South Central Waterfront

Agenda Item 2.b.

Consultant's Report & Review of 305 S Congress PUD Application Infrastructure Costs

Updated: March 12, 2020

DRAFT

CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	1:	Infrastructure Improvements (DRAFT) - Key Map	(prepared by Endeavor consultant team)
	2:	Waterfront Park Concept Map	(prepared by Endeavor consultant: CMG Landscape Architecture)
	3:	Waterfront Park Cost Estimates Table	(prepared by Endeavor consultant: CMG Landscape Architecture)
	4:	Site Infrastructure - Program Cost Metrics Spreadsheet	(prepared by Endeavor consultant: DPR Construction)
	5:	Below-Grade Parking Cost Spreadsheet	(prepared by Endeavor consultant: DPR Construction)
2.b.ii.	**City Of Austin Review & Adjustments Of Cost Estimates For Site Improvements As Submitted By Endeavor Real Estate Group**		Consultant review of item 2.b.i.
	1:	MEMO: Review of Cost Estimates submitted by Applicant for 305 S. Congress PUD	(prepared by Project Cost Resources, consultants to CoA/PAZ)
	2:	Adjusted Direct Costs for 305 S. Congress PUD	(prepared by CoA/PAZ staff, based on Project Cost Resources memo)

COST ESTIMATES PACKET FOR SITE IMPROVEMENTS
FROM ENDEAVOR REAL ESTATE GROUP

At the request of the City of Austin, Planning & Zoning Department, the Endeavor Real Estate Group, the development partner of the Applicant team for the 305 S. Congress Planned Unit Development (PUD) amendment submission, provided cost estimates for the PUD-proposed Site Improvements, including Waterfront Park, Plazas, Streets and Streetscapes (improvements to existing and newly proposed), and Underground Parking, as well as Site Preparation and Utilities Infrastructure.

The purpose of the City request was twofold: (1) better understand the proposed Site Improvements in terms schematic design and the quantity and qualities of building materials; and (2) conduct an independent review of the submitted cost estimates with City-hired consultants as part of the ongoing South Central Waterfront planning update.

The Endeavor Real Estate Group submitted the following documents, prepared by their consultants, in support of their cost estimates:

Attachment 1: Infrastructure Improvements (DRAFT) - Key Map
(prepared by Endeavor consultant team)

Attachment 2: Waterfront Park Concept Map
(prepared by Endeavor consultant: CMG Landscape Architecture)

Attachment 3: Waterfront Park Cost Estimates Table
(prepared by Endeavor consultant: CMG Landscape Architecture)

Attachment 4: Site Infrastructure - Program Cost Metrics Spreadsheet
(prepared by Endeavor consultant: DPR Construction)

Attachment 5: Below-Grade Parking Cost Spreadsheet
(prepared by Endeavor consultant: DPR Construction)

These documents have been assembled in this packet.

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South Central Waterfront

2.b.i. Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group

1. Infrastructure Improvements (DRAFT) - Key Map

Updated: March 12, 2020

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CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	1:	Infrastructure Improvements (DRAFT) - Key Map	(prepared by Endeavor consultant team)

305 S Congress Avenue

Infrastructure Improvements (DRAFT)

2019.10.30

KEY	PROJECT NAME	AREA sqft	AREA acre	LENGTH ft
BS-1	Barton Springs Segment 1	70,146	1.61	-
Barton Springs Extension Subtotal		**70,146**	**1.61**	**-**
S-1	Internal Street Segment 1	15,710	0.36	-
S-2	Shared Street Segment 2	26,319	0.60	-
S-3	Internal Street Segment 3	16,212	0.37	-
S-4	Internal Street Segment 4	10,083	0.23	-
Internal Street Subtotal		**68,324**	**1.57**	**-**
G-1	Lakefront Park	305,641	7.02	-
G-2	Presenvation/Relocation of Trees	-	-	-
G-3	Regrading Works	-	-	-
Park Land Subtotal		**305,641**	**7.02**	**-**
P-1	Great Steps	28,308	0.65	-
P-2	Landscape Plaza 2 (Adjacent to park)	3,098	0.07	-
P-3	Landscape Plaza 3 (Adjacent to park)	3,322	0.08	-
P-4	Landscape Plaza 4 (Adjacent to park)	13,781	0.32	-
P-5	Landscape Plaza 5 (Congress edge)	9,327	0.21	-
P-6	Landscape Plaza 6 (Congress edge)	3,236	0.07	-
P-7	Grand Pedestrian Walkway	15,982	0.37	-
Plaza/Landscape Area Subtotal		**77,054**	**1.77**	**-**
W-1	Inundated Land	28,256	0.65	-
Inundated Land Subtotal		**28,256**	**0.65**	**-**

Infrastructure Improvement outside Property Line

C-1	Congress Intersection 1	22,100	0.51	-
C-2	Congress Improvement 2	55,700	1.28	-
Congress Improvement Subtotal		**77,800**	**1.79**	**-**
BS-2	Barton Springs Improvement 2	35,500	0.81	-
BS-3	Barton Springs - E Riverside Intersection	6,500	0.15	-
Barton Springs Improvement Subtotal		**42,000**	**0.96**	**-**

*Preliminary estimation of areas based on conceptual design and subject to change

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South Central Waterfront

2.b.i. Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group

2. Waterfront Park Concept Map

Updated: March 12, 2020

CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	2:	Waterfront Park Concept Map	(prepared by Endeavor consultant: CMG Landscape Architecture)

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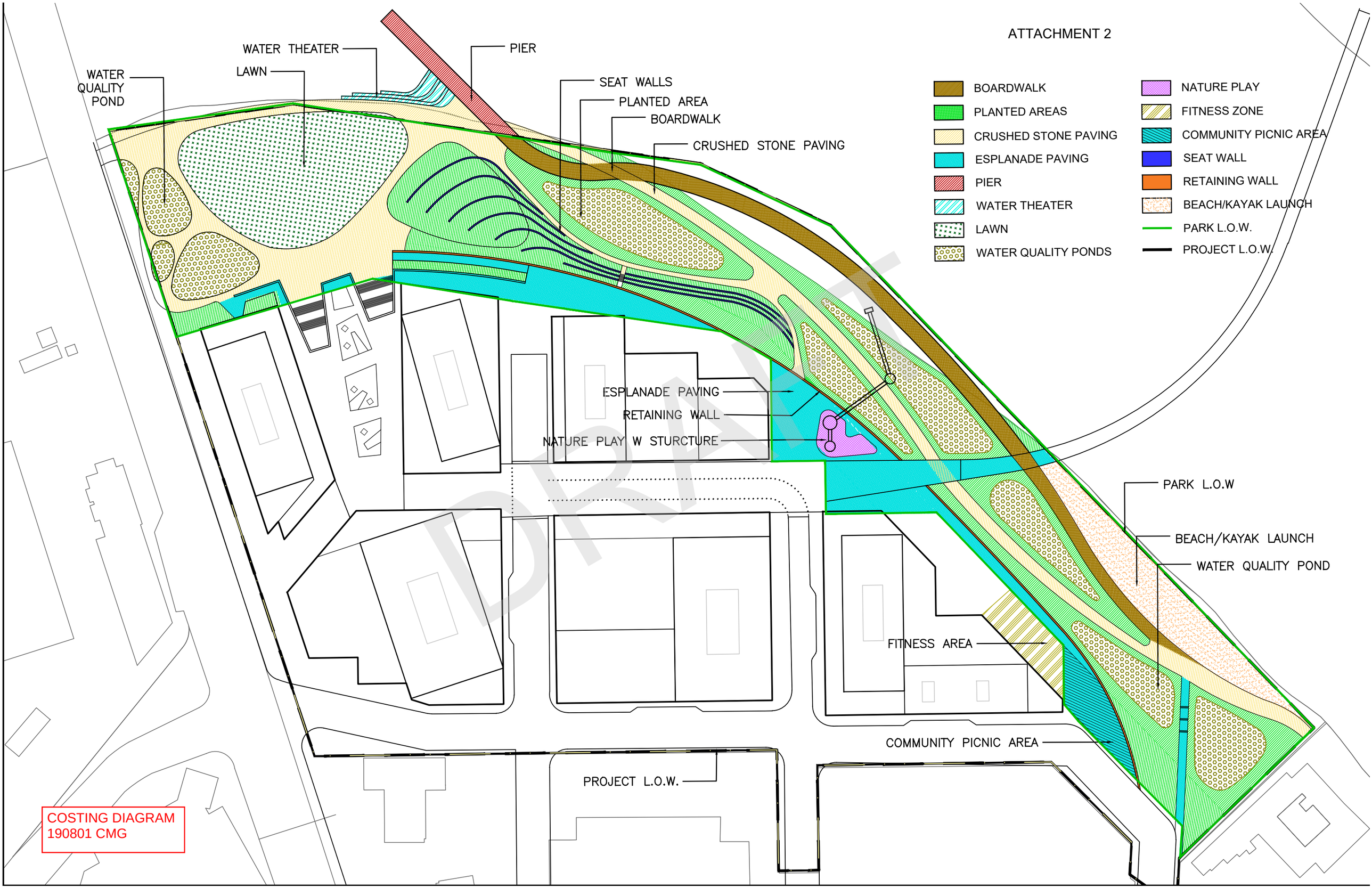
ATTACHMENT 2



COSTING DIAGRAM
190801 CMG

South Central Waterfront

2.b.i. Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group

3. Waterfront Park Cost Estimates Table

Updated: March 12, 2020

CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	3:	Waterfront Park Cost Estimates Table	(prepared by Endeavor consultant: CMG Landscape Architecture)

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ATTACHMENT 3

2019 305 S CONGRESS PUBLIC REALM CONCEPT DESIGN ESTIMATE							8/9/2019
ITEM	**AREA (SF)**	**AREA (AC)**	**QTY**	**UNIT**	**UNIT COST**	**TOTAL COST**	**NOTES**
Site Preparation (Demo, Utility, Earthwork)	334,300	7.67		SF	$5.25	$1,755,075	Site area includes all improvements within the Waterfront Park L.O.W. Staking and layout, site clearing and grubbing, tree removal and disposal and rough grading
Heritage Tree Relocation			15	EA	$115,000.00	$1,725,000	Assumes 15 of 22 Heritage Trees will be relocated
Tree Protection & Care			210	EA	$2,000.00	$420,000	Michael Embesi cost plus buffer
Boardwalk	20,502	0.47		SF	$175.00	$3,587,850	Wood decking - 50% on grade, 50% on piers over water with metal guard rail throughout (ERG also contemplates a bulkhead, which will reduce the cost of this line item)
Planting	147,066	3.38		SF	$20.00	$2,941,320	Predominately ornamental planting. Includes soil amendments and mulch. Includes planting areas in Water Quality Ponds as well
Irrigation	182,274	4.18		SF	$5.00	$911,370	Subsurface Drip includes pump, meter, back-flow preventer and controllers
Lawn	35,208	0.81		SF	$5.00	$176,040	Sod, planting soil and coarse sand drainage
Crushed Stone Paving + Trail Amenities	56,698	1.30		SF	$12.00	$680,376	Stabilized crushed stone paving, vehicular grade for maintenance (see attached packet for additional details)
Esplanade Paving & Amenities (On-Structure)	45,001	1.03		SF	$45.00	$2,025,045	Precast Concrete Unit Pavers with subgrade preparation, base materials, and grading for pedestrian
Retaining Walls	2,332			LF	$450.00	$1,049,400	CIP reinforced concrete retaining walls with guard rail where needed
Seat Walls	1,558			LF	$250.00	$389,500	18"X18" CIP Seatwall
Stairs	48			LF	$200.00	$9,600	10 stairs-6' wide, and 8 stairs-10' wide - includes handrails, CIP Concrete
Water Quality Pond/Biofiltration Area	57,000	1.31		SF	$20.00	$1,140,000	Top soil, filter fabric, drain rock, etc. Final SF requirements to be coordinated with Civil. Additional green infrastructure measures will need to be incorporated into the estimates for the garage and MEP systems; however, the design team is still coordinating these efforts.
Amenities:							
Bat Viewing Feature				LS	$230,000.00	$230,000	Design TBD
Bat Viewing Signage				LS	$250,000.00	$250,000	BCI: Bat Conservation International Collaboration for special educational signage
Pier	4,213	0.10		SF	$175.00	$737,240	Wood decking on piers with metal guardrails
Water Theater					$800,000.00	$800,000	Allowance. CIP Concrete Steps/Seatwalls at Water's Edge
Natural Beach & Kayak Launch	16,535	0.38		SF	$25.00	$413,375	Sand, boulders and platform for kayak launch
Nature/Adventure Play				LS	$1,000,000.00	$1,000,000	Allowance. Design TBD, custom play structure with lookout onto lake, predominately wood. Play safety surface. Also includes allowance for smaller play moments along waters edge.
Public Art Allowance				LS	$1,250,000.00	$1,250,000	TBD
Lighting & Electrical				LS	$3,000,000.00	$3,000,000	Combo of approx. 14' tall pole lights and smaller/detailed specialty lighting. Also includes specialty lighting considerations for bat viewing.
Power & AV				LS	$450,000.00	$450,000	Allowance. Electrical services sufficient for events.
Community Picnic Area				LS	$200,000.00	$200,000	Amenities only (paving not included). Shade Structure, Picnic Tables (6), Benches (4), BBQs, Trash Cans. Exact location TBD.
Site Furnishings (without Community Picnic Area)				LS	$400,000.00	$400,000	Allowance. Includes, benches, trash cans, drinking fountains, bike racks
Fitness Pavilion				LS	$500,000.00	$500,000	Allowance. Catalog Multi-use exercise station. Exact location TBD.
Showers & Restroom				LS	$500,000.00	$500,000	Allowance. Pre-fabricated Structure with outdoor shower and 2 Stalls.
Plaza Water Feature (On-Structure)						$0	Included in Great Steps Infrastructure Budget
WATERFRONT PARK SUBTOTAL	334,300	7.67			$79.39	**$26,541,191**	
Contractor's Overhead, Profit & Insurance; General Conditions & Site Requirements			14%			$3,715,767	Security, Equipment, Temporary Facilities included
Traffic Control/Interim Trail Conditions						$750,000	
SUBTOTAL						**$31,006,958**	
Escalation (2-years to mid-point of construction)			6%			$1,860,417	
SUBTOTAL						**$32,867,375**	
Design Contingency			10%			$3,286,738	
TOTAL CONSTRUCTION COST						**$36,154,113**	
SOFT COSTS							NOTES
Landscape Architect						$2,000,000	
Masterplan/Amenity Architect						$250,000	
Lighting Consultant						$200,000	
Signage/Wayfinding Consultant						$125,000	
Bat Consultant						$25,000	
Playground Consultant						$25,000	
Sustainability Consultant						$50,000	
Arborist						$25,000	
Structural						$500,000	Includes work for Pier Pilings and Retaining Walls
Civil Engineering/MEP						$711,691	Total Estimated Cost across project is $1.75M --> 7.67 acres / 18.86 total site area = $711,691
Irrigation						$50,000	
Legal Fees/POA Formation						$300,000	
City of Austin Site Development & Permit Fees						$400,000	
Soft Cost Contingency			10%			$466,169	
SOFT COST SUBTOTAL						**$5,127,861**	
TOTAL HARD PLUS SOFT COSTS						**$41,281,973**	
Development Fee			3%			$1,238,459	
GRAND TOTAL						**$42,520,432**	

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South Central Waterfront

2.b.i. Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group

4. Site Infrastructure - Program Cost Metrics Spreadsheet

Updated: March 12, 2020

CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	4:	Site Infrastructure - Program Cost Metrics Spreadsheet	(prepared by Endeavor consultant: DPR Construction)

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STATESMAN SITE INFRASTRUCTURE

Program Cost Metrics

Date: 11/20/2019

Program		GSF	$/SF	Cost
R-1	Site Utility Removal / Relocation	402,000	$ 2.70	$ 1,086,171
C-1	Congress Intersection 1	22,100	$ 253.38	$ 5,599,727
C-2	Congress Improvement 2	55,700	$ 21.17	$ 1,179,388
BS-1	Barton Springs Segment 1	71,200	$ 54.62	$ 3,888,993
BS-2	Barton Springs Segment 2	35,500	$ 71.05	$ 2,522,241
BS-3	Barton Springs Intersection	6,500	$ 345.01	$ 2,242,593
P-1	Great Steps Plaza 1	28,300	$ 115.76	$ 3,276,077
P-2	Landscape Plaza 2	3,098	$ 208.88	$ 647,110
P-3	Landscape Plaza 3	3,322	$ 117.12	$ 389,076
P-4	Landscape Plaza 4	13,781	$ 82.74	$ 1,140,210
P-5	Landscape Plaza 5	9,327	$ 77.93	$ 726,816
P-6	Landscape Plaza 6	3,236	$ 99.78	$ 322,879
P-7	Landscape Plaza 7	16,100	$ 77.45	$ 1,246,936
S-1	Internal Streets Segment 1	15,700	$ 61.95	$ 972,607
S-2	Shared Street Segment 2	26,350	$ 48.30	$ 1,272,604
S-3	Internal Streets Segment 3	16,400	$ 50.50	$ 828,138
S-4	Shared Street Segment 4	10,100	$ 63.40	$ 640,355
WQ-1	Barton Springs Water Quality	113,200	$ 13.00	$ 1,471,600
WQ-2	Plaza 7 Water Quality	16,100	$ 13.00	$ 209,300
WQ-3	Internal Street Water Quality	68,550	$ 13.00	$ 891,150
G-1	Lakefront Park Design			Excluded
G-2	Relocation of Trees			Excluded
G-3	Regrading Works	718,740	$ 4.56	$ 3,277,428
Total Area				**$ 33,831,396**

Notes:

1) All prices include tax, insurances, fees and markups.
2) Escalation is included at the rate of five percent (5%) per annum for two (2) years.
3) Prices are based on recent cost for projects located in the City of Austin CBD

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	UTILITY REMOVAL		CONGRESS IMPROVEMENTS		CONGRESS IMPROVEMENTS	
			Congress Intersection 1		Congress Improvement 2	
	R-1		C-1		C-2	
		402,000		22,100		55,700
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ 402,000	$ 1.00	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ 402,000	$ 1.00	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ -	$ -	$ 4,145,000	$ -	$ 350,000	$ -
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ -	$ -	$ -	$ -	$ 170,000	$ -
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ -	$ -	$ -	$ -	$ 187,000	$ -
G2080 - LANDSCAPING	$ -	$ -	$ -	$ -	$ 166,000	$ -
G3010 - WATER UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3020 - SANITARY SEWERAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
G4050 - SITE LIGHTING	$ -	$ -	$ -	$ -	$ -	$ -
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	**$ 804,000**	**$ 2.00**	**$ 4,145,000**	**$ 187.56**	**$ 873,000**	**$ 15.67**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 48,240	$ 0.12	$ 248,700	$ 11.25	$ 52,380	$ 0.94
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 47,725	$ 0.12	$ 246,047	$ 11.13	$ 51,821	$ 0.93
CONTINGENCY	$ 85,224	$ 0.21	$ 439,370	$ 19.88	$ 92,538	$ 1.66
ESCALATION	$ 100,982	$ 0.25	$ 520,610	$ 23.56	$ 109,648	$ 1.97
SUBTOTAL	**$ 282,171**	**$ 0.70**	**$ 1,454,727**	**$ 65.82**	**$ 306,388**	**$ 5.50**
GRAND TOTAL	**$ 1,086,171**	**$ 2.70**	**$ 5,599,727**	**$ 253.38**	**$ 1,179,388**	**$ 21.17**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	BARTON SPRING EXTENSION		BARTON SPRING EXTENSION		BARTON SPRING EXTENSION	
	Segment 1		Segment 2		Intersection	
	BS-1		BS-2		BS-3	
		71,200		35,500		6,500
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ 335,000	$ -	$ 667,000	$ -	$ 1,660,000	$ -
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ 54,000	$ -	$ 124,000	$ -	$ -	$ -
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ 920,000	$ -	$ 515,000	$ -	$ -	$ -
G2080 - LANDSCAPING	$ 475,000	$ -	$ 323,000	$ -	$ -	$ -
G3010 - WATER UTILITIES	$ 240,000	$ -	$ 119,000	$ -	$ -	$ -
G3020 - SANITARY SEWERAGE UTILITIES	$ 240,000	$ -	$ 119,000	$ -	$ -	$ -
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ 120,000	$ -	$ -	$ -	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ 300,000	$ -	$ -	$ -	$ -	$ -
G4050 - SITE LIGHTING	$ -	$ -	$ -	$ -	$ -	$ -
G5010 - SITE COMMUNICATIONS SYSTEMS	$ 180,000	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	**$ 2,864,000**	**$ 40.22**	**$ 1,867,000**	**$ 52.59**	**$ 1,660,000**	**$ 255.38**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 171,840	$ 2.41	$ 112,020	$ 3.16	$ 99,600	$ 15.32
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 170,007	$ 2.39	$ 110,825	$ 3.12	$ 98,538	$ 15.16
CONTINGENCY	$ 321,584	$ 4.52	$ 197,902	$ 5.57	$ 175,960	$ 27.07
ESCALATION	$ 361,562	$ 5.08	$ 234,494	$ 6.61	$ 208,495	$ 32.08
SUBTOTAL	**$ 1,024,993**	**$ 14.40**	**$ 655,241**	**$ 18.46**	**$ 582,593**	**$ 89.63**
GRAND TOTAL	**$ 3,888,993**	**$ 54.62**	**$ 2,522,241**	**$ 71.05**	**$ 2,242,593**	**$ 345.01**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	PLAZA		PLAZA		PLAZA	
	Great Steps		Plaza 2		Plaza 3	
	P-1		P-2		P-3	
		28,300		3,098		3,322
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ -	$ -	$ -	$ -	$ -	$ -
G2030 - PEDESTRIAN PLAZAS & WALKWAYS		$ -	$ 110,000	$ 35.51	$ 108,000	$ 32.51
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ 1,350,000	$ -	$ 221,000	$ 71.34	$ 85,000	$ 25.59
G2080 - LANDSCAPING	$ 875,000	$ -	$ 48,000	$ 15.49	$ 45,000	$ 13.55
G3010 - WATER UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3020 - SANITARY SEWERAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
G4050 - SITE LIGHTING	$ 200,000	$ 7.07	$ 100,000	$ 32.28	$ 50,000	$ 15.05
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	**$ 2,425,000**	**$ 85.69**	**$ 479,000**	**$ 154.62**	**$ 288,000**	**$ 86.69**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 145,500	$ 5.14	$ 28,740	$ 9.28	$ 17,280	$ 5.20
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 143,948	$ 5.09	$ 28,433	$ 9.18	$ 17,096	$ 5.15
CONTINGENCY	$ 257,050	$ 9.08	$ 50,774	$ 16.39	$ 30,528	$ 9.19
ESCALATION	$ 304,579	$ 10.76	$ 60,162	$ 19.42	$ 36,173	$ 10.89
SUBTOTAL	**$ 851,077**	**$ 30.07**	**$ 168,110**	**$ 54.26**	**$ 101,076**	**$ 30.43**
GRAND TOTAL	**$ 3,276,077**	**$ 115.76**	**$ 647,110**	**$ 208.88**	**$ 389,076**	**$ 117.12**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	PLAZA		PLAZA		PLAZA	
	Plaza 4		Plaza 5		Plaza 6	
	P-4		P5		P6	
		13,781		9,327		3,236
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ -	$ -	$ -	$ -	$ -	$ -
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ 445,000	$ 32.29	$ 300,000	$ 90.31	$ 105,000	$ 31.61
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ 184,000	$ 13.35	$ 100,000	$ 30.10	$ 65,000	$ 19.57
G2080 - LANDSCAPING	$ 140,000	$ 10.16	$ 88,000	$ 26.49	$ 44,000	$ 13.25
G3010 - WATER UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3020 - SANITARY SEWERAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
G4050 - SITE LIGHTING	$ 75,000	$ 5.44	$ 50,000	$ 15.05	$ 25,000	$ 7.53
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	**$ 844,000**	**$ 61.24**	**$ 538,000**	**$ 57.68**	**$ 239,000**	**$ 73.86**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 50,640	$ 3.67	$ 32,280	$ 3.46	$ 14,340	$ 4.43
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 50,100	$ 3.64	$ 31,936	$ 3.42	$ 14,187	$ 4.38
CONTINGENCY	$ 89,464	$ 6.49	$ 57,028	$ 6.11	$ 25,334	$ 7.83
ESCALATION	$ 106,006	$ 7.69	$ 67,572	$ 7.24	$ 30,018	$ 9.28
SUBTOTAL	**$ 296,210**	**$ 21.49**	**$ 188,816**	**$ 20.24**	**$ 83,879**	**$ 25.92**
GRAND TOTAL	**$ 1,140,210**	**$ 82.74**	**$ 726,816**	**$ 77.93**	**$ 322,879**	**$ 99.78**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	Plaza		STREET		STREET	
	Plaza 7		Internal Street Segment 1		Intersection	
	P-7		S-1		S-2	
		16,100		15,700		26,350
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ 53,000	$ -	$ 68,000	$ 4.33	$ 15,000	$ -
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ 242,000	$ -	$ 53,000	$ 3.38	$ 11,000	$ -
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ 326,000	$ -	$ 284,000	$ 18.09	$ 36,000	$ -
G2080 - LANDSCAPING	$ 101,000	$ -	$ 96,000	$ 6.11	$ 13,000	$ -
G3010 - WATER UTILITIES	$ 96,000	$ -	$ 48,000	$ 3.06	$ 18,000	$ -
G3020 - SANITARY SEWERAGE UTILITIES	$ 70,000	$ -	$ 48,000	$ 3.06	$ 13,000	$ -
G3030 - STORM DRAINAGE UTILITIES	$ 35,000	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ 24,000	$ 1.53	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ 60,000	$ 3.82	$ -	$ -
G4050 - SITE LIGHTING	$ -	$ -	$ -	$ -	$ -	$ -
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ 36,000	$ -	$ -	$ -
SUBTOTAL	**$ 923,000**	**$ 57.33**	**$ 717,000**	**$ 45.67**	**$ 106,000**	**$ 4.02**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 55,380	$ 3.44	$ 43,020	$ 2.74	$ 6,360	$ 0.24
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 54,789	$ 3.40	$ 42,561	$ 2.71	$ 6,292	$ 0.24
CONTINGENCY	$ 97,838	$ 6.08	$ 79,602	$ 5.07	$ 11,236	$ 0.43
ESCALATION	$ 115,928	$ 7.20	$ 90,424	$ 5.76	$ 13,314	$ 0.51
SUBTOTAL	**$ 323,936**	**$ 20.12**	**$ 255,607**	**$ 16.28**	**$ 37,202**	**$ 1.41**
GRAND TOTAL	**$ 1,246,936**	**$ 77.45**	**$ 972,607**	**$ 61.95**	**$ 143,202**	**$ 5.43**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	STREET		STREET		STREET	
	Segment 2		Intersection		Internal Street Segment 3	
	S-2		S-2		S-3	
		26,350		26,350		16,400
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ -	$ -	$ -	$ -
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ -	$ -
G1070 - SITE EARTHWORK	$ -	$ -	$ -	$ -	$ -	$ -
G2010 - ROADWAYS	$ 157,000	$ -	$ 15,000	$ -	$ 75,000	$ 4.57
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ 77,000	$ -	$ 11,000	$ -	$ 35,000	$ 2.13
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ -	$ -
G2060 - SITE DEVELOPMENT	$ 295,000	$ -	$ 36,000	$ -	$ 288,000	$ 17.56
G2080 - LANDSCAPING	$ 76,000	$ -	$ 12,000	$ -	$ 115,000	$ 7.01
G3010 - WATER UTILITIES	$ 73,000	$ -	$ 18,000	$ -	$ 50,000	$ 3.05
G3020 - SANITARY SEWERAGE UTILITIES	$ 53,000	$ -	$ 13,000	$ -	$ 50,000	$ 3.05
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ -	$ -
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
G4050 - SITE LIGHTING	$ -	$ -	$ -	$ -	$ -	$ -
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ -	$ -	$ -	$ -
SUBTOTAL	**$ 731,000**	**$ 27.74**	**$ 105,000**	**$ 3.98**	**$ 613,000**	**$ 37.38**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 43,860	$ 1.66	$ 6,300	$ 0.24	$ 36,780	$ 2.24
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 43,392	$ 1.65	$ 6,233	$ 0.24	$ 36,388	$ 2.22
CONTINGENCY	$ 77,486	$ 2.94	$ 11,130	$ 0.42	$ 64,978	$ 3.96
ESCALATION	$ 91,813	$ 3.48	$ 13,188	$ 0.50	$ 76,992	$ 4.69
SUBTOTAL	**$ 256,551**	**$ 9.74**	**$ 36,851**	**$ 1.40**	**$ 215,138**	**$ 13.12**
GRAND TOTAL	**$ 987,551**	**$ 37.48**	**$ 141,851**	**$ 5.38**	**$ 828,138**	**$ 50.50**

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STATESMAN SITE INFRASTRUCTURE
Date: 11/20/2019

	STREET		GREEN		TOTAL COST	
	Intersection		Regrading Works			
	S-4		G-3		Project Site - 16.5 Acres	
		10,100		-		718,740
	Total Cost	Unit Cost	Total Cost	Unit Cost	Total Cost	Unit Cost
F3010 - STRUCTURE DEMOLITION	$ -	$ -	$ -	$ -	$ -	$ -
G1010 - SITE CLEARING	$ -	$ -	$ 266,000	$ -	$ 2,051,000	$ 2.85
G1020 - SITE ELEMENTS DEMOLITION	$ -	$ -	$ 200,000	$ -	$ 602,000	$ 0.84
G1030 - SITE ELEMENTS RELOCATION	$ -	$ -	$ -	$ -	$ 402,000	$ 0.56
G1070 - SITE EARTHWORK	$ -	$ -	$ 1,600,000	$ -	$ 1,600,000	$ 2.23
G2010 - ROADWAYS	$ 111,000	$ -	$ -	$ -	$ 5,896,000	$ 8.20
G2030 - PEDESTRIAN PLAZAS & WALKWAYS	$ 50,000	$ -	$ -	$ -	$ 4,197,000	$ 5.84
G2050 - ATHLETIC, RECREATION & PLAYFIELDS	$ -	$ -	$ -	$ -	$ 1,250,000	$ 1.74
G2060 - SITE DEVELOPMENT	$ 263,000	$ -	$ -	$ -	$ 6,608,000	$ 9.19
G2080 - LANDSCAPING	$ 50,000	$ -	$ 360,000	$ -	$ 12,202,000	$ 16.98
G3010 - WATER UTILITIES	$ -	$ -	$ -	$ -	$ 662,000	$ 0.92
G3020 - SANITARY SEWERAGE UTILITIES	$ -	$ -	$ -	$ -	$ 606,000	$ 0.84
G3030 - STORM DRAINAGE UTILITIES	$ -	$ -	$ -	$ -	$ 35,000	$ 0.05
G3050 - SITE ENERGY DISTRIBUTION	$ -	$ -	$ -	$ -	$ -	$ -
G3060 - SITE FUEL DISTRIBUTION	$ -	$ -	$ -	$ -	$ 144,000	$ 0.20
G4010 - SITE ELECTRIC DISTRIBUTION SYSTEMS	$ -	$ -	$ -	$ -	$ 360,000	$ 0.50
G4050 - SITE LIGHTING	$ -	$ -	$ -	$ -	$ 1,935,000	$ 2.69
G5010 - SITE COMMUNICATIONS SYSTEMS	$ -	$ -	$ -	$ -	$ 216,000	$ 0.30
SUBTOTAL	**$ 474,000**	**$ 46.93**	**$ 2,426,000**	**$ -**	**$ 38,766,000**	**$ 53.94**
GENERAL REQUIREMENTS & GENERAL CONDITIONS	$ 28,440	$ 2.82	$ 145,560	$ -	$ 2,325,960	$ 3.24
PERMITS & FEES	$ -	$ -	$ -	$ -	$ -	$ -
INSURANCE, FEES & MARKUPS	$ 28,137	$ 2.79	$ 144,007	$ -	$ 2,301,150	$ 3.20
CONTINGENCY	$ 50,244	$ 4.97	$ 257,156	$ -	$ 4,130,796	$ 5.75
ESCALATION	$ 59,534	$ 5.89	$ 304,704	$ -	$ 4,871,200	$ 6.78
SUBTOTAL	**$ 166,355**	**$ 16.47**	**$ 851,428**	**$ -**	**$ 13,629,106**	**$ 18.96**
GRAND TOTAL	**$ 640,355**	**$ 63.40**	**$ 3,277,428**	**$ -**	**$ 52,395,106**	**$ 72.90**

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C-1
Congress Intersection

Typical	Length		lf
	Section Width		lf
	Area	21,000	sf
Turn Lane	Length		lf
	Section Width		lf
	Area		sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -
G2010		Asphalt Pavement - Typical	22,100.0	sf	$ 5.45	/sf	$ 120,445
G2010		Asphalt Pavement - Turn Lane		sf	$ 3.00	/sf	$ -
G2010		Striping	22,100.0	sf	$ 0.25	/sf	$ 5,525
G2010		Bike Lane		sf	$ 3.00	/sf	$ -
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -
G2010		Street Lights / Light Poles - 90' Spacing	4.0	ea	$ 5,000.00	/ea	$ 20,000
G2010		Traffic Signals	1.0	ls	$ 4,000,000.00	/ls	$ 4,000,000
G2030		Sidewalk		sf	$ 8.00	/sf	$ -
G2030		ADA Ramps		ea	$ 2,500.00	/ea	$ -
G2060		Tree Grates		ea	$ 3,500.00	/ea	$ -
G2060		Site Furnishings		ls	$ 100,000.00	/ls	$ -
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -
G2080		Landscape Strip		sf	$ 10.00	/sf	$ -
G2080		Trees - 20' Spacing		ea	$ 2,800.00	/ea	$ -
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -
G3010		Auxillary Water	-	lf	$ -	/lf	$ -
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -
G3030		Storm Drain	-	lf	$ -	/lf	$ -
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -
G3090		District Cooling	-	lf	$ -	w/District Cooling	
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -

Total $ 4,145,970

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Notes
Assume Intersection is 45'

C-2
Congress Improvements

Typical	Length		lf
	Section Width		lf
	Area	55,700	sf
Turn Lane	Length		lf
	Section Width		lf
	Area	22,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -
G2010		Asphalt Pavement - Typical	55,700.0	sf	$ 3.00	/sf	$ 167,100
G2010		Asphalt Pavement - Turn Lane	22,100.0	sf	$ 3.00	/sf	$ 66,300
G2010		Striping	77,800.0	sf	$ 0.25	/sf	$ 19,450
G2010		Bike Lane	9,600.0	sf	$ 3.00	/sf	$ 28,800
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -
G2010		Street Lights / Light Poles - 90' Spacing	14.0	ea	$ 5,000.00	/ea	$ 70,000
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -
G2030		Sidewalk	20,000.0	sf	$ 8.00	/sf	$ 160,000
G2030		ADA Ramps	4.0	ea	$ 2,500.00	/ea	$ 10,000
G2060		Tree Grates	25.0	ea	$ 3,500.00	/ea	$ 87,500
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -
G2080		Landscape Strip	9,600.0	sf	$ 10.00	/sf	$ 96,000
G2080		Trees - 20' Spacing	25.0	ea	$ 2,800.00	/ea	$ 70,000
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -
G3010		Auxillary Water	-	lf	$ -	/lf	$ -
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -
G3030		Storm Drain	-	lf	$ -	/lf	$ -
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -
G3090		District Cooling	-	lf	$ -	w/District Cooling	
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -

Total $ 875,150

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Notes
Assume Intersection is 45'

BS-1
BARTON SPRINGS SEGMENT 1

Typical	Length	1,050	lf
	Section Width	56	lf
	Area	58,800	sf
Turn Lane	Length	150	lf
	Section Width	59	lf
	Area	8,850	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
G2010		Curb & Gutter	2,310.0	lf	$ 18.00	/lf	$ 41,580
G2010		Asphalt Pavement - Typical	28,350.0	sf	$ 3.00	/sf	$ 85,050
G2010		Asphalt Pavement - Turn Lane	4,500.0	sf	$ 3.00	/sf	$ 13,500
G2010		Striping	32,850.0	sf	$ 0.25	/sf	$ 8,213
G2010		Bike Lane	11,100.0	sf	$ 3.00	/sf	$ 33,300
G2010		Unidentified Strip - Assume Concrete	2,220.0	sf	$ 8.00	/sf	$ 17,760
G2010		Street Lights / Light Poles - 90' Spacing	27.0	ea	$ 5,000.00	/ea	$ 135,000
G2010		Traffic Signals	1.0	ls	$ -	/ls	$ -
G2030		Sidewalk	5,550.0	sf	$ 8.00	/sf	$ 44,400
G2030		ADA Ramps	4.0	ea	$ 2,500.00	/ea	$ 10,000
G2060		Tree Grates	120.0	ea	$ 3,500.00	/ea	$ 420,000
G2060		Site Furnishings	1.0	ls	$ 500,000.00	/ls	$ 500,000
G2080		Bioswale	7,200.0	sf	$ 10.00	/sf	$ 72,000
G2080		Landscape Strip	6,660.0	sf	$ 10.00	/sf	$ 66,600
G2080		Trees - 20' Spacing	120.0	ea	$ 2,800.00	/ea	$ 336,000
G3010		12" Water Line	1,200.0	lf	$ 200.00	/lf	$ 240,000
G3010		Auxillary Water	-	lf	$ -	/lf	$ -
G3020		8" Waste Water Line	1,200.0	lf	$ 200.00	/lf	$ 240,000
G3030		Storm Drain	-	lf	$ -	/lf	$ -
G3060		Natural Gas	1,200.0	lf	$ 100.00	/lf	$ 120,000
G3090		District Cooling	-	lf	$ -	w/District Cooling	
G4010		Permanent Power Ductbank	1,200.0	lf	$ 250.00	/lf	$ 300,000
G5010		Telecom Ductbank	1,200.0	lf	$ 150.00	/lf	$ 180,000
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
					Total		$ 2,863,403

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Notes
Assume Intersection is 45'

BS-2
BARTON SPRINGS SEGMENT 2

Typical	Length	445	lf
	Section Width	66	lf
	Area	29,370	sf
Turn Lane	Length	150	lf
	Section Width	69	lf
	Area	10,350	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	1,190.0	lf	$ 18.00	/lf	$ 21,420	
G2010		Asphalt Pavement - Typical	12,015.0	sf	$ 3.00	/sf	$ 36,045	
G2010		Asphalt Pavement - Turn Lane	4,500.0	sf	$ 3.00	/sf	$ 13,500	
G2010		Striping	16,515.0	sf	$ 0.25	/sf	$ 4,129	
G2010		Bike Lane	7,140.0	sf	$ 3.00	/sf	$ 21,420	
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -	
G2010		Street Lights / Light Poles - 90' Spacing	14.0	ea	$ 5,000.00	/ea	$ 70,000	
G2010		Traffic Signals	1.0	ls	$ 500,000.00	/ls	$ 500,000	
G2030		Sidewalk	14,875.0	sf	$ 8.00	/sf	$ 119,000	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	90.0	ea	$ 3,500.00	/ea	$ 315,000	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip	7,140.0	sf	$ 10.00	/sf	$ 71,400	
G2080		Trees - 20' Spacing	90.0	ea	$ 2,800.00	/ea	$ 252,000	
G3010		12" Water Line	595.0	lf	$ 200.00	/lf	$ 119,000	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	595.0	lf	$ 200.00	/lf	$ 119,000	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ 1,866,914

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Notes
Assume Intersection is 45'

BS-3
Barton Springs Intersection

Typical	Length		lf
	Section Width		lf
	Area	6,500	sf
Turn Lane	Length		lf
	Section Width		lf
	Area		sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -
G2010		Asphalt Pavement - Typical	6,500.0	sf	$ 5.75	/sf	$ 37,375
G2010		Asphalt Pavement - Turn Lane		sf	$ 3.00	/sf	$ -
G2010		Striping	6,500.0	sf	$ 0.25	/sf	$ 1,625
G2010		Bike Lane		sf	$ 3.00	/sf	$ -
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -
G2010		Street Lights / Light Poles - 90' Spacing	4.0	ea	$ 5,000.00	/ea	$ 20,000
G2010		Traffic Signals	1.0	ls	$ 1,601,000.00	/ls	$ 1,601,000
G2030		Sidewalk		sf	$ 8.00	/sf	$ -
G2030		ADA Ramps		ea	$ 2,500.00	/ea	$ -
G2060		Tree Grates		ea	$ 3,500.00	/ea	$ -
G2060		Site Furnishings		ls	$ 100,000.00	/ls	$ -
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -
G2080		Landscape Strip		sf	$ 10.00	/sf	$ -
G2080		Trees - 20' Spacing		ea	$ 2,800.00	/ea	$ -
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -
G3010		Auxillary Water	-	lf	$ -	/lf	$ -
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -
G3030		Storm Drain	-	lf	$ -	/lf	$ -
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -
G3090		District Cooling	-	lf	$ -	w/District Cooling	
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
					Total		$ 1,660,000

Notes
Assume Intersection is 45'

DRAFT

P-1
Plaza - Great Steps

Typical	Length	225		
	Section Width	varies		
		80' at south end		
		145' at north end		
	Area	28,300	sf	
	Elevation Change	5	ft	450' at top, 445' at bottom

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
		Stair Landings	4.0	ea	$ -	/ea	$ -	
		Landing Area - Top	1,450.0	sf	$ -	/sf	$ -	
		Landing Area - Mid-1	4,360.0	sf	$ -	/sf	$ -	
		Landing Area - Mid-2	5,375.0	sf	$ -	/sf	$ -	
		Landing Area - Bottom	4,900.0	sf	$ -	/sf	$ -	replaced by S-1 street
		Total Stair Landing Area	16,085.0	sf	$ -	/sf	$ -	replaced by S-1 street
		Steps - Top to Mid-1	4.0	riser	$ -	/riser	$ -	
		Steps - Mid 1 to Mid-2	5.0	riser	$ -	/riser	$ -	North side only
		Steps - Mid 2 to Bottom	5.0	riser	$ -	/riser	$ -	
		Step Length - Top to Mid-1	90.0	lf	$ -	/lf	$ -	North side only
		Step Length - Mid-1 to Mid-2	110.0	lf	$ -	/lf	$ -	North side only
		Step Length - Mid-2 to Bottome	135.0	lf	$ -	/lf	$ -	
		Total Step Length	1,585.0	lf	$ -	/lf	$ -	
		Stair Construction						
G2060		Structural Geofoam	63,675.0	cf	$ 5.00	/cf	$ 318,375	
G2060		Concrete Landings	16,085.0	sf	$ 12.00	/sf	$ 193,020	
G2060		Concrete Stairs	1,585.0	lf	$ 100.00	/lf	$ 158,500	
G2060		Concrete Walls on Sides	5,850.0	sf	$ 25.00	/sf	$ 146,250	Assume 13' Tall, Both Sides, Entire Length
G2060		Pavers on Landings	16,805.0	sf	$ 15.00	/sf	$ 252,075	
G2060		Stair Treads	1,585.0	lf	$ 25.00	/lf	$ 39,625	
G2060		Stairs Risers	1,585.0	lf	$ 25.00	/lf	$ 39,625	
G2060		Stair Nosings	1,585.0	lf	$ 10.00	/lf	$ 15,850	
G2060		Handrails	180.0	lf	$ 175.00	/lf	$ 31,500	30 lf per set per side of steps, 3 sets of steps
G2060		Center Rail	180.0	lf	$ 250.00	/lf	$ 45,000	60 lf per set of steps, 3 sets of steps
G2060		Wall Claddings - Stone	3,600.0	sf	$ 25.00	/sf	$ 90,000	assume 10' drop, treat as triangel shape on both sides, add 3' cap wall on top
G2060		Wall Claddings - Stone Cap	550.0	lf	$ 35.00	/lf	$ 19,250	
G2080		Furnishings	1.0	ea	$ 200,000.00	/ea	$ 200,000	
G2080		Landscaping	1.0		$ 175,000.00		$ 175,000	
G2080		Water Feature	1.0		$ 500,000.00		$ 500,000	
G4050		Lighting	1.0	ls	$ 200,000.00	/ls	$ 200,000	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 2,424,070
Cost/SF	$ 85.66

Notes
Assume Intersection is 45'

DRAFT

P-2
Plaza

Typical	Length	52	lf
	Section Width	60	lf
	Area	3,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,480.0	sf	$ 40.00	/sf	$ 99,200	80% of area
G2030		Tapered Insulation	2,480.0	sf	$ 4.00	/sf	$ 9,920	
G2060		Tree Grates	6.0	ea	$ 3,500.00	/ea	$ 21,000	
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2060		Water Feature	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2080		Trees	6.0	ea	$ 2,800.00	/ea	$ 16,800	
G2080		Landscaping	620.0	sf	$ 50.00	/sf	$ 31,000	20% of area
G4050		Lighting	1.0	ls	$ 100,000.00	/ls	$ 100,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 477,920
Cost/SF	$ 154.17

Notes
Assume Intersection is 45'

DRAFT

P-3
Plaza

Typical	Length	225	lf
	Section Width	15	lf
	Area	3,375	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,700.0	sf	$ 40.00	/sf	$ 108,000	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	10.0	ea	$ 3,500.00	/ea	$ 35,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 50,000.00	/ls	$ 50,000	
G2060		Water Feature	-	ls	$ 100,000.00	/ls	$ -	
G2080		Trees	10.0	ea	$ 2,800.00	/ea	$ 28,000	
G2080		Landscaping	675.0	sf	$ 25.00	/sf	$ 16,875	20% of area
G4050		Lighting	1.0	ls	$ 50,000.00	/ls	$ 50,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	287,875
Cost/SF	$	85.30

Notes
Assume Intersection is 45'

DRAFT

P-4
Plaza

Typical	Length	316	lf
	Section Width	44	lf
	Area	13,904	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	11,123.2	sf	$ 40.00	/sf	$ 444,928	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	24.0	ea	$ 3,500.00	/ea	$ 84,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	24.0	ea	$ 2,800.00	/ea	$ 67,200	
G2080		Landscaping	2,780.8	sf	$ 25.00	/sf	$ 69,520	20% of area
G4050		Lighting	1.0	ls	$ 75,000.00	/ls	$ 75,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	840,648
Cost/SF	$	60.46

Notes
Assume Intersection is 45'

DRAFT

P-5
Plaza

Typical	Length	310	lf
	Section Width	30	lf
	Area	9,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	7,440.0	sf	$ 40.00	/sf	$ 297,600	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	15.0	ea	$ 3,500.00	/ea	$ 52,500	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 50,000.00	/ls	$ 50,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	15.0	ea	$ 2,800.00	/ea	$ 42,000	
G2080		Landscaping	1,860.0	sf	$ 25.00	/sf	$ 46,500	20% of area
G4050		Lighting	1.0	ls	$ 50,000.00	/ls	$ 50,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	538,600
Cost/SF	$	57.91

Notes
Assume Intersection is 45'

DRAFT

P-6
Plaza

Typical	Length	110	lf
	Section Width	30	lf
	Area	3,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,640.0	sf	$ 40.00	/sf	$ 105,600	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	10.0	ea	$ 3,500.00	/ea	$ 35,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 30,000.00	/ls	$ 30,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	10.0	ea	$ 2,800.00	/ea	$ 28,000	
G2080		Landscaping	660.0	sf	$ 25.00	/sf	$ 16,500	20% of area
G4050		Lighting	1.0	ls	$ 25,000.00	/ls	$ 25,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	240,100
Cost/SF	$	72.76

Notes
Assume Intersection is 45'

DRAFT

P-7

Plaza - 7 (Grand Pedestrian Walkway)

Typical	Length	351	lf
	Section Width	46	lf
	Area	16,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	702.0	lf	$ 18.00	/lf	$ 12,636	
G2010		Street Lights / Light Poles - 90' Spacing	8.0	ea	$ 5,000.00	/ea	$ 40,000	
G2030		Pathway Pavers	2,808.0	sf	$ 15.00	/sf	$ 42,120	
G2030		Outdoor Seating Pavers	4,212.0	sf	$ 15.00	/sf	$ 63,180	
G2030		Signature Walkway	8,775.0	sf	$ 15.00	/sf	$ 131,625	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	36.0	ea	$ 3,500.00	/ea	$ 126,000	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Trees - 20' Spacing	36.0	ea	$ 2,800.00	/ea	$ 100,800	
G3010		12" Water Line	351.0	lf	$ 200.00	/lf	$ 70,200	
G3010		Auxillary Water	351.0	lf	$ 75.00	/lf	$ 26,325	
G3020		8" Waste Water Line	351.0	lf	$ 200.00	/lf	$ 70,200	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3030		Trench Drain	351.0	lf	$ 100.00	/lf	$ 35,100	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 923,186
Cost/SF	$ 57.34

DRAFT

Notes

Assume Intersection is 45'

S-1
Internal Street Segment 1

Typical	Length	238	lf
	Section Width	66	lf
	Area	15,700	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	476.0	lf	$ 18.00	/lf	$ 8,568	
G2010		Asphalt Pavement - Typical	6,426.0	sf	$ 3.00	/sf	$ 19,278	
G2010		Striping	6,426.0	sf	$ 0.25	/sf	$ 1,607	
G2010		Bike Lane	2,856.0	sf	$ 3.00	/sf	$ 8,568	
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 5,000.00	/ea	$ 30,000	
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -	
G2030		Sidewalk	5,950.0	sf	$ 8.00	/sf	$ 47,600	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	24.0	ea	$ 3,500.00	/ea	$ 84,000	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip	2,856.0	sf	$ 10.00	/sf	$ 28,560	
G2080		Trees - 20' Spacing	24.0	ea	$ 2,800.00	/ea	$ 67,200	
G3010		12" Water Line	238.0	lf	$ 200.00	/lf	$ 47,600	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	238.0	lf	$ 200.00	/lf	$ 47,600	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	238.0	lf	$ 100.00	/lf	$ 23,800	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	238.0	lf	$ 250.00	/lf	$ 59,500	
G5010		Telecom Ductbank	238.0	lf	$ 150.00	/lf	$ 35,700	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
					Total		$ 714,581	

DRAFT

Notes
Assume Intersection is 45'

S2 Int 1
S2 Intersection 1

Typical	Length	66	lf
	Section Width	67	lf
	Area	4,400	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	66.0	lf	$ 18.00	/lf	$ 1,188	
G2010		Roadway Pavers	729.0	sf	$ 15.00	/sf	$ 10,935	
G2010		Street Lights / Light Poles - 90' Spacing	-	ea	$ 5,000.00	/ea	$ -	
G2010		Bike Lane	792.0	sf	$ 3.00	/sf	$ 2,376	
G2030		Pathway Pavers - North Side Only	396.0	sf	$ 15.00	/sf	$ 5,940	
G2030		Outdoor Seating Pavers	-	sf	$ 15.00	/sf	$ -	replaced by S-1 street
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	3.0	ea	$ 3,500.00	/ea	$ 10,500	North side only
G2060		Site Furnishings	1.0	ls	$ 25,000.00	/ls	$ 25,000	
G2080		Trees - 20' Spacing	3.0	ea	$ 2,800.00	/ea	$ 8,400	North side only
G2080		Landscape Strip	396.0	sf	$ 10.00	/sf	$ 3,960	North side only
G3010		12" Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	
G3010		Auxillary Water	66.0	lf	$ 75.00	/lf	$ 4,950	
G3020		8" Waste Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 104,649
Cost/SF	$ 23.78

Notes
Assume Intersection is 45'

DRAFT

S2
S2 Laneway (Decorative Street)
Cross Section similar to BS-2 Extension

Typical	Length	266	lf
	Section Width	66	lf
	Area	17,600	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	532.0	lf	$ 18.00	/lf	$ 9,576	
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 5,000.00	/ea	$ 30,000	
G2010		Bike Lane	3,192.0	sf	$ 3.00	/sf	$ 9,576	
G2010		Roadway Pavers	7,182.0	sf	$ 15.00	/sf	$ 107,730	
G2030		Pathway Pavers	1,596.0	sf	$ 15.00	/sf	$ 23,940	
G2030		Outdoor Seating Pavers	3,192.0	sf	$ 15.00	/sf	$ 47,880	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	27.0	ea	$ 3,500.00	/ea	$ 94,500	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Trees - 20' Spacing	27.0	ea	$ 2,800.00	/ea	$ 75,600	
G3010		12" Water Line	266.0	lf	$ 200.00	/lf	$ 53,200	
G3010		Auxillary Water	266.0	lf	$ 75.00	/lf	$ 19,950	
G3020		8" Waste Water Line	266.0	lf	$ 200.00	/lf	$ 53,200	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 730,152
Cost/SF	$ 41.49

Notes
Assume Intersection is 45'

DRAFT

S2
S2 Intersection 2

Typical	Length	66	lf
	Section Width	65	lf
	Area	4,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	66.0	lf	$ 18.00	/lf	$ 1,188	
G2010		Roadway Pavers	729.0	sf	$ 15.00	/sf	$ 10,935	
G2010		Street Lights / Light Poles - 90' Spacing	-	ea	$ 5,000.00	/ea	$ -	
G2010		Bike Lane	792.0	sf	$ 3.00	/sf	$ 2,376	
G2030		Pathway Pavers - North Side Only	396.0	sf	$ 15.00	/sf	$ 5,940	
G2030		Outdoor Seating Pavers	-	sf	$ 15.00	/sf	$ -	replaced by S-1 street
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	3.0	ea	$ 3,500.00	/ea	$ 10,500	North side only
G2060		Site Furnishings	1.0	ls	$ 25,000.00	/ls	$ 25,000	
G2080		Trees - 20' Spacing	3.0	ea	$ 2,800.00	/ea	$ 8,400	North side only
G2080		Landscape Strip	396.0	sf	$ 10.00	/sf	$ 3,960	North side only
G3010		12" Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	
G3010		Auxillary Water	66.0	lf	$ 75.00	/lf	$ 4,950	
G3020		8" Waste Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	104,649
Cost/SF	$	24.34

Notes
Assume Intersection is 45'

DRAFT

S-3
Internal Street Segment 3

Typical	Length	248	lf
	Section Width	66	lf
	Area	16,400	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	496.0	lf	$ 18.00	/lf	$ 8,928	
G2010		Asphalt Pavement - Typical	6,696.0	sf	$ 3.00	/sf	$ 20,088	
G2010		Striping	6,696.0	sf	$ 0.25	/sf	$ 1,674	
G2010		Bike Lane	2,976.0	sf	$ 3.00	/sf	$ 8,928	
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 5,000.00	/ea	$ 30,000	
G2010		Unidentified Strip - Assume Concrete	496.0	sf	$ 8.00	/sf	$ 3,968	
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -	
G2030		Sidewalk	3,720.0	sf	$ 8.00	/sf	$ 29,760	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	25.0	ea	$ 3,500.00	/ea	$ 87,500	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Bioswale	1,488.0	sf	$ 10.00	/sf	$ 14,880	
G2080		Landscape Strip	2,856.0	sf	$ 10.00	/sf	$ 28,560	
G2080		Trees - 20' Spacing	25.0	ea	$ 2,800.00	/ea	$ 70,000	
G3010		12" Water Line	248.0	lf	$ 200.00	/lf	$ 49,600	
G3010		Auxillary Water	248.0	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	248.0	lf	$ 200.00	/lf	$ 49,600	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	0	lf	$ 100.00	/lf	$ -	under S-1
G3090		District Cooling	-	lf	$ -	/lf	N/A	under S-1
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	under S-1
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	under S-1
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ 608,486

DRAFT

Notes
Assume Intersection is 45'

S4

S4 Laneway (Decorative Street)

Typical	Length	170	lf
	Section Width	60	lf
	Area	10,200	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
G2010		Curb & Gutter	340.0	lf	$ 18.00	/lf	$ 6,120
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 5,000.00	/ea	$ 30,000
G2010		Bike Lane	2,040.0	sf	$ 3.00	/sf	$ 6,120
G2010		Roadway Pavers	4,590.0	sf	$ 15.00	/sf	$ 68,850
G2030		Pathway Pavers	1,020.0	sf	$ 15.00	/sf	$ 15,300
G2030		Outdoor Seating Pavers	2,040.0	sf	$ 15.00	/sf	$ 30,600
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000
G2060		Tree Grates	18.0	ea	$ 3,500.00	/ea	$ 63,000
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000
G2080		Trees - 20' Spacing	18.0	ea	$ 2,800.00	/ea	$ 50,400
G3010		12" Water Line		lf	$ 200.00	/lf	$ -
G3010		Auxillary Water	-	lf	$ 75.00	/lf	$ -
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -
G3030		Storm Drain	-	lf	$ -	/lf	$ -
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -
G3090		District Cooling	-	lf	$ -	w/District Cooling	
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -
						/	$ -

Total	$ 475,390
Cost/SF	$ 46.61

Notes

Assume Intersection is 45'

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G-3
Regrading Works

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
		Tree Removal					
G2080	320000	Parcel 1	8.0	ea	$ 5,000.00	/ea	$ 40,000
G2080	320000	Parcel 2	1.0	ea	$ 5,000.00	/ea	$ 5,000
G2080	320000	Parcel 3	2.0	ea	$ 5,000.00	/ea	$ 10,000
G2080	320000	Parcel 4	23.0	ea	$ 5,000.00	/ea	$ 115,000
G2080	320000	BS-1	27.0	ea	$ 5,000.00	/ea	$ 135,000
G2080	320000	BS-2	-	ea	$ 5,000.00	/ea	$ -
G2080	320000	Segment 2	1.0	ea	$ 5,000.00	/ea	$ 5,000
G2080	320000	Lakefront Park					w/ G-1
		Protected Tree Removal					
G2080	320000	Parcel 4	2.0	ea	$ 5,000.00	/ea	$ 10,000
G2080	320000	BS-1	8.0	ea	$ 5,000.00	/ea	$ 40,000
		Clear & Grubb Site					
G1010	320000	Main Site	465,000.0	sf	$ 0.25	/sf	$ 116,250
G1010		Park	292,000.0	sf	$ 0.50	/sf	$ 146,000
G1010		BS-2	42,000.0	sf	$ 0.10	/sf	$ 4,200
G1010		S-3					Excluded
		Demolition					
G1030		Parking Lot Demolition	200,000.0	sf	$ 1.00	/sf	$ 200,000
		Grading, Cut & Fill					
G1070		Main Site	465,000.0	sf	$ 2.00	/sf	$ 930,000
G1070		Park	292,000.0	sf	$ 2.00	/sf	$ 584,000
G1070		BS-2	42,000.0	sf	$ 2.00	/sf	$ 84,000
G1070		S-3					Excluded
						/	$ -
						/	$ -
					Total		**$ 2,424,450**

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South Central Waterfront

2.b.i. Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group

5. Below-Grade Parking Cost Spreadsheet

Updated: March 12, 2020

CONTENTS			WHAT'S NEW
2.b.i.	**Cost Estimates Packet for Site Improvements from Endeavor Real Estate Group**		Applicant provided cost estimates for the PUD-proposed site improvements
	5:	Below-Grade Parking Cost Spreadsheet	(prepared by Endeavor consultant: DPR Construction)

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ATTACHMENT 5

Parking Design
Two Below Grade Levels
Level B2 Elevation: 428'-0"
Level B1 Elevation: 435'-6"
Ground Level Elevation: 450'-0"
Car Stackers on Level 1 Only

STATESMAN SITE INFRASTRUCTURE ATTACHMENT 5
Date: 10/12/2018
BELOW GRADE PARKING - OPTION IV - TOTAL FOR ALL THREE PHASES

Code	System	Quantity	UOM	Unit Price	/UOM	Ext
A1020	Foundations	408,000.0	sf	$ 16.78	/sf	$ 6,846,327
A2010	Sugrade Enclosures	408,000.0	sf	$ 16.54	/sf	$ 6,748,448
A4010	Slab-on-Grade	408,000.0	sf	$ 8.85	/sf	$ 3,611,556
A4040	Pits & Bases	408,000.0	sf	$ 4.29	/sf	$ 1,750,000
A9010	Excavation	408,000.0	sf	$ 20.43	/sf	$ 8,337,143
A9020	Construction Dewatering	408,000.0	sf	$ 7.35	/sf	$ 3,000,000
A9030	Excavation Support	408,000.0	sf	$ 12.60	/sf	$ 5,141,495
B1010	Floor Construction	408,000.0	sf	$ 121.36	/sf	$ 49,515,617
B1080	Stairs	408,000.0	sf	$ 1.79	/sf	$ 729,000
B3040	Traffic Bearing Horizontal Enclosures	408,000.0	sf	$ 10.54	/sf	$ 4,300,400
C1010	Interior Construction	408,000.0	sf	$ 7.88	/sf	$ 3,215,400
C1090	Interior Specialties & Striping	408,000.0	sf	$ 3.49	/sf	$ 1,422,900
D1010	Conveying	408,000.0	sf	$ 5.29	/sf	$ 2,160,000
D2010	Plumbing	408,000.0	sf	$ 6.00	/sf	$ 2,448,000
D3010	Mechanical	408,000.0	sf	$ 12.00	/sf	$ 4,896,000
D4010	Fire Sprinklers	408,000.0	sf	$ 7.50	/sf	$ 3,060,000
D5010	Electrical	408,000.0	sf	$ 9.00	/sf	$ 3,672,000
E1010	Vehicle Equipment	408,000.0	sf	$ 26.68	/sf	$ 10,887,090
Z1050	Tower Cranes	408,000.0	sf	$ 12.50	/sf	$ 5,100,000
	Subtotal					**$ 126,841,374**
	General Requirements/General Conditions	6.0%				$ 7,610,482
	Permits & Fees	0.0%				$ -
	Insurances and Fee	5.6%				$ 7,529,304
	Contingency	10.0%				$ 14,198,116
	Escalation 5% per Annum, Two Years	10.3%				$ 16,008,376
	Subtotal					**$ 45,346,278**
	GRAND TOTAL					**$ 172,187,652**

Area	816,000
Stalls	2,775
Efficiency	294
$/SF	$ 211.01
$/Stall	$ 62,050

BELOW GRADE PARKING - PHASE I

Code	System	Quantity	UOM	Unit Price	/UOM	Ext	
A1020	Foundations	769,600.0	sf	$ 4.20	/sf	$ 3,224,247	
A2010	Basement Walls - B2 and B3	33,155.0	sf	$ 37.00	/sf	$ 1,226,735	
A2010	Basement Walls - B1	25,302.5	sf	$ 35.00	/sf	$ 885,588	
A2010	Basement Wall Waterproofing - B2and B3	33,155.0	sf	$ 8.50	/sf	$ 281,818	
A2010	Basement Wall Waterproofing - B1	25,302.5	sf	$ 8.00	/sf	$ 202,420	
A4010	Slab-on-Grade	192,400.0	sf	$ 7.00	/sf	$ 1,346,800	
A4010	Base Rock under SOG	8,907.4	tn	$ 40.00	/tn	$ 356,296	assume 12" layer required
A4040	Pits	30.0	ea	$ 25,000.00	/ea	$ 750,000	10 elevators per building
A9010	Excavation & Offhaul - B2 and B3	135,392.6	cy	$ 16.50	/cy	$ 2,233,978	
A9010	Excavation & Offhaul - B1	103,325.9	cy	$ 16.00	/cy	$ 1,653,215	
A9020	Construction Dewatering	12.0	mo	$ 100,000.00	/mo	$ 1,200,000	
A9030	Shoring - B2 and B3	33,155.0	csf	$ 42.00	/csf	$ 1,392,510	
A9030	Shoring - B1	25,302.5	csf	$ 40.00	/csf	$ 1,012,100	
B1010	Elevated Decks - Level B1 and B2	384,800.0	sf	$ 22.00	/sf	$ 8,465,600	
B1010	Elevated Decks - Podium	192,400.0	sf	$ 42.00	/sf	$ 8,080,800	
B1010	Increased Height	447.0	ea	$ 1,362.00	/ea	$ 608,814	
B1010	Garage Entry/Exit Ramp Construction	4.0	ea	$ 50,000.00	/ea	$ 200,000	assume 160' ramp, 4 total, 30' wide
B1010	Columns	1,282.7	ea	$ 2,500.00	/ea	$ 3,206,667	
B1010	Shearwalls	20,100.0	sf	$ 45.00	/sf	$ 904,500	200 lf per building, 3 buildings
B1010	Misc Metals	577,200.0	sf	$ 2.00	/sf	$ 1,154,400	
B1080	Stairs	24.0	flt	$ 13,500.00	/flt	$ 324,000	2 per building, 3 buildings; 2 stairs direct access to pedestrian walkway
B3040	Underslab Spray Insulation	75,000.0	sf	$ 6.00	/sf	$ 450,000	25ksf per building
B3040	Roofing/ Waterproofing of Garage Lid	65,900.0	sf	$ 8.00	/sf	$ 527,200	amortorize 50% of prior calculation
B3040	3' Thick Structural Foam at Street Sections					$ -	with streets
B3040	Protection/Topping Slab	131,800.0	sf	$ 8.00	/sf	$ 1,054,400	amortorize 50% of prior calculation
C1010	Interior Construction	577,200.0	sf	$ 3.00	/sf	$ 1,731,600	
C1090	Striping	1,443.0	stall	$ 65.00	/stall	$ 93,795	
C1090	Specialties	577,200.0	sf	$ 1.00	/sf	$ 577,200	
D1010	Conveying	36.0	stp	$ 30,000.00	/stp	$ 1,080,000	4 stps per building, 3 buildings; 4 dedicated elevators (2 bank) between B2, B1 and pedestrain park, 3 stps per elevator

Control Dimensions - Phase I Parking

Level B2and B3

Length		lf	
Width		lf	
Height	9.5	lf	finished height is 8.5'; includes 1' for overex to top of footing and 12" of drain rock
Perimeter	1,745.0	lf	
Floor Area	192,400.0	sf	
Wall Area	16,577.5	sf	

Level B1

Length		lf
Width		lf
Height	14.5	lf
Perimeter	1,745.0	lf
Floor Area	192,400.0	sf
Wall Area	25,302.5	sf

Parking Counts

		Stalls	Efficiency	
Phase 1 Area	577,200	1443		assume 75 stall lost to get total count between 2600 and 2900
Phase 2 Area	304,400	1019		assume 100 stall lost to get total count between 2600 and 2900
Phase 3 Area	126,800	417		assume 50 stall lost to get total count between 2600 and 2900
Total	1,008,400	2879	350.32	

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D2010	Plumbing	577,200.0	sf	$ 2.00	/sf	$ 1,154,400	
D3010	Mechanical	577,200.0	sf	$ 4.00	/sf	$ 2,308,800	
D4010	Fire Sprinklers	577,200.0	sf	$ 2.50	/sf	$ 1,443,000	
D5010	Electrical	577,200.0	sf	$ 3.00	/sf	$ 1,731,600	
E1010	Parking Controls	1.0	ls	$ 250,000.00	/ls	$ 250,000	
E1010	Parking Management	996.0	ea	$ 417.00	/ea	$ 415,332	
E1010	Car Stackers	447.0	ea	$ 10,000.00	/ea	$ 4,470,000	
Z1050	Tower Crane	25.0	mo	$ 85,000.00	/mo	$ 2,125,000	5 cranes, 5 months per crane
	Subtotal					**$ 58,122,814**	
	General Requirements/General Conditions	6.0%				$ 3,487,369	
	Permits & Fees	0.0%				$ -	
	Insurances and Fee	5.6%				$ 3,450,170	
	Contingency	10.0%				$ 6,506,035	
	Escalation 5% per Annum, Two Years	10.3%				$ 7,335,555	
	Subtotal					**$ 20,779,129**	
	GRAND TOTAL					**$ 78,901,943**	
					Area	577,200	
					Stalls	1,443	
					Efficiency	400	
					$/SF	$ 136.70	
					$/Stall	$ 54,679	

BELOW GRADE PARKING - PHASE II

Code	System	Quantity	UOM	Unit Price	/UOM	Ext	
A1020	Foundations	608,800.0	sf	$ 4.20	/sf	$ 2,556,960	
A2010	Basement Walls - B2and B3	29,640.0	sf	$ 37.00	/sf	$ 1,096,680	assume structural that PH I wall cannot be shared
A2010	Basement Walls - B1	21,840.0	sf	$ 35.00	/sf	$ 764,400	assume structural that PH I wall cannot be shared
A2010	Basement Wall Waterproofing - B2 and B3	49,780.0	sf	$ 8.50	/sf	$ 423,130	remove 500lf on west side next to PH I
A2010	Basement Wall Waterproofing - B1	14,840.0	sf	$ 8.00	/sf	$ 118,720	remove 500lf on west side next to PH I
A2010	Punch Walls into Phase 1	1.0	ls	$ 100,000.00	/ls	$ 100,000	
A4010	Slab-on-Grade	152,200.0	sf	$ 7.00	/sf	$ 1,065,400	
A4010	Base Rock under SOG	7,046.3	tn	$ 40.00	/tn	$ 281,852	assume 12" layer required
A4040	Pits	30.0	ea	$ 25,000.00	/ea	$ 750,000	assume 10 per building
A9010	Excavation & Offhaul - B2 and B3	107,103.7	cy	$ 16.50	/cy	$ 1,767,211	
A9010	Excavation & Offhaul - B1	78,918.5	cy	$ 16.00	/cy	$ 1,262,696	
A9020	Construction Dewatering	12.0	mo	$ 75,000.00	/mo	$ 900,000	
A9030	Shoring - B2 and B3	20,140.0	csf	$ 42.00	/csf	$ 845,880	remove 500lf on west side next to PH I
A9030	Shoring - B1	14,840.0	csf	$ 40.00	/csf	$ 593,600	remove 500lf on west side next to PH I
A9030	Remove Shorting, East Wall of Phase I	1.0	ls	$ 100,000.00	/ls	$ 100,000	
B1010	Elevated Decks - Level B1 and B2	304,400.0	sf	$ 22.00	/sf	$ 6,696,800	
B1010	Elevated Decks - Podium	152,200.0	sf	$ 42.00	/sf	$ 6,392,400	
B1010	Increased Height	139.0	ea	$ 1,362.00	/ea	$ 189,318	
B1010	Garage Entry/Exit Ramp Construction	4.0	ea	$ 50,000.00	/ea	$ 200,000	assume 160' ramp, 2 total, 30' wide
B1010	Columns	1,522.0	ea	$ 2,500.00	/ea	$ 3,805,000	
B1010	Shearwalls	13,200.0	sf	$ 45.00	/sf	$ 594,000	200 lf per building, 2 buildings
B1010	Misc Metals	456,600.0	sf	$ 2.00	/sf	$ 913,200	
B1080	Stairs	18.0	flt	$ 13,500.00	/flt	$ 243,000	2 per building, 2 buildings; 2 stairs direct access to pedestrian walkway
B3040	Underslab Spray Insulation	75,000.0	sf	$ 6.00	/sf	$ 450,000	25ksf floor plate per building
B3040	Roofing/ Waterproofing of Garage Lid	65,900.0	sf	$ 8.00	/sf	$ 527,200	amortorize 50% of prior calculation
B3040	3' Thick Structural Foam at Street Sections					$ -	with streets
B3040	Protection/Topping Slab	65,900.0	sf	$ 8.00	/sf	$ 527,200	amortorize 50% of prior calculation
C1010	Interior Construction	304,400.0	sf	$ 3.00	/sf	$ 913,200	
C1090	Striping	1,141.5	stall	$ 65.00	/stall	$ 74,198	
C1090	Specialties	456,600.0	sf	$ 1.00	/sf	$ 456,600	
D1010	Conveying	21.0	stp	$ 30,000.00	/stp	$ 630,000	4 stps per building, 2 buildings; 2 dedicated elevators (1 bank) between B2, B1 and pedestrain park, 3 stps per elevator
D2010	Plumbing	456,600.0	sf	$ 2.00	/sf	$ 913,200	
D3010	Mechanical	456,600.0	sf	$ 4.00	/sf	$ 1,826,400	
D4010	Fire Sprinklers	456,600.0	sf	$ 2.50	/sf	$ 1,141,500	
D5010	Electrical	456,600.0	sf	$ 3.00	/sf	$ 1,369,800	
E1010	Parking Controls	1.0	ls	$ 250,000.00	/ls	$ 250,000	
E1010	Parking Management	801.0	ea	$ 471.00	/ea	$ 377,271	
E1010	Car Stackers	340.0	ea	$ 10,000.00	/ea	$ 3,400,000	
Z1050	Tower Crane	20.0	mo	$ 85,000.00	/mo	$ 1,700,000	4 cranes, 5 months per crane
	Subtotal					**$ 46,216,816**	
	General Requirements/General Conditions	6.0%				$ 2,773,009	
	Permits & Fees	0.0%				$ -	
	Insurances and Fee	5.6%				$ 2,743,430	
	Contingency	10.0%				$ 5,173,325	
	Escalation 5% per Annum, Two Years	10.3%				$ 5,832,924	
	Subtotal					**$ 16,522,689**	
	GRAND TOTAL					**$ 62,739,505**	
					Area	456,600	
					Stalls	1,142	

Control Dimensions - Phase II Parking

Level B2			
Length		lf	
Width		lf	
Height	9.5	lf	finished height is 8.67'; includes 1' for overex to top of footing and 12" of drain rock
Perimeter	1,560.0	lf	
Floor Area	152,200.0	sf	
Wall Area	14,820.0	sf	
Level B1			
Length		lf	
Width		lf	
Height	14.0	lf	
Perimeter	1,560.0	lf	
Floor Area	152,200.0	sf	
Wall Area	21,840.0	sf	

Parking Counts

Parking Counts

		Stalls	Efficiency	
Phase 1 Area	384,800	1340		assume 75 stall lost to get total count between 2600 and 2900
Phase 2 Area	456,600	1142		assume 100 stall lost to get total count between 2600 and 2900
Phase 3 Area	126,800	417		assume 50 stall lost to get total count between 2600 and 2900
Total	968,200	2898	334.15	

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Efficiency		400
$/SF	$	137.41
$/Stall	$	54,962

BELOW GRADE PARKING - PHASE III

Code	System	Quantity	UOM	Unit Price	/UOM	Ext	
A1020	Foundations	253,600.0	sf	$ 4.20	/sf	$ 1,065,120	
A2010	Basement Walls - B2 and B3	19,475.0	sf	$ 37.00	/sf	$ 720,575	assume structural that PH II wall cannot be shared
A2010	Basement Walls - B1	14,350.0	sf	$ 35.00	/sf	$ 502,250	assume structural that PH II wall cannot be shared
A2010	Basement Wall Waterproofing - B2 and B3	34,105.0	sf	$ 8.50	/sf	$ 289,893	remove 255 lf for the west side already in place
A2010	Basement Wall Waterproofing - B1	10,780.0	sf	$ 8.00	/sf	$ 86,240	remove 255 lf for the west side already in place
A2010	Punch Walls into Phase II	1.0	ls	$ 50,000.00	/ls	$ 50,000	
A4010	Slab-on-Grade	63,400.0	sf	$ 7.00	/sf	$ 443,800	
A4010	Base Rock under SOG	2,935.2	tn	$ 40.00	/tn	$ 117,407	assume 12" layer required
A4040	Pits	10.0	ea	$ 25,000.00	/ea	$ 250,000	10 ea/bldg; 1 building
A9010	Excavation & Offhaul - B2 and B3	22,307.4	cy	$ 16.50	/cy	$ 368,072	
A9010	Excavation & Offhaul - B1	65,748.1	cy	$ 16.00	/cy	$ 1,051,970	
A9020	Construction Dewatering	12.0	mo	$ 75,000.00	/mo	$ 900,000	
A9030	Shoring - B2 and B3	17,052.5	csf	$ 42.00	/csf	$ 716,205	remove 255 lf for the west side already in place
A9030	Shoring - B1	10,780.0	csf	$ 40.00	/csf	$ 431,200	remove 255 lf for the west side already in place
A9030	Remove Shorting, East Wall of Phase II	1.0	ls	$ 50,000.00	/ls	$ 50,000	
B1010	Elevated Decks - Level B1 and B2	126,800.0	sf	$ 22.00	/sf	$ 2,789,600	
B1010	Elevated Decks - Podium	63,400.0	sf	$ 42.00	/sf	$ 2,662,800	
B1010	Increased Height	139.0	ea	$ 1,362.00	/ea	$ 189,318	
B1010	Garage Entry/Exit Ramp Construction	4.0	ea	$ 50,000.00	/ea	$ 200,000	assume 160' ramp, 1 total, 30' wide
B1010	Columns	634.0	ea	$ 2,500.00	/ea	$ 1,585,000	
B1010	Shearwalls	6,600.0	sf	$ 45.00	/sf	$ 297,000	200 lf per building
B1010	Misc Metals	190,200.0	sf	$ 2.00	/sf	$ 380,400	
B1080	Stairs	12.0	flt	$ 13,500.00	/flt	$ 162,000	2 per building, 1 buildings; 2 stairs direct access to pedestrian walkway
B3040	Underslab Spray Insulation	25,000.0	sf	$ 6.00	/sf	$ 150,000	25ksf is building footprint
B3040	Roofing/ Waterproofing of Garage Lid	38,400.0	sf	$ 8.00	/sf	$ 307,200	
B3040	3' Thick Structural Foam at Street Sections					$ -	with streets
B3040	Protection/Topping Slab	38,400.0	sf	$ 8.00	/sf	$ 307,200	
C1010	Interior Construction	190,200.0	sf	$ 3.00	/sf	$ 570,600	
C1090	Striping	475.5	stall	$ 65.00	/stall	$ 30,908	
C1090	Specialties	190,200.0	sf	$ 1.00	/sf	$ 190,200	
D1010	Conveying	15.0	stp	$ 30,000.00	/stp	$ 450,000	4 stps per building, 1 buildings; 2 dedicated elevators (1 bank) between B2, B1 and pedestrain park, 3 stps per elevator
D2010	Plumbing	190,200.0	sf	$ 2.00	/sf	$ 380,400	
D3010	Mechanical	190,200.0	sf	$ 4.00	/sf	$ 760,800	
D4010	Fire Sprinklers	190,200.0	sf	$ 2.50	/sf	$ 475,500	
D5010	Electrical	190,200.0	sf	$ 3.00	/sf	$ 570,600	
E1010	Parking Controls	1.0	ls	$ 175,000.00	/ls	$ 175,000	
E1010	Parking Management	334.5	ea	$ 417.00	/ea	$ 139,487	
E1010	Car Stackers	141.0	ea	$ 10,000.00	/ea	$ 1,410,000	
Z1050	Tower Crane	15.0	mo	$ 85,000.00	/mo	$ 1,275,000	3 cranes for 5 months per
	Subtotal					**$ 22,501,745**	
	General Requirements/General Conditions	6.0%				$ 1,350,105	
	Permits & Fees	0.0%				$ -	
	Insurances and Fee	5.6%				$ 1,335,704	
	Contingency	10.0%				$ 2,518,755	
	Escalation 5% per Annum, Two Years	10.3%				$ 2,839,897	
	Subtotal					**$ 8,044,460**	
	GRAND TOTAL					**$ 30,546,205**	

Area		190,200
Stalls		476
Efficiency		400
$/SF	$	160.60
$/Stall	$	64,240

Control Dimensions - Phase III Parking

Level B2

Length		lf	
Width		lf	
Height	9.5	lf	finished height is 8.67'; includes 1' for overex to top of footing and 12" of drain rock
Perimeter	1,025.0	lf	
Floor Area	63,400.0	sf	
Wall Area	9,737.5	sf	

Level B1

Length		lf
Width		lf
Height	14.0	lf
Perimeter	1,025.0	lf
Floor Area	63,400.0	sf
Wall Area	14,350.0	sf

Parking Counts

Parking Counts

		Stalls	Efficiency	
Phase 1 Area	384,800	1340		assume 75 stall lost to get total count between 2600 and 2900
Phase 2 Area	304,400	1019		assume 100 stall lost to get total count between 2600 and 2900
Phase 3 Area	190,200	476		assume 50 stall lost to get total count between 2600 and 2900
Total	879,400	2834	310.30	

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South Central Waterfront

2.b.ii. City Of Austin Review & Adjustments Of Cost Estimates For Site Improvements As Submitted By Endeavor Real Estate Group

1. MEMO: Review of Cost Estimates

Updated: March 12, 2020

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2.b.ii.	**City Of Austin Review & Adjustments Of Cost Estimates For Site Improvements As Submitted By Endeavor Real Estate Group**		Consultant review of item 2.b.i.
	1:	MEMO: Review of Cost Estimates submitted by Applicant for 305 S. Congress PUD	(prepared by Project Cost Resources, consultants to CoA/PAZ)

CITY OF AUSTIN REVIEW & ADJUSTMENTS OF COST ESTIMATES FOR SITE IMPROVEMENTS AS SUBMITTED BY ENDEAVOR REAL ESTATE GROUP

The Endeavor Real Estate Group and their consultant team submitted Cost Estimates for Site Improvements associated with their proposed PUD. *[See separate packet: COST ESTIMATES PACKET FOR SITE IMPROVEMENTS FROM ENDEAVOR REAL ESTATE GROUP]*

This packet includes two documents associated with the City of Austin's review of the Cost Estimates as submitted by the Endeavor Real Estate Group:

Attachment 1: MEMO: Review of Cost Estimates submitted by Applicant for 305 S. Congress PUD
(prepared by Project Cost Resources, consultants to CoA/PAZ)

Attachment 2: Adjusted Direct Costs for 305 S. Congress PUD
(prepared by CoA/PAZ staff, based on Project Cost Resources memo)

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Project Cost Resources
410 West Grand Parkway South, Suite 390
Katy, Texas 77494

MEMORANDUM

To: City of Austin Planning and Zoning Department, Attn: Alan Holt

From: Project Cost Resources, Inc. (Greg Edwards) Greg Edwards

Date: February 13, 2020

Re: Review of Cost Estimate submitted by Applicant for 305 S. Congress PUD

At the request of the City of Austin, Planning & Zoning Department, the Applicant team for the 305 S. Congress Planned Unit Development (PUD) amendment submission provided cost estimates for proposed Site Improvements, including Parkland, Plazas, Streets and Streetscapes (improvements to existing and newly proposed), and the Underground Parking, as well as site preparation and utilities infrastructure. The Applicant submitted the following documents in support of their cost estimates:

Attachment 1: Infrastructure Improvements (DRAFT) - Key Map
Attachment 2: Waterfront Park Concept Map
Attachment 3: Waterfront Park Cost Estimates Table
Attachment 4: Site Infrastructure - Program Cost Metrics Spreadsheet
Attachment 5: Below-Grade Parking Cost Spreadsheet

As part of a consultant contract with the City of Austin Planning & Zoning Department, PCR has completed an independent review and evaluation of the Applicant's cost estimates submissions. In this memo, PCR offers an assessment on whether the cost estimates provided by the Applicant are in alignment with current market conditions and highlights where our assessment differs from the Applicant's submission.

Throughout this memo, reviews assess cost estimates according to Hard Costs, Indirect Costs and Grand Total Costs. Definitions for the purposes of this memo include:

Hard Costs – labor and material for direct construction costs
Indirect Costs – markups by the contractor for general conditions, general requirements, contractor contingencies, insurances, performance & payment bonds and fee.
Soft Costs - includes fees for consultants including architecture, landscape architecture, engineering, legal, material testing, regulatory fees and other consultants. These costs are typically assigned by the Owner and are not specifically under the purview of a construction cost consultant. For purposes of this memo, Soft Costs are assumed to be 20%.
Grand Total Costs – the sum of hard costs, indirect costs and soft costs.

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Waterfront Park – Hard Costs, Indirect Costs, & Grand Total Costs

The 305 S. Congress PUD proposes an Open Space plan that consists of a 7.02-acre Waterfront Park **(G-1 on Attachment 1)** and is complemented with an additional 1.77 acres of Plaza Areas (**P-1 through P-7 on Attachment 1**).

To provide additional detail on the cost estimations associated with Waterfront Park, the Applicant provided a Waterfront Park Concept Map (**Attachment 2**) and an accompanying Waterfront Park Cost Estimates table (**Attachment 3**). Attachments 2 and 3 were generated by the Applicant's consultant, CMG Landscape Architecture.

Generally, the landscaped areas, such as lawns, esplanade, waterfront trail, water quality ponds, and natural areas, are priced with unit costs. Park amenities, such as a bat viewing feature, water theater, pier, boardwalk, kayak launch area, picnic and play areas, fitness pavilion, and showers and restrooms, have generally been priced individually.

Waterfront Park

- *Hard Cost*: CMG Landscape Architecture estimate: $26,541,191
    - PCR is of the opinion that the Waterfront Park Hard Costs estimate appears to be reasonable except for the following:
        - Heritage tree relocation is included at a unit cost of $115,000 – our opinion is that this should be more in the $75,000 range.
        - The Lighting & Electrical line item is included as an allowance of $3,000,000. PCR suggest increasing this allowance to $7,500,000
        - The Power and AV line item is included as an allowance of $450,000. PCR suggests increasing this allowance to $4,500,000
        - There are no general costs included for Wet Site Utilities / Connections or Drainage. PCR suggests including an allowance for these items of around $3,000,000.

- *Indirect Cost*: CMG Landscape Architecture estimate: $5,127,861
    - PCR is of the opinion that the Waterfront Park Indirect Costs estimate appears to be reasonable.

- *Grand Total:* CMG Landscape Architecture estimate: $42,520,434
    - Based on PCR review of the Hard Costs and Indirect Costs, and assuming the Development Fee @ 3% ($1,238,459), the Grand Total Cost estimate appears to be low primarily due to the Lighting, Electrical, Power and AV allowances and the Underground Utility allowance recommended above.

Plazas & Streets – Indirect Costs

The Applicant provided cost estimates for the collection of proposed Plazas and Streets/Streetscapes which were generated by their consultant, DPR Construction (see **Attachment 4**). The Hard Costs associated each of the proposed Plazas and proposed

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segment of Street improvement/construction are individually itemized. All estimated Hard Costs are augmented with consistent Indirect Cost assumptions. The Indirect Cost assumptions are assumed for all Plazas and Streets are as follows:

- General Requirements & General Conditions: 6.0%
- Insurance, Fees, & Markups: 6.0%
- Contingency: 10.6%
- Escalation @ 5% per annum for 2 years 10.3%

PCR is of the opinion that the Indirect Costs assumptions appear low. At this stage of estimation, we would suggest a contingency of 20%. Also, the DPR Construction assumptions do not appear to consider consultant fees (i.e., "soft costs" as defined on page 1 of this memo). We defer to the City's suggestion of using 20% of Direct Costs to cover these "soft costs".

Plazas – Hard Costs & Grand Total Costs

Seven (7) Plaza Areas, totaling 1.77 acres, complements the Waterfront Park to complete the Open Space plan (**Attachment 1**). Cost estimates for these Plazas are contained in the Site Infrastructure Program Cost Metrics Spreadsheet (**Attachment 4**). Attachment 4 was generated by the Applicant's consultant, DPR Construction. DPR Construction notes that prices are based on recent cost for projects located in the City of Austin CBD. The DPR spreadsheet breaks all costs into Hard Costs, Indirect Costs[1], and Grand Total (Hard + Indirect Costs).

Plaza 1

- *Hard Cost:* DPR Construction estimate = $2,424,070 (rounded to $2,425,000.)
    - PCR is of the opinion that the Plaza 1 Hard Costs estimate appears low.
        - Handrails are included at a unit cost of $175.00/lf. PCR's opinion is that these should be more in the $275.00/lf range.
        - Stone wall cladding is included at a unit cost of $25.00/sf. PCR's opinion is that this should be more in the $35.00/sf range.
        - Stone caps are included at a unit cost of $35.00/sf. PCR's opinion is that this should be more in the $45.00/sf range.
        - There is no consideration for underground utility conflicts or re-routing. PCR suggests including an allowance for this work of $100,000.

- *Grand Total:* DPR Construction estimate = $3,276.077
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 1 appears low for the reasons outlined above and the contingency percentage and lack of accounting for soft costs.

[1] DPR Construction Indirect Costs includes: Taxes, insurance, fees and markups; Contingency; Escalation @ 5% per annum for two (2) years. See Attachment 4 for details.

Plaza 2

- *Hard Cost:* DPR Construction estimate = $477,920 (rounded to $479,000)
    - PCR is of the opinion that the Plaza 2 Hard Costs estimate appears reasonable.

- *Grand Total:* DPR Construction estimate = $647,110
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 2 appears to be low relative to the contingency amount and the lack of accounting for soft costs.

Plaza 3

- *Hard Cost:* DPR Construction estimate = $287,875 (rounded to $288,000)
    - PCR is of the opinion that the Plaza 3 Hard Costs estimate appears reasonable.
- *Grand Total:* DPR Construction estimate = $389,076
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 3 appears to be low relative to the contingency amount and the lack of accounting for soft costs.

Plaza 4

- *Hard Cost:* DPR Construction estimate = $840,648 (rounded to $844,000)
    - PCR is of the opinion that the Plaza 4 Hard Costs estimate appears reasonable.

- *Grand Total:* DPR Construction estimate = $$1,140,210
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 4 appears to be low relative to the contingency amount and the lack of accounting for soft costs.

Plaza 5

- *Hard Cost:* DPR Construction estimate = $$538,600 (rounded to $538,000)
    - PCR is of the opinion that the Plaza 5 Hard Costs estimate appears reasonable.

- *Grand Total:* DPR Construction estimate = $726,816
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 5 appears to be low relative to the contingency amount and the lack of accounting for soft costs.

Plaza 6

- *Hard Cost:* DPR Construction estimate = $240,100 (rounded to $239,000)
    - PCR is of the opinion that the Plaza 6 Hard Costs estimate appears reasonable.

- *Grand Total:* DPR Construction estimate = $322,879
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 6 appears to be low relative to the contingency amount and the lack of accounting for soft costs.

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Plaza 7

- *Hard Cost:* DPR Construction estimate = $923,186 (rounded to $923,000)
    - PCR is of the opinion that the Plaza 7 Hard Costs estimate appears low:
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Pathway pavers, outdoor seating pavers and signature walkway pavers are all included at a unit price of $15.00/sf. PCR's opinion is that the unit cost for pavers should be in the $32.00 range and that a 4" concrete sub-base should be included at $6.00/sf for a total of $38.00/sf for these areas.
        - There is no consideration for underground utility conflicts or re-routing. PCR suggests including an allowance for this work of $50,000.
        - 8" water line pricing is included at a unit cost of $200.00/sf (the same as a 12" line). PCR's opinion is that this should be more in the $175.00/lf range.

- *Grand Total:* DPR Construction estimate = $1,246,936
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Plaza 7 appears low for the reasons outlined above and the contingency percentage and the lack of accounting for soft costs.

Streets on-site (inside 305 S. Congress property line) – Hard Costs & Grand Total Costs

The Applicant has provided cost estimates for all streets (existing and newly proposed) as part of their PUD application (**Attachment 1**). Cost estimates for Streets are contained in the Site Infrastructure Program Cost Metrics Spreadsheet (**Attachment 4**), generated by the Applicant's consultant, DPR Construction.

Barton Springs extension (BS-1, New Street)

- *Hard Cost:* DPR Construction estimate = $2,863,403 (rounded to $2,864,000)
    - PCR is of the opinion that the Barton Springs extension Hard Costs estimate appears low:
        - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Bioswale unit pricing is included at $10.00/sf. PCR's opinion is that this should be more in the $30.00/sf range.

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        - 8” water line pricing is included at a unit cost of $200.00/sf (the same as a 12” line). PCR’s opinion is that this should be more in the $175.00/lf range.

- *Grand Total:* DPR Construction estimate = $3,888,993
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for the Barton Springs extension appears low due to the reasons noted above and the contingency percentage and the lack of accounting for soft costs.

Internal Street, Segment 1 (S-1, New Street)

- *Hard Cost:* DPR Construction estimate = $714,581 (rounded to $717,000)
    - PCR is of the opinion that the Internal Street, Segment 1 Hard Costs estimate appears low:
        - Asphalt paving is included at a unit cost of $3.00/sf. PCR’s opinion is that this unit cost should be more in the $5.00/sf range
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR’s opinion is that these should be more in the $12,000.00/ea range.
        - 8” water line pricing is included at a unit cost of $200.00/sf (the same as a 12” line). PCR’s opinion is that this should be more in the $175.00/lf range.
        - Bike lane is included at a unit cost of $3.00/sf. PCR’s opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $972,607
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for the Internal Street, Segment 1 appears low due to the reasons noted above and the contingency percentage and the lack of accounting for soft costs.

Internal (Shared) Street, Segment 2 (S-2, New Street) ***NOTE***: In the cost estimation, S-2 was broken into three components: Intersection to the west (S-2, Intersection 1), the Internal (decorative) street segment (S-2 Laneway); and the Intersection to the east (S-2, Intersection 2).

- *Hard Cost:* DPR Construction estimate = $104,649 + $730,152 + $104,649 (rounded to $106,000 + 731,000 + 105,000). Total = $942,000
    - PCR is of the opinion that the Internal Street, Segment 2 Hard Costs estimate appears low:
        - Roadway pavers and pathway pavers are included at a unit price of $15.00/sf. PCR’s opinion is that the unit cost for pavers should be in the $32.00 range and that a 4” concrete sub-base should be included at $6.00/sf for a total of $38.00/sf for this unit cost.

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        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - 8" water line pricing is included at a unit cost of $200.00/sf (the same as a 12" line). PCR's opinion is that this should be more in the $175.00/lf range.
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $1,272,604
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Internal Street, Segment 2 appears low due to the reasons noted above and the contingency percentage and the lack of accounting for soft costs.

Internal Street, Segment 3 (S-3, New Street)

- *Hard Cost:* DPR Construction estimate = $608,484 (rounded to $613,000)
    - PCR is of the opinion that the internal Street, Segment 3 Hard Costs estimate appears low:
        - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Bioswale unit pricing is included at $10.00/sf. PCR's opinion is that this should be more in the $30.00/sf range.
        - 8" water line pricing is included at a unit cost of $200.00/sf (the same as a 12" line). PCR's opinion is that this should be more in the $175.00/lf range.
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $828,138
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Internal Street, Segment 3 appears low due to the reasons noted above and the contingency percentage and the lack of accounting for soft costs.

Internal Street, Segment 4 (S-4, New Street)

- *Hard Cost:* DPR Construction estimate = $475,390 (rounded to $474,000)
    - PCR is of the opinion that the Internal Street, Segment 4 Hard Costs estimate appears low:
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Pathway pavers, roadway pavers and outdoor seating pavers are all included at a unit price of $15.00/sf. PCR's opinion is that the unit cost

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for pavers should be in the $32.00 range and that a 4" concrete sub-base should be included at $6.00/sf for a total of $38.00/sf for these areas.
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $640,355
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Internal Street, Segment 4 appears low due to the reasons noted above and the contingency percentage and the lack of accounting for soft costs.

Streets off-site (outside 305 S. Congress property line) – Hard Costs & Grand Total Costs

Congress Avenue Intersection (C-1, Existing Street)

- *Hard Cost:* DPR Construction estimate = $4,145,000.
    - PCR is of the opinion that the Congress Avenue Intersection Hard Costs estimate appears low:
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $5,599,727
    - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for the Congress Avenue Intersection appears low due to the item above and the contingency percentage and the lack of accounting for soft costs.

Congress Avenue Segment (C-2, Existing Street)

- *Hard Cost:* DPR Construction estimate = $873,000.
    - PCR is of the opinion that the Congress Avenue Segment Hard Costs estimate appears low:
        - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
        - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
        - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.

- *Grand Total:* DPR Construction estimate = $1,179,388.

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- Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for the Congress Avenue segment appears low due to the item above and the contingency percentage and the lack of accounting for soft costs.

Barton Springs Improvement 2 (BS-2, Existing Street)

- *Hard Cost:* DPR Construction estimate = $1,866,914 (rounded to $1,867,000)
  - PCR is of the opinion that the Barton Springs 2 Improvements Hard Costs estimate appears low:
    - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
    - Bike lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $8.00/sf range.
    - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.
    - 8" water line pricing is included at a unit cost of $200.00/sf (the same as a 12" line). PCR's opinion is that this should be more in the $175.00/lf range.

- *Grand Total:* DPR Construction estimate = $2,522,241
  - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Barton Springs 2 Improvements appears low due to the items above and the contingency percentage and the lack of accounting for soft costs.

Barton Springs Intersection @ E. Riverside Drive (BS-3, Existing Street)

- *Hard Cost:* DPR Construction estimate = $1,660,000.
  - PCR is of the opinion that the Barton Springs Intersection @ E. Riverside Drive Hard Costs estimate appears low: :
    - Asphalt turn lane is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
    - Asphalt paving is included at a unit cost of $3.00/sf. PCR's opinion is that this unit cost should be more in the $5.00/sf range
    - Street lights and poles are included at a unit cost of $5,000.00/ea. PCR's opinion is that these should be more in the $12,000.00/ea range.

- *Grand Total:* DPR Construction estimate = $2,242,593
  - Based on PCR review of the Hard Costs and our evaluation of the Indirect Costs assumptions, the Grand Total Cost estimate for Barton Springs Intersection @ E. Riverside Drive appears low due to the items above and the contingency percentage and the lack of accounting for soft costs.

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Below Grade Parking - Overview

The 305 S. Congress PUD proposes to build Below Grade Parking to accommodate parking for approximately 3800+/- cars, estimated to satisfy about 94% of their full parking buildout. The Below Grade Parking will be built in three phases. The design generally assumes two levels below grade, with car stackers on Level 1 to double cars per stall in approximately 928 stalls.

The estimated Total Cost for all three phases of the Below Grade Parking structure/system is estimated to cost $172,187,652 (see **Attachment 5**, provided by the Applicant's consultant, DPR Construction). The estimated cost per parking stall varies between the three phases. The overall Total Cost estimate is $62,050/stall; however, since stackers will be installed in an estimated 928 stalls, this estimated cost per stalls does not reflect the cost per car. The overall Total Cost for the below grade parking structure and system is an estimated $211/SF.

Below Grade Parking – Indirect Costs

The Hard Costs associated each of the proposed phases of Below Grade Parking are individually itemized (**Attachment 5**). All estimated Hard Costs are augmented with consistent Indirect Costs assumptions. The Indirect Costs assumptions are assumed for all Below Grade Parking are as follows:

- General Requirements/General Conditions: 6.0%
- Permits & Fees: 0%
- Insurance, Fees, & Markups: 5.6%
- Contingency: 10.0%
- Escalation 5% per Annum, Two Years 10.3%

PCR is of the opinion that the Indirect Costs assumptions appear low. At this stage of estimation, we would suggest a contingency of 20%. Also, the DPR Construction assumptions do not appear to consider consultant fees (i.e., "soft costs" as defined on page 1 of this memo). We defer to the City's suggestion of using 20% of Direct Costs to cover these "soft costs".

Below Grade Parking – Hard Costs & Grand Total Costs

The Below Grade Parking Cost Spreadsheet provides itemized Hard Costs estimates for each of the three phases (**Attachment 5**). The DPR spreadsheet breaks all costs into Hard Costs, Indirect Costs, and Grand Total (Hard + Indirect Costs).

Below Grade Parking: Phases 1-3

- *Hard Cost:* DPR Construction estimate = 1=$58,122,814 / 2=$46,216,816 / 3=$22,501,745
    - PCR is of the opinion that the estimated subtotal of Hard Costs for Below-Grade Parking, Phase 1, 2 and 3 appears reasonable. We have estimated underground garages, with a rock excavation premium, escalated to 2021 dollars at a price point of $128.00/sf (without stackers). The stackers add from $8.00 - $10.00/sf

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so our estimates would be from $136.00 to $138.00/sf (within the range of DPR's pricing).

- *Grand Total:* DPR Construction estimate = 1=$78,901,943 / 2=$62,739,505 / 3=$30,546,205
    - Based on PCR review of the Hard Costs for this infrastructure and our evaluation of the Indirect Costs assumptions (subject to the qualifiers that we highlighted above to their Indirect Cost assumptions), the Grand Total Cost estimate for Below Grade Parking, Phases 1-3 appears reasonable

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DIRECT COSTS for the 305 S. Congress PUD proposal for STREET, OPEN SPACES, INFRASRUCTURE & SITE PREPARATION, as Reviewed and Adjusted by City of Austin consultants.

The following PDF **excepts the Direct Costs** from the cost estimates provided to the City of Austin by the Endeavor Real Estate Group's consultant, DPR Construction.

Direct Cost (aka: Hard Costs) includes the materials, unit quantities and costs, and labor for construction.

Indirect Costs (including markups by contractor for general conditions, general requirements, contractor contingencies, insurance, performance & payment bonds and fees; and including Soft Costs which comprises fees for consultants such as architecture, landscape architecture, engineering, legal services, etc) are not included in the following excerpts.

The following excerpt shows redline markups by CoA/PAZ staff that adjust unit costs in accordance to the Project Cost Resources memo dated February 13, 2020. Therefore, the following redline adjustments provide the Direct Costs of the PUD proposed streets/open spaces/infrastructure to match the recommendations of the City's consultant review.

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DIRECT COSTS for the 305 S. Congress PUD proposal for STREET, OPEN SPACES, INFRASRUCTURE & SITE PREPARATION, as Reviewed by City of Austin consultants.

NOTE: The attached PDF shows the direct costs estimates that were provided to the City of Austin by the Endeavor consultant, DPR. These direct costs were reviewed by the City's cost consultant, PCR, in their memo dated February 13, 2020.

The redlines in the attached memo were made by City of Austin staff, using the PCR adjustments, in order to attain the direct costs for the PUD proposed streets/open spaces/infrastructure that match the City's consultant review.

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South Central Waterfront

2.b.ii. City Of Austin Review & Adjustments Of Cost Estimates For Site Improvements As Submitted By Endeavor Real Estate Group

2. Adjusted Direct Costs for 305 S. Congress PUD

Updated: March 12, 2020

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	2:	Adjusted Direct Costs for 305 S. Congress PUD	(prepared by CoA/PAZ staff, based on Project Cost Resources memo)

C-1
Congress Intersection

Typical	Length		lf
	Section Width		lf
	Area	21,000	sf
Turn Lane	Length		lf
	Section Width		lf
	Area		sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -	
G2010		Asphalt Pavement - Typical	22,100.0	sf	$ 5.45	/sf	$ 120,445	Road and Drain
G2010		Asphalt Pavement - Turn Lane		sf	$ 3.00	/sf	$ -	
G2010		Striping	22,100.0	sf	$ 0.25	/sf	$ 5,525	Road and Drain
G2010		Bike Lane		sf	$ 3.00	/sf	$ -	
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -	
G2010		Street Lights / Light Poles - 90' Spacing	4.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~20,000~~ 48,000	Streetscape
G2010		Traffic Signals	1.0	ls	$ 4,000,000.00	/ls	$ 4,000,000	Road and Drain
G2030		Sidewalk		sf	$ 8.00	/sf	$ -	
G2030		ADA Ramps		ea	$ 2,500.00	/ea	$ -	
G2060		Tree Grates		ea	$ 3,500.00	/ea	$ -	
G2060		Site Furnishings		ls	$ 100,000.00	/ls	$ -	
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip		sf	$ 10.00	/sf	$ -	
G2080		Trees - 20' Spacing		ea	$ 2,800.00	/ea	$ -	
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ ~~4,145,970~~ $4,173,970

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Notes
Assume Intersection is 45'

C-2
Congress Improvements

Typical	Length		lf
	Section Width		lf
	Area	55,700	sf
Turn Lane	Length		lf
	Section Width		lf
	Area	22,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -	
G2010		Asphalt Pavement - Typical	55,700.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~167,100~~	278,500 R&Drain
G2010		Asphalt Pavement - Turn Lane	22,100.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~66,300~~	110,500 R&Drain
G2010		Striping	77,800.0	sf	$ 0.25	/sf	$ 19,450	R&Drain
G2010		Bike Lane	9,600.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~28,800~~	76,800 Streetscape
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -	
G2010		Street Lights / Light Poles - 90' Spacing	14.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~70,000~~	168,000 Streetscape
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -	
G2030		Sidewalk	20,000.0	sf	$ 8.00	/sf	$ 160,000	Streetscape
G2030		ADA Ramps	4.0	ea	$ 2,500.00	/ea	$ 10,000	Streetscape
G2060		Tree Grates	25.0	ea	$ 3,500.00	/ea	$ 87,500	Streetscape
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000	Streetscape
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip	9,600.0	sf	$ 10.00	/sf	$ 96,000	Streetscape
G2080		Trees - 20' Spacing	25.0	ea	$ 2,800.00	/ea	$ 70,000	Streetscape
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ ~~875,150~~ $1,176,750

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Notes
Assume Intersection is 45'

BS-1
BARTON SPRINGS SEGMENT 1

Typical	Length	1,050	lf
	Section Width	56	lf
	Area	58,800	sf
Turn Lane	Length	150	lf
	Section Width	59	lf
	Area	8,850	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	2,310.0	lf	$ 18.00	/lf	$ 41,580	R&Drain
G2010		Asphalt Pavement - Typical	28,350.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~85,050~~	141,750 R&Drain
G2010		Asphalt Pavement - Turn Lane	4,500.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~13,500~~	22,500 R&Drain
G2010		Striping	32,850.0	sf	$ 0.25	/sf	$ 8,213	R&Drain
G2010		Bike Lane	11,100.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~33,300~~	88,800 Streetscape
G2010		Unidentified Strip - Assume Concrete	2,220.0	sf	$ 8.00	/sf	$ 17,760	R&Drain
G2010		Street Lights / Light Poles - 90' Spacing	27.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~135,000~~	324,000 Streetscape
G2010		Traffic Signals	1.0	ls	$ -	/ls	$ -	
G2030		Sidewalk	5,550.0	sf	$ 8.00	/sf	$ 44,400	Streetscape
G2030		ADA Ramps	4.0	ea	$ 2,500.00	/ea	$ 10,000	Streetscape
G2060		Tree Grates	120.0	ea	$ 3,500.00	/ea	$ 420,000	Streetscape
G2060		Site Furnishings	1.0	ls	$ 500,000.00	/ls	$ 500,000	Streetscape
G2080		Bioswale	7,200.0	sf	$ 30.00 ~~10.00~~	/sf	$ ~~72,000~~	216,000 Green Infra
G2080		Landscape Strip	6,660.0	sf	$ 10.00	/sf	$ 66,600	Streetscape
G2080		Trees - 20' Spacing	120.0	ea	$ 2,800.00	/ea	$ 336,000	Streetscape
G3010		12" Water Line	1,200.0	lf	$ 200.00	/lf	$ 240,000	Utilities
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	1,200.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~240,000~~	210,000 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	1,200.0	lf	$ 100.00	/lf	$ 120,000	Utilities
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	1,200.0	lf	$ 250.00	/lf	$ 300,000	Utilities
G5010		Telecom Ductbank	1,200.0	lf	$ 150.00	/lf	$ 180,000	Utilities
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
					Total		$ ~~2,863,403~~	$3,287,603

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Notes
Assume Intersection is 45'

BS-2
BARTON SPRINGS SEGMENT 2

Typical	Length	445	lf
	Section Width	66	lf
	Area	29,370	sf
Turn Lane	Length	150	lf
	Section Width	69	lf
	Area	10,350	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	1,190.0	lf	$ 18.00	/lf	$ 21,420	
G2010		Asphalt Pavement - Typical	12,015.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~36,045~~	60,075
G2010		Asphalt Pavement - Turn Lane	4,500.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~13,500~~	22,500
G2010		Striping	16,515.0	sf	$ 0.25	/sf	$ 4,129	
G2010		Bike Lane	7,140.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~21,420~~	57,120
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -	
G2010		Street Lights / Light Poles - 90' Spacing	14.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~70,000~~	168,000
G2010		Traffic Signals	1.0	ls	$ 500,000.00	/ls	$ 500,000	
G2030		Sidewalk	14,875.0	sf	$ 8.00	/sf	$ 119,000	
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	90.0	ea	$ 3,500.00	/ea	$ 315,000	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip	7,140.0	sf	$ 10.00	/sf	$ 71,400	
G2080		Trees - 20' Spacing	90.0	ea	$ 2,800.00	/ea	$ 252,000	
G3010		12" Water Line	595.0	lf	$ 200.00	/lf	$ 119,000	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	595.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~119,000~~	104,125
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
					Total		~~$ 1,866,914~~	$2,018,769

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Notes
Assume Intersection is 45'

BS-3
Barton Springs Intersection

Typical	Length		lf
	Section Width		lf
	Area	6,500	sf
Turn Lane	Length		lf
	Section Width		lf
	Area		sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter		lf	$ 18.00	/lf	$ -	
G2010		Asphalt Pavement - Typical	6,500.0	sf	$ 5.00 ~~5.75~~	/sf	$ ~~37,375~~	32,500
G2010		Asphalt Pavement - Turn Lane		sf	$ 5.00 ~~3.00~~	/sf	$ -	
G2010		Striping	6,500.0	sf	$ 0.25	/sf	$ 1,625	
G2010		Bike Lane		sf	$ 8.00 ~~3.00~~	/sf	$ -	
G2010		Unidentified Strip - Assume Concrete	-	sf	$ 8.00	/sf	$ -	
G2010		Street Lights / Light Poles - 90' Spacing	4.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~20,000~~	48,000
G2010		Traffic Signals	1.0	ls	$ 1,601,000.00	/ls	$ 1,601,000	
G2030		Sidewalk		sf	$ 8.00	/sf	$ -	
G2030		ADA Ramps		ea	$ 2,500.00	/ea	$ -	
G2060		Tree Grates		ea	$ 3,500.00	/ea	$ -	
G2060		Site Furnishings		ls	$ 100,000.00	/ls	$ -	
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip		sf	$ 10.00	/sf	$ -	
G2080		Trees - 20' Spacing		ea	$ 2,800.00	/ea	$ -	
G3010		12" Water Line	-	lf	$ 200.00	/lf	$ -	
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ ~~1,660,000~~ $1,683,125

Notes
Assume Intersection is 45'

DRAFT

P-1
Plaza - Great Steps

Typical	Length	225		
	Section Width	varies		
		80' at south end		
		145' at north end		
	Area	28,300	sf	
	Elevation Change	5	ft	450' at top, 445' at bottom

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
		Stair Landings	4.0	ea	$ -	/ea	$ -	
		Landing Area - Top	1,450.0	sf	$ -	/sf	$ -	
		Landing Area - Mid-1	4,360.0	sf	$ -	/sf	$ -	
		Landing Area - Mid-2	5,375.0	sf	$ -	/sf	$ -	
		Landing Area - Bottom	4,900.0	sf	$ -	/sf	$ -	replaced by S-1 street
		Total Stair Landing Area	16,085.0	sf	$ -	/sf	$ -	replaced by S-1 street
		Steps - Top to Mid-1	4.0	riser	$ -	/riser	$ -	
		Steps - Mid 1 to Mid-2	5.0	riser	$ -	/riser	$ -	North side only
		Steps - Mid 2 to Bottom	5.0	riser	$ -	/riser	$ -	
		Step Length - Top to Mid-1	90.0	lf	$ -	/lf	$ -	North side only
		Step Length - Mid-1 to Mid-2	110.0	lf	$ -	/lf	$ -	North side only
		Step Length - Mid-2 to Bottome	135.0	lf	$ -	/lf	$ -	
		Total Step Length	1,585.0	lf	$ -	/lf	$ -	
		Stair Construction						
G2060		Structural Geofoam	63,675.0	cf	$ 5.00	/cf	$ 318,375	
G2060		Concrete Landings	16,085.0	sf	$ 12.00	/sf	$ 193,020	
G2060		Concrete Stairs	1,585.0	lf	$ 100.00	/lf	$ 158,500	
G2060		Concrete Walls on Sides	5,850.0	sf	$ 25.00	/sf	$ 146,250	Assume 13' Tall, Both Sides, Entire Length
G2060		Pavers on Landings	16,805.0	sf	$ 15.00	/sf	$ 252,075	
G2060		Stair Treads	1,585.0	lf	$ 25.00	/lf	$ 39,625	
G2060		Stairs Risers	1,585.0	lf	$ 25.00	/lf	$ 39,625	
G2060		Stair Nosings	1,585.0	lf	$ 10.00	/lf	$ 15,850	
G2060		Handrails	180.0	lf	$ 275.00 ~~175.00~~	/lf	$ ~~31,500~~ 49,500	30 lf per set per side of steps, 3 sets of steps
G2060		Center Rail	180.0	lf	$ 250.00	/lf	$ 45,000	60 lf per set of steps, 3 sets of steps
G2060		Wall Claddings - Stone	3,600.0	sf	$ 35.00 ~~25.00~~	/sf	$ ~~90,000~~ 126,000	assume 10' drop, treat as triangel shape on both sides, add 3' cap wall on top
G2060		Wall Claddings - Stone Cap	550.0	lf	$ 45.00 ~~35.00~~	/lf	$ ~~19,250~~ 24,750	
G2080		Furnishings	1.0	ea	$ 200,000.00	/ea	$ 200,000	
G2080		Landscaping	1.0		$ 175,000.00		$ 175,000	
G2080		Water Feature	1.0		$ 500,000.00		$ 500,000	
G4050		Lighting	1.0	ls	$ 200,000.00	/ls	$ 200,000	
		Allowance- underground utility conflicts/re-routing			$100,000	/	$ -	$100,000
						/	$ -	
						/	$ -	

Total	$ ~~2,424,070~~	$2,583,570
Cost/SF	$ 85.66	

Notes
Assume Intersection is 45'

DRAFT

P-2
Plaza

Typical	Length	52	lf
	Section Width	60	lf
	Area	3,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,480.0	sf	$ 40.00	/sf	$ 99,200	80% of area
G2030		Tapered Insulation	2,480.0	sf	$ 4.00	/sf	$ 9,920	
G2060		Tree Grates	6.0	ea	$ 3,500.00	/ea	$ 21,000	
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2060		Water Feature	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2080		Trees	6.0	ea	$ 2,800.00	/ea	$ 16,800	
G2080		Landscaping	620.0	sf	$ 50.00	/sf	$ 31,000	20% of area
G4050		Lighting	1.0	ls	$ 100,000.00	/ls	$ 100,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ 477,920
Cost/SF	$ 154.17

Notes
Assume Intersection is 45'

DRAFT

P-3
Plaza

Typical	Length	225	lf
	Section Width	15	lf
	Area	3,375	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,700.0	sf	$ 40.00	/sf	$ 108,000	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	10.0	ea	$ 3,500.00	/ea	$ 35,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 50,000.00	/ls	$ 50,000	
G2060		Water Feature	-	ls	$ 100,000.00	/ls	$ -	
G2080		Trees	10.0	ea	$ 2,800.00	/ea	$ 28,000	
G2080		Landscaping	675.0	sf	$ 25.00	/sf	$ 16,875	20% of area
G4050		Lighting	1.0	ls	$ 50,000.00	/ls	$ 50,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	287,875
Cost/SF	$	85.30

Notes
Assume Intersection is 45'

DRAFT

P-4
Plaza

Typical	Length	316	lf
	Section Width	44	lf
	Area	13,904	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	11,123.2	sf	$ 40.00	/sf	$ 444,928	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	24.0	ea	$ 3,500.00	/ea	$ 84,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 100,000.00	/ls	$ 100,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	24.0	ea	$ 2,800.00	/ea	$ 67,200	
G2080		Landscaping	2,780.8	sf	$ 25.00	/sf	$ 69,520	20% of area
G4050		Lighting	1.0	ls	$ 75,000.00	/ls	$ 75,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	840,648
Cost/SF	$	60.46

Notes
Assume Intersection is 45'

DRAFT

P-5
Plaza

Typical	Length	310	lf
	Section Width	30	lf
	Area	9,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	7,440.0	sf	$ 40.00	/sf	$ 297,600	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	15.0	ea	$ 3,500.00	/ea	$ 52,500	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 50,000.00	/ls	$ 50,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	15.0	ea	$ 2,800.00	/ea	$ 42,000	
G2080		Landscaping	1,860.0	sf	$ 25.00	/sf	$ 46,500	20% of area
G4050		Lighting	1.0	ls	$ 50,000.00	/ls	$ 50,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	538,600
Cost/SF	$	57.91

Notes
Assume Intersection is 45'

DRAFT

P-6
Plaza

Typical	Length	110	lf
	Section Width	30	lf
	Area	3,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2030		Pavers and Concrete	2,640.0	sf	$ 40.00	/sf	$ 105,600	80% of area
G2030		Tapered Insulation	-	sf	$ 4.00	/sf	$ -	
G2060		Tree Grates	10.0	ea	$ 3,500.00	/ea	$ 35,000	20' on center, both sides
G2060		Site Furnishings	1.0	ls	$ 30,000.00	/ls	$ 30,000	
G2060		Water Feature	-	ls	$ -	/ls	$ -	
G2080		Trees	10.0	ea	$ 2,800.00	/ea	$ 28,000	
G2080		Landscaping	660.0	sf	$ 25.00	/sf	$ 16,500	20% of area
G4050		Lighting	1.0	ls	$ 25,000.00	/ls	$ 25,000	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$	240,100
Cost/SF	$	72.76

Notes
Assume Intersection is 45'

DRAFT

P-7

Plaza - 7 (Grand Pedestrian Walkway)

Typical	Length	351	lf
	Section Width	46	lf
	Area	16,100	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	702.0	lf	$ 18.00	/lf	$ 12,636	
G2010		Street Lights / Light Poles - 90' Spacing	8.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~40,000~~	96,000
G2030		Pathway Pavers	2,808.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~42,120~~	106,704
G2030		Outdoor Seating Pavers	4,212.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~63,180~~	160,056
G2030		Signature Walkway	8,775.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~131,625~~	333,450
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	
G2060		Tree Grates	36.0	ea	$ 3,500.00	/ea	$ 126,000	three rows
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	
G2080		Trees - 20' Spacing	36.0	ea	$ 2,800.00	/ea	$ 100,800	
G3010		12" Water Line	351.0	lf	$ 200.00	/lf	$ 70,200	
G3010		Auxillary Water	351.0	lf	$ 75.00	/lf	$ 26,325	
G3020		8" Waste Water Line	351.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~70,200~~	61,425
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3030		Trench Drain	351.0	lf	$ 100.00	/lf	$ 35,100	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
		Allowance- Underground utility conflicts/re-routing				/	$ $50,000	$50,000
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ ~~923,186~~	$1,383,896
Cost/SF	$ 57.34	

DRAFT

Notes

Assume Intersection is 45'

S-1
Internal Street Segment 1

Typical	Length	238	lf
	Section Width	66	lf
	Area	15,700	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	476.0	lf	$ 18.00	/lf	$ 8,568	R&Drain
G2010		Asphalt Pavement - Typical	6,426.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~19,278~~	32,130 R&Drain
G2010		Striping	6,426.0	sf	$ 0.25	/sf	$ 1,607	R&Drain
G2010		Bike Lane	2,856.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~8,568~~	22,920 Streetscape
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$12,000 ~~5,000.00~~	/ea	$ ~~30,000~~	72,000 Streetscape
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -	
G2030		Sidewalk	5,950.0	sf	$ 8.00	/sf	$ 47,600	Streetscape
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	24.0	ea	$ 3,500.00	/ea	$ 84,000	three rows Streetscape
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	Streetscape
G2080		Bioswale	-	sf	$ 10.00	/sf	$ -	
G2080		Landscape Strip	2,856.0	sf	$ 10.00	/sf	$ 28,560	Streetscape
G2080		Trees - 20' Spacing	24.0	ea	$ 2,800.00	/ea	$ 67,200	Streetscape
G3010		12" Water Line	238.0	lf	$ 200.00	/lf	$ 47,600	Utilities
G3010		Auxillary Water	-	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	238.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~47,600~~	41,650 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	238.0	lf	$ 100.00	/lf	$ 23,800	Utilities
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	238.0	lf	$ 250.00	/lf	$ 59,500	Utilities
G5010		Telecom Ductbank	238.0	lf	$ 150.00	/lf	$ 35,700	Utilities
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
					Total		$ ~~714,581~~	$777,835

DRAFT

Notes
Assume Intersection is 45'

S2 Int 1
S2 Intersection 1

Typical	Length	66	lf
	Section Width	67	lf
	Area	4,400	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	66.0	lf	$ 18.00	/lf	$ 1,188	R&Drain
G2010		Roadway Pavers	729.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~10,935~~	27,702 Streetscape
G2010		Street Lights / Light Poles - 90' Spacing	-	ea	$ 12,000 ~~5,000.00~~	/ea	$ -	
G2010		Bike Lane	792.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~2,376~~	6,336 Streetscape
G2030		Pathway Pavers - North Side Only	396.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~5,940~~	15,048 Streetscape
G2030		Outdoor Seating Pavers	-	sf	$ 15.00	/sf	$ -	replaced by S-1 street
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	3.0	ea	$ 3,500.00	/ea	$ 10,500	North side only Streetscape
G2060		Site Furnishings	1.0	ls	$ 25,000.00	/ls	$ 25,000	Streetscape
G2080		Trees - 20' Spacing	3.0	ea	$ 2,800.00	/ea	$ 8,400	North side only Streetscape
G2080		Landscape Strip	396.0	sf	$ 10.00	/sf	$ 3,960	North side only Streetscape
G3010		12" Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	Utilities
G3010		Auxillary Water	66.0	lf	$ 75.00	/lf	$ 4,950	Utilities
G3020		8" Waste Water Line	66.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~13,200~~	11,500 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ ~~104,649~~	$132,784
Cost/SF	$ 23.78	

Notes
Assume Intersection is 45'

DRAFT

S2
S2 Laneway (Decorative Street)
Cross Section similar to BS-2 Extension

Typical	Length	266	lf
	Section Width	66	lf
	Area	17,600	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	532.0	lf	$ 18.00	/lf	$ 9,576	R&Drain
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~30,000~~	72,000 Streetscape
G2010		Bike Lane	3,192.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~9,576~~	25,536 Streetscape
G2010		Roadway Pavers	7,182.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~107,730~~	272,916 Streetscape
G2030		Pathway Pavers	1,596.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~23,940~~	60,648 Streetscape
G2030		Outdoor Seating Pavers	3,192.0	sf	$ 15.00	/sf	$ 47,880	Streetscape
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	27.0	ea	$ 3,500.00	/ea	$ 94,500	three rows Streetscape
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	Streetscape
G2080		Trees - 20' Spacing	27.0	ea	$ 2,800.00	/ea	$ 75,600	Streetscape
G3010		12" Water Line	266.0	lf	$ 200.00	/lf	$ 53,200	Utilities
G3010		Auxillary Water	266.0	lf	$ 75.00	/lf	$ 19,950	Utilities
G3020		8" Waste Water Line	266.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~53,200~~	46,550 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ ~~730,152~~	$983,356
Cost/SF	$ ~~41.49~~	

Notes
Assume Intersection is 45'

DRAFT

S2
S2 Intersection 2

Typical	Length	66	lf
	Section Width	65	lf
	Area	4,300	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	66.0	lf	$ 18.00	/lf	$ 1,188	R&Drain
G2010		Roadway Pavers	729.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~10,935~~	27,702 Streetscape
G2010		Street Lights / Light Poles - 90' Spacing	-	ea	$ 12,000 ~~5,000.00~~	/ea	$ -	
G2010		Bike Lane	792.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~2,376~~	6,336 Streetscape
G2030		Pathway Pavers - North Side Only	396.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~5,940~~	15,048 Streetscape
G2030		Outdoor Seating Pavers	-	sf	$ 15.00	/sf	$ -	replaced by S-1 street
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	3.0	ea	$ 3,500.00	/ea	$ 10,500	North side only Streetscape
G2060		Site Furnishings	1.0	ls	$ 25,000.00	/ls	$ 25,000	Streetscape
G2080		Trees - 20' Spacing	3.0	ea	$ 2,800.00	/ea	$ 8,400	North side only Streetscape
G2080		Landscape Strip	396.0	sf	$ 10.00	/sf	$ 3,960	North side only Streetscape
G3010		12" Water Line	66.0	lf	$ 200.00	/lf	$ 13,200	Utilities
G3010		Auxillary Water	66.0	lf	$ 75.00	/lf	$ 4,950	Utilities
G3020		8" Waste Water Line	66.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~13,200~~	11,500 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ ~~104,649~~	$132,784
Cost/SF	$ ~~24.34~~	

Notes
Assume Intersection is 45'

DRAFT

S-3
Internal Street Segment 3

Typical	Length	248	lf
	Section Width	66	lf
	Area	16,400	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	496.0	lf	$ 18.00	/lf	$ 8,928	R&Drain
G2010		Asphalt Pavement - Typical	6,696.0	sf	$ 5.00 ~~3.00~~	/sf	$ ~~20,088~~	33,480 R&Drain
G2010		Striping	6,696.0	sf	$ 0.25	/sf	$ 1,674	R&Drain
G2010		Bike Lane	2,976.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~8,928~~	23,808 Streetscape
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$ 12,000 ~~5,000.00~~	/ea	$ ~~30,000~~	72,000 Streetscape
G2010		Unidentified Strip - Assume Concrete	496.0	sf	$ 8.00	/sf	$ 3,968	Streetscape
G2010		Traffic Signals	-	ls	$ 500,000.00	/ls	$ -	
G2030		Sidewalk	3,720.0	sf	$ 8.00	/sf	$ 29,760	Streetscape
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	25.0	ea	$ 3,500.00	/ea	$ 87,500	three rows Streetscape
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	Streetscape
G2080		Bioswale	1,488.0	sf	$ 30.00 ~~10.00~~	/sf	$ 1~~4,880~~	44640 Green Infra
G2080		Landscape Strip	2,856.0	sf	$ 10.00	/sf	$ 28,560	Streetscape
G2080		Trees - 20' Spacing	25.0	ea	$ 2,800.00	/ea	$ 70,000	Streetscape
G3010		12" Water Line	248.0	lf	$ 200.00	/lf	$ 49,600	Utilities
G3010		Auxillary Water	248.0	lf	$ -	/lf	$ -	
G3020		8" Waste Water Line	248.0	lf	$ 175.00 ~~200.00~~	/lf	$ ~~49,600~~	43,400 Utilities
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	0	lf	$ 100.00	/lf	$ -	under S-1
G3090		District Cooling	-	lf	$ -	/lf	N/A	under S-1
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	under S-1
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	under S-1
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total $ ~~608,486~~ $702,318

DRAFT

Notes
Assume Intersection is 45'

S4

S4 Laneway (Decorative Street)

Typical	Length	170	lf
	Section Width	60	lf
	Area	10,200	sf

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension	
G2010		Curb & Gutter	340.0	lf	$ 18.00	/lf	$ 6,120	R&Drain
G2010		Street Lights / Light Poles - 90' Spacing	6.0	ea	$12,000 ~~5,000.00~~	/ea	$ ~~30,000~~	72,000 Streetscape
G2010		Bike Lane	2,040.0	sf	$ 8.00 ~~3.00~~	/sf	$ ~~6,120~~	16,320 Streetscape
G2010		Roadway Pavers	4,590.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~68,850~~	174,420 Streetscape
G2030		Pathway Pavers	1,020.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~15,300~~	38,760 Streetscape
G2030		Outdoor Seating Pavers	2,040.0	sf	$ 38.00 ~~15.00~~	/sf	$ ~~30,600~~	77,520 Streetscape
G2030		ADA Ramps	2.0	ea	$ 2,500.00	/ea	$ 5,000	Streetscape
G2060		Tree Grates	18.0	ea	$ 3,500.00	/ea	$ 63,000	Streetscape
G2060		Site Furnishings	1.0	ls	$ 200,000.00	/ls	$ 200,000	Streetscape
G2080		Trees - 20' Spacing	18.0	ea	$ 2,800.00	/ea	$ 50,400	Streetscape
G3010		12" Water Line		lf	$ 200.00	/lf	$ -	
G3010		Auxillary Water	-	lf	$ 75.00	/lf	$ -	
G3020		8" Waste Water Line	-	lf	$ 200.00	/lf	$ -	
G3030		Storm Drain	-	lf	$ -	/lf	$ -	
G3060		Natural Gas	-	lf	$ 100.00	/lf	$ -	
G3090		District Cooling	-	lf	$ -	w/District Cooling		
G4010		Permanent Power Ductbank	-	lf	$ 250.00	/lf	$ -	
G5010		Telecom Ductbank	-	lf	$ 150.00	/lf	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	
						/	$ -	

Total	$ ~~475,390~~	$703,540
Cost/SF	$ 46.61	

Notes

Assume Intersection is 45'

DRAFT

G-3
Regrading Works

Code	Code	Description	Qty	UOM	U/P	/UOM	Extension
		Tree Removal					
G2080	320000	Parcel 1	8.0	ea	$ 5,000.00	/ea	$ 40,000
G2080	320000	Parcel 2	1.0	ea	$ 5,000.00	/ea	$ 5,000
G2080	320000	Parcel 3	2.0	ea	$ 5,000.00	/ea	$ 10,000
G2080	320000	Parcel 4	23.0	ea	$ 5,000.00	/ea	$ 115,000
G2080	320000	BS-1	27.0	ea	$ 5,000.00	/ea	$ 135,000
G2080	320000	BS-2	-	ea	$ 5,000.00	/ea	$ -
G2080	320000	Segment 2	1.0	ea	$ 5,000.00	/ea	$ 5,000
G2080	320000	Lakefront Park					w/ G-1
		Protected Tree Removal					
G2080	320000	Parcel 4	2.0	ea	$ 5,000.00	/ea	$ 10,000
G2080	320000	BS-1	8.0	ea	$ 5,000.00	/ea	$ 40,000
		Clear & Grubb Site					
G1010	320000	Main Site	465,000.0	sf	$ 0.25	/sf	$ 116,250
G1010		Park	292,000.0	sf	$ 0.50	/sf	$ 146,000
G1010		BS-2	42,000.0	sf	$ 0.10	/sf	$ 4,200
G1010		S-3					Excluded
		Demolition					
G1030		Parking Lot Demolition	200,000.0	sf	$ 1.00	/sf	$ 200,000
		Grading, Cut & Fill					
G1070		Main Site	465,000.0	sf	$ 2.00	/sf	$ 930,000
G1070		Park	292,000.0	sf	$ 2.00	/sf	$ 584,000
G1070		BS-2	42,000.0	sf	$ 2.00	/sf	$ 84,000
G1070		S-3					Excluded
						/	$ -
						/	$ -
					Total		**$ 2,424,450**

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