

North Carolina Department of Transportation Roadside Environmental Unit Erosion & Sedimentation / Stormwater Report

ICA

Immediate Corrective Action

This project does not comply with the North Carolina Erosion and Sedimentation Control laws. Immediate Corrective Action is needed to resolve the situation to full compliance with the Law: (T15A: 04B.0000).

Project Information

Inspection Date: 08/08/2022	Evaluator: Reid Whitehead
Project #: 36030.3.GV4	TIP #: I-4700 Contract #: C204266
Division #: 13	County: Buncombe
Project Type: Contract	Engineer: Buncombe I-4700 I-26 Widening
Project Length: 7.49	Disturbed Acres: 10
River Basin: French Broad	HQW Zone: NO Trout Zone: NO
Location Description: I-26 from NC-280 (Exit 40) to I-40	

Project Evaluation

Report Type: Routine ICA ICA Ex 1st ICA Ex 2nd CICA - SWO
 PCN ECPAR

Length	Section	Installation of BMPs	Maintenance of BMPs	Effectiveness of BMPs	Plan Implementation	Overall Project Evaluation
0.5	Permitted Area(s)	8	7	7	8	7
6.0	Remainder of Project	8	7	8	8	8
0.01	Station 1090+50 Rt.	6	6	6	6	6

Grading Scale: 0 - 6 = Immediate Corrective Action Required, 7 = Fair, 8 = Good, 9 = Very Good, 10 = Excellent

Remarks and Recommendations:

Inspection was done on Monday 8/8/2022 with Rick Cunningham - Erosion Inspector. I spoke with Justin James - Asst. Resident during the inspection.

Grading is underway.

Please continue NPDES inspections.

General Note - When EC measures need to be removed for grading recommend planning what EC measures are going to be reinstalled with the operation inspector and the timeline for reinstallation before removal.

General Note - When major EC measures such as basins need to be impacted by grading recommend consulting the project EC inspector and the Assistant Resident before impacting so that I can be consulted before the impact.

General Note - Basins (storage) should remain installed until permanent cover is growing. The dimensions may

need to change. The size might be able to change. Complete elimination is not what is intended in the EC plan if the basin is on the final EC plan.

General Note - Recommend staking the basin locations before installation to determine if there are conflicts between the grading limits and the basin. If there are conflicts adjustments can be made to basin dimensions before installation which will reduce impacts to the basins during construction.

General Note - Please make sure to install the PAM measures shown in the EC plan

General note EC Measure Clean Out - When maintaining EC measures recommend not placing the cleaned out material near the EC measures where it can wash back in. Recommend instead removing to an approved WA or protected stockpile.

General Note - When active grading is underway and an area on the project is transitioning from the C&G EC plan to the Final EC plan recommend checking the Final EC plan for EC measures and installing a similar number of measures as temporary EC measures even though these measures may need to be installed at the end of one day and removed the next day to continue grading.

General Note - recommend installing EC measures per detail and provision.

ACTION ITEMS -

An ICA is being issued for this station - Approximately L- station 1090+50 Rt. There is a small JS that parallels the project at this station. A pipe extension is underway in this area. Perimeter EC measures had been installed. On Friday 8-5-2022 work was being done on the headwall for this pipe extension. The perimeter EC measures along the JS were removed to work on the headwall. These measures were not reinstalled at the end of the day on Friday. There were localized heavy rain events in this section of the project over the weekend. These resulted in washing in the fillslope and loss of sediment into the JS in the immediate vicinity of the pipe extension I believe the loss is 3 to 4 five gallon bucketfuls.

Another piece of silt fence was used to divert run-off to the sides of the work area above the work area. It was installed straight across the top of the work area and run-off did not divert. The silt fence was washed under. Recommend removal of the sediment in the JS.

Recommend reinstallation of the perimeter silt fence with outlets along the JS.

Recommend reinstalling the silt fence to divert run-off to the sides of the work area with a highpoint rather than straight across so it actually functions as a diversion.

This area will be reviewed again in 5 working days. If it repairs are made sooner reinspection can occur earlier than 5 working days.

Remaining Urgent Items:

Approximately L- station 1112+90 Med.-Rt. Sediment was lost through the existing drop inlet into the JS in the median.

Silt Basin, Type B 25.2C is installed in the location shown in the EC plan. The Rock Inlet Sediment Trap, Type B was installed on the existing drop inlet directly below the basin. The basin side of the Rock Inlet Sediment Trap, Type B was washed out. There is evidence of heavy flow in the ditchline South of this basin. The measures in the ditchline above the basin all need maintenance/repair.

Even though Silt Basin, Type B 25.2C is installed at the location on the plan I believe it is too close to the existing drop inlet. Recommend moving the basin South up the ditchline 30 to 50 feet.

Recommend installing another 50'x15-3' Silt Basin Type B above the Basin 24.2C.

Recommend reinstalling the Rock Inlet Sediment Trap, Type B around the existing drop inlet. Recommend changing it to a Type A if ditch depth allows.

Recommend installing at least 2 Temporary Rock Silt Checks, Type A between the the new location of Basin 25.2C and the Rock Inlet Sediment Trap, Type B.

Approximately L- station 1113+00 Med.-Rt. to 1121+00 Med.Rt./ Rt. Sediment is in the JS in the median and below the outlet of the existing culvert at 1121+00 Rt.

Recommend cleanup of this material. Cleanup was underway the morning of 8-9-2022.

Recommend consulting Kevin Mitchell - DEQ-WR. about installing temporary coir fiber wattles in the JS channel below the existing culvert to catch any material that flushes after cleanup is complete.

Approximately L- station 1103+00 to 1113+00 Med.-Rt. recommend maintenance/repair of the checks in the ditchline.

Recommend adding additional check dams.
Recommend restabilization of the ditch and shoulder.

Approximately L- station 996+25 Med.-Rt. there is an open pipe where I believe a box was recently removed.
Recommend installation of a pipe inlet protection.

Monday 8-8-2022

Approximately L- station 832+00 to 836+00 Rt. recommend stabilization for the ditchline.

Approximately L- station 832+25 Rt. recommend repair of the wash in the berm.

Approximately L- station 836+00 to 838+00 Med.-Rt. recommend adding wattles to the swale between the currently in use I-26W and the future I-26W.

Approximately L- station 836+75 Rt. this area has been disturbed again since the last inspection. Recommend stabilizing the disturbed cutslope.

Approximately L- station 839+75 to 841+00 Rt. recommend adding wattles to the swale between the current off-ramp to Airport Rd. and the future off-ramp to Airport Rd.

Approximately L- station 841+00 to 855+50 Med.-Rt. stabilization of these areas had been completed since the last inspection but these areas have been redisturbed.

Recommend stabilizing the drainage openings in the berm and any disturbed areas on the berm.

Recommend removal of the piles of material beside the openings to appropriate stockpile area's or WA's.

Approximately L- station 841+00 Med.-Rt. recommend adding checks to shoulder section of the diversion across the old I-26W. The diversion is starting to wash.

Approximately L- station 842+00 Rt./Y13RPC- station 14+00 Rt. the drop inlet protection at the Northern end of the new wall was replaced by silt fence. Recommend removal of the silt fence and replacing it with a Rock Inlet Sediment Trap, Type C.

There is a small amount of sediment in the box. Recommend removal of this sediment.

Approximately L- station 842+75 Med.-Rt. recommend removing and replacing the 57 stone on the Rock Inlet Sediment Trap, Type B. The 57 stone is full of sediment.

Approximately L- station Y13RPC- station 16+00 to 18+50 Rt. grading has been done on the cutslope but is not complete. Recommend installation of temporary PAM checks along the toe of the cutslope. When these checks have to be removed to grade recommend reinstallation as soon as possible.

Approximately L- station Y13RPC- station 16+30 Rt. the new drop inlet has been covered by plywood. This inlet needs a drop inlet protection installed.

Recommend installing a Rock Inlet Sediment Trap, Type C.

Approximately L- station 852+00 Rt. the stockpile has had material removed again. Recommend recovering to meet the NPDES cover requirement as the timelimit is reached after each disturbance.

Approximately L- station 859+50 to 860+00 Rt. there is a disturbed soil berm on the right of way side of the on-ramp. Recommend temporary stabilization.

Approximately L- station 860+50 to 913+00 Rt. recommend stabilization of the disturbed areas to the right of way side of the shoulder. This work is scheduled.

Approximately L- station 864+50 to 901+00 Med.-Rt. most of the wattle checks and drop inlet protections between the current I-26W and the future I-26W need maintenance/repair. Recommend maintaining the EC measures.

Approximately L- station 873+50 Rt. recommend maintenance of the Silt Basin, Type B of Tierred Skimmer Basin 7.2B.

Approximately L- station 879+25 to 879+75 Rt. recommend maintenance checks in the ditchline and at the inlet of the rip rapped ditchline.

Approximately L- station 891+00 Rt. recommend clean up sediment in the ditchline and maintenance of the Rock Inlet Sediment Trap, Type C.

Approximately L- station 911+20 Med.-Rt. recommend maintenance of the Rock Inlet Sediment Trap, Type C.

Approximately L- station 911+25 to 912+75 Med.-Rt. recommend stabilization of the soil stockpile or removal to an appropriate site if no longer needed.

Approximately L- station 913+00 Med.-Rt. the concrete gutter under the new I-26W bridge is full of sediment. Recommend cleanup of this sediment. The sediment empties directly into the box below on Glenn Bridge Rd.

Approximately Y14- station 14+30 Rt. the ditch is full of sediment. Recommend cleanup of the sediment.

Approximately L- station 914+00 to 914+75 Med.-Rt. recommend stabilization of the soil stockpile or removal to an appropriate site if no longer needed.

Approximately L- station 917+50 Rt. sediment from an EC device has been placed in a ditchline where it could wash. Recommend removal to an appropriate WA.

Approximately L- station 923+80 Med. the Rock Inlet Sediment Trap, Type C is missing 57 stone on one side of the measure. Recommend repair.

Approximately L- station 930+75 Med. the bottom of the ditchline that had been holding water is dry and is bare. Recommend stabilization.

Approximately L- station 931+00 Rt. opening into the basin thru the berm has been closed off. This will cause the drop inlet to function. Recommend reopening the outlet thru the berm or installing an inlet protection on the drop inlet.

Approximately L- station 938+00 Med.-Rt. the slope drain has been cut off. Recommend making it functional again or if no longer needed recommend removal.

Approximately L- station 944+00 to 946+00 Rt. recommend stabilization of the disturbed areas on the cutslope.

Approximately L- station 958+40 Med. the bottom of the ditchline is starting to rill slightly. Recommend installation of a check in the ditchline. Recommend stabilizing the previously seeded areas on the fillslope that have not taken.

Approximately L- station 962+00 to 971+50 Rt. the toe of the cutslope has been disturbed. Recommend stabilization.

Approximately L- station 979+00 to 979+75 Med.- Rt. recommend stabilization of the disturbed areas.

Approximately L- station 991+50 to 992+50 Rt. recommend temporary stabilization of the cutslope.

Approximately L- station 996+00 Med.-Rt. recommend maintenance of the Type C drop inlet protection.

Approximately L- station 1000+50 Rt. recommend stabilization of the disturbed fillslope.

Approximately L- station 1026+50 Lt. there is small wash starting in the fillslope that was too rough to be matted. Recommend repair and stabilization of the small rill and maintenance of the special sediment control fence outlet below it.

Approximately L- station 1026+75 Lt. recommend maintenance of the special sediment control fence outlet.

Approximately L- station 1030+25 Rt. recommend stabilization of the fillslope disturbed during pipe installation.

Approximately L- station 1033+00 to 1041+00 Rt. the temporary checks have been removed for grading. Recommend reinstalling checks at the toe of the cutslope as soon as possible.

Approximately L- station 1038+00 Rt. the Type B drop inlet protection has been impacted by grading. Recommend removal and installation of a Rock Inlet Sediment Trap, Type A which is higher.

Approximately L- station 1043+25 Rt. recommend maintenance of the check dam.

Approximately L- station 1051+75 Med. The C&G EC plan shows Silt Basin Type B 20.5C. This would be in the footprint of the bridge construction.

I believe a basin is needed in the median. Recommend installation of Silt Basin Type B 20.5C farther North in the median. As close to the original station as possible without affecting bridge construction.

A basin was installed at approximately 1058+75 Med. this is too far from the original basin location.

I do not believe this location was as close to the original station as possible without affecting bridge construction.

Recommend installing a basin in the median closer to the original location perhaps station 1054+00 Med.

Approximately L- station 1052+00 to 1062+00 Rt. the swale between the existing pavement and fill has been impacted by placement of dirt between this swale and the swale at the top of the fillslope.

Recommend maintenance/repair of the checks in this swale.

Approximately L- station 1053+00 Rt. run-off from the swale along the top of the fillslope is washing down the fillslope. Recommend installation of a slope drain.

Approximately L- station 1053+00 to 1068+00 Rt. dirt has been placed in some areas along the swale behind the berm at the top of the fillslope. This has caused rilling to occur in the swale and many of the checks to fill up with sediment and be washed around.

Recommend reestablishing the swale, then reinstalling the check dams and stabilizing the swale.

Approximately L- station 1068+90 Med. recommend installation of an inlet protection at the existing drop inlet.

Approximately L- station 1070+00 to 1073+50 Rt. recommend stabilization of the disturbed areas on the cutslope above the old I-26W.

Approximately L- station 1074+00 Med. recommend maintenance of the drop inlet protection on the existing drop inlet.

Approximately L- station 1078+00 Rt. the outlet of the existing pipe has been disturbed. Recommend installation of a dissipater pad at the pipe outlet.

Approximately L- station 1088+00 to 1092+00 Med.-Rt. recommend stabilization of the shoulder and ditch front slope.

Approximately L- station 1091+75 to 1092+50 Rt. there is a rill wash starting along the berm at the top of the fillslope. Recommend repair of the rill wash and installation of an additional checkdam.

Approximately L- station 1094+00 to 1103+00 Med.-Rt. recommend maintenance of the checks in the ditchline. Recommend restabilization of the ditch and shoulder.

Approximately L- station 1095+00 to 1098+00 Rt. there is a rill wash starting in front of the retaining wall. Recommend installing additional checks per EC plan.

Approximately L- station 1099+00 to 1101+00 Rt. recommend installing the PAM checks shown in the EC plan at the toe of the cutslope.

Approximately L- station 1112+50 Rt. recommend repair of the upper baffle in basin 25.3C.

Approximately L- station 1113+00 to 1118+00 Med-Rt. recommend maintenance of the ditch checks.

Approximately L- station 1113+25 to 1114+00 Rt. recommend installation of the Type B checks shown in the final EC plan.

Approximately L- station 1131+80 Rt. recommend use of a jump pipe when active construction is not underway so that the pump will not need to run 24hr/day until pipe the extension is complete.

Recommend the plugging of the pipe from the median that outlets into the work area per pipe construction sequence if this has not already been done.

Approximately L- station 1172+00 to 1215+00 Rt. recommend temporary stabilization of the recently cleared

and partially grubbed areas.

Approximately 1178+00 to 1228+00 Med.-Rt./Med. C&G operations are underway on the right side of the project.

Recommend planning to install the remaining basins shown in the C&G EC plans before clearing or as soon as possible after clearing is complete.

Approximately L- station 1182+75 Rt. silt fence with a special sediment control fence outlet has been installed. Recommend installing the 4 check dams shown in the C&G EC plan below the pipe outlet.

Approximately L- station 1183+50 Rt. basins 30.3C and 30.1C are being installed. Recommend removing the material from the basin construction to an appropriate stockpile area.

Approximately L- station 1193+80 Rt. recommend installing another Temporary Rock Silt Check, Type A approximately 30 feet below the existing turnout to include an additional small disturbed area.

Approximately L- station 1194+00 to 1196+00 Rt. there is a short section of silt fence not already installed. Recommend completing perimeter silt fence installation.

BRP:

Approximately BRP- station 522+00 to 525+25 Rt. the checks installed across the access road need routine maintenance. Recommend maintaining the checks.

As work continues, contractor should continue efforts to install and maintain erosion control devices in a timely manner, as per specification, and as per erosion control plans.

Groundcover should be provided to any areas that will remain idle for 7 or 14 days or more, including stockpiles and waste areas.

Continue NPDES inspections weekly and within 24 hours after a 0.5 inch or greater rain event.

Please continue NPDES inspections daily at the French Broad River.

Urgent items should be completed within 24 hours after any storm event or as soon as conditions allow.