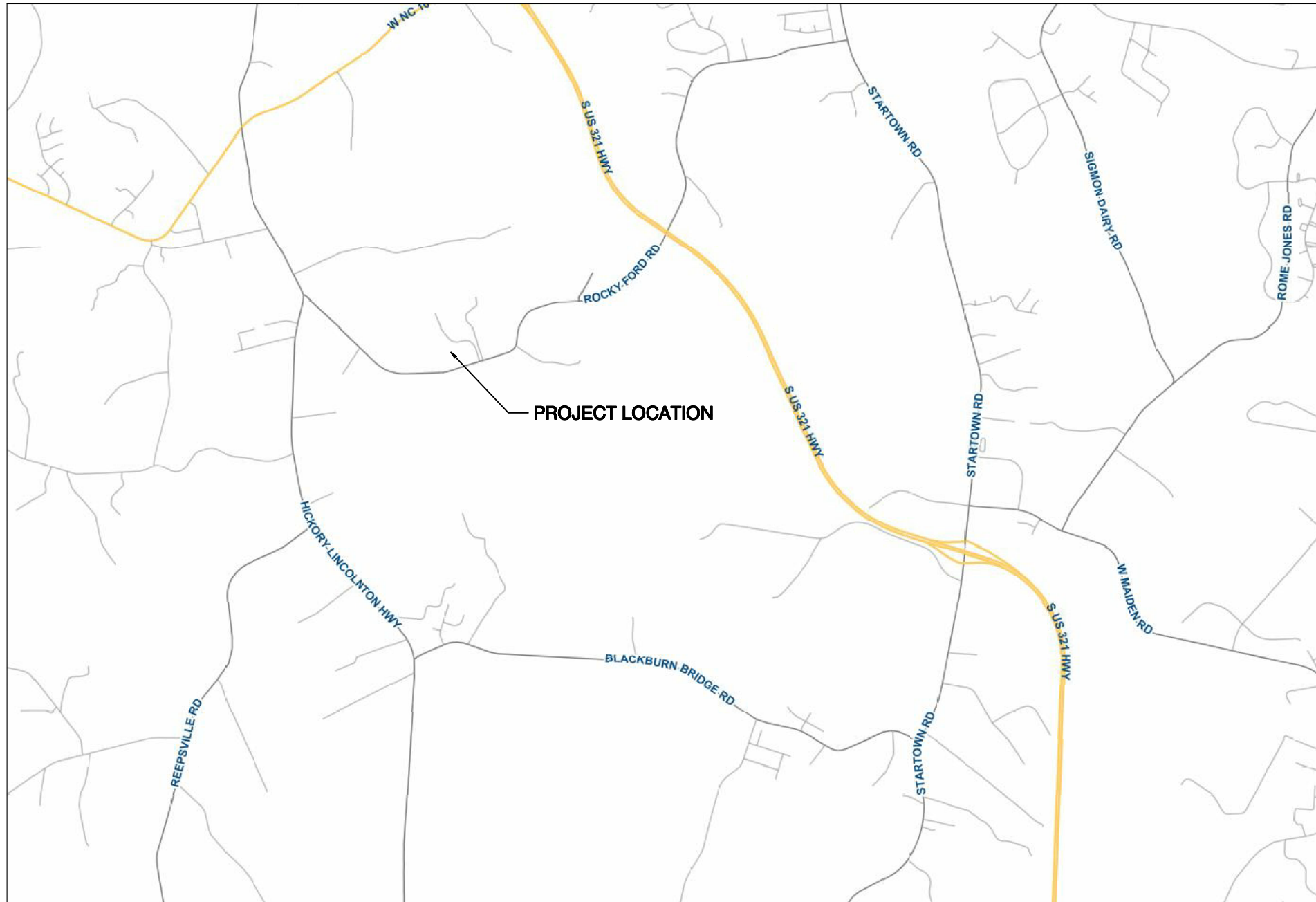


CATAWBA COUNTY  
BLACKBURN RESOURCE RECOVERY FACILITY  
TREATMENT AND PROCESSING FACILITY  
CONSTRUCTION DRAWINGS

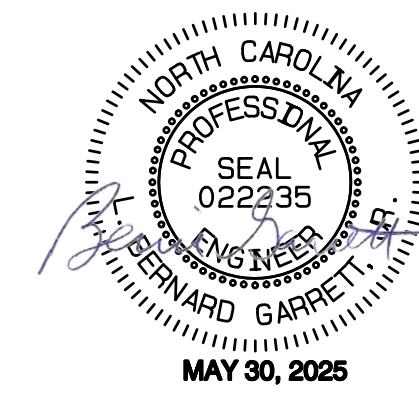
LOCATION MAP



INDEX OF DRAWINGS

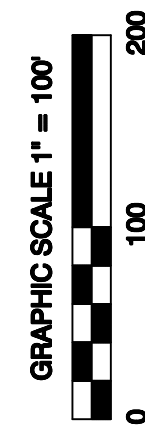
SHEET 1	EXISTING CONDITIONS
SHEET 2	PHASE 1 EROSION CONTROL PERIMETER CONTROLS
SHEET 3	PHASE 2 EROSION CONTROL GRADING
SHEET 4	PHASE 3 EROSION CONTROL POST CONSTRUCTION
SHEET 5	PROFILES ROAD A DATA
SHEET 6	PROFILES ROAD B, STORM, AND SCALES PLAZA
SHEET 7	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 8	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 9	EROSION AND SEDIMENT CONTROL DETAILS
SHEET 10	EROSION AND SEDIMENT CONTROL DETAILS
GONTRAM ARCHITECTS NEW SCALE HOUSE DRAWINGS 12-05-2024	
RPA ENGINEERING TIRE BUILDING DRAWINGS 05-15-2025	

MAY 2025



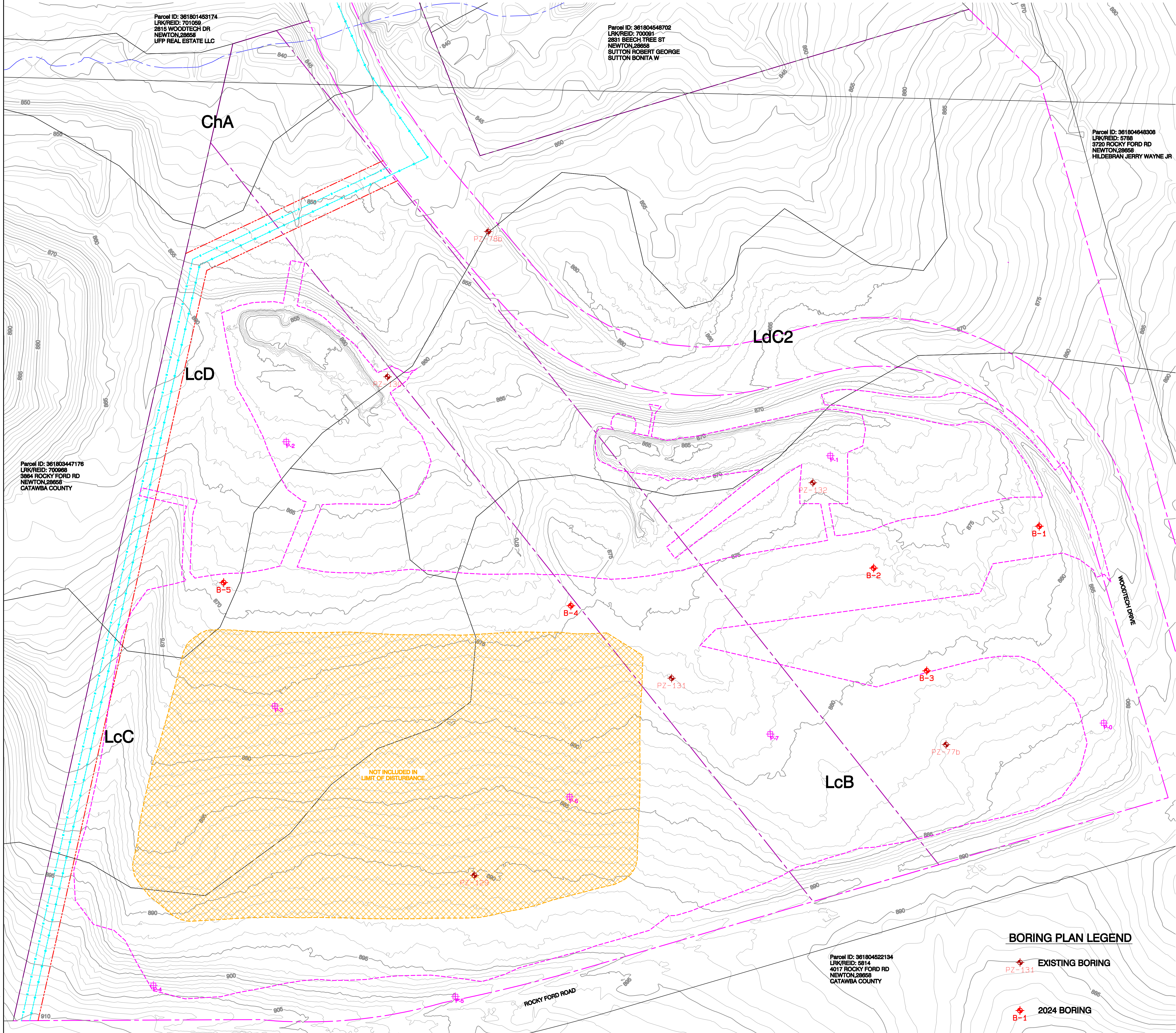
CATAWBA COUNTY  
BLACKBURN RESOURCE  
RECOVERY FACILITY  
TREATMENT AND PROCESSING FACILITY  
SMALL TYPE 1 COMPOST  
AND SCRAP TIRE COLLECTION

CONSTRUCTION DRAWINGS



SHEET  
0

Path: D:\Project\Catawba\CADD\CATAWBA PROCESS FACILITY 05-28-25.dwg Plot Date/Time: Fri May 30, 2025 / 12:19:28



PROJECT OCCURS IN CATAWBA RIVER BASIN  
SITE DISCHARGE IS TO AN UNNAMED TRIBUTARY OF THE CATAWBA RIVER  
AND NOT TO THE MAIN STEM OF THE CATAWBA RIVER. THEREFORE THE  
PROJECT IS NOT SUBJECT TO CATAWBA RIVER BASIN RIPARIAN BUFFER  
RULES.

SITE SOILS LEGEND			
map unit symbol	map unit name	area in ac	percent total
LcB	Lloyd loam, 2 to 5 percent slopes	8.8	66.2%
LcC	Lloyd loam, 6 to 10 percent slopes	3.0	22.7%
LcD	Lloyd loam, 10 to 15 percent slopes	0.9	6.6%
LdC2	Lloyd clay loam, 0 to 10 percent slopes, moderately eroded	0.6	4.5%
Totals for Area of Interest		13.3	100.0%

CONTROL POINTS			
Northing	Easting	Elevation	Descriptor
683659.62	1316314.28	885.74	P-0
694190.02	1315678.20	872.20	P-1
684207.31	1315303.80	882.18	P-2
683980.88	1315288.65	875.98	P-3
683535.46	1315138.52	902.31	P-4
683521.61	1315512.84	889.95	P-5
683788.47	1315653.83	884.30	P-6
683846.07	1315902.03	878.95	P-7

LEGEND

EXISTING NORMAL CONTOUR

EXISTING INDEX CONTOUR

PROPOSED NORMAL CONTOUR

PROPOSED INDEX CONTOUR

LIMIT OF DISTURBANCE

TEMP. DIVERSION (DETAIL 3/8)  
W/ ROCK CHECK @ 60 FT

SILT FENCE (DETAIL 8/5)

POROUS BAFFLES (DETAIL 7/8)

PERM. STORMWATER CHANNEL

STORM DRAIN, RCP

SEEDING LIMITS

HCG

HCG INLET PROTECTION (DETAIL 5/8)

FB

FILTER BAG (DETAIL 6/9)

ROCK CHECK DAM

CW

CONCRETE WASHOUT (DETAIL 2/10)

PROFESSIONAL SEAL

028235

ENGINEER

JOHNWARD GARRETT

MAY 30, 2025

Garrett & Moore

Engineering for the Power and Waste Industries

1029 West South Street

Raleigh, NC 27603

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CATAWBA COUNTY

BLACKBURN RESOURCE RECOVERY FACILITY

TREATMENT AND PROCESSING FACILITY

SMALL TYPE 1 COMPOST AND SCRAP TIRE COLLECTION

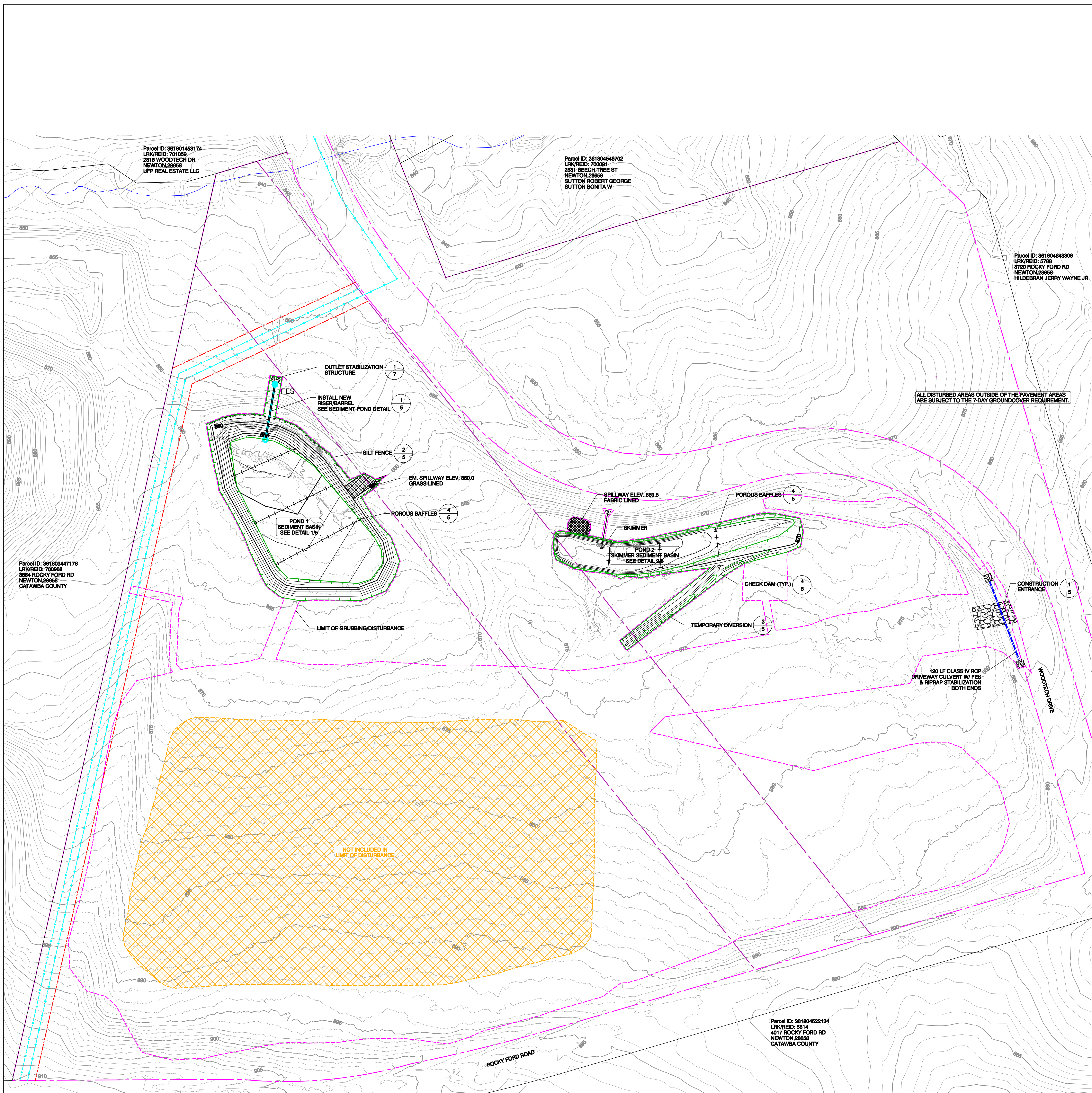
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0 50 100

SHEET

1

Path: D:\Project\Catawba\CADD\CATAWBA PROCESS FACILITY 05-28-25.dwg Plot Date/Time: Fri May 30, 2025 / 12:58:32



STORMWATER GENERAL PERMIT NCG010000  
REPORTING AND INSPECTION NOTES  
Self-inspection and monitoring for this project is required under the conditions of Stormwater General Permit NCG010000. DEMLR Monitoring Form Rev. 08/12/13 can be located at <http://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms>

LAND DISTURBANCE GENERAL NOTES

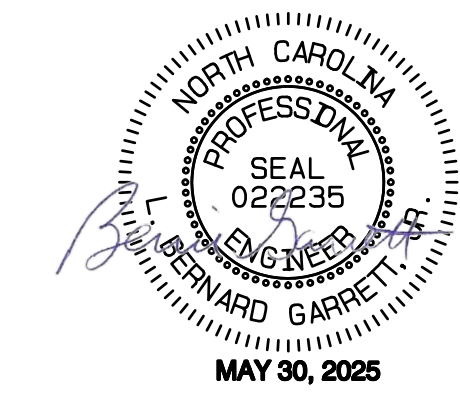
1. PER NPDES REQUIREMENTS, A RAIN GAUGE, SELF-INSPECTIONS RECORDS, PERMIT, CERTIFICATE OF COVERAGE, AND S&E PLAN ARE REQUIRED TO BE MAINTAINED ON SITE AND ACCESSIBLE DURING INSPECTION. IT IS RECOMMENDED THAT THESE ITEMS BE PLACED IN A PERMITS BOX AT THE BEGINNING OR ENTRANCE OF PROJECT.
2. SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING.
3. EROSION AND SEDIMENT CONTROL (EASC) PERMIT AND A CERTIFICATE OF COVERAGE (COC) MUST BE OBTAINED BEFORE ANY LAND DISTURBING ACTIVITIES (INCLUDING TIMBERING AND DEMOLITION) OCCUR.
4. WHEN THE PROJECT IS COMPLETE, THE PERMITTEE SHALL CONTACT DEMLR TO CLOSE OUT THE EASC PLAN.
5. NO LAND DISTURBING ACTIVITIES, INCLUDING TIMBERING OR DEMOLITION ACTIVITIES, ARE ALLOWED WITHOUT FIRST OBTAINING A SEDIMENT AND EROSION CONTROL PLAN APPROVAL AND CERTIFICATE OF COVERAGE.
6. MINIMAL CLEARING AND GRUBBING TO INSTALL PERIMETER MEASURES AND CONVEYANCES WILL BE ALLOWED AND THAT STAGED STABILIZATION ON BARE SOILS OF SLOPES AND OTHER COMPLETE OR INACTIVE AREAS WILL BE DONE IN A TIMELY MANNER AS OUTLINED UNDER NPDES PERMIT CONDITIONS.
7. ALL SLOPES SOIL PILES, UPSTREAM AND DOWNSTREAM BASIN SLOPES WILL BE COVERED WITH A SUITABLE RCP AFTER SEEDBED PREP, ADDITION OF SOIL AMENDMENTS AND SEEDING.
8. ANY BARE SOILS BETWEEN DOWNSTREAM TOE OF BASINS AND/OR DIVERSIONS AND THE PERIMETER MEASURES WILL BE SEEDBED AFTER SEEDBED PREP WITH SOIL AMENDMENTS, MULCH AND TACK.
9. ALL DITCHES WILL BE LINED TO THE TOP OF BANK.
10. ANY DEWATERING OF THE PROJECT IS TO BE DONE THROUGH A SILT BAG WITH A FLOATING INTAKE THAT IS CONSTANTLY MONITORED WHEN IN USE.

CONSTRUCTION SEQUENCE

1. CONTACT THE DEMLR MOORESEVILLE REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO COMMENCING THE LAND-DISTURBING ACTIVITY. (704) 235-2100
2. FLAG LIMITS OF DISTURBANCE.
3. CLEAR MINIMAL AREA TO ALLOW INSTALLATION OF SILT FENCE.
4. INSTALL SILT FENCE.
5. CLEAR MINIMAL AREA TO ALLOW INSTALLATION OF POND 1 SEDIMENT BASIN AND POND 2 SKIMMER SEDIMENT BASIN.
6. CONSTRUCT POND NO. 1 BERM, PRIMARY OUTLET STRUCTURE, SKIMMER, AND ENERGY DISSIPATER.
7. GRADE POND NO. 1, INSTALL BAFFLES, AND APPLY PERMANENT SEEDING.
8. CONSTRUCT POND 2 SKIMMER AND SPILLWAY.
9. POND 2 VICINITY MAY INCLUDE AN EXISTING OUTLET.
10. GRADE POND 2 AND APPLY PERMANENT SEEDING ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION.
11. INSTALL TEMPORARY DIVERSIONS AND CHECK DAMS AND APPLY PERMANENT SEEDING.

LEGEND

- |  |   |
|--|---|
|  | EXISTING NORMAL CONTOUR                               |
|  | EXISTING INDEX CONTOUR                                |
|  | PROPOSED NORMAL CONTOUR                               |
|  | PROPOSED INDEX CONTOUR                                |
|  | LIMIT OF DISTURBANCE                                  |
|  | TEMP. DIVERSION (DETAIL 3/5)<br>W/ ROCK CHECK @ 60 FT |
|  | SILT FENCE (DETAIL 5/5)                               |
|  | POROUS BAFFLES (DETAIL 7/8)                           |
|  | PERM. STORMWATER CHANNEL                              |
|  | STORM DRAIN, RCP                                      |
|  | SEEDING LIMITS  |
|  | HOG HOG INLET PROTECTION (DETAIL 5/5)                 |
|  | FILTER BAG (DETAIL 6/5)                               |
|  | ROCK CHECK DAM  |
|  | CONCRETE WASHOUT (DETAIL 2/10)                        |



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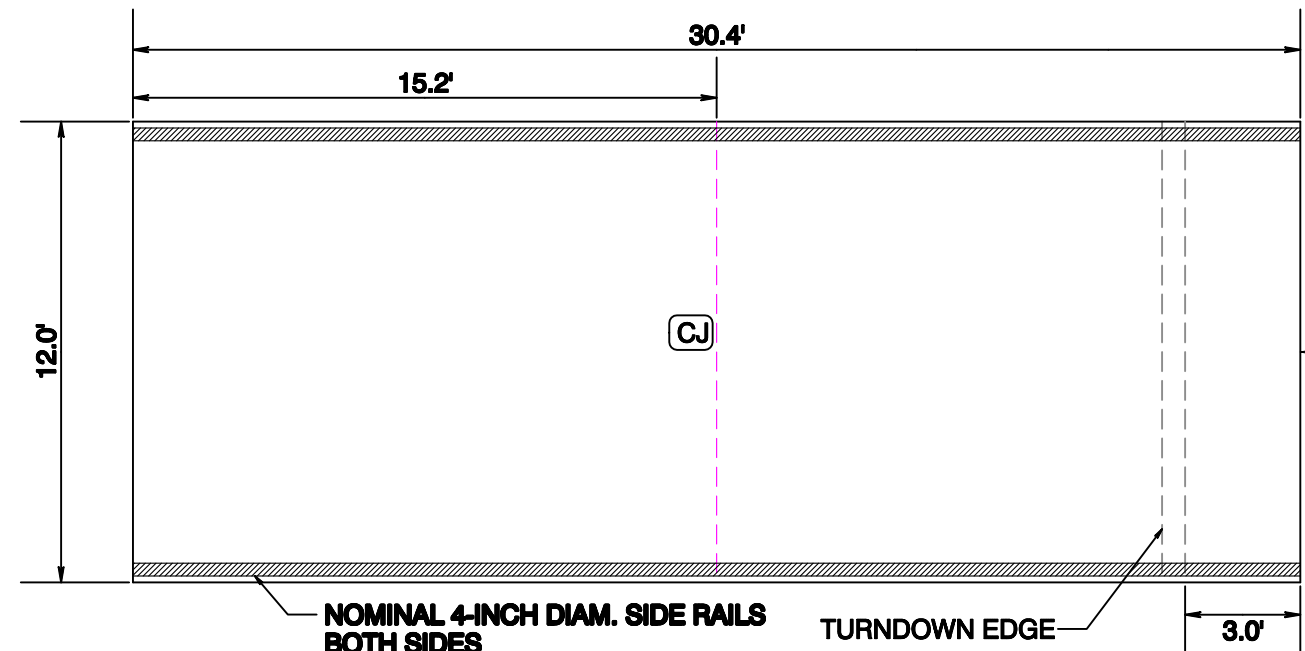
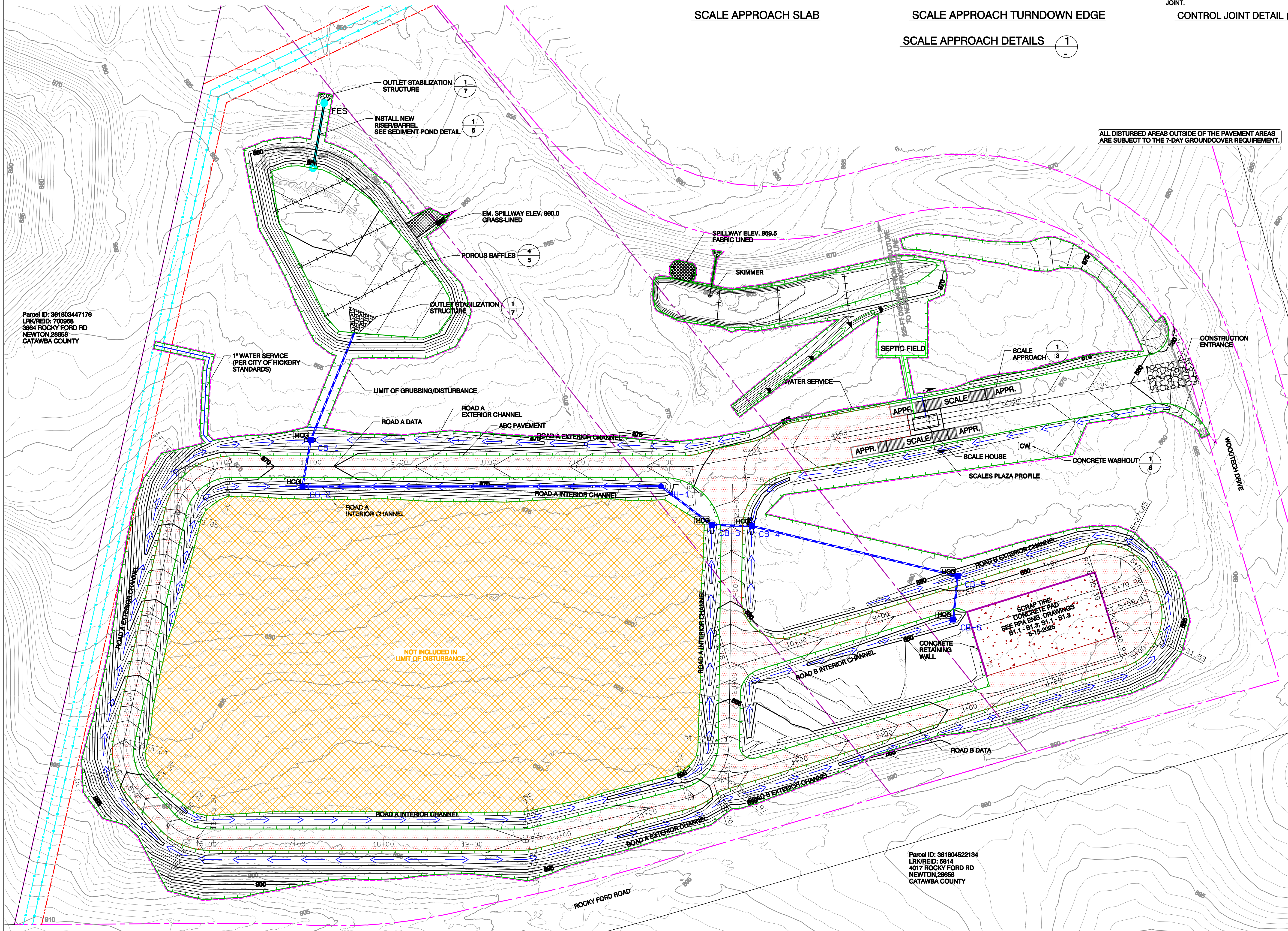
CATAWBA COUNTY  
BLACKBURN RESOURCE  
RECOVERY FACILITY  
TREATMENT AND PROCESSING FACILITY  
SMALL TYPE 1 COMPOST  
AND SCRAP TIRE COLLECTION

PHASE 1 EROSION CONTROL  
PERIMETER CONTROLS

GRAPHIC SCALE 1" = 50'  
0 50 100

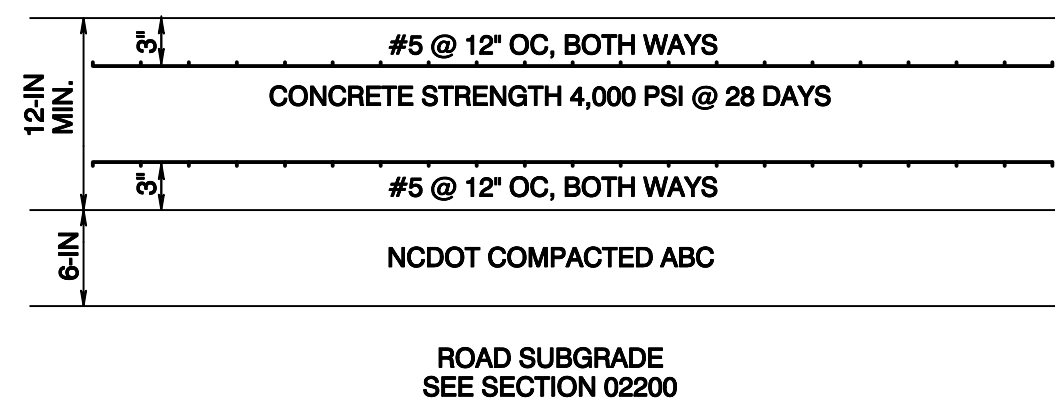
SHEET  
2

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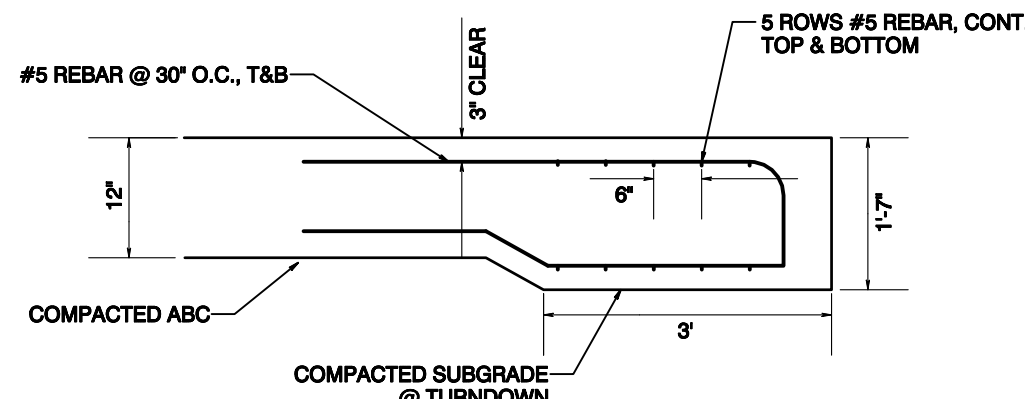


SCALE APPROACH PLAN

1" = 5'

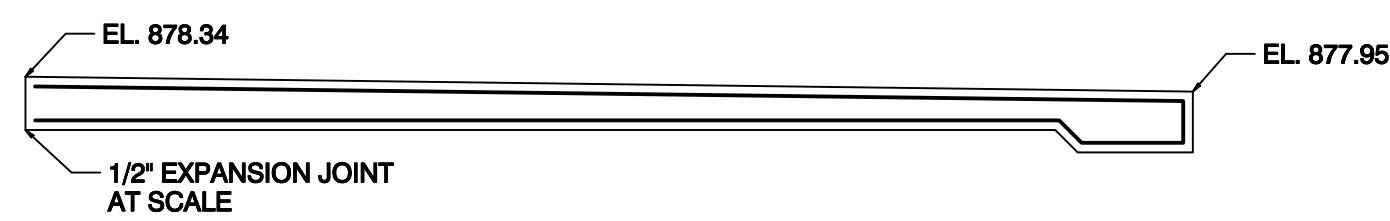


SCALE APPROACH SLAB



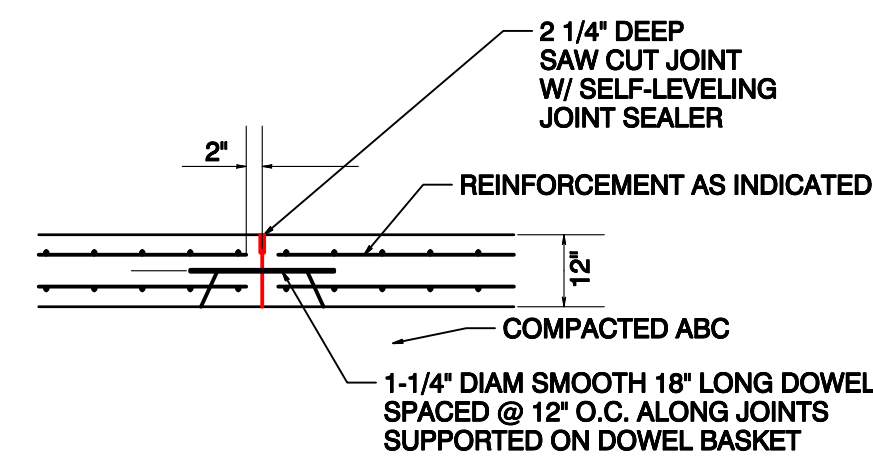
SCALE APPROACH TURNDOWN EDGE

SCALE APPROACH DETAILS 1



SCALE APPROACH PROFILE

1" = 5'

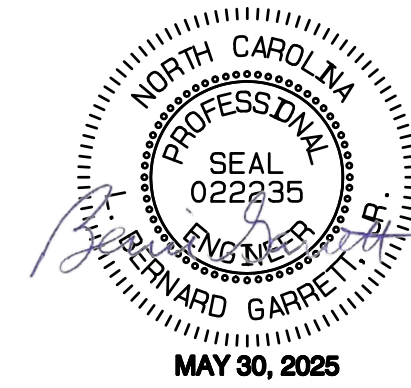


NOTE: TERMINATE REINFORCING AT ALL JOINTS AS SHOWN ABOVE. BARS DO NOT EXTEND ACROSS JOINT.

CONTROL JOINT DETAIL (CJ)

- CONSTRUCTION SEQUENCE
1. MAINTAIN ALL EXISTING STORMWATER INFRASTRUCTURE AND EROSION AND SEDIMENTATION CONTROLS CONSTRUCTED FOR PHASE 1 AS REQUIRED BY THE APPROVED DETAILS.
  2. SEED AND STABILIZE ALL AREAS REACHING FINAL GRADES WHERE INDICATED ON PLAN AND IN ACCORDANCE WITH THE APPROVED SEEDING SCHEDULE SHOWN ON THE DETAILS.

LEGEND	
	EXISTING NORMAL CONTOUR
	EXISTING INDEX CONTOUR
	PROPOSED NORMAL CONTOUR
	PROPOSED INDEX CONTOUR
	LIMIT OF DISTURBANCE
	TEMP. DIVERSION (DETAIL 3/6) W/ ROCK CHECK @ 80 FT
	SILT FENCE (DETAIL 6/5)
	POROUS BAFFLES (DETAIL 7/6)
	PERM. STORMWATER CHANNEL
	STORM DRAIN, RCP
	SEEDING LIMITS
	HCG HCG INLET PROTECTION (DETAIL 5/6)
	FB FILTER BAG (DETAIL 6/6)
	ROCK CHECK DAM
	CW CONCRETE WASHOUT (DETAIL 2/10)



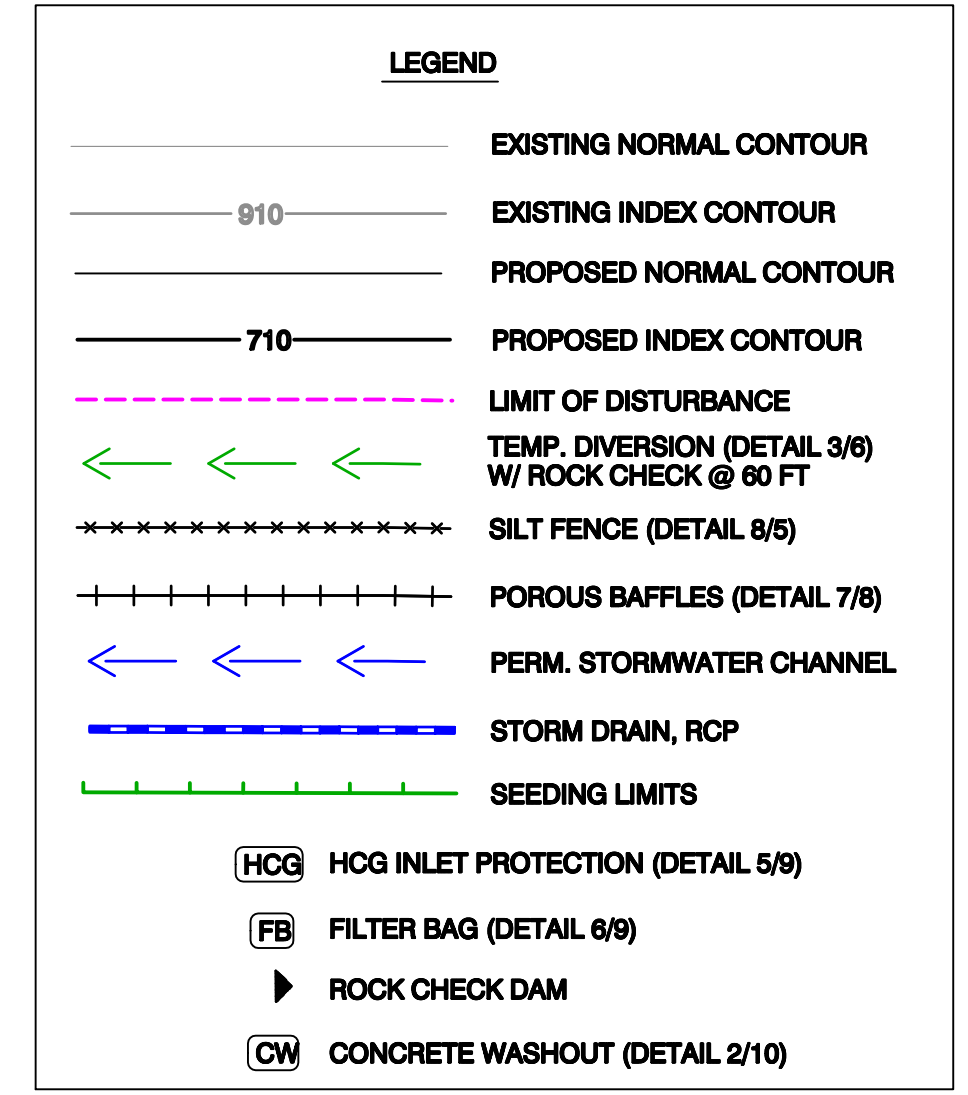
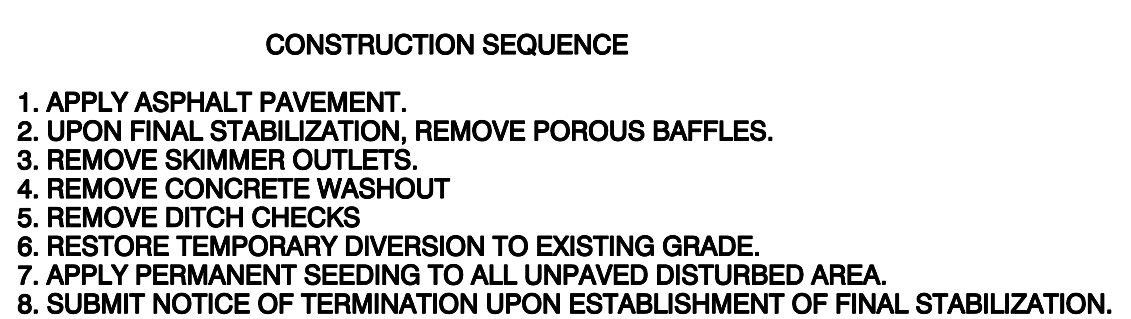
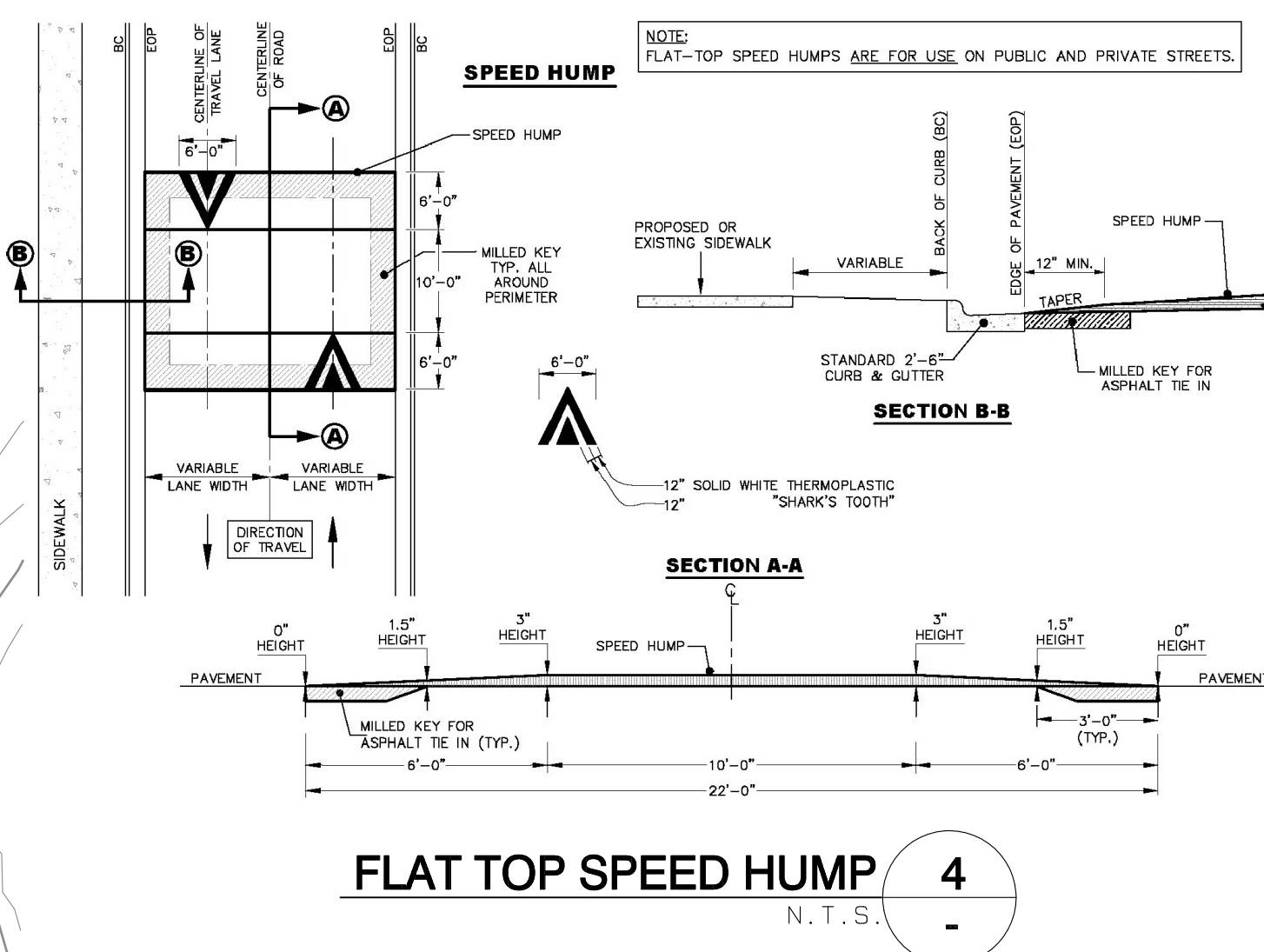
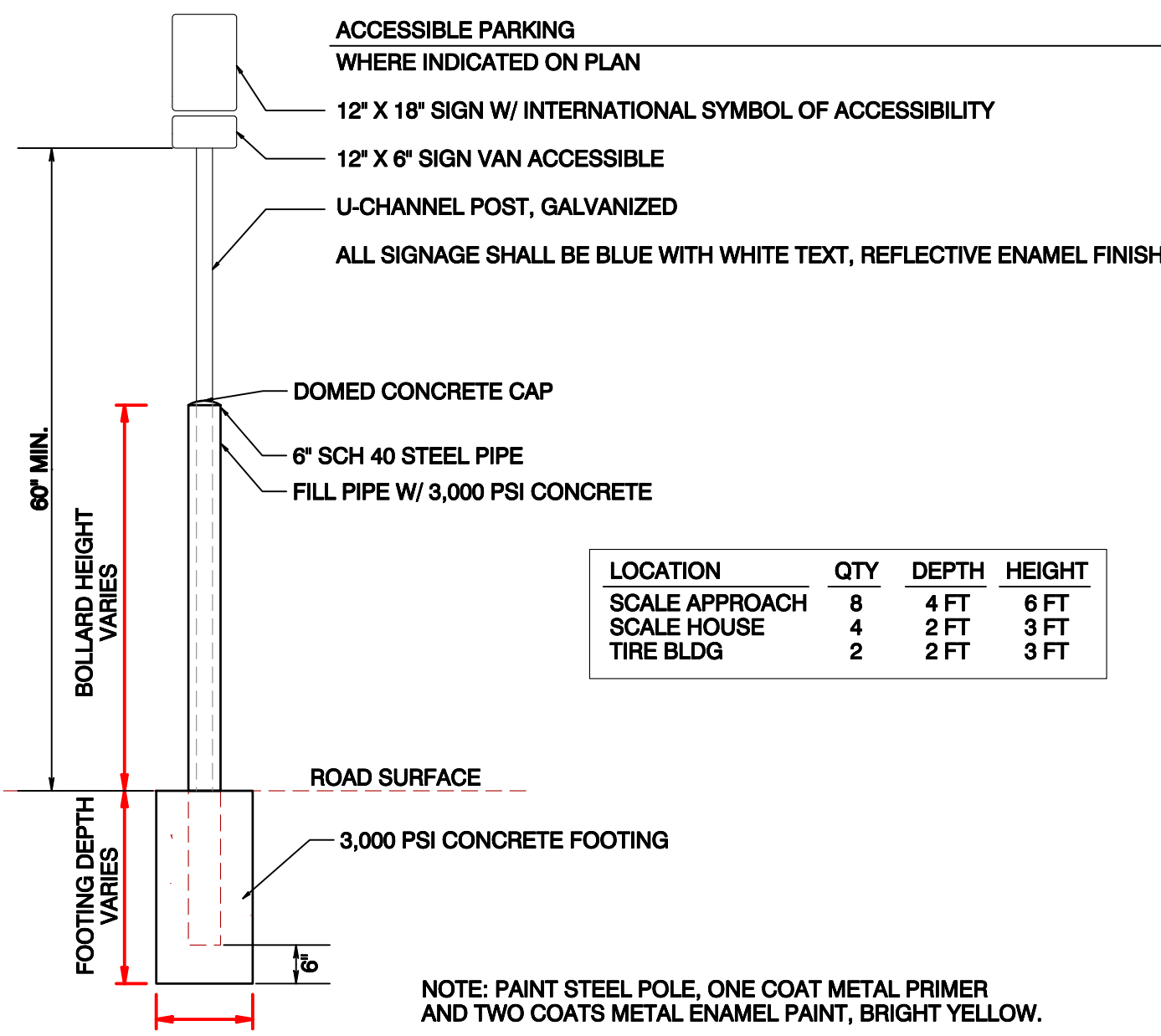
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CATAWBA COUNTY  
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RECOVERY FACILITY  
TREATMENT AND PROCESSING FACILITY  
SMALL TYPE 1 COMPOST  
AND SCRAP TIRE COLLECTION

PHASE 2 EROSION CONTROL  
GRADING

GRAPHIC SCALE 1" = 50'

SHEET  
3

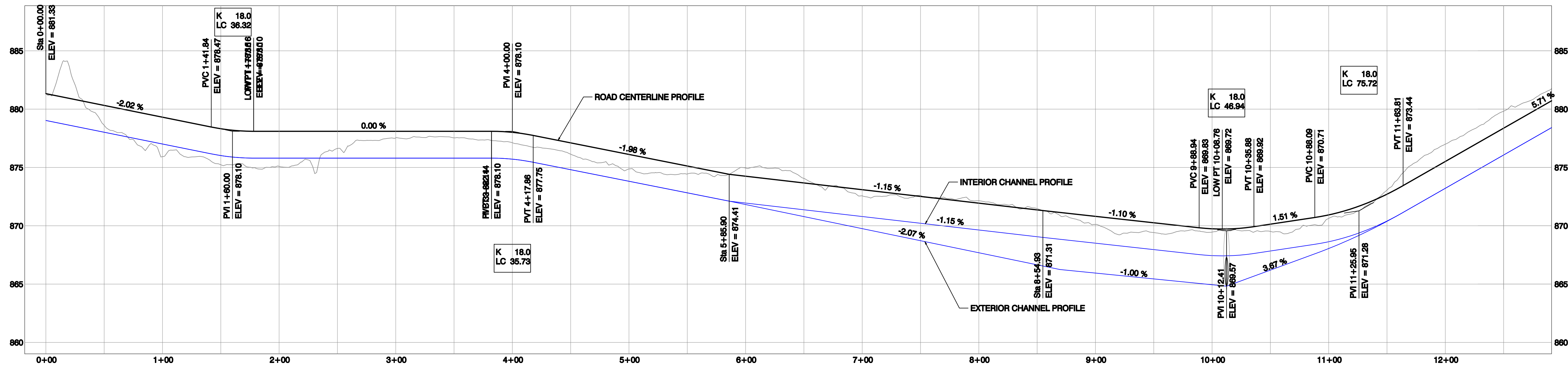
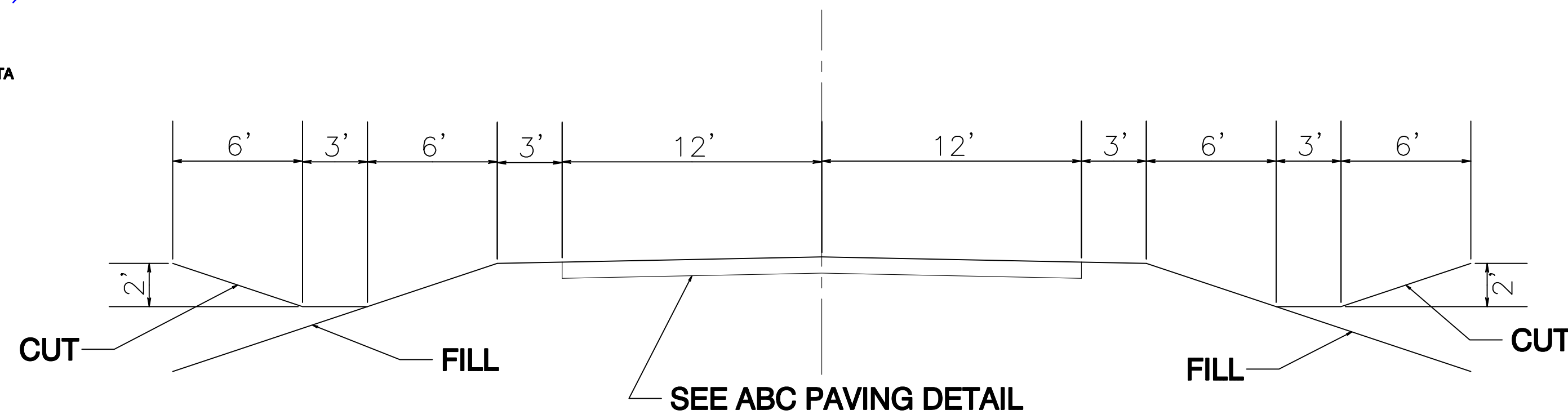
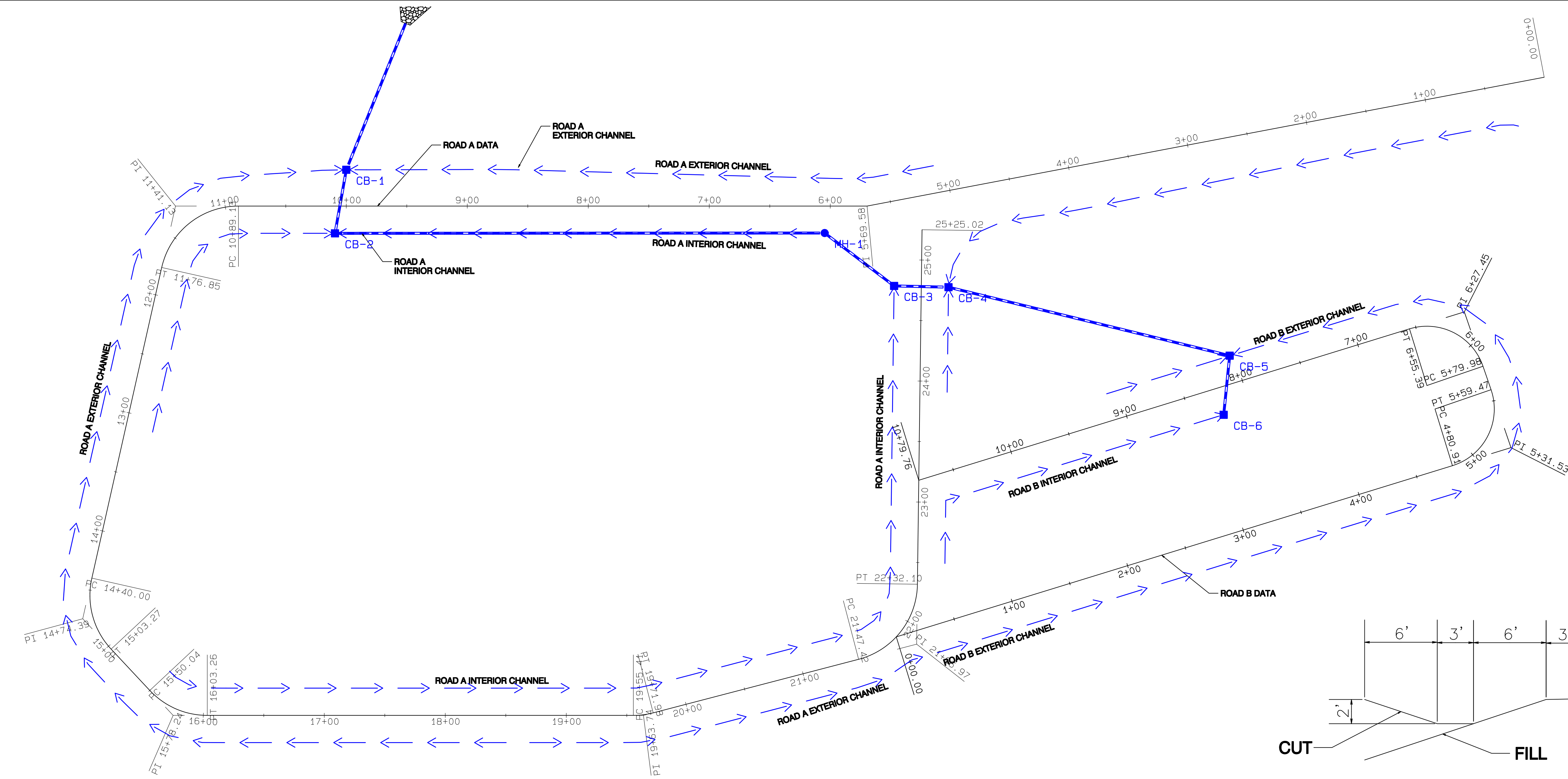


<p><b>CATAWBA COUNTY BLACKBURN RESOURCE RECOVERY FACILITY</b></p>	<p><b>TREATMENT AND PROCESSING FACILITY SMALL TYPE 1 COMPOST AND SCRAP TIRE COLLECTION</b></p>
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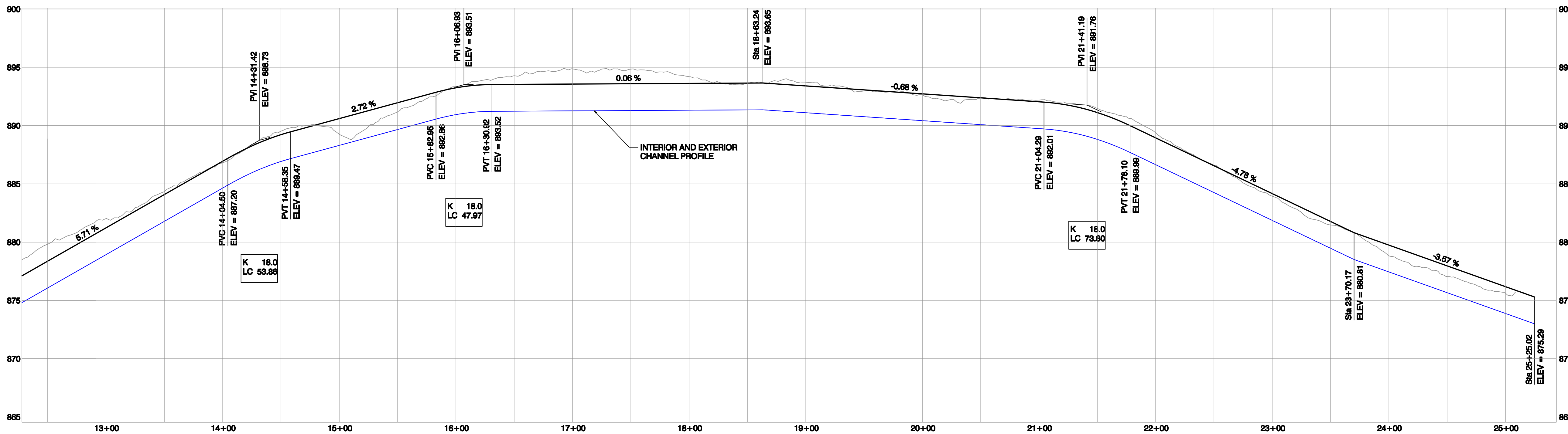
## PHASE 3 EROSION CONTROL POST CONSTRUCTION

**SHEET**  
**4**

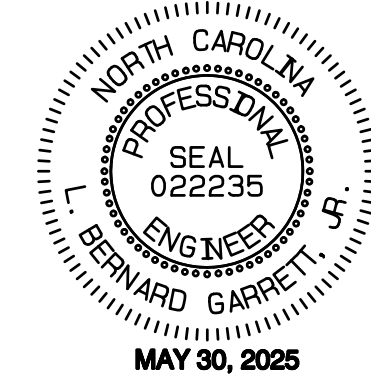
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ROAD A PROFILE



ROAD A PROFILE



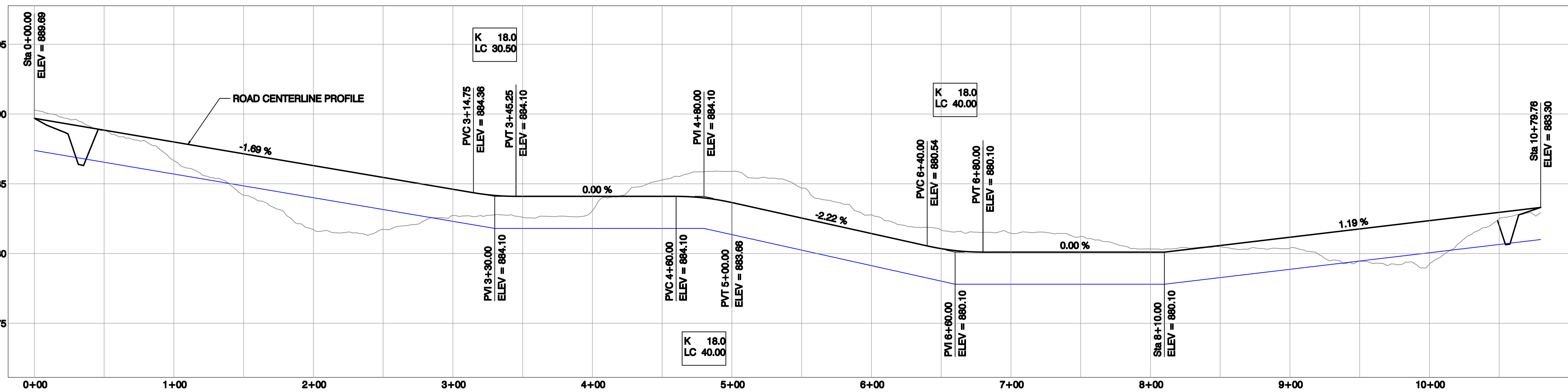
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SMALL TYPE 1 COMPOST  
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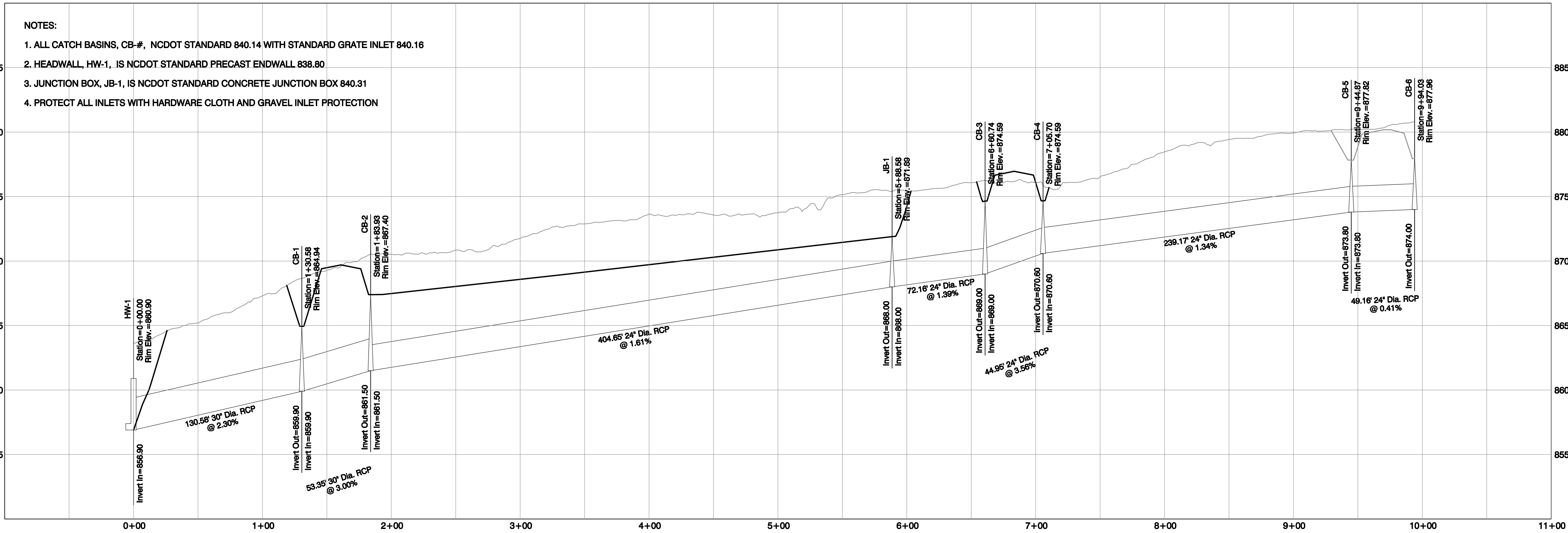
**PROFILES  
ROAD A DATA**



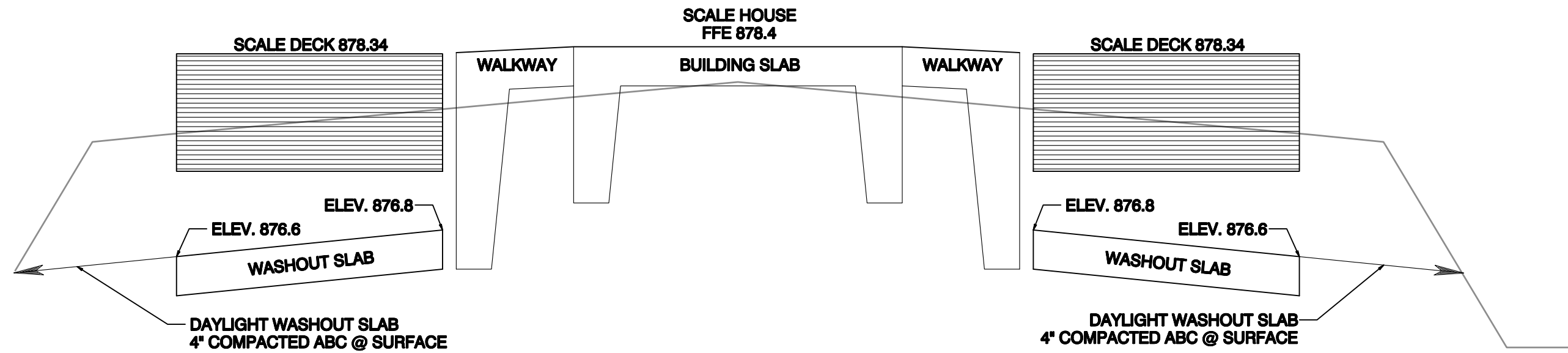
**SHEET  
5**



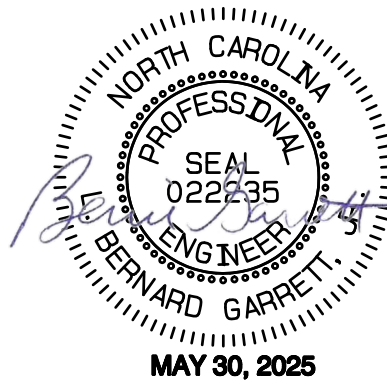
ROAD B PROFILE



STORM DRAIN PROFILE



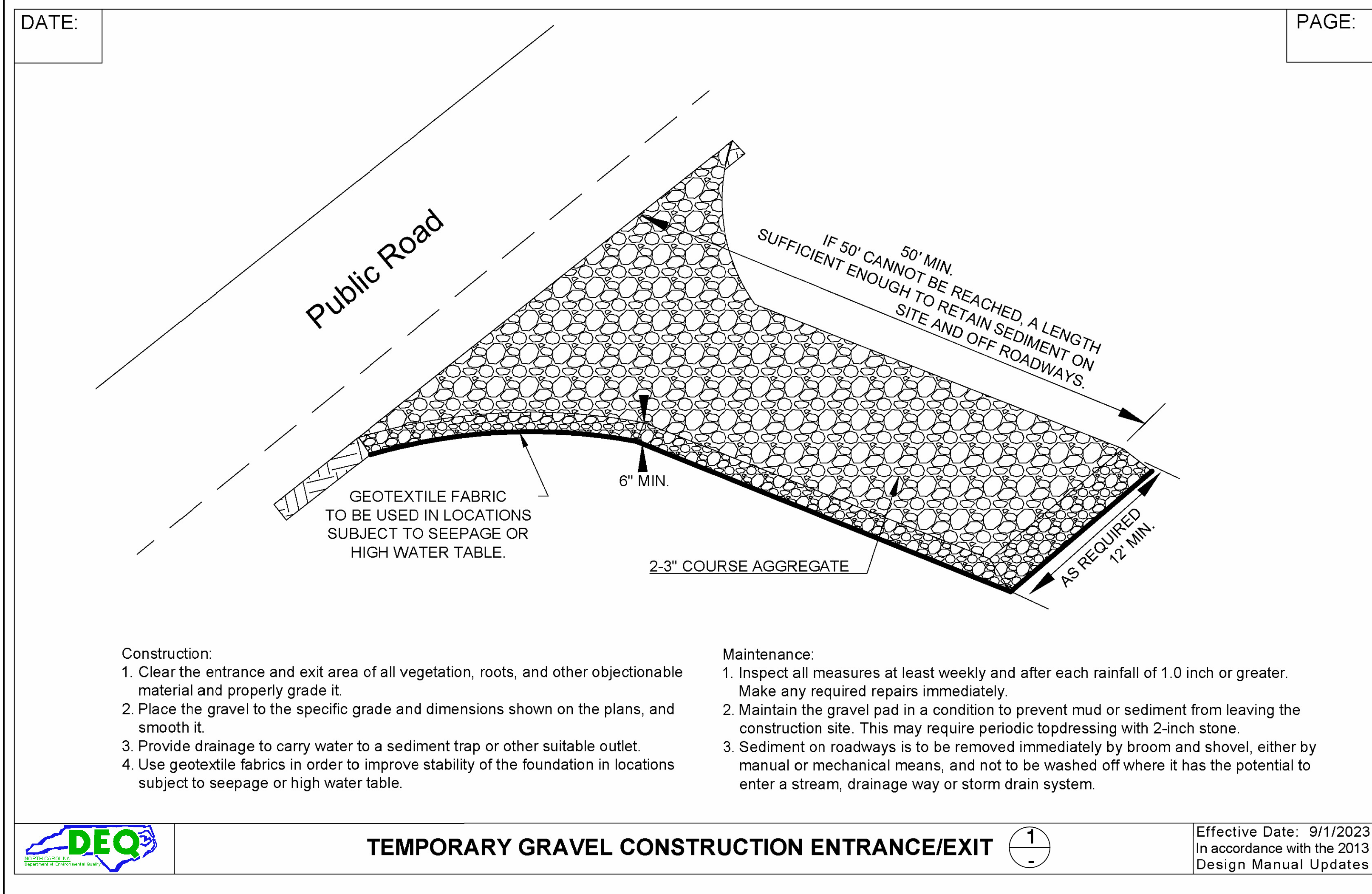
SCALES PLAZA PROFILE



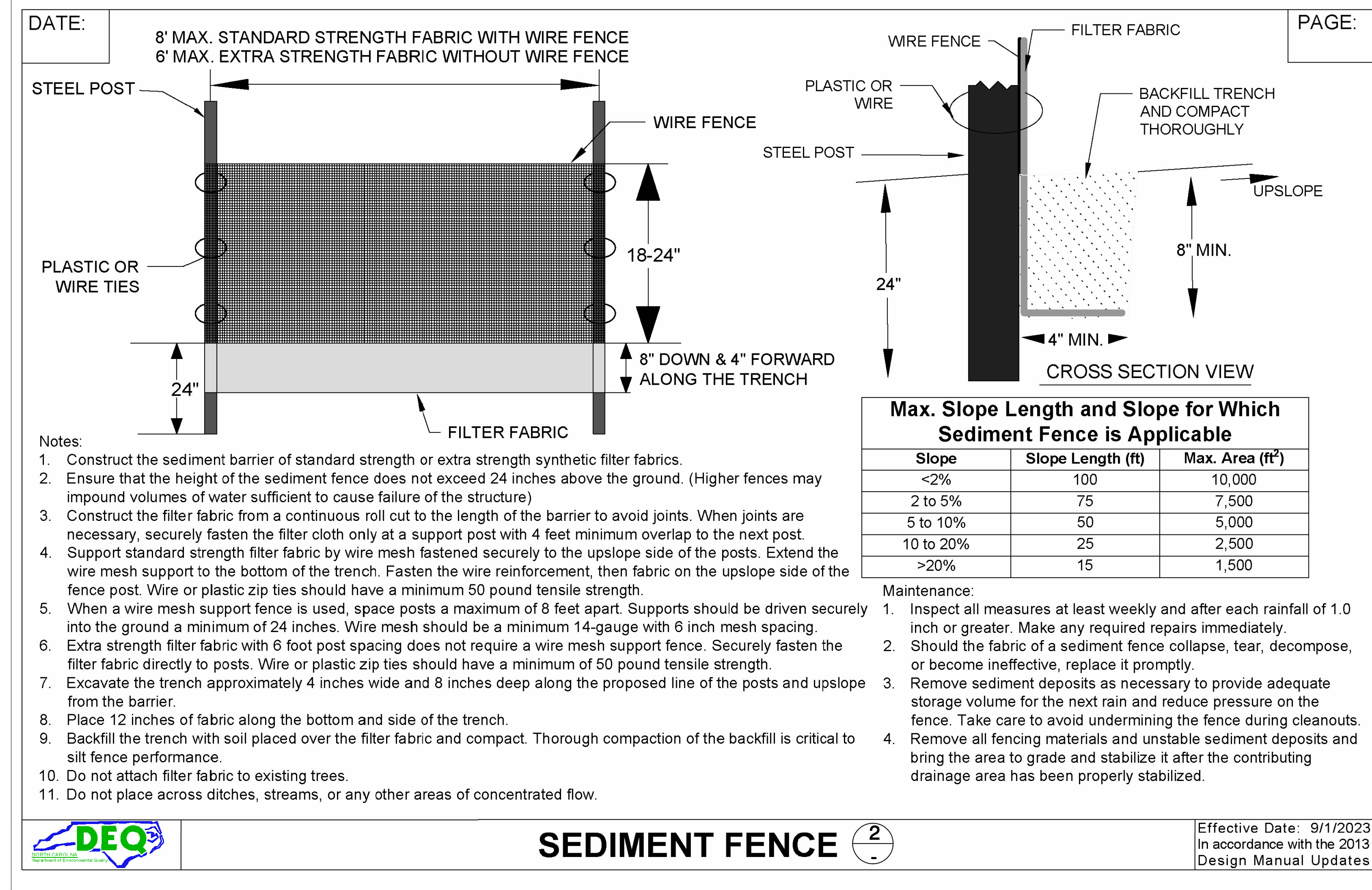
CATAWBA COUNTY  
BLACKBURN RESOURCE  
RECOVERY FACILITY  
TREATMENT AND PROCESSING FACILITY  
SMALL TYPE 1 COMPOST  
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PROFILES  
ROAD B, STORM, AND SCALES PLAZA

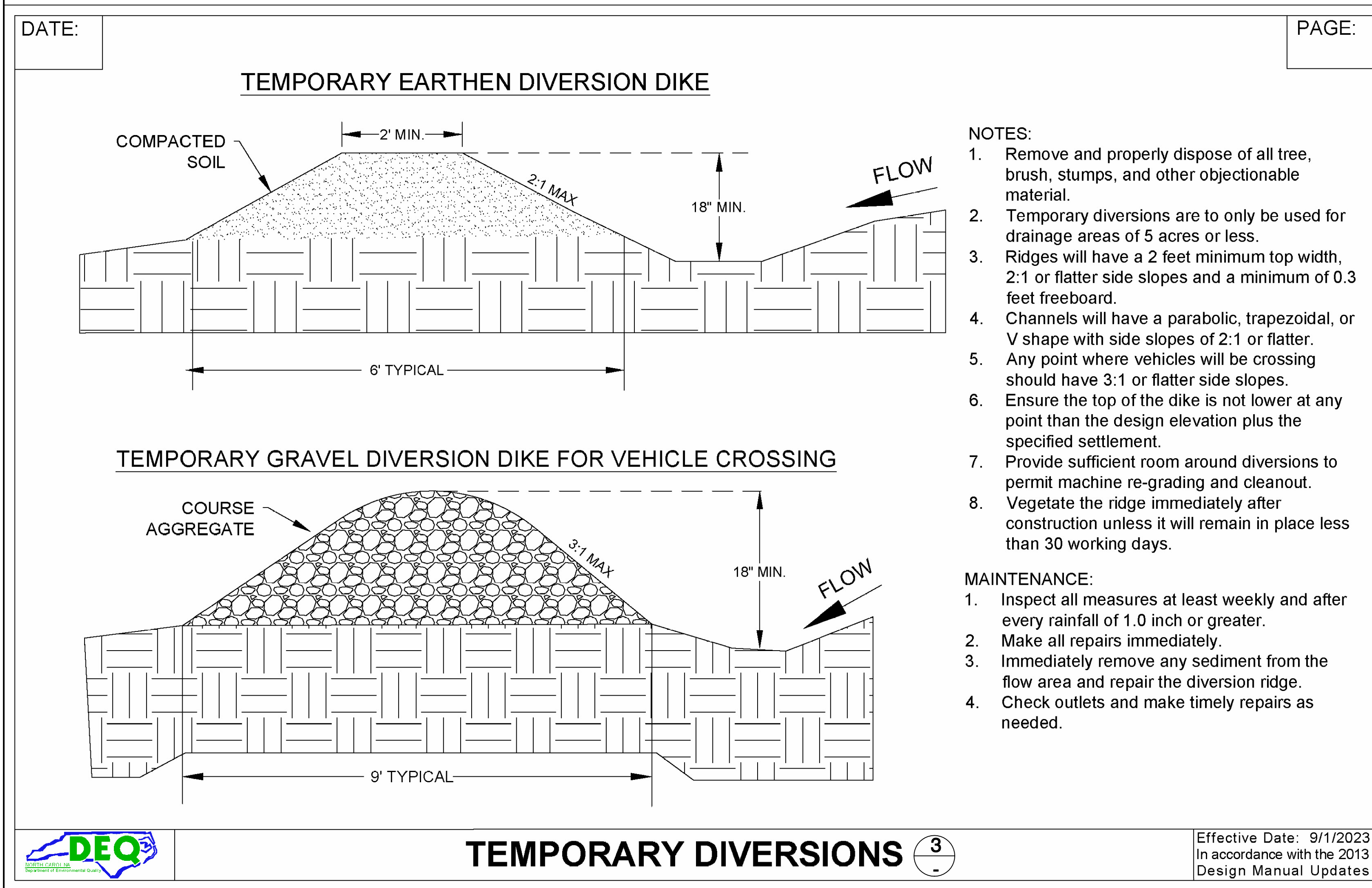
GRAPHIC SCALE 1" = 50'  
0 50 100  
SHEET  
6



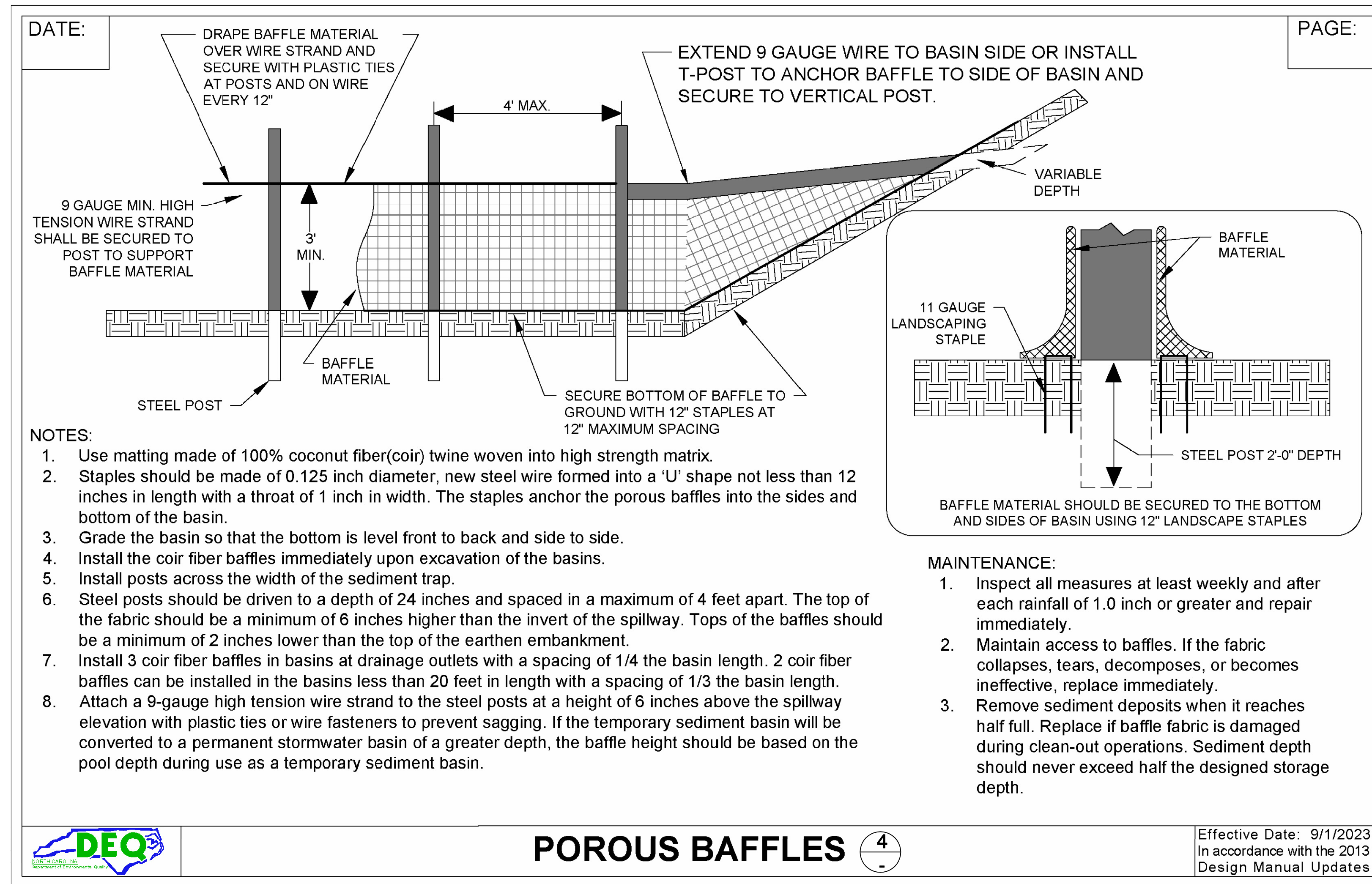
6.06 Temporary Gravel Construction Entrance Exit.JPG



6.02 Sediment Fence.JPG



6.09 Temporary Diversions.JPG



6.08 Porous Baffles.JPG



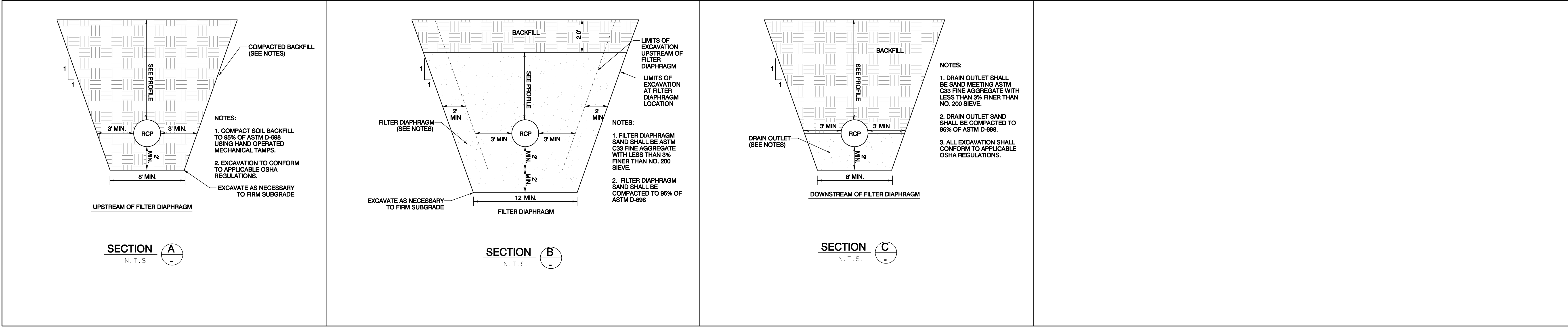
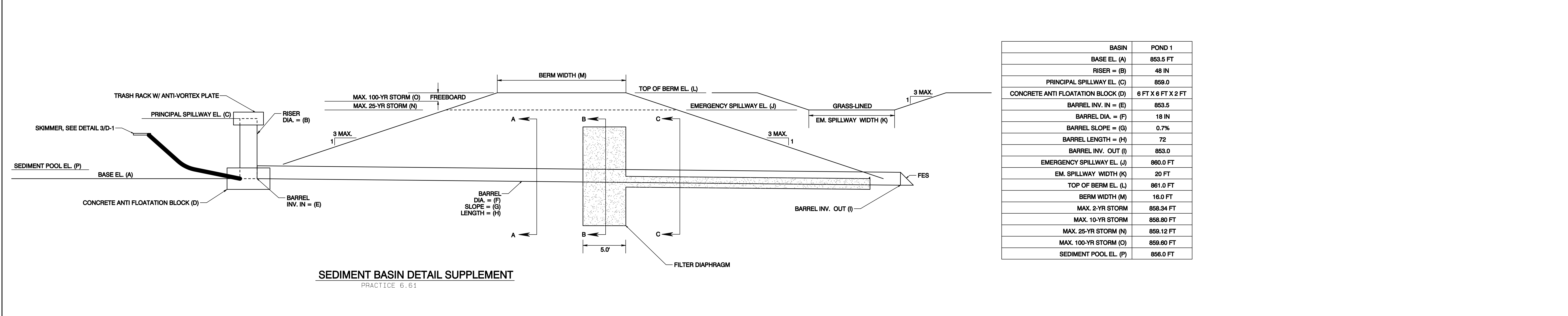
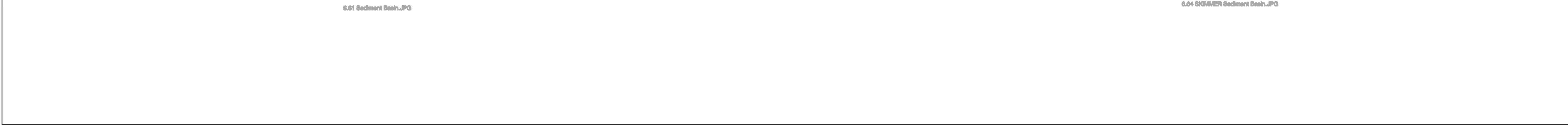
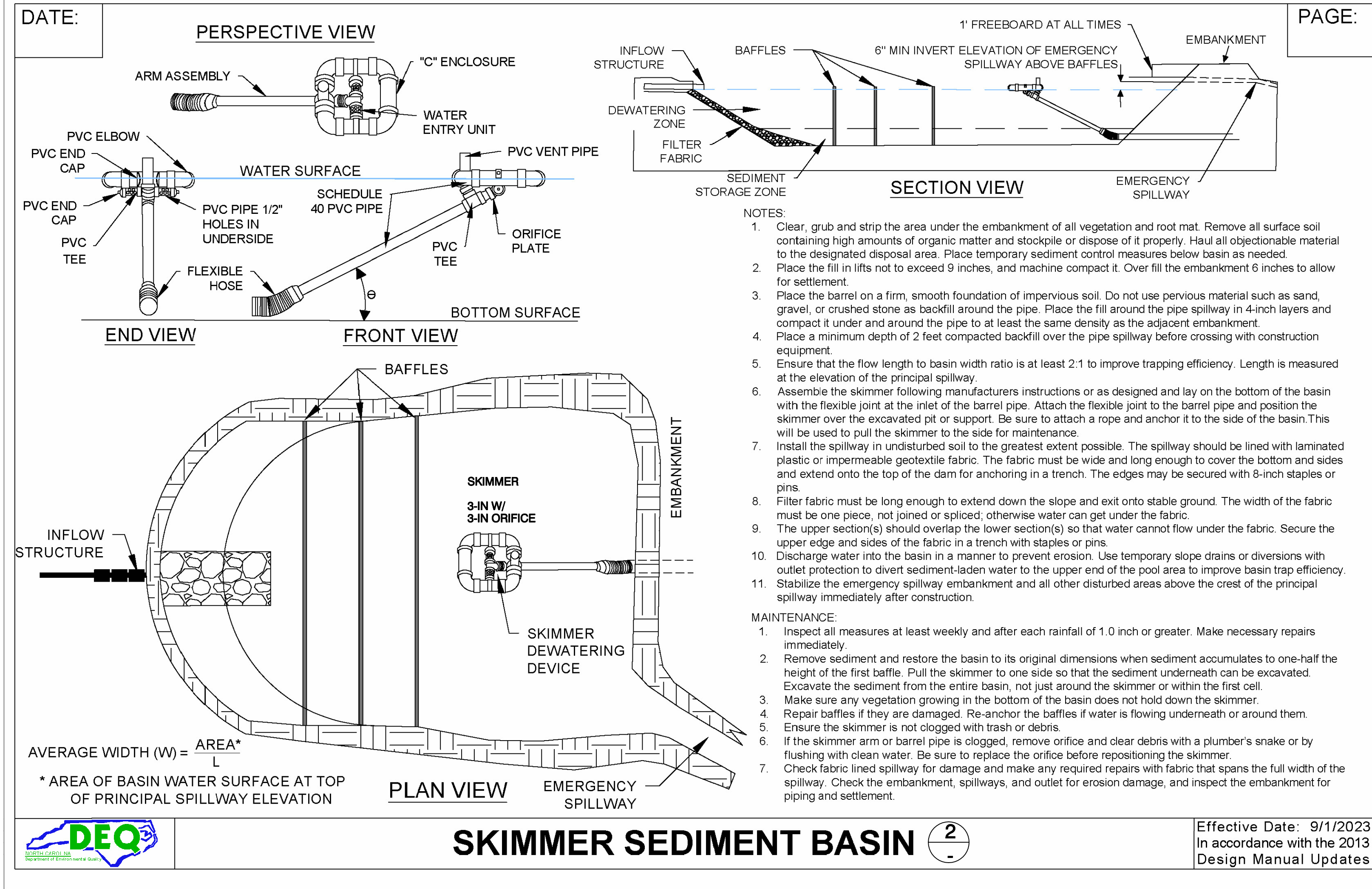
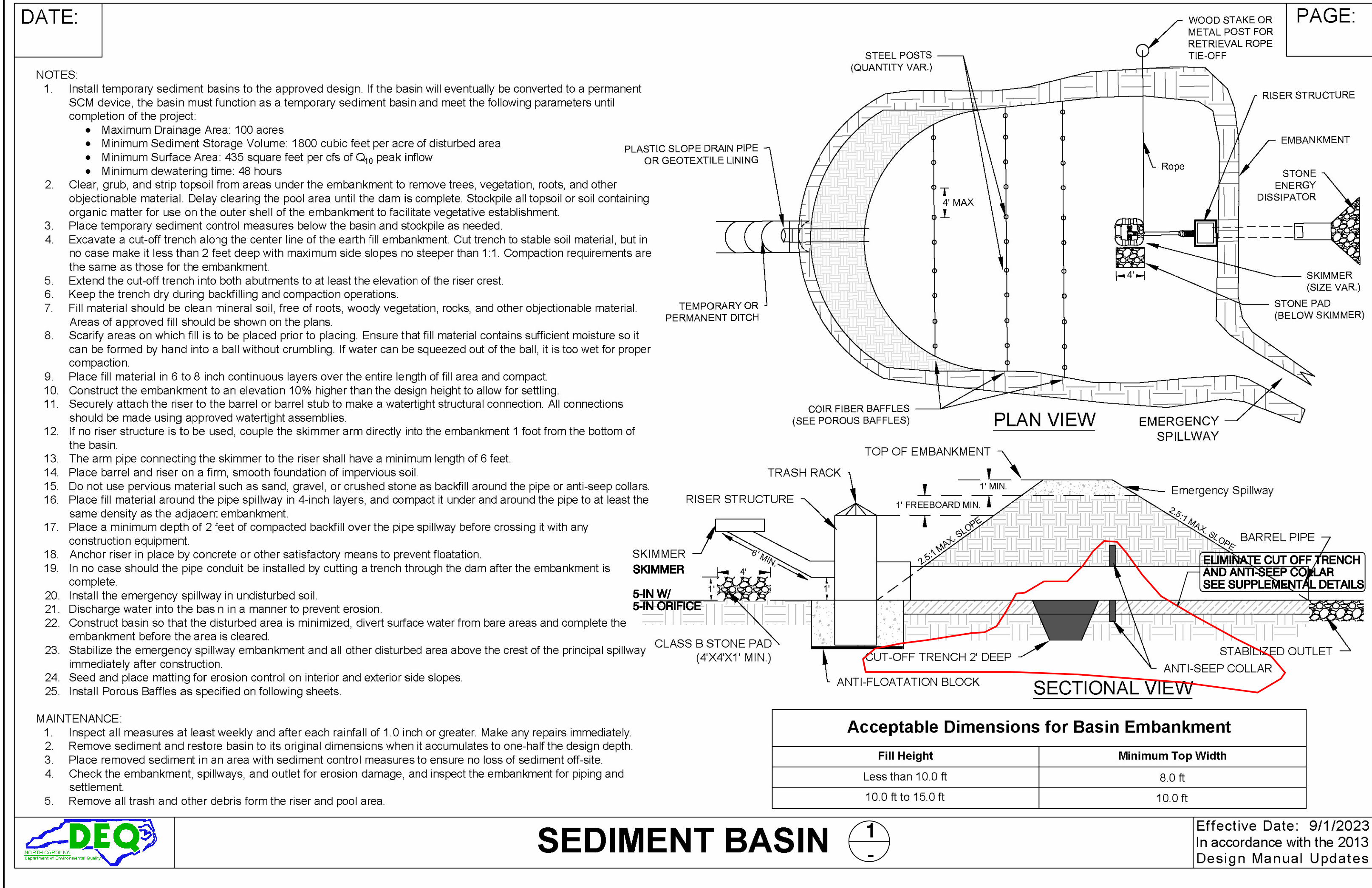
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EROSION & SEDIMENT CONTROL  
DETAILS

GRAPHIC SCALE 1" = 50'  
0 50 100

SHEET  
7



CATAWBA COUNTY  
BLACKBURN RESOURCE  
RECOVERY FACILITY

TREATMENT AND PROCESSING FACILITY  
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AND SCRAP TIRE COLLECTION

EROSION & SEDIMENT CONTROL  
DETAILS

GRAPHIC SCALE 1" = 50'

SHEET 8

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DATE: \_\_\_\_\_

PAGE: \_\_\_\_\_

**ENERGY DISSIPATOR SCHEDULE**

ENERGY DISSIPATOR ID	PIPE DIAMETER (in)	d <sub>50</sub>	d <sub>max</sub>	APRON THICKNESS (ft)	La (ft)	WIDTH (ft)	3Do (ft)	RIPRAP SIZE
POND 1 OUTLET	18	0.5	1.0	1.5	10	16	5	CLASS B
POND 1 INLET	30	0.75	1.5	2.5	25	33	8	CLASS B
DRIVEWAY CULVERT	12	0.5	1.0	1.5	10	10	3	CLASS B
POND 2 SKIMMER OUT	6	0.5	1.0	1.5	10	10	3	CLASS B

**NOTES:**

1. Compact any fill required in the subgrade to the density of the surrounding undisturbed material. Low areas in the subgrade on undisturbed soil may also be filled by increasing the riprap thickness.
2. The riprap and gravel filter must conform to the specified grading limits shown on the plans.
3. Filter cloth, when used, must meet design requirements, and be properly protected from punching or tearing during installation. Repair any damage by removing the riprap and placing another piece over the damaged area. If the damage is extensive, replace the entire filter cloth.
4. All connecting joints should overlap so the top layer is above the downstream layer a minimum of 1 foot.
5. The minimum thickness of the riprap should be 1.5 times the maximum stone diameter but not less than 6".
6. Riprap may be field stone or rough quarry stone. It should be hard, angular highly weather-resistant and well graded.
7. Construct the apron on zero grade with no overflow at the end. Make the top of the riprap at the downstream end level with the receiving area or slightly below it.
8. Ensure that the apron is properly aligned with the receiving stream and preferably straight throughout its length. If a curve is needed, place in the upper section of the apron.

**MAINTENANCE:**

1. Inspect outlet structures at least weekly and after each rainfall of 1.0 inch or greater.
2. Check outlets for erosion around or below riprap and for if stones have been dislodged. Make repairs immediately to prevent further damage.

**PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL**

**PLAN**

**SECTION A**

La = Length of Riprap Apron  
d = Thickness of Riprap Apron

**PIPE OUTLET TO WELL-DEFINED CHANNEL**

**PLAN**

**SECTION AA**

La = Length of Riprap Apron  
d = Thickness of Riprap Apron

**OUTLET STABILIZATION STRUCTURE**

Effective Date: 9/1/2023  
In accordance with the 2013  
Design Manual Updates

DATE:

PAGE:

**L = THE DISTANCE SUCH THAT POINTS A AND B ARE OF EQUAL ELEVATION**

**CROSS-SECTION VIEW**

12" OF NCDOT #5 OR #57 WASHED STONE

CLASS B RIPRAP

FILTER CLOTH

1.5'

2:1

2' MAX AT CENTER

4'-6"

**NOTES:**

1. Place stone on a filter fabric foundation.
2. The center stone section must be at least 9 inches below natural ground level where the dam abuts the channel banks.
3. Extend stone at least 1.5 feet beyond the ditch bank to keep water from cutting around the ends of the check dam.
4. Set spacing between dams to assure that the elevation at the top of the lower dam is the same as the toe elevation of the upper dam.
5. Protect the channel after the lowest check dam from heavy flow that could cause erosion.
6. Make sure the channel reach above the most upstream dam is stable.
7. Ensure that other areas of the channel, such as culvert entrances below the check dams, are not subject to damage or blockage from displaced stones.
8. Riprap and filter fabric should be keyed in to prevent under cutting.
9. Ends of check dams may need to be turned uphill to prevent bypass and better conform to site conditions.
10. Do not place check dams in intermittent or perennial streams.

**PLAN VIEW**

1.5' MIN.

9" MIN.

FILTER CLOTH

**MAINTENANCE:**

1. Inspect check dams and channels at least weekly and after each rainfall of 1.0 inch or greater. Clean out sediment, straw, limbs or other debris that could clog the channel when needed.
2. Anticipate submergence and deposition above the check dam and erosion from high flows around the edges of the dam. Correct all damage immediately. If significant erosion occurs between dams, additional measures can be taken such as, installing a protective riprap liner in that portion of the channel.
3. Remove sediment accumulated behind the dams as needed to prevent damage to channel vegetation, allow the channel to drain through the stone check dam, and prevent large flows from carrying sediment over the dam. Add stones to the dams as needed to maintain design height and cross section.

# CHECK DAM

Effective Date: 9/1/2023  
In accordance with the 2013 Design Manual Updates

**Specifications:**

- 1) Remove all trees, brush, stumps, and other objectionable material from the foundation area, and dispose of properly.
- 2) Excavate the channel, and shape it to neat lines and dimensions shown on the plans plus a 0.2-foot overcut around the channel perimeter to allow for bulking during seeded preparations and sod buldip.
- 3) Remove and properly dispose of all excess soil so that surface water may enter the channel freely.
- 4) The procedure used to establish grass in the channel will depend upon the severity of the conditions and selection of species. Protect the channel with mulch or a temporary liner sufficient to withstand anticipated velocities during the establishment period (Appendix 8.05).

**Maintenance, Grass-Lined Ditches:**

During the establishment period, check grass-lined channels after every rainfall. After grass is established, periodically check the channel; check if every heavy rainfall event. Immediately make repairs. It is particularly important to check the channel outlet and all road crossings for bank stability and evidence of piping or scour holes. Remove all significant sediment accumulations to maintain the designed carrying capacity. Keep the grass in a healthy, vigorous condition at all times, since it is the primary erosion protection for the channel (Practice 6.11, Permanent Seeding).

**Maintenance, Riprap-Lined Ditches:**

Inspect channels at regular intervals as well as after major rains, and make repairs promptly. Give special attention to the outlet and inlet sections and other points where concentrated flow enters. Carefully check stability at road crossings, and look for indications of piping, scour holes, or bank failures. Make repairs immediately. Maintain all vegetation adjacent to the channel in a healthy, vigorous condition to protect the area from erosion and scour during out-of-bank flow.

**PERMANENT STORMWATER CHANNEL**

PRACTICE 6.30

1"=5'

2

DATE:

PAGE:

STAKES AT 3'-5' INTERVALS

CHECK SLOTS AT 25' INTERVALS

INITIAL CHANNEL ANCHOR TRENCH

TERMINAL SLOPE AND CHANNEL ANCHOR TRENCH

OVERLAP 6" MIN.

OVERCUT CHANNEL 2" TO ALLOW BULKING DURING SEEDBED PREPARATION

LONGITUDINAL ANCHOR TRENCH

DESIGN DEPTH

TYPICAL INSTALLATION WITH EROSION CONTROL BLANKETS OR TURF REINFORCEMENT MATS

INTERMITTENT CHECK SLOT

LONGITUDINAL ANCHOR TRENCH

3" MIN. OVERLAP

ANCHOR 6"X6" MIN. TRENCH AND STAPLE AT 12" INTERVALS

6" MIN. OVERLAP

PREPARE SOIL AND APPLY SEED BEFORE INSTALLING BLANKETS, MATS OR OTHER TEMPORARY CHANNEL LINER SYSTEMS

**NOTES:**

1. Lime, fertilize and seed before installation. Planting of shrubs, trees, etc. should occur after installation.
2. Slope surface shall be smooth before placement for proper soil contact.
3. Design velocities exceeding 2 feet/second require temporary blankets, mats or similar liners to protect seed and soil until vegetation becomes established.
4. Terminal anchor trenches are required at RECP ends and intermittent check slots must be constructed across channels at 25 foot intervals.
5. Terminal anchor trenches should be a minimum of 12 inches in depth and 6 inches in width. Intermittent check slots should be 6 inches deep and 6 inches wide.
6. For installation on a slope, place RECP 2-3 feet over the top of the slope and into an excavated end trench measuring approximately 12 inches deep by 6 inches wide. Pin the RECP at 1 foot intervals along the bottom of the trench, backfill and compact. Unroll the RECP down the slope maintaining direct contact between the soil and RECP. Secure using staples or pins in a 3 foot center-to-center pattern.
7. 11 gauge, at least 6 inch by 1 inch staples or 12 inch minimum length wooden stakes are recommended for anchoring.
8. Grass-lined channels with design velocities exceeding 6 feet/second should include turf reinforcement mats
9. Check slots to be constructed per manufacturers specifications.
10. Staking or stapling layout per manufacturers specification.
11. If there is a berm at the top of slope, anchor up-slope of the berm.
12. Do not stretch blankets/matting tight, allow the rolls to conform to any irregularities.
13. For slopes less than 3H:1V, rolls may be placed in horizontal strips.

SINGLE-ROLL SPLICED ENDS OR BEGIN NEW ROLL IN AN INTERMITTENT CHECK SLOT

FLOW

**MAINTENANCE:**

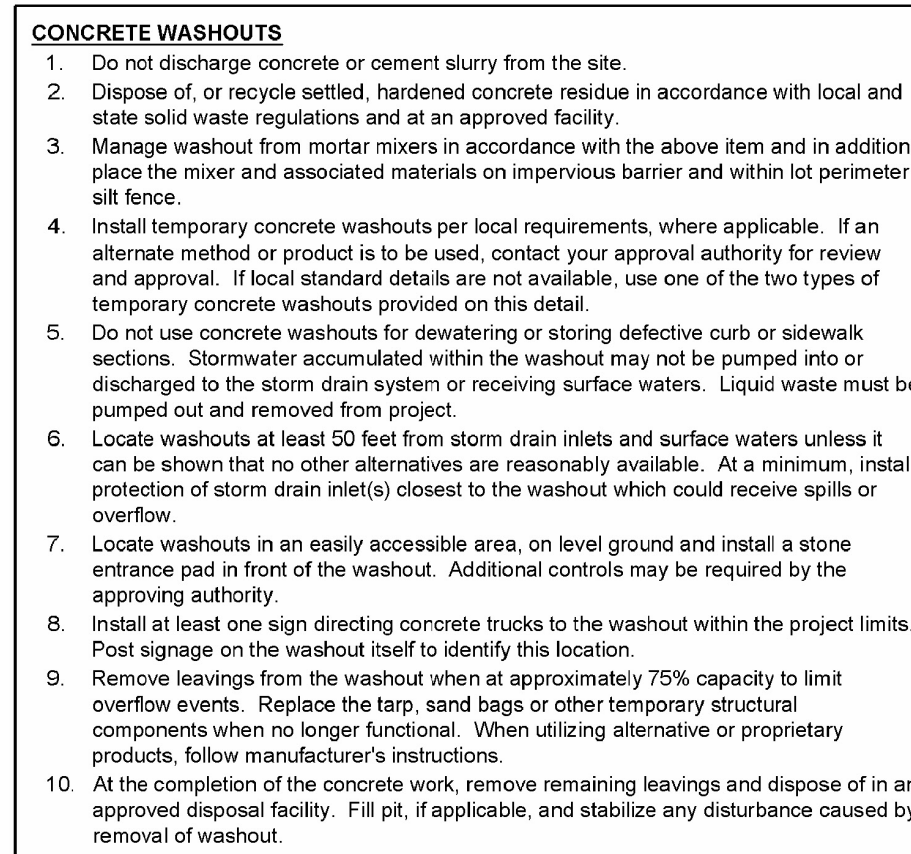
1. Inspect Rolled Erosion Control Products at least weekly and after each rainfall of 1.0 inch or greater; repair immediately.
2. Good contact with the ground must be maintained, and erosion must not occur beneath the RECP.
3. Any areas of the RECP that are damaged or not in close contact with the ground shall be repaired and stapled.
4. If erosion occurs due to poorly constructed drainage, the problem shall be fixed and the eroded area protected.
5. Monitor and repair the RECP as necessary until ground cover is established.

# ROLLED EROSION CONTROL PRODUCTS

3

Effective Date: 9/1/2023  
In accordance with the 2013  
Design Manual Updates


**NORTH CAROLINA**  
*Environmental Quality*  
 EFFECTIVE DATE: 11/12/2020



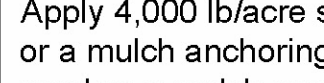

 NORTH CAROLINA  
*Environmental Quality*  
 EFFECTIVE DATE: 11/12/2020


NCG-01 SELF INSPECTION
 

2
-



# TREATMENT AND PROCESSING FACILITY SMALL TYPE 1 COMPOST AND SCRAP TIRE COLLECTION

<p>Rye (grain) 120          Annual lespedeza (Kobe) 50          Piedmont and Coastal Plain,          Korean in Mountains)</p> <p>Omit annual lespedeza when duration of temporary cover is not to extend beyond June.</p>	<p><b>TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER</b></p> <p><b>Seeding Mixture</b></p> <table border="1"> <thead> <tr> <th>Species</th> <th>Rate (lb/acre)</th> </tr> </thead> <tbody> <tr> <td>German millet</td> <td>40</td> </tr> </tbody> </table> <p>In the Piedmont and Mountains, a small-stemmed Sudagrass may be substituted at a rate of 50 lb/acre.</p> <p><b>Seeding Dates</b></p> <p>Mountains — May 15 - Aug. 15          Piedmont — Jan 1 - Aug. 15          Coastal Plain — Apr. 15 - Aug. 15</p> <p><b>Mulch</b></p> <p>Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.</p> <p><b>Maintenance</b></p> <p>Refertilize if growth is not fully adequate. Reseed, refertilize and mulch immediately following erosion or other damage.</p>	Species	Rate (lb/acre)	German millet	40	<p><b>TEMPORARY SEEDING RECOMMENDATIONS FOR FALL</b></p> <p><b>Seeding Mixture</b></p> <table border="1"> <thead> <tr> <th>Species</th> <th>Rate (lb/acre)</th> </tr> </thead> <tbody> <tr> <td>Rye (grain)</td> <td>120</td> </tr> </tbody> </table> <p><b>Seeding Dates</b></p> <p>Mountains — Aug. 15 - Dec. 15          Coastal Plain and Piedmont — Aug. 15 - Dec. 31</p> <p><b>Mulch</b></p> <p>Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool.</p> <p><b>Maintenance</b></p> <p>Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary cover beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Coastal Plain) or Korean (Mountains) lespedeza in late February or early March.</p>	Species	Rate (lb/acre)	Rye (grain)	120
Species	Rate (lb/acre)									
German millet	40									
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Rye (grain)	120									
<p><b>SEED BED PREPARATION:</b></p>										
<p><b>LIMING:</b> Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1-1½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.</p> <p><b>FERTILIZER:</b> Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700 - 1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.</p> <p><b>SURFACE ROUGHENING:-</b> If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage. Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.</p>										
	<p><b>TEMPORARY SEEDING</b></p>	<p>3</p>								
<p>Effective Date: 9/1/2023          In accordance with the 2013 Design Manual Update</p>										

<p>Indian Woodoats 1.5-2.5 lbs/acre* Virginia Wild Rye 4-6 lbs/acre</p> <p>*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.</p> <p><b>Seeding Dates</b> Coastal or Eastern Piedmont for Centipede- Sept. 1 - May 1 Coastal and Piedmont for Indian Woodoats and Virginia Wild Rye- Feb 15 - April 1 Mountains for Indian Woodoats and Virginia Wild Rye- March 1 - May 15</p> <p><b>Maintenance:</b> Significant maintenance may be required to obtain desired cover.</p>	<p>Indian Woodoats 1.5-2.5 lbs/acre* Virginia Wild Rye 4-6 lbs/acre*</p> <p>*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.</p> <p><b>Seeding Dates</b> Mountains - July 15- Aug 15 Piedmont - Aug 15 - Oct 15</p> <p><b>Maintenance:</b> Indian Woodoats and Virginia Wild Rye are both sun and shade tolerant.</p>	<p>Big Bluestem 7-7 lbs/acre* Indian Woodoats 1.5-2.5 lbs/acre* Virginia Wild Rye 4-6 lbs/acre*</p> <p>*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC Erosion and Sediment Control Planning and Design Manual.</p> <p><b>Seeding Dates</b> Mountains - Hard Fescue- Aug 1 - June 1 Mountains- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 15 Piedmont and Coastal- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 1 Coastal- Indian Woodoats and Virginia Wild Rye- Sept 1 - Nov 1</p> <p><b>Maintenance:</b> Hard Fescue is not recommended for slopes &gt; 5%. Prefers shade.</p>
<p><b>SEED BED PREPARATION:</b></p> <p>LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1 1/2 tons/acre on coarse textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.</p> <p>FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of soil. If an hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.</p> <p>SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. the finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. all ridges and depressions shall be removed and filled to provide the approved surface drainage . Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.</p> <p>NOTES:</p> <ol style="list-style-type: none"> <li>1. Permanent seeding, sodding or other means of stabilization are required when all construction work is completed according to the NPDES timeframes table.</li> <li>2. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted.</li> <li>3. Use a seeding mix that will produce fast growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must cover at least 80% of the soil surface.</li> <li>4. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.</li> </ol>		
<div style="display: flex; justify-content: space-between; align-items: center;">  <div style="text-align: center;"> <h1 style="margin: 0;">PERMANENT SEEDING</h1> <div style="border: 1px solid black; border-radius: 50%; width: 40px; height: 40px; margin: 0 auto; display: flex; align-items: center; justify-content: center;"> <span style="font-size: 24px; font-weight: bold;">4</span> </div> </div> <div style="text-align: right;"> <p>Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates</p> </div> </div>		

GRAPHIC SCALE 1" = 50'

100  
50

**SHEET**