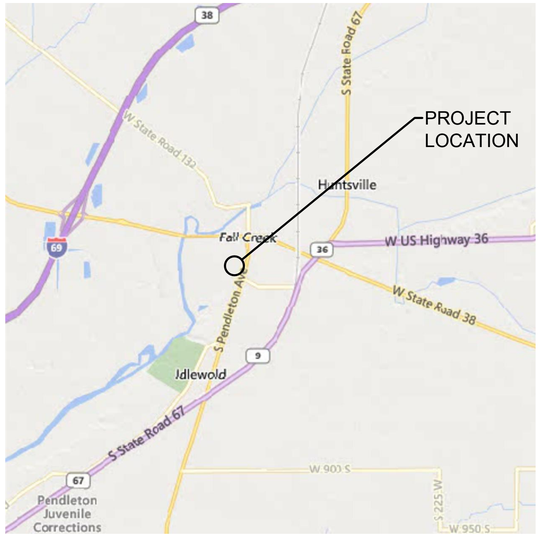
TOWN OF PENDLETON

ELM STREET DRAIN RECONSTRUCTION



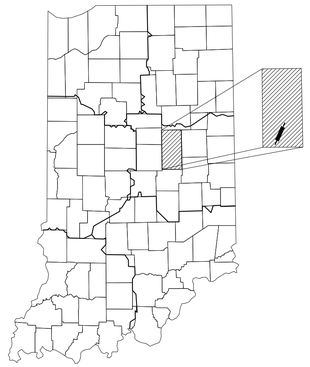
VICINITY MAP
NO SCALE

Project Description:

Replacing Existing Drain Starting on the North Side of W Elm Street following the Existing Drain and Crossing S Main Street in Pendleton in Section 21, T-18-N, R-7-E, Fall Creek Township, Madison County, Indiana.

LOCATION
TOWN OF PENDLETON
NO SCALE

DESIGN DATA	
PROJECT DESIGN CRITERIA	TOWN OF PENDLETON
DRAIN SIZE	36"



PROJECT LOCATION SHOWN BY MADISON COUNTY

LATITUDE: 39° 59' 56" N LONGITUDE: 85° 44' 48" W

OPERATING AUTHORITIES

GAS
Vectren (Anderson)
Jon Eastham
1800W. 26th St.
Muncie, IN 47302
jeastham@vectren.com
Phone: (765) 287-2119

SANITARY
Fall Creek Regional Waste District
Tim McCurdy
PO Box 59
Pendleton, IN 46064
tmccurdy@fcrwd.com
Phone: (765) 778-7544

TELEPHONE
Nine Star Connect
Jennifer McMillan
2243 E. Main St.
Greenfield, IN 46140
jmcmillan@ninestarconnect.com
Phone: (317) 323-2090

ELECTRIC
Town of Pendleton
Craig Switzer
100 W State St.
Pendleton, IN 46064
cswitzer@town.pendleton.in.us
Phone: (765) 208-0104

STORM
Town of Pendleton
Jim Cook
100 W State St.
Pendleton, IN 46064
jcook@town.pendleton.in.us
Phone: (765) 208-0097

WATER
Town of Pendleton
Ryan Brashears
100 W State St.
Pendleton, IN 46064
rbrashears@town.pendleton.in.us
Phone: (765) 778-2173

FIBER
Frontier
Steve Coslow
Noblesville, IN
steve.costlow@ftr.com
Phone: (317) 984-9010

SHEET INDEX	
SHEET NO	DESCRIPTION
1	TITLE SHEET
2 - 3	GENERAL NOTES & DETAILS
4 - 5	EXISTING TOPOGRAPHY
6 - 7	DEMO PLAN
8	STORM DRAIN PLAN & PROFILE
9	YARD DRAIN PLAN & PROFILE
10	STORM STRUCTURE AND PIPE TABLES

ACCEPTED BY: BID SET

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

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

NOT FOR CONSTRUCTION

PLANS PREPARED BY: BANNING ENGINEERING INC. 317-707-3700 PHONE NUMBER

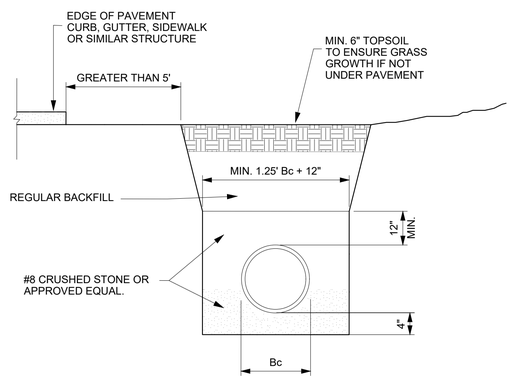
CERTIFIED BY: MARK J. BUTLER, P.E. 1/8/24 DATE

BRIDGE FILE
N/A
DESIGNATION
N/A

SURVEY BOOK	SHEET
N/A	1 of 10
CONTRACT	PROJECT
N/A	22402

GENERAL NOTES:

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS INCLUDED IN THE BID PACKAGE.
2. DRAIN RECONSTRUCTION LIMITS ARE AS SHOWN ON THE PLANS UNLESS OTHERWISE SPECIFIED.
3. MAINTENANCE OF TRAFFIC (MOT) IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL PROVIDE ACCESS TO RESIDENCES AND BUSINESSES DURING THE ENTIRE CONSTRUCTION PERIOD. MOT DEVICES SHALL CONFORM TO THE GUIDELINES SHOWN IN THE LATEST EDITION OF THE INDIANA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (IN MUTCD). MOT LANE CLOSURE METHODS AND PROCEDURES ARE SUBJECT TO REVIEW AND APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
4. THE WORK IS MAINLY LOCATED IN RESIDENTIAL AREAS. THE CONTRACTOR SHALL NOTIFY ALL RESIDENTS ADJACENT TO THE WORK SITE IN WRITING NO LESS THAN 48 HOURS PRIOR TO THE COMMENCEMENT OF WORK.
5. CONTRACTOR IS TO MINIMIZE AREA OF IMPACT AS BEST AS POSSIBLE.
6. AT THE END OF EACH DAY OR WHEN THE WORK IS TO BE DISCONTINUED FOR A PERIOD OF TIME THE CONTRACTOR SHALL INSTALL A TAPERED JOINT AT THE END OF PAVING TO ALLOW TRAFFIC A TRANSITION.
7. THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN HMA MIX DESIGN NO LATER THAN 10 DAYS PRIOR TO
8. CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IN CONSTRUCTION AREAS.
9. CONTRACTOR TO RESTORE SITE CONDITIONS IN CONSTRUCTION AREA AFTER WORK IS COMPLETED.
10. CONTRACTOR SHALL NOTIFY OWNER PRIOR TO THE WORK BEING COMPLETED IF A CONTRACT QUANTITY IS NOT SUFFICIENT TO PERFORM THE WORK. CONTRACT QUANTITY OVERAGES WILL NOT BE PAID FOR WITHOUT PRIOR WRITTEN NOTIFICATION TO THE OWNER.
11. IF EXISTING BLIND TIES ARE ENCOUNTERED, CONTRACTOR TO RE-ESTABLISH TIE-INS.
12. AT THE END OF EACH WORK DAY OR WHEN THE WORK IS TO BE DISCONTINUED FOR A PERIOD OF TIME, THE CONTRACTOR SHALL SECURE AREAS OF EXCAVATION WITH CAUTION TAPE, EQUIPMENT, AND SNOW FENCE.
13. TREE REMOVAL SHALL BE BETWEEN OCTOBER 31 AND APRIL 1 PER USFW REGULATIONS.
14. AREAS OUTSIDE OF LIMITS AS SHOWN IN PLANS THAT ARE DISTURBED WITHOUT PRE-APPROVAL FROM TOWN OR ENGINEER SHALL BE RESTORED AT THE EXPENSE OF THE CONTRACTOR.



NOTE:
-ALL BEDDING & INITIAL BACKFILL SHALL BE INSTALLED IN 6" TO 12" BALANCED LIFTS.

-A MINIMUM 9" CLEARANCE SHALL BE PROVIDED ON EACH SIDE OF THE INSTALLED PIPE

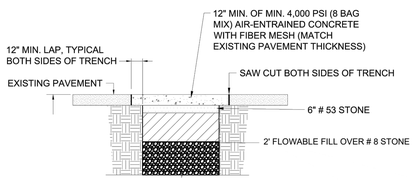
LEGEND

Bc = OUTSIDE DIAMETER
D = INSIDE DIAMETER
d = DEPTH OF BEDDING MATERIAL BELOW PIPE

HDPE/PVC PIPE TRENCH DETAIL

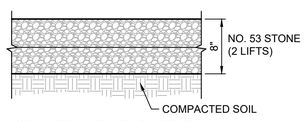
GREATER THAN 5' FROM EDGE OF PAVEMENT

N0 SCALE



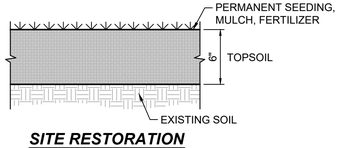
OPEN CUT ROAD REPAIR
(PER TOWN STANDARDS)

NO SCALE



GRAVEL DRIVE SECTION

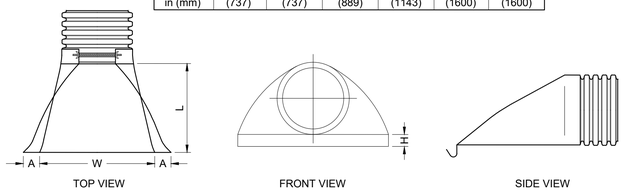
NO SCALE



SITE RESTORATION

NO SCALE

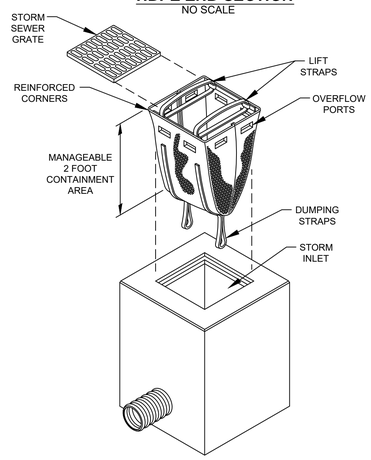
PIPE DIAMTER, in (mm)						
Diameter	12	15	18	24	30	36
in (mm)	(300)	(375)	(450)	(600)	(750)	(900)
A	6.5	6.5	7.5	7.5	7.5	7.5
in (mm)	(165)	(165)	(191)	(191)	(191)	(191)
B (max)	10.0	10.0	15.0	18.0	22.0	25.0
in (mm)	(254)	(254)	(381)	(475)	(559)	(635)
H	6.5	6.5	6.5	6.5	8.6	8.6
in (mm)	(165)	(165)	(165)	(165)	(218)	(218)
L	256.0	25.0	32.0	36.0	58.0	58.0
in (mm)	(635)	(635)	(813)	(914)	(1473)	(1473)
W	29.0	29.0	35.0	45.0	63.0	63.0
in (mm)	(737)	(737)	(889)	(1143)	(1600)	(1600)



Requirements
The invert of the pipe and the end section shall be at the same elevation. The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213320C; contact manufacturer for additional cell classification information. The metal threaded fastening rod shall be stainless steel.

HDPE END SECTION

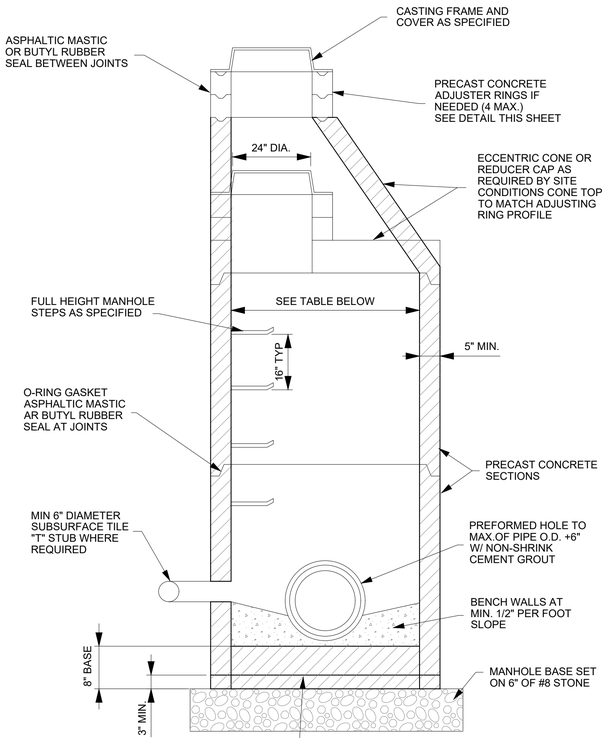
NO SCALE



Maintenance
1. Remove all accumulated sediment and debris weekly or after each 1/2" rainfall event.
2. Remove sediment from bag after bag is 1/3 full.
3. If bag is damaged, remove bag and replace with new.

INLET SACK PROTECTION

NO SCALE



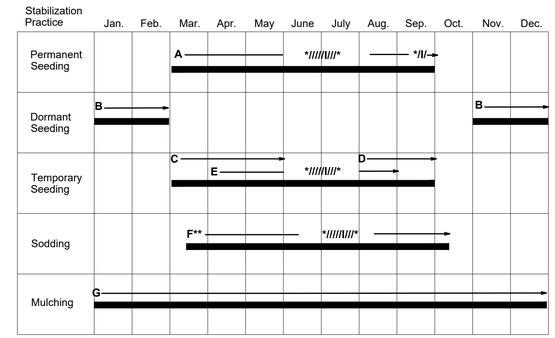
NOTE:
MANHOLE CONFORMS
TO ASTM C478

STORM MANHOLE

N0 SCALE

TABLE 404-2

PIPE SIZE	PIPES ENTERING OR LEAVING AT A 0-45 DEGREE ANGLE	PIPES ENTERING OR LEAVING AT A 46-90 DEGREE ANGLE
12" - 21"	48" DIA.	48" DIA.
24"	48" DIA.	60" DIA.
27" - 30"	60" DIA.	60" DIA.
33" - 36"	60" DIA.	72" DIA.



A = Kentucky Bluegrass 40 lbs/acre; or 40 lbs. tall Fescue; plus 2 tons straw mulch/acre or add Annual Ryegrass 20 lbs/acre.

B = Kentucky Bluegrass 60 lbs/acre; or 40 lbs. tall Fescue; plus 2 tons straw mulch/acre or add Annual Ryegrass 30 lbs/acre.

C = Spring Oats 100 lbs./acre

D = Wheat or Rye 150 lbs./acre.

E = Annual Ryegrass 40 lbs/acre. (1 lb./1000 sq. ft.)

F = Sod

G = Straw Mulch 2 tons/acre.

// Irrigation needed during June, July, and/or September.

** Irrigation needed for 2 to 3 weeks after applying sod.

Lime and fertilize to site specific soils tests or apply fertilizer at a rate of 1000 lbs. per acre or 12-12-12 or equivalent.

All swales shall be seeded with 2 lbs. Adelphi bluegrass and 2 lbs. Perennial Derby rye, or equivalent per 1000 square feet. mulch with one bale of straw per 1000 square feet. Fertilize with 5 lbs. of 20-5-5 per 1000 square feet unless specified otherwise.

MAINTENANCE
Inspect weekly and after each 1/2" rainfall event, until the stand is successfully established. (Characteristics of a successful stand include: vigorous dark green or bluish-green seedlings; uniform density with nurse plants, legumes, and grasses well inter-mixed; green leaves; and the perennials remaining green throughout the summer, at least at the plant base.)

Plan to add fertilizer the following growing season according to soil test recommendations.

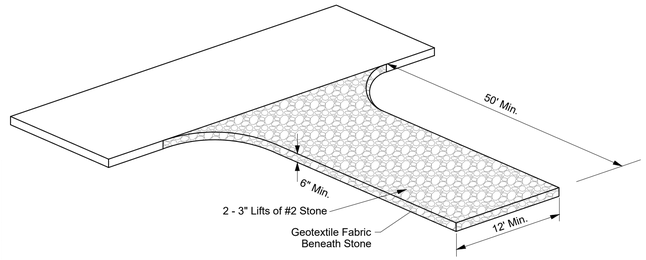
Repair damaged, bare, or sparse areas by filling any gullies, re-fertilizing, over- or re-seeding, and mulching.
If plant cover is sparse or patchy, review the plant materials chosen, soil fertility, moisture condition, and mulching; then repair the affected area either by over-seeding or by re-seeding and mulching after re-preparing the seedbed.

If vegetation fails to grow, consider soil testing to determine acidity or nutrient deficiency problems. (Contact your SWCD or Cooperative Extension office for assistance.)

If additional fertilization is needed to get a satisfactory stand, do so according to the soil test recommendations.

SEEDING CHART

NO SCALE



MAINTENANCE
*Inspect entrance pad and sediment disposal area weekly and after each 1/2" rainfall event or heavy use.
*Reshape pad as needed for drainage and runoff control.
*Topdress with clean stone as needed.
*Immediately remove mud and sediment tracked or washed onto public roads by brushing or sweeping. Flushing should only be used if the water is conveyed into a sediment trap or basin
*Repair any broken road pavement immediately.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

LESS THAN 2 ACRES
NO SCALE

REVISIONS		
NUMBER	DESCRIPTION	DATE

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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

BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED:	PBR 1/8/24	DRAWN:	PBR 1/8/24
CHECKED:	MJB 1/8/24	CHECKED:	MJB 1/8/24

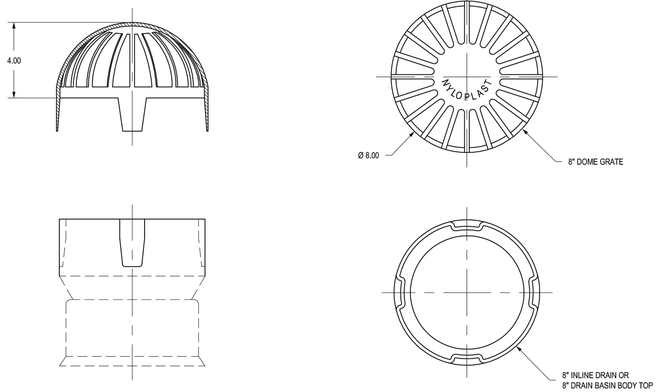
TOWN OF PENDLETON

GENERAL NOTES & DETAILS

HORIZONTAL SCALE	BRIDGE FILE
	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	2 of 10
CONTRACT	PROJECT
N/A	22402

0899CGD

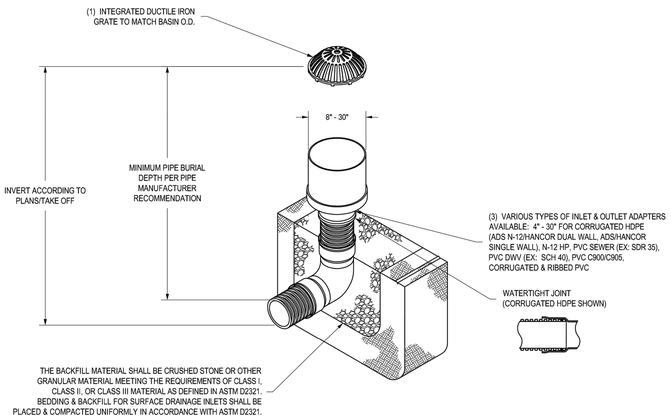
APPROX. DRAIN AREA = 30.00 SQ IN
APPROX. WEIGHT = 4.54 LBS



DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO. 7001-110-228

DRAWN BY EBC	MATERIAL	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-03-06	DUCTILE IRON		
REVISED BY CCA	PROJECT NO./NAME	TITLE	
DATE 08-27-13		8 IN DOME GRATE ASSEMBLY	
DWG SIZE A	SCALE 1:4 SHEET 1 OF 1	DWG NO. 7001-110-197	REV C

NYLOPLAST INLINE DRAIN WITH DOME GRATE



1 - 8" - 30" DOME GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
3 - 8" - 30" DOME GRATES HAVE NO LOAD RATING.

DRAWN BY EBC	MATERIAL	ADS Nyloplast	3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com
DATE 03-25-10			
REVISED BY NMH	PROJECT NO./NAME	TITLE	
DATE 03-15-16		INLINE DRAIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL	
DWG SIZE A	SCALE 1:40 SHEET 1 OF 1	DWG NO. 7003-110-057	REV D

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

BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24	TOWN OF PENDLETON	
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24	GENERAL NOTES & DETAILS	

HORIZONTAL SCALE	BRIDGE FILE
	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	3 of 10
CONTRACT	PROJECT
N/A	22402

SEE SHEET 5 FOR CONTINUED

Control Point Table				
Pt. #	Northing	Easting	Elev.	Description
1	1730766.121	305819.777	845.26	Mag nail
2	1730772.382	305529.197	844.27	5/8" Rebar w/Banning Eng. Control Point cap
3	1730480.306	305714.294	844.90	5/8" Rebar w/Banning Eng. Control Point cap
4	1730319.256	305643.289	845.32	5/8" Rebar w/Banning Eng. Control Point cap
5	1730184.555	305591.840	846.05	5/8" Rebar w/Banning Eng. Control Point cap
6	1730114.879	305492.692	839.24	5/8" Rebar w/Banning Eng. Control Point cap
7	1729786.923	305439.309	840.25	5/8" Rebar w/Banning Eng. Control Point cap

Project Benchmark
The vertical datum for this site was based upon North American Vertical Datum of 1988 (NAVD 88) and established by an OPUS solution on Control Point #1. Differential leveling from Control Point #1 was utilized to establish the elevations of the remaining control points for this survey.

Site Benchmarks
TBM #1
Benchtie set 1 foot above grade in southwest face of first power pole (no number) west of Pendleton Avenue on north side of Elm Street.
Elev. = 849.89' (NAVD 88)

TBM #2
Benchtie set 1 foot above grade in west face of power pole (no number) located along east right-of-way of Main Street at the intersection of Main Street and Tile Street.
Elev. = 840.60' (NAVD 88)

TBM #3
Benchtie set 1 foot above grade in east face of power pole located on the west side of Main Street at the intersection of Main Street and Madison Avenue.
Elev. = 839.02' (NAVD 88)

Notes:
Per 865 IAC 1-12-12 this drawing is not intended to be represented as a retracement or original boundary survey, a route survey, or a Surveyor Location Report.

The horizontal data shown on this exhibit is based upon standard radial survey techniques and by global positioning equipment, utilizing the VRS Network, a real-time kinematic (RTK) correction service over the internet. The coordinate values shown are in Indiana State Plane East Zone on the 1983 North American Datum.

All bearings, distances and coordinates are referenced to the Indiana State Plane East Zone (NAD 83) Coordinate System. The Combined Scale Factor for this project is 1.000000. Distances shown hereon are GRID distances.

The topographic information shown hereon was obtained in the field during July 2023. The topographic data was gathered using a robotic total station and data collector applying standard radial surveying techniques and by global positioning equipment, utilizing the VRS Network, a real-time kinematic (RTK) correction service over the internet.

Elevations on hard surfaces or structures are accurate to within 0.05 feet, elevations on natural surfaces are accurate to within 0.15 feet. The contours shown hereon were plotted based upon interpolation of spot elevations and other topographic information and are accurate to within one half of the contour interval.

This survey reflects above ground indications of utilities and information available from utility companies. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated, although they are located as accurately as possible from the information available. The surveyor has not physically located the underground utilities.

Underground utilities shown per Indiana 811 ticket numbers 2306264572, 2306264617, 2306264809 and 2306265126.

Floodplain information shown per Flood Insurance Rate Map (FIRM) for Madison County, Indiana, community panel number 18095C0326E revised June 9, 2014. The limits of the floodplain is shown as scaled from said firm and is subject to map scale uncertainty.

Parcel lines shown per available online GIS mapping.

LEGEND

OHU	OVERHEAD UTILITY LINES
W	WATER LINE
CATV	UNDERGROUND CABLE TV LINE
UFO	UNDERGROUND FIBER OPTIC LINE
G	GAS LINE
X	FENCE
	TREE LINE
S	SANITARY SEWER LINE
ST	STORM SEWER LINE
	SANITARY SEWER STRUCTURE
	STORM SEWER STRUCTURE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GAS VALVE
	UTILITY POLE
	GUY ANCHOR
	TELEPHONE SPLICE BOX
	WATER WELL
	COMMUNICATIONS MANHOLE
	SEWER CLEAN-OUT
	SIGN
	MAIL BOX
	TREE

0 30' 60'

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

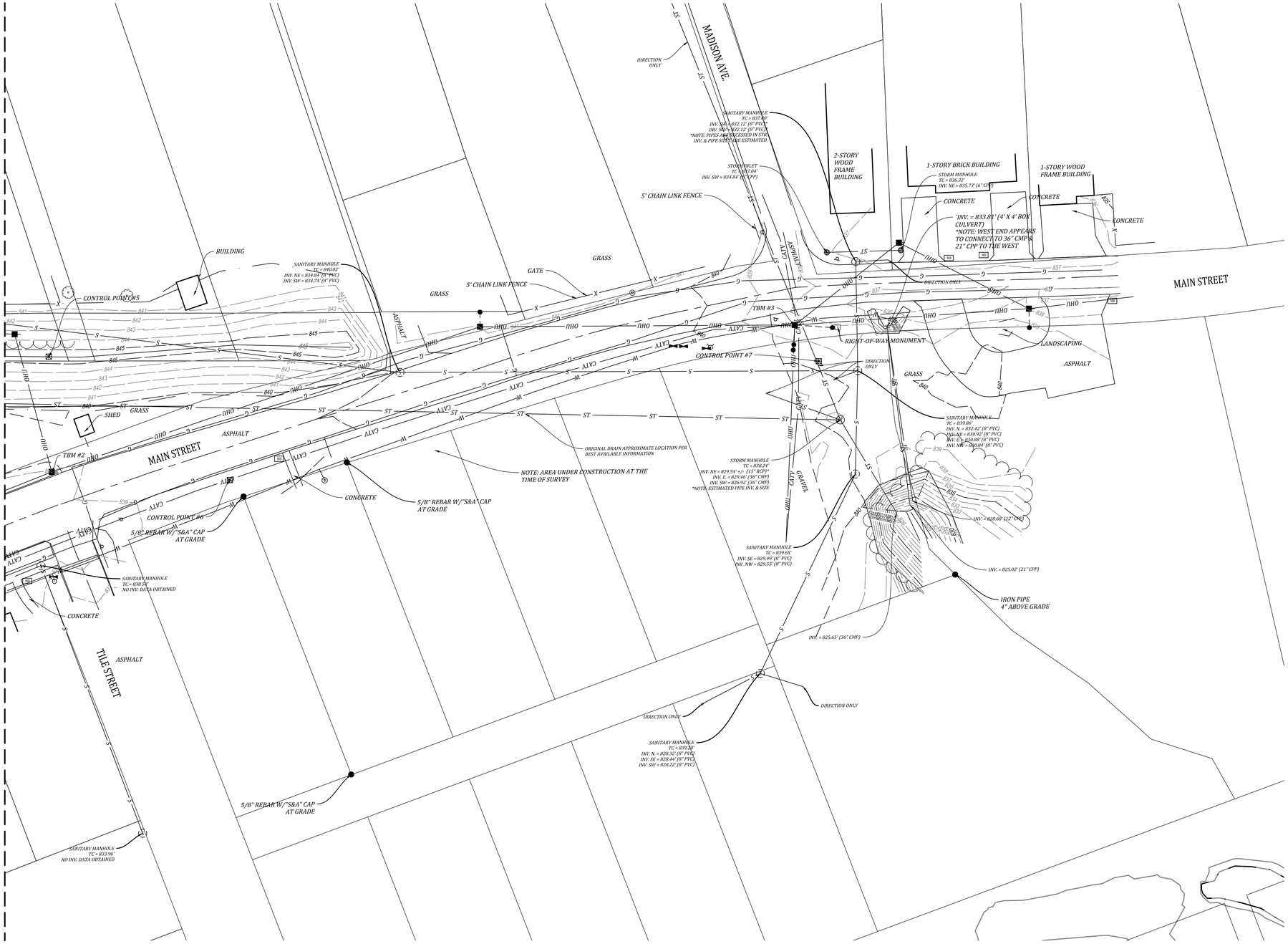
DESIGNED:	PBR 1/8/24	DRAWN:	PBR 1/8/24
CHECKED:	MJB 1/8/24	CHECKED:	MJB 1/8/24

TOWN OF PENDLETON

EXISTING TOPOGRAPHY

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	4 of 10
CONTRACT	PROJECT
N/A	22402

pnusche P:\2022\22402\Engineering\Cadd\Sheet Files\Drain\22402_topo.dwg Jan 09, 2024 - 11:26am



SEE SHEET 4 FOR CONTINUED

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Per 865 IAC 1-12-12 this drawing is not intended to be represented as a retracement or original boundary survey, a route survey, or a Surveyor Location Report.

The horizontal data shown on this exhibit is based upon standard radial survey techniques and by global positioning equipment, utilizing the VRS Network, a real-time kinematic (RTK) correction service over the internet. The coordinate values shown are in Indiana State Plane East Zone on the 1983 North American Datum.

All bearings, distances and coordinates are referenced to the Indiana State Plane East Zone (NAD 83) Coordinate System. The Combined Scale Factor for this project is 1.000000. Distances shown hereon are GRID distances.

The topographic information shown hereon was obtained in the field during July 2023. The topographic data was gathered using a robotic total station and data collector applying standard radial surveying techniques and by global positioning equipment, utilizing the VRS Network, a real-time kinematic (RTK) correction service over the internet.

Elevations on hard surfaces or structures are accurate to within 0.05 feet, elevations on natural surfaces are accurate to within 0.15 feet. The contours shown hereon were plotted based upon interpolation of spot elevations and other topographic information and are accurate to within one half of the contour interval.

This survey reflects above ground indications of utilities and information available from utility companies. The surveyor makes no guarantee that the underground utilities shown comprise all such utilities in the area, either in service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated, although they are located as accurately as possible from the information available. The surveyor has not physically located the underground utilities.

Underground utilities shown per Indiana 811 ticket numbers 2306264572, 2306264617, 2306264809 and 2306265126.

Floodplain information shown per Flood Insurance Rate Map (FIRM) for Madison County, Indiana, community panel number 18095C0326E revised June 9, 2014. The limits of the floodplain is shown as scaled from said firm and is subject to map scale uncertainty.

Parcel lines shown per available online GIS mapping.

LEGEND

OHU	OVERHEAD UTILITY LINES
W	WATER LINE
CATV	UNDERGROUND CABLE TV LINE
UFO	UNDERGROUND FIBER OPTIC LINE
G	GAS LINE
X	FENCE
	TREE LINE
S	SANITARY SEWER LINE
ST	STORM SEWER LINE
S	SANITARY SEWER STRUCTURE
ST	STORM SEWER STRUCTURE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GAS VALVE
	UTILITY POLE
	GUY ANCHOR
TS	TELEPHONE SPLICE BOX
W	WATER WELL
C	COMMUNICATIONS MANHOLE
	SEWER CLEAN-OUT
	SIGN
MB	MAIL BOX
	TREE

0 30' 60'

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

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED: PBR 1/8/24 | DRAWN: PBR 1/8/24
CHECKED: MJB 1/8/24 | CHECKED: MJB 1/8/24

TOWN OF PENDLETON

EXISTING TOPOGRAPHY

HORIZONTAL SCALE	BRIDGE FILE
1"=30'	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	5 of 10
CONTRACT	PROJECT
N/A	22402

0 20' 40'

SEE SHEET 7 FOR CONTINUED

CRUSH EXISTING DRAIN IN PLACE

TREE, REMOVE

MANHOLE, REMOVE

CLEAR TREES WHERE NECESSARY FOR DRAIN INSTALLATION

CLEAR TREES WHERE NECESSARY FOR DRAIN INSTALLATION

EXISTING STRUCTURE TO HAVE CAMERA WORK TO DETERMINE LOCATION OF PIPES

REMOVE AND REPLACE INLET; TIE-IN EXISTING PIPES

REMOVE AND REPLACE RETAINING WALL IN KIND; 31 LFT

REMOVE AND REPLACE RETAINING WALL IN KIND; 33 LFT

REPLACE GRAVEL DRIVE AREA; 30 SYS

Pt. 10+82.61

Pt. 9+18.35

Pt. 7+59.57

Pt. 5+50.46

NOTES:

1. OLD CLAY PIPE TO BE CRUSHED WHEN ENCOUNTERED.
2. TREES AND SHRUBS TO BE CLEARED IF ENCOUNTERED. CONTRACTOR TO AVOID REMOVING TREES AND OTHER PLANTINGS IF POSSIBLE.
3. ADDITIONAL CONTOURS OBTAINED FROM EXISTING LIDAR INFORMATION.
4. TREE REMOVAL SHALL BE PRIOR TO APRIL 1, 2024 PER USFW REGULATIONS.

LEGEND

- OHU — OVERHEAD UTILITY LINES
- W — WATER LINE
- UFO — UNDERGROUND CABLE TV LINE
- G — UNDERGROUND FIBER OPTIC LINE
- X — GAS LINE
- S — FENCE
- ST — TREE LINE
- (S) — SANITARY SEWER LINE
- (ST) — STORM SEWER LINE
- SANITARY SEWER STRUCTURE
- STORM SEWER STRUCTURE
- FIRE HYDRANT
- WATER VALVE
- WATER METER
- GAS VALVE
- UTILITY POLE
- GUY ANCHOR
- TELEPHONE SPLICE BOX
- WATER WELL
- COMMUNICATIONS MANHOLE
- SEWER CLEAN-OUT
- SIGN
- MAIL BOX
- TREE

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24		
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24		

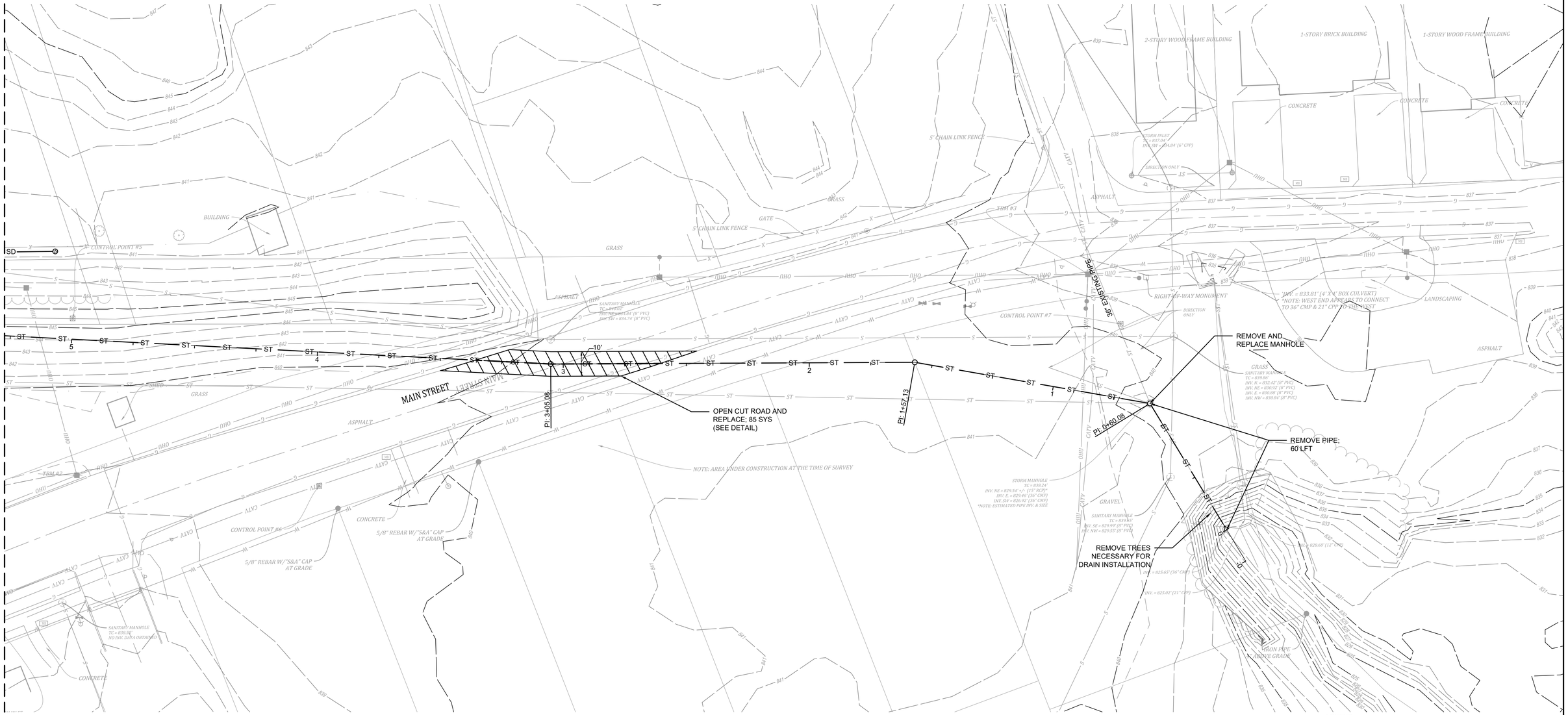
TOWN OF PENDLETON

DEMO PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	6 of 10
CONTRACT	PROJECT
N/A	22402

prusche P:\2022\22402\Engineering\Cadd\Sheet Files\Drain\22402_demo.dwg Jan 09, 2024 - 11:26am

SEE SHEET 6 FOR CONTINUED



NOTES:
1. OLD CLAY DRAIN TO BE CRUSHED WHEN ENCOUNTERED.
2. TREES AND SHRUBS TO BE CLEARED IF ENCOUNTERED. CONTRACTOR TO AVOID REMOVING TREES AND OTHER PLANTINGS IF POSSIBLE.
3. ADDITIONAL CONTOURS OBTAINED FROM EXISTING LIDAR INFORMATION.
4. CONTRACTOR SHALL NOTIFY TOWN OF PENDLETON ELECTRIC UTILITY WHEN WORK OCCURS UNDER ACTIVE POWER LINES.

LEGEND

OHU	OVERHEAD UTILITY LINES
W	WATER LINE
UFO	UNDERGROUND CABLE TV LINE
G	UNDERGROUND FIBER OPTIC LINE
X	GAS LINE
	FENCE
	TREE LINE
S	SANITARY SEWER LINE
ST	STORM SEWER LINE
	SANITARY SEWER STRUCTURE
	STORM SEWER STRUCTURE
	FIRE HYDRANT
	WATER VALVE
	WATER METER
	GAS VALVE
	UTILITY POLE
	GUY ANCHOR
	TELEPHONE SPLICE BOX
	WATER WELL
	COMMUNICATIONS MANHOLE
	SEWER CLEAN-OUT
	SIGN
	MAIL BOX
	TREE

0 20' 40'

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED:	PBR 1/8/24	DRAWN:	PBR 1/8/24
CHECKED:	MJB 1/8/24	CHECKED:	MJB 1/8/24

TOWN OF PENDLETON

DEMO PLAN

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	7 of 10
CONTRACT	PROJECT
N/A	22402

LEGEND

CONSTRUCTION LIMITS

APPROXIMATE LOCATION; CONTRACTOR TO VERIFY SIZE AND DEPTH

STRUCTURE 102 TO BE SET OVER EXISTING STORM PIPE

SEE SHEET 9 FOR YARD DRAIN DETAILS

REMOVE STRUCTURE

SET STRUCTURE OVER EXISTING PIPE AND TIE-IN EXISTING PIPES

CONSTRUCTION ENTRANCE

ELM STREET TO BE REDONE BY OTHERS

N: 1730734.986
E: 305782.604

N: 1730583.927
E: 305739.876

N: 1730684.230
E: 305711.780

N: 1730428.371
E: 305681.747

N: 1730235.724
E: 305585.421

N: 1730234.128
E: 305604.311

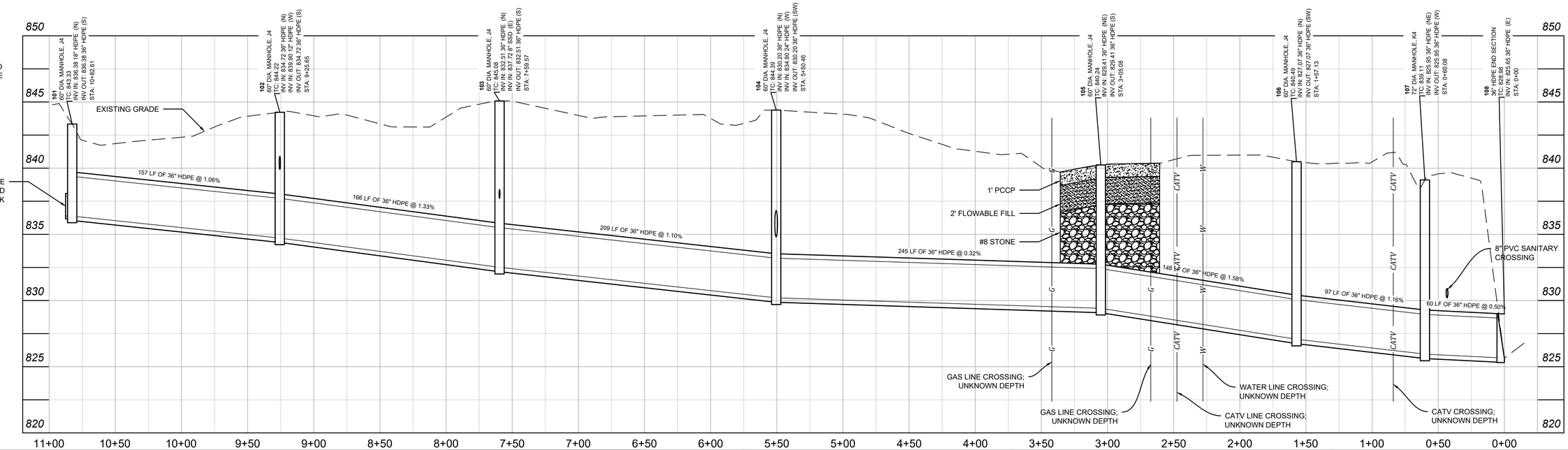
N: 1730009.382
E: 305505.825

N: 1729870.740
E: 305454.188

N: 1729767.230
E: 305404.746

N: 1729776.196
E: 305345.684

NOTES:
1. CONTRACTOR TO POTHOLE UTILITY CROSSINGS TO VERIFY DEPTHS.
2. CONTRACTOR TO INSTALL EROSION CONTROL BASKETS IN ALL INLETS AND CATCH BASINS ON PROJECT SITE.
3. ALL NEW PIPE CONNECTIONS TO EXISTING STRUCTURES TO HAVE AN INVERT MATCHING THE LOWEST INVERT OF THE EXISTING STRUCTURE AT A MINIMUM.



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BID SET

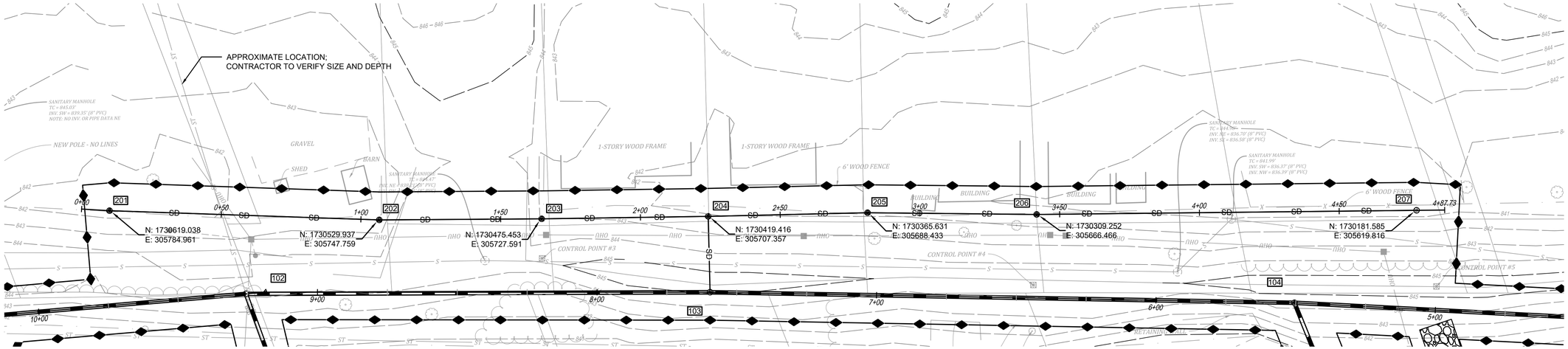
RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

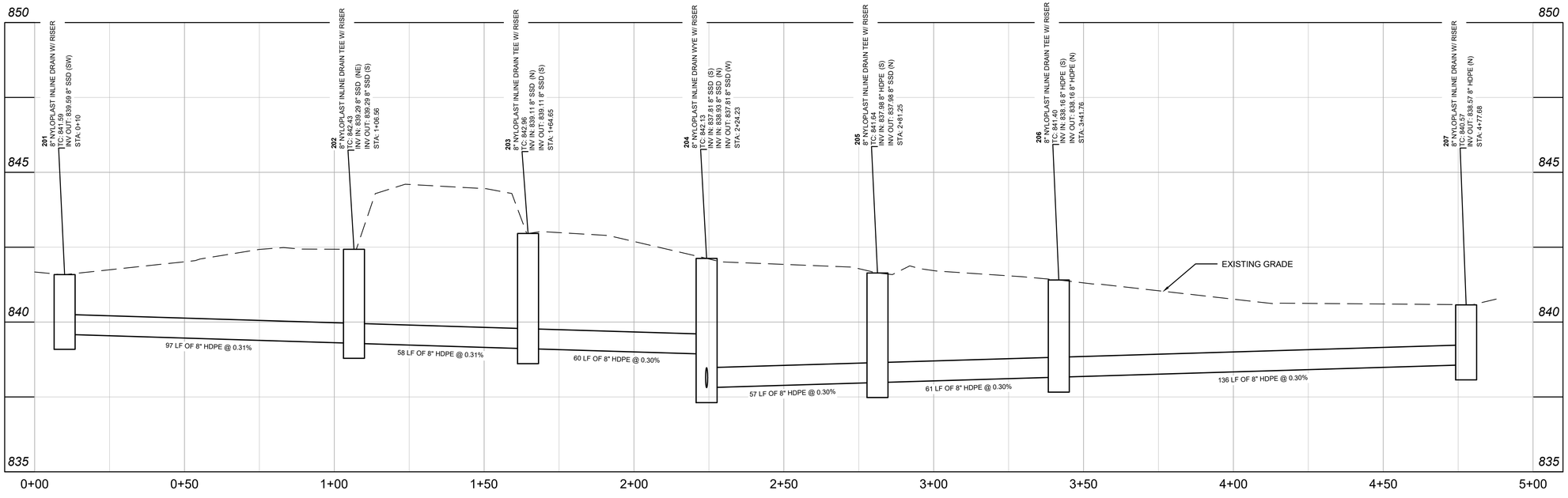
DESIGNED:	PBR 1/8/24	DRAWN:	PBR 1/8/24
CHECKED:	MJB 1/8/24	CHECKED:	MJB 1/8/24

TOWN OF PENDLETON

STORM DRAIN PLAN & PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1" = 40'	N/A
VERTICAL SCALE	DESIGNATION
1" = 4'	N/A
SURVEY BOOK	SHEET
N/A	8 of 10
CONTRACT	PROJECT
N/A	22402





NOTES:
1. SEE SHEET 3 FOR NYLOPLAST DETAILS.
2. CONTRACTOR MAY ADJUST YARD DRAIN LOCATIONS AS NEEDED.
3. CONTRACTOR TO DIRECT TIE YARD DRAINS INTO MAIN DRAIN WHEREVER THERE IS A CONFLICT THAT PREVENTS CONNECTION TO OTHER YARD DRAINS.

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24

TOWN OF PENDLETON

YARD DRAIN PLAN & PROFILE

HORIZONTAL SCALE	BRIDGE FILE
1"=20'	N/A
VERTICAL SCALE	DESIGNATION
1"=2'	N/A
SURVEY BOOK	SHEET
N/A	9 of 10
CONTRACT	PROJECT
N/A	22402

STRUCTURE DATA TABLE: Elm Street Drain									
Str. No.	Str. Type	Top of Casting	Casting Type	INV. (in)	Pipe Size (in)	Pipe Type (in)	INV. (out)	Pipe Size (out)	Pipe Type (out)
101	60" Dia. Manhole, J4	843.33	Neenah R-1714	836.38	18"	HDPE	836.38	36"	HDPE
102	60" Dia. Manhole, J4	844.22	Neenah R-1714	834.72 839.90	36" 12"	HDPE HDPE	834.72	36"	HDPE
103	60" Dia. Manhole, J4	845.08	Neenah R-1714	832.51 837.72	36" 8"	HDPE SSD	832.51	36"	HDPE
104	60" Dia. Manhole, J4	844.39	Neenah R-1714	830.20 834.80	36" 24"	HDPE HDPE	830.20	36"	HDPE
105	60" Dia. Manhole, J4	840.24	Neenah R-1714	829.41	36"	HDPE	829.41	36"	HDPE
106	60" Dia. Manhole, J4	840.49	Neenah R-1714	827.07	36"	HDPE	827.07	36"	HDPE
107	72" Dia. Manhole, K4	839.11	Neenah R-1714	825.95	36"	HDPE	825.95	36"	HDPE
108	36" HDPE End Section	828.98		825.65	36"	HDPE			
111	30" x 30" Catch Basin	840.31	Neenah R-2560-D2	835.00	18"	HDPE	835.00	24"	HDPE
112	30" x 30" Catch Basin	841.25	Neenah R-2560-D2				840.00	12"	HDPE
201	8" Nyloplast Inline Drain w/ Riser	841.59	Nyloplast Cast Iron Dome Grate				839.59	8"	SSD
202	8" Nyloplast Inline Drain Tee w/ Riser	842.43	Nyloplast Cast Iron Dome Grate	839.29	8"	SSD	839.29	8"	SSD
203	8" Nyloplast Inline Drain Tee w/ Riser	842.96	Nyloplast Cast Iron Dome Grate	839.11	8"	SSD	839.11	8"	SSD
204	8" Nyloplast Inline Drain Wye w/ Riser	842.13	Nyloplast Cast Iron Dome Grate	837.81 838.93	8" 8"	SSD SSD	837.81	8"	SSD
205	8" Nyloplast Inline Drain Tee w/ Riser	841.64	Nyloplast Cast Iron Dome Grate	837.98	8"	SSD	837.98	8"	SSD
206	8" Nyloplast Inline Drain Tee w/ Riser	841.40	Nyloplast Cast Iron Dome Grate	838.16	8"	SSD	838.16	8"	SSD
207	8" Nyloplast Inline Drain w/ Riser	840.57	Nyloplast Cast Iron Dome Grate				838.57	8"	SSD

PIPE DATA TABLE: Elm Street Drain			
Pipe Name	Size	Length	Slope
EXZ-111	18"	31.43'	0.80%
STUB	18"	5.00'	0.00%
101-102	36"	156.96'	1.06%
102-103	36"	166.06'	1.33%
103-104	36"	209.11'	1.10%
104-105	36"	245.38'	0.32%
105-106	36"	147.95'	1.58%
106-107	36"	97.05'	1.16%
107-108	36"	60.08'	0.50%
111-104	24"	18.89'	1.06%
112-102	12"	28.10'	0.36%
201-202	8"	96.56'	0.31%
202-203	8"	58.10'	0.31%
203-204	8"	59.58'	0.30%
204-103	8"	27.13'	0.33%
205-204	8"	57.02'	0.30%
206-205	8"	60.51'	0.30%
207-206	8"	135.92'	0.30%

NOTES:
1. SEE SHEET 3 FOR NYLOPLAST DETAILS.
2. ALL MANHOLE AND CATCH BASIN CASTINGS TO BE PRE-STAMPED WITH "CLEAN WATER" MESSAGE.

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BID SET

RECOMMENDED FOR APPROVAL _____ DESIGN ENGINEER

DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24	TOWN OF PENDLETON	
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24	STORM STRUCTURE AND PIPE TABLES	

HORIZONTAL SCALE	BRIDGE FILE
	N/A
VERTICAL SCALE	DESIGNATION
	N/A
SURVEY BOOK	SHEET
N/A	10 of 10
CONTRACT	PROJECT
N/A	22402