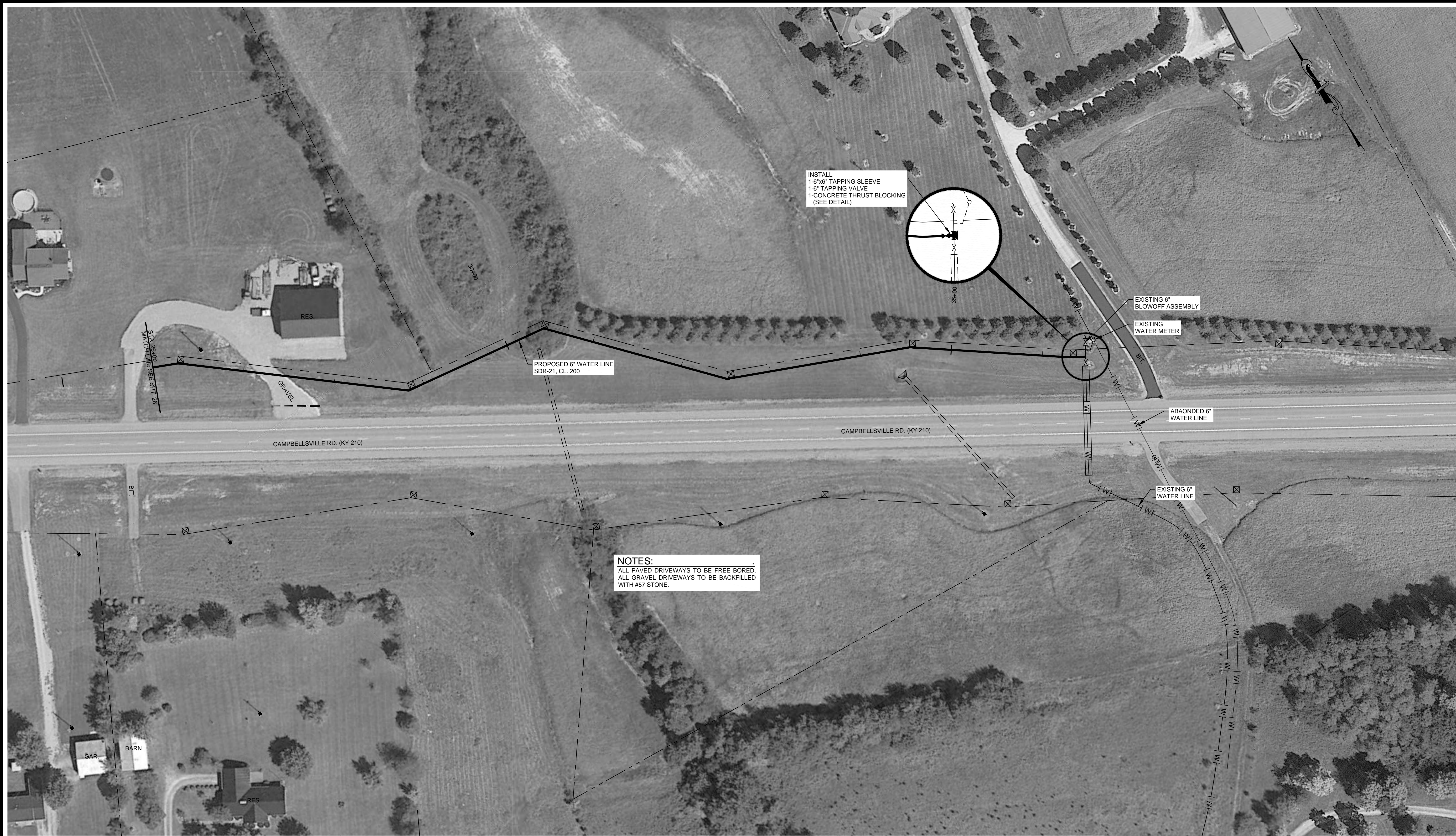


U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\AIRLINE ROAD.dwg, SHT 27, 3/26/2020 11:23:09 AM, 1:1



INSTALL
 1-6"x6" TAPPING SLEEVE
 1-6" TAPPING VALVE
 1-CONCRETE THRUST BLOCKING
 (SEE DETAIL)

EXISTING 6"
 BLOWOFF ASSEMBLY
 EXISTING
 WATER METER

PROPOSED 6" WATER LINE
 SDR-21, CL. 200

ABANDONED 6"
 WATER LINE

CAMPBELLVILLE RD. (KY 210)

CAMPBELLVILLE RD. (KY 210)

EXISTING 6"
 WATER LINE

NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED
 WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS

CT **CANN-TECH, LLC**
 Engineers · Planners · Managers

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Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

CAMPBELLVILLE ROAD (KY 210)
 STATION 26+00 TO STATION 36+48

SHEET
 27
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\FLATS ROAD.dwg, SHT 28, 3/26/2020 11:31:51 AM, 1:1



35 L.F. OF 8" ROAD BORE
35 L.F. OF 8" STEEL CASING PIPE

EXISTING 6" WATER LINE

PROPOSED 4" WATER LINE
SDR-17, CL. 250

INSTALL
1-6"x4" TAPPING SLEEVE
1-4" TAPPING VALVE
1-CONCRETE THRUST BLOCKING
(SEE DETAIL)

NOTES:
ALL PAVED DRIVEWAYS TO BE FREE BORED.
ALL GRAVEL DRIVEWAYS TO BE BACKFILLED
WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
SCALE: 1" = 50'

DESIGNED BY: MAB
DRAWN BY: JH
CHECKED BY: MAB
RECORD DRAWINGS

CT **CANN-TECH, LLC**
Engineers · Planners · Managers

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Lawrenceburg, KY 40342**

**Phone (502) 859-0907
Fax (502) 859-0668**

**LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY**

FLATS ROAD
STATION 0+00 TO STATION 13+00

SHEET
28
OF
44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\FLATS ROAD.dwg, SHT 29, 3/26/2020 11:31:32 AM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

PROPOSED 4" WATER LINE
 SDR-17, CL. 250

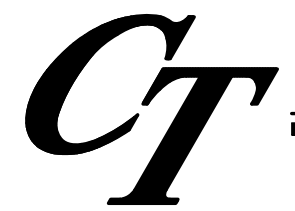
PROPOSED 4" GATE VALVE

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB

RECORD DRAWINGS



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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

FLATS ROAD
 STATION 13+00 TO STATION 26+00

SHEET
29
OF
44

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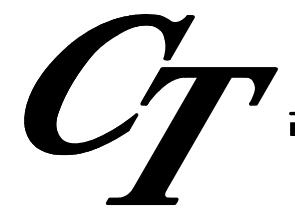
NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

PROPOSED 4" WATER LINE
 SDR-17, CL. 250

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



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**LCWD 2020 WATER IMPROVEMENTS
 LARUE COUNTY WATER DISTRICT
 LARUE COUNTY, KENTUCKY**

FLATS ROAD
 STATION 26+00 TO STATION 39+00

SHEET
 30
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\FLATS ROAD.dwg, SHT 31, 3/26/2020 11:30:53 AM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

PROPOSED 4" WATER LINE
 SDR-17, CL. 250

CONNECT TO EXISTING
 4" BLOWOFF ASSEMBLY

PROPOSED 4" BLOWOFF ASSEMBLY

EXISTING 4" BLOWOFF ASSEMBLY

EXISTING 4" WATER LINE

STA 39+00
 MATCH LINE SEE SHT. 30

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS

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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

FLATS ROAD
 STATION 39+00 TO STATION 52+24

SHEET
 31
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Patton Road.dwg, SHT 32, 3/26/2020 11:34:09 AM, 1:1

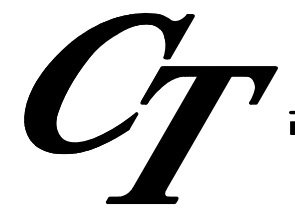


NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY:	MAB
DRAWN BY:	JH
CHECKED BY:	MAB
RECORD DRAWINGS	



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 Lawrenceburg, KY 40342

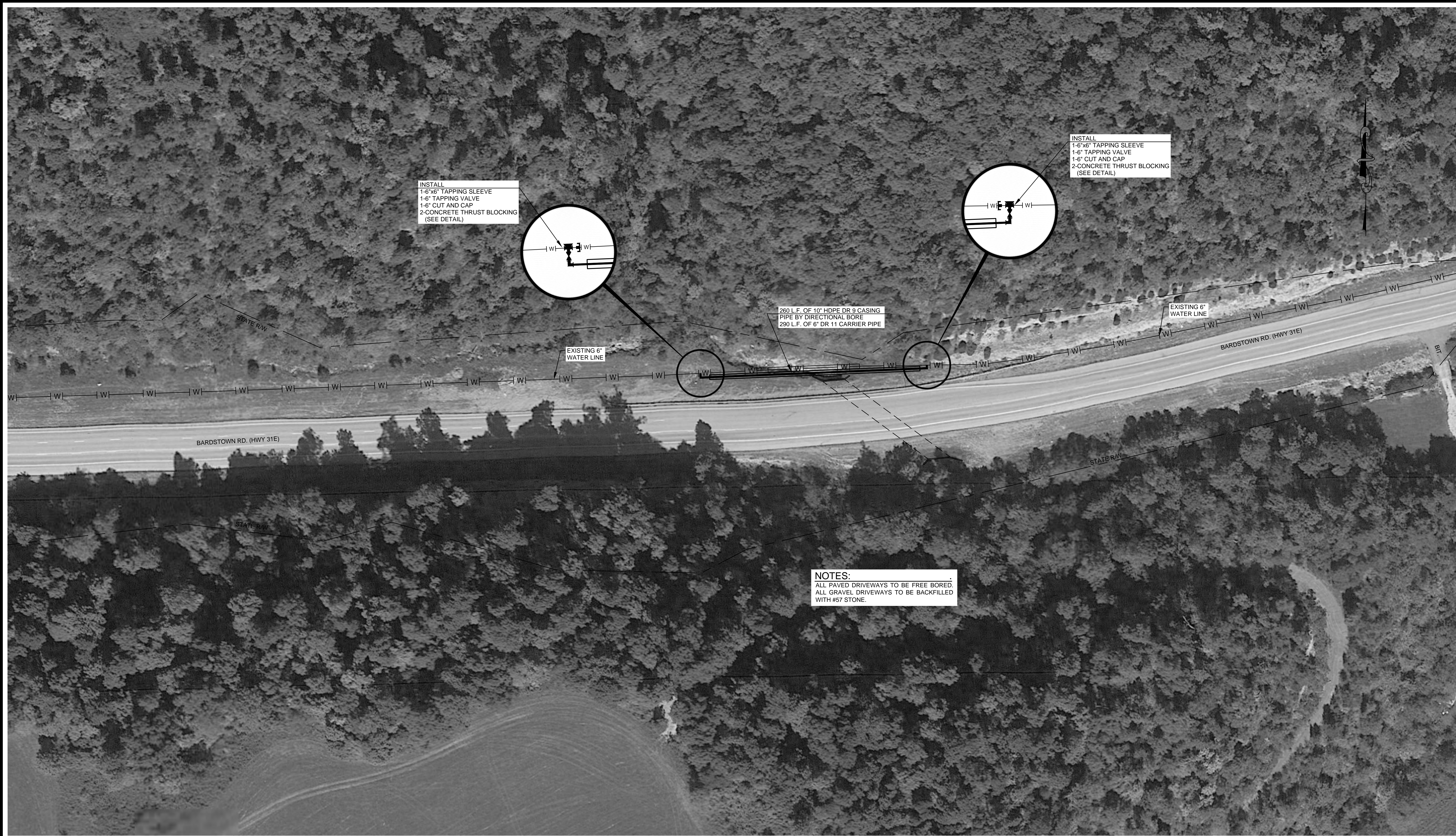
Phone (502) 859-0907
 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

PATTON ROAD
 STATION 0+00 TO STATION 1+20

SHEET
 32
 OF
 44

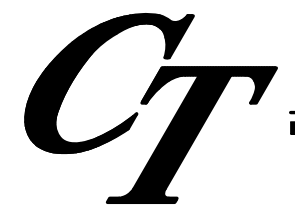
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NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'
 DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

BARDSTOWN ROAD (HWY 31E)
 STATION 0+00 TO STATION 2+90

SHEET
 33
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Avery Lane.dwg, SHT 34, 3/26/2020 11:39:01 AM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.
 CONTRACTOR SHALL RECONNECT EXISTING WATER METERS.

INSTALL
 1-6"x3" TAPPING SLEEVE
 1-3" TAPPING VALVE
 1-CONCRETE THRUST BLOCKING
 (SEE DETAIL)

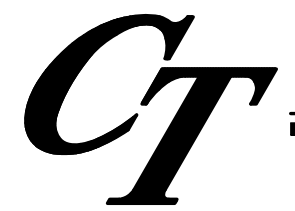
35 L.F. OF 8" ROAD BORE
 35 L.F. OF 8" STEEL CASING PIPE

PROPOSED 3" WATER LINE
 SDR-21, CL. 200

PROPOSED 3" BLOWOFF ASSEMBLY

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	1" = 50'	DESIGNED BY:	MAB
DRAWN BY:	JH	CHECKED BY:	MAB
RECORD DRAWINGS			


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 Lawrenceburg, KY 40342
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 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY
 AVERY LANE
 STATION 0+00 TO STATION 8+60

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\COX LANE.dwg, SHT 35, 3/26/2020 11:43:01 AM, 1:1



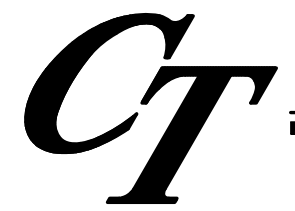
NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED
 WITH #57 STONE.

INSTALL
 1-6"x4" TAPPING SLEEVE
 1-4" TAPPING VALVE
 1-CONCRETE THRUST BLOCKING
 (SEE DETAIL)

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

COX ROAD
 STATION 0+00 TO STATION 13+00

SHEET
 35
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\COX LANE.dwg, SHT 36, 3/26/2020 11:42:30 AM, 1:1

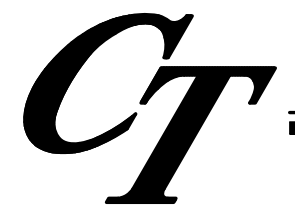


NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

COX ROAD
 STATION 13+00 TO STATION 22+80

SHEET
 36
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Robinson Lane.dwg, SHT 37, 3/26/2020 12:01:26 PM, 1:1



INSTALL
 1-6" x 4" x 6" M.J. TEE
 2-6" GATE VALVES
 1-4" GATE VALVE
 1-CONCRETE THRUST BLOCKING
 (SEE DETAIL)

EXISTING 6" WATER LINE

30 L.F. OF 8" ROAD BORE
 30 L.F. OF 8" STEEL CASING PIPE

PROPOSED 4" WATER LINE
 SDR-21, CL. 200

NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'
 DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS

CT **CANN-TECH, LLC**
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 1100 Glensboro Road Phone (502) 859-0907
 Lawrenceburg, KY 40342 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY
 ROBINSON LANE
 STATION 0+00 TO STATION 13+00

SHEET 37 OF 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Robinson Lane.dwg, SHT 38, 3/26/2020 12:00:27 PM, 1:1

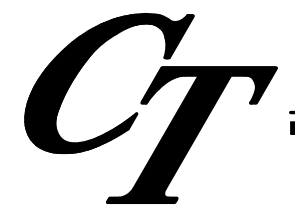


NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY:	MAB
DRAWN BY:	JH
CHECKED BY:	MAB
RECORD DRAWINGS	


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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY
 ROBINSON LANE
 STATION 13+00 TO STATION 21+90

SHEET
 38
 OF
 44

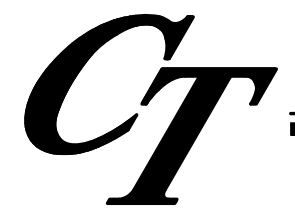
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NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

CHESTNUT FORK
 STATION 0+00 TO STATION 12+00

SHEET
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OF
44

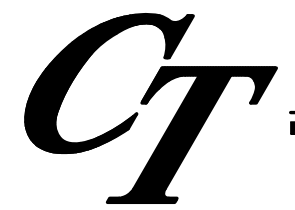
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NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	1" = 50'		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			


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 Lawrenceburg, KY 40342
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 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

CHESTNUT FORK
 STATION 12+00 TO STATION 25+00

SHEET
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 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Robinson Lane.dwg, SHT 41, 3/26/2020 11:58:43 AM, 1:1




NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB

RECORD DRAWINGS


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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

CHESTNUT FORK
 STATION 25+00 TO STATION 31+20

SHEET
 41
 OF
 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Robinson Lane.dwg, SHT 42, 3/26/2020 11:58:05 AM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB

RECORD DRAWINGS

CT **CANN-TECH, LLC**
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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

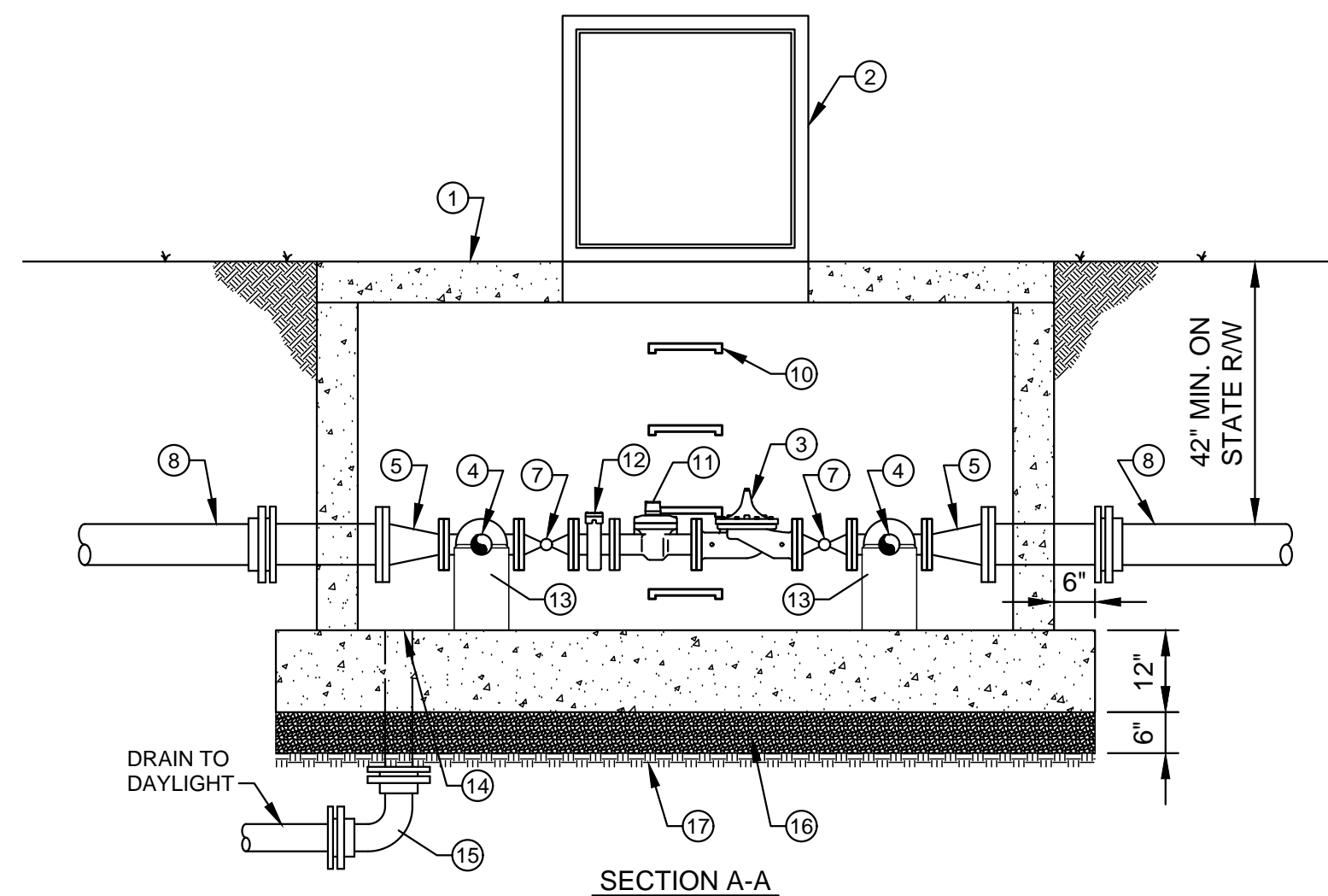
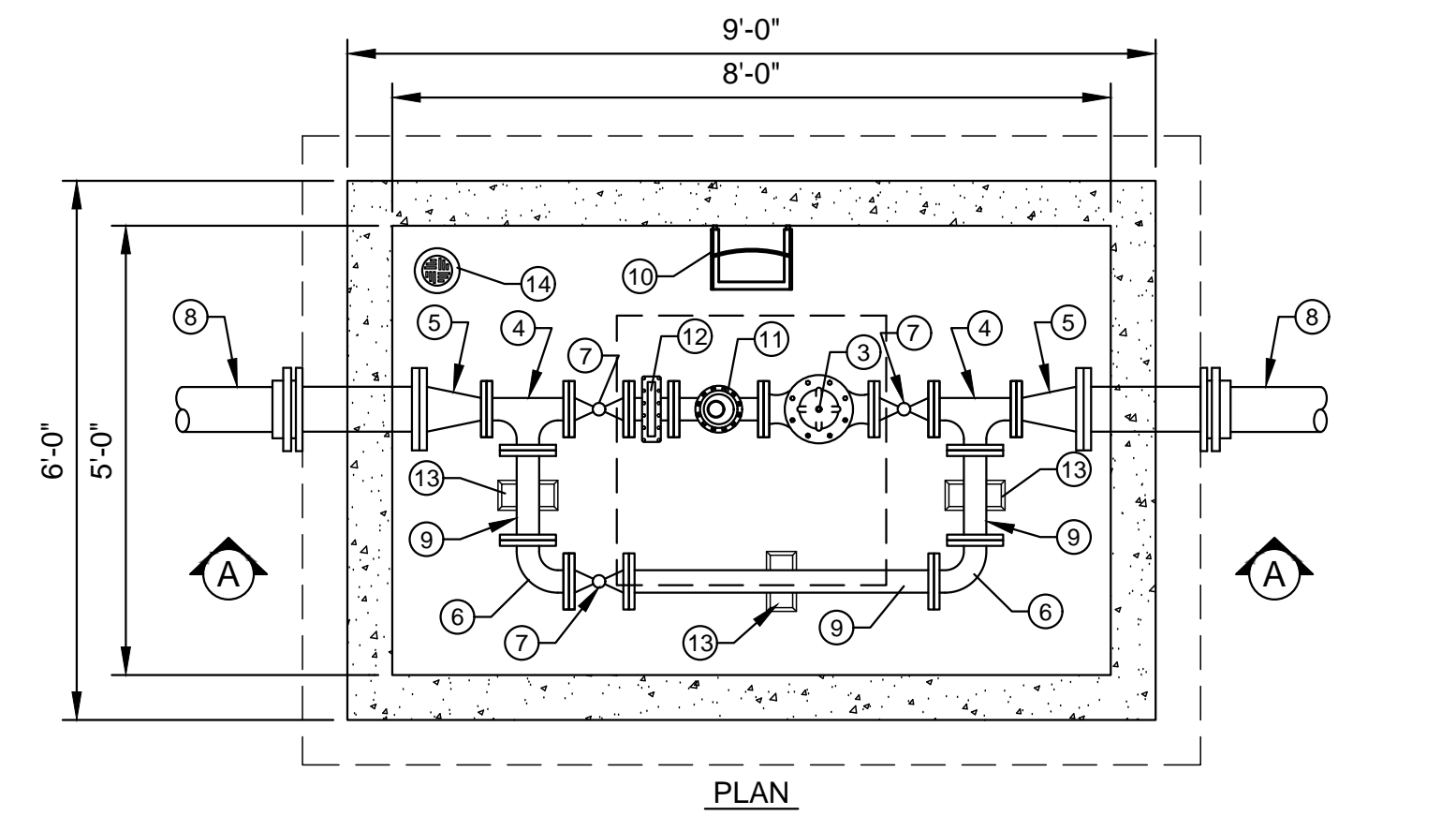
CATLETT ROAD
 STATION 0+00 TO STATION 4+20

SHEET
42
OF
44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\AIRLINE ROAD.dwg, SHT 43, 3/26/2020 11:22:04 AM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.



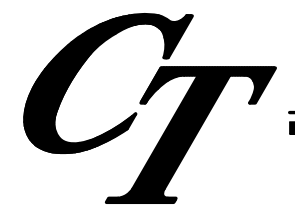
CHECK VALVE AND VAULT DETAIL
 SCALE: N.T.S.

- LEGEND**
- ① PRECAST CONCRETE VALVE VAULT
 - ② 36"x36" ALUMINUM ACCESS HATCH
 - ③ 3" CLA-VAL PRESSURE REDUCING VALVE
 - ④ 6"x3" FL. REDUCER
 - ⑤ 3"x3"x3" FL. TEE
 - ⑥ 3" 90° FL. BEND
 - ⑦ 3" GATE VALVE
 - ⑧ 6" WATER MAIN
 - ⑨ 3" SPOOL PIECE
 - ⑩ MANHOLE STEP
 - ⑪ 3" BADGER MASTER METER
 - ⑫ 3" BADGER STRAINER
 - ⑬ CONCRETE SUPPORT BLOCK
 - ⑭ 4" FLOOR DRAIN
 - ⑮ 4" M.J. 90° BEND
 - ⑯ COMPACTED #57 D.G.A
 - ⑰ UNDISTURBED EARTH

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



CANN-TECH, LLC
 Engineers · Planners · Managers

1100 Glensboro Road
 Lawrenceburg, KY 40342

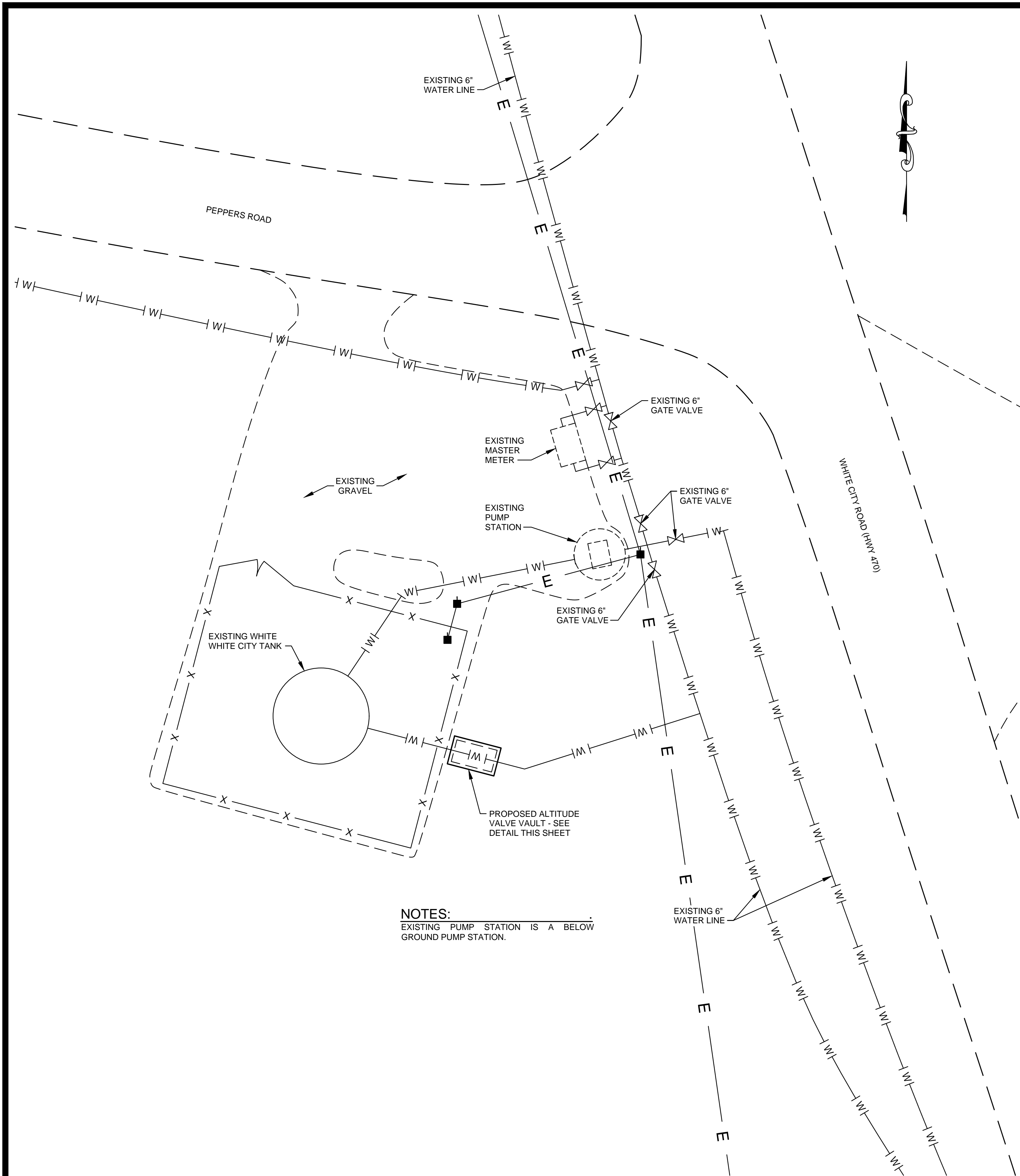
Phone (502) 859-0907
 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

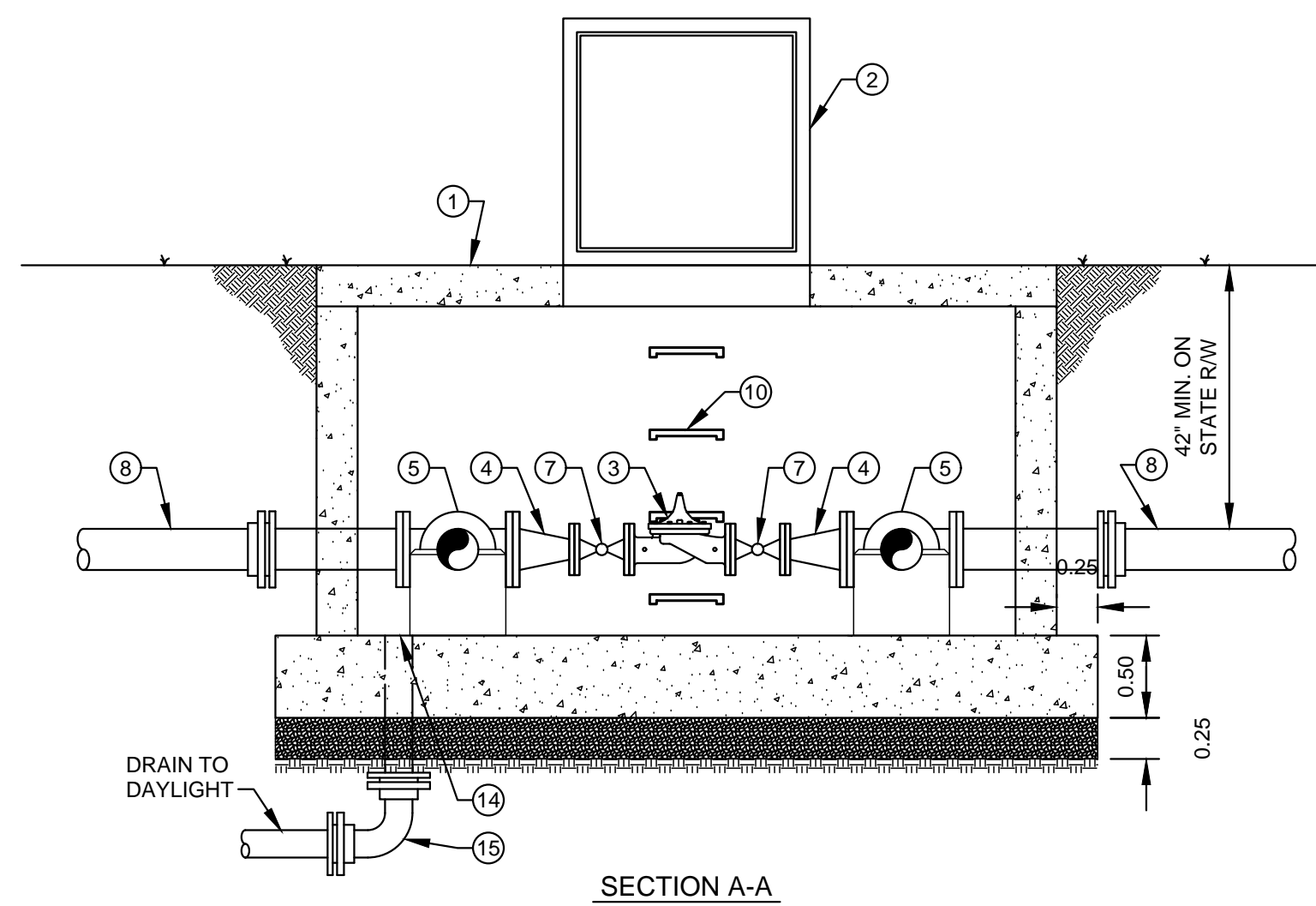
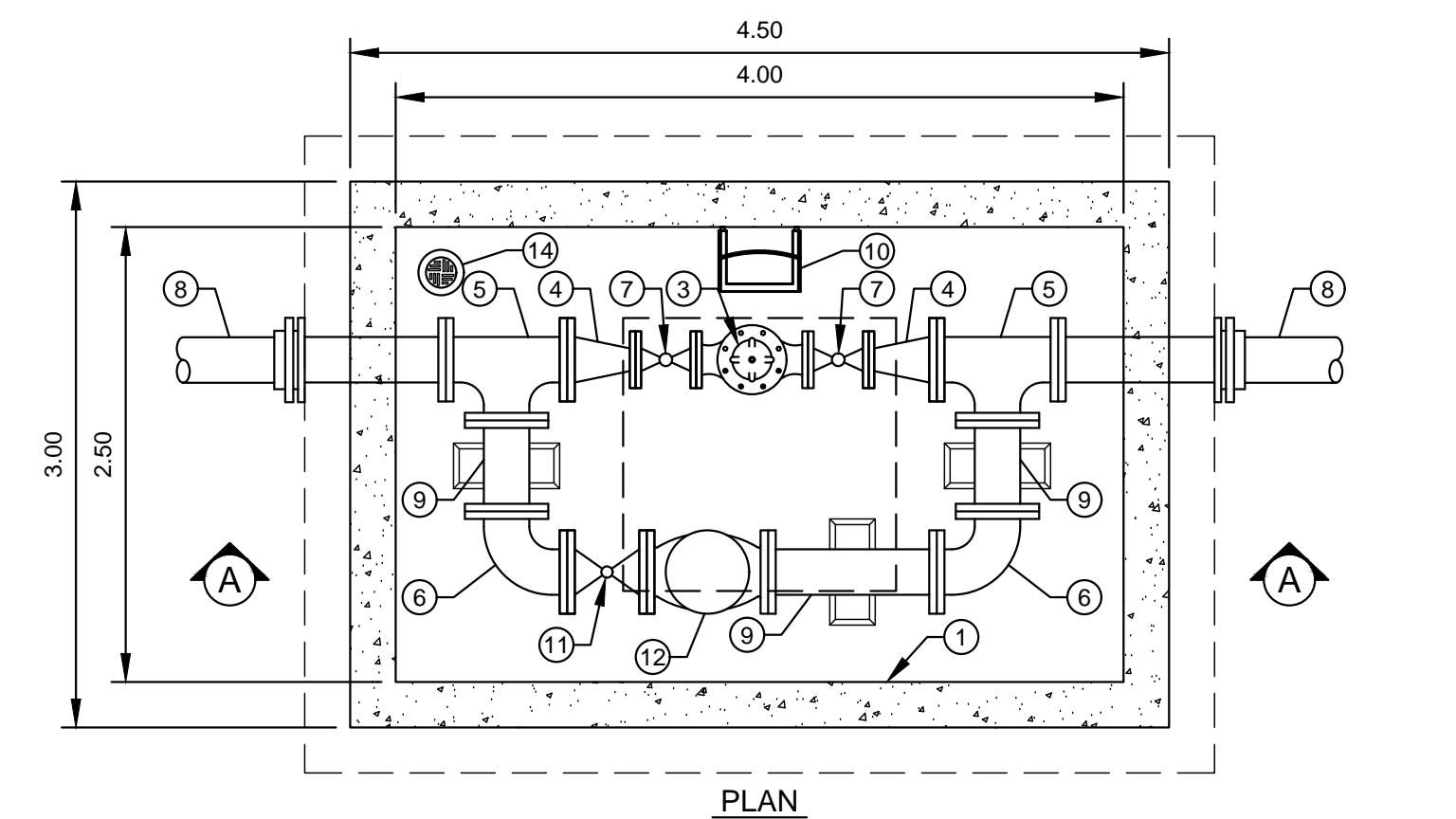
NORTH L & N TURNPIKE RD. (HWY 470)
 CHECK VALVE AND VAULT

SHEET 43
 OF 44

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\White City Tank.dwg, Layout1, 3/26/2020 12:05:43 PM, 1:1



NOTES:
EXISTING PUMP STATION IS A BELOW GROUND PUMP STATION.



ALTITUDE VALVE AND VAULT DETAIL
SCALE: N.T.S.

- LEGEND**
- ① PRECAST CONCRETE VALVE VAULT
 - ② 36"x36" ALUMINUM ACCESS HATCH
 - ③ 3" CLA-VAL ALTITUDE VALVE
 - ④ 6"x3" FL. REDUCER
 - ⑤ 6"x6"x6" FL. TEE
 - ⑥ 6" 90° FL. BEND
 - ⑦ 3" GATE VALVE
 - ⑧ 6" WATER MAIN
 - ⑨ 6" SPOOL PIECE
 - ⑩ MANHOLE STEP
 - ⑪ 6" GATE VALVE
 - ⑫ 6" CHECK VALVE
 - ⑬ CONCRETE SUPPORT BLOCK
 - ⑭ 4" FLOOR DRAIN
 - ⑮ 4" M.J. 90° BEND
 - ⑯ COMPACTED #57 D.G. A
 - ⑰ UNDISTURBED EARTH

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	1" = 10'		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			

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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

WHITE CITY TANK PUMP STATION AND
ALTITUDE VALVE AND VAULT

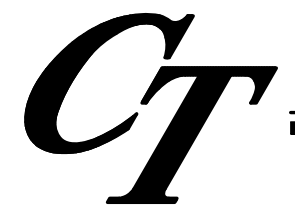
U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Miller Road.dwg, SHT 45, 3/26/2020 12:18:35 PM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'
 DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS


CANN-TECH, LLC
 Engineers · Planners · Managers
 1100 Glensboro Road
 Lawrenceburg, KY 40342
 Phone (502) 859-0907
 Fax (502) 859-0668

LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY
 MILLER ROAD
 STATION 0+00 TO STATION 12+00

SHEET 45 OF 47

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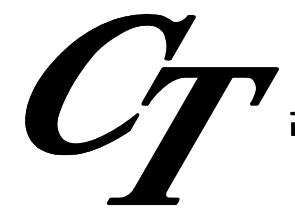


NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED WITH #57 STONE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/12/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS



CANN-TECH, LLC

Engineers · Planners · Managers

**1100 Glensboro Road
Lawrenceburg, KY 40342**

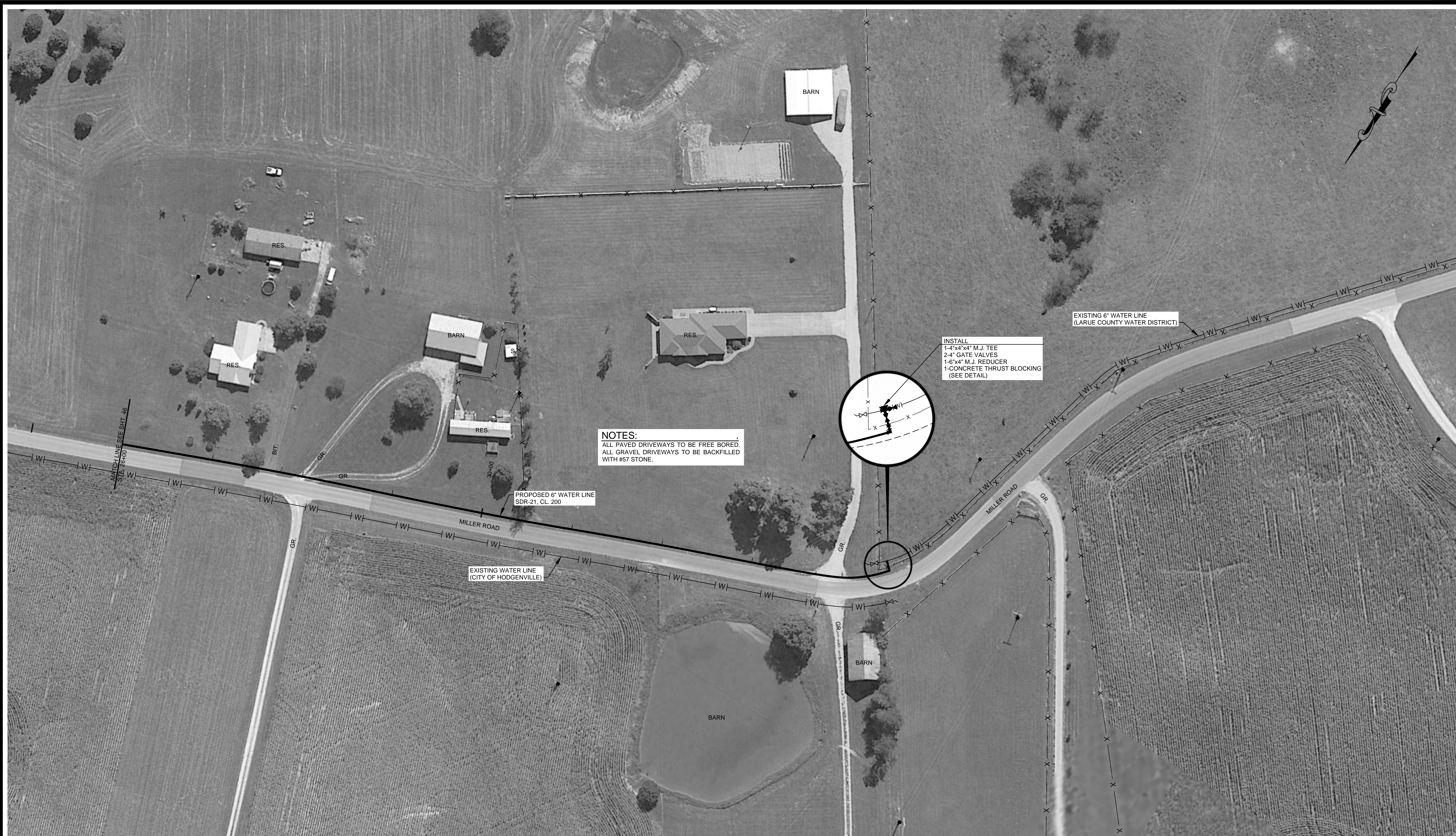
**Phone (502) 859-0907
Fax (502) 859-0668**

**LCWD 2020 WATER IMPROVEMENTS
 LARUE COUNTY WATER DISTRICT
 LARUE COUNTY, KENTUCKY**

MILLER ROAD
 STATION 12+00 TO STATION 26+00

SHEET
46
OF
47

U:\LARUE COUNTY WATER DISTRICT\465-LCWD 2020 Project\Drawings\Contract 1 - Water Lines\Miller Road.dwg, SHT 47, 3/26/2020 12:17:33 PM, 1:1



NOTES:
 ALL PAVED DRIVEWAYS TO BE FREE BORED.
 ALL GRAVEL DRIVEWAYS TO BE BACKFILLED
 WITH #57 STONE.

INSTALL
 1-4"x4"x4" M.J. TEE
 2-4" GATE VALVES
 1-6"x4" M.J. REDUCER
 1-CONCRETE THRUST BLOCKING
 (SEE DETAIL)

PROPOSED 6" WATER LINE
 SDR-21, CL. 200

EXISTING WATER LINE
 (CITY OF HODGENVILLE)

EXISTING 6" WATER LINE
 (LARUE COUNTY WATER DISTRICT)

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT: 467 DATE: 3/26/2020
 SCALE: 1" = 50'

DESIGNED BY: MAB
 DRAWN BY: JH
 CHECKED BY: MAB
 RECORD DRAWINGS

CT **CANN-TECH, LLC**
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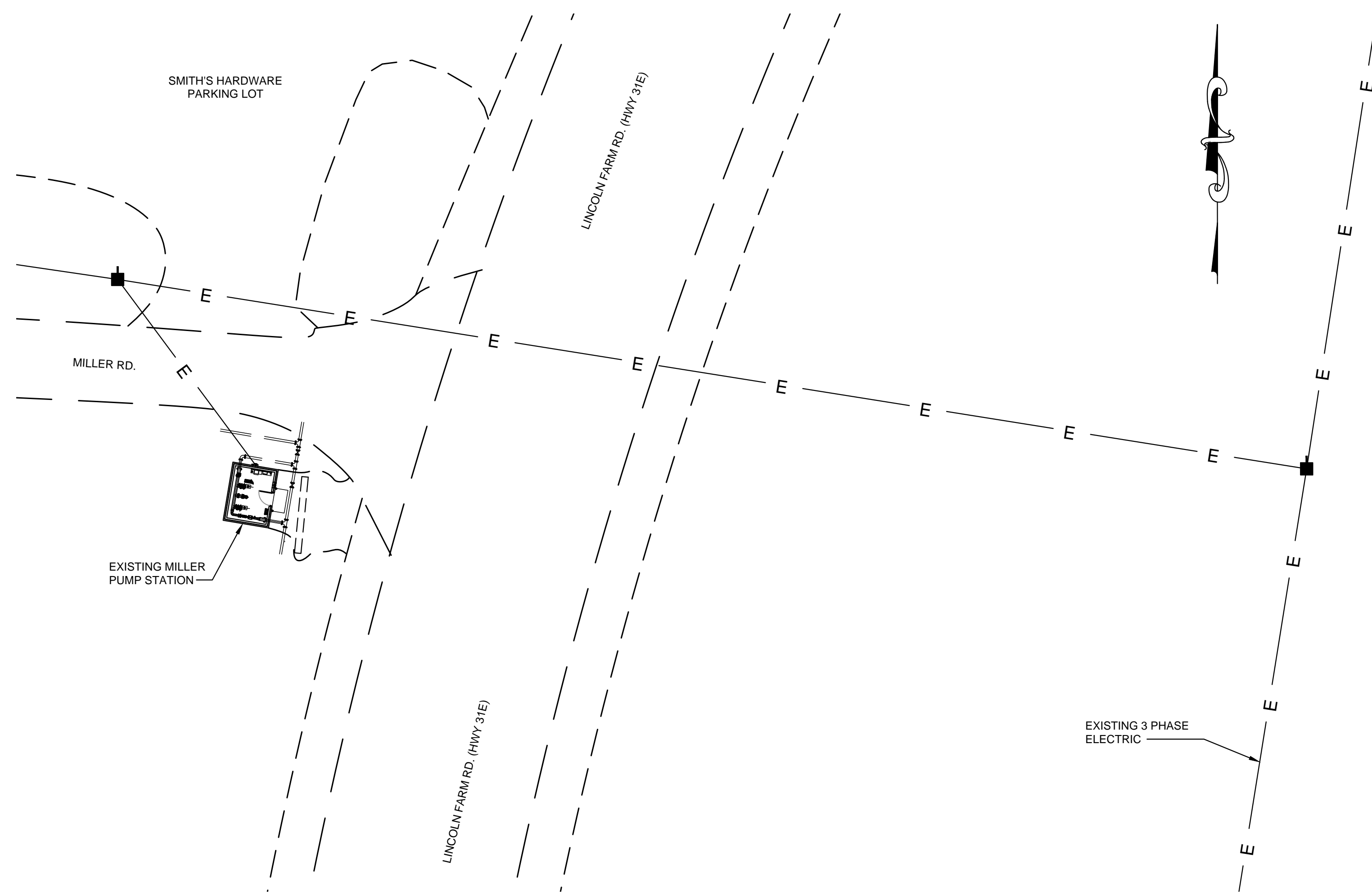
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Fax (502) 859-0668

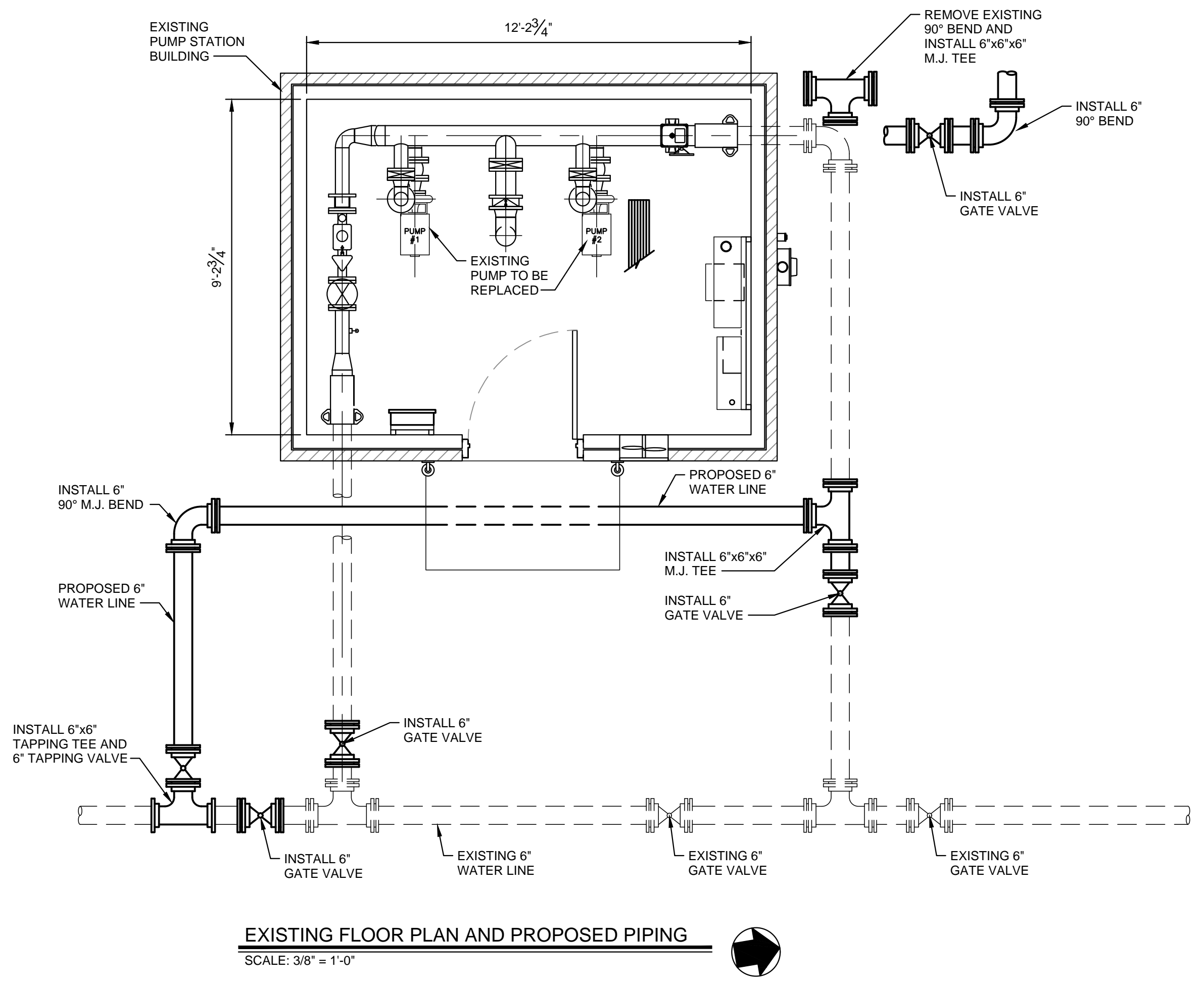
LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

MILLER ROAD
 STATION 26+00 TO STATION 34+65

SHEET
 47
 OF
 47



EXISTING MILLER PUMP STATION SITE
SCALE: 1" = 20'



EXISTING FLOOR PLAN AND PROPOSED PIPING
SCALE: 3/8" = 1'-0"

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	1/9/2020
SCALE:	AS NOTED		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			

CT **CANN-TECH, LLC**
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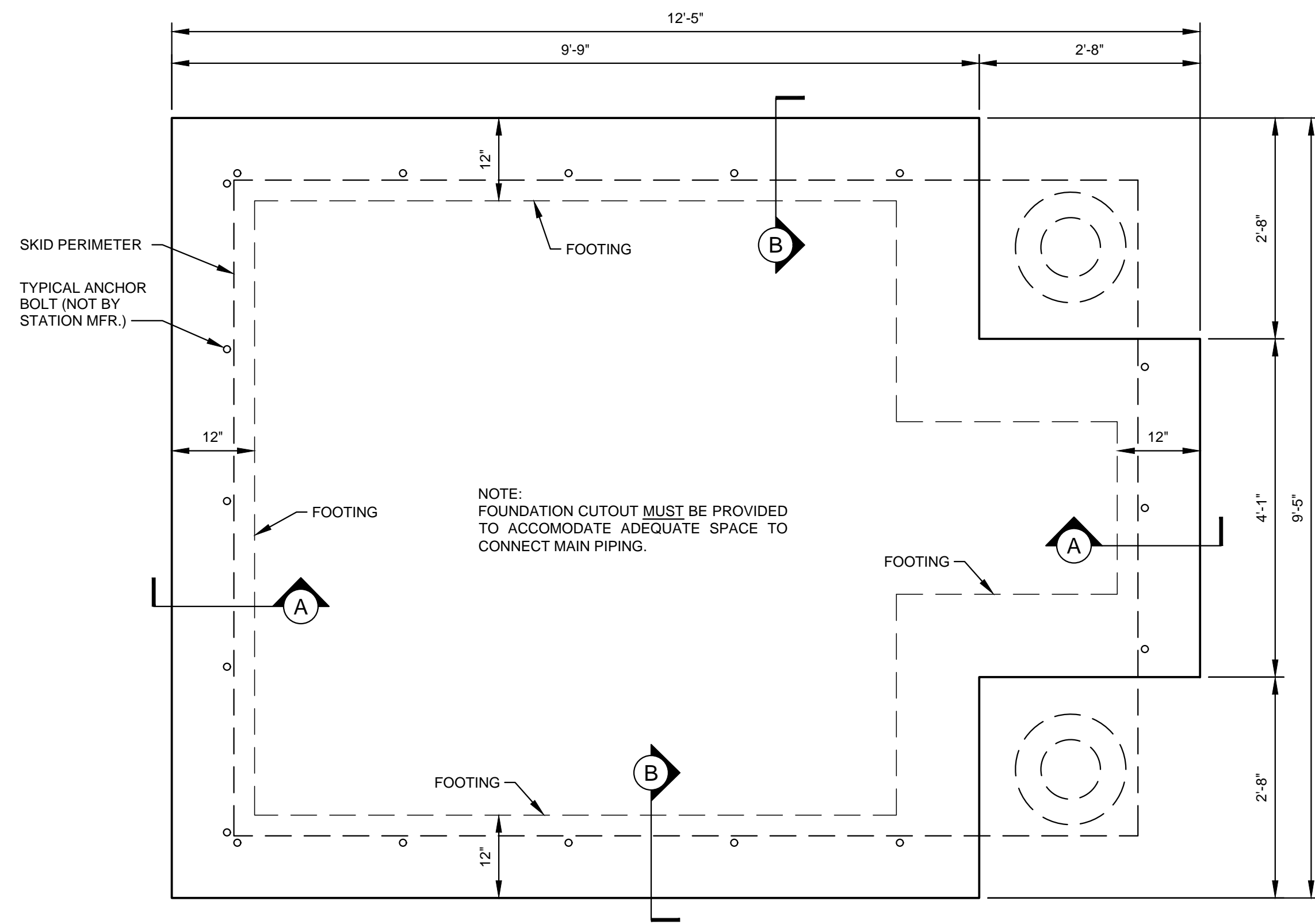
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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

EXISTING MILLERS ROAD PUMP STATION
AND FLOOR PLAN

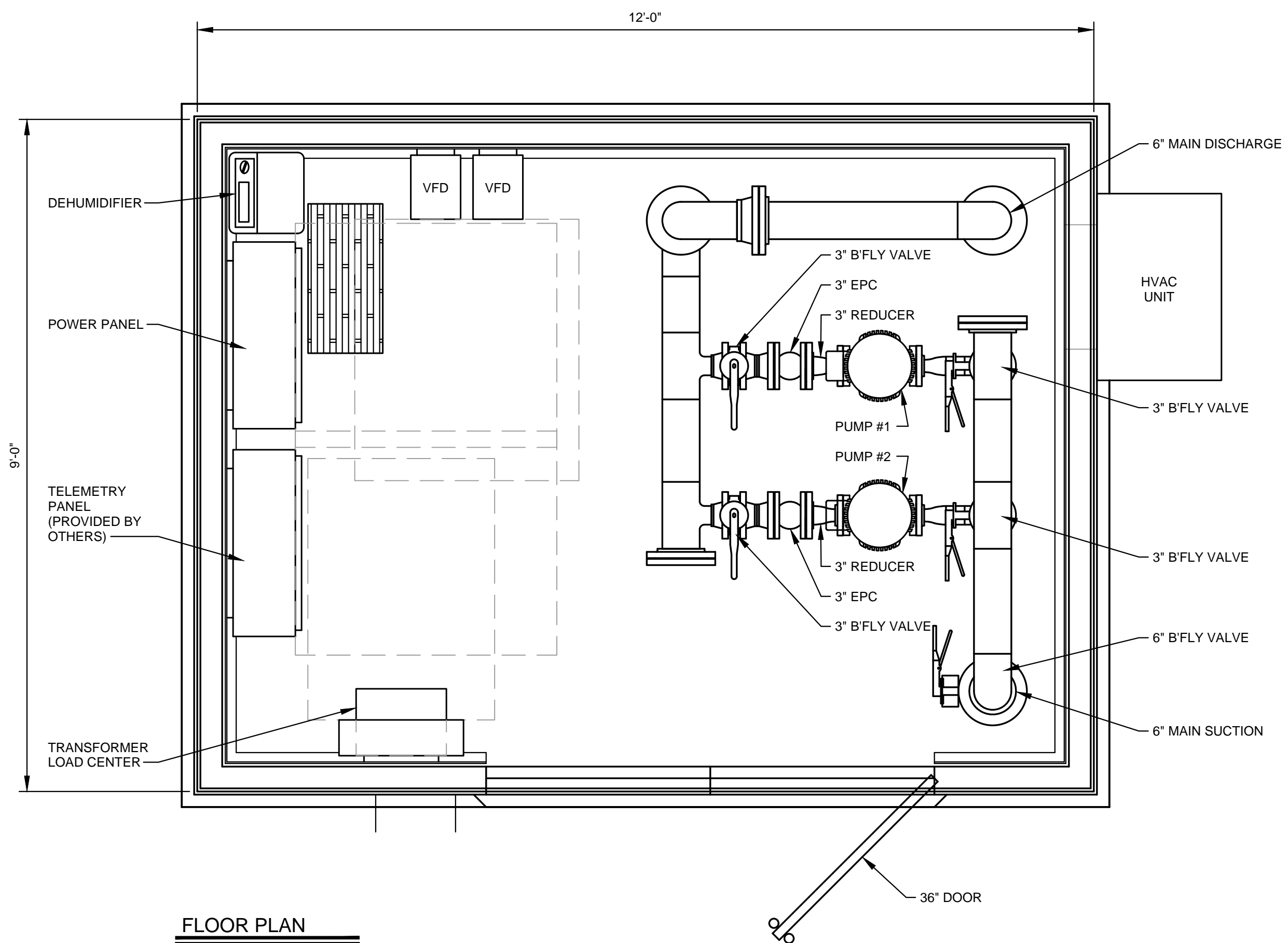
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TYPICAL FOUNDATION LAYOUT

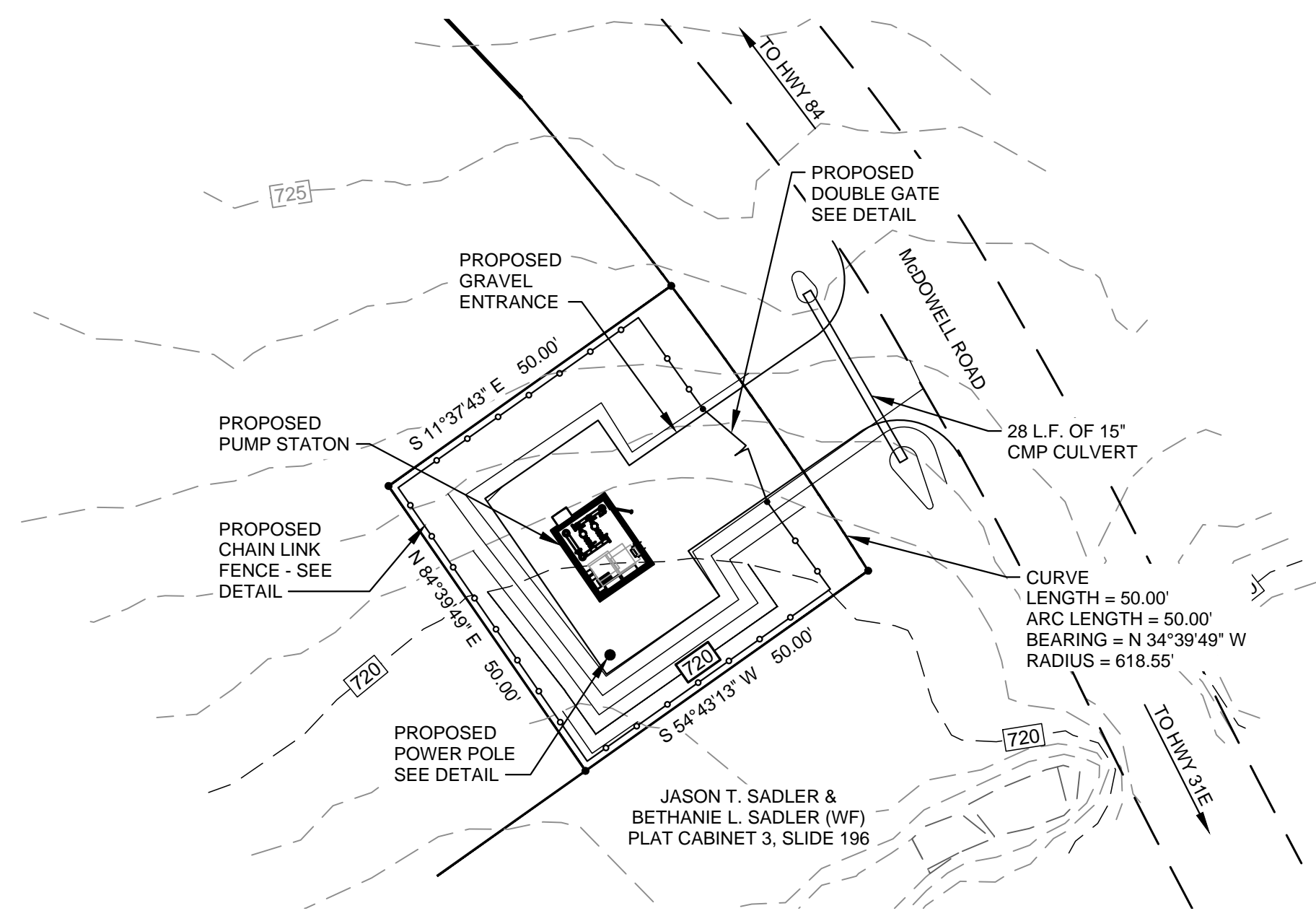
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NOTE: NOT FOR CONSTRUCTION PURPOSES



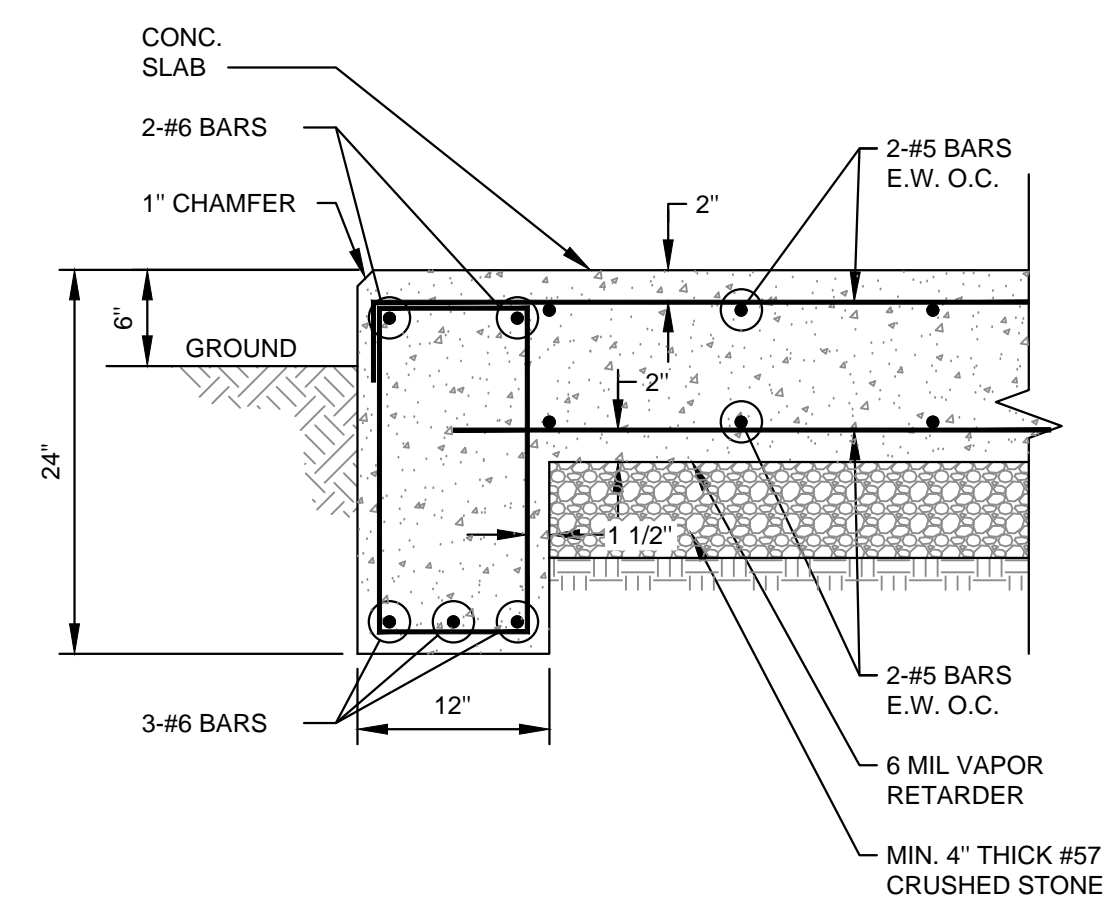
FLOOR PLAN

SCALE: N.T.S.



PUMP STATION SITE

SCALE: N.T.S.



SECTION A-A

SCALE: N.T.S.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			

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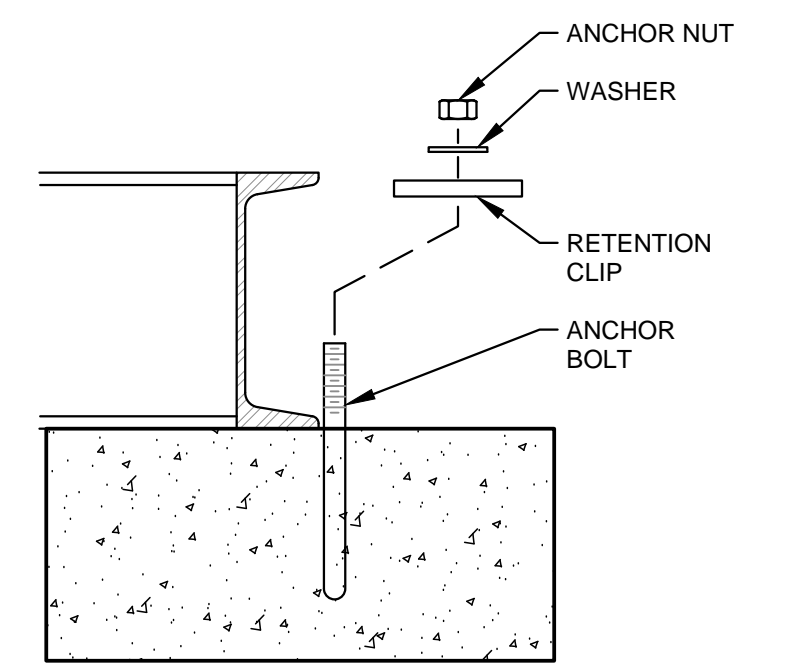
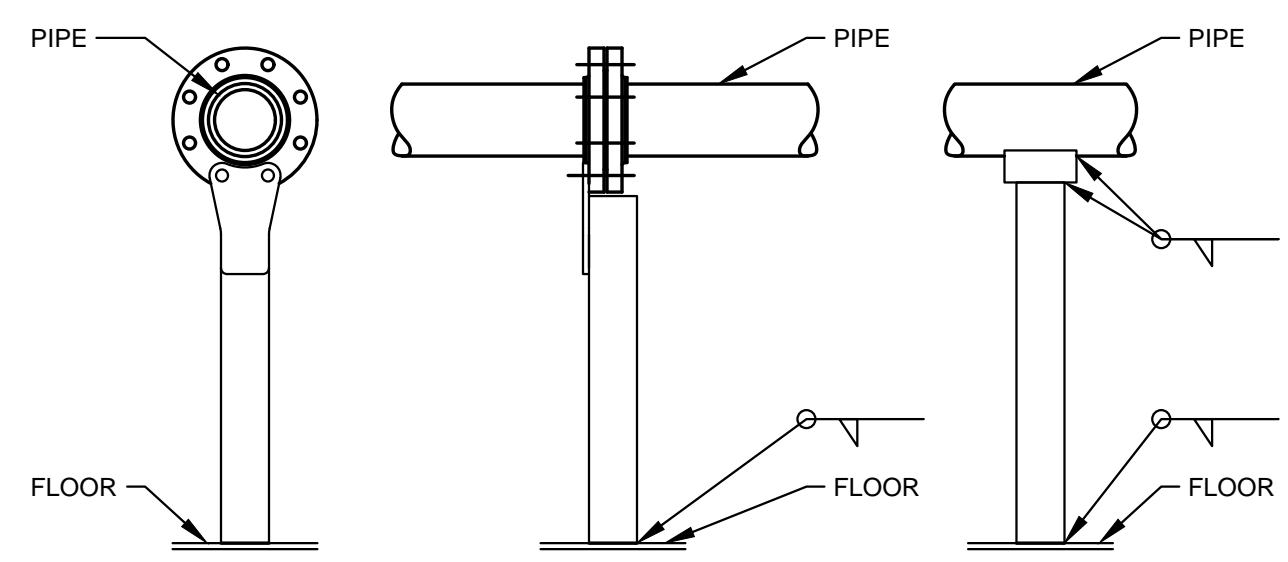
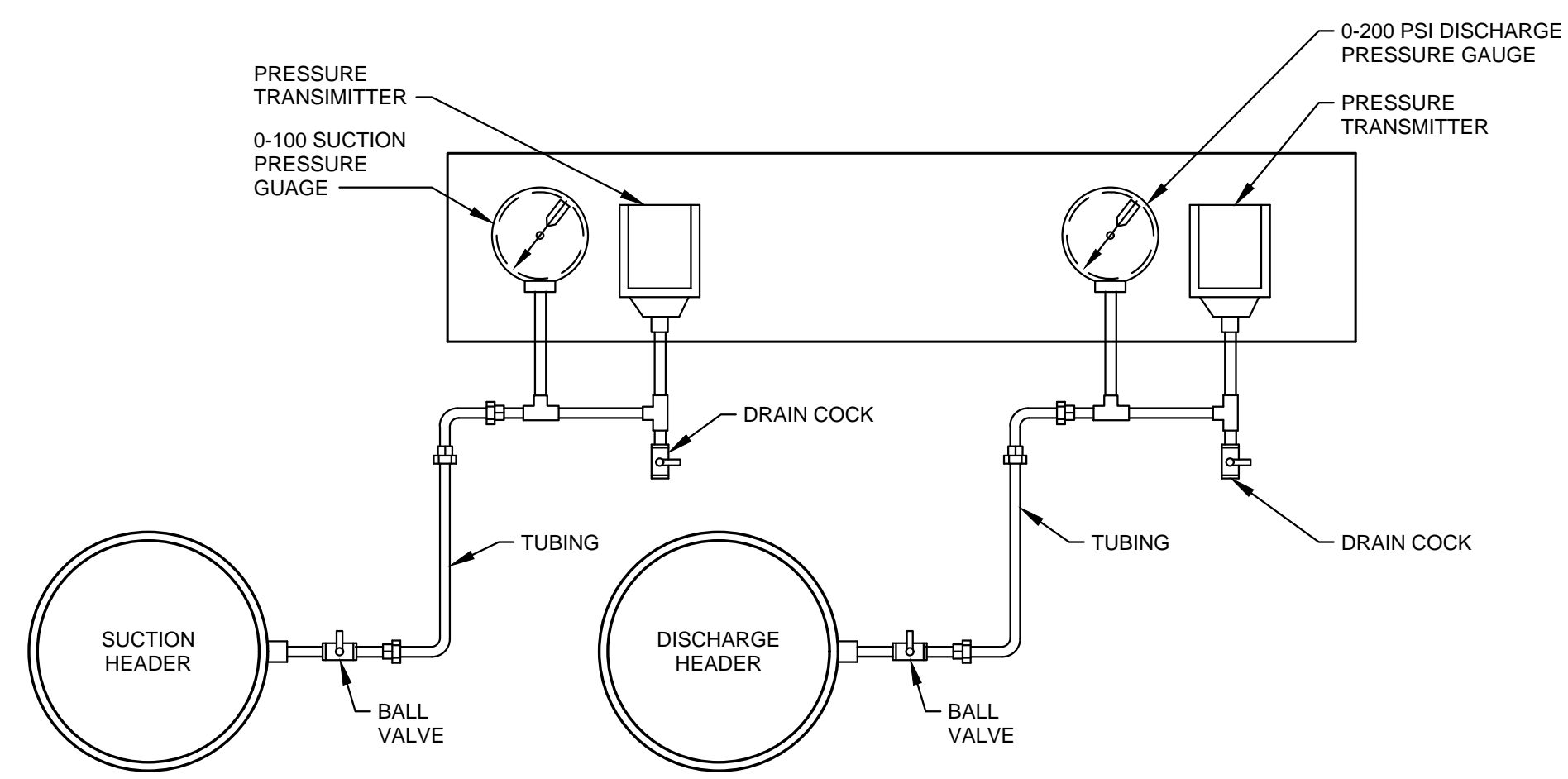
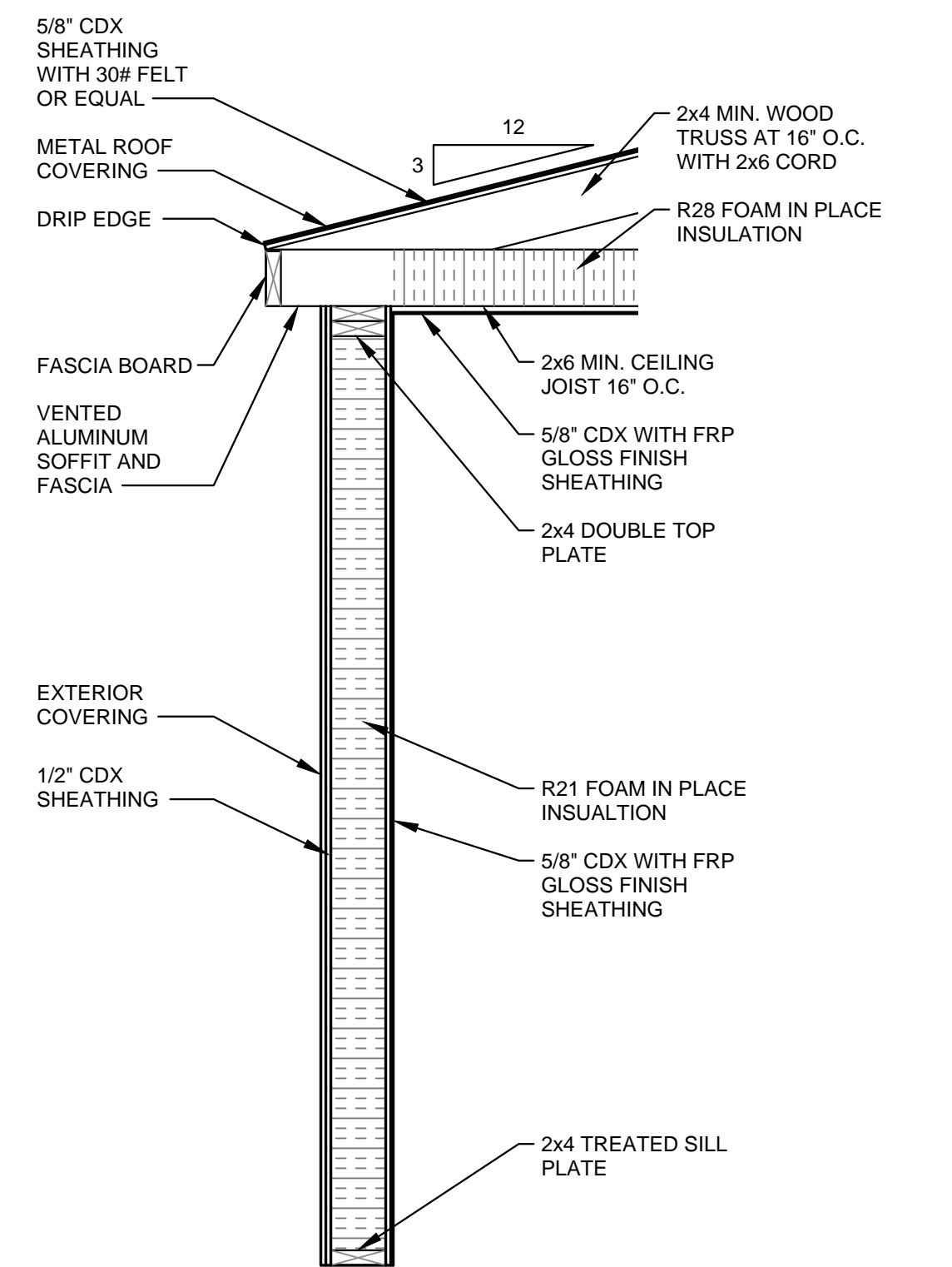
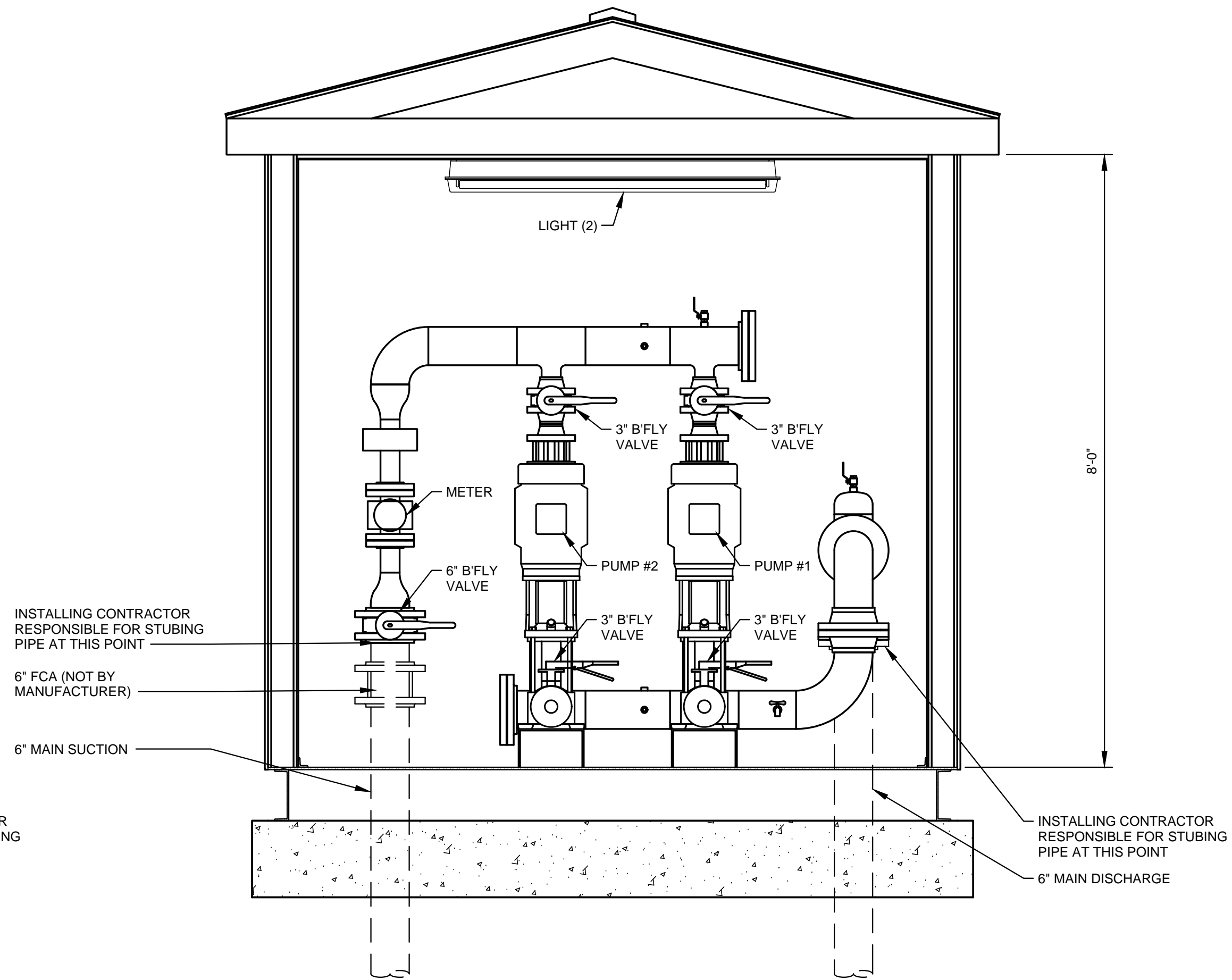
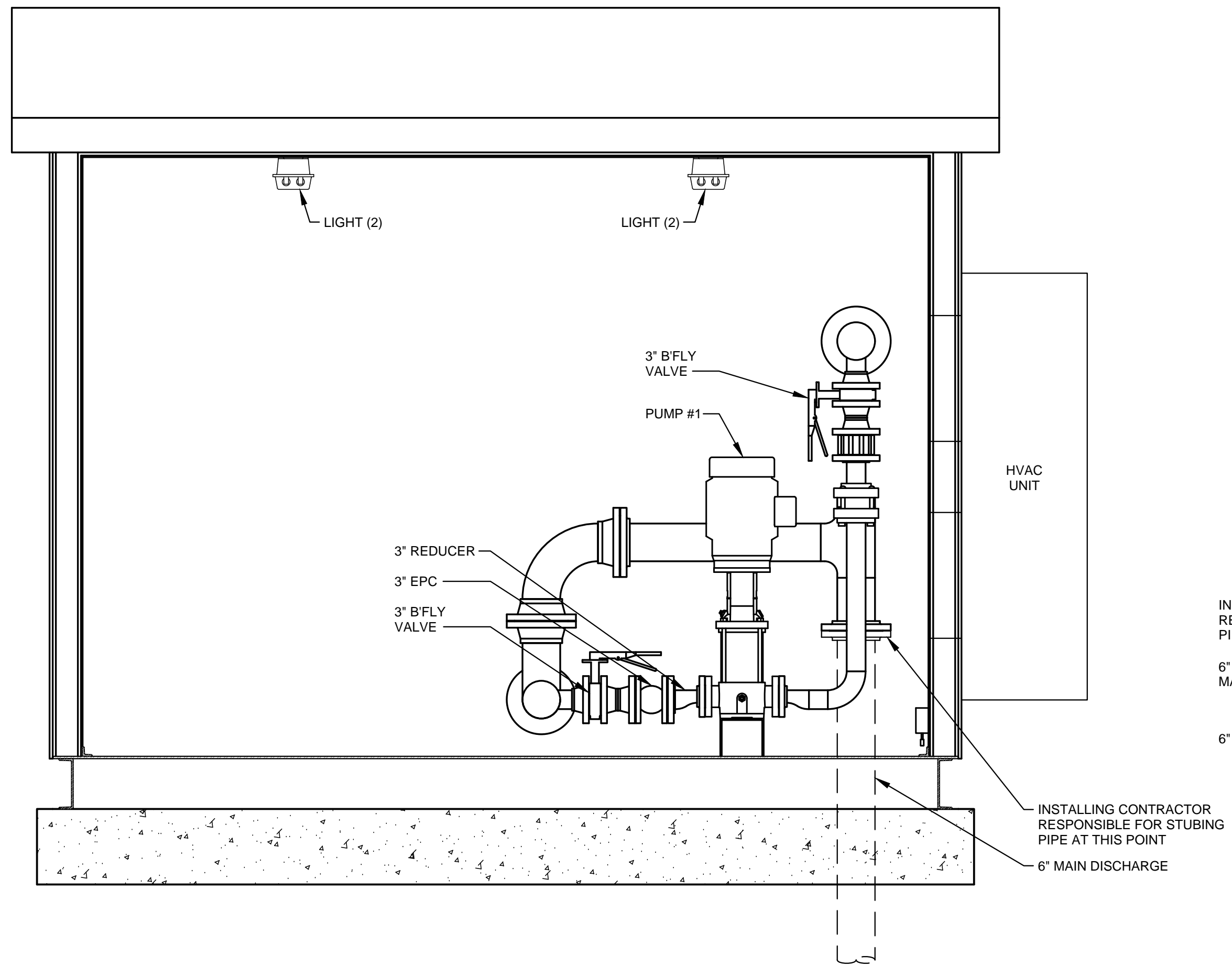
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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

MCDOWELL PUMP STATION FLOOR/SKID PLANS & TYPICAL FOUNDATION LAYOUT

SHEET
PS2
OF
PS3

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NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED	DESIGNED BY:	MAB
		DRAWN BY:	JH
		CHECKED BY:	MAB
		RECORD DRAWINGS	

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LCWD 2020 WATER IMPROVEMENTS
LARUE COUNTY WATER DISTRICT
LARUE COUNTY, KENTUCKY

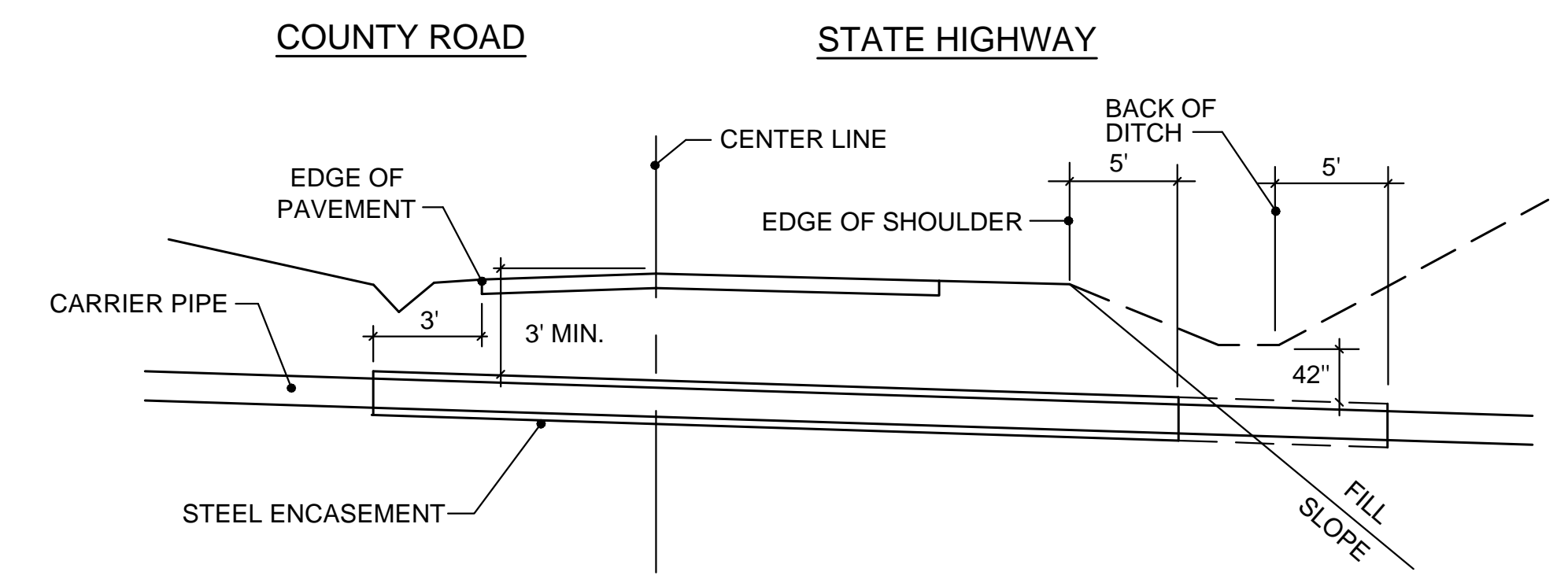
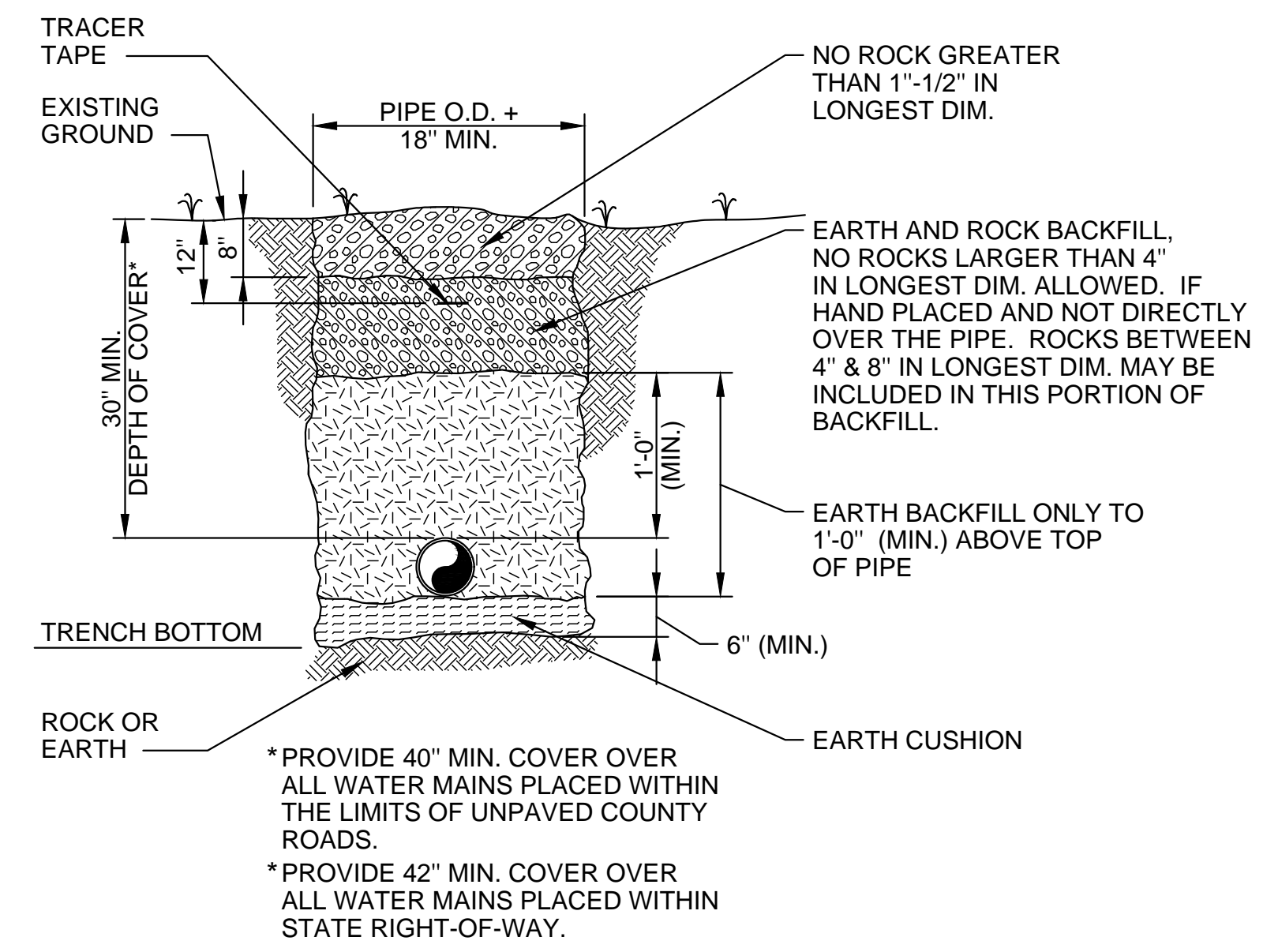
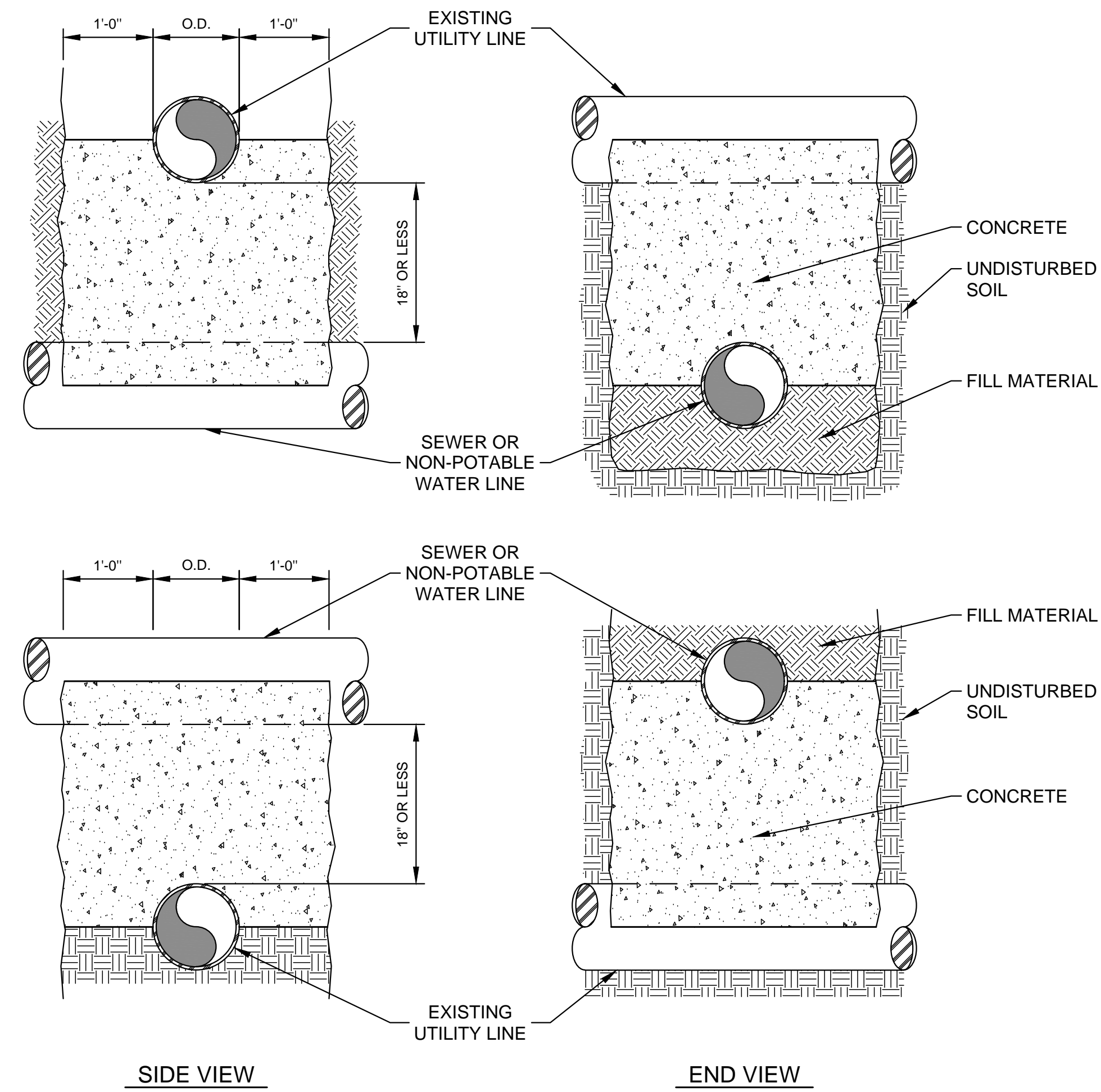
MCDOWELL PUMP STATION
SECTIONS AND DETAILS

SHEET
PS3

OF
PS3

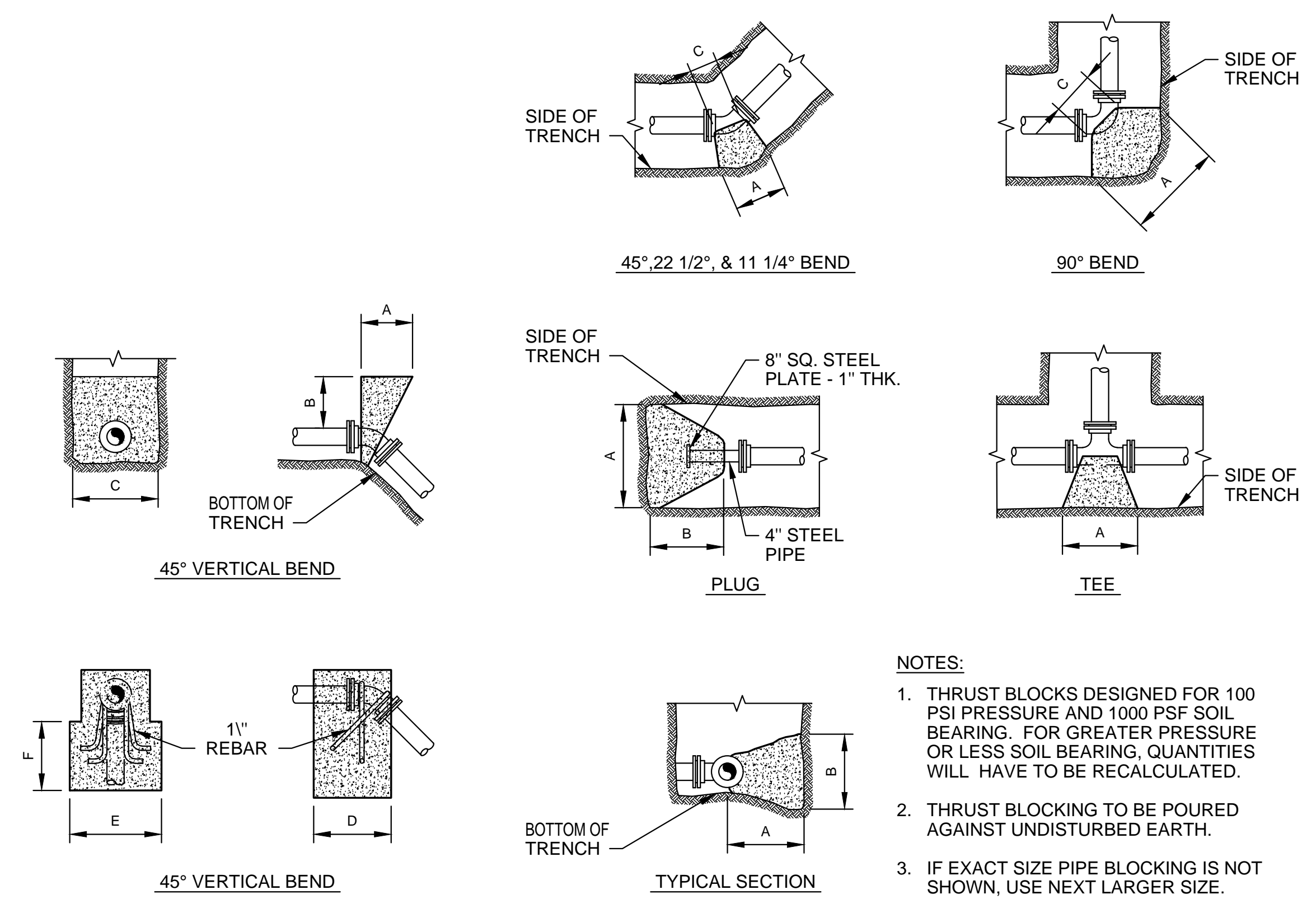
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- NOTES:**
1. CONCRETE ENCASEMENT SHALL BE USED WHEN CLEARANCE BETWEEN SEWER OR NON-POTABLE WATER LINE AND UTILITY LINE IS 18" OR LESS.
 2. WHEN ENCOUNTERING UTILITY LINE WITH SEPARATION LESS THAN 18" VERTICAL OR 10'-0" HORIZONTAL, CONCRETE ENCASEMENT SHALL BE USED. FULL SECTION OF SEWER OR NON-POTABLE WATER LINE SHALL BE CENTERED UNDER UTILITY LINE TO ACHIEVE MAXIMUM JOINT DISPLACEMENT.
 3. CONCRETE ENCASEMENT IS NOT A SEPARATE PAY ITEM.



BEDDING/BACKFILL
SCALE: N.T.S.

TYPICAL ROAD CROSSING
SCALE: N.T.S.



90° BEND								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	72	64	50	40	33	26	16	16
B	72	64	50	40	33	24	16	16
C	32	30	16	15	12	12	9	9
D	36	32	25	20	16	12	8	9

45° BEND								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	54	48	37	31	24	18	12	12
B	54	48	37	31	24	18	12	12
C	16	18	16	14	12	12	8	8
D	25	22	18	15	12	9	6	6

22 1/2° BEND								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	38	34	26	23	18	13	9	9
B	38	34	26	23	18	13	9	9
C	16	18	16	14	12	10	8	8
D	18	16	13	11	9	6	4	4

11 1/4° BEND								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	27	24	18	16	13	11	9	9
B	27	24	18	16	13	11	9	9
C	16	18	16	14	12	10	8	8
D	14	12	9	8	6	5	4	4

PLUG								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	60	54	52	43	34	26	26	26
B	60	54	52	43	34	26	26	26
C	12	12	12	12	12	12	12	12
D	54	44	32	22	15	11	11	11

TEE								
SIZE	18"	16"	12"	10"	8"	6"	4"	2"
A	60	54	52	42	26	43	26	26
B	60	54	52	43	26	43	26	26
C	32	30	12	12	12	12	12	12
D	36	30	26	21	13	21	13	13

DIMENSIONS ARE IN INCHES

- NOTES:**
1. THRUST BLOCKS DESIGNED FOR 100 PSI PRESSURE AND 1000 PSF SOIL BEARING. FOR GREATER PRESSURE OR LESS SOIL BEARING, QUANTITIES WILL HAVE TO BE RECALCULATED.
 2. THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH.
 3. IF EXACT SIZE PIPE BLOCKING IS NOT SHOWN, USE NEXT LARGER SIZE.
 4. THRUST BLOCKING TO BE POURED IN PLACE CLASS B CONCRETE.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			

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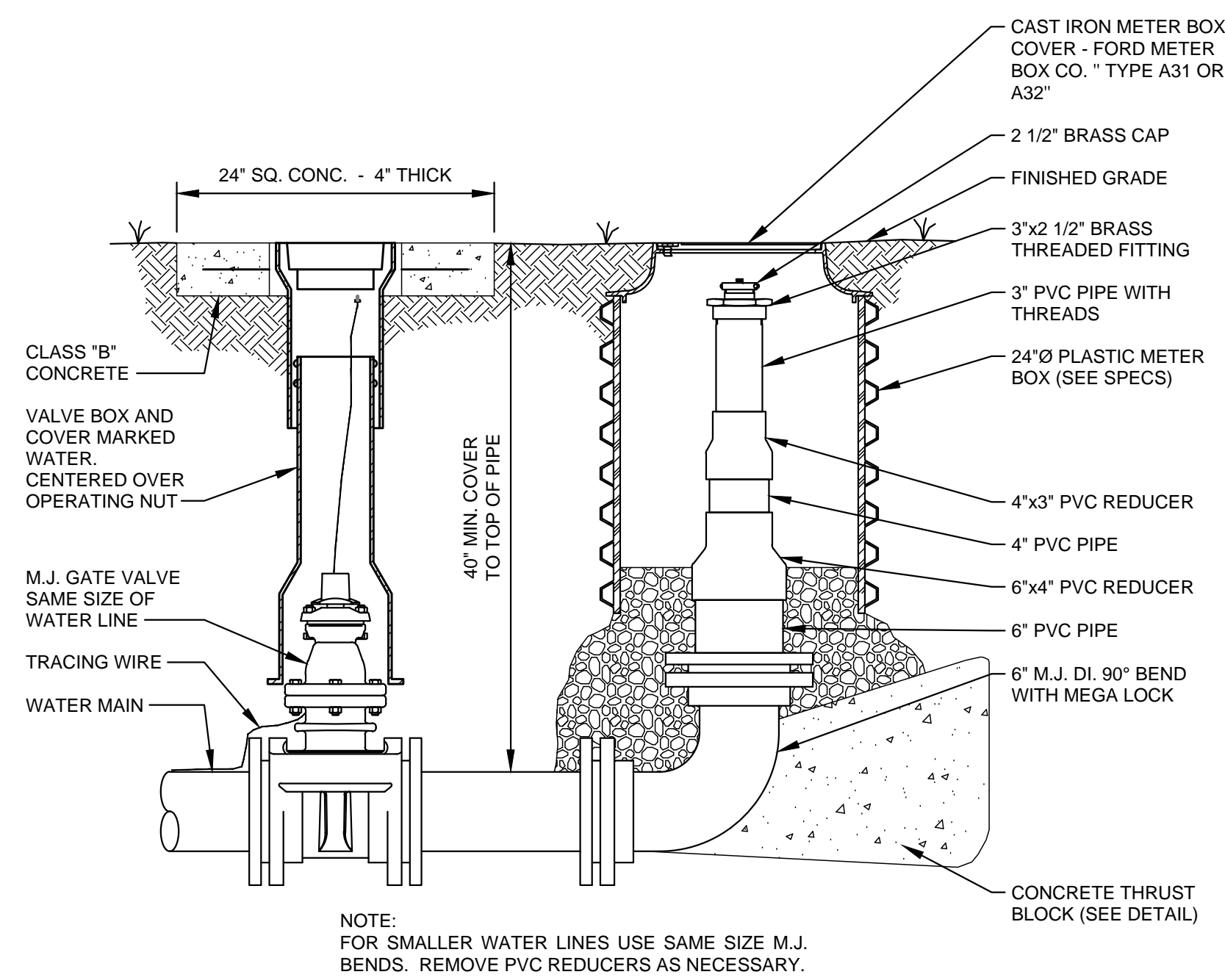
2020 WATER LINE IMPROVEMENTS

LARUE COUNTY #1 WATER DISTRICT

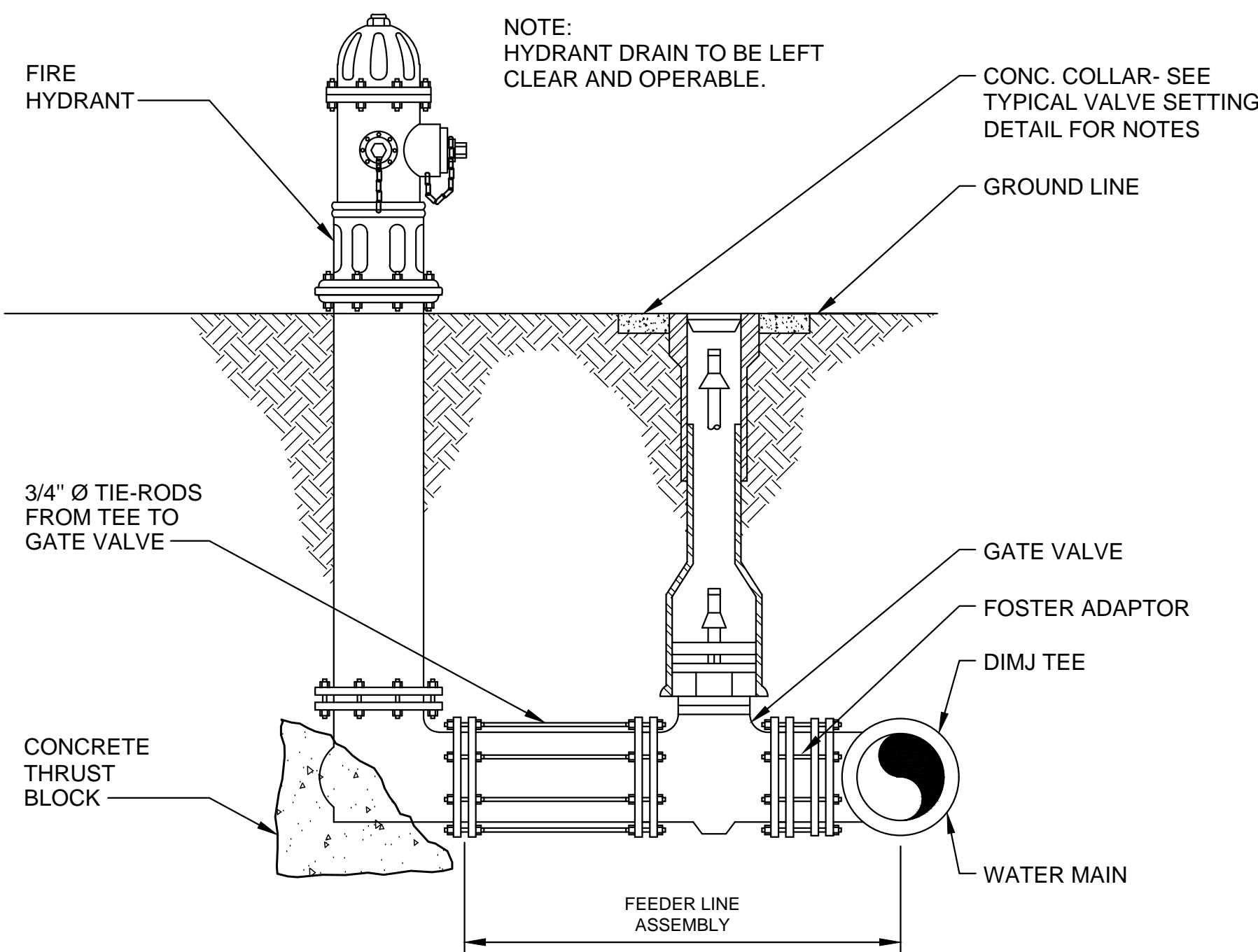
LARUE COUNTY, KENTUCKY

STANDARD DETAILS

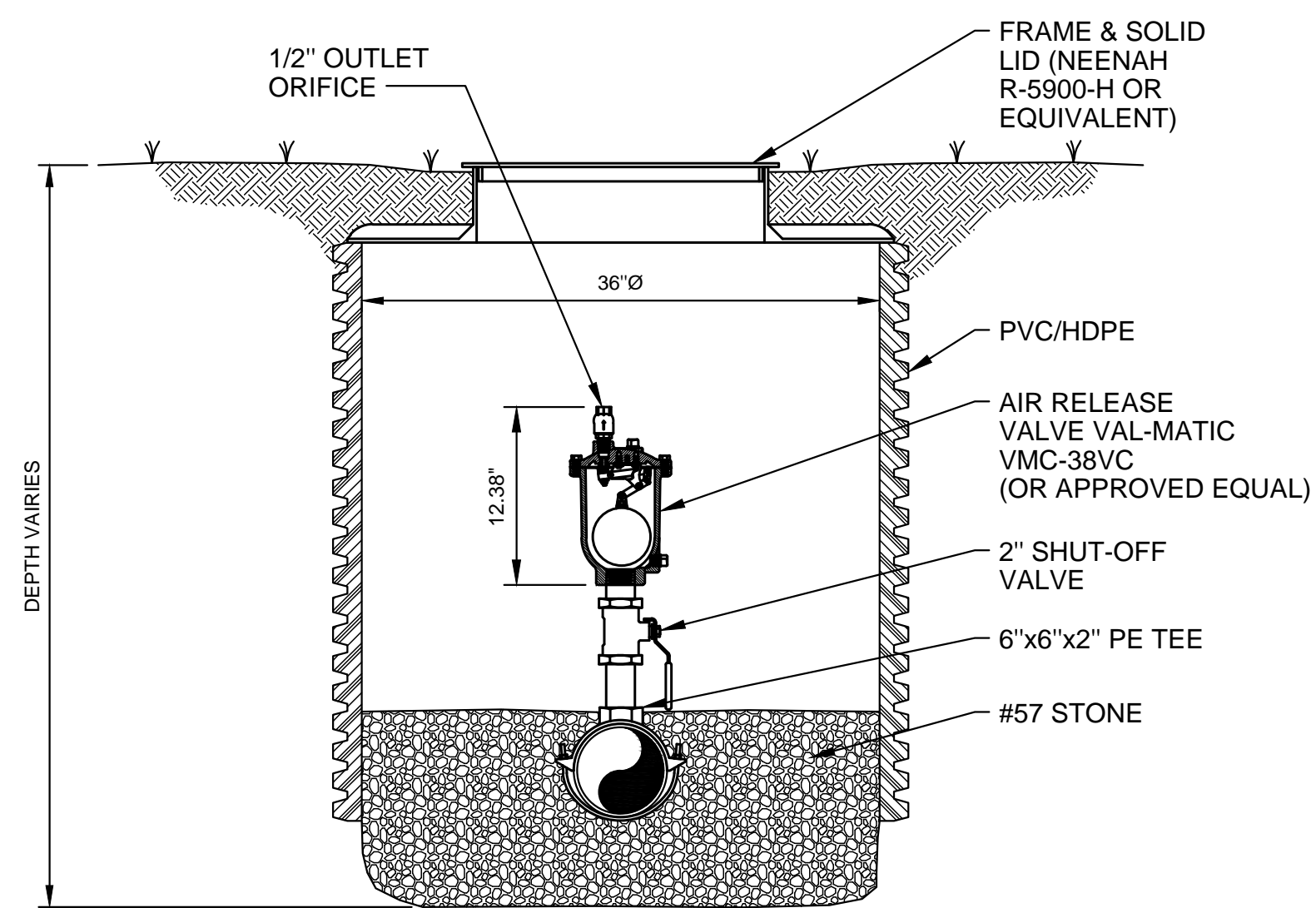
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BLOWOFF ASSEMBLY
SCALE: N.T.S.

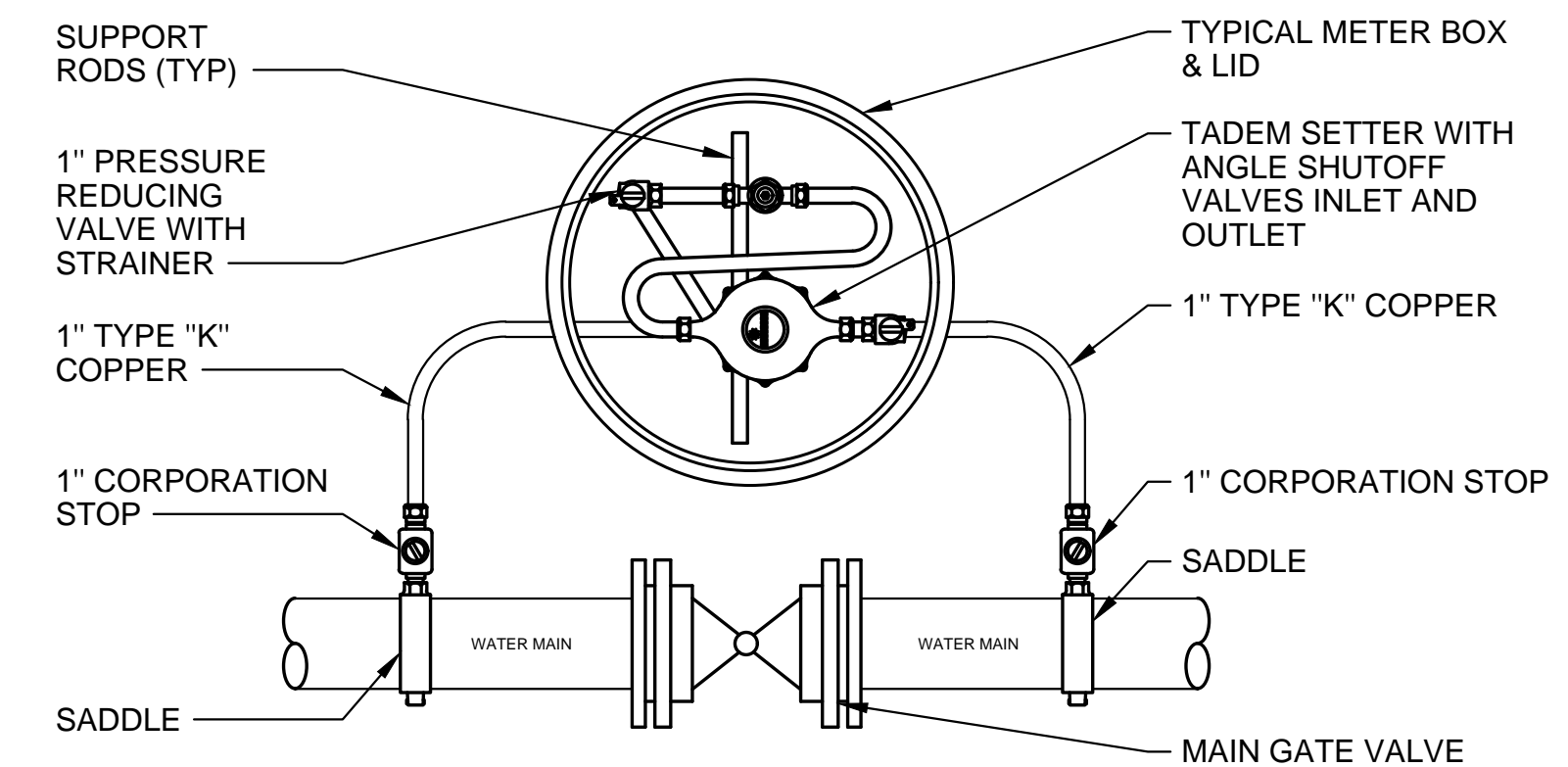


**FIRE HYDRANT (3 NOZZLE) OR
SINGLE NOZZLE BLOW-OFF HYDRANT (1 NOZZLE)**
SCALE: N.T.S.



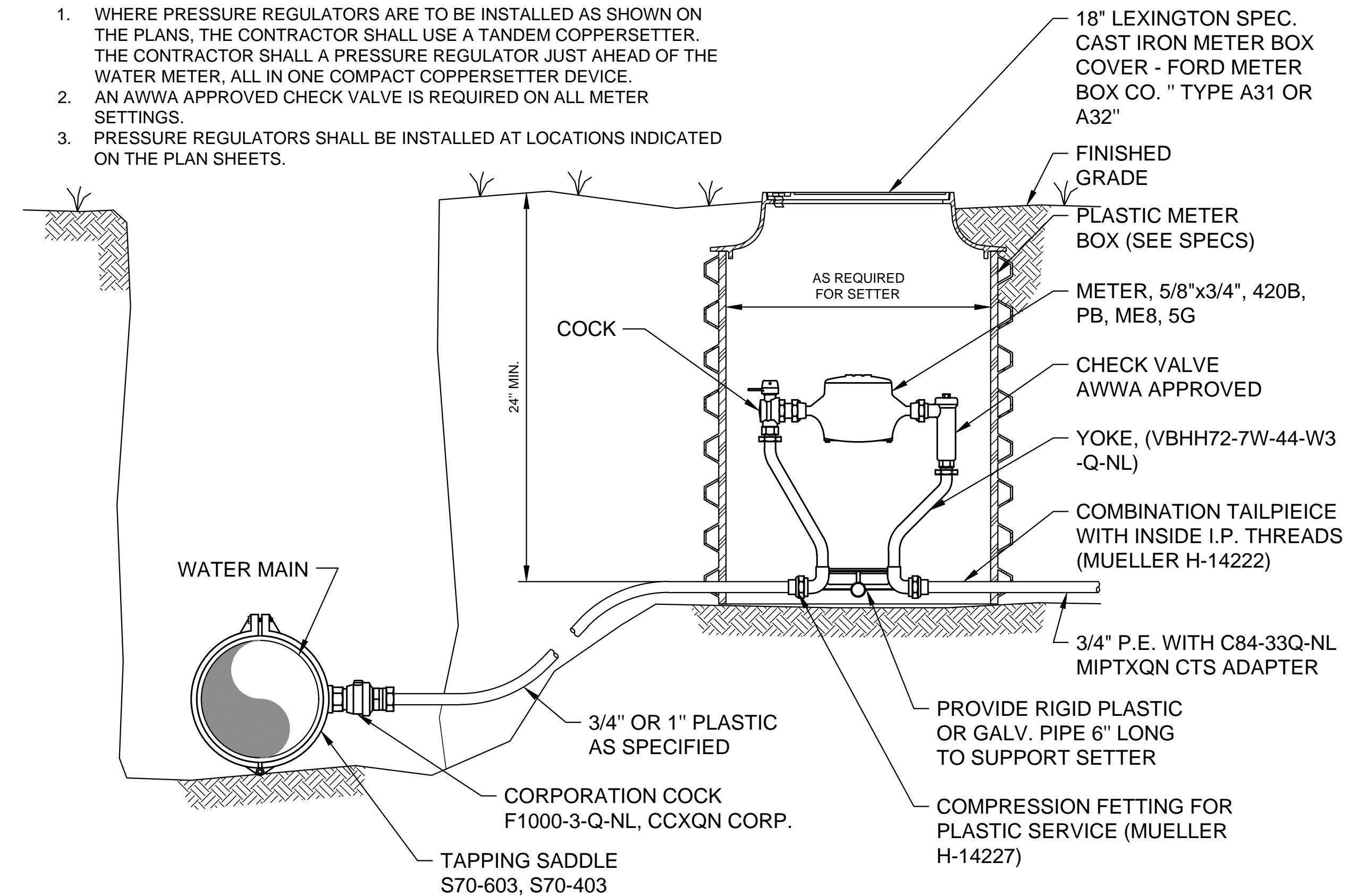
AIR/VACUUM VALVE
SCALE: N.T.S.

NOTES:
1. BOX AND SETTER TO BE PRE-FABRICATED.
2. A TOTAL OF TWO (2) 1" METERS TO BE SUPPLIED AND DELIVERED TO THE WATER DISTRICT FOR USE WHERE METER SETTERS ARE INSTALLED AT THE GATE VALVES.



TEST METER AT GATE VALVE
SCALE: N.T.S.

NOTES:
1. WHERE PRESSURE REGULATORS ARE TO BE INSTALLED AS SHOWN ON THE PLANS, THE CONTRACTOR SHALL USE A TANDEM COPPERSETTER. THE CONTRACTOR SHALL A PRESSURE REGULATOR JUST AHEAD OF THE WATER METER, ALL IN ONE COMPACT COPPERSETTER DEVICE.
2. AN AWWA APPROVED CHECK VALVE IS REQUIRED ON ALL METER SETTINGS.
3. PRESSURE REGULATORS SHALL BE INSTALLED AT LOCATIONS INDICATED ON THE PLAN SHEETS.



**TYPICAL METER SETTING
5/8" x 3/4" & 1" SERVICES**
SCALE: N.T.S.

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED		
DESIGNED BY:	MAB		
DRAWN BY:	JH		
CHECKED BY:	MAB		
RECORD DRAWINGS			

CANN-TECH, LLC
Engineers · Planners · Managers

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Lawrenceburg, KY 40342**

**Phone (502) 859-0907
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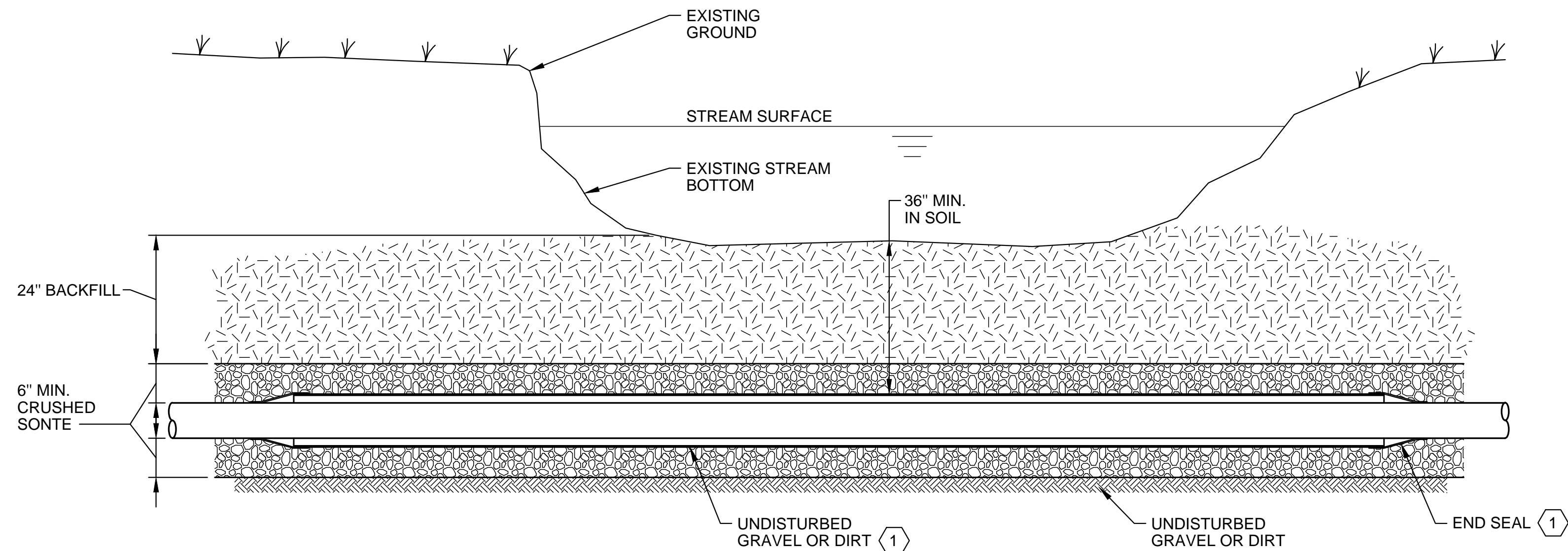


**2020 WATER LINE IMPROVEMENTS
LARUE COUNTY #1 WATER DISTRICT
LARUE COUNTY, KENTUCKY**

STANDARD DETAILS

SHEET
SD2
OF
SD5

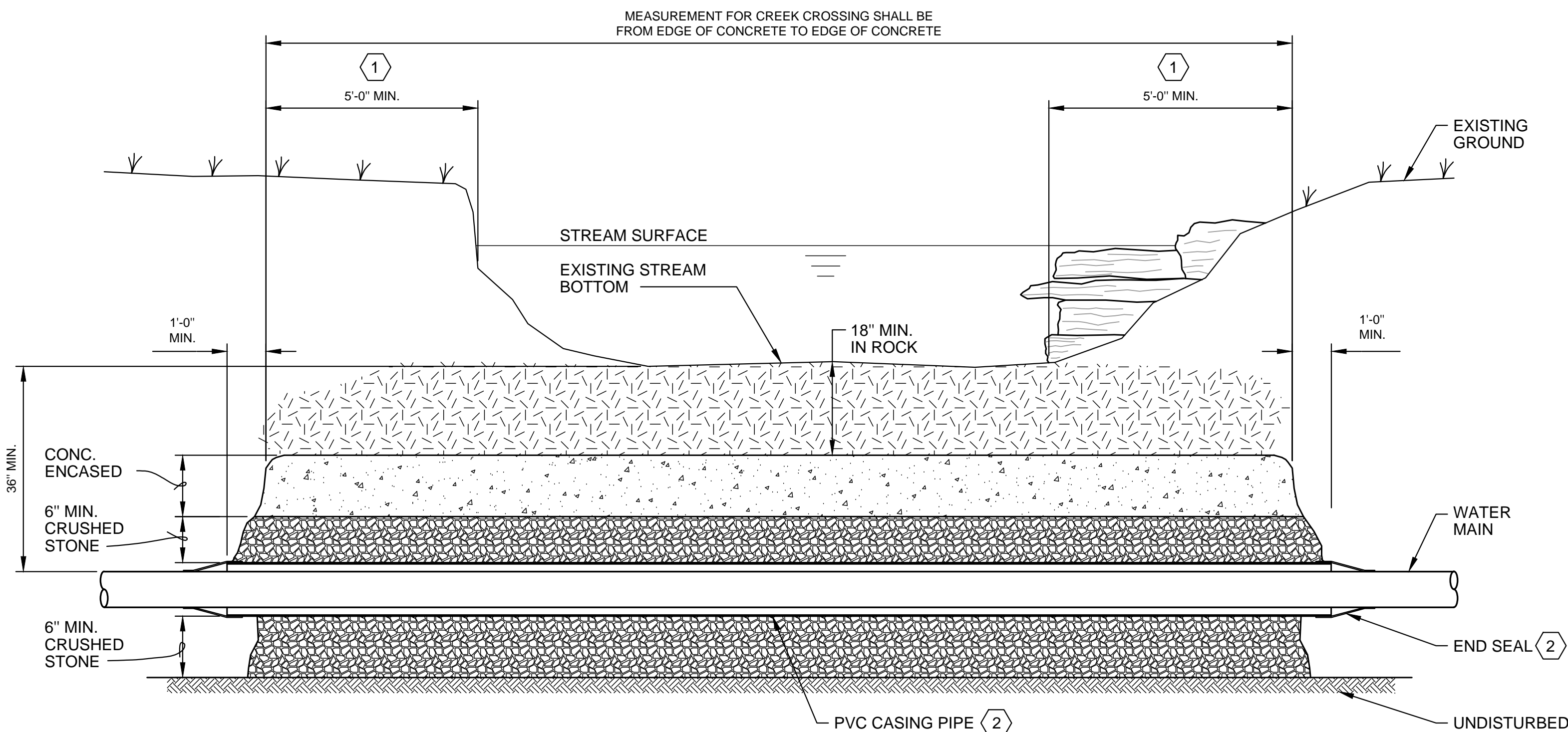
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NOTE:
 ① REFER TO DETAIL - ENCASEMENT PIPE SPACER

TYPE "A" STREAM CROSSING

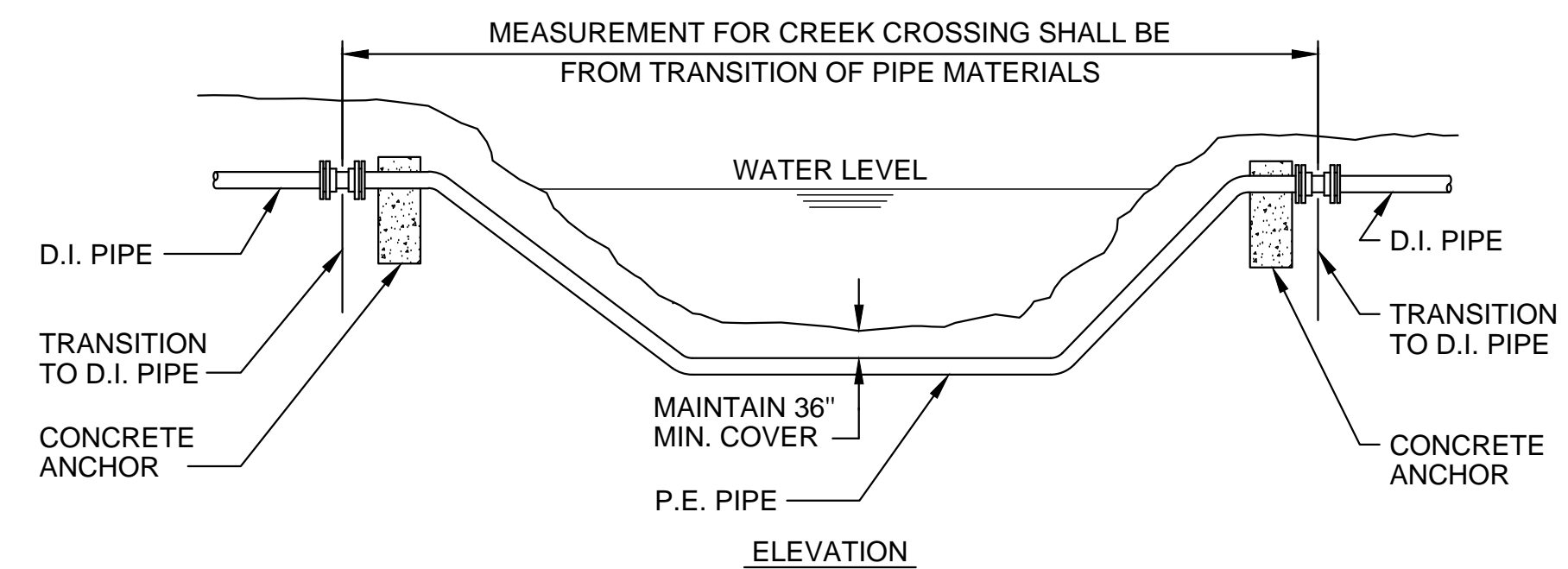
GRAVEL OR DIRT BOTTOM W/ GRAVEL CAP
 SCALE: N.T.S.



NOTES:
 ① CONCRETE TO EXTEND 5'-0" @ BEGINNING POINT OF BANK
 ② REFER TO DETAIL - ENCASEMENT PIPE SPACER

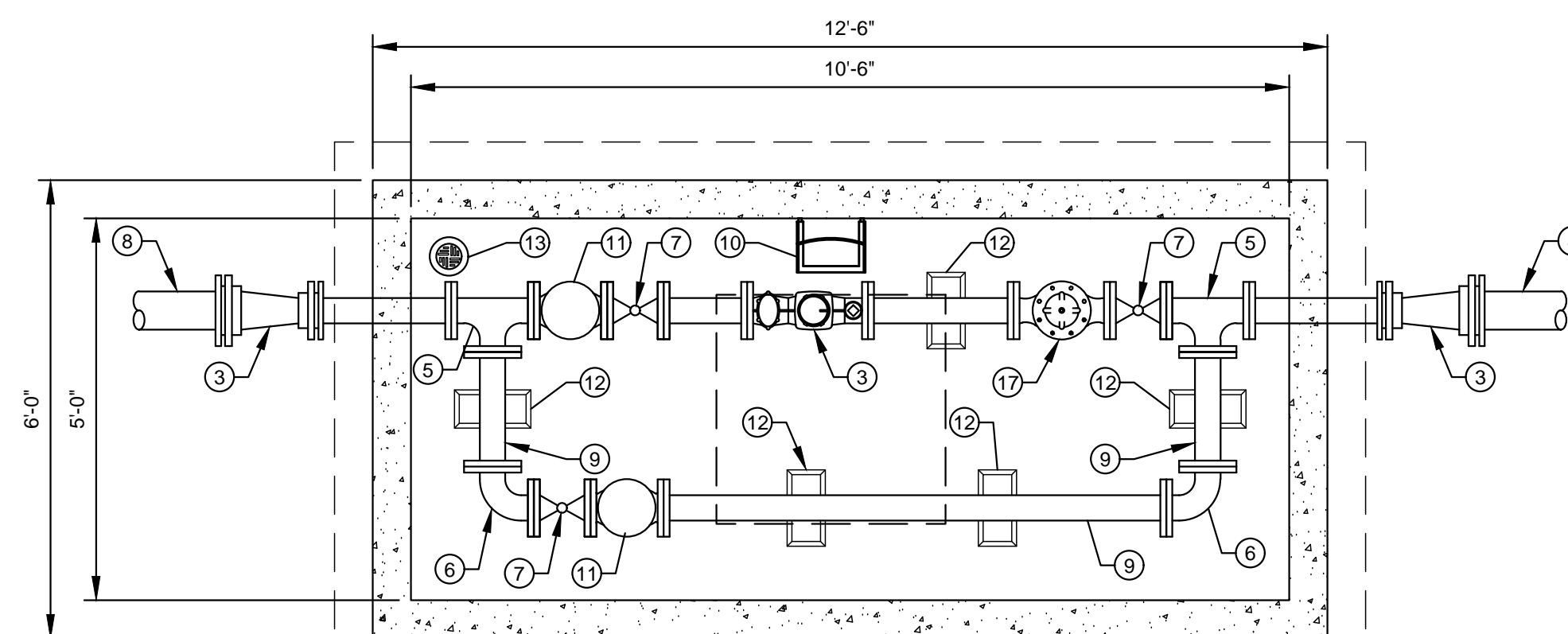
TYPE "B" STREAM CROSSING

SOLID ROCK BOTTOM WITH CONCRETE CAP.
 SCALE: N.T.S.

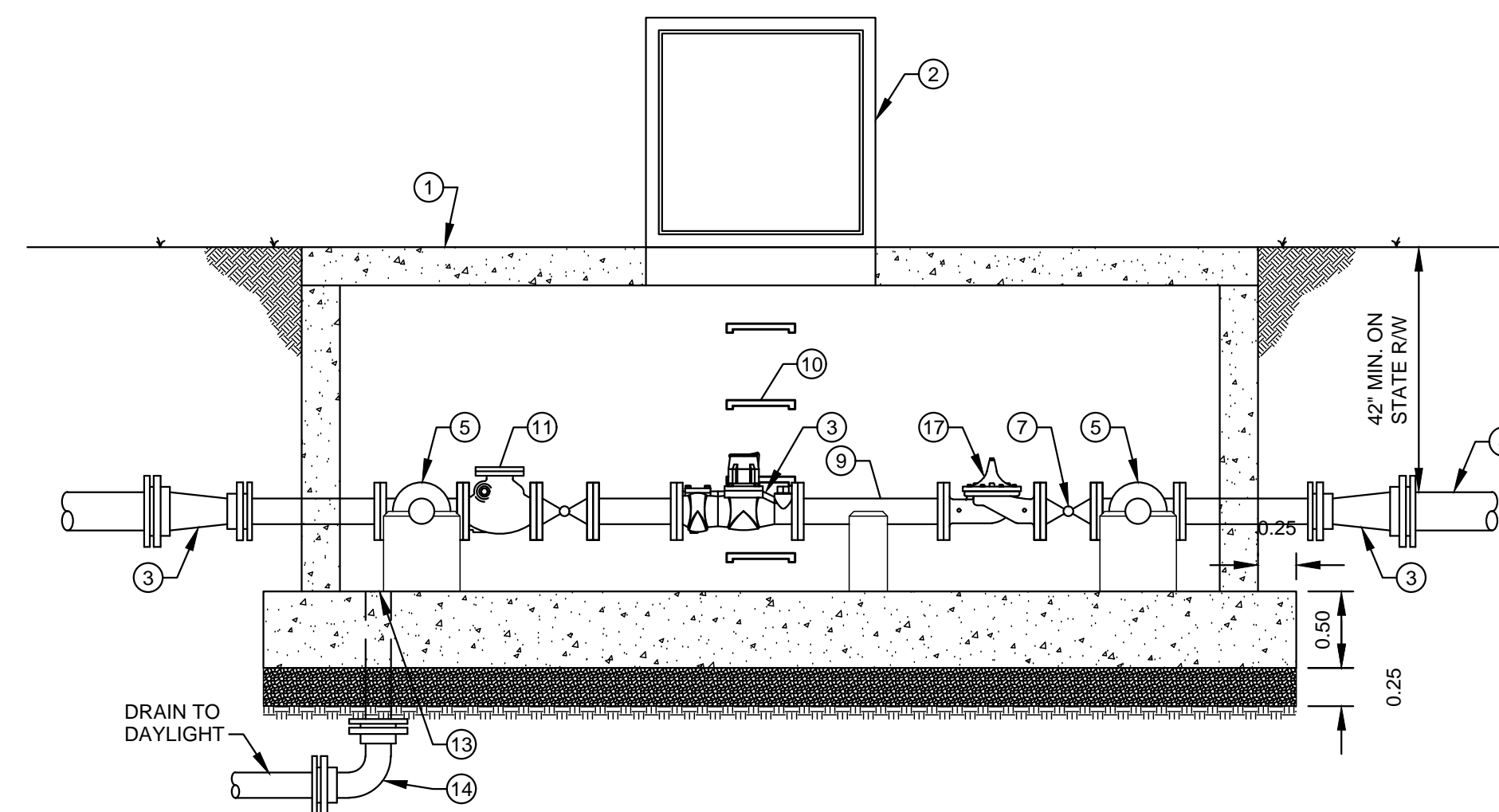


DIRECTIONAL BORE CREEK CROSSING

SCALE: N.T.S.



PLAN



SECTION A-A

MASTER METER

SCALE: N.T.S.

- LEGEND**
- ① PRECAST CONCRETE VALVE VAULT
 - ② 36"x36" ALUMINUM ACCESS HATCH
 - ③ 4" RECORDALL TURBO METER WITH INTEGRAL STRAINER
 - ④ 6"x4" M.J. REDUCER
 - ⑤ 4"x4"x4" FL. TEE
 - ⑥ 4" 90° FL. BEND
 - ⑦ 4" GATE VALVE
 - ⑧ 6" WATER MAIN
 - ⑨ 4" SPOOL PIECE
 - ⑩ MANHOLE STEP
 - ⑪ 4" CHECK VALVE
 - ⑫ CONCRETE SUPPORT BLOCK
 - ⑬ 4" FLOOR DRAIN
 - ⑭ 4" M.J. 90° BEND
 - ⑮ COMPACTED #57 D.G.A
 - ⑯ UNDISTURBED EARTH
 - ⑰ 4" CLA-VAL PRESSURE REDUCING VALVE

NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED	DESIGNED BY:	MAB
		DRAWN BY:	JH
		CHECKED BY:	MAB
		RECORD DRAWINGS	

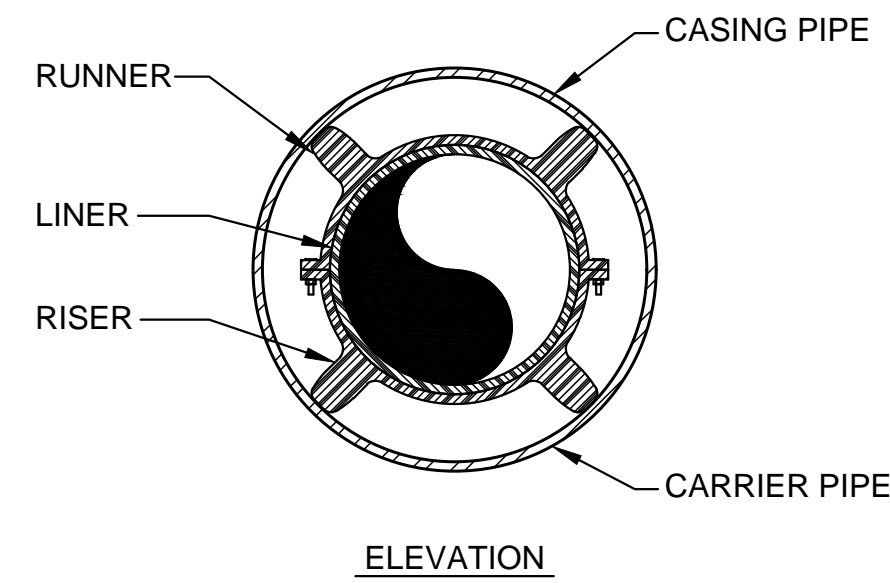
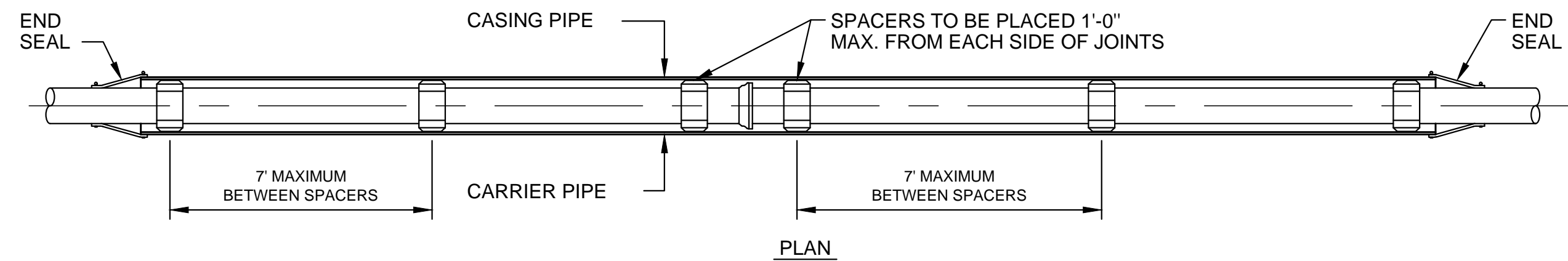
CANN-TECH, LLC
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2020 WATER LINE IMPROVEMENTS
LARUE COUNTY #1 WATER DISTRICT
LARUE COUNTY, KENTUCKY

STANDARD DETAILS

SHEET
 SD3
 OF
 SD5

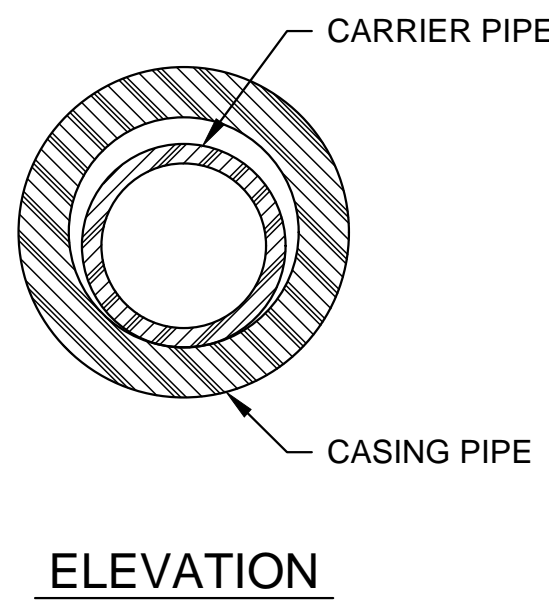
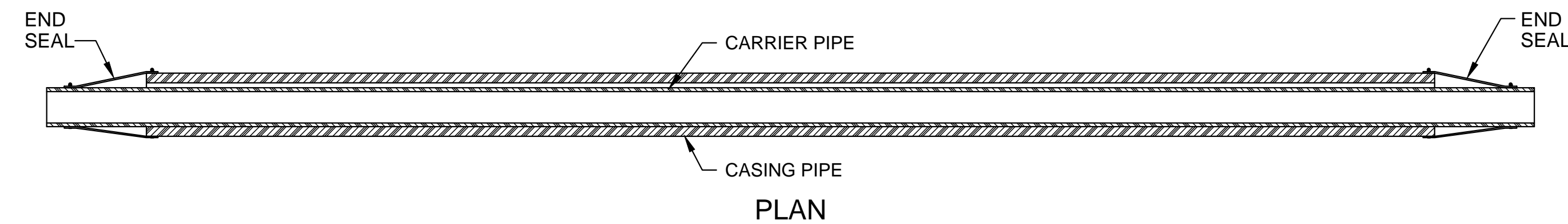


- TYPICAL ROAD CROSSING NOTES:**
1. ALL JOINTS SHALL BE SOLIDLY WELDED. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. MINIMUM DEPTHS MAY INCREASE IN AREA WHICH REQUIRE MINIMUM SEPARATION WITH OTHER FACILITIES.
 3. OPEN TRENCH NO CLOSER THAN THE DITCH LINE OR TOE OF FILL FROM THE EDGE OF THE PAVEMENT OR AS DIRECTED BY STATE, COUNTY OR MUNICIPAL SPECIFICATIONS.
 4. HIGHWAY CROSSINGS SHALL UTILIZE STEEL CASING PIPE. STEEL CASING PIPES 4" AND LESS SHALL BE NEW SCHEDULE 40. STEEL CASING PIPES LARGER THE 4" SHALL HAVE MINIMUM WALL THICKNESS OF 0.25". ALL BORED AND JACKED ENCASEMENT PIPE SHALL BE INSTALLED IN BORE HOLES NO LARGER THAN THE OUTSIDE DIAMETER OF THE ENCASEMENT PIPE.

- TYPICAL STREAM CROSSING NOTES:**
1. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. CONCRETE CAP SHALL END A MINIMUM OF ONE FOOT FROM EDGE OF CASING PIPE.
 3. STREAM CROSSINGS SHALL UTILIZE PVC SDR-35 CASING PIPE.

ENCASEMENT PIPE SPACER

SCALE: N.T.S.

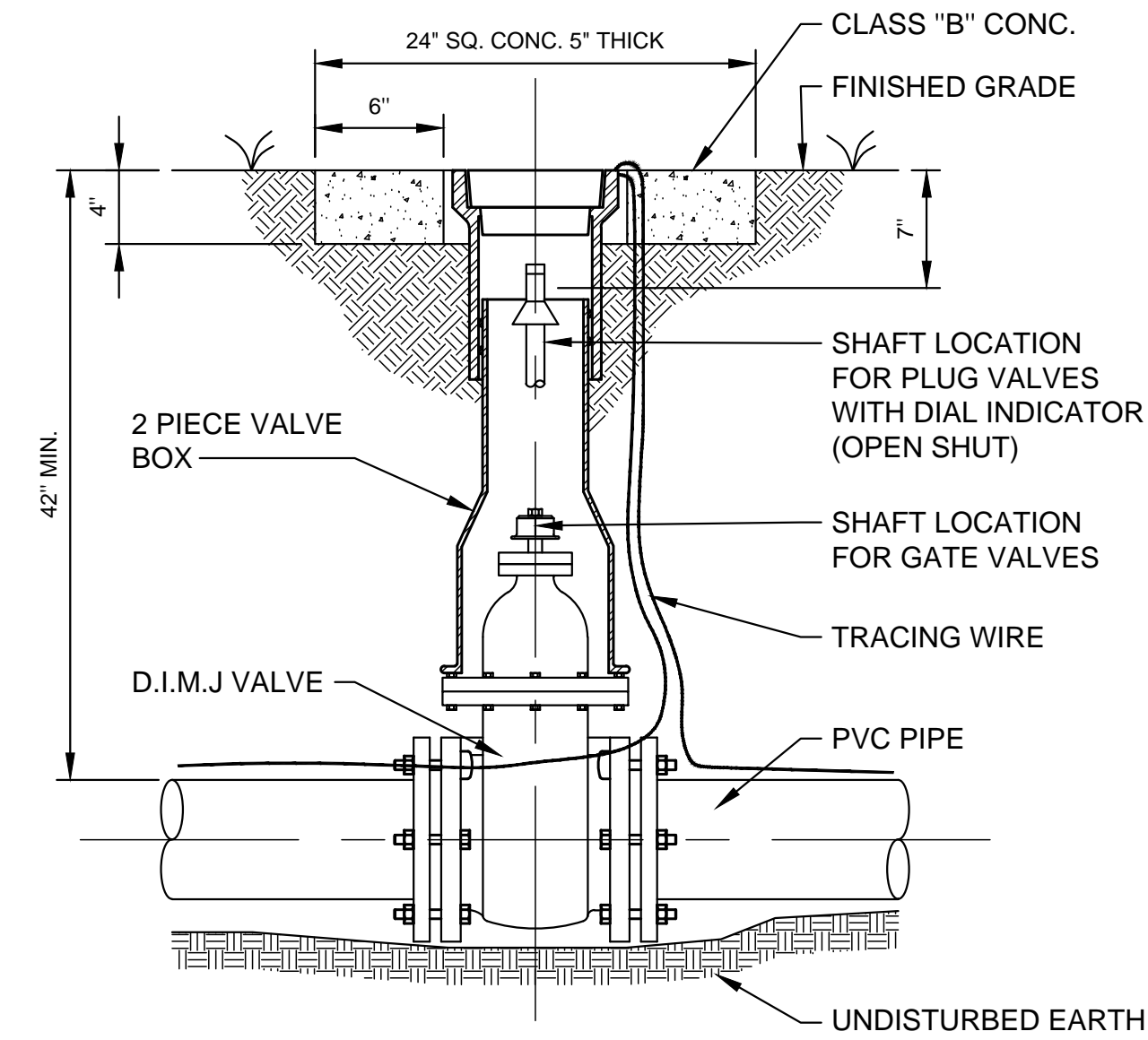


- TYPICAL ROAD CROSSINGS:**
1. ALL JOINTS SHALL BE SOLIDLY WELDED. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. MINIMUM DEPTHS MAY INCREASE IN AREA WHICH REQUIRE MINIMUM SEPARATION WITH OTHER FACILITIES.
 3. OPEN TRENCH NO CLOSER THAN THE DITCH LINE OR TOE OF FILL FROM THE EDGE OF THE PAVEMENT OR AS DIRECTED BY STATE, COUNTY OR MUNICIPAL SPECIFICATIONS.
 4. HIGHWAY CROSSINGS SHALL UTILIZE HDPE CASING PIPE. HDPE CASING PIPE CLASSIFICATION SHALL BE DETERMINED BY THE ENGINEER. ALL DIRECTIONAL BORE ENCASEMENT SHALL BE INSTALLED IN BORE HOLES NO LARGER THAN THE OUTSIDE DIAMETER OF THE HDPE ENCASEMENT PIPE.

- TYPICAL STREAM CROSSING NOTES:**
1. ALL JOINTS SHALL BE SOLIDLY WELDED. END CASING SHALL BE SEALED AFTER LINE HAS BEEN INSTALLED AND TESTED.
 2. CONCRETE ANCHORS SHALL BE INSTALLED AS SHOWN ON DIRECTIONAL BORE DETAIL.
 3. STREAM CROSSINGS SHALL UTILIZE HDPE CASING PIPE. CLASSIFICATION SHALL BE DETERMINED BY THE ENGINEER.

HDPE ENCASEMENT PIPE

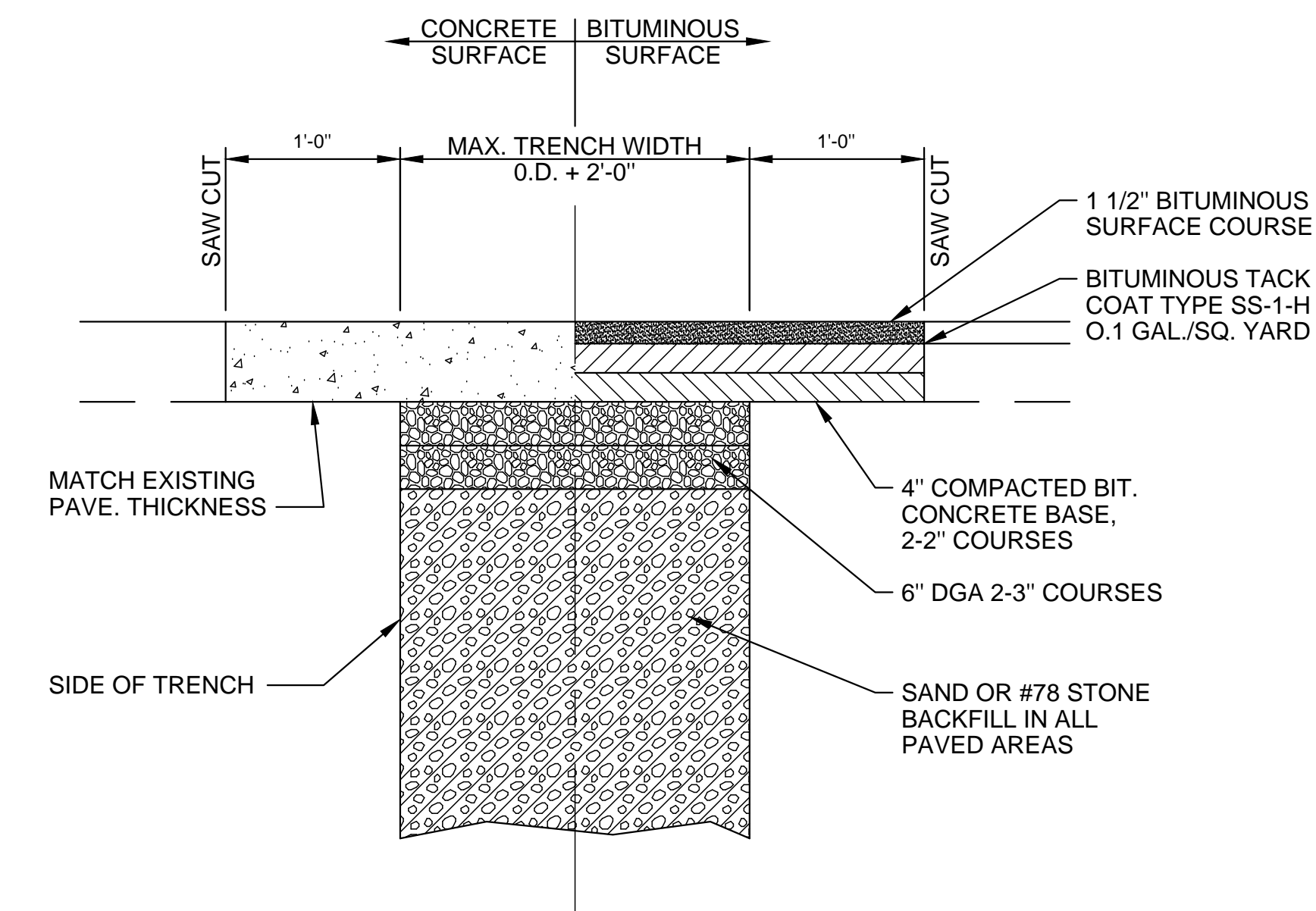
SCALE: N.T.S.



- NOTES:**
1. NO EXTRA PAY ALLOWED FOR CONCRETE COLLAR
 2. CONCRETE PAD SHALL BE SQUARE
 3. CONCRETE PAD REQUIRED ON ALL VALVES

TYPICAL VALVE SETTING

SCALE: N.T.S.



PAVEMENT REPLACEMENT

SCALE: N.T.S.

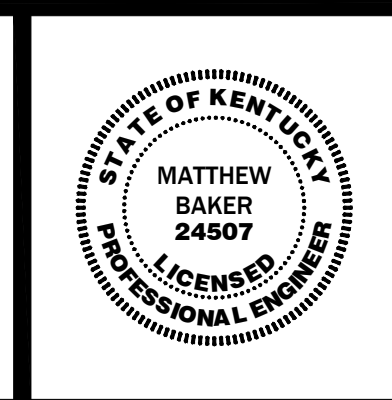
NO.	DATE	REVISIONS	DATE	APPR'D	DATE

PROJECT:	467	DATE:	3/26/2020
SCALE:	AS NOTED	DESIGNED BY:	MAB
		DRAWN BY:	JH
		CHECKED BY:	MAB
		RECORD DRAWINGS	

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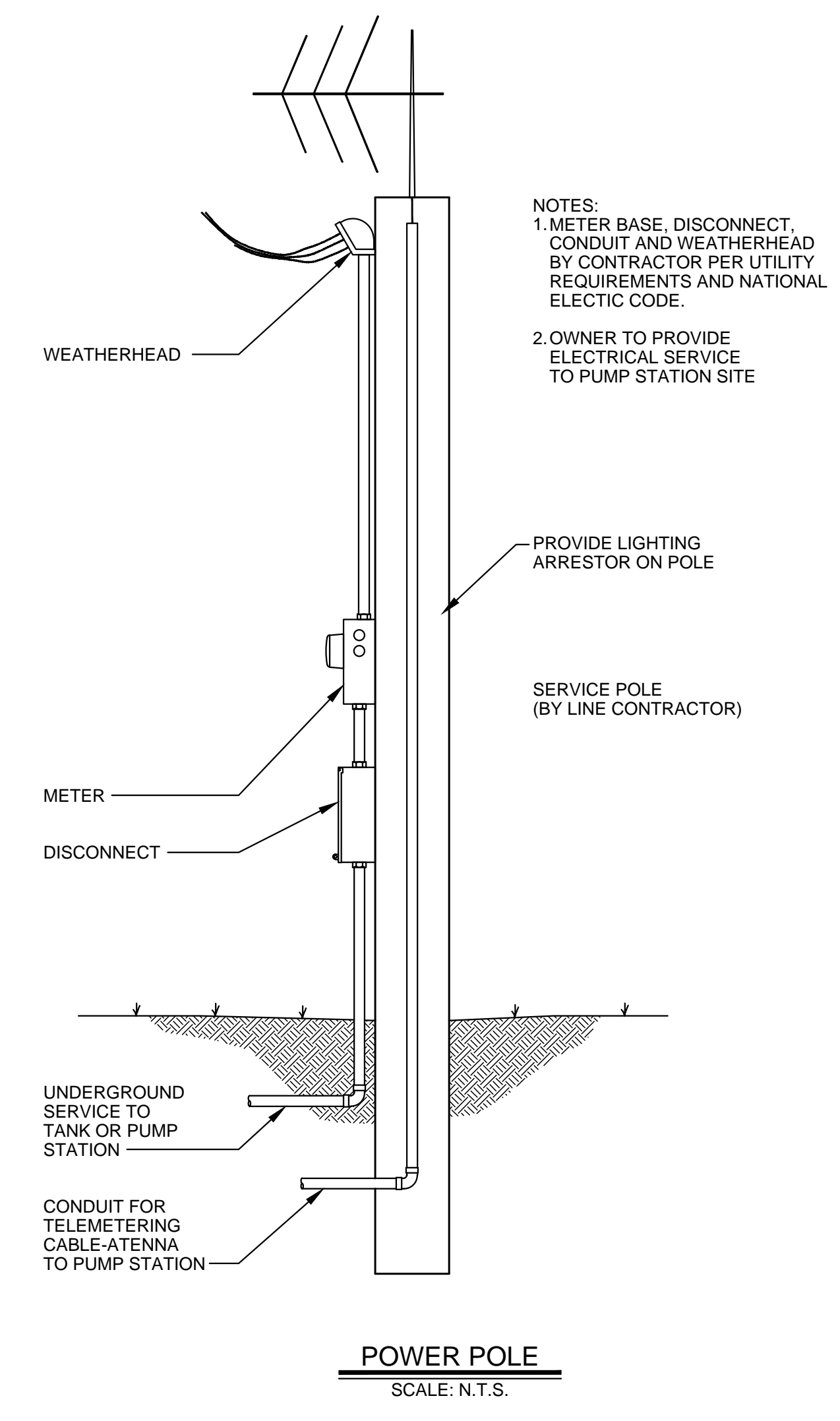
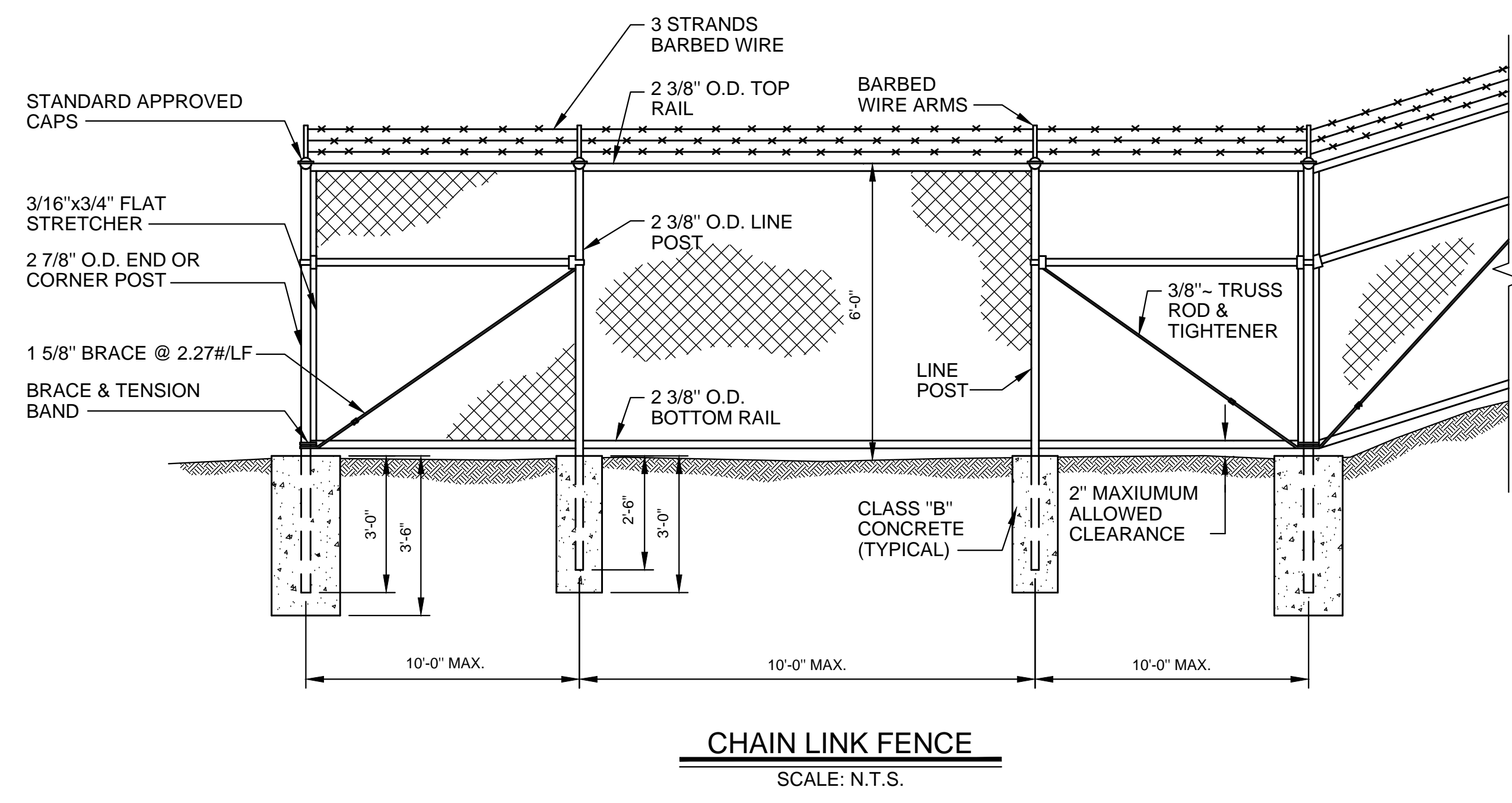
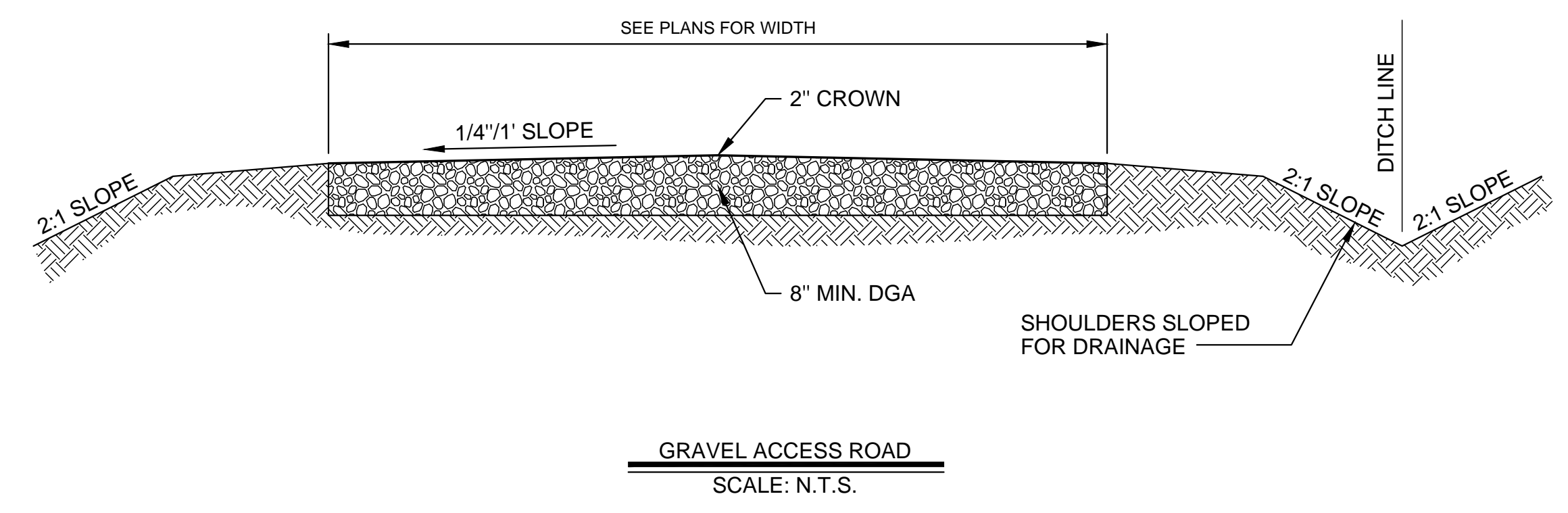
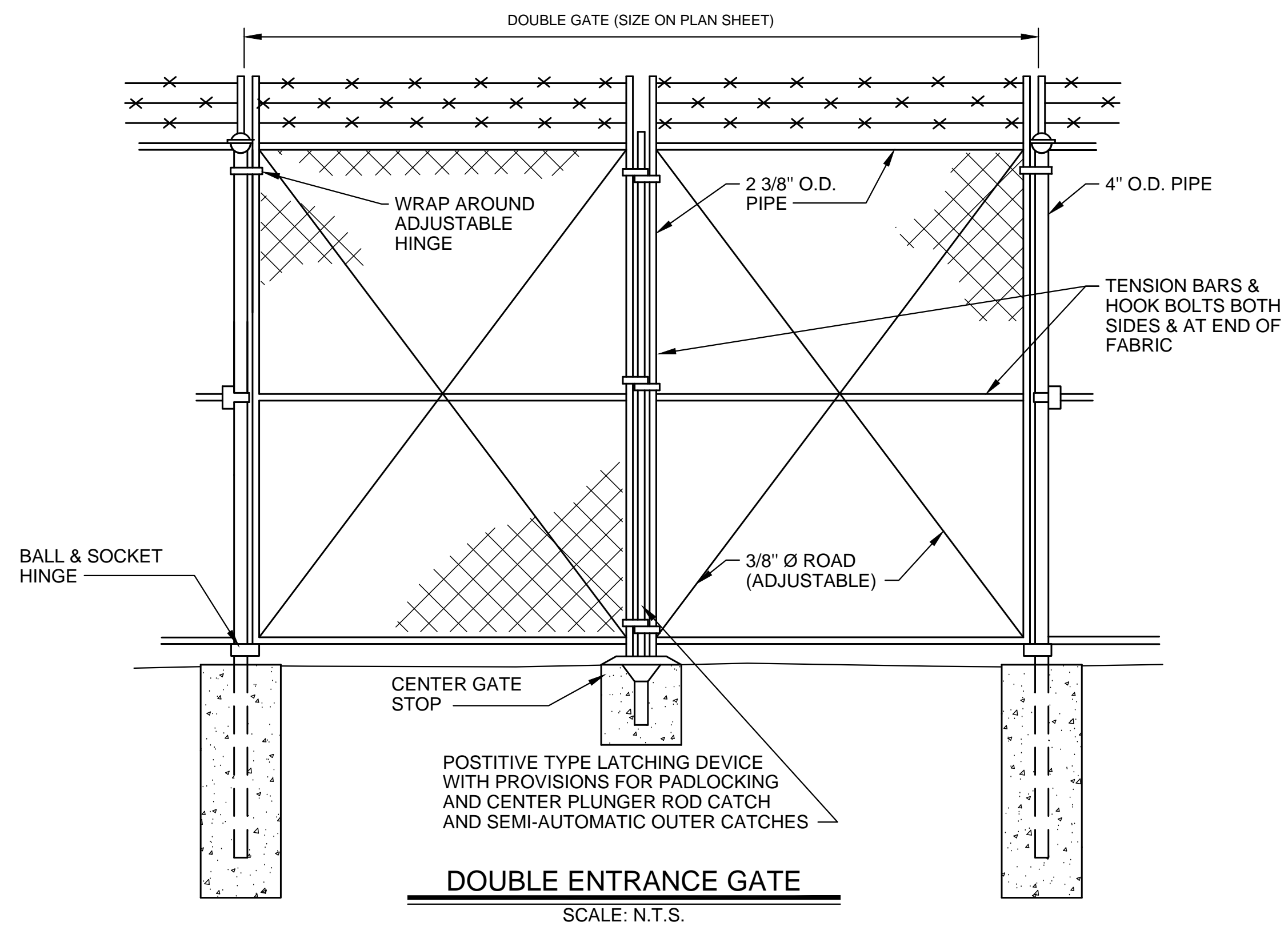


2020 WATER LINE IMPROVEMENTS
LARUE COUNTY #1 WATER DISTRICT
LARUE COUNTY, KENTUCKY

STANDARD DETAILS


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NO.	DATE	REVISIONS	DATE	APPR'D	DATE

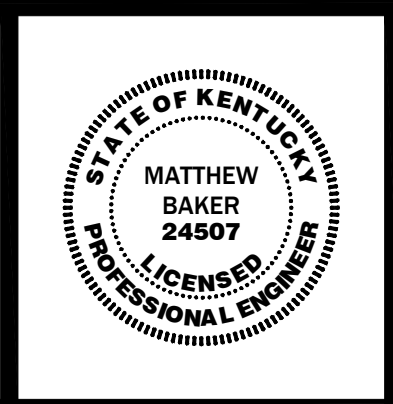
PROJECT:	467	DATE:	3/26/2020
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**2020 WATER LINE IMPROVEMENTS
LARUE COUNTY #1 WATER DISTRICT
LARUE COUNTY, KENTUCKY**

STANDARD DETAILS

SHEET SD5
OF SD5