



SURVEYOR'S OFFICE

Hamilton County

Kenton C. Ward, Surveyor

Phone (317) 776-8495

Fax (317) 776-9628

Suite 188

One Hamilton County Square

Noblesville, Indiana 46060-2230

August 12, 2002

To: Hamilton County Drainage Board

Re: J.W. Brendel Drain, Lakes at Hayden Run, Section 1 Arm

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the Lakes at Hayden Run, Section 1 Arm, J.W. Brendel Drain. I have reviewed the submittals and petition and have found each to be in proper form.

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 drain will consist of the following:

6" SSD	11,490 ft	18" RCP	246 ft	27" RCP	730 ft
12" RCP	1,615 ft	21" RCP	1,120 ft	30" RCP	245 ft
15" RCP	378 ft	24" RCP	333 ft	36" RCP	1,012 ft
				48" RCP	336 ft

The total length of the drain will be 17,505 feet.

The retention ponds located in Common Areas' 1 and 2 will be considered part of the regulated drain. Only the inlet and outlet will be maintained as part of the regulated drain. The maintenance such as mowing of the pond will be the responsibility of the Homeowners Association. The Board will however, retain jurisdiction for ensuring the storage volume for which the lake was designed will be retained. Thereby, allowing no fill or easement encroachments.

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs. Only the main SSD lines, which are located within the right of way, are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain.

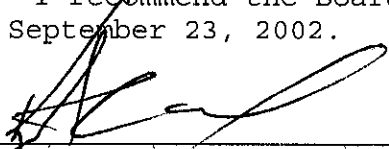
Parcels for this drain will be assessed for the J.W. Brendel Drain.

I have reviewed the plans and believe the drain will benefit each lot equally. Therefore, I recommend each lot be assessed equally. I also believe that no damages will result to landowners by the construction of this drain. I recommend a maintenance assessment of \$65.00 per lot, \$10.00 per acre for roadways, with a \$65.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$4,869.60.

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC 36-9-27-67 to 69. Therefore, this drain shall be designated as an Urban Drain.

I recommend that upon approval of the above proposed drain that the Board also approve the attached non-enforcement request. This request is for the reduction of the regulated drain easement to those easements widths as shown on the secondary plat for The Lakes at Hayden Run Section 1 as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for September 23, 2002.



Kenton C. Ward
Hamilton County Surveyor

KCW/pl1

STATE OF INDIANA)
)
COUNTY OF HAMILTON)

TO: HAMILTON COUNTY DRAINAGE BOARD
 % Hamilton County Surveyor, Courthouse, Noblesville, IN 46060

In the matter of The Lakes At Hayden Run Subdivision, Section One Drain
Petition.

Petitioner is the owner of all lots in the land affected by the proposed new regulated drain. The drainage will affect various lots in The Lakes At Hayden Run, a subdivision in Hamilton County, Indiana. The general route of such drainage shall be in existing easements and along public roads as shown in the plans on file in the Surveyor's Office.

Petitioner believes that the cost, damages and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land likely to be benefitted thereby. Petitioner believes the proposed improvements will:

- (a) improve public health
- (b) benefit a public street
- (c) be of public utility

Petitioner agrees to pay the cost of construction of the drainage system and requests periodic maintenance assessments by the Board thereafter.

The Petitioner also agrees to the following:

1. To provide the Drainage Board a Performance Bond for the portion of the drainage system which will be made a regulated drain. The bond will be in the amount of 100% of the Engineers estimate. The bond will be in effect until construction of 100% of the system is completed and so certified by the Engineer.

2. The Petitioner shall retain an Engineer throughout the construction phase. At completion of the project the Petitioner's Engineer shall certify that the drainage system which is to be maintained as a regulated drain has been constructed as per construction plans.

3. The Petitioner agrees to request in writing to the County Surveyor any changes from the approved plan and must receive written authorization from the County Surveyor prior to implementation of the change. All changes shall be documented and given to the Surveyor to be placed in the Drain File.
4. The Petitioner shall instruct his Engineer to provide a reproducible print on a 24" x 36" mylar of the final design of the Drainage System. This shall be submitted to the County Surveyor prior to the release of the Performance Bond.
5. The Petitioner shall comply with the Erosion Control Plan as specified on the construction plans. Failure to comply with the Erosion Control Plan shall be determined by the Board as being an obstruction to the drainage system. The County Surveyor shall immediately install or repair the needed measures at Petitioner cost as per IC 36-9-27-46.

The Petitioner further requests that the Drain be classified as an Urban Drain.

Thomas L. Kutz

LAND DEVELOPMENT MANAGER

Printed Name

Signed

Tom K 5/2/02
Centex Homes A Nevada General Partnership
By: Centex Real Estate Corporation, A Nevada Corporation
Its: Managing General Partner

Printed Name

RECORDED OWNER(S) OF LAND INVOLVED

DATE 5/2/02

CENTEX HOMES

April 22, 2002

Steve Cash
Hamilton County Surveyor's Office
One Hamilton County Square, Suite 188
Noblesville, IN 46060

Corporate Office

6602 East 75th Street
Suite 100
Indianapolis, IN 46250

Phone: 317-915-2200

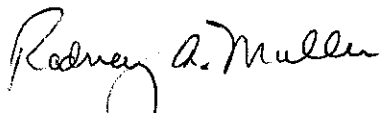
RE: Lakes at Hayden Run Section 1 Engineers Estimate and Performance bond

Dear Steve,

Enclosed is an engineers estimate letter from Stoepelwerth & Associates for the storm sewer, erosion control, and monument and marker improvements for the Lakes at Hayden Run Section 1. Also enclosed is performance bond #B2 1847255 in the amount of \$333,798.53, which matches the amount shown on the engineers estimate.

Please contact me with any questions or concerns.

Sincerely,
CENTEX HOMES

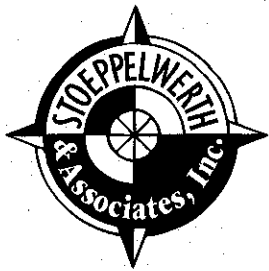


Rodney A. Muller
Land Development Project Manager
RAM/ram

FILED

APR 22 2002

OFFICE OF HAMILTON COUNTY SURVEYOR



CONSULTING ENGINEERS
LAND SURVEYORS

R.M. Stoepelwerth, PE, PLS • David J. Stoepelwerth, PE, PLS • Curtis C. Huff, PLS • Dennis D. Olmstead, PLS • Jeffery W. Darling, PLS

April 11, 2002

Hamilton County Surveyor
One Hamilton County Square
Suite 188
Noblesville, Indiana 46060

Attention: Steve Cash

Re: The Lakes At Hayden Run, Section 1

Dear Mr. Cash:

Please accept the following Engineer's Estimate for The Lakes At Hayden Run, Section 1. The amounts are as follows:

Lakes at Hayden Run, Section 1 Engineers Estimate

Description	Quantity	Unit	Unit Price	Total
Storm Sewer				
12" RCP	1542	LF	\$15.00	\$23,130.00
15" RCP	549	LF	\$17.25	\$9,470.25
18" RCP	246	LF	\$20.25	\$4,981.50
21" RCP	1094	LF	\$23.50	\$25,709.00
24" RCP	334	LF	\$25.50	\$8,517.00
27" RCP	929	LF	\$27.70	\$25,733.30
30" RCP	73	LF	\$38.00	\$2,774.00
36" RCP	1012	LF	\$44.49	\$45,023.88
48" RCP	352	LF	\$68.00	\$23,936.00
Storm Inlets	23	EA	\$1,388.00	\$31,924.00
Storm Manholes	5	EA	\$1,385.00	\$6,925.00
Yard Inlet	12	EA	\$986.00	\$11,832.00
6" SSD w/ Backfill	9129	LF	\$4.52	\$41,263.08
21" CES	2	EA	\$362.82	\$725.64
27" CES	2	EA	\$500.00	\$1,000.00
30" CES	1	EA	\$700.00	\$700.00
36" CES	2	EA	\$950.00	\$1,900.00
48" CES	2	EA	\$1,000.00	\$2,000.00
Total				\$267,544.65

2636 Elm Hill Pike, Suite 500
Nashville, Tennessee 37214

Copy

HCDB 2002-00314

Bond No. B2 1847255

SUBDIVISION PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we, CROSSMANN COMMUNITIES PARTNERSHIP, dba: CROSSMANN COMMUNITIES, INC. located at 9202 North Meridian Street, Suite 300, Indianapolis, Indiana 46260, as Principal, and GULF INSURANCE COMPANY, authorized to do business in the State of Indiana, and having an office at 3055 Lebanon Road, Building No. 3, Nashville, Tennessee 37214, as Surety, are held and firmly bound unto Hamilton County Board of Commissioners located at One Hamilton County Square, Rm 157, Noblesville, IN 46060, as Obligee, in the penal sum of Three hundred thirty-three thousand seven Hundred ninety-eight and 53/100 Dollars (\$ 333,798.53) for the payment of which sum well and truly to be made, we bind ourselves, our heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents;

WHEREAS, the above bounden principal has been granted approval by the above named Obligee for Lakes of Hayden Run, Section One - Storm Sewer, Erosion Control, Monuments and Markers as set forth at a meeting of the ~~Town of~~ Hamilton County Board of Commissioners on _____, for final revision.

NOW, THEREFORE, the condition of the above obligation is such, that if the said Principal shall complete the above improvements in accordance with the plans and specifications prepared by _____, within the _____ year period from the date hereof; and shall indemnify and save harmless the Town from all costs and damages which it may suffer by reason of failure to do so, and fully reimburse and repay the Obligee any outlay and expense which it may incur in making good any such default, then this obligation shall be null and void, otherwise to remain in full force and effect.

THE FOREGOING OBLIGATIONS, however, is limited by the following express conditions, the performance of which shall be a condition precedent to any rights of claims or recovery hereunder:

1. Upon the discovery by the Obligee, or by the Obligee's agent or representative, or any act or omission that shall or might involve a loss hereunder, the Obligee shall endeavor to give written notice thereof with the fullest information obtainable at the time to the Surety at its office at Nashville, Tennessee.

FILED

APR 22 2002

0500

Bond No. B2 1847255

2. Legal proceedings for recovery hereunder may not be brought unless begun within twelve (12) months from the date of the discovery of the act or omission of the Principal on account of which claim is made.

3. The Principal shall be made a party of any suit or or action for recovery hereunder, and no judgment shall be rendered against the Surety in excess of the penalty on this instrument.

4. No right of action shall accrue hereunder to or for the use or benefit of anyone other than the Obligee, and the Obligee's right hereunder may not be assigned without the written consent of the Surety.

IN WITNESS WHEREOF, this instrument has been executed by the duly authorized representative of the Principal and the Surety.

SIGNED, SEALED AND DATED: April 17, 2002

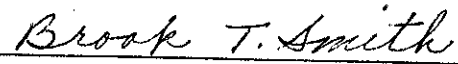
(Seal)

Crossmann Communities Partnership
By: Crossmann Communities, Inc.

By: 
Steven M. Dunn, President

(Seal)

Gulf Insurance Company

By: 
Brook T. Smith, Attorney-in-Fact

Copy

GULF INSURANCE COMPANY
HARTFORD, CONNECTICUT
POWER OF ATTORNEY

ORIGINALS OF THIS POWER OF ATTORNEY ARE PRINTED ON BLUE SAFETY PAPER WITH TEAL INK.

KNOW ALL MEN BY THESE PRESENTS: That the Gulf Insurance Company, a corporation duly organized under the laws of the State of Connecticut, having its principal office in the city of Irving, Texas, pursuant to the following resolution, adopted by the Finance & Executive Committee of the Board of Directors of the said Company on the 10th day of August, 1993, to wit:

"RESOLVED, that the President, Executive Vice President or any Senior Vice President of the Company shall have authority to make, execute and deliver a Power of Attorney constituting as Attorney-in-Fact, such persons, firms, or corporations as may be selected from time to time; and any such Attorney-in-Fact may be removed and the authority granted him revoked by the President, or any Executive Vice President, or any Senior Vice President, or by the Board of Directors or by the Finance and Executive Committee of the Board of Directors.

RESOLVED, that nothing in this Power of Attorney shall be construed as a grant of authority to the attorney(s)-in-fact to sign, execute, acknowledge, deliver or otherwise issue a policy or policies of insurance on behalf of Gulf Insurance Company.

RESOLVED, that the signature of the President, Executive Vice President or any Senior Vice President, and the Seal of the Company may be affixed to any such Power of Attorney or any certificate relating thereto by facsimile, and any such powers so executed and certified by facsimile signature and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond and documents relating to such bonds to which they are attached."

Gulf Insurance Company does hereby make, constitute and appoint

James T. Smith John B. Manus Kathy Hobbs James H. Martin Raymond M. Hundley
Brook T. Smith Jason D. Cromwell

its true and lawful attorney(s)-in-fact, with full power and authority hereby conferred in its name, place and stead, to sign, execute, acknowledge and deliver in its behalf, as surety, any and all bonds and undertakings of suretyship, and to bind Gulf Insurance Company thereby as fully and to the same extent as if any bonds, undertakings and documents relating to such bonds and/or undertakings were signed by the duly authorized officer of the Gulf Insurance Company and all the acts of said attorney(s)-in-fact, pursuant to the authority herein given, are hereby ratified and confirmed.

The obligation of the Company shall not exceed five million (5,000,000) dollars.

IN WITNESS WHEREOF, the Gulf Insurance Company has caused these presents to be signed by any officer of the Company and its Corporate Seal to be hereto affixed.

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS



GULF INSURANCE COMPANY

Lawrence P. Minter

Lawrence P. Minter
Executive Vice President

On this 1st day of October, AD 2001, before me came Lawrence P. Minter, known to me personally who being by me duly sworn, did depose and say: that he resides in the County of Bergen, State of New Jersey; that he is the Executive Vice President of the Gulf Insurance Company, the corporation described in and which executed the above instrument; that he knows the seal of said corporation; that the seal affixed to the said instruments is such corporate seal; that it was so affixed by order of the Board of Directors of said corporation and that he signed his name, thereto by like order.

STATE OF NEW YORK }
COUNTY OF NEW YORK } SS



Angie Mahabir-Begazo

ANGIE MAHABIR-BEGAZO
Notary Public, State of New York
No. 01MA6019988
Qualified in Kings County
Commission Expires February 16, 2003

I, the undersigned, Senior Vice President of the Gulf Insurance Company, a Connecticut Corporation, DO HEREBY CERTIFY that the foregoing and attached POWER OF ATTORNEY remains in full force.

Signed and Sealed at the City of New York.



Dated the 17th day of April, 20 02

George Biancardi

George Biancardi
Senior Vice President

FINDINGS AND ORDER

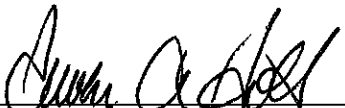
CONCERNING THE MAINTENANCE OF THE

J. W. Brendel Drain, Lakes @ Hayden Run Section 1 Arm


On this *23rd day of September 2002*, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *J. W. Brendel Drain, Lakes @ Hayden Run Section 1 Arm*.

Evidence has been heard. Objections were presented and considered. The Board then adopted the original/amended Schedule of Assessments. The Board now finds that the annual maintenance assessment will be less than the benefits to the landowners and issues this order declaring that this Maintenance Fund be established.

HAMILTON COUNTY DRAINAGE BOARD




President

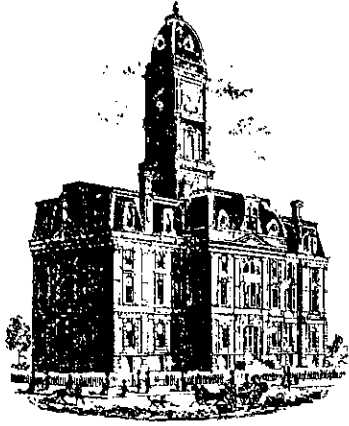


Member



Member

Attest: 



Kew

SURVEYOR'S OFFICE
Hamilton County

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

To: Hamilton County Drainage Board

August 10, 2010

Re: JW Brendle: Lakes at Hayden Run Section 1

Attached are plans, and other information for Lakes at Hayden Run Section 1. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated August 12, 2002. The report was approved by the Board at the hearing held September 23, 2002. (See Drainage Board Minutes Book 6, Pages 443-445) The changes are as follows:

Structure:	Length:	Size	Material:	Up Invert:	Dn Invert	Grade:	Changes:
229-228	30	12	RCP	907.9	907.81	0.3	
228-227	150	15	RCP	907.81	906.31	1	
227-226	101	18	RCP	906.31	906.01	0.3	
226-225	59	18	RCP	906.01	905.83	0.3	
225-224	36	21	RCP	905.83	905.72	0.3	
224-223	157	21	RCP	905.72	905.25	0.3	
223-217A	177	24	RCP	905.25	904.82	0.25	
217A-217	156	24	RCP	904.82	904.43	0.25	
231-230	58	12	RCP	908.5	907.92	1	
230-217A	150	12	RCP	907.92	904.82	2.07	
235-234	36	12	RCP	908.1	907.92	0.5	
234-233	157	12	RCP	907.92	907.14	0.5	
233-236	162	12	RCP	907.14	905.52	1	
236-237	150	21	RCP	905.52	905.07	0.3	
237-238	33	21	RCP	905.07	904.97	0.3	
238-239	225	21	RCP	904.97	902.7	1.01	
272-273	216	36	RCP	902.7	902.27	0.2	
273-243	142	36	RCP	902.27	901.98	0.2	
243-274	483	36	RCP	901.98	901.03	0.2	
274-275	171	36	RCP	901.03	900.7	0.2	
222-221	96	12	RCP	906	905.71	0.3	

221-219	142	12	RCP	905.71	905.29	0.3	
219-218	56	18	RCP	905.29	905.12	0.3	
218-217	229	21	RCP	905.12	904.43	0.3	
220-219	36	12	RCP	906.01	905.29	2	
240-241	154	12	RCP	907	906.54	0.3	
241-242	36	15	RCP	906.54	906.43	0.31	
242-243	142	15	RCP	906.43	901.98	1.78	
217-216	190	27	RCP	904.43	903.83	0.42	
216-212	157	30	RCP	903.63	903.15	0.3	
212-211	36	30	RCP	903.15	903.05	0.3	
211-210	73	30	RCP	903.05	900	4.18	
208-207	136	12	RCP	908	906.64	1	
207-206	86	15	RCP	906.64	906.25	0.45	
206-205	30	18	RCP	906.25	906.12	0.45	
205-204	238	21	RCP	906.12	904.93	0.5	
209-206	213	12	RCP	907.95	906.25	0.8	
215-214	30	12	RCP	907	906.7	1	
214-214A	129	12	RCP	906.7	900	5.19	
203-202	141	48	RCP	900.7	900.4	0.21	
202-201	46	48	RCP	900.4	900.3	0.2	
201-200	323	48	RCP	900.3	900	0.09	174
199-198	225	27	RCP	900.08	899.63	0.2	
198-197	315	27	RCP	899.63	899	0.2	

The length of the drain due to the changes described above is now **15,189 feet**.

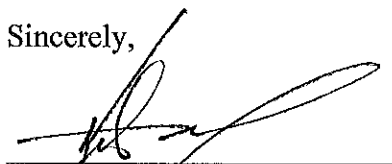
The non-enforcement was approved by the Board at its meeting on January 27, 2003 and recorded under instrument# 2000300011400.

The following sureties were guaranteed by Gulf Insurance Company and released by the Board on its April 9, 2007 meeting.

Bond-LC No: B21847255
Insured For: Storm Sewers, Erosion Control
Amount: \$333,798.53
Issue Date: April 17, 2002

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

Sincerely,



Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/slm

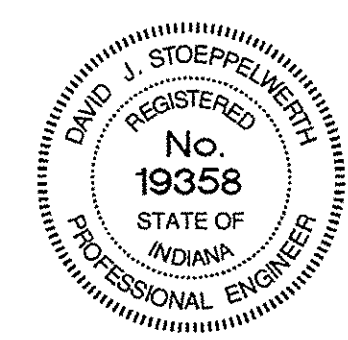
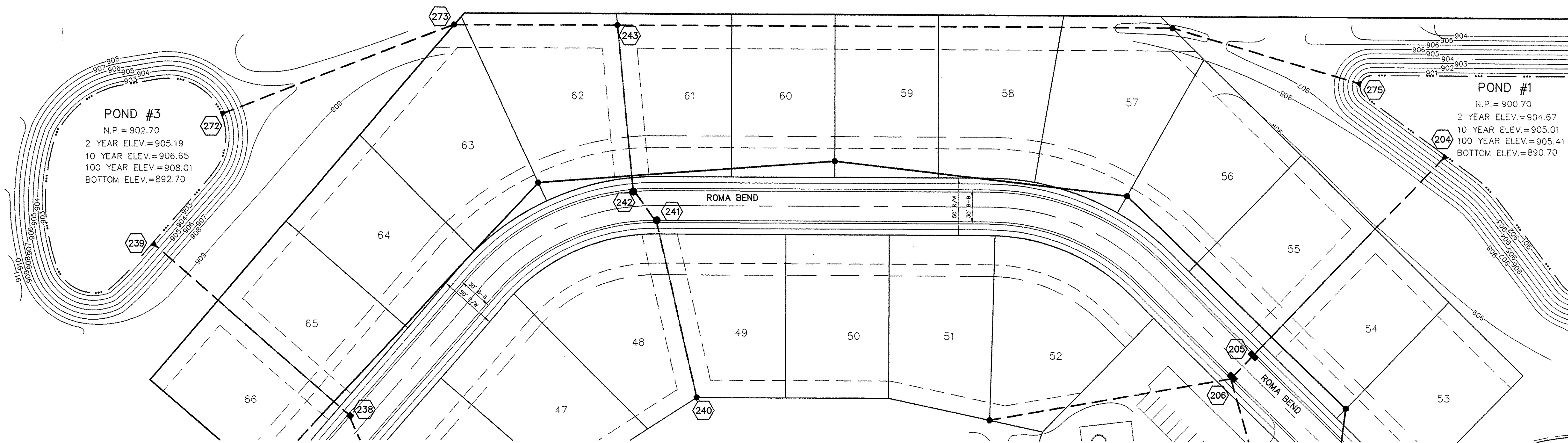
From: "Ed Fleming" <efleming@Stooppelwerth.com>
To: <jll@co.hamilton.in.us>
Date: 1/11/2007 10:52 AM
Subject: The Lakes at Hayden Run Section 1 Pond As-built Top of Bank
Attachments: LHR1-ABPondTB.pdf

CC: <lbrock@beazer.com>
Jerry,

Here is the Pond top of bank that was as-built in the above section. The Bank has been raised considerably to work with the elevations needed. If you have any questions, let me know.

Thanks!

Edward E. Fleming
Project Manager
Phone: (317) 570-4840
Fax: (317) 849-5942
Mobile: 903-9652



CERTIFIED: 3/01/02
 David J. Stoppelwirth
 SCALE: 1" = 50'

CURB INLET TABLE

PIPE SIZE	STRUCTURES LESS THAN 48" FROM T/C TO INVERT	STRUCTURES GREATER THAN 48" FROM T/C TO INVERT	ANGLE AND QUALITY OF PIPES WILL REQUIRE SPECIAL DESIGN	STEPS REQUIRED	CURB CASTING *R-3501 N	CASTING *S501 TL & TR
12" to 18"	24"x24"		DESIGN APPROVAL	No	Yes	Yes
12" to 21"	30"x30"		DESIGN APPROVAL	No	Yes	Yes
18" to 21"		MH/BOX	DESIGN APPROVAL	Yes	Yes	Yes
21" to 27"	24"x36"		DESIGN APPROVAL	No	No	Yes
12" to 24"	36"x36"		DESIGN APPROVAL	No	Yes	Yes
24" OR LARGER			DESIGN APPROVAL	No	No	Yes
24" or LARGER		MH/BOX	DESIGN APPROVAL	Yes**	Yes	Yes

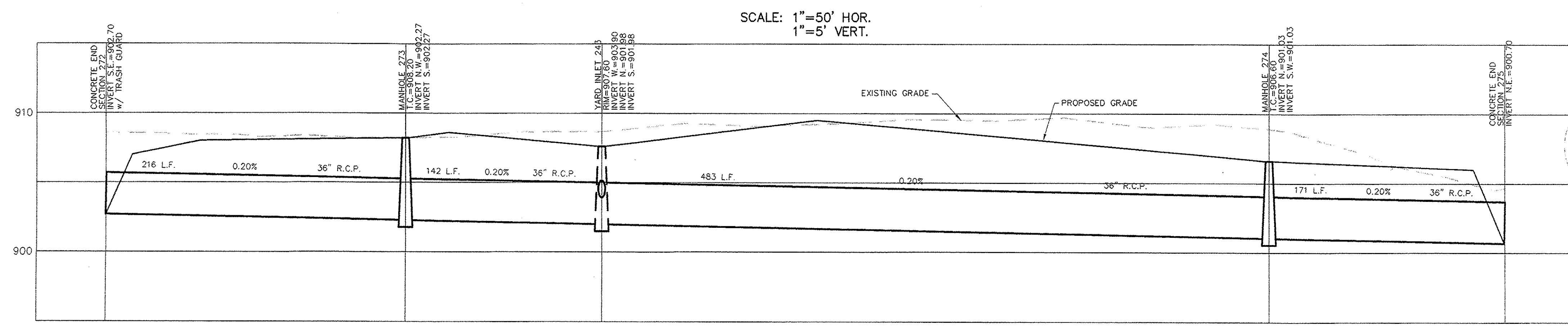
* PIPES NO LARGER THAN 18" CAN BE USED IN THE 9' SIDE OF THIS BOX
 ** INCOMING AND OUT GOING PIPES EFFECT STEPS IN THIS STRUCTURE

SPECIAL NOTE:
 STRUCTURES DEEPER THAN 48" FROM T/C TO INVERT WILL BE A R.H. OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED.

SPECIAL NOTE:
 STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES

SPECIAL NOTE:
 COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.

This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.
 Entry Date: Aug 2010
 Entered by: SM



HAMILTON CO. SURVEYOR'S OFFICE
APPROVED
 BY: _____ DATE: AUG 01 2002

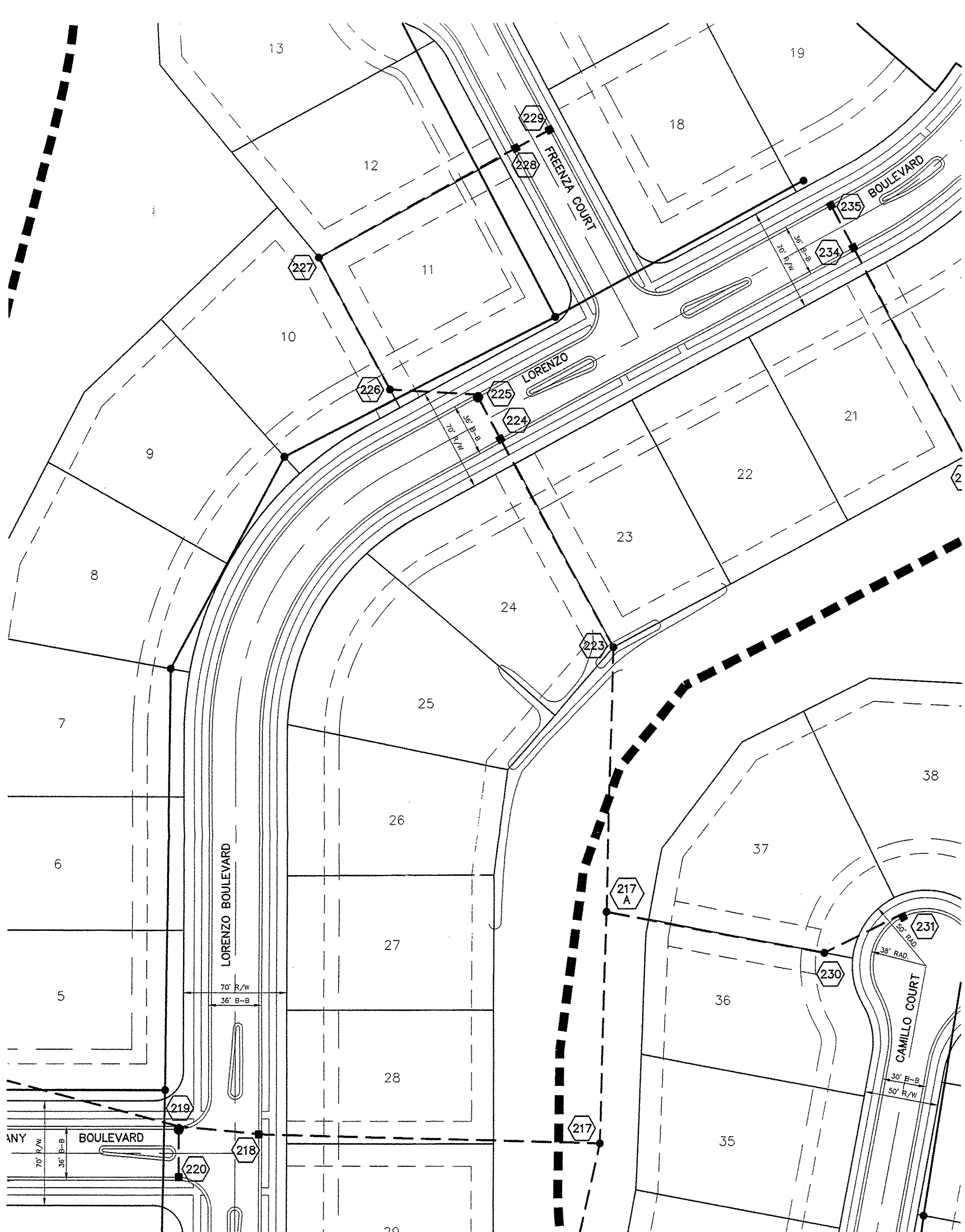
Approved where drainage plans comply with Hamilton County Replatting Drain Design Standards only and does not imply Drainage Board acceptance nor secondary plot approval.

FILED
 JUL 24 2002

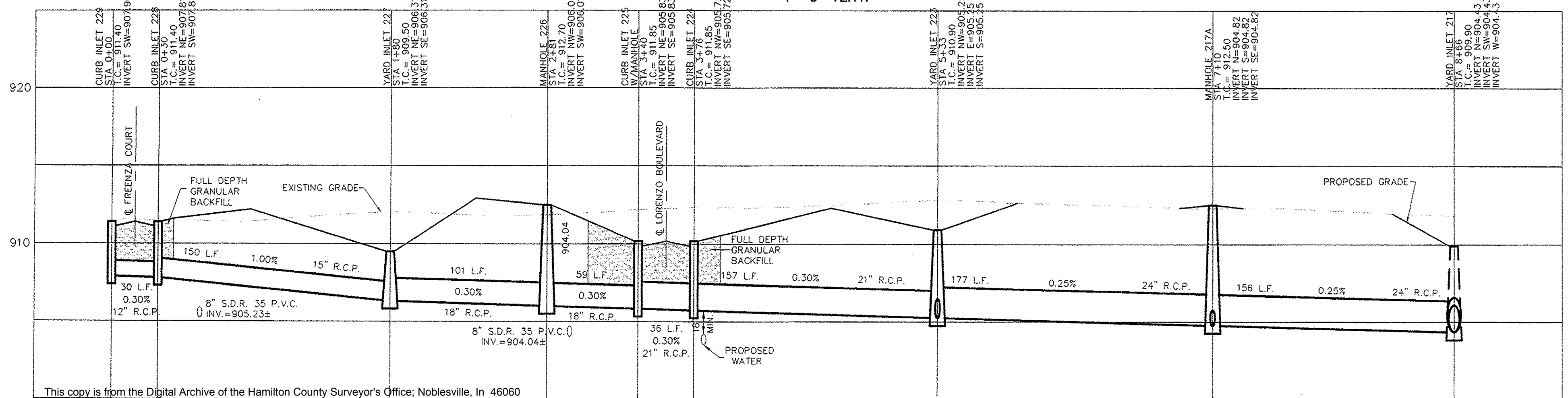
APPROVED FOR CONSTRUCTION
 HAMILTON COUNTY
 HIGHWAY DEPARTMENT

**STORM SEWER PLAN & PROFILE
 LAKES AT HAYDEN RUN
 SECTION 1**

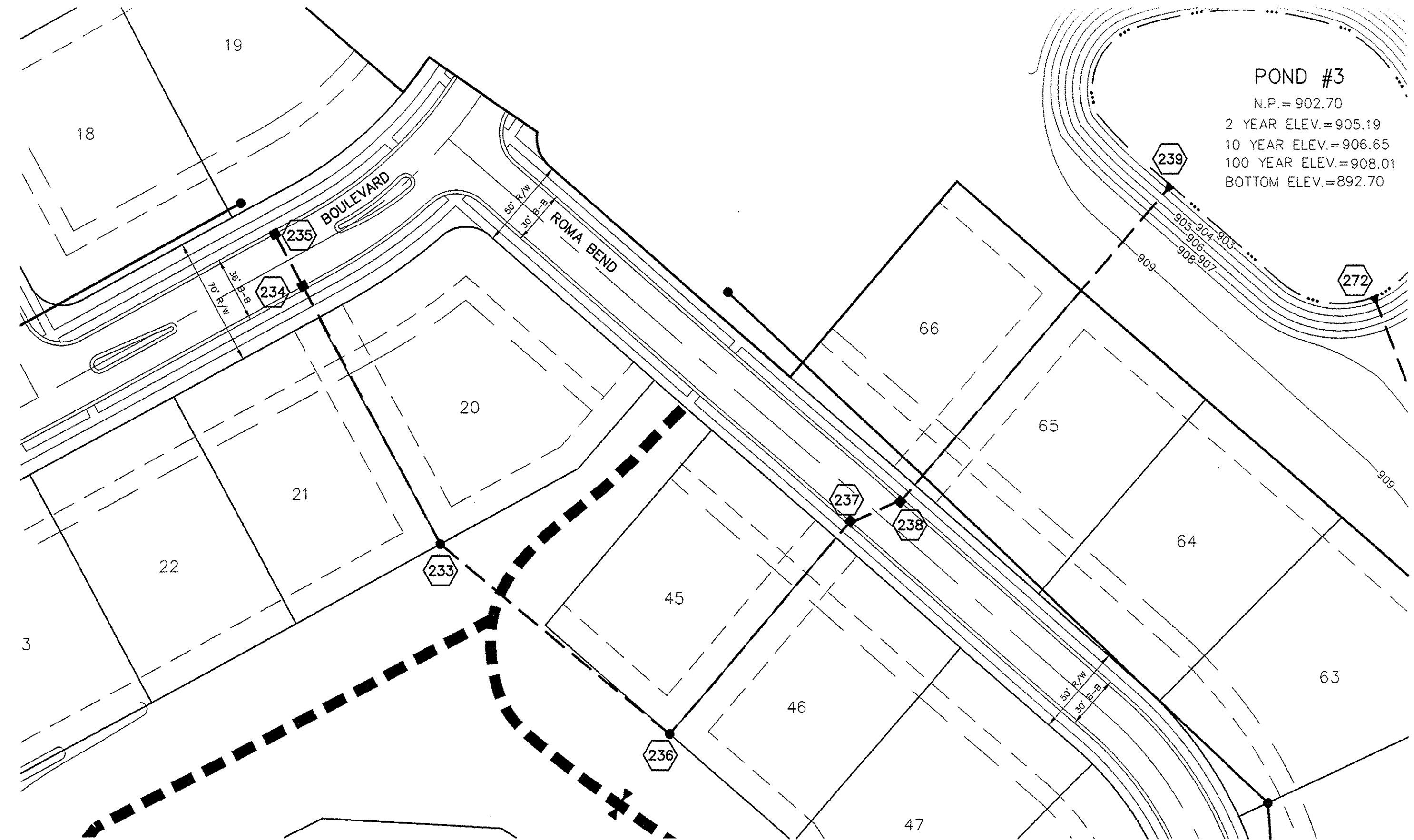
SHEET NO.
22
 OF 29 SHEETS
 JOB NO. 41848



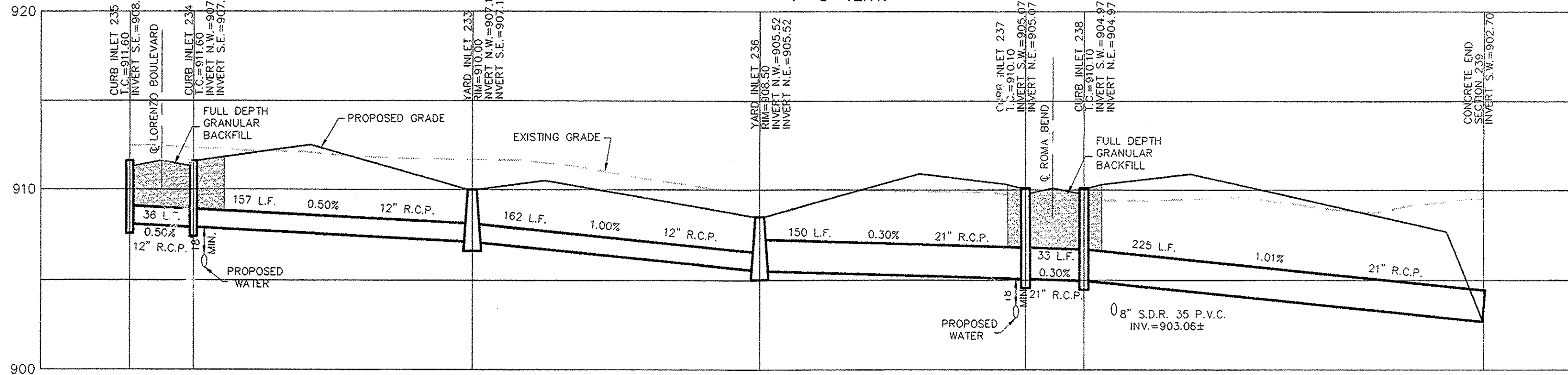
SCALE: 1" = 50' HOR.
1" = 5' VERT.



This copy is from the Digital Archive of the Hamilton County Surveyor's Office, Noblesville, In 46060



SCALE: 1" = 50' HOR.
1" = 5' VERT.



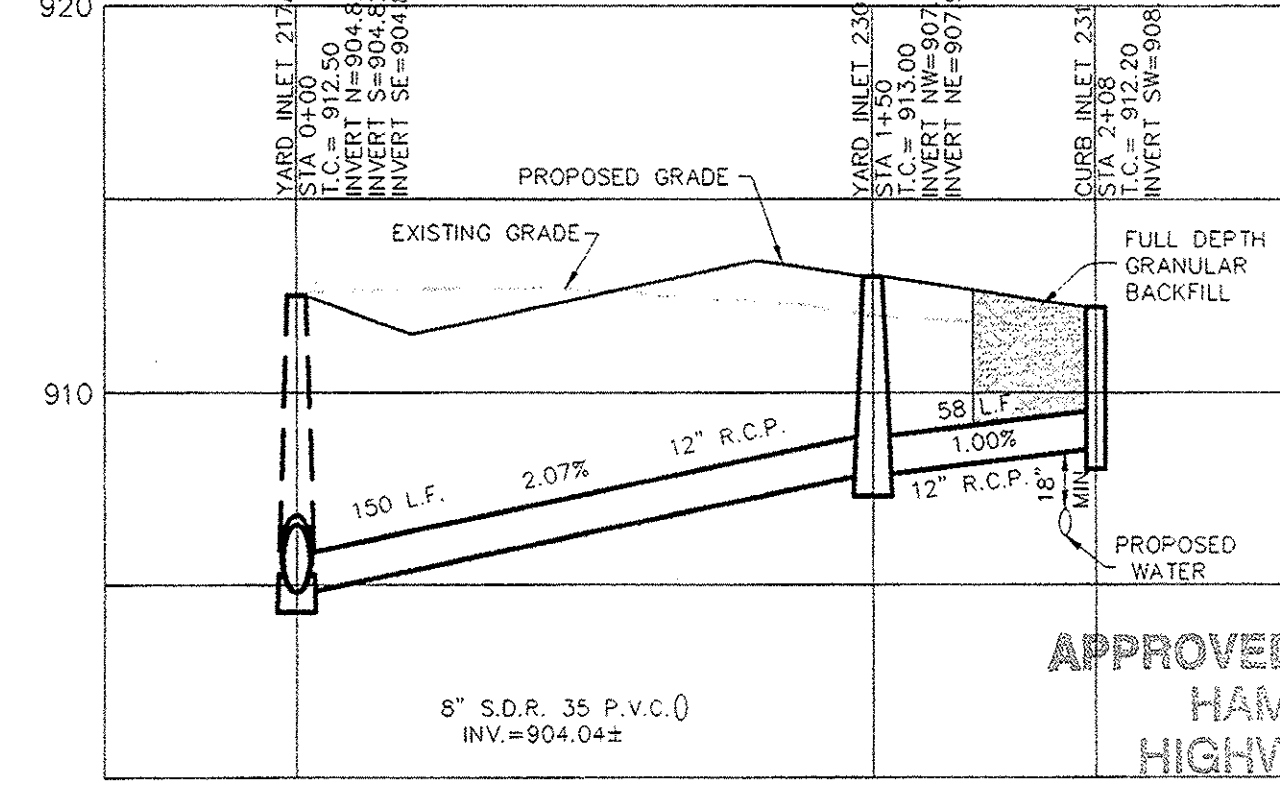
CURB INLET TABLE

PIPE SIZE	STRUCTURES LESS THAN 48" FROM T/C TO INVERT	STRUCTURES GREATER THAN 48" FROM T/C TO INVERT	ANGLE AND QUALITY OF PIPES WILL REQUIRE SPECIAL DESIGN	STEPS REQUIRED	CURB CASTING *R-3501 N	CASTING *3501 TL & TR
12" to 18"	24"x24"		DESIGN APPROVAL	No	Yes	Yes
12" to 21"	30"x30"		DESIGN APPROVAL	No	Yes	Yes
18" to 21"		MH/BOX	DESIGN APPROVAL	Yes	Yes	Yes
21" to 27"	24"x36"		DESIGN APPROVAL	No	No	Yes
12" to 24"	36"x36"		DESIGN APPROVAL	No	Yes	Yes
24" OR LARGER	DESIGN APPROVAL		DESIGN APPROVAL	No	No	Yes
24" or LARGER		MH/BOX	DESIGN APPROVAL	Yes**	Yes	Yes

* PIPES NO LARGER THAN 18" CAN BE USED IN THE 2' SIDE OF THIS BOX
** INCOMING AND OUT GOING PIPES EFFECT STEPS IN THIS STRUCTURE

SPECIAL NOTE:
STRUCTURES DEEPER THAN 48" FROM T/C TO INVERT WILL BE A MH, OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED.
SPECIAL NOTE:
STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES
SPECIAL NOTE:
COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS

SCALE: 1" = 50' HOR.
1" = 5' VERT.



APPROVED FOR CONSTRUCTION
HAMILTON COUNTY
HIGHWAY DEPARTMENT

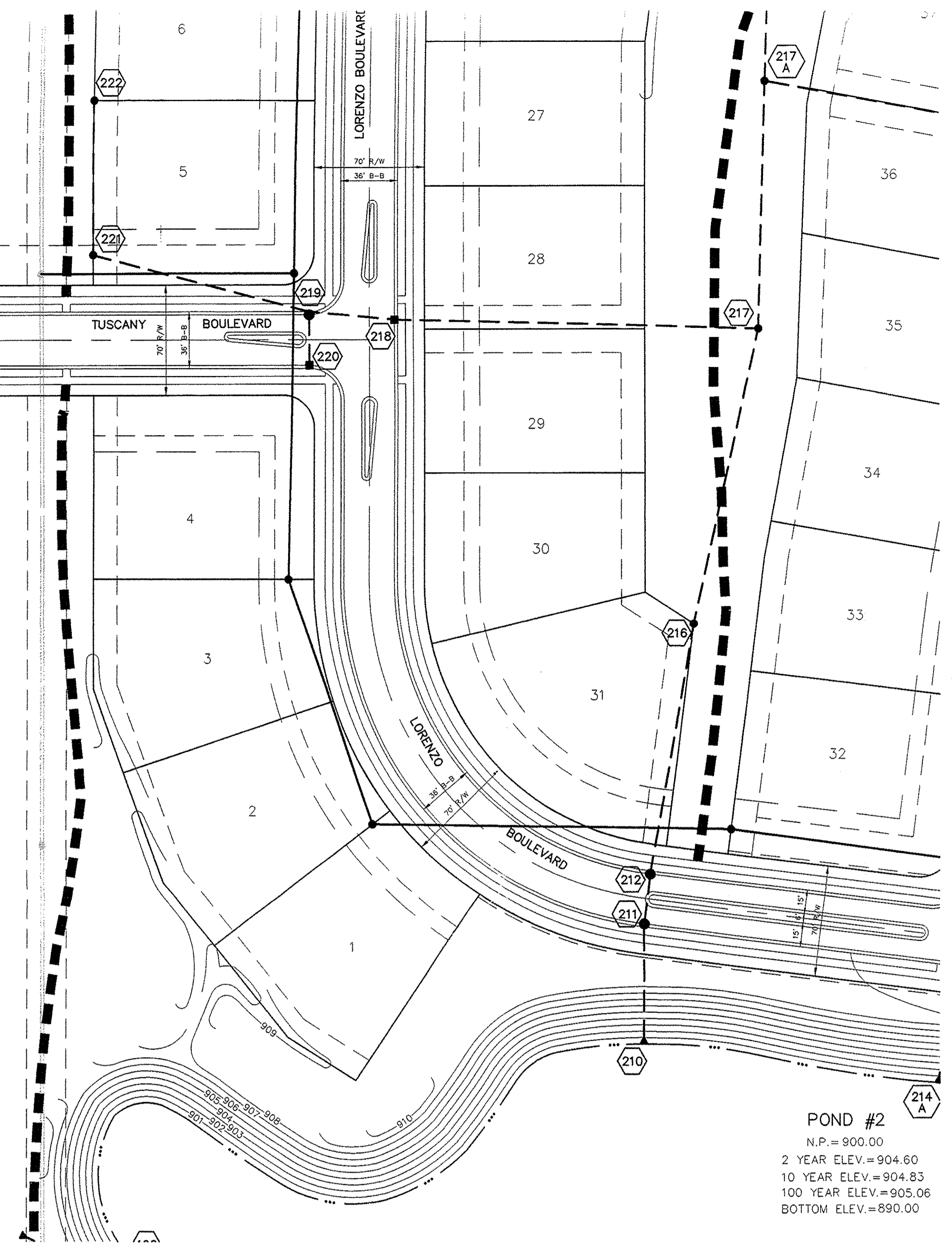


REV.	DATE	BY	REVISIONS
1	3/01/02	DAJ	REVISED PER IAC COMMENTS
2	4/27/02	BAH	REVISED STORM PIPES AND PROFILES
3	5/7/02	EEF	REVISED STORM STR'S 174,330,331
4	4/22/02	BAH	CHANGED STUB STREET NAME
5	3/28/02	CPN	REVISED PER IAC COMMENTS

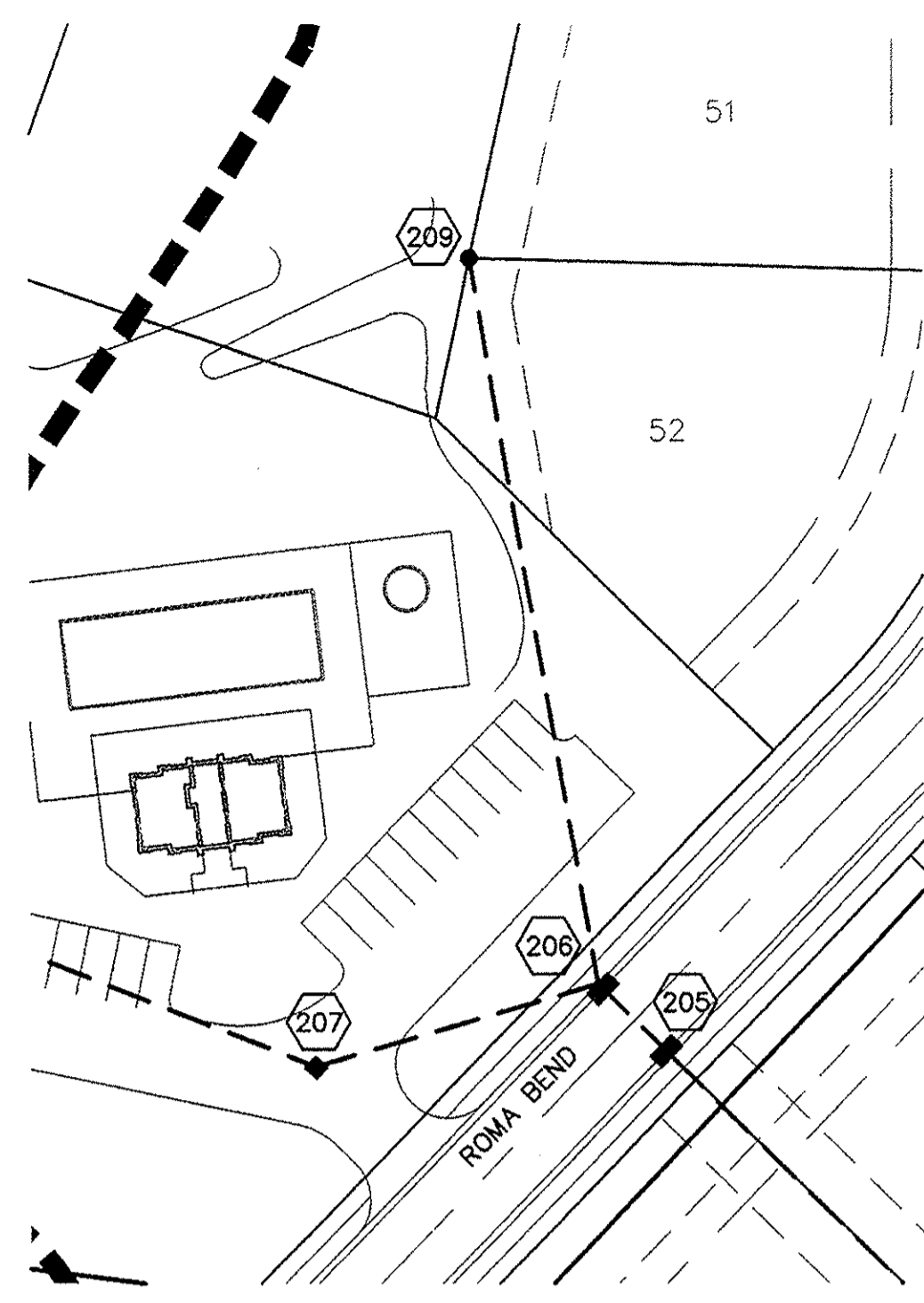
CERTIFIED: 3/01/02
CONSULTING ENGINEERS - LAND SURVEYORS
(317) 849-5935 1-800-728-6917 FAX: (317) 849-5942
INDIANAPOLIS INDIANA



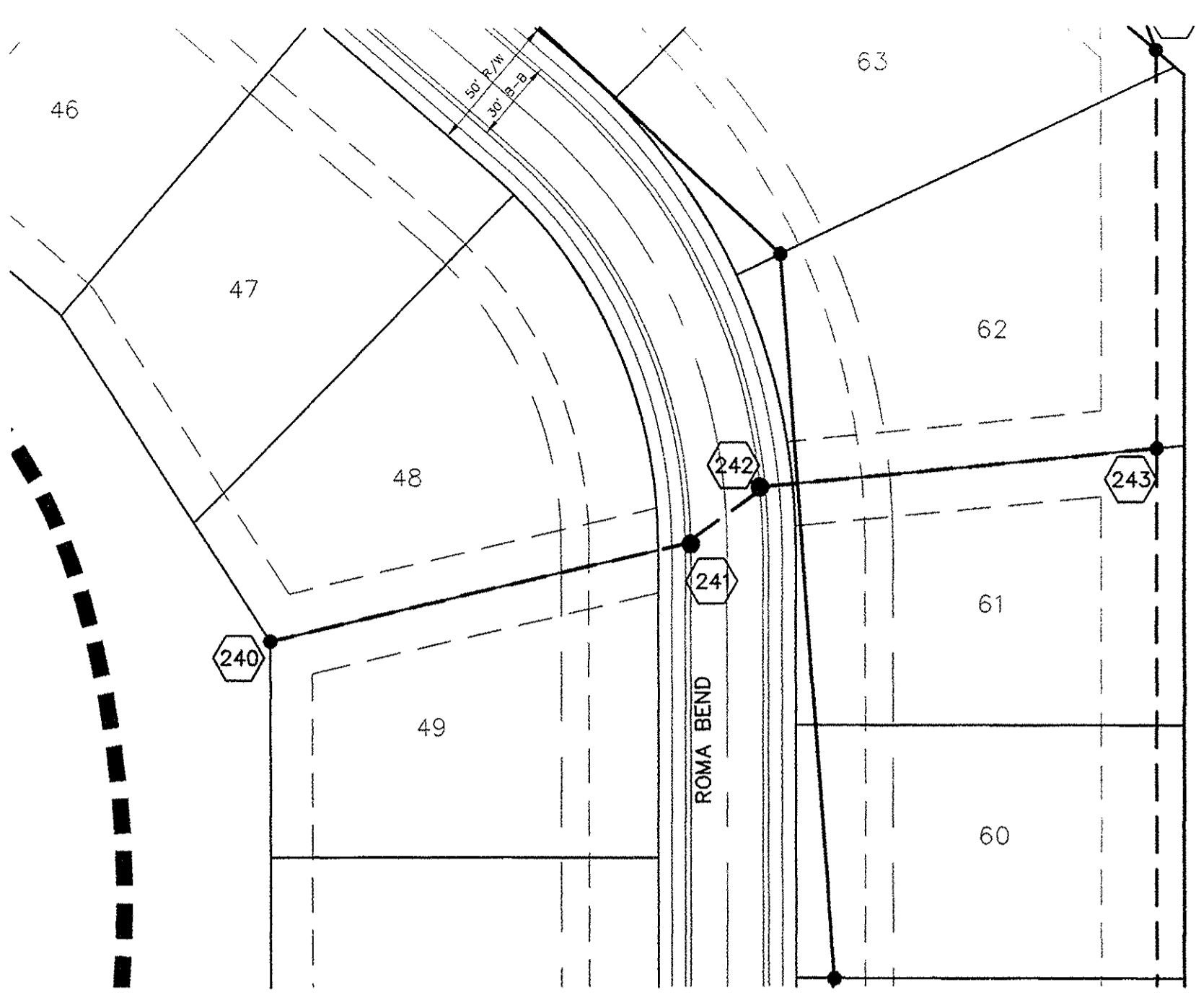
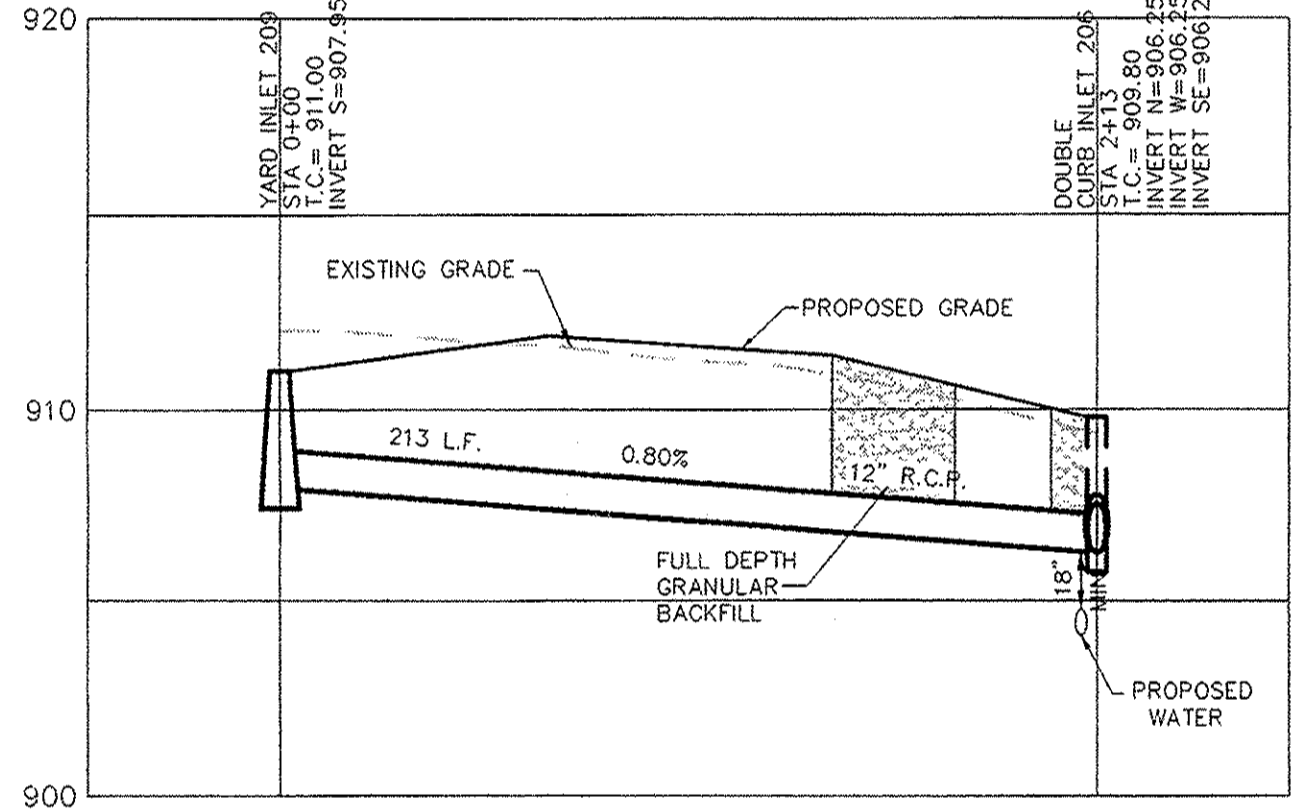
STORM SEWER PLAN & PROFILE
LAKES AT HAYDEN RUN
SECTION 1



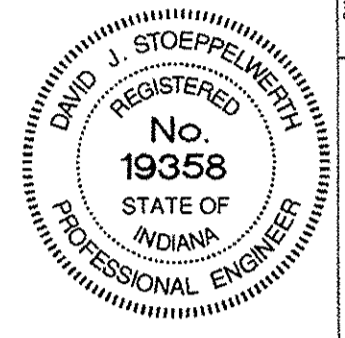
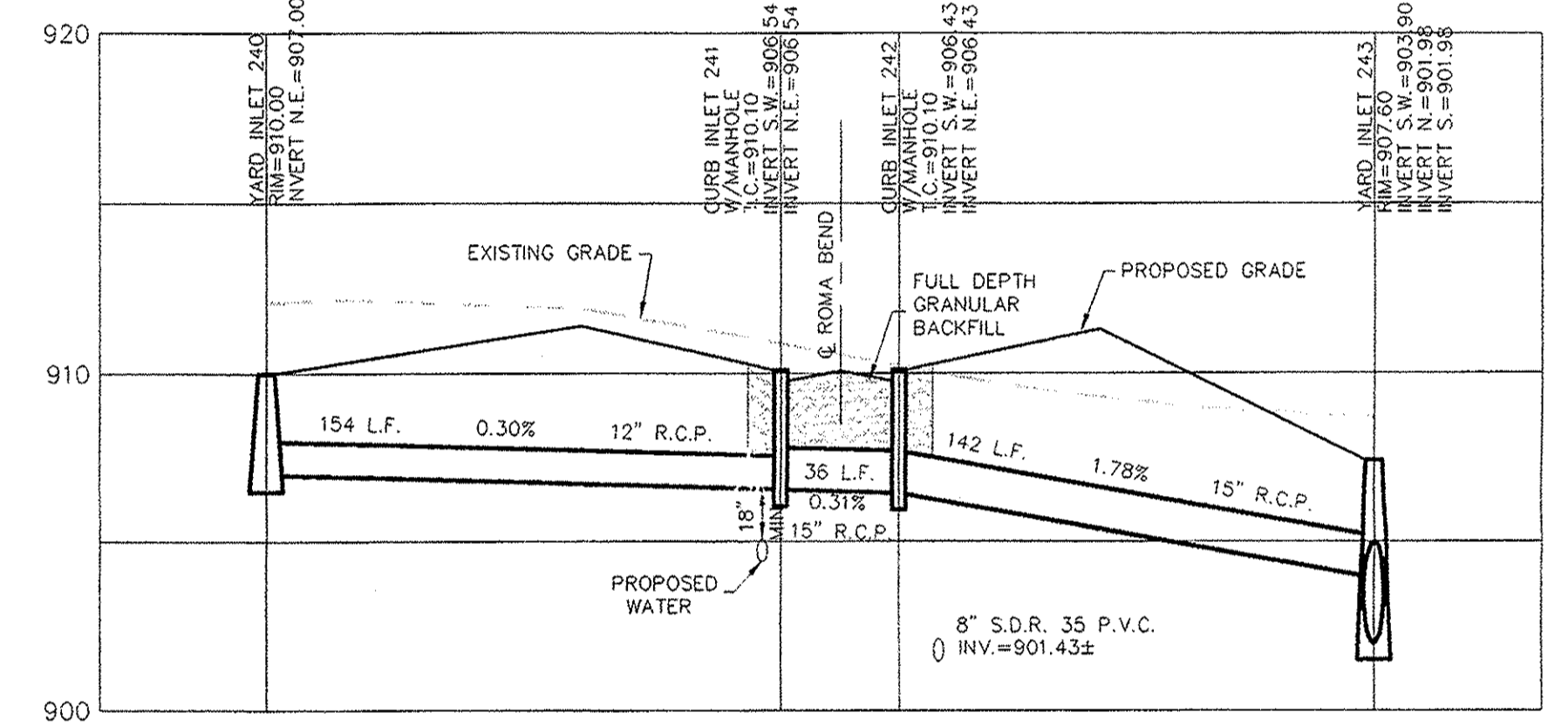
POND #2
 N.P. = 900.00
 2 YEAR ELEV. = 904.60
 10 YEAR ELEV. = 904.83
 100 YEAR ELEV. = 905.06
 BOTTOM ELEV. = 890.00



SCALE: 1"=50' HOR.
 1"=5' VERT.



SCALE: 1"=50' HOR.
 1"=5' VERT.



CERTIFIED: 3/01/02
 David J. Stappewitz

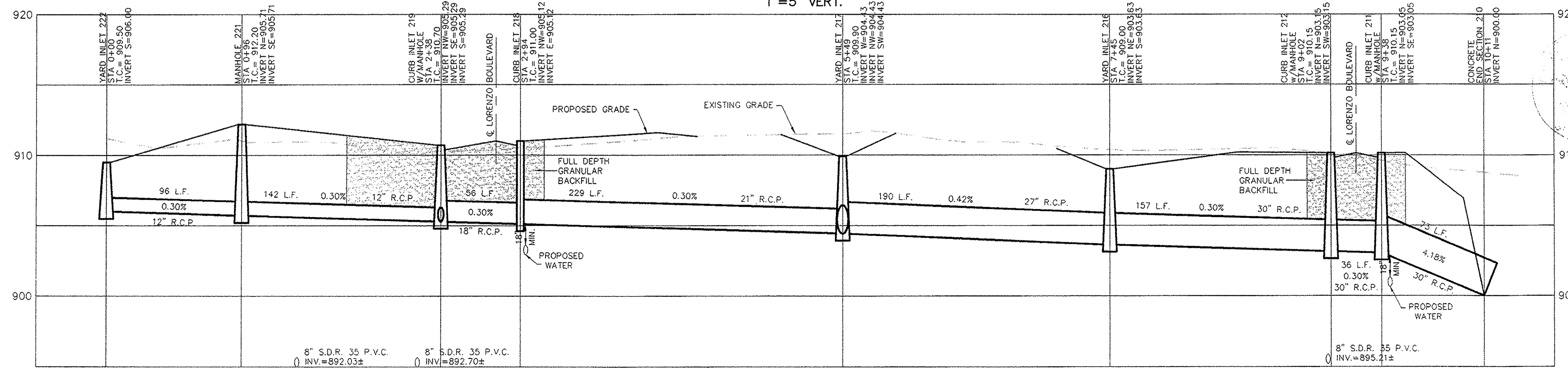
CURB INLET TABLE

PIPE SIZE	STRUCTURES LESS THAN 48" FROM 1/2" TO INVERT	STRUCTURES GREATER THAN 48" FROM 1/2" TO INVERT	ANGLE AND QUALITY OF PIPES WILL REQUIRE SPECIAL DESIGN	STEPS REQUIRED	CURB CASTING *R-3501 N	CASTING *3501 TL & TR
12" to 18"	24"x24"		DESIGN APPROVAL	No	Yes	Yes
12" to 21"	30"x30"		DESIGN APPROVAL	No	Yes	Yes
18" to 21"		MH/BOX	DESIGN APPROVAL	Yes	Yes	Yes
21" to 27"	24"x36"		DESIGN APPROVAL	No	No	Yes
12" to 24"	36"x36"		DESIGN APPROVAL	No	Yes	Yes
24" OR LARGER	DESIGN APPROVAL		DESIGN APPROVAL	No	No	Yes
24" or LARGER		MH/BOX	DESIGN APPROVAL	Yes**	Yes	Yes

* PIPES NO LARGER THAN 18" CAN BE USED IN THE 2' SIDE OF THIS BOX
 ** INCOMING AND OUT GOING PIPES EFFECT STEPS IN THIS STRUCTURE
 SPECIAL NOTE: STRUCTURES DEEPER THAN 48" FROM 1/2" TO INVERT WILL BE A MIN. OF 4' BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED.
 SPECIAL NOTE: STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES
 SPECIAL NOTE: COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET TO IMPROVE ACCESS.

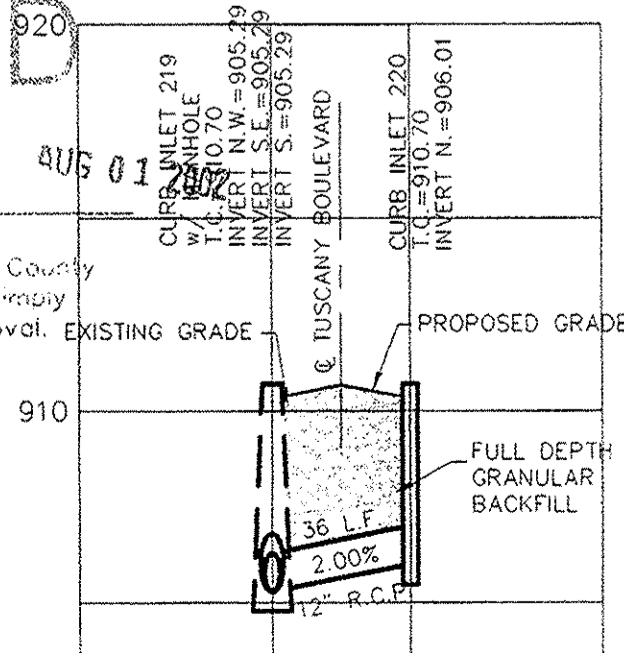
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 Entry Date: Aug 2010
 Entered By: SLM

SCALE: 1"=50' HOR.
 1"=5' VERT.



HAMILTON CO. SURVEYORS OFFICE
APPROVED
 BY: [Signature] DATE: AUG 01 2010

SCALE: 1"=50' HOR.
 1"=5' VERT.



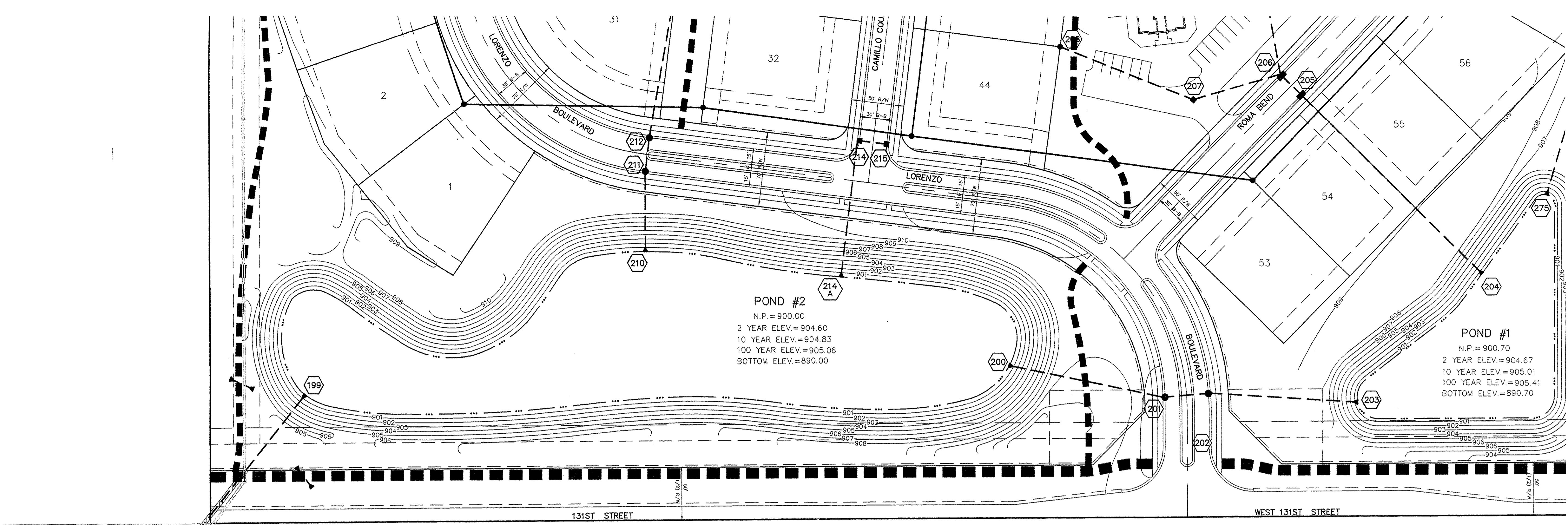
APPROVED FOR CONSTRUCTION
 HAMILTON COUNTY
 HIGHWAY DEPARTMENT

CONSULTING ENGINEERS - LAND SURVEYORS
 (317) 849-5935 1-800-728-6917 FAX: (317) 849-5942
 INDIANAPOLIS INDIANA

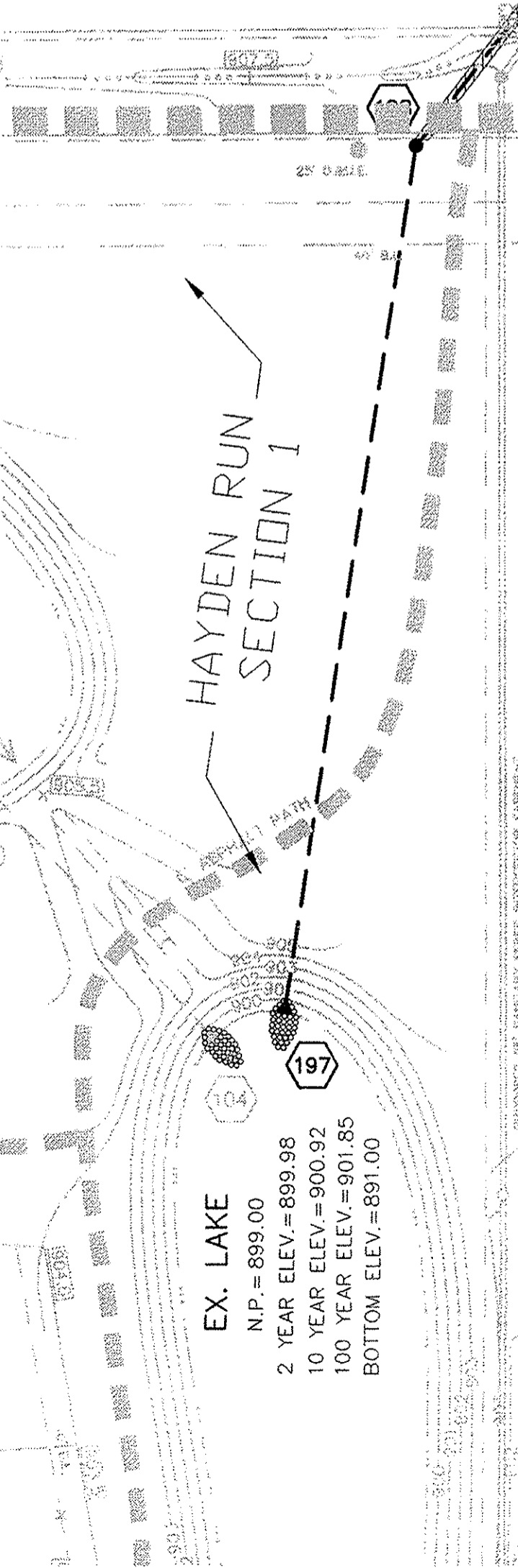


INDIANA
STORM SEWER PLAN & PROFILE
LAKES AT HAYDEN RUN
SECTION 1

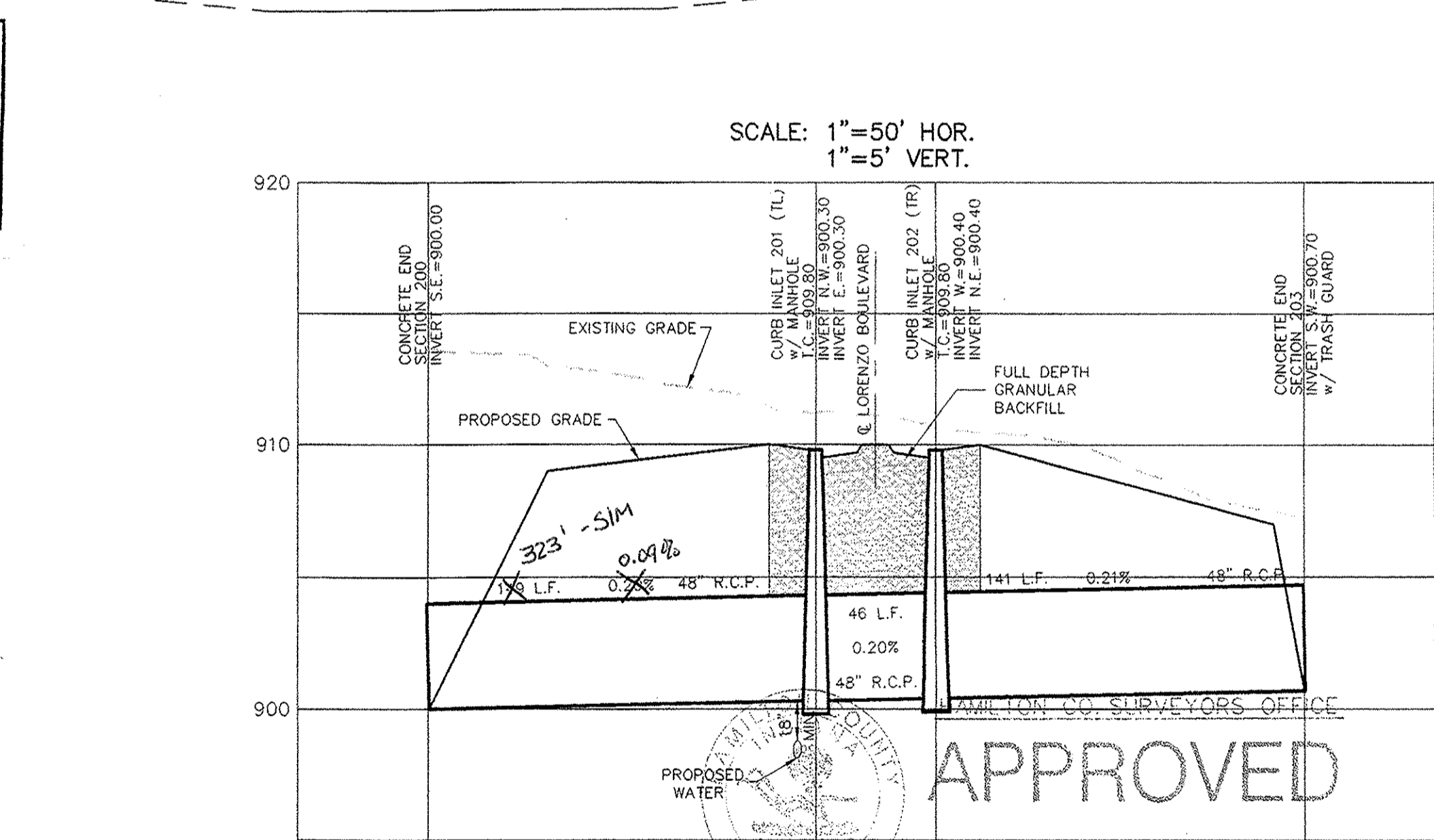
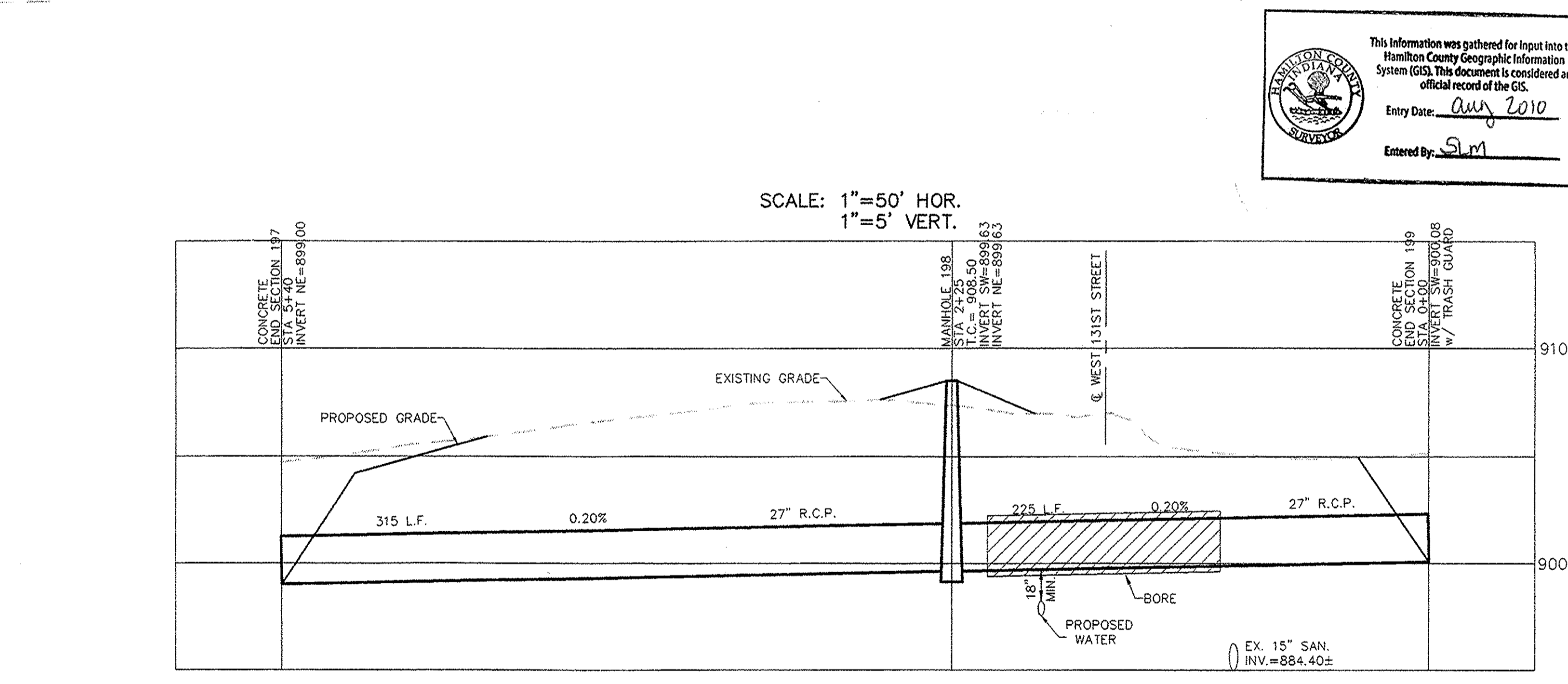
SHEET NO. **20**
 OF 29 SHEETS
 JOB NO. 41848



CERTIFIED: 3/01/02
 David J. Stappeler
 REGISTERED PROFESSIONAL ENGINEER
 No. 19358
 STATE OF INDIANA
 CONSULTING ENGINEERS - LAND SURVEYORS
 (317) 849-5935 1-800-728-6917 FAX: (317) 849-5942
 INDIANAPOLIS INDIANA
 DATE: 3/01/02
 MARK: REVISIONS



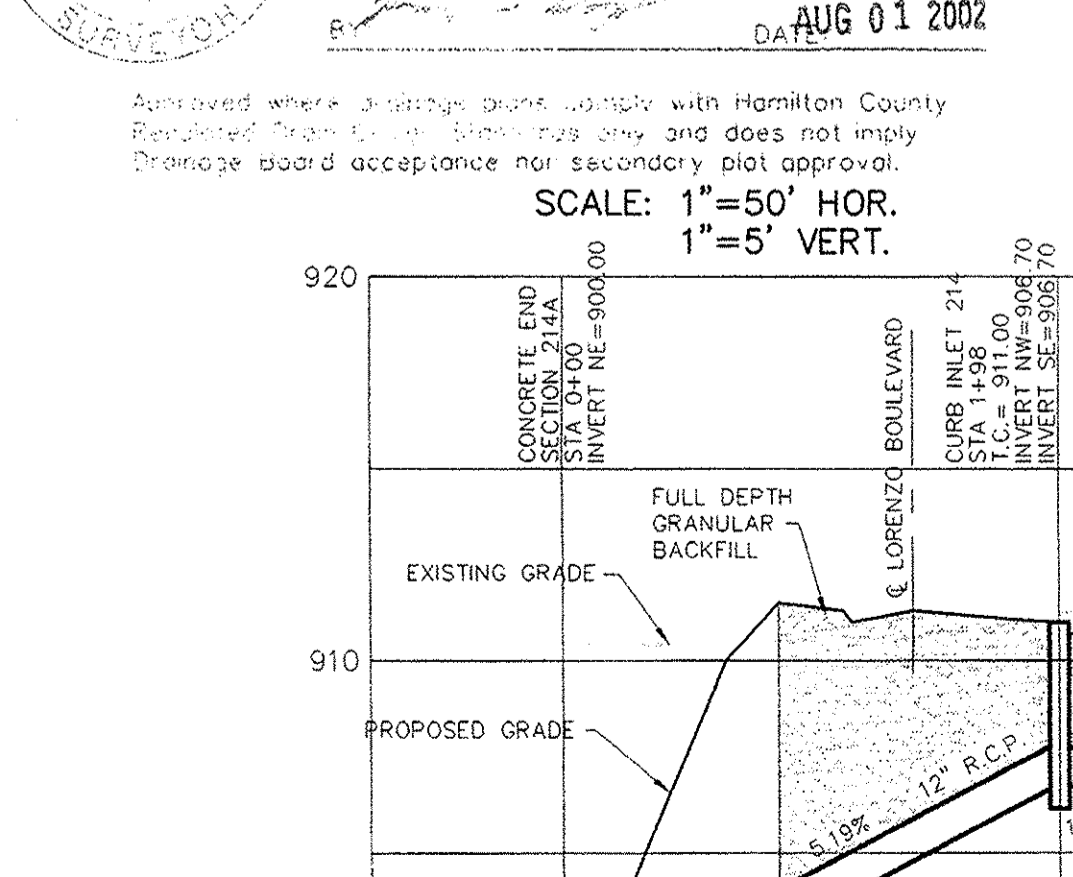
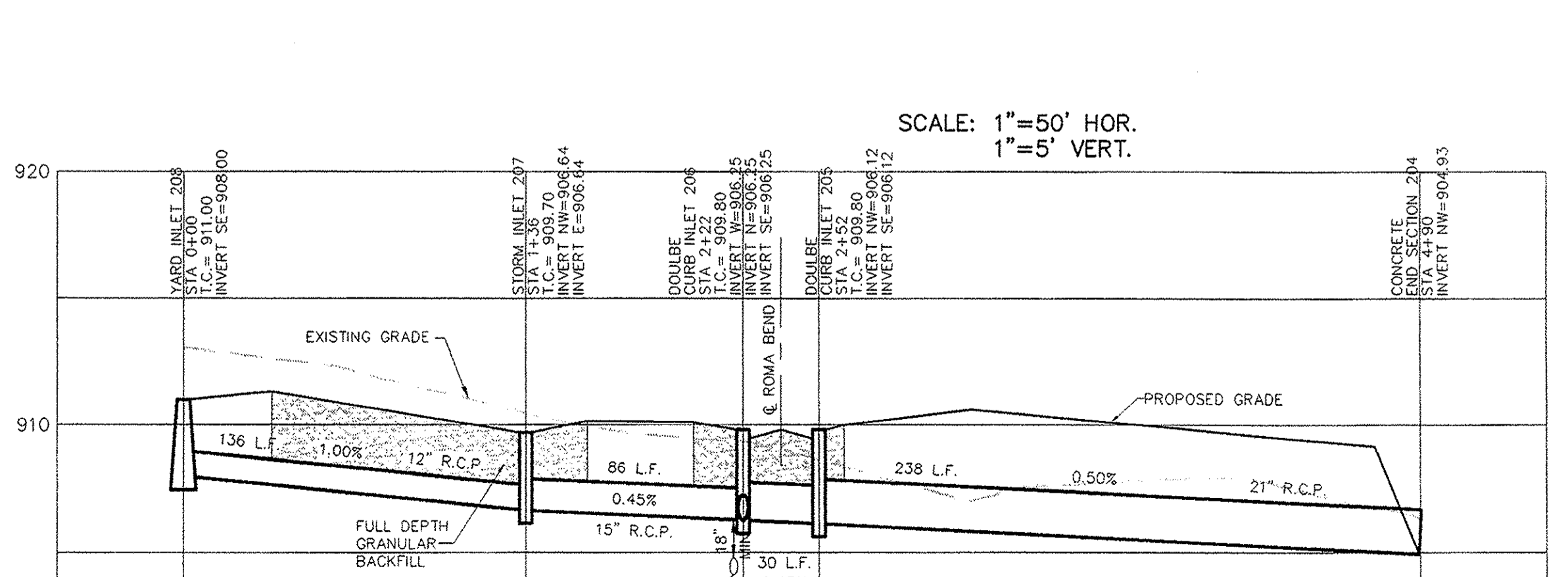
EX. LAKE
 N.P. = 899.00
 2 YEAR ELEV. = 899.98
 10 YEAR ELEV. = 900.92
 100 YEAR ELEV. = 901.85
 BOTTOM ELEV. = 891.00



CURB INLET TABLE

PIPE SIZE	STRUCTURES LESS THAN 48" FROM 1/2 C TO INVERT	STRUCTURES GREATER THAN 48" FROM 1/2 C TO INVERT	ANGLE AND QUALITY OF PIPES WILL REQUIRE SPECIAL DESIGN	STEPS REQUIRED	CURB CASTING *R-3501 N	CASTING *3501 TL & TR
12" to 18"	24"x24"		DESIGN APPROVAL	No	Yes	Yes
12" to 21"	30"x30"		DESIGN APPROVAL	No	Yes	Yes
18" to 21"		MH/BOX	DESIGN APPROVAL	Yes	Yes	Yes
21" to 27"	24"x36"		DESIGN APPROVAL	No	No	Yes
12" to 24"	36"x36"		DESIGN APPROVAL	No	Yes	Yes
24" OR LARGER	DESIGN APPROVAL		DESIGN APPROVAL	No	No	Yes
24" or LARGER		MH/BOX	DESIGN APPROVAL	Yes**	No	Yes

* PIPES NO LARGER THAN 18" CAN BE USED IN THE 2' SIDE OF THIS BOX
 ** INCOMING AND OUT GOING PIPES EXCEPT STEPS IN THIS STRUCTURE
SPECIAL NOTE:
 STRUCTURES DEEPER THAN 48" FROM 1/2 C TO INVERT WILL BE A M.H. OR A BOX WITH STEPS UNLESS SPECIAL DESIGN IS APPROVED.
SPECIAL NOTE:
 STRUCTURES WILL BE DESIGNED FOR MAXIMUM FLOW IN PIPES
SPECIAL NOTE:
 COUNTY MAY REQUIRE STEPS TO BE INSTALLED AFTER STRUCTURE IS SET, TO IMPROVE ACCESS.



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 Entry Date: Aug 2010
 Entered By: SLM

APPROVED
 HAMILTON COUNTY SURVEYORS OFFICE
 DATE AUG 01 2002

Approved where shown, but does not imply Hamilton County Board of Health approval and does not imply Drainage Board acceptance nor secondary plot approval.