

Appendix J: Order of Magnitude Cost Estimate / Phasing Matrix

# Pease Park Master Plan Order of Magnitude Cost Estimate / Phasing Matrix 

July 28, 2014

Listed below are a series of explanations and assumptions for the Order of Magnitude Cost Estimate / Phasing Matrix for the Pease Park Master Plan. This contains two sections: 1) Project Phasing 2) Order of Magnitude Cost Estimate.

The Orde of Magnitude Cost Estimate / Phasing Matrix is split up into two parts: 1) Inside the Park boundary and 2) Outside the Park. Inside the Park projects include trails, natural resources, cultural resources, recreation, etc. Outside the Park projects are infrastructural projects outside the park proper but benefit the Park through improved access and environmental enhancements. These items include Lamar Blvd enhancements (street trees, sidewalks, stormwater management), Parkway/Kingsbury enhancements (street trees, sidewalks, stormwater management), neighborhood connectivity, and reclaimed water infrastructure (purple pipes and storage tanks) and offsite storm water filtration.

## Projects

1. The potential implementation projects are listed by phase (first number in project code), by theme (CR = Cultural resources, I = Infrastructure, NR = Natural Resources \& $R=$ Recreation) and by project number by theme in that phase.
2. Project names in bold with an * designate specific early action projects within Phase 1.

## Phasing

1. The Master Plan will be a long term project whose implementation time frame is up to 20 years. The specific projects have been divided into three phases for each of the landscape character rooms: 1) Phase 1, 2) Phase 2, 3) Phase 3.
2. All projects and recommended phasing are subject to prioritization by the Pease Park Conservancy, PARD and the Technical Advisory Group and can shift from one phase to another if needed.

## Order of Magnitude Construction Cost Estimate

1. The purpose of the Order of Magnitude Cost Estimate is to help establish potential construction budgets at a Master Plan Level. More cost estimates will need to be conducted in subsequent schematic , design development and construction documentation phases.
2. All costs are based on 2014 costs.
3. The Order of Magnitude Cost Estimate has been divided into a Low Range and a High Range of potential costs. This is a typical process at a Master Plan level since much of the design work will need to continue is subsequent phases of work.
4. A $38 \%$ Master Plan Overall Contingency has been applied to all project totals with the exception of Kingsbury Commons which has a $48 \%$ Master Plan Overall Contingency.

The Master Plan Overall Contingency consists of 25\% Design Contingency (35\% for Kingsbury Commons) $+10 \%$ Project Management Expense $+2 \%$ Art in Public Places + .5\% Cost of Issuance of Debt.
5. Soft costs (designer fees) are not included in the Master plan Construction Estimate.

## PEASE PARK MASTER PLAN

## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

July 28, 2014

| INSIDE THE PARK |  |  |
| :---: | :---: | :---: |
| Landscape Character | Total |  |
|  | Low Range | High Range |
| Kingsbury Commons | \$4,195,060 | \$6,458,202 |
| Big Field | \$865,674 | \$1,560,780 |
| North Ramble \& Hillside | \$296,148 | \$466,716 |
| Windsor Hillside | \$411,240 | \$774,180 |
| Polecat Hollow | \$2,220,420 | \$4,328,370 |
| Caswell Shoals | \$101,568 | \$202,722 |
| Custer's Meadow | \$629,280 | \$1,012,920 |
| 24th St Bridge | \$563,040 | \$935,640 |
| Wooten Woods | \$405,720 | \$661,020 |
| Live Oak Terrace | \$196,650 | \$383,640 |
| Gaston Green | \$985,941 | \$1,637,232 |
| East Bank | \$68,310 | \$164,220 |
| Ramble Scramble | \$1,033,620 | \$1,672,560 |
| Lamar Slope | \$82,800 | \$193,200 |
| Lamar Terrace | \$1,121,250 | \$2,028,600 |
| 29th St Bridge | \$455,400 | \$759,000 |
| The Bluffs | \$359,490 | \$757,620 |
| Reclaimed Water | \$871,200 | \$1,742,400 |
| TOTAL | \$14,862,811 | \$25,739,022 |


| OUTSIDE THE PARK |  |  |
| :---: | :---: | :---: |
| Landscape Character Zone | Total |  |
|  | Low Range | High Range |
| Kingsbury Commons | \$489,900 | \$897,000 |
| Gaston Green | \$55,200 | \$82,800 |
| East Bank | \$34,500 | \$55,200 |
| Lamar Parkway | \$4,335,960 | \$7,990,200 |
| Parkway / Kingsbury | \$996,360 | \$1,835,400 |
| Reclaimed Water | \$1,400,000 | \$4,200,000 |
| TOTAL | \$7,311,920 | \$15,060,600 |

PEASE PARK MASTER PLAN
order of magnitude cost estimate / phasing matrix July 28, 2014

| INSIDE THE PARK |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Landscape Character Zone | Phase 1 |  | Phase 2 |  | Phase 3 |  | Total |  | Not Included |
|  | Low Range | High Range | Low Range | High Range | Low Range | High Range | Low Range | High Range |  |
| Kingsbury Commons | \$2,475,300 | \$3,774,962 | \$1,719,760 | \$2,683,240 |  |  | \$4,195,060 | \$6,458,202 |  |
| Big Field | \$113,850 | \$197,340 | \$751,824 | \$1,363,440 |  |  | \$865,674 | \$1,560,780 |  |
| North Ramble \& Hillside | \$183,540 | \$295,320 | \$112,608 | \$171,396 |  |  | \$296,148 | \$466,716 |  |
| Windsor Hillside | \$362,940 | \$684,480 | \$48,300 | \$89,700 |  |  | \$411,240 | \$774,180 |  |
| Polecat Hollow | \$115,920 | \$286,350 | \$1,504,200 | \$3,052,560 | \$600,300 | \$989,460 | \$2,20,420 | \$4,328,370 | Public Art in Contingency |
| Caswell Shoals | \$24,840 | \$49,680 | \$76,728 | \$153,042 |  |  | \$101,568 | \$202,722 |  |
| Custer's Meadow | \$31,740 | \$77,280 | \$597,540 | \$935,640 |  |  | \$629,280 | \$1,012,920 |  |
| 24th St Bridge |  |  | \$563,040 | \$935,640 |  |  | \$563,040 | \$935,640 |  |
| Wooten Woods | \$59,340 | \$125,580 | \$346,380 | \$535,440 |  |  | \$405,720 | \$661,020 |  |
| Live Oak Terrace | \$6,900 | \$20,700 | \$189,750 | \$362,940 |  |  | \$196,650 | \$383,640 |  |
| Gaston Green | \$43,470 | \$80,040 | \$942,471 | \$1,557,192 |  |  | \$985,941 | \$1,637,232 |  |
| East Bank | \$68,310 | \$164,220 |  |  |  |  | \$68,310 | \$164,220 |  |
| Ramble Scramble | \$84,180 | \$195,960 | \$362,940 | \$579,600 | \$586,500 | \$897,000 | \$1,033,620 | \$1,672,560 |  |
| Lamar Slope | \$31,740 | \$91,080 | \$51,060 | \$102,120 |  |  | \$82,800 | \$193,200 |  |
| Lamar Terrace | \$126,270 | \$380,880 | \$994,980 | \$1,647,720 |  |  | \$1,121,250 | \$2,028,600 |  |
| 29th St Bridge |  |  | \$455,400 | \$759,000 |  |  | \$455,400 | \$759,000 |  |
| The Bluffs | \$305,670 | \$633,420 | \$48,300 | \$96,600 | \$5,520 | \$27,600 | \$359,490 | \$757,620 |  |
| Reclaimed Water |  |  |  |  | \$871,200 | \$1,742,400 | \$871,200 | \$1,742,400 |  |
| TOTAL | \$4,034,010 | \$7,057,292 | \$8,765,281 | \$15,025,270 | \$2,063,520 | \$3,656,460 | \$14,862,811 | \$25,739,022 |  |


| OUTSIDE THE PARK |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Landscape Character Zone | Phase 1 |  | Phase 2 |  | Phase 3 |  | Total |  | Not Included |
|  | Low Range | High Range | Low Range | High Range | Low Range | High Range | Low Range | High Range |  |
| Kingsbury Commons | \$317,400 | \$552,000 |  |  | \$172,500 | \$345,000 | \$489,900 | \$897,000 |  |
| Gaston Green |  |  |  |  | \$55,200 | \$82,800 | \$55,200 | \$82,800 |  |
| East Bank |  |  |  |  | \$34,500 | \$55,200 | \$34,500 | \$55,200 |  |
| Lamar Parkway |  |  | \$2,093,460 | \$3,781,200 | \$2,242,500 | \$4,209,000 | \$4,335,960 | \$7,990,200 | 15th St Gateway |
| Parkway / Kingsbury | \$2,760 | \$11,040 |  |  | \$993,600 | \$1,824,360 | \$996,360 | \$1,835,400 |  |
| Reclaimed Water |  |  | \$1,400,000 | \$4,200,000 |  |  | \$1,400,000 | \$4,200,000 |  |
| TOTAL | \$320,160 | \$563,040 | \$3,493,460 | \$7,981,200 | \$3,498,300 | \$6,516,360 | \$7,311,920 | \$15,060,600 |  |

## PEASE PARK MASTER PLAN

## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; $\mathrm{R}=$ Recreation

| Landscape Character Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project Code | Project Name | Project Code | Project Name | Project Code | Project Name | Low Range | High Range |



## PEASE PARK MASTER PLAN

## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resource; $\mathrm{R}=$ Recreation

| Landscape Character Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project Code | Project Name | Project Code | Project Name | Project Code | Project Name | Low Range | High Range |




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## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; $\mathrm{R}=$ Recreation

| Landscape Character <br> Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project <br> Code | Project Name | Project <br> Code | Project Name | Project <br> Code | Project Name | Low Range | High Range |



| Caswell Shoals |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1.NR. 1 | Invasive Species Removal |  | \$3,000 | \$6,000 |
| 1.NR. 2 | Riparian Restoration |  | \$10,000 | \$15,000 |
| 1.NR. 3 | Upland Reforestation |  | \$5,000 | \$15,000 |
|  |  |  | $\$ 18,000$ <br> Phase 1 Subtotal $\$ 6,840$ <br> Contingency | $\begin{array}{r} \$ 36,000 \\ \text { Phase } 1 \text { Subtotal } \\ \$ 13,680 \\ \text { Contingency } \end{array}$ |
|  |  |  | $\mathbf{\$ 2 4 , 8 4 0}$ <br> Phase 1 Total | $\mathbf{\$ 4 9 , 6 8 0}$ <br> Phase 1 Total |
|  | 2.CR. 1 | Historical Intepretation | \$5,000 | \$15,000 |
|  | 2.I. 1 | Overlooks \& Trail Connections | \$40,600 | \$75,900 |
|  | 2.NR. 1 | Signature Plantings | \$10,000 | \$20,000 |
|  |  |  | $\begin{array}{r} \$ \mathbf{5 5 , 6 0 0} \\ \text { Phase } 2 \text { Subtotal } \\ \mathbf{\$ 2 1 , 1 2 8} \\ \text { Contingency } \end{array}$ | $\$ 110,900$ <br> Phase 2 Subtotal $\$ 42,142$ <br> Contingency |
|  |  |  | \$76,728 Phase 2 Total $\mathbf{\$ 1 0 1 , 5 6 8}$ Caswell Shoals Total | $\$ \mathbf{1 5 3 , 0 4 2}$ <br> Phase 2 Total <br>  <br> $\mathbf{\$ 2 0 2 , 7 2 2}$ <br> Caswell Shoals Total |

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ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX
INSIDE THE PARK
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PEASE PARK MASTER PLAN

## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; $R=$ Recreation

| Landscape Character Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project Code | Project Name | Project Code | Project Name | Project Code | Project Name | Low Range | High Range |


| Live Oak Terrace |  |  |  |
| :--- | :--- | :--- | :--- |
|  | 1.NR.1 | Riparian Restoration |  |
|  |  |  |  |
|  |  |  |  |
|  | $2 . C R .1$ | Restore Historic Walls and Stone Bench Triangle |  |
|  | $2 . C R .2$ | Stone Step Restoration |  |
|  | 2.1 .1 | Overlooks \& Trail Connections |  |
|  | 2.R.1 | Picnic Tables and Dog Waste Stations |  |
|  | 2.R.2 | Shade Structure |  |
|  | 2.NR.1 | Signature Plantings |  |


|  |  |
| :---: | :---: |
| \$5,000 | \$15,000 |
| $\$ 5,000$ Phase 1 Subtotal $\$ 1,900$ Contingency | $\$ 15,000$ <br> Phase 1 Subtotal $\$ 5,700$ <br> Contingency |
| \$6,900 Phase 1 Total | $\mathbf{\$ 2 0 , 7 0 0}$ <br> Phase 1 Tota |
| \$5,000 | \$10,000 |
| \$5,000 | \$8,000 |
| \$41,500 | \$83,000 |
| \$6,000 | \$12,000 |
| \$70,000 | \$130,000 |
| \$10,000 | \$20,000 |
| $\$ 137,500$ Phase 2 Subtotal $\$ 52,250$ Contingency | $\$ 263,000$ <br> Phase 2 Subtotal <br> $\$ 99,940$ <br> Contingency |
| $\begin{array}{r} \$ 189,750 \\ \text { Phase } 2 \text { Total } \end{array}$ | $\mathbf{\$ 3 6 2 , 9 4 0}$ Phase 2 Total |
| $\$ 196,650$ Live Oak Terrace Total | \$278,000 <br> Live Oak Terrace Total |


| Gaston Green |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 1.R. 1 | Picnic Tables / Seating / Dog Waste Stations |  | \$15,000 | \$25,000 |
| 1.NR. 1 | Invasive Species Removal |  | \$1,500 | \$3,000 |
| 1.NR. 2 | Riparian Restoration |  | \$5,000 | \$15,000 |
| *1.NR.3 | Tree Care |  | \$10,000 | \$15,000 |
|  |  |  | $\$ \mathbf{3 1 , 5 0 0}$ Phase 1 Subtotal $\mathbf{\$ 1 1 , 9 7 0}$ Contingency | Phase $\$ 58,000$ <br> Phase 1 Subtotal $\$ 22,040$ <br> Contingency |
|  |  |  | $\begin{array}{r} \$ 43,470 \\ \text { Phase } 1 \text { Total } \end{array}$ | $\$ 80,040$ Phase 1 Total |
|  | 2.CR. 1 | Historical Intepretation | \$5,000 | \$15,000 |
|  | 2.CR. 2 | Lighting at Bridges | \$40,000 | \$80,000 |
|  | 2.CR. 3 | Restore Historic Walls and Benches | \$8,000 | \$20,000 |
|  | 2.CR. 4 | History Hut | \$220,000 | \$360,000 |
|  | 2.I. 1 | Repave Shoal Creek Trail | \$148,500 | \$203,000 |
|  | 2.1 .2 | Overlooks \& Trail Connections | \$32,200 | \$64,400 |
|  | 2.1 .3 | Excursion Trail | \$29,250 | \$39,000 |
|  | 2.1. 4 | Waterline/Waterfountain | \$24,000 | \$30,000 |
|  | 2.R. 1 | Shade Structure | \$140,000 | \$260,000 |
|  | 2.R. 2 | Children's Nature Play | \$10,000 | \$15,000 |
|  | 2.NR. 1 | Sustainable Lawn Establishment | \$6,000 | \$12,000 |
|  | 2.NR. 2 | Signature Plantings | \$20,000 | \$30,000 |
|  |  |  | $\$ 682,950$ Phase 2 Subtotal $\$ \mathbf{\$ 2 5 9 , 5 2 1}$ Contingency | $\$ 1,128,400$ <br> Phase 2 Subtotal <br> \$428,792 <br> Contingency |
|  |  |  | \$942,471 Phase 2 Total $\mathbf{\$ 9 8 5 , 9 4 1}$ Gaston Green Total | $\$ 1,557,192$ <br> Phase 2 Total <br>  <br> $\$ 1,637,232$ <br> Gaston Green Total |


| East Bank |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 1.NR. 1 | Invasive Species Removal | \$4,500 | \$9,000 |
|  | 1.NR. 2 | Upland Reforestation | \$5,000 | \$10,000 |
|  | 1.I. 1 | Earthwork for Stormwater Infiltration Basins | \$40,000 | \$100,000 |
|  |  |  | \$49,500 <br> Phase 1 Subtotal <br> \$18,810 <br> Contingency | $\$ 119,000$ <br> Phase 1 Subtotal $\$ 45,220$ <br> Contingency |
|  |  |  | $\mathbf{\$ 6 8 , 3 1 0}$ East Bank Total | $\$ \mathbf{1 6 4 , 2 2 0}$ East Bank Total |

PEASE PARK MASTER PLAN
ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX
INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R=Recreation

| Landscape Character Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project <br> Code | Project Name | Project Code | Project Name | Project Code | Project Name | Low Range | High Range |
| Ramble Scamble |  |  |  |  |  |  |  |  |
|  | 1.I. 1 | Hiking Trail |  |  |  |  | \$19,000 | \$28,000 |
|  | 1.R. 1 | Picnic Tables and Dog Waste Stations |  |  |  |  | \$6,000 | \$12,000 |
|  | $*_{1 . \mathrm{NR} .1}$ | Invasive Species Removal |  |  |  |  | \$6,000 | \$12,000 |
|  | 1.NR. 2 | Upland Reforestation |  |  |  |  | \$10,000 | \$30,000 |
|  | 1.NR. 3 | Riparian Reforestation |  |  |  |  | \$20,000 | \$60,000 |
|  |  |  |  |  |  |  | $\$ 61, \mathbf{0 0 0}$ Phase 1 Subtotal $\mathbf{\$ 2 3 , 1 8 0}$ Contingency | $\$ 142,000$ <br> Phase 1 Subtotal $\$ 53,960$ <br> Contingency |
|  |  |  |  |  |  |  | \$84,180 Phase 1 Total | \$195,960 Phase 1 Total |
|  |  |  | 2.CR. 1 | Historical Intepretation |  |  | \$5,000 | \$15,000 |
|  |  |  | 2.CR. 2 | Stone Wall Restoration |  |  | \$2,000 | \$6,000 |
|  |  |  | 2.I. 1 | Repave Shoal Creek Trail |  |  | \$209,000 | \$285,000 |
|  |  |  | 2.1. 2 | Overlooks \& Trail Connections |  |  | \$37,000 | \$94,000 |
|  |  |  | 2.R. 1 | Children's Nature Play |  |  | \$10,000 | \$20,000 |
|  |  |  |  |  |  |  | $\$ \mathbf{2 6 3 , 0 0 0}$ Phase 2 Subtotal $\mathbf{\$ 9 9 , 9 4 0}$ Contingency | $\$ 420,000$ Phase 2 Subtotal $\mathbf{\$ 1 5 9 , 6 0 0}$ Contingency |
|  |  |  |  |  |  |  | \$362,940 Phase 2 Total | \$579,600 Phase 2 Total |
|  |  |  |  |  | 3.1. 1 | Elevate Janet Long Bridge | \$425,000 | \$650,000 |
|  |  |  |  |  |  |  | $\$ \mathbf{\$ 2 5 , 0 0 0}$ Phase 3 Subtotal $\mathbf{\$ 1 6 1 , 5 0 0}$ Contingency | $\$ \mathbf{6 5 0 , 0 0 0}$ Phase 3 Subtotal $\mathbf{\$ 2 4 7 , 0 0 0}$ Contingency |
|  |  |  |  |  |  |  | \$586,500 Phase 3 Total $\mathbf{\$ 1 , 0 3 3 , 6 2 0}$ Ramble Scramble Total | $\$ 897,000$ <br> Phase 3 Total <br> \$1,672,560 <br> Ramble Scramble Total |
| Lamar Slope |  |  |  |  |  |  |  |  |
|  | * ${ }_{1 . \text { NR. } 1}$ | Invasive Species Removal |  |  |  |  | \$3,000 | \$6,000 |
|  | 1.NR. 2 | Riparian Reforestation |  |  |  |  | \$20,000 | \$60,000 |
|  |  |  |  |  |  |  | $\$ 23,000$ <br> Phase 1 Subtotal $\$ 8,740$ <br> Contingency | $\mathbf{\$ 6 6 , 0 0 0}$ Phase 1 Subtotal $\mathbf{\$ 2 5 , 0 8 0}$ Contingency |
|  |  |  |  |  |  |  | \$31,740 Phase 1 Total | \$91,080 Phase 1 Total |
|  |  |  | 2.1. 1 | Overlooks \& Trail Connections |  |  | \$37,000 | \$74,000 |
|  |  |  |  |  |  |  | $\begin{array}{r} \$ 37,000 \\ \text { Phase } 2 \text { Subtotal } \\ \$ 14,060 \\ \text { Contingency } \end{array}$ | $\begin{array}{r} \$ \mathbf{7 4 , 0 0 0} \\ \text { Phase } 2 \text { Subtotal } \\ \mathbf{\$ 2 8 , 1 2 0} \\ \text { Contingency } \end{array}$ |
|  |  |  |  |  |  |  | $\$ \mathbf{\$ 1 , 0 6 0}$ Phase 2 Total $\$ 82,800$ Lamar Slope Total | $\mathbf{\$ 1 0 2 , 1 2 0}$ Phase 2 Total $\mathbf{\$ 1 9 3 , 2 0 0}$ Lamar SlopeTotal |

PEASE PARK MASTER PLAN
ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX
INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R = Recreation


## PEASE PARK MASTER PLAN

## ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

INSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; $\mathrm{R}=$ Recreation

| Landscape Character Zone | PHASE 1 |  | PHASE 2 |  | PHASE 3 |  | COST ESTIMATE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Project Code | Project Name | Project Code | Project Name | Project Code | Project Name | Low Range | High Range |




# APPENDIX J: ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX 

PEASE PARK MASTER PLAN
ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX
OUTSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R = Recreation



## PEASE PARK MASTER PLAN

ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX
OUTSIDE THE PARK
Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R=Recreation


## Pease Park Master Plan

ORDER OF MAGNITUDE COST ESTIMATE / PHASING MATRIX

## ORDER OF MAGNITUDE COST ESTIMATE

The purpose of the Order of Magnitude Cost Estimate is to help establish potential construction budgets at a Master Plan Level. More cost estimates will need to be conducted in subsequent schematic, design development and construction documentation phases.

The following Order of Magnitude Cost Estimate information is the back-up, detailed information that was used to generate the Low Rang and High Range Cost Estimates in the preceding spreadsheets. The back-up, detailed information below does not include contingencies. The contingencies have been included on the preceding spreadsheets.

## Inside the Park

Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R = Recreation

## Kingsbury Commons

Phase 1
1.CR. 1 Tudor Cottage Adaptive Re-Use: Low Range - Demo and New Finishes $\$ 50,000$; Outdoor kitchenette $\$ 30,000$; Storage $\$ 40,000$, Utilities $\$ \$ 60,000$; Total $\$ 180,000$. High Range - Demo and New Finishes $\$ 80,000$; Outdoor kitchenette $\$ 40,000$; Storage $\$ 60,000$, Utilities $\$ \$ 100,000$; Total \$280,000.
1.CR. 2 Tudor Cottage Terrace: Low Range - Accessible walk \$8,000; Vehicular Access \$12,000; Patios $\$ 60,000$; Retaining Walls/Steps $\$ 50,000$; Total $\$ 130,000$. High Range - Accessible walk $\$ 10,000$; Vehicular Access $\$ 16,000$; Patios $\$ 100,000$; Retaining Walls/Steps $\$ 80,000$; Total $\$ 206,000$.
1.CR. 3 Picnic Table/Stone Wall Repairs: Spot patch concrete and repointing of stone walls Low Range \$2,000-High Range - \$10,000.
1.I. 2 Restroom \& Splash Pad Relocation / Rebuild: Low Range - Demo Splashpad = \$20,000, New Restroom, Storage, Mechanical = \$475,000; New Splashpad = \$300,000; Utilities = \$200,000 Total = $\$ 995,000$. High Range - Demo Splashpad = \$40,000, New Restroom, Storage, Mechanical = \$750,000; Utilities $\$ 300,000$; New Splashpad $=\$ 450,000$; Total $=\$ 1,540,000$
1.I. 3 Historic Gate Bump-Outs / Framing: Low Range - Demolition of asphalt and curb 100LF (2 bumpouts) @ $\$ 35$ LF $=\$ 3,500$; New Curb $=200$ LF $@ \$ 25=\$ 5,000$; Relocate storm drain ( 2 each) @ $\$ 10,000$ each $=\$ 20,000$; Fill \& Grass $=\$ 3,000$; Total $=\$ 31,500$. High Range - Demolition of asphalt and curb 100LF (2 bumpouts) @\$50LF = \$5,000; New Curb = 200LF @ $\$ 35=\$ 7,000$; Relocate storm drain (2 each) @ \$15,000 each = \$30,000; Fill \& Grass = \$3,000; Total = \$45,000
1.I.4 Kingsbury Parking Lot: Low Range - Demolition asphalt, guardrail, sidewalk, curb LS $\$ 30,000$; Asphalt resurfacing 650 SY @ \$20 SY = \$13,000; new curb 200LF @ \$25 = \$5,000; Sidewalk 1,800 SF @ $\$ 10 / \mathrm{SF}=\$ 18,000 ;$ Total $=\$ 66,000$. High Range = Demolition asphalt, guardrail, sidewalk, curb LS $\$ 40,000$; Asphalt resurfacing 650 SY @ \$25 SY = \$16,250; new curb 200LF @ \$35 = \$7,000; Sidewalk 1,800 SF @ \$13/SF = \$23,400; Total = \$86,650
1.I. 5 Pave Shoal Creek Trail: Low Range - 400LF @ $\$ 90=\$ 36,000$. High Range -400 LF $@ \$ 120=$ \$48,000
1.I. 6 Entry Improvements: Low Range - Lawn @ 1 acre = \$10,000; Seatwall 150LF @ \$400 = \$60,000; Steps 150LF @ $\$ 150=\$ 22,000$; Plantings LS $\$ 20,000$; Kiosk $\$ 15,000$; Total $=\$ 127,000$. High Range Lawn @ 1 acre = \$15,000; Seatwall 150LF @ $\$ 500=\$ 75,000$; Steps 150LF @ $\mathbf{2 0 0}=\$ 30,000$; Plantings LS \$25,000; Kiosk \$20,000; Total = \$165,000
1.R. 1 Basketball Court Relocation / Rebuild: Low Range - Demolition \$10,000; Concrete 5,000SF @ 7/SF = \$35,000; Nets (2) \& Fence = \$15,000; Total = \$60,000. High Range - Demolition \$15,000; Concrete 5,000SF @ 10/SF = \$50,000; Nets (2) \& Fence = \$20,000; Total = \$85,000
*1.NR. 1 Tree Care/Replacement Plantings: Low Range $=\$ 25,000$. High Range $=\$ 40,000$
*1.NR. 2 Tree Spade / Relocate Tress in Viewshed: Low Range $20 @ \$ 750=\$ 15,000$. High Range $=20$ \$1,500 = \$30,000
*1.NR. 3 Riparian Reforestation: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - 5 acres $\mathrm{x} \$ 10,000=\$ 5,000$ High Range -1 acres $\mathrm{x} \$ 15,000=\$ 15,000$.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.I.1 New Ped Bridge to Shoal Creek Trail @15 ${ }^{\text {th }}$ St.: Low Range - demolition $\$ 25,000$; Bridge \& Abutments \$400,000; Total = \$425,000 High Range - demolition \$50,000; Bridge \& Abutments \$700,000; Total = \$750,000
2.I. 2 Overlooks and Trail Connections: Low Range - 400LF@ \$30LF = \$12,000; Overlook LS = \$5,000; Total $\$ 17,000$. High Range - 400 LF @ $\$ 45=\$ 18,000$; Overlook LS= $\$ 10,000$; Total $=\$ 28,000$.
2.R. 1 Playground Pod Development: Low Range - Play Equipment with engineered fiber LS = $\$ 400,000$; New Paving LS = $\$ 75,000$, Site Furnishings LS = $\$ 50,000$; (4) Shade Structure/Trellis $@ \$ 20,000$ ea $=\$ 80,000$ Total $=\$ 605,000$. High Range - Play Equipment with Rubber Surface LS $=$ $\$ 500,000$; New Paving LS = \$100,000, Site Furnishings LS = \$75,000; (4) Shade Structure/Trellis @ \$30,000 ea = \$120,000 Total = \$795,000.
2.R.2 Children's Nature Play: Low Range - LS \$10,000. High Range - \$25,000.
2.R. 3 Treehouse: Low Range - LS \$75,000. High Range - \$150,000.
2.NR. 1 Signature Plantings: Low Range $-\$ 25,000$. High Range $=\$ 50,000$

## Big Field

Phase 1
1.I.1 Pave Shoal Creek Trail: Low Range - 900LF @\$75 = \$67,500. High Range - 900LF @\$120= \$108,000
1.NR. 1 Riparian Restoration: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - . 5 acres $\times \$ 10,000=\$ 5,000$ High Range -1 acres $\times \$ 15,000=\$ 15,000$.
*1.NR. 2 Tree Care: Low Range = \$10,000. High Range = \$20,000

## Phase 2

2.I. ADA Bridge Connection to Polecat Hollow: Low Range - demolition \$20,000; Bridge \& Abutments $\$ 400,000$; Total $=\$ 425,000$ High Range - demolition $\$ 30,000$; Bridge \& Abutments \$700,000; Total = \$730,000
2.I.2 Trail Node: Low Range - Stone pavement 400 SF @\$20/SF= \$8,000; Interpretation/Wayfinding \$10,000; Planting \$10,000; Total = \$28,000 High Range - Stone pavement 500 SF @\$30/SF= \$15,000; Interpretation/Wayfinding $\$ 15,000$; Planting $\$ 15,000$; Stone walls/ seats 150 LF @ $\mathbf{2 0 0 / L F}=\$ 30,000$; Total = \$75,000.
2.I.3 Waterline / Waterfountain: Low Range - Waterline LS \$20,000; Fountain \$4,000; Total = $\$ 24,000$. High Range - Waterline $\$ 30,000$, Fountain $\$ 5,000 ;$ Total $=\$ 35,000$.
2.1.4 Overlooks \& Trail Connection: Low Range-800LF@ \$30LF = \$24,000,000; Overlook LS = \$5,000; Total $\$ 29,000$. High Range - 800 LF @ $\$ 45=\$ 36,000$; Overlook LS= $\$ 10,000$; Total $=\$ 46,000$.
2.R.1 Baseball Field Improvements / Restoration: Low Range - Backstops, seating, Fencing, infield LS $\$ 20,000$. High Range - LS $\$ 50,000$
2.NR. 1 Sustainable Lawn Establishment: Low Range - Maintain Bermuda grass - 4 acres $@ \$ 5,000 /$ Acre $=\$ 15,000$. High Range - Habiturf or other sustainable grass -4 acres $@ \$ 8,000 /$ Acre $=$ \$32,000.
2.NR. 2 Signature Planting: Low Range - LS \$10,000. High Range - LS \$20,000.

## North Ramble \& Hillside

Phase 1
1.I. 1 Pave Shoal Creek Trail (Unpaved Section): Low Range - 500LF @\$90 = \$45,000. High Range 500LF @\$120 = \$60,000
*1.I.2 Trail Connection to Windsor Gateway: Low Range - LS \$25,000. High Range LS \$40,000.
*1.I.3 Hiking Trail Improvements: Low Range - 3,000 LF @ \$8LF = \$24,000. High Range 3,000LF @ \$12LF = \$36,000.
1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range -3 acres $x \$ 3,000=\$ 9,000$; High Range -6 acres $\times \$ 3,000=\$ 18,000$.
*1.NR. 2 Upland Reforestation: Additional Tree Plantings \& Herbaceous Layer \$10,000 per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range -3 acres $x \$ 10,000=\$ 30,000$ High Range -4 acres $\mathrm{x} \$ 15,000=\$ 60,000$.

## Phase 2

2.CR. 1 Historical Interpretation / Capitol View Node: Low Range $=\$ 10,000$ High Range $=\$ 20,000$
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range - Demolition, 560 LF @\$20= \$11,200; Pavement 560LF @\$90 = \$50,400; Total = \$61,600. High Range

- Demolition, 560 LF @\$30= \$17,000; Pavement 560LF @\$120=\$67,200; Total = \$84,200.
2.NR. 1 Signature Plantings: Low Range - LS \$10,000. High Range - LS \$20,000.


## Windsor Hillside

Phase 1
*1.I. 1 Windsor Gateway: Low Range - Demolition LS $\$ 15,000$; Conc Steps 40 steps, 10 ' wide @ $\$ 150$ LF $=\$ 60,000$; Pavement 2,000 SF at $\$ 12$ SF $=\$ 24,000$, Cheekwall at 320LF - $\$ 200$ LF $=\$ 64,000$; Railing 320 LF @ \$150LF = \$48,000; Concrete Ramp 2,400 sf x \$15/sf = \$36,000 Total = \$247,000. High Range - Demolition LS $\$ 20,000$; Stone Steps 40 steps, $10^{\prime}$ wide @ $\$ 300 \mathrm{LF}=\$ 120,000$; Stone Pavement 2,000 SF at $\$ 25$ SF = $\$ 50,000$, Cheekwall at 320LF - $\$ 400$ LF = $\$ 128,000$; Railing 320 LF @ \$200LF = \$64,000; Concrete Ramp 2,400 sf x \$30/sf = \$72,000; Total = \$454,000.
1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range -2 acres $x \$ 3,000=\$ 6,000$; High Range -4 acres $\mathrm{x} \$ 3,000=\$ 12,000$.
1.NR. 2 Upland Reforestation: Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - 1 acres $x \$ 10,000=\$ 10,000$ High Range -2 acres $\mathrm{x} \$ 15,000=\$ 30,000$.

Phase 2
2.CR. 1 Historical Interpretation: Low Range = \$5,000 High Range = \$15,000
2.I.1 Hiking Trails: Low Range - 2,500 LF @ \$8LF = \$20,000. High Range - 2,500 LF @ \$12LF = \$30,000.
2.NR. 1 Signature Plantings: Low Range - LS \$10,000. High Range - LS \$20,000.

## Polecat Hollow

## Phase 1

1.I. 1 Waterline / Waterfountain: Low Range - Waterline LS \$20,000; Fountain \$4,000; Total = $\$ 24,000$. High Range - Waterline $\$ 30,000$, Fountain $\$ 5,000$; Total $=\$ 35,000$.
1.R. 1 Volley Ball Court Improvements: Low Range - Edging, Seating, Shade Trees LS $\$ 50,000$. High Range - Edging, Seating, Shade Trellis, LS \$150,000.
1.NR. 1 Riparian Restoration: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000$ /acre starting from scratch) Low Range - 1 acres $x \$ 10,000=\$ 10,000$ High Range -1.5 acres $x \$ 15,000=\$ 22,500$.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.I.1 ADA Bridge Connection to Custer's Meadow: Low Range - demolition \$20,000; Bridge \& Abutments $\$ 400,000$; Total $=\$ 420,000$ High Range - demolition $\$ 30,000$; Bridge \& Abutments \$700,000; Total = \$730,000
2.I.2 Excursion Trail: Low Range - 1,400LF@ \$45LF = \$63,000. High Range - 1,400 LF @ \$60=\$84,000 2.I.3 Overlooks \& Trail Connectors: Low Range - 800LF@ $\$ 30 \mathrm{LF}=\$ 24,000$; Overlook LS = \$5,000; Total \$29,000. High Range - 800 LF @ \$45 = \$36,000; Overlook LS= \$10,000; Total = \$46,000. 2.I.4 Earthwork for Stormwater Infiltration Basins: Low Range - 4,800 cuyds x $\$ 10=\$ 48,000$; High Range $-4,800$ cuyds $\times \$ 25=\$ 120,000$.
2.I. 5 Polecat Hollow/ Rainbow Rd Utility Line Burial: Low Range - 1000 LF $=\$ 120,000$. High Range $=$ \$350,000.
2.R.1 Picnic Shelter: Low Range - Structure $=\$ 60,000$; Stone Paving $=\$ 80,000$; Total $=\$ 140,000$. High Range Structure = \$100,000; Stone Paving = \$160,000; Total = \$260,000
2.R. 2 Amphitheater: Low Range - landform and modified "stage" LS $\$ 200,000$ High Range - 11 rows 100 long, stone seating $2^{\prime} x^{\prime} 4^{\prime} @ \$ 1,500$ each, stone stage LS $\$ 500,000$.
2.R.3 Fitness Stations \& Picnic Tables: Low Range - LS \$20,000 High Range - \$30,000
2.R.4 Children's Nature Play: Low Range - LS \$10,000. High Range - \$20,000.
2.NR. 1 Sustainable Lawn Establishment: Low Range - Maintain Bermuda grass - 4 acres $@ \$ 5,000 /$ Acre $=\$ 20,000$. High Range - Habiturf or other sustainable grass -4 acres $@ \$ 8,000 /$ Acre $=$ \$32,000.
2.NR. 1 Signature Plantings: Low Range - LS \$15,000. High Range - LS \$25,000.

## Phase 3

3.CR.1 Public Art: To be determined on a specific public art schedule - Costs included as part of overall master plan contingency.
3.I.1 Consider Additional Parking: Low Range - Demolition LS \$ 7,000; Pavement 1,400 SY @ \$30 SY = $\$ 42,000$, Curb Cut $\$ 5,000$, Sidewalk 250LF @ $\$ 25=\$ 6,000$; Signage $\$ 5,000$; Traffic Lights $=\$ 50,000$ Total = \$115,000 High Range - Demolition LS \$ 10,000; Pavement 1,400 SY @ \$45 SY = \$63,000, Curb Cut \$10,000, Sidewalk 250LF @ \$35 = \$9,000; Signage \$10,000; Traffic Lights \$75,000 Total = \$167,000
3.I.2 Consider Additional Restroom: Low Range - Structure $=\$ 120,000$; Utilities $=\$ 200,000$; Total $=$ $\$ 320,000$. High Range - Structure = \$250,000; Utilities = \$300,000; Total = \$550,000.

## Caswell Shoals

## Phase 1

1.NR. 1 Invasive Species Removal: Supplement Watersheds Project - $\$ 3,000$ per acre Low Range -1 acres $x \$ 3,000=\$ 3,000$; High Range -2 acres $\times \$ 3,000=\$ 6,000$.
1.NR. 2 Riparian Restoration: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer \$10,000 per acre (Floyds Fork is \$14,000/acre starting from scratch) Low Range - 1 acres $x \$ 10,000=\$ 10,000$ High Range -1 acres $x \$ 15,000=\$ 15,000$.
1.NR. 3 Upland Reforestation: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - 5 acres $\mathrm{x} \$ 10,000=\$ 5,000$ High Range -1 acres $\mathrm{x} \$ 15,000=\$ 15,000$.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.I.1 Overlooks \& Trail Connectors: Low Range - 1020LF@ \$30LF = \$30,600; Overlooks (2) LS = $\$ 10,000$; Total $\$ 40,600$. High Range - 1020 LF @ \$45 = \$45,900; Overlooks (2) LS= \$20,000; Total = \$75,900.
2.NR. 1 Signature Plantings: Low Range - LS \$10,000. High Range - LS \$20,000.

## Custer's Meadow

Phase 1
1.NR. 1 Invasive Species Removal: Supplement Watersheds Project -\$3,000 per acre Low Range 1acres $x \$ 3,000=\$ 3,000$; High Range -2 acres $x \$ 3,000=\$ 6,000$.
1.NR. 2 Riparian Restoration: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range -1 acres $\mathrm{x} \$ 10,000=\$ 10,000$ High Range - 2 acres $\times \$ 1,000=\$ 30,000$.
*1.NR. 3 Tree Care: Low Range = \$10,000. High Range = \$20,000

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 10,000$ High Range $=\$ 20,000$
2.CR. 2 Restore Tables /Culverts: Low Range LS \$1,000. High Range - LS \$5,000
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range

- Demolition, 1,600 LF @\$20= \$32,000; Pavement 1,600LF @\$90 = \$144,000; Total = \$176,000. High Range - Demolition, 1,600 LF @\$30= \$48,000; Pavement 1,600LF @\$120=\$192,000; Total = \$240,000.
2.I.3 Excursion Trail: Low Range - 900LF@ \$45LF = \$41,000. High Range - 900 LF @ \$60=\$54,000
2.I. 1 Overlooks \& Trail Connectors: Low Range - 1,200 LF@ \$30LF = \$36,000; Overlook LS = \$5,000;

Total \$41,000. High Range - 1,200 LF @ \$45 = \$54,000; Overlook LS= \$10,000; Total = \$64,000.
2.R. 1 Picnic Shelter: Low Range - Structure $=\$ 60,000$; Stone Paving $=\$ 80,000$; Total $=\$ 140,000$. High Range Structure = \$100,000; Stone Paving = \$160,000; Total = \$260,000
2.R.2 Children's Nature Play: Low Range - LS \$10,000. High Range - \$20,000.
2.NR. 1 Signature Plantings: Low Range - LS \$25,000. High Range - LS \$40,000.

## $\underline{24}$ St Bridge

Phase 2
2.CR.1 Bridge Lighting: Low Range - Arch under-lighting = LS \$20,000; 4 Ped Lights at Ends LS = $\$ 20,000 ;$ Total $=\$ 40,000$. High Range - Arch under-lighting = LS $\$ 40,000 ; 4$ Ped Lights at Ends LS = $\$ 40,000 ;$ Total $=\$ 80,000$.
2.I.1 East Side Trail Connections: Low Range - Demolition LS \$5,000; Conc Steps 24 steps, 12 ' wide @ $\$ 150 L F=\$ 44,000$; Pavement 2,000 SF at $\$ 12$ SF $=\$ 24,000$, Cheekwall at 250LF - $\$ 200$ LF $=\$ 50,000$; Railing 250 LF @ \$150LF = \$38,000; Ramp \& Wall LS $=\$ 25,000$; Total $=\$ 206,000$. High Range Demolition LS $\$ 7,000$; Stone Steps 24 steps, $12^{\prime}$ wide $@ \$ 300 \mathrm{LF}=\$ 86,000$; Pavement 2,000 SF at $\$ 25 \mathrm{SF}=\$ 50,000$, Cheekwall at 250LF - $\$ 300 \mathrm{LF}=\$ 75,000$; Railing 250 LF @ $\$ 200 \mathrm{LF}=\$ 50,000$; Ramp \& Wall LS = \$40,000 ; Total = \$308,000.
2.I. 2 West Side Trail Connections: Low Range - Demolition LS $\$ 10,000$; Conc Steps 18 steps, 10 ' wide @ $\$ 150 \mathrm{LF}=\$ 27,000$; Pavement 1,000 SF at $\$ 12 \mathrm{SF}=\$ 12,000$, Cheekwall at 125LF - $\$ 200 \mathrm{LF}=\$ 25,000$; Railing 125 LF @ \$150LF = \$19,000; Scupper LS = \$7,000 ; North Side Connection LS = \$50,000; Total = \$150,000. High Range - Demolition LS \$10,000; Stone Steps 18 steps, 10 ’ wide @ $\$ 300 \mathrm{LF}=\$ 54,000$; Pavement 1,000 SF at $\$ 25 S F=\$ 25,000$, Cheekwall at 125 LF - $\$ 300 \mathrm{LF}=\$ 38,000$; Railing $125 \mathrm{LF} @$ $\$ 200$ LF = \$25,000; Scupper LS = \$20,000 ; North Side Connection LS = \$100,000 Total = \$272,000. 2.I. 3 Sidewalk Connection from Bridge to Parkway: Low Range - 240 If @ $\$ 50$ LF = $\$ 12,000$. High Range - 240 LF @ $\$ 75$ LF = \$18,000.

## Wooten Woods

## Phase 1

1.NR. 1 Invasive Species Removal: Supplement Watersheds Project - $\$ 3,000$ per acre Low Range - 1 acres $\times \$ 3,000=\$ 3,000$; High Range -2 acres $\times \$ 3,000=\$ 6,000$.
*1.NR. 2 Tree Care: Low Range - $\$ 15,000$. High Range - $\$ 30,000$.
1.NR. 3 Riparian Reforestation: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - . 5 acres $\mathrm{x} \$ 10,000=\$ 5,000$ High Range -1 acres $\times \$ 15,000=\$ 15,000$.
1.R.1 Picnic Tables / Seating / Dog Waste Stations: Low Range - \$20,000. High Range - \$40,000.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.CR. 2 Stone Culvert Restorations: Low Range - $\$ 1,000$. High Range - $\$ 5,000$
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range - Demolition, 1,600 LF @\$20= \$32,000; Pavement 1,600LF @\$90 = \$144,000; Total = \$176,000. High Range - Demolition, 1,600 LF @\$30= \$48,000; Pavement 1,600LF @\$120 = \$192,000; Total = \$240,000. 2.I.2 Overlooks \& Trail Connectors: Low Range - 1,300 LF@ \$30LF = \$39,000; Overlook LS = \$15,000; Total \$54,000. High Range - 1,300 LF @ \$60 = \$78,000; Overlook LS= \$30,000; Total = \$108,000.
2.NR. 1 Signature Plantings: Low Range - LS $\$ 20,000$. High Range - LS $\$ 35,000$.

## Live Oak Terrace

Phase 1
1.NR. 1 Riparian Reforestation: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - 5 acres x $\$ 10,000=\$ 5,000$ High Range - 1.0 acres x $\$ 15,000=\$ 15,000$

Phase 2
2.CR. 1 Repair Historic Walls and Stone Bench Triangle: Low Range - $\$ 5,000$. High Range - $\$ 10,000$. 2.CR. 2 Stone Step Restoration: Low Range - \$5,000. High Range - \$8,000.
2.I. 1 Overlooks \& Trail Connectors: Low Range - 1050 LF@ \$30LF = \$31,500; Overlook LS = \$10,000; Total $\$ 41,500$. High Range - 1050 LF $@ \$ 60=\$ 63,000$; Overlook LS= $\$ 20,000$; Total = \$83,000.
2.R. 1 Picnic Tables and Dog Waste Stations: Low Range - $\$ 6,000$. High Range - $\$ 12,000$.
2.R. 2 Shade Shelter: Low Range - Structure $=\$ 30,000$; Stone Paving $=\$ 40,000$; Total $=\$ 70,000$. High Range Structure = \$50,000; Stone Paving = \$800,000; Total = \$130,000
2.NR. 1 Signature Plantings: Low Range - LS $\$ 10,000$. High Range - LS $\$ 20,000$.

## Gaston Green

## Phase 1

1.R.1 Picnic Tables / Seating / Dog Waste Stations: Low Range - \$15,000. High Range - \$25,000.
1.NR. 1 Invasive Species Removal: Supplement Watersheds Project - $\$ 3,000$ per acre Low Range - . 5 acres $x \$ 3,000=\$ 1,500$; High Range -1 acres $\times \$ 3,000=\$ 3,000$.
1.NR. 2 Riparian Reforestation: Supplement Watersheds Project - Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - . 5 acres $x \$ 10,000=\$ 5,000$ High Range -1 acres $x \$ 15,000=\$ 15,000$.
1.NR. 3 Tree Care: Low Range = \$10,000. High Range = \$15,000

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.CR. 2 Bridge Lighting: Both Shoal Creek Blvd Bridges - Low Range - 8 Ped Lights at Ends LS $=\$ 40,000$ High Range - 8 Ped Lights at Ends LS = \$80,000.
2.CR. 3 Restore Historic Walls and Benches: Low Range - $\$ 8,000$ High Range - $\$ 20,000$.
2.CR.4 History Hut: Low Range -Structure $=\$ 120,000$, Utilities $=\$ 100,000 ;$ Total $=\$ 220,000$. High

Range - Structure $=\$ 160,000$, Utilities $=\$ 200,000$; Total $=\$ 360,000$
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range - Demolition, 1,350 LF @\$20= \$27,000; Pavement 1,350LF @\$90 = \$121,500; Total = \$148,500. High Range - Demolition, 1,350 LF @\$30= \$41,000; Pavement 1,350LF @\$120 = \$162,000; Total = \$203,000.
2.I. 2 Overlooks \& Trail Connectors: Low Range - 740 LF@ $\$ 30 L F=\$ 22,200$; Overlook LS = \$10,000;

Total $\$ 32,200$. High Range -740 LF @ $\$ 60=\$ 44,400$; Overlook LS $=\$ 20,000$; Total $=\$ 64,400$.
2.1.3 Excursion Trail: Low Range - 650LF@ \$45LF = \$29,250. High Range - 650 LF @ $\$ 60=\$ 39,000$.
2.I.4 Waterline / Waterfountain: Low Range - Waterline LS \$20,000; Fountain \$4,000; Total = $\$ 24,000$. High Range - Waterline $\$ 25,000$, Fountain $\$ 5,000$; Total $=\$ 30,000$.
2.R. 1 Shade Shelter: Low Range - Structure $=\$ 60,000$; Stone Paving $=\$ 80,000$; Total $=\$ 140,000$. High Range Structure = \$100,000; Stone Paving = \$160,000; Total = \$260,000.
2.R.2 Children's Nature Play: Low Range - LS \$10,000. High Range - \$15,000.
2.NR. 1 Sustainable Lawn Establishment: Low Range - Maintain Bermuda grass - 1.5 acres
$@ \$ 4,000 /$ Acre $=\$ 6,000$. High Range - Habiturf or other sustainable grass -1.5 acres @\$8,000/Acre = \$12,000.
2.NR. 1 Signature Plantings: Low Range - LS \$20,000. High Range - LS \$30,000.

## East Bank

Phase 1
1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range - 1.5 acres $x \$ 3,000=\$ 4,500$; High Range - 3 acres $\times \$ 3,000=\$ 9,000$.
1.NR. 2 Upland Reforestation: Additional Tree Plantings \& Herbaceous Layer \$10,000 per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range - 5 acres $\mathrm{x} \$ 10,000=\$ 5,000$ High Range -1 acres $\mathrm{x} \$ 15,000=\$ 15,000$.
1.I. 1 Earthwork for Stormwater Infiltration Basins: Low Range - 4,000 cuyds x $\$ 10=\$ 40,000$; High Range $-4,000$ cuyds $\times \$ 25=\$ 100,000$.

## Ramble Scramble

Phase 1
1.I.1 Hiking Trails: Low Range - 1,750 LF @ \$5LF = \$9,000; Gateway LS \$10,000; Total = \$19,000. High Range - 1,750 LF @ \$10LF = \$18,000; Gateway LS \$10,000; Total = \$28,000.
1.R. 1 Picnic Tables and Dog Waste Stations: Low Range - $\$ 6,000$. High Range - $\$ 12,000$.
*1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range -2 acres $x \$ 3,000=\$ 6,000$; High Range -4 acres $\mathrm{x} \$ 3,000=\$ 12,000$.
1.NR. 2 Upland Reforestation: Additional Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range -1 acres $x \$ 10,000=\$ 10,000$ High Range -2 acres $x$ \$15,000 = \$30,000.
1.NR. 3 Riparian Reforestation: Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000$ /acre starting from scratch) Low Range -2 acres $x \$ 10,000=\$ 20,000$ High Range -4 acres $x$ $\$ 15,000=\$ 60,000$.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range = \$5,000 High Range = \$15,000
2.CR. 2 Stone Wall Restoration: Low Range $=\$ 2,000$ High Range $=\$ 6,000$
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range - Demolition, 1,900 LF @\$20= \$38,000; Pavement 1,900LF @\$90=\$171,000; Total = \$209,000. High Range - Demolition, 1,900 LF @\$30=\$57,000; Pavement 1,900LF @\$120=\$228,000; Total = \$285,000.
2.I.2 Overlooks \& Trail Connectors: Low Range - 900 LF@ \$30LF = \$27,000; Overlook LS = \$10,000; Total \$37,000. High Range - 900 LF @ \$60 = \$54,000; Overlook LS= \$20,000; Total = \$74,000. 2.R. 1 Children's Nature Play: Low Range - LS \$10,000. High Range - \$20,000.

## Phase 3

3.I. 1 Elevate Janet Long Bridge: Low Range - demolition $\$ 25,000 ;$ Bridge \& Abutments $\$ 400,000$; Total = \$425,000 High Range - demolition \$50,000; Bridge \& Abutments \$500,000; Total = \$650,000

## Lamar Slope

## Phase 1

*1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range - 1 acres x $\$ 3,000=\$ 3,000$; High Range - 2 acres x $\$ 3,000=\$ 6,000$.
1.NR. 2 Riparian Reforestation: Tree Plantings \& Herbaceous Layer $\$ 10,000$ per acre (Floyds Fork is $\$ 14,000$ /acre starting from scratch) Low Range -2 acres $x \$ 10,000=\$ 20,000$ High Range -4 acres $x$ $\$ 15,000=\$ 60,000$.

## Phase 2

2.I.1 Overlooks \& Trail Connectors: Low Range - 900 LF@ \$30LF = \$27,000; Overlook LS = \$10,000; Total $\$ 37,000$. High Range - 900 LF @ $\$ 60=\$ 54,000$; Overlook LS= $\$ 20,000$; Total $=\$ 74,000$.

## Lamar Terrace

Phase 1
1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range - 5 acres $x \$ 3,000=\$ 1,500$; High Range - 2 acres $\times \$ 3,000=\$ 6,000$.
1.NR.2 Riparian Reforestation/ Bank Stabilization: Watershed's Project is $\$ 6.2$ Million for $6,200 \mathrm{LF}$ of work along the Creek $=\$ 1,000$ LF which includes both sides of the Creek, or $\$ 500$ LF for each side of the Creek. This rate of $\$ 500$ LF represents a maximum unit price (includes non-riparian reforestation \& bank stabilization work like trails \& raingardens). Low Range - @ \$100 LF x 900 LF = \$90,000 High Range - $\$ 300$ LF X 900LF = $\$ 270,000$.

## Phase 2

2.CR. 1 Historical Interpretation: Low Range $=\$ 5,000$ High Range $=\$ 15,000$
2.I.1 Repave Shoal Creek Trail (remove old paved trail and install new Shoal Creek Trail): Low Range - Demolition 750 LF @ $\$ 15=\$ 12,000$; Pavement 750LF $@ \$ 90=\$ 68,000$; Total $=\$ 80,000$. High Range Demolition, 750 LF @ $\$ 30=\$ 23,000$; Pavement 750 LF $@ \$ 120=\$ 90,000$; Total = $\$ 113,000$.
2.I.2 Overlooks \& Trail Connectors: Low Range - 400 LF@ $\$ 30$ LF = $\$ 12,000$; Overlook LS = $\$ 6,000$; Total $\$ 18,000$. High Range -400 LF $@ \$ 60=\$ 24,000$; Overlook LS $=\$ 10,000$; Total $=\$ 34,000$.
2.1.3 Excursion Trail: Low Range - 800LF@ \$45LF = \$36,000. High Range-800 LF @ $\$ 60=\$ 48,000$.
2.R. 1 Shade Shelter: Low Range - Structure $=\$ 60,000$; Stone Paving $=\$ 80,000$; Total $=\$ 140,000$. High Range Structure = \$100,000; Stone Paving = \$160,000; Total = \$260,000.
2.R. 2 Restroom / Overlook: Restroom, Overlook, Utilities: Low Range - \$400,000 High Range \$650,000
2.R.3 Children's Nature Play: Low Range - LS \$10,000. High Range - \$20,000.
2.R.4 Fitness Stations \& Dog Waste Stations: Low Range - LS \$8,000 High Range - \$16,000
2.NR. 1 Sustainable Lawn Establishment: Low Range - Maintain Bermuda grass - 1 acre @\$4,000/Acre
$=\$ 4,000$. High Range - Habiturf or other sustainable grass -1 acres $@ \$ 8,000 /$ Acre $=\$ 8,000$.
2.NR. 2 Signature Plantings: Low Range - LS $\$ 20,000$. High Range - LS $\$ 30,000$.

## $29^{\text {th }}$ St Bridge

## Phase 2

> 2.CR. 1 Bridge Lighting: Low Range - Arch under-lighting $=$ LS $\$ 20,000 ; 4$ Ped Lights at Ends LS = $\$ 20,000 ;$ Total $=\$ 40,000$. High Range - Arch under-lighting $=L S \$ 30,000 ; 4$ Ped Lights at Ends LS = $\$ 40,000 ;$ Total $=\$ 70,000$.
> 2.CR. Bridge Event Space: Low Range - $\$ 250,000$ High Range $-\$ 400,000$
> 2.I. 1 East Side Trail Connections: Low Range - Pavement \& Walls $\$ 40,000$. High Range - Pavement \& Walls $\$ 80,000$.

## The Bluffs

Phase 1
1.I. 1 Shoal Creek Retaining Wall / Guardrails: Low Range - Railing = 500 LF @ \$200=\$10,000; Retaining Wall $=500$ LF $\times \$ 150=\$ 75,000$; Pavement $=500$ LF $\times 10$ ' widex $\$ 10=\$ 50,000$; Total $=$ $\$ 135,000$. High Range - Railing $=600$ LF @ \$400 LF = \$24,000; Retaining Wall 600 LF $\times \$ 175=$ $\$ 105,000$; Pavement $=600$ LF x $10^{\prime}$ wide $\times \$ 12=\$ 72,000$; Total $=\$ 201,000$.
1.NR. 1 Invasive Species Removal: $\$ 3,000$ per acre Low Range - . 5 acres $\times \$ 3,000=\$ 1,500$; High Range -1 acres $x \$ 3,000=\$ 3,000$.
1.NR. 2 Upland Reforestation: Additional Tree Plantings \& Herbaceous Layer \$10,000 per acre (Floyds Fork is $\$ 14,000 /$ acre starting from scratch) Low Range -.5 acres $x \$ 10,000=\$ 5,000$ High Range -1 acres $\mathrm{x} \$ 10,000=\$ 15,000$.
1.NR.3 Riparian Reforestation/ Bank Stabilization: Watershed's Project is $\$ 6.2$ Million for 6,200LF of work along the Creek $=\$ 1,000$ LF which includes both sides of the Creek, or $\$ 500$ LF for each side of the Creek. This rate of $\$ 500$ LF represents a maximum unit price (includes non-riparian reforestation \& bank stabilization work like trails \& raingardens). Low Range - @ \$100 LF x 800 LF = \$80,000 High Range - $\$ 300$ LF X 800LF = $\$ 240,000$.

## Phase 2

2.CR. 1 Historical Interpretation : Low Range = \$5,000 High Range = \$15,000
2.I.1 Overlooks \& Trail Connections: Low Range - 500 LF@ \$30LF = \$15,000; Overlook LS = \$5,000;

Total $\$ 20,000$. High Range - 500 LF $@ \$ 60=\$ 30,000$; Overlook LS $=\$ 10,000$; Total $=\$ 40,000$.
2.R. 1 Children's Nature Play: Low Range - LS $\$ 10,000$. High Range - $\$ 15,000$.

Phase 3
3.CR. 1 Restore Pylons / Culverts : Low Range = \$4,000 High Range = \$20,000

## Reclaimed Water

Phase 33.I.1 Integrate Purple Pipe Irrigation System into the Park: Low Range - 20 acres @ \$1/SF = \$871,200. High Range - 20 acres @ \$2/SF = \$1,742,400.

## Pease Park Master Plan

# ORDER OF MAGNITUDE COST ESTIMATE 

## Outside the Park

Project Code: CR = Cultural Resources; I = Infrastructure; NR = Natural Resources; R = Recreation

## Kingsbury Commons

Phase 1
1.I.1 Overhead Utility Burial: Low Range - 200LF of Burial with 3 relocations = \$100,000; Total = $\$ 230,000$. High Range - 975LF of Burial with 6 relocations $=\$ 400,000$

Phase 3
3.I.1 Parkway Sidewalk Connections: Low Range - 500LF @ \$200 = \$100,000. High Range = 500LF @ $\$ 400=\$ 200,000$
3.1.2 Stormwater Storage Tanks: Low Range - LS \$25,000. High Range = \$50,000

## Gaston Green

Phase 3
3.I.1 Gaston Sidewalk / Gateway: Low Range - 800 If @ $\$ 50$ LF = \$40,000. High Range - 800 LF @ $\mathbf{~ 7 5}$ LF = \$60,000

## East Bank

Phase 3
3.I. 128 ½ St Gateway: Low Range - \$25,000 High Range \$40,000

## Lamar Parkway

Phase 2
2.I.1 Widen Lamar Sidewalk to 12' (15th - 29th): Low Range - Demolition @ \$20LF; Conc Sidewalk @ \$60 LF = \$80LF for 9,100 LF = \$728,000 High Range - Demolition @ \$40LF; Conc Sidewalk @ \$100 LF = \$140LF for 9,100 LF = \$1,275,000
2.I. 2 Widen Lamar Sidewalk to 8'/10'/12' (29th - 31St): Low Range - Demolition @ \$50LF; Conc Sidewalk @ \$80 LF = \$130LF for 1,450 LF = \$189,000 High Range - Demolition @ \$75LF; Conc Sidewalk @ \$200 LF = \$275LF for 1,450 LF = \$400,000.
2.I.3 Lamar Sidewalk Overlooks: Low Range - 500 LF@ \$30LF = \$15,000; Overlook LS = \$20,000; Total $\$ 35,000$. High Range - 500 LF @ $\$ 60=\$ 30,000$; Overlook LS= \$40,000; Total = \$70,000.
2.I. 4 Street Tree Plantings: Low Range - 300 Trees @ 40' Spacing @ \$400/Tree = \$120,000 High Range - 450 Trees @ $\$ 500$ / Tree = $\$ 225,000$.
2.I. $5 \mathbf{2 4}^{\text {th }}$ St Signalization : Low Range - Pedestrian Crossing Signals-pushbuttons, countdown displays ( 8 @ LS $\$ 5,000$ each = $\$ 40,000$; pedestrian paving amenities LS $\$ 10,000$, crosswalk striping LS 4 at $\$ 5,000=\$ 20,000 ;$ Total $=\$ 70,000$ High Range - Pedestrian Crossing Signals-pushbuttons, countdown displays (8@ LS $\$ 10,000$ each) = $\$ 80,000$; pedestrian paving amenities LS $\$ 20,000$, crosswalk striping LS 4 at $\$ 10,000=\$ 40,000 ;$ Total $=\$ 140,000$
2.I.6 29 ${ }^{\text {th }}$ St Signalization: Low Range - Pedestrian Crossing Signals-pushbuttons, countdown displays (14@ LS \$5,000 each) = \$70,000; pedestrian paving amenities LS \$20,000, crosswalk striping LS 7 at $\$ 5,000=\$ 35,000$; Total $=\$ 125,000$ High Range - Pedestrian Crossing Signals-pushbuttons, countdown displays (14@ LS \$10,000 each) = \$140,000; pedestrian paving amenities LS \$40,000, crosswalk striping LS 7 at $\$ 10,000=\$ 70,000$; Total $=\$ 250,000$
2.I.7 MLK Bus Stop Parkside: Low Range - Bus Shelter \$55,000; Plaza Paving $\$ 10 \times 1,500$ SF=\$15,000; Stone Wall 30LF x $\$ 400=\$ 12,000$; Total $=\$ 82,000$ High Range - Bus Shelter $\$ 75,000$; Plaza Paving $\$ 30$ x 1,500 SF=\$45,000; Stone Wall 30LF x $\$ 500=\$ 15,000$; Total $=\$ 135,000$
2.I. $\mathbf{2 4} 4^{\text {th }}$ St Bus Stop Parkside: Low Range - Bus Shelter $\$ 55,000$; Plaza Paving $\$ 10 \times 750$ SF=\$7,500; Stone Wall 85LF x $\$ 400=\$ 34,000$; Total $=\$ 96,500$ High Range - Bus Shelter \$75,000; Plaza Paving $\$ 30$ x 750 SF=\$22,500; Stone Wall 85LF x \$500= \$42,500; Total = \$140,000 2.I. $9 \mathbf{2 9}^{\text {th }} / \mathbf{3 1} \mathbf{1}^{\text {st }}$ Bus Stop Parkside: Low Range - Bus Shelter \$55,000; Plaza Paving $\$ 10 \times 500$

SF=\$5,000; Stone Wall 30LF x $\$ 400=\$ 12,000$; Total $=\$ 72,000$ High Range - Bus Shelter $\$ 75,000$; Plaza Paving $\$ 30 \times 500$ SF= 15,000 ; Stone Wall 30LF x $\$ 500=\$ 15,000$; Total $=\$ 105,000$

Phase 3
3.I.1 Overhead Utility Burial @ Polecat Hollow: Low Range - 1400 LF of Burial = \$600,000; High Range $-2,100$ LF of Burial $=\$ 900,000$
3.I.2 MLK Intersection Improvements: Relocate curbs, Remove free-right turns, enhanced crosswalks Low Range - \$75,000 High Range - \$150,000
3.I.3 24th St Intersection Improvements: Relocate curbs, Bump-outs, enhanced crosswalks Low Range - \$50,000 High Range - \$100,000
3.I.4 29th St Intersection Improvements: Relocate curbs, Remove free-right turns, enhanced crosswalks Low Range - \$100,000 High Range - \$200,000
3.I.5 Bluffs Overlook: Low Range - LS S100,000 High Range - $\$ 300,000$
3.I.6 Daylighting / Bioswales: Low Range - \$700,000 High Range - \$1,400,000

## Parkway / Kignsbury

Phase 1
1.I.1 Remove Bollards to allow for Parking: Low Range - Demolition LS \$2,000 High Range Demolition \$8,000

Phase 3
3.I.1 Sidewalk, Overlooks \& Parallel Parking: Low Range - Demolition @\$10 LF; Conc Sidewalk @ \$30LF; Walls @ \$100LF; Curb \$15LF; Drainage @ \$25LF; Utility @ \$20LF = \$200 LF Length = 3,600 LF Total = \$720,000. High Range - Demolition @\$30 LF; Conc Sidewalk @ \$50LF; Walls @ \$150LF; Curb \$40LF; Drainage @ \$50LF; Utility @ \$50LF = \$370 LF Length = 3,600 LF Total = \$1,332,000.

## Reclaimed Water

Phase 2
2.I.1 Purple Pipe Connection from City System to Pease Park: Low Range - Duncan Park to $15^{\text {th }}$ St $=$ $\$ 1,400,000$ High Range - Duncan to $15^{\text {th }}$ St $+15^{\text {th }}$ St to $24^{\text {th }}$ St $+24^{\text {th }}$ St to $29^{\text {th }}$ St $=\$ 4,200,000$.

