

SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, CEM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

May 5, 2017

TO: Hamilton County Drainage Board

RE: Williams Creek Drainage Area, Windemere Subdivision Pond Reconstruction

Attached are the plans and drainage shed maps, for the Reconstruction of the Windemere Subdivision Pond. This project was initiated thru the City of Carmel as one identified as drainage issue in the City of Carmel Southwest Clay Annexation Agreement. A petition was not filed on the project.

I have made a personal inspection of the land described in the petition. Upon doing so, I believe that the drain is practicable, will improve the public health, benefit a public highway and be of public utility; and that the costs, damages and expenses of the proposed drain will probably be less than the benefits accruing to the owners of land likely to be benefited.

The attached plans were prepared by Banning Engineering dated November 19, 2015, Project Number 14025.

The Windemere Drain is first described in a report by the Hamilton County Surveyor dated November 5, 1992. The drain was approved by the Board at the meetings of December 21, 1992 (See Drainage Board Minute Book 3, page 73) and March 15, 1993 (See Drainage Board Minute Book 3, page 97).

The City of Carmel petitioned the Board to make improvements to the Pond 1 outlet system at the October 24, 2001 meeting of the Drainage Board. A new culvert with increased capacity was installed across 105th Street; the existing outlet structure was removed; end sections were installed to resolve the grate capacity issue; and riprap was installed for surface stabilization and to reduce the potential of erosion from the high flows that are conveyed from Pond 1 during large rain events. (See Drainage Board Minute Book 14, Pages 3-4). The project was completed by the City of Carmel and the final report for the project was presented and the project accepted at the November 23, 2015 meeting of the Drainage Board. (See Drainage Board Minute Book 16, Page 389).

The South West Clay Township Annexation Master Drainage Plan dated July 27, 2012 prepared by the City of Carmel identified several issues with the Drain:

1. Debris blocking the Pond 1 outlet structure (debris and grate was removed under maintenance).
2. Insufficient pipe and grate capacity of the Pond 1 outlet structure.
3. An existing block wall constructed along the northern border of the development being located within the primary spillway of Pond 1.
4. Overtopping of 106th Street due to limited capacity of the twin culverts under 106th Street in flood events.
5. Concerns about the elevations of Pond 1 having periodically approached the existing top of bank elevation and rear yards at the northeast corner of the pond.
6. Indication that the emergency spillway is frequently active.

The drain was made part of the William Creek Drainage Area at the meeting of the Drainage Board on September 23, 2013. (See Drainage Board Minute Book 15, page 167).

Based on known issues with the drain, the Board invited proposals from several engineering firms for a hydraulic study of the drain. The Board opened the proposals for the hydraulic study of the drain at the meeting of the Drainage Board on February 2, 2014. (See Drainage Board Minute Book 15, page 349). The Contract for this hydraulic study was awarded to Banning Engineering at the meeting of the Drainage Board on March 24, 2014. (See Drainage Board Minute Book 15, page 376).

As explained further below, the findings of the hydraulic study were presented to the Board at the meeting of the Drainage Board on July 28, 2014. (See Drainage Board Minute Book 15, pages 485-491).

The Board signed a contract with Banning Engineering to develop Construction Plans for the improvements at the meeting of the Drainage Board on February 17, 2015. (See Drainage Board Minute Book 16, Pages 100-101).

An update on progress of the design was provided at the meeting of the Drainage Board on February 27, 2015. (See Drainage Board Minute Book 16, pages 263-264)

The Surveyor's report dated May 20, 2016 indicated that the construction plans for the project were complete and that the engineer's estimate for the project totaled \$116,834.25. \$80,666.75 is for the work to improve the lower and larger pond (Pond 1) outlet and \$36,167.50 to re-dress the banks of Pond 1 after the lowering of the normal pool. The \$80,666.75 was to be paid by Hamilton County. The \$36,167.50 was to be paid by the City of Carmel. The use of maintenance funds from the William Creek Drainage Shed to fund the County portion of the project was approved at the meeting of the Drainage Board on May 26, 2015. (See Drainage Board Minute Book 16, Pages 557-558). It was agreed that written commitment for participation from the City of Carmel was needed.

The City of Carmel Board of Public Works and Safety signed the Cost Sharing Agreement on April 19, 2017.

The Board will be presented the Cost Sharing Agreement for full execution at the meeting of the Drainage Board on May 22, 2017.

The June 2014 Hydraulic Study by Banning Engineering identified several issues.

1. When reviewing the original drainage reports a substantial error in the hydrologic and hydraulic calculations was identified. It was apparent that the original design by Stoeppelwerth & Associates, Inc. did not properly model the hydrograph routings used to (1) size the detention facility outfall pipes; (2) size the detention facilities and; (3) establish the appropriate 100-year flood elevations.
2. 106th Street would continue to overtop during a 100-year storm event until the discharge is reduced from the auxiliary spillway on Pond 1.
3. Several structures were allowed to be built with entry elevations lower than the current 100-year pond elevations.
4. Other residences have very little freeboard above the 100-year pond elevations.

At the July 28, 2014 meeting of the Drainage Board, it was stated that several properties had constructed berms between the ponds and the structures to minimize flooding. It was also stated at the meeting that the auxiliary spillway of Pond 1 was undersized. (See Drainage Board Minute Book 15, pages 485-491).

The Pond 1 spillway was noted to be active more frequently that would otherwise be expected.

The June 2014 Hydraulic Study recommended (1) lowering the normal pool elevation of both ponds within the subdivision by 2.3-feet; (2) replacing the existing 12-inch diameter Pond 1 outlet pipe with an 18-inch pipe; (3) installing a secondary outlet between the two ponds; (4) installing an improved outlet control structure on Pond 1 with a trash rack; and (5) improving the spillways for both ponds to the current design standard. The total cost was estimated at \$426,000.00.

Banning Engineering was contracted in February of 2015 to provide construction plans for the reconstruction of the outlet for Pond 1. The construction plans were completed on November 19, 2015. After several meetings with the Windemere HOA in the Fall of 2016, the construction plans were modified slightly and the final plans are now dated December 23, 2016.

The final plans do not include all the recommendations outlined in the June 2014 hydraulic study. The recommendations that are not implemented with the current project may be implemented in the future if needed or desired.

The final scope of work was developed with input from the Drainage Board, the utility coordination process and meetings with the HOA.

The final plan includes the work to: (1) install a secondary outlet from Pond 1; (2) lowering the normal pool of Pond 1 six-inches (6") with the ability to lower the normal pool further in the future; (3) re-dressing the banks of Pond 1 that will be exposed from lowering the normal pool; and (4) improving the Pond 1 spillway to reduce erosion potential. More specifically, the final proposed project includes:

1. Installation of a new primary outlet structure for Pond 1 consisting of a new 3' x 3' drop structure 0.5' below the current normal pool elevation. The drop structure will have the ability to lower the Pond 1 normal pool an additional 2.5' +/- if needed in the future.
2. A 12" reinforced concrete pipe will discharge from new primary outlet structure. A total of 154 linear feet of new pipe will be installed consisting of 42-LF of 12" RCP, 104-LF of 15" RCP and 8-LF of 18" RCP.
3. The last 8 linear feet of the new pipe run will replace the existing 15" pipe in the 106th Street right-of-way that is part of the existing Pond 1 outlet system.
4. The existing outlet piping and existing spillway will remain in place.
5. The Pond 1 auxiliary spillway will be stabilized with high velocity erosion control measures.
6. Erosion control blanket, seeding and riprap will be placed along the banks of Pond 1 after the normal pool of Pond 1 is lowered 6 inches with the installation of the new outlet drop structure.

The proposed reconstruction will lower the maximum water surface elevation of Pond 1 resulting from all rain events up to the 10-year event. The proposed reconstruction will also result in a reduction in the frequency of the activation of the Pond 1 auxiliary spillway by limiting such occurrences to rain events above the 10-year event.

The project will add 42-LF of 12" RCP and 104-LF of 15" RCP. The project will replace the original Str. 829 on the Stoepelwerth Plans with Str. 102 of the Banning Plans. Also, 8-LF of 15" pipe installed during the initial development of the Windemere Subdivision downstream of St. 829 will be replaced with 18" RCP.

The project will increase the length of the Windemere Drain a net length of 146-LF.

All work will be performed within existing platted easement.

The cost estimate for this reconstruction is as follows:

Reconstruction Costs

Item No	Description	Quantity	Unit	Unit price	Amount
1	3'x3' Box w/Trash Rack & Rubber Boot	1	EA	\$6,500.00	\$ 6,500.00
2	2'x2' Box w/Casting	1	EA	\$2,500.00	\$ 2,500.00
3	2'x2.5' Box w/Casting	1	EA	\$2,750.00	\$ 2,750.00
4	18" RCP outside 5'	8	LFT	\$ 100.00	\$ 800.00
5	15" RCP within 5'	104	LFT	\$ 95.00	\$ 9,880.00
6	12" RCP outside 5'	30	LFT	\$ 75.00	\$ 2,250.00
7	12" RCP within 5'	12	LFT	\$ 85.00	\$ 1,020.00
8	30" Steel Casting w/blocks & grout	6	LFT	\$ 750.00	\$ 4,500.00
9	End Sections	1	EA	\$1,750.00	\$ 1,750.00
10	Auxiliary Spillway Re-grading	1	LS	\$5,000.00	\$ 5,000.00
11	P300 ECB	67	SYD	\$ 25.00	\$ 1,675.00
12	Shormax	60	SFT	\$ 40.00	\$ 2,400.00
13	New 4' Sidewalk including 4" Aggregate	480	SFT	\$ 25.00	\$12,000.00
14	Sawcut & remove 120' of sidewalk	1	LS	\$2,000.00	\$ 2,000.00

15	Remove 15" RCP	8	LFT	\$ 15.00	\$ 120.00
16	Rework gate	1	LS	\$2,500.00	\$ 2,500.00
17	Seeding & Mulch	1	LS	\$12,500.00	<u>\$12,500.00</u>
			Total		\$70,145.00
			Contingencies 15%		<u>\$10,521.75</u>
			Net Total		\$80,666.75

Pond Treatment Costs

Item No.	Description	Quantity	Unit	Unit Price	Amount
1	S150BN E88	885	SYD	\$ 10.00	\$ 8,850.00
2	6" Rip Rap	13	Tons	\$200.00	\$ 2,600.00
3	Pond Bank Grading	1	LS	\$10,000.00	\$10,000.00
4	Seeding	1	LS	\$10,000.00	<u>\$10,000.00</u>
			Total		\$31,450.00
			Contingencies 15%		<u>\$ 4,717.50</u>
			Net Total		\$36,167.50

The project will be funded by both Hamilton County and City of Carmel. \$80,666.75 will be paid by Hamilton County from the Williams Creek Watershed Maintenance Fund as allowed under IC-36-9-27-45.5. \$36,167.50 will be paid by the City of Carmel.

The county will bid this project and administer the construction contract.

The following tracts are affected by the project:

Parcel	Owner	Description
17-13-09-00-03-019.000	Windemere Homeowners Assoc. Inc.	S9 T17 R3 Windemere Sec. 1 CA1
17-13-09-00-03-001.000	Kheradiya, Rajan S & Nisha S	S9 T17 R3 Windemere Sec. 1 Lot 1
17-13-09-00-03-002.000	Hollingsworth, Samuel	S9 T17 R3 Windemere Sec. 1 Lot 2
17-13-09-00-03-003.000	Ehman, Mark W & Karen O	S9 T17 R3 Windemere Sec. 1 Lot 3
17-13-09-00-03-004.000	Tapiero, Jacques Trustee	S9 T17 R3 Windemere Sec. 1 Lot 4
17-13-09-00-03-005.000	Lasek, Kelley C & Dana H	S9 T17 R3 Windemere Sec. 1 Lot 5
17-13-09-00-03-006.000	Yount, David B & Carol F.	S9 T17 R3 Windemere Sec. 1 Lot 6
17-13-09-00-03-007.000	Finkelmeier, Williams R & Terri A.	S9 T17 R3 Windemere Sec. 1 Lot 7
17-13-09-00-03-008.000	Vore, Charles Scott & Pamela Ann	S9 T17 R3 Windemere Sec. 1 Lot 8
99-99-99-99-999.005	City of Carmel, Dept. of Administration	S9 T17 R3 106 th Street

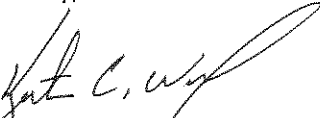
Parcels benefitted by this drain are currently assessed for the Williams Creek Watershed. Therefore no changes in the current assessment shall be required.

I believe no damages will result to the landowners. Damages are set at zero (0).

There are no permits required for this project from the US Army Corps of Engineers (COE), Indiana Department of Natural Resources (IDNR) or the Indiana Department of Environmental Management (IDEM). A permit is required from the City of Carmel to close, remove and reconstruct the existing sidewalk along 106th Street for the installation of the new secondary outlet pipe from Pond 1.

I recommend that the Board set a hearing for this proposal for June 26, 2017.

Sincerely,

A handwritten signature in black ink, appearing to read "Kenton C. Ward". The signature is fluid and cursive, with a large loop at the end.

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY
DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
*Williams Creek Drainage Area, Windemere Subdivision Pond
Reconstruction*

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the *Williams Creek Drainage Area, Windemere Subdivision Pond Reconstruction* came before the Hamilton County Drainage Board for hearing on *June 26, 2017*, on the Reconstruction Report consisting of the report and the Schedule of Damages and Assessments. The Board also received and considered the written objection of an owner of certain lands affected by the proposed Reconstruction, said owner being:

Evidence was heard on the Reconstruction Report and on the aforementioned objections.

The Board, having considered the evidence and objections, and, upon motion duly made, seconded and unanimously carried, did find and determine that the costs, damages and expenses of the proposed Reconstruction will be less than the benefits accruing to the owners of all land benefited by the Reconstruction.

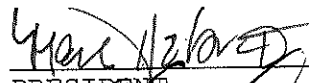
The Board having considered the evidence and objections, upon motion duly made, seconded and unanimously carried, did adopt the Schedule of Assessments as proposed, subject to amendment after inspection of the subject drain as it relates to the lands of any owners which may have been erroneously included or omitted from the Schedule of Assessments.

The Board further finds that it has jurisdiction of these proceedings and that all required notices have been duly given or published as required by law.

Wherefore, it is ORDERED, that the proposed Reconstruction of the *Williams Creek Drainage Area, Windemere Subdivision Pond Reconstruction* be and is hereby declared established.

Thereafter, the Board made inspection for the purpose of determining whether or not the lands of any owners had been erroneously included or excluded from the Schedule of Assessments. The Board finds on the basis of the reports and findings at this hearing as follows:

HAMILTON COUNTY DRAINAGE BOARD

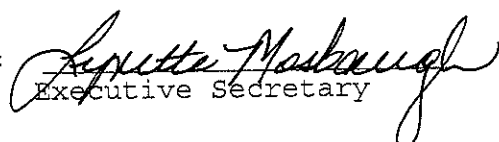


PRESIDENT



Member

Member

ATTEST: 
Executive Secretary

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

*Williams Creek Drainage Area,
Windemere Subdivision Pond Reconstruction*

NOTICE

To Whom It May Concern and: _____

Notice is hereby given of the hearing of the Hamilton County Drainage Board concerning the reconstruction of the Williams Creek Drainage Area, Windemere Subdivision Pond Reconstruction on June 26, 2017 at 9:00 A.M. in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana. Construction and maintenance reports of the Surveyor and the Schedule of Assessments proposed by the Drainage Board have been filed and are available for public inspection in the office of the Hamilton County Surveyor.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

STATE OF INDIANA)
) SS BEFORE THE HAMILTON
)
COUNTY OF HAMILTON) DRAINAGE BOARD

IN THE MATTER OF Williams Creek Drainage Area, Windemere
Subdivision Pond Reconstruction

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting June 26, 2017 adopted the reconstruction report of the Surveyor and the Amended Schedule of damages and assessments including annual assessment for periodic maintenance, finding that the costs, damages and expense of the proposed improvement would be less than the benefits which will result to the owner of lands benefited thereby.

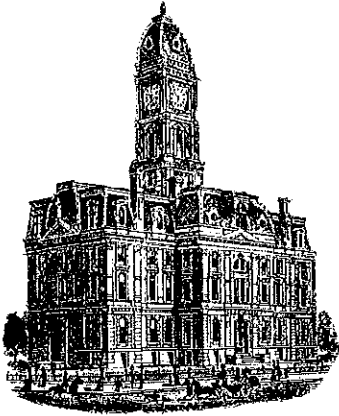
The Board issued an order declaring the proposed improvement established. Such findings and order were marked filed and are available for inspection in the Office of the Hamilton County Surveyor.

If judicial review of the findings and order of the Board is not requested pursuant to Article VIII of the 1965 Indiana Drainage Code as amended within twenty (20) days from the date of publication of this notice, the findings and order shall become conclusive.

HAMILTON COUNTY DRAINAGE BOARD

BY: Mark Heirbrandt
PRESIDENT

ATTEST: Lynette Mosbaugh
SECRETARY



Kenton C. Ward, CFM
Surveyor of Hamilton County
Phone (317) 776-8495
Fax (317) 776-9628

Suite 188
One Hamilton County Square
Noblesville, Indiana 46060-2230

August 8, 2019

To: Hamilton County Drainage Board

Re: Windemere Subdivision Pond Reconstruction
Final Inspection Report

FINAL REPORT

This is the inspector's final report on the Windemere Subdivision Pond Reconstruction, located in Section 11, Township 18 North, Range 3 East, in Washington Township in Hamilton County, Indiana.

The Hamilton County Drainage Board opened RFPs for the Windemere Pond at its February 24, 2014 meeting. There were ten proposals and they were referred to the Surveyor's Office for review. (Hamilton County Drainage Minutes Book 15, page 349) The Board awarded the contract in the amount of \$14, 835 for pond review to Banning Engineering at its March 10, 2014 meeting. (Hamilton County Drainage Minute Book 15, page 360) and the contract was signed at the March 24, 2018 meeting. (Hamilton County Drainage Minute Book 15, page 376)

Mr. Joe Miller of Banning Engineering presented the Board with Banning's presentation and recommendations at the July 28, 2014 meeting. (Hamilton County Drainage Board Minute Book 15, pages 485-491)

A Professional Services Agreement with a fixed fee of \$17,250.00 (Task Order 1) was approved at the February 17, 2015 meeting. Task Order 1 is for the design and fix of Windermere Pond. (Hamilton County Drainage Board Minute Book 16, pages 100-101)

The Board approved the Professional Services Agreement with Banning Engineering at the May 8, 2017 meeting for construction inspection, construction staking and asbuilts in the amount not

to exceed \$25,750. (Task Order 2) (Hamilton County Drainage Board Minute Book 17, pages 340-341)

Total engineering costs add up to \$57,835. Billing from Banning resulted in a cost of \$37,593.75 with a difference of \$20,241.25 not billed. In an email to and response from Joe Miller of Banning Engineering he stated that all billing was complete and there was no outstanding balance.

The Board approved a Cost Sharing Agreement with the City of Carmel at the May 22, 2017 meeting. The agreement provided for the Williams Creek fund paying for the outlet and City of Carmel paying for the redressing of the bank. (Hamilton County Minute Book 17, pages 369-371)

The Surveyor's Report for the Windemere Subdivision Pond Reconstruction dated May 5, 2017 was presented to the Drainage Board and approved at hearing on June 26, 2017. (Hamilton County Drainage Board Minute Book 17, pages 391-396) The Engineer's Estimate was \$116,834.25. (\$80,666.75 for outlet and \$36,167.50 for redressing the bank.)

The Board took bids for the project at the July 24, 2017 meeting (Hamilton County Drainage Board Minute Book 17, page 421) and the August 28, 2017 meeting. (Hamilton County Drainage Board Minute Book 17, pages 441-442) No Bids were received.

In a letter to the Board dated October 20, 2017 Gary Duncan, the Surveyor's Office Engineer described the problems with getting a bid for the project. After contacting several companies directly, only one company expressed any interest in the project. Elevation Excavation was interested in doing the piping and spillway work only and would not submit a bid for the redress of the banks. This problem had been discussed at the August 28, 2017 meeting. (Hamilton County Drainage Board Minute Book 17, pages 441-442)

A revised bid tab (Dated 10/5/17) which did not include the bank redress and the casing under the brick wall along 106th Street was issued to Elevation Excavation. Elevation Excavation then submitted a quote for the work on October 18, 2017 for \$85,813.75.

The Board awarded the contract for the piping and spillway reconstruction of the Windemere Subdivision Pond Reconstruction to Elevation Excavation on October 23, 2017 for the amount of \$85,813.75. (Hamilton County Minute Book 17, pages 519-520).

Banning's recommended lowering of the Lake 1 normal pool to an elevation of 853.0 was objected to by the surrounding landowners. Although it provided the additional storm water storage recommended the objection was that it would have exposed too much bare land around the lake. After numerous discussions with the landowners the Board agreed to raise the reduced normal pool to 854.62 feet. The Board will reconsider this per a notice approved by the Board at its meeting of March 11, 2019. This notice as recorded in the office of the Hamilton County Recorder on June 27, 2019 as instrument number 2019027867. The notice was mailed by certified mail on July 25, 2019 to the Windemere Homeowners Association. The certified letter was signed for on July 29, 2019 and the return receipt was delivered on August 7, 2019.

An email was received from Janet Daniels, President of the Windemere Homeowners Association on October 31, 2018 stating that the HOA Board agreed that the bank redressing around the pond is not necessary and considers the project completed as installed.

I recommend that the Board of Public Works & Safety of the City of Carmel be released from their obligations from the Cost Sharing Agreement signed and dated by Carmel April 19, 2017 and signed by the Board May 22, 2017. (Minute Book 17, pages 369-371) The Agreement was for the City of Carmel to pay \$36,167.50 for bank redressing as a part of the reconstruction of the Windemere Detention Pond.

There were no change orders issued on this project. There were no changes to the original Surveyor's Report dated May 5, 2017. (Hamilton County Drainage Board Minute Book 17, pages 391-396)

Partial Pay Requests for this project submitted and paid as allowed in IC 36-9-27-81 are as follows:

Pay Request #1	Paid 4/10/18	\$ 39,920.90
Pay Request #2	Paid 6/12/18	\$ 24,255.57
Pay Request #3	Paid 7/10/18	\$ 8,765.22
Pay Request #4 Retainage Released	Paid 9/11/18	\$ 12,872.06
Total Construction Costs – Elevation Excavation		\$ 85,813.75

The Final Costs for the Reconstruction are as follows:

Engineer's Construction Estimate -----	\$ 80,666.75
Elevation Excavation Reconstruction Costs -----	\$ 85,813.75
Difference -----	\$ -5,174.00

Total Cost for the Windemere Project:

Windemere Pond Review by Banning Engineering -----	\$ 14,835.00
Construction Plans by Banning Engineering -----	\$ 17,250.00
Construction Staking by Banning Engineering -----	\$ 1,508.75
Asbuilts by Banning Engineering -----	\$ 4,000.00
Total Costs Banning Engineering -----	\$ 37,593.75
Total Costs for Engineering -----	\$ 37,593.75
Total Reconstruction Costs -----	\$ 85,813.75
Total Project Cost to Williams Creek Fund -----	\$123,407.50

The newly constructed pond outlet consists of the following:

A 3'x3' concrete box outlet structure, 41 feet of 12 inch RCP to a 2'x2' concrete box structure, 104 feet of 15 inch RCP to a 2'x3' concrete box structure, and 8 feet of 18 inch RCP with end section at the outlet. The existing outlet of the pond was tied into the 2'x3' box also.

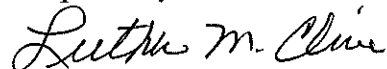
Form E-1 stating that all expenses for labor & materials has been paid as required by IC 36-9-27-82(b) has been received and retainage withheld was released September 11, 2018.

As of the date of this report, I hereby attest to and agree that the reconstruction was completed according to the specified plans. All inspections have been completed. Construction staking was performed by and asbuilts were prepared by Banning Engineering. Asbuilt plans have been submitted and approved.

All costs paid from the Williams Creek Maintenance Fund.

I recommend the Board approve the drain's reconstruction as complete and acceptable.

Respectfully



Luther M. Cline

Inspector

Hamilton County Surveyor's Office

CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor

Re: WINDEMERE RECONSTRUCTION

I hereby certify that:

1. I am a Registered Land Surveyor or Engineer in the State of Indiana.
2. I am familiar with the plans and specifications for the above referenced subdivision.
3. I have personally observed and supervised the completion of the drainage facilities for the above referenced subdivision.
4. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been installed and completed in conformity with all plans and specifications.
5. The drainage facilities within the above referenced subdivision to the best of my knowledge, information and belief have been correctly represented on the Record Drawings, Digital Record Drawings and the Structure Data Spreadsheet.

Signature:  Date: 9-7-18

Type or Print Name: JOSEPH L. MILLER

Business Address: 853 COLUMBIA RD, SUITE 101
PLAINFIELD, IN 46168

Telephone Number: 317-707-3736



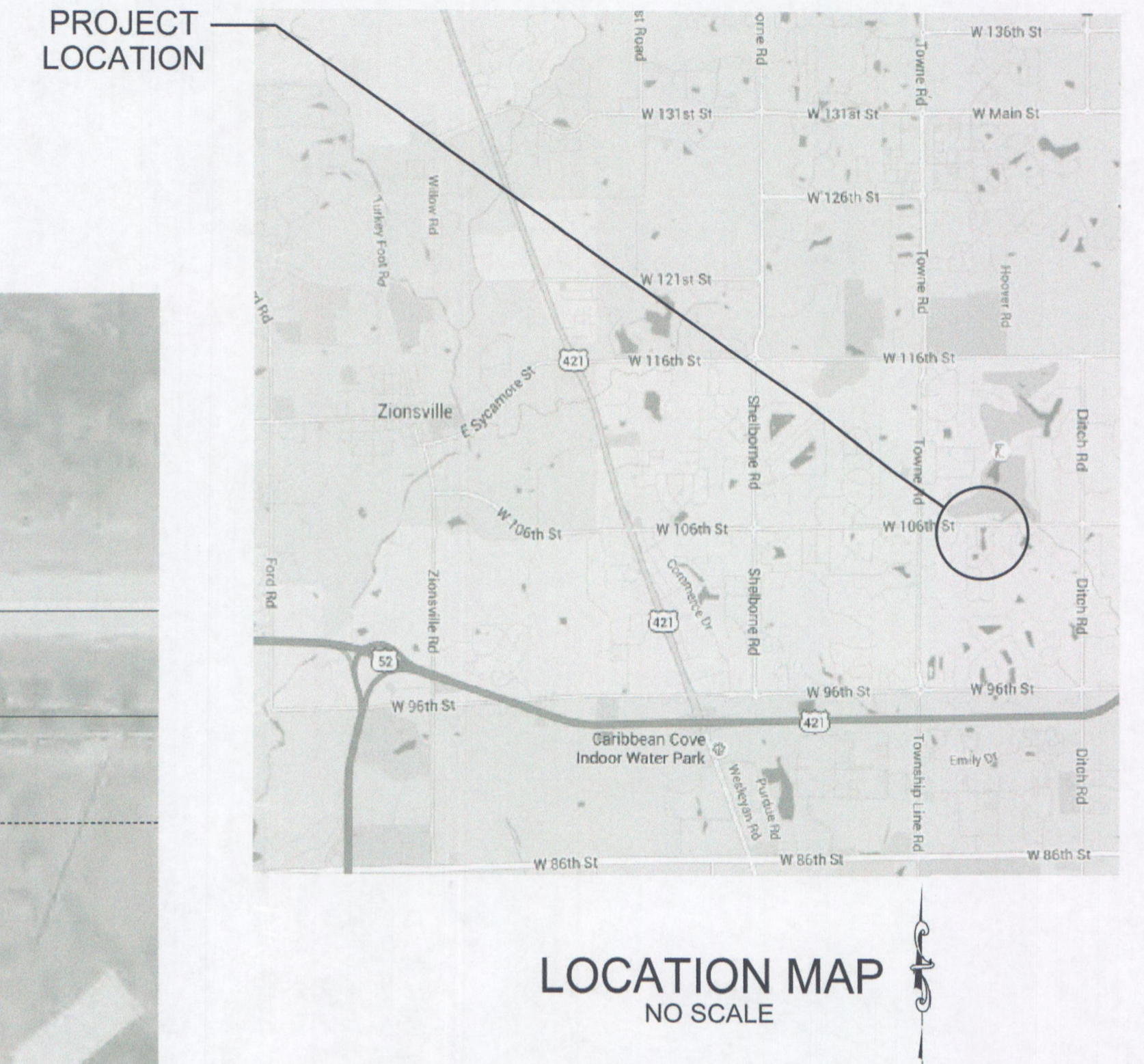
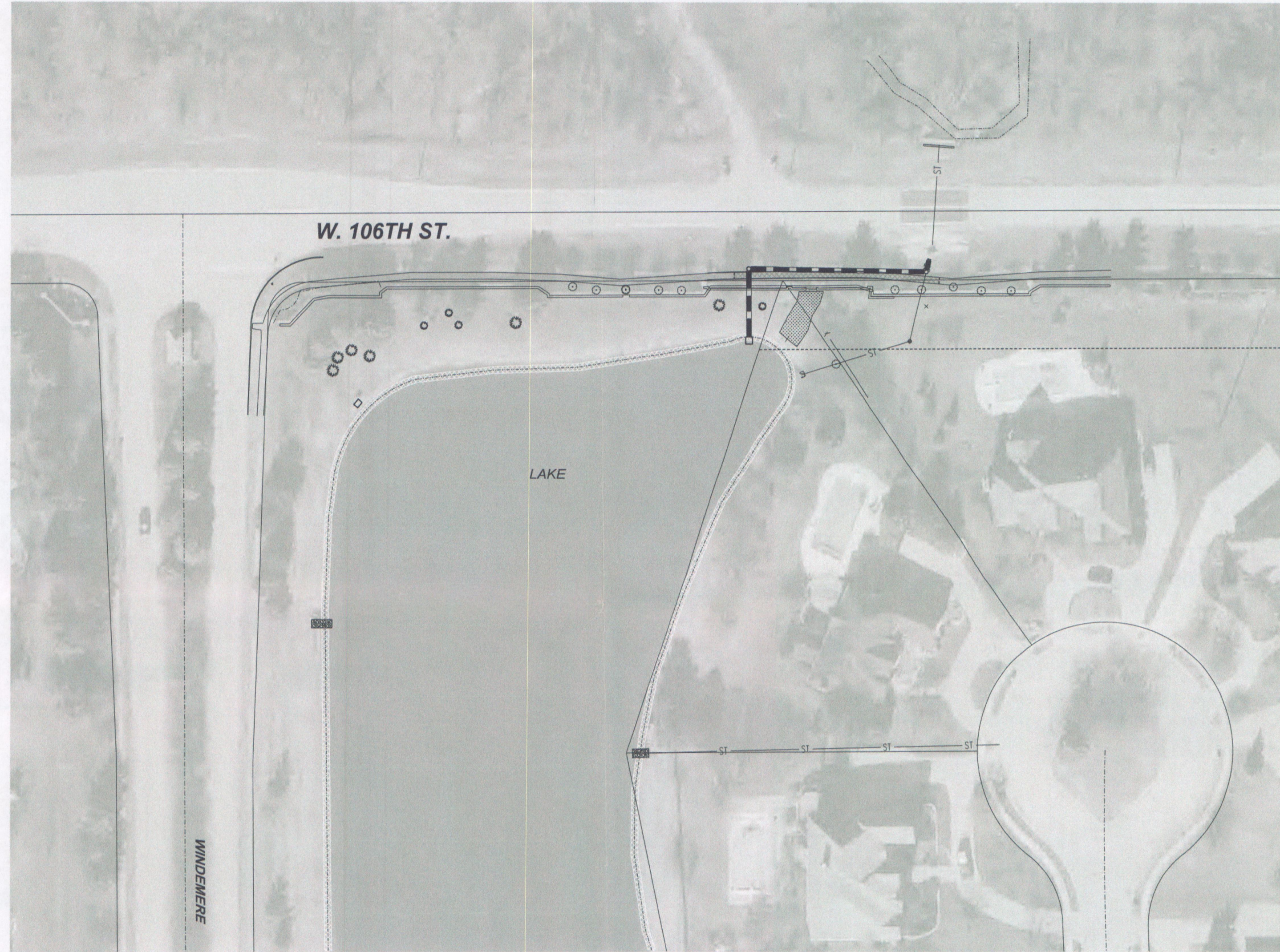
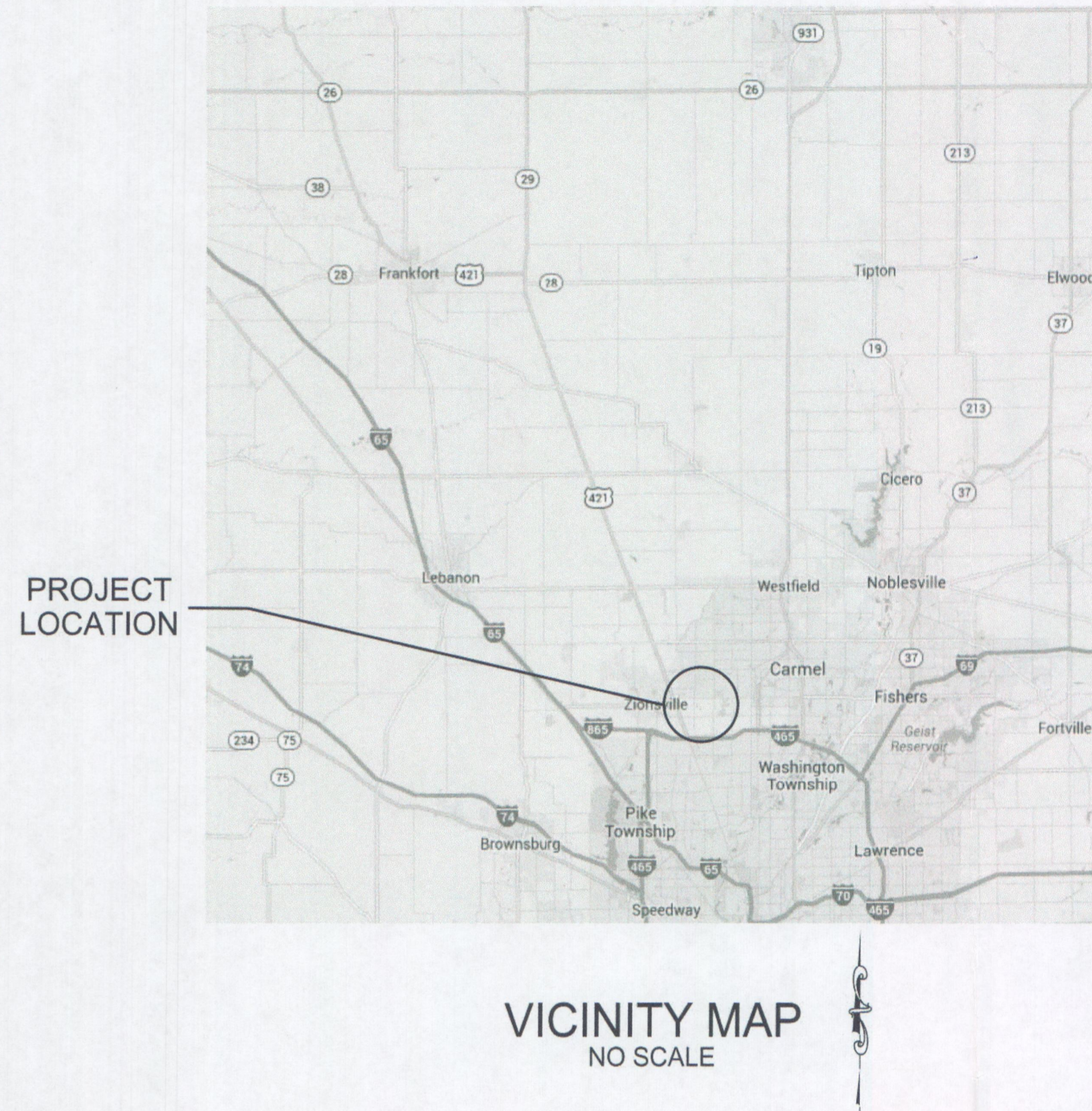
INDIANA REGISTRATION NUMBER

PE 10403431

WINDEMERE SUBDIVISION POND RECONSTRUCTION

SEC. 32, T17N, R3E, CLAY TOWNSHIP
HAMILTON COUNTY
ZONED: S-1

PLANS PREPARED FOR:
HAMILTON COUNTY DRAINAGE BOARD
1 HAMILTON COUNTY SQUARE, SUITE 188
NOBLESVILLE, IN 46060
PHONE: 317-776-9626
FAX: 317-776-9628
CONTACT: KENTON WARD



OPERATING AUTHORITIES

GAS Vectren 16000 Allisonville Road Noblesville, IN 46061 317-776-5534	STORM Hamilton County Square Suite 188 Noblesville, IN 46060 317-776-8495	WATER Carmel Utilities 31 1st Ave NW Carmel, IN 46032 317-571-2586
ELECTRIC Indianapolis Power and Light Company One Monument Circle P.O. Box 1595 Indianapolis, IN 46206-1595 317-261-5203	STREET Carmel Street Department 3400 West Main Street Carmel, IN 46074 317-733-2001	SANITARY Clay Township Regional Waste District 10701 N. College Avenue Suite A Indianapolis, IN 46280 317-261-1505
TELEPHONE AT&T - Distribution 5858 N College Avenue Indianapolis, IN 46220 317-252-4007	SCHOOL DISTRICT Carmel Clay Schools 5185 E Main Street (131st) Carmel, IN 317-815-3962	FIRE DEPARTMENT Carmel Fire Department 5032 E 131st St Carmel, IN 317-571-2600
CABLE Comcast Cablevision - Indianapolis 5330 E. 65th St Indianapolis, IN 46220 317-872-2225 x 2	CABLE Bright House Networks 3030 Roosevelt Ave Indianapolis, IN 46218 317-632-9077	HIGHWAY DEPARTMENT Hamilton County Highway Department 1700 S 10th Street Noblesville, IN 46060 317-773-7770

PLANS PREPARED BY:

BANNING ENGINEERING

853 COLUMBIA ROAD, SUITE #101
PLAINFIELD, IN 46168
BUS: (317) 707-3700, FAX: (317) 707-3800
E-MAIL: Banning@BanningEngineering.com
WEB: www.BanningEngineering.com

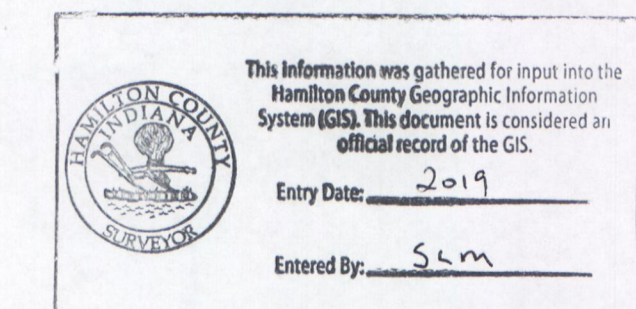
CONTACT: JOSEPH L. MILLER

CONSTRUCTION DOCUMENTS

PROJECT MANAGER: _____ DATE: _____

THESE PLANS ARE NOT TO BE CONSIDERED FINAL OR TO BE UTILIZED FOR CONSTRUCTION UNLESS SIGNED AND DATED BY THE APPROPRIATE BANNING ENGINEERING PROJECT MANAGER.

THESE PLANS ARE NOT INTENDED TO BE REPRESENTED AS A RETRACEMENT OR ORIGINAL BOUNDARY SURVEY, A ROUTE SURVEY, OR A SURVEYOR LOCATION REPORT.



CERTIFIED BY: _____

RECORD DRAWING

Certificate of Survey

I hereby state that the record information provided herein is true and correct to the best of my knowledge and belief and was collected under my supervision with the field data completed on July 18, 2018. The record information pertains to the location and elevation of the storm sewer structures, the size and type of the sewer pipes, and the slope of said pipes between structures. The elevations on top of castings of the structures and their accompanying pipe inverts are accurate to within 0.05 feet and were gathered using a total station applying standard radial surveying techniques.

Jonathan D. Polson
Jonathan D. Polson
Registered Land Surveyor - LS21500011
State of Indiana

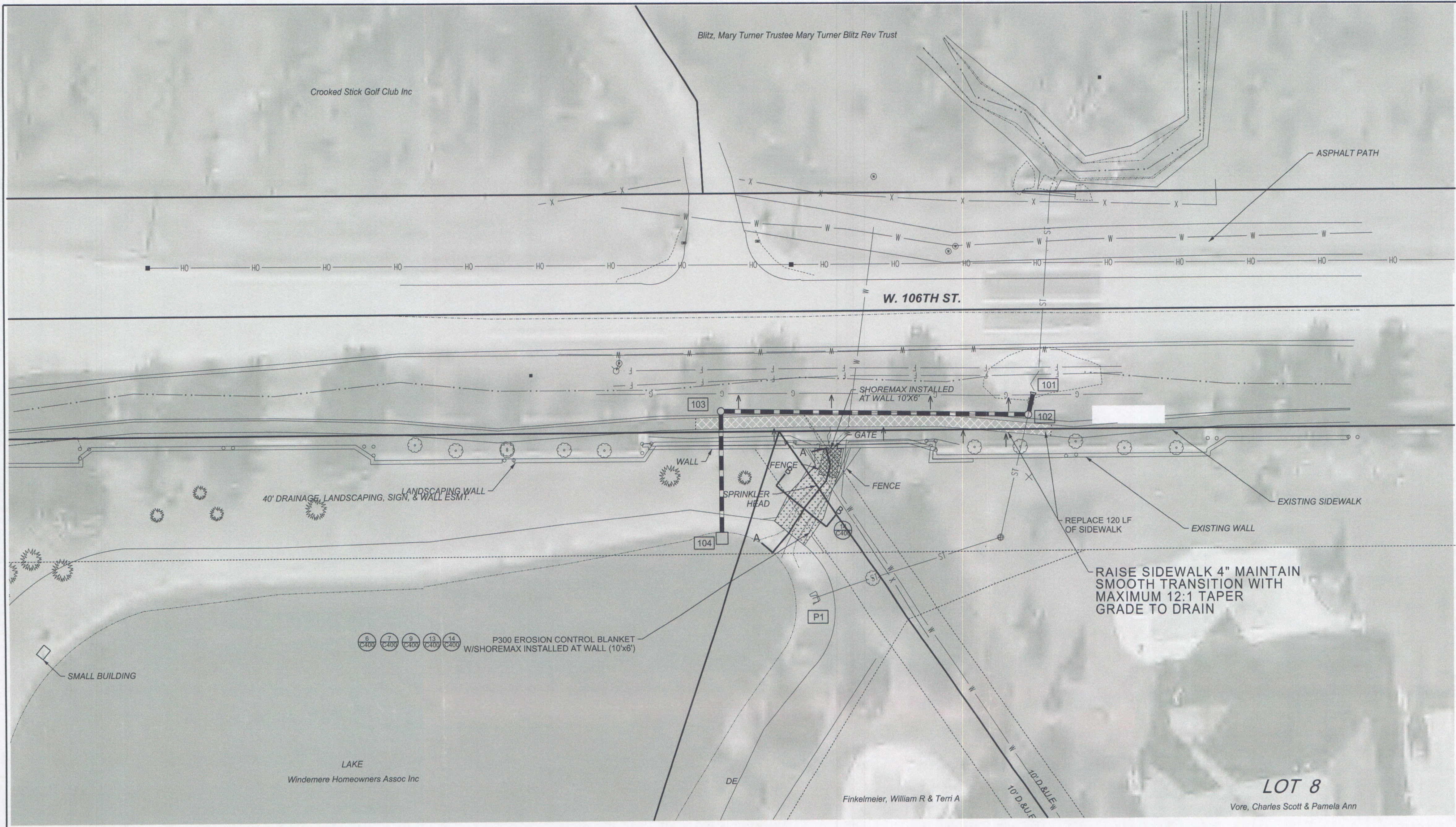


NUMBER	DESCRIPTION	DATE
1	PER HOA COMMENTS	12-23-16

SHEET INDEX	
SHEET NO	DESCRIPTION
C100	TITLE SHEET
C200	EXISTING TOPOGRAPHY / DEMOLITION PLAN
C300	PLAN AND PROFILE
C301	POND SHORELINE STABILIZATION
C400	MISC. DETAILS

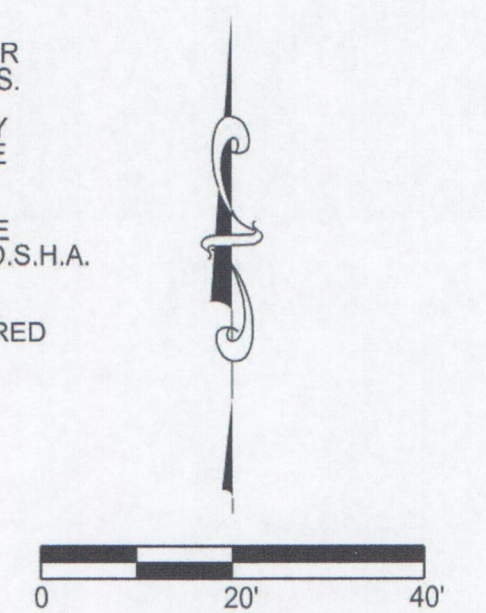
Date: 11-19-15
Project No: 14025
Sheet No:
C100





STORM SEWER GENERAL NOTES:

1. ALL STORM SEWER CONSTRUCTION SHALL BE PER HAMILTON COUNTY DETAILS AND SPECIFICATIONS.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL UTILITY LOCATIONS BEFORE CONSTRUCTION BEGINS.
3. ALL CONSTRUCTION ACTIVITY ON THIS SITE TO BE PERFORMED IN COMPLIANCE WITH APPLICABLE O.S.H.A. STANDARDS
4. STRUCTURES TO HAVE PRE-CAST TOP AS REQUIRED TO FIT CASTING.



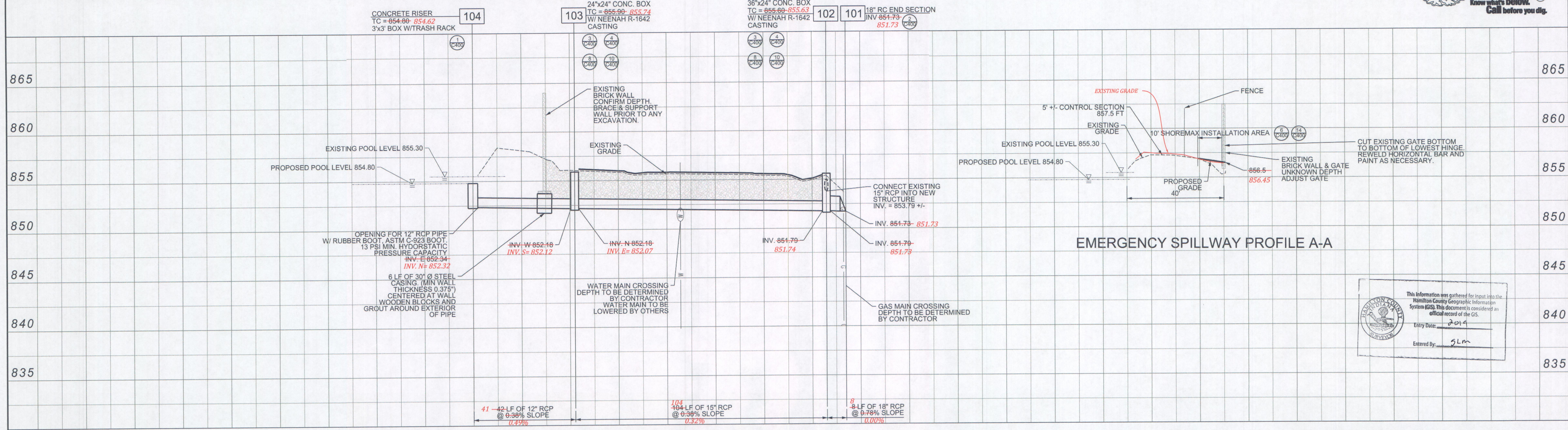
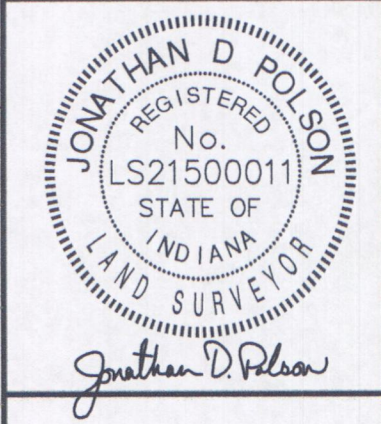
RECORD DRAWING

LEGEND

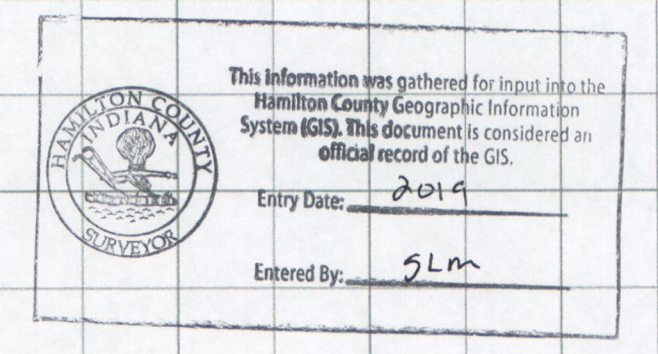
EXISTING	PROPOSED
—S— STORM SEWER	—S— STORM SEWER
—S— SANITARY SEWER	○ STORM MANHOLE
—W— WATER LINE	■ STORM INLETS
—X— FENCE LINE	□ CURB INLET
—OH— OVERHEAD UTILITIES	△ END SECTION
—T— TELEPHONE LINE	102 STORM STRUCTURE NO.
—G— GAS LINE	← FLOW DIRECTION
—FO— FIBER OPTICS	780.5 PROPOSED GRADE
○ STORM MANHOLE	—SSD— SUBSURFACE DRAIN
■ STORM INLETS	
○ SANITARY MANHOLES	
■ UTILITY POLES	
○ WATER VALVE	
○ TREE	
○ TREE LINE	
● SHRUB	
■ WATER METER	
— MW — WATER WELL	
— MB — MAILBOX	
— LP — LIGHT POLE	
— S — SIGN	
— BW — BRICK WALL	
— RP — RIPRAP	
— E — EASEMENT	



Storm Sewer Plan and Profile
Windemere Subdivision Pond Reconstruction
CLAY TOWNSHIP
CARMEL, INDIANA (HAMILTON COUNTY)



EMERGENCY SPILLWAY PROFILE A-A



PLAN & PROFILE STRUCTURES

Project No: 14025
 Sheet No:
C300

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