

2" STOPCOCK
STOP BOX ON
STOP COCK INSIDE
TOP HALF OF
VALVEBOX

4"x2" M.J. PLUG

SECURELY BLOCK
B.O. ASSEMBLY

4" 45° BENDS
AS REQUIRED

4" GATE VALVE (OPTIONAL)

8" X 4" REDUCER

LAST HYDRANT BEFORE CUL-DE-SAC

Diagram illustrating the location of a hydrant relative to a cul-de-sac. The diagram shows a cul-de-sac with a hydrant located at the end. Labels indicate the following components and instructions:

- GALVANIZED B.O. ASSEMBLY
- M.J. PLUG TAPPED 2"
- RESTRAIN LAST THREE PIPE JOINTS
- SOLID SLEEVE
- M.J. BENDS AS REQUIRED
- LAST HYDRANT BEFORE CUL-DE-SAC

Diagram illustrating the connection of a hydrant to a water main, showing the gate valve and box, tracing wire, anchor coupling, drain, backfill, and fieldbed rock.

Labels and components shown in the diagram:

- HYDRANT
- WIRE TO BE SLEEVED BETWEEN VALVE BOX HALVES APPROX. 3' ABOVE GRADE
- GATE VALVE & BOX
- GRADE LINE
- BACKFILL
- FULLY RESTRAIN ALL JOINTS BETWEEN HYD. AND MAIN
- WATER MAIN
- TRACING WIRE
- ANCHOR COUPLING
- DRAIN
- FIELDBED ROCK

Diagram illustrating the installation of a tracing wire for a standard valve box set to grade. The diagram shows a cross-section of the ground with a hatched area representing the backfill. A horizontal line indicates the GRADE LINE. A vertical structure represents the STANDARD VALVE BOX SET TO GRADE. A WIRE TO BE SLEEVED BETWEEN VALVE BOX HALVES APPROX. 3' ABOVE GRADE is shown. A SERVICE TAP is shown on the left. A WRAP BARE COPPER WIRE AROUND COPPER SERVICE & ATTACH TO MAIN TRACING WIRE is shown. A TAPE TRACING WIRE TO TOP OF MAIN UNTIL BACKFILLED is shown.

2" GALV. 90° ELBOW

2" X 7' GALV. PIPE

GRADE LINE

4' MIN.

2" GALV. SLEEVE

2" CORP. COCK

2" TAPPING SADDLE

2" STOP COCK

2" X 6" GALV. NIPPLE

Diagram illustrating the assembly of a valve box and pipe, showing the connection between the valve box and the main pipe line. The diagram includes the following components and labels:

- TOP HALF VALVE BOX
- TOP HALF VALVE BOX WITH STOP BOX INSERT
- FINAL GRADE
- WIRE TO BE SLEEVED BETWEEN VALVE BOX HALVES APPROX. 3' ABOVE GRADE
- SOLID SLEEVE
- 2" BRASS SLEEVE TOP OF SLEEVE MUST BE WITHIN 6" OF TOP OF VALVE BOX.
- 2" GALV. PIPE
- 2" GALV. 90° ELBOW
- BLOCKING
- 2" x 12" GALV. NIPPLE
- 2" STOP COCK
- 2" BRASS NIPPLE
- M.J. PLUG TAPPED 2"
- RESTRAIN LAST 2 PIPE JOINTS (MINIMUM)

1. PVC PIPE MAY BE BENT NO MORE THAN 12.3 INCHES OVER A 20' JOINT. USE FITTINGS AS NECESSARY TO PREVENT OVER-DEFLECTION OF PIPE.
2. ALL RESTRAINED JOINTS PER EVANSVILLE WATER SEWER UTILITY SPECIFICATIONS.
3. ALL BLOW OFF ASSEMBLIES SHALL HAVE PIPE JOINTS PRIOR TO BLOW OFF RESTRAINED WITH SERIES 1500 RESTRAINERS, IN ACCORDANCE WITH THE JOINT RESTRAINT MANUFACTURERS SPECIFICATIONS.
4. ALL FIRE HYDRANTS TO BE LOCATED SO THAT THEY DO NOT INTERFERE WITH THE SIDEWALKS, (WHERE REQUIRED).
5. CONTRACTOR SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL CODES, ORDINANCES, RULES, REGULATIONS, ORDERS AND OTHER LEGAL REQUIREMENTS OF MUNICIPAL AUTHORITIES WHICH BEAR ON THE PERFORMANCE OF THE WORK.
6. THE CONTRACTOR IS CAUTIONED THAT THE LOCATION AND / OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. CONTRACTOR SHALL LOCATE EXISTING UTILITIES AND ESTABLISH ELEVATIONS AND CLEARANCES WITH PROPOSED IMPROVEMENTS PRIOR TO INITIATING CONSTRUCTION.

7. MATERIAL SPECIFICATIONS SHALL BE IN CONFORMANCE WITH APPLICABLE PORTIONS OF THE INDOT STANDARD SPECIFICATIONS, (LATEST EDITION) UNLESS SPECIFICALLY STATED OTHERWISE ON THESE PLANS, CONTRACT DOCUMENTS, OR LOCAL CODE.

REV.		DATE	BY
CITY OF EVANSVILLE, IN WATERWORKS DEPT.			
ESTIMATE NO.			
STANDARD WATER DETAIL DRAWINGS			
DWG. <u>LA55ACK</u>	DATE: <u>10-23-96</u>	SCALE: <u>NONE</u>	
CHECKED	APPROVED		