

**Drain:** PONDOS WEST DRAIN **Drain #:** 254  
**Improvement/Arm:** PONDOS WEST - SECTION 3  
**Operator:** JDH **Date:** 3-11-04  
**Drain Classification:** Urban/Rural **Year Installed:** 1994

### GIS Drain Input Checklist

- Pull Source Documents for Scanning JDH 3-11
- Digitize & Attribute Tile Drains N/A
- Digitize & Attribute Storm Drains JDH 3-11
- Digitize & Attribute SSD JDH 3-15
- Digitize & Attribute Open Ditch N/A
- Stamp Plans JDH 3-15
- Sum drain lengths & Validate JDH 3-15
- Enter Improvements into Posse JDH 3-15
- Enter Drain Age into Posse JDH 3-30
- Sum drain length for Watershed in Posse JDH 3-30
- Check Database entries for errors JDH 3-15

**Gasb 34 Footages for Historical Cost**  
**Drain Length Log**

Drain-Improvement: PONDOS WEST DRAIN - PONDOS WEST SECTION 3

Drain Type:	Size:	Length <small>SURVEYED LENGTH</small>	Length (DB Query)	Length Reconcile	Price:	Cost:
SSD	6"	5859'	5859'	Ø		
RCP	15"	276'	276'	Ø		
	18"	358'	358'	Ø		
	21"	460'	460'	Ø		
	24"	117'	117'	Ø		
	27"	356'	356'	Ø		
CMP	8"	20'	20'	Ø		

Sum:                              7446'                              7446'                              Ø

Final Report: \_\_\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



SURVEYOR'S OFFICE

# Hamilton County

Kenton C. Ward, Surveyor

Suite 146

776-8495

One Hamilton County Square

Noblesville, Indiana 46060-2230

March 25, 1994

5/23/94 - 9:00 a.m.

TO: Hamilton County Drainage Board

RE: Ponds West, Section 3

Attached is a petition, non-enforcement request, plans, calculations, quantity summary and assessment roll for the Ponds West Drain, Section 3. I have reviewed the submittals and petition and have found each to be in proper form.

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

The drain will consist of the following:

6" SSD	5859 ft	18" RCP	507 ft
8" CMP	20 ft	24" RCP	460 ft
12" RCP	107 ft	30" RCP	403 ft
15" RCP	89 ft		

The total length of the drain will be 7,445 feet.

The subsurface drains (SSD) to be part of the regulated drain are those located under the curbs and those main lines between lots or in rear yards. Only the main SSD lines which are located within the easement are to be maintained as regulated drain. Laterals for individual lots will not be considered part of the regulated drain. The portion of the SSD which will be regulated other than those under curbs are as follows: West corner -Lot 92; Corner of Lots 95,96 and 97 to Pond; rear of lots 85 and 86; 76, 82 and 83; 89,90,91,93,94 and in Right of Way, West side of Springmill Road.

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 \$30.00 per lot, \$5.00 per acre for roadways, with a \$30.00 minimum. With this assessment the total annual assessment for the drain/this section will be \$ 908 <sup>00</sup>.

Parcels assessed for this drain may be assessed for the Collins-Osborn or Williams Creek at sometime in the future.

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.

This request is for the reduction of the regulated drain easement to those easement widths as shown on the secondary plat for Ponds West, Section as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for May 1994.

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Kenton C. Ward  
Hamilton County Surveyor



THE NATIONAL  
**BANK OF INDIANAPOLIS**  
 CORPORATION

107 NORTH PENNSYLVANIA STREET  
 SUITE 700  
 INDIANAPOLIS, IN 46204

NATIONAL BANK OF INDIANAPOLIS  
 7140 2130000

<b>IRREVOCABLE STANDBY LETTER OF CREDIT</b>  Except so far as otherwise expressly stated, this documentary credit is subject to the "Uniform Customs and Practice for Documentary Credits".	Date: <b>March 7, 1994</b>  <b>Applicant</b> Dart Development Corp. II PO Box 1423 Carmel, IN 46032
<b>Beneficiary:</b> Hamilton County Commissioners and/or City of Carmel Hamilton County Courthouse Noblesville, IN 46060	Amount: <b>\$71,462.00</b> Seventy One Thousand Four Hundred Sixty Two Dollars 00/100  Expiration Date: <b>March 14, 1995</b>

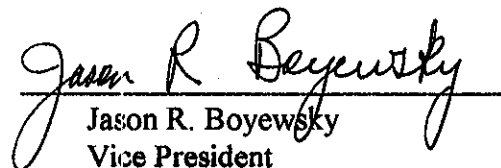
We hereby issue in your favor this irrevocable standby letter of credit which is available against the following documents: Drafts drawn at sight on The National Bank of Indianapolis, 107 North Pennsylvania St. Ste 700 Indianapolis, IN 46204 bearing the clause; "Drawn under irrevocable standby letter of credit no. 6700000-01

**Other Documents:**

1. The original of this Letter of Credit No. 6700000-01
2. Beneficiary's signed certificate that the applicant has not properly completed the storm sewers, sub-surface drains, monuments and markers in Project Ponds West subdivision, Section 3.

**Special Conditions:**

None

  
 Jason R. Boyewsky  
 Vice President

**MSE Engineering**

*Engineering  
Surveying  
Landscape Architecture  
Digital Mapping*

MSE Corporation  
941 North Meridian Street  
Indianapolis, IN 46204 1061  
317 634-1000  
317 634-3576 FAX

FILED

JUN 11 1994

OFFICE OF HAMILTON COUNTY SURVEYOR

**HAMILTON COUNTY DRAINAGE BOARD**  
**CERTIFICATE OF COMPLETION AND COMPLIANCE**

Address of premises on which land alteration was accomplished: Southwest corner of  
146th Street and Springmill Road, Carmel, Indiana

Project Name: Ponds West Section III

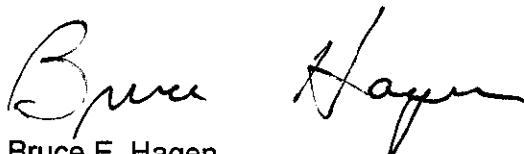
Relative to plans prepared by MSE Corporation on May 19, 1994:

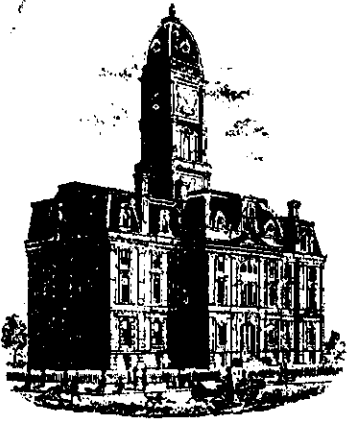
I hereby certify that:

1. I am familiar with drainage requirements applicable to such land alteration (as set forth by the Hamilton County Drainage Board).
2. Land alteration accomplished pursuant to the referenced drainage permit was observed by p[ersonnel under my direction, and
3. To the best of my knowledge, information and belief, such land alteration has been performed and completed in conformity with all such drainage requirements.

Certified this 10th day of June, 1994.

MSE CORPORATION

  
Bruce E. Hagen  
Professional Engineer #920299 - Indiana



SURVEYOR'S OFFICE  
**Hamilton County**

Kenton C. Ward, Surveyor

Suite 146

776-8495

One Hamilton County Square

Noblesville, Indiana 46060-2230, August 30, 1995

TO: Hamilton County Drainage Board

RE: Ponds West Drain  
Ponds West Sec. 3

Attached are as-builts, certificate of completion & compliance, and other information for Ponds West Sec. 3. 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 March 25, 1994. The changes are as follows: Structure 90 was changed from a manhole to a concrete end section noted in a letter to Jeff Kenelly dated December 14, 1993. Structure 94-95 consisted of a 12" RCP which was replaced with a 15" RCP of the same length. Structure 96 to 94 was downsized from a 24" RCP to a 21" RCP of the same length. Structure 94 to 93 was downsized from a 30" RCP to a 24" RCP of the same length. Structure 93 to 92 was downsized from a 30" RCP to a 27" RCP of the same length. Structure 92 to 91 was downsized from a 30" RCP to a 27" RCP and shortened from 147 feet to 145 feet. Structure 89 to 90 was upgraded from a 12" RCP to a 15" RCP of the same length. Structure 77 to 78 was upgraded from a 15" RCP to a 24" RCP of the same length. Structure 96 to 97 was downsized from a 24" RCP to a 21" RCP of the same length. Structure 97 to 98 was downsized from a 24" RCP to a 21" RCP of the same length. Structure 98 to 100 consists of 18" RCP which was lengthened from 171 feet to 172 feet. Structure 101 to 102 was downsized from a 18" RCP to a 15" RCP of the same length.

The length of the drain due to the changes described above is now 7446 feet.

~~Attached also is a non-enforcement for the drain which I recommend that the Board approve at this time.~~ The non-enforcement was approved by the Board at its meeting on May 23, 1994.

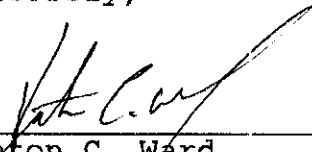
The bond or letter of credit from The National Bank of Indianapolis Corp., number 6700000-01, dated March 7, 1994, in the



amount of \$71,462.00, has been recommended for release in a letter to the Commissioners dated June 23, 1994.

I recommend the Board approve the drains construction as complete and acceptable.

Sincerely,

  
\_\_\_\_\_  
Kenton C. Ward SLM  
Hamilton County Surveyor

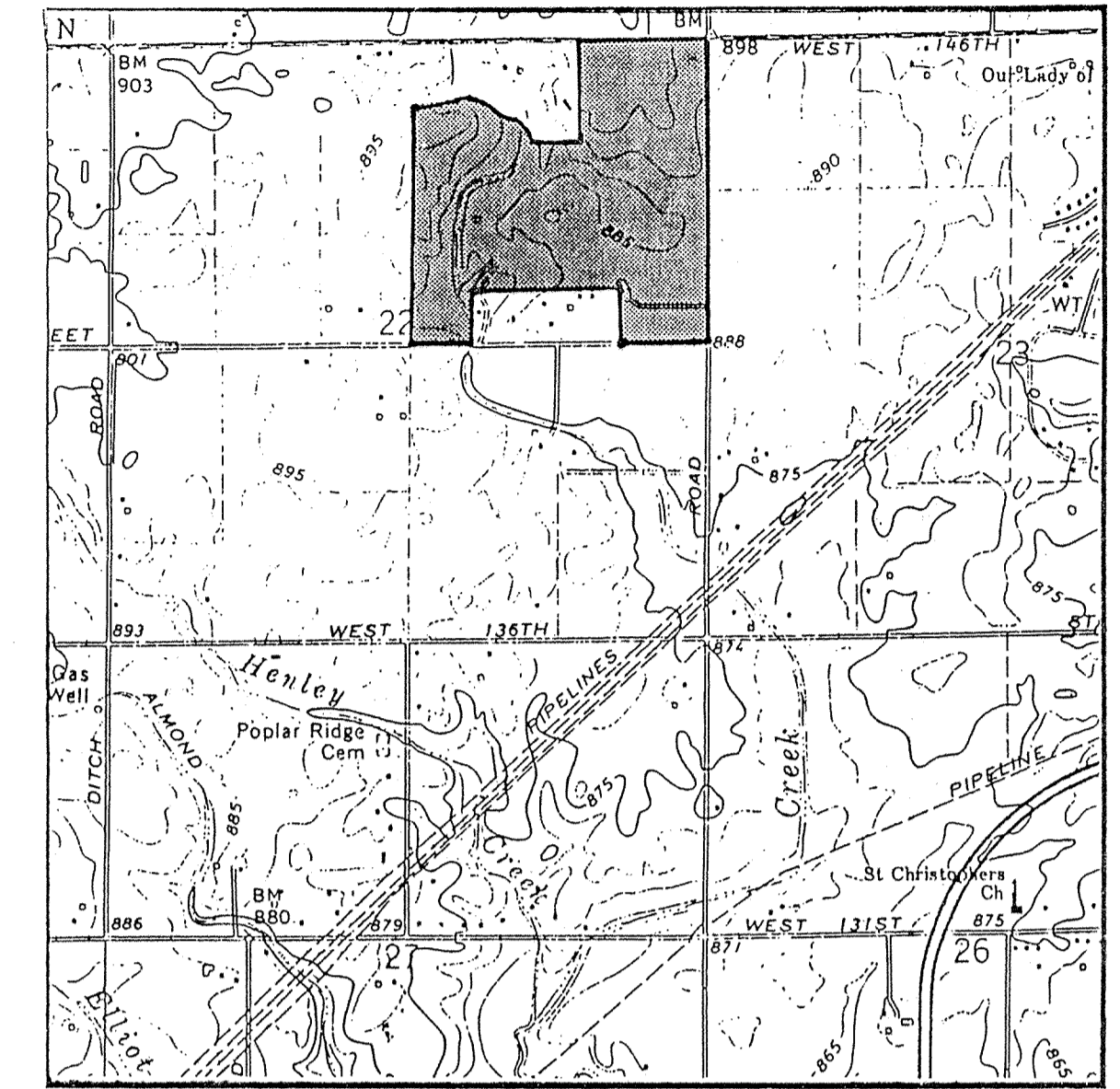
KCW/nw

Land Description

Land being part of the Northeast Quarter of Section 22, Township 18 North, Range 3 East, Hamilton County, Indiana, more particularly described as follows:

Beginning at the Southeast corner of said Northeast Quarter Section; thence South 89°20'11" West on and along the South line of said Quarter Section, a distance of 767.80 feet; thence North 00°04'20" East 475.00 feet; thence South 89°20'11" West parallel with the South line of said Quarter Section a distance of 733.70 feet; thence South 00°04'20" West 31.00 feet; thence South 89°20'11" West on and along the North line, and the prolongation thereof, of land described in a deed to Sarah B. Hein, recorded in Deed Book 329, Page 547, in the Office of the Recorder of Hamilton County, Indiana, a distance of 721.58 feet to the Northwest corner of said Hein's land; thence South 00°05'18" West, on Hein's West line, a distance of 444.00 feet to the South line of aforesaid Northeast Quarter Section; thence South 89°20'11" West on said South line a distance of 412.50 feet to the Southwest corner of said Quarter Section; thence North 00°05'18" East on and along the West line of said Quarter Section a distance of 2132.02 feet to a point 495 feet South of the Northwest corner of said Quarter Section; thence North 89°04'58" East parallel with the North line of said Quarter Section a distance of 412.50 feet; thence North 00°05'18" East 0.74 feet to an iron pipe found at the Southwest corner of land described in a deed to James M. Buck, as recorded in Deed Book 330, Page 304, in said Recorder's Office; thence North 79°49'38" East on and along the South line of said Buck's land a distance of 478.11 feet; thence South 00°55'02" East 57.80 feet; thence South 83°45'01" East 53.37 feet; thence South 41°01'24" East 43.56 feet; thence South 90°00'00" East 60.18 feet; thence South 11°18'35" East 310.67 feet; thence North 85°43'26" East 454.02 feet; thence North 00°48'29" West 795.00 feet to the North line of said Northeast Quarter Section; thence North 89°04'58" East on and along said North line, a distance of 1102.37 feet to the Northeast corner of said Quarter Section; thence South 00°02'16" East on and along the East line of said Quarter Section a distance of 2638.59 feet to the Point of Beginning, containing 123.288 acres, more or less, subject to rights-of-way, restrictions, easements, and legal drains.

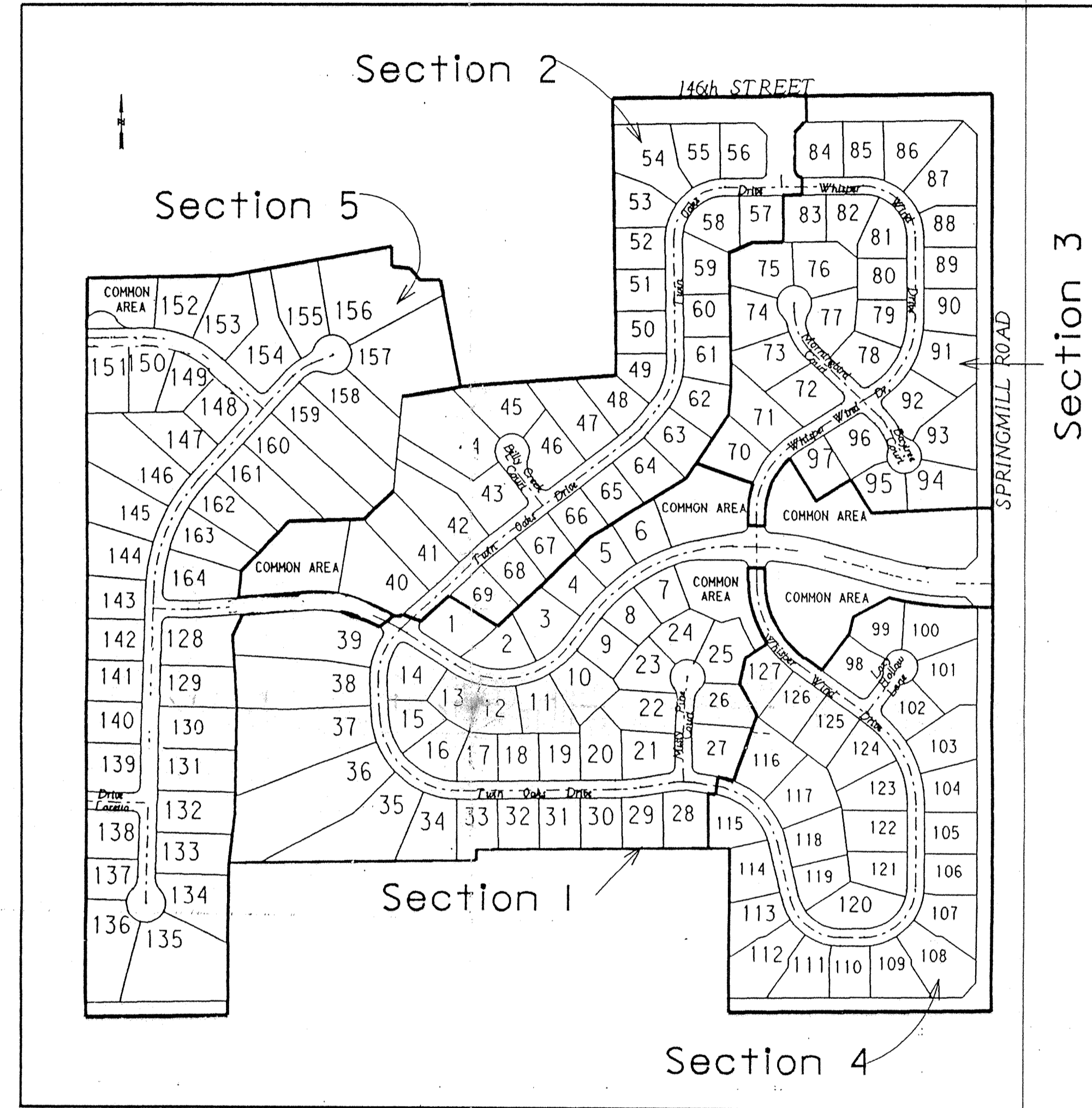
# CONSTRUCTION PLANS FOR PONDS WEST AS-BUILTS SECTION 3



VICINITY MAP

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	SPECIFICATIONS
3-8B	SITE UTILITY PLANS & GRADING PLANS
9-20	STREET PLAN & PROFILES
21-32	STORM PLAN & PROFILES
33-43	SANITARY PLAN & PROFILES
44-46	CUL-DE-SAC & INTERSECTION DETAILS
47-48	ENTRANCE DETAILS
49-50	EROSION CONTROL PLANS
51-52	DETAILS

SHEET NO.	REVISIONS
33-43	2/22/93 Revise San. Sewer Inverts
51	2/22/93 Revise San. Sewer Bedding Details
3-9,26-30,	3/12/93 See Sheets
47-48	3/12/93 See Sheets
1, 7-9, 27, 47, 49-52	3/28/93 See Sheets
1-52	4/9/93 Change Subd. name & Street Names
3-6, 8, 10, 14, 15, 17, 19, 21, 23, 25	4/20/93 See Sheets
41, 47	4/20/93 See Sheets
49	4/30/93 See Sheet
44	6/3/93 See Sheets
4, 8A, 21	7/30/93 See Sheets
4, 47	9-14-93 See Sheets
2, 3, 7, 26, 48	1-4-94 See Sheets
2, 3, 7, 26, 48	4-23-94 See Sheets



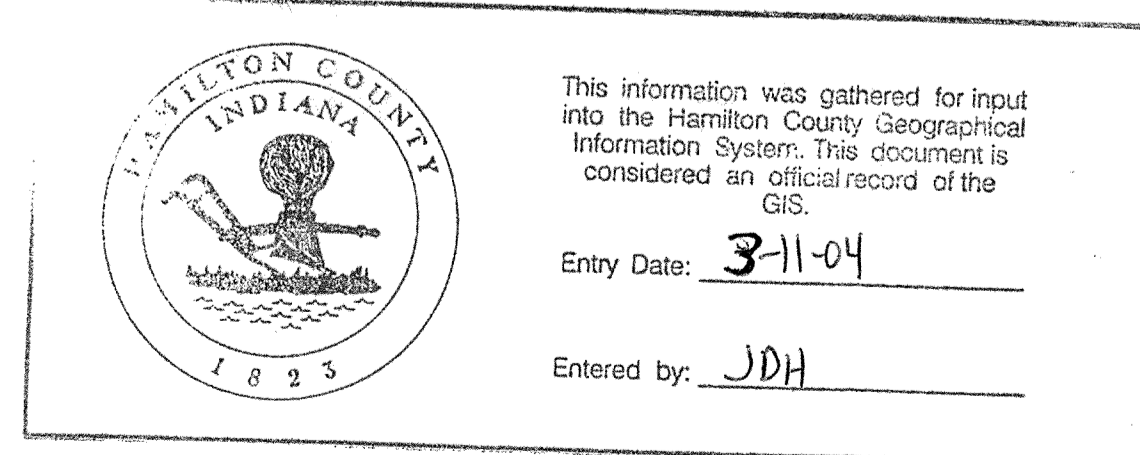
Sections 1-4 are to be approved and constructed at this time.  
Section 5 to be approved and constructed at a later date.  
4/1/93

PLANS PREPARED FOR  
DART DEVELOPMENT CORP II  
14122 SPRINGMILL ROAD  
CARMEL, IN 46032  
(317) 844-4451

STEPHEN E. BOURQUEIN  
No. 50441  
STATE OF INDIANA  
LAND SURVEYOR  
CERTIFIED THIS 14th DAY OF April 1993  
STEPHEN BOURQUEIN  
Registered Professional Land Surveyor No. 50441 - Indiana

NOTES:  
CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

ANY ALTERATIONS TO THESE PLANS NOT AUTHORIZED BY MSE ENGINEERING AND NOT IN ACCORDANCE WITH THE PLANS AND RECORDS ON FILE AT MSE ENGINEERING OFFICES SHALL RELIEVE MSE ENGINEERING OF RESPONSIBILITY FOR OVERALL ACCURACY OF PLANS.



PREPARED BY:  
MSE Engineering  
MSE Corporation  
941 North Meridian  
Indianapolis, IN 46204  
317 634-1000  
317 634-3576 FAX



As-built information provided by MSE Corporation, certified this 19th day of May, 1994.  
Jeffrey A. Meyerrose  
Registered Land Surveyor No. 890003-IN

Sanitary and Storm  
AS-BUILTS

PROJECT DATA  
ACRES : 123.288  
LOTS : 164  
LOTS/ACRE : 1.33  
FILED  
AUG 02 1994  
HAMILTON COUNTY DRAINAGE BOARD  
SECRETARY

JOB No. 114-0522  
SHEET 4 OF 52



SITE WORK GENERAL NOTES AND SPECIFICATIONS

I. GENERAL CONDITIONS

- A. The Contractor shall be responsible for obtaining or verifying that all permits and approvals are obtained from the respective city, county and state agencies prior to starting construction.
B. It shall be the Contractor's responsibility to determine the exact location of all existing utilities in the vicinity of the construction area prior to starting construction.
C. The Contractor shall be responsible for notification and coordination of all construction with the respective utility companies.
D. It shall be the responsibility of the Developer and Contractor to maintain quality control throughout the project; failure to do so may result in removal and replacement of defective work.
E. It is essential that the work performed in conjunction with this project be installed according to these specifications.
F. The designation A.S.T.M. shall refer to the American Society of Testing and Materials standards.
G. The designation I.N.D.O.T. shall refer to the Indiana Department of Transportation Standard Specifications dated 1988 and all subsequent revisions.

II. CLEARING AND GRUBBING

- A. Clearing and grubbing shall consist of cutting, removal and satisfactory disposal of all trees, down timber, brush, projecting roots, stumps, rubbish, boulders, broken concrete, fencing (as designed), and other material on the project site and within the boundary as shown on the Construction Documents and/or as designated by "construction limits".
B. Special care shall be taken to insure that trees to be left remaining in the project area shall not receive limb, bark or root injuries.
C. All "unsuitable material" from clearing operations stated in Item II-A shall be removed to disposal area(s) off the project site; unless a Bury Pit is utilized.
D. Materials shall not be disposed of by burning unless approved by the local Fire Marshal.

III. TREE REMOVAL AND PROTECTION

- A. Trees shall be removed from the project site only in areas occupied by roadway and surfaced areas in accordance with specifications of the City of Carmel.
B. Trees shall be removed from the project site as directed by the Developer and so designated.
C. Trees shall be removed from the project site where they interfere with the placement of storm or sanitary sewers.
D. The Contractor shall endeavor to save and protect trees of value and worth which do not impair construction of improvements as designated.
E. The Contractor shall be responsible for determining the method of protection of tops, trunks and roots of existing trees on the project site which are to remain.
F. See note II-B.

IV. STRIPPING OF TOPSOIL

- A. The Contractor shall verify that all topsoil has been removed in the areas to be occupied by road, walks and designated building areas.
B. Topsoil shall be kept separated from suitable fill materials and shall not be used as fill under pavement and/or building areas.
C. Topsoil shall be stored at a location where it does not interfere with construction operations.
D. Topsoil shall be reasonably free from subsoil debris and stones.

V. GRADING

- A. The Contractor shall perform all grading operations to bring subgrades, after final compaction, to the grades required for site improvement.
B. Subgrade shall be proofrolled with appropriate equipment and all spongy and otherwise unsuitable material shall be removed and replaced with suitable material.
C. Subgrade for streets shall be prepared in compliance with Hamilton County.
D. All fill material shall be formed from soil free of deleterious material.
E. All fill material in areas outside of building and pavement areas shall be compacted lightly and protected from erosion.

VI. SANITARY SEWER CONSTRUCTION

- 1. Standard specifications of the Clay Waste District and Indiana Department of Highways shall apply for all work and materials.
2. Sanitary sewer pipe shall be PVC in accordance with ASTM D-3034 (S.D.R. 35) and ASTM 2321.
3. PVC sewer fittings shall conform to the requirements of ASTM D-3034-89 specification.
4. All sanitary manholes shall be "precast concrete" manholes in accordance with ASTM C-478 and Section 720.
5. Butyl rubber coating shall be applied around each manhole joint from 6-inches above to 6-inches below each joint.
6. The casting elevations are set by plan.
7. Backfill around all structures and all cuts under paved areas with granular material.
8. The Contractor shall be responsible for verifying that all state highways, city and county permits have been obtained by the developer prior to start of construction.
9. The Contractor shall be required to furnish the developer's actual sewer location and invert, to include lateral location, depth and length.
10. All sanitary sewer lines upon completion will be required to pass an infiltration weir test and a low pressure air test.
11. Deflection tests shall be performed on all flexible pipe after the final backfill has been in place at least 30 days.
12. All manhole testing shall be observed by a Professional Engineer.
13. The ends of laterals are to be plugged tight with a braced plastic disc or cap capable of withstanding a low pressure air test without leakage.
14. Bedding for flexible pipe shall be No. 8 crushed stone from 6-inches below the pipe to 12-inches above the pipe.
15. Water and sewer line crossings and separations shall be in accordance with Ten States' Standards.
16. Trench shall be opened sufficiently ahead of pipe laying to reveal obstructions, and shall be properly protected and/or barricaded when left unattended.
17. No water shall be permitted to flow into the sanitary sewer system during construction.
18. All sewer laterals installed by the mainline Contractor shall be bedded the same as the main line sewer.
19. Forty-eight (48) hours notice shall be given to the Clay Regional Waste District prior to the start of sewer construction.
20. Manhole castings shall be stamped "SANITARY SEWER" (Neenah Casting R-1642 or equal) and be self-sealing type.
21. The minimum slope for sewer acceptance by the Clay Township Regional Waste District are:
Size of Pipe Minimum Constructed Slope
8-inch 0.40%
10-inch 0.28%
12-inch 0.22%
15-inch 0.15%
18-inch 0.12%

- 22. The Contractor shall provide measurements of the slope of the sewer for each manhole section as construction progresses.
23. In the event the Contractor does not meet the minimum slopes, the sewer section and any other affected sewer sections shall be reconstructed to meet such minimum slopes.

VII. EROSION PROTECTION DURING CONSTRUCTION

- A. The Contractor shall provide adequate erosion protection measures during construction.
1. Rip-rap at locations designated on the plans.
2. Swales draining the site shall be mulch seeded or sodded and Contractor shall be responsible for establishing grass cover.
3. Construction operations conducted on private or city-owned property shall be neatly finish graded and mulch seeded.

VIII. STORM SEWER CONNECTION

- A. Storm sewer structures shall comply with current specifications of the City, County and all agencies with respect to design and quality of construction.
B. All storm sewer construction inside public right-of-way, either existing or proposed, shall be in accordance with the Hamilton County specifications.
C. Where reinforced concrete pipe is shown on the construction plans, it shall be in accordance with A.S.T.M. C-76 Class III Wall "B", unless otherwise specified on the plans.
D. Where corrugated metal pipe is shown on the construction plans, it shall be 16 gauge unless otherwise specified and shall have the connecting bands and seals as specified by the manufacturer.
E. Manholes, catchbasins, and inlets may be precast concrete or poured in place concrete.
F. Precast concrete and steel for manholes and inlets shall be in accordance with A.S.T.M. C-478.
G. Castings shall be as shown on the Structure Data Table.
H. Granular backfill shall be required for all crossings under pavement areas, per the Hamilton County specifications.

IX. UTILITIES

- A. Water Line
1. See Sanitary Sewers Notes for vertical and horizontal separations.
2. All water lines shall be in accordance with the Standards and Specifications of the Indiana State Board of Health and the Hamilton Western Utilities.
3. Pressure tests for the water system shall be done in accordance with manufacturer's recommendations and the Hamilton Western Utilities specifications.
4. Granular backfill shall be required for all utility crossings under pavement areas.
5. Where private water lines are shown on the contract plans the pipe materials shall meet the Hamilton Western Utilities specifications.
6. Thrust blocks shall be installed in accordance with the details contained within the plans or the Hamilton Western Utilities standard specifications as applicable.
7. Felt material not to exceed 3/8 inch thick shall be placed between pipes and concrete thrust blocks.
8. All valves and appurtenances for domestic and fire protection water mains shall be approved by the Underwriters Laboratories and Factory Mutual for critical use.
B. Electric and Telephone
1. Conduit shall be required for all crossings under pavement areas.
2. Granular backfill shall be required for all crossings under pavement areas and three feet beyond the edge of the pavement.
3. Concrete pads for electric and telephone transformers shall be set at the approximate ground grade as shown on the Site Development Grading Plans.

X. GRANULAR BACKFILL

Shall be in accordance with I.N.D.O.T. Standard Specifications.

XI. PAVEMENT CONSTRUCTION

- A. All pavement construction shall be in accordance with the plans and specifications and conform to the minimum standards of Hamilton County.
B. Subgrade shall be prepared in compliance with Section 207.02 of the I.N.D.O.T. standard specifications.
C. Backfilling of utility trenches with granular material under pavement areas is required and shall conform to Hamilton County specifications.
D. Contractor shall notify Hamilton County forty-eight hours prior to commencement of street construction within any existing or proposed right-of-way.

XII. CONCRETE CURB AND WALKS

- A. See Detail Sheet for type and details. Curbs and walks within existing or proposed right-of-way shall be constructed in accordance with Hamilton County specifications.
B. Concrete shall be ready mixed Portland cement conforming to A.S.T.M. C-150. Aggregate shall conform to A.S.T.M. C-33.
C. Application
1. Place concrete only on a moist, compacted subgrade or base free from loose material.
2. Concrete shall be deposited so as to require a little rehandling as practical.
3. Except as otherwise specified, cure all concrete by one of the methods described in Section 501.17 of the I.N.D.O.T. Specifications, 1988 edition.

XIII. FINISH GRADING AND SEEDING

- A. Topsoil or approved fill shall be spread over the rough grade to a depth sufficient to insure finish grades are met after rolling and settlement.
B. Fertilizer and agricultural limestone shall be spread uniformly over the area to be seeded and mixed into the top two inches of soil with a disk harrow, rotary tiller, or other approved equipment.
C. A seeding mixture in stripping, cut, or fill areas shall be applied at a rate of 90 pounds per acre with a mixture as follows: 18 lbs. Kentucky Bluegrass, 18 lbs. Park Kentucky Bluegrass, 18 lbs. Delta Kentucky Bluegrass, 10 lbs. Pennlawn Fescue and 26 lbs. Annual Ryegrass.

XIV. LIME MODIFIED SOIL

- A. The use of Lime Modification shall be used to improve the upper 12" of subgrade that does not conform to Section 207 of the 1988 I.N.D.O.T. Specifications.
1. The subgrade shall be placed to the proper grade.
2. Lime shall be dry placed on the subgrade at an application rate of 24 to 36 pounds per square yard as directed by the Engineer.
3. Initial compaction shall be performed with a sheepfoot roller.
4. The density of the soil-lime mixture will be determined by the City of Carmel near the end of the finishing operations.
5. When compaction of the lime-soil mixture is nearing completion, the surface shall be sloped to the required lines, grades, and cross section.
6. The surface shall be maintained in a moist condition by means of a fine spray of water during all finishing operations.
7. Caution: Lime and lime mixtures are caustic in nature. The manufacturer of the lime shall be consulted to determine what special precautions are required to protect the skin, and particularly the eyes.

XVI. REMOVAL OF PAVEMENT, SIDEWALKS, CURBS, ETC.

- A. Pavement removal shall consist of the removal and satisfactory disposal of bituminous pavement or the total of any combination of base, binder and surface course of any pavement on a rigid base (including the base).
B. Prior to performing the work of pavement removal at locations indicated on the plans, or where directed, cement concrete pavement to be removed shall be cut with a power driven concrete saw along designated lines.

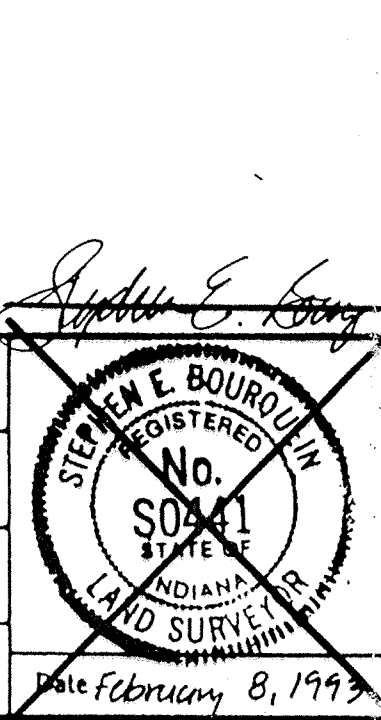
XVII. SEALING CRACKS AND JOINTS IN BITUMINOUS PAVEMENT

- A. Reflection cracks and joints, both longitudinal and transverse, as well as checked, cracked and alligator areas shall be sealed using from 0.10 to 0.15 gallon per square yard of AE-90 or AE-150 bituminous material and covering with either No. 14-2 or No. 17 sand. The cracks, joints and alligator areas shall be cleaned by blowing with compressed air or other suitable means prior to the placing of the bituminous sealing material.

STRUCTURE DATA TABLE SANITARY SEWER. Table with columns: Structure Number, Structure Type, Casting. Includes entries for Manhole Type 'C', Manhole Type 'B', Manhole Type 'A'.

STRUCTURE DATA TABLE STORM SEWER. Table with columns: Structure Number, Structure Type, Casting. Includes entries for Inlet Type 'A', Inlet Type 'B', End Section, No Structure, Manhole Type 'B', Special Structure.

As-built information provided by MSE Corporation, certified this 19th day of May, 1994. Jeffrey A. McWhorter, Registered Land Surveyor No. 890003 IN.



Sanitary and Storm AS - BUILTS

Revisions and Dates: 2-25-93 Rev San Sewer Specs, 1-4-94 Add Str 90A, 4-23-94 Del Str 90A, Rev Str 90 to End Section. Includes fields for Designed by, Drawn by, Checked by, and Approved by.

Middle States Engineering, Inc. 501 Congressional Blvd., Suite 110 Carmel, IN 46032 317-843-5080

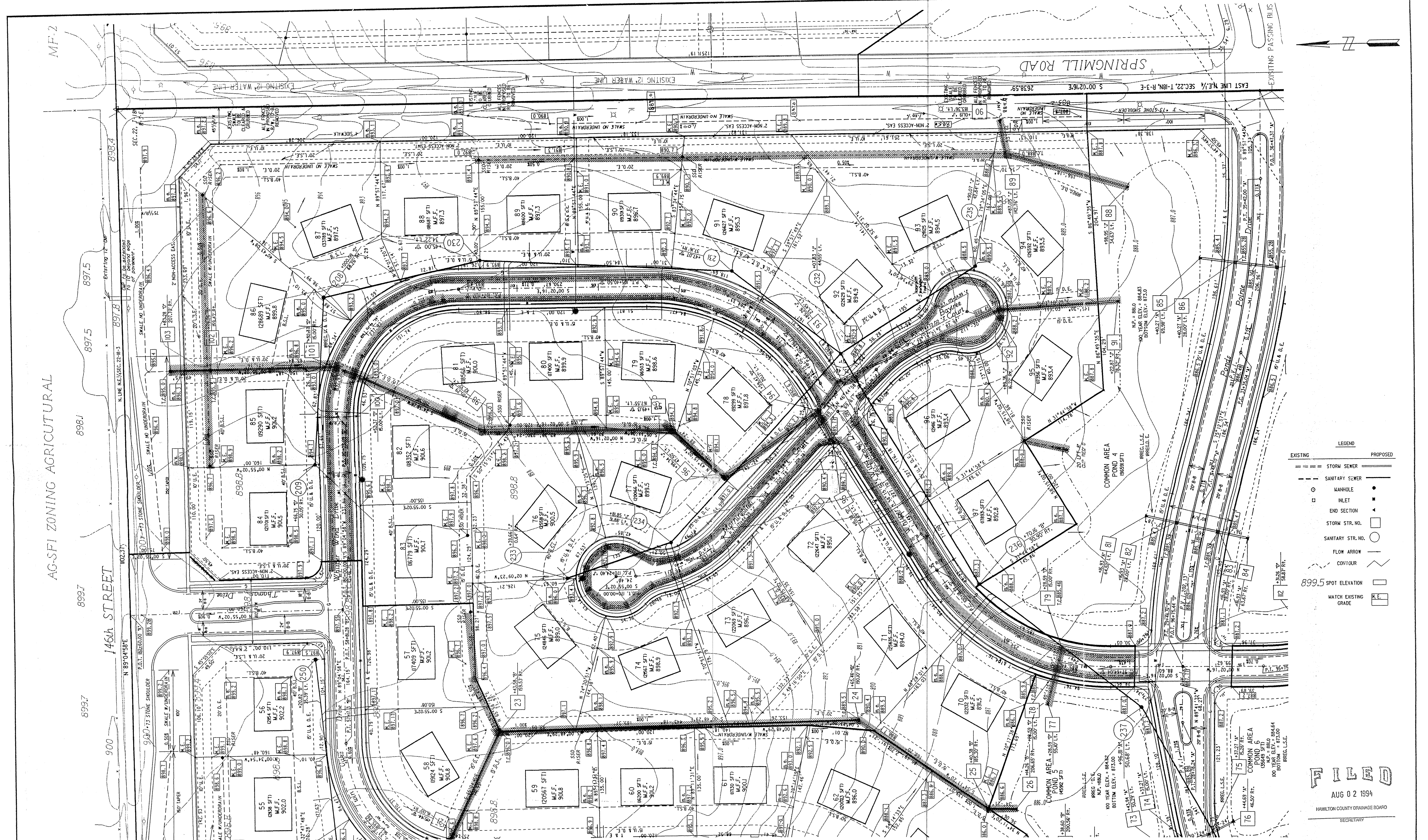
HAMILTON COUNTY DRAINAGE BOARD SECRETARY. SPECIFICATIONS. Job No.: 114-052, Date: AUG 02 1994.



MF-2

AG-SFI ZONING AGRICULTURAL

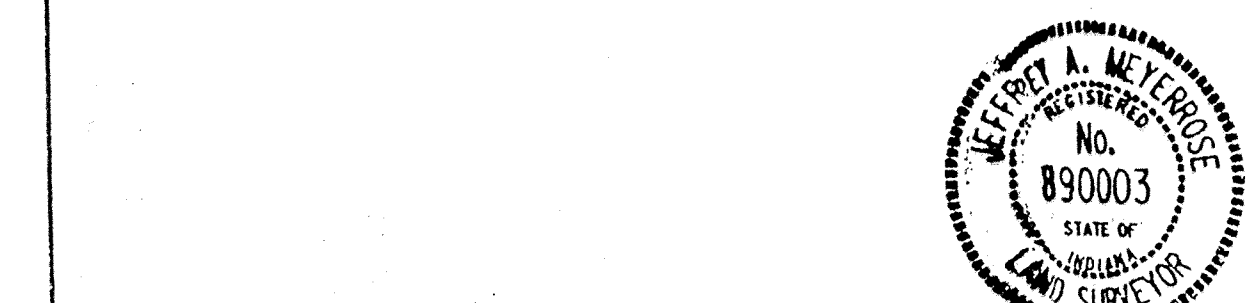
8997 146th STREET 8997 8997 8997 8997



LEGEND	
EXISTING	PROPOSED
—	—
—	—
○	○
□	□
—	—
—	—
—	—
—	—
—	—
—	—

FILED  
AUG 02 1994  
HAMILTON COUNTY DRAINAGE BOARD  
SECRETARY

### PONDS WEST



As-built information provided by MSE Corporation, certified this 19<sup>th</sup> day of MAY, 1994

Jeffrey A. Meyer  
Registered Land Surveyor No. 890003-IN

## Sanitary and Storm AS - BUILTS

Revisions and Dates	
3-12-93	Revise Springmill & 146th St R/W Grading.
3-28-93	Delete str 80, Add pipe run in I2
3-28-93	Add 20 Lft 8" CMP to SSD outfalls
3-28-93	Add Fence Removal/Swale grubbing note
4-09-93	Changed Street Name
4-20-93	Relocate Str III & II
4-20-93	Add SSD Riser east of Lot 90
1-4-94	Add Str 90A

Designed by:	BEH
Drawn by:	DSC
Checked by:	BEH
Approved by:	SEB

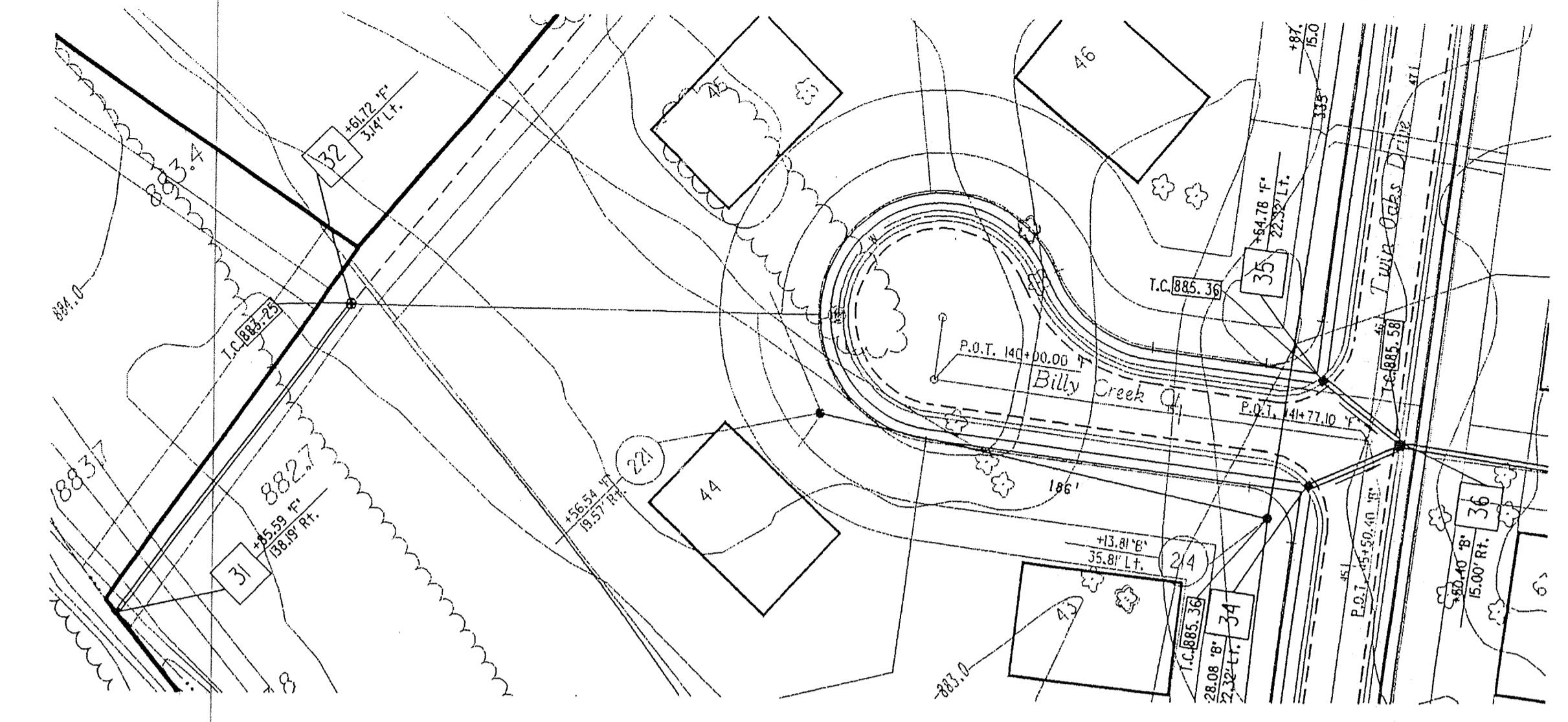
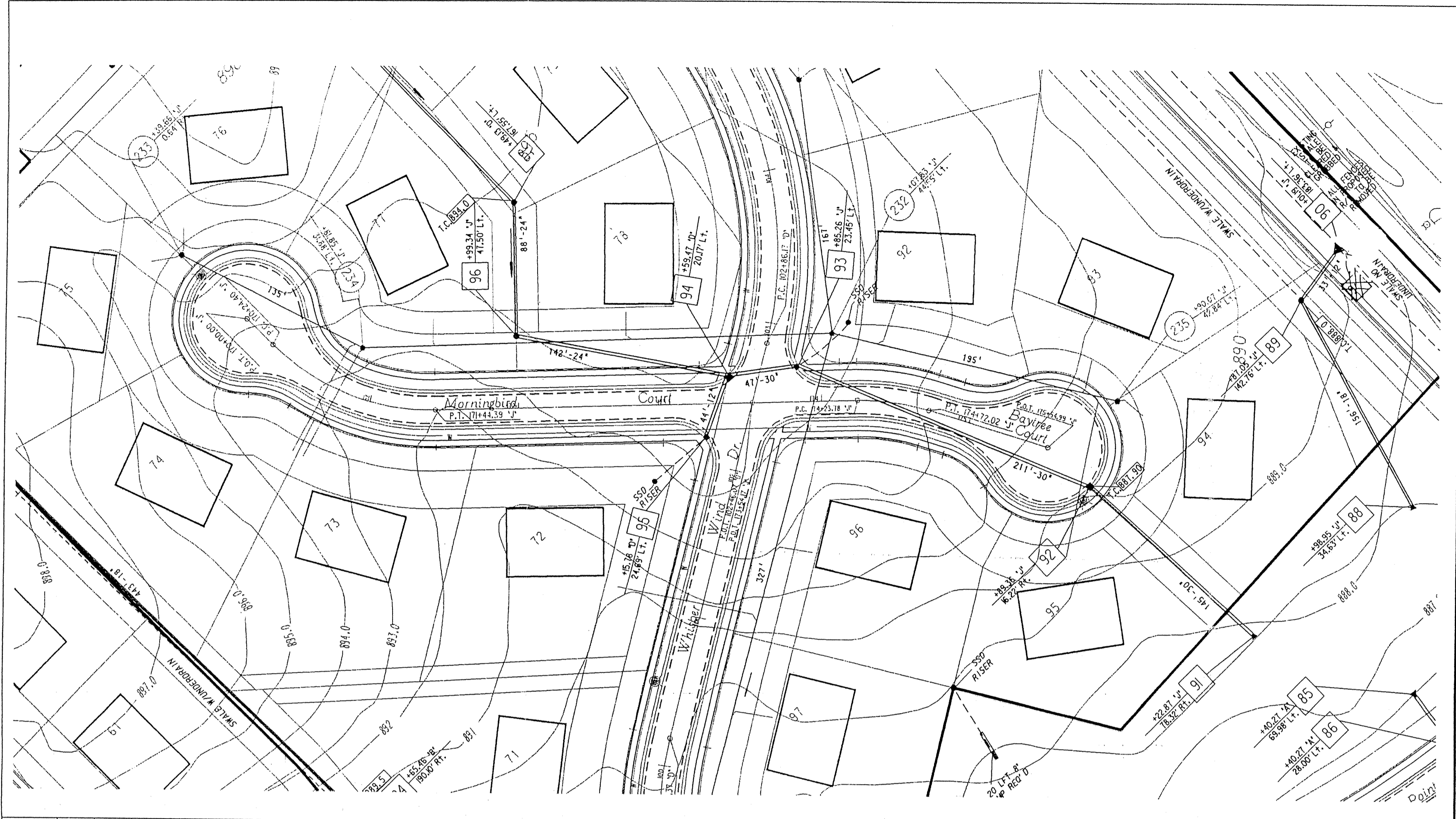
**MSE Engineering**  
MSE Corporation  
501 Congressional Boulevard  
Suite 110  
Carmel, IN 46032  
317 843-5080  
317 843-5089 FAX

Title: **SITE UTILITY PLAN & GRADING PLAN SECTION 3**

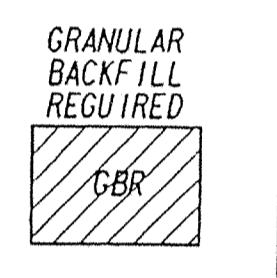
Scale: 1" = 50'      Job No. 114-0522      Sheet No. 1 of 1



PLAN  
 DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 ALIGNED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 INCHES: \_\_\_\_\_



NOTES:  
 LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.  
 CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

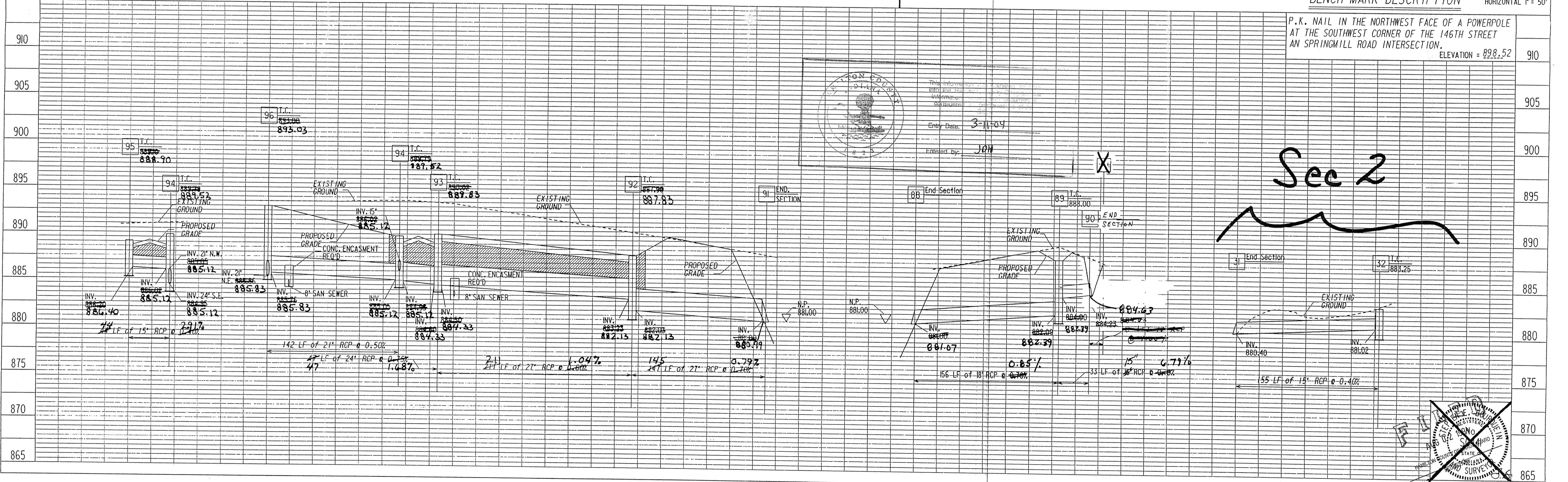


SCALE:  
 PLAN: 1" = 50'  
 PROFILE: 1" = 5'  
 HORIZONTAL: 1" = 50'

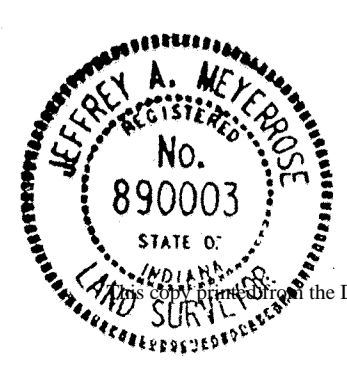
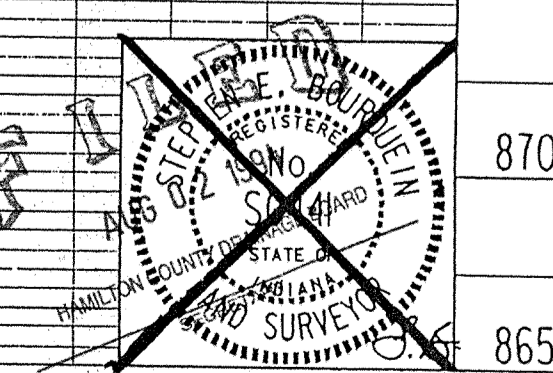
BENCH MARK DESCRIPTION

P.K. NAIL IN THE NORTHWEST FACE OF A POWERPOLE AT THE SOUTHWEST CORNER OF THE 146TH STREET AN SPRINGMILL ROAD INTERSECTION.  
 ELEVATION = 898.52

PROFILE  
 DATE: \_\_\_\_\_  
 SURVEYED: \_\_\_\_\_  
 PLOTTED: \_\_\_\_\_  
 NOTE BOOK: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 INCHES: \_\_\_\_\_



Professional Engineer Seal for Jeffrey A. Meyer, State of Indiana, License No. 890003. Entry Date: 3-11-04, Entered by: JAM.



**MSE Engineering**  
 As-built information provided by MSE Corporation, certified this 19<sup>th</sup> day of Mar, 1994.  
 Jeffrey A. Meyer  
 Registered Land Surveyor No. 890003-IN

**Storm AS-BUILTS**

PONDS WEST

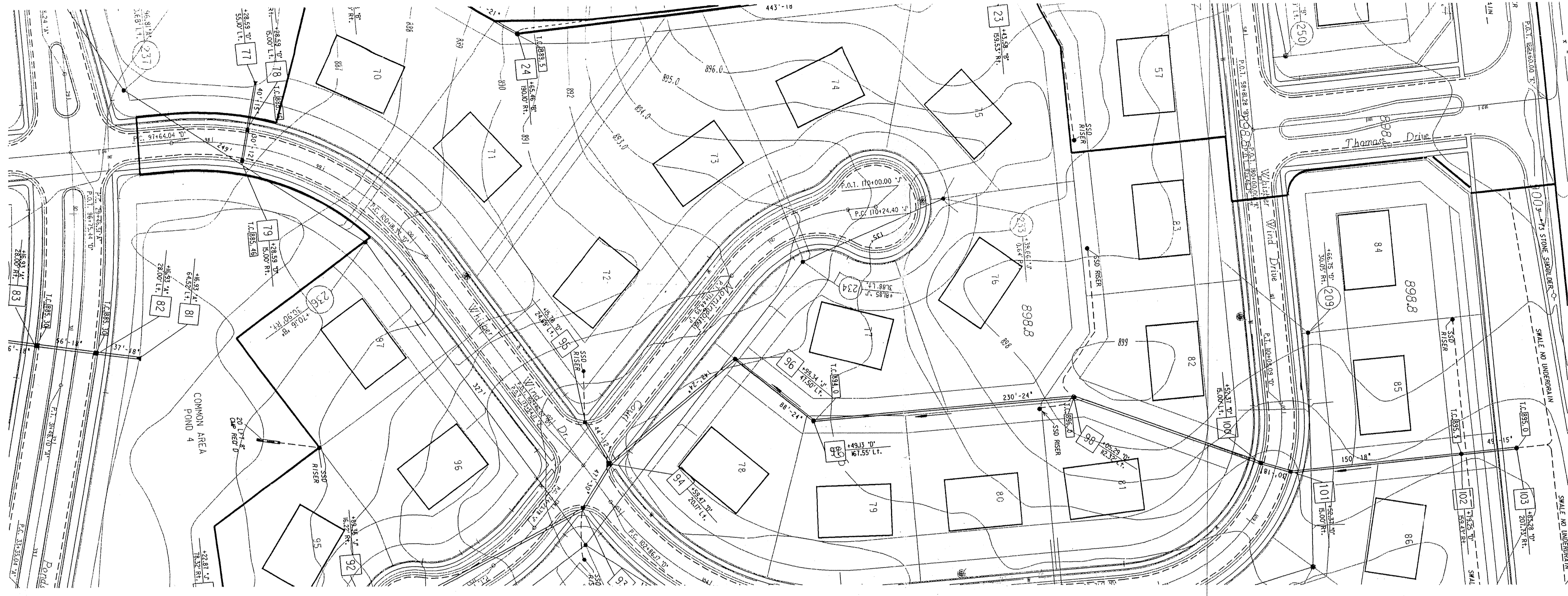
PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
04-0522		4	4	522511	522511

3-12-93 Adjust T.C. Str 90  
 1-4-94 Add Str. 90A  
 7-23-94 Del. Str 90A; Rev Str 90 to End Section

4  
 STORM PLAN & PROFILES



PLAN	DATE
SKETCHED	
PLOTTED	
NOTE BOOK	
ALIGNED CHECKED	
BY	

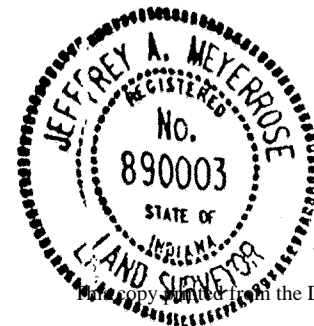
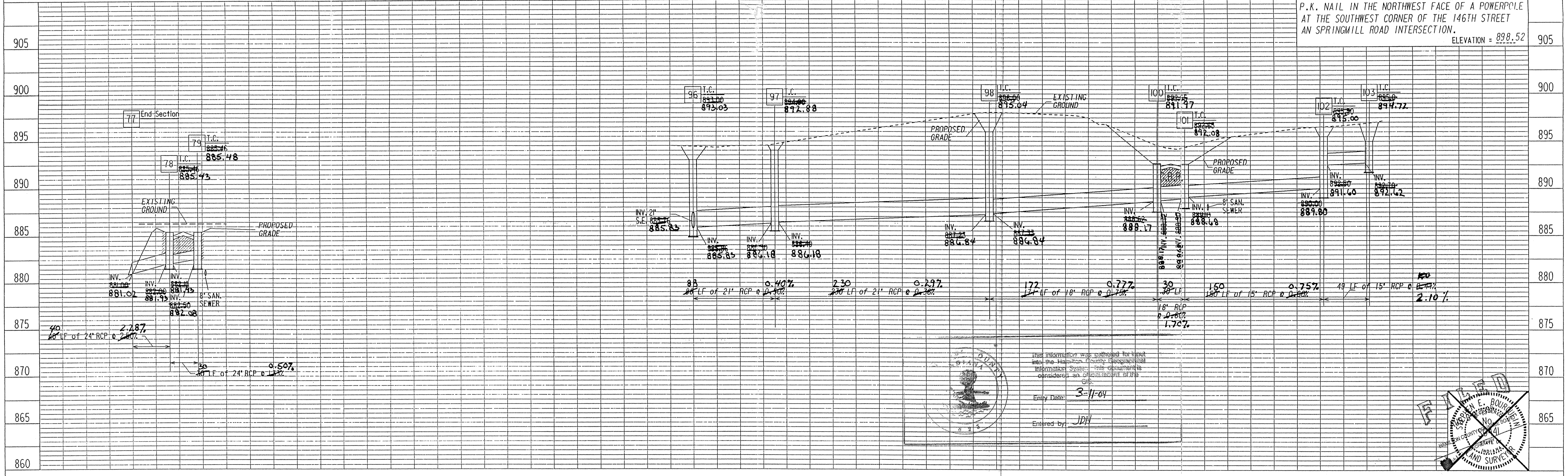


NOTES:  
 LENGTHS OF PIPES INDICATED ARE FROM CENTER TO CENTER OF STRUCTURES AND ARE NOT ACTUAL PIPE LENGTHS.  
 CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL PERMIT ISSUING AGENCIES WITHIN THE TIME FRAME SPECIFIED BY THAT AGENCY PRIOR TO BEGINNING CONSTRUCTION.

SCALE:  
 PLAN: 1" = 50'  
 PROFILE: 1" = 5'  
 VERTICAL: 1" = 50'  
 HORIZONTAL: 1" = 50'

BENCH MARK DESCRIPTION

PROFILE	DATE
SKETCHED	
PLOTTED	
NOTE BOOK	
GRADES CHECKED	
B.M. & WATER	
BY	



**MSE Engineering**  
 As-built information provided by MSE Corporation, certified this 19th day of May, 1994.  
 Jeffrey A. McElroy  
 Registered Land Surveyor No. 890003-IN

**Storm AS-BUILTS**

PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	DGN	PRF
14-0522				5225TM2	5225TM2
3-12-93	Adjust T.C. Str 103				
3-28-93	Rev Profile 77-79				
3-28-93	Add Profile III-12				
4-20-93	Relocate Str III-12, Delete Profile				

STORM PLAN AND PROFILE





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

**Map Correction-Field Verification**

Drain Number: #254

Drain Length: —

Drain Name: Ponds West : Section 3 Arm

Change +/- : —

Date: 5-29-08

New Length: —

Verified By: SLM : LMC

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**Notes & Sketch:**

Due to the Road Improvements in 2007 to Springmill Rd.  
STRUCTURE 90, formerly an end section, is now a man hole.

See attached map.

Suzanne L. Mills  
GIS Specialist

