



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

November 2, 2012

TO: Hamilton County Drainage Board

RE: Village of West Clay Drain, Section 10010C Arm.

Attached is a petition filed by Pulte Homes of Indiana, LLC., along with a non-enforcement request, plans, calculations, quantity summary and assessment roll for the Section 10010-C Arm, Village of West Clay Drain to be located in Clay Township. 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:

12" RCP	1,295 ft.	21" RCP	149 ft.
15" RCP	361 ft.	24" RCP	178 ft.
18" RCP	982 ft.	6" SSD	1,808 ft.

This proposal will add an additional 4,773 feet to the drains total length.

The retention pond (Lake #1) which will be located in future common area #3 and retention pond (Lake #2) which will be located in future common area #4 are not to be considered part of the regulated drain for maintenance purposes. Only the inlets and outlets will be maintained as part of the regulated drain. The maintenance of the ponds (Lake #1 & #2) shall be the responsibility of the Homeowners Association as per the subdivision covenants on pages 11 and 12, sections 4 and 5, as recorded in the Office of the Hamilton County Recorder as instrument number 199909946964. 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) under curbs are not to be part of the regulated drain. This is per the agreement between Brenwick Development and the Hamilton County Commissioners on April 26, 1999. (See Commissioner's Minute Book 93, Pages 565-566). Only the main SSD lines which are located within the easements are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain. The portions of the SSD which will be regulated are as follows:

- From Str. 410 to Str. 415 in the rear yards of lots 16, 17, 18, 19, and 20.
- From Str. 415 to Str. 424 in the rear yards of lots 21, 22, 23, and 24.
- From Str. 424 running north in the rear yards of lots 25 and 26.
- From Str. 416A running west in the rear yards of lots 1, 2, and 3.
- From Lake #1 running south then turning east in the rear yards of lots 4, 5, and 6.
- From Str. 406 running south-east in in the rear yard of lot 15.
- From Str. 406 to Str. 412 in the rear yards of lots 12, 13, and 14.
- From Str. 412 to Str. 420 in the rear yards of lots 7, 8, 9, 10, 11, and Common Area #1.

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 \$5.00 per acre, \$5.00 per acre for roadways, with a \$120.00 minimum. With this assessment the total annual assessment for this drain/this section will be \$3,275.40.

The petitioner has submitted surety for the proposed drain at this time. The sureties which are in the form of a Performance Bond are as follows:

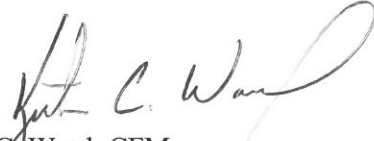
Agent: Liberty Mutual Insurance Company
Date: September 19, 2012
Number: 268002855
For: Storm Sewers
Amount: \$198,977.00

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

I believe this proposed drain meets the requirements for Urban Drain Classification as set out in IC36-9-27-67 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. The request is for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Village of West Clay Section 10010-C as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for December 10, 2012.


Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

**Village of West Clay 10010-C
GASB 34 Calculation**

Village of West Clay Drain- VOWC 10010C: 4773 ft

JW Brendle Drain-Relocation: 324 ft

Total Footage = 5097

Engineer's Estimate = \$148,564.50

JW Brendle Drain-Relocation: .06 (\$148,564.50) = \$8,913.87

Village of West Clay Drain- VOWC 10010C: .94 (\$148,564.50) = \$139,650.63

Note: Bonds were posted at 120% of the engineers estimate. This dollar amount is based upon the engineer's estimate.

STATE OF INDIANA)
)
COUNTY OF HAMILTON)

FILED

NOV 13 2012

OFFICE OF HAMILTON COUNTY SURVEYOR

TO: HAMILTON COUNTY DRAINAGE BOARD
% Hamilton County Surveyor
One Hamilton County Square, Suite 188
Noblesville, IN. 46060-2230

In the matter of The Village of West Clay Subdivision, Section
10010-C 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 Village of West Clay, Section 10010-C, 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 benefited 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 or Non-Revocable Letter of Credit for the portion of the drainage system which will be made a regulated drain. The bond will be in the amount of 120% of the Engineer's 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 Petitioners cost as per IC 36-9-27-46.

The Petitioner further requests that the Drain be classified as an Urban Drain as per IC 36-9-27-69(d).

RECORDED OWNER(S) OF LAND INVOLVED


Signed

MATTHEW D. LOHMEYER
Printed Name

11/8/12
Date

Signed

Printed Name

Date

Signed

Printed Name

Date

Signed

Printed Name

Date



STOEPPELWERTH & ASSOCIATES, INC.

CONSULTING ENGINEERS • LAND SURVEYORS

FILED

SEP 27 2012

David J. Stoepfelwerth
President, CEO
Professional Engineer
Professional Land Surveyor

Curtis C. Huff
Vice President, COO
Professional Land Surveyor

R.M. Stoepfelwerth
Founder
Professional Engineer
Professional Land Surveyor

September 21, 2012

OFFICE OF HAMILTON COUNTY SURVEYOR

Hamilton County Surveyor's Office
One Hamilton County Square, Suite 188
Noblesville, Indiana 46060

Attention: Greg Hoyes

Re: Village of WestClay, Section 10010 -C

Dear Mr. Hoyes:

Please accept the following Engineer's Estimate on behalf of Pulte Homes, LLC for Village of WestClay, Section 10010-C. The estimate is as follows:

Village of WestClay, Section 10010-C Performance Bond Cost Estimate

<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Contract Amount</u>	120%	<u>Performance Bond</u>
Monumentation				\$ 6,000.00		\$ 7,200.00
Lot Corners	26.00	Lots	\$ 100.00	\$ 2,600.00		
Centerline	20.00	Each	\$ 170.00	\$ 3,400.00		
Storm Sewer				\$148,564.50		\$ 178,277.40
12" Pipe	1,246.00	LF	\$ 19.00	\$ 23,674.00		
15" Pipe	390.00	LF	\$ 21.00	\$ 8,190.00		
18" Pipe	972.00	LF	\$ 23.00	\$ 22,356.00		
21" Pipe	149.00	LF	\$ 28.00	\$ 4,172.00		
24" Pipe	158.00	LF	\$ 30.00	\$ 4,740.00		
27" Pipe	95.00	LF	\$ 32.00	\$ 3,040.00		
15" ES and TR Grate	1.00	Each	\$ 875.00	\$ 875.00		
18" ES and TR Grate	1.00	Each	\$1,000.00	\$ 1,000.00		
24" ES and TR Grate	1.00	Each	\$1,350.00	\$ 1,350.00		

7965 East 106th Street
Fishers, Indiana
46038-2505

317.849.5935
Fax: 317.849.5942
www.Stoepfelwerth.com

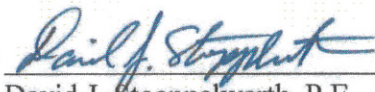
Hamilton County Surveyor
September 21, 2012
Page 2 of 2

27" ES and TR Grate	1.00	Each	\$2,200.00	\$ 2,200.00
Standard MH	5.00	Each	\$1,400.00	\$ 7,000.00
Inlet	20.00	Each	\$1,270.00	\$ 25,400.00
Granular Backfill	513.00	Ton	\$ 9.50	\$ 4,873.50
SSD Under Curb	3,575.00	LF	\$ 7.00	\$ 25,025.00
SSD in Swale	1,767.00	LF	\$ 7.00	\$ 12,369.00
SSD Laterals	23.00	Each	\$ 100.00	\$ 2,300.00

If you have any questions regarding these estimates, please contact Brett A. Huff at (317) 570-4841.

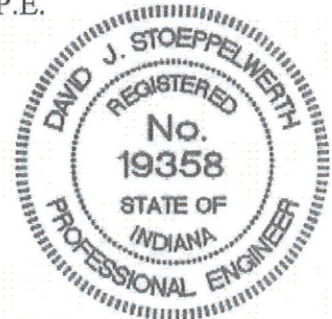
Very truly yours,

STOEPPELWERTH & ASSOCIATES, INC.



David J. Stoeppelwerth, P.E.
Professional Engineer
No. 19358

Cc: Matthew Lohmeyer



HCD B-2012-00037

Bond No. 268002855



PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that Pulte Homes of Indiana, LLC of 11590 N. Meridian, Suite 530, Carmel, IN 46032 as Principal, and Liberty Mutual Insurance Company a corporation organized and existing under the laws of the State of Massachusetts and authorized to transact business in the State of Indiana, as Surety, are held and firmly bound unto Hamilton County Commissioners of One Hamilton County Square, Noblesville, IN 46060 as Obligee, in the penal sum of one hundred ninety eight thousand nine hundred seventy seven and 00/100 (\$198,977.00) 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 Principal has agreed to construct or have constructed, storm sewer improvements in West Village at West Clay, Sec. 10010C subdivision.

NOW, THEREFORE, the condition of this obligation is such that if said Principal shall well and truly perform said work in accordance with said standards, then this obligation shall be void, otherwise to remain in full force and effect.

Signed, sealed and dated this 19th day of September, 2012

Pulte Homes of Indiana, LLC
Principal

Bruce E. Robinson, VP & Treasurer

Liberty Mutual Insurance Company
Surety

Robert Porter, Attorney-in-Fact

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.

LIBERTY MUTUAL INSURANCE COMPANY
BOSTON, MASSACHUSETTS
POWER OF ATTORNEY



KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint STEVEN M. COOK, BRUCE E. ROBINSON, DORY MALOUF, COLETTE R. ZUKOFF, SUZANNE TREPPA, ROBERT PORTER, JAN M. KLYM, NICOLE M. OCHOLIK, DAVID J. FURSTENBERG, MICHAEL J. SCHWENINGER, BRIEN O'MEARA, ALL OF THE CITY OF BLOOMFIELD, STATE OF MICHIGAN

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding TWO MILLION, FIVE HUNDRED THOUSAND AND 00/100 DOLLARS (\$ 2,500,000.00) each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article XIII, Section 5 of the By-Laws, David M. Carey, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual Insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this day of 4th day of January 2012.



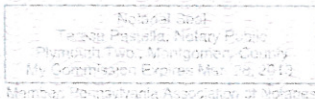
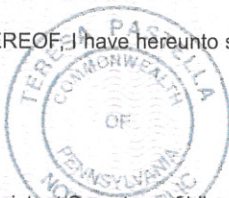
LIBERTY MUTUAL INSURANCE COMPANY

By David M. Carey
David M. Carey, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 4th day of January, 2012, before me, a Notary Public, personally came David M. Carey, to me known, and acknowledged that he is an Assistant Secretary of Liberty Mutual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Mutual Insurance Company thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article XIII, Section 5 of the By-laws of Liberty Mutual Insurance Company.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of March, 1980.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 19th day of September, 2012.



By Gregory W. Davannport
Gregory W. Davannport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.




ACKNOWLEDGEMENT BY SURETY


STATE OF MICHIGAN)
)ss.
COUNTY OF OAKLAND)

On this 19th Day of September, 2012, before me, a Notary Public in and for said State, personally appeared Robert Porter who acknowledges himself to be Attorney-in-Fact for Liberty Mutual Insurance Company, the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed the said instrument on behalf of the said corporation executed the same.

WITNESS my hand and official seal.



Shirley E. Hutchins, Notary Public
Wayne County, Michigan
Acting in Oakland County, Michigan
My Commission Expires: March 30, 2017

SHIRLEY E. HUTCHINS
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Mar 30, 2017
ACTING IN COUNTY OF 




ACKNOWLEDGEMENT BY PRINCIPAL

STATE OF MICHIGAN)
)ss.
COUNTY OF OAKLAND)

On this 19th of September, 2012, before me, the undersigned authorized employee, personally appeared Bruce E. Robinson who acknowledges himself to be VP & Treasurer of Pulte Homes of Indiana, LLC, and as such employee, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the Corporation by himself as such officer.

WITNESS my hand and official seal.



Shirley E. Hutchins, Notary Public
Wayne County, Michigan
Acting in Oakland County, Michigan
My Commission Expires: March 30, 2017

SHIRLEY E. HUTCHINS
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Mar 30, 2017
ACTING IN COUNTY OF *Oakland*



PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that Pulte Homes of Indiana, LLC of 11590 N. Meridian, Suite 530, Carmel, IN 46032 as Principal, and Liberty Mutual Insurance Company a corporation organized and existing under the laws of the State of Massachusetts and authorized to transact business in the State of Indiana, as Surety, are held and firmly bound unto Hamilton County Commissioners of One Hamilton County Square, Noblesville, IN 46060 as Obligee, in the penal sum of seven thousand two hundred and 00/100 (\$7,200.00) 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 Principal has agreed to construct or have constructed, monumentation in West Village at West Clay, Sec. 10010C subdivision.

NOW, THEREFORE, the condition of this obligation is such that if said Principal shall well and truly perform said work in accordance with said standards, then this obligation shall be void, otherwise to remain in full force and effect.

Signed, sealed and dated this 19th day of September, 2012

Pulte Homes of Indiana, LLC
Principal

Bruce E. Robinson, VP & Treasurer

Liberty Mutual Insurance Company
Surety

Robert Porter, Attorney-in-Fact

THIS POWER OF ATTORNEY IS NOT VALID UNLESS IT IS PRINTED ON RED BACKGROUND.

5074523

This Power of Attorney limits the acts of those named herein, and they have no authority to bind the Company except in the manner and to the extent herein stated.



LIBERTY MUTUAL INSURANCE COMPANY
BOSTON, MASSACHUSETTS
POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS: That Liberty Mutual Insurance Company (the "Company"), a Massachusetts stock insurance company, pursuant to and by authority of the By-law and Authorization hereinafter set forth, does hereby name, constitute and appoint **STEVEN M. COOK, BRUCE E. ROBINSON, DORY MALOUF, COLETTE R. ZUKOFF, SUZANNE TREPPA, ROBERT PORTER, JAN M. KLYM, NICOLE M. OCHOLIK, DAVID J. FURSTENBERG, MICHAEL J. SCHWENINGER, BRIEN O'MEARA, ALL OF THE CITY OF BLOOMFIELD, STATE OF MICHIGAN**.....

, each individually if there be more than one named, its true and lawful attorney-in-fact to make, execute, seal, acknowledge and deliver, for and on its behalf as surety and as its act and deed, any and all undertakings, bonds, recognizances and other surety obligations in the penal sum not exceeding **TWO MILLION, FIVE HUNDRED THOUSAND AND 00/100**..... **DOLLARS** (\$ 2,500,000.00.....) each, and the execution of such undertakings, bonds, recognizances and other surety obligations, in pursuance of these presents, shall be as binding upon the Company as if they had been duly signed by the president and attested by the secretary of the Company in their own proper persons.

That this power is made and executed pursuant to and by authority of the following By-law and Authorization:

ARTICLE XIII - Execution of Contracts: Section 5. Surety Bonds and Undertakings.

Any officer of the Company authorized for that purpose in writing by the chairman or the president, and subject to such limitations as the chairman or the president may prescribe, shall appoint such attorneys-in-fact, as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations. Such attorneys-in-fact, subject to the limitations set forth in their respective powers of attorney, shall have full power to bind the Company by their signature and execution of any such instruments and to attach thereto the seal of the Company. When so executed such instruments shall be as binding as if signed by the president and attested by the secretary.

By the following instrument the chairman or the president has authorized the officer or other official named therein to appoint attorneys-in-fact:

Pursuant to Article XIII, Section 5 of the By-Laws, David M. Carey, Assistant Secretary of Liberty Mutual Insurance Company, is hereby authorized to appoint such attorneys-in-fact as may be necessary to act in behalf of the Company to make, execute, seal, acknowledge and deliver as surety any and all undertakings, bonds, recognizances and other surety obligations.

That the By-law and the Authorization set forth above are true copies thereof and are now in full force and effect.

IN WITNESS WHEREOF, this Power of Attorney has been subscribed by an authorized officer or official of the Company and the corporate seal of Liberty Mutual Insurance Company has been affixed thereto in Plymouth Meeting, Pennsylvania this day of 4th day of January, 2012.



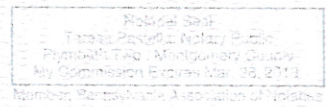
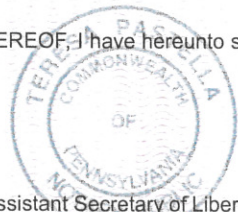
LIBERTY MUTUAL INSURANCE COMPANY

By David M. Carey
David M. Carey, Assistant Secretary

COMMONWEALTH OF PENNSYLVANIA ss
COUNTY OF MONTGOMERY

On this 4th day of January, 2012, before me, a Notary Public, personally came David M. Carey, to me known, and acknowledged that he is an Assistant Secretary of Liberty Mutual Insurance Company; that he knows the seal of said corporation; and that he executed the above Power of Attorney and affixed the corporate seal of Liberty Mutual Insurance Company thereto with the authority and at the direction of said corporation.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed my notarial seal at Plymouth Meeting, Pennsylvania, on the day and year first above written.



By Teresa Pastella
Teresa Pastella, Notary Public

CERTIFICATE

I, the undersigned, Assistant Secretary of Liberty Mutual Insurance Company, do hereby certify that the original power of attorney of which the foregoing is a full, true and correct copy, is in full force and effect on the date of this certificate; and I do further certify that the officer or official who executed the said power of attorney is an Assistant Secretary specially authorized by the chairman or the president to appoint attorneys-in-fact as provided in Article XIII, Section 5 of the By-laws of Liberty Mutual Insurance Company.

This certificate and the above power of attorney may be signed by facsimile or mechanically reproduced signatures under and by authority of the following vote of the board of directors of Liberty Mutual Insurance Company at a meeting duly called and held on the 12th day of March, 1980.

VOTED that the facsimile or mechanically reproduced signature of any assistant secretary of the company, wherever appearing upon a certified copy of any power of attorney issued by the company in connection with surety bonds, shall be valid and binding upon the company with the same force and effect as though manually affixed.

IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the said company, this 19th day of September, 2012.



By Gregory W. Davenport
Gregory W. Davenport, Assistant Secretary

Not valid for mortgage, note, loan, letter of credit, bank deposit, currency rate, interest rate or residual value guarantees.

To confirm the validity of this Power of Attorney call 1-610-832-8240 between 9:00 am and 4:30 pm EST on any business day.

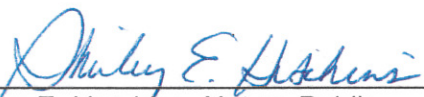


ACKNOWLEDGEMENT BY SURETY

STATE OF MICHIGAN)
)ss.
COUNTY OF OAKLAND)

On this 19th Day of September, 2012, before me, a Notary Public in and for said State, personally appeared Robert Porter who acknowledges himself to be Attorney-in-Fact for Liberty Mutual Insurance Company, the corporation described in and that executed the within and foregoing instrument, and known to me to be the person who executed the said instrument on behalf of the said corporation executed the same.

WITNESS my hand and official seal.



Shirley E. Hutchins, Notary Public
Wayne County, Michigan
Acting in Oakland County, Michigan
My Commission Expires: March 30, 2017

SHIRLEY E. HUTCHINS
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Mar 30, 2017
ACTING IN COUNTY OF *Oakland*

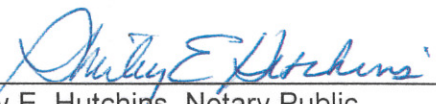


ACKNOWLEDGEMENT BY PRINCIPAL

STATE OF MICHIGAN)
)ss.
COUNTY OF OAKLAND)

On this 19th of September, 2012, before me, the undersigned authorized employee, personally appeared Bruce E. Robinson who acknowledges himself to be VP & Treasurer of Pulte Homes of Indiana, LLC, and as such employee, being authorized to do so, executed the foregoing instrument for the purposes therein contained by signing the name of the Corporation by himself as such officer.

WITNESS my hand and official seal.



Shirley E. Hutchins, Notary Public
Wayne County, Michigan
Acting in Oakland County, Michigan
My Commission Expires: March 30, 2017

SHIRLEY E. HUTCHINS
NOTARY PUBLIC, STATE OF MI
COUNTY OF WAYNE
MY COMMISSION EXPIRES Mar 30, 2017
ACTING IN COUNTY OF *Oakland*

FINDINGS AND ORDER

CONCERNING THE MAINTENANCE OF THE

Village of West Clay Drain, Section 10010-C Arm

On this 10th day of December, 2012, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Village of West Clay Drain, Section 10010-C Arm*.

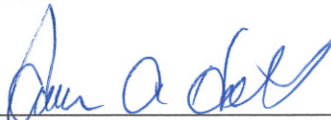
Evidence has been heard. Objections were presented and considered. The Board then adopted the original/amended Schedule of Assessments. The Board now finds that the annual maintenance assessment will be less than the benefits to the landowners and issues this order declaring that this Maintenance Fund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

HAMILTON COUNTY DRAINAGE BOARD

President



Member



Member

Attest:



BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

Village of West Clay Drain, Section 10010-C Arm

NOTICE

To Whom It May Concern and: _____

Notice is hereby given of the hearing of the Hamilton County Drainage Board on the **Village of West Clay Drain, Section 10010-C Arm** on **December 10, 2012** at **12:05 P.M.** in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana, and which construction and maintenance reports of the 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 Hamilton County Surveyor.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF THE

Village of West Clay Drain, Section 10010-C Arm

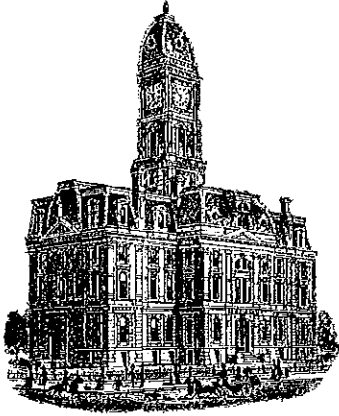
NOTICE

Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment on **December 10, 2012** has issued an order adopting the Schedule of Assessments, filed the same and made public announcement thereof at the hearing and ordered publication. If judicial review of the findings and order of the Board is not requested pursuant to Article Eight of this code within twenty (20) days from the date of this publication, the order shall be conclusive.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY



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 20, 2013

Re: Village of West Clay Drain– Village of West Clay Section 10010C

Attached are as-builts, certificate of completion & compliance, and other information for Village of West Clay Section 10010C. 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 November 2, 2012. The report was approved by the Board at the hearing held December 10, 2012. (See Drainage Board Minutes Book 14, Pages 436-438) The changes are as follows:

The 12" RCP was shortened from 1295 feet to 1285 feet. The 15" RCP was shortened from 361 feet to 356 feet. The 18" RCP was lengthened from 982 feet to 984 feet. The 21" RCP was shortened from 149 feet to 146 feet. The 24" RCP was lengthened from 178 feet to 181 feet. The 6" SSD was shortened from 1808 to 1598 feet.

The length of the drain due to the changes described above is now **4550 feet**.

It should be noted that Structures 402, 417, and 426 are Hydrodynamic Separators. They are made by Vort Sentry models H572, H548 & H548 respectively.


The non-enforcement was approved by the Board at its meeting on December 10, 2012 and recorded under instrument #2013004080.

The following sureties were guaranteed by Liberty Mutual and released by the Board on its September 9, 2013 meeting.

Bond-LC No: 268002855
Insured For: Storm Sewers
Amount: \$198,977
Issue Date: September 19, 2012

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

Sincerely,



Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/slm

FILED

JAN 15 2013

HAMILTON COUNTY SURVEYOR


CERTIFICATE OF COMPLETION AND COMPLIANCE

To: Hamilton County Surveyor

Re: Village of WestClay, Section 10010-C

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.

Signature:  Date: January 15, 2013

Type or Print Name: Dennis D. Olmstead

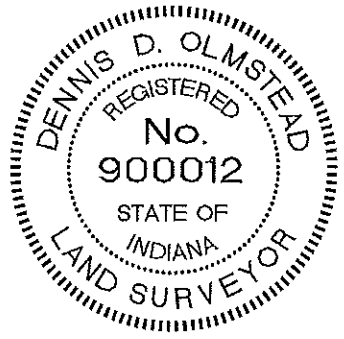
Business Address: Stooppelwerth & Associates, Inc.
7965 East 106th Street, Fishers, Indiana 46038

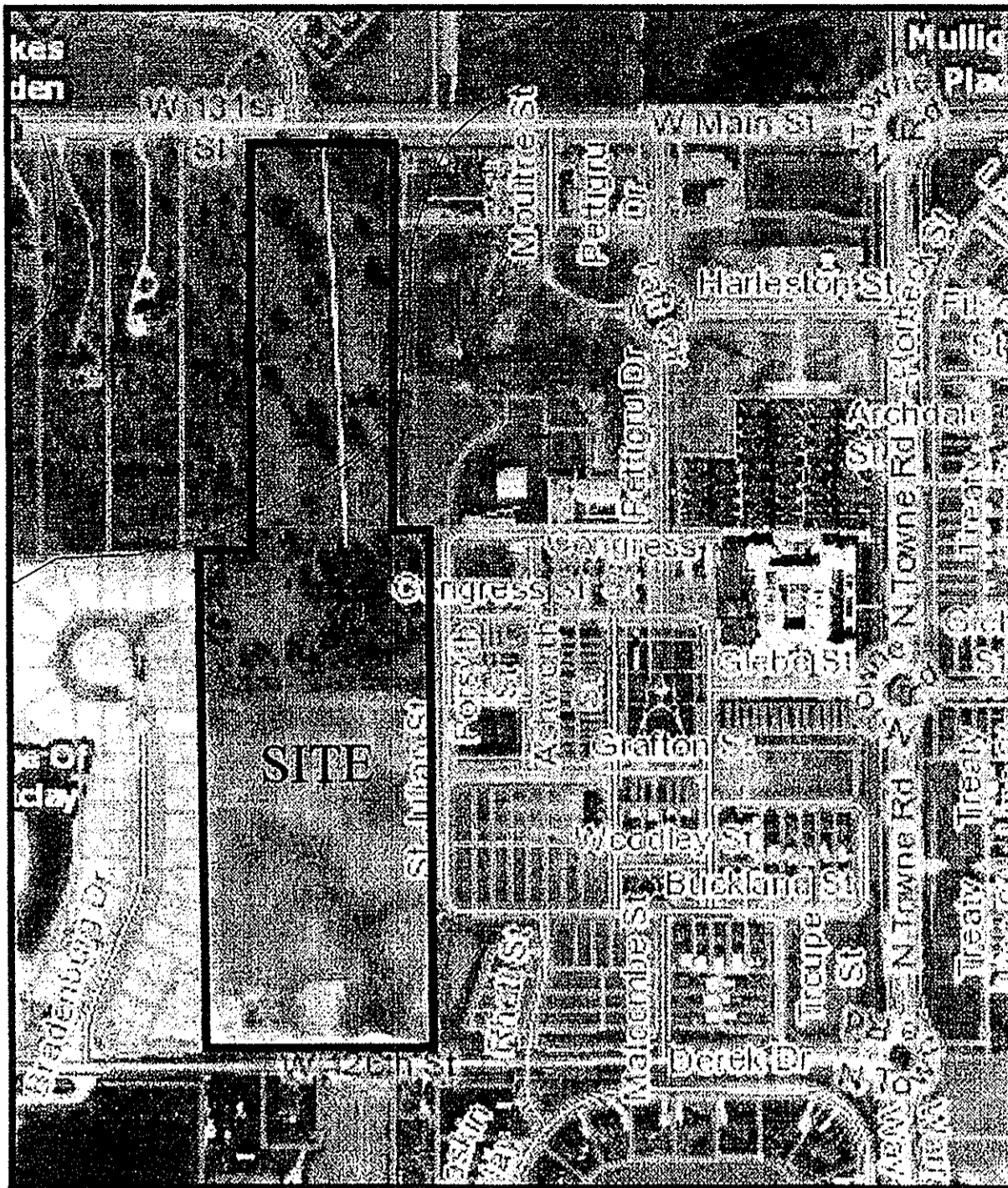
Telephone Number: (317) 849-5935

SEAL

INDIANA REGISTRATION NUMBER

900012



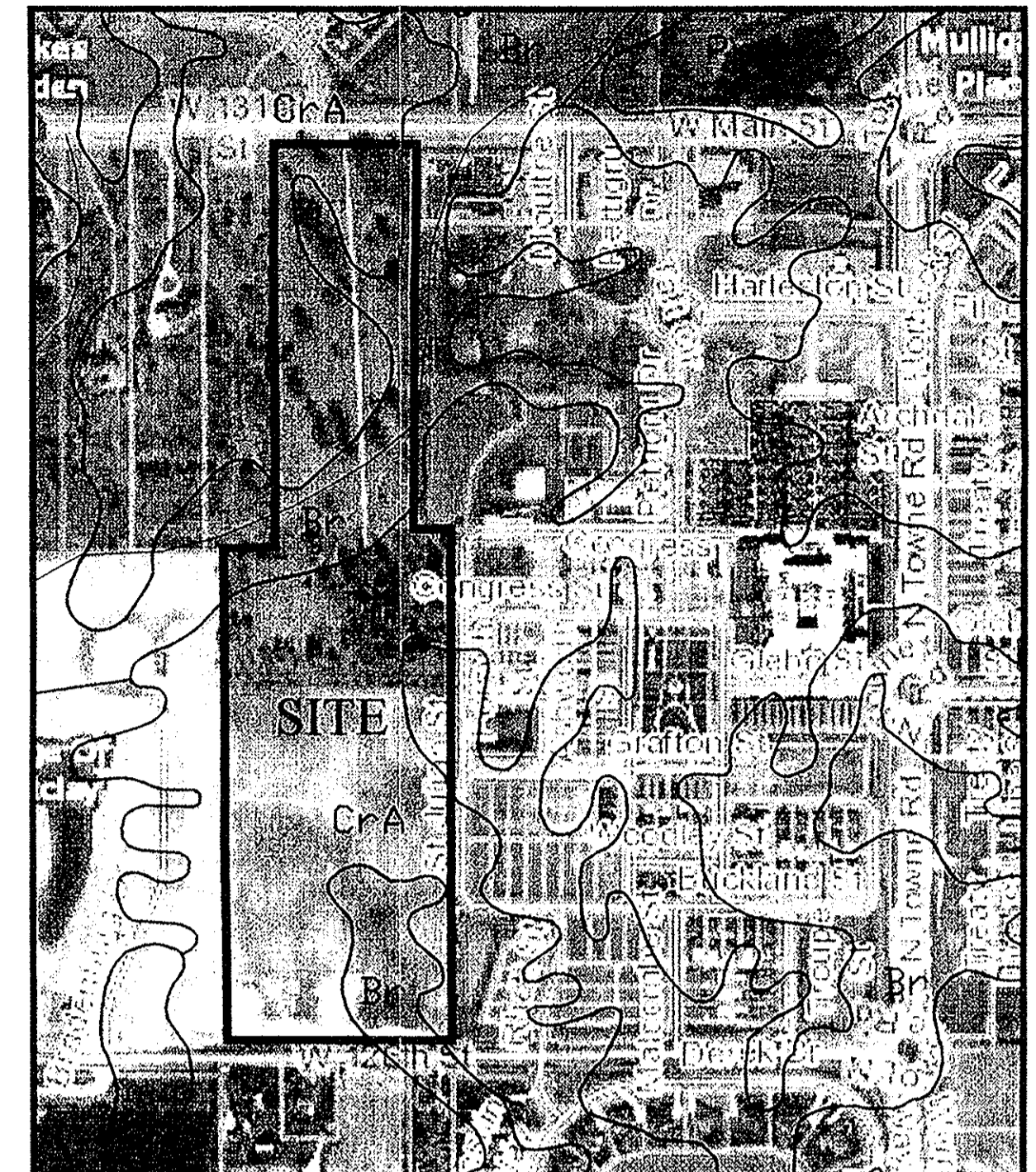


VICINITY MAP
NOT TO SCALE

VILLAGE OF WEST CLAY, SECTION 10010-C

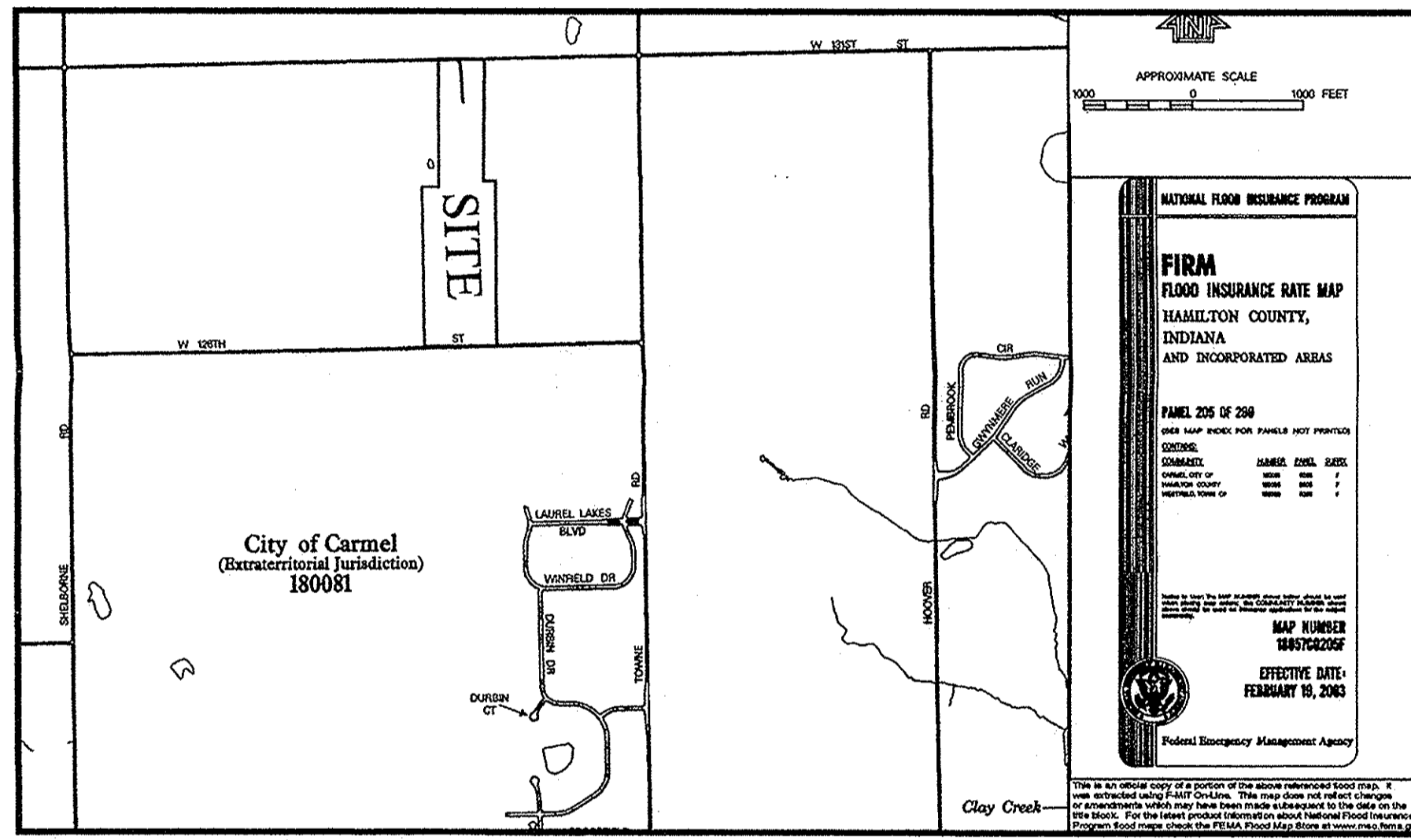
Developed by:
PULTE HOMES OF INDIANA, LLC.
11590 NORTH MERIDIAN STREET,
SUITE 530
CARMEL, INDIANA 46032
PHONE: (317) 575-2350
CONTACT PERSON: MATT LOHMEYER

OWNER:
WENDY M. FORTUNE
13025 EAST 300 SOUTH
ZIONSVILLE, INDIANA 46077
PHONE: (317) 506-5422
EMAIL: tneal@kdlegal.com



SOILS MAP
NOT TO SCALE

RECORD DRAWING

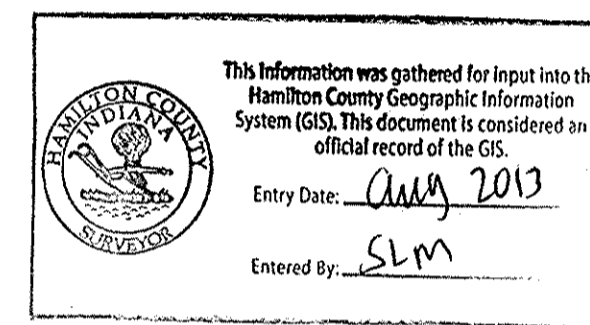


FEMA MAP
NOT TO SCALE

D. D. O.
 Dennis D. Olmstead
 Registered Land Surveyor
 No. 900012

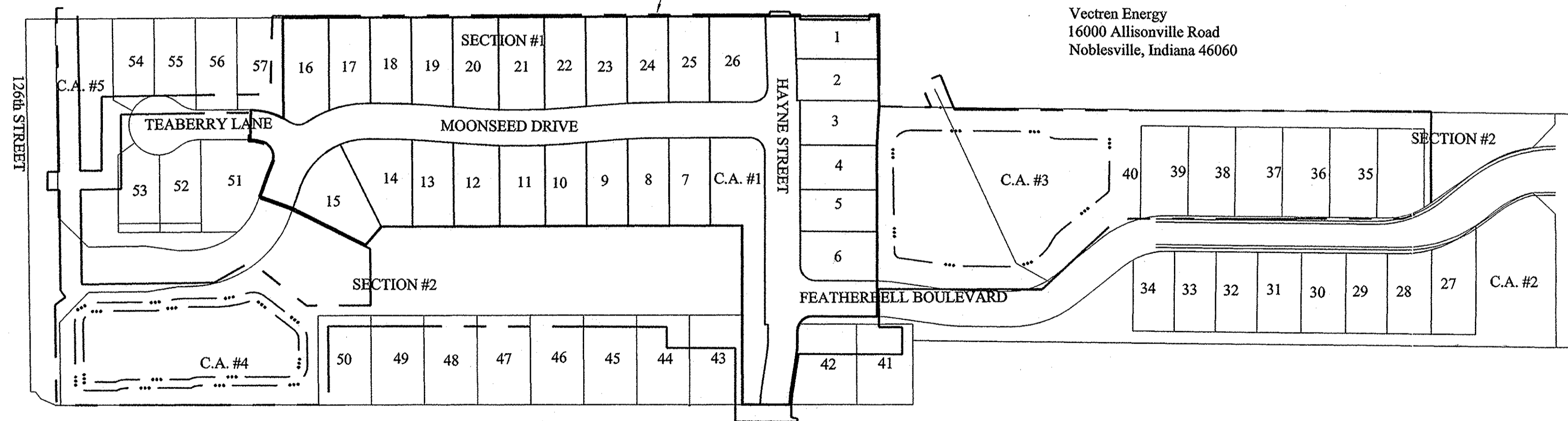


OPERATOR ON N.O.I. LETTER:
PULTE HOMES OF INDIANA, LLC.
11590 NORTH MERIDIAN STREET, SUITE 530
CARMEL, INDIANA 46032
PHONE: (317) 575-2350
CONTACT PERSON: MATT LOHMEYER



GRAPHIC SCALE
SCALE: 1"=150'

CONSTRUCTION LIMITS



SECTION 1

Part of the Southeast Quarter of Section 29, Township 18 North, Range 3 East in Clay Township, Hamilton County, Indiana, described as follows:

Commencing at the Southeast Corner of said Quarter Section; thence North 89 degrees 14 minutes 56 seconds East along the South line of said Quarter Section a distance of 1,978.65 feet; thence North 00 degrees 22 minutes 21 seconds West 434.13 feet to the POINT OF BEGINNING of this description; thence continuing North 00 degrees 22 minutes 21 seconds West 1,007.55 feet; thence North 88 degrees 53 minutes 43 seconds East 153.46 feet; thence South 86 degrees 42 minutes 36 seconds East 64.56 feet; thence North 89 degrees 47 minutes 20 seconds East 282.50 feet; thence South 00 degrees 12 minutes 40 seconds East 110.00 feet to the point of curvature of a curve concave northeasterly, the radius point of said curve being North 89 degrees 47 minutes 20 seconds East 25.00 feet from said point; thence southeasterly along said curve 39.27 feet to the point of tangency of said curve, said point being South 00 degrees 12 minutes 40 seconds East 25.00 feet from the radius point of said curve; thence North 89 degrees 47 minutes 20 seconds East 20.58 feet to the point of curvature of a curve concave southerly, the radius point of said curve being South 00 degrees 12 minutes 40 seconds East 175.00 feet from said point; thence easterly along said curve 27.54 feet to the point of tangency of said curve, said point being North 08 degrees 48 minutes 15 seconds East 175.00 feet from the radius point of said curve; thence South 81 degrees 11 minutes 45 seconds East 62.45 feet to the point of curvature of a curve concave northerly, the radius point of said curve being North 08 degrees 48 minutes 15 seconds East 125.00 feet from said point; thence easterly along said curve 18.65 feet to the point of tangency of said curve, said point being South 00 degrees 15 minutes 19 seconds West 125.00 feet from the radius point of said curve; thence South 00 degrees 12 minutes 40 seconds East 80.00 feet; thence South 89 degrees 47 minutes 20 seconds West 300.51 feet; thence South 00 degrees 22 minutes 21 seconds East 612.49 feet; thence South 49 degrees 26 minutes 53 seconds East 40.00 feet; thence South 26 degrees 14 minutes 07 seconds West 143.27 feet; thence South 12 degrees 43 minutes 06 seconds West 50.00 feet; thence North 77 degrees 16 minutes 54 seconds West 71.98 feet to the point of curvature of a curve concave southeasterly, the radius point of said curve being South 12 degrees 43 minutes 06 seconds West 25.00 feet from said point; thence southwesterly along said curve 39.00 feet to the point of tangency of said curve, said point being North 76 degrees 39 minutes 19 seconds West 25.00 feet from the radius point of said curve, said point also being the point of curvature of a curve concave easterly, the radius point of said curve being South 76 degrees 39 minutes 19 seconds East 75.00 feet from said point; thence southerly along said curve 15.52 feet to the point of tangency of said curve, said point being North 88 degrees 30 minutes 49 seconds West 75.00 feet from the radius point of said curve; thence North 88 degrees 30 minutes 49 seconds West 50.00 feet to a point on a curve concave easterly, the radius point of said curve being South 88 degrees 30 minutes 49 seconds East 125.00 feet from said point; thence northerly along said curve 57.25 feet to the point of tangency of said curve, said point being North 62 degrees 16 minutes 18 seconds West 125.00 feet from the radius point of said curve; thence South 89 degrees 37 minutes 39 seconds West 169.73 feet to the place of beginning, containing 9.366 acres, more or less, subject to all legal highways, rights-of-way, easements, and restrictions of record.



UTILITY CONTACTS:

Clay Township Regional Waste District
 10701 College Avenue
 Indianapolis, Indiana 46280

Carmel Water Utilities
 3450 West 131st Street
 Westfield, IN 46074

AT & T
 5858 North College Avenue
 Indianapolis, Indiana 46220

BrightHouse Networks
 3030 Roosevelt Avenue
 Indianapolis, Indiana 46218

Duke Energy
 16475 Southpark Drive
 Westfield, Indiana 46074

Indianapolis Power & Light Company
 3600 North Arlington Avenue
 Indianapolis, Indiana 46218

Vectren Energy
 16000 Allisonville Road
 Noblesville, Indiana 46060

Map Unit: Bs - Brookston silt clay loam, 0 to 2 percent slopes

Brookston silty clay loam (0 to 2 percent slopes) (Bs).--Some of this soil is in large tracts within which are irregularly shaped islandlike areas of lighter colored soils, and some of it is in drainageways and small depressions surrounded by lighter colored soils. This soil has the profile described as representative of the series.

The content of organic matter is high in this soil. Wetness is the main limitation that affects use and management.

If this Brookston soil is adequately drained, it is suited to all crops commonly grown in the county. Under proper management it can be used intensively for row crops. Its limitations for uses associated with residential development are severe. Capability unit II-1: tree and shrub suitability group 1.

Map Unit: CrA - Crosby silt loam, 0 to 2 percent slopes

CrA--Crosby silt loam, 0 to 2 percent slopes
 This is a somewhat poorly drained soil and has a seasonal high water table at 0.5 to 2.0 ft. and is on rises on uplands. Slopes are 0 to 2 percent. The native vegetation is hardwoods. The surface layer is silt loam and has moderately low or moderate organic matter content (1.0 to 3.0 percent). Permeability is very slow (< 0.06 in/hr) in the most restrictive layer above 60 inches. Available water capacity is moderate (6.2 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 5.1 to 6.0. Droughtiness and wetness are management concerns for crop production. This soil responds well to tile drainage.

DESIGN DATA

DESIGN SPEED = 25 M.P.H.

HAYNE STREET	684.39 L.F.
MOONSEED DRIVE	948.28 L.F.
TEABERRY LANE	80.34 L.F.
FEATHERBELL BOULEVARD	160.00 L.F.
TOTAL	1,873.01 L.F.

OPERATING AUTHORITY
 CITY OF CARMEL (317) 571-2441
 ONE CIVIC SQUARE
 CARMEL, INDIANA 46032

FLOOD STATEMENT
 NO PORTION OF THIS SITE LIES WITHIN FLOODPLAIN PER
 FIRM 18057C0205F DATED FEB. 19, 2003

SHT.	INDEX DESCRIPTION
C001	TITLE SHEET
C100-C102	TOPOGRAPHICAL SURVEY/TREE CONSERVATION PLAN
C200-C203	SITE DEVELOPMENT PLAN/EMERGENCY FLOOD ROUTE PLAN/UTILITY PLAN
C300-C305	EROSION CONTROL PLAN/SWPP DETAILS AND SPECIFICATIONS
C400-C406	STREET PLAN AND PROFILES/INTERSECTION DETAILS/TRAFFIC MAINTENANCE/PAVING POLICIES
C500-C502	SANITARY SEWER PLAN AND PROFILES
C600-C603	STORM SEWER PLAN AND PROFILES/SUMP PLAN
C700	WATER PLAN
C800-C805	CONSTRUCTION DETAILS AND SPECIFICATIONS SANITARY SEWER STORM SEWER STREET ADA RAMP
C900-C901	EXISTING TREE CONSERVATION PLAN/LANDSCAPE PLAN

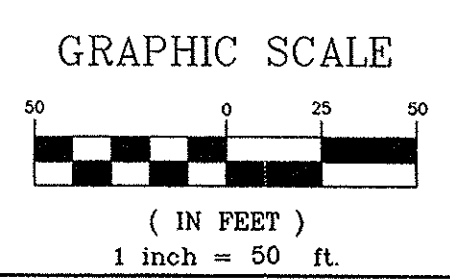
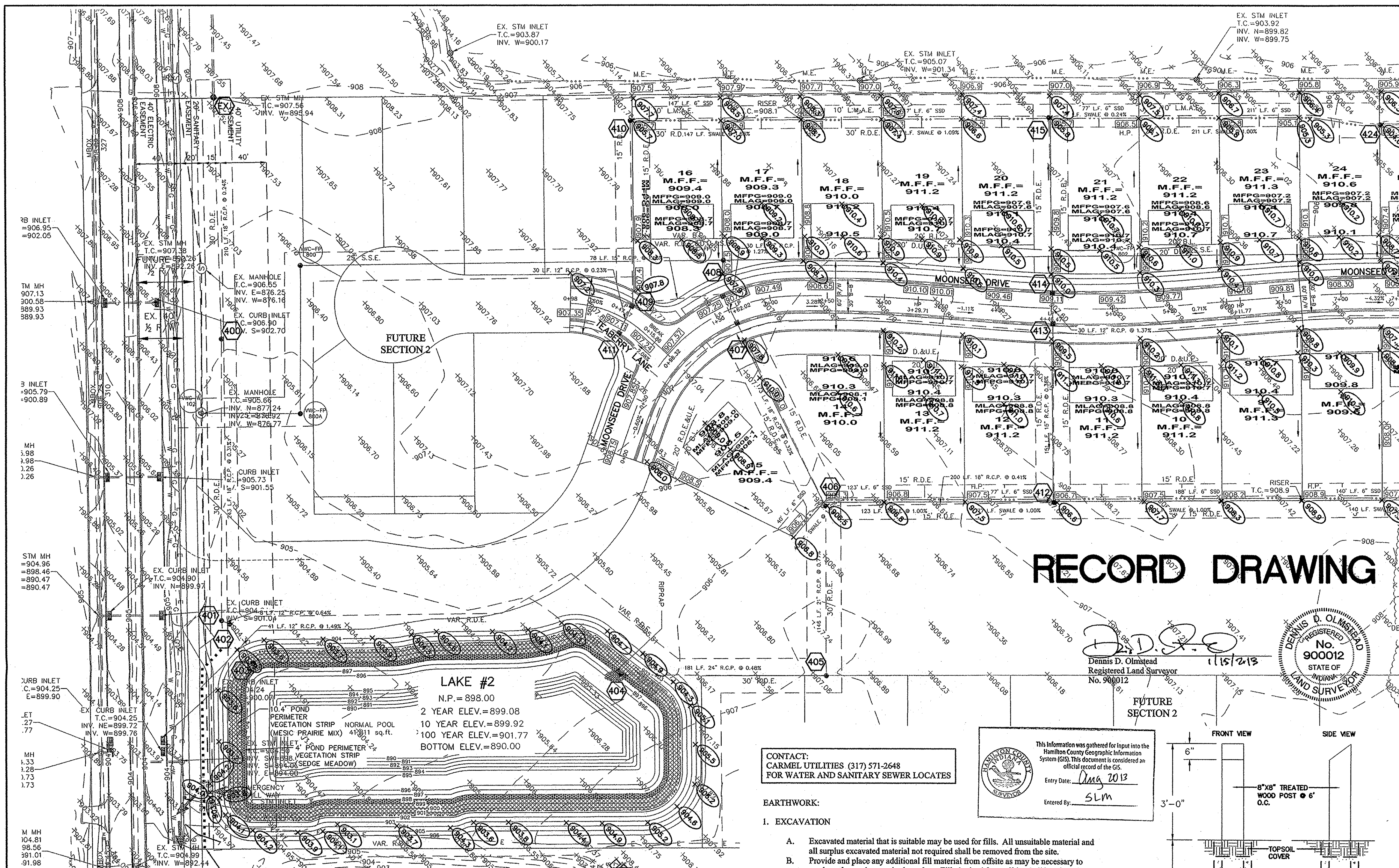
SHT.	DESCRIPTIONS
ALL	REVISED PER TAC COMMENTS 8/29/12 DCM
ALL	REVISED PER CTRWD AND CITY OF CARMEL COMMENTS 9/14/12 DCM
	AS-BUILTS 1/11/13 KJM

PLANS PREPARED BY:
STOEPPELWERTH & ASSOCIATES, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
 7965 E. 106TH STREET, FISHERS, INDIANA 46038
 PHONE: (317)-849-5935
 FAX: (317)-849-5942
 CONTACT PERSON: BRETT A. HUFF
 EMAIL: BHUFF@STOEPPELWERTH.COM

PLANS CERTIFIED BY:

David J. Stoepfelwerth 7/20/12
 DAVID J. STOEPPELWERTH
 PROFESSIONAL LAND SURVEYOR
 NO. 19358





STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.
 ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.

DRAINAGE SUMMARY		VOLUME DETENTION REQUIRED	
OVERALL SITE ACREAGE=32.446 AC.±		LAKE #1 =	257,940 ft³
SECTION 0010-C=9.366 AC.±		LAKE #2 =	180,742 ft³
ALLOWABLE RATE CALCULATION:		VOLUME DETENTION PROVIDED	
0.1 cfs/acre = 10-yr 0.24 cfs/acre = 100-yr		LAKE #1 =	258,798 ft³
Restricted rates based on the J.W. Brendle Drain		LAKE #2 =	320,786 ft³
RELEASE RATE (WITH 8" ORIFICE)		LAKE #1 OFFSITE DRAINAGE:	
LAKE #1	10 YR. 100 YR.	100 YR. cfs = 14.479 (PER VOWC SEC 6001 DRAINAGE REPORT)	
ALLOWABLE	1.818cfs 4.363cfs	LAKE #2 OFFSITE DRAINAGE:	
POST DEV.	1.806cfs 4.302cfs	THERE IS NO OFFSITE TO LAKE #2	
RELEASE RATE (WITH 7" ORIFICE)		PRE DEVELOPED ONSITE ACREAGE	
LAKE #2	1.438cfs 3.451cfs	OUTLET 1 = 18.18	
ALLOWABLE	1.403cfs 3.428cfs	OUTLET 2 = 14.38	
POST DEV.		POST DEVELOPED ONSITE ACREAGE	
		LAKE #1 = 16.93	
		LAKE #2 = 15.56	

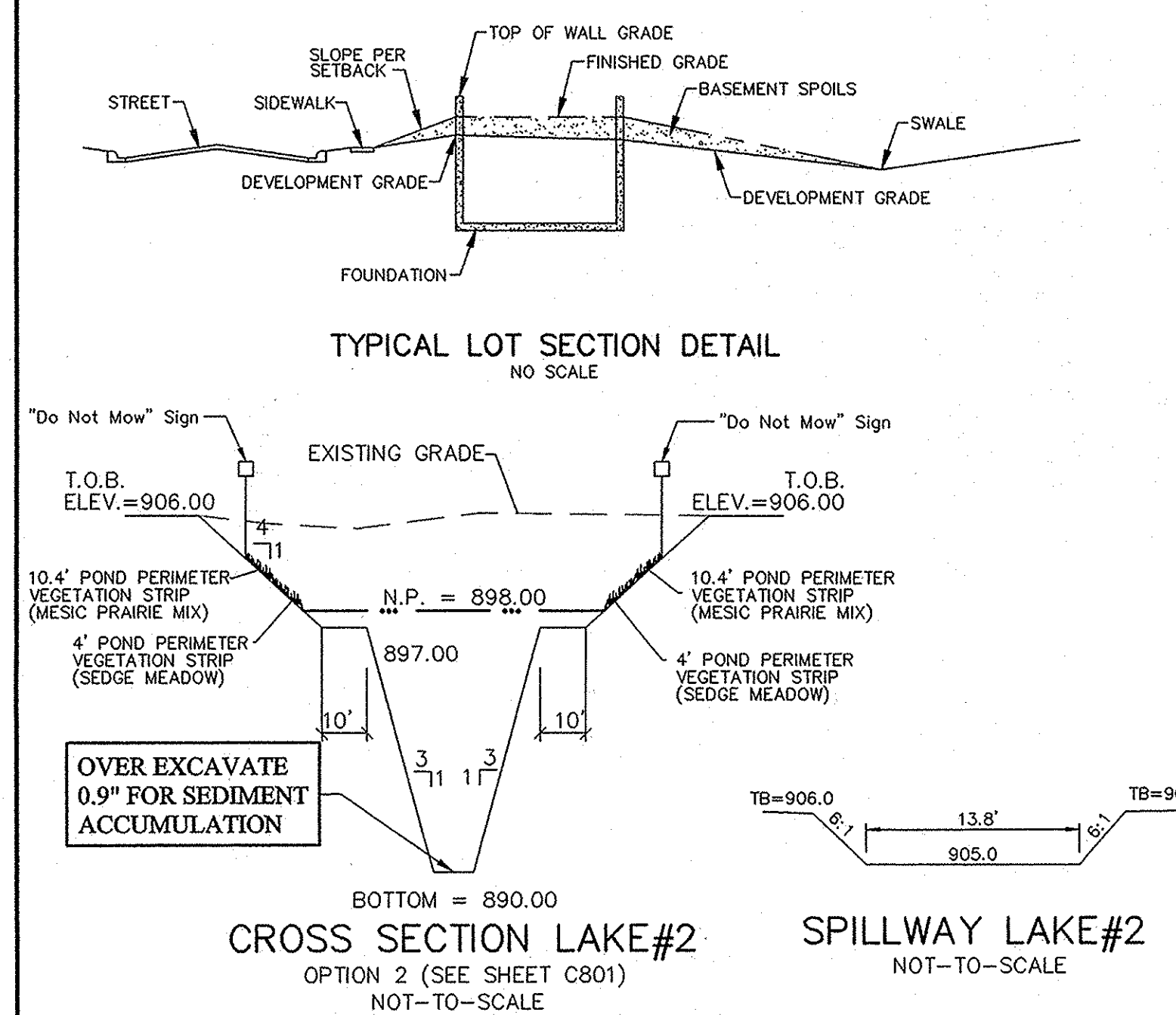
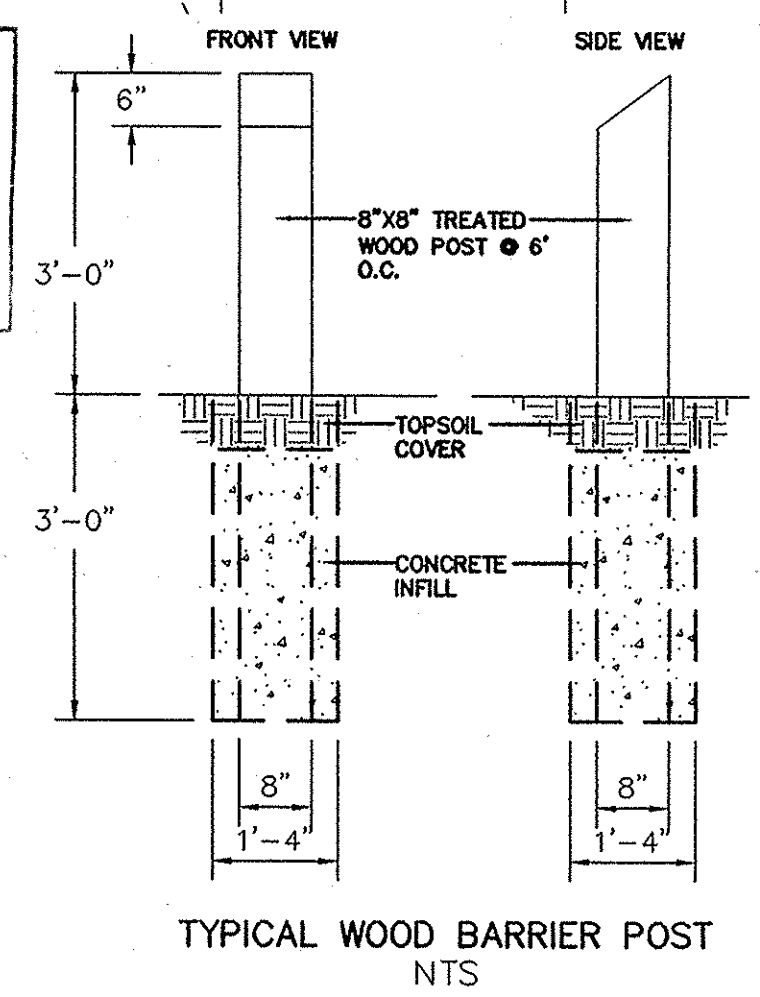
LEGEND	
	EXISTING CONTOUR
	EXISTING SANITARY SEWER
	EXISTING STORM SEWER
	PROPOSED GRADE
	PROPOSED CONTOUR
	PROPOSED SANITARY SEWER
	PROPOSED STORM SEWER
	PROPOSED WATER LINE
	PROPOSED SWALE
	PROPOSED 5' SIDEWALK (BY HOME BUILDER) (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)
	LOT NUMBER
	PAD ELEVATION
	4" SSD LATERAL STUB TO LOTS WITHOUT REAR YARD UNDERDRAINS (LOTS 4-6)
	PROPOSED 6" DUAL WALL HANCOR HI-Q TYPE 4 UNDERDRAINS
	MFF=752.6
	MFPG=753.0 MINIMUM FLOOD PROTECTION GRADE
	MLAG=753.0 MINIMUM LOWEST ADJACENT GRADE
	4" SSD TO LOT
	6" DUAL WALL, HANCOR HI-Q TYPE 4 SSD
	CONSTRUCTION LIMITS

RECORD DRAWING

Dennis D. Olmstead
 Registered Land Surveyor
 No. 900012
 STATE OF INDIANA

CONTACT:
 CARMEL UTILITIES (317) 571-2648
 FOR WATER AND SANITARY SEWER LOCATES

- EARTHWORK:**
- EXCAVATION**
 - Excavated material that is suitable may be used for fills. All unsuitable material and all surplus excavated material not required shall be removed from the site.
 - Provide and place any additional fill material from offsite as may be necessary to produce the grades required on plans. Fill obtained from offsite shall be of quality as specified for fills herein and the source approved by the Developer. It will be the responsibility of the Contractor for any costs for fill needed.
 - REMOVAL OF TREES**
 - All trees and stumps shall be removed from areas to be occupied by a road surface or structure area. Trees and stumps shall not be buried on site.
 - PROTECTION OF TREES**
 - The Contractor shall, at the direction of the Developer, endeavor to save and protect trees of value and worth which do not impair construction of improvements as designed.
 - In the event cut or fill exceeds 0.5 foot over the road area, the Developer shall be consulted with respect to protective measure to be taken, if any, to preserve such trees.
 - REMOVAL OF TOPSOIL**
 - All topsoil shall be removed from all areas beneath future pavements or building. Topsoil removal shall be to a minimum depth of 6 inches or to the depth indicated in the geotechnical report provided by the Developer to be excavated or filled. Topsoil should be stored at a location where it will not interfere with construction operations. The topsoil shall be free of debris and stones.
 - UTILITIES**
 - Rules and regulation governing the respective utility shall be observed in executing all work under this section.
 - It shall be the responsibility of the Contractor to determine the location of existing underground utilities 2 working days prior to commencing work. For utility locations to be marked call Toll Free 1-800-382-5544 within Indiana or 1-800-428-5200 outside Indiana.
 - SITE GRADING**
 - Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
 - The project area shall not exceed 0.05 feet above established subgrade. Provide roundings at top and bottom of banks and other breaks in grade.
 - The Engineer shall be notified when the Contractor has reached the tolerance as stated above, so that field measurements and spot elevations can be verified by the Engineer. The Contractor shall not remove his equipment from the site until the Engineer has verified that the job meets the above tolerance.



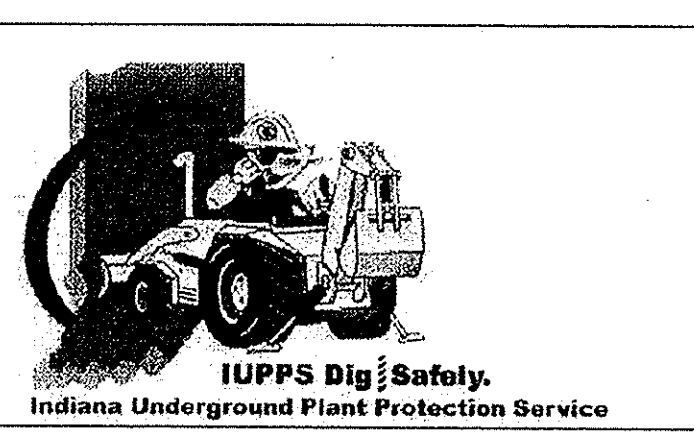
Minimum Flood Protection Grades
 From Sections 104.02, 302.06 and 303.07 of the City of Carmel Storm Water Technical Standards Manual

- Definitions**
 - Minimum Flood Protection Grade of all structures fronting a pond or open ditch shall be no less than 2 feet above any adjacent 100-year local or regional flood elevations, whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building.
 - Lowest Adjacent Grade is the elevation of the lowest grade adjacent to a structure, where the soil meets the structural members such as basement walkout, patios, decks, porches, support posts or piers, and rim of the window well.
- Standard: Lowest Adjacent Grade**
 - General
 - The Lowest Adjacent Grade for residential, commercial, or industrial buildings shall have two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.
 - For areas outside a Special Flood Hazard Area (SFHA) or FEMA or IDNR designated floodplain
 - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the 100-year pond elevation or 2 feet above the emergency overflow weir elevation, whichever is higher.
 - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow path/ponding elevation across the property frontage. In addition to the Lowest Adjacent Grade requirements, any basement floor must be at least a foot above the normal water level of any wet-bottom pond.
 - Design Notes
 - Each lot that is adjacent to a pond, open ditch or flooding source has a flood protection grade. There are instances where there are multiple different flooding sources for 1 structure. In this case, there should be a flood protection grade listed for each side of the structure in the event that piping from the structure discharge to either flood source.
 - Finished floor elevation or the lowest building entry elevation shall be no less than 6 inches above finished grade around the building. Also, the building's lowest entry elevation that is adjacent to and facing a road shall be a minimum of 15 inches above the road elevation.

FLOOD STATEMENT
 THIS SITE DOES NOT LIE WITHIN A FLOODWAY OR FLOOD PLAIN PER FIRM MAP 18057C0205F DATED FEB 19, 2003.

VEGETATIVE COVER
 EXISTING SITE CONSIST MOSTLY OF GRASS AND WEEDS WITH WOODS ON THE SITE.

ADJACENT PROPERTIES
 NORTH: RESIDENTIAL
 EAST: RESIDENTIAL
 SOUTH: RESIDENTIAL
 WEST: RESIDENTIAL



Know what's below.
 Call before you dig.

STOEPPELWERTH
 ALWAYS ON
 7945 East 106th Street, Fishers, IN 46038-2505
 phone: 317.840.5935 fax: 317.840.5942

SITE DEVELOPMENT PLAN
 VILLAGE OF WEST CLAY,
 SECTION 10010-C

HAMILTON COUNTY, INDIANA
 CLAY TOWNSHIP

ASBUILT REVISED VEGETATION STRIP REVISED SPILLWAY AND D. SUMMARY REVISED PER COMMENTS REVISED PER M54 COMMENTS REVISED PER TAC COMMENTS

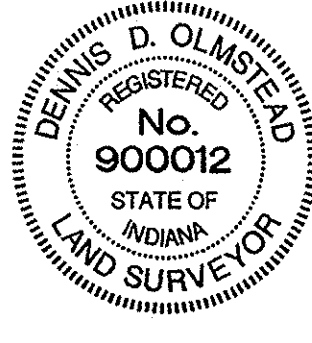
DATE 11/17/13 9/29/12 9/25/12 9/20/12 9/14/12

REGISTERED PROFESSIONAL ENGINEER
 No. 19358
 STATE OF INDIANA
 David J. Stappeler

CERTIFIED: 7/20/12

DRAWN BY: KRC CHECKED BY: BAH
 SHEET NO. C200
 S & A JOB NO. 55960PUL

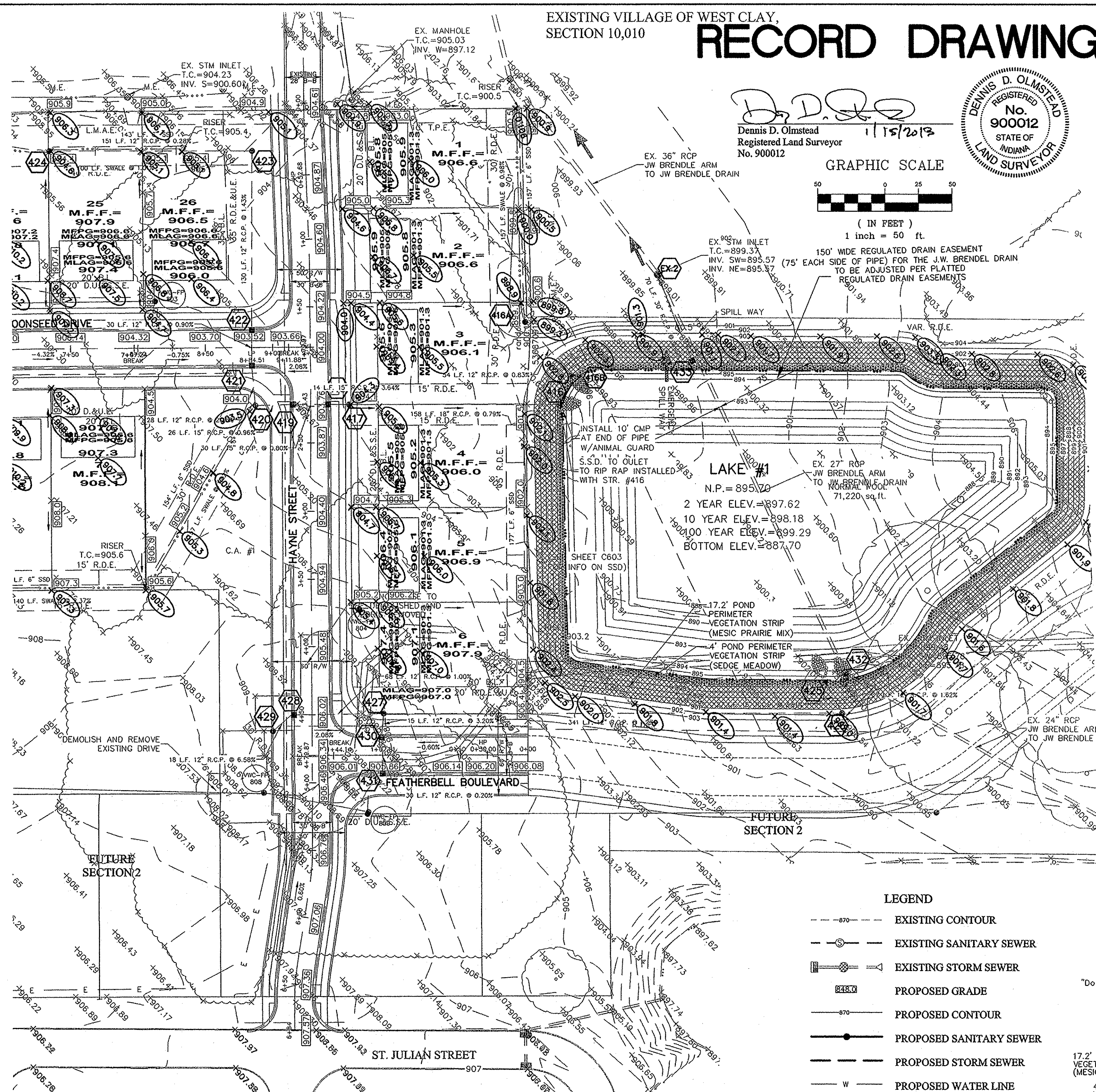
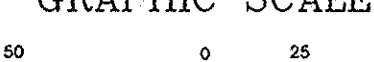
EXISTING VILLAGE OF WEST CLAY,
SECTION 10,010
RECORD DRAWING



Dennis D. Olmstead
Registered Land Surveyor
No. 900012

11/5/2012

GRAPHIC SCALE
1 inch = 50 ft.



DRAINAGE SUMMARY

OVERALL SITE ACREAGE=32.446 AC±
SECTION 0010-C=9.366 AC±
ALLOWABLE RATE CALCULATION:
0.1 cfs/acre = 10-yr 0.24 cfs/acre = 100-yr
Restricted rates based on the J.W. Brendle Drain

RELEASE RATE (WITH 8" ORIFICE)

LAKE #	10 YR.	100 YR.
LAKE #1	1.818cfs	4.363cfs
POST DEV.	1.806cfs	4.302cfs

RELEASE RATE (WITH 7" ORIFICE)

LAKE #	ALLOWABLE	POST DEV.
LAKE #1	1.438cfs	3.451cfs
LAKE #2	1.403cfs	3.428cfs

VOLUME DETENTION REQUIRED

LAKE #1	= 257,940 ft³
LAKE #2	= 180,742 ft³

VOLUME DETENTION PROVIDED

LAKE #1	= 258,798 ft³
LAKE #2	= 320,786 ft³

LAKE #1 OFFSITE DRAINAGE:
100 YR. cfs = 14.479 (PER VOVWC SEC 6001 DRAINAGE REPORT)

LAKE #2 OFFSITE DRAINAGE:
THERE IS NO OFFSITE TO LAKE #2

PRE DEVELOPED ONSITE ACREAGE

OUTLET 1	= 18.18
OUTLET 2	= 14.38

POST DEVELOPED ONSITE ACREAGE

LAKE #1	= 16.93
LAKE #2	= 15.56

FLOOD STATEMENT
THIS SITE DOES NOT LIE WITHIN A FLOODWAY OR FLOOD PLAIN PER FIRM MAP 18057C0205F DATED FEB 19, 2003.

VEGETATIVE COVER
EXISTING SITE CONSIST MOSTLY OF GRASS AND WEEDS WITH WOODS ON THE SITE.

ADJACENT PROPERTIES
NORTH: RESIDENTIAL
EAST: RESIDENTIAL
SOUTH: RESIDENTIAL
WEST: RESIDENTIAL

Minimum Flood Protection Grades
From Sections 104.02, 302.06 and 303.07 of the City of Carmel Storm Water Technical Standards Manual

1. Definitions

a. Minimum Flood Protection Grade of all structures fronting a pond or open ditch shall be no less than 2 feet above any adjacent 100-year local or regional flood elevations, whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building.

b. Lowest Adjacent Grade is the elevation of the lowest grade adjacent to a structure, where the soil meets the foundation around the outside of the structure (including structural members side of the structure in the event that decks, porches, support posts or piers, and rim of the window well.

2. Standard: Lowest Adjacent Grade

a. General

- The Lowest Adjacent Grade for residential, commercial, or industrial buildings shall be two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.
- For areas outside of a Special Flood Hazard Area (SFHA) or FEMA or INR designated floodplain.
 - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the 100-year pond elevation or 2 feet above the emergency overflow weir elevation, whichever is higher.
 - The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow path/ponding elevation across the property frontage.
 - In addition to the Lowest Adjacent Grade requirements, any basement floor must be at least a foot above the normal water level of any wet-bottom pond.

b. Design Notes:

- Each lot that is adjacent to a pond, open ditch or flooding source has a flood protection grade. There are instances where there are multiple different flooding sources for 1 structure. In this case, there should be a flood protection grade listed for each side of the structure in the event that piping from the structure discharge to either flood source.
- Finished floor elevation or the lowest building entry elevation shall be no less than 6 inches above finished grade around the building. Also, the building's lowest entry elevation that is adjacent to and facing a road shall be a minimum of 15 inches above the road elevation.

LEGEND

- - - - - EXISTING CONTOUR
- - - - - EXISTING SANITARY SEWER
- - - - - EXISTING STORM SEWER
- - - - - PROPOSED GRADE
- - - - - PROPOSED CONTOUR
- - - - - PROPOSED SANITARY SEWER
- - - - - PROPOSED STORM SEWER
- - - - - PROPOSED WATER LINE
- - - - - PROPOSED SWALE
- - - - - PROPOSED 5' SIDEWALK (BY HOME BUILDER) (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)

LOT NUMBER PAD ELEVATION

25
744.7

MFF=752.6

MFFP=753.0 MINIMUM FLOOD PROTECTION GRADE

MLAG=753.0 MINIMUM LOWEST ADJACENT GRADE

4" SSD TO LOT

6" DUAL WALL, HANCOR HI-Q TYPE 4 SSD

RISER TC

CONSTRUCTION LIMITS

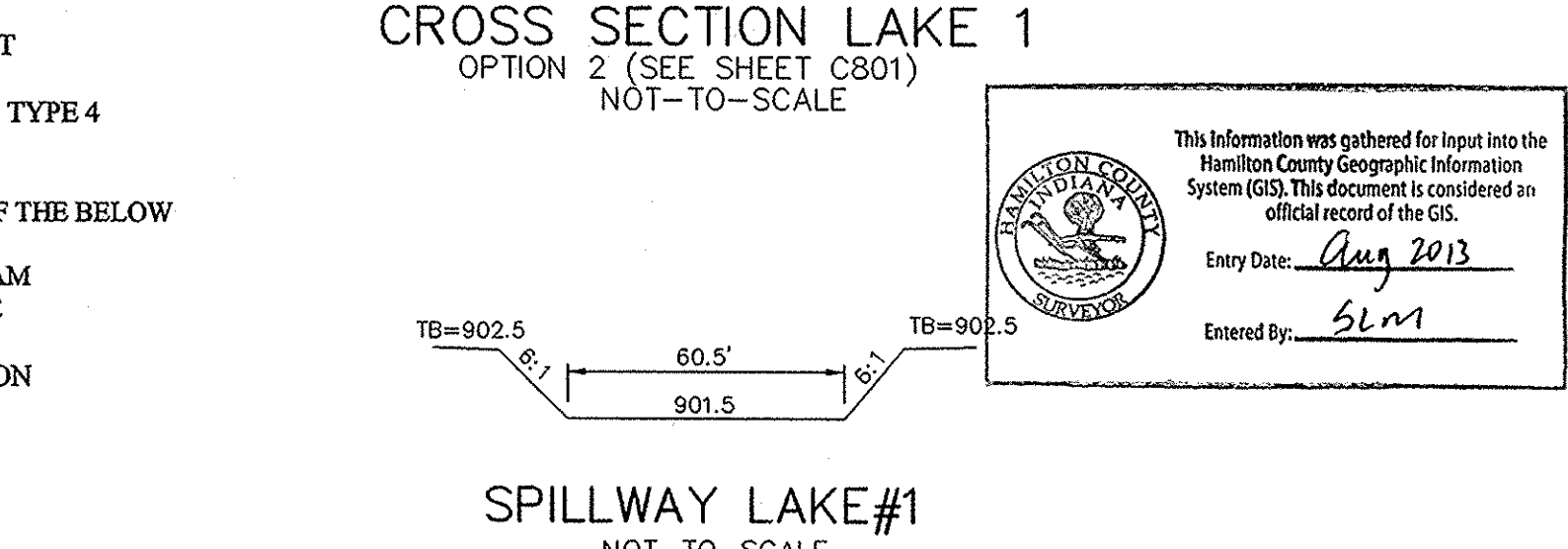
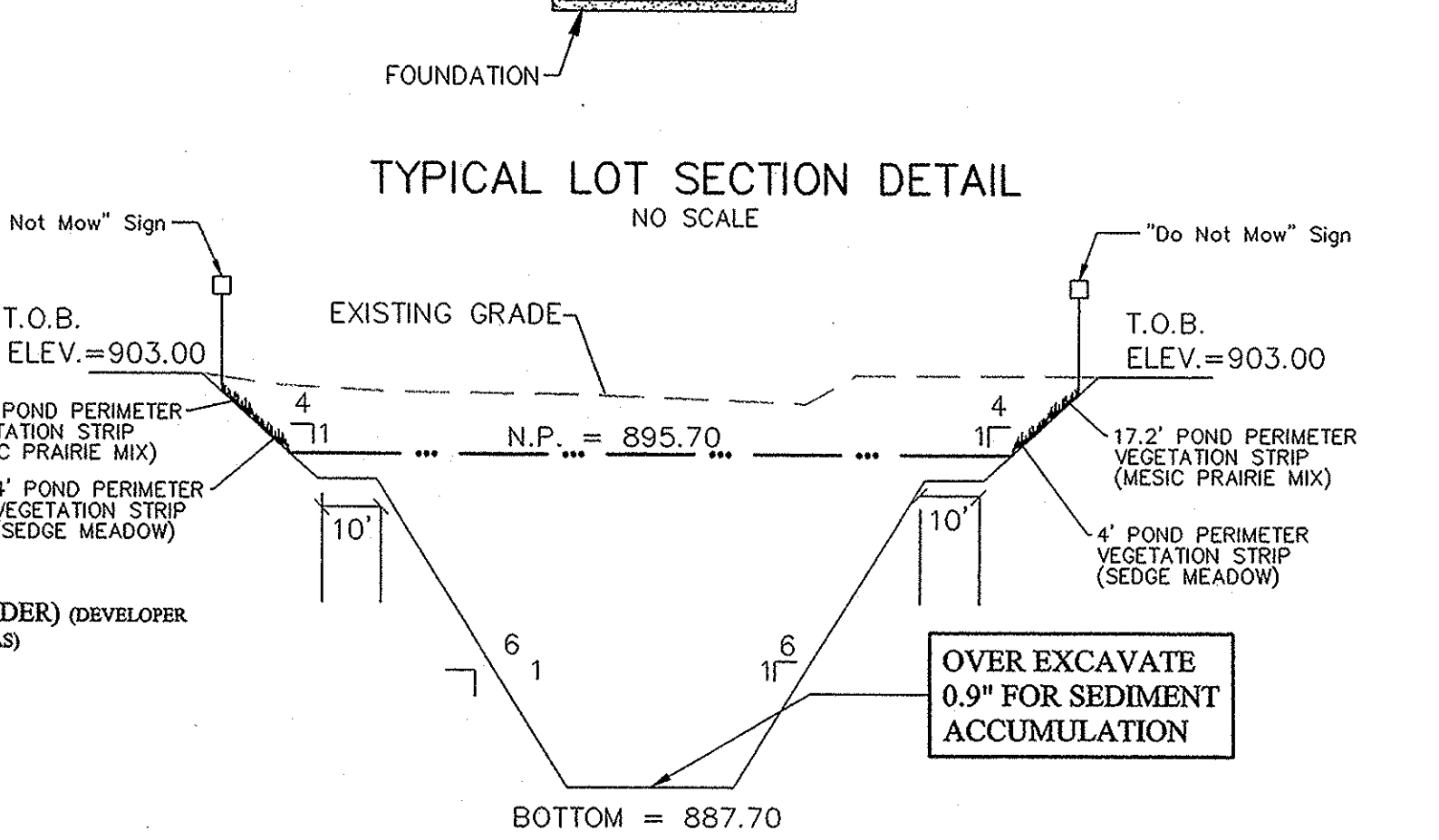
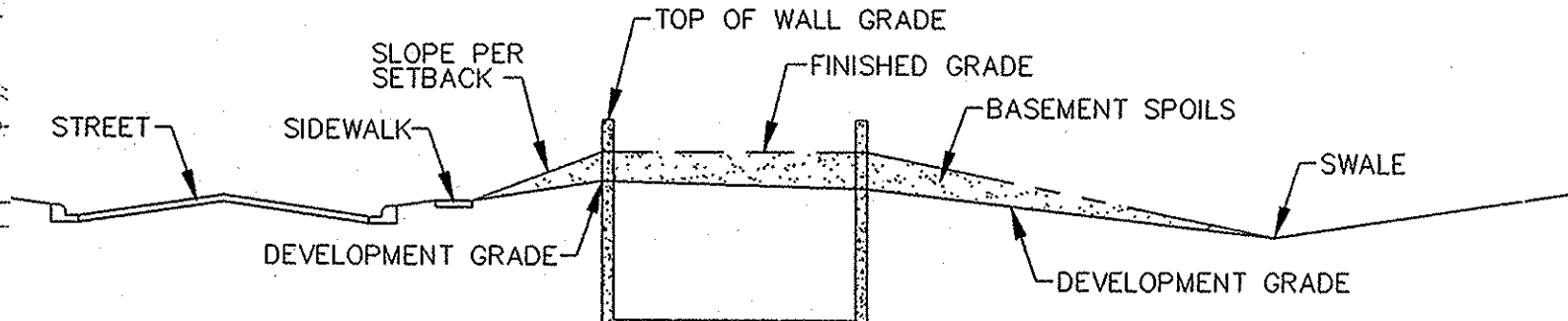
STRUCTURE TABLE

STR.#	TYPE	T.C.	CASTING TYPE	DIAMETER IN	DIRECTION IN	INV. IN	DIAMETER OUT	DIRECTION OUT	INV. OUT	SLOPE
400	MANHOLE	906.00	R-4342	18	E	896.65	18	W	896.65	0.24%
401	YARD INLET	905.39	R-1772	12	NE	897.50	18	W	897.39	0.31%
402	BMP STR.	905.87	Special	12	NE	897.55	12	SW	897.55	0.64%
403	OUTLET CONTROL STR.						12	SW	898.16	1.49%
404	END SECTION			24	N	898.10				
405	YARD INLET	904.53	R-4342	21	W	899.07	24	S	898.97	0.48%
406	YARD INLET	904.53	R-4342	18	SW	900.29	21	E	900.19	0.77%
407	CURB INLET	907.12	R-3501-L2	15	SW	900.92	18	NE	900.84	0.32%
408	CURB INLET	907.25	R-3501-L2	15	S	901.40	15	NE	901.30	1.27%
409	CURB INLET	907.20	R-3501-L2	12	W	902.35	15	N	902.30	1.15%
410	YARD INLET	905.65	R-4342						902.67	0.20%
411	CURB INLET	907.18	R-3501-L2				12	NW	902.52	0.23%
412	YARD INLET	906.68	R-4342	15	W	901.20	18	S	901.10	0.41%
413	CURB INLET	909.22	R-3501-L2	12	W	901.82	15	E	901.77	0.38%
414	CURB INLET	909.18	R-3501-L2	12	W	902.28	12	E	902.23	1.37%
415	YARD INLET	905.83	R-4342				12	E	903.03	0.50%
416	END SECTION			18	S	895.62				
416A	YARD INLET	898.61	R-4342				12	NE	896.33	0.83%
416B	END SECTION			12	SW	895.88				
417	BMP STR.	904.57	SPECIAL	15	S	896.97	18	N	896.87	0.79%
418	CURB INLET	903.78	R-3501-L2	15	S	897.53	15	N	897.47	1.27%
419	CURB INLET	903.77	R-3501-L2	15	S	897.82	15	N	897.77	0.80%
420	YARD INLET	903.60	R-4342	12	W	898.12	15	N	898.07	0.96%
421	CURB INLET	903.45	R-3501-L2	12	W	901.12	12	E	898.74	2.25%
422	CURB INLET	903.55	R-3501-L2	12	W	901.17	12	E	899.07	0.90%
423	MANHOLE	905.53	R-1772	12	E	901.13	12	E	901.03	1.43%
424	YARD INLET	904.61	R-4342				12	N	901.56	0.28%
425	END SECTION			12	NE	895.76				
426	BMP STR.	902.31		12	NE	896.35	15	SW	896.79	3.81%
427	MANHOLE		R-1772	12	S	901.18	12	N	901.13	1.00%
428	CURB INLET	905.91	R-3501-L2	12	SE	901.91	12	N	901.86	1.27%
429	YARD INLET	906.50	R-4342				12	NW	903.10	6.58%
430	CURB INLET	905.94	R-3501-L2	12	E	901.61	12	W	901.62	3.20%
431	CURB INLET	905.80	R-3501-L2	12	W	901.67	12	W	901.67	0.20%
432	END SECTION			27	W	895.70				
433	OUTLET CONTROL STR.						30	W	895.86	0.49%
EX. MANHOLE		907.62	EXISTING	18	E	896.15				
EX.2 EX. MANHOLE		899.37	EXISTING	30	E	895.52				

PIPE TABLE

NAME	SIZE	LENGTH	SLOPE	MATERIAL	UPSTREAM STR. #	DOWNSTREAM STR. #
132	12"	53.61'	0.83%	R.C.P.	416A	416B
400-401	18"	242.64'	0.31%	R.C.P.	401	400
401-402	12"	7.55'	0.64%	R.C.P.	402	401
401-STUB	12"	6.70'	0.36%	R.C.P.		401
402-403	12"	41.44'	1.49%	R.C.P.	403	402
404-405	24"	180.82'	0.48%	R.C.P.	405	404
405-406	21"	145.77'	0.77%	R.C.P.	406	405
406-407	18"	173.27'	0.32%	R.C.P.	407	406
406-412	18"	199.61'	0.41%	R.C.P.	412	406
407-408	15"	30.10'	1.27%	R.C.P.	408	407
408-409	15"	78.29'	1.15%	R.C.P.	409	408
409-410	12"	158.81'	0.20%	R.C.P.	410	409
409-411	12"	30.20'	0.23%	R.C.P.	411	409
412-413	15"	151.27'	0.38%	R.C.P.	413	412
413-414	12"	30.40'	0.50%	R.C.P.	414	413
414-415	12"	1.00'	0.50%	R.C.P.	415	414
416-417	15"	158.19'	0.79%	R.C.P.	417	416
417-418	15"	13.62'	3.64%	R.C.P.	418	417
418-419	15"	30.26'	0.80%	R.C.P.	419	418
419-420	15"	25.54'	0.96%	R.C.P.	420	419
420-421	12"	27.57'	2.25%	R.C.P.	421	420
421-422	12"	30.27'	0.90%	R.C.P.	422	421
422-423	12"	130.24'	1.43%	R.C.P.	423	422
423-424	12"	150.62'	0.28%	R.C.P.	424	423
425-426	15"	26.92'	3.81%	R.C.P.	426	425
426-427	12"	340.62'	1.27%	R.C.P.	427	426
426-STUB	12"	7.05'	1.62%	R.C.P.		426
427-428	12"	68.33'	1.00%	R.C.P.	428	427
427-430	12"	15.47'	3.20%	R.C.P.	430	427
428-429	12"	18.20'	6.58%	R.C.P.	429	428
430-431	12"	30.38'	0.20%	R.C.P.	431	430
433-EX.2	30"	70.34'	0.49%	R.C.P.	EX.2	433
EX.-400	18"	209.64'	0.24%	R.C.P.	400	EX.
EX.1-432	27"	0.00'	0.00%	R.C.P.		432

CONTACT:
CARMELO UTILITIES (317) 571-2648
FOR WATER AND SANITARY SEWER LOCATES



NOTES TO CONTRACTOR:

ALL PADS SHOULD BE TESTED TO ASSURE A COMPACTION OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY USING THE STANDARD PROCTOR TEST METHOD.

ANY PRIVATE TILES LOCATED ON THIS SITE WILL NEED TO BE LOCATED; BREATHERS SET AT THE DOWNSTREAM PROPERTY LINE AND CRUSHED OR REMOVED ACROSS THIS SITE. IF ANY OF THESE TILES EXTEND BEYOND THE LIMITS OF THIS PROJECT, THEY WILL NEED TO BE PROVIDED A POSITIVE OUTLET AND ALLOWED TO CONTINUE TO FUNCTION, AS IT IS ILLEGAL TO BLOCK OFF A PRIVATE "MUTUAL" TILE.

CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ONSITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF WORK TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY R/W.

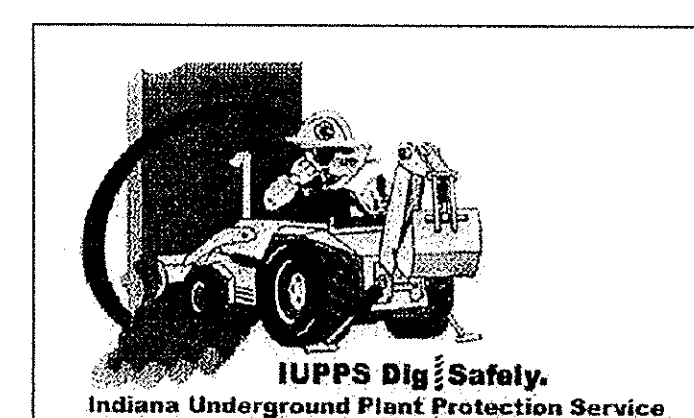
EXISTING PAVEMENT TO BE SAW CUT TO A CLEAN EDGE ADJACENT TO ANY WIDENING, AUXILIARY LANES, ETC.

NO EARTH DISTURBING ACTIVITY MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

THERE IS TO BE NO DRIVEWAY ENCROACHMENTS INTO EASEMENTS BETWEEN LOTS.

UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.

STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.
ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.



811
Know what's below.
Call before you dig.

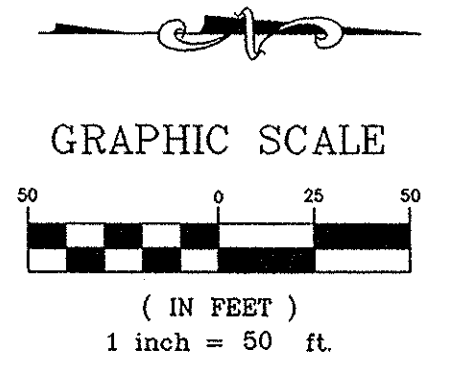
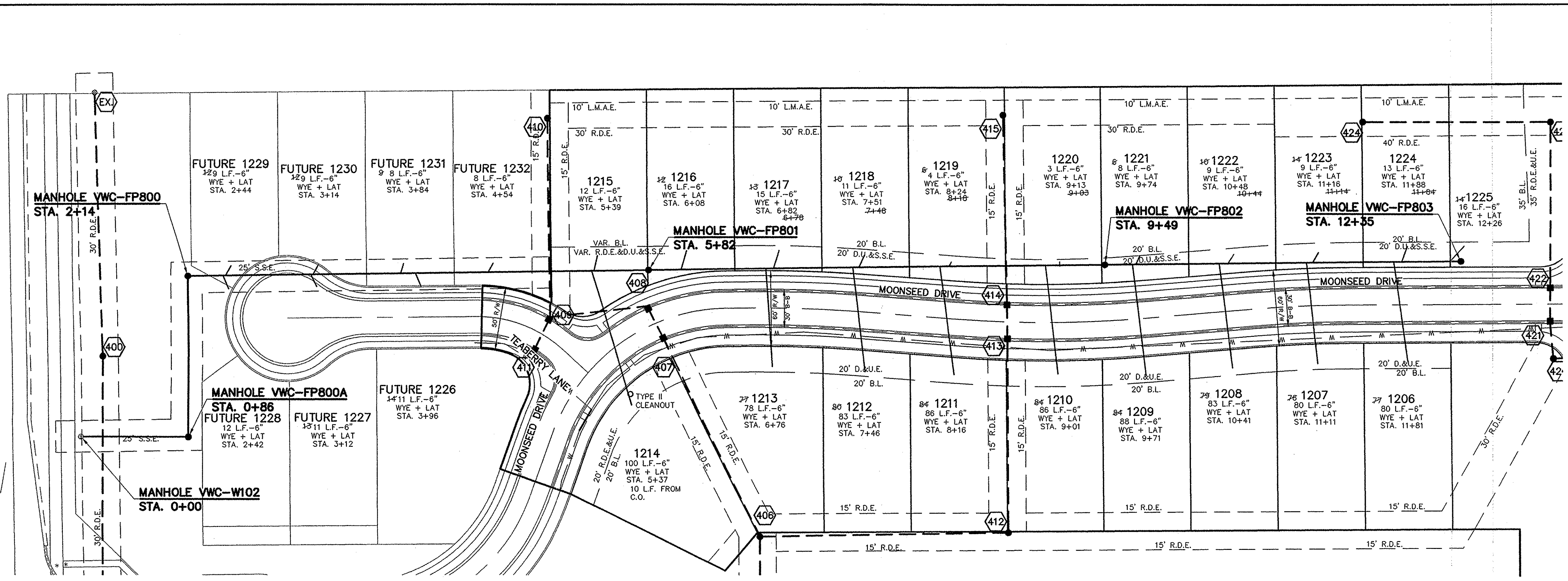
STOEPPELWERTH
ALWAYS ON
7945 East 106th Street, Fishers, IN 46038-2035
phone: 317.291.9285 fax: 317.949.5492

STOEPPELWERTH
REGISTERED PROFESSIONAL ENGINEER
No. 19358
STATE OF INDIANA
David J. Stoepfelwirth

CERTIFIED: 7/20/12

SITE DEVELOPMENT PLAN
VILLAGE OF WEST CLAY,
SECTION 10010-C
HAMILTON COUNTY, INDIANA
CLAY TOWNSHIP

DRAWN BY: KRG CHECKED BY: BAH
SHEET NO. C201
5 A 100 IN. 55960PUL



NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

MIN. SLOPES PER THE TEN STATE STANDARDS SHALL PREVAIL IN ALL CASES.

THE EXTERIORS OF ALL MANHOLES NEED TO BE COATED PER CLAY TOWNSHIP REGIONAL WASTE STANDARDS.

THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

INSTALL A TRACER WIRE WITH ALL MAINS AND SERVICE CONNECTIONS.

FOR INSTALLATION OF STORM MAINS, WATER MAINS, SANITARY MAINS, WATER SERVICE LATERALS, SANITARY SERVICE LATERALS UNDER CITY STREETS, REGARDLESS OF THE JURISDICTION OF THE UTILITY, THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1'-0", BUT UNDER NO CIRCUMSTANCES SHALL THE COVER ALONG ANY PART OF THE PIPE FROM THE FINAL PAVEMENT ELEVATION TO THE TOP OF THE PIPE BE LESS THAN 2.5 FEET.

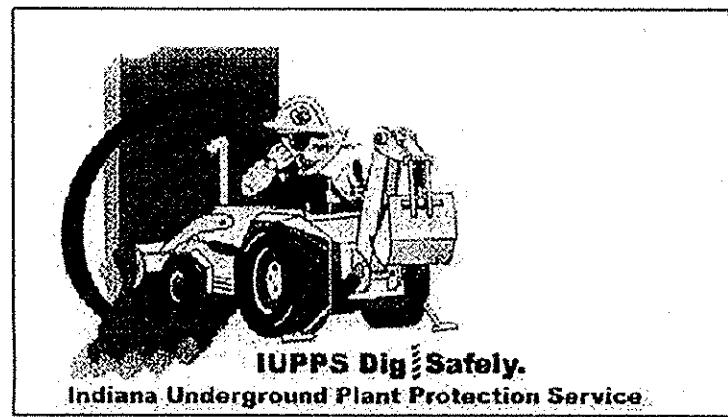
RECORD DRAWING

D.D.O.
 Dennis D. Olmstead
 Registered Land Surveyor
 No. 900012
 2/5/2013



FULL DEPTH GRANULAR BACKFILL

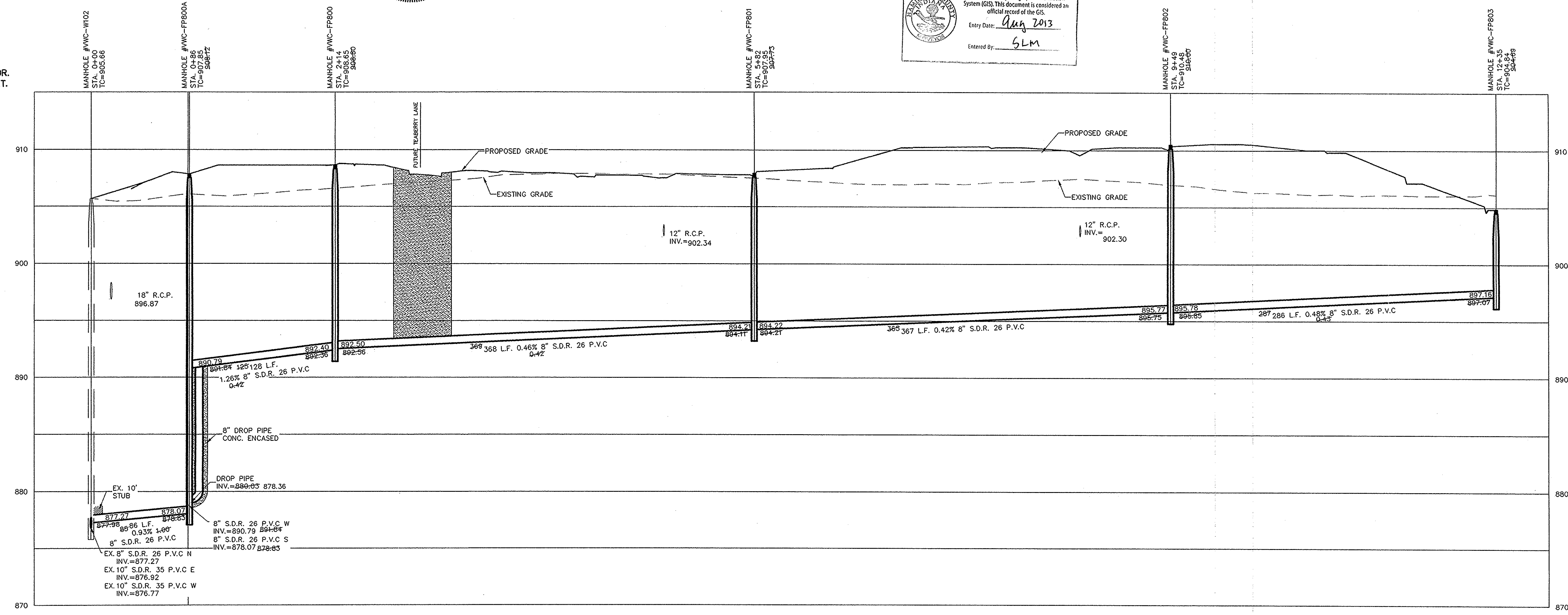
NOTE:
 ALL FINAL STRUCTURE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE TENTH (0.1') OF A FOOT OF DESIGN GRADE, AND ARE TO BE ESTABLISHED UTILIZING 1-4" RISER RING, NO MORE NO LESS, ON EACH STRUCTURE.



811
 Know what's below.
 Call before you dig.

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 2013
 Entered By: SLM

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



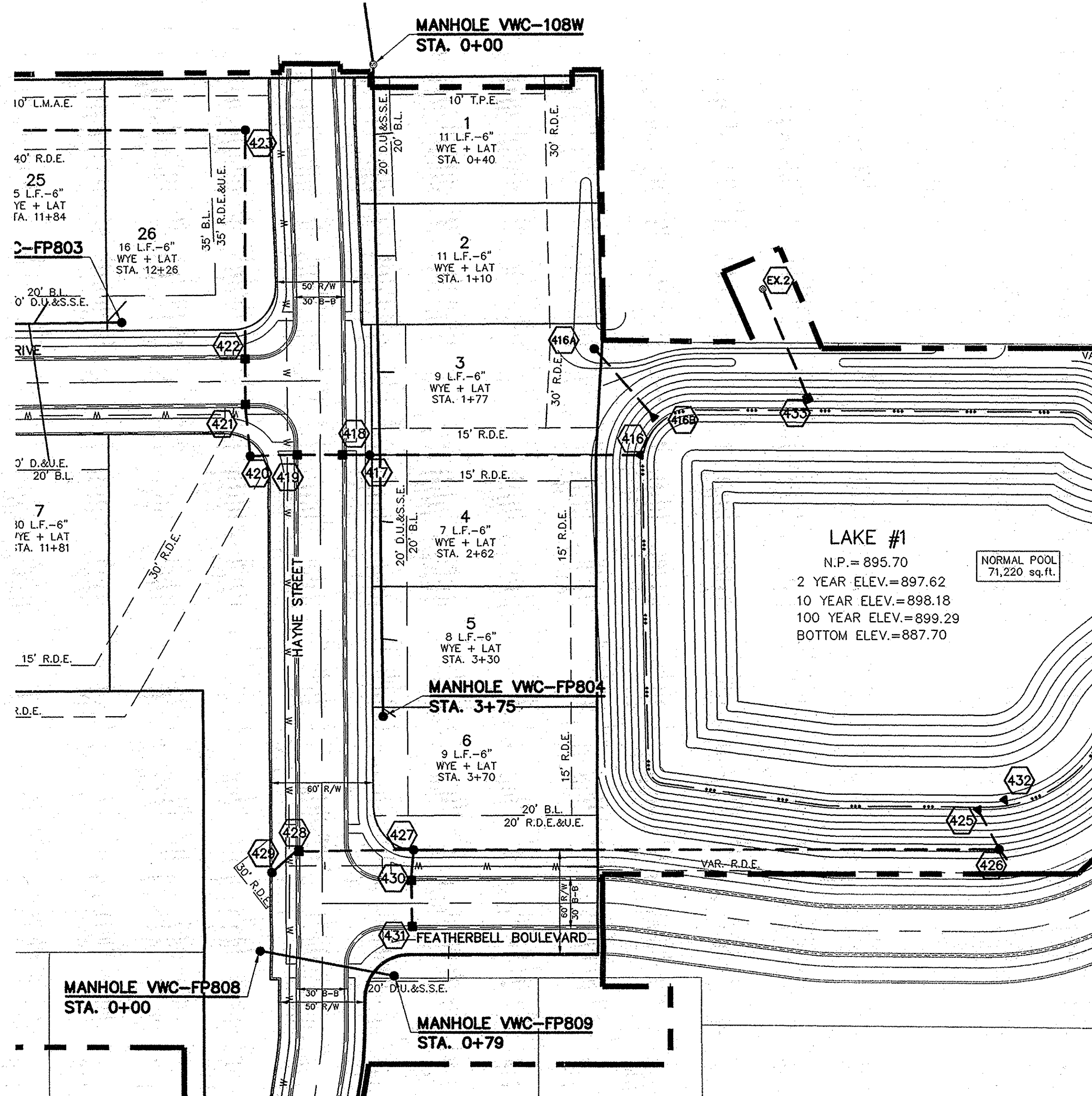
BY	KRG	DATE	
CHKD	BAH		
DESIGNED	KRM		
DRAWN	DCM		
REVISIONS	REVISED PER TAC COMMENTS		
REVISED	REVISED PER TAC COMMENTS		
DATE	DATE		
MARK	MARK		

DAVID J. STOEPPELWERTH
 REGISTERED PROFESSIONAL ENGINEER
 No. 19358
 STATE OF INDIANA
 CERTIFIED: 7/20/12
David J. Stoepfelwerth

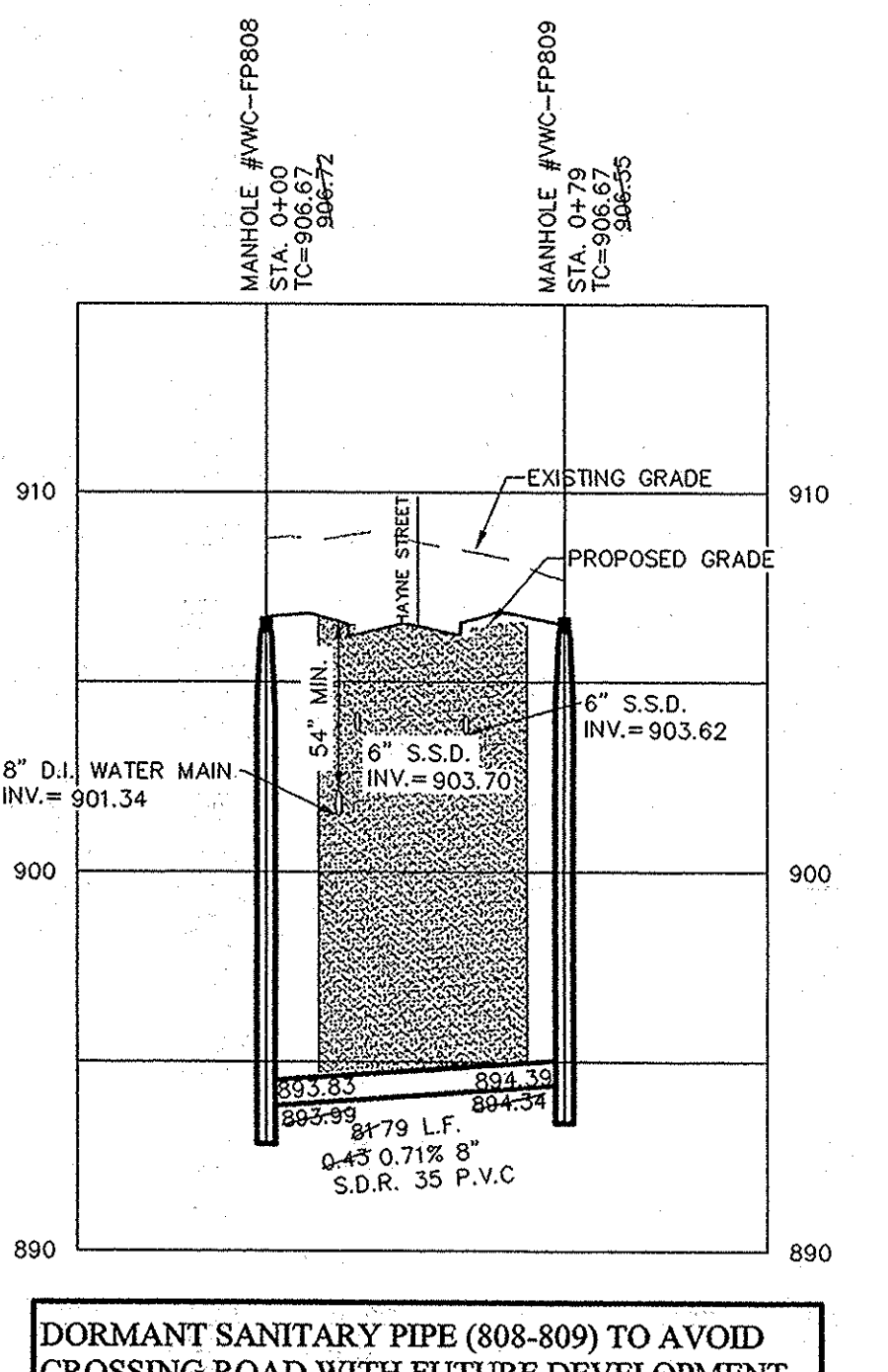
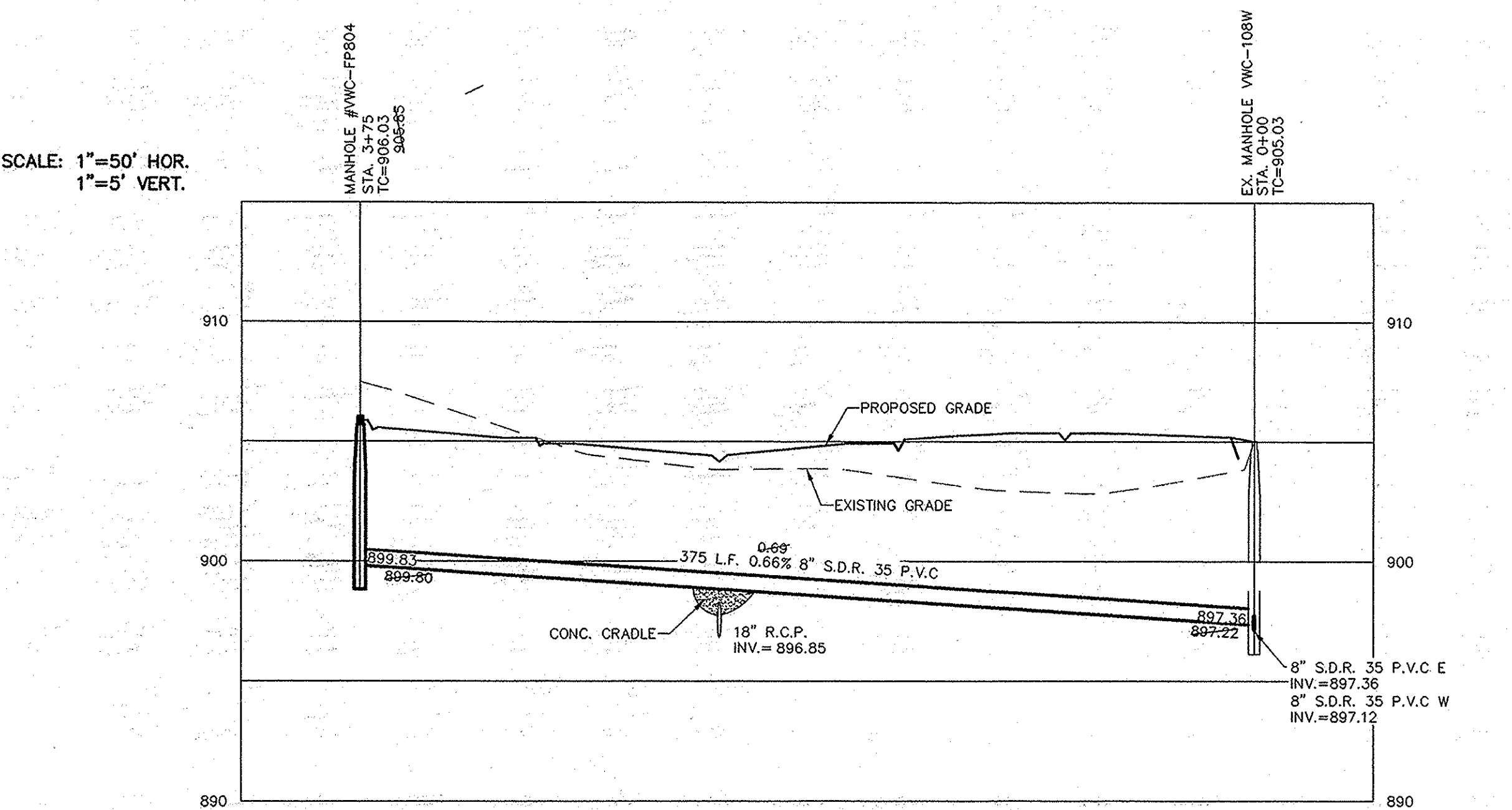
STOEPPELWERTH
 ALWAYS ON
 7965 East 10th Street, Fishers, IN 46038-2505
 phone: 317.849.2905 fax: 317.849.5942

SANITARY PLAN & PROFILES
 VILLAGE OF WEST CLAY,
 SECTION 10010-C
 HAMILTON COUNTY, INDIANA
 CLAY TOWNSHIP

DRAWN BY: KRG
 CHECKED BY: BAH
 SHEET NO. **C500**
 OF 4 SHEETS NO. 6596 OF 11

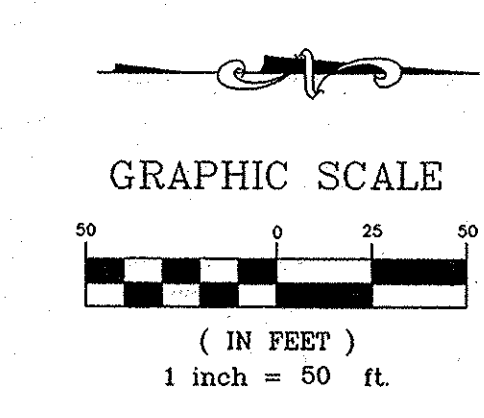


FULL DEPTH GRANULAR BACKFILL



DORMANT SANITARY PIPE (808-809) TO AVOID CROSSING ROAD WITH FUTURE DEVELOPMENT

RECORD DRAWING



D.D.O.
Dennis D. Olmstead
Registered Land Surveyor
No. 900012
11/15/2013

DENNIS D. OLMSHEAD
REGISTERED
No. 900012
STATE OF INDIANA
LAND SURVEYOR

NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

MIN. SLOPES PER THE TEN STATE STANDARDS SHALL PREVAIL IN ALL CASES.

THE EXTERIORS OF ALL MANHOLES NEED TO BE COATED PER CLAY TOWNSHIP REGIONAL WASTE STANDARDS.

THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

INSTALL A TRACER WIRE WITH ALL MAINS AND SERVICE CONNECTIONS.

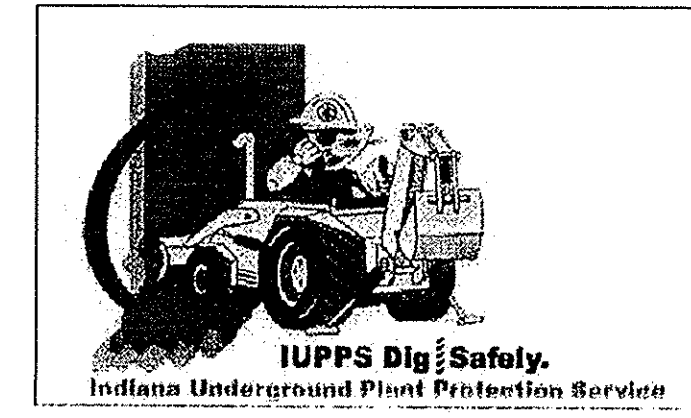
FOR INSTALLATION OF STORM MAINS, WATER MAINS, SANITARY MAINS, WATER SERVICE LATERALS, SANITARY SERVICE LATERALS UNDER CITY STREETS, REGARDLESS OF THE JURISDICTION OF THE UTILITY, THE MINIMUM COVER FROM THE TOP OF THE INSTALLED PAVEMENT TO THE TOP OF THE INSTALLED PIPE SHALL BE THE PAVEMENT SECTION THICKNESS (ALL BITUMINOUS AND AGGREGATE MATERIAL ABOVE THE SUBGRADE) PLUS 1'-0", BUT UNDER NO CIRCUMSTANCES SHALL THE COVER ALONG ANY PART OF THE PIPE FROM THE FINAL PAVEMENT ELEVATION TO THE TOP OF THE PIPE BE LESS THAN 2.5 FEET.

NOTE:
ALL FINAL STRUCTURE GRADES ARE TO BE WITHIN PLUS OR MINUS ONE TENTH (0.1') OF A FOOT OF DESIGN GRADE, AND ARE TO BE ESTABLISHED UTILIZING 1-4" RISER RING, NO MORE NO LESS, ON EACH STRUCTURE.

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 2013*
Entered By: *SLM*



Know what's below.
Call before you dig.



ASBUILT	11/12	REVISIONS	BY
REVISION PER COMMENTS	07/21/12	DATE	MARK
ADDED SSD IN PROFILE	07/16/12	REVISIONS	BY
REVISION PER TAC COMMENTS	07/14/12	DATE	MARK

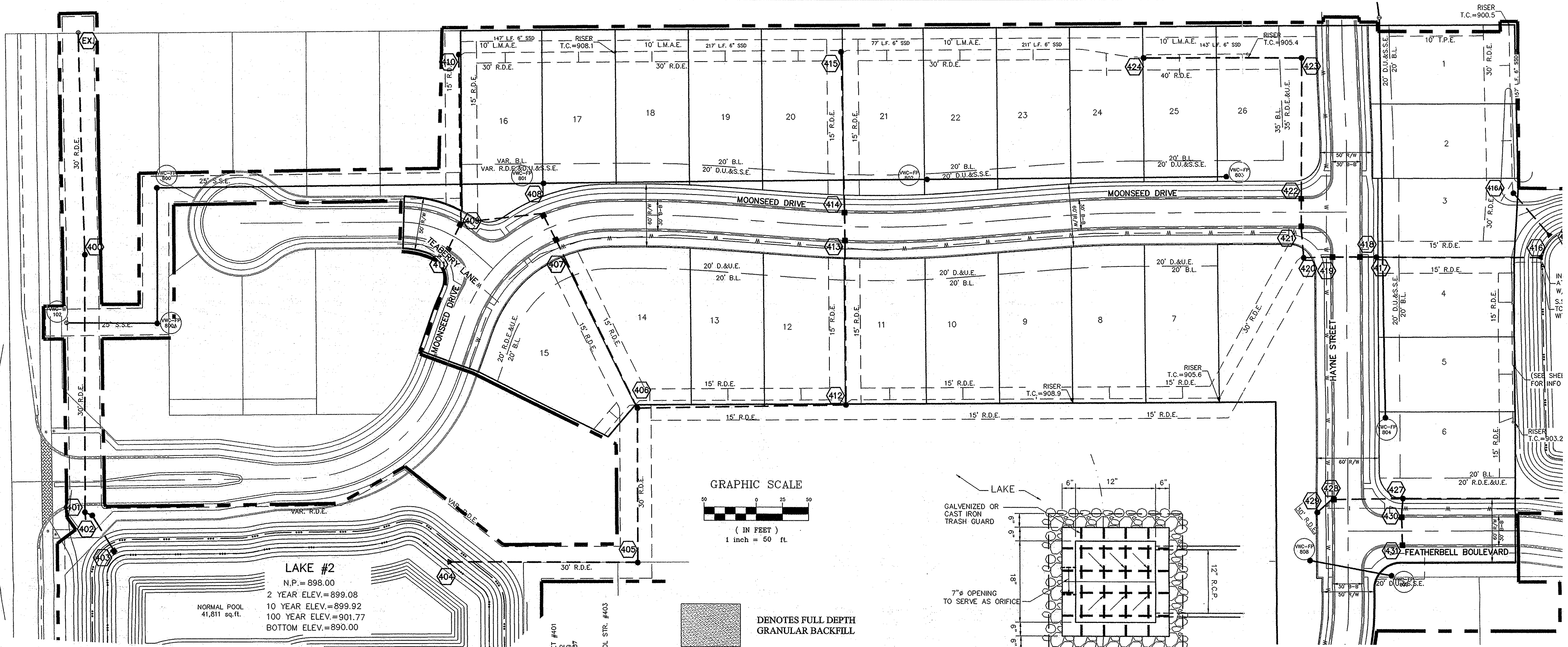
DAVID J. STOEPPELWERTH
REGISTERED
No. 19358
STATE OF INDIANA
PROFESSIONAL ENGINEER

CERTIFIED: 7/20/12
David J. Stoepfelwerth

STOEPPELWERTH
ALWAYS ON
796 East 10th Street, Fishers, IN 46038-2505
phone: 317.849.5985 fax: 317.849.5942

SANITARY PLAN & PROFILES
VILLAGE OF WEST CLAY,
SECTION 10010-C
CLAY TOWNSHIP
HAMILTON COUNTY, INDIANA

DRAWN BY: KRG
CHECKED BY: BAH
SHEET NO. C501



LAKE #2
 N.P. = 898.00
 2 YEAR ELEV. = 899.08
 10 YEAR ELEV. = 899.92
 100 YEAR ELEV. = 901.77
 BOTTOM ELEV. = 890.00

402 * BMP STR. - Hydrodynamic Separator
 Vortech Sentry AS72
 Per Inspector Luther Cline

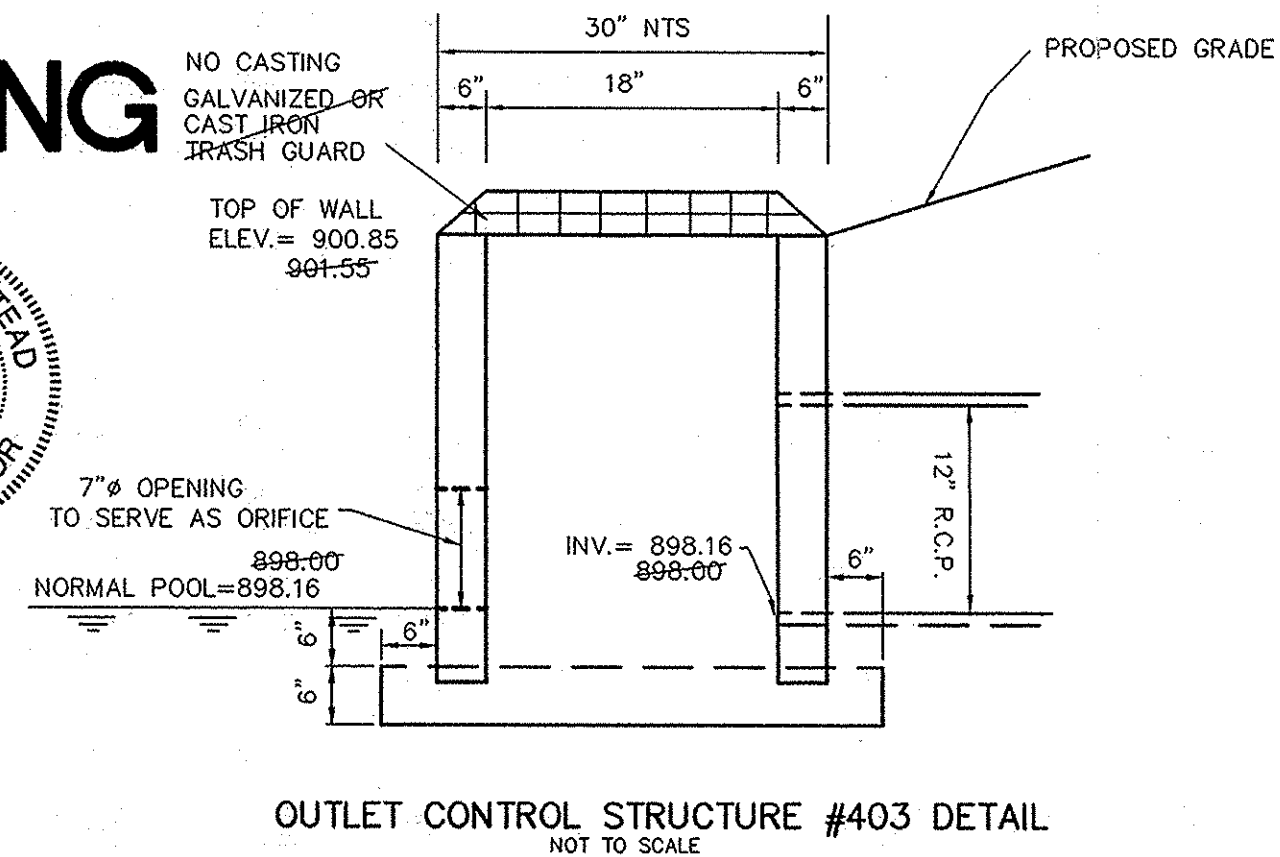
RECORD DRAWING

D. D. Olmstead
 Dennis D. Olmstead
 Registered Land Surveyor
 No. 900012
 11/15/2013



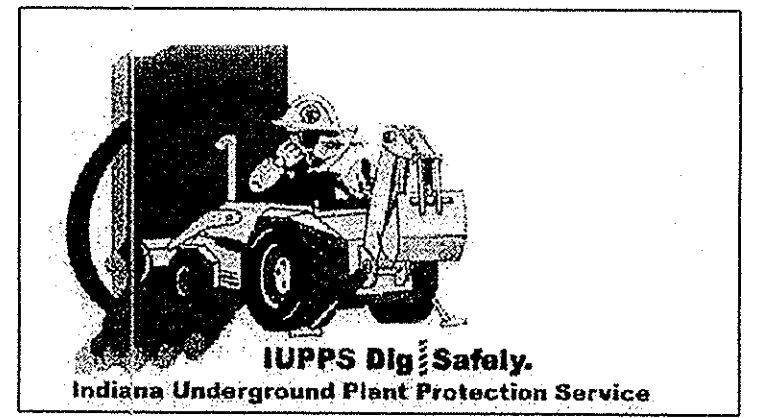
STORM SEWER NOTE

THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OF CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS AND 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.



- NOTES:
- ALL STORM STRUCTURES TO RECEIVE SOLID LID CASTINGS ARE TO BE CONSTRUCTED TO PROVIDE ONE 4" RISER RING NO MORE, NO LESS TO ACHIEVE PLAN RIM GRADE.
 - ALL YARD INLETS ARE TO BE CONSTRUCTED AT A TOLERANCE OF +0.00' TO -0.20' OF PLAN GRADE.
 - ALL STORM SEWER CASTINGS SHALL BE LABELED "DUMP NO WASTE-DRAINS TO WATERWAY"
 - ALL SSD'S (SUBSURFACE DRAINS) WILL NEED TO BE DOUBLE WALL SMOOTH BORE PERFORATED (HDPE) PIPE.

- DEBRIS GUARDS ARE TO BE INSTALLED ON ALL OPEN ENDED INLETS.
- FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.
- ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.



Know what's below.
 Call before you dig.

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

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

DATE	REVISIONS	BY
9/1/12	REVISED PER COMMENTS	KRG
9/12/12	ADDED SSD IN PROFILES	DCM
9/1/12	REVISED PER TAC COMMENTS	KRG

REGISTERED PROFESSIONAL ENGINEER
 No. 19358
 STATE OF INDIANA
 David J. Stoepelwerth

CERTIFIED: 7/20/12

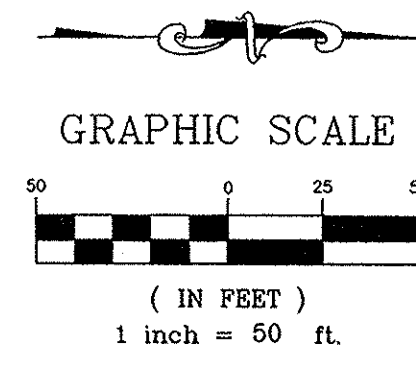
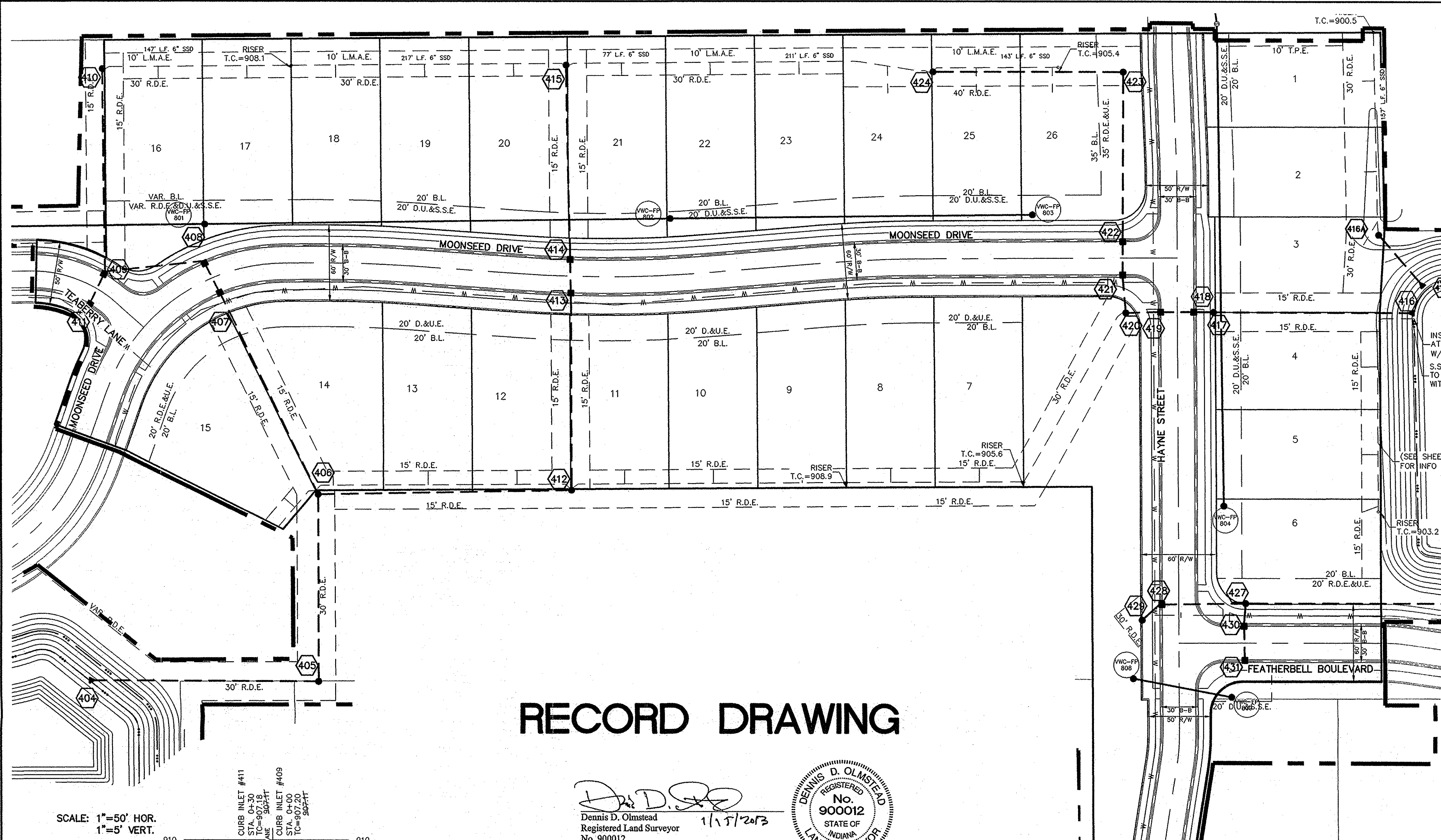
STOEPPELWERTH
 ALWAYS ON
 7965 East High Street, Fishers, IN 46038-2505
 phone: 317.848.5905 fax: 317.848.5942

HAMILTON COUNTY, INDIANA

CLAY TOWNSHIP

STORM PLAN & PROFILES
 VILLAGE OF WEST CLAY,
 SECTION 10010-C

DRAWN BY: KRG CHECKED BY: BAH
 SHEET NO. C600



NOTES:

ALL STORM STRUCTURES TO RECEIVE SOLID LID CASTINGS ARE TO BE CONSTRUCTED TO PROVIDE ONE 4" RISER RING NO MORE, NO LESS TO ACHIEVE PLAN RIM GRADE.

ALL YARD INLETS ARE TO BE CONSTRUCTED AT A TOLERANCE OF +0.00' TO -0.20' OF PLAN GRADE.

ALL STORM SEWER CASTINGS SHALL BE LABELED "DUMP NO WASTE-DRAINS TO WATERWAY"

ALL SSD'S (SUBSURFACE DRAINS) WILL NEED TO BE DOUBLE WALL SMOOTH BORE PERFORATED (HDPE) PIPE.

DEBRIS GUARDS ARE TO BE INSTALLED ON ALL OPEN ENDED INLETS.

FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.

ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.

STORM SEWER NOTE

THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OR CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS AND 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.

RECORD DRAWING

Dennis D. Olmstead
Registered Land Surveyor
No. 900012

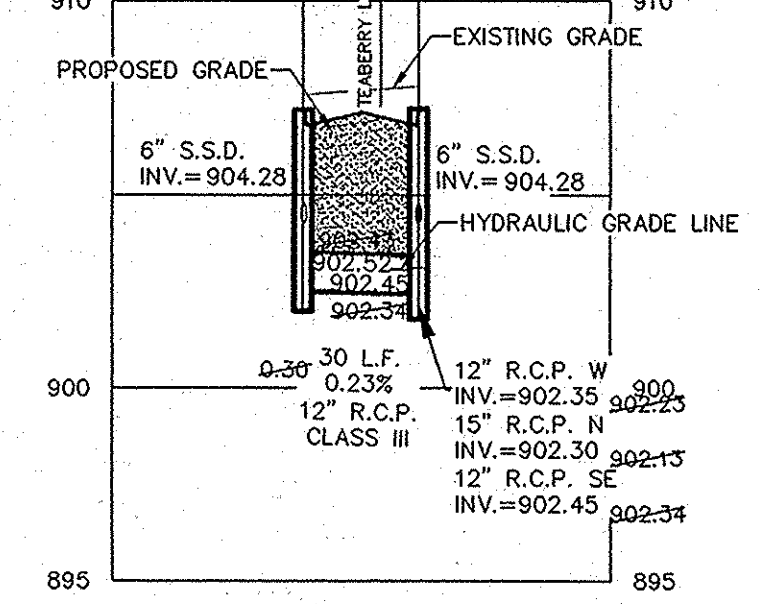
1/17/2013

This information was gathered for input into the Hamilton County Geographic Information System (GIS). This document is considered an official record of the GIS.

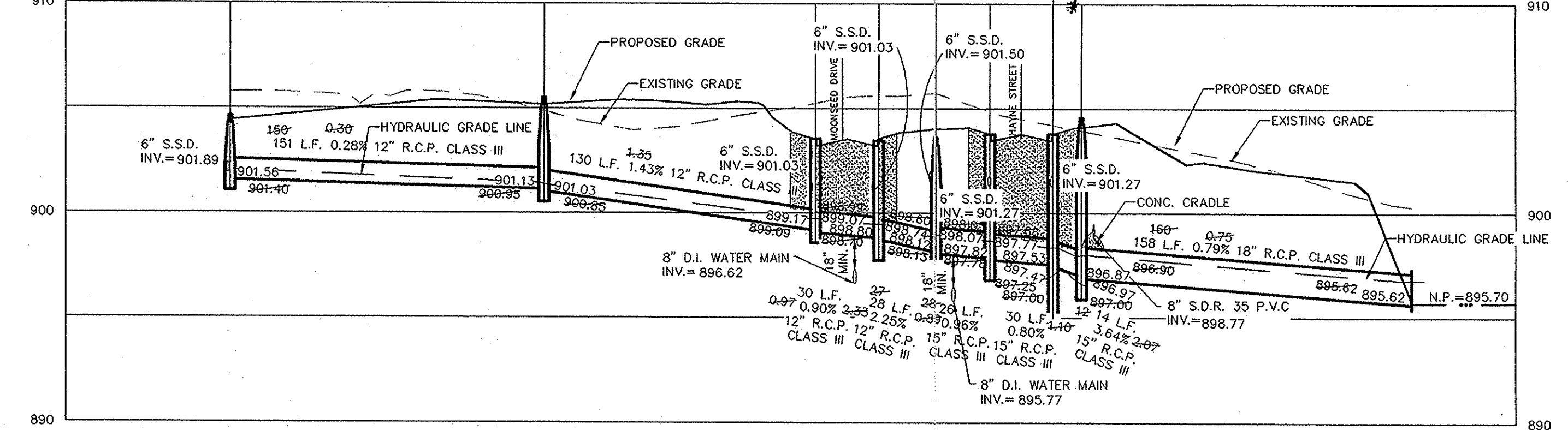
Entry Date: Aug 2013

Entered By: SLM

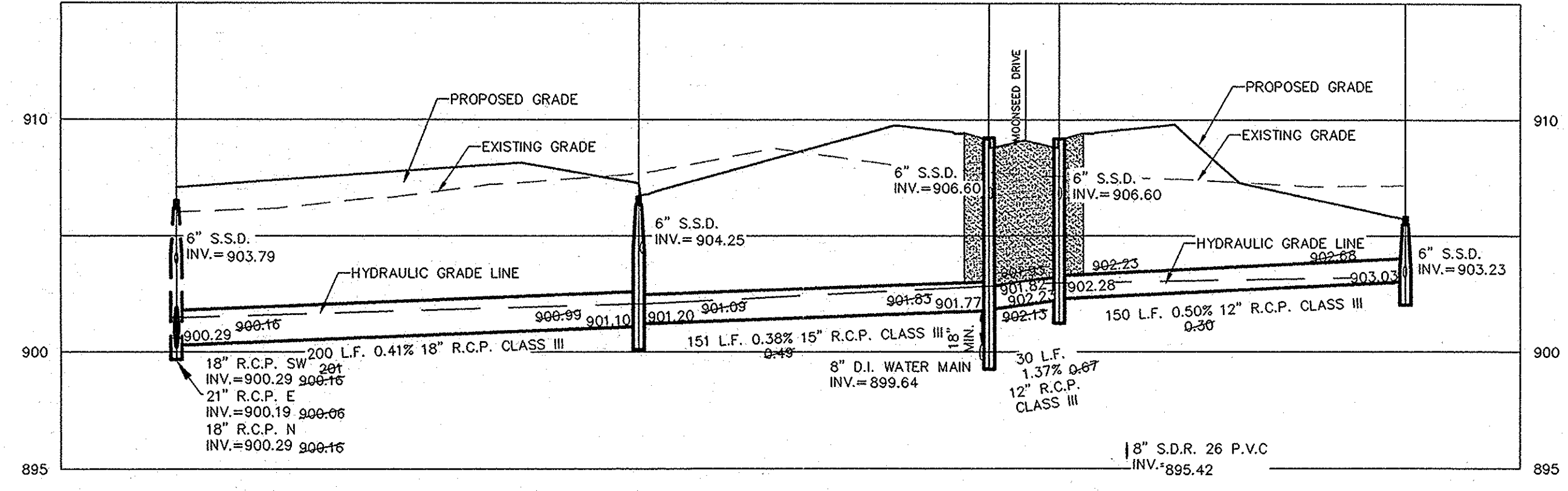
SCALE: 1"=50' HOR.
1"=5' VERT.



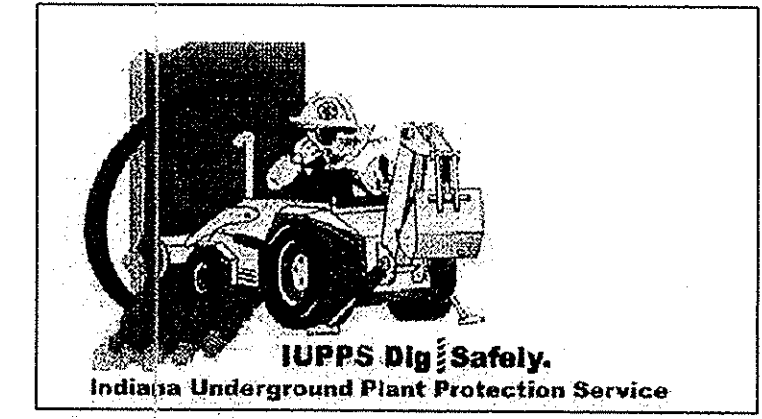
SCALE: 1"=50' HOR.
1"=5' VERT.



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



DENOTES FULL DEPTH GRANULAR BACKFILL



811
Know what's below.
Call before you dig.

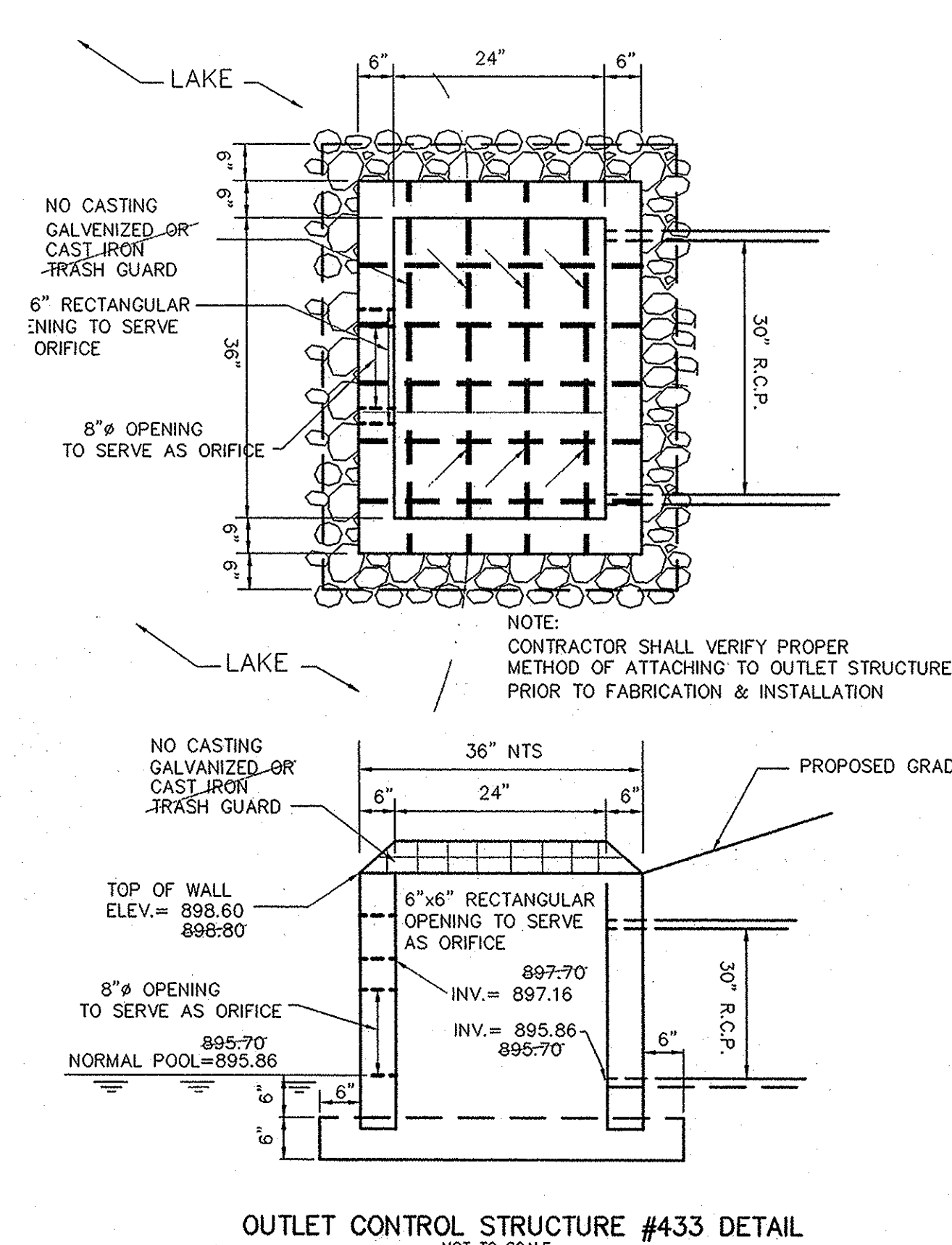
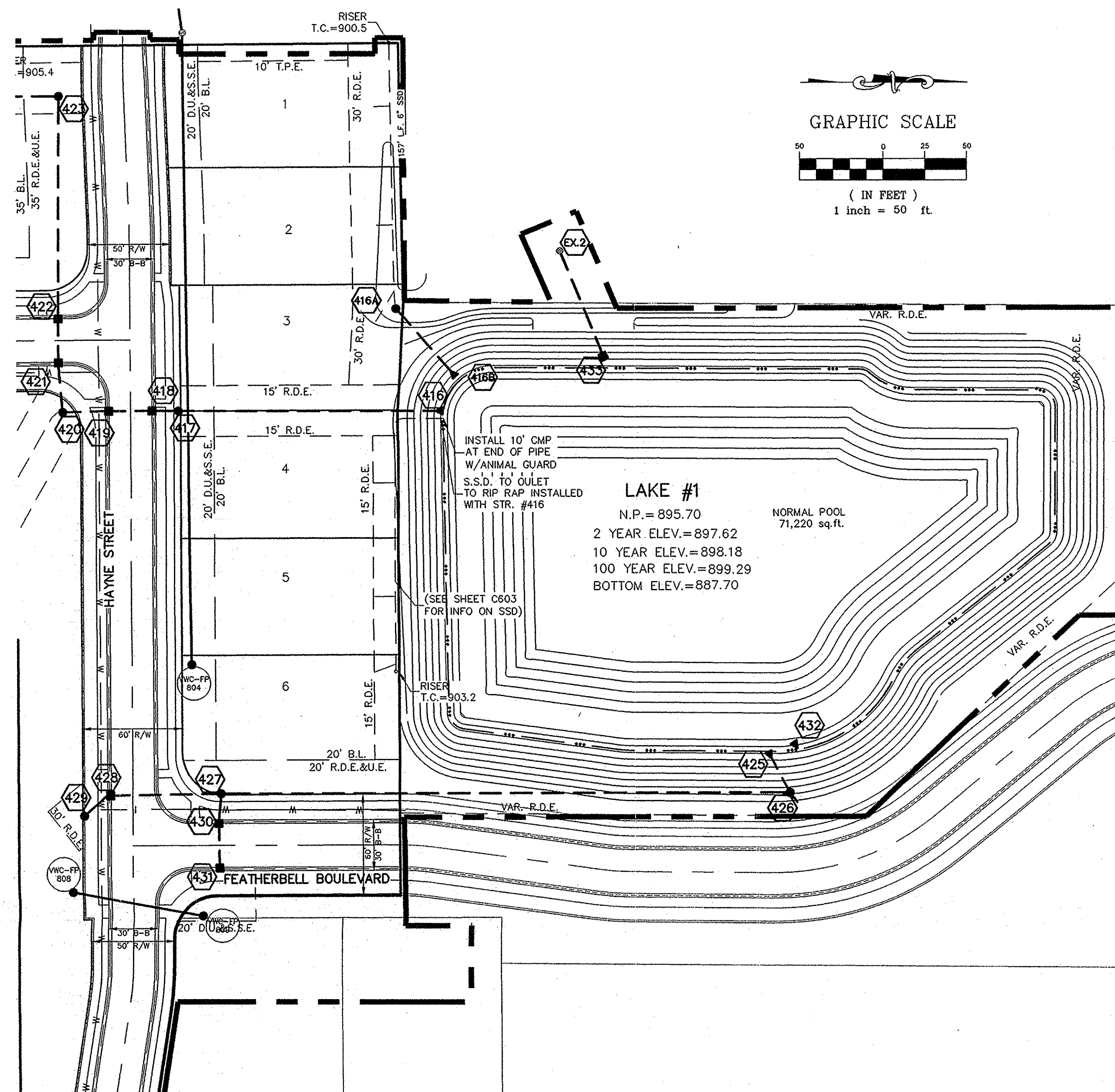
STOEPPELWERTH
ALWAYS ON
7945 East 10th Street, Fishers, IN 46038-2505
phone: 317.849.5945 fax: 317.849.5942

CERTIFIED: 7/20/12
David J. Stoepelwerth
Professional Engineer

STORM PLAN & PROFILES
VILLAGE OF WEST CLAY,
SECTION 10010-C
CLAY TOWNSHIP
HAMILTON COUNTY, INDIANA

ASSULTS	REVISIONS
DATE	MARK
9/21/12	
9/21/12	
9/21/12	
9/21/12	

DRAWN BY: KRG
CHECKED BY: BAH
SHEET NO. C601



NOTES:

ALL STORM STRUCTURES TO RECEIVE SOLID LID CASTINGS ARE TO BE CONSTRUCTED TO PROVIDE ONE 4" RISER RING NO MORE, NO LESS TO ACHIEVE PLAN RIM GRADE.

ALL YARD INLETS ARE TO BE CONSTRUCTED AT A TOLERANCE OF +0.00' TO -0.20' OF PLAN GRADE.

ALL STORM SEWER CASTINGS SHALL BE LABELED "DUMP NO WASTE-DRAINS TO WATERWAY"

ALL SSD'S (SUBSURFACE DRAINS) WILL NEED TO BE DOUBLE WALL SMOOTH BORE PERFORATED (HDPE) PIPE.

DEBRIS GUARDS ARE TO BE INSTALLED ON ALL OPEN ENDED INLETS.

FOR STORM STRUCTURE SIZING AND CASTING TABLE SEE DETAIL D-18 ON SHEET C802.

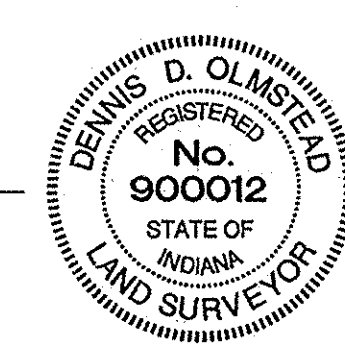
ALL STORM SEWERS WITHIN PUBLIC RIGHT-OF-WAY SHALL BE RCP CLASS III.

STORM SEWER NOTE

THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OR CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS AND 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.

RECORD DRAWING

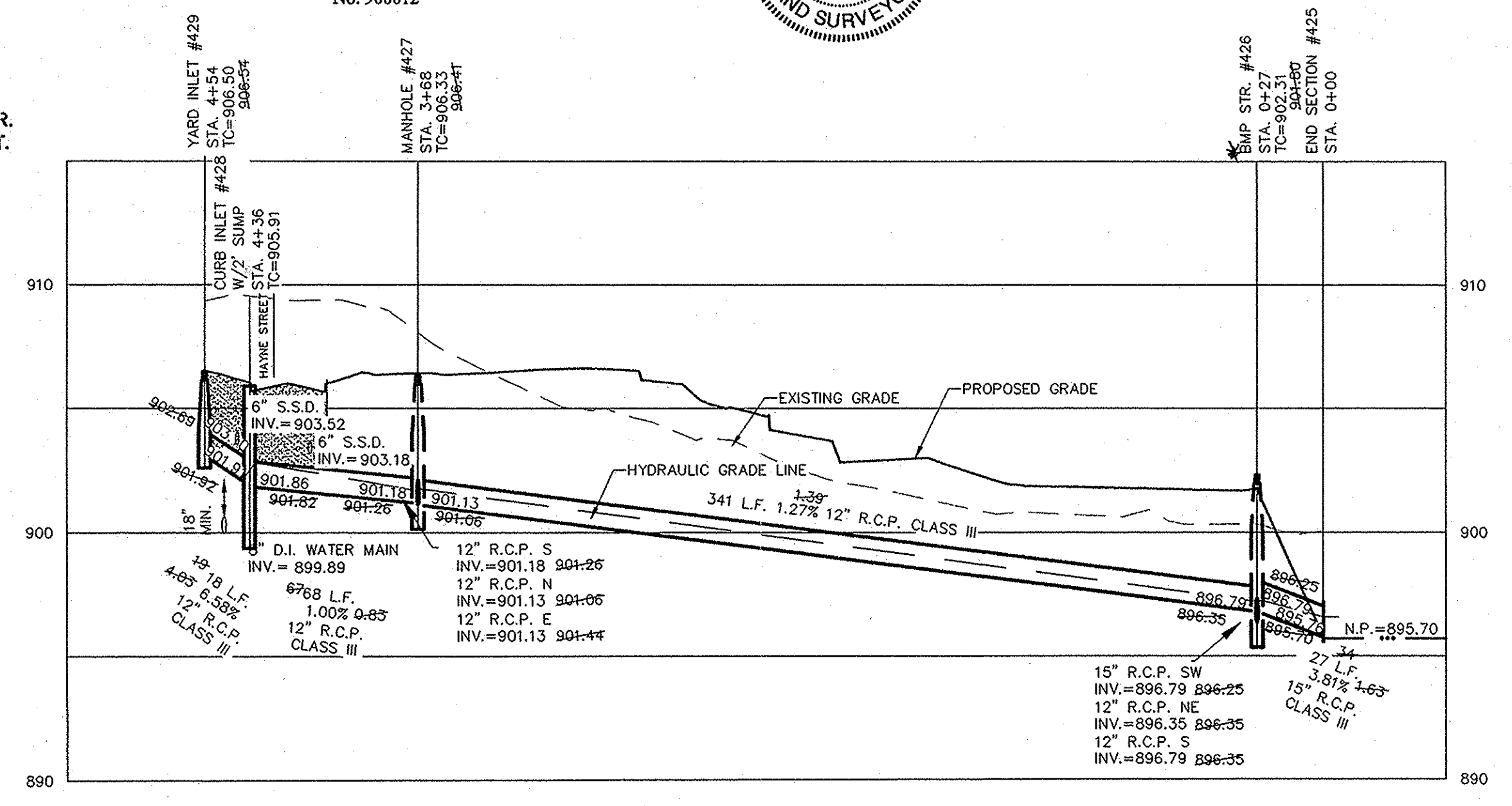
Dennis D. Olmstead
Registered Land Surveyor
No. 900012
1/15/2013



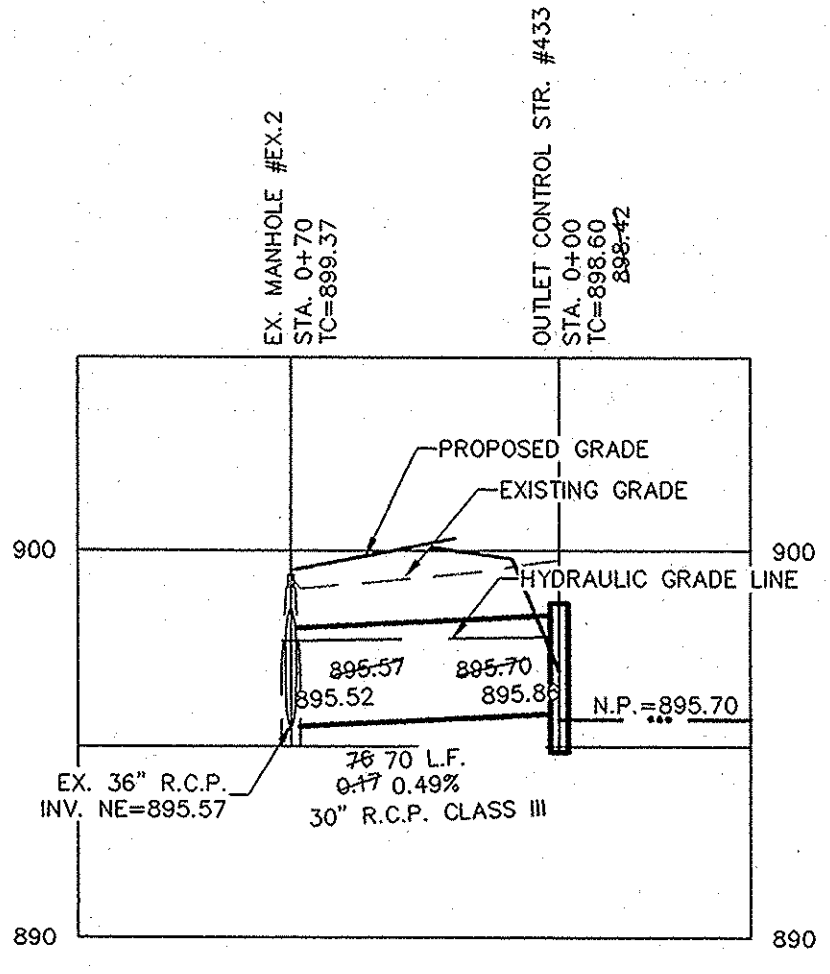
--- -- CONSTRUCTION LIMITS
 [Hatched Box] DENOTES FULL DEPTH GRANULAR BACKFILL

STR. # 426
 * BMP STR. - Hydrodynamic Separator
 Vert Sentry H548
 Per Inspector Lutna Cline

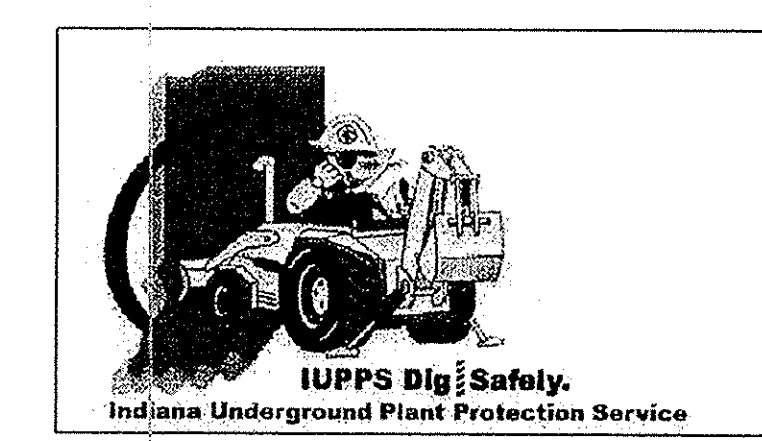
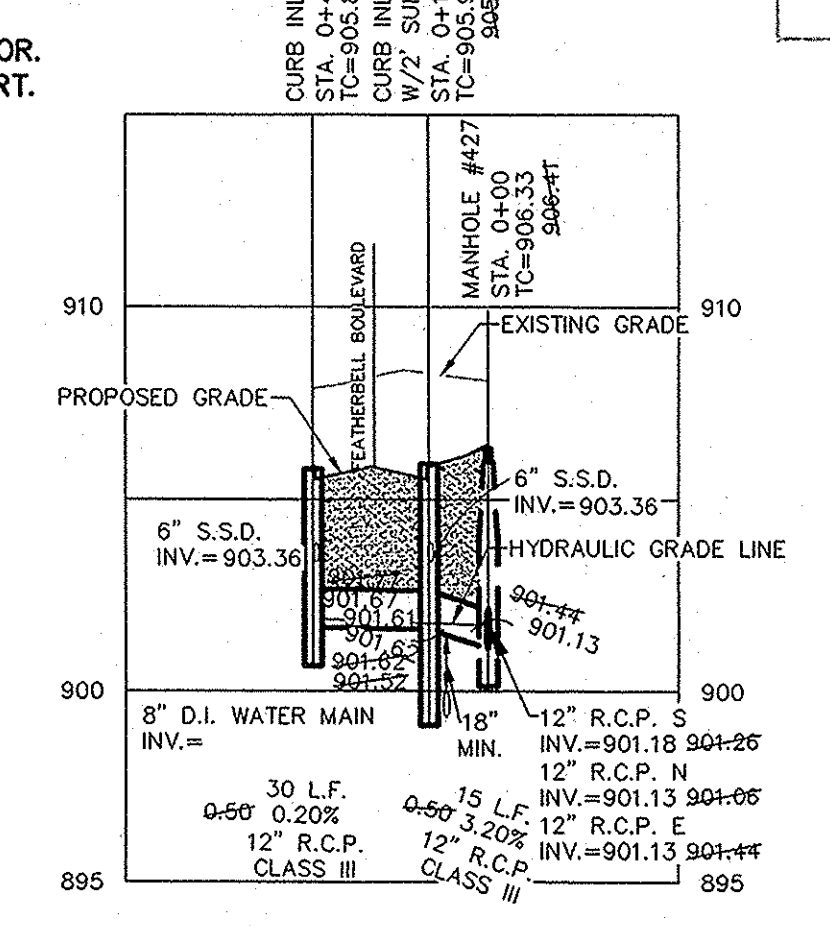
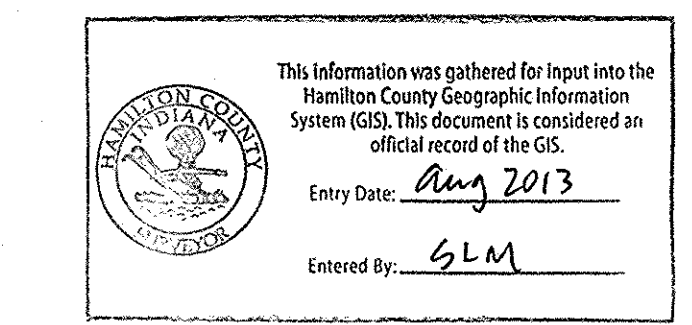
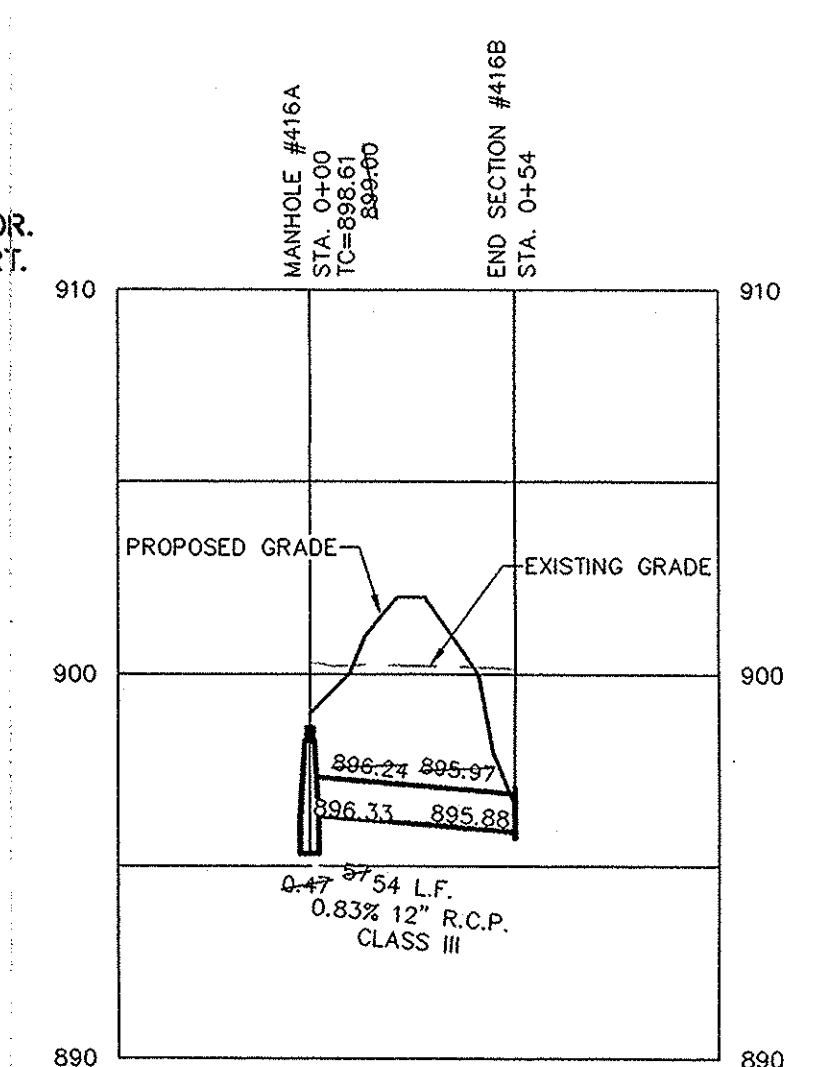
SCALE: 1"=50' HOR.
 1"=5' VERT.



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



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



811
 Know what's below.
 Call before you dig.

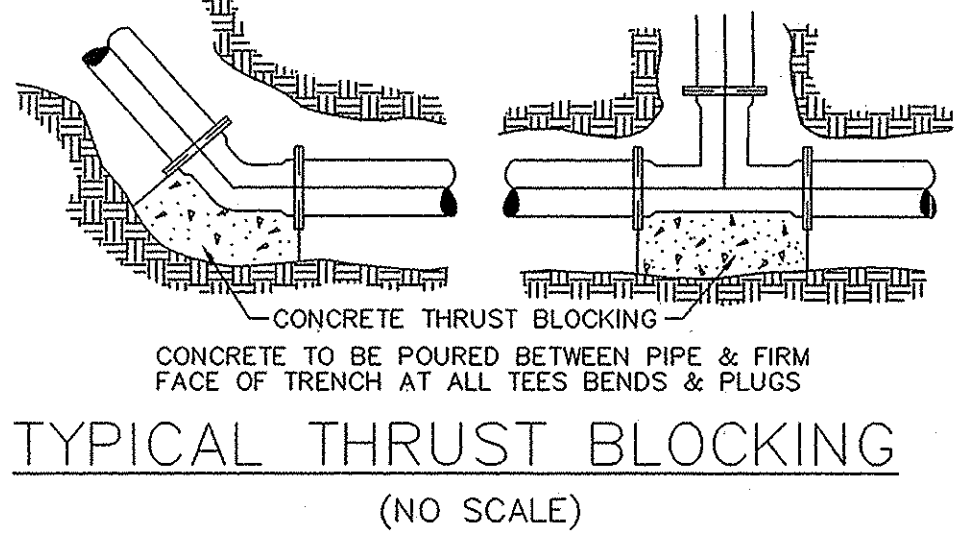
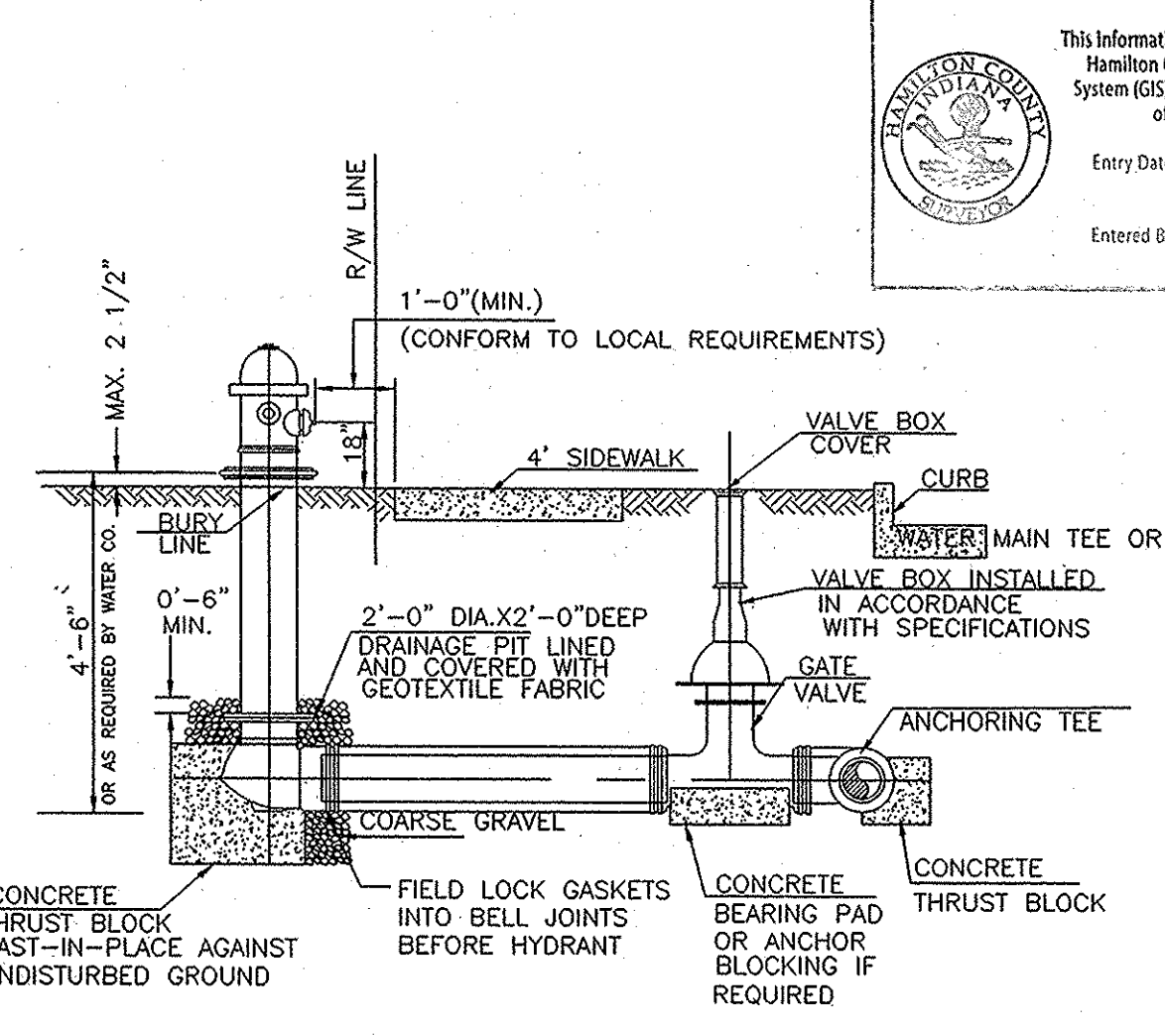
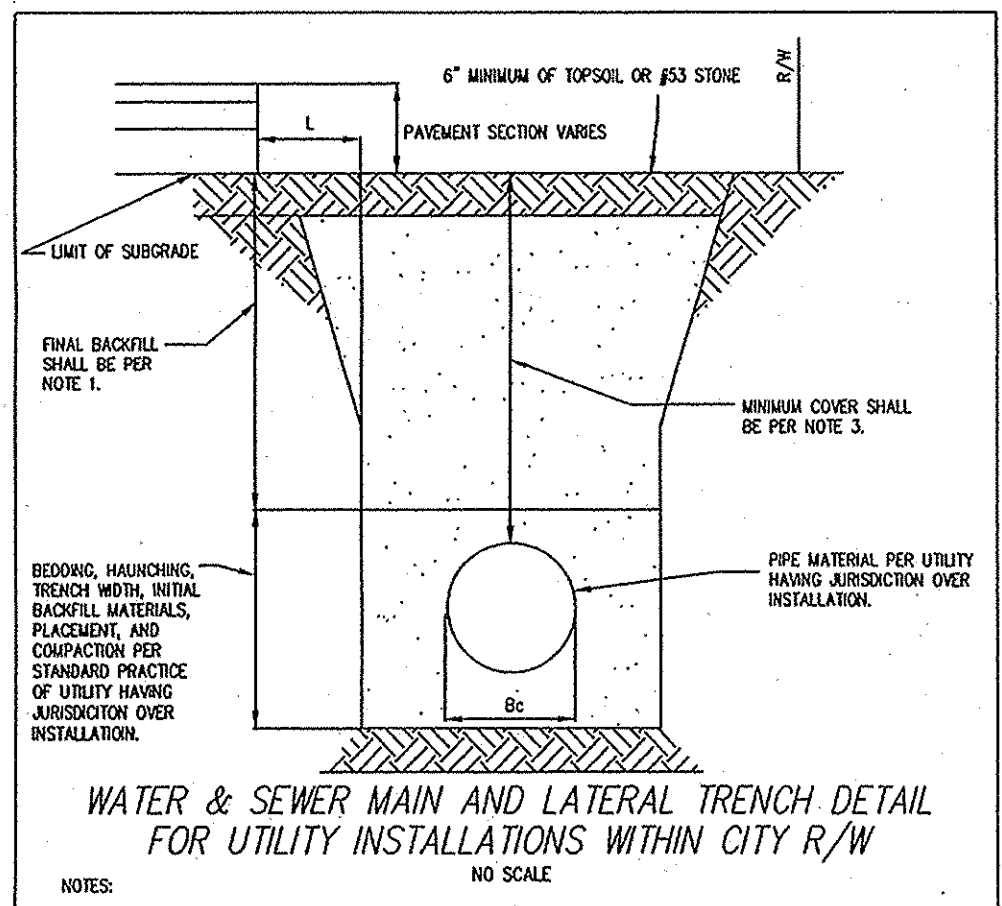
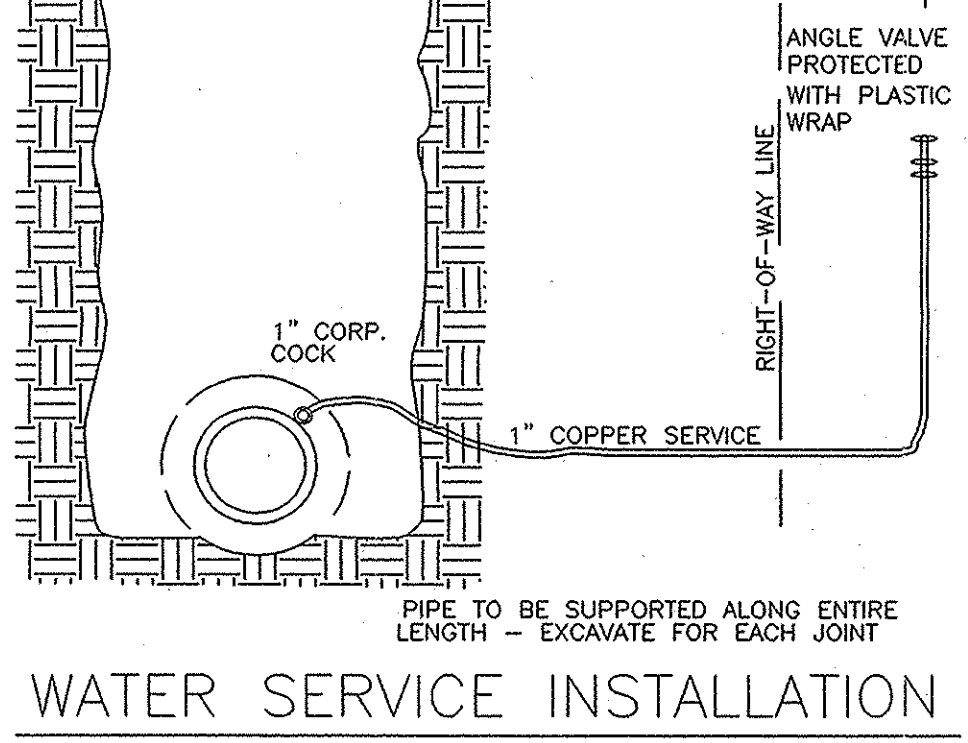
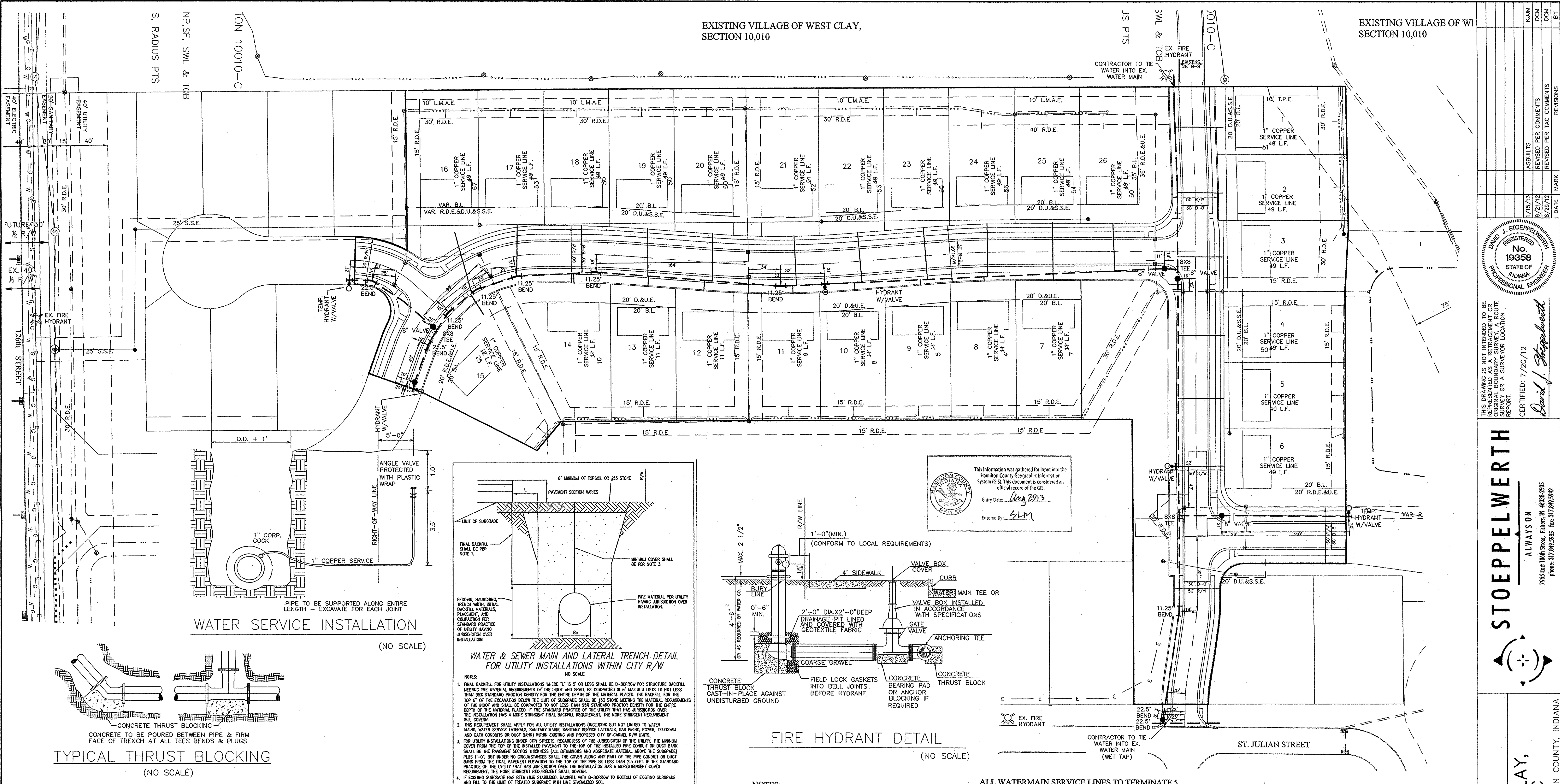
STOEPPELWERTH
 ALWAYS ON
 7845 Pennington Street, Fishers, IN 46038-2005
 Phone: 317.848.5205 Fax: 317.848.5292

STORM PLAN & PROFILES
VILLAGE OF WEST CLAY,
SECTION 10010-C
 HAMILTON COUNTY, INDIANA
 CLAY TOWNSHIP

DATE	REVISIONS	BY
8/29/12	REVISED PER TAC COMMENTS	DCM
8/21/12	REVISED PER COMMENTS	DCM
7/11/13	ABSOLUTE	KJLM

REGISTERED PROFESSIONAL ENGINEER
 No. 19358
 STATE OF INDIANA
 David J. Stoepelwerth
 CERTIFIED: 7/20/12

DRAWN BY: KRG
 CHECKED BY: BAH
 SHEET NO. C602



PRESSURE PIPE JOINT RESTRAINT TABLE

LENGTH OF IPE TO BE RESTRAINED IN EACH DIRECTION FROM 1/4 OF BEND BASED ON 150 psi TEST PRESSURE

DEGREE OF BEND	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"
90°, TEES & PLUGS	27'	35'	42'	50'	58'	65'	73'	80'	95'	115'
45°	7'	9'	11'	13'	15'	17'	19'	21'	24'	29'
22-1/2°	3'	4'	5'	6'	7'	8'	9'	10'	12'	14'
11-1/4°	2'	2'	3'	3'	4'	4'	4'	5'	6'	7'

CITY OF CARMEL STANDARDS
WATER & SEWER MAIN AND LATERAL TRENCH DETAIL FOR UTILITY INSTALLATIONS WITHIN CITY R/W
STANDARD DRAWING 10-29

- LEGEND**
- PROPOSED HYDRANT W/6" VALVE
 - VALVE
 - BLOW OFF ASSEMBLY
 - REDUCER
 - EX. WATER METER
 - EX. WATER VALVE
 - EX. FIRE HYDRANT
 - CONSTRUCTION LIMITS

RECORD DRAWING

Devin D. Olmstead
Registered Land Surveyor
No. 900012
11/5/2013

DEVIN D. OLMSTEAD
REGISTERED
No. 900012
STATE OF INDIANA
LAND SURVEYOR

RESTRAINED JOINTS SHALL BE MECHANICAL JOINT WITH RETAINER GLANDS, US PIPE TR FLEX JOINT SYSTEM, US PIPE FIELD LOK GASKET SYSTEM,
NOTE: THE ABOVE RESTRAINED JOINT LENGTHS ARE MINIMUM LENGTHS THE DESIGN ENGINEER SHALL DETERMINE IF LONGER LENGTHS ARE REQUIRED.

NOTES:
NO EARTH DISTURBING ACTIVITIES MAY TAKE PLACE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.

FOR INSTALLATION OF STORM, SANITARY, AND WATER UNDER CITY STREETS AND COVER REQUIREMENTS, SEE SHEET No. C800 ON THE TRENCH DETAIL.

THERE ARE TO BE NO WATER VALVES OR MANHOLES WITHIN THE PAVEMENT, CURB, OR SIDEWALK WITH THE EXCEPTION OF CURB INLETS.

ALL WATERMAIN SERVICE LINES TO TERMINATE 5 FEET BEHIND SIDEWALK AND MARKED WITH A 4" PVC PIPE WITH A PAINTED BLUE TOP.

POSI-CAPS OR EQUIVALENT IS REQUIRED ON ALL WATER VALVE INSTALLATION AND MEGA LUGS MUST BE INSTALLED AT ALL MECHANICAL JOINTS.

ALL DUCTILE IRON WATERMANS SHALL BE BEDDED IN SAND, FROM THE BOTTOM OF THE TRENCH TO 12" ABOVE THE PIPE

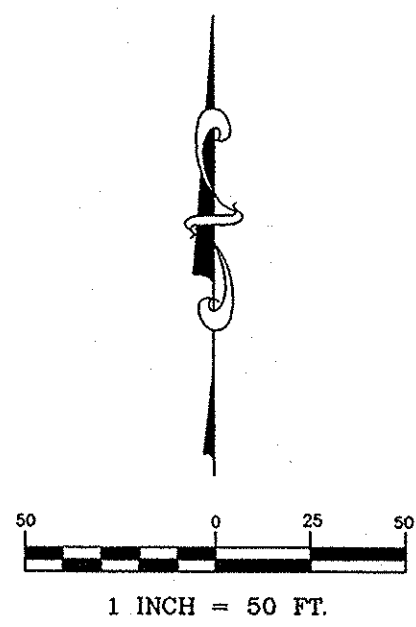
INSTALL WATERMAIN TRACER WIRE WITH ALL WATER MAINS LAID AND BLUE REFLECTOR TAPE MUST BE INSTALLED 12" TO 18" ABOVE ALL WATERMANS LAID,

ALL WATERMANS SHALL BE DUCTILE IRON AND INSTALLED PER THE CITY OF CARMEL SPECIFICATIONS

FULL DEPTH GRANULAR BACKFILL PER CITY STANDARDS SHALL BE PLACED FOR ALL STREET CROSSINGS

FIRE HYDRANT MARKERS TO BE INSTALLED IN THE STREET PAVEMENT PERPENDICULAR TO THE FIRE HYDRANT.

ONLY MUELLER HYDRANTS AND VALVES MAY BE USED.



STOEPPELWERTH
ALWAYS ON
7965 East 10th Street, Fishers, IN 46038-2995
Phone: 317.949.2995 Fax: 317.949.2942

REGISTERED PROFESSIONAL ENGINEER
No. 19358
STATE OF INDIANA
DAVID J. STOEPPELWERTH

CERTIFIED: 7/20/12
David J. Stoepfelwerth

THIS DRAWING IS NOT INTENDED TO BE REPRESENTED AS A RETRACTION OR ORIGINAL BOUNDARY SURVEY. A ROUTE REPORT OR A SURVEYOR LOCATION REPORT.

REVISIONS

DATE	MARK	REVISIONS
8/29/12		REVISED PER FAC COMMENTS
9/27/12		REVISED PER COMMENTS
10/15/13		ASBUILTS

DRAWN BY: KRG CHECKED BY: BAH
SHEET NO. C700
3 & 4 JOB NO. 55960PUL

CLAY TOWNSHIP
HAMILTON COUNTY, INDIANA
VILLAGE OF WEST CLAY, SECTION 10010-C