

**CSX TRANSPORTATION, INC.  
FORCE ACCOUNT ESTIMATE**

Page 1

**ACCT. CODE : 709 - SC0310**

<b>ESTIMATE SUBJECT TO REVISION AFTER:</b> 11/13/2016		<b>DOT NO.:</b> 244291S
<b>CITY:</b> Spartanburg/Mayo (near)	<b>COUNTY:</b> Spartanburg	<b>STATE:</b> SC
<b>DESCRIPTION:</b> Estimate of construction engineering, inspection, flagging, and track construction services in support of proposed I-85 widening and CSXT bridge replacement/relocation (assume 36 months of coordination with 24 months of continuous daytime flagging and inspection) *Buy America Requirements Apply*		
<b>DIVISION:</b> Appalachian	<b>SUB-DIV:</b> Blue Ridge	<b>MILE POST:</b> Z 269.69-270.69
<b>AGENCY PROJECT NUMBER:</b> File No. 42.040692		

**PRELIMINARY ENGINEERING:**

212 Contracted & Administrative Engineering Services (CSXT In-House)	\$ -
212 Contracted & Administrative Engineering Services (CSXT Signal Assistant)	\$ -
212 Contracted & Administrative Engineering Services (Arcadis)	\$ -
<b>Subtotal</b>	<b>\$ -</b>

**CONSTRUCTION ENGINEERING/INSPECTION:**

212 Contracted & Administrative Engineering Services (CSXT In-House)	\$ 2,000
212 Contracted & Administrative Engineering Services (CSXT Signal Assistant)	\$ 10,543
212 Contracted & Administrative Engineering Services (Arcadis)	\$ 530,000
<b>Subtotal</b>	<b>\$ 542,543</b>

**FLAGGING SERVICE: (Contract Labor)**

070 Labor (Conductor-Flagman)		\$ -
050 Labor (Foreman/Inspector)	528 Days @ \$ 434.00	\$ 229,152
070 Additive (Transportation Department)		\$ -
050 Additive 163.09% (Engineering Department)		\$ 373,724
230 Per Diem (Engineering Department)	528 Days @ \$ 158.19	\$ 83,524
230 Expenses		\$ -
<b>Subtotal</b>		<b>\$ 686,400</b>

**SIGNAL & COMMUNICATIONS WORK:** (Details Attached) align="right">\$ 508,929

**TRACK WORK:** (Details Attached) align="right">\$ 1,612,260

**PROJECT SUBTOTAL** align="right">\$ 3,350,132

900 **CONTINGENCIES:** 10.00% align="right">\$ 335,013

**GRAND TOTAL \*\*\*\*\*** align="right">**\$ 3,685,146**

**DIVISION OF COST:**

Agency	<u>100.00%</u>	\$ 3,685,146
Railroad		\$ -
<b>TOTAL *****</b>		<b>\$ 3,685,146</b>

**NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces.**

This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for CSXT work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work

Office of Assistant Chief Engineer Public Projects--Jacksonville, Florida

<b>Estimated prepared by:</b> J. Schofield, ARCADIS	<b>Approved by:</b> DLS	<b>CSXT Public Project Group</b>
<b>DATE:</b> 5/17/2016	<b>REvised:</b>	<b>DATE:</b> 05/17/16

Project Summary Sheet

**CSX TRANSPORTATION, INC.  
FORCE ACCOUNT ESTIMATE**

Page 2 of 4

ACCT. CODE : 709 - SC0310  
Pub EB - SC EB3 (SC)

<b>ESTIMATE SUBJECT TO REVISION AFTER:</b>		<b>11/13/2016</b>	<b>DOT NO.: 244291S</b>
<b>CITY:</b> Spartanburg/Mayo (near)	<b>COUNTY:</b> Spartanburg	<b>STATE: SC</b>	
<b>DESCRIPTION:</b> Estimate of construction engineering, inspection, flagging, and track construction services in support of proposed I-85 widening and CSXT bridge replacement/relocation (assume 36 months of coordination with 24 months of continuous daytime flagging and inspection) <i>*Buy America Requirements Apply*</i>			
<b>DIVISION:</b> Appalachian	<b>SUB-DIV:</b> Blue Ridge	<b>MILEPOST:</b> Z 269.69-270.69	
<b>DRAWING NO.:</b> ____	<b>DRAWING DATE:</b> ____		
<b>AGENCY PROJECT NUMBER:</b> File No. 42.040692			

**PRELIMINARY ENGINEERING:**

212	Contracted & Administrative Engineering Services (CSXT In-House)	\$ -
212	Contracted & Administrative Engineering Services (CSXT Signal Assistant)	\$ -
212	Contracted & Administrative Engineering Services (Arcadis)	\$ -
	<b>Subtotal</b>	<b>\$ -</b>

**CONSTRUCTION ENGINEERING/INSPECTION:**

212	Contracted & Administrative Engineering Services (CSXT In-House)	\$ 2,000
212	Contracted & Administrative Engineering Services (CSXT Signal Assistant)	\$ 10,543
212	Contracted & Administrative Engineering Services (Arcadis)	\$ 530,000
	<b>Subtotal</b>	<b>\$ 542,543</b>

**FLAGGING SERVICE: (Contract Labor)**

70	Labor (Conductor-Flagman)		\$ -
50	Labor (Foreman/Inspector)	528 Days @ \$ 434.00	\$ 229,152
70	Additive (Transportation Department)		\$ -
50	Additive 163.09% (Engineering Department)		\$ 373,724
230	Expenses (Engineering Department)	528 Days @ \$ 158.19	\$ 83,524
230	Expenses (Transportation Department)		\$ -
	<b>Subtotal</b>		<b>\$ 686,400</b>

**COMMUNICATIONS WORK:**

Temporary (Details Attached)	\$ -
Permanent (Details Attached)	\$ -
<b>Subtotal</b>	<b>\$ -</b>

**TRACK: LABOR**

50	Traffic Control	0	MAN-HRS	\$ 28.00	\$ -
50	Remove Existing Crossing	0	MAN-HRS	\$ 28.00	\$ -
50	Renew Cross Ties	240	MAN-HRS	\$ 28.00	\$ 6,720
50	Renew Rail	0	MAN-HRS	\$ 28.00	\$ -
50	Install OTM	0	MAN-HRS	\$ 28.00	\$ -
50	Install Field Welds	936	MAN-HRS	\$ 28.00	\$ 26,208
50	Install Geo-Textile Fabric	0	MAN-HRS	\$ 28.00	\$ -
50	Install Sub-Drains	0	MAN-HRS	\$ 28.00	\$ -
50	Install Ballast (1 week)	420	MAN-HRS	\$ 28.00	\$ 11,760
50	Line and Surface (2 weeks)	560	MAN-HRS	\$ 28.00	\$ 15,680
50	Install Crossing Materials	0	MAN-HRS	\$ 28.00	\$ -
50	Install Bituminous Pavement	0	MAN-HRS	\$ 28.00	\$ -
50	Track Removal (3,611 TF) (3 weeks)	1260	MAN-HRS	\$ 28.00	\$ 35,280
50	Track Shift (1,205 TF) (1 week)	420	MAN-HRS	\$ 28.00	\$ 11,760

**CSX TRANSPORTATION, INC.  
FORCE ACCOUNT ESTIMATE**

Page 3 of 4

		ACCT. CODE : 709 - SC0310			
		Pub EB -	SC	EB3 (SC)	
50	Special Trackwork (3 No. 10 Turnouts)	(9 days)	<u>756</u>	MAN-HRS	\$ 28.00
50	Removal of Conway Black Timber Bridge	(3 weeks)	<u>1050</u>	MAN-HRS	\$ 28.00
50	Track Construction (3,630 TF)	(4 weeks)	<u>1680</u>	MAN-HRS	\$ 28.00
50	Clean-Up	(1 day)	<u>84</u>	MAN-HRS	\$ 28.00
50	Additive				\$ 338,196
230	Per Diem		<u>741</u>	MAN-DAY	\$ 90.00
<b>Subtotal</b>					<b>\$ 612,254</b>

<b>TRACK: MATERIAL</b>		<b>ALL STEEL OR CAST COMPONENTS MUST BE BUY AMERICA COMPLIANT</b>			
220	Cross Ties, Main Line		<u>0</u>	EA	\$ 44.00
220	Cross-tie - Borate		<u>2661</u>	EA	\$ 56.00
220	Crossties, 10' Length		<u>0</u>	EA	\$ 55.00
220	Tie plates		<u>5322</u>	EA	\$ 10.51
220	Rail, 136RE, New		<u>7416</u>	LF	\$ 24.30
220	Misc. OTM		<u>1</u>	LOT	\$ 20,000.00
210	Geo-Textile Fabric		<u>0</u>	RL	\$ 930.00
210	Sub-Drains		<u>0</u>	LF	\$ 6.00
220	Ballast - Car load		<u>4115</u>	NT	\$ 12.00
220	Ballast - Trucked in		<u>450</u>	NT	\$ 45.00
220	Field Welds		<u>117</u>	EA	\$ 100.00
220	Joint Bars		<u>0</u>	PR	\$ 225.00
220	Transition Rails 136(new)/141(worn)		<u>10</u>	EA	\$ 1,100.00
220	#10 Prefabricated Turnout		<u>3</u>	EA	\$ 52,500.00
210	Concrete Full Width		<u>0</u>	TF	\$ 250.00
210	Concrete/Rubber Xing (CSX)		<u>0</u>	TF	\$ 200.00
210	Rubber Crossing, Full Depth		<u>0</u>	TF	\$ 325.00
210	Timber/Asphalt Crossing (CSX Standard)		<u>0</u>	TF	\$ 42.00
210	Bituminous Material		<u>0</u>	NT	
210	Sales Tax on Material	7.00%			\$ 45,849
210	Material Handling	5.00%			\$ 32,749
<b>Subtotal</b>					<b>\$ 733,588</b>

<b>CONTRACT:</b>					
215	Asphalt Paving (In Place)		<u>0</u>	NT	\$ -
241	Disposal of Waste Materials		<u>3630</u>	TF	\$ 15.00
241	Disposal of ties		<u>241</u>	EA	\$ 10.00
215	Maintenance of Traffic		<u>0</u>	DAY	\$ -
<b>Subtotal</b>					<b>\$ 56,860</b>

241	<b>EQUIPMENT RENTAL:</b>	CSX vehicle and equipment rental included in overhead percentage			
<b>Subtotal</b>					Use for extraordinary rental or unique Service Contract
					\$ 207,368

50	<b>WORK TRAIN:</b>		<u>9</u>	DAY	\$ 2,100.00
<b>Subtotal</b>					<b>\$ 18,900</b>

<b>SALVAGE:</b>					
228	Rail		<u>159</u>	NT	\$ 65.00
228	OTM		<u>85</u>	NT	\$ 75.00
<b>Subtotal</b>					<b>\$ (16,710)</b>

**SIGNAL WORK:**

**CSX TRANSPORTATION, INC.  
FORCE ACCOUNT ESTIMATE**

Page 4 of 4

ACCT. CODE : 709 - SC0310  
Pub EB - SC EB3 (SC)

210	Material - Field & Consumables	<b>AII STEEL OR CAST COMPONENTS MUST BE BUY AMERICA COMPLIANT</b>	\$	-
210	Material - Sales Tax		\$	-
220	Material - Shop	<b>AII STEEL OR CAST COMPONENTS MUST BE BUY AMERICA COMPLIANT</b>	\$	-
60	Construction Labor		\$	-
65	Shop Labor		\$	-
230	Per Diem		\$	-
200	RR Engineering, Preliminary		\$	-
200	RR Engineering, Construction		\$	-
60	Additives to Construction Labor		\$	-
65	Additives to Shop Labor		\$	-
200	Additives to Engineering		\$	-
241	Equipment Expense		\$	-
241	Waste Management		\$	-
212	Contract Engineering		\$	-
211	Freight		\$	-
216	AC Power Service		\$	-
228	Salvage		\$	-
900	Other		\$	508,929
<b>Subtotal</b>			\$	508,929

**PROJECT SUBTOTAL:**

\$ 3,350,132

900	<b><u>CONTINGENCIES:</u></b>	10.00%	\$	335,013
-----	------------------------------	--------	----	---------

<b>GRAND TOTAL *****</b>			\$	3,685,146
--------------------------	--	--	----	-----------

**DIVISION OF COST:**

Agency	<u>100.00%</u>	\$	3,685,146
Railroad	<u>0.00%</u>	\$	-
<b>TOTAL *****</b>		\$	3,685,146

**NOTE: Estimate is based on FULL CROSSING CLOSURE during work by Railroad Forces.**

This estimate has been prepared based on site conditions, anticipated work duration periods, material prices, labor rates, manpower and resource availability, and other factors known as of the date prepared. The actual cost for CSXT work may differ based upon the agency's requirements, their contractor's work procedures, and/or other conditions that become apparent once construction commences or during the progress of the work

Office of Assistant Chief Engineer Public Projects--Jacksonville, Florida

Estimated prepared by: J. Schofield, ARCADIS

Approved by: DLS

CSXT Public Project Group

DATE: 5/17/2016

REVISED:

DATE: **05/17/16**

**Form Revised 11-21-2013**

Date: May 17, 2016  
Location: near Spartanburg & Mayo, SC  
Milepost: Z 269.69-270.69 (approx.), Z-270.20  
DOT Number: 244291S  
Description: I-85 Widening and CSXT Bridge Relocation  
(36 month construction coordination with 24 months of daytime flagging)

OP Number: SC0310  
GEC Number: NCCSXP14.23CE  
RailDOCS No.: DCSC2013015

----- CE&I LABOR COST CALCULATOR -----

Task	Sr. RR Eng. (\$190/ hr.)	RR Engineer (\$160/ hr.)	JAX Asst. PM II (\$145/ hr.)	RDH Asst. PM I (\$130/ hr.)	CLT Sr. Inspector (\$100/ hr.)	Engineer I (\$92/ hr.)	Clerical (\$69/ hr.)
CE&I Project file/billing setup/updates, initiations, CE&I handoff and related coordination	1		2	2			0.5
Generate and distribute CSXT Notice To Proceed and acknowledgement letter			1		4		
Generate CSXT preconstruction meeting packet and meeting preparation			4	4	4		
Attend preconstruction conference with minutes, related corres., and travel from JAX, RDH, & CLT			12	10	8		
Coordinate contractor insurance approval and assist to arrange flagging protection				8			
Facilitate utility permitting through CSXT Property Services and related adjustments			4	4			
Review shop drawings and contractor construction submissions: Assume 3 reviews of demolition, erection, lifts, shoring, walls, grading, access and staging	4	4	6	6	60		
Preliminary Engineering (PE) review of I-85 roadway design plans (2 iterations), with comment letter, approval letter, and related coordination and corres.			24		48	4	
Ongoing scheduling coordination with Roadmaster, CSX PM., Sponsor, Signal Manager, and contractor (0.5 hr./wk. for 24 months)				52			
Prepare contract documents and bid packages for bid of track construction by contract, bid and selection assistance			8	40			
Bridge   3 Walls   Earthwork   Track   Bridge Demo: onsite construction oversight, monitoring, and inspect with reporting and travel from CLT, QC and distribute weekly reports (24 months = 104 weeks). Assume 3, 8-hour days/week on average, plus travel and reporting time.				104	3744		
Buy America compliance and material ordering support		4	2	2			
Additional inspection support during bridge superstructure construction	4	40	1	1			
Additional inspection support during track construction	2	40	1	1			
Excess soil handling support, management, and landfill coordination services (sampling not included)			12	12		24	
At-grade crossing permit, installation, renewal, and removal support			2	12			
Coordination with track construction contractor and CSXT for track construction and cut-over		2		8			
Coordination with CSXT for new track cut-over and yard track construction		2		8			
Monthly progress inspections, including travel from CLT and reporting (16 months)				16	128		
Monthly billing activities (1.0 hr./mo. for project duration)						36	36
Ongoing project admin., accounting, oversight and management (0.5 hr./wk. for project duration)			78				
Project close-out activities, PCR	1		1			1	1
Total Hours	12	92	158	290	3996	65	37.5
Total Cost by Staff	\$2,280.00	\$14,720.00	\$22,910.00	\$37,700.00	\$399,600.00	\$5,980.00	\$2,587.50
Subtotal ARCADIS Labor:							\$485,777.50

----- SUMMARY OF EXPENSES (NON-LABOR DIRECT COSTS) -----

ITEM	Quant.	Unit Price	Total
Airfare from JAX to GSP with fees, rental car, and gas (Schofield)	1 trip(s)	\$600.00	\$600.00
Airfare from (unknown) to GSP with fees, rental car, and gas (Bielski)	2 trip(s)	\$600.00	\$1,200.00
Personal/Company vehicle mileage reimbursement; from CLT, round-trip (Habersang) =	170 mi (2.5 hr travel time, round-trip)	\$0.540	\$30,202.20
Vehicle Mileage Reimbursement; from RDH office, round-trip (Koonce) =	450 mi (6.4 hr travel time, round-trip)	\$0.540	\$243.00
Lodging	14 night(s)	\$130.00	\$1,820.00
Individual travel meals and subsistence	668 meal(s)	\$15.00	\$10,020.00
Reproduction and other expenses			\$137.30
Subtotal Expenses:			\$44,222.50
TOTAL COST ESTIMATE			\$530,000.00