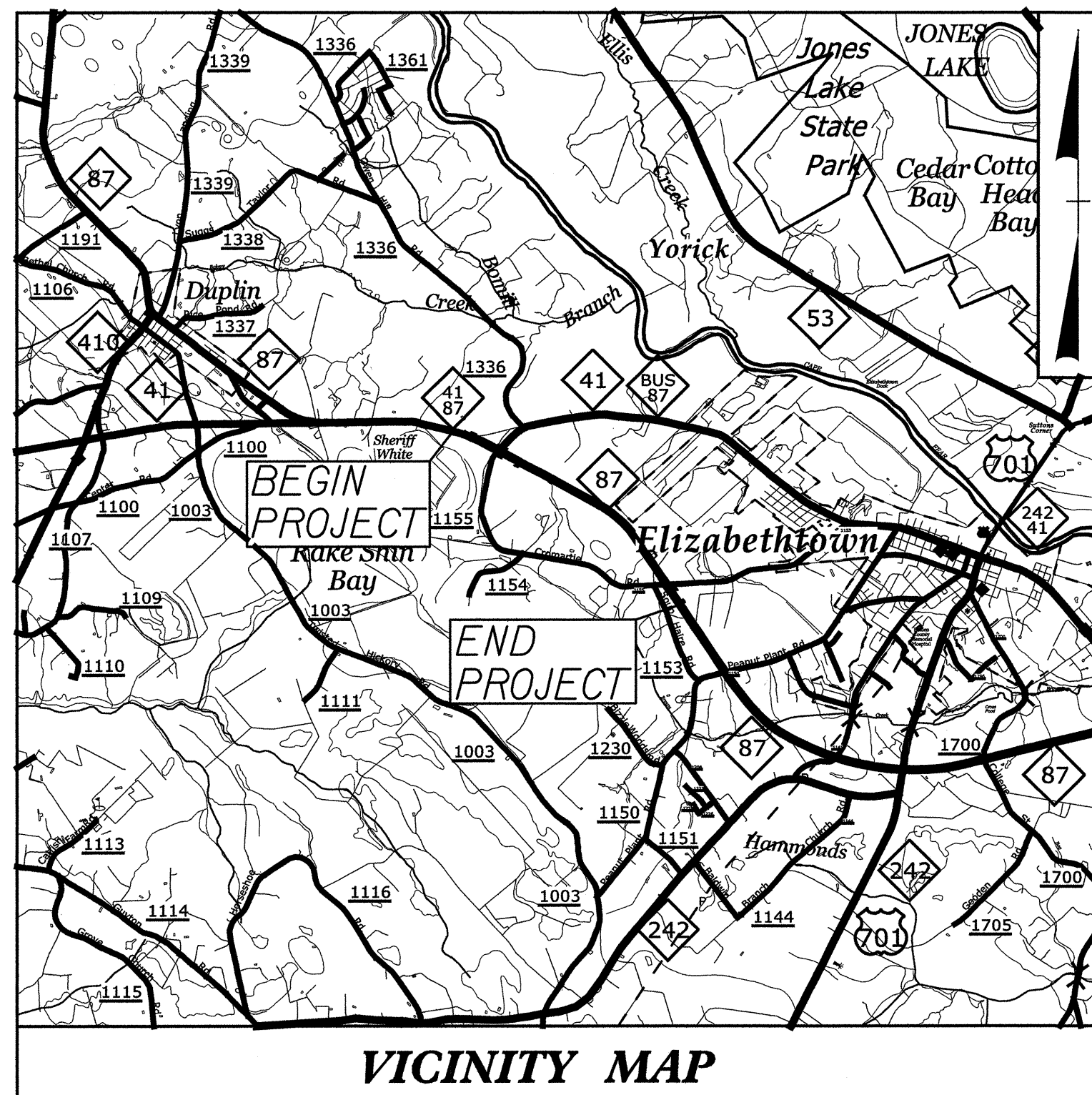


TIP PROJECT: W-5206C



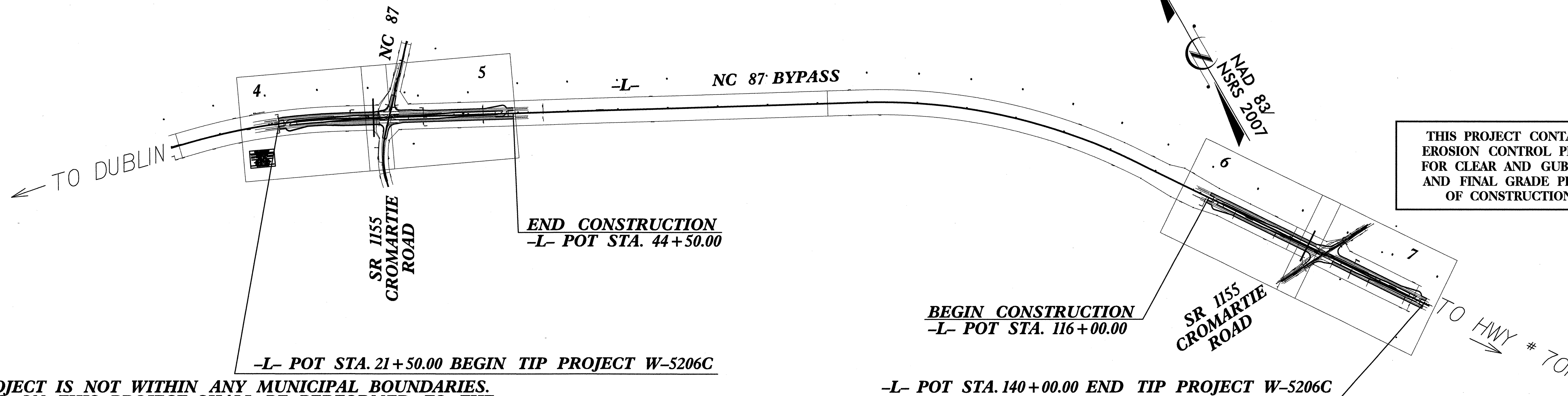
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS
**PLAN FOR PROPOSED
HIGHWAY EROSION CONTROL**

| | | | |
|-----------------|-----------------------------|-------------|--------------|
| STATE | STATE PROJECT REFERENCE NO. | SHEET NO. | TOTAL SHEETS |
| N.C. | W-5206C | EC-1 | |
| STATE PROJ. NO. | F.A. PROJ. NO. | DESCRIPTION | |
| | | | |
| | | | |

EROSION AND SEDIMENT CONTROL MEASURES

| Std. # | Description | Symbol |
|---------|--|-------------------------|
| 1605.01 | Temporary Silt Fence | — III — III — III — |
| 1606.01 | Special Sediment Control Fence | — X X X X X X X X X X — |
| 1633.01 | Temporary Rock Silt Check Type-A | — X X X X X X X X X X — |
| | Wattle/Coir Fiber Wattle with Polyacrylamide (PAM) | — () — |
| 1635.01 | Rock Pipe Inlet Sediment Trap Type-A | — U — |
| 1635.02 | Rock Pipe Inlet Sediment Trap Type-B | — U — |
| | Rock Inlet Sediment Trap: | |
| 1632.03 | Type C | — C — |

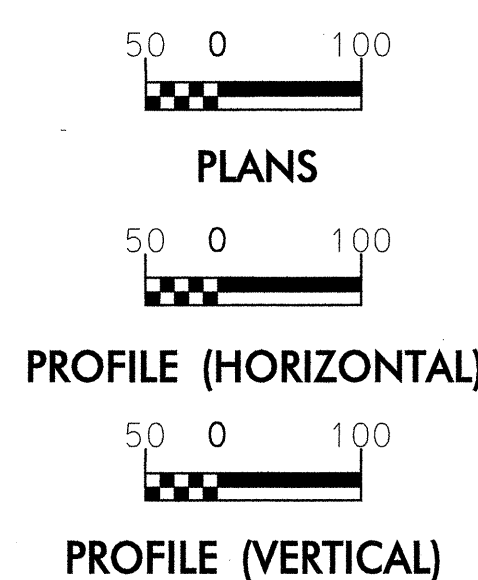
THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.



THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEAR AND GUBBING AND FINAL GRADE PHASE OF CONSTRUCTION.

THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES. CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

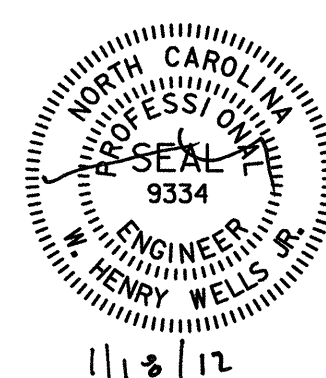
GRAPHIC SCALE



ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

SUNGATE DESIGN GROUP, P.A.

915 JONES FRANKLIN ROAD
RALEIGH, NORTH CAROLINA 27606
TEL (919) 859-2243 FAX (919) 859-6258



JOSH DALTON, PE, CPESC
NCDOT LEVEL III-A CERTIFICATION NUMBER 307



6 & M of North Carolina, Inc.
801 Corporate Center Drive, Suite 300
Raleigh, NC 27601-9073
Tel: 919/854-4282 Fax: 919/854-5448

Prepared In the Office of:

ROADSIDE ENVIRONMENTAL UNIT

1 South Wilmington St.
Raleigh, NC 27611

2012 STANDARD SPECIFICATIONS

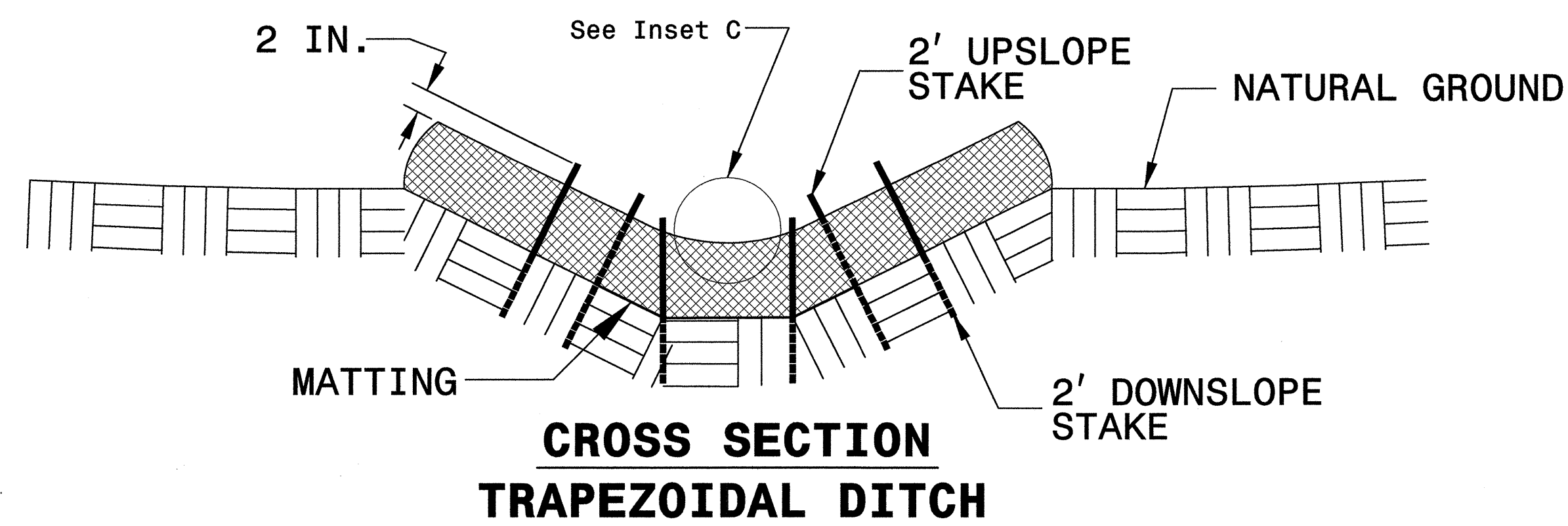
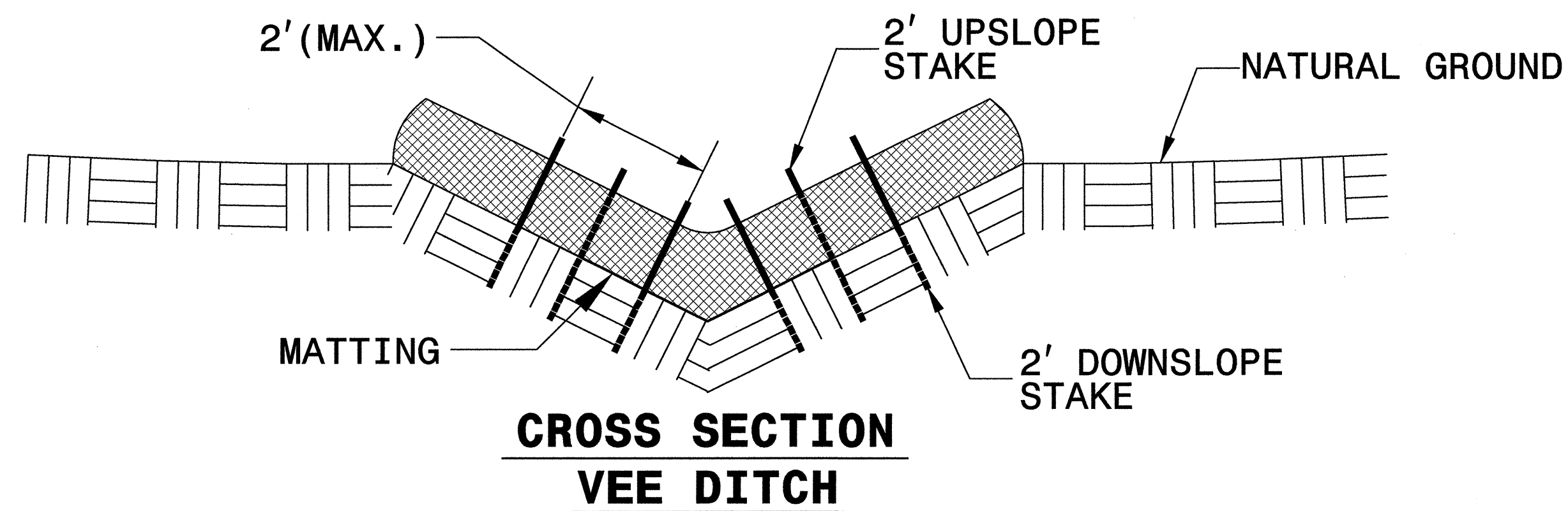
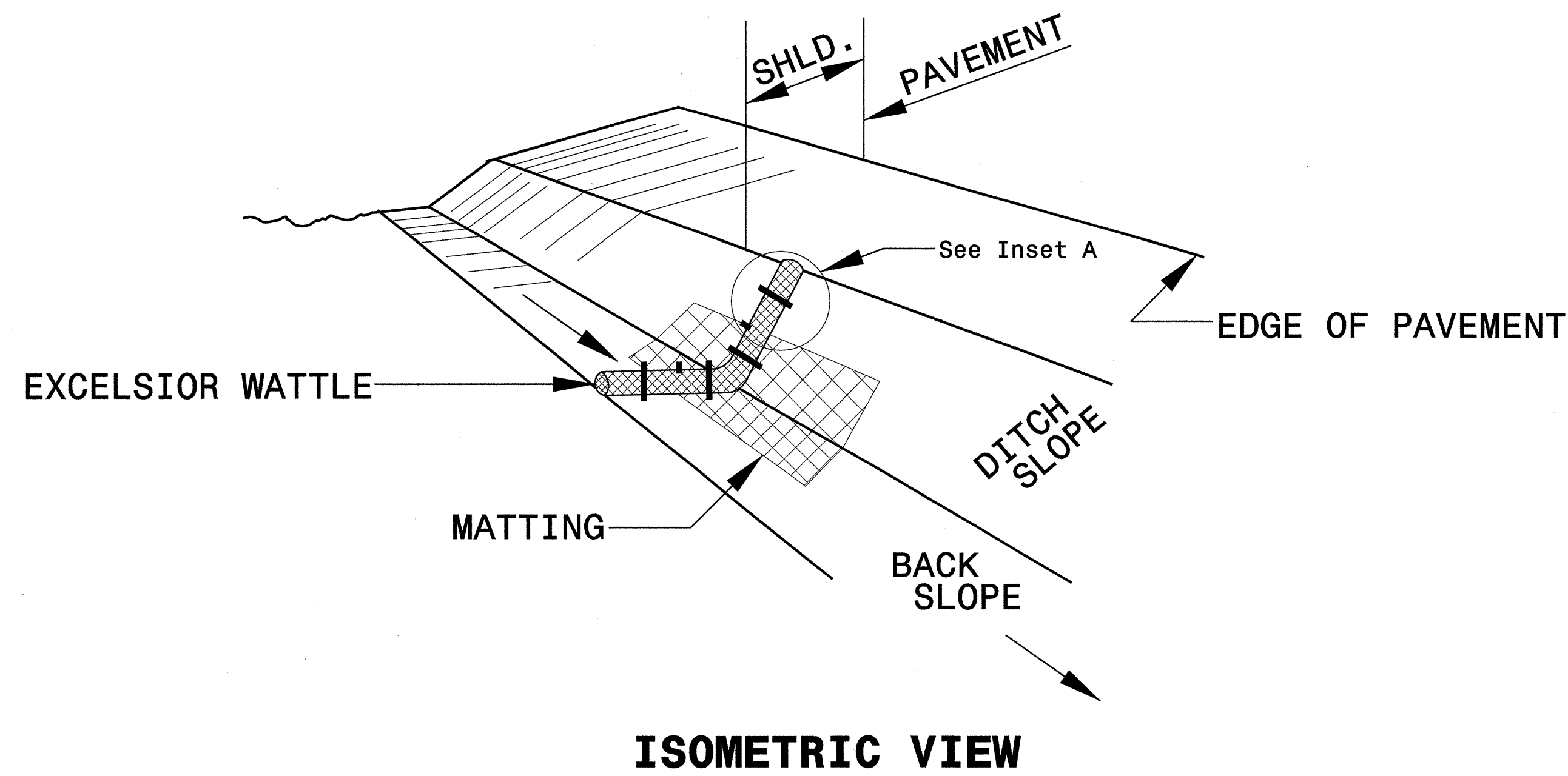
Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

- 1605.01 Temporary Silt Fence
- 1606.01 Special Sediment Control Fence
- 1632.03 Rock Inlet Sediment Trap Type C
- 1633.01 Temporary Rock Silt Check Type A
- 1635.01 Rock Pipe Inlet Sediment Trap Type A
- 1635.02 Rock Pipe Inlet Sediment Trap Type B
- 1631.01 Matting Installation

| | |
|----------------------------------|---------------------|
| PROJECT REFERENCE NO. W-5206C | SHEET NO. EC-2 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

WATTLE WITH POLYACRYLAMIDE (PAM) DETAIL



NOTES:

USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE.

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

ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.

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

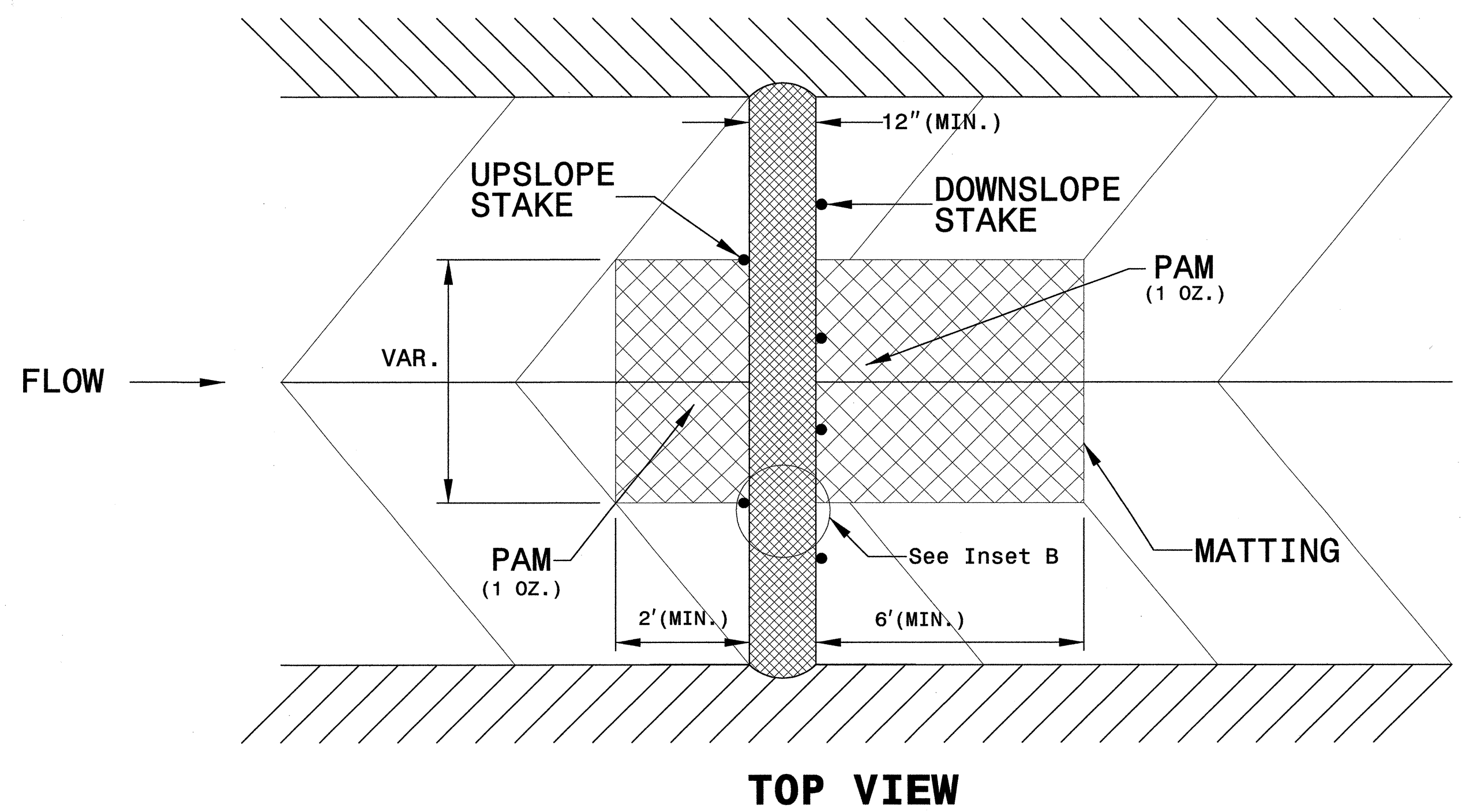
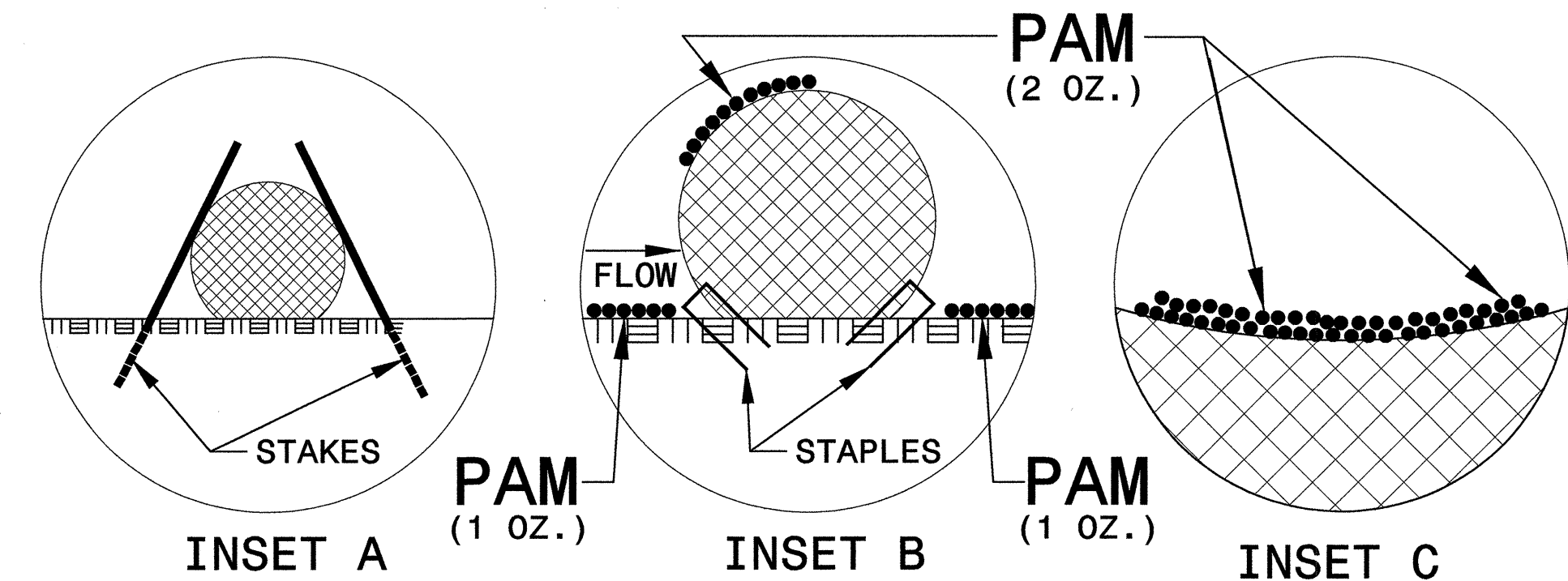
PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.

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

INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE STANDARD SPECIFICATIONS.

PRIOR TO POLYACRYLAMIDE (PAM) APPLICATION, OBTAIN A SOIL SAMPLE FROM PROJECT LOCATION, AND FROM OFFSITE MATERIAL, AND ANALYZE FOR APPROPRIATE PAM FLOCCULANT TO BE APPLIED TO EACH WATTLE.

INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALLY CHARGED PAM OVER WATTLE WHERE WATER WILL FLOW AND 1 OUNCE OF PAM ON MATTING ON EACH SIDE OF WATTLE. REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

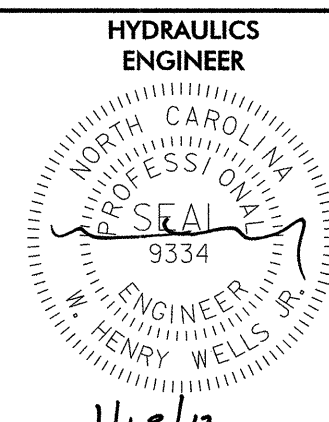


DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

| | |
|---|---------------------------|
| PROJECT REFERENCE NO. <i>W-5206C</i> | SHEET NO. <i>EC-3A</i> |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

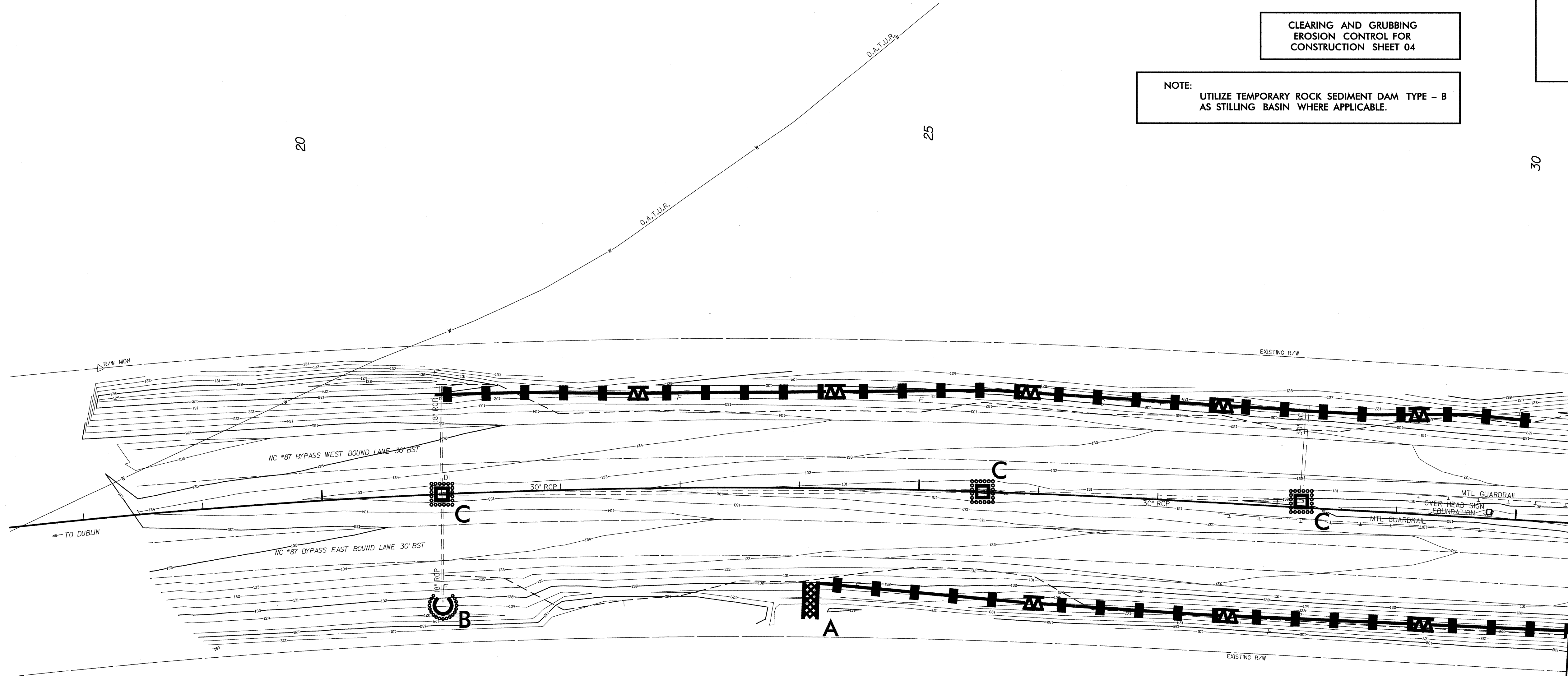
SOIL STABILIZATION TIMEFRAMES

| <i>SITE DESCRIPTION</i> | <i>STABILIZATION TIME</i> | <i>TIMEFRAME EXCEPTIONS</i> |
|--|---------------------------|--|
| 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 OR FLATTER | 14 DAYS | 7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH. |
| ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1 | 14 DAYS | NONE, EXCEPT FOR PERIMETERS AND HQW ZONES. |

| | |
|-------------------------|--|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5206C | EC-04/CONST.04 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| |  11/2/12 |

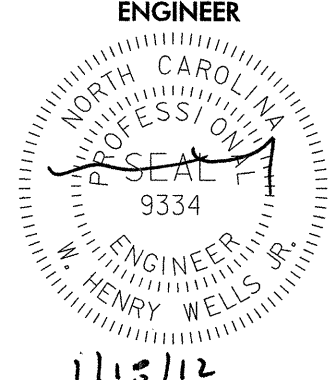
CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 04

NOTE:
 UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
 AS STILLING BASIN WHERE APPLICABLE.



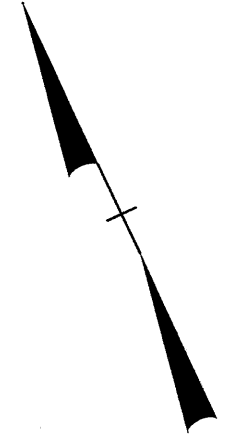
MATCHLINE STA. 30+50 -L-
SEE SHEET 5

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "W5206C-2"
 WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 325418.7429(ft) EASTING: 2096097.7252(ft) ELEVATION: 134.96(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: .99992946
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "W5206C-2" TO -L- STA. 10+00.00 IS N 74° 33' 48.98" W 644.1432 FEET
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88

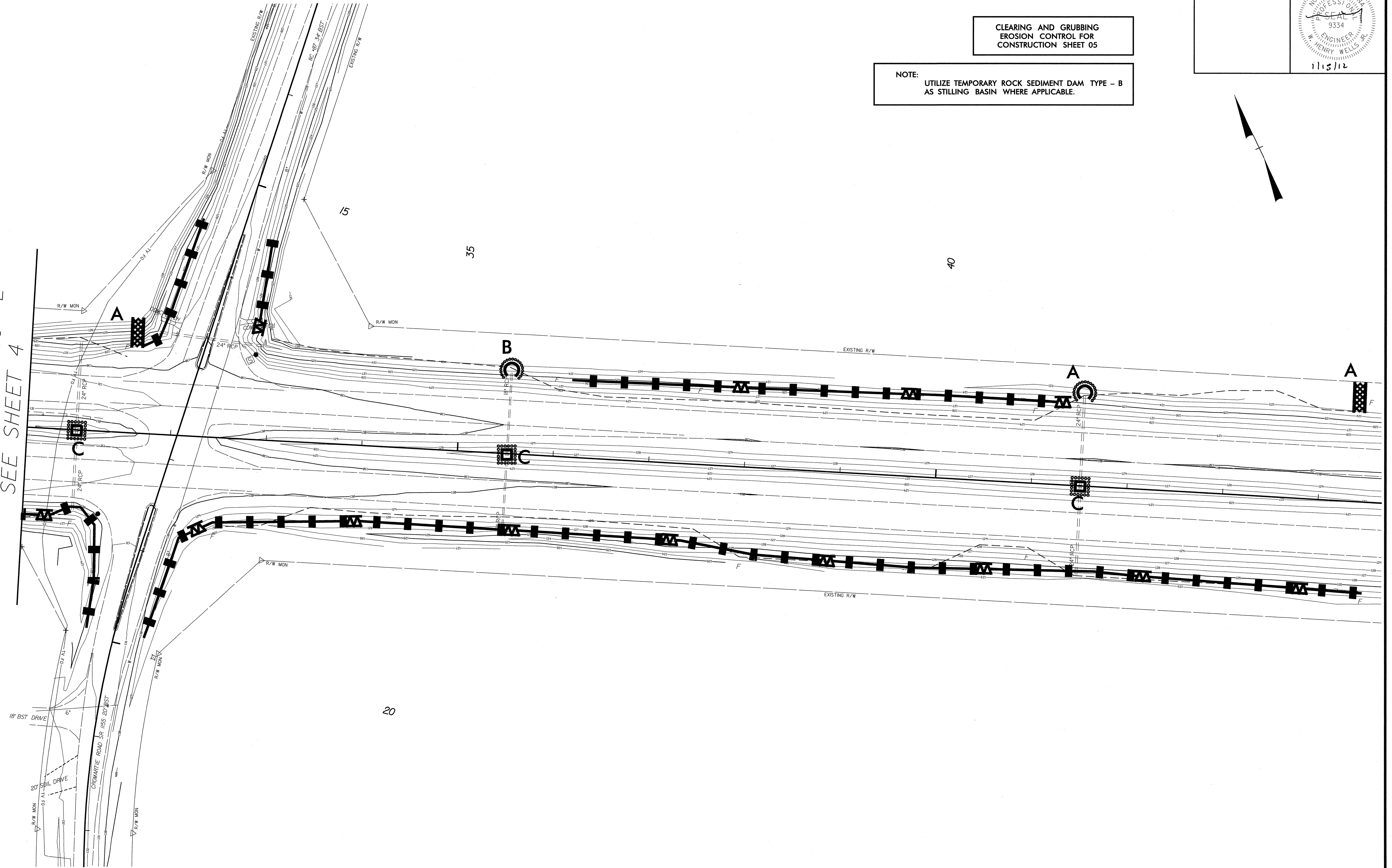
| | |
|----------------------------------|---|
| PROJECT REFERENCE NO. W-5206C | SHEET NO. EC-05/CONST.05 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| |  HENRY WELLS 11/3/12 |

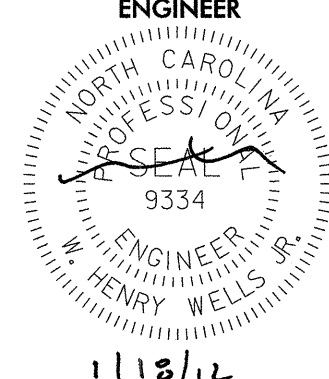
**CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 05**

NOTE: UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B AS STILLING BASIN WHERE APPLICABLE.



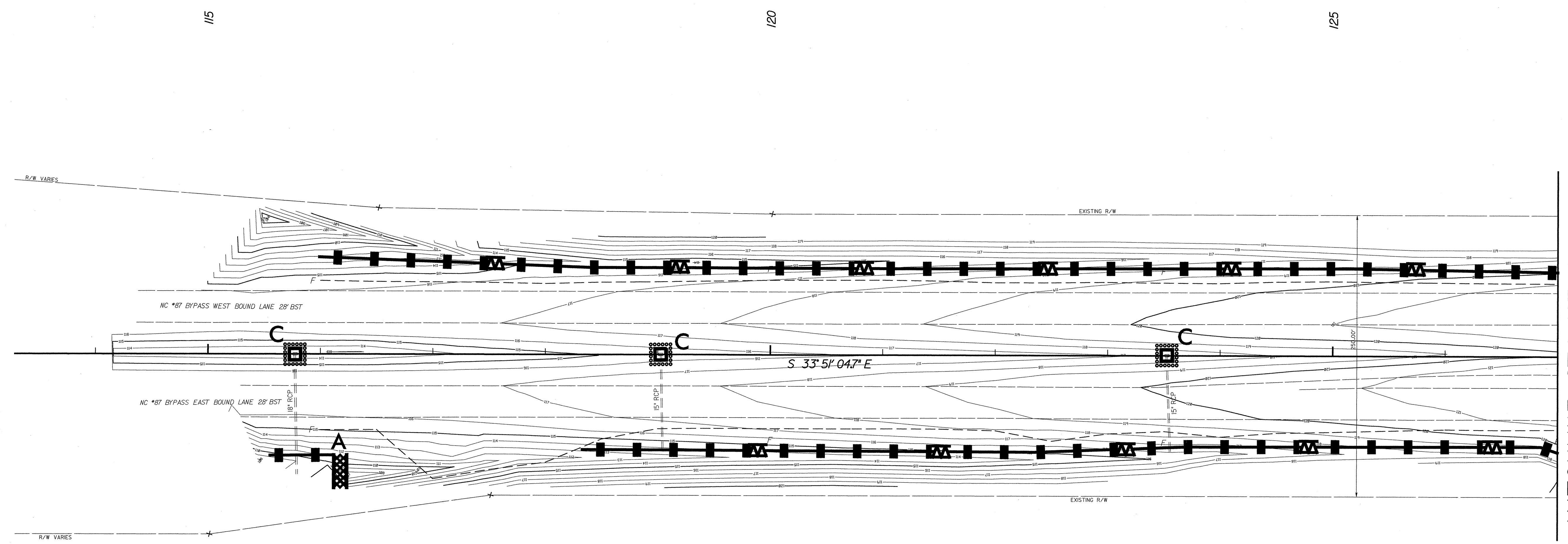
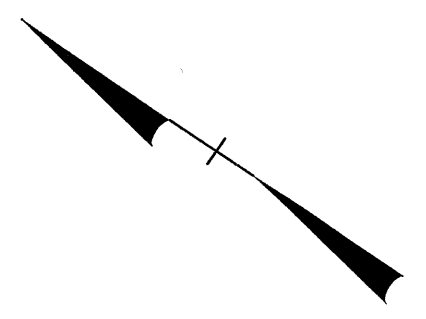
MATCHLINE STA. 30+50 -L-
 SEE SHEET 4



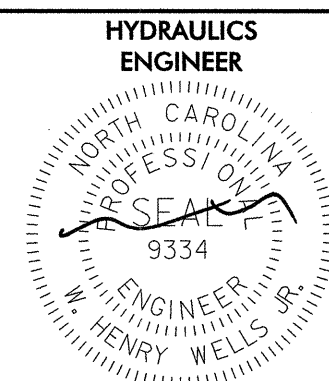
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|----------------------------------|--|
| PROJECT REFERENCE NO. W-5206C | SHEET NO. EC-06/CONST.06 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| |  11/8/12 |

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 06

NOTE:
 UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
 AS STILLING BASIN WHERE APPLICABLE.

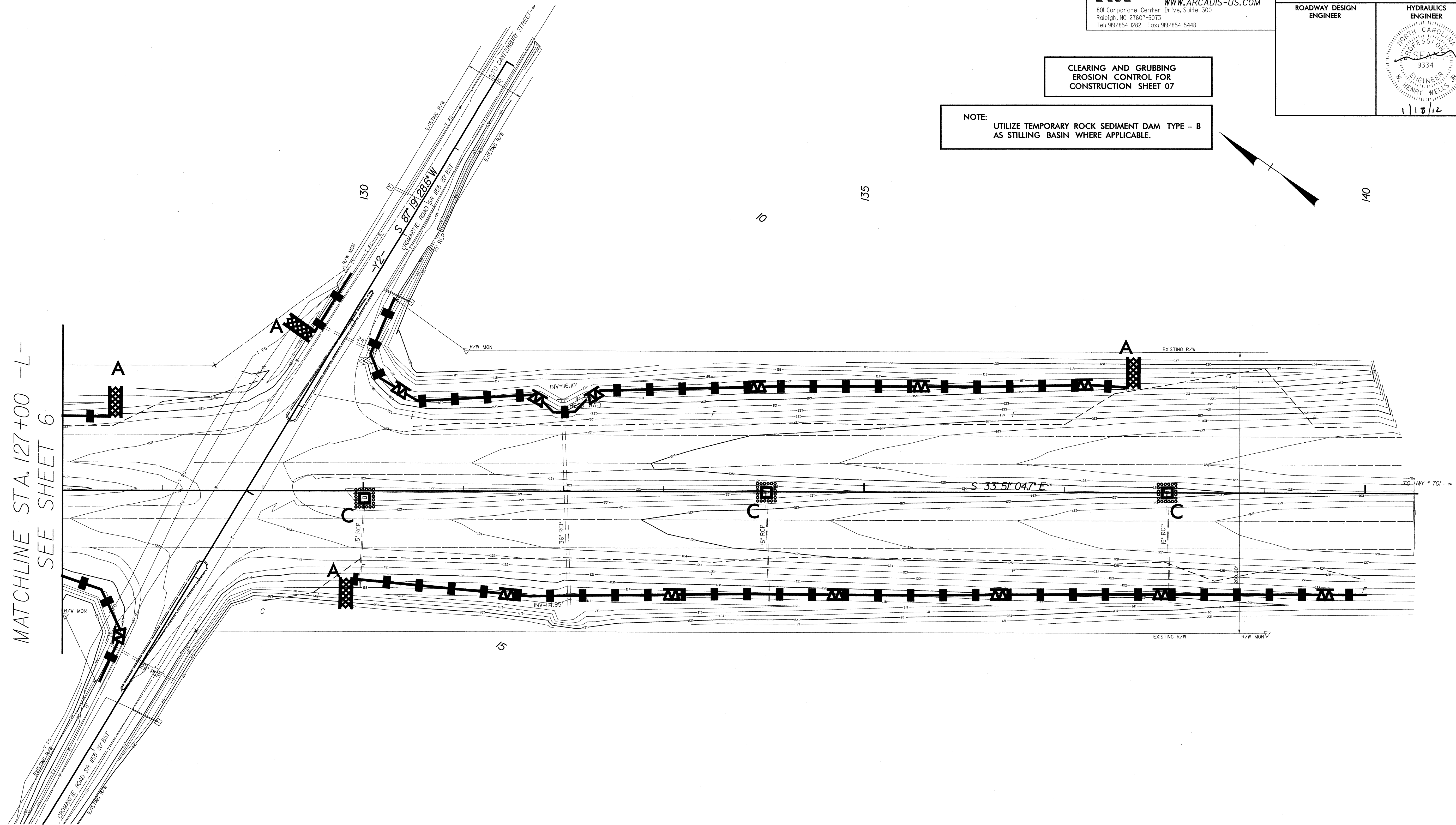


MATCHLINE STA. 127+00 -L-
 SEE SHEET 7

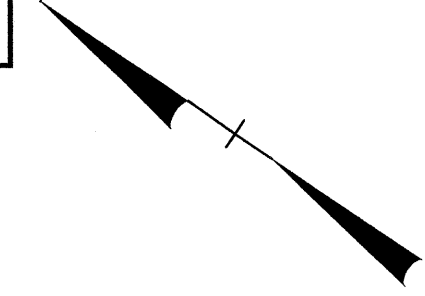
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|-------------------------|---|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5206C | EC-07/CONST.07 |
| R/W SHEET NO. | HYDRAULICS ENGINEER |
| ROADWAY DESIGN ENGINEER |  HENRY WELLS 11/8/12 |

CLEARING AND GRUBBING
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 07

NOTE:
 UTILIZE TEMPORARY ROCK SEDIMENT DAM TYPE - B
 AS STILLING BASIN WHERE APPLICABLE.



MATCHLINE STA. 127+00 -L-
 SEE SHEET 6



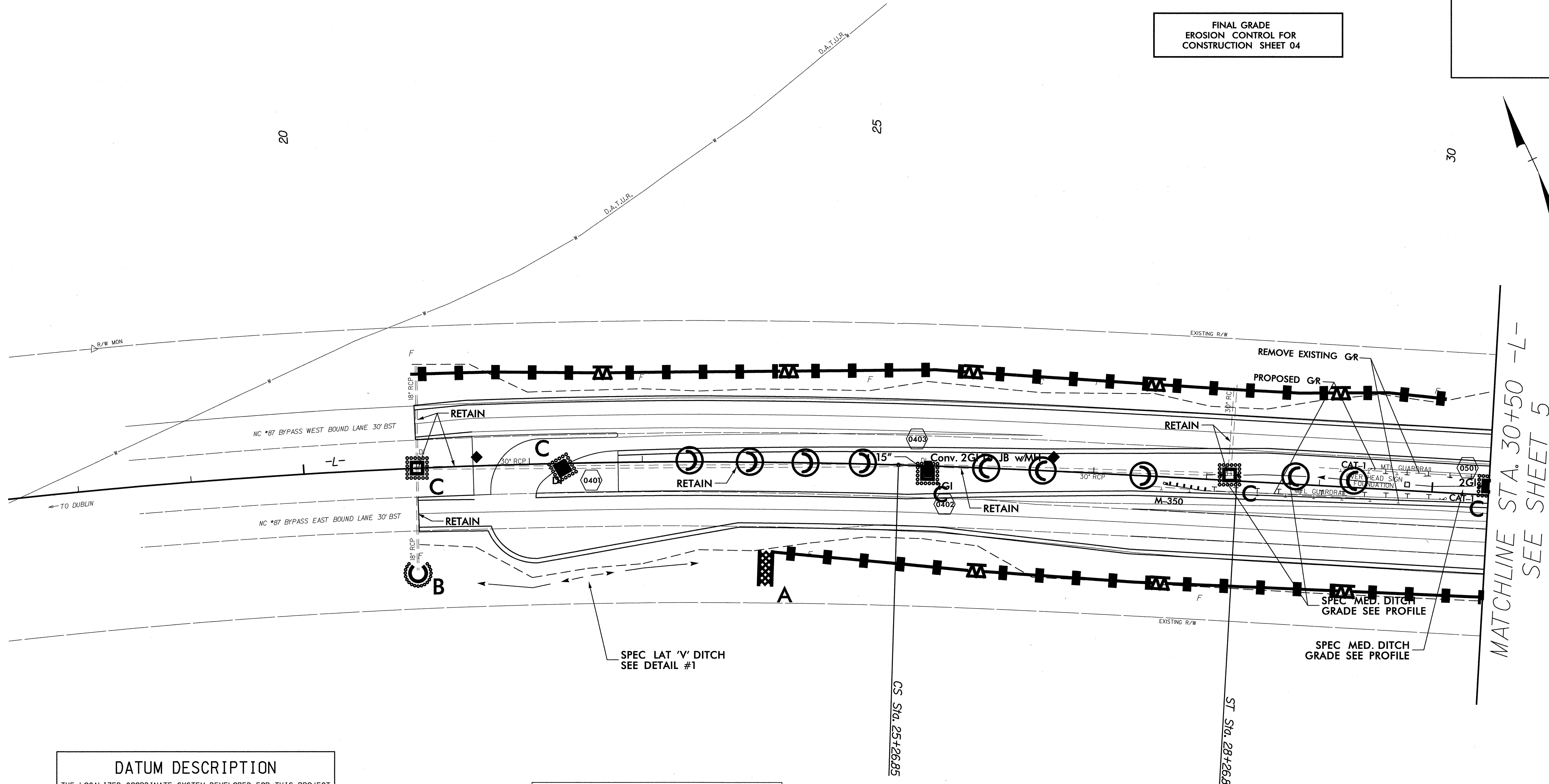
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135

130

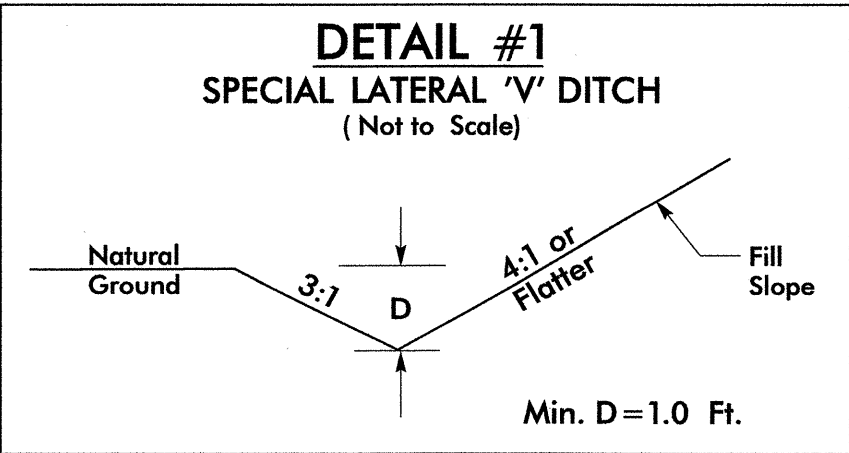
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FINAL GRADE
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 04



MATCHLINE STA. 30+50 -L-
 SEE SHEET 5

DATUM DESCRIPTION
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "W5206C-2"
 WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 325418.7429(ft) EASTING: 2096097.7252(ft) ELEVATION: 134.96(ft)
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: .99992946
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND BEARING FROM "W5206C-2" TO -L- STA. 10+00.00 IS N 74° 33' 48.98" W 644.1432 FEET
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES
 VERTICAL DATUM USED IS NAVD 88



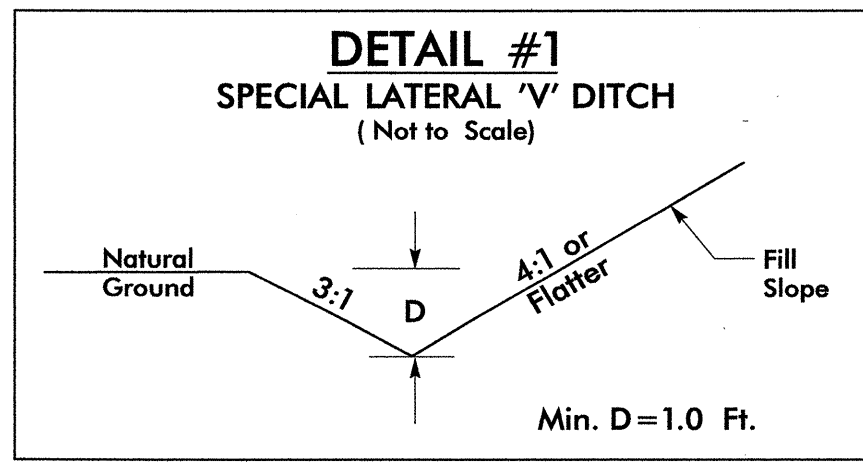
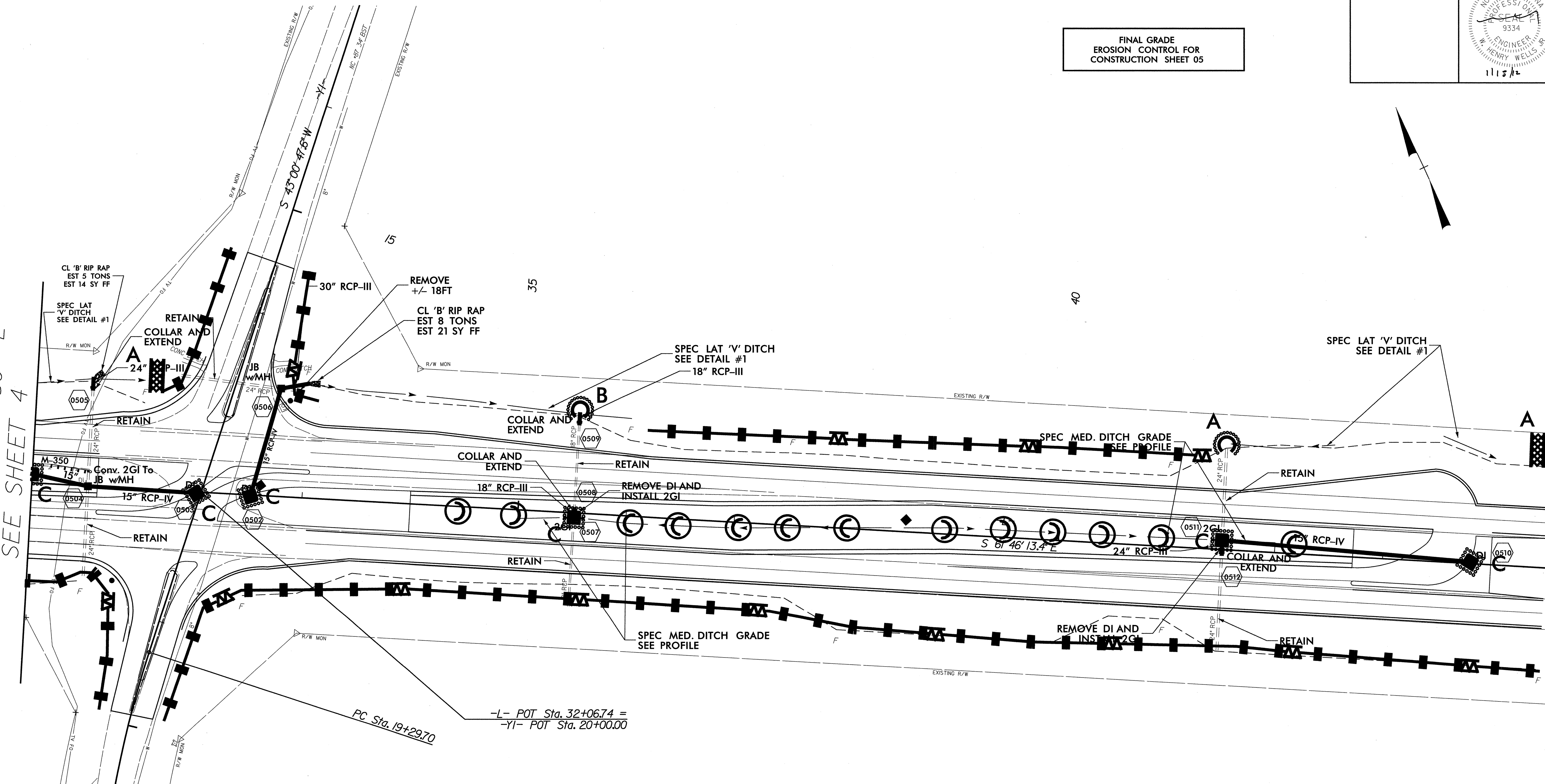
FROM STA. 21+50 TO STA. 23+50 -L- RT

INSTALL MATTING FOR
 EROSION CONTROL IN
 ALL DITCH LINES.

| | |
|----------------------------------|-----------------------------|
| PROJECT REFERENCE NO. W-5206C | SHEET NO. EC-09/CONST.05 |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |

FINAL GRADE
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 05

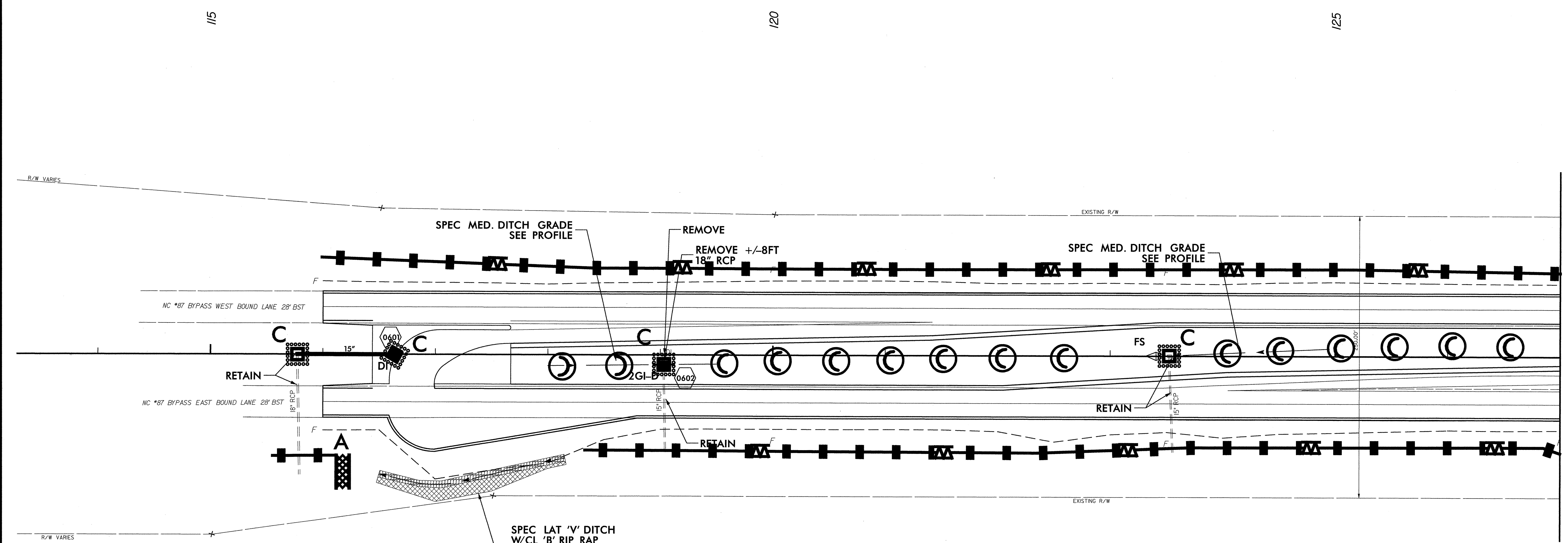
MATCHLINE STA. 30+50 -L-
 SEE SHEET 4



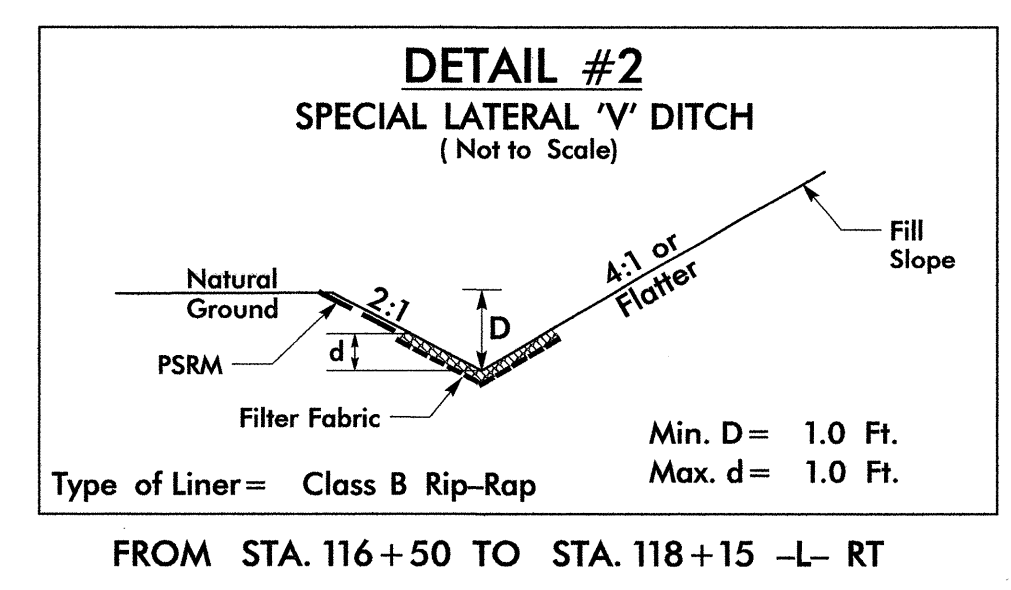
- FROM STA. 30+50 TO STA. 31+50 -L- LT
- FROM STA. 33+00 TO STA. 36+00 -L- LT
- FROM STA. 41+50 TO STA. 42+50 -L- LT
- FROM STA. 43+50 TO STA. 44+00 -L- LT

INSTALL MATTING FOR
 EROSION CONTROL IN
 ALL DITCH LINES.

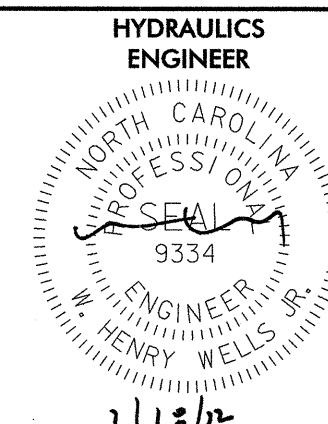
FINAL GRADE
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 06

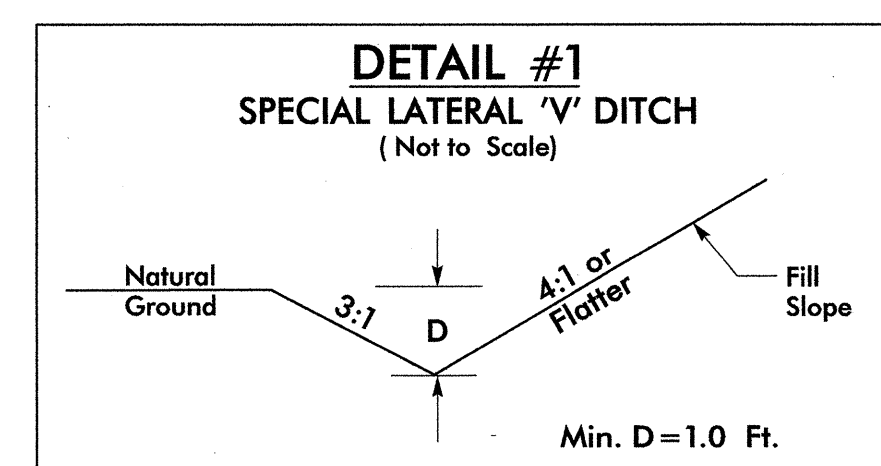


MATCHLINE STA. 127+00 -L-
SEE SHEET 7

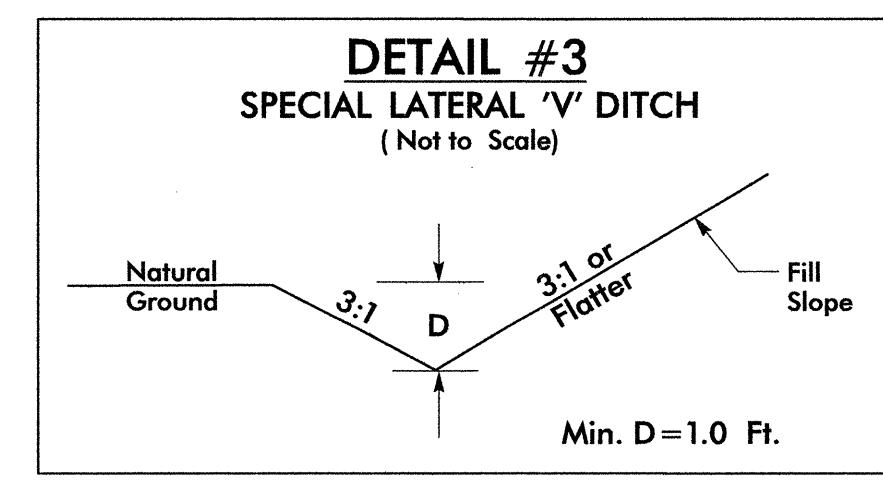


INSTALL MATTING FOR
 EROSION CONTROL IN
 ALL DITCH LINES.

| | |
|-------------------------|---|
| PROJECT REFERENCE NO. | SHEET NO. |
| W-5206C | EC-II/CONST.07 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| |  |



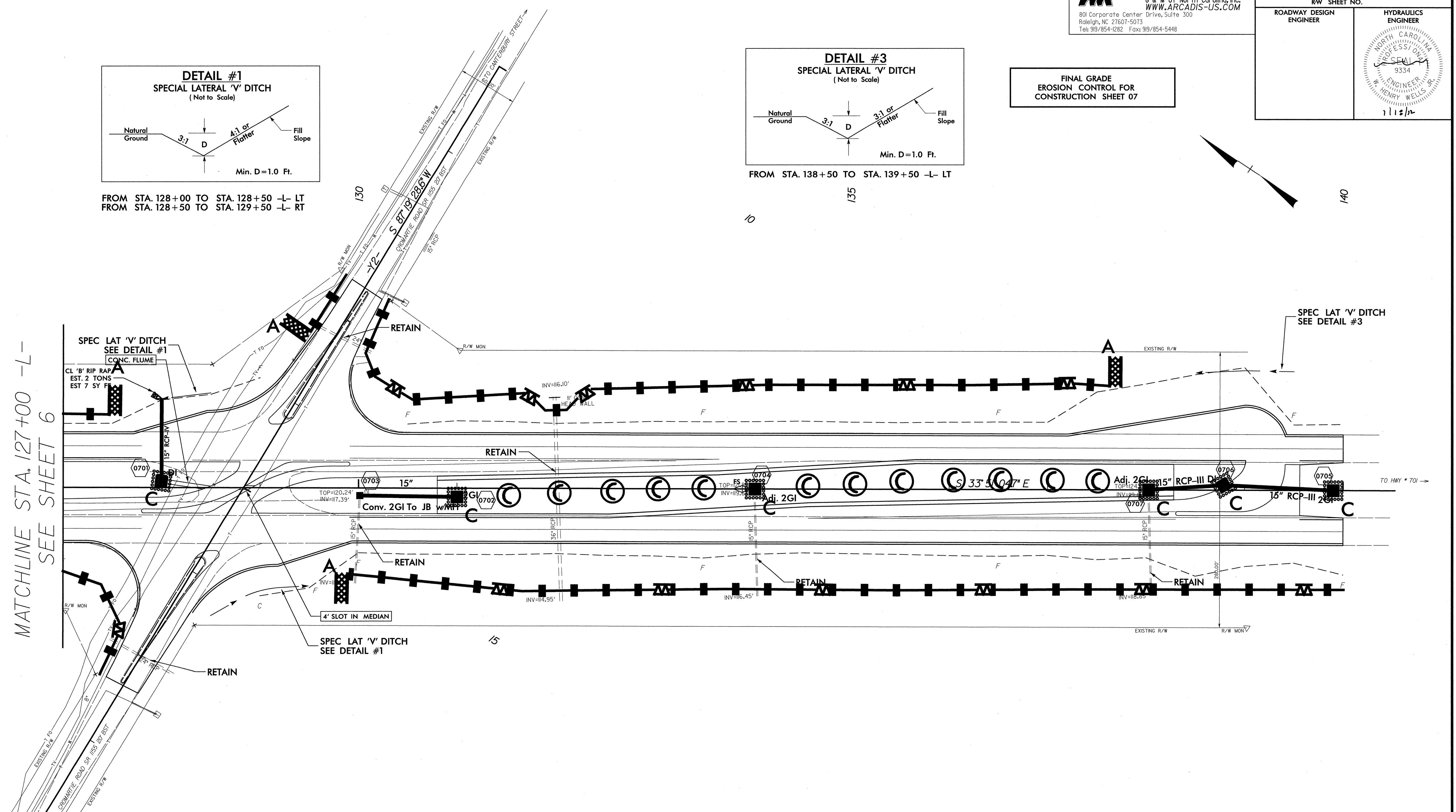
FROM STA. 128+00 TO STA. 128+50 -L- LT
 FROM STA. 128+50 TO STA. 129+50 -L- RT



FROM STA. 138+50 TO STA. 139+50 -L- LT

FINAL GRADE
 EROSION CONTROL FOR
 CONSTRUCTION SHEET 07

MATCHLINE STA. 127+00 -L-
 SEE SHEET 6



INSTALL MATTING FOR
 EROSION CONTROL IN
 ALL DITCH LINES.