

ANTWERP SQUARE - PHASE 1

VILLAGE OF ANTWERP, PAULDING COUNTY, OHIO

BEING PART OF THE NORTHEAST $\frac{1}{4}$
OF SECTION 34, TOWNSHIP 3
NORTH, RANGE 1 EAST, CARRYALL
TOWNSHIP, VILLAGE OF ANTWERP,
PAULDING COUNTY, OHIO

SHEET INDEX:

TITLE SHEET	TITLE
EXISTING CONDITIONS TOPOGRAPHIC SURVEY	C100
SITE PLAN	C101
UTILITY PLAN	C102
GRADING PLAN	C103
PAVEMENT MARKING AND SIGNING PLAN	C104
PLAN & PROFILE - MEYER AVE	C200
PROFILE - MEYER AVE	C201-C202
PLAN & PROFILE - MEYER AVE	C203
PLAN & PROFILE - ANTWERP PARKWAY	C204
PROFILE - STREET A & STREET B	C205
PROFILE - STREET C	C206
PROFILE - STREET D	C207
INTERSECTION DETAILS	C208
PROPOSED STRUCTURE TABLES	C300
GENERAL NOTES	C301
TYPICAL SECTIONS & DETAILS	C302
GENERAL DETAILS	C303

UTILITY OWNERSHIP

WATER, SANITARY SEWER, STORM SEWER
VILLAGE OF ANTWERP
118 N. MAIN ST., ANTWERP, OH 45813
PHONE : (419) 258-2371

ELECTRIC
AMERICAN ELECTRIC POWER
1 RIVERSIDE PLAZA, COLUMBUS, OH 43215-2373
PHONE : (614) 716-1000

NATURAL GAS
OHIO GAS COMPANY
715 E. WILSON ST., BRYAN, OH 43506
PHONE : (419) 636-1117

FIBER
METALINK TECHNOLOGIES
417 WAYNE AVENUE, SUITE 101, DEFIANCE, OH 43512
PHONE : (888) 999-8002



VICINITY MAP
N 41° 10' 28" W 84° 43' 59"

8/10/26
DATE

Bryan Smith
BRYAN SMITH
MAYOR OF ANTWERP

8/10/26
DATE

Brian Davis
BRIAN DAVIS
ANTWERP VILLAGE ADMINISTRATOR



8/14/2026
DATE

GREGORY A. BOCKRATH P.E., P.S.
BOCKRATH & ASSOCIATES
ENGINEERING AND SURVEYING, LLC

9-9-26 ADDENDUM #2

2 WORKING DAYS BEFORE YOU DIG!

OHIO
Utilities Protection
SERVICE

www.oups.org

Call Before You Dig
CALL TOLL FREE: (800) 362-2764
NON-MEMBERS MUST BE CALLED DIRECTLY

Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

TITLE SHEET
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

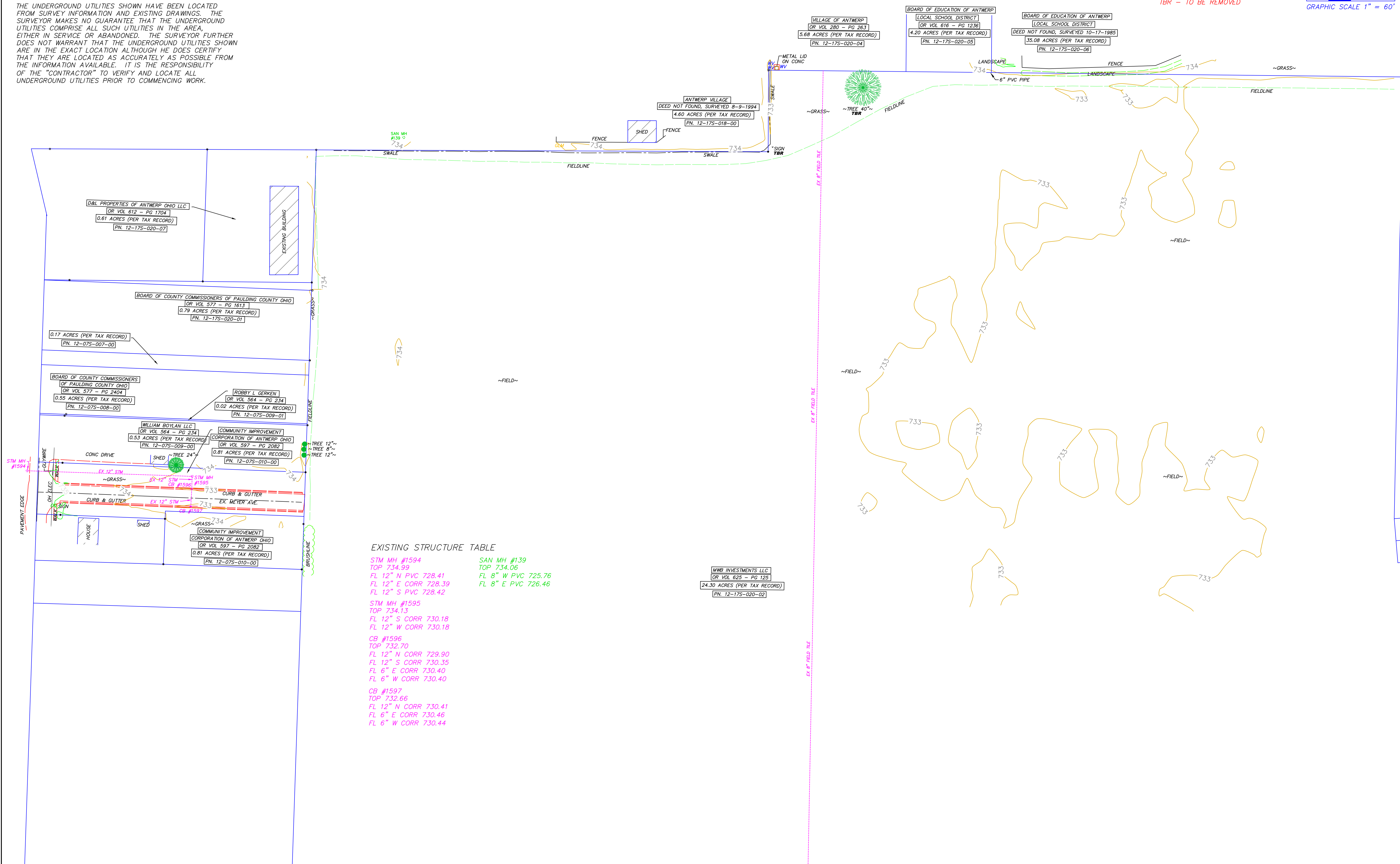
REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

TITLE

NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE EXAMINATION. BEYOND THE DEED DOCUMENTS CITED ON THE SURVEY DRAWING THERE MAY BE RECORDED OR UN-RECORDED EASEMENTS AND/OR ENCUMBRANCES BENEFITING OR ENCUMBERING THE SURVEYED PROPERTY WHICH ARE NOT SHOWN ON THIS DRAWING.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES 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 ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. IT IS THE RESPONSIBILITY OF THE "CONTRACTOR" TO VERIFY AND LOCATE ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.



EXISTING STRUCTURE TABLE

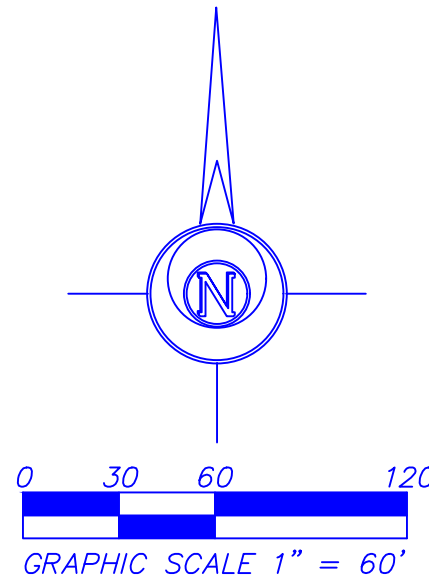
STM MH #1594
TOP 734.99
FL 12" N PVC 728.41
FL 12" E CORR 728.39
FL 12" S PVC 728.42
STM MH #1595
TOP 734.13
FL 12" S CORR 730.18
FL 12" W CORR 730.18
CB #1596
TOP 732.70
FL 12" N CORR 729.90
FL 12" S CORR 730.35
FL 6" E CORR 730.40
FL 6" W CORR 730.40
CB #1597
TOP 732.66
FL 12" N CORR 730.41
FL 6" E CORR 730.46
FL 6" W CORR 730.44

SAN MH #139
TOP 734.06
FL 8" W PVC 725.76
FL 8" E PVC 726.46

MWB INVESTMENTS LLC
OR VOL 625 - PG 125
24.30 ACRES (PER TAX RECORD)
PN. 12-175-020-02

LEGEND

WV - WATER VALVE
GLM - GASLINE MARKER
OH - OVERHEAD
P - POWER POLE
CB - CATCH BASIN
MH - MANHOLE
CO - CLEANOUT
TBR - TO BE REMOVED



EX. CONDITIONS TOPOGRAPHIC SURVEY

ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

REVIEWED BY:
DESIGNED BY: RDL 5/12/26
JOB NUMBER: 26-084

C100

NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE EXAMINATION. BEYOND THE DEED DOCUMENTS CITED ON THE SURVEY DRAWING THERE MAY BE RECORDED OR UN-RECORDED EASEMENTS AND/OR ENCUMBRANCES BENEFITING OR ENCUMBERING THE SURVEYED PROPERTY WHICH ARE NOT SHOWN ON THIS DRAWING.

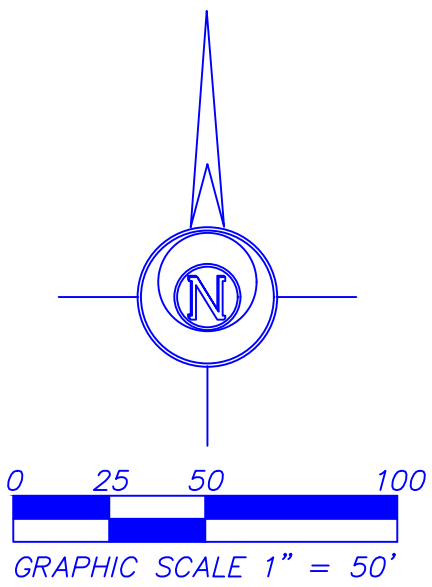
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. IT IS THE RESPONSIBILITY OF THE "CONTRACTOR" TO VERIFY AND LOCATE ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

PROJECT KEYNOTES:

- 1 PROPOSED TYPE 3 ROLLED CURB (SEE DETAIL SHEET C301)
- 2 PROPOSED ROADWAY (SEE DETAIL SHEET C301) PROPOSED
- 3 PROPOSED SIDEWALK - 4' WIDE (SEE DETAIL SHEET C301)
- 4 PROPOSED ADA DETECTION PAD (LOCATION MARKED BY HATCHED AREA IN SIDEWALK)
- 5 PROPOSED 5' WIDE ADA RAMP

LEGEND

WV - WATER VALVE
GLM - GASLINE MARKER
OH - OVERHEAD
P - POWER POLE
CB - CATCH BASIN
MH - MANHOLE
CO - CLEANOUT
TBR - TO BE REMOVED



Bockrath &

Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

SITE PLAN
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C101

9-9-26 ADDENDUM #2

LOT AREA TABLE	
LOT #	AREA (ACRES)
1	0.130
2	0.059
3	0.059
4	0.059
5	0.059
6	0.091
7	0.091
8	0.058
9	0.058
10	0.057
11	0.057
12	0.089
13	0.088
14	0.056
15	0.056
16	0.056
17	0.056
18	0.111
19	0.143
20	0.081

LOT AREA TABLE	
LOT #	AREA (ACRES)
21	0.081
22	0.081
23	0.081
24	0.110
25	0.110
26	0.081
27	0.081
28	0.143
29	0.113
30	0.051
31	0.051
32	0.051
33	0.051
34	0.051
35	0.051
36	0.080
37	0.080
38	0.051
39	0.051
40	0.051

LOT AREA TABLE	
LOT #	AREA (ACRES)
41	0.051
42	0.051
43	0.051
44	0.113
45	0.123
46	0.055
47	0.055
48	0.055
49	0.055
50	0.056
51	0.056
52	0.088
53	0.088
54	0.056
55	0.056
56	0.056
57	0.056
58	0.056
59	0.056
60	0.126

LOT AREA TABLE	
LOT #	AREA (ACRES)
61	0.192
62	0.138
63	0.138
64	0.138
65	0.138
66	0.138
67	0.138
68	0.192
69	0.138
70	0.138
71	0.138
72	0.138
73	0.188
74	0.138
75	0.138
76	0.138
77	0.138
78	0.192
79	0.138
80	0.138

LOT AREA TABLE	
LOT #	AREA (ACRES)
81	0.138
82	0.138
83	0.199
84	0.138
85	0.138
86	0.138
87	0.138
88	0.138
89	0.199
90	0.180
91	0.138
92	0.138
93	0.138
94	0.138
95	0.138
96	0.138
97	0.138
98	0.138
99	0.138
100	0.138

LOT AREA TABLE	
LOT #	AREA (ACRES)
101	0.138
102	0.138

RESERVE AREA TABLE

RESERVE	AREA (ACRES)
RESERVE A	0.552
RESERVE B	0.965
RESERVE C	0.069

NWB INVESTMENTS LLC
OR VOL 625 - PG 125
24.30 ACRES (PER TAX RECORD)
PN. 12-175-020-02

EXISTING STRUCTURE TABLE

STM MH #1594
TOP 734.99
FL 12" N PVC 728.41
FL 12" E CORR 728.39
FL 12" S PVC 728.42

STM MH #1595
TOP 734.13
FL 12" S CORR 730.18
FL 12" W CORR 730.18

CB #1596
TOP 732.70
FL 12" N CORR 729.90
FL 12" S CORR 730.35
FL 6" E CORR 730.40
FL 6" W CORR 730.40

CB #1597
TOP 732.66
FL 12" N CORR 730.41
FL 6" E CORR 730.46
FL 6" W CORR 730.44

SAN MH #139
TOP 734.06
FL 8" W PVC 725.76
FL 8" E PVC 726.46

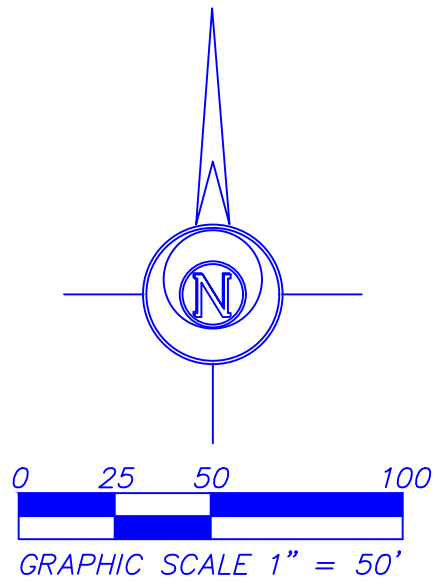
NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE EXAMINATION. BEYOND THE DEED DOCUMENTS CITED ON THE SURVEY DRAWING THERE MAY BE RECORDED OR UN-RECORDED EASEMENTS AND/OR ENCUMBRANCES BENEFITING OR ENCUMBERING THE SURVEYED PROPERTY WHICH ARE NOT SHOWN ON THIS DRAWING.

THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES 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 ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. IT IS THE RESPONSIBILITY OF THE "CONTRACTOR" TO VERIFY AND LOCATE ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

LEGEND

WV - WATER VALVE
GLM - GASLINE MARKER
OH - OVERHEAD
OP - POWER POLE
CB - CATCH BASIN
MH - MANHOLE
CO - CLEANOUT
TBR - TO BE REMOVED



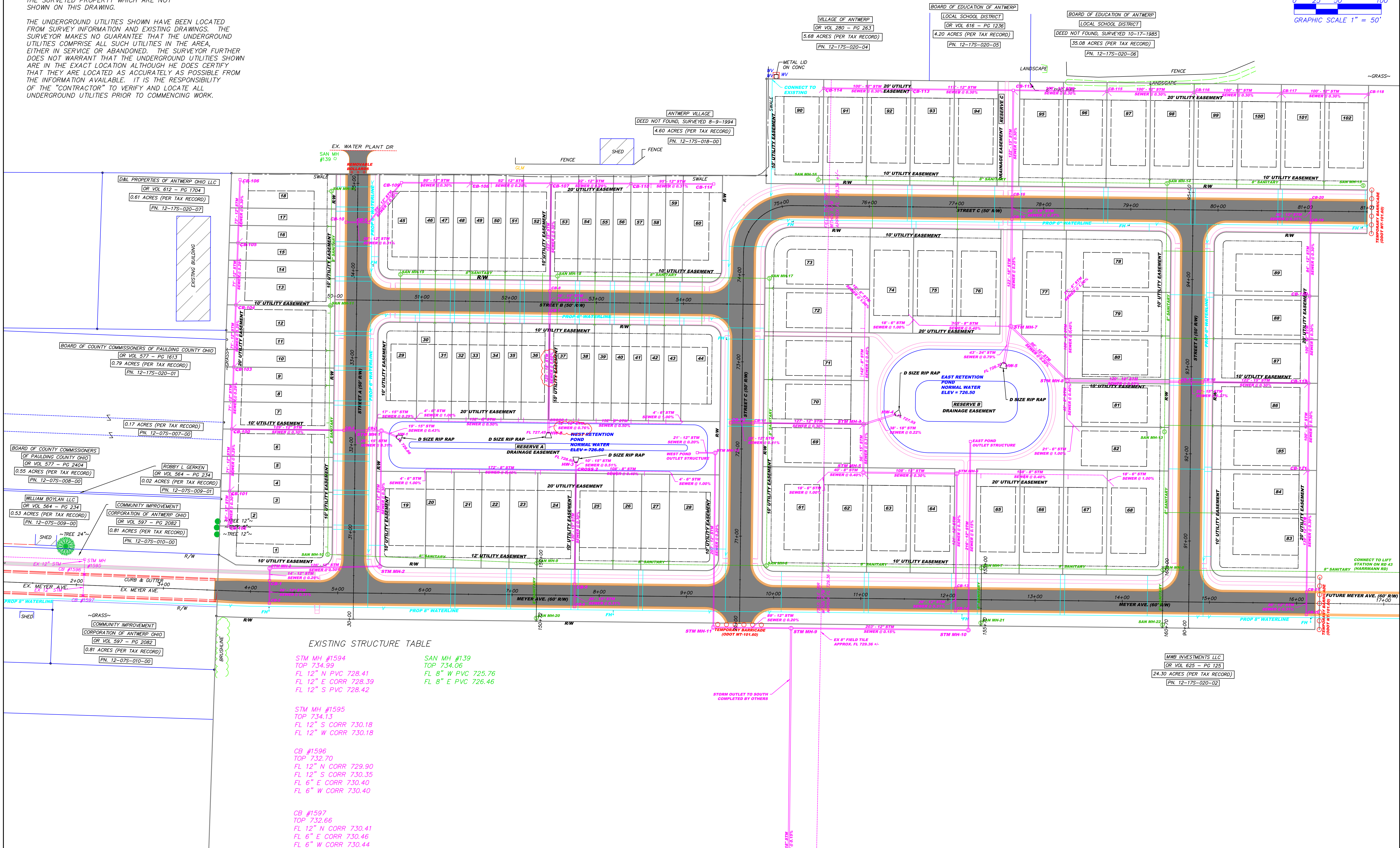
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

UTILITY PLAN
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C102

9-9-26 ADDENDUM #2



NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE EXAMINATION. BEYOND THE DEED DOCUMENTS CITED ON THE SURVEY DRAWING THERE MAY BE RECORDED OR UNRECORDED EASEMENTS AND/OR ENCUMBRANCES BENEFITING OR ENCUMBERING THE SURVEYED PROPERTY WHICH ARE NOT SHOWN ON THIS DRAWING.

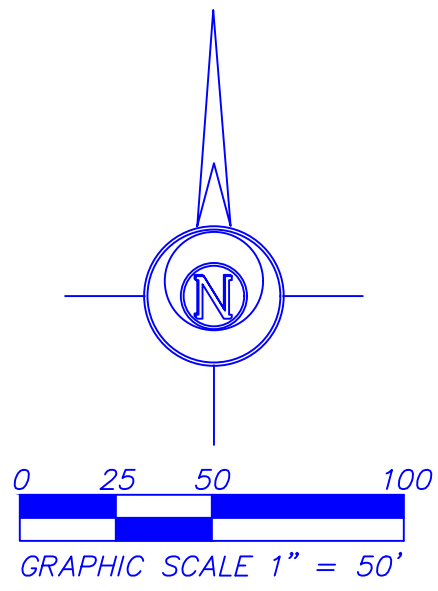
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. IT IS THE RESPONSIBILITY OF THE "CONTRACTOR" TO VERIFY AND LOCATE ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

PROJECT KEYNOTES:

G.A.B. MIN. GRADE AT BUILDING

LEGEND

WV - WATER VALVE
GLM - GASLINE MARKER
OH - OVERHEAD
CP - POWER POLE
CB - CATCH BASIN
MH - MANHOLE
CO - CLEANOUT



Bockrath &

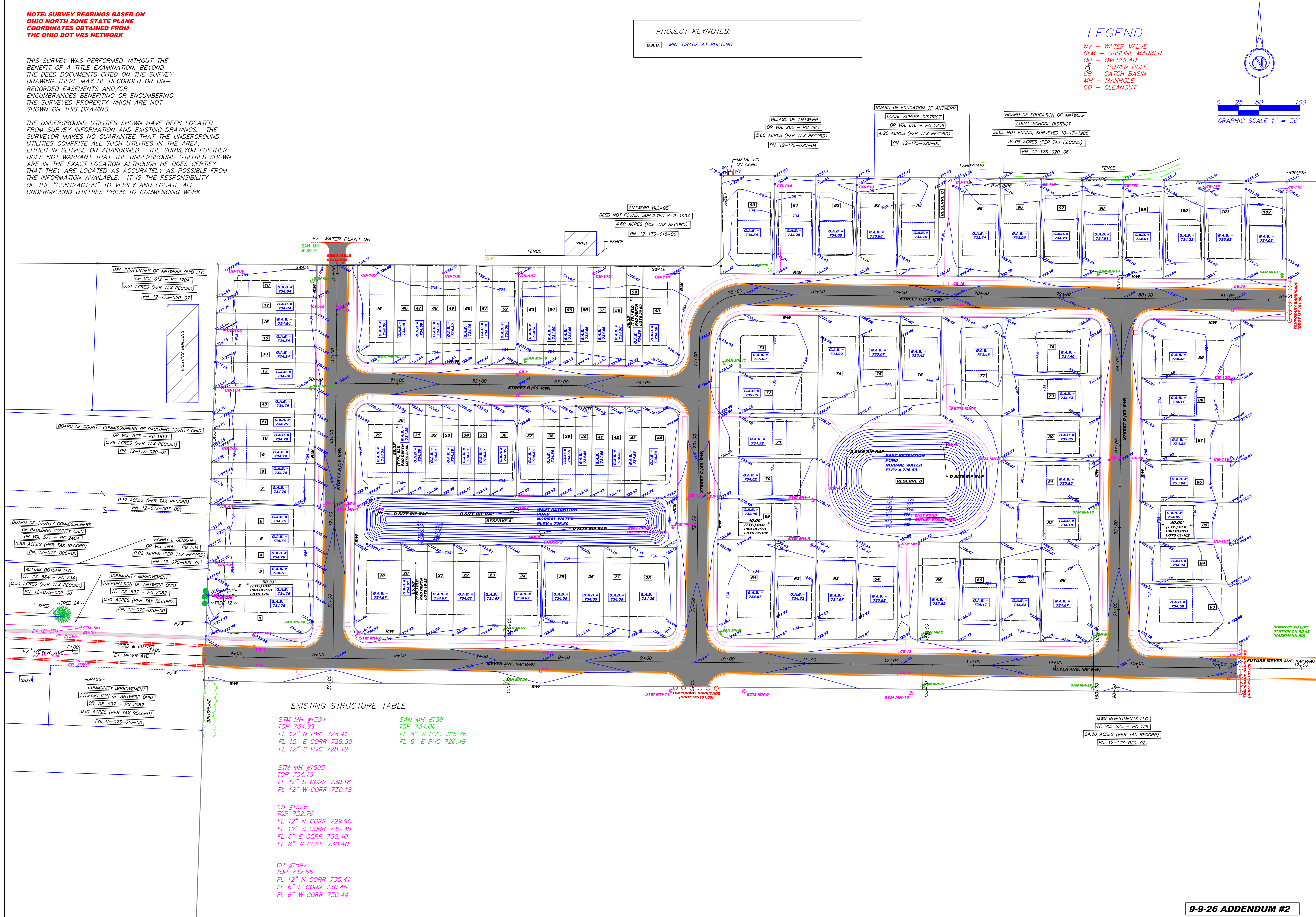
Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

GRADING PLAN
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C103

9-9-26 ADDENDUM #2



EXISTING STRUCTURE TABLE

STM MH #1594
TOP 734.99
FL 12" N PVC 728.41
FL 12" E CORR 728.39
FL 12" S PVC 728.42

STM MH #1595
TOP 734.13
FL 12" S CORR 730.18
FL 12" W CORR 730.18

CB #1596
TOP 732.70
FL 12" N CORR 729.90
FL 12" S CORR 730.35
FL 6" E CORR 730.40
FL 6" W CORR 730.40

CB #1597
TOP 732.66
FL 12" N CORR 730.41
FL 6" E CORR 730.46
FL 6" W CORR 730.44

SAN MH #139
TOP 734.06
FL 8" W PVC 725.76
FL 8" E PVC 726.46

NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A TITLE EXAMINATION. BEYOND THE DEED DOCUMENTS CITED ON THE SURVEY DRAWING THERE MAY BE RECORDED OR UN-RECORDED EASEMENTS AND/OR ENCUMBRANCES BENEFITING OR ENCUMBERING THE SURVEYED PROPERTY WHICH ARE NOT SHOWN ON THIS DRAWING.

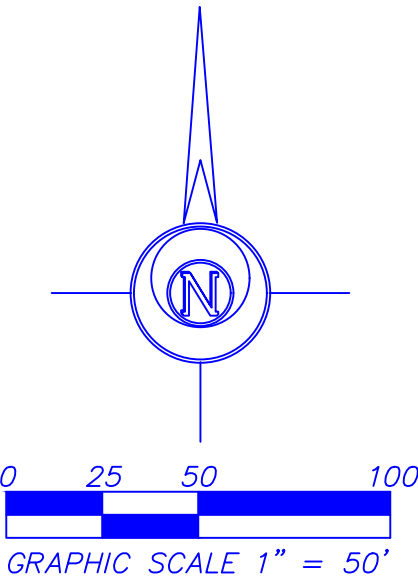
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION ALTHOUGH HE DOES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. IT IS THE RESPONSIBILITY OF THE "CONTRACTOR" TO VERIFY AND LOCATE ALL UNDERGROUND UTILITIES PRIOR TO COMMENCING WORK.

PROJECT KEYNOTES:

- 1 PROPOSED 6.5' WIDE STRIPED CROSSWALK - ODOT ITEM 642
- 2 PROPOSED STOP SIGN
- 3 PROPOSED SPEED LIMIT SIGN

LEGEND

WV - WATER VALVE
GLM - GASLINE MARKER
OH - OVERHEAD
PP - POWER POLE
CB - CATCH BASIN
MH - MANHOLE
CO - CLEANOUT
TBR - TO BE REMOVED



PAVEMENT MARKING AND SIGNING PLAN

ANTWERP SQUARE
PHASE 1

ANTWERP, OHIO 45813

Bockrath &

Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C104

9-9-26 ADDENDUM #2

EXISTING STRUCTURE TABLE

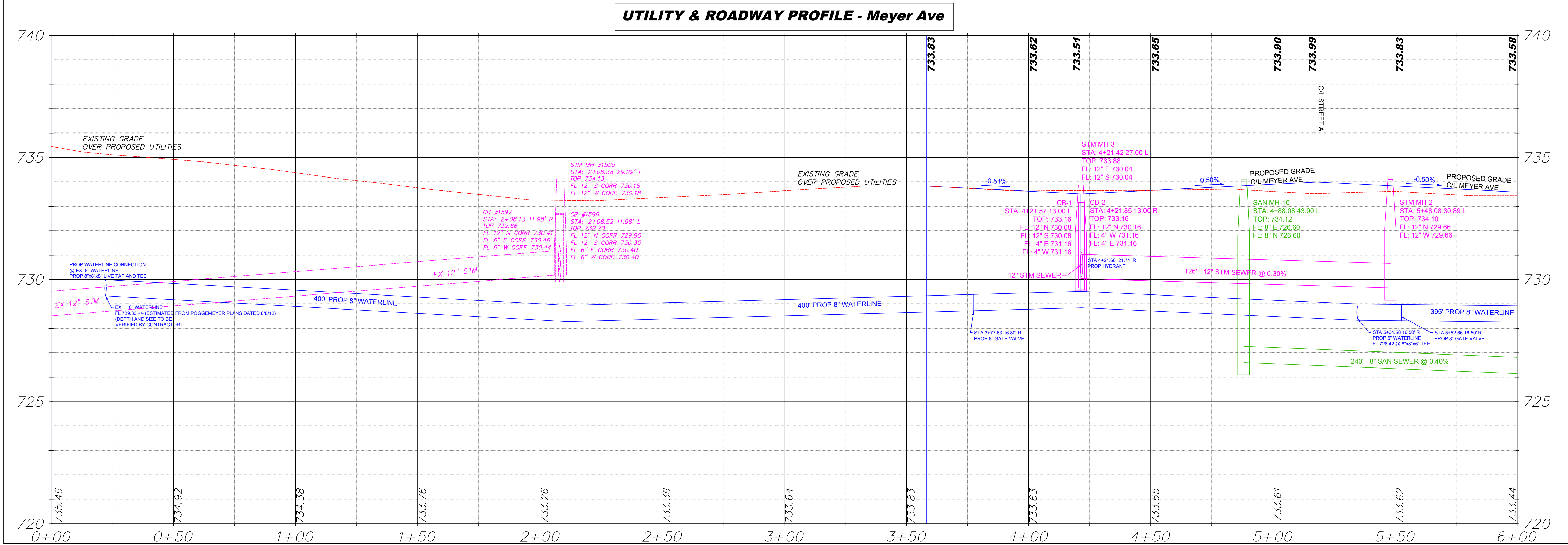
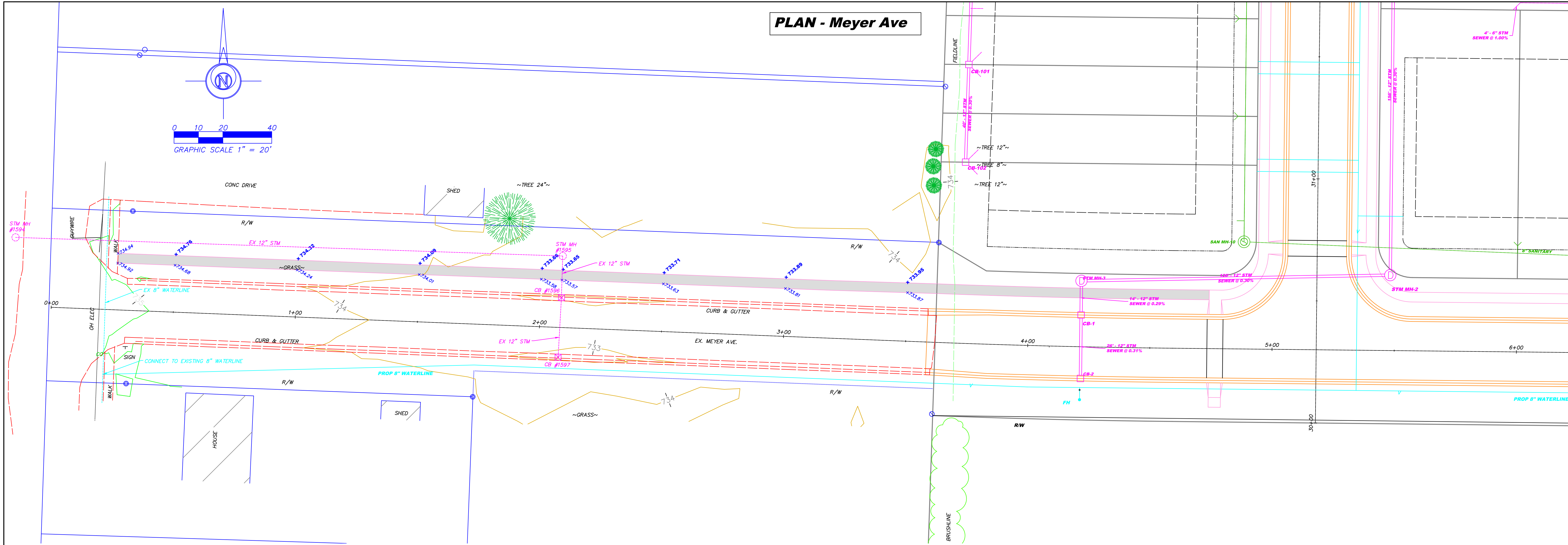
STM MH #1594
TOP 734.99
FL 12" N PVC 728.41
FL 12" E CORR 728.39
FL 12" S PVC 728.42

STM MH #1595
TOP 734.13
FL 12" S CORR 730.18
FL 12" W CORR 730.18

CB #1596
TOP 732.70
FL 12" N CORR 729.90
FL 12" S CORR 730.35
FL 6" E CORR 730.40
FL 6" W CORR 730.40

CB #1597
TOP 732.66
FL 12" N CORR 730.41
FL 6" E CORR 730.46
FL 6" W CORR 730.44

SAN MH #139
TOP 734.06
FL 8" W PVC 725.76
FL 8" E PVC 726.46



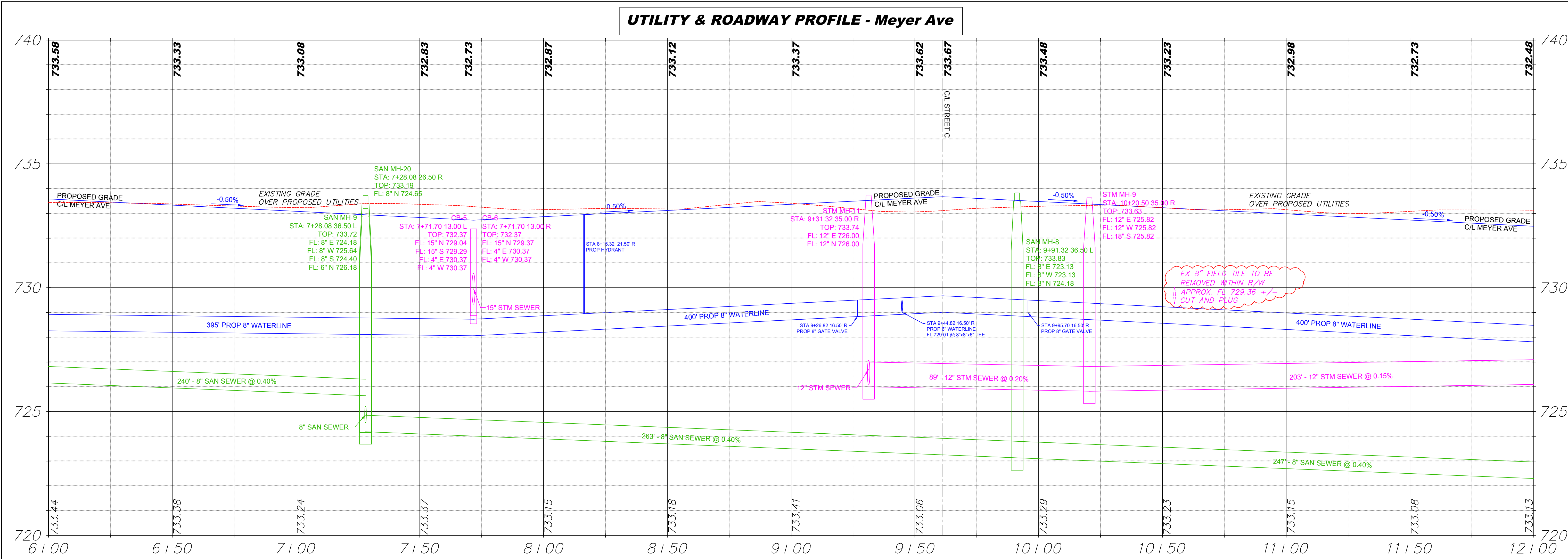
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

PLAN & PROFILE - MEYER AVE
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

SCALE 1" = 20' HORIZ

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C200



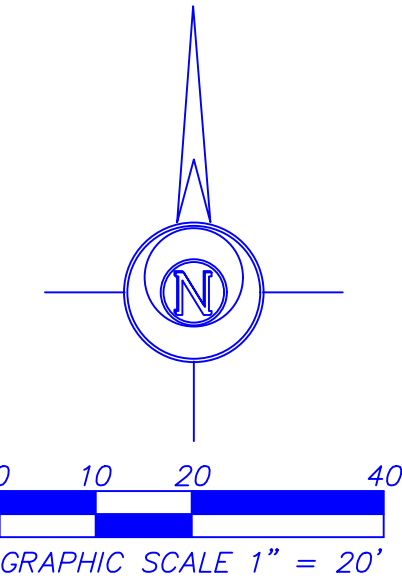
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

PROFILE - MEYER AVE
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

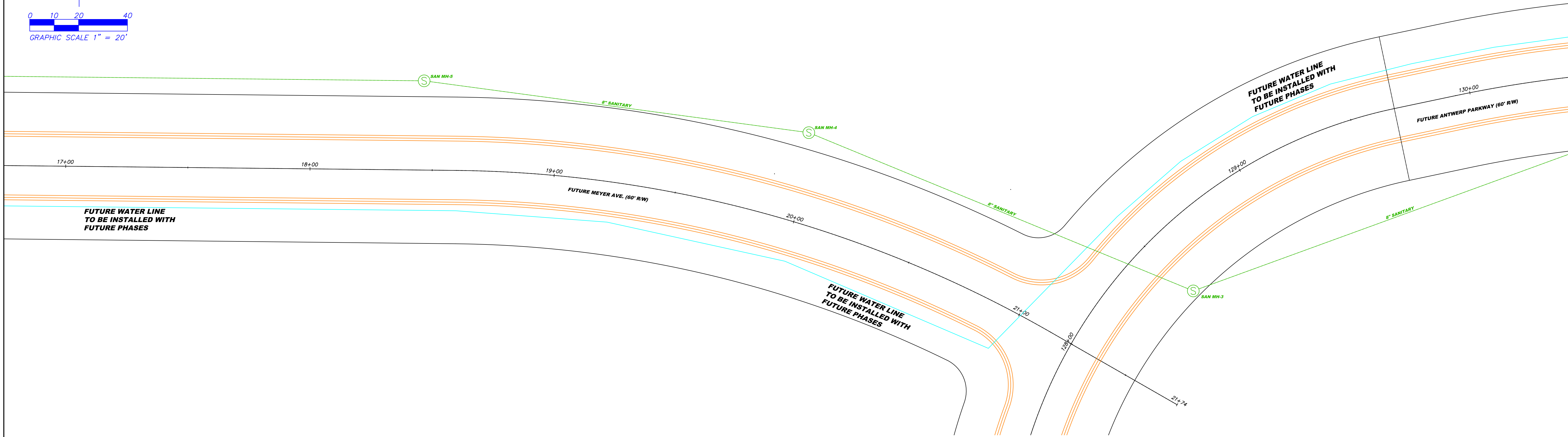
SCALE 1" = 20' HORIZ

REVIEWED BY:	GAB	8/14/26
DESIGNED BY:	RDL	8/12/26
JOB NUMBER:	26-084	

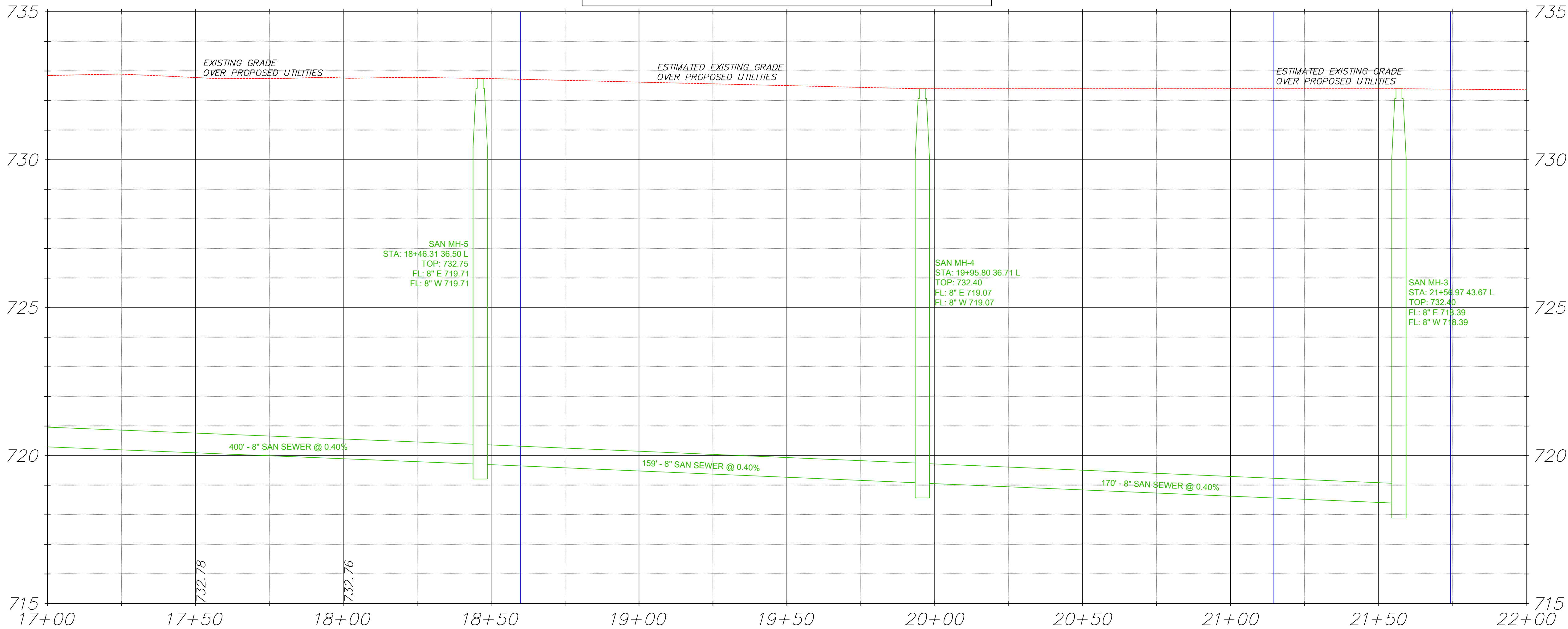
C201



PLAN - Meyer Ave



UTILITY & ROADWAY PROFILE - Meyer Ave



PLAN & PROFILE - MEYER AVE
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

SCALE 1" = 20' HORIZ

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

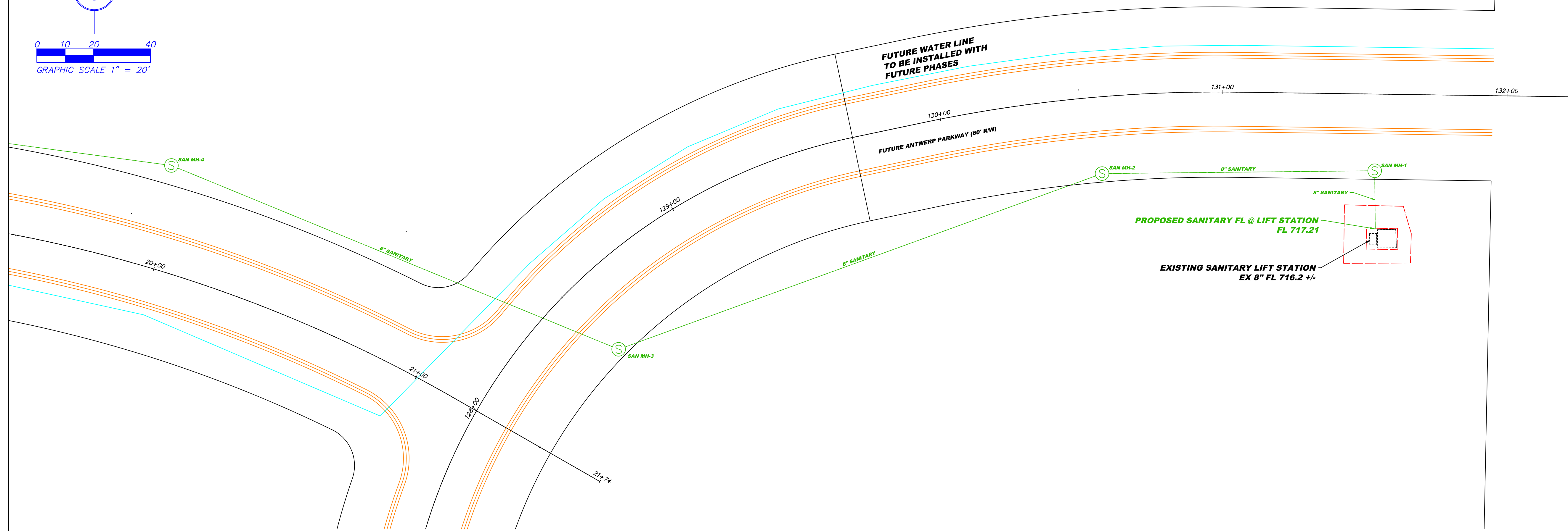
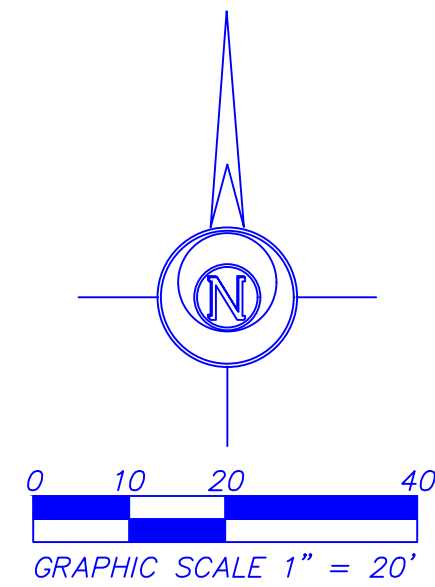
C203

Bockrath &

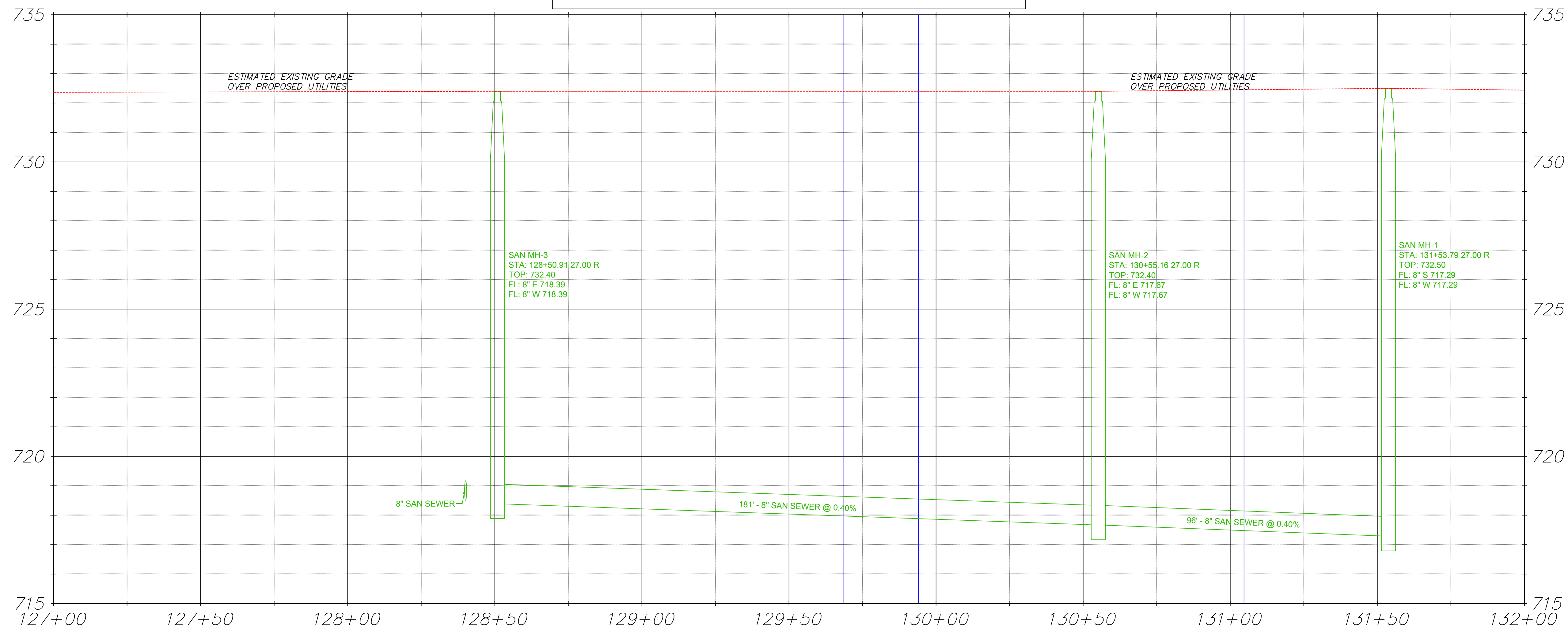
Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

9-9-26 ADDENDUM #2

PLAN - Antwerp Parkway



UTILITY & ROADWAY PROFILE - Antwerp Parkway



9-9-26 ADDENDUM #2

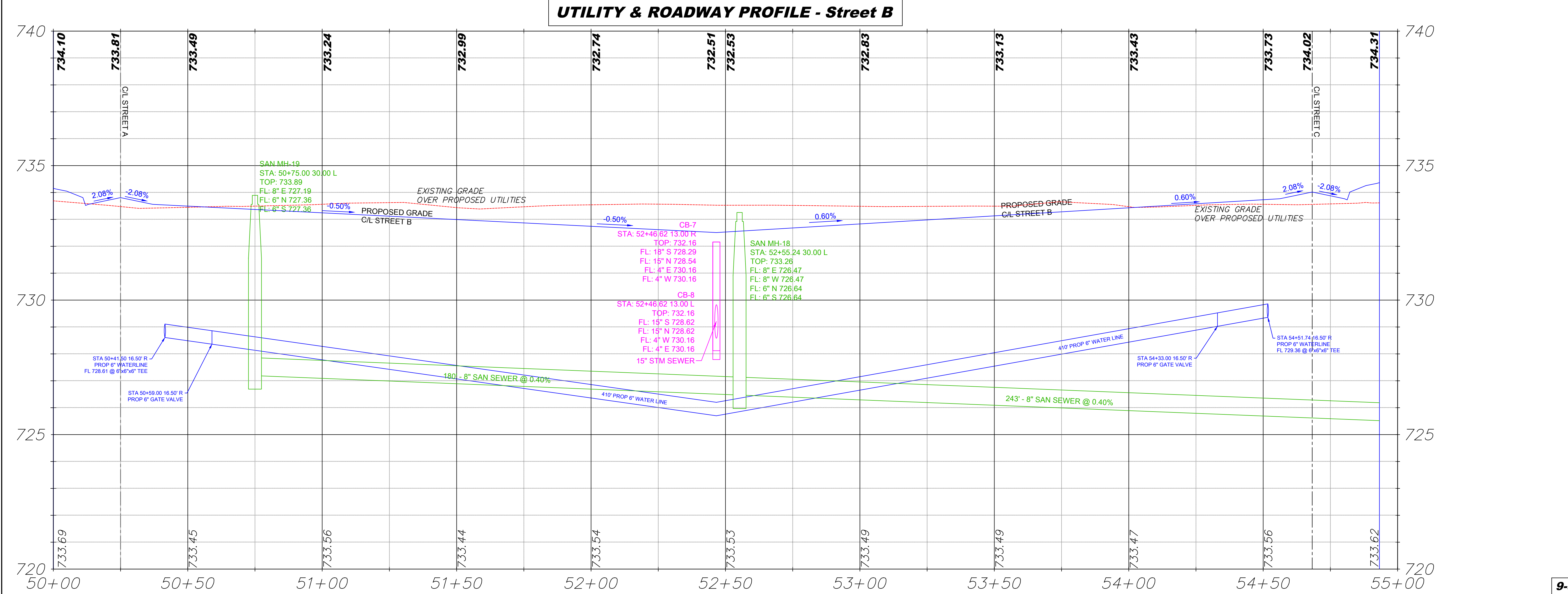
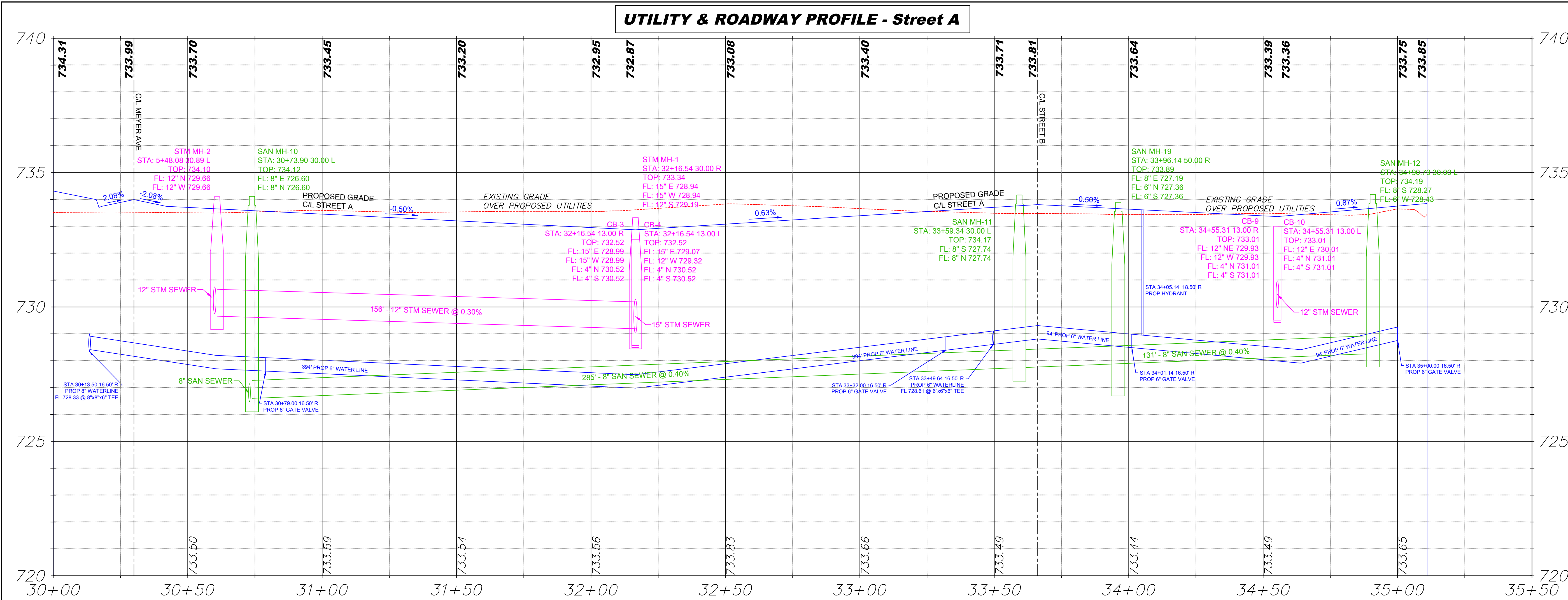
PLAN & PROFILE - ANTWERP PARKWAY
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

SCALE 1" = 20' HORIZ

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C204

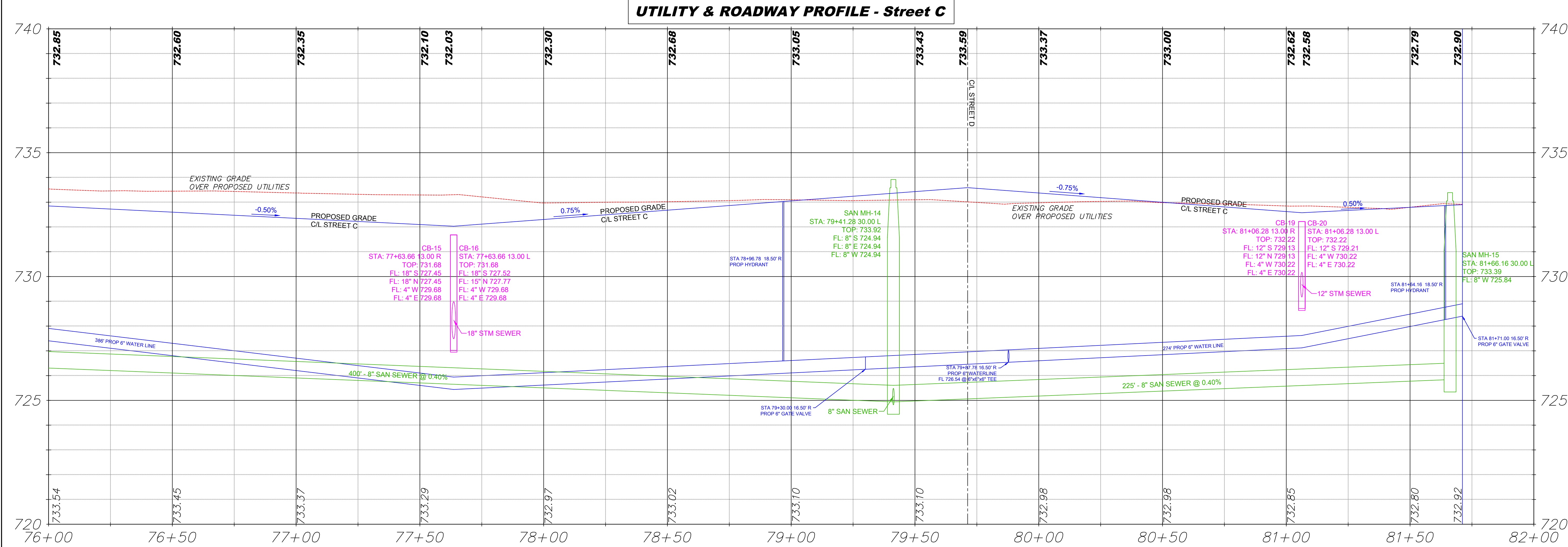
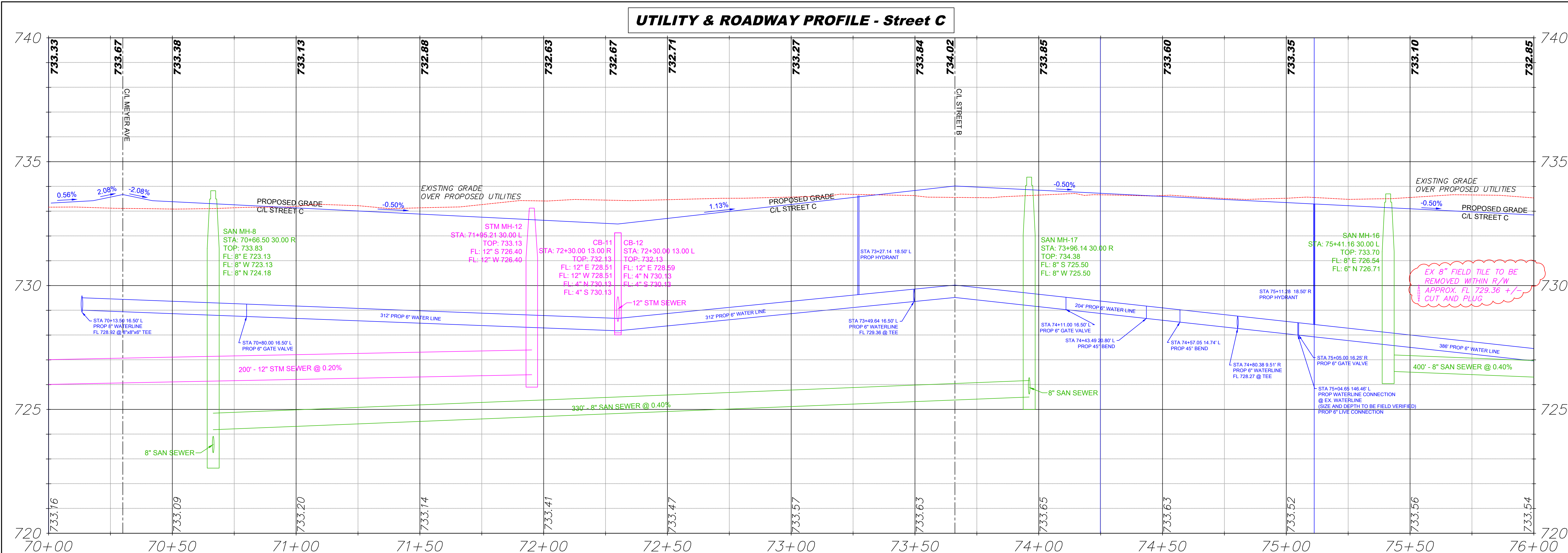
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789



PROFILE - STREET A & STREET B
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

SCALE 1" = 20' HORIZ		
REVIEWED BY:	GAB	8/14/26
DESIGNED BY:	RDL	8/12/26
JOB NUMBER:	26-084	

Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789





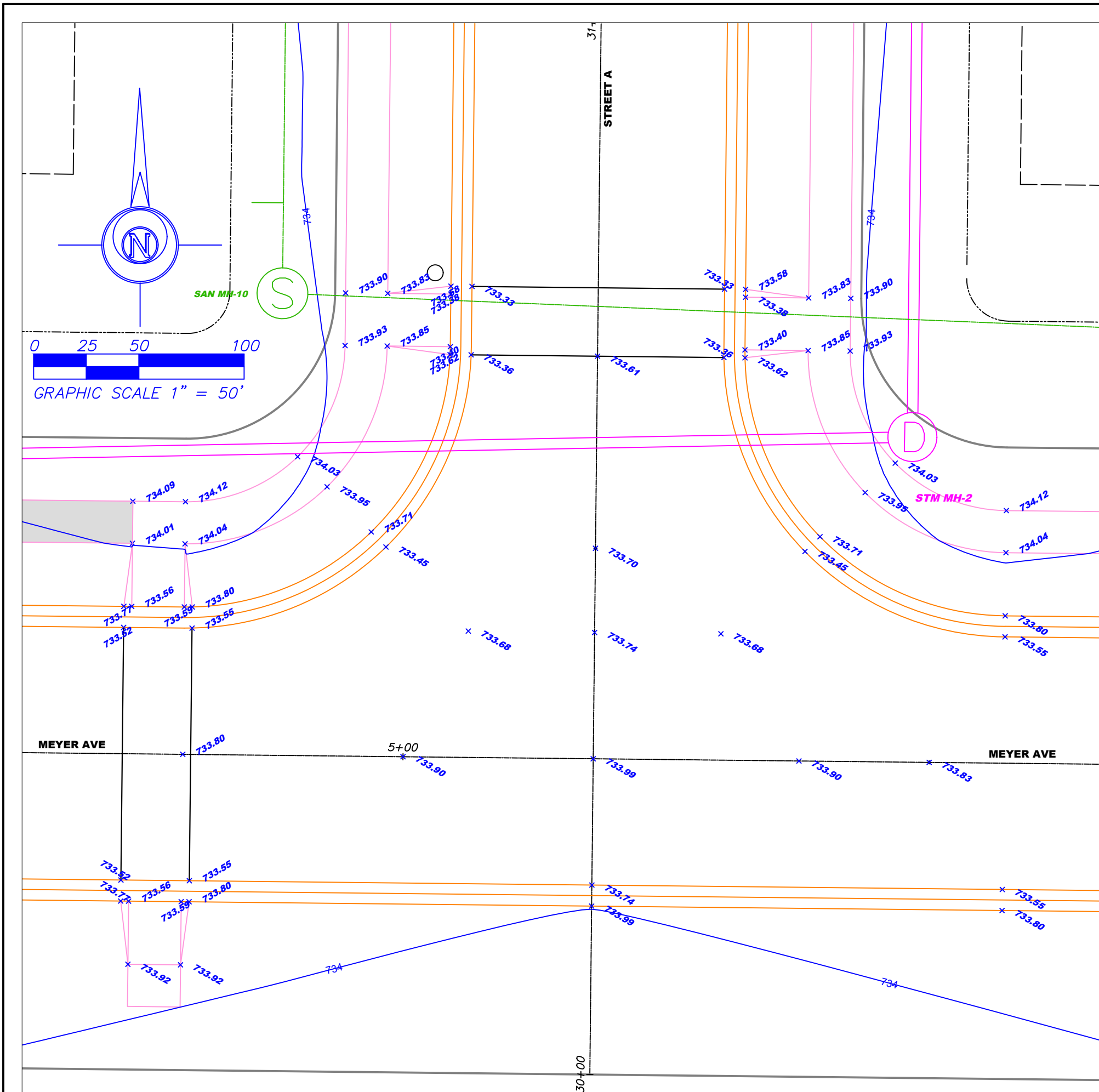
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

PROFILE - STREET C
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

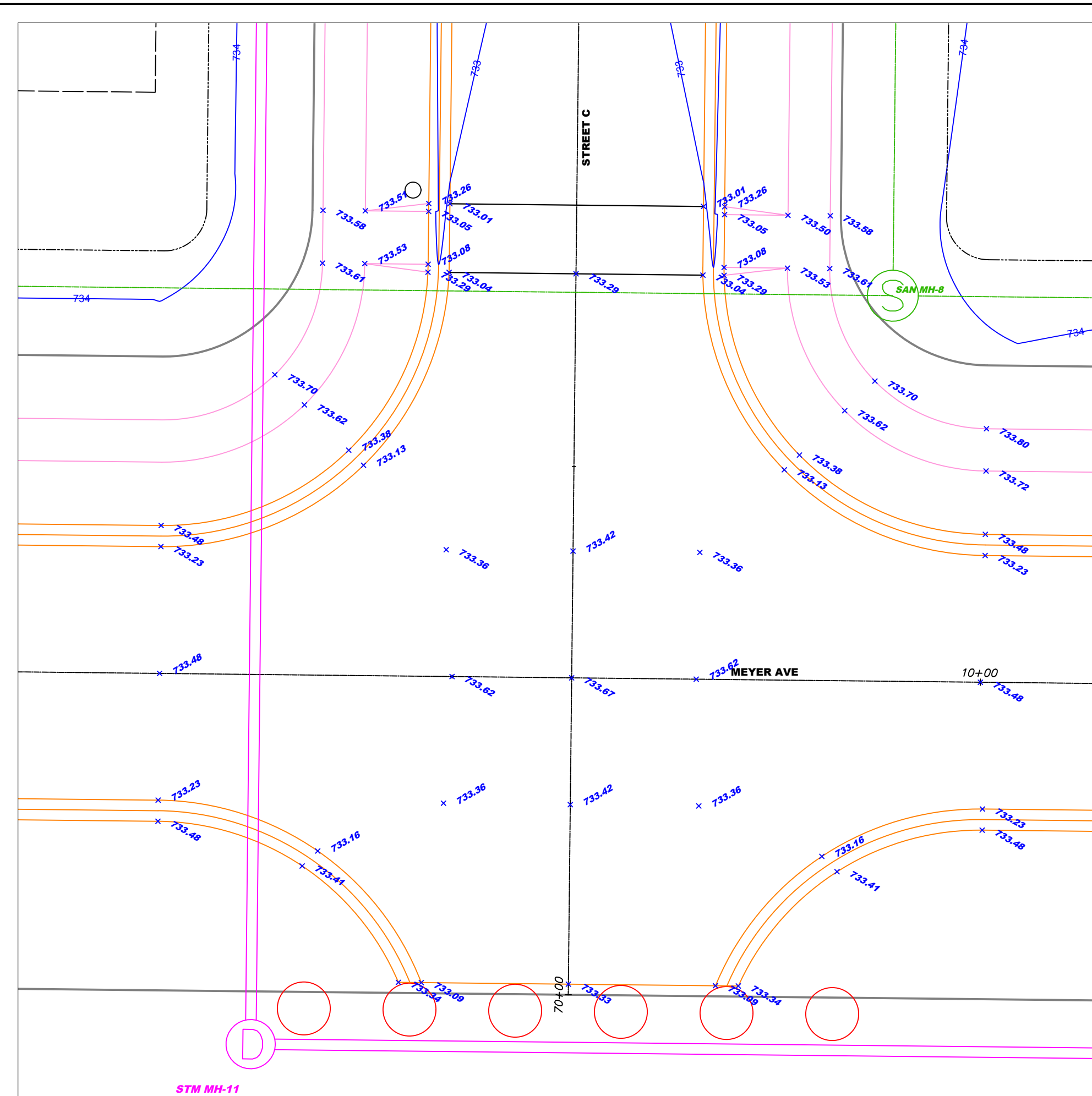
SCALE 1" = 20' HORIZ

REVIEWED BY:	GAB	8/14/26
DESIGNED BY:	RDL	8/12/26
JOB NUMBER:	26-084	

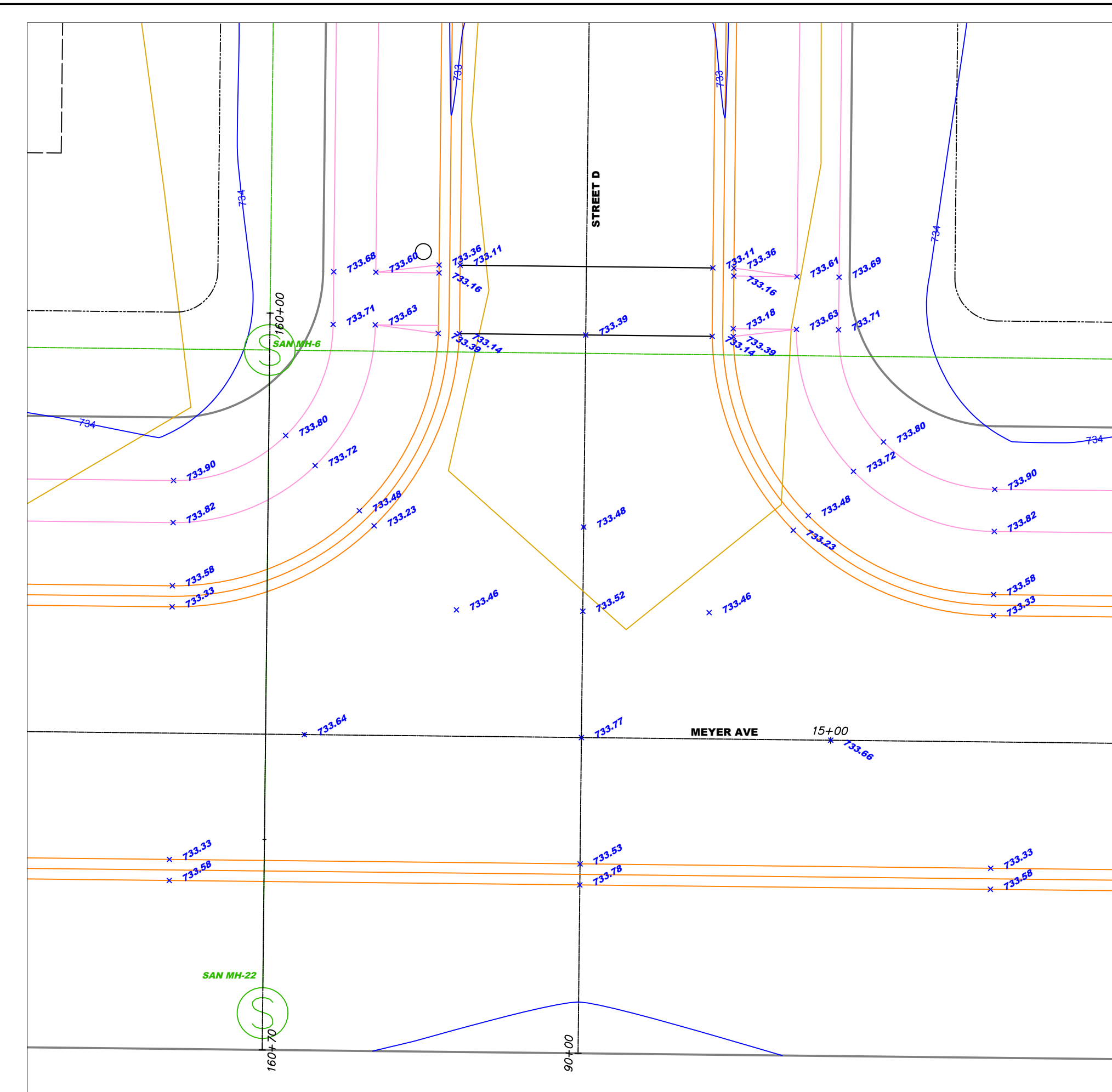
C206



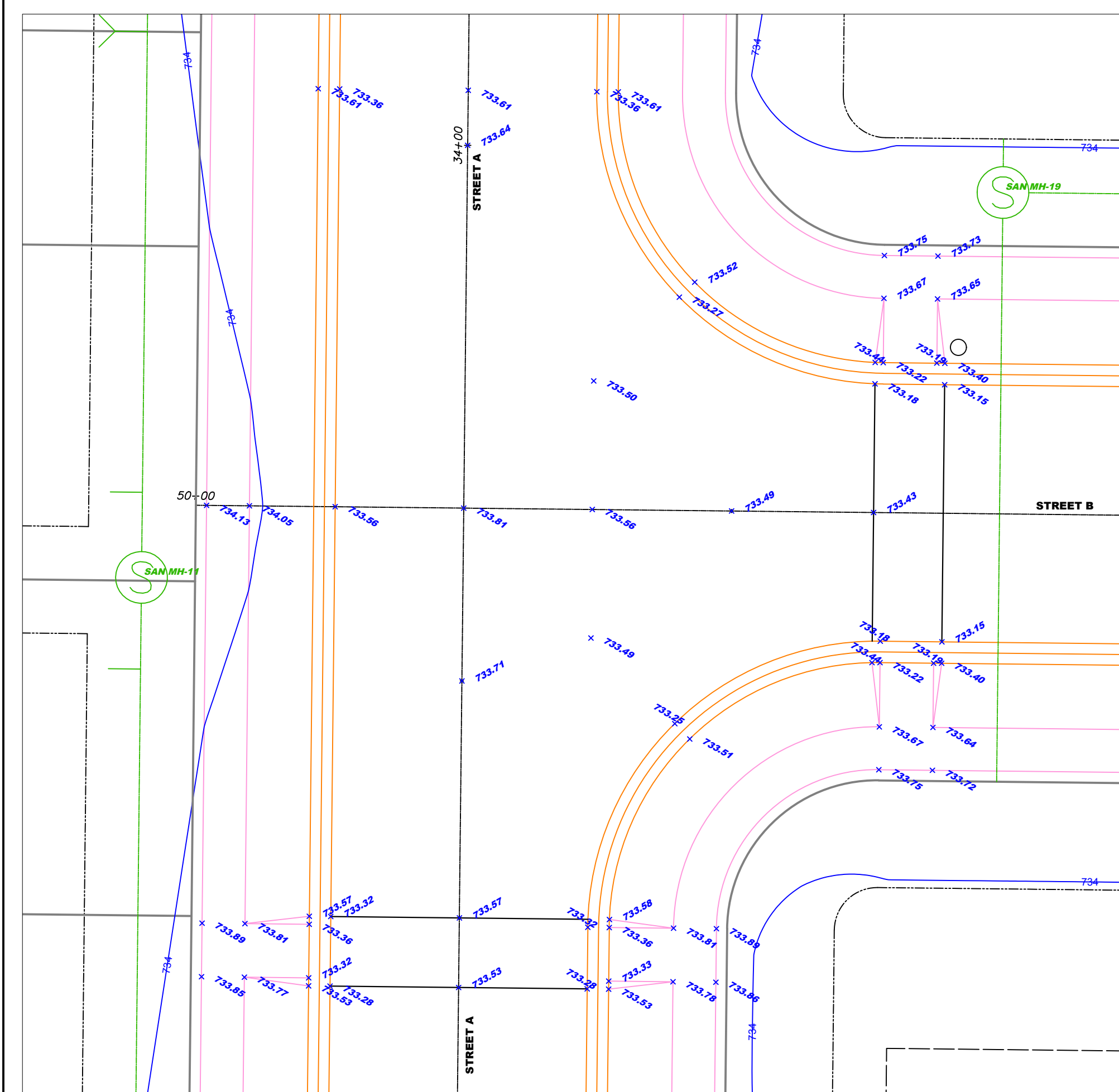
MEYER AVE & STREET A



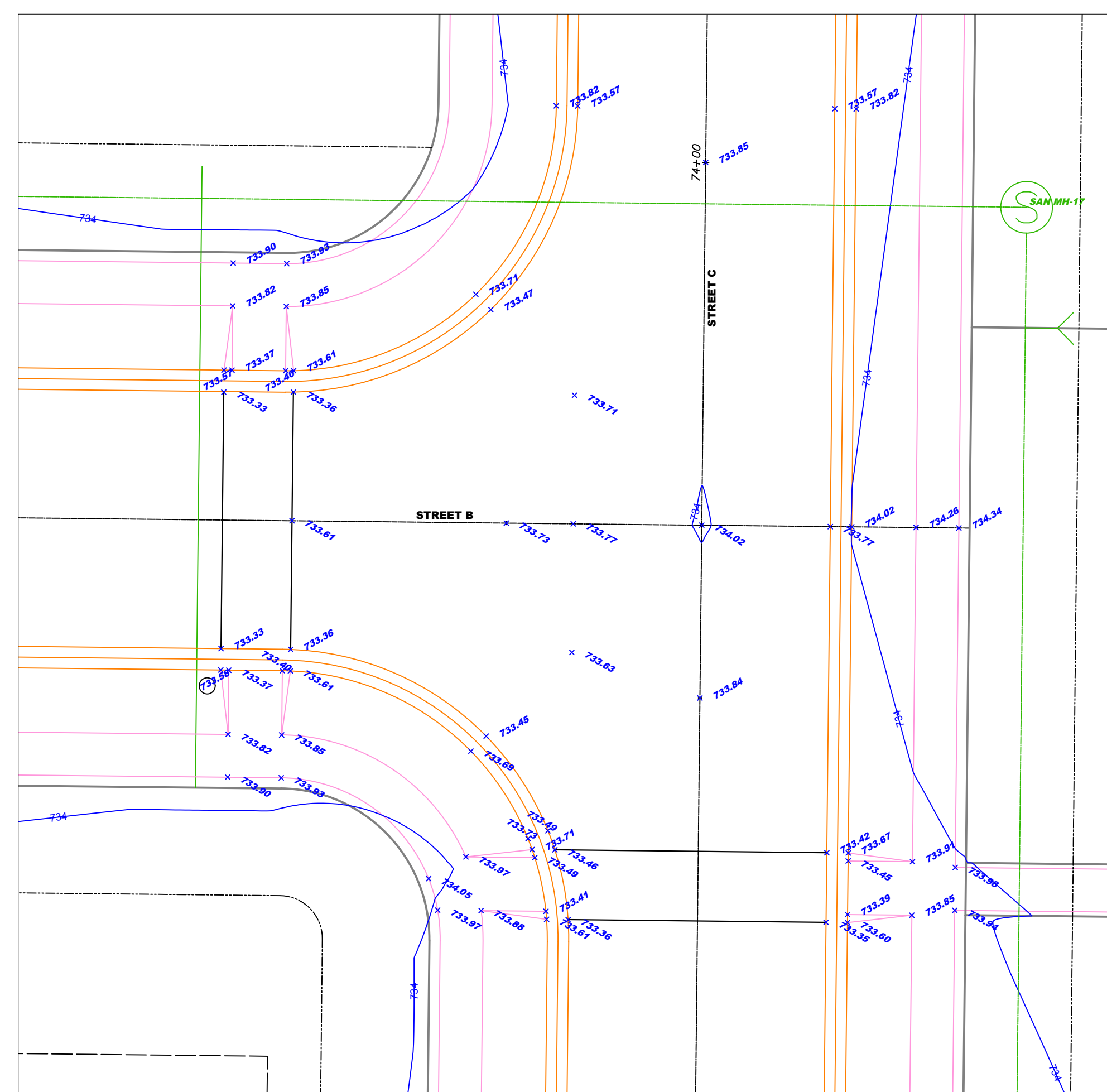
MEYER AVE & STREET C



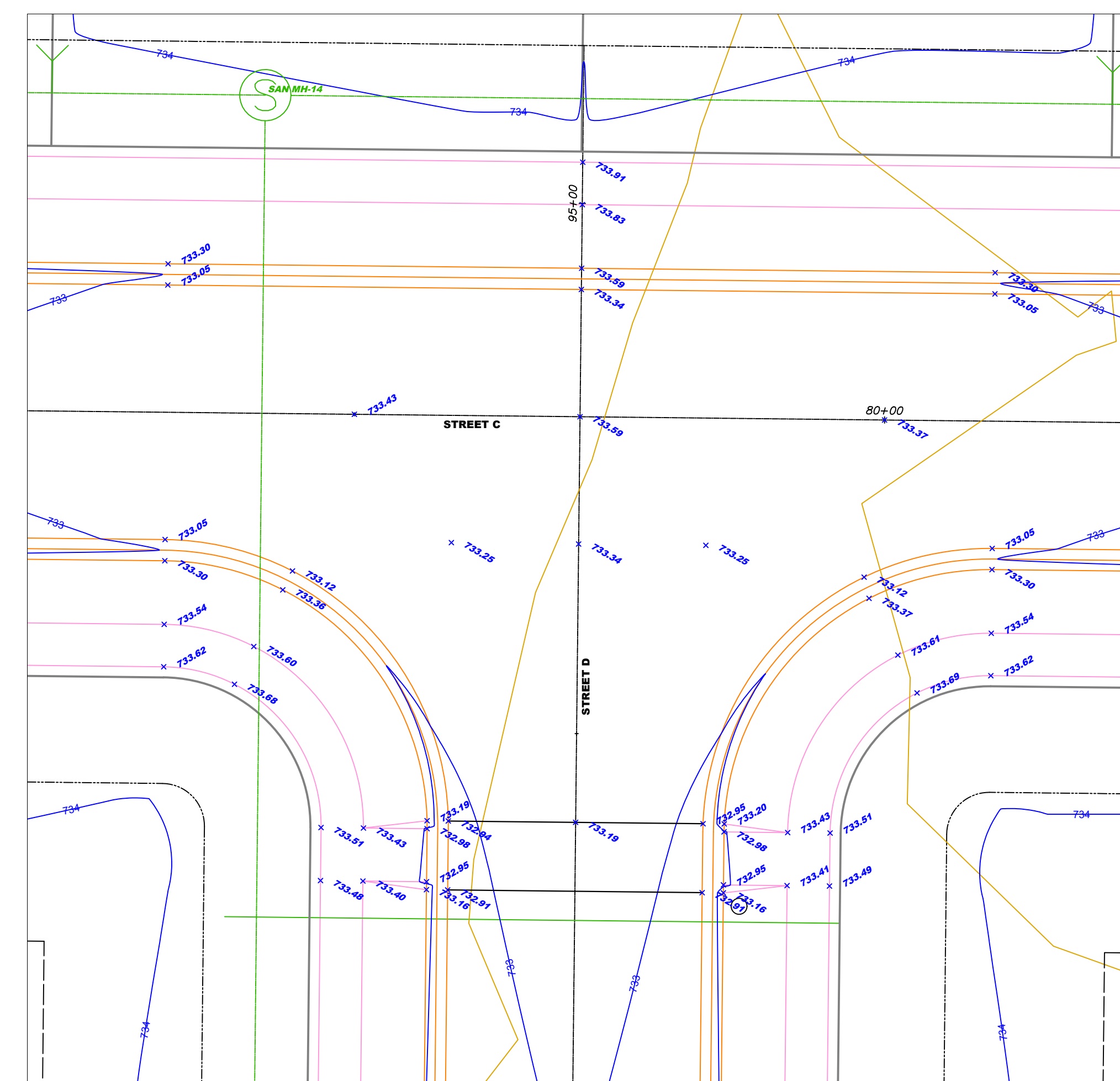
MEYER AVE & STREET D



STREET A & STREET B



STREET B & STREET C



STREET C & STREET D

Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

INTERSECTION DETAILS
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

9-9-26 ADDENDUM #2

C208

****ALL STORM AND SANITARY PRE-CAST CONCRETE STRUCTURES TO BE FURNISHED BY OWNER****

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE INFO
CB-1	TOP 733.16 FL 12" N 730.08 FL 12" S 730.08 FL 4" E 731.16 FL 4" W 731.16
CB-2	TOP 733.16 FL 12" N 730.16 FL 4" W 731.16 FL 4" E 731.16
CB-3	TOP 732.52 FL 15" E 728.99 FL 15" W 728.99 FL 4" N 730.52 FL 4" S 730.52
CB-4	TOP 732.52 FL 15" E 729.07 FL 12" W 729.32 FL 4" N 730.52 FL 4" S 730.52
CB-5	TOP 732.37 FL 15" N 729.04 FL 15" S 729.29 FL 4" E 730.37 FL 4" W 730.37
CB-6	TOP 732.37 FL 15" N 729.37 FL 4" E 730.37 FL 4" W 730.37
CB-7	TOP 732.16 FL 18" S 728.29 FL 15" N 728.54 FL 4" E 730.16 FL 4" W 730.16
CB-8	TOP 732.16 FL 15" S 728.62 FL 15" N 728.62 FL 4" W 730.16 FL 4" E 730.16
CB-9	TOP 733.01 FL 12" NE 729.93 FL 12" W 729.93 FL 4" N 731.01 FL 4" S 731.01
CB-10	TOP 733.01 FL 12" E 730.01 FL 4" N 731.01 FL 4" S 731.01
CB-11	TOP 732.13 FL 12" E 728.51 FL 12" W 728.51 FL 4" N 730.13 FL 4" S 730.13
CB-12	TOP 732.13 FL 12" E 728.59 FL 4" N 730.13 FL 4" S 730.13
CB-13	TOP 732.09 FL 12" N 729.01 FL 12" S 729.01 FL 4" E 730.09 FL 4" W 730.09
CB-14	TOP 732.09 FL 12" N 729.09 FL 4" E 730.09 FL 4" W 730.09
CB-15	TOP 731.68 FL 18" S 727.45 FL 18" N 727.45 FL 4" W 729.68 FL 4" E 729.68
CB-16	TOP 731.68 FL 18" S 727.52 FL 15" N 727.77 FL 4" W 729.68 FL 4" E 729.68
CB-17	TOP 731.97 FL 18" W 727.64 FL 15" E 727.89 FL 4" N 729.97 FL 4" S 729.97
CB-18	TOP 731.97 FL 15" W 727.96 FL 15" E 727.96 FL 4" N 729.97 FL 4" S 729.97
CB-19	TOP 732.22 FL 12" S 729.13 FL 12" N 729.13 FL 4" W 730.22 FL 4" E 730.22
CB-20	TOP 732.22 FL 12" S 729.21 FL 4" W 730.22 FL 4" E 730.22
CB-21	TOP 732.75 FL 12" N 729.67 FL 12" S 729.67 FL 4" E 730.75 FL 4" W 730.75
CB-22	TOP 732.75 FL 12" N 729.75 FL 4" E 730.75 FL 4" W 730.75

STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE INFO
CB-100	TOP 733.05 FL 12" E 729.71 FL 12" S 729.93 FL 12" N 729.71 FL 6" SE 730.43 FL 6" NE 730.43
CB-101	TOP 733.06 FL 12" N 730.14 FL 12" S 730.14 FL 6" SE 730.64 FL 6" NE 730.64
CB-102	TOP 733.44 FL 12" N 730.26 FL 6" SE 730.76 FL 6" NE 730.76
CB-103	TOP 733.05 FL 12" S 729.92 FL 12" N 729.92 FL 6" SE 730.42 FL 6" NE 730.43
CB-104	TOP 733.05 FL 12" S 730.13 FL 12" N 730.13 FL 6" SE 730.63 FL 6" NE 730.63
CB-105	TOP 733.05 FL 12" S 730.34 FL 12" N 730.34 FL 6" SE 730.84 FL 6" NE 730.84
CB-106	TOP 733.02 FL 12" S 730.56 FL 6" SE 731.06
CB-107	TOP 732.95 FL 15" S 728.99 FL 12" W 729.24 FL 12" E 729.36 FL 6" SW 729.86 FL 6" SE 729.86
CB-108	TOP 733.00 FL 12" E 729.51 FL 12" W 729.51 FL 6" SE 730.01 FL 6" SW 730.01
CB-109	TOP 734.00 FL 12" E 729.75 FL 12" SW 729.75 FL 6" S 730.25
CB-110	TOP 733.07 FL 12" W 729.63 FL 12" E 729.63 FL 6" SW 730.13 FL 6" SE 730.13
CB-111	TOP 732.92 FL 12" W 729.92 FL 6" SW 730.42
CB-112	TOP 733.26 FL 15" S 728.14 FL 12" W 728.39 FL 12" E 728.39 FL 6" SE 728.89
CB-113	TOP 731.54 FL 12" E 728.74 FL 12" W 728.74 FL 6" SW 729.24 FL 6" SE 729.24
CB-114	TOP 732.04 FL 12" E 729.04 FL 6" SW 729.54 FL 6" SE 729.54
CB-115	TOP 732.38 FL 12" W 728.71 FL 12" E 728.71 FL 6" SW 729.21 FL 6" SE 729.21
CB-116	TOP 732.38 FL 12" W 729.01 FL 12" E 729.01 FL 6" SW 729.51 FL 6" SE 729.51
CB-117	TOP 731.82 FL 12" W 729.31 FL 12" E 729.31 FL 6" SW 729.81 FL 6" SE 729.81
CB-118	TOP 731.82 FL 12" W 729.61 FL 6" SW 730.11
CB-119	TOP 731.93 FL 15" W 728.33 FL 12" N 728.58 FL 12" S 728.95 FL 6" SW 729.45 FL 6" NW 729.45
CB-120	TOP 731.95 FL 12" S 728.88 FL 12" N 728.88 FL 6" SW 729.38 FL 6" NW 729.38
CB-121	TOP 731.93 FL 12" N 729.25 FL 12" S 729.25 FL 6" SW 729.75 FL 6" NW 729.75

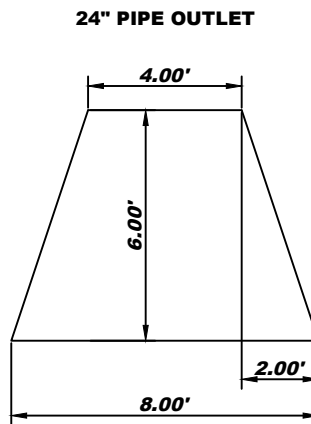
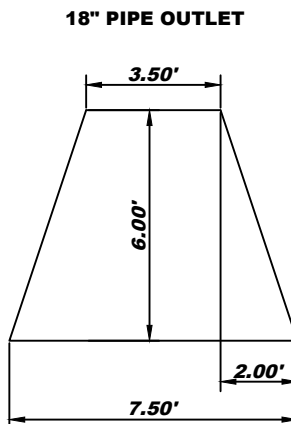
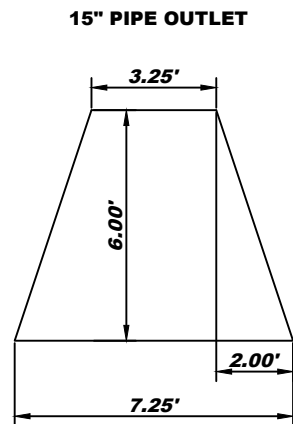
STORM SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE INFO
STM MH-1	TOP 733.34 FL 15" E 728.94 FL 15" W 728.94 FL 12" S 729.19
STM MH-2	TOP 734.10 FL 12" N 729.66 FL 12" W 729.66
STM MH-3	TOP 733.88 FL 12" E 730.04 FL 12" S 730.04
STM MH-4	TOP 732.29 FL 18" E 727.63 FL 12" W 728.13 FL 15" S 727.88 FL 8" N 728.46 FL 6" NW 728.63 FL 6" SW 728.63
STM MH-5	TOP 732.42 FL 15" N 728.05 FL 15" E 728.05 FL 8" W 728.63 FL 6" SE 728.80 FL 6" S 728.80
STM MH-6	TOP 732.14 FL 15" W 728.37 FL 12" S 728.62 FL 8" E 728.95 FL 6" SW 729.12
STM MH-7	TOP 731.72 FL 24" S 726.64 FL 18" N 727.14 FL 18" SE 727.14 FL 8" W 727.97 FL 6" E 728.14
STM MH-8	TOP 732.11 FL 18" NW 727.32 FL 18" E 727.32 FL 8" S 728.15 FL 8" N 728.15 FL 6" NE 728.32 FL 6" SE 728.32
STM MH-9	TOP 733.63 FL 12" E 725.82 FL 12" W 725.82 FL 18" S 725.82
STM MH-10	TOP 732.77 FL 12" N 726.13 FL 12" W 726.13
STM MH-11	TOP 733.74 FL 12" E 726.00 FL 12" N 726.00
STM MH-12	TOP 733.13 FL 12" S 726.40 FL 12" W 726.40

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE INFO
SAN MH-1	TOP 732.50 FL 8" S 717.29 FL 8" W 717.29
SAN MH-2	TOP 732.40 FL 8" E 717.67 FL 8" W 717.67
SAN MH-3	TOP 732.40 FL 8" E 718.39 FL 8" W 718.39
SAN MH-4	TOP 732.40 FL 8" E 719.07 FL 8" W 719.07
SAN MH-5	TOP 732.75 FL 8" E 719.71 FL 8" W 719.71
SAN MH-6	TOP 733.93 FL 8" W 724.31 FL 8" E 721.31 FL 8" N 723.17 FL 8" S 722.50
SAN MH-7	TOP 733.31 FL 8" E 722.14 FL 8" W 722.14 FL 8" S 722.50
SAN MH-8	TOP 733.83 FL 8" E 723.13 FL 8" W 723.13 FL 8" N 724.18
SAN MH-9	TOP 733.72 FL 8" E 724.18 FL 8" W 725.64 FL 8" S 724.40 FL 6" N 726.18
SAN MH-10	TOP 734.12 FL 8" E 726.60 FL 8" N 726.60
SAN MH-11	TOP 734.17 FL 8" S 727.74 FL 8" N 727.74

SANITARY SEWER STRUCTURE TABLE	
STRUCTURE	STRUCTURE INFO
SAN MH-12	TOP 734.19 FL 8" S 728.27 FL 6" W 728.43
SAN MH-13	TOP 733.20 FL 8" S 723.80 FL 8" N 723.80
SAN MH-14	TOP 733.92 FL 8" S 724.94 FL 8" E 724.94 FL 8" W 724.94
SAN MH-15	TOP 733.39 FL 8" W 725.84
SAN MH-16	TOP 733.70 FL 8" E 726.54 FL 6" N 726.71
SAN MH-17	TOP 734.38 FL 8" S 725.50 FL 8" W 725.50
SAN MH-18	TOP 733.26 FL 8" E 726.47 FL 8" W 726.47 FL 6" N 726.64 FL 6" S 726.64
SAN MH-19	TOP 733.89 FL 8" E 727.19 FL 6" N 727.36 FL 6" S 727.36
SAN MH-20	TOP 733.19 FL 8" N 724.65
SAN MH-21	TOP 732.84 FL 8" N 722.75
SAN MH-22	TOP 733.88 FL 8" N 722.75

STORM SEWER HEADWALL TABLE	
HEADWALL	HEADWALL INFO
HW-1	15" FL 728.86
HW-2	18" FL 727.45
HW-3	15" FL 728.60
HW-4	18" FL 727.55
HW-5	24" FL 726.30
HW-6	18" FL 722.91

D SIZE RIP RAP - 1.5' DEEP



PROPOSED STRUCTURE TABLES
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C300

Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

GENERAL

In general, all work and materials shall be in accordance with the Ohio Department of Transportation "Construction and Material Specifications"and/or the Ohio Environmental Protection Agency. Paragraph, item and section numbers shown herein and on the drawings shall refer to said O.D.O.T. specifications. All notes or requirements contained herein which do not refer to a particular state specification shall be considered supplementary to said state specifications.

REGULATIONS

All work must comply with applicable federal, state and local regulations in all respects, including compliance with the Occupational Health and Safety Act.

BEGINNING CONSTRUCTION AND STAKING

Location and grade stakes shall be set by the Engineer or Contractor. The Contractor will notify the Engineer 48 hours prior to beginning actual construction and when requesting additional staking.

PRIVATE PROPERTY

The Contractor must at all times conduct his operations within the owners property, public right of way, utility easements or work agreements as shown on the plans.

MAINTAINING TRAFFIC

At the time of construction all public thoroughfares shall be maintained as two-way traffic, at no time shall traffic be detoured. All work described above, including all barricades, lights, signs, flagmen, or other labor or materials required to safely maintain or control traffic according to the Ohio Manual of Uniform Traffic Control Devices is included for payment under other items of work.

MAINTAINING PUBLIC SAFETY

The Contractor shall be responsible for furnishing and maintaining all lights, signs and barricades necessary to maintain public safety.

GENERAL

All storm sewer construction shall adhere to ODOT specification Item Number 603 in the latest revision of the Construction and Material Specifications manual of ODOT.

CONDUIT MATERIAL

Storm Sewer Conduit shall be ADS N-12 Smooth Wall Corrugated Polyethylene Pipe with Soil-tight fittings or equal. Minimum trench width shall conform to manufacturer's specifications.

BEDDING

All conduit shall be bedded with #57 or #67 aggregate (minimum 6 inches) and backfilled with the same to a minimum of 6 inches of cover over the top of the conduit or more as called for in the plans or as directed by the Village. If a trenching machine is used for excavation and a rounded trench bottom of undisturbed earth is provided with the adequate grade, the 6 inches of stone bedding may be omitted.

EXISTING TILE HOOKUPS

All existing storm sewers currently connected to an existing storm sewer shall be connected to the proposed storm sewer. Any drainage tile damaged by the contractor/developer shall be replaced by the contractor/developer to a condition equal to or better than its original conditions.

All field or storm drains which are encountered during construction shall be provided with unobstructed outlets or plugged as approved and directed by the Village.

WATERLINE PIPE

All 6 inch and larger water lines shall be PVC and meet AWWA specification C900, Class 150, SDR-18.

Wherever an 18 inch vertical or 10 foot horizontal clearance cannot be maintained between a sanitary sewer main and a water line, the sanitary sewer will be constructed with concrete encasement or pressure rated pipe 10 feet on either side of the conflict. No entry or contact with sanitary manholes will be permitted by any line.

Maintain 4-1/2 foot minimum of cover for all water lines, except as shown on the Plans.

Gate valves shall open left and conform to AWWA C-500'hydrants shall open left and conform to AWWA C-502 and meet the Village of Antwerp Standards.

Valve boxes shall be the adjustable type and be approved three piece 5-1/2 inch shaft, screw type or cast cover with cast iron pipe shell.

Water line fittings shall be ductile iron and meet AWWA specifications.

PIPE EMBEDMENT

Water line embedment shall include the material placed beneath (4"minimum), around, and six (6) inches above the barrel of the new pipe. The material shall consist of No. 57 Stone, the cost of which shall be included in the price of the waterline. If a trenching machine is used for excavation and a rounded trench bottom of undisturbed earth is provided with the adequate grade, the stone bedding may be omitted.

GRANULAR BACKFILL

Granular backfill material will conform to O.D.O.T. Item 411. Granular backfill will be used whenever the water line is located under or within two (2) feet of pavement, drives or parking areas. The materials shall be compacted in six (6) inch layers. The cost of all granular backfill will be per bid item, Granular Backfill.

TESTING AND STERILIZATION

Water line testing shall conform to AWWA C-605 and C-651 for pressure and sterilization testing, respectively. A 24-hour notification to the Village Utilities Director is required prior to any testing. Testing will be done by the contractor under the supervision of the Engineer and the Village of Antwerp personnel.

SANITARY SEWER PIPE

The following materials will be permitted for sanitary sewer pipe: PVC conforming to ASTM D-3034, SDR-35 with joints conforming to ASTM-3212.

SANITARY SEWER CONNECTIONS

Roof drains, foundation drains and other clean water connections to the sanitary sewer system are prohibited.

MANHOLES

Foundations shall be precise or poured in place concrete. Manhole sections shall have an internal diameter of forty-eight (48) inches, wall thickness five (5) inches and laying length in multiples of sixteen (16) inches meeting ASTM C-478 specification. Joints shall be of tongue and groove type to permit laying up with an "O"ring gasket, meeting ASTM C-443 specification. Manhole steps on sixteen (16) inch center to center spacing shall be cast into the section in such a manner as to provide a continuous vertical ladder the full depth of the manhole. The top or dome section shall be a straight side type, covering from the forty-eight (48) inch manhole a diameter to a twenty-four (24) inch opening. A concrete invert shall be provided in the bottom of each manhole having a thickness at the sewer line equal to the radius of the sewer pipe and sloping slightly upward toward the manhole walls. Manhole frames and covers shall be Neenah R-1782, or equal with "Sanitary Sewer"cast into the cover. Flexible rubber boots shall be cast in the walls at the factory and be used to connect pipes to manholes. SANITARY MANHOLE TESTING SHALL CONFORM TO ASTM C-1244.

PIPE EMBEDMENT

Pipe embedment shall include the material placed beneath (4 inch minimum), around and six (6) inches above the barrel of the new pipe. The material shall consist of No. 57 stone, the cost of which shall be included in the price of the pipe. If a trenching machine is used for excavation and a rounded trench bottom of undisturbed earth is provided with the adequate grade, the stone bedding may be omitted.

GRANULAR BACKFILL

Granular backfill material will conform to O.D.O.T. Item 310, Granular or Backfill will be used wherever the pipe or manhole is located under or within two (2) feet of pavement, drives or parking areas. The materials shall be compacted in six (6) inch layers. The Cost of all granular backfill will be per bid item Granular Backfill.

LEAKAGE TESTING

The Contractor will test all new sanitary sewer lines after backfilling and settling of the trenches has occurred. Testing shall be under the supervision of the Engineer and Village of Antwerp.

The Village may choose the exact method, time and location of each individual test, but the entire system will be tested prior to acceptance.

The Contractor will furnish all equipment and labor required for the test. The Contractor may conduct his own testing prior to backfilling, if he desires, but the results are only for his information and will not be accepted by the Engineer.

If test requirements are not met, or if there is any visible leakage in manholes regardless of test results, the Contractor will make the necessary repairs and retest the line without cost to the Owner.

All testing of sewer lines will be done using a low pressure air test, unless otherwise ordered by the Engineer.

LOW PRESSURE AIR TEST SHALL CONFORM TO ASTM F-1417 FOR PLASTIC PIPE

Pressure gauges will have minimum graduations of 0.1 PSI and an accuracy of +/- 0.04 PSI. Adjustments for groundwater pressure will be made by adding 0.433 PSI for each foot of groundwater above the pipe invert and will be confirmed by the Engineer.

The line will then be pressurized to about 4.0 PSI plus any adjustment for ground water and held for two minutes. The air supply will then be shut off and the time between the pressure dropping from 3.5 to 2.5 PSI G (or equivalent for ground water presence) will be measured.

The permissible time allocation for the 1.0 PSI G pressure drop will be calculated of the basis of the diameter and length of main sewer tested. No adjustment shall be made for service connections included in the test.

The air test for the test section shall be considered acceptable if the time elapsed for the 1.0 PSI G pressure drop is at least the time, in minutes, indicated in the following table:

LENGTH OF MAIN LINE TESTED

Diameter	100'	200'	300'	400'
6"or 8"	4	4	4	5.25
10"	4.75	4.75	6	8

Time for intermediate lengths is to be interpolated

Safety precautions must be observed by the Contractor during air testing, recognizing the danger from plugs blowing out. No one will be allowed in the manholes during the testing.

If an infiltration test is ordered, the minimum allowable head is four feet. If this head cannot be met with existing groundwater, the trench will be bulkheaded and flooded by the Contractor. The v-notch weir or other measuring device must be approved by the Engineer.

All pipe must meet the infiltration requirement of 100 gallons per inch diameter per mile, regardless of the method of testing used. The Engineer may order infiltration tests of sections of pipe already tested by other methods if he deems it necessary. No visible leakage will be permitted, regardless of testing.

Payment for leakage testing is included with payment for the pipes.

DEFLECTION TESTING

PVC pipe must be tested for deflection after trench setline has occurred, 30 days minimum after backfilling.

Deflection tests can be run by use of electronic equipment approved by the Engineer. If such equipment is not available, the deflection test can run using rigid balls or mandrels having diameters equal to 95% of the inside diameter of the undeformed pipes.

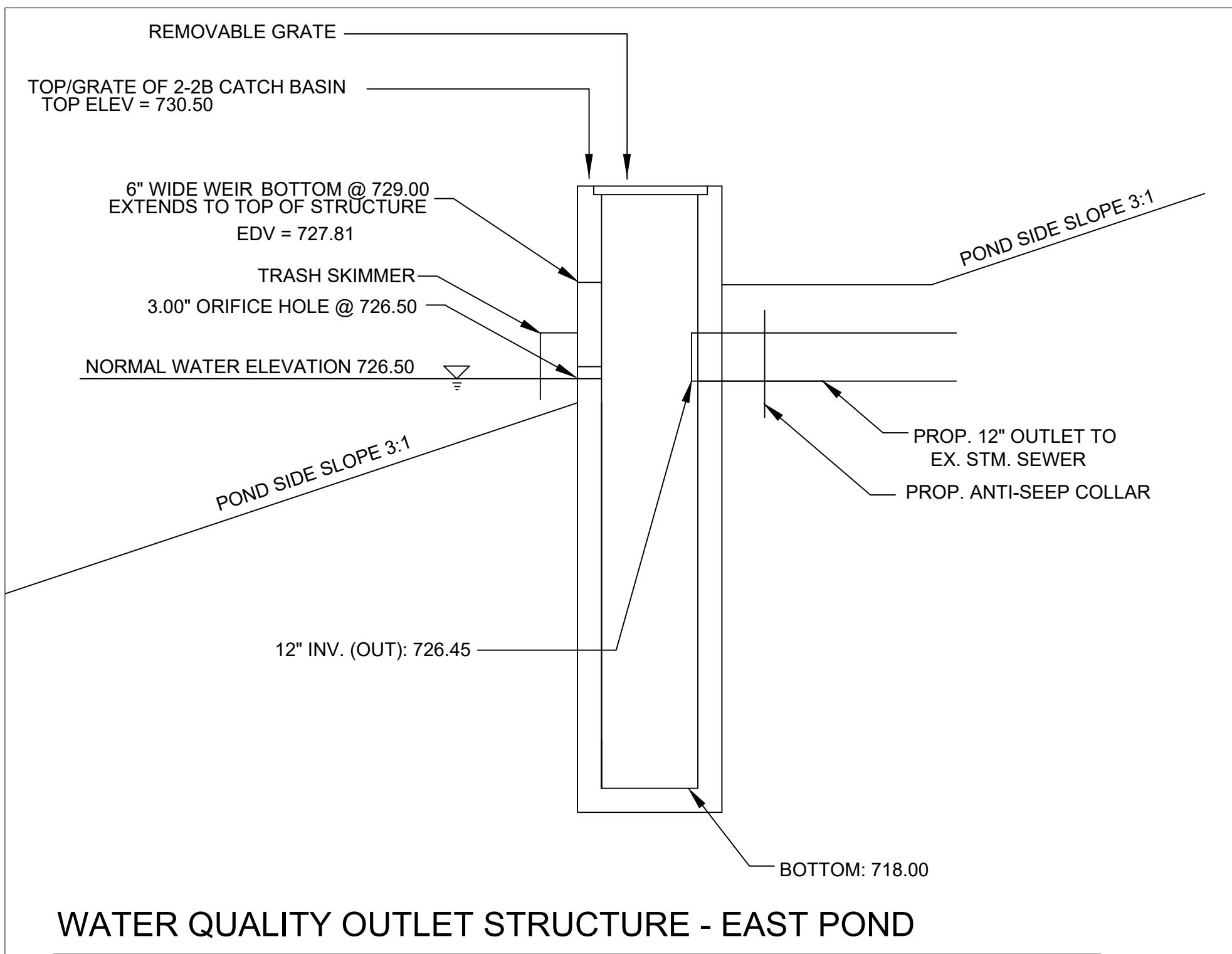
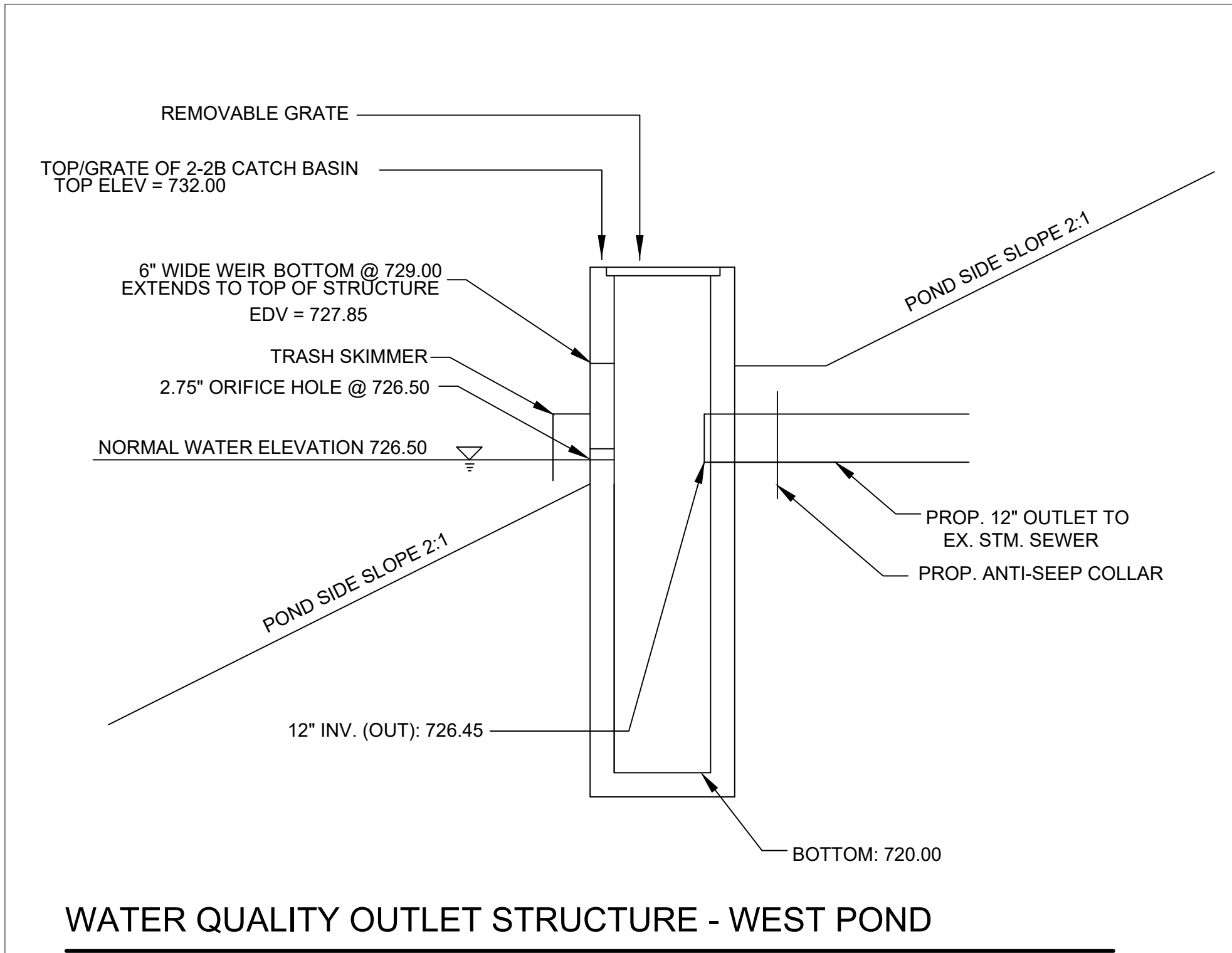
Mandrels must have an odd number of fins. No mandrel will have less than nine fins. Mechanical pulling devices are not allowed for either mandrel or rigid balls.

The Engineer may require additional testing for deflection before expiration of the one year maintenance bond. This test is in addition to that conducted prior to conditional acceptance. Conduit deflection tests must be conducted prior to conditional acceptance. Conduit deflected more than 5 percent must be corrected to the satisfaction of the Engineer, at the expense of the Contractor.

Payment for deflection testing is included in the payment for the pipe.

SANITARY SEWER FITTINGS

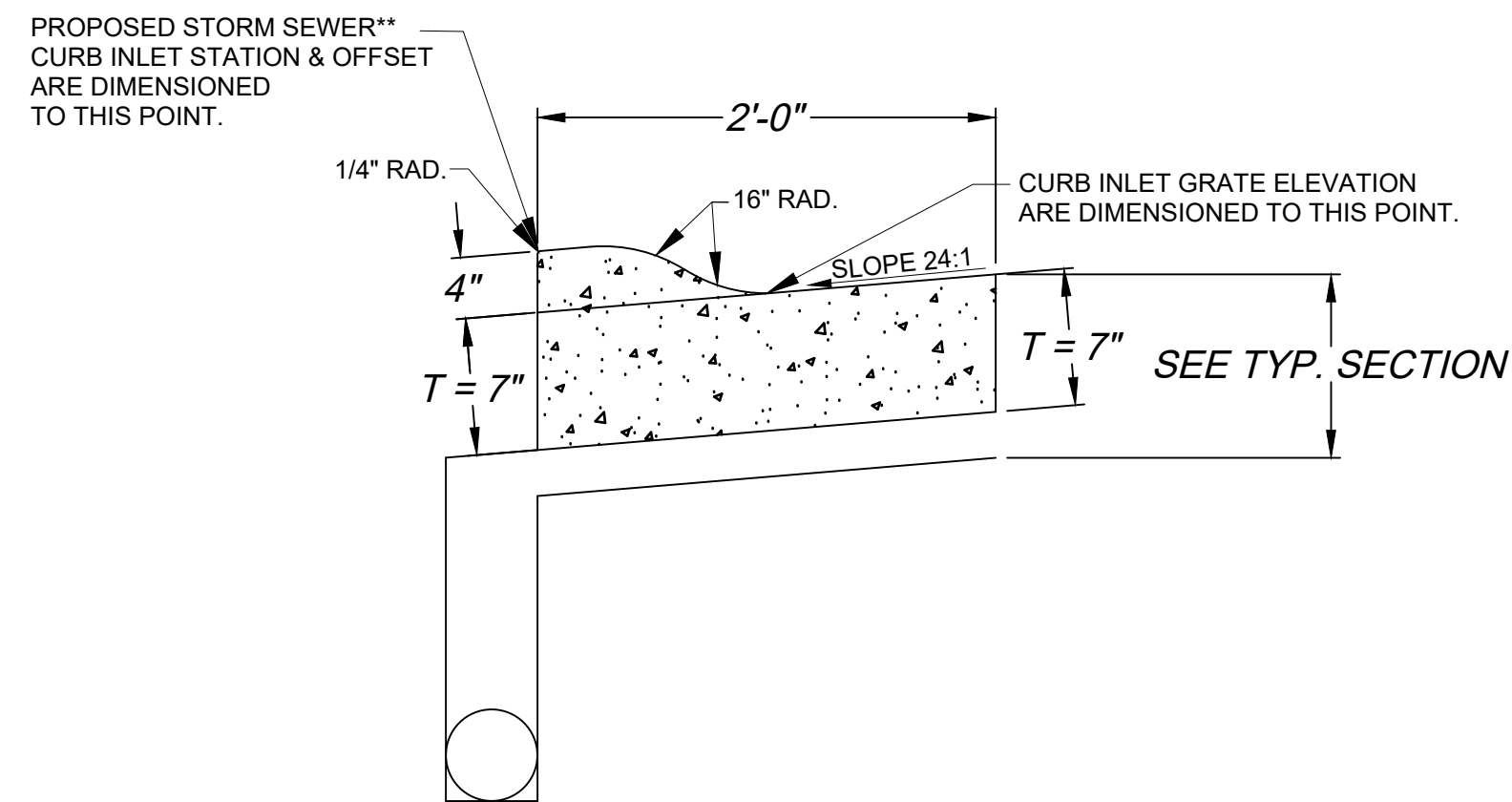
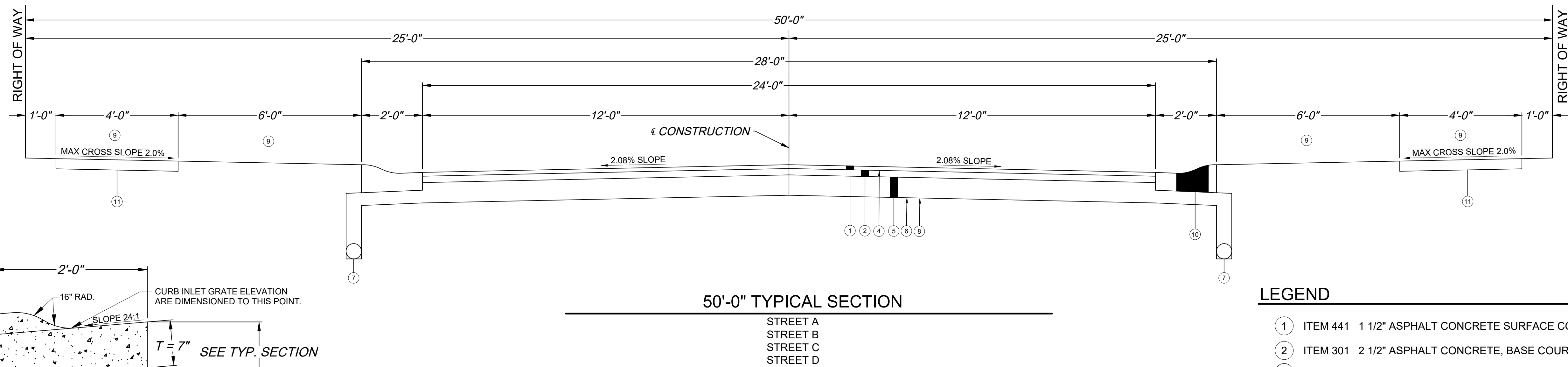
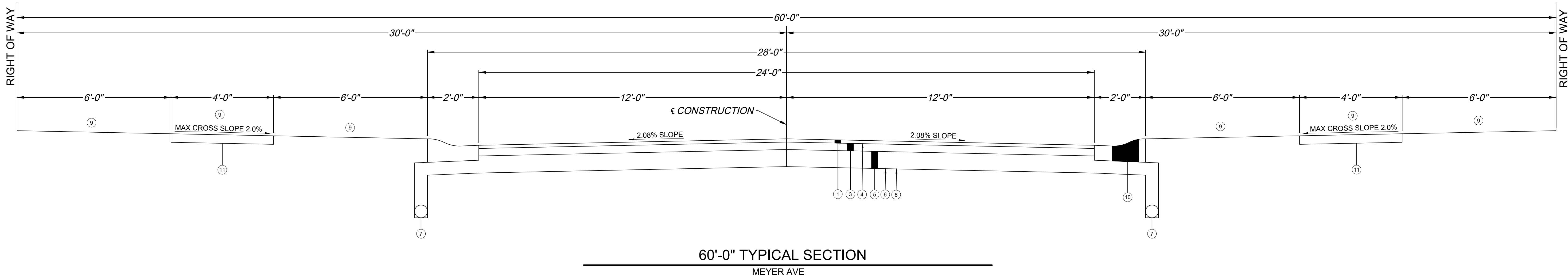
All cost of the wyes, tees, bends and plugs required in the main lines sanitary sewer or in the house sewer laterals shall be included in the bid for each pertinent sanitary sewer fitting. All sewer connections shall be made with manufactured fittings.



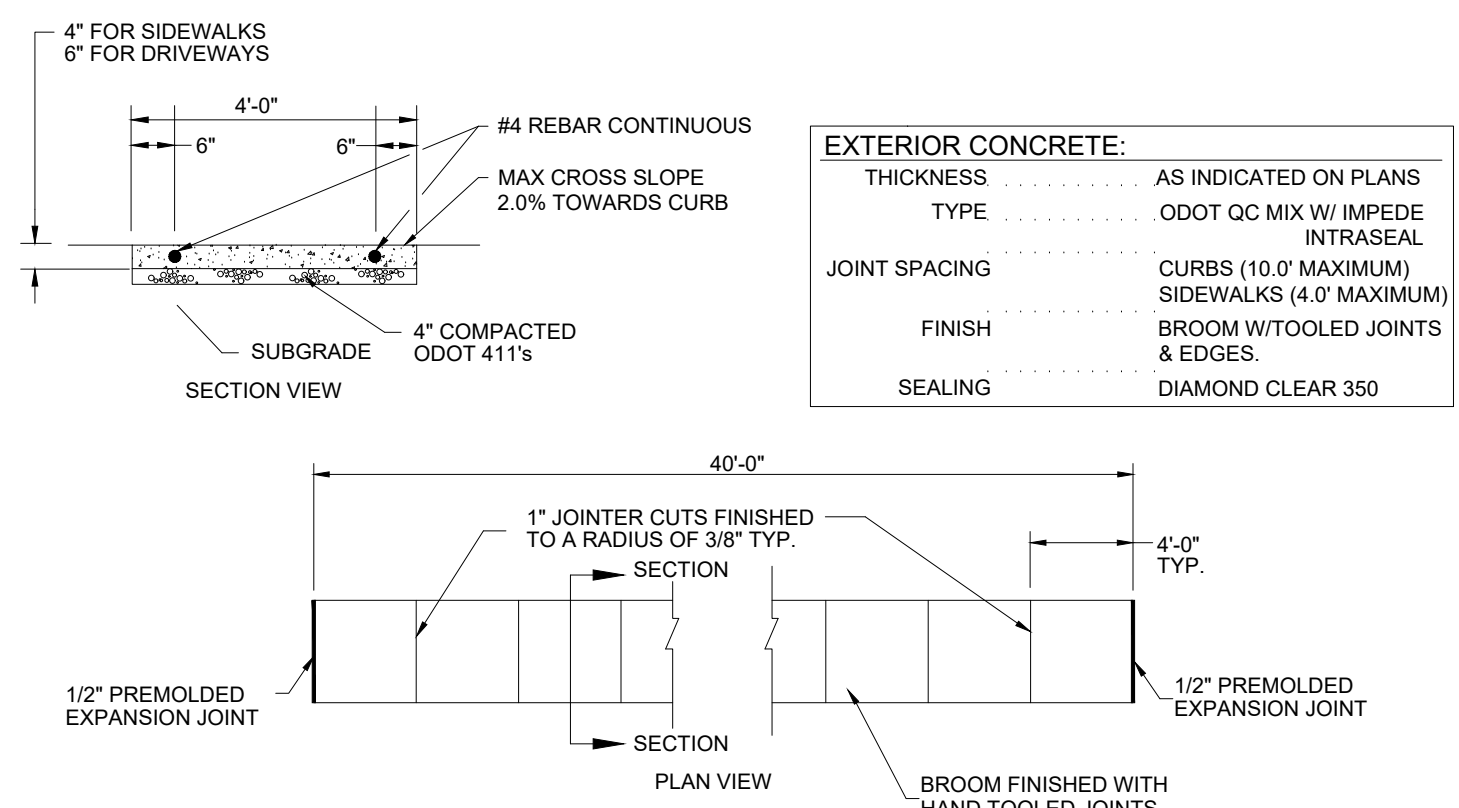
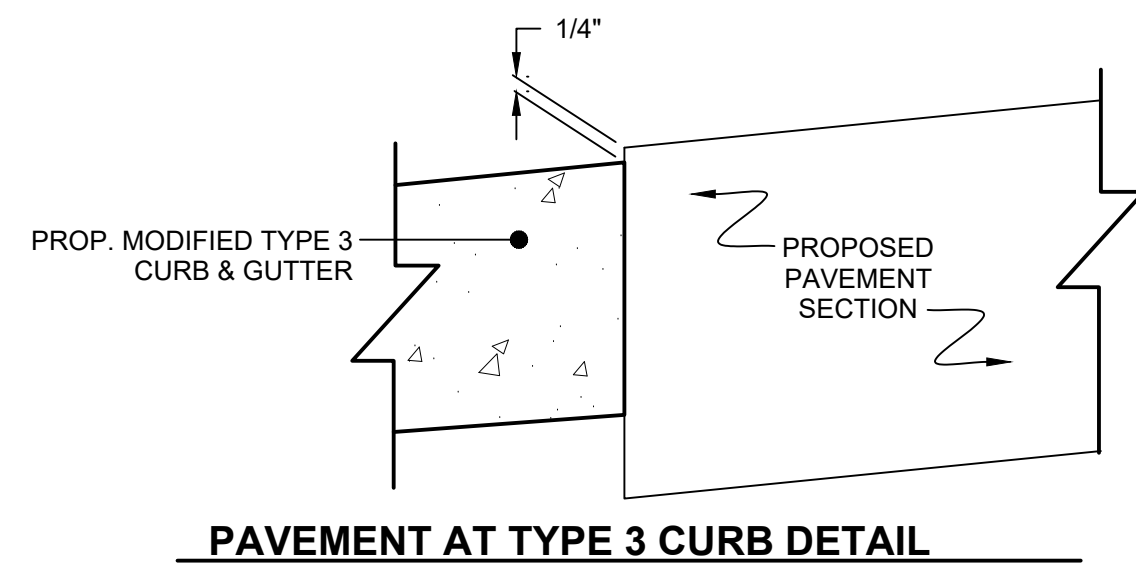
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

GENERAL NOTES
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

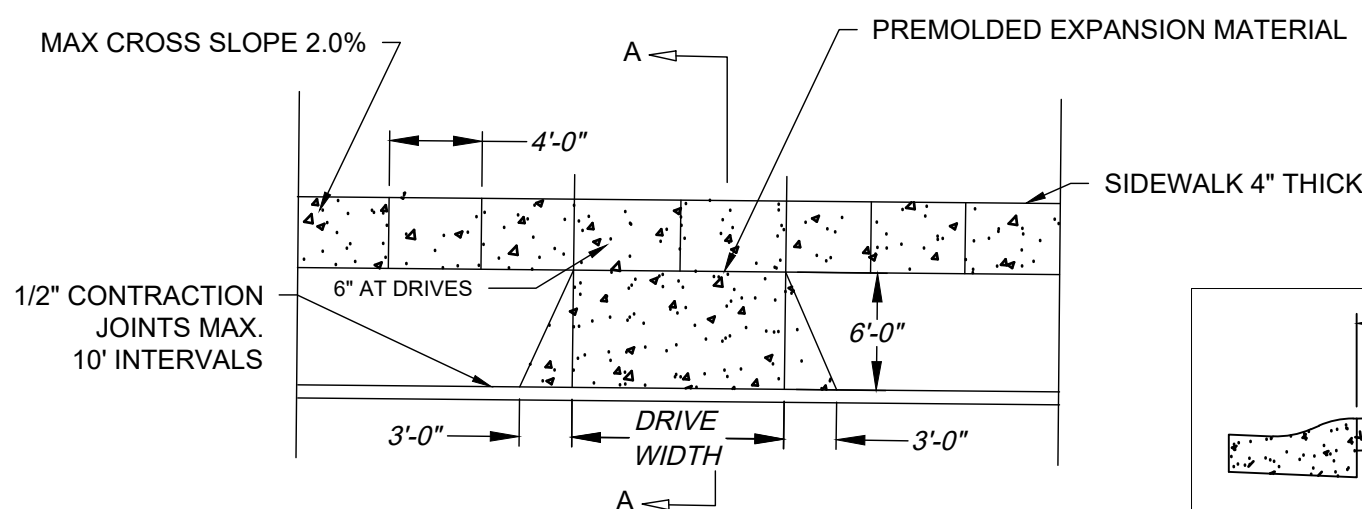
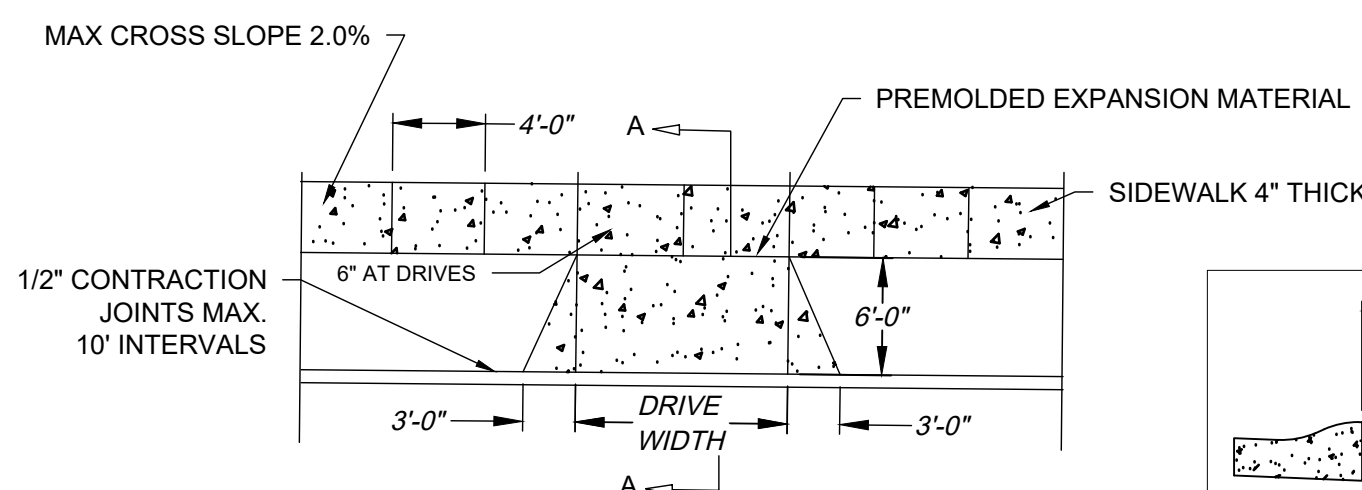
REVIEWED BY:	GAB	8/14/26
DESIGNED BY:	RDL	8/12/26
JOB NUMBER:	26-084	
C301		



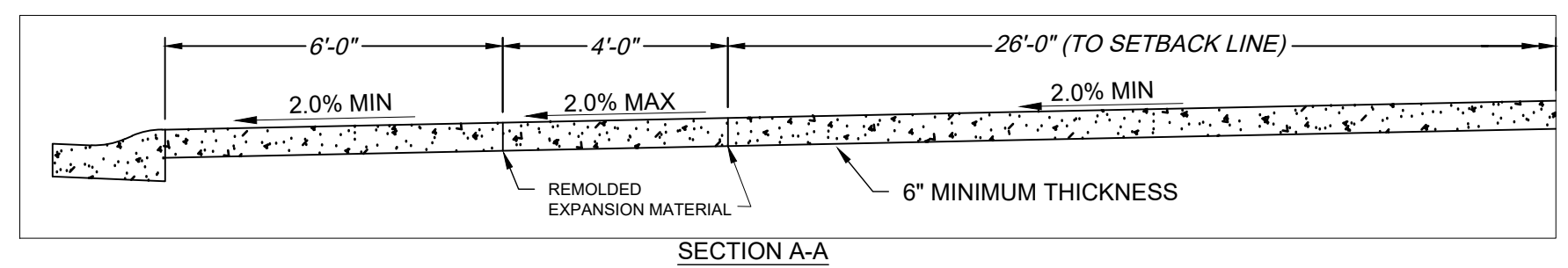
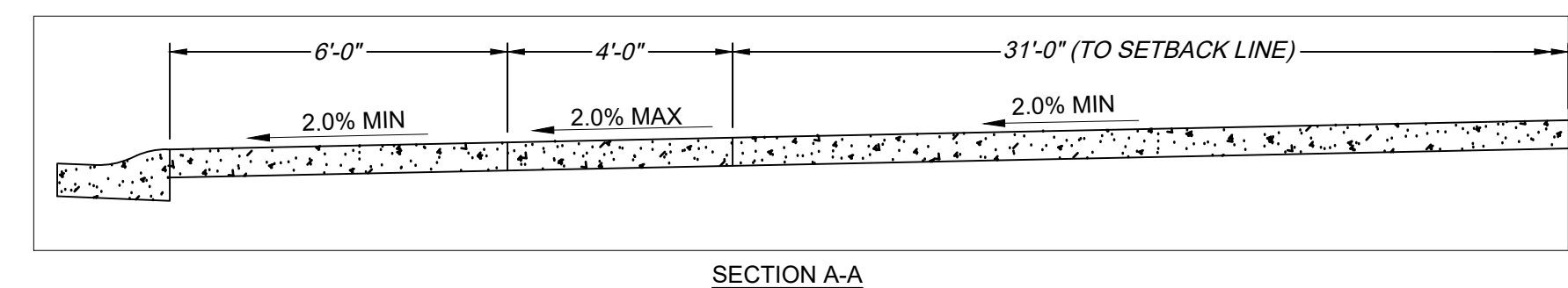
CONCRETE WALKS, DRIVES AND CURB RAMPS SHALL BE REINFORCED AND DOWELED INTO THE PROPOSED CURB.
TO CLARIFY, THIS APPLIES TO SIDEWALKS, DRIVE APRONS AND CURB RAMPS. THE REINFORCING SHALL BE A #4 REBAR MAT IN THE CENTER OF THE CAST-IN-PLACE SLAB AT MAXIMUM 4 FOOT ON CENTER AND ALSO THE DOWELS SHALL BE AT MAXIMUM 4 FOOT SPACING. THE DOWELS ALSO SHALL BE #4 REBAR AND CAN BE DRILLED INTO THE CURB, SIDEWALK, DRIVE, ETC.



- NOTES
- CONCRETE AND WORK SHALL MEET THE REQUIREMENTS SET FORTH IN ODOT ITEM 609 CURBING.
 - CURBING SHALL HAVE CONTRACTION JOINTS EVERY 10'. ALL JOINTS SHALL BE SAWCUT.
 - MINIMUM OF 6" ODOT 304 SHALL BE PLACED UNDER CURBING.
 - CURBING SHALL BE BACKFILLED IMMEDIATELY AFTER FORMS ARE REMOVED OR AS SOON AS PRACTICAL WHEN SLIP FORMING PRIOR TO OTHER CONSTRUCTION OPERATIONS.
 - PROVIDE BROOM FINISH AND EDGING TO ALL EXPOSED SURFACES.
 - APPLY WHITE PIGMENTED CURING COMPOUND ON ALL SURFACES INCLUDING BACK IMMEDIATELY AFTER FINISHING SURFACES. ANY OTHER METHOD OR TYPE OF CURING COMPOUND MUST BE PREAPPROVED.
 - CONCRETE SHALL BE ODOT QC-1 (NO RECYCLED MATERIALS)
 - CONCRETE SHALL CONTAIN 6% $\pm$ 2% OF TOTAL AIR.



- LEGEND
- ITEM 441 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 64-22
 - ITEM 301 2 1/2" ASPHALT CONCRETE, BASE COURSE (301)
 - ITEM 301 3 1/2" ASPHALT CONCRETE, BASE COURSE (301)
 - ITEM 407 TACK COAT APPLIED AT 0.04 GAL./S.Y.
 - ITEM 304 8" MINIMUM AGGREGATE BASE
 - ITEM 204 SUB-GRADE COMPACTION
 - ITEM 605 4" SHALLOW UNDERDRAIN (WITH FILTER FABRIC WRAP)
 - MIRAFI 500X GEOTEXTILE, OR APPROVED EQUAL
 - STRAIGHT GRADE BETWEEN TWO POINTS
 - MODIFIED TYPE 3 COMBINATION ROLLED CURB & GUTTER, SEE DETAIL THIS SHEET
 - ITEM 608 4" CONCRETE WALK



9-9-26 ADDENDUM #2

TYPICAL SECTIONS & DETAILS

ANTWERP SQUARE

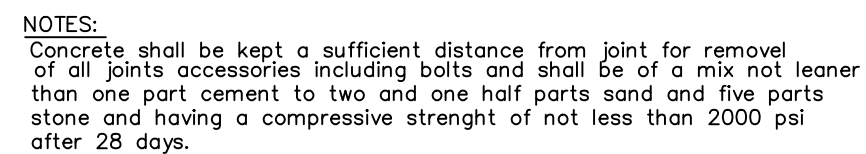
PHASE 1

ANTWERP, OHIO 45813

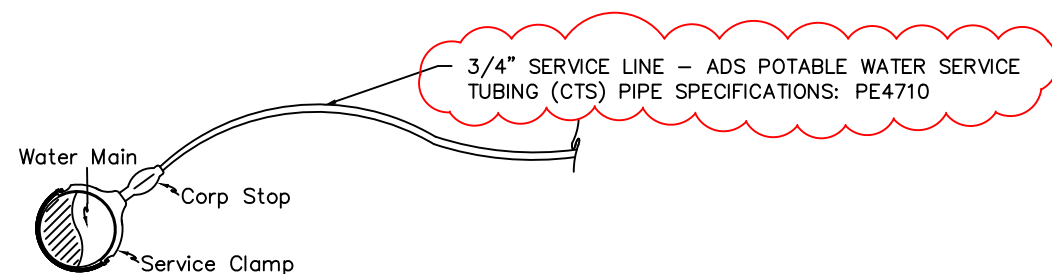
Bockrath & Associates
Engineering and Surveying, LLC
115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

REVIEWED BY: GAB 8/14/26
DESIGNED BY: RDL 8/12/26
JOB NUMBER: 26-084

C302



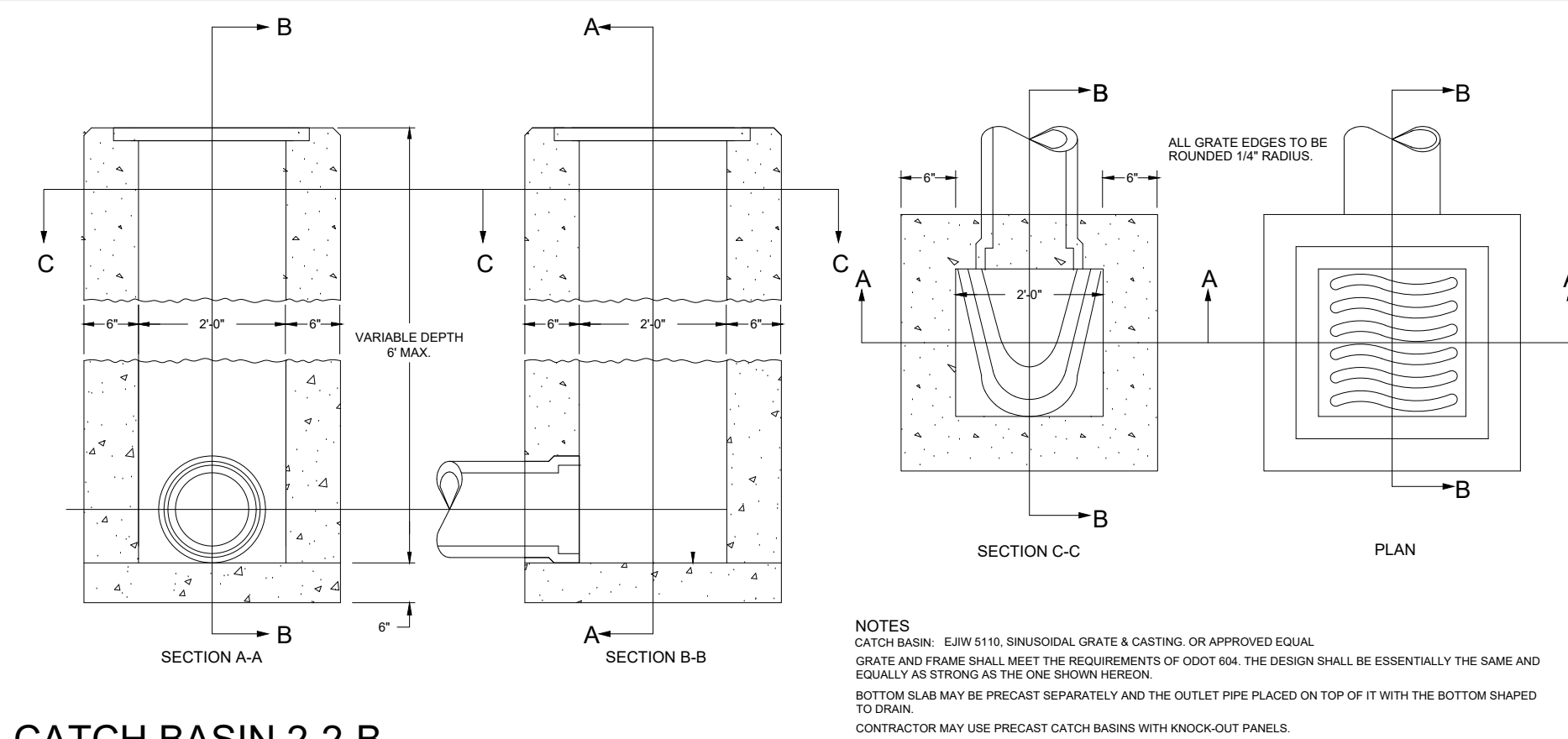
CONSTRUCTION STANDARDS TEE BLOCKING DETAIL



1. A service clamp shall be used for connection onto the main.
2. The corporation stop shall be positioned at a 45° angle to the horizontal above the spring line, unless otherwise specified.
3. An upward bend shall be made in the service pipe, as shown above to protect the service pipe when the excavation settles.
4. When live tapping PVC water mains, a shell cutter shall be used & the PVC coupon must be removed with the cutter.
5. Only approved materials shall be used in the installation.
6. The excavation shall be filled with 57's to a point 6" above the upward bend in the service pipe.

CONSTRUCTION STANDARDS

SERVICE BRANCH CONNECTIONS TO WATER MAIN



CATCH BASIN 2-2-B

SANITARY SEWER

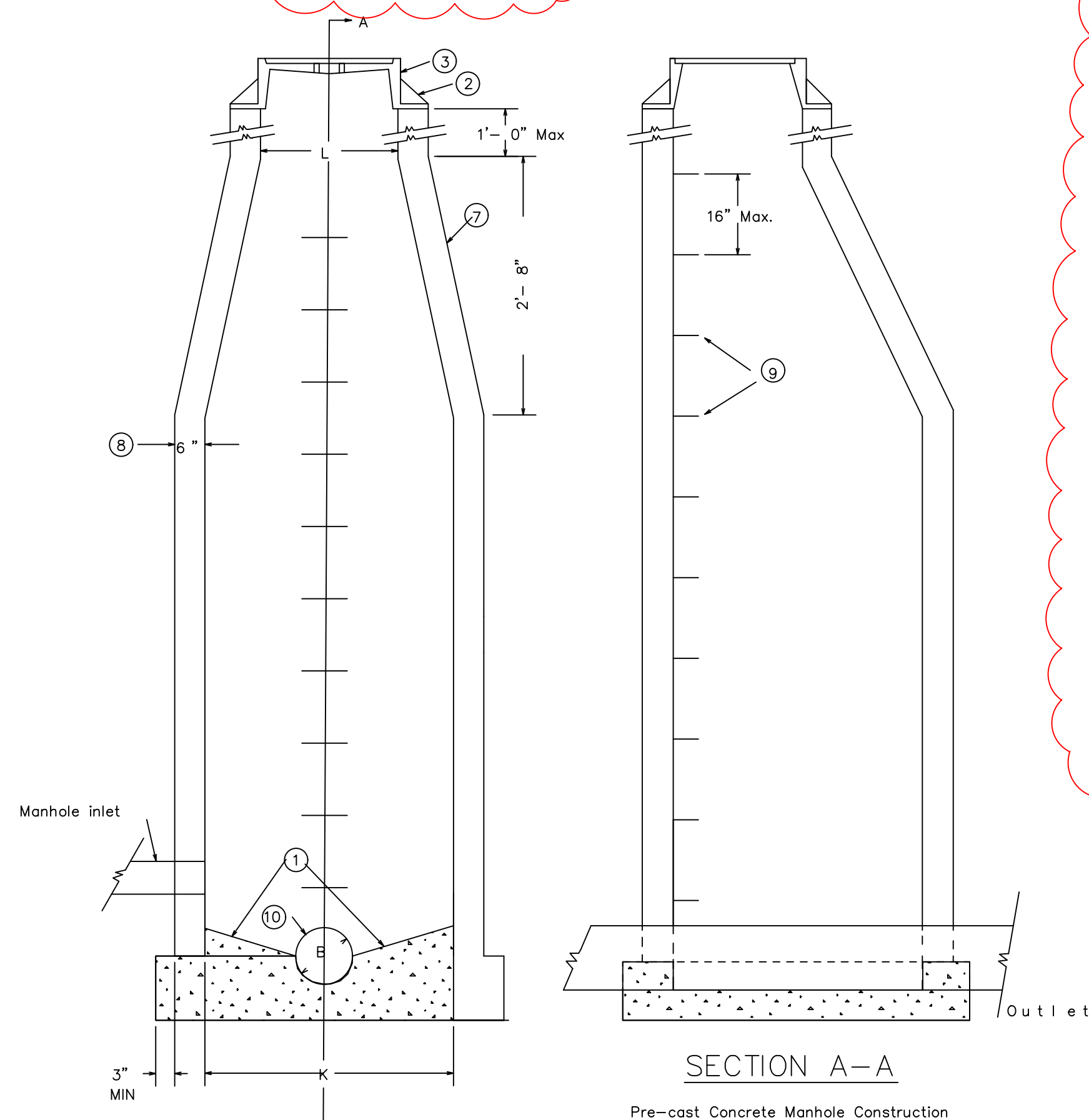
SANITARY SEWER PIPE

The following materials will be permitted for sanitary sewer pipe:
PVC conforming to ASTM D-3034, SDR-35 with joints conforming to ASTM D-3212

SANITARY SEWER CONNECTIONS

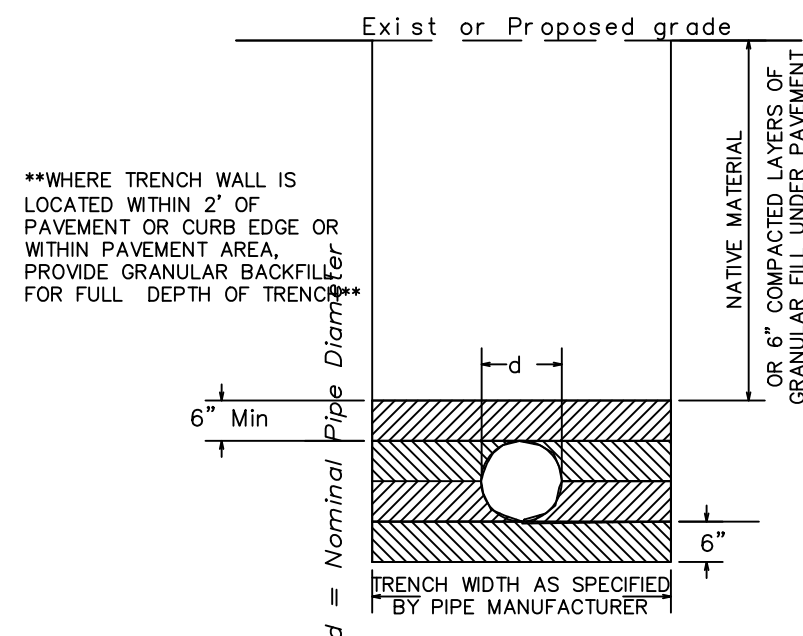
Roof drains, foundation drains and other clean water connections to the sanitary sewer system are prohibited.

SANITARY SEWER MANHOLE DETAIL



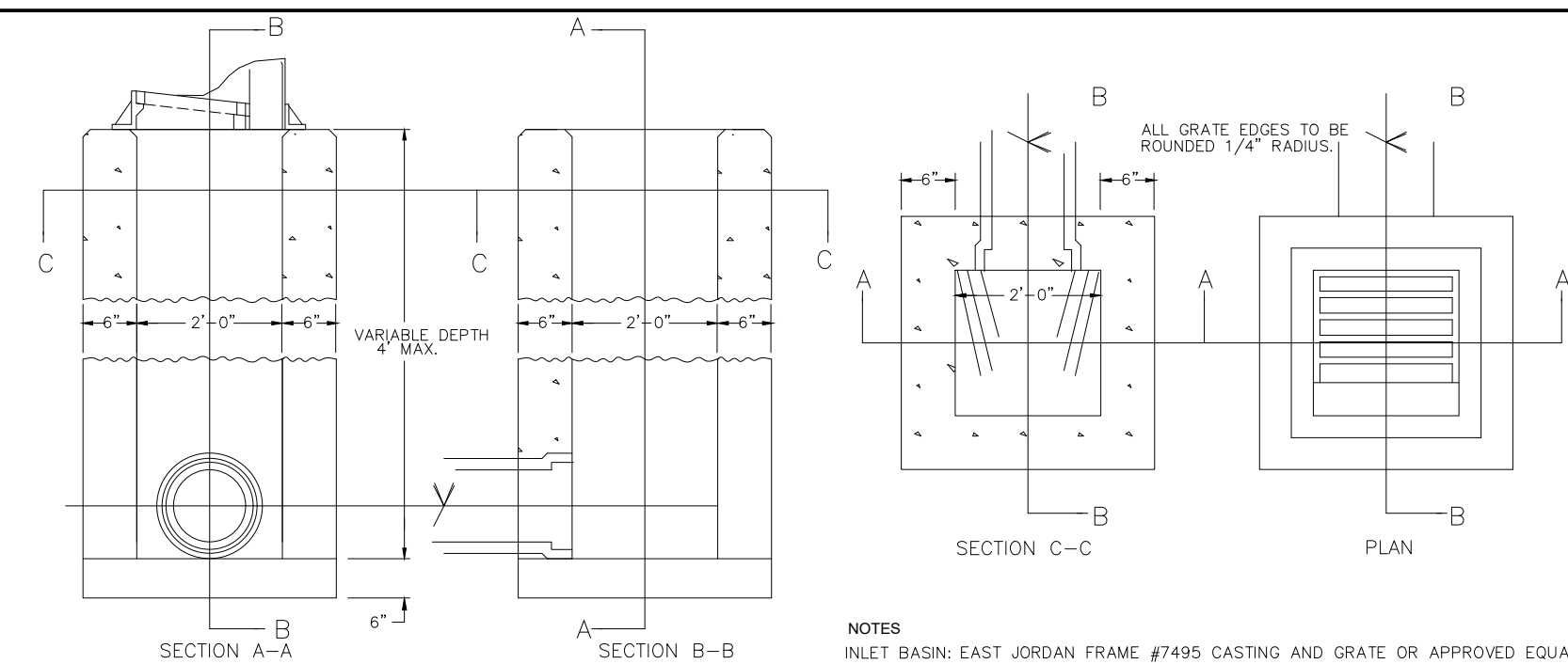
SECTION A-A

Pre-cast Concrete Manhole Construction

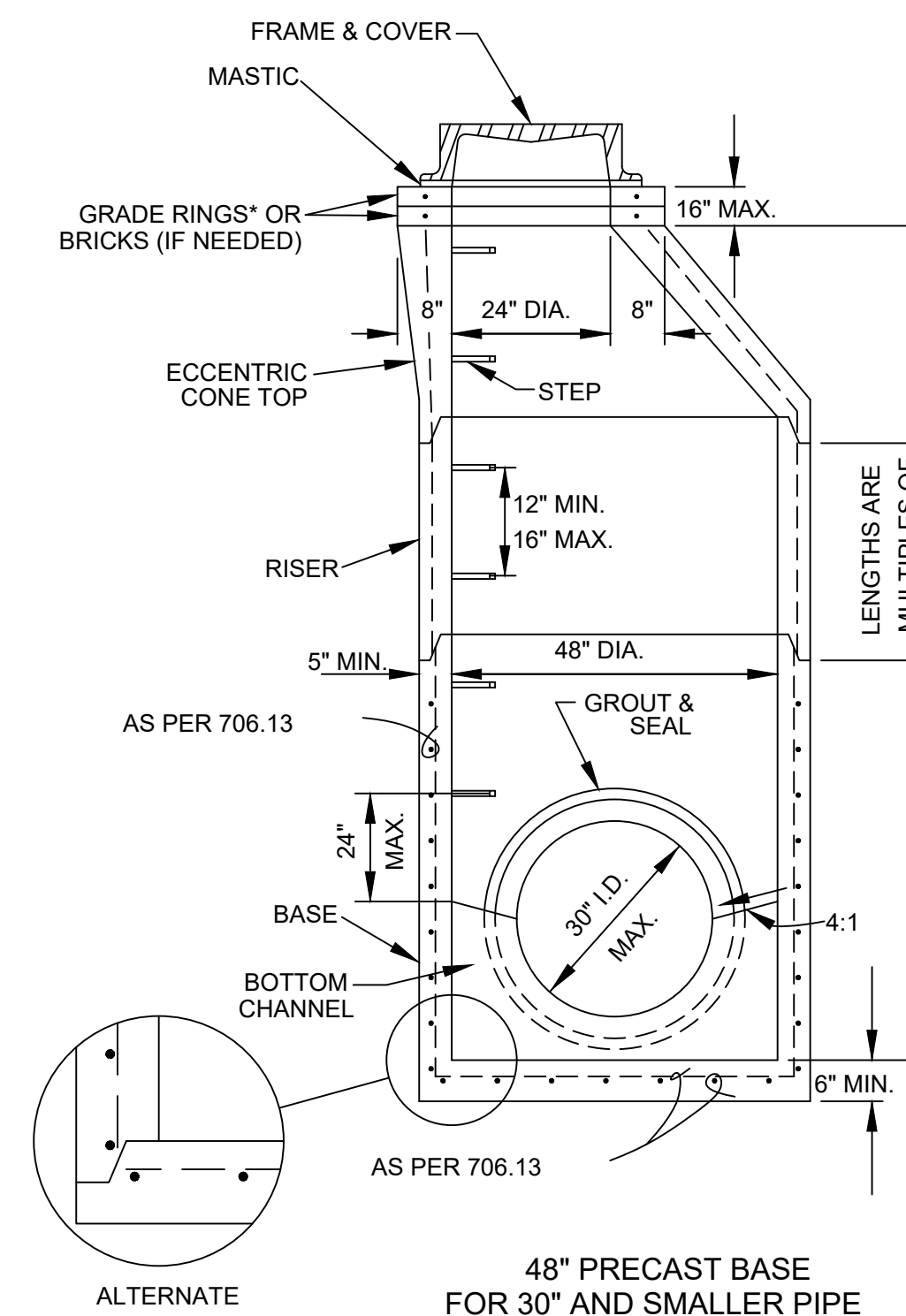


SANITARY SEWER BEDDING &
BACKFILL DETAIL

Bedding and backfill material shall be placed in compacted layers as indicated and shall be coarse sand or gravel not exceeding 3/4" in size.



CATCH BASIN 2-2B DETAIL



PRECAST STORM SEWER CONCRETE MANHOLE

NOTES:

GENERAL: WITH NORMAL SOIL AND SITE CONDITIONS THIS STANDARD PRECAST MANHOLE MAY BE USED FOR ANY REQUIRED MANHOLE DEPTH.

SECTIONS OF THE PRECAST MANHOLE SHALL BE CAST AND ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP. LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.

TOP AND TRANSITION: (OR REDUCER)
SECTIONS MAY BE EITHER ECCENTRIC
CONE OR FLAT SLAB.

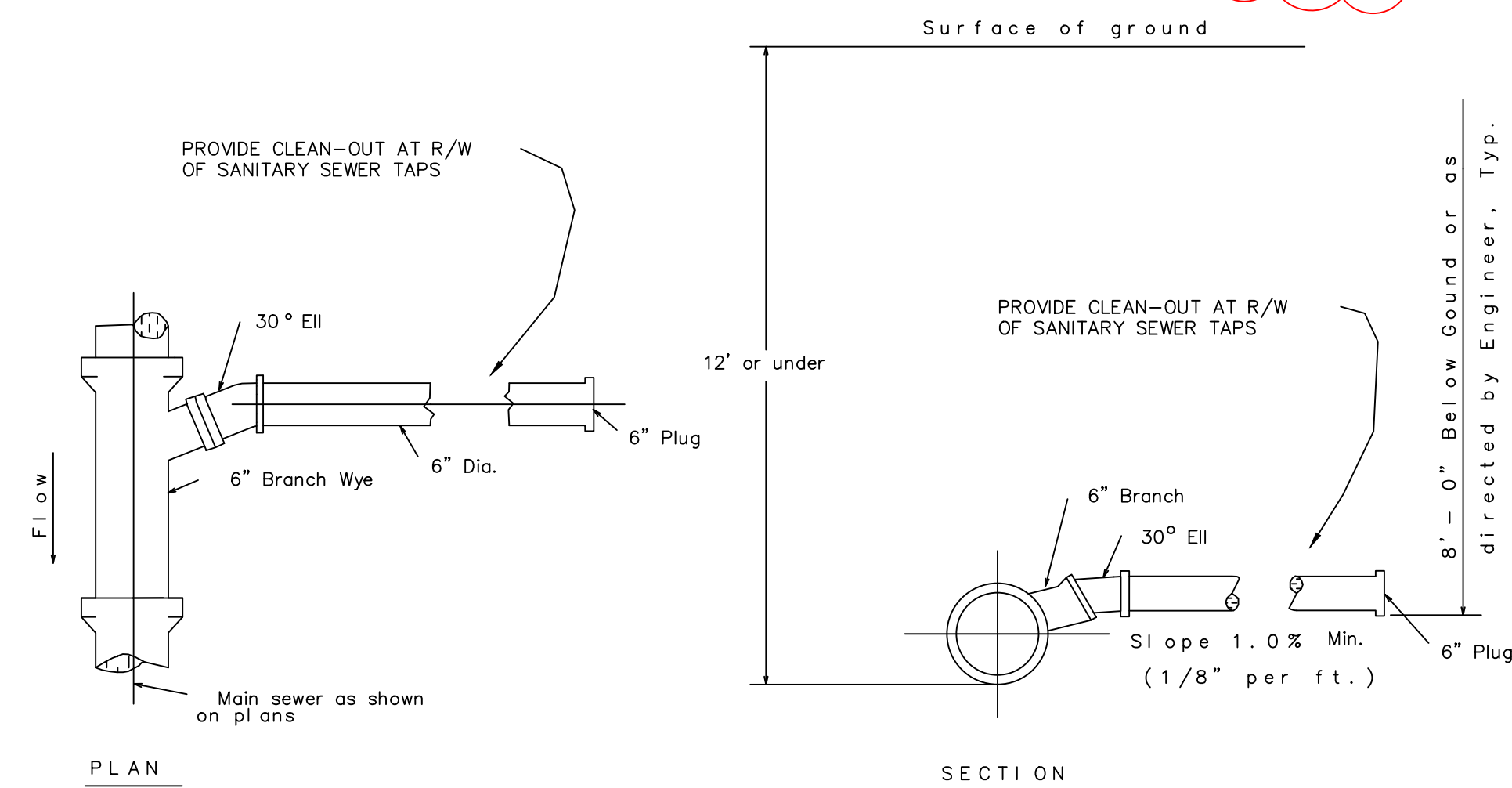
BASES FOR MANHOLES ARE SHOWN WITH MONOLITHIC FLOOR AND RISER WHICH MAY BE CAST IN ONE OR TWO OPERATIONS. A PERMISSIBLE ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BARREL SEPARATELY. OPENINGS FOR INLET AND OUTLET PIPES SHALL BE PROVIDED, EITHER WHEN THE UNIT IS CAST OR LATER, TO MEET PROJECT REQUIREMENTS. BOTTOM CHANNELS MAY BE FORMED OF CONCRETE PRECAST IN THE BASE, OR BY FIELD CONSTRUCTION.

OPENINGS IN RISER SECTIONS FOR 18" AND SMALLER INLET PIPES MAY BE PREFABRICATED OR CORED IN THE FIELD PROVIDED THE SIDES OF THE PIPE AT THE SPRINGLINE DO NOT PROJECT INTO THE MANHOLE.

CONNECTIONS BETWEEN PRECAST MANHOLE SECTIONS AND PIPES SHALL BE RUBBER, WATERTIGHT, RESILIENT CONNECTORS CONFORMING TO ASTM C923.

MATERIALS FOR BASES AND OTHER PRECAST SECTIONS, INCLUDING REINFORCEMENT NOT SPECIFIED HEREON, SHALL COMPLY WITH THE REQUIREMENTS OF 706.13.

* FRAME AND COVER TO BE EAST JORDAN
1600Z1 AND 1925A1 RESPECTIVELY. LID TO BE
SOLID OR PERFORATED AND MARKED
"STORM SEWER".



TYPE-1 HOUSE CONNECTION

To Be Used Where Main Sewers
Are 12' or Less in Depth.

9-9-26 ADDENDUM #2

GENERAL DETAILS
ANTWERP SQUARE
PHASE 1
ANTWERP, OHIO 45813

Bockrath & Associates
Engineering and Surveying, LLC
1115 South Fair Avenue, Suite A, Ottawa, OH 45875
Phone: 419.523.5789

REVIEWED BY:	GAB	8/14/26
DESIGNED BY:	RDL	8/12/26
JOB NUMBER:	26-084	

C303