

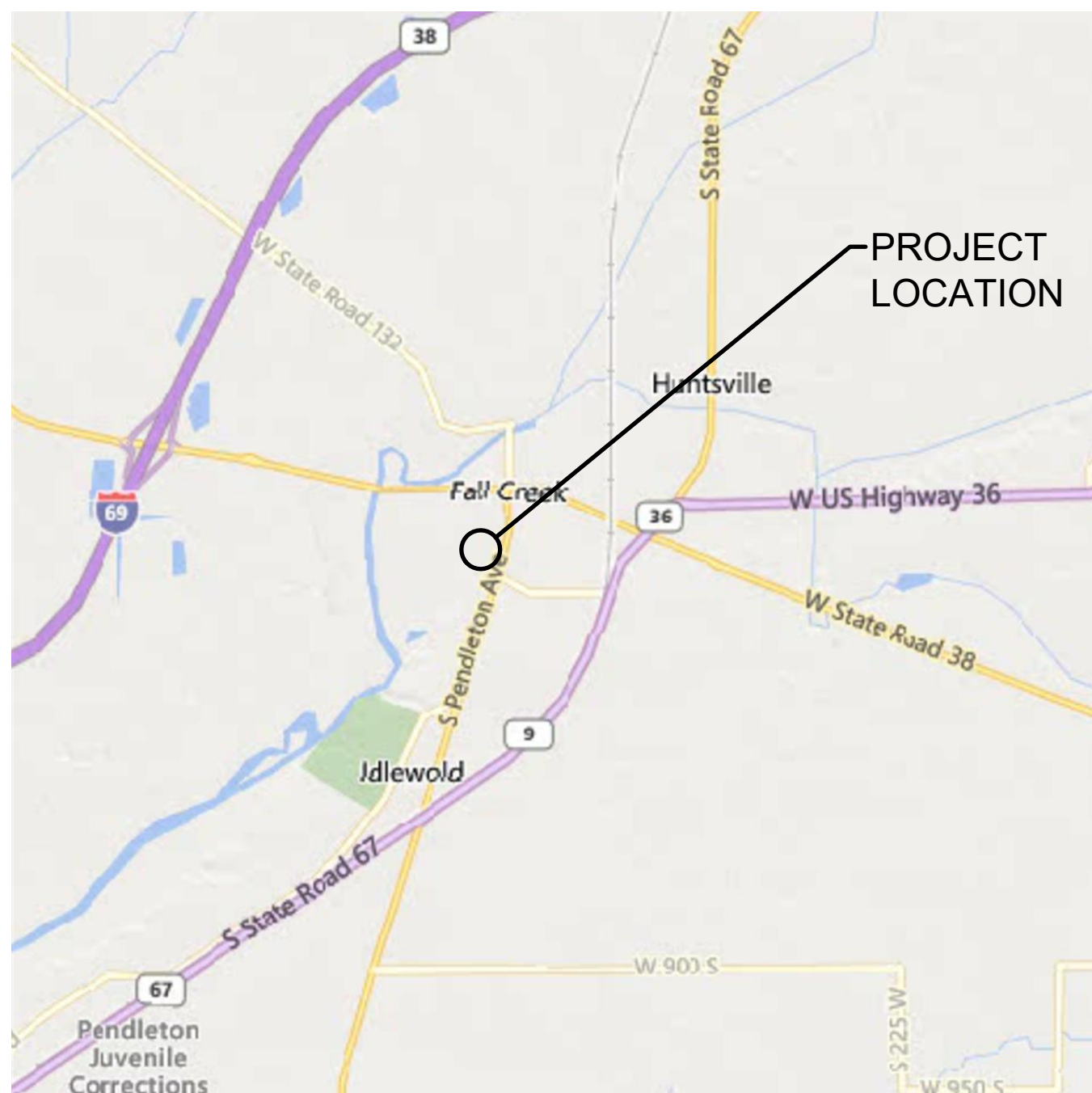
TOWN OF PENDLETON



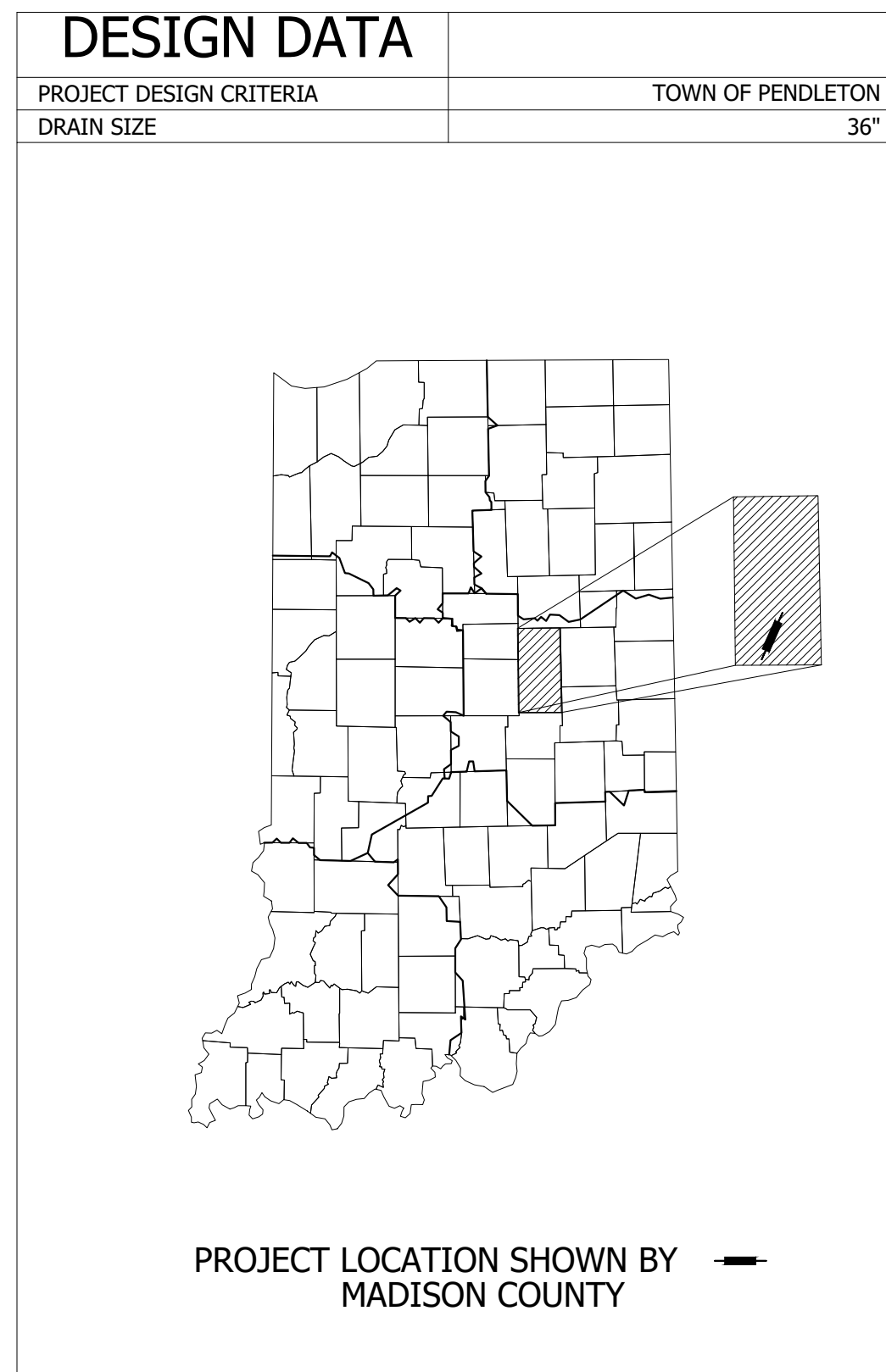
ELM STREET DRAIN RECONSTRUCTION

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.



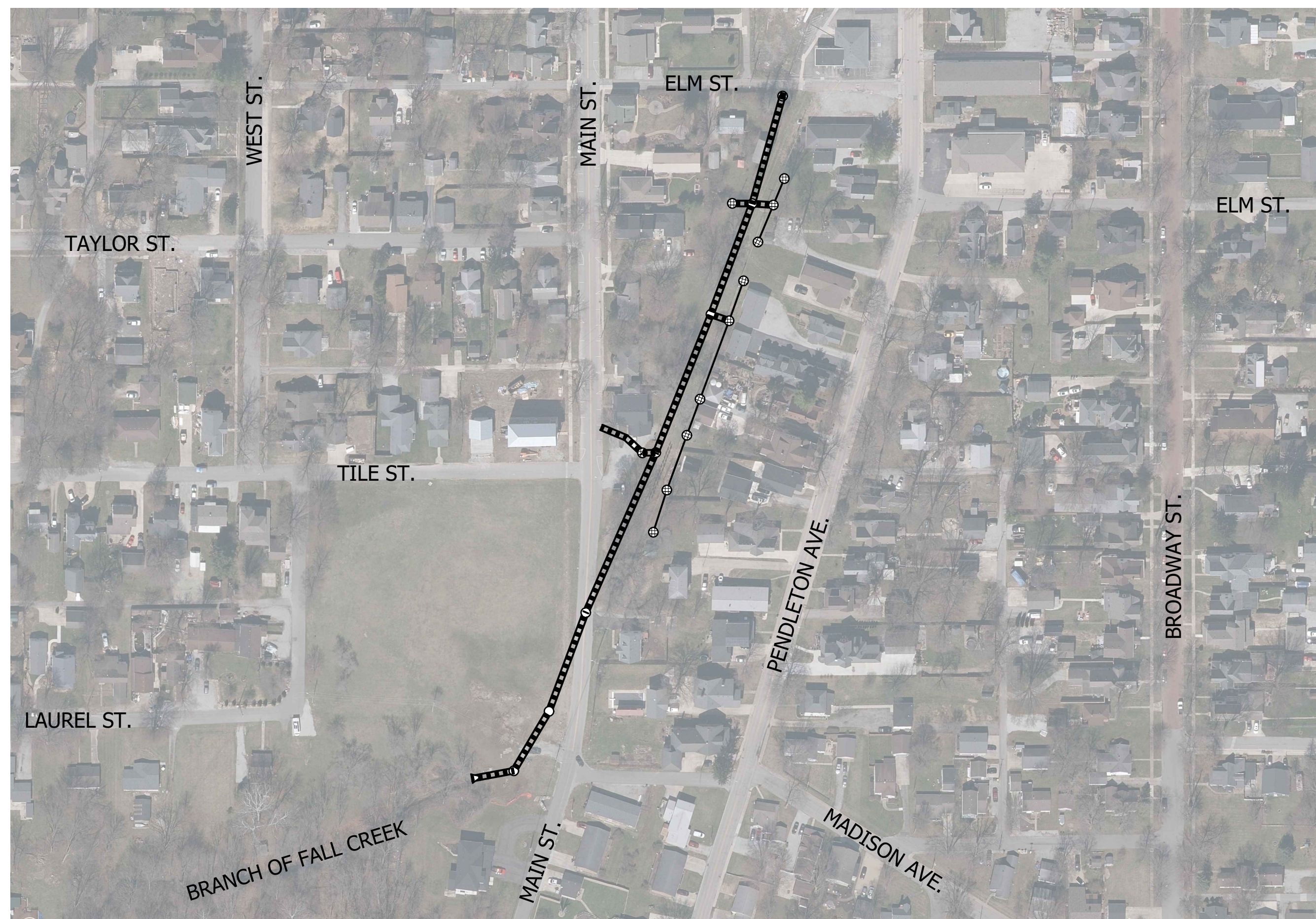
VICINITY MAP
NO SCALE



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

OPERATING AUTHORITIES

GAS Vectren (Anderson) Jon Eastham 1800W. 28th 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@ninstarconnect.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.coslow@ftr.com Phone: (317) 984-9010		



LOCATION
TOWN OF PENDLETON
NO SCALE



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

BID SET

ACCEPTED BY: _____



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

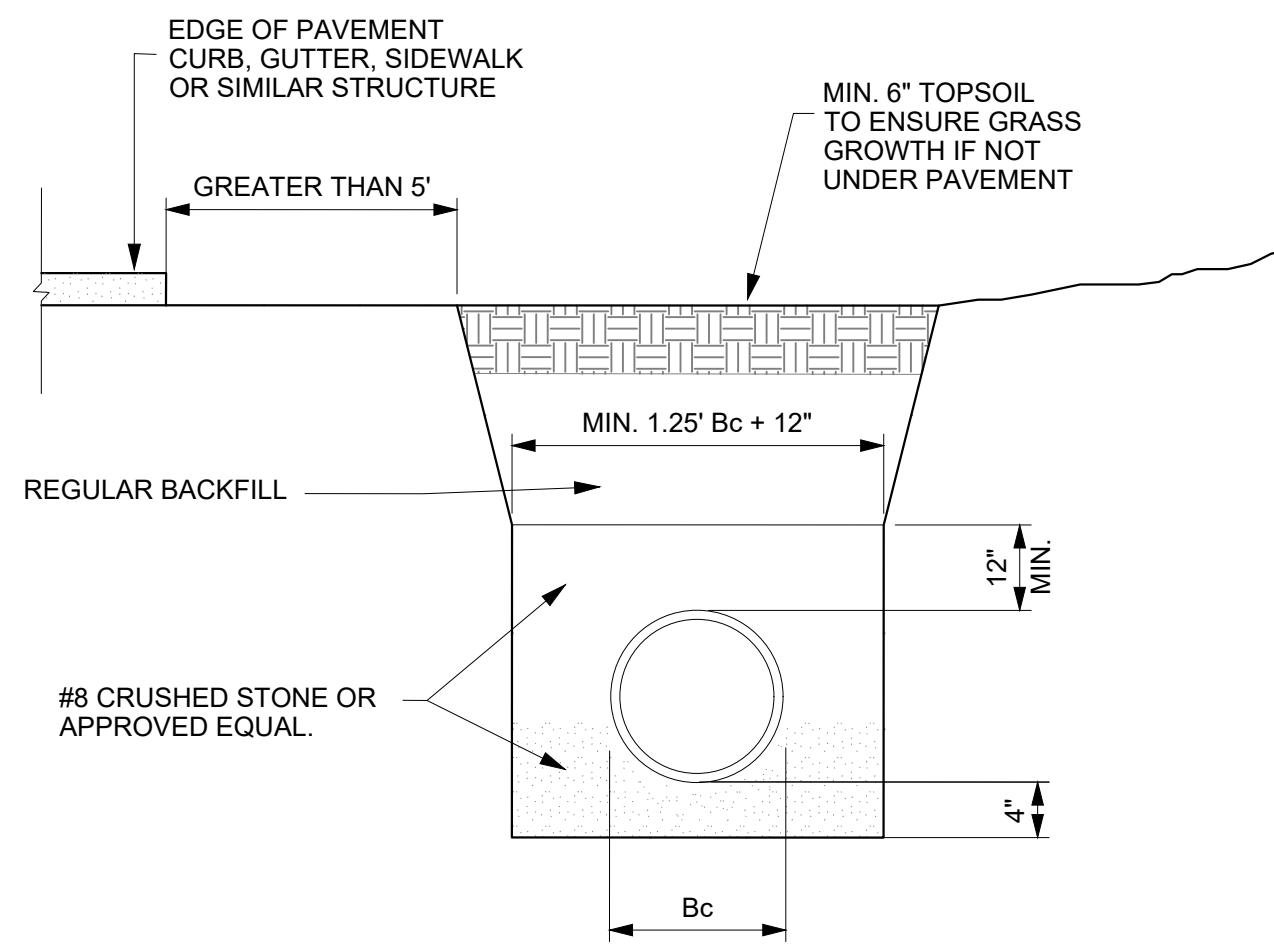
NOT FOR CONSTRUCTION

PLANS PREPARED BY: BANNING ENGINEERING INC. 317-707-3700 PHONE NUMBER
 CERTIFIED BY: MARK J. BUTLER, P.E. 1/8/24 DATE

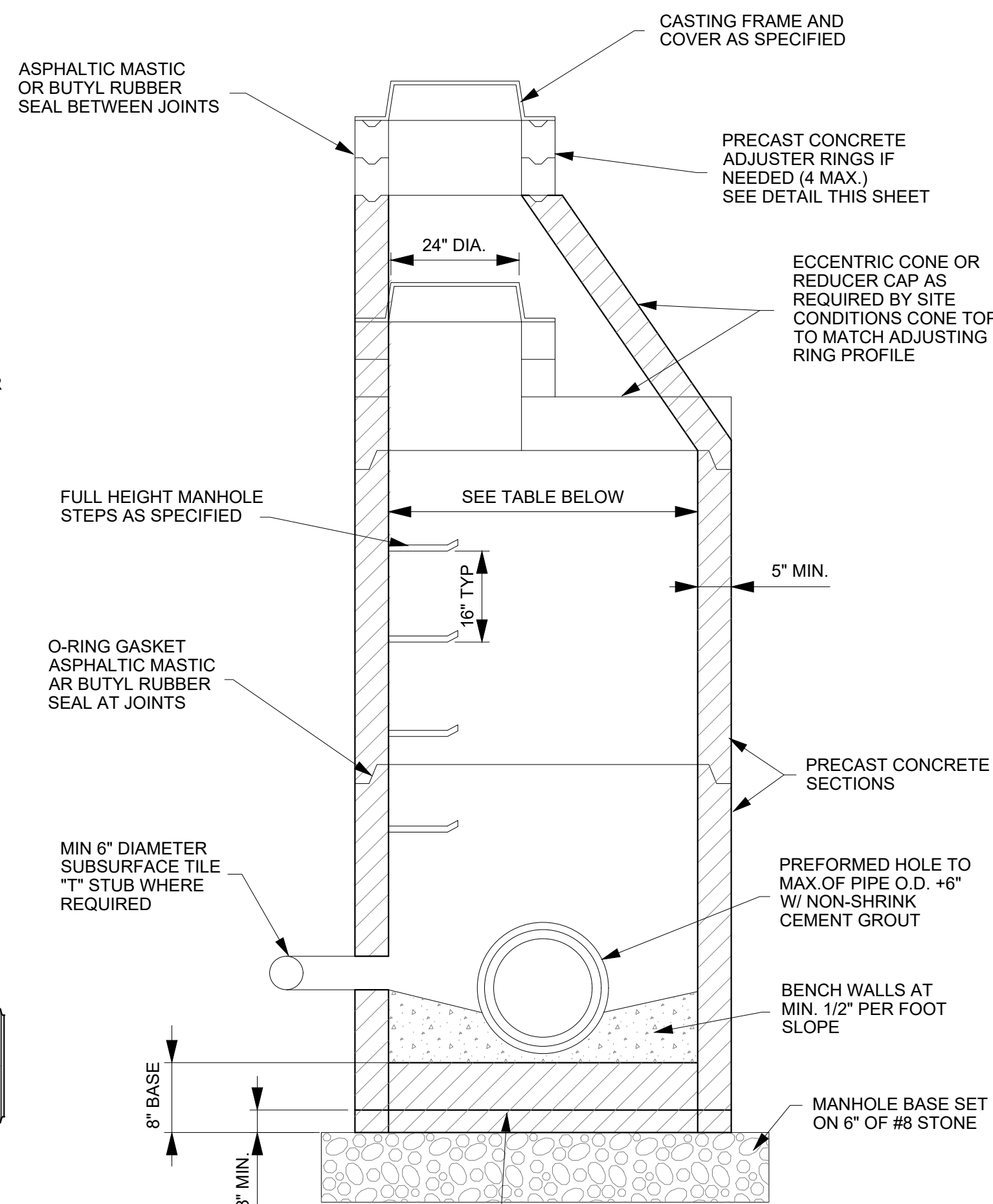
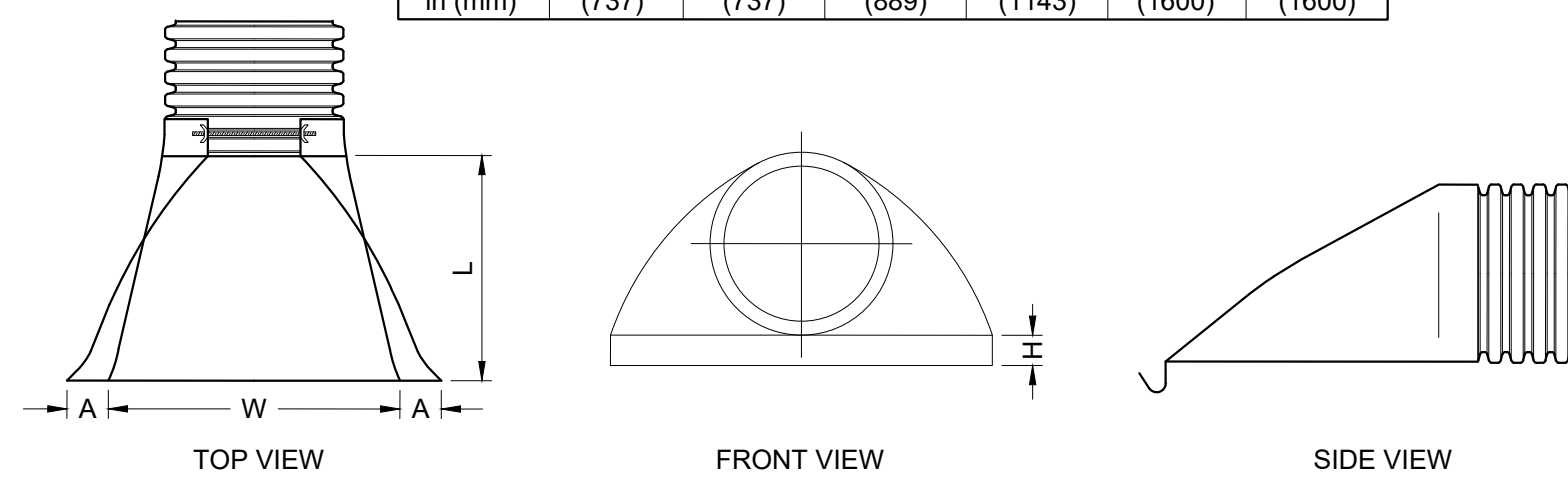
BRIDGE FILE	N/A
DESIGNATION	N/A
SURVEY BOOK	SHEET
N/A	1 of 10
CONTRACT	PROJECT
N/A	22402

GENERAL NOTES:

- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS INCLUDED IN THE BID PACKAGE.
- DRAIN RECONSTRUCTION LIMITS ARE AS SHOWN ON THE PLANS UNLESS OTHERWISE SPECIFIED.
- 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.
- 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.
- CONTRACTOR IS TO MINIMIZE AREA OF IMPACT AS BEST AS POSSIBLE.
- 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.
- THE CONTRACTOR IS RESPONSIBLE FOR SUBMITTING AN HMA MIX DESIGN NO LATER THAN 10 DAYS PRIOR TO
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE IN CONSTRUCTION AREAS.
- CONTRACTOR TO RESTORE SITE CONDITIONS IN CONSTRUCTION AREA AFTER WORK IS COMPLETED.
- 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.
- IF EXISTING BLIND TIES ARE ENCOUNTERED, CONTRACTOR TO RE-ESTABLISH TIE-INS.
- 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.
- TREE REMOVAL SHALL BE BETWEEN OCTOBER 31 AND APRIL 1 PER USFW REGULATIONS.
- 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.



PIPE DIAMETER, 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)



NOTE: MANHOLE CONFORMS TO ASTM C478

#4 RE-BARS @ 12" O.C. EACH WAY (STEEL AREA= 0.12 SQ.IN./SQ.FT. OR APPROVED EQUAL)

Stabilization Practice	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Permanent Seeding			A				*///////*		*//			
Dormant Seeding	B										B	
Temporary Seeding			C					D				
Sodding			E				*///////*					
Mulching	G											

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.

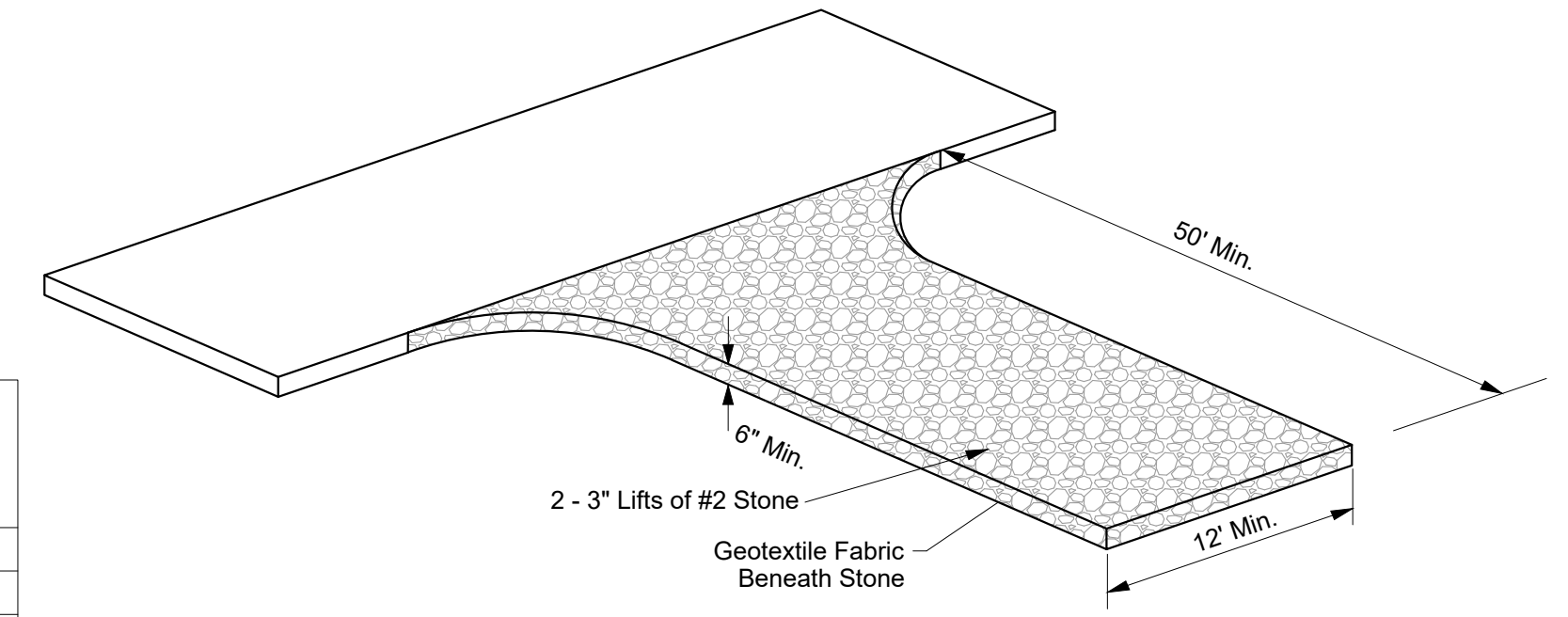
** Irrigation needed for 2 to 3 weeks after applying sod.

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.

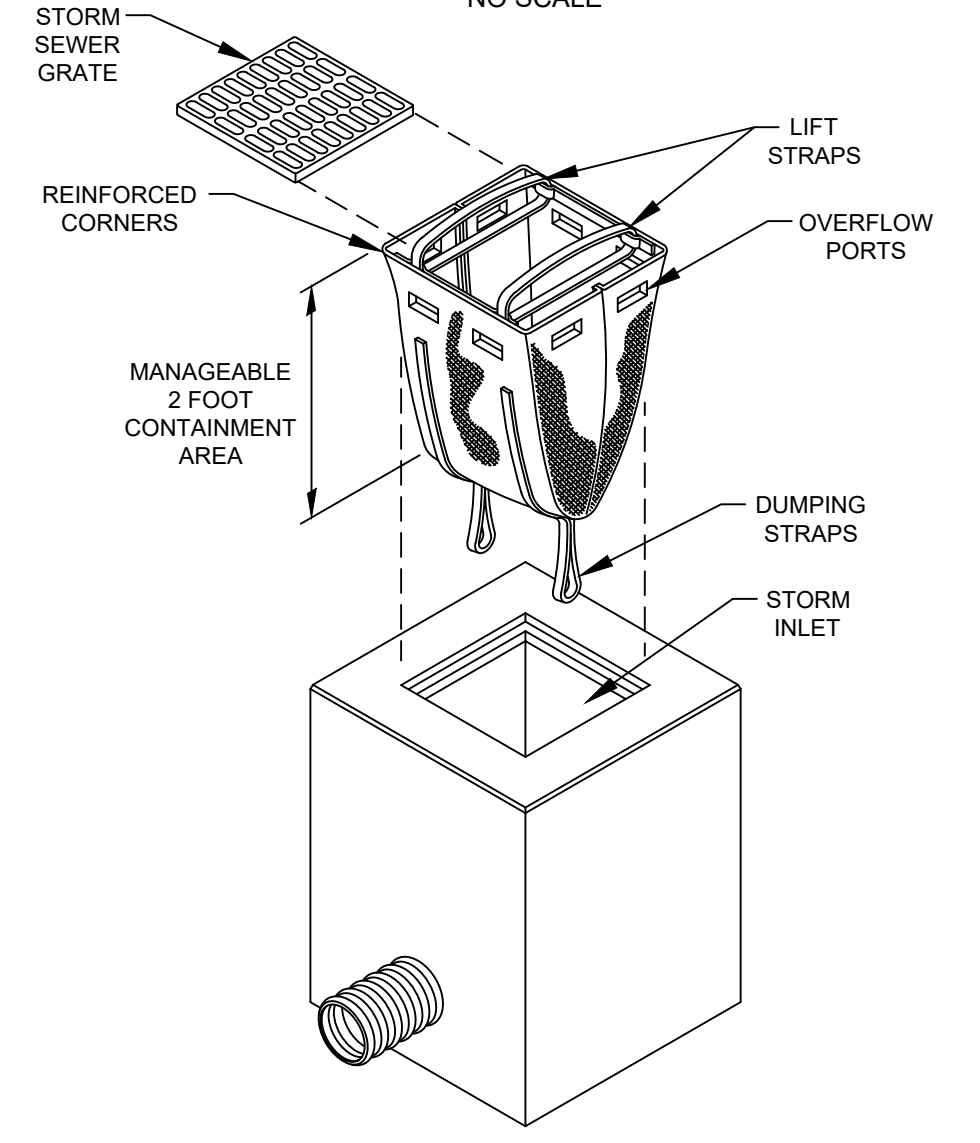
TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT
LESS THAN 2 ACRES
NO SCALE

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

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.

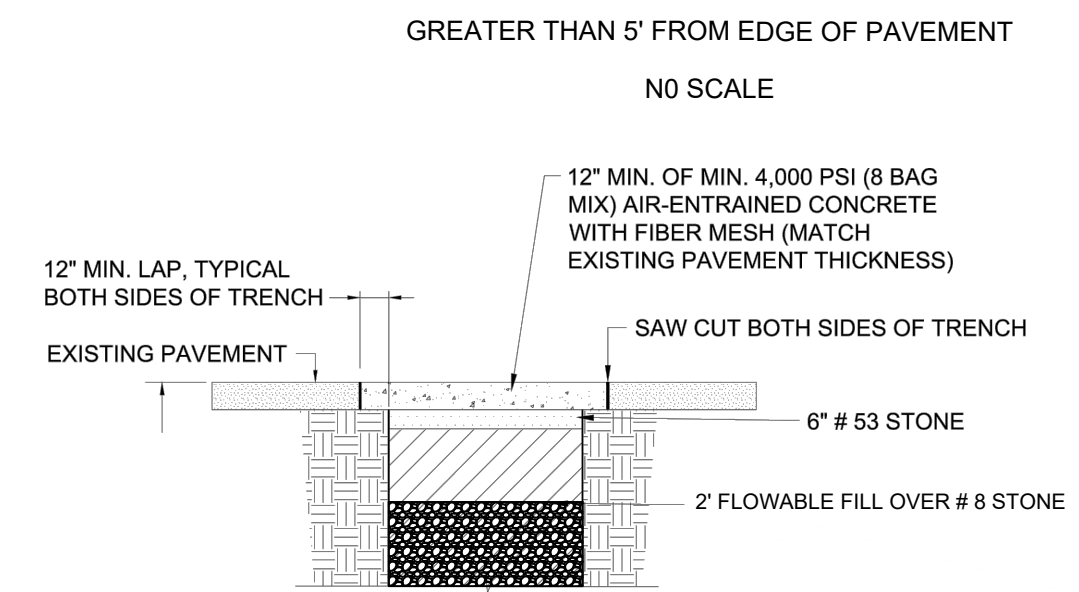
HDPE END SECTION
NO SCALE



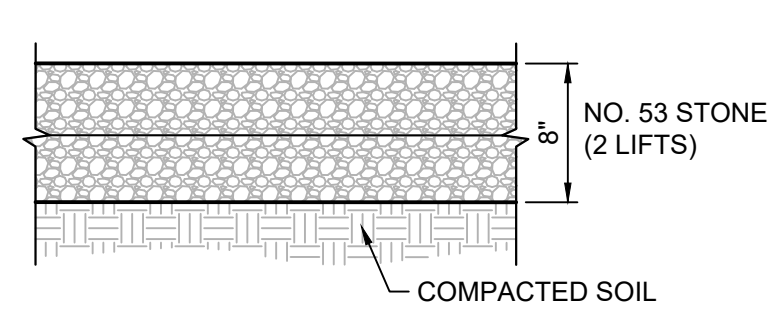
Maintenance
1. Remove all accumulated sediment and debris weekly or after each 1/2" rainfall event.
2. Remove sediment from bag after bag is 1/3 full.
3. If bag is damaged, remove bag and replace with new.

INLET SACK PROTECTION
NO SCALE

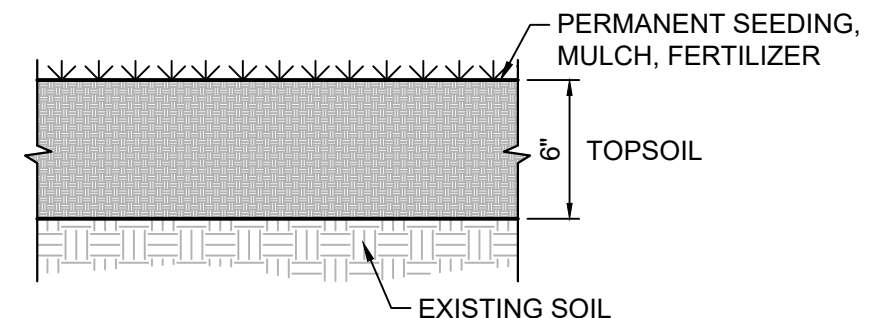
HDPE/PVC PIPE TRENCH DETAIL
NO SCALE



OPEN CUT ROAD REPAIR (PER TOWN STANDARDS)
NO SCALE



GRAVEL DRIVE SECTION
NO SCALE



SITE RESTORATION
NO SCALE

STORM MANHOLE
NO 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.

REVISIONS		
NUMBER	DESCRIPTION	DATE
1	UPDATED YARD DRAIN AND STORM STRUCTURE LAYOUTS/DETAILS; ADDED MORE INFORMATION ABOUT RETAINING WALL; UPDATED CONSTRUCTION EXTENTS; UPDATED NOTE FOR YARD DRAIN DETAIL	1/25/2024

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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

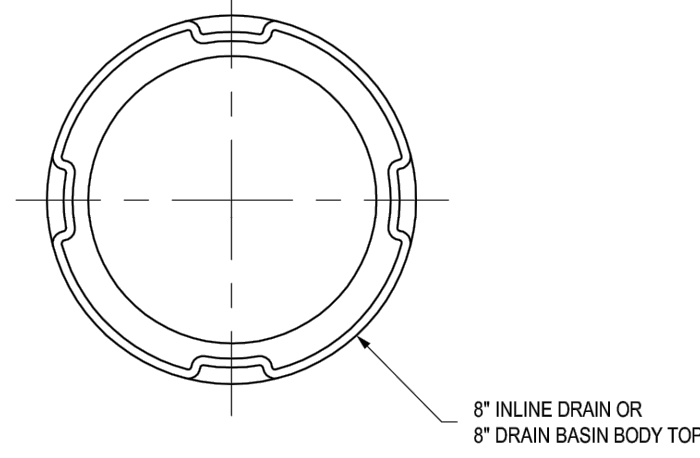
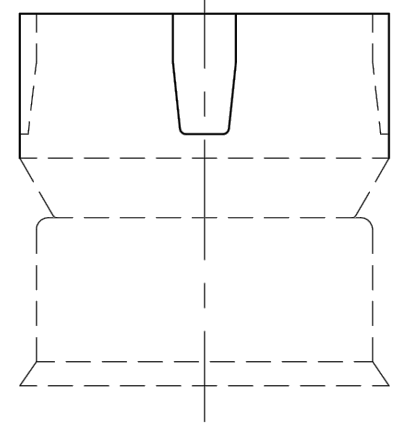
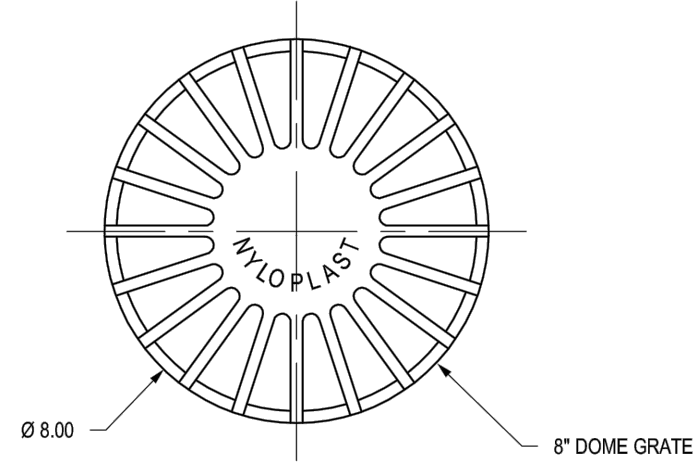
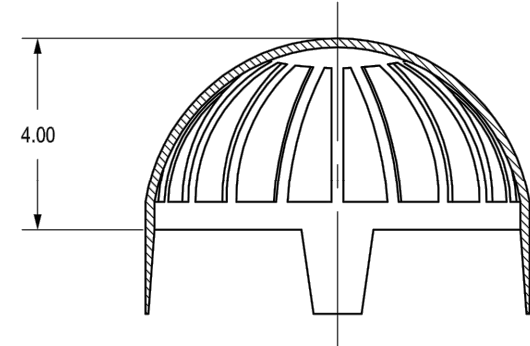
TOWN OF PENDLETON

GENERAL NOTES & DETAILS

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

0899CGD

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

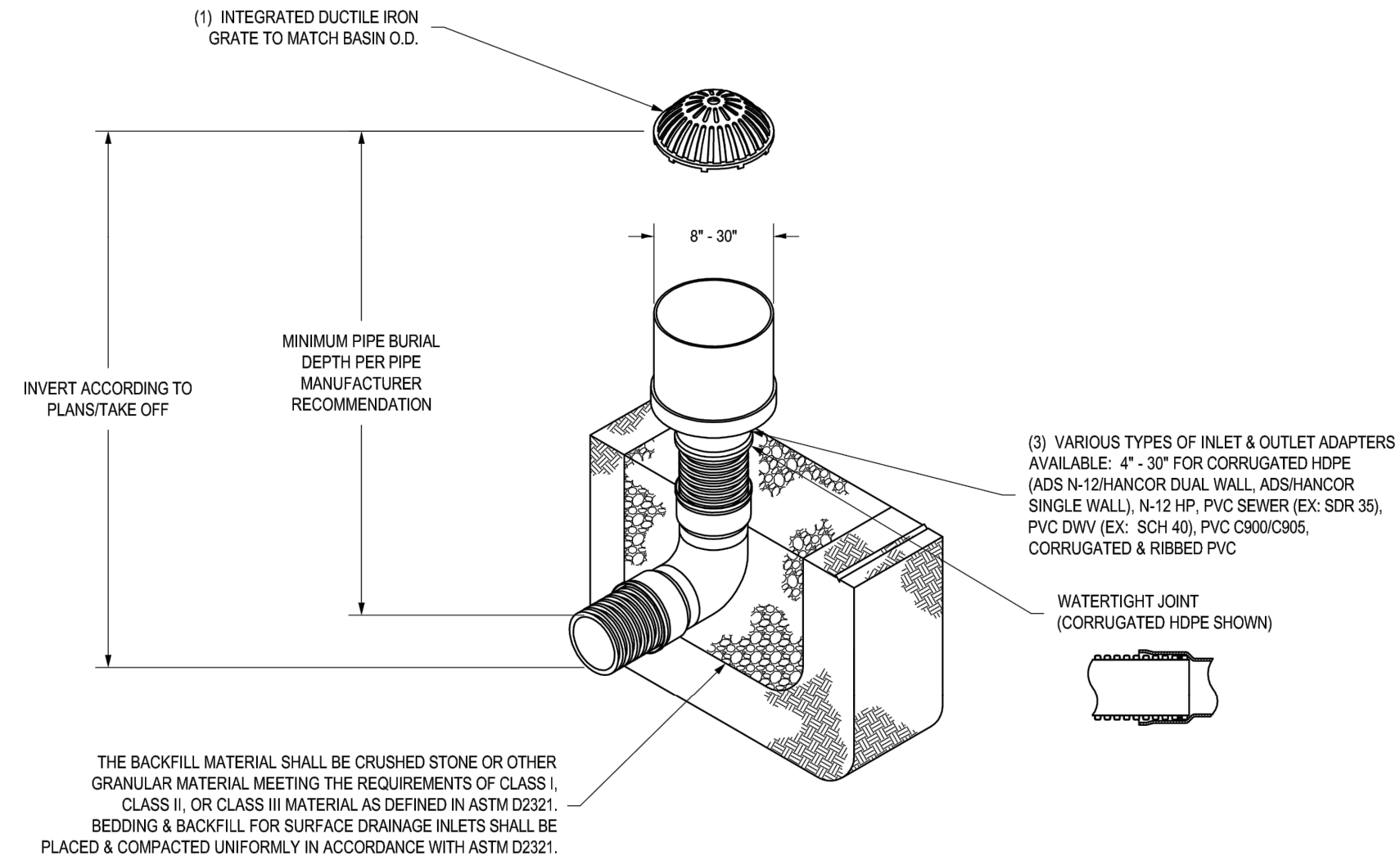


DIMENSIONS ARE FOR REFERENCE ONLY
ACTUAL DIMENSIONS MAY VARY
DIMENSIONS ARE IN INCHES
QUALITY: MATERIALS SHALL CONFORM TO ASTM A536 GRADE 70-50-05
PAINT: CASTINGS ARE FURNISHED WITH A BLACK PAINT
LOCKING DEVICE AVAILABLE UPON REQUEST SEE DRAWING NO.
7001-110-228

THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.

DRAWN BY	EBC	MATERIAL	DUCTILE IRON	<p>3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com</p>
DATE	03-25-10	PROJECT NO./NAME		
REVISED BY	CCA	PROJECT NO./NAME		TITLE
DATE	08-27-15			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 (EX - SDR 35), N-12 HP, & PVC SEWER (EX - 24")
- 3 - 8" - 30" DOME GRATES HAVE NO LOAD RATING

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DRAWN BY	EBC	MATERIAL		<p>3130 VERONA AVE BUFORD, GA 30518 PHN (770) 932-2443 FAX (770) 932-2490 www.nyloplast-us.com</p>
DATE	03-25-10	PROJECT NO./NAME		
REVISED BY	NMH	PROJECT NO./NAME		TITLE
DATE	05-15-16			INLINE DRAIN WITH DOME GRATE QUICK SPEC INSTALLATION DETAIL
DWG SIZE	A	SCALE	1:40	SHEET
				1 OF 1
DWG NO.	7003-110-457	REV	D	

NOTES:
1. ALL NYLOPLAST INLINE DRAINS/RISERS TO INCLUDE CAPPED 4" PERFORATED STUB OUT FOR HOMEOWNER'S TO TIE INTO IN THE FUTURE.

1

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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
GENERAL NOTES & DETAILS

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

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.

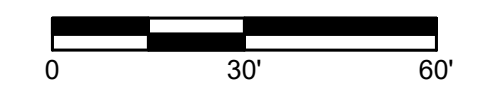
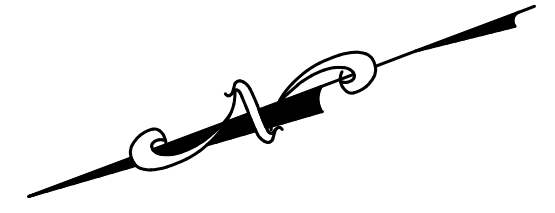
Parcel lines shown per available online GIS mapping.

SEE SHEET 5 FOR CONTINUED



LEGEND

OHU	OVERHEAD UTILITY LINES
W	WATER LINE
UFO	UNDERGROUND CABLE TV LINE
G	UNDERGROUND FIBER OPTIC LINE
X	GAS LINE
—	FENCE LINE
—	TREE LINE
—	SANITARY SEWER LINE
—	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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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	HORIZONTAL SCALE	BRIDGE FILE
	1"=30'	N/A
EXISTING TOPOGRAPHY	VERTICAL SCALE	DESIGNATION
	N/A	N/A
	SURVEY BOOK	SHEET
	N/A	4 of 10
	CONTRACT	PROJECT
	N/A	22402

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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.

SEE SHEET 4 FOR CONTINUED

Project: P:\2022\22402\Engineering\Cadd\Sheet Files\Drain\22402_topo.dwg Jun 25, 2024 11:06am



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BID SET

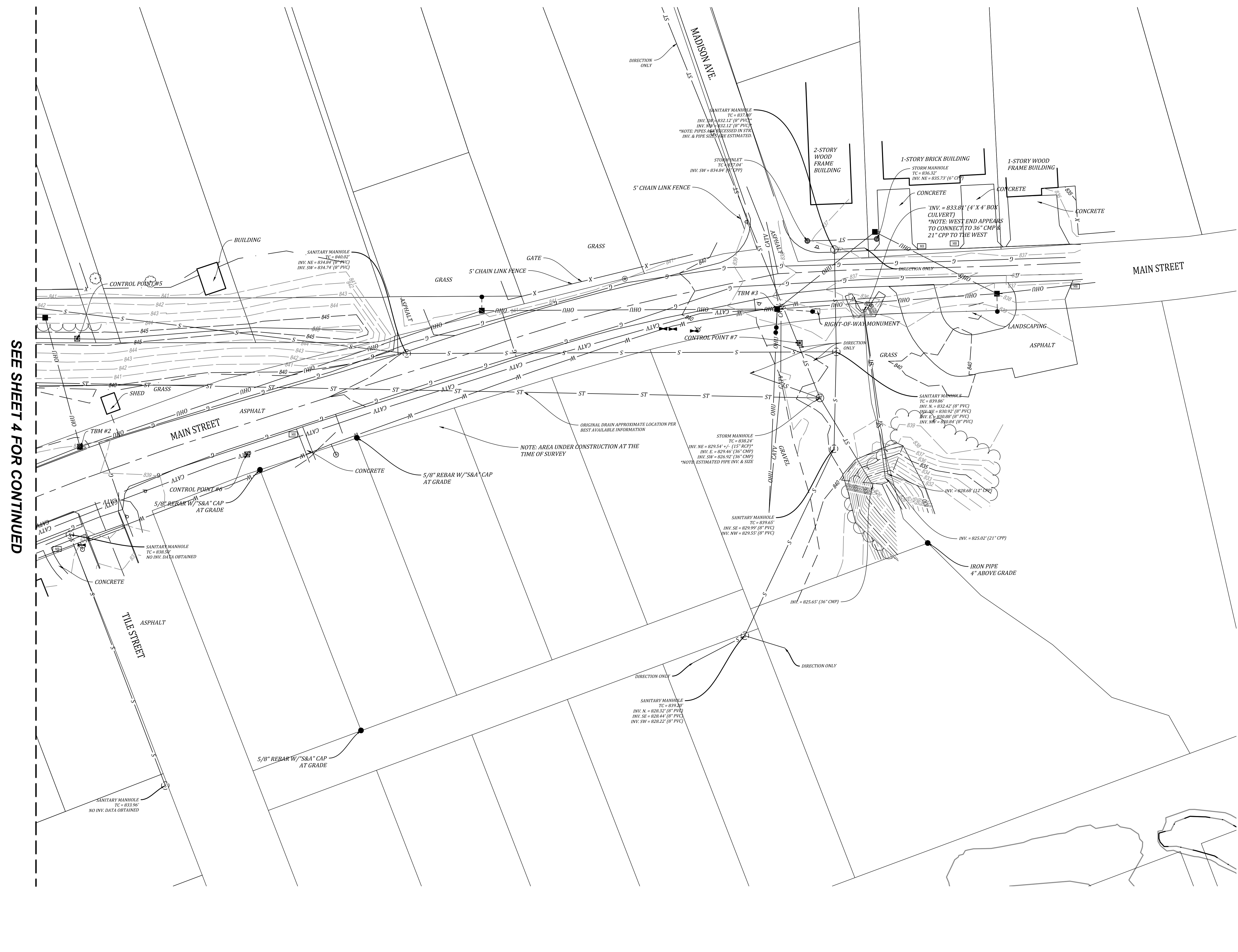
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DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24

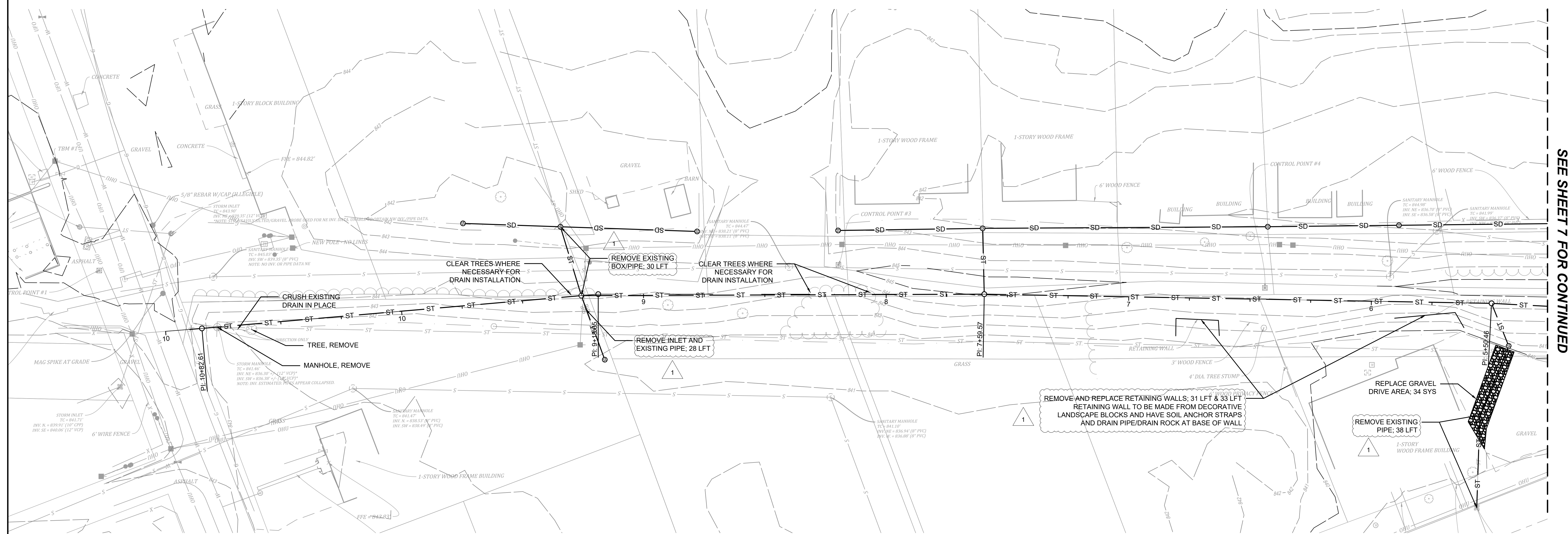
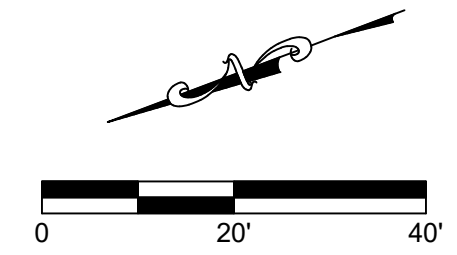
TOWN OF PENDLETON
EXISTING TOPOGRAPHY

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

LEGEND

- OHU OVERHEAD UTILITY LINES
- W WATER LINE
- UCV UNDERGROUND CABLE TV LINE
- UFO UNDERGROUND FIBER OPTIC LINE
- G GAS LINE
- X FENCE
- TREE LINE
- S SANITARY SEWER LINE
- ST STORM SEWER LINE
- SM SANITARY SEWER STRUCTURE
- SS STORM SEWER STRUCTURE
- FH FIRE HYDRANT
- WV WATER VALVE
- WM WATER METER
- GV GAS VALVE
- UP UTILITY POLE
- GA GUY ANCHOR
- TS TELEPHONE SPLICE BOX
- WW WATER WELL
- CM COMMUNICATIONS MANHOLE
- SC SEWER CLEAN-OUT
- SIGN SIGN
- MB MAIL BOX
- TREE TREE





SEE SHEET 7 FOR CONTINUED

- 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
— F —	FENCE
— T —	TREE LINE
— S —	SANITARY SEWER LINE
— ST —	STORM SEWER LINE
— S (S) —	SANITARY SEWER STRUCTURE
— S (S) (S) —	STORM SEWER STRUCTURE
— FH —	FIRE HYDRANT
— W V —	WATER VALVE
— W M —	WATER METER
— G V —	GAS VALVE
— U P —	UTILITY POLE
— G A —	GUY ANCHOR
— T S B —	TELEPHONE SPLICE BOX
— W W —	WATER WELL
— C M —	COMMUNICATIONS MANHOLE
— S C O —	SEWER CLEAN-OUT
— S —	SIGN
— M B —	MAIL BOX
— T —	TREE

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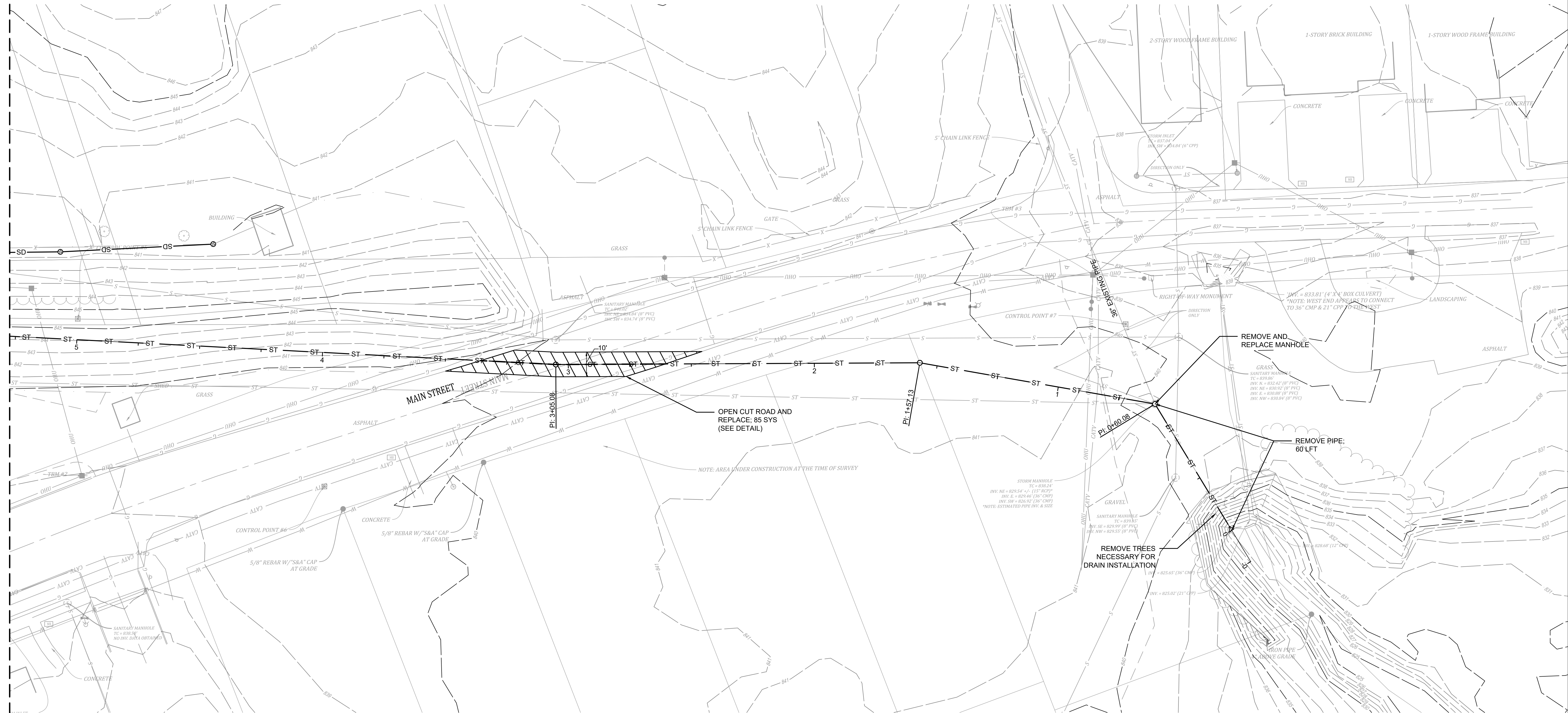
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RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER
DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24

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

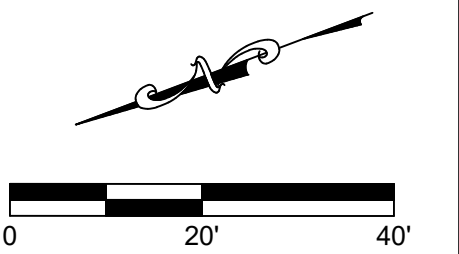
SEE SHEET 6 FOR CONTINUED



- 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

	OVERHEAD UTILITY LINES
	WATER LINE
	UNDERGROUND CABLE TV LINE
	UNDERGROUND FIBER OPTIC LINE
	GAS LINE
	FENCE
	TREE LINE
	SANITARY SEWER LINE
	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



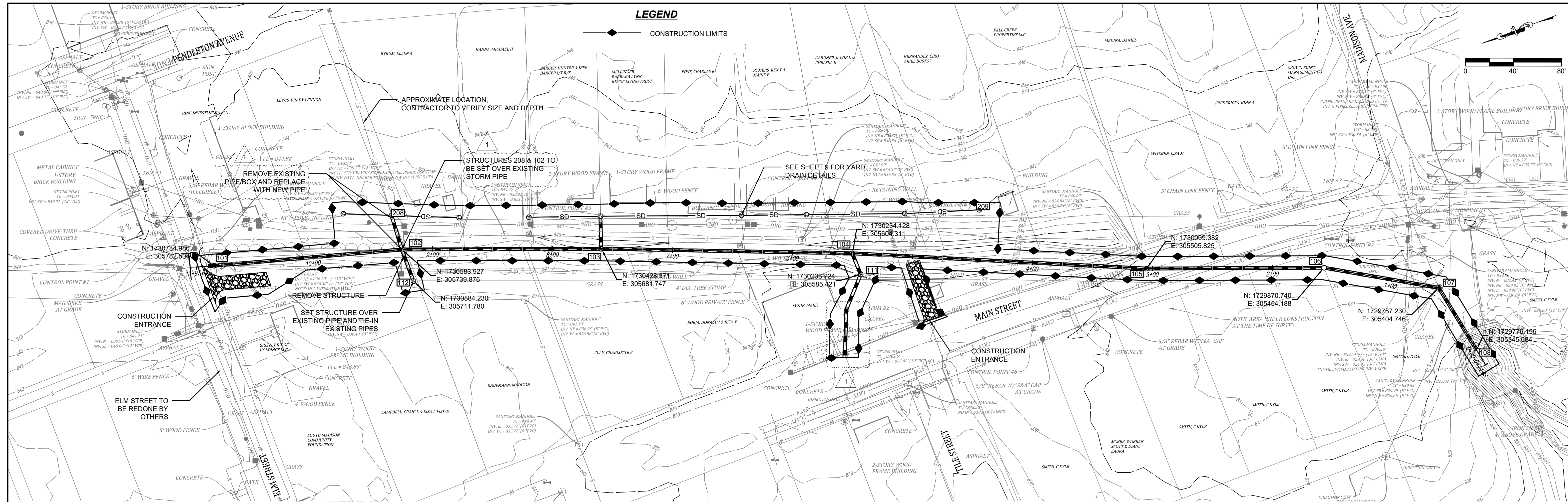
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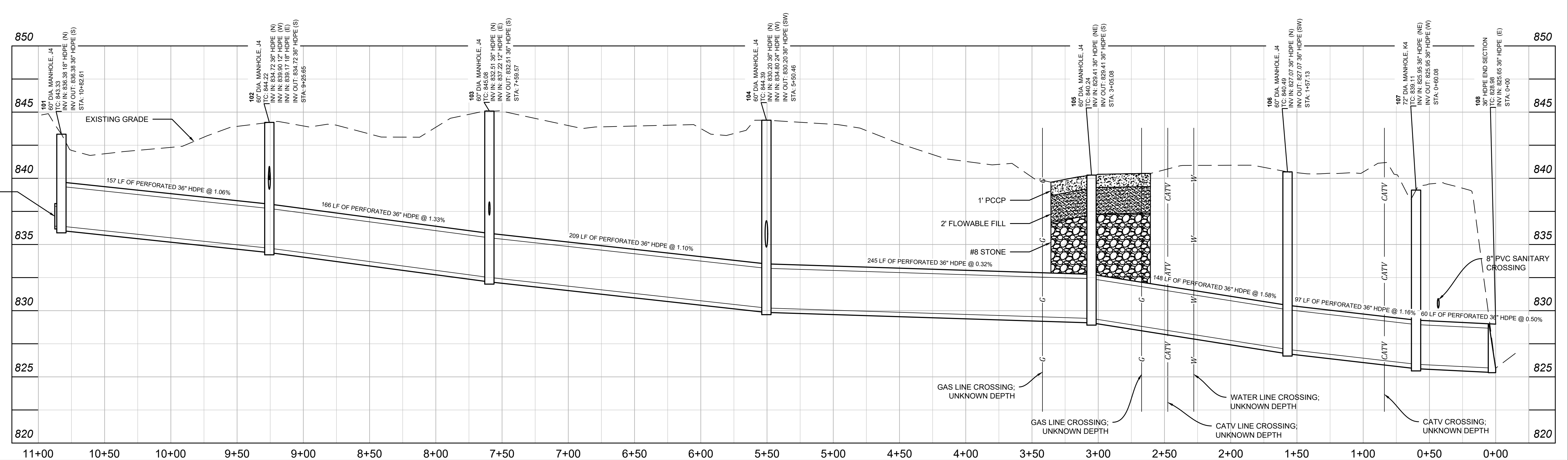
RECOMMENDED FOR APPROVAL _____	DESIGN ENGINEER
DESIGNED: PBR 1/8/24	DRAWN: PBR 1/8/24
CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24

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



- NOTES:**
- CONTRACTOR TO POTHOLE UTILITY CROSSINGS TO VERIFY DEPTHS.
 - CONTRACTOR TO INSTALL EROSION CONTROL BASKETS IN ALL INLETS AND CATCH BASINS ON PROJECT SITE.
 - ALL NEW PIPE CONNECTIONS TO EXISTING STRUCTURES TO HAVE AN INVERT MATCHING THE LOWEST INVERT OF THE EXISTING STRUCTURE AT A MINIMUM.
 - PIPE TO BE PERFORATED WITH FILTER FABRIC INSTALLED AROUND TO PREVENT INFILTRATION OF SOIL.



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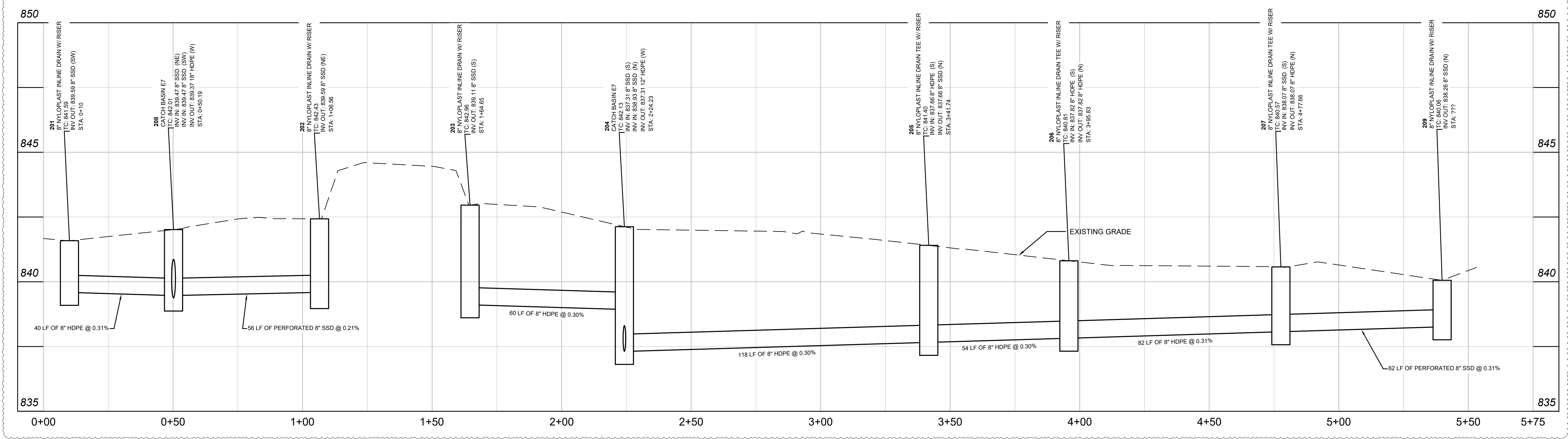
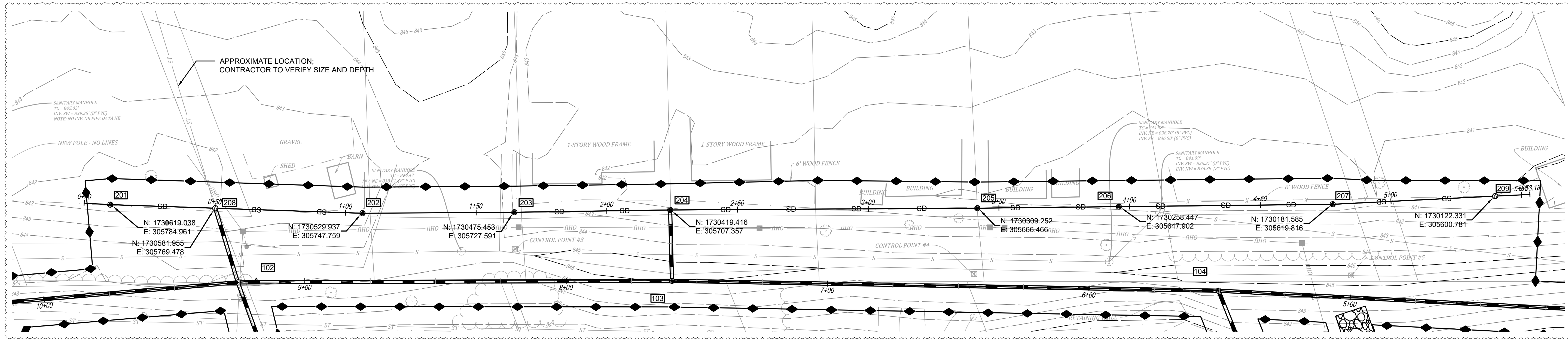
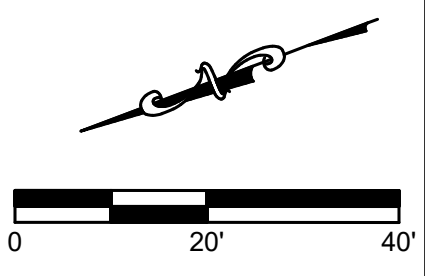
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CHECKED: MJB 1/8/24	CHECKED: MJB 1/8/24

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

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- NOTES:**
- SEE SHEET 3 FOR NYLOPLAST DETAILS.
 - CONTRACTOR MAY ADJUST YARD DRAIN LOCATIONS AS NEEDED.
 - CONTRACTOR TO DIRECT THE YARD DRAINS INTO MAIN DRAIN WHEREVER THERE IS A CONFLICT THAT PREVENTS CONNECTION TO OTHER YARD DRAINS.
 - PIPE TO BE PERFORMED WITH FILTER FABRIC INSTALLED AROUND TO PREVENT INFILTRATION OF SOIL.



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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

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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	834.72 839.90 839.17	36" 12" 18"	HDPE HDPE HDPE	834.72	36"	HDPE
103	60" Dia. Manhole, J4	845.08	Neenah R-1714	832.51 837.22	36" 12"	HDPE HDPE	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	Catch Basin E7	840.31	Casting Type 7	835.00	24"	HDPE	835.00	24"	HDPE
112	Catch Basin E7	841.25	Casting Type 7				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 w/ Riser	842.43	Nyloplast Cast Iron Dome Grate				839.59	8"	SSD
203	8" Nyloplast Inline Drain w/ Riser	842.96	Nyloplast Cast Iron Dome Grate				839.11	8"	SSD
204	Catch Basin E7	842.13	Casting Type 7	837.31 838.93	8" 8"	SSD SSD	837.31	12"	HDPE
205	8" Nyloplast Inline Drain Tee w/ Riser	841.40	Nyloplast Cast Iron Dome Grate	837.66	8"	SSD	837.66	8"	SSD
206	8" Nyloplast Inline Drain Tee w/ Riser	840.81	Nyloplast Cast Iron Dome Grate	837.82	8"	SSD	837.82	8"	SSD
207	8" Nyloplast Inline Drain Tee w/ Riser	840.57	Nyloplast Cast Iron Dome Grate	838.07	8"	SSD	838.07	8"	SSD
208	Catch Basin E7	842.01	Casting Type 7	839.47 839.47	8" 8"	SSD SSD	839.37	18"	HDPE
209	8" Nyloplast Inline Drain w/ Riser	840.06	Nyloplast Cast Iron Dome Grate				838.26	8"	SSD

PIPE DATA TABLE: Elm Street Drain			
Pipe Name	Size	Length	Slope
EXZ2-EXZ1	24"	37.62'	0.53%
EXZ1-111	24"	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%
201-208	8"	40.19'	0.31%
202-208	8"	56.37'	0.21%
203-204	8"	59.58'	0.30%
204-103	12"	27.13'	0.33%
205-204	8"	117.51'	0.30%
206-205	8"	54.09'	0.30%
207-206	8"	81.83'	0.31%
208-102	18"	29.67'	0.67%
209-207	8"	62.24'	0.31%



- 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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DESIGNED: <u> PBR </u> 1/8/24	DRAWN: <u> PBR </u> 1/8/24
CHECKED: <u> MJB </u> 1/8/24	CHECKED: <u> MJB </u> 1/8/24

TOWN OF PENDLETON	
STORM STRUCTURE AND PIPE TABLES	

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