

# 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 20, 2017

To: Hamilton County Drainage Board

Re: Williams Creek Drain, Jackson's Grant Section 2 Arm

Attached is a petition filed by Jackson's Grant Real Estate Company, LLC., along with a non-enforcement request, plans, calculations, quantity summary and assessment roll for Jackson's Grant Section 2 Arm, Williams Creek 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	1,178 ft.	18" RCP	19 ft.
15" RCP	405 ft.	6" SSD	5,857 ft.

The total length of the drain will be 7,459 feet.

The dry detention basins (BMPs) located as listed below are not to be considered part of the regulated drain. Basin maintenance assumed by the Drainage Board shall only include the inlets and outlet as part of the regulated drain. The maintenance of the dry detention basins (BMPs) such as sediment removal and erosion control along the banks, mowing, aquatic vegetation maintenance and control, and anything required per the Storm Water Quality Maintenance and Operations Manual will be the responsibility of the Homeowners Association. The Board will also retain jurisdiction for ensuring the storage volume for which the pond was designed will be retained. Thereby, allowing no fill or easement encroachments.

Basin	Location
Existing BMP #25	Common Area #38

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs, front/rear yards, and those in common areas. Only the main SSD lines as described below, which are located within the easement, or right of way 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 and maintained are as follows:

Curblin SSD in Streets:

Westvale Drive  
Jackson's Grant Blvd.

Front/Rear Yard SSDs:

Rear yard lots 303 to 304 from Str. 650 running west to riser.  
Rear yard lots 301 to 302 from Str. 650 to Str. 645.  
Rear yard lots 298 to 300 from Str. 645 to Str. 655.  
Rear yard lots 296 to 297 from Str. 655 running east to riser.  
Common area #38 and front yard lot 295 from Str. 663 running west and north to riser.

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 common areas, with \$65.00 minimum, and \$10.00 per acre for roadways. With this assessment the total annual assessment for this drain will be \$1,763.20.

The petitioner has submitted surety for the proposed drain at this time. The sureties which are in the form of an Irrevocable Letter of Credit are as follows:

Agent: Standard Financial Corporation

Date: November 6, 2017

Number: 1294JG2

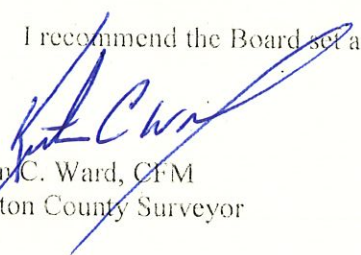
For: Storm Sewers

Amount: \$191,950.38

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. The request will be for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Jackson's Grant, Section 2 as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for January 22, 2018.



Kenton C. Ward, CFM  
Hamilton County Surveyor

KCW/pll

(Revised 06/08/04)

STATE OF INDIANA )  
 )  
COUNTY OF HAMILTON )

**FILED**  
**MAY 20 2015**

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 Jackson's Grant on Williams Creek Subdivision, Section  
2 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 Jackson's Grant on Williams Creek, Section 2 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.

Adobe PDF Fillable Form

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 Douglas B. Wagner for Jackson's Grant Real Estate Company, LLC by JG Development Company, LLC its manager  
Printed Name  
May 15, 2015  
Date

\_\_\_\_\_  
Signed  
\_\_\_\_\_  
Printed Name  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Signed  
\_\_\_\_\_  
Printed Name  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Signed  
\_\_\_\_\_  
Printed Name  
\_\_\_\_\_  
Date

FINDINGS AND ORDER


CONCERNING THE MAINTENANCE OF THE

Williams Creek Drain, Jackson's Grant Section 2 Arm

On this 22<sup>nd</sup> day of January, 2018, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the *Williams Creek Drain, Jackson's Grant Section 2 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.

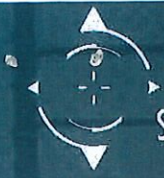
HAMILTON COUNTY DRAINAGE BOARD

  
\_\_\_\_\_  
President

  
\_\_\_\_\_  
Member

  
\_\_\_\_\_  
Member

Attest:   
Executive Secretary



**STOEPPELWERTH**

ALWAYS ON

ofc: 317.849.5935  
fax: 317.849.5942

7965 East 106th Street  
Fishers, IN 46038-2505  
www.stooppelwerth.com

March 17, 2016

Hamilton County Surveyor  
One Hamilton County Square, Suite 188  
Noblesville, Indiana 46038

Attention: Greg Hoyes

Re: Jackson's Grant on Williams Creek, Section 2

Dear Mr. Hoyes:

On behalf of the developer Jackson's Grant Real Estate Company, LLC by JG Development Company, LLC its manager, please accept this Engineer's Estimate for Jackson's Grant on Williams Creek, Section 2. The estimate is as follows:

**Storm Sewer**

	QTY	UNIT	UNIT \$	TOTALS
Manholes	5	EA	\$2,330.00	\$11,650.00
Beehives	4	EA	\$1,732.00	\$6,928.00
Double Curb Inlet	4	EA	\$3,837.00	\$15,348.00
Curb Inlet	3	EA	\$2,900.00	\$8,700.00
12" RCP	1340	LF	\$22.96	\$30,766.40
15" RCP	360	LF	\$26.00	\$9,360.00
18" RCP	24	LF	\$28.00	\$672.00
Televising	1724	LF	\$2.00	\$3,448.00
Granular Fill #53	400	TONS	\$15.00	\$6,000.00
12" End Section w/ Debris Guard	1	EA	\$1,400.00	\$1,400.00
18" End Section w/ Debris Guard	1	EA	\$1,650.00	\$1,650.00
Bedding #8	300	TONS	\$18.00	\$5,400.00
Street SSD (Stone & Fabric Included)	4098	LF	\$9.75	\$39,955.50
BMP / Swale SSD - 6" (Stone & Fabric Included)	1677	LF	\$9.75	\$16,350.75

**LAND DEVELOPMENT SUPPORT SOLUTIONS**

ENGINEERING | SURVEYING

Risers	4	EA	\$295.00	\$1,180.00
Lot Services Each	10	EA	\$115.00	\$1,150.00
			<b>Storm Sewer Subtotal</b>	<b>\$159,958.65</b>


**Monumentation**

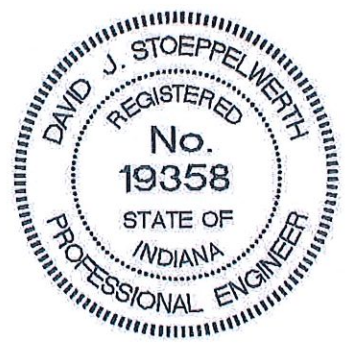
	QTY	UNIT	UNITS	TOTALS
Lot Corners	25	EA	\$100.00	\$2,500.00
Centerline Monuments	10	EA	\$150.00	\$1,500.00
			<b>Monumentation Subtotal</b>	<b>\$4,000.00</b>

**TOTAL** **\$163,958.65**

If you have any questions or comments regarding this estimate, please call Brett A. Huff at (317) 570-4841.

Witness my signature this 4<sup>th</sup> day of May, 2015.

  
\_\_\_\_\_  
David J. Stoepfelwerth  
Professional Engineer  
No. 19358



Cc: Doug Wagner  
BAH/meb  
S:\60160REP-S2\Blue\_Book\Agency\_Correspondence\HamiltonCountySurveyorHoyesEE03-10-16.doc

NOV 06 2017

OFFICE OF HAMILTON COUNTY SURVEYOR  
November 6, 2017

HCD B-2017-00052

**Irrevocable Letter of Credit No.: 1294JG2**

TO: Hamilton County Commissioners  
1 Hamilton County Square, Suite 157  
Noblesville, IN 46060

To Whom It May Concern:

We hereby authorize you to value on us for the account of:

Developer Name: Jackson's Grant Real Estate Company, LLC  
Developer Address: 3150 Republic Blvd. N., #3  
Toledo, OH 43615

For a sum or sums in United States of America Dollars not to exceed the aggregate total of **One Hundred Ninety-One Thousand Nine Hundred Fifty and 38/100 Dollars (\$191,950.38)** by your draft(s) at sight.

The purpose of this Letter of Credit is for the performance of the installation of storm sewers in Jackson's Grant, Section 2.

The condition for payment of any drafts drawn against the Letter of Credit requires that the draft be accompanied by beneficiary's signed statement on Hamilton County Commissioners letterhead stating that Jackson's Grant Real Estate Company, LLC has not performed or complied with the terms of the construction plan requirements of said project. The statement must also outline the specific deficiencies in construction.

All drafts must be marked, "Drawn under Standard Financial Corporation Letter of Credit No. 1294JG2."

This credit is subject, so far as applicable, to "The Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600."

This Letter of Credit is effective as of November 6, 2017 and shall expire on November 6, 2018, but such expiration date shall be automatically extended for a period of one year on November 6, 2018, and on each successive expiration date, unless a release is received from the Hamilton County Commissioners or we notify both the Hamilton County Commissioners and Jackson's Grant Real Estate Company, LLC by certified mail, at least ninety (90) days before the current expiration date, that we have decided not to extend this Letter of Credit beyond the



current expiration date. In the event of such notification by us, the credit established by this Letter shall be available to the Hamilton County Commissioners upon its sight draft or demand for payment for ninety (90) days after receipt of such notice by the Hamilton County Commissioners as shown on the signed return receipt.

We hereby agree with you that all drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the main office of Standard Financial Corporation, 13578 E. 131<sup>st</sup> Street, Suite 200, Fishers, IN 46037.

Sincerely,

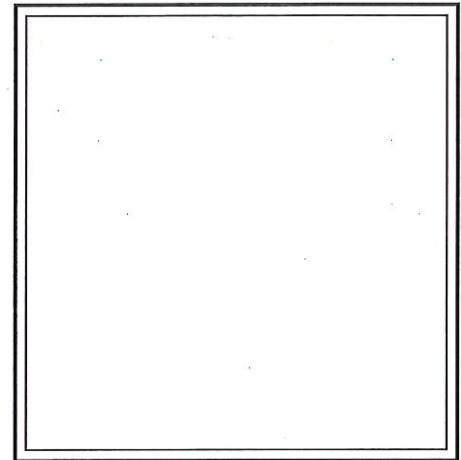
**STANDARD FINANCIAL CORPORATION**



\_\_\_\_\_  
Authorized Signature

Eric Roof, Treasurer

\_\_\_\_\_  
Name and Title



*This Letter of Credit is not valid unless the seal of Standard Financial Corporation is affixed hereto.*

NOV 06 2017

OFFICE OF HAMILTON COUNTY SURVEYOR  
November 6, 2017

HCD-2017-00053

**Irrevocable Letter of Credit No.: 1295JG2**

TO: Hamilton County Commissioners  
1 Hamilton County Square, Suite 157  
Noblesville, IN 46060

To Whom It May Concern:

We hereby authorize you to value on us for the account of:

Developer Name: Jackson's Grant Real Estate Company, LLC  
Developer Address: 3150 Republic Blvd. N, #3  
Toledo, OH 43615

For a sum or sums in United States of America Dollars not to exceed the aggregate total of **Four Thousand Eight Hundred and 00/100 Dollars (\$4,800.00)** by your draft(s) at sight.

The purpose of this Letter of Credit is for the performance of the installation of monumentation in Jackson's Grant, Section 2.

The condition for payment of any drafts drawn against the Letter of Credit requires that the draft be accompanied by beneficiary's signed statement on Hamilton County Commissioners letterhead stating that Jackson's Grant Real Estate Company, LLC has not performed or complied with the terms of the construction plan requirements of said project. The statement must also outline the specific deficiencies in construction.

All drafts must be marked, "Drawn under Standard Financial Corporation Letter of Credit No. 1295JG2."

This credit is subject, so far as applicable, to "The Uniform Customs and Practice for Documentary Credits (2007 Revision), International Chamber of Commerce Publication No. 600."

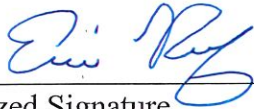
This Letter of Credit is effective as of November 6, 2017 and shall expire on November 6, 2018, but such expiration date shall be automatically extended for a period of one year on November 6, 2018, and on each successive expiration date, unless a release is received from the Hamilton County Commissioners or we notify both the Hamilton County Commissioners and Jackson's Grant Real Estate Company, LLC by certified mail, at least ninety (90) days before the current expiration date, that we have decided not to extend this Letter of Credit beyond the

current expiration date. In the event of such notification by us, the credit established by this Letter shall be available to the Hamilton County Commissioners upon its sight draft or demand for payment for ninety (90) days after receipt of such notice by the Hamilton County Commissioners as shown on the signed return receipt.

We hereby agree with you that all drafts drawn under and in compliance with the terms of this credit shall be duly honored on due presentation to the main office of Standard Financial Corporation, 13578 E. 131<sup>st</sup> Street, Suite 200, Fishers, IN 46037.

Sincerely,

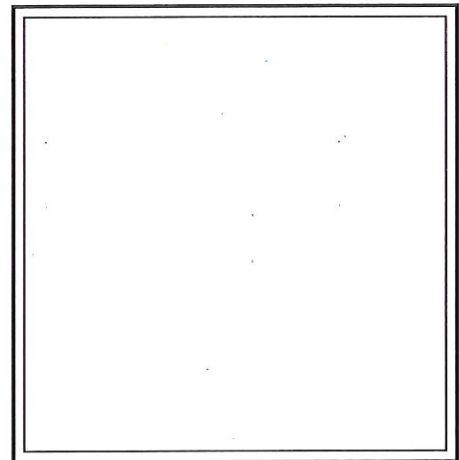
**STANDARD FINANCIAL CORPORATION**



\_\_\_\_\_  
Authorized Signature

Eric Roof, Treasurer

\_\_\_\_\_  
Name and Title



*This Letter of Credit is not valid unless the seal of Standard Financial Corporation is affixed hereto.*

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD  
IN THE MATTER OF

*Williams Creek Drain, Jackson's Grant Section 2 Arm*

NOTICE

To Whom It May Concern and: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Notice is hereby given of the hearing of the Hamilton County Drainage Board on the **Williams Creek Drain, Jackson's Grant Section 2 Arm** on **January 22, 2018** at **9:00 A.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

Williams Creek Drain, Jackson's Grant Section 2 Arm

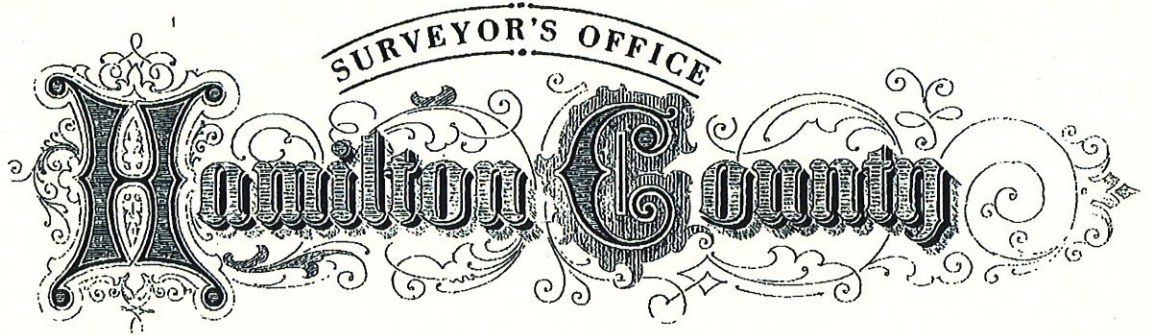
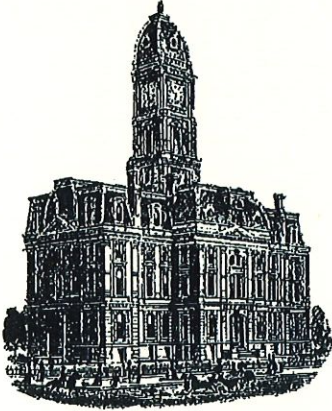
NOTICE

Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment on **January 22, 2018** 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**

**January 30, 2019**

**Re: Williams Creek Drainage Area – Jackson's Grant Section 2**

Attached are as-built, certificate of completion & compliance, and other information for Jackson's Grant Section. An inspection of the drainage facilities for this section has been made and the facilities were found to be complete and acceptable.

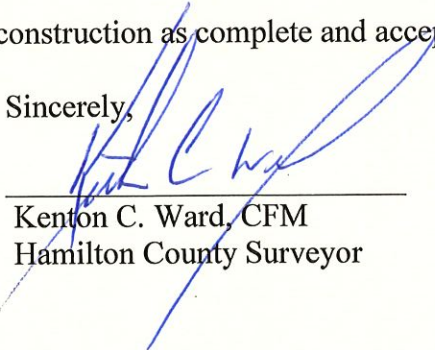
During construction, changes were made to the drain, which will alter the plans submitted with my report for this drain-dated November 20, 2017. The report was approved by the Board at the hearing held January 22, 2018. (See Drainage Board Minutes Book 18, Pages 6-8) The changes are as follows: the 12" RCP was lengthened from 1,178 feet to 1,207 feet. The 15" RCP was shortened from 405 feet to 380 feet. The 6" SSD was shortened from 5,857 feet to 5,525 feet. The length of the drain due to the changes described above is now **7,131 feet**.

The non-enforcement was approved by the Board at its meeting on January 22, 2018 and recorded under instrument #2018044751. The following sureties were guaranteed by Standard Financial Corporation and released by the Board on its August 27, 2018 meeting.

Bond-LC No: 1294JG2  
Amount: \$191,950.38  
For: Storm Sewers  
Issue Date: November 6, 2017

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

Sincerely,

  
Kenton C. Ward, CFM  
Hamilton County Surveyor



STOEPPELWERTH

ALWAYS ON

ofc: 317.849.5935  
fax: 317.849.5942

7965 East 106th Street  
Fishers, IN 46038-2505  
www.stooppelwerth.com

**CERTIFICATE OF COMPLETION AND COMPLIANCE**

To: Hamilton County Surveyor

Re: Jackson's Grant, Section 2

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: August 3, 2018

Type or Print Name: Dennis D. Olmstead

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

Telephone Number: (317) 849-5935

SEAL

INDIANA REGISTRATION NUMBER

900012

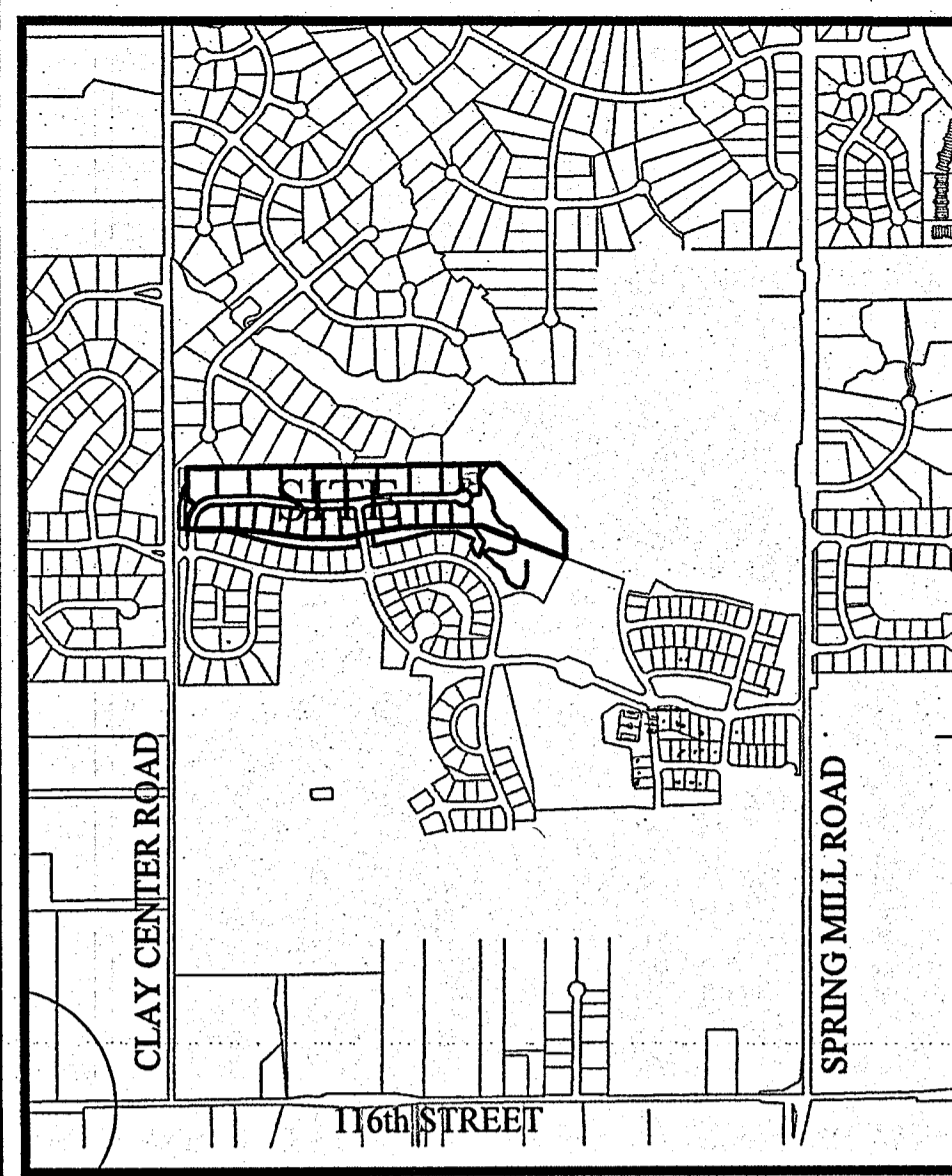


**LAND DEVELOPMENT SUPPORT SOLUTIONS**

ENGINEERING | SURVEYING

# JACKSON'S GRANT SECTION 2

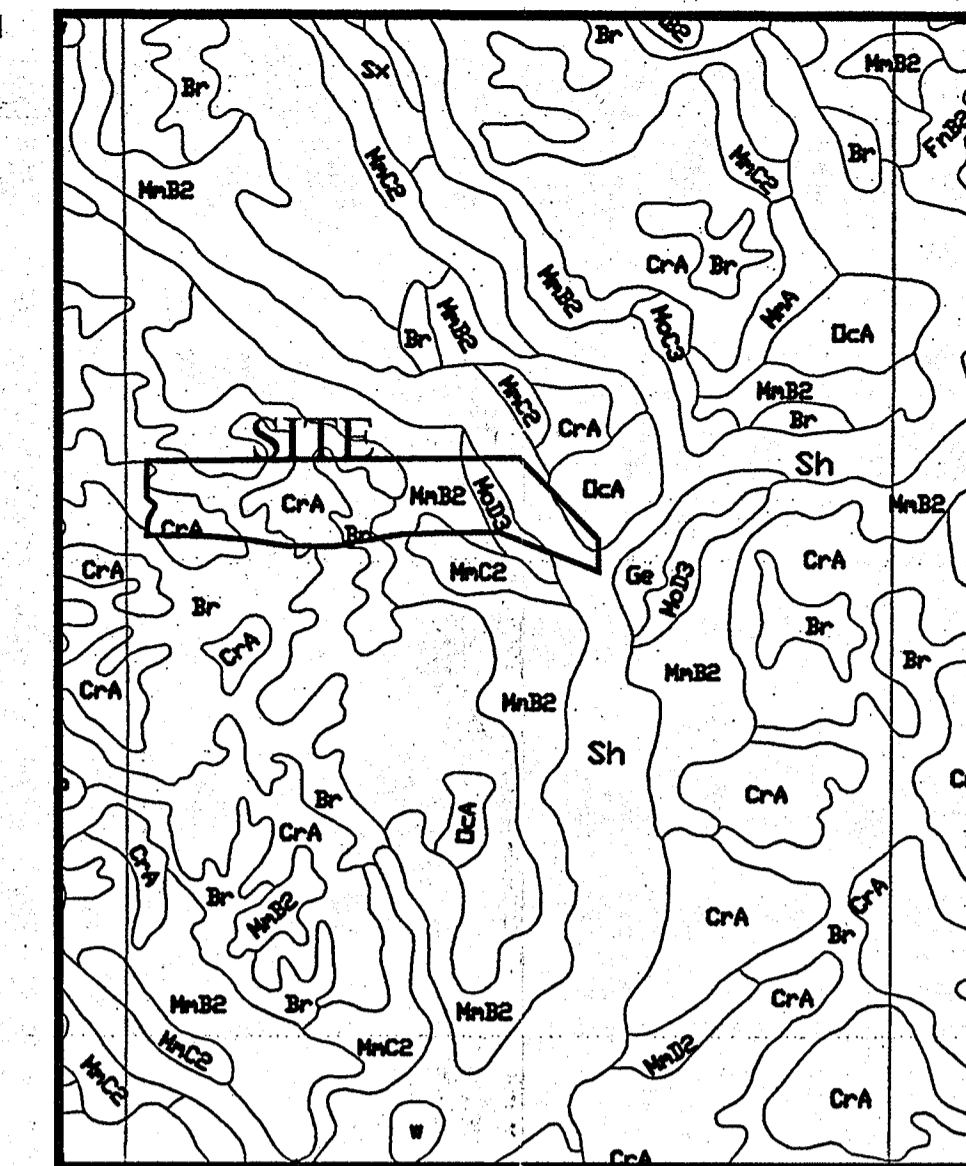
Developed by:  
**Jacksons Grant Real Estate Co., LLC**  
**13578 East 131st Street**  
**Suite 200**  
**Fishers, Indiana 46037**  
**Phone: (317) 770-1818**  
**Fax: (317) 770-1819**  
**Contact Person: DOUG WAGNER**  
**email: dwagner@republicdev.com**



LOCATION MAP  
SCALE: 1"=1200'

PLANS PREPARED BY:  
**STOEPPEL WERTH & 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. Stoepelwerth* 2/20/15  
 DAVID J. STOEPPELWERTH  
 PROFESSIONAL LAND SURVEYOR  
 NO. 19358



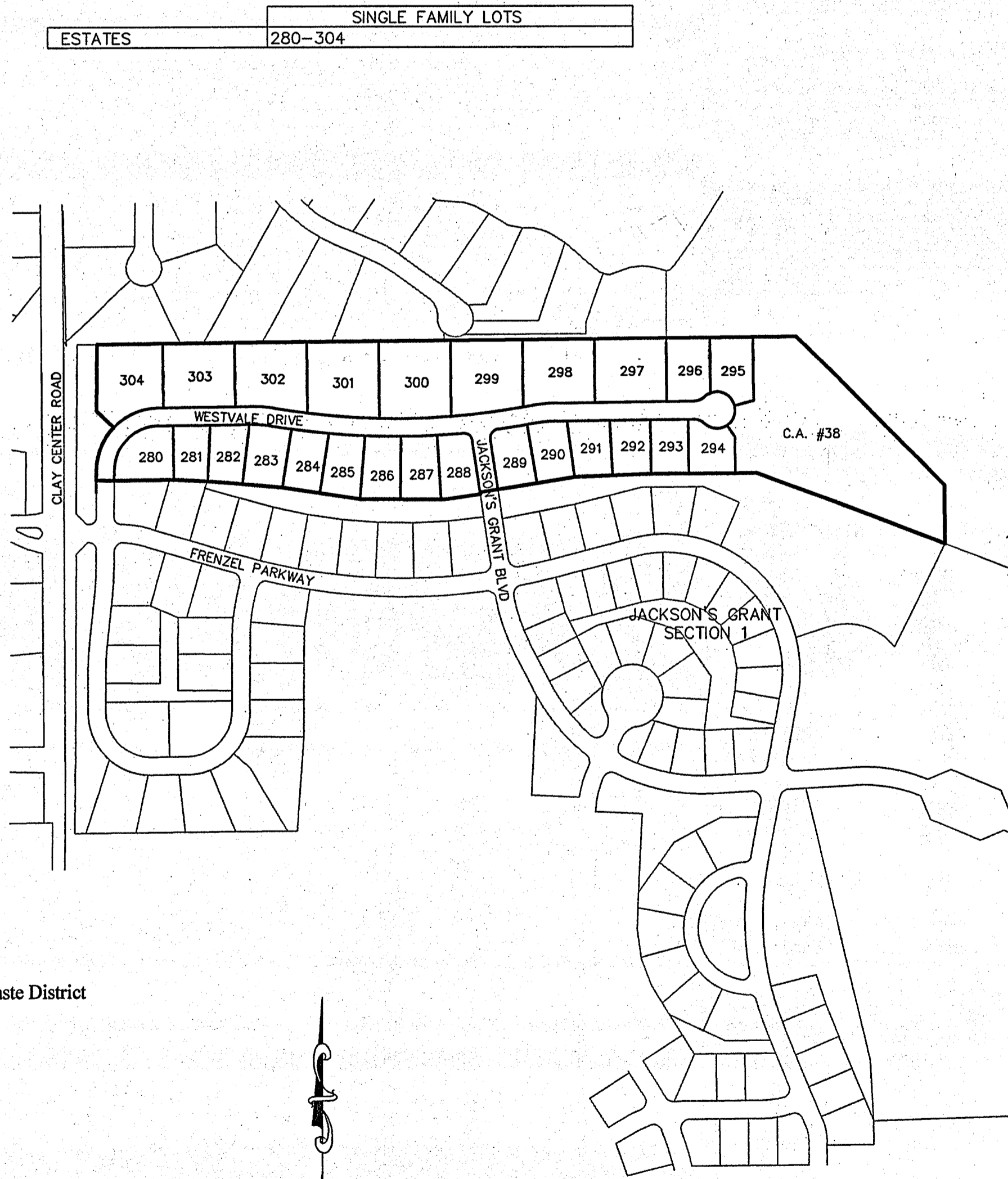
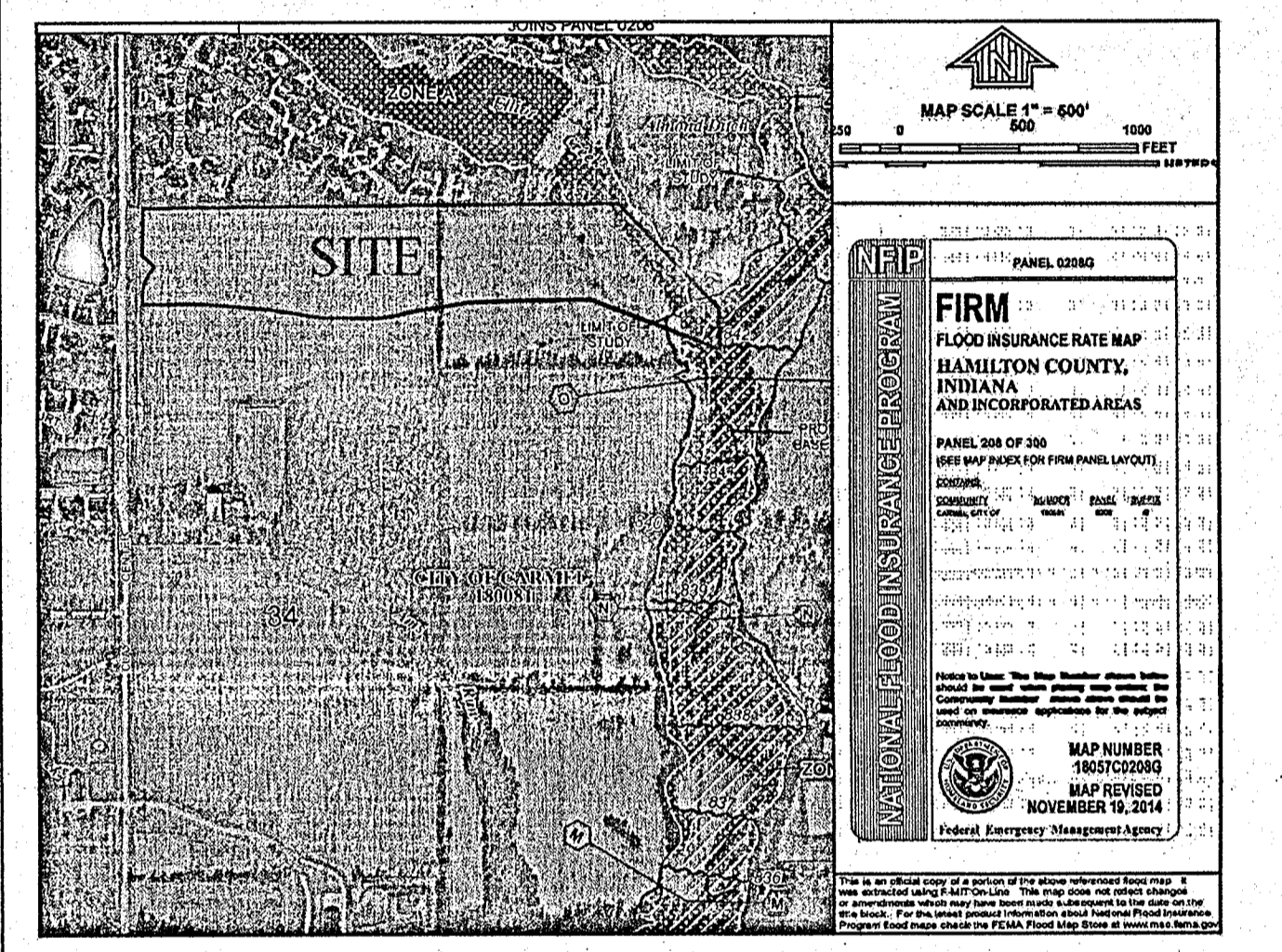
SOILS MAP  
SCALE: 1"1000'

Map Unit: Br - Brookston silt clay loam  
 Br-Brookston silt clay loam  
 This poorly drained soil has a seasonal high water table above the surface or within 1.0 ft. and is in depressions. Slopes are 0 to 2 percent. The native vegetation is water tolerant grasses and hardwoods. The surface layer is silt clay loam and has moderate or high organic matter content (2.0 to 3.0 percent). Permeability is moderately slow (0.2 to 0.6 in/hr) in the most restrictive layer above 60 inches. Available water capacity is high (10.0 inches in the upper 60 inches). The pH of the surface layer in non-limed areas is 6.1 to 7.3. This soil is hydric. Wetness is a management concern for crop production. This soil responds well to tile drainage.

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 moderate 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.

MnB2 - Miami silt loam, 2 to 6 percent slopes, eroded  
 MnB2-Miami silt loam, 2 to 6 percent slopes, eroded  
 This gently sloping, deep, well drained soil is on rises on till plains and along drainageways and streams. The mapped areas range from 3 to 50 acres in size. In a typical profile the surface layer is dark grayish brown silt loam about 7 inches thick. The subsoil is dark yellowish brown and brown, firm clay loam about 23 inches thick. The substratum, to a depth of 60 inches, is yellowish brown loam that contains free carbonates. In a few areas the lower part of the subsoil is stratified sandy loam, loamy sand and sandy clay loam. The depth to till is more than 40 inches in some areas. Included with this soil in mapping are small areas of Crosby soils, small areas of severely eroded soils that have a surface layer of clay loam, small areas of soils have slopes of more than 6 percent, and small areas of soils that have gravel and cobbles on the surface.

MoD3 - Miami clay loam, 12 to 18 percent  
 This strongly sloping, deep, well drained soil is on breaks along streams and drainageways. The mapped areas are irregular in shape and range from 3 to 15 acres in size. In a typical profile the surface layer is dark brown, clay loam about 5 inches thick. The subsoil is dark yellowish brown, firm clay loam about 19 inches thick. The substratum, to a depth of 60 inches, is yellowish brown loam. In some areas calcareous glacial till is at the surface. Cobbles and gravel are in the surface layer in most areas. In many areas the subsoil is gravelly loam or clay loam.



DESIGN DATA

DESIGN SPEED = 25 M.P.H.

JACKSON'S GRANT BLVD.	191.82 L.F.
WESTVALE DR.	1848.84 L.F.
TOTAL	2040.66 L.F.

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

FLOOD STATEMENT  
 A PORTION OF THIS SITE DOES LIE WITHIN A FLOODWAY OR FLOOD PLAIN  
 PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS  
 PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd.  
 PROJECT #07-760

ZONING  
 PUD

Planning Area	Minimum Lot <sup>2</sup>		Minimum Yard Setbacks			Min. Dwelling Unit Size (sf)		Max. Lot Coverage	
	Width	Area (sf)	Street Frontage	Front <sup>1</sup>	Side (Aggregate)	Rear	1-story		2-story
Westvale - (formerly known as The Estates)	100'	15,000	50'	25'	7' (20')	20'	2,400	3,000	1.25

<sup>1</sup>The following front yard setbacks shall apply for: (i) Dwellings w/ rear load garage, 10'; and (ii) Dwellings w/ covered garage, 20'.  
<sup>2</sup>Portions of lots within the hatched areas shown on the Conceptual Plan shall also be subject to the following: (i) minimum Rear Lot Line width of 100'; and (ii) minimum Lot depth of 100'. Portion lots within the cross-hatched areas shown on the Conceptual Plan shall also be subject to the following: (i) Minimum Lot Line width of 140'; and (ii) minimum Lot depth of 140'.

INDEX

SHT.	DESCRIPTION
C001	TITLE SHEET
C100-C101	TOPOGRAPHICAL SURVEY/TREE CONSERVATION PLAN
C200-C202	SITE DEVELOPMENT PLAN/STORM CHART AND PIPE CHART/EMERGENCY FLOOD ROUTE
C300-C306	EROSION CONTROL PLAN/SWPP DETAILS AND SPECIFICATIONS
C400-C405	STREET PLAN AND PROFILES/INTERSECTION DETAILS/PAVING POLICIES
C500-C501	SANITARY SEWER PLAN AND PROFILES
C600-C602	STORM SEWER PLAN AND PROFILES/SUMP PLAN
C700-701	WATER PLAN
C800-C805	CONSTRUCTION DETAILS AND SPECIFICATIONS SANITARY SEWER STORM SEWER STREET ADA RAMP

REVISIONS

SHT.	DESCRIPTIONS
ALL	REVISED PER TAC COMMENTS 05/14/15
C803	REVISED PER WATER BLOCK DETAIL 07/06/15
ALL	REVISED PER CITY COMMENTS 10/15/15 - JSM
C201	REVISED TRAILHEAD PERGOLA LOCATION PER CLIENT 10/26/15 - JSM
ALL	REVISED LOT NUMBERS 02/15/16 - HAM
ALL	REVISED 8/17/17 - GEM
C500-C501	ASBUILT 06/25/18 - GEM
C600-C601	STORM ASBUILTS 08/02/18 - PCW

UTILITY CONTACTS:

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

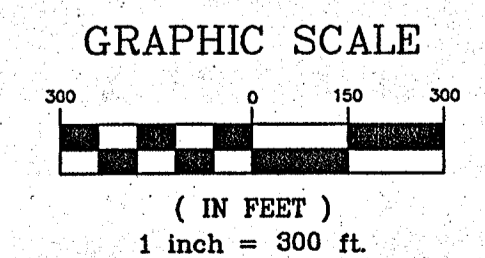
Carmel Water Utilities  
 3450 West 131st Street  
 Westfield, IN 46074

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

Vectren Energy  
 16000 Allisonville Road  
 Noblesville, Indiana 46060



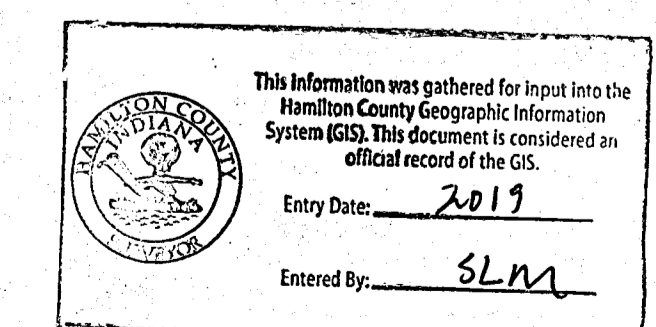
JACKSON'S GRANT SECTION 2

A part of the Northwest quarter and the Northeast quarter of Section 34, Township 18 North, Range 3 East, in Clay Township, Hamilton County, Indiana more particularly described as follows:

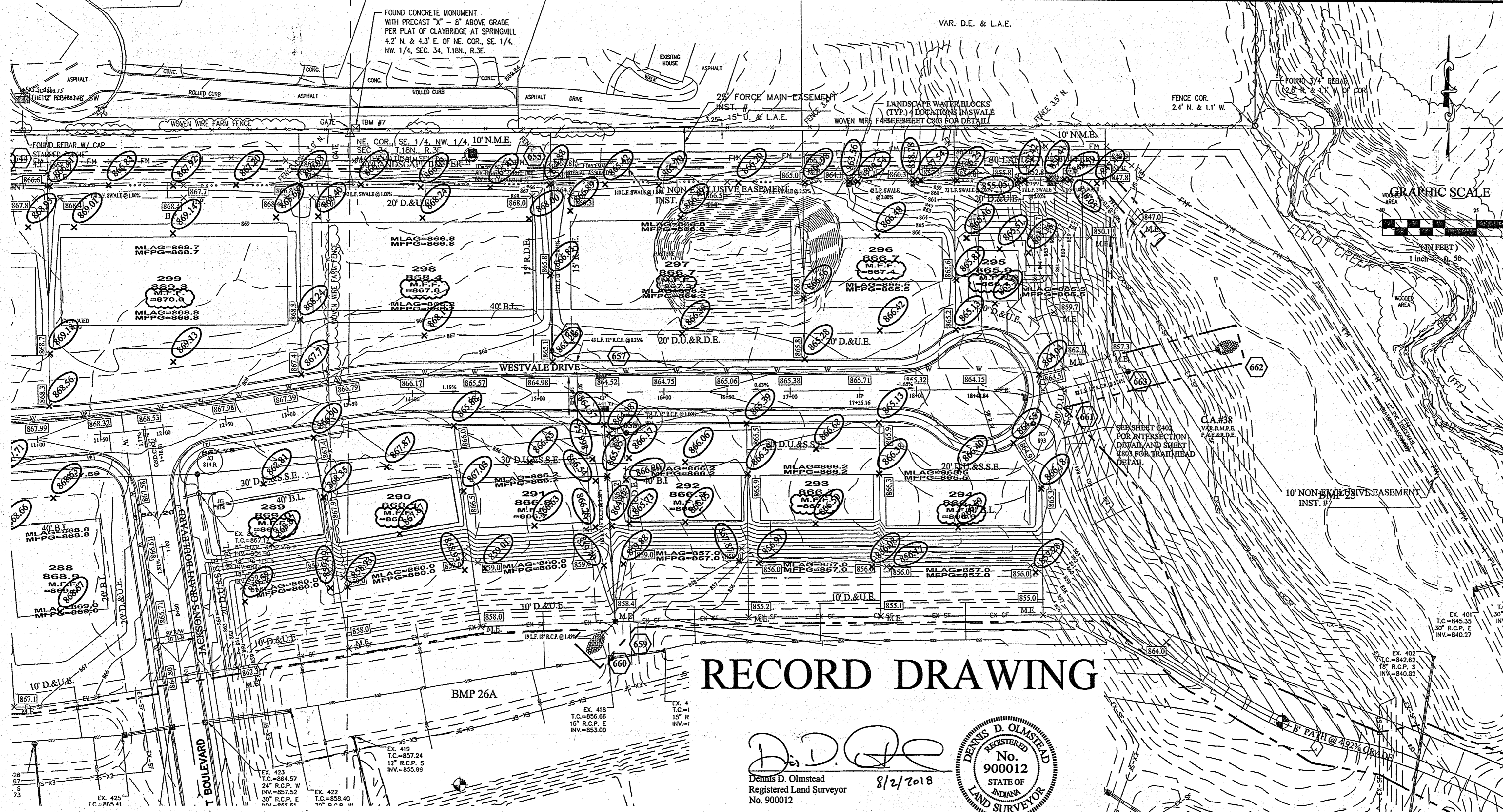
Commencing at the Northwest corner of the Southeast quarter of the Northwest quarter of said Section 34 also being the Southwest corner of Claybridge at Springmill, a subdivision in Hamilton County, Indiana, the plat of which is recorded as instrument Number 89-27503, Plat Cabinet 1, Slide 72 in the Office of the Recorder, Hamilton County, Indiana; thence North 89 degrees 33 minutes 14 seconds East 99.87 feet along the South line of said Claybridge at Springmill also being the North line of the Southeast quarter of said Northwest quarter to the POINT OF BEGINNING of this description; thence North 89 degrees 33 minutes 14 seconds East 1,183.00 feet along said South line of Claybridge at Springmill and said North line of said Southeast quarter to the Northeast corner of said Southeast quarter; thence North 89 degrees 30 minutes 59 seconds East 760.00 feet along said South line of Claybridge at Springmill and the North line of the Southwest quarter of said Northeast quarter; thence South 44 degrees 42 minutes 34 seconds East 585.38 feet; thence South 00 degrees 28 minutes 13 seconds East 160.89 feet to the Northeast corner of Jackson's Grant, Section 1A, a subdivision in Hamilton County, Indiana, the plat of which is recorded as instrument Number 2015064863, Plat Cabinet 5, Slide 438 in said Recorder's Office; thence along the northerly boundary of said Jackson's Grant, Section 1A by the next seventeen (17) courses: 1) North 69 degrees 27 minutes 24 seconds West 558.43 feet; 2) South 89 degrees 30 minutes 51 seconds West 293.43 feet; 3) South 88 degrees 01 minutes 57 seconds West 212.87 feet; 4) South 80 degrees 48 minutes 02 seconds West 215.94 feet; 5) South 81 degrees 29 minutes 45 seconds West 97.63 feet; 6) South 82 degrees 20 minutes 15 seconds West 235.33 feet; 7) South 81 degrees 29 minutes 45 seconds West 97.63 feet; 8) North 89 degrees 43 minutes 06 seconds West 235.33 feet; 9) North 81 degrees 19 minutes 22 seconds West 220.60 feet; 10) North 84 degrees 50 minutes 19 seconds West 198.35 feet; 11) North 86 degrees 44 minutes 43 seconds West 98.65 feet; 12) South 89 degrees 34 minutes 53 seconds West 171.40 feet; 13) North 89 degrees 39 minutes 16 seconds West 50.00 feet; 14) North 00 degrees 20 minutes 44 seconds East 27.63 feet to the point of curvature of a curve concave easterly, the radius point of said curve being South 89 degrees 39 minutes 16 seconds East 175.00 feet from said point; 15) northerly along said curve 132.73 feet to the point of tangency of said curve, said point being North 46 degrees 11 minutes 58 seconds West 175.00 feet from the radius point of said curve; 16) North 46 degrees 11 minutes 58 seconds West 66.27 feet; 17) North 00 degrees 20 minutes 44 seconds East 186.67 feet to the place of beginning, containing 20,651 acres, more or less.

RECORD DRAWING

*D. D. Olmstead*  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 08/02/18



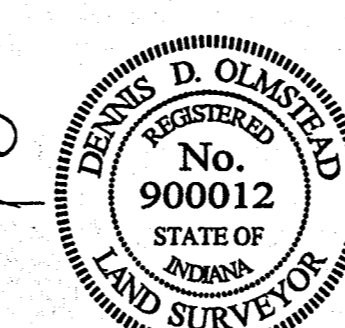




- LEGEND**
- EXISTING CONTOUR
  - EXISTING SANITARY SEWER
  - EXISTING STORM SEWER
  - PROPOSED GRADE
  - PROPOSED CONTOUR
  - PROPOSED SANITARY SEWER
  - PROPOSED STORM SEWER
  - PROPOSED WATER LINE
  - PROPOSED SWALE
  - PROPOSED 5' SIDEWALK (BY HOME BUILDER) (DEVELOPER SHALL INSTALL SIDEWALKS ALONG ALL COMMON AREAS)
- REAR R/W**
- MFPG=XXX.X DENOTES REAR PROTECTION GRADES
  - XX XXX.X LOT NUMBER PAD ELEVATION
  - MFPG=XXX.X DENOTES FRONT PROTECTION GRADES
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- PROPOSED 6" DUAL WALL HANCOR HI-Q TYPE 4 UNDERDRAINS UNDER CURB.
  - MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:
    1. (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE WHICH EVER IS LOWEST.
    2. 15" (1.25) ABOVE THE ROAD ELEVATION
    3. 6" (0.5') ABOVE THE M.L.A.G
  - MFPG=XXX.X MINIMUM FLOOD PROTECTION GRADE
  - MLAG=XXX.X MINIMUM LOWEST ADJACENT GRADE
- 4" SSD TO LOT RISER TC**
- DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS)**
- CONSTRUCTION LIMITS

# RECORD DRAWING

D.D.O.  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 State of Indiana  
 8/2/2018



**STRUCTURE TABLE**

STR.#	TYPE	T.C.	CASTING TYPE	DIAMETER IN	DIRECTION IN	INV. IN	DIAMETER OUT	DIRECTION OUT	INV. OUT	SLOPE
644	YARD INLET	867.05	R-4342				12	W	863.05	0.35%
645	YARD INLET	867.71	R-4342	12	E	862.35	12	S	862.25	0.45%
646	MANHOLE	867.55	R-1772	12	N	861.50	12	SW	861.40	0.83%
647	CURB INLET	866.90	R-3501-L2	12	NE	861.05	12	S	860.95	2.23%
648	DBL CURB INLET	866.86	R-3501-TL-TR	12	N	860.28	12	S	860.18	1.07%
649	YARD INLET	863.96	R-4342				12	S	863.99	0.51%
650	YARD INLET	867.99	R-4342				12	S	863.22	0.56%
651	MANHOLE	868.27	R-1772	12	N	863.32	12	SE	863.22	0.56%
652	CURB INLET	867.85	R-3501-L2	12	N	862.95	12	S	862.85	0.93%
653	DBL CURB INLET	867.82	R-3501-TL-TR	12	N	862.57	12	S	862.57	2.34%
654	YARD INLET	864.04	R-4342				12	S	861.17	0.41%
655	YARD INLET	865.17	R-1772	12	N	860.63	12	SE	860.63	0.26%
656	MANHOLE	865.19	R-1772	12	N	860.63	12	SE	860.63	0.26%
657	DBL CURB INLET	864.79	R-3501-TL-TR	12	NW	860.52	15	S	860.46	1.00%
658	DBL CURB INLET	864.80	R-3501-TL-TR	12	N	860.06	15	S	860.06	2.58%
659	MANHOLE	864.90	R-1772	15	N	855.86	18	SW	855.76	1.45%
660	MANHOLE	864.90	R-1772	18	NE	855.48	18	SW	855.48	1.45%
661	CURB INLET	864.16	R-3501-L2	12	E	861.02	12	E	861.02	5.24%
662	MANHOLE	854.83	R-1772	12	W	841.04	12	W	841.04	5.24%
663	MANHOLE	854.83	R-1772	12	W	846.62	12	W	844.83	5.00%

**Pipe Table**

NAME	SIZE	LENGTH	SLOPE	POTENTIAL
644-645	12"	200.74'	0.35%	R.C.P.
645-646	12"	167.62'	0.45%	R.C.P.
646-647	12"	41.98'	0.83%	R.C.P.
647-648	12"	30.04'	0.75%	R.C.P.
648-649	15"	17.22'	0.7%	R.C.P.
650-651	12"	139.07'	0.51%	R.C.P.
651-652	12"	48.12'	0.56%	R.C.P.
652-653	12"	30.10'	0.93%	R.C.P.
653-654	12"	83.24'	0.41%	R.C.P.
655-656	12"	131.54'	0.26%	R.C.P.
656-657	12"	43.10'	0.26%	R.C.P.
657-658	15"	29.95'	1.00%	R.C.P.
658-659	15"	162.54'	2.58%	R.C.P.
659-660	18"	19.30'	1.45%	R.C.P.
660-661	12"	82.13'	5.24%	R.C.P.
663-662	12"	74.87'	5.06%	R.C.P.

- EARTHWORK:**
1. **EXCAVATION**
    - A. 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.
    - B. 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.
  2. **REMOVAL OF TREES**
    - A. 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.
  3. **PROTECTION OF TREES**
    - A. 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.
    - B. In the event cut or fill exceeds 0.5 foot over the root area, the Developer shall be consulted with respect to protective measure to be taken, if any, to preserve such trees.
  4. **REMOVAL OF TOPSOIL**
    - A. 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.
  5. **UTILITIES**
    - A. Rules and regulation governing the respective utility shall be observed in executing all work under this section.
    - B. 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.
  6. **SITE GRADING**
    - A. Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
    - B. The tolerance for paved areas shall not exceed 0.05 feet above established subgrade. All other areas shall not exceed 0.05 feet plus or minus the established grade. Provide roundings at top and bottom of banks and other breaks in grade.
    - C. 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.

**DRAINAGE SUMMARY**

REFERENCE SHEET C200 FOR DRAINAGE SUMMARY INFORMATION.

**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,
  - b. whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building.
2. **Standard: Lowest Adjacent Grade**
  - i. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall have two feet of freeboard above the flooding source's 100-year flood elevation under proposed conditions.
  - ii. For areas outside a Special Flood Hazard Area (SFHA) or FEMA or IDNR designated floodplain
  - iii. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be set a minimum of 2 feet above the highest noted overflow weir elevation, whichever is higher.
  - iv. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings shall be set a minimum of 2 feet above the highest noted overflow ponding elevation across the property frontage.
  - v. 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.
3. **Design Notes:**
  - a. Each lot that is adjacent to a pond, open ditch or flooding source is 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.
  - b. 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.

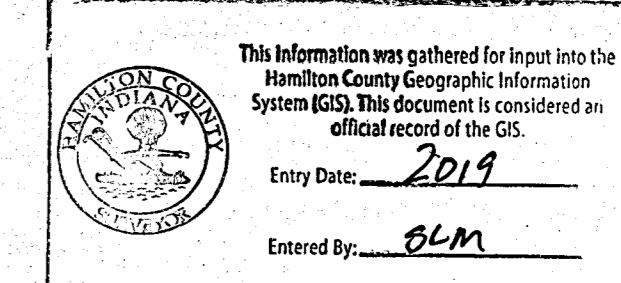
**FLOOD STATEMENT**  
 A PORTION OF THIS SITE DOES LIE WITHIN A FLOODWAY OR FLOOD PLAIN PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, L.L.C. PROJECT #07-760

**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

THERE WILL BE NO OFF-SITE BORROW, STOCKPILE, OR DISPOSAL AREAS ASSOCIATED WITH THIS PROJECT.

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



**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 ON-SITE 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.

**CONTACT:**  
 CARMEL UTILITIES (317) 571-2648 FOR WATER LOCATES  
 FOR SANITARY SEWER LOCATES  
 CONTACT: CLAY TOWNSHIP REGIONAL WASTE DISTRICT (317) 844-9200

**NOTE:**  
 FOR STORM AND PIPE CHARTS SEE SHEET THIS SHEET

**NOTE:**  
 ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE 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 THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY.

**STOEPPELWERTH**  
 ALWAYS ON  
 7845 East 108th Street, Fishers, IN 46038-2505  
 Phone: 317.848.9295 Fax: 317.848.9297

**JACKSONS GRANT SECTION 2**

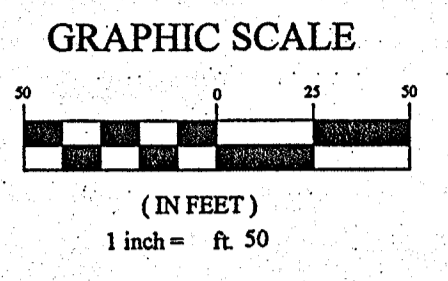
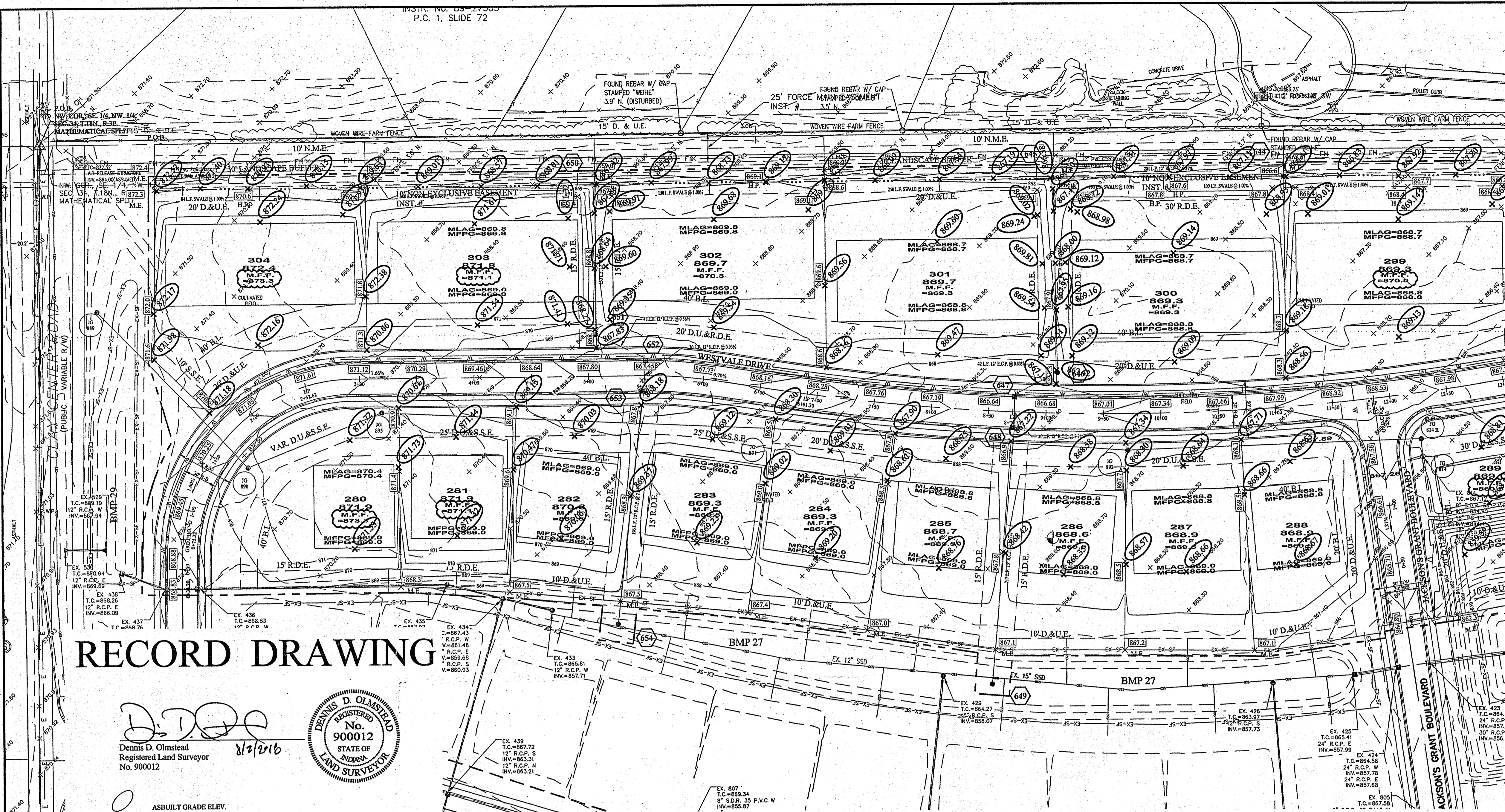
**SITE DEVELOPMENT PLAN**

**C201**

S & A JOB NO. 60160REP-S2

DRAWN BY: JSM CHECKED BY: BAH  
 REVISION: 01/21/16  
 REVISION: 02/06/15  
 REVISION: 10/15/15  
 REVISION: 09/22/15

CERTIFIED: 02/20/15  
 David J. Stoepfelwirth  
 PROFESSIONAL ENGINEER



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

- REAR RL**  
MFPG=XXX.X DENOTES REAR PROTECTION GRADES  
XXX.X LOT NUMBER  
PAD ELEVATION  
MFPG=XXX.X DENOTES FRONT PROTECTION GRADES
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- PROPOSED 6" DUAL WALL HANCOR HI-Q TYPE 4 UNDERDRAINS UNDER CURB.
- MIN. FINISH FLOOR ELEV. IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:
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- 4" SSD TO LOT RISER TC  
DUAL WALL, HANCOR HI-Q TYPE 4 SSD (SIZE NOTED ON PLANS)
- CONSTRUCTION LIMITS

# RECORD DRAWING

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

8/2/2016

REGISTERED No. 900012  
STATE OF INDIANA  
LAND SURVEYOR

**NOTES TO CONTRACTOR:**

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- EARTHWORK:**
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  6. SITE GRADING
    - A. Do all cutting, filling, compacting of fills and rough grading required to bring entire project area to subgrade as shown on the drawing.
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    - C. 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**  
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  - b. whichever is greater, for all windows, doors, pipe entrances, window wells, and any other structure member where floodwaters can enter a building.
2. Standard: Lowest Adjacent Grade
  - a. General
    - i. 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.
    - ii. For areas outside a Special Flood Hazard Area (SFHA) or FEMA or DNR designated floodplain
      1. The Lowest Adjacent Grade for all residential, commercial, or industrial buildings adjacent to ponds shall be a minimum of 2 feet above the emergency overflow weir elevation, whichever is higher.
      2. 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/pooling elevation across the property frontage.
    - iii. 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:
    - a. 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.
    - b. 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.

**STORM SEWER FOR THIS PROJECT WILL BE PUBLIC.**

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

**FLOOD STATEMENT**  
A PORTION OF THIS SITE DOES LIE WITHIN A FLOODWAY OR FLOOD PLAN PER THE WILLIAMS CREEK HYDRAULIC ANALYSIS PERFORMED BY CHRISTOPHER B. BURKE ENGINEERING, Ltd. PROJECT #07-760

**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

THERE WILL BE NO OFF-SITE BORROW, STOCKPILE, OR DISPOSAL AREAS ASSOCIATED WITH THIS PROJECT.

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: 2019  
Entered By: *slm*

**DRAINAGE SUMMARY**  
OVERALL  
Site Acreage = +/-266 ac.  
Offsite/Upstream Acreage = +/-6.80ac.  
Allowable Release Rate:  
10yr = 140.90 c.f.s. 100yr = 335.07 c.f.s.  
Post Developed Release Rate:  
10 yr = 124.77 c.f.s. 100 yr = 304.77 c.f.s.

**SECTION 2**  
Site Acreage = +/-20.65 ac.  
Is the primary water quality treatment for the development as planned in the Master Plan - YES  
If NO, provide the following information per BMP (Only for BMP's with vegetative swale req.):  
\*Length of vegetated swale treatment (from discharge point to outlet pipe) - N/A  
\*Minimum length of vegetated swale treatment as required by the Master Plan - N/A

Is the primary water quantity treatment for the development as planned in the Master Plan - YES  
If YES, provide the following information:  
Total Master Plan contributing watershed = 203.53 Ac.  
Total Watershed Currently Built (or Approved) contributing to this system = 90.45 Ac.  
Total watershed from Section 2 contributing to the system = 20.65 Ac.  
Total watershed available in the system post-project = 92.43 Ac.

Is the entire BMP treatment train to an outlet point being constructed with this section - NO  
If NO, provide the following information:  
\*Master Plan BMP(s) downstream of this sections discharge location (list each) - 25/26A/26B/27  
\*BMP(s) downstream that have been previously constructed (list each) - 25/26A/26B/27

Detention Basins BMP's Constructed with this section. (See BMP pond data table-this sheet) - N/A

Also, reference Post-Construction Stormwater Master Plan prepared by Williams Creek Consulting.

**CONTACT:**  
CARMEL UTILITIES (317) 571-2648 FOR WATER LOCATES  
FOR SANITARY SEWER LOCATES  
CONTACT: CLAY TOWNSHIP REGIONAL WASTE DISTRICT (317) 844-9200

**NOTE:**  
FOR STORM AND PIPE CHARTS SEE SHEET C201

**NOTE:**  
ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE 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 THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY.

ADG	07/18/18
BAH	07/18/18
HAN	07/18/18
WAL	07/18/18
BSH	07/18/18
BY	07/18/18

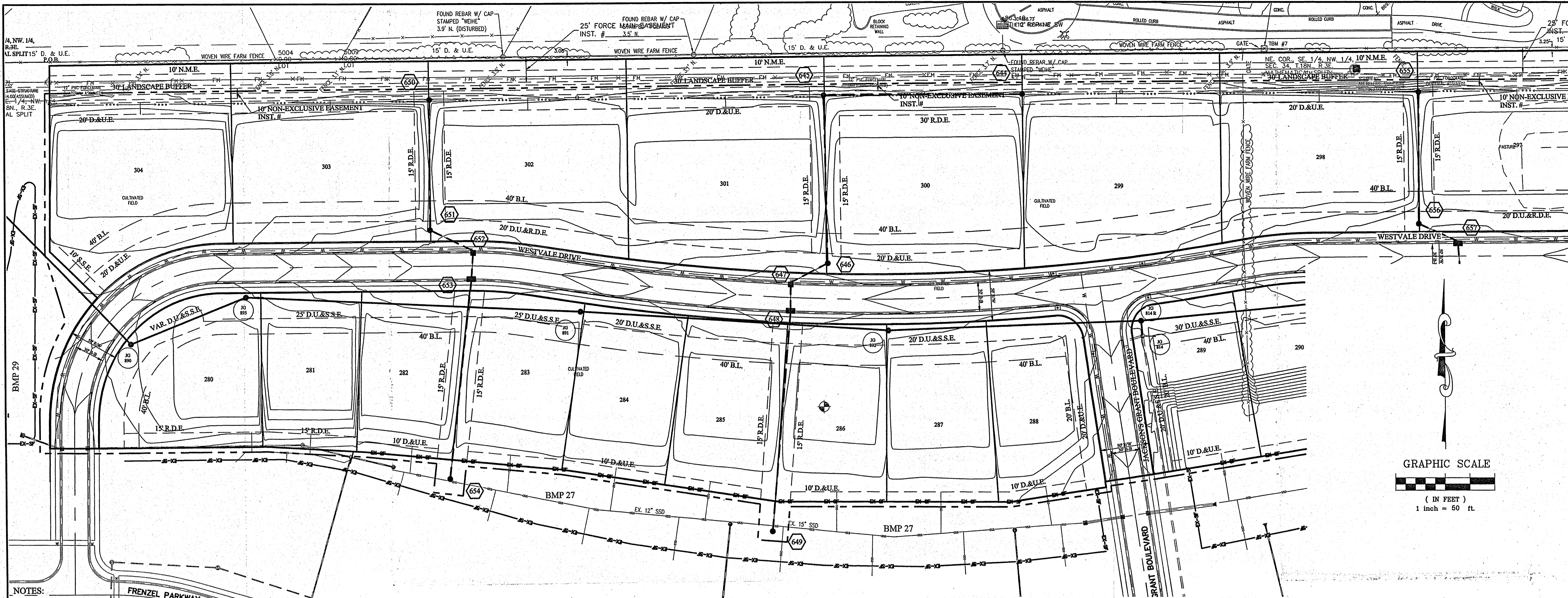
REGISTERED No. 19358  
STATE OF INDIANA  
PROFESSIONAL ENGINEER

CERTIFIED: 02/20/15  
*Daniel J. Stoppelwerth*

**STOEPPELWERTH**  
ALWAYS ON  
7805 East 106th Street, Fishers, IN 46038-2505  
Phone: 317.849.2955 Fax: 317.849.5942

**SITE DEVELOPMENT PLAN**  
JACKSONS GRANT SECTION 2  
CARMEL

DRAWN BY: JSM  
CHECKED BY: BAH  
SHEET NO. **C200**  
DATE: 08/02/19  
60160REP-S2



**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.

FOR INSTALLATION OF STORM UNDER CITY STREETS AND COVER REQUIREMENTS, SEE SHEET No. C802 ON THE TRENCH DETAIL.

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.

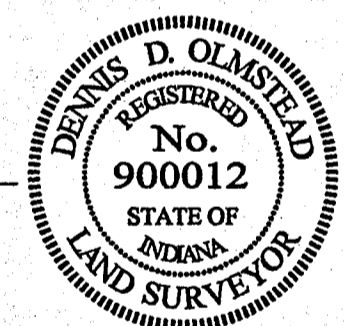
# RECORD DRAWING

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: 2/19/19

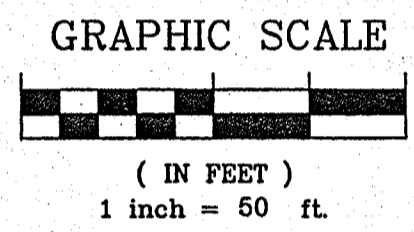
Entered By: SLM

Dennis D. Olmstead  
Registered Land Surveyor  
No. 900012



CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE 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.

DENOTES FULL DEPTH GRANULAR BACKFILL SEE RCP TRENCH DETAIL SHEET C802

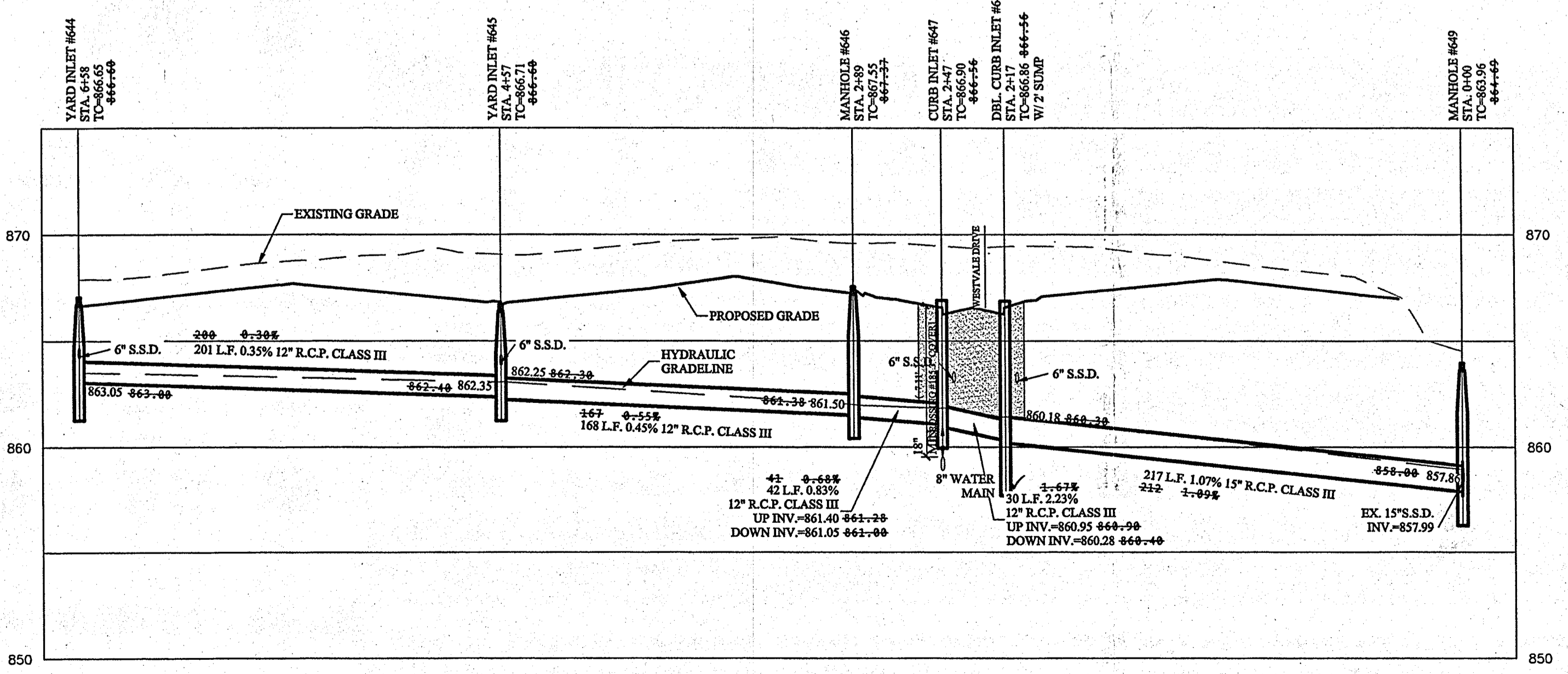
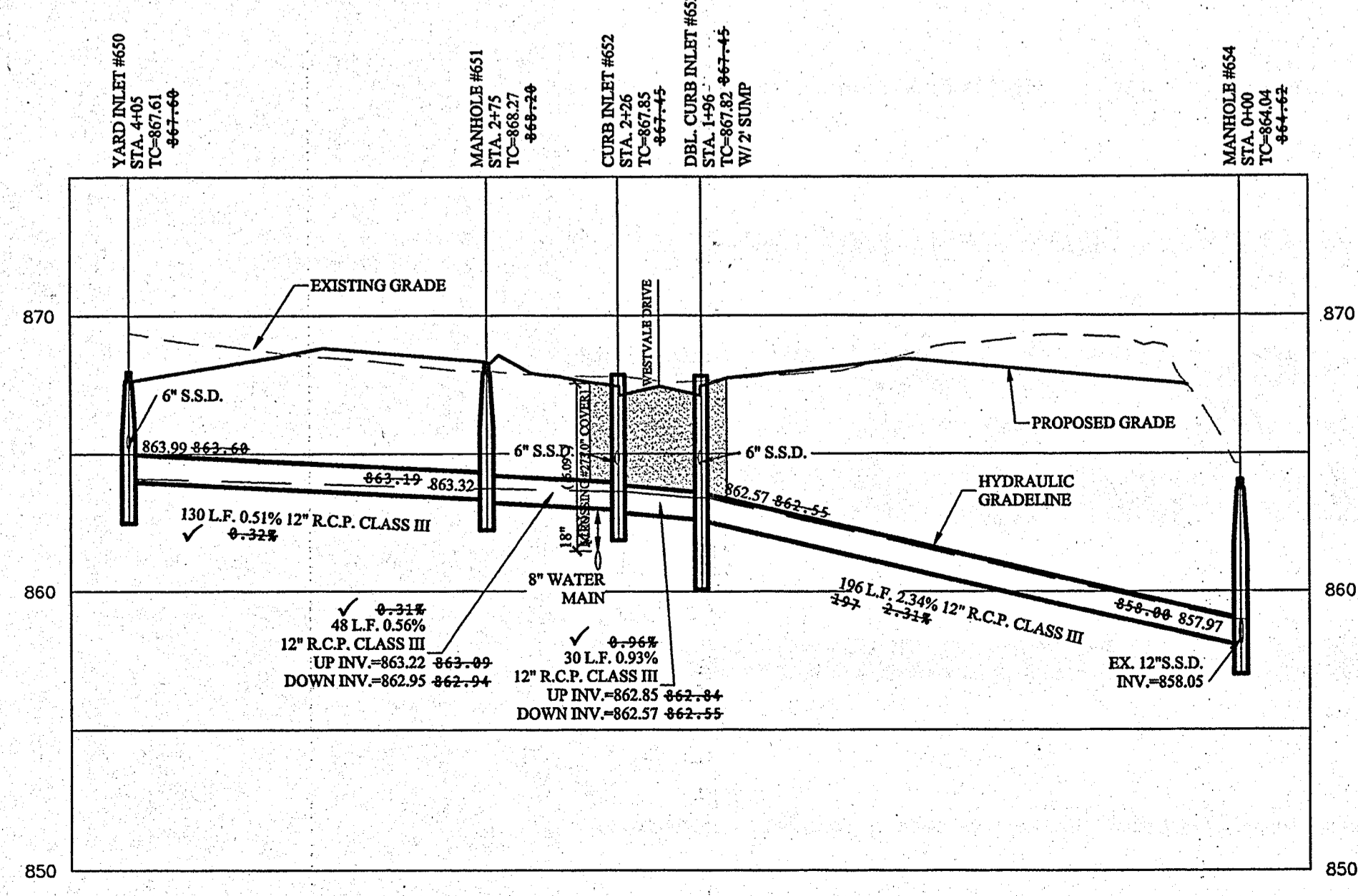


NO.	DATE	BY	REVISIONS
AS-BUILTS	07/27/2018	JSM	Revised lot numbers
	02/15/2019	JSM	Revised per city comments

David J. Stoppelwerth  
REGISTERED PROFESSIONAL ENGINEER  
No. 19358  
STATE OF INDIANA  
CERTIFIED: 02/20/15

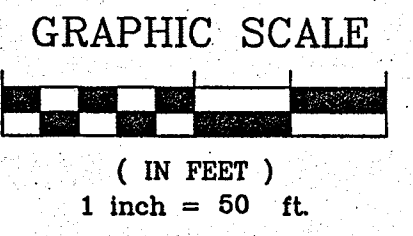
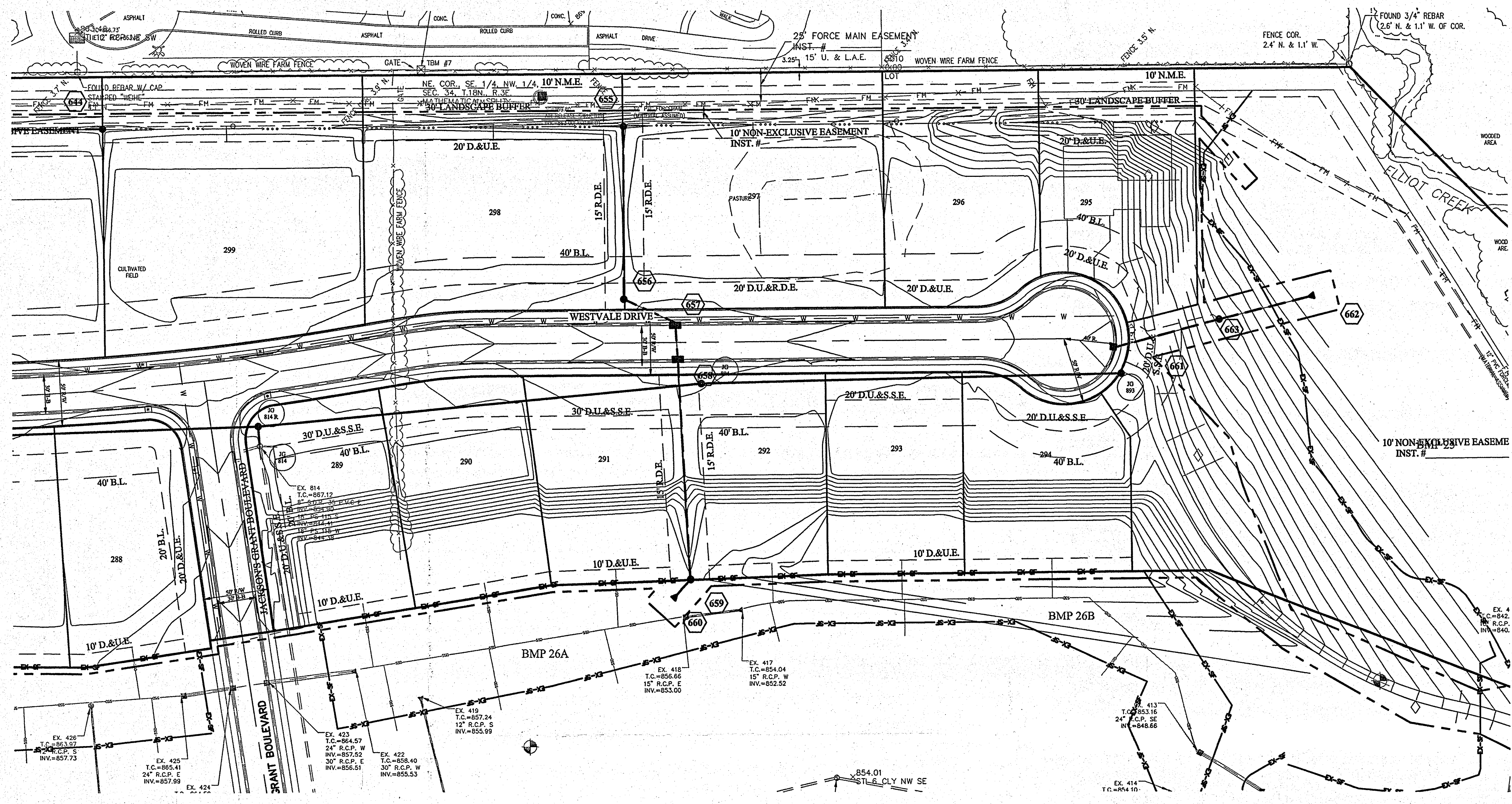
**STOEPPELWERTH**  
ALWAYS ON  
7905 East 106th Street, Fishers, IN 46038-2535  
phone: 317.491.5955 fax: 317.491.5942

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Plotted / By: July 6, 2018 4:47:08 PM / Pale White

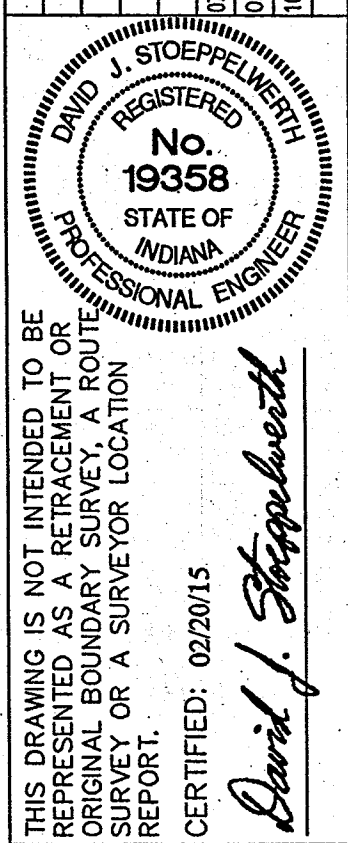


**STORM PLAN & PROFILES**  
**JACKSONS GRANT**  
**SECTION 2**

DRAWN BY: JSM  
CHECKED BY: BAH  
SHEET NO. C600  
S & A JOB NO. 60160REP-S2



- 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.
  - FOR INSTALLATION OF STORM UNDER CITY STREETS AND COVER REQUIREMENTS, SEE SHEET No. C802 ON THE TRENCH DETAIL.
  - 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.



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

David J. Steppelwerth  
 CERTIFIED: 02/20/15  
 7805 East 106th Street, Fishers, IN 46038-2505  
 phone: 317.849.5935 fax: 317.849.5942

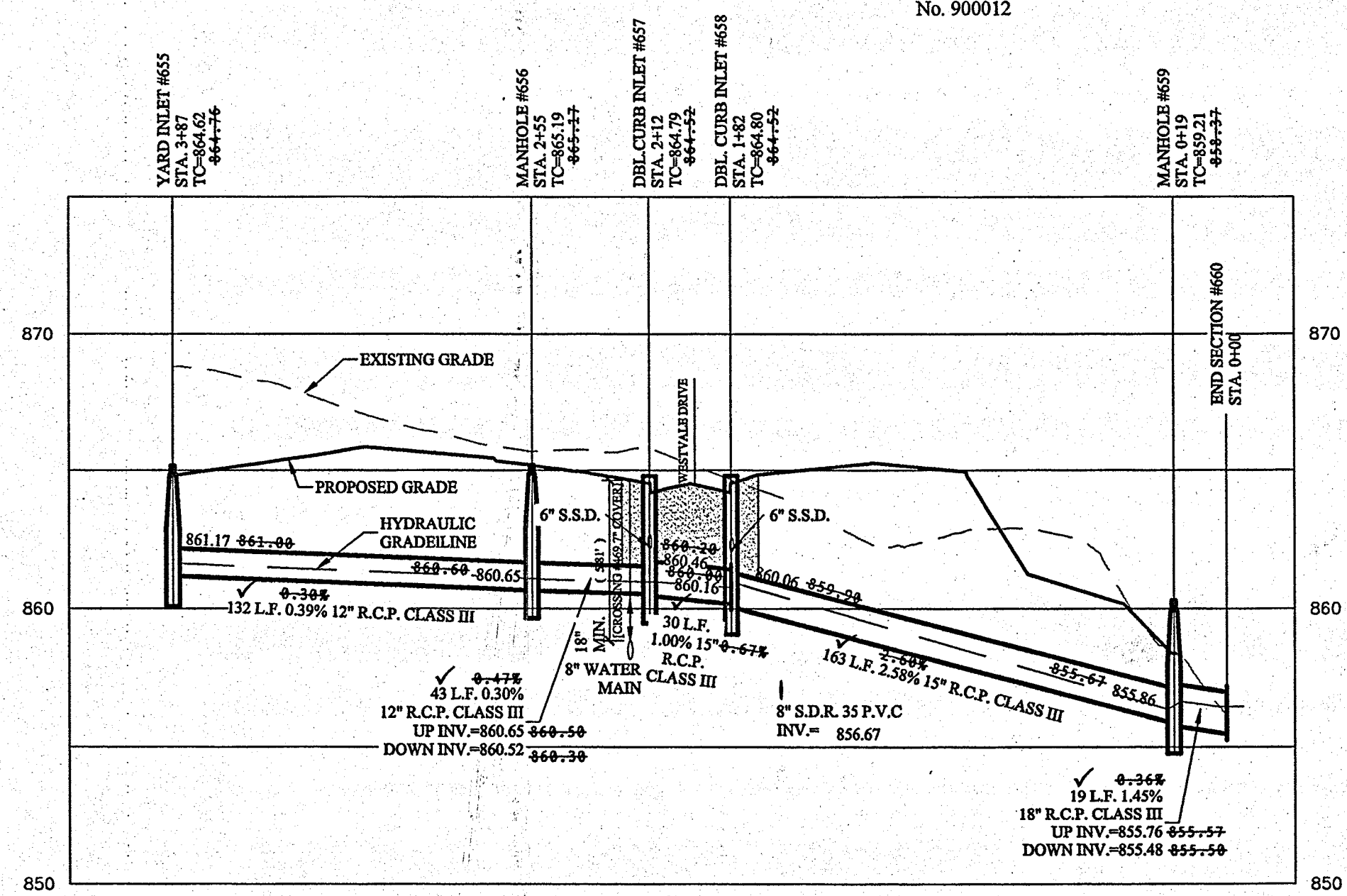
# RECORD DRAWING

*D.D.O.*  
 Dennis D. Olmstead  
 Registered Land Surveyor  
 No. 900012  
 8/2/2018

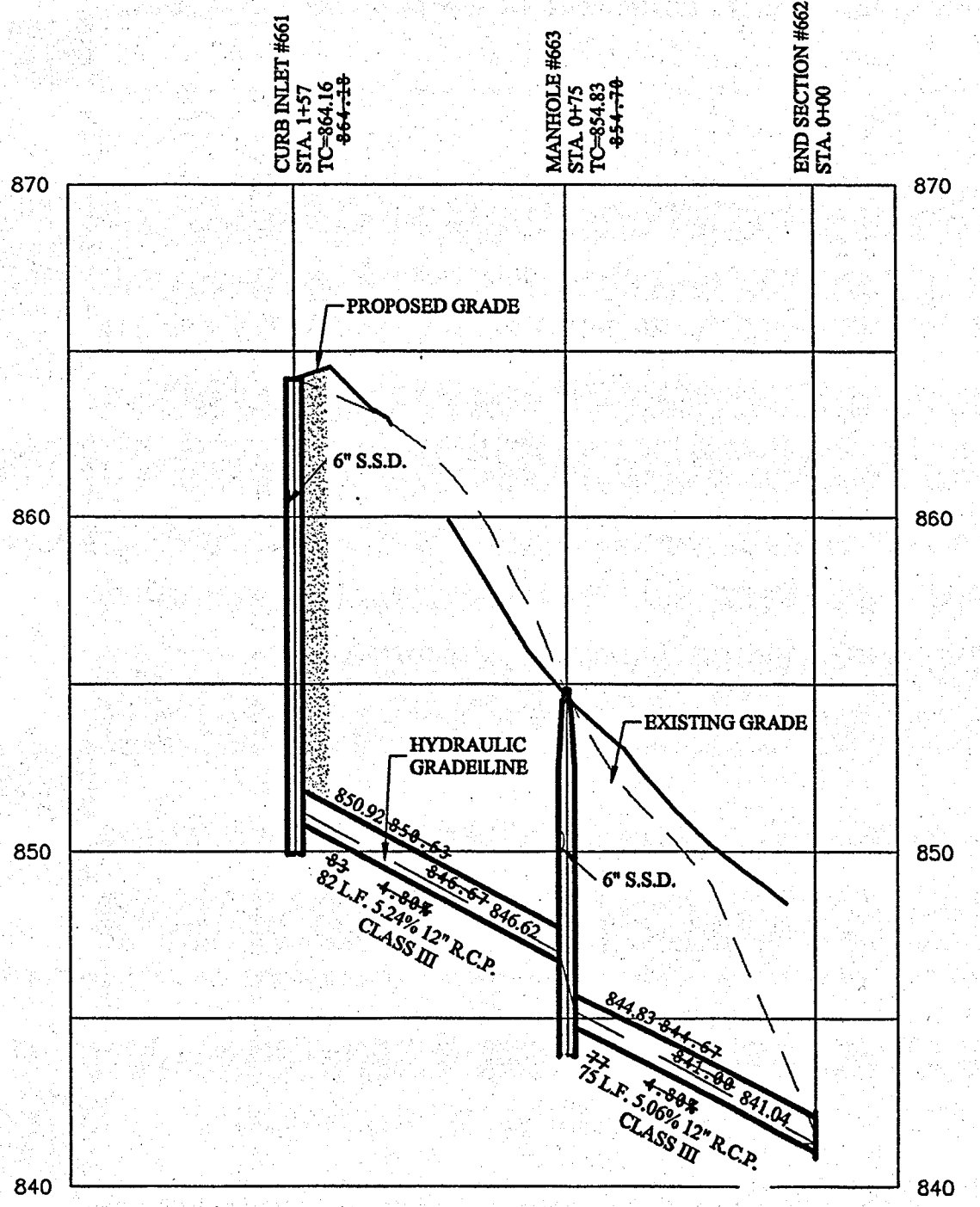
CONTRACTOR SHALL VERIFY DEPTHS OF ALL EXISTING ON-SITE UTILITIES PRIOR TO CONSTRUCTION TO CONFIRM THERE IS NOT ANY CONFLICTS WITH OTHER UTILITIES, STORM SEWERS OR STREETS. CONFLICTS AFTER CONSTRUCTION BEGINS ARE SOLELY THE CONTRACTOR'S RESPONSIBILITY.

DENOTES FULL DEPTH GRANULAR BACKFILL SEE RCP TRENCH DETAIL SHEET C802

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



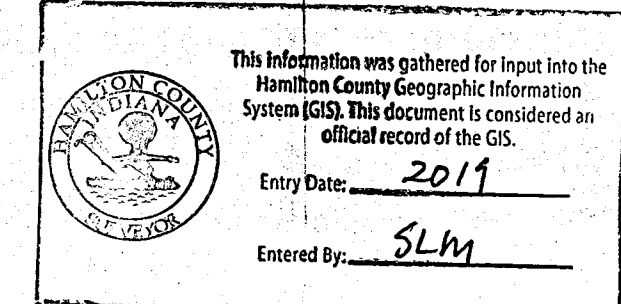
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 1"=5' VERT.



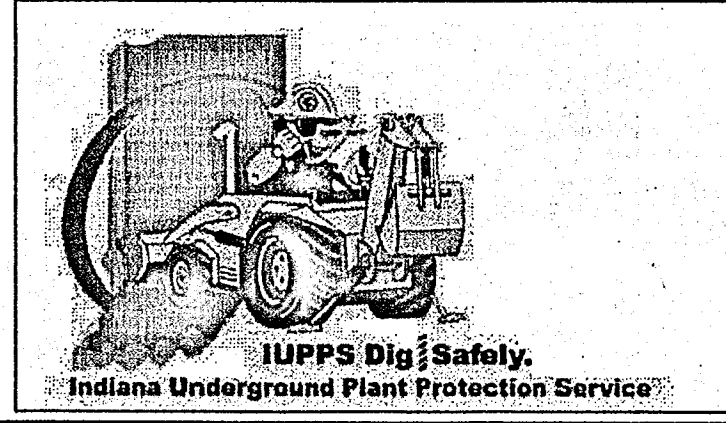
## STORM SEWER NOTE

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.

STORM SYSTEM  
 STORM SEWERS FOR THIS DEVELOPMENT WILL BE PUBLIC.



Know what's below.  
 Call before you dig.



STOEPPELWERTH

STORM PLAN & PROFILES  
 JACKSONS GRANT  
 SECTION 2

DRAWN BY: JSM  
 CHECKED BY: BAH  
 SHEET NO.  
**C601**  
 S & A JOB NO.  
 60160REP-S2

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