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<td>6.64</td>
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<td>1ST BAFFLE: RIP RAP &amp; WASHED STONE BERM</td>
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<td>NCDOT 1606.1</td>
<td>SPECIAL SEDIMENT CONTROL FENCE</td>
<td>—</td>
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</table>

THE STANDARDS & SPECIFICATIONS SHOWN ARE FROM THE "NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL" (NCESCPDM) PREPARED BY NC DEPT. OF ENVIRONMENT AND NATURAL RESOURCES (NCDENR); ALSO REFERENCE NCDOT "ROADWAY STANDARD DRAWINGS," LATEST EDITION.

THE TOWN HAS ADOPTED THE SPECIFIC STANDARDS & SPECIFICATIONS SHOWN ON THIS DETAIL AS MANDATORY MINIMUM DESIGN STANDARDS & SPECIFICATIONS. "SPECIAL REQUIREMENTS & NOTES" ARE INCLUDED WHEN THE TOWN'S CRITERIA IS MORE STRINGENT THAN THE NCESCPDM OR NCDOT STANDARDS.
NOTES:
1. PLEASE REFER TO NCSOPDM SECTION #6.60 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING TEMPORARY SEDIMENT TRAPS.
2. REFER TO RLDS 30.19 FOR BAFFLE SPACING AND INSTALLATION.

DATA BLOCK

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<th>TRAP NO.</th>
<th>DRAINAGE AREA (ACRES)</th>
<th>DENUDED AREA (ACRES)</th>
<th>Q10</th>
<th>TRAP VOLUME REQUIRED (CUBIC FT.)</th>
<th>TRAP VOLUME PROVIDED (CUBIC FT.)</th>
<th>TRAP SURFACE AREA REQUIRED (SQ FT.)</th>
<th>TRAP SURFACE AREA PROVIDED (SQ FT.)</th>
<th>CLEAONUT DEPTH (FT.) H/2</th>
<th>H (FEET)</th>
<th>L (FEET)</th>
<th>T (FEET)</th>
<th>W (FEET)</th>
<th>X (FEET)</th>
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TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

TEMPORARY SEDIMENT TRAP
NOTES:

1. REFER TO NCESCOPDM SECTION 6.64 FOR ADDITIONAL DESIGN SPECIFICATIONS REGARDING SKIMMER SEDIMENT BASINS.

2. REFER TO PLDS 30.19 FOR BAFFLE SPACING AND INSTALLATION.

DATA BLOCK

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<th>BASIN</th>
<th>DRAINAGE AREA (ACRES)</th>
<th>DENuded AREA (ACRES)</th>
<th>Q&lt;sub&gt;0&lt;/sub&gt;</th>
<th>BASIN VOLUME REQUIRED (CUBIC FT.)</th>
<th>PROVIDED (CUBIC FT.)</th>
<th>BASIN SURFACE AREA REQUIRED (SQ FT.)</th>
<th>PROVIDED (SQ FT.)</th>
<th>CLEANOUT Depth (FT)</th>
<th>H/2</th>
<th>Z (FEET)</th>
<th>L (FEET)</th>
<th>T (FEET)</th>
<th>W (FEET)</th>
<th>SKIMMER PIPE Dia.</th>
<th>SKIMMER ORIFICE Dia.</th>
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TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

SKIMMER SEDIMENT BASIN

NOT TO SCALE

REV. DATE

STD. NO. REV.
30.02A
## Sediment Basin Design Criteria

<table>
<thead>
<tr>
<th>Drainage Area (Acres)</th>
<th>&gt;10 AC. &lt;100 AC.</th>
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<tbody>
<tr>
<td>Min. / Max. Length to Width Ratio</td>
<td>2:1 / 6:1</td>
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<tr>
<td>Min. Volume Required</td>
<td>1800 (Cu. Ft. Per Ac. Disturbed)</td>
</tr>
<tr>
<td>Surface Area Required</td>
<td>435 (Sq. Ft. Per CFS Q10)</td>
</tr>
</tbody>
</table>

### Notes:

1. Refer to NCESCPDM Section #5.61 for additional design specifications regarding sediment basins.
2. Refer to PLDS 30.19 for baffle spacing and installation.
3. First baffle is to be constructed of rip-rap and #5 washed stone, with a min. height of 3' and min. topwidth of 2'.
4. Flashboard riser not permitted for use.

### Plan View

- **Baffle**
- **Inflow Structure**
- **3rd Baffle: Hardware Cloth Surrounding Skimmer**
- **Riser**
- **Skimmer Dewatering Device**

### Cross-Section View

- **1' Freeway**
- **1' Min. Invert Elevation of Emergency Spillway**
- **Primary Spillway (Riser)**
- **Embankment**
- **Emergency Spillway**
- **Anti-Seep Collar**

### Table: Sediment Basin Design

<table>
<thead>
<tr>
<th>Basin</th>
<th>Drainage Area (Acres)</th>
<th>Denuded Area (Acres)</th>
<th>Q0</th>
<th>Basin Volume Required (Cubic Ft.)</th>
<th>Basin Surface Area Required (Sq. Ft.)</th>
<th>Cleanout Depth H/2 (Feet)</th>
<th>H (Feet)</th>
<th>Z (Feet)</th>
<th>L (Feet)</th>
<th>T (Feet)</th>
<th>W (Feet)</th>
<th>Skimmer Pipe Dia.</th>
<th>Skimmer Orifice Dia.</th>
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### Town of Pineville

**Land Development Standards**

8/1/19

**NOT TO SCALE**

**30.03A 3**
GENERAL NOTES:

1. AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ANY VEGETATION AND ROOT MATERIAL.

2. THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE BEING CONSTRUCTED. SPILLWAYS SHOULD NOT BE CONSTRUCTED THROUGH FILL SECTIONS. ALL SPILLWAYS SHOULD BE LINED AND/OR RIPRAPPED.

3. SEDIMENT SHALL BE REMOVED AND TRAP RESTORRED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA IN SUCH.

4. THE TRAP SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NECESSARY.

5. CONSTRUCTION OPERATION SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.

6. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.

7. SEDIMENT BASIN EMBANKMENTS SHOULD BE PROVIDED WITH EROSION CONTROL AND STABILIZATION.

8. STORAGE AREA MAY BE CONSTRUCTED IN ANY SHAPE PROVIDED THE MINIMUM STORAGE VOLUME REQUIREMENT IS MET. THE BASIN SHOULD ALSO BE ORIENTED SUCH THAT THE FILTER AND THE MAIN FLOW OF WATER AND SEDIMENT ARE ON OPPOSITE ENDS ON THE LONGER BASIN DIMENSIONS.

9. THE LENGTH OF THE STONE OUTLET (SPILLWAY) IS TO BE BASED ON A 10 YEAR STORM.

10. WHENEVER TOPOGRAPHY ALLOWS, THE BASIN LENGTH SHOULD BE TWICE (2X) THE BASIN WIDTH, TO ALLOW FOR SETTLING. BAFFLES SHALL BE INSTALLED IN ALL BASINS.

11. CLEANOUT STAKES SHALL BE PLACED IN ALL SEDIMENT BASINS AT THE LOW POINT IN THE BASIN. THE STAKES SHALL BE MARKED SHOWING THE HALF FULL, CLEANOUT POINT, OF THE BASIN.

12. SAFETY FENCING 3' HIGH SHOULD BE PLACED AROUND ALL SEDIMENT BASINS.

13. FOR DESIGN OF SEDIMENT BASINS, REFER TO THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.

14. FOR SLOPES GREATER THAN 10° IN LENGTH AND PROTECTED BY SILT FENCE AT THE TOE OF THE SLOPE, SLOPE TERRACING WILL.

15. THE BERM ON SEDIMENT BASINS SHALL BE SEEDED ONCE FINAL GRADE HAS BEEN REACHED. THE SILT FENCE MAY BE REMOVED IF PERMISSION HAS BEEN GRANTED BY THE COUNTY LAND DEVELOPMENT INSPECTOR AFTER THE GRASS HAS GERMINATED AND STABLE GROUND HAS BEEN ESTABLISHED.

16. WASHED STONE AND WIRE BACKING SHALL BE USED WITH SILT FENCE WHENEVER SILT FENCE IS PLACE AT THE TOE OF A SLOPE >10° VERTICAL OR ALONG ANY CHANNEL OR WATER COURSE WHERE 50' OF BUFFER IS NOT PROVIDED.
CONSTRUCTION SPECIFICATIONS:

1. THE TOP OF THE EARTH DIKE OVER THE INLET PIPE AND THOSE DIKES CARRYING WATER TO THE PIPE SHALL BE AT LEAST 1.5 FEET HIGHER AT ALL POINTS THAN THE TOP OF THE INLET PIPE.

2. THE PIPE SHALL BE FLEXIBLE WITH WATER TIGHT CONNECTING BANDS. FLEXIBLE PIPE SHOULD BE STAKED ON EITHER SIDE.

3. A RIP RAP APRON SHALL BE PROVIDED AT THE OUTLET, IF EMPTYING INTO A DISTURBED AREA.

4. THE SOIL AROUND AND UNDER THE INLET PIPE AND ENTRANCE SECTION SHALL BE HAND TAMPEED IN 4" LIFTS TO THE TOP OF THE EARTH DIKE.

5. FOLLOW-UP INSPECTION AND ANY NEEDED MAINTENANCE SHALL BE PERFORMED AFTER EACH STORM BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT.

6. OUTLET PIPE SHOULD BE TAKEN OVER OR THROUGH ANY SILT FENCE, TAKING CARE NOT TO VOID THE EFFECTIVENESS OF THE SILT FENCE.
NOTES:
1. DITCH SHOULD HAVE LONGITUDINAL SLOPE OF 1% 
2. SILT FENCE MAY BE REQUIRED BEHIND BERM.
GENERAL NOTES:
1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 WIRES WITH 12" STAY SPACING.
2. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF–FASTENER ANGLE STEEL TYPE.
3. TURN SILT FENCE UP SLOPE AT ENDS.
4. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWM BUFFERS, STREAMS OR WETLANDS (REFER TO SWM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
5. DRAINAGE AREA CAN NOT BE GREATER THAN 1/4 ACRE PER 100 FT OF FENCE.
6. SLOPE LENGTHS CAN NOT EXCEED CRITERIA SHOWN IN TABLE 6.62A NORTH CAROLINA EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
7. DO NOT INSTALL SEDIMENT FENCE ACROSS STREAMS, DITCHES, WATERWAYS OR OTHER AREAS OF CONCENTRATED FLOW.
8. WOVEN FILTER FABRIC TO BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.

MAINTENANCE NOTES:
1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH APPROXIMATE HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
GENERAL NOTES:
1. FILTER FABRIC FENCE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. WOVEN FILTER FABRIC TO BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
3. STEEL POSTS SHALL BE 5'-0" IN HEIGHT AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
4. WIRE FENCING SHALL BE AT LEAST #10 GAGE WITH A MINIMUM OF 6 LINE WIRES WITH 6" STAY SPACING.
5. TURN SILT FENCE UP SLOPE AT ENDS.
6. WIRE MESH SHALL BE MIN. 13 GAGE WITH MAXIMUM 12" OPENINGS.
7. WIRE AND WASHED STONE IS REQUIRED TO BE SHOWN ON PLANS AT THE TOE OF SLOPES GREATER THAN 10 FEET VERTICAL (2:1 SLOPE).
8. ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE WHEN GRADING IS ADJACENT TO SWM BUFFERS, STREAMS OR WETLANDS (REFER TO SWM BUFFER GUIDELINES). THE COLOR ORANGE IS RESERVED FOR VISUAL IDENTIFICATION OF ENVIRONMENTALLY SENSITIVE AREAS.
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MAINTENANCE NOTES:
1. FILTER BARRIERS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
GENERAL NOTES:

1. SEDIMENT FILTER OUTLET SHALL BE 16 INCHES HIGH BUT NO TALLER THAN 18 INCHES.
2. CLASS 1 OR 2 RIP-RAP SHALL BE USED AND COVERED WITH 4 INCHES OF NCDOT #5 OR #57 WASHED STONE ON THE UPSLOPE SIDE.
3. POSTS SHALL BE NO MORE THAN 4 FEET APART.
4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.
5. ONE ACRE MAXIMUM DRAINAGE AREA PER OUTLET.

MAINTENANCE NOTES:

1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.
3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
GENERAL NOTES:

1. SEDIMENT FILTER OUTLET AND HARDWARE CLOTH SHALL BE 18 INCHES HIGH BUT NO TALLER THAN 18 INCHES.

2. HARDWARE CLOTH SHALL BE ANCHORED TO THE STEEL POSTS SECURELY USING APPROPRIATE ANCHORS. HARDWARE CLOTH SHALL BE KEYED IN A MINIMUM OF 12 INCHES IN LENGTH AND BACKFILLED PROPERLY AS SHOWN IN ABOVE DETAIL. HARDWARE CLOTH TO BE SAME AS STD. #30.09 (19 GAUGE, 1/4" SPACING).

3. POSTS SHALL BE NO MORE THAN 4 FEET APART.

4. SITE OUTLETS AT ANY POINT SMALL CONCENTRATED FLOWS ARE ANTICIPATED AND AT THE DIRECTION OF THE INSPECTOR.

5. ONE ACRE MAXIMUM DRAINAGE AREA PER OUTLET.

MAINTENANCE NOTES:

1. FILTER OUTLETS SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.

2. THE STONE SHALL BE REPLACED PROMPTLY AFTER ANY EVENT THAT HAS CLOGGED OR REMOVED IT.

3. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OUTLET IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
SPECIFIC APPLICATION:
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

STONE INLET PROTECTION
BLOCK AND GRAVEL
STONE INLET PROTECTION

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS
GENERAL NOTES:

1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.

2. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

3. THE STRUCTURE SHALL BE INSPECTED BY THE FINANCIALLY RESPONSIBLE PARTY OR HIS AGENT AFTER EACH STORM EVENT AND REPAIRS MADE AS NECESSARY.

4. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.

5. THE SEDIMENT TRAP SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE BASIN HAS BEEN PROPERLY STABILIZED.

6. ON LARGER DRAINAGE AREAS RIP RAP MAY BE REQUIRED UNDER THE WASHED STONE.

7. MUST BE LOCATED AT LEAST 30’ AWAY FROM VEHICULAR TRAFFIC,
GENERAL NOTES:

1. UNIFORMLY GRADE A SHALLOW DEPRESSION APPROACHING THE INLET.

2. DRIVE 5-FOOT STEEL POSTS 2 FEET INTO THE GROUND SURROUNDING THE INLET. SPACE POSTS EVENLY AROUND THE PERIMETER OF THE INLET, A MAXIMUM OF 4 FEET APART.

3. SURROUND THE POSTS WITH WIRE MESH HARDWARE CLOTH. SECURE THE WIRE MESH TO THE STEEL POSTS AT THE TOP, MIDDLE, AND BOTTOM. PLACING A 2-FOOT FLAP OF THE WIRE MESH UNDER THE GRAVEL FOR ANCHORING IS RECOMMENDED.

4. PLACE CLEAN GRAVEL (NC DOT #5 OR #57 STONE) ON A 2:1 SLOPE WITH A HEIGHT OF 16 INCHES AROUND THE MESH, AND SMOOTH TO AN EVEN GRADE.

5. ONCE THE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, REMOVE ACCUMULATED SEDIMENT, AND ESTABLISH FINAL GRADING ELEVATIONS.

6. COMPACT THE AREA PROPERLY AND STABILIZED IT WITH GROUND COVER.

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

HARDWARE CLOTH AND GRAVEL INLET PROTECTION

30.09
TEMPORARY ROCK CHECK DAM

GENERAL NOTES:
1. RIPRAP SIZE TO BE DESIGNED BY ENGINEER.
2. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.

PLAN

CROSS SECTION

A AND B ARE AT EQUAL ELEVATIONS

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

TEMPORARY ROCK CHECK DAM

REV. DATE
8/1/19

STD. NO. REV
30.10A 3
GENERAL NOTES:

1. CHECK DAMS MAY BE USED IN SLOPING DITCHES OR CHANNELS TO SLOW VELOCITY OR TO CREATE SEDIMENT TRAPS.


3. COIR MATTING SHALL BE SUBSTITUTED FOR EXCELSIOR MATTING IN HIGH FLOW AREAS.

4. INITIALLY APPLY 3.50 OUNCES OF POLYACRYLAMIDE (PAM) TO THE FACE AND TOP OF THE CHECK DAM AND AFTER EVERY RAINFALL EVENT THAT EQUALS OR EXCEEDS 0.50 INCHES.

5. ONLY PAMS THAT PASS THE CHRONIC TOXICITY TESTING REQUIREMENTS, ESTABLISHED BY NCDWQ, MAY BE USED.

6. A SEDIMENT BASIN OR SIMILAR STRUCTURE BETWEEN THE APPLICATION POINT OF PAMS AND SURFACE WATERS IS REQUIRED.

7. SUPPLIER TO DETERMINE APPROPRIATE PAM BASED ON SOIL TYPE.

A AND B ARE AT EQUAL ELEVATIONS

NOT TO SCALE

REV. DATE 8/1/19
STD. NO. 30.10B 3
GENERAL NOTES:
1. USE MINIMUM 12 INCH DIAMETER FIBER WATTLE.
2. USE 2 FT. WOODEN STAKES WITH A 2 IN. X 2 IN. NOMINAL CROSS SECTION
3. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND
   WATTLE AND SCOUR DITCH SLOPES AND AS DIRECTED.
4. INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE
   TO WEDGE WATTLE TO BOTTOM OF DITCH.
5. PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE
   NOT LESS THAN 12" IN LENGTH.
6. INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE
   AND AT EACH END TO SECURE IT TO THE SOIL.
7. INSTALL MATTING IN ACCORDANCE WITH SECTION 1631 OF THE NCDOT STANDARD
   SPECIFICATIONS.
8. 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.
9. INITIALLY APPLY 2 OUNCES OF ANIONIC OR NEUTRALY CHARGED PAM OVER WATTLE
    WHERE WATER WILL FLOW AND 1 OUNCE ON MATTING ON EACH SIDE OF WATTLE.
    REAPPLY PAM AFTER EVERY RAINFALL EVENT THAT IS EQUAL TO OR EXCEEDS 0.50 IN.

**NOT TO SCALE**

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**TOWN OF PINEVILLE**

**LAND DEVELOPMENT**

**STANDARDS**

**TEMPORARY WATTLE WITH MATTING AND**

**OPTIONAL PAM**

---

**REV. DATE**

8/1/19

**STD. NO. REV.**

30.10.C 3
NOTES:

1. A STABILIZED ENTRANCE PAD OF 2"–3" WASHED STONE OR RAIL ROAD BALLAST SHALL BE LOCATED WHERE TRAFFIC WILL ENTER OR LEAVE THE CONSTRUCTION SITE ONTO A PUBLIC STREET.

2. FILTER FABRIC OR COMPACTED CRUSHER RUN STONE SHALL BE USED AS A BASE FOR THE CONSTRUCTION ENTRANCE.

3. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS OR EXISTING PAVEMENT. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS WARRANT AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.

4. ANY SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC STREETS MUST BE REMOVED IMMEDIATELY.

5. WHEN APPROPRIATE, WHEELS MUST BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTERING A PUBLIC STREET. WHEN WASHING IS REQUIRED, IT SHALL BE DONE IN AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT BASIN. SEE PLDS 30.11B.

6. THE TOWN MAY REQUIRE A STANDARD COMMERCIAL DRIVEWAY (PLDS 10.24 & 10.25) TO ACCESS THE CONSTRUCTION SITE IF THE DRIVEWAY IS ON A THOROUGHFARE.
TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

GRAVEL AND RIP RAP
FILTER BERM BASIN

GENERAL NOTES:

1. GRAVEL AND RIP RAP FILTER BERM BASIN SHOULD BE USED TO PROTECT EXISTING PIPE INVERTS THAT DRAIN 5 ACRES OR LESS.

2. MAY BE USED AT PIPES WITH MAXIMUM DIAMETER OF 36”.

3. DIMENSIONS SHOWN ARE THE MINIMUM ACCEPTED UNLESS OTHERWISE NOTED.

4. CLEANOUT PRIOR TO SEDIMENT REACHING HALF OF BERM HEIGHT.

NOT TO SCALE

REV. DATE
8/1/19

STD. NO. REV.
30.12 3

VOLUME = 3600 FT³ PER ACRE DISTURBED TO TOP OF BERM ELEVATION. SURFACE AREA REQ'D = 435 SQ. FT. PER CFS Q10

#5 WASHED STONE
1" MIN. THICK x 2’ HIGH (MIN)

CLASS I RIP RAP

36” PIPE DIAMETER MAX.

FLOW

SECTION

CLEANOUT ELEVATION (SEE NOTE 4)

#5 WASHED STONE

1" MIN.

3’

CLASS I RIP RAP

FINISHED GRADE

FLOW

PIPE
NOTE:

1. PRIOR TO INSTALLATION, MANUFACTURER SPECIFICATIONS OF FILTER MEDIA SHALL BE PROVIDED TO THE EROSION CONTROL INSPECTOR FOR APPROVAL AND USE. DISCHARGE FROM FILTER MEDIA SHALL MEET OR EXCEED THE PROVISIONS OF THE CLEAN WATER ACT.

2. ENSURE THAT PUMP PRESSURE DOES NOT EXCEED FILTER MEDIA PRESSURE RATING.

3. FILTER MEDIA MAY BE, BUT NOT LIMITED TO, SAND MEDIA FILTRATION DEVICES, RATED FILTER FABRIC BAGS OR POLYMER BASED DEWATERING PRACTICES.

4. PUMP STRAINER SHALL NOT BE IN CONTACT WITH BOTTOM OF POND.
NOTES:
1. REMOVE THE STRUCTURE WHEN NO LONGER NEEDED. (NOT TO EXCEED 1 YEAR).
2. AS A MINIMUM, DESIGN THE STRUCTURE TO PASS 2 YEAR PEAK FLOW WITHOUT OVERTOPPING.
3. ENSURE THAT DESIGN FLOW VELOCITY AT THE OUTLET OF THE CROSSING STRUCTURE IS NON-EROSIVE FOR THE RECEIVING STREAM CHANNEL.

ADDITIONAL MEASURES MAY BE REQUIRED PER THE TOWN ENGINEER BASED ON SPECIFIC SITE CONDITIONS.
NOTES
1. INLET MAINTENANCE SHALL BE DOCUMENTED IN PROJECT LOG BOOK.
2. FILTER TYPES SHALL BE APPROVED BY THE TOWN INSPECTOR PRIOR TO INSTALLATION.
3. FILTER BAGS MAY BE REMOVED WHEN SITE IS STABILIZED AT THE DIRECTION OF THE ENGINEER.
4. FILTER BAGS SHALL BE REMOVED PRIOR TO STREET ACCEPTANCE.
5. FILTER BAGS SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS (NOT BE MORE THAN HALF FULL AT ANY TIME).
6. FILTER BAGS SHALL NOT BE ALLOWED IN EXISTING TOWN OR NCDOT ROADS.

NOT TO SCALE
NOTE:
1. DIVERSION DITCH SHOULD FLOW INTO SEDIMENT BASIN ROCK CHECK DAM, OR SLOPE DRAIN.
2. REFER TO NCESCOPDM TABLE 6.02A FOR SPACING OF SLOPE BREAKS.
## Temporary Seeding Schedule

**For Late Winter and Early Spring:**
- **Soil Amendments:** Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10–10–10 fertilizer.
- **Mulch:** 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.
- **Maintenance:** Refertilize if growth is not fully adequate. Reseed, fertilize and mulch immediately following erosion or other damage.

**Seeding Mixture:**
- Rye (Grain) – 120 lb/acre
- Lespedeza (Kobe) – 50 lb/acre (Omit annual Lespedeza when duration of temporary cover is not to extend beyond June)

**Seeding Dates:**
- Jan. 1 – May 1

**For Summer:**
- **Soil Amendments:** Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 750 lb/acre 10–10–10 fertilizer.
- **Mulch:** 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.
- **Maintenance:** Refertilize if growth is not fully adequate. Reseed, fertilize and mulch immediately following erosion or other damage.

**Seeding Mixture:**
- German millet – 40 lb/acre (A small-stemmed sudangrass may be substituted at a rate of 50 lb/acre)

**Seeding Dates:**
- May 1 – Aug. 15

**For Fall:**
- **Soil Amendments:** Follow recommendations of soil tests or apply 2,000 lb/acre ground agricultural limestone and 1,000 lb/acre 10–10–10 fertilizer.
- **Mulch:** 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.
- **Maintenance:** 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 Lespedeza in late February or early March.

**Seeding Mixture:**
- Rye (Grain) – 120 lb/acre

**Seeding Dates:**
- Aug. 15 – Dec. 30

For additional information, refer to NCDENR Erosion and Sediment Control Planning and Design Manual (ESCPDM), Section 6.10. For permanent seeding specifications, including seed bed prep, seasonal limitations for seeding operations, the kinds of grades of fertilizers, the kinds of seed, and the rates of application of limestone, fertilizer, and seed, refer to NCDENR ESCPDM section 6.11.
## SEEDING SCHEDULE

### GENTLE SLOPES

<table>
<thead>
<tr>
<th>SEEDING MIXTURE</th>
<th>80 LBS/ACRE OF TALL FESCUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEEDING DATES</td>
<td>FALL: AUGUST 25 – OCTOBER LATE WINTER: FEBRUARY 15 – APRIL 15</td>
</tr>
<tr>
<td></td>
<td>TO EXTEND SPRING SEEDING INTO JUNE, ADD 15 LBS/ACRE HULLED BERMUDAGRASS OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE.</td>
</tr>
<tr>
<td>SEEDING AMENDMENTS</td>
<td>APPLY LIME AND FERTILIZER PER SOIL TESTS, OR 4000 LBS/ACRE LIMESTONE AND 1000 LBS/ACRE 10–10–10 FERTILIZER.</td>
</tr>
</tbody>
</table>

### STEEP SLOPES

<table>
<thead>
<tr>
<th>100 LBS/ACRE TALL FESCUE</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 LBS/ACRE SERICEA LESPEDEZA (UNSCARIFIED AFTER AUGUST 15)</td>
</tr>
<tr>
<td>10 LBS/ACRE KOBE LESPEDEZA</td>
</tr>
<tr>
<td>SEEDING DATES</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>SEEDING AMENDMENTS</td>
</tr>
</tbody>
</table>

**NOTE 1**
GROUND COVER—PROTECTIVE COVER MUST BE ESTABLISHED ON ALL DISTURBED AREAS WITHIN 21 CALENDAR DAYS AFTER LAND DISTURBING ACTIVITY IS COMPLETED OR HAS TEMPORARILY CEASED.

**NOTE 2**
GRADED SLOPES AND FILLS—PROTECTIVE COVER MUST BE ESTABLISHED ON ALL GRADED SLOPES AND FILLS WITHIN 21 CALENDAR DAYS AFTER A PHASE OF GRADING IS COMPLETED OR HAS TEMPORARILY CEASED.
TEMPORARY SEEDING FOR WARM AND COOL SEASON

<table>
<thead>
<tr>
<th>SEEDING MIXTURE</th>
<th>EARLY SUMMER SEASON</th>
<th>STEEP SLOPES</th>
</tr>
</thead>
<tbody>
<tr>
<td>40 LBS/ACRE OF GERMAN MILLET</td>
<td>120 LBS/ACRE RYE (GRAIN)</td>
<td></td>
</tr>
<tr>
<td>80 LBS/ACRE OF TALL FESUE</td>
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</thead>
<tbody>
<tr>
<td>MAY 1 – AUGUST 15</td>
<td>OCTOBER 25 – DECEMBER 30</td>
<td></td>
</tr>
<tr>
<td>REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE.</td>
<td>BETWEEN DECEMBER 30 – FEBRUARY 15, ADD 50 LBS/ACRE OF ANNUAL KOBE LESPEDEZA.</td>
<td></td>
</tr>
<tr>
<td>APPLY 4000 LBS/ACRE STRAW OR EQUIVALENT HYDROSEEDING.</td>
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<td></td>
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<th>EARLY SUMMER SEASON</th>
<th>STEEP SLOPES</th>
</tr>
</thead>
</table>
NOTES:
1. Work in creek shall be planned to minimize the number of days of disturbance.
2. The contractor is to observe the local weather forecasts and not begin work in the creek unless at least three days without rain is anticipated.
3. All disturbed creek bed and banks are to be stabilized prior to the end of each work day.
4. For larger creeks, construction should occur on one side of the creek at a time. The first side should be stabilized before beginning construction on the opposite side.
5. A temporary pipe or pump may be installed to control creek flow during construction.

CONSTRUCT THREE ROCK CHECK DAMS (PLDS 30.10) AT 100-FOOT SPACING DOWNSTREAM FROM THE CONSTRUCTION ZONE IF CONDITIONS AND PROPERTY RIGHTS ALLOW.

INSTALL DIKE OR COFFERDAM IMMEDIATELY UPSTREAM OF THE CONSTRUCTION ZONE IF CREEK HAS BASE FLOW.

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT
STANDARDS

CONSTRUCTION WITHIN CREEK BANK
(FOR USE WITH ROAD CROSSINGS, UTILITY CROSSINGS & CULVERT CONSTRUCTION)
GENERAL NOTES:

1. DRIVE 5' STEEL POST AT LEAST 24" INTO SOLID GROUND.

2. USE STAPLES 1' APART HORIZONTALLY AND VERTICALLY TO ATTACH THE POROUS MATERIAL TO THE WIRE FENCE.

3. MINIMUM BAFLE SPACING IS 10'.

4. THE FLOOR OF THE BASIN IN THE OUTLET ZONE AND BERM SHOULD BE SEEDED IMMEDIATELY AFTER THE BASIN IS CONSTRUCTED.

5. REFER TO NCESCPEM SECTION 6.65 FOR ADDITIONAL SPECIFICATIONS.
GENERAL NOTES

1. LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.

2. * DIMENSIONS SHOWN ARE MINIMUM, MANUFACTURED PRODUCTS MAY HAVE ADDITIONAL REQUIREMENTS THAT MUST BE MET.

3. SLOPE SURFACE SHALL BE FREE OF ROCKS, SOIL CLODS, STICKS, GRASS. MAT/BLANKETS SHALL HAVE GOOD SOIL CONTACT.

4. THE DETAIL SHOWN IS FOR SLOPE MATTING. FOR CHANNEL OR PIPE OUTFALL MATTING SPECIFICATIONS, PLEASE REFER TO NCESCPDM STANDARD #0.17 AND MANUFACTURER'S GUIDELINES.

NOT TO SCALE

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

EMBANKMENT MATTING DETAIL

REV. DATE
30.20
GENERAL NOTES:

1. SEE APPROPRIATE STANDARD FOR CATCH BASIN, MANHOLE, JUNCTION BOX USED.

2. ALL PIPE IN STORM DRAIN STRUCTURES SHALL BE STRUCK EVEN WITH THE INSIDE WALL, GROUTED AND BRUSHED SMOOTH.

TEMPORARY OUTLET PIPE SIZED FOR 10 YEAR EVENT SHALL BE REMOVED AS DIRECTED BY THE TOWN ENGINEER.

NCDOT STD. 840.72 PIPE COLLAR (TO BE REMOVED WITH TEMP. PIPE)

SECTION X-X
ACTIVE SYSTEM

SEE NCDOT STD. 840.71 CONCRETE AND BRICK PIPE PLUG. PLACE PIPE PLUG FLUSH WITH INSIDE WALL OF STRUCTURE AND AT OUTLET END OF PIPE OR USE FLOWABLE FILL AS DIRECTED BY TOWN ENGINEER.

OUTLET END OF PIPE

SELECT BACKFILL AROUND RCP

INSIDE FACE OF STRUCTURE.

PIPE PLUG DETAIL
AFTER REMOVAL OF TEMPORARY PIPE

STUB 4 FEET MINIMUM RCP TO MAKE CONNECTION WITH TEMPORARY PIPE. (RCP TO REMAIN IN STRUCTURE)

TOWN OF PINEVILLE
LAND DEVELOPMENT STANDARDS

NOT TO SCALE

REV. DATE

STD. NO. REV.

30.21