




smartsewer

INNOVATION & INFRASTRUCTURE TO LAST A LIFETIME

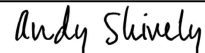
QAQC REVIEW FORM

Project Name: Green Infrastructure Mnt Program	Document Type: Bid Recommendation
Project Number: 60820062	Contract Number: 9903, 9904, 9905, 9906, 9907
Project Manager: Sarah Lothman	Contract Administrator: Jamie Driskell

Review Schedule	
This final version of this document is needed no later than the following date:	<u>ASAP</u>
The First Line Review is to be completed no later than the following date:	<u>ASAP</u>
Smart Sewer Program Approval for Issuance needed no later than the following date:	<u>ASAP</u>

Project Manager	
	<u>4/30/24</u>
Signature	Date

Smart Sewer Design/Construction Manager	
<i>Kyle Tonjes</i>	<u>5/9/2024</u>
Signature	Date

KC DocuSigned by Smart Sewer Program Manager	
	<u>7/1/2024</u>
Signature	Date



MEMORANDUM

DATE: July 1, 2024

TO: Kelly Postlewait, Interim Director

CC: Andy Shively, P.E., Deputy Director

FROM: Sarah Lothman, P.E., Smart Sewer Project Manager

SUBJECT: Facility Repair & Maintenance Contract recommendation for Green Infrastructure Maintenance Program Project No. 60820062, Contract No. 9903, 9904, 9905, 9906, 9907

On September 21, 2023, KC Water advertised a request for proposals from local small business landscape contractors to become prequalified for the maintenance of green infrastructure of existing sites constructed by KC Water. Work will result in continuous and ongoing maintenance to achieve required aesthetics and function of the green infrastructure sites. A mandatory pre-proposal meeting was held on September 28, 2023. Proposals were received on October 24, 2023.

Project Description:

The work under this contract consists of landscape and surface maintenance of existing green stormwater infrastructure sites. The Green Infrastructure Maintenance Program will maintain the function and aesthetic of green infrastructure sites across the City. In order to be successful long-term, green infrastructure sites require continuous and ongoing maintenance throughout the year to meet performance expectations related to their general appearance, vegetative health, infiltration, and stormwater drainage functions. Each green infrastructure site has unique maintenance needs influenced by the individual site layout and configuration, surrounding area, and weather conditions. Contractors are required to perform regular maintenance activities to continuously meet the Services Levels of Performance Standards defined in the scope of work. Maintenance of the sites is key to meeting performance objectives to continue to capture, store, and infiltrate stormwater while providing an amenity for the community. Maintenance activities and needs will vary by green infrastructure practice and individual green infrastructure components that comprise it on a seasonal basis. Regular maintenance activities may include but not be limited to the following tasks:

1. Remove sediment, debris, trash, and blockages
2. Replace settled or excavated materials, repair erosion/damage
3. Apply pre-emergen herbicide
4. Remove weeds
5. Manage disease and pests
6. Maintain clean landscape edges, prune plants
7. Mow turf grass areas
8. Water vegetated areas

9. Refresh mulch
10. Wooded area selective vegetation removal

Proposals Received from the Following Firms:

1. Common Nature
2. DuPree Landscaping & Lawn Care LLC
3. Eyedeal Lawn Care Solutions
4. Lotus Lawncare & Services LLC
5. Snoop's Lawn Mowing LLC

Selection Type and Committee Members:

1. Selection Type: N/A – Prequalifications of contractors by KC Water
2. Selection Method: N/A – eligibility based on contractor's qualifications and acceptance of work unit prices established by KC Water.
 - a. KC Water Smart Sewer Program evaluated contractor proposal documents, qualifications, and work unit price information received from the five contractors.

Work Unit Pricing

All shortlisted contractors were requested to provide preliminary work unit price information for maintenance tasks of nine green infrastructure sites. KC Water Smart Sewer Program team had follow-up meetings with each proposer to review preliminary work unit price information, standardize assumptions, understand the intended execution process and approach, and discuss any pricing outliers. The KC Water Smart Sewer Program established the preliminary unit pricing for each green infrastructure maintenance activity for eight green infrastructure sites that will be contracted for maintenance in the first year of the Green Maintenance Program (2024) as shown in the attached Schedule of Values and Exhibit B.1-Green Stormwater Infrastructure Site Locations & Practices. Four of these eight green infrastructure sites were added by the KC Water Smart Sewer Program to this green maintenance program after giving consideration to the unit price information submitted by the short-listed contractors for nine other green infrastructure sites. The number and location of green infrastructure sites is subject to change from year to year depending on the City's maintenance needs and available resources.

Landscape Contractors Selection:

1. Common Nature
2. DuPree Landscaping & Lawn Care LLC
3. Lotus Lawncare & Services LLC
4. Snoop's Lawn Mowing LLC

*Eyedeal Lawn Care Solutions is pre-qualified but will be awarded a contract in year 2 of the program.

MBE/WBE Utilization and CREO KC Approval:

KC Water will use a programmatic approach to achieve the M/WBE goals established for the Green Infrastructure Maintenance Program whereby KC Water will be responsible for contracting the maintenance of specific green infrastructure sites directly with prequalified M/WBE contractors. At the commencement of this program in 2024, the M/WBE goals for this program are suggested at be 23% MBE and 0% WBE based on the number of prequalified M/WBE contractors in the program for the first year.

M/WBE goals for this program will be reviewed jointly by CREO and KC Water leadership on an annual basis and adjusted as needed based on the actual number of prequalified M/WBE firms participating in the Green Maintenance Program.

Experience Reference Form


All selected contractors submitted the required Experience Reference Forms for similar projects, which were completed within the last 5 years. Past project references appear to be in good standing.

Negotiated Fee: \$1,100,000.00. This amount covers the 1st year, with 4 additional 1-year renewals for a maximum authorization of \$5,500,000.00.

Funding Source: 25-8110-801320-616140-60820062

Permission is requested to proceed with Ordinance authorization for Contract No's. 9903, 9904, 9905, 9906, 9907 for the Green Maintenance Program.

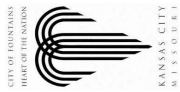
Approved: 
Andy Shively, P.E., Deputy Director
Water Services Department

Approved: 
Kelly Postlewait, Interim Director
Water Services Department

Attachment:

- 1. Approved Green Maintenance Program Year 1 Schedule of Values
- 2. Exhibit B.1 Year 1 Green Infrastructure Site Figures

SCHEDULE OF VALUES



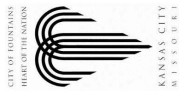
KANSAS CITY
MISSOURI

Project Number 60820062

Project Title Green Maintenance Program

A UNIT ITEM NO.	B UNIT	C ESTIMATED QUANTITY	D DESCRIPTION OF WORK UNIT ITEM DESCRIPTION	E UNIT PRICE	F NO. OF UNITS	G \$ TOTAL OR LUMP SUM	H	I \$ COMPLETED WORK	J \$ STORED MATERIAL	K \$ J/H	L % J/H	CREO APPROVED CUP			R \$ AMOUNT THIS APPLICATION L-R
												M \$ MBE	N \$ WBE	O \$ DBE	
Target Green Marlborough 81st & Troost															
1a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 700	26	\$ 18,200									
1b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 2,300	4	\$ 9,200									
1c.	Frequency	4	Apply pre-emergent herbicide	\$ 2,000	4	\$ 8,000									
1d.	Frequency	14	Remove weeds	\$ 1,500	14	\$ 21,000									
1e.	Frequency	7	Manage disease and pests	\$ 1,150	7	\$ 8,050									
1f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,200	14	\$ 16,800									
1g.	Frequency	4	Water vegetated areas	\$ 1,500	4	\$ 6,000									
1h.	Frequency	1	Refresh mulch	\$ 4,000	1	\$ 4,000									
						\$ 97,250									
Target Green Marlborough 87st & Troost Annual Site															
2 Target Green Marlborough Rachel Morado															
2a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 600	26	\$ 15,600									
2b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 2,400	4	\$ 9,600									
2c.	Frequency	4	Apply pre-emergent herbicide	\$ 2,000	4	\$ 8,000									
2d.	Frequency	14	Remove weeds	\$ 3,000	14	\$ 42,000									
2e.	Frequency	7	Manage disease and pests	\$ 1,000	7	\$ 7,000									
2f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,300	14	\$ 18,200									
2g.	Frequency	4	Water vegetated areas	\$ 1,500	4	\$ 6,000									
2h.	Frequency	1	Refresh mulch	\$ 5,500	1	\$ 5,500									
2i.	Frequency	4	Wooded area selective vegetation removal	\$ 1,500	4	\$ 6,000									
						\$ 177,900									
Target Green Marlborough Rachel Morado Annual Site															
3 Target Green Marlborough Arleta Park															
3a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 400	26	\$ 10,400									
3b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 2,500	4	\$ 10,000									
3c.	Frequency	4	Apply pre-emergent herbicide	\$ 2,000	4	\$ 8,000									
3d.	Frequency	14	Remove weeds	\$ 1,000	14	\$ 14,000									
3e.	Frequency	7	Manage disease and pests	\$ 600	7	\$ 4,200									
3f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,000	14	\$ 14,000									
3g.	Frequency	4	Water vegetated areas	\$ 1,500	4	\$ 6,000									
3h.	Frequency	1	Refresh mulch	\$ 6,500	1	\$ 6,500									
						\$ 73,100									
Target Green Marlborough Arleta Park Annual Site															
4 Target Green Marlborough 74th Street															
4a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 650	26	\$ 16,900									
4b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 1,500	4	\$ 6,000									
4c.	Frequency	4	Apply pre-emergent herbicide	\$ 1,200	4	\$ 4,800									
4d.	Frequency	14	Remove weeds	\$ 1,500	14	\$ 21,000									
4e.	Frequency	7	Manage disease and pests	\$ 500	7	\$ 3,500									
4f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,600	14	\$ 22,400									
4g.	Frequency	4	Water vegetated areas	\$ 1,500	4	\$ 6,000									
4h.	Frequency	1	Refresh mulch	\$ 10,600	1	\$ 10,600									
						\$ 97,200									
Target Green Marlborough 74th Street Annual Site															

SCHEDULE OF VALUES



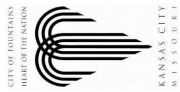
KANSAS CITY
MISSOURI

Project Number 60820062

Project Title Green Maintenance Program

A UNIT ITEM NO.	B UNIT	C ESTIMATED QUANTITY	D DESCRIPTION OF WORK UNIT ITEM DESCRIPTION	E UNIT PRICE	F NO. OF UNITS	G \$ TOTAL OR LUMP SUM	H	I \$ COMPLETED WORK	J \$ STORED MATERIAL	K \$ J/K	L % J/H	CREO APPROVED CUP				R \$ AMOUNT THIS APPLICATION L-R
												M \$ MBE	N \$ WBE	O \$ DBE	P % AT BOTTO M	
5 Central Industrial District (CID)/West Bottoms																
5a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 600	26	\$ 15,600										
5b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 1,800	4	\$ 7,200										
5c.	Frequency	4	Apply pre-emergent herbicide	\$ 3,000	4	\$ 12,000										
5d.	Frequency	14	Remove weeds	\$ 2,500	14	\$ 35,000										
5e.	Frequency	7	Manage disease and pests	\$ 1,500	7	\$ 10,500										
5f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 2,000	14	\$ 28,000										
5g.	Frequency	20	Mow turf grass areas	\$ 400	20	\$ 8,000										
5h.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000										
						\$ 120,300										
6 Northeast Industrial District (NEID)																
6a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 600	26	\$ 15,600										
6b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 2,400	4	\$ 9,600										
6c.	Frequency	4	Apply pre-emergent herbicide	\$ 2,500	4	\$ 10,000										
6d.	Frequency	14	Remove weeds	\$ 1,000	14	\$ 14,000										
6e.	Frequency	7	Manage disease and pests	\$ 650	7	\$ 4,550										
6f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 750	14	\$ 10,500										
6g.	Frequency	20	Mow turf grass areas	\$ 300	20	\$ 6,000										
6h.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000										
6i.	Frequency	1	Refresh mulch	\$ 10,000	1	\$ 10,000										
						\$ 84,250										
7 Linwood Green Park																
7a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 500	26	\$ 13,000										
7b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 3,000	4	\$ 12,000										
7c.	Frequency	4	Apply pre-emergent herbicide	\$ 1,500	4	\$ 6,000										
7d.	Frequency	14	Remove weeds	\$ 1,500	14	\$ 21,000										
7e.	Frequency	7	Manage disease and pests	\$ 1,000	7	\$ 7,000										
7f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,100	14	\$ 15,400										
7g.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000										
7h.	Frequency	1	Refresh mulch	\$ 10,000	1	\$ 10,000										
						\$ 88,400										
8 KCATA Trolley Trail (Outfall 066/067)																
8a.	Frequency	26	Remove sediment, debris, trash, blockages	\$ 500	26	\$ 13,000										
8b.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 1,500	4	\$ 6,000										
8c.	Frequency	4	Apply pre-emergent herbicide	\$ 1,200	4	\$ 4,800										
8d.	Frequency	14	Remove weeds	\$ 1,500	14	\$ 21,000										
8e.	Frequency	7	Manage disease and pests	\$ 1,000	7	\$ 7,000										
8f.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,100	14	\$ 15,400										
8g.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000										
						\$ 71,200										
KCATA Trolley Trail (Outfall 066/067) Annual Site																

SCHEDULE OF VALUES



CITY OF HOUNDSTONS
HEART OF THE NATION
KANSAS CITY
MISSOURI

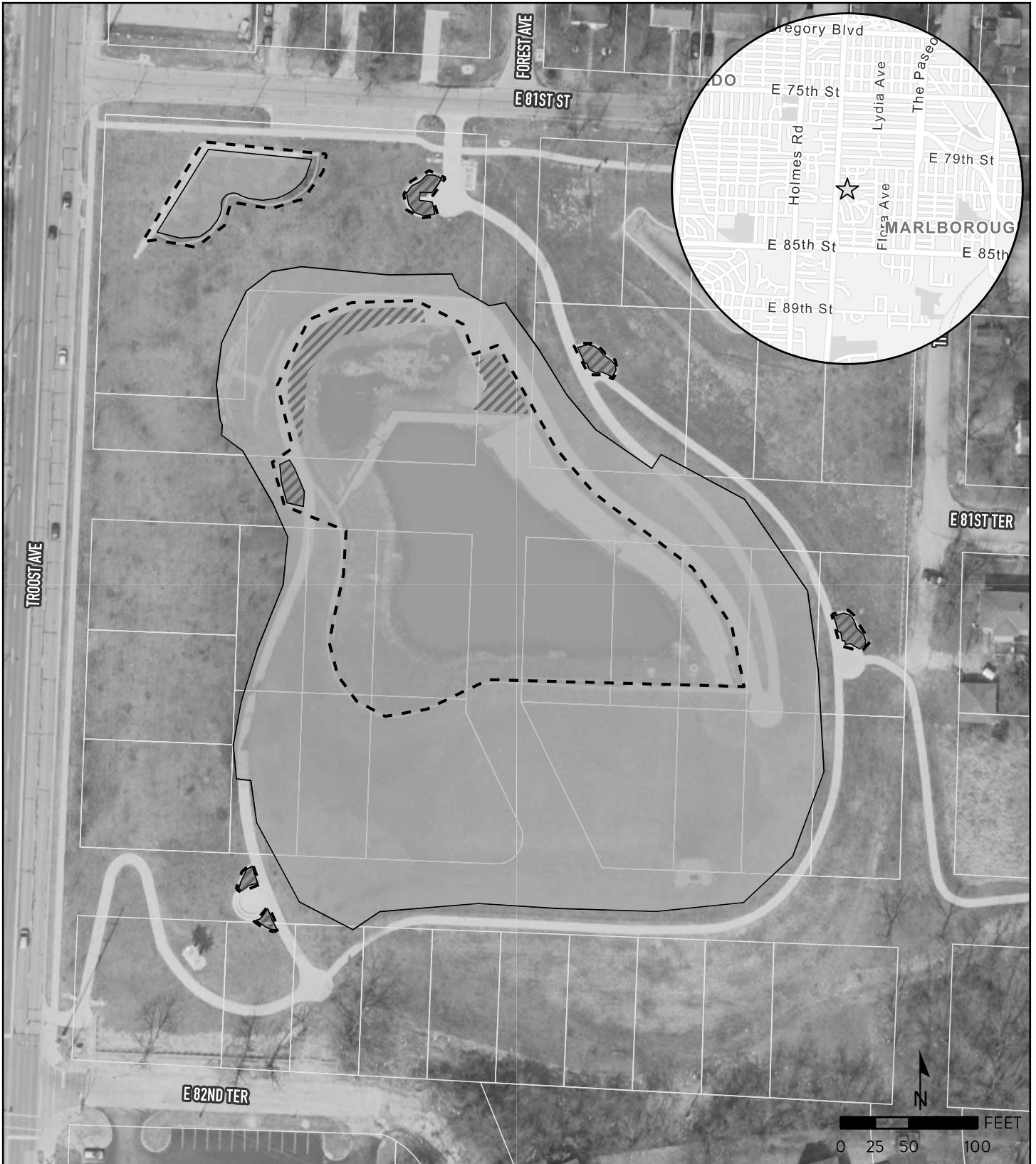
Project Number 60820062

Project Title Green Maintenance Program

A UNIT ITEM NO.	B UNIT	C ESTIMATED QUANTITY	D DESCRIPTION OF WORK UNIT ITEM DESCRIPTION	E \$ UNIT PRICE	F NO. OF UNITS	G \$ TOTAL OR LUMP SUM	H	I \$ COMPLETED WORK	J \$ STORED MATERIAL	K \$ J-HK	L % J/H	CREO APPROVED CUP			R \$ AMOUNT THIS APPLICATION L-R
												M \$ MBE	N \$ WBE	O \$ DBE	
Water Services Admin Building/Swope Campus															
9	Frequency	26	Remove sediment, debris, trash, blockages	\$ 400	26	\$ 10,400									
9a.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 2,000	4	\$ 8,000									
9b.	Frequency	4	Apply pre-emergent herbicide	\$ 600	4	\$ 2,400									
9c.	Frequency	14	Remove weeds	\$ 600	14	\$ 8,400									
9d.	Frequency	7	Manage disease and pests	\$ 900	7	\$ 6,300									
9e.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 1,200	14	\$ 16,800									
9f.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000									
9g.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000									
Water Services Admin Building/Swope Campus Annual															
						\$ 56,300									
81st & Lydia & President Gardens															
10	Frequency	26	Remove sediment, debris, trash, blockages	\$ 400	26	\$ 10,400									
10a.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 1,000	4	\$ 4,000									
10b.	Frequency	4	Apply pre-emergent herbicide	\$ 500	4	\$ 2,000									
10c.	Frequency	14	Remove weeds	\$ 500	14	\$ 7,000									
10d.	Frequency	7	Manage disease and pests	\$ 400	7	\$ 2,800									
10e.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 400	14	\$ 5,600									
10f.	Frequency	20	Mow turf grass areas	\$ 100	20	\$ 2,000									
10g.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000									
10h.	Frequency	4	Water vegetated areas	\$ 1,000	4	\$ 4,000									
						\$ 37,800									
81st & Lydia & President Gardens Annual Site Maintenance															
Paseo Medians & Wabash Tree Planters															
11	Frequency	26	Remove sediment, debris, trash, blockages	\$ 400	26	\$ 10,400									
11a.	Frequency	4	Replace settled or excavated materials, repair erosion/damage	\$ 1,200	4	\$ 4,800									
11b.	Frequency	4	Apply pre-emergent herbicide	\$ 950	4	\$ 3,800									
11c.	Frequency	14	Remove weeds	\$ 1,150	14	\$ 16,100									
11d.	Frequency	7	Manage disease and pests	\$ 800	7	\$ 5,600									
11e.	Frequency	14	Maintain clean landscape edges, prune plants	\$ 850	14	\$ 11,900									
11f.	Frequency	4	Water vegetated areas	\$ 800	4	\$ 3,200									
11g.	Frequency	4	Water vegetated areas	\$ 800	4	\$ 3,200									
11h.	Frequency	1	Refresh mulch	\$ 6,000	1	\$ 6,000									
						\$ 67,800									
						\$ 893,500									
Paseo Medians & Wabash Tree Planters Annual Site															
						\$ 67,800									
						\$ 893,500									
WORK ORDERS FOR ADDITIONAL SERVICES - HOURLY RATES															
Hourly Rate (must include all overhead expenses)															
STANDARD RATE															
6	HR	1	Laborer	\$ 80											
7	HR	1	Equipment Operator	\$ 125											
OVERTIME RATE															
8	HR	1	Laborer	\$ 120											
9	HR	1	Equipment Operator	\$ 188											
PREMIUM RATE - SATURDAY & SUNDAY															
10	HR	1	Laborer	\$ 120											
11	HR	1	Equipment Operator	\$ 188											
ALLOWANCE															
						15%	\$ 135,000								
							\$ 1,028,500								

EXHIBIT B.1 GREEN STORMWATER INFRASTRUCTURE SITE LOCATIONS & PRACTICES

1. Target Green Marlborough 81st & Troost
2. Target Green Marlborough Rachel Morado
3. Target Green Marlborough Arleta Park
4. Target Green Marlborough 74th Street
5. Central Industrial District (CID)/West Bottoms
6. Northeast Industrial District (NEID)
7. Linwood Green Park
8. KCATA Trolley Trail (Outfall 066/067)
9. Water Services Admin Building/Swope Campus
10. Target Green Marlborough 81st & Lydia
11. Target Green Marlborough Paseo Medians
12. Target Green Marlborough President Gardens Detention
13. Target Green Marlborough Wabash Tree Planters



TARGET GREEN MARLBOROUGH 81ST & TROOST

LEGEND

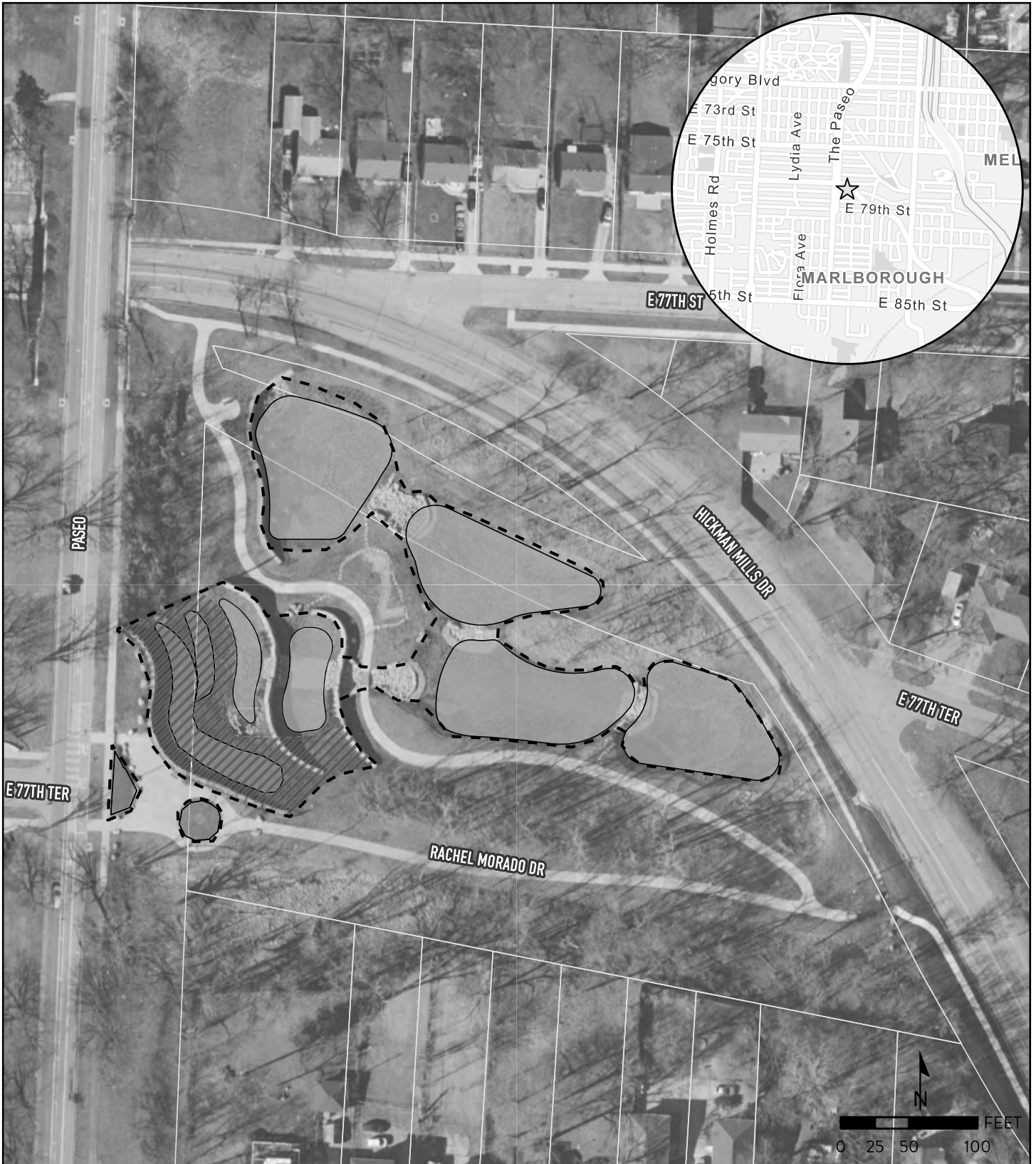
- GSI Maintenance Extent
- Mulch Area
- Bioretention
- Extended Detention Wetland
- Traditional Landscape Bed

*No mowing

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





**TARGET GREEN
MARLBOROUGH
RACHEL MORADO**

LEGEND

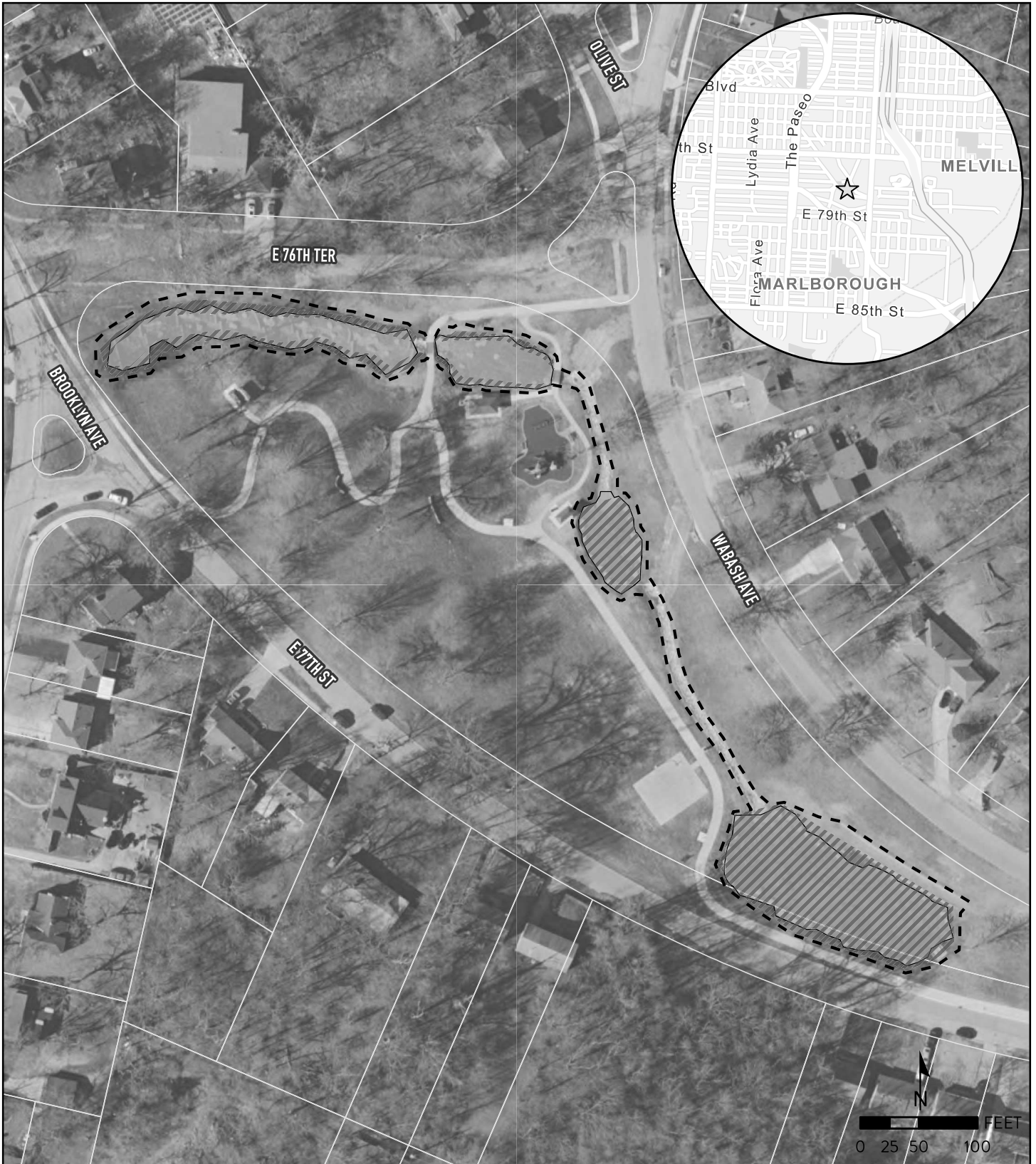
-  GSI Maintenance Extent
-  Mulch Area
-  Bioretention
-  Traditional Landscape Bed

*No mowing

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





TARGET GREEN MARLBOROUGH ARLETA PARK

LEGEND

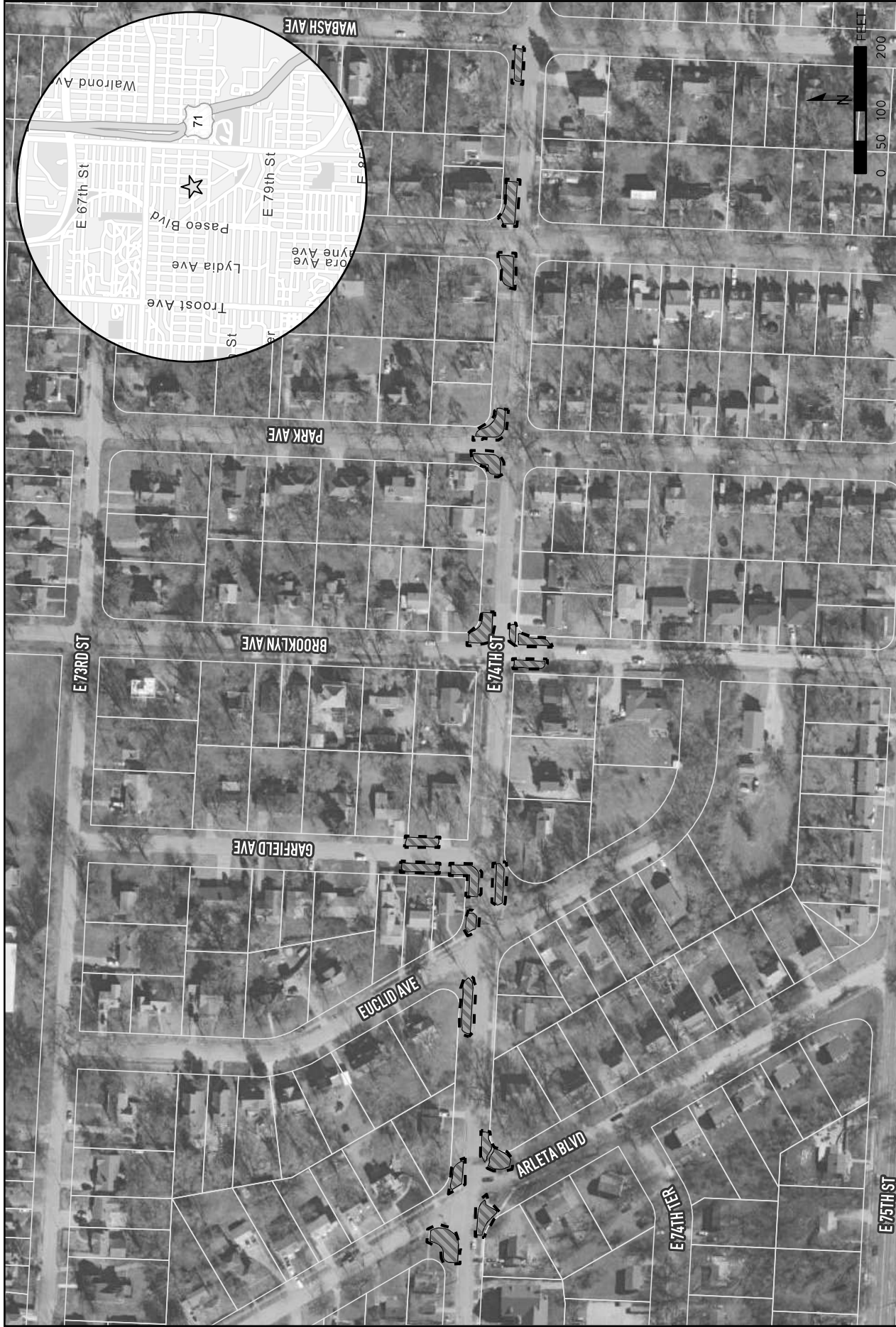
-  GSI Maintenance Extent
-  Mulch Area
-  Bioretention

*No mowing

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





GSI COMPONENTS

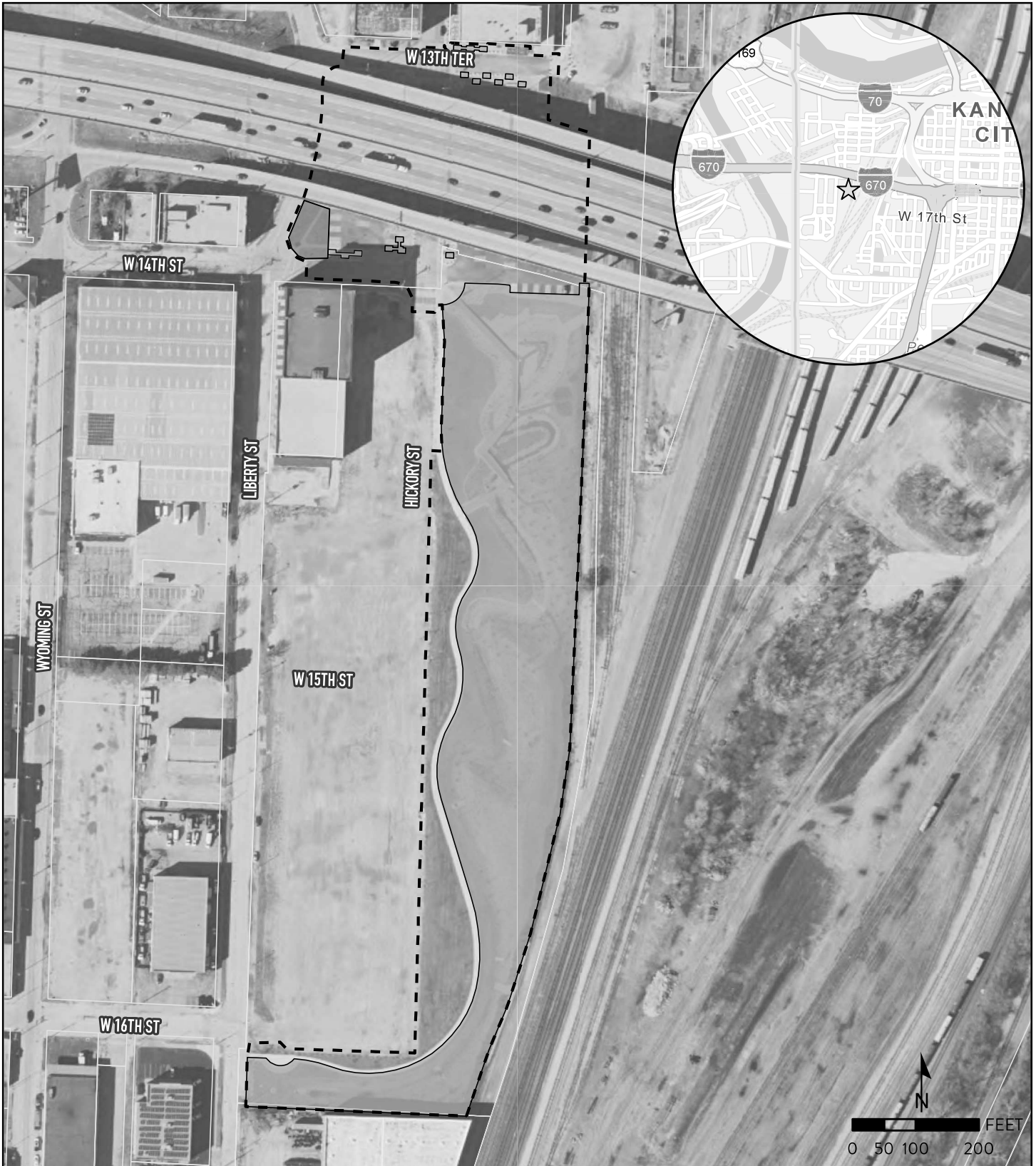
- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets

LEGEND

- GSI Maintenance Extent
- Mulch Area
- Bioretention




*No mowing

**TARGET GREEN MARLBOROUGH
74TH STREET**



CENTRAL INDUSTRIAL DISTRICT (CID) / WEST BOTTOMS 670

LEGEND

-  GSI Maintenance Extent
-  Bioretention
-  Traditional Landscape Bed

*No mulch
 *Permeable paver area includes trash & removal only

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets
- GSI-10 Storage Chambers





CENTRAL INDUSTRIAL DISTRICT (CID) / WEST BOTTOMS 170

LEGEND

-  GSI Maintenance Extent
-  Cistern
-  Traditional Landscape Bed
-  Infiltration Trench

*No mulch

GSI COMPONENTS






- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets
- GSI-10 Storage Chambers





NORTHEAST INDUSTRIAL DISTRICT (NEID)

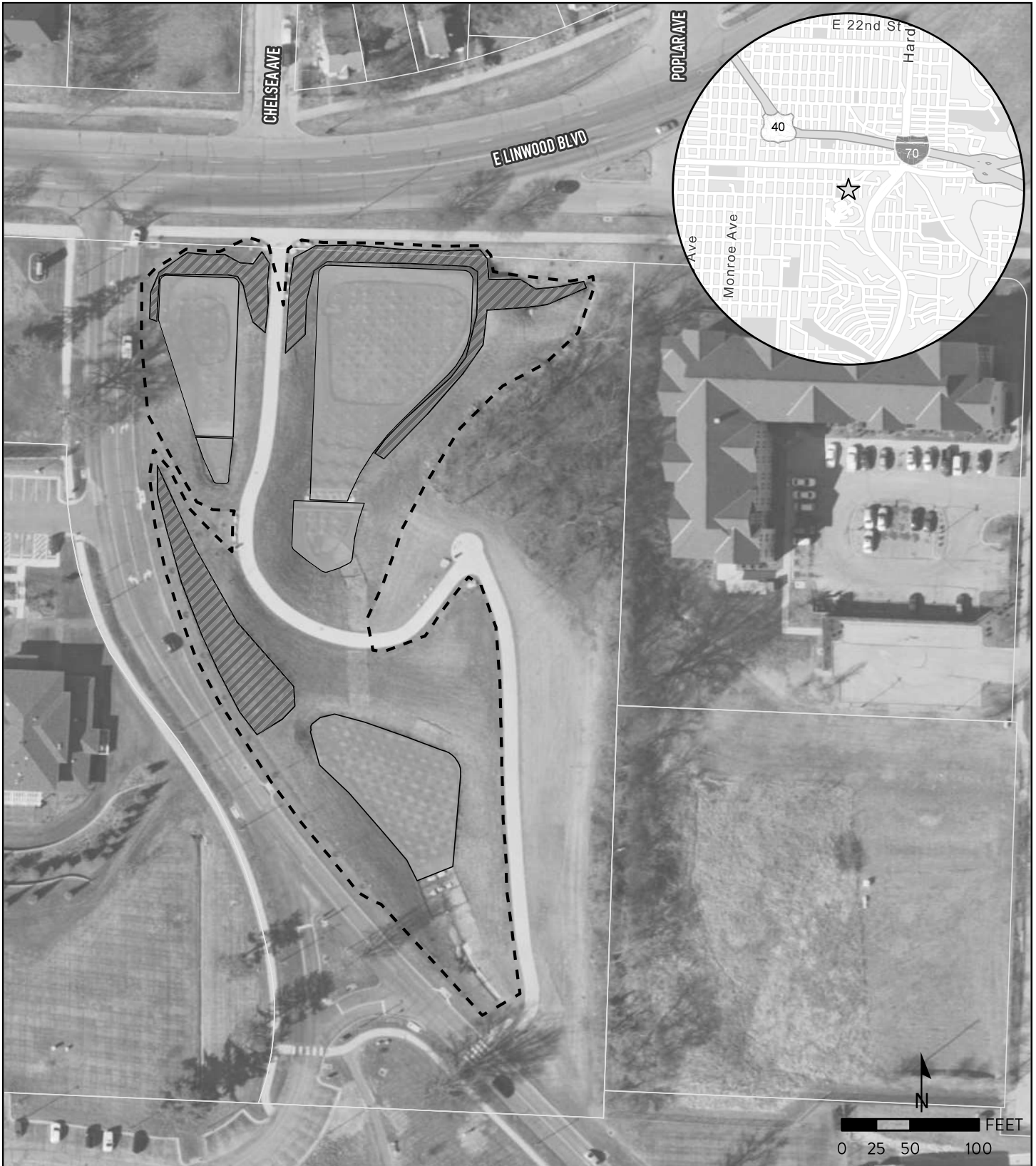
LEGEND

-  GSI Maintenance Extent
-  Mulch Area
-  Bioretention
-  Extended Detention Wetland
-  Traditional Landscape Bed

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets
- GSI-10 Storage Chambers





VETERAN AFFAIRS MEDICAL CENTER & LINWOOD GREEN PARK

LEGEND

- GSI Maintenance Extent
- Mulch Area
- Bioretention
- Traditional Landscape Bed

*No mowing

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





**KCATA TROLLEY
TRAIL (OUTFALL
066/067)**

LEGEND

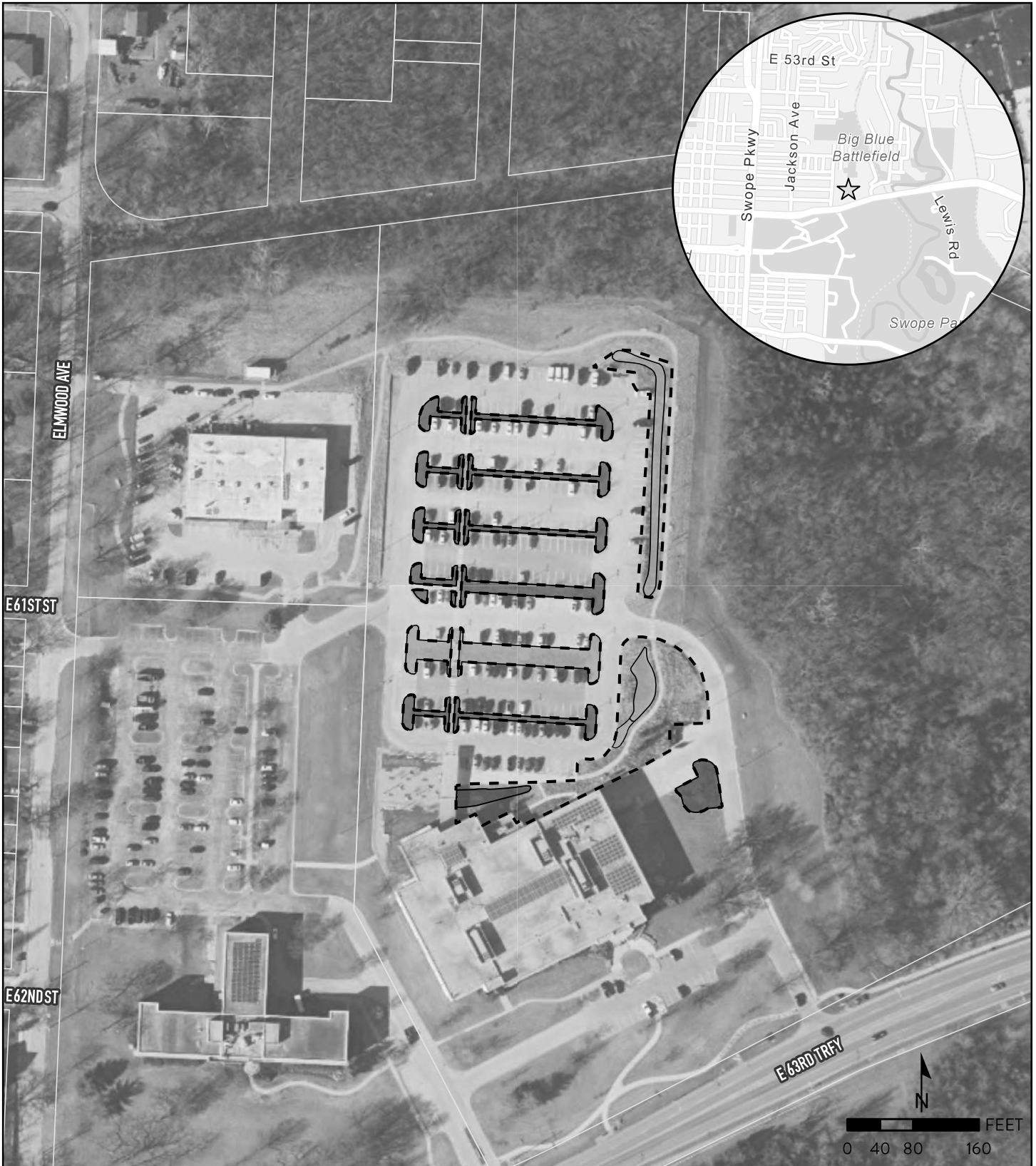
-  GSI Maintenance Extent
-  Bioretention

*No mowing
*No mulch

GSI COMPONENTS





- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





**WATER SERVICES
ADMIN BUILDING/
SWOPE CAMPUS**

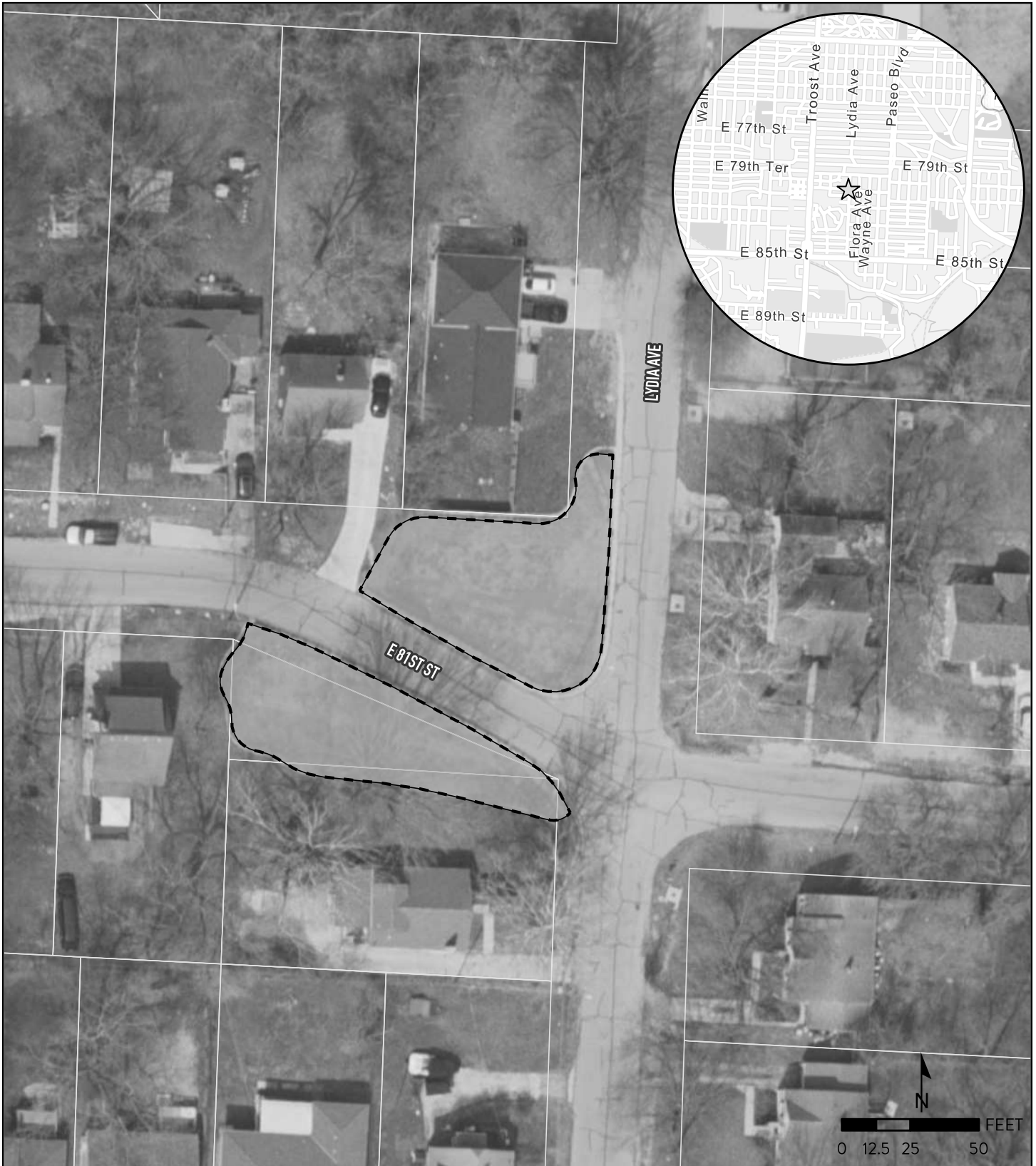
LEGEND

-  GSI Maintenance Extent
-  Bioretention
-  Non-Structural Native Vegetation Swale
-  Rain Garden
- *No mowing
- *No mulch

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





TARGET GREEN MARLBOROUGH 81ST & LYDIA

LEGEND

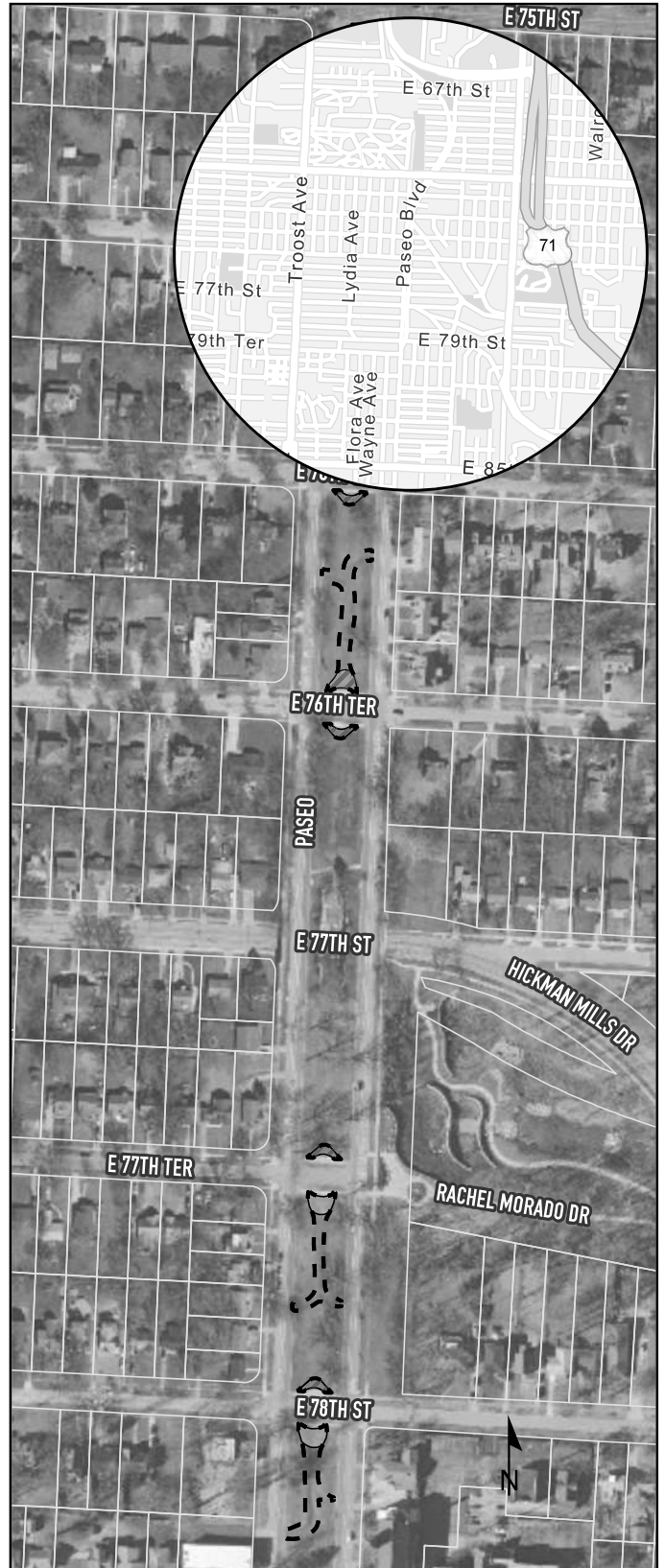
-  GSI Maintenance Extent
-  Bioretention

- *No mowing
- *No mulch

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





**TARGET GREEN
MARLBOROUGH
PASEO MEDIANS**

LEGEND

-  GSI Maintenance Extent
-  Mulch Area
-  Bioretention
-  Traditional Landscape Bed

*No mowing

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





TARGET GREEN MARLBOROUGH PRESIDENT GARDENS

LEGEND

-  GSI Maintenance Extent
-  Extended Dry Detention Basin

- *No mowing
- *No mulch

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets





WABASH TREE PLANTERS

LEGEND

-  GSI Maintenance Extent
-  Bioretention

*No mowing
*No mulch

GSI COMPONENTS

- GSI-1 Inlets
- GSI-2 Energy Dissipation & Pollutant Removal
- GSI-3 Above Grade Barriers
- GSI-5 Soil & Aggregate Media
- GSI-6 Media Liners
- GSI-7 Landscaping
- GSI-8 Piping
- GSI-9 Outlets

