

Table A-1: Summary of Estimated Remediation Costs for Tannery Park Proposal Former Apollo Tannery Site, 116 Washington Avenue, Camden, Maine				
	Number	Units	Unit Cost	Total
Engineering Support and Project Reporting				
Environmental Media Management Plan	1	LS	\$2,500	\$2,500
Site-Specific Quality Assurance Project Plan ⁽⁸⁾	1	LS	\$3,000	\$3,000
Engineering Design	1	LS	\$12,000	\$12,000
Construction Oversight and Bidding Phase Services ⁽⁹⁾	1	LS	\$24,000	\$24,000
VRAP Closure Reporting and Documentation ⁽¹⁰⁾	1	LS	\$8,000	\$8,000
<i>Engineering Support and Project Reporting Subtotal:</i>				\$44,000
Concrete Slab Removal ⁽¹⁾				
Demolition and Disposal of Concrete Slabs ⁽²⁾	250	CY	\$50	\$12,500
<i>Concrete Slab Removal Subtotal:</i>				\$12,500
Targeted Riverwalk Hot Spot Remediation ⁽³⁾				
Impacted Soil Excavation ⁽⁴⁾	900	Tons	\$10	\$9,000
Transportation & Disposal (T&D) - Non- Hazardous ⁽⁵⁾	880	Tons	\$75	\$66,000
Transportation & Disposal (T&D) - Hazardous ⁽⁵⁾	22	Tons	\$590	\$12,980
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	4	EA	\$1,500	\$6,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	1,200	CY	\$30	\$36,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
<i>Targeted Soil Removal Subtotal:</i>				\$147,980
Soil Removal in Proposed Building Footprints and Cover Systems in Green Spaces ⁽⁷⁾				
Town of Camden				
Cover System	500	SY	\$20	\$10,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
<i>Cover System Subtotal:</i>				\$20,000
Development Team				
Impacted Soil Excavation ⁽⁴⁾	4,200	Tons	\$10	\$42,000
Transportation & Disposal (T&D) ⁽⁵⁾	4,200	Tons	\$75	\$315,000
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	9	EA	\$1,500	\$13,500
Final Developed Cover System	4,300	SY	\$20	\$86,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
Dust Control / Site H&S	1	LS	\$4,000	\$4,000
<i>Development Soil Management Subtotal:</i>				\$468,500
Tannery Park Alternative Subtotal:				\$692,980
Contingency 15% ⁽¹¹⁾				\$104,000
TANNERY PARK PROPOSAL ALTERNATIVE TOTAL				\$796,980

1 Site-Specific Quality Assurance Project Plan must be prepared for collection of required waste characterization samples.

2 Cost includes bidding documents, contractor selection, and periodic oversight during remediation.

3 Cost includes VRAP Closure Report and Declaration of Environmental Covenants.

4 Assumes volume of concrete = 500 cy based on proposed excavation depth of 0.25 feet across the 27,000 square feet of existing concrete slabs. Assume density of 2 tons per cy for concrete debris.

5 Demolition and disposal costs based on recent projects and costs for similar type materials.

6 Assumes volume of impacted soil = 11,300 cy based on proposed excavation depth of 2 feet across the entire 3.5 acre Site. Assume soil density of 1.5 tons per cy for fill soil. Therefore, total contaminated soil volume to be excavated = 11,300 cy or 17,000 tons (1.5 tons per cy).

7 Assumes excavator & operator cost = \$1,500 per day and excavation of up to 100 cy per day or 150 tons per day (soil density of 1.5 tons per cy for fill soil). Therefore, \$1,500 per day / 150 tons per day = \$10 per ton for excavation of soils.

8 Assumes transportation and disposal/recycling as a special waste soil (i.e., non-hazardous waste) at a licensed landfill at \$75 per ton.

9 One waste characterization sample is required per 500 tons of soil disposal.

10 Assumes placement of interim gravel cover system consisting of 1 ft common borrow gravel and seeding to stabilize for future development

11 Covers previously unidentified changes that could come up during cleanup activities on Site.

NOTE: Costs presented in table above do not include programmatic tasks required by the use of Brownfield Cleanup Funds. These tasks would include, but are not limited to, the following Community Relations Plan, Public Comment and Public Meetings, and Public Bidding. These costs are estimated to add to the cost of the project in the range from \$15,000 to \$25,000.

LS = Lump Sum, CY = Cubic Yard, EA = Each, SY = Square Yard

Table A-2: Summary of Estimated Remediation Costs for Habitat for Humanity Proposal Former Apollo Tannery Site, 116 Washington Avenue, Camden, Maine				
	Number	Units	Unit Cost	Total
Engineering Support and Project Reporting				
Environmental Media Management Plan	1	LS	\$2,500	\$2,500
Site-Specific Quality Assurance Project Plan ⁽⁸⁾	1	LS	\$3,000	\$3,000
Engineering Design	1	LS	\$12,000	\$12,000
Construction Oversight and Bidding Phase Services ⁽⁹⁾	1	LS	\$24,000	\$24,000
VRAP Closure Reporting and Documentation ⁽¹⁰⁾	1	LS	\$8,000	\$8,000
<i>Engineering Support and Project Reporting Subtotal:</i>				\$44,000
Concrete Slab Removal ⁽¹⁾				
Demolition and Disposal of Concrete Slabs ⁽²⁾	250	CY	\$50	\$12,500
<i>Concrete Slab Removal Subtotal:</i>				\$12,500
Targeted Riverwalk Hot Spot Remediation ⁽³⁾				
Impacted Soil Excavation - Non-Hazardous ⁽⁴⁾	900	Tons	\$10	\$9,000
Transportation & Disposal (T&D) - Non-Hazardous ⁽⁵⁾	880	Tons	\$75	\$66,000
Transportation & Disposal (T&D) - Hazardous ⁽⁵⁾	22	Tons	\$590	\$12,980
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	4	EA	\$1,500	\$6,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	1,200	CY	\$30	\$36,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
<i>Targeted Soil Removal Subtotal:</i>				\$147,980
Soil Removal in Proposed Building Footprints and Cover Systems Across Unused Portions of the Site ⁽⁷⁾				
Town of Camden				
Cover System	5,000	SY	\$20	\$100,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
<i>Cover System Subtotal:</i>				\$110,000
Development Team				
Impacted Soil Excavation ⁽⁴⁾	465	Tons	\$10	\$4,650
Transportation & Disposal (T&D) ⁽⁵⁾	465	Tons	\$75	\$34,875
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	3	EA	\$1,500	\$4,500
Final Developed Cover System	500	SY	\$30	\$15,000
Site Restoration, Grading, Seeding	1	LS	\$2,000	\$2,000
Dust Control / Site H&S	1	LS	\$2,000	\$2,000
<i>Development Soil Management Subtotal:</i>				\$63,025
Habitat for Humanity Alternative Subtotal:				\$377,505
Contingency 15% ⁽¹¹⁾				\$56,700
HABITAT FOR HUMANITY PROPOSAL ALTERNATIVE TOTAL				\$434,205

1 Site-Specific Quality Assurance Project Plan must be prepared for collection of required waste characterization samples.

2 Cost includes bidding documents, contractor selection, and periodic oversight during remediation.

3 Cost includes VRAP Closure Report and Declaration of Environmental Covenants.

4 Assumes volume of concrete = 500 cy based on proposed excavation depth of 0.25 feet across the 27,000 square feet of existing concrete slabs. Assume density of 2 tons per cy for concrete debris. Therefore, total

5 Demolition and disposal costs based on recent projects and costs for similar type materials.

6 Assumes volume of impacted soil = 11,300 cy based on proposed excavation depth of 2 feet across the entire 3.5 acre Site. Assume soil density of 1.5 tons per cy for fill soil. Therefore, total contaminated soil volume to be excavated = 11,300 cy or 17,000 tons (1.5 tons per cy).

7 Assumes excavator & operator cost = \$1,500 per day and excavation of up to 100 cy per day or 150 tons per day (soil density of 1.5 tons per cy for fill soil). Therefore, \$1,500 per day / 150 tons per day = \$10 per ton for excavation of soils.

8 Assumes transportation and disposal/recycling as a special waste soil (i.e., non-hazardous waste) at a licensed landfill at \$75 per ton.

9 One waste characterization sample is required per 500 tons of soil disposal.

10 Assumes placement of interim gravel cover system consisting of 1 ft common borrow gravel and seeding to stabilize for future development

11 Covers previously unidentified changes that could come up during cleanup activities on Site.

NOTE: Costs presented in table above do not include programmatic tasks required by the use of Brownfield Cleanup Funds. These tasks would include, but are not limited to, the following Community Relations Plan, Public Comment and Public Meetings, and Public Bidding. These costs are estimated to add to the cost of the project in the range from \$15,000 to \$25,000.

LS = Lump Sum, CY = Cubic Yard, EA = Each

Table A-3: Summary of Estimated Remediation Costs for Friends of Tannery Park Proposal Former Apollo Tannery Site, 116 Washington Avenue, Camden, Maine				
	Number	Units	Unit Cost	Total
Engineering Support and Project Reporting				
Environmental Media Management Plan	1	LS	\$2,500	\$2,500
Site-Specific Quality Assurance Project Plan ⁽⁸⁾	1	LS	\$3,000	\$3,000
Engineering Design	1	LS	\$12,000	\$12,000
Construction Oversight and Bidding Phase Services ⁽⁹⁾	1	LS	\$24,000	\$24,000
VRAP Closure Reporting and Documentation ⁽¹⁰⁾	1	LS	\$8,000	\$8,000
<i>Engineering Support and Project Reporting Subtotal:</i>				\$44,000
Concrete Slab Removal ⁽¹⁾				
Demolition and Disposal of Concrete Slabs ⁽²⁾	250	CY	\$50	\$12,500
<i>Concrete Slab Removal Subtotal:</i>				\$12,500
Targeted Hot Spot Remediation ⁽³⁾				
Impacted Soil Excavation - Non-Hazardous ⁽⁴⁾	900	Tons	\$10	\$9,000
Transportation & Disposal (T&D) - Non-Hazardous ⁽⁵⁾	880	Tons	\$75	\$66,000
Transportation & Disposal (T&D) - Hazardous ⁽⁵⁾	22	Tons	\$590	\$12,980
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	4	EA	\$1,500	\$6,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	1,200	CY	\$30	\$36,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
<i>Targeted Soil Removal Subtotal:</i>				\$147,980
Soil Removal in Proposed Building Footprints and Cover Systems to Support Park Features ⁽⁷⁾				
Town of Camden				
Cover System	4,500	SY	\$20	\$90,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
<i>Cover System Subtotal:</i>				\$100,000
Development Team				
Impacted Soil Excavation ⁽⁴⁾	465	Tons	\$10	\$4,650
Transportation & Disposal (T&D) ⁽⁵⁾	465	Tons	\$75	\$34,875
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	3	EA	\$1,500	\$4,500
Final Developed Cover System	1,000	SY	\$30	\$30,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
Dust Control / Site H&S	1	LS	\$4,000	\$4,000
<i>Development Soil Management Subtotal:</i>				\$86,025
Friends of Tannery Park Alternative Subtotal:				\$390,505
Contingency 15% ⁽¹¹⁾				\$58,600
FRIENDS OF TANNERY PARK ALTERNATIVE TOTAL				\$449,105

1 Site-Specific Quality Assurance Project Plan must be prepared for collection of required waste characterization samples.
2 Cost includes bidding documents, contractor selection, and periodic oversight during remediation.
3 Cost includes VRAP Closure Report and Declaration of Environmental Covenants.
4 Assumes volume of concrete = 500 cy based on proposed excavation depth of 0.25 feet across the 27,000 square feet of existing concrete slabs. Assume density of 2 tons per cy for concrete debris. Therefore,
5 Demolition and disposal costs based on recent projects and costs for similar type materials.
6 Assumes volume of impacted soil = 11,300 cy based on proposed excavation depth of 2 feet across the entire 3.5 acre Site. Assume soil density of 1.5 tons per cy for fill soil. Therefore, total contaminated soil volume to be excavated = 11,300 cy or 17,000 tons (1.5 tons per cy).
7 Assumes excavator & operator cost = \$1,500 per day and excavation of up to 100 cy per day or 150 tons per day (soil density of 1.5 tons per cy for fill soil). Therefore, \$1,500 per day / 150 tons per day = \$10 per ton for excavation of soils.
8 Assumes transportation and disposal/recycling as a special waste soil (i.e., non-hazardous waste) at a licensed landfill at \$75 per ton.
9 One waste characterization sample is required per 500 tons of soil disposal.
10 Assumes placement of interim gravel cover system consisting of 1 ft common borrow gravel and seeding to stabilize for future development
11 Covers previously unidentified changes that could come up during cleanup activities on Site.

NOTE: Costs presented in table above do not include programmatic tasks required by the use of Brownfield Cleanup Funds. These tasks would include, but are not limited to, the following Community Relations Plan, Public Comment and Public Meetings, and Public Bidding. These costs are estimated to add to the cost of the project in the range from \$15,000 to \$25,000.
LS = Lump Sum, CY = Cubic Yard, EA = Each, SY = Square Yard

Table A-4: Summary of Estimated Remediation Costs for Millville Apartments Proposal Former Apollo Tannery Site, 116 Washington Avenue, Camden, Maine				
	Number	Units	Unit Cost	Total
Engineering Support and Project Reporting				
Environmental Media Management Plan	1	LS	\$2,500	\$2,500
Site-Specific Quality Assurance Project Plan ⁽⁸⁾	1	LS	\$3,000	\$3,000
Engineering Design	1	LS	\$12,000	\$12,000
Construction Oversight and Bidding Phase Services ⁽⁹⁾	1	LS	\$24,000	\$24,000
VRAP Closure Reporting and Documentation ⁽¹⁰⁾	1	LS	\$8,000	\$8,000
<i>Engineering Support and Project Reporting Subtotal:</i>				\$44,000
Concrete Slab Removal ⁽¹⁾				
Demolition and Disposal of Concrete Slabs ⁽²⁾	250	CY	\$50	\$12,500
<i>Concrete Slab Removal Subtotal:</i>				\$12,500
Targeted Hot Spot Remediation ⁽³⁾				
Impacted Soil Excavation ⁽⁴⁾	900	Tons	\$10	\$9,000
Transportation & Disposal (T&D) - Non- Hazardous ⁽⁵⁾	880	Tons	\$75	\$66,000
Transportation & Disposal (T&D) - Hazardous ⁽⁵⁾	22	Tons	\$590	\$12,980
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	4	EA	\$1,500	\$6,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	1,200	CY	\$30	\$36,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
<i>Targeted Soil Removal Subtotal:</i>				\$147,980
Soil Removal in Proposed Building Footprints and Cover Systems in Green Spaces ⁽⁷⁾				
Town of Camden				
Cover System	2,750	SY	\$20	\$55,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
<i>Cover System Subtotal:</i>				\$65,000
Development Team				
Impacted Soil Excavation ⁽⁴⁾	4,200	Tons	\$10	\$42,000
Transportation & Disposal (T&D) ⁽⁵⁾	4,200	Tons	\$75	\$315,000
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	9	EA	\$1,500	\$13,500
Final Developed Cover System	2,750	SY	\$20	\$55,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
Dust Control / Site H&S	1	LS	\$4,000	\$4,000
<i>Development Soil Management Subtotal:</i>				\$437,500
Millville Apartments Alternative Subtotal:				\$706,980
Contingency 15% ⁽¹¹⁾				\$106,100
MILLVILLE APARTMENTS PROPOSAL ALTERNATIVE TOTAL				\$813,080

1 Site-Specific Quality Assurance Project Plan must be prepared for collection of required waste characterization samples.

2 Cost includes bidding documents, contractor selection, and periodic oversight during remediation.

3 Cost includes VRAP Closure Report and Declaration of Environmental Covenants.

4 Assumes volume of concrete = 500 cy based on proposed excavation depth of 0.25 feet across the 27,000 square feet of existing concrete slabs. Assume density of 2 tons per cy for concrete debris. Therefore,

5 Demolition and disposal costs based on recent projects and costs for similar type materials.

6 Assumes volume of impacted soil = 11,300 cy based on proposed excavation depth of 2 feet across the entire 3.5 acre Site. Assume soil density of 1.5 tons per cy for fill soil. Therefore, total contaminated soil volume to be excavated = 11,300 cy or 17,000 tons (1.5 tons per cy).

7 Assumes excavator & operator cost = \$1,500 per day and excavation of up to 100 cy per day or 150 tons per day (soil density of 1.5 tons per cy for fill soil). Therefore, \$1,500 per day / 150 tons per day = \$10 per ton for excavation of soils.

8 Assumes transportation and disposal/recycling as a special waste soil (i.e., non-hazardous waste) at a licensed landfill at \$75 per ton.

9 One waste characterization sample is required per 500 tons of soil disposal.

10 Assumes placement of interim gravel cover system consisting of 1 ft common borrow gravel and seeding to stabilize for future development

11 Covers previously unidentified changes that could come up during cleanup activities on Site.

NOTE: Costs presented in table above do not include programmatic tasks required by the use of Brownfield Cleanup Funds. These tasks would include, but are not limited to, the following Community Relations Plan, Public Comment and Public Meetings, and Public Bidding. These costs are estimated to add to the cost of the project in the range from \$15,000 to \$25,000.

LS = Lump Sum, CY = Cubic Yard, EA = Each, SY = Square Yard

Table A-5: Summary of Estimated Remediation Costs for Interim Cover System Proposal Former Apollo Tannery Site, 116 Washington Avenue, Camden, Maine				
	Number	Units	Unit Cost	Total
Engineering Support and Project Reporting				
Environmental Media Management Plan	1	LS	\$2,500	\$2,500
Site-Specific Quality Assurance Project Plan ⁽⁸⁾	1	LS	\$3,000	\$3,000
Engineering Design	1	LS	\$12,000	\$12,000
Construction Oversight and Bidding Phase Services ⁽⁹⁾	1	LS	\$24,000	\$24,000
VRAP Closure Reporting and Documentation ⁽¹⁰⁾	1	LS	\$8,000	\$8,000
<i>Engineering Support and Project Reporting Subtotal:</i>				\$44,000
Concrete Slab Removal ⁽¹⁾				
Demolition and Disposal of Concrete Slabs ⁽²⁾	250	CY	\$50	\$12,500
<i>Concrete Slab Removal Subtotal:</i>				\$12,500
Targeted Hot Spot Remediation ⁽³⁾				
Impacted Soil Excavation - Non-Hazardous ⁽⁴⁾	900	Tons	\$10	\$9,000
Transportation & Disposal (T&D) - Non-Hazardous ⁽⁵⁾	880	Tons	\$75	\$66,000
Transportation & Disposal (T&D) - Hazardous ⁽⁵⁾	22	Tons	\$590	\$12,980
Waste Characterization Sampling & Analysis for Disposal ⁽⁶⁾	4	EA	\$1,500	\$6,000
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	1,200	CY	\$30	\$36,000
Site Restoration, Grading, Seeding	1	LS	\$8,000	\$8,000
<i>Targeted Soil Removal Subtotal:</i>				\$147,980
Interim Cover System ⁽⁷⁾				
Stormwater and Erosion Controls	1	LS	\$10,000	\$10,000
Clean Backfill	5,000	CY	\$30	\$150,000
Dust Control / Site H&S	1	LS	\$4,000	\$4,000
<i>Upland Development Soil Removal Subtotal:</i>				\$164,000
Interim Cover System Alternative Subtotal:				\$368,480
Contingency 15% ⁽¹¹⁾				\$55,300
INTERIM COVER SYSTEM ALTERNATIVE TOTAL				\$423,780

1 Site-Specific Quality Assurance Project Plan must be prepared for collection of required waste characterization samples.

2 Cost includes bidding documents, contractor selection, and periodic oversight during remediation.

3 Cost includes VRAP Closure Report and Declaration of Environmental Covenants.

4 Assumes volume of concrete = 500 cy based on proposed excavation depth of 0.25 feet across the 27,000 square feet of existing concrete slabs. Assume density of 2 tons per cy for concrete debris. Therefore, total concrete slab volume to be removed = 500 cy or 1,000 tons (2 tons per cy).

5 Demolition and disposal costs based on recent projects and costs for similar type materials.

6 Assumes volume of impacted soil = 11,300 cy based on proposed excavation depth of 2 feet across the entire 3.5 acre Site. Assume soil density of 1.5 tons per cy for fill soil. Therefore, total contaminated soil volume to be excavated = 11,300 cy or 17,000 tons (1.5 tons per cy).

7 Assumes excavator & operator cost = \$1,500 per day and excavation of up to 100 cy per day or 150 tons per day (soil density of 1.5 tons per cy for fill soil). Therefore, \$1,500 per day / 150 tons per day = \$10 per ton for excavation of soils.

8 Assumes transportation and disposal/recycling as a special waste soil (i.e., non-hazardous waste) at a licensed landfill at \$75 per ton.

9 One waste characterization sample is required per 500 tons of soil disposal.

10 Assumes placement of interim gravel cover system consisting of 1 ft common borrow gravel and seeding to stabilize for future development

11 Covers previously unidentified changes that could come up during cleanup activities on Site.

NOTE: Costs presented in table above do not include programmatic tasks required by the use of Brownfield Cleanup Funds. These tasks would include, but are not limited to, the following Community Relations Plan, Public Comment and Public Meetings, and Public Bidding. These costs are estimated to add to the cost of the project in the range from \$15,000 to \$25,000.

LS = Lump Sum, CY = Cubic Yard, EA = Each