



**AGENDA
CITY OF CREVE COEUR
STORMWATER COMMITTEE
300 N NEW BALLAS RD - COUNCIL CHAMBERS
MARCH 20, 2024
3:00 PM**

CALL TO ORDER

ROLL CALL

APPROVAL OF AGENDA

APPROVAL OF MINUTES - None

UNFINISHED BUSINESS - None

BUSINESS FROM STAFF

1. Evaluate/discuss HOA stormwater cost-share application
2. Evaluate/discuss individual stormwater cost-share applications

COMMENTS FROM THE GENERAL PUBLIC

NEXT MEETING DATE

ADJOURNMENT

Posted by: T. Pelkey

Date/Time posted: 03-15-2024 at 2:00pm

If you need special accommodations to attend a meeting, services may be arranged by contacting the Office of the City Administrator in advance.



DEPARTMENT OF PUBLIC WORKS STAFF MEMORANDUM

DATE: March 13, 2024

TO: Stormwater Cost-Share Program Subcommittee

CC: Jim Heines, Director of Public Works
Steve Bercz, P.E., Assistant Director of Public Works and City Engineer

FROM: Dione Garson, P.E., Civil Engineer

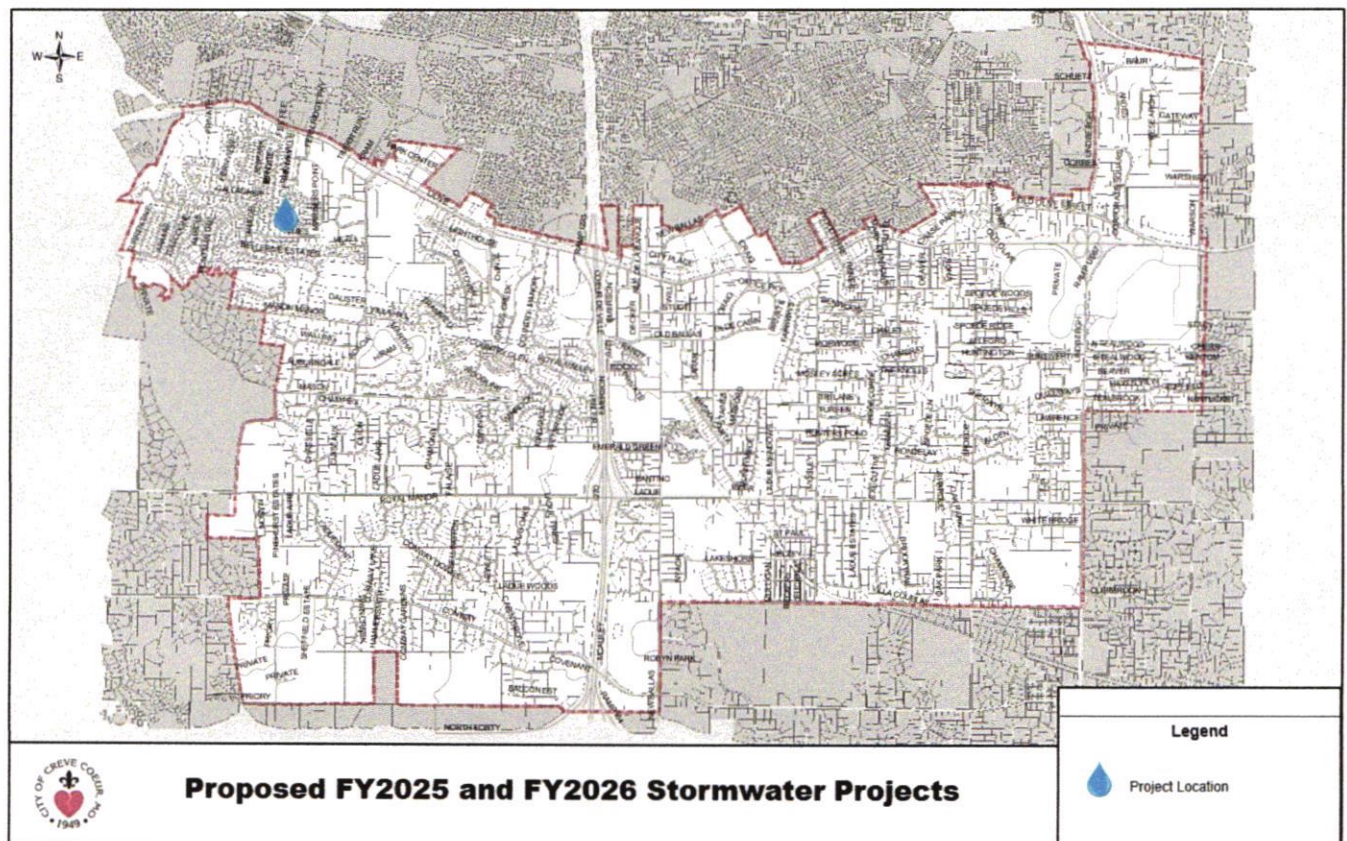
SUBJECT: Summary of 2024 Applications

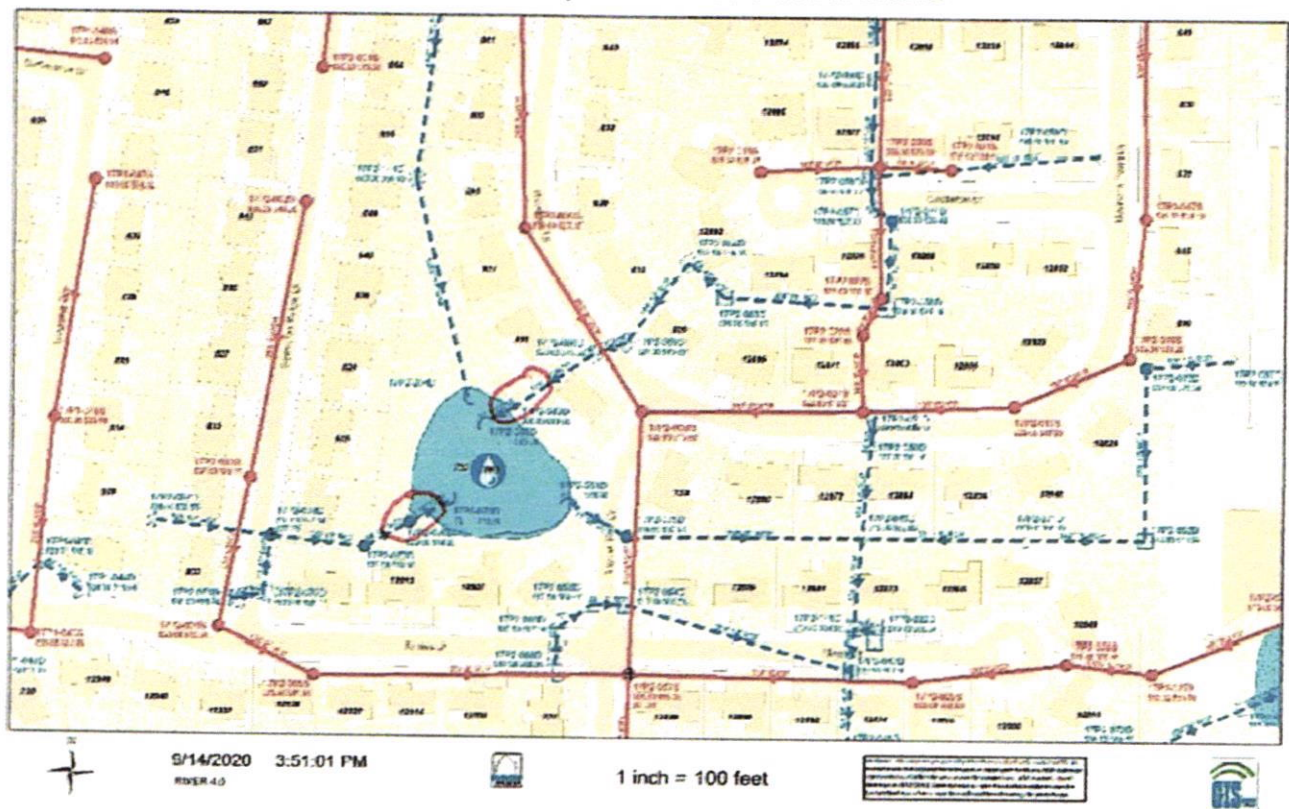
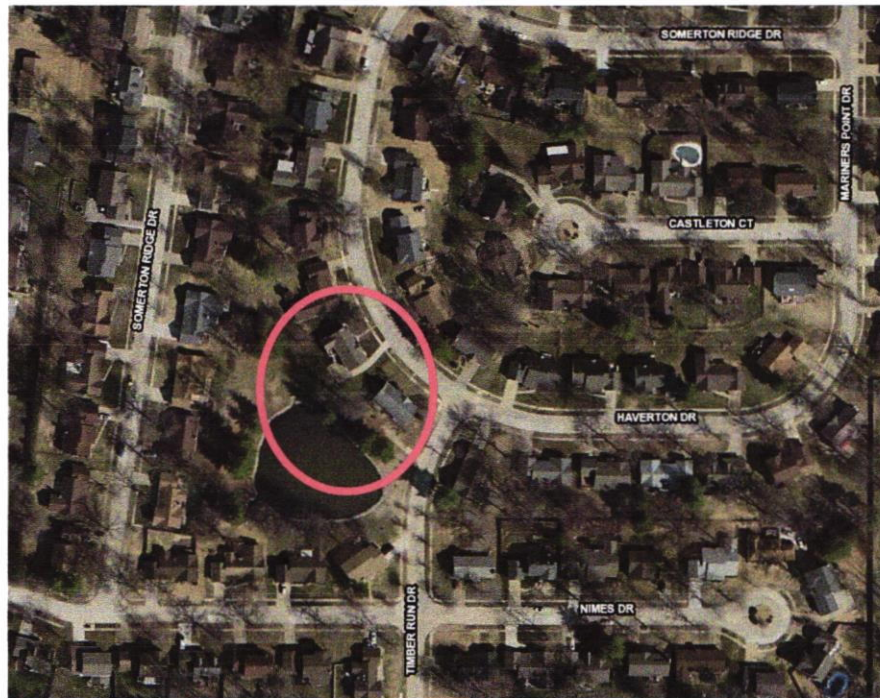
The following applications were submitted to the Stormwater Management Cost-Share program:

Homeowner Association Category

Application 1: Somerton Homeowner Association

Location: 811 Haverton Drive – Ward 4





From the application (summary):

Problem:

The Somerton Pond has two inlet corrugated metal pipes (CMP) that are collapsing. One of the inlet pipes is a 30-inch diameter pipe, and the other is an 18-inch diameter pipe. The failing pipes are creating the following safety hazards:

- Backups cause the manhole to surcharge and lift the manhole cover.
- Erosion and sinkholes are a safety hazard.



Proposed solution:

Replace both failing CMPs with Sanitite pipes. Connect new pipes to the existing manhole.

What efforts if any have been made in the past to solve the stormwater issues?

A camera inspection was attempted but could not be completed because the water levels in the pipes was too high.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

The CMPs continue to deteriorate and cause additional sinkholes and manhole surcharges.

Will neighboring sites or public infrastructure benefit from the project?

The primary beneficiary will be the subdivision's residents.

Estimates:

1. Kelpe Contracting, INC*

This is the HOA's choice for contactor and scope of work.

In the past, the HOA worked with this contractor to replace a failing CMP.

Scope:

- 20 LF of 18-inch Sanitite
- 20 LF of 30-inch Sanitite
- Pumping to be able to preform the work
- Site restoration (seed and straw)
- Granular bedding
- Rip Rap/Stone revetment
- Permits and inspections
- Mobilization

Bid price: \$17,172

2. Kuesel Excavating Co.

Scope:

- Mobilization
- Permit
- Pumping to be able to perform the work
- 40 LF of 18-inch Sanitite
- 20 LF of 30-inch Sanitite
- Connect to existing manhole
- Finish grading and seed & straw restoration

Bid price: \$25,695

3. Budrovich

Scope Option 1 – remove and replace 20 LF of CMP on North Pond Bank:

- 20 LF of 18-inch HP storm pipe
- Remove tree
- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$12,750

Scope Option 2 – reinstall pipe, dredge to improve drainage

- 20 LF of 18-inch HP storm pipe
- Dredge

- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$36,915

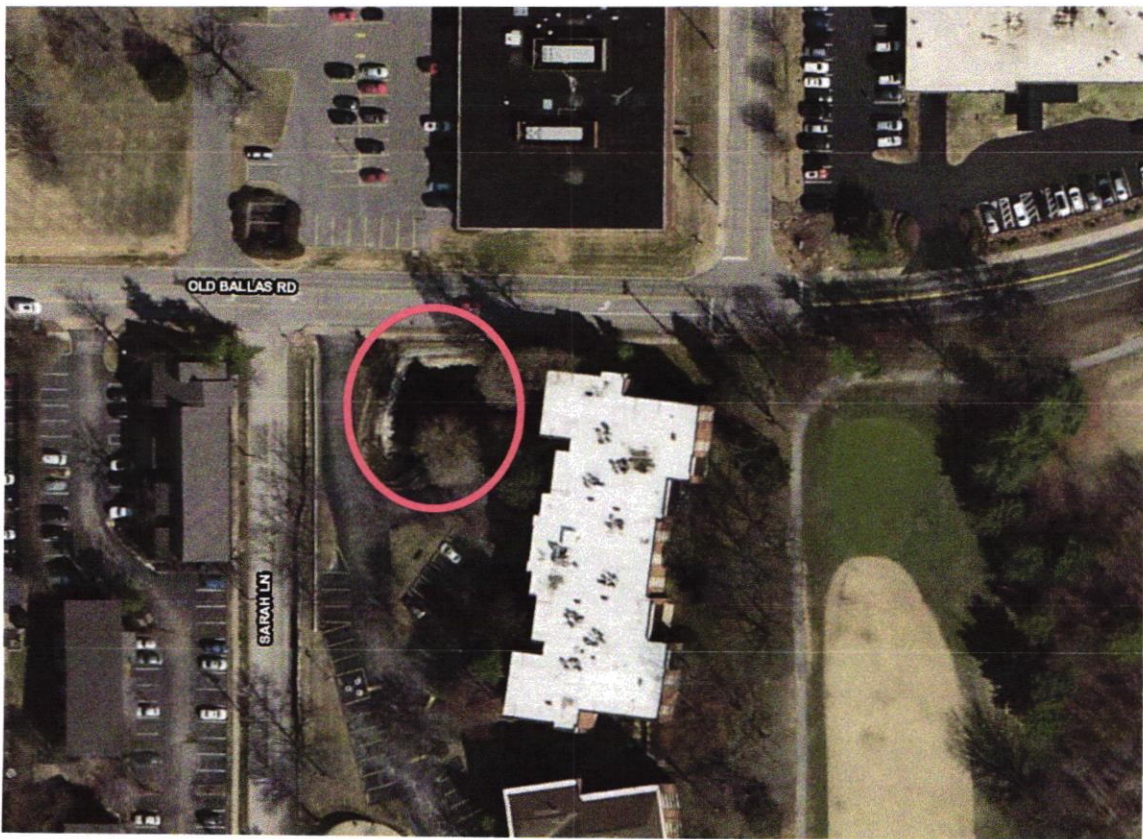
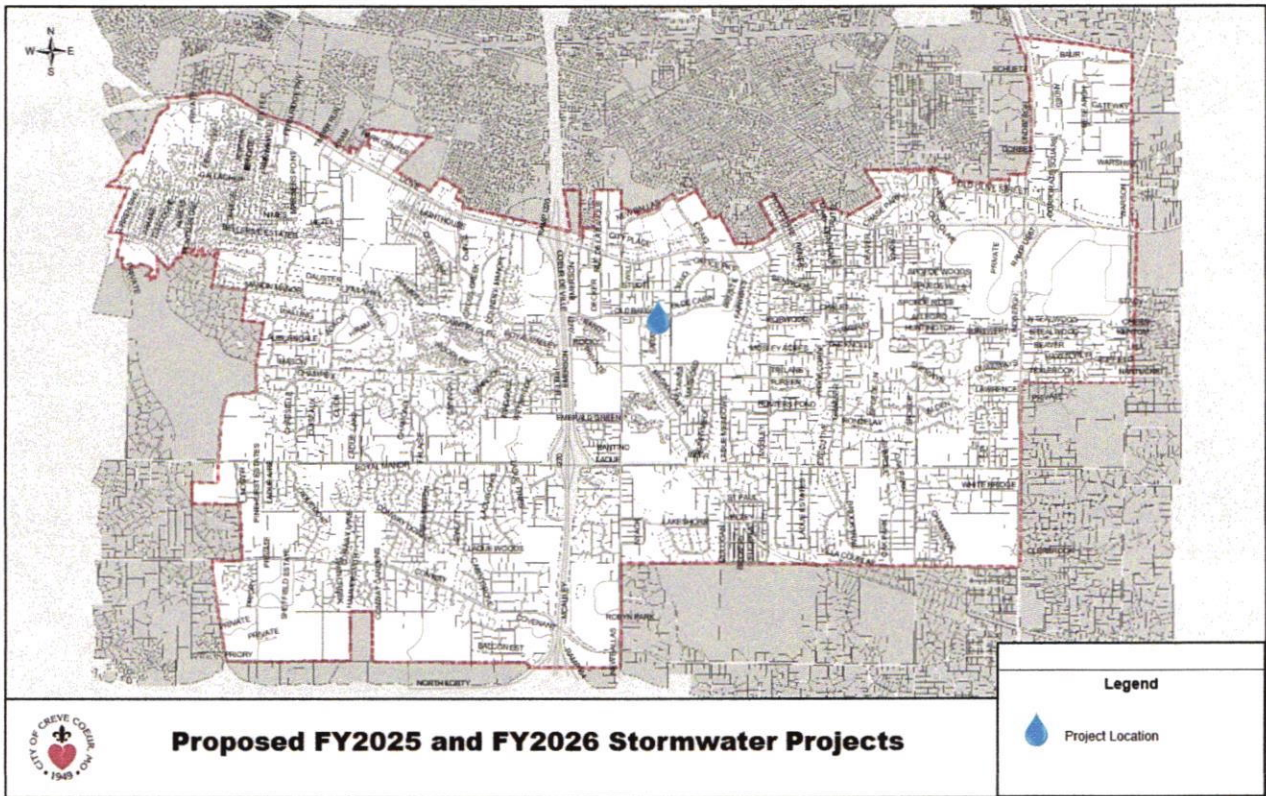
Scope Option 2B – clean existing rip-rap to slightly dredge to improve drainage

- Clean rip-rap
- Dredge
- Seed and straw
- Pumping to be able to perform the work
- Rock bedding
- Hauling spoils
- Permit

Bid price: \$29,960

Application 2: Golf View on the Green

Location: 590 Sarah Lane – Ward 2



From the application (summary):

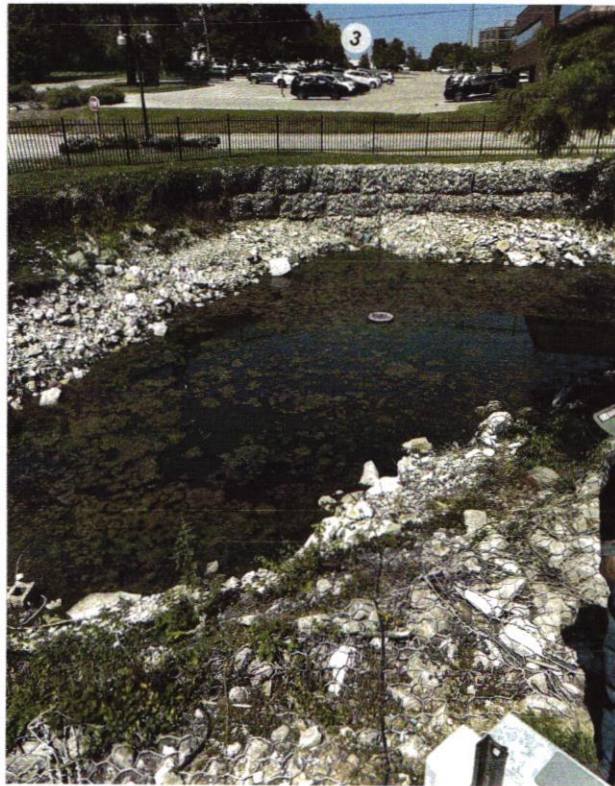
Problem:

The detention pond is required to satisfy MSD regulatory requirements.

To keep more water in the pond for aesthetic reasons, the HOA blocked a low-flow outlet to keep more water in the pond.

In 2020, MSD informed the HOA that blocking outflows to detain water was preventing the pond from functioning as designed and required. By holding the detained water from the blocked outlet, the pond was unable to manage flows during rain events, which created flooding issues on Old Ballas Road and at neighboring sites.

After the low-flow outfalls were restored, the HOA installed a fountain, which failed because the water level was too shallow. Without a pump, the pond experienced an algae bloom. The HOA is concerned about mosquitos and water quality.



Proposed solution:

Dredging the pond to a depth that would allow a fountain to work. The proposed project would also remove overgrown vegetation.

What efforts if any have been made in the past to solve the stormwater issues?

The HOA complied with MSD, lowered the water level to create the required storage volume, and installed a fountain which soon failed.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

The failing fountain created conditions that enabled algae growth.

Will neighboring sites or public infrastructure benefit from the project?

Neighbors will benefit from a more aesthetically pleasing pond.

Estimates:

1. G&W Engineering

According to the G&W estimate, MSD will not require submittals or approvals if the scope of work is limited to dredging. Any modifications to the outlets will require plan submittal and approval plus meeting current water quality and quantity requirements. To meet current requirements, the pond would mostly likely need to be significantly larger.

Scope:

- Survey
- Feasibility study
- Project management

Bid price: \$10,600

2. MuckMiners

Sample measures indicate the pond has approximately 1 foot of water about the sediment. Bottom of basin is estimated to be about 6 feet deep.

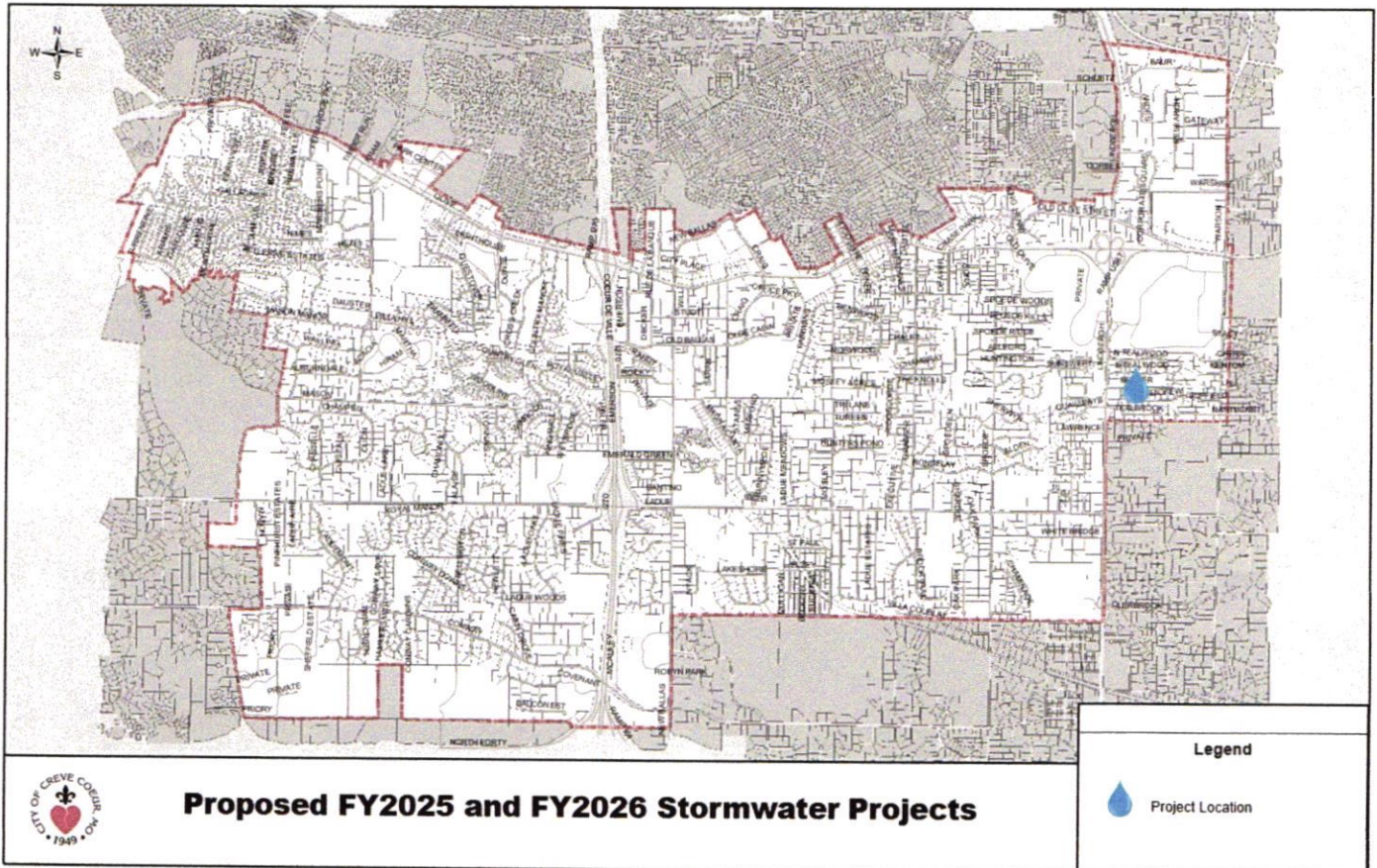
Scope:

- Remove approximately 65 cubic yards of sediment (assumes an average sediment depth of 3.5 feet).

Bid price: \$15,000 to \$25,000

Individual Homeowner Category

Application 1:
2 Dielmann Farm Estates Drive – Ward 1





Higher elevations on the east side (648 feet) than the west side (640 feet).

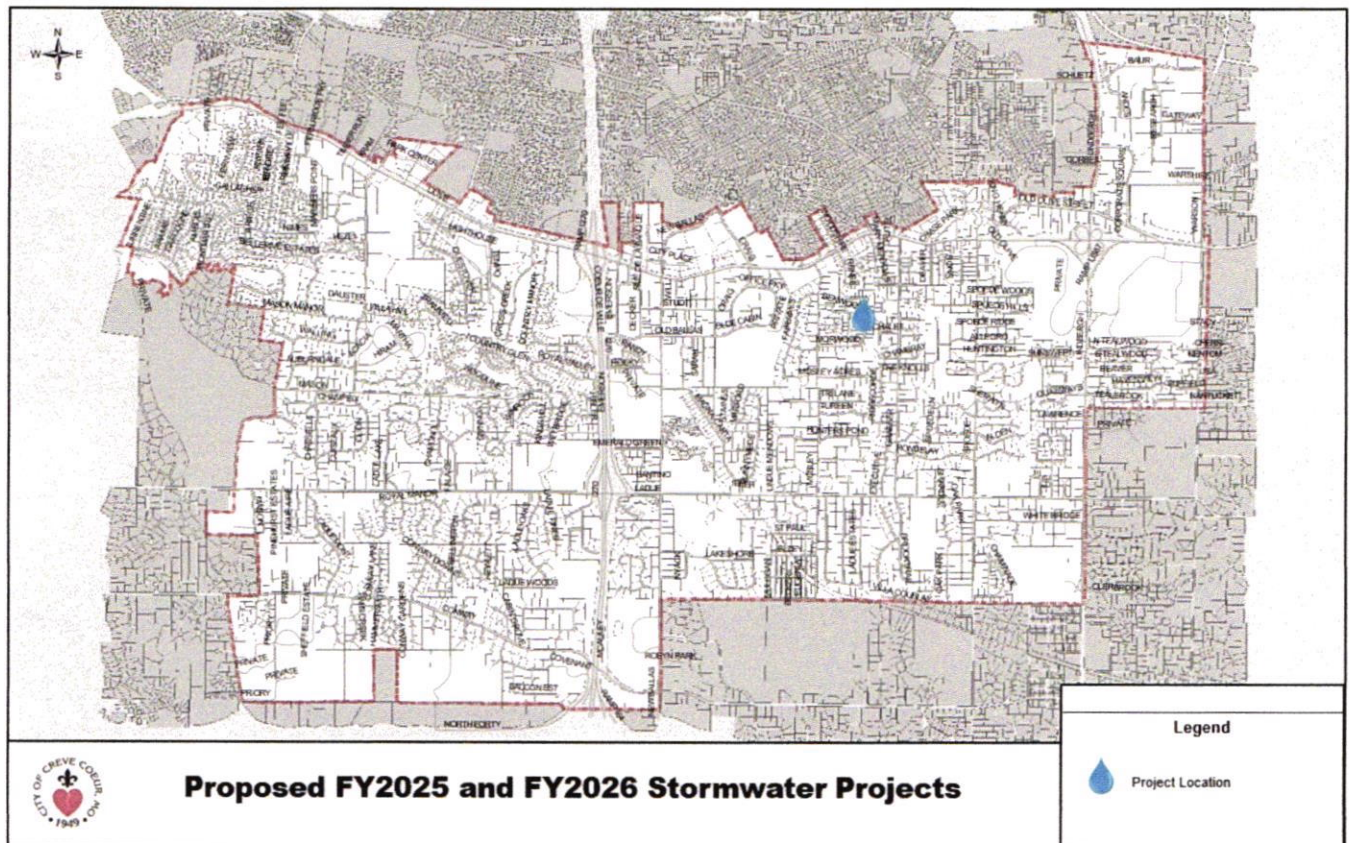
Estimate:

The homeowner will install the proposed drainage system. On our phone conversations with the homeowner, he is open to installing modified French drains, which will keep more stormwater onsite.

From the application:

Item	Quantity	Price
Downspout filter connectors	7	49
pipe tape	1	5
100' perforated pipe 4"	1	77
100' solid corrugated 6' pipe	1	170
250' solid corrugated 4' pipe	1	125
Duraweb 4' x 125' Geotextile Fabric	1	90
B gravel kirkwood material	2 yards	560
4" Y connector	4	84
4" to 6 inch connector	1	13
Total cost of material		1173

**Application 2:
42 Morwood Lane – Ward 2**



The east side of the property is approximate 12 feet lower than the neighboring lawn.

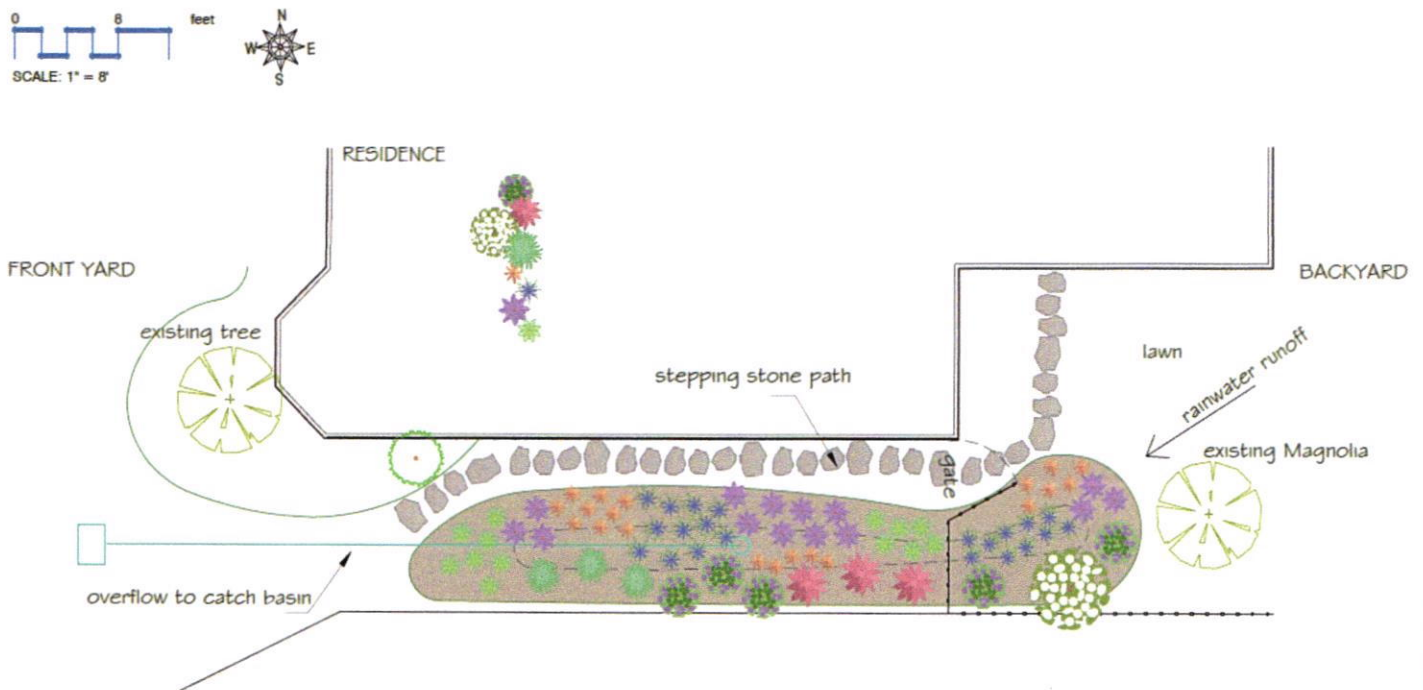
From the application (summary):

Problem:

Runoff from the site to the east causes backyard flooding, erosion, damage to plants, and damage to the home.

Proposed solution:

Grade and install a raingarden. Regrade and then reinstall existing flagstone path to create better flow from the backyard. Install an Atrium drain with an underdrain in the rain garden and direct flows to an underground basin.



What efforts if any have been made in the past to solve the stormwater issues?

A retaining wall with erosion barrier and catch basin was constructed. Three years ago, the homeowners also installed a French drain system and regraded. Last year, additional drains were installed and the existing system was cleaned.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

No

Will neighboring sites or public infrastructure benefit from the project?

The project may keep some flows from the home to the south.

Estimate:

1. O'Hara Outdoors

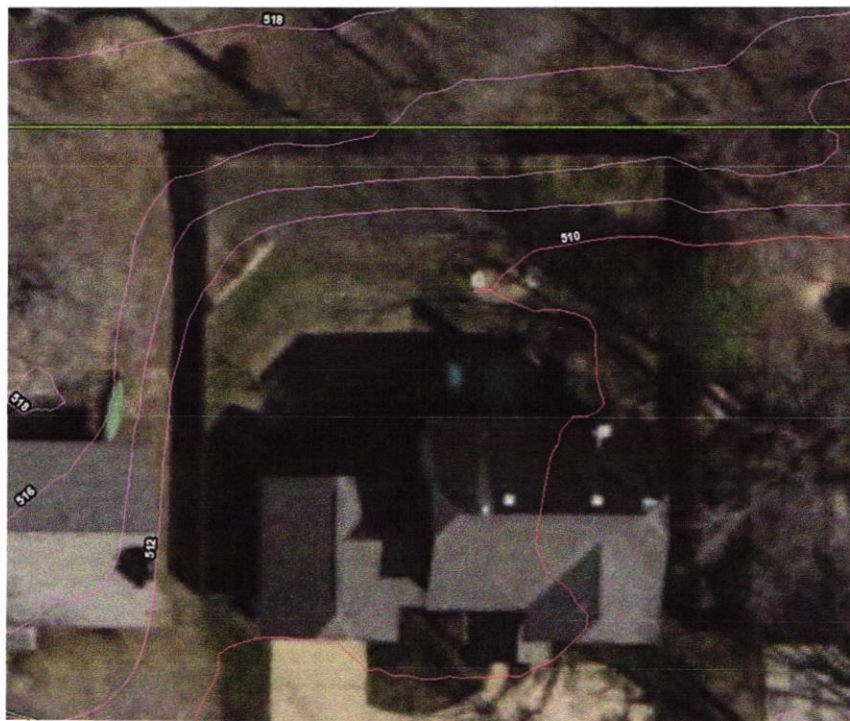
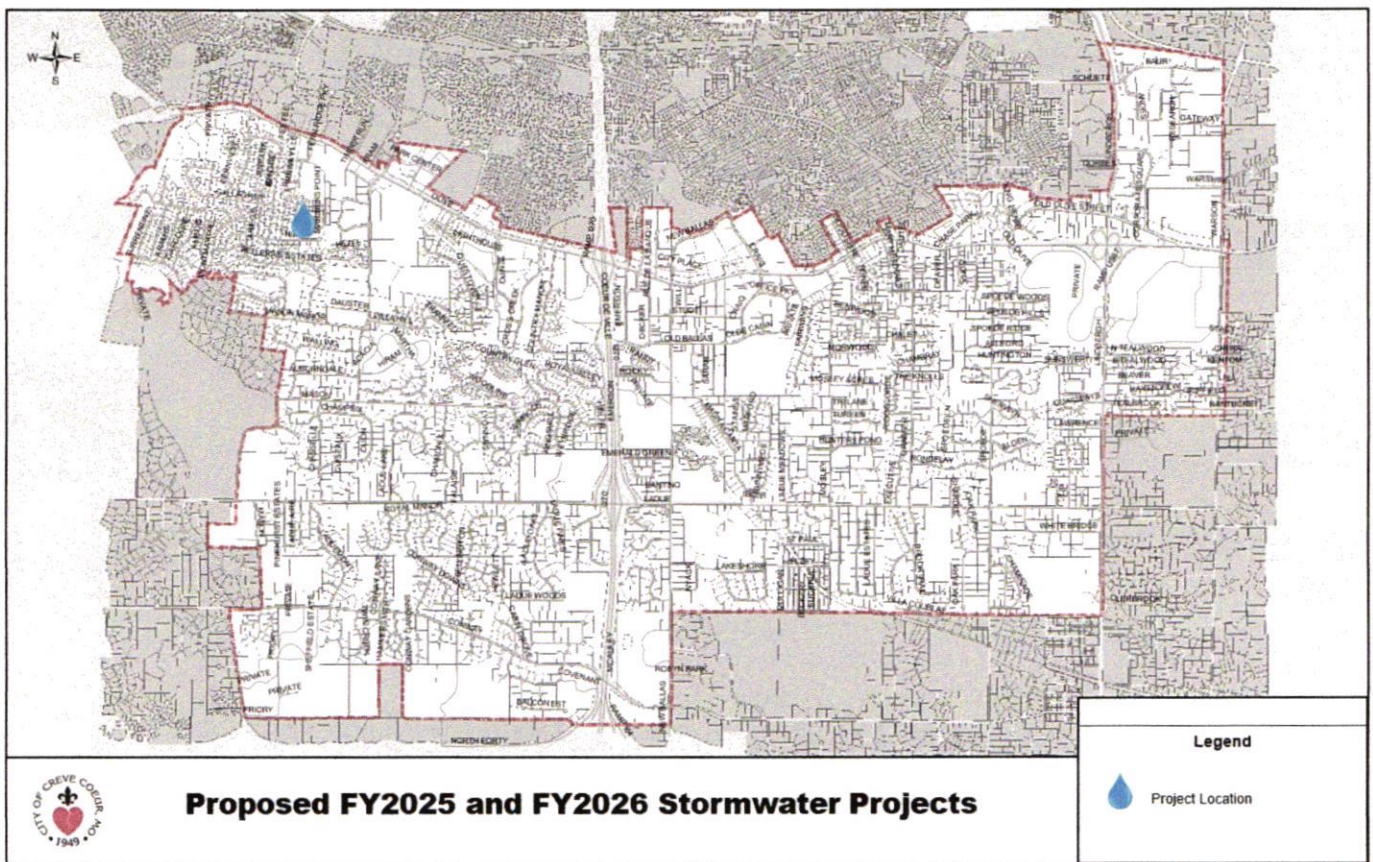
Scope:

- Grading
- Install raingarden soil mix
- Install underdrain
- Underground basin
- Plant raingarden plants

Bid price: \$9,642

Four bids were submitted before the deadline. After a call with City Staff, the homeowner sent the above revised plan and estimate. It is Staff's opinion that in this situation one bid meets program requirements and that this is a responsible bid.

**Application 3:
12889 Nimes Drive – Ward 4**



There is an approximate 8 foot elevation difference between the neighbors to the north and this applicant's yard.

From the application (summary):

Problem:

Excessive runoff from the sites to the north (upgrade) causes yard and structural flooding.

Proposed solution:

French drain system.

What efforts if any have been made in the past to solve the stormwater issues?

The previous owners installed a French drain system that was not sized properly.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

Since the homes to the north have been renovated, the homeowner reports flows increased. The homeowners recently renovated the basement and installed an egress window. The egress window well fills with stormwater and floods the basement. The homeowner installed a pump in the window well. The pump, however, fails.

City staff has talked with the homeowner about checking the drain in the window well to make sure it is not blocked. The homeowner reports that water is infiltrating the well from the ground and not overtopping the lip. Staff still recommended that the homeowner consider raising the window well lip. Staff also recommended that the homeowners remove a raised stone planting bed that may be blocking flows from exiting the site and instead ponding near the window well.

Will neighboring sites or public infrastructure benefit from the project?

No

Estimates:

From the application:

"We had three bids and the other two were ridiculously expensive and required removal of trees and landscape, which we were not willing to do. Upgrading the French drain system seemed like the most rationale and reasonable approach."

Scope:

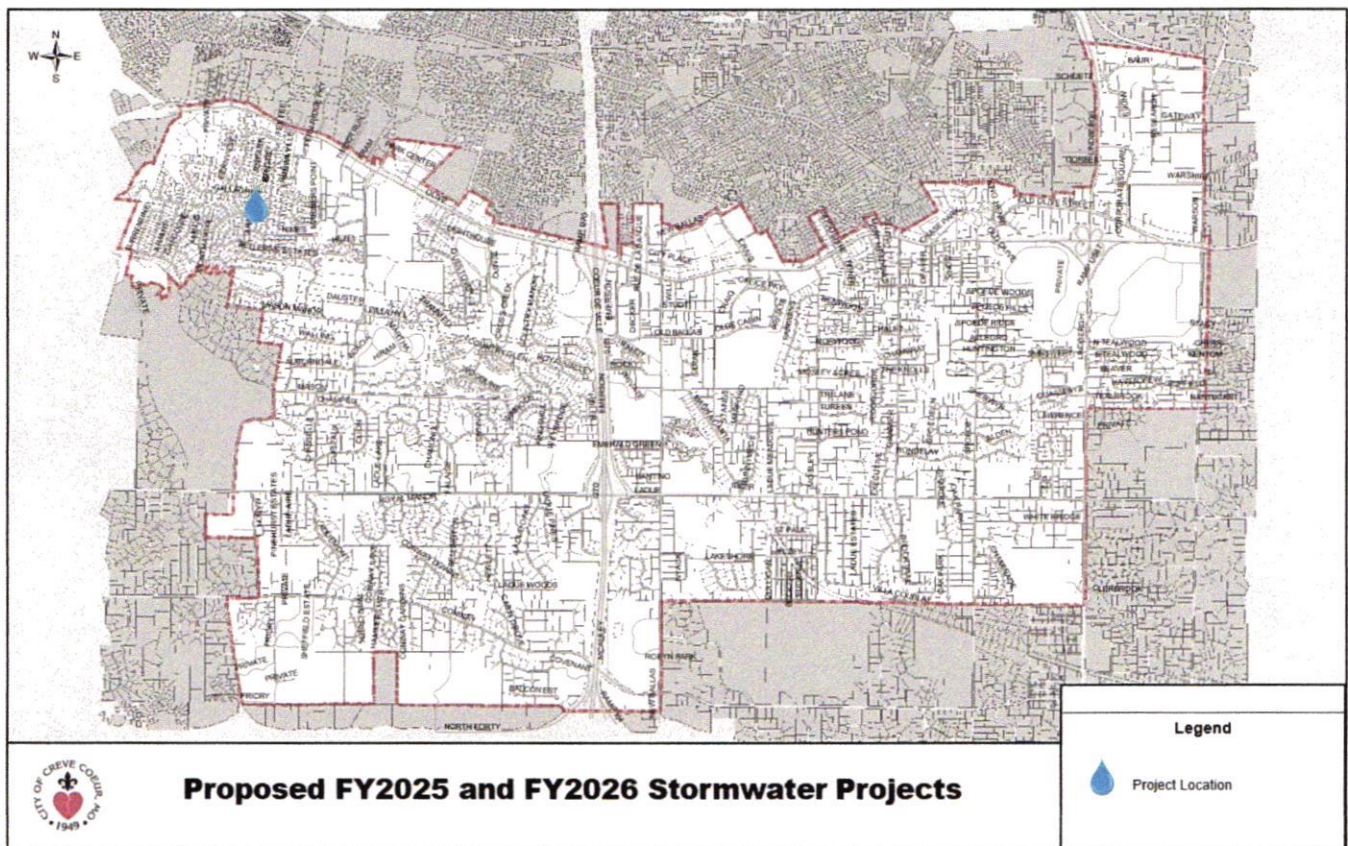
- Install 150 LF of four-inch PVC and six nine-inch catch basins.

Bid price: \$6,570

Staff notes:

The existing outlet pipe for the window well will need to be either cut back or redirected to comply with City Code Section 500.210 (A)(2), which requires outfalls to be at least 10 feet from the property line.

**Application 4:
828 Fernview Drive – Ward 4**



Problem:

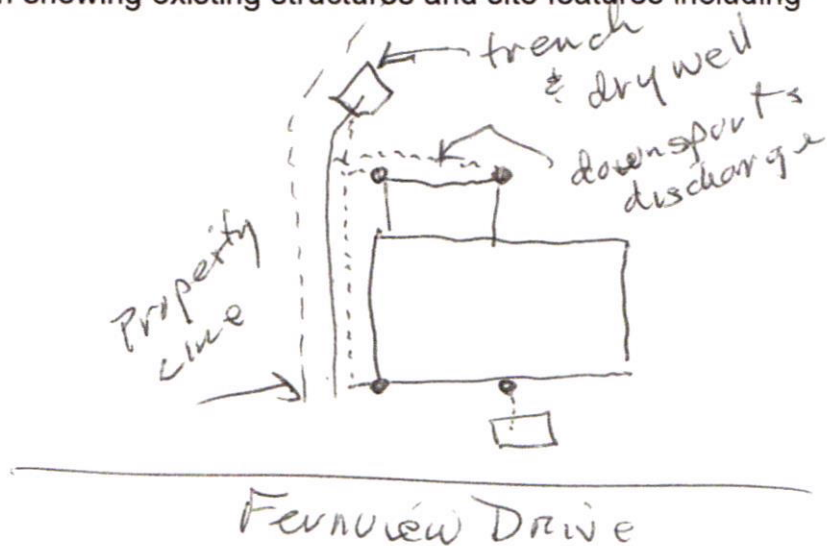
Yard and structural flooding.

Proposed solution:

Install French drain system with drywells.

Please provide the following:

- ☐ Layout and description showing existing structures and site features including creeks and streams
- ☐ Location of laterals
- ☐ Simple project plans



What efforts if any have been made in the past to solve the stormwater issues?

Installed block walls at the front and rear of the house. Re-grade yard to slope away from the home. The previous owner installed a drain system that does not work.

Has anything changed on the site or near the site that may have caused or exacerbated the stormwater problem?

No

Will neighboring sites or public infrastructure benefit from the project

No

Estimates:

1. Quiet Village Landscape, Co.

Scope:

- Install French drain system

Bid price: \$12,276.37

2. If the homeowner performs the work (from an email):

As requested I have put together a rough estimate of materials and equipment.

- Using a walk behind trencher (150')
- 4" SDR Pipe perforated and solid with fittings and cleanouts
- Drywell
- Backfill topsoil/1"clean limestone/geo fabric

Cost should not exceed \$6,000

Staff notes:

If the funding for the proposed work is approved, existing outfall pipes will need to be cut back or redirected to conform with City Code Section 500.210 (A)(2), which requires outfalls to be at least 10 feet from the property line.

Application 4:
8 Knolls Lane

Proposed work is associated with new construction/redevelopment and is not eligible to receive funding from this program.

Summary

Resolution No. 1677 authorized a total pilot phase budget of up to \$60,000. Of that total budget:

- The Homeowner Association (HOA) Category will have a budget of \$40,000.
 - Up to two HOA projects can be funded.
 - Each awarded project will be eligible for up to \$20,000 reimbursement.
 - The program will reimburse 50% of the total cost (materials and labor) up to the maximum limit.
- The Individual Homeowner Category will have a budget of \$20,000.
 - Up to four Individual Homeowner projects can be funded.
 - Each awarded project will be eligible for up to \$5,000 reimbursement.
 - The program will reimburse 50% of the total cost (materials and labor) up to the maximum limit.

Homeowner Association Category	Estimated Cost	Potential City Funding
Somerton Homeowner Association	\$17,172	\$8,586
Golf View on the Green	Up to \$25,000	Up to \$12,5000
Individual Homeowner Category		
2 Dielmann Farm Estates Drive	\$1,173	\$587
42 Morwood Lane	\$9,642	\$4,821
12889 Nimes Drive	\$6,570	\$3,285
828 Fernview Drive	\$12,276	\$6,138
8 Knolls Lane	NA	NA
Total (maximum)		\$35,917