NCDOT Observations and Translating BMP’s from Plans to the Ground

Josh Young
Special Sediment Control Outlets
74 x 37 x 3
1.5 inch Skimmer with 1.5 inch Orifice Diameter
10 ft. weir
ID 9.1

90 x 45 x 3
2 inch Skimmer with 1.75 inch Orifice Diameter
15 ft. weir
ID 9.2

AFTER FINAL STABILIZATION, RESTORE BASIN TO PRECONDITION CONTOURS

BEGIN 3'-6" CMP 210' STA 83+25.4 - L-11
SEE SHEET 20-3
Temporary Diversions
Rock Checks
Special Stilling Basin
1. Construct 4' base temporary channel change with liner. Secure II and outlet of channel for energy dissipation as shown.
2. Utilize special stilling basin(s), temporary dike(s) and bypass pump to tie temporary channel change into stream.
3. Install impervious dike(s) as shown to direct water flow around work area into the temporary channel change on the west side future culvert.
4. Construct culvert using special stilling basin(s) and pump to de-water the work zone.
5. Use temporary dike(s) and bypass pumps to complete inlet and outlet channel protections. Ensure these are complete prior to removing impervious dike(s) and release of stream flow.
6. Remove impervious dike(s) to establish flow through newly constructed culvert.
7. Remove temporary channel change and complete grading and roadway work.

*Note: Install temporary silt fence at top of bypass channels while water is being diverted.*
Stream Diversion and Temporary Stream Crossings
PHASE I

1. UTILIZE SPECIAL STEELING, BARS AS NEEDED THROUGHOUT THE COVERT SEQUENCE
2. USE TEMPORARY STREAM CROSSINGS AS REQUIRED FOR ACCESS TO SITE TEMPORARY CROSSINGS SHOULD BE LIMITED TO SLOPESTAIRS
3. INSTALL TEMPORARY DREDGING TRENCHES TEMPORARY DREDGING TRENCHES AS SHOWN ON PLANS
4. INSTALL IMPERVIOUS DROPS #1 AND #2 AS SHOWN ON THE PLANS

PHASE II

1. UTILIZE SPECIAL STEELING, BARS AS NEEDED THROUGHOUT THE COVERT SEQUENCE
2. INSTALL 2 – 8’ X 8’ RC3C AS SHOWN ON PLANS
3. REMOVE TEMPORARY DREDGES ONLY AFTER 2 – 8’ X 8’ RC3C HAVE BEEN APPROVED
4. COMPLETE ROAD

INSTALL DYES IN JURISDICTIONAL AREAS WITHOUT IMPACTING STREAM UNITS AREA STABILIZED AND ACCORDING TO NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL

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Skimmer Basins
140 x 40 x 3
2.0 inch Skimmer with 2.0 inch Orifice Diameter
20 ft. weir
ID 7.1
STORAGE PAD
WOOD STAKE, METAL POST OR STAPLE

EARTH DIKE

COIR FIBER MAT
LOW PERMEABILITY GEOTEXTILE

18 IN. OVERLAP (MIN.)

NATURAL GROUND

UNCLASSIFIED EARTH MATERIAL

PLACE SEALANT AROUND BARREL PIPE WITH MINIMUM WIDTH OF 6 IN.

CLASS B STONE PAD (4' x 4' x 1' MIN.)

RIGID COUPLING

VARIABLE

4 IN. (MIN.)

1' (MIN.)

W. = 3 W
Miscellaneous BMP’s on Project
Polyacrylamide (PAM)
Without PAM
With PAM
Construction Entrances
Weep sections along shoulder berms
Final Thoughts