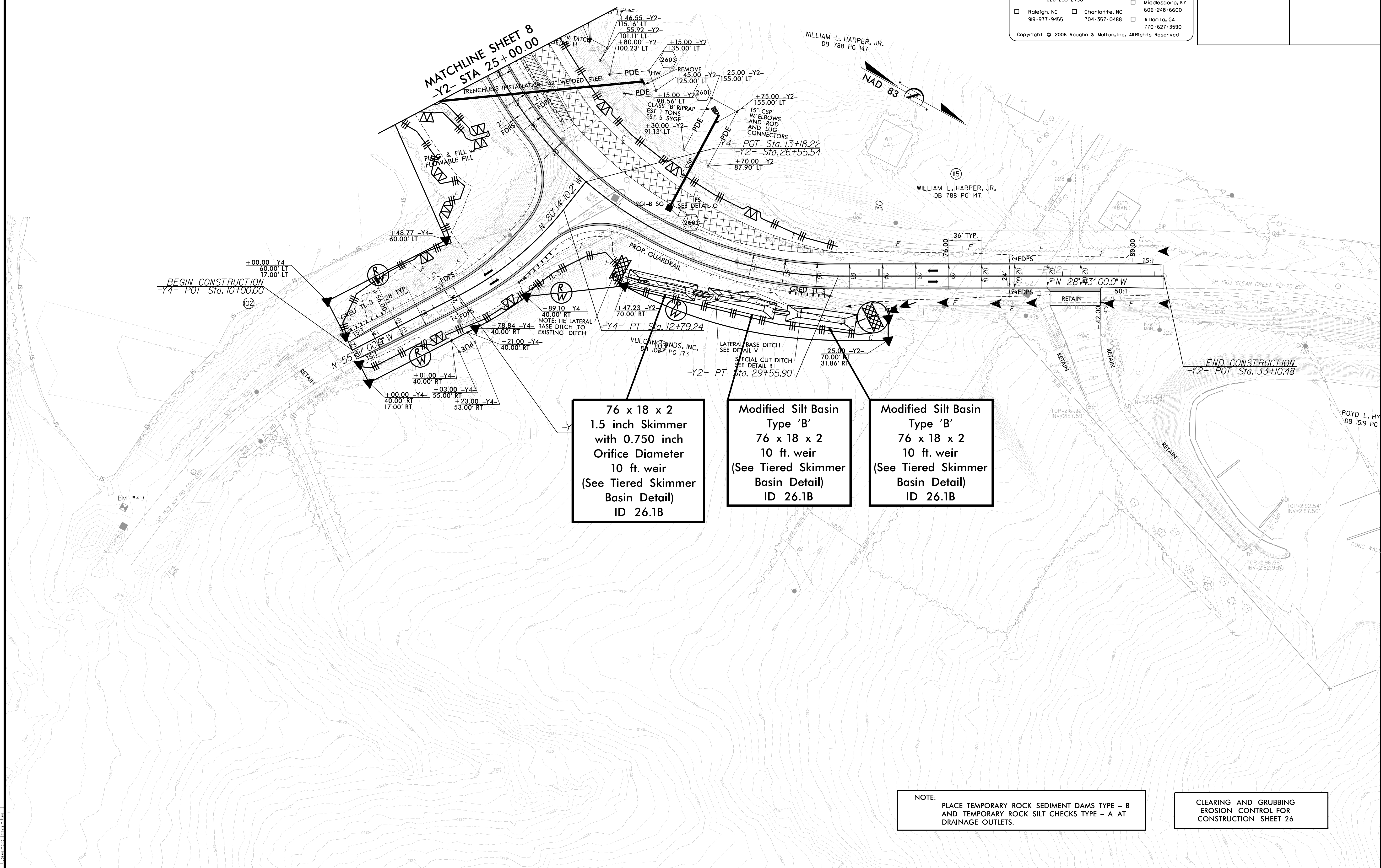


NOTE:
 PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 25

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590
 Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-26/CONST.26
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



76 x 18 x 2
 1.5 inch Skimmer
 with 0.750 inch
 Orifice Diameter
 10 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 26.1B

Modified Silt Basin
 Type 'B'
 76 x 18 x 2
 10 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 26.1B

Modified Silt Basin
 Type 'B'
 76 x 18 x 2
 10 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 26.1B

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

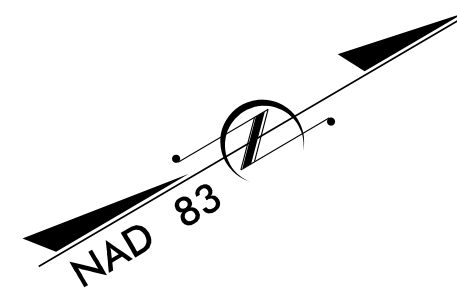
CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 26

6/7/2016 03:04 PM
 V:\Asheville\I-4400BB\Construction\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-21.dgn

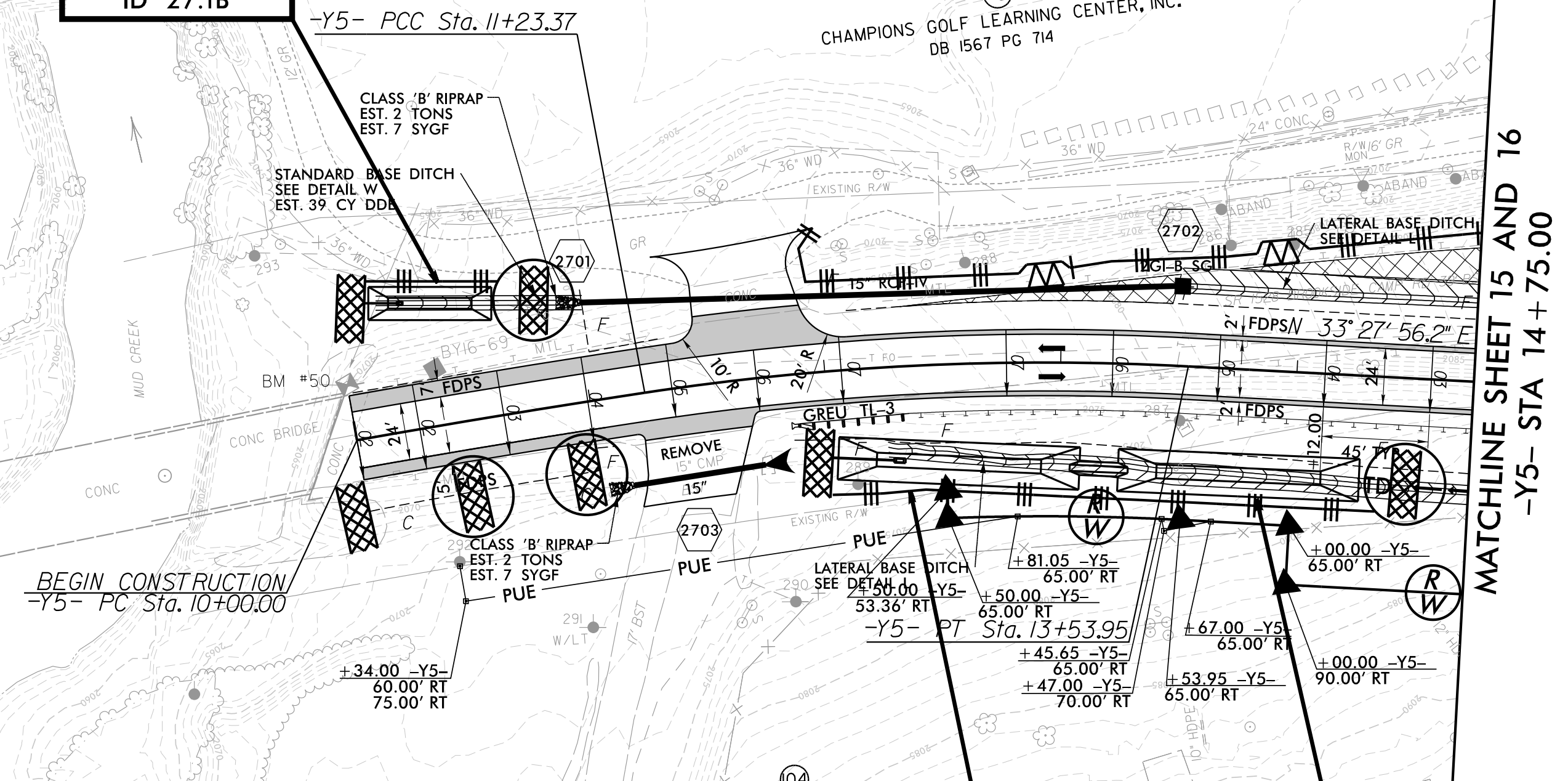
V&M
Vaughn & Melton
 Consulting Engineers
 Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590
 Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
1-4400BB	EC-27/CONST.27
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



52 x 14 x 3
 1.5 inch Skimmer
 with 0.625 inch
 Orifice Diameter
 4 ft. weir
 ID 27.1B




MATCHLINE SHEET 15 AND 16
 -Y5- STA 14+75.00

BEGIN CONSTRUCTION
 -Y5- PC Sta. 10+00.00

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

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 27

6/7/2016 9:40:14 PM
 V:\Asheville\Transportation\31834-01\1-4400BB\Erosion Control\Sheets\14400BB_Env_EC-22.dgn
 User: jmelton

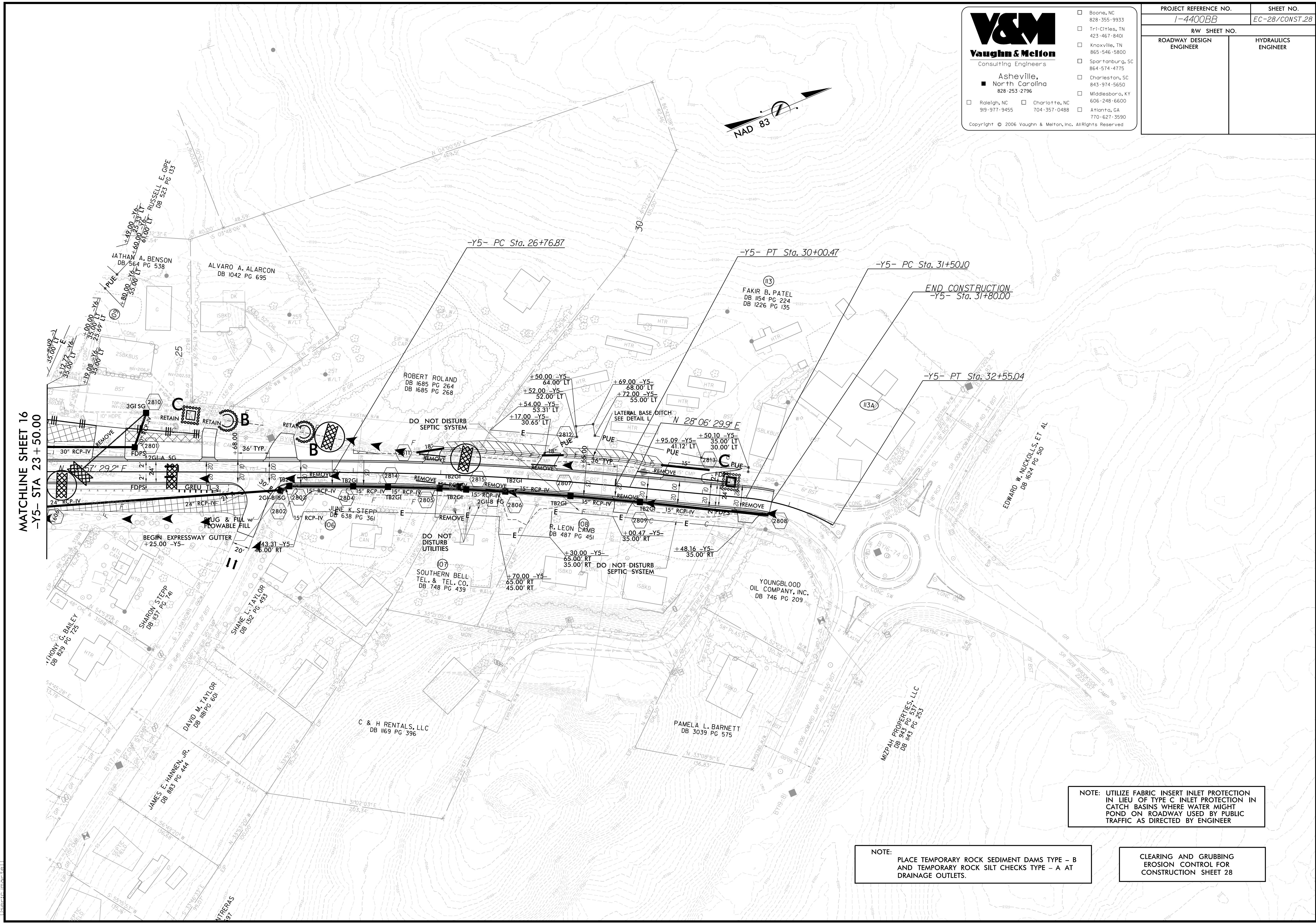


Asheville, North Carolina
828-253-2796

Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Raleigh, NC 919-977-9455
Charlotte, NC 704-357-0488
Atlanta, GA 770-627-3590

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
1-4400BB	EC-28/CONST.28
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



F:\31\2019 5:23:35 AM
 V:\Asheville\14400BB\14400BB-Erosion Control\Sheets\14400BB_Env_EC-23.dgn
 11/23/2019 11:23:35 AM

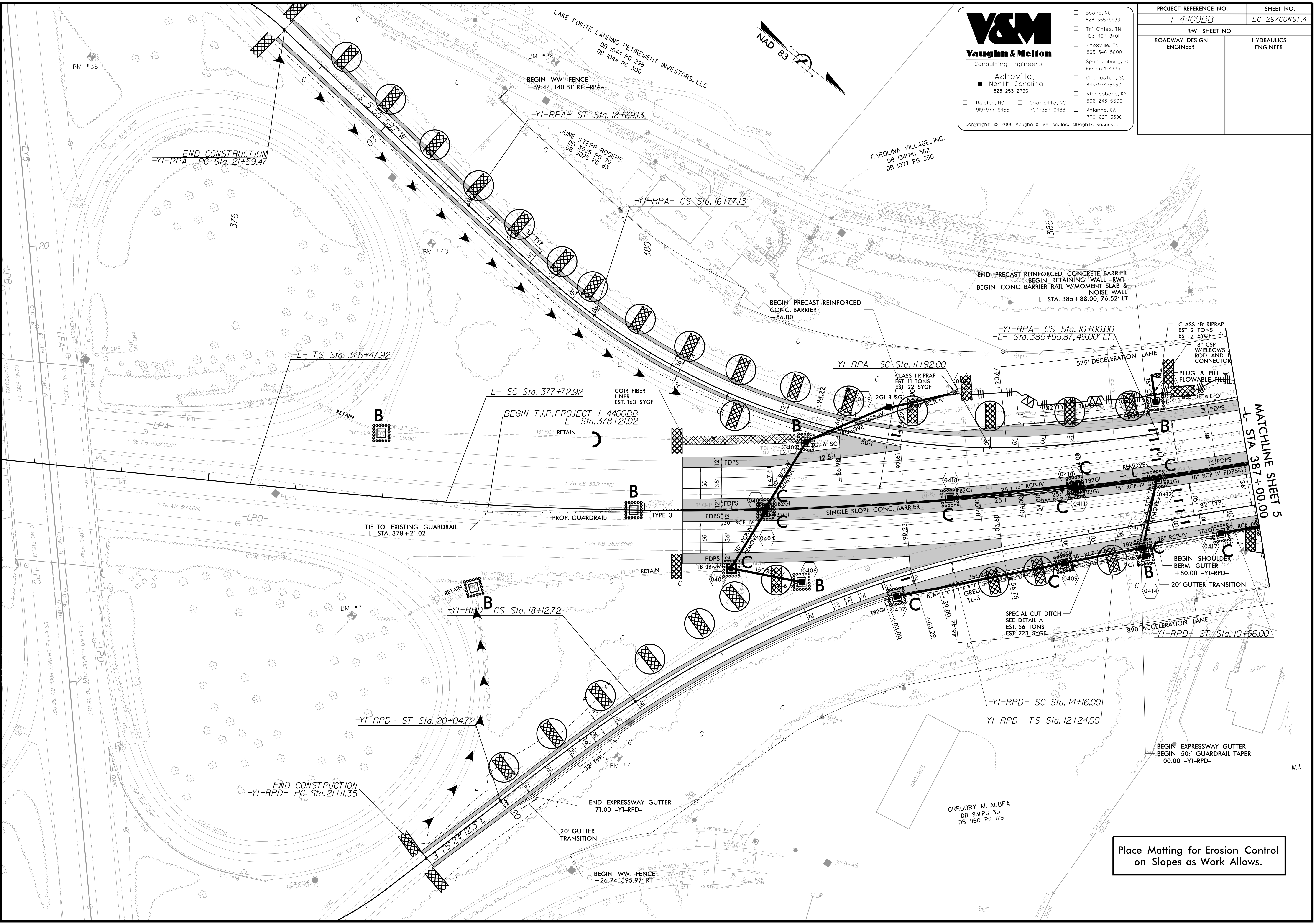
6/7/2019 11:24 PM
V:\Asheville\Transportation\31834-01\1-4400BB\Erosion Control\Sheets\14400BB_Env_EC-24.dgn

V&M
Vaughn & Melton
Consulting Engineers
Asheville,
North Carolina
828-253-2796

- Boone, NC 828-355-9933
- Tri-Cities, TN 423-467-8401
- Knoxville, TN 865-546-5800
- Spartanburg, SC 864-574-4775
- Charleston, SC 843-974-5650
- Middlesboro, KY 606-248-6600
- Raleigh, NC 919-977-9455
- Charlotte, NC 704-357-0488
- Atlanta, GA 770-627-3590

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
1-4400BB	EC-29/CONST.4
RW DESIGN NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control
on Slopes as Work Allows.

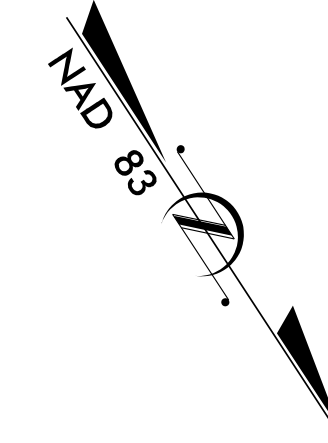
Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590

Asheville, North Carolina
 828-253-2796

Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488

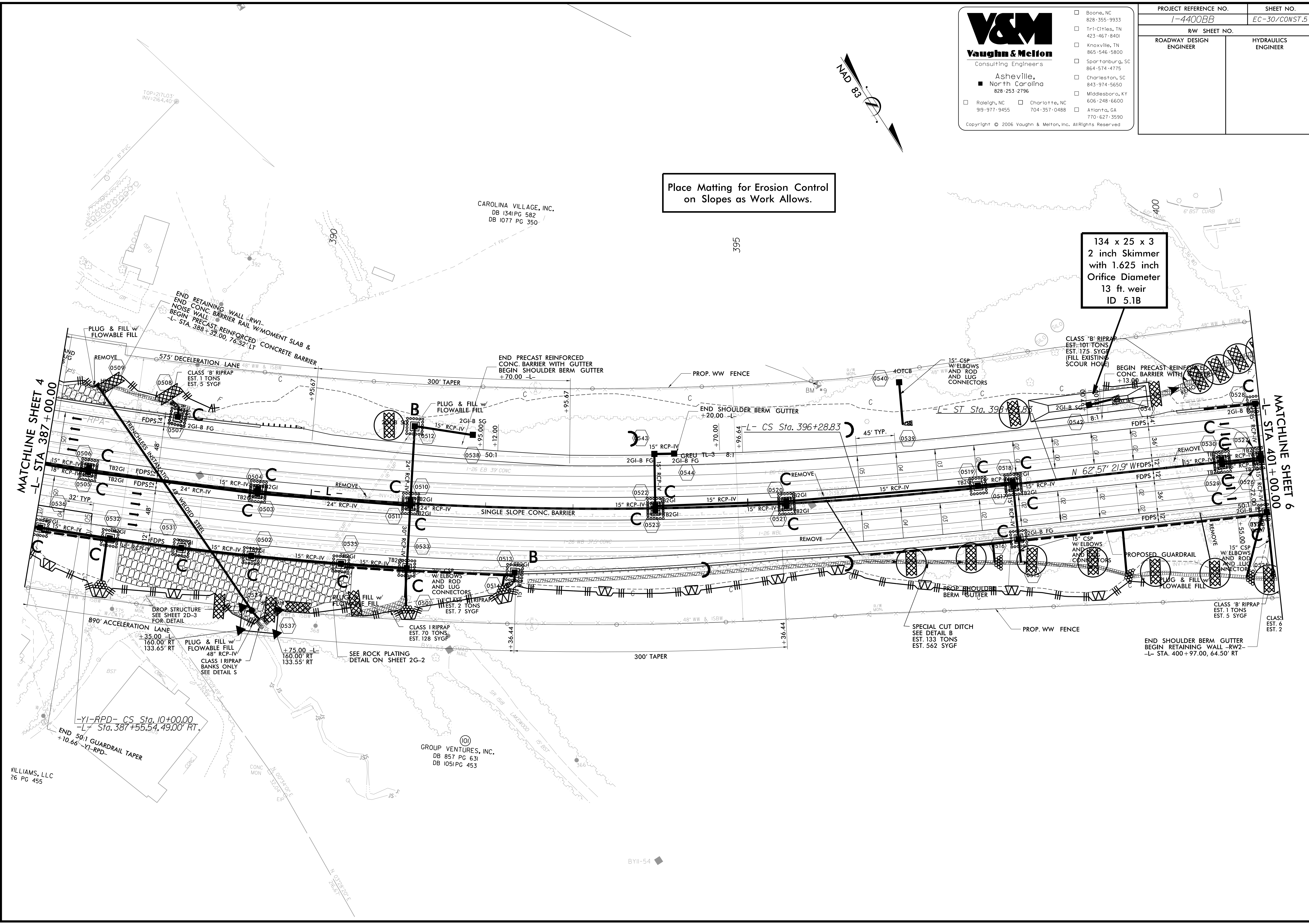
Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-30/CONST.5
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	



Place Matting for Erosion Control on Slopes as Work Allows.

134 x 25 x 3
 2 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 13 ft. weir
 ID 5.1B



MATCHLINE SHEET 4
 -L- STA 387+00.00

MATCHLINE SHEET 6
 -R- STA 401+00.00

6/11/2019 4:25:14 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\4400BB_Env_EC-25.dgn
 Williams, LLC
 26 PG 455

WILLIAMS, LLC
 26 PG 455

GROUP VENTURES, INC.
 DB 857 PG 631
 DB 1051 PG 453

BY11-54

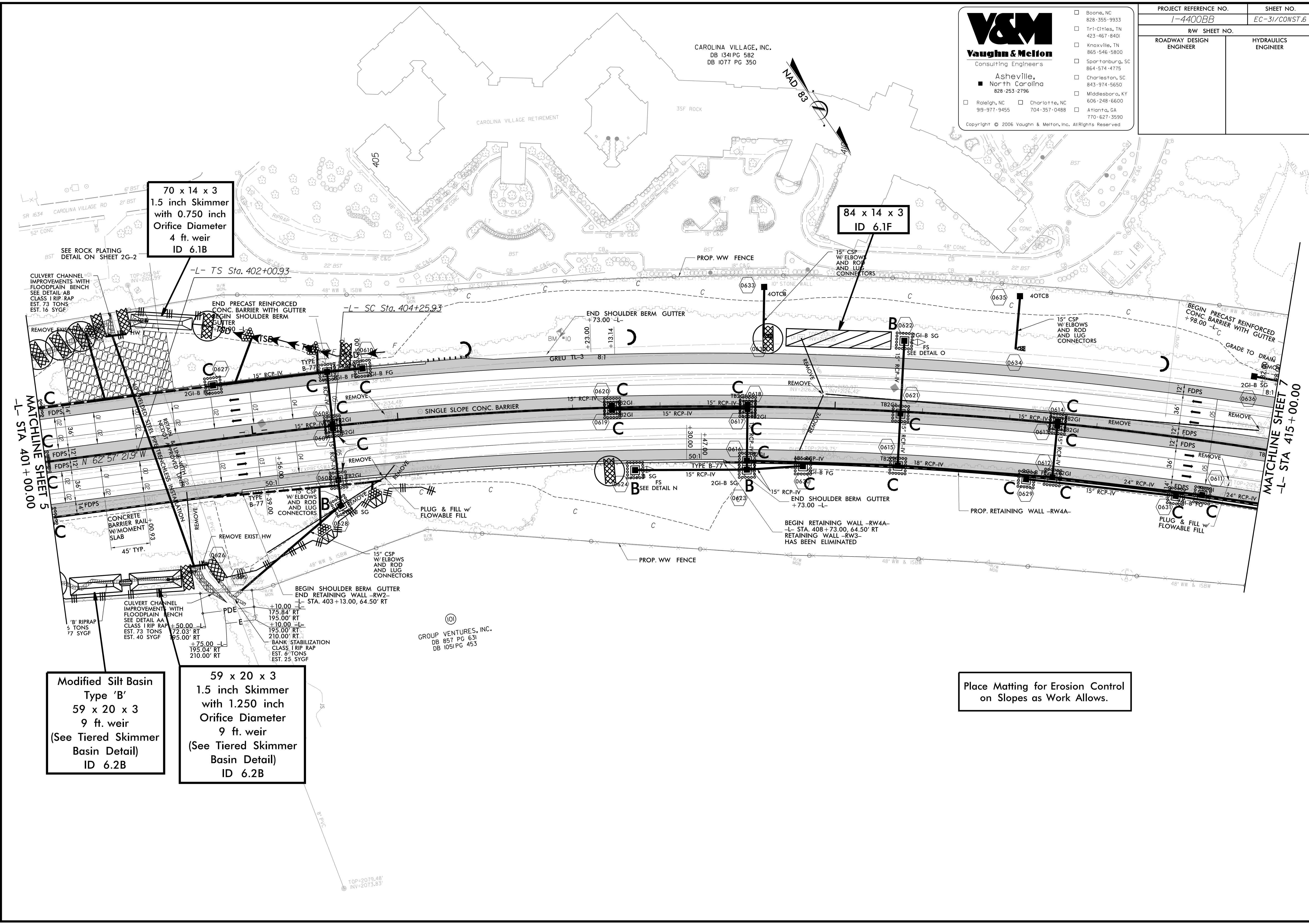
PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-31/CONST.6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

V&M
Vaughn & Melton
Consulting Engineers

Asheville, North Carolina
828-253-2796

Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Atlanta, GA 770-627-3590
Charlotte, NC 704-357-0488
Raleigh, NC 919-977-9455

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved



70 x 14 x 3
1.5 inch Skimmer
with 0.750 inch
Orifice Diameter
4 ft. weir
ID 6.1B

84 x 14 x 3
ID 6.1F

Modified Silt Basin
Type 'B'
59 x 20 x 3
9 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 6.2B

59 x 20 x 3
1.5 inch Skimmer
with 1.250 inch
Orifice Diameter
9 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 6.2B

Place Matting for Erosion Control
on Slopes as Work Allows.

6/1/2019 12:57:16 PM V:\Asheville\transportation\31834-01_I-4400BB\Erosion Control\Sheets\4400BB-Env-EC-26.dgn

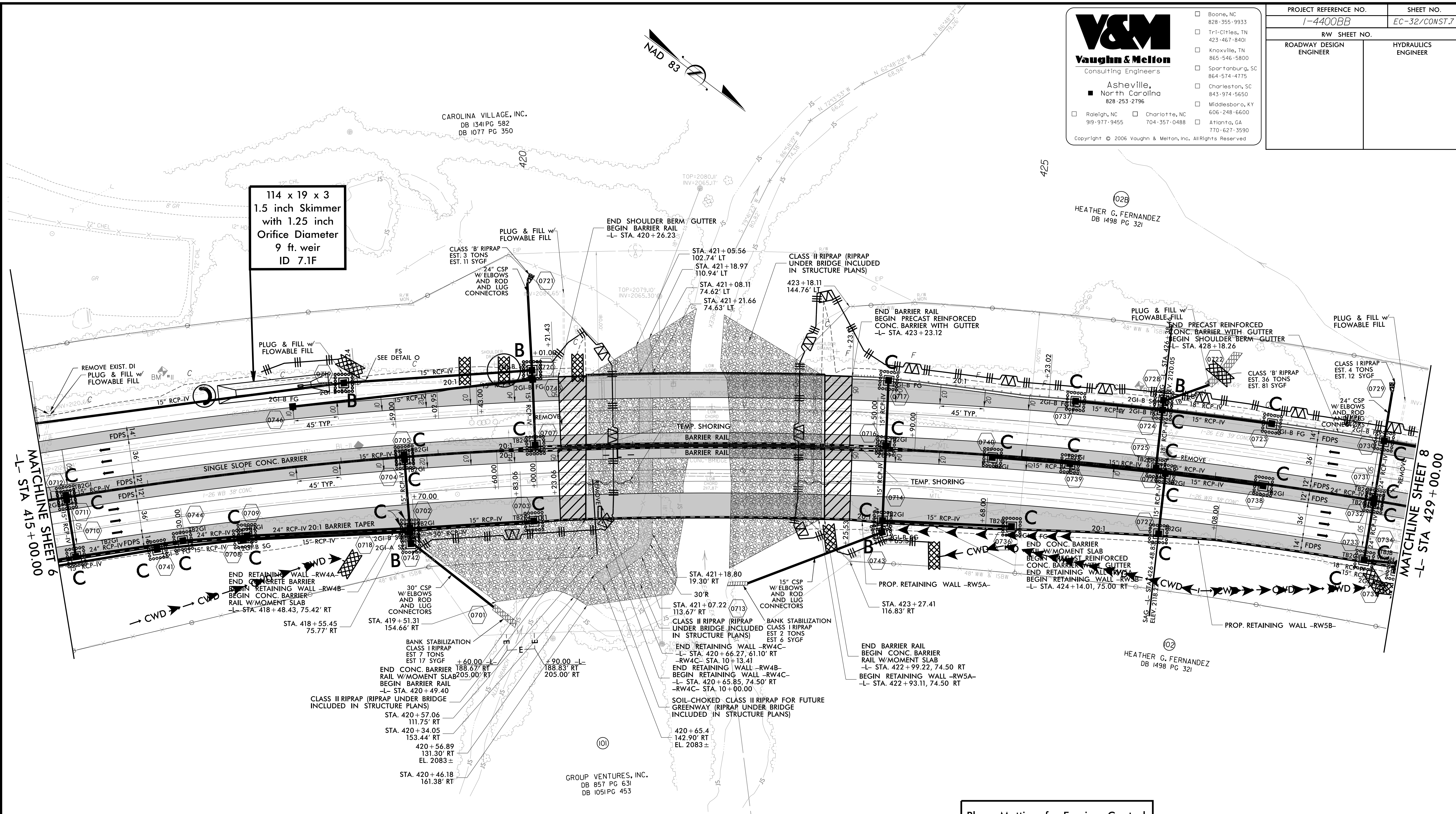
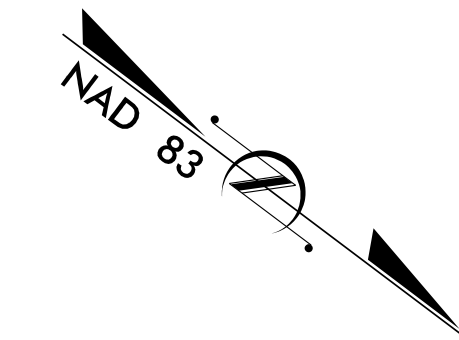
V&M
Vaughn & Melton
 Consulting Engineers

Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590

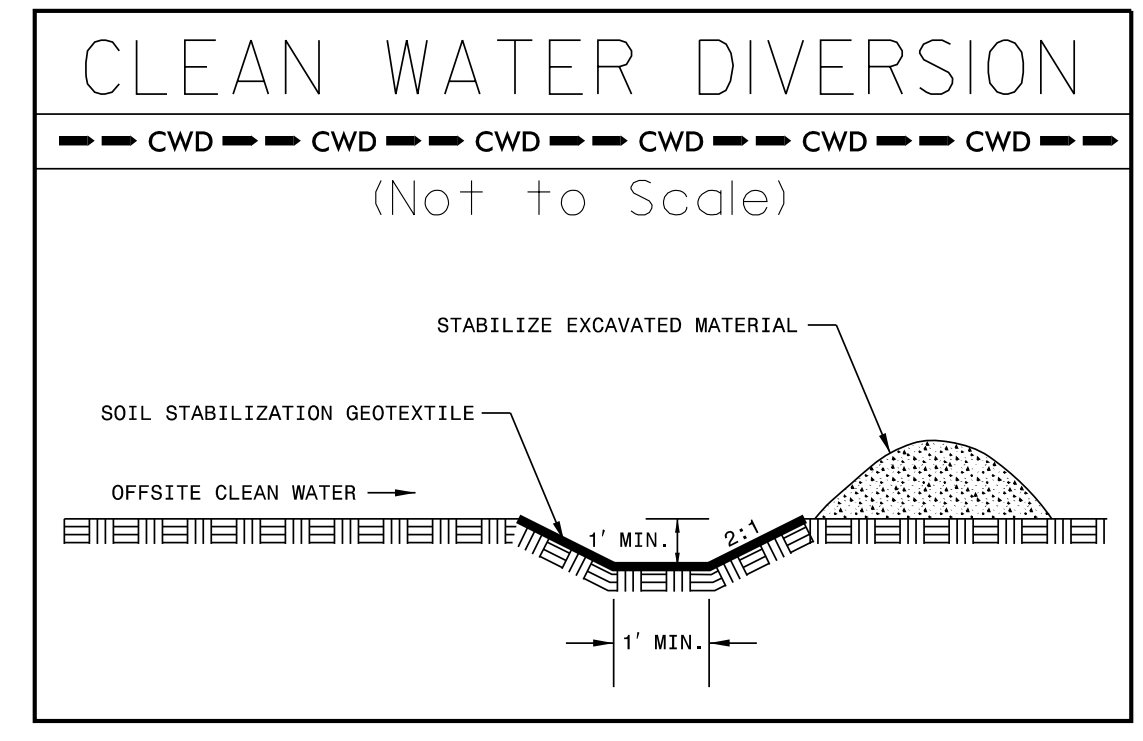
Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-32/CONST.7
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



114 x 19 x 3
 1.5 inch Skimmer
 with 1.25 inch
 Orifice Diameter
 9 ft. weir
 ID 7.1F

Place Matting for Erosion Control
 on Slopes as Work Allows.



5/31/2019 12:30:00 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-27.dgn
 User: jmelton

MATCHLINE SHEET 25
-Y3- STA 14+00.00

MATCHLINE SHEET 25
-Y2- STA 16+00.00

V&M
Vaughn & Melton
Consulting Engineers

Asheville,
North Carolina
828-253-2796

Boone, NC 828-355-9933
Tri-Cities, TN 423-467-8401
Knoxville, TN 865-546-5800
Spartanburg, SC 864-574-4775
Charleston, SC 843-974-5650
Middlesboro, KY 606-248-6600
Atlanta, GA 770-627-3590
Raleigh, NC 919-977-9455
Charlotte, NC 704-357-0488

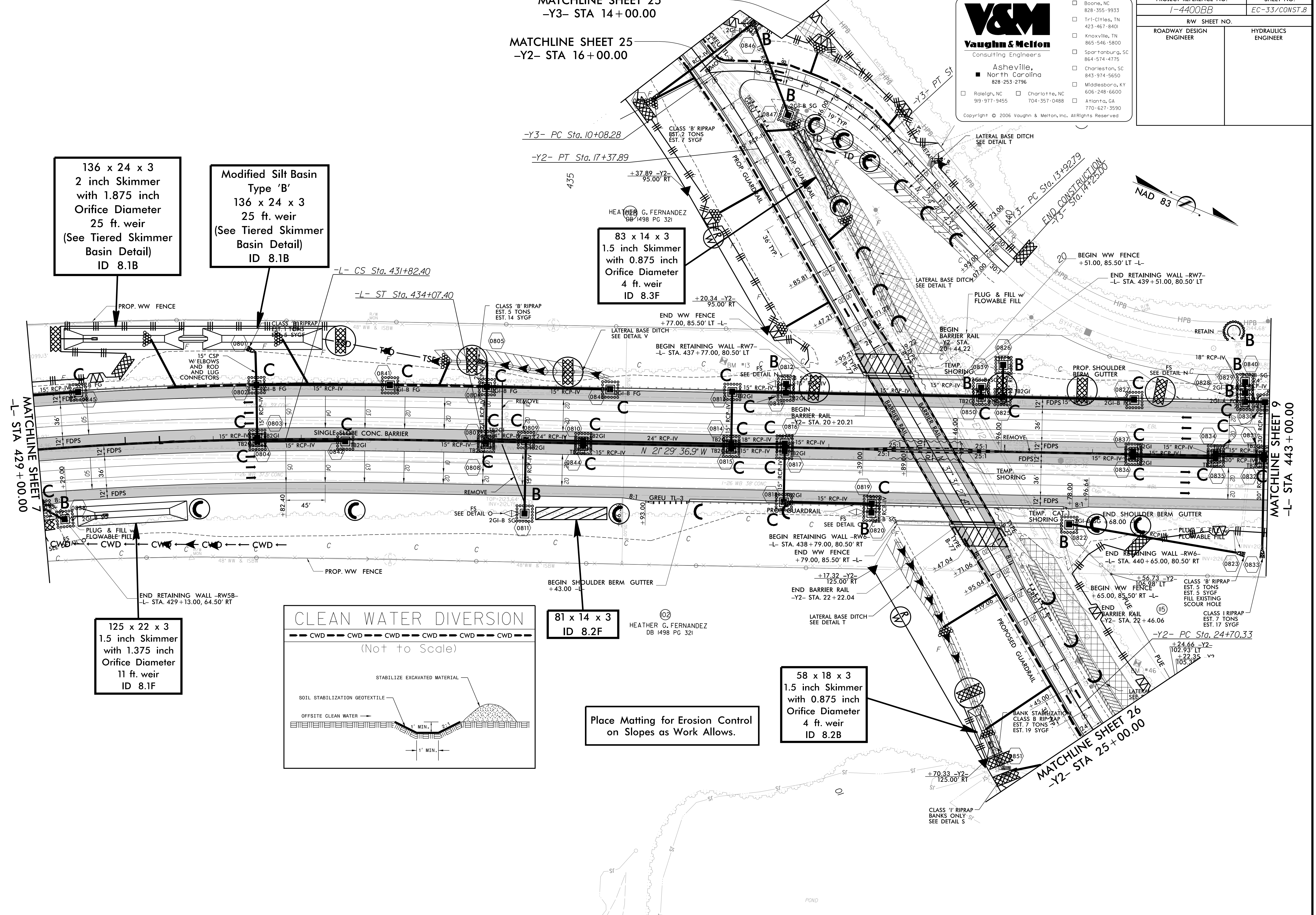
Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-33/CONST.B
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

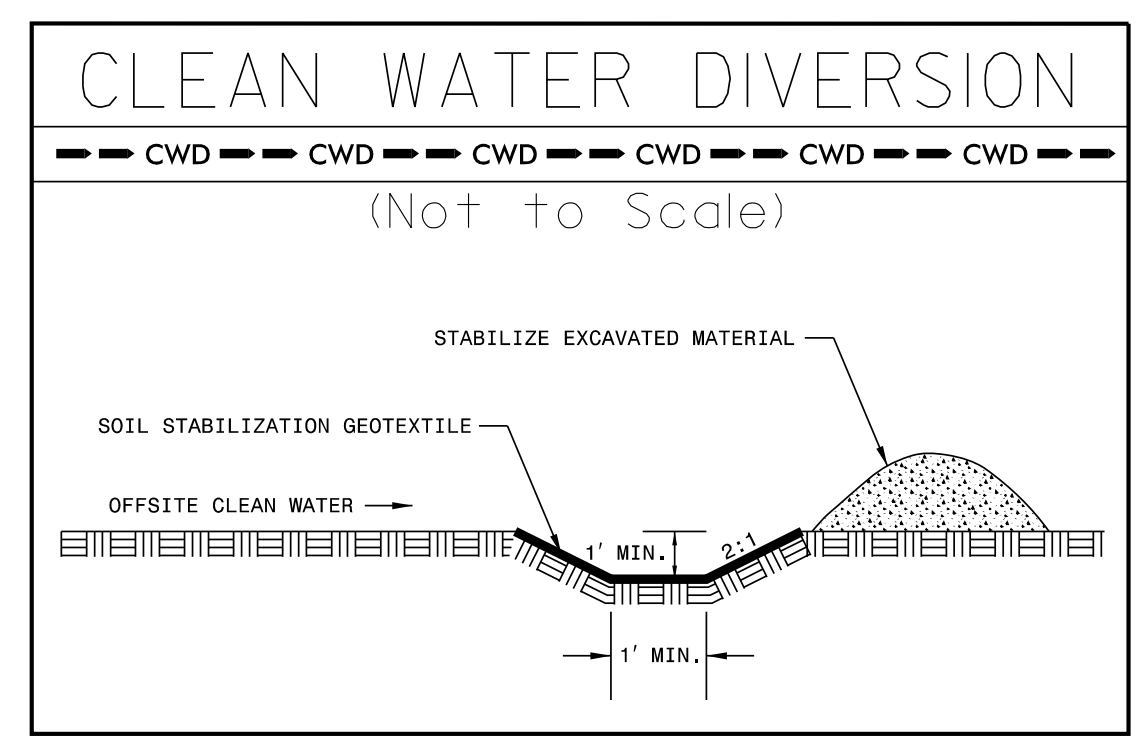
136 x 24 x 3
2 inch Skimmer
with 1.875 inch
Orifice Diameter
25 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.1B

Modified Silt Basin
Type 'B'
136 x 24 x 3
25 ft. weir
(See Tiered Skimmer
Basin Detail)
ID 8.1B

83 x 14 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 8.3F



125 x 22 x 3
1.5 inch Skimmer
with 1.375 inch
Orifice Diameter
11 ft. weir
ID 8.1F



81 x 14 x 3
ID 8.2F

Place Matting for Erosion Control
on Slopes as Work Allows.

58 x 18 x 3
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 8.2B

6/1/2019 12:26:54 PM V:\Asheville\transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-28.dgn

V&M
Vaughn & Melton
 Consulting Engineers

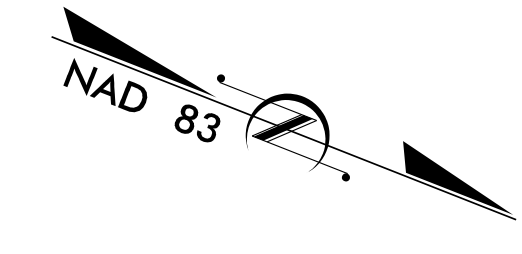
Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590
 Charlotte, NC 704-357-0488

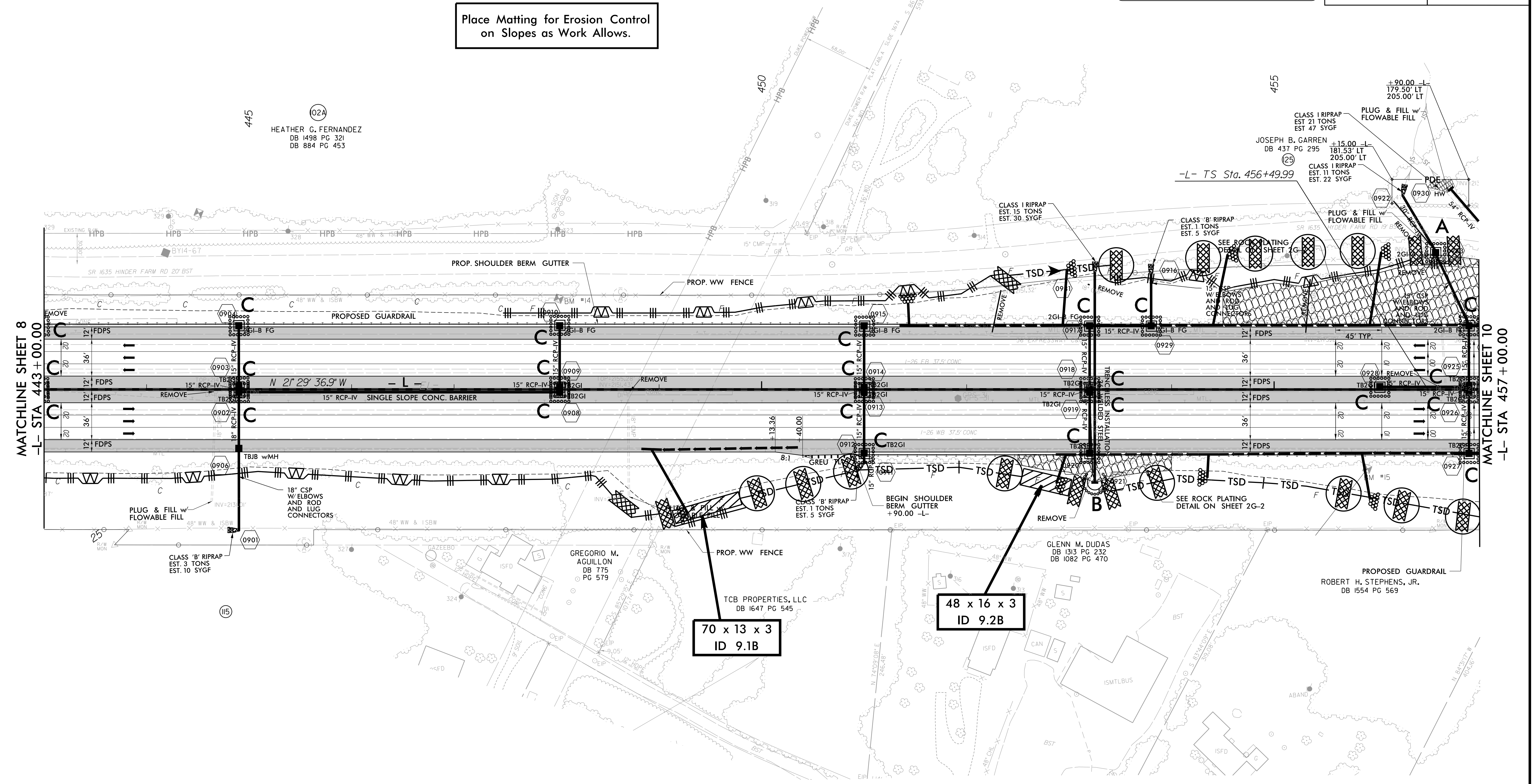
Raleigh, NC 919-977-9455

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO.	SHEET NO.
I-4400BB	EC-34/CONST.9
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slopes as Work Allows.



MATCHLINE SHEET 8
 -L- STA 443+00.00

MATCHLINE SHEET 10
 -L- STA 457+00.00

HEATHER C. FERNANDEZ
 DB 1498 PG 321
 DB 884 PG 453

JOSEPH B. GARREN
 DB 437 PG 295

GREGORIO M. AGUILLON
 DB 775 PG 579

TCB PROPERTIES, LLC
 DB 1647 PG 545

GLENN M. DUDAS
 DB 1313 PG 232
 DB 1082 PG 470

ROBERT H. STEPHENS, JR.
 DB 1554 PG 569

70 x 13 x 3
 ID 9.1B

48 x 16 x 3
 ID 9.2B

6/11/2019 12:28:14 PM
 V:\Asheville\Transportation\31834-01 I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-29.dgn

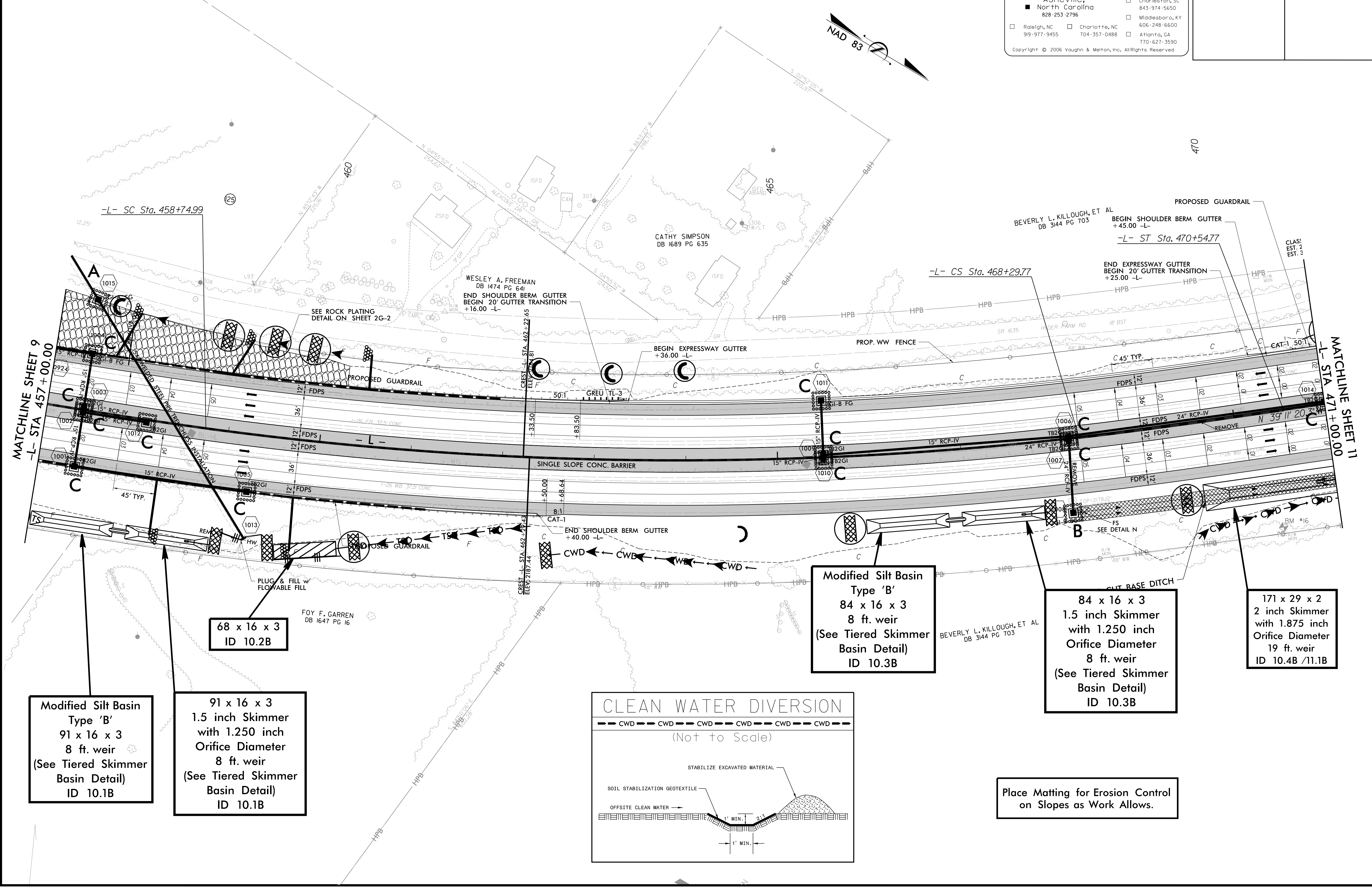
V&M
Vaughn & Melton
 Consulting Engineers
 Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590

Charlotte, NC 704-357-0488
 Raleigh, NC 919-977-9455

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-35/CONST.10
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Modified Silt Basin
 Type 'B'
 91 x 16 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 8 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 10.1B

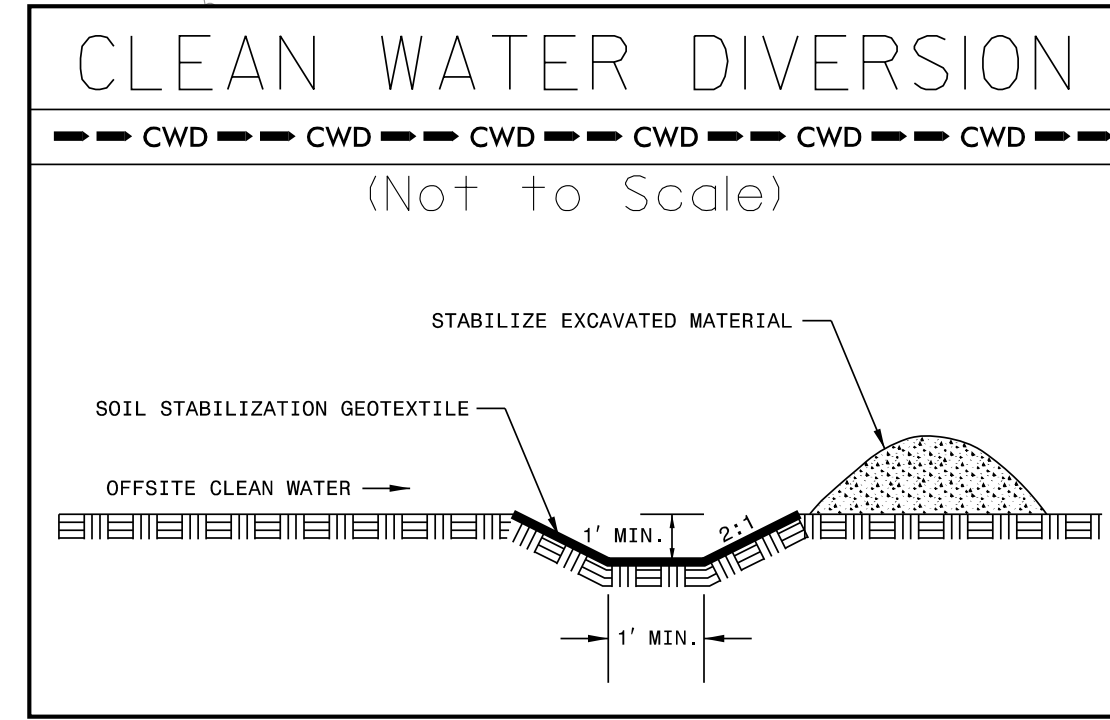
91 x 16 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 8 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 10.1B

68 x 16 x 3
 ID 10.2B

Modified Silt Basin
 Type 'B'
 84 x 16 x 3
 8 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 10.3B

84 x 16 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 8 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 10.3B

171 x 29 x 2
 2 inch Skimmer
 with 1.875 inch
 Orifice Diameter
 19 ft. weir
 ID 10.4B /11.1B



Place Matting for Erosion Control
 on Slopes as Work Allows.

6/1/2019 12:51:05 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-30.dgn
 User: cmc

V&M
Vaughn & Melton
 Consulting Engineers

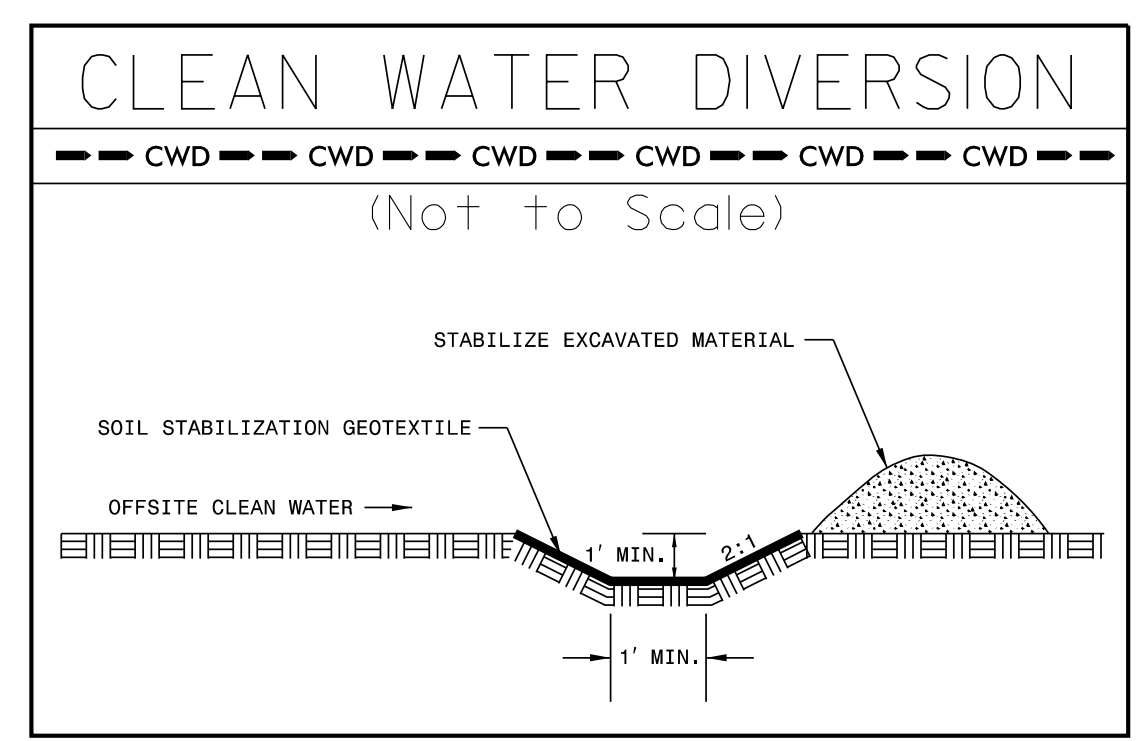
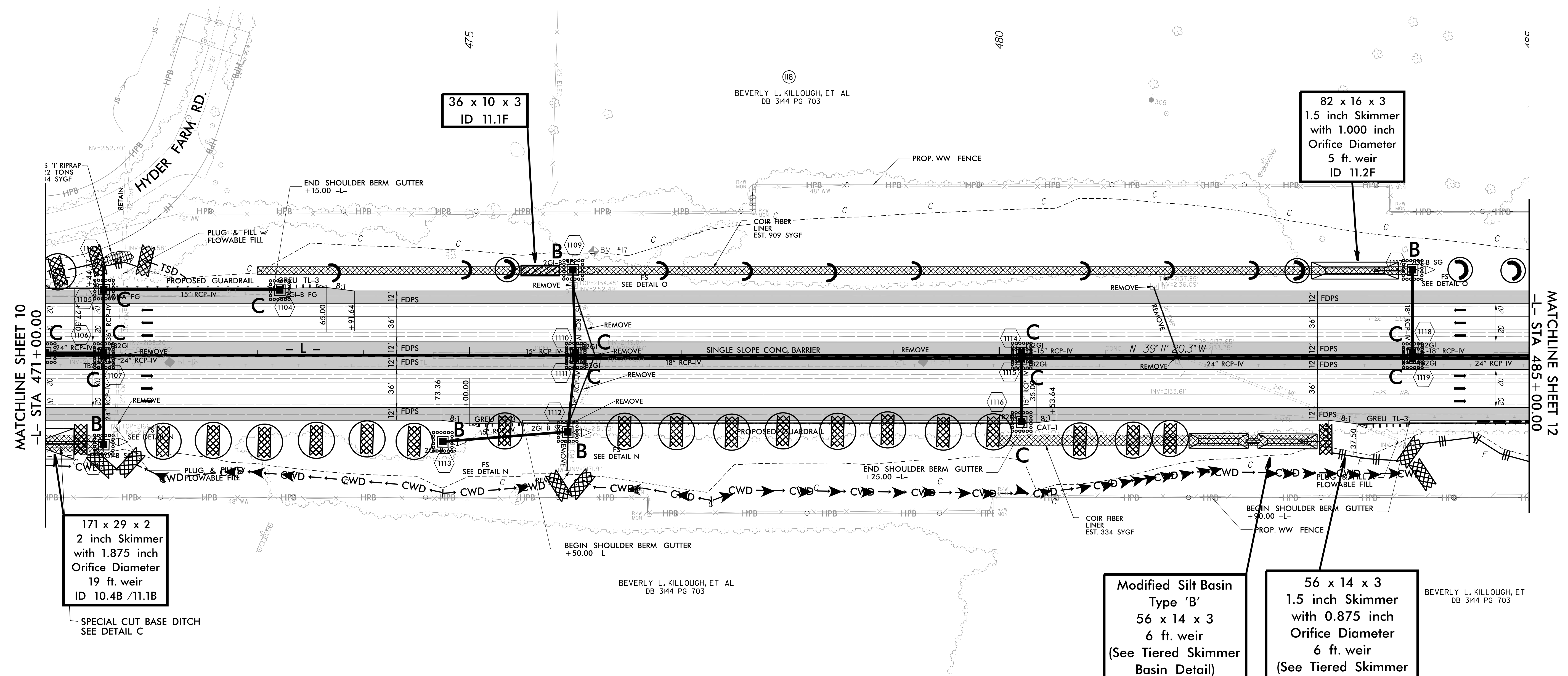
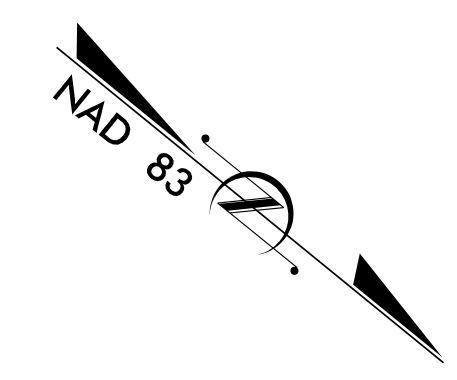
Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590

Charlotte, NC 704-357-0488

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-36/CONST.II
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



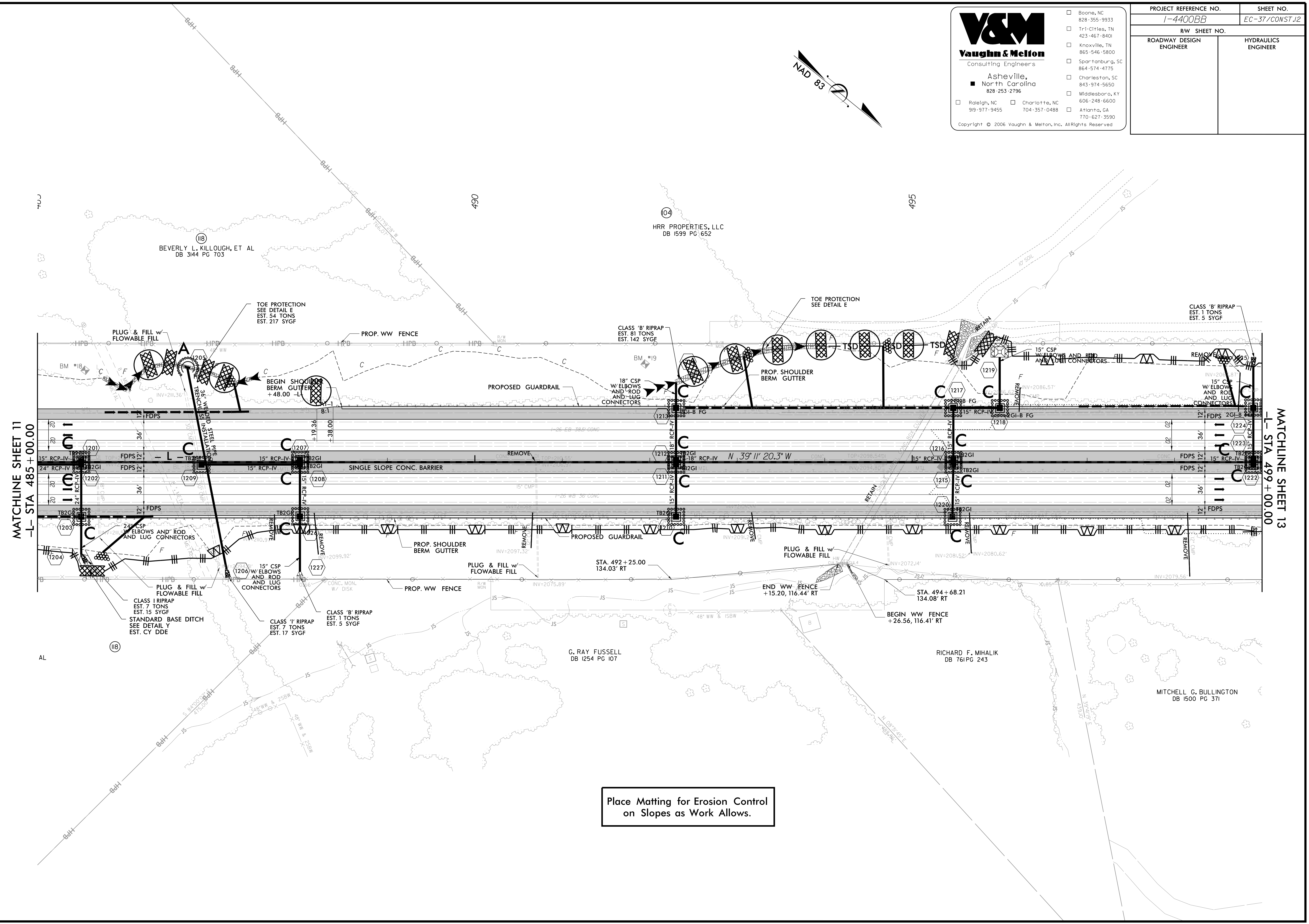
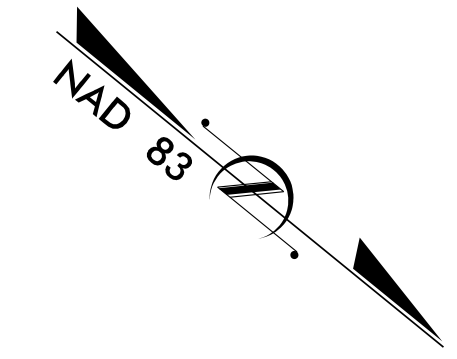
Place Matting for Erosion Control on Slopes as Work Allows.

6/18/2019 12:46:33 PM
 V:\Asheville\transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-31.dgn
 User: cmc

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590
 Asheville, North Carolina 828-253-2796

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-37/CONST.12
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



MATCHLINE SHEET 11
 -L- STA 485 + 00.00

MATCHLINE SHEET 13
 -L- STA 499 + 00.00

Place Matting for Erosion Control
 on Slopes as Work Allows.

6/11/2019 10:06:34 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-32.dgn
 User: cmc

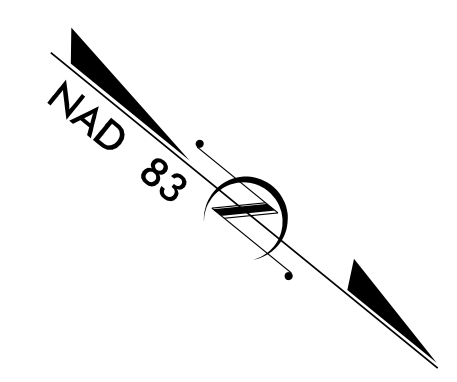
Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590

Asheville, North Carolina
 828-253-2796

Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488

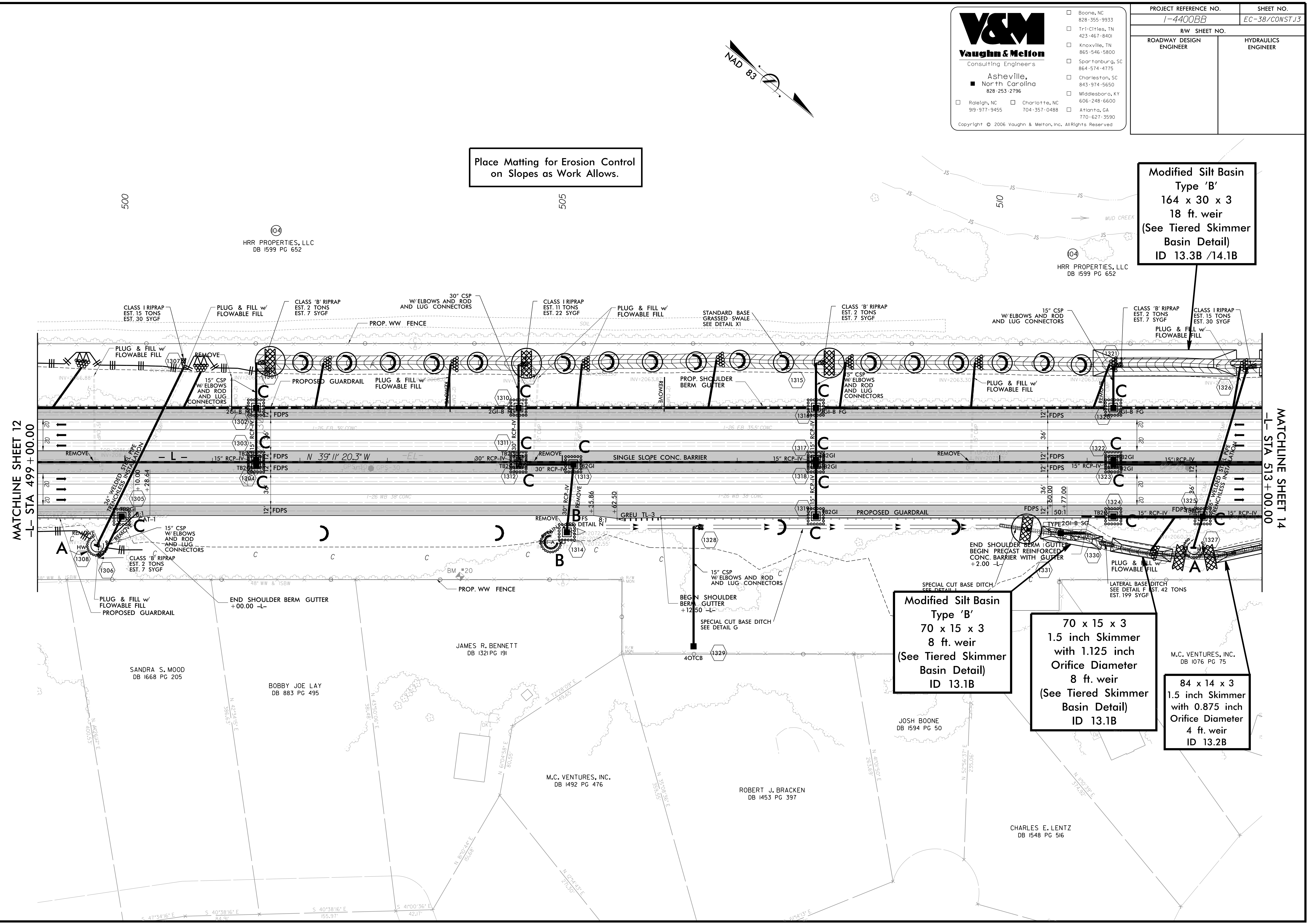
Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-38/CONST.13
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slopes as Work Allows.

Modified Silt Basin Type 'B'
 164 x 30 x 3
 18 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 13.3B /14.1B



Modified Silt Basin Type 'B'
 70 x 15 x 3
 8 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 13.1B

70 x 15 x 3
 1.5 inch Skimmer with 1.125 inch Orifice Diameter
 8 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 13.1B

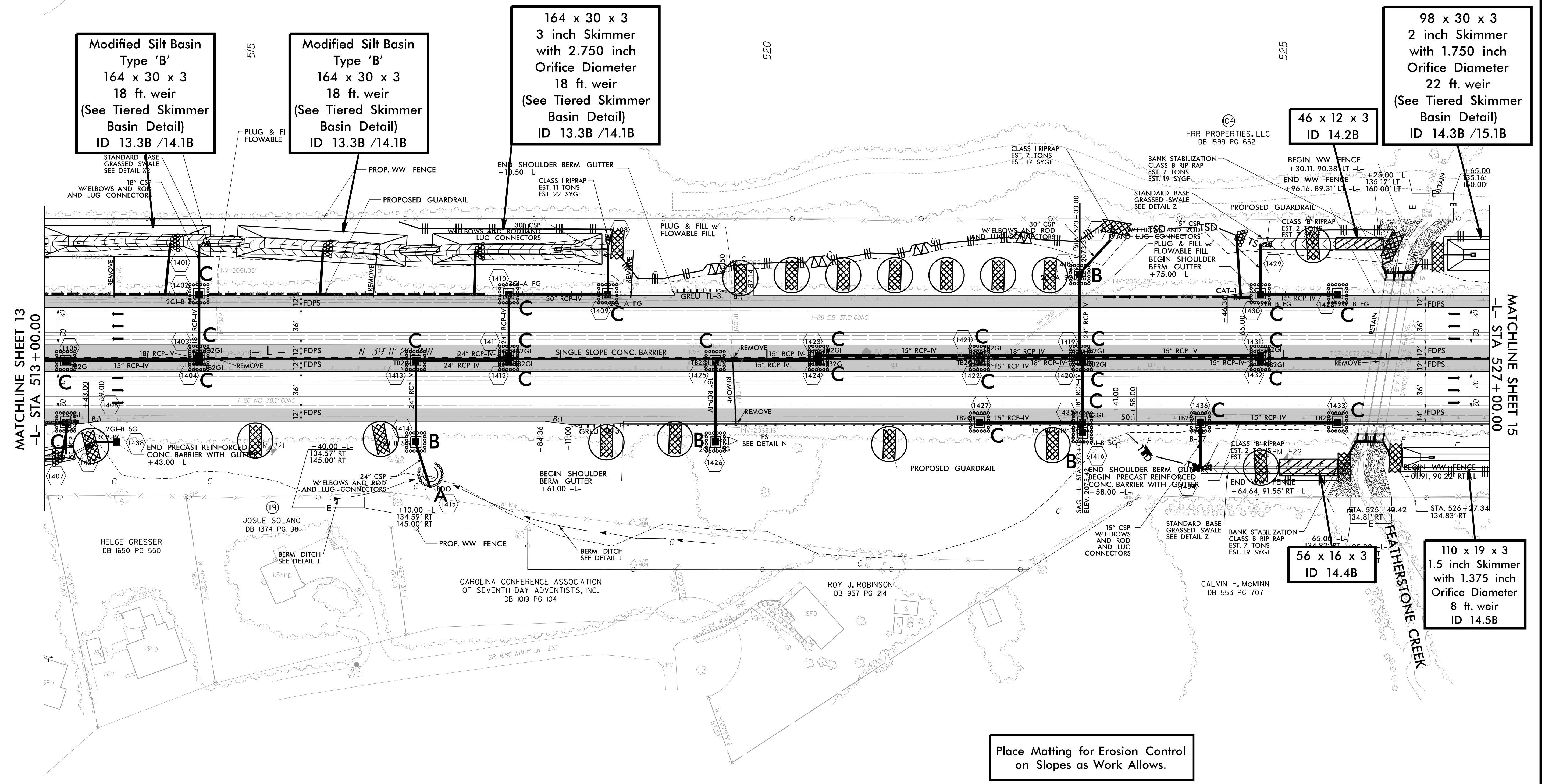
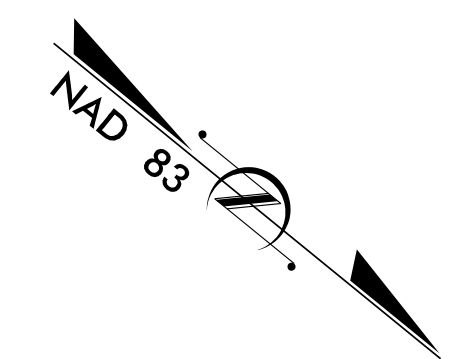
84 x 14 x 3
 1.5 inch Skimmer with 0.875 inch Orifice Diameter
 4 ft. weir
 ID 13.2B

6/19/2019 9:32:09 AM V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-33.dgn

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Asheville, North Carolina 828-253-2796
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590
 Raleigh, NC 919-977-9455

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-39/CONST.14
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slopes as Work Allows.

6/12/2019 3:16:30 PM V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-34.dgn

V&M
Vaughn & Melton
Consulting Engineers

Asheville, North Carolina
828-253-2796

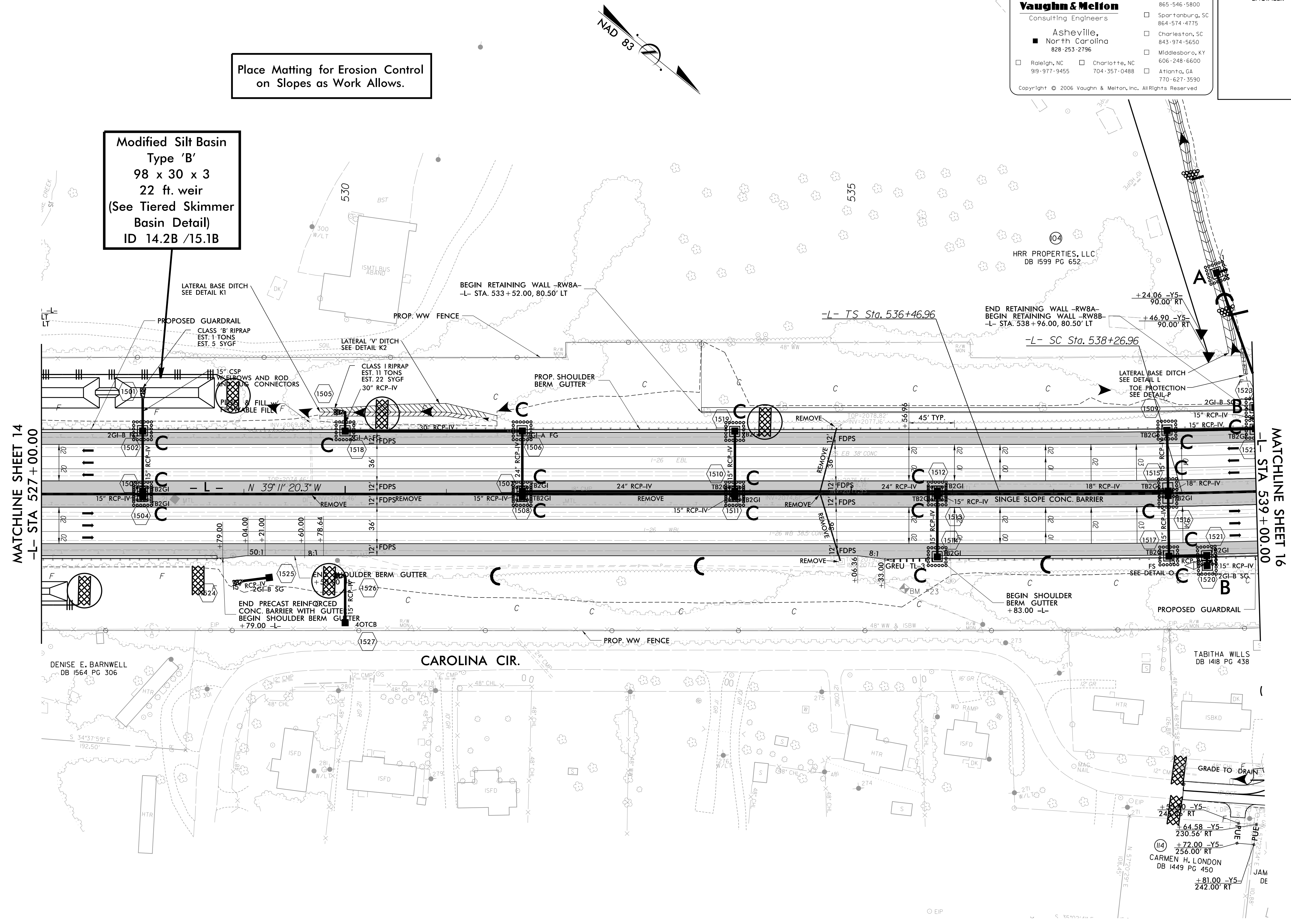
- Boone, NC 828-355-9933
- Tri-Cities, TN 423-467-8401
- Knoxville, TN 865-546-5800
- Spartanburg, SC 864-574-4775
- Charleston, SC 843-974-5650
- Middlesboro, KY 606-248-6600
- Raleigh, NC 919-977-9455
- Charlotte, NC 704-357-0488
- Atlanta, GA 770-627-3590

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved.

PROJECT REFERENCE NO. 1-4400BB	SHEET NO. EC-40/CONST.15
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Place Matting for Erosion Control on Slopes as Work Allows.

Modified Silt Basin
Type 'B'
98 x 30 x 3
22 ft. weir
(See Tiered Skimmer Basin Detail)
ID 14.2B /15.1B



6/9/2016 1:34:37 PM
 V:\Asheville\transportation\14400BB\Erosion_Control\Sheets\14400BB_Env_EC-35.dgn
 (User: jmelton)

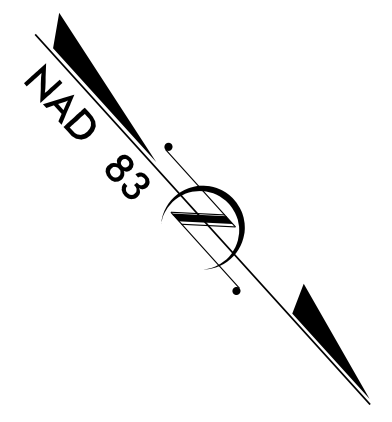
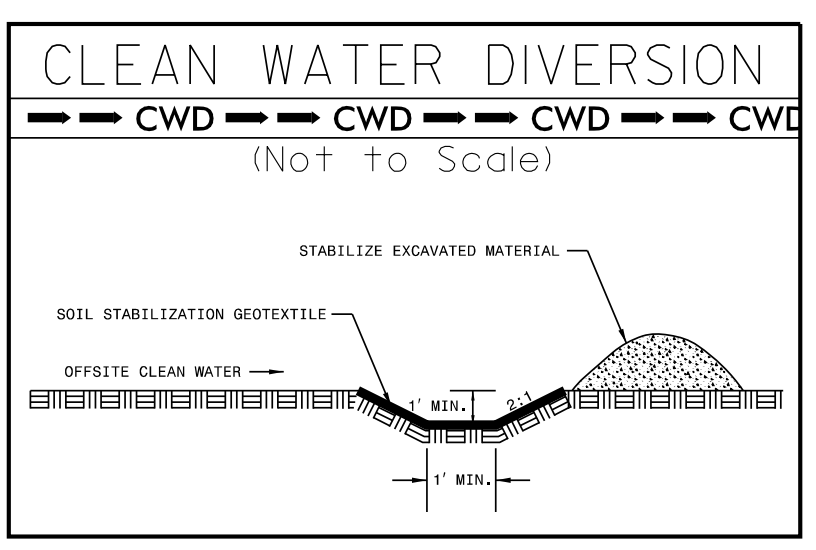
V&M
Vaughn & Melton
 Consulting Engineers
 Asheville, North Carolina
 828-253-2796

Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Atlanta, GA 770-627-3590

Raleigh, NC 919-977-9455
 Charlotte, NC 704-357-0488

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-41/CONST.16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

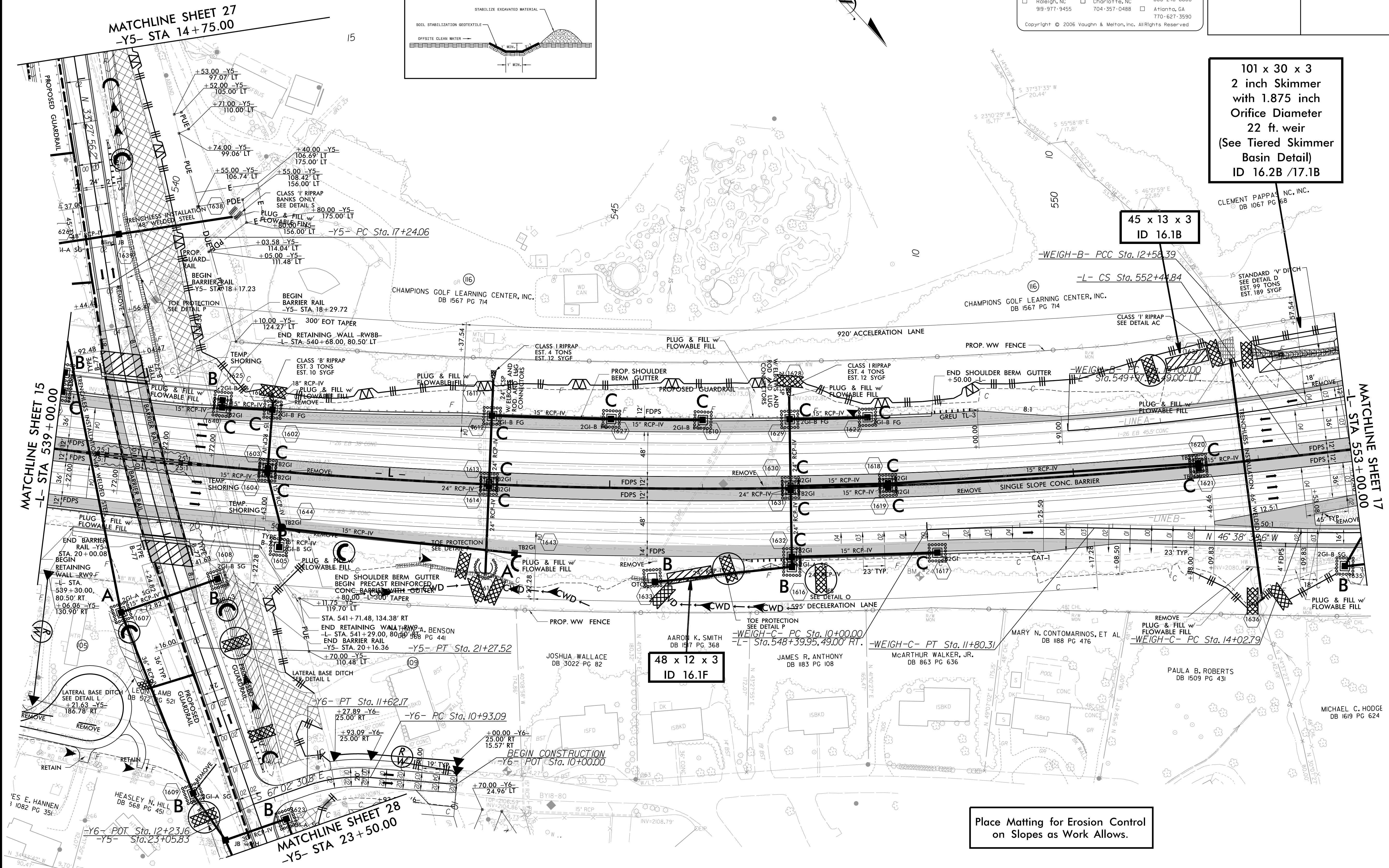


101 x 30 x 3
 2 inch Skimmer
 with 1.875 inch
 Orifice Diameter
 22 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 16.2B /17.1B

45 x 13 x 3
 ID 16.1B

48 x 12 x 3
 ID 16.1F

Place Matting for Erosion Control
 on Slopes as Work Allows.



6/11/2019 1:33:26 PM
 V:\Asheville\Transportation\31834-01_I-4400BB-Env.EC-36.dgn
 I:\Projects\31834-01_I-4400BB-Env.EC-36.dgn

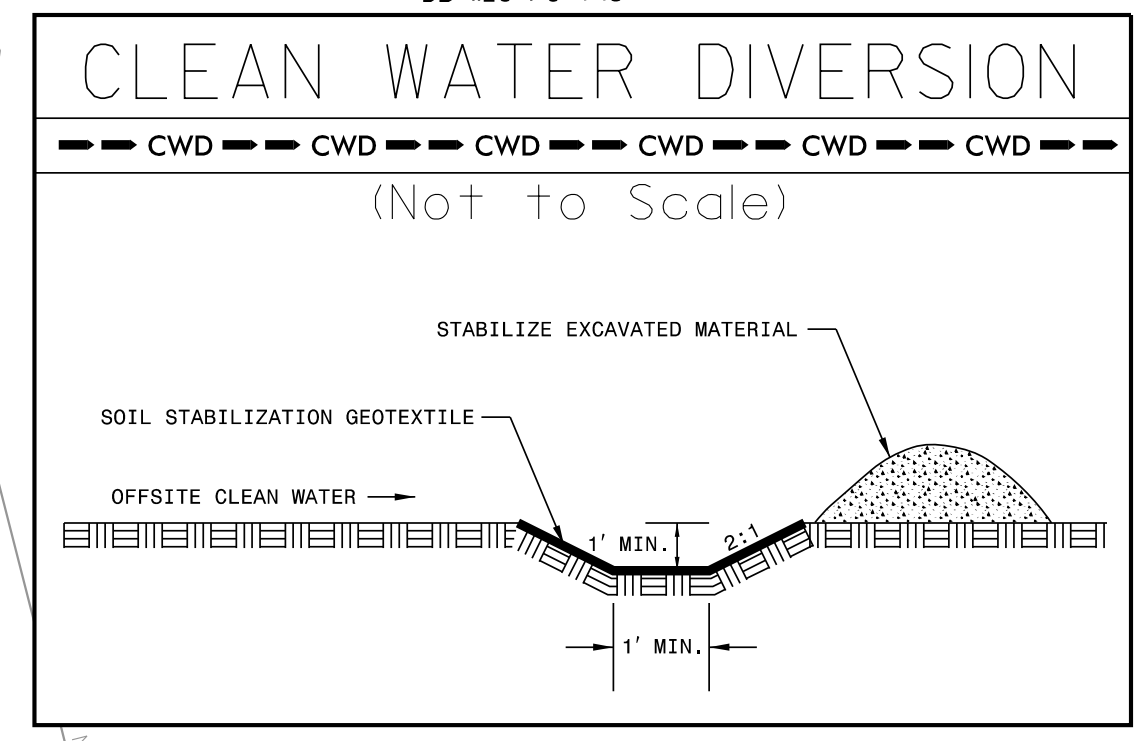
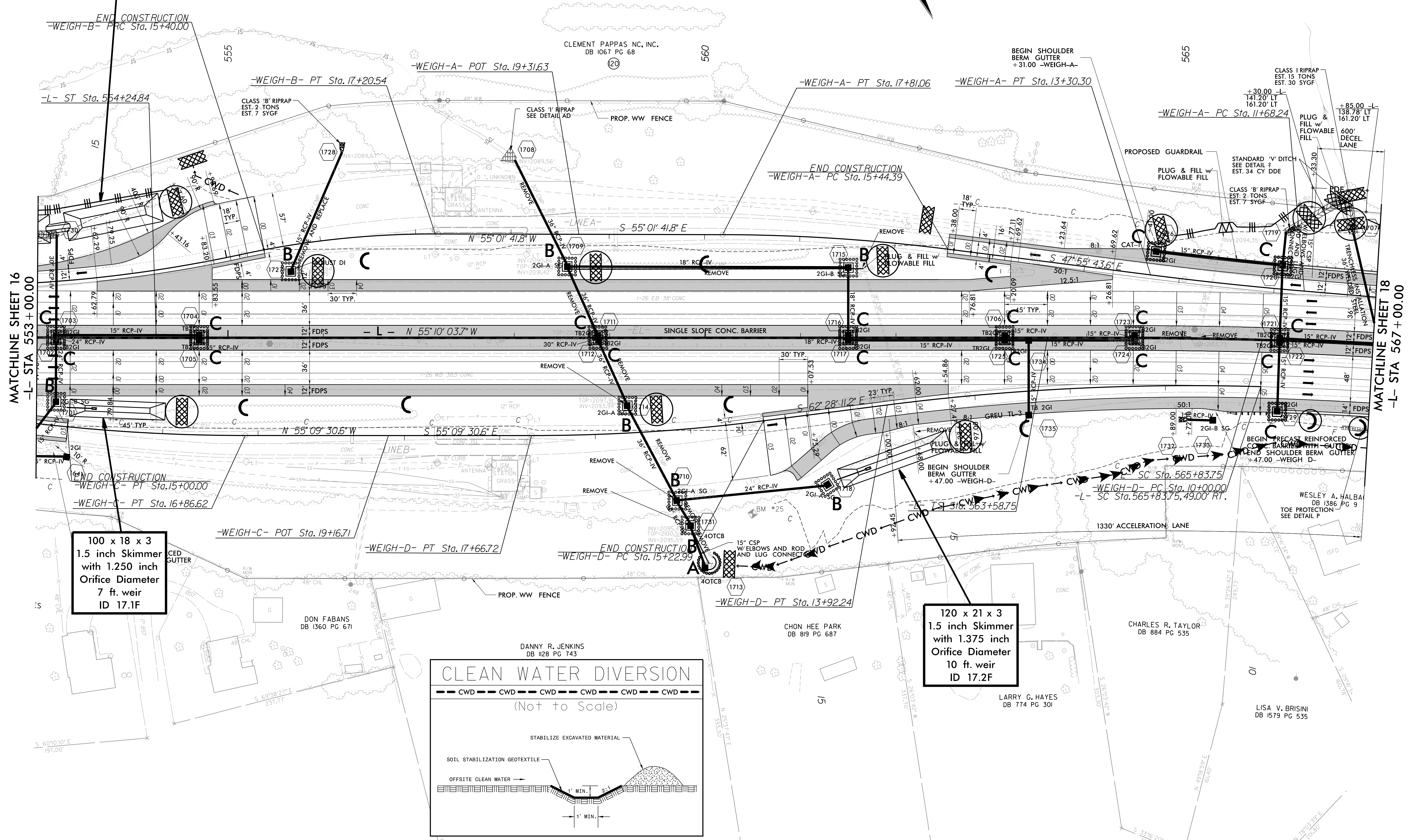
Boone, NC 828-355-9933
 Tri-Cities, TN 423-467-8401
 Knoxville, TN 865-546-5800
 Spartanburg, SC 864-574-4775
 Charleston, SC 843-974-5650
 Middlesboro, KY 606-248-6600
 Asheville, NC 828-253-2796
 Charlotte, NC 704-357-0488
 Atlanta, GA 770-627-3590

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-42/CONST.17
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Modified Silt Basin
 Type 'B'
 101 x 30 x 3
 22 ft. weir
 (See Tiered Skimmer Basin Detail)
 ID 16.2B /17.1B

Place Matting for Erosion Control on Slopes as Work Allows.



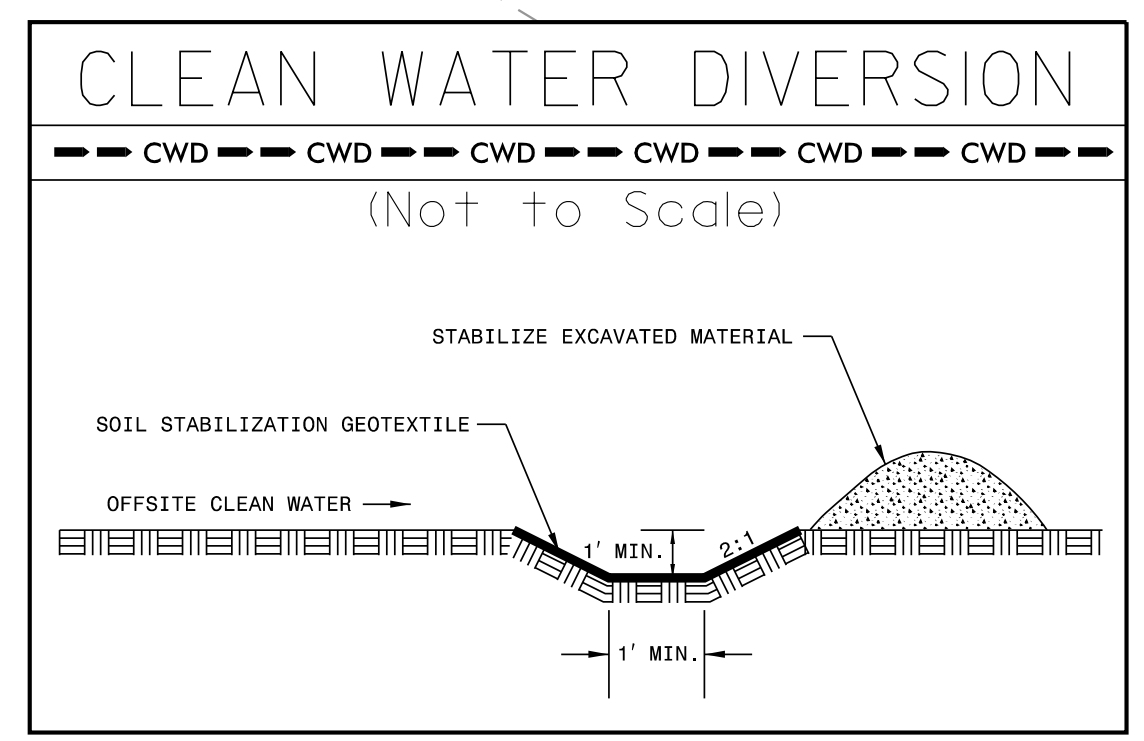
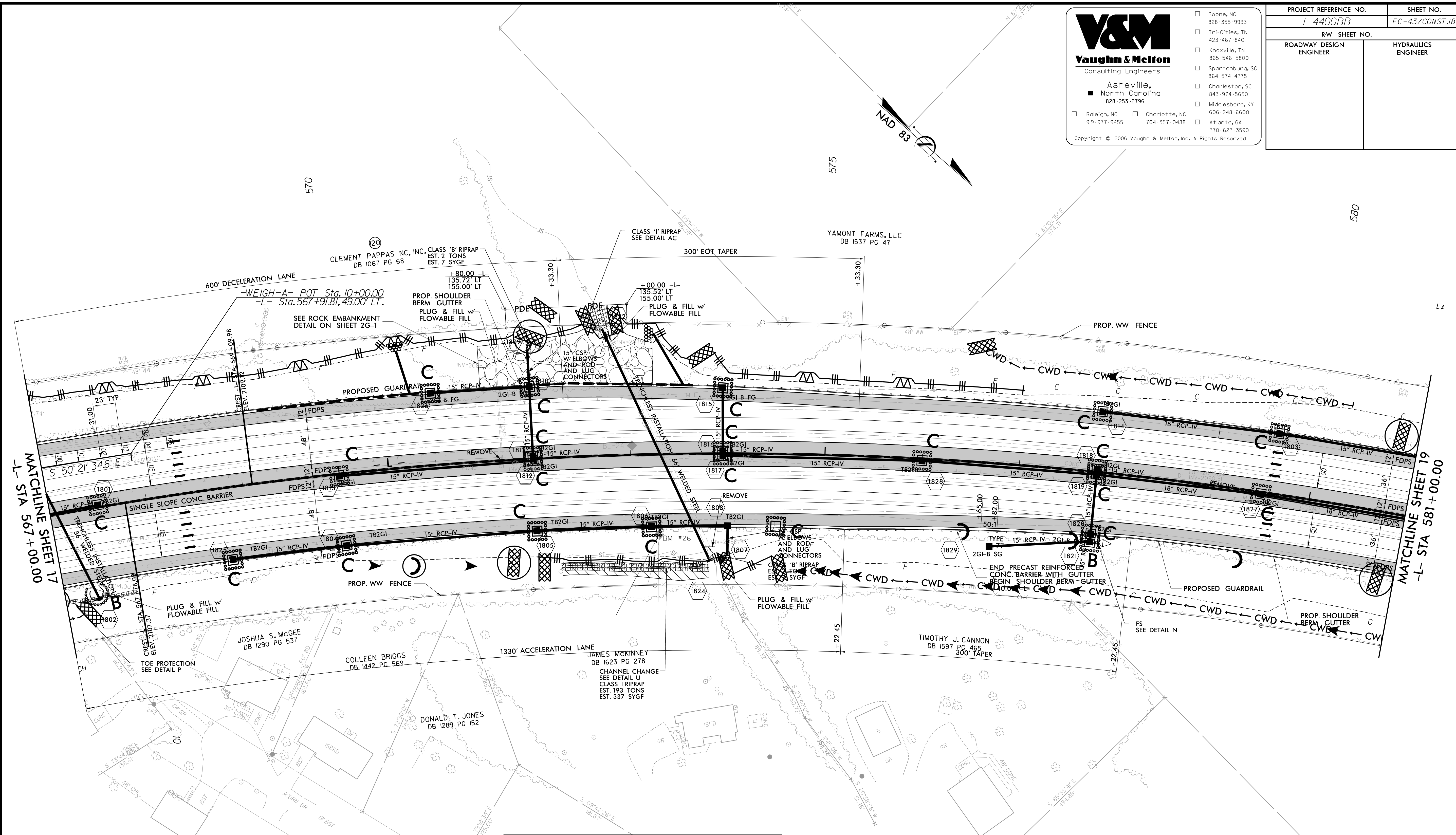
6/1/2019 1:44:36 PM V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-37.dgn

Asheville, North Carolina
828-253-2796

- Boone, NC 828-355-9933
- Tri-Cities, TN 423-467-8401
- Knoxville, TN 865-546-5800
- Spartanburg, SC 864-574-4775
- Charleston, SC 843-974-5650
- Middlesboro, KY 606-248-6600
- Atlanta, GA 770-627-3590
- Raleigh, NC 919-977-9455
- Charlotte, NC 704-357-0488

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-43/CONST.18
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



Place Matting for Erosion Control on Slopes Adjacent to Jurisdictional Streams as Work Allows.

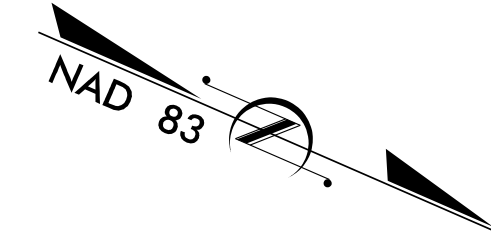
6/1/2019 2:58:37 PM
 V:\Asheville\Transportation\31834-01_I-4400BB\Erosion Control\Sheets\14400BB_Env_EC-38.dgn
 User: jmelton

V&M
Vaughn & Melton
 Consulting Engineers
 Asheville, North Carolina
 828-253-2796

- Boone, NC 828-355-9933
- Tri-Cities, TN 423-467-8401
- Knoxville, TN 865-546-5800
- Spartanburg, SC 864-574-4775
- Charleston, SC 843-974-5650
- Middlesboro, KY 606-248-6600
- Atlanta, GA 770-627-3590
- Raleigh, NC 919-977-9455
- Charlotte, NC 704-357-0488

Copyright © 2006 Vaughn & Melton, Inc. All Rights Reserved

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-44/CONST.19
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

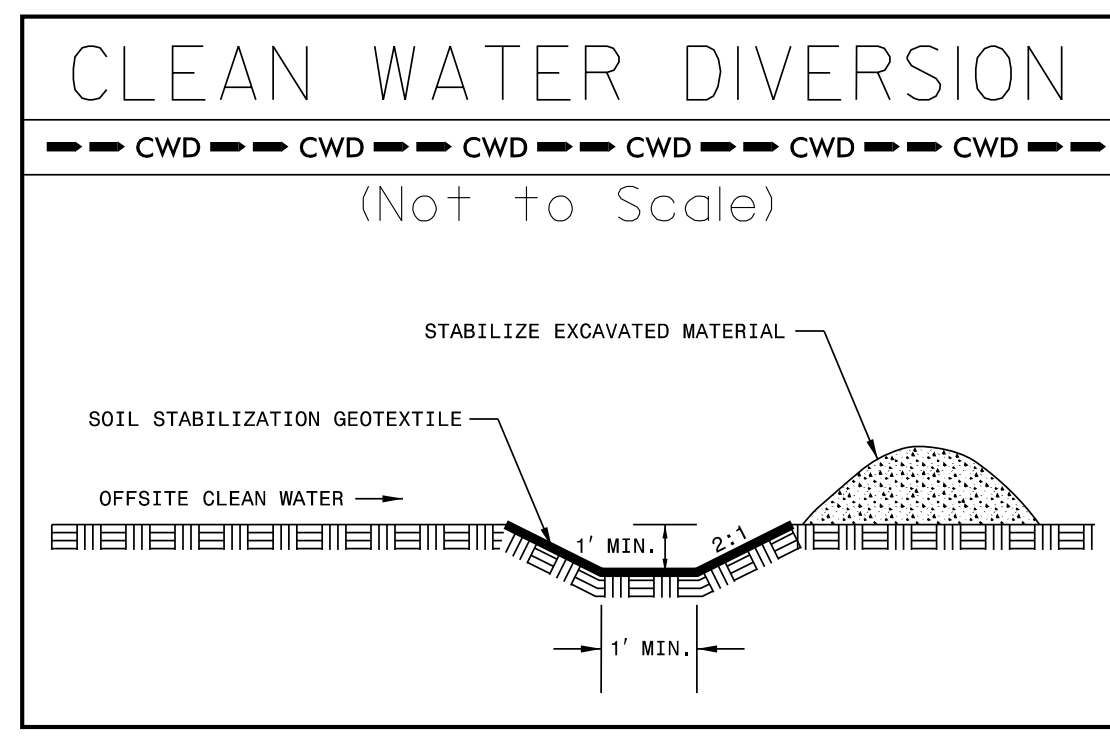
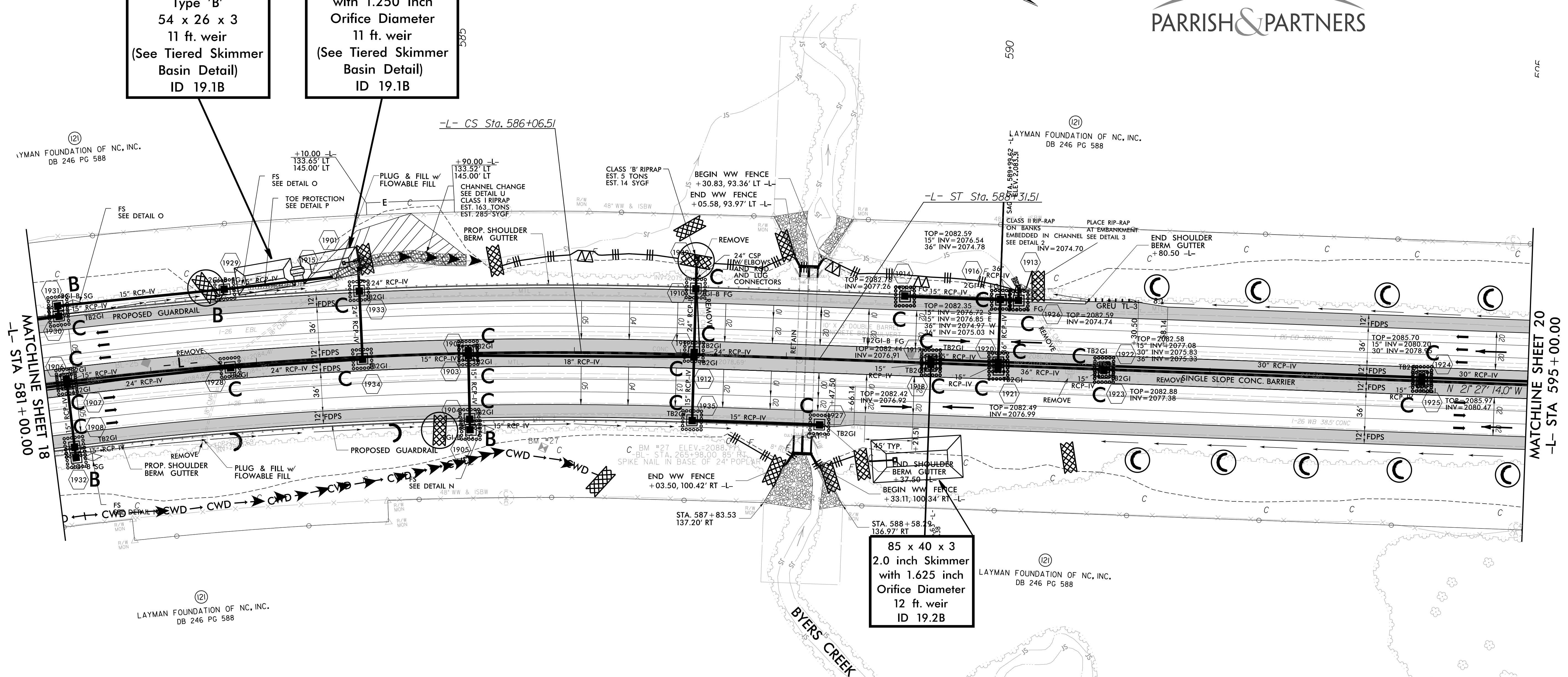


**Modified Silt Basin
 Type 'B'
 54 x 26 x 3
 11 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 19.1B**

**54 x 26 x 3
 1.5 inch Skimmer
 with 1.250 inch
 Orifice Diameter
 11 ft. weir
 (See Tiered Skimmer
 Basin Detail)
 ID 19.1B**

**Place Matting for Erosion Control
 on Slopes as Work Allows.**

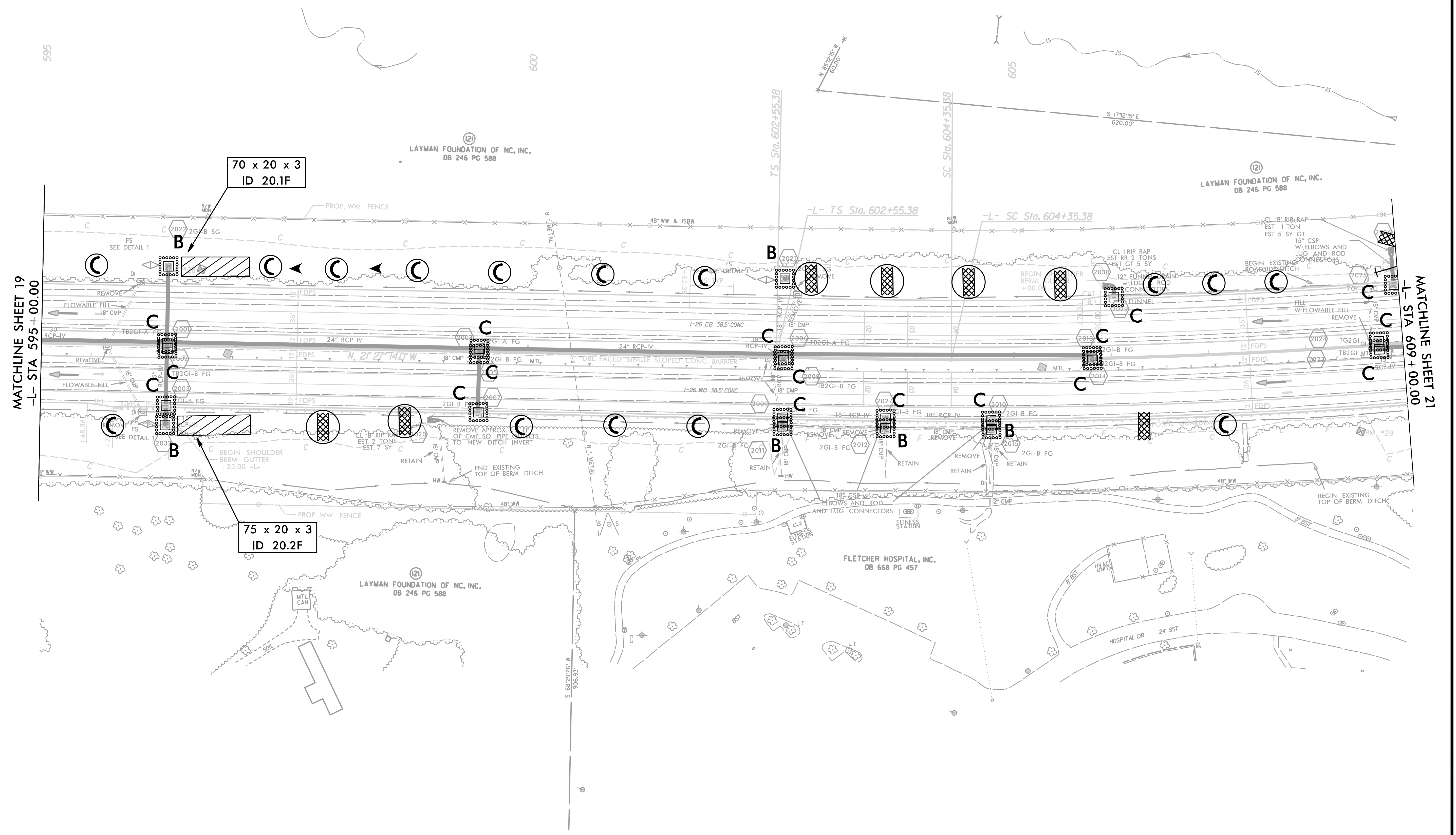
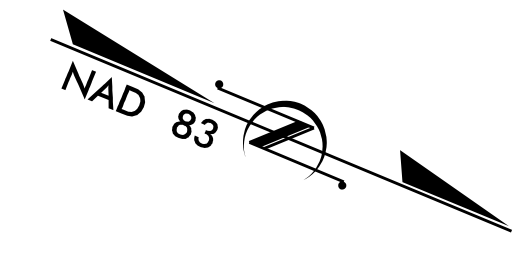
**85 x 40 x 3
 2.0 inch Skimmer
 with 1.625 inch
 Orifice Diameter
 12 ft. weir
 ID 19.2B**



6/11/2019 4:48:03 PM
 V:\Asheville\transportation\31834-01_I-4400BB\Erosion Control\Sheets\4400BB_Env_EC-39.dgn
 User: jmm@v&m.com

PROJECT REFERENCE NO. I-4400BB	SHEET NO. EC-45/CONST.20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Place Matting for Erosion Control on as Work Allows.



70 x 20 x 3
ID 20.1F

75 x 20 x 3
ID 20.2F

MATCHLINE SHEET 19
-L- STA 595+00.00

MATCHLINE SHEET 21
-L- STA 609+00.00

\$\$\$SYTIME\$\$\$
 \$\$\$USERNAME\$\$\$
 \$\$\$SCALE\$\$\$
 \$\$\$ENVIRONMENT\$\$\$