#### **SENT VIA EMAIL**



# AMENDMENT No. Three (3) to Contract No. 30006826

## NE 42<sup>nd</sup> Avenue over Lombard Street Bridge Design

This Amendment No. Three (3) amends Contract No. 30006826 dated 1<sup>st</sup> day of April, 2019, by and between David Evans & Associates, Inc. (Consultant) a corporation of the State of Oregon, and the City of Portland, a municipal corporation of the State of Oregon ("City") by and through their duly authorized representatives. This Amendment may refer to Consultant and City individually as a "Party" or collectively as the "Parties."

The Effective Date of this Amendment is June 15, 2022. The purpose of this Amendment is to add scope of work and additional funds to the contract per Exhibits A and B, attached hereto.

The Contract was previously amended as follows:

Amendment 1, dated 9/18/2019, which added a subconsultant labor classification.

Amendment 2, dated 11/24/2020, which increased the prior not-to-exceed amount of the Contract from \$2,009,884.47 by \$50,137.56 to a new total not-to-exceed amount of \$2,060,022.03, and which amended the Scope of Work.

The Parties agree to Amend the Contract as follows:

- 1. The Contract not-to-exceed amount of \$2,060,022.03 is increased by \$2,368,989.94 to a new total not-to-exceed amount of \$4,429,011.97 per Exhibit A. The Scope of Work for this project is hereby amended per Exhibit B.
- 2. The Term is extended from 12/31/2021 to 5/30/2024, unless terminated sooner under the provisions of the Contract.

All other terms and conditions of the Contract remain unchanged by this Amendment and in full force and effect.

This Amendment may be signed in two (2) or more counterparts, each of which shall be deemed an original, and which, when taken together, shall constitute one and the same instrument. The Parties agree that they may execute this Amendment by electronic means, including the use of electronic signatures.

IN WITNESS WHEREOF, the Parties hereby cause this Amendment to be executed.

Contract Number: 30006826 Amendment Number: 3

Contract Title: 42<sup>nd</sup> Avenue over Lombard Street Bridge Design

David Evans & Associates, Inc. (Consultant)

Authorized Signature

Date

Printed Name and Title

Address: 530 Center Street NE, Suite 605

Salem, Oregon 97301

Phone: 503-408-1309

Prepared by Cary Watters and Kapua Foster

Sent to Doug Johnson via email at <a href="mailto:DMJ@DEAInc.com">DMJ@DEAInc.com</a>

Contract Number: 30006826 Amendment Number: 3

Contract Title: 42<sup>nd</sup> Avenue over Lombard Street Bridge Design

## **CITY OF PORTLAND SIGNATURES**

By:		Date:	
•	Chief Procurement Officer		
Ву:		Date:	
	Elected Official		
Appr	oved:		
Ву:		Date:	
	Office of City Auditor		
Appr	oved as to Form:		
Ву:		Date:	
	Office of City Attorney		

#### Exhibit A

## **EXHIBIT A**

# **Summary Breakdown of Costs**

0

Amendment No. 3

PROJECT NAME: NE 42nd Ave Bridge Replacement

Total Non-Contingency Hours	16310
Total Non-Contingency Labor Costs	\$ 2,185,564.34
Total Non-Contingency Direct Expenses	\$ 24,600.00
Total Non-Contingency Costs	\$ 2,210,164.34
Total Non-Contingency Profit	\$ 158,825.60
Total Non-Contingency Cost + Profit	\$ 2,368,989.94

Total Contingency Hours	0
Total Contingency Labor Costs	\$ -
Total Contingency Direct Expenses	\$ -
Total Contingency Costs	\$ -
Total Contingency Profit	\$ -
Total Contingency Cost + Profit	\$ -

Total Non-Contingency + Contingency

\$

2,368,989.94

Breakdown of Costs - Dated: 07/29/2022		MULTI	PLIERS	
	% of budget in Current Year (C)	20.00%	Accepted Overhead	177.45°
Amendment No. 3	% of budget in CY+1	50.00%	FCCM	0.17
PROJECT NAME: NE 42nd Ave Bridge Replacement	% of budget in CY+2	30.00%	Negotiated Profit	10.50°
	% of budget in CY+3	0.00%	Annual Escalation Rate	3.50°
	Weighted Escalation Factor	1.039		

		David	d Eva	ns an	nd Ass	socia	tes, Ir	ıc.																							
																		DATA E	ENTRY S	ECTION											
	Job Classifications (Individuals' names are optional)	Project Manager III	Project Manager IV	Transportation Traffic/ Engineer II	Transportation/ Traffic Engineer IV	Bridge/ Sructural Engineer III	Bridge/ Structural Engineer I	Bridge/ Structural Engineer III	Designer IV	CADD Technician II	Transportation/ Traffic Engineer III	Transportation/ Traffic Engineer II	Designer II	Fransportation/Tra	SADD Technician II	Designer III	Project Manager IV	Hydraulic Engineer II	Designer II	Survey Technician	Project Surveyor IV	Survey Technician I	Survey Technician III	Project Assistant IV	Construction Service Manager II	QA/QC Specialist I	Construction Inspector IV	QA/QC Specialist	Party Chief IV	Field Survey Tech IV	Project Surveyor III
		SCR	DMU	STL	TCST .	AMST	TBL	GAP	ΣXC	DJAL (	TXKU .	SEHE	L D	3ACA 1	SJXM C	CMW	JRM C	ASR H	DKW R	DEM	scw	MXB	JJG	ETNA	EABO (	HLB	AVCC	Kelly A.	DWB	MXB	DAFE F
	Direct Salary Rate (Avg, Actual, Max) Current Year				\$84.57	\$70.71	\$42.27			\$43.10	\$65.42	\$54.56	\$40.32	\$43.20	\$43.10		\$74.00	\$58.50	\$40.32	\$38.19	\$60.56	\$30.55	\$38.19	\$43.65	\$50.70	\$28.34	\$43.76	\$43.00	\$39.00	\$33.70	\$48.00
Task#	Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) Fully Burdened Billing Rate					\$73.46 \$225.34	\$43.91 \$134.70				\$67.96 \$208.48	\$56.68 \$173.87	\$41.89 \$128.49	\$44.88 \$137.67	\$44.78 \$137.35	\$47.04 \$144.30	\$76.88 \$235.82	\$60.77 \$186.42	\$41.89 \$128.49	\$39.67 \$121.70	\$62.91 \$192.99	\$31.74 \$97.36	\$39.67 \$121.70	\$45.35 \$139.10	\$52.67 \$161.57	\$29.44 \$90.31			\$40.52 \$124.28		\$49.87 \$152.96
NON-CO	NTINGENCY TASKS/DELIVERABLES																														
1	PROJECT MANAGEMENT AND ADMINISTRATION	0	77	63	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	0	0	0	0
1.1	Project Coordination		63	63																											
1.2	Project Schedule and Work Plan		4																												
1.3	Monthly Invoices and Progress Reports		10																					32							
2	MEETINGS	0	7	12	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.5	Utility Coordination Meetings - 7 additional meetings		7	12						•		•				12						•						0			
4	ADVANCED CONCEPT ENGINEERING SURVEYING AND MAPPING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40	58	0 54	44	0	0	0	0	0	0	0	0
<b>4</b>	Survey Data Research	U	U	2	U	U	U	U	U	0	U	3	3	U	U	U	U	U	U	48	<b>58</b>	54	<b>11</b>	U	U	U	U	U	U	U	U
4.2	Additional ROW parcel			2								3	3								6	6	<u> </u>								
4.6	Utility Pothole Locates												Ü							16	4	16	4								
4.7	ROW Staking																			32	8	32	2								
5	HAZARDOUS MATERIALS ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	GEOTECHNICAL ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	PRELIMINARY ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)	0	28	59	9	0	27	0	0	27	62	132	180	0	119	0	0	1	0	8	4	8	4	17	0	0	0	0	0	0	0
8.6	Final Engineering (Additional Scope)																														
8.6.1	Street Design		3	22	7						47	69	110		78									1							
8.6.2	Bridge Design		5				27			27																					
8.6.3	Retaining Wall Design																														
8.6.4	Stormwater Design																														
8.6.5	Update for 2020 City of Portland Std. Construction Specs		16	12																				16					$\longrightarrow$		
8.6.6	Intersection Design Vehicle Assumption Reports		_	5								40	40		20																
8.6.7	95% PS&E Submittal		2	4							2	4						1													
8.6.8 8.6.9	Existing Sewer Relocation 42nd & Holman Survey/Design		1	0	2						13	19	30		21					0	4	8	4								
8.6.10	BES Planting Coordination		1	8	2						13	19	30		21					0	4	0	4								
9	ENVIRONMENTAL COORDINATION AND PERMITTING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	UTILITY COORDINATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RAILROAD COORDINATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TRAFFIC ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	LOMBARD ODOT DESIGN	0	10	90	12	0	0	0	0	0	0	100	76	172	130	0	6	53	84	10	7	8	0	0	0	0	0	0	0	0	0
13.1	Preliminary Investigations & Coordination		4	40								16	16	20	8			5		2	1										
13.2	Project Management		6	50								6		6																	
13.3	Roadway Design				10							40	60	80	60																
13.4	Design Exceptions											30		50	10																
13.5	Drainage Design														28		6	48	84												
13.6	Traffic Design													4.0	24																
13.7	Erosion Control Design				2							8		16	24					0	0	8									
13.8 14	Survey  CONSTRUCTION PROJECT MANAGEMENT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6 0	0	0	0	342	228	84	0	0	0	0
14.1	Project Coordination	U	U	U	U	U	U	U	U	0	U	U	U	U	U	U	U	U	U	U	U	U	U	U	234	156	84	U	U	U	U
14.1	Monthly Invoices and Progress Reports																								234	72					
14.3	Construction Meetings																								84	12	84				
15	CONSTRUCTION SUPPORT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3036	0	3036	0	0	0	0
15.1	Construction Manager																		-						2956						
15.2	Construction Inspection																										2976				

Breakdown of Costs - Dated: 07/29/2022		MULTI	PLIERS	
	% of budget in Current Year (C)	20.00%	Accepted Overhead	177.45%
Amendment No. 3	% of budget in CY+1	50.00%	FCCM	0.17%
PROJECT NAME: NE 42nd Ave Bridge Replacement	% of budget in CY+2	30.00%	Negotiated Profit	10.50%
	% of budget in CY+3	0.00%	Annual Escalation Rate	3.50%
	Weighted Escalation Factor	1.039		

	Weighted I	Escalation	1 Factor	1.039	J																									
	David	d Eva	ns an	d As	socia	tes, Ir	ıc.																							
																	DATA I	ENTRY S	ECTION											
Job Classifications (Individuals' names are optional)	Project Manager III	Project Manager IV	Transportation Traffic/ Engineer II	Transportation/ Traffic Engineer IV	Bridge/ Sructural Engineer III	Bridge/ Structural Engineer I	Bridge/ Structural Engineer III	Designer IV	CADD Technician II	Transportation/ Traffic Engineer III	Transportation/ Traffic Engineer II	Designer II	Transportation/Tra ffic Engineer II	CADD Technician II	Designer III	Project Manager IV	Hydraulic Engineer II	Designer II	Survey Technician	Project Surveyor IV	Survey Technician I	Survey Technician	Project Assistant IV	Construction Service Manager II	QA/QC Specialist I	Construction Inspector IV	QA/QC Specialist	Party Chief IV	Field Survey Tech IV	Project Surveyor III
	PSCR	DMJ	STL	TCST	AMST	TBL	GAP	JXC	DJAL	AXKU	BEHE	RT U	BACA	RJXM	СМW	JRM	ASR	DKW R	DEM	SCW	MXB	JJG	ETNA	EABO	HLB	AVLL	Kelly A.	DWB	MXB	DAFE
Direct Salary Rate (Avg, Actual, Max) Current Year		\$89.13		\$84.57	\$70.71	\$42.27	\$70.71	\$50.23	\$43.10	\$65.42	\$54.56	\$40.32	\$43.20	\$43.10		\$74.00	\$58.50	\$40.32	\$38.19	\$60.56	\$30.55	\$38.19	\$43.65	\$50.70	\$28.34	\$43.76	\$43.00		\$33.70	
Annualized Direct Salary Rate (OR enter Negotiated Billing Rate)  Task # Fully Burdened Billing Rate		\$92.59	\$56.68	\$87.86	\$73.46	\$43.91 \$134.70	\$73.46 \$225.24	\$52.18 \$160.07	\$44.78	\$67.96	\$56.68 \$472.97	\$41.89	\$44.88	-		\$76.88	\$60.77 \$186.42	\$41.89 \$128.49	\$39.67 \$121.70	\$62.91	\$31.74	\$39.67	\$45.35	\$52.67 \$161.57	\$29.44	\$45.46	\$44.67		\$35.01	
NON-CONTINGENCY TASKS/DELIVERABLES	<b>\$226.04</b>	<b>\$204.U3</b>	\$173.07	\$269.50	<b>\$225.34</b>	\$134.70	<b>\$225.34</b>	\$160.07	\$137.35	\$208.48	\$173.07	\$128.49	\$137.67	\$137.35	\$144.30	<b>\$235.02</b>	\$100.42	\$120.49	\$121.70	\$192.99	\$97.30	\$121.70	\$139.10	\$101.57	\$90.31	\$139.45	\$137.03	\$124.20	\$107.39	\$152.96
15.3 Construction Administration																								40		40				
15.4 Punch List / Close-Out																								40		40				
15.5 Dispute/Claim Resolution																								40		20				
16 QUALITY COMPLIANCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1560	0	0	0
16.1 Quality Compliance																											1560			
17 CONSTRUCTION SURVEY QUALITY ASSURANCE	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	172	172	174
Coordination, Calculations and Quality Assurance (QA) of Construction Contractor's Survey Work																												116	116	56
17.2 Locate, Recover and Reference Monuments																												24	24	24
17.3 Right of Way ("ROW") Monumentation																												24	24	24
17.4 Monumentation Survey Filing Map (SFM)																												8	8	70
TOTAL Non-Contingency	0	122	226	21	0	27	0	0	27	62	235	259	172	249	12	6	54	84	66	69	70	15	49	3378	228	3120	1560	172	172	174
CONTINGENCY TASKS/DELIVERABLES																														
TOTAL Contingency	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL Non-Contingency + Contingency	0	122	226	21	0	27	0	0	27	62	235	259	172	249	12	6	54	84	66	69	70	15	49	3378	228	3120	1560	172	172	174

WOC #XX, ATA #XXXX

# Breakdown of Costs - Dated: 07/29/2022

	down of Costs - Dated: 07/29/2022	]												in Current Ye	JLTIPLIERS ear (CY)	0.00%		Overhead							% of budget
	ent No. 3 T NAME: NE 42nd Ave Bridge Replacement												% of budget % of budget % of budget Weighted E	in CY+2	tor		FCCM Negotiate Annual Es								% of budget % of budget % of budget Weighted Es
									Cert	ification:	Not Certified		Globa	l Trans	sportat	ion Er	naine	erina			Certi	fication:	DBE		NGI
								CA	LCULAT	ION SECTIO	)N		Ssoci		ENTRY SEC		.9			CALC	CULATION	N SECTION			
		or II		_	<b>=</b>								s & A er 4 th)	# 0	g (gr		(s		<u> </u>						fallo er/
	Job Classifications (Individuals' names are optional)	,,,	Survey Analys	Project Mange	Survey Analys		ed Direct Labor o	gg		xpenses	ost		Principal/ Project Manager 4 (Dana Beckwith)	Senior Projec Engineer 5 (Monica Leal	Sr Engineerin Associate 4 (Robert Spierlir	Engineering Associate 1 (Phoebe Kuo)	Tech XIV (Rick Harkins)		ed Direct Labor o	þ		xpenses	ost (		Senior Engine Geologist
	Direct Coloma Data (Aven Astrol Man) Commant Value	E K PMG	₩ } L	9	W X	lours	scalat IBR \$	verhe	CCM	lirect E	otal Co	rofit	<b>\$440.00</b>	<b>\$440.00</b>	\$400.00	<b>\$75.00</b>	<b>*</b> 05.00	lours	Escalat NBR \$	verhe	CCM	irect E	otal Co	rofit	\$107.00
Task#	Direct Salary Rate (Avg, Actual, Max) Current Year Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) Fully Burdened Billing Rate	\$84.15 \$45.71	\$35.84	\$46.75		<b>T</b>	шг	177.45%	0.17%		<del>-</del>	10.50%	\$140.00 \$144.20 \$144.20	\$140.00 \$144.20 \$144.20	\$120.00 \$123.60 \$123.60		\$95.00 \$97.85 \$97.85		ш Z	0.00%	0.00%		F	0.00%	\$197.00 \$197.00 \$197.00
	NTINGENCY TASKS/DELIVERABLES	V20010		•	<b>VIII</b>								*******	<b>VIII.20</b>	<b>V.120.00</b>	<b>VIII.20</b>	Ţō/iloc								VIOLE I
1	PROJECT MANAGEMENT AND ADMINISTRATION	0 0	0	0	0	172			\$ 21		\$ 33,735.62		0	0	0	0	0		<b>T</b>	T	\$ -	\$ -		\$ -	0
1.1	Project Coordination  Project Schedule and Work Plan					126 4	\$ 9,404 \$ 370		\$ 16 \$ 1	\$ -	\$ 26,108.26 \$ 1,028.24							0	\$ - \$ -		\$ - \$ -		\$ - \$ -	\$ - \$ -	
1.3	Monthly Invoices and Progress Reports					42			\$ 4		\$ 6,599.12							0		\$ -	\$ -		\$ -		
2	MEETINGS	0 0	0	0	0	31	\$ 1,893	\$ 3,359	\$ 3	\$ -	\$ 5,254.81	\$ 551.42	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
2.5	Utility Coordination Meetings - 7 additional meetings					31	\$ 1,893	\$ 3,359	\$ 3	\$ -	\$ 5,254.81	\$ 551.42						0	\$ -	\$ -	\$ -			\$ -	
3	ADVANCED CONCEPT ENGINEERING SURVEYING AND MAPPING	0 0	0	0	0	179	\$ - \$ 8,113	\$ - \$ 14396	\$ - \$ 14	<u> </u>	\$ - 0 \$ 23,322.40	\$ - \$ 2,363.40	0	0	0	0	0	0	\$ - ¢ -	\$ -	\$ - \$ -	\$ - e _		\$ - \$ -	0
4.1	Survey Data Research			0	0		\$ 2,715	,		φ ουυ.υι	\$ 7,537.17		0	0			U	0	\$ -	\$ -	\$ -	Φ -		\$ -	- U
4.2	Additional ROW parcel					20					\$ 2,712.27							0	\$ -	\$ -	\$ -			\$ -	
4.6	Utility Pothole Locates					40				\$ 800.00								0	\$ -	\$ -	\$ -		\$ -	\$ -	
4.7	ROW Staking						\$ 2,868				\$ 7,961.68							0	\$ -	\$ -	\$ -			\$ -	
<u>5</u>	HAZARDOUS MATERIALS ENGINEERING  GEOTECHNICAL ENGINEERING	0 0	0	0	0	0	\$ - \$ -	\$ - \$ -	\$ - \$ -	, ,	\$ - \$ -	\$ - \$ -	0	0	0	0	0	0	\$ - \$ -	\$ - \$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	0
7	PRELIMINARY ENGINEERING	0 0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -		\$ -	0
8	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)	0 0	0	0	0	685	\$ 35,499	\$ 62,993	\$ 60	\$ -	\$ 98,551.94	\$ 10,341.62	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0
8.6	Final Engineering (Additional Scope)					0	· ·	T	\$ -		\$ -	\$ -						0			\$ -			\$ -	
8.6.1 8.6.2	Street Design  Bridge Design						\$ 17,390 \$ 2,858	\$ 30,859 \$ 5,071			\$ 48,279.12 \$ 7,933.13	\$ 5,066.20 \$ 832.47						0	\$ -		\$ - \$ -			\$ -	
8.6.3	Retaining Wall Design					0		\$ -			\$ 7,933.13	\$ 632.47						0	\$ -		\$ -		\$ - \$ -	\$ - \$ -	
8.6.4	Stormwater Design					0			\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -	
8.6.5	Update for 2020 City of Portland Std. Construction Specs						\$ 2,887	\$ 5,123	\$ 5		\$ 8,015.50							0	\$ -	\$ -	\$ -		\$ -	\$ -	
8.6.6	Intersection Design Vehicle Assumption Reports					105		, ,,,,,,,	\$ 9		\$ 14,218.63							0	\$ -	,	\$ -			\$ -	
8.6.7 8.6.8	95% PS&E Submittal  Existing Sewer Relocation					13 0	\$ 835 \$ -	\$ 1,482 \$ -	\$ 1 \$ -		\$ 2,319.05	\$ 243.35						0	\$ - \$ -		\$ - \$ -			\$ - \$ -	
8.6.9	42nd & Holman Survey/Design					118	Ψ	*	\$ 10		T	\$ 1,707.37						0	\$ -	,	\$ -		,	\$ -	
8.6.10	BES Planting Coordination					9	\$ 546	\$ 969	\$ 1		\$ 1,515.91	\$ 159.07						0	\$ -	\$ -	\$ -		\$ -	\$ -	
9	ENVIRONMENTAL COORDINATION AND PERMITTING	0 0	0	0	0	0	\$ -	\$ -	\$ -	, ,	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -		\$ -	0
10	UTILITY COORDINATION  RAILROAD COORDINATION	0 0	0	0	0	0	\$ - \$	\$ - \$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	0	0	0	0	0	0	\$ - \$	\$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	0
12	TRAFFIC ENGINEERING	0 0	0	0	0	0	\$ -	•	\$ -	, ,	\$ -	•	0	0	0	0	0	0	\$ -	\$ -	\$ -			\$ -	0
13	LOMBARD ODOT DESIGN	0 0	0	0	0	758	\$ 37,765	\$ 67,014	\$ 64	\$ 50.00	0 \$ 104,892.54	\$ 11,001.73	29	4	0	48	20	101	\$ 10,424	\$ -	\$ -	\$ 100.00	\$ 10,523.60	\$ -	0
13.1	Preliminary Investigations & Coordination						\$ 5,917					\$ 1,723.64							\$ -					\$ -	
13.2	Project Management  Roadway Design						\$ 3,999 \$ 11,936					\$ 1,164.99 \$ 3,477.18						0	\$ - \$ -		\$ - \$ -			\$ - \$ -	
13.4	Design Exceptions						\$ 4,392					\$ 1,279.52						0		\$ -				\$ -	
13.5	Drainage Design						\$ 8,151					\$ 2,374.46						0	\$ -	\$ -	\$ -		\$ -	\$ -	
13.6	Traffic Design					0			\$ -		\$ -	-	29	4		48	20					\$ 100.00	\$ 10,523.60		
13.7	Erosion Control Design Survey					50 22	\$ 2,422 \$ 949			\$ 50.00	\$ 6,723.48 0 \$ 2,683.99							0			\$ - \$ -			\$ - \$ -	
14	CONSTRUCTION PROJECT MANAGEMENT	0 0	0	0	0		\$ <b>28,545</b>		\$ 49		\$ <b>79,245.83</b>		0	0	0	0	0	0	\$ -		\$ -	\$ -		\$ -	0
14.1	Project Coordination						\$ 16,918					\$ 4,928.53						0	\$ -	\$ -	\$ -		\$ -	\$ -	
14.2	Monthly Invoices and Progress Reports						\$ 3,384				\$ 9,394.33							0	\$ -		\$ -			\$ -	
14.3	CONSTRUCTION SUPPORT	0 0		0	•		\$ 8,243					\$ 2,401.38		0		0	0	0	\$ -		\$ -	¢		\$ -	
15.1	CONSTRUCTION SUPPORT  Construction Manager	U	0	0	U						<b>834,904.95 834,904.95 8 9 9 1 1 1 1 1 1 1 1 1 1</b>		0	0	U	U	U	0	\$ -	\$ - \$ -	<b>\$ -</b> \$ -	\$ -		<b>\$</b> -	U
15.2	Construction Inspection										0 \$ 380,471.17								\$ -		\$ -			\$ -	

**MULTIPLIERS** 

## Breakdown of Costs - Dated: 07/29/2022

% of budget in Current Year (CY) 0.00% Accepted Overhead % of budget in CY+1 100.00% FCCM Amendment No. 3 % of budget in CY+2 PROJECT NAME: NE 42nd Ave Bridge Replacement 0.00% Negotiated Profit % of budget % of budget in CY+3 0.00% Annual Es % of budget Weighted Escalation Factor **Global Transportation Engineering** NGI **Certification: Not Certified** Certification: **DATA ENTRY SECTION CALCULATION SECTION CALCULATION SECTION Job Classifications** (Individuals' names are optional) Direct Salary Rate (Avg, Actual, Max) Current Year \$81.00 \$44.00 \$34.50 \$45.00 \$44.08 \$140.00 \$140.00 \$120.00 \$75.00 \$95.00 \$197.00 Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) \$84.15 \$45.71 \$35.84 \$46.75 \$45.79 \$144.20 \$123.60 \$77.25 \$97.85 \$197.00 177.45% 0.17% 10.50% 0.00% 0.00% 0.00% Fully Burdened Billing Rate \$258.13 \$140.22 \$109.94 \$143.40 \$140.47 \$144.20 \$144.20 \$123.60 \$197.00 \$77.25 \$97.85 Task # NON-CONTINGENCY TASKS/DELIVERABLES Construction Administration 0 | \$ - | \$ - | \$ -15.4 Punch List / Close-Out 80 \$ 3,925 \$ 6,965 \$ 7 \$ 10,897.30 \$ 1,143.52 Dispute/Claim Resolution 60 \$ 3,016 \$ 5,352 \$ 5 \$ 8,373.13 \$ 878.64 QUALITY COMPLIANCE 1560 \$ 69,687 \$ 123,660 \$ 118 \$ - \$ 193,465.69 \$ 20,301.46 - \$ 193,465.69 \$ 20,301.46 Quality Compliance 1560 \$ 69,687 \$ 123,660 \$ 118 \$ CONSTRUCTION SURVEY QUALITY ASSURANCE 22 80 778 \$ 33,637 \$ 59,688 \$ 57 \$ 10,000.00 \$ 103,381.98 \$ 9,799.10 Coordination, Calculations and Quality Assurance (QA) of Construction 384 \$ 15,940 \$ 28,285 \$ 27 <mark>\$ 6,500.00</mark> \$ 50,751.38 \$ 4,643.55 Contractor's Survey Work Locate, Recover and Reference Monuments 102 \$ 4,382 \$ 7,776 \$ 7 \$ 1,000.00 \$ 13,165.38 \$ 1,276.58 Right of Way ("ROW") Monumentation 102 | \$ 4,382 | \$ 7,776 | \$ 7 \$ 1,000.00 \$ 13,165.38 \$ 1,276.58 Monumentation Survey Filing Map (SFM) 190 | \$ 8,933 | \$ 15,852 | \$ 15 <mark>| \$ 1,500.00</mark> | \$ 26,299.83 | \$ 2,602.39 **TOTAL Non-Contingency** 10889 \$ 525,216 \$ 931,996 \$ 893 \$ 18,650.00 \$ 1,476,755.76 \$ 153,007.35 - \$ 100.00 \$ 10,523.60 \$ -22 CONTINGENCY TASKS/DELIVERABLES **TOTAL Contingency** TOTAL Non-Contingency + Contingency 22 18 80 18 122 10,889 \$ 525,216 \$ 931,996 \$ 893 \$ 18,650.00 \$ 1,476,755.76 \$ 153,007.35 48 | 20 | 101 | \$ 10,424 | \$ - | \$ - | \$ 100.00 | \$ 10,523.60 | \$ -29 4 0

WOC #XX, ATA #XXXX

Ameno	ment No. 3 CT NAME: NE 42nd Ave Bridge Replacement	MU in Current Ye in CY+1 in CY+2 in CY+3 scalation Fact		100.00° 0.00° 0.00°	% Accepted % FCCM % Negotiated % Annual Es	d Profit								% of budg % of budg % of budg % of budg Weighted	et in CY+1 et in CY+2 et in CY+3	2		50.00% 50.00% 0.00% 0.00% 1.015	3.00%							% of bud % of bud	get in Curre get in CY+1 get in CY+3 get in CY+3 I Escalation	2 3
									Cert	tification:	MWE	SB		Terag	gan A	Assoc	iates					Certifica	ation:	Not Ce	ertified	<b>ACN</b>	IS	
		DATA E	NTRY SEC	TION				CAL	CULATIO	N SECTION	V			DATA E	NTRY SE	ECTION	(	CALCUL	ATION S	ECTION						DATA E	NTRY SE	ECTION
	Job Classifications (Individuals' names are optional)	Project Engineer/ Geologist II	Project Engineer/ Geologist I	Staff Engineer/ Geologist II	Engineering Technician II		ated Direct Labor or	lead	_	t Expenses		Cost		Todd Prager (Certified Arborist)					Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expenses	Total Cost	Profit	Teragan Ass Engineering Technician	Construction	
	Direct Salary Rate (Avg, Actual, Max) Current Year Annualized Direct Salary Rate (OR enter Negotiated Billing Rate)	\$175.00	\$159.00 \$159.00	\$136.00		Hours	Escal NBR (	0.00%	0.00%	Direct	i i	Total	%00.0	\$175.00 \$177.63							0.00%	0.00%			0.00%		\$141.00 \$145.69	
Task #	Fully Burdened Billing Rate CONTINGENCY TASKS/DELIVERABLES	\$175.00	\$159.00	\$136.00	\$103.00			0.00%	0.00%			-	0.00%	\$177.63												\$125.70	\$145.69	
1	PROJECT MANAGEMENT AND ADMINISTRATION	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	_	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
1.1	Project Coordination					0			\$ -		\$		\$ -					-		\$ -		\$ -		\$ -	•			
1.2	Project Schedule and Work Plan					0	\$ -	\$ -	\$ -		\$	-							0	\$ -	\$ -	\$ -		\$ -	\$ -			
1.3	Monthly Invoices and Progress Reports  MEETINGS	0	0	0	0	0	\$ -		\$ -	¢	\$	-		0	0	0	0	0	0 <b>0</b>	\$ -	\$ - <b>c</b>	\$ -	\$ -	\$ - • -	\$ - <b>&amp;</b> _	0	0	0
2.5	Utility Coordination Meetings - 7 additional meetings	U	U	U	U	0	<u> </u>	\$ - \$ -	\$ - \$ -	<b>\$</b> -	\$		<b>\$</b> -	U	U	U	U	U		<u>.</u>	\$ - \$ -	\$ - \$ -	<b>a</b> -	\$ - \$ -	•	U	U	U
3	ADVANCED CONCEPT ENGINEERING	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$		\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
4	SURVEYING AND MAPPING	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
4.1	Survey Data Research						\$ -		\$ -		\$		\$ -						0			\$ -		\$ -	\$ -			
4.6	Additional ROW parcel  Utility Pothole Locates						\$ - \$ -		\$ - \$ -		\$		\$ - \$ -						0		\$ -	\$ - \$ -		\$ - \$ -	\$ - \$ -			
4.7	ROW Staking						\$ -	<u> </u>	\$ -		\$		\$ -						0			\$ -		\$ -	\$ -			
5	HAZARDOUS MATERIALS ENGINEERING	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	-	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
6	GEOTECHNICAL ENGINEERING	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	-		0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
7	PRELIMINARY ENGINEERING	0	0	0	0	0	\$ -	<u> </u>	\$ -	\$ -	\$	-		0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
8.6	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)  Final Engineering (Additional Scope)	U	0	0	U	0	\$ - \$ -	\$ - \$ -	<b>\$</b> -	<b>5</b> -	\$	<u>-</u>	\$ - \$ -	22	0	0	0	U	<b>22</b> 0	\$ 3,908 \$ -		<b>\$</b> -	\$ -	\$ 3,907.75 \$ -	•	0	U	U
8.6.1	Street Design						\$ -	<u> </u>	\$ -		\$		\$ -							\$ -	-	\$ -		\$ -	\$ -			
8.6.2	Bridge Design					0	\$ -	\$ -	\$ -		\$	-	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -			
8.6.3	Retaining Wall Design						\$ -	<u> </u>	\$ -		\$		\$ -							\$ -	<u> </u>	\$ -		\$ -	\$ -			
8.6.4							\$ -	<u> </u>	\$ -		\$		\$ -						0			\$ -		\$ -	•			
8.6.5 8.6.6	Update for 2020 City of Portland Std. Construction Specs Intersection Design Vehicle Assumption Reports						\$ - \$ -		\$ - \$ -		\$		\$ -						0	,	\$ - \$ -	\$ - \$ -		\$ - \$ -	\$ - \$ -			
8.6.7	95% PS&E Submittal					-	\$ -	<u> </u>	\$ -		\$		\$ -						0	T	\$ -			\$ -	\$ -			
8.6.8	Existing Sewer Relocation					0	\$ -	\$ -	\$ -		\$	-	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -			
8.6.9	42nd & Holman Survey/Design						\$ -	<u> </u>	\$ -		\$		\$ -						0			\$ -		\$ -	\$ -			
8.6.1	BES Planting Coordination  ENVIRONMENTAL COORDINATION AND PERMITTING		0		0	0	\$ -	\$ -	\$ -	¢	\$		\$ - \$ -	22					22	\$ 3,908	8 \$ -			\$ 3,907.75 <b>\$</b> -	_			
10	UTILITY COORDINATION	0	0	0	0	0	\$ -	\$ -	\$ - \$ -	\$ -	\$		\$ - \$ -	0	0	0	0	0	0	\$ -	\$ -	\$ - \$ -	\$ -	\$ -	\$ - \$ -	0	0	0
11	RAILROAD COORDINATION	0	0	0	0	0	\$ -	<u> </u>	\$ -		\$		\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0
12	TRAFFIC ENGINEERING	0	0	0	0					\$ -			\$ -	0	0	0	0	0		\$ -				\$ -	\$ -	0	0	0
13	LOMBARD ODOT DESIGN  Draliminary Investigations & Coordination	7	0	0	0		\$ 1,225		<b>\$</b> -	\$ -			<b>\$</b> -	0	0	0	0	0	0	\$ -		\$ -				0	0	0
13.1	Preliminary Investigations & Coordination  Project Management	1					\$ 1,225 \$ -		\$ - \$ -		\$ 1		\$ - \$ -						0			\$ - \$ -		\$ - \$ -	•			
13.3	Roadway Design								\$ -		\$		\$ -						0	<u> </u>	<u> </u>	\$ -		\$ -	•			
13.4	Design Exceptions					0	\$ -	\$ -	\$ -		\$	-	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -			
13.5	Drainage Design						\$ -		\$ -		\$		\$ -						0			\$ -		\$ -	\$ -			
13.6 13.7	Traffic Design  Erosion Control Design						\$ - \$ -		\$ - \$ -		\$		\$ - \$ -						0	<u> </u>	<u> </u>	\$ - \$ -		\$ - \$ -	•			
13.7	Survey						\$ - \$ -	<u>'</u>	\$ -		\$		\$ -						0			\$ -		\$ -	•			
14	CONSTRUCTION PROJECT MANAGEMENT	0	0	0	0	0	\$ -		\$ -	\$ -	\$		\$ -	0	0	0	0	0	0	,		\$ -			•	0	0	0
14.1	Project Coordination							\$ -	\$ -		\$		\$ -						0			\$ -		\$ -	\$ -			
14.2	Monthly Invoices and Progress Reports						\$ -	<u> </u>	\$ -		\$		\$ -						0	_		\$ -		\$ -	•			
14.3 15	Construction Meetings  CONSTRUCTION SUPPORT	0	0	0	0		\$ -		\$ - \$ -	\$	\$ <b>\$</b>		\$ - \$ -	0	0	0	0	0	0	\$ - \$ -		\$ - \$ -	\$ -	\$ -	•	1560	3120	0
15.1	Construction Manager	U	U	- U	U		-		\$ -	Ψ -	\$		\$ -		J	U	U	U	0	-		\$ -		\$ -	•	1560	3120	
15.2	Construction Inspection								\$ -		\$		\$ -						0			\$ -		\$ -	\$ -		3120	

Amendme	nt No. 3 NAME: NE 42nd Ave Bridge Replacement	in Current in CY+1 in CY+2 in CY+3 icalation Fa		100.00° 0.00° 0.00°	% Accepted % FCCM % Negotiate % Annual Es	d Profit	d						% of bud % of bud % of bud	get in Curr get in CY+ get in CY+; get in CY+; d Escalatio	ent Year (C 1 2 3	PLIERS Y)	50.00% 50.00% 0.00% 0.00% 1.015								% of bud % of bud % of bud	get in Current get in CY+1 get in CY+2 get in CY+3 d Escalation F
									Cer	ification:	MWESB		Tera	gan A	Assoc	iates					Certifica	ation:	Not C	ertified	g ACN	18
		DATA	ENTRY SE	CTION				CAL	CULATIO	N SECTION	_		DATA E	ENTRY SI	ECTION		CALCUL	ATION S	ECTION						DATA E	ENTRY SEC
	Job Classificatio (Individuals' names are option	111 2	Project Engineer/ Geologist I	Staff Engineer/ Geologist II	Engineering Technician II		Direct Labor or	_		penses	4		NGI Todd Prager (Certified Arborist)					Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expenses	Total Cost	Profit	Teragan Ass Engineering Technician	Construction
	Direct Salary Rate (Avg, Actual, Max) Current Y	ear \$175.00	\$159.00	\$136.00	\$103.00	Hours	Escalated NBR \$	Overhead	CCM	Direct Ex	Fotal Cos	Profit	\$175.00					_		J	_	_	•	_	\$121.65	\$141.00
	Annualized Direct Salary Rate (OR enter Negotiated Billing Ra							0.00%	0.00%			0.00%	\$177.63							0.00%	0.00%			0.00%		\$145.69
Task#	Fully Burdened Billing R			\$136.00	\$103.00			0.00%	0.00%			0.00%	\$177.63												\$125.70	\$145.69
ION-CO	NTINGENCY TASKS/DELIVERABLES	_							_												_					
5.3	Construction Administration					0	\$ -	\$ -	\$ -		\$ .	- \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -	1480	
5.4	Punch List / Close-Out					0	\$ -		\$ -			- \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -	40	
5.5	Dispute/Claim Resolution					0	\$ -	\$ -	\$ -		\$	- \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -	40	
3	QUALITY COMPLIANCE	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	- \$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0
3.1	Quality Compliance					0	\$ -	\$ -	\$ -		\$ -	- \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -		
7	CONSTRUCTION SURVEY QUALITY ASSURANCE	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	- \$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0
7.1	Coordination, Calculations and Quality Assurance (QA) of Construction Contractor's Survey Work					0	\$ -	\$ -	s -		\$ .	- \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -		
7.2	Locate, Recover and Reference Monuments					0	\$ -		\$ -			- \$ -						0			\$ -		\$ -			
7.3	Right of Way ("ROW") Monumentation					0	\$ -		\$ -			- \$ -						0		<u> </u>	\$ -		\$ -			
7.4	Monumentation Survey Filing Map (SFM)					0	\$ -		\$ -			- \$ -						0	\$ -	<u>'</u>	\$ -		\$ -	\$ -		
	TOTAL Non-Contingency	7	0	0	0	7	\$ 1,225	T	\$ -	\$ -		.00 \$ -	22	0	0	0	0	22	\$ 3,908	т	т	\$ -	\$ 3,907.75	\$ -	1560	3120
ONTINE	DENOV TACKO DEL IVEDADI EC																									
ONTINO	SENCY TASKS/DELIVERABLES																									
	TOTAL Contingency	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$	- \$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0
	TOTAL Non-Contingency + Contingency	7	0	0	0	7	\$ 1,225	\$ -	\$ -	\$ -	\$ 1,225	.00 \$ -	22	0	0	0	0	22	\$ 3,908	\$ -	\$ -	\$ -	\$ 3,907.75	\$ -	1560	3120

Amenda	ent No. 3 T NAME: NE 42nd Ave Bridge Replacement	Y)	20.00% 50.00% 30.00%	FCCM Negotiate	l Overhead		3.0	0.00% 0.00% 0.00%							% of bud % of bud % of bud	get in Curre lget in CY+1 lget in CY+2 lget in CY+3 d Escalation	2		50.00% 50.00% 0.00% 0.00% 1.015	3.00%						litecis
											Certifica	ition:	DBE &	MWESB	Mari	ianne	Zarki	n Lan	dscap	pe Aı	rchitec	ts	Certifica	tion:	MV	SESB SESPECT
							CALCUI	LATION S	SECTION						DATA E	ENTRY SE	ECTION	(	CALCULA	ATION S	SECTION					Sca
	Job Classifications (Individuals' names are optional)							Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expenses	Total Cost	Profit	ACMS Principal LA (Marianne Zarkin)	Landscape Architect (Larua Hartzell)	Project Admin (Susan Baker)			Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expenses	Total Cost	Profit arianne Zarkin Lano
	Direct Salary Rate (Avg, Actual, Max) Current Year															\$109.00										≥
Task#	Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) Fully Burdened Billing Rate							-		0.00%	0.00%			0.00%		\$110.64 \$110.64						0.00%	0.00%			0.00%
NON-C	ONTINGENCY TASKS/DELIVERABLES																									
1	PROJECT MANAGEMENT AND ADMINISTRATION	0	0	0	0	0	0				\$ -	\$ -		\$ -	0	0	0	0	0			\$ -	\$ -	\$ -	\$ -	\$ -
1.1	Project Coordination							0	\$ -	<u> </u>	\$ -		\$ -	\$ -							\$ -		\$ -		\$ -	\$ -
1.2	Project Schedule and Work Plan							0	\$ -	\$ -	i i		\$ -	\$ -									\$ -		\$ -	\$ -
1.3	Monthly Invoices and Progress Reports	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	•	\$ -	\$ - ¢		0	0	0	0		\$ -		\$ -	•	\$ -	
2.5	MEETINGS  Utility Coordination Meetings - 7 additional meetings	0	U	0	U	0	U	0	\$ - \$ -	<b>\$</b> -	1	\$ -	\$ - \$ -	\$ - \$ -	0	0	U	0	U		<b>\$</b> -		\$ - \$ -	<b>\$</b>	\$ - \$ -	\$ - \$ -
3	ADVANCED CONCEPT ENGINEERING	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4	SURVEYING AND MAPPING	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.1	Survey Data Research							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
4.2	Additional ROW parcel							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
4.6	Utility Pothole Locates							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
4.7	ROW Staking							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
5	HAZARDOUS MATERIALS ENGINEERING	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	GEOTECHNICAL ENGINEERING	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	PRELIMINARY ENGINEERING	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
8	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	10	40	0	0	0		\$ 5,846	\$ -	<b>T</b>	<b>\$</b> -	\$ 5,846.40	
8.6	Final Engineering (Additional Scope)							0	<u> </u>		\$ -		\$ - \$ -	\$ -						0		<u> </u>	\$ - \$ -		\$ -	•
8.6.1 8.6.2	Street Design  Bridge Design							0	\$ -	<u> </u>	\$ - \$ -			\$ - \$ -						0		\$ - \$ -	-		\$ -	· ·
8.6.3	Retaining Wall Design							0	<u> </u>		\$ -		\$ -	\$ - \$ -						0		\$ -			\$ - \$ -	•
8.6.4	Stormwater Design							0	<u> </u>	<u> </u>	\$ -		\$ -	\$ -						0		\$ -			\$ -	
8.6.5	Update for 2020 City of Portland Std. Construction Specs							0	-	<u> </u>	\$ -		\$ -	\$ -						0			\$ -		\$ -	,
8.6.6	Intersection Design Vehicle Assumption Reports							0	\$ -		\$ -		\$ -	\$ -						0		\$ -			\$ -	\$ -
8.6.7	95% PS&E Submittal							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
8.6.8	Existing Sewer Relocation							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
8.6.9	42nd & Holman Survey/Design							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
8.6.10	BES Planting Coordination								\$ -	\$ -	\$ -		\$ -	\$ -	10	40				50	\$ 5,846	\$ -	\$ -		\$ 5,846.40	
9	ENVIRONMENTAL COORDINATION AND PERMITTING							0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -						0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	UTILITY COORDINATION	0	0	0	0	0	0	0	\$ -	<u> </u>	\$ -	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
11	RAILROAD COORDINATION  TRAFFIC ENGINEERING	0	0	0	0	0	0	0	\$ - \$ -	<u> </u>	<b>\$</b> -	\$ - \$ -		\$ - ¢ -	0	0	0	0	0	0	\$ - \$ -	\$ -	\$ - ¢	\$ -	\$ - \$ -	<b>\$</b> -
13	LOMBARD ODOT DESIGN	0	0	0	0	0	0	0	\$ - \$ -		\$ - \$ -			\$ - \$ -	0	0	0	0	0		\$ - \$ -	_ ·	\$ - \$ -	-	· ·	
13.1	Preliminary Investigations & Coordination	U	0	U	0	0	U		Ψ	\$ -		Ψ -		\$ -	U	J				0	Ψ	· ·	\$ -	<u> </u>	\$ -	
13.2	Project Management							0	\$ -		\$ -		\$ -	\$ -							·		\$ -		\$ -	
13.3	Roadway Design							0	\$ -	<u> </u>	\$ -		\$ -	\$ -									\$ -		\$ -	•
13.4	Design Exceptions							0	\$ -	\$ -	\$ -		\$ -	\$ -						0			\$ -		\$ -	\$ -
13.5	Drainage Design							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
13.6	Traffic Design							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
13.7	Erosion Control Design							0	\$ -	\$ -	\$ -		\$ -	\$ -							7		\$ -		\$ -	\$ -
13.8	Survey							0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
14	CONSTRUCTION PROJECT MANAGEMENT	0	0	0	0	0	0	0	\$ -	\$ -	· ·	\$ -	\$ -	\$ -	0	0	0	0	0	0	\$ -	¥	\$ -	\$ -	\$ -	\$ -
14.1	Project Coordination										\$ -		\$ -	\$ -									\$ -		\$ -	<u> </u>
14.2	Monthly Invoices and Progress Reports							0	\$ -		\$ -		\$ -	\$ -							\$ -		\$ -			\$ -
14.3	Construction Meetings			-	_		_	0	\$ -		\$ -	<b>A = 255</b>	\$ -	\$ -									\$ -			\$ -
15	Construction Manager	0	0	0	0	0	0		\$ 650,644			\$ 5,850.00	\$ 656,493.92		0	0	0	0	0			<b>\$</b> -		\$ -		<b>\$</b> -
15.1	Construction Manager								\$ -			¢ 4 075 00		\$ -								\$ -				\$ -
15.2	Construction Inspection							3120	<b>3</b> 454,556	φ -	- ۵	\$ 4,8/5.0 <mark>0</mark>	\$ 459,431.14	φ -						0	ъ -	\$ -	ъ -		\$ -	\$ -

Breakdown of Costs - Dated: 07/29/2022		MULTIPLIE 20.00% Acce		ad		0.00%								% of budget in Co		IPLIERS	50.00%							
mendment No. 3		50.00% ACCE		<del>z</del> au		0.00%								% of budget in C		(01)	50.00%		_					
OJECT NAME: NE 42nd Ave Bridge Replacement		30.00% Nego		<u> </u>		0.00%								% of budget in C			0.00%							
		0.00% Annu			3.	00%								% of budget in C			0.00%	3.00%						
	1	1.033					_							Weighted Escala	ion Factor		1.015		_					
-																								
									Certifica	ation:	DRF &	MWESB		Mariann	o Zark	in I ai	ndecs	no A	rchito	ete	Certifica	tion:	MV	VESB
										ation.	DDE W	MITTEOD		ıvıaı iaiiii	c Zain	III Lai	iiusce	ihe v		Jio	oci tilloa			·LOD
					CALCU	Ι ΔΤΙΩΝ 9	SECTION							DATA ENTRY	SECTION		CAL CIII	ΔΤΙΩΝ 9	SECTION					
					CALCO		LOTION						ဟ	DATA LIVINT	SECTION		CALCOI		JECTION					
													CM	Ē								40		
							rec \$			Ses			) V	ar Pe	Admin Baker)				d Direct NBR \$			Ses		
Job Classifications										)en				pal L/e Zarle Zarlescape	Ad Ba							)en		
(Individuals' names are optional)							ted or P	ad		X				rinci riann riann ands Arch	ect				ted or N	ad		Г Х	OSI	
						S	ala or c	å	_ ≥		S	≝		Prijarija Laj	Proje (Susa			<u>s</u>	ala or o	, å	<b>E</b>	ct –	0	≝
						n o p	Escalated Direct Labor or NBR \$	) Še	CCM	) ire	ofe.	Į į		_ <u>\$</u>	ਜੇ   ਯੂਲ			n o p	Esc	) Še	FCCM	) jre	ote	
						1 -				-								1 -			"		-	
Direct Salary Rate (Avg, Actual, Max) Current Year														\$140.00 \$109.0	0 \$75.00									
Annualized Direct Salary Rate (OR enter Negotiated Billing Rate)								0.00%	0.00%			0.00%		\$142.10 \$110.6						0.00%	0.00%			0.00%
# Fully Burdened Billing Rate														\$142.10 \$110.6										
I-CONTINGENCY TASKS/DELIVERABLES																								
Construction Administration						1480	\$ 186.032	2 \$ -	\$ -	\$ 975.00	\$ 187,007.00	) \$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
Punch List / Close-Out						40	\$ 5,028		\$ -		\$ 5,027.89							0	\$ -	\$ -	\$ -		\$ -	\$ -
Punch List / Close-Out  Dispute/Claim Resolution						40					\$ 5,027.89							0	\$ -	\$ -	\$ -		\$ -	\$ -
QUALITY COMPLIANCE	0	0 (	0	0	0	0	\$ -	\$ -		\$ -	\$ -			0 0	0	0	0	0	\$ -	<b>s</b> -	\$ -	\$ -	\$ -	\$ -
Quality Compliance						0	\$ -	\$ -	1		\$ -	•						0	\$ -	\$ -	•		\$ -	\$ -
CONSTRUCTION SURVEY QUALITY ASSURANCE	0	0 (	0	0	0	0				¢				0 0	0	0	0	0		1		¢	•	e e
Coordination, Calculations and Quality Assurance (QA) of Construction				0			Ψ -	\$ -	<b>\$</b> -	\$ -	<b>\$</b> -	_		0		-			Ψ -	Ψ -	\$ -	\$ -	\$ -	Ψ -
Contractor's Survey Work						0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
Locate, Recover and Reference Monuments						0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
Right of Way ("ROW") Monumentation						0	\$ -	\$ -			\$ -	\$ -						0	\$ -	\$ -	\$ -			\$ -
Monumentation Survey Filing Map (SFM)						0	\$ -	\$ -	\$ -		\$ -	\$ -						0	\$ -	\$ -	\$ -		\$ -	\$ -
TOTAL Non-Contingency	0	0 (	0	0	0	4680	\$ 650,644	4 \$ -	\$ -	\$ 5,850.00	\$ 656,493.92	2 \$ -		10 40	0	0	0	50	\$ 5,846	\$ -	\$ -	\$ -	\$ 5,846.40	) \$ -
NTINGENCY TASKS/DELIVERABLES																								
TOTAL Contingency	0	0 (	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		0 0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$
TOTAL Non-Contingency + Contingency	0	0 (	0	0	0	1 690	\$ 650 GA	1 ¢	¢	¢ 5 950 00	\$ 656,493.92	2 \$ -		10 40	0	0	0	<b>E</b> 0	¢ E Q A G	e e	· ·	¢	\$ 5,846.40	) \$ -
TOTAL Non-Contingency + Contingency	U	0 (	U	U	U	4,000	ψ 000,044	- Ψ	Ψ -	ψ 5,050.00	, φ 000,433.92	- Ψ		10 40	U	U	U	30	ψ 5,040	Ψ -	Ψ -	Ψ -	ψ 5,040.40	Ψ

Amendment No. 3 PROJECT NAME: NE 42nd Ave Bridge Replacement			MULTIPLIERS% of budget in Current Year (CY)55.00% Accepted Overhead148.72%% of budget in CY+130.00% FCCM% of budget in CY+215.00% Negotiated Profit10.50%% of budget in CY+30.00% Annual Escalation R3.00%Weighted Escalation Factor1.018													
		Exel	tech	Cons	ulting	յ, Inc.							Certifica	ation:	MW	ESB
		DATA E	NTRY S	ECTION					CALCUL	LATION S	SECTION					÷.
	Job Classifications (Individuals' names are optional)	Principal Engineer	Supervisory Engineer	Senior Engineer	Structural	Project Engineer	Associate Engineer	Cadd Tech	Admin	Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expenses	Total Cost	Profit Exelted
<b>T</b> 1-#	Direct Salary Rate (Avg, Actual, Max) Current Year Annualized Direct Salary Rate (OR enter Negotiated Billing Rate)	\$76.36	\$61.00 \$62.11	\$40.00 \$40.73	\$61.00 \$62.11	\$35.00 \$35.63	\$34.00 \$34.62	\$23.50 \$23.93	\$20.00 \$20.36			148.72%	0.00%			10.50%
Task # NON-CO	Fully Burdened Billing Rate NTINGENCY TASKS/DELIVERABLES	\$209.86	\$170.69	\$111.93	\$170.69	\$97.94	\$95.14	\$65.76	\$55.96							
1	PROJECT MANAGEMENT AND ADMINISTRATION	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1.1	Project Coordination									0	\$ -	\$ -	\$ -		\$ -	\$ -
1.2	Project Schedule and Work Plan									0	\$ -	\$ -	\$ -		\$ -	\$ -
1.3	Monthly Invoices and Progress Reports  MEETINGS	0	0	0	0	0	0	0	0	<b>0</b>	\$ -	\$ -	\$ -	¢	\$ -	\$ -
2.5	Utility Coordination Meetings - 7 additional meetings	U	U	U	U	U	U	U	U	0	\$ - \$ -	<b>\$</b> -	<b>\$</b> -	\$ -	\$ - \$ -	<b>\$</b> -
3	ADVANCED CONCEPT ENGINEERING	0	0	0	0	0	0	0	0	0	\$ -		\$ -	\$ -	\$ -	\$ -
4	SURVEYING AND MAPPING	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
4.1	Survey Data Research									0	\$ -		\$ -		\$ -	\$ -
4.2	Additional ROW parcel									0	\$ -	\$ -	\$ -		\$ -	\$ -
4.6	Utility Pothole Locates  ROW Staking									0	\$ - \$ -		\$ - \$ -		\$ - \$ -	\$ - \$ -
5	HAZARDOUS MATERIALS ENGINEERING	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6	GEOTECHNICAL ENGINEERING	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
7	PRELIMINARY ENGINEERING	0	0	0	0	0	0	0	0	0	\$ -		\$ -	\$ -	\$ -	\$ -
8	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)	0	0	53	170	126	0	212	0	561		\$ 33,133		\$ -		\$ 5,818.25
8.6 8.6.1	Final Engineering (Additional Scope)  Street Design									0	\$ - \$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	\$ -
8.6.2	Bridge Design			6	25			12		43	Ψ	\$ 3,100			\$ 5,183.63	
8.6.3	Retaining Wall Design			47	94			94		235	\$ 10,001	\$ 14,874	\$ -		\$ 24,874.84	\$ 2,611.86
8.6.4	Stormwater Design				40	86		86		212	\$ 7,606	\$ 11,312	\$ -		\$ 18,918.85	\$ 1,986.48
8.6.5	Update for 2020 City of Portland Std. Construction Specs				5	8				13	\$ 596				\$ 1,481.40	
8.6.6 8.6.7	Intersection Design Vehicle Assumption Reports  95% PS&E Submittal				2	2		2		6	\$ -	\$ - \$ 362	\$ - \$ -		\$ - \$ 605.22	\$ -
8.6.8	Existing Sewer Relocation				4	30		18		52		\$ 2,600			\$ 4,347.97	
8.6.9	42nd & Holman Survey/Design									0	\$ -	\$ -	\$ -		\$ -	\$ -
8.6.10	BES Planting Coordination									0	\$ -	\$ -	\$ -		\$ -	\$ -
9	ENVIRONMENTAL COORDINATION AND PERMITTING									0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10	UTILITY COORDINATION	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
12	TRAFFIC ENGINEERING	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ - \$ -	\$ -	\$ - \$ -	\$ - \$ -
13	LOMBARD ODOT DESIGN	0	0	0	0	0	0	0	0	0	\$ -	\$ -		\$ -	\$ -	\$ -
13.1	Preliminary Investigations & Coordination									0	\$ -	\$ -	\$ -		\$ -	\$ -
13.2	Project Management									0	\$ -	\$ -	\$ -		\$ -	\$ -
13.3	Roadway Design									0	\$ -	\$ -	\$ -		\$ -	\$ -
13.4	Design Exceptions  Drainage Design									0	\$ - \$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	\$ - \$ -
13.6	Traffic Design									0	\$ -	\$ -	\$ -		\$ -	\$ -
13.7	Erosion Control Design									0	\$ -	\$ -	\$ -		\$ -	\$ -
13.8	Survey									0	\$ -	\$ -	\$ -		\$ -	\$ -
14	CONSTRUCTION PROJECT MANAGEMENT	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
14.1	Project Coordination  Monthly Invoices and Progress Reports									0	\$ -	\$ -	\$ -		\$ -	\$ - ¢
14.2	Monthly Invoices and Progress Reports  Construction Meetings									0	\$ - \$ -	\$ - \$ -	\$ - \$ -		\$ - \$ -	\$ - \$ -
15 15	CONSTRUCTION SUPPORT	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
15.1	Construction Manager									0	\$ -	\$ -	\$ -		\$ -	\$ -
15.2	Construction Inspection									0	\$ -	\$ -	\$ -		\$ -	\$ -

Developed to the second to															_	
Breakdown of Costs - Dated: 07/29/2022					ULTIPLIE											
Amendment No. 3	% of budget in Current Year (CY) 55.00% Accepted Overhead 148.72% % of budget in CY+1 30.00% FCCM															
PROJECT NAME: NE 42nd Ave Bridge Replacement		get in CY+				Negotiate	d Profit		10.50%	-						
1 NOSEOT MAINE. NE 42110 Ave Bridge Replacement		get in CY+					scalation F	3.0	00%							
		l Escalatio			1.018	7.1111.00.1		4								
	Exel	tech	Cons	ulting	g, Inc.							Certifica	ation:	MW	WESB	
	DATA E	NTRY S	ECTION					CALCUL	LATION S	SECTION					Ş	
	e_				_										The second of th	
	ine	≥ _	Senior Enginee	= -	Project Enginee	ω ـ	ے			s \$			les es		) O	
Job Classifications	ing	Supervisory Engineer	ngi	Structural Engineer	ngi	Associate Engineer	Cadd Tech	Ë		Dir.			ens		111	
(Individuals' names are optional		erv	Ш	uct igir	— <del>х</del>	soc	명	Admin		ed Z	ad		dx:	Cost		
	Cip	l gi	nio	St in	) jec	As	Ca	1		alat or o	- The	Σ	t	o o	<u>.</u> =	
	Principal	0,	Se		Pro				Hours	Escalated Direct Labor or NBR \$	Overhead	FCCM	Direct Expen	Total	Profit	
	<u> </u>								Ξ.			Щ		-	Δ.	
Direct Colom: Boto (Ave. Actual May) Current Voc	*	¢c4.00	£40.00	¢C4.00	¢25.00	¢24.00	¢02.50	<b>#20.00</b>								
Direct Salary Rate (Avg, Actual, Max) Current Yea Annualized Direct Salary Rate (OR enter Negotiated Billing Rate		\$61.00 \$62.11	\$40.00 \$40.73	\$61.00 \$62.11	\$35.00 \$35.63	\$34.00 \$34.62	\$23.50 \$23.93	\$20.00 \$20.36			148.72%	0.00%			10.50%	
Task # Fully Burdened Billing Rate						\$95.14	\$65.76	\$55.96			140.72 /0	0.0076			10.30 /6	
NON-CONTINGENCY TASKS/DELIVERABLES								·								
15.3 Construction Administration									0	\$ -	\$ -	\$ -		\$ -	\$ -	
15.4 Punch List / Close-Out									0	\$ -	\$ -	\$ -		\$ -	\$ -	
15.5 Dispute/Claim Resolution									0	\$ -	\$ -	\$ -		\$ -	\$ -	
16 QUALITY COMPLIANCE	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
16.1 Quality Compliance									0	\$ -	\$ -	\$ -		\$ -	\$ -	
17 CONSTRUCTION SURVEY QUALITY ASSURANCE	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Coordination, Calculations and Quality Assurance (QA) of Construction 17.1 Contractor's Survey Work									0	\$ -	\$ -	\$ -		\$ -	\$ -	
17.2 Locate, Recover and Reference Monuments									0	\$ -	\$ -	\$ -		\$ -	\$ -	
17.3 Right of Way ("ROW") Monumentation									0	\$ -	\$ -	\$ -		\$ -	\$ -	
17.4 Monumentation Survey Filing Map (SFM)									0	\$ -	\$ -	\$ -		\$ -	\$ -	
TOTAL Non-Contingency	0	0	53	170	126	0	212	0	561	\$ 22,279	т	т	\$ -	Ψ	\$ 5,818.25	
, and the same of										,	, 10,130		T T		, 5,5 15126	
CONTINGENCY TASKS/DELIVERABLES																
TOTAL Contingency	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	-	
TOTAL Non-Contingency + Contingency	0	0	53	170	126	0	212	0	561	\$ 22,279	\$ 33,133	\$ -	\$ -	\$ 55,411.91	\$ 5,818.25	
		-	-		-	-		-		-		-				

# Breakdown of Costs - Dated: 07/29/2022

Amendment No. 3
PROJECT NAME: NE 42nd Ave Bridge Replacement

		Project Summary												
	·					GR	ANI	D TOT	AL CALCUL	ATION SECTI	ON	1		
	Job Classifications (Individuals' names are optional)			Escalated Direct Labor or NBR \$		70			benses	<b>+</b>			ofit	% of Total Non-Contingency Labor Costs
Task#	Direct Salary Rate (Avg, Actual, Max) Current Year Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) Fully Burdened Billing Rate	Hours		Escalatec NBR \$		Overhead		FCCM	Direct Ex	Total Cost		Profit	Cost + Profit	% of Tota Labor Co
NON-CON	TINGENCY TASKS/DELIVERABLES													
1	PROJECT MANAGEMENT AND ADMINISTRATION	172	\$	12,152		21,563		21		\$ 33,736		3,540	·	
1.1	Project Coordination	126	\$	9,404		16,688		16		\$ 26,108.26		2,739.69		
1.2	Project Schedule and Work Plan	4	\$	370		657	\$	1	\$ -	\$ 1,028.24		107.90		
1.3	Monthly Invoices and Progress Reports	42	\$	2,377		4,218		3	\$ -	\$ 6,599.12		692.48		
2.5	MEETINGS  Utility Coordination Meetings - 7 additional meetings	<b>31</b> 31	<b>\$</b>	<b>1,893</b> 1,893		<b>3,359</b> 3,359		3		<b>5,254.81</b> \$ 5,254.81		<b>551.42</b> 551.42		
3	ADVANCED CONCEPT ENGINEERING	0	\$	1,093	\$	3,339	\$	_	\$ -	\$ 5,234.61	\$	331.42	\$ 5,000.23	0.2 %
4	SURVEYING AND MAPPING	179	\$	8,113		14,396	\$	14	\$ 800.00	\$ 23,322.40		2,363.40	<del>.</del>	
4.1	Survey Data Research	45	\$	2,715		4,818	-	5		\$ 7,537.17		790.92		
4.2	Additional ROW parcel	20	\$	977		1,734	\$	2		\$ 2,712.27		284.61		
4.6	Utility Pothole Locates	40	\$	1,553	\$	2,756	\$	3	\$ 800.00	\$ 5,111.27	\$	452.41	\$ 5,563.68	0.2%
4.7	ROW Staking	74	\$	2,868	\$	5,089	\$	5	\$ -	\$ 7,961.68	\$	835.46	\$ 8,797.15	0.4%
5	HAZARDOUS MATERIALS ENGINEERING	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
6	GEOTECHNICAL ENGINEERING	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
7	PRELIMINARY ENGINEERING	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
8	FINAL ENGINEERING (60%, 90%, 100%, AND FINAL PS&E)	1,318	\$	67,532	\$	96,126	\$	60	\$ -	\$ 163,717.99	\$	16,159.87	\$ 179,877.86	7.5%
8.6	Final Engineering (Additional Scope)	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
8.6.1	Street Design	337	\$	17,390		30,859		30		\$ 48,279.12		5,066.20		2.2%
8.6.2	Bridge Design	102	\$	4,942		8,170		5	<b>\$</b> -	\$ 13,116.76		1,376.75		0.6%
8.6.3	Retaining Wall Design	235	\$	10,001		14,874		-	\$ -	\$ 24,874.84		2,611.86		
8.6.4	Stormwater Design	212	\$	7,606		11,312		-	\$ -	\$ 18,918.85		1,986.48	·	
8.6.5 8.6.6	Update for 2020 City of Portland Std. Construction Specs	57	\$	3,483		6,009		5		\$ 9,496.90		996.66		
8.6.7	Intersection Design Vehicle Assumption Reports 95% PS&E Submittal	105 19	\$	5,122 1,079		9,088 1,844		9	\$ - \$ -	\$ 14,218.63 \$ 2,924.27		1,492.04 306.90	·	0.7%
8.6.8	Existing Sewer Relocation	52	\$	1,748		2,600	\$		\$ -	\$ 2,924.27 \$ 4,347.97		456.54	·	0.1%
8.6.9	42nd & Holman Survey/Design	118	\$	5,861		10,400		10		\$ 16,270.59		1,707.37	·	
8.6.10	BES Planting Coordination	81	\$	10,300		969	\$	1	\$ -	\$ 11,270.06			\$ 11,429.14	0.5%
9	ENVIRONMENTAL COORDINATION AND PERMITTING	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
10	UTILITY COORDINATION	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
11	RAILROAD COORDINATION	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
12	TRAFFIC ENGINEERING	0	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-	\$ -	0.0%
13	LOMBARD ODOT DESIGN	866	\$	49,413	\$	67,014	\$	64	\$ 150.00	\$ 116,641.14	\$	11,001.73	\$ 127,642.87	5.3%
13.1	Preliminary Investigations & Coordination	119	\$	7,142	\$	10,499	\$	10	\$ -	\$ 17,650.66	\$	1,723.64	\$ 19,374.30	0.8%
13.2	Project Management	68	\$	3,999		7,096		7	\$ -	\$ 11,101.90		1,164.99	·	
13.3	Roadway Design	250	\$	11,936		21,180		20		\$ 33,136.34		3,477.18		
13.4	Design Exceptions	90	\$	4,392		7,794		7		\$ 12,193.41		1,279.52	·	
13.5	Drainage Design	166	\$	8,151		14,463		14		\$ 22,627.76		2,374.46		
13.6 13.7	Traffic Design Erosion Control Design	101	\$	10,424 2,422		4,298	\$	- 4	\$ 100.00			705.53	\$ 10,523.60 \$ 7,429.01	
13.8	Survey	50 22	\$	949		1,684		2				705.53 276.40		
14	CONSTRUCTION PROJECT MANAGEMENT	654	\$	28,545		50,653		49		\$ 79,245.83		8,315.72		
14.1	Project Coordination	390	\$	16,918		30,021		29		\$ 46,967.17		4,928.53		
14.2	Monthly Invoices and Progress Reports	96	\$	3,384		6,005		6		\$ 9,394.33		985.80		
14.3	Construction Meetings	168	\$	8,243		14,627		14		\$ 22,884.33		2,401.38		1.0%
15	CONSTRUCTION SUPPORT	10,752	\$	948,571		528,671							\$ 1,578,191.71	67.6%
15.1	Construction Manager	2,956	\$	155,694	\$	276,279	\$	265	\$ 2,925.00	\$ 435,163.35	\$	45,357.24	\$ 480,520.59	19.8%
15.2	Construction Inspection	6,096	\$	589,848	\$	240,075	\$	230	\$ 9,750.00	\$ 839,902.30	\$	39,413.45	\$ 879,315.75	38.0%

# Breakdown of Costs - Dated: 07/29/2022

Amendment No. 3
PROJECT NAME: NE 42nd Ave Bridge Replacement

		Project Summary															
						GR	ANE	тот	AL (	CALCUL	.AT	TON SECTI	ON	ı			
	Job Classifications (Individuals' names are optional)  Direct Salary Rate (Avg, Actual, Max) Current Year	Hours		Escalated Direct Labor or NBR \$		Overhead		FCCM		Direct Expenses		Total Cost		Profit		Cost + Profit	% of Total Non-Contingency Labor Costs
Task#	Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) Fully Burdened Billing Rate																
	NTINGENCY TASKS/DELIVERABLES																
15.3	Construction Administration	1,480	\$	186,032	\$	-	\$	-	\$	975.00	\$	187,007.00	\$	-	\$	187,007.00	8.5%
15.4	Punch List / Close-Out	120	\$	8,953	\$	6,965	\$	7	\$	-	\$	15,925.19	\$	1,143.52	\$	17,068.71	0.7%
15.5	Dispute/Claim Resolution	100	\$	8,044	\$	5,352	\$	5	\$	-	\$	13,401.02	\$	878.64	\$	14,279.66	0.6%
16	QUALITY COMPLIANCE	1,560	\$	69,687	\$	123,660	\$	118	\$	-	\$	193,465.69	\$	20,301.46	\$	213,767.15	8.9%
16.1	Quality Compliance	1,560	\$	69,687	\$	123,660	\$	118	\$	-	\$	193,465.69	\$	20,301.46	\$	213,767.15	8.9%
17	CONSTRUCTION SURVEY QUALITY ASSURANCE	778	\$	33,637	\$	59,688	\$	57	\$ 10	0,000.00	\$	103,381.98	\$	9,799.10	\$	113,181.08	4.3%
17.1	Coordination, Calculations and Quality Assurance (QA) of Construction Contractor's Survey Work	384	\$	15,940	\$	28,285	\$	27	\$ 6	6,500.00	\$	50,751.38	\$	4,643.55	\$	55,394.93	2.0%
17.2	Locate, Recover and Reference Monuments	102	\$	4,382		7,776				1,000.00			\$	1,276.58		14,441.96	0.6%
17.3	Right of Way ("ROW") Monumentation	102	\$	4,382		7,776				1,000.00		13,165.38		1,276.58		14,441.96	0.6%
17.4	Monumentation Survey Filing Map (SFM)	190	\$	8,933		15,852				1,500.00			\$	2,602.39	\$	28,902.22	1.1%
	TOTAL Non-Contingency	16,310	\$			965,130		893				2,210,164.34	\$	158,825.60	\$ 2	2,368,989.94	
CONTING	GENCY TASKS/DELIVERABLES																
	TOTAL Contingency	0	\$		\$	-	\$	_		_				_			
					_		¥										
	TOTAL Non-Contingency + Contingency	16,310	\$	1,219,542	\$	965,130	\$	893	24	4,600.00	2	2,210,164.34		158,825.60	;	2,368,989.94	

WOC #XX, ATA #XXXX

(BOC version 10/7/08

# **Consulting Firm: David Evans and Associates, Inc.**

(Complete a separate sheet for Prime and each subconsultant, as needed. Totals must be manually entered into the BOC worksheet.)

Task #	ask # Description Basis of Estimate		A	Amount
NON-COI	NTINGENCY TASKS/DELIVERABLES	Include enough detail for the reader to understand how the estimate was determined.		
4	SURVEYING AND MAPPING		\$	800.00
4.6	Utility Pothole Locates	Flagging	\$	800.00
13	LOMBARD ODOT DESIGN		\$	50.00
13.8	Survey	Survey mileage	\$	50.00
15	CONSTRUCTION SUPPORT		\$	7,800.00
15.2	Mileage	20 Mile RT x 1 trip/day * 78 weeks (7,800 @ \$0.625/mile)	\$	2,925.00
	Mileage	20 Mile RT x 3 trip/wk * 78 weeks 5 days per week (1,560 @ \$0.625/mile)	\$	4,875.00
16	QUALITY COMPLIANCE		\$	-
17	CONSTRUCTION SURVEY QUALITY	ASSURANCE	\$	10,000.00
17	Survey	LS - Mileage to Site + Survey Recording, Monuments, Files	\$	10,000.00
			\$	18,650.00
CONTING	GENCY TASKS/DELIVERABLES	Include enough detail for the reader to understand how the estimate was determined.		
	TOTAL Contingency		\$	-
	TOTAL Non-Contingency + Conting	ency	\$	18,650.00

# **Consulting Firm: ACMS**

(Complete a separate sheet for Prime and each subconsultant, as needed. Totals must be manually entered into the BOC worksheet.)

ENCY TASKS/DELIVERABLES	Include enough detail for the reader to understand how the estimate was determined.		
OTPLICTION OURDORT			
STRUCTION SUPPORT		\$	5,850.00
ge	20 Mile RT x 1 trip/day * 78 weeks 5 days per week (7,800 @ \$0.625/mile)	\$	4,875.00
ge	20 Mile RT x 1 trip/wk * 78 weeks (1,560 @ \$0.625/mile)	\$	975.00
		\$	5,850.00
/ TASKS/DELIVERABLES	Include enough detail for the reader to understand how the estimate was determined.		
AL Contingency		\$	-
		determined.	determined.

TOTAL Non-Contingency + Contingency	\$ 5,850.00
-------------------------------------	-------------

TOTAL Non-Contingency + Contingency

Consulting Firm: Global Transportation Engineering (Complete a separate sheet for Prime and each subconsultant, as needed. Totals must be manually entered into the BOC worksheet.)

Task #	Description	Basis of Estimate	Aı	mount
INUN-CUNTINGENCT TASKS/DELIVERABLES		Include enough detail for the reader to understand how the estimate was determined.		
13	LOMBARD ODOT DESIGN		\$	100.00
13.6	Traffic Design	Photocopies	\$	100.00
			\$	100.00
CONTING	GENCY TASKS/DELIVERABLES	Include enough detail for the reader to understand how the estimate was determined.		
	TOTAL Contingency		\$	-

100.00

\$

### Go to BOC

# 1. Contract Numbers and Project Name

Info comes from Project Specific Contract or Work Order Contract.

## 2. Job Classifications

Job classifications come from Consultant's currently approved Escalated Salary Rate Schedule or Negotiated Billing Rate schedule.

## 3. Direct Salary Rate for Current Year

Direct rates must not exceed the maximum direct rates on Consultant's approved Escalated Salary Rate Schedule. If Consultant uses Negotiated Billing rates, enter zero.

## 4. Annualized Direct Salary Rate

Calculates the direct salary rates with escalation for multi-year contracts. If Consultant uses Negotiated Billing Rates, manually enter the negotiated billing rate instead.

## 5. Task Numbers and Names

Info comes from the negotiated Statement of Work.

## 6. Level of Effort

Enter estimated number of labor hours for each Job Classification for each subtask (yellow cells). The task totals will calculate automatically (green

# 7. Contingency Tasks/Deliverables

Estimated costs for Contingency Tasks must be separate from estimated costs for Non-contingency tasks (also called Required

# 8. Deleting rows and columns on spreadsheet

Recommend **hiding** rows and columns that are rows/columns, make sure applicable subtotals and

11. Multipliers for NBR 9. Enter Date of Final 10. Multipliers for Escalation For Primes or subconsultants using If current phase of contract covers multiple years, Negotiated Billing Rates, enter zero for After negotiations are enter the estimated percentage of work to be ALL the multipliers. complete, enter date of completed for each year. final agreed to BOC. Rreakdown of Costs - Dated: [enter date of final] MULTIPLIERS PAATA or Contract Num: ##### 150.00% % of budget in Current Year (CY) 20.00% Accepted Overhead 0.30% % of budget in CY+1 60.00% FCCM PROJECT NAME: [Enter Project Name] % of budget in CY+2 9.00% 20.00% Negotiated Profit % of budget in CY+3 Weighted Escalation Factor 0.00% Annual Escalation Rate 4.50% Cell Color Legend Yellow cells are for data entry 15. Certification [Enter Prime Consultant's Name] Click the cell for drop-down lists Creen cells have formulas (no data entry unless specified) to select appropriate certification **DATA ENTRY SECTION** 

\$0.00

\$0.00

\$0.00

\$0.00

0 0 0 0 0 0 0 0

\$0.00

\$0.00

\$0.00

\$0.00

Job Classifications

Fully Burdened Billing Rate \$285.19 \$0.00

10

100

(Individuals' names are optional)

Direct Salary Rate (Avg, Actual, Max) Current Year \$100.00

Annualized Direct Salary Rate (OR enter Negotiated Billing Rate) \$104.54

Grey cells are section dividers (no data entry unless specified)

ON-CONTINGENCY TASKS/DELIVERABLES

TASK 1 NAME

Subtask name

Subtask name

Subtask name

Subtask name

**TOTAL Non-Contingency** 

CONTIGENCY TASK NAME 1

**CONTINGENCY TASKS/DELIVERABLES** 

**TOTAL Contingency** 

TOTAL Non-Contingency + Contingency

**TASK 2 NAME** 

C1.1 Subtask name

C1.2 Subtask name

C1.3 Subtask name

C1.4 Subtask name

12. Multipliers for Escalated Billing Rates Obtain current Overhead and FCCM rates from ODOT Procurement Office. Overhead and FCCM rates are specific to the Prime or sub.

## 13. Profit for Escalated Billing Rates

ODOT negotiates profit rate with the Prime Consultant. The same profit rate is applied to Prime and all subconsultants under the contract.

## 14. Direct Expenses

\$0.00 \$0.00

Enter total estimate of direct expenses for each task or subtask. Show detailed breakdown of direct expenses on separate worksheet.

150.00% 0.30%

10 | \$ 1,045 | \$ 1,568 | \$ 3

10 \$ 1,045 \$ 1,568 \$ 3

10 \$ 1,045 \$ 1,568 \$ 3

0 | \$ - | \$ - | \$ -

0 | \$ - | \$ - | \$ -

0 | \$ - | \$ - | \$ -

0 | \$ - | \$ - | \$ -

0 | \$ - | \$ - | \$ -

0 | \$ - | \$ - | \$ -

16. Total Profit The total estimated profit can be used as the basis for negotiating the

fee on Cost Plus Fixed Fee

contracts.

17. Total Cost + Profit

The total estimated cost + profit is the basis for the contract's Not To Exceed amount for Time & Materials contracts and Fixed Fee contracts.

Additional information regarding BOC is available at the link below: **BOC Requirements** 

#### **Project Summary** Certification: Not Certified **CALCULATION SECTION** GRAND TOTAL CALCULATION SECTION 9.00% 40 \$ 4,182 \$ 6,272 \$ 13 \$ 100 \$ 10,567 \$ \$ 4,182 \$ 6,272 \$ 11,507 941 10 \$ 1,045 \$ 1,568 \$ 3 \$ 100 \$ 2,717 \$ 235 \$ 1,045 | \$ 1,568 \$ 100 \$ 2,717 \$ 235 2,952 25.0% \$ 2,617 \$ \$ 1,045 | \$ 1,568 \$ - \$ 2,617 \$ 235 2,852 25.0% \$ 2,617 \$ 10 \$ 1,045 \$ 1,568 | \$ 3 | \$ \$ 2,617 | \$ 2,852 25.0% \$ 2,617 \$ \$ 1,045 | \$ 1,568 \$ 3 \$ \$ 2,617 | \$ 2,852 25.0% 0 \$ - \$ - \$ - \$ - \$ 0 | \$ - | \$ - | \$ - | \$ - |\$ - |\$ | \$ - | \$ 0.0% \$ - \$ |\$ - |\$ - | \$ - | \$ - | \$ 0.0% - |\$ - |\$ 0.0% 40 \$ 4,182 \$ 6,272 \$ 13 \$ 100 \$ 10,567 \$ 6,272 \$ 13 \$ 100 \$ 10,567 \$ 941 \$ 11,507 40 \$ 4,182 \$ 100 \$ 10,454 \$ 15,681 \$ 31 \$ 100 \$ 26,266 \$ 2,352 15,681 \$ 31 \$ 100 \$ 26,266 \$ 2,352 \$ 100 | \$ 10,454 | \$ 15,681 | \$ 31 | \$ 100 | \$ 26,266 | \$ 15,681 \$ 31 \$ 100 \$ 26,266 \$ 2,352 \$ 100 \$ 10,454 \$ 2,352 28,619 - |\$ - |\$ - |\$ -\$ - \$ - |\$ - |\$ - |\$ -\$ - \$ - |\$ - |\$ \$ - \$ - |\$ - |\$ - |\$ -100 \$ 10,454 \$ 15,681 \$ 31 \$ 100 \$ 26,266 \$ 2,352 100 \$ 10,454 \$ 15,681 \$ 31 \$ 100 \$ 26,266 \$ 2,352 \$ 140 | \$ 14,636 | \$ 21,954 | \$ 44 | \$ 200 | \$ 36,833 | \$ 3,293 | \$ 40,126

not needed instead of deleting. If deleting totals still calculate correctly.

WOC #XX, ATA #XXXX

# EXHIBIT B STATEMENT OF WORK (SOW) – AMENDMENT 3 Engineering, Land Surveying and Related Services for

#### **NE 42ND AVENUE OVER NE LOMBARD STREET BRIDGE DESIGN**

Project Name:	Contract Number:
NE 42 <sup>nd</sup> Ave Over NE Lombard St Bridge Design	30006826
Roadway Name:	Work Order:
NE 42 <sup>nd</sup> Avenue	Amendment 3
Completion Date (revised):	
12/31/2024	
Owner:	Consultant:
Portland Bureau of Transportation (Agency)	David Evans and Associates
Winston Sandino (Project Manager)	Doug Johnson, PE (Project Manager)
and the second second	
1120 SW 5 <sup>th</sup> Ave, Suite 800	530 Center St NE
Portland, OR 97204	Salem, OR 97301
E02 922 E767 (Phone)	E02 408 1200 (Phone)
503.823.5767 (Phone)	503.408.1309 (Phone)
Winston.Sandino@portlandoregon.gov	dmj@deainc.com

#### **AMENDMENT OVERVIEW**

This amendment revises the SOW in three general packages:

- Amending the original contract with out of scope work for the project by adding street design, bridge, and retaining wall work not anticipated in the original contract scope, providing survey and design for ramp at the NW corner of 42<sup>nd</sup> & Holman, adding Intersection Design Vehicle Assumption Reports (IDVARs) for turn movements along the project, providing PWB design exception documents, modifying sewer designs as a result of potholing, providing additional survey research regarding ownership and jurisdictional boundaries, surveying utility potholes, adding utility coordination meetings, revising special provisions and estimate for the 2020 Portland Standard Construction Specifications, providing an additional (95%) submittal package for review and comment, and extending the project schedule.
- Incorporating work to NE Lombard as requested and funded by ODOT, detailed below.
- Adding a Construction Management and Inspection task to support PBOT during construction.

#### **CONSTRUCTION SUPPORT**

As described in Tasks 14 - 17, Consultant shall administer the construction of the 42<sup>nd</sup> Avenue Bridge Replacement and the NE Lombard work in accordance with the Project Plans, Special Provisions, and the City of Portland Standard Construction Specifications, in effect at the time the project is advertised for construction.

#### **ASSUMPTIONS & EXCLUSIONS**

#### **Construction Support Assumptions**

- Quality Assurance material testing is excluded from the Consultants Scope.
- Construction Survey Staking is excluded from the Consultant's Scope.
- The Owner will provide access to the eBuilder document management platform for managing construction documentation.
- The Construction Contractor will retain sole responsibility for site safety.

#### **EXHIBITS**

The following exhibits are incorporated into this Amendment by this reference:

Exhibit A: Statement of Work (SOW)

Exhibit B: Breakdown of Costs (BOC) dated 8/1/2022

Exhibit C: ODOT Approval for Funds

(ODOT to Pay PBOT up to \$597,000 for design and construction work on NE Lombard in conjunction with the T00713 project)

Exhibit D: ODOT Supplemental Information

#### **PROJECT SCHEDULE**

The project schedule is revised to assume that final stamped PS&E will be submitted by November 30, 2022 and construction completion will occur by May 31, 2025.

It is assumed that the Construction NTP date of approximately April 1, 2023. It is assumed that construction will be complete and closeout by May 31, 2025.

#### **TASKS**

#### <u>Task 1 Project Management and Coordination (Additional Scope)</u>

Consultant shall provide project coordination, invoicing, and progress reports for an additional 14 months due to the revised project schedule.

#### Task 2.5 Utility Coordination Meetings (Additional Scope)

Consultant shall schedule, prepare for, attend and document up to seven (7) additional Utility Coordination Meetings.

#### <u>Task 4.1</u> Survey Data Research (Additional Scope)

Consultant shall perform additional research to review available documentation pertaining to the extent of ownership and apparent discrepancies in the jurisdictional boundaries between ODOT, PBOT and Union Pacific Railroad in the vicinity of NE 42<sup>nd</sup> Avenue and NE Lombard Street.

#### Task 4.2 Additional ROW Parcel (Additional Scope)

Consultant shall prepare legal description and exhibit map for one additional ROW parcel as required for the sewer line relocation.

#### Task 4.6 Utility Pothole Locates (New Task)

Consultant shall survey and tie the location of 20 potholes for Lumen (CenturyLink) facilities throughout the length of the project and add data into the project base map.

#### Task 4.1 ROW staking (New Task)

Consultant shall stake existing and proposed ROW lines and temporary easement lines for 5 proposed ROW parcels.

#### Task 8.6 Final Engineering (60%, 90%, 100% and Final PS&E - Additional Scope)

#### Task 8.6.1 Street Design (Additional Scope)

Consultant shall investigate up to 3 alternatives for the southbound bike path intersection with the Lombard Street ramps. Consultant shall create and submit 12 additional Street Design plan sheets, including Title Sheet, Symbols, TOC, Typical Sections, Details, Horizontal Alignment and Street Plan and Profile sheets. Consultant shall update plans and incorporate review comments at each design stage and shall include additional sheets in 60%, 90%, 100% and Final PS&E submittals. Additional details must include varying pavement depths for various sections of the project as directed by PBOT. Consultant shall prepare exhibits showing the potential impacts of construction staging in the "half-moon" area between Lombard Street and the Lombard Ramps.

#### Task 8.6.2 Bridge Design (Additional Scope)

Consultant shall create and submit 3 additional Bridge Plan sheets. Additional details must include unique non-standard approach slabs at each end of the bridge. Consultant shall update plans and incorporate review comments at each design stage and shall include additional sheets in 60%, 90%, 100% and Final PS&E submittals.

#### Task 8.6.3 Retaining Wall Design (Additional Scope)

Consultant shall create and submit 7 additional Retaining Wall sheets. The retaining wall details must account for changes made to the roadway alignment after the Preliminary (30%) submittal. Three soldier pile walls, one precast concrete block wall and one precast barrier wall are included. Consultant shall update plans and incorporate review comments at each design stage and shall include additional sheets in 60%, 90%, 100% and Final PS&E submittals.

#### Task 8.6.4 Stormwater Design (Additional Scope)

Consultant shall revise and update stormwater conveyance design to incorporate results of utility potholing. Consultant shall prepare up to 6 Design Exceptions for Portland Water Bureau.

# <u>Task 8.6.5</u> <u>Update for 2020 City of Portland Standard Construction Specifications (Additional Scope)</u>

Consultant shall revise and update the preliminary special provisions and estimate to conform to 2020 City of Portland Standard Construction Specifications.

#### Task 8.6.6 Intersection Design Vehicle Assumption Reports (New Task)

Consultant shall create and submit up to 14 draft Intersection Design Vehicle Assumptions Reports (IDVARs) at public drive intersection and two driveways along the corridor to demonstrate proposed

vehicle access to existing businesses and public ROW. Consultant shall update and submit final IDVARs incorporating Agency comments.

#### Task 8.6.7 95% PS&E Submittal (New Task)

Consultant shall prepare and submit 95% Plans, Specifications and Estimate incorporating Agency comments on 90% submittal. Consultant shall record, track and respond to Agency comments on 95% submittal.

#### Task 8.6.8 Existing Sewer Relocation (Additional Effort)

Consultant shall provide additional effort to update and complete the relocated sewer plans, specifications and estimate.

#### Task 8.6.9 42<sup>nd</sup> & Holman Survey/Design (New Task)

Consultant shall collect topographic survey data needed for design at the 42<sup>nd</sup> & Holman intersection and add data into the DTM and project base map. Consultant shall create and submit 3 additional Street Design plan sheets covering the ADA design and associated drainage changes for the curb ramp at the NE corner of the 42<sup>nd</sup> & Holman intersection. Only the E-W ramp in the NW corner of the intersection will be designed, based on previous City investigations determining ADA compliance at the nearby ramps.

#### Task 8.6.10 BES Planting Coordination – International Tree Grove Support (New Task)

Consultant shall coordinate with BES and UF to understand tree removal impacts and re-planting requirements in the International Tree Grove. Consultant shall conduct a site visit and assess existing tree size, species, and health and include the trees to the existing tree inventory for the project.

Consultant shall modify existing design sheets and add approximately two additional planting sheets to incorporate tree removal areas which reflect changes to the staging area and BES's involvement with the International Tree Grove. These changes will require modifications to the overall plant schedule, tree plans and planting plans.

Consultant shall update associated cost estimate & quantities related to the elimination of the tree planting regarding the International Tree Grove area.

Consultant shall coordinate with BES staff, project arborist and City Urban Forester to confirm modifications to plans meet expectations for future planting and code requirements.

Consultant shall provide BES staff with base drawings for their use in producing a tree planting plan for the International Tree Grove and provide coordination to insure the inclusion of their drawing into the permit set for City review.

Consultant shall update tree inventory in correlation with Tree Plans and that tree mitigation numbers (including those in the International Tree Grove) meet with Urban Forestry requirements.

#### Task 13.1 Deliverables/Schedule: Consultant shall provide to the Agency:

- Updated tree inventory (as part of Task 9.2)
- Updated planting and tree removal plans (as part of Tasks 8.3 & 8.4)

#### TASK 13 ODOT DESIGN - LOMBARD

The City of Portland Bureau of Transportation (Agency) and Oregon Department of Transportation (ODOT) have entered into an agreement for Consultant to provide additional design services in connection with the Street Design Services for NE 42<sup>nd</sup> Ave Bridge Replacement. This comes as a request from ODOT to widen NE Lombard St in an approximate 500-linear foot stretch below the bridge.

Consultant shall prepare plans, specifications and estimates (PS&E) for the NE Lombard work that meet the requirements of the 2020 City of Portland Standard Construction Specifications.

The NE Lombard work will improve the existing right-of-way by widening paved shoulders on both the WB and EB direction of travel and constructing a sidewalk in the EB direction for pedestrians and cyclists to navigate this corridor more safely. Below is a detailed description of the work requested from ODOT:

#### **ROADWAY DESIGN**

- EB direction: Approximately 450 linear feet of improvement along NE Lombard. Replace the length of the existing asphalt path with an 8' sidewalk, 0.5' curb, 8' asphalt buffered bike lane (6' lane + 2' paint striped buffer)
  - The sidewalk will be 8' where it fits without impacting the proposed bridge abutment or slope paving, with a likely pinch point under the bridge (not to be less than 6' width).
  - Tie into existing driveway on the east end before power pole (shown in photo below).
     Adjacent property has removed driveway as access point.



 Begin new concrete sidewalk on west end with ODOT ramp details, matching to existing MUP access point shown below. This allows for future ODOT projects to connect to a new sidewalk.



• WB direction: Approximately 500 linear feet of improvement along NE Lombard. Widen to 6' min bike lane and using 2-horizontal to 1-vertical slopes into the UPRR ROW. Outside travel lane may be narrowed to 11' to accommodate this widened shoulder in places as required. A design exception is anticipated for these roadway cross sections.

#### **STORMWATER DESIGN**

- Direction from ODOT assumes no treatment will be added to existing drainage systems. ODOT has deemed the lack of federal nexus triggering treatment to this bike/ped improvement. Email detailing this assumption is attached Exhibit C. Scope to be completed with this project includes:
  - Adjust 3 inlets adjacent to the EB curb and reconnect with pipe
  - Water currently draining toward the railroad will continue to do so and will infiltrate without conveyance or treatment designs
- Railroad Ditch Analysis
  - A complete hydrologic and hydraulic study is required whenever new or additional drainage is added to the railroad right-of-way. The drainage pattern of the site before and after construction shall be analyzed. Hydraulic analysis for the ditch parallel to railroad tracks are sized to convey the 100-yr event with a minimum 10 feet bottom width. A drainage report will be completed in compliance with Railroad Hydraulic Criteria and report format.

#### **ODOT/Lombard Inclusion – Assumptions and Exclusions**

- No roadway lighting analysis or design along Lombard will be completed
- The work will be completed on a separate timeline from PBOT's project cycle and will require two (2) ODOT reviews. Final plans shall incorporate this additional work for contractor bidding.
- No additional submittals to UPRR shall be included to inform them of permanent changes adjacent to their ROW. Work in this amendment shall be included in 100% delivery package to UPRR. No additional support for UPRR aiding with ODOT changes is included in this effort.
- A single plan set and specification package will be completed inclusive of the bridge replacement project and the Lombard widening, all conforming to PBOT standards of drafting and specification formatting

- A separate cost estimate will be completed for work on Lombard, conforming to PBOT's engineering estimate template
- This will not require a BUD Urban Design Concurrence
- This will not require a new MAC presentation. An email updating the MAC of roadway changes will suffice and support will be provided by ODOT staff to complete this
- No access management process will be required. New design will terminate into existing before any adjacent driveways are touched.
- Existing culverts crossing Lombard Street are in good conditions and will not be replaced as part of this project (confirm assumption w/ ODOT culvert group)
- Drainage to the north (toward UPRR) will continue the same drainage pattern as today with a sliver fill. No additional treatment for flow control or quality will be included for that work. A RR ditch analysis will be completed for UPRR understanding and approval
- Infiltration tests from bridge replacement project will be accepted for any necessary ODOT design work.
- Infiltration rates found are high enough to manage stormwater runoff
- ODOT will provide as-built pavement information and pavement design information for improvements along NE Lombard Ave
- Assume 50mph design speed along Lombard (5mph over posted speed)
- No additional environmental assessment will be completed
- Tree impacts along Lombard will be treated according to ODOT tree removal policy and not reviewed via PBOT Urban Forestry Title XI standards.

#### <u>Task 13.1 Preliminary Investigations & Coordination</u>

Consultant shall coordinate with ODOT Project manager and ODOT staff prior to beginning work on PS&E deliverables to determine conceptual design of NE Lombard Street improvements. Coordination will occur via telephone communication, written correspondence, e-mail and meetings. This effort includes multiple iterations to requested improvements along NE Lombard by ODOT including varying slope angles and stability discussions, varied cross sectional widths and roadway design elements, investigations into existing stormwater facilities, and pavement sections.

#### Task 13.1 Deliverables/Schedule: Consultant shall provide to the Agency and ODOT:

- Meeting minutes and design memos describing design modification findings
- Agreed upon direction for improvements to NE Lombard for ODOT to be included with PBOT project

#### Task 13.2 Project Management

Consultant shall coordinate with ODOT Area Manager, ODOT technical leads, Agency Project Manager, and ODOT staff as needed throughout the duration of the project. Coordination will occur via telephone communication, written correspondence, e-mail and virtual on-line meetings.

Consultant shall schedule, prepare for, attend and document meetings through the Project duration. Meetings anticipated include:

- Team Meetings (4 x 1hr)
- Design Review Meetings (2 x 2hr)
- Agency Coordination Meetings (2 x 2hr)

#### Task 13.2 Deliverables/Schedule: Consultant shall provide to the Agency and ODOT:

- Maintenance and records of coordination activities and decisions made, and copies of documentation to Agency Project Manager upon completion of project, or as requested through the duration of the project.
- Agenda developed for each meeting, distributed one (1) business day prior to each meeting
- Meeting minutes distributed within five (5) business days following each meeting

#### Task 13.3 Roadway Design

Consultant shall complete a design of the roadway improvements detailed in this scope of work for delivery to ODOT & PBOT and final inclusion into PBOT's 42<sup>nd</sup> Over Lombard Project. Consultant shall document design efforts for ODOT & Agency review at the 60% level of completion and 100% level of completion.

Consultant shall complete 60% Roadway Design for the project with the goal of defining the project footprint, major items of work, and vertical and horizontal alignments. 60% deliverable will include a preliminary estimate of anticipated construction costs, and a draft list of additional ODOT construction specifications to be included with the PBOT project specifications. 100% Roadway plans for the Project will incorporate ODOT comments on the 60% submittal. Consultant shall update the final cost estimate and specifications.

Consultant shall prepare design deliverables that include the following:

- Roadway Design Plan & Profile (Assume 3 plan sheets)
- Horizontal Alignment Plans (Assume 1 plan sheet)
- Typical Sections (Assume 1 plan sheet)
- Details (Assume 1 plan sheet)
- Construction Cost Estimate

Consultant shall coordinate all submittals with the ODOT. Consultant shall respond to and update the plans as a result of review comments at each design review stage, assuming 2 reviews (60% & 100%) prior to stamped deliverable.

Consultant shall complete an internal QA/QC review of each submittal prior to delivery to the ODOT.

#### **Task 13.3 Deliverables/Schedule:** Consultant shall provide to the ODOT:

- One (1) full-size, 11"x17" set of preliminary design plans in Adobe Acrobat(.PDF) format
- 60% PS&E Engineer's Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- 100% PS&E Engineer's Final Bid Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- List of additional or edited special provisions required from ODOT to be included in PBOT Standard Project Special Provisions (at 60%)
- 100% PS&E Final stamped Technical Specifications in Microsoft Word

• Electronic files in MicroStation (.dgn) Design File format as part of the larger T00713 project. The MicroStation design files shall be kept on their original coordinate base. Level names that currently exist shall remain. New logical level names may be added as needed. All necessary MicroStation resource files (font libraries, line styles, etc.) shall be included with the returned set. File structure is to be organized so that the CADD operator can open the disk, go to a specific plan sheet and print the plan sheet in the final condition without having to reattach or move reference files. All files in MicroStation/InRoads format, file .dgn, .alg, .dtm and all CED cogo points.

#### Task 13.4 Design Exceptions

Consultant shall prepare up to 1 (one) ODOT Design Exception (DE) Request for the Project. The Design Exception Request must be prepared using the ODOT standard Design Exception Request form defined in the Highway Design Manual and processed by ODOT staff. The Design Exception is anticipated to include:

- Shy distance to guardrail, Shoulder Width, and WB outside lane width on NE Lombard St
  - a. Excludes any DE for WB inside lane width, EB lane widths, or median width along NE Lombard St

ODOT will provide comments on the draft Design Exception Request within 10 business days of the submittal to ODOT. The final Design Exception Requests for the Project will be submitted no later than 10 business days after receipt of comments. ODOT will coordinate approval of the Design Exception Requests.

#### **Task 13.4 Deliverables/Schedule:** Consultant shall provide to the ODOT

- 1 electronic copy (WORD and .pdf format) of Draft Design Exception Requests
- 1 electronic copy (WORD and .pdf format) of Final Design Exception Requests no later than 2 weeks after receipt of comments.

#### Task 13.5 Drainage Design

Consultant shall complete a design of the drainage improvements detailed in this scope of work for delivery to ODOT & PBOT and final inclusion into PBOT's 42<sup>nd</sup> Over Lombard Project. Consultant shall document design efforts for ODOT review at the 60% level of completion and 100% level of completion. This work shall meet current BES standards within the *City of Portland Stormwater Management Manual*.

Consultant shall complete 60% Drainage Design for the project and will develop drainage design including plans, profiles, stormwater details and typical sections of drainage. 60% deliverable will include a preliminary estimate of anticipated construction costs, and a draft list of additional ODOT construction specifications to be included with the PBOT project specifications. Consultant shall prepare a preliminary stormwater memo describing the results of the analysis.

100% drainage plans for the Project will incorporate ODOT comments on the 60% submittal and will develop drainage design including plans, profiles, stormwater details for the storm system proposed improvements. Consultant shall update the final cost estimate and specifications.

Consultant shall complete a Railroad Ditch Analysis which includes a complete hydrologic and hydraulic study of new or additional drainage added to the railroad right-of-way. The drainage pattern of the site

before and after construction shall be analyzed. The hydraulic analysis will review ditch capacity during the 100-year storm event under existing and proposed conditions. A drainage report will be completed in compliance with Railroad Hydraulic Criteria and report format.

Consultant shall coordinate all submittals with the ODOT. Consultant shall respond to and update the plans as a result of review comments at each design review stage, assuming 2 reviews prior to stamped deliverable.

Consultant shall complete an internal QA/QC review of each submittal prior to delivery to the ODOT.

#### **Task 13.5 Deliverables/Schedule:** Consultant shall provide to the ODOT:

- Railroad Ditch Analysis (Draft with 60%, Final with 100% deliverables)
- One (1) full-size, 11"x17" set of preliminary design plans in Adobe Acrobat(.PDF) format
- 60% PS&E Engineer's Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- 100% PS&E Engineer's Final Bid Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- List of additional or edited special provisions required from ODOT to be included in PBOT Standard Project Special Provisions (at 60%)
- 100% PS&E Final stamped Technical Specifications in Microsoft Word

#### Task 13.6 Traffic Design

Consultant shall prepare 60% plans, specifications, and construction cost estimates for the permanent signing and pavement markings associated with the proposed improvements.

Consultant shall update traffic control plans (including TPAR information) to incorporate additional work on Lombard and revise the TMP to incorporate those changes. Consultant shall update ODOT's workzone decision tree. No presentation or update to ODOT MAC is included. The design must be completed in accordance with applicable MUTCD and ODOT standards.

#### **Task 13.6 Deliverables/Schedule:** Consultant shall provide to the ODOT:

- One (1) full-size, 11"x17" set of preliminary design plans in Adobe Acrobat(.PDF) format
- 60% PS&E Engineer's Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- 100% PS&E Engineer's Final Bid Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- List of additional or edited special provisions required from ODOT to be included in PBOT Standard Project Special Provisions (at 60%)
- 100% PS&E Final stamped Technical Specifications in Microsoft Word
- Updated TMP & ODOT Work Zone Decision Tree (Up to one revision)

#### Task 13.7 Erosion Control Design

Consultant shall prepare Erosion Control Plans. The Erosion Control Plans will include construction notes and details regarding the placement of items such as sediment barriers, drainage inlet protection, silt fences and seeding.

#### **Task 13.7 Deliverables/Schedule:** Consultant shall provide to the ODOT:

- One (1) full-size, 11"x17" set of preliminary design plans in Adobe Acrobat(.PDF) format
- 60% PS&E Engineer's Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- 100% PS&E Engineer's Final Bid Estimate with bid items and quantity take-offs in Microsoft Excel with narrative explaining assumptions and contingencies
- List of additional or edited special provisions required from ODOT to be included in PBOT Standard Project Special Provisions (at 60%)
- 100% PS&E Final stamped Technical Specifications in Microsoft Word

#### Task 13.8 Survey

Consultant shall provide a topographic survey along the entire frontage of tax lot 11800 at least 10-feet beyond the public right-of-way of Northeast Lombard Street and update the current topographic base map.

#### **Task 13.8 Deliverables/Schedule:** Consultant shall provide to the Agency:

Update to existing Microstation basemap for PBOT project T00713

#### TASK 14 CONSTRUCTION PROJECT MANAGEMENT

Consultant shall provide the management, coordination, and direction to the Consultant Project Team throughout the Project. Consultant shall coordinate with PBOT Project Manager and staff throughout the project.

#### Task 14.1 Project Coordination

This activity is continuous throughout the duration of these CA/CEI Services. Consultant shall guide and direct the CA/CEI Services and Consultant's team in conformance with all applicable requirements of the CA/CEI Services and the Project's goals and objectives. Consultant shall monitor progress of the Project and CA/CEI Services, and provide coordination between the Owner, Agency, and other project stakeholders.

#### Task 14.1 Deliverables/Schedule: Consultant shall provide to the Agency:

- Continuous, on-going coordination and communication as needed to appropriately manage the CA/CEI Services
- Maintenance and records of coordination activities and decisions made, and copies of documentation to Agency Project Manager upon completion of project, or as requested through the duration of the project.

#### Task 14.2 Monthly Invoices and Progress Reports

Consultant shall prepare monthly billing invoices in a format approved by the Owner Contract Administrator. Consultant shall prepare and submit monthly invoices and progress reports to the Owner.

#### **Task 14.2 Deliverables/Schedule:** Consultant shall provide to the Owner

Monthly progress reports detailing work completed and identifying any issues or concerns that
may affect the CA/CEI Services and budget or the Project schedule and Project budget.

 Monthly invoices that reflect the project schedule and show the budgeted cost for each task, tasks completed/percent complete, actual cost/cost to date, earned value, billable hours per person per task, and cost of materials submitted within ten (10) days of month-end.

#### Task 14.3 Construction Meetings

Work with the Agency CED Supervising Engineer to schedule, develop and distribute agendas for, lead, and distribute meeting notes for the following meetings:

- **Pre-construction Agency staff roles and responsibilities meeting** (virtual via Teams/Zoom). *Note:* This is the one meeting on this list that will be led by the Agency CED Supervising Engineer. Consultant Construction Manager shall attend and introduce themself.
- Pre-construction meeting with Agency staff and construction contractor (virtual via Teams/Zoom)
- Pre-construction site visit with Agency staff and construction contractor
- **Utility coordination meeting** prior to construction (including Bureau of Environmental Services, Portland Water Bureau, PGE/PP&L, NW Natural, CenturyLink, others as appropriate)
- Additional (up to 4) meetings with individual utilities as needed during construction
- **Weekly construction meetings** (virtual via Teams/Zoom, 30-90 minutes each, 60 minutes on average) covering the following topics:
  - Erosion control issues
  - Site security issues
  - o Site safety, including addressing any incidents or near misses, and COVID-19 protocols
  - Traffic control
  - Contractor quality control / materials testing
  - Contractor current construction activities and three-week look-ahead
  - Contractor submittals and status
  - Staking requests
  - Other issues as appropriate

#### **Task 14.3 Deliverables/Schedule:** Consultant shall provide to the Owner:

Meeting agendas and minutes distributed to the team. Agendas to be provided at least one (1) working day before the meeting. Minutes to be distributed within three (3) business days.

#### TASK 15.0 CONSTRUCTION SUPPORT

#### Task 15.1 Construction Manager

Agency requires a contracted Construction Manager for the full duration of the construction phase of the Project. Working with guidance of a PBOT Civil Engineering & Drafting (CED) Supervising Engineer, Consultant shall provide the following construction management services. Assumed level of effort includes a full-time manager for an approximate 78-week construction duration

#### Qualifications:

Consultant Construction Manager will have a bachelor's degree in Engineering, Construction Management or a related field and will be a Licensed Professional Engineer (PE), Certified Construction Manager (CCM), or Project Management Professional (PMP).

Consultant Construction Manager shall maintain the inspector certifications for each of the disciplines required on the project.

The following are the approved ODOT Inspector Certifications currently in place in the Inspection Quality Assurance Program:

- Certified Bridge Construction Inspector ("CBCI")
- Certified Environmental Construction Inspector ("CECI")
- Certified Traffic Signal Inspector ("CTSI")
- Certified General Inspector ("CGI")
- Certified Asphalt Concrete Pavement Inspector ("ACP")
- Certified Drilled Shaft Inspector ("CDSI")
- Certified ADA Inspector ("ADAI")

Consultant shall provide the following Construction Management services:

- Lead project team coordinator.
- Facilitator between City and Contractor.
- Coordinate Tree Protection Inspections.
- Conduct and attend weekly project meetings, prepare agenda, take, and distribute minutes.
  - Distribute agenda digitally prior to each meeting
  - Distribute minutes within 5 days of project meeting
- Negotiate, prepare, and distribute contract change orders (CCO)
  - PBOT PM will provide final authorization and approval for all Contract Change Orders, design changes, or other contract modifications.
- Prepare and present design changes during construction.
- Review and approve submittals, payments, and inspectors' daily reports.
- Respond to RFI's and Clarifications.
- Prepare Written Orders.
- Track, document and facilitate the resolution of claims from start to finish.
- Coordinate, facilitate and resolve utility conflicts.
- Review contractor's weekly erosion control reports.
- Meet with ODOT Region Assurance Specialist, QCS and Technician when scheduled, and coordinate the resolution of outstanding items.
- Address missing documentation in a timely manner (reporting and receiving).
- Monitor and approve all subcontracted work.
- Enforce accountability.
- Monitor DBE, OJT and EEO reporting requirements and enforce contract compliance.
- Coordinate, inspect, write, and deliver punch list.
- Coordinate, inspect final walk-thru and document.
- Collect the as-builts from contractor, and inspectors; signals, ODOT structures, etc.
- Create single as-built plan set after consideration of as-builts received from other parties stated above

#### **Task 15.1 Deliverables/Schedule:** Consultant shall provide to the Owner:

• Above listed reports and required documentation

#### Task 15.2 Construction Inspection

Qualifications:

Consultant Inspector will be certified in the discipline of the project that they are inspecting. Assumed level of effort includes two full-time inspectors for an approximate 78-week construction duration. The following are the approved ODOT Inspector Certifications currently in place in the Inspection Quality Assurance Program:

- Certified Bridge Construction Inspector ("CBCI")
- Certified Environmental Construction Inspector ("CECI")
- Certified Traffic Signal Inspector ("CTSI")
- Certified General Inspector ("CGI")
- Certified Asphalt Concrete Pavement Inspector ("ACP")
- Certified Drilled Shaft Inspector ("CDSI")
- Certified ADA Inspector ("ADAI")

Consultant shall provide the following Construction Inspection services:

- Inspection of PBOT facilities according to the PBOT Inspection Manual
- Attend Weekly Meetings, turn in dailies and QC documents through RoadRunner
- Monitor and inspect all traffic control daily and note on daily report if applicable.
- Monitor safety at jobsite. Document and inform contractor and CM if concerns arise. Check all
  erosion control and pollution control daily
- Complete Daily Inspection Reports (DIR), daily and turn in right away to RoadRunner.
- Track all disputed work, extra work or changed work on PBOT Force Account Forms
- Complete Field Inspection Reports for all project related materials incorporated into project at the time of installation. Turn in with installation sheets.
- Complete installation sheets at time of install, keep an as-paid log of plan sheets. Installation sheets to Tech within 3 business days of cutoff.
- Perform employee interviews for all contractors. This in RoadRunner.
- Refer public complaints to CM.
- Prepare preconstruction photo-log to document existing conditions
- Take project photos daily with date/time stamp. Load into RoadRunner.
- Keep a record of As-Constructed conditions. Inspector turns in record copy at the completion of project via RoadRunner (folder 411). Also keep as-paids here.
- Coordinate inspections with SSL, PWB and BES inspectors.
- Review survey requests with CM and contractor and provide concurrence.
- Witness and document contractor QC testing.
- Inspect punch list with CM.
- Inspect final walk-thru with CM.
- Will be allowed to reject or stop work.
- Create as-builts and transmit to CM.

#### **Task 15.2 Deliverables/Schedule:** Consultant shall provide to the Owner

- Above listed reports and required documentation
- At a minimum, daily inspection reports uploaded daily and provided to project construction manager weekly for project filing

#### Task 15.3 Construction Administration

Assumed level of effort includes one construction administrator/technician half-time for an approximate 78-week construction duration. Consultant shall provide the following Construction Administration/ Engineering Technician services:

- Responsible for reporting on, filing and distributing all quality documentation.
- Maintain up-to-date test summaries A and B.
- Prepare progress estimates in RoadRunner.
- Track, distribute and transmit submittals in RoadRunner.
- Report missing submittals or quality documents at weekly meetings.
- Attend weekly project meetings.
- Verify calculations, quantities, and sign off on all installation sheets.
- Maintain and upkeep project files (electrical and hard copy).
- Prepare closeout documents.
- Verify certified payrolls and labor compliance documentation.
- Review Subcontracts and prepare Report on Subcontractor's Request.
- Meet with CM, QCS and ODOT RAS during project reviews and assist in resolving all missing documentation.

#### **Task 15.3 Deliverables/Schedule:** Consultant shall provide to the Owner:

Above listed reports and document control

#### Task 15.4 Punch List / Close-Out

- Work with construction contractor and Agency Project Team to develop punch list at substantial completion of construction.
- Schedule and attend two (2) walk-throughs with construction contractor and Agency construction staff, before and after completion of punch list items.
- Work with Agency CED Supervising Engineer to issue a notice of Substantial Completion.
- Oversee close out process, resolving all pay item quantities, verify punch list items are complete, and that contractor has met the requirements of the contract.

#### **Task 15.4 Deliverables/Schedule:** Consultant shall provide to the Owner:

- Maintenance of punch list items and resolution
- Bluebeam (.PDF) red-lined construction notes to serve as as-built documentation

#### Task 15.5 Dispute/Claim Resolution

- Work with Agency construction staff, Agency Project Manager, and construction contractor to review and resolve any claims filed by the contractor during or after construction.
- Participate in claim resolution process for an assumed single (1) claim, without involving legal support from either PBOT nor consultant agencies. Additional support for claims will require additional work order support.

#### **Task 15.4 Deliverables/Schedule:** Consultant shall provide to the Owner:

• Support for up to one (1) claim resolution excluding legal support

#### TASK 16.0 QUALITY COMPLIANCE

Consultant shall provide the following Quality Compliance services:

- Request and coordinate QA testing.
  - o QA testing is assumed to be performed by PBOT or ODOT technicians.
- Review material submittals as requested by CM.
- Review QA/QC documents as a quality check.
- Assist Tech/Inspector with QA/QC requirements, review and monitor the books for completeness, provide guidance as necessary.
- Attend ODOT RAS review meetings; assist in resolving issues as assigned.
- Attend project meetings as necessary.
- Attend pre-paving conference.

#### **Task 16.0 Deliverables/Schedule:** Consultant shall provide to the Owner

Above listed reports and quality control documentation

#### TASK 17.0 CONSTRUCTION SURVEY QUALITY ASSURANCE

Consultant shall provide Quality Assurance Survey services as follows:

Consultant's licensed Land Surveyor shall provide land surveying Services and deliverables that conform to all state statutes pertaining to survey and land boundary laws. These include, but are not limited to, the following Oregon Revised Statutes (ORS):

- ORS Chapter 92 Subdivisions and Partitions
- ORS Chapter 93 Conveyancing and Recording
- ORS Chapter 209 County Surveyors
- ORS Chapter 672 Professional Engineers; Land Surveyors; Photogrammetrists; Geologists

Consultant's survey personnel shall perform all construction surveying tasks in accordance with the most recent version of the <u>ODOT Construction Surveying Manual for Contractors</u>, as required to ensure conformance of the Project construction with the approved plans and specifications. Consultant shall provide qualified personnel to verify the Project is constructed to the lines and grades as shown, specified, or established.

# <u>Task 17.1</u> Coordination, Calculations and Quality Assurance (QA) of Construction Contractor's Survey Work

#### Consultant shall:

- Coordinate with CM and Construction Contractor (CC) as needed to require compliance with and verify that the construction survey work completed by the CC for the Project is in conformance with the approved plans, specifications, and applicable laws.
- Attend and participate in a pre-survey meeting
- Coordinate with CC, CM, and PM to determine participants and to schedule the pre-survey meetings at an agreed-upon time no later than 14 calendar days prior to beginning construction.
- Prepare and distribute the meeting agenda to PM and other participants at least 4 business days prior to meeting.
- Prepare and distribute the meeting minutes to PM and other participants within 1 week of meeting.

- Perform QA review of CC's survey data such as, but not limited to, office calculations and stakeout information.
- Provide memo indicating dates and times grade calculation checks were performed and the
  results of the calculation checks along with copy of notification to CC on items not in compliance
  from calculation checks and when/what corrections were made.
- Perform QA review of CC's field survey work. Provide memo indicating dates and times the survey field checks of CC's survey work were performed and the results of the field checks along with copy of notification to CC on items not in compliance with approved construction plans and when/what corrections were made.
- Provide a map, digital ASCII file of the coordinates, and field notes as applicable, of horizontal and vertical control points (from the construction contract plans) for use by the CC's surveyor.
- Prepare horizontal and vertical alignment print outs, construction grade data, including annotated cross sections (from the construction contract plans) for use by the CC's surveyor.

#### **Task 17.1 Deliverables/Schedule:** Consultant shall provide to the Owner

- Pre-survey meeting agenda Submit 1 copy to each conference attendee and the PM 4 business
  days prior to the scheduled meeting. Pre-survey meeting minutes 1 copy to each meeting
  attendee and the PM within 1 week after the meeting.
- Memo regarding grade calculation checks Submit via email to CC with copy to PM within 5 business days of receipt of survey data from CC.
- Memo regarding survey field checks Submit via email to CC with copy to PM within 5 business days of request.
- Map, digital ASCII file of the coordinates and field notes as applicable, of horizontal and vertical control points Submit original to CC at the pre-construction or pre-survey meeting.
- Horizontal and vertical alignment print outs, construction grade data, including annotated cross sections Submit original to CC at the pre-construction or pre-survey meeting.

#### Task 17.2 Locate, Recover and Reference Monuments

Consultant shall recover and reference monuments (as indicated below) in the location of the ROW identified in the control, recovery and retracement survey. Consultant shall document in field notes the monuments either found, or not found during the search phase. Consultant shall ensure compliance with the requirements of ORS 209.155.

For all monuments not destroyed during construction activities, Consultant shall note in the field notes that:

- All monuments were recovered (include date),
- All monuments exist per the control, recovery and retracement survey, or
- All monuments are within the new ROW and do not need to be reset.

The monuments may or may not be retied to confirm their original surveyed positions. This decision will be made based on Consultant surveyor's professional judgment.

#### Consultant shall:

Recover monuments shown on the control, recovery and retracement survey to confirm they
either still exist or were destroyed during construction. Consultant shall note destroyed
monuments that are within the Project limits.

- Locate and recover any new monumentation within the Project work zone which were placed
  after the original field search and survey ties, which may include research of county records as
  appropriate. Agency may provide monuments tied prior to construction not filed with the
  control, recovery and retracement survey.
- Use Agency point number range for control points and monuments.

#### **Task 17.2 Deliverables/Schedule:** Consultant shall provide:

- ASCII File of located monuments with monument point numbers and coordinates and any other
  electronic files (such as .fwd, .alg, ASCII, etc.) created or produced for the Project documenting
  Monumentation surveying Submit within 14 calendar days after recording of the survey filing
  map (SFM) with the appropriate County Surveyor's office.
- Original field notes and 1 electronic .pdf copy Submit within 14 calendar days after recording of the SFM with the appropriate County Surveyor's office.

#### Task 17.3 Right of Way ("ROW") Monumentation

Consultant shall document the location of the ROW lines at the completion of the Project construction. Consultant shall preserve the location of the monuments found prior to construction and shall document the ROW lines for all property acquired for the Project.

Unless otherwise approved by the Agency, Consultant shall monument the new ROW using the Boundary Method in conformance with the <u>ODOT Monumentation Policy</u> and the <u>Survey Filing Map Standards</u> (available at <a href="http://cms.oregon.gov/ODOT/HWY/GEOMETRONICS/Pages/documents.aspx">http://cms.oregon.gov/ODOT/HWY/GEOMETRONICS/Pages/documents.aspx</a>). Consultant may be assigned the method of monumentation, which could be the Network Method, Boundary Method, or a combination of both methods which are defined in the <u>ODOT Monumentation Policy</u>.

Consultant shall set control and ROW monuments, as applicable, within 60 calendar days after issuance of Second Notification.

#### **Task 17.3 Deliverables/Schedule:** Consultant shall provide:

- Bentley MicroStation.dgn file displaying the control and monuments as applicable Submit within 14 calendar days after recording of the SFM with the County Surveyor's office.
- Bentley Inroads.alg(s) file with centerline(s), control and monument data, and report of alignment(s) showing coordinates, bearing, stations, etc., per Bentley Inroads standard reports – Submit within 14 calendar days after recording of the SFM with the County Surveyor's office.
- Final report of monument station and offset relationship to the alignment(s) Submit within 14 calendar days after recording of the SFM with the appropriate County Surveyor's office.
- Agency ROW files and copies of all deeds, court judgments, etc., from the County Submit within 14 calendar days after recording of the SFM with the County Surveyor's office.
- Original field notes and 1 copy in .pdf format Submit within 14 calendar days after recording of the SFM with the County Surveyor's office.
- Final ASCII file of all control and monument points set Submit within 14 calendar days after recording of the SFM with the County Surveyor's office.

#### Task 17.4 Monumentation Survey Filing Map (SFM)

Consultant shall create SFM in accordance with Agency Survey Filing Map Standards, County and ORS 209 requirements. Consultant shall ensure preservation of existing survey markers in conformance with Chapter 6.2 of the ODOT Construction Survey Manual for Contractors.

Consultant shall monument any newly acquired ROW in accordance with <u>Survey Filing Map Standards</u> <u>for Right of Way Monumentation</u>.

Consultant shall submit the survey to the appropriate county for filing on archival Mylar or acceptable media per county requirements.

#### **Task 17.4 Deliverables/Schedule:** Consultant shall provide:

- SFM —File at the appropriate County Surveyor's office within 45 calendar days after setting monuments.
- Submit the deliverables below to Owner PM (required for projects on or connected to an ODOT facility).
- Final recorded SFM and narrative regarding methodologies used Submit within 14 calendar days after recording of the SFM with the appropriate County Surveyor's office.