

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

May 5, 2017

TO: Hamilton County Drainage Board

RE: William Krause Drain, Sheridan Stormwater Improvements

Attached are the petition, plans and drainage shed map, for the reconstruction of the William Krause Drain by the Town of Sheridan. This petition was filed by the Town of Sheridan on December 15, 2016. The petition was referred to the Surveyor for report by the Drainage Board December 21, 2016. (See Hamilton County Drainage Board Minutes Book 17, page 237). I have reviewed the petition and found it 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 attached plans were prepared by Banning Engineering dated April 27 2017, Project Number 1:1194SH. The plans were prepared and funded by the Town of Sheridan. The county portion of the proposed project is shown on sheet C300 of the plans.

The proposed project will improve the drainage in the southeastern portion of Sheridan. The drainage facilities will be placed in either existing street right of way or the existing drainage easement of the William Krause Drain.

A 2013 hydraulic study for the George Symonds and William Krause watershed by Banning Engineering identified that the hydraulic capacity of the 24" tile portion of the William Krause Drain is 10 cubic feet per second and is only adequate to convey the runoff from a 1% frequency storm event. The study identified that without significant upsizing or diversion, flooding in the area served by the main arm of the William Krause Drain generally between Fanning Street and Hudson Street and north of 8th Street to SR 38 would be expected to continue. This area experienced significant flooding on June 20, 2011 with water overtopping SR 38 near the Apostolic Faith Church.

This project will reconstruct the portion of the main arm of the Krause Drain downstream of the intersection of 8th and Bailey Streets. The existing main arm will be intercepted at approximately Station 23+38 of the 1920 Krause Drain description at the intersection of 8th and Bailey Streets (Structure 115 on the Banning Plans). 47-LF of the existing 24" tile will be removed. This will be replaced with 14 feet of 36" tile, 22 feet of 12" tile and 11 feet of 24" tile connecting at the intersection of 8th and Bailey Streets to allow flow in the tile to utilize both the existing 24" Krause Drain and the proposed 36" tile arm. These are the lengths of storm drain between Structures 114 and 115, 114 and 117, and 117 and 121.

The 36" tile arm will then run north within Bailey Street a distance of 345-LF to a new manhole at 7th Street (Structure 113 of the plans). The 36" tile then turns east within 7th Street a distance of 111-LF to a new manhole (Structure 112) and then continues 53-LF to a new manhole at Structure. A new structure will be set on the existing tile at Structure 120 and 19-LF of 24" tile will be installed and connected to Structure 111. This is to maintain the drainage in the existing tile between this location and the intersection of 8th and Bailey Streets. The proposed tile then runs north out of Structure 111 as a 42" tile a distance of 97-LF to a new structure (Structure 110) then turns northeast a distance of 78-LF to a new structure on the west side of SR 38. The structure is identified as EX1 which is Sta. 30+50 of the 1920 Krause Drain description. This 42" segment of the proposed tile is being installed west of the existing tile, but within the existing regulated drain easement, to provide more separation between the tile and an existing Midwest Grill building. The existing 163-LF of 24" tile parallel to this segment of the proposed 42" tile will be grouted full and capped and abandoned in place.

The downstream terminus of this project at Sta. 30+50 (Structure EX1 on the Banning plan) is the beginning of the proposed William Krause Drain, Krause Drain Reconstruction Phase I as shown on the Banning Plans for that project (Project No. 1194KRUS, dated May 1, 2017) as Structure 106.

Along the run of the new 36" tile, three lateral stubs to area inlets will be installed off of the 36" tile. These lateral stubs consist of a total of 43-LF of 12" tile and 18-LF of 15" tile. These are those lengths between Structures 115 & 116, 117 and 118, and 119 and 112.

This project will vacate 163 feet of the existing drain between Stations 28+87 and 30+50 of the 1920 Krause Drain description (Structure 120 to EX1 on Banning plans). This is the 163-LF of the existing 24" tile installed in 1920 west of the current Midwest Grill building which is to be grouted full and abandoned in place per the plans.

The length of the existing 1920 Krause Drain between Sta. 23+38 and Sta. 28+87 (Structures 115 and 120 on the Banning plans) shall remain as regulated drain.

The new arm will consist of the following:

22-LF of 12" Plastic pipe
21-LF of 12" Plastic pipe
18-LF of 15" Plastic pipe
345-LF of 36" Plastic pipe
111-LF of 36" Plastic pipe
53-LF of 36" Plastic pipe
19-LF of 24" RCP
97-LF of 42" RCP
78-LF of 42" RCP

Also, 47-LF of the existing drain will be replaced with new drain between Structures 115-114, 114-117 and 117-121 as outlined below.

1. 14-LF of the existing 24" tile installed in 1920 between Stations 23+38 and 23+52 will be replaced with 14-LF of 36" RCP.
2. 11-LF of the existing 24" tile installed in 1920 between Stations 23+52 and 23+63 will be replaced with 11-LF of 24" RCP.
3. 22-LF of the existing 24" tile installed in 1920 between Stations 23+63 and 23+85 will be replaced with 20-LF of 24" RCP.

The total length of the new tile shall be 811 feet.

This project is consistent with the February 2013 study completed for the William Krause and George Symonds Drains by Banning Engineering.

A regulated drain easement will be established over the new tile within South Bailey Street and East 7th Street. The easement shall be the platted rights of way for both streets as shown on the plat for the J.H. Cox Addition dated April 6, 1891 and the Smith's 3rd Addition dated January 15, 1923 as recorded in the office of the Hamilton County Recorder in Books 54, pages 30 and 31 and 114 pages 334 respectively.

Over the new tile, the easement will be 49.5 feet in width as shown on the right of way for the above referenced plats.

The existing 75 foot regulated drain easement across parcels 02-01-32-03-08-18.001 owned by Matt Cutler, 02-01-32-03-08-016.000 owned by Daniel W & Wanda K. Lyons, and 02-01-32-03-08-015.000 owed by KCF Enterprises LLC, will remain 75-feet where the proposed 42" tile is installed parallel to the existing 24" tile west of the current Midwest Grill building.

The cost estimate for the proposed project is as follows:

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
1	Mobilization / Demobilization	1	LS	\$10,000.00	\$ 10,000.00
2	Construction Engineering	1	LS	\$10,000.00	\$ 10,000.00
3	Traffic Control	1	LS	\$5,000.00	\$5,000.00
4	Sewer Service Lateral Conflicts	4	EA	\$2,000.00	\$8,000.00
5	110 lb/sy, QC/QA-HMA, 2, 64, Surface, 9.5mm	52	TON	\$100.00	\$5,200.00
6	440 lb/sy, QC/QA-HMA, 2, 64, Base, 25mm	201	TON	\$80.00	\$ 16,080.00
7	2.2" Compacted #53 Stone	563	TON	\$20.00	\$ 11,260.00
8	24" RCP with Granular Backfill	50	LFT	\$60.00	\$3,000.00
9	36" RCP with Granular Backfill	14	LFT	\$80.00	\$1,120.00
10	42" RCP with Granular Backfill	175	LFT	\$120.00	\$ 21,000.00
11	12" PP with Granular Backfill	43	LFT	\$35.00	\$1,505.00
12	15" PP with Granular Backfill	18	LFT	\$45.00	\$ 810.00
13	36" PP with Granular Backfill	509	LFT	\$90.00	\$ 45,810.00
14	48" Manhole with Casting	4	EA	\$3,000.00	\$ 12,000.00
15	60" Manhole with Casting	3	EA	\$4,500.00	\$ 13,500.00
16	72" Manhole with Casting	5	EA	\$6,000.00	\$ 30,000.00
17	96" Manhole with Casting	2	EA	\$7,500.00	\$ 15,000.00
18	24" X 24" Inlet with Casting	3	EA	\$2,000.00	\$6,000.00
19	Pipe Connections	4	EA	\$2,875.00	\$ 11,500.00
SUB TOTAL					\$ 226,785.00
15% Contingency					\$34,018.00
TOTAL					\$260,803.00

Banning Engineering provided professional engineering and surveying services for this project. The Town of Sheridan contracted directly with Banning for these services. The construction cost for this project will be paid for directly by the Town of Sheridan by a Grant from the Office of Community and Rural Affairs (OCRA). The Town of Sheridan will bid this project and administer the construction contract. The County contracted with Mendenhall & Associates for assistance in preparing the application for the OCRA Grant and the environmental review for the project. The cost of this contract was \$8,000.00. This cost will be reimbursed to the county from the OCRA Grant.

As part of this project the Drainage Board loaned the Town of Sheridan \$120,000.00 for the local match for the OCRA Grant. These funds are to be repaid over a seven (7) year period with 2% interest. The Letter of Commitment and Memorandum of Understanding was approved by the Board at its October 10, 2016 meeting. (See Hamilton County Drainage Board Minutes Book 17, page 145 and 146).

Parcels benefitted by this drain are currently assessed for the William Krause Drain. No changes in the current assessment shall be required.

I believe no damages will result to the landowners by the reconstruction of this drain. Damages are set at zero (\$0).

There are no permits required for this project from the US Army Corps of Engineers (COE), Indiana Department of Natural Resources (IDNR) or the Indiana Department of Environmental Management (IDEM).

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 the Board set a hearing for this proposal for June 26, 2017.

Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

DWK
~~William Krause~~
IN THE MATTER OF THE THORPE CREEK DRAIN
HAMILTON COUNTY DRAINAGE BOARD

FILED
DEC 15 2016
OFFICE OF HAMILTON COUNTY SURVEYOR

Come now the Town Council of the Town of Sheridan, Indiana who petition the Hamilton County Drainage Board as follows:

1. They are the duly elected Town Council of the Town of Sheridan, Indiana.
2. That in that capacity they are responsible for the drainage of public streets.
3. That they now desire that the William Krause regulated drain be reconstructed in Adams Township which involves 4th, 5th, 6th and 7th Streets and various other streets within the Town and various areas surrounding these streets in the drainage shed.
4. The names and address of each owner affected by the proposed public drainage are attached hereto, made a part hereof, and marked Exhibit "A", which area of land involved in the proposed drainage area is located in Section 32, Township 20 north, Range 3 east, Hamilton County, Indiana.
5. No other public lands or owners are located in the area which would affect improvement.
6. That the general route of the proposed drain is the construction of a regional detention facility between Stations 35+00 and 53+15 of the original William Krause Drain.
7. That in the opinion of the Petitioner, the costs, damages, and expenses of the proposed improvement will be less than the benefits which will result to the owners of the land to be benefited thereby.
8. That in the opinion of the Petitioner, the proposed improvement will benefit a public highway in the Town of Sheridan, Hamilton County, Indiana.
9. That the name of the attorney representing Petitioner in the drainage petition is Chou-il Lee, One Indiana Square, Suite 3500, Indianapolis, Indiana.
10. That Petitioners shall pay the cost of notice and all legal costs if the Petition is dismissed.
11. Petitioner shall post a bond, if required, to pay the cost of notice and all legal costs in the case the improvement is not established.

Town Council, Sheridan,
Hamilton County, Indiana

BY: *David W. Kinkead*
David Kinkead, President

BY: *[Signature]*
Member

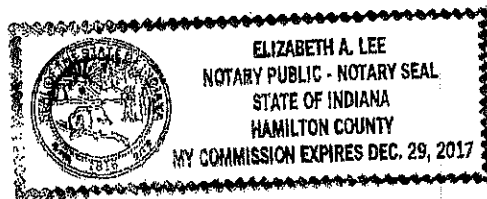
BY: *[Signature]*
Member

BY: *[Signature]*
Member

BY: *[Signature]*
Member

Attest:

Elizabeth A. Walden
Elizabeth A. Walden/Clerk - Treasurer of Sheridan, Indiana



STATE OF INDIANA)
) SS:
COUNTY OF HAMILTON)

Subscribed and sworn to before me, A Notary Public this 8 day of December 2016.

Elizabeth A. Lee
Notary Public of Hamilton County

My Commission Expires:

12-29-2017

FINDINGS AND ORDER

CONCERNING THE PARTIAL VACATION OF THE

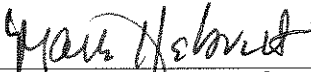
William Krause Drain, Sheridan Stormwater Improvements

Station 28+87 to Station 30+50


On this 26th day of June, 2017, the Hamilton County Drainage Board has held a hearing on the Maintenance Report and Schedule of Assessments of the William Krause Drain, Sheridan Stormwater Improvements (Station 28+87 to Station 30+50).

Evidence has been heard. Objections were presented and considered. The Board then adopted an order of action. The Board now finds that the costs of continued maintenance to the portion of the above drain exceed the benefits to the real estate benefited by the portion of the drain to be abandoned and issues this order vacating the above section of the William Krause Drain, Sheridan Stormwater Improvements (Station 28+87 to Station 30+50).

HAMILTON COUNTY DRAINAGE BOARD



President



Member

Member

Attest: 

STATE OF INDIANA)
) ss:
COUNTY OF HAMILTON)

BEFORE THE HAMILTON COUNTY
DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN THE MATTER OF THE
RECONSTRUCTION OF THE
William Krause Drain, Sheridan Stormwater Improvements

FINDINGS AND ORDER FOR RECONSTRUCTION

The matter of the proposed Reconstruction of the *William Krause Drain, Sheridan Stormwater Improvements* came before the Hamilton County Drainage Board for hearing on *June 26, 2017*, on the Reconstruction Report consisting of the report and the Schedule of Damages and Assessments. The Board also received and considered the written objection of an owner of certain lands affected by the proposed Reconstruction, said owner being:

Evidence was heard on the Reconstruction Report and on the aforementioned objections.

The Board, having considered the evidence and objections, and, upon motion duly made, seconded and unanimously carried, did find and determine that the costs, damages and expenses of the proposed Reconstruction will be less than the benefits accruing to the owners of all land benefited by the Reconstruction.


The Board having considered the evidence and objections, upon motion duly made, seconded and unanimously carried, did adopt the Schedule of Assessments as proposed, subject to amendment after inspection of the subject drain as it relates to the lands of any owners which may have been erroneously included or omitted from the Schedule of Assessments.

The Board further finds that it has jurisdiction of these proceedings and that all required notices have been duly given or published as required by law.


Wherefore, it is ORDERED, that the proposed Reconstruction of the *William Krause Drain, Sheridan Stormwater Improvements* be and is hereby declared established.

Thereafter, the Board made inspection for the purpose of determining whether or not the lands of any owners had been erroneously included or excluded from the Schedule of Assessments. The Board finds on the basis of the reports and findings at this hearing as follows:

HAMILTON COUNTY DRAINAGE BOARD




PRESIDENT



Member

Member

ATTEST: 
Executive Secretary

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

William Krause Drain, Sheridan Stormwater Improvements

NOTICE

To Whom It May Concern and: _____

Notice is hereby given of the hearing of the Hamilton County Drainage Board concerning the reconstruction of the **William Krause Drain, Sheridan Stormwater Improvements** on **June 26, 2017 at 9:00 A.M.** in Commissioners Court, Hamilton County Judicial Center, One Hamilton County Square, Noblesville, Indiana. Construction and maintenance reports of the Surveyor and the Schedule of Assessments proposed by the Drainage Board have been filed and are available for public inspection in the office of the Hamilton County Surveyor.

Hamilton County Drainage Board

Attest: Lynette Mosbaugh

ONE TIME ONLY

STATE OF INDIANA)
) SS BEFORE THE HAMILTON
)
COUNTY OF HAMILTON) DRAINAGE BOARD

IN THE MATTER OF William Krause Drain, Sheridan Stormwater
Improvements

NOTICE

Notice is hereby given that the Hamilton County Drainage Board at its regular meeting **June 26, 2017** adopted the reconstruction report of the Surveyor and the Amended Schedule of damages and assessments including annual assessment for periodic maintenance, finding that the costs, damages and expense of the proposed improvement would be less than the benefits which will result to the owner of lands benefited thereby.

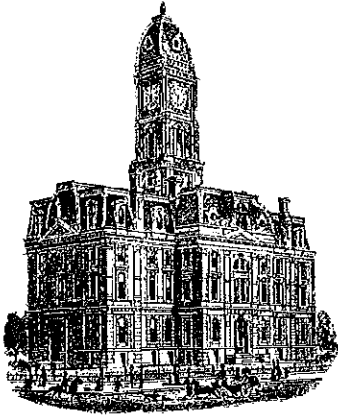
The Board issued an order declaring the proposed improvement established. Such findings and order were marked filed and are available for inspection in the Office of the Hamilton County Surveyor.

If judicial review of the findings and order of the Board is not requested pursuant to Article VIII of the 1965 Indiana Drainage Code as amended within twenty (20) days from the date of publication of this notice, the findings and order shall become conclusive.

HAMILTON COUNTY DRAINAGE BOARD

BY: Mark Heirbrandt
PRESIDENT

ATTEST: Lynette Mosbaugh
SECRETARY



JLW

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

August 9, 2021

TO: Hamilton County Drainage Board

RE: William Krause Drain - Town of Sheridan - Final Report

This is the inspector's final report on the William Krause Drain, Town of Sheridan Stormwater Improvements, located in Section 32 of Township 20 North Range 3 East in Adams Township, Hamilton County, Indiana.

The Surveyor's Report for the William Krause Drain, Town of Sheridan Stormwater Improvements dated May 5, 2017 was presented to the Drainage Board and approved on June 26, 2017 (Hamilton County Drainage Board Minutes Book 17, Pages 380 - 384). The reconstruction cost estimate was \$260,803.00. The construction cost of this project was paid for directly by the Town of Sheridan by a grant from the Office of Community and Rural Affairs (OCRA).

As part of this project the Drainage Board loaned the Town of Sheridan \$120,000.00 for the local match for the OCRA Grant. The funds were to be paid back over a seven (7) year period with 2% interest. The Letter of Commitment and Memorandum of Understanding was approved by the Board at the October 10, 2016 meeting (see Hamilton County Drainage Minute Book 17, pages 145 & 146). The Town of Sheridan was able to pay back the loan early. On June 6, 2018 the final payment was made which included \$3,055.70 of interest. The interest was transferred to the William Krause Drain fund on June 26, 2018.

The engineering design and plans were prepared by Banning Engineering dated April 27, 2017, Project # 11194SH. The regulated drain portion of the project is shown on page C300 of the Banning Engineering plans. The construction staking and as-built (record) drawings were prepared by Banning Engineering. The final revision of the as-built drawings were reviewed by the office on June 7, 2021 and indicated that the work was complete and acceptable. The as-built drawings are attached.

William Krause Drain, Town of Sheridan Stormwater Improvements consisted 177 feet of 42" RCP, 16 feet of 36" RCP, 30 feet of 24" RCP, 510 feet of 36" HDPE, 31 feet of 24" HDPE, 18 feet of 15" HDPE, 41 feet of 12" HDPE, 9 manholes and 3 24" x 24" box inlets.

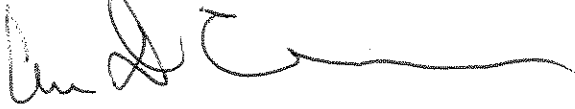
This project installed 823 feet of new pipe as part of the drain relocation and the new arm along Bailey Street.

The William Krause Drain, Town of Sheridan Stormwater Improvements relocated 163 feet of existing drain tile from Station 30+50 to Station 28+87 and 57 feet of existing 24-inch drain between Sta 24+79 to Sta 25+36. The project removed 17 feet of 24-inch drain between the existing Str. 500 and Str. 116 (Sta 23+31 to Sta. 23+38). The project added 586 feet of new drain to the total length of the William Krause Drain.

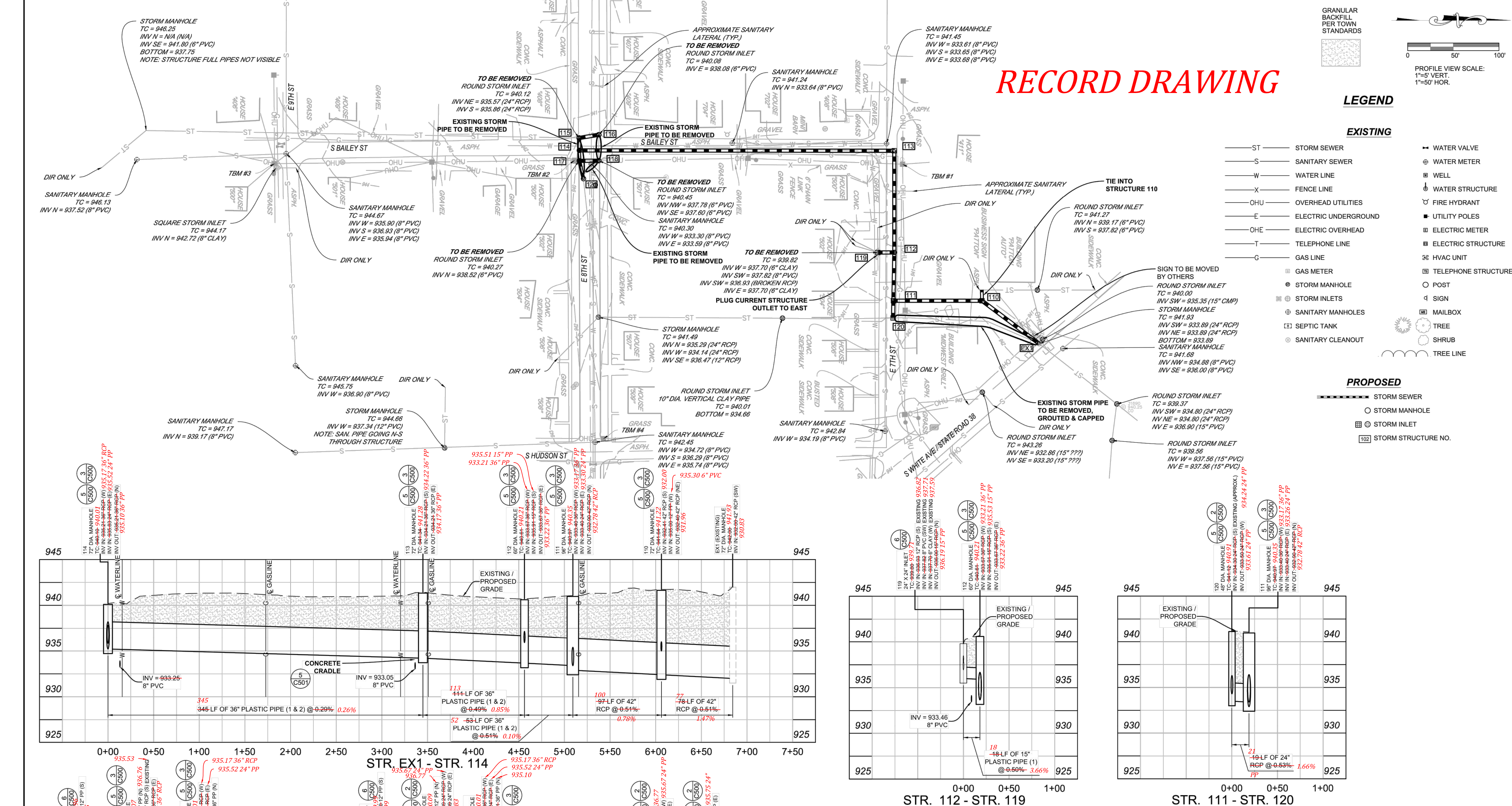
As of August 3, 2021, I hereby attest to and agree that the reconstruction was installed according to the specified plans and change orders and have approved such work under IC 36-9-27-82(a). All inspections have been completed. Final inspection was on August 20, 2018.

I recommend the Board approve the reconstruction as complete and acceptable.

Respectfully,

A handwritten signature in black ink, appearing to read 'Andrew Conover', written over a horizontal line.

Andrew Conover
Inspector



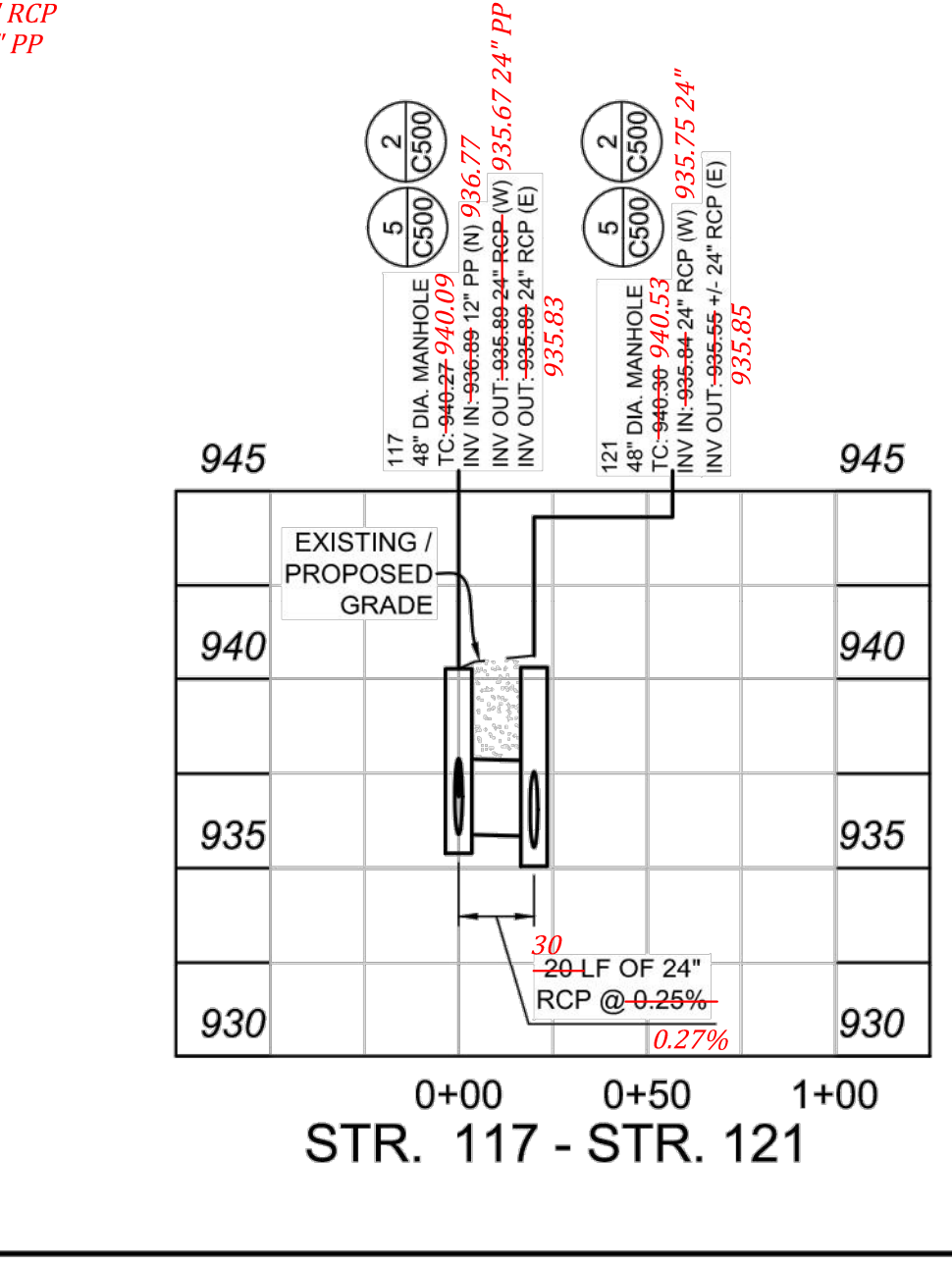
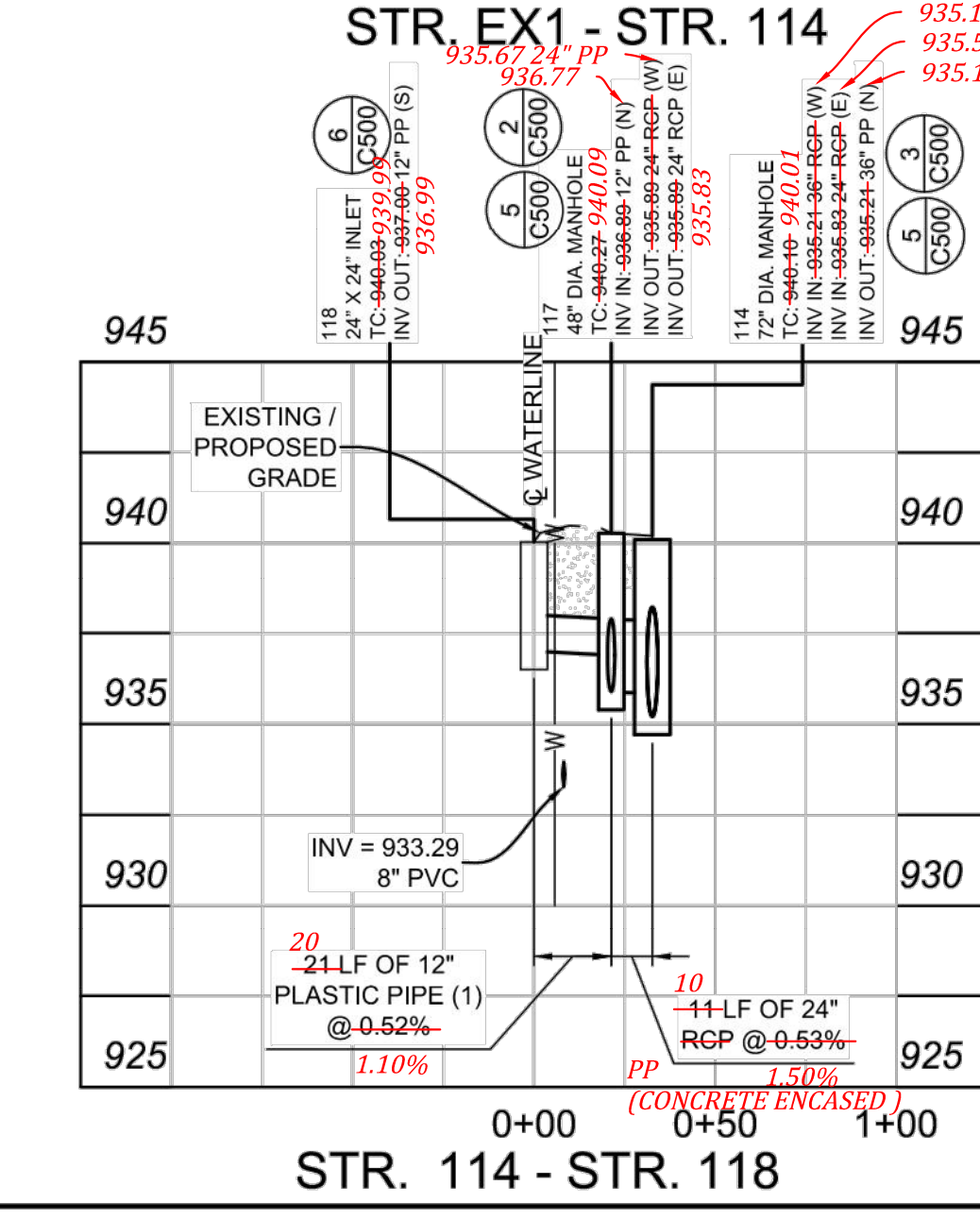
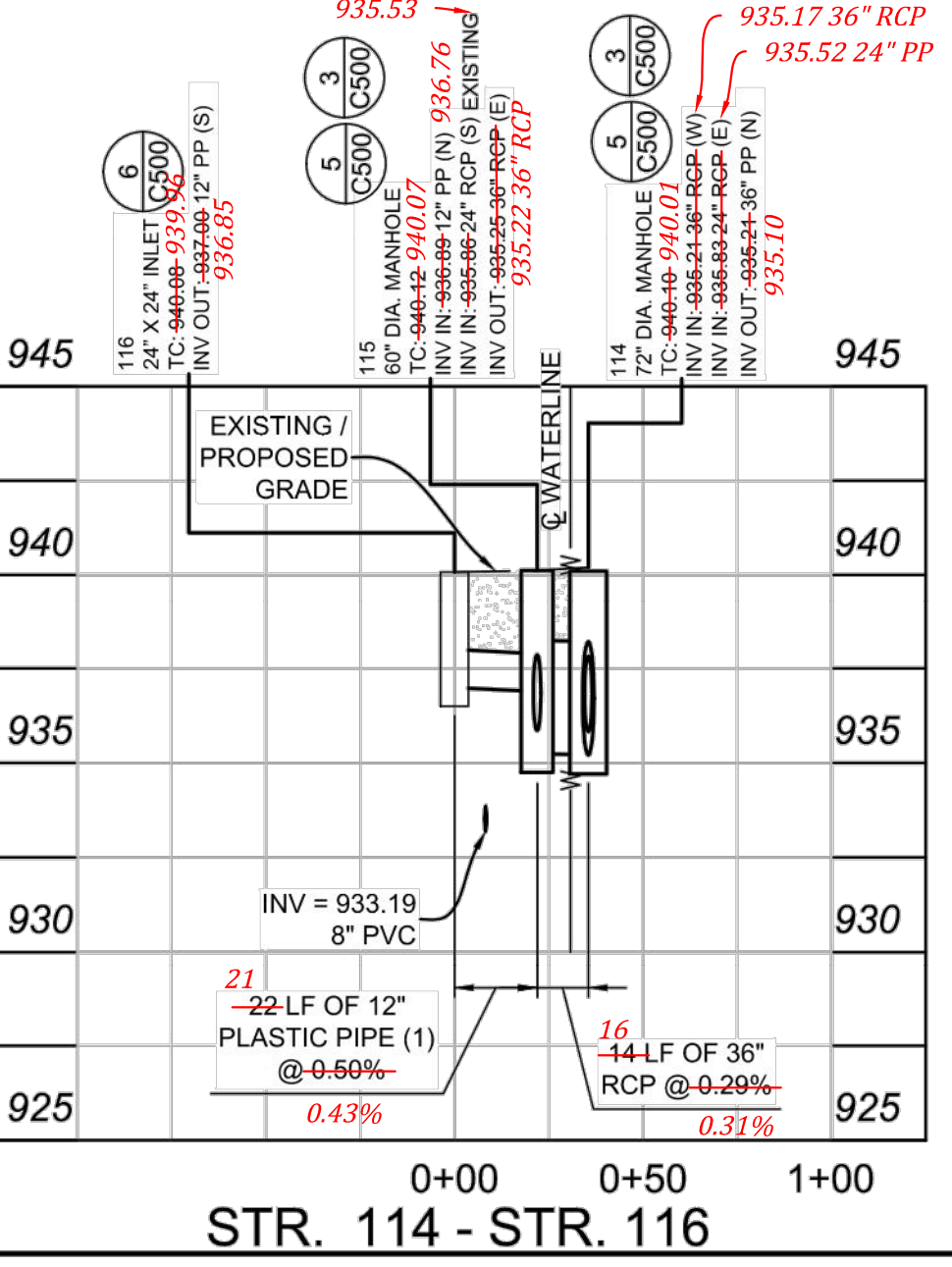
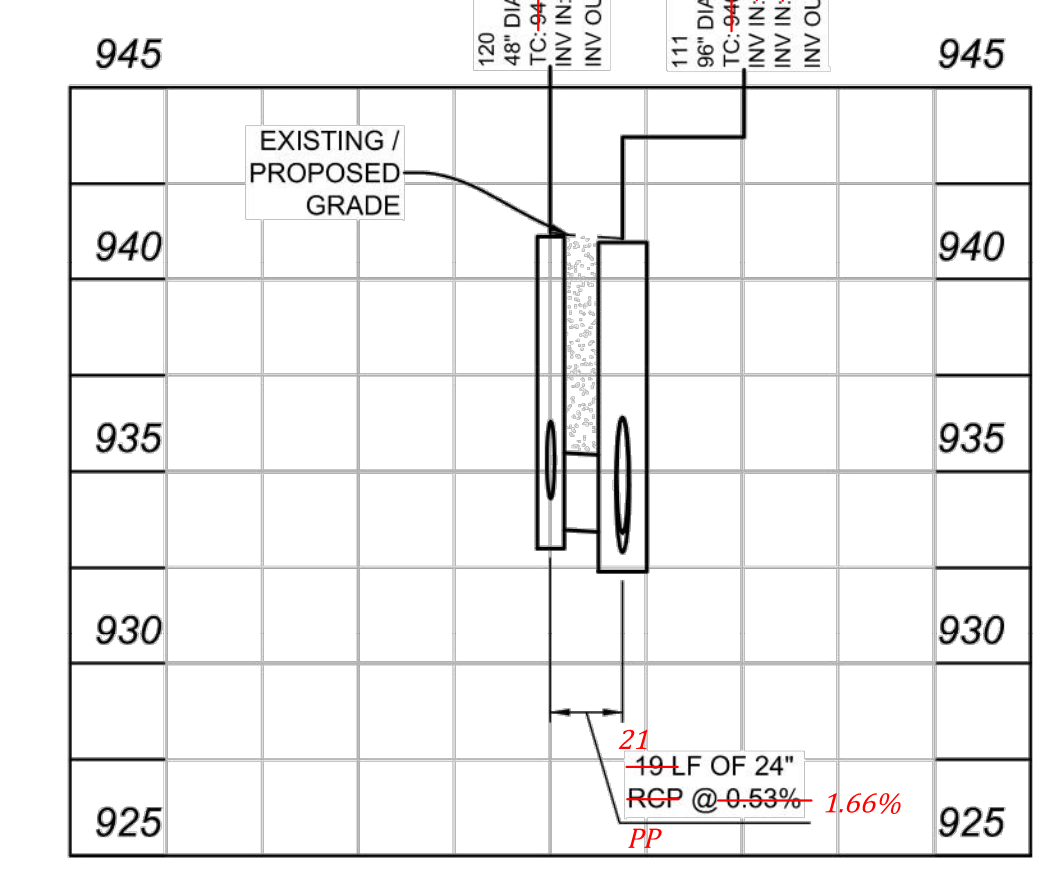
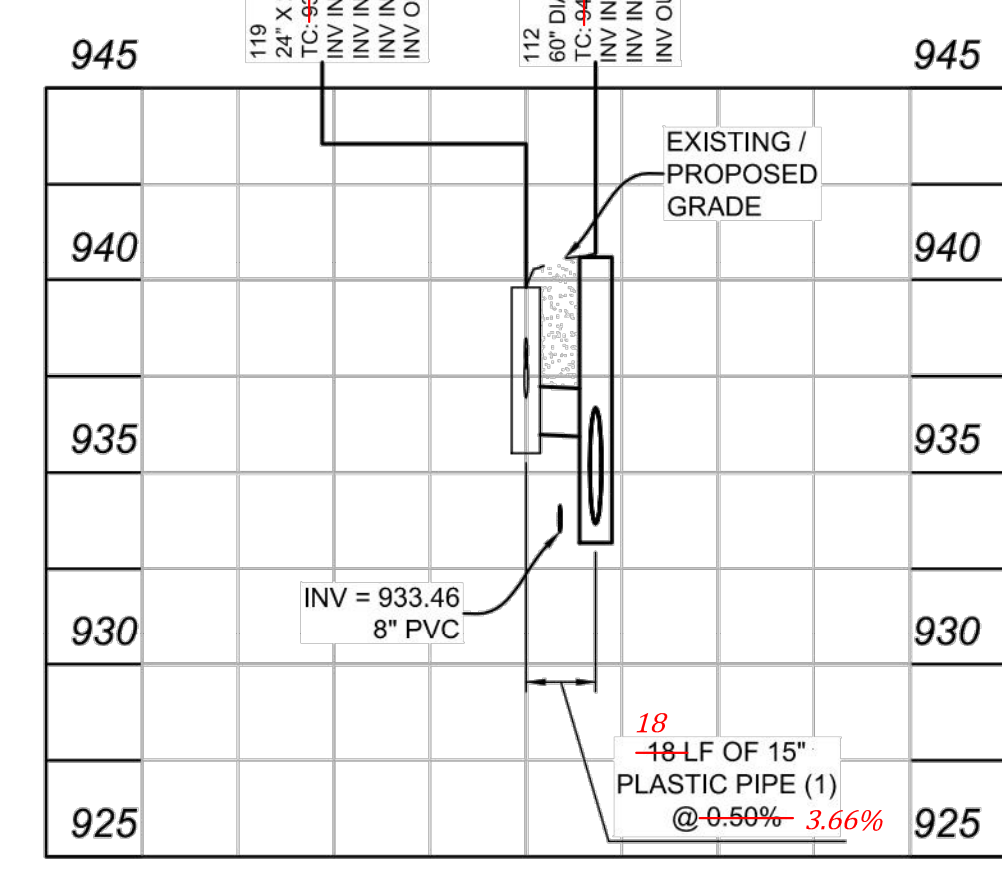
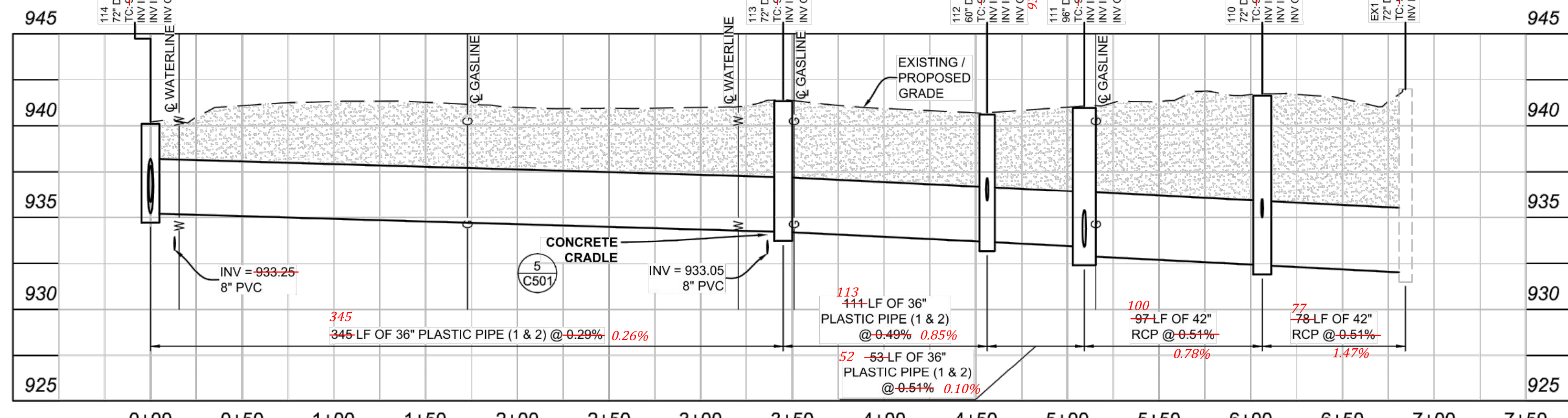
RECORD DRAWING

GRANULAR BACKFILL PER TOWN STANDARDS

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

LEGEND

- EXISTING**
- ST — STORM SEWER
 - S — SANITARY SEWER
 - W — WATER LINE
 - X — FENCE LINE
 - OHU — OVERHEAD UTILITIES
 - E — ELECTRIC UNDERGROUND
 - OHE — ELECTRIC OVERHEAD
 - T — TELEPHONE LINE
 - G — GAS LINE
- PROPOSED**
- ST — STORM SEWER
 - STORM MANHOLE
 - ⊕ STORM INLET
 - ⊠ STORM STRUCTURE NO.
- ◀ WATER VALVE
 ⊕ WATER METER
 ⊕ WELL
 ⊕ WATER STRUCTURE
 ⊕ FIRE HYDRANT
 ⊕ UTILITY POLES
 ⊕ ELECTRIC METER
 ⊕ ELECTRIC STRUCTURE
 ⊕ HVAC UNIT
 ⊕ TELEPHONE STRUCTURE
 ⊕ MAILBOX
 ⊕ TREE
 ⊕ SHRUB
 ⊕ TREE LINE



STORM SEWER PLAN GENERAL NOTES

- Do not scale from these plans for Survey Field Locations.
- All known utility locations shown are approximate. It shall be the responsibility of each contractor to verify existing utility locations and conditions. It shall also be the contractor's responsibility to contact the various utilities for proper staking and locations for each prior to construction.
- Any errors or omissions shall be brought to the attention of the engineer prior to construction. In the event of the contractor's failing to give such notice, they shall be held responsible for the results of any such errors or omissions and the cost of rectifying the same.
- Benchmark information, as provide, shall be utilized to confirm existing topographic conditions prior to the commencement of any construction activities. Any discrepancies encountered between existing topography shown and actual site conditions which could affect the design and/or construction shall be reported to the engineer immediately for resolution. In the event of the contractor's failing to give such notice, they shall be held responsible for the results of any such errors or omissions and the cost of rectifying the same.
- It shall be the contractor/installer responsibility for contacting all permit issuing agencies within the time frame specified by that agency prior to any construction.
- All construction activity on this site shall be performed in compliance with OSHA standards.
- Structures along curb lines are stationed to the middle of the structure and offset to the back of curb. End sections are stationed and offset to the end of the end section. All other structures are stationed and offset to the center of the structure.
- Any field tiles encountered during the course of construction of improvements shall be intercepted and perpetuated into the proposed storm drainage system. The contractor shall notify the engineer in any circumstance where this cannot be accomplished.
- Water mains are shown on this sheet for reference only.
- There is to be a minimum of 10 feet horizontal separation and 18 inches vertical separation between the sanitary sewer and the water line.
- Any sanitary sewer and storm sewer crossings with less than 2 feet of vertical separation shall be concrete encased.

PLASTIC PIPE SPECIFICATIONS:

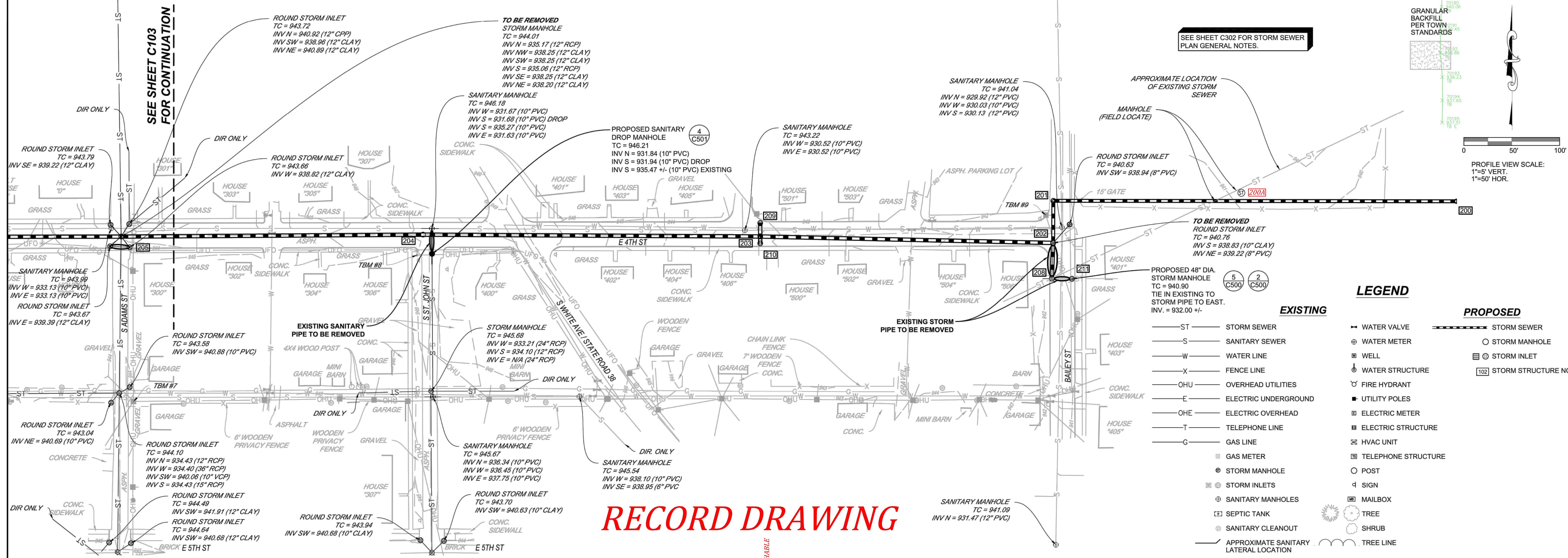
- Plastic pipe referenced shall be Dual Wall High Performance Polypropylene (PP) per ASTM F2881 or Polyvinyl Chloride (PVC) profile wall per ASTM F949. Either alternative shall be smooth interior and installed per plans and specifications.
- Plastic pipe shall have perforations that meet AASHTO Class 2 perforation specifications.

STORM SEWER PLAN AND PROFILE
 SHERIDAN STORMWATER IMPROVEMENTS
 ADAMS TOWNSHIP
 SHERIDAN, INDIANA

Registered Professional Engineer
 No. LS21500011
 State of Indiana
 J. D. Wilson

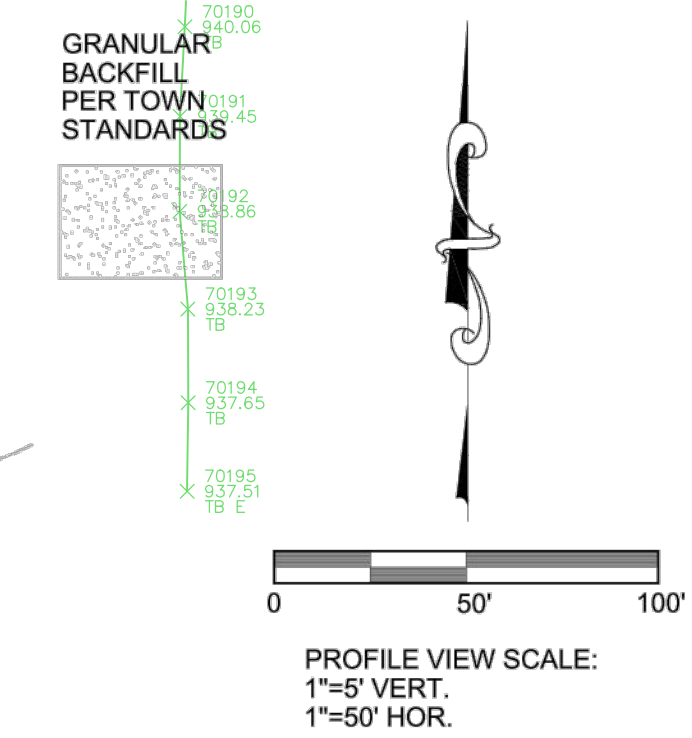
Project No: 11194SH
 Sheet No: C300

BANNING ENGINEERING
 853 COLUMBIA ROAD, SUITE #101
 PLAINFIELD, IN 46168
 BUS: (317) 707-3700, FAX: (317) 707-3800
 E-MAIL: Banning@BanningEngineering.com
 WEB: www.BanningEngineering.com

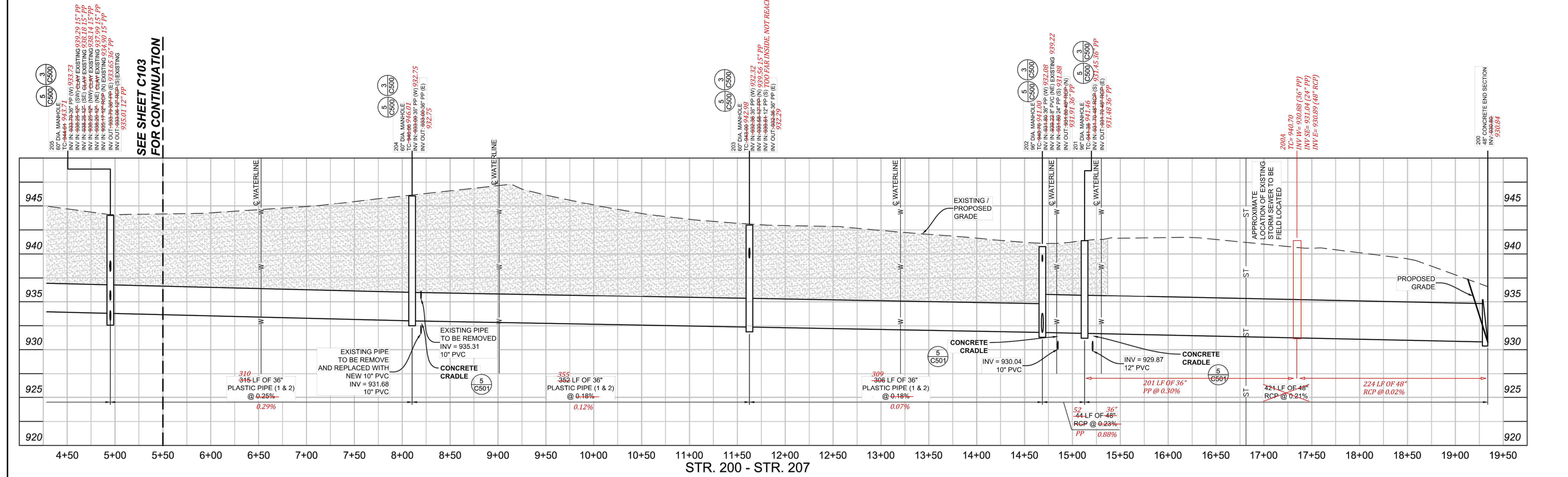


RECORD DRAWING

SEE SHEET C302 FOR STORM SEWER PLAN GENERAL NOTES.



- LEGEND**
- | | | | |
|-----------------------------------------|----------------------|-----------------------|------------------------|
| — ST — | STORM SEWER | — WATER VALVE | — PROPOSED STORM SEWER |
| — S — | SANITARY SEWER | ⊗ WATER METER | ○ STORM MANHOLE |
| — W — | WATER LINE | ⊕ WELL | ⊕ STORM INLET |
| — X — | FENCE LINE | ⊕ WATER STRUCTURE | ⊕ STORM STRUCTURE NO. |
| — OHU — | OVERHEAD UTILITIES | ⊕ FIRE HYDRANT | |
| — E — | ELECTRIC UNDERGROUND | ⊕ UTILITY POLES | |
| — OHE — | ELECTRIC OVERHEAD | ⊕ ELECTRIC METER | |
| — T — | TELEPHONE LINE | ⊕ ELECTRIC STRUCTURE | |
| — G — | GAS LINE | ⊕ HVAC UNIT | |
| ⊕ GAS METER | | ⊕ TELEPHONE STRUCTURE | |
| ⊕ STORM MANHOLE | | ○ POST | |
| ⊕ STORM INLETS | | ⊕ SIGN | |
| ⊕ SANITARY MANHOLES | | ⊕ MAILBOX | |
| ⊕ SEPTIC TANK | | ⊕ TREE | |
| ⊕ SANITARY CLEANOUT | | ⊕ SHRUB | |
| — APPROXIMATE SANITARY LATERAL LOCATION | | ⊕ TREE LINE | |



SEE SHEET C103 FOR CONTINUATION

SEE SHEET C103 FOR CONTINUATION

Project No: 11194SH
 Sheet No: C301

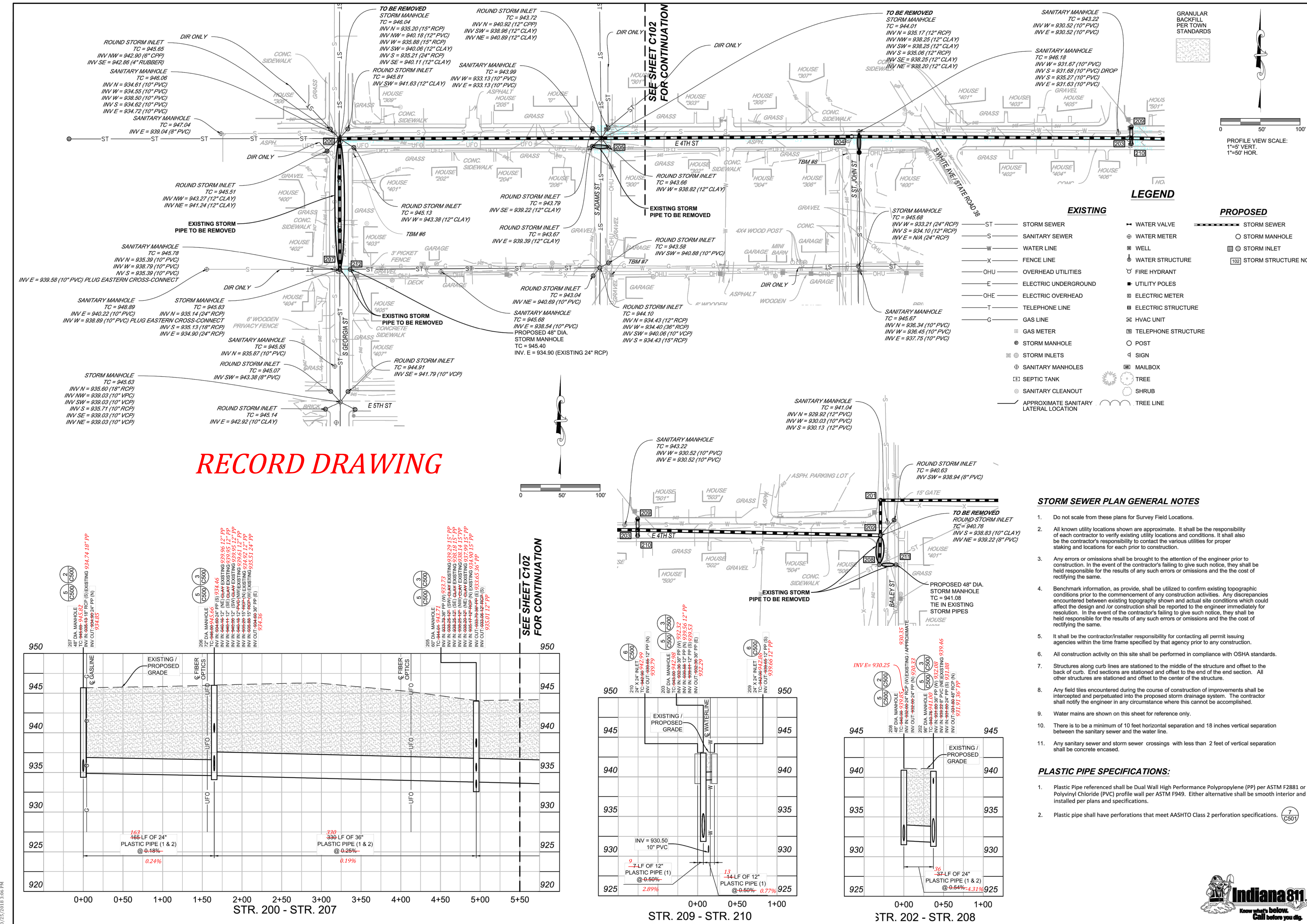
BANNING ENGINEERING
 853 COLUMBIA ROAD, SUITE #101
 PLAINFIELD, IN 46168
 BUS: (317) 707-3700, FAX: (317) 707-3800
 E-MAIL: Banning@BanningEngineering.com
 WEB: www.BanningEngineering.com

REGISTERED PROFESSIONAL ENGINEER
 No. LS21500011
 STATE OF INDIANA
 LAND SURVEYOR

Jonathan D. Wilson

DESIGNED: JLM
 DRAWN: TWF
 CHECKED: ASH
 SCALE: AS SHOWN
 DATE: 04-27-17

10/25/2018 3:06 PM



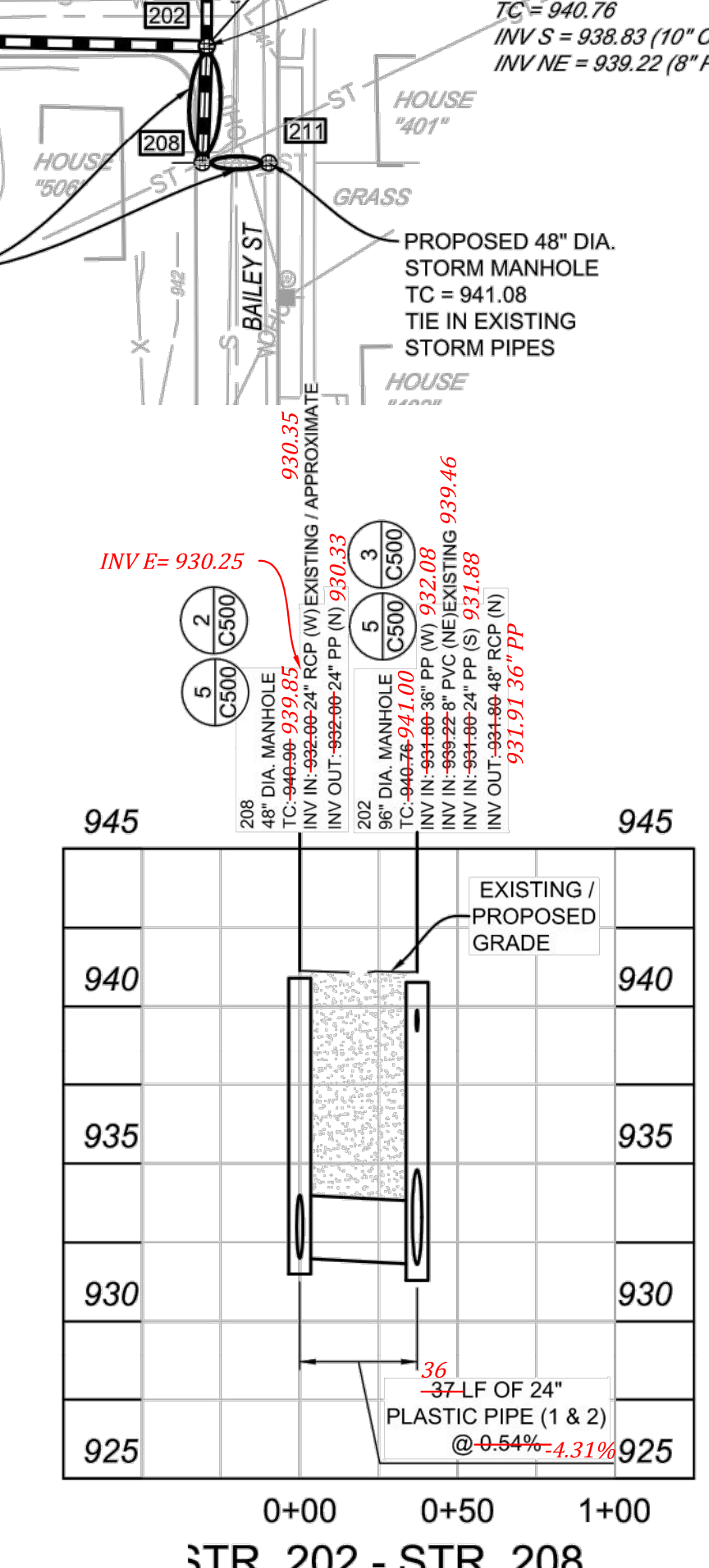
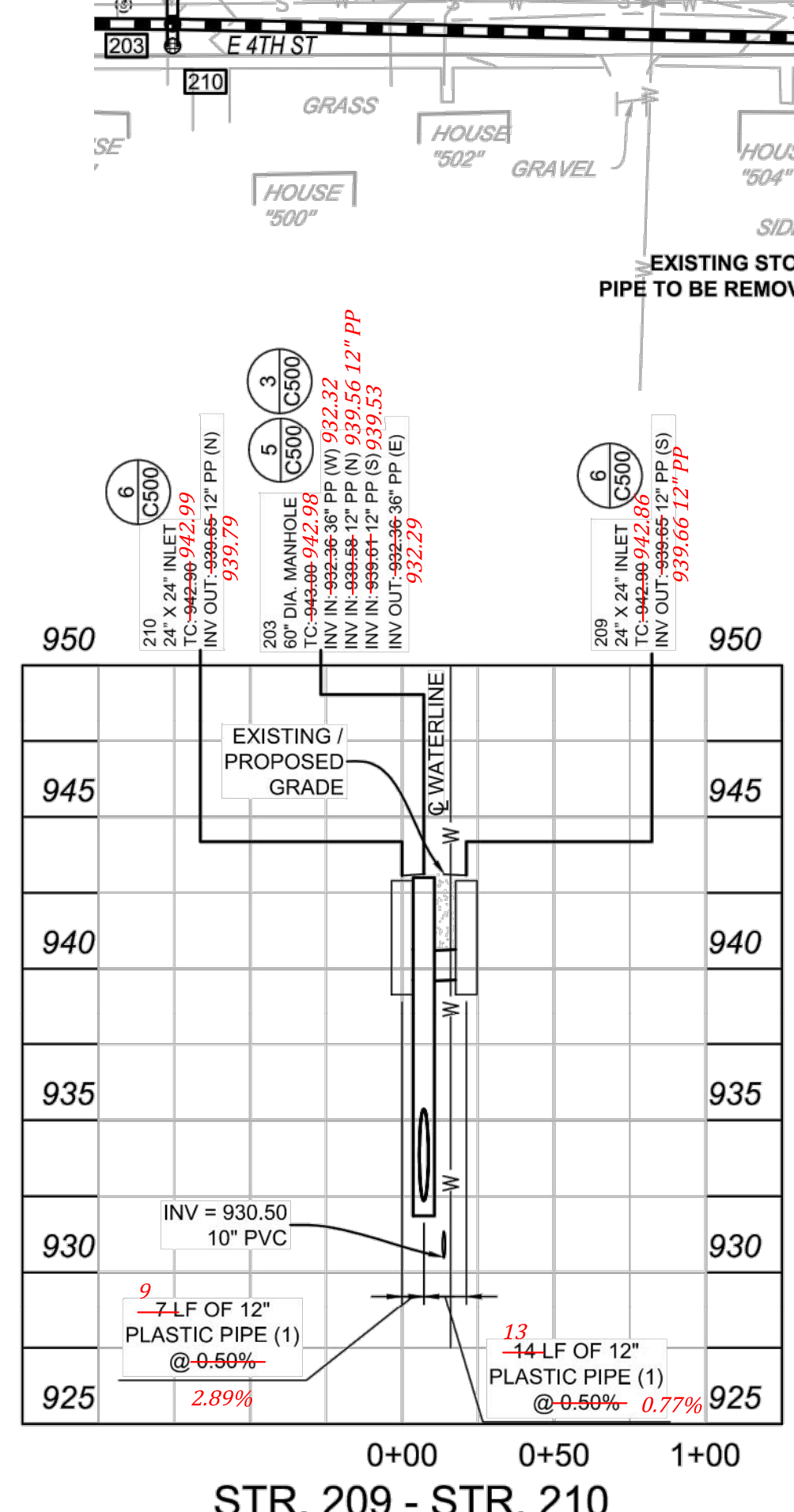
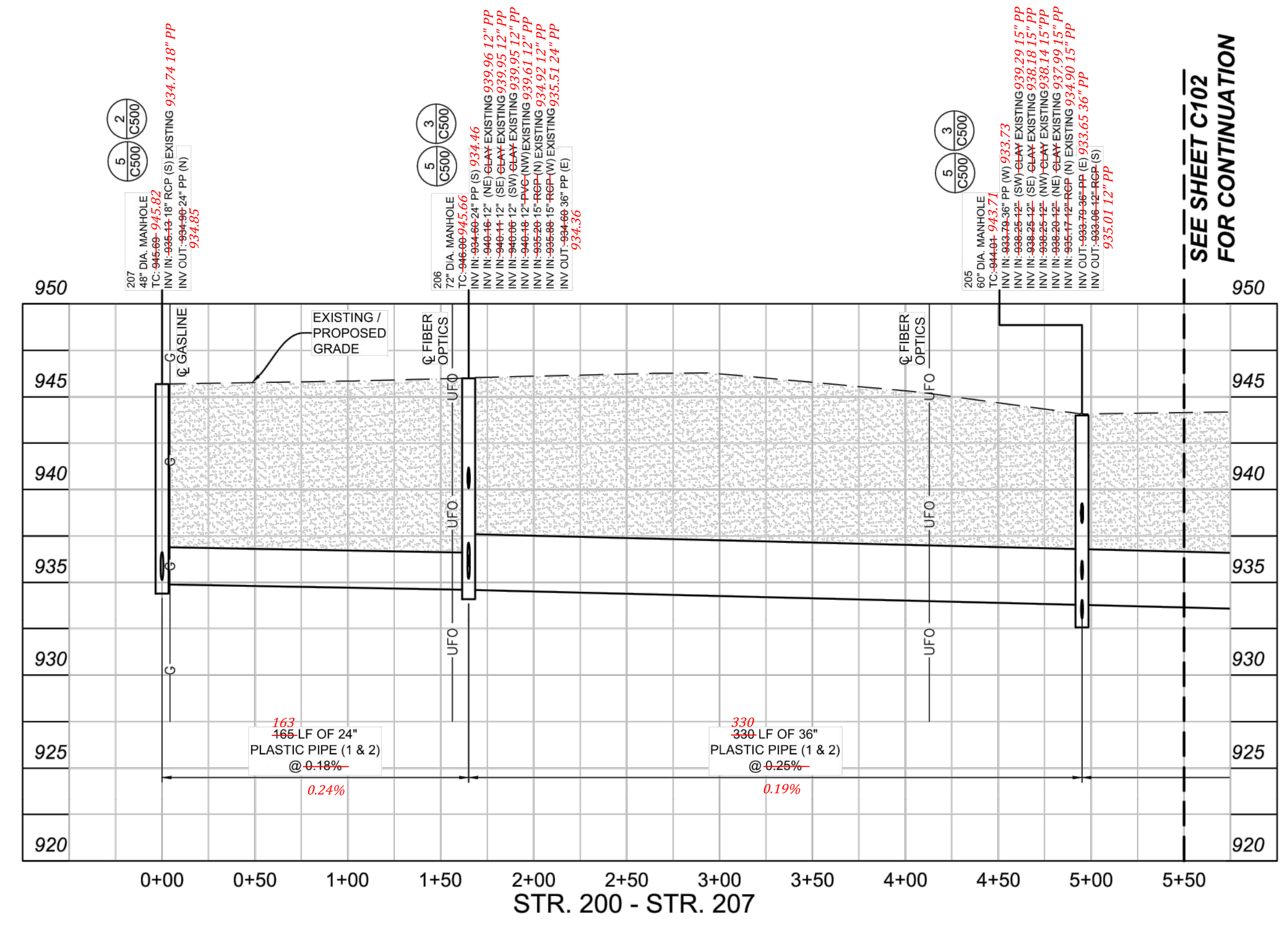
RECORD DRAWING

STORM SEWER PLAN GENERAL NOTES

- Do not scale from these plans for Survey Field Locations.
- All known utility locations shown are approximate. It shall be the responsibility of each contractor to verify existing utility locations and conditions. It shall also be the contractor's responsibility to contact the various utilities for proper staking and locations for each prior to construction.
- Any errors or omissions shall be brought to the attention of the engineer prior to construction. In the event of the contractor's failing to give such notice, they shall be held responsible for the results of any such errors or omissions and the cost of rectifying the same.
- Benchmark information, as provide, shall be utilized to confirm existing topographic conditions prior to the commencement of any construction activities. Any discrepancies encountered between existing topography shown and actual site conditions which could affect the design and/or construction shall be reported to the engineer immediately for resolution. In the event of the contractor's failing to give such notice, they shall be held responsible for the results of any such errors or omissions and the cost of rectifying the same.
- It shall be the contractor/installer responsibility for contacting all permit issuing agencies within the time frame specified by that agency prior to any construction.
- All construction activity on this site shall be performed in compliance with OSHA standards.
- Structures along curb lines are stationed to the middle of the structure and offset to the back of curb. End structures are stationed and offset to the end of the end section. All other structures are stationed and offset to the center of the structure.
- Any field tiles encountered during the course of construction of improvements shall be intercepted and perpetuated into the proposed storm drainage system. The contractor shall notify the engineer in any circumstance where this cannot be accomplished.
- Water mains are shown on this sheet for reference only.
- There is to be a minimum of 10 feet horizontal separation and 18 inches vertical separation between the sanitary sewer and the water line.
- Any sanitary sewer and storm sewer crossings with less than 2 feet of vertical separation shall be concrete encased.

PLASTIC PIPE SPECIFICATIONS:

- Plastic Pipe referenced shall be Dual Wall High Performance Polypropylene (PP) per ASTM F2881 or Polyvinyl Chloride (PVC) profile wall per ASTM F949. Either alternative shall be smooth interior and installed per plans and specifications.
- Plastic pipe shall have perforations that meet AASHTO Class 2 perforation specifications.



Project No: 11194SH
Sheet No: C302

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

DESIGNED: JDM
DRAWN: TUF
CHECKED: [Signature]
SCALE: AS SHOWN
DATE: 04-27-17

STORM SEWER PLAN AND PROFILE
SHERIDAN STORMWATER IMPROVEMENTS
ADAMS TOWNSHIP
SHERIDAN, INDIANA