



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

October 12, 2017

TO: Prospective Bidders

FROM: Jeff Turner, Division Proposals Engineer

SUBJECT: **Addendum #1 - Revised**
Contract DI00174
Grading, Drainage, Paving and Culvert on SR 1170 (Dull Road) – Culvert 133
Over Ellison Creek

The subject contract proposal contains the following addendum:

1. Add the attached plan sheet to existing plans for clarification.

Please note that an .ebs amendment file has been provided for use with electronic bidding. Contractors who submit electronic bid preparation with manual delivery proposals shall include a signed "Addenda" form. The addendum has been updated to the Division 9 Letting website.

This addendum officially becomes part of the contract.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
DIVISION 9 – PROJECT DEVELOPMENT
375 SILAS CREEK PARKWAY
WINSTON-SALEM, NC 27127

Telephone: (336) 747-7800
Fax: (336) 703-6693
Website: www.ncdot.gov

Location:
375 SILAS CREEK PARKWAY
WINSTON-SALEM, NC 27127

ADDENDA

ADDENDUM #1

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #1.

ADDENDUM #2

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #2.

ADDENDUM #3

I, _____ representing _____
(SIGNATURE)

Acknowledge receipt of Addendum #3.

SITE DATA

Drainage Area 1.84 sq mi Source USGS Quad - Clemmons Character Light Urban - Residential/Commercial
River Basin Yadkin
Stream Classification (Such as Trout, High Quality Water, etc.) C
Proposed Structure 17'-0" x 10'-10" CASPPA w/HW Sta 13+98 -L- Skew 73°
Existing Structure 2 @ 96" CMP w/BLOCK HW
Existing Structures Up and Down Stream DS = C94 - 2 @ 12' X 9' RCBC
US = 2053 - 60" CMP

Historical Flood Information:
Date Road Overlaid Elev. +/-766.5 Est. Freq. 100 Yrs Source Local Resident - Mr. Compton Period of Knowledge 50 yrs
Date Date Elev. Est. Freq. Source Period of Knowledge
Channel Slope 0.02 ft/ft Source Project Survey Normal Water Surface Elev. 754.7
Manning's n Left 0.8 Channel Right 0.8 Source
Flood Study / Status Non-FEMA Floodway Established?

CULVERT DESIGN DATA

Hydrological Method USGS 2014 SIR Urban IA=15%
Hydraulic Design Method HDS-5 Proposed Analyzed Buried 1 ft

	Size & Type	Q	K _e	Inlet Control		Outlet Control							Remarks
				HW/D	H.W.	dc	d _o +D/2	h _o	H	LS _o	H.W.	H.W. ELEV.	
Exist	2@96" CMP w/HW	1000	0.5	1.13	9.0	5.7	6.9	6.9	2.9	1.8	8.0	762.7	25 Yr
Exist	2@96" CMP w/HW	1350	0.5	1.53	12.2	6.6	7.3	7.3	5.4	1.8	10.9	765.9	100 Yr
Prop	17'-0"x10'-10" CASPPA	1000	0.5	0.89	8.9	4.1	7.1	8.0	1.7	1.9	7.8	761.9	25 Yr
Prop	17'-0"x10'-10" CASPPA	1350	0.5	1.09	10.9	6.3	8.2	8.2	3.2	1.9	9.5	763.9	100 Yr

Design Control Maintain Or Improve 25 Yr LOS & 100 Yr Backwater
Outlet Velocity (V₁₀) 15.8 ft/s
Required Outlet Protection CLASS II RIP RAP

PROJECT DESCRIPTION

REPLACE CULVERT #133 ON SR 1170 DULL ROAD
OVER ELLISON CREEK

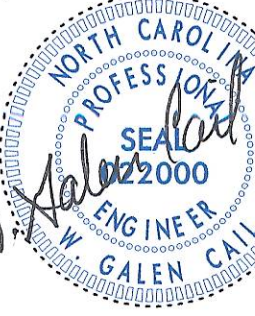
FORSYTH COUNTY

COMPUTATIONS

USGS 2014 Urban DISCHARGES FEMA DISCHARGES
IA=15%
Q10=780 cfs Non-FEMA
Q25=1000 cfs
Q50=1200 cfs
Q100=1350 cfs

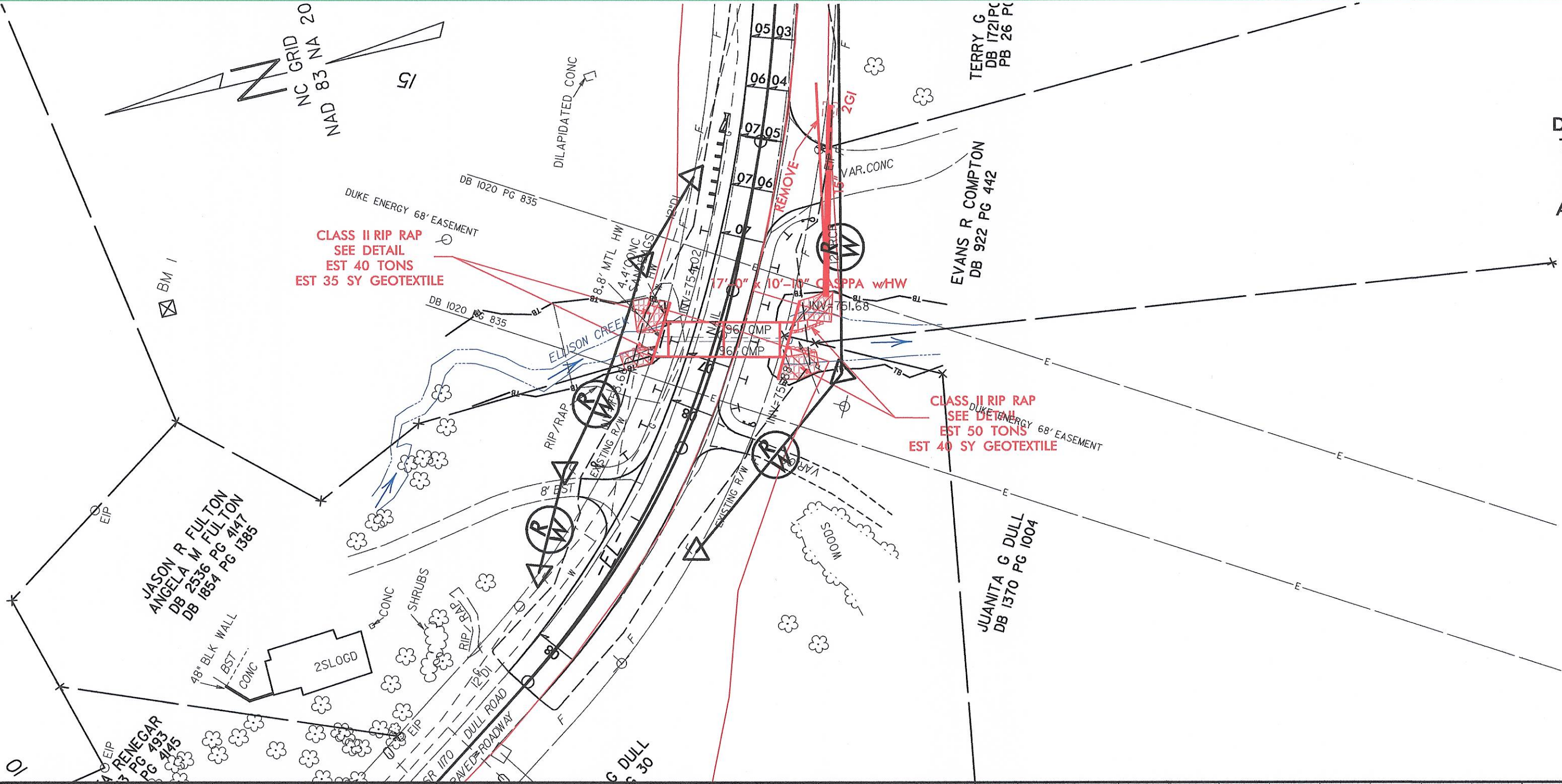
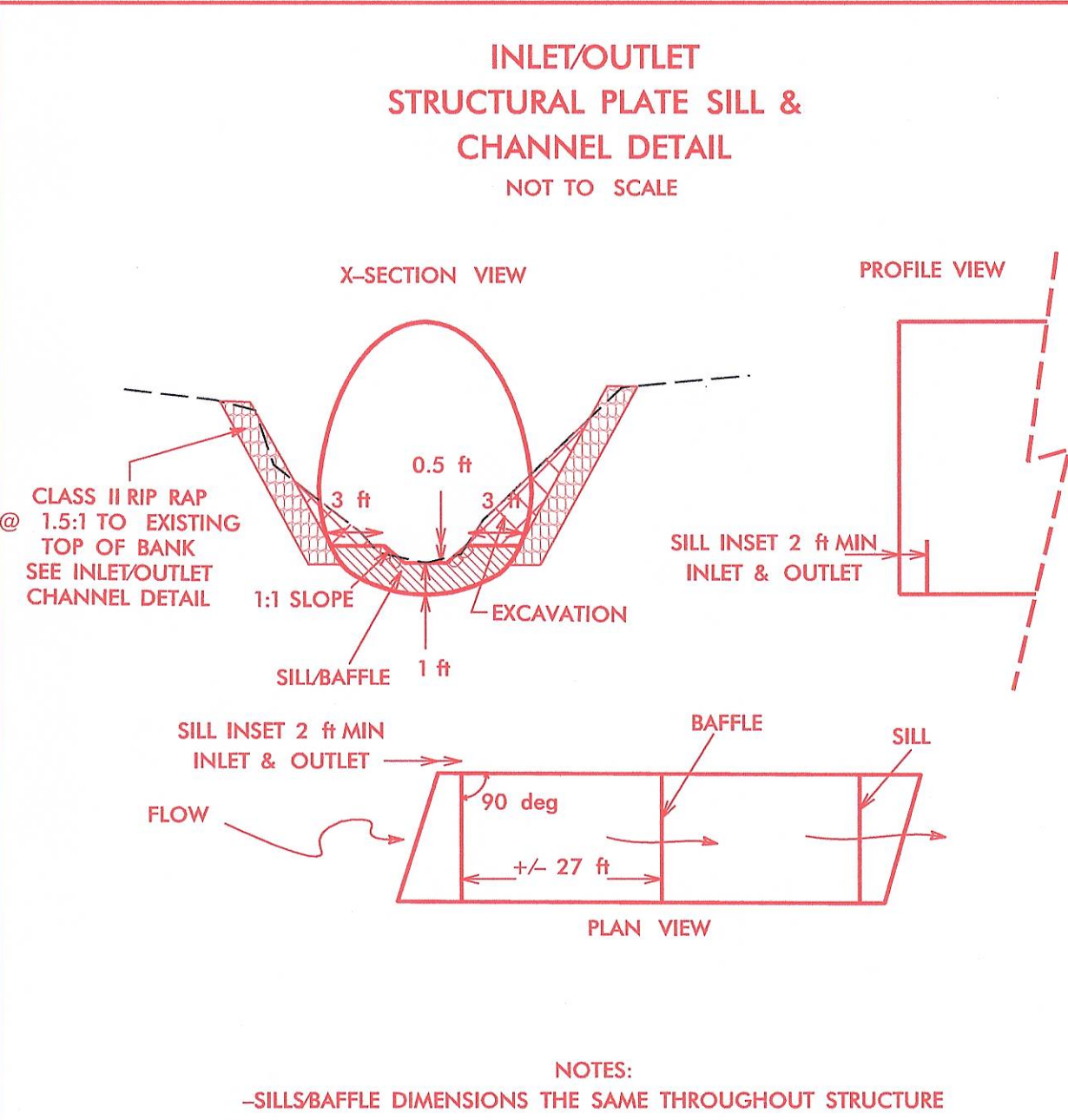
PROJECT REFERENCE

HYDRAULICS
ENGINEER



SCALE:

1" = 50' HORIZ
1" = 10' VERT



NOTE:
BACKFILL CULVERT WITH NATIVE BED MATERIAL. NATIVE BED MATERIAL CONSISTS OF MATERIAL THAT IS EXCAVATED FROM THE STREAM BED OR FLOODPLAIN AT THE PROJECT SITE DURING CONSTRUCTION. RIP RAP MAY BE USED TO SUPPLEMENT THE NATIVE BED MATERIAL. IF RIP RAP IS USED, NATIVE MATERIAL SHOULD BE PLACED ON TOP OF THE RIP RAP AND AT A FLAT GRADE TO FACILITATE ANIMAL PASSAGE. NATIVE BED MATERIAL AND RIP RAP ARE SUBJECT TO APPROVAL BY THE ENGINEER AND PER PROJECT PERMIT CONDITIONS.

