

Existing Conditions Aerial dated 04-01-2021

TULIP BLVD & COLLEGE PARK INTERSECTION **UPDATE OF IMPROVEMENT OPTIONS**

Prepared by: Culpepper & Terpening, Inc.

May 16, 2022



**TULIP BLVD &
COLLEGE PARK
INTERSECTION**

PROJECT BACKGROUND

History	Resident Concerns
<ul style="list-style-type: none">▪ Mini-roundabout was constructed as part of the PSL/Gatlin Blvd. safety improvement project in collaboration with FDOT;▪ Mini-roundabout was provided to maintain access to Walgreens and CVS; and▪ Mini-roundabout also served to slow traffic entering the neighborhood.▪ Initial Project Review by City Council on September 20, 2021▪ Project Informational Meeting (PIM) with Residents Held on January 12, 2022	<ul style="list-style-type: none">▪ East/West traffic queues from signal through mini-roundabout blocking northbound and southbound traffic on College Park▪ Signs and markings stating “Do Not Block” are ineffective▪ Concrete “island” is unsightly and is not landscaped like other roundabouts in the City

TULIP BLVD & COLLEGE PARK INTERSECTION



PIM RESIDENT FEEDBACK

Public Informational Meeting attended by the following

- 37 Residents
- WTPV Channel 5
- City Councilwoman Caraballo
- City Manager Russ Blackburn
- City and Consultant Staff
- 9 additional comment cards received

TULIP BLVD &
COLLEGE PARK
INTERSECTION

PIM RESIDENT FEEDBACK

Original Concerns

- East/West traffic queues from signal through mini-roundabout blocking northbound and southbound traffic on College Park
- Signs and markings stating “Do Not Block” are ineffective
- Concrete “island” is unsightly and is not landscaped like other roundabouts in the City

Most prevalent comments from PIM

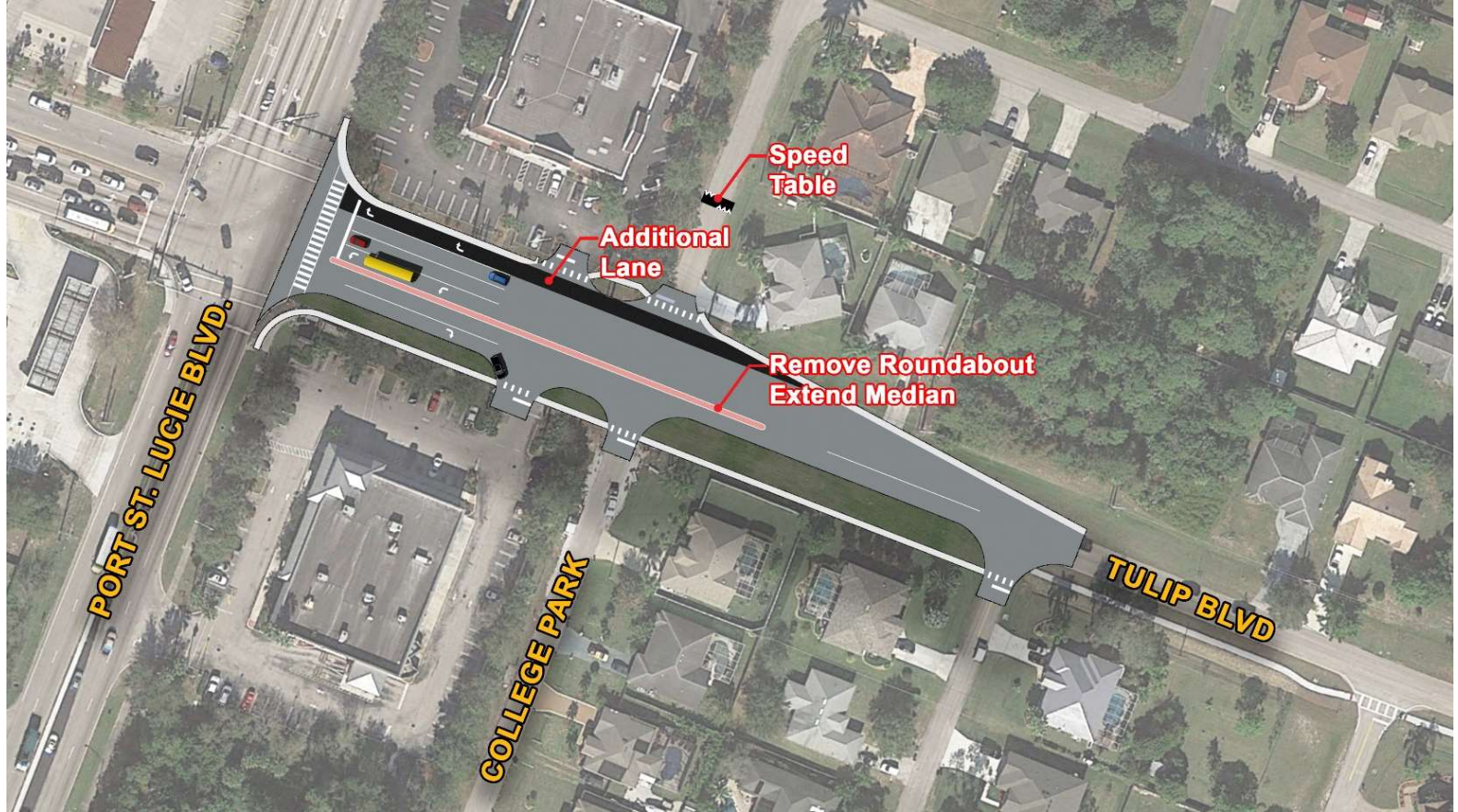
- Construct additional lane west bound at Gatlin & PSL Blvd
- Remove mini traffic circle
- Prohibit cross traffic at College Park
- Slow down speed on Tulip Blvd.
- Provide traffic calming north College Park

TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 1

REPLACE W/ MEDIAN NEW RIGHT TURN LANE

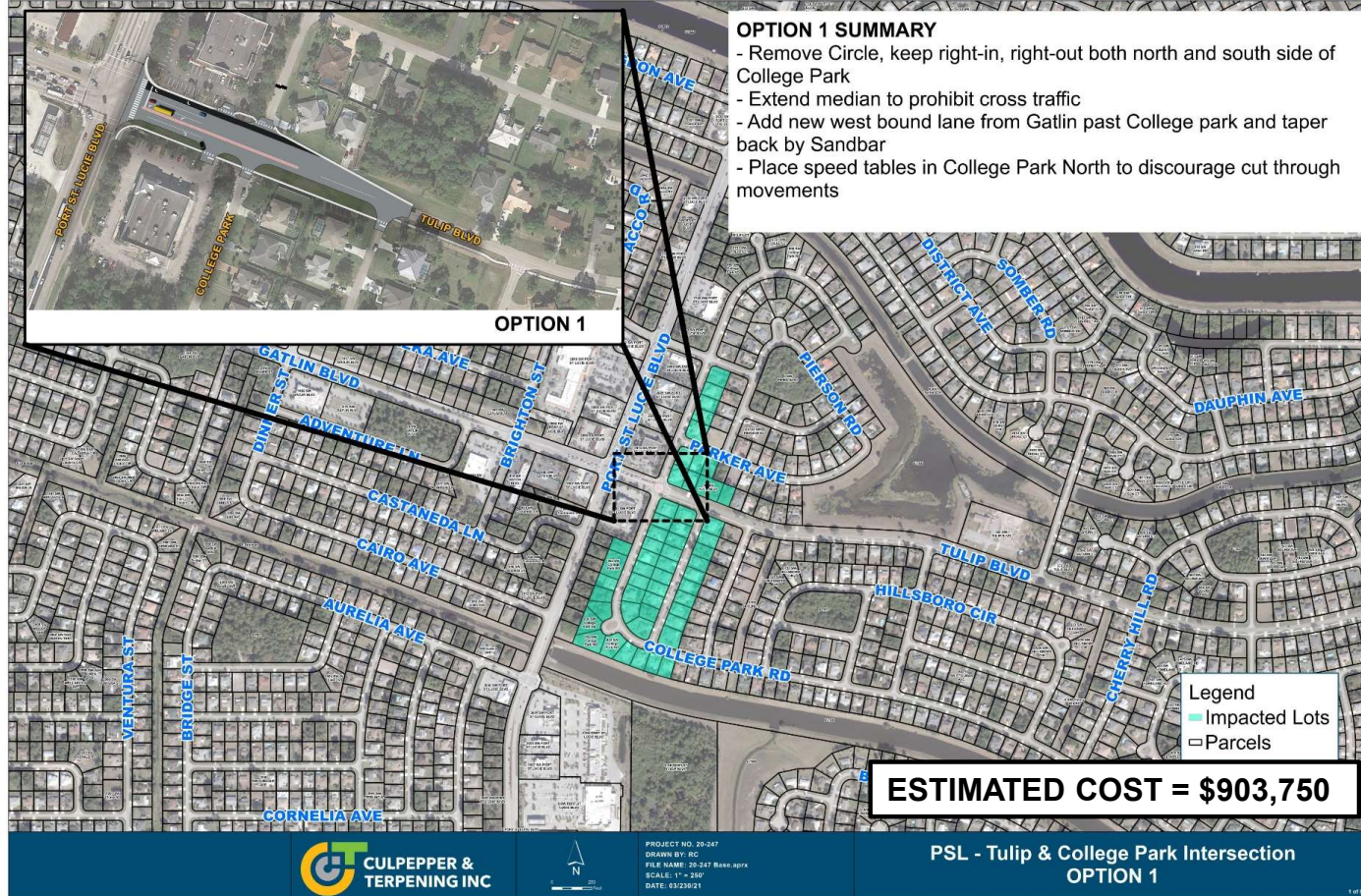


TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 1

REPLACE W/ MEDIAN NEW RIGHT TURN LANE



TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 1 | REPLACE W/ MEDIAN NEW RIGHT TURN LANE

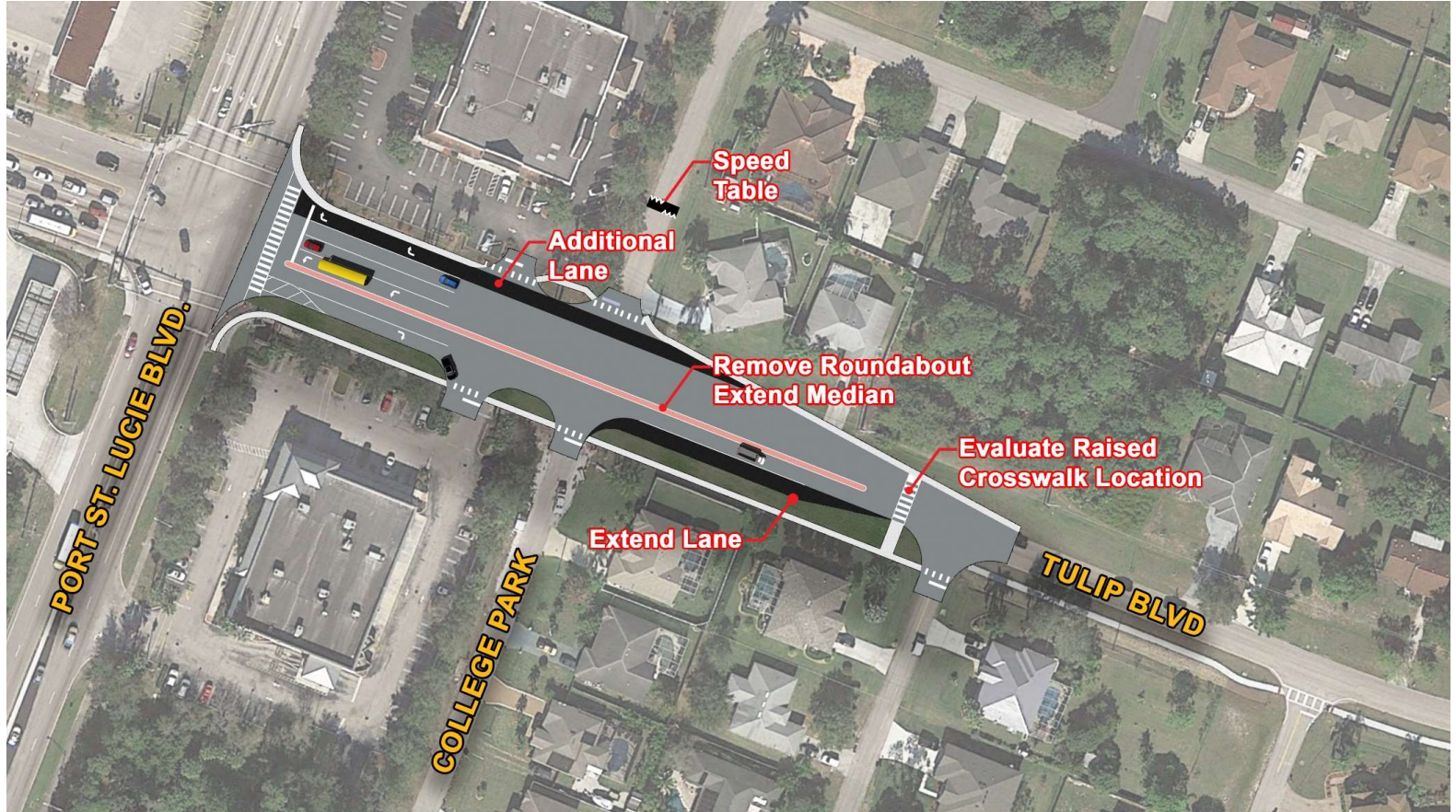
Detailed Estimate of Probable Cost

Pay Item Number	Pay Item Description	Quantity	Unit	Engineer's Unit Cost	Engineer's Subtotal Cost
101-1A	MOBILIZATION	1	LS	15.0%	\$ 60,247.50
101-18	CONSTRUCTION VIDEO	1	LS	5.0%	\$ 20,082.50
101-99	SURVEY STAKING AND RECORD DRAWINGS	1	LS	10.0%	\$ 40,165.00
102-1	MAINTENANCE OF TRAFFIC	1	LS	20.0%	\$ 80,330.00
104-10-3	INLET PROTECTION	4	LF	\$ 50.00	\$ 200.00
110-1-1	CLEARING AND GRUBBING (SELECT)	1.00	AC	\$ 6,500.00	\$ 6,500.00
110-4-10	REMOVAL OF EXISTING CONCRETE/PAVEMENT	500	SY	\$ 30.00	\$ 15,000.00
120-1	REGULAR EXCAVATION & EMBANKMENT	1	LS	\$ 10,000.00	\$ 10,000.00
334-1-11	ASPHALT ROADWAY OVERLAY	125	TON	\$ 110.00	\$ 13,750.00
334-1-12	ROADWAY CONSTRUCTION	1920	SY	\$ 100.00	\$ 192,000.00
334-1	ASPHALT SPEED TABLE (COMPLETE)	1	LS	\$ 15,000.00	\$ 15,000.00
400-0-11	CONC CLASS I, GRAVITY WALL	42	CY	\$ 650.00	\$ 27,300.00
425-1-321	INLET, CURB	4	EA	\$ 3,500.00	\$ 14,000.00
430-174-124	PIPE CULVERT, RCP, ROUND, 24"	500	LF	\$ 60.00	\$ 30,000.00
455-1A	DEWATERING FOR CONSTRUCTION OPERATIONS	1	LS	\$ 2,500.00	\$ 2,500.00
520-1	TYPE F CURB & GUTTER	1260	LF	\$ 25.00	\$ 31,500.00
520-5-11	CONCRETE TRAFFIC SEPARATOR	58	SY	\$ 50.00	\$ 2,900.00
522-1	CONCRETE SIDEWALK	330	SY	\$ 40.00	\$ 13,200.00
700-1-11	SINGLE POST SIGN, < 12 SF	12	EA	\$ 300.00	\$ 3,600.00
711-11101	6" WHITE, SOLID TRAFFIC, THERMOPLASTIC	600	LF	\$ 2.50	\$ 1,500.00
711-11141	6" WHITE, SKIP TRAFFIC, THERMOPLASTIC	300	LF	\$ 2.50	\$ 750.00
711-11123	12" WHITE, SOLID TRAFFIC, THERMOPLASTIC	50	LF	\$ 5.00	\$ 250.00
711-11125	24" WHITE, SOLID TRAFFIC, THERMOPLASTIC	200	LF	\$ 10.00	\$ 2,000.00
711-11141	6" YELLOW, TRAFFIC, THERMOPLASTIC	600	LF	\$ 2.50	\$ 1,500.00
711-11170	TREMOPLASTIC STD, WHITE, ARROW	8	EA	\$ 150.00	\$ 1,200.00
570-1-2	PERFORMANCE TURF, SOD	1400	SY	\$ 5.00	\$ 7,000.00
580-1-1	LANDSCAPE	1	LS	\$ 5,000.00	\$ 5,000.00
2000-1	UTILITY ADJUSTMENT	10	EA	\$ 500.00	\$ 5,000.00
Subtotal					\$ 602,475.00
Contingency @ 25%					\$ 150,618.75
Tech Services @ 20%					\$ 150,618.75
Total					\$ 903,712.50

TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 2 | ADD EB LANE & EXTEND MEDIAN TO SANDBAR

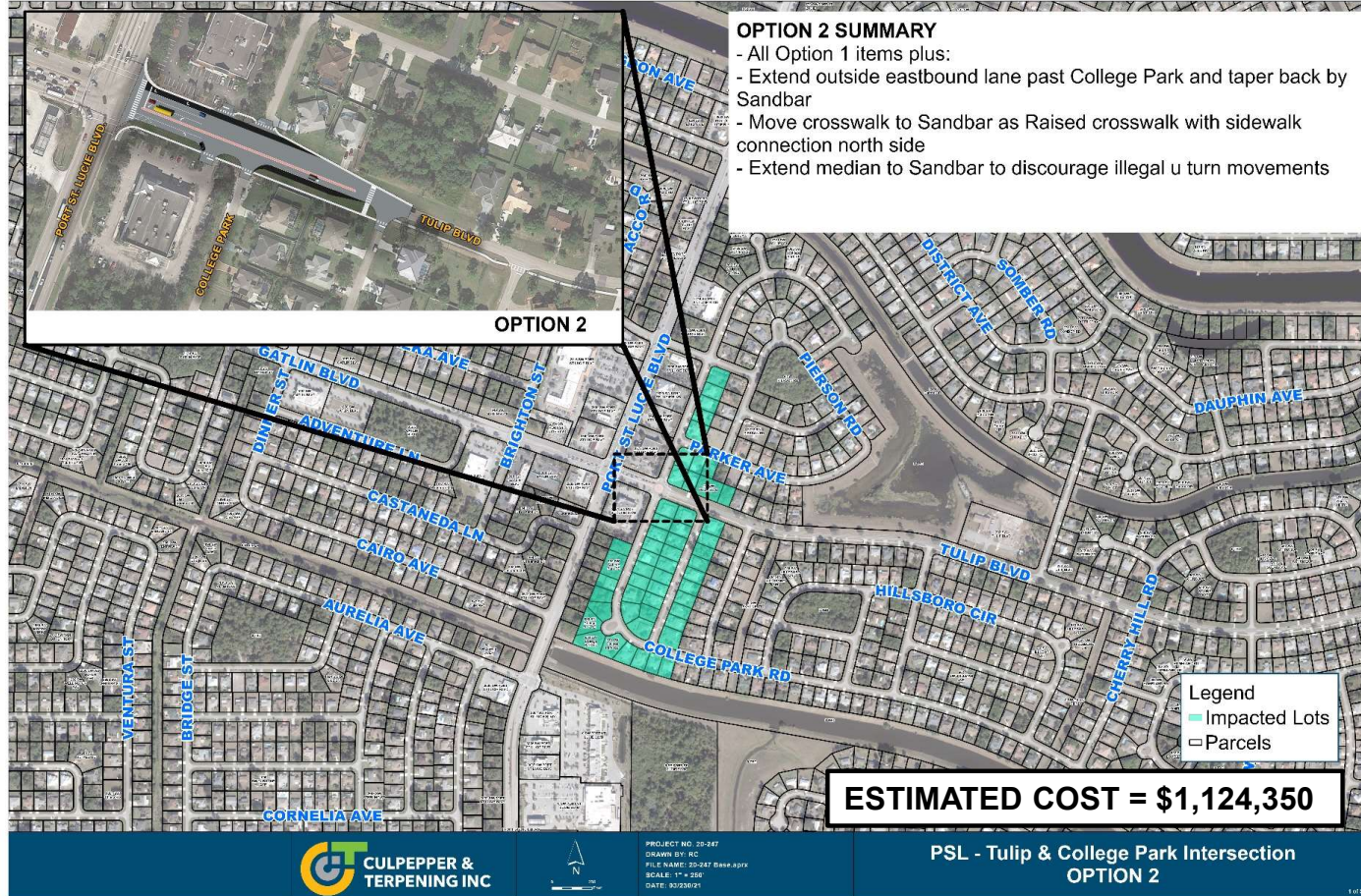


TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 2

ADD EB LANE & EXTEND MEDIAN TO SANDBAR



TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 2

ADD EB LANE & EXTEND MEDIAN TO SANDBAR

Detailed Estimate of Probable Cost

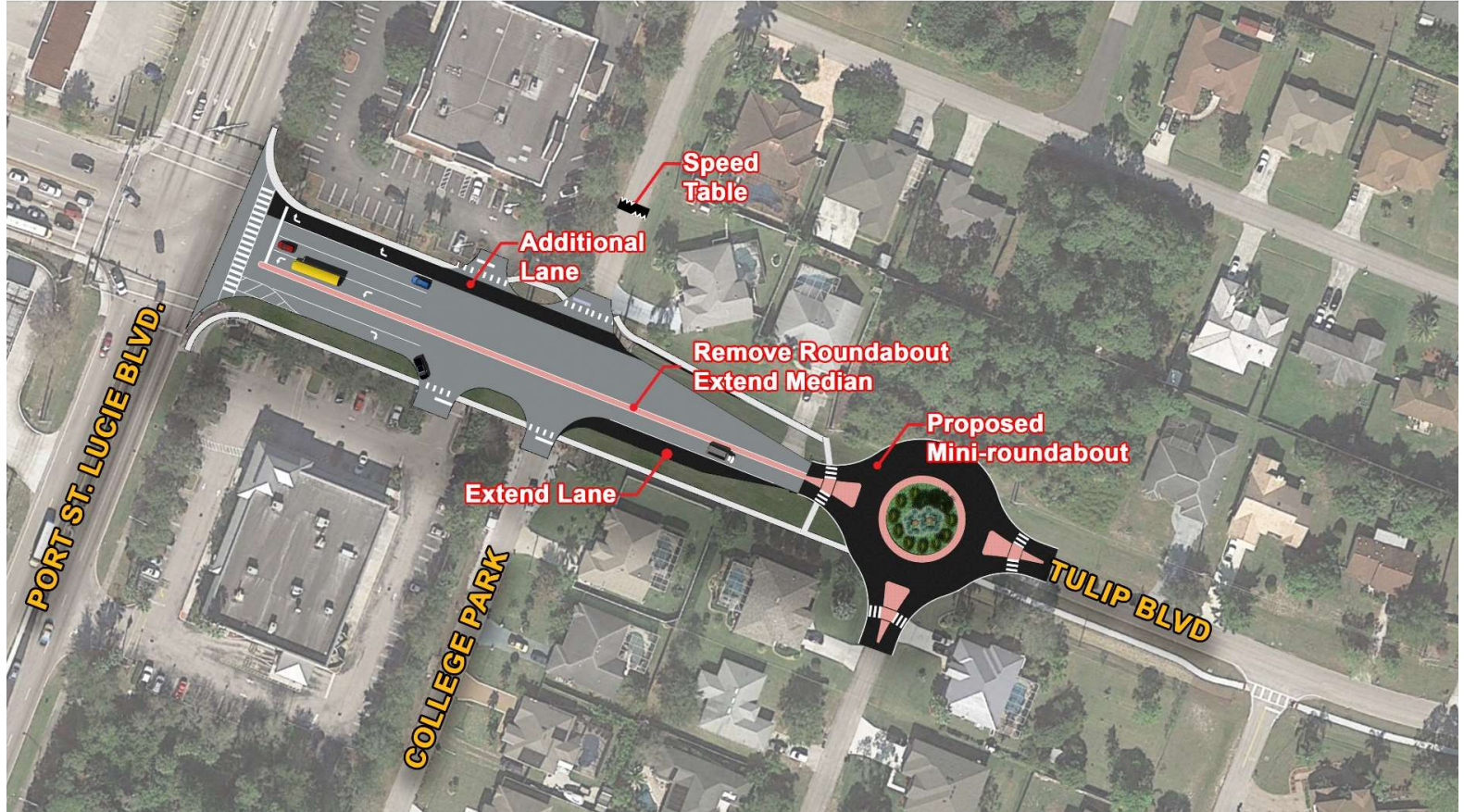
Pay Item Number	Pay Item Description	Quantity	Unit	Engineer's Unit Cost	Engineer's Subtotal Cost
101-1A	MOBILIZATION	1	LS	15.0%	\$ 74,954.25
101-18	CONSTRUCTION VIDEO	1	LS	5.0%	\$ 24,984.75
101-99	SURVEY STAKING AND RECORD DRAWINGS	1	LS	10.0%	\$ 49,969.50
102-1	MAINTENANCE OF TRAFFIC	1	LS	20.0%	\$ 99,939.00
104-10-3	INLET PROTECTION	4	LF	\$ 50.00	\$ 200.00
110-1-1	CLEARING AND GRUBBING (SELECT)	1.00	AC	\$ 6,500.00	\$ 6,500.00
110-4-10	REMOVAL OF EXISTING CONCRETE/PAVEMENT	500	SY	\$ 30.00	\$ 15,000.00
120-1	REGULAR EXCAVATION & EMBANKMENT	1	LS	\$ 10,000.00	\$ 10,000.00
334-1-11	ASPHALT ROADWAY OVERLAY	195	TON	\$ 110.00	\$ 21,450.00
334-1-12	ROADWAY CONSTRUCTION	2240	SY	\$ 100.00	\$ 224,000.00
334-1A	ASPHALT SPEED TABLE (COMPLETE)	1	LS	\$ 15,000.00	\$ 15,000.00
334-1B	RAISED CROSSWALK (COMPLETE)	1	LS	\$ 15,000.00	\$ 15,000.00
400-0-11	CONC CLASS I, GRAVITY WALL	42	CY	\$ 650.00	\$ 27,300.00
425-1-321	INLET, CURB	6	EA	\$ 3,500.00	\$ 21,000.00
430-174-124	PIPE CULVERT, RCP, ROUND, 24"	580	LF	\$ 60.00	\$ 34,800.00
455-1A	DEWATERING FOR CONSTRUCTION OPERATIONS	1	LS	\$ 2,500.00	\$ 2,500.00
520 1	TYPE F CURB & GUTTER	1660	LF	\$ 25.00	\$ 41,500.00
520-5-11	CONCRETE TRAFFIC SEPARATOR	138	SY	\$ 50.00	\$ 6,900.00
522-1	CONCRETE SIDEWALK	463	SY	\$ 40.00	\$ 18,520.00
700-1-11	SINGLE POST SIGN, < 12 SF	20	EA	\$ 300.00	\$ 6,000.00
711-11101	6" WHITE, SOLID TRAFFIC, THERMOPLASTIC	1200	LF	\$ 2.50	\$ 3,000.00
711-11141	6" WHITE, SKIP TRAFFIC, THERMOPLASTIC	600	LF	\$ 2.50	\$ 1,500.00
711-11123	12" WHITE, SOLID TRAFFIC, THERMOPLASTIC	100	LF	\$ 5.00	\$ 500.00
711-11125	24" WHITE, SOLID TRAFFIC, THERMOPLASTIC	300	LF	\$ 10.00	\$ 3,000.00
711-11141	6" YELLOW, TRAFFIC, THERMOPLASTIC	1150	LF	\$ 2.50	\$ 2,875.00
711-11170	TREMOPLASTIC STD, WHITE, ARROW	16	EA	\$ 150.00	\$ 2,400.00
711-11171	TREMOPLASTIC STD, WHITE, MESSAGE, MERGE	2	EA	\$ 200.00	\$ 400.00
570-1-2	PERFORMANCE TURF, SOD	2070	SY	\$ 5.00	\$ 10,350.00
580-1-1	LANDSCAPE	1	LS	\$ 5,000.00	\$ 5,000.00
2000-1	UTILITY ADJUSTMENT	10	EA	\$ 500.00	\$ 5,000.00
Subtotal					\$ 749,542.50
Contingency @ 25%					\$ 187,385.63
Tech Services @ 20%					\$ 187,385.63
Total					\$ 1,124,313.75

TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 3

ADD EB MINI ROUNDABOUT AT SANDBAR

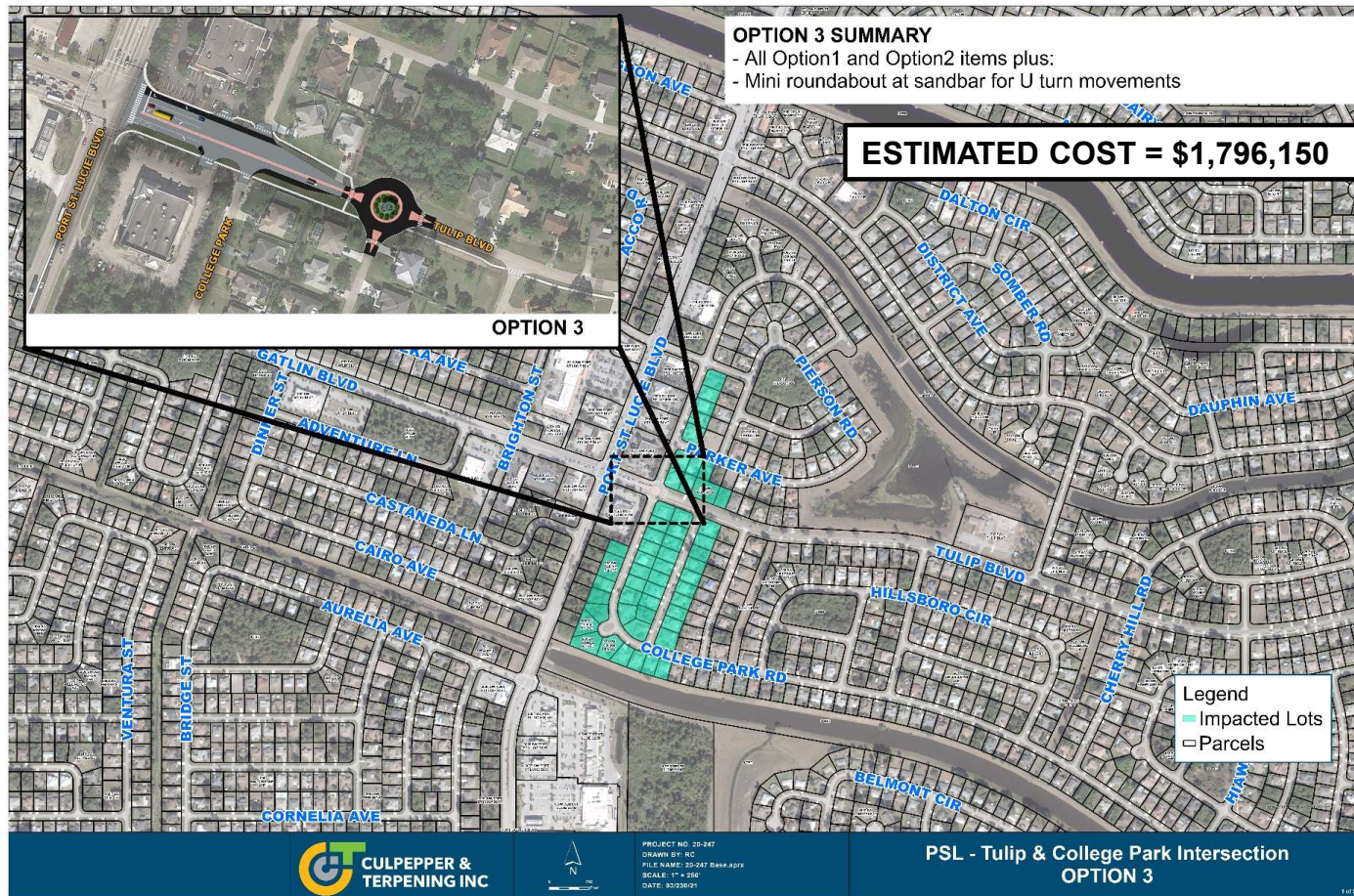


TULIP BLVD & COLLEGE PARK INTERSECTION



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TULIP BLVD & COLLEGE PARK INTERSECTION



OPTION 3

ADD EB MINI ROUNDABOUT AT SANDBAR

Detailed Estimate of Probable Cost

Pay Item Number	Pay Item Description	Quantity	Unit	Engineer's Unit Cost	Engineer's Subtotal Cost
101-1A	MOBILIZATION	1	LS	15.0%	\$ 103,076.25
101-18	CONSTRUCTION VIDEO	1	LS	5.0%	\$ 34,358.75
101-99	SURVEY STAKING AND RECORD DRAWINGS	1	LS	10.0%	\$ 68,717.50
102-1	MAINTENANCE OF TRAFFIC	1	LS	20.0%	\$ 137,435.00
104-10-3	INLET PROTECTION	6	LF	\$ 50.00	\$ 300.00
110-1-1	CLEARING AND GRUBBING (SELECT)	1.50	AC	\$ 6,500.00	\$ 9,750.00
110-4-10	REMOVAL OF EXISTING CONCRETE/PAVEMENT	600	SY	\$ 30.00	\$ 18,000.00
120-1	REGULAR EXCAVATION & EMBANKMENT	1	LS	\$ 15,000.00	\$ 15,000.00
334-1-11	ASPHALT ROADWAY OVERLAY	195	TON	\$ 110.00	\$ 21,450.00
334-1-12	ROADWAY CONSTRUCTION	3290	SY	\$ 100.00	\$ 329,000.00
334-1A	ASPHALT SPEED TABLE (COMPLETE)	1	LS	\$ 15,000.00	\$ 15,000.00
334-1B	RAISED CROSSWALK (COMPLETE)	0	LS	\$ 15,000.00	\$ -
400-0-11	CONC CLASS I, GRAVITY WALL	42	CY	\$ 650.00	\$ 27,300.00
425-1-321	INLET, CURB	10	EA	\$ 3,500.00	\$ 35,000.00
430-174-124	PIPE CULVERT, RCP, ROUND, 24"	780	LF	\$ 60.00	\$ 46,800.00
455-1A	DEWATERING FOR CONSTRUCTION OPERATIONS	1	LS	\$ 2,500.00	\$ 2,500.00
520-1	TYPE F CURB & GUTTER	2160	LF	\$ 25.00	\$ 54,000.00
520-2-4	TYPE D CURB & GUTTER	64	LF	\$ 20.00	\$ 1,280.00
520-2-8	TYPE A F CURB & GUTTER	160	LF	\$ 25.00	\$ 4,000.00
520-5-11	CONCRETE TRAFFIC SEPARATOR	138	SY	\$ 50.00	\$ 6,900.00
522-1	CONCRETE SIDEWALK	463	SY	\$ 40.00	\$ 18,520.00
523-1	PATTERNED PAVEMENT - ROUNDABOUT APRON	250	SY	\$ 110.00	\$ 27,500.00
700-1-11	SINGLE POST SIGN, < 12 SF	32	EA	\$ 300.00	\$ 9,600.00
711-11101	6" WHITE, SOLID TRAFFIC, THERMOPLASTIC	1500	LF	\$ 2.50	\$ 3,750.00
711-11141	6" WHITE, SKIP TRAFFIC, THERMOPLASTIC	600	LF	\$ 2.50	\$ 1,500.00
711-11123	12" WHITE, SOLID TRAFFIC, THERMOPLASTIC	100	LF	\$ 5.00	\$ 500.00
711-11125	24" WHITE, SOLID TRAFFIC, THERMOPLASTIC	300	LF	\$ 10.00	\$ 3,000.00
711-11141	6" YELLOW, TRAFFIC, THERMOPLASTIC	1310	LF	\$ 2.50	\$ 3,275.00
711-11170	THERMOPLASTIC STD, WHITE, ARROW	19	EA	\$ 150.00	\$ 2,850.00
711-11171	THERMOPLASTIC STD, WHITE, MESSAGE, MERGE	2	EA	\$ 200.00	\$ 400.00
570-1-2	PERFORMANCE TURF, SOD	3000	SY	\$ 5.00	\$ 15,000.00
580-1-1	LANDSCAPE	1	LS	\$ 10,000.00	\$ 10,000.00
2000-1	UTILITY ADJUSTMENT	10	EA	\$ 500.00	\$ 5,000.00
				Subtotal	\$ 1,030,762.50
				Contingency @ 25%	\$ 257,690.63
				Tech Services @ 20%	\$ 257,690.63
				Lot Acquisition (2)	\$ 250,000.00
				Total	\$ 1,796,143.75

TULIP BLVD &
COLLEGE PARK
INTERSECTION

OVERVIEW | OPTIONS

COMPARISON MATRIX (PRESENTED IN ORDER OF INCREASED COSTS)

RECOMMENDED OPTION

ITEM	OPTION 1	OPTION 2	OPTION 3
Description	Replace w/ Median New Right Turn Lane at PSL BLVD	Add EB Lane & Extend Median to Sandbar	Add Mini-Roundabout at Sandbar
No. of Impacted Lots	53	53	53
Blocks North of Intersection	No	No	No
Blocks South of Intersection	No	No	No
North/South Traffic Impacted	Yes	Yes	Yes
East/West Traffic Impacted	No	No	No
ROW Acquisition Required	No	No	No
Estimated Cost	\$903,750	\$1,124,350	\$1,796,150



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TULIP BLVD & COLLEGE PARK INTERSECTION



THANK YOU

QUESTIONS