APPENDIX K: COST ESTIMATES



Date Created Date Revised Prepared By

1/29/2018 Jothika Thivakaran

Checked by

\$347,587.20

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 1a			
Department	Public Works		CIP ID	10796.017
Category	Mobility Infrastructure	<u> </u>	Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER)	(-20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)		28%	\$1,067,784.48
	CONSULTANTS		\$741,517.00	
5520	A/E Basic Services ²	\$741,517.00		
	INTERDEPARTMENTAL CHARGES		\$326,267.48	
6237	PWD Project Management Services (PMD) ³	\$163,133.74		
6238	PWD Construction Services (CSD) ³	\$163,133.74		
6203	Sponsor Department Charges ⁴			
2801 - SURVEYING	.5		2%	\$68,855.15
2802 - TESTING			2%	\$82,626.18
5730	Construction Material Testing ⁶		\$45,550.33	
5730	Geotechnical Report ⁷		\$37,075.85	
5588	Hazardous Material Testing ⁸			
5588	Environmental Assessment ⁹		_	
2803 - INSPECTION	NS		0%	

2804 - CONSTRUCTION (see detailed cost estimate)	55%	\$2 118 620 00

5560	New Construction ¹	\$2,072,000.00
5600	Hazardous Material Abatement ¹⁸	
6324	ROCIP ¹⁹	\$46,620.00

2805 - LAND & RIGHT-OF-WAY ¹¹	1%	\$50,000.00
	_	
2806 MISCELLANEOLIS	1%	\$42 215 22

		_	• /
558	0 Debt Issuance ¹³	\$21,029.03	
684	3 Permits/ Fees ¹⁴	\$21,186.20	
715	7 GAATN Connection ¹⁵	\$0.00	

2807 - EQUIPMENT/FURNISHINGS ¹⁶	0%

2808 - MATERIALS	0%

2809 - ART IN PUBLIC PLACES (Rounded to nearest \$100) ¹²	2%	\$66,800.00
PROJECT SUB-TOTAL		\$3,475,872.01

				1 - 7 - 7 -
COST CONTINGENCY (Based on project risk analysis)	Risk Probability %10	10.00%	9%	\$347,587.20

TOTAL PROJECT BUDGET	ESTIMATE (Rounded to nearest \$1,000)	100%	\$3,844,000.00

	LOW (-20%)		HIGH (30%)
CLASS 4 COST ESTIMATE ACCURACY RANGE	\$3,075,200.00	to	\$4,997,200.00

Printed on: 7/9/2019 @ 2:10 PM Page 1 of 2



Prepared By Date Created Date Revised

2/6/2018 Jothika Thivakaran

Checked by

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 1b-Option 1 (BRIDGE)		
Department	Public Works	CIP ID	10796.017
Category	Mobility Infrastructure	Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER) (-20% to 30%)		

Department	Public Works		CIP ID	10796.017
Category	Mobility Infrastructure		Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER)	(-20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)		28%	\$1,360,497.60
	CONSULTANTS		\$944,790.00	
5520	A/E Basic Services ²	\$944,790.00		
	INTERDEPARTMENTAL CHARGES		\$415,707.60	
6237	PWD Project Management Services (PMD) ³	\$207,853.80		
6238	PWD Construction Services (CSD) ³	\$207,853.80		
6203	Sponsor Department Charges⁴			
2801 - SURVEYING	5		2%	\$87,730.50
2802 - TESTING			2%	\$105,276.60
5730	Construction Material Testing ⁶		\$58,037.10	
5730	Geotechnical Report ⁷	•	\$47,239.50	
5588	Hazardous Material Testing ⁸			
5588	Environmental Assessment ⁹			
2803 - INSPECTION	NS		0%	
2804 - CONSTRUC	TION (see detailed cost estimate)		55%	\$2,699,400.00
5560	New Construction ¹		\$2,640,000.00	
5600	Hazardous Material Abatement ¹⁸			
6324	ROCIP ¹⁹		\$59,400.00	
2805 - LAND & RIG	GHT-OF-WAY ¹¹		2%	\$100,000.00
2806 - MISCELLAN	EOUS		1%	\$54,007.24
5580	Debt Issuance ¹³		\$27,013.24	
6843	Permits/ Fees ¹⁴	•	\$26,994.00	
7157	GAATN Connection ¹⁵		\$0.00	
2807 - EQUIPMEN	T/FURNISHINGS ¹⁶		0%	
2808 - MATERIALS			0%	

7157 GAATN Connection ¹⁵	\$0.00
2807 - EQUIPMENT/FURNISHINGS ¹⁶	0%
2808 - MATERIALS	0%
2809 - ART IN PUBLIC PLACES (Rounded to nearest \$100) ¹²	2% \$85,100.00

PROJECT SUB-TOTAL				\$4,464,998.70
COST CONTINGENCY (Based on project risk analysis)	Risk Probability % ¹⁰	10.00%	9%	\$446,499.87

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000)	100%	\$4,939,000.00

CLASS 4 COST ESTIMATE ACCURACY RANGE \$3,951,200.00 \$6,420,700.00 to

Printed on: 7/9/2019 @ 2:12 PM Page 1 of 2



Printed on: 7/9/2019 @ 2:13 PM

Prepared By Date Created Date Revised

1/29/2018 Jothika Thivakaran

Checked by

Page 1 of 2

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 1b-OPT 2 (UNDERPASS)		
Department	Public Works	CIP ID	10796.017
Category	Mobility Infrastructure	Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER) (-20% to 30%)		
			64 500 045 53

			_		
Categor	Mobility Infrastructure			Index ²¹	104.7
Class ²	Class 4 Cost Estimate - Preliminary Engineering Report (PE	ER) (-20% to 30%)			
2800 - ARCHITE	CTURE/ ENGINEERING (A/E)			28%	\$1,508,915.52
2000 - AIRCHITE	CONSULTANTS		\$1.0	47,858.00	ψ1,500,515.52
5520		\$1,047,858.00		47,030.00	
3320	INTERDEPARTMENTAL CHARGES	Ψ1,047,030.00	-	61,057.52	
6237	•	\$230,528.76			
6238		\$230,528.76	-		
6203	· · · · · · · · · · · · · · · · · · ·	. ,			
2801 - SURVEYII	NG ⁵			2%	\$97,301.10
2802 - TESTING				2%	\$116,761.32
5730	Construction Material Testing ⁶		Ś	64,368.42	· · · · · · · · · · · · · · · · · · ·
5730	-			52,392.90	
5588					
5588					
2803 - INSPECTI	ONS			0%	
2804 - CONSTRU	JCTION (see detailed cost estimate)			55%	\$2,993,880.00
5560	New Construction ¹		\$2,9	28,000.00	
5600	Hazardous Material Abatement ¹⁸				
6324	ROCIP ¹⁹		\$	65,880.00	
2805 - LAND & F	RIGHT-OF-WAY ¹¹			1%	\$50,000.00
2806 - MISCELLA	ANEOUS			1%	\$59,529.94
5580	Debt Issuance ¹³		\$	29,591.14	
6843	B Permits/ Fees ¹⁴			29,938.80	
7157				\$0.00	
2807 - EQUIPME	ENT/FURNISHINGS ¹⁶			0%	
2808 - MATERIA	ıls			0%	
2809 - ART IN P	JBLIC PLACES (Rounded to nearest \$100) ¹²			2%	\$94,300.00
PROJECT SUB-	TOTAL				\$4,891,096.74
	COST CONTINGENCY (Based on project risk analysis)	Risk Probability % ¹⁰	10.00%	9%	¢490 100 67
	233. 2011 HOLITO (Bused on project risk dilarysis)	Mak i robublity 70	10.00/0		\$489,109.67
TOTAL PR	OJECT BUDGET ESTIMATE (Rounded to nearest \$1,0	000)		100%	\$5,410,000.00

	LOW (-20%)		HIGH (30%)	
CLASS 4 COST ESTIMATE ACCURACY RANGE	\$4,328,000.00	to	\$7,033,000.00	



Prepared By Date Created Date Revised

1/29/2018 Jothika Thivakaran

Checked by

100%

\$3,246,000.00

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

	NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initia	I scope of work		
Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 1b-C	PT3 (AT-GRADE)		
Department	Public Works		CIP ID	10796.017
Category	Mobility Infrastructure		Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER)	(-20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)		28%	\$899,136.00
	CONSULTANTS		\$624,400.00	
5520	A/E Basic Services ²	\$624,400.00		
	INTERDEPARTMENTAL CHARGES		\$274,736.00	
6237	PWD Project Management Services (PMD) ³	\$137,368.00		
6238	PWD Construction Services (CSD) ³	\$137,368.00		
6203	Sponsor Department Charges ⁴			
2801 - SURVEYING	5		2%	\$57,980.00
2802 - TESTING			2%	\$69,576.00
5730	Construction Material Testing ⁶		\$38,356.00	
5730	Geotechnical Report ⁷	_	\$31,220.00	
5588	Hazardous Material Testing ⁸		, , , , , , , , , , , , , , , , , , , ,	
5588	Environmental Assessment ⁹	_		
		_		
2803 - INSPECTIOI	NS		0%	
2804 - CONSTRUC	TION (see detailed cost estimate)		55%	\$1,784,000.00
5560	New Construction ¹		\$1,784,000.00	
5600	Hazardous Material Abatement ¹⁸			
6324	ROCIP ¹⁹	_	\$0.00	
2805 - LAND & RIC	GHT-OF-WAY ¹¹		2%	\$50,000.00
2806 - MISCELLAN	IEOUS		1%	\$35,595.13
5580	Debt Issuance ¹³		\$17,755.13	
6843	Permits/ Fees ¹⁴	_	\$17,840.00	
7157	GAATN Connection ¹⁵	_	\$0.00	
2807 - EQUIPMEN	T/FURNISHINGS ¹⁶		0%	
2808 - MATERIALS			0%	
2809 - ART IN PUE	BLIC PLACES (Rounded to nearest \$100) ¹²		2%	\$56,200.00
PROJECT SUB-T	OTAL			\$2,934,732.00
	COST CONTINGENCY (Based on project risk analysis)	Risk Probability % ¹⁰	10.00% 9%	\$293,473.20

CLASS 4 COST ESTIMATE ACCURACY RANGE \$2,596,800.00 \$4,219,800.00 to

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000)

Printed on: 7/9/2019 @ 2:14 PM Page 1 of 2



Prepared By Date Created Date Revised

Jothika Thivakaran 1/29/2018

Checked by

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

	NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial	al scope of work			
Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 2				
Department	Public Works			CIP ID	10796.017
Category	Mobility Infrastructure			Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER	a) (-20% to 30%)			
2800 - ARCHITECT	URE/ ENGINEERING (A/E)			27%	\$720,871.20
	CONSULTANTS		\$5	00,605.00	
5520	A/E Basic Services ²	\$500,605.00			
	INTERDEPARTMENTAL CHARGES		\$2	20,266.20	
6237	PWD Project Management Services (PMD) ³	\$110,133.10			
6238	PWD Construction Services (CSD) ³	\$110,133.10	•		
6203	Sponsor Department Charges ⁴				
2801 - SURVEYING	5 5			2%	\$46,484.75
2802 - TESTING				2%	\$55,781.70
5730	Construction Material Testing ⁶		Ś	30,751.45	. ,
5730	Geotechnical Report ⁷			25,030.25	
5588	Hazardous Material Testing ⁸				
5588	Environmental Assessment ⁹				
2803 - INSPECTIO	NS			0%	
2804 - CONSTRUC	TION (see detailed cost estimate)			54%	\$1,430,300.00
5560	New Construction ¹		\$1,4	30,300.00	
5600	Hazardous Material Abatement ¹⁸				
6324	ROCIP ¹⁹			\$0.00	
2805 - LAND & RIG	GHT-OF-WAY ¹¹			4%	\$100,000.00
2806 - MISCELLAN	IEOUS			1%	\$28,900.69
5580	Debt Issuance ¹³		\$	 14,597.69	. ,
6843	Permits/ Fees ¹⁴			14,303.00	
7157	GAATN Connection ¹⁵		<u> </u>	\$0.00	
2807 - EQUIPMEN	T/FURNISHINGS ⁻⁰			0%	
2808 - MATERIALS	5			0%	
2809 - ART IN PUE	BLIC PLACES (Rounded to nearest \$100) ¹²			2%	\$45,100.00
PROJECT SUB-T	OTAL			_	\$2,412,840.65
	COST CONTINGENCY (Based on project risk analysis)	Risk Probability % ¹⁰	10.00%	9%	\$241,284.07

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000)

LOW (-20%) HIGH (30%) \$2,135,200.00 to \$3,469,700.00 100%

\$2,669,000.00

CLASS 4 COST ESTIMATE ACCURACY RANGE

Printed on: 7/9/2019 @ 2:15 PM Page 1 of 2



Prepared By Date Created Date Revised

Jothika Thivakaran 1/29/2018

Checked by

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

	NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and Initial scope of work		
Project Name	Walnut Creek Trail Connector - La Loma - ALTERNATIVE 3		
Department	Public Works	CIP ID	10796.017
Category	Mobility Infrastructure	Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER) (-20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)	27%	\$565,992.00
	CONSULTANTS	\$393,050.00	
5520	A/E Basic Services ² \$393,05	50.00	
	INTERDEPARTMENTAL CHARGES	\$172,942.00	
6237	PWD Project Management Services (PMD) ³ \$86,43	71.00	
6238	PWD Construction Services (CSD) ³ \$86,4	71.00	
6203	Sponsor Department Charges ⁴		
2801 - SURVEYING	3 ⁵	2%	\$36,497.50
2802 - TESTING		2%	\$43,797.00
5730	Construction Material Testing ⁶	\$24,144.50	
5730	Geotechnical Report ⁷	\$19,652.50	
5588	Hazardous Material Testing ⁸		
5588	Environmental Assessment ⁹		
2803 - INSPECTIO	NS	0%	
2804 - CONSTRUC	TION (see detailed cost estimate)	54%	\$1,123,000.00
5560	New Construction ¹	\$1,123,000.00	
5600	Hazardous Material Abatement ¹⁸		
6324	ROCIP ¹⁹	\$0.00	
2805 - LAND & RIG	GHT-OF-WAY ¹¹	2%	\$50,000.00
2806 - MISCELLAN	IEOUS	1%	\$22,518.79
5580	Debt Issuance ¹³	\$11,288.79	
6843	Permits/ Fees ¹⁴	\$11,230.00	
7157	GAATN Connection ¹⁵	\$0.00	
2807 - EQUIPMEN	IT/FURNISHINGS ¹⁶	0%	
2808 - MATERIALS	S	0%	
2809 - ART IN PUE	BLIC PLACES (Rounded to nearest \$100) ¹²	2%	\$35,400.00
PROJECT SUB-T	OTAL		\$1,865,916.50
			. , ,

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000) 100% \$2,064,000.00

Risk Probability %10

10.00%

9%

\$186,591.65

CLASS 4 COST ESTIMATE ACCURACY RANGE \$1,651,200.00 to \$2,683,200.00

COST CONTINGENCY (Based on project risk analysis)

Printed on: 7/9/2019 @ 2:15 PM Page 1 of 2



2808 - MATERIALS

Date Revised Prepared By Date Created

Jothika Thivakaran 1/29/2018

Checked by

0%

100%

\$1,038,000.00

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

Project Name	Walnut Creek Trail Connector - La Loma - LOTT - OPTION 1			
Department	Public Works		CIP ID	10796.017
Category	Mobility Infrastructure		Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER) (-	20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)		28%	\$287,000.00
	CONSULTANTS	_	\$125,000.00	
5520	A/E Basic Services ²	\$125,000.00		
	INTERDEPARTMENTAL CHARGES		\$162,000.00	
6237	PWD Project Management Services (PMD) ³	\$92,500.00		
6238	PWD Construction Services (CSD) ³	\$69,500.00		
6203	Sponsor Department Charges ⁴			
2801 - SURVEYING	5		2%	\$25,000.00

2802 - TESTING		2%	\$25,000.00
5730	Construction Material Testing ⁶	\$12,500.00	
5730	Geotechnical Report ⁷	\$12,500.00	

Hazardous Material Testing⁸ 5588 Environmental Assessment⁹ 5588

2803 - INSPECTIONS 0%

\$500,000.00 2804 - CONSTRUCTION (see detailed cost estimate) 48% \$500,000.00 5560 New Construction¹

Hazardous Material Abatement¹⁸ 5600 ROCIP¹⁹ 6324 \$0.00

2805 - LAND & RIGHT-OF-WAY11 8% \$80,000.00 2806 - MISCELLANEOUS \$10,679.14

Debt Issuance¹³ 5580 \$5,679.14 Permits/ Fees¹⁴ 6843 \$5,000.00

7157 GAATN Connection¹⁵ \$0.00

2807 - EQUIPMENT/FURNISHINGS16 0%

2809 - ART IN PUBLIC PLACES (Rounded to nearest \$100)12 \$16,700.00 2%

PROJECT SUB-TOTAL \$938,700.00

> Risk Probability %10 COST CONTINGENCY (Based on project risk analysis) 10.00% 9% \$93,870.00

CLASS 4 COST ESTIMATE ACCURACY RANGE \$830,400.00 \$1,349,400.00 to

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000)

Printed on: 7/9/2019 @ 2:16 PM Page 1 of 2



Prepared By Date Created Date Revised

Jothika Thivakaran 1/29/2018

Checked by

100%

\$923,000.00

CIVIL PROJECT BUDGET ESTIMATE

PROJECT CHARTER ATTACHMENT A

NOTE: Refer to the Project Charter or Construction Cost Estimate for goals and initial scope of work

Project Name	Walnut Creek Trail Connector - La Loma - LOTT - OPTION 2			
Department	Public Works		CIP ID	10796.017
Category	Mobility Infrastructure		Index ²¹	104.7
Class ²⁰	Class 4 Cost Estimate - Preliminary Engineering Report (PER) ((-20% to 30%)		
2800 - ARCHITECT	URE/ ENGINEERING (A/E)		30%	\$275,520.00
	CONSULTANTS	_	\$120,000.00	
5520	A/E Basic Services ²	\$120,000.00		
	INTERDEPARTMENTAL CHARGES		\$155,520.00	
6237	PWD Project Management Services (PMD) ³	\$88,800.00		
6238	PWD Construction Services (CSD) ³	\$66,720.00		
6203	Sponsor Department Charges ⁴			
2801 - SURVEYING	5		3%	\$24,000.00
2802 - TESTING			3%	\$24,000.00
5730	Construction Material Testing ⁶		\$12,000.00	
5730	Geotechnical Report ⁷	_	\$12,000.00	
5588	Hazardous Material Testing ⁸			
5588	Environmental Assessment ⁹			
2803 - INSPECTION	vs		0%	
2804 - CONSTRUC	TION (see detailed cost estimate)		52%	\$480,000.00
5560	New Construction ¹		\$480,000.00	
5600	Hazardous Material Abatement ¹⁸			
6324	ROCIP ¹⁹	_	\$0.00	
2805 - LAND & RIC	GHT-OF-WAY ¹¹		1%	\$10,000.00
2806 - MISCELLAN	EOUS		1%	\$9,848.24
5580	Debt Issuance ¹³		\$5,048.24	
6843	Permits/ Fees ¹⁴	_	\$4,800.00	
7157	GAATN Connection ¹⁵	_	\$0.00	

2807 - EQUIPMENT/FURNISHINGS¹⁶ 0%

2808 - MATERIALS 0%

2809 - ART IN PUBLIC PLACES (Rounded to nearest \$100)¹² 2% \$16,100.00

PROJECT SUB-TOTAL \$834,420.00

COST CONTINGENCY (Based on project risk analysis)

Risk Probability %¹⁰

10.00%

9%
\$83,442.00

LOW (-20%) HIGH (30%)

CLASS 4 COST ESTIMATE ACCURACY RANGE \$738,400.00 to \$1,199,900.00

TOTAL PROJECT BUDGET ESTIMATE (Rounded to nearest \$1,000)

Printed on: 7/9/2019 @ 2:16 PM Page 1 of 2

FOOTNOTES (Assumptions & Constraints)

- 1 The construction cost estimate is based on the detailed estimate provided by <name> with <company> dated <mm/dd/yyyy>. The detailed estimate includes a description of the project scope, assumptions, exclusions and source/ references for all cost information.
- The A/E design budget estimate is based on historical City of Austin actual costs per construction value. It includes reimbursable expenses and all services from conceptual through warranty phases. This estimate excludes additional services.
- 3 Project management and construction services budget estimates are based on historical City of Austin Public Works actual costs per construction value.
- The Sponsoring department has chosen to charge their project management time to the project. This budget estimate is provided by <name> with <department> dated <mm/dd/yyyy> and accounts for management through all phases of the project life cycle.
- 5 The survey cost estimate is based on a historical average of City of Austin Public Works actual costs per construction value.
- 6 The material testing cost estimate is based on a historical average of City of Austin Public Works actual costs per construction value.
- 7 The geotechnical cost estimate is based on a historical average of City of Austin Public Works actual costs per construction value.
- 8 The cost estimate for hazardous testing for asbestos, lead and mold is based on a historical average of City of Austin Public Works actual costs per construction value. <This cost is included in the 'Environmental Assessment' budget line.>
- 9 The cost estimate for an Environmental Phase 1 assessment is based on historical averages of City of Austin Public Works actual costs per construction value. <This cost estimate includes the testing for hazardous materials.>
- When estimating the cost for a project, there is always uncertainty as to the precise content of all items in the estimate, how work will be performed, what work conditions will be like when the project is implemented and so on. These uncertainties are risks to the project. Some refer to these risks as "known-unknowns" because the estimator is aware of them, and based on past experience, can even estimate their probable costs, or in this case, the 'Risk Probability %'. The estimated costs of the known-unknowns is referred to by cost estimators as cost contingency. The Cost Contingency amount is calculated by multiplying the Risk Probability % by the 'Project Sub-Total' which excludes the 'Debt Issuance'.
- The land acquisition cost estimate is based on average real estate prices per zip code and is provided by <name> of the Real Estate Office dated <mm/dd/yyyy>.
- As required by the 1985 City Ordinance (No. 850926-0; amended by No. 861009-A; amended by No. 970904-B; Austin City Code Volume 1, Title IX, Chapter 9-2).
- 13 This amount is not included in the subtotal for '2806 Miscellaneous'. It is instead included in the Total Project Budget Estimate.
- Permits/ fees includes costs for site development, building and demolition permits, LEED certification, TDLR requirements and any others.
- The GAATN connection cost estimate is based on the detailed estimate provided by <name> with CTM dated <mm/dd/yyyy>. Assumes a specific site exits to determine the scope of work.
- The budget line for equipment/ furniture (FF&E) includes costs for office furniture, equipment, data and voice, audio/ visual solutions, and security. See attached breakdown of the budget estimate for each cost.
- 17 Not used.
- Demolition is required and the area may contain hazardous material. This cost estimate is provided by <name> with Building Services dated <mm/dd/yyyy. It includes the cost of abatement before demolition can begin and is separate from the construction contract.
- 19 Rolling Owner Controlled Insurance Program (ROCIP)
- The cost estimate classification is to align the project budget estimate with the phase of design scope development and decision making process. The five (5) class levels provides a summary of the maturity level of project definition (i.e., 30% or PER) characteristic. The maturity is roughly indicated by a percentage of complete definition, or design phase; however, it is the maturity of the defining design deliverables that is the determinant, not the percent or design phase. The specific deliverables, and their maturity or status are provided in the Construction Cost Estimating instructions. The percentage range in parenthesis represents the variation of the cost estimate from actual costs. The budget estimate uses the highest value of the range and is reflected in the Contingency's costs. The contingency level reduces as the design matures to a Class 1.
- The base index represents the Engineering News-Record's Building Cost Index (BCI) for the month the budget estimate is created and accepted. The index is used to validate the escalation rate to improve the cost estimating processes.

Printed on: 7/9/2019 @ 2:13 PM Page 2 of 2

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME	T NAME LA LOMA TRAIL - PROPOSED ALTERNATIVE 1a - Underpass existing Railroad bridge at Tanehill						
PROJECT LIMITS	ROJECT LIMITS SARA DRIVE TO SOUTHERN WALNUT CREEK TRAIL						
PREPARED	SERVICE AGREEMENT/AMENDMENT/WORK ORDER #	SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY					
Ву	JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220		
Date	10/23/2017	11796.017					
CHMMARY OF WOL							

Proposed Alternative 1a approximately 2200 LF of trail segment connecting Sara Drive / Prock Lane to existing Southern Walnut Creek Trail (SWCT) near Tannehill branch creek. The proposed alternative alignment will follow the existing beaten path from SWCT to the Railroad track and will underpass the tracks utilizing the existing railroad bridge and will be parallel to left bank of the Tannehill Branch Creek. There are two creek crossing near Sara Drive need to be addressed for this alignment.

COMMENTS

This estimate is preliminary and are based on the preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and final designs become available.

ITEM	OST ESTIMATE ITEM DESCRIPTION	OHANTITY	LINUT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	QUANTITY	UNIT	\$15,000.00	
102S-A 104S-A	REMOVE P.C. CONCRETE SLAB	1.01	AC SF	\$6.00	\$15,15 \$72,00
111S-A	EXCAVATION	1,600	CY	\$45.00	\$72,00
132S-A	EMBANKMENT	1,600	CY	\$45.00	\$72,00
201S	SUBGRADE PREPARATION	4,400	SY	\$6.00	\$26,40
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	4,400	SY	\$30.00	\$132,00
360S-A	6 IN. CONCRETE PAVEMENT	2,900	SY	\$80.00	\$232,00
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	100	CY	\$600.00	\$60,00
432S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	900	LF	\$80.00	\$72,00
591S-A	DRY ROCK RIPRAP	1,000	SY	\$150.00	\$150,00
591S-F	CONCRETE RIPRAP, 6IN	1,100	SY	\$200.00	\$220,00
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	2,400	SY	\$1.00	\$2,40
604S-I	TOP SOIL AND SEEED BED PREPARATION	2,400	SY	\$5.00	\$12,00
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	63	EA	\$570.00	\$35,9
639S	ROCK BERM	600	LF	\$45.00	\$27,00
641S	STABILIZED CONSTRUCTION ENTRANCE	4.0	EA	\$1,500.00	\$6,00
642S	SILT FENCE FOR EROSION CONTROL	4,600	LF	\$5.00	\$23,00
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,00
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,80
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	16	EA	\$500.00	\$8,00
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	1,100	LF	\$4.00	\$4,40
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	1,100	LF	\$4.00	\$4,4
	CHANNEL CROSSING	1	LS	\$80,000.00	\$80,0
SS490S-1	BOLLARDS	8	EA	\$850.00	\$6,80
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	22	EA	\$2,500.00	\$55,00
S16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	22	EA	\$1,200.00	\$26,40
	PEDESTRIAN BRIDGE (20 FT SPAN, STEEL FRAME, WOOD DECK)	1.00	LS	\$30,000.00	\$30,00
					9
				LINE ITEM TOTAL	34.4=0.00
				LINE ITEM TOTAL	\$1,479,60
				CONTINGENCY	40

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME LA LOMA TRAIL - PROPOSED ALTERNATIVE 1b - OVERPASS						ESTIMATE CLASS
PROJECT LIMITS SARA DRIVE TO SOUTHERN WALNUT CREEK TRAIL						D
PREPAREI	D	SERVICE AGREEMENT/AMENDMENT/WORK ORDER #	C.I.P. NUMBER	FUND	AGENCY	ORGANIZATION
Ву		JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220
Date		2/6/2018	11796.017			
CHMMADV	/ OF WORK					

Proposed Alternative 1a approximately 2200 LF of trail segment connecting Sara Drive / Prock Lane to existing Southern Walnut Creek Trail (SWCT) near Tannehill branch creek. The proposed alternative alignment will follow the existing beaten path from SWCT to the Railroad track and will overpass the tracks with the proposed bridge and will be parallel to left bank of the Tannehill Branch Creek.

COMMENTS

This estimate does not include impacts / relocation of Austin Energy overhead electric/ transmission line.

This estimate is preliminary and are based on the preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and geotechnical reports and final design become available.

	OST ESTIMATE	OHANTITY	11517	LIMIT PRIOR	44401111
ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.99	AC	\$15,000.00	\$14,80
104S-A	REMOVE P.C. CONCRETE SLAB	12,000	SF	\$6.00	\$72,00
111S-A	EXCAVATION	3,000	CY	\$45.00	\$135,00
132S-A	EMBANKMENT	3,000	CY	\$45.00	\$135,00
201S	SUBGRADE PREPARATION	2,500	SY	\$6.00	\$15,00
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	2,500	SY	\$30.00	\$75,00
360S-A	6 IN. CONCRETE PAVEMENT	1,700	SY	\$80.00	\$136,00
403S-CY-1	BRIDGE ABUTMENT AND CONCRETE BENT CAPS	90	CY	\$1,500.00	\$135,00
403S-SY	CONCRETE TOPPING SLAB	1,500	SY	\$55.00	\$82,50
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	220	CY	\$600.00	\$132,00
420S-A	DRILLED SHAFT, 24" DIA	1,000	LF	\$80.00	\$80,00
432S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	2,000	LF	\$80.00	\$160,00
591S-A	DRY ROCK RIPRAP	1,000	SY	\$150.00	\$150,00
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	1,400	SY	\$1.00	\$1,40
604S-I	TOP SOIL AND SEEED BED PREPARATION	1,400	SY	\$5.00	\$7,0
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	63	EA	\$570.00	\$35,9
639S	ROCK BERM	600	LF	\$45.00	\$27,00
641S	STABILIZED CONSTRUCTION ENTRANCE	4.0	EA	\$1,500.00	\$6,00
642S	SILT FENCE FOR EROSION CONTROL	4,500	LF	\$5.00	\$22,50
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,0
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,8
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	16	EA	\$500.00	\$8,00
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	1,075	LF	\$4.00	\$4,3
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	1,075	LF	\$4.00	\$4,3
SS490S-1	BOLLARDS	8	EA	\$850.00	\$6,80
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	22	EA	\$2,500.00	\$55,00
S16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
S16651-TL-F	TRAIL LIGHT POLE FOUNDATION	22	EA	\$1,200.00	\$26,40
SS5442-1	3" DEEP X 16 GAUGE GALVANIZED FORM DECK	10,800	SF	\$30.00	\$324,0
					;
				LINE ITEM TOTAL	\$1,885,71
				CONTINGENCY	40

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME	LA LOMA TRAIL - PROPOSED ALTERNATIVE 1 b - OPT 2 - Underpass using CONTECH Tunnel Liner Plate					
PROJECT LIMITS	T LIMITS SARA DRIVE TO SOUTHERN WALNUT CREEK TRAIL					
PREPARED	SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY					
Ву	JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220	
Date	4/26/2018					

Proposed Alternative 1b approximately 2150 LF of trail segment connecting Sara Drive / Prock Lane to existing Southern Walnut Creek Trail (SWCT) near Tannehill branch creek. The proposed alternative alignment will follow the existing beaten path from SWCT to the Railroad track and underpass the track at about 100 FT east from the creek centerline with a Contech Tunnel Liner Plate and will be parallel to left bank after passing tracks to Sara Drive. There are two creek crossing near Sara Drive need to be addressed for this alignment.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. Tunnel Liner Plate/ construction costs are based on Contech Engineering Solution's price. The level of accuracy will increse as the design moves forward and topographic surveys and environmental report become available. This does not include any cost associated with railroad activity monitoring during the construction.

INSTRUCTION CO	OST ESTIMATE				
ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.99	AC	\$15,000.00	\$14,80
111S-A	EXCAVATION	4,111	CY	\$45.00	\$185,00
132S-A	EMBANKMENT	3,000	CY	\$45.00	\$135,00
201S	SUBGRADE PREPARATION	4,300	SY	\$6.00	\$25,800
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	4,300	SY	\$30.00	\$129,000
360S-A	6 IN. CONCRETE PAVEMENT	2,900	SY	\$80.00	\$232,000
403S-CY	CONCRETE FOR STRUCTURES	200.0	CY	\$200.00	\$40,000
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	100	CY	\$600.00	\$60,000
432S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	900	LF	\$80.00	\$72,000
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	2,400	SY	\$1.00	\$2,400
604S-I	TOP SOIL AND SEEED BED PREPARATION	2,400	SY	\$5.00	\$12,000
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	63	EA	\$570.00	\$35,910
639S	ROCK BERM	600	LF	\$45.00	\$27,000
641S	STABILIZED CONSTRUCTION ENTRANCE	4.0	EA	\$1,500.00	\$6,000
642S	SILT FENCE FOR EROSION CONTROL	4,600	LF	\$5.00	\$23,000
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,000
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,800
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	16	EA	\$500.00	\$8,000
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	1,075	LF	\$4.00	\$4,300
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	1,075	LF	\$4.00	\$4,300
CTECH-1	124 IN DIA, 10 GAUGE HOT DIP GALVANIZED TUNNEL LINER PLATE (CONTECH)	220	LF	\$1,000.00	\$220,000
CTECH-2	TUNNEL EXCAVATION/ CONSTRUCTION	220	LF	\$1,600.00	\$352,000
CTECH-3	TUNNEL TRANSITION - BOTH ENDS	300	LF	\$700.00	\$210,00
CTECH-4	TUNNEL ENDS (RETAINING WALL)	2.0	EA	\$40,000.00	\$80,000
CTECH-5	DRAINAGE	1.0	LS	\$60,000.00	\$60,00
SS490S-1	BOLLARDS	8	EA	\$850.00	\$6,80
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	22	EA	\$2,500.00	\$55,00
SS16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	22	EA	\$1,200.00	\$26,40
	PEDESTRIAN BRIDGE (20 FT SPAN, STEEL FRAME, WOOD DECK)	1.00	LS	\$30,000.00	\$30,00
				LINE ITEM TOTAL	\$2,091,51
				CONTINGENCY	40.

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME	ME LA LOMA TRAIL - PROPOSED ALTERNATIVE 1 b - OPT 3 - At-Grade crossing near Tannehill					
PROJECT LIMITS	ROJECT LIMITS SARA DRIVE TO SOUTHERN WALNUT CREEK TRAIL					
PREPARED	SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY					
Ву	JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220	
Date	10/23/2017	11796.017				
SUMMARY OF WOR	SUMMARY OF WORK					

Proposed Alternative 1b approximately 2150 LF of trail segment connecting Sara Drive / Prock Lane to existing Southern Walnut Creek Trail (SWCT) near Tannehill branch creek. The proposed alternative alignment will follow the existing beaten path from SWCT to the Railroad track and cross the tracks at-grade and will be parallel to left bank of the Tannehill Branch Creek. There are two creek crossing need to be addressed for this alignment.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and environemental report become available. This estimate includes pathway crossing with railroad signs as per TxDOT detail RCD(2)-16. Assumes the construction during off railroad service time

ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.99	AC	\$15,000.00	\$14,80
111S-A	EXCAVATION	3,000	CY	\$45.00	\$135,00
132S-A	EMBANKMENT	3,000	CY	\$45.00	\$135,00
201S	SUBGRADE PREPARATION	4,300	SY	\$6.00	\$25,80
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	4,300	SY	\$30.00	\$129,00
360S-A	6 IN. CONCRETE PAVEMENT	2,900	SY	\$80.00	\$232,00
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	100	CY	\$600.00	\$60,00
432S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	900	LF	\$80.00	\$72,00
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	2,400	SY	\$1.00	\$2,40
604S-I	TOP SOIL AND SEEED BED PREPARATION	2,400	SY	\$5.00	\$12,00
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	63	EA	\$570.00	\$35,91
639S	ROCK BERM	600	LF	\$45.00	\$27,00
641S	STABILIZED CONSTRUCTION ENTRANCE	4.0	EA	\$1,500.00	\$6,00
642S	SILT FENCE FOR EROSION CONTROL	4,500	LF	\$5.00	\$22,50
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,00
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,80
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	16	EA	\$500.00	\$8,00
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	1,075	LF	\$4.00	\$4,30
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	1,075	LF	\$4.00	\$4,30
SS490S-1	BOLLARDS	8	EA	\$850.00	\$6,80
	RAILROAD CROSSING SIGNS	8	EA	\$1,000.00	\$8,00
	RAILROAD AT-GRADE CROSSING TRACKS	1.00	LS	\$250,000.00	\$250,00
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	5	EA	\$2,500.00	\$12,50
SS16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	5	EA	\$1,200.00	\$6,00
	PEDESTRIAN BRIDGE (20 FT SPAN, STEEL FRAME, WOOD DECK)	1.00	LS	\$30,000.00	\$30,00
					\$
					\$
				LINE ITEM TOTAL	\$1,274,11

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME LA LOMA TRAIL - PROPOSED ALTERNATIVE 1 - SEGMENT 1						
PROJECT LIMITS	PROJECT LIMITS SARA DRIVE TO SOUTHERN WALNUT CREEK TRAIL					
PREPARED	SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY					
Ву	JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220	
Date	2/13/2018	11796.017				

Proposed segment will begin from Alf Avenue to La Loma Trail Alternative 1, which will cross the Tannehill Branch Creek with a pedestrian bridge. Proposed 12 ft wide concrete

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and environemental report become available. This estimate does not include the pavement strong enough for truck traffic.

ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.30	AC	\$15,000.00	\$4,4
111S-A	EXCAVATION	100	CY	\$45.00	\$4,5
132S-A	EMBANKMENT	100	CY	\$45.00	\$4,5
201S	SUBGRADE PREPARATION	1,300	SY	\$6.00	\$7,8
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	1,300	SY	\$30.00	\$39,0
360S-A	6 IN. CONCRETE PAVEMENT	900	SY	\$80.00	\$72,0
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	0	CY	\$600.00	
132S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	100	LF	\$80.00	\$8,0
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	700	SY	\$1.00	\$7
604S-I	TOP SOIL AND SEEED BED PREPARATION	700	SY	\$5.00	\$3,5
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	5	EA	\$570.00	\$2,8
639S	ROCK BERM	20	LF	\$45.00	\$9
641S	STABILIZED CONSTRUCTION ENTRANCE	2.0	EA	\$1,500.00	\$3,0
642S	SILT FENCE FOR EROSION CONTROL	1,500	LF	\$5.00	\$7,5
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	1	MO	\$1,500.00	\$1,5
824S	TRAFFIC SIGNS	2	EA	\$880.00	\$1,7
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR 2 EA	EA	\$500.00	\$1,0	
371S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	325	LF	\$4.00	\$1,3
371S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	325	LF	\$4.00	\$1,3
SS490S-1	BOLLARDS	8	EA	\$850.00	\$6,8
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	2	EA	\$2,500.00	\$5,0
S16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$1,000.00	\$1,0
S16651-TL-F	TRAIL LIGHT POLE FOUNDATION	2	EA	\$1,200.00	\$2,4
	PEDESTRIAN BRIDGE (20 FT SPAN, STEEL FRAME, WOOD DECK)	1.00	LS	\$30,000.00	\$30,0
				CONTINGENCY	\$210,7

N:\Team4\PWD_La_Loma\2-Bid_Award\Bid_Tab\LALO-90%COST

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME	PROJECT NAME LA LOMA TRAIL - PROPOSED ALTERNATIVE 2 - OPT2 - At-Grade crossing at Jain Lane					
PROJECT LIMITS BROOKSWOOD AVE TO JAIN LANE						
PREPARED	SERVICE AGREEMENT/AMENDMENT/WORK ORDER #	ORGANIZATION				
Ву	JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220	
Date	10/23/2017	11796.017				
SUMMARY OF WO	RK					

Proposed Alternative 2 will be approximately 470 LF of trail connecting Brookswood Ave and Jain Lane through the vacant parcel at 1100 Brookswood Ave (TCAD parcel No. 0204190113) and cross the rail road tracks at-grade. This alignment can follow the existing beaten path in the vacant parcel and cross the tracks at-grade to Jain Lane.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys become available. Assumes the construction during off service time. This estimate includes pathway crossing with railroad signs as per TxDOT detail RCD(2)-16. Added sidewalk improvements and construction of missing sidewalk to connect SWCT & Sara Drive through Brookswood Avenue and Sauced St.

ISTRUCTION C	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.22	AC	\$10,000.00	\$2,1
132S-A	EMBANKMENT	300	CY	\$45.00	\$13,5
201S	SUBGRADE PREPARATION	900	SY	\$6.00	\$5,4
201S 204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	900	SY	\$30.00	\$27,0
360S-A	6 IN. CONCRETE PAVEMENT	600	SY	\$80.00	\$48,0
414S-C	CAST-IN-PLACE PORTLAND CEMENT CONCRETE RETAINING WALL, INCLUDING REINFORCEMENT	100	CY	\$800.00	\$80,0
432S-4	NEW P.C. CONCRETE SIDEWALKS 4-INCH THICKNESS	18,500	SF	\$24.00	\$444,0
432S-PRC-4	PEDESTRIAN ADA RAILING - OPTION 3 (STANDARD 707S-4)	740	LF	\$75.00	\$55,5
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	500	SY	\$1.00	\$5
604S-I	TOP SOIL AND SEEED BED PREPARATION	500	SY	\$5.00	\$2,5
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	5	EA	\$570.00	\$2,8
639S	ROCK BERM	250	LF	\$45.00	\$11,2
641S	STABILIZED CONSTRUCTION ENTRANCE	2.0	EA	\$1,500.00	\$3,0
642S	SILT FENCE FOR EROSION CONTROL	1,140	LF	\$5.00	\$5,7
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,0
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,8
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	4	EA	\$500.00	\$2,0
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	235	LF	\$4.00	\$9
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	235	LF	\$4.00	\$9
SS490S-1	BOLLARDS	6	EA	\$850.00	\$5,1
	RAILROAD CROSSING SIGNS	8	EA	\$1,000.00	\$8,0
	RAILROAD AT-GRADE CROSSING TRACKS	1.00	LS	\$250,000.00	\$250,0
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	5	EA	\$2,500.00	\$12,5
SS16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,0
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	5	1.00	\$1,200.00	\$6,0
	<u> </u>			LINE ITEM TOTAL	\$1,021,6
				CONTINGENCY	4(
	CONSTRUCTION COST ESTIMA	TE			\$1,430,29

CONSTRUCTION COST ESTIMATE (Form 4)

PRO.	PROJECT NAME LA LOMA TRAIL - PROPOSED ALTERNATIVE 3 - Underpass existing railroad bridge at Fort Branch					ESTIMATE CLASS	
PRO.	PROJECT LIMITS PROCK LANE TO SOUTHERN WALNUT CREEK TRAIL					D	
PREF	REPARED SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY					ORGANIZATION	
Ву		JOTHIKA THIVAKARAN	C.I.P ID#	8119	6207	L220	
Date		10/23/2017	11796.017	8119 6207 L220			
SUM	SUMMARY OF WORK						

Proposed Alternative 3 will be approximately 1800 LF of trail connect the end of Prock Lane with the SWCT near Fort Branch Creek. This alternative will begin from Prock Lane end and continue eastward parallel to Tura Lane and turn towards south to cross the railroad track and connect with existing SWCT.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and environemtnal report become available.

ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.83	AC	\$30,000.00	\$24,7
111S-A	EXCAVATION	2,200	CY	\$45.00	\$99,0
132S-A	EMBANKMENT	2.200	CY	\$45.00	\$99.0
201S	SUBGRADE PREPARATION	3,600	SY	\$6.00	\$21,6
2013	PORTLAND CEMENT TREATMENT OF MATERIALS IN	3,000		ψ0.00	Ψ2 1,0
204S-A	PLACE 8 IN THICKNESS	3,600	SY	\$30.00	\$108,0
360S-A	6 IN. CONCRETE PAVEMENT	2,400	SY	\$80.00	\$192,0
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	2,000	SY	\$1.00	\$2,0
604S-I	TOP SOIL AND SEEED BED PREPARATION	2,000	SY	\$5.00	\$10,0
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	144	EA	\$570.00	\$82,0
639S	ROCK BERM	250	LF	\$45.00	\$11,2
641S	STABILIZED CONSTRUCTION ENTRANCE	3.0	EA	\$1,500.00	\$4,5
642S	SILT FENCE FOR EROSION CONTROL	3,800	LF	\$5.00	\$19,0
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,0
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,8
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	16	EA	\$500.00	\$8,0
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	1,800	LF	\$4.00	\$7,2
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	1,800	LF	\$4.00	\$7,2
SS490S-1	BOLLARDS	6	EA	\$850.00	\$5,1
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	18	EA	\$2,500.00	\$45,0
S16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,0
S16651-TL-F	TRAIL LIGHT POLE FOUNDATION	18	1.00	\$1,200.00	\$21,6
		_			
				LINE ITEM TOTAL	\$802,1
				CONTINGENCY	40

PROBABLE CONSTRUCTION COST ESTIMATE

PROJECT NAME LA LOMA TRAIL - PROPOSED LOTT AVENUE CONNECT- OPTION 1						ESTIMATE CLASS
PROJE	PROJECT LIMITS ELEANOR STREET TO LOTT AVE					D
PREPA	PREPARED SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY		AGENCY	ORGANIZATION		
Ву		JOTHIKA THIVAKARAN	C.I.P ID #	8119	6207	L220
Date		10/23/2017	11796.017			
CLIMANA	ABY OF WORK					

Proposed 450 LF of Eleanor connection will connect Eleanor Street with Lott Ave to provide access to the community in the east of Fort Branch Creek to La Loma trail. This connection will be through the vacant lot at 1124 Eleanor St (TCAD 0208210617) and 1125 Lott Ave. (TCAD 0208210650). This proposed trail segment will cross the Fort Branch creek with a proposed bridge structure.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and environmental report become available.

ITEM	OST ESTIMATE ITEM DESCRIPTION	OHANTITY	LINET	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	QUANTITY 0.21	AC	\$15,000.00	AMOUNT \$3,099
111S-A	EXCAVATION EXCEPTION	400	CY	\$45.00	\$18,000
132S-A	EMBANKMENT	400	CY	\$45.00	\$18,000
201S	SUBGRADE PREPARATION	900	SY	\$6.00	\$5,400
2015		900	31	ψ0.00	φ5,400
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	900	SY	\$30.00	\$27,000
360S-A	6 IN. CONCRETE PAVEMENT	600	SY	\$80.00	\$48,000
403S-CY-A	CONCRETE FOR STRUCTURES: ABUTMENT (PEDESTRIAN BRIDGE)	8	CY	\$550.00	\$4,400
420S-B-24	DRILLED SHAFT (24IN DIA, REINFORCING, 4,000 PSI CONCRETE)	96	LF	\$200.00	\$19,20
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	500	SY	\$1.00	\$50
604S-I	TOP SOIL AND SEEED BED PREPARATION	500	SY	\$5.00	\$2,50
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	25	EA	\$570.00	\$14,25
639S	ROCK BERM	300	LF	\$45.00	\$13,50
641S	STABILIZED CONSTRUCTION ENTRANCE	2.0	EA	\$1,500.00	\$3,00
642S	SILT FENCE FOR EROSION CONTROL	1,100	LF	\$5.00	\$5,50
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,00
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,80
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	4	EA	\$500.00	\$2,00
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	450	LF	\$4.00	\$1,80
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	450	LF	\$4.00	\$1,80
	PEDESTRIAN BRIDGE (60 FT SPAN, STEEL FRAME, WOOD DECK)	1	LS	\$110,000.00	\$110,00
SS490S-1	BOLLARDS	6	EA	\$850.00	\$5,10
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	5	EA	\$2,500.00	\$12,50
SS16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	5	1.00	\$1,200.00	\$6,00
					\$
					 \$
					 \$
					<u> </u>
					9
					9
	+				\$
				LINE ITEM TOTAL	\$356,34
				CONTINGENCY	40.

PROBABLE CONSTRUCTION COST ESTIMATE (Form 4)

PROJECT NAME	LA LOMA TRAIL - PROPOSED LOTT AVENUE CONNECT- O	PTION 2			ESTIMATE CLASS
PROJECT LIMITS	PROJECT LIMITS FORT BRANCH BLVD TO LOTT AVE				
PREPARED	PREPARED SERVICE AGREEMENT/AMENDMENT/WORK ORDER # C.I.P. NUMBER FUND AGENCY				
Ву	JOTHIKA THIVAKARAN	C.I.P ID #	8119	6207	L220
Date	1/22/2018	11796.017			
SLIMMARY OF WOR	ů.				

Proposed 400 LF of Eleanor connection will connect Fort Branch Blvd with Lott Ave to provide access to the community in the east of Fort Branch Creek to La Loma trail. This connection will be through the dedicated street ROW for Fort Branch Blvd and City of Austin parcels. This proposed trail segment will cross the Fort Branch creek with a proposed bridge structure.

COMMENTS

This estimate is preliminary and are based on a preliminary design stage. The level of accuracy will increse as the design moves forward and topographic surveys and environmental report become available.

NSTRUCTION C				LINET PRIOR	
ITEM	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
102S-A	CLEARING AND GRUBBING	0.18	AC	\$15,000.00	\$2,75
111S-A	EXCAVATION	370	CY	\$45.00	\$16,65
132S-A	EMBANKMENT	370	CY	\$45.00	\$16,6
201S	SUBGRADE PREPARATION	800	SY	\$6.00	\$4,80
204S-A	PORTLAND CEMENT TREATMENT OF MATERIALS IN PLACE 8 IN THICKNESS	800	SY	\$30.00	\$24,00
360S-A	6 IN. CONCRETE PAVEMENT	550	SY	\$80.00	\$44,00
403S-CY-A	CONCRETE FOR STRUCTURES: ABUTMENT (PEDESTRIAN BRIDGE)	8	CY	\$550.00	\$4,40
420S-B-24	DRILLED SHAFT (24IN DIA, REINFORCING, 4,000 PSI CONCRETE)	96	LF	\$200.00	\$19,20
604S-E	NATIVE SEEDING FOR EROSION CONTROL METHOD, FIBER MULCH	440	SY	\$1.00	\$44
604S-I	TOP SOIL AND SEEED BED PREPARATION	440	SY	\$5.00	\$2,20
610S-E	TREE TRUNK PROTECTION, WOOD PLANKING	25	EA	\$570.00	\$14,25
639S	ROCK BERM	300	LF	\$45.00	\$13,50
641S	STABILIZED CONSTRUCTION ENTRANCE	2.0	EA	\$1,500.00	\$3,00
642S	SILT FENCE FOR EROSION CONTROL	1,000	LF	\$5.00	\$5,00
803S-MO	BARRICADES, SIGNS AND TRAFFIC HANDLING	12	MO	\$1,500.00	\$18,00
824S	TRAFFIC SIGNS	10	EA	\$880.00	\$8,80
829S-F	TYPE II BICYCLE LANE PREFERENTIAL (DIRECTIONAL ARROW) SYMBOLS, WHITE IN COLOR	4	EA	\$500.00	\$2,00
871S-A-4YB	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS YELLOW IN COLOR (BROKEN)	400	LF	\$4.00	\$1,60
871S-A-4YS	REFLECTORIZED TYPE I THERMOPLASTIC PAVEMENT MARKINGS 4 INCHES IN WIDTH, 90 MILS IN THICKNESS, YELLOW IN COLOR (SOLID)	400	LF	\$4.00	\$1,60
	PEDESTRIAN BRIDGE (60 FT SPAN, STEEL FRAME, WOOD DECK)	1	LS	\$110,000.00	\$110,00
SS490S-1	BOLLARDS	6	EA	\$850.00	\$5,10
SS16651-TL	TRAIL LIGHT POLE WITH LIGHT	5	EA	\$2,500.00	\$12,50
SS16651-TL-C	CONTROLS (TRAILS)	1.00	LS	\$8,000.00	\$8,00
SS16651-TL-F	TRAIL LIGHT POLE FOUNDATION	5	1.00	\$1,200.00	\$6,00
				LINE ITEM TOTAL	\$344,44
				CONTINGENCY	40
	CONSTRUCTION COST ESTIMA	mp.			\$482,22