

# 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

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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"

DATE

BRYAN SMITH  
MAYOR OF ANTWERP

DATE

BRIAN DAVIS  
ANTWERP VILLAGE ADMINISTRATOR

DATE

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

ISSUED FOR BIDS 8-3-26

2 WORKING DAYS BEFORE YOU DIG!

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**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: RDL 8/3/26  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

TITLE

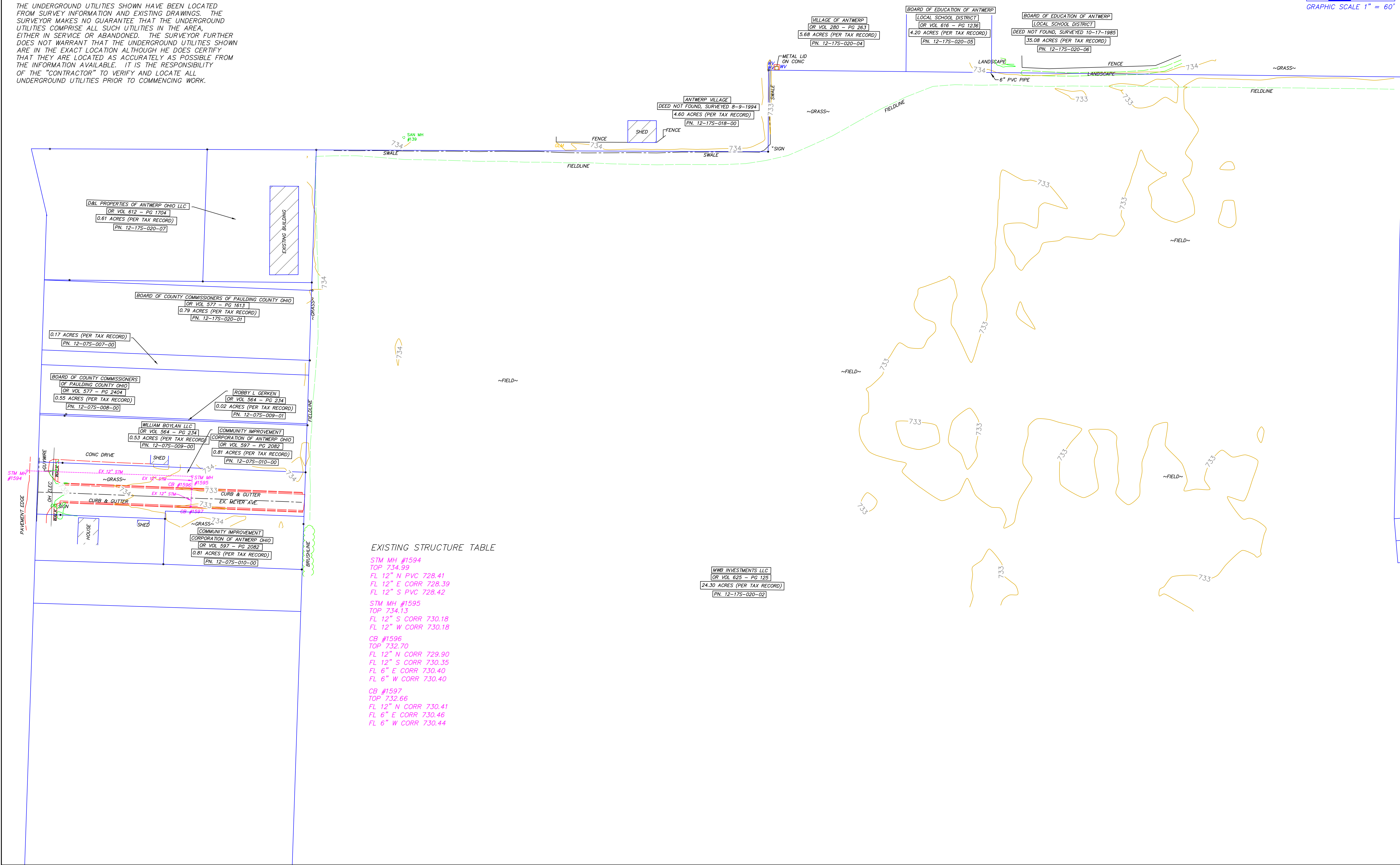
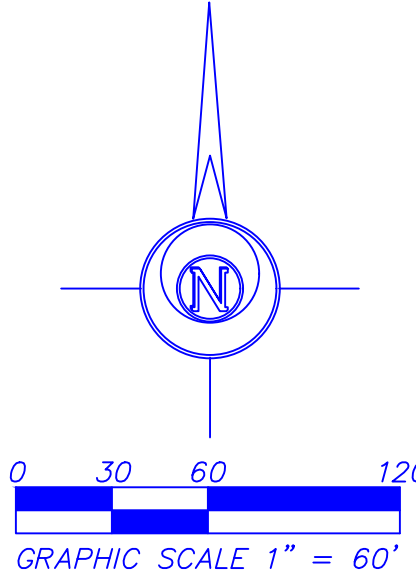
NOTE: SURVEY BEARINGS BASED ON OHIO NORTH ZONE STATE PLANE COORDINATES OBTAINED FROM THE OHIO DOT VRS NETWORK

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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  
P - POWER POLE  
CB - CATCH BASIN  
MH - MANHOLE  
CO - CLEANOUT



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

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

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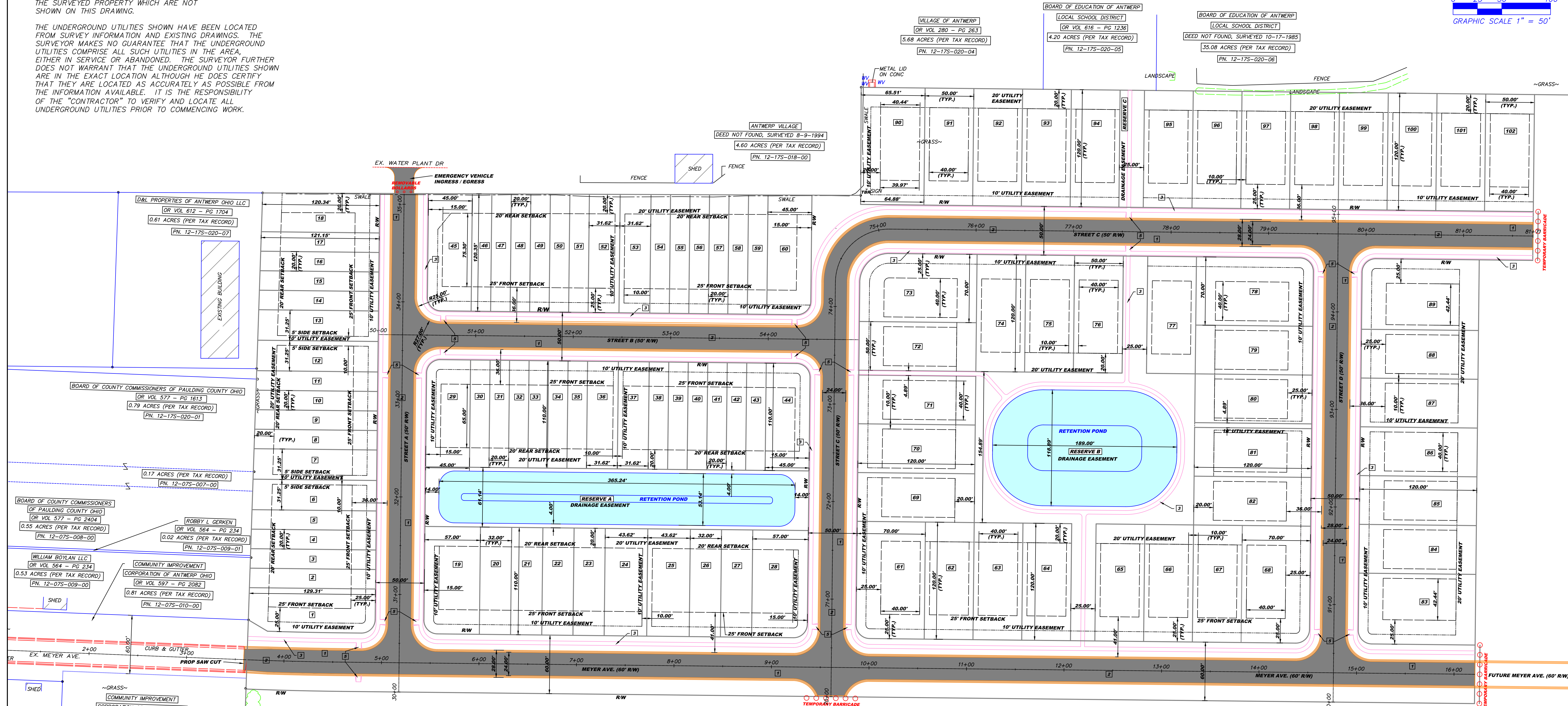
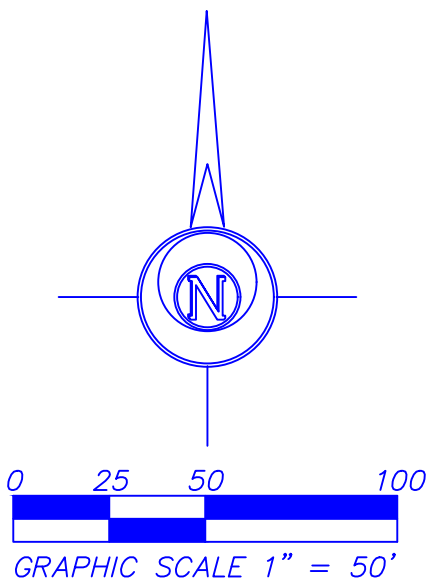
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PROJECT KEYNOTES:

- 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  
CP - POWER POLE  
CB - CATCH BASIN  
MH - MANHOLE  
CO - CLEANOUT  
TBR - TO BE REMOVED



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  
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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

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    | 0.138        |
| 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    | 0.192        |
| 82    | 0.138        |
| 83    | 0.199        |
| 84    | 0.138        |
| 85    | 0.138        |
| 86    | 0.138        |
| 87    | 0.138        |
| 88    | 0.192        |
| 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        |

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

ISSUED FOR BIDS 8-3-26

SITE PLAN  
ANTWERP SQUARE  
PHASE 1  
ANTWERP, OHIO 45813

REVIEWED BY:  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

C101

Bockrath &

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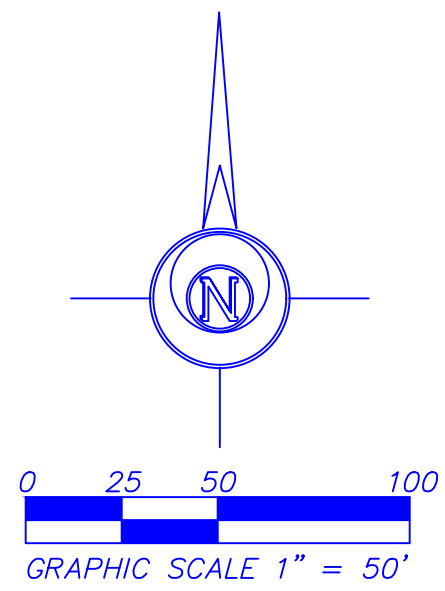
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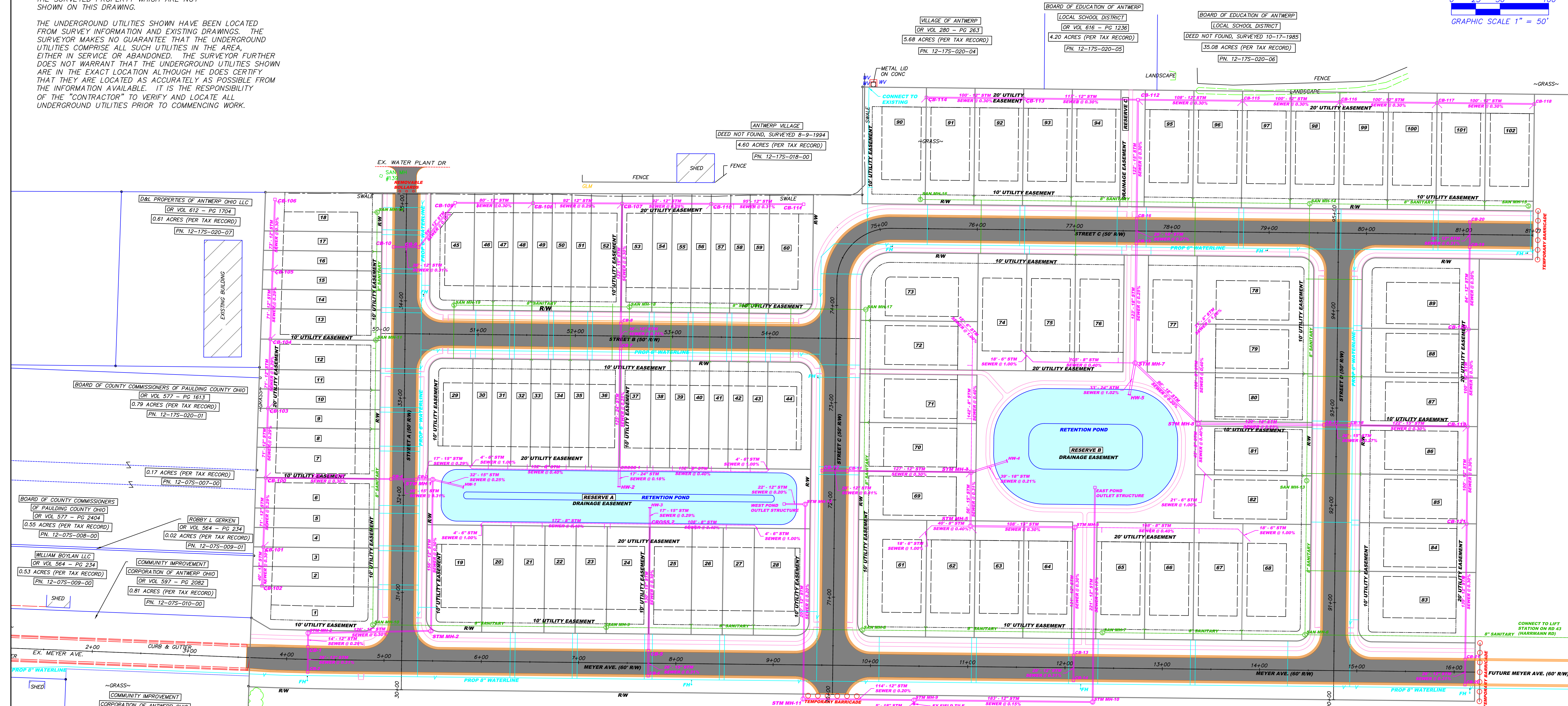
UTILITY PLAN

ANTWERP SQUARE  
PHASE 1  
ANTWERP, OHIO 45813

REVIEWED BY:  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

C102

ISSUED FOR BIDS 8-3-26



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  
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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

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

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    | 0.051        |
| 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        |
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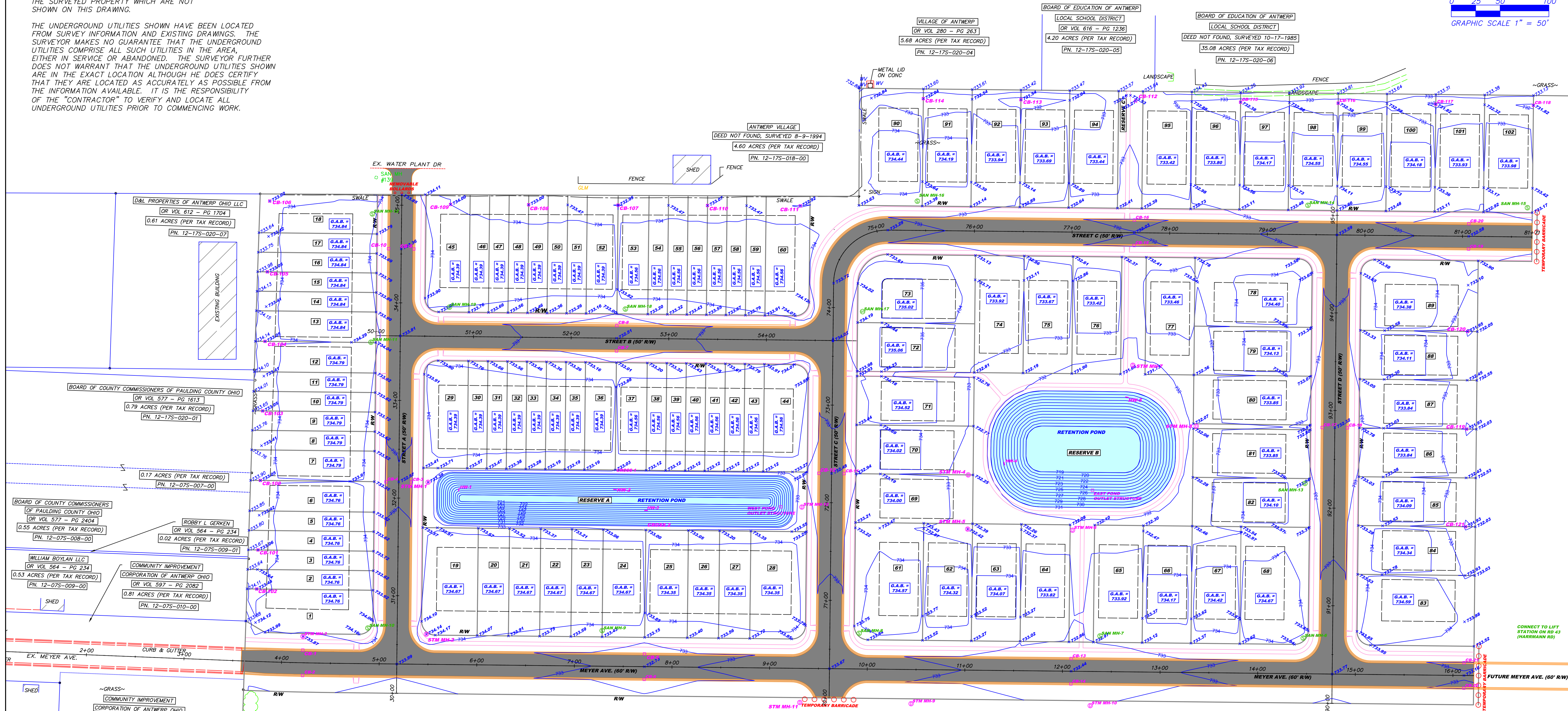
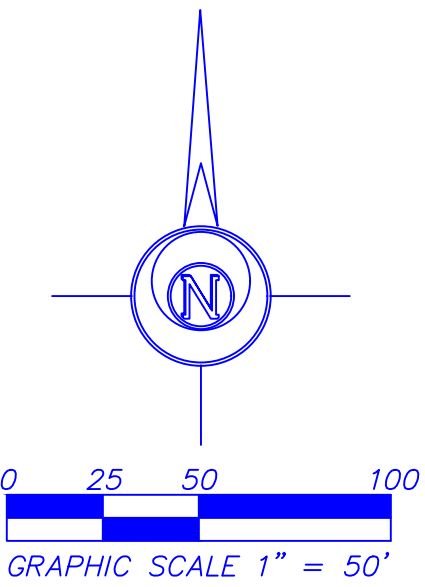
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PROJECT KEYNOTES:

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



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  
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CB #1596  
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FL 12" N CORR 729.90  
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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

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        |
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| 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        |

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| 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        |

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| 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        |

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

ISSUED FOR BIDS 8-3-26

GRADING PLAN  
ANTWERP SQUARE  
PHASE 1  
ANTWERP, OHIO 45813

REVIEWED BY:  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

C103

Bockrath &

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

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.

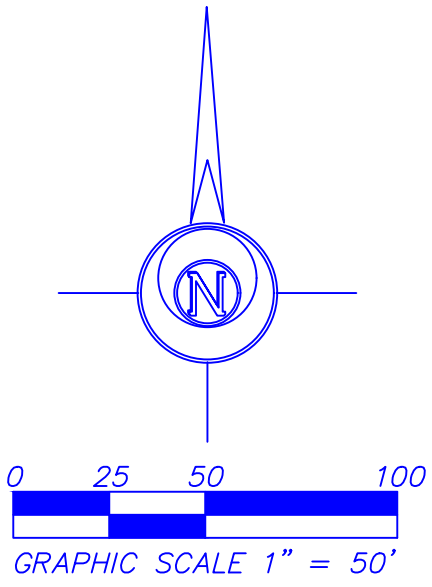
THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM SURVEY INFORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES 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:  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

C104

ISSUED FOR BIDS 8-3-26

| 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        |

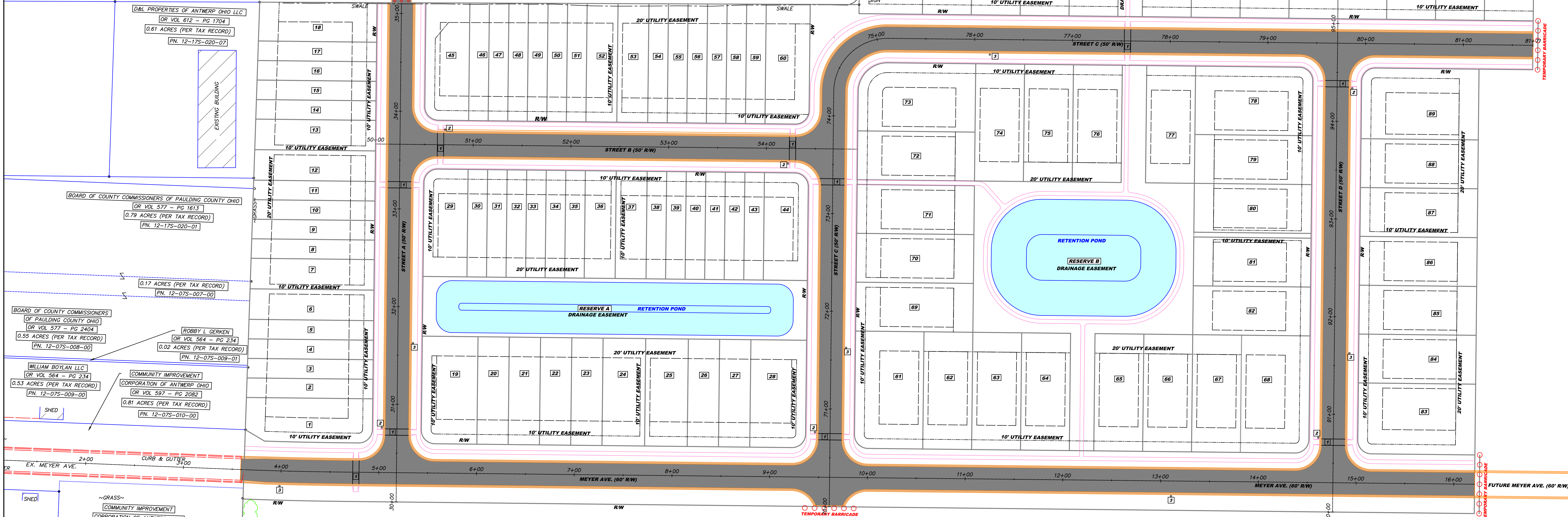
EXISTING STRUCTURE TABLE

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

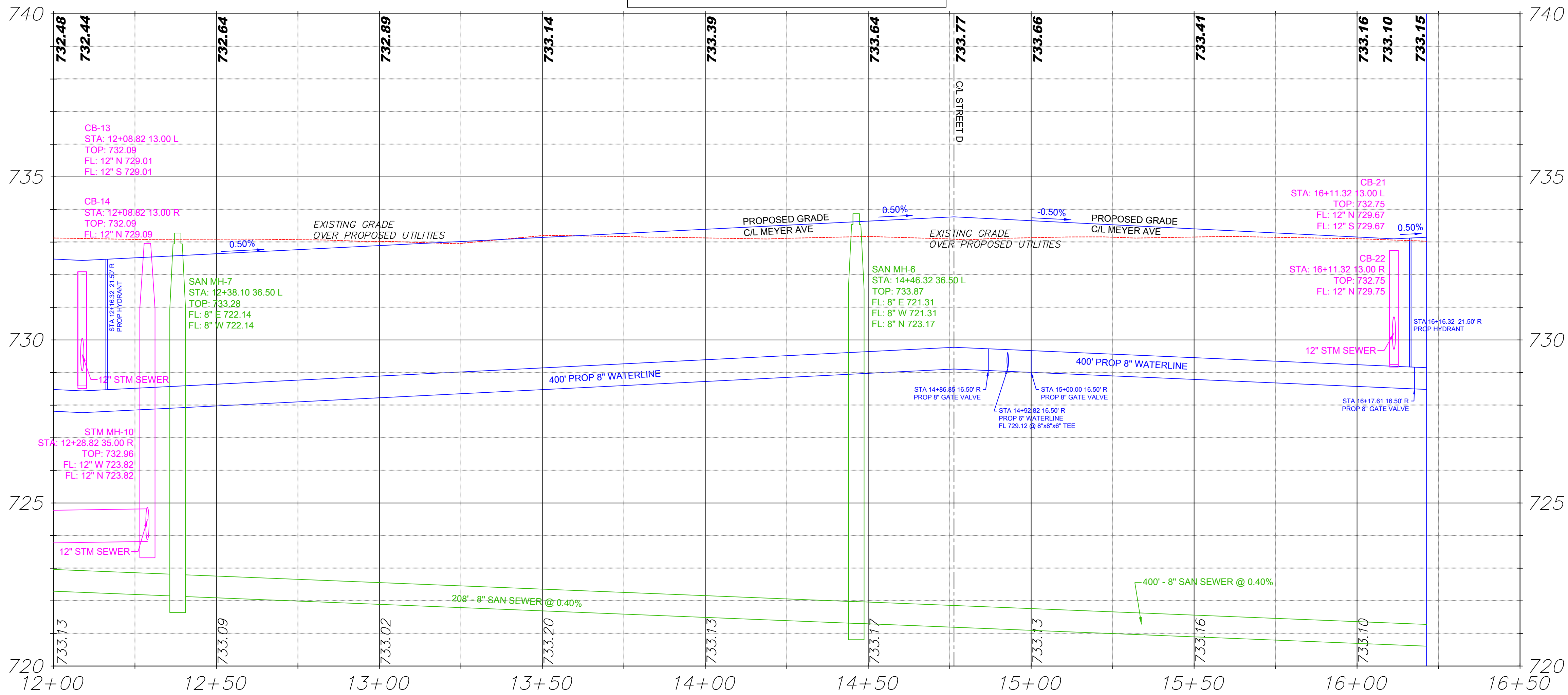
CB #1596  
TOP 732.70  
FL 12" N CORR 729.90  
FL 12" S CORR 730.35  
FL 6" E CORR 730.40  
FL 6" W CORR 730.40

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





UTILITY PROFILE - Meyer Ave



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

SCALE 1" = 20' HORIZ

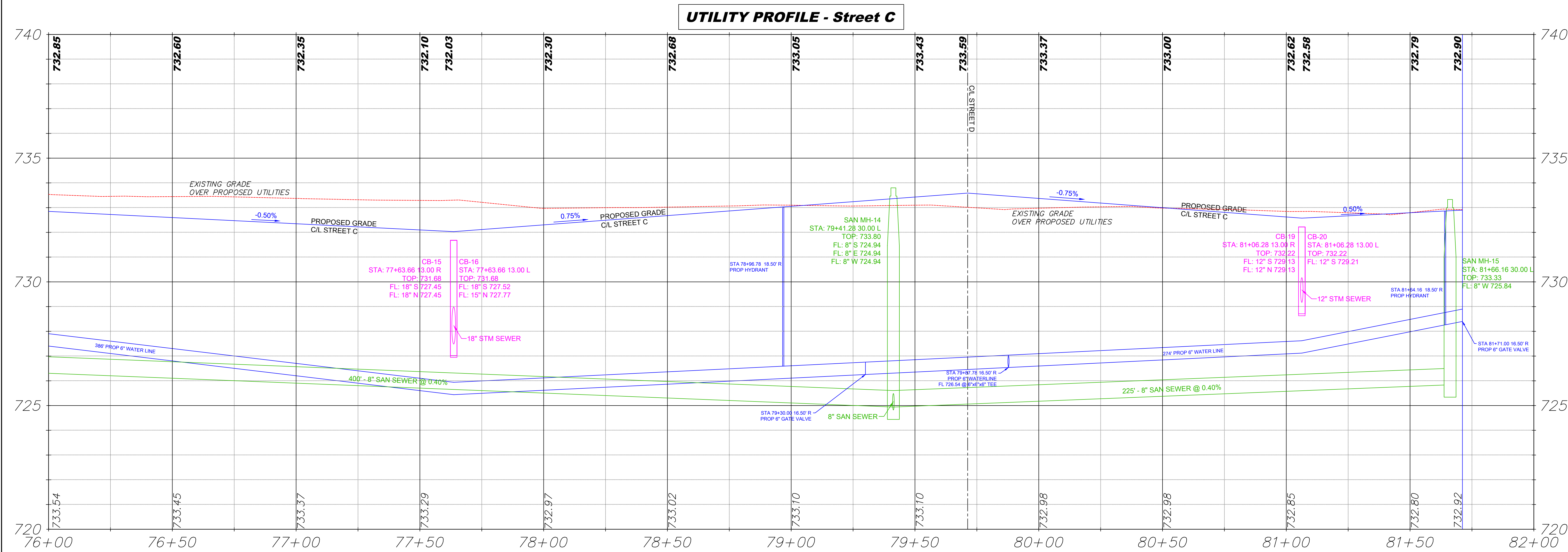
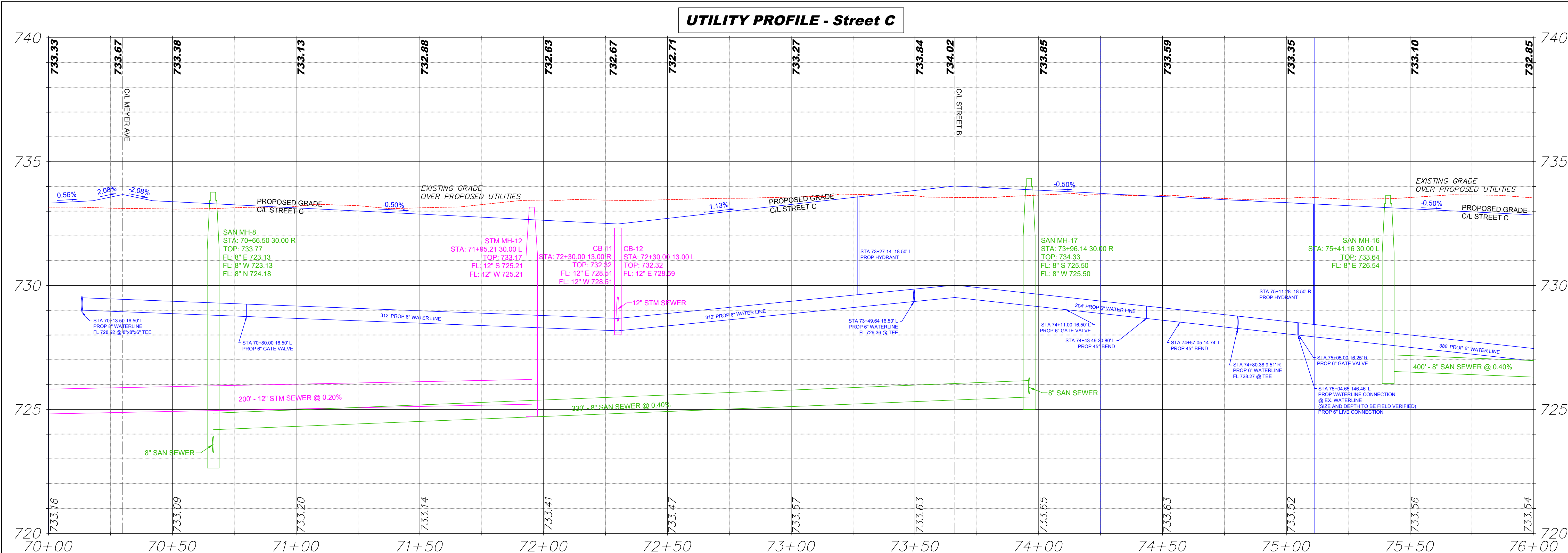
REVIEWED BY: RDL 8/3/26  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

ISSUED FOR BIDS 8-3-26

C201

**Bockrath & Associates**  
Engineering and Surveying, LLC  
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Phone: 419.523.5789





**Bockrath & Associates**  
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Phone: 419.523.5789

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

SCALE 1" = 20' HORIZ

|              |            |
|--------------|------------|
| REVIEWED BY: |            |
| DESIGNED BY: | RDL 8/3/26 |
| JOB NUMBER:  | 26-084     |

C203

ISSUED FOR BIDS 8-3-26



| STORM SEWER STRUCTURE TABLE |                                                   |
|-----------------------------|---------------------------------------------------|
| STRUCTURE                   | STRUCTURE INFO                                    |
| CB-1                        | TOP 733.16<br>FL 12" N 730.08<br>FL 12" S 730.08  |
| CB-2                        | TOP 733.16<br>FL 12" N 730.16                     |
| CB-3                        | TOP 732.71<br>FL 15" E 728.99<br>FL 15" W 728.99  |
| CB-4                        | TOP 732.71<br>FL 15" E 729.07<br>FL 12" W 729.32  |
| CB-5                        | TOP 732.37<br>FL 15" N 729.04<br>FL 15" S 729.29  |
| CB-6                        | TOP 732.37<br>FL 15" N 729.37                     |
| CB-7                        | TOP 732.36<br>FL 24" S 727.79<br>FL 15" N 728.54  |
| CB-8                        | TOP 732.36<br>FL 15" S 728.62<br>FL 15" N 728.62  |
| CB-9                        | TOP 733.01<br>FL 12" NE 729.93<br>FL 12" W 729.93 |
| CB-10                       | TOP 733.01<br>FL 12" E 730.01                     |
| CB-11                       | TOP 732.32<br>FL 12" E 728.51<br>FL 12" W 728.51  |
| CB-12                       | TOP 732.32<br>FL 12" E 728.59                     |
| CB-13                       | TOP 732.09<br>FL 12" N 729.01<br>FL 12" S 729.01  |
| CB-14                       | TOP 732.09<br>FL 12" N 729.09                     |
| CB-15                       | TOP 731.68<br>FL 18" S 727.45<br>FL 18" N 727.45  |
| CB-16                       | TOP 731.68<br>FL 18" S 727.52<br>FL 15" N 727.77  |
| CB-17                       | TOP 732.16<br>FL 18" W 727.64<br>FL 15" E 727.89  |
| CB-18                       | TOP 732.16<br>FL 15" W 727.96<br>FL 15" E 727.96  |
| CB-19                       | TOP 732.22<br>FL 12" S 729.13<br>FL 12" N 729.13  |

| STORM SEWER STRUCTURE TABLE |                                                                                                           |
|-----------------------------|-----------------------------------------------------------------------------------------------------------|
| STRUCTURE                   | STRUCTURE INFO                                                                                            |
| CB-20                       | TOP 732.22<br>FL 12" S 729.21                                                                             |
| CB-21                       | TOP 732.75<br>FL 12" N 728.67<br>FL 12" S 729.67                                                          |
| CB-22                       | TOP 732.75<br>FL 12" N 729.75                                                                             |
| CB-100                      | TOP 733.05<br>FL 12" E 729.71<br>FL 12" S 729.93<br>FL 12" N 729.71<br>FL 6" SE 730.43<br>FL 6" NE 730.43 |
| CB-101                      | TOP 733.06<br>FL 12" N 730.14<br>FL 12" S 730.14<br>FL 6" SE 730.64<br>FL 6" NE 730.64                    |
| CB-102                      | TOP 733.44<br>FL 12" N 730.26<br>FL 6" SE 730.76<br>FL 6" NE 730.76                                       |
| CB-103                      | TOP 733.05<br>FL 12" S 729.92<br>FL 12" N 729.92<br>FL 6" SE 730.42<br>FL 6" NE 730.43                    |
| CB-104                      | TOP 733.05<br>FL 12" S 730.13<br>FL 12" N 730.13<br>FL 6" SE 730.63<br>FL 6" NE 730.63                    |
| CB-105                      | TOP 733.05<br>FL 12" S 730.34<br>FL 12" N 730.34<br>FL 6" SE 730.84<br>FL 6" NE 730.84                    |
| CB-106                      | TOP 733.02<br>FL 12" S 730.56<br>FL 6" SE 731.06                                                          |
| CB-107                      | TOP 732.95<br>FL 15" S 728.99<br>FL 12" W 729.24<br>FL 12" E 729.36<br>FL 6" SW 729.86<br>FL 6" SE 729.86 |
| CB-108                      | TOP 733.00<br>FL 12" E 729.51<br>FL 12" W 729.51<br>FL 6" SE 730.01<br>FL 6" SW 730.01                    |
| CB-109                      | TOP 734.00<br>FL 12" E 729.75<br>FL 12" SW 729.75<br>FL 6" S 730.25                                       |
| CB-110                      | TOP 733.07<br>FL 12" W 729.63<br>FL 12" E 729.63<br>FL 6" SW 730.13<br>FL 6" SE 730.13                    |
| CB-111                      | TOP 732.92<br>FL 12" W 729.92<br>FL 6" SW 730.42                                                          |
| CB-112                      | TOP 733.26<br>FL 15" S 728.14<br>FL 12" W 728.39<br>FL 12" E 728.39<br>FL 6" SE 728.89                    |
| CB-113                      | TOP 731.54<br>FL 12" E 728.74<br>FL 12" W 728.74<br>FL 6" SW 729.24<br>FL 6" SE 729.24                    |
| CB-114                      | TOP 732.04<br>FL 12" E 729.04<br>FL 6" SW 729.54<br>FL 6" SE 729.54                                       |
| CB-115                      | TOP 732.38<br>FL 12" W 728.71<br>FL 12" E 728.71<br>FL 6" SW 729.21<br>FL 6" SE 729.21                    |

| STORM SEWER STRUCTURE TABLE |                                                                                                                             |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| STRUCTURE                   | STRUCTURE INFO                                                                                                              |
| CB-116                      | TOP 732.38<br>FL 12" W 729.01<br>FL 12" E 729.01<br>FL 6" SW 729.51<br>FL 6" SE 729.51                                      |
| CB-117                      | TOP 731.82<br>FL 12" W 729.31<br>FL 12" E 729.31<br>FL 6" SW 729.81<br>FL 6" SE 729.81                                      |
| CB-118                      | TOP 731.82<br>FL 12" W 729.61<br>FL 6" SW 730.11                                                                            |
| CB-119                      | TOP 731.93<br>FL 15" W 728.33<br>FL 12" N 728.58<br>FL 12" S 728.95<br>FL 6" SW 729.45<br>FL 6" NW 729.45                   |
| CB-120                      | TOP 731.95<br>FL 12" S 728.88<br>FL 12" N 728.88<br>FL 6" SW 729.38<br>FL 6" NW 729.38                                      |
| CB-121                      | TOP 731.93<br>FL 12" N 729.25<br>FL 12" S 729.25<br>FL 6" SW 729.75<br>FL 6" NW 729.75                                      |
| STM MH-1                    | TOP 733.38<br>FL 15" E 728.94<br>FL 15" W 728.94<br>FL 12" S 729.19                                                         |
| STM MH-2                    | TOP 734.14<br>FL 12" N 729.66<br>FL 12" W 729.66                                                                            |
| STM MH-3                    | TOP 733.87<br>FL 12" E 730.04<br>FL 12" S 730.04                                                                            |
| STM MH-4                    | TOP 732.29<br>FL 18" E 727.63<br>FL 12" W 728.13<br>FL 15" S 727.88<br>FL 8" N 728.46<br>FL 6" NW 728.63<br>FL 6" SW 728.63 |
| STM MH-5                    | TOP 732.42<br>FL 15" N 728.05<br>FL 15" E 728.05<br>FL 8" W 728.63<br>FL 6" SE 728.80<br>FL 6" S 728.80                     |
| STM MH-6                    | TOP 732.14<br>FL 15" W 728.37<br>FL 12" S 728.62<br>FL 8" E 728.95<br>FL 6" SW 729.12                                       |
| STM MH-7                    | TOP 731.72<br>FL 24" S 726.64<br>FL 18" N 727.14<br>FL 18" SE 727.14<br>FL 8" W 727.97<br>FL 6" E 728.14                    |
| STM MH-8                    | TOP 732.11<br>FL 18" NW 727.32<br>FL 18" E 727.32<br>FL 8" S 728.15<br>FL 8" N 728.15<br>FL 6" NE 728.32<br>FL 6" SE 728.32 |
| STM MH-9                    | TOP 733.68<br>FL 12" E 723.54<br>FL 12" W 724.58<br>FL 18" S 723.54<br>FL 4" S 729.25                                       |
| STM MH-10                   | TOP 732.96<br>FL 12" N 723.82<br>FL 12" W 723.82                                                                            |
| STM MH-11                   | TOP 733.74<br>FL 12" E 724.81<br>FL 12" N 724.81                                                                            |
| STM MH-12                   | TOP 733.17<br>FL 12" S 725.21<br>FL 12" W 725.21                                                                            |

| SANITARY SEWER STRUCTURE TABLE |                                                                  |
|--------------------------------|------------------------------------------------------------------|
| STRUCTURE                      | STRUCTURE INFO                                                   |
| SAN MH-1                       | TOP 721.86<br>FL 8" S 717.29<br>FL 8" W 717.29                   |
| SAN MH-2                       | TOP 722.24<br>FL 8" E 717.67<br>FL 8" W 717.67                   |
| SAN MH-3                       | TOP 722.96<br>FL 8" E 718.39<br>FL 8" W 718.39                   |
| SAN MH-4                       | TOP 723.64<br>FL 8" E 719.07<br>FL 8" W 719.07                   |
| SAN MH-5                       | TOP 724.28<br>FL 8" E 719.71<br>FL 8" W 719.71                   |
| SAN MH-6                       | TOP 733.87<br>FL 8" W 721.31<br>FL 8" E 721.31<br>FL 8" N 723.17 |
| SAN MH-7                       | TOP 733.28<br>FL 8" E 722.14<br>FL 8" W 722.14                   |
| SAN MH-8                       | TOP 733.77<br>FL 8" E 723.13<br>FL 8" W 723.13<br>FL 8" N 724.18 |
| SAN MH-9                       | TOP 733.68<br>FL 8" E 724.18<br>FL 8" W 725.64                   |
| SAN MH-10                      | TOP 734.12<br>FL 8" E 726.60<br>FL 8" N 726.60                   |
| SAN MH-11                      | TOP 734.13<br>FL 8" S 727.77<br>FL 8" N 727.77                   |
| SAN MH-12                      | TOP 734.14<br>FL 8" S 728.30                                     |
| SAN MH-13                      | TOP 733.30<br>FL 8" S 723.80<br>FL 8" N 723.80                   |
| SAN MH-14                      | TOP 733.80<br>FL 8" S 724.94<br>FL 8" E 724.94<br>FL 8" W 724.94 |
| SAN MH-15                      | TOP 733.33<br>FL 8" W 725.84                                     |
| SAN MH-16                      | TOP 733.64<br>FL 8" E 726.54                                     |
| SAN MH-17                      | TOP 734.33<br>FL 8" S 725.50<br>FL 8" W 725.50                   |
| SAN MH-18                      | TOP 733.36<br>FL 8" E 726.47<br>FL 8" W 726.47                   |
| SAN MH-19                      | TOP 733.99<br>FL 8" E 727.19                                     |

PROPOSED STRUCTURE TABLES

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: RDL 7/15/26  
DESIGNED BY: RDL 26-084  
JOB NUMBER: 26-084

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.

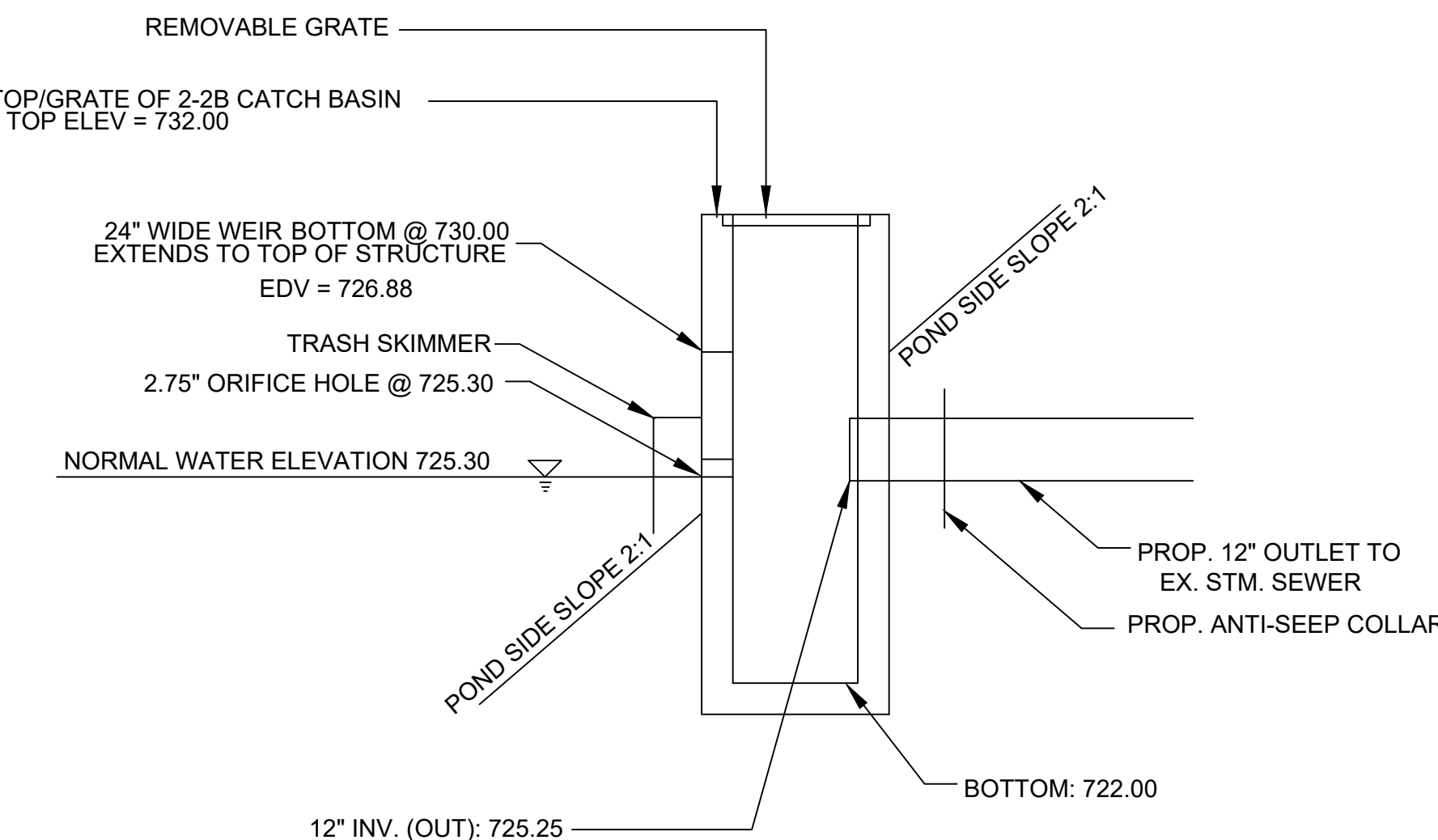
Mandrels must have an odd number of fins. No mandrel will have less than nine fins. Mechanical pulling devices are not allowed for either mandrel or rigid balls.

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.

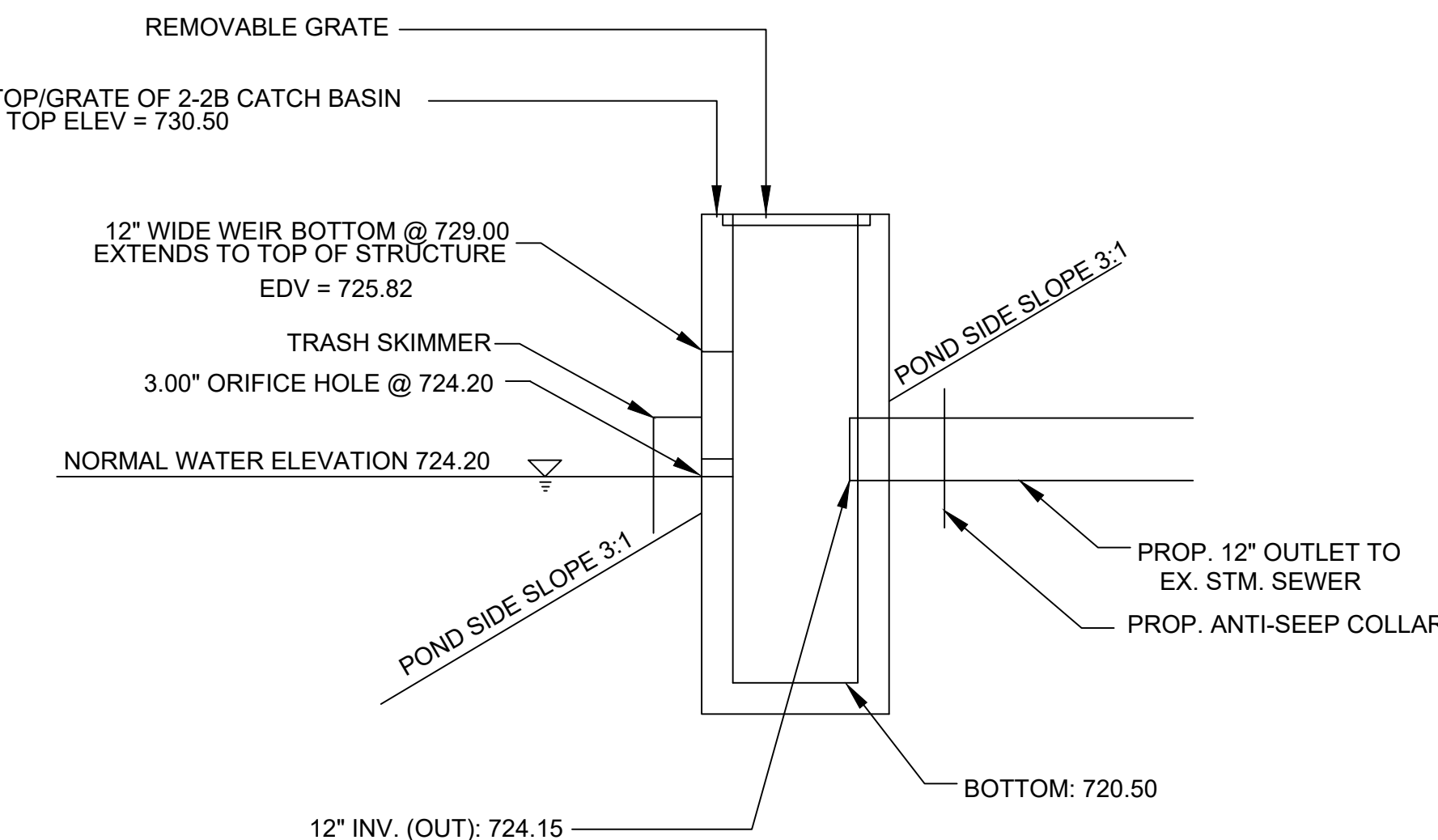
Payment for deflection testing is included in the payment for the pipe.

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.



WATER QUALITY OUTLET STRUCTURE - WEST POND



WATER QUALITY OUTLET STRUCTURE - EAST POND

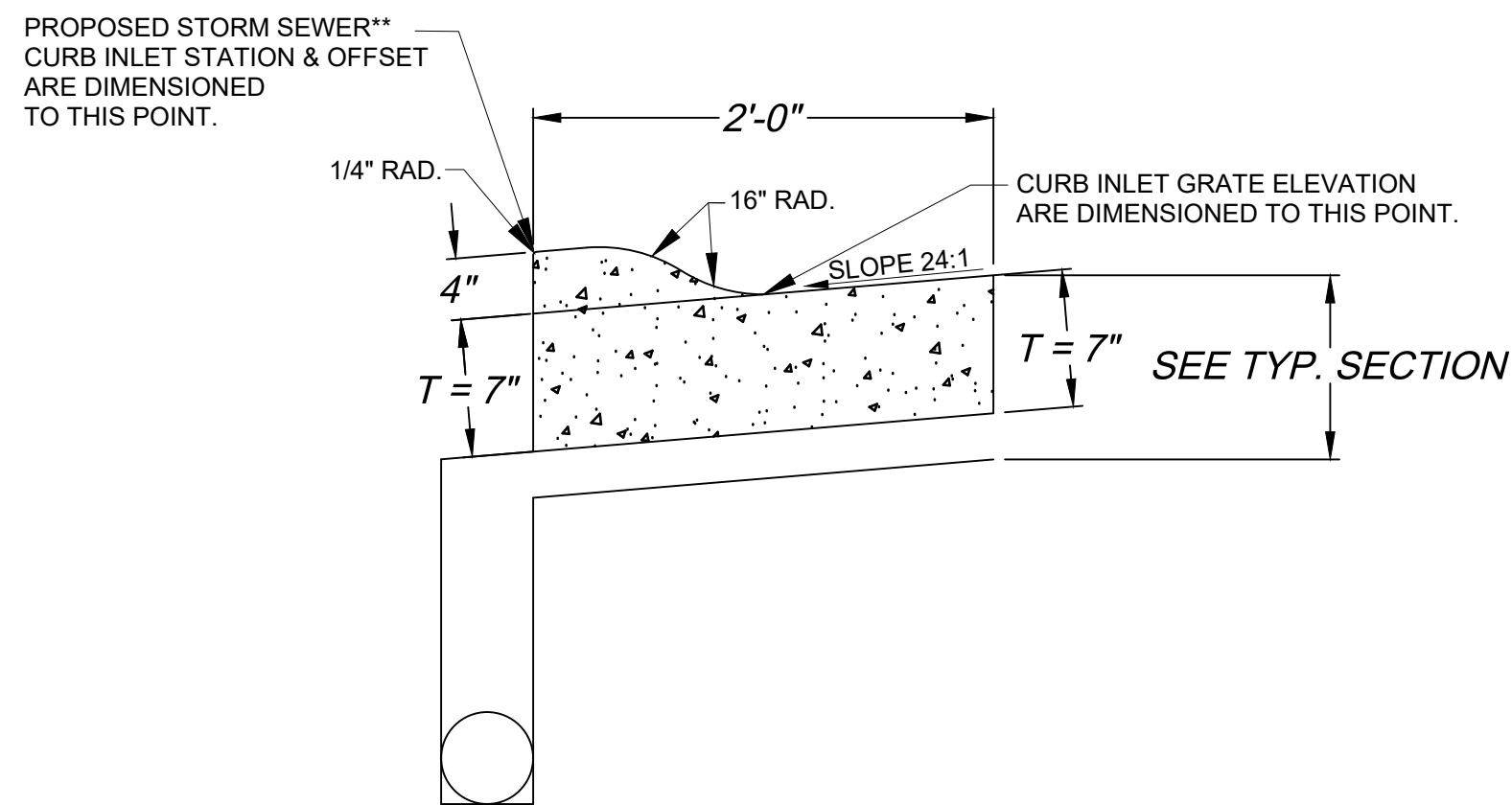
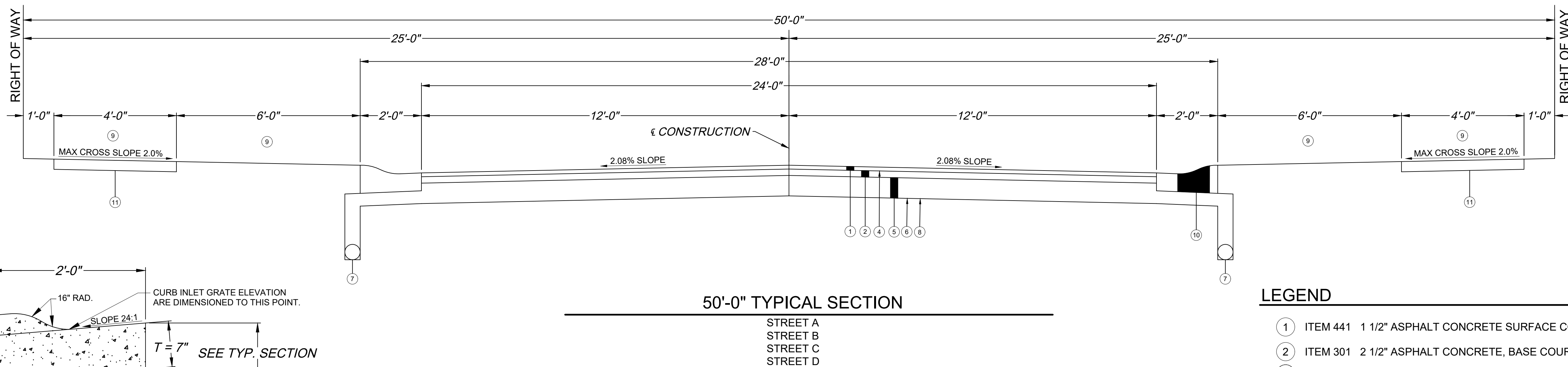
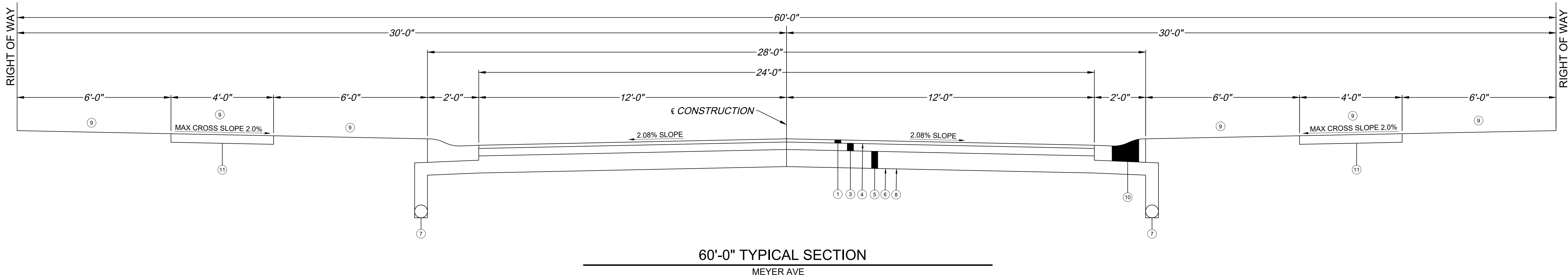
**Bockrath & Associates**  
**Engineering and Surveying, LLC**  
115 South Fair Avenue, Suite A, Ottawa, OH 45875  
Phone: 419.523.5789

**GENERAL NOTES**  
**ANTWERP SQUARE**  
**PHASE 1**  
**ANTWERP, OHIO 45813**

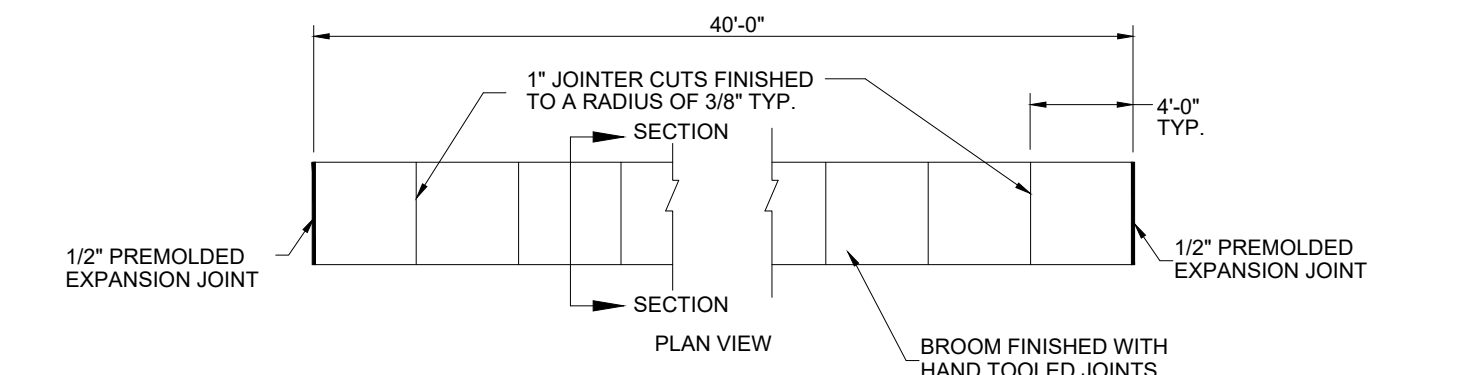
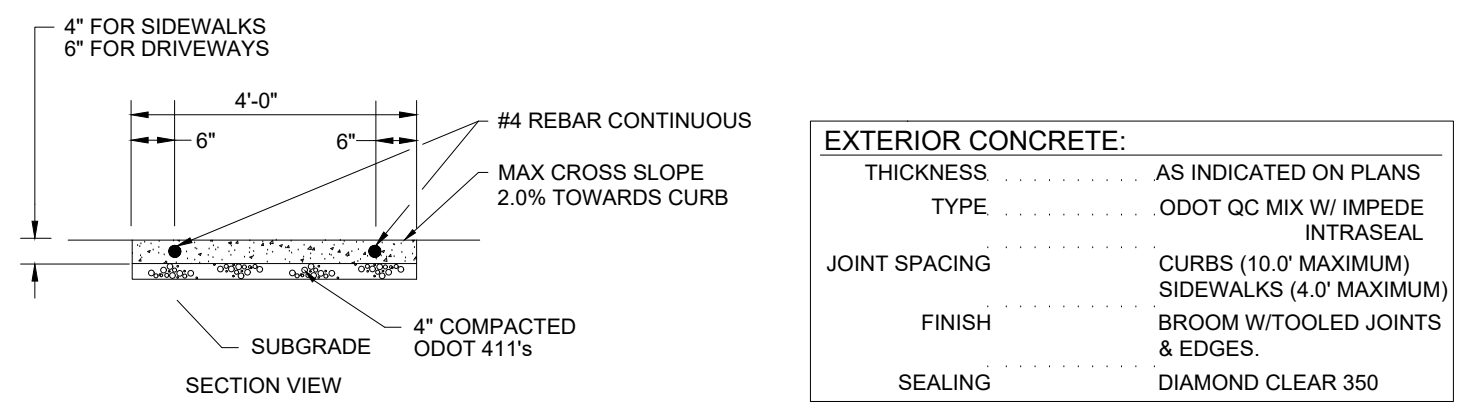
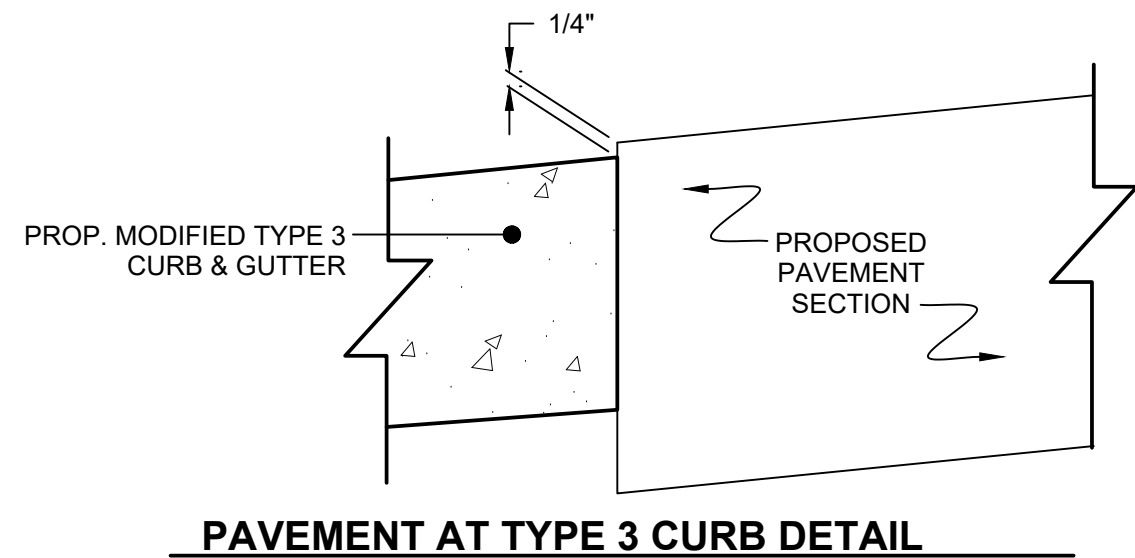
REVIEWED BY:  
DESIGNED BY: RDL 8/3/26  
JOB NUMBER: 26-084

ISSUED FOR BIDS 8-3-26

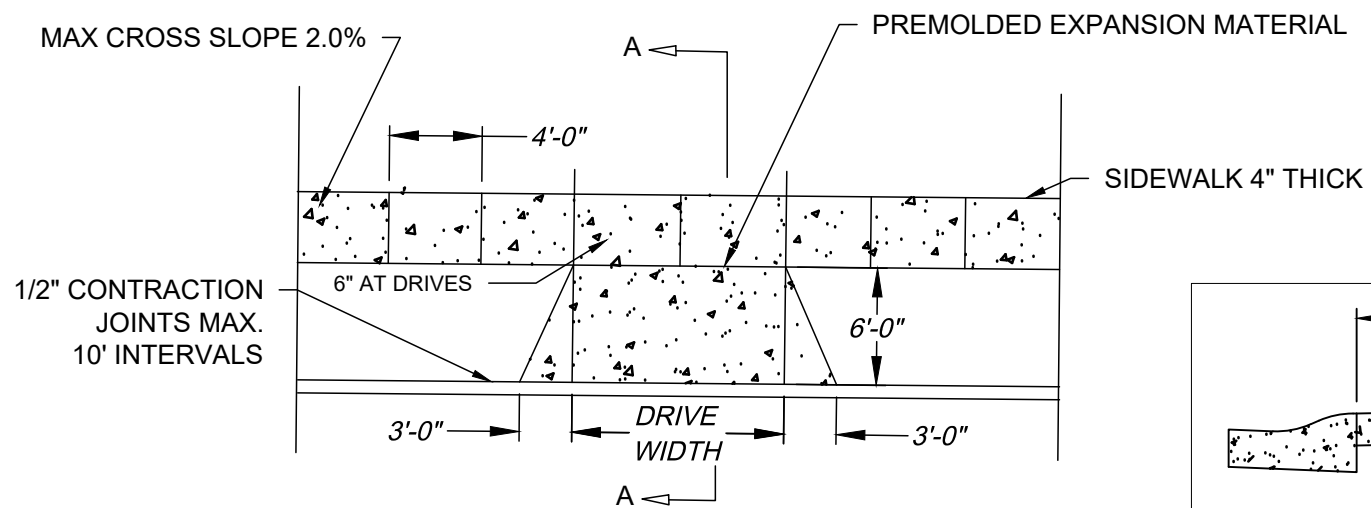
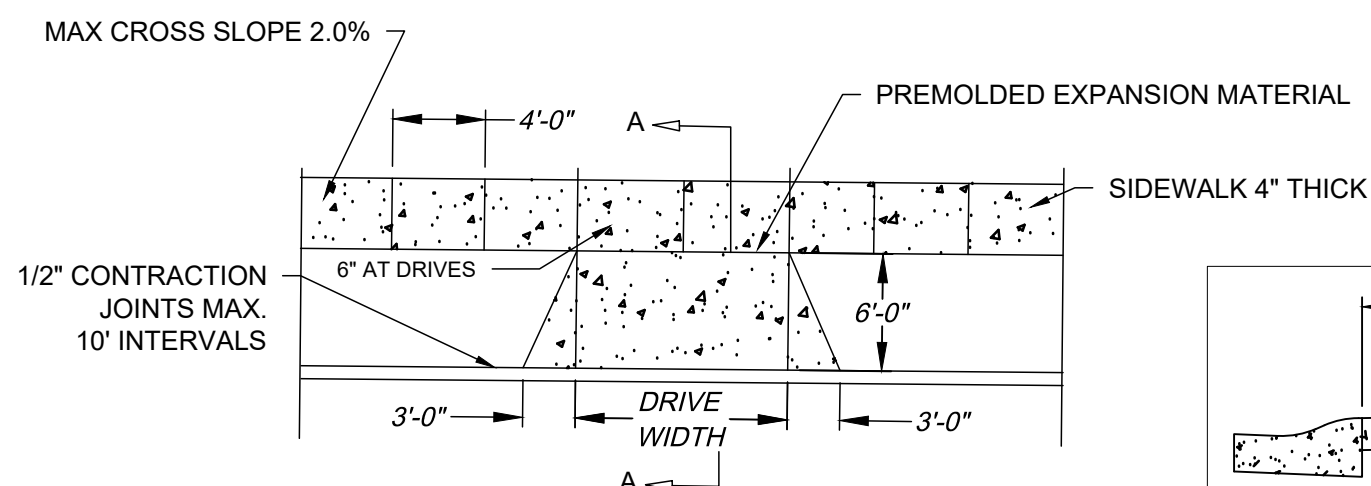
C301



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.

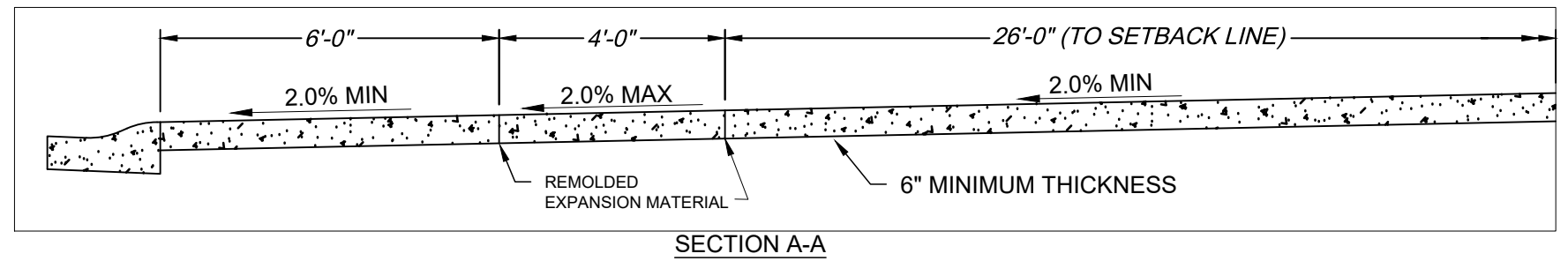
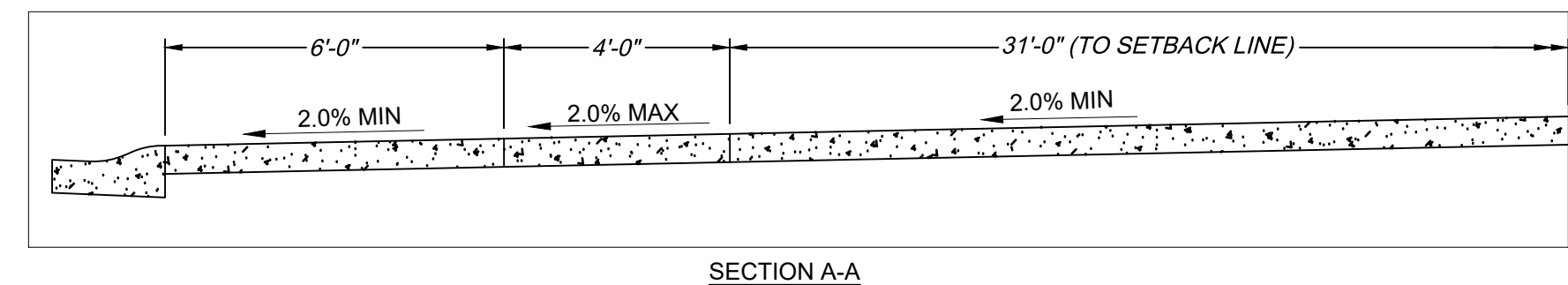


- NOTES
- CONCRETE AND WORK SHALL MEET THE REQUIREMENTS SET FORTH IN ODOT ITEM 609 CURBING.
  - CURBING SHALL HAVE CONTRACTION JOINTS EVERY 10'. ALL JOINTS SHALL BE SAWCUT.
  - MINIMUM OF 6" ODOT 304 SHALL BE PLACED UNDER CURBING.
  - CURBING SHALL BE BACKFILLED IMMEDIATELY AFTER FORMS ARE REMOVED OR 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



ISSUED FOR BIDS 8-3-26

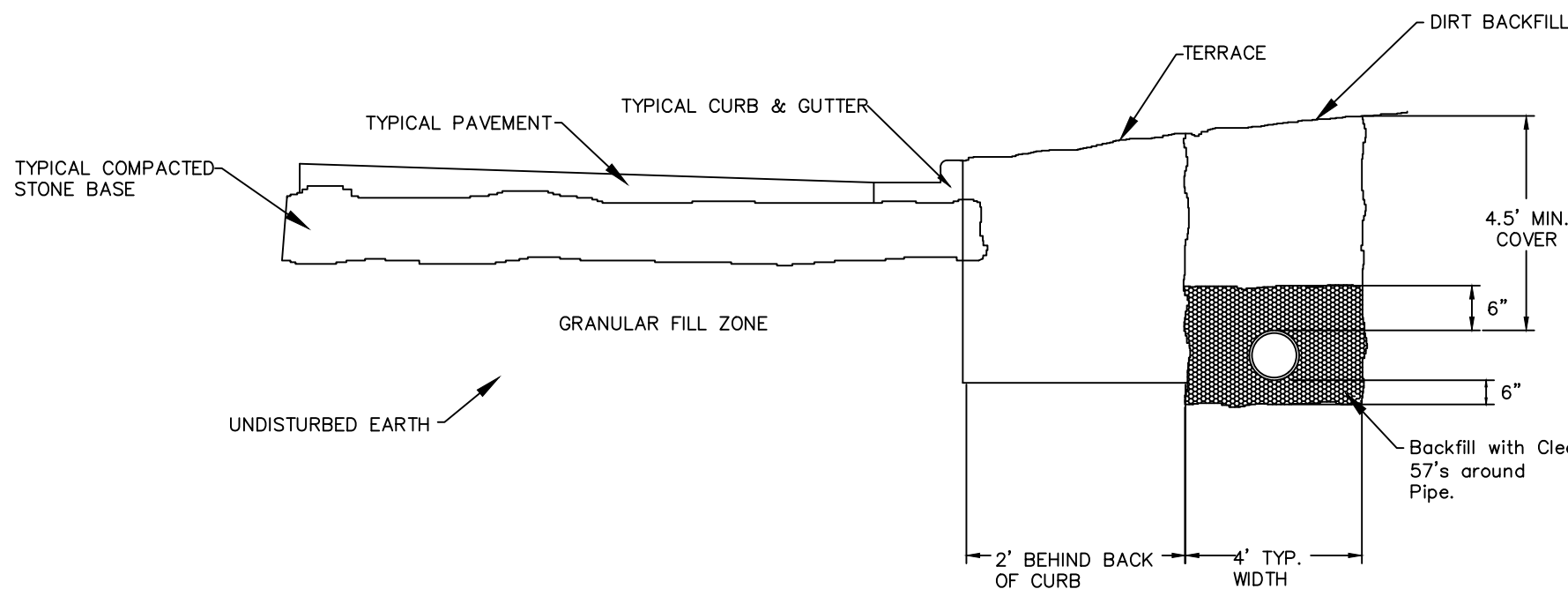
**Bockrath & Associates**  
Engineering and Surveying, LLC  
115 South Fair Avenue, Suite A, Ottawa, OH 45875  
Phone: 419.523.5789

**TYPICAL SECTIONS & DETAILS**

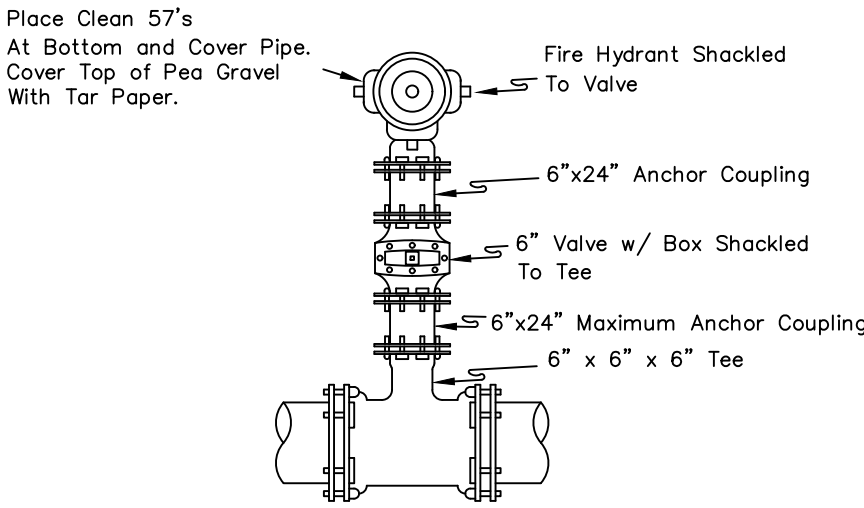
**ANTWERP SQUARE  
PHASE 1  
ANTWERP, OHIO 45813**

REVIEWED BY: RDL 8/3/26  
DESIGNED BY: RDL 26-084  
JOB NUMBER: 26-084

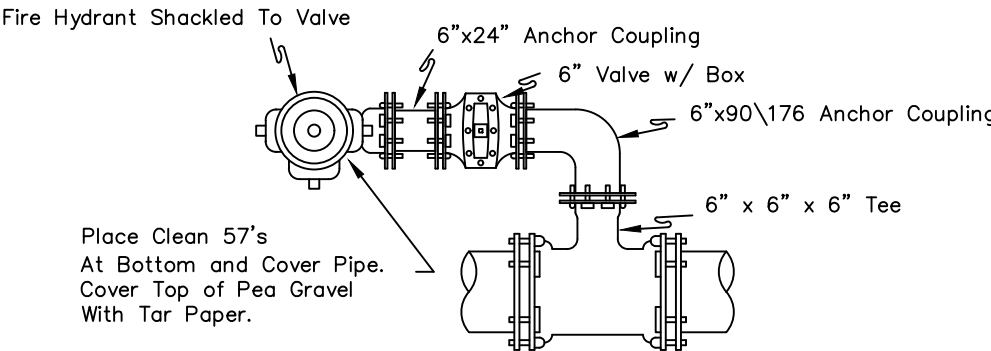
C302



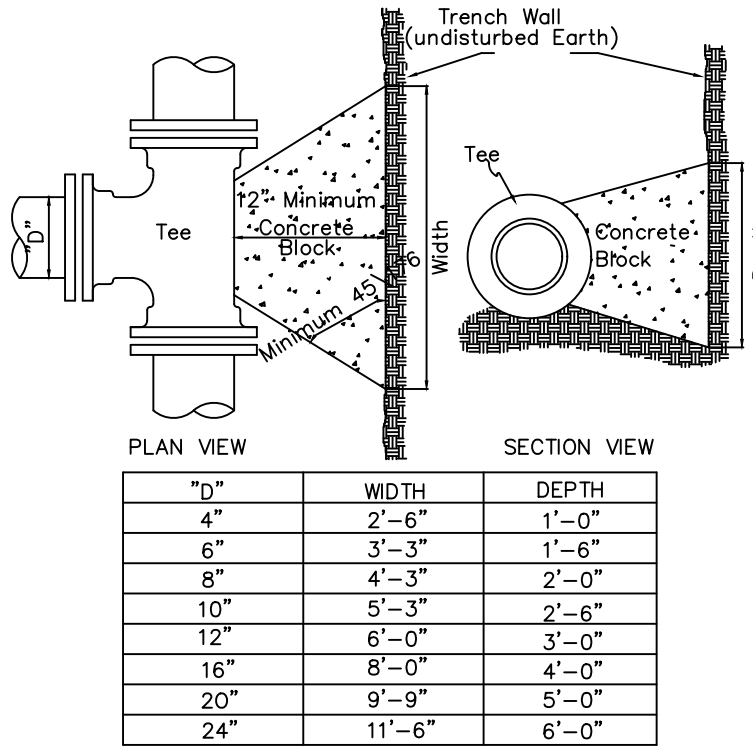
CONSTRUCTION STANDARDS  
TYPICAL BACKFILL DETAIL



CONSTRUCTION STANDARDS  
FIRE HYDRANT ASSEMBLY  
TYPE I  
STANDARD HYDRANT ASSEMBLY

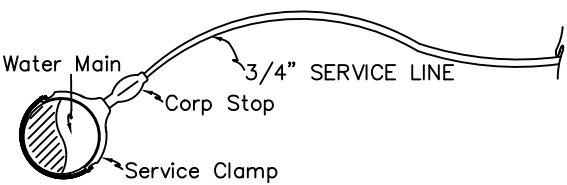


CONSTRUCTION STANDARDS  
FIRE HYDRANT ASSEMBLY  
TYPE II



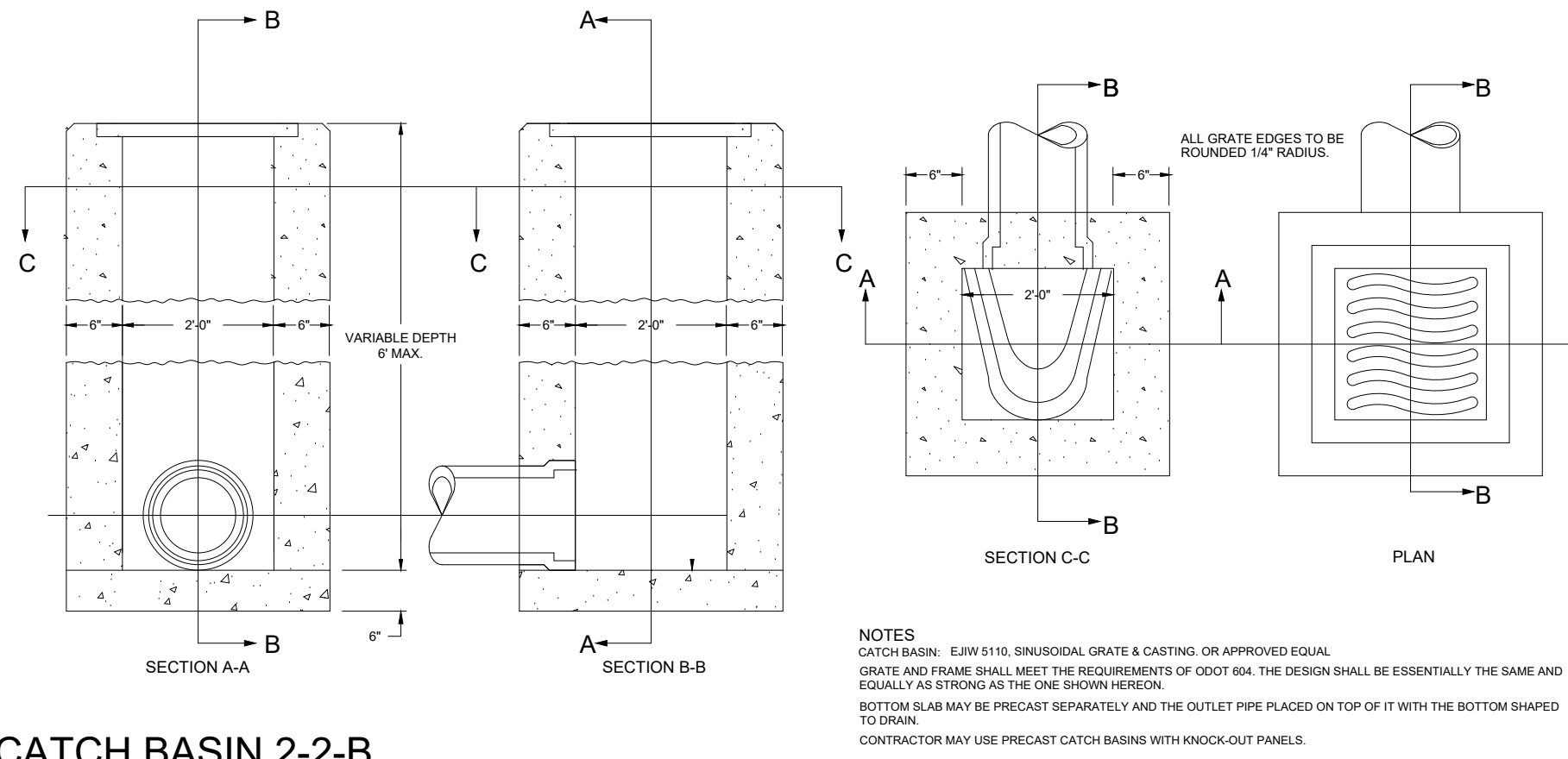
NOTES:  
Concrete shall be kept a sufficient distance from joint for removal of all joints accessories including bolts and shall be of a mix not leaner than one part cement to two and one half parts sand and five parts stone and having a compressive strenght of not less than 2000 psi after 28 days.

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°/176 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



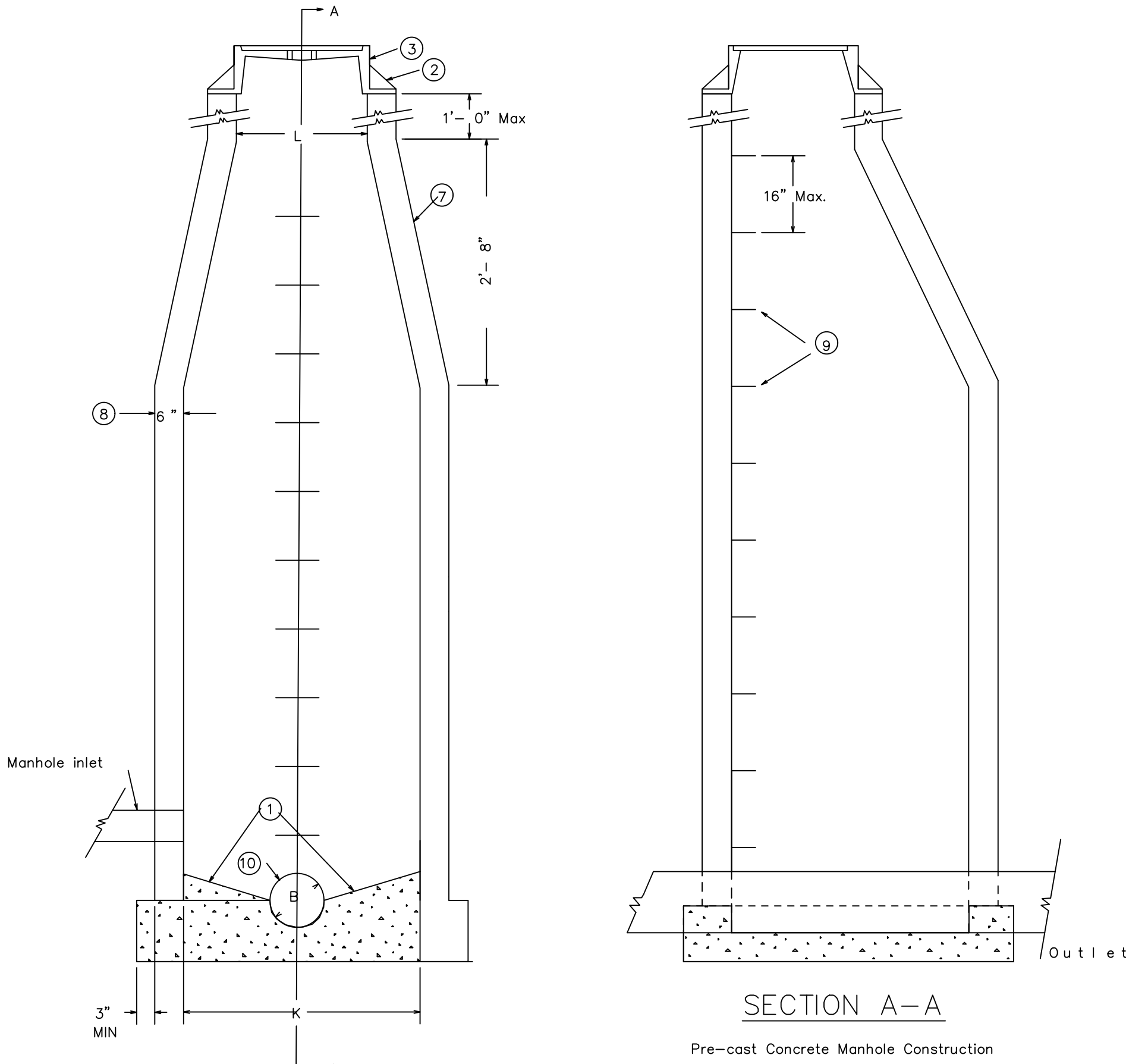
CATCH BASIN 2-2-B

#### SANITARY SEWER

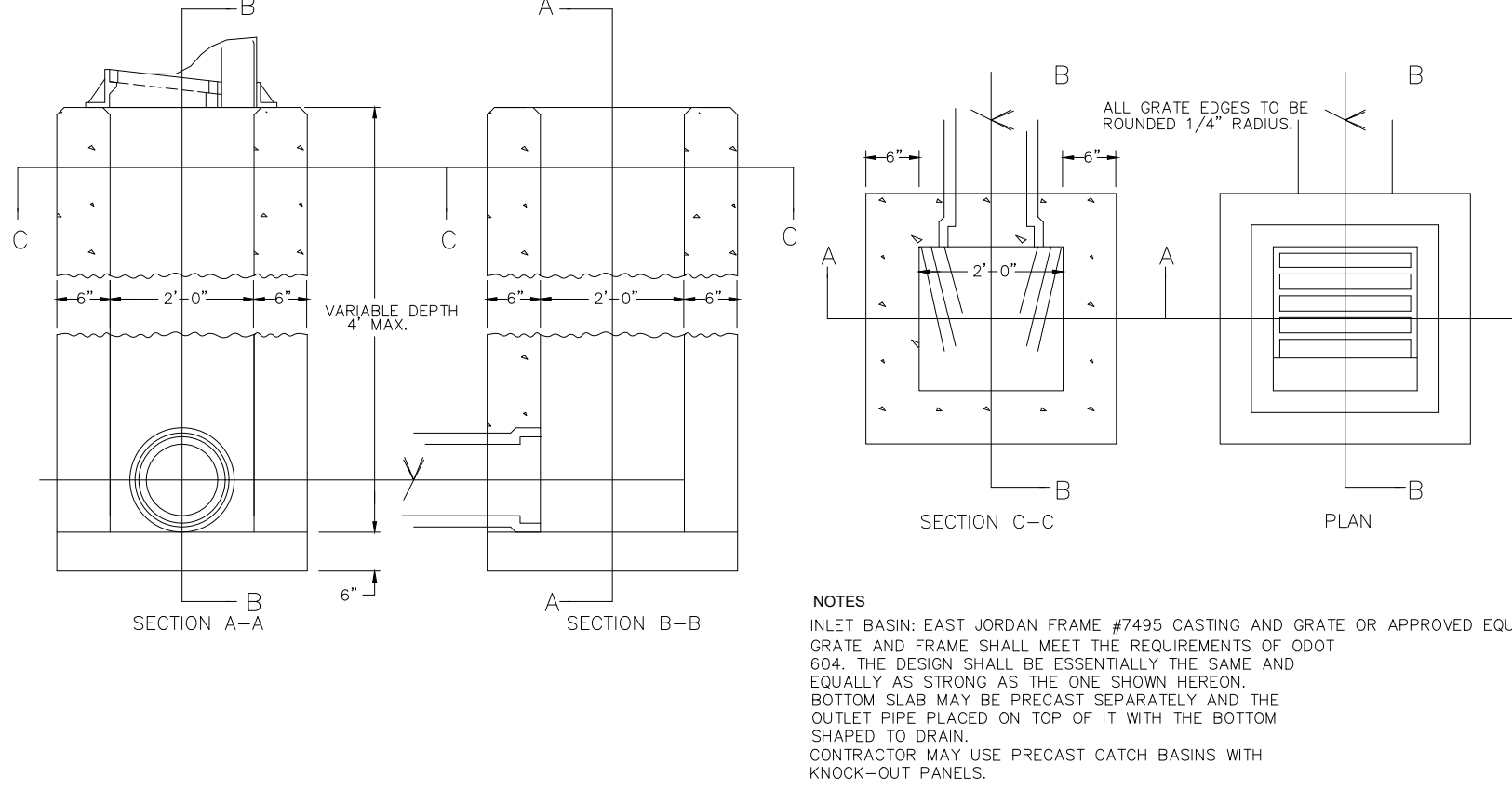
**SANITARY SEWER PIPE**  
The following materials will be permitted for sanitary sewer pipe:  
PVC conforming to ASTM D-3034, SDR-35 with joints conforming to ASTM D-3212

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

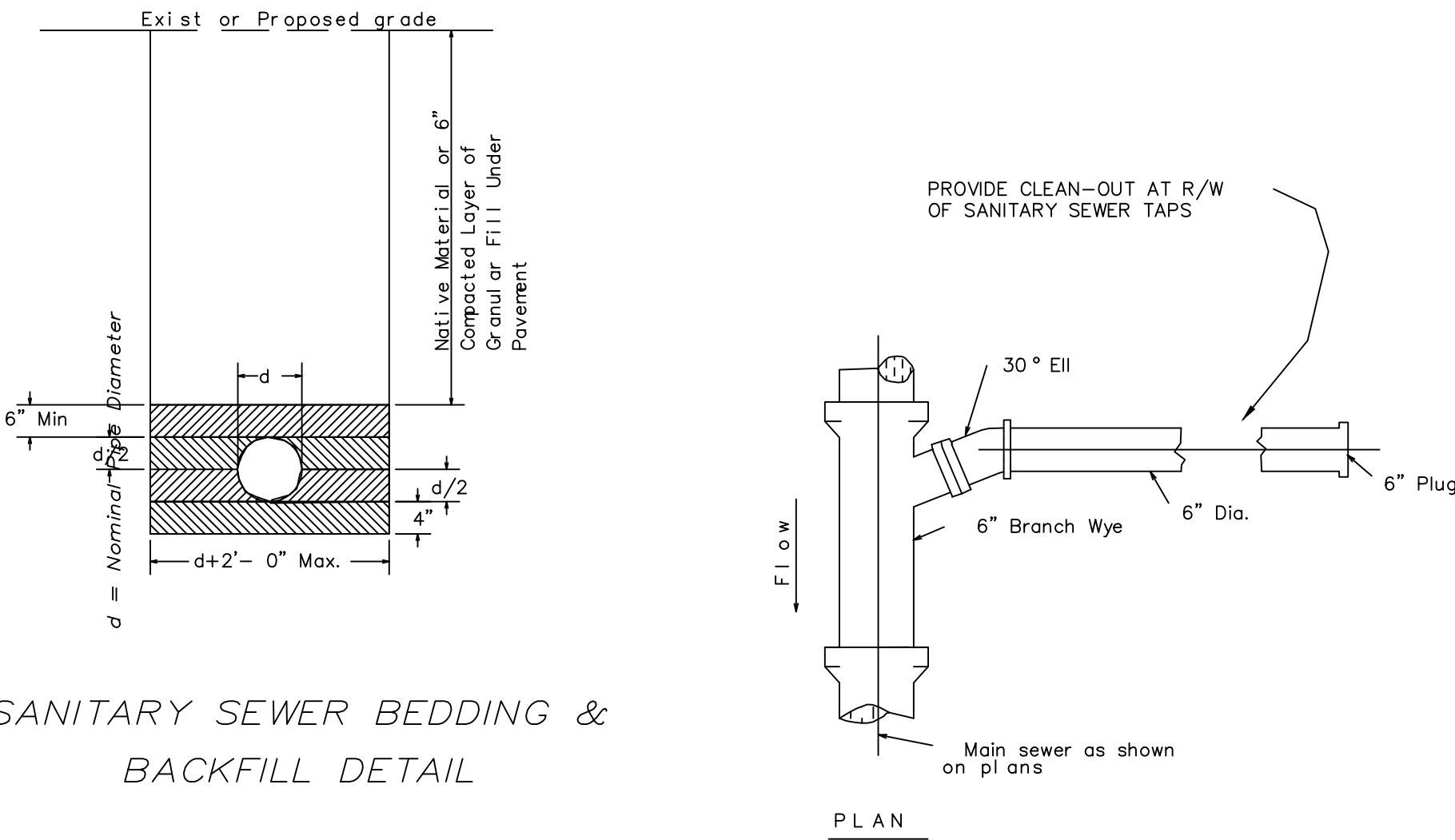
## MANHOLE DETAIL



1. Alternate methods of construction.
2. Precast adjusting rings to set frame and cover at finish grade. Adjust 1'-0" maximum.
3. Standard manhole castings - Neenah R-1782, without perforation. Lid shall be marked "SANITARY".
4. Minimum of 5" concrete encasement.
7. Height = 2'-8" for 4' diameter manhole.
8. Precast manhole sections shall be A.S.T.M. C-478 with O-ring joints conforming to A.S.T.M. C-443.
9. Steps shall be Neenah R-1980-C or equal.
10. Rubber water tight boot to be cast into manhole by manufacturer.

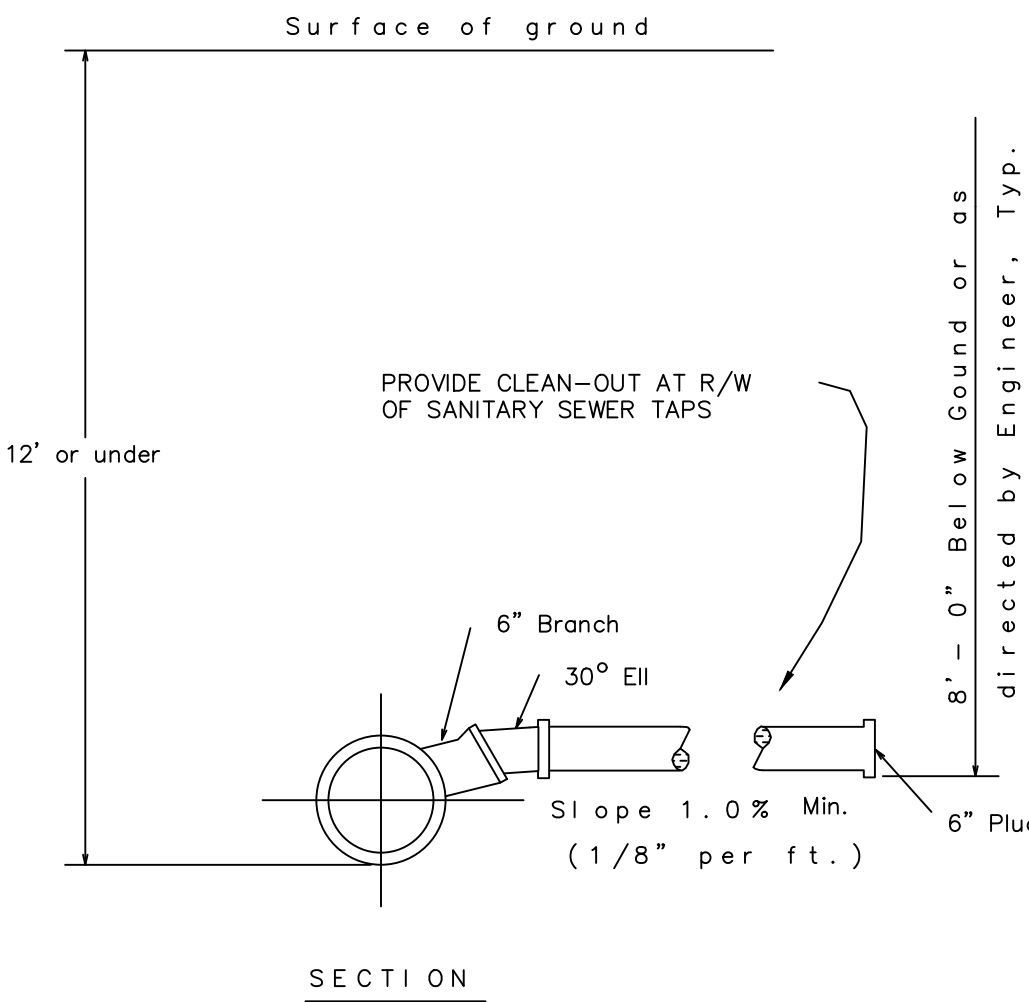


CATCH BASIN 2-2B DETAIL



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.



TYPE-1 HOUSE CONNECTION

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

ISSUED FOR BIDS 8-3-26

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

**GENERAL DETAILS**  
**ANTWERP SQUARE**  
**PHASE 1**  
**ANTWERP, OHIO 45813**

REVIEWED BY:  
DESIGNED BY: RDL 8/3/26  
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C303