



LAWRENCEVILLE

GEORGIA

STORMWATER BOARD REGULAR MEETING AGENDA

Wednesday, May 22, 2019
3:30 PM

Council Assembly Room
70 S. Clayton St, GA 30046

Call to Order

Approval of Prior Meeting Minutes

1. [March](#) 27, 2019 Regular Meeting

Review of Current Projects

- [2.](#) Update on Current Projects

Review of Proposed New Projects

- [3.](#) Creekwood Cove [1271-1331] & Cottonwood Cove [342-307]. Eleven lots impacted.
- [4.](#) 920 Lauren Kay Court

Comments from Utility Board Staff

- [5.](#) Update from Storm Water Program Managers

Adjourn



LAWRENCEVILLE

GEORGIA

AGENDA REPORT
MEETING: STORMWATER MAY 22, 2019
AGENDA CATEGORY: MINUTES

Item: March 27, 2019 Regular Meeting

Department: Stormwater

Date of Meeting: Wednesday, May 22, 2019

Fiscal Impact: N/A

Presented By: Dennis Billew

Action Requested: Approve Minutes

Attachments/Exhibits:
Minutes of March 27, 2019 Meeting



LAWRENCEVILLE

GEORGIA

AGENDA REPORT
MEETING: STORM WATER UTILITY BOARD MAY 22, 2019
AGENDA CATEGORY: DISCUSSION

Item: Update on Current Projects

Department: Engineering

Date of Meeting: Wednesday, May 22, 2019

Fiscal Impact: None

Presented By: Johannes Louw

Action Requested: None

Summary:

- 271 Hanarry Drive sinkhole – emergency repair. Complete - \$7,000.00
- 105 Grayland Place storm drain repair. Complete - \$22,965.00
- 1021 Stone Mill Way [Outlet protection] & Stone Mtn St HDPE repair. Complete \$28,975.00.
- Old Norcross Road at CSX Spur [650 Hurricane Shoals Road] - \$200,376.00.
- John Court [Hanarry] Outlet Control Structure. Complete - \$55,225.55
- 1140 Grayland Hills Road - \$58,415.61

Attachments/Exhibits:



LAWRENCEVILLE

GEORGIA

AGENDA REPORT

MEETING: STORM WATER UTILITY BOARD MAY 22, 2019

AGENDA CATEGORY: NEW PROJECT

Item: Creekwood Cove [1271-1331] & Cottonwood Cove [342-307]. Eleven lots impacted.

Department: Engineering

Date of Meeting: Wednesday, May 22, 2019

Fiscal Impact: Estimated at \$280,000.00

Presented By: Johannes Louw

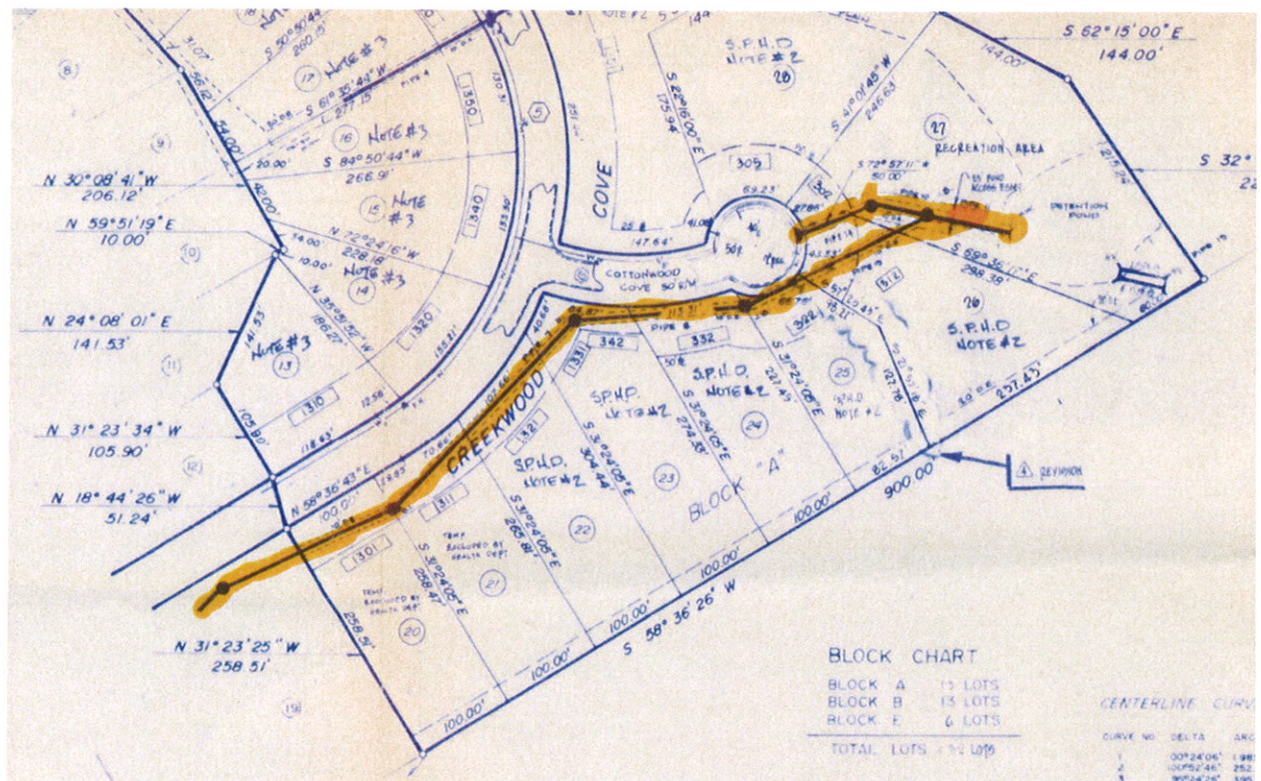
Action Requested: Authorize Engineering to Bid the project and forward selected Bid to Council for approval.

Summary: Developer of St. Lawrence Plantation piped a ditch along the front of eleven lots in Unit One and Unit Two of the subdivision. Street drainage was tied into the longitudinal pipe at two locations. The original pipes are rusted out and in need of replacing.

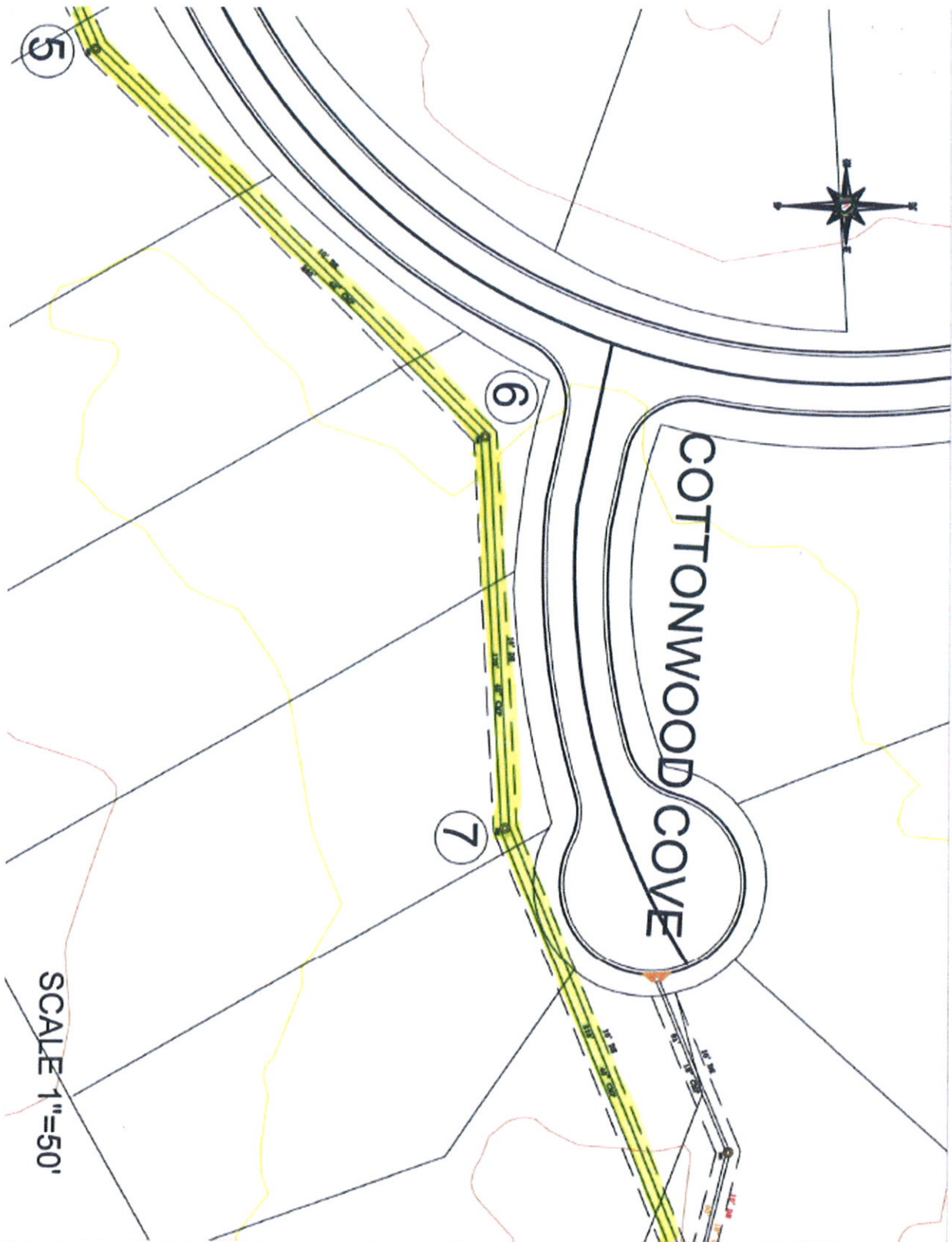
Attachments/Exhibits:
Creekwood Cove Attachments

This is a detailed survey map of Block 'A'. The map shows a large irregular polygon representing the block, with various bearings and distances along its boundaries. Key features include:

- Block 'A' Label:** Located in the lower-left quadrant of the map.
- Survey Notes:** Numerous circular notes (11 through 18) and rectangular notes (12A through 12I) are scattered throughout the map, often containing references to other notes or specific survey details.
- Boundaries:** The block is bounded by several lines with bearings and distances. For example, the bottom boundary is labeled $S 58^{\circ} 36' 26'' W$ and $402.99'$. The left boundary is labeled $N 30^{\circ} 08' 41'' W$ and $886.28'$.
- Internal Features:** The map shows internal divisions, including a curved line labeled 'CURVE 4' and 'CURVE 5', and a yellow-shaded area in the center-right. There are also labels for 'SP.H.D.' (Standard Point of Horizontal Distance) and 'LL 139', 'LL 151', 'LL 150'.
- Scale:** A scale bar at the bottom left indicates distances of 200 and 300 feet.
- Title:** At the bottom right, the text reads 'RE-RECORDED IN P.B. PG. ON 10/3/86'.

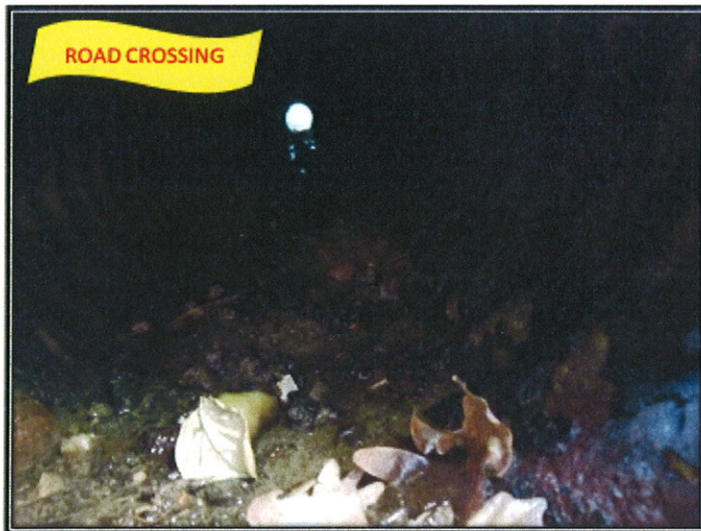


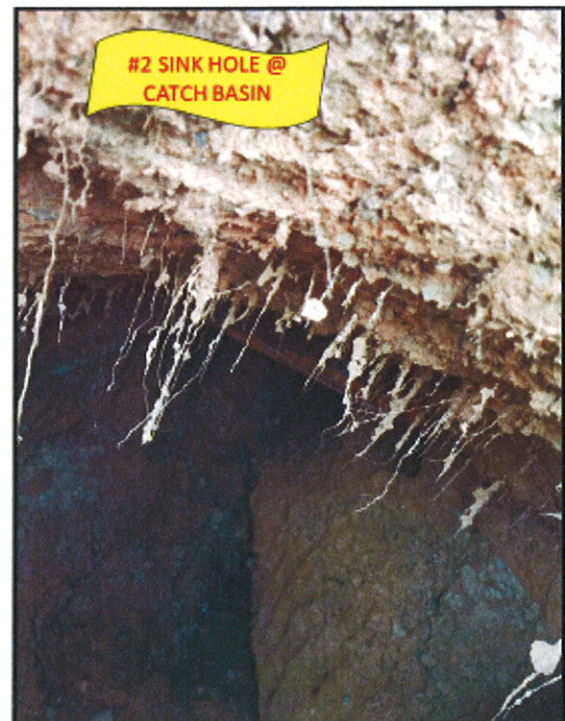






PICTURES TAKEN:





RECOMMENDATIONS

- To table this project at the next storm water utility meeting for discussion after we have all the info from the CCTV inspection report on this entire system.
 - To request Engineering Dep. to send out bids to repair AFTER CCTV inspection were done and determine the total scope of work & cost est. to replace the deteriorated storm pipe system.
-

SCOPE:

CCTV inspections Est.

COST EST.

AQ007-19	1291 CREEKWOOD COVE DRAINAGE SYSTEM					
ITEM #	DESCRIPTION	APPROX. QTY		UNIT PRICE	TOTAL PRICE	STRUCTURE #
1	Move-in move-out operations	1	Each	\$800.00	\$800.00	
2	Televised (CCTV) inspections of existing storm drain pipe systems at various locations throughout the City of Lawrenceville GA $\geq 15"$ dia pipe up to 28" pipe dia pipe	203	LF	\$7.25	\$1,471.75	
3	Televised (CCTV) inspections of existing storm drain pipe systems at various locations throughout the City of Lawrenceville GA $\geq 30"$ dia pipe up to 48" pipe dia pipe	1043	LF	\$12.25	\$12,776.75	STRUCTURE #1 TO STRUCTURE #11
4	Televised (CCTV) inspections of existing storm drain pipe systems at various locations throughout the City of Lawrenceville GA $>48"$ dia pipe up to 60" pipe dia pipe	85	LF	\$15.75	\$1,338.75	
5	Storm drain structure inspection	11	Each	\$125.00	\$1,375.00	
				TOTAL EST.	\$17,762.25	

1291 Creek Wood Cove- work order #4)

Pipe inspections

CB #1- 18" CMP pipe TO CB #2 (downstream) (32') street crossing

(REPLACE WITH 18" RCP)

- 1) Pipe seems rushed out, debris in pipe.
- 2) Joints are poor but No infiltration.

- 3) 2 x black 6" roof drain pipes is coming into CB # 2 and is poorly grouted in.
This is where the sinkhole is and complain from the owner.
- 4) CB # needs re-grouting and inverts

CB # 2- 24" CMP pipe TO JB # 4 (downstream) (33.5')

(REPLACE WITH 24" HDPE)

- 1) Pipe bottom completely rusted out, debris and boulders in pipe, water infiltration from the bottom into the pipe.
- 2) Joints are OK and No infiltration.
- 3) **JB #4** needs invert & grouting.
- 4) Outgoing pipe CMP 42" rusted out at the bottom and needs replacement.
- 5) Incoming 30" CMP pipe from **Headwall # 3** to **JB #4** is completely rusted out at the bottom and needs replacement.

JB # 4 - 30" CMP pipe TO HW # 3 (upstream) (Total length 238')

(REPLACE WITH 30" HDPE)

- 1) Pipe rusted out, debris and boulders in pipe- water flow constantly through the pipe.
- 2) At 22' pipe oval shape with low spot holding water.
- 3) Pipe low at some places with about 4"-6" standing water in pipe.
- 4) At 40' pipe separation – elevation dropped about 6" Joints are very bad with infiltration at the joint.
- 5) Headwall in fair shape.

JB # 4 - 42" CMP pipe TO MH # 5 (downstream) (Total length 205')

(REPLACE WITH 42" HDPE)

- 1) Pipe bottom completely rusted out, debris and boulders in pipe- water flow constantly through the pipe. From 0' to end Joints very bad with infiltration at about every joint.
- 2) Start from 18' on- big boulders in pipe.
- 3) At 60' pipe oval shape – low spot with lots of gravel & big boulders, bottom completely rusted out.

- 4) **MH #5** in fair shape, needs invert pour.

MH # 6 - 48" CMP pipe TO MH # 5(upstream) (Total length 221')

(REPLACE WITH 48" HDPE)

- 1) 6" Pipe black roof drain squeezed in to the MH #6.
- 2) Pipe bottom completely rushed out, debris and boulders in pipe- water flow constantly though the pipe.
- 3) At 117' very bad joint pipe damage with no infiltration.
- 4) From 120' to 160' pipe completely crushed in about 60%.
- 5) From 180' to 190' major damage to the roof of the pipe during construction pipe crushed in about 20%.
- 6) Pipe low at some places with about 3"-6" standing water in pipe
- 7) Pipe has an oval shape at places.
- 8) Joints are very bad with infiltration.
- 9) Joints are damage during construction and in very bad shape.
- 10) **MH #6** in fair shape, needs invert pour and re-grout.

MH # 6 - 48" CMP pipe TO MH# 7 (178') (downstream)

(REPLACE WITH 48" HDPE)

- 1) Pipe bottom rusted out.
- 2) At 17' Pipe damage at the roof.
- 3) At 65' Pipe damage at the roof.
- 4) Joints are bad with minor infiltration.
- 5) Joints are damage during construction.
- 6) **MH #7** in fair condition needs invert, grouting & cleanout.

JB # 8 - 48" CMP pipe TO MH# 7 (194') (downstream)

(REPLACE WITH 48" HDPE)

- 1) From 0' to 8' big boulders in pipe.
- 2) At 37' – 67' pipe damage at the roof 20%.

- 3) Joints are bad with minor infiltration.
- 4) Pipe bottom looks good.
- 5) No debris after 10' and - water flow constantly through the pipe.
- 6) From 92' to 130' bottom rusted out, bad joints, damage pipe during construction, big boulders and pipe sagging and low spot holds water.
- 7) At the MH #7 a 6" black roof drain pipe is inserted in the pre-cast structure from the right side.
- 8) **MH #7** in fair condition needs invert , grouting & cleanout-

JB # 8 - 54" CMP pipe TO HW # 9 (84') (downstream)

(REPLACE WITH 48" HDPE)

- 1) Pipe bottom rusted out no debris in pipe.
- 2) Joints are bad all the way to the outfall with roots infiltration, joints were damaged during construction.
- 3) Pipe in fair condition from 10' to End.
- 4) Sand & gravel about 6" thick close to the outfall

CB # 10 - 18" CMP pipe TO MH # 11 (70') (downstream)

(REPLACE WITH 18" HDPE)

- 1) Pipe bottom look good no debris in pipe.
- 2) Joints looks OK with minor infiltration.
- 3) Pipe sag 15% from 40' to End **MH #11** with 4" standing water in it.

1291CREEK WOOD COVE DRAIN REPLACEMENT PROJECT.				COST EST.	
ITEM #	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL PRICE
1	WARRANTIES & BONDS	1	LS	\$5,000.00	\$5,000.00
2	MOBILIZATION	1	LS	\$4,000.00	\$4,000.00
3	EROSION CONTROL	1	LS	\$3,600.00	\$3,600.00
4	DEMOLITION EXIST. STORMDRAIN PIPE SYSTEM (18" CMP UP TO 54" CMP PIPES),INCLUDING REMOVE & REPLACE UNSUITABLE MATERIAL . (Existing structures to remain)	1	LS	\$18,000.00	\$18,000.00
5	INSTALL COMPLETE 18"RCP PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	35	LF	\$55.00	\$1,925.00
6	INSTALL COMPLETE 18"HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	102	LF	\$45.00	\$4,590.00
7	INSTALL COMPLETE 24"HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	83	LF	\$62.00	\$5,146.00
8	INSTALL COMPLETE 30"HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	238	LF	\$110.00	\$26,180.00
9	INSTALL COMPLETE 42"HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	205	LF	\$135.00	\$27,675.00
10	INSTALL COMPLETE 48"HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL , INCLUDING TIE-INS.	677	LF	\$195.00	\$132,015.00
11	PATCHING ALL INCLUDED (MIN. 6" THICK GAB COMPACTED TO 95%. 3" - 1.5MM ASPHALT BINDER. 2"- 9.5 MM SURFACE COURSE)	1	LS	\$6,500.00	\$6,500.00
12	RE-GROUT ALL THE STORMDRAIN STRUCTURES(11).	1	LS	\$1,000.00	\$1,000.00
13	PERMANENT VEGETATION SOD. INCLUDING MULCH FOR LAND SCAPING, INCL.FERTILIZER	2200	SY	\$8.00	\$17,600.00
	10% Contingencies				\$25,323.10
TOTAL				\$278,554.10	

Comments others:



LAWRENCEVILLE

GEORGIA

AGENDA REPORT
MEETING: STORM WATER UTILITY BOARD MAY 22, 2019
AGENDA CATEGORY: NEW PROJECT/ACTION ITEM

Item: 920 Lauren Kay Court

Department: Engineering

Date of Meeting: Wednesday, May 22, 2019

Fiscal Impact: Estimated at \$100,000.00

Presented By: Johannes Louw

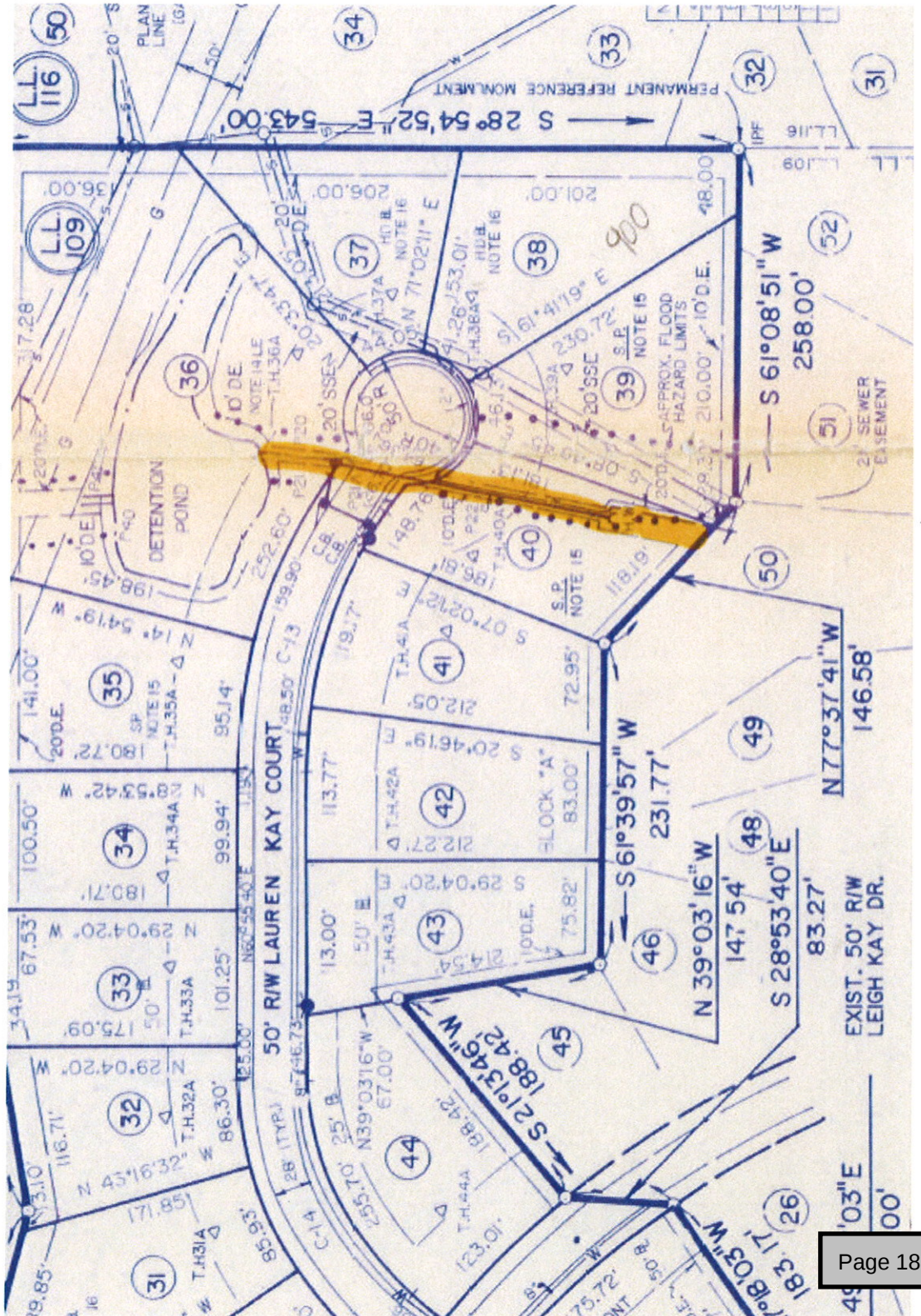
Action Requested: Authorize Department to bid work and forward successful bidder to Council for approval.

Summary: Quick overview – 260' of CMP which includes two headwalls and one JB is rusted out and failing.
Replace with 210' of HDPE out of street, 50' of RCP under street and two JB's; one at each end of the RCP.
Estimated cost \$100,000.00

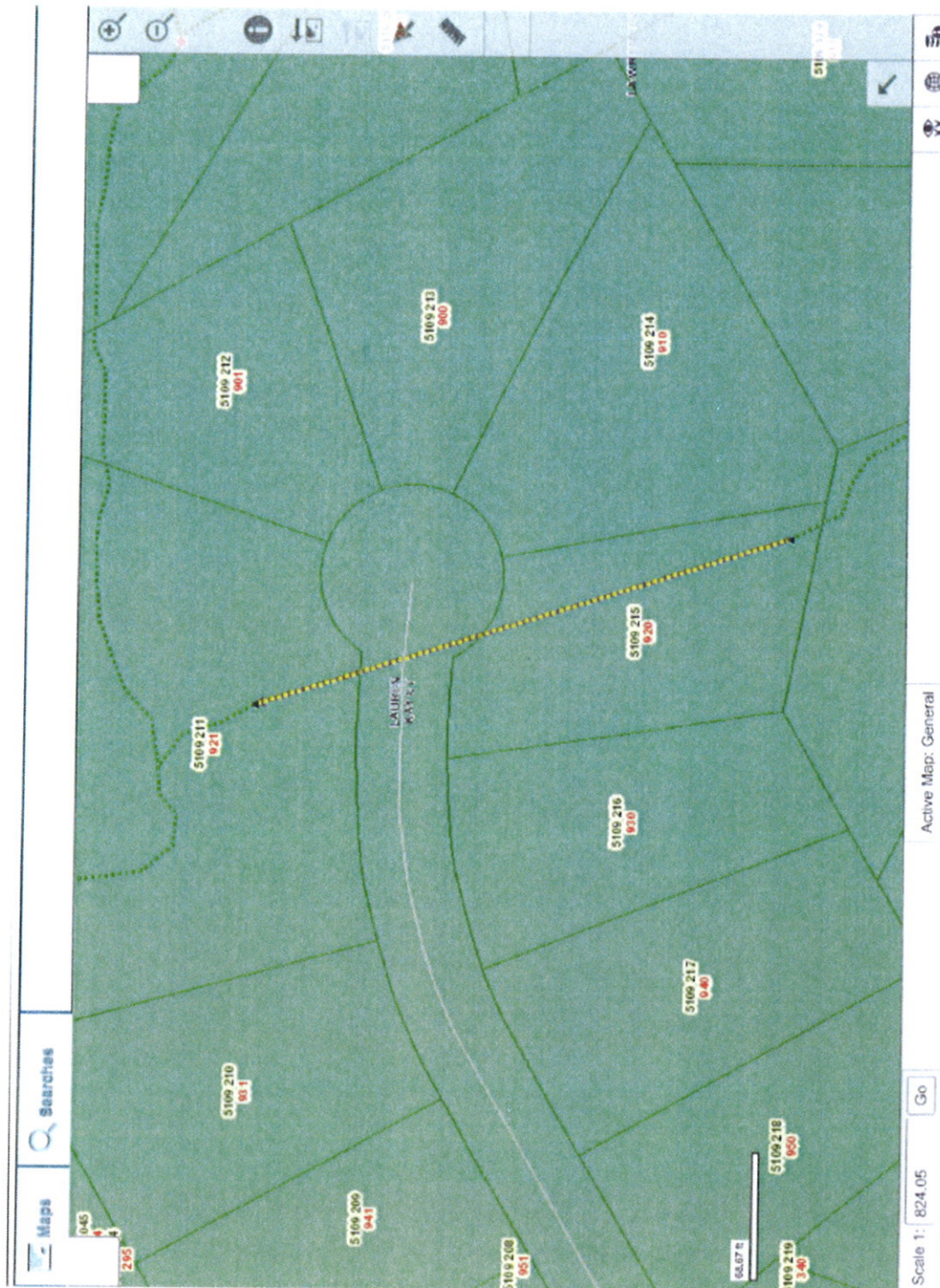
Attachments/Exhibits: 920 Lauren Kay Attachments

Dennis Billew

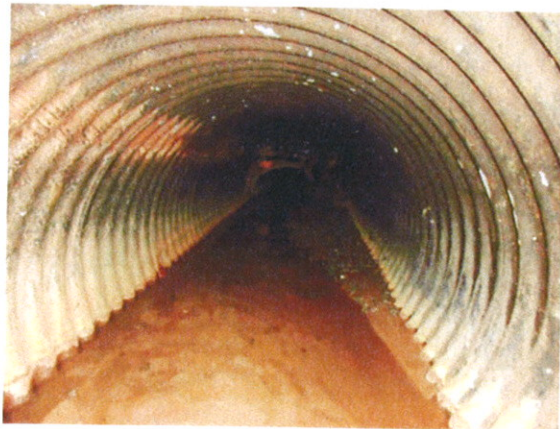
From: Johannes Louw
Sent: Monday, May 13, 2019 10:25 AM
To: Dennis Billew
Subject: LAUREN KAY COURT



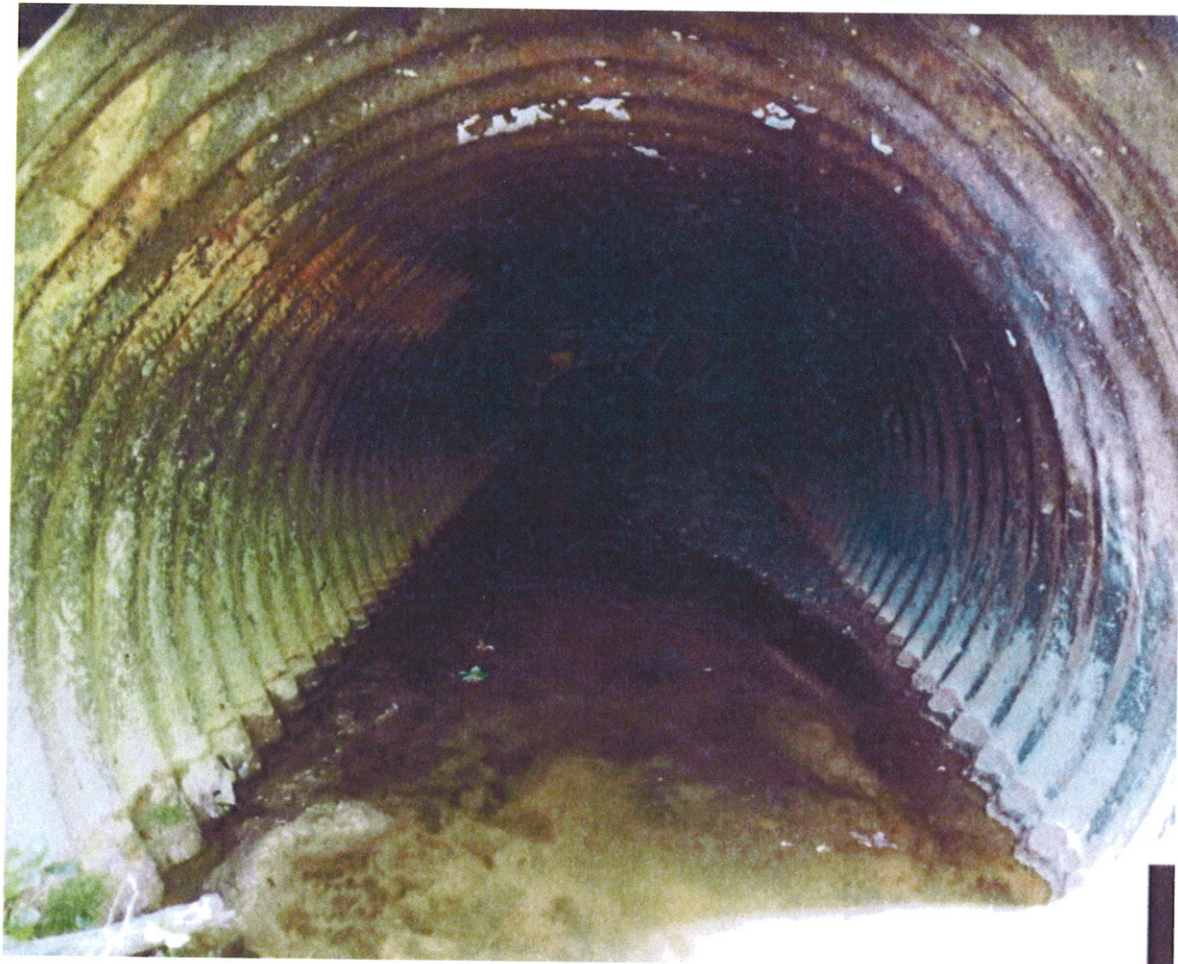
GIS MAP



PICTURES TAKEN:







COST EST.

920 LAUREN KAY ST. STORM DRAIN REPLACEMENT PROJECT.				COST EST.	
ITEM #	DESCRIPTION	APPROX.		UNIT PRICE	TOTAL PRICE
1	WARRANTIES & BONDS	0	LS	\$2,200.00	\$0.00
2	MOBILIZATION	1	LS	\$4,000.00	\$4,000.00
3	EROSION CONTROL	1	LS	\$3,600.00	\$3,600.00
4	DEMOLITION EXIST. 54" CMP PIPES, HEADWALLS, INCLUDING REMOVE & REPLACE UNSUITABLE MATERIAL.	1	LS	\$8,600.00	\$8,600.00
	INSTALL COMPLETE 54" PRE-CAST HEADWALLS	2	EACH	\$2,300.00	\$4,600.00
5	INSTALL COMPLETE 54" HDPE PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL, INCLUDING TIE-INS.	210	LF	\$220.00	\$46,200.00
6	INSTALL COMPLETE 54" RCP PIPE INCL. BEDDING, COMPACTION, SHORING & BACKFILL, INCLUDING TIE-INS.	50	LF	\$110.00	\$5,500.00
8	INSTALL NEW JB - 8'-12" DEEP, SHORING & BACKFILL, INCLUDING TIE-INS.	2	EACH	\$3,800.00	\$7,600.00
9	PATCHING ALL INCLUDED (MIN. 6" THICK GAB COMPACTED TO 95%. 3" - 1.5MM ASPHALT BINDER. 2" - 9.5 MM SURFACE COURSE)	1	LS	\$6,500.00	\$6,500.00
	RE-GROUT ALL THE STORM DRAIN STRUCTURES.	1	LS	\$1,000.00	\$1,000.00
10	PERMANENT VEGETATION SOD. INCLUDING MULCH FOR LAND SCAPING, INCL. FERTILIZER	250	SY	\$8.00	\$2,000.00
	10% Contingencies				\$8,960.00
TOTAL				\$98,560.00	

Comments others:



LAWRENCEVILLE

GEORGIA

AGENDA REPORT
MEETING: STORM WATER UTILITY BOARD MAY 22, 2019
AGENDA CATEGORY: UPDATE

Item: Update from Storm Water Program Managers

Department: Engineering

Date of Meeting: Wednesday, May 22, 2019

Fiscal Impact: N/A

Presented By: Dennis Billew

Action Requested: None

Summary: Precision Planning is the program manager for the City regarding the Storm Water Basin Study. Bill Crowder is the manager for PPI. Bill and his team have evaluated all three basins and have recommended action on several culverts or pipe systems. Initial focus is on situations where a failed culvert will block access to homes beyond the pipe.

Pew Creek:

- Spring Ridge Drive [Forest Hills] culvert
- Beford Bay Trail [Oglethorpe Colony] culvert
- Hanarry Drive [Hanarry North] culvert between John Court and Jami Court
- 241-301 Hanarry Drive [Hanarry North] waiting for CCTV

Shoal Creek:

- 520 Carithers Road [Village Gate] culvert

Attachments/Exhibits: Update from Storm Water Program Managers Attachment





Hayes James
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**DRAINAGE BASIN
STUDY**
CITY OF LAWRENCEVILLE
P.O. BOX 2000
LAWRENCEVILLE, GA 30046
DENNIS BILLEV
770-983-2414

This document is prepared for the use of the City of Lawrenceville and shall not be used for any other project without the written consent of Hayes James & Associates, Inc.

Revision	By	Date
1	JD	08/11/10
2	JD	08/11/10
3	JD	08/11/10
4	JD	08/11/10
5	JD	08/11/10
6	JD	08/11/10
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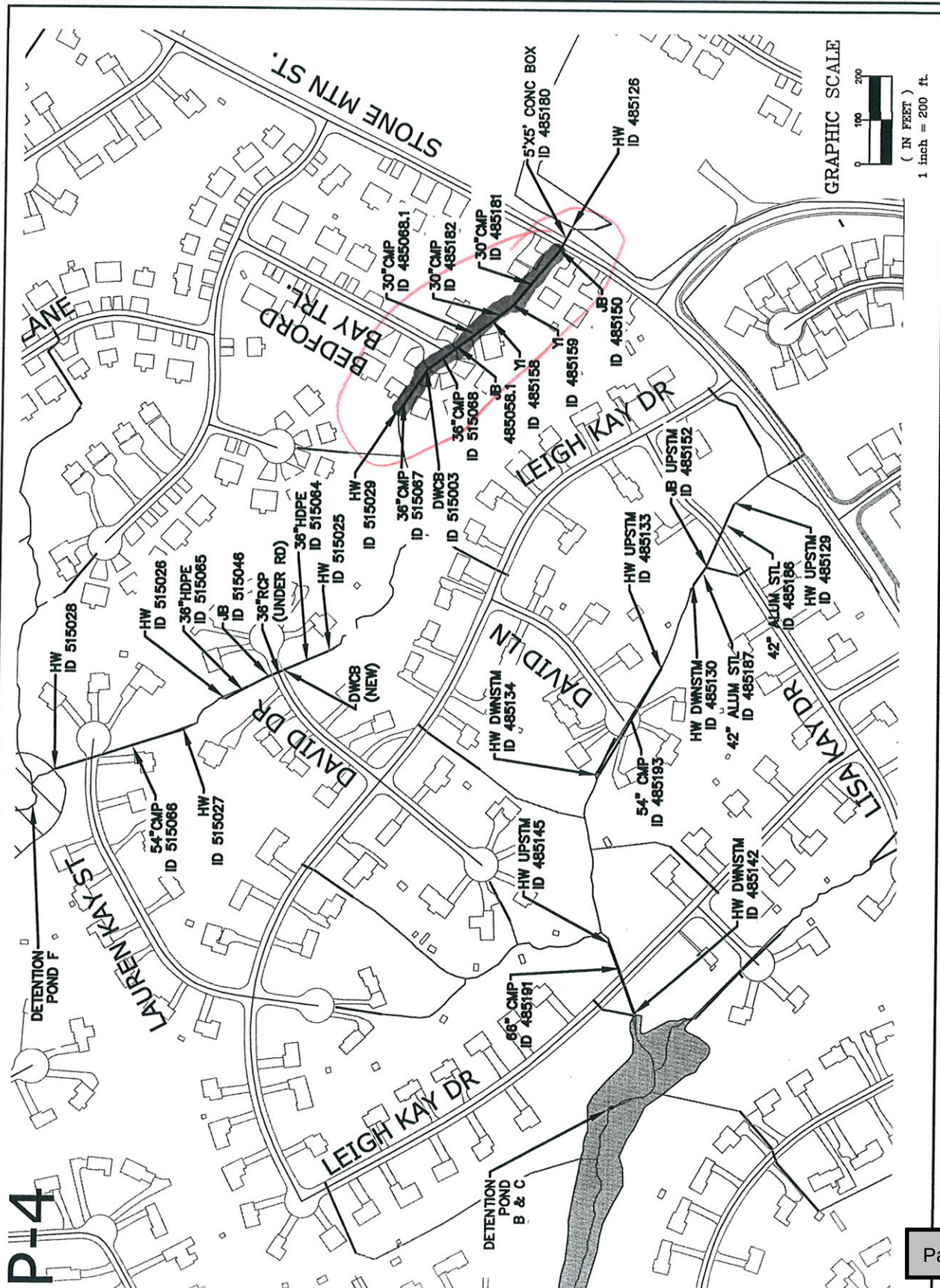
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Project Title
Lawrenceville Drainage
Basin Study

Project Location
City: Lawrenceville, GA
County: Gwinnett
Project No.: 110324
Drawn By: JDB
Scale: 1" = 200'

Sheet Title
LEIGH KAY DR & DAVID DR

Sheet Number
P-4





Hayes James
 ENGINEERS, PLANNERS & ARCHITECTS
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DRAINAGE BASIN STUDY
 FOR THE
 CITY OF LAWRENCEVILLE
 P.O. BOX 2200
 LAWRENCEVILLE, GA 30046
 DENNIS BILLYW
 770-963-3414

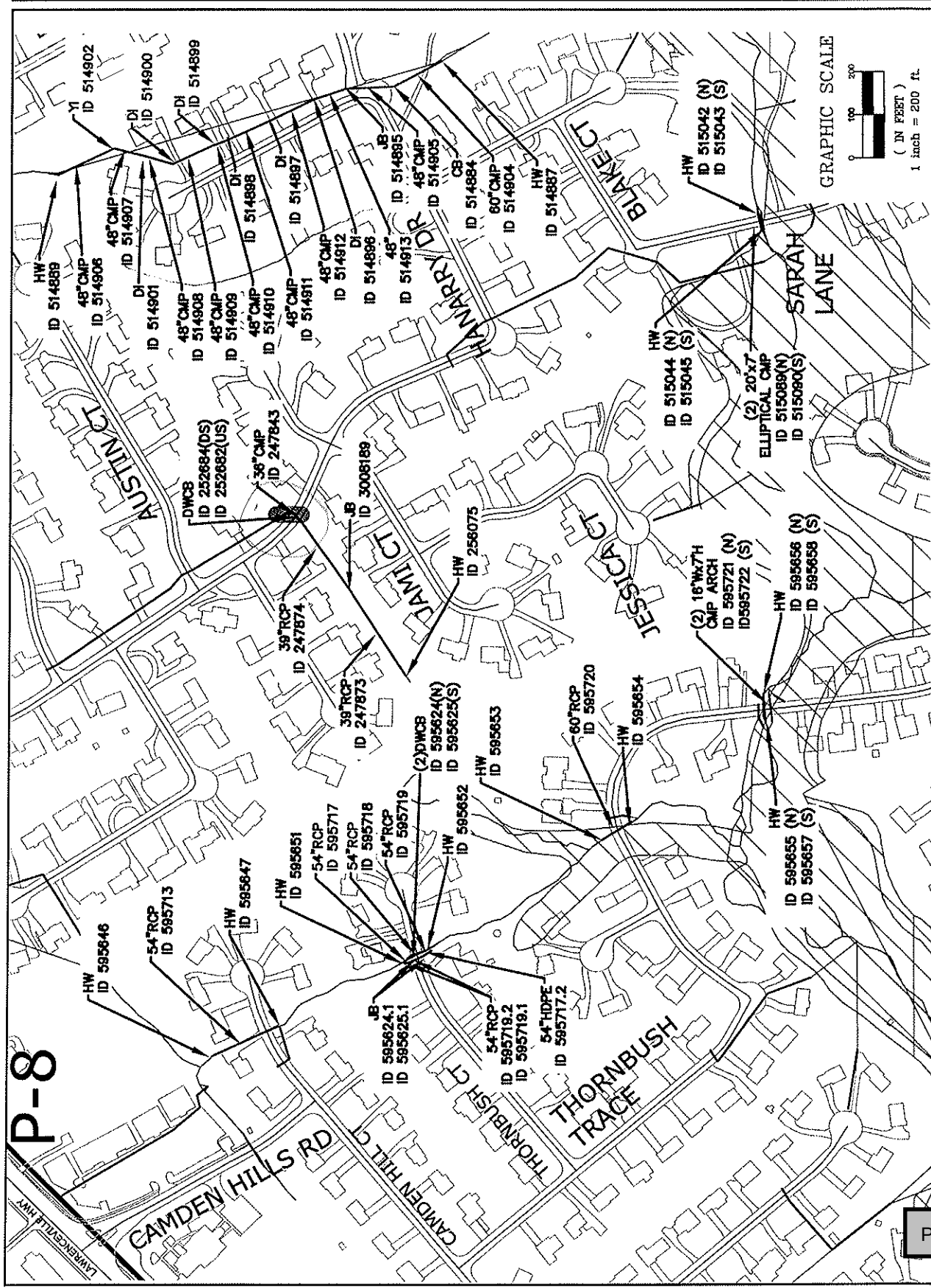
Project Title
 Lawrenceville Drainage
 Basin Study

Project Location
 City: City of Lawrenceville, GA
 State: GA
 County: Gwinnett
 Project No.: 170200
 Drawn By: [blank]
 Checked By: [blank]
 Date: [blank]
 Sheet Title: [blank]
 Sheet Number: [blank]

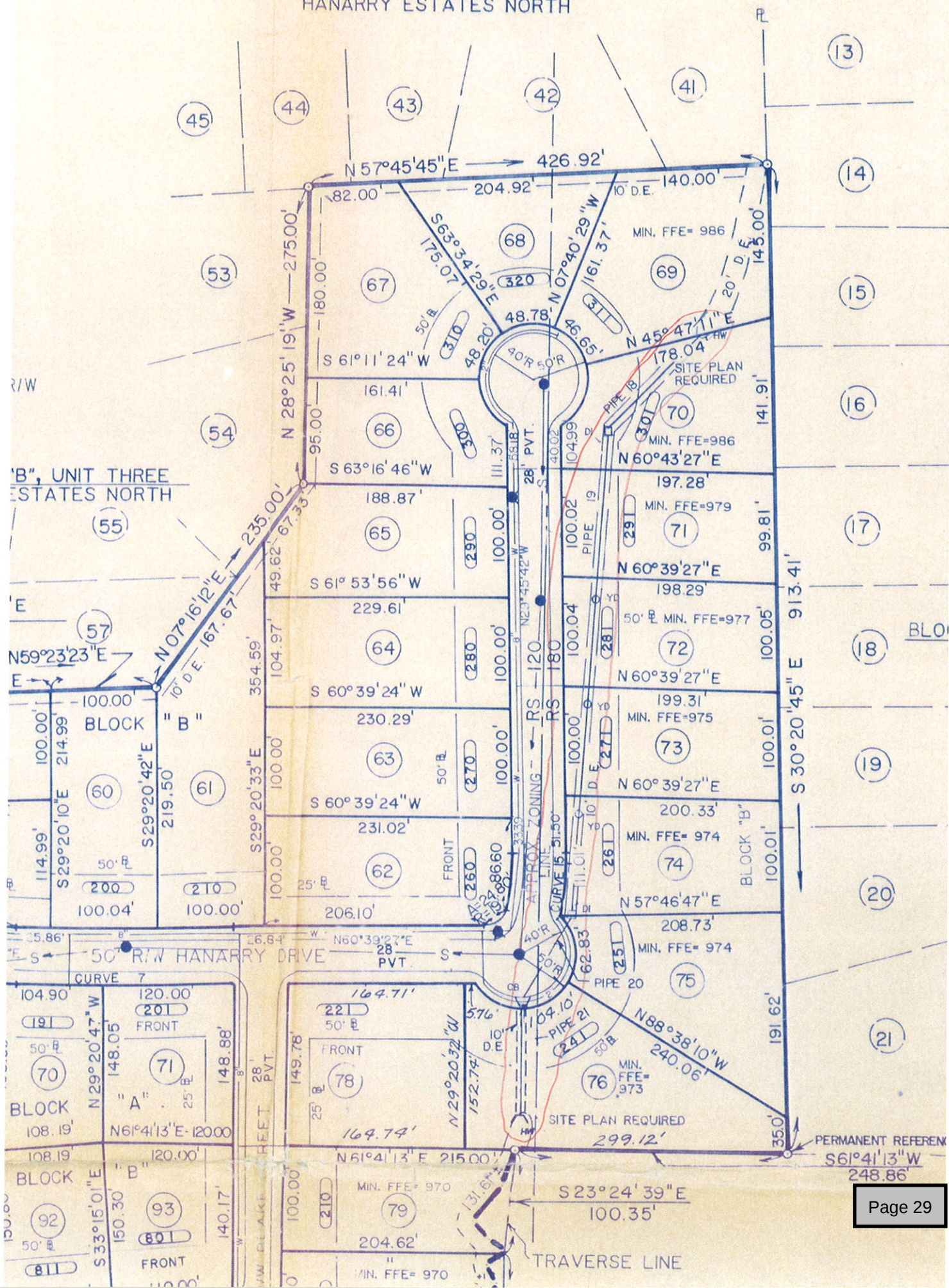
Scale
 1 inch = 200 ft.

Graphic Scale
 0 100 200
 (IN FEET)

Sheet Number
 P-8



HANARRY ESTATES NORTH



In my opinion, the plat is a correct representation of the land shown and the same appears to conform with the minimum standards and requirements of law.

Jacques L. Williams
 Reg. Land Surveyor

This survey has been calculated for closure by latitudes and departures and is found to be accurate within one foot in 12,442 feet.

