



STA. 0+00
 CONNECT NEW 6-INCH WATER LINE TO EXISTING 6-INCH WATER LINE BY REMOVING EXISTING FLUSH HYDRANT AND CONNECTING DIRECTLY INTO THE EXISTING 6-INCH GATE VALVE.
 LAT: 38°55'43.18" N
 LONG: 84°38'49.25" W

2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 KENTUCKY HIGHWAY 790 WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
CHECKED BY: JLM	SCALE: 1" = 100'		9
CHECKED BY: DSB	PROJECT: 2235		



**2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY**

KENTUCKY HIGHWAY 790 WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
CHECKED BY: JLM	SCALE: 1" = 100'		10
CHECKED BY: DSB	PROJECT: 2235		



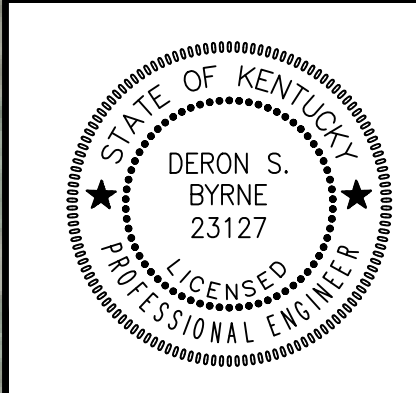
STA. 0+00
 CONNECT NEW 6-INCH WATER LINE TO EXISTING
 4-INCH WATER LINE WITH 6-INCHx4-INCH REDUCER,
 4-INCHx4-INCH TAPPING SLEEVE AND VALVE.
 LAT: 36° 54' 47.99" N
 LONG: 84° 38' 11.67" W

INSTALL 6-INCH PVC SDR 17
 WATER LINE

INSTALL NEW PRESSURE
 REDUCING VALVE STATION.
 SEE DETAILS SHEET PRV-1

INSTALL 6-INCH WATER LINE
 ALONG COMMONWEALTH OF
 KENTUCKY RIGHT-OF-WAY

2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 KENTUCKY HIGHWAY 790 WATER LINE REPLACEMENT

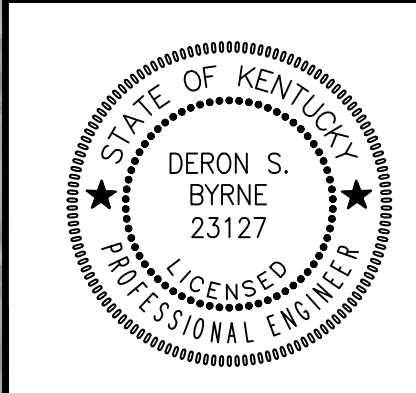


M
 Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
CHECKED BY: JLM	SCALE: 1" = 100'		11
CHECKED BY: DSB	PROJECT: 2235		



2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY
KENTUCKY HIGHWAY 790 WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
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CHECKED BY: DSB	PROJECT: 2235		



**2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
BRONSTON WATER ASSOCIATION
PULASKI & WAYNE COUNTIES, KENTUCKY
FLYNN ROAD WATER LINE REPLACEMENT**

	Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342			
	DRAWN BY: JRC CHECKED BY: JLM CHECKED BY: DSB	DATE: JULY 2022 SCALE: 1" = 100' PROJECT: 2235	REVISED 	SHEET 13



CONNECT NEW 3-INCH WATER LINE TO EXISTING 3-INCH WATER LINE BY CONNECTING TO EXISTING 3-INCH GATE VALVE.
 LAT: 36° 57' 45.24" N
 LONG: 84° 43' 32.74" W

INSTALL 3-INCH PVC SDR 17 WATER LINE

INSTALL 3-INCH GATE VALVE

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

INSTALL 30 LF OF BORE & CASE FOR 3-INCH WATER LINE

INSTALL 3-INCH GATE VALVE

INSTALL 3-INCH BLOWOFF ASSEMBLY

INSTALL 3-INCH BLOWOFF ASSEMBLY

INSTALL 3-INCH PVC SDR 17 WATER LINE

INSTALL 3-INCH PVC SDR 17 WATER LINE

INSTALL 30 LF OF CREEK CROSSING FOR 3-INCH WATER LINE

INSTALL 3-INCH GATE VALVE

INSTALL 2-WAY FLUSH HYDRANT

RECONNECT EXISTING METER TO NEW WATER LINE WITH NEW 3/4-INCH HDPE SERVICE LINE AND FITTINGS (TYP.)

INSTALL 3-INCH GATE VALVE

INSTALL 3-INCH GATE VALVE

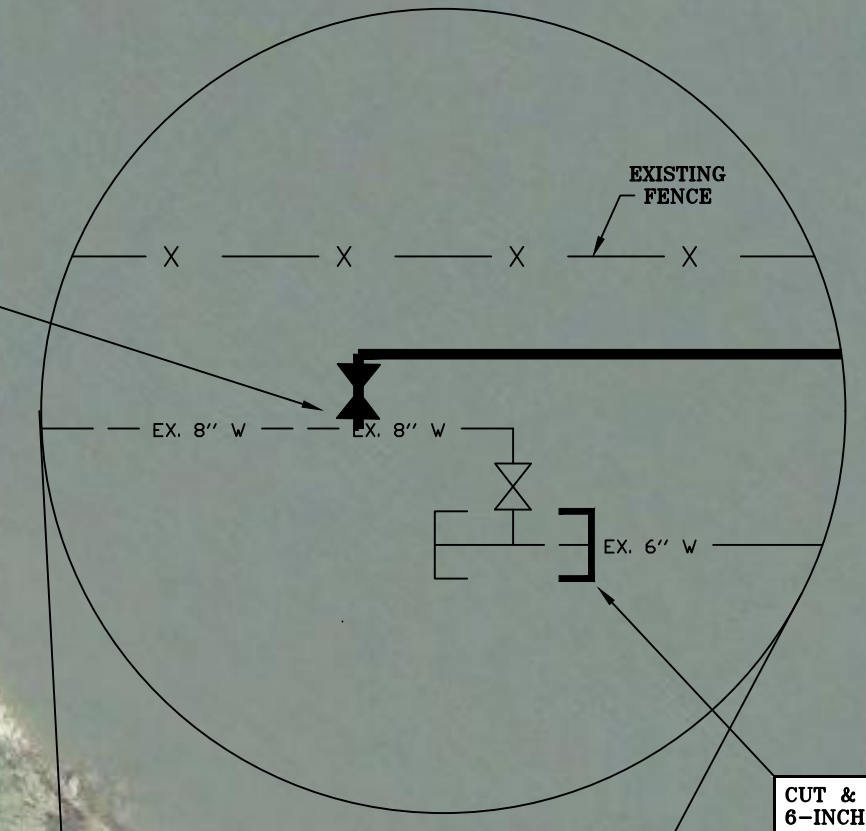
2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 CEDAR BLUFF WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
CHECKED BY: JLM	SCALE: 1" = 100'		14
CHECKED BY: DSB	PROJECT: 2235		

STA. 0+00
 CONNECT NEW 8-INCH WATER LINE
 TO EXISTING 8-INCH WATER LINE
 WITH AN 8-INCH-8-INCH TAPPING
 SLEEVE AND VALVE
 LAT: 36° 57' 16.88" N
 LONG: 84° 36' 28.03" W



CUT & CAP EXISTING
 6-INCH WATER LINE

INSTALL 100 LF OF OPEN CUT & PAVEMENT
 REPLACEMENT FOR 8-INCH WATER LINE

INSTALL 40 LF OF BORE & CASE
 FOR 8-INCH WATER LINE

INSTALL 3-INCH
 GATE VALVE

INSTALL 50 LF OF OPEN CUT &
 PAVEMENT REPLACEMENT FOR
 8-INCH WATER LINE

INSTALL 8-INCH PVC SDR 17
 WATER LINE

STA. 0+70
 CONNECT NEW 8-INCH WATER LINE DIRECTLY
 INTO EXISTING 6-INCH GATE VALVE WITH
 8-INCH-6-INCH REDUCER AND ACCESSORIES

INSTALL DIRECT CONNECTION TO
 EXISTING 3-INCH GATE VALVE WITH
 8-INCH-3-INCH REDUCER AND
 ACCESSORIES FOR A COMPLETE TIE IN.

CUT & CAP EXISTING
 3-INCH WATER LINE

INSTALL 180 LF OF OPEN CUT & PAVEMENT
 REPLACEMENT FOR 8-INCH WATER LINE

2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 COLYER ROAD WATER LINE REPLACEMENT



Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
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CHECKED BY: DSB	PROJECT: 2235		



STA. 0+00
 CONNECT NEW 3-INCH WATER LINE TO EXISTING
 8-INCH WATER LINE WITH 6-INCHx3-INCH REDUCER,
 3-INCHx3-INCH TAPPING SLEEVE AND VALVE.
 LAT: 36° 56' 24.52" N
 LONG: 84° 43' 58.95" W

INSTALL 50 LF OF BORE & CASE
 FOR 3-INCH WATER LINE

INSTALL 3-INCH PVC SDR 17
 WATER LINE

INSTALL 20 LF OF DRIVEWAY
 BORE & CASE FOR 3-INCH
 WATER LINE (TYP.)

STA. 14+20
 INSTALL 3-INCH BLOWOFF ASSEMBLY

INSTALL 30 LF OF BORE & CASE
 FOR 3-INCH WATER LINE

CONNECT NEW 3-INCH WATER LINE TO
 EXISTING 2-INCH WATER LINE WITH
 3-INCHx2-INCH REDUCER, 2-INCHx2-INCH
 TAPPING SLEEVE AND VALVE.

EXISTING METER
 TO REMAIN (TYP.)

CUT & CAP EXISTING
 2-INCH WATER LINE

CUT & CAP EXISTING
 3-INCH WATER LINE

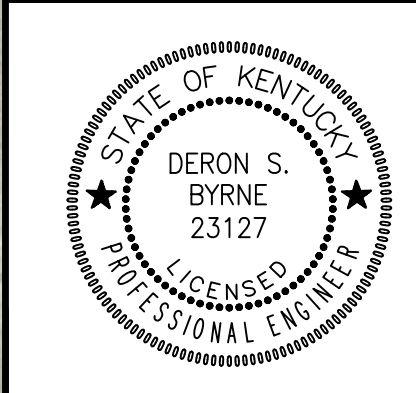
RECONNECT EXISTING METER
 TO NEW WATER LINE WITH
 NEW 3/4-INCH HDPE SERVICE
 LINE AND FITTINGS (TYP.)

INSTALL 30 LF OF BORE & CASE
 FOR 3-INCH WATER LINE

CUT & CAP EXISTING
 2-INCH WATER LINE

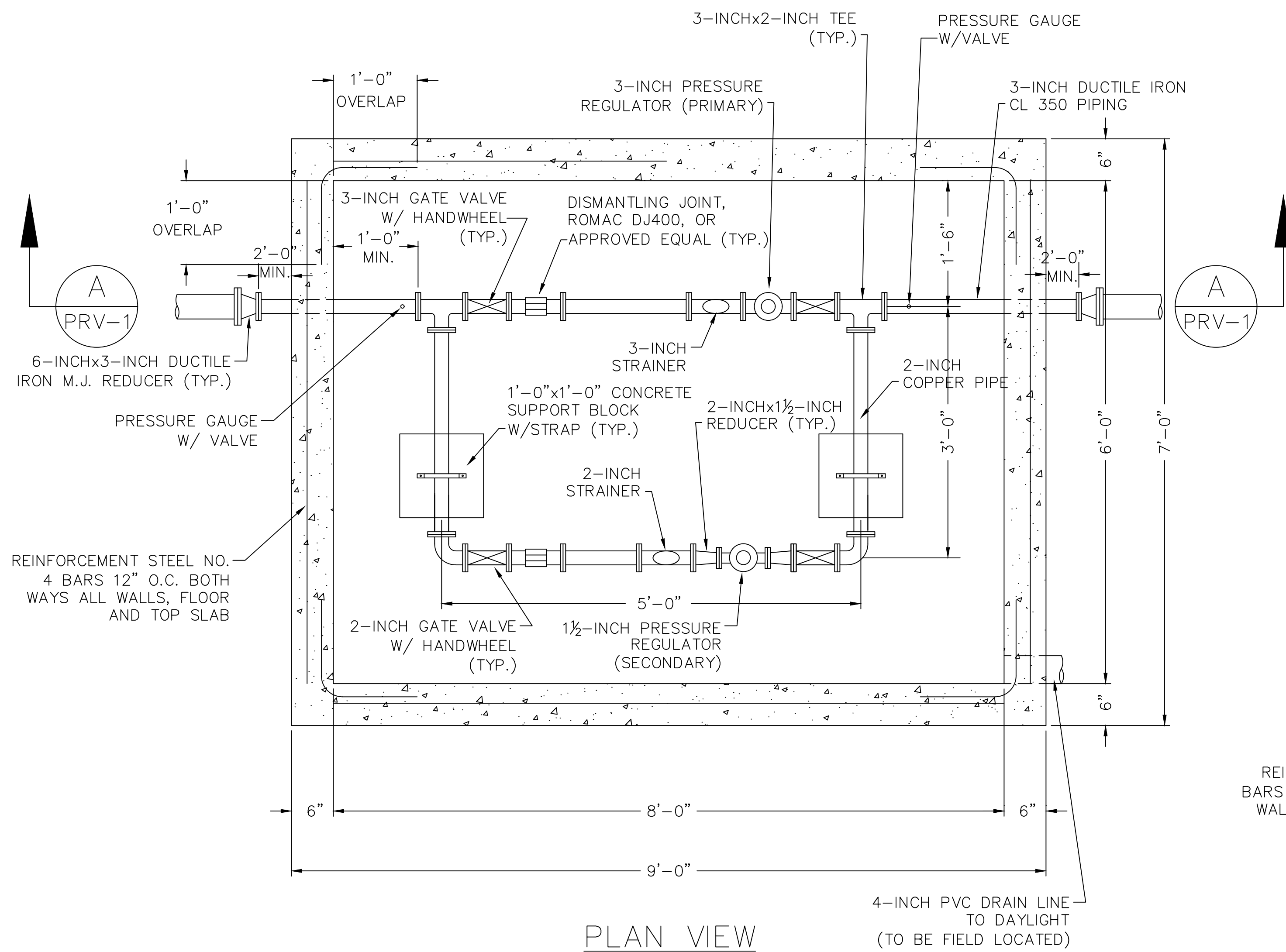
CONNECT NEW 3-INCH WATER LINE TO
 EXISTING 2-INCH WATER LINE WITH
 3-INCHx2-INCH REDUCER, 2-INCHx2-INCH
 TAPPING SLEEVE AND VALVE.

2022 WATER SYSTEM IMPROVEMENTS & REPLACEMENTS
 BRONSTON WATER ASSOCIATION
 PULASKI & WAYNE COUNTIES, KENTUCKY
 RUTH ROAD WATER LINE REPLACEMENT

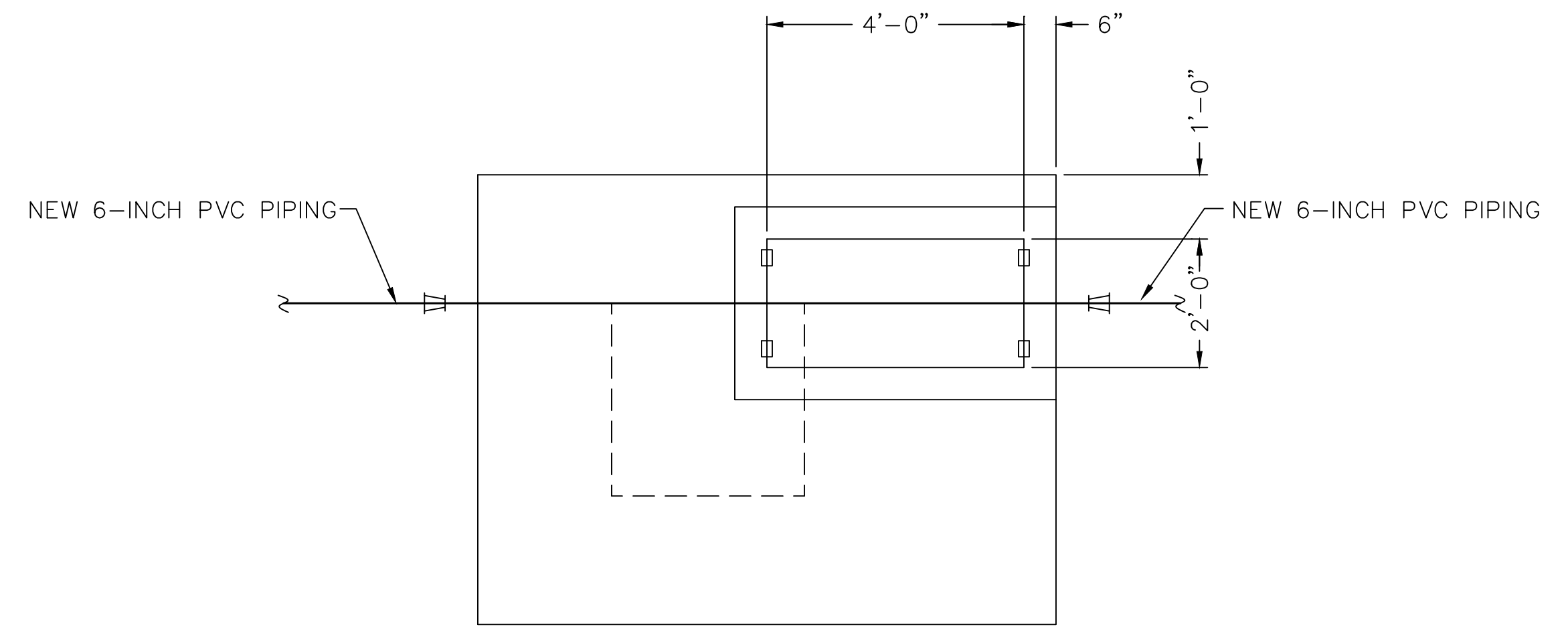


Monarch Engineering, Inc.
 556 CARLTON DRIVE
 LAWRENCEBURG, KY 40342

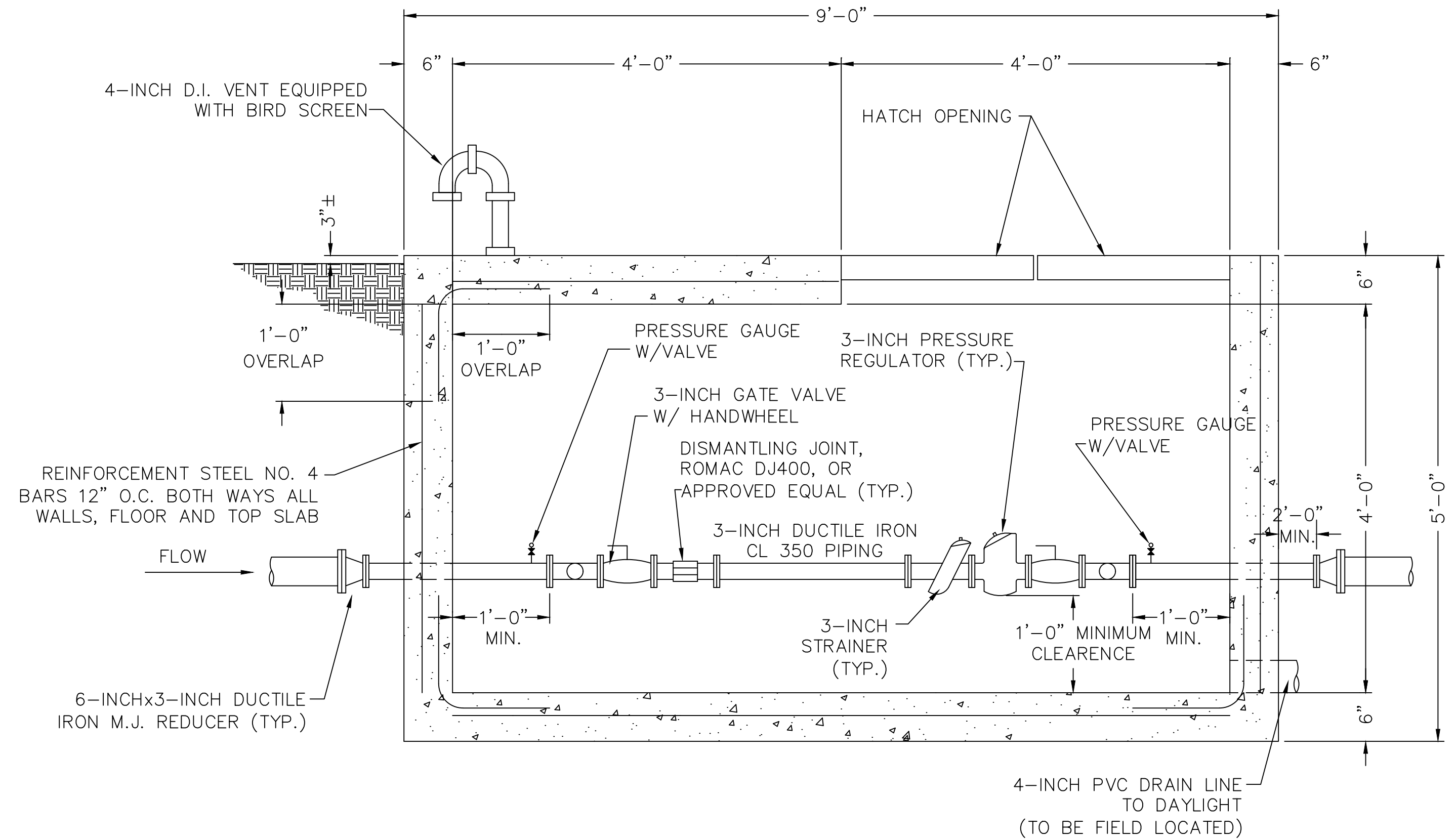
DRAWN BY: JRC	DATE: JULY 2022	REVISED	SHEET
CHECKED BY: JLM	SCALE: 1" = 100'		16
CHECKED BY: DSB	PROJECT: 2235		



PLAN VIEW



PLAN OF HATCH OPENING DETAIL FOR PRESSURE REGULATING STATION



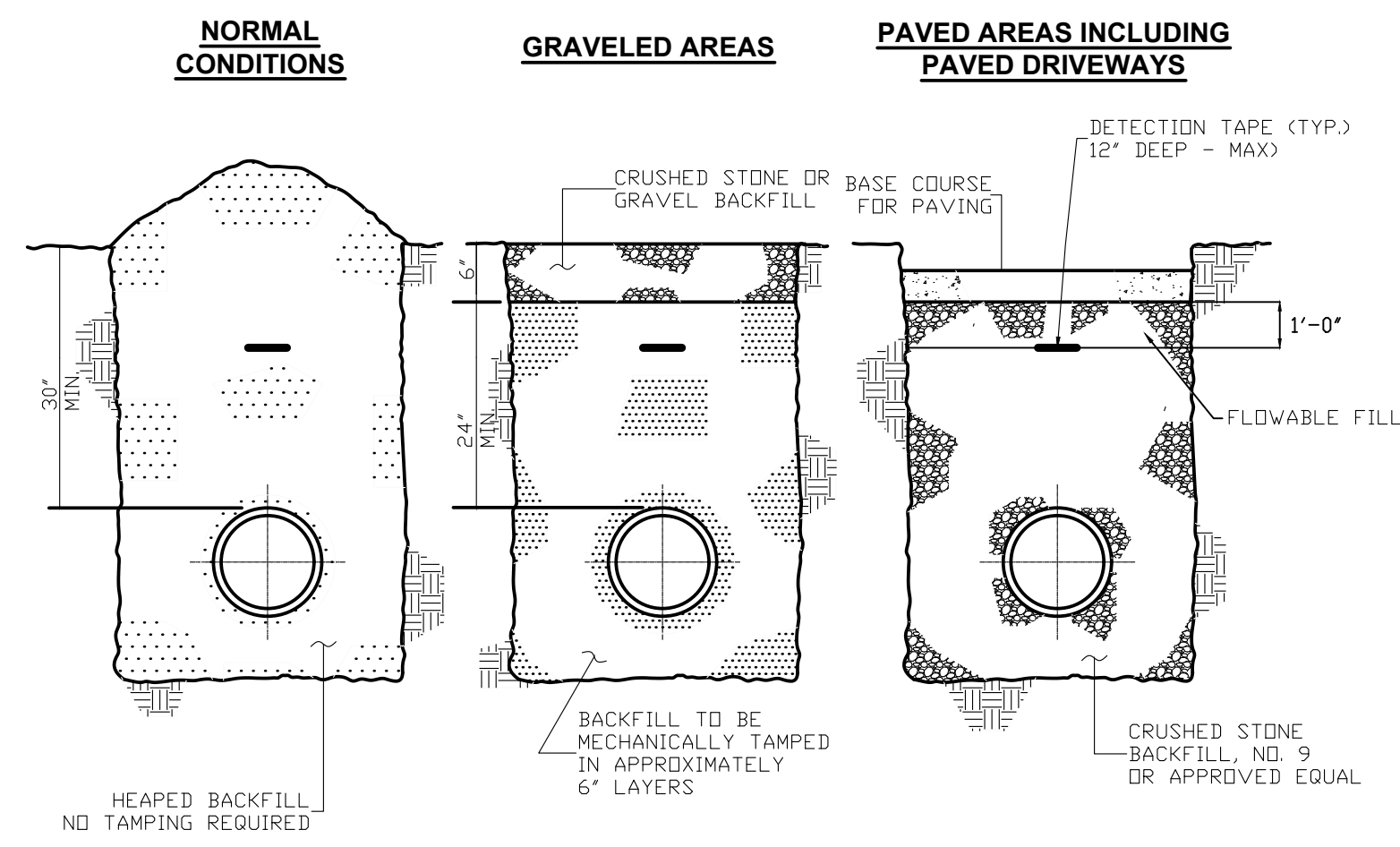
SECTION A-A

PRESSURE REGULATING VALVE SETTING CHART		
LOCATION	INLET PSI	SET POINT
PRIMARY (HIGH FLOWS)	60-160	40
SECONDARY (LOW FLOWS)	60-160	45

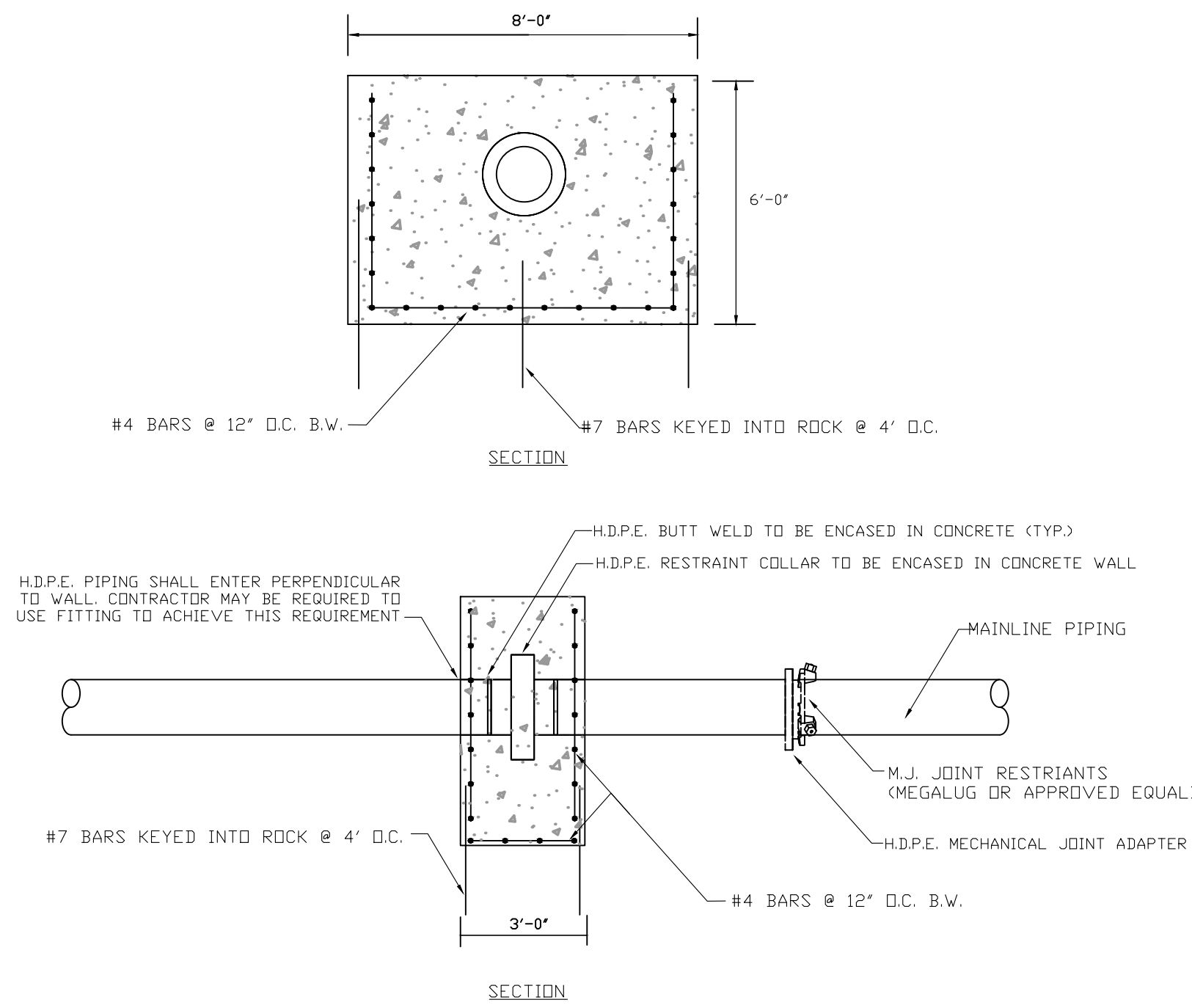
**2022 WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
WAYNE & PULASKI COUNTIES, KENTUCKY**

KY HIGHWAY 790 PRESSURE REDUCING VALVE STATION

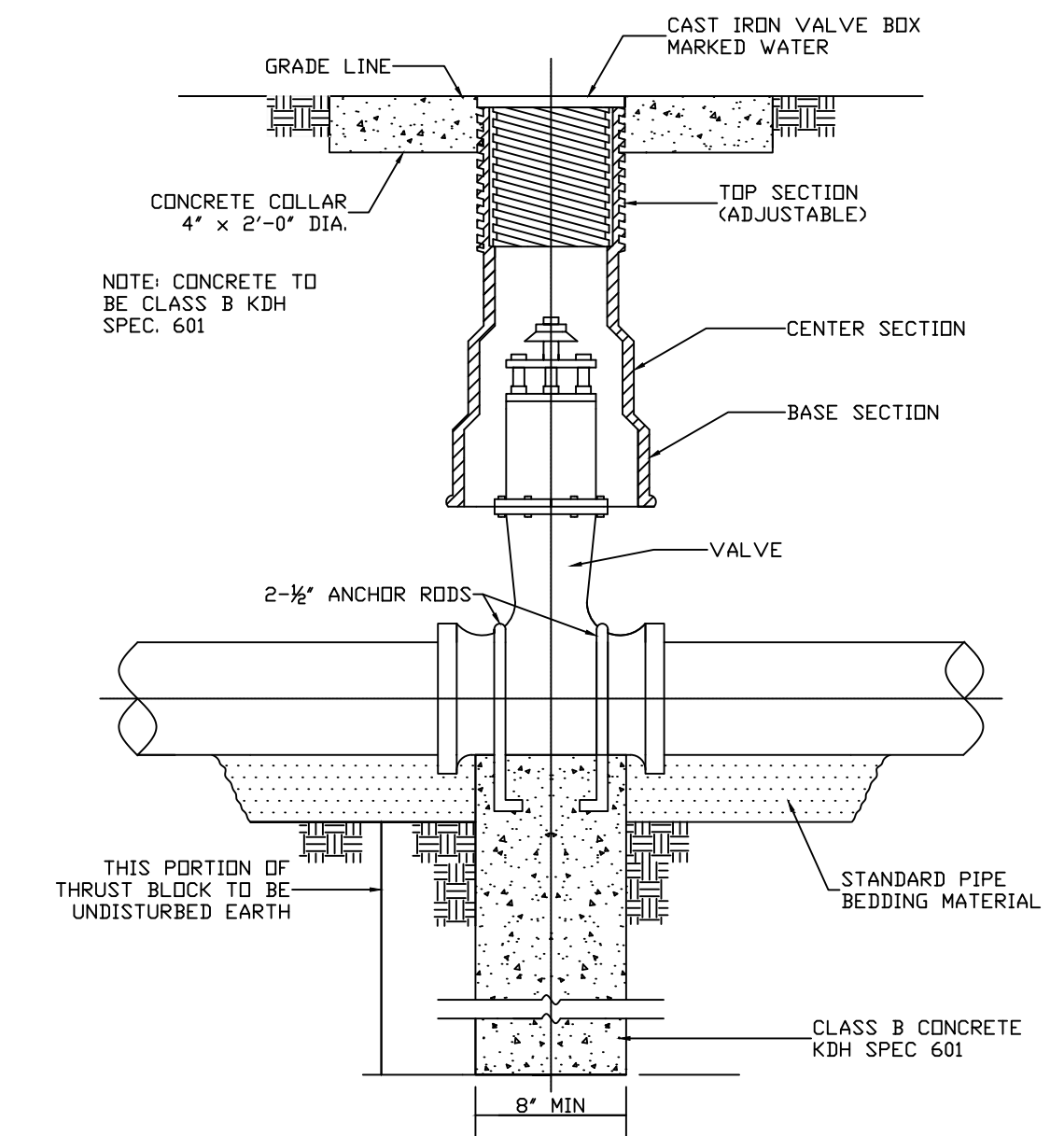
			SHEET PRV-1	
	DRAWN BY: JRC CHECKED BY: DSB	DATE: JULY 2022 SCALE: AS SHOWN		REVISED
	PROJECT: 2235			CHECKED BY: DMB



BACKFILLING DETAILS
N.T.S

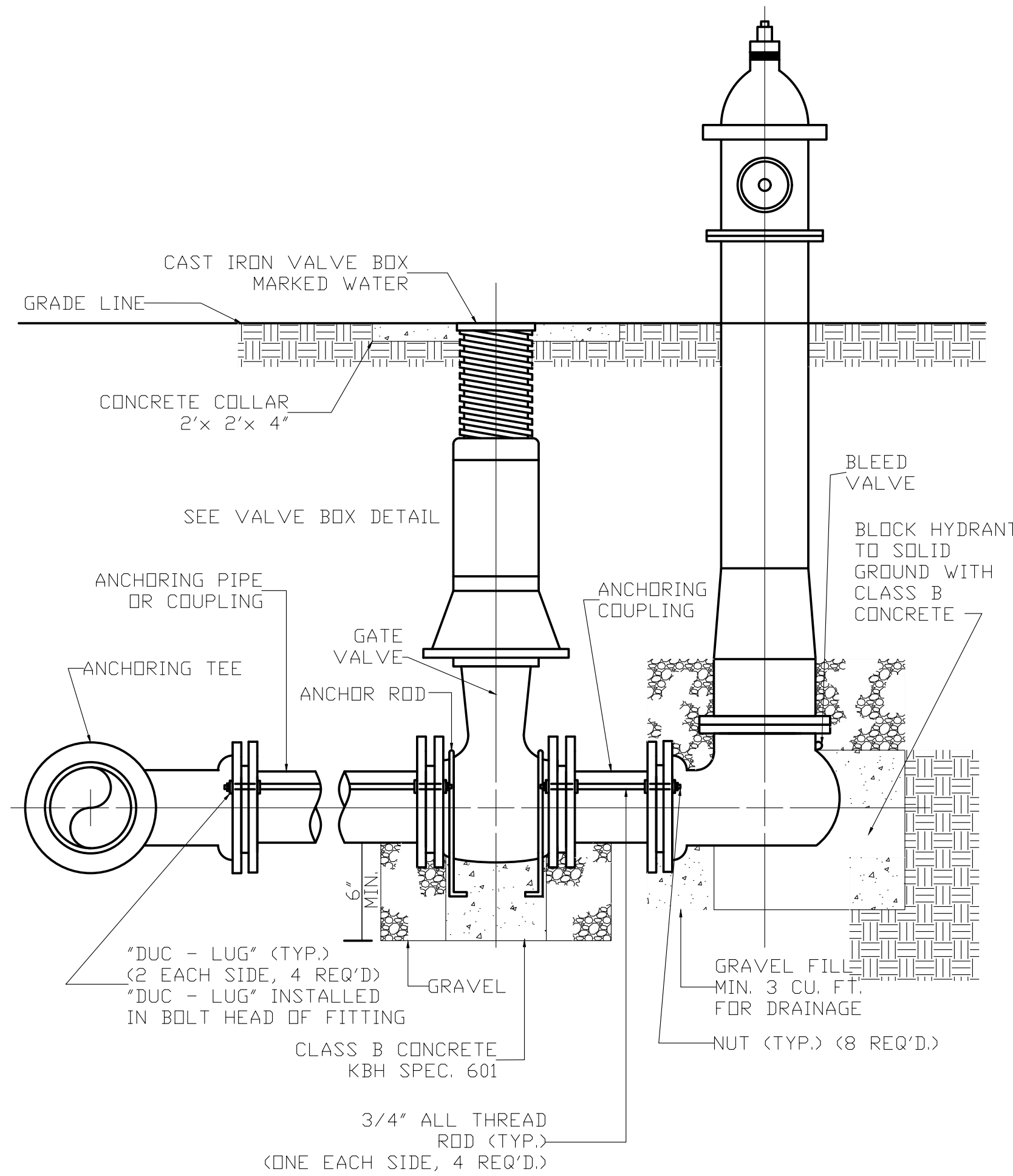


HDPE RESTRAINT WALL
N.T.S



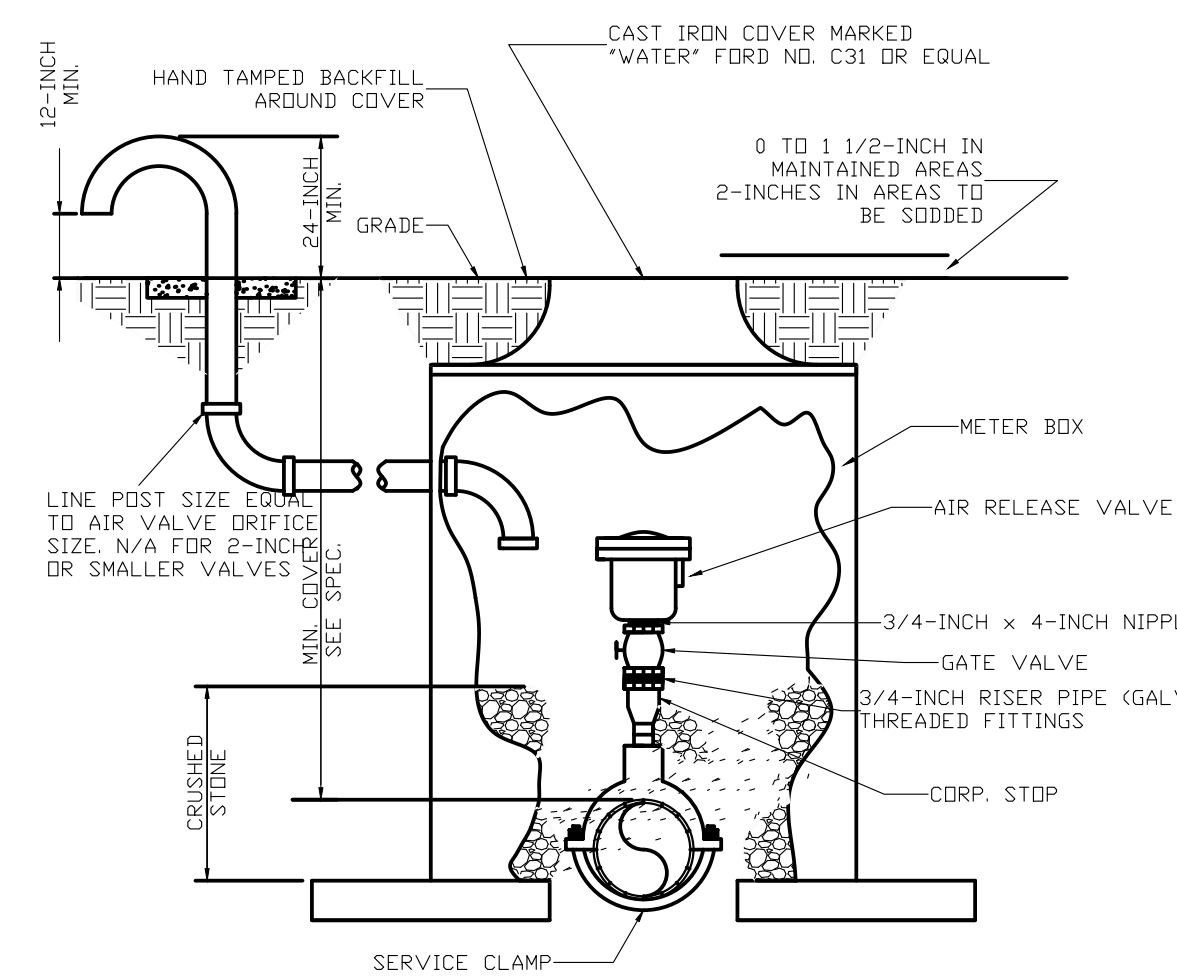
NOTE: SEE SPECIFICATION FOR PIPING MATERIALS AND PIPING JOINTS

GATE VALVE DETAIL
N.T.S



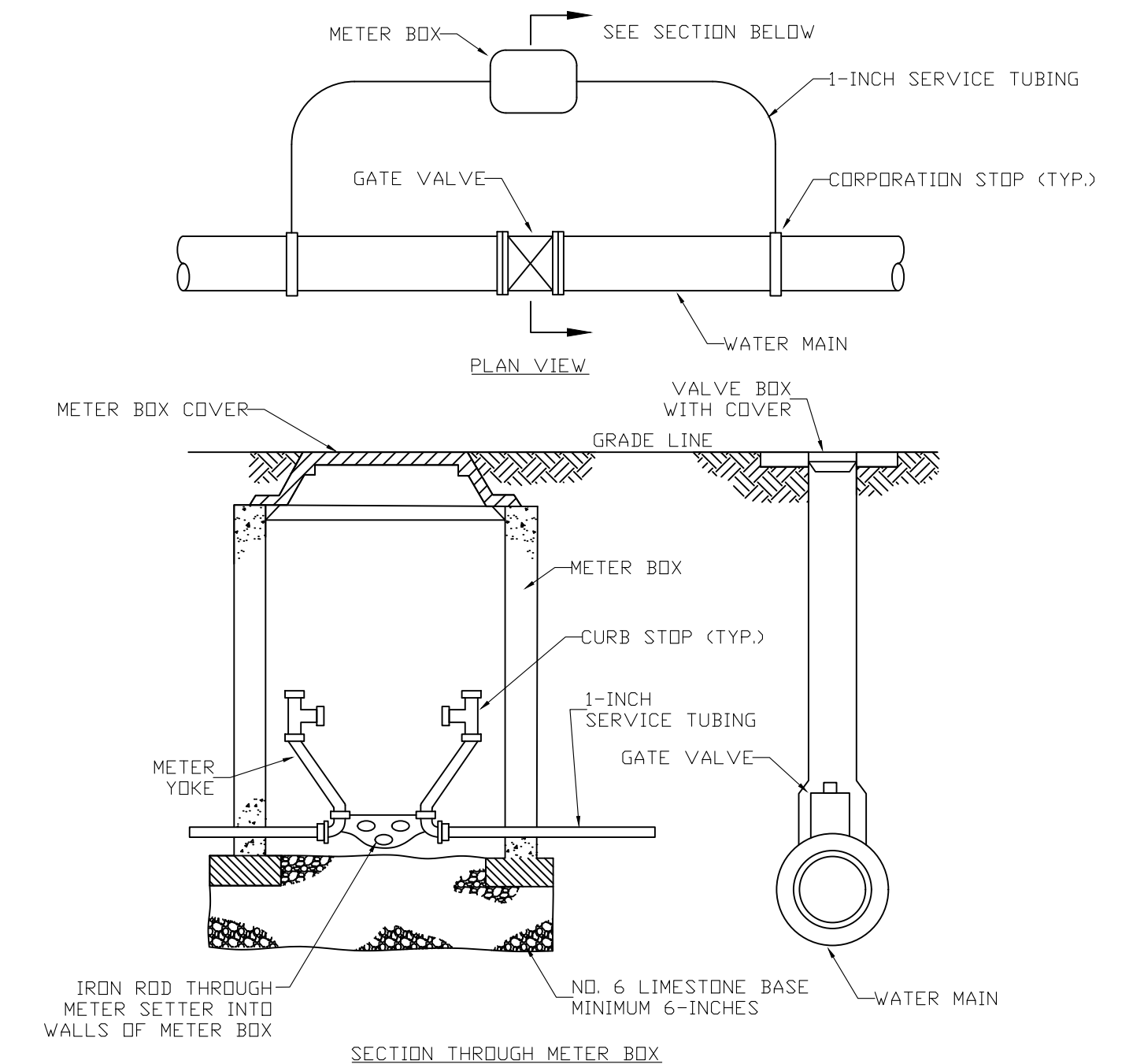
NOTES: SEE SPECIFICATIONS FOR PIPING MATERIALS AND BLEED VALVE NOT TO BE ENCASED IN CONCRETE

FLUSH HYDRANT DETAIL
N.T.S

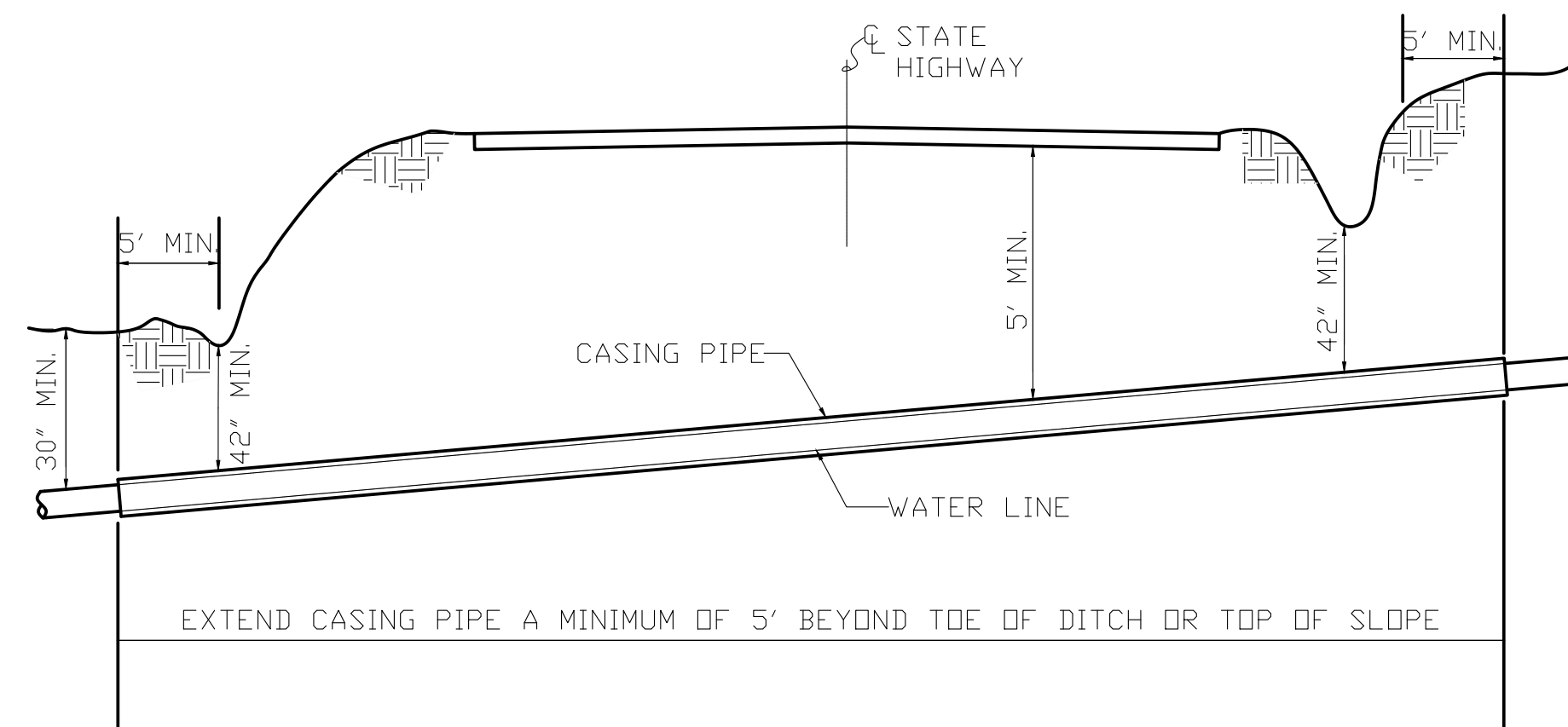


NOTE: WHERE THE WATER LINE IS LOCATED IN A STREET OR ROAD, THE AIR RELEASE VALVE AND BOX ARE TO BE LOCATED OFF THE ROAD AS DIRECTED BY THE ENGINEER AND CONNECTED TO THE MAINLINE BY 3/4-INCH SERVICE PIPE.
NOTE: 2\"/>

AIR RELEASE VALVE
N.T.S



ISOLATION CHECK METER DETAIL
N.T.S

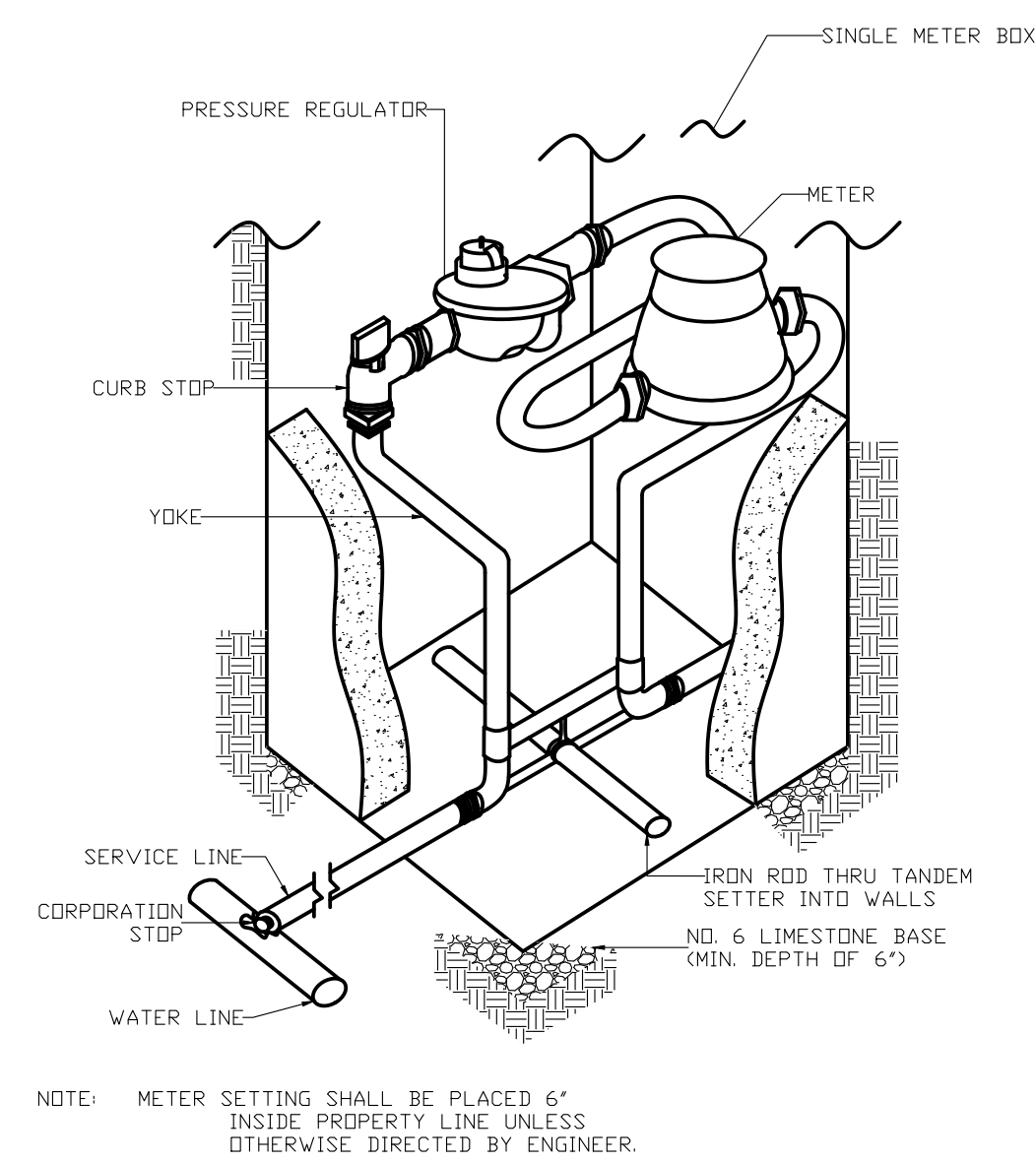


TYP. STATE HIGHWAY ENCASED BORE CROSSING
N.T.S

**2022 WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
WAYNE & PULASKI COUNTIES, KENTUCKY**

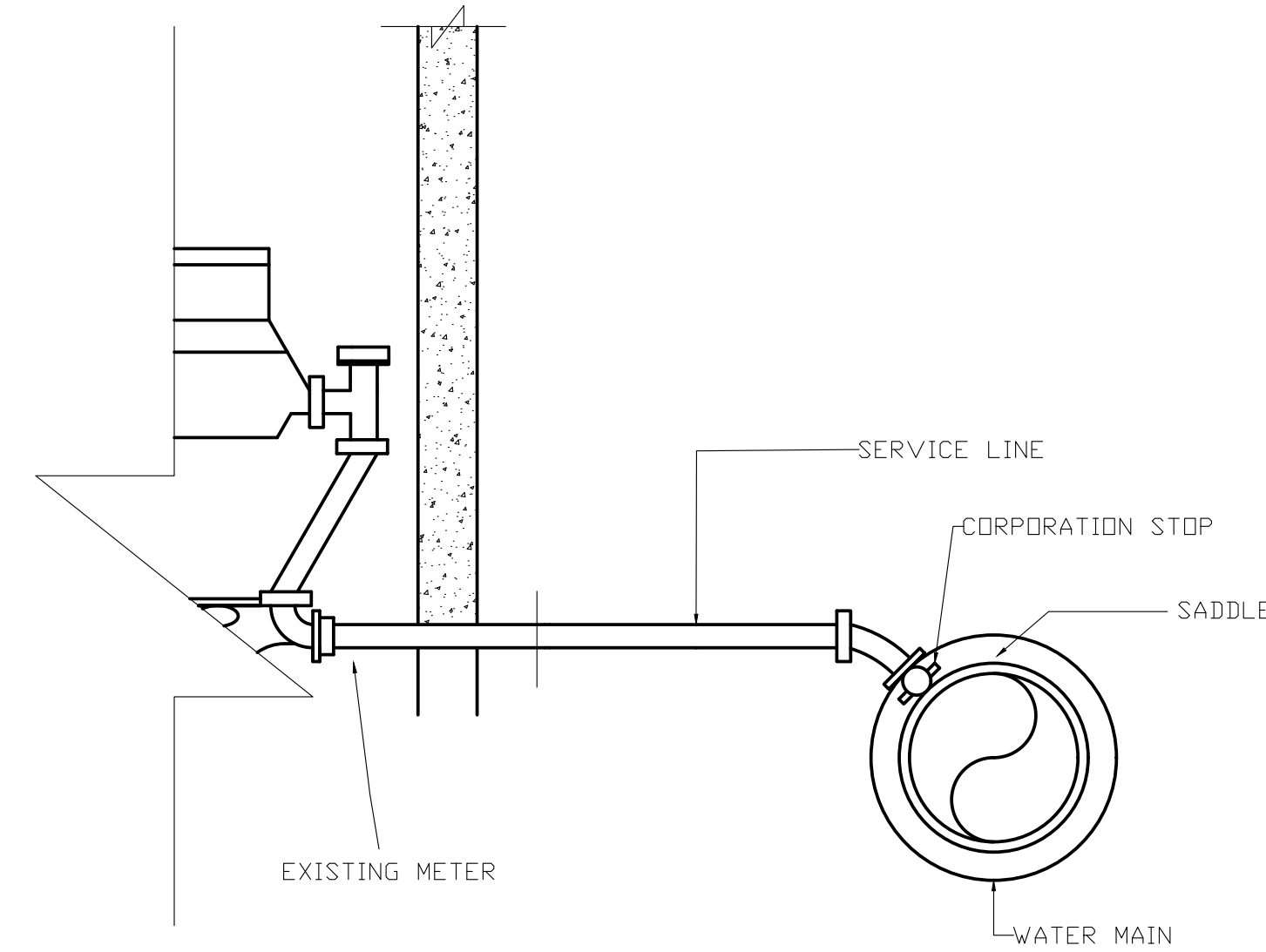
STANDARD DRAWINGS

	Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342	
	DRAWN BY: JRC CHECKED BY: DSB CHECKED BY: DMB	DATE: JULY 2022 SCALE: AS SHOWN PROJECT: 2235
	REVISED	SHEET SD-1



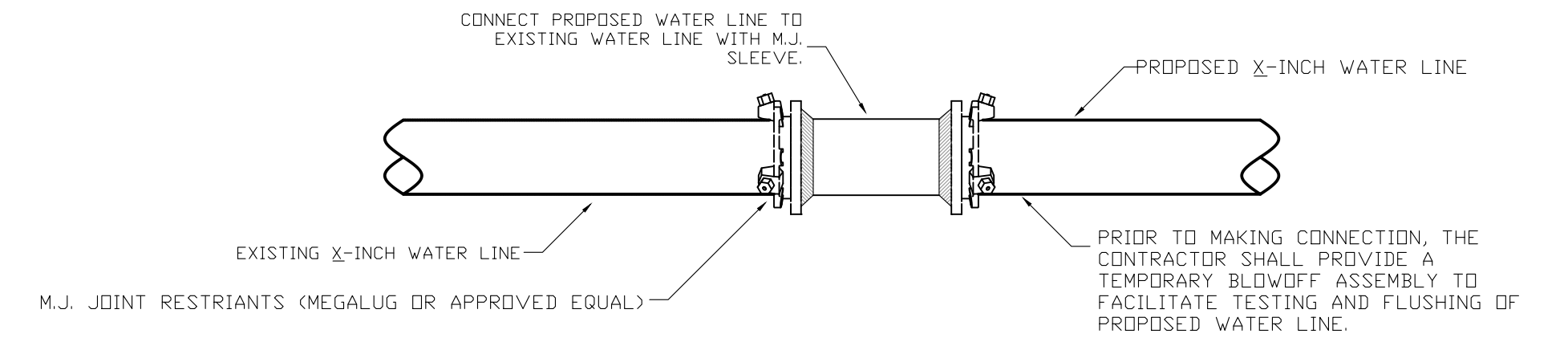
METER SETTING AND CONNECTION DETAIL
N.T.S

NOTE: METER SETTING SHALL BE PLACED 6" INSIDE PROPERTY LINE UNLESS OTHERWISE DIRECTED BY ENGINEER.



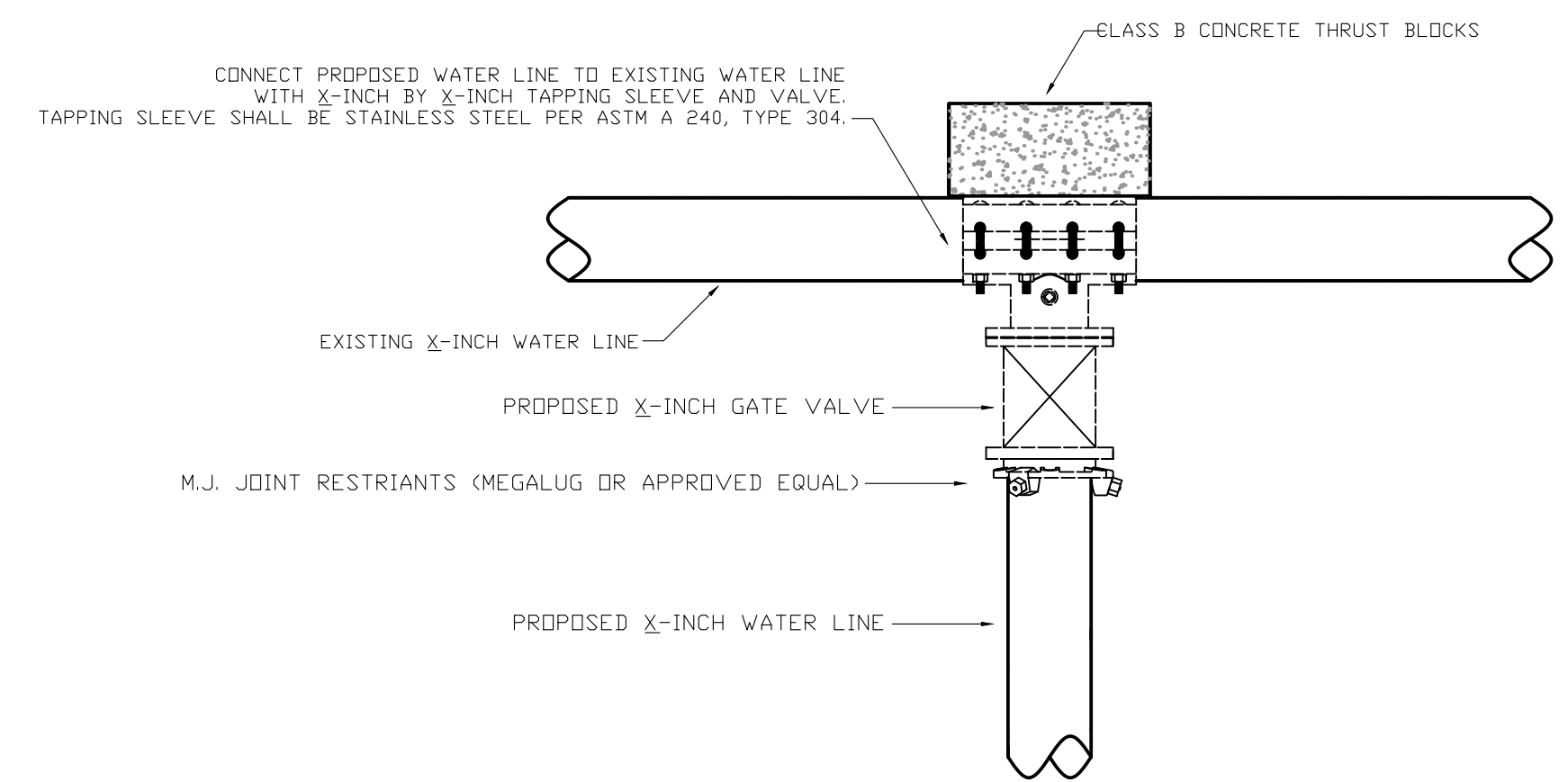
SERVICE RECONNECTION DETAIL
N.T.S

CONNECT NEW SERVICE LINE TO NEW WATER MAIN AND EXTEND TO AND CONNECT TO EXISTING METER.



DIRECT CONNECTION DETAIL
N.T.S

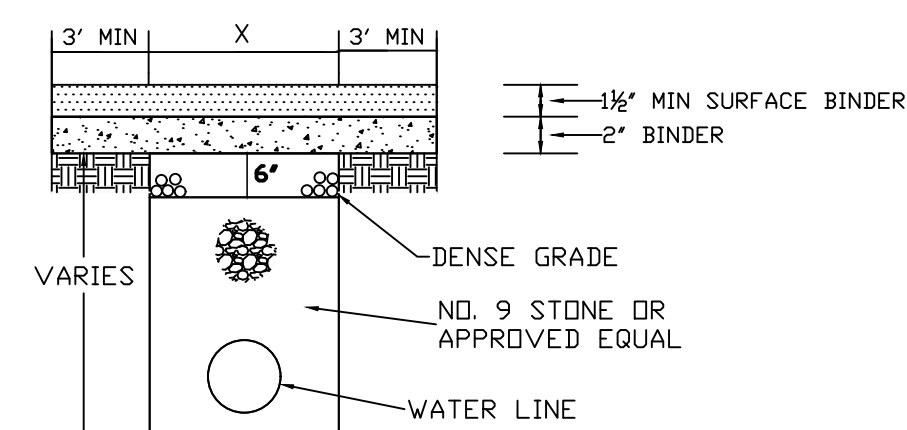
CONNECT PROPOSED WATER LINE TO EXISTING WATER LINE WITH M.J. SLEEVE.
PRIOR TO MAKING CONNECTION, THE CONTRACTOR SHALL PROVIDE A TEMPORARY BLOWOFF ASSEMBLY TO FACILITATE TESTING AND FLUSHING OF PROPOSED WATER LINE.



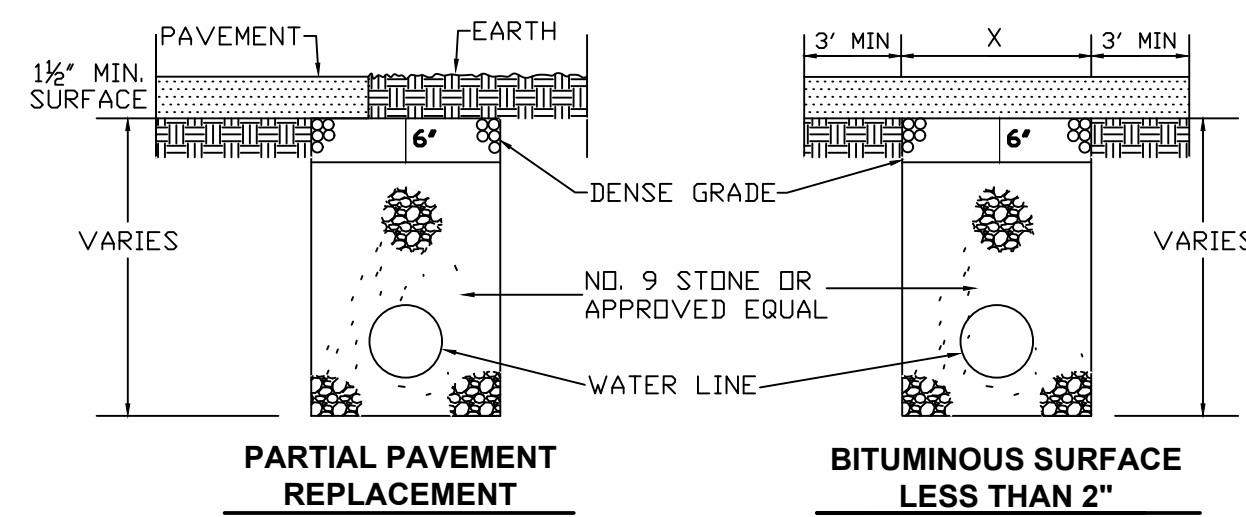
TYPE II CONNECTION DETAIL
N.T.S

CONNECT PROPOSED WATER LINE TO EXISTING WATER LINE WITH X-INCH BY X-INCH TAPPING SLEEVE AND VALVE. TAPPING SLEEVE SHALL BE STAINLESS STEEL PER ASTM A 240, TYPE 304.

REPLACE BITUMINOUS PAVEMENT WITH SAME TYPE AND DEPTH AS EXISTING PAVEMENT

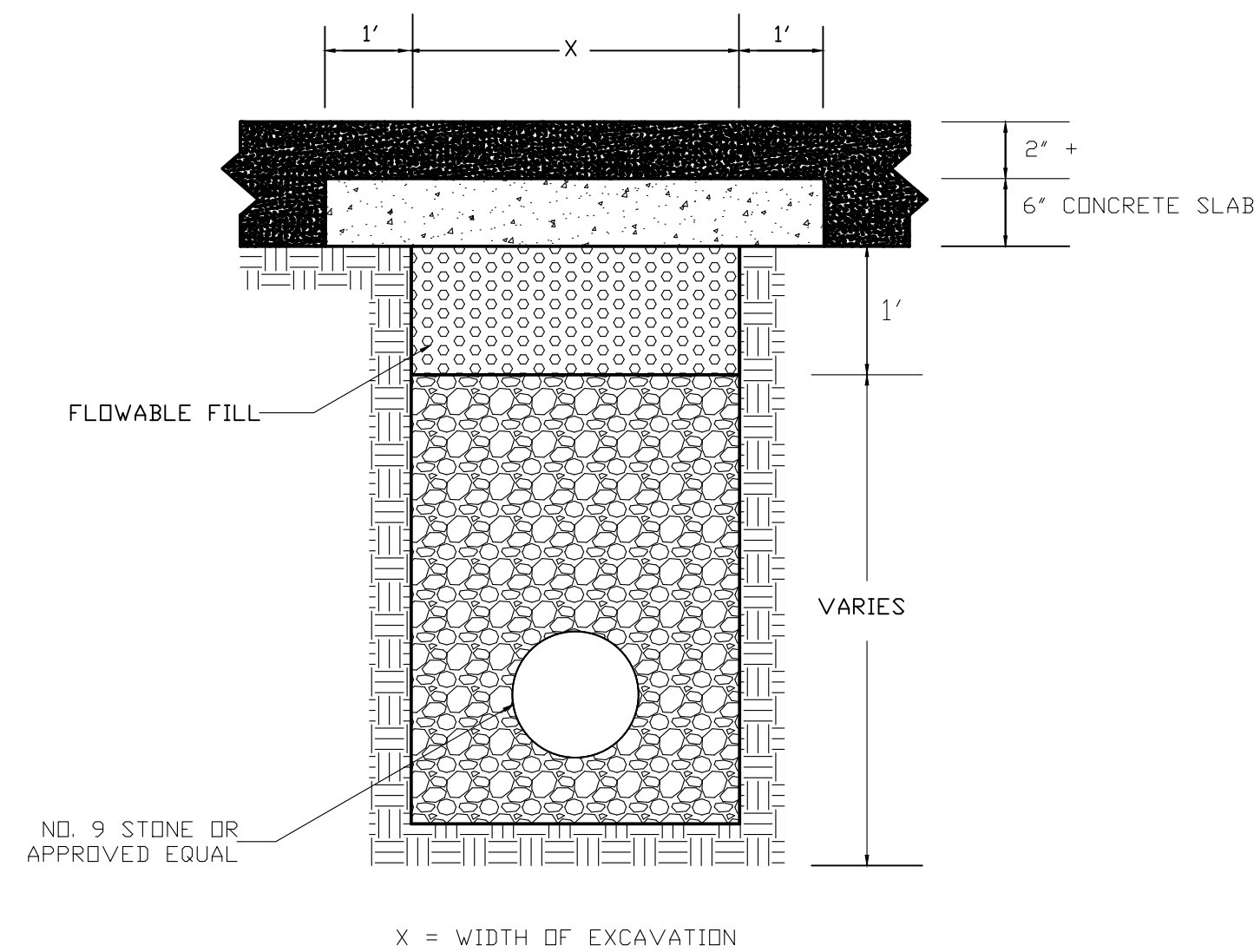


BITUMINOUS SURFACE 2" +



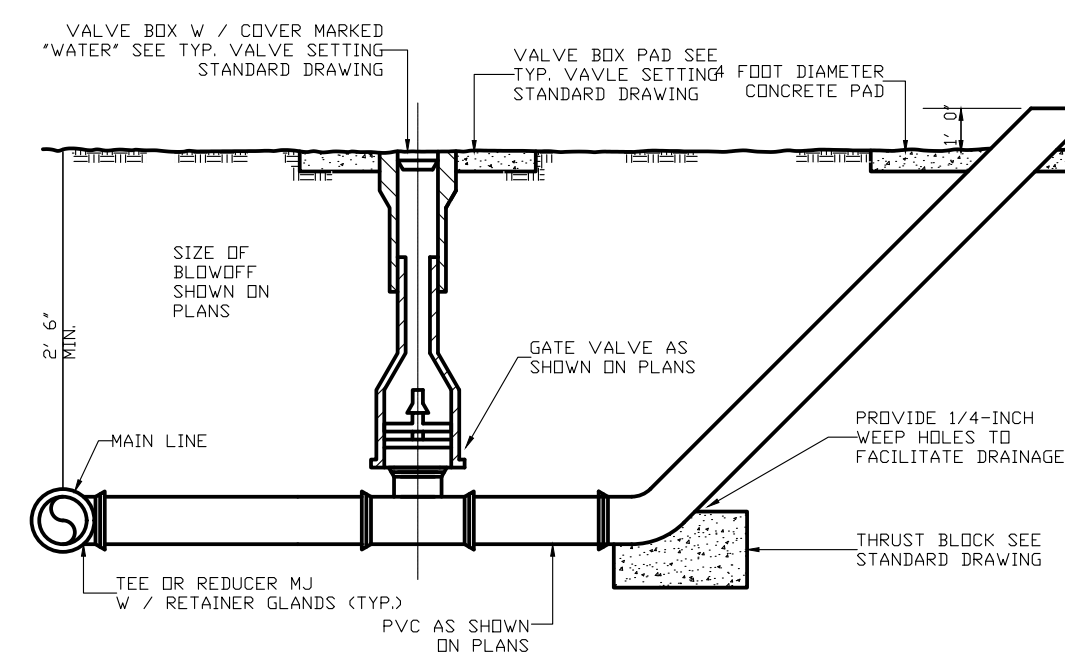
BITUMINOUS PAVEMENT REPLACEMENT DETAILS
N.T.S

ANY TRENCH THAT DISTURBS PAVEMENT SHALL BE BACKFILLED WITH STONE



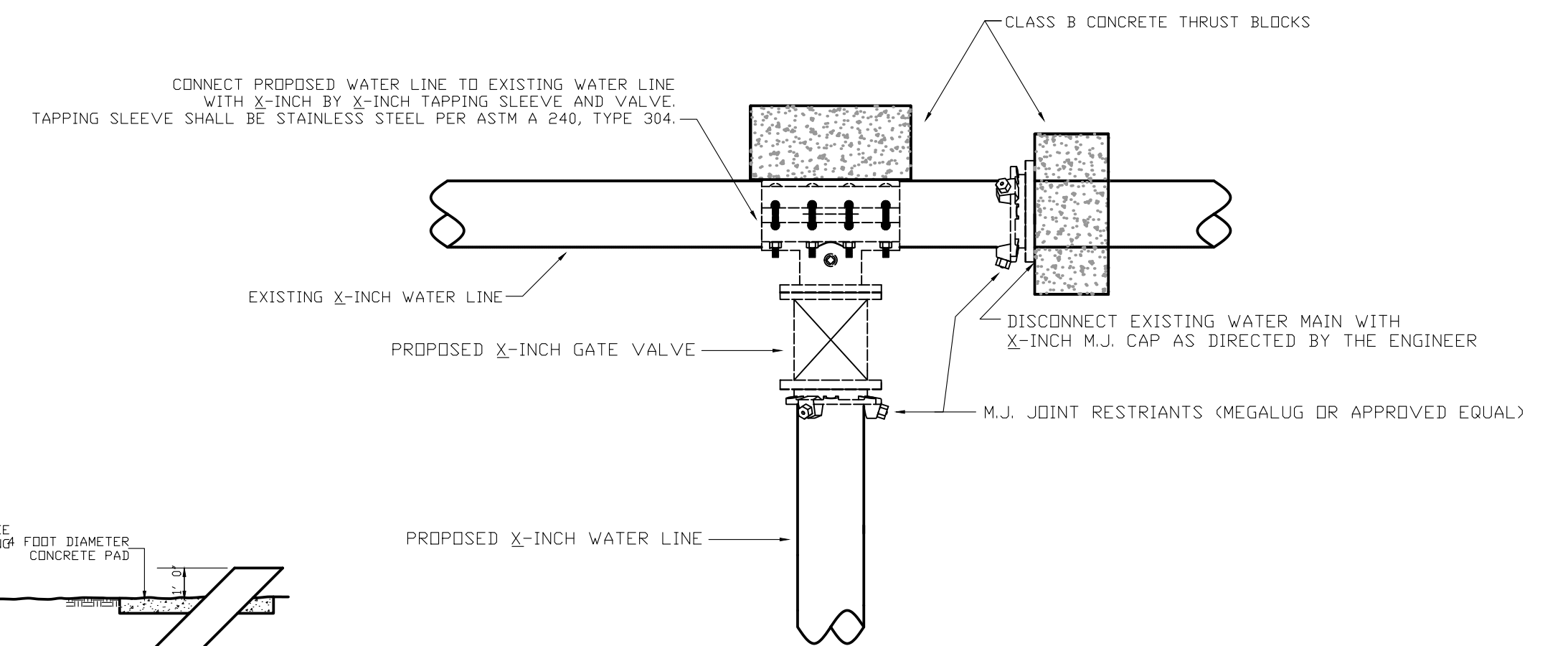
STATE HIGHWAY PAVEMENT REPLACEMENT
N.T.S

X = WIDTH OF EXCAVATION



BLOWOFF DETAIL
N.T.S

NOTE: WHERE BLOWOFF ASSEMBLIES ARE REQUIRED AT THE END OF A LINE, NO TEE OR REDUCER IS REQUIRED AT THESE LOCATIONS. VALVES AND PIPES ARE TO BE THE SAME SIZE AS THE WATER MAIN.



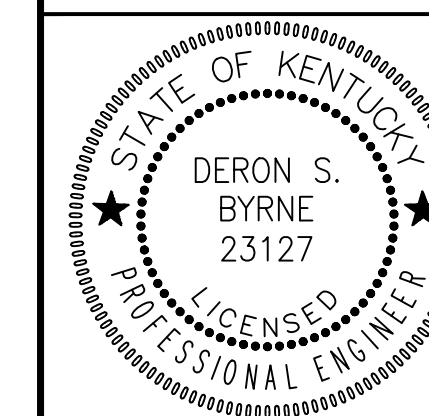
TYPE I CONNECTION DETAIL
N.T.S

CONNECT PROPOSED WATER LINE TO EXISTING WATER LINE WITH X-INCH BY X-INCH TAPPING SLEEVE AND VALVE. TAPPING SLEEVE SHALL BE STAINLESS STEEL PER ASTM A 240, TYPE 304.

DISCONNECT EXISTING WATER MAIN WITH X-INCH M.J. CAP AS DIRECTED BY THE ENGINEER

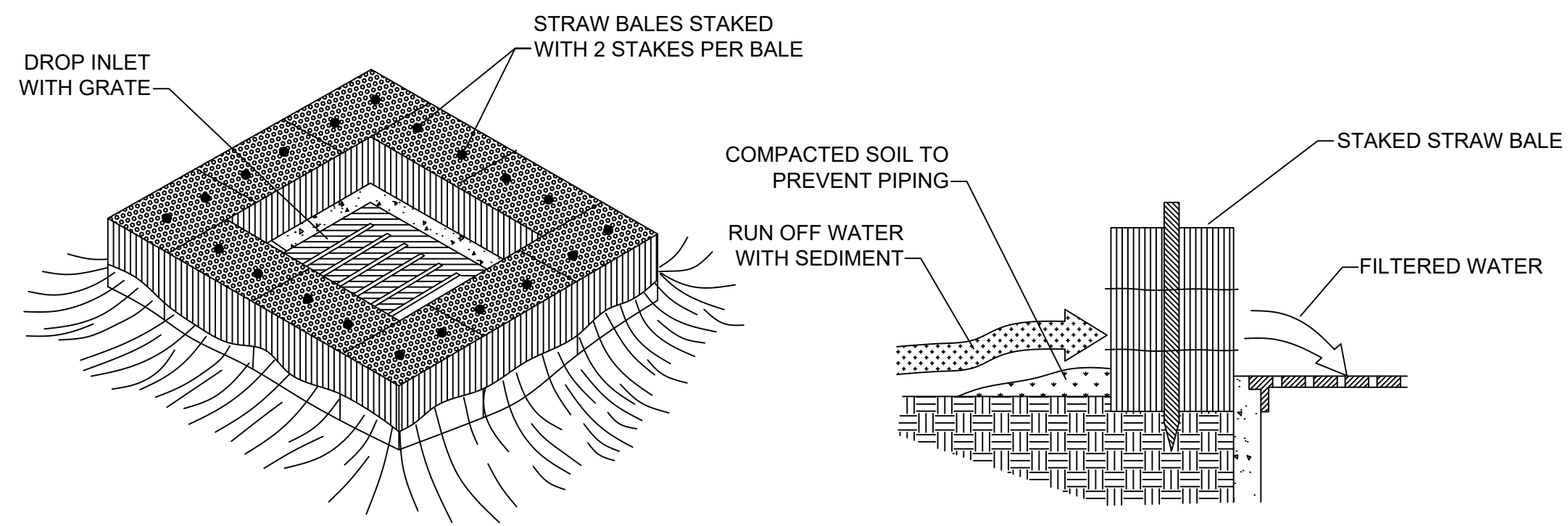
2022 WATER SYSTEM IMPROVEMENTS
BRONSTON WATER ASSOCIATION
WAYNE & PULASKI COUNTIES, KENTUCKY

STANDARD DRAWINGS

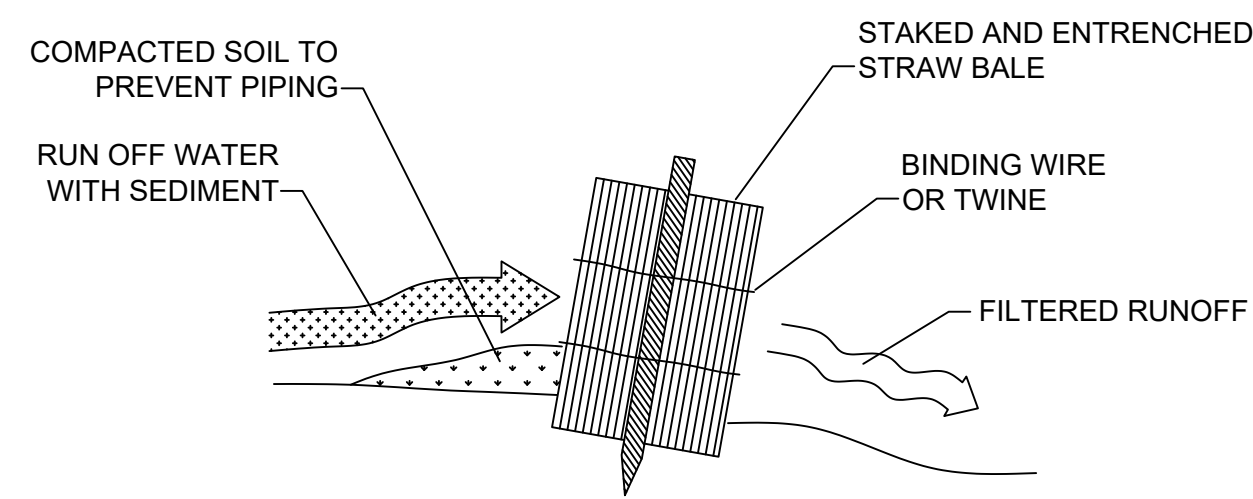


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LAWRENCEBURG, KY 40342

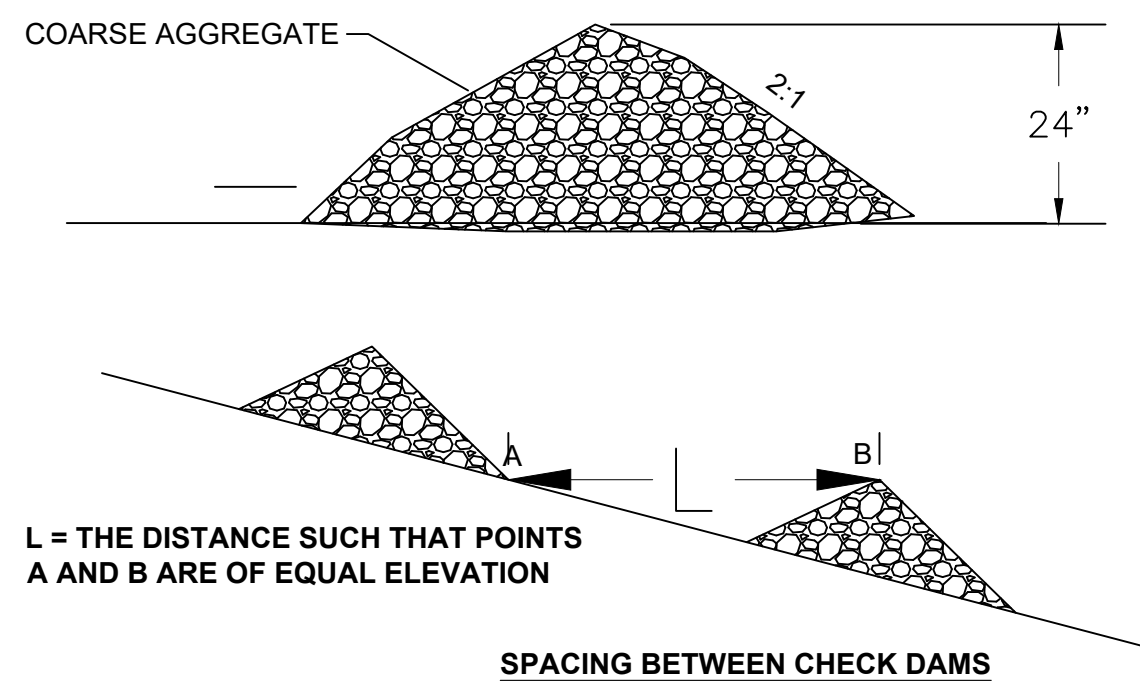
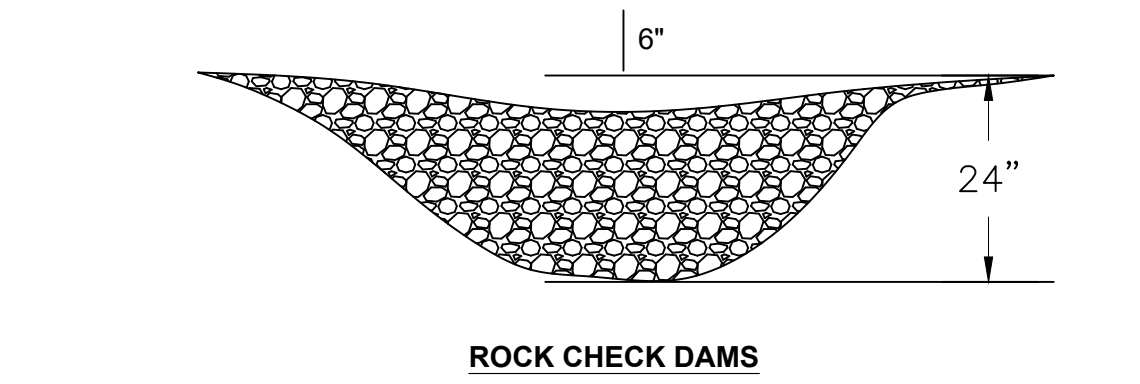
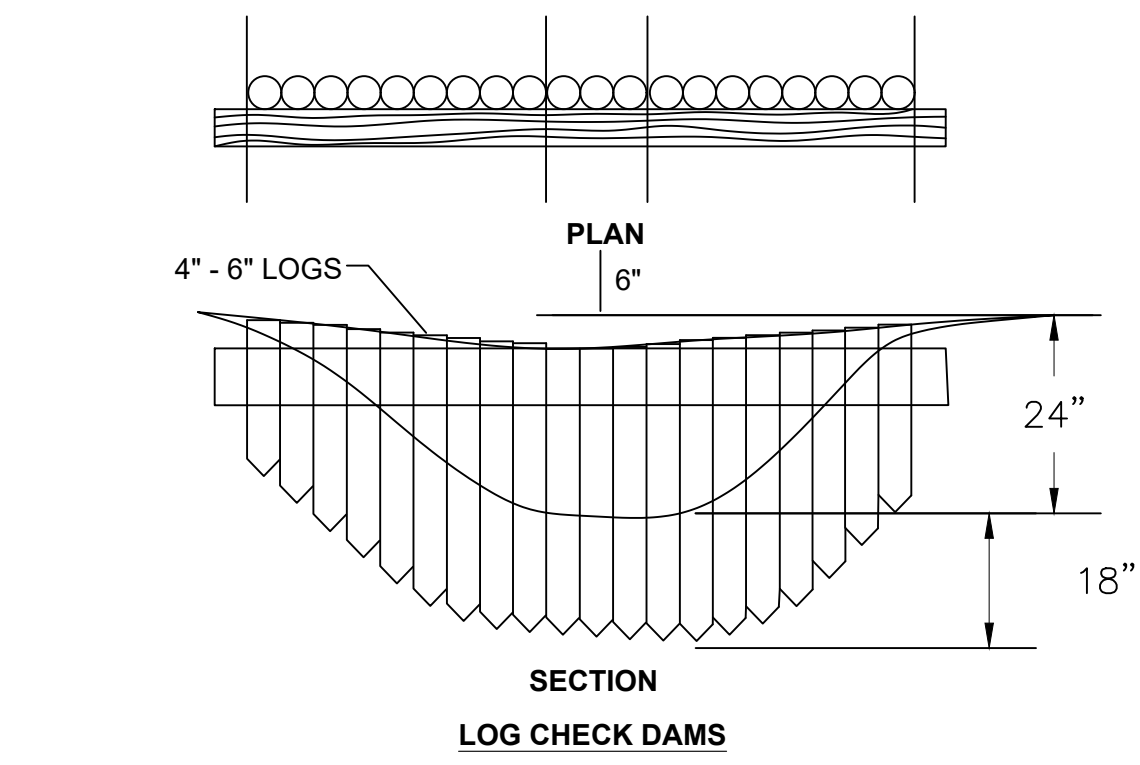
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CHECKED BY: DSB	SCALE: AS SHOWN		SD-2
CHECKED BY: DMB	PROJECT: 2235		



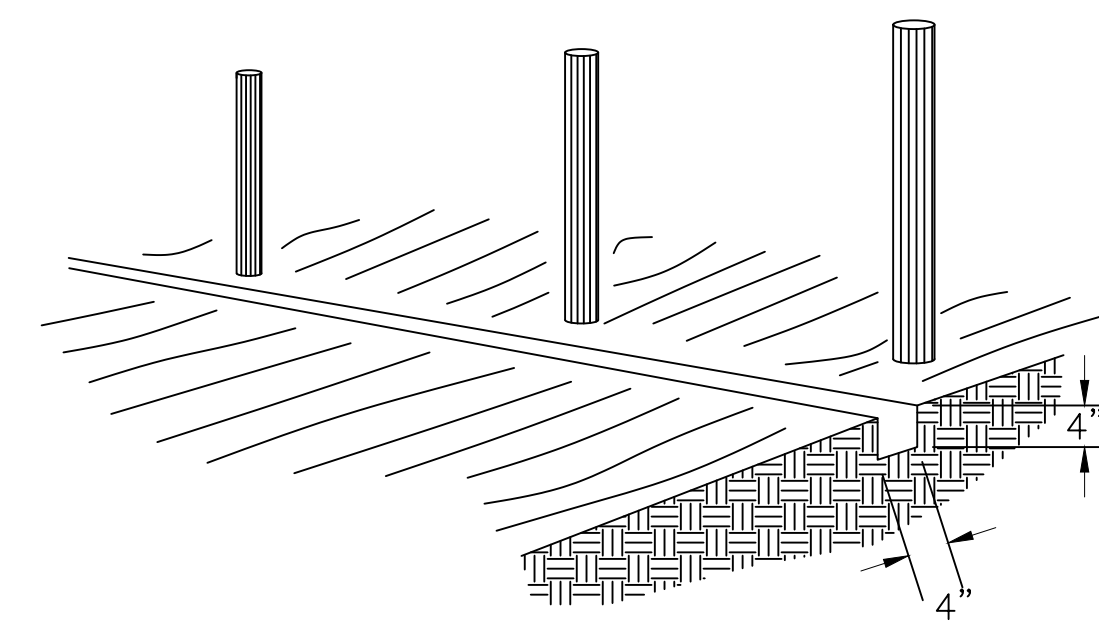
STRAW BALE DROP INLET SEDIMENT FILTER
N.T.S.



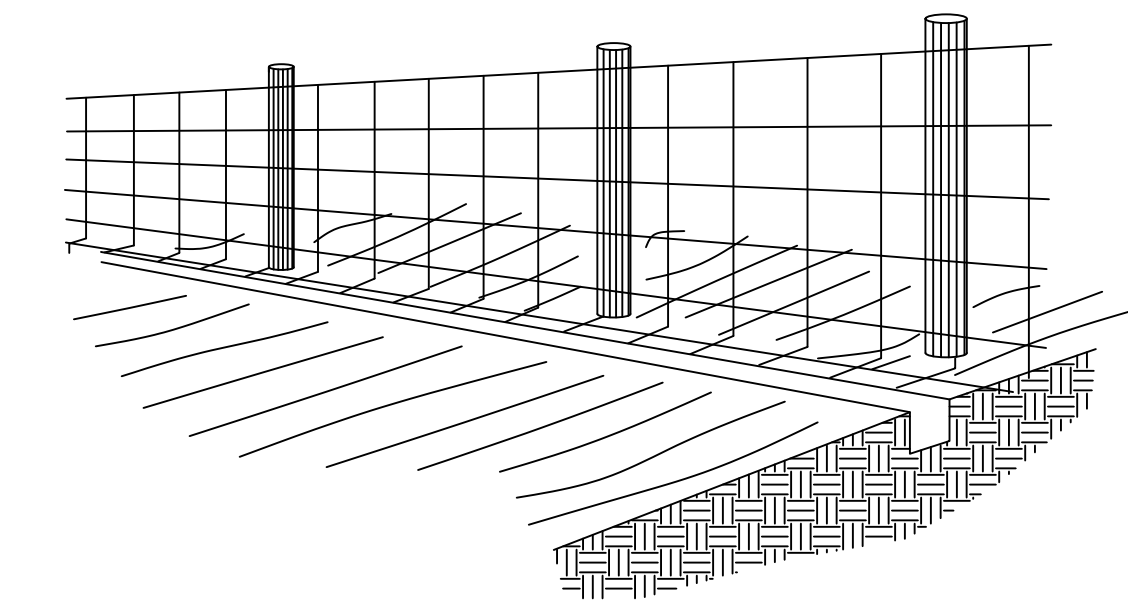
STRAW BALE INSTALLATION PROCEDURES
N.T.S.



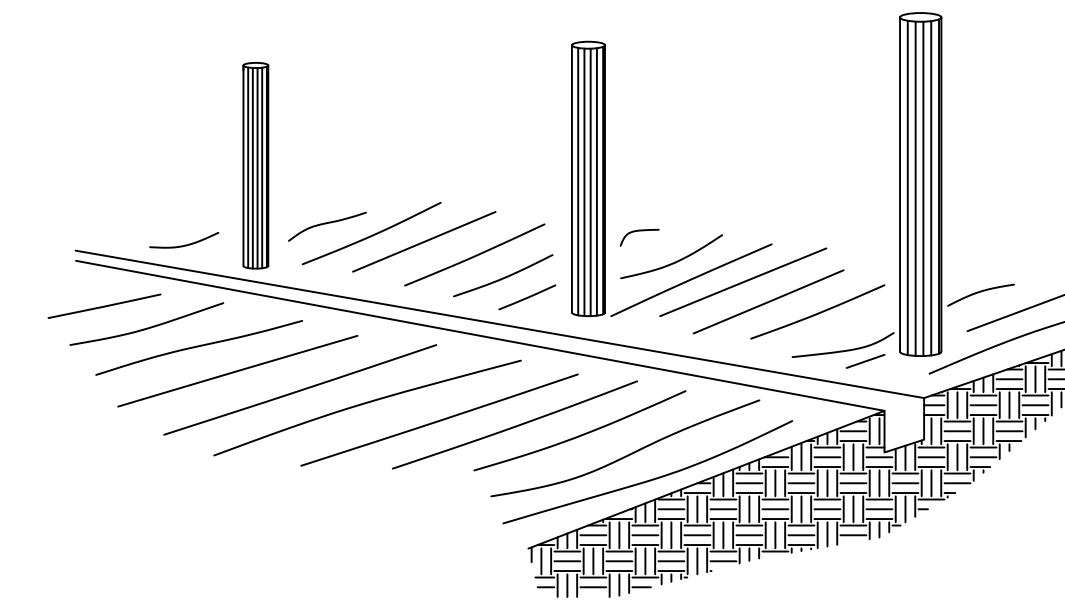
CHECK DAM DETAILS
N.T.S.



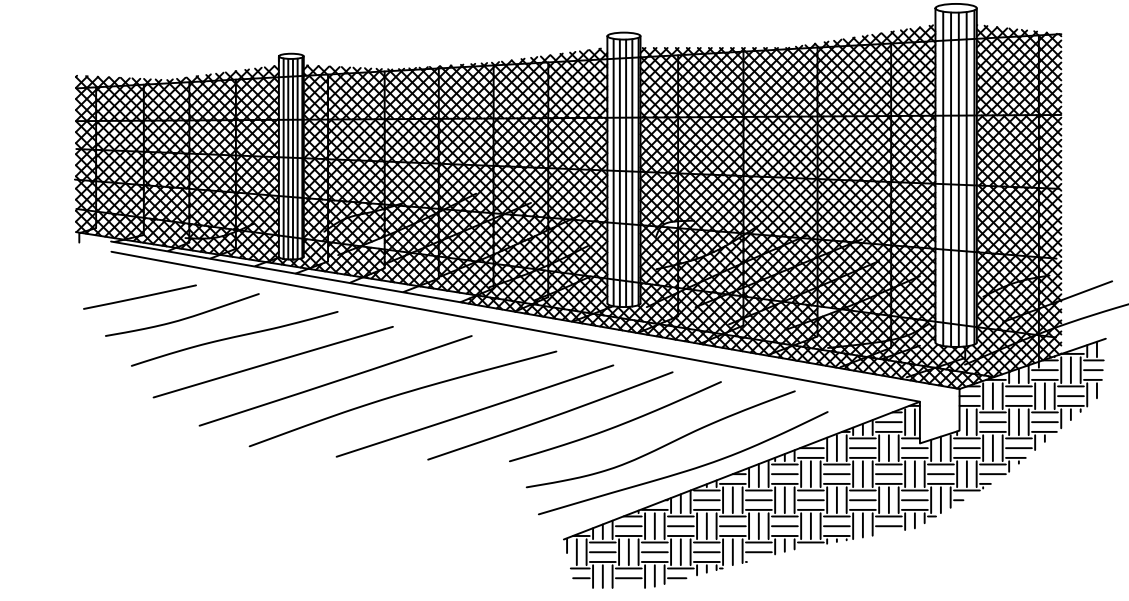
1. SET POSTS AND EXCAVATE A 4" x 4" TRENCH UPSLOPE ALONG THE LINE OF POSTS



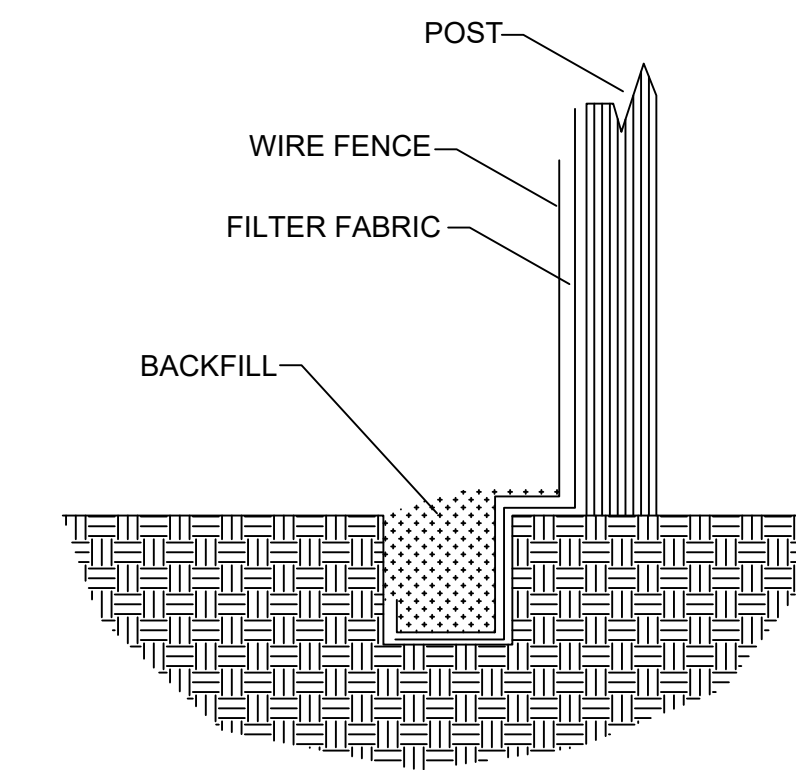
2. STAPLE WIRE FENCING TO POSTS



3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH

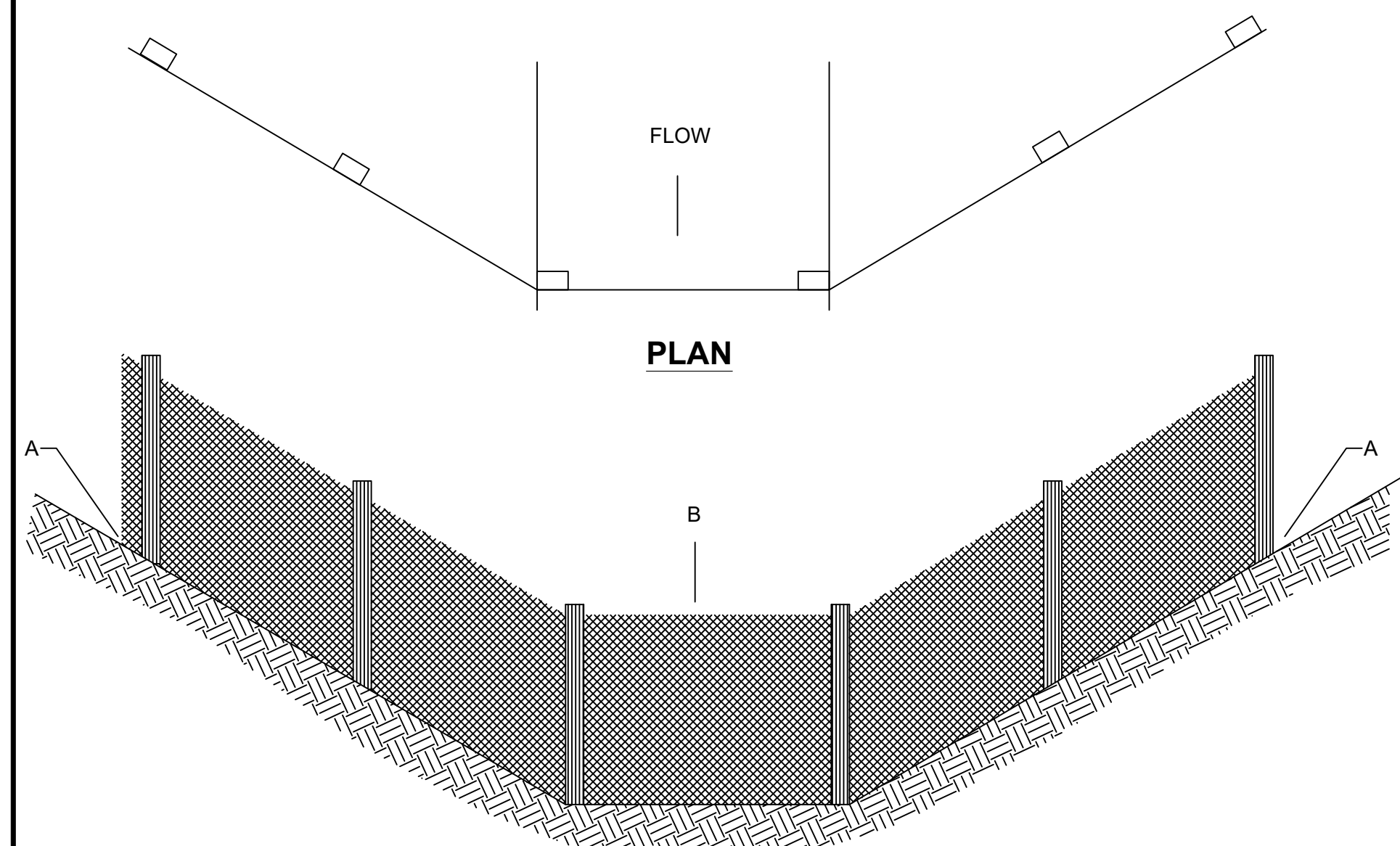


4. BACKFILL AND COMPACT THE EXCAVATED SOIL



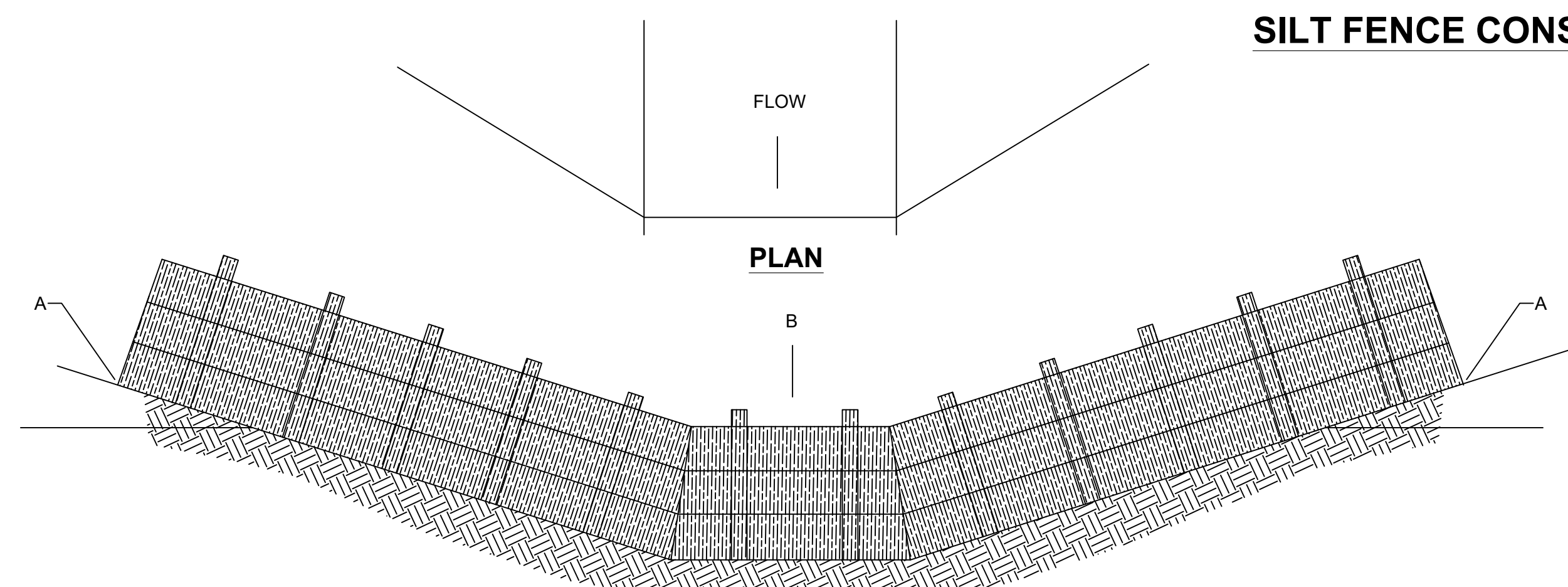
EXTENSION OF FABRIC AND WIRE INTO THE TRENCH

SILT FENCE CONSTRUCTION PROCEDURES
N.T.S.



ELEVATION
POINT A SHOULD BE HIGHER THAN POINT B

PLACEMENT OF FILTER BARRIER
N.T.S.



ELEVATION
POINT A SHOULD BE HIGHER THAN POINT B

PLACEMENT OF STRAW BALE BARRIER
N.T.S.

EROSION CONTROL DETAILS
N.T.S.

The Contractor shall do all work and take all measures necessary to control soil erosion resulting from construction operations, and shall prevent the flow of sediment from the construction site, and shall contain construction materials (including excavation and backfill) within their protected working area so as to prevent damage to the adjacent wetlands and water courses. The Contractor shall use any of the acceptable methods necessary to control soil erosion and prevent the flow of sediment to the maximum extent possible. These methods shall include, but not be limited to, the use of water diversion structures, diversion ditches, and settling basins.

2022 WATER SYSTEM IMPROVEMENTS BRONSTON WATER ASSOCIATION WAYNE & PULASKI COUNTIES, KENTUCKY			
EROSION CONTROL DETAILS			
	Monarch Engineering, Inc. 556 CARLTON DRIVE LAWRENCEBURG, KY 40342		
	DRAWN BY: JRC	DATE: JULY 2022	REVISED
CHECKED BY: DSB	SCALE: AS SHOWN		EC-1
CHECKED BY: DMB	PROJECT: 2235		