



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 7, 2012

To: Hamilton County Drainage Board

Re: John Osborne Drain, Bridlebourne Reconstruction - Revised

This report is a revision of the John Osborne Drain, Bridlebourne Reconstruction report to the Board dated April 11, 2011 and approved at a hearing on May 23, 2011 (see Hamilton County Drainage Board Minutes Book 13, pages 404 to 414). Since that time there have been several meetings with the Bridlebourne Homeowners Association, City of Carmel and my office. This revision is based on the final agreed fixed between the City of Carmel and the Bridlebourne HOA.

Attached are plans, specifications and drain map for the reconstruction of the Bridlebourne Drain. This drain is located in Clay Township, more specific on the east side of Shelborne Road between 106th and 116th Streets.

The Bridlebourne Drain was established as an arm to the John Osborne Drain by the Board through a petition by the developer. My report to the Board for sections 2 and 3 dated January 7, 1988 was approved by the Board at hearing on February 8, 1988 (see Hamilton County Drainage Board Minutes Book 2, pages 254 – 255). The portion across Section 5 was included in my report dated February 21, 1989 for Larkspur Drain, Section1 which was approved by the Board at hearing on April 24, 1989 (see Hamilton County Drainage Board Minutes Book 2, page 357). The remainder of the drain is covered in my report for the John Osborne Drain dated December 22, 1994 which was approved by the Board at hearing on February 27, 1995 (see Hamilton County Drainage Board Minutes Book 4, pages 72-75).

Over the period of time that Larkspur and Bridlebourne have been completed, this office has had many complaints regarding high water. Because of the complaints the Board contracted American Consulting, Inc. (now American Structurepoint, Inc.) at the meeting on August 23, 2004 through a RFP process (see Hamilton County Drainage Board Minutes Book 7, page 549). Three options were submitted to this office for review on April 18, 2005. After years of working with the Bridlebourne HOA and additional investigation, it was determine the lakes could not be lowered without causing problems. In mid-2011, Mike McBride, City of Carmel Engineer, and I worked with American Structurepoint to determine a plan to add additional storage volume

without being able to lower the normal pool elevations in Bridlebourne. Several options were reviewed during this process.

The result of that new engineering was to add a new off-site dry detention basin on the University High School property, which increase the storage capacity available for Pond 1. The dry detention basin will be connected to Pond 1 by a 36" pipe that will be sloped from the dry basin to Pond 1 and has been sized to allow Pond 1 to back up through this pipe into the dry basin. As the level of Pond 1 recedes after the storm events, this runoff stored in the dry basin will be released back into Pond 1 and drain through the existing system. The dry basin was sized to accommodate runoff from storms up to the 10-year storm event. Larger storm events will utilize the spillway provided on the eastern end of the dry detention basin to overflow into the existing University High School dry basin. The existing University High School pond system was analyzed to verify that there would not be an increase in the runoff rate to the east towa5rs the Spring Mill Run Legal Drain from what was designed release rate of this existing basin. The analysis shows that no detrimental impact will occur to the University High School pond or storm sewer system.

Along with the additional dry basin, some work is proposed to the storm sewer system in Bridlebourne, which is part of the John Osborne Regulated Drain, to remove restriction and improve flow. This work is all shown in the revised final plans that were filed in my office on July 31, 2012. These plans call for the following improvements:

- 1. The existing 24" RCP between the north inlet on Hintocks Circle and the Larkspur pond to be removed and replaced with a 30" RCP.
- 2. Expand the storage volume of the Bridlebourne north pond (Pond 1) by creating a separate basin located adjacent to the existing dry basin on the University High School property. The dry detention basin will be connected to Pond 1 by a 36" RCP.
- 3. The current 18" RCP outlet pipe for the Bridlebourne south pond (Pond 2) to be removed and replaced with an 18" RCP pipe.
- 4. The current outlet channel between the Bridlebourne south pond (Pond 2) and Sedgemoor Circle Road will be cleared of large woody vegetation and regraded as needed.

The reconstructed drain will consist of the following:

18" RCP	140 feet	36" RCP	586 feet
30" RCP	151 feet		

The total length of new tile shall be 877 feet. Of that footage, 288 feet is replacing existing regulated drain tile or open ditch. This proposal will add an additional 589 feet to the drains total length.

The above improvements are outlined in the report submitted by American Structurepoint dated July 29, 2012 and the accompanying plans dated July 30, 2012. The cost estimate prepared by American Structurepoint dated July 30, 2012 for this work is as follows:

	Description	<u>Unit</u>	Quantity	Unit Price	<u>Total</u>
1.	Mobilization, Demobilization	LS	1	\$17,600.00	\$17,600.00

2.	Clearing & Grubbing	LS	1	\$7,000.00	\$7,000.00
3.	Tree Removal	LS	1	\$5,000.00	\$5,000.00
4.	Utility Coordination	LS	1	\$10,000.00	\$10,000.00
5.	Pipe Removal	LFT	720	\$25.00	\$18,000.00
6.	Curb Removal	LFT	44	\$18.00	\$792.00
7.	Fence, Remove & Replace	LFT	20	\$105.00	\$2,100.00
8.	Storm Structure Removal	EACH	6	\$1,000.00	\$6,000.00
9.	Paver Salvage & Replacement	SYD	55	\$200.00	\$11,000.00
10.	Earthwork, Export	CYS	17,975	\$10.00	\$179,750.00
	Concrete Curb	LFT	44	\$28.00	\$1,232.00
12.	Type "J" Manhole	EACH	4	\$3,500.00	\$14,000.00
	30-Inch RCP Pipe	LFT	151	\$80.00	\$12,080.00
	36-Inch RCP Pipe	LFT	586	\$80.00	\$46,880.00
	End Section – 30"	EACH	1	\$500.00	\$500.00
16.	End Section – 36"	EACH	2	\$750.00	\$1,500.00
	18-Inch RCP Pipe	LFT	140	\$45.00	\$6,300.00
	End Section – 18"	EACH	2	\$250.00	\$500.00
19.	B-Borrow for Backfill	CYS	34	\$20.00	\$680.00
20.	Compacted #8 Stone	TONS	29	\$30.00	\$870.00
	Erosion Control Blanket	SYD	3,957	\$2.50	\$9,892.50
22.	Seeding	LBS	610	\$2.50	\$1,525.00
	Silt Fence Inlet Protection	EACH	3	\$250.00	\$750.00
24.	Catch All Inlet Protection	EACH	4	\$350.00	\$1,400.00
	#2 Stone Construction Entrance	TONS	210	\$25.00	\$5,250.00
26.	Riprap, Class 2	TONS	305	\$25.00	\$7,625.00
	Rock Check Dam	EACH	3	\$400.00	\$1,200.00
	Contingency			10%	\$34,742.65
	Grand Total				\$382,169.15

The work shall be conducted in existing platted easements for Larkspur and Bridlebourne. Those easements are shown on the following secondary plats:

•	Larkspur Phase 1	Instrument Number 8905082
•	Bridlebourne Section 2	Instrument Number 8742244
•	Bridlebourne Section 3	Instrument Number 8804920
•	Bridlebourne Section 4	Instrument Number 8820715
•	Bridlebourne Section 5	Instrument Number 9026131
•	Bridlebourne Section 6	Instrument Number 9134257

The above listed secondary plats are on file in the office of the Hamilton County Recorder.

The following lots will be affected with the removal and replacement of pipe and the clearing and regrading of the open ditch:

Owner	Lot	Parcel Number
Larkspur HOA	Common Area A	17-13-05-00-06-009.000
Roger & Jacqueline Malone	Lot 9	17-13-05-00-06-010.000

Bridlebourne HOA	Common Area G	17-13-05-00-08-015.000
Bridlebourne HOA	Common Area	17-13-05-00-08-016.000
Bridlebourne HOA	Common Area J	17-13-05-00-07-017.000
Niraj Gupta & Parul Agarwal	Lot 8A	17-13-05-00-08-001.000
Christopher & Mercy Obeime	Lot 7	17-13-05-00-08-002.000
Yiming Yang & Qi Huang Zheng	Lot 10	17-13-05-00-07-005.000
Christopher & Jane Clark	Lot 11	17-13-05-00-07-006.000
University High School of Indiana I	nc.	17-13-05-00-00-001.103
Bridlebourne HOA	Common Area I	17-13-05-00-05-012.000
Tahir & Afia Naqvi	Lot 61	17-13-05-00-04-012.000
William F. Conour	Lot 62	17-13-05-00-04-011.000
William F. Conour	Pt. Lot 63	17-13-05-00-02-003.001

Additional easement is needed beyond the existing easement on the following parcels and the City of Carmel has appraisals complete and offer pending with the landowners. The City of Carmel will be purchasing the required easements from the following landowners

<u>Owner</u>	Lot	Parcel Number
University High School of Indian	17-13-05-00-00-001.103	
Niraj Gupta & Parul Agarwal	Lot 8A	17-13-05-00-08-001.000
Christopher & Mercy Obeime	Lot 7	17-13-05-00-08-002.000

Since the submission of the 2007 report the area of southwest Clay has been annexed into the City of Carmel. Prior to this time Carmel passed Ordinance C-263 which annexed Southwest Clay on November 24, 2004. This was remonstrated against in Hamilton County Superior Court, Cause No. 29D03-0502-MI-188. After the filing negotiations between the residents of Southwest Clay and the City of Carmel produced a settlement agreement dated September 6, 2005. This agreement is attached as Exhibit B to the annexation ordinance, Ordinance No. C-263-A which was passed on October 7, 2005, Instrument No. 200500011849. In this agreement the drainage problems associated with Bridlebourne and Larkspur are set out as items to be addressed with the annexation. The project is mentioned in the Southwest Clay Township Annexation Master Drainage Plan dated July 20, 2009. This plan was prepared for the City of Carmel by Cross Roads Engineers, Inc. In that plan the proposed project for Bridlebourne / Larkspur is considered a first level priority.

On February 8, 2011 the City of Carmel passed a bond issue with the Bridlebourne / Larkspur project, Interlocal Agreement C-266-11, Instrument No. 2011012198, which included in the funding package. On November 8, 2010 the Hamilton County Drainage Board approved an Interlocal Agreement for the construction by the Drainage Board of the improvements with the funding for the improvements to come from Carmel. On February 7, 2011 this agreement was approved by the City of Carmel.

Therefore, the funding of the proposed reconstruction project will be provided by the City of Carmel. Property Owners within the drainage shed will not be assessed for the reconstruction. The current maintenance assessments will not change with this proposal. Other than the purchase of easements mentioned above, no damages will result to property owners by the work; therefore, all damages other than required easements shall be set at \$0.00.

No state or federal permits are required for this reconstruction.

I recommend that this item be set for hearing for September 26, 2012.

Sincerely,

Kenton C. Ward, CFM Hamilton County Surveyor

KCW/llm

BRIDLEBOURNE SUBDIVISION - DRAINAGE IMPROVEMENTS ENGINEER'S PRELIMINARY OPINION OF PROBABLE COSTS OF CONSTRUCTION

July 30, 2012

	CARME	L, INDIANA				
ITEM NO.	DESCRIPTION	UNIT	QUANTITY		UNIT PRICE	TOTAL
1	CLEARING AND GRUBBING	LS	1	\$	7,000.00	\$ 7,000.00
2	TREE REMOVAL	LS	1	\$	5,000.00	\$ 5,000.00
3	UTILITY COORDINATION	LS	1	\$	10,000.00	\$ 10,000.00
4	PIPE REMOVAL	LFT	720	\$	25.00	\$ 18,000.00
5	CURB REMOVAL	LFT	44	\$	18.00	\$ 792.00
6	FENCE, REMOVE AND REPLACE	LFT	20	\$	105.00	\$ 2,100.00
7	STORM STRUCTURE REMOVAL	EA	6	\$	1,000.00	\$ 6,000.00
8	PAVER SALVAGE AND REPLACEMENT	SYD	55	\$	200	\$ 11,000.00
9	EARTHWORK, EXPORT	CYS	17,975	\$	10.00	\$ 179,750.00
10	CONCRETE CURB	LFT	44	\$	28.00	\$ 1,232.00
11	TYPE "J" MANHOLE	EA	4	\$	3,500.00	\$ 14,000.00
12	PIPE, 30" RCP	LFT	151	\$	80.00	\$ 12,080.00
13	PIPE, 36" RCP	LFT	586	\$	80.00	\$ 46,880.00
14	END SECTION, 30"	EA	1	\$	500.00	\$ 500.00
15	END SECTION, 36"	EA	2	\$	750.00	\$ 1,500.00
16	PIPE, 18" RCP	LFT	140	\$	45.00	\$ 6,300.00
17	END SECTION, 18"	EA	2	\$	250.00	\$ 500.00
18	B-BORROW FOR STRUCTURAL BACKFILL	CYS	34	\$	20.00	\$ 680.00
19	COMPACTED AGGREGATE, #8 STONE	TONS	29	\$	30.00	\$ 870.00
20	EROSION CONTROL BLANKET	SYS	3,957	\$	2.50	\$ 9,892.50
21	SEEDING	LBS	610	\$	2.50	\$ 1,525.00
22	SILT FENCE INLET PROTECTION	EA	3	\$	250.00	\$ 750.00
23	CATCH ALL INLET PROTECTION	EA	4	\$	350.00	\$ 1,400.00
24	#2 STONE FOR CONSTRUCTION ENTRANCE	TONS	210	\$	25.00	\$ 5,250.00
25	RIPRAP, CLASS 2	TONS	305	\$	25.00	\$ 7,625.00
26	ROCK CHECK DAM	EA	3	\$	400.00	\$ 1,200.00
27	MOBILIZATION/DEMOBILIZATION	LS	1	\$	17,600.00	\$ 17,600.00
	TOTAL					\$ 347,426.50
					15%	52,113.9
			CO	NTIN	IGENCY (10%)	34,742.65
					TOTAL	\$ 382,169.15

EASEMENTS

399,540.48 205,800.00 605,340.48

399,540,48

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD NOBLESVILLE, INDIANA

IN THE MATTER OF THE RECONSTRUCTION OF THE

John Osborne Drain, Bridlebourne Reconstruction (Revised)

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the John Osborne Drain, Bridlebourne Reconstruction came before the Hamilton County Drainage Board for hearing on September 26, 2012, 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 *John Osborne Drain, Bridlebourne 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

OFFICE OF HAMILTON COUNTY DRAINAGE BOARD August 24, 2012

RETURNED

Notice of Hearing on Reconstruction & Schedule of Assessments and Damages on the **John Osborn Drain**, **Bridlebourne Reconstruction - Revised**.

Christian, Justin & Darrianne P 8921 Greenridge Dr Indianapolis, IN 46278

Under the Indiana Drainage Code, all land which drains directly, or indirectly, may be assessed for either maintenance cost or reconstruction cost within the drain. In making the calculation for each parcel, the Drainage Board must calculate the percentage of the cost attributable to each parcel of land benefitted. The Drainage Board has received a reconstruction report and schedule of assessments which affects your land. The purpose of the reconstruction project is to perform work which will substantially improve the drainage for the entire watershed served by the drain.

You are hereby notified that the reconstruction report of the County Surveyor and the schedule of assessments made by the Drainage Board have been filed and are available for public inspection in the office of the County Surveyor. The chart below contains your proposed assessment and your percentage of the total reconstruction assessment.

The reconstruction report of the Surveyor and schedule of damages and benefits as determined by the Drainage Board for the proposed improvement known as the **John Osborn Drain**, **Bridlebourne Reconstruction** have been filed and are available for inspection in the office of the County Surveyor. The schedule of assessments shows the following lands in your name are affected as follows. This assessment is not a charge for services associated with regulating the quality of storm water within your city or town.

Description of Land 17-13-05-00-08-008.000	Acres Benefited	Damages	Reconst. Assmt.	% of Total Benefit	Maint. Assmt.	
S5 T17 R3 Bridlebourne 6th Lot 1 1.29Ac	1.29	Zero	*	0.67%	*	

The hearing on the Surveyor's reconstruction report and on the schedules of damages and assessments are set for hearing at 9:50 A.M. on September 26, 2012, in the Commissioner's Court. The law provides that objections must be written and filed not less than 5 days before the date of the hearing. Objections may be for causes as specified by law and which are available at the Surveyor's Office. Written evidence in support of objections may be filed. The failure to file objections constitutes a waiver of your right to thereafter object, either before the Board or in court on such causes, to any final action of the Board. On or before the day of the hearing before the Board, the Surveyor shall and any owner of affected lands may cause written evidence to be filed in support of or in rebuttal to any filed objections.

HAMILTON COUNTY DRAINAGE BOARD One Hamilton County Square, Ste. 188 Noblesville, IN 46060-2230

For a copy of the Surveyor's Report to the Drainage Board and a copy of the map, if applicable, please go to www.hamiltoncounty.in.gov/drainageboardnotices.

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD IN THE MATTER OF

John Osborne Drain, Bridlebourne Reconstruction (Revised)

NOTICE

То	Whom	It	May	Concern	and:			

Notice is hereby given of the hearing of the Hamilton County Drainage Board concerning the reconstruction of the John Osborne Drain, Bridlebourne Reconstruction (Revised) on September 26, 2012 at 9:50 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)		DRAINAC	GE BO	DARD

IN THE MATTER OF John Osborne Drain, Bridlebourne Reconstruction

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting September 26, 2012 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: Steven C. Dillinger
PRESIDENT

ATTEST: Lynette Mosbaugh
SECRETARY