



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

March 20, 2020

To: Hamilton County Drainage Board

Re: Williams Creek Drainage Area, Spring Mill Run Drain, The Estates at Towne Meadow Arm

Attached is a petition by PLP UHS Properties LLC, along with a non-enforcement request, plans, calculations, quantity summary and assessment roll for The Estates at Towne Meadow Arm, Williams Creek Drain located in Clay Township. I have reviewed the submittals 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	1,016 LF	30" RCP	735 LF
15" RCP	1,921 LF	36" RCP	178 LF
18" RCP	843 LF	6" SSD	4,425 LF
21" RCP	410 LF		
24" RCP	484 LF		

The total length of the drain will be 10,112 feet.

This project will reconstruct a portion of the Spring Mill Run Drain – University High School Arm (2002). The existing open ditch will flow through the new developments detentions ponds

constructed in Common Areas "2" and "3". The construction through the development will enclose 89 feet of existing open ditch with dual 36" RCP pipes between Structure 624 and 623. It will remove 23' of 12" plastic pipe at existing Structure B1 and extend the existing 24" RCP at existing Structure 27 by an additional 26 feet. These changes are outlined on the plans on Sheet C2.3 and detailed on Sheet C6.6.

The site is split by the Spring Mill Run Regulated Drain which runs through the property from the north to south. The Three (3) detention basins located in Common Area C.A. "B" will 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 detention basins such as sediment removal and erosion control along the banks, mowing, aquatic vegetation maintenance 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.

The subsurface drains (SSD) under curbs in the Estates at Towne Meadows are not to be part of the regulated drain due to the requirement of street trees by the City of Carmel. The subsurface drains (SSD) to be part of the regulated drain are those main lines in front/rear yards, and those in common areas. Only the main SSD lines as described below, which are located within these areas 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:

Front/Rear Yard SSD:

Side Yard Lot 1 from Str. 604 North to SSD Riser
Rear Yard Lots 1-3 from Str. 604 West to Str. 604A
Rear Lot 3 from Str. 604A West to SSD Riser
Common Area "F" from Str. 608 West to SSD Riser
Rear Yard Lot 4 from Str. 605 East to SSD Riser
Rear Yard Lots 5-6 from Str. 605 West to SSD Riser
Rear Yard Lots 41-44 from Str. 617 to Str. 609
Rear Yard Lots 39-40 from Str. 618 to Str. 617
Rear Yard Lots 7-11 from SSD Risers to Str. 651
Rear Yard Lots 37-38 from Str. 601 to Str. 618
Rear Yard Lots 35-36 from Str. 630 East to SSD Riser
Rear Yard Lots 33-34 from Str. 630 West to Str. 649
Rear Yard Lots 31-32 from Str. 649 SW to Str. 648
Rear Yard Lots 27-30 from Str. 640 North to Str. 648
Rear Yard Lot 17 from Str. 634 West to SSD Riser
Rear Yard Lots 18-20 from Str. 634 East to Str. 635
Rear Yard Lot 21 from Str. 635 East to SSD Riser
Rear Yard Lots 25-26 from Str. 644 West to SSD Riser
Rear Yard Lots 22-24 from Str. 644 East to Str. 645

The plans for The Estates at Towne Meadow show 11 BMP storm structures with sumps and snouts. The sumps will be maintained as part of the regulated drain facilities and cleaned annually or as needed after the drainage facilities are accepted as part of the County's regulated drain system. Those structures are as follows: Str. 603, Str. 606, Str. 611, 616, Str. 621, Str. 626, Str. 629, Str. 633, Str. 636, Str. 639 and Str. 643.

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. The area is assessed for the Williams Creek Drainage shed at this time. The current rates are as follows: \$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 \$3,499.70.

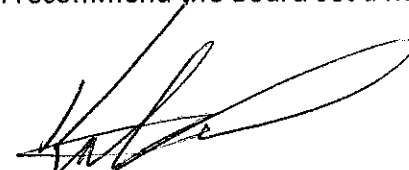
In accordance with IC 36-7-4-709, the petitioner did not submit surety for the proposed drain prior to construction commencing. If the petitioner/developer wants to submit final secondary plat for recording prior to the final inspection and approved as-built drawings, a bond will be required at that time.

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

Attached is an easement (Recorder's Office Instrument #2020005589) granted by University High School of Indiana, Inc. conveying to the Board of Commissioners of Hamilton County a non-exclusive perpetual easement through, upon, over, along and across parcel 17-13-05-00-00-003.000. The easement is granted for providing overland or subsurface paths and courses for the construction, maintenance and preservation of storm drainage facilities which are part of this proposed regulated drain.

I recommend 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 The Estates at Towne Meadow as recorded in the office of the Hamilton County Recorder.

I recommend the Board set a hearing for this proposed drain for April 27, 2020.



Kenton C. Ward, CFM
Hamilton County Surveyor

KCW/pll

HAMILTON COUNTY DRAINAGE BOARD
NOBLESVILLE, INDIANA

IN RE: The Estates at Towne Meadow)
Hamilton County, Indiana)


PETITION FOR RELOCATION AND RECONSTRUCTION

PLP UHS Properties, LLC (hereinafter Petitioner”),

hereby petitions the Hamilton County Drainage Board for authority to relocate and improve a section of the Spring Mill Run Drain, and in support of said petition advises the Board that:

1. Petitioner owns real estate through which a portion of the Spring Mill Run Drain runs.
2. Petitioner plans to develop its real estate with roads, buildings, utilities, storm drains, sanitary sewers and other structures.
3. Petitioner’s proposed development of its real estate will require relocation and reconstruction of a portion of the Spring Mill Run Drain, as specifically shown on engineering plans and specifications filed with the Hamilton County Surveyor.
4. The work necessary for the proposed relocation and reconstruction will be undertaken at the sole expense of the Petitioner and such work will result in substantial improvement to the Spring Mill Run Drain, without cost to other property owners on the watershed of the Spring Mill Run Drain.

WHEREFORE, Petitioner requests that an Order issued from the Hamilton County Drainage Board authorizing relocation and reconstruction of the Spring Mill Run Drain, in conformance with applicable law and plans and specifications on file with the Hamilton County Surveyor.


Signed _____
Timothy J. Walter
Printed _____

FINDINGS AND ORDER

CONCERNING THE MAINTENANCE OF THE

WILLIAMS CREEK DRAIN, SPRINGMILL RUN DRAIN, THE ESTATES AT TOWNE
MEADOW ARM


On this 27th day of APRIL, 2020, the Hamilton County
Drainage Board has held a hearing on the Maintenance Report and
Schedule of Assessments of the **WILLIAMS CREEK DRAIN**.

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

BEFORE THE HAMILTON COUNTY DRAINAGE BOARD
IN THE MATTER OF

*Williams Creek Drain,
Spring Mill Run Drain, The Estates at Towne Meadow 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, Spring Mill Run Drain, The Estates at Towne Meadow Arm** on **April 27, 2020** 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,
Springmill Run Drain, The Estates at Towne Meadow Arm**

NOTICE

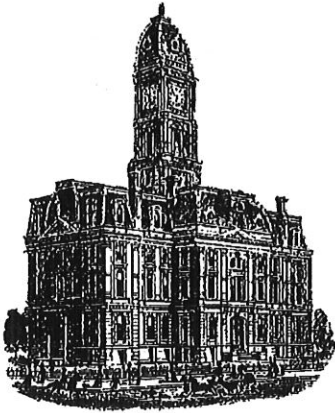
Notice is hereby given pursuant to Section 405 of the 1965 Indiana Drainage Code that this Board, prior to final adjournment on **April 27, 2020** has issued an order adopting the Schedule of Assessments, filed the same and made public announcement thereof at the hearing and ordered publication. If judicial 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: Pamela Louks

ONE TIME ONLY

KCW



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Hamilton County

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Surveyor of Hamilton County
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Fax (317) 776-9628

Suite 188
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Noblesville, Indiana 46060-2230

To: Hamilton County Drainage Board

March 31, 2022

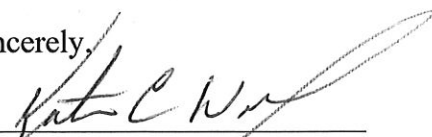
Re: Williams Creek D.A.-Springmill Run Drain: Estates at Towne Meadows Arm

Attached are as-built, certificate of completion & compliance, and other information for Estates at Towne Meadow. 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 20, 2020. The report was approved by the Board at the hearing held April 27, 2020. (See Drainage Board Minutes Book 19, Pages 190-192) The changes are as follows: the 12" RCP was lengthened from 1,016 feet to 1,075 feet. The 15" RCP was lengthened from 1,912 to 1,940 feet. The 18" RCP was lengthened from 843 feet to 850 feet. The 21" RCP was lengthened from 410 feet to 516 feet. The 24" RCP was lengthened from 484 feet to 537 feet. The 30" RCP was lengthened from 735 feet to 746 feet. The 36" RCP was lengthened from 178 feet to 207 feet. The 6" SSD was lengthened from 4,425 feet to 4,254 feet. The project added 68 feet of open ditch in the detention area where the existing drain was removed. The length of the drain due to the changes described above is now **10,193 feet**. It should be noted that this project removed 194 feet of the 2002 University High School 2002 Arm.

The non-enforcement was approved by the Board at its meeting on April 27, 2020 and recorded under instrument #2022015016. In accordance with IC 36-7-4-709 the petitioner did not submit a surety.

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

Sincerely,

Kenton C. Ward, CFM
Hamilton County Surveyor



ENGINEER'S CERTIFICATION

I, the undersigned engineer Duane A. Sharrer, for the sanitary sewers for the development project known as Estates at Towne Meadow, (The Project) located at Towne Road south of 116th Street, Carmel, Indiana in Hamilton County, Indiana, do hereby certify that to the best of my knowledge, The Project has been built in accordance with the plans approved by the TriCo Regional Sewer District (The District) and has passed all tests required under State law and/or the rules and ordinances of The District.

Dated: 1/23/2020

Engineering Firm: Weihe Engineers, Inc.

Signed by: *Duane A. Sharrer*


Printed Name: Duane A. Sharrer

Title: Vice President, Residential Development





DULY ENTERED FOR TAXATION *SML*
 Subject to final acceptance for transfer
 17 day of February, 2022
Rubin M. Mills Auditor of Hamilton County
 Parcel # _____

2022008981 CERT CORR \$25.00
 02/17/2022 02:53:07P 4 PGS
 Jennifer Hayden
 HAMILTON County Recorder IN
 Recorded as Presented


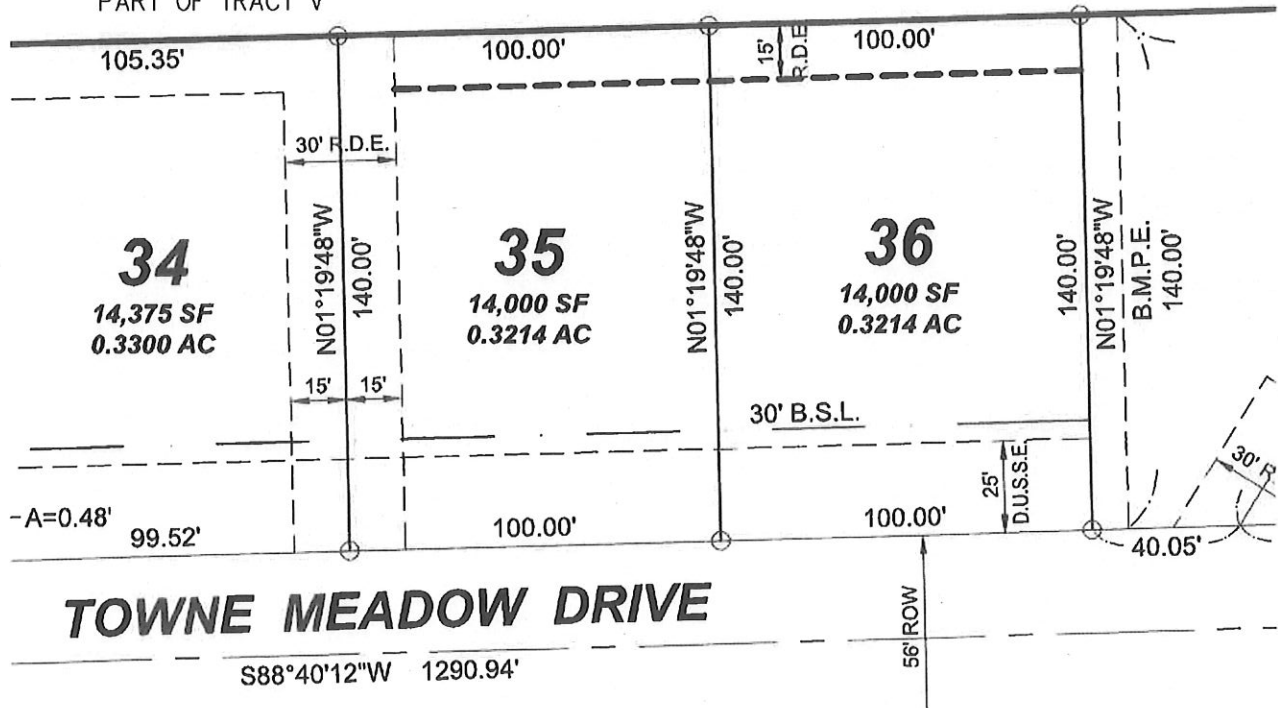
④ 25.

CERTIFICATE OF CORRECTION / AMENDMENT

I, herby certify that I prepared the secondary plat known as "THE ESTATES AT TOWNE MEADOWS," a subdivision in Hamilton County, Indiana, the plat of which is recorded as Instrument number 2020005588 on January 31, 2020 in the Office of the Recorder of Hamilton County, Indiana.

This instrument is filed for the purpose of amending said Plat to include the following R.D.E. easements;

UNIVERSITY HIGH SCHOOL
 OF INDIANA, INC.
 PART OF INST. #2011006809
 PART OF TRACT V

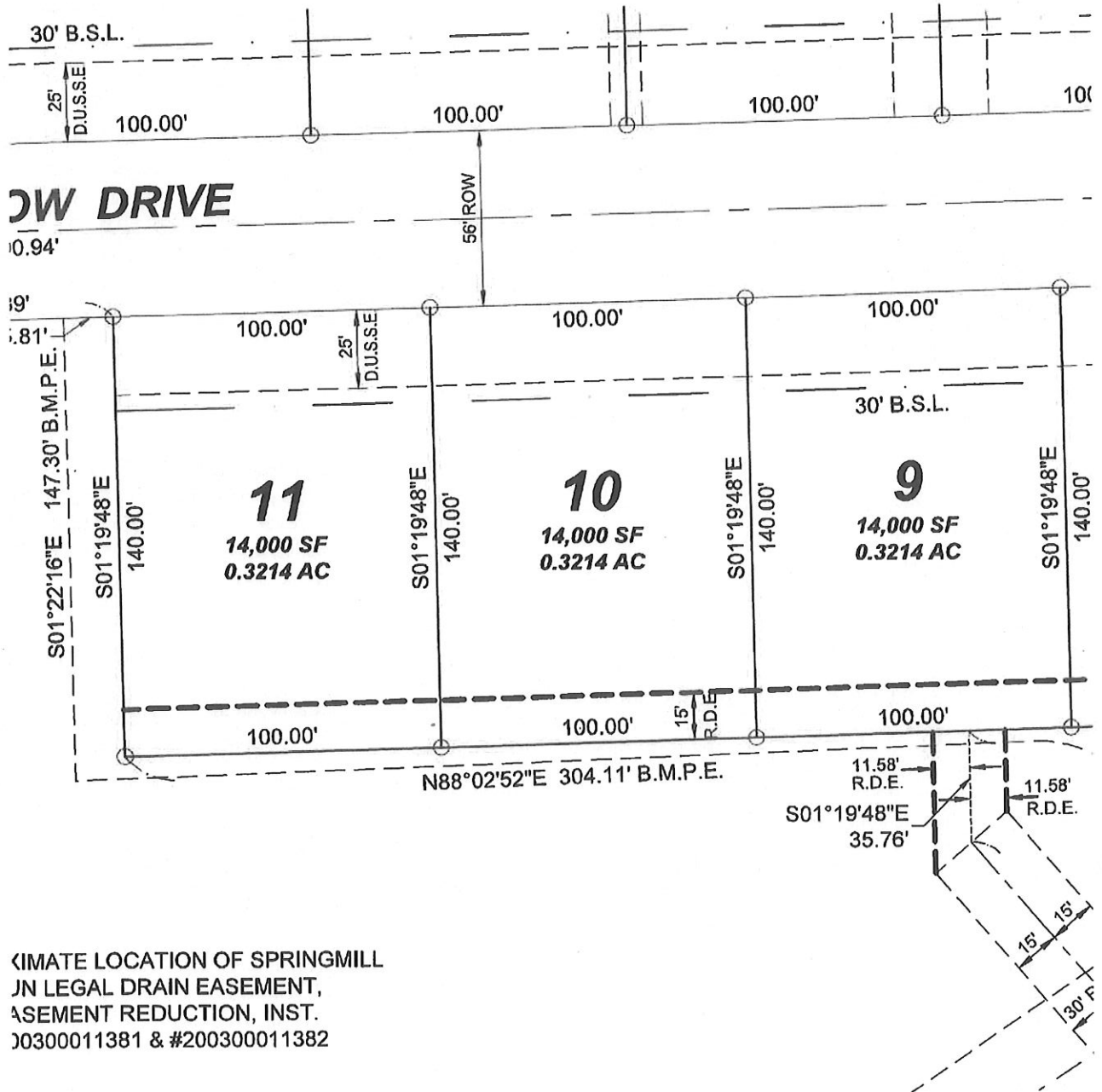


Engineers
 Scientists
 Surveyors

9420 Calumet Avenue
 St. John, IN 46373
 219-314-1467 voice
 v3co.com

PREPARED FOR:
 PLP UHSProperties, LLC
 9757 Westpoint Drive, Suite 600
 Indianapolis, IN 46256
 317-818-2900

PROJECT NO. 18414
 GROUP NO. VP04.2
 SCALE: 1"=50'
 DATE: 02/07/2022



APPROXIMATE LOCATION OF SPRINGMILL
 EASEMENT LEGAL DRAIN EASEMENT,
 EASEMENT REDUCTION, INST.
 #200300011381 & #200300011382

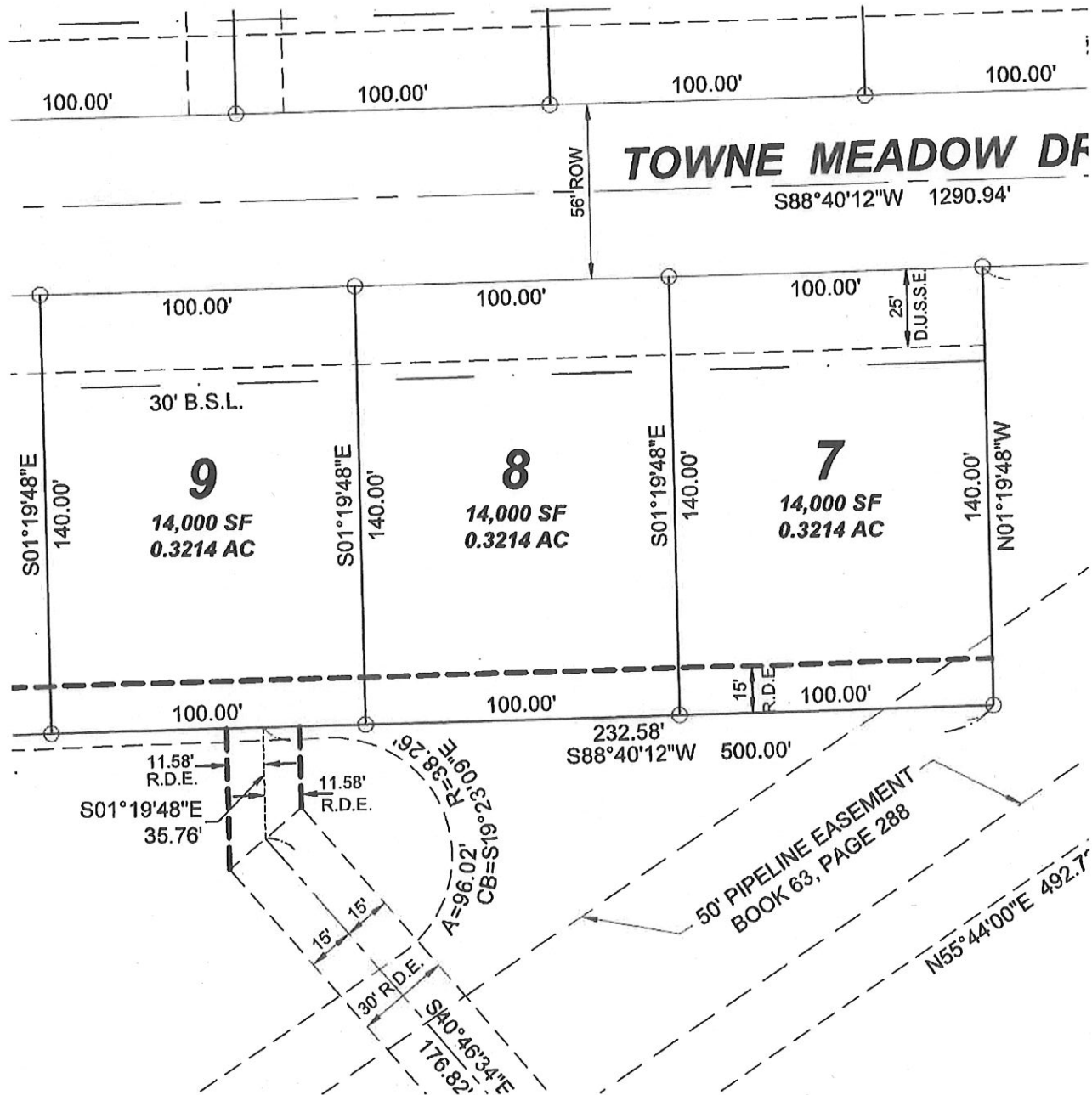


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DATE: 02/07/2022



CERTIFICATE OF CORRECTION / AMENDMENT

Certified this 7th day of FEBRUARY, 2022



Anthony J. Strickland
Registered Indiana Land Surveyor
LS20800143



State Of Indiana Required Statements For Recordation: I affirm, under the penalties for perjury, that I have taken reasonable care to redact each Social Security Number in this document, unless required by law, Anthony J. Strickland.

This document was prepared by Anthony J. Strickland.

PAGE 4 OF 4



Engineers
Scientists
Surveyors

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St. John, IN 46373
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v3co.com

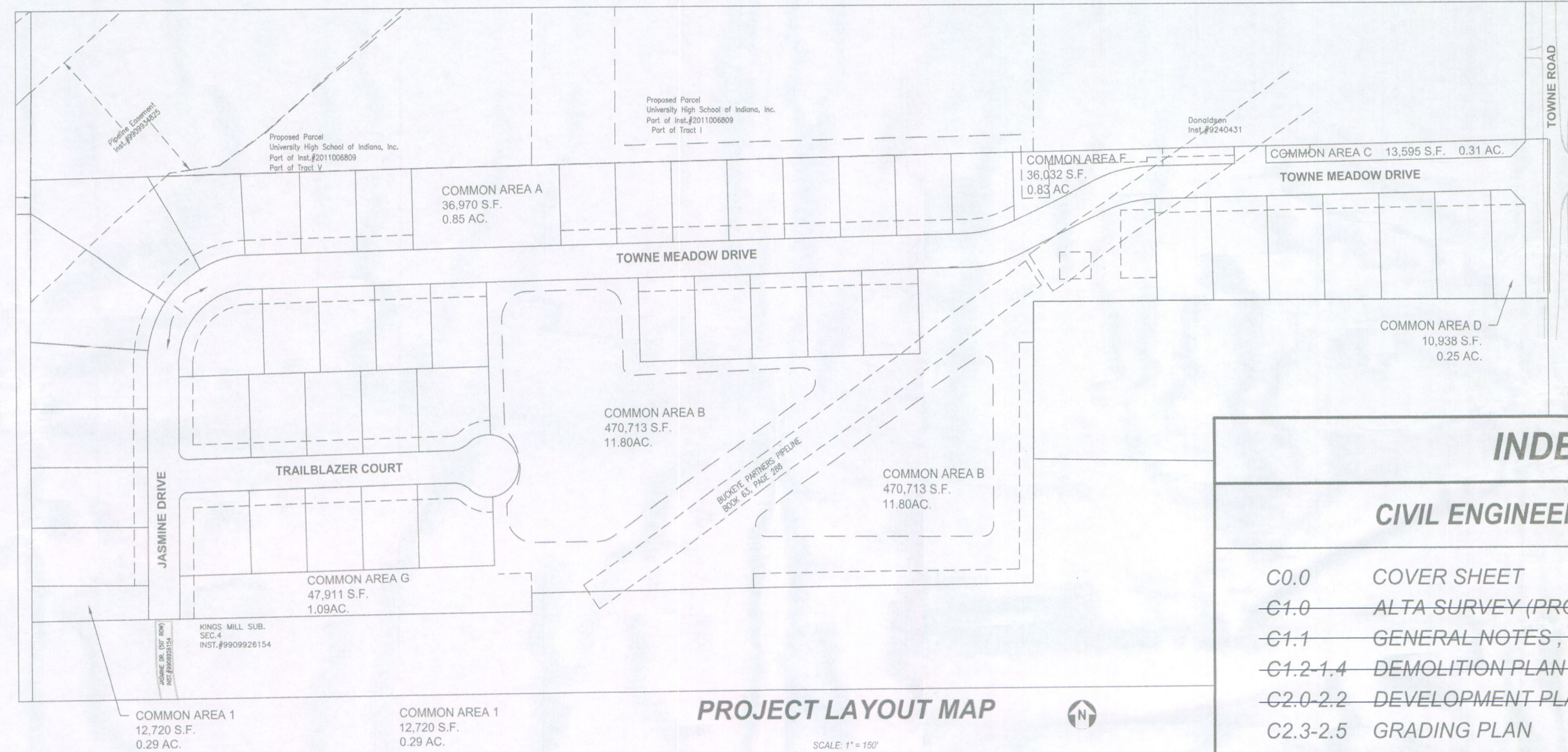
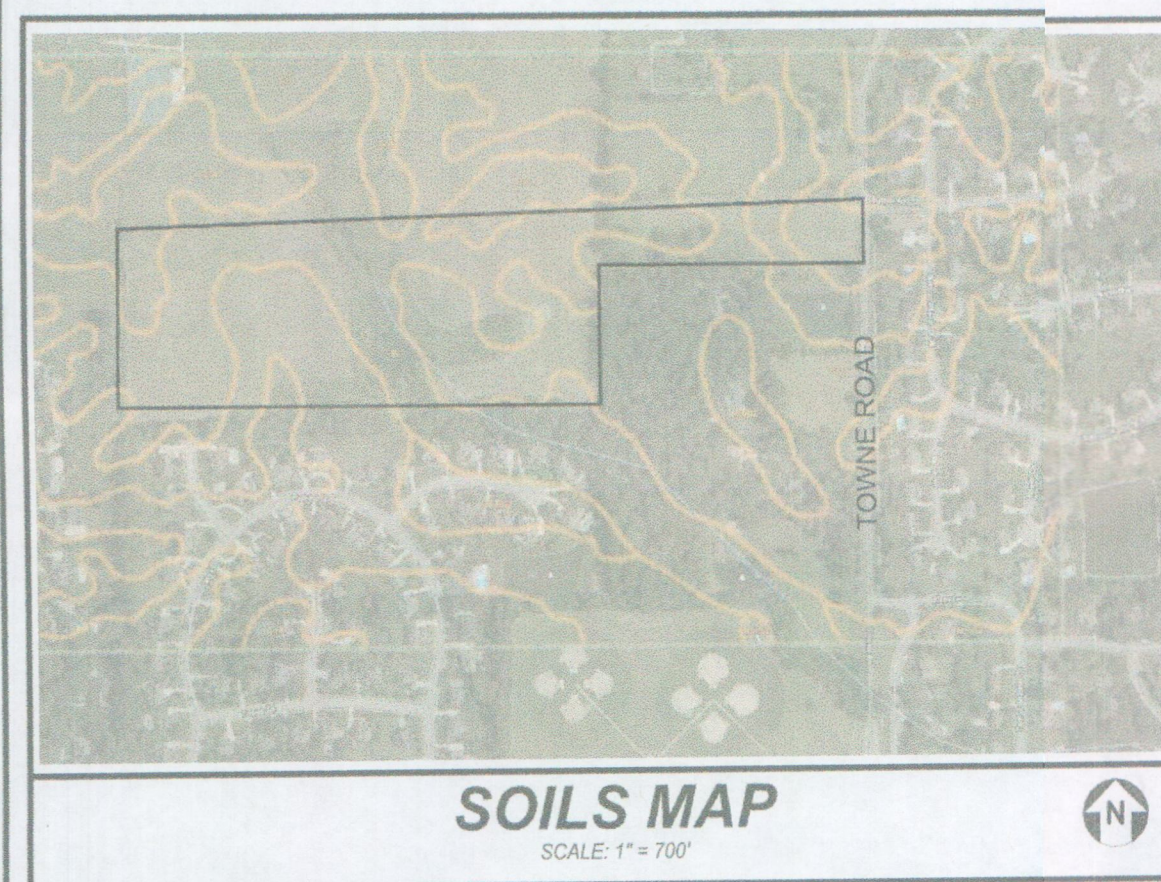
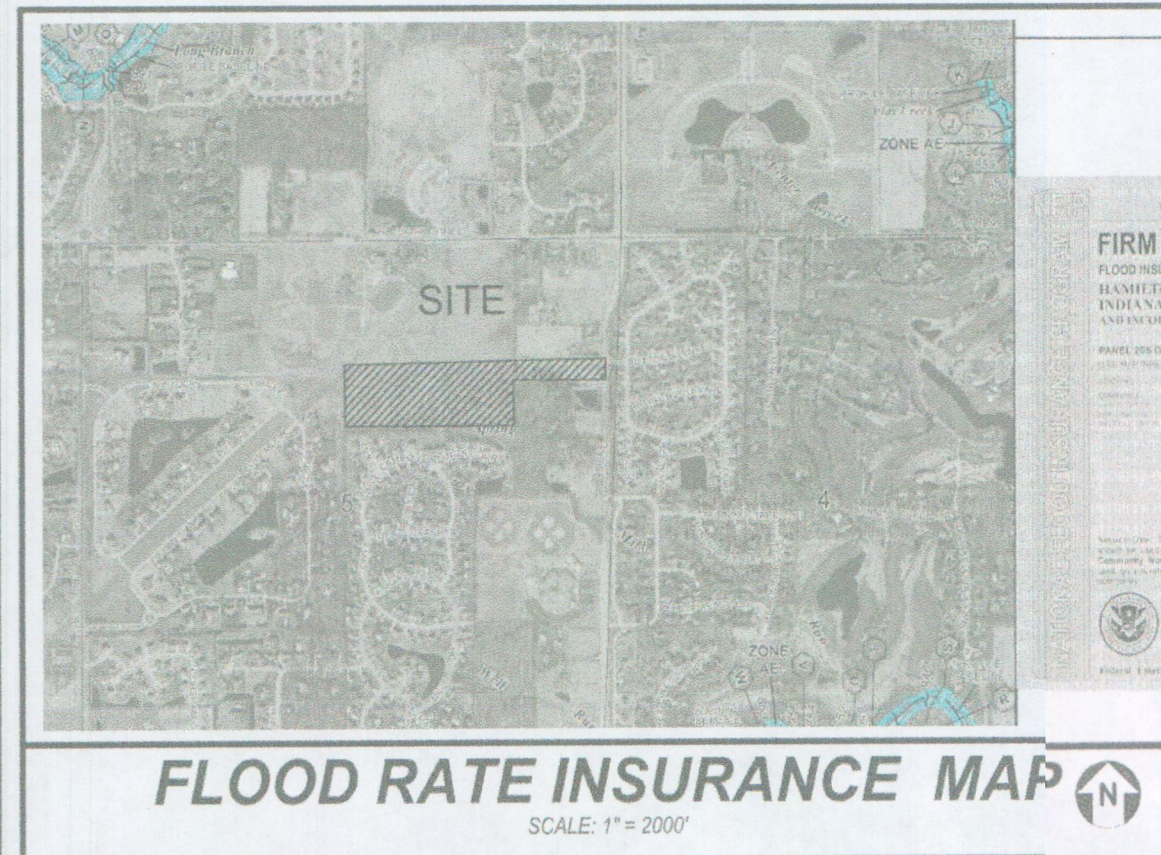
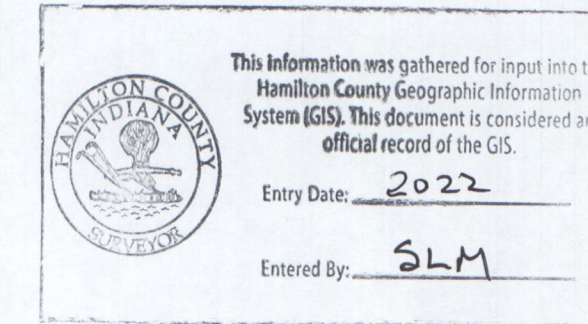
PREPARED FOR:
PLP UHSProperties, LLC
9757 Westpoint Drive, Suite 600
Indianapolis, IN 46256
317-818-2900

PROJECT NO. 18414
GROUP NO. VP04.2
SCALE: N/A
DATE: 02/07/2022

FINAL ENGINEERING PLANS RECORD DRAWING
FOR

ESTATES AT TOWNE MEADOW

CARMEL, INDIANA



PROJECT TEAM	
OWNER/DEVELOPER	PLP UHS PROPERTIES L.L.C. 9757 Westpoint Drive Indianapolis, Indiana 46256 317.818.2900 Contact: Tim Walter Email: twalter@platinum-properties.com
ENGINEER	V3 Companies, Ltd. 619 North Pennsylvania Street Indianapolis, IN 46204 317.423.0690 Project Manager: Jim Rinehart jrinehart@v3co.com
SURVEYOR	SEA GROUP 494 Gradle Drive Carmel, IN 46032 317.844.3333 317.844.3383
OPERATING AUTHORITY:	CITY OF CARMEL

INDEX	
CIVIL ENGINEERING PLANS	
C0.0	COVER SHEET
C1.0	ALTA SURVEY (PROVIDED BY SEA GROUP)
C1.1	GENERAL NOTES, LEGEND, AND ABBREVIATIONS
C1.2-1.4	DEMOLITION PLAN
C2.0-2.2	DEVELOPMENT PLAN
C2.3-2.5	GRADING PLAN
C2.6-2.8	EMERGENCY FLOOD ROUTING
C3.0-3.2	EROSION CONTROL PLAN
C3.3	EROSION CONTROL DETAILS
C3.4	STORMWATER POLLUTION PREVENTION PLAN
C4.0	TOWNE MEADOW DRIVE PLAN & PROFILE
C4.1	TOWNE MEADOW DRIVE PLAN & PROFILE
C4.2	JASMINE DRIVE PLAN & PROFILE
C4.3	UNIVERSITY COURT PLAN & PROFILE
C4.4	ENTRANCE AND INTERSECTION DETAILS
C4.5	SIGNAGE AND PAVEMENT MARKING PLAN
C5.0-5.3	SANITARY SEWER PLAN & PROFILE
C6.0-6.7	STORM SEWER PLAN & PROFILE
C7.0-7.2	WATER PLAN
C7.3	WATER DETAILS
C8.0-8.7	CONSTRUCTION DETAILS
C9.0	SPECIFICATIONS
L1.0-1.5	LANDSCAPE PLAN
L2.0-2.1	LANDSCAPE DETAILS

LAND DESCRIPTION

LAND DESCRIPTION PER SURVEY

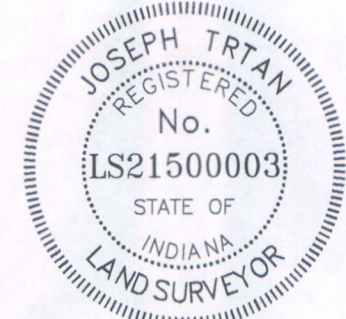
PART OF THE NORTHEAST QUARTER OF SECTION 5, TOWNSHIP 17 NORTH, RANGE 3 EAST OF THE SECOND PRINCIPAL MERIDIAN, IN HAMILTON COUNTY, INDIANA, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID NORTHEAST QUARTER; THENCE SOUTH 00 DEGREES 04 MINUTES 12 SECONDS WEST (STATE PLANE BEARING) ALONG THE EAST LINE OF SAID NORTHEAST QUARTER A DISTANCE OF 1101.55 FEET TO THE POINT OF BEGINNING, SAID POINT BEING THE NORTHEAST CORNER OF TRACT II AS DESCRIBED IN INSTRUMENT NUMBER 2011006809 AND RECORDED IN THE OFFICE OF THE RECORDER OF SAID COUNTY; THENCE SOUTH 88 DEGREES 40 MINUTES 12 SECONDS WEST ALONG THE NORTH LINE THEREOF AND THE WESTERLY EXTENSION THEREOF A DISTANCE OF 2710.60 FEET TO THE WEST LINE OF SAID NORTHEAST QUARTER SECTION; THENCE SOUTH 00 DEGREES 10 MINUTES 50 SECONDS WEST ALONG THE WEST LINE THEREOF A DISTANCE OF 744.39 FEET TO THE NORTH LINE OF KINGS MILL SUBDIVISION; RECORDED AS INSTRUMENT NUMBER 990926164; THENCE NORTH 89 DEGREES 20 MINUTES 19 SECONDS EAST ALONG THE NORTH LINE THEREOF A DISTANCE OF 892.80 FEET; THENCE NORTH 00 DEGREES 16 MINUTES 43 SECONDS WEST A DISTANCE OF 32.47 FEET TO THE SOUTHWEST CORNER OF TRACT I AS DESCRIBED IN SAID INSTRUMENT NUMBER 2011006809; THENCE NORTH 89 DEGREES 09 MINUTES 18 SECONDS EAST ALONG THE SOUTH LINE THEREOF A DISTANCE OF 897.59 FEET; THENCE NORTH 00 DEGREES 13 MINUTES 35 SECONDS EAST ALONG THE EAST LINE THEREOF A DISTANCE OF 471.89 FEET; THENCE NORTH 89 DEGREES 45 MINUTES 39 SECONDS EAST ALONG THE SOUTH LINE OF SAID TRACT II OF INSTRUMENT NUMBER 2011006809 A DISTANCE OF 919.84 FEET TO THE EAST LINE OF SAID NORTHEAST QUARTER SECTION; THENCE NORTH 00 DEGREES 04 MINUTES 12 SECONDS EAST ALONG THE EAST LINE THEREOF A DISTANCE OF 276.36 FEET TO THE POINT OF BEGINNING, CONTAINING 35.97 ACRES, MORE OR LESS.

WEIHE ENGINEERS
Land Surveying | Civil Engineering
Landscape Architecture

10505 N. College Avenue
Indianapolis, Indiana 46280
weihe.net
317 | 846 - 6611
800 | 452 - 6408
317 | 843 - 0546 fax
ALLAN H. WEIHE, P.E., L.S. - FOUNDER

RECORD DRAWING
1/20/2020
JOSEPH TRTAN, LS21500003



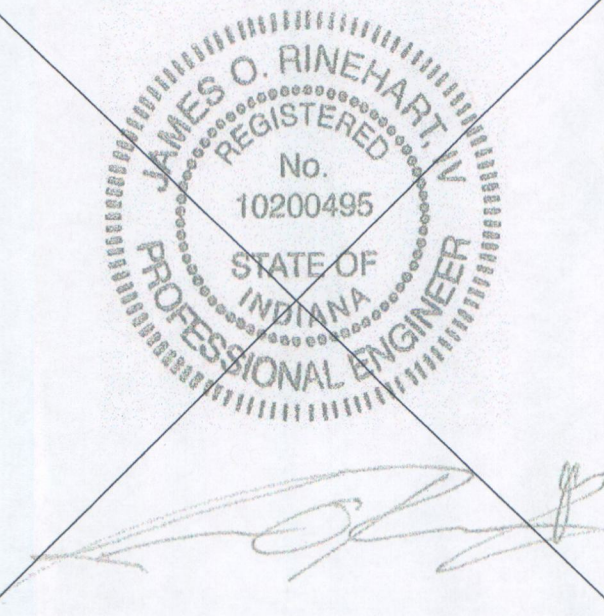
ALL IMPROVEMENTS HAVE BEEN INSTALLED IN REASONABLE COMPLIANCE WITH THE ORIGINAL DESIGN PLANS, WITH RESPECT TO HORIZONTAL LOCATIONS AND GRADES, AND ANY DEVIATIONS OF LOCATIONS, GRADE OR MATERIAL. WEIHE ENGINEERS JOB NUMBER W190059

FLOOD NOTE:

THE SUBJECT DEVELOPABLE AREA LIES ENTIRELY IN FLOOD HAZARD ZONE "X". FLOOD ZONE DETERMINATION IS AS SCALED FROM THE FLOOD INSURANCE MAP (FIRM) FOR HAMILTON COUNTY, INDIANA, COMMUNITY NAME OF CARMEL, COMMUNITY NUMBER 180081, MAP NUMBER 18057C0205G, PANEL NUMBER 205 OF 300, RETRIEVED FROM FEMA.GOV ON DECEMBER 19, 2018.

REFERENCE NFIP MAP #: 18057C0205G
EFFECTIVE DATE: NOVEMBER 19, 2014

- NOTES:**
1. THE PRESENT ZONING CLASSIFICATION IS S-1.
 2. THE TOTAL AREA OF THE PARCEL IS 35.97± GROSS ACRES.
 3. AS SHOWN, 61% OF THE SITE IS DEDICATED TO OPEN SPACE
 4. THE DESIGN SPEED LIMIT IS 25 MPH
 5. FRONT SETBACK IS 30 FEET
 6. REAR YARD SETBACK IS 20 FEET
 7. MIN. SIDE YARD IS 5 FEET
 8. AGGREGATE SIDE YARD SETBACK IS 20 FEET
 9. TOTAL DISTURBANCE IS 33 ACRES



NO.	DATE	DESCRIPTION	REVISIONS

PROJECT NO: 16414
PROJECT MANAGER: JOR
DESIGNED BY: JOR
DRAWN BY: RLD

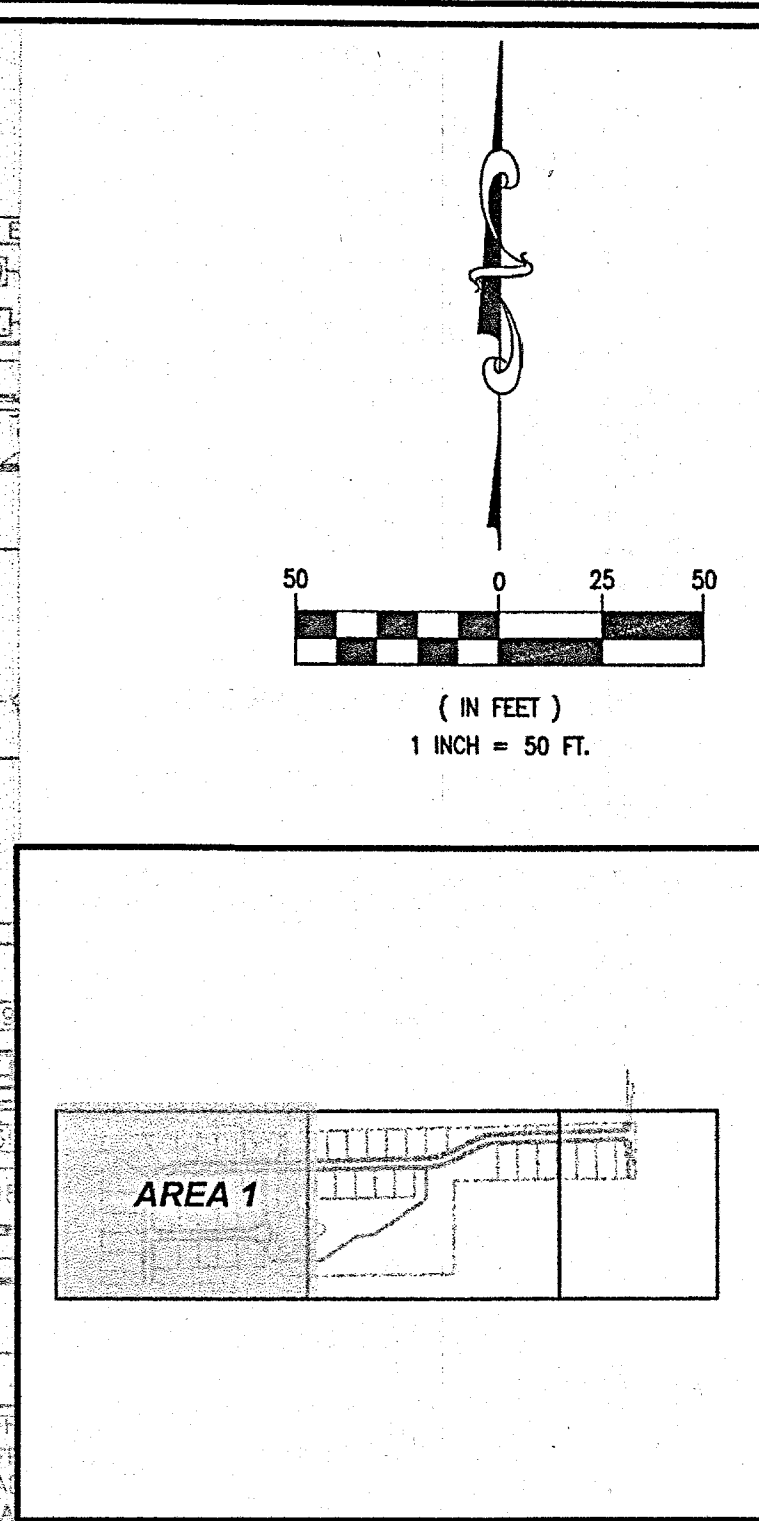
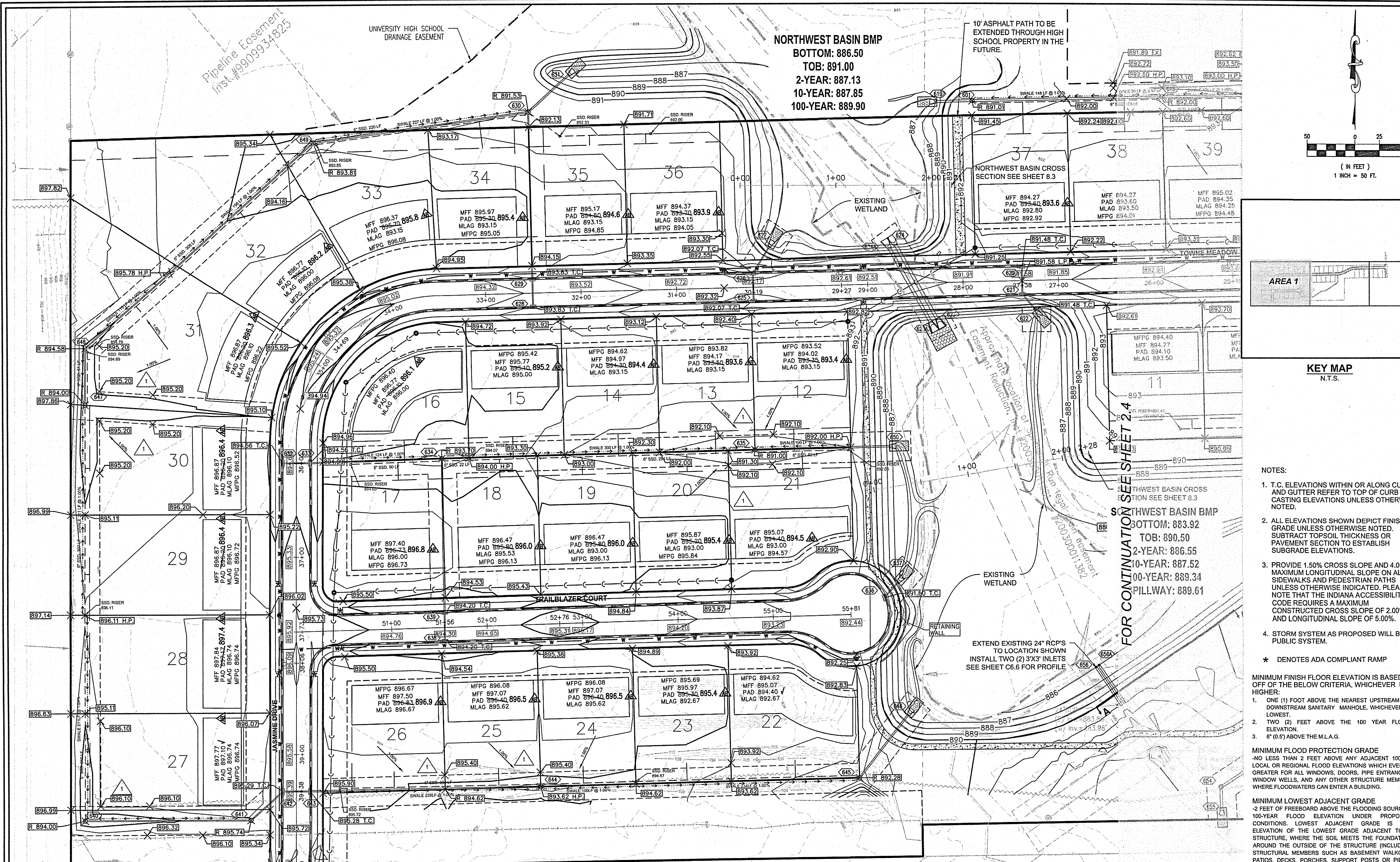
COVER SHEET

ESTATES AT TOWNE MEADOW

CARMEL INDIANA

619 N. Pennsylvania St.
Indianapolis, IN 46204
317.423.0690 phone
www.v3co.com

DRAWING NO:
C0.0



NO.	DATE	DESCRIPTION	REVISIONS			
			NO.	DATE	DESCRIPTION	PLD

ORIGINAL ISSUE DATE: DECEMBER 14, 2018

- NOTES:**
- T.C. ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO TOP OF CURB / CASTING ELEVATIONS UNLESS OTHERWISE NOTED.
 - ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. SUBTRACT TOPSOIL THICKNESS OR PAVEMENT SECTION TO ESTABLISH SUBGRADE ELEVATIONS.
 - PROVIDE 1.50% CROSS SLOPE AND 4.00% MAXIMUM LONGITUDINAL SLOPE ON ALL SIDEWALKS AND PEDESTRIAN PATHS UNLESS OTHERWISE INDICATED. PLEASE NOTE THAT THE INDIANA ACCESSIBILITY CODE REQUIRES A MAXIMUM CONSTRUCTED CROSS SLOPE OF 2.00% AND LONGITUDINAL SLOPE OF 5.00%.
 - STORM SYSTEM AS PROPOSED WILL BE A PUBLIC SYSTEM.
- * DENOTES ADA COMPLIANT RAMP

- MINIMUM FINISH FLOOR ELEVATION IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:
- ONE (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE, WHICHEVER IS LOWEST.
 - TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.
 - SIX (6) INCHES ABOVE THE M.L.A.G.
- MINIMUM FLOOD PROTECTION GRADE
 NO LESS THAN 2 FEET ABOVE ANY ADJACENT 100-YR LOCAL OR REGIONAL FLOOD ELEVATIONS WHICH EVER IS GREATER FOR ALL WINDOWS, DOORS, PIPE ENTRANCES, WINDOW WELLS, AND ANY OTHER STRUCTURE MEMBER WHERE FLOODWATERS CAN ENTER A BUILDING.
- MINIMUM LOWEST ADJACENT GRADE
 2 FEET OF FREEBOARD ABOVE THE FLOODING SOURCES 100-YEAR FLOOD ELEVATION UNDER PROPOSED CONDITIONS. LOWEST ADJACENT GRADE IS THE ELEVATION OF THE LOWEST GRADE ADJACENT TO A STRUCTURE, WHERE THE SOIL MEETS THE FOUNDATION AROUND THE OUTSIDE OF THE STRUCTURE (INCLUDING STRUCTURAL MEMBERS SUCH AS BASEMENT WALKOUT, PATIOS, DECKS, PORCHES, SUPPORT POSTS OR PIERS, AND RIM OF THE WINDOW WELL).
- SPECIAL DRAINAGE GRADING TO BE COMPLETED AND CONFIRMED BY HOME BUILDER.

PROJECT NO.: 18414
 PROJECT MANAGER: JOR
 DESIGNED BY: JOR
 DRAWN BY: PLD

2.3 - GRADING PLAN
ESTATES AT TOWNE MEADOW
 INDIANA
 CARMEL

619 N Pennsylvania St
 Indianapolis, IN 46204
 317.423.0890 phone
 www.v3co.com

V3CO

DRAWING NO.

C2.3

MH-KM407
 TOC Elev.=896.47
 S.10" PVC = 877.27'

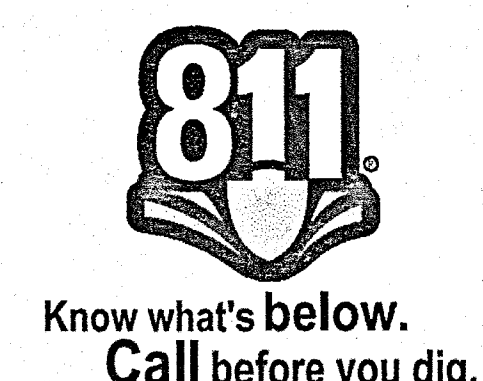
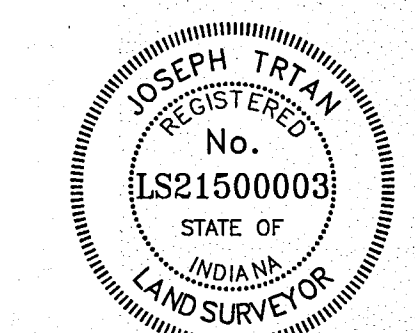
Existing Sanitary Sewer Manhole
 TOC Elev.=896.44'
 N./S.10" PVC = 876.24'

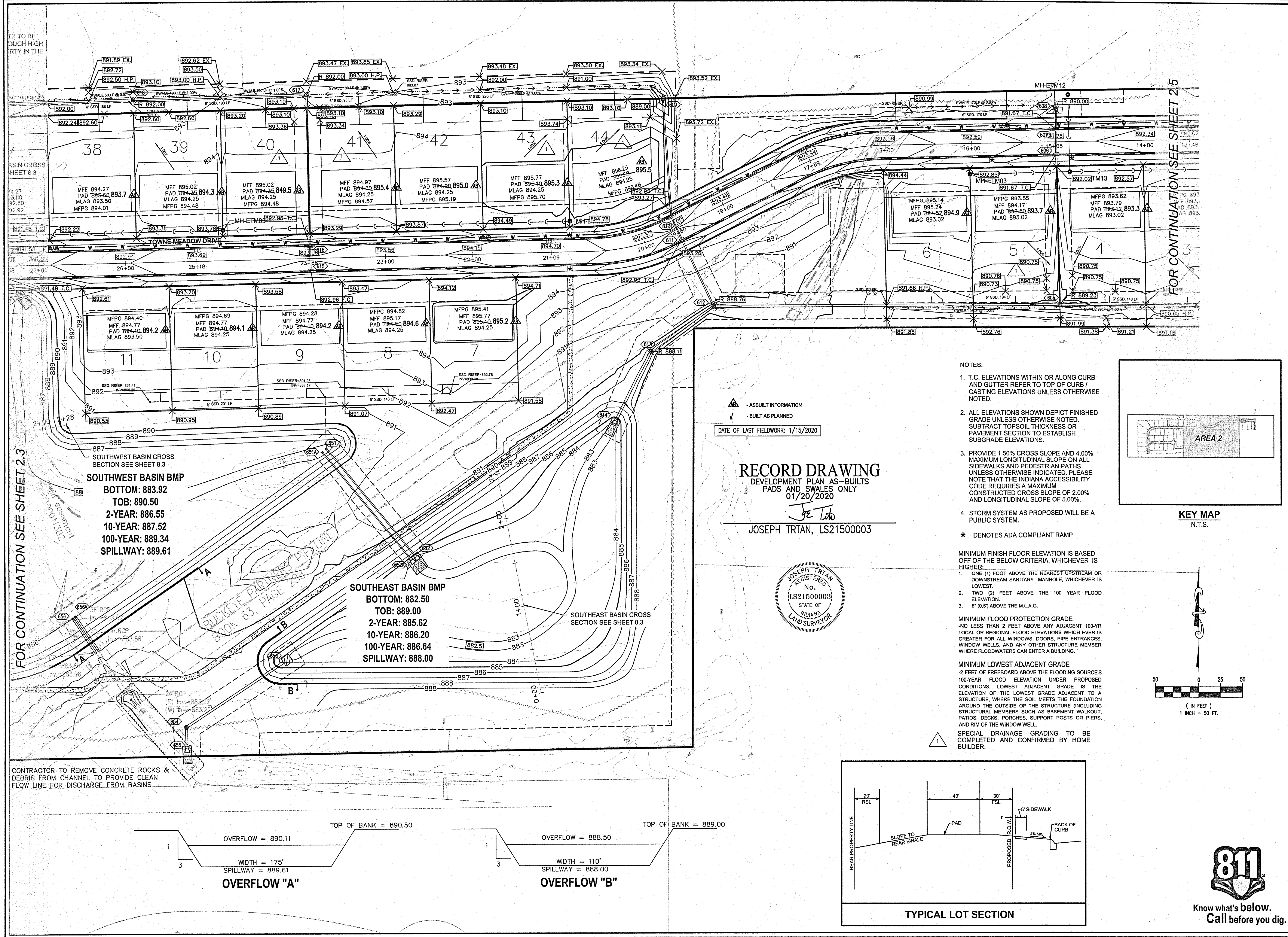
AS-BUILT INFORMATION
 BUILT AS PLANNED

DATE OF LAST FIELDWORK: 1/15/2020

RECORD DRAWING
 DEVELOPMENT PLAN AS-BUILTS
 PADS AND SWALES ONLY
 1/20/2020

JOSEPH TRTAN, LS21500003



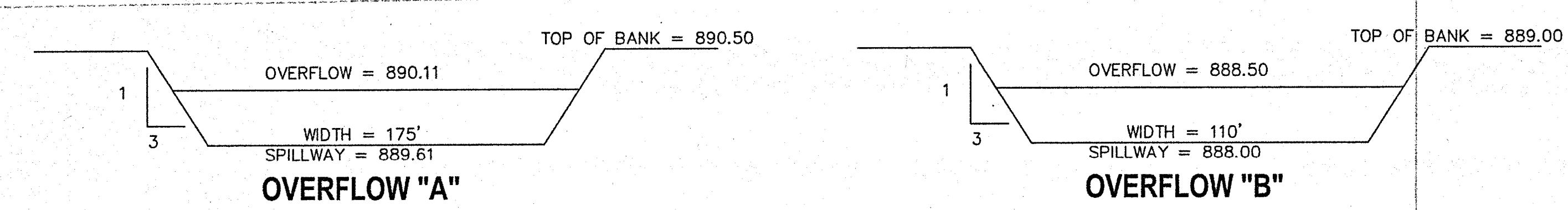


FOR CONTINUATION SEE SHEET 2.3

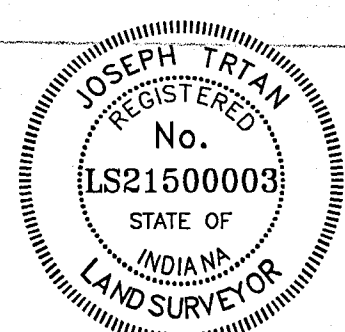
FOR CONTINUATION SEE SHEET 2.5

SOUTHWEST BASIN BMP
 BOTTOM: 883.92
 TOB: 890.50
 2-YEAR: 886.55
 10-YEAR: 887.52
 100-YEAR: 889.34
 SPILLWAY: 889.61

SOUTHEAST BASIN BMP
 BOTTOM: 882.50
 TOB: 889.00
 2-YEAR: 885.62
 10-YEAR: 886.20
 100-YEAR: 886.64
 SPILLWAY: 888.00

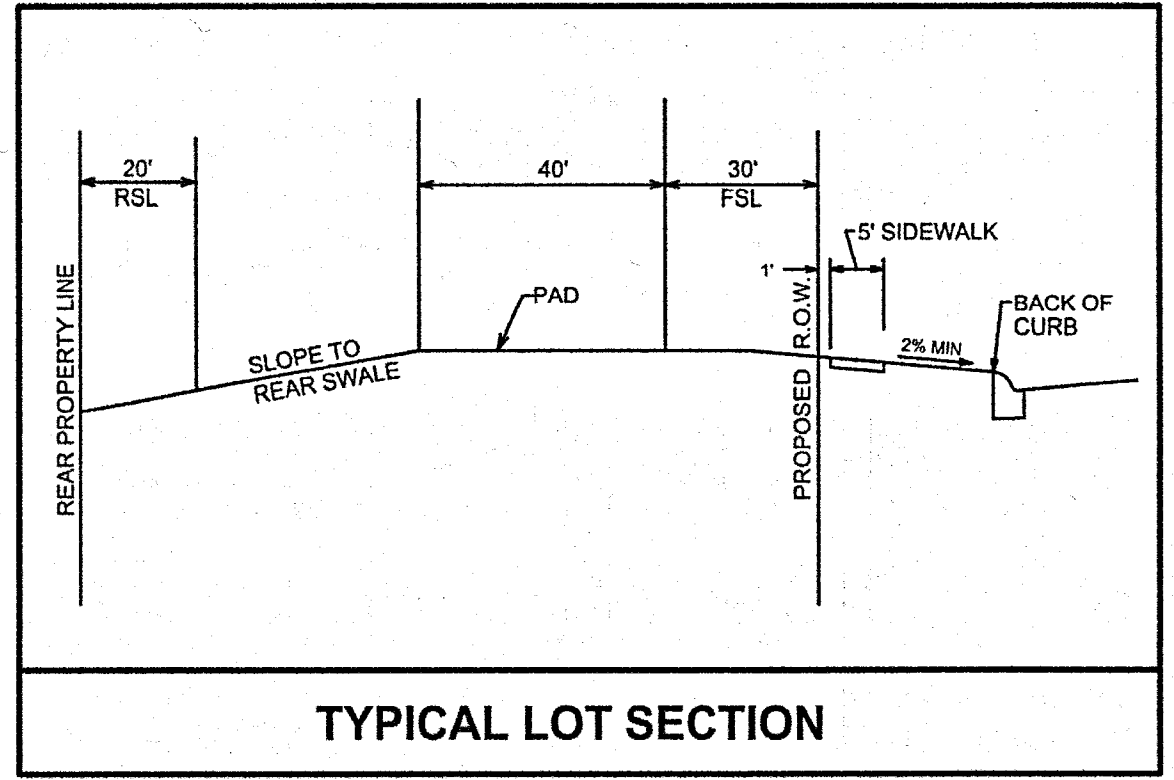
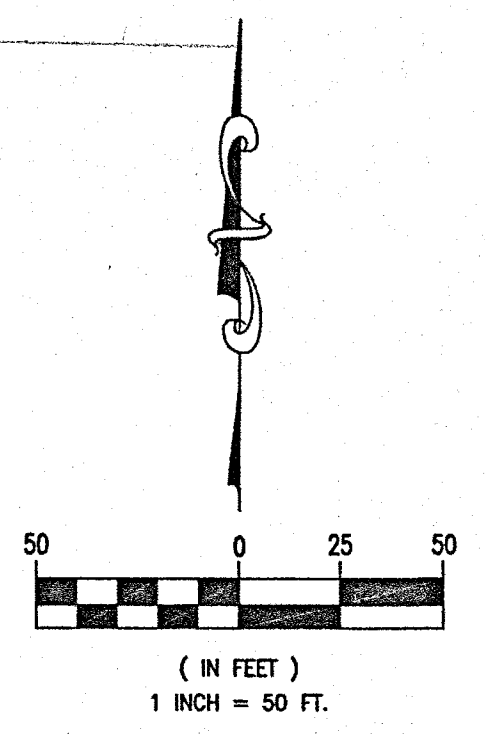
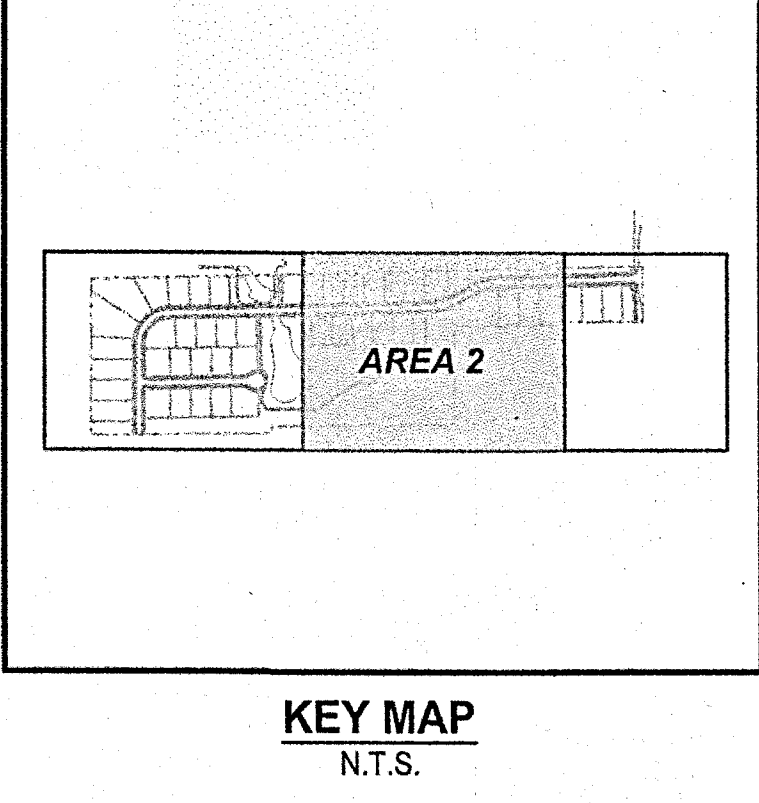


RECORD DRAWING
 DEVELOPMENT PLAN AS-BUILTS
 PADS AND SWALES ONLY
 01/20/2020
 JOSEPH TRTAN, LS21500003



NOTES:

- T.C. ELEVATIONS WITHIN OR ALONG CURB AND GUTTER REFER TO TOP OF CURB / CASTING ELEVATIONS UNLESS OTHERWISE NOTED.
 - ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. SUBTRACT TOPSOIL THICKNESS OR PAVEMENT SECTION TO ESTABLISH SUBGRADE ELEVATIONS.
 - PROVIDE 1.50% CROSS SLOPE AND 4.00% MAXIMUM LONGITUDINAL SLOPE ON ALL SIDEWALKS AND PEDESTRIAN PATHS UNLESS OTHERWISE INDICATED. PLEASE NOTE THAT THE INDIANA ACCESSIBILITY CODE REQUIRES A MAXIMUM CONSTRUCTED CROSS SLOPE OF 2.00% AND LONGITUDINAL SLOPE OF 5.00%.
 - STORM SYSTEM AS PROPOSED WILL BE A PUBLIC SYSTEM.
- * DENOTES ADA COMPLIANT RAMP
- MINIMUM FINISH FLOOR ELEVATION IS BASED OFF OF THE BELOW CRITERIA, WHICHEVER IS HIGHER:
- ONE (1) FOOT ABOVE THE NEAREST UPSTREAM OR DOWNSTREAM SANITARY MANHOLE, WHICHEVER IS LOWEST.
 - TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.
 - SIX (6) INCHES ABOVE THE M.L.A.G.
- MINIMUM FLOOD PROTECTION GRADE
 -NO LESS THAN 2 FEET ABOVE ANY ADJACENT 100-YR LOCAL OR REGIONAL FLOOD ELEVATIONS WHICH EVER IS GREATER FOR ALL WINDOWS, DOORS, PIPE ENTRANCES, WINDOW WELLS, AND ANY OTHER STRUCTURE MEMBER WHERE FLOODWATERS CAN ENTER A BUILDING.
- MINIMUM LOWEST ADJACENT GRADE
 -2 FEET OF FREEBOARD ABOVE THE FLOODING SOURCE'S 100-YEAR FLOOD ELEVATION UNDER PROPOSED CONDITIONS. LOWEST ADJACENT GRADE IS THE ELEVATION OF THE LOWEST GRADE ADJACENT TO A STRUCTURE, WHERE THE SOIL MEETS THE FOUNDATION AROUND THE OUTSIDE OF THE STRUCTURE INCLUDING STRUCTURAL MEMBERS SUCH AS BASEMENT WALKOUT, PATIOS, DECKS, PORCHES, SUPPORT POSTS OR PIERS, AND RIM OF THE WINDOW WELL.
- SPECIAL DRAINAGE GRADING TO BE COMPLETED AND CONFIRMED BY HOME BUILDER.



REVISIONS		NO.	DATE	DESCRIPTION

2.4 - GRADING PLAN
ESTATES AT TOWNE MEADOW
 CARMEL, INDIANA

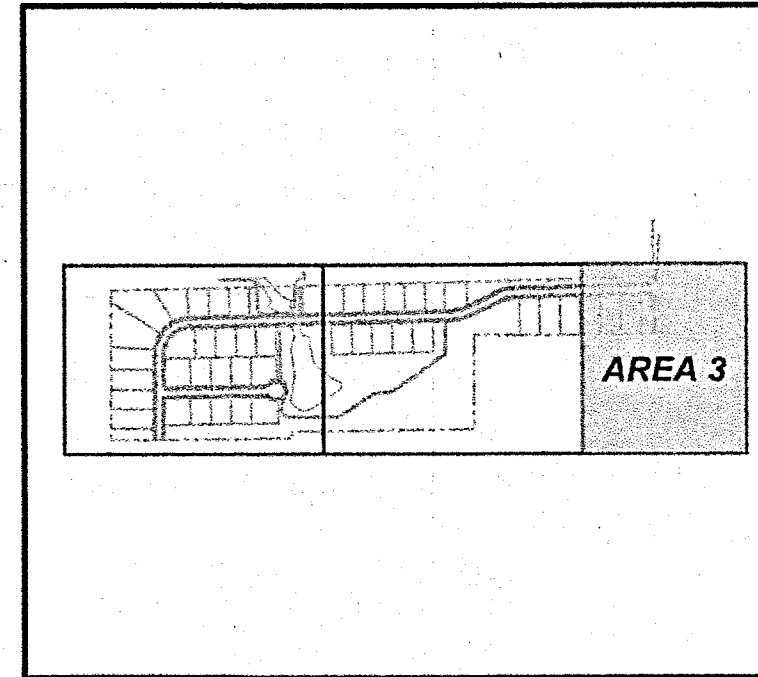
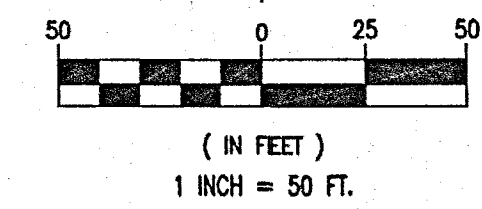
619 N Pennsylvania St
 Indianapolis, IN 46204
 317.423.0630 phone
 www.v3co.com

DRAWING NO.
C2.4



S 89°29'28" W 2707.54'

S 00°04'12" W 1197.55'



KEY MAP
N.T.S.

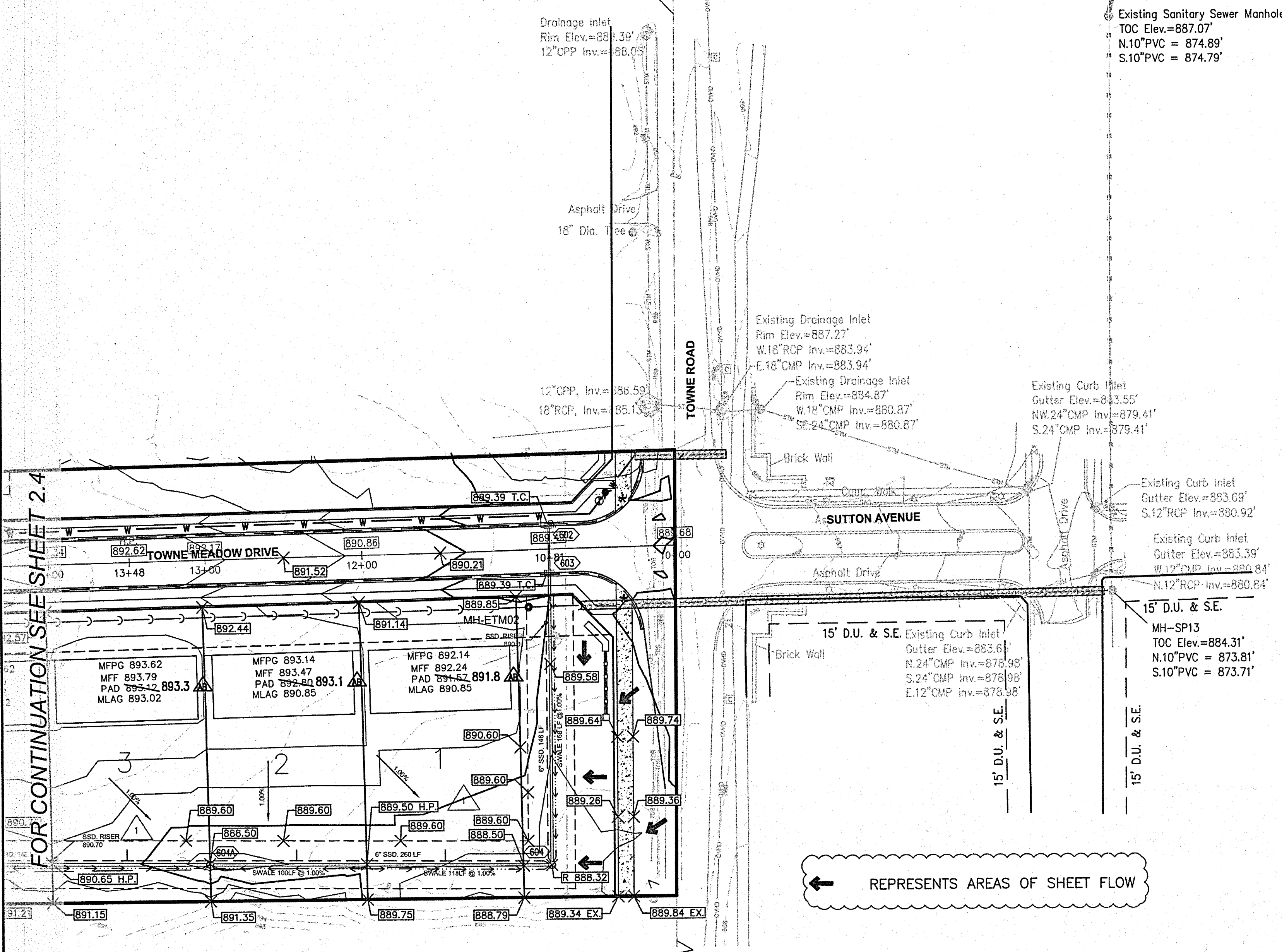
REVISIONS		DESCRIPTION
NO.	DATE	

PROJECT NO. 18414	ORIGINAL ISSUE DATE: DECEMBER 14, 2018
PROJECT MANAGER: JOR	DESIGNED BY: JOR
DRAWN BY: PLD	

2.5 - GRADING PLAN
ESTATES AT TOWNE MEADOW
INDIANA
CARMEL

619 N Pennsylvania St
Indianapolis, IN 46204
317.423.0690 phone
www.v3co.com

DRAWING NO. C2.5



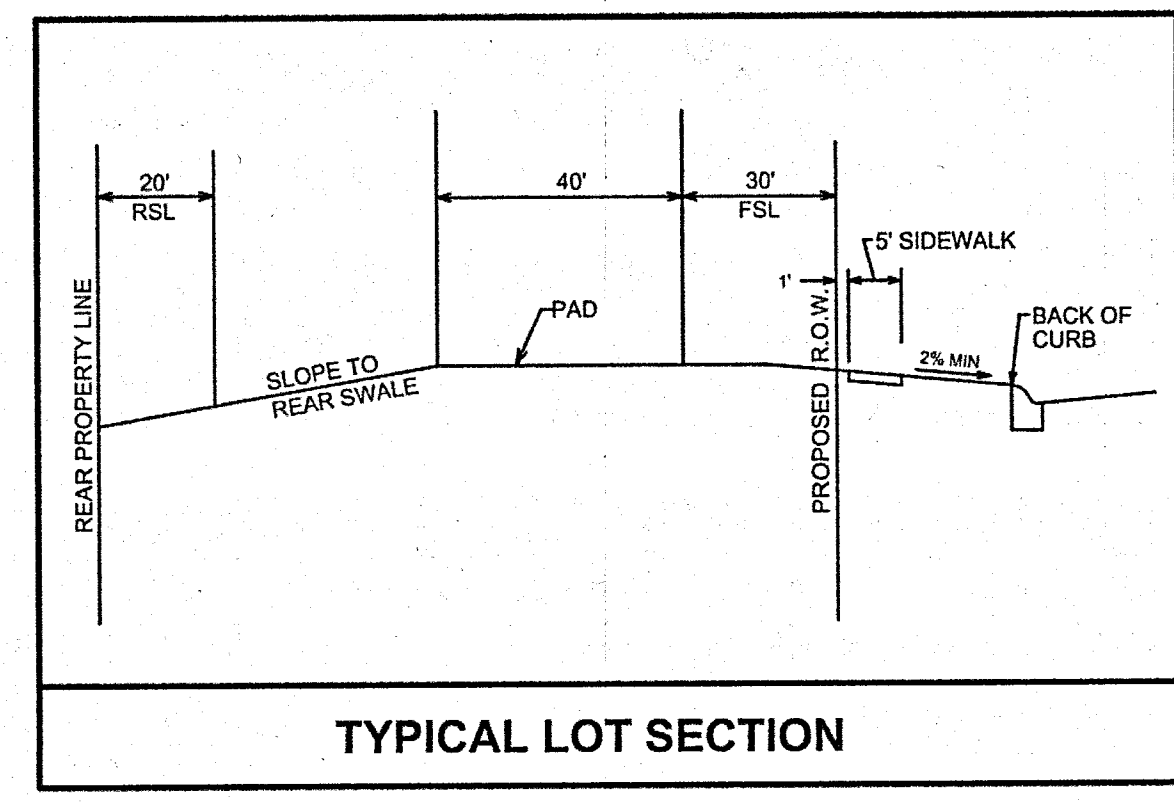
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 - ALL ELEVATIONS SHOWN DEPICT FINISHED GRADE UNLESS OTHERWISE NOTED. SUBTRACT TOPSOIL THICKNESS OR PAVEMENT STRUCTURE TO ESTABLISH SUBGRADE ELEVATIONS.
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- * DENOTES ADA COMPLIANT RAMP

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- TWO (2) FEET ABOVE THE 100 YEAR FLOOD ELEVATION.
- SIX (6) FEET ABOVE THE M.L.A.G.

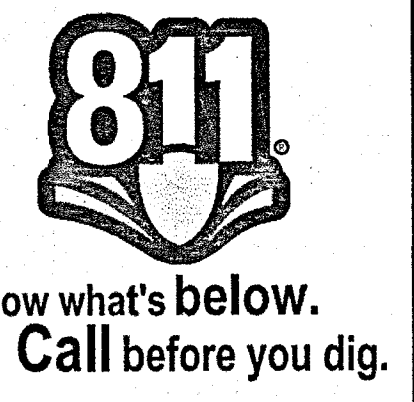
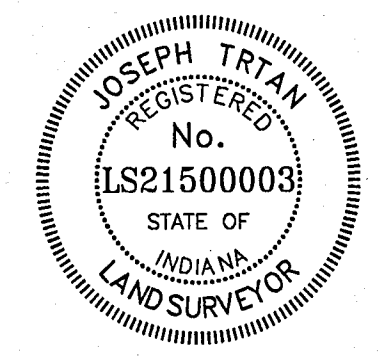
MINIMUM FLOOD PROTECTION GRADE
-NO LESS THAN 2 FEET ABOVE ANY ADJACENT 100-YR LOCAL OR REGIONAL FLOOD ELEVATIONS WHICH EVER IS GREATER FOR ALL WINDOWS, DOORS, PIPE ENTRANCES, WINDOW WELLS, AND ANY OTHER STRUCTURE MEMBER WHERE FLOODWATERS CAN ENTER A BUILDING.

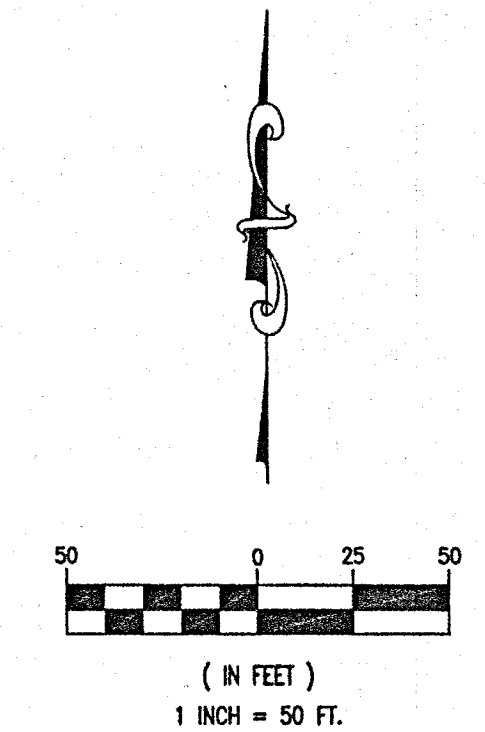
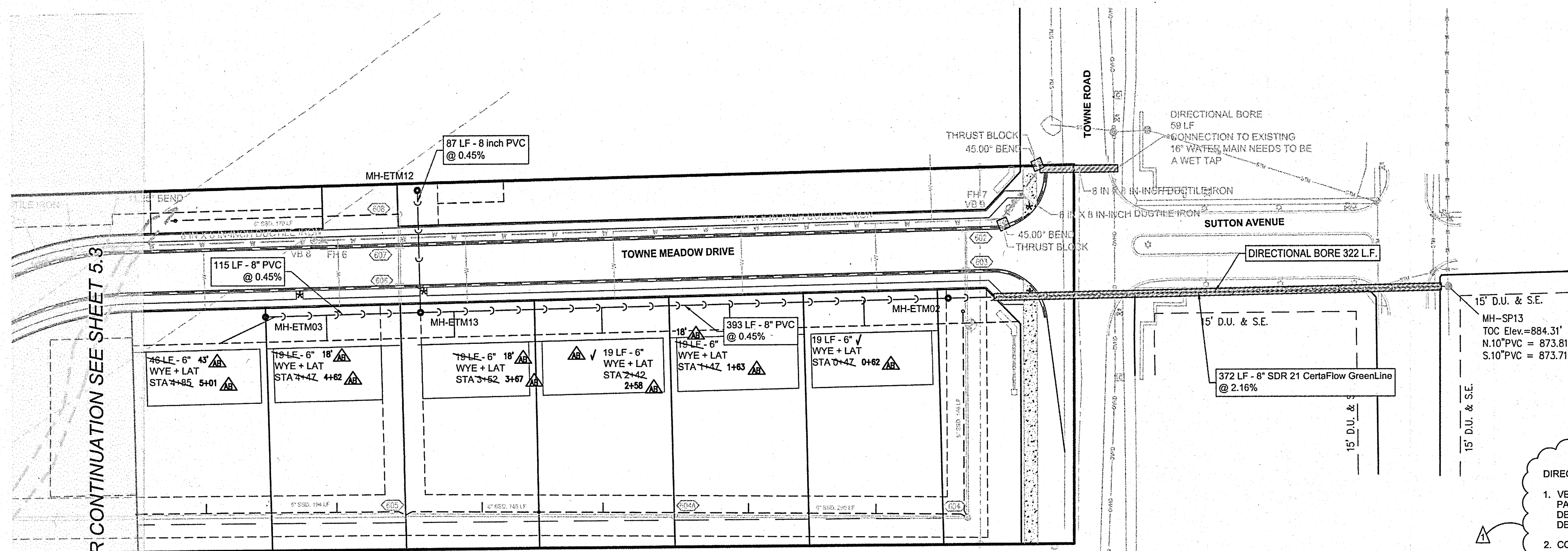
MINIMUM LOWEST ADJACENT GRADE
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TYPICAL LOT SECTION

RECORD DRAWING
DEVELOPMENT PLAN AS-BUILTS
PADS AND SWALES ONLY
1/20/2020
JE Tito
JOSEPH TRTAN, LS21500003





FOR CONTINUATION SEE SHEET 5.3

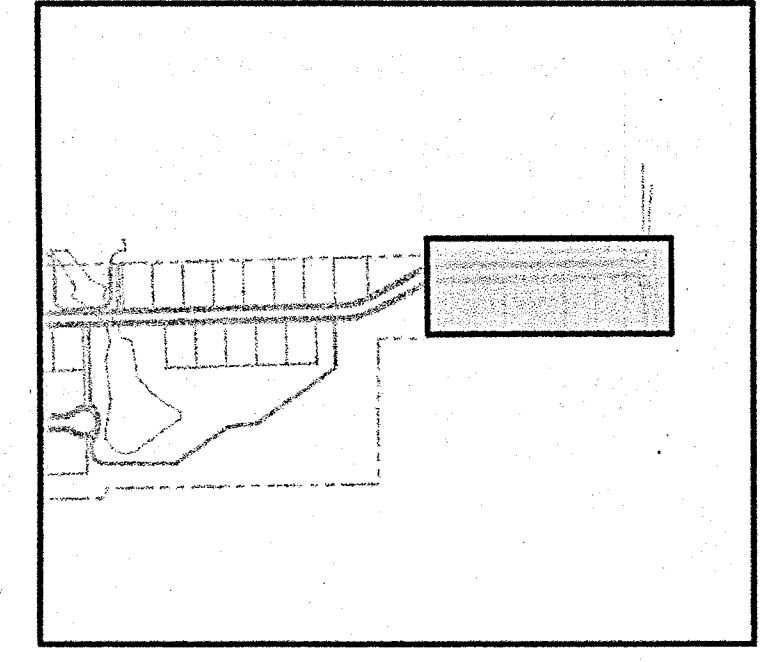
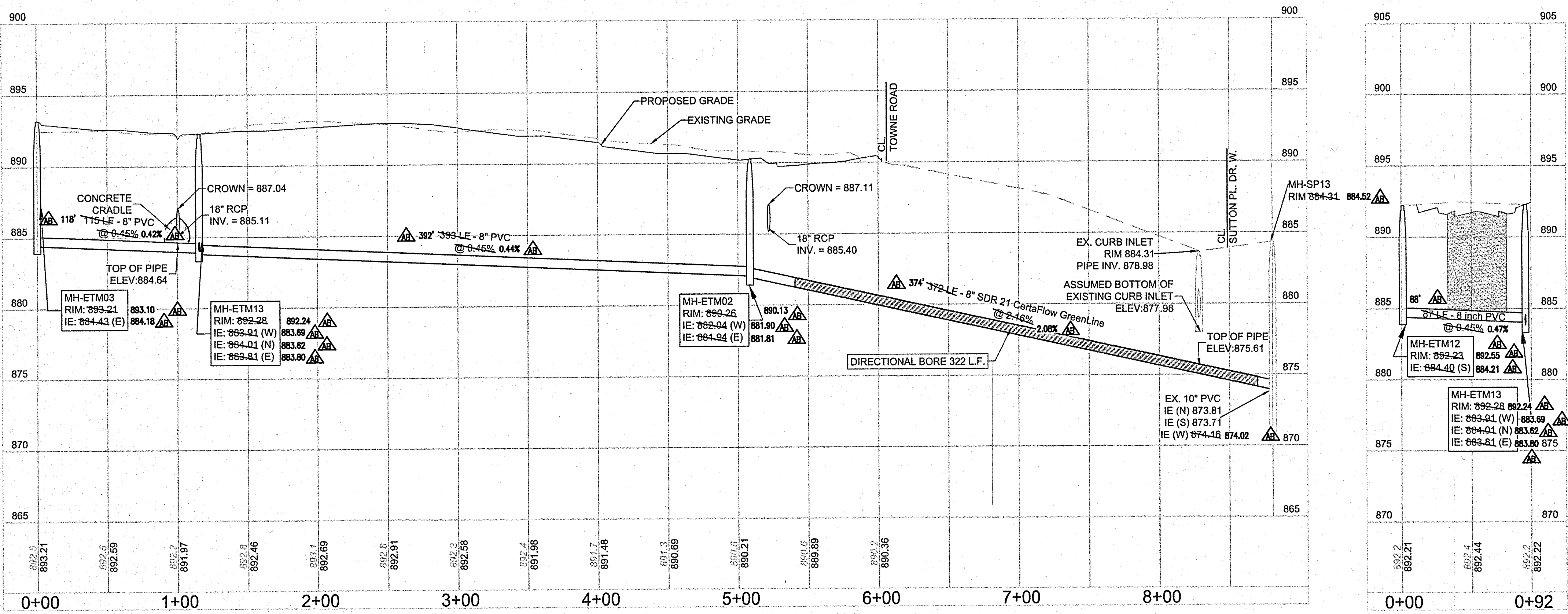
▲ - AS-BUILT INFORMATION
 ✓ - BUILT AS PLANNED
 DATE OF LAST FIELDWORK: 1/15/2020

RECORD DRAWING
 SANITARY SEWER AS-BUILTS
 SANITARY SEWER STRUCTURES ONLY
 1/20/2020
Joe Trtan
 JOSEPH TRTAN, LS21500003



DIRECTIONAL BORE NOTES:

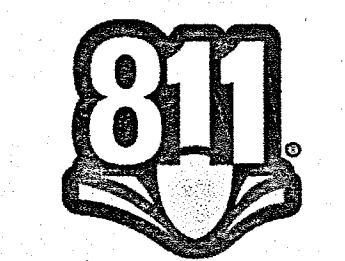
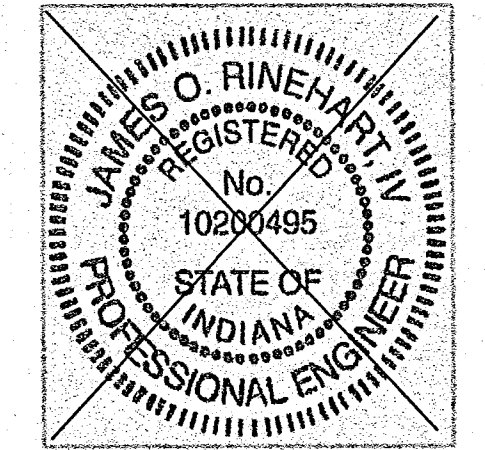
- VERTICAL SIGHT HOLES ARE REQUIRED EVERY 30 TO 50 FEET ALONG THE PATH OF THE PROPOSED HORIZONTAL DRILLING IN ORDER TO CHECK THE DEPTH OF THE AUGER HEAD AS IT PASSES THROUGH THE HOLE AND TO DETERMINE GRADE ACCURACY.
- COMPLETED SANITARY SEWER MUST BE LASER TESTED AND SHALL BE REJECTED IF IT FAILS THE LASER TEST.
- A DETAILED INSPECTION AND/OR TESTING LOG WILL BE PREPARED AND SUBMITTED TO IDEM OFFICE OF WATER QUALITY FACILITY CONSTRUCTION SECTION FOR THE HORIZONTAL DIRECTIONAL DRILLING INSTALLATION. THE LOG MUST CONTAIN THE HORIZONTAL AND VERTICAL COORDINATES OF THE AUGER HEAD AS MEASURED IN THE SIGHT BORINGS DEMONSTRATING THAT AN ACCEPTABLE AND CONSISTENT GRADE HAS BEEN ACHIEVED.



KEY MAP
 N.T.S.

NOTES:

- CONTRACTOR TO FIELD VERIFY LOCATION, INVERT, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO ORDERING MATERIALS OR BEGINNING UTILITY WORK. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
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- LIGHT POLES SHOWN FOR COORDINATION OR LOCATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE PLANS BY SITE LIGHTING CONSULTANT FOR SITE LIGHTING INFORMATION.

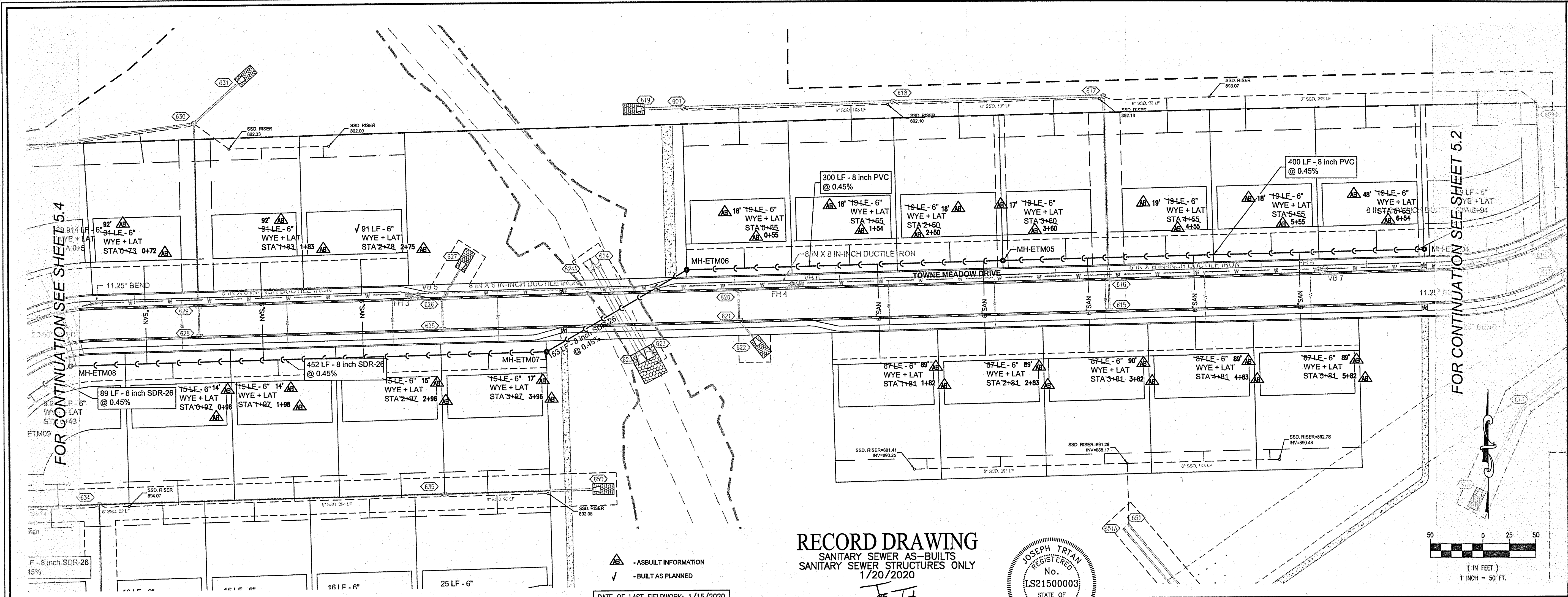


REVISIONS		DESCRIPTION
NO.	DATE	
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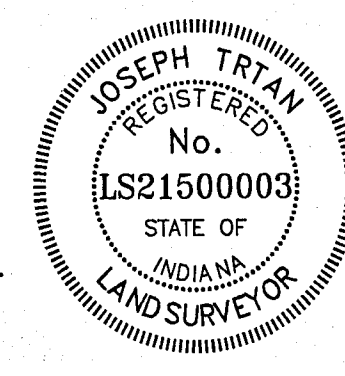
PROJECT NO:	18414	ORIGINAL ISSUE DATE:	DECEMBER 14, 2018
PROJECT MANAGER:	JOR	DESIGNED BY:	JOR
DRAWN BY:	PLD		

SANITARY SEWER PLAN & PROFILE		INDIANA
ESTATES AT TOWNE MEADOW		
CARMEL		

619 N Pennsylvania St Indianapolis, IN 46204 317.423.0680 phone www.v3co.com	DRAWING NO. C5.0



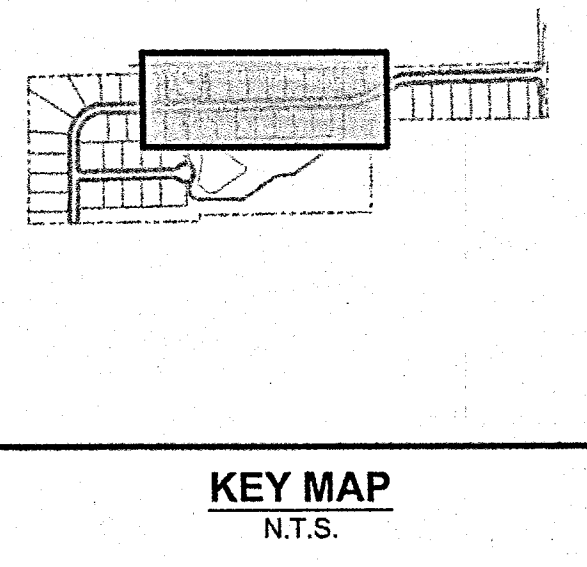
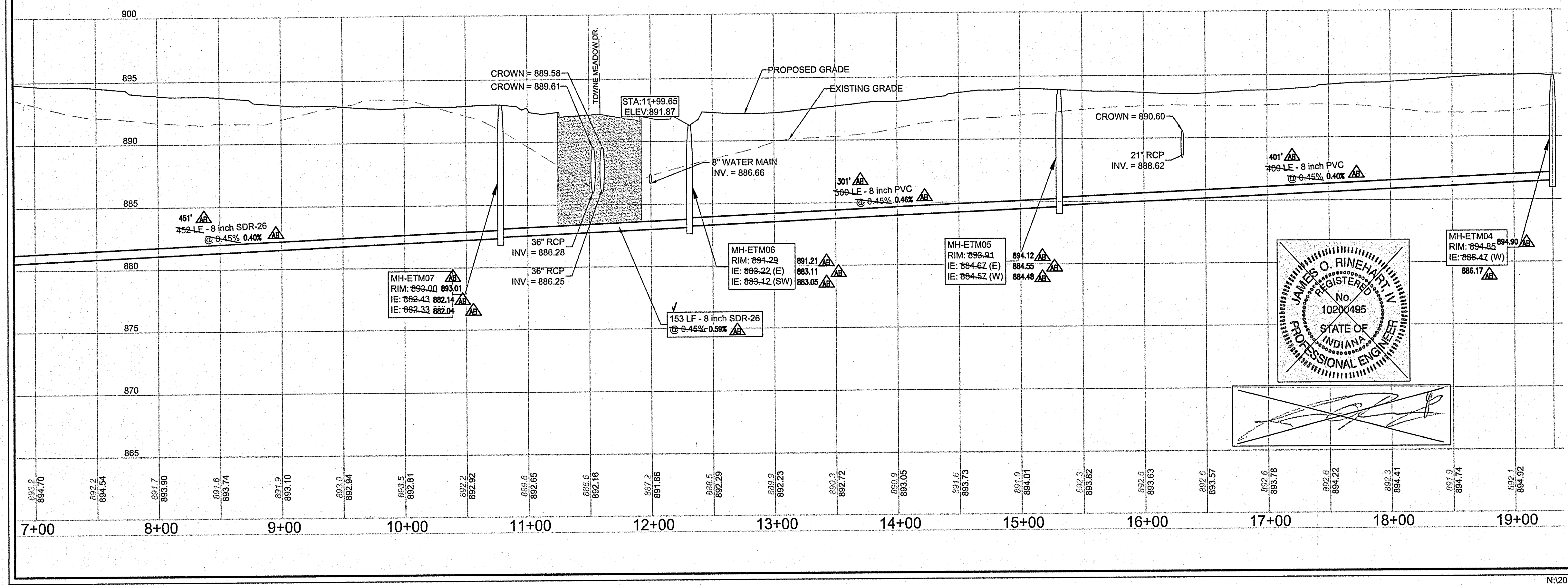
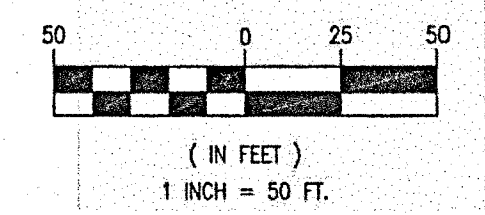
RECORD DRAWING
 SANITARY SEWER AS-BUILTS
 SANITARY SEWER STRUCTURES ONLY
 1/20/2020
 Joe Tolo
 JOSEPH TRTAN, LS21500003



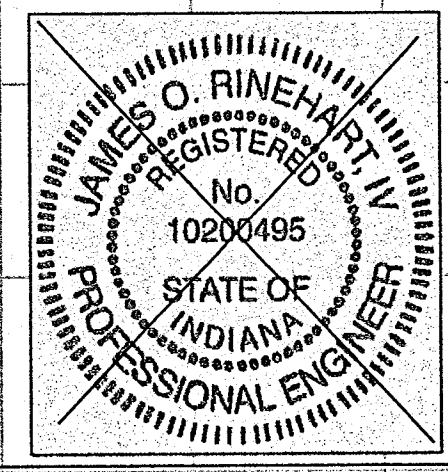
▲ - AS-BUILT INFORMATION
 ✓ - BUILT AS PLANNED
 DATE OF LAST FIELDWORK: 1/15/2020

FOR CONTINUATION SEE SHEET 5.2

FOR CONTINUATION SEE SHEET 5.4



- NOTES:
1. CONTRACTOR TO FIELD VERIFY LOCATION, INVERT, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO ORDERING MATERIALS OR BEGINNING UTILITY WORK. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
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REVISIONS		DESCRIPTION
NO.	DATE	

PROJECT NO:	18414
PROJECT MANAGER:	JOR
DESIGNED BY:	JOR
DRAWN BY:	PLD

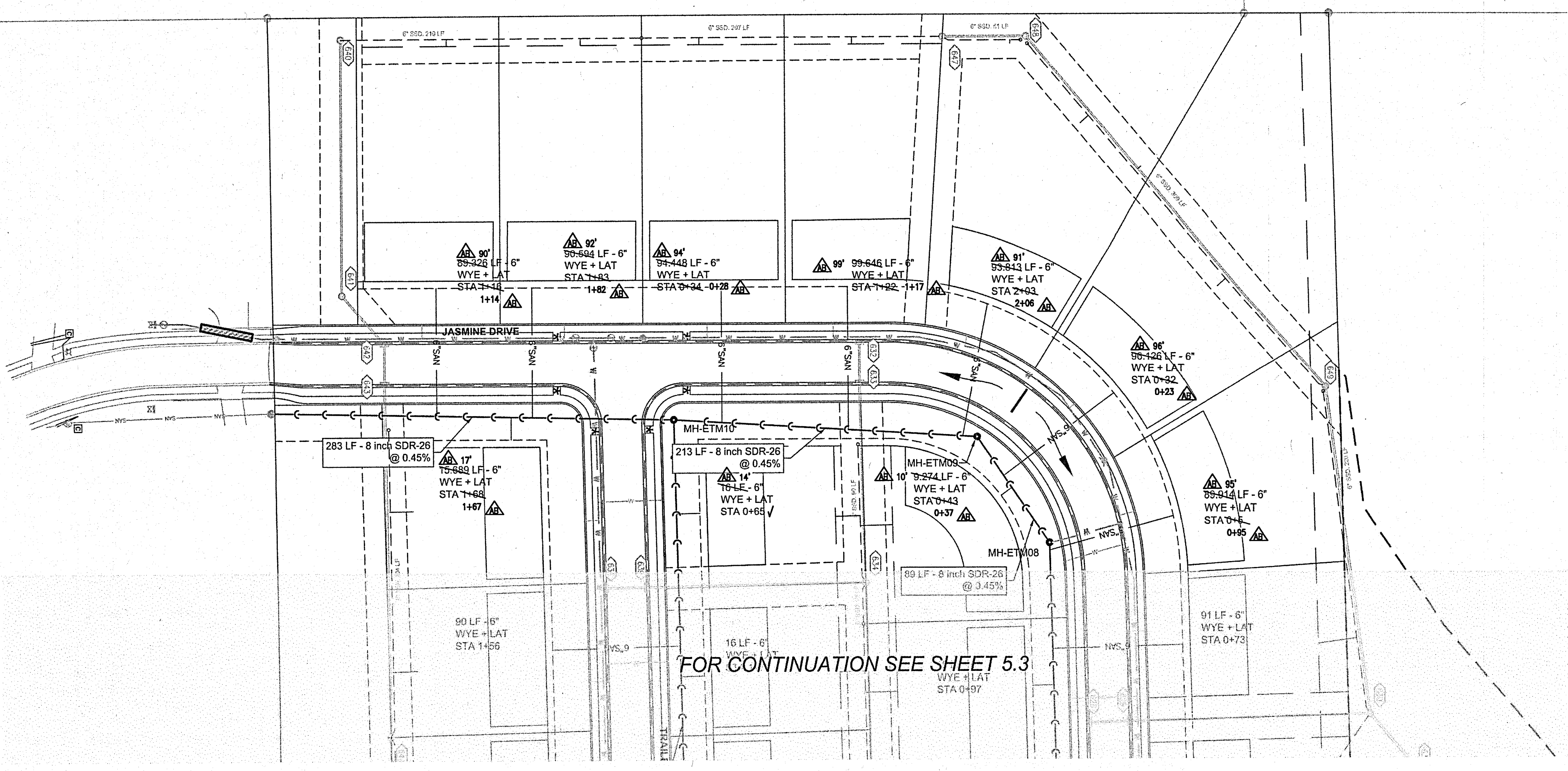
ORIGINAL ISSUE DATE:	DECEMBER 14, 2018
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SANITARY SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 INDIANA
 CARMEL

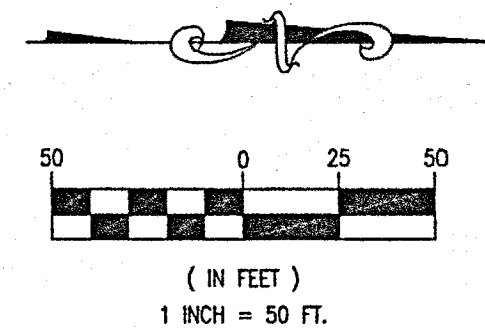
619 N. Pennsylvania St.
 Indianapolis, IN 46204
 317.423.0690 phone
 www.v3cc.com

811
 Know what's below.
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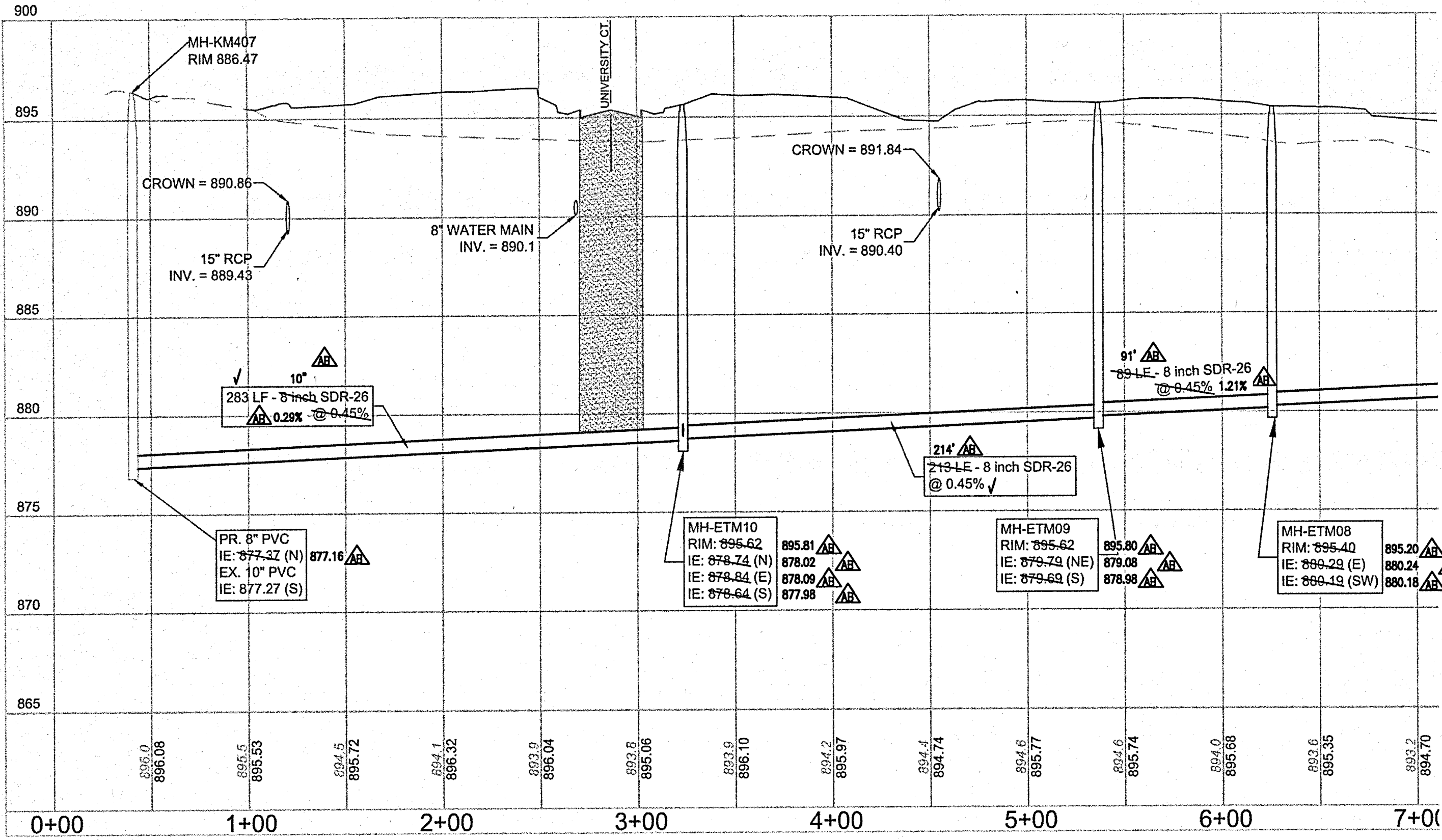
DRAWING NO.
C5.1



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FOR CONTINUATION SEE SHEET 5.3



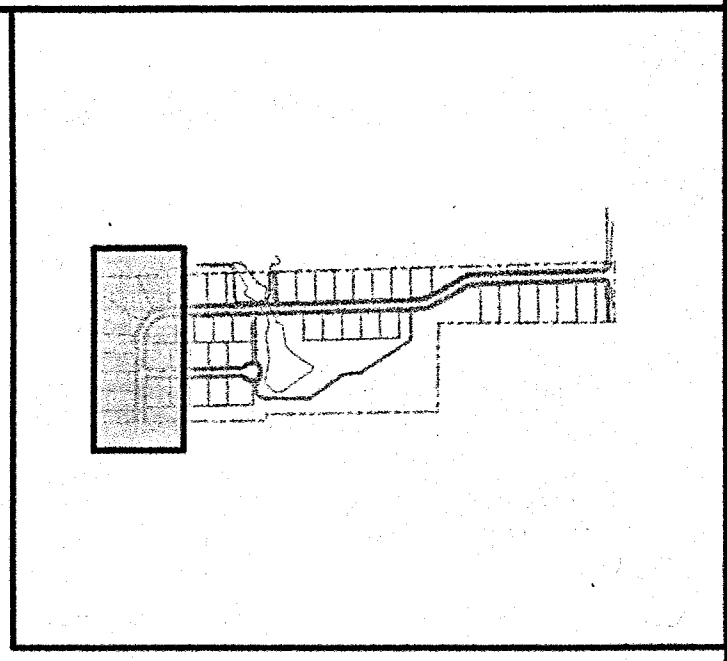
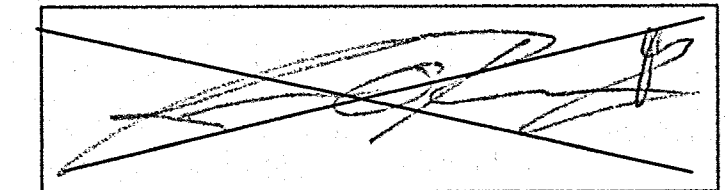
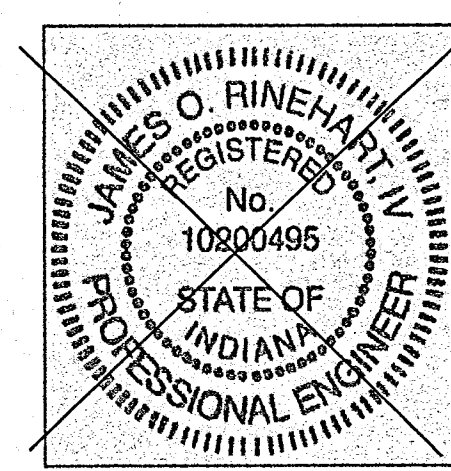
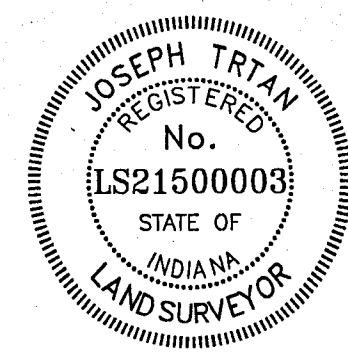
- ▲ - AS-BUILT INFORMATION
- ✓ - BUILT AS PLANNED

DATE OF LAST FIELDWORK: 01/15/2020

RECORD DRAWING
SANITARY SEWER AS-BUILTS
SANITARY SEWER STRUCTURES ONLY
1/20/2020

JE Trian

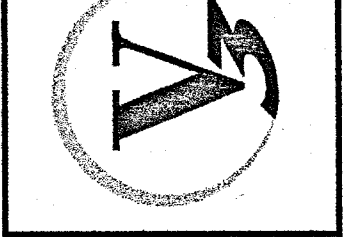
JOSEPH TRTAN, LS21500003



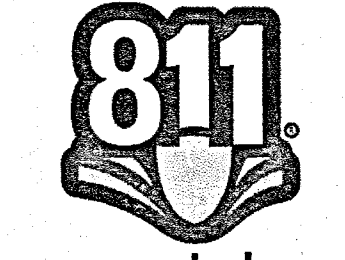
KEY MAP
N.T.S.

SANITARY SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 CARMEL, INDIANA

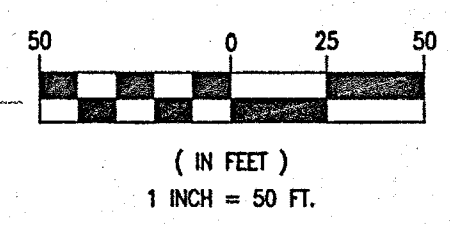
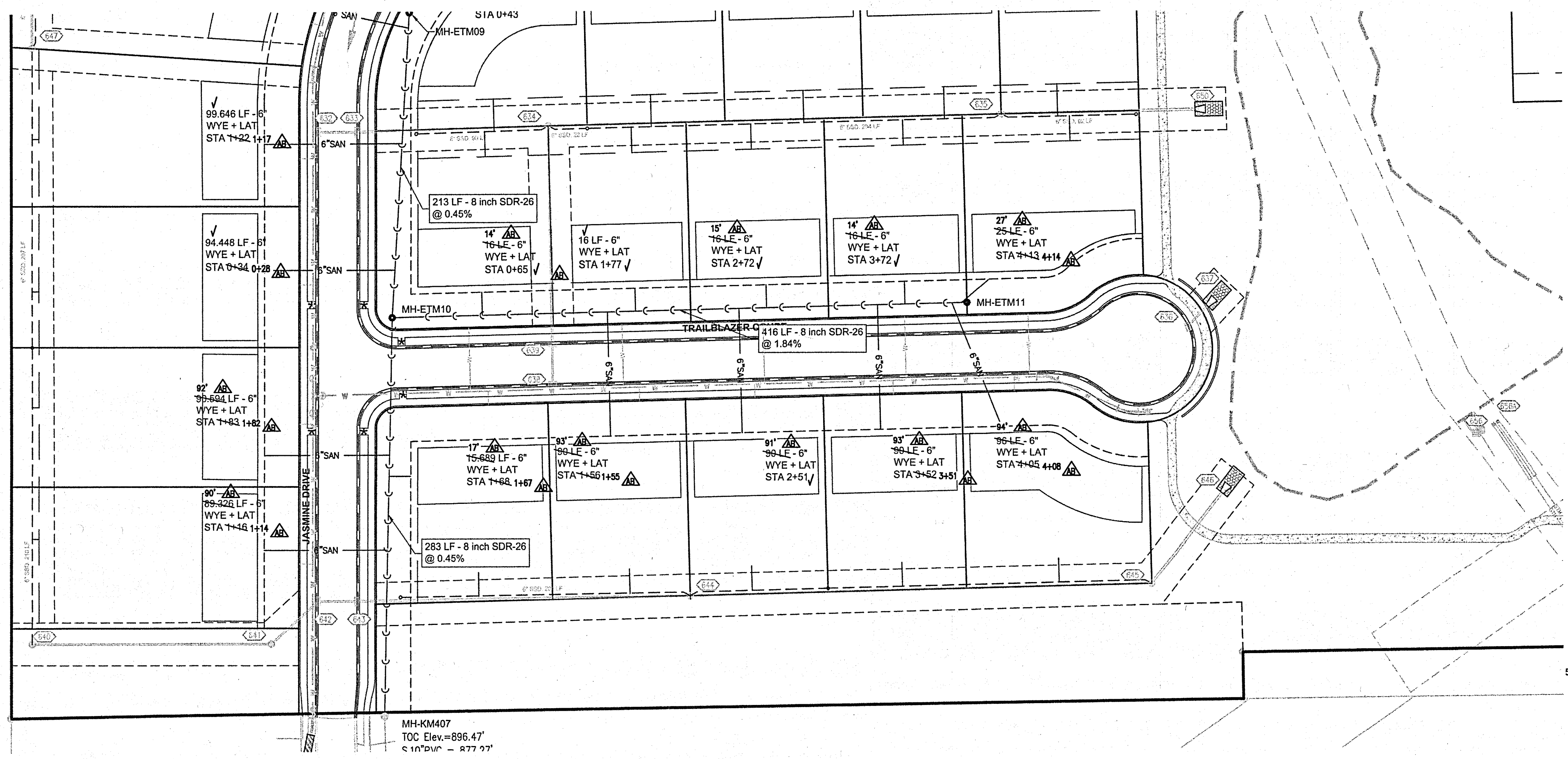
619 N Pennsylvania St
Indianapolis, IN 46204
317-423-0690 phone
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DRAWING NO.
C5.2

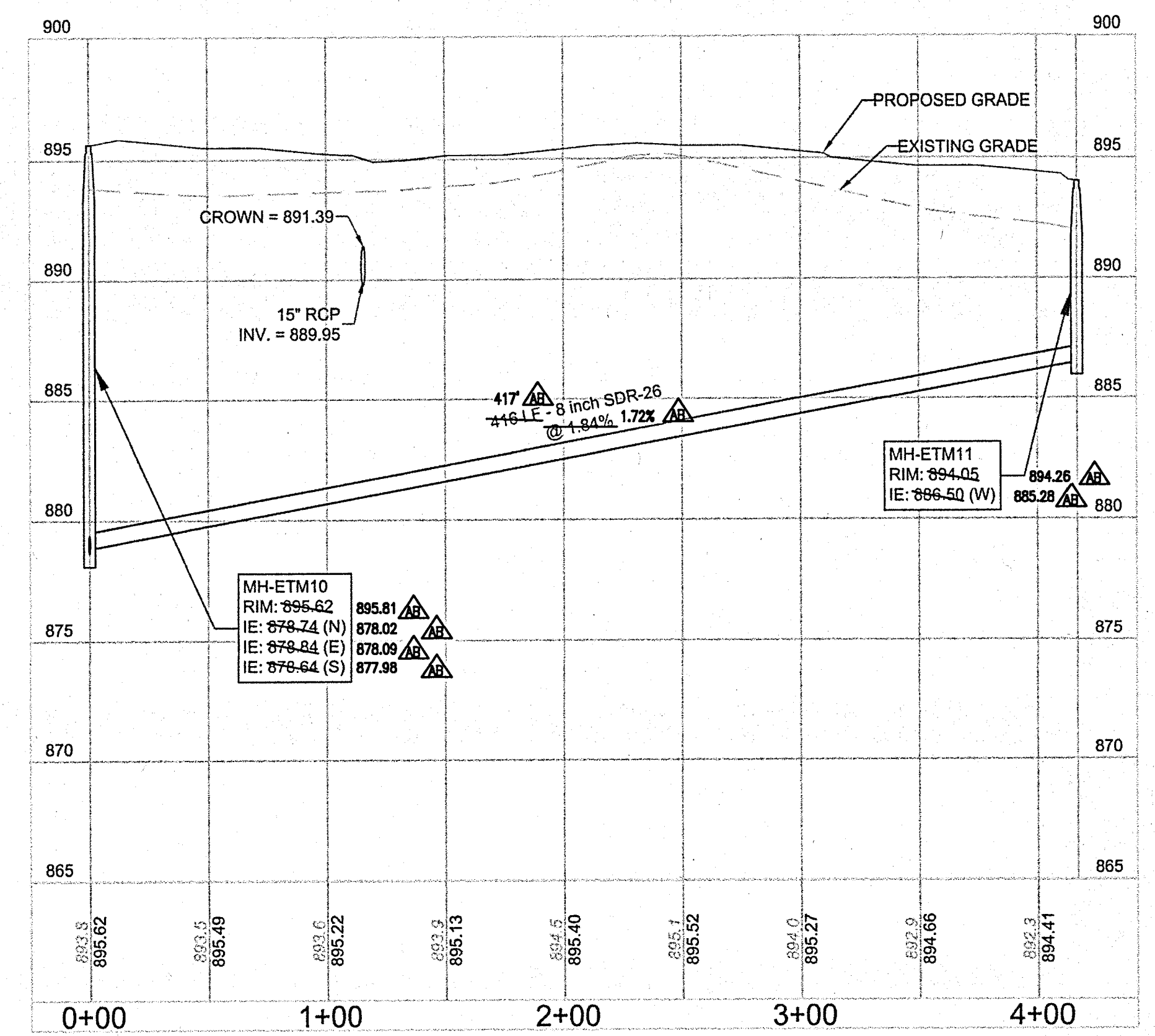


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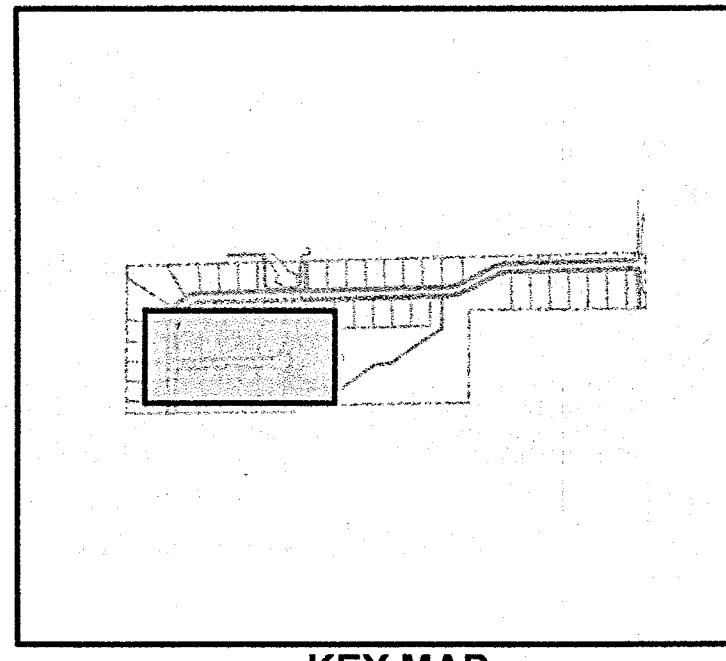
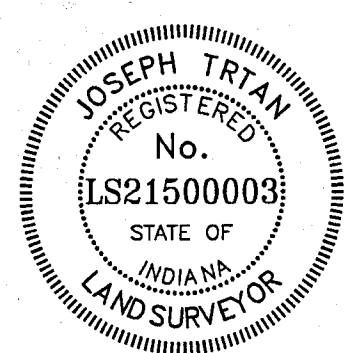


REVISIONS		DESCRIPTION
NO.	DATE	

PROJECT NO.:	18414	ORIGINAL ISSUE DATE:	DECEMBER 14, 2018
PROJECT MANAGER:	JOR	DESIGNED BY:	JOR
DRAWN BY:	PLD		

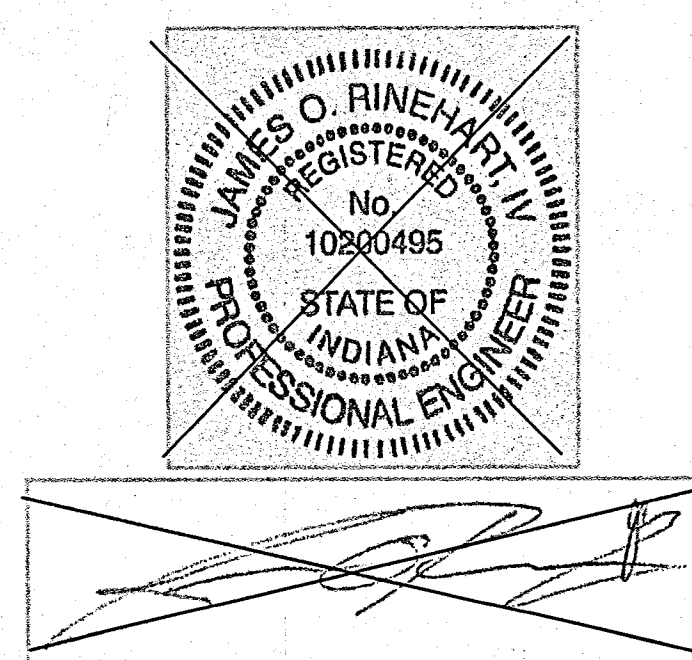


RECORD DRAWING
 SANITARY SEWER AS-BUILTS
 SANITARY SEWER STRUCTURES ONLY
 1/20/2020
 JOSEPH TRTAN, LS21500003



- ▲ - AS-BUILT INFORMATION
- ✓ - BUILT AS PLANNED

DATE OF LAST FIELDWORK: 1/15/2020



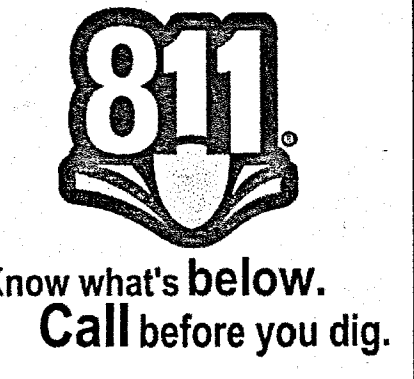
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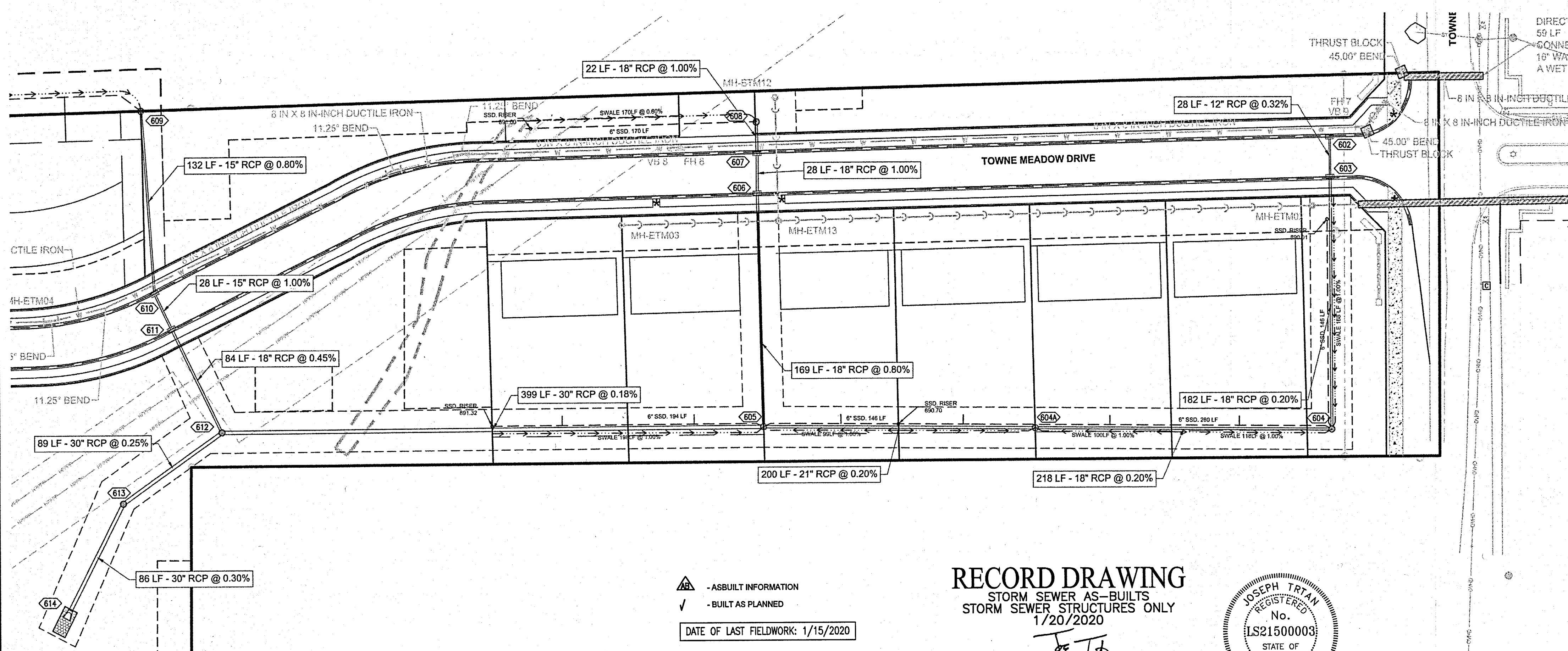
1. CONTRACTOR TO FIELD VERIFY LOCATION, INVERT, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO ORDERING MATERIALS OR BEGINNING UTILITY WORK. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
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SANITARY SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 CARMEL INDIANA

619 N Pennsylvania St
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DRAWING NO.
C5.3

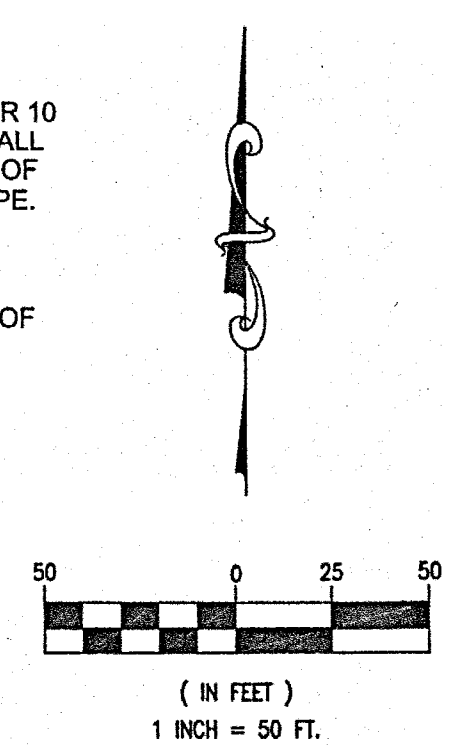
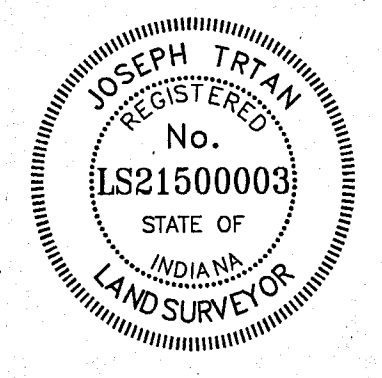




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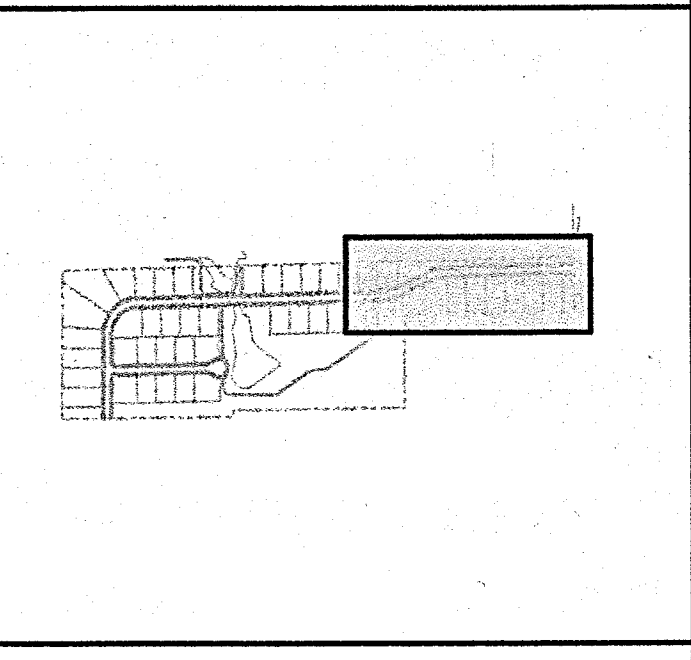
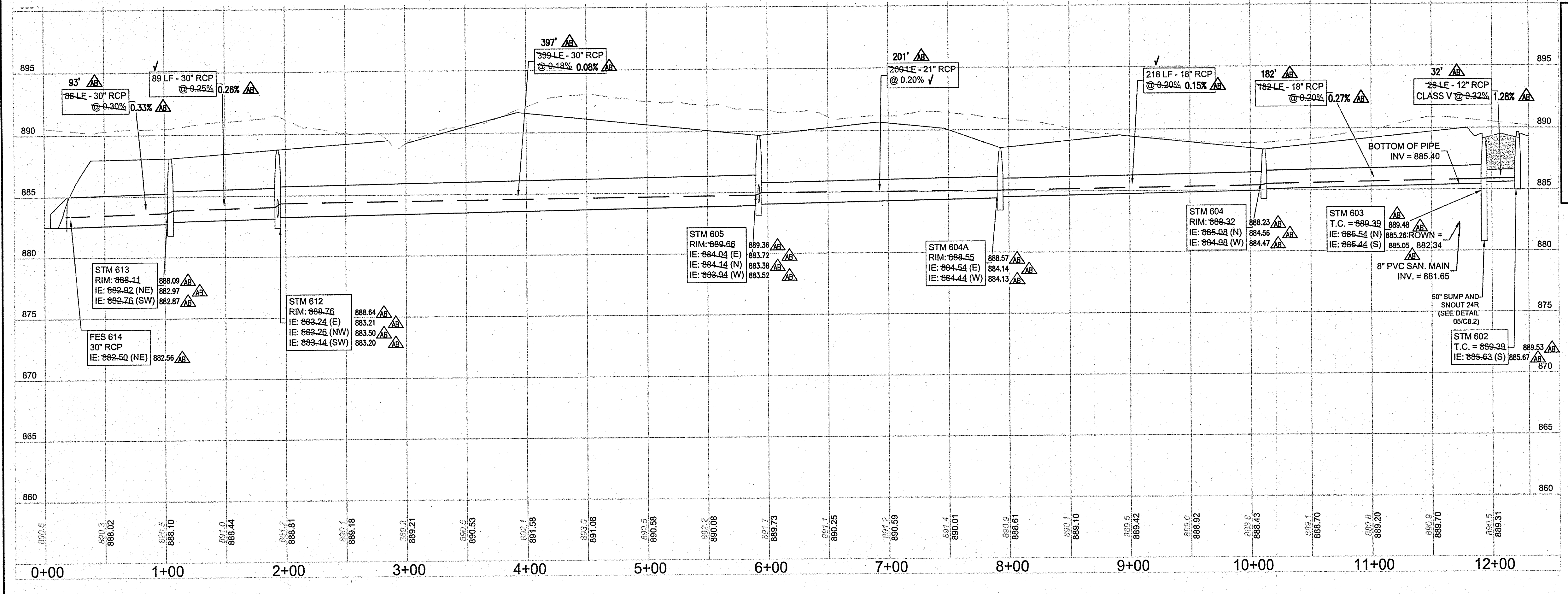
▲ - AS-BUILT INFORMATION
 ✓ - BUILT AS PLANNED
 DATE OF LAST FIELDWORK: 1/15/2020

RECORD DRAWING
 STORM SEWER AS-BUILTS
 STORM SEWER STRUCTURES ONLY
 1/20/2020
 J. E. Trtan
 JOSEPH TRTAN, LS21500003



REVISIONS		NO.	DATE	DESCRIPTION

PROJECT NO.: 18414
 ORIGINAL ISSUE DATE: DECEMBER 14, 2018
 PROJECT MANAGER: JOR
 DESIGNED BY: JOR
 DRAWN BY: PLD
STORM SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 INDIANA
 CARMEL

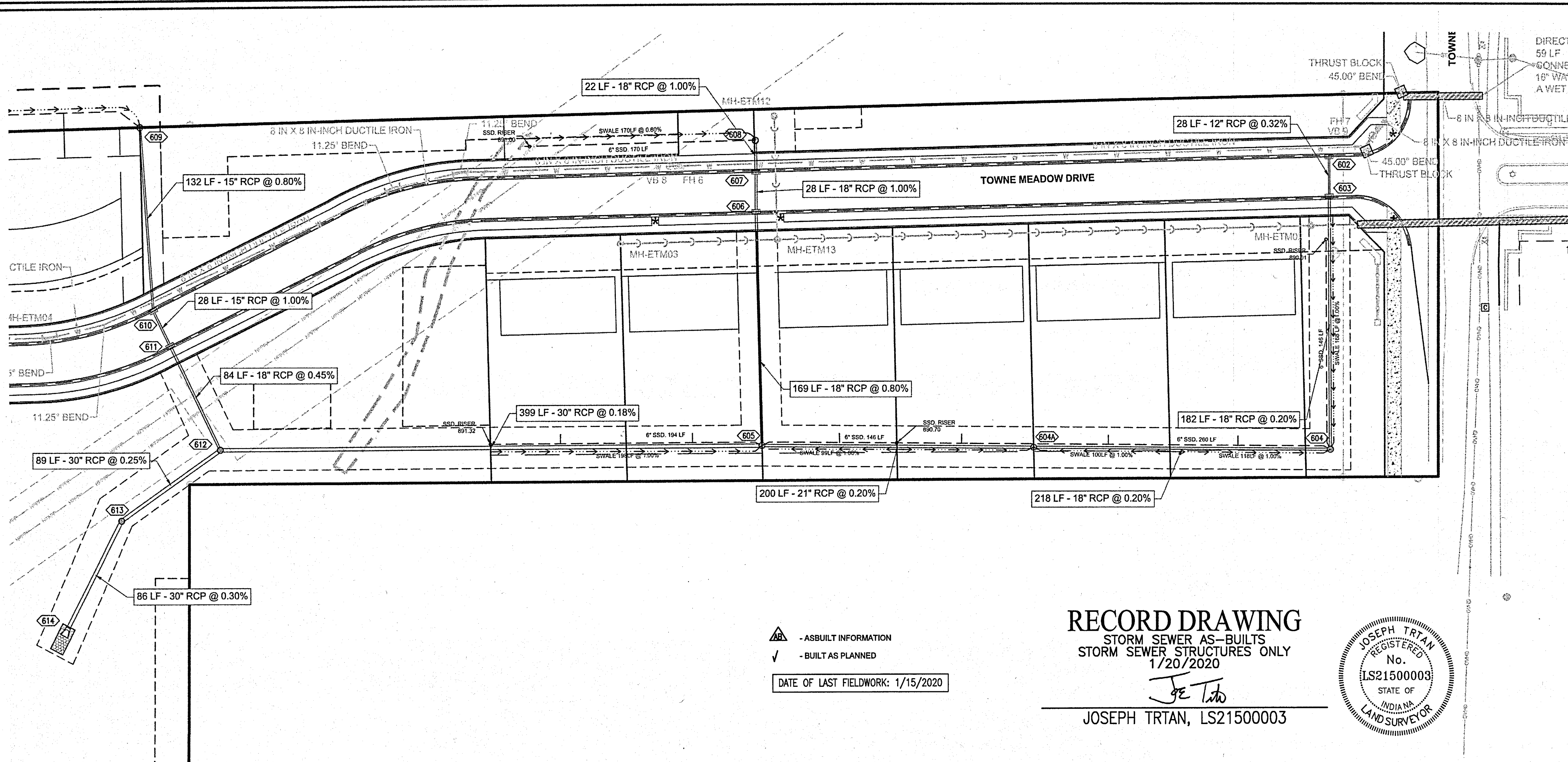


- KEY MAP**
N.T.S.
- DRAINAGE SUMMARY**
- SITE AREA: 106.12 ACRES
 - OFFSITE/UPSTREAM AREA: 123.7 ACRES
 - ALLOWABLE RELEASE RATES:
 - 10-YEAR 10.6 C.F.S.
 - 100-YEAR 31.8 C.F.S.
 - POST DEVELOPED 10 & 100 YR FLOWS:
 - 10-YEAR 10.37 C.F.S.
 - 100-YEAR 12.22 C.F.S.
 - VOLUME OF DETENTION REQUIRED: 1,002,900 CUBIC FEET
 - VOLUME OF DETENTION PROVIDED: 1,431,600 CUBIC FEET
 - RELEASE RATES OF THE PONDS:
 - 10-YEAR 10.37 C.F.S.
 - 100-YEAR 12.22 C.F.S.



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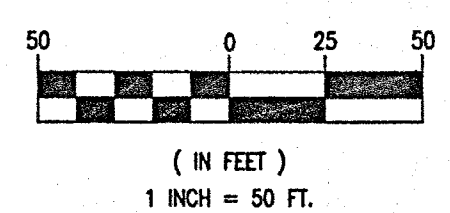
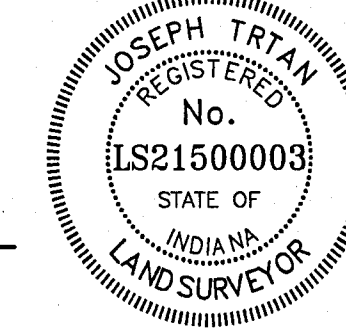
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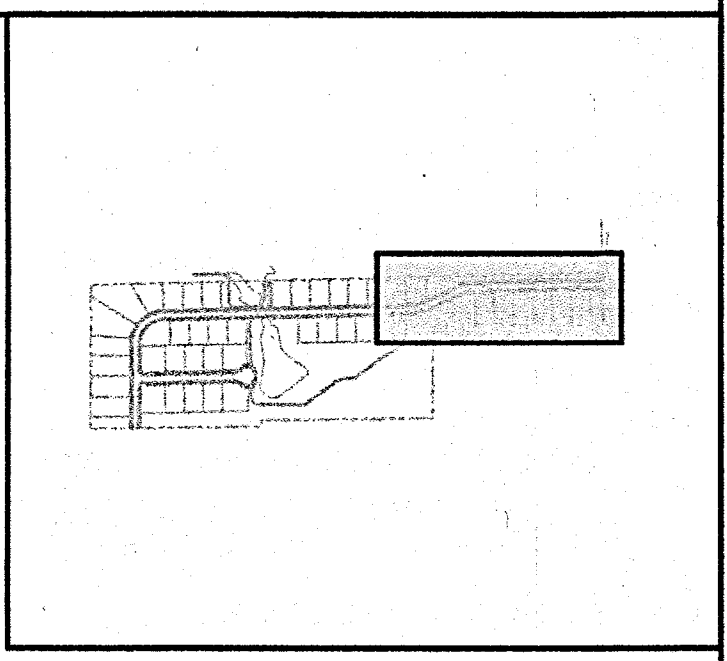
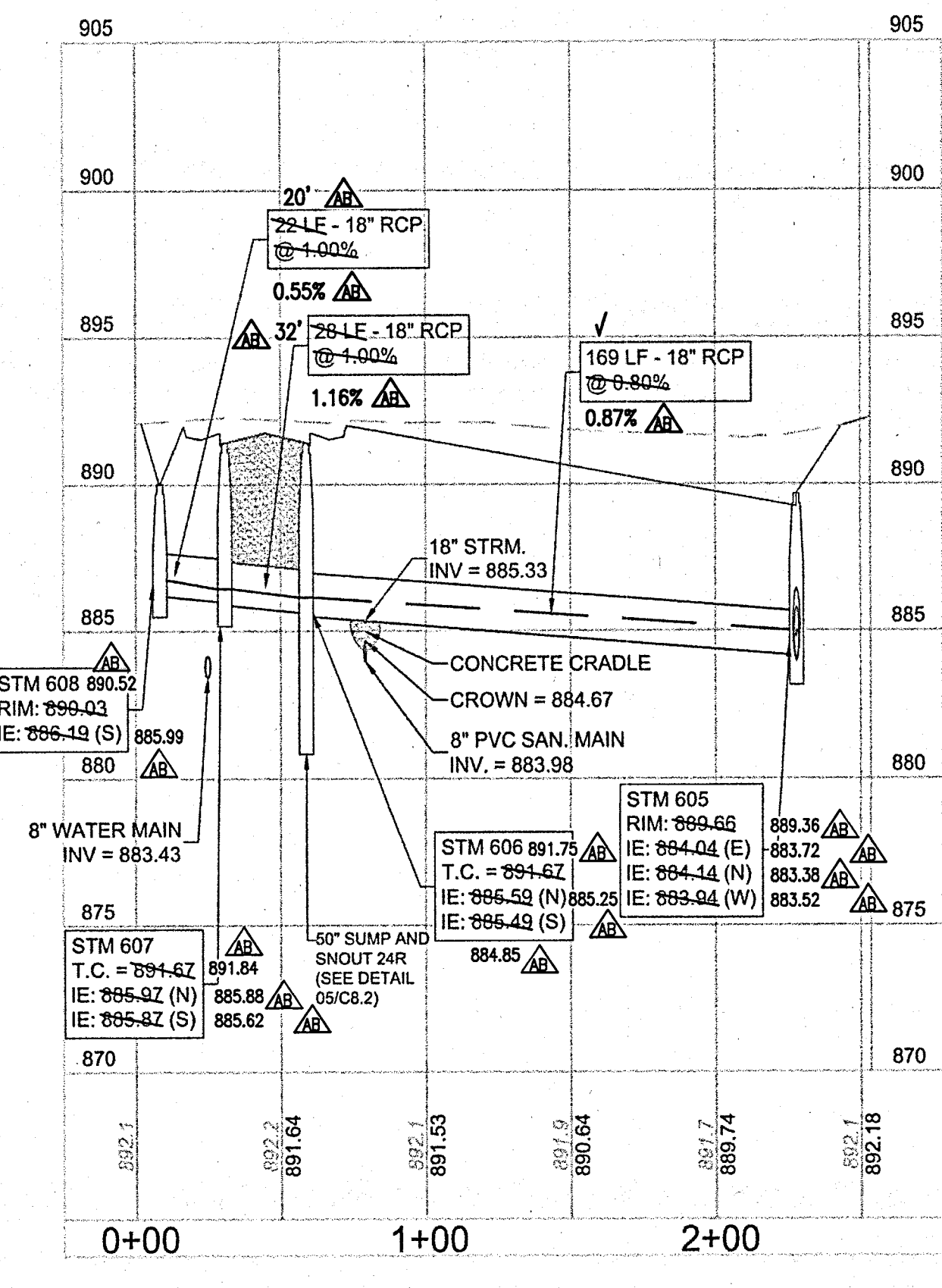
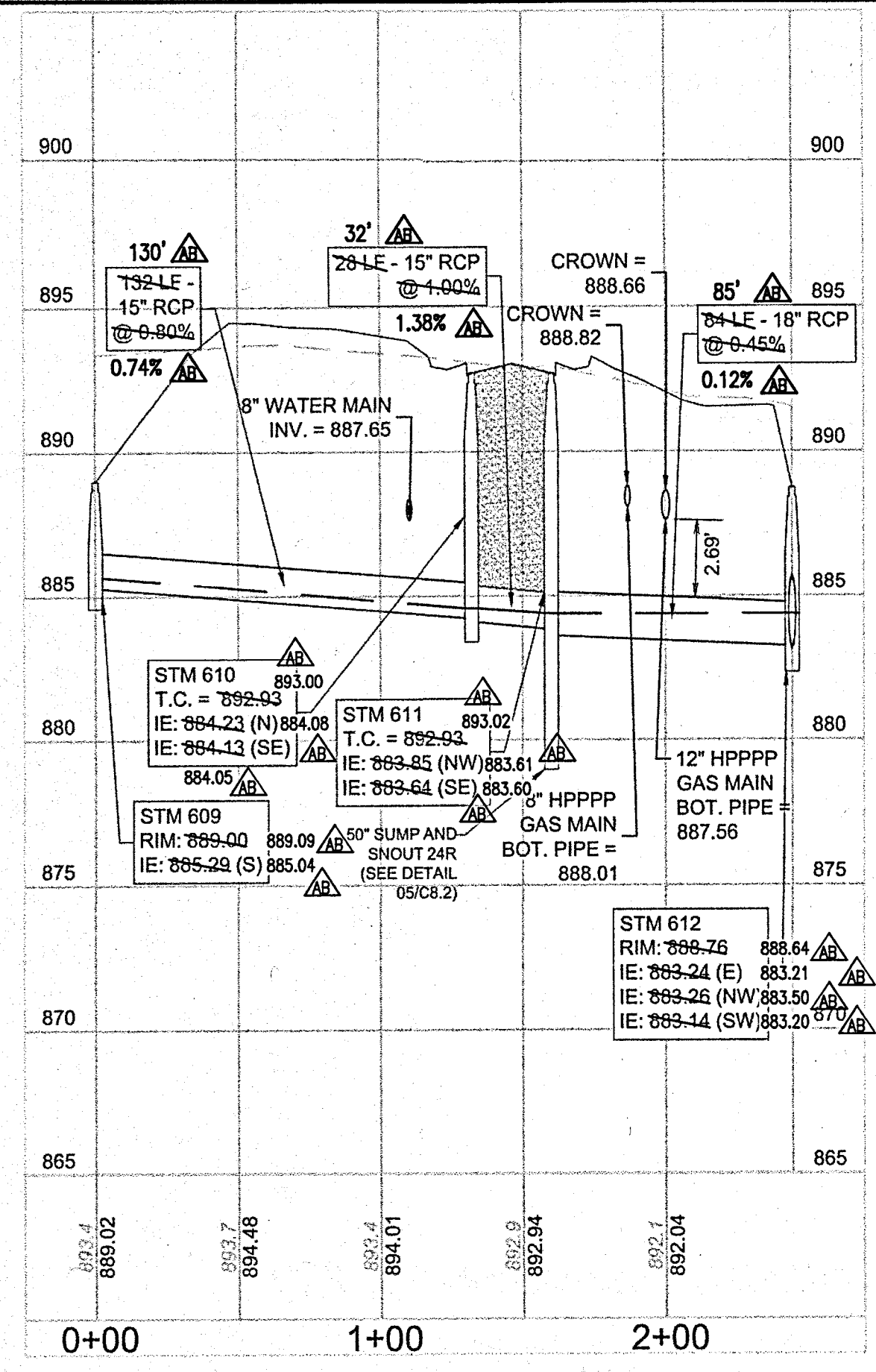
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Joe Trtan
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ORIGINAL ISSUE DATE: DECEMBER 14, 2018

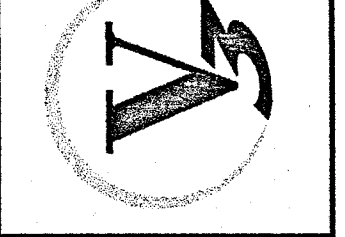
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PROJECT MANAGER:			
DESIGNED BY:			
DRAWN BY:			



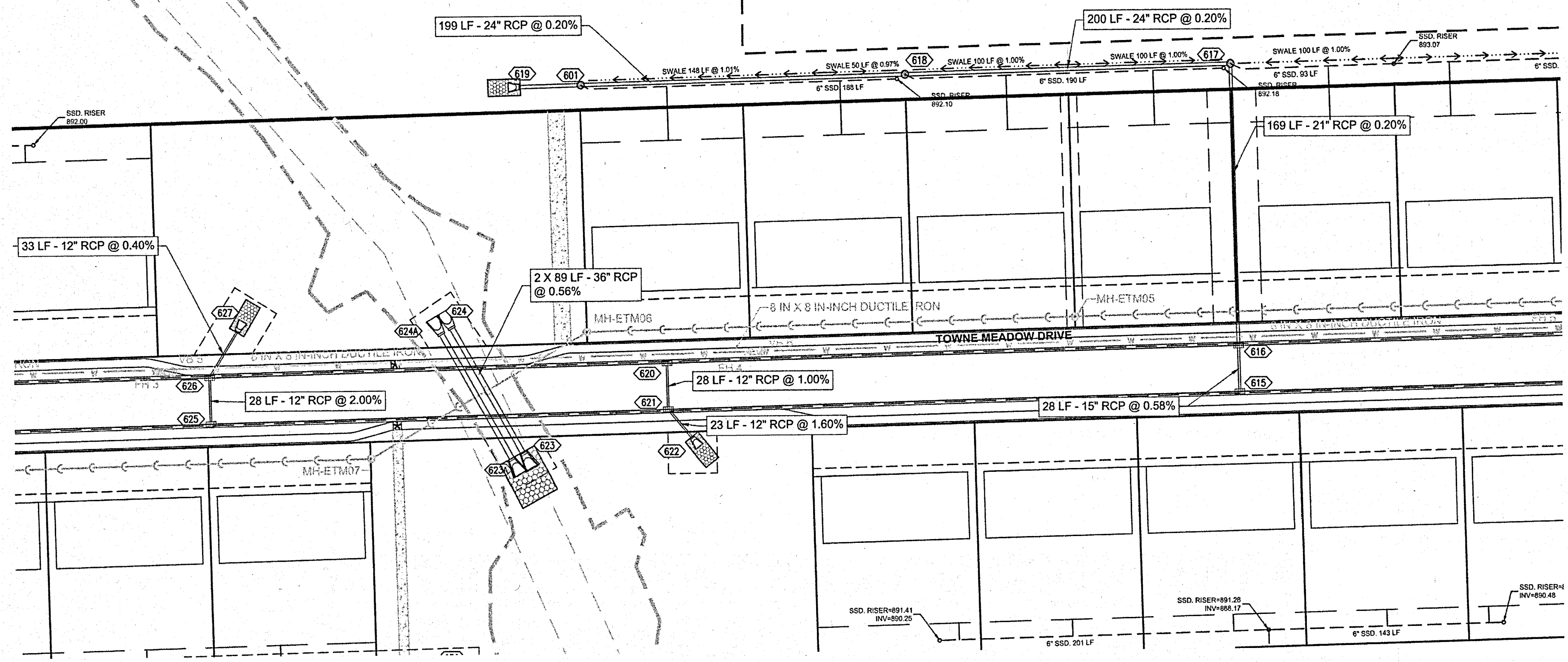
STORM SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 CARMEL, INDIANA



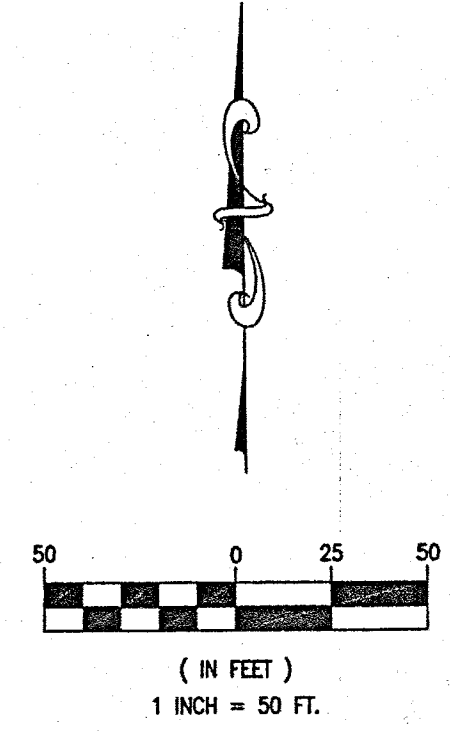
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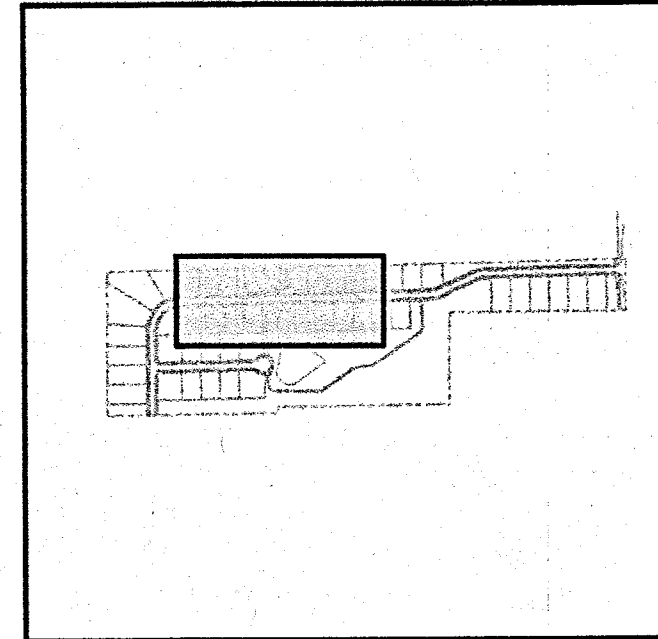
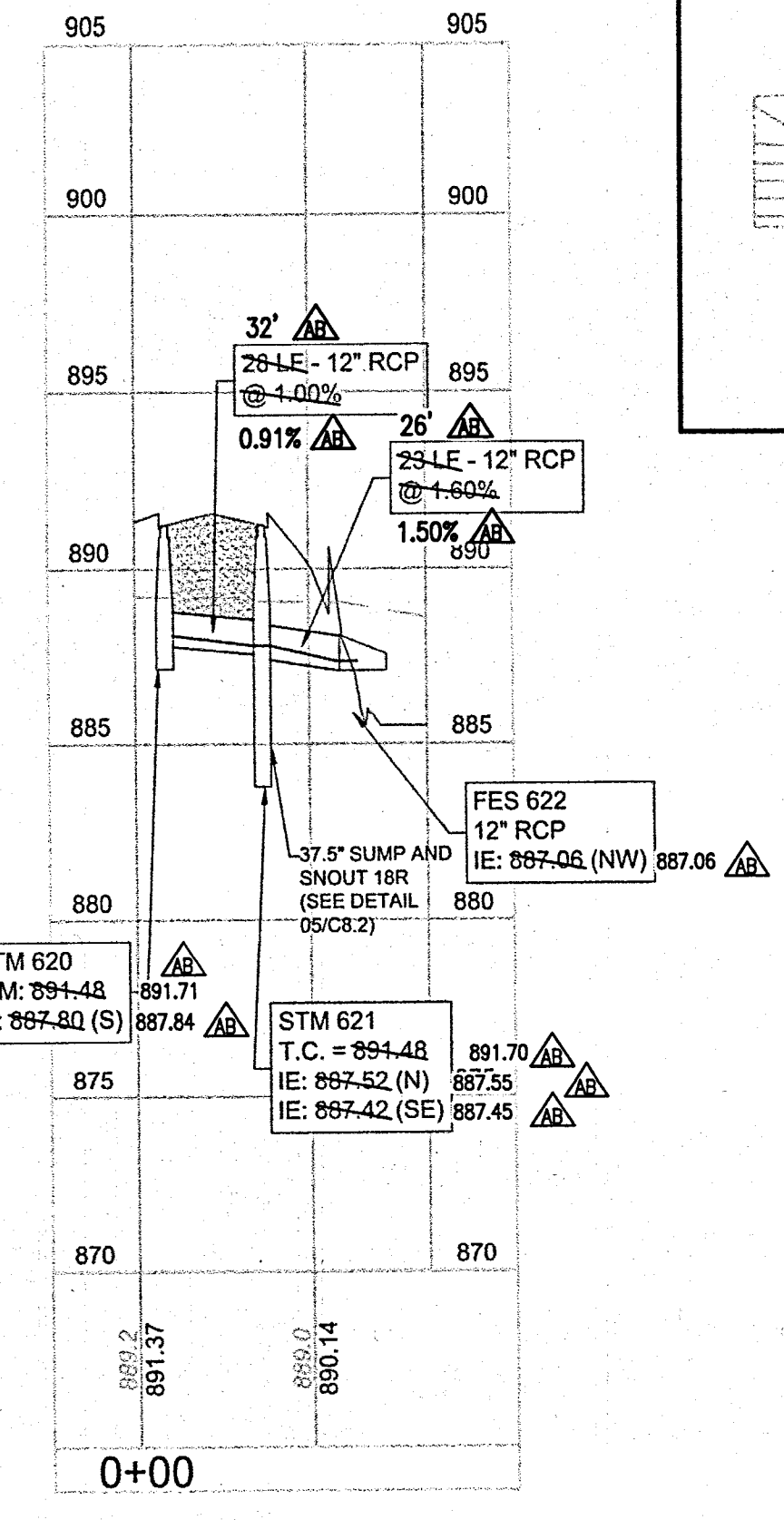
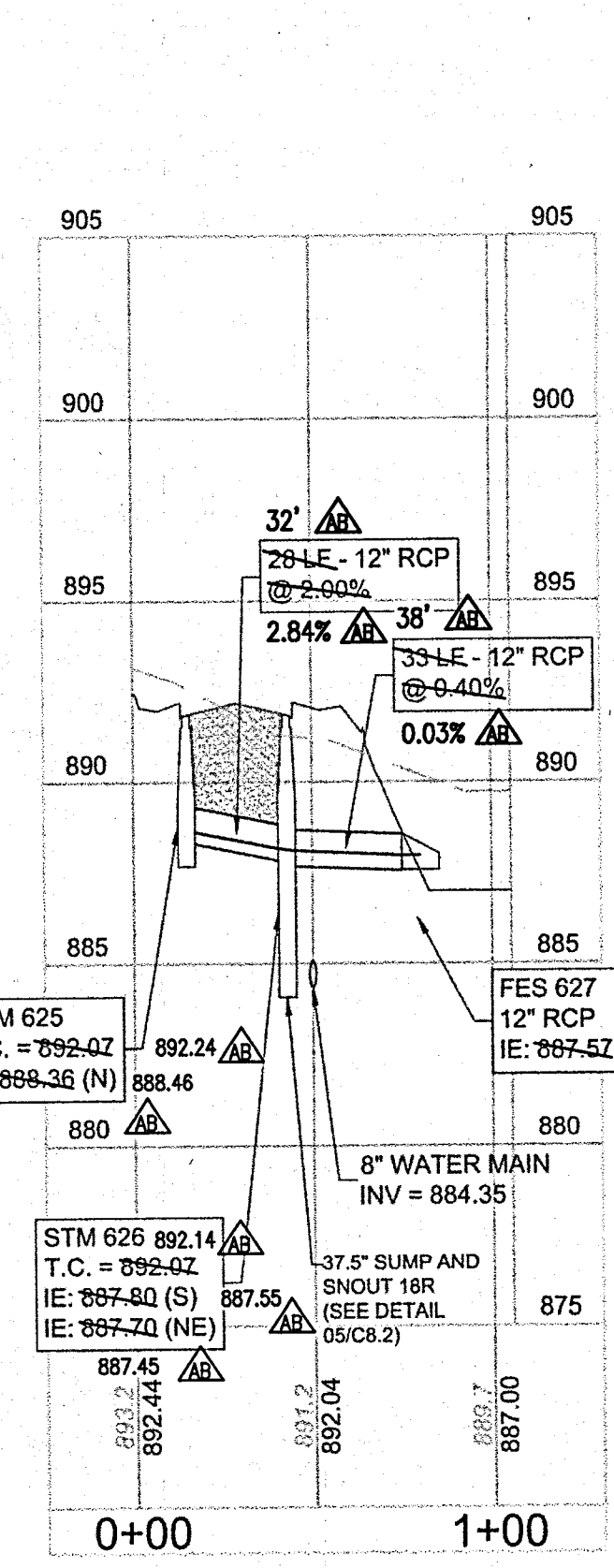
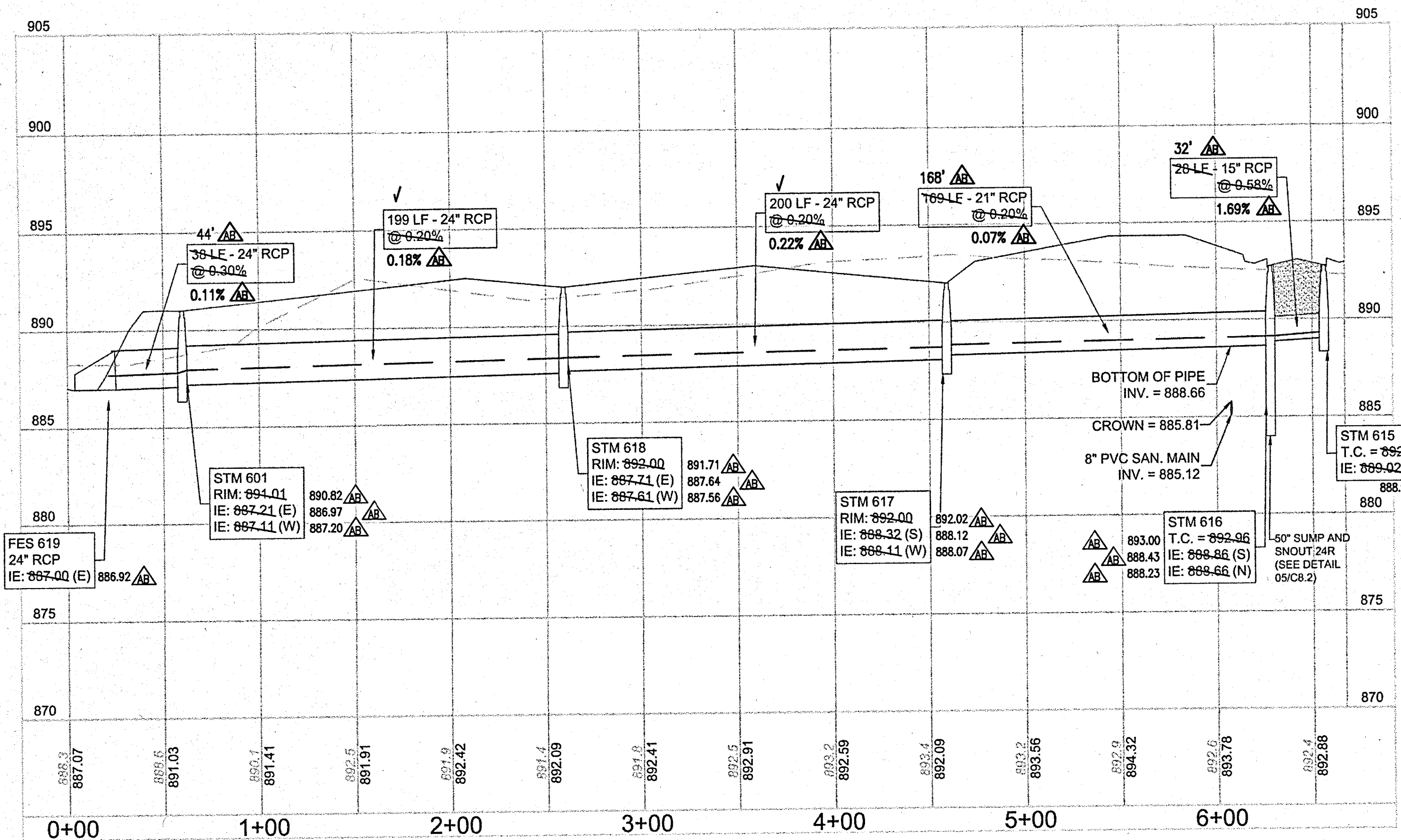
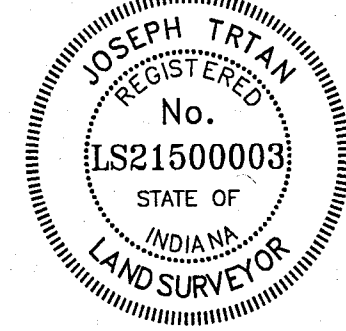


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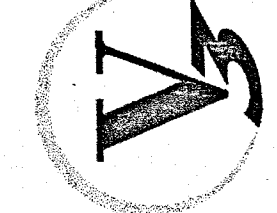
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NO.	DATE	DESCRIPTION	REVISIONS			
			NO.	DATE	DESCRIPTION	

PROJECT NO: 18414
 ORIGINAL ISSUE DATE: DECEMBER 14, 2018
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 DESIGNED BY: JOR
 DRAWN BY: PLD

STORM SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 INDIANA
 CARMEL



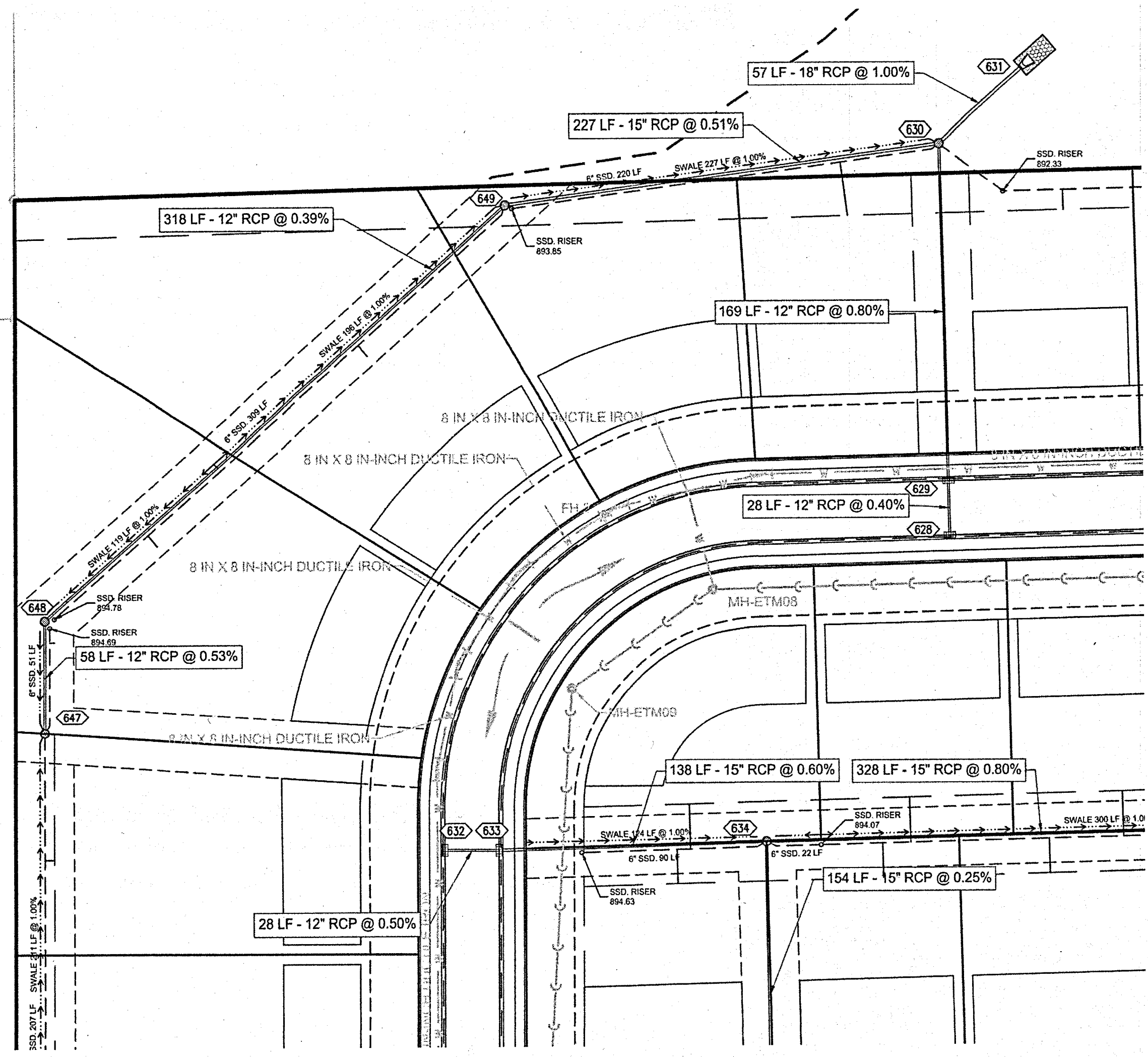
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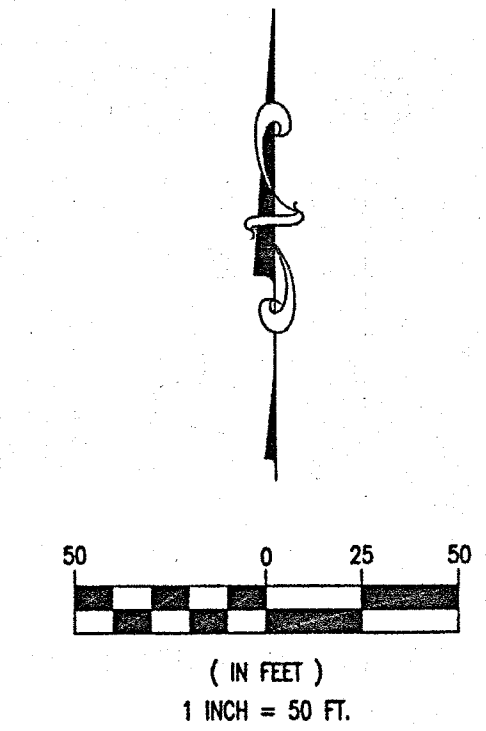
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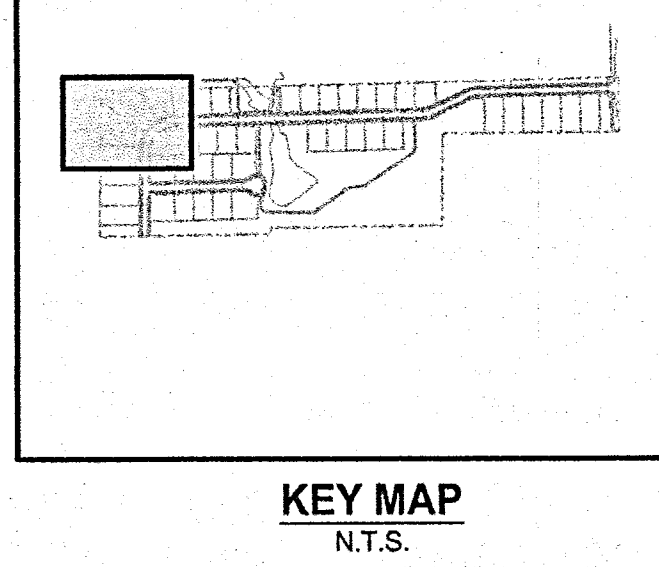
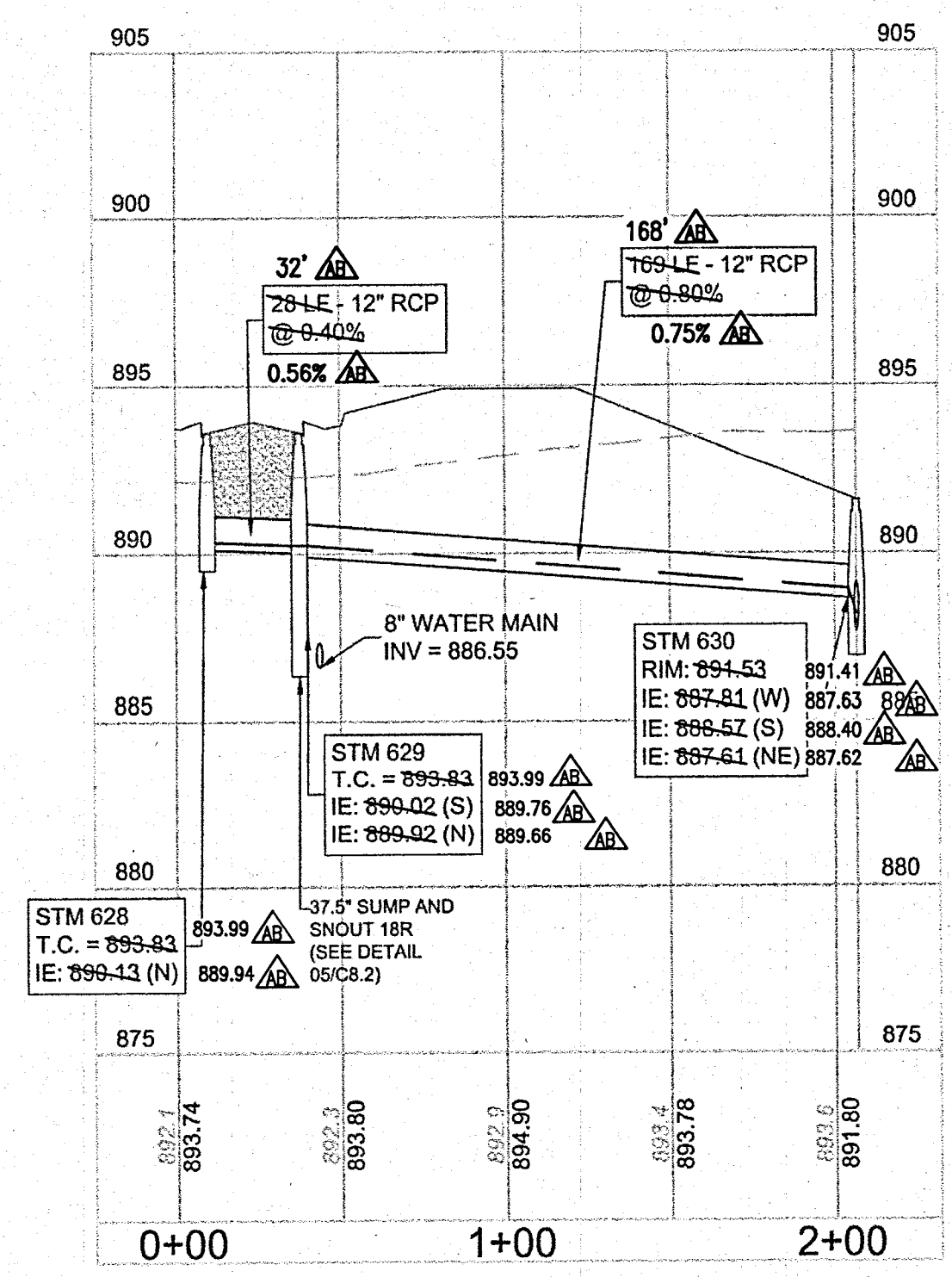
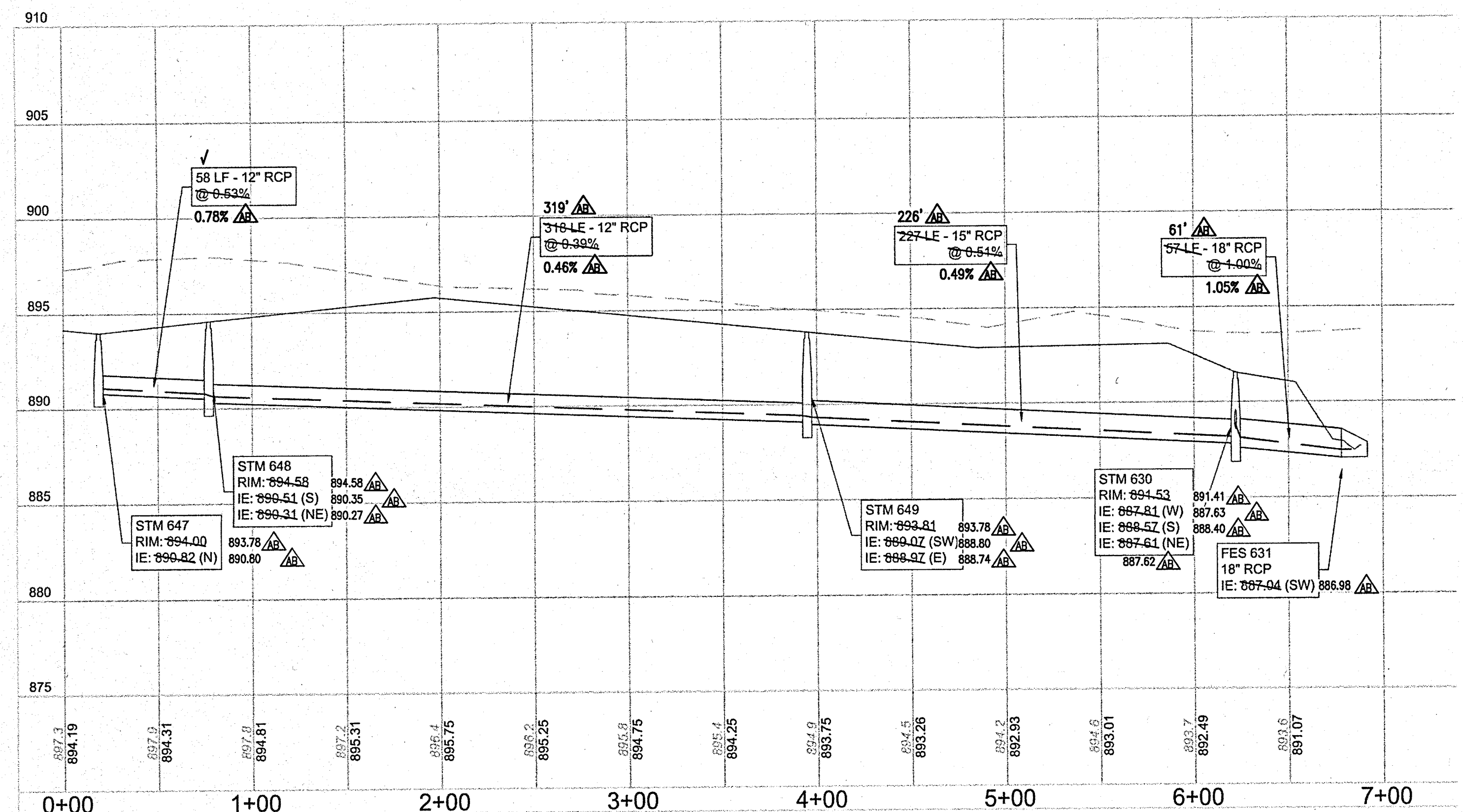


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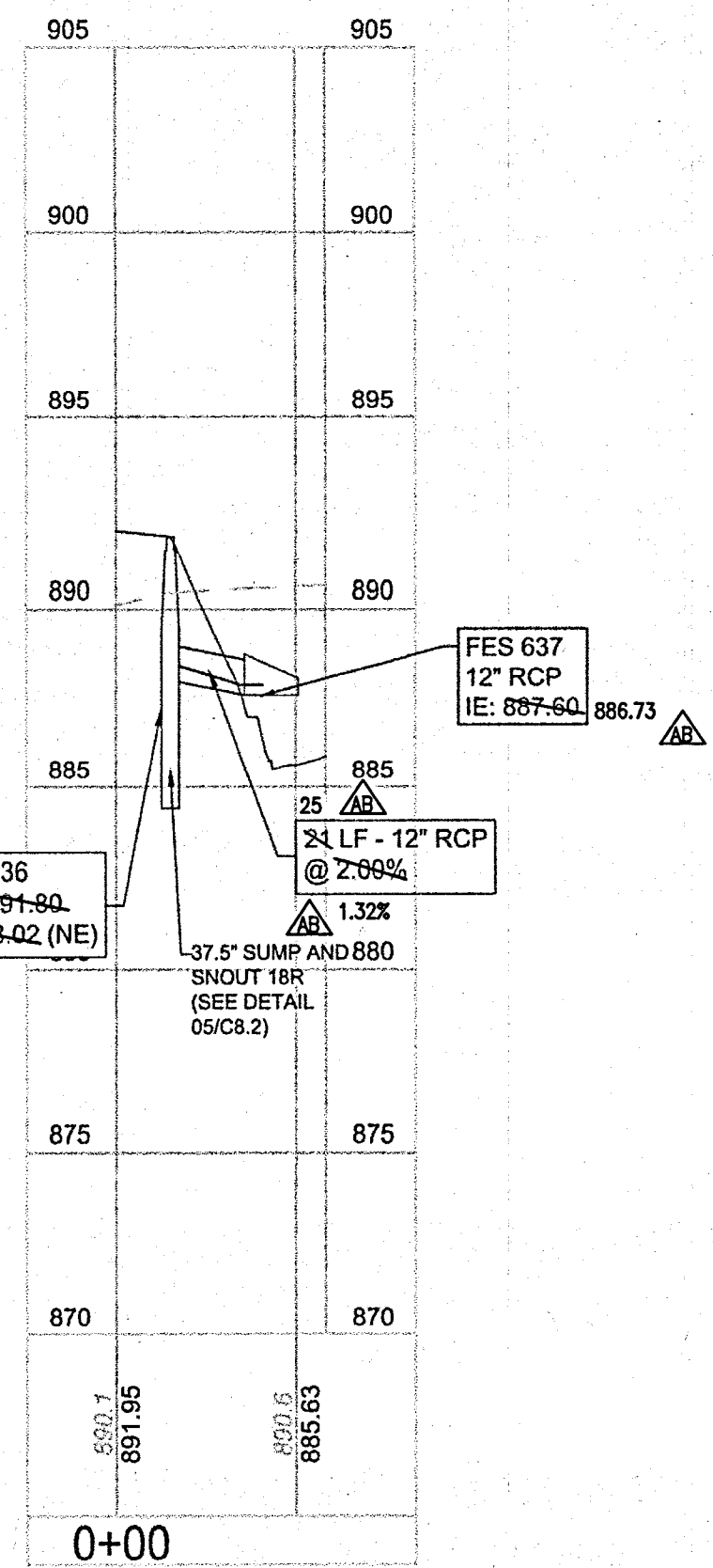
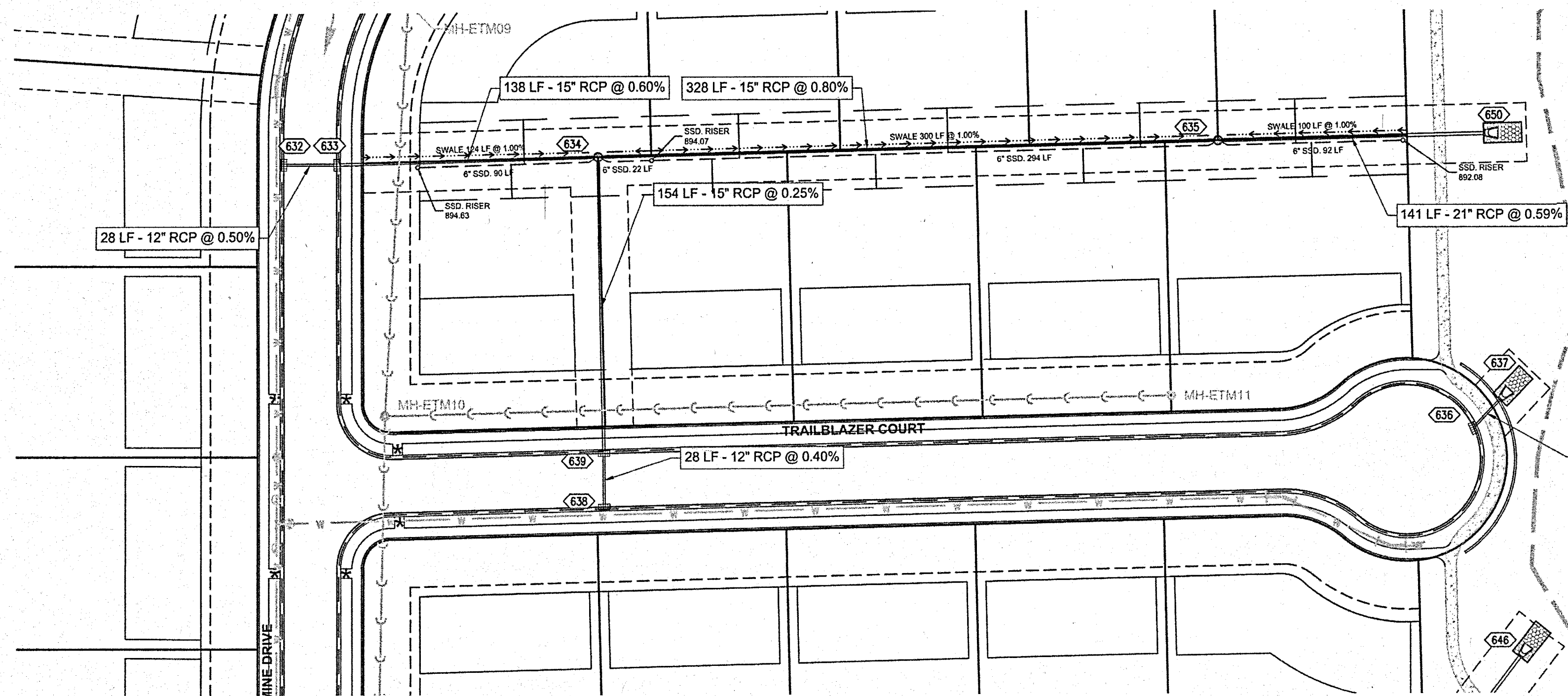


STORM SEWER PLAN & PROFILE
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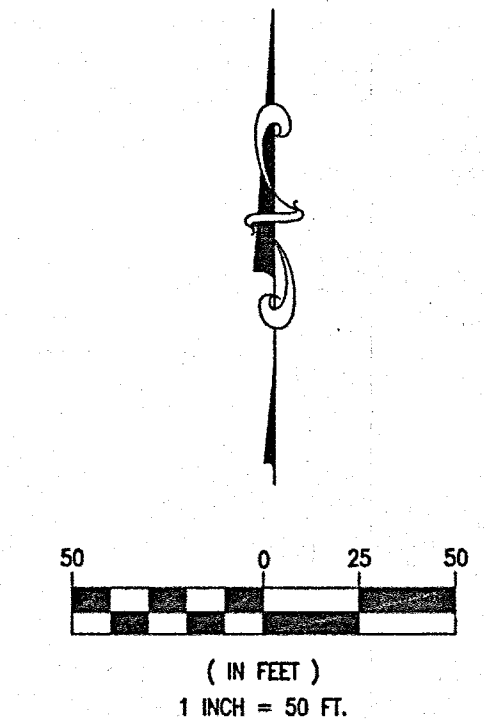


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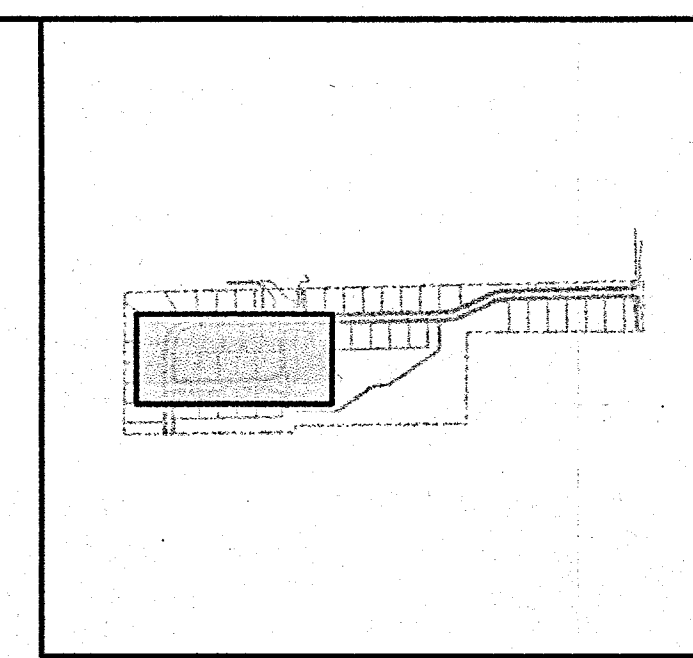
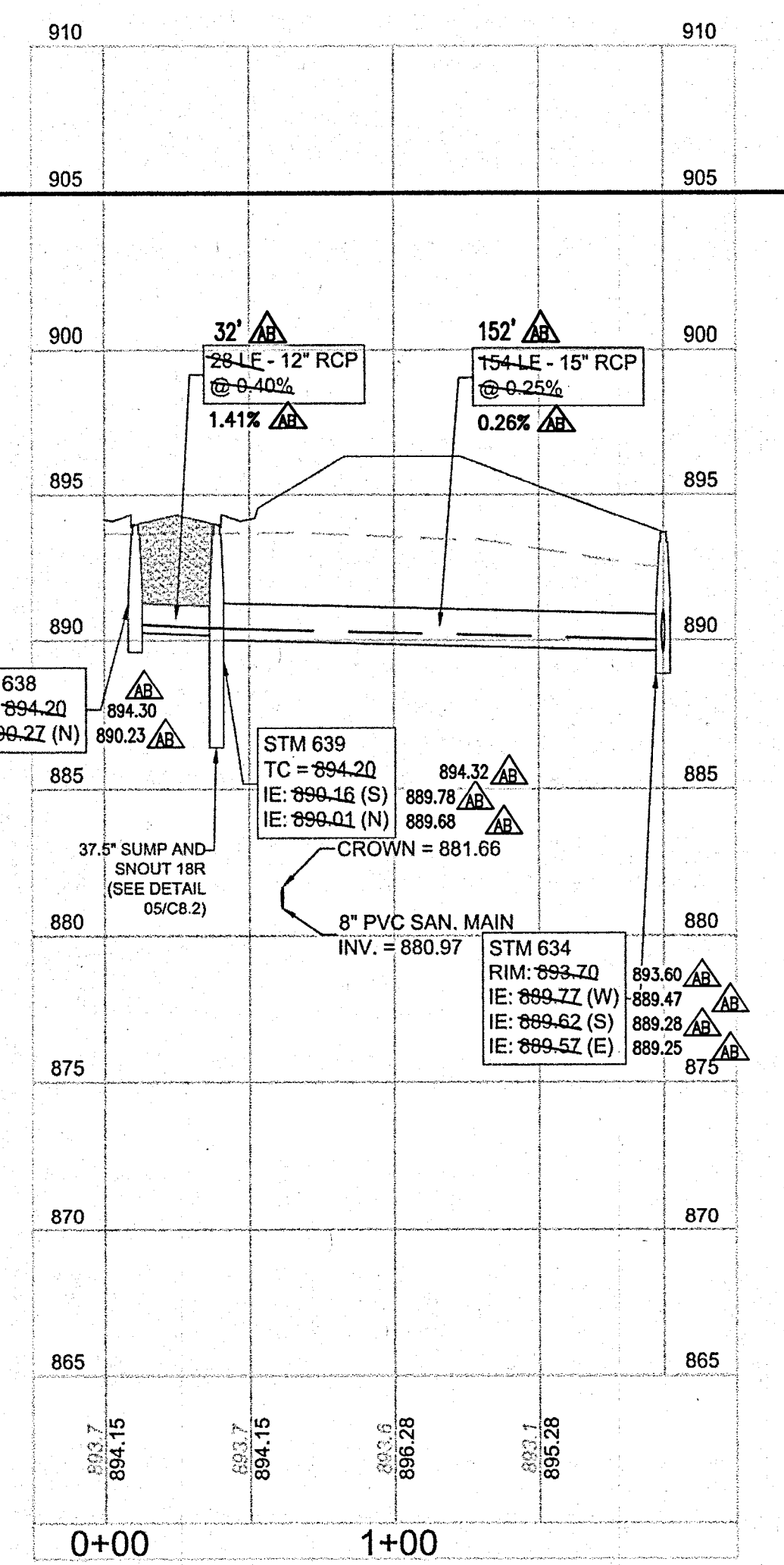
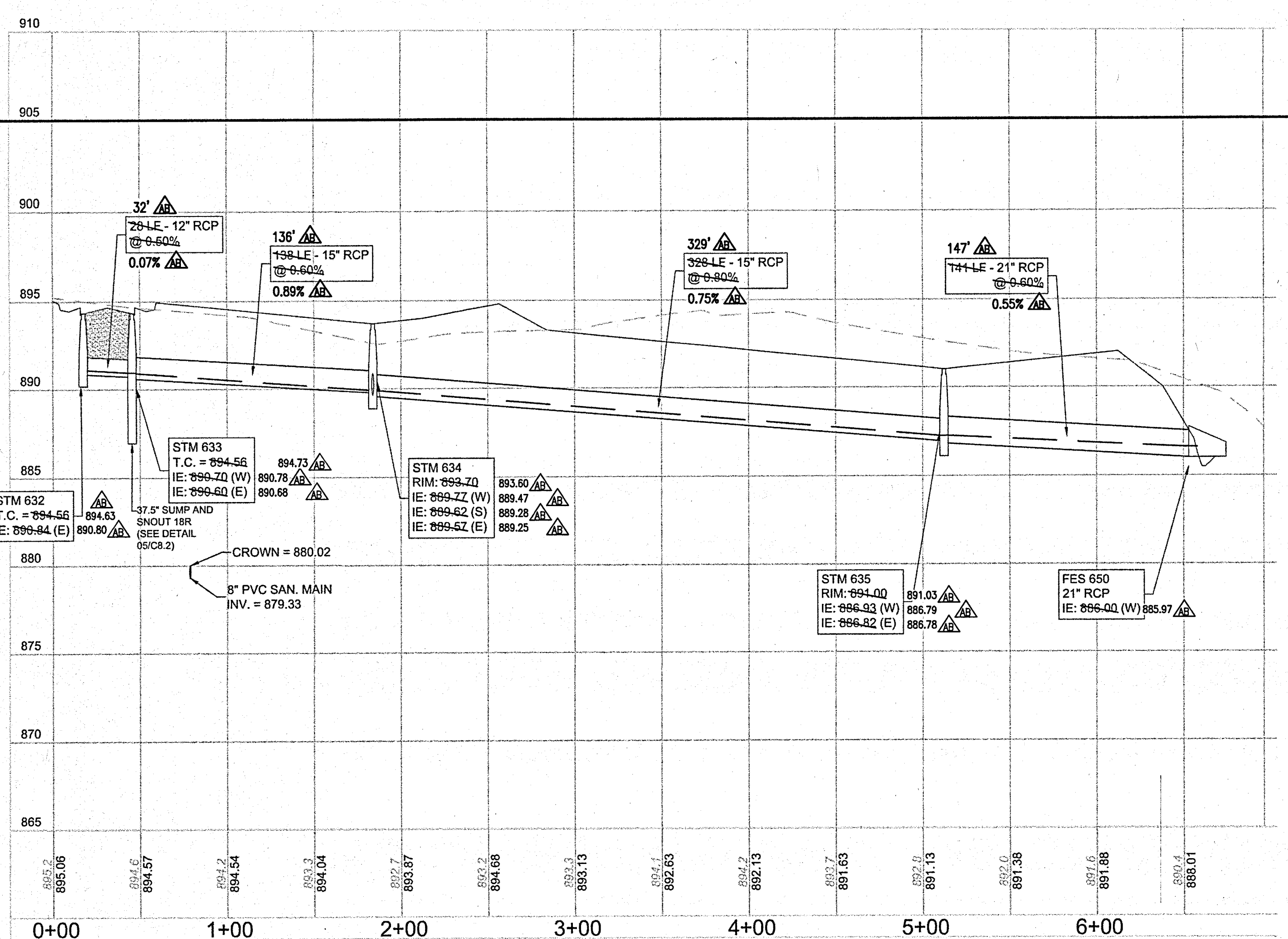


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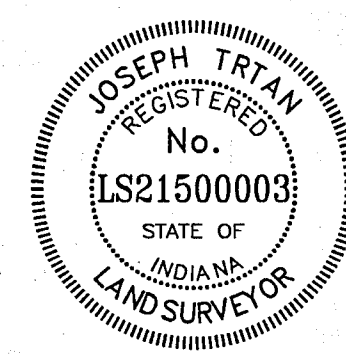
REVISIONS		NO.	DATE	DESCRIPTION

PROJECT NO.:	18414	ORIGINAL ISSUE DATE:	DECEMBER 14, 2018
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DRAWN BY:	PLD		



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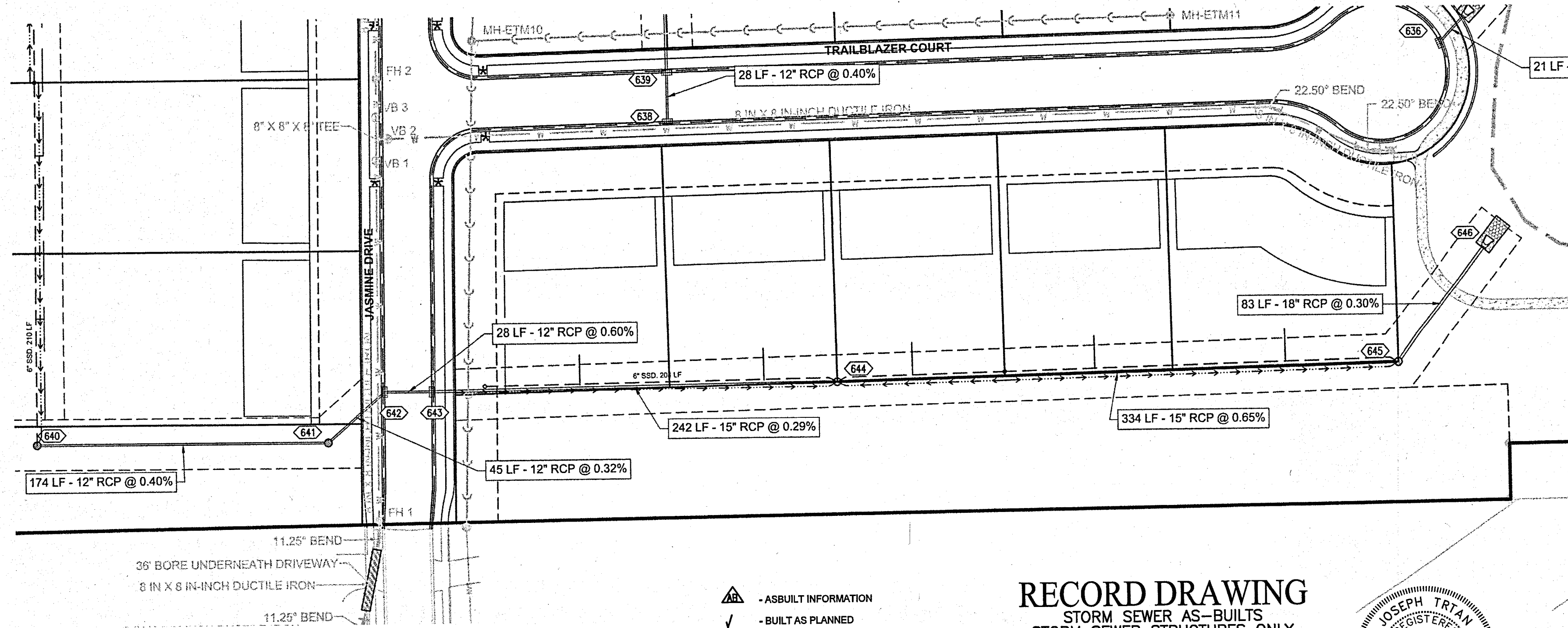
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STORM SEWER PLAN & PROFILE
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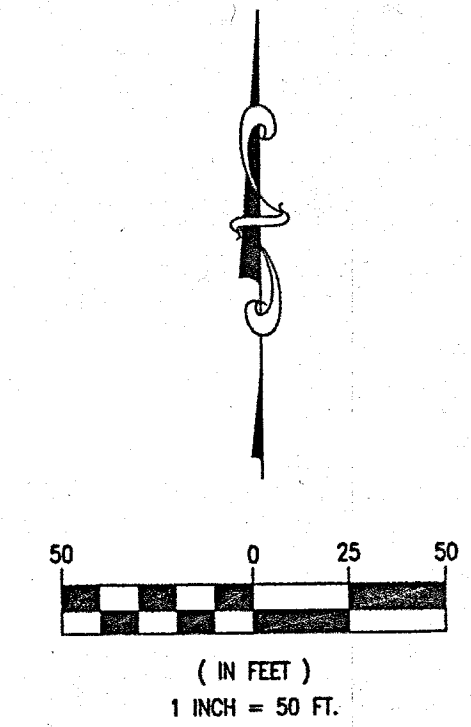
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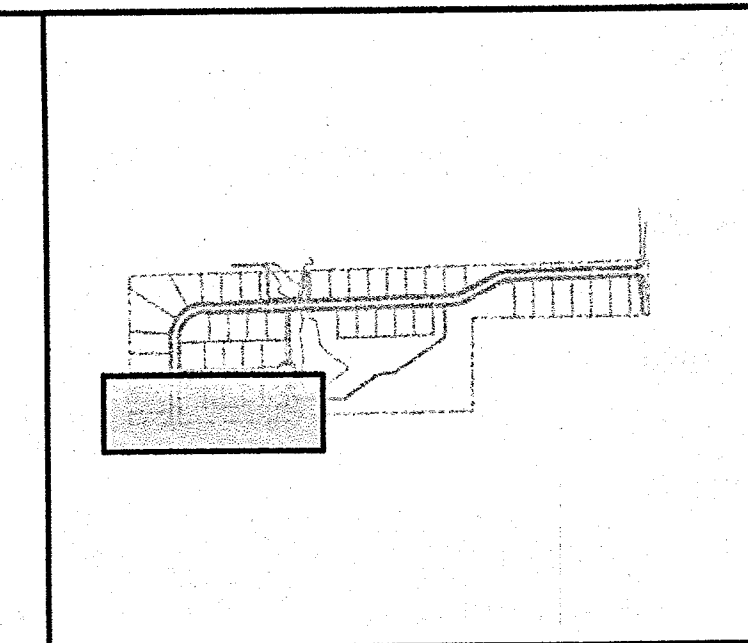
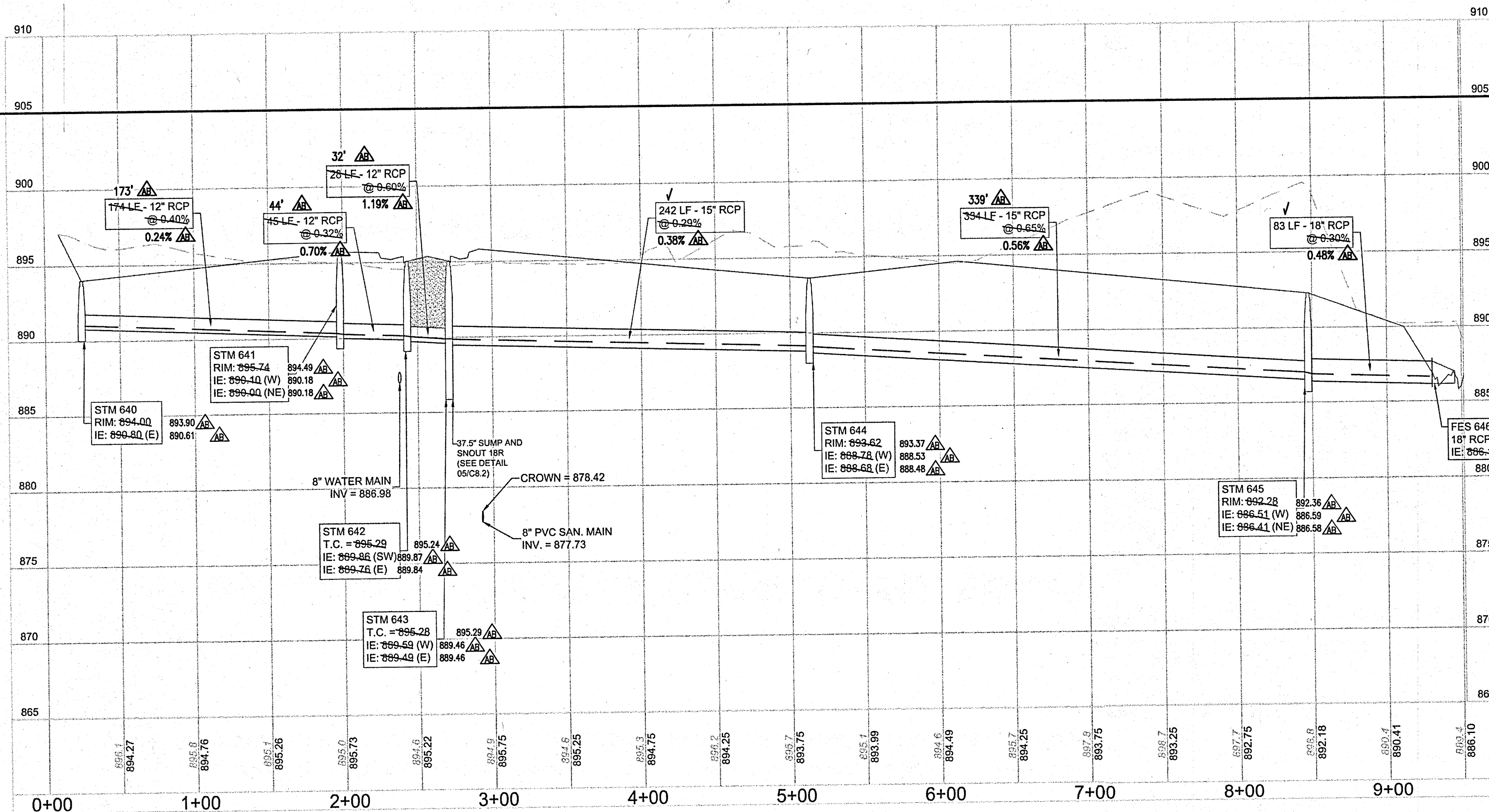
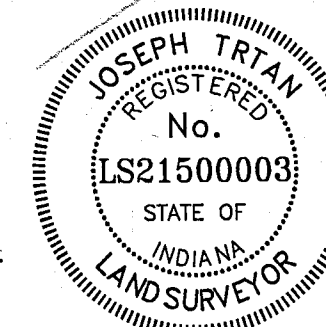
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- THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OF CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS OR 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.



▲ AS-BUILT INFORMATION
 ✓ BUILT AS PLANNED
 DATE OF LAST FIELDWORK: 1/15/2020

RECORD DRAWING
 STORM SEWER AS-BUILTS
 STORM SEWER STRUCTURES ONLY
 1/20/2020
 J. E. Tolo
 JOSEPH TRTAN, LS21500003

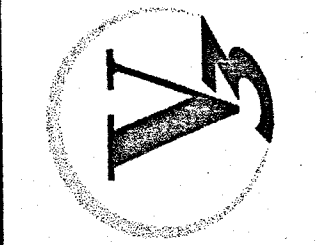


REVISIONS		DESCRIPTION
NO.	DATE	

PROJECT NO.: 18414
 ORIGINAL ISSUE DATE: DECEMBER 14, 2018
 STORM SEWER PLAN & PROFILE
 ESTATES AT TOWNE MEADOW
 INDIANA
 CARMEL

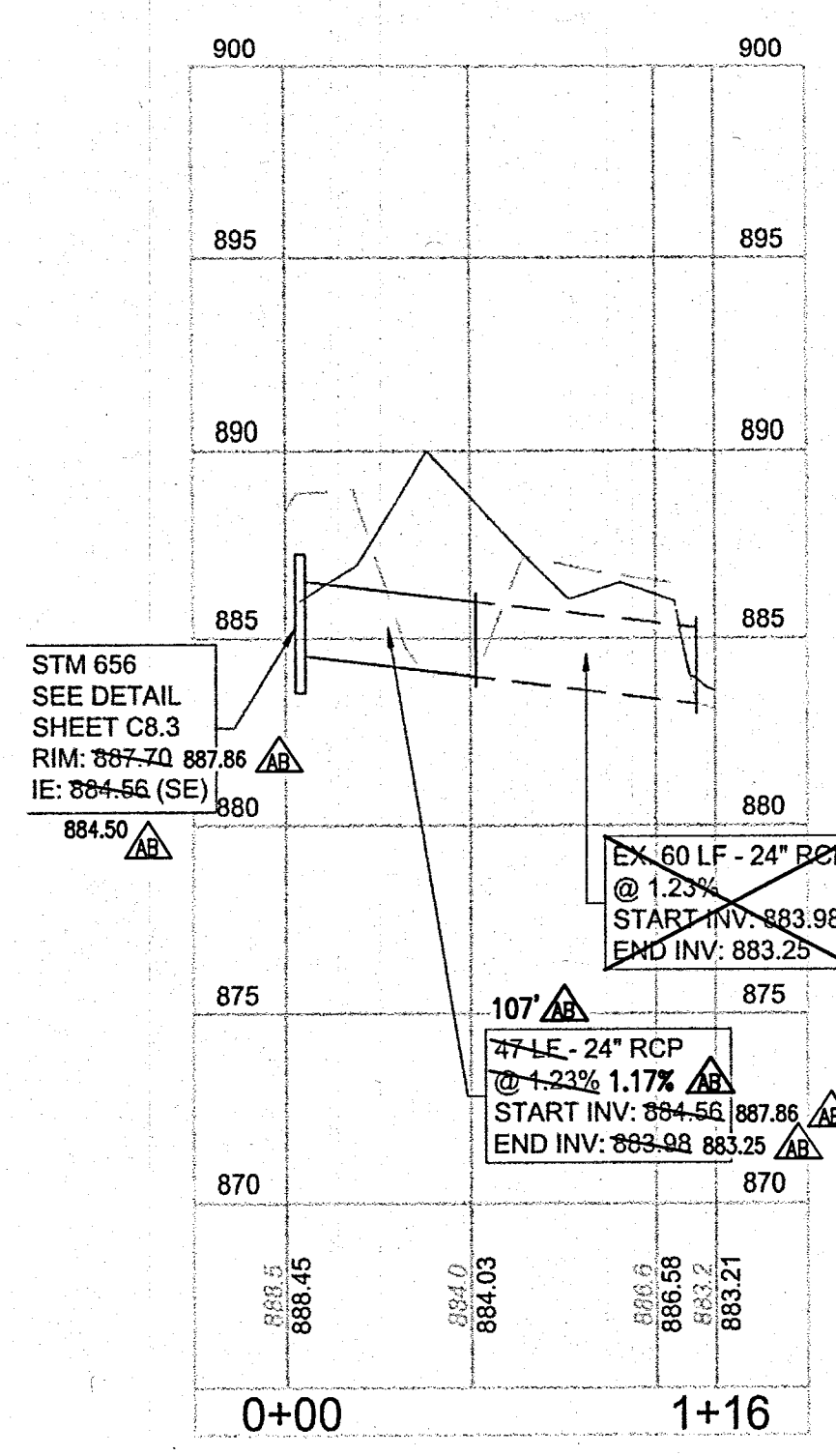
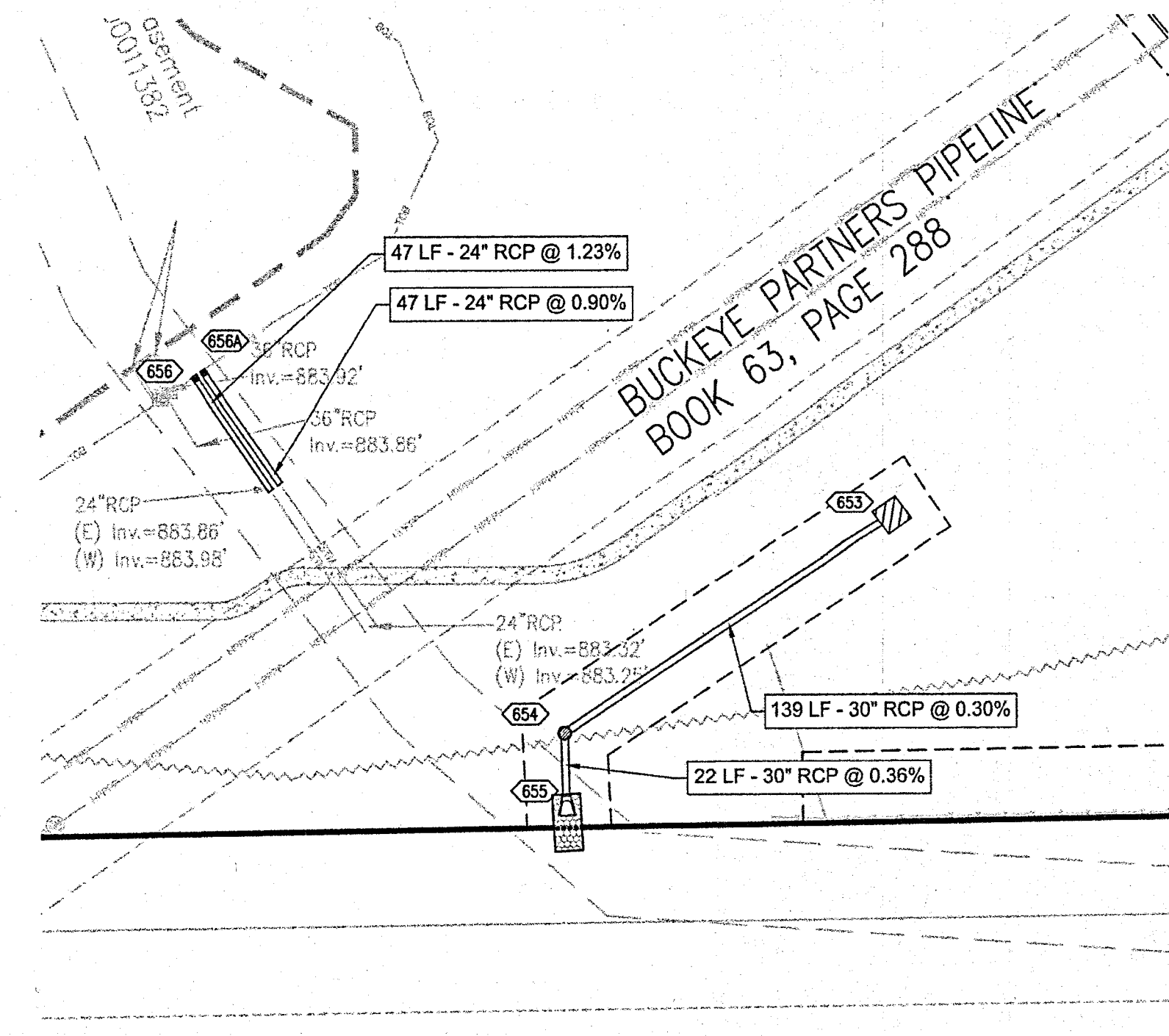
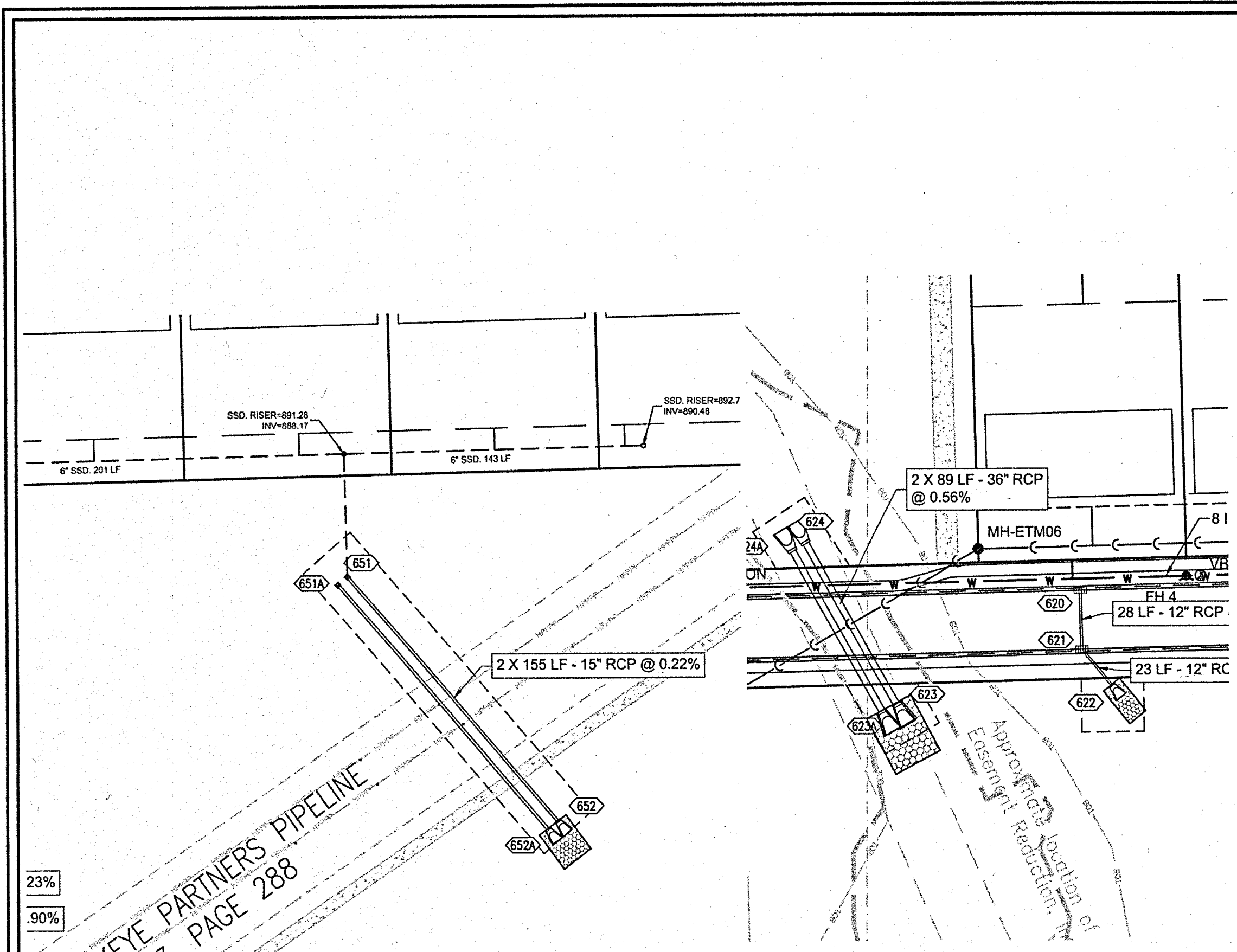


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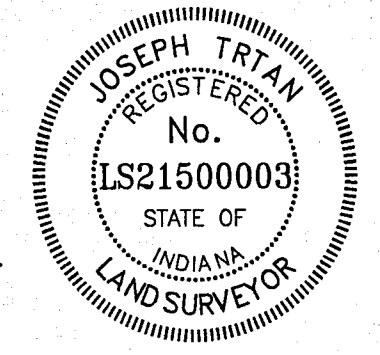
DRAWING NO.

C6.5



- NOTES:
- CONTRACTOR TO FIELD VERIFY LOCATION, INVERT, AND SIZE OF ALL EXISTING UTILITIES PRIOR TO ORDERING MATERIALS OR BEGINNING UTILITY WORK. CONTRACTOR TO NOTIFY ENGINEER OF ANY DISCREPANCIES IMMEDIATELY.
 - UNLESS INDICATED OTHERWISE, FRAME AND OPEN LID STORM STRUCTURES IN PAVEMENT SHALL BE NEENAH R-2502 WITH TYPE D LID OR APPROVED EQUAL, AND FRAME AND CLOSED LID STORM STRUCTURES IN PAVEMENT SHALL BE NEENAH R-1772 OR APPROVED EQUAL. FRAME AND OPEN LID STORM STRUCTURES IN OPEN SPACE SHALL BE R-4340-B OR APPROVED EQUAL. ALL FRAME AND GRATES SHALL CONFORM TO LOCAL MUNICIPALITY REQUIREMENTS. FRAME AND CLOSED LID STORM STRUCTURES LOCATED WITHIN AN ACCESSIBLE ROUTE SHALL BE NEENAH R-1772 WITH TYPE C LID (OR EQUIVALENT) WITH PERMA-GRIP SURFACE. DRILL 1 - 1" DIAMETER LIFT HOLE INSTEAD OF A STANDARD PICK HOLE.
 - LIGHT POLES SHOWN FOR COORDINATION OR LOCATION PURPOSES ONLY AND DO NOT REPRESENT ACTUAL SIZE. SEE PLANS BY SITE LIGHTING CONSULTANT FOR SITE LIGHTING INFORMATION.
 - THE STORM SEWER SYSTEM SHALL BE CONSTRUCTED PER DESIGN SPECIFIED AND AS APPROVED BY THE CITY OF CARMEL ON THE FINAL APPROVED CONSTRUCTION PLANS. DEVIATIONS FROM THE APPROVED DESIGN SHALL ONLY BE PERMITTED DUE TO SPECIAL CIRCUMSTANCES OR DIFFICULTY DURING CONSTRUCTION AND WILL REQUIRE PRIOR FIELD APPROVAL FROM A DESIGNATED REPRESENTATIVE OF THE CITY OF CARMEL IN ADDITION TO SUPPLEMENTAL APPROVAL BY THE DESIGN ENGINEER. AN EXPLANATION OF ANY SUCH DEVIATION SHALL BE INCLUDED AS A REQUIREMENT ON AS-BUILT/RECORD DRAWINGS SUBMITTED FOR RELEASE OF PERFORMANCE GUARANTEES. APPROVED DESIGN SLOPES IDENTIFIED AS GENERATING VELOCITIES OF 2.5 FPS OR LESS OR 10 FPS OR GREATER (AT FULL FLOW CAPACITY) SHALL REQUIRE AS-BUILT CERTIFICATION AT THE TIME OF CONSTRUCTION, PRIOR TO BACKFILLING THE PIPE. THE CONTRACTOR IS INSTRUCTED TO AS-BUILT EACH SECTION OF STORM PIPE AS IT IS BEING INSTALLED TO ENSURE COMPLIANCE WITH THE DESIGN PLANS AND AS APPROVED BY THE CITY OF CARMEL.

RECORD DRAWING
 STORM SEWER AS-BUILTS
 STORM SEWER STRUCTURES ONLY
 1/20/2020
 Joe Tolo
 JOSEPH TRTAN, LS21500003

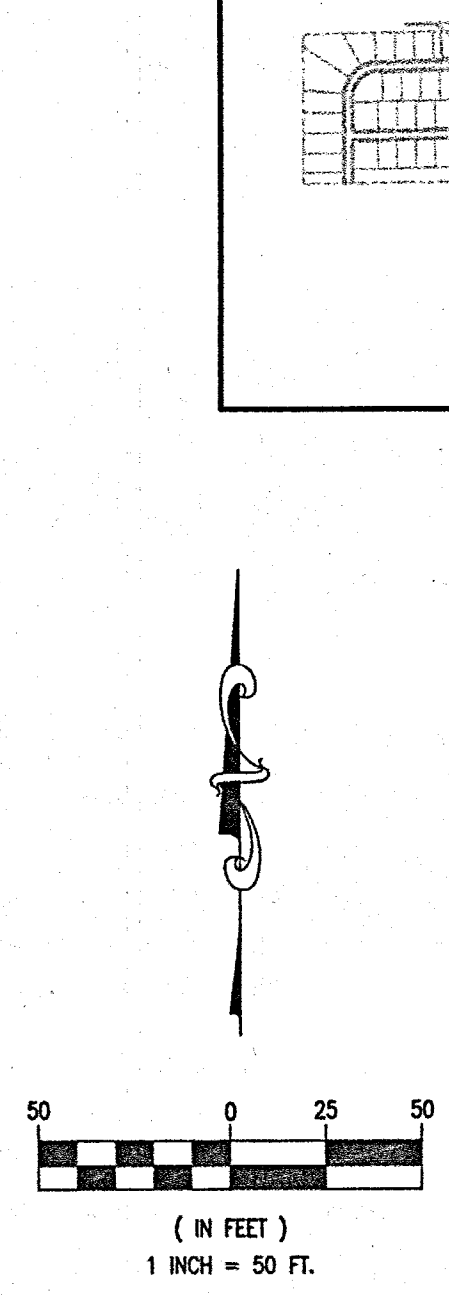
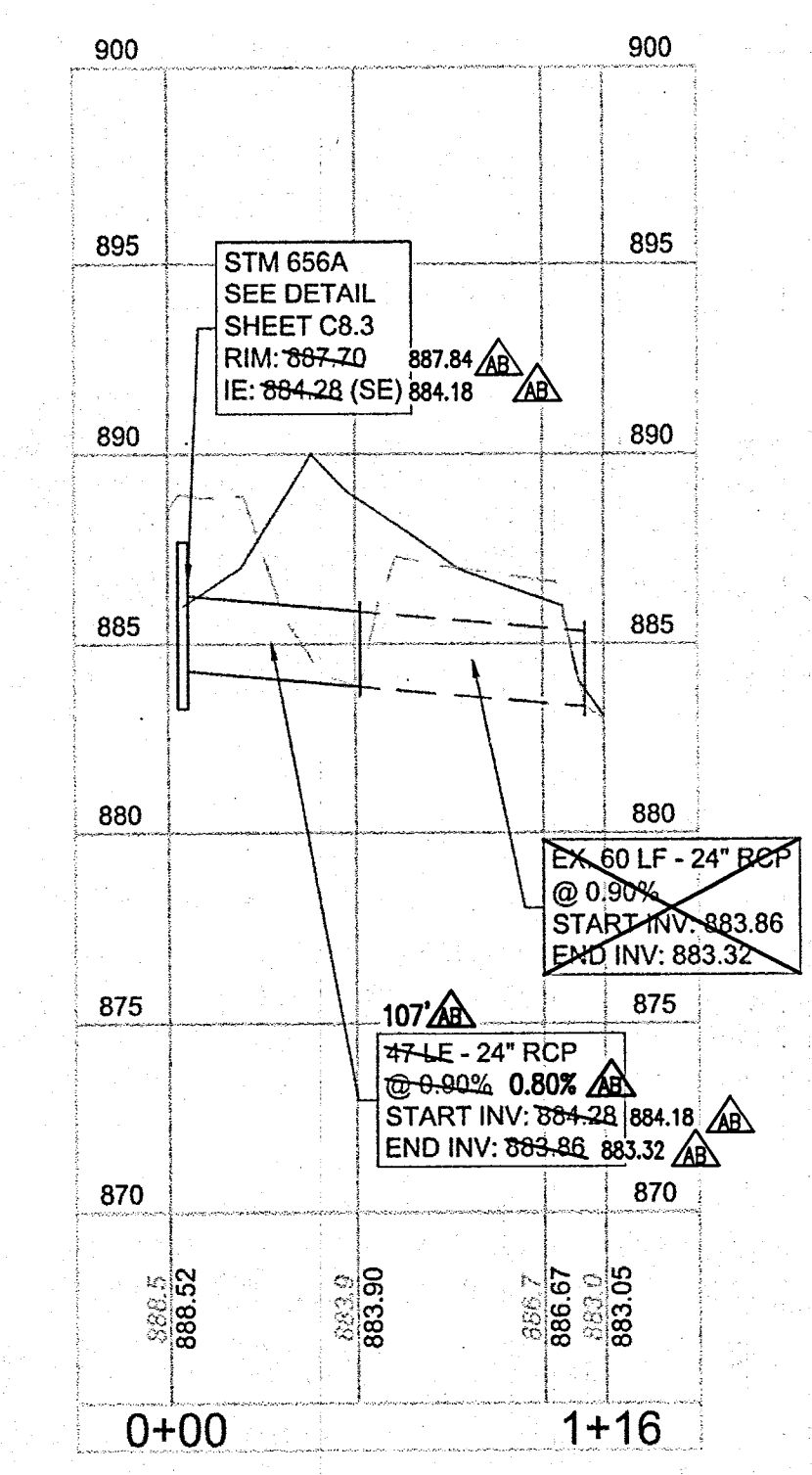
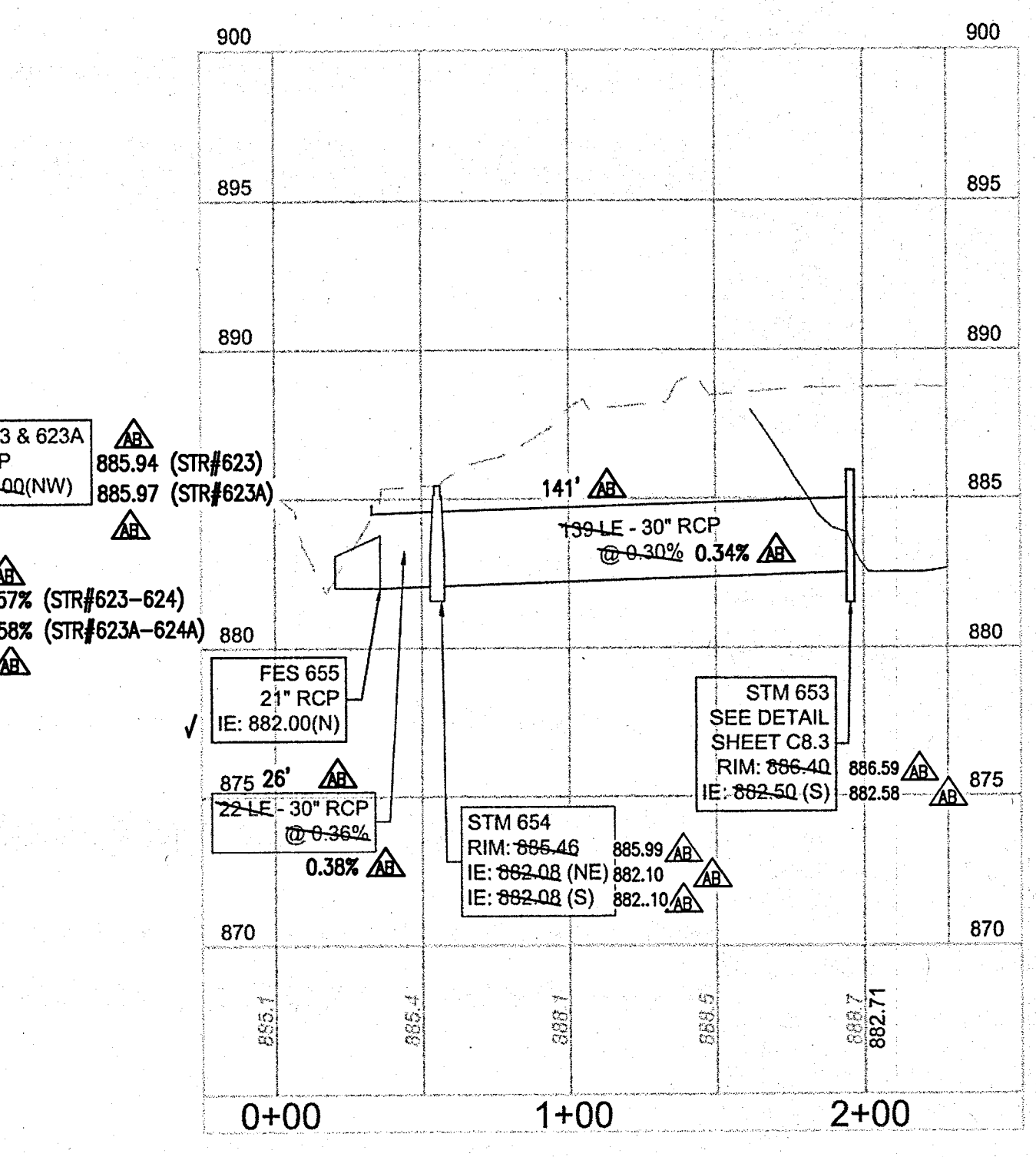
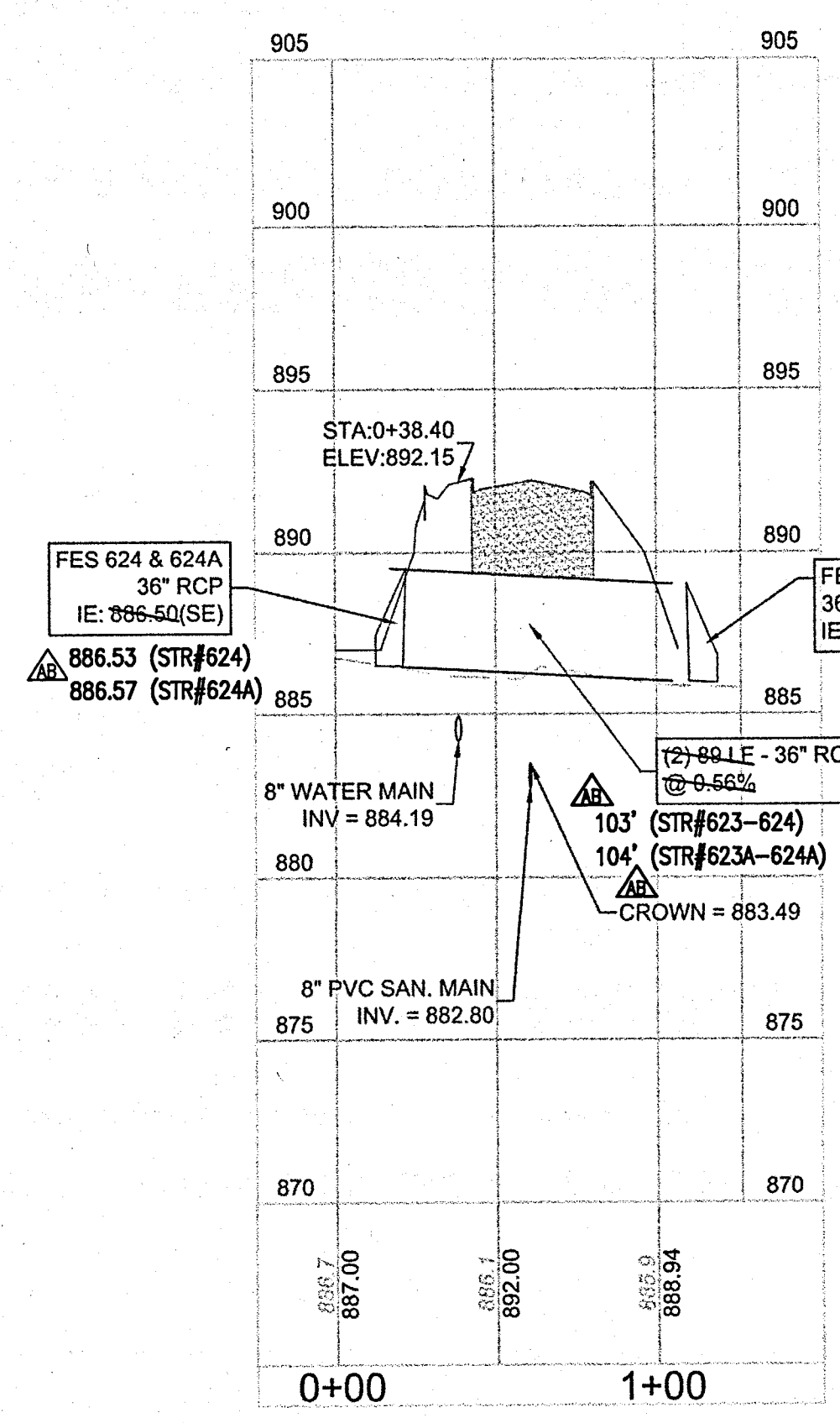
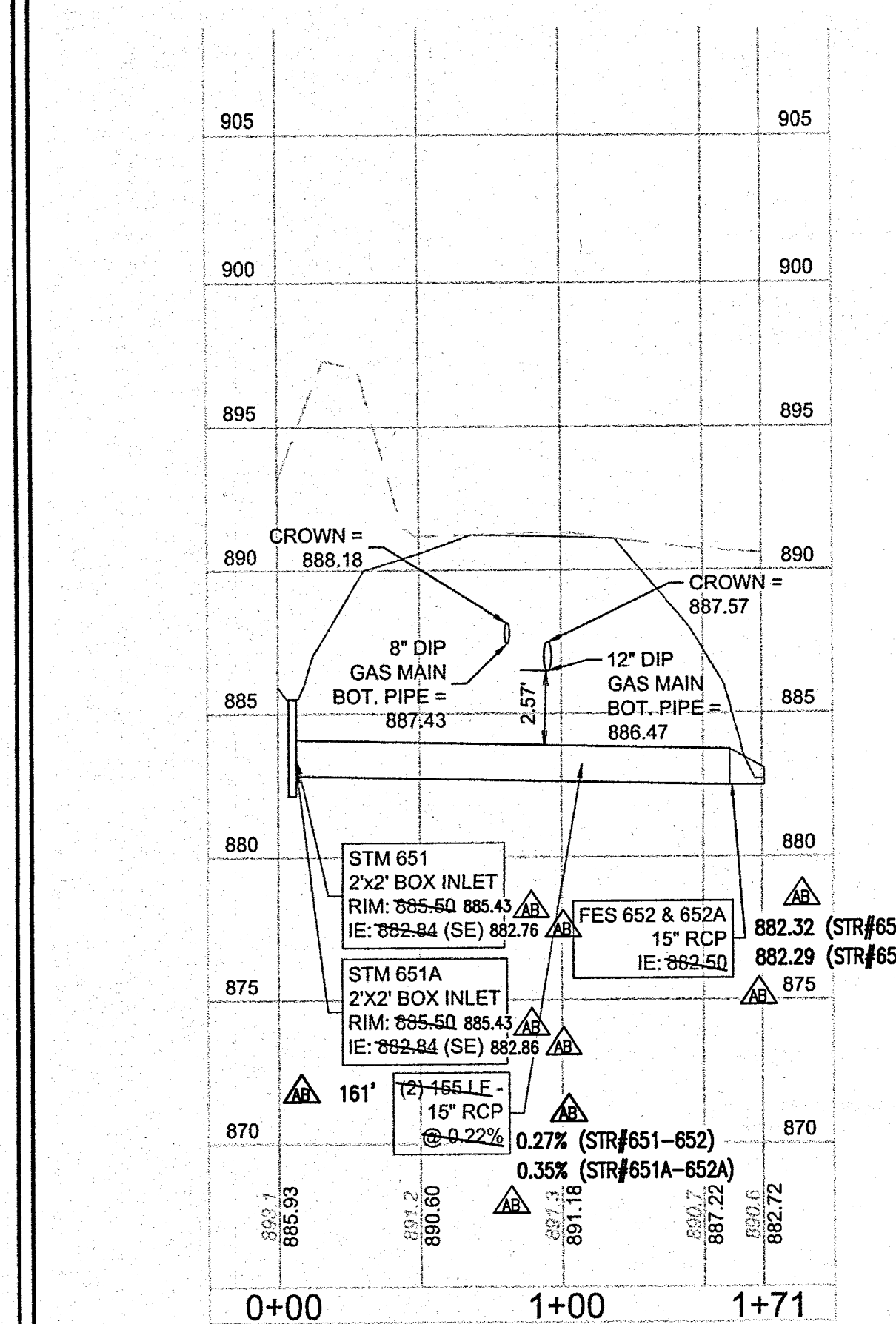


▲ - AS-BUILT INFORMATION
 ✓ - BUILT AS PLANNED
 DATE OF LAST FIELDWORK: 1/15/2020

REVISIONS		DESCRIPTION
NO.	DATE	

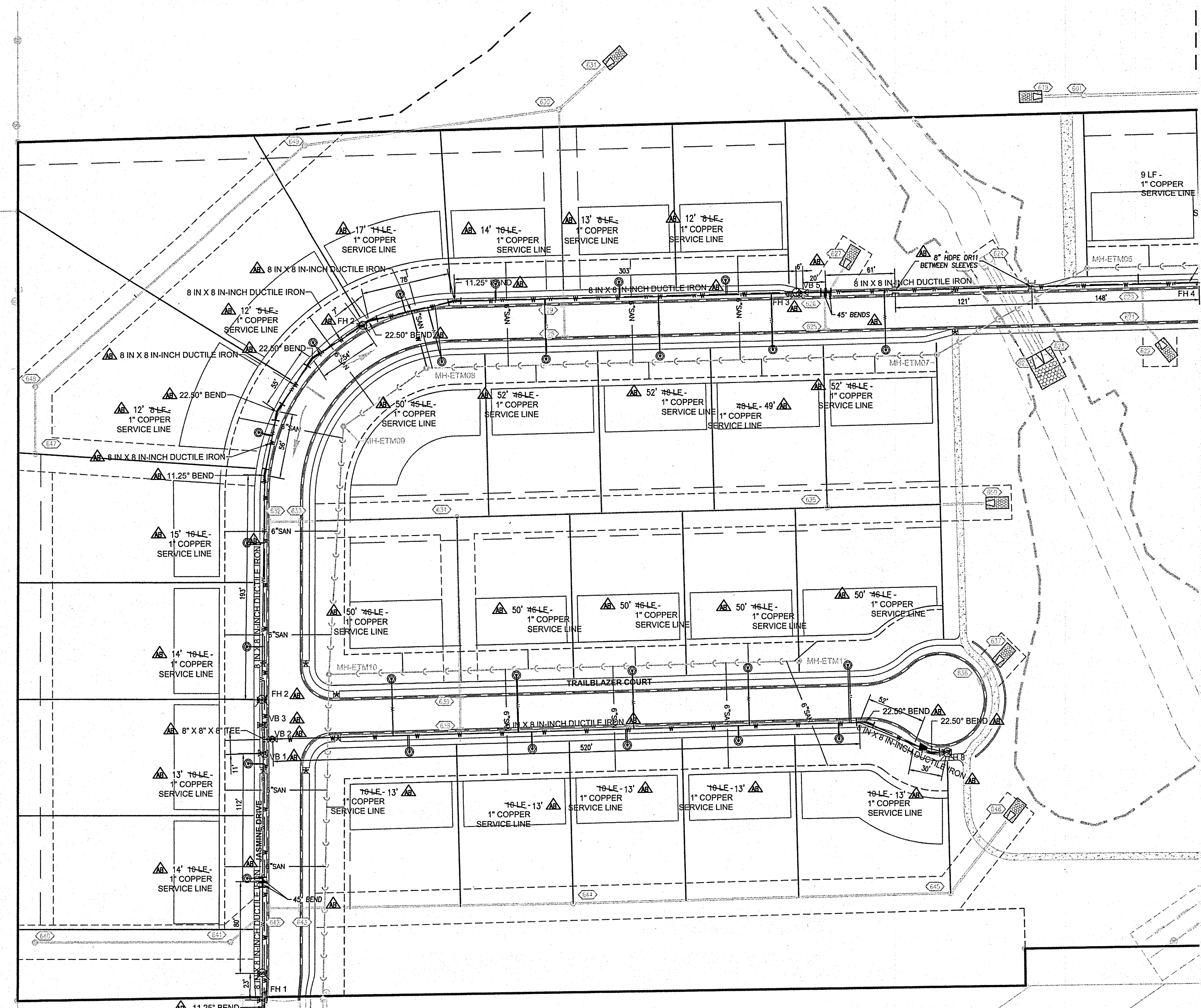
PROJECT NO: 18414 ORIGINAL ISSUE DATE: DECEMBER 14, 2018
 PROJECT MANAGER: JOR
 DESIGNED BY: JOR
 DRAWN BY: PLD

STORM SEWER PLAN & PROFILE
ESTATES AT TOWNE MEADOW
 CARMEL, INDIANA

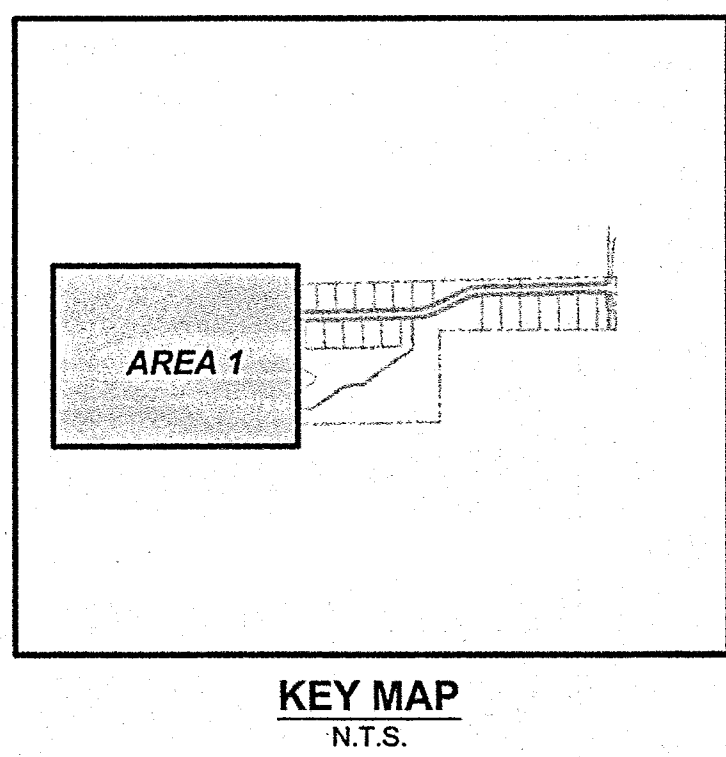
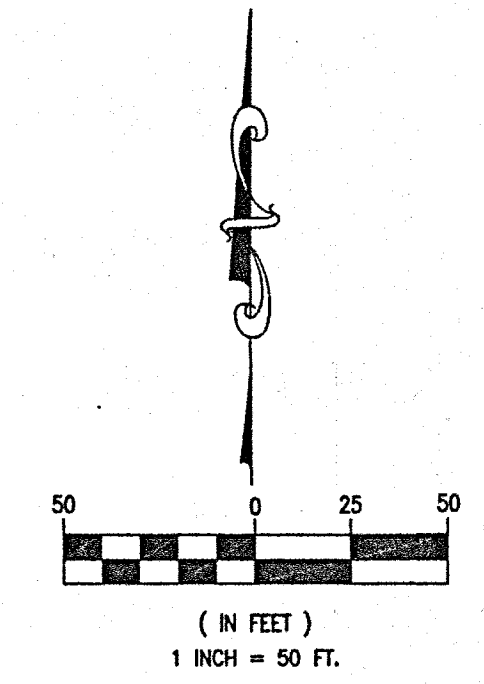


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DRAWING NO.
C6.6



FOR CONTINUATION SEE SHEET 7.1



NOTES

1. For installation of water mains and service lines, see 03/C7.2 for trench details.
2. All water service lines are to be stubbed per plan. The termination of the stub is to be marked with a 4" PVC pipe with a painted blue top.
3. Tracer wire must be installed along all water mains per City of Carmel Utilities Department specifications.
4. Granular backfill must be placed at all water main road crossings per City of Carmel standards.
5. Blue snowplowable raised pavement markers are to be installed at the centerline of the road adjacent to each fire hydrant.
6. All ductile iron water mains shall be bedded in sand, from the bottom of the trench to 12" above pipe (see sheet C7.2).
7. All fire hydrants shall be Mueller or American Darling (Safety Yellow, M.A.B. #043291, Sherwin Williams #F75Y2), open to the right, and have a safety blue stripe around hydrant bonnet from the factory. The hydrant pump nozzle shall be of one-piece design, compatible with 5" Storz hose coupling. The nozzle shall be an integral part of the fire hydrant and must be furnished by the manufacturer or authorized distributor designated by the manufacturer. Mueller model 290220 for casting and 290221 for cap. Storz adapters will not be accepted.
8. Blue reflective tape must be installed 18" above all water mains.
9. Tracer wire shall be installed with all water mains.
10. Post-Caps or the equivalent are required on all water valve installations.

NOTE: ALL WATER MAINS SHALL BE DUCTILE IRON AND INSTALLED PER THE CITY OF CARMEL STANDARDS
 UNLESS OTHERWISE NOTED, ALL WATER MAINS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 64"
 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 SHALL BE RELOCATED TO WITHIN ONE FOOT OF THE PROPOSED RIGHT-OF-WAY LINE.
 Utility inspectors have the authority to make changes in the field if conditions are warranted.

- AS-BUILT INFORMATION
- BUILT AS PLANNED
- AS-BUILT WATER LATERAL STUB
- AS-BUILT TEE
- AS-BUILT 45° VERTICAL BEND
- AS-BUILT 11.25° BEND
- AS-BUILT 22.5° BEND
- AS-BUILT 45° BEND
- AS-BUILT FIRE HYDRANT
- AS-BUILT WATER VALVE
- AS-BUILT SLEEVE
- AS-BUILT BLOW OFF
- AS-BUILT WATERSTOP
- AS-BUILT REDUCER

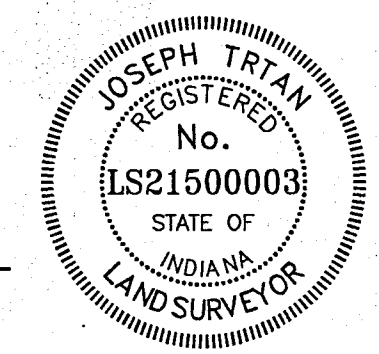
DATE OF LAST FIELDWORK: 1/15/2020

ALL UNDERGROUND STRUCTURE AND BEND LOCATIONS ARE PER THE REDLINE WATER MARKUPS PROVIDED BY THE CONTRACTOR.

WATER TABLE		
STREET	SIZE	LENGTH
UNIVERSITY COURT	0'-8"	596'-0"
JASMINE DRIVE	0'-8"	651'-0"
TOWNE MEADOW DRIVE	0'-8"	2,440

RECORD DRAWING
 WATER AS-BUILTS
 WATER STRUCTURES ONLY
 1/20/2020

 JOSEPH TRTAN, LS21500003



REVISIONS		NO.	DATE	DESCRIPTION

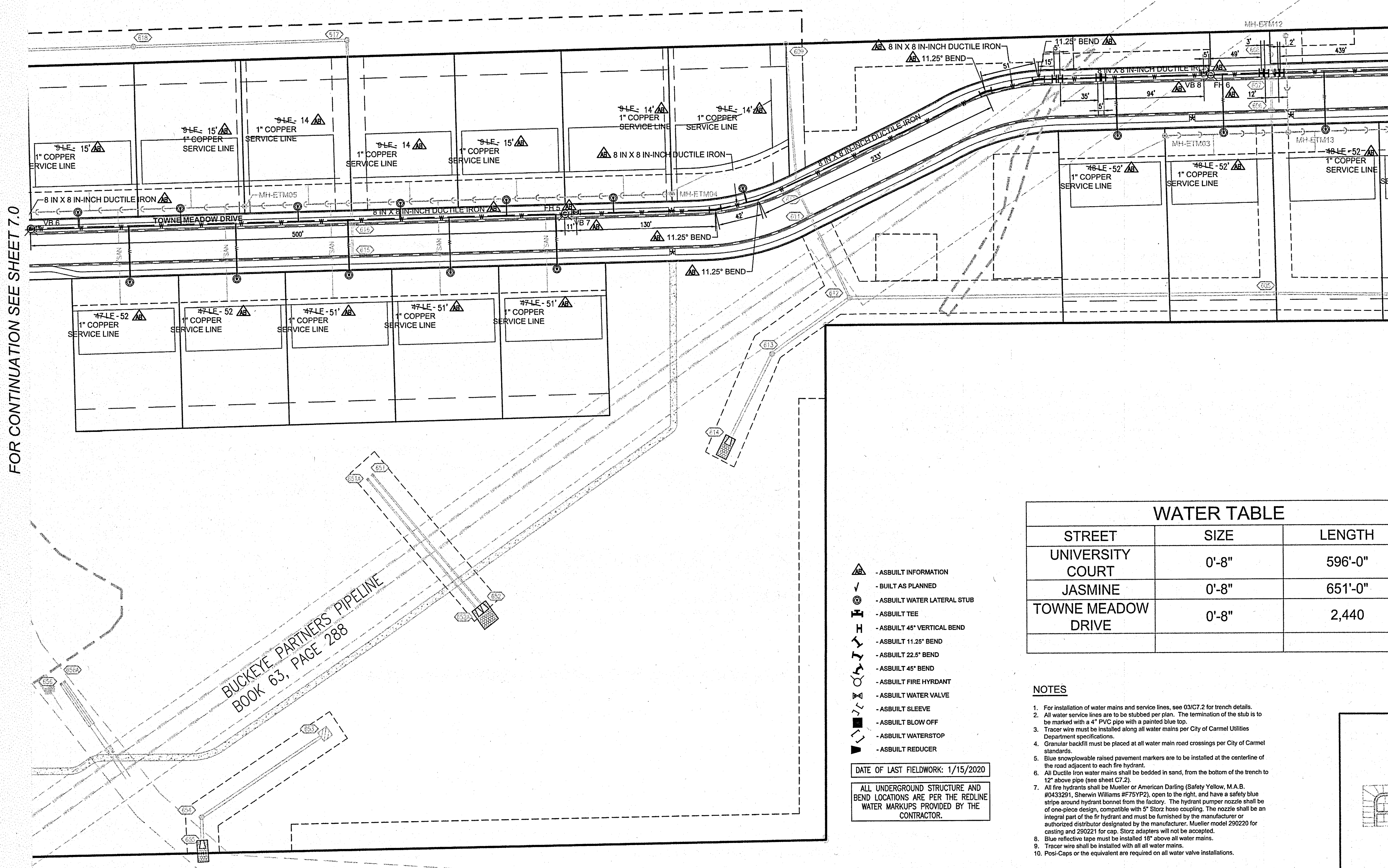
ORIGINAL ISSUE DATE: DECEMBER 14, 2018

PROJECT NO.: 18414	PROJECT MANAGER: JOR	DESIGNED BY: JOR	DRAWN BY: PLD
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WATER PLAN - AREA 1
ESTATES AT TOWNE MEADOW
 CARMEL, INDIANA

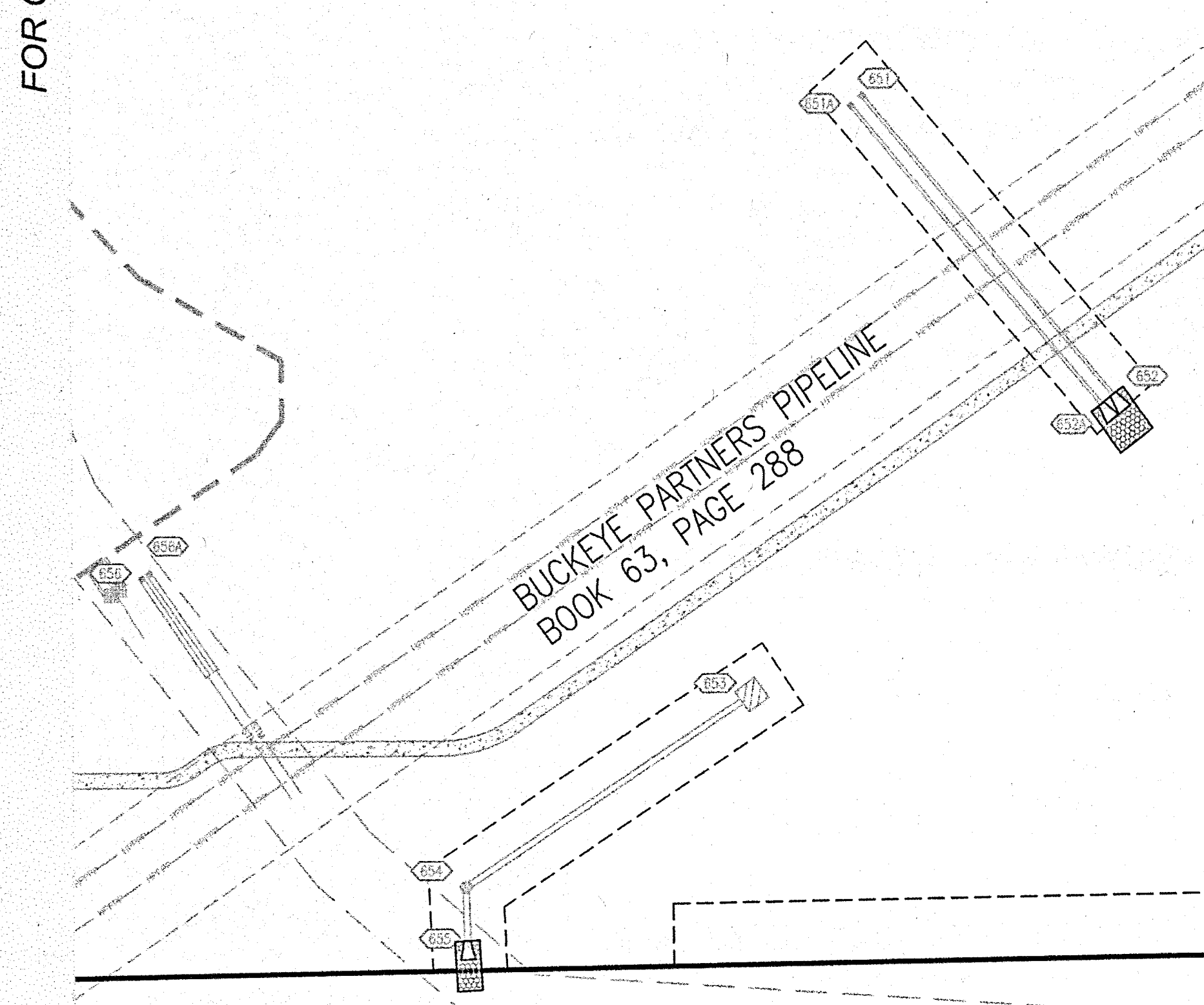
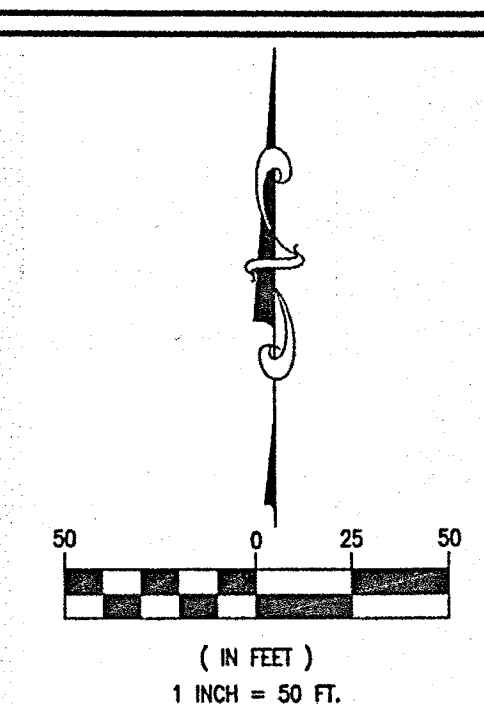
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DRAWING NO.
C7.0



FOR CONTINUATION SEE SHEET 7.0

FOR CONTINUATION SEE SHEET 7.2



WATER TABLE		
STREET	SIZE	LENGTH
UNIVERSITY COURT	0'-8"	596'-0"
JASMINE	0'-8"	651'-0"
TOWNE MEADOW DRIVE	0'-8"	2,440

- AS-BUILT INFORMATION
- BUILT AS PLANNED
- AS-BUILT WATER LATERAL STUB
- AS-BUILT TEE
- AS-BUILT 45° VERTICAL BEND
- AS-BUILT 11.25° BEND
- AS-BUILT 22.5° BEND
- AS-BUILT 45° BEND
- AS-BUILT FIRE HYDRANT
- AS-BUILT WATER VALVE
- AS-BUILT SLEEVE
- AS-BUILT BLOW OFF
- AS-BUILT WATERSTOP
- AS-BUILT REDUCER

DATE OF LAST FIELDWORK: 1/15/2020

ALL UNDERGROUND STRUCTURE AND BEND LOCATIONS ARE PER THE REDLINE WATER MARKUPS PROVIDED BY THE CONTRACTOR.

NOTES

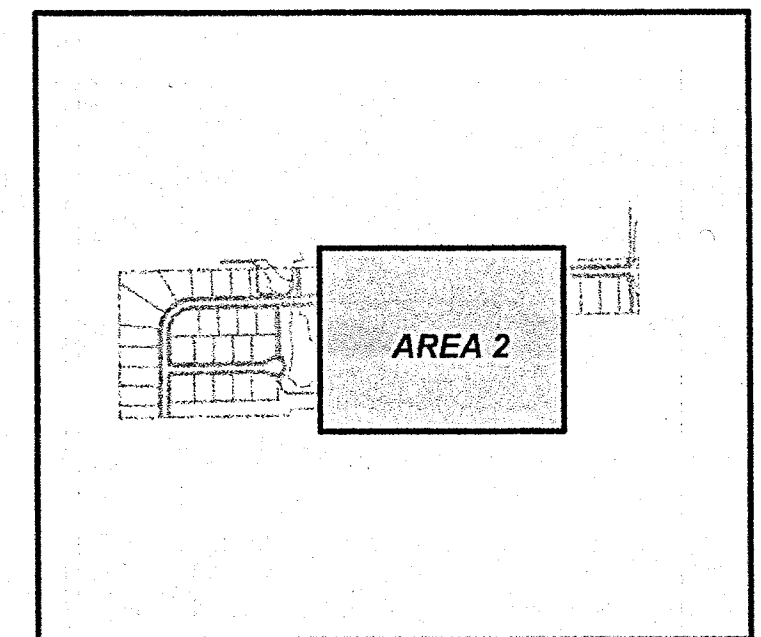
1. For installation of water mains and service lines, see 03/C7.2 for trench details.
2. All water service lines are to be stubbed per plan. The termination of the stub is to be marked with a 4" PVC pipe with a painted blue top.
3. Tracer wire must be installed along all water mains per City of Carmel Utilities Department specifications.
4. Granular backfill must be placed at all water main road crossings per City of Carmel standards.
5. Blue snowplowable raised pavement markers are to be installed at the centerline of the road adjacent to each fire hydrant.
6. All ductile iron water mains shall be bedded in sand, from the bottom of the trench to 12" above pipe (see sheet C7.2).
7. All fire hydrants shall be Mueller or American Darling (Safety Yellow, M.A.B. #0432291, Shevin Williams #F751F2), open to the right, and have a safety blue stripe around hydrant bonnet from the factory. The hydrant pumper nozzle shall be of one-piece design, compatible with 5" Storz hose coupling. The nozzle shall be an integral part of the hydrant and must be furnished by the manufacturer or authorized distributor designated by the manufacturer. Mueller model 290220 for casting and 290221 for cap. Storz adapters will not be accepted.
8. Blue reflective tape must be installed 18" above all water mains.
9. Tracer wire shall be installed with all water mains.
10. Post-Caps or the equivalent are required on all water valve installations.

NOTE: ALL WATER MAINS SHALL BE DUCTILE IRON AND INSTALLED PER THE CITY OF CARMEL STANDARDS

UNLESS OTHERWISE NOTED, ALL WATER MAINS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 54"

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 SHALL BE RELOCATED TO WITHIN ONE FOOT OF THE PROPOSED RIGHT-OF-WAY LINE.

Utility inspectors have the authority to make changes in the field if conditions are warranted.



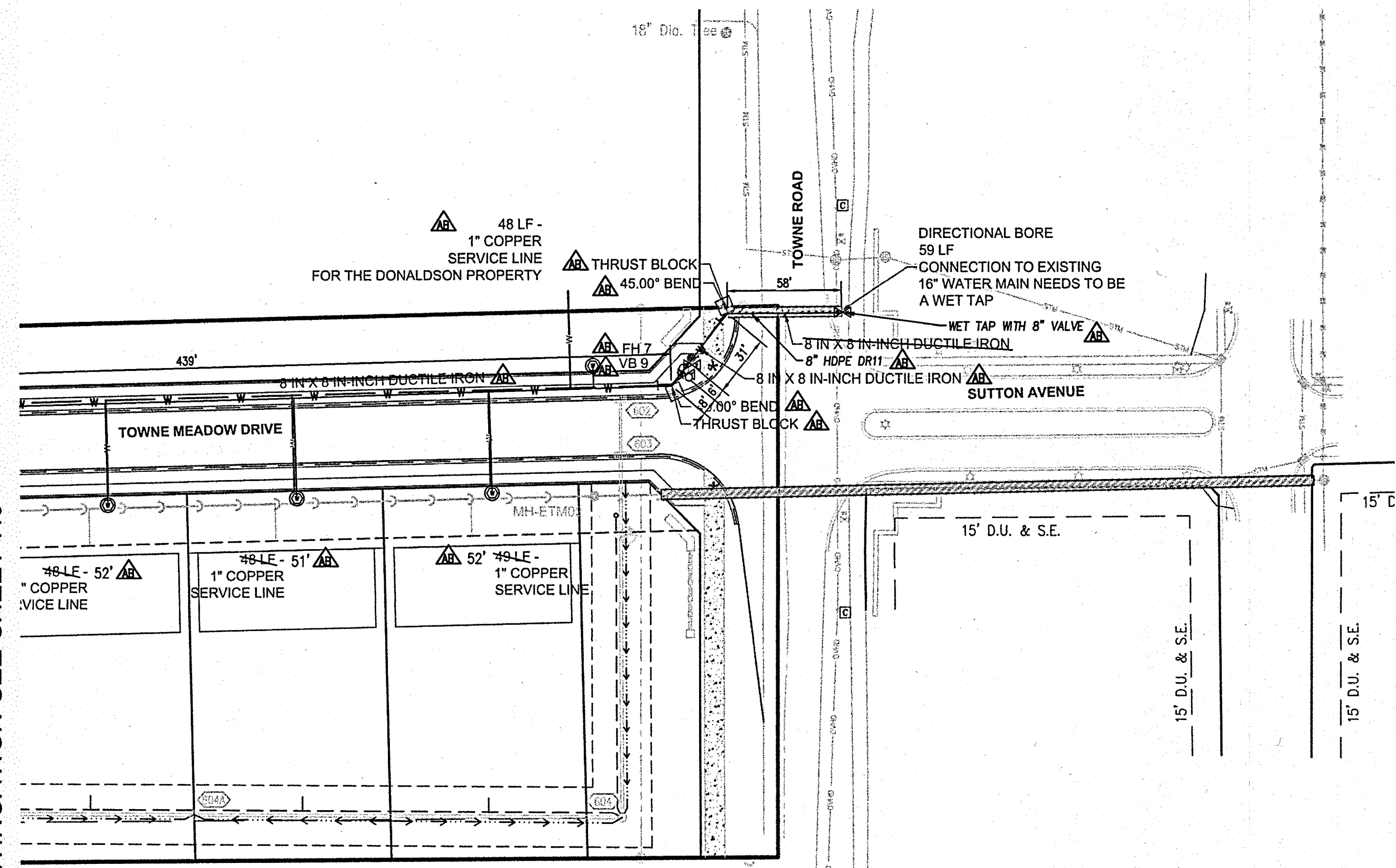
KEY MAP
N.T.S.

RECORD DRAWING
WATER AS-BUILTS
WATER STRUCTURES ONLY
1/20/2020
Joseph Trtan
JOSEPH TRTAN, LS21500003



PROJECT NO. 18414		ORIGINAL ISSUE DATE: DECEMBER 14, 2018	
PROJECT MANAGER	JOR	DESCRIPTION	REVISIONS
DESIGNED BY	JOR	NO.	DATE
DRAWN BY	PLD		
WATER PLAN - AREA 2			
ESTATES AT TOWNE MEADOW			
CARMEL			
INDIANA			
619 N Pennsylvania St Indianapolis, IN 46204 317.423.0690 phone www.v3co.com			
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DRAWING NO.			
C7.1			

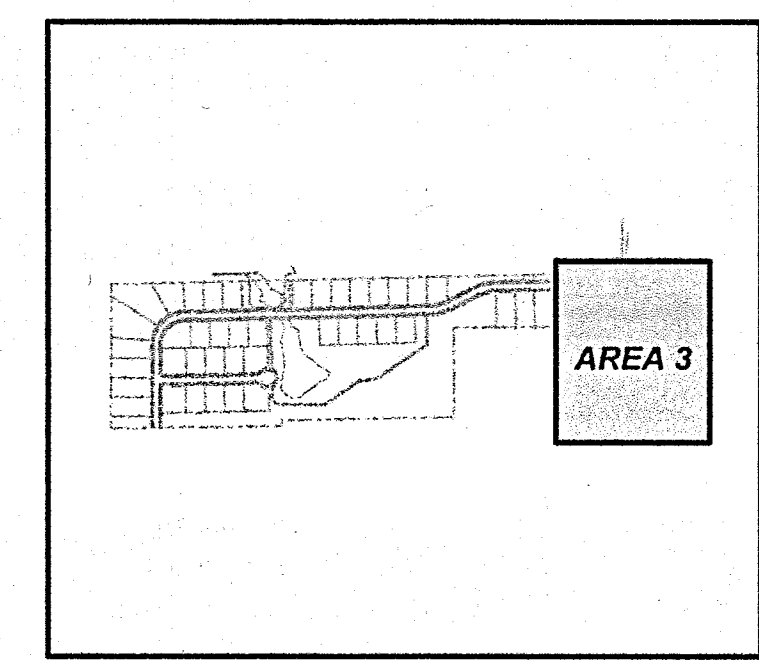
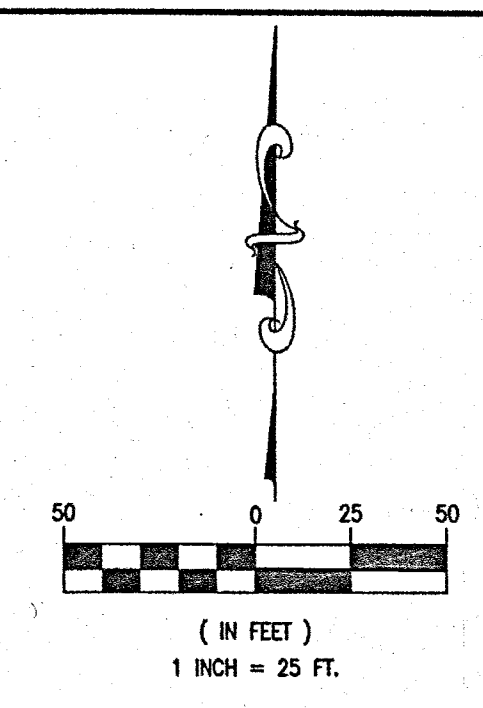
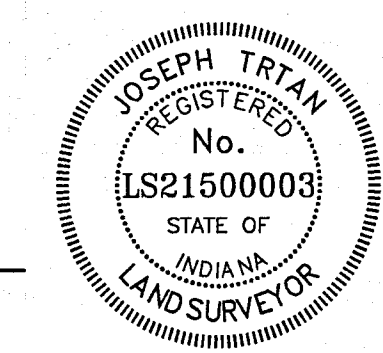
FOR CONTINUATION SEE SHEET 7.0



- ▲ AS-BUILT INFORMATION
- ~ AS-BUILT AS PLANNED
- AS-BUILT WATER LATERAL STUB
- ⊥ AS-BUILT TEE
- ⤴ AS-BUILT 45° VERTICAL BEND
- ⤵ AS-BUILT 11.25° BEND
- ⤶ AS-BUILT 22.5° BEND
- ⤷ AS-BUILT 45° BEND
- ⤸ AS-BUILT FIRE HYDRANT
- ⤹ AS-BUILT WATER VALVE
- ⤺ AS-BUILT SLEEVE
- ⤻ AS-BUILT BLOW OFF
- ⤼ AS-BUILT WATERSTOP
- ⤽ AS-BUILT REDUCER

DATE OF LAST FIELDWORK: 1/15/2020

RECORD DRAWING
 WATER AS-BUILTS
 WATER STRUCTURES ONLY
 1/20/2020
Joe Trian
 JOSEPH TRIAN, LS21500003



KEY MAP
N.T.S.

WATER TABLE		
STREET	SIZE	LENGTH
UNIVERSITY COURT	0'-8"	596'-0"
JASMINE	0'-8"	651'-0"
TOWNE MEADOW DRIVE	0'-8"	2,440

NOTES

1. For installation of water mains and service lines, see 03/C7.2 for trench details.
2. All water service lines are to be stubbed per plan. The termination of the stub is to be marked with a 4" PVC pipe with a painted blue top.
3. Tracer wire must be installed along all water mains per City of Carmel Utilities Department specifications.
4. Granular backfill must be placed at all water main road crossings per City of Carmel standards.
5. Blue snowplowable raised pavement markers are to be installed at the centerline of the road adjacent to each fire hydrant.
6. All Ductile iron water mains shall be bedded in sand, from the bottom of the trench to 12" above pipe (see sheet C7.2).
7. All fire hydrants shall be Mueller or American Darling (Safety Yellow, M.A.B. #0433291, Sherwin Williams #F75YP2), open to the right, and have a safety blue stripe around hydrant bonnet from the factory. The hydrant pumper nozzle shall be of one-piece design, compatible with 5" Storz hose coupling. The nozzle shall be an integral part of the fire hydrant and must be furnished by the manufacturer or authorized distributor designated by the manufacturer. Mueller model 290220 for casting and 290221 for cap. Storz adapters will not be accepted.
8. Blue reflective tape must be installed 18" above all water mains.
9. Tracer wire shall be installed with all water mains.
10. Post-Caps or the equivalent are required on all water valve installations.
11. All kickers shall be solid concrete block. NO POURED CONCRETE

NOTE: ALL WATER MAINS SHALL BE DUCTILE IRON AND INSTALLED PER THE CITY OF CARMEL STANDARDS UNLESS OTHERWISE NOTED, ALL WATER MAINS SHALL BE INSTALLED AT A MINIMUM DEPTH OF 54"

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 SHALL BE RELOCATED TO WITHIN ONE FOOT OF THE PROPOSED RIGHT-OF-WAY LINE.

Utility inspectors have the authority to make changes in the field if conditions are warranted.

REVISIONS		NO.	DATE	DESCRIPTION

ORIGINAL ISSUE DATE: DECEMBER 14, 2018

PROJECT NO.: 18414	PROJECT MANAGER: JOR	DESIGNED BY: JOR	DRAWN BY: PLD
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WATER PLAN - AREA 3

ESTATES AT TOWNE MEADOW

CARMEL INDIANA

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811
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