Project Cost Estimates

Appendix I

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
Project: Lois	s Drive & 3	2nd Avenue Pathway			Alternative 1 - Lois	
Project Num	ıber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DEGLON		lъ : м	¢24.105			
DESIGN	G 2022	Design Management	\$24,105			
	Start 20??	PM&E Design Services	\$0			
		PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$213,000			
		Contractual Dsgn Sers (Add'l)	\$27,500			
		Contractual Design Survey	\$41,000			
		Contractual Design Soils	\$20,000			
		Miscellaneous	\$0	_		
Subtotal				\$325,605		
UTILITIES		AWWU	\$0			
	Start 20??	CEA	\$0			
		ACS	\$135,000			
		GCI	\$0			
		Enstar	\$42,000	_		
Subtotal				\$177,000		
ROW		Real Estate Services	\$70,820			
	Start 20??	Land Acquisition	\$69,000			
Subtotal		•		\$139,820		
CONSTRUC	CTION	Construction Management	\$40,175			
	Start 20??	Inspection	\$107,669			
		Materials Testing	\$16,070			
		Survey	\$16,070			
		Miscellaneous	\$0			
		Construction Contract	\$1,607,000			
Subtotal		•		- \$1,786,984		
				7-7, 00, 00		
MISCELLA	NEOUS	Bond Overhead (15.0%)	\$471,249			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$241,000			
Subtotal			. ,	- \$712,249		
				ψ.12,21 <i>)</i>	-	
PROJECT T	готат.			\$3,141,658		
INOUECI	V 1/11/			Ψ3,171,030	=	

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 1 - LOIS DRIVE

No. Schedule A-1 2 A-2 2 A-3 2 A-4 2		ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	LECT OLIVNIT	UNIT PRICE	TOTAL COST
A-1 2 A-2 2 A-3 2 A-4 2				QUANT	FACTOR	FACTOR	LOT QUAINT	OIIII I IIIOL	IOIAL COST
A-2 2 A-3 2 A-4 2	20.02	adway Improvements							
A-3 2 A-4 2		Storm Water Pollution Prevention Plan (Type 3)	LS	1		0	1	\$10,000	\$10,000
A-4 2		Test Pit for Utility Locate	Hour	8		0	8	\$800	\$6,400
		Clearing and Grubbing	LS	1		0	1	\$12,000	\$12,000
		Remove Curb and Gutter	LF	239	1.00	0	239	\$7	\$1,673
		Remove Pavement Unusable Excavation	SY	3,855 7,986	1.00 1.25	-2	3,855 10,000	\$4 \$15	\$15,420
		Classified Fill and Backfill (Type II)	Ton	2,451	1.25	-2	3,100	\$18	\$150,000 \$55,800
					9,800	\$18	\$176,400		
		Leveling Course	Ton	515	1.08	-1	560	\$35	\$19,600
		Geotextile (Type A)	SY	8,673	1.00	-1	8,670	\$2	\$17,340
A-11 2	20.26	Insulation Board (R-9)	SF	50,905	1.01	-1	51,410	\$3	\$154,230
A-12 2	20.26	Insulation Board (R-4.5)	SF	7,987	1.01	-1	8,070	\$2	\$16,140
A-13 2	20.28	Reconstruct Driveway	EA	12	1.00	0	12	\$3,250	\$39,000
		P.C.C. Curb and Gutter (All Types)	LF	2,000	1.00	0	2,000	\$27	\$54,000
		P.C.C. Sidewalk	SY	413	1.00	0	413	\$60	\$24,780
		P.C.C. Curb Ramp (6" Thick)	EA	11	1.00	0	11	\$2,000	\$22,000
		A.C. Pavement (Class D)	Ton	534	1.06	-1	570	\$105	\$59,850 \$40,500
		A.C. Pavement (Class E) Remove and Replace Manhole Cone Section	Ton EA	425 1	1.06 1.00	-1 0	450 1	\$110 \$1,800	\$49,500 \$1,800
		Remove and Replace Manhole Cover and Frame	EA	1	1.00	0	1	\$700	\$700
		Remove and Replace Valve Box Top Section	EA	6		0	6	\$500	\$3,000
		Furnish and Install Fire Hydrant Assembly Single Pumper	EA	1		0	1	\$9,000	\$9,000
		Adjust Key Box	EA	10		0	10	\$450	\$4,500
	60.08	Decommission Fire Hydrant Assembly	EA	1		0	1	\$3,000	\$3,000
A-25	65.02	Construction Survey Measurement	LS	1	1.00	0	1	\$20,000	\$20,000
		Two-Person Survey Crew	Hour	10	1.00	0	10	\$225	\$2,250
		Remove and Reset Fence	LF	732	1.10	0	805	\$40	\$32,200
		Inlaid Traffic Markings (Methyl Methacrylate) (4" Yellow) (90 Mil) Inlaid Traffic Markings (Methyl Methacrylate) (4" White) (90 Mil)	LF LF	1,992 1,792	1.00	0	1,992 1,792	\$6 \$6	\$11,952 \$10,752
		Inlaid Traffic Markings (Methyl Methacrylate) (4" White) (90 Mil)	LF	90		0	90	\$30	\$2,700
		Standard Sign	SF	162		0	162	\$100	\$16,200
		Traffic Maintenance	LS	1	1.00	0	1	\$100,000	\$100,000
		Temporary Group Mailboxes	LS	1		0	1	\$10,000	\$10,000
A-34	70.17	Relocate Mailbox	EA	6	1.00	0	6	\$500	\$3,000
		Temporary Fencing	LF	732	1.10	0	805	\$10	\$8,050
		Trees (type to be determined)	EA	9		0	9	\$500	\$4,500
		Shrubs (type to be determined)	EA	18		0	18	\$75	\$1,350
		Topsoil (4-inch Depth)	MSF	24.3	1.30	0	32	\$550	\$17,600
		Seeding (Schedule A)	MSF	24.3	1.30	0	32	\$450	\$14,400
		Temporary Tree Protection Fence Root Pruning	LF LF	200 70		0	200 70	\$7 \$25	\$1,400 \$1,750
		Install Loop Detector - New Work	LS	1		0	1	\$20,000	\$20,000
7172	00.10	modul 2009 Bolodol 110W 110M			1.00	U		TOTAL	\$1,184,237
Cohodul-	D D	sinago Improvemento							. ,,
		inage Improvements Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000
		Trench Excavation and Backfill (Various Depths)	LF	877	1.00	0	877	\$3,000	\$21,925
		Furnish Trench Backfill (Type II)	Ton	590		0	767	\$17	\$13,039
		Bedding Material (Class D)	LF	877	1.00	0	877	\$30	\$26,310
		Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6 2	20.27	Disposal of Unusable or Surplus Material	CY	610	1.30	0	793	\$20	\$15,860
B-7 !	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	189	1.00	0	189	\$60	\$11,340
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	688		0	688	\$70	\$48,160
		Connect to Existing Storm Drain System	EA	1	1.00	0	1	\$2,500	\$2,500
		Construct (Type II) Catch Basin Manhole	EA	4		0	4	\$10,000	\$40,000
		Construct (Type II) Bypass Manhole	EA	1		0	1	\$25,000	\$25,000
		Construct Catch Basin	EΑ	5		0	5	\$4,500	\$22,500
		Remove Manhole Remove Catch Basin	EA EA	5 4		0	5 4	\$1,000 \$900	\$5,000 \$3,600
		Oil and Grit Separator	EA	1		0	1	\$25,000	\$3,600 \$25,000
		Storm Drain Bypass System	LS	1	1.00	0	1	\$25,000	\$25,000
		Remove Pipe	LF	840		0	840	\$13	\$10,000
		1 .		3.0				TOTAL	\$286,794

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 1 - LOIS DRIVE

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	EST OLIANIT	UNIT PRICE	TOTAL COST
No.	No.	TIEW DESCRIPTION	UNIT	QUANT	FACTOR	FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedu	le C - IIIu								
C-1	80.02	Trench and Backfill (2'W x 3.5'D)	LF	875	1.10	-1	960	\$24	\$23,424
C-2	80.04	Driven Pile Luminaire Pole Foundations	EA	6	1.00	0	6	\$2,778	\$16,668
C-3	80.05	Fixed Base Luminaire Pole	EA	6	1.00	0	6	\$3,940	\$23,640
C-4	80.06	Luminaire Arm	EA	6	1.00	0	6	\$775	\$4,650
C-5	80.07	Steel Conduit (2 inch)	FT	875	1.10	-1	960	\$39	\$37,440
C-6	80.08	Junction Box (Type IA)	EA	6	1.00	0	6	\$1,263	\$7,578
C-7	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	875	1.10	-1	960	\$7	\$6,720
C-8	80.23	Luminaire (6,000 Lm, Medium, Type 2)	EA	3	1.00	0	3	\$1,000	\$3,000
C-9	80.23	Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,000	\$1,000
C-10	80.23	Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,150	\$1,150
C-11	80.23	Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,250	\$1,250
C-12	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-13	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-14	80.23	Spare Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,000	\$1,000
C-15	80.23	Spare Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,100	\$1,100
C-16	80.28	Remove Luminaire Pole	EA	7	1.00	0	7	\$800	\$5,600
				·		<u>-</u>	·	TOTAL	\$135,920

SUMMARY

Total Estimated Construction Cost: \$1,607,000

Summary Lois Dr - Alternative 1

Utility Relocation Summary Lois/32nd Avenue Upgrades: Alternative 1								
Electric (CEA)	\$0							
Telecommunications (ACS)	\$123,110							
Cable Television (GCI)	\$0							
Natural Gas (Enstar)	\$38,253							
Subtotal:	\$161,363							
Construction Contingency (10%) \$16,136								
Total Utility Relocation Cost: \$177,499								

ACS Lois Dr - Alternative 1

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	12+50 - 12+88	RT	underground T line	within proposed improvements	Relocate as needed	40	LF	\$80	\$3,200	
ACS-2	11+53 - 20+68	RT/LT	underground T line	within proposed improvements	Relocate as needed	980	LF	\$80	\$78,400	
ACS-3	18+50	RT	telephone pedestal	within proposed improvements	Relocate	1	EA	\$4,300	\$4,300	
ACS-4	19+26 - 19+49	RT	underground T line	within proposed improvements	Relocate as needed	25	LF	\$80	\$2,000	
ACS-5	19+86 - 20+20	RT	underground T line	within proposed improvements at driveway	Relocate as needed	35	LF	\$80	\$2,800	
ACS-6	20+88 - 21+36	RT	underground T line	within proposed improvements at driveway	Relocate as needed	50	LF	\$80	\$4,000	
ACS-7	21+44	Crossing	underground T line	within proposed improvements	Verify Depth. Relocate as needed.	40	LF	\$0	\$0	
ACS-8	21+90 - 21+97	RT	underground T line	within proposed improvements	Verify Depth. Relocate as needed.	8	LF	\$0	\$0	

Construction Costs: \$94,700

Engineering/Administration (30%): \$28,410

Total: \$123,110

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	12+31 - 12+51	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-2	14+30 - 14+66	LT	2-Inch Steel	within proposed improvements	adjust	30	LF	\$125	\$3,750	
Enstar-3	15+78	Crossing	2-Inch Steel	within proposed improvements	adjust	75	LF	\$125	\$9,375	
Enstar-4	16+70 - 16+88	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-5	17+04 - 17+18	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-6	17+86 - 18+02	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-7	18+32 - 18+52	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-8	18+83 - 19+03	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-9	19+31 - 19+51	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-10	19+70 - 19+88	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-11	20+03 - 20+13	Crossing	5/8"-Plastic Service	within proposed roadway improvements	adjust	1	EA	\$2,250	\$2,250	
Enstar-12	20+20 - 20+64	LT	2-Inch Steel	within proposed improvements	adjust	75	LF	\$125	\$9,375	
Enstar-13	21+60	Crossing	3-Inch Steel	within proposed improvements	adjust	30	LF	\$135	\$4,050	
Enstar-14	21+95 - 21+99	LT	2-Inch Steel	within proposed improvements	adjust	5	LF	\$125	\$625	

Construction Costs: \$29,425
Engineering/Administration (30%) \$8,828

Total: \$38,253

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 1 - LOIS DRIVE

PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's
100					0
101		Х	Х		1
102		Х	Х		1
103		Х	Х		1
104		Х	Х		1
105		Х	Х		1
106		Х	Х		1
107		X	X		1
108		X	X		0
109		X	X		1
110		X	X		0
111		X	X		0
112		Х	X		1
123		Х	Х		2
124		Х			3
125		Х			1
TOTAL	0	15	13	0	15

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
		2nd Avenue Pathway			Alternative 1 - 32nd Avenue	
Project Nun	nber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DESIGN		Design Management	\$36,255			
DESIGN	Start 2022	PM&E Design Services	\$0,255			
	51477 20	PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$283,000			
		Contractual Dsgn Sers (Add'l)	\$37,500			
		Contractual Design Survey	\$55,000			
		Contractual Design Soils	\$25,000			
		Miscellaneous	\$0			
Subtotal		•	· · · · · · · · · · · · · · · · · · ·	\$ 436,755		
				7,		
UTILITIES	1	AWWU	\$0			
	Start 20??		\$277,000			
		ACS	\$254,000			
		GCI	\$294,000			
		Enstar	\$288,000			
Subtotal		•		\$1,113,000	1	
ROW		Real Estate Services	\$50,220			
	Start 20??	Land Acquisition	\$4,599,000			
Subtotal				\$4,649,220	1	
CONSTRU	CTION	Construction Management	\$58,008			
	Start 20??	Inspection	\$154,688			
		Materials Testing	\$24,170			
		Survey	\$24,170			
		Miscellaneous	\$0			
		Construction Contract	\$2,417,000	_		
Subtotal				\$2,678,036		
MISCELLA	NEOUS	Bond Overhead (15.0%)	\$1,630,590			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$363,000			
Subtotal				\$1,993,590	_	

\$10,870,601

PROJECT TOTAL

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 1 - 32ND AVENUE

ITEM	MASS		1	CALC.	CONT.	ROUND	ı		1
No.	No.	ITEM DESCRIPTION	UNIT	QUANT	FACTOR		EST QUANT	UNIT PRICE	TOTAL COST
		adway Improvements		QUAINT	TACTOR	TACTOR			
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$16,000	\$16,000
A-2		Test Pit for Utility Locate	Hour	8		0	8	\$800	\$6.400
A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$19.000	\$19,000
A-4		Remove Sidewalk or Concrete Apron	SY	896	1.00	0	896	\$15	\$13,440
A-5		Remove Curb and Gutter	LF	251	1.00	0	251	\$7	\$1,757
A-6		Remove Pavement	SY	5,397	1.00	0	5.397	\$4	\$21,588
A-7		Unusable Excavation	CY	12,347	1.25	-2	15,400	\$15	\$231,000
A-8		Classified Fill and Backfill (Type II)	Ton	3,660	1.25	-2	4,600	\$18	\$82,800
A-9		Classified Fill and Backfill (Type II-A)	Ton	11,381	1.25	-2	14,200	\$18	\$255,600
A-10		Leveling Course	Ton	867	1.08	-1	940	\$35	\$32,900
A-10		Geotextile (Type A)	SY	12,951	1.00	-1	12,950	\$2	\$25,900
A-11		Insulation Board (R-9)	SF	76,018		-1 -1	76,780	\$3	\$230,340
A-12 A-13		Insulation Board (R-4.5)	SF	10,936			,	\$3 \$2	\$230,340
		,		,	1.01	-1	11,050		
A-14 A-15		Reconstruct Driveway P.C.C. Curb and Gutter (All Types)	EA LF	2,980	1.00	0	8	\$3,250 \$27	\$26,000
				,	1.00		2,980		\$80,460
A-16		Curb Nose P.C.C. Sidewalk	EA	10	1.00	0	10	\$1,500	\$15,000
A-17			SY	601	1.00	0	601	\$60	\$36,060
A-18 A-19		P.C.C. Curb Ramp (6" Thick) Colored Concrete	EA SY	22 64	1.00	0	22	\$2,000 \$160	\$44,000
		A.C. Pavement (Class D)			1.00	0	64		\$10,240
A-20			Ton	897	1.06	-1	950	\$105 \$105	\$99,750
A-21		A.C. Pavement (Class E)	Ton	756		-1	800		\$84,000
A-22		Remove and Replace Manhole Cone Section	EA	4		0	4	\$1,800	\$7,200
A-23		Adjust Storm Drain Manhole Ring	EA	1	1.00	0	1	\$1,400	\$1,400
A-24		Remove and Replace Valve Box Top Section	EA	5		0	5	\$500	\$2,500
A-25		Adjust Key Box	EA	1	1.00	0	1	\$450	\$450
A-26		Construction Survey Measurement	LS	1	1.00	0	1	\$30,000	\$30,000
A-27 A-28		Two-Person Survey Crew Remove Fence	Hour	10 141	1.00 1.00	0	10 141	\$225 \$10	\$2,250
A-28 A-29		Remove and Reset Fence	LF	650	1.00	0	715	\$10	\$1,410
A-29 A-30		Inlaid Traffic Markings (Methyl Methacrylate) (4" Yellow) (90 Mil	LF	4,272		0	4,272	\$6	\$28,600 \$25,632
A-30		Inlaid Traffic Markings (Methyl Methacrylate) (4 Tellow) (90 Mil	LF	4,272		0	4,272	\$25	\$25,632 \$101,125
A-32		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil	LF	90		0	90	\$30	\$2,700
A-33		Inlaid Traffic Markings (Methyl Methacrylate) (Words & Symbols) (90 Mil	EA	2	1.00	0	2	\$700	\$1,400
A-34		Standard Sign	SF	72	1.00	0	72	\$100	\$7,200
A-35		Traffic Maintenance	LS	1	1.00	0	1	\$160,000	\$160,000
A-36		Bollard (Concrete Pipe, Yellow)	EA	16		0	16	\$1,250	\$20.000
A-37		Remove Bollard	EA	3		0	3	\$200	\$600
A-38		Temporary Group Mailboxes	LS	1	1.00	0	1	\$10,000	\$10,000
A-39		Relocate Mailbox	EA	1	1.00	0	1	\$10,000	\$10,000
A-39 A-40		Temporary Fencing	LF	650	1.10	0	715	\$10	\$7,150
A-41		Trees (type to be determined)	EA	9		0	9	\$500	\$4,500
A-41 A-42		Shrubs (type to be determined)	EA	18		0	18	\$75	\$4,500 \$1,350
A-42 A-43		Topsoil (4-inch Depth)	MSF	29.6		0	39	\$550	\$1,350
A-43 A-44		Seeding (Schedule A)	MSF	29.6		0	39	\$450	\$21,450 \$17,550
A-44 A-45		Temporary Tree Protection Fence	LF	29.6	1.30	0	200	\$450 \$7	\$17,550
A-45 A-46		Root Pruning	LF	70		0	70	\$7 \$25	\$1,400 \$1,750
A-46	75.13	KOOL Fluiling	LF	70	1.00	U	70		
								TOTAL	\$1,812,452

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 1 - 32ND AVENUE

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST		
Schedul	Schedule B - Drainage Improvements										
B-1		Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000		
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	1,081	1.00	0	1,081	\$25	\$27,025		
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	290	1.30	0	377	\$17	\$6,409		
B-4	20.16	Bedding Material (Class D)	LF	1,081	1.00	0	1,081	\$30	\$32,430		
B-5	20.26	Insulation Board (R-20)	SF	64	1.00	0	64	\$5	\$320		
B-6	20.27	Disposal of Unusable or Surplus Material	CY	580	1.30	0	754	\$20	\$15,080		
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	135	1.00	0	135	\$60	\$8,100		
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	502	1.00	0	502	\$70	\$35,140		
B-9	55.02	Furnish, Install, and Televise Pipe (24-Inch, Type S, CPEP)	LF	444	1.00	0	444	\$80	\$35,520		
B-10	55.04	Connect to Existing Storm Drain System	EA	2	1.00	0	2	\$2,500	\$5,000		
B-11	55.05	Construct (Type II) Catch Basin Manhole	EA	6	1.00	0	6	\$10,000	\$60,000		
B-12	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000		
B-13	55.09	Construct Catch Basin	EA	6	1.00	0	6	\$4,500	\$27,000		
B-14	55.11	Remove Manhole	EA	1	1.00	0	1	\$1,000	\$1,000		
B-15	55.11	Remove Catch Basin	EA	2	1.00	0	2	\$900	\$1,800		
B-16	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$25,000	\$25,000		
B-17	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$5,000	\$5,000		
B-18	70.07	Remove Pipe	LF	509	1.00	0	509	\$13	\$6,617		
B-19	80.29	Heat Trace System	LS	1	1.00	0	1	\$96,952	\$96,952		
0.1.1.1								TOTAL	\$418,393		
		Imination Improvements	LF	4 040	4.40		4.070	CO4	COO 400		
C-1 C-2		Trench and Backfill (2'W x 3.5'D) Driven Pile Luminaire Pole Foundations	EA	1,246	1.10	-1 0	1,370	\$24 \$2,778	\$33,428		
C-2			EA	7		0	7		\$19,446		
C-3		Cast-In-Place Light Column Foundation Fixed Base Luminaire Pole	EA	2	1.00	0	7	\$2,500	\$5,000		
				7				\$3,940	\$27,580		
C-5	80.06	Luminaire Arm	EA	4 202	1.00	0	8	\$775	\$6,200		
C-6 C-7		Steel Conduit (2 inch) Junction Box (Type IA)	FT EA	1,293 11	1.10	-1 0	1,420	\$39 \$1,263	\$55,380		
						-			\$13,893		
C-8 C-9		3 Conductor 8 AWG Type XHHW-2 Cable	FT EA	1,891	1.10	-1	2,080	\$7	\$14,560		
C-10		Pedestrian Light Column		2	1.00	0	2	\$3,900	\$7,800		
C-10	80.29	Spare Pedestrian Light Column	EA	1	1.00	0	1	\$2,900	\$2,900		
								TOTAL	\$186,187		

2 of 2

SUMMARY

Schedule A - Roadway Improvements Schedule B - Drainage Improvements Schedule C - Illumination Improvements Subtotal \$1,812,452 \$418,393 \$186,187 \$2,417,032

Total Estimated Construction Cost: \$2,417,000

Summary 32nd Ave - Alternative 1

Utility Relocation Summary								
32nd Avenue Upgrades: Alternative 1								
Electric (CEA)	\$251,323							
Telecommunications (ACS)	\$230,815							
Cable Television (GCI)	\$267,696							
Natural Gas (Enstar)	\$261,950							
Subtotal:	\$1,011,784							
Construction Contingency (10%) \$101,178								
Total Utility Relocation Cost:	\$1,112,962							

CEA 32nd Ave - Alternative 1

	ADDDOV				RECOMMENDED					
ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	ACTION	AMOUNT	LINIT	UNIT PRICE	COST	COMMENTS
10 140.		OFFSET	OTILITY CONFLICT	DESCRIPTION OF CONFEREN	ACTION	AIVIOUNT	UNIT	UNIT PRICE	(031	COMMENTS
CEA-1	32+00 -	LT	OH 3 Phase - distribution	within proposed improvements	underground	1215	LF	\$95	\$115,425	
	44+22							,	, -, -	
CEA-2	33+18 -	RT	OH 3 Phase - distribution	within proposed improvements	underground	100	LF	\$95	\$9,500	
CEALE	33+19	111	OTT ST THUSE GISCHISACION	within proposed improvements	unacibiouna	100		433	ψ3,300	
CEA-3	33+18	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
CEA-4	33+18	RT	Service to Parcel 115	within proposed improvements	underground	1	EA	\$2,500	\$2,500	
CEA-5	36+27	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
CEA-6	36+29	RT	OH 3 Phase - distribution	within proposed improvements	underground	100	LF	\$95	\$9,500	
CEA-7	39+74	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
	39+74 -							+		
CEA-8	39+79	Crossing	OH 3 Phase - distribution	within proposed improvements	underground	60	LF	\$95	\$5,700	
	37+78 -							4		
CEA-9	37+83	RT	OH 1 Phase - distribution	within proposed improvements	underground	30	LF	\$75	\$2,250	
	39+79 -									
CEA-10	39+83	RT	OH 3 Phase - distribution	within proposed improvements	underground	60	LF	\$95	\$5,700	
CEA-11	39+81	RT	Service to Parcel 118	within proposed improvements	underground	1	EA	\$2,500	\$2,500	
CEA-12	39+81	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
	39+83 -									
CEA-13	40+32	RT	OH 1 Phase - distribution	within proposed improvements	underground	70	LF	\$75	\$5,250	
CEA-14	40+88	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
						_				and the second s
CEA-15	43+06	RT	Service to Parcel 121 (2 total)	within proposed improvements	underground	2	EA	\$2,500	\$5,000	
CEA-16	43+06	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
CEA-17	43+06	RT	OH 1 Phase - distribution	within proposed improvements	underground	200	LF	\$75	\$15,000	
		!		h character h a consense		+		trustion Costs	¢102.22F	!

Construction Costs:

\$193,325

Engineering/Administration (30%): \$57,998

Total: \$251,323

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	32+50 - 33+18	LT	UG 500 pair telephone	within proposed improvements	adjust	80	LF	\$90	\$7,200	
ACS-2	32+00 - 38+06	LT	UG 600 pair telephone	within proposed improvements	adjust	625	LF	\$100	\$62,500	
ACS-3	33+18 - 33+19	RT	OH 100 pair telephone	within proposed improvements	underground	100	LF	\$80	\$8,000	
ACS-4	33+18 - 36+29	RT	OH 200 pair telephone	within proposed improvements	underground	315	LF	\$85	\$26,775	
ACS-5	36+29	RT	OH 100 pair telephone	within proposed improvements	underground	55	LF	\$80	\$4,400	
ACS-6	38+00	LT	Vault	within proposed improvements	adjust	1	EA	\$10,750	\$10,750	
ACS-7	38+06 - 39+83	RT	OH 100 pair telephone	within proposed improvements	underground	195	LF	\$80	\$15,600	
ACS-8	39+83	LT	UG 100 pair telephone	within proposed improvements	relocate	65	LF	\$80	\$5,200	
ACS-9	39+83 - 43+06	RT	OH 50 pair telephone	within proposed improvements	underground	325	LF	\$65	\$21,125	
ACS-10	43+06	LT	OH 100 pair telephone	within proposed improvements	underground	200	LF	\$80	\$16,000	

ACS

Construction Costs: \$177,550

Engineering/Administration (30%): \$53,265 \$230,815 Total:

GCI 32nd Ave - Alternative 1

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	32+00 - 43+06	RT	overhead C line	within proposed improvements	underground	1106	LF	\$20	\$22,120	Additional cost with FO underground
GCI-2	32+00 - 43+06	RT	overhead FO line	within proposed improvements	underground	1106	LF	\$100	\$110,600	
GCI-3	33+16 - 33+18	RT	underground C line	within proposed improvements	adjust	100	LF	\$80	\$8,000	
GCI-4	36+29	RT	overhead C line	within proposed improvements	underground	100	LF	\$80	\$8,000	
GCI-5	36+29	RT	overhead FO line	within proposed improvements	underground	100	LF	\$120	\$12,000	
GCI-6	36+29 - 38+06	LT	underground FO line	within proposed improvements	adjust	200	LF	\$120	\$24,000	
GCI-7	39+80 - 39+83	Crossing	underground C line	within proposed improvements	adjust	70	LF	\$20	\$1,400	
GCI-8	39+80 - 39+81	Crossing	underground FO line	within proposed improvements	adjust	70	LF	\$100	\$7,000	Additional cost with FO underground
GCI-9	39+77 - 39+83	RT	underground C line	within proposed improvements	adjust	60	LF	\$80	\$4,800	
GCI-10	43+06	RT	overhead C line	within proposed improvements	underground	100	LF	\$80	\$8,000	underground to next northern pole

Construction Costs: \$205,920

Engineering/Administration (30%) \$61,776

Total: \$267,696

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	32+00 - 45+00	LT	3-Inch Steel	within proposed improvements	relocate	1200	LF	\$135	\$162,000	
Enstar-2	34+45	Crossing	1-1/4"-Inch Steel	within proposed improvements	relocate	50	LF	\$108	\$5,400	
Enstar-3	37+82	Crossing	1-1/4-Inch Steel	within proposed improvements	relocate	50	LF	\$108	\$5,400	
Enstar-4	38+31	Crossing	1-1/4-Inch Steel	within proposed improvements	relocate	50	LF	\$108	\$5,400	
Enstar-5	39+88	Crossing	2-Inch Steel	within proposed improvements	relocate	50	LF	\$125	\$6,250	
Enstar-6	39+97	Crossing	2-Inch Steel	within proposed improvements	relocate	50	LF	\$125	\$6,250	
Enstar-7	41+24	Crossing	1-1/4-Inch Steel	within proposed improvements	relocate	50	LF	\$108	\$5,400	
Enstar-8	41+95	Crossing	1-1/4-Inch Steel	within proposed improvements	relocate	50	LF	\$108	\$5,400	

Construction Costs: \$201,500

Engineering/Administration (30%) \$60,450

Total: \$261,950

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 1 - 32ND AVENUE

Lois & 32nd Ave Upgrade - Alternative 1 - 32nd Avenue									
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's				
115		Х	Х		1				
116		Х	Х		1				
117	Х				0				
118		Х	Х	X	0				
119		Х	X	Х	1				
120		Х	Х		1				
121		Х	Х		1				
122	Х				0				
123		Х	Х		2				
TOTAL	2	7	7	2	7				

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
		2nd Avenue Pathway			Alternative 1 - Intersection	
Project Numb	er:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DESIGN		Design Management	\$8,070			
	Start 2022	PM&E Design Services	\$0,070			
۵	siari 20: :	PM&E Design Survey	\$0 \$0			
		PM&E Design Soil	\$0 \$0			
		Contractual Dsgn Sers (Basic) Contractual Dsgn Sers (Add'l)	\$71,000			
		<u> </u>	\$10,000			
		Contractual Design Survey	\$12,000			
		Contractual Design Soils	\$5,000			
a		Miscellaneous	\$0			
Subtotal				\$106,070		
UTILITIES		AWWU	\$0			
	Start 20??		\$102,000			
b	31a11 20: :	ACS	\$24,000			
		GCI	\$24,000			
		Enstar	\$36,000			
Subtotal		Elistai	\$30,000			
Subiolai				\$186,000		
ROW		Real Estate Services	\$15,420			
S	Start 20??	Land Acquisition	\$2,130,000			
Subtotal		•		\$2,145,420		
		_				
CONSTRUCT	ΓΙΟΝ	Construction Management	\$10,760			
S	Start 20??	Inspection	\$26,900			
		Materials Testing	\$4,708			
		Survey	\$5,380			
		Miscellaneous	\$0			
		Construction Contract	\$269,000			
Subtotal		•		\$316,748		
		-				
MISCELLAN	EOUS	Bond Overhead (15.0%)	\$493,101			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$40,000	=		
Subtotal				\$533,101	_	
PROJECT TO	OTAL			\$3,287,338	=	

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 1 - INTERSECTION

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
		adway Improvements						* 4.000	04.000
A-1 A-2	20.02	Storm Water Pollution Prevention Plan (Type 3) Test Pit for Utility Locate	LS Hour	1 8	1.00	0	8	\$1,200 \$800	\$1,200
A-2 A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$1,400	\$6,400 \$1,400
A-4		Remove Pavement	SY	554	1.00	0	554	\$4	\$2,216
A-5		Unusable Excavation	CY	903	1.25	-2	1,100	\$15	\$16,500
A-6		Classified Fill and Backfill (Type II)	Ton	270	1.25	-2	300	\$18	\$5,400
A-7	20.21	Classified Fill and Backfill (Type II-A)	Ton	793	1.25	-2	1,000	\$18	\$18,000
A-8	20.22	Leveling Course	Ton	65	1.08	-1	70	\$35	\$2,450
A-9		Geotextile (Type A)	SY	949	1.00	-1	950	\$2	\$1,900
A-10		Insulation Board (R-9)	SF	5,569	1.01	-1	5,620	\$3	\$16,860
A-11		Insulation Board (R-4.5)	SF	743	1.01	-1	750	\$2	\$1,500
A-12		P.C.C. Curb and Gutter (All Types)	LF	226	1.00	0	226	\$27	\$6,102
A-13		P.C.C. Sidewalk	SY	134	1.00	0	134	\$60	\$8,040
A-14 A-15		P.C.C. Curb Ramp (6" Thick) A.C. Pavement (Class D)	EA Ton	4 68	1.00	-1	70	\$2,000 \$105	\$8,000 \$7,350
A-15		A.C. Pavement (Class E)	Ton	68	1.06	-1 -1	70	\$103	\$7,700
A-17		Remove and Replace Valve Box Top Section	EA	3	1.00	0	3	\$500	\$1,500
A-18		Construction Survey Measurement	LS	1	1.00	0	1	\$2,100	\$2,100
A-19		Two-Person Survey Crew	Hour	5	1.00	0	5	\$225	\$1,125
A-20		Remove Fence	LF	116	1.00	0	116	\$10	\$1,160
A-21		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)	LF	25	1.00	0	25	\$30	\$750
A-22		Standard Sign	SF	18	1.00	0	18	\$100	\$1,800
A-23		Traffic Maintenance	LS	1	1.00	0	1	\$10,000	\$10,000
A-24		Trees (type to be determined)	EA	2	1.00	0	2	\$500	\$1,000
A-25		Shrubs (type to be determined) Topsoil (4-inch Depth)	EA	5.2	1.00	0	7	\$75	\$300
A-26 A-27		Seeding (Schedule A)	MSF MSF	5.2	1.30 1.30	0	7	\$550 \$450	\$3,850 \$3,150
A-28		Temporary Tree Protection Fence	LF	10	1.00	0	10	\$450	\$3,150
A-29		Root Pruning	LF	10	1.00	0	10	\$25	\$250
		· ·					-	TOTAL	\$138,073
		ainage Improvements		4	4.00	0		#0.000	#0.000
B-1 B-2		Trench Dewatering Tranch Evacuation and Realfill (Various Penths)	LS LF	1 320	1.00	0	320	\$3,000	\$3,000
B-2 B-3		Trench Excavation and Backfill (Various Depths) Furnish Trench Backfill (Type II)	Ton	200	1.30	0	260	\$25 \$17	\$8,000 \$4,420
B-3		Bedding Material (Class D)	LF	320	1.00	0	320	\$30	\$9,600
B-5		Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6		Disposal of Unusable or Surplus Material	CY	210	1.30	0	273	\$20	\$5,460
B-7		Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	132	1.00	0	132	\$60	\$7,920
B-8		Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	189	1.00	0	189	\$70	\$13,230
B-9	55.05	Construct (Type I) Manhole	EA	1	1.00	0	1	\$5,500	\$5,500
B-10		Construct (Type II) Catch Basin Manhole	EA	2	1.00	0	2	\$10,000	\$20,000
B-11	55.09	Construct Catch Basin	EA	4	1.00	0	4	\$4,500	\$18,000
Schedul	le C - Illu	imination Improvements						TOTAL	\$95,770
C-1		Trench and Backfill (2'W x 3.5'D)	LF	5	1.10	-1	10	\$24	\$244
C-2		Driven Pile Luminaire Pole Foundations	EA	1	1.00	0	1	\$2,778	\$2,778
C-3		Load Center Foundation (Type 1A)	EA	1	1.00	0	1	\$4,900	\$4,900
C-4		Cast-In-Place Light Column Foundation	EA	1	1.00	0	1	\$3,233	\$3,233
C-5	80.05	Fixed Base Luminaire Pole	EA	1	1.00	0	1	\$3,940	\$3,940
			EA	2	1.00	0	2	\$775	\$1,550
C-6	80.06	Luminaire Arm			4 4 6		4.0		
C-6 C-7	80.06 80.07	Steel Conduit (2 inch)	FT	5	1.10	-1	10	\$39	\$390 \$4.363
C-6 C-7 C-8	80.06 80.07 80.08	Steel Conduit (2 inch) Junction Box (Type IA)	FT EA	5 1	1.00	0	1	\$1,263	\$1,263
C-6 C-7 C-8 C-9	80.06 80.07 80.08 80.08	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II)	FT EA EA	5 1 1	1.00 1.00	0	1	\$1,263 \$2,990	\$1,263 \$2,990
C-6 C-7 C-8 C-9	80.06 80.07 80.08 80.08 80.10	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable	FT EA EA FT	5 1 1 5	1.00 1.00 1.10	0 0 -1	1 1 10	\$1,263 \$2,990 \$7	\$1,263 \$2,990 \$70
C-6 C-7 C-8 C-9 C-10	80.06 80.07 80.08 80.08 80.10 80.14	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control	FT EA EA FT EA	5 1 1 5	1.00 1.00 1.10 1.00	0 0 -1 0	1 1 10 1	\$1,263 \$2,990 \$7 \$8,612	\$1,263 \$2,990 \$70 \$8,612
C-6 C-7 C-8 C-9	80.06 80.07 80.08 80.08 80.10 80.14 80.23	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable	FT EA EA FT	5 1 1 5	1.00 1.00 1.10	0 0 -1	1 1 10	\$1,263 \$2,990 \$7	\$1,263 \$2,990 \$70 \$8,612 \$1,150
C-6 C-7 C-8 C-9 C-10 C-11 C-12	80.06 80.07 80.08 80.08 80.10 80.14 80.23 80.23	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control Luminaire (6,000 Lm, Medium, Type 3)	FT EA EA FT EA EA	5 1 1 5 1	1.00 1.00 1.10 1.00 1.00	0 0 -1 0	1 1 10 1 1	\$1,263 \$2,990 \$7 \$8,612 \$1,150	\$1,263 \$2,990 \$70 \$8,612 \$1,150 \$1,200
C-6 C-7 C-8 C-9 C-10 C-11 C-12 C-13	80.06 80.07 80.08 80.08 80.10 80.14 80.23 80.23	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control Luminaire (6,000 Lm, Medium, Type 3)	FT EA EA FT EA EA	5 1 1 5 1 1	1.00 1.00 1.10 1.00 1.00	0 0 -1 0 0	1 1 10 1 1	\$1,263 \$2,990 \$7 \$8,612 \$1,150 \$1,200	\$1,263 \$2,990 \$70 \$8,612 \$1,150 \$1,200 \$1,000
C-6 C-7 C-8 C-9 C-10 C-11 C-12 C-13	80.06 80.07 80.08 80.08 80.10 80.14 80.23 80.23 80.23	Steel Conduit (2 inch) Junction Box (Type IA) Junction Box (Type II) 3 Conductor 8 AWG Type XHHW-2 Cable Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control Luminaire (6,000 Lm, Medium, Type 3) Luminaire (10,000 Lm, Medium, Type 3) Spare Luminaire (6,000 Lm, Medium, Type 3)	FT EA EA FT EA EA EA	5 1 1 5 1 1 1	1.00 1.00 1.10 1.00 1.00 1.00	0 0 -1 0 0 0	1 10 10 1 1 1	\$1,263 \$2,990 \$7 \$8,612 \$1,150 \$1,200 \$1,000	\$1,263

SUMMARY

Schedule A - Roadway Improvements \$138,073 Schedule B - Drainage Improvements \$95,770 Schedule C - Illumination Improvements \$35,170 Subtotal \$269,013

Total Estimated Construction Cost: \$269,000

Summary Intersection - Alternative 1

Utility Relocation Summary Lois/32nd Intersection Upgrades: Alternative 1										
Electric (CEA)	Electric (CEA) \$92,300									
Telecommunications (ACS) \$21,450										
Cable Television (GCI)	\$22,100									
Natural Gas (Enstar)	\$32,695									
Subtotal:	\$168,545									
Construction Contingency (10%) \$16,855										
Total Utility Relocation Cost:	\$185,400									

ld No.	APX. STA	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
CEA-1	31+35	LT	Utility Pole - Transmission and Distribution	Within proposed improvements	Relocate	1	EA	\$30,000	\$65,000	
CEA-2	31+35	LT	Service Line to Parcel 112	Relocated with pole	Relocate	1	EA		\$0	Parcel to be bought under Alternative 1
CEA-3	31+35	LT	Service Line to Parcel 113	Relocated with pole	Relocate	1	EA	\$3,000	\$3,000	
CEA-3	31+35	LT	Service Line to Parcel	Relocated with pole	Relocate	1	EA	\$3,000	\$3,000	

Construction Costs: \$71,000 Engineering/Administration (30%): \$21,300 9/1/2020

Total: \$92,300

ACS Intersection - Alternative 1

ld No.	APX. STA	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	11+49- 12+50	RT	underground T line	within proposed improvements	Relocate as needed	100	LF	\$80	\$8,000	
ACS-2	30+87 - 31+35	LT	OH 100 pair telephone	within proposed improvements	underground	50	LF	\$80	\$4,000	
ACS-3	32+00 - 32+50	LT	underground T line	within proposed improvements	Relocate as needed	50	LF	\$90	\$4,500	

Construction Costs:

\$16,500 Engineering/Administration (30%): \$4,950

\$21,450 Total:

GCI Intersection - Alternative 1

ld No.	APX. STA	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	30+87 - 31+35	LT	overhead C line	within proposed improvements	underground	50	LF	\$80	\$4,000	
GCI-2	31+35 - 32+00	RT	overhead C line	within proposed improvements	underground	65	LF	\$80	\$5,200	
GCI-2	31+35 - 32+00	RT	overhead F line	within proposed improvements	underground	65	LF	\$120	\$7,800	

Construction Costs:

\$17,000

Engineering/Administration (30%) \$5,100

Total: \$22,100

ld No.	APX. STA	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	30+40 - 31+40	LT	1-1/4-Inch Steel	within proposed improvements	relocate	100	LF	\$108	\$10,800	
Enstar-2	31+40	Crossing	2-Inch Steel	within proposed improvements	relocate	50	LF	\$125	\$6,250	
Enstar-3	31+43 - 32+00	LT	3-Inch Steel	within proposed improvements	relocate	60	LF	\$135	\$8,100	

Construction Costs: \$25,150 Engineering/Administration (30%) \$7,545

Total: \$32,695

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 1 - INTERSECTION

Lois & 32nd Ave Upgrade - Alternative 1 - Intersection									
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's				
112	Х				0				
113		X			1				
114	X				0				
TOTAL	2	1	0	0	1				

Date: 1/14/2021 1 of 1

1/14/2021	Basis:	Prepared By:	CRW	Ver. 5.1					
Project: Lois Drive & 3	32nd Avenue Pathway		Alternative 2 - Lois						
Project Number:	19-08	[B]=local bond; [S	[B]=local bond; [S]=state grant; [F]= federal grant						
	L								
DESIGN	Design Management \$23,								
Start 20?	PM&E Design Services	\$0							
	PM&E Design Survey	\$0							
	PM&E Design Soil	\$0							
	Contractual Dsgn Sers (Basic) \$213.								
	Contractual Dsgn Sers (Add'l) \$27.								
	Contractual Design Survey \$41.								
	Contractual Design Soils \$20,	000							
	Miscellaneous	\$0							
Subtotal		\$325,14	0						
UTILITIES	AWWU	\$0							
Start 20?		\$0							
	ACS \$142.	000							
	GCI	\$0							
	Enstar \$42.	000							
Subtotal		\$184,00	0						
ROW	Real Estate Services \$22.	700							
Start 20?.	Land Acquisition \$32	000							
Subtotal		\$54,70	0						
	•								
CONSTRUCTION	Construction Management \$39.	400							
Start 20?	Inspection \$105,	592							
	Materials Testing \$15.	760							
	Survey \$15.	760							
	Miscellaneous	\$0							
	Construction Contract \$1,576,	000							
Subtotal		\$1,752,51	2						
MISCELLANEOUS	Bond Overhead (15.0%) \$450.	415							
	Grant Overhead (0.0%)	\$0							
	Contingency (15%) \$236,	000							
Subtotal	-	\$686,41	5						
PROJECT TOTAL		\$3,002,76	7						

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - LOIS DRIVE

ITEM	MASS			CALC.	CONT.	ROUND	ı	1	
No.	No.	ITEM DESCRIPTION	UNIT	QUANT	FACTOR		EST QUANT	UNIT PRICE	TOTAL COST
		adway Improvements	l .	QUAINT	TACTOR	TACTOR	J.	<u> </u>	
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$10,000	\$10,000
A-2		Test Pit for Utility Locate	Hour	8		0	8	\$800	\$6,400
A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$12,000	\$12,000
A-4	20.08	Remove Curb and Gutter	LF	230	1.00	0	230	\$7	\$1,610
A-5	20.09	Remove Pavement	SY	3,836	1.00	0	3,836	\$4	\$15,344
A-6	20.10	Unusable Excavation	CY	8,091	1.25	-2	10,100	\$15	\$151,500
A-7		Classified Fill and Backfill (Type II)	Ton	2,343	1.25	-2	2,900	\$18	\$52,200
A-8		Classified Fill and Backfill (Type II-A)	Ton	7,351	1.25	-2	9,200	\$18	\$165,600
A-9		Leveling Course	Ton	523	1.08	-1	560	\$35	\$19,600
A-10		Geotextile (Type A)	SY	8,292	1.00	-1	8,290	\$2	\$16,580
A-11		Insulation Board (R-9)	SF	48,669	1.01	-1	49,160	\$3	\$147,480
A-12		Insulation Board (R-4.5)	SF	7,689	1.01	-1	7,770	\$2	\$15,540
A-13		Reconstruct Driveway	EA	12		0	12	\$3,250	\$39,000
A-14		P.C.C. Curb and Gutter (All Types)	LF	2,117	1.00	0	2,117	\$27	\$57,159
A-15		P.C.C. Sidewalk	SY	400		0	400	\$60	\$24,000
A-16		P.C.C. Curb Ramp (6" Thick)	EA	11	1.00	0	11	\$2,000	\$22,000
A-17		A.C. Pavement (Class D)	Ton	542	1.06	-1	570	\$105	\$59,850
A-18		A.C. Pavement (Class E)	Ton	436		-1	460	\$110	\$50,600
A-19		Remove and Replace Manhole Cone Section	EA	1		0	1	\$1,800	\$1,800
A-20		Remove and Replace Manhole Cover and Frame	EA	1		0	1	\$700	\$700
A-21		Remove and Replace Valve Box Top Section	EA	6		0	6	\$500	\$3,000
A-22		Furnish and Install Fire Hydrant Assembly Single Pumper	EA	1	1.00	0	1	\$9,000	\$9,000
A-23		Adjust Key Box	EA	10		0	10	\$450	\$4,500
A-24		Decommission Fire Hydrant Assembly	EA	1		0	1	\$3,000	\$3,000
A-25 A-26		Construction Survey Measurement	LS	1 10		0	10	\$20,000 \$225	\$20,000 \$2,250
A-26 A-27		Two-Person Survey Crew Remove and Reset Fence	Hour	656	1.00	0	722	\$225 \$40	\$2,250 \$28,880
A-27		Inlaid Traffic Markings (Methyl Methacrylate) (4" Yellow) (90 Mil)	LF	1.960		0	1,960	\$6	\$20,000
A-29		Inlaid Traffic Markings (Methyl Methacrylate) (4" White) (90 Mil)	LF	1,759	1.00	0	1,759	\$6	\$10,554
A-30		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)	LF	93		0	93	\$30	\$2,790
A-31		Standard Sign	SF	72	1.00	0	72	\$100	\$7,200
A-32		Traffic Maintenance	LS	1		0	1	\$100,000	\$100,000
A-33	70.16	Temporary Group Mailboxes	LS	1	1.00	0	1	\$10,000	\$10,000
A-34	70.17	Relocate Mailbox	EA	7	1.00	0	7	\$500	\$3,500
A-35	70.23	Temporary Fencing	LF	656	1.10	0	722	\$10	\$7,220
A-36	75.02	Trees (type to be determined)	EA	9	1.00	0	9	\$500	\$4,500
A-37	75.02	Shrubs (type to be determined)	EA	18	1.00	0	18	\$75	\$1,350
A-38		Topsoil (4-inch Depth)	MSF	24.3	1.30	0	32	\$550	\$17,600
A-39		Seeding (Schedule A)	MSF	24.3		0	32	\$450	\$14,400
A-40		Temporary Tree Protection Fence	LF	200		0	200	\$7	\$1,400
A-41		Root Pruning	LF	70		0	70	\$25	\$1,750
A-42	80.18	Install Loop Detector - New Work	LS	1	1.00	0	1	\$20,000	\$20,000
							·	TOTAL	\$1,153,617

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - LOIS DRIVE

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	EST QUANT	UNIT PRICE	TOTAL COST
No.	No.		01411	QUANT	FACTOR	FACTOR	201 007.111	OHITTHOL	101712 0001
		ainage Improvements							
B-1		Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	877	1.00	0	877	\$25	\$21,925
B-3		Furnish Trench Backfill (Type II)	Ton	590	1.30	0	767	\$17	\$13,039
B-4		Bedding Material (Class D)	LF	877	1.00	0	877	\$30	\$26,310
B-5	20.26	Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6	20.27	Disposal of Unusable or Surplus Material	CY	610	1.30	0	793	\$20	\$15,860
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	189	1.00	0	189	\$60	\$11,340
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	688	1.00	0	688	\$70	\$48,160
B-9	55.04	Connect to Existing Storm Drain System	EA	1	1.00	0	1	\$2,500	\$2,500
B-10	55.05	Construct (Type II) Catch Basin Manhole	EA	4	1.00	0	4	\$10,000	\$40,000
B-11	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000
B-12	55.09	Construct Catch Basin	EA	5	1.00	0	5	\$4,500	\$22,500
B-13	55.11	Remove Manhole	EA	5	1.00	0	5	\$1,000	\$5,000
B-14	55.11	Remove Catch Basin	EA	4	1.00	0	4	\$900	\$3,600
B-15	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$25,000	\$25,000
B-16	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$10,000	\$10,000
B-17	70.07	Remove Pipe	LF	840	1.00	0	840	\$13	\$10,920
								TOTAL	\$286,794
		umination Improvements							
C-1		Trench and Backfill (2'W x 3.5'D)	LF	875	1.10	-1	960	\$24	\$23,424
C-2		Driven Pile Luminaire Pole Foundations	EA	6	1.00	0	6	\$2,778	\$16,668
C-3		Fixed Base Luminaire Pole	EA	6	1.00	0	6	\$3,940	\$23,640
C-4	80.06	Luminaire Arm	EA	6	1.00	0	6	\$775	\$4,650
C-5	80.07	Steel Conduit (2 inch)	FT	875	1.10	-1	960	\$39	\$37,440
C-6	80.08	Junction Box (Type IA)	EA	6	1.00	0	6	\$1,263	\$7,578
C-7	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	875	1.10	-1	960	\$7	\$6,720
C-8		Luminaire (6,000 Lm, Medium, Type 2)	EA	3	1.00	0	3	\$1,000	\$3,000
C-9		Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,000	\$1,000
C-10		Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,150	\$1,150
C-11	80.23	Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,250	\$1,250
C-12		Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-13	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-14	80.23	Spare Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,000	\$1,000
C-15	80.23	Spare Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,100	\$1,100
C-16	80.28	Remove Luminaire Pole	EA	7	1.00	0	7	\$800	\$5,600
			*					TOTAL	\$135,920

SUMMARY

Total Estimated Construction Cost: \$1,576,000

Summary Lois Dr - Alternative 2

Utility Relocation Summary Lois/32nd Avenue Upgrades: Alternative 2							
Electric (CEA)	\$0						
Telecommunications (ACS)	\$129,350						
Cable Television (GCI)	\$0						
Natural Gas (Enstar)	\$38,253						
Subtotal:	\$167,603						
Construction Contingency (10%)	<i>\$16,760</i>						
Total Utility Relocation Cost:	\$184,363						

ACS Lois Dr - Alternative 2

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	соѕт	COMMENTS
ACS-1	12+00 - 12+88	RT	underground T line	within proposed improvements	adjust	100	LF	\$80	\$8,000	
ACS-2	11+53 - 20+68	RT	underground T line	within proposed improvements	adjust	980	LF	\$80	\$78,400	
ACS-3	18+50	RT	telephone pedestal	within proposed improvements	Relocate	1	EA	\$4,300	\$4,300	
ACS-4	19+26 - 19+49	RT	underground T line	within proposed improvements	adjust	25	LF	\$80	\$2,000	
ACS-5	19+86 - 20+20	RT	underground T line	within proposed improvements	adjust	35	LF	\$80	\$2,800	
ACS-6	20+88 - 21+36	RT	underground T line	within proposed improvements	adjust	50	LF	\$80	\$4,000	
ACS-7	21+44	Crossing	underground T line	within proposed improvements	Verify Depth. Relocate as needed	40	LF	\$0	\$0	
ACS-8	21+90 - 21+97	RT	underground T line	within proposed improvements	Verify Depth. Relocate as needed	8	LF	\$0	\$0	

Construction Costs:

\$99,500

Engineering/Administration (30%): \$29,850

Total: \$129,350

Enstar Lois Dr - Alternative 2

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	12+31 - 12+51	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-2	14+30 - 14+66	LT	2-Inch Steel	within proposed improvemnts	adjust	30	LF	\$125	\$3,750	
Enstar-3	15+78	Crossing	2-Inch Steel	within proposed improvemnts	adjust	75	LF	\$125	\$9,375	
Enstar-4	16+70 - 16+88	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-5	17+04 - 17+18	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-6	17+86 - 18+02	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-7	18+32 - 18+52	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-8	18+83 - 19+03	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-9	19+31 - 19+51	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-10	19+70 - 19+88	LT	2-Inch Steel	within proposed improvemnts	Locate and protect	20	LF	\$0	\$0	
Enstar-11	20+03 - 20+13	Crossing	5/8"-Plastic Service	within proposed improvemnts	adjust	1	EA	\$2,250	\$2,250	
Enstar-12	20+20 - 20+64	LT	2-Inch Steel	within proposed improvemnts	adjust	75	LF	\$125	\$9,375	
Enstar-13	21+60	Crossing	3-Inch Steel	within proposed improvemnts	adjust	30	LF	\$135	\$4,050	
Enstar-14	21+95 - 21+99	LT	2-Inch Steel	within proposed improvemnts	modify	5	LF	\$125	\$625	

Construction Costs:

\$29,425

Engineering/Administration (30%) \$8,828

Total: \$38,253

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 2 - LOIS DRIVE

PARCEL	Purchase Entire Property	PUE	SE	Drainage Easement	TCE	# Of TCP's
100						0
101						1
102						1
103						1
104						1
105						1
106						1
107			X			1
108			X			0
109						1
110			X			0
111			X			0
123		X				1
124		X				3
125		X				1
TOTAL	0	3	4	0	0	13

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
		2nd Avenue Pathway			Alternative 2 - 32nd Avenue	
Project Number:	:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DECICN		Declar Management	¢24.800			
DESIGN	2 022	Design Management PM&E Design Services	\$34,890			
Sia	iri 20: :	_	\$0 \$0			
		PM&E Design Survey	\$0 \$0			
		PM&E Design Soil				
		Contractual Dsgn Sers (Basic) Contractual Dsgn Sers (Add'l)	\$283,000			
		<u> </u>	\$37,500			
		Contractual Design Survey	\$55,000			
		Contractual Design Soils	\$25,000			
6.11		Miscellaneous	\$0	_		
Subtotal				\$435,390)	
UTILITIES		AWWU	\$0			
	art 20??		\$0 \$0			
Sia	111 20	ACS	\$124,000			
		GCI	\$69,000			
		Enstar	\$288,000			
Subtotal		Enista	Ψ200,000	- \$481,000	1	
Subioidi				\$401,000	,	
ROW		Real Estate Services	\$35,200			
Sta	art 20??	Land Acquisition	\$3,923,000			
Subtotal		•		\$3,958,200)	
CONSTRUCTIO	ON	Construction Management	\$55,824			
Sta	art 20??	Inspection	\$148,864			
		Materials Testing	\$23,260			
		Survey	\$23,260			
		Miscellaneous	\$0			
		Construction Contract	\$2,326,000	_		
Subtotal		-		\$2,577,208	}	
MISCELLANEO	OUS	Bond Overhead (15.0%)	\$1,376,611			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$349,000	_		
Subtotal				\$1,725,611	<u>-</u>	
PROJECT TOT	TAL			\$9,177,409) =	

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - 32ND AVENUE

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	CCT OLIANIT	UNIT PRICE	TOTAL COST
No.	No.		UNIT	QUANT	FACTOR	FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedul	e A - Ro	adway Improvements							
A-1	20.02	Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$15,000	\$15,000
A-2	20.03	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3	20.04	Clearing and Grubbing	LS	1	1.00	0	1	\$18,000	\$18,000
A-4	20.07	Remove Sidewalk or Concrete Apron	SY	896	1.00	0	896	\$15	\$13,44
A-5	20.08	Remove Curb and Gutter	LF	341	1.00	0	341	\$7	\$2,387
A-6	20.09	Remove Pavement	SY	5,339	1.00	0	5,339	\$4	\$21,350
A-7	20.10	Unusable Excavation	CY	10,489		-2	13,100	\$15	\$196,500
A-8	20.21	Classified Fill and Backfill (Type II)	Ton	3,247	1.25	-2	4,100	\$18	\$73,800
A-9		Classified Fill and Backfill (Type II-A)	Ton	9,673	1.25	-2	12,100	\$18	\$217,800
A-10	20.22	Leveling Course	Ton	896	1.08	-1	970	\$35	\$33,950
A-11	20.25	Geotextile (Type A)	SY	11,489	1.00	-1	11,490	\$2	\$22,980
A-12		Insulation Board (R-9)	SF	67,433	1.01	-1	68,110	\$3	\$204,330
A-13	20.26	Insulation Board (R-4.5)	SF	9,791	1.01	-1	9,890	\$2	\$19,780
A-14	20.28	Reconstruct Driveway	EA	8	1.00	0	8	\$3,250	\$26,000
A-15	30.02	P.C.C. Curb and Gutter (All Types)	LF	4,751	1.00	0	4,751	\$27	\$128,27
A-16	30.02	Curb Nose	EA	11	1.00	0	11	\$1,500	\$16,500
A-17	30.03	P.C.C. Sidewalk	SY	456	1.00	0	456	\$60	\$27,360
A-18	30.04	P.C.C. Curb Ramp (6" Thick)	EA	24	1.00	0	24	\$2,000	\$48,000
A-19	30.10	Colored Concrete	SY	612	1.00	0	612	\$160	\$97,920
A-20		A.C. Pavement (Class D)	Ton	812	1.06	-1	860	\$105	\$90,300
A-21	40.06	A.C. Pavement (Class E)	Ton	674	1.06	-1	710	\$110	\$78,100
A-22		Remove and Replace Manhole Cone Section	EA	4	1.00	0	4	\$1,800	\$7,200
A-23	55.08	Adjust Storm Drain Manhole Ring	EA	1	1.00	0	1	\$1,400	\$1,400
A-24	60.03	Remove and Replace Valve Box Top Section	EA	5	1.00	0	5	\$500	\$2,500
A-25		Adjust Key Box	EA	1	1.00	0	1	\$450	\$450
A-26		Construction Survey Measurement	LS	1		0	1	\$30,000	\$30,000
A-27		Two-Person Survey Crew	Hour	10		0	10	\$225	\$2,250
A-28		Remove and Reset Fence	LF	778		0	856	\$40	\$34,240
A-29		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil	LF	128		0	128	\$30	\$3,840
A-30		Inlaid Traffic Markings (Methyl Methacrylate) (Words & Symbols) (90 Mil	EA	2	1.00	0	2	\$700	\$1,400
A-31		Standard Sign	SF	198		0	198	\$100	\$19,80
A-32		Traffic Maintenance	LS	1	1.00	0	1	\$150,000	\$150,000
A-33		Bollard (Concrete Pipe, Yellow)	EA	36		0	36	\$1,250	\$45,000
A-34		Remove Bollard	EA	3		0	3	\$200	\$600
A-35		Temporary Group Mailboxes	LS	1		0	1	\$10,000	\$10,000
A-36		Relocate Mailbox	EA	1	1.00	0	1	\$500	\$500
A-37		Temporary Fencing	LF	778		0	856	\$10	\$8,56
A-38		Trees (type to be determined)	EA	9		0	9	\$500	\$4,50
A-39		Shrubs (type to be determined)	EA	18		0	18	\$75	\$1,350
A-40		Topsoil (4-inch Depth)	MSF	29.6		0	39	\$550	\$21,45
A-41		Seeding (Schedule A)	MSF	29.6		0	39	\$450	\$17,55
A-42		Temporary Tree Protection Fence	LF	100		0	100	\$7	\$70
A-43	75.13	Root Pruning	LF	10	1.00	0	10	\$25	\$25
								TOTAL	\$1,721,72

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - 32ND AVENUE

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	CCT OLIANIT	UNIT PRICE	TOTAL COST
No.	No.	TIEW DESCRIPTION	UNIT	QUANT	FACTOR	FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule B - Drainage Improvements									
B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	1,081	1.00	0	1,081	\$25	\$27,025
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	290	1.30	0	377	\$17	\$6,409
B-4	20.16	Bedding Material (Class D)	LF	1,081	1.00	0	1,081	\$30	\$32,430
B-5	20.26	Insulation Board (R-20)	SF	64	1.00	0	64	\$5	\$320
B-6	20.27	Disposal of Unusable or Surplus Material	CY	580	1.30	0	754	\$20	\$15,080
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	135	1.00	0	135	\$60	\$8,100
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	502	1.00	0	502	\$70	\$35,140
B-9	55.02	Furnish, Install, and Televise Pipe (24-Inch, Type S, CPEP)	LF	444	1.00	0	444	\$80	\$35,520
B-10	55.04	Connect to Existing Storm Drain System	EA	2	1.00	0	2	\$2,500	\$5,000
B-11	55.05	Construct (Type II) Catch Basin Manhole	EA	6	1.00	0	6	\$10,000	\$60,000
B-12	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000
B-13	55.09	Construct Catch Basin	EA	6	1.00	0	6	\$4,500	\$27,000
B-14	55.11	Remove Manhole	EA	1	1.00	0	1	\$1,000	\$1,000
B-15	55.11	Remove Catch Basin	EA	2	1.00	0	2	\$900	\$1,800
B-16	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$25,000	\$25,000
B-17	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$5,000	\$5,000
B-18	70.07	Remove Pipe	LF	509	1.00	0	509	\$13	\$6,617
B-19	80.29	Heat Trace System	LS	1	1.00	0	1	\$96,952	\$96,952
								TOTAL	\$418,393
		umination Improvements							
C-1	80.02	Trench and Backfill (2'W x 3.5'D)	LF	1,246	1.10	-1	1,370	\$24	\$33,428
C-2	80.04	Driven Pile Luminaire Pole Foundations	EA	7	1.00	0	7	\$2,778	\$19,446
C-3	80.04	Cast-In-Place Light Column Foundation	EA	2	1.00	0	2	\$2,500	\$5,000
C-4	80.05	Fixed Base Luminaire Pole	EA	7	1.00	0	7	\$3,940	\$27,580
C-5	80.06	Luminaire Arm	EA	8	1.00	0	8	\$775	\$6,200
C-6	80.07	Steel Conduit (2 inch)	FT	1,293	1.10	-1	1,420	\$39	\$55,380
C-7	80.08	Junction Box (Type IA)	EA	11	1.00	0	11	\$1,263	\$13,893
C-8	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	1,891	1.10	-1	2,080	\$7	\$14,560
C-9	80.29	Pedestrian Light Column	EA	2	1.00	0	2	\$3,900	\$7,800
	00.20	Spare Pedestrian Light Column	EA	1	1.00	0	1	\$2,900	\$2,900
C-10	00.29	Opare i cuestilan Eight Column			1.00			Ψ2,500	Ψ2,300

SUMMARY

Schedule A - Roadway Improvements
Schedule B - Drainage Improvements
Schedule C - Illumination Improvements
Subtotal
S2,326,300

Total Estimated Construction Cost: \$2,326,000

Summary 32nd Ave - Alternative 2

Utility Relocation Summary 32nd Avenue Upgrades: Alternative 2							
Electric (CEA)	\$0						
Telecommunications (ACS)	\$112,385						
Cable Television (GCI)	\$62,400						
Natural Gas (Enstar)	\$261,950						
Subtotal:	\$436,735						
Construction Contingency (10%)	\$43,674						
Total Utility Relocation Cost:	\$480,409						

ACS 32nd Ave - Alternative 2

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	32+20 - 33+18	LT	UG 500 pair telephone	within proposed improvements	adjust	100	LF	\$90	\$9,000	
ACS-2	32+00 - 38+06	LT	UG 600 pair telephone	within proposed improvements	adjust	615	LF	\$100	\$61,500	
ACS-3	33+18 - 33+19	CL	OH 100 pair telephone	within proposed improvements	protect in place	60	LF	\$0	\$0	
ACS-4	33+18 - 36+29	RT	OH 200 pair telephone	within proposed improvements	protect in place	315	LF	\$0	\$0	
ACS-5	36+29	RT	OH 100 pair telephone	within proposed improvements	protect in place	55	LF	\$0	\$0	
ACS-6	38+00	LT	Vault	within proposed improvements	adjust	1	EA	\$10,750	\$10,750	
ACS-7	38+06 - 39+83	RT	OH 100 pair telephone	within proposed improvements	protect in place	195	LF	\$0	\$0	
ACS-8	39+83	RT	UG 100 pair telephone	within proposed improvements	adjust	65	LF	\$80	\$5,200	
ACS-9	39+83 - 43+06	RT	OH 50 pair telephone	within proposed improvements	protect in place	325	LF	\$0	\$0	
ACS-10	43+06	LT	OH 100 pair telephone	within proposed improvements	protect in place	35	LF	\$0	\$0	

Construction Costs: \$86,450

Engineering/Administration (30%): \$25,935

Total: \$112,385

GCI 32nd Ave - Alternative 2

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	32+00 - 43+06	RT	overhead C line	within proposed improvements	protect in place	1215	LF	\$0	\$0	
GCI-2	32+07 - 39+83	RT	overhead FO line	within proposed improvements	protect in place	780	LF	\$0	\$0	
GCI-3	33+16 - 33+18	RT	underground C line	within proposed improvements	adjust	65	LF	\$80	\$5,200	
GCI-4	36+29	RT	overhead C line	within proposed improvements	protect in place	55	LF	\$0	\$0	
GCI-5	36+29	RT	overhead FO line	within proposed improvements	protect in place	55	LF	\$0	\$0	
GCI-6	36+29 - 38+06	LT	underground FO line	within proposed improvements	adjust	200	LF	\$120	\$24,000	
GCI-7	39+80 - 39+83	Crossing	underground C line	within proposed improvements	adjust	70	LF	\$80	\$5,600	
GCI-8	39+80 - 39+81	Crossing	underground FO line	within proposed improvements	adjust	70	LF	\$120	\$8,400	
GCI-9	39+77 - 39+83	RT	underground C line	within proposed improvements	adjust	60	LF	\$80	\$4,800	
GCI-10	43+06	RT	overhead C line	within proposed improvements	protect in place	35	LF	\$0	\$0	

Construction Costs: \$48,000

Engineering/Administration (30%) \$14,400

Total: \$62,400

Enstar 32nd Ave - Alternative 2

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	32+00 - 45+00	LT	3-Inch Steel	within proposed improvemnts	adjust	1200	LF	\$135	\$162,000	
Enstar-2	34+45	Crossing	1-1/4"-Inch Steel	within proposed improvemnts	adjust	50	LF	\$108	\$5,400	
Enstar-3	37+82	Crossing	1-1/4-Inch Steel	within proposed improvemnts	adjust	50	LF	\$108	\$5,400	
Enstar-4	38+31	Crossing	1-1/4-Inch Steel	within proposed improvemnts	adjust	50	LF	\$108	\$5,400	
Enstar-5	39+88	Crossing	2-Inch Steel	within proposed improvemnts	adjust	50	LF	\$125	\$6,250	
Enstar-6	39+97	Crossing	2-Inch Steel	within proposed improvemnts	adjust	50	LF	\$125	\$6,250	
Enstar-7	41+24	Crossing	1-1/4-Inch Steel	within proposed improvemnts	adjust	50	LF	\$108	\$5,400	
Enstar-8	41+95	Crossing	1-1/4-Inch Steel	within proposed improvemnts	adjust	50	LF	\$108	\$5,400	

Construction Costs: \$201,500

Engineering/Administration (30%) \$60,450

Total: \$261,950

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 2 - 32ND AVENUE

Lois & 32nd Av	Lois & 32nd Ave Upgrade - Alternative 2 - 32nd									
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's					
115			Х	Х	2					
116		X	X	X	1					
117		X	X	X	0					
118			X	X	1					
119				X	1					
120					1					
121					1					
122	X				0					
123		Χ	X		2					
TOTAL	1	3	5	5	9					

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
		2nd Avenue Pathway		[D] 1114-[C]	Alternative 2 - Intersection	
Project Nun	nber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DESIGN		Design Management	\$8,370			
	Start 20??	PM&E Design Services	\$0			
		PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$71,000			
		Contractual Dsgn Sers (Add'l)	\$10,000			
		Contractual Design Survey	\$12,000			
		Contractual Design Soils	\$5,000			
		Miscellaneous	\$0			
Subtotal				\$106,370		
UTILITIES	}	AWWU	\$0			
	Start 20??	CEA	\$0			
		ACS	\$8,000			
		GCI	\$0			
		Enstar	\$36,000			
Subtotal		•		\$44,000		
		_				
ROW		Real Estate Services	\$18,600			
	Start 20??	Land Acquisition	\$1,319,000	_		
Subtotal				\$1,337,600		
CONSTRU		Construction Management	\$11,160			
	Start 20??	Inspection	\$27,900			
		Materials Testing	\$4,883			
		Survey	\$5,580			
		Miscellaneous	\$0			
		Construction Contract	\$279,000	_		
Subtotal				\$328,523		
		•				
MISCELLA	NEOUS	Bond Overhead (15.0%)	\$327,969			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$42,000			
Subtotal				\$369,969	_	

\$2,186,462

PROJECT TOTAL

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - INTERSECTION

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedule	e A - Ro	adway Improvements							
A-1	20.02	Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$1,000	\$1,000
A-2	20.03	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3	20.04	Clearing and Grubbing	LS	1	1.00	0	1	\$2,000	\$2,000
A-4	20.09	Remove Pavement	SY	824	1.00	0	824	\$4	\$3,296
A-5	20.10	Unusable Excavation	CY	868	1.25	-2	1,100	\$15	\$16,500
A-6	20.21	Classified Fill and Backfill (Type II)	Ton	260	1.25	-2	300	\$18	\$5,400
A-7	20.21	Classified Fill and Backfill (Type II-A)	Ton	753	1.25	-2	900	\$18	\$16,200
A-8	20.22	Leveling Course	Ton	67	1.08	-1	70	\$35	\$2,450
A-9	20.25	Geotextile (Type A)	SY	919	1.00	-1	920	\$2	\$1,840
A-10	20.26	Insulation Board (R-9)	SF	5,395	1.01	-1	5,450	\$3	\$16,350
A-11	20.26	Insulation Board (R-4.5)	SF	719	1.01	-1	730	\$2	\$1,460
A-12	30.02	P.C.C. Curb and Gutter (All Types)	LF	188	1.00	0	188	\$27	\$5,076
A-13	30.02	Curb Nose	EA	3	1.00	0	3	\$1,500	\$4,500
A-14	30.03	P.C.C. Sidewalk	SY	91	1.00	0	91	\$60	\$5,460
A-15	30.04	P.C.C. Curb Ramp (6" Thick)	ĒΑ	4	1.00	0	4	\$2,000	\$8,000
A-16	30.10	Colored Concrete	SY	5	1.00	0	5	\$160	\$800
A-17	40.06	A.C. Pavement (Class D)	Ton	68	1.06	-1	70	\$105	\$7,350
A-18	40.06	A.C. Pavement (Class E)	Ton	68	1.06	-1	70	\$110	\$7,700
A-19	60.03	Remove and Replace Valve Box Top Section	EA	3	1.00	0	3	\$500	\$1,500
A-20		Construction Survey Measurement	LS	1	1.00	0	1	\$2,300	\$2,300
A-21	65.02	Two-Person Survey Crew	Hour	5	1.00	0	5	\$225	\$1,125
A-22	70.08	Remove and Reset Fence	LF	82	1.10	0	90	\$40	\$3,600
A-23		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)	LF	29	1.00	0	29	\$30	\$870
A-24		Standard Sign	SF	18	1.00	0	18	\$100	\$1,800
A-25		Traffic Maintenance	LS	1	1.00	0	1	\$10,000	\$10,000
A-26	70.13	Bollard (Concrete Pipe, Yellow)	EA	4	1.00	0	4	\$1,250	\$5,000
A-27	70.23	Temporary Fencing	LF	82	1.10	0	90	\$10	\$900
A-28	75.02	Trees (type to be determined)	EA	2	1.00	0	2	\$500	\$1,000
A-29	75.02	Shrubs (type to be determined)	EA	4	1.00	0	4	\$75	\$300
A-30	75.03	Topsoil (4-inch Depth)	MSF	5.2	1.30	0	7	\$550	\$3,850
A-31	75.04	Seeding (Schedule A)	MSF	5.2	1.30	0	7	\$450	\$3,150
A-32	75.12	Temporary Tree Protection Fence	LF	100	1.00	0	100	\$7	\$700
A-33	75.13	Root Pruning	LF	10	1.00	0	10	\$25	\$250
								TOTAL	\$148,127
Schedule	e B - Dr	ainage Improvements							
B-1		Trench Dewatering	LS	1	1.00	0	1	\$3,000	\$3,000
B-2		Trench Excavation and Backfill (Various Depths)	LF	320	1.00	0	320	\$25	\$8,000
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	200	1.30	0	260	\$17	\$4,420
B-4		Bedding Material (Class D)	LF	320	1.00	0	320	\$30	\$9,600
B-5		Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6		Disposal of Unusable or Surplus Material	CY	210	1.30	0	273	\$20	\$5,460
B-7		Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	132	1.00	0	132	\$60	\$7,920
B-8			LF	189	1.00	0	189	\$70	\$13,230
B-9	55.05	Construct (Type I) Manhole	EA	1	1.00	0	1	\$5,500	\$5,500
B-10		Construct (Type II) Catch Basin Manhole	EA	2	1.00	0	2	\$10,000	\$20,000
		Construct Catch Basin	EA	4	1.00	0	4	\$4.500	\$18.000
B-11	55.09								

ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 2 - INTERSECTION

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	EST OLIANT	UNIT PRICE	TOTAL COST
No.	No.	TIEW DESCRIPTION	UNIT	QUANT	FACTOR	FACTOR	EST QUANT	UNIT FRICE	TOTAL COST
Schedu	le C - IIIu	umination Improvements							
C-1	80.02	Trench and Backfill (2'W x 3.5'D)	LF	5	1.10	-1	10	\$24	\$244
C-2	80.04	Driven Pile Luminaire Pole Foundations	EA	1	1.00	0	1	\$2,778	\$2,778
C-3	80.04	Load Center Foundation (Type 1A)	EA	1	1.00	0	1	\$4,900	\$4,900
C-4	80.04	Cast-In-Place Light Column Foundation	EA	1	1.00	0	1	\$3,233	\$3,233
C-5	80.05	Fixed Base Luminaire Pole	EA	1	1.00	0	1	\$3,940	\$3,940
C-6	80.06	Luminaire Arm	EA	2	1.00	0	2	\$775	\$1,550
C-7	80.07	Steel Conduit (2 inch)	FT	5	1.10	-1	10	\$39	\$390
C-8	80.08	Junction Box (Type IA)	EA	1	1.00	0	1	\$1,263	\$1,263
C-9	80.08	Junction Box (Type II)	EA	1	1.00	0	1	\$2,990	\$2,990
C-10	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	5	1.10	-1	10	\$7	\$70
C-11	80.14	Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control	EA	1	1.00	0	1	\$8,612	\$8,612
C-12	80.23	Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,150	\$1,150
C-13	80.23	Luminaire (10,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,200	\$1,200
C-14	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,000	\$1,000
C-15	80.23	Spare Luminaire (10,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,050	\$1,050
C-16	80.28	Remove Luminaire Pole	EA	1	1.00	0	1	\$800	\$800
					·			TOTAL	\$35,170

SUMMARY

Total Estimated Construction Cost: \$279,000

Summary Intersection - Alternative 2

Utility Relocation Summary Lois/32nd Avenue Intersection: Alternative 2							
Electric (CEA)	\$0						
Telecommunications (ACS)	\$7,540						
Cable Television (GCI)	\$0						
Natural Gas (Enstar)	\$32,695						
Subtotal:	\$40,235						
Construction Contingency (10%) \$4,024							
Total Utility Relocation Cost:	\$44,259						

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	соѕт	COMMENTS
ACS-1	11+49- 12+00	RT	underground T line	within proposed improvements	Relocate as needed	50	LF	\$80	\$4,000	
ACS-2	30+87 - 31+36	LT	OH 100 pair telephone	within proposed improvements	protect in place	50	LF	\$0	\$0	
ACS-3	32+00 - 32+20	LT	underground T line	within proposed improvements	Relocate as needed	20	LF	\$90	\$1,800	

Construction Costs: \$5,800 Engineering/Administration (30%): \$1,740

\$7,540 Total:

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	соѕт	COMMENTS
Enstar-1	30+40 - 31+40	LT	1-1/4-Inch Steel	within proposed improvemnts	adjust	100	LF	\$108	\$10,800	
Enstar-2	31+40	Crossing	2-Inch Steel	within proposed improvemnts	adjust	50	LF	\$125	\$6,250	
Enstar-3	31+43 - 32+00	LT	3-Inch Steel	within proposed improvemnts	adjust	60	LF	\$135	\$8,100	

Construction Costs: \$25,150

Engineering/Administration (30%) \$7,545

\$32,695

ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 2 - INTERSECTION

Lois & 32nd Ave Upgrade - Alternative 2 - Intersection									
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's				
112		Х	Х		1				
113		Х	X		1				
114	X				0				
123		Χ			0				
TOTAL	1	3	2	0	2				

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
Project: Lois	S Drive & 3	2nd Avenue Pathway			Alternative 3 - Lois	
Project Num	ber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DESIGN		Design Management	\$21,615			
	Start 20??	PM&E Design Services	\$0			
		PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$213,000			
		Contractual Dsgn Sers (Add'l)	\$27,500			
		Contractual Design Survey	\$41,000			
		Contractual Design Soils	\$20,000			
		Miscellaneous	\$0	=		
Subtotal				\$323,115		
UTILITIES		AWWU	\$0			
	Start 20??		\$0			
		ACS	\$53,000			
		GCI	\$0			
		Enstar	\$30,000			
Subtotal				\$83,000		
ROW		Real Estate Services	\$10,960			
	Start 20??	Land Acquisition	\$2,000	_		
Subtotal				\$12,960		
~~~~~	~~~	la				
CONSTRUC		Construction Management	\$36,025			
	Start 20??	Inspection	\$96,547			
		Materials Testing	\$14,410			
		Survey	\$14,410			
		Miscellaneous	\$0			
		Construction Contract	\$1,441,000	_		
Subtotal				\$1,602,392		
MICCELLA	NEOUG	In 10 1 1/15 0W	¢204.047			
MISCELLA	NEUUS	Bond Overhead (15.0%)	\$394,847			
		Grant Overhead (0.0%)	\$0			
G 14 + 1		Contingency (15%)	\$216,000			
Subtotal				\$610,847	-	
DDATECT	готат			\$2,632,314		
PROJECT T	UIAL			\$2,032,314	=	

#### ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - LOIS DRIVE

ITEM	MACC			CALC	CONT	DOLIND	ſ		1
ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
		adway Improvements		QUAIT	FACTOR	FACTOR			
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$9,000	\$9,000
A-2		Test Pit for Utility Locate	Hour	8		0	8	\$800	\$6,400
A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$11,000	\$11,000
A-4	20.08	Remove Curb and Gutter	LF	230	1.00	0	230	\$7	\$1,610
A-5	20.09	Remove Pavement	SY	3,836	1.00	0	3,836	\$4	\$15,344
A-6	20.10	Unusable Excavation	CY	6,874	1.25	-2	8,600	\$15	\$129,000
A-7		Classified Fill and Backfill (Type II)	Ton	2,040		-2	2,500	\$18	\$45,000
A-8		Classified Fill and Backfill (Type II-A)	Ton	6,156	1.25	-2	7,700	\$18	\$138,600
A-9		Leveling Course	Ton	497	1.08	-1	540	\$35	\$18,900
A-10		Geotextile (Type A)	SY	7,218	1.00	-1	7,220	\$2	\$14,440
A-11		Insulation Board (R-9)	SF	42,367	1.01	-1	42,790	\$3	\$128,370
A-12		Insulation Board (R-4.5)	SF	6,849	1.01	-1	6,920	\$2	\$13,840
A-13		Reconstruct Driveway	EA	12	1.00	0	12	\$3,250	\$39,000
A-14		P.C.C. Curb and Gutter (All Types)	LF	1,948	1.00	0	1,948	\$27	\$52,596
A-15		P.C.C. Sidewalk	SY	371	1.00	0	371	\$60	\$22,260
A-16		P.C.C. Curb Ramp (6" Thick)	EA	13		0	13	\$2,000	\$26,000
A-17		A.C. Pavement (Class D)	Ton	515	1.06	-1	550	\$105	\$57,750
A-18		A.C. Pavement (Class E)	Ton	424	1.06	-1	450	\$110	\$49,500
A-19		Remove and Replace Manhole Cone Section	EA	1	1.00	0	1	\$1,800	\$1,800
A-20		Remove and Replace Manhole Cover and Frame	EA	1		0	1	\$700	\$700
A-21		Remove and Replace Valve Box Top Section	EA	<u>6</u>		0	6	\$500	\$3,000
A-22 A-23		Furnish and Install Fire Hydrant Assembly Single Pumper Adjust Key Box	EA EA	10	1.00	0	•	\$9,000 \$450	\$9,000
A-23 A-24		Decommission Fire Hydrant Assembly	EA	10		0	10	\$3,000	\$4,500 \$3,000
A-24 A-25		Construction Survey Measurement	LS	<u>1</u>		0	1	\$20.000	\$20.000
A-26		Two-Person Survey Crew	Hour	10		0	10	\$20,000	\$2,250
A-27		Remove and Reset Fence	LF	22	1.10	0	24	\$40	\$960
A-28		Inlaid Traffic Markings (Methyl Methacrylate) (4" Yellow) (90 Mil)	LF	1,791	1.00	0	1,791	\$6	\$10,746
A-29	70.10	Inlaid Traffic Markings (Methyl Methacrylate) (4" White) (90 Mil)	LF	1,578	1.00	0	1,578	\$6	\$9,468
A-30		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)	LF	116		0	116	\$30	\$3,480
A-31		Standard Sign	SF	99		0	99	\$100	\$9,900
A-32		Traffic Maintenance	LS	1		0	1	\$90,000	\$90,000
A-33		Temporary Group Mailboxes	LS	1		0	1	\$10,000	\$10,000
A-34		Relocate Mailbox	EA	7	1.00	0	7	\$500	\$3,500
A-35		Temporary Fencing	LF	22	1.10	0	24	\$10	\$240
A-36		Trees (type to be determined)	EA	9		0	9	\$500	\$4,500
A-37		Shrubs (type to be determined)	EA	18		0	18	\$75	\$1,350
A-38		Topsoil (4-inch Depth)	MSF	23.1	1.30	0	30	\$550	\$16,500
A-39		Seeding (Schedule A)	MSF	23.1	1.30	0	30	\$450	\$13,500
A-40		Temporary Tree Protection Fence	LF	100		0	100	\$7	\$700
A-41		Root Pruning	LF	10		0	10	\$25	\$250
A-42	80.18	Install Loop Detector - New Work	LS	1	1.00	0	1	\$20,000	\$20,000
								TOTAL	\$1,017,954

#### **ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - LOIS DRIVE**

							1		
ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	EST QUANT	UNIT PRICE	TOTAL COST
No.	No.		•	QUANT	FACTOR	FACTOR		•	
		ainage Improvements							
B-1		Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000
B-2		Trench Excavation and Backfill (Various Depths)	LF	877	1.00	0	877	\$25	\$21,925
B-3		Furnish Trench Backfill (Type II)	Ton	590	1.30	0	767	\$17	\$13,039
B-4		Bedding Material (Class D)	LF	877	1.00	0	877	\$30	\$26,310
B-5		Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6		Disposal of Unusable or Surplus Material	CY	610	1.30	0	793	\$20	\$15,860
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	189	1.00	0	189	\$60	\$11,340
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	688	1.00	0	688	\$70	\$48,160
B-9	55.04	Connect to Existing Storm Drain System	EA	1	1.00	0	1	\$2,500	\$2,500
B-10	55.05	Construct (Type II) Catch Basin Manhole	EA	4	1.00	0	4	\$10,000	\$40,000
B-11	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000
B-12	55.09	Construct Catch Basin	EA	5	1.00	0	5	\$4,500	\$22,500
B-13	55.11	Remove Manhole	EA	5	1.00	0	5	\$1,000	\$5,000
B-14	55.11	Remove Catch Basin	EA	4	1.00	0	4	\$900	\$3,600
B-15	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$25,000	\$25,000
B-16	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$10,000	\$10,000
B-17	70.07	Remove Pipe	LF	840	1.00	0	840	\$13	\$10,920
								TOTAL	\$286,794
Schedul		mination Improvements						•	
C-1		Trench and Backfill (2'W x 3.5'D)	LF	875	1.10	-1	960	\$24	\$23,424
C-2		Driven Pile Luminaire Pole Foundations	EA	6	1.00	0	6	\$2,778	\$16,668
C-3		Fixed Base Luminaire Pole	EA	6	1.00	0	6	\$3,940	\$23,640
C-4	80.06	Luminaire Arm	EA	6	1.00	0	6	\$775	\$4,650
C-5	80.07	Steel Conduit (2 inch)	FT	875	1.10	-1	960	\$39	\$37,440
C-6	80.08	Junction Box (Type IA)	EA	6	1.00	0	6	\$1,263	\$7,578
C-7	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	875	1.10	-1	960	\$7	\$6,720
C-8	80.23	Luminaire (6,000 Lm, Medium, Type 2)	EA	3	1.00	0	3	\$1,000	\$3,000
C-9	80.23	Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,000	\$1,000
C-10	80.23	Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,150	\$1,150
C-11	80.23	Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,250	\$1,250
C-12	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-13	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-14	80.23	Spare Luminaire (10,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$1,000	\$1,000
C-15	80.23	Spare Luminaire (13,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,100	\$1,100
C-16	80.28	Remove Luminaire Pole	EA	7	1.00	0	7	\$800	\$5,600
		·						TOTAL	\$135,920

SUMMARY

Total Estimated Construction Cost: \$1,441,000

### Summary Lois Dr - Alternative 3

Utility Relocation Summary Lois/32nd Avenue Upgrades: Alternative 3								
Electric (CEA)	\$0							
Telecommunications (ACS)	\$48,230							
Cable Television (GCI)	\$0							
Natural Gas (Enstar)	\$27,300							
Subtotal:	\$75,530							
Construction Contingency (10%) \$7,553								
Total Utility Relocation Cost:	\$83,083							

#### ACS Lois Dr - Alternative 3

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	12+99 - 13+28	RT	underground T line	within proposed improvements	adjust	35	LF	\$80	\$2,800	
ACS-2	15+71 - 18+52	RT	underground T line	within proposed improvements	adjust	155	LF	\$80	\$12,400	
ACS-3	18+50	RT	telephone pedestal	within proposed improvements	Relocate	1	EA	\$4,300	\$4,300	
ACS-4	18+83 - 19+03	LT	underground T line	within proposed improvements	adjust	20	LF	\$80	\$1,600	
ACS-5	19+26 - 19+49	RT	underground T line	within proposed improvements	adjust	25	LF	\$80	\$2,000	
ACS-6	19+31 - 19+51	LT	underground T line	within proposed improvements	adjust	20	LF	\$80	\$1,600	
ACS-7	19+70 - 19+88	LT	underground T line	within proposed improvements	adjust	20	LF	\$80	\$1,600	
ACS-8	19+86 - 20+20	RT	underground T line	within proposed improvements	adjust	35	LF	\$80	\$2,800	
ACS-9	20+17 - 20+66	LT	underground T line	within proposed improvements	adjust	50	LF	\$80	\$4,000	
ACS-10	20+86 - 21+36	RT	underground T line	within proposed improvements	adjust	50	LF	\$80	\$4,000	
ACS-11	21+44	Crossing	underground T line	within proposed improvements	Verify Depth. Relocate as needed	40	LF	\$0	\$0	
ACS-12	21+90 - 21+97	RT	underground T line	within proposed improvements	Verify Depth. Relocate as needed	8	LF	\$0	\$0	

Construction Costs: \$37,100

Engineering/Administration (30%): \$11,130

Total: \$48,230

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	14+30 - 14+66	LT	2-Inch Steel	within proposed improvemnts	adjust	30	LF	\$125	\$3,750	
Enstar-2	15+78	Crossing	2-Inch Steel	within proposed improvemnts	adjust	75	LF	\$125	\$9,375	
Enstar-3	16+70 - 16+88	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-4	17+04 - 17+18	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-5	17+86 - 18+02	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-6	18+32 - 18+52	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-7	18+83 - 19+03	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-8	19+31 - 19+51	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-9	19+70 - 19+88	LT	2-Inch Steel	Within Driveway Limits	Locate and protect	20	LF	\$0	\$0	
Enstar-10	20+03 - 20+13	Crossing	5/8"-Plastic Service	within proposed improvemnts	adjust	1	EA	\$2,250	\$2,250	
Enstar-11	20+40 - 20+62	LT	2-Inch Steel	within proposed improvemnts	adjust	45	LF	\$125	\$5,625	
Enstar-12	21+60	Crossing	3-Inch Steel	within proposed improvemnts	protect as needed	30	LF	\$0	\$0	
Enstar-13	21+95 - 21+99	LT	2-Inch Steel	within proposed improvemnts	protect as needed	5	LF	\$0	\$0	

Construction Costs: \$21,000 Engineering/Administration (30%) \$6,300

Total: \$27,300

#### ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 3 - LOIS DRIVE

Lois & 32nd Av	e Upgrade - Altern	ative 3 - Lois			
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's
100					0
101					1
102					1
103					1
104					1
105					1
106					1
107					1
108					0
109					1
110					0
111			Х		0
123			Х		0
124					3
125					1
TOTAL	0	0	2	0	12

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
Project: Lois	Drive & 3	2nd Avenue Pathway			Alternative 3 - 32nd Avenue	
Project Numb	ber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
		Ī				
DESIGN		Design Management	\$26,295			
	Start 20??	PM&E Design Services	\$0			
		PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$283,000			
		Contractual Dsgn Sers (Add'l)	\$37,500			
		Contractual Design Survey	\$55,000			
		Contractual Design Soils	\$25,000			
		Miscellaneous	\$0	_		
Subtotal				\$426,795		
UTILITIES		AWWU	\$0			
	Start 20??	CEA	\$71,000			
		ACS	\$97,000			
		GCI	\$205,000			
		Enstar	\$178,000	_		
Subtotal		-		\$551,000		
ROW		Real Estate Services	\$47,340			
	Start 20??	Land Acquisition	\$569,000			
Subtotal		•		\$616,340		
CONSTRUC	TION	Construction Management	\$43,825			
	Start 20??	Inspection	\$117,451			
		Materials Testing	\$17,530			
		Survey	\$17,530			
		Miscellaneous	\$0			
		Construction Contract	\$1,753,000			
Subtotal		•		<b>\$</b> 1,949,336		
MISCELLAN	NEOUS	Bond Overhead (15.0%)	\$671,730			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$263,000			
Subtotal		1 , , ,		<b>\$</b> 934,730		
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	
PROJECT TO	OTAL			\$4,478,201		
I I I I I I I I I I I I I I I I I I I				ψ1,170,201	=	

#### ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - 32ND AVENUE

ITEM	MACC			CALC	CONT.	DOLIND	ı	1	
ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
		adway Improvements		QUAINT	FACTOR	FACTOR			
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$10,000	\$10,000
A-2	20.02	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$12,000	\$12,000
A-4		Remove Sidewalk or Concrete Apron	SY	514	1.00	0	514	\$15	\$7,710
A-5		Remove Curb and Gutter	LF	223	1.00	0	223	\$7	\$1,561
A-6		Remove Pavement	SY	3,855	1.00	0	3,855	\$4	\$15,420
A-7	20.10	Unusable Excavation	CY	7,120	1.25	-2	8,900	\$15	\$133,500
A-8	20.21	Classified Fill and Backfill (Type II)	Ton	2,323	1.25	-2	2,900	\$18	\$52,200
A-9	20.21	Classified Fill and Backfill (Type II-A)	Ton	7,183	1.25	-2	9,000	\$18	\$162,000
A-10	20.22	Leveling Course	Ton	560	1.08	-1	600	\$35	\$21,000
A-11	20.25	Geotextile (Type A)	SY	8,220	1.00	-1	8,220	\$2	\$16,440
A-12	20.26	Insulation Board (R-9)	SF	54,681	1.01	-1	55,230	\$3	\$165,690
A-13	20.26	Insulation Board (R-4.5)	SF	7,233	1.01	-1	7,310	\$2	\$14,620
A-14		Reconstruct Driveway	EA	8	1.00	0	8	\$3,250	\$26,000
A-15		P.C.C. Curb and Gutter (All Types)	LF	2,750	1.00	0	2,750	\$27	\$74,250
A-16		P.C.C. Sidewalk	SY	37	1.00	0	37	\$60	\$2,220
A-17		P.C.C. Curb Ramp (6" Thick)	EA	12	1.00	0	12	\$2,000	\$24,000
A-18		P.C.C. Retaining Wall	CY	5	1.00	0	5	\$2,000	\$10,000
A-19		A.C. Pavement (Class D)	Ton	579	1.06	-1	610	\$105	\$64,050
A-20		A.C. Pavement (Class E)	Ton	455	1.06	-1	480	\$110	\$52,800
A-21	50.06	Remove and Replace Manhole Cone Section	EA	4	1.00	0	4	\$1,800	\$7,200
A-22		Adjust Storm Drain Manhole Ring	EA	1	1.00	0	1	\$1,400	\$1,400
A-23		Remove and Replace Valve Box Top Section	EA	5	1.00	0	5	\$500	\$2,500
A-24		Adjust Key Box	EA	1	1.00	0	1	\$450	\$450
A-25		Construction Survey Measurement	LS	1	1.00	0	1	\$20,000	\$20,000
A-26	65.02	Two-Person Survey Crew	Hour	20	1.00	0	20	\$225	\$4,500
A-27 A-28		Remove Fence Remove and Reset Fence	LF LF	202 865	1.00	0	202 952	\$10 \$40	\$2,020 \$38,080
A-26 A-29		Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)	LF	160	1.10 1.00	0	160	\$30	\$4,800
A-29		Standard Sign	SF	144	1.00	0	144	\$100	\$14,400
A-31		Traffic Maintenance	LS	1	1.00	0	1	\$100,000	\$100,000
A-32		Bollard (Concrete Pipe, Yellow)	EA	12	1.00	0	12	\$1,250	\$15,000
A-33		Remove Bollard	EA	3	1.00	0	3	\$200	\$600
A-34	70.16	Temporary Group Mailboxes	LS	1	1.00	0	1	\$10,000	\$10,000
A-35		Relocate Mailbox	EA	1	1.00	0	1	\$500	\$500
A-36	70.23	Temporary Fencing	LF	865	1.10	0	952	\$10	\$9,520
A-37	75.02	Trees (type to be determined)	EA	9	1.00	0	9	\$500	\$4,500
A-38		Shrubs (type to be determined)	EA	18	1.00	0	18	\$75	\$1,350
A-39		Topsoil (4-inch Depth)	MSF	28.2	1.30	0	37	\$550	\$20,350
A-40		Seeding (Schedule A)	MSF	28.2 1.30		0	37	\$450	\$16,650
A-41	75.12	Temporary Tree Protection Fence	LF	200 1.00		0	200	\$7	\$1,400
A-42		Root Pruning	LF	70	1.00	0	70	\$25	\$1,750
		<u>▼</u>						TOTAL	\$1,148,831

#### **ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - 32ND AVENUE**

ITEM No.	MASS No.	ITEM DESCRIPTION	UNIT	CALC. QUANT	CONT. FACTOR	ROUND FACTOR	EST QUANT	UNIT PRICE	TOTAL COST		
Schedule B - Drainage Improvements											
B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$5,000	\$5,000		
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	1,081	1.00	0	1,081	\$25	\$27,025		
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	290	1.30	0	377	\$17	\$6,409		
B-4	20.16	Bedding Material (Class D)	LF	1,081	1.00	0	1,081	\$30	\$32,430		
B-5	20.26	Insulation Board (R-20)	SF	64	1.00	0	64	\$5	\$320		
B-6	20.27	Disposal of Unusable or Surplus Material	CY	580	1.30	0	754	\$20	\$15,080		
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	135	1.00	0	135	\$60	\$8,100		
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	502	1.00	0	502	\$70	\$35,140		
B-9	55.02	Furnish, Install, and Televise Pipe (24-Inch, Type S, CPEP)	LF	444	1.00	0	444	\$80	\$35,520		
B-10	55.04	Connect to Existing Storm Drain System	EA	2	1.00	0	2	\$2,500	\$5,000		
B-11	55.05	Construct (Type II) Catch Basin Manhole	EA	6	1.00	0	6	\$10,000	\$60,000		
B-12	55.05	Construct (Type II) Bypass Manhole	EA	1	1.00	0	1	\$25,000	\$25,000		
B-13	55.09	Construct Catch Basin	EA	6	1.00	0	6	\$4,500	\$27,000		
B-14	55.11	Remove Manhole	EA	1	1.00	0	1	\$1,000	\$1,000		
B-15	55.11	Remove Catch Basin	EA	2	1.00	0	2	\$900	\$1,800		
B-16	55.22	Oil and Grit Separator	EA	1	1.00	0	1	\$25,000	\$25,000		
B-17	55.27	Storm Drain Bypass System	LS	1	1.00	0	1	\$5,000	\$5,000		
B-18	70.07	Remove Pipe	LF	509	1.00	0	509	\$13	\$6,617		
B-19	80.29	Heat Trace System	LS	1	1.00	0	1	\$96,952	\$96,952		
0-1-1-1								TOTAL	\$418,393		
C-1		mination Improvements Trench and Backfill (2'W x 3.5'D)	LF	1,246	1.10	-1	1,370	\$24	\$33,428		
C-2	80.04	Driven Pile Luminaire Pole Foundations	EA	7	1.00	0	7	\$2,778	\$19,446		
C-3		Cast-In-Place Light Column Foundation	EA	2	1.00	0	2	\$2,500	\$5,000		
C-4	80.05	Fixed Base Luminaire Pole	EA	7	1.00	0	7	\$3,940	\$27,580		
C-5	80.06	Luminaire Arm	EA	8	1.00	0	8	\$775	\$6,200		
C-6	80.07	Steel Conduit (2 inch)	FT	1,293	1.10	-1	1,420	\$39	\$55,380		
C-7	80.08	Junction Box (Type IA)	EA	11	1.00	0	11	\$1,263	\$13,893		
C-8	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	1,891	1.10	-1	2,080	\$7	\$14,560		
C-9	80.29	Pedestrian Light Column	EA	2	1.00	0	2	\$3,900	\$7,800		
C-10	80.29	Spare Pedestrian Light Column	EA	1	1.00	0	1	\$2,900	\$2,900		
		· · · · · · · · · · · · · · · · · · ·	1					TOTAL	\$186,187		

#### SUMMARY

Schedule A - Roadway Improvements
Schedule B - Drainage Improvements
Schedule C - Illumination Improvements
Subtotal
Subtotal
Subtotal
Subtotal

Total Estimated Construction Cost: \$1,753,000

### Summary 32nd Ave - Alternative 3

Utility Relocation Summary 32nd Avenue Upgrades: Alternative 3								
Electric (CEA)	\$64,545							
Telecommunications (ACS)	\$88,010							
Cable Television (GCI)	\$186,160							
Natural Gas (Enstar)	\$161,389							
Subtotal:	\$500,104							
Construction Contingency (10%) \$50,010								
Total Utility Relocation Cost:	\$550,114							

#### CEA 32nd Ave - Alternative 3

	APPROX.				RECOMMENDED					
ld No.	STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	ACTION	AMOUNT	LINIT	UNIT PRICE	COST	COMMENTS
10 1101	32+00 -	OTTSET	OTIETT CONTEIET	DESCRIPTION OF CONFEREN	/ Action	AWOUNT	ONT	ONIT PRICE	2031	COMMENTS
CEA-1	43+06	LT	OH 3 Phase - distribution	construction clearance	provide cable watch	1200	LF	\$5	\$6,000	
CEA-2	36+27	RT	Distribution Pole	within proposed improvements	Relocate Pole	1	EA	\$15,000	\$15,000	undergrounding costs are separate
CEA-3	36+29	RT	OH 3 Phase - distribution	within proposed improvements	Relocate with pole	1	EA	\$1,500	\$1,500	
CEA-4	37+78 - 37+84	RT	OH 1 Phase - distribution	construction clearance	provide cable watch	40	LF	\$5	\$200	
CEA-5	37+74	RT	Distribution Pole	within proposed improvements	Protect in place	1	EA	\$1,500	\$1,500	undergrounding costs are separate
CEA-6	39+74 - 39+79	Crossing	OH 3 Phase - distribution	within proposed improvements	Relocate Overhead to new pole	1	EA	\$1,500	\$1,500	
CEA-7	37+78 - 37+83	RT	OH 1 Phase - distribution	within proposed improvements	provide cable watch	30	LF	\$5	\$150	
CEA-8	39+79 - 39+83	RT	OH 3 Phase - distribution	within proposed improvements	Relocate Overhead to new pole	1	EA	\$1,500	\$1,500	
CEA-9	39+81	RT	Service to Parcel 118	within proposed improvements	Relocate Overhead to new pole	1	EA	\$1,000	\$1,000	
CEA-10	39+81	RT	Distribution Pole	within proposed improvements	Relocate Pole	1	EA	\$15,000	\$15,000	undergrounding costs are separate
CEA-11	39+83 - 40+32	RT	OH 1 Phase - distribution	within proposed improvements	Relocate Overhead to new pole	1	EA	\$1,500	\$1,500	
CEA-12	40+88	RT	Distribution Pole	within proposed improvements	Protect in Place	1	EA	\$1,500	\$1,500	undergrounding costs are separate
CEA-13	43+06	RT	Service to Parcel 121 (2 total)	construction clearance	provide cable watch	2	EA	\$400	\$800	
CEA-14	43+06	RT	Distribution Pole	within proposed improvements	Protect in place	1	EA	\$1,500	\$1,500	undergrounding costs are separate
CEA-15	43+06	RT	OH 1 Phase - distribution	construction clearance	provide cable watch	200	LF	\$5	\$1,000	

Construction Costs: \$49,650

Engineering/Administration (30%): \$14,895

Total: \$64,545

#### ACS 32nd Ave - Alternative 3

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	33+15 - 33+19	Crossing	OH 100 pair telephone	within proposed improvements	underground	60	LF	\$80	\$4,800	
ACS-2	33+18 - 36+29	RT	OH 200 pair telephone	within proposed improvements	underground	315	LF	\$85	\$26,775	
ACS-3	35+99 - 36+26	RT	OH 600 pair telephone	within proposed improvements	underground	30	LF	\$100	\$3,000	
ACS-4	36+29	RT	OH 100 pair telephone	within proposed improvements	underground	60	LF	\$80	\$4,800	
ACS-5	38+00	LT	Vault	within proposed improvements	adjust	1	EA	\$4,300	\$4,300	
ACS-6	38+06 - 39+83	RT	OH 100 pair telephone	within proposed improvements	underground	195	LF	\$80	\$15,600	
ACS-7	39+61 - 39+83	LT	OH 600 pair telephone	within proposed improvements	underground	40	LF	\$100	\$4,000	
ACS-8	39+83	RT	OH 100 pair telephone	within proposed improvements	underground	35	LF	\$80	\$2,800	
ACS-9	39+83 - 40+09	RT	OH 50 pair telephone	within proposed improvements	underground	25	LF	\$65	\$1,625	

Construction Costs: \$67,700

Engineering/Administration (30%): \$20,310

Total: \$88,010

#### GCI 32nd Ave - Alternative 3

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	33+00 - 40+09	RT	overhead C line	within proposed improvements	underground	700	LF	\$20	\$14,000	Joint trench with FO
GCI-2	33+00 - 39+83	RT	overhead FO line	within proposed improvements	underground	670	LF	\$120	\$80,400	
GCI-3	33+16 - 33+18	RT	underground C line	within proposed improvements	adjust	60	LF	\$80	\$4,800	
GCI-4	36+29	RT	overhead C line	within proposed improvements	underground	100	LF	\$20	\$2,000	Joint trench with FO
GCI-5	36+29	RT	overhead FO line	within proposed improvements	underground	100	LF	\$120	\$12,000	
GCI-6	39+77 - 39+83	RT	underground C line	within proposed improvements	adjust	70	LF	\$80	\$5,600	
GCI-7	39+80 - 39+83	Crossing	underground C line	within proposed improvements	adjust	45	LF	\$80	\$3,600	
GCI-8	39+81 - 39+83	Crossing	underground FO line	within proposed improvements	adjust	40	LF	\$120	\$4,800	
GCI-9	43+06	RT	overhead C line	within proposed improvements	underground	100	LF	\$80	\$8,000	underground to next northern pole
GCI-10	44+02 - 44+22	LT	overhead C line	within proposed improvements	underground	100	LF	\$80	\$8,000	underground to next northern pole

Construction Costs: \$143,200

Engineering/Administration (30%) \$42,960

Total: \$186,160

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
Enstar-1	33+00 - 39+29	LT	3-Inch Steel	within proposed improvemnts	Relocate as needed	635	LF	\$135	\$85,725	
Enstar-2	34+45	Crossing	1-1/4"-Inch Steel	within proposed improvemnts	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-3	37+82	Crossing	1-1/4-Inch Steel	within proposed improvemnts	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-4	38+31	Crossing	1-1/4-Inch Steel	within proposed improvemnts	Relocate as needed	50	LF	\$108	\$5,400	
Enstar-5	39+59 - 39+95	LT	3-Inch Steel	within proposed improvemnts	Relocate as needed	40	LF	\$135	\$5,400	
Enstar-6	39+88	Crossing	2-Inch Steel	within proposed improvemnts	Relocate as needed	50	LF	\$125	\$6,250	
Enstar-7	39+97	Crossing	2-Inch Steel	within proposed improvemnts	Relocate as needed	50	LF	\$125	\$6,250	
Enstar-8	41+24	Crossing	1-1/4-Inch Steel	within proposed improvemnts	Relocate as needed	40	LF	\$108	\$4,320	

Construction Costs: \$124,145

Engineering/Administration (30%) \$37,244

Total: \$161,389

#### ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 3 - 32ND AVENUE

Lois & 32nd Ave	Lois & 32nd Ave Upgrade - Alternative 3 - 32nd										
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's						
115		Х	X		2						
116		X	X	Х	1						
117		Х		X	1						
118		X	X	X	1						
119		X	X	X	1						
120		X	X		1						
121	X				1						
122		X	X		3						
123					2						
TOTAL	1	7	6	4	13						

Date: 1/14/2021 1 of 1

1/14/2021		Basis:		Prepared By:	CRW	Ver. 5.1
Project: Loi	s Drive & 3	2nd Avenue Pathway			Alternative 3 - Intersection	
Project Nun	ıber:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
DEGLON		ln · v	Φ12.7.C0			
DESIGN	Cr 2022	Design Management	\$13,560			
	Start 20??	PM&E Design Services	\$0			
		PM&E Design Survey	\$0			
		PM&E Design Soil	\$0			
		Contractual Dsgn Sers (Basic)	\$71,000			
		Contractual Dsgn Sers (Add'l)	\$10,000			
		Contractual Design Survey	\$12,000			
		Contractual Design Soils	\$5,000			
		Miscellaneous	\$0	_		
Subtotal				\$111,560		
		1				
UTILITIES		AWWU	\$0			
	Start 20??		\$58,000			
		ACS	\$53,000			
		GCI	\$29,000			
		Enstar	\$55,000	_		
Subtotal				\$195,000		
ROW		Real Estate Services	\$11,800			
	Start 20??	Land Acquisition	\$41,000	_		
Subtotal				\$52,800		
CONSTRUC	CTION	Construction Management	\$18,080			
	Start 20??	Inspection	\$45,200			
		Materials Testing	\$7,910			
		Survey	\$9,040			
		Miscellaneous	\$0			
		Construction Contract	\$452,000	<u></u>		
Subtotal				\$532,230		
MISCELLA	NEOUS	Bond Overhead (15.0%)	\$169,339			
		Grant Overhead (0.0%)	\$0			
		Contingency (15%)	\$68,000			
Subtotal		-		<b>\$237,339</b>		
				-	<b>=</b>	
PROJECT 7	ГОТАL			\$1,128,929		
				,, 2	=	

#### ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - INTERSECTION

ITEM	MASS	T	_	CALC.	CONT.	ROUND		1	1
No.	No.	ITEM DESCRIPTION	UNIT	QUANT	FACTOR		<b>EST QUANT</b>	UNIT PRICE	TOTAL COST
		l padway Improvements		QUANT	FACTOR	FACTOR			
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$2,000	\$2,000
A-1 A-2		Test Pit for Utility Locate	Hour	8	1.00	0	8	\$2,000	\$2,000 \$6.400
A-2 A-3		Clearing and Grubbing	LS	0	1.00	0	8	\$2,000	\$6,400
A-3 A-4		Remove Pavement	SY	682	1.00	0	682	\$2,000	\$2,000
A-4 A-5		Unusable Excavation	CY	1,480	1.00	-2	1.900	\$ <del>1</del> 5	\$2,728 \$28,500
A-5 A-6		Classified Fill and Backfill (Type II)	Ton	424	1.25	-2	500	\$15 \$18	\$9,000
A-6 A-7		Classified Fill and Backfill (Type II-A)	Ton	1.269	1.25	-2	1.600	\$10 \$18	
					1.25		,		\$28,800
A-8		Leveling Course	Ton	116		-1	130	\$35	\$4,550
A-9		Geotextile (Type A)	SY	1,502	1.00	-1	1,500	\$2	\$3,000
A-10		Insulation Board (R-9)	SF	8,816		-1	8,900	\$3	\$26,700
A-11		Insulation Board (R-4.5)	SF	1,176		-1	1,190	\$2	\$2,380
A-12		P.C.C. Curb and Gutter (All Types)	LF	398	1.00	0	398	\$27	\$10,746
A-13		P.C.C. Sidewalk	SY	54	1.00	0	54	\$60	\$3,240
A-14		P.C.C. Curb Ramp (6" Thick)	EA	3	1.00	0	3	\$2,000	\$6,000
A-15		Colored Concrete	SY	39		0	39	\$160	\$6,240
A-16		A.C. Pavement (Class D)	Ton	109	1.06	-1	120	\$105	\$12,600
A-17		A.C. Pavement (Class E)	Ton	94	1.06	-1	100	\$110	\$11,000
A-18		Remove and Replace Valve Box Top Section	EA	3		0	3	\$500	\$1,500
A-19		Construction Survey Measurement	LS	1	1.00	0	1	\$3,700	\$3,700
A-20		Two-Person Survey Crew	Hour	10	1.00	0	10	\$225	\$2,250
A-21		Remove and Reset Fence	LF	225	1.10	0	248	\$40	\$9,920
A-22		Inlaid Traffic Markings (Methyl Methacrylate) (4" Yellow) (250 Mil	LF	259	1.00	0	259	\$12	\$3,108
A-23		Inlaid Traffic Markings (Methyl Methacrylate, 18" White, 250 Mil	LF	41	1.00	0	41	\$110	\$4,510
A-24 A-25	70.10	Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil Inlaid Traffic Markings (Methyl Methacrylate) (Words & Symbols) (250 Mil	LF EA	61	1.00	0	61	\$30	\$1,830
			SF	3	1.00	0	3	\$1,200	\$3,600
A-26		Standard Sign		63	1.00	0	63	\$100	\$6,300
A-27		Traffic Maintenance	LS	1	1.00	0	1	\$20,000	\$20,000
A-28		Bollard (Concrete Pipe, Yellow)	EA	2		0	2	\$1,250	\$2,500
A-29		Temporary Fencing	LF	225	1.10	0	248	\$10	\$2,480
A-30		Trees (type to be determined)	EA	5		0	5	\$500	\$2,500
A-31		Shrubs (type to be determined)	EA	10	1.00	0	10	\$75	\$750
A-32		Topsoil (4-inch Depth)	MSF	5.4	1.30	0	7	\$550	\$3,850
A-33		Seeding (Schedule A)	MSF	5.4	1.30	0	7	\$450	\$3,150
A-34		Temporary Tree Protection Fence	LF	150	1.00	0	150	\$7	\$1,050
A-35	75.13	Root Pruning	LF	30	1.00	0	30	\$25	\$750
								TOTAL	\$239,632

#### **ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 3 - INTERSECTION**

ITEM	MASS	ITEM DECODIDATION	LINUT	CALC.	CONT.	ROUND	FOT OLIANT	LINIT DDIGE	TOTAL 000T
No.	No.	ITEM DESCRIPTION	UNIT	QUANT	FACTOR	FACTOR	EST QUANT	UNIT PRICE	TOTAL COST
Schedul	e B - Dr	ainage Improvements							
B-1	20.13	Trench Dewatering	LS	1	1.00	0	1	\$3,000	\$3,000
B-2	20.13	Trench Excavation and Backfill (Various Depths)	LF	320	1.00	0	320	\$25	\$8,000
B-3	20.15	Furnish Trench Backfill (Type II)	Ton	200	1.30	0	260	\$17	\$4,420
B-4	20.16	Bedding Material (Class D)	LF	320	1.00	0	320	\$30	\$9,600
B-5	20.26	Insulation Board (R-20)	SF	128	1.00	0	128	\$5	\$640
B-6	20.27	Disposal of Unusable or Surplus Material	CY	210	1.30	0	273	\$20	\$5,460
B-7	55.02	Furnish, Install, and Televise Pipe (12-Inch, Type S, CPEP)	LF	132	1.00	0	132	\$60	\$7,920
B-8	55.02	Furnish, Install, and Televise Pipe (18-Inch, Type S, CPEP)	LF	189	1.00	0	189	\$70	\$13,230
B-9	55.05	Construct (Type I) Manhole	EA	1	1.00	0	1	\$5,500	\$5,500
B-10	55.05	Construct (Type II) Catch Basin Manhole	EA	2	1.00	0	2	\$10,000	\$20,000
B-11	55.09	Construct Catch Basin	EA	4	1.00	0	4	\$4,500	\$18,000
								TOTAL	\$95,770
		umination Improvements							
C-1		Trench and Backfill (2'W x 3.5'D)	LF	393	1.10	-1	430	\$24	\$10,492
C-2		Load Center Foundation (Type 1A)	EA	1	1.00	0	1	\$4,900	\$4,900
C-3		Driven Pile Luminaire Pole Foundations	EA	4	1.00	0	4	\$2,778	\$11,112
C-4		Cast-In-Place Light Column Foundation	EA	2	1.00	0	2	\$2,500	\$5,000
C-5		Fixed Base Luminaire Pole	EA	4	1.00	0	4	\$3,940	\$15,760
C-6		Luminaire Arm	EA	5	1.00	0	5	\$775	\$3,875
C-7		Steel Conduit (2 inch)	FT	507	1.10	-1	560	\$39	\$21,840
C-8	80.08	Junction Box (Type IA)	EA	8	1.00	0	8	\$1,263	\$10,104
C-9	80.08	Junction Box (Type II)	EA	1	1.00	0	1	\$2,990	\$2,990
C-10		3 Conductor 8 AWG Type XHHW-2 Cable	FT	429	1.10	-1	470	\$7	\$3,290
C-11		Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control	EA	1	1.00	0	1	\$8,612	\$8,612
C-12		Luminaire (5,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$850	\$850
C-13		Luminaire (6,000 Lm, Medium, Type 2)	EA	3	1.00	0	3	\$1,000	\$3,000
C-14		Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$1,000	\$1,000
C-15	80.23	Spare Luminaire (5,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$700	\$700
C-16	80.23	Spare Luminaire (6,000 Lm, Medium, Type 2)	EA	1	1.00	0	1	\$850	\$850
C-17	80.23	Spare Luminaire (6,000 Lm, Medium, Type 3)	EA	1	1.00	0	1	\$850	\$850
C-18		Pedestrian Light Column	EA	2	1.00	0	2	\$3,900	\$7,800
C-19		Spare Pedestrian Light Column	EA	1	1.00	0	1	\$2,900	\$2,900
C-20	80.28	Remove Luminaire Pole	EA	1	1.00	0	1	\$800	\$800
								TOTAL	\$116,725

#### SUMMARY

Total Estimated Construction Cost: \$452,000

# Summary Intersection - Alternative 3

Utility Relocation Summary Lois/32nd Intersection Upgrades: Alternative 3									
Electric (CEA) \$53,040									
Telecommunications (ACS) \$48,360									
Cable Television (GCI)	\$26,000								
Natural Gas (Enstar)	\$50,180								
Subtotal:	\$177,580								
Construction Contingency (10%) \$17,758									
Total Utility Relocation Cost:	\$195,338								

#### CEA Intersection - Alternative 3

ld No.	APPROX. STATION	OFFCET	LITH ITV CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	ANAGUNIT	LINUT	LINIT PRICE	T202	COMMENTS
iu ivo.	STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
CEA-1	31+35 - 32+07	LT	OH 3-phase electric line	within proposed improvements	underground	100	LF	\$90	\$9,000	service to school
CEA-2	31+35 - 33+18	RT	OH 3-phase electric line	within proposed improvements	underground	200	LF	\$90	\$18,000	
CEA-3	33+18	RT	Distribution Pole	within proposed improvements	Remove	1	EA	\$2,500	\$2,500	undergrounding costs are separate
CEA-4	33+18 - 33+19	RT	OH 3 Phase - distribution	within proposed improvemnts	underground	50	LF	\$95	\$4,750	
CEA-5	33+18	RT	Service to Parcel 115	within proposed improvements	underground	1	EA	\$2,500	\$2,500	
CEA-6	32+55 - 33+00	RT	OH 3-phase electric line	within proposed improvements	underground	45	LF	\$90	\$4,050	

Construction Costs: \$40,800

Engineering/Administration (30%): \$12,240

Total: \$53,040

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
ACS-1	32+06 - 32+10	LT	underground T line	within proposed improvements	adjust	165	LF	\$80	\$13,200	
ACS-2	32+10 - 32+12	LT	underground T line	within proposed improvements	adjust	155	LF	\$80	\$12,400	
ACS-3	32+27 - 32+95	LT	underground T line	within proposed improvements	adjust	70	LF	\$80	\$5,600	
ACS-4	32+33 - 33+05	LT	underground T line	within proposed improvements	adjust	75	LF	\$80	\$6,000	

\$37,200 Construction Costs:

Engineering/Administration (30%): \$11,160

\$48,360 Total:

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	31+35 - 31+95	RT	overhead C line	within proposed improvements	underground	55	LF	\$80	\$4,400	
GCI-2	32+55 - 33+00	RT	overhead C Line	within proposed improvements	underground	45	LF	\$80	\$3,600	
GCI-3	31+35 - 31+95	RT	overhead F line	within proposed improvements	underground	55	LF	\$120	\$6,600	
GCI-4	32+55 - 33+00	RT	overhead F line	within proposed improvements	underground	45	LF	\$120	\$5,400	

Construction Costs: \$20,000

Engineering/Administration (30%)

Total: \$26,000

\$6,000

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	соѕт	COMMENTS
Enstar-1	30+48 - 31+40	LT	1-1/4-Inch Steel	within proposed improvemnts	adjust	100	LF	\$108	\$10,800	
Enstar-2	31+40	Crossing	2-Inch Steel	within proposed improvemnts	adjust	55	LF	\$125	\$6,875	
Enstar-3	31+43 - 33+00	LT	3-Inch Steel	within proposed improvemnts	adjust	155	LF	\$135	\$20,925	

Construction Costs: \$38,600

Engineering/Administration (30%) \$11,580

\$50,180

#### ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 3 - INTERSECTION

Lois & 32nd Ave Upgrade - Alternative 3 - Intersection										
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's					
112		Х			1					
113		Х			1					
114		Х		X	1					
123		Χ			0					
TOTAL	0	4	0	1	3					

Date: 1/14/2021 1 of 1

1/14/2021	Basis:		Prepared By:	CRW	Ver. 5.1
Project: Lois Drive & 3	32nd Avenue Pathway			Alternative 4 - Lois	
Project Number:	19-08		[B]=local bond; [S]	=state grant; [F]= federal grant	
Proven	la	<b>#10.22</b> 0			
DESIGN	Design Management	\$10,320			
Start 20??	PM&E Design Services	\$0			
	PM&E Design Survey	\$0			
	PM&E Design Soil	\$0			
	Contractual Dsgn Sers (Basic)	\$70,500			
	Contractual Dsgn Sers (Add'l)	\$9,750			
	Contractual Design Survey	\$13,500			
	Contractual Design Soils	\$6,250			
	Miscellaneous	\$0			
Subtotal	-		\$110,320		
UTILITIES	AWWU	\$0			
Start 20??		\$0			
2	ACS	\$0			
	GCI	\$0			
	Enstar	\$0			
Subtotal	Liistai	ΨΟ	_		
Subiolal			\$0		
ROW	Real Estate Services	\$6,100			
	Land Acquisition	\$4,000			
	Land Acquisition	\$4,000			
Subtotal			\$10,100		
CONSTRUCTION	Construction Management	\$13,760			
Start 20??	_	\$34,400			
Start 20	Materials Testing	\$6,020			
	Survey	\$6,880			
	· ·				
	Miscellaneous	\$0			
	Construction Contract	\$344,000			
Subtotal			\$405,060		
MICCELLANDOUG	Dand Overhood (15 00/)	¢101 000			
MISCELLANEOUS	Bond Overhead (15.0%)	\$101,908			
	Grant Overhead (0.0%)	\$0			
	Contingency (15%)	\$52,000			
Subtotal			\$153,908	=	

\$679,388

PROJECT TOTAL

#### **ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 4 - LOIS DRIVE**

ITEM	MASS	ITEM DESCRIPTION	UNIT	CALC.	CONT.	ROUND	EST OLIANT	UNIT PRICE	TOTAL COST
No.	No.		OINIT	QUANT	FACTOR	FACTOR	EST QUAINT	UNIT PRICE	TOTAL COST
Schedule A - Roadway Improvements									
A-1		Storm Water Pollution Prevention Plan (Type 3)	LS	1	1.00	0	1	\$1,000	\$1,000
A-2	20.03	Test Pit for Utility Locate	Hour	8	1.00	0	8	\$800	\$6,400
A-3		Clearing and Grubbing	LS	1	1.00	0	1	\$1,000	\$1,000
A-4		Remove Pavement	SY	412	1.00	0	412	\$4	\$1,648
A-5	20.10	Unusable Excavation	CY	1,184	1.25	-2	1,500	\$15	\$22,500
A-6		Classified Fill and Backfill (Type II-A)	Ton	2,095	1.25	-2	2,600	\$18	\$46,800
A-7	20.22	Leveling Course	Ton	119	1.08	-1	130	\$35	\$4,550
A-8		Geotextile (Type A)	SY	1,483	1.00	-1	1,480	\$2	\$2,960
A-9	20.28	Reconstruct Driveway	EA	2	1.00	0	2	\$3,250	\$6,500
A-10		P.C.C. Curb Ramp (6" Thick)	EA	1	1.00	0	1	\$2,000	\$2,000
A-11	40.06	A.C. Pavement (Class D)	Ton	123	1.06	-1	130	\$105	\$13,650
A-12		Remove and Replace Manhole Cover and Frame	EA	1	1.00	0	1	\$700	\$700
A-13		Construction Survey Measurement	LS	1	1.00	0	1	\$2,000	\$2,000
A-14	65.02	Two-Person Survey Crew	Hour	10	1.00	0	10	\$225	\$2,250
A-15		Remove and Reset Fence	LF	90	1.10	0	99	\$40	\$3,960
A-16	70.11	Standard Sign	SF	63	1.00	0	63	\$100	\$6,300
A-17	70.12	Traffic Maintenance	LS	1	1.00	0	1	\$10,000	\$10,000
A-18	70.23	Temporary Fencing	LF	90	1.10	0	99	\$10	\$990
A-19	75.03	Topsoil (4-inch Depth)	MSF	5.0	1.30	0	7	\$550	\$3,850
A-20	75.04	Seeding (Schedule A)	MSF	5.0	1.30	0	7	\$450	\$3,150
A-21	75.12	Temporary Tree Protection Fence	LF	100	1.00	0	100	\$7	\$700
A-22	75.13	Root Pruning	LF	50	1.00	0	50	\$25	\$1,250
								TOTAL	\$144,158
Schedul	e B - IIIu	mination Improvements							
B-1	80.02	Trench and Backfill (2'W x 3.5'D)	LF	913	1.10	-1	1,000	\$24	\$24,400
B-2	80.04	Load Center Foundation (Type 1A)	EA	1	1.00	0	1	\$4,900	\$4,900
B-3	80.04	Cast-In-Place Light Column Foundation	EA	14	1.00	0	14	\$2,500	\$35,000
B-4	80.07	Steel Conduit (2 inch)	FT	913	1.10	-1	1,000	\$39	\$39,000
B-5	80.08	Junction Box (Type IA)	EA	14	1.00	0	14	\$1,263	\$17,682
B-6	80.08	Junction Box (Type II)	EA	1	1.00	0	1	\$2,990	\$2,990
B-7	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	913	1.10	-1	1,000	\$7	\$7,000
B-8	80.14	Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control	EA	1	1.00	0	1	\$8,612	\$8,612
B-9	80.29	Pedestrian Light Column (35W)	EA	14	1.00	0	14	\$3,900	\$54,600
B-10	80.29	Spare Pedestrian Light Column (35W)	EA	2	1.00	0	2	\$2,900	\$5,800
		· · · · · · · · · · · · · · · · · · ·					*	TOTAL	\$199,984

#### SUMMARY

Schedule A - Roadway Improvements \$144,158 Schedule B - Illumination Improvements \$199,984 Subtotal \$344,142

Total Estimated Construction Cost: \$344,000

#### ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 4 - LOIS DRIVE

Lois & 32nd Ave Upgrade - Alternative 4 - Lois Drive									
PARCEL Purchase Entire PUE SE TCE # Of TCP's									
123	123 X 0								
124					2				
125	125 X 1								
TOTAL	0	0	2	0	3				

Date: 1/14/2021 1 of 1

1/14/2021	Basis:		Prepared By:	CRW	Ver. 5.1
Project: Lois Drive & 32nd Avenue Pathway Project Number: 19-08				Alternative 4 - 32nd Avenue	
Project Number:	19-08		[B]=local bond; [S	]=state grant; [F]= federal grant	
DEGLON	D : W	¢10.020			
DESIGN	Design Management	\$10,020			
Start 2	20?? PM&E Design Services	\$0			
	PM&E Design Survey	\$0			
	PM&E Design Soil	\$0			
	Contractual Dsgn Sers (Basic)	\$70,500			
	Contractual Dsgn Sers (Add'l)	\$9,750			
	Contractual Design Survey	\$13,500			
	Contractual Design Soils	\$6,250			
	Miscellaneous	\$0	-		
Subtotal			\$110,020	)	
	•				
UTILITIES	AWWU	\$0			
Start 2	0?? CEA	\$0			
	ACS	\$0			
	GCI	\$7,000			
	Enstar	\$0	_		
Subtotal	-		\$7,000	)	
ROW	Real Estate Services	\$27,680			
Start 2	0?? Land Acquisition	\$498,000			
Subtotal	•		\$525,680	)	
CONSTRUCTION	Construction Management	\$15,030			
Start 2	0?? Inspection	\$40,080			
	Materials Testing	\$7,515			
	Survey	\$7,515			
	Miscellaneous	\$0			
	Construction Contract	\$501,000			
Subtotal	•	,	<b>-</b> \$571,140	)	
Suotour			φ3/1,11	,	
MISCELLANEOUS	S Bond Overhead (15.0%)	\$227,442			
1,118,022,211,200,	Grant Overhead (0.0%)	\$0			
	Contingency (15%)	\$75,000			
Subtotal	Tomangency (1070)	Ψ, υ, υ	<b>\$</b> 302,442	)	
Subtom			Ψ302,442	<u>-</u>	
PROJECT TOTAL			\$1,516,282	)	
I NOJECI TOTAL			\$1,310,282	<u>=</u>	

#### ENGINEER'S ESTIMATE - FINAL DSR - ALTERNATIVE 4 - 32ND AVENUE

No.   No.   No.   No.   TIEM DESCRIPTION   UNIT   QUANT   FACTOR   FACTOR   EST QUANT   NOT PRICE   TOTAL COST	ITEM	MASS			CALC.	CONT.	ROUND	1		
A-1   2002   Storm Water Pollution Prevention Plan (Type 3)   LS   1   1.00   0   1   \$2,000   \$2,00     A-2   20.03   Test Pit for Utility Locate   Hour   B   1.00   0   8   \$800   \$5,4.4     A-3   20.04   Cleaning and Grubbing   LS   1   1.00   0   0   641   \$2,000   \$2,00     A-4   20.09   Remove Pavement   SY   641   1.00   0   641   \$4   \$2,000   \$2,00     A-4   20.09   Remove Pavement   SY   641   1.00   0   641   \$4   \$2,000   \$2,00     A-5   20.10   Unisastie Excavation   CY   1,506   1.25   -2   3,200   \$15   \$28,55     A-6   20.21   Classified Fill and Backfill (Type II-A)   Ton   2,544   1.25   -2   3,200   \$15   \$28,55     A-7   20.22   Leveling Course   Ton   194   1.08   -1   210   \$35   \$73,36     A-8   20.25   Geotextiel (Type A)   SY   2,296   1.00   -1   2,300   \$2   \$44,60     A-8   20.25   Geotextiel (Type A)   SY   2,296   1.00   -1   2,300   \$3   \$3,250   \$93,76     A-9   20.28   Reconstruct Driveway   EA   3   1.00   0   48   \$27   \$13,11     A-11   30.04   P.C.C. Curb and Gutter (All Types)   LF   488   1.00   0   68   \$2,000   \$12,001     A-11   30.04   P.C.C. Curb and Gutter (Class E)   Ton   58   1.06   -1   210   \$105   \$22,00     A-13   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   210   \$105   \$22,00     A-14   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   40   40   40     A-16   56.02   Two-Person Survey (New   EA   1   1.00   0   1   \$4,000   \$4,00     A-16   56.02   Two-Person Survey (New   EA   1   1.00   0   1   \$4,000   \$4,00     A-18   70.05   Algust Key Box   EA   1   1.00   0   1   \$4,000   \$4,00     A-19   70.11   Standard Sign   LF   308   1.10   0   339   \$40   \$13,50     A-19   70.11   Standard Sign   LF   50   1.00   0   50   \$25   \$2,22     A-17   70.08   Remove and Reset Fence   LF   50   1.00   0   1   \$4,000   \$4,00     A-19   70.11   Standard Sign   LF   50   1.00   0   50   \$25   \$3,20     A-19   70.11   Standard Sign   LF   50   1.00   0   50   \$25   \$3,20     A-19   70.11   Standard Sign   LF   50   1.00   0   50   \$25   \$3,20     A-19			ITEM DESCRIPTION	UNIT				EST QUANT	UNIT PRICE	TOTAL COST
A-1   20.02   Storm Water Pollution Prevention Plan (Type 3)   LS   1   1.00   0   1   \$2.000   \$2.04			adway Improvements		QUAINT	TACTOR	TACTOR		ļ	
A-2   20.03   Test Pit for Utility Locate	$\overline{}$					1.00	0	1	\$2,000	\$2,000
A-3   20.04   Clearing and Grubbing   LS   1   1.00   0   1   \$2.000   \$2.00										\$6,400
A-4   20.09   Remove Pavement										\$2,000
A-5   20.10   Unusable Excavation							-	641		\$2,564
A-6										\$28,500
A-7   20.22   Leveling Course   Ton   194   1.08   -1   210   \$35   \$77.34     A-8   20.25   Geotextile (Type A)   SY   2.296   1.00   -1   2.300   \$2   \$3.46     A-9   20.28   Reconstruct Driveway   EA   3   1.00   0   3   \$3.250   \$3.77     A-10   30.02   P.C.C. Curb and Gutter (All Types)   LF   488   1.00   0   488   \$27   \$13.17     A-11   30.04   P.C.C. Curb Ramp (6" Thick)   EA   6   1.00   0   6   \$2.000     A-12   40.06   A.C. Pavement (Class D)   Ton   200   1.06   -1   210   \$105   \$22.00     A-12   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   210   \$105   \$22.00     A-13   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   60   \$105   \$3.30     A-14   60.05   Adjust Key Box   EA   1   1.00   0   1   \$4.500   \$44     A-15   65.02   Two-Person Survey Orew   Hour   10   1.00   0   1   \$4.000   \$4.00     A-16   65.02   Two-Person Survey Orew   Hour   10   1.00   0   10   \$22.5   \$2.24     A-17   70.08   Remove and Reset Fence   LF   308   1.10   0   339   \$40   \$13.5     A-18   70.10   Iniald Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)   LF   68   1.00   0   27   \$100   \$2.70     A-20   70.11   Standard Sign   LF   308   1.10   0   339   \$40   \$13.5     A-22   75.03   Topsoli (4-inch Depth)   MSF   5.0   1.30   0   7   \$550   \$3.38     A-23   75.04   Seeding (Schedula A)   MSF   5.0   1.30   0   7   \$450   \$3.16     B-2   80.04   Load Center Foundation (Type 1A)   EA   1   1.00   0   1   \$4.900   \$4.90     B-3   80.04   Cast-In-Place Light Column Foundation   EA   1   1.00   0   1   \$4.900   \$4.90     B-4   80.07   Steel Conduit (2 inch)   FT   1.328   1.10   1   1.400   \$39   \$66.90     B-6   80.08   Junction Box (Type II)   EA   1   1.00   0   1   \$4.900   \$4.90     B-8   80.04   Load Center Foundation (Type 1A)   EA   1   1.00   0   1   \$4.900   \$4.90     B-9   80.29   Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$4.900   \$4.90     B-10   80.29   Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$4.900   \$4.90     B-11   80.29   Spare Pedestrian Li										\$57,600
A-8	-									\$7,350
A-9										\$4,600
A-10   30.02   P.C.C. Curb and Gutter (All Types)										\$9,750
A-11   30.04   R.C.C. Curb Ramp (6" Thick)   EA   6   1.00   0   6   \$2,000   \$12,00										\$13,176
A-12   40.06   A.C. Pavement (Class D)   Ton   200   1.06   -1   210   \$105   \$22.05     A-13   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   60   \$105   \$6.33     A-14   60.05   Adjust Key Box   EA   1   1.00   0   1   \$4.000   \$4.44     A-15   65.02   Construction Survey Measurement   LS   1   1.00   0   1   \$4.000   \$4.00     A-16   65.02   Two-Person Survey Crew   Hour   10   1.00   0   10   \$225   \$2.25     A-17   70.08   Remove and Reset Fence   LF   308   1.10   0   339   \$40   \$13.55     A-18   70.10   Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)   LF   68   1.00   0   68   \$30   \$2.00     A-19   70.11   Standard Sign   SF   27   1.00   0   27   \$100   \$2.77     A-20   70.12   Traffic Maintenance   LS   1   1.00   0   1   \$20,000   \$20.00     A-21   70.23   Temporary Fencing   LF   308   1.10   0   339   \$10   \$3.35     A-23   75.04   Seeding (Schedule A)   MSF   5.0   1.30   0   7   \$450   \$3.15     A-24   75.12   Temporary Tree Protection Fence   LF   100   1.00   0   100   \$7   \$7   \$700     A-25   75.13   Root Pruning   LF   50   1.00   0   50   \$25   \$1.25     Schedule B - Illumination Improvements   LF   1,422   1.10   -1   1,560   \$24   \$38.00     B-3   80.04   Cast-In-Place Light Column Foundation   EA   1   1.00   0   1   \$4.900   \$4.90     B-6   80.08   Junction Box (Type IA)   EA   1   1.00   0   1   \$2.290   \$2.90     B-7   80.10   Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control   EA   1   1.00   0   1   \$8.612   \$8.65     B-10   80.29   Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.20     B-11   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.20     B-12   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.20   \$5.		30.04	P.C.C. Curb Ramp (6" Thick)							\$12,000
A-13   40.06   A.C. Pavement (Class E)   Ton   58   1.06   -1   60   \$105   \$6,30					-					\$22,050
A-14   60.05   Adjust Key Box   EA										\$6,300
A-15   65.02   Construction Survey Measurement   LS										\$450
A-16   65.02   Two-Person Survey Crew   Hour   10   1.00   0   10   \$225   \$2.25     A-17   70.08   Remove and Reset Fence   LF   308   1.10   0   339   \$40   \$13.56     A-18   70.10   Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)   LF   68   1.00   0   68   \$30   \$2.00     A-19   70.11   Standard Sign   SF   27   1.00   0   27   \$100   \$2.70     A-20   70.12   Traffic Maintenance   LS   1   1.00   0   1   \$20,000   \$2.00     A-21   70.23   Temporary Fencing   LF   308   1.10   0   339   \$10   \$2.30     A-22   75.03   Topsoil (4-inch Depth)   MSF   5.0   1.30   0   7   \$550   \$3.38     A-23   75.04   Seeding (Schedule A)   MSF   5.0   1.30   0   7   \$450   \$3.31     A-24   75.12   Temporary Tree Protection Fence   LF   100   1.00   0   100   \$7   \$70     A-25   75.13   Root Pruning   LF   50   1.00   0   50   \$25   \$1.25     Schedule B - Illumination Improvements     B-1   80.02   Trench and Backfill (2W x 3.5TD)   LF   1.422   1.10   -1   1.560   \$24   \$38.06     B-2   80.04   Load Center Foundation (Type 1A)   EA   1   1.00   0   18   \$2.500   \$45.00     B-3   80.04   Cast-In-Place Light Column Foundation   EA   18   1.00   0   19   \$1.263   \$2.90     B-6   80.08   Junction Box (Type II)   EA   1   1.00   0   1   \$2.290   \$2.99     B-7   80.10   3   Conductor 8 AWG Type XHHW-2 Cable   FT   1.328   1.10   -1   1.460   \$7   \$10.2     B-9   80.29   Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80     B-10   80.29   Spare Pedestrian Light Column (55W)   EA   1   1.00   0   1   \$8.2900   \$5.80										\$4,000
A-18   70.10   Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)   LF   68   1.00   0   68   \$30   \$2,04								10		\$2,250
A-19	A-17			LF	308	1.10	0	339	\$40	\$13,560
A-20   70.12   Traffic Maintenance	A-18	70.10	Inlaid Traffic Markings (Methyl Methacrylate) (24" White) (90 Mil)		68	1.00	0	68	\$30	\$2,040
A-21   70.23   Temporary Fencing	A-19			SF	27	1.00	0	27	\$100	\$2,700
A-22   75.03   Topsoil (4-inch Depth)   MSF   5.0   1.30   0   7   \$5550   \$3,85	A-20	70.12	Traffic Maintenance		1	1.00	0	1	\$20,000	\$20,000
A-23   75.04   Seeding (Schedule A)	A-21	70.23			308	1.10	0	339	\$10	\$3,390
A-24   75.12   Temporary Tree Protection Fence   LF   100   1.00   0   100   \$7   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70   \$70	A-22					1.30	0	7		\$3,850
A-25   75.13   Root Pruning	A-23	75.04	Seeding (Schedule A)	MSF	5.0	1.30	0	7	\$450	\$3,150
Schedule B - Illumination Improvements   E1   80.02   Trench and Backfill (2'W x 3.5'D)   LF   1,422   1.10   -1   1,560   \$24   \$38,06		75.12	Temporary Tree Protection Fence		100	1.00	0	100	\$7	\$700
Schedule B - Illumination Improvements   B-1   80.02   Trench and Backfill (2'W x 3.5'D)   LF   1,422   1.10   -1   1,560   \$24   \$38,06	A-25	75.13	Root Pruning	LF	50	1.00	0	50	\$25	\$1,250
B-1         80.02         Trench and Backfill (2'W x 3.5'D)         LF         1,422         1.10         -1         1,560         \$24         \$38,06           B-2         80.04         Load Center Foundation (Type 1A)         EA         1         1.00         0         1         \$4,900         \$4,900           B-3         80.04         Cast-In-Place Light Column Foundation         EA         18         1.00         0         18         \$2,500         \$45,00           B-4         80.07         Steel Conduit (2 inch)         FT         1,328         1.10         -1         1,460         \$39         \$56,94           B-5         80.08         Junction Box (Type IA)         EA         19         1.00         0         19         \$1,263         \$23,95           B-6         80.08         Junction Box (Type II)         EA         1         1.00         0         1         \$2,990         \$2,99           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         <									TOTAL	\$231,630
B-2         80.04         Load Center Foundation (Type 1A)         EA         1         1.00         0         1         \$4,900         \$4,900           B-3         80.04         Cast-In-Place Light Column Foundation         EA         18         1.00         0         18         \$2,500         \$45,00           B-4         80.07         Steel Conduit (2 inch)         FT         1,328         1.10         -1         1,460         \$33         \$56,90           B-5         80.08         Junction Box (Type IA)         EA         19         1.00         0         19         \$1,263         \$23,93           B-6         80.08         Junction Box (Type IA)         EA         1         1.00         0         1         \$2,990         \$2,990           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15 <td>Schedul</td> <td>le B - IIIu</td> <td>mination Improvements</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Schedul	le B - IIIu	mination Improvements							
B-3         80.04         Cast-In-Place Light Column Foundation         EA         18         1.00         0         18         \$2,500         \$45,00           B-4         80.07         Steel Conduit (2 inch)         FT         1,328         1.10         -1         1,460         \$39         \$56,94           B-5         80.08         Junction Box (Type IA)         EA         19         1.00         0         19         \$1,263         \$23,95           B-6         80.08         Junction Box (Type II)         EA         1         1.00         0         1         \$2,990         \$2,95           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$58,50           B-10         80.29         Pedestrian Light Column (55W)         EA         2         1.00         0         2	B-1	80.02	Trench and Backfill (2'W x 3.5'D)	LF	1,422	1.10	-1	1,560	\$24	\$38,064
B-4         80.07         Steel Conduit (2 inch)         FT         1,328         1.10         -1         1,460         \$39         \$56,94           B-5         80.08         Junction Box (Type IA)         EA         19         1.00         0         19         \$1,263         \$23,95           B-6         80.08         Junction Box (Type II)         EA         1         1.00         0         1         \$2,990         \$2,95           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$51,70           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$51,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2	B-2	80.04	Load Center Foundation (Type 1A)	EA	1	1.00	0	1	\$4,900	\$4,900
B-5         80.08         Junction Box (Type IA)         EA         19         1.00         0         19         \$1,263         \$23,99           B-6         80.08         Junction Box (Type II)         EA         1         1.00         0         1         \$2,990         \$2,990           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$58,50           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$11,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1 </td <td></td> <td>80.04</td> <td>Cast-In-Place Light Column Foundation</td> <td>EA</td> <td></td> <td>1.00</td> <td>0</td> <td>18</td> <td></td> <td>\$45,000</td>		80.04	Cast-In-Place Light Column Foundation	EA		1.00	0	18		\$45,000
B-6         80.08         Junction Box (Type II)         EA         1         1.00         0         1         \$2,990         \$2,990           B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$55,50           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$11,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$5,80	B-4	80.07	Steel Conduit (2 inch)	FT	1,328	1.10	-1	1,460	\$39	\$56,940
B-7         80.10         3 Conductor 8 AWG Type XHHW-2 Cable         FT         1,328         1.10         -1         1,460         \$7         \$10,22           B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,61           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$58,50           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$11,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$2,900	B-5	80.08	Junction Box (Type IA)	EA	19	1.00	0	19	\$1,263	\$23,997
B-8         80.14         Single-Meter Pad-Mount Load Center, Type 1A with Lighting Control         EA         1         1.00         0         1         \$8,612         \$8,612           B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$58,50           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$15,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,90           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$2,90	B-6			EA		1.00	0	1		\$2,990
B-9         80.29         Pedestrian Light Column (35W)         EA         15         1.00         0         15         \$3,900         \$58,50           B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$11,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$2,900	B-7	80.10	3 Conductor 8 AWG Type XHHW-2 Cable	FT	1,328	1.10	-1	1,460	\$7	\$10,220
B-10         80.29         Pedestrian Light Column (55W)         EA         3         1.00         0         3         \$3,900         \$11,70           B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$2,900										\$8,612
B-11         80.29         Spare Pedestrian Light Column (35W)         EA         2         1.00         0         2         \$2,900         \$5,80           B-12         80.29         Spare Pedestrian Light Column (55W)         EA         1         1.00         0         1         \$2,900         \$2,900	B-9				15	1.00	0	15		\$58,500
B-12 80.29 Spare Pedestrian Light Column (55W) EA 1 1.00 0 1 \$2,900 \$2,90	B-10	80.29	Pedestrian Light Column (55W)	EA	3	1.00	0	3	\$3,900	\$11,700
						1.00	0	2		\$5,800
TOTAL \$269.62	B-12	80.29	Spare Pedestrian Light Column (55W)	EA	1	1.00	0	1		\$2,900
101112					<u> </u>				TOTAL	\$269,623

#### SUMMARY

Schedule A - Roadway Improvements \$231,630 Schedule B - Illumination Improvements \$269,623 Subtotal \$501,253

Total Estimated Construction Cost: \$501,000

### Summary Alternative 4

Utility Relocation Summary 32nd Avenue Upgrade: Alternative 4							
Electric (CEA) \$0							
Telecommunications (ACS)	\$0						
Cable Television (GCI)	\$6,500						
Natural Gas (Enstar)	\$0						
Subtotal:	\$6,500						
Construction Contingency (10%) \$650							
Total Utility Relocation Cost: \$7,150							

#### GCI Alternative 4

ld No.	APPROX. STATION	OFFSET	UTILITY CONFLICT	DESCRIPTION OF CONFLICT	RECOMMENDED ACTION	AMOUNT	UNIT	UNIT PRICE	COST	COMMENTS
GCI-1	23+60 - 25+50	LT	underground FO line	within proposed improvements	protect in place	180	LF	\$0	\$0	
GCI-2	25+50	CL	FO manhole	within proposed improvements	adjust as needed	1	EA	\$5,000	\$5,000	
GCI-3	27+60	LT	overhead FO line	within proposed improvements	protect in place	10	LF	\$0	\$0	
GCI-4	27+60 - 31+00	LT	overhead C line	within proposed improvements	protect in place	10	LF	\$0	\$0	
GCI-5	30+90	CL	overhead C line	within proposed improvements	protect in place	6	LF	\$0	\$0	
Construction Costs:								\$5,000		

Engineering/Administration (30%) \$1,500

Total: \$6,500

#### ROW REQUIREMENTS ESTIMATE - FINAL DSR - ALTERNATIVE 4 - 32ND AVENUE

Lois & 32nd Ave Upgrade - Alternative 4 - 32nd Avenue								
PARCEL	Purchase Entire Property	PUE	SE	TCE	# Of TCP's			
118		Х	Х	X	0			
119		Х	Х	Х	1			
120		Х	Х		1			
121	X				0			
122					2			
123			X		2			
TOTAL	1	3	4	2	6			

Date: 1/14/2021 1 of 1