

I. EXECUTIVE SUMMARY



RIB U.S. Cost was tasked with providing a cost estimate, utilizing the Final Master Plan Design Submittal for the renovation of Van Dyck Park in the City of Fairfax, VA as a guide that was prepared by Lardner/Klein Landscape Architects, P.C.

The Master Plan estimate for Van Dyck Park includes several program areas outlined in the Final Master Plan dated October 03, 2017 and review comments from the design team and City of Fairfax Parks and Recreation.

Each program item is estimated separately to provide the City of Fairfax a type of shopping list to allow the city to fit items within the current budget.

The project is estimated not to start for three to five years from the current date, to allow the city to provide funding through various options. The estimate includes escalation to the estimated mid-point start of construction based on the ENR 10 year running average.

The project elements are estimated from various projects of the same type within the Virginia area completed by RIB US Cost. Specialty items, like the skate park, are based on budget quotes from contractors in the industry.

Labor cost is based on the 2017 RS Means and Davis/Bacon prevailing wage rates for the City and County of Fairfax, VA.

The estimate assumes the project will be constructed under a single general contract, and the cost estimate has been priced for construction by a General Contractor utilizing subcontractors.

The estimate was compiled by the RIB U. S Cost with offices in Stafford, Virginia.

R. Bruce Dixon, CCP as the Project Manager.

Executive Cost Summary

Master Plan – Van Dyck Park

Base Bid Cost:

Playground -----	\$ 1,755,940 – 25,000 GSF
Skate Park -----	\$ 626,500 – 7,000 GSF
Street Plaza -----	\$ 815,970 – 10,500 GSF
Large Pavilion w/ Restroom -----	\$ 1,302,496 – 1,850 GSF
Small Pavilions – 2 each -----	\$ 200,161 – 1,000 GSF
Parking Area 1 – Permeable/ Impervious	\$ 750,486 – 20,195 GSF
Parking Area 2 – Permeable/ Impervious	\$ 515,752 – 17,560 GSF
Switchback Trail -----	\$ 127,447 – 3,760 GSF
Mulched Trail & Sign -----	\$ 70,051 – 4,637 GSF
Front Door Trail -----	\$ 304,697 – 11,362 GSF
Plaza at Large Pavilion -----	\$ 126,630 – 4,872 GSF
Basketball Courts -----	\$ 149,987 – 7,050 GSF
University Drive Entrance -----	\$ 308,160 – 500 GSF
Access Roadway & crosswalk -----	\$ 158,259 – 8,406 GSF
Site Preparation -----	\$ 706,650 – 260,000 GSF

Base Bid Construction Costs ----- \$ 7,919,187

Alternates:

1 – Parking Area 1- Impervious -----	\$ 362,381
2 – Parking Area 2- Impervious -----	\$ 324,101

Prime Contractor Markups:

Direct Design Development Allowance- --	25.00%
Escalation for Market Conditions -----	9.45%
Field General Conditions -----	15.00%
Contractor Overhead and Profit -----	7.50%
Contractor's Bond & Insurance -----	2.00%

The estimate is based on current design development documents and American Association of Cost Engineering International (ACEI) standard practices. The estimate would be classified as a Class 3 for budget authorization, feasibility and would indicate a possible range for the total project cost of plus/minus 10 to 15 percent.



Inclusions

General rough grading of project areas	Parking lot area with permeable pavers
Skate park area – Vendor budget quote	Large and small picnic pavilions open sides
Revisions to University Drive entrance	Restroom at large pavilion only
Pedestrian bridge at University Drive entrance	ADA accessible trail
Limited landscaping around the various project areas	Basketball Courts – Full and Half
Access roadway with removable bollards	New and relocated welcome signage – based on previous projects of similar type
Water and sewer service mains to restroom only	Raised crosswalk and landscaped median
Allowance for tap fees for water and sewer only	General landscaping around project areas

Exclusions

Land/Real Estate Costs	Relocation/Moving Costs
Endowment for Future Operations	Design Permits and Testing
Design Fees	Permanent Utility Consumption Charges
Legal and Accounting Fees	Fundraising Expenses
Temporary Utility Consumption Charges	Removal of unsuitable soils and replacing with select structural fill
Hazardous Waste Removal and Disposal	
Rock Excavation	

Factors that affect project cost for future projects:

Direct Cost Development Allowance (Design Contingence):

This is a percentage applied to the direct cost of the project for the labor, material and equipment used to construct the project. This percentage is based on the level of design development. In the early project definition phase, for studies and conceptual designs, when not all the scope or design criteria is known, the design contingencies are high, twenty (20) to twenty five (25) percent on average. This percentage reduces as the design details are developed and finalized through the design process. When the project is completely designed and ready for bid, this percentage will be reduced to zero (0). There is no industry standard that dictates what percentage to be used at each design phase. There are only guidelines based on the level of design detail. The Direct Cost Development Allowance is based on the estimator's professional judgment, conversations with the design team and client input with regards to the overall completeness of the design documents at a particular phase in the design process.

Escalation for Current Market Conditions:

This is a percentage added to the direct cost for the labor, material and equipment used to construct the project. It is based on the current and projected local market conditions. The percentage is calculated to the midpoint of construction and is based on the duration of the projects design and construction schedule. This is the point in the project when the prime contractor will have bought out the project, have it under contract, and most likely have the final project cost established. RIB US Cost uses data from the ENR 10 year running average table to calculate the escalation percentage. The percentage is a compounded factor for each year the project is under construction. The escalation factor is based on established industry projections and conversations with the design team and client as to the duration of their project and knowledge of the local construction market.



SUMMARY REPORT - LEVEL 1
Total Cost

LEVEL DESCRIPTION	TOTAL	QUANTITY	UNIT	UNIT COST
- BASE BID	\$7,919,187	260,000	SF	\$30.46
- 01 PLAYGROUND	\$1,755,940	25,000	SF	\$70.24
0101 PLAYGROUND SURFACE	\$1,002,311	25,000	SF	\$40.09
0102 PLAYGROUND EQUIPMENT	\$753,630	25,000	SF	\$30.15
- 02 SKATE PARK	\$626,500	7,000	SF	\$89.50
0201 SKATE PARK CONSTRUCTION	\$626,500	7,000	SF	\$89.50
- 03 STREET PLAZA	\$815,970	10,500	SF	\$77.71
- 0301 PEDESTRIAN PAVING - 75% of AREA	\$545,673	7,875	SF	\$69.29
3032 LANDSCAPING- 25% of AREA	\$257,079	218	SY	\$1,179.26
0303 ENTRANCE SIGNAGE	\$13,218	1	EA	\$13,218.19
- 04 LARGE PICNIC PAVILION w/ RESTROOM	\$1,302,496	1,850	SF	\$704.05
0401 LARGE PICNIC PAVILION	\$313,427	1,850	SF	\$169.42
0402 RESTROOM - STRUCTURE	\$522,107	1,000	SF	\$522.11
0403 RESTROOM SERVICES	\$466,962	1,450	LF	\$322.04
- 05 SMALL PICNIC PAVILIONS - 2 EA	\$200,161	1,000	SF	\$200.16
0501 SMALL PICNIC PAVILIONS - 2 EA	\$200,161	1,000	SF	\$200.16
- 06 PARKING AREA 1 - PERMEABLE/IMPERVIOUS	\$750,486	20,195	SF	\$37.16
- 0601 PAVEMENT	\$750,486	20,195	SF	\$37.16
- 07 PARKING AREA 2 - PERMEABLE/IMPERVIOUS	\$515,752	17,560	SF	\$29.37
- 0701 PAVEMENT	\$515,752	17,560	SF	\$29.37
- 08 SWITCHBACK TRAIL	\$127,447	3,760	SF	\$33.90
0801 SWITCHBACK TRAIL	\$48,186	3,760	SF	\$12.82
0802 RAILINGS & BENCHES	\$79,260	1	LS	\$79,260.32
- 09 MULCHED TRAIL & WELCOME SIGN	\$70,051	4,637	SF	\$15.11
0901 MULCHED TRAIL	\$56,833	4,637	SF	\$12.26
0903 ENTRANCE SIGNAGE	\$13,218	1	EA	\$13,218.19
- 10 FRONT DOOR TRAIL	\$304,697	11,362	SF	\$26.82
1001 FRONT DOOR TRAIL	\$145,610	11,362	SF	\$12.82
1002 RAILINGS & BENCHES	\$111,220	1	LS	\$111,219.60
1003 ENTRANCE SIGNAGE w/ ELECTRICAL	\$47,868	1	EA	\$47,867.60



SUMMARY REPORT - LEVEL 1
Total Cost

LEVEL DESCRIPTION	TOTAL	QUANTITY	UNIT	UNIT COST
- 11 PLAZA @ LARGE PAVILION	\$126,630	4,872	SF	\$25.99
1101 PEDESTRIAN PAVING	\$79,410	4,872	SF	\$16.30
1102 SEAT WALL 18" WIDE	\$47,221	50	LF	\$944.41
- 12 BASKETBALL COURTS	\$149,987	7,050	SF	\$21.27
1201 BASKETBALL COURT - FULL COURT	\$99,353	4,700	SF	\$21.14
1202 BASKETBALL COURT - HALF COURT	\$50,634	2,350	SF	\$21.55
- 13 UNIVERSITY DRIVE ENTRANCE	\$308,160	500	SF	\$616.32
1301 BRIDGE	\$147,769	1	EA	\$147,768.57
1302 SHADED GATHERING SPACE	\$147,173	500	SF	\$294.35
1303 ENTRANCE SIGNAGE	\$13,218	1	EA	\$13,218.19
- 14 ACCESS ROADWAY & CROSSWALK	\$158,259	8,406	SF	\$18.83
- 1401 ROADWAY - IMPERVIOUS SURFACE	\$111,716	830	SY	\$134.60
1402 RAISED LANDSCAPE MEDIAN	\$27,222	360	SF	\$75.62
- 1403 RAISED CROSSWALK/SPEED TABLE	\$6,103	576	SF	\$10.60
1404 ENTRANCE SIGNAGE	\$13,218	1	EA	\$13,218.19
- 15 SITE PREPARATION	\$706,650	260,000	SF	\$2.72
1501 SITE DEMOLITION	\$320,657	114,786	SF	\$2.79
1502 SITE EARTHWORK & LANDSCAPING	\$344,204	145,214	SF	\$2.37
1503 TEMPORARY EROSION & SEDIMENT CONTROL	\$41,789	260,000	SF	\$0.16