7/2/99

TIP PROJECT: U-5027

CONTRACT: C202074

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

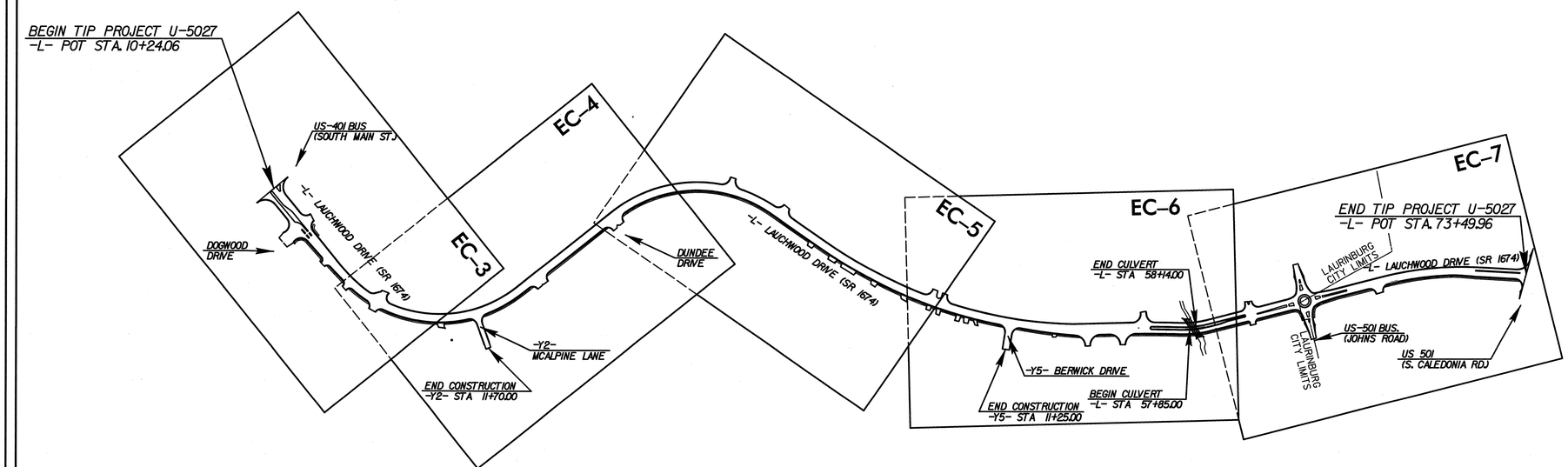
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-5027	EC-1	12

STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION

EROSION AND SEDIMENT CONTROL MEASURES

Std. #	Description	Symbol
	Streambank Reforestation	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1630.04	Stilling Basin	
1630.06	Special Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.03	Type C	C OR C
1633.01	Temporary Rock Silt Check Type-A	
1633.02	Temporary Rock Silt Check Type-B	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	

NAD 83



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

GRAPHIC SCALE

50 25 0 50 100
PLANS

ROADSIDE ENVIRONMENTAL UNIT
DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A YARLEY

10/8/08

SIGNATURE: P.E.

Reviewed and Approved by the Office of:

ROADSIDE ENVIRONMENTAL UNIT
1 South Wilmington St.
Raleigh, NC 27611

2006 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 July 18, 2006 and the latest revison thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01	Temporary Silt Fence	1632.03	Rock Inlet Sediment Trap Type C
1606.01	Special Sediment Control Fence	1633.01	Temporary Rock Silt Check Type A
1607.01	Gravel Construction Entrance	1633.02	Temporary Rock Silt Check Type B
1630.05	Temorary Diversion	1634.02	Temporary Rock Sediment Dam Type B
1630.06	Special Stilling Basin	1635.02	Rock Pipe Inlet Sediment Trap Type B

DGN
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

N.T.S.

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-2
R/W SHEET NO.	

EROSION CONTROL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A. YARLEY
10/8/08

Construction Sequence for Erosion Control Measures

1. Obtain a copy of erosion control plan approval and a land-disturbing permit. Schedule a preconstruction conference with NCDOT, engineer, and NCDENR. Work limits and buffers must be flagged by this meeting.

2. Install gravel construction entrance, temporary diversions, silt fence, sediment basins or other measures on the perimeter of the site as shown on the approved plan. Clear only as necessary to install these devices. Seed temporary diversions, berms, and basins immediately after construction.

3. Begin clearing and grubbing. Maintain devices as needed. Rough grade site.

4. Install storm sewer and protect inlets with fabric inlet devices, sediment basins or pits, temporary diversion ditches, or other measures as shown on the plan. Begin construction,

5. Stabilize site as areas are brought up to finished grade with vegetation, paving, ditch linings, etc. Seed and mulch denuded areas within twenty-one (21) calendar days of completion of any phase of construction.

6. When construction is complete and all areas are stabilized completely, call for an inspection by the NCDOT, engineer, and NCDENR.

7. If site is approved, remove temporary diversions, silt fence, sediment basins, etc., and seed out or stabilize any resulting bare areas. All remaining permanent erosion control devices, such as velocity dissipators/rip-rap aprons, should now be installed.

8. When vegetation has become established, call for a final site inspection by NCDOT, engineer, and NCDENR. Obtain a Certificate of Completion.

Note: Temporary seeding will occur at every location where an area of exposed soil will not be reworked within 30 days, where final grade is not yet reached, or where planned landscaping is to be applied at a later date. Temporary seeding will be undertaken as per standard specifications for species, rate and surface preparation

Erosion Control Maintenance Plan

All erosion and sedimentation control measures shall be inspected weekly and after each runoff-producing rainfall event. Structures that shall be inspected include but are not limited to:

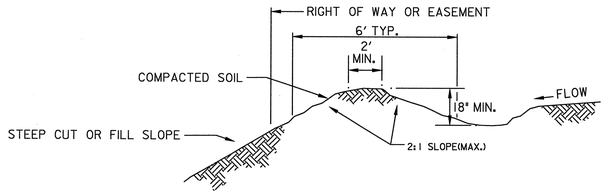
Sediment Dams and Silt Basins
Sediment shall be removed from the structure and the structure shall be restored to its original dimensions when 1.0 ft of sediment has accumulated in the structure. The sediment shall be disposed of off-site and the contaminated part of the gravel shall be replaced. The structure shall be inspected for damage and repaired accordingly.

Temporary Rock Silt Checks
Remove sediment and restore sediment storage to its original dimensions when sediment accumulates to within 6" of the top. add stone as necessary to maintain design dimensions.

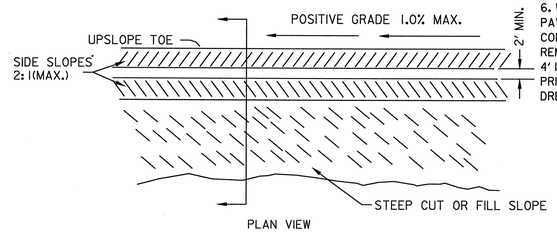
Silt Fence and Fabric Inlet Protection
Place additional silt fence over and around top of all pipes. Any fabric which collapses, tears, decomposes, or becomes ineffective shall be replaced immediately. Sediment deposits shall be removed when sediment behind the fence reaches 6".

Seeding, Fertilizing, and Mulching
Seeded areas shall be inspected for failure and necessary repairs and re-seeding shall be made within the same season.

Temporary Diversion Ditches
Sediment shall be removed from the flow area immediately after each rainfall.



CROSS SECTION



PLAN VIEW

TEMPORARY DIVERSION DITCH

SCALE: N.T.S.

NOTES:
1. REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONAL MATERIAL.

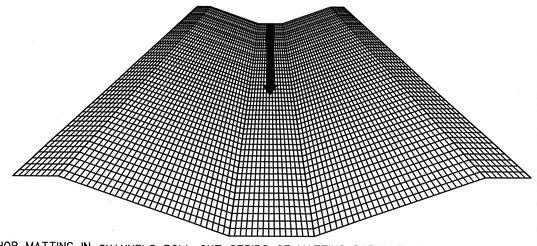
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.

3. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.

4. SEED THE BERM IMMEDIATELY AFTER GRADING, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

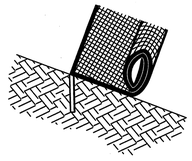
5. TEMPORARY DIVERSION DITCHES SHALL BE CONSTRUCTED IMMEDIATELY AFTER THE CLEARING ANG GRUBBING OPERATION IS COMPLETE. NOTE THAT ALL CONSTRUCTION ASSOCIATED WITH TEMPORARY DIVERSION DITCHES SHALL BE CONTAINED WITHIN THE RIGHT OF WAY AND EASEMENTS.

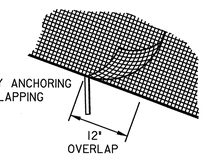
6. WHERE NECESSARY, AND ONLY AFTER INITIAL LIFTS OF PAVEMENT HAVE BEEN PLACED AND CURB AND GUTTER CONSTRUCTED, TEMPORARY DIVERSION DITCHES MAY BE REMOVED AND REPLACED WITH TEMPORARY SILT FENCE PLACED 4' INSIDE THE RIGHT OF WAY OR EASEMENT LINE, JUST PRIOR TO FINE GRADING AND FINAL DRESSING OF SLOPES. DRESSING OF SLOPES.



ANCHOR MATTING IN A 12" TRENCH

CHANNELS, ROLL OUT STRIPS OF MATTING PARALLEL TO THE DIRECTION OF FLOW AND OVER THE PROTECTIVE MULCH





EROSION CONTROL MATTING

SCALE: N.T.S.

NOTES:

1. EROSION CONTROL MATTING SHALL BE INSTALLED ON ALL TEMPORARY DITCHES WHERE THE GRADE > 2%, AND SHALL BE USED IN ALL PERMANENT DITCHES.

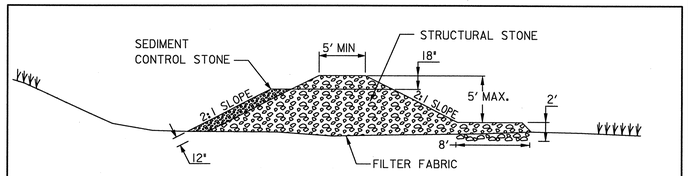
2. EROSION CONTROL MATTING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. ANY MAT ANY MAT OR BLANKET-TYPE PRODUCT USED AS A PROTECTIVE MULCH SHOULD PROVIDE COVER OF AT LEAST 30% OF THE SURFACE WHERE IT IS APPLIED.

3. APPLY LIME, FERTILIZER, AND SEED BEFORE LAYING THE MATTING.

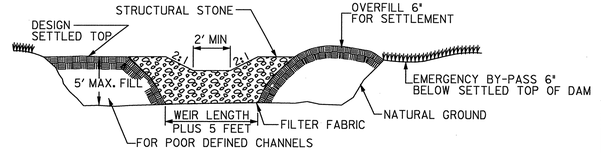
4. START LAYING THE MATTING FROM THE TOP OF THE CHANNEL OR SLOPE AND UNROLL IT DOWN THE GRADE. ALLOW MATTING TO LAY LOOSELY ON THE SOIL OR MULCH COVER BUT WITHOUT WRINKLES -- DO NOT STRETCH.

5. TO SECURE THE MATTING, BURY THE UPSLOPE END IN A SLOT OR TRENCH NO LESS THAN 6 INCHES DEEP, COVER WITH SOIL, AND TAMP FIRMLY. STAPLE THE MATTING EVERY 12 INCHES ACROSS THE TOP END AND EVERY 3 FEET AROUND THE EDGES AND BOTTOM. WHERE TWO STRIPS OF MATTING ARE LAID SIDE BY SIDE, THE ADJACENT EDGES SHOULD BE OVERLAPPED 3 INCHES AND STAPLED TOGETHER. EACH STRIP OF MATTING SHOULD ALSO BE STAPLED DOWN THE CENTER, EVERY 3 FEET. DO NOT STRETCH THE MATTING WHEN APPLYING STAPLES.

6. TO JOIN TWO STRIPS, CUT A TRENCH TO ANCHOR THE END OF THE NEW MATTING. OVERLAP THE END OF THE PREVIOUS ROLL 12 INCHES AND STAPLE EVERY 12 INCHES JUST BELOW THE ANCHOR SLOT.



PROFILE SECTION



CROSS SECTION

NOTES:
1. USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

2. USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.

3. DIKE MAY EXTEND ALONG MORE THAN ONE SIDE OF THE TRAP AREA. PROVIDE A TOTAL SEDIMENT STORAGE VOLUME OF 1800± CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY OTHER UP OR DOWNSTREAM CONTROLS.

4. AN UNDERLAY OF STRUCTURAL STONE WITH FIKTER FABRIC MAY BE REQUIRED BY THE ENGINEER.

DRAINAGE AREA (ACRES)	WEIR LENGTH (FT)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

TEMPORARY ROCK SEDIMENT DAM, TYPE "B"

SCALE: N.T.S.

DRN
$DATE$
$TIME$

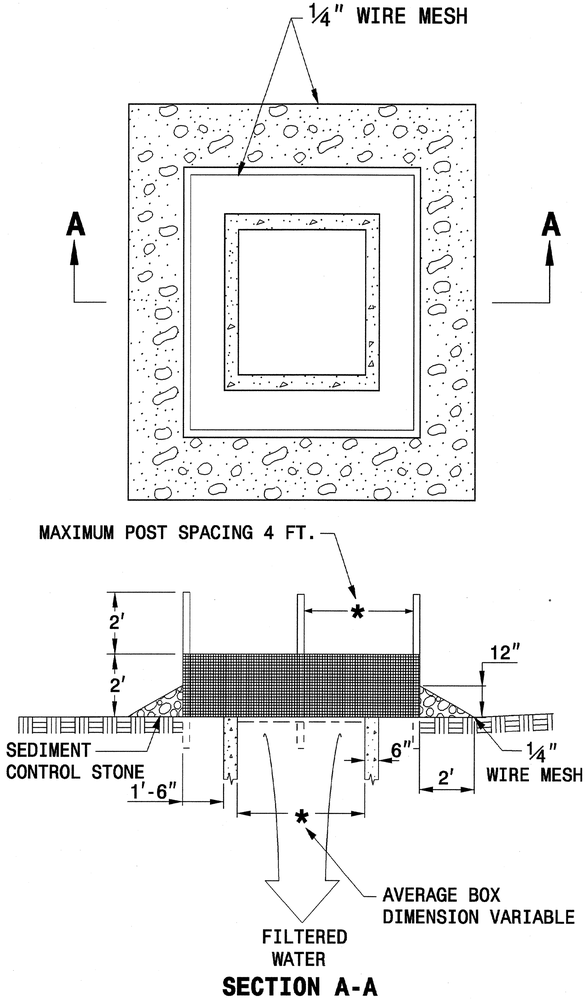
HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

N.T.S.

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-2A
R/W SHEET NO.	

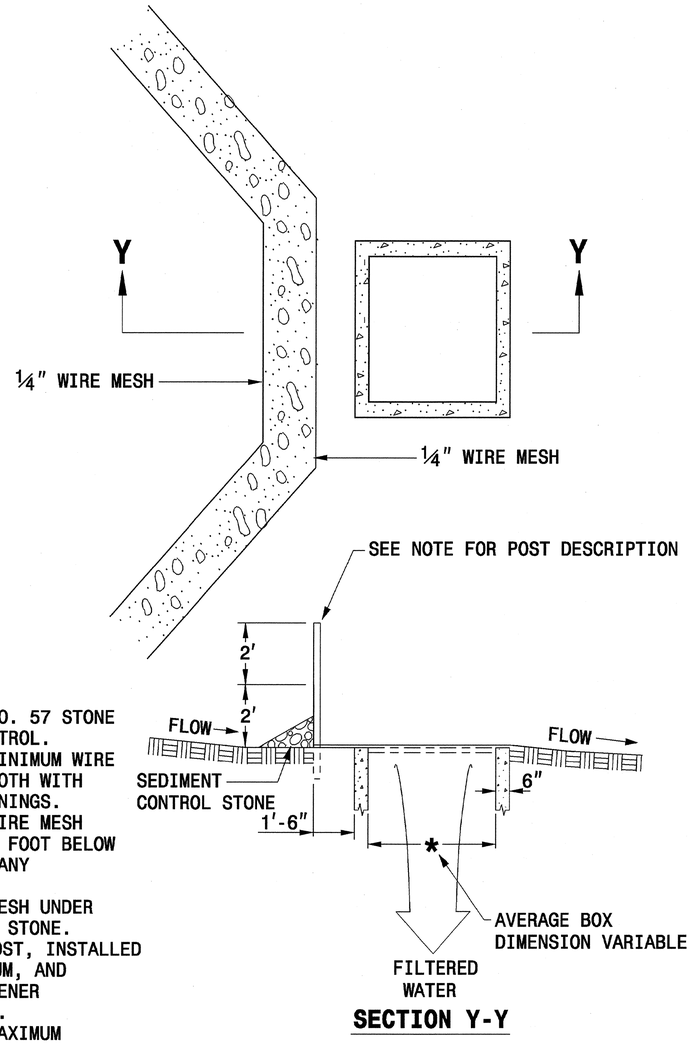
EROSION CONTROL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A YARLEY
10/8/08



SECTION A-A

NOTE
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
USE 24 GAUGE MINIMUM WIRE MESH HARDWARE CLOTH WITH ¼ INCH MESH OPENINGS.
PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
INSTALL WIRE MESH UNDER SEDIMENT CONTROL STONE.
USE 5' STEEL POST, INSTALLED 1.5' DEEP MINIMUM, AND OF THE SELF-FASTENER ANGLE STEEL TYPE.
SPACE POST A MAXIMUM OF 4'.



SECTION Y-Y

MULTI-DIRECTIONAL FLOW

SINGLE-DIRECTIONAL FLOW

ROCK INLET SEDIMENT TRAP TYPE 'C'

SCALE: N.T.S.

DGN
$DATE$
$TIME$

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PROJECT REFERENCE NO.	SHEET NO.
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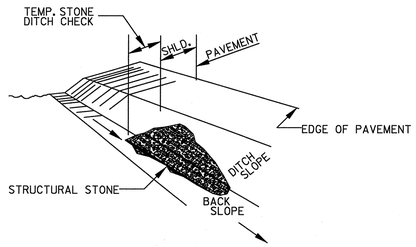
R/W SHEET NO.	

EROSION CONTROL ENGINEER

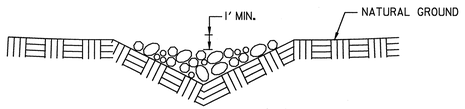


ISOMETRIC VIEW

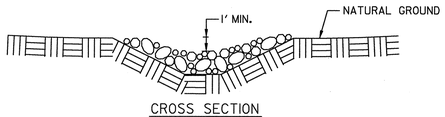
NOTES:

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

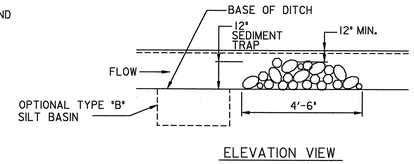
THE ENGINEER MAY DIRECT THE OPTION OF CLASS 'A' STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



CROSS SECTION
VEE DITCH



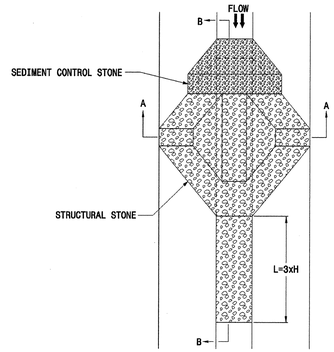
CROSS SECTION
TRAPEZOIDAL DITCH



ELEVATION VIEW

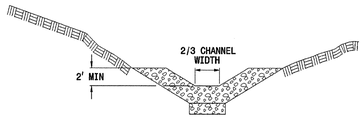
TEMPORARY ROCK SILT CHECK, TYPE 'B'

SCALE: N.T.S.

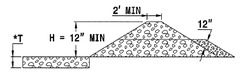


PLAN

NOTE
USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.



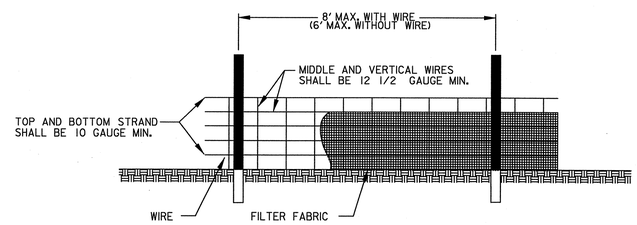
SECTION A-A



SECTION B-B
*T = 12" MIN., 18" MAX.

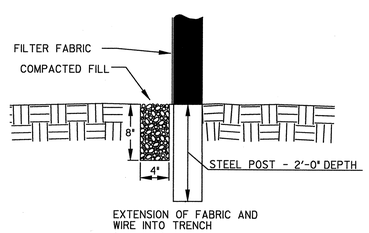
TEMPORARY ROCK SILT CHECK, TYPE 'A'

SCALE: N.T.S.



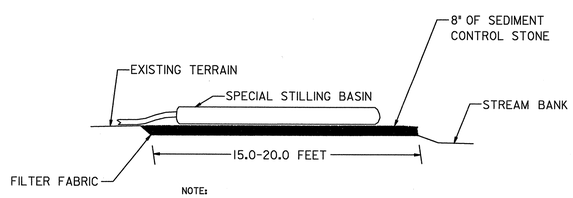
NOTES:

1. USE WIRE A MINIMUM OF 32" IN WIDTH AND A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING
2. USE FILTER FABRIC A MINIMUM OF 36" IN WIDTH AND FASTEN ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
3. PROVIDE 5'-0" STEEL POST OF THE SELF-FASTENER ANGLE STEEL TYPE. ANGLE STEEL TYPE.



TEMPORARY SILT FENCE

SCALE: N.T.S.



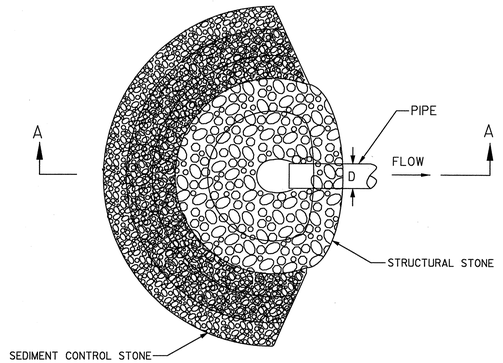
NOTE:
PROVIDE STABILIZED OUTLET TO STREAMBANK

SPECIAL STILLING BASIN WITH ROCK PAD

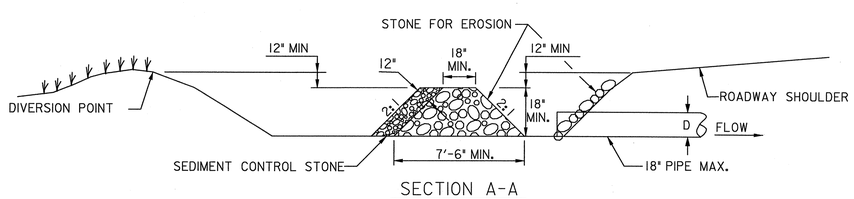
SCALE: N.T.S.

NOTES:

1. USE CLASS 'A' EROSION CONTROL STONE FOR STRUCTURAL STONE.
2. USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.
3. CONSTRUCT TOP OF BERM A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR DIVERSION POINT.
4. PROVIDE A TOTAL SEDIMENT TRAP VOLUME OF 1800+ CUBIC FEET PER ACRE OF DISTURBED AREA. SOME OF THE REQUIRED VOLUME MAY BE PROVIDED BY OTHER UP OR DOWNSTREAM CONTROLS.



PLAN



SECTION A-A

ROCK PIPE INLET SEDIMENT TRAP TYPE 'B'

SCALE: N.T.S.

DGN
$DATE$
$TIME$

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N.T.S.

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R/W SHEET NO.	

EROSION CONTROL ENGINEER

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
7-06

ENGLISH STANDARD DRAWING FOR
SPECIAL SEDIMENT CONTROL FENCE

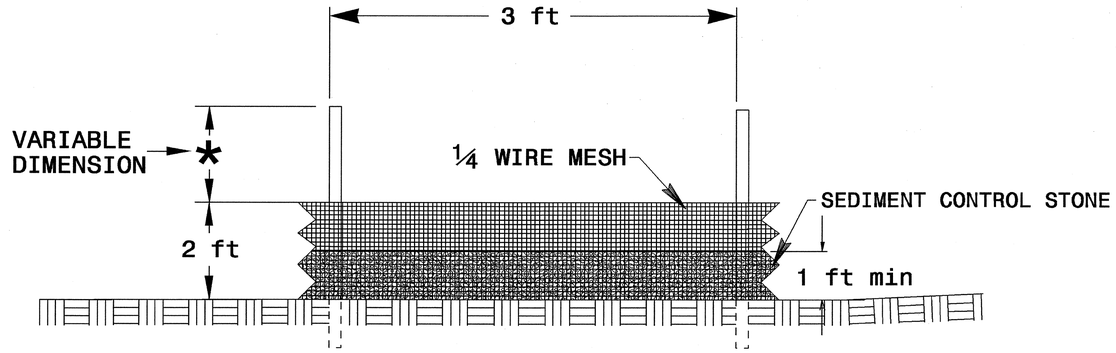
GENERAL NOTES:

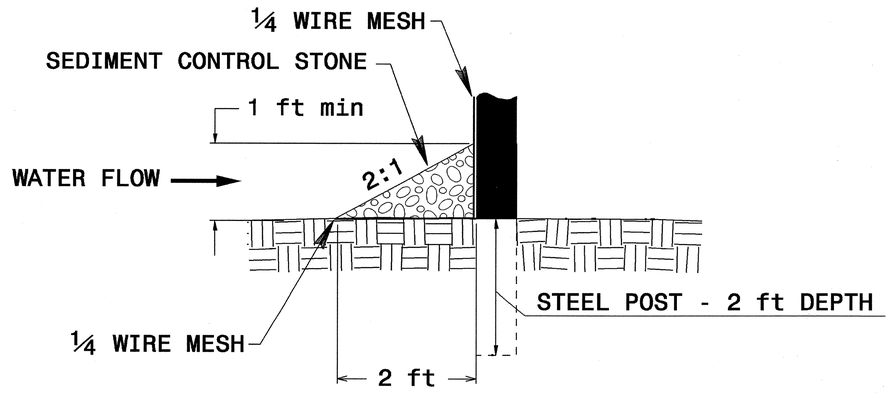
USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL.

USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH ¼ INCH MESH OPENINGS.

INSTALL 5 FT. SELF FASTENER ANGLE STEEL POST 2 FT. DEEP MINIMUM.

SPACE POST A MAXIMUM OF 3 FT.





SHEET 1 OF 1
1606.01

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$DATE$
$TIME$

STATE OF NORTH CAROLINA
DEPT. OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
7-06

ENGLISH STANDARD DRAWING FOR
SPECIAL SEDIMENT CONTROL FENCE

SHEET 1 OF 1
1606.01

HNTB NORTH CAROLINA, P.C.
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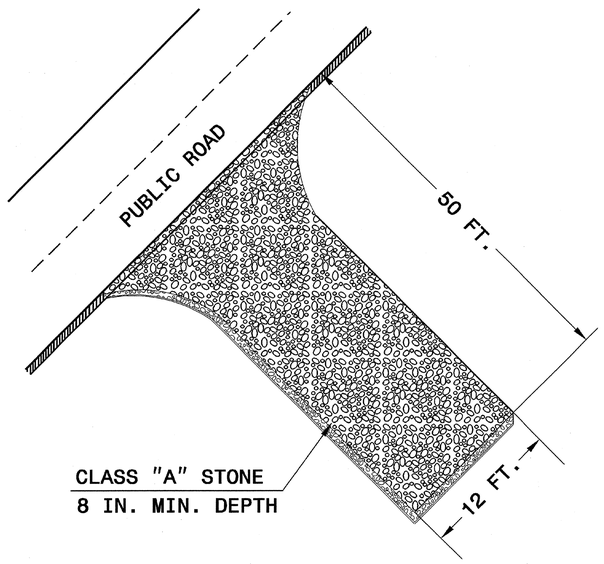
R/W SHEET NO.	

EROSION CONTROL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A. YARLEY

10/8/08

NOTES:
1. PROVIDE TURNING RADIUS SUFFICIENT TO ACCOMMODATE LARGE TRUCKS.
2. LOCATE ENTRANCE(S) TO PROVIDE FOR UTILIZATION BY ALL CONSTRUCTION VEHICLES.
3. MUST BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR DIRECT FLOW OF MUD ONTO STREETS. PERIODIC TOPDRESSING WITH STONE WILL BE NECESSARY.
4. ANY MATERIAL TRACKED ONTO THE ROADWAY MUST BE CLEANED UP IMMEDIATELY.
5. LOCATE GRAVEL CONSTRUCTION ENTRANCE AT ALL POINTS OF INGRESS AND EGRESS UNTIL SITE IS STABILIZED. PROVIDE FREQUENT CHECKS OF THE DEVICE AND TIMELY MAINTENANCE.
6. NUMBER AND LOCATION OF CONSTRUCTION ENTRANCES TO BE DETERMINED BY THE ENGINEER.
7. USE CLASS 'A' STONE OR OTHER COARSE AGGREGATE APPROVED BY THE ENGINEER.



NOTE: PLACE FILTER FABRIC BENEATH STONE

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

SCALE: N.T.S.

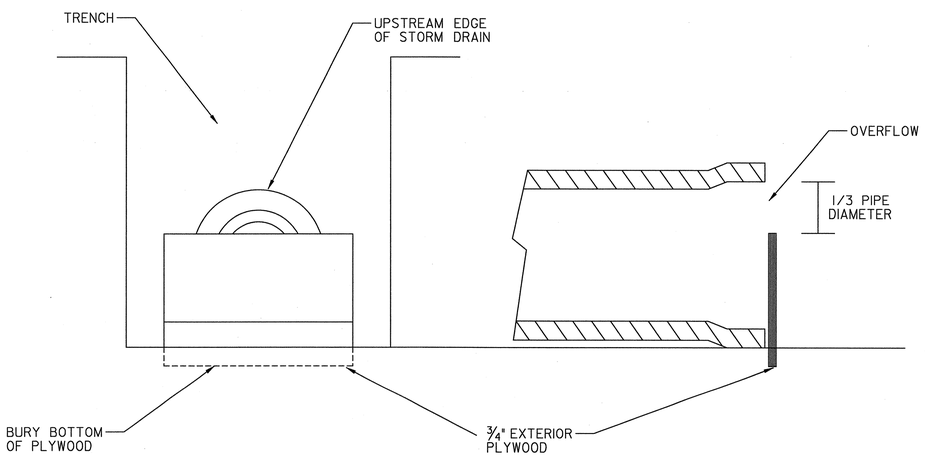


FIGURE 1: PLYWOOD INLET PROTECTION FOR STORM DRAIN UNDER CONSTRUCTION

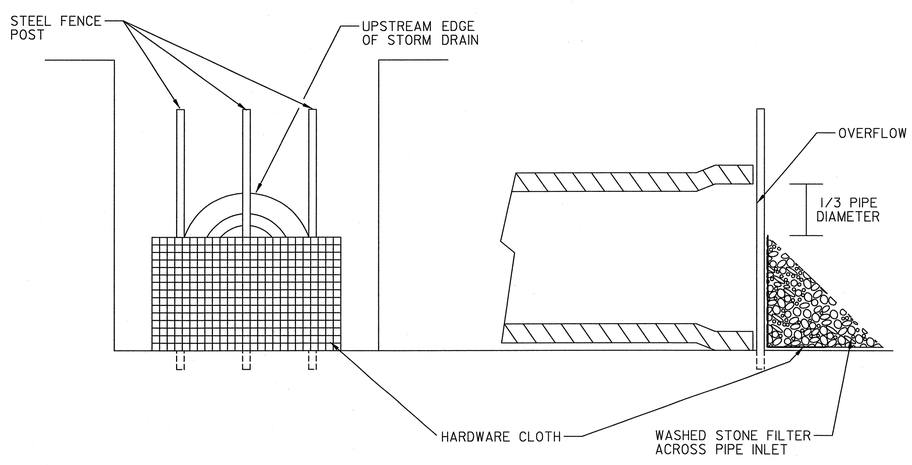


FIGURE 2: STONE FILTER INLET PROTECTION FOR STORM DRAIN UNDER CONSTRUCTION

INLET PROTECTION FOR STORM DRAIN UNDER CONSTRUCTION

SCALE: N.T.S.

NOTES: INLET PROTECTION FOR STORM DRAIN UNDER CONSTRUCTION SHALL BE INSTALLED AT THE END OF EACH DAY'S WORK AT THE UPSTREAM SIDE OF ALL STORM DRAIN PIPES THAT ARE UNDER CONSTRUCTION OR OTHERWISE NOT CONNECTED TO A DRAINAGE STRUCTURE.

DGN
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

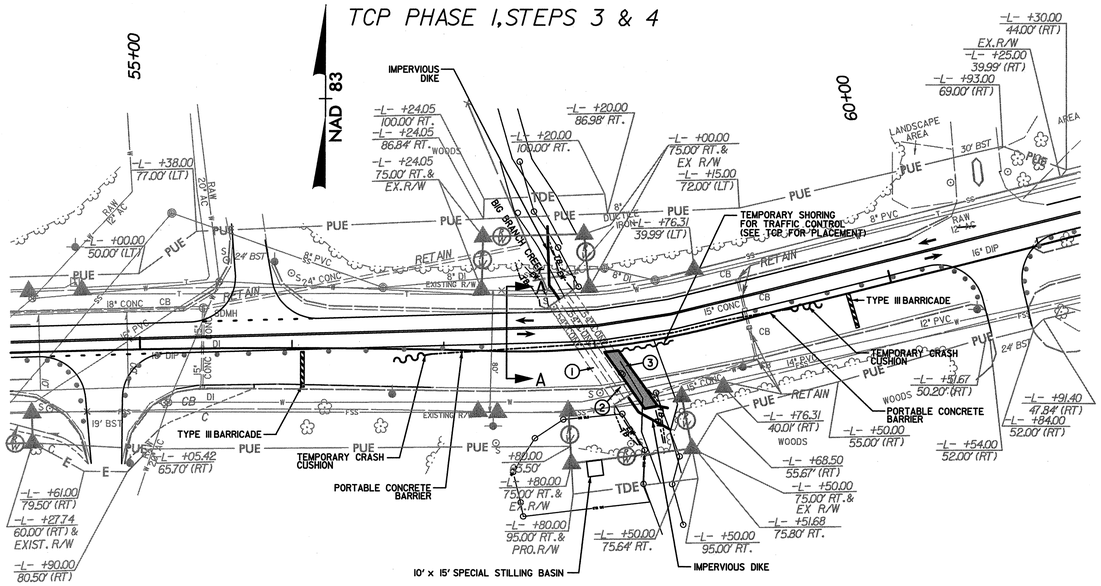
PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-2E
R/W SHEET NO.	

EROSION CONTROL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A. KYLE
10/8/08

STEP 1

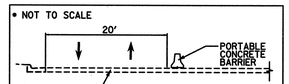
TCP PHASE I, STEPS 3 & 4



STEP 1
A) INSTALL IMPERVIOUS DIKES TO DIVERT STREAM FLOW THROUGH EXISTING CULVERT ①.
B) INSTALL 10' X 15' SPECIAL STILLING BASIN.
C) SHIFT TRAFFIC TO THE PATTERN SHOWN ACCORDING TO THE TRAFFIC CONTROL PLAN.
D) CONSTRUCT NEW CULVERT ③ AS SHOWN.

CONSTRUCTION

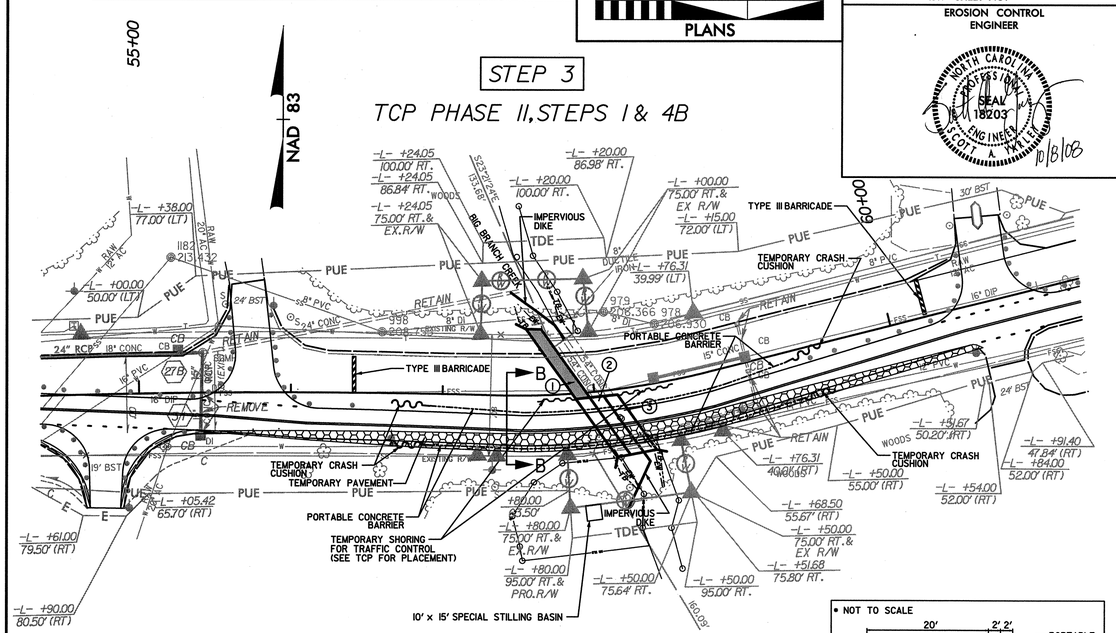
• NOT TO SCALE



SECTION A-A

STEP 3

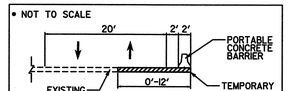
TCP PHASE II, STEPS 1 & 4B



STEP 1
A) MAINTAIN IMPERVIOUS DIKES AND STREAM FLOW PATTERN FROM PHASE I, STEP 2.
B) SHIFT TRAFFIC TO THE NEW PATTERN SHOWN ACCORDING TO THE TRAFFIC CONTROL PLAN.
C) CONSTRUCT NEW CULVERT ① AS SHOWN.

CONSTRUCTION

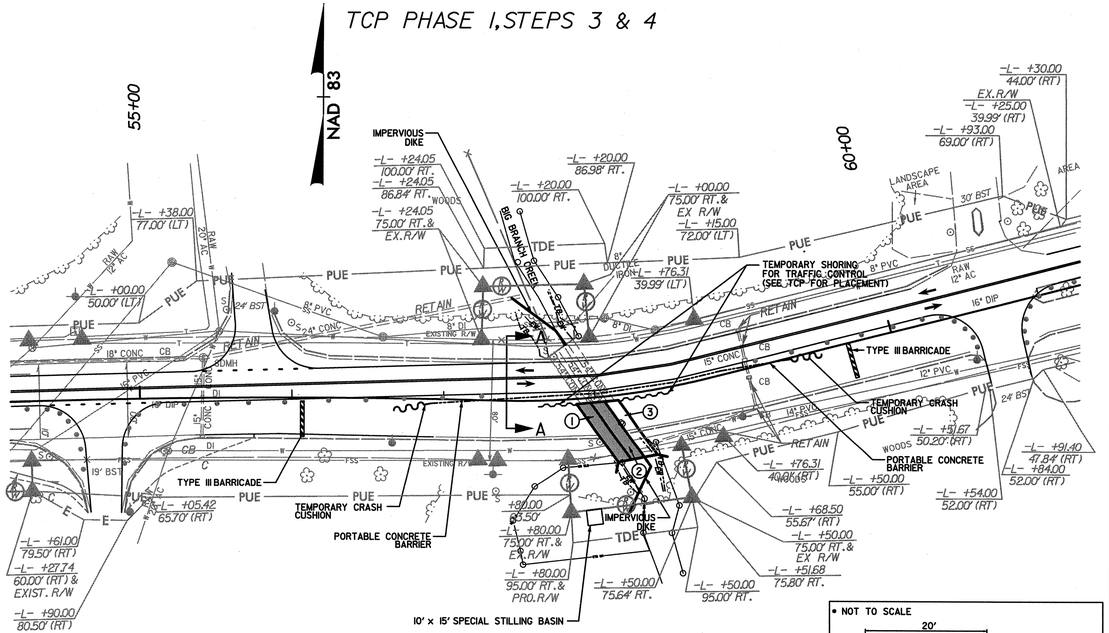
• NOT TO SCALE



SECTION B-B

STEP 2

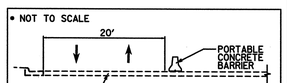
TCP PHASE I, STEPS 3 & 4



STEP 2
A) RELOCATE IMPERVIOUS DIKES TO DIVERT STREAM FLOW THROUGH EXISTING/NEW CULVERT ③. (SEE STRUCTURE PLANS FOR DETAIL SHOWING TEMPORARY CONNECTION BETWEEN EXISTING 54" RCP AND NEW RCBC).
B) CONSTRUCT NEW CULVERTS ① AND ②.

- PROPOSED CONSTRUCTION

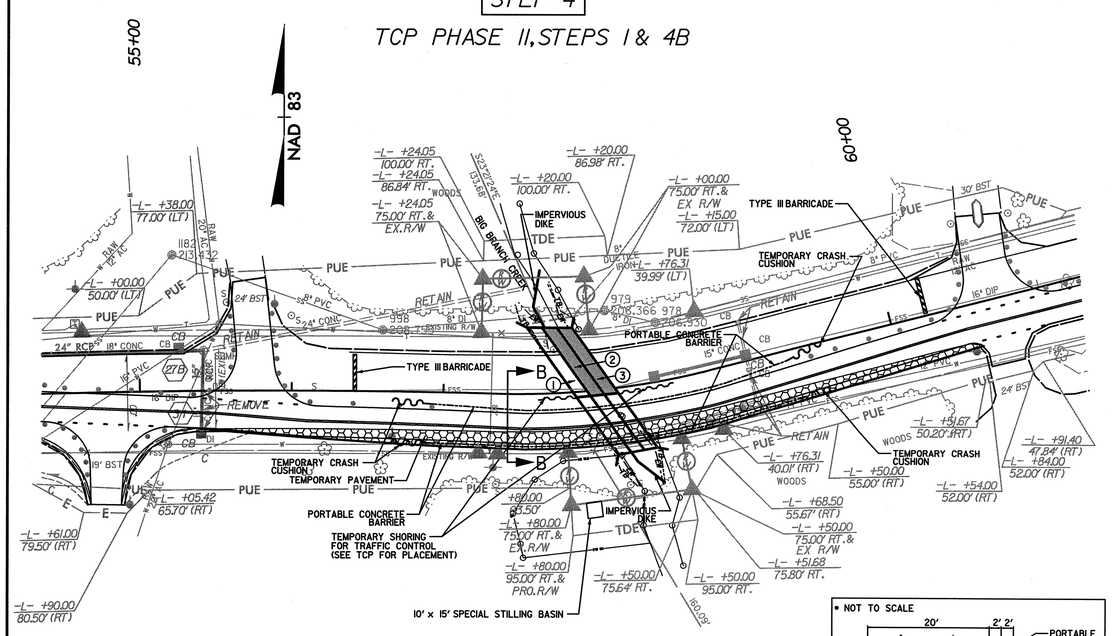
• NOT TO SCALE



SECTION A-A

STEP 4

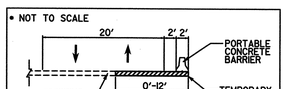
TCP PHASE II, STEPS 1 & 4B



STEP 2
A) RELOCATE IMPERVIOUS DIKES TO DIVERT STREAM FLOW THROUGH CULVERT ①.
B) CONSTRUCT NEW CULVERTS ② AND ③.

CONSTRUCTION

• NOT TO SCALE



SECTION B-B

DGN
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-3
R/W SHEET NO.	

EROSION CONTROL ENGINEER

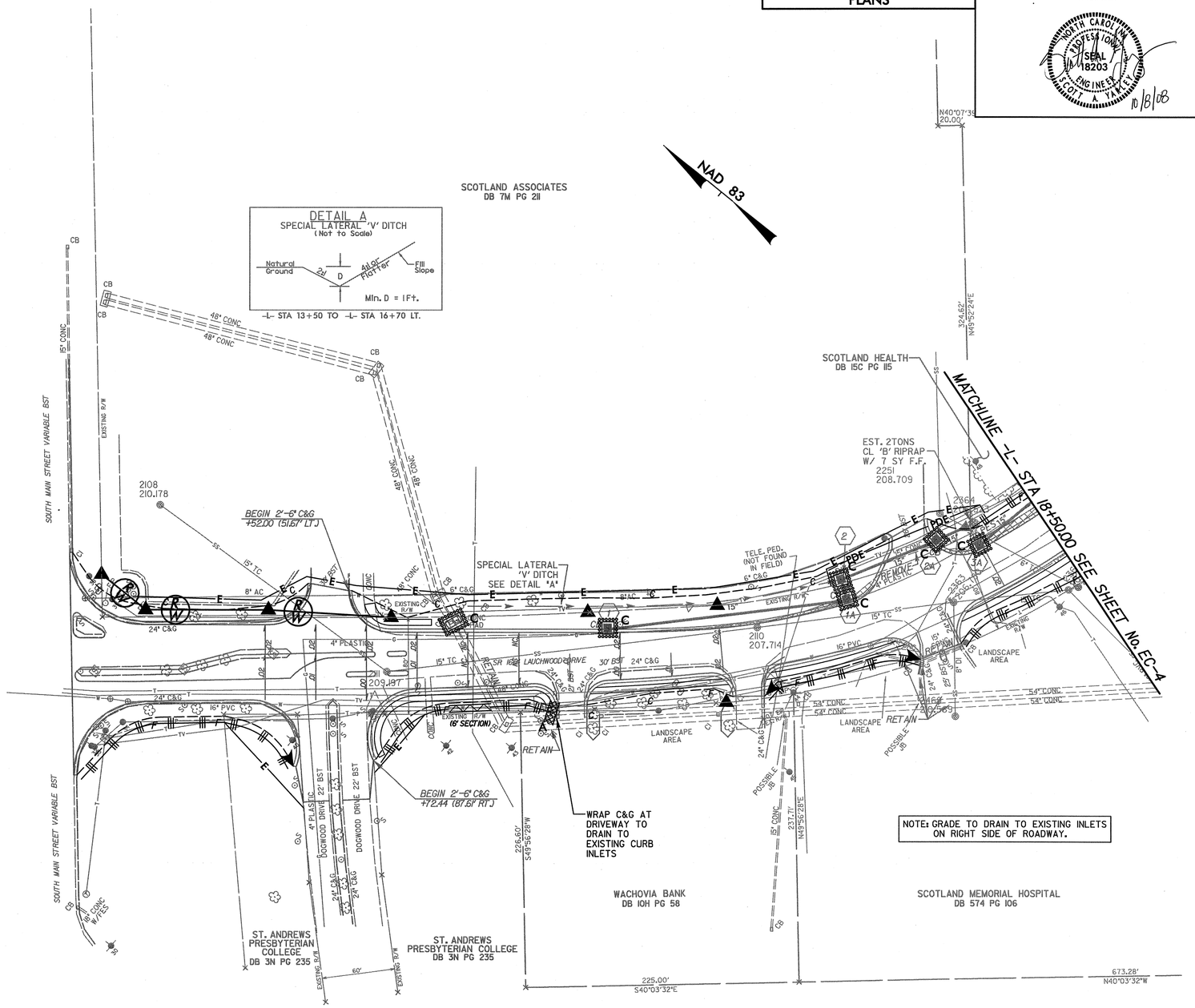
NORTH CAROLINA PROFESSIONAL SEAL 18203 ENGINEER SCOTT A. YAKEL
10/8/08

EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE
- C – ROCK INLET SEDIMENT TRAP TYPE 'C'
- SPECIAL SEDIMENT CONTROL FENCE
- TEMPORARY ROCK SILT CHECK TYPE 'A'
- TEMPORARY ROCK SILT CHECK TYPE 'B'

LINING REQUIREMENTS FOR DITCHES

PERCENT GRADE (%)	TYPE OF LINING
0 ≤ 1	STRAW AND TACK
1 ≤ 3	EROSION CONTROL MATTING
3 ≤ 5	SYNTHETIC ROVING



NOTE:
FOR -L- PROFILE SEE SHEET No. 9.

DGN
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-4
R/W SHEET NO.	

EROSION CONTROL ENGINEER

SEAL 48203 ENGINEER SCOTT A. TAYLOR
10/20/08

NAD 83

MATCHLINE -L- STA 18+50.00 SEE SHEET No.EC-3

MATCHLINE -L- STA 31+50.00 SEE SHEET No.EC-5

DETAIL B
SPECIAL LATERAL BASE DITCH
(Not to Scale)

Natural Ground, 2d, D, B, Ad or Flatter, Fill Slope
Min. D = 1Ft.
B = 4 Ft.

-L- STA 20+50 TO -L- STA 26+50 LT.
-L- STA 20+50 TO -L- STA 21+50 RT.

DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)

Natural Ground, 2d, D, Ad or Flatter, Fill Slope
Min. D = 1Ft.

-L- STA 26+50 TO -L- STA 31+00 LT.
-L- STA 22+30 TO -L- STA 24+50 RT.
-Y2- STA 10+50 TO -Y2- STA 11+50 RT.
-L- STA 30+50 TO -L- STA 31+50 RT.

SCOTLAND MEMORIAL HOSPITAL
DB 574 PG 106

SCOTLAND HEALTH
DB 15C PG 115

J BOWLING & BEVERLEY BOWLING
DB 452 PG 74
MB 9 PG 248

HIGHLAND APARTMENTS
DB 402 PG 288
MB 8 PG 307

SHERBROOKE HOMEOWNERS INC.
DB 90 PG 722
DB 15M PG 77
MB 8 PG 349
MB 8 PG 378
MB 8 PG 464

SPECIAL LATERAL 4' BASE DITCH SEE DETAIL "B"

SPECIAL LATERAL 'V' DITCH SEE DETAIL "A"

EST. 5 TONS CL 'B' RIPRAP W/ 14 SY F.F.

EST. 2 TONS CL "B" RIPRAP W/ 7 SY F.F.

SR 1674 LAUCHWOOD DRIVE 30' BST

24" C&G DUNDEE DRIVE VARIABLE BST

WOODS

LANDSCAPE AREA

EXISTING R/W

EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE
- C – ROCK INLET SEDIMENT TRAP TYPE 'C'
- B – ROCK PIPE INLET SEDIMENT TRAP TYPE 'B'
- SPECIAL SEDIMENT CONTROL FENCE
- TEMPORARY ROCK SILT CHECK TYPE 'A'
- TEMPORARY ROCK SILT CHECK TYPE 'B'

LINING REQUIREMENTS FOR DITCHES

PERCENT GRADE (%)	TYPE OF LINING
0 ≤ 1	STRAW AND TACK
1 ≤ 3	EROSION CONTROL MATTING
3 ≤ 5	SYNTHETIC ROVING

NOTE:
FOR -L- PROFILE SEE SHEET No. 9
FOR -Y2- PROFILE SEE SHEET No. 11.

DGN
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

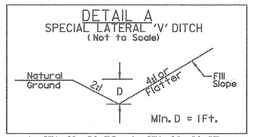
PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-5
R/W SHEET NO.	

EROSION CONTROL ENGINEER

SEAL 08203 — NORTH CAROLINA PROFESSIONAL ENGINEER SCOTT A YARLEY — 10/8/08

NAD 83

DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



-L- STA 31+50 TO -L- STA 32+10 RT
-L- STA 32+10 TO -L- STA 40+50 RT.
-L- STA 35+75 TO -L- STA 37+70 LT.
-L- STA 37+50 TO -L- STA 41+50 LT.
-L- STA 42+50 TO -L- STA 43+00 RT.
-L- STA 43+50 TO -L- STA 44+50 RT.
-L- STA 44+95 TO -L- STA 45+50 RT.

MATCHLINE -L- STA 31+50.00 SEE SHEET No.EC-4

MATCHLINE -L- STA 45+50.00 SEE SHEET No.EC-6

SCOTLAND HEALTH
DB 15C PG 115

SCOTLAND MEMORIAL HOSPITAL
DB 11F PG 84
MB 8 PG 474

SCOTLAND ORTHOPEDIC
DB 407 PG 283
MB 8 PG 474

SCOTLAND MEMORIAL HOSPITAL
DB 11F PG 84
MB 8 PG 237

HIGHLAND APARTMENTS
DB 402 PG 288
MB 8 PG 307

GEORGE WASHIGTON & MARCY COLKITT
DB 14Y PG 117
MB 8 PG 307

WILLIAM GOODWIN & CARNEVALE REYNOLDS
DB 9K PG 715
MB 8 PG 307

CHARLES M GRACE IV
DB 11P PG 334
MB 8 PG 307

FRANK ROOFE
DB 440 PG 243
MB 8 PG 307

H HUGHES & K HARRELL
DB 12F PG 147
MB 8 PG 307

HAL FOGLEMAN
DB 9H PG 285
MB 8 PG 307

JAMES CURRIN
DB 636 PG 265
MB 8 PG 307

SR 1674 LAUCHWOOD DRIVE 30' BST

SPECIAL LATERAL 'V' DITCH SEE DETAIL "A"

NOTE:
15" RCP CONFLICTS W/ S.S. MANHOLE

EST. 5 TONS CL 'B' RIPRAP W/ 14 SY F.F.

EXIST. DITCH

EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE
- ROCK INLET SEDIMENT TRAP TYPE 'C'
- SPECIAL SEDIMENT CONTROL FENCE
- TEMPORARY ROCK SILT CHECK TYPE 'A'
- TEMPORARY ROCK SILT CHECK TYPE-B

LINING REQUIREMENTS FOR DITCHES

PERCENT GRADE (%)	TYPE OF LINING
0 ≤ 1	STRAW AND TACK
1 ≤ 3	EROSION CONTROL MATTING
3 ≤ 5	SYNTHETIC ROVING

NOTE:
FOR -L- PROFILE SEE SHEET No. 9 & 10.

$DRGN$
$DATE$
$TIME$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-6
RW SHEET NO.	

EROSION CONTROL ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 48203 ENGINEER SCOTT A. YATES
6/6/08

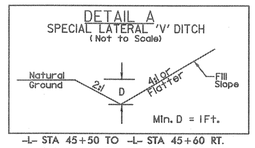
EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE
- C – ROCK INLET SEDIMENT TRAP TYPE 'C'
- SPECIAL SEDIMENT CONTROL FENCE
- TEMPORARY ROCK SEDIMENT DAM TYPE 'B'
- TEMPORARY ROCK SILT CHECK TYPE 'A'
- TEMPORARY ROCK SILT CHECK TYPE 'B'

LINING REQUIREMENTS FOR DITCHES

PERCENT GRADE (%)	TYPE OF LINING
0 ≤ 1	STRAW AND TACK
1 ≤ 3	EROSION CONTROL MATTING
3 ≤ 5	SYNTHETIC ROVING

DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



-L- STA 45+50 TO -L- STA 45+60 RT.
-L- STA 46+50 TO -L- STA 47+00 RT.
-L- STA 48+39 TO -L- STA 49+00 RT.
-Y5- STA 10+35 TO -Y5- STA 11+25 RT.
-Y5- STA 10+35 TO -Y5- STA 11+25 LT.
-L- STA 50+00 TO -L- STA 52+50 RT.
-L- STA 53+50 TO -L- STA 54+50 RT.

NOTE:
REFER TO CULVERT PHASING SHEET No. 2-E FOR CONSTRUCTION PHASING.

NOTE:
FOR -L- PROFILE SEE SHEET No. 10.
FOR -L1- PROFILE SEE SHEET No. 10.
FOR -Y5- PROFILE SEE SHEET No. 11.

DGN
$$DATE$$
$$TIME$$

HNTB NORTH CAROLINA, P.C.
343 E. SIX FORKS ROAD, SUITE 200
Raleigh, North Carolina 27609

GRAPHIC SCALE
50 25 0 50 100
PLANS

PROJECT REFERENCE NO.	SHEET NO.
U-5027	EC-7
R/W SHEET NO.	

EROSION CONTROL ENGINEER

SEAL 038203 — NORTH CAROLINA PROFESSIONAL ENGINEER — SCOTT A. YARBROUGH — 10/8/08

EROSION CONTROL LEGEND:

- TEMPORARY SILT FENCE
- C — ROCK INLET SEDIMENT TRAP TYPE 'C'
- SPECIAL SEDIMENT CONTROL FENCE
- TEMPORARY ROCK SILT CHECK TYPE 'A'
- TEMPORARY ROCK SILT CHECK TYPE 'B'

LINING REQUIREMENTS FOR DITCHES

PERCENT GRADE (%)	TYPE OF LINING
0 ≤ 1	STRAW AND TACK
1 ≤ 3	EROSION CONTROL MATTING
3 ≤ 5	SYNTHETIC ROVING

NAD 83

MATCHLINE -L- STA 59+50.00 SEE SHEET No. EC-6

SCOTLAND COUNTY
DB 627 PG 275

PROFESSIONAL PROVIDERS HOMECARE AGENCY INC.
DB 498 PG 207
MB 4 PG 493

LAURINBURG APPROXIMATE CITY LIMITS

INSTALL 2-6" PVC PIPES INCLUDING ELBOWS & CAPS FOR FUTURE USE

SR 1674 LAUCHWOOD DRIVE VARIABLE WIDTH

SR 1674 LAUCHWOOD DRIVE

DIRT DRIVE

JOHNS ROAD 22' BST

EST. 2 TONS CL. 'B' RIPRAP W/ 7 SY FILTER FABRIC (BOTH LOCATIONS)

ADJUST SLOPE TO MAINTAIN POSITIVE DRAINAGE

ADJUST SLOPE TO MAINTAIN POSITIVE DRAINAGE

REPAIR EXISTING PIPE END

COLLARS

SPECIAL LATERAL 'V' DITCH SEE DETAIL 'A'

EST. 3 TONS CL. 'B' RIPRAP W/ 10 SY F.F.

ANDREW O INGRAM
DB 767 PG 26

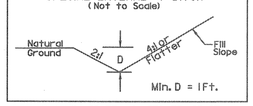
CHARLES M GRACE IV
DB 800 PG 294
MB 4 PG 493
MB 10 PG 151

PROFESSIONAL PROVIDERS HOMECARE AGENCY INC.
DB 498 PG 207
MB 4 PG 493
MB 10 PG 151

NO RECORD INFORMATION WAS FOUND FOR THIS TELE. PED.

S.CALEDONIA IDS 501 22' BST

DETAIL A
SPECIAL LATERAL 'V' DITCH
(Not to Scale)



-L- STA 72+50 TO -L- STA 73+15 RT.

NOTE:
FOR -L- PROFILE SEE SHEET No. 10 & 11.

DGN
$DATE$
$TIME$