



## Green Solutions Funding Agreement M03076P54

### **Nine Green Alleys**

This Agreement is between the Milwaukee Metropolitan Sewerage District (District), 260 West Seeboth Street, Milwaukee, Wisconsin 53204-1446 and the City of Milwaukee, Department of Public Works (Milwaukee), 841 North Broadway, Milwaukee, Wisconsin 53202.

WHEREAS, Wisconsin law authorizes any municipality to establish an intergovernmental cooperation agreement with another municipality for the furnishing of services (Wis. Stat. sec. 66.0301); and

WHEREAS, the District is responsible for collecting and treating wastewater from locally-owned sewerage systems in the District's service area; and

WHEREAS, during wet weather, stormwater enters the sewerage system, increasing the volume of wastewater the District must collect and treat; and

WHEREAS, during wet weather, stormwater directly enters surface water, increasing pollution levels in those waterways and increasing the risk of flooding; and

WHEREAS, green infrastructure, such as constructed wetlands, rain gardens, green roofs, bioswales, and porous pavement, reduces the volume of stormwater in the sewerage system and the amount of pollutants discharged to surface waters; and

WHEREAS, the District's wastewater discharge permit requires the installation of twelve million gallons of new green infrastructure retention capacity before the end of 2017; and

WHEREAS, the District wants to expedite the amount of green infrastructure installed in its service area; and

WHEREAS, Milwaukee plans to install green infrastructure that supports the District's green infrastructure goals;

Now, therefore, for the consideration of the mutual promises made by the parties to this Agreement, the parties agree as follows.

#### **1. Date of Agreement**

This Agreement becomes effective immediately upon signature by both parties and ends when Milwaukee receives final payment from the District or when the parties terminate this Agreement according to sec. 12 of this Agreement.

## **2. District Funding**

The District will reimburse Milwaukee for the cost of the project described in the attached project description (Project), up to \$636,744. The District will provide funding after the District receives the Baseline Report and the signed Maintenance Covenant.

## **3. Location of the Project**

The Project is the construction of nine green alleys, as identified in the project description.

## **4. Baseline Report**

After completion of the Project, Milwaukee will provide a Baseline Report using forms provided or approved by the District. The Baseline Report will include:

- (a) a site drawing, showing the Project as completed;
- (b) design specifications for the Project, including rainwater capture capacity (maximum per storm) and other information regarding runoff rate reduction or pollutant capture;
- (c) a legal description of the property where the Project is located;
- (d) photographs of the completed Project;
- (e) a maintenance plan;
- (f) an outreach and education strategy, including a description of events or activities completed or planned;
- (g) an itemization of all construction costs, with supporting documentation;
- (h) a W-9 Tax Identification Number form;
- (i) a Small, Veterans, Women, and Minority Business Enterprise Report; and
- (j) an Economic Impact Report, showing the total number of people and the estimated number of hours worked on design and construction of the Project by Milwaukee's employees, contractors, consultants, and volunteers.

## **5. Procedure for Payment**

Milwaukee will submit an invoice to the District for the amount to be reimbursed. The invoice will document all costs to be reimbursed. Invoices from consultants will provide: their hourly billing rates, if applicable; the hours worked, by individual; and a summary of the tasks accomplished.

Milwaukee will send the Baseline Report and the invoice to:

Andy Kaminski, Civil Engineer  
Milwaukee Metropolitan Sewerage District  
260 West Seeboth Street  
Milwaukee, Wisconsin 53204 – 1446

The District will not provide reimbursement until the Project is complete and the District has received all required deliverables.

**6. Changes in the Project and Modifications to the Agreement**

Any changes to the Project must be approved by the District in writing in advance. The District will not reimburse for work that is not described in the original project description unless Milwaukee obtains prior written approval from the District.

**7. Modifications to this Agreement**

Any modifications to this Agreement will be in writing and signed by both parties.

**8. Project Maintenance**

Milwaukee will maintain the Project for at least ten years. If the Project fails to perform as anticipated or if maintaining the Project is not feasible, then Milwaukee will provide a report to the District explaining the failure of the Project or why maintenance is not feasible. Failure to maintain the Project will make Milwaukee ineligible for future District funding until Milwaukee corrects the maintenance problems.

**9. Permits, Certificates, and Licenses**

Milwaukee is solely responsible for compliance with all federal, state, and local laws and any required permits, certificates, or licenses.

**10. Public Bidding**

Milwaukee must select professional service providers according to Milwaukee’s ordinances and policies. Milwaukee must procure all non-professional services, such as construction, sewer inspection, and post-construction restoration, according to State of Wisconsin statutes and regulations and Milwaukee’s ordinances and policies. Whenever work valued over \$25,000 is procured without the use of a public sealed bidding process, the District may request and Milwaukee must provide an opinion from a licensed attorney representing Milwaukee explaining why the procurement complies with State of Wisconsin law and Milwaukee’s ordinances.

**11. Responsibility for Work, Insurance, and Indemnification**

Milwaukee is solely responsible for planning, design, construction, and maintenance of the Project, including the selection of and payment for consultants, contractors, and materials.

The District will not provide any insurance coverage of any kind for the Project or Milwaukee.

Milwaukee will defend, indemnify, and hold harmless the District and its Commissioners, employees, and agents against all damages, costs, liability, and expenses, including attorney’s fees and related disbursements, arising from or connected with the planning, design, construction, operation, or maintenance of the Project.

**12. Terminating this Agreement**

The District may terminate this Agreement at any time before the commencement of construction. After the commencement of construction, the District may terminate this Agreement only for good cause, including, but not limited to, breach of this Agreement by Milwaukee. Milwaukee may terminate this Agreement at any time, but will not receive any payment from the District if Milwaukee does not complete the Project.

**13. Maintenance Covenant**

After the completion of construction, the District must receive a Maintenance Covenant from Milwaukee. The Maintenance Covenant will be limited to the Project. The term of the Maintenance Covenant will be ten years.

**14. Exclusive Agreement**

This Agreement is the entire agreement between Milwaukee and the District.

**15. Severability**

If a court holds any part of this Agreement unenforceable, then the remainder of the Agreement will continue in effect.

**16. Applicable Law**

The laws of the State of Wisconsin apply to this Agreement.

**17. Resolving Disputes**

If a dispute arises under this Agreement, then the parties will try to resolve the dispute with the help of a mutually agreed-upon mediator in Milwaukee County. The parties will equally share the costs and fees associated with the mediation, other than attorney's fees. If the dispute is not resolved within 30 days after it is referred to the mediator, then either party may take the matter to court.

**18. Notices**

All notices and other communications in connection with this Agreement will be in writing and will be considered given as follows:

- (a) when delivered personally to the recipient's address as stated on this Agreement; or
- (b) three days after being deposited in the United States mail, with postage prepaid to the recipient's address as stated on this Agreement.

**19. Independence of the Parties**

This Agreement does not create a partnership. Milwaukee does not have authority to make promises binding upon the District or otherwise have authority to enter into contracts on the District's behalf.

**20. Assignment**

Milwaukee may not assign any rights or obligations under this Agreement without the District's prior written approval.

**21. Public Records**

Milwaukee will produce any records in the possession of Milwaukee that are subject to disclosure by the District pursuant to the State of Wisconsin's Open Records Law, Wis. Stats. secs. 19.31 to 19.39. Milwaukee will indemnify the District against all claims, demands, or causes of action resulting from Milwaukee's failure to comply with this requirement.

**Signatures on Next Page**

**MILWAUKEE METROPOLITAN  
SEWERAGE DISTRICT**

**CITY OF MILWAUKEE  
DEPARTMENT OF PUBLIC WORKS**

By: \_\_\_\_\_  
Kevin L. Shafer, P.E.  
Executive Director

By: \_\_\_\_\_  
Ghassan Korban, P.E.  
Commissioner

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Approved as to Form

By: \_\_\_\_\_  
Attorney for the District

# Green Solutions Funding Agreement M03076P54

## Nine Green Alleys

### Project Description

Milwaukee will install permeable pavers in nine alleys bounded by the following streets.

1. West Cleveland Ave, West Montana St, South 49<sup>th</sup> St and South 50<sup>th</sup> St
2. West Greenfield Ave, South Layton Blvd, West Scott St and South 28<sup>th</sup> St
3. West Main St, South 61<sup>st</sup> St, South 62<sup>nd</sup> St and lands north
4. West Auer Ave, West Concordia Ave, North 87<sup>th</sup> St and North 88<sup>th</sup> St
5. West Keefe Ave, West Nash St, North 99<sup>nd</sup> St and North 100<sup>th</sup> St
6. West Chambers St, West Locust St, North 76<sup>th</sup> St and North 77<sup>th</sup> St
7. West Keefe Ave, West Medford Ave, West Roosevelt Dr., West Scranton Pl and North 45<sup>th</sup> St
8. West Fiebrantz Ave, West Hope Ave, North 82<sup>nd</sup> St and North 83<sup>rd</sup> St
9. West Auer Ave, West Burleigh St, North 54<sup>th</sup> St and North 55<sup>th</sup> St (north/south leg)

The total amount of alley area will be removed and replaced is approximately 96,000 sq. ft. Approximately 18% (17,500 sq. ft.) will be permeable paver area. As part of the paving project, the entire lengths of the alleys will be excavated and removed to install the pavers in the center 4-feet of each alley over a strip of 3/4-inch bedding layer placed over a 2-foot depth of storage area with 2½-inch crushed stone. The stone will be installed to capture and store stormwater. Storm water runoff from garages and surface runoff will percolate through the pavers and into the storage area. The attached tables describe the elements of each alley.

For each green alley, Milwaukee will install 12-inch diameter perforated underdrains within the storage layer and be connected to either side of the existing catch basin located at the end of each alley to remove excess stormwater to the storm sewer system. The existing catch basin will also be used as an overflow structure.

### Budget

Total cost for these projects is estimated be \$1,200,000. The cost for the permeable pavers and associated materials is approximately \$746,376. The attached tables provide cost estimates for each alley.

### Schedule

Milwaukee will complete construction before December 31, 2017.

## **Outreach and Education**

Milwaukee will post educational signage at the Project site. This signage will acknowledge District funding for the Project. In addition, Fox Point will describe the Project and its benefits in a community newsletter or web page.

## **Results**

One of the alleys is located in a combined sewer service area. This alley will have the capacity to remove up to approximately 80,000 gallons of storm water runoff. The remaining eight alleys are in the separate storm sewer area and will capture up to 420,000 gallons. Total retention capacity will be 500,000 gallons.

The eight green alleys located within the separate storm sewer area will remove at least 55% of total suspended solids.

## Green Alley 1

Alley bounded by: W. Cleveland Av., W. Montana St., S. 49th St. S. 50th St.				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$2,000	\$2,000
Finishing Roadway	L.S.	1	\$500	\$500
Barricading and Signing	L.S.	1	\$500	\$500
Cutting	C.Y.	992	\$24	\$23,808
Pavement Removal	S.Y.	1,292	\$5	\$6,460
Concrete Walk and/or Driveway Removal	S.Y.	198	\$1	\$198
5 inch Concrete Walk	S.F.	78	\$5	\$390
7 inch Concrete Driveway	S.F.	120	\$6	\$720
7 inch Concrete Alley Pavement	S.F.	1,052	\$35	\$36,820
4 inch Crushed Stone Base	S.F.	1,052	\$7	\$7,259
24 inches of 2 & 1/2 inch (ASTM#2) Crushed Stone Base	S.F.	1,292	\$25	\$32,300
3/4" Bedding Stone	TONS	73	\$12	\$876
1/4" Bedding Stone	TONS	20	\$16	\$320
Sodding	S.F.	35	\$24	\$840
Topsoil	C.Y.	2	\$50	\$100
Geotextile Fabric, Type DF	S.F.	1,593	\$3	\$4,779
Sealing Pavement Joints and Cracks	S.F.	1,052	\$1	\$1,052
Manhole / Inlet Adjustment Type I	V.F.	1	\$250	\$250
Permeable Pavers	S.F.	2,160	\$12	\$25,920
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$145,192
Project Totals for Green Alley Items				\$88,003

## Green Alley 2

Alley bounded by: W.Greenfield Av., S.Layton Bl., W. Scott St., S. 28th St.				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$5,000	\$5,000
Finishing Roadway	L.S.	1	\$2,000	\$2,000
Barricading and Signing	L.S.	1	\$1,500	\$1,500
Cutting	C.Y.	1,212	\$25	\$30,300
Pavement Removal	S.Y.	1,486	\$6	\$8,916
Concrete Walk and/or Driveway Removal	S.F.	84	\$1	\$84
Sawing (Full Depth)	L.F.	130	\$2	\$260
Variable Thickness Concrete Walk and/or Driveway	C.Y.	1	\$250	\$250
7 inch Concrete Driveway	S.F.	1,179	\$35	\$41,265
Variable Thickness Concrete Base	C.Y.	1	\$250	\$250
Variable Thickness Asphalt Concrete Pavement	TONS	1	\$200	\$200
4 inch Crushed Stone Base	S.Y.	1,179	\$5	\$5,895
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	1,486	\$25	\$37,150
3/4" Bedding Stone	TONS	91	\$15	\$1,365
1/4" Bedding Stone	TONS	45	\$15	\$675
Sodding	S.Y.	48	\$25	\$1,200
Topsoil	C.Y.	3	\$50	\$150
Geotextile Fabric, Type DF	S.V.	1,920	\$4	\$6,720
Sealing Pavement Joints and Cracks	S.V.	1,179	\$2	\$2,004
Manhole / Inlet Adjustment Type I	V.F.	3	\$250	\$750
Permeable Pavers	S.F.	2,772	\$15	\$41,580
Erosion Control	L.S.	1	\$500	\$500
Project Total				\$188,014
Project Totals for Green Alley Items				\$117,790

### Green Alley 3

Alley bounded by: W. Main St., S. 61st St., S. 62nd St., Lands north				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$5,000	\$5,000
Finishing Roadway	L.S.	1	\$800	\$800
Barricading and Signing	L.S.	1	\$600	\$600
Cutting	C.Y.	510	<b>\$25</b>	\$12,495
Pavement Removal	S.Y.	646	\$6	\$3,876
Concrete Walk and/or Driveway Removal	S.F.	28	\$1	\$28
Sawing (Full Depth)	L.F.	397	\$2	\$794
Variable Thickness Concrete Walk and/or Driveway	C.Y.	1	\$275	\$275
7 inch Concrete Alley Pavement	S.Y.	514	\$39	\$19,789
Variable Thickness Concrete Base	C.Y.	15	\$300	\$4,500
Variable Thickness Asphalt Concrete Pavement	TONS	11	\$300	\$3,300
4 inch Crushed Stone Base	S.Y.	514	\$6	\$3,084
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	646	\$25	\$16,150
3/4" Bedding Stone	TONS	40	\$12	\$480
1/4" Bedding Stone	TONS	11	\$18	\$198
Sodding	S.Y.	40	\$24	\$960
Topsoil	C.Y.	2	\$50	\$100
Geotextile Fabric, Type DF	S.Y.	832	\$3	\$2,621
Sealing Pavement Joints and Cracks	S.Y.	514	\$1	\$720
Manhole / Inlet Adjustment Type I	V.F.	1	\$250	\$250
Permeable Pavers	S.F.	1,180	\$12	\$14,455
Erosion Control	L.S.	1	\$200	\$200
Project Total				\$90,675
Project Totals for Green Alley Items				\$46,399

## Green Alley 4

Alley bounded by: W Auer Ave, W Concordia Ave, N 87th St, N 88th St.				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$4,000	\$4,000
Finishing Roadway	L.S.	1	\$2,200	\$2,200
Barricading and Signing	L.S.	1	\$1,800	\$1,800
Cutting	C.Y.	859	\$25	\$21,475
Pavement Removal	S.Y.	1,333	\$6	\$7,998
Concrete Walk and/or Driveway Removal	S.F.	26	\$1	\$26
Sawing (Full Depth)	L.F.	10	\$2	\$20
Variable Thickness Concrete Walk and/or Driveway	C.Y.	1	\$250	\$250
<b>7 inch Concrete Driveway</b>	S.F.	0	\$5	\$0
7 inch Concrete Alley Pavement	S.Y.	1,144	\$35	\$40,040
Variable Thickness Concrete Base	C.Y.	0	\$240	\$0
Variable Thickness Asphalt Concrete Pavement	Tons	0	\$200	\$0
4 inch crushed stone base	S.Y.	1,144	\$5	\$5,720
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone	S.Y.	1,068	\$25	\$26,700
3/4" Bedding Stone	TONS	68	\$15	\$1,020
1/4" Bedding Stone	TONS	16	\$15	\$240
Sodding	S.Y.	30	\$25	\$750
Topsoil	C.Y.	2	\$50	\$100
Geotextile Fabric, Type DF	S.Y.	1,316	\$4	\$4,606
Sealing Pavement Joints and Cracks	S.Y.	1,333	\$2	\$2,266
Manhole / Inlet Adjustment Type I	V.F.	1	\$250	\$250
Permeable Pavers	S.F.	1,700	\$15	\$25,500
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$145,061
Project Totals for Green Alley Items				\$79,541

## Green Alley 5

Alley bounded by: W Keefe Ave,W Nash St,N 99th St N 100th St				
Item	Unit	Quantity	Unit Price	Estimat
Mobilization	L.S.	1	\$2,000	\$2,000
Finishing Roadway	L.S.	1	\$500	\$500
Barricading and Signing	L.S.	1	\$500	\$500
Cutting	C.Y.	928	\$24	\$22,272
Pavement Removal	S.Y.	1,192	\$5	\$5,960
Concrete Walk and/or Driveway Removal	S.Y.	108	\$1	\$108
7 inch Concrete Driveway	S.F.	108	\$6	\$648
7 inch Concrete Alley Pavement	S.F.	948	\$35	\$33,180
4 inch Crushed Stone Base	S.F.	948	\$7	\$6,541
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	1,192	\$25	\$29,800
Variable Thickness Crushed Stone	S.Y.	2	\$35	\$70
3/4" Bedding Stone	TONS	75	\$12	\$900
1/4" Bedding Stone	TONS	20	\$16	\$320
Sodding	S.Y.	23	\$24	\$552
Topsoil	C.Y.	1	\$50	\$50
Geotextile Fabric, Type OF	S.Y.	1,501	\$3	\$4,503
Sealing Pavement Joints and Cracks	S.Y.	948	\$1	\$948
Manhole /Inlet Adjustment Type I	V.F.	2	\$250	\$500
Permeable Pavers	S.F.	2,200	\$12	\$26,400
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$135,852
Project Totals for Green Alley Items				\$84,195

## Green Alley 6

Alley bounded by: W. Chambers St., W Locust St, N 76 <sup>th</sup> St, N 77 <sup>th</sup> St.				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$2,000	\$2,000
Finishing Roadway	L.S.	1	\$500	\$500
Barricading and Signing	L.S.	1	\$500	\$500
Cutting	C.Y.	907	\$24	\$21,768
Pavement Removal	S.Y.	1,210	\$5	\$6,050
Concrete Walk and/or Driveway Removal	S.F.	432	\$1	\$432
Sawing (Full Depth)	L.F.	408	\$2	\$816
Variable Thickness Concrete Walk and/or Driveway	C.Y.	1	\$250	\$750
7 inch Concrete Driveway	S.F.	108	\$6	\$648
7 inch Concrete Alley Pavement	S.F.	980	\$35	\$34,300
Variable Thickness Concrete Base	C.Y.	7	\$235	\$1,645
Variable Thickness Asphalt Concrete Pavement	TONS	4	\$230	\$800
4 inch Crushed Stone Base	S.Y.	980	\$7	\$6,762
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	1,210	\$25	\$30,250
3/4" Bedding Stone	TONS	70	\$12	\$840
1/4" Bedding Stone	TONS	19	\$16	\$304
Sodding	S.Y.	19	\$24	\$456
Topsoil	C.Y.	1	\$50	\$50
Geotextile Fabric, Type DF	S.Y.	1,523	\$3	\$4,569
Sealing Pavement Joints and Cracks	S.Y.	980	\$1	\$980
Manhole /Inlet Adjustment Type I	V.F.	1	\$250	\$250
Permeable Pavers	S.F.	2,074	\$12	\$24,888
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$139,158
Project Totals for Green Alley Items				\$82,619

## Green Alley 7

Alley bounded by: W. Keefe Av., W. Medford Av., W. Roosevelt Dr., W. Scranton Pl.,N.				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$2,000	\$2,000
Finishing Roadway	L.S.	1	\$500	\$500
Barricading and Signing	L.S.	1	\$500	\$500
Cutting	C.Y.	969	\$24	\$23,256
Pavement Removal	S.Y.	1,273	\$5	\$6,365
Concrete Walk and/or Driveway Removal	S.F.	174	\$1	\$174
Sawing (Full Depth)	L.F.	163	\$2	\$326
Variable Thickness Concrete Walk and/or Driveway	C.Y.	3	\$250	\$750
7 inch Concrete Alley Pavement	S.F.	1,075	\$35	\$37,625
Variable Thickness Concrete Base	C.Y.	1	\$250	\$250
Variable Thickness Asphalt Concrete Pavement	TONS	1	\$230	\$230
4 inch Crushed Stone Base	S.Y.	1,267	\$7	\$8,742
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	1,273	\$25	\$31,825
Variable Thickness Crushed Stone	TONS	5	\$35	\$175
3/4" Bedding Stone	TONS	60	\$12	\$720
1/4" Bedding Stone	TONS	17	\$16	\$272
Sodding	S.Y.	86	\$24	\$2,064
Topsoil	C.Y.	5	\$50	\$250
Geotextile Fabric, Type DF	S.Y.	1,603	\$3	\$4,809
Sealing Pavement Joints and Cracks	S.Y.	1,267	\$1	\$1,267
Manhole / Inlet Adjustment Type I	V.F.	2	\$250	\$500
Permeable Pavers	S.F.	1,776	\$12	\$21,312
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$144,012
Project Totals for Green Alley Items				\$82,194

## Green Alley 8

Alley bounded by: W. Fiebrantz Av.W. Hope Av., N. 82nd St.,N.83rd St.				
	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$2,000	\$2,000
Finishing Roadway	L.S.	1	\$500	\$500
Barricading and Signing	L.S.	1	\$500	\$500
Cutting	C.Y.	965	\$24	\$23,160
Pavement Removal	S.Y.	1,280	\$5	\$6,400
Concrete Walk and/or Driveway Removal	S.F.	110	\$1	\$110
5 inch Concrete Walk	S.F.	10	\$5	\$50
7 inch Concrete Driveway	S.F.	100	\$6	\$600
7 inch Concrete Alley Pavement	S.Y.	1,046	\$35	\$36,610
4 inch Crushed Stone Base	S.Y.	1,046	\$7	\$7,217
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone Base	S.Y.	1,280	\$25	\$32,000
3/4" Bedding Stone	TONS	71	\$12	\$852
1/4" Bedding Stone	TONS	19	\$16	\$304
Sodding	S.Y.	56	\$24	\$1,344
Topsoil	C.Y.	3	\$50	\$150
Geotextile Fabric,Type DF	S.Y.	1,578	\$3	\$4,734
Sealing Pavement Joints and Cracks	S.Y.	1,046	\$1	\$1,046
Manhole /Inlet Adjustment Type I	V.F.	1	\$250	\$250
Permeable Pavers	S.F.	2,104	\$12	\$25,248
Erosion Control	L.S.	1	\$100	\$100
Project Total				\$143,175
Project Totals for Green Alley Items				\$ 86,298

## Green Alley 9

Alley bounded by: W Auer Ave, W Burleigh St, N 54th St, N 55th St (n-s leg)				
Item	Unit	Quantity	Unit Price	Estimate
Mobilization	L.S.	1	\$5,000	\$5,000
Finishing Roadway	L.S.	1	\$700	\$700
Barricading and Signing	L.S.	1	\$540	\$540
Cutting	C.Y.	735	\$25	\$18,375
Pavement Removal	S.Y.	918	\$7	\$6,426
Concrete Walk and/or Driveway Removal	S.F.	429	\$1	\$429
Sawing (Full Depth)	L.F.	196	\$2	\$392
Variable Thickness Concrete Walk and/or Driveway	C.Y.	6	\$250	\$1,500
7 inch Concrete Driveway	S.F.	159	\$5	\$795
7 inch Concrete Alley Pavement	S.Y.	747	\$35	\$26,145
Variable Thickness Concrete Base	C.Y.	1	\$240	\$240
Variable Thickness Asphalt Concrete Pavement	TONS	1	\$200	\$200
4 inch Crushed Stone Base	S.Y.	747	\$4	\$2,988
24 inches of 2 & 1/2 inch (ASTM #2) Crushed Stone	S.Y.	918	\$25	\$22,950
3/4" Bedding Stone	TONS	52	\$11	\$572
1/4" Bedding Stone	TONS	14	\$19	\$266
Sodding	S.Y.	28	\$30	\$840
Topsoil	C.Y.	2	\$100	\$200
Geotextile Fabric, Type DF	S.Y.	1,164	\$4	\$4,074
Sealing Pavement Joints and Cracks	S.Y.	747	\$1	\$934
Manhole / Inlet Adjustment Type I	V.F.	1	\$225	\$225
Permeable Pavers	S.F.	1,540	\$15	\$23,100
Erosion Control	L.S.	1	\$150	\$150
Project Total				\$117,041
Project Totals for Green Alley Items				\$69,337