ORIGINAL TO GENERAL FILES

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

OFFICE OF DESIGN POLICY & SUPPORT
INTERDEPARTMENTAL CORRESPONDENCE

FILE P.I. #0007357
CSSTP-0007-00(357)
Forsyth County
Signal Improvements:SR 9@ SR 369,
SR 20 @ SR 306 & SR 20 @ CR 455

OFFICE Design Policy & Support

DATE December 21, 2010

FROM for Brent Story, State Design Policy Engineer

TO SEE DISTRIBUTION

SUBJECT **APPROVED CONCEPT REPORT**

Attached is the approved Concept Report for the above subject project.

Attachment

DISTRIBUTION:

Genetha Rice-Singleton, Program Control Adminstrator
Ron Wishon, State Project Review Engineer
Glenn Bowman, State Environmental Administrator
Ken Thompson, Statewide Location Bureau Chief
Michael Henry, Systems & Classification Branch Chief
Kathy Zahul, State Traffic Engineer
Cindy VanDyke, State Transportation Planning Administrator
Bobby Hilliard, State Program Delivery Engineer
Angela Robinson, Financial Management Administrator
Jeff Baker, State Utilities Engineer
Allen Ferguson, District 1 Utilities Engineer
Robert Mahoney, District 1 Preconstruction Engineer
Todd McDuffie, District 1 Engineer
Cynthia Burney, Project Manager
BOARD MEMBER - 9th Congressional District

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

PROJECT CONCEPT REPORT

Project Number: CSSTP-0007-00(357)
County: Forsyth
P. I. Number: 0007357
Federal Route Number: NA
State Route Number: 9, 20, 306, 369

SR 9 @ SR 369; SR 20 @ SR 306 & SR 20 @ CR 455/BETHELVIEW RD

Submitted for approval:

DATE 8·26·10 — Kathleen Zahul
State Traffic Engineer

DATE 18 Aug 2010 — [signature]
Project Manager

Recommendation for approval:

DATE 11/03/10 — Lee Upkins / Jeff Baker (MHB) * on file
State Utilities Engineer

DATE _____ — _____
Program Control Administrator

DATE 11/22/10 — Glenn Bowman (MHB) * on file
State Environmental Administrator

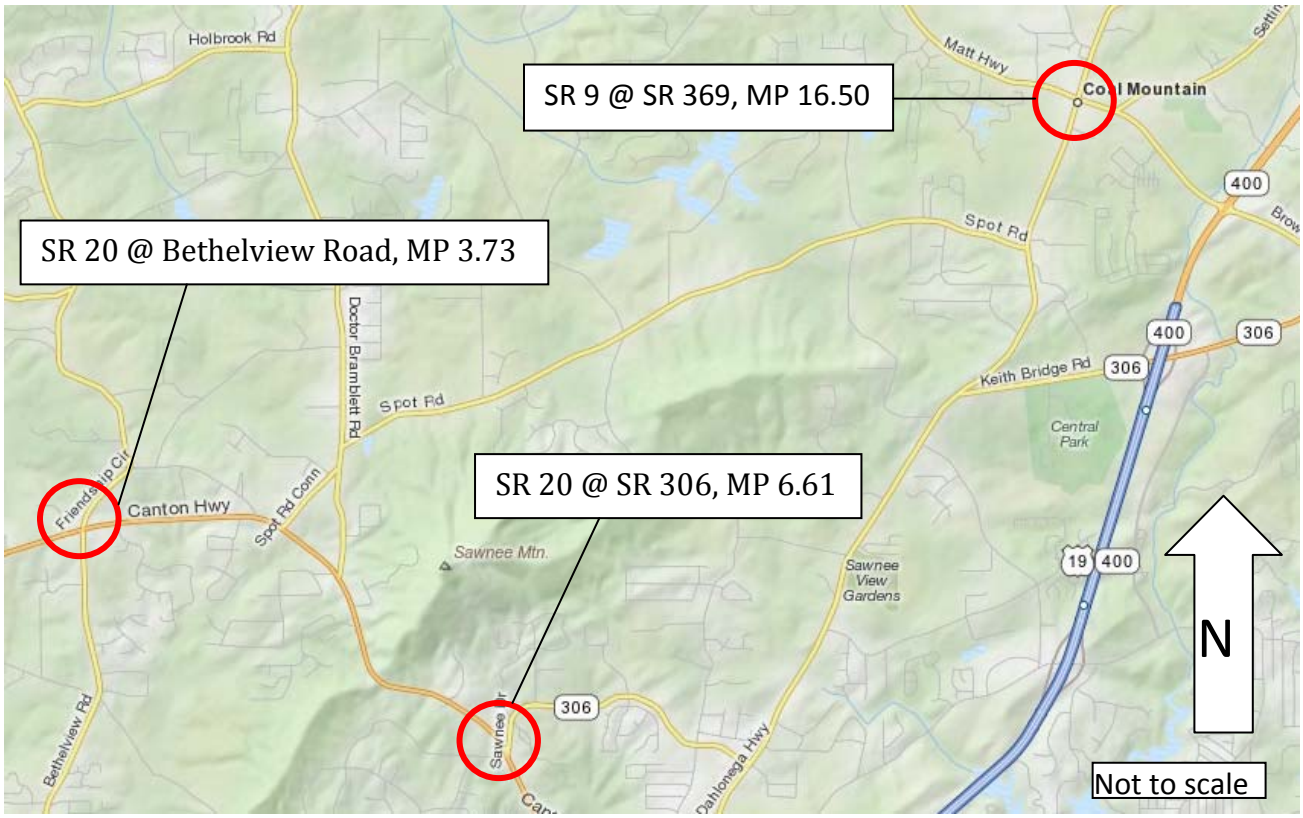
DATE 10/28/10 — Ron Wishon (MHB) * on file
Project Review Engineer

DATE 11/04/10 — Todd McDuffie (MHB) * on file
District Engineer

DATE 12/01/10 — Windy Bickers for OFM (MHB) on file
State Transportation Financial Management Administrator

The concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 11/2/10 — Angela S. Alexander
State Transportation Planning Administrator



Project Location Map

Need and Purpose: Three (3) signalized intersections in Forsyth County have been identified for upgrades. Specific improvements will aid in maximizing efficiency and effectiveness and include the following: modernization of traffic signal equipment to provide cost-effective maintenance, increased communication capability, and operational capabilities to accommodate pedestrian traffic.

Description of the proposed project: The proposed project is located in Forsyth County (100%). The project's three (3) locations consist of traffic signalization upgrades using the latest pedestrian facility improvements to include countdown pedestrian signals, ADA wheel chair ramps, and cross walk striping. The project will end with volume data collection to develop and install signal coordination and timing.

These improvements will be made to the following signalized intersections:

1. SR 9 @ SR 369, MP 16.50
2. SR 20 @ SR 306, MP 6.61
3. SR 20 @ Bethelview Road, MP 3.73

Is the project located in a PM 2.5 Non-attainment area? ___X___ Yes _____ No

Is this project located in an Ozone Non-attainment area? ___X___ Yes _____ No

PDP Classification: Major_____ Minor__X_____

Federal Oversight: Full Oversight ( ) Exempt (X) State Funded ( ) or Other ( )

- Functional Classification: SR 9/Dahlonega Hwy – Urban Minor Arterial
  SR 20/Canton Hwy – Urban Principal Arterial - Other
  SR 306/Sawnee Dr - Urban Minor Arterial
  SR 369/Matt Hwy – Rural Major Collector
  CR 455/Bethelview Road – Urban Minor Arterial

U. S. Route Number(s): NA **State Route Number(s):** 9, 20, 306, 369

Traffic (AADT):

Base Year: (20XX) _____ Design Year: (20YY) _____

(This project does not add capacity.)

Existing design features:

- Typical Section:
  - SR 9/Dahlonega Hwy – 2-12 foot lanes with left turning lanes at its intersection with SR 369.
  - SR 20/Canton Hwy – 3-12 foot lanes (2 westbound lanes and 1 eastbound lane) with a 14-foot two way left turn lane and left turning lanes (4 lanes total) and a northbound free flowing right turn lane at its intersection with SR 306. At its intersection with Bethelview Rd, it has 2-12 foot lanes with left and right turning lanes.
  - SR 306/Sawnee Dr - 2-12 foot lanes with right turn lane at its intersection with SR 20.
  - SR 369/Matt Hwy – 2-12 foot lanes with left turning lanes at its intersection with SR 9.
  - CR 455/Bethelview Road – 2-12 foot lanes with left and right turning lanes at its intersection with SR 20.
- Posted speed: SR 9/Dahlonega Hwy – 55MPH
  SR 20/Canton Hwy – 55MPH
  SR 306/Sawnee Dr - 45MPH
  SR 369/Matt Hwy – 45MPH
  CR 455/Bethelview Road – 50MPH
- Minimum radius for curve: NA
- Maximum super-elevation rate for curve: NA
- Maximum grade: NA %
- Width of right-of-way: Varies from 50 to 80 ft.
- Major structures: NA
- Major interchanges or intersections along the project. NA
- Existing length of roadway: SR 9/Dahlonega Hwy – MP 16.3 to MP 16.6
  SR 20/Canton Hwy – @ Bethelview Rd, MP 3.72 to MP 3.76
  @ SR 306, MP 6.59 to MP 6.62
  SR 306/Sawnee Dr - MP 0.00 to MP 0.02
  SR 369/Matt Hwy – MP 10.07 to MP 10.10
  CR 455/Bethelview Road – MP 0.02 to MP 0.02
- ITS: None

Proposed Design Features:

- Proposed typical section(s): Same as existing for all intersections
- Proposed Design Speed Mainline NA mph
- Proposed Maximum grade Mainline NA %
- Maximum grade allowable NA %

- Proposed Maximum grade Side Street __NA__%
- Maximum grade allowable ___NA___%
- Proposed Maximum grade driveway __NA__%
- Proposed Maximum degree of curve __NA__
- Maximum degree allowable ___NA___
- Maximum superelevation rate ___NA__
- Right-of-Way:
  - Width _Corner Miters Only (if needed)_____
  - Easements: Temporary ( ) Permanent ( ) Utility ( ) Other ( ).
  - Type of access control: Full ( ) Partial ( ) By Permit (X) Other ( ).
  - Number of parcels: _____ Number of displacements: __0___
    - Business: ___0_____
    - Residences: __0_____
    - Mobile homes: ___0____
    - Other: ___0_____
- Structures:
  - Bridges (NA)
  - Retaining walls (NA)
- Major intersections, interchanges, median openings and signal locations.
  SR 9 (Dahlonega Hwy) @ SR 369 (Matt Hwy)
  SR 20 (Canton Hwy) @ SR 306 (Sawnee Dr)
  SR 20 (Canton Hwy) @ CR 455 (Bethelview Road)
- ITS: None
- Transportation Management Plan Anticipated: Yes ( ) No (X)
- Design Exceptions to controlling criteria anticipated:

	YES	NO	UNDETERMINED
HORIZONTAL ALIGNMENT:	( )	(X)	( )
LANE WIDTH:	( )	(X)	( )
SHOULDER WIDTH:	( )	(X)	( )
VERTICAL GRADES:	( )	(X)	( )
CROSS SLOPES:	( )	(X)	( )
STOPPING SIGHT DISTANCE:	( )	(X)	( )
SUPERELEVATION RATES:	( )	(X)	( )
VERTICAL ALIGNMENT:	( )	(X)	( )
SPEED DESIGN:	( )	(X)	( )
VERTICAL CLEARANCE:	( )	(X)	( )
BRIDGE WIDTH:	( )	(X)	( )
BRIDGE STRUCTURAL CAPACITY:	( )	(X)	( )
LATERAL OFFSET TO OBSTRUCTION:	( )	(X)	( )

- Design Variances: None anticipated

- Environmental concerns:
  Section 404 not anticipated.
  Water quality impacts are not anticipated.
  UST's are present at all intersections.
  Historical and/or archaeological sites are anticipated. SR 9 is an historic roadway.

Anticipated Level of environmental analysis:

- Are Time Savings Procedures appropriate? Yes (X) No ( )
- Categorical exclusion anticipated (X).
- Environmental Assessment/Finding of No Significant Impact anticipated (FONSI)( ).
- Environmental Impact Statement (EIS) ( ).

- Utility involvements: Communications, Power, Gas, Water, Television
- VE Study Anticipated Yes ( ) No (X)
- Benefit/Cost Ratio __NA__

Project Cost Estimate and Funding Responsibilities:

	PE	ROW	UTILITY	CST	MITIGATION
By Whom	GDOT	GDOT	GDOT	GDOT	NA
$ Amount	$167,936.87	TBD	TBD	$371,886.56	NA

Project Activities Responsibilities:

- Design: ____GDOT_____
- Right-of-Way Acquisition: ___GDOT (if needed)_____
- Right-of-Way funding (real property): _____GDOT (if needed)_____
- Relocation of Utilities: ____GDOT_____
- Letting to contract: _____GDOT_____
- Supervision of construction: _____GDOT_____
- Providing material pits: _____GDOT_____
- Providing detours: _____GDOT_____
- Environmental Studies/Documents/Permits: _____GDOT_____
- Environmental Mitigation: _____NA_____

Traffic Signal Timing and Coordination: Traffic signals will be timed to maintain coordinated traffic flow progression through the synchronized intersections. The signal timing will be designed to minimize the overall total delay of the roadway segment. The major street typically carries the larger volumes, thus the signal timing will provide the majority of the green time to the major roadway approaches. The progression of vehicles along the major roadway will be given the priority even when the characteristics of the roadway traffic flow and control changes. Once a signal timing plan has been completed to optimize traffic flow, any modification to the signal timing to increase green time on minor streets will not adversely affect the traffic flow progression on the major roadway.

Coordination

- Initial Concept Meeting date and brief summary. (NA)
- Concept meeting date and brief summary. (NA)
- P A R meetings, dates and results. (NA)
- FEMA, USCG, and/or TVA. (NA)
- Public involvement. (NA)
- Local government comments. (NA)
- Other projects in the area. (None)
- Railroads. (NA)
- Other coordination to date. (NA)

Scheduling – Responsible Parties' Estimate

• Time to complete the environmental process:	Begin: 1-2011	End: 9-2011
• Time to complete preliminary construction plans:	Begin: 2-2011	End: 5-2011
• Time to complete right-of-way plans:	Begin: 9-2011	End: 11-2011
• Time to complete the Section 404 Permit:	Begin: NA	End: NA
• Time to complete final construction plans:	Begin: 2-2012	End: 5-2012
• Time to complete to purchase right-of-way:	Begin: 12-2011	End: 1-2012
• List other major items that will affect the project schedule:	Begin: NA	End: NA

Other alternates considered: None considered

Comments: None

Attachments:

1. Detailed Cost Estimates:
    a. Construction including Contingencies, Engineering and Inspection.

Exempt projects

Concur: James B Burns
Director of Engineering

Approve: MR Date: 12/3/10
Chief Engineer

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE PROJECT No. CSSTP-0007-00(357), Forsyth County
SR 9 @ 1 Loc SR 20 @ 2 Locs
P.I. No. 0007357

OFFICE Traffic Operations

DATE 10/13/2010

FROM Kathy Zahul, P.E., State Traffic Engineer

TO Ron Wishon, State Project Review Engineer, Office of Engineering Services

SUBJECT REVISIONS TO PROGRAMMED COSTS

PROJECT MANAGER Cynthia C. Burney, P.E.

MNGT LET DATE 4/15/2012

MNGT R/W DATE 4/15/2011

PROGRAMMED COST (TPro W/OUT INFLATION)		**LAST ESTIMATE UPDATE**
CONSTRUCTION	$410,432.11	DATE 12/1/2009
RIGHT OF WAY	$n/a	DATE n/a
UTILITIES	$n/a	DATE n/a

REVISED COST ESTIMATES

CONSTRUCTION*	$371,886.56
RIGHT OF WAY	$0.00
UTILITIES	$0.00

* Costs contain 5% Engineering and Inspection

REASON FOR COST DECREASE: 2009 cost was calculated in the Detailed Estimate program. This cost is from CES.

CONTINGENCY SUMMARY

Construction Cost Estimate:	$354,177.67	(Base Estimate)
Engineering and Inspection:	$17,708.89	(Base Estimate x 5 %)
Construction Contingency:	$to be determined	(Base Estimate x 0 %) (The Construction Contingency is based on the Project Improvement Type in TPro.)
Total Fuel Adjustment	$ Enter Value	(From attached worksheet)
Total Liquid AC Adjustment	$ Enter Value	(From attached worksheet)
Construction Total:	$371,886.56	
Utility Cost Estimate:	$to be determined	
Utility Contingency:	$to be determined	
Utility Total:	$to be determined	

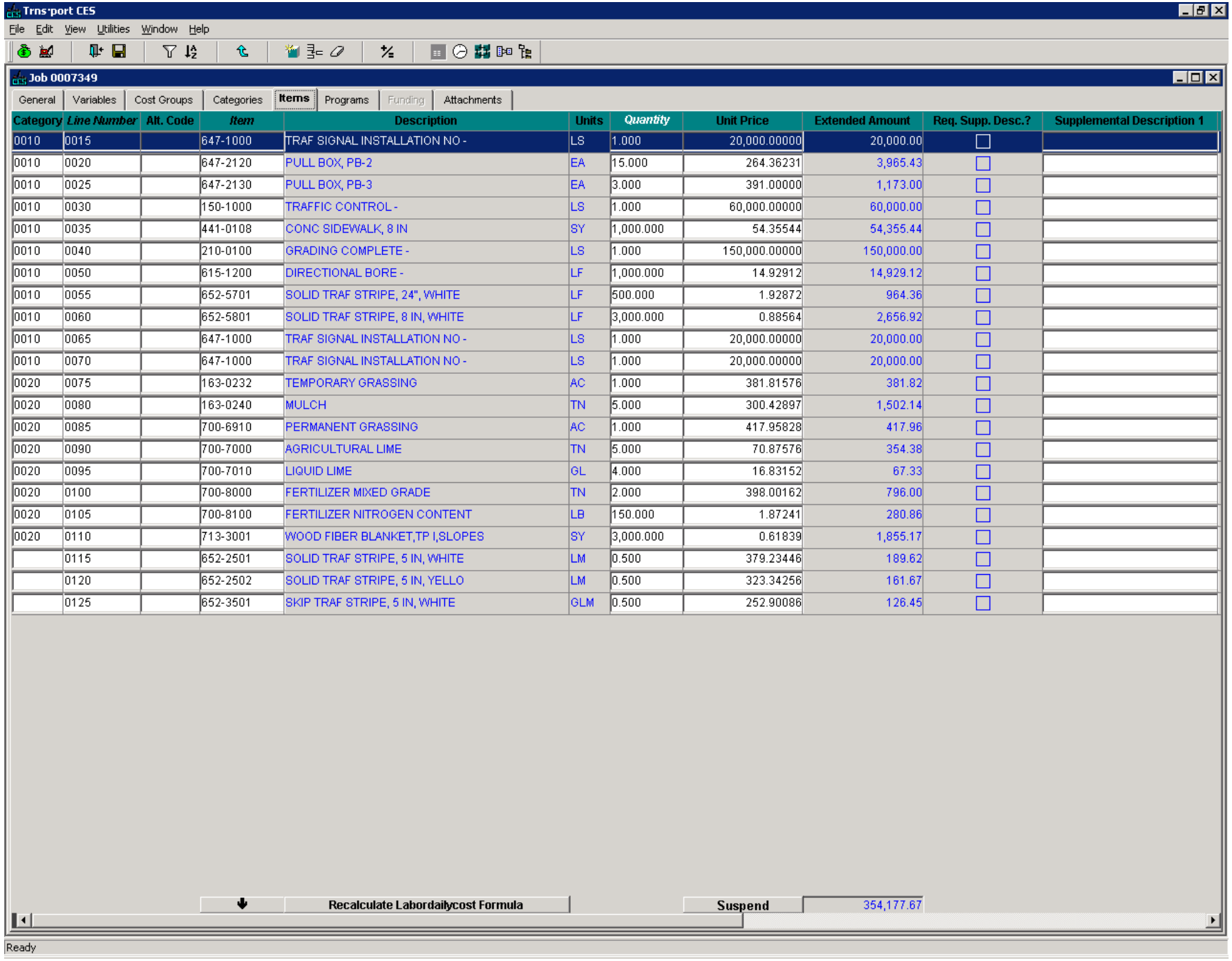
REIMBURSABLE UTILITY COST

Utility Owner	Reimbursable Costs

Attachments

c: Genetha Rice - Singleton, Assistant Director of Preconstruction
Angela Whitworth, Financial Management Administrator

0007357 Concept CES Items



Category	Line Number	Alt. Code	Item	Description	Units	Quantity	Unit Price	Extended Amount	Req. Supp. Desc.?	Supplemental Description 1
0010	0015		647-1000	TRAF SIGNAL INSTALLATION NO -	LS	1.000	20,000.00000	20,000.00	☐	
0010	0020		647-2120	PULL BOX, PB-2	EA	15.000	264.36231	3,965.43	☐	
0010	0025		647-2130	PULL BOX, PB-3	EA	3.000	391.00000	1,173.00	☐	
0010	0030		150-1000	TRAFFIC CONTROL -	LS	1.000	60,000.00000	60,000.00	☐	
0010	0035		441-0108	CONC SIDEWALK, 8 IN	SY	1,000.000	54.35544	54,355.44	☐	
0010	0040		210-0100	GRADING COMPLETE -	LS	1.000	150,000.00000	150,000.00	☐	
0010	0050		615-1200	DIRECTIONAL BORE -	LF	1,000.000	14.92912	14,929.12	☐	
0010	0055		652-5701	SOLID TRAF STRIPE, 24", WHITE	LF	500.000	1.92872	964.36	☐	
0010	0060		652-5801	SOLID TRAF STRIPE, 8 IN, WHITE	LF	3,000.000	0.88564	2,656.92	☐	
0010	0065		647-1000	TRAF SIGNAL INSTALLATION NO -	LS	1.000	20,000.00000	20,000.00	☐	
0010	0070		647-1000	TRAF SIGNAL INSTALLATION NO -	LS	1.000	20,000.00000	20,000.00	☐	
0020	0075		163-0232	TEMPORARY GRASSING	AC	1.000	381.81576	381.82	☐	
0020	0080		163-0240	MULCH	TN	5.000	300.42897	1,502.14	☐	
0020	0085		700-6910	PERMANENT GRASSING	AC	1.000	417.95828	417.96	☐	
0020	0090		700-7000	AGRICULTURAL LIME	TN	5.000	70.87576	354.38	☐	
0020	0095		700-7010	LIQUID LIME	GL	4.000	16.83152	67.33	☐	
0020	0100		700-8000	FERTILIZER MIXED GRADE	TN	2.000	398.00162	796.00	☐	
0020	0105		700-8100	FERTILIZER NITROGEN CONTENT	LB	150.000	1.87241	280.86	☐	
0020	0110		713-3001	WOOD FIBER BLANKET,TP I,SLOPES	SY	3,000.000	0.61839	1,855.17	☐	
	0115		652-2501	SOLID TRAF STRIPE, 5 IN, WHITE	LM	0.500	379.23446	189.62	☐	
	0120		652-2502	SOLID TRAF STRIPE, 5 IN, YELLO	LM	0.500	323.34256	161.67	☐	
	0125		652-3501	SKIP TRAF STRIPE, 5 IN, WHITE	GLM	0.500	252.90086	126.45	☐	