



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

February 10, 2017

**Addendum No. 1**

RE: Contract # C203661

WBS # 40373.3.3

F. A. # STPDA-1445(008)

**Cabarrus County (U-4910A, U-4910B)**

SR-1445 (Derita Road) From North Of SR-2894 (Concord Mills Boulevard)

To SR-1394 (Poplar Tent Road)

**February 21, 2017 Letting**

To Whom It May Concern:

Reference is made to the plans furnished to you on this project.

The following revisions have been made to the Structure plans:

Sheet No.	Revisions
S-55	Sheet had been inadvertently omitted from the original plan set
C-07	Sheet had been inadvertently omitted from the original plan set

Please staple Sheet No. S-55 after Sheet No. S-54 in your plans. Please staple Sheet No. C-07 after Sheet No. C-06 in your plans.

The following revisions have been made to the proposal:

Page No.	Revisions
Proposal Cover	Note added that reads "Includes Addendum No. 1 Dated 02-10-2017".

Please void the Proposal Cover and staple the revised Proposal Cover thereto.

Mailing Address:  
NC DEPARTMENT OF TRANSPORTATION  
CONTRACT STANDARDS AND DEVELOPMENT  
1591 MAIL SERVICE CENTER  
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900  
Fax: (919) 250-4127  
Customer Service: 1-877-368-4968

Location:  
1020 BIRCH RIDGE DR.  
RALEIGH, NC 27610

Website: [www.ncdot.gov](http://www.ncdot.gov)

C203661  
Cabarrus County

U-4910A/U-4910B

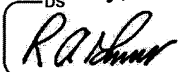
On the item sheets the following pay item quantities have been changed:

<u>Item</u>	<u>Description</u>	<u>Old Quantity</u>	<u>New Quantity</u>
245-8133000000-E-414	Foundation Conditioning Material, Box Culvert	718 TON	359 TON
246-8196000000-E-420	Class A Concrete (Culvert)	1,088.3 CY	544.30 CY
247-8245000000-E-425	Reinforcing Steel (Culvert)	189,306 LB	94,653 LB

The Contractor's bid must be based on these revised pay item quantities. The contract will be prepared accordingly.

The Expedite File has been updated to reflect these revisions. Please download the Expedite Addendum File and follow the instructions for applying the addendum. Bid Express will not accept your bid unless the addendum has been applied.

Singerely,  
DS



R. A. Garris, PE  
Contract Officer

RAG/jag

cc: Mr. Lamar Sylvester, PE  
Mr. Louis Mitchell, PE  
Mr. Rodger Rochelle, PE  
Mr. R.E. Davenport, PE  
Mr. Ken Kennedy, PE  
Ms. Jaci Kincaid  
Project File (2)

Mr. Ray Arnold, PE  
Ms. Theresa Canales, PE  
Ms. Marsha Sample  
Mr. Mike Gwyn  
Mr. Mitchell Dixon  
Ms. Penny Higgins  
Ms. Lori Strickland

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, N.C.

PROPOSAL

**INCLUDES ADDENDUM No. 1 DATED 02-10-2017**

DATE AND TIME OF BID OPENING: **FEBRUARY 21, 2017 AT 2:00 PM**

CONTRACT ID C203661  
WBS 40373.3.3

FEDERAL-AID NO. STPDA-1445(008)  
COUNTY CABARRUS  
T.I.P. NO. U-4910A, U-4910B  
MILES 2.382  
ROUTE NO. SR 1445  
LOCATION SR-1445 (DERITA RD) FROM NORTH OF SR-2894 (CONCORD MILLS  
BLVD) TO SR-1394 (POPLAR TENT RD).

TYPE OF WORK GRADING, DRAINAGE, PAVING, SIGNALS, AND STRUCTURES.

**NOTICE:**

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

**BIDS WILL BE RECEIVED AS SHOWN BELOW:**

**THIS IS A ROADWAY & STRUCTURE PROPOSAL**

**5% BID BOND OR BID DEPOSIT REQUIRED**

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County: Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
<b>ROADWAY ITEMS</b>						
0001	0000100000-N	800	MOBILIZATION	Lump Sum	L.S.	
0002	0000400000-N	801	CONSTRUCTION SURVEYING	Lump Sum	L.S.	
0003	0001000000-E	200	CLEARING & GRUBBING .. ACRE(S)	Lump Sum	L.S.	
0004	0008000000-E	200	SUPPLEMENTARY CLEARING & GRUB- BING	2 ACR		
0005	0015000000-N	205	SEALING ABANDONED WELLS	1 EA		
0006	0022000000-E	225	UNCLASSIFIED EXCAVATION	68,900 CY		
0007	0029000000-N	SP	REINFORCED BRIDGE APPROACH FILL, STATION ***** (147+70 -L-)	Lump Sum	L.S.	
0008	0036000000-E	225	UNDERCUT EXCAVATION	1,700 CY		
0009	0106000000-E	230	BORROW EXCAVATION	104,500 CY		
0010	0127000000-N	SP	EMBANKMENT SETTLEMENT GAUGES	4 EA		
0011	0134000000-E	240	DRAINAGE DITCH EXCAVATION	960 CY		
0012	0141000000-E	240	BERM DITCH CONSTRUCTION	170 LF		
0013	0156000000-E	250	REMOVAL OF EXISTING ASPHALT PAVEMENT	7,430 SY		
0014	0177000000-E	250	BREAKING OF EXISTING ASPHALT PAVEMENT	7,960 SY		
0015	0195000000-E	265	SELECT GRANULAR MATERIAL	1,200 CY		
0016	0196000000-E	270	GEOTEXTILE FOR SOIL STABILIZA- TION	9,350 SY		
0017	0199000000-E	SP	TEMPORARY SHORING	3,900 SF		
0018	0318000000-E	300	FOUNDATION CONDITIONING MATE- RIAL, MINOR STRUCTURES	1,664 TON		
0019	0320000000-E	300	FOUNDATION CONDITIONING GEO- TEXTILE	6,002 SY		

County : Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0020	0366000000-E	310	15" RC PIPE CULVERTS, CLASS III	1,060	LF	
0021	0372000000-E	310	18" RC PIPE CULVERTS, CLASS III	120	LF	
0022	0378000000-E	310	24" RC PIPE CULVERTS, CLASS III	264	LF	
0023	0384000000-E	310	30" RC PIPE CULVERTS, CLASS III	624	LF	
0024	0390000000-E	310	36" RC PIPE CULVERTS, CLASS III	192	LF	
0025	0402000000-E	310	48" RC PIPE CULVERTS, CLASS III	176	LF	
0026	0448200000-E	310	15" RC PIPE CULVERTS, CLASS IV	7,228	LF	
0027	0448300000-E	310	18" RC PIPE CULVERTS, CLASS IV	1,412	LF	
0028	0448400000-E	310	24" RC PIPE CULVERTS, CLASS IV	984	LF	
0029	0448500000-E	310	30" RC PIPE CULVERTS, CLASS IV	1,228	LF	
0030	0448600000-E	310	36" RC PIPE CULVERTS, CLASS IV	88	LF	
0031	0576000000-E	310	*** CS PIPE CULVERTS, ***** THICK (48", 0.109")	64	LF	
0032	0582000000-E	310	15" CS PIPE CULVERTS, 0.064" THICK	276	LF	
0033	0588000000-E	310	18" CS PIPE CULVERTS, 0.064" THICK	40	LF	
0034	0594000000-E	310	24" CS PIPE CULVERTS, 0.064" THICK	44	LF	
0035	0600000000-E	310	30" CS PIPE CULVERTS, 0.079" THICK	56	LF	
0036	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (15", 0.064")	6	EA	

County: Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0037	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (18", 0.064")	1 EA		
0038	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (24", 0.064")	2 EA		
0039	0636000000-E	310	*** CS PIPE ELBOWS, ***** THICK (48", 0.109")	2 EA		
0040	0654000000-E	310	**** X **** CS PIPE ARCH CUL- VERTS, ***** THICK (73" X 55", 0.079")	72 LF		
0041	0995000000-E	340	PIPE REMOVAL	2,534 LF		
0042	1011000000-N	500	FINE GRADING	Lump Sum	L.S.	
0043	1099500000-E	505	SHALLOW UNDERCUT	2,900 CY		
0044	1099700000-E	505	CLASS IV SUBGRADE STABILIZA- TION	6,950 TON		
0045	1121000000-E	520	AGGREGATE BASE COURSE	31,600 TON		
0046	1220000000-E	545	INCIDENTAL STONE BASE	2,000 TON		
0047	1275000000-E	600	PRIME COAT	420 GAL		
0048	1297000000-E	607	MILLING ASPHALT PAVEMENT, **** DEPTH (1-1/2")	8,510 SY		
0049	1330000000-E	607	INCIDENTAL MILLING	1,200 SY		
0050	1489000000-E	610	ASPHALT CONC BASE COURSE, TYPE B25.0B	8,890 TON		
0051	1498000000-E	610	ASPHALT CONC INTERMEDIATE COURSE, TYPE 119.0B	17,870 TON		
0052	1519000000-E	610	ASPHALT CONC SURFACE COURSE, TYPE S9.5B	14,860 TON		
0053	1575000000-E	620	ASPHALT BINDER FOR PLANT MIX	2,145 TON		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0054	1693000000-E	654	ASPHALT PLANT MIX, PAVEMENT REPAIR	2,624 TON		
0055	2000000000-N	806	RIGHT OF WAY MARKERS	123 EA		
0056	2022000000-E	815	SUBDRAIN EXCAVATION	230 CY		
0057	2033000000-E	815	SUBDRAIN FINE AGGREGATE	170 CY		
0058	2044000000-E	815	6" PERFORATED SUBDRAIN PIPE	1,000 LF		
0059	2070000000-N	815	SUBDRAIN PIPE OUTLET	3 EA		
0060	2077000000-E	815	6" OUTLET PIPE	18 LF		
0061	2209000000-E	838	ENDWALLS	18 CY		
0062	2253000000-E	840	PIPE COLLARS	9,839 CY		
0063	2286000000-N	840	MASONRY DRAINAGE STRUCTURES	152 EA		
0064	2308000000-E	840	MASONRY DRAINAGE STRUCTURES	71.6 LF		
0065	2364000000-N	840	FRAME WITH TWO GRATES, STD 840.16	12 EA		
0066	2366000000-N	840	FRAME WITH TWO GRATES, STD 840.24	7 EA		
0067	2367000000-N	840	FRAME WITH TWO GRATES, STD 840.29	10 EA		
0068	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (E)	12 EA		
0069	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (F)	54 EA		
0070	2374000000-N	840	FRAME WITH GRATE & HOOD, STD 840.03, TYPE ** (G)	53 EA		
0071	2396000000-N	840	FRAME WITH COVER, STD 840.54	5 EA		

County : Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0072	2451000000-N	852	CONCRETE TRANSITIONAL SECTION FOR DROP INLET	16 EA		
0073	2538000000-E	846	***.*** CONCRETE CURB & GUTTER (2'-9")	6,520 LF		
0074	2542000000-E	846	1'-6" CONCRETE CURB & GUTTER	8,270 LF		
0075	2549000000-E	846	2'-6" CONCRETE CURB & GUTTER	25,180 LF		
0076	2591000000-E	848	4" CONCRETE SIDEWALK	12,680 SY		
0077	2605000000-N	848	CONCRETE CURB RAMP	51 EA		
0078	2612000000-E	848	6" CONCRETE DRIVEWAY	1,310 SY		
0079	2619000000-E	850	4" CONCRETE PAVED DITCH	160 SY		
0080	2647000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (SURFACE MOUNTED)	1,820 SY		
0081	2655000000-E	852	5" MONOLITHIC CONCRETE ISLANDS (KEYED IN)	3,110 SY		
0082	2738000000-E	SP	GENERIC PAVING ITEM 6" CONCRETE PAVED DITCH	540 SY		
0083	2800000000-N	858	ADJUSTMENT OF CATCH BASINS	2 EA		
0084	2860000000-N	859	CONVERT EXISTING CATCH BASIN TO JUNCTION BOX	1 EA		
0085	3030000000-E	862	STEEL BM GUARDRAIL	2,875 LF		
0086	3045000000-E	862	STEEL BM GUARDRAIL, SHOP CURVED	125 LF		
0087	3150000000-N	862	ADDITIONAL GUARDRAIL POSTS	20 EA		
0088	3210000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE CAT-1	6 EA		
0089	3215000000-N	862	GUARDRAIL ANCHOR UNITS, TYPE III	4 EA		



Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0090	3270000000-N	SP	GUARDRAIL ANCHOR UNITS, TYPE 350	8 EA		
0091	3360000000-E	863	REMOVE EXISTING GUARDRAIL	425 LF		
0092	3380000000-E	862	TEMPORARY STEEL BM GUARDRAIL	225 LF		
0093	3387000000-N	862	TEMPORARY GUARDRAIL ANCHOR UNITS, TYPE ***** (CAT-1)	1 EA		
0094	3389100000-N	SP	TEMPORARY GUARDRAIL ANCHOR UNITS, TYPE 350	2 EA		
0095	3575000000-E	SP	GENERIC FENCING ITEM DECORATIVE FENCE	730 LF		
0096	3628000000-E	876	RIP RAP, CLASS I	430 TON		
0097	3649000000-E	876	RIP RAP, CLASS B	710 TON		
0098	3656000000-E	876	GEOTEXTILE FOR DRAINAGE	6,260 SY		
0099	4072000000-E	903	SUPPORTS, 3-LB STEEL U-CHANNEL	1,563 LF		
0100	4102000000-N	904	SIGN ERECTION, TYPE E	113 EA		
0101	4108000000-N	904	SIGN ERECTION, TYPE F	1 EA		
0102	4155000000-N	907	DISPOSAL OF SIGN SYSTEM, U-CHANNEL	42 EA		
0103	4158000000-N	907	DISPOSAL OF SIGN SYSTEM, WOOD	1 EA		
0104	4400000000-E	1110	WORK ZONE SIGNS (STATIONARY)	392 SF		
0105	4405000000-E	1110	WORK ZONE SIGNS (PORTABLE)	197 SF		
0106	4410000000-E	1110	WORK ZONE SIGNS (BARRICADE MOUNTED)	130 SF		
0107	4415000000-N	1115	FLASHING ARROW BOARD	2 EA		
0108	4420000000-N	1120	PORTABLE CHANGEABLE MESSAGE SIGN	2 EA		

County: Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0109	4430000000-N	1130	DRUMS	485	EA	
0110	4435000000-N	1135	CONES	150	EA	
0111	4445000000-E	1145	BARRICADES (TYPE III)	324	LF	
0112	4450000000-N	1150	FLAGGER	1,520	HR	
0113	4465000000-N	1160	TEMPORARY CRASH CUSHIONS	2	EA	
0114	4470000000-N	1160	RESET TEMPORARY CRASH CUSHION	2	EA	
0115	4480000000-N	1165	TMA	2	EA	
0116	4485000000-E	1170	PORTABLE CONCRETE BARRIER	2,890	LF	
0117	4500000000-E	1170	RESET PORTABLE CONCRETE BARRIER	1,672	LF	
0118	4510000000-N	SP	LAW ENFORCEMENT	160	HR	
0119	4516000000-N	1180	SKINNY DRUM	100	EA	
0120	4650000000-N	1251	TEMPORARY RAISED PAVEMENT MARKERS	745	EA	
0121	4685000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)	7,962	LF	
0122	4686000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (4", 120 MILS)	16,761	LF	
0123	4695000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)	3,123	LF	
0124	4697000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (8", 120 MILS)	1,362	LF	
0125	4700000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 90 MILS)	333	LF	
0126	4702000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (12", 120 MILS)	1,410	LF	

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0127	4710000000-E	1205	THERMOPLASTIC PAVEMENT MARKING LINES (24", 120 MILS)	451	LF	
0128	4721000000-E	1205	THERMOPLASTIC PAVEMENT MARKING CHARACTER (120 MILS)	16	EA	
0129	4725000000-E	1205	THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)	116	EA	
0130	4770000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (4") (III)	1,938	LF	
0131	4785000000-E	1205	COLD APPLIED PLASTIC PAVEMENT MARKING LINES, TYPE ** (12") (III)	355	LF	
0132	4810000000-E	1205	PAINT PAVEMENT MARKING LINES (4")	90,302	LF	
0133	4820000000-E	1205	PAINT PAVEMENT MARKING LINES (8")	1,527	LF	
0134	4835000000-E	1205	PAINT PAVEMENT MARKING LINES (24")	415	LF	
0135	4840000000-N	1205	PAINT PAVEMENT MARKING CHARACTER	12	EA	
0136	4845000000-N	1205	PAINT PAVEMENT MARKING SYMBOL	177	EA	
0137	4900000000-N	1251	PERMANENT RAISED PAVEMENT MARKERS	314	EA	
0138	5325800000-E	1510	8" WATER LINE	560	LF	
0139	5326200000-E	1510	12" WATER LINE	40	LF	
0140	5326600000-E	1510	16" WATER LINE	4,238	LF	
0141	5546000000-E	1515	8" VALVE	2	EA	
0142	5558000000-E	1515	12" VALVE	1	EA	
0143	5558600000-E	1515	16" VALVE	4	EA	
0144	5648000000-N	1515	RELOCATE WATER METER	17	EA	

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0145	5649000000-N	1515	RECONNECT WATER METER	1 EA		
0146	5656310000-E	1515	RELOCATE 3" RPZ BACKFLOW PRE-VENTION ASSEMBLY	1 EA		
0147	5672000000-N	1515	RELOCATE FIRE HYDRANT	17 EA		
0148	5691000000-E	1520	*** SANITARY GRAVITY SEWER (48")	94 LF		
0149	5691700000-E	1520	18" SANITARY GRAVITY SEWER	170 LF		
0150	5774000000-E	1525	*** DIA UTILITY MANHOLE (7')	2 EA		
0151	5776000000-E	1525	5' DIA UTILITY MANHOLE	2 EA		
0152	5780000000-E	1525	UTILITY MANHOLE WALL, *** DIA (7')	24 LF		
0153	5782000000-E	1525	UTILITY MANHOLE WALL, 5' DIA	13 LF		
0154	5798000000-E	1530	ABANDON *** UTILITY PIPE (48")	94 LF		
0155	5804000000-E	1530	ABANDON 12" UTILITY PIPE	105 LF		
0156	5810000000-E	1530	ABANDON 16" UTILITY PIPE	4,160 LF		
0157	5811000000-E	1530	ABANDON 18" UTILITY PIPE	170 LF		
0158	5814000000-E	1530	ABANDON 30" UTILITY PIPE	60 LF		
0159	5828000000-N	1530	REMOVE UTILITY MANHOLE	3 EA		
0160	5836200000-E	1540	30" ENCASEMENT PIPE	280 LF		
0161	5871900000-E	1550	TRENCHLESS INSTALLATION OF 16" IN SOIL	358 LF		
0162	5871910000-E	1550	TRENCHLESS INSTALLATION OF 16" NOT IN SOIL	358 LF		
0163	5888000000-E	SP	GENERIC UTILITY ITEM 90" TUNNEL LINER PLATE	68 LF		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0164	5906000000-E	SP	GENERIC UTILITY ITEM DUCTILE IRON WATER PIPE FITTINGS	9,265 LB		
0165	6000000000-E	1605	TEMPORARY SILT FENCE	32,150 LF		
0166	6006000000-E	1610	STONE FOR EROSION CONTROL, CLASS A	1,500 TON		
0167	6009000000-E	1610	STONE FOR EROSION CONTROL, CLASS B	5,025 TON		
0168	6012000000-E	1610	SEDIMENT CONTROL STONE	3,575 TON		
0169	6015000000-E	1615	TEMPORARY MULCHING	98 ACR		
0170	6018000000-E	1620	SEED FOR TEMPORARY SEEDING	4,800 LB		
0171	6021000000-E	1620	FERTILIZER FOR TEMPORARY SEED- ING	25.5 TON		
0172	6024000000-E	1622	TEMPORARY SLOPE DRAINS	3,750 LF		
0173	6029000000-E	SP	SAFETY FENCE	1,800 LF		
0174	6030000000-E	1630	SILT EXCAVATION	18,750 CY		
0175	6036000000-E	1631	MATTING FOR EROSION CONTROL	104,000 SY		
0176	6037000000-E	SP	COIR FIBER MAT	200 SY		
0177	6038000000-E	SP	PERMANENT SOIL REINFORCEMENT MAT	1,050 SY		
0178	6042000000-E	1632	1/4" HARDWARE CLOTH	8,400 LF		
0179	6071012000-E	SP	COIR FIBER WATTLE	2,900 LF		
0180	6071020000-E	SP	POLYACRYLAMIDE (PAM)	1,960 LB		
0181	6071030000-E	1640	COIR FIBER BAFFLE	4,000 LF		
0182	6071050000-E	SP	*** SKIMMER (1-1/2")	6 EA		

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0183	6071050000-E	SP	*** SKIMMER (2")	5 EA		
0184	6071050000-E	SP	*** SKIMMER (2-1/2")	3 EA		
0185	6084000000-E	1660	SEEDING & MULCHING	55 ACR		
0186	6087000000-E	1660	MOWING	40 ACR		
0187	6090000000-E	1661	SEED FOR REPAIR SEEDING	1,000 LB		
0188	6093000000-E	1661	FERTILIZER FOR REPAIR SEEDING	3 TON		
0189	6096000000-E	1662	SEED FOR SUPPLEMENTAL SEEDING	1,800 LB		
0190	6108000000-E	1665	FERTILIZER TOPDRESSING	53 TON		
0191	6111000000-E	SP	IMPERVIOUS DIKE	455 LF		
0192	6114500000-N	1667	SPECIALIZED HAND MOWING	40 MHR		
0193	6117000000-N	SP	RESPONSE FOR EROSION CONTROL	200 EA		
0194	6120000000-E	SP	CULVERT DIVERSION CHANNEL	276 CY		
0195	6123000000-E	1670	REFORESTATION	6 ACR		
0196	6132000000-N	SP	GENERIC EROSION CONTROL ITEM CONCRETE WASHOUT STRUCTURE	22 EA		
0197	7048500000-E	1705	PEDESTRIAN SIGNAL HEAD (16", 1 SECTION W/COUNTDOWN)	37 EA		
0198	7060000000-E	1705	SIGNAL CABLE	13,830 LF		
0199	7120000000-E	1705	VEHICLE SIGNAL HEAD (12", 3 SECTION)	38 EA		
0200	7132000000-E	1705	VEHICLE SIGNAL HEAD (12", 4 SECTION)	4 EA		
0201	7180000000-N	1706	BACKPLATE	32 EA		

County: Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0202	7252000000-E	1710	MESSENGER CABLE (1/4")	13,425	LF	
0203	7264000000-E	1710	MESSENGER CABLE (3/8")	1,070	LF	
0204	7279000000-E	1715	TRACER WIRE	810	LF	
0205	7300000000-E	1715	UNPAVED TRENCHING (*****) (1, 2")	3,340	LF	
0206	7300000000-E	1715	UNPAVED TRENCHING (*****) (2, 2")	85	LF	
0207	7300000000-E	1715	UNPAVED TRENCHING (*****) (3, 2")	30	LF	
0208	7300000000-E	1715	UNPAVED TRENCHING (*****) (4, 2")	85	LF	
0209	7301000000-E	1715	DIRECTIONAL DRILL (*****) (1, 2")	400	LF	
0210	7301000000-E	1715	DIRECTIONAL DRILL (*****) (2, 2")	525	LF	
0211	7301000000-E	1715	DIRECTIONAL DRILL (*****) (3, 2")	125	LF	
0212	7324000000-N	1716	JUNCTION BOX (STANDARD SIZE)	25	EA	
0213	7348000000-N	1716	JUNCTION BOX (OVER-SIZED, HEAVY DUTY)	26	EA	
0214	7360000000-N	1720	WOOD POLE	4	EA	
0215	7372000000-N	1721	GUY ASSEMBLY	21	EA	
0216	7408000000-E	1722	1" RISER WITH WEATHERHEAD	1	EA	
0217	7420000000-E	1722	2" RISER WITH WEATHERHEAD	3	EA	
0218	7432000000-E	1722	2" RISER WITH HEAT SHRINK TUBING	5	EA	
0219	7444000000-E	1725	INDUCTIVE LOOP SAWCUT	5,220	LF	

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0220	7456000000-E	1726	LEAD-IN CABLE (***** (14-2)	20,080	LF	
0221	7481200000-N	SP	LUMINAIRE ARM FOR VIDEO SYSTEM	4	EA	
0222	7481280000-N	SP	RELOCATE CAMERA SENSOR UNIT	8	EA	
0223	7516000000-E	1730	COMMUNICATIONS CABLE (**FIBER) (96)	17,500	LF	
0224	7528000000-E	1730	DROP CABLE	1,870	LF	
0225	7540000000-N	1731	SPLICE ENCLOSURE	5	EA	
0226	7552000000-N	1731	INTERCONNECT CENTER	4	EA	
0227	7564000000-N	1732	FIBER-OPTIC TRANSCEIVER, DROP & REPEAT	3	EA	
0228	7566000000-N	1733	DELINEATOR MARKER	7	EA	
0229	7576000000-N	SP	METAL STRAIN SIGNAL POLE	4	EA	
0230	7588000000-N	SP	METAL POLE WITH SINGLE MAST ARM	8	EA	
0231	7613000000-N	SP	SOIL TEST	12	EA	
0232	7614100000-E	SP	DRILLED PIER FOUNDATION	96	CY	
0233	7631000000-N	SP	MAST ARM WITH METAL POLE DE- SIGN	8	EA	
0234	7636000000-N	1745	SIGN FOR SIGNALS	13	EA	
0235	7642100000-N	1743	TYPE I POST WITH FOUNDATION	23	EA	
0236	7642200000-N	1743	TYPE II PEDESTAL WITH FOUND- ATION	12	EA	
0237	7684000000-N	1750	SIGNAL CABINET FOUNDATION	3	EA	
0238	7756000000-N	1751	CONTROLLER WITH CABINET (TYPE 2070L, BASE MOUNTED)	3	EA	



Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0239	7780000000-N	1751	DETECTOR CARD (TYPE 2070L)	28 EA		
0240	7901000000-N	1753	CABINET BASE EXTENDER	3 EA		
0241	7960000000-N	SP	METAL POLE FOUNDATION REMOVAL	4 EA		
0242	7972000000-N	SP	METAL POLE REMOVAL	4 EA		
0243	7980000000-N	SP	GENERIC SIGNAL ITEM ETHERNET EDGE SWITCH	3 EA		

**CULVERT ITEMS**

0244	8126000000-N	414	CULVERT EXCAVATION, STA ***** (124+11.00 -L-)	Lump Sum	L.S.	
0245	8133000000-E	414	FOUNDATION CONDITIONING MATERIAL, BOX CULVERT	359 TON		
0246	8196000000-E	420	CLASS A CONCRETE (CULVERT)	544.3 CY		
0247	8245000000-E	425	REINFORCING STEEL (CULVERT)	94,653 LB		

**WALL ITEMS**

0248	8801000000-E	SP	MSE RETAINING WALL NO **** (1)	352.9 SF		
0249	8802014000-E	SP	SOLDIER PILE RETAINING WALLS	9,043.1 SF		

**STRUCTURE ITEMS**

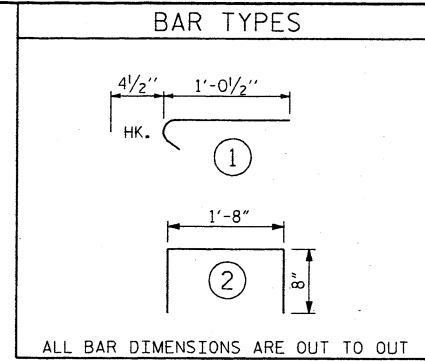
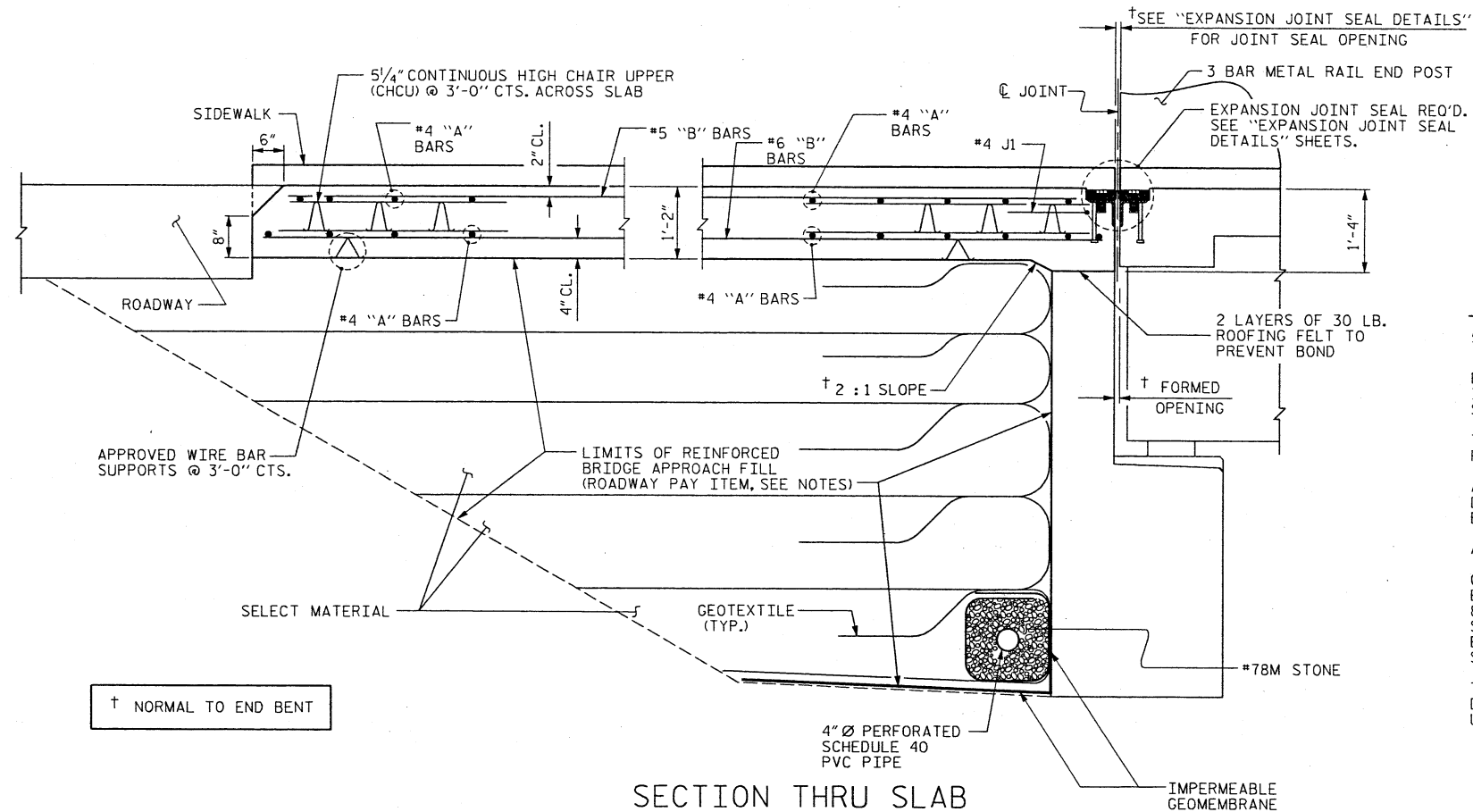
0250	8017000000-N	SP	CONSTRUCTION, MAINTENANCE, & REMOVAL OF TEMP ACCESS AT STA ***** (147+80.00 -L-)	Lump Sum	L.S.	
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County: Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0251	8035000000-N	402	REMOVAL OF EXISTING STRUCTURE AT STATION ***** (147+80.00 -L-)	Lump Sum	L.S.	
0252	8105560000-E	411	4'-0" DIA DRILLED PIERS IN SOIL	384.7 LF		
0253	8105660000-E	411	4'-0" DIA DRILLED PIERS NOT IN SOIL	124 LF		
0254	8111600000-E	411	PERMANENT STEEL CASING FOR 4'-0" DIA DRILLED PIER	248.7 LF		
0255	8112730000-N	450	PDA TESTING	1 EA		
0256	8113000000-N	411	SID INSPECTIONS	2 EA		
0257	8114000000-N	411	SPT TESTING	12 EA		
0258	8115000000-N	411	CSL TESTING	4 EA		
0259	8147000000-E	420	REINFORCED CONCRETE DECK SLAB	25,401 SF		
0260	8161000000-E	420	GROOVING BRIDGE FLOORS	25,491 SF		
0261	8182000000-E	420	CLASS A CONCRETE (BRIDGE)	387.5 CY		
0262	8210000000-N	422	BRIDGE APPROACH SLABS, STATION ***** (147+80.00 -L-)	Lump Sum	L.S.	
0263	8217000000-E	425	REINFORCING STEEL (BRIDGE)	146,770 LB		
0264	8238000000-E	425	SPIRAL COLUMN REINFORCING STEEL (BRIDGE)	16,070 LB		
0265	8265000000-E	430	54" PRESTRESSED CONCRETE GIR- DERS	2,882.9 LF		
0266	8364000000-E	450	HP12X53 STEEL PILES	1,160 LF		
0267	8482000000-E	460	THREE BAR METAL RAIL	485.5 LF		
0268	8608000000-E	876	RIP RAP CLASS II (2'-0" THICK)	710 TON		

County : Cabarrus

Line #	Item Number	Sec #	Description	Quantity	Unit Cost	Amount
0269	8622000000-E	876	GEOTEXTILE FOR DRAINAGE	789 SY		
0270	8657000000-N	430	ELASTOMERIC BEARINGS	Lump Sum	L.S.	
0271	8706000000-N	SP	EXPANSION JOINT SEALS	Lump Sum	L.S.	
0272	8860000000-N	SP	GENERIC STRUCTURE ITEM ASBESTOS ASSESSMENT	Lump Sum	L.S.	
1430/Feb09/Q1163488.539/D1267626676000/E272			Total Amount Of Bid For Entire Project :			



BILL OF MATERIAL					
STAGE I					
FOR ONE APPROACH SLAB (2 REQ'D)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*A1	50	#4	STR	23'-1"	770
A2	52	#4	STR	21'-11"	761
*B1	81	#5	STR	23'-10"	2014
B2	81	#6	STR	24'-8"	3001
*B3	10	#4	STR	24'-8"	165
*G1	26	#4	STR	5'-1"	88
*J1	34	#4	①	1'-5"	32
*U1	10	#4	②	3'-0"	20
REINFORCING STEEL					LBS. 3762
* EPOXY COATED REINFORCING STEEL					LBS. 3089
CLASS AA CONCRETE					
POUR #1 (SLAB)					C.Y. 44.5
POUR #2 (SIDEWALK)					C.Y. 3.2
TOTAL					C.Y. 47.7
STAGE II					
FOR ONE APPROACH SLAB (2 REQ'D)					
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT
*A1	75	#4	STR	22'-1"	1105
A2	78	#4	STR	21'-11"	1140
*B1	122	#5	STR	23'-10"	3033
B2	122	#6	STR	24'-8"	4520
*B3	10	#4	STR	24'-8"	165
*G1	26	#4	STR	5'-1"	88
*J1	54	#4	1	1'-5"	51
*U1	10	#4	2	3'-0"	20
REINFORCING STEEL					LBS. 5660
* EPOXY COATED REINFORCING STEEL					LBS. 4462
CLASS AA CONCRETE					
POUR #1 (SLAB)					C.Y. 66.4
POUR #2 (SIDEWALK)					C.Y. 3.2
TOTAL					C.Y. 69.6

**NOTES**

APPROACH SLAB SHALL NOT BE CONSTRUCTED PRIOR TO COMPLETION OF THE BRIDGE DECK.

FOR REINFORCED BRIDGE APPROACH FILL INCLUDING GEOTEXTILE, IMPERMEABLE GEOMEMBRANE, 4" Ø DRAINAGE PIPE, #78M STONE, AND SELECT MATERIAL, SEE ROADWAY PLANS.

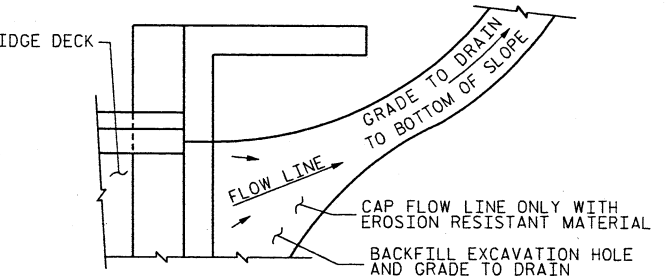
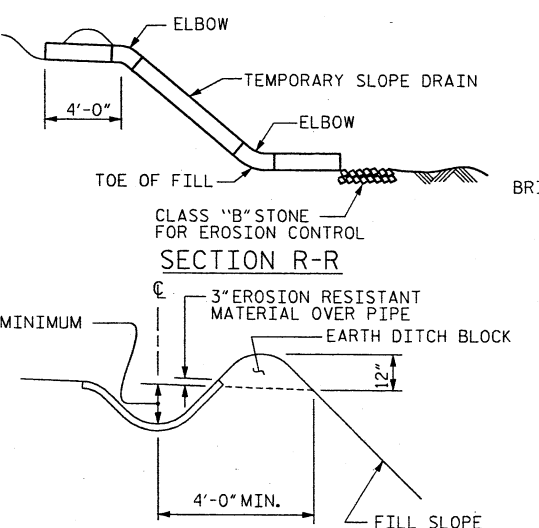
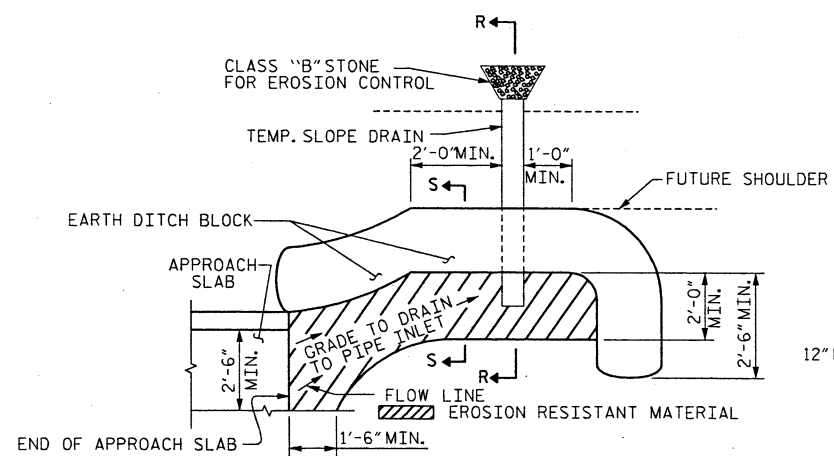
TEMPORARY DRAINAGE AND TEMPORARY BERM AND SLOPE DRAINS WILL BE PAID FOR UNDER THE LUMP SUM PRICE FOR BRIDGE APPROACH SLAB.

AREA BETWEEN THE WINGWALL AND APPROACH SLAB SHALL BE GRADED TO DRAIN THE WATER AWAY FROM THE FILL FACE OF THE BRIDGE AND SHALL BE PAVED. SEE ROADWAY PLANS.

ALL REINFORCING STEEL IN THE SIDEWALK SHALL BE EPOXY COATED.

GROOVED CONTRACTION JOINTS, 1/2" IN DEPTH, SHALL BE TOOLED IN ALL EXPOSED FACES OF THE SIDEWALK IN ACCORDANCE WITH ARTICLE 825-10(B) OF THE STANDARD SPECIFICATIONS. THE CONTRACTION JOINTS SHALL BE LOCATED AT A SPACING OF 8 FEET TO 10 FEET BETWEEN EXPANSION JOINTS. NO CONTRACTION JOINT WILL BE REQUIRED FOR SEGMENTS LESS THAN 10 FEET IN LENGTH.

THE COST OF THE SIDEWALK, TEMPORARY DRAINAGE AND TEMPORARY BERM AND SLOPE DRAINS WILL BE PAID FOR UNDER THE LUMP SUM PRICE FOR BRIDGE APPROACH SLAB.



**NOTE:** IMMEDIATELY AFTER THE CONSTRUCTION OF THE APPROACH SLAB, THE CONTRACTOR SHALL PROVIDE TEMPORARY BERM AND SLOPE DRAIN. CONTRACTOR SHALL GRADE TO PIPE INLET AND PROVIDE EROSION RESISTANT MATERIAL AS SHOWN. THE EROSION RESISTANT MATERIAL SHALL BE EITHER 1) ASPHALT PLANT MIX, TYPE 1 OR TYPE 2, MIN. 2" DEPTH, 2) EROSION CONTROL MAT, OR 3) CONCRETE, AS DIRECTED BY THE ENGINEER. THE SLOPE DRAIN SHALL CONSIST OF A NON-PERFORATED TEMPORARY DRAINAGE PIPE, 12 INCHES IN DIAMETER.

**NOTE:** IF THE APPROACH SLAB IS NOT CONSTRUCTED IMMEDIATELY AFTER THE BACKFILLING OF THE END BENT EXCAVATION, GRADE TO DRAIN TO THE BOTTOM OF THE SLOPE AND PROVIDE EROSION RESISTANT MATERIAL, SUCH AS FIBERGLASS ROVING, OR AS DIRECTED BY THE ENGINEER TO PREVENT SOIL EROSION AND TO PROTECT THE AREA ADJACENT TO THE STRUCTURE. THE CONTRACTOR WILL BE REQUIRED TO REMOVE THESE MATERIALS PRIOR TO CONSTRUCTION OF THE APPROACH SLAB.

SPlice LENGTHS		
BAR SIZE	EPOXY COATED	UNCOATED
#4	2'-0"	1'-9"
#5	2'-6"	2'-2"
#6	3'-10"	2'-7"

PROJECT NO. U-4910A  
CABARRUS COUNTY  
 STATION: 147+80.00 -L-

SHEET 4 OF 4

**AECOM**  
 AECOM TECHNICAL SERVICES, INC.  
 701 CORPORATE CENTER DRIVE, SUITE 475  
 RALEIGH, NC 27607  
 (919) 854-4200  
 AECOM License No. F-0342

11/30/2016

**PROFESSIONAL ENGINEER**  
 JOHN B. MORRISON  
 SEAL 030474  
 A370E14202P448

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
BRIDGE APPROACH SLAB DETAILS					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

SHEET NO. **S-55**  
 TOTAL SHEETS **55**

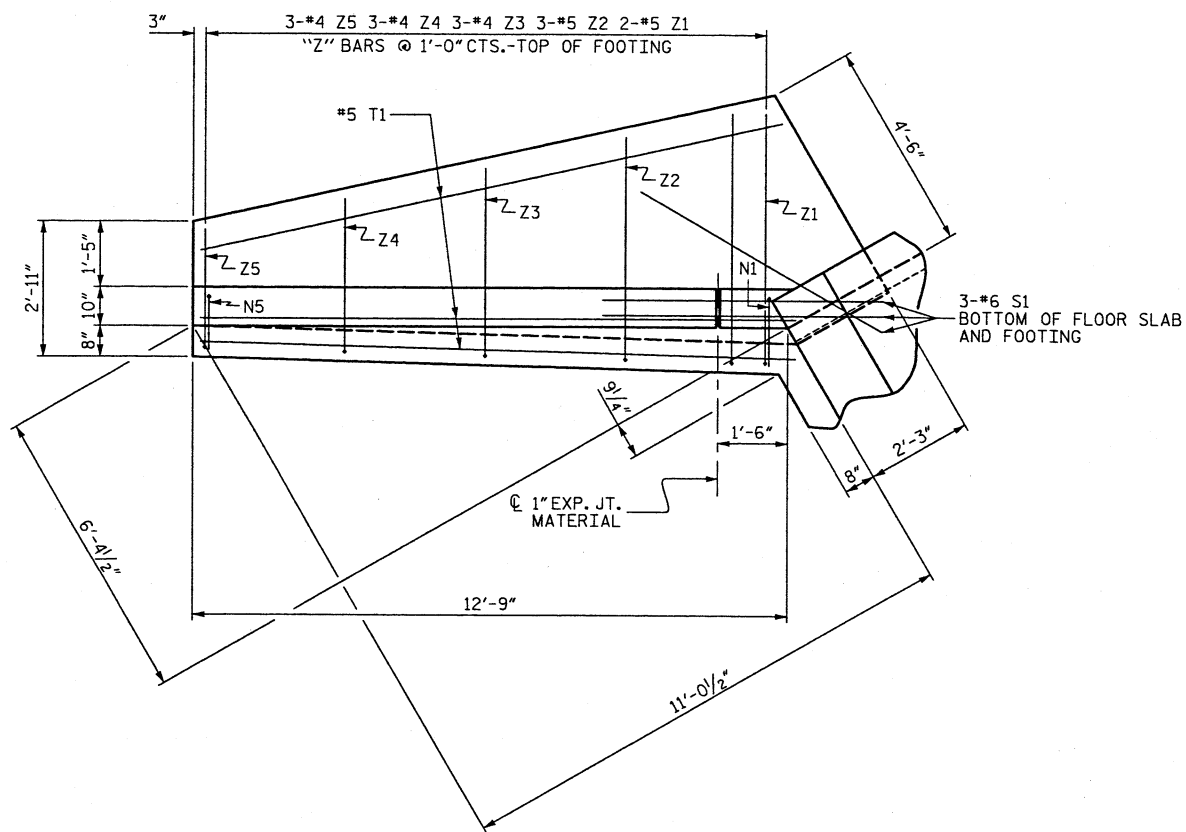
DRAWN BY : K.H. COMPTON DATE : 5/2016  
 CHECKED BY : G.L. HAMILTON DATE : 7/2016  
 DESIGNED BY : K.H. COMPTON DATE : 5/2016

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

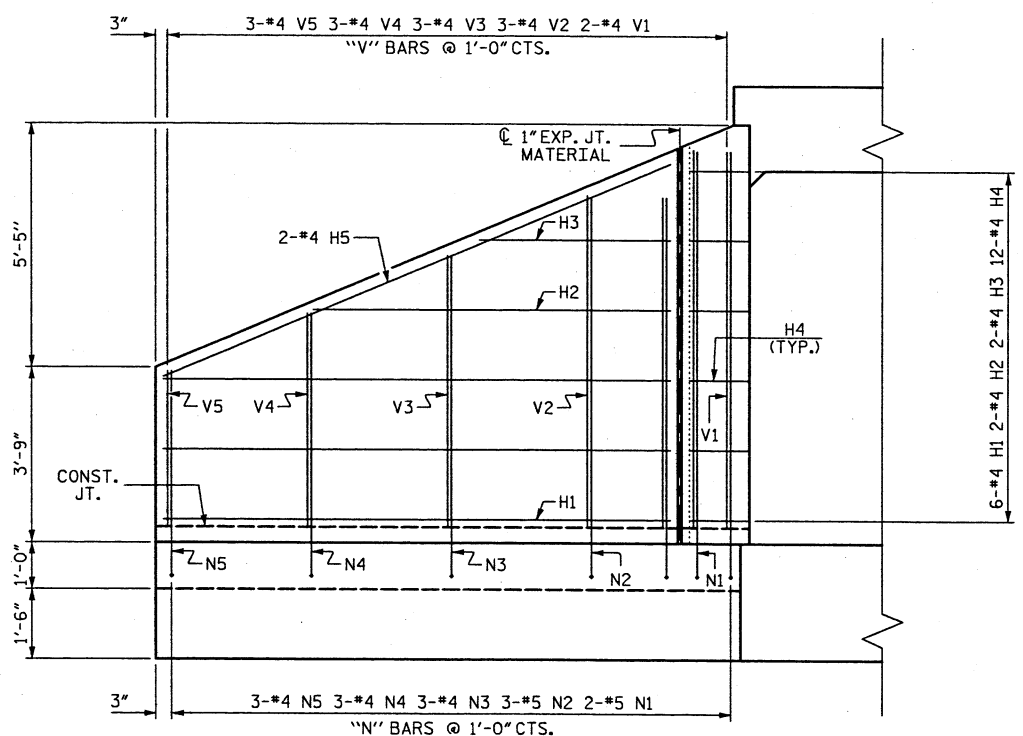
**TEMPORARY BERM AND SLOPE DRAIN DETAILS**  
 (TO BE USED WHEN SHOULDER BERM GUTTER IS REQUIRED)

DATE: 11/30/2016 TIME: 10:53:39 AM

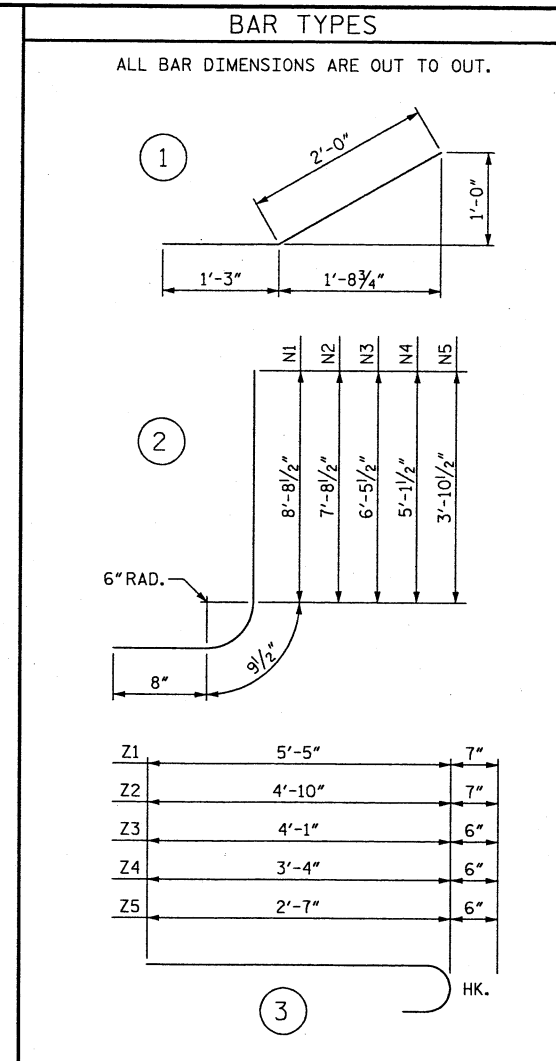
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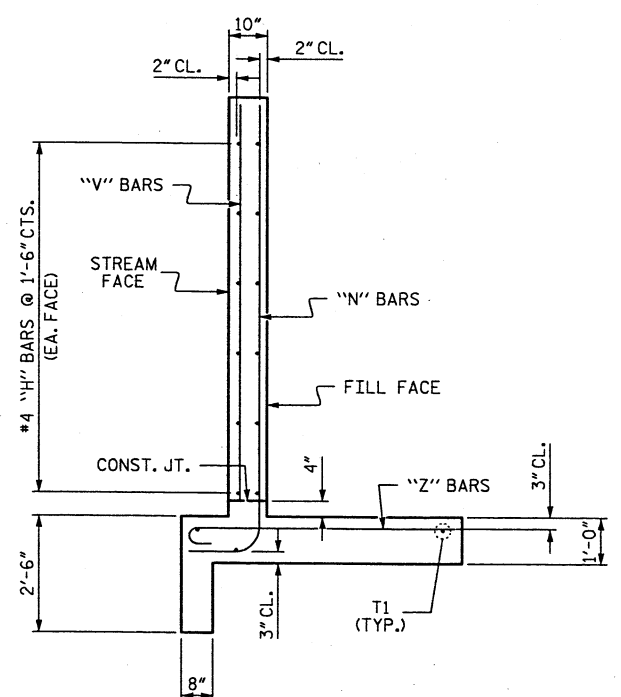
PLAN W1



ELEVATION W1



BILL OF MATERIAL													
STAGE I						STAGE II & III							
BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT	BAR	NO.	SIZE	TYPE	LENGTH	WEIGHT		
H1	12	#4	STR	10'-10"	87	H1	12	#4	STR	10'-10"	87		
H2	4	#4	STR	7'-8"	21	H2	4	#4	STR	7'-8"	21		
H3	4	#4	STR	4'-1"	11	H3	4	#4	STR	4'-1"	11		
H4	24	#4	1	3'-3"	52	H4	24	#4	1	3'-3"	52		
H5	4	#4	STR	11'-9"	32	H5	4	#4	STR	11'-9"	32		
N1	4	#5	2	10'-2"	43	N1	4	#5	2	10'-2"	43		
N2	6	#5	2	9'-2"	58	N2	6	#5	2	9'-2"	58		
N3	6	#4	2	7'-11"	32	N3	6	#4	2	7'-11"	32		
N4	6	#4	2	6'-7"	27	N4	6	#4	2	6'-7"	27		
N5	6	#4	2	5'-4"	22	N5	6	#4	2	5'-4"	22		
S1	6	#6	STR	6'-0"	54	S1	6	#6	STR	6'-0"	54		
T1	6	#5	STR	12'-9"	80	T1	6	#5	STR	12'-9"	80		
V1	4	#4	STR	8'-1"	22	V1	4	#4	STR	8'-1"	22		
V2	6	#4	STR	7'-1"	29	V2	6	#4	STR	7'-1"	29		
V3	6	#4	STR	5'-10"	24	V3	6	#4	STR	5'-10"	24		
V4	6	#4	STR	4'-7"	19	V4	6	#4	STR	4'-7"	19		
V5	6	#4	STR	3'-4"	14	V5	6	#4	STR	3'-4"	14		
Z1	4	#5	3	6'-0"	25	Z1	4	#5	3	6'-0"	25		
Z2	6	#5	3	5'-5"	34	Z2	6	#5	3	5'-5"	34		
Z3	6	#4	3	4'-7"	19	Z3	6	#4	3	4'-7"	19		
Z4	6	#4	3	3'-10"	16	Z4	6	#4	3	3'-10"	16		
Z5	6	#4	3	3'-1"	13	Z5	6	#4	3	3'-1"	13		
REINFORCING STEEL FOR 2 WINGS						734 LBS	REINFORCING STEEL FOR 2 WINGS						734 LBS
CLASS A CONCRETE							CLASS A CONCRETE						
2 WINGS						10.7 CY	2 WINGS						10.7 CY
1 HEADWALLS						1.3 CY	1 HEADWALLS						1.3 CY
1 END CURTAIN WALLS						1.9 CY	1 END CURTAIN WALLS						1.9 CY
TOTAL						13.9 CY	TOTAL						13.9 CY



TYPICAL WING SECTION

NOTE:  
A 3 FOOT STRIP OF FILTER FABRIC SHALL BE ATTACHED TO THE FILL FACE OF THE WING COVERING THE ENTIRE LENGTH OF THE EXPANSION JOINT.

PROJECT NO. U-4910A  
CABARRUS COUNTY  
STATION: 124+11.00 -L-

**AECOM**  
AECOM TECHNICAL SERVICES, INC.  
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(919) 854-4200  
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AECOM License No. F-0342

11/30/2016  
NORTH CAROLINA PROFESSIONAL SEAL  
030474  
ENGINEER  
John C. Morrison  
A370E14202F44B

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

STANDARD WINGS  
FOR  
CONCRETE BOX CULVERT  
H = 8'-0" SLOPE = 2:1  
90° SKEW

REVISIONS				SHEET NO.		
NO.	BY:	DATE:	NO.	BY:	DATE:	C-07 TOTAL SHEETS 7
1			3			
2			4			

ASSEMBLED BY: NKB DATE: 07/16  
CHECKED BY: JCM DATE: 07/16  
DRAWN BY: CCJ 10/99  
CHECKED BY: RWW 03/00

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