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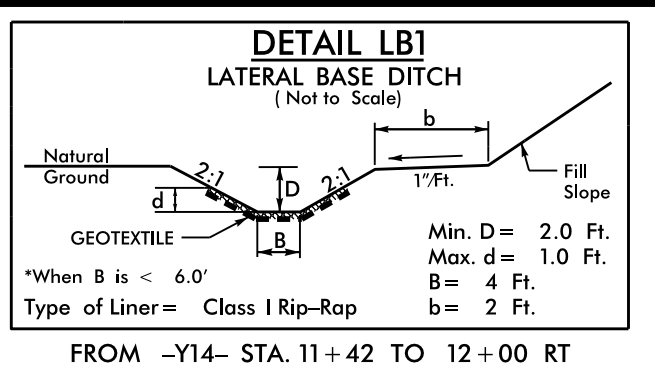
**This file or an individual page
shall not be considered a certified document.**

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

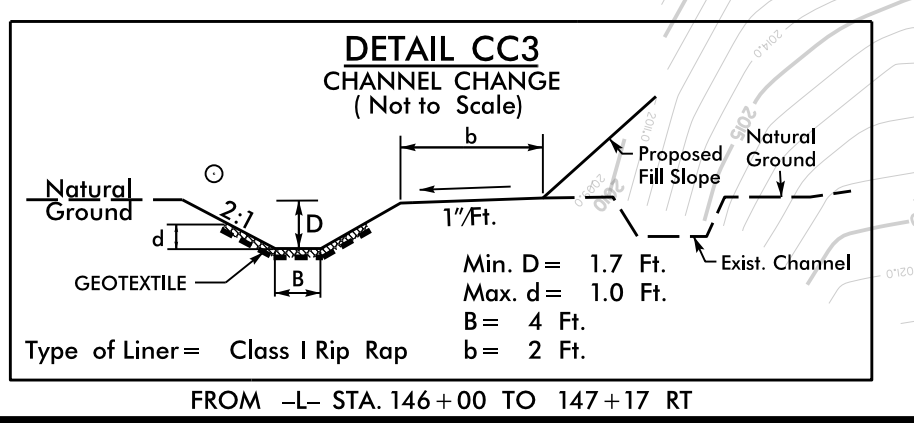
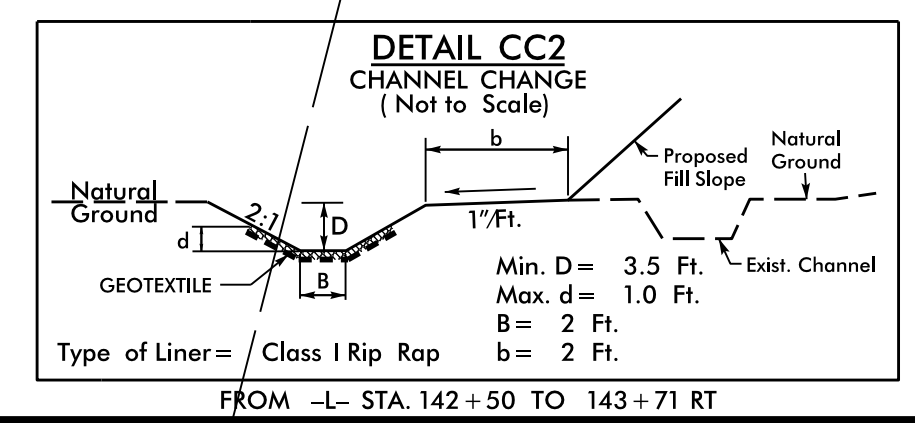
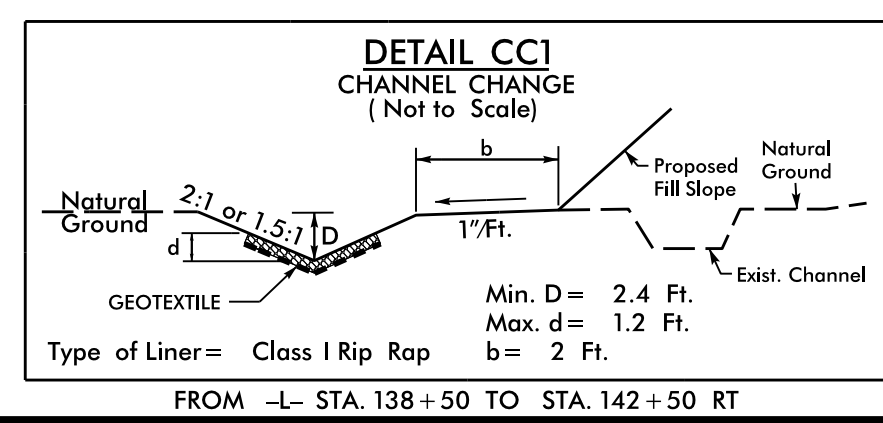
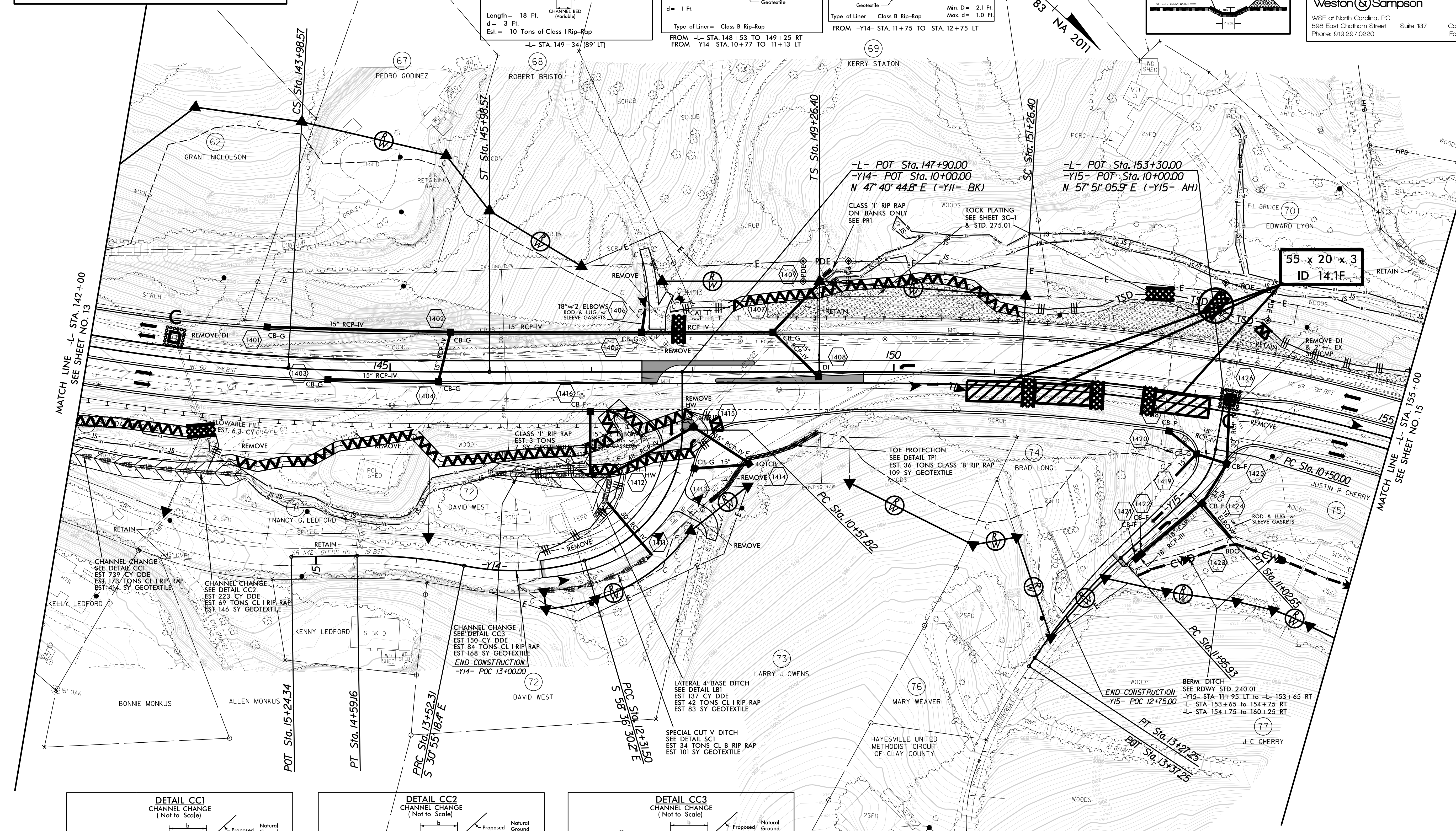
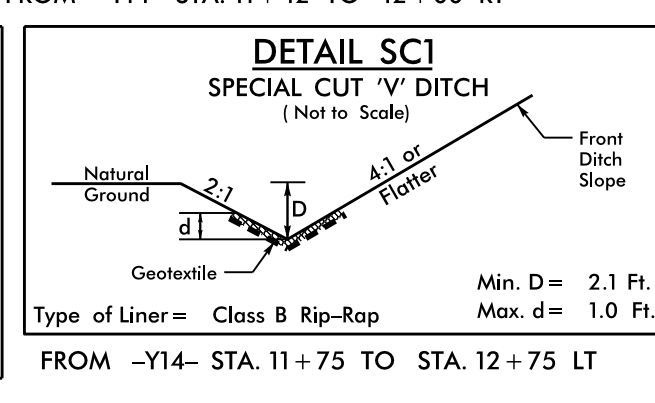
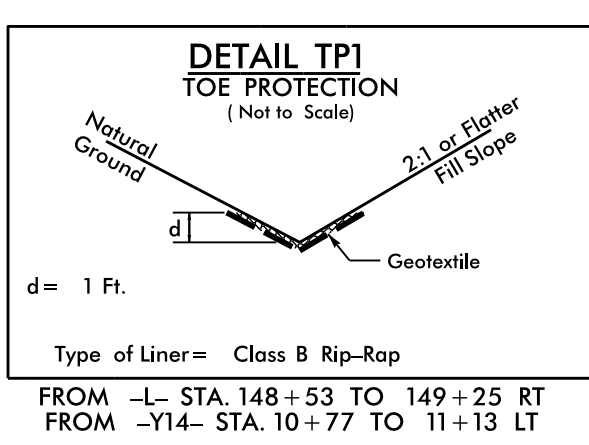
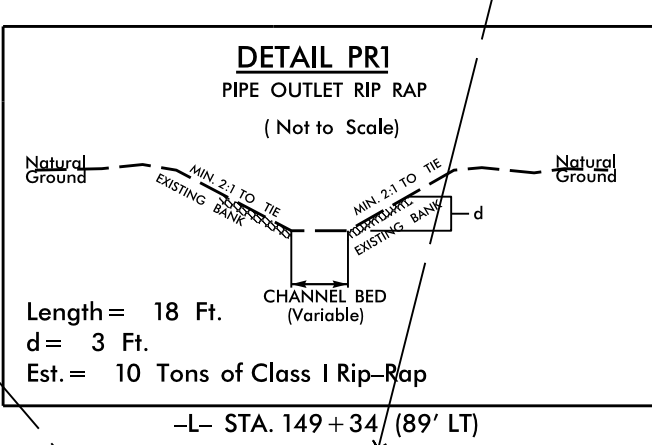
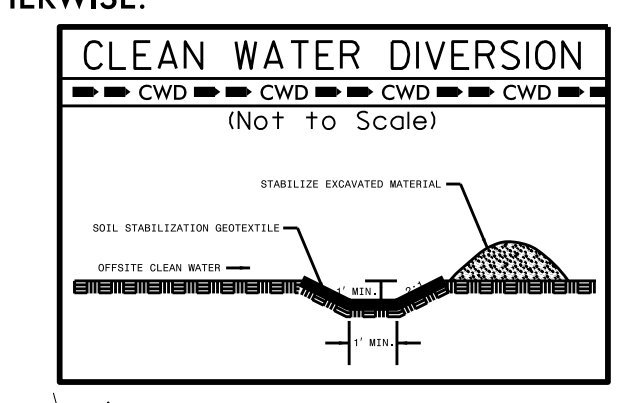
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.



SEE SHEET 27 FOR -L- PROFILE
 SEE SHEET 35 FOR -Y14- & -Y15- PROFILES
 SEE SHEET 28-5 FOR -Y14- & -Y15- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 14

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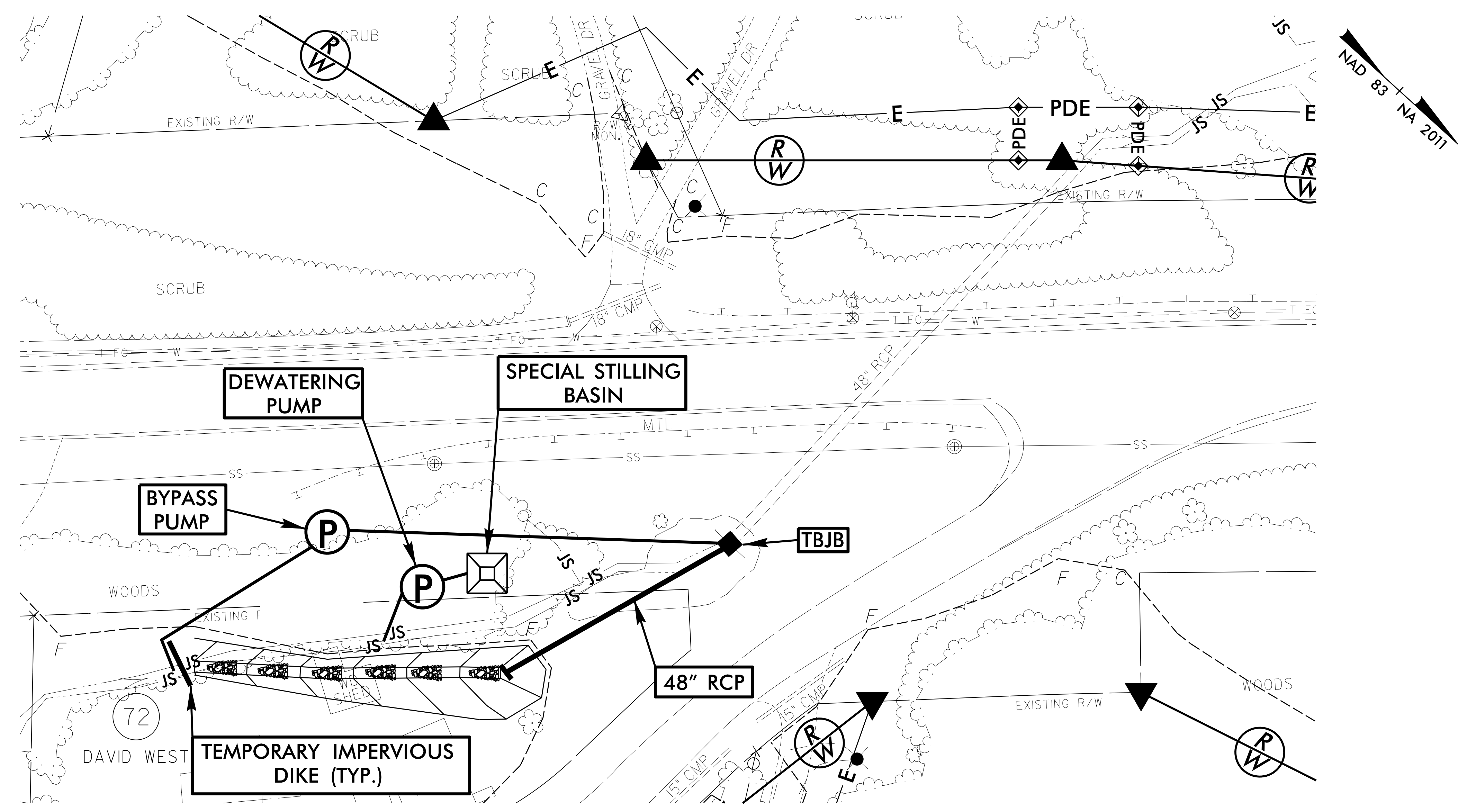
8/17/99

PROJECT REFERENCE NO.	SHEET NO.
A-0011C	EC-17/CONST.4
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PIPE CONSTRUCTION SEQUENCE STA. 148+51 -L-

1. INSTALL SPECIAL STILLING BASIN IN DESIRED LOCATION.
2. INSTALL BYPASS PUMP WITH TEMPORARY FLEXIBLE HOSE.
3. INSTALL UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PUMP IMPOUNDED BASE FLOW WITH DEWATERING PUMP THROUGH SPECIAL STILLING BASIN.
5. REMOVE HEADWALL OF EX. 48" RCP.
6. INSTALL TRAFFIC BEARING JUNCTION BOX (TBJB) AT INLET OF EX. 48" RCP, AND CONSTRUCT UPSTREAM PIPE EXTENSION AND HEADWALL.
7. CONSTRUCT PERMANENT CHANNEL CHANGE WITH CLASS 1 RIP RAP (4 FT. BASE, 1.7 FT. DEPTH, 2:1 SIDE SLOPE).
8. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
9. COMPLETE ROADWAY CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM.



8/1/2019
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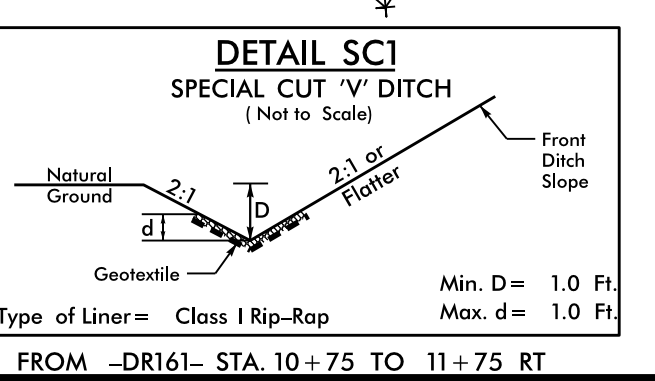
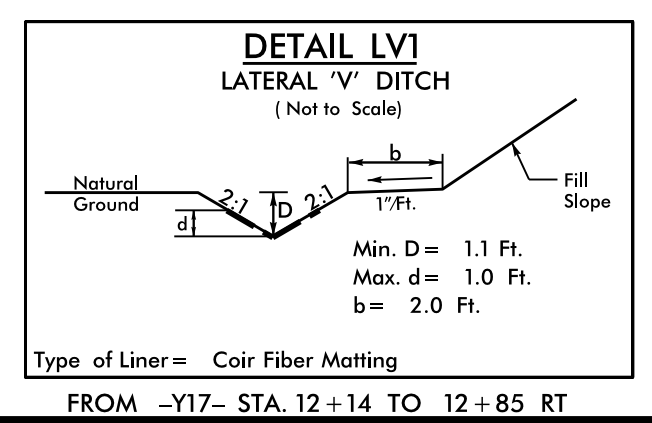
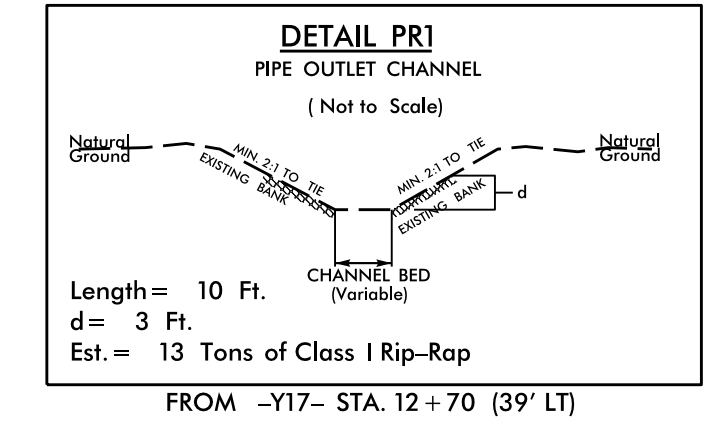
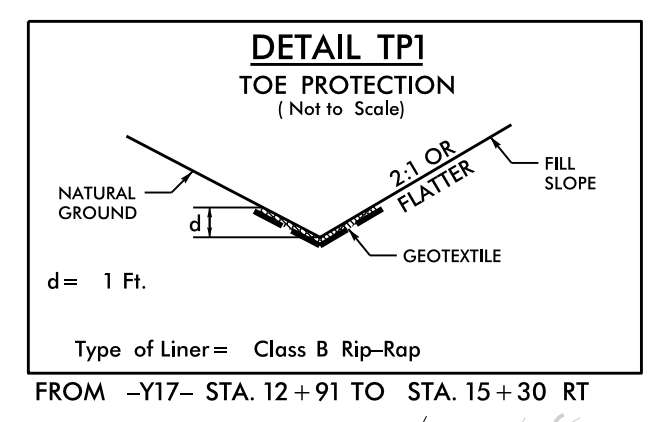
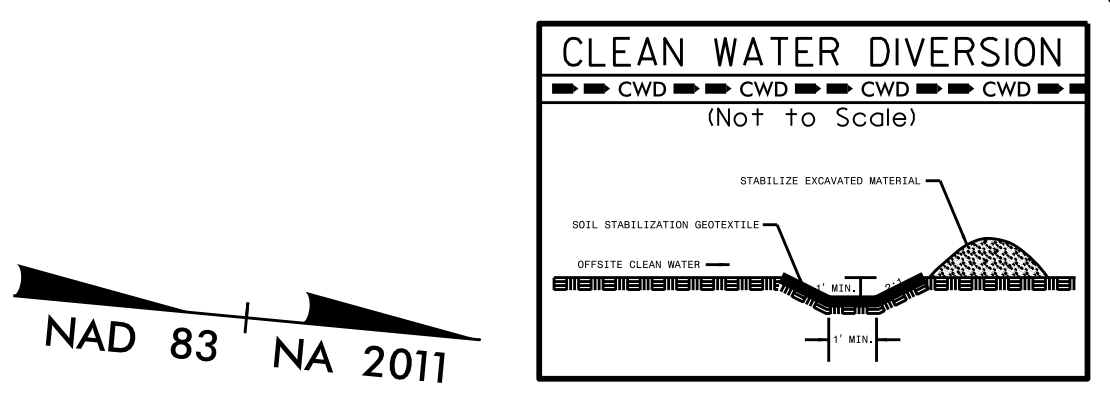
NOTE: INSTALL PIPE(S) IN JURISDICTIONAL AREA WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

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

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

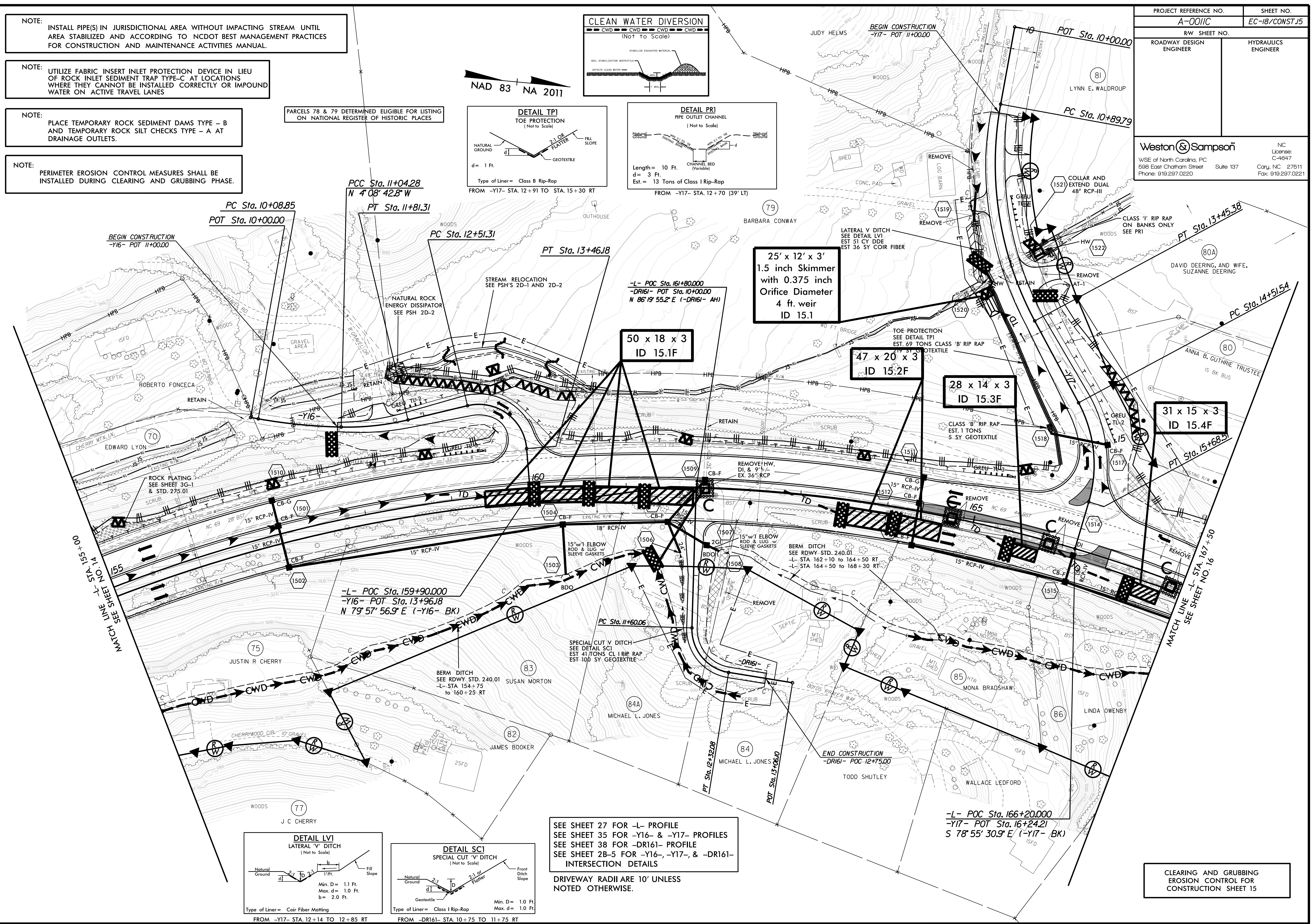
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SEE SHEET 27 FOR -L- PROFILE
SEE SHEET 35 FOR -Y16- & -Y17- PROFILES
SEE SHEET 38 FOR -DR161- PROFILE
SEE SHEET 2B-5 FOR -Y16-, -Y17-, & -DR161- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 15



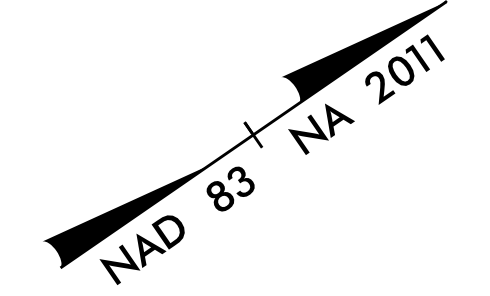
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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-19/CONST.16
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221

SEE SHEET 28 FOR -L- PROFILE

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 16



80A
DAVID DEERING, AND WIFE,
SUZANNE DEERING

80
ANNA B. GUTHRIE TRUSTEE

87
MARCOT LLC

89
FRANCES LEE WHITE

CLASS 'B' RIP RAP
EST. 2 TONS
7 SY GEOTEXTILE
WOODS

26 x 13 x 3
ID 16.1F

BEGIN RETAINING WALL 2
& 60' CHAIN LINK FENCE
-L- STA.168+75.00 (160.00' LT)

END RETAINING WALL 2
& 60' CHAIN LINK FENCE
-L- STA.172+25.00 (156.75' LT)

RETAINING WALL 2
-L- STA.169+50.00 (156.75' LT)

MATCH LINE -L- STA. 171+50
SEE SHEET NO. 17

MATCH LINE -L- STA. 178+50
SEE SHEET NO. 17

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

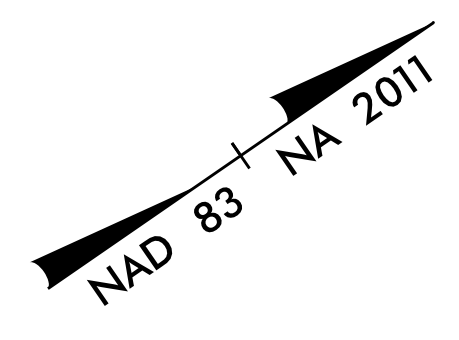
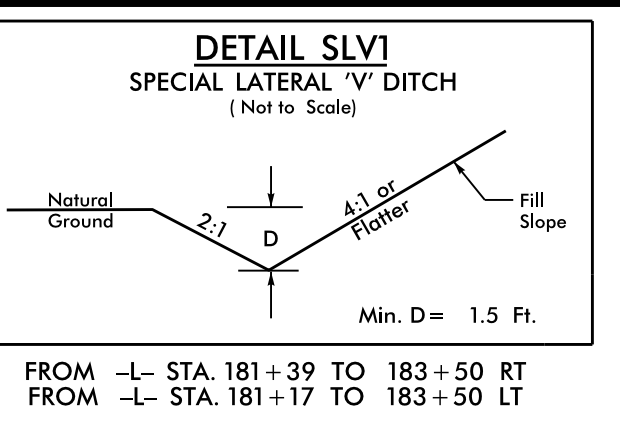
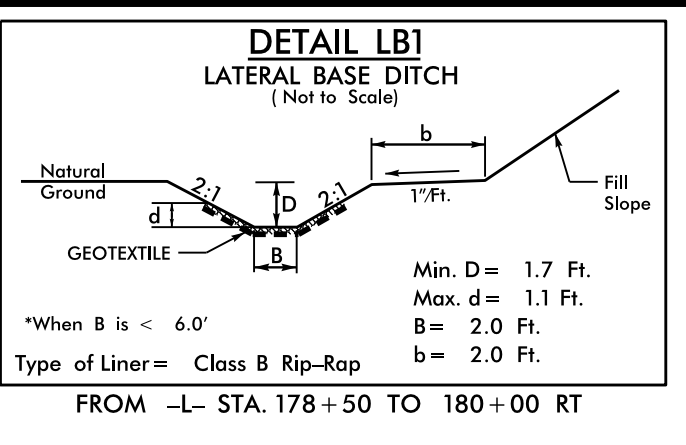
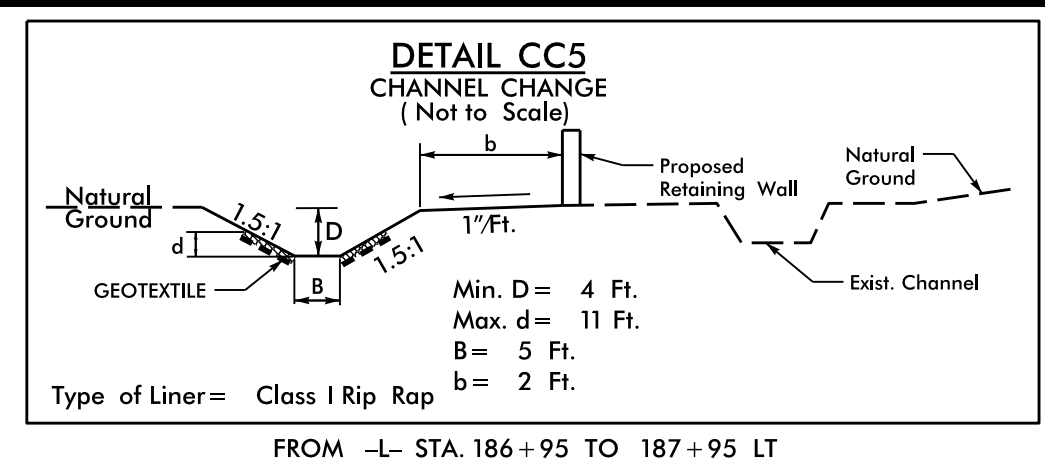
NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE
INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU
OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS
WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND
WATER ON ACTIVE TRAVEL LANES

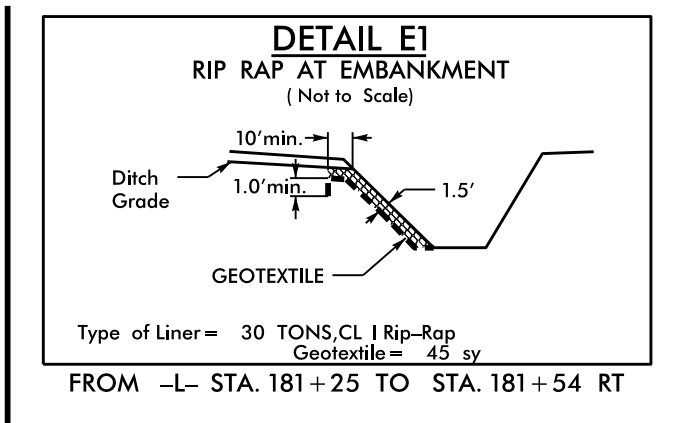
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FRANCIS H GARRETT
LIFE ESTATE

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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-20/CONST.17
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	



SEE SHEET 28 FOR -L- PROFILE
 DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



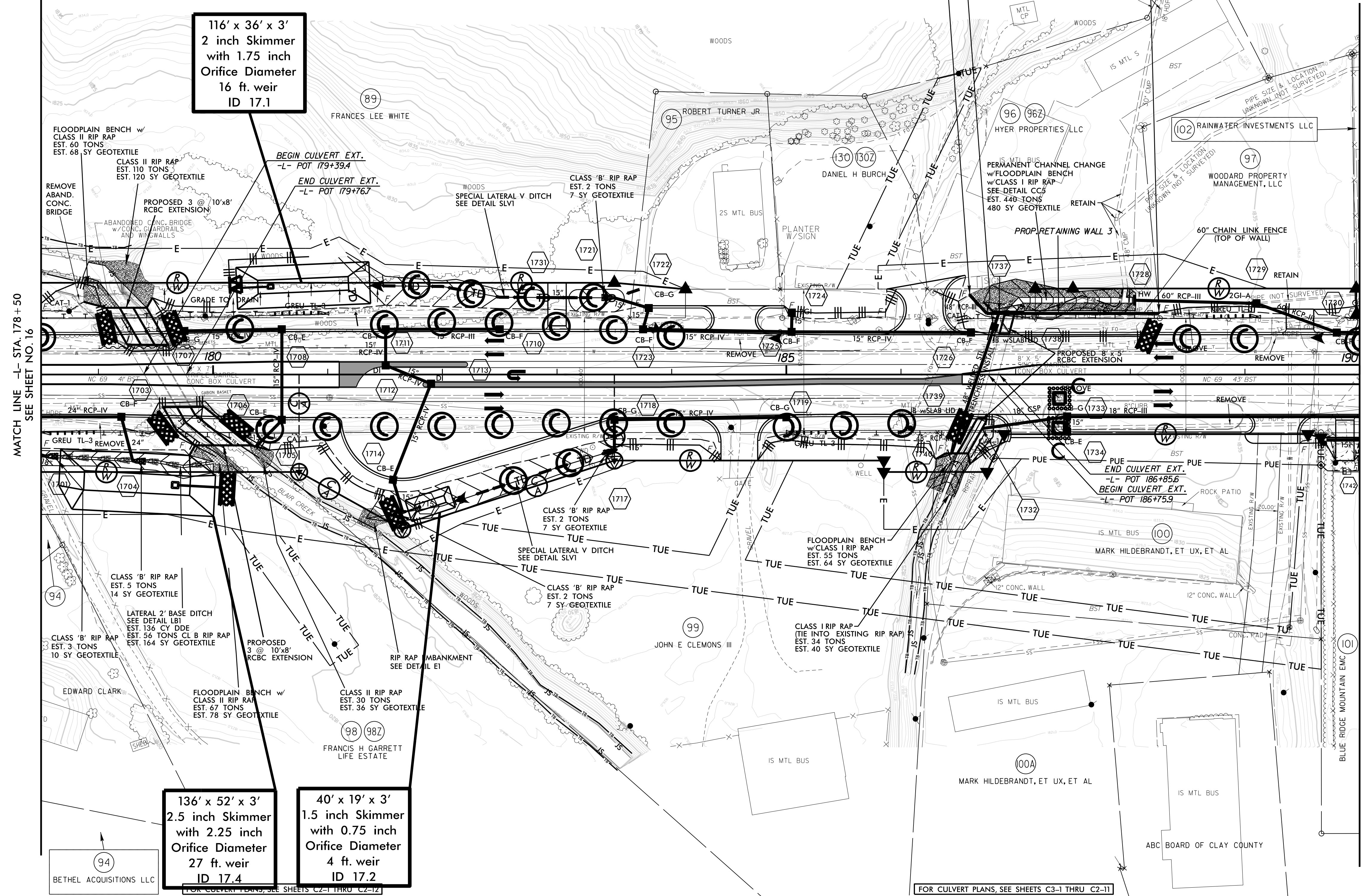
NOTE: INSTALL PIPE(S) IN JURISDICTIONAL AREA WITHOUT IMPACTING STREAM UNTIL AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES BEGIN RETAINING WALL 3 & 60' CHAIN LINK FENCE -L- STA.186+60.00 (53.75' LT)

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

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 17



MATCH LINE -L- STA. 178+50
 SEE SHEET NO. 16

MATCH LINE -L- STA. 190+00
 SEE SHEET NO. 18

94
 BETHEL ACQUISITIONS LLC

136' x 52' x 3'
 2.5 inch Skimmer
 with 2.25 inch
 Orifice Diameter
 27 ft. weir
 ID 17.4

40' x 19' x 3'
 1.5 inch Skimmer
 with 0.75 inch
 Orifice Diameter
 4 ft. weir
 ID 17.2

FOR CULVERT PLANS, SEE SHEETS C3-1 THRU C2-11

8/17/19

8/17/2019
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8/17/19

Weston Sampson
NC License
L68666
C-4847
688 East Chatham Street Suite 137
Cary, NC 27511
Phone: 919.297.0220 Fax: 919.297.0221

PROJECT REFERENCE NO. A-001C SHEET NO. EC-21/CONST.7

RW SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

CULVERT CONSTRUCTION SEQUENCE STA. 179+58 -L-

PHASE I

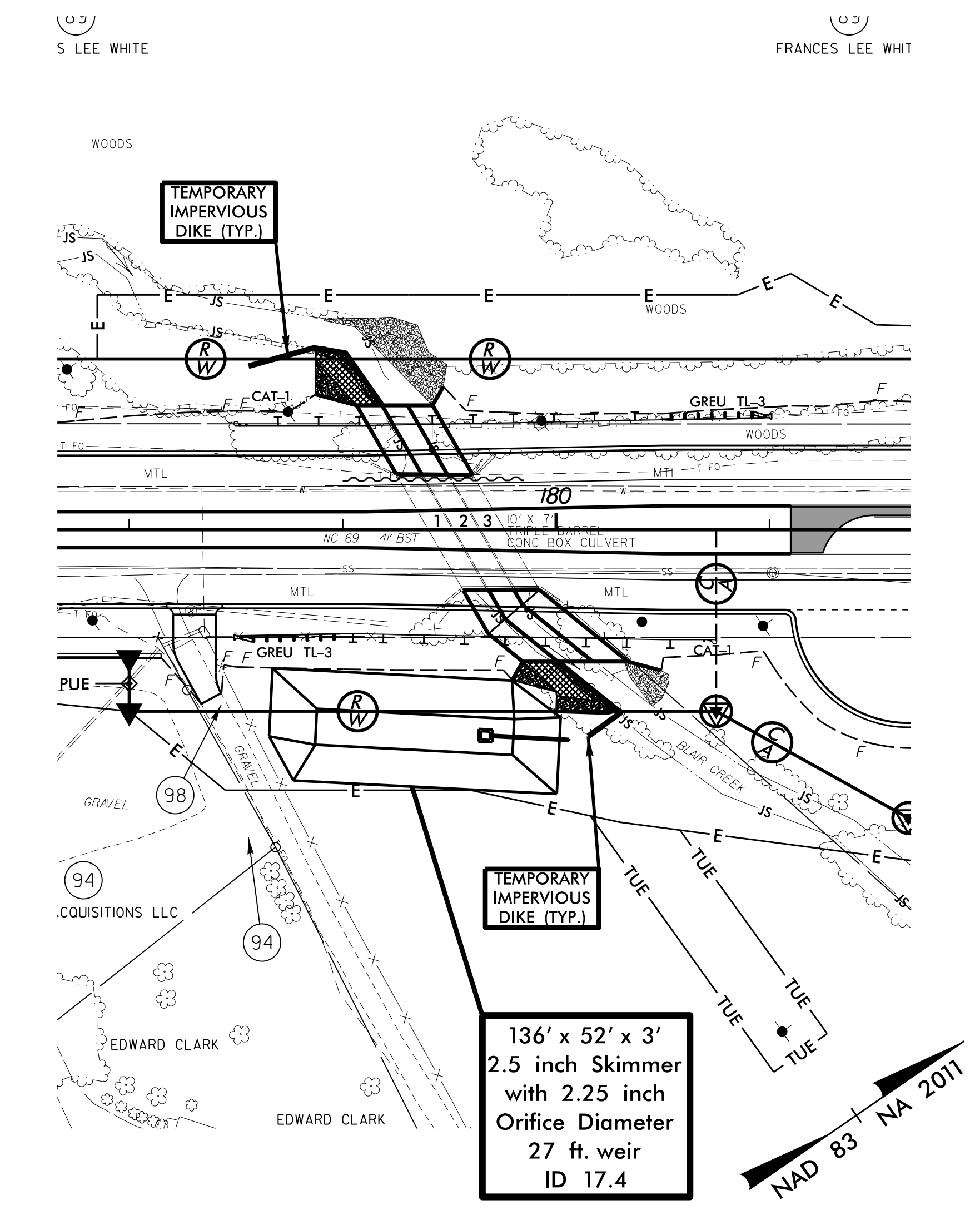
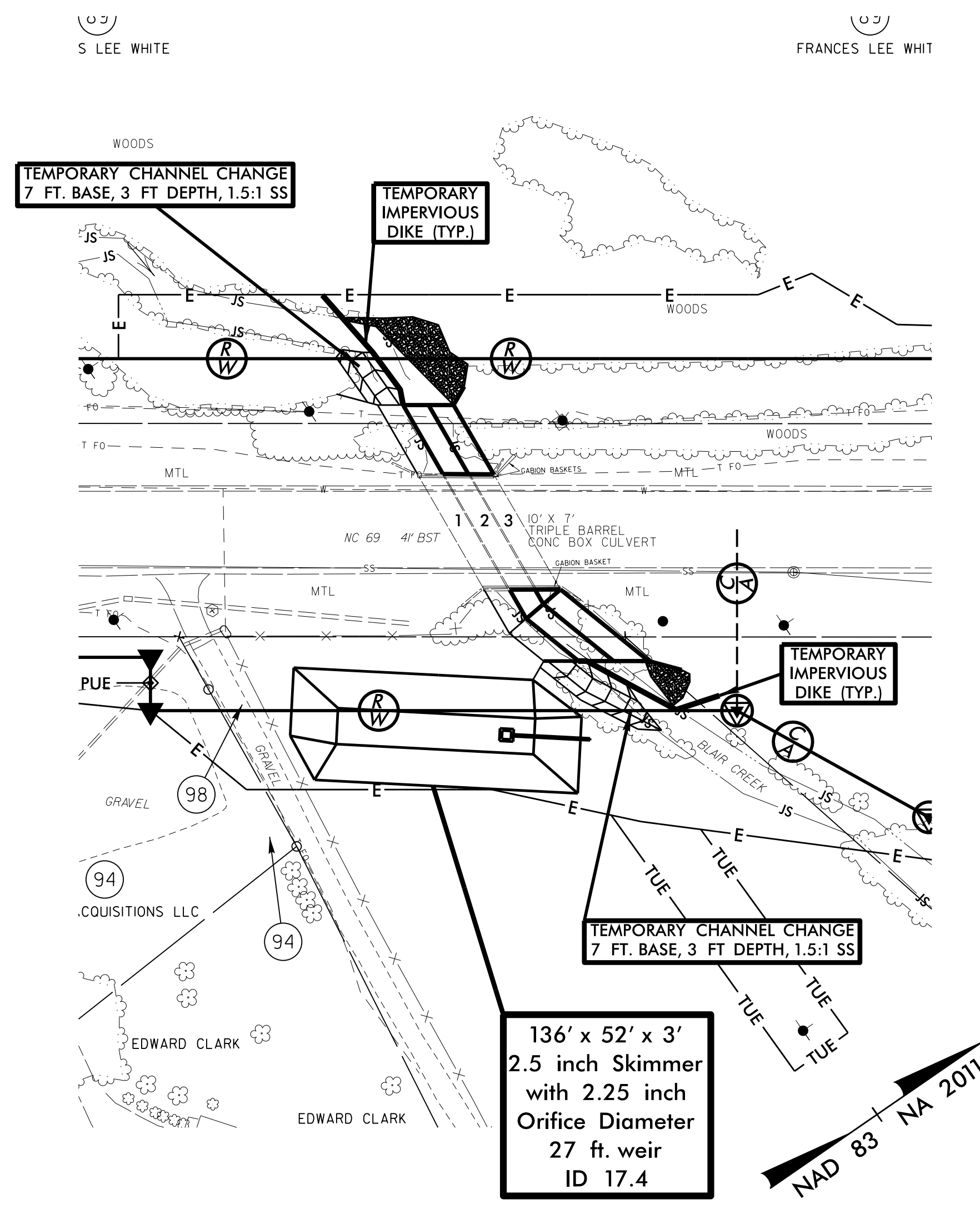
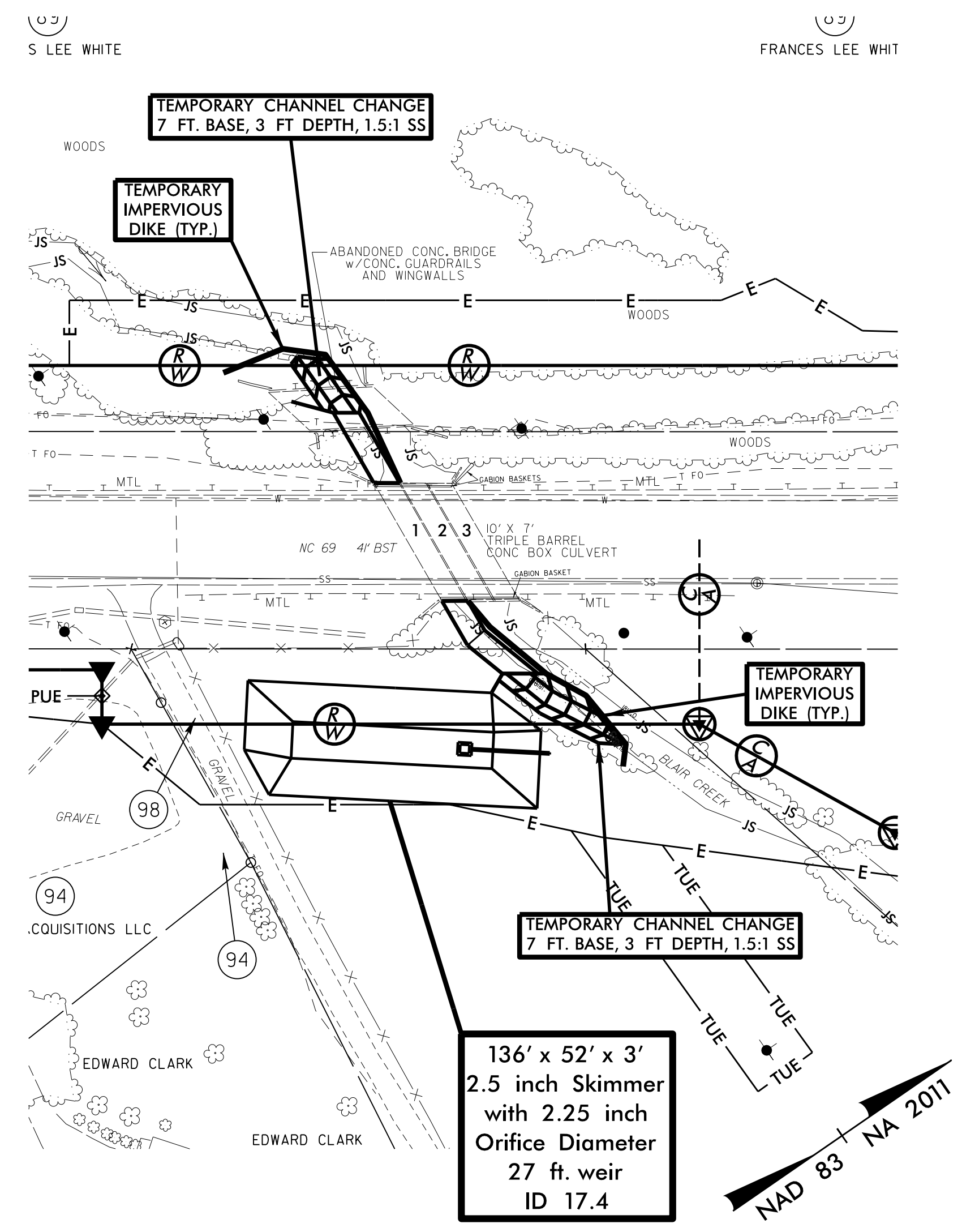
1. PLACE SKIMMER BASIN 17.4 (136' X 52' X 3') IN LOCATION AS SHOWN AND USE AS STILLING BASIN FOR DURATION OF CULVERT CONSTRUCTION.
2. REMOVE UPSTREAM ABANDONED BRIDGE DECK AND ABUTMENTS
3. INSTALL TEMPORARY IMPERVIOUS DIKES AS SHOWN. MAINTAIN FLOW IN EXISTING BARRELS 2 AND 3.
4. PUMP IMPOUNDED FLOW TO SKIMMER BASIN 17.4
5. REMOVE EXISTING HEADWALLS AND GABION BASKETS AS NEEDED FOR UPSTREAM AND DOWNSTREAM EXTENSIONS OF BARREL 1.
6. CONSTRUCT BOTH UPSTREAM AND DOWNSTREAM EXTENSIONS FOR BARREL 1.
7. AS ALLOWED, CONSTRUCT PORTIONS OF UPSTREAM AND DOWNSTREAM PROPOSED HEADWALL.
8. CONSTRUCT TEMPORARY CHANNEL CHANGE WITH LINER (7 FT. BASE, 3 FT. DEPTH, 1.5:1 SIDE SLOPES) FOR USE IN PHASE II.

PHASE II

1. REMOVE PHASE I IMPERVIOUS DIKES.
2. INSTALL TEMPORARY IMPERVIOUS DIKES AS SHOWN AND DIVERT FLOW TO BARREL 1 THROUGH TEMPORARY CHANNEL CHANGE CREATED IN PHASE I.
3. PUMP IMPOUNDED FLOW TO SKIMMER BASIN 17.4.
4. REMOVE REMAINDER OF EXISTING UPSTREAM AND DOWNSTREAM HEADWALLS AND GABION BASKETS ON BARRELS 2 AND 3.
5. CONSTRUCT UPSTREAM AND DOWNSTREAM EXTENSIONS FOR BARRELS 2 AND 3.
6. INSTALL UPSTREAM AND DOWNSTREAM RIP RAP CHANNEL IMPROVEMENTS AND BANK STABILIZATIONS ON NORTH BANKS OF BLAIR CREEK ACCORDING TO NCDOT'S BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL

PHASE III

1. REMOVE PHASE II IMPERVIOUS DIKES.
2. INSTALL PHASE III TEMPORARY IMPERVIOUS DIKES AS SHOWN TO ALLOW FOR CONSTRUCTION OF BARREL 1 FLOODPLAIN BENCHES.
3. PUMP IMPOUNDED FLOW TO SKIMMER BASIN 17.4.
4. REMOVE PHASE II UPSTREAM AND DOWNSTREAM CHANNEL CHANGES.
5. CONSTRUCT BARREL 1 FLOODPLAIN BENCHES ACCORDING TO NCDOT'S BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.
6. REMOVE IMPERVIOUS DIKES AND DIVERT FLOW UNDER NORMAL CONDITIONS THROUGH EXTENDED CULVERT
7. COMPLETE ROADWAY CONSTRUCTION AND REMOVE SKIMMER BASIN 17.4 AFTER COMPLETION OF CONSTRUCTION OR AT ENGINEER'S DISCRETION.



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CULVERT CONSTRUCTION SEQUENCE STA. 186+81 -L-

PHASE I

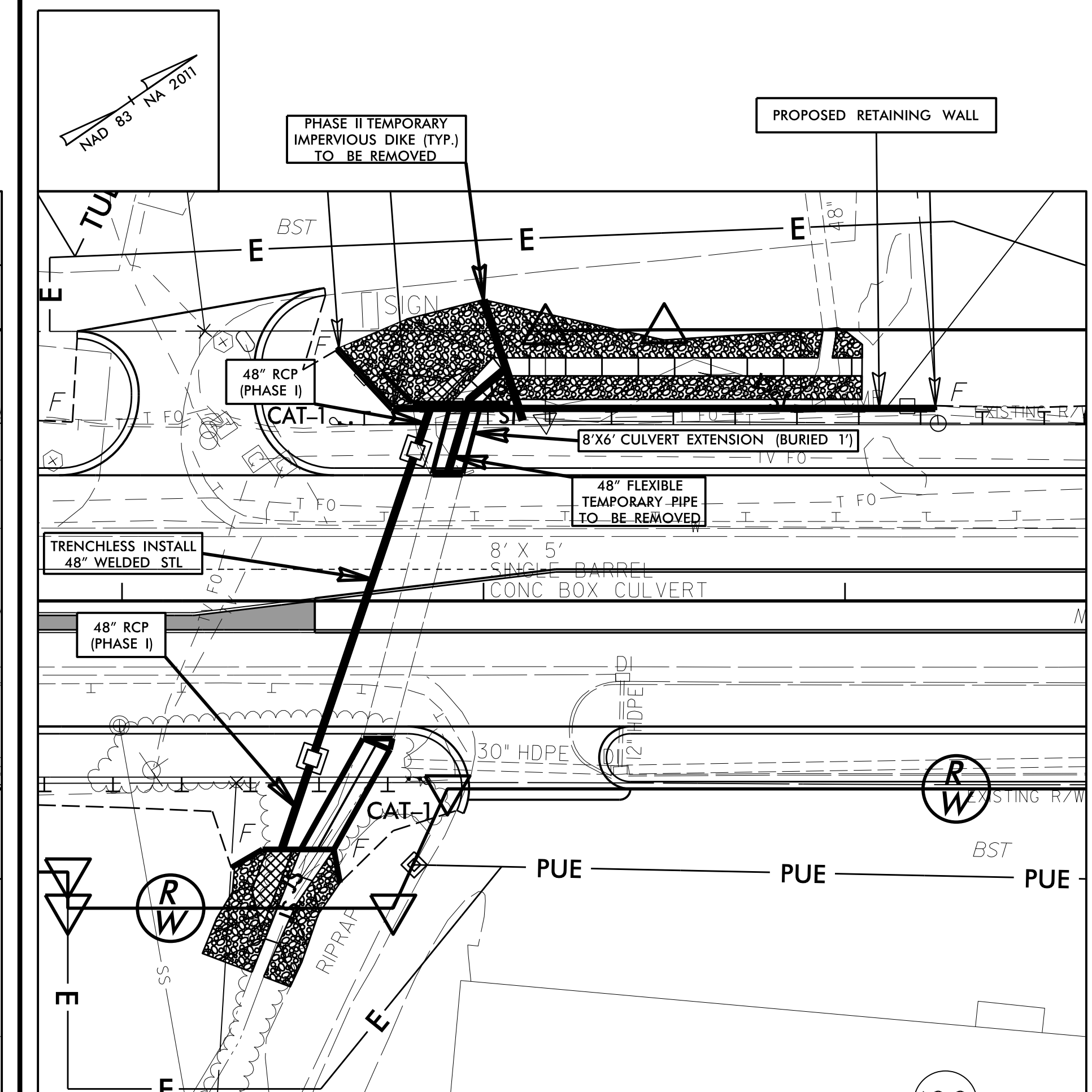
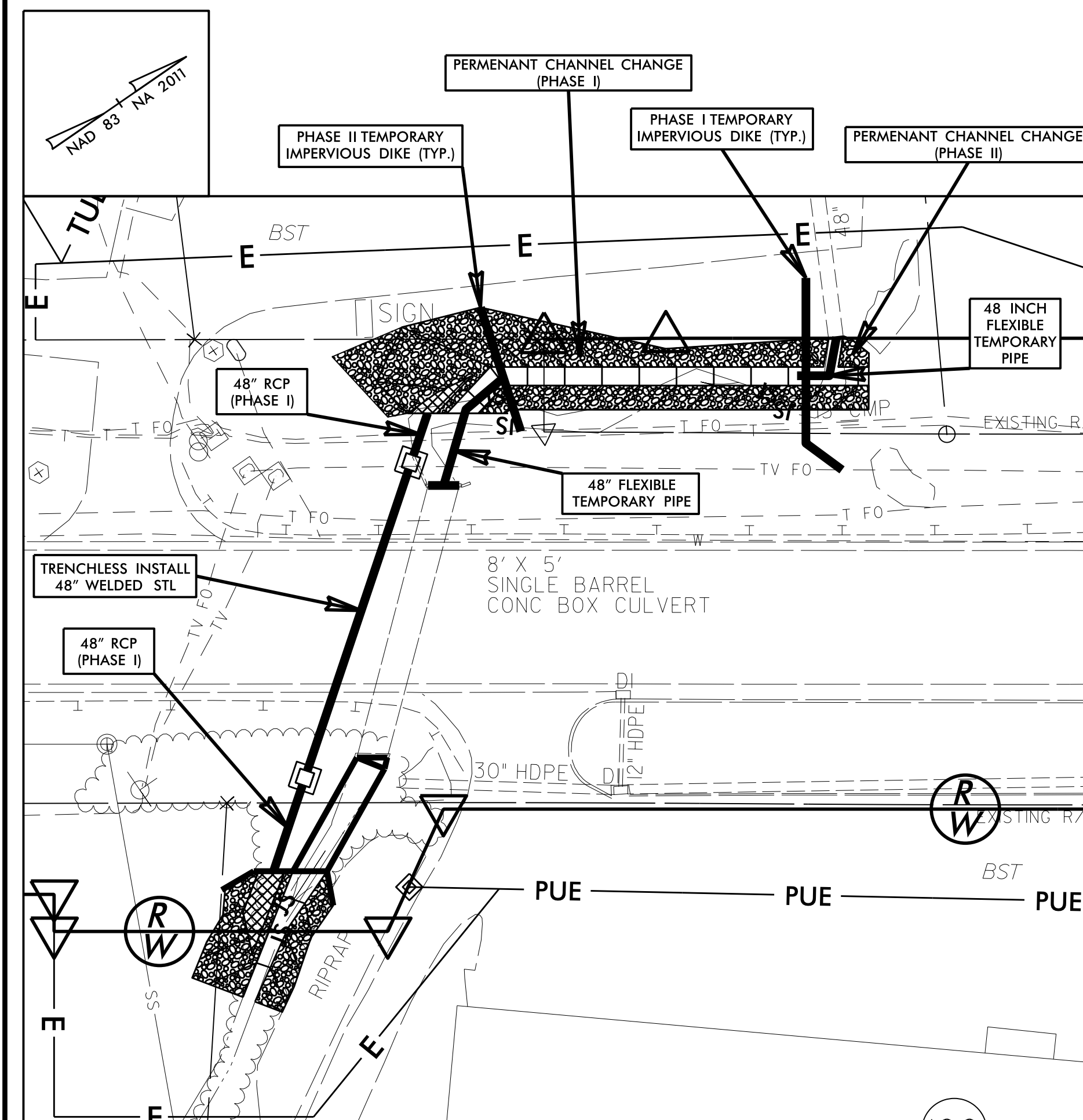
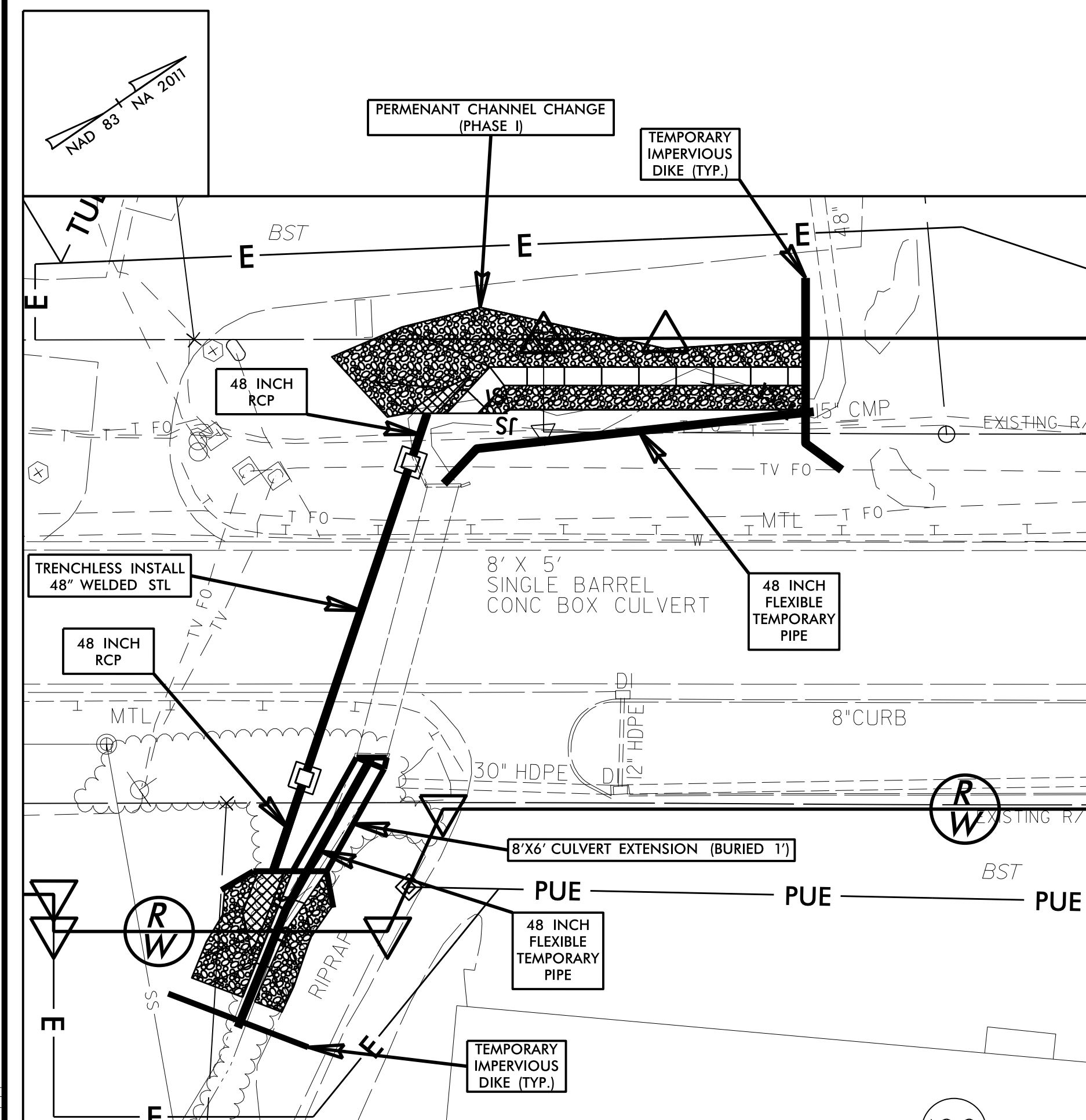
1. PLACE SPECIAL STILLING BASIN IN DESIRED LOCATION. UTILIZE FOR DURATION OF CONSTRUCTION
2. UPSTREAM PLACE IMPERVIOUS DIKE AT OUTLET OF EX. 48" RCP IN UNNAMED TRIB. INSTALL TEMPORARY FLEXIBLE 48" PIPE ACCORDING TO NCDOT 'BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES' MANUAL. WHEN PLACING KEEP FLEXIBLE PIPE OUTSIDE LIMITS OF PROPOSED STREAM RELOCATION.
3. PUMP IMPOUNDED FLOW TO SPECIAL STILLING BASIN.
4. DOWNSTREAM, INSTALL TEMPORARY FLEXIBLE 48" PIPE ACCORDING TO NCDOT 'BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES' MANUAL, AND IMPERVIOUS DIKE AS SHOWN.
5. PUMP IMPOUNDED FLOW TO SPECIAL STILLING BASIN.
6. USING TRENCHLESS METHODS INSTALL PERMANENT 48" WELDED STEEL OVERFLOW BARREL WHILE MAINTAINING EXISTING TRAFFIC PATTERNS. INSTALL JB'S AT INLET AND OUTLET OF WELDED STEEL AND ATTACH PERMANENT 48" RCP PIPES.
7. CONSTRUCT DOWNSTREAM EXTENSION OF CULVERT WHILE ALSO CONSTRUCTING OUTLET STR. 1732 IN EXTENSION. CONSTRUCT HEADWALL INCLUDING DOWNSTREAM CHANNEL IMPROVEMENTS AND CULVERT FLOODPLAIN BENCHES.
8. WHILE CONSTRUCTING DOWNSTREAM EXTENSION, ALSO CONSTRUCT UPSTREAM CHANNEL CHANGE AS SHOWN ON CONST. PSH 17 TO LIMITS ALLOWED BY UPSTREAM IMPERVIOUS DIKE.

PHASE II

1. REMOVE DOWNSTREAM IMPERVIOUS DIKE AND TEMP 48" FLEXIBLE PIPE.
2. MAINTAIN UPSTREAM IMPERVIOUS DIKE LOCATION AS SHOWN IN PHASE I.
3. UPSTREAM, ADD ADDITIONAL PHASE II IMPERVIOUS DIKE AS SHOWN.
4. PUMP IMPOUNDED FLOW TO SPECIAL STILLING BASIN.
5. INSTALL NEW TEMPORARY FLEXIBLE 48" PIPE ACCORDING TO NCDOT 'BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES' MANUAL THROUGH NEW IMPERVIOUS DIKE.
6. ATTACH TEMPORARY FLEXIBLE 48" PIPE TO OUTLET OF EX. 48" AND DIVERT FLOW INTO PERMANENT CHANNEL CHANGE CONSTRUCTED DURING PHASE I.
7. PUMP IMPOUNDED FLOW TO SPECIAL STILLING BASIN.
8. ONCE NEW TEMP. PIPES ARE INSTALLED AND DIVERSION COMPLETE, REMOVE UPSTREAM TEMP. FLEXIBLE 48" AS SHOWN IN PHASE I.
9. CONSTRUCT REMAINDER OF UPSTREAM PERMANENT CHANNEL CHANGE NORTH OF PHASE I IMPERVIOUS DIKE.
10. ONCE CHANNEL CHANGE IS STABILIZED REMOVE NORTHERNMOST UPSTREAM IMPERVIOUS DIKE FROM PHASE I AND ALLOW FLOW FULL CONDITIONS INTO PERMANENT CHANNEL CHANGE.

PHASE III

1. CONSTRUCT UPSTREAM CULVERT EXTENSION AROUND TEMP. 48" FLEXIBLE PIPE.
2. CONSTRUCT REMAINDER OF UPSTREAM HEADWALL.
3. REMOVE REMAINDER OF TEMP. PIPES AND TEMPORARY DIKES
4. COMPLETE ROADWAY WHILE LEAVING SPECIAL STILLING BASIN FOR DURATION OF CONSTRUCTION OF RETAINING WALL AND ROADWAY.
5. ONCE RETAINING WALL AND ROADWAY ARE COMPLETE, REMOVE SPECIAL STILLING BASIN.



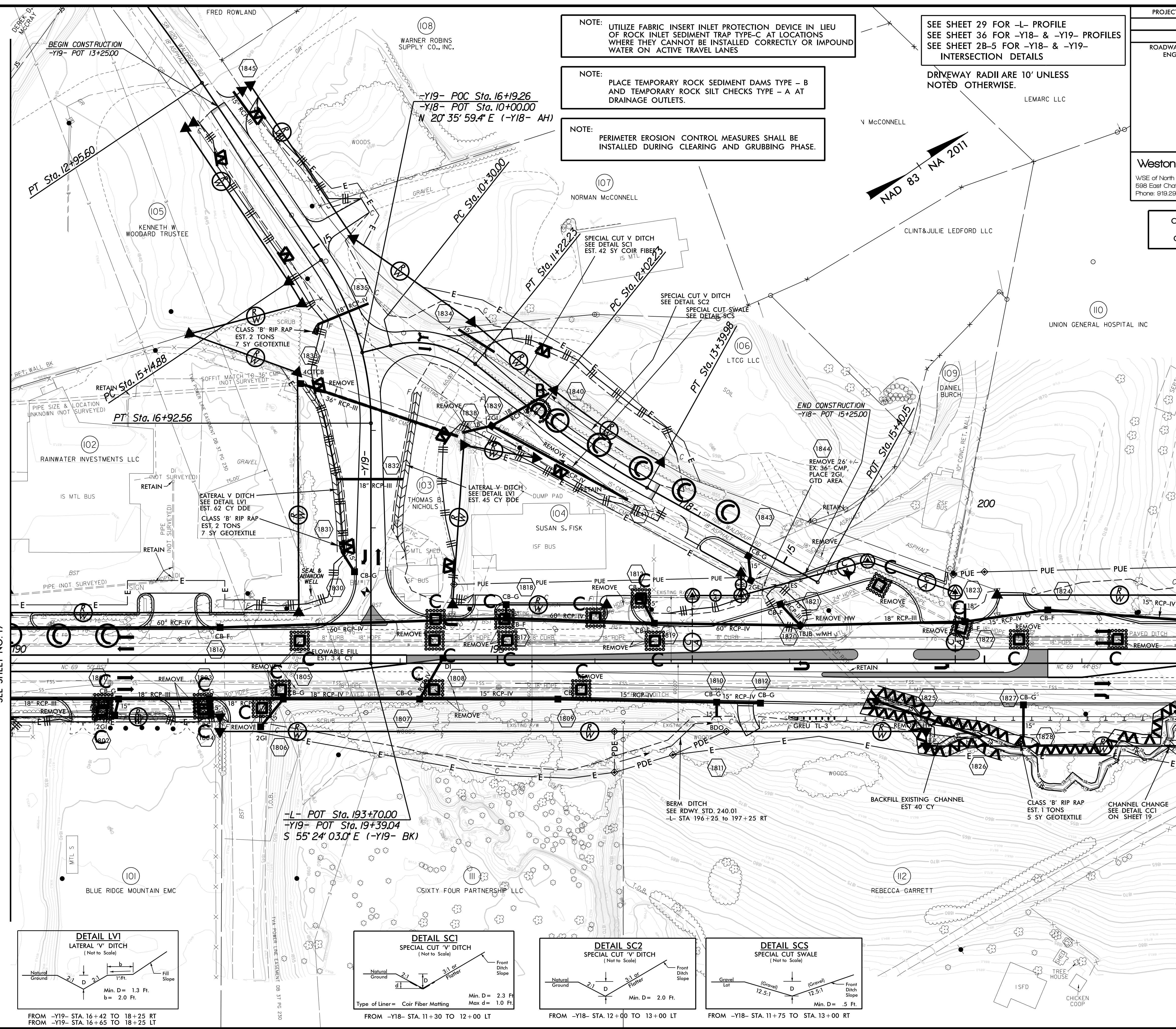
PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-23/CONST 18
RW SHEET NO. ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221	

CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 18

- NOTE:** UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES
- NOTE:** PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.
- NOTE:** PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

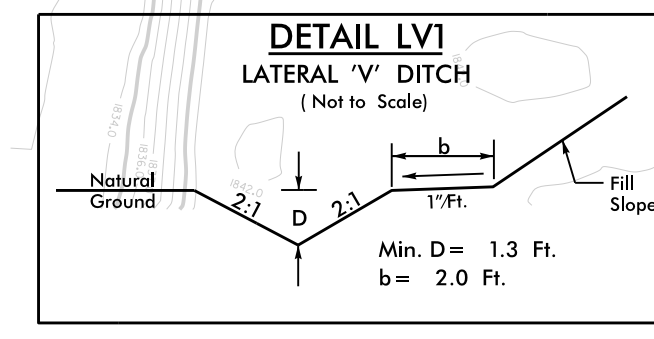
SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 36 FOR -Y18- & -Y19- PROFILES
SEE SHEET 2B-5 FOR -Y18- & -Y19- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

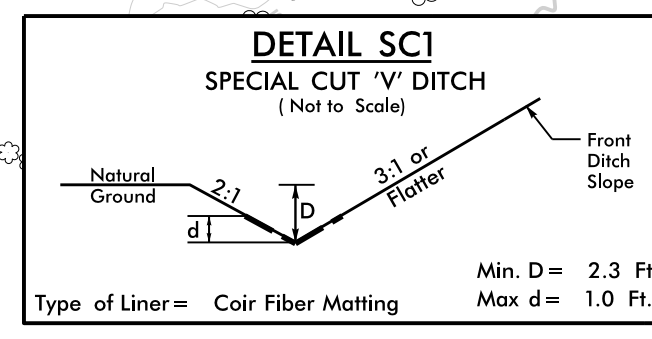


MATCH LINE -L- STA. 190+00
SEE SHEET NO. 17

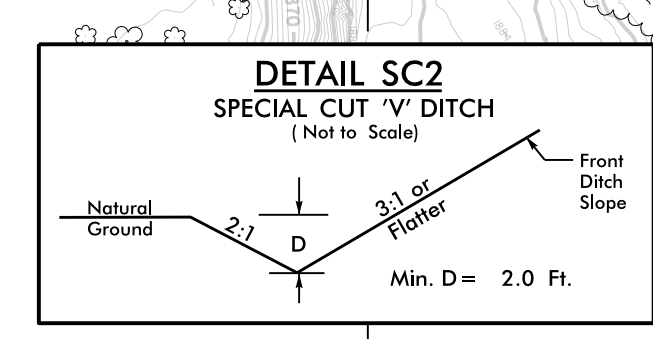
MATCH LINE -L- STA. 202+00
SEE SHEET NO. 19



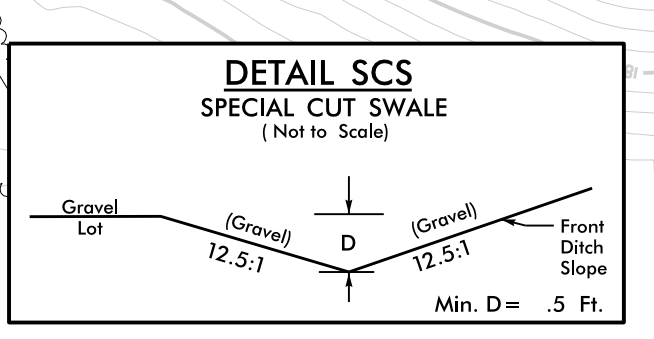
FROM -Y19- STA. 16+42 TO 18+25 RT
FROM -Y19- STA. 16+65 TO 18+25 LT



FROM -Y18- STA. 11+30 TO 12+00 LT



FROM -Y18- STA. 12+00 TO 13+00 LT



FROM -Y18- STA. 11+75 TO STA. 13+00 RT

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8/17/99

Weston Sampson
WSE of North Carolina, PC
598 East Chatham Street
Phone: 919.287.0220

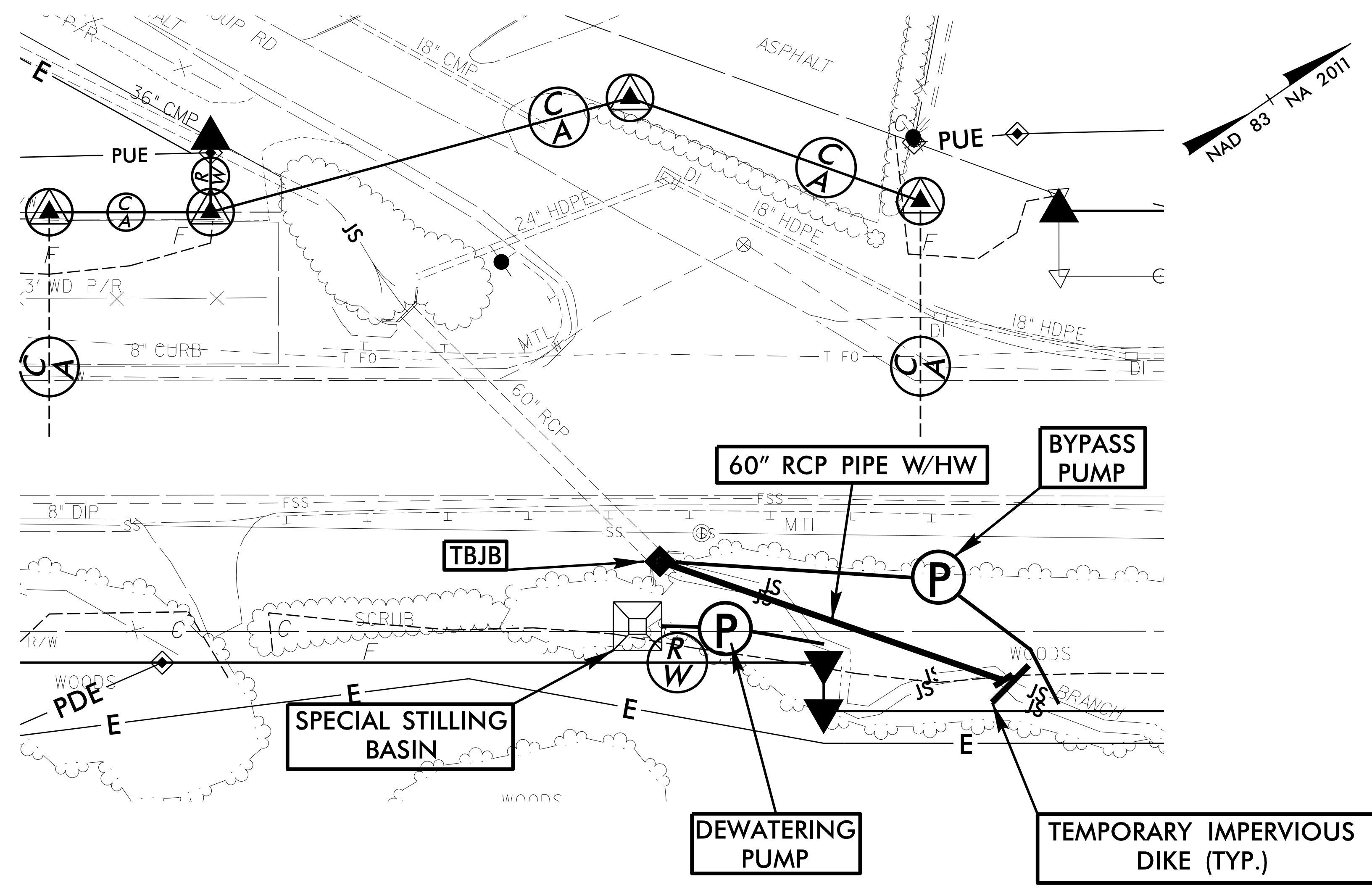
NC
License:
C-4847
Cary, NC 27511
Fax: 919.287.0221

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-24/CONST JB
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

PIPE CONSTRUCTION SEQUENCE STA. 198+50 -L-

1. INSTALL SPECIAL STILLING BASIN IN DESIRED LOCATION.
2. INSTALL BYPASS PUMP WITH TEMPORARY FLEXIBLE HOSE.
3. INSTALL UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION.
4. PUMP IMPOUNDED FLOW WITH DEWATERING PUMP THROUGH STILLING BASIN.
5. REMOVE HEADWALL OF EX. 60" RCP.
6. INSTALL TRAFFIC BURY JUNCTION BOX (TBJB) AT INLET OF EX. 60" RCP, AND CONSTRUCT UPSTREAM PIPE EXTENSION AND HEADWALL.
7. REMOVE IMPERVIOUS DIKES, SPECIAL STILLING BASIN, AND PUMP DIVERSION.
8. AS CONSTRUCTION PHASING ALLOWS COMPLETE REMAINDER OF DOWNSTREAM STORMWATER SYSTEM AND ROADWAY CONSTRUCTION.

NOTE: THE CONTRACTOR SHALL NOT PUMP SEDIMENT-LADEN WATER DIRECTLY INTO STREAM.



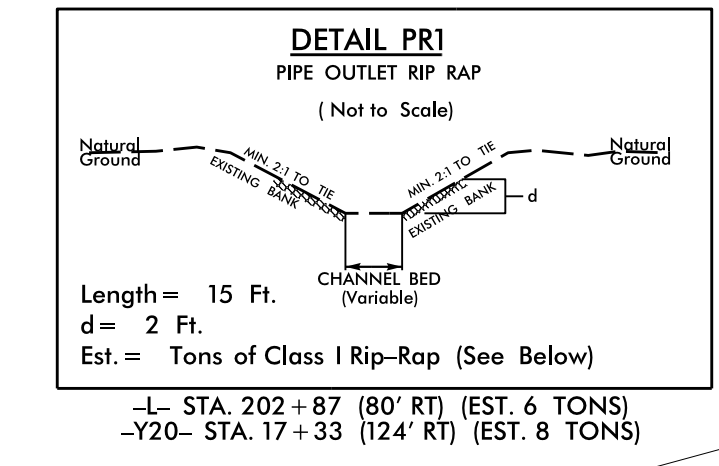
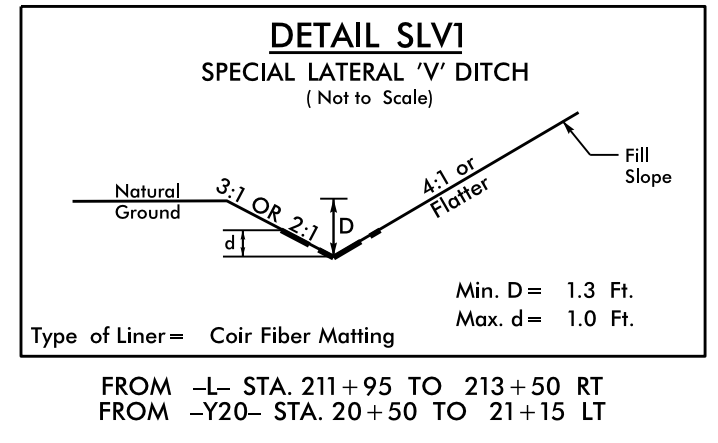
8/1/2019
C:\Users\jgiles\OneDrive\Documents\ECVA0011C-EC-EC24-L198+50.60 PIPE Con Seq.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-25/CONST 19
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	
Weston Sampson	
WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221

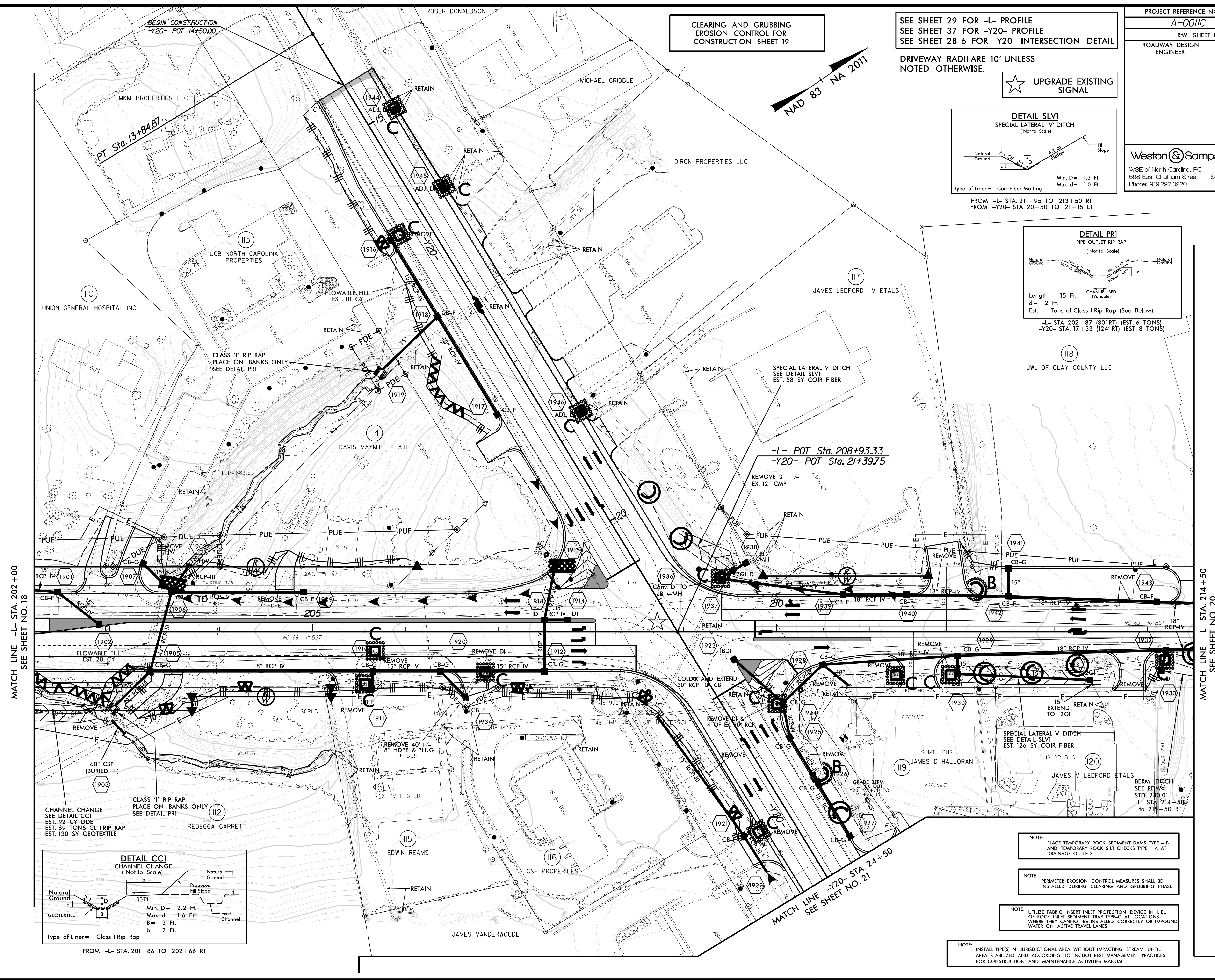
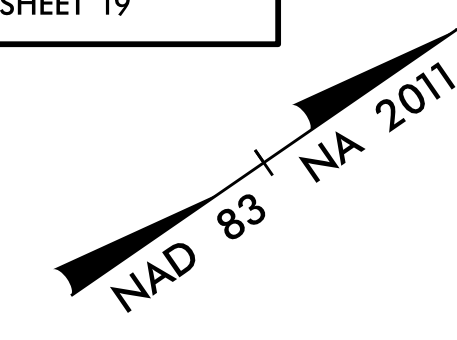
SEE SHEET 29 FOR -L- PROFILE
SEE SHEET 37 FOR -Y20- PROFILE
SEE SHEET 2B-6 FOR -Y20- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

★ UPGRADE EXISTING SIGNAL

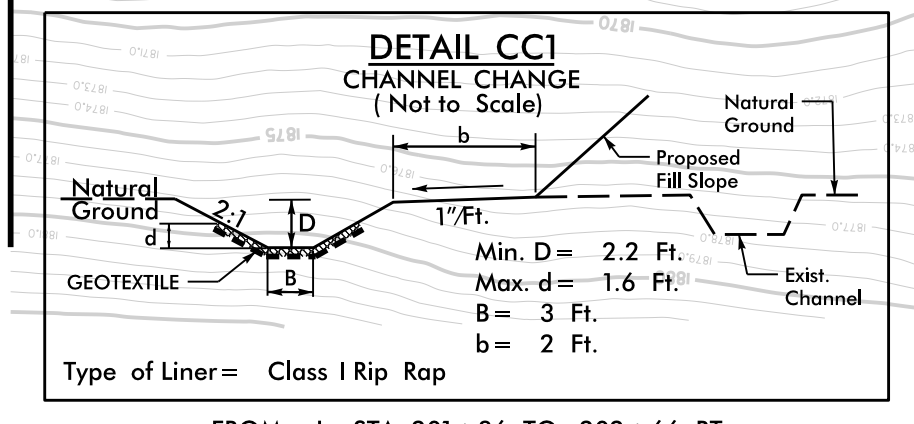


CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 19



MATCH LINE -L- STA. 202+00
SEE SHEET NO. 18

MATCH LINE -L- STA. 214+50
SEE SHEET NO. 20



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

NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES.

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

8/17/19 8/17/2019 C:\projects\EC-0011C-EC-25-19.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-26/CONST.20
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<small>W&S of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220</small>	
<small>NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221</small>	

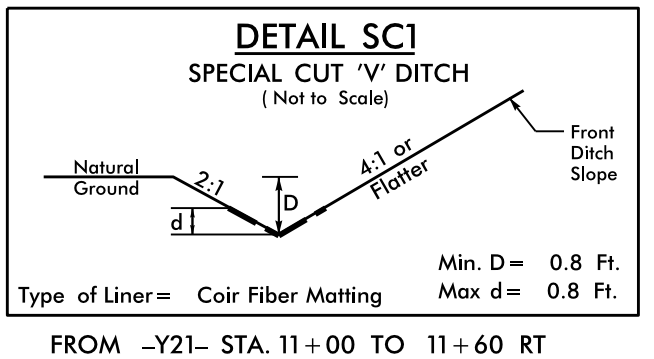
CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 20

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

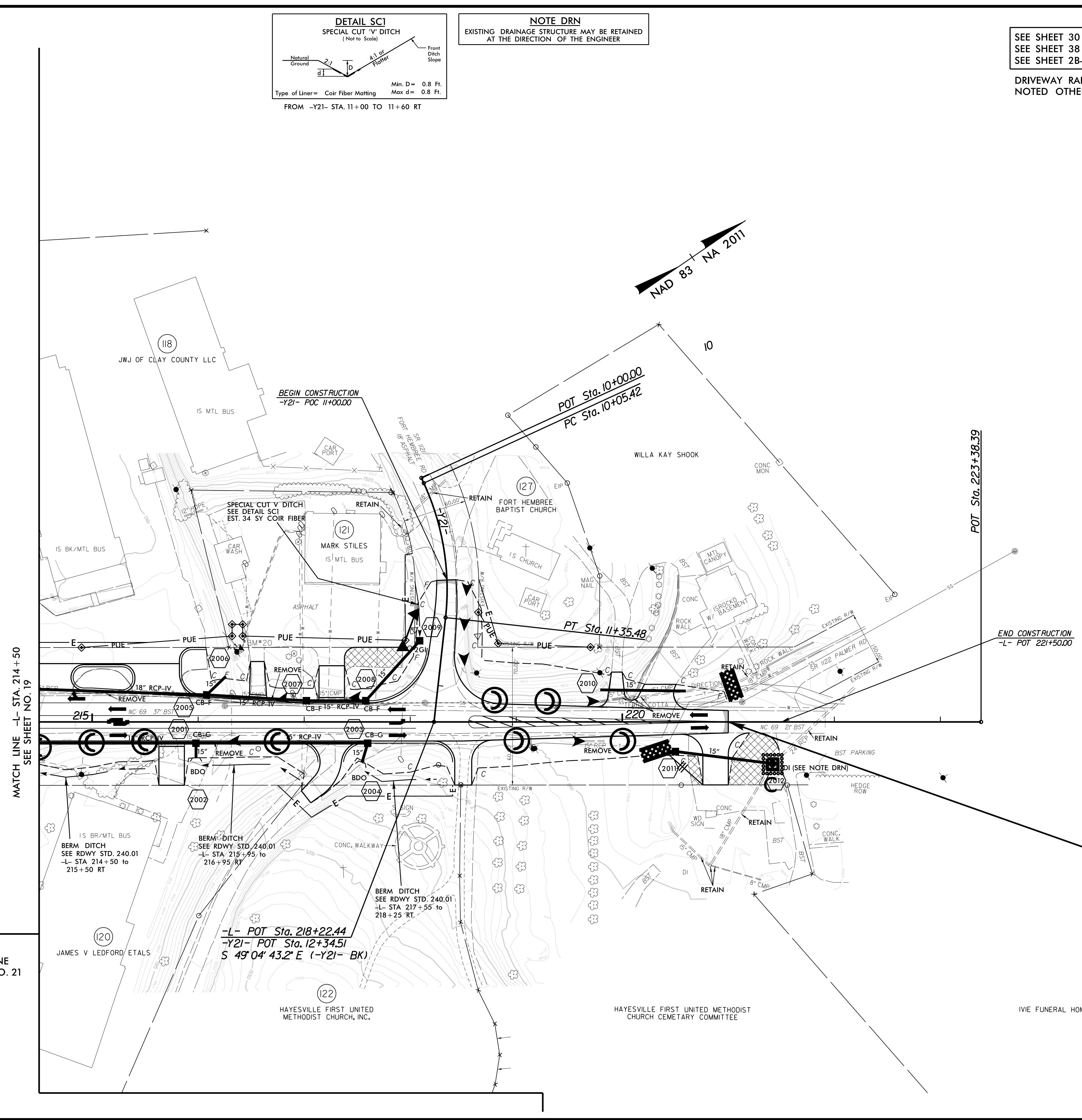
NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE
INSTALLED DURING CLEARING AND GRUBBING PHASE.

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU
OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS
WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND
WATER ON ACTIVE TRAVEL LANES

SEE SHEET 30 FOR -L- PROFILE
SEE SHEET 38 FOR -Y21- PROFILE
SEE SHEET 2B-6 FOR -Y21- INTERSECTION DETAIL
DRIVEWAY RADII ARE 10' UNLESS
NOTED OTHERWISE.



NOTE DRN
EXISTING DRAINAGE STRUCTURE MAY BE RETAINED
AT THE DIRECTION OF THE ENGINEER



MATCH LINE -L- STA. 214+50
SEE SHEET NO. 19

MATCH LINE
SEE SHEET NO. 21

END T.I.P. PROJECT A-0011C
-L- POT 221+00.00

8/17/19

8/17/2019
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2:23:57 PM

8/17/19

8/17/2019 9:00 AM C:\Users\ec\OneDrive\EC\EC27_EC.dgn

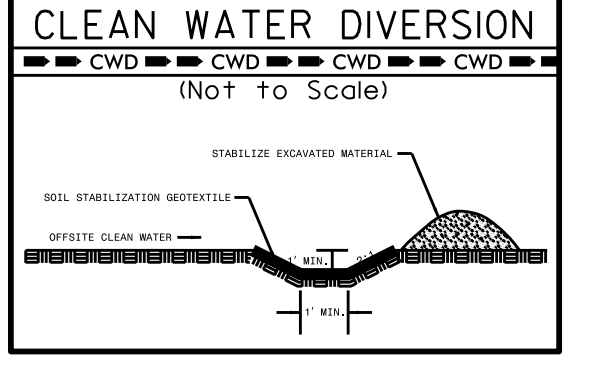
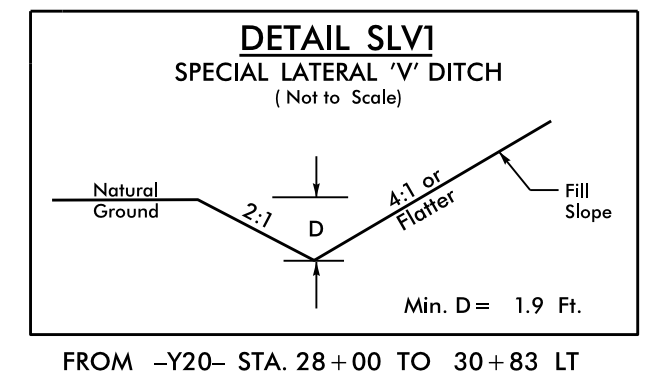
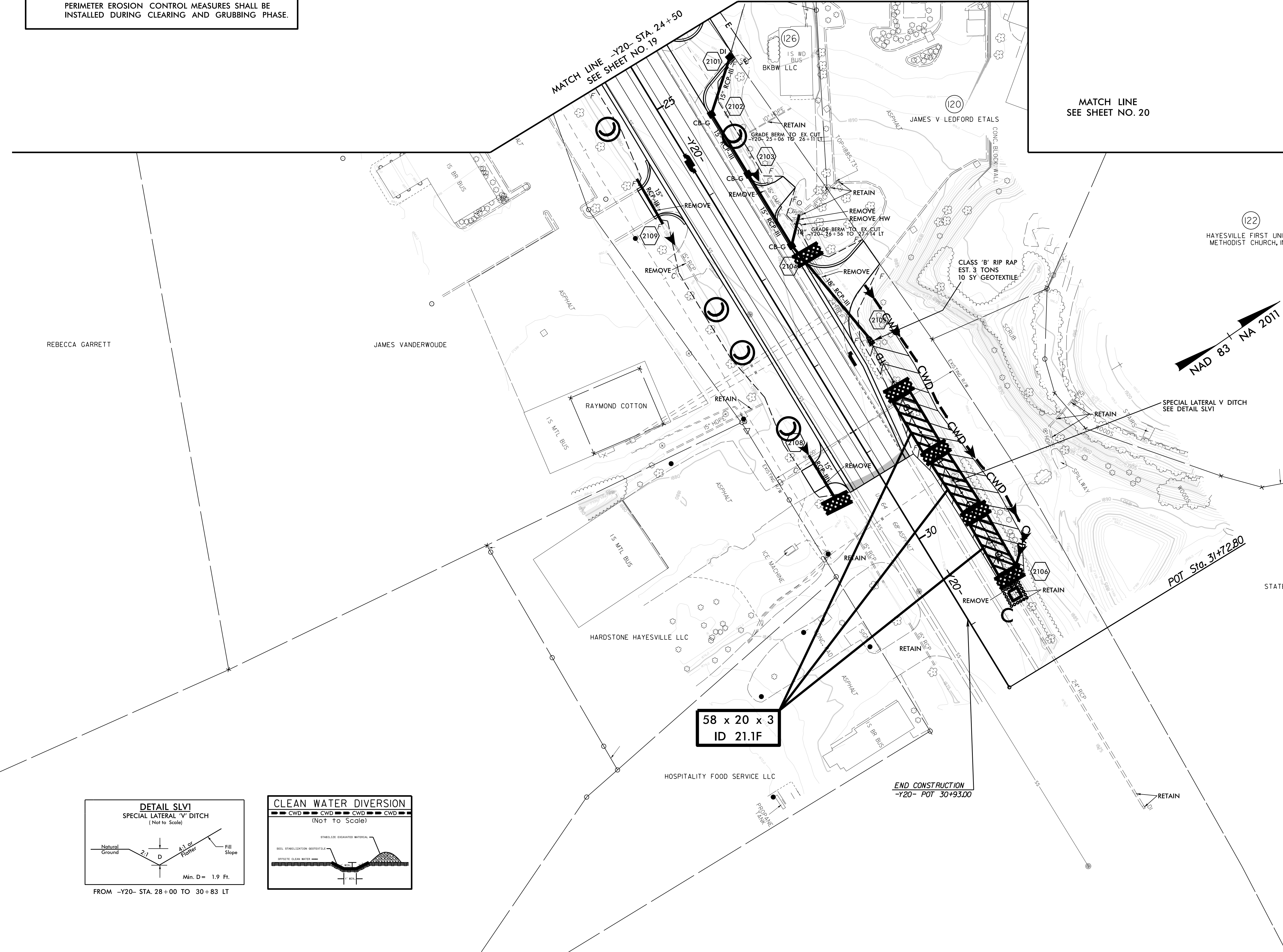
NOTE:
PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NOTE:
PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

CLEARING AND GRUBBING
EROSION CONTROL FOR
CONSTRUCTION SHEET 21

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-27/CONST.21
RW SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

MATCH LINE
SEE SHEET NO. 20



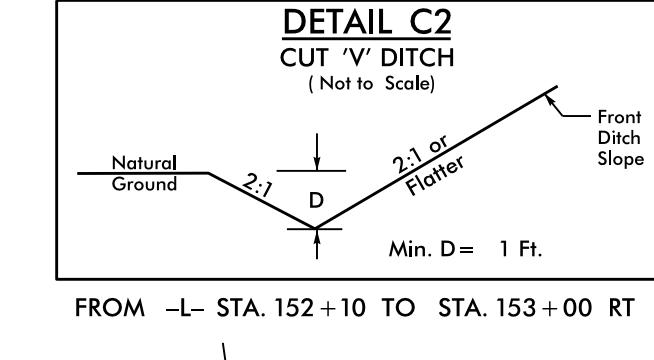
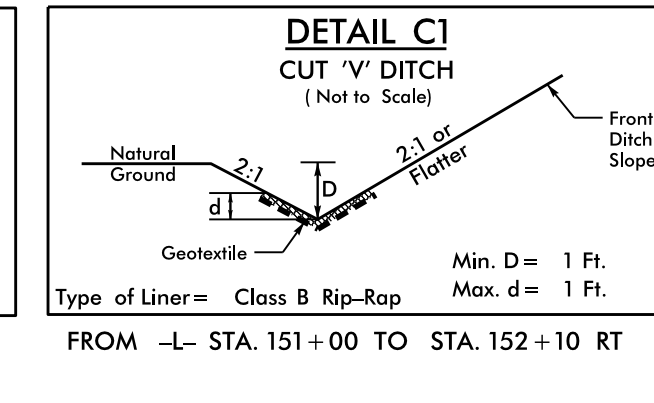
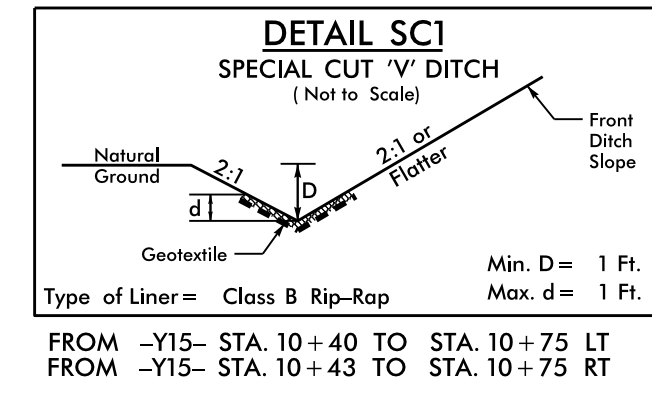
SEE SHEET 37 FOR -Y20- PROFILE

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

8/17/99

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

NOTE: WHEN THE -Y15DET- DETOUR IS NO LONGER NEEDED, THE CONTRACTOR SHALL REMOVE THE PAVEMENT AND GRADE THE ROADBED AND DITCHES TO DRAIN TO THE PROPOSED -Y15-DITCH AND OPEN END PIPE #1419 TO LIMIT THE AMOUNT OF STORMWATER DRAINING TO THE -L- CURB & GUTTER AS MUCH AS PRACTICABLE.



Weston & Sampson
WSE of North Carolina, PC
598 East Chatham Street
Phone: 919.297.0220

PROJECT REFERENCE NO. A-0011C
SHEET NO. EC-28/CONST.28-1
RW SHEET NO.
ROADWAY DESIGN ENGINEER
HYDRAULICS ENGINEER

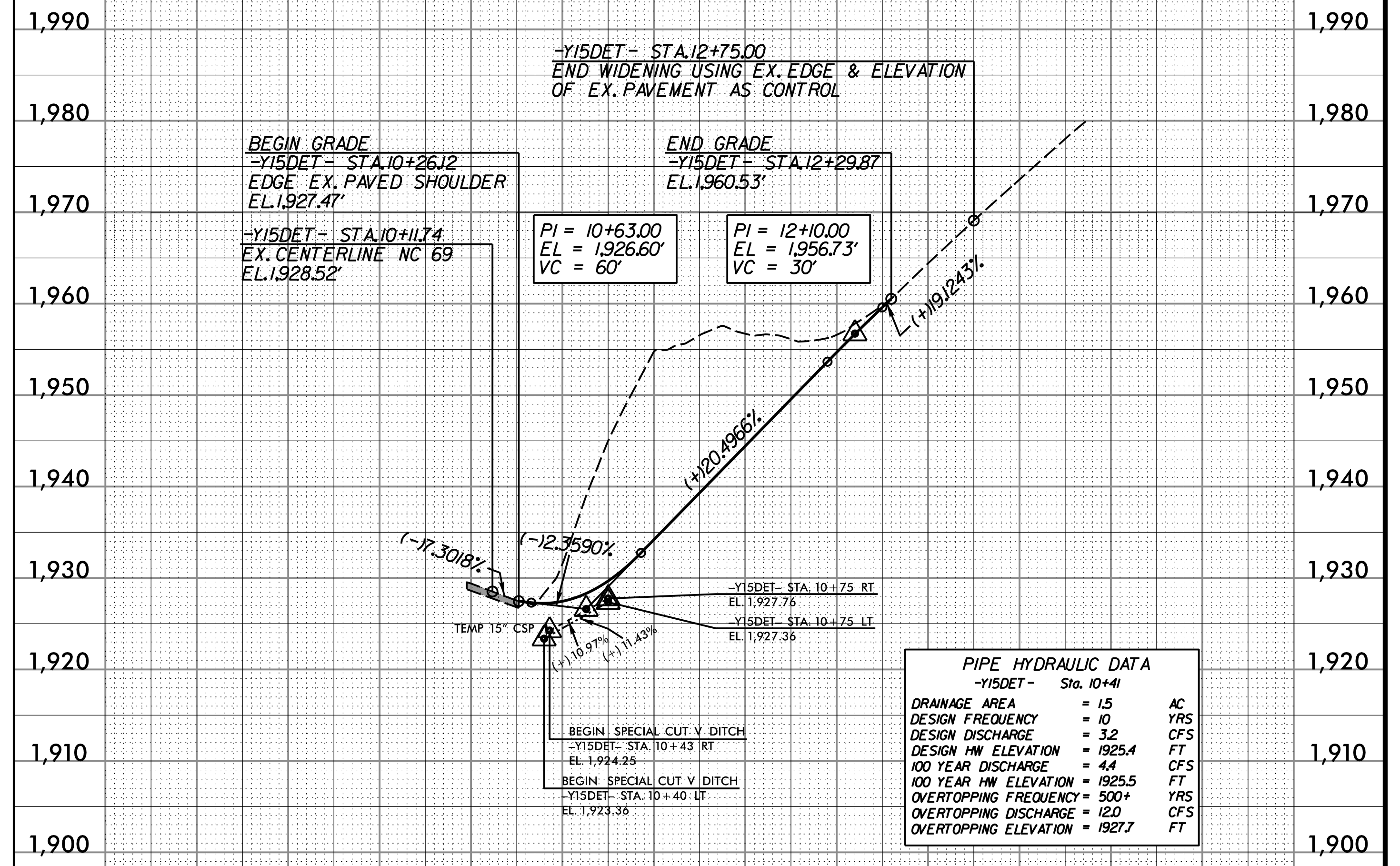
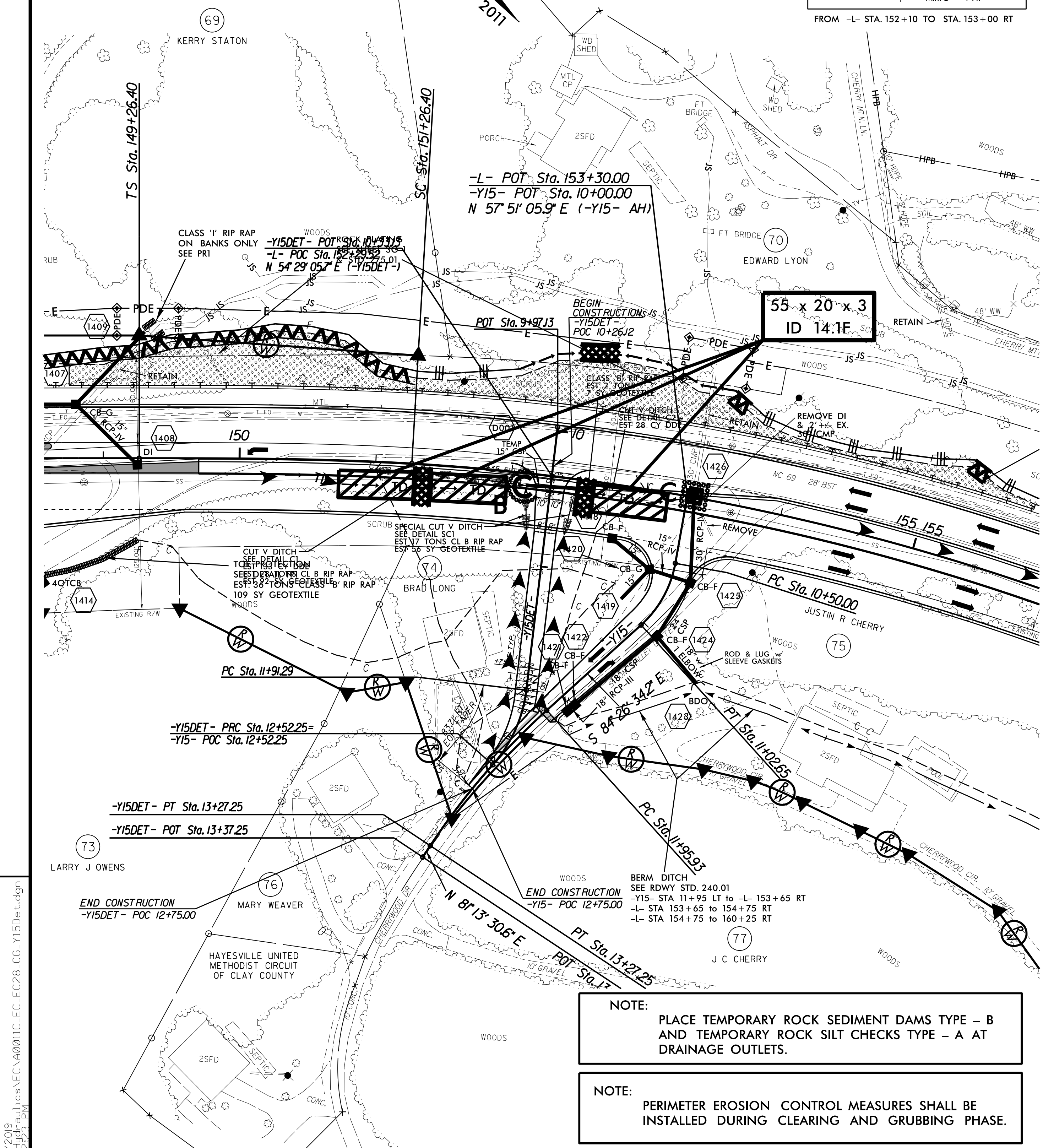
CLEARING AND GRUBBING
EROSION CONTROL FOR
DET CONSTRUCTION SHEET 28-1

EXISTING GROUND
PROPOSED GRADE
LEFT DITCH GRADE
RIGHT DITCH GRADE

-Y15DET- CHERRYWOOD DR. DETOUR

-Y15DET-

REVISIONS



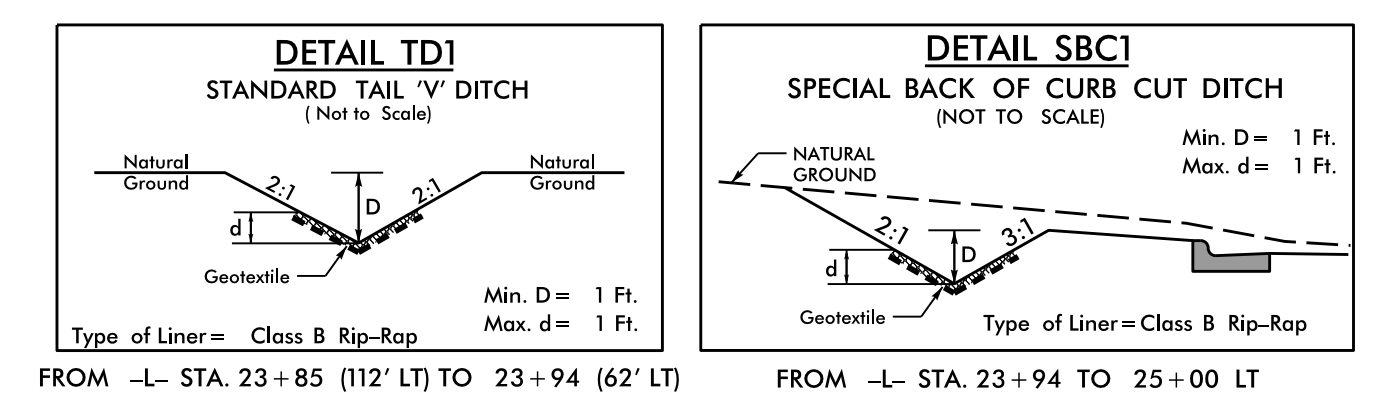
PIPE HYDRAULIC DATA	
-Y15DET- Sta. 10+41	
DRAINAGE AREA	= 15 AC
DESIGN FREQUENCY	= 10 YRS
DESIGN DISCHARGE	= 3.2 CFS
DESIGN HW ELEVATION	= 1925.4 FT
100 YEAR DISCHARGE	= 4.4 CFS
100 YEAR HW ELEVATION	= 1925.5 FT
OVERTOPPING FREQUENCY	= 500+ YRS
OVERTOPPING DISCHARGE	= 12.0 CFS
OVERTOPPING ELEVATION	= 1927.7 FT

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

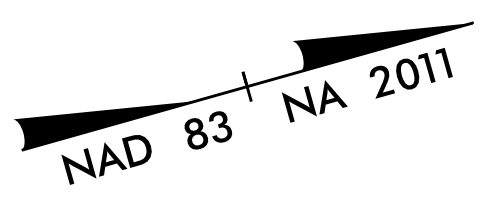
NOTE: PERIMETER EROSION CONTROL MEASURES SHALL BE INSTALLED DURING CLEARING AND GRUBBING PHASE.

8/1/2019
R:\Projects\2019\EC\A0011C-EC-EC28-CC-Y15Det.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-29/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<small>W&S of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220</small>	
<small>NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221</small>	



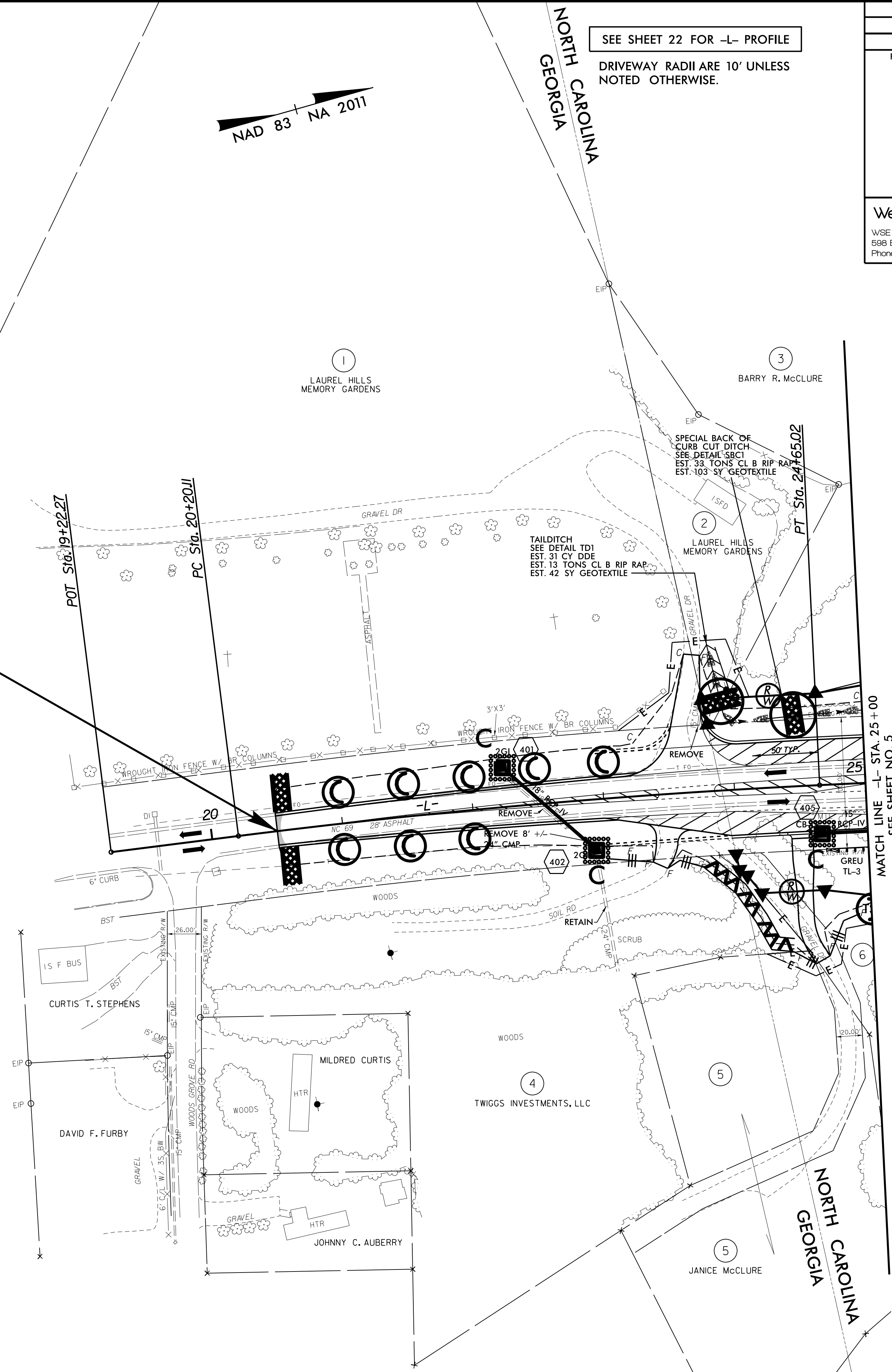
SEE SHEET 22 FOR -L- PROFILE
DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



BEGIN T.I.P. PROJECT A-0011C
-L- POC 20+50.00

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

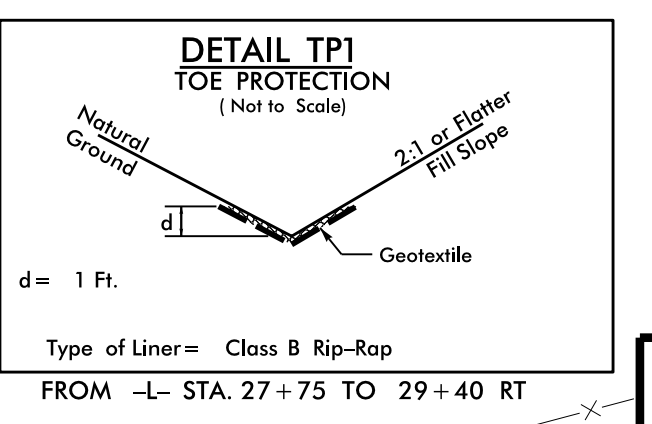
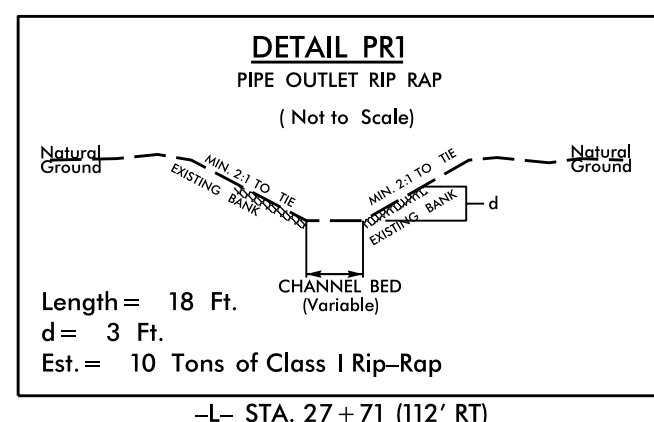
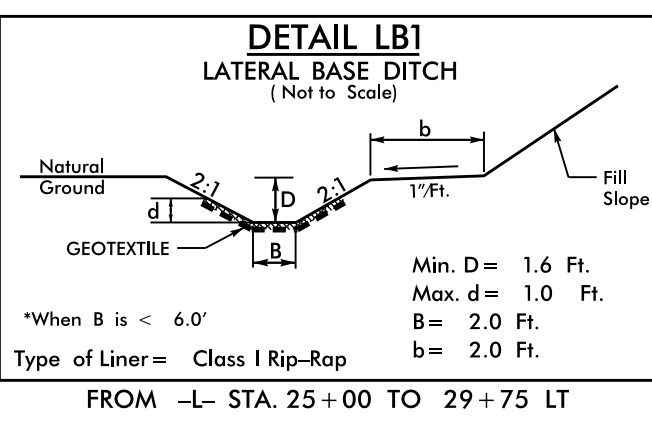


8/17/19 8/2/2019 S:\Projects\EC\A0011C-EC-EC29_FINAL.dgn

PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-30/CONST.5
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

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



Place Matting for Erosion Control on Slope as Work Allows. -L- Sta. 28+00-29+50 LT

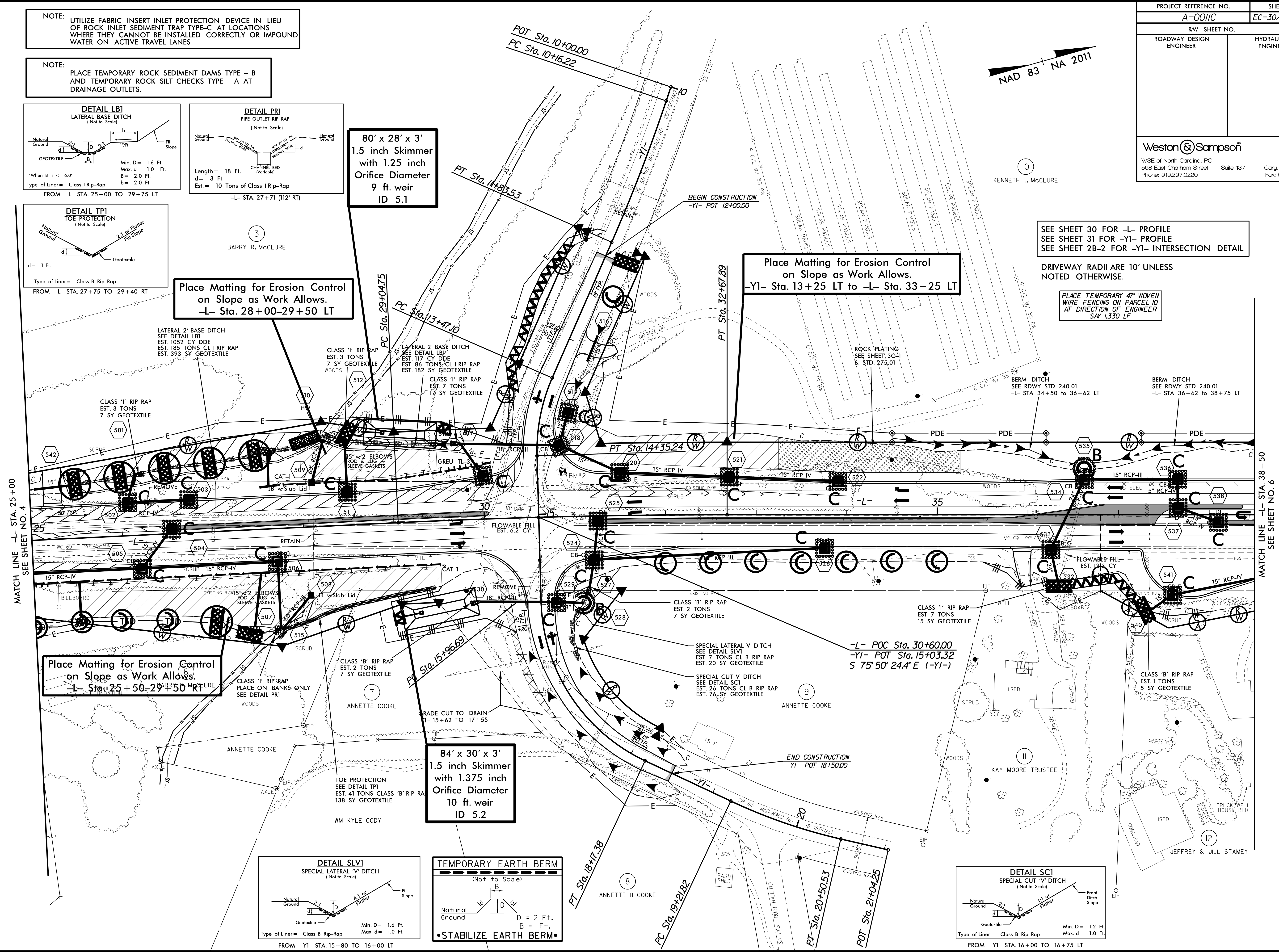
80' x 28' x 3' 1.5 inch Skimmer with 1.25 inch Orifice Diameter 9 ft. weir ID 5.1

Place Matting for Erosion Control on Slope as Work Allows. -Y1- Sta. 13+25 LT to -L- Sta. 33+25 LT

SEE SHEET 30 FOR -L- PROFILE
SEE SHEET 31 FOR -Y1- PROFILE
SEE SHEET 2B-2 FOR -Y1- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

PLACE TEMPORARY 4" WOVEN WIRE FENCING ON PARCEL 10 AT DIRECTION OF ENGINEER SAY 1,330 LF

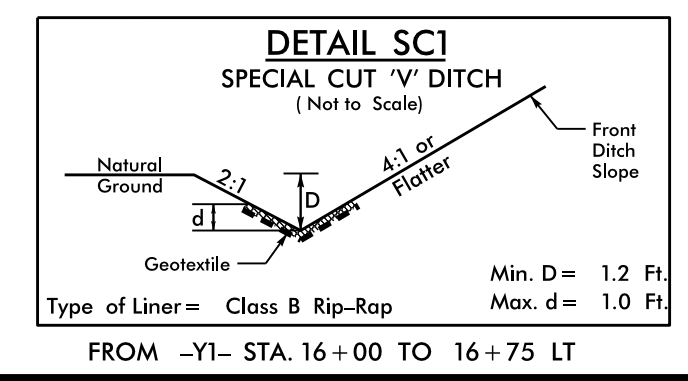
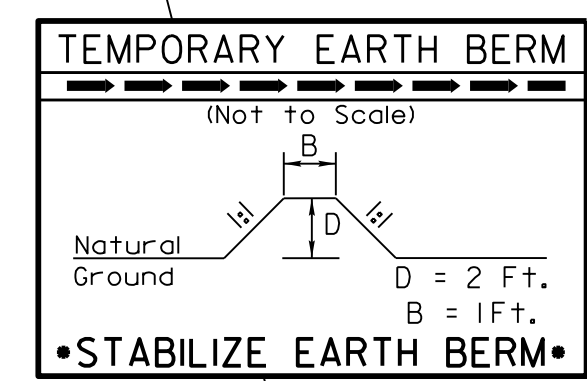
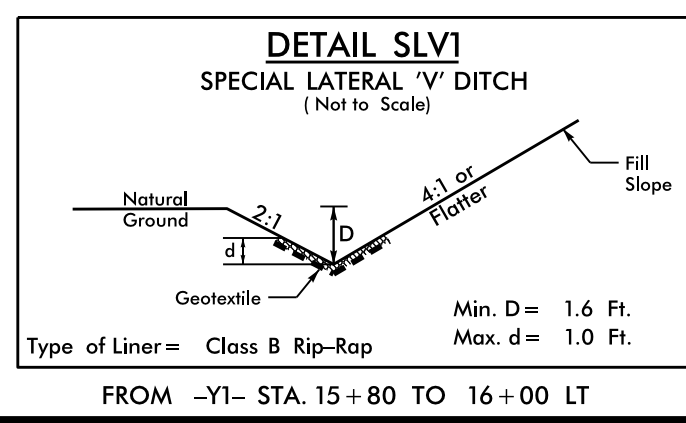


MATCH LINE -L- STA. 25+00 SEE SHEET NO. 4

MATCH LINE -L- STA. 38+50 SEE SHEET NO. 6

Place Matting for Erosion Control on Slope as Work Allows. -L- Sta. 25+50-29+50 RT

84' x 30' x 3' 1.5 inch Skimmer with 1.375 inch Orifice Diameter 10 ft. weir ID 5.2

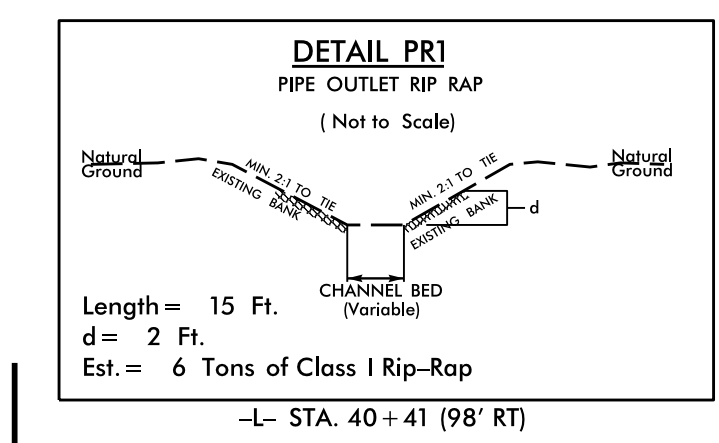
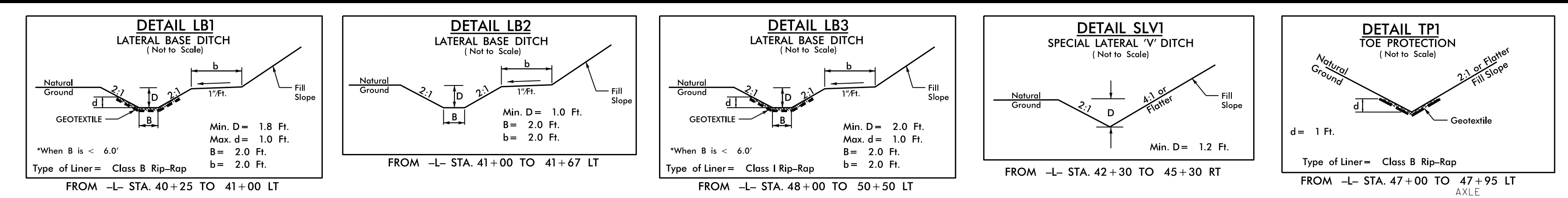


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PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-31/CONST.6
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

SEE SHEET 23 FOR -L- PROFILE
 DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

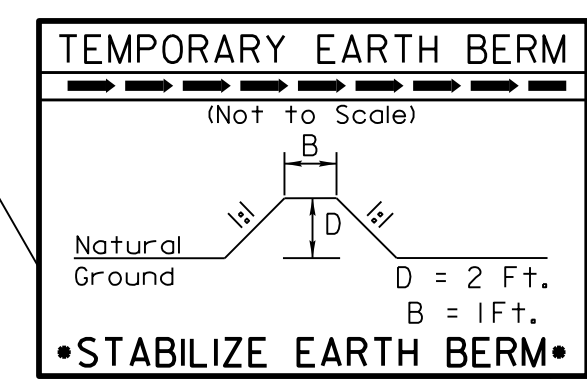
Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 38+50-39+00 LT

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 40+50-42+00 LT

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 44+00-45+00 LT

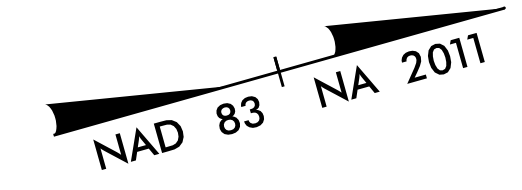
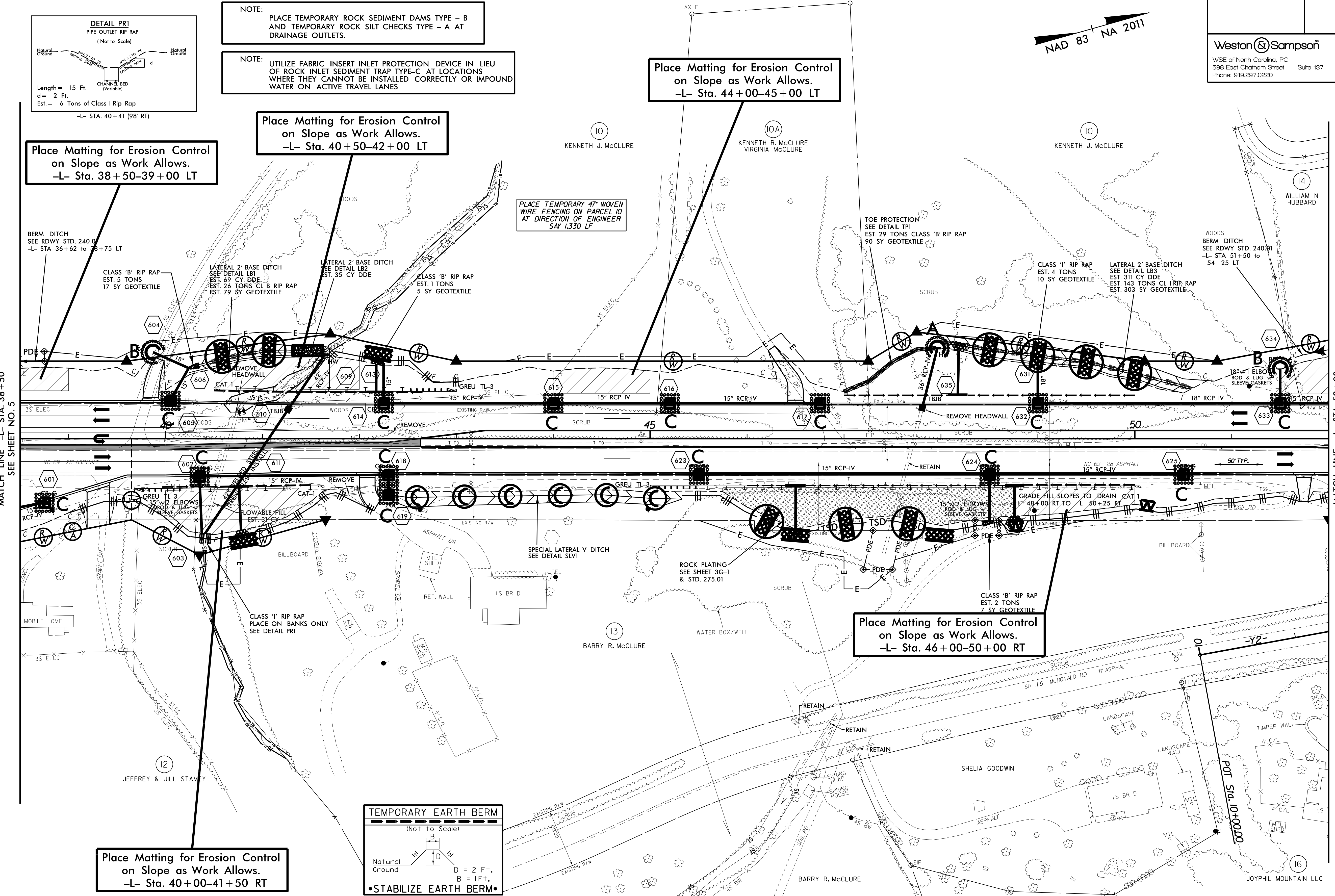
Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 46+00-50+00 RT

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 40+00-41+50 RT



MATCH LINE -L- STA. 38+50
 SEE SHEET NO. 5

MATCH LINE -L- STA. 52+00
 SEE SHEET NO. 7



8/17/19

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

SEE SHEET 23 FOR -L- PROFILE
 SEE SHEET 31 FOR -Y2- & -Y3- PROFILES
 SEE SHEET 32 FOR -Y4- & -Y5- PROFILES
 SEE SHEET 2B-2 FOR -Y2-, -Y3-, & -Y4- INTERSECTION DETAILS
 SEE SHEET 2B-3 FOR -Y5- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

PROJECT REFERENCE NO. **A-0011C** SHEET NO. **EC-32/CONST.7**

RW SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

Weston Sampson
 WSE of North Carolina, PC
 588 East Chatham Street
 Phone: 919.297.0220

NC License: C-4847
 Suite 137
 Cary, NC 27511
 Fax: 919.297.0221

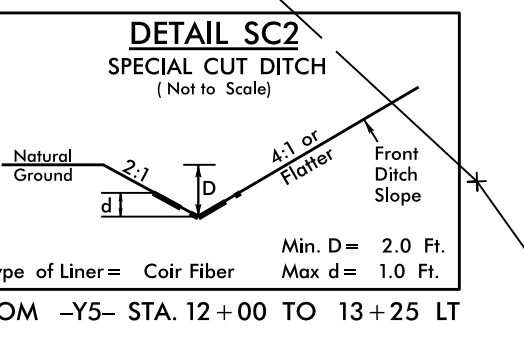
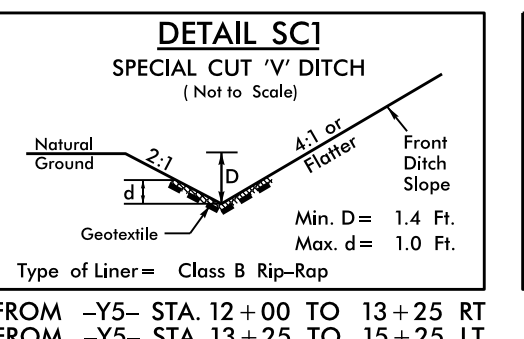
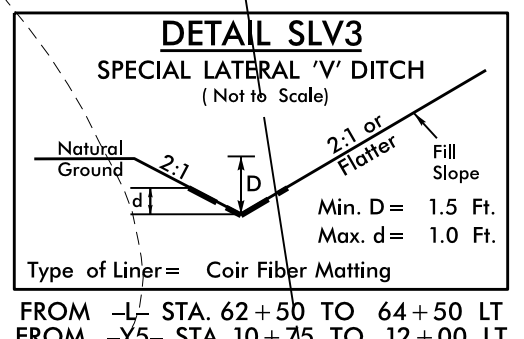
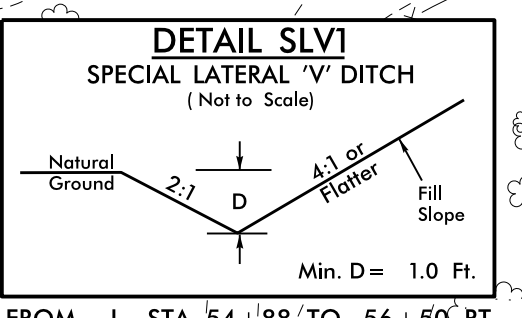
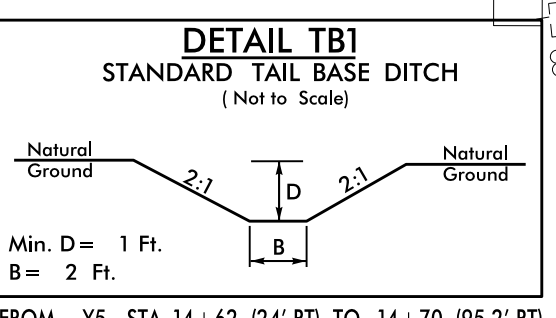
Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 51+50-57+00 LT

-L- POC Sta. 54+43.03
 -Y3- POT Sta. 10+00.00
 S 77°19'15.2" E (-Y3- AH)

-L- POC Sta. 62+90.54
 -Y5- POT Sta. 10+00.00
 N 86°29'34.5" E (-Y5- AH)

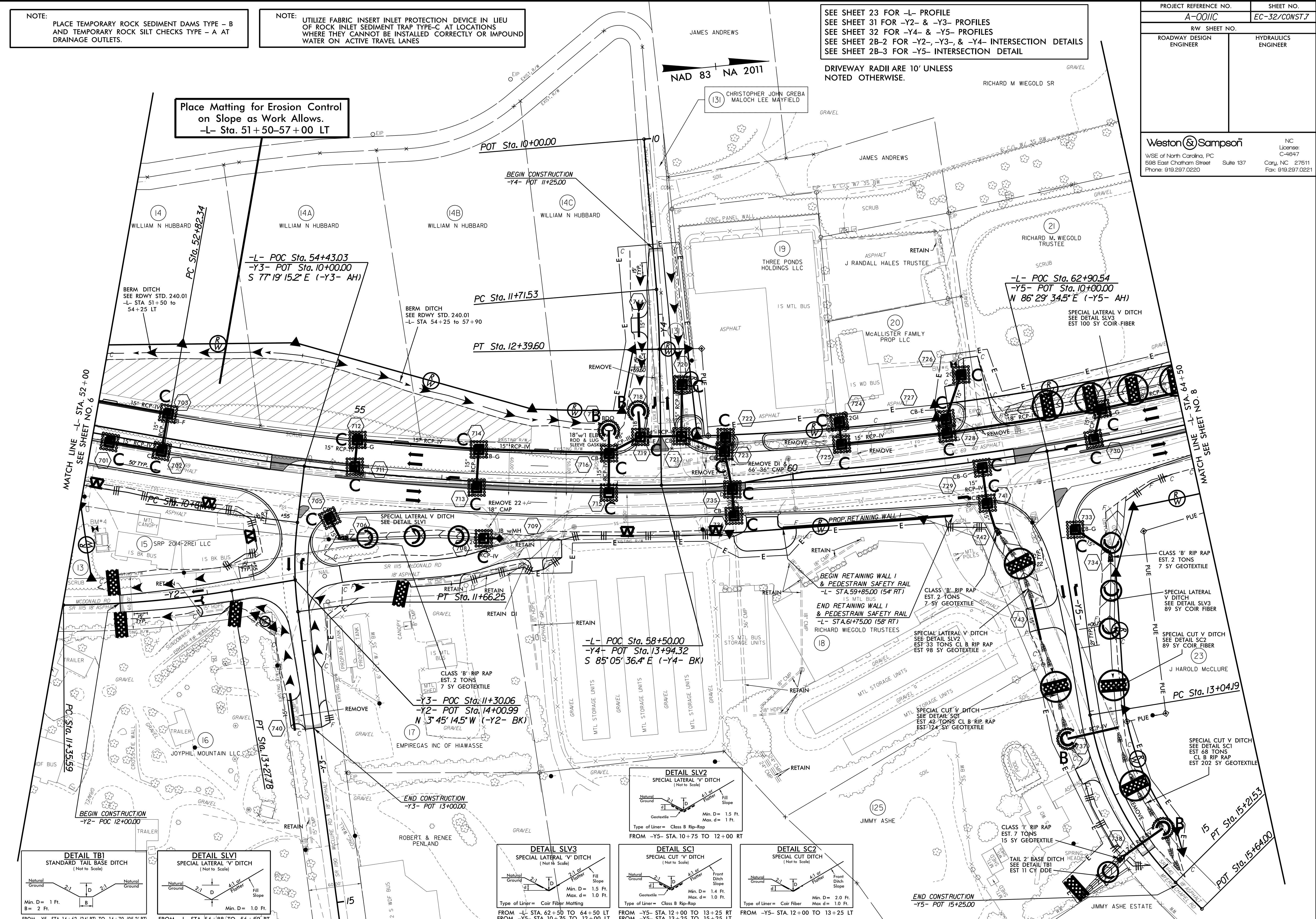
-L- POC Sta. 58+50.00
 -Y4- POT Sta. 13+94.32
 S 85°05'36.4" E (-Y4- BK)

-Y3- POC Sta. 11+30.06
 -Y2- POT Sta. 14+00.99
 N 3°45'14.5" W (-Y2- BK)

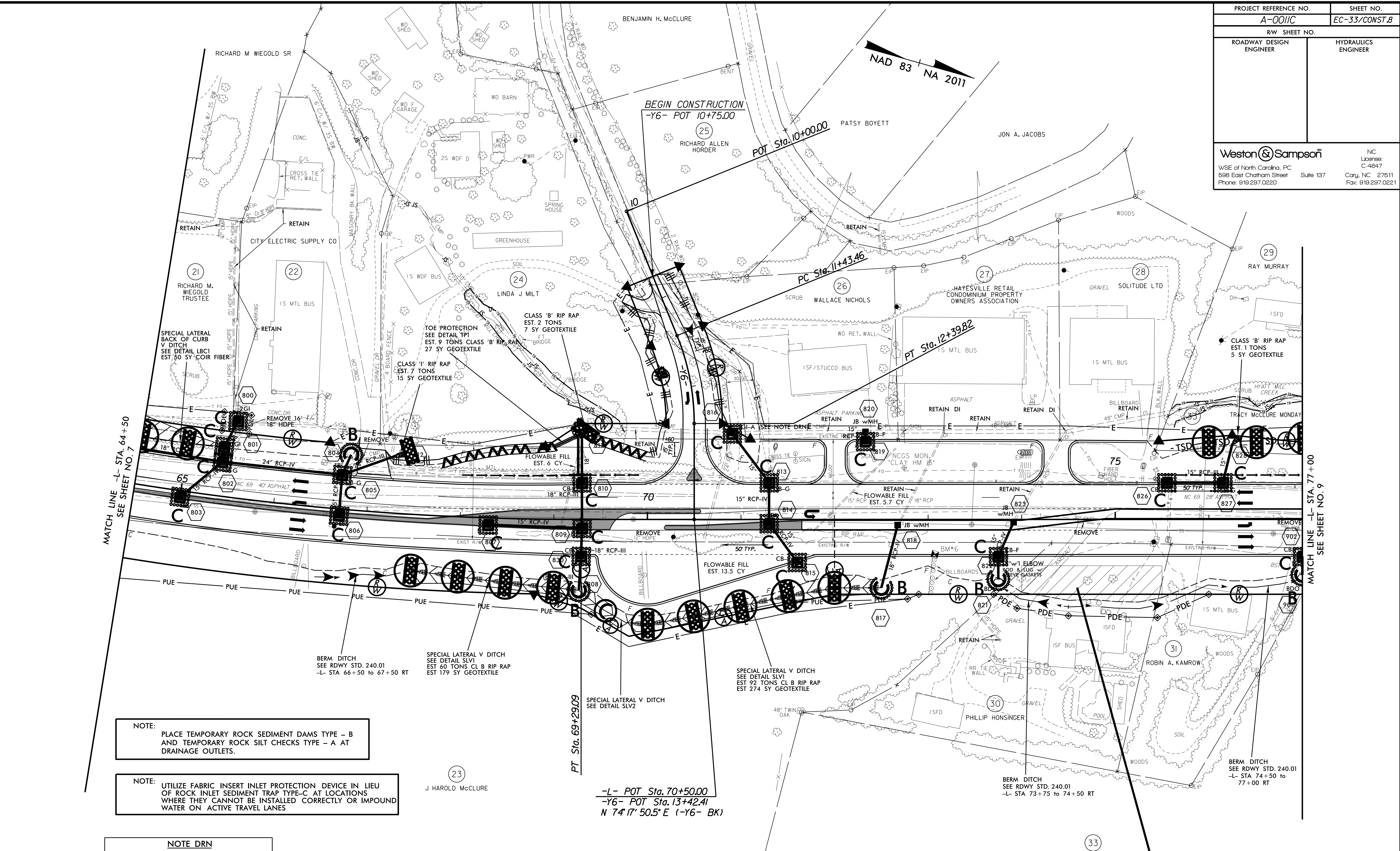


8/17/99

8/17/2019 jca:ec:0011c.ec.ec32.final.dgn



PROJECT REFERENCE NO. A-0011C		SHEET NO. EC-33/CONST.8	
RW SHEET NO.		HYDRAULICS ENGINEER	
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220		NC License: C-4847 Suite 137 Cary, NC 27511 Fax: 919.297.0221	



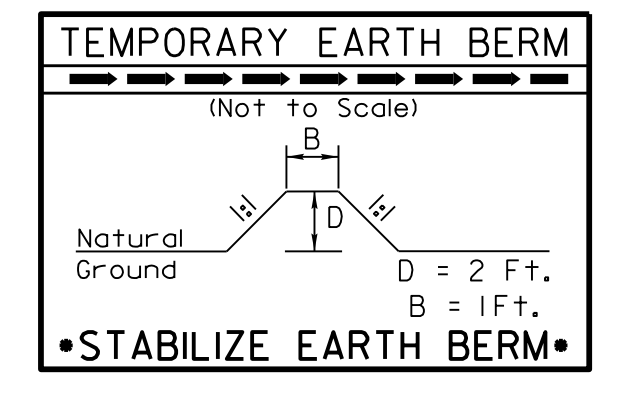
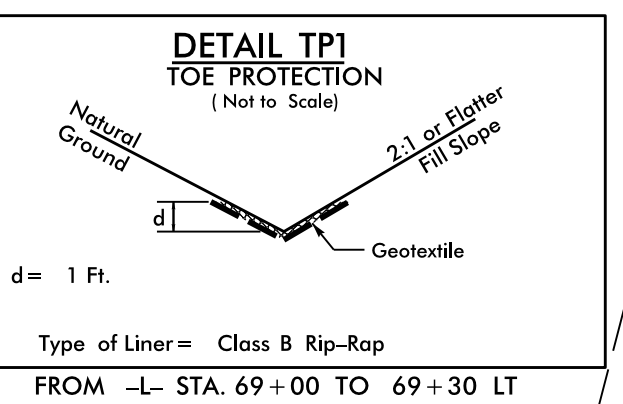
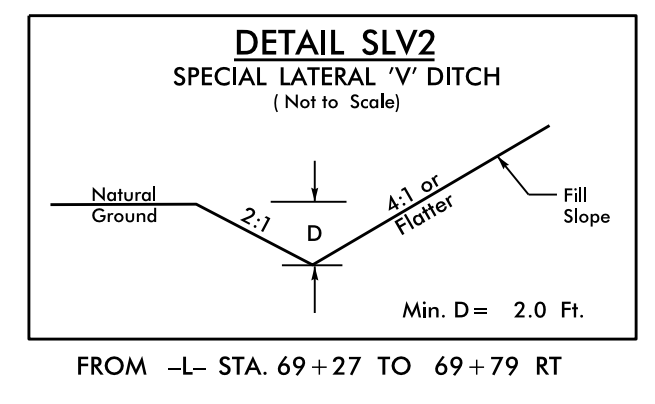
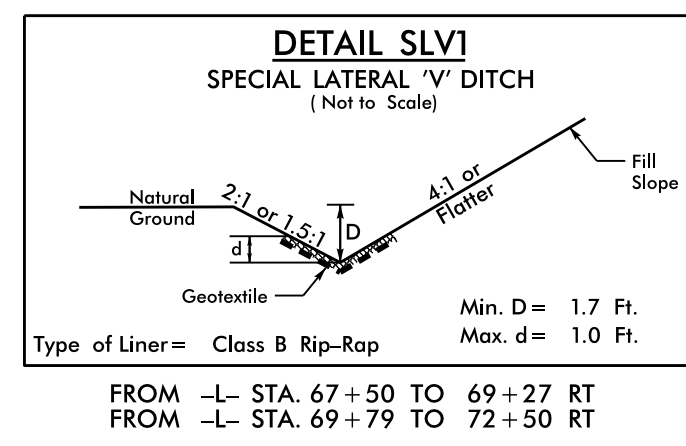
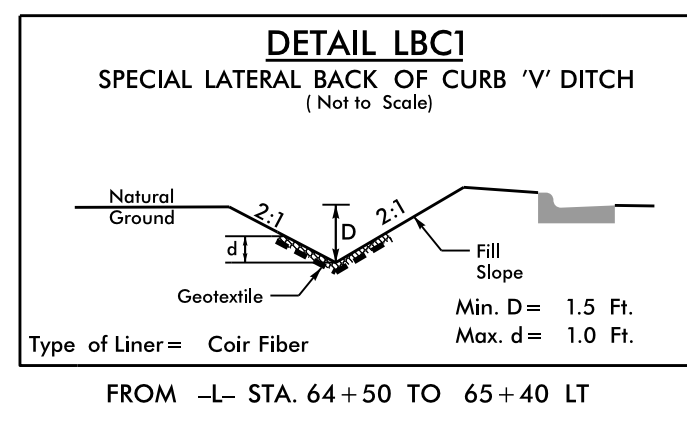
MATCH LINE -L- STA. 64+50
SEE SHEET NO. 7

MATCH LINE -L- STA. 77+00
SEE SHEET NO. 9

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

NOTE:
UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

NOTE DRN
EXISTING DRAINAGE STRUCTURES MAY BE RETAINED AT THE DIRECTION OF THE ENGINEER



Place Matting for Erosion Control on Slope as Work Allows.
-L- Sta. 74+00-75+50 RT

SEE SHEET 24 FOR -L- PROFILE
SEE SHEET 32 FOR -Y6- PROFILE
SEE SHEET 2B-3 FOR -Y6- INTERSECTION DETAIL

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.

8/17/99

8/2/2019
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S:\Projects\EC-0011C-EC-EC33_FINAL.dgn

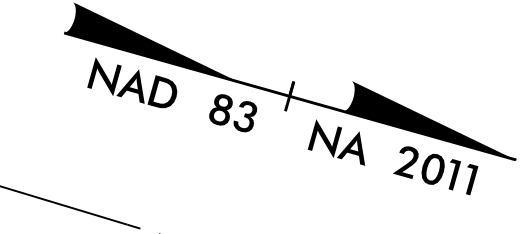
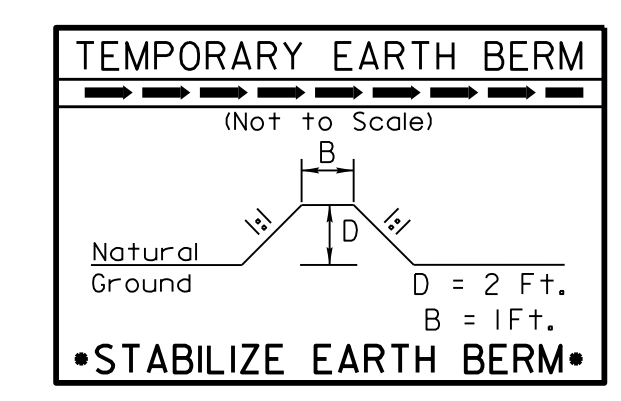
PROJECT REFERENCE NO. A-0011C	SHEET NO. EC-34/CONST.9
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
Weston & Sampson WSE of North Carolina, PC 588 East Chatham Street Phone: 919.297.0220	
NC License: C-4847 Cary, NC 27511 Fax: 919.297.0221	

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

SEE SHEET 24 FOR -L- PROFILE
SEE SHEET 32 FOR -Y7- PROFILE
SEE SHEET 28-3 FOR -Y7- INTERSECTION DETAIL

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

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



46' x 18' x 3'
1.5 inch Skimmer
with 0.75 inch
Orifice Diameter
4 ft. weir
ID 9.1

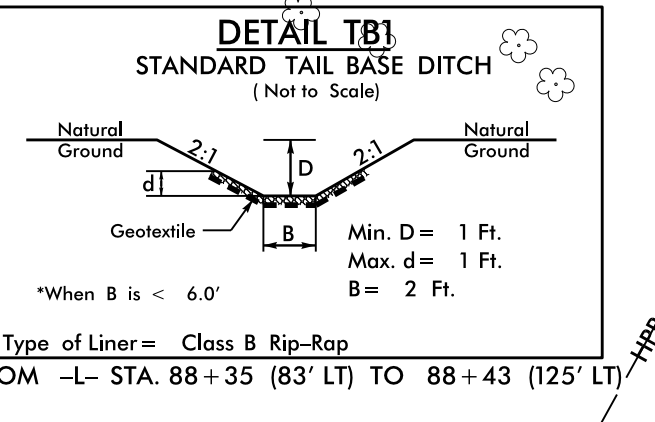
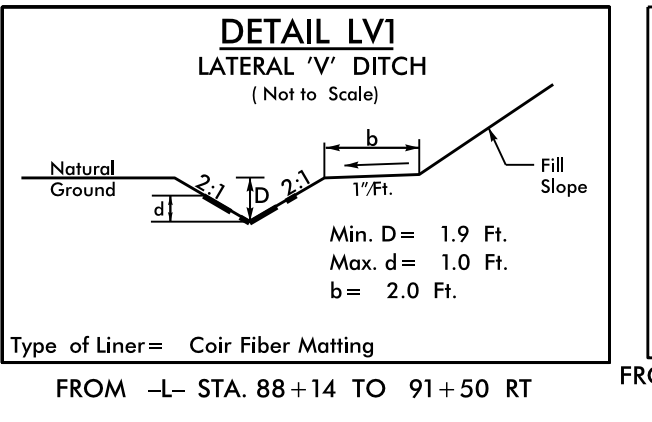
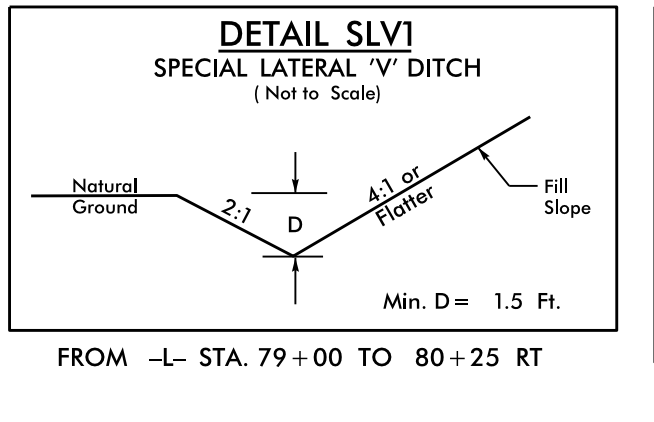
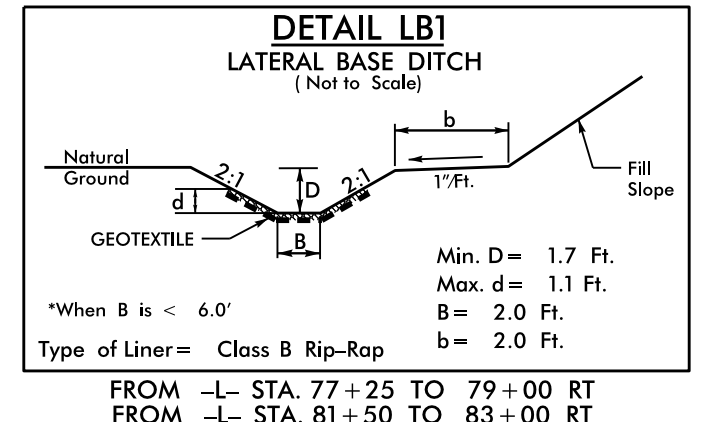
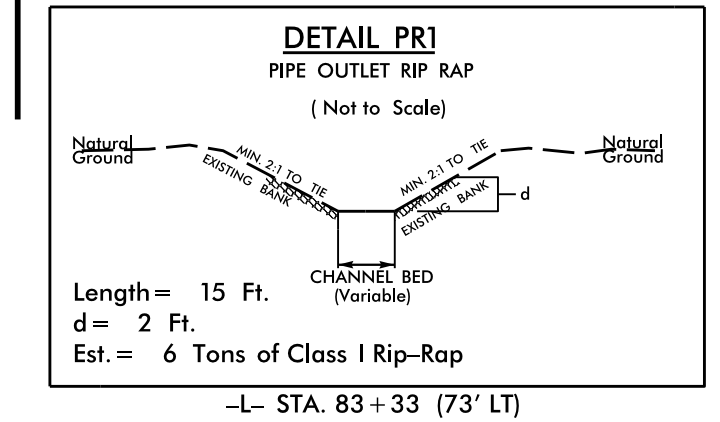
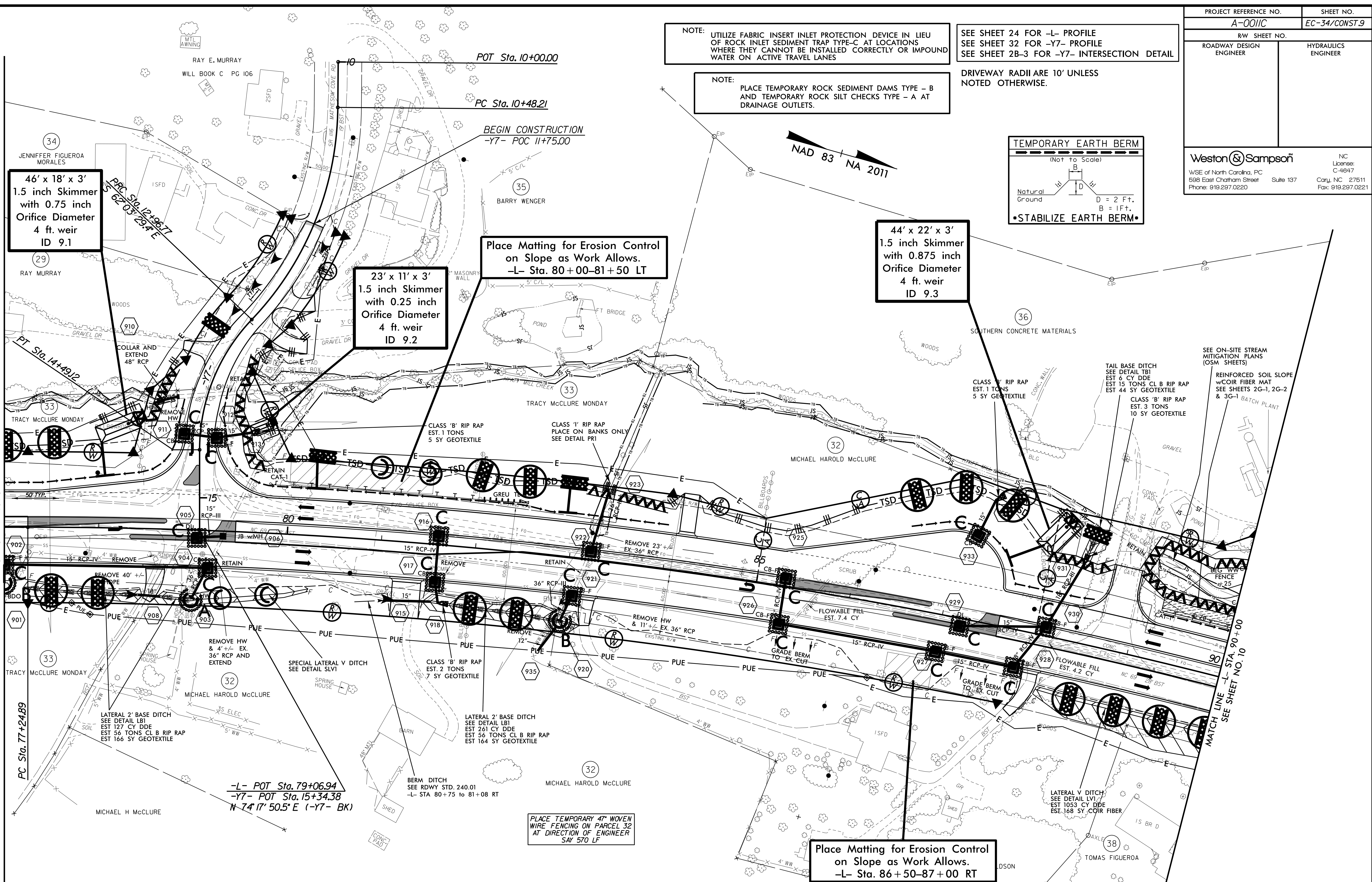
23' x 11' x 3'
1.5 inch Skimmer
with 0.25 inch
Orifice Diameter
4 ft. weir
ID 9.2

Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 80+00-81+50 LT

44' x 22' x 3'
1.5 inch Skimmer
with 0.875 inch
Orifice Diameter
4 ft. weir
ID 9.3

MATCH LINE -L- STA. 77+00
SEE SHEET NO. 8

MATCH LINE -L- STA. 90+00
SEE SHEET NO. 10



Place Matting for Erosion Control
on Slope as Work Allows.
-L- Sta. 86+50-87+00 RT

PARCEL 39 DETERMINED ELIGIBLE FOR LISTING ON NATIONAL REGISTER OF HISTORIC PLACES

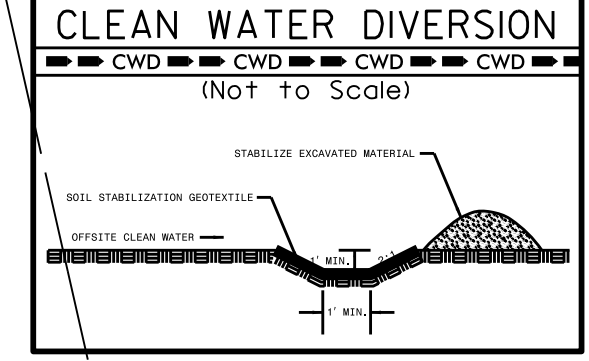
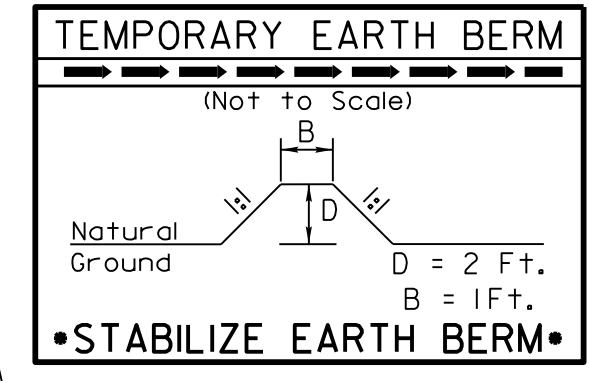
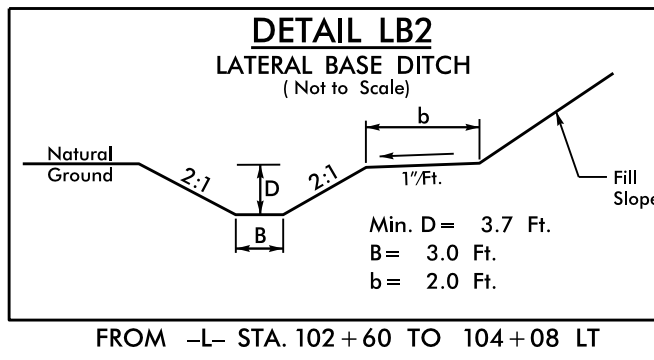
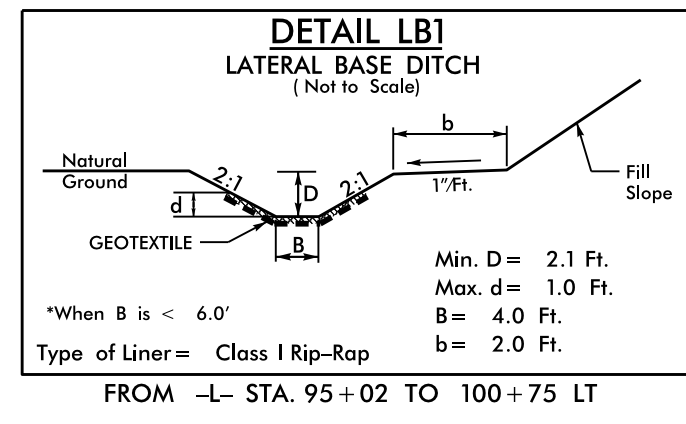
8/17/19

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8/17/99

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

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES



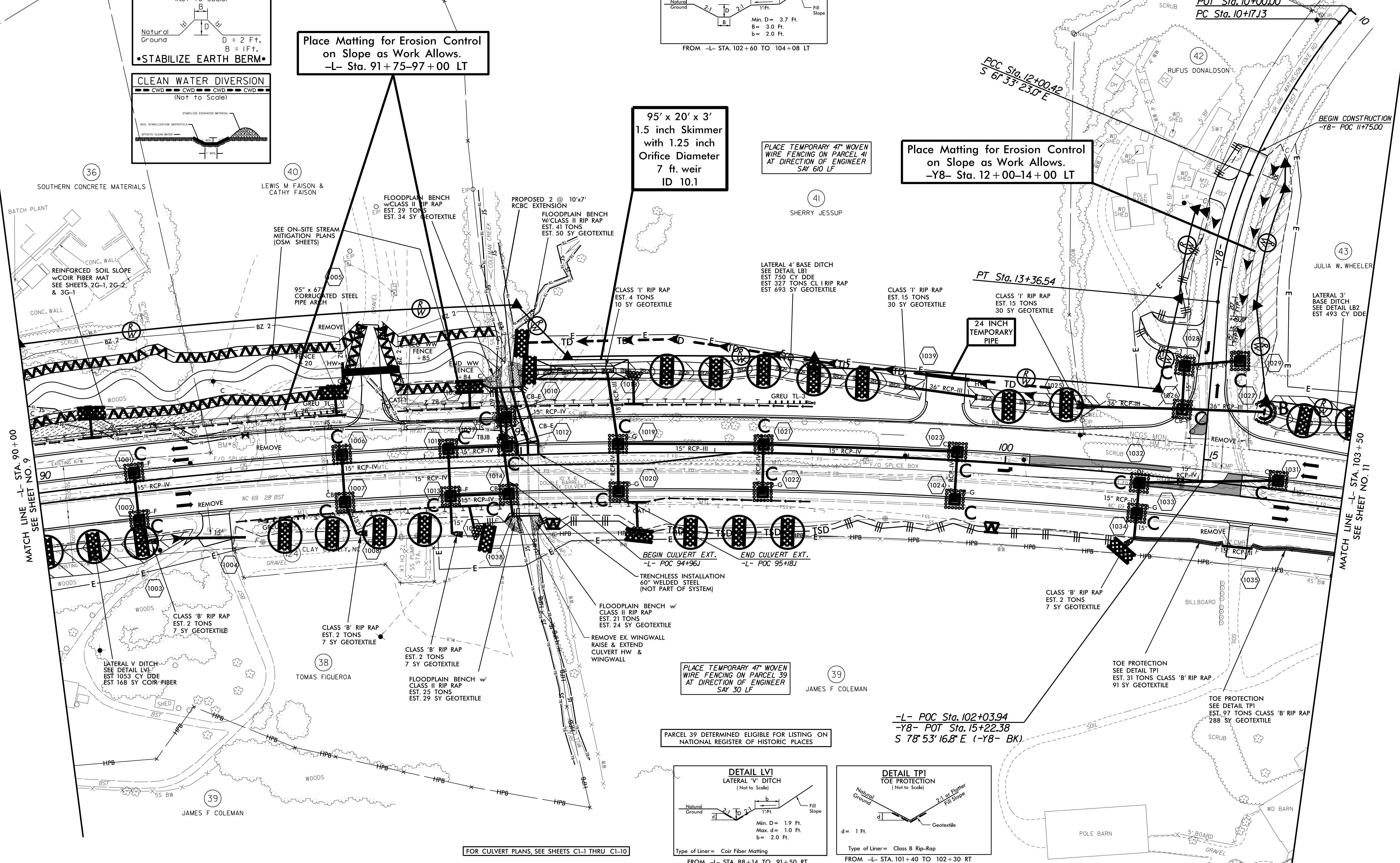
Place Matting for Erosion Control on Slope as Work Allows. -L- Sta. 91+75-97+00 LT

95' x 20' x 3' 1.5 inch Skimmer with 1.25 inch Orifice Diameter 7 ft. weir ID 10.1

PLACE TEMPORARY 47' WOVEN WIRE FENCING ON PARCEL 41 AT DIRECTION OF ENGINEER SAY 610 LF

Place Matting for Erosion Control on Slope as Work Allows. -Y8- Sta. 12+00-14+00 LT

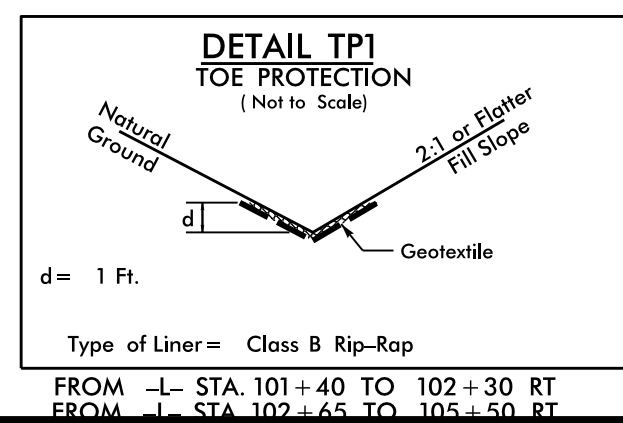
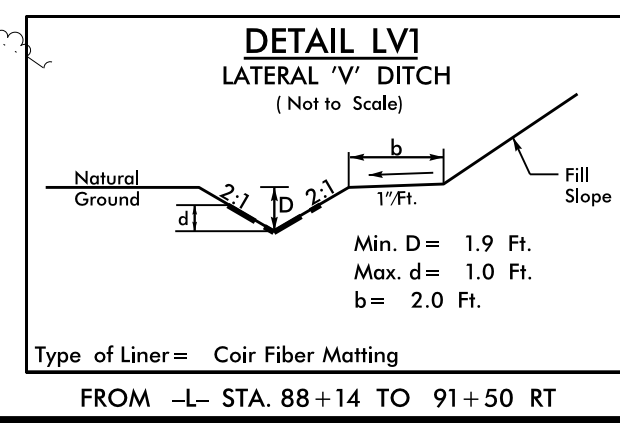
NAD 83 NA 2011



MATCH LINE -L- STA. 90+00 SEE SHEET NO. 9

MATCH LINE -L- STA. 103+50 SEE SHEET NO. 11

FOR CULVERT PLANS, SEE SHEETS C1-1 THRU C1-10



8/2/2019 10:15:00 AM EC-0011C-EC-35.FINAL.dgn

NOTE: UTILIZE FABRIC INSERT INLET PROTECTION DEVICE IN LIEU OF ROCK INLET SEDIMENT TRAP TYPE-C AT LOCATIONS WHERE THEY CANNOT BE INSTALLED CORRECTLY OR IMPOUND WATER ON ACTIVE TRAVEL LANES

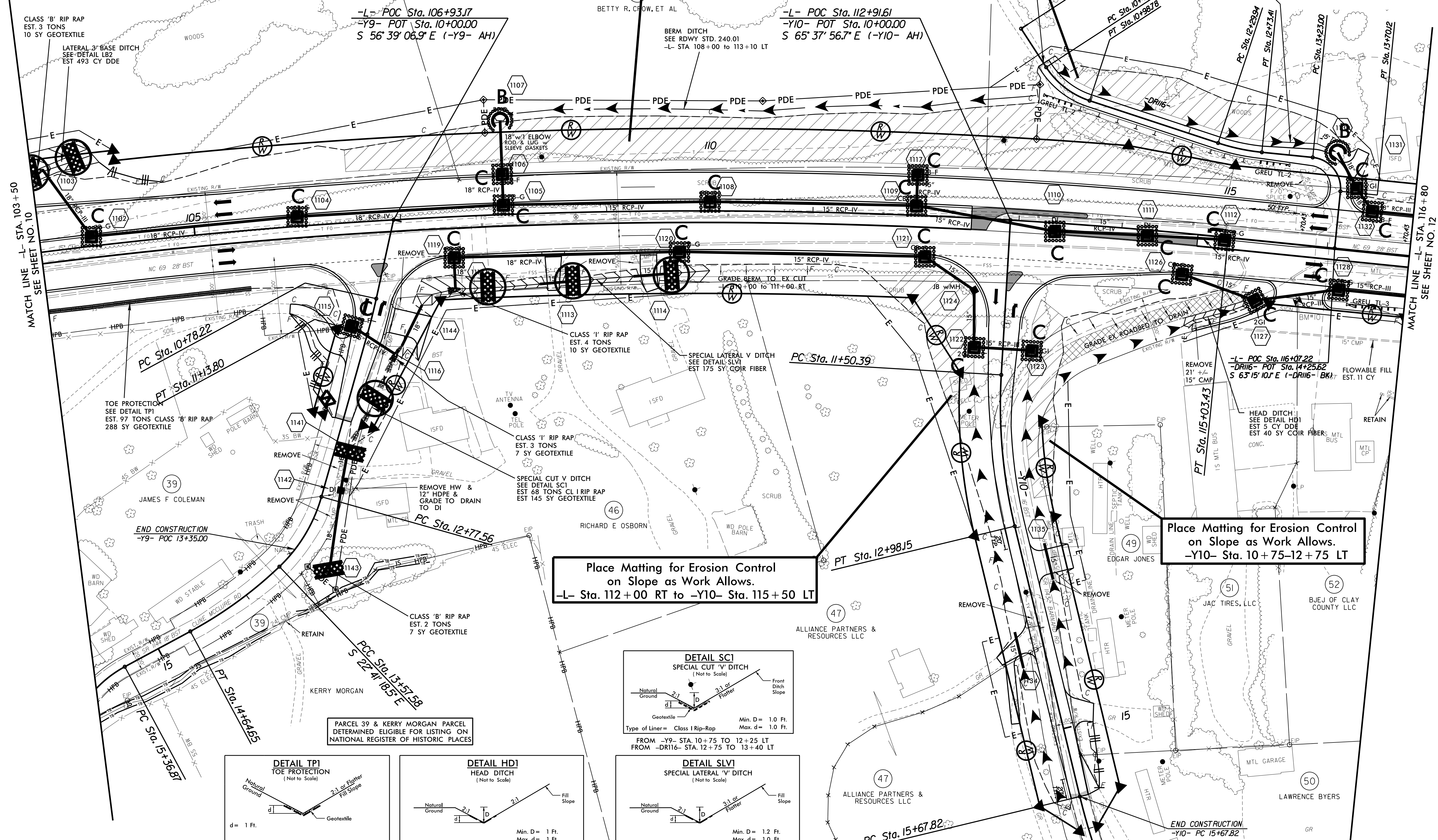
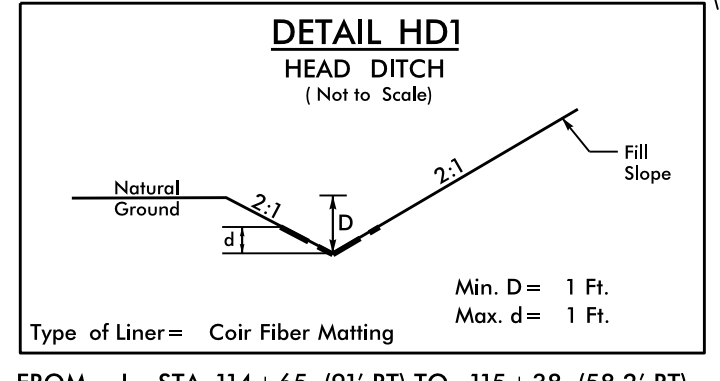
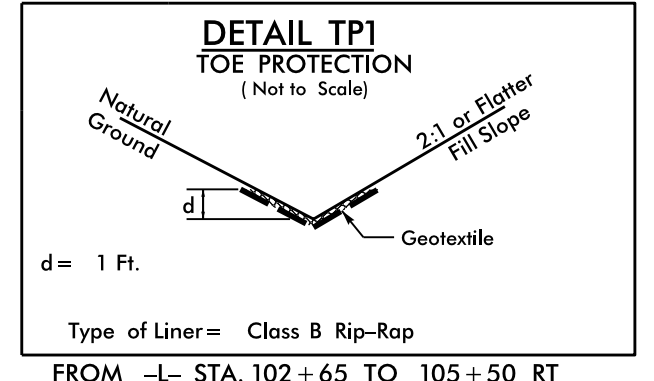
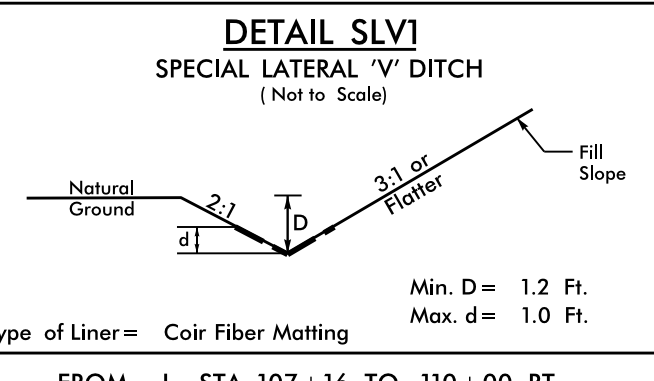
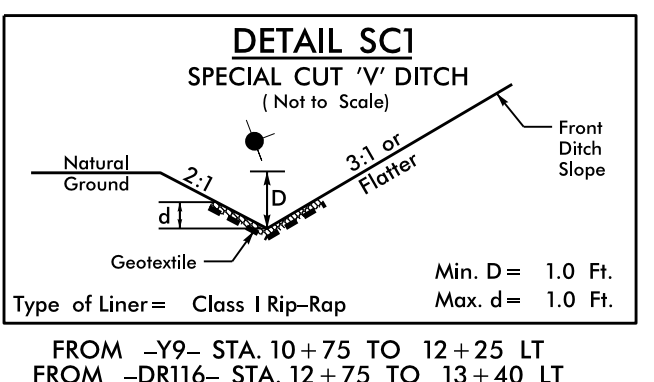
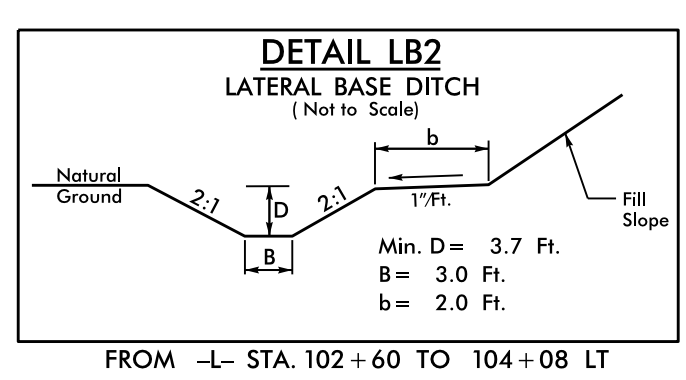
NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 106+50 LT to -DR116- Sta. 12+50 RT

Place Matting for Erosion Control on Slope as Work Allows.
 -DR116- Sta. 10+75-13+25 LT

SEE SHEET 25 FOR -L- PROFILE
 SEE SHEET 33 FOR -Y9- & -Y10- PROFILES
 SEE SHEET 38 FOR -DR161- PROFILE
 SEE SHEET 2B-4 FOR -Y9-, -Y10-, & -DR116- INTERSECTION DETAILS

DRIVEWAY RADII ARE 10' UNLESS NOTED OTHERWISE.



Place Matting for Erosion Control on Slope as Work Allows.
 -Y10- Sta. 10+75-12+75 LT

Place Matting for Erosion Control on Slope as Work Allows.
 -L- Sta. 112+00 RT to -Y10- Sta. 115+50 LT

MATCH LINE -L- STA. 103+50
 SEE SHEET NO. 10

MATCH LINE -L- STA. 116+80
 SEE SHEET NO. 12

8/17/19 8/20/19 8/21/19 8/22/19 8/23/19 8/24/19 8/25/19 8/26/19 8/27/19 8/28/19 8/29/19 8/30/19 8/31/19 9/1/19 9/2/19 9/3/19 9/4/19 9/5/19 9/6/19 9/7/19 9/8/19 9/9/19 9/10/19 9/11/19 9/12/19 9/13/19 9/14/19 9/15/19 9/16/19 9/17/19 9/18/19 9/19/19 9/20/19 9/21/19 9/22/19 9/23/19 9/24/19 9/25/19 9/26/19 9/27/19 9/28/19 9/29/19 9/30/19 10/1/19 10/2/19 10/3/19 10/4/19 10/5/19 10/6/19 10/7/19 10/8/19 10/9/19 10/10/19 10/11/19 10/12/19 10/13/19 10/14/19 10/15/19 10/16/19 10/17/19 10/18/19 10/19/19 10/20/19 10/21/19 10/22/19 10/23/19 10/24/19 10/25/19 10/26/19 10/27/19 10/28/19 10/29/19 10/30/19 10/31/19 11/1/19 11/2/19 11/3/19 11/4/19 11/5/19 11/6/19 11/7/19 11/8/19 11/9/19 11/10/19 11/11/19 11/12/19 11/13/19 11/14/19 11/15/19 11/16/19 11/17/19 11/18/19 11/19/19 11/20/19 11/21/19 11/22/19 11/23/19 11/24/19 11/25/19 11/26/19 11/27/19 11/28/19 11/29/19 11/30/19 12/1/19 12/2/19 12/3/19 12/4/19 12/5/19 12/6/19 12/7/19 12/8/19 12/9/19 12/10/19 12/11/19 12/12/19 12/13/19 12/14/19 12/15/19 12/16/19 12/17/19 12/18/19 12/19/19 12/20/19 12/21/19 12/22/19 12/23/19 12/24/19 12/25/19 12/26/19 12/27/19 12/28/19 12/29/19 12/30/19 12/31/19