

# US 68 KY 80 WATERLINE RELOCATION

MARCH 4, 2011

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<u>SHEET NO.</u>	<u>TITLE</u>
	COVER SHEET
W1.01	12" WATER LINE RELOCATION PLAN
W2.01	WATER DETAILS

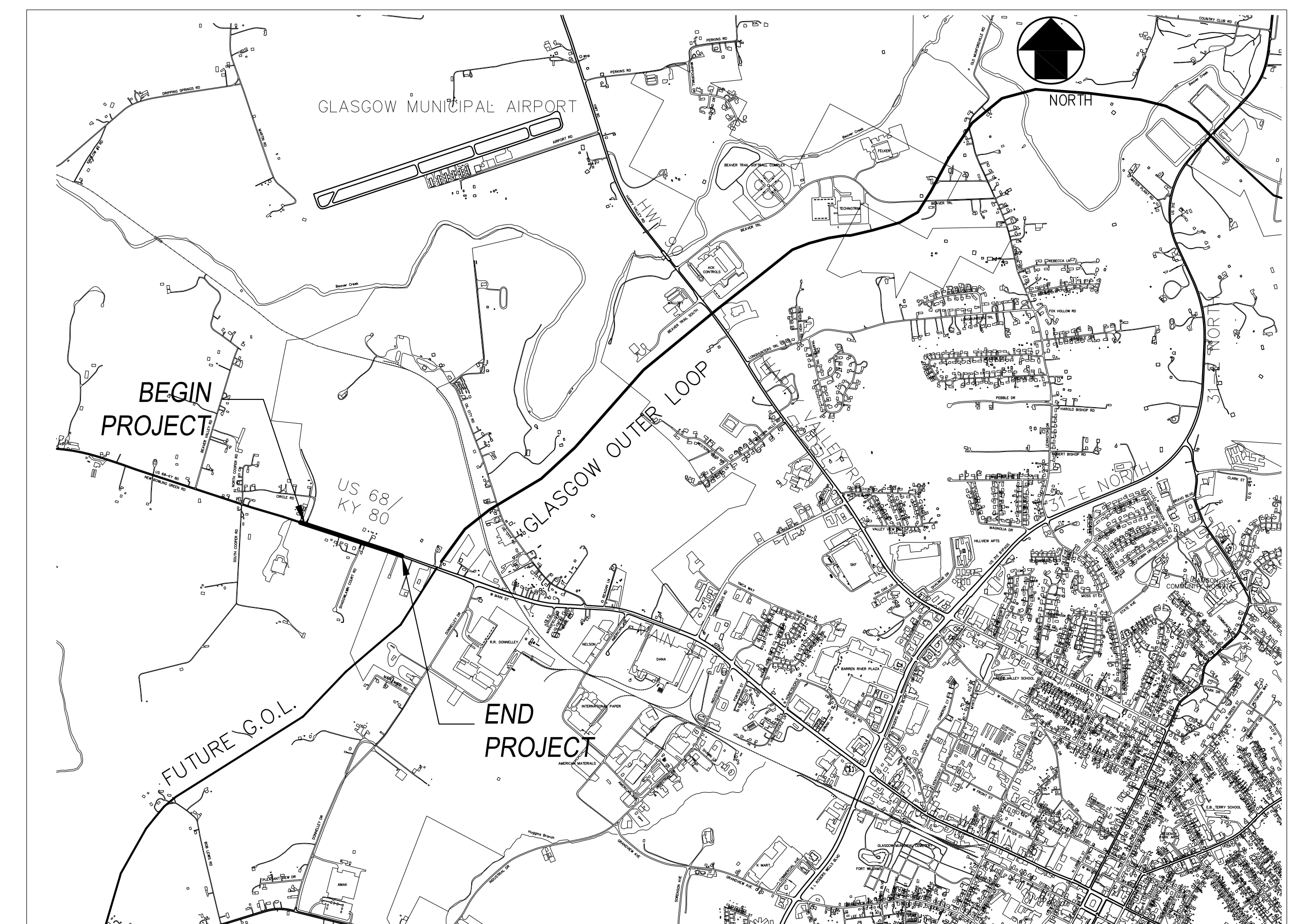


126 EAST PUBLIC SQUARE  
GLASGOW, KENTUCKY  
(270) 651-3727

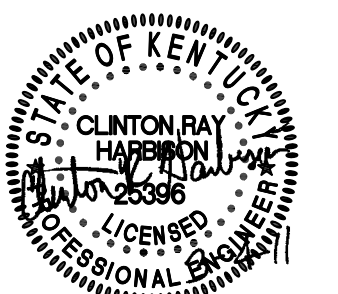
**SCOTT YOUNG, MANAGER**  
**BILLY R. CARVER, JR., ASSISTANT MANAGER**

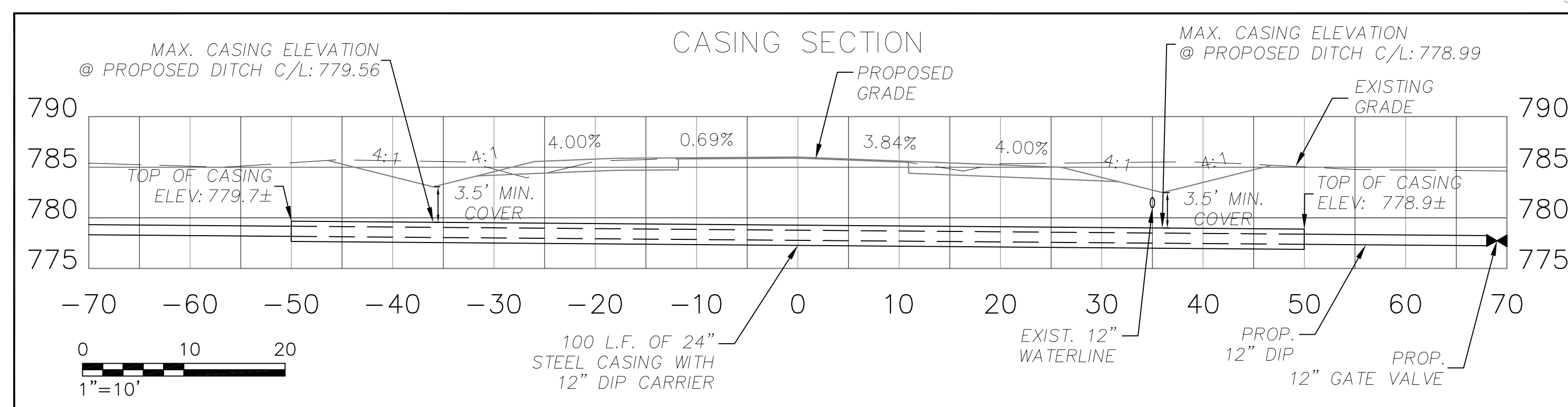
**BOARD OF COMMISSIONERS:**  
**JERRY A. BOTTS, CHAIRMAN**  
**BUDDY UNDERWOOD, VICE CHAIRMAN**  
**WOODFORD L. GARDNER, JR., SECRETARY-TREASURER**  
**JIM MARION, COUNCIL REPRESENTATIVE**  
**RHONDA R. TRAUTMAN, MEMBER-MAYOR**

## VICINITY MAP

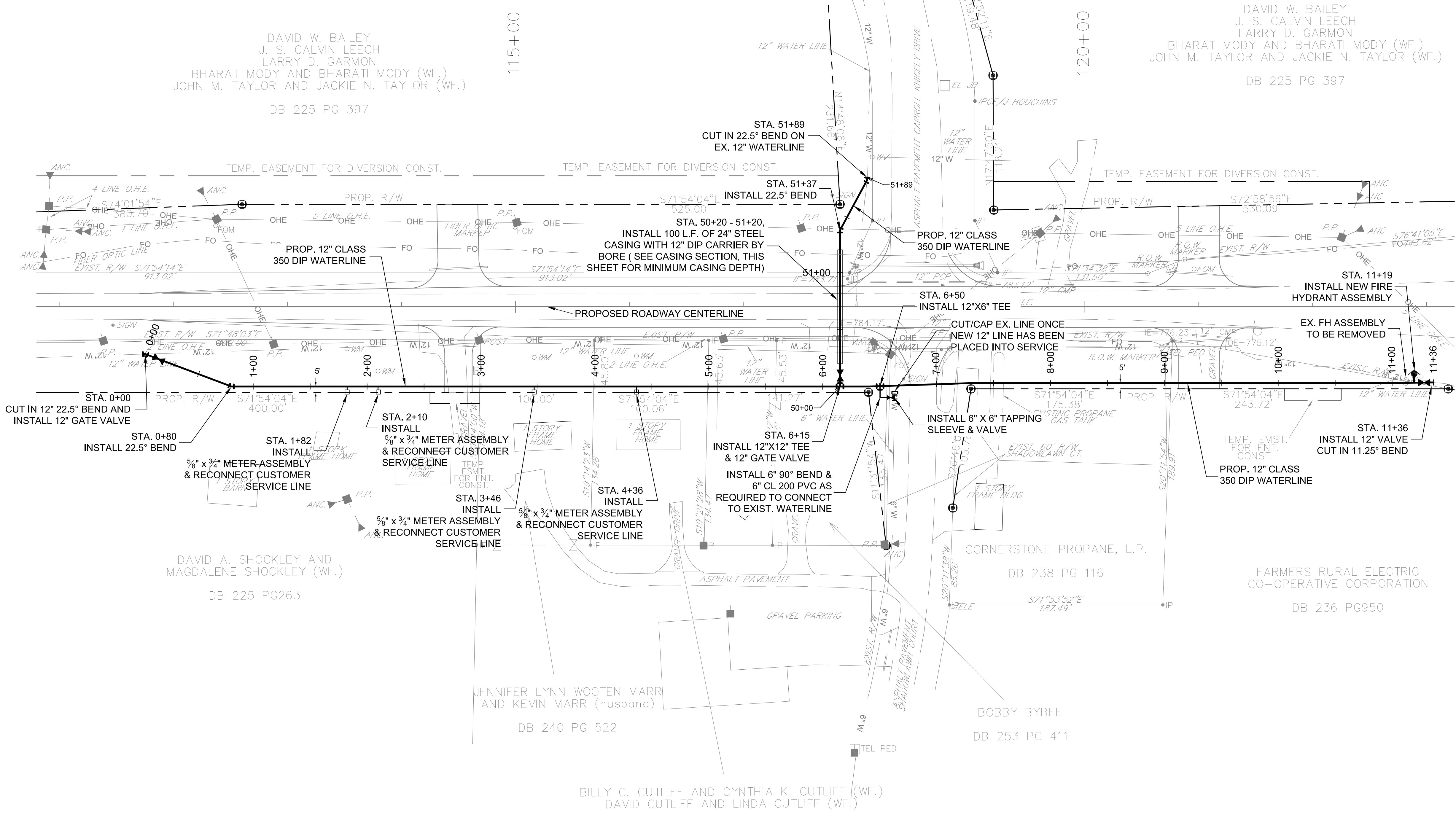


SCALE: N.T.S.





- NOTES:
- ALL BASE MAPPING SHOWN ON THE PLAN WAS DERIVED FROM KYTC ROADWAY PLANS (ITEM No. 3-143.00)
  - THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES IN THE PROPOSED WORK AREA BY CONTACTING THE KENTUCKY ONE CALL SYSTEM AT "811" A MINIMUM OF 2 BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION.
  - SERVICE LINE CONNECTIONS TO THE PROPOSED DUCTILE IRON WATER MAIN SHALL BE MADE BY INSTALLING A CORPORATION STOP BY DIRECT TAP.
  - THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONNECTING CUSTOMER SERVICE LINES TO THE NEW METER ASSEMBLIES ONCE THE NEW WATER MAIN IS PLACED IN SERVICE. CUSTOMER SERVICE SHALL BE MAINTAINED DURING WATER LINE INSTALLATION.
  - THE CONTRACTOR SHALL PROVIDE GLASGOW WATER COMPANY WATER WITH A MINIMUM OF 48 HOURS NOTICE FOR SCHEDULING EXISTING WATER SYSTEM SHUT DOWNS NECESSARY FOR LINE INSTALLATION.
  - PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. FURNISH ANY SPECIAL EQUIPMENT REQUIRED TO WORK OVER AND AROUND EXISTING UTILITIES.
  - TRENCH DESIGN AND SAFETY FOR PIPELINE CONSTRUCTION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM WITH ALL APPLICABLE LOCAL, STATE, AND OSHA REGULATIONS.
  - THE CONTRACTOR SHALL INSTALL THE PROPOSED WATER LINE AT A POSITIVE GRADE BETWEEN CONNECTIONS TO THE EXISTING SYSTEM TO PREVENT TRAPPING OF AIR.
  - THE CONTRACTOR SHALL MAINTAIN ACCESS FOR LOCAL TRAFFIC AND EMERGENCY VEHICLES AT ALL TIMES TO PROPERTIES WITHIN THE PROJECT AREA.
  - THE CONTRACTOR SHALL INSTALL 2" TEMPORARY BLOW OFFS AS REQUIRED FOR FLUSHING AND TESTING.
  - THE CONTRACTOR SHALL INSTALL CONCRETE THRUST BLOCKS AND/OR DEAD MEN AS REQUIRED FOR TIE-INS.



REVISIONS

NO.	DESCRIPTION	DATE

**Cannon & Cannon, Inc.**  
Consulting Engineers • Field Surveyors  
730 Fairview Avenue, Suite A5  
Bowling Green, Kentucky 42101  
Tel: 270.843.2744  
Fax: 270.843.2720

CLIENT:

**GUC**  
126 EAST PUBLIC SQUARE  
GLASGOW, KENTUCKY 42141

PROJECT:

US 68 KY 80  
WATERLINE RELOCATION

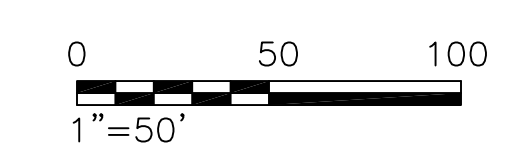
**12" WATER LINE RELOCATION PLAN**

CCI PROJECT NO. 00676-0037

DATE: 3/4/11  
P.I.C.: JMD  
DRAWN: KDH

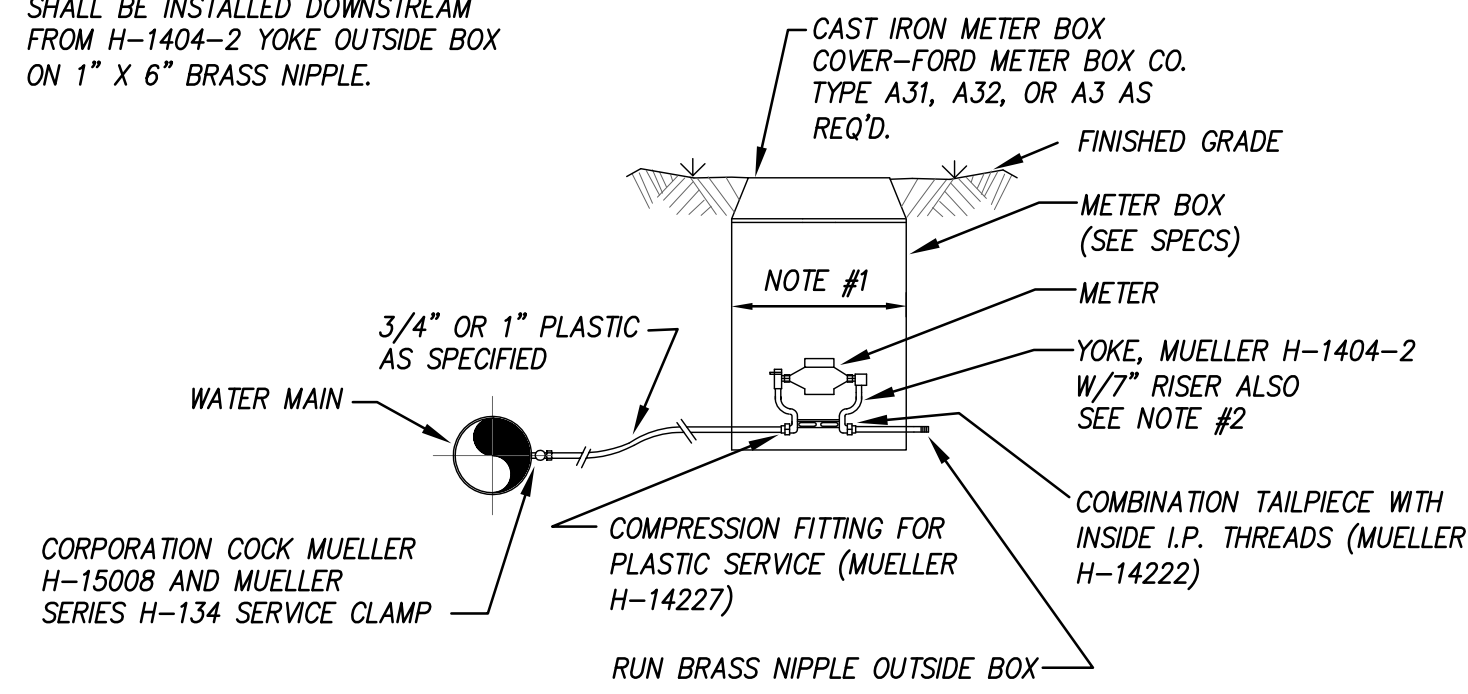
**W1.01**

Professional Engineer Seal: David W. Bailey, License No. 25396, State of Kentucky



**NOTES:**

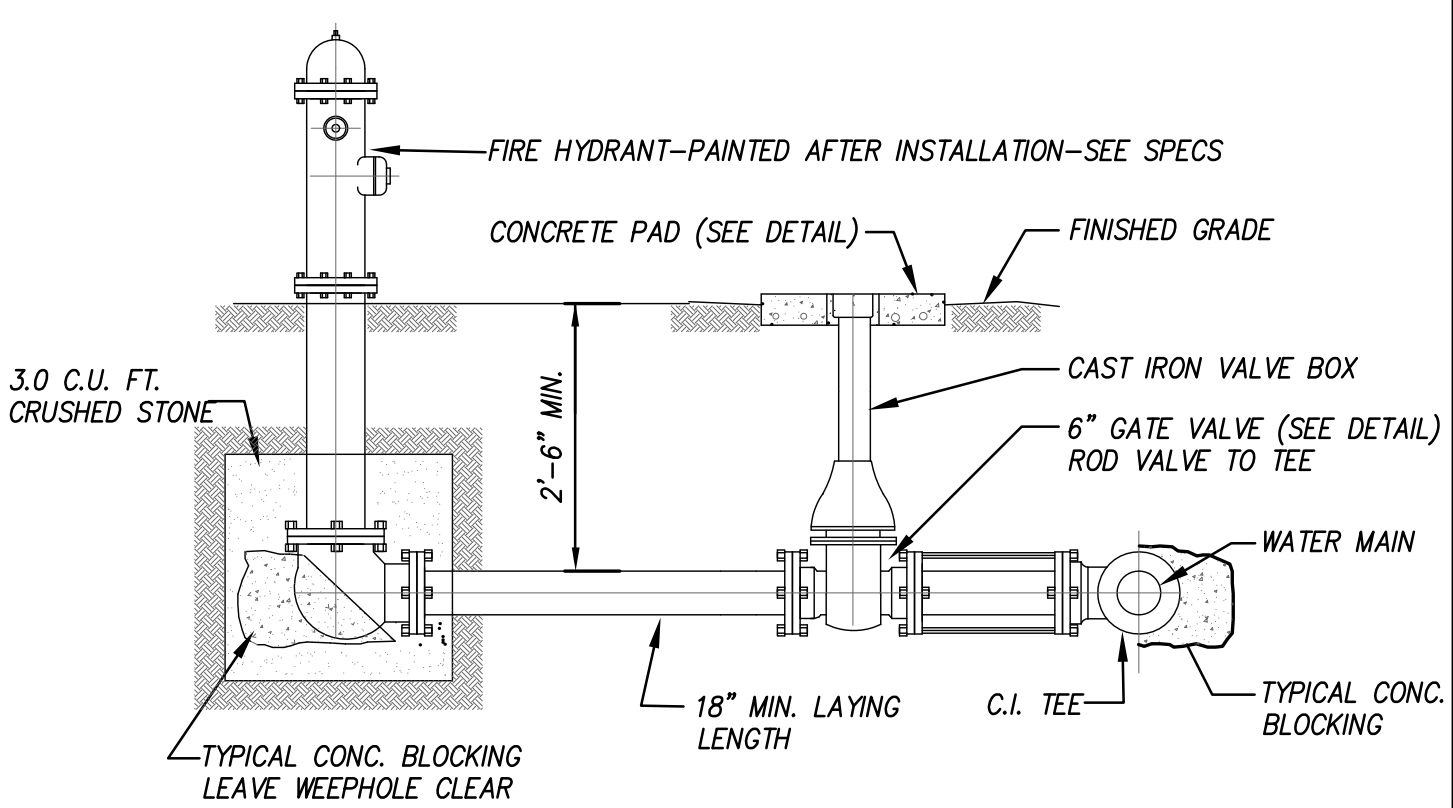
- METER BOX DIA FOR 3/4" SERVICE SHALL BE 15" OR 18" FOR LOCATIONS W/O & W/REGULATORS RESPECTIVELY ALL 1" SERVICES SHALL USE 20" DIA. BOX.
- WHERE A REGULATOR IS REQUIRED IT SHALL BE WATTS NO. 223-HP-Z3. FOR 3/4" SERVICE, REG. SHALL BE INSTALLED IN MUELLER H-1404-012 TANDEM YOKE. FOR 1" SERVICE, REG SHALL BE INSTALLED DOWNSTREAM FROM H-1404-2 YOKE OUTSIDE BOX ON 1" X 6" BRASS NIPPLE.



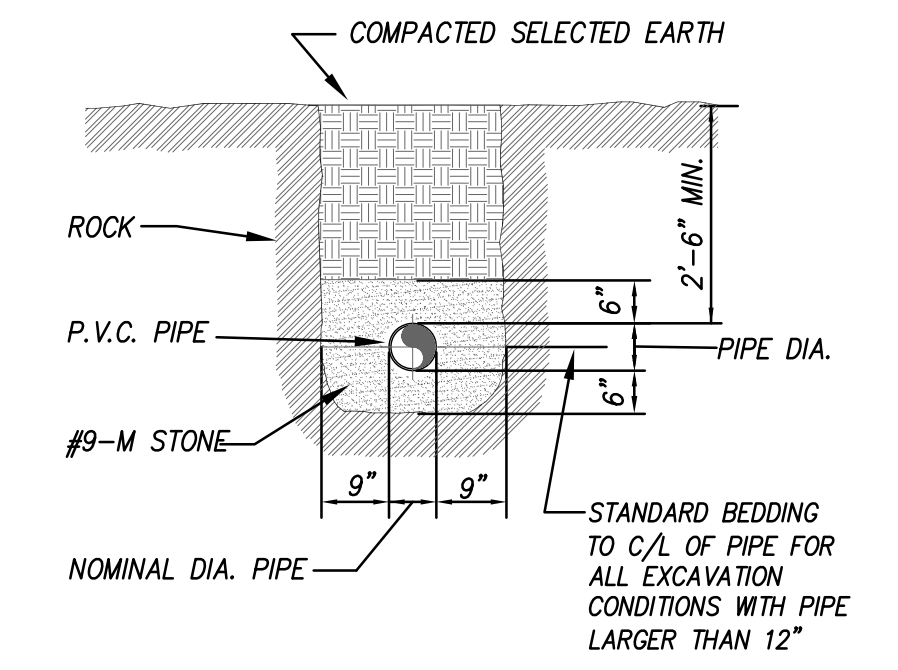
**TYPICAL METER SETTING FOR 3/4" & 1" SERVICES**

**NOTE:**

FOR THE PURPOSE OF PAYMENT, FIRE HYDRANTS SHALL CONSIST OF THE FIRE HYDRANT PROPER, THE 6" VALVE & VALVE BOX, 6" WATER LINE AND OTHER APPURTENANCES SHOWN. THE C.I. TEE WILL BE PAID FOR AT THE CONTRACT UNIT PRICE.



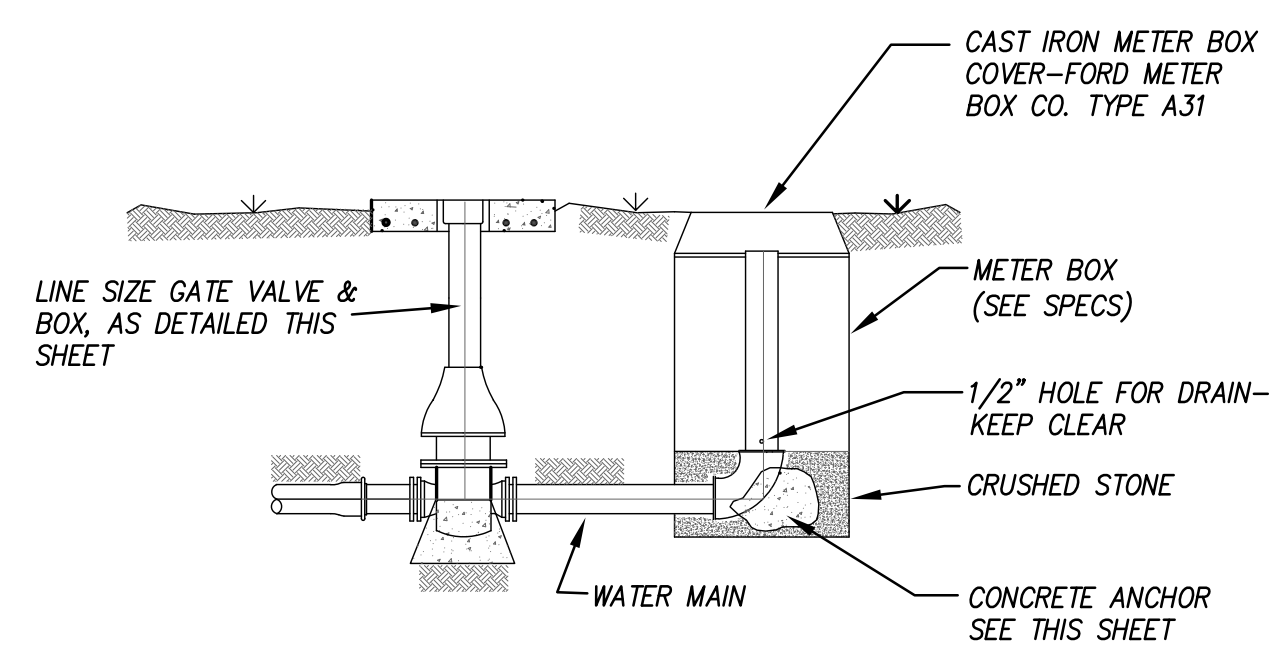
**TYPICAL FIRE HYDRANT SETTING**



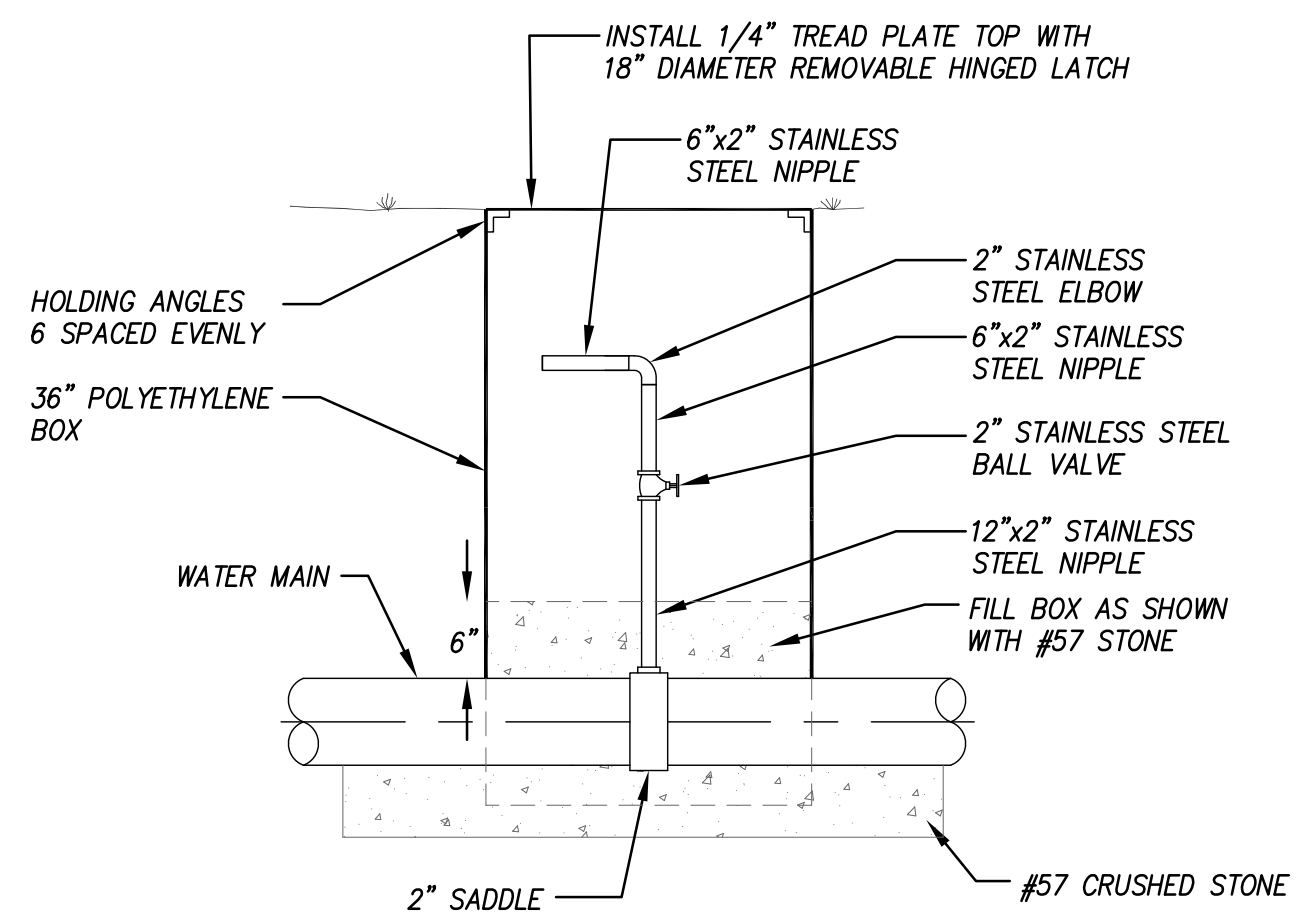
**TYPICAL STONE ENVELOPE FOR LARGE PIPE OF ROCK EXCAVATION**  
(MAX. PAY QUANTITIES IN ROCK)

**NOTE:**

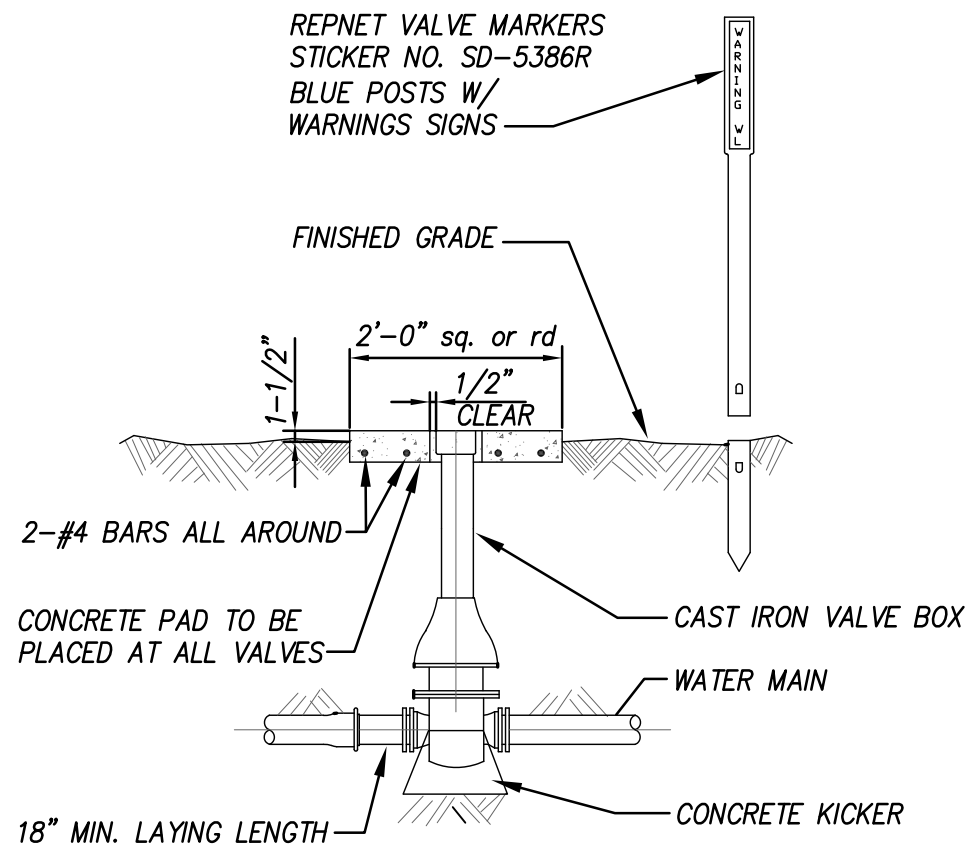
THE LUMP SUM PRICE SHALL INCLUDE THE GATE VALVE, BOX, METER BOX, BEND, CRUSHED STONE & INSTALLATION. THE PIPE WILL BE PAID FOR AT THE CONTRACT PRICE.



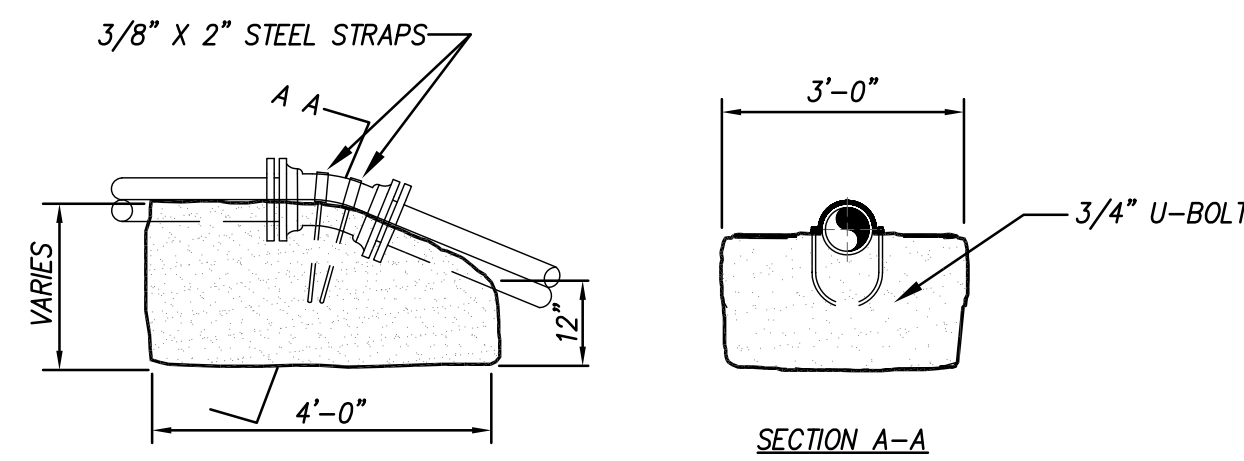
**STANDARD END OF LINE BLOW OFF DETAIL**  
SIDE OUTLET BLOWOFFS SHALL BE AS SHOWN, BUT LUMP SUM PRICE SHALL ALSO INCLUDE MAIN LINE TEE. GATE VALVE & BLOWOFF PIPING SIZE SHALL BE AS INDICATED ON THE PLANS.



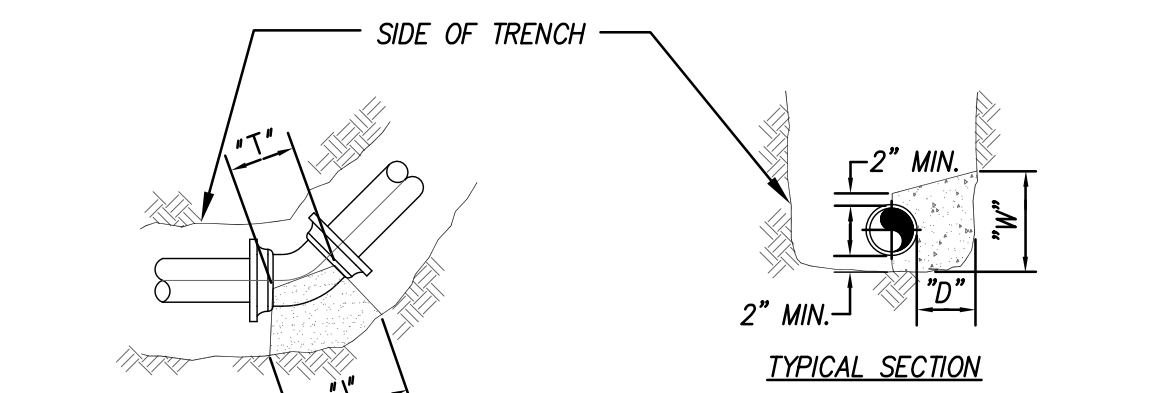
**MANUAL AIR RELEASE VALVE**



**TYPICAL LINE VALVE SETTING**



**PIPE ANCHOR DETAIL**  
(FOR VERTICAL BENDS TYPICAL FOR D.I.P. AND P.V.C. PIPE.)



90° BENDS							
SIZE	2"	4"	6"	8"	12"	16"	20"
D	6'	8'	8'	10'	14'	22'	24'
L	16'	20'	24'	30'	34'	68'	96'
W	8'	10'	12'	18'	24'	34'	48'
T	10'	12'	16'	20'	22'	38'	44'

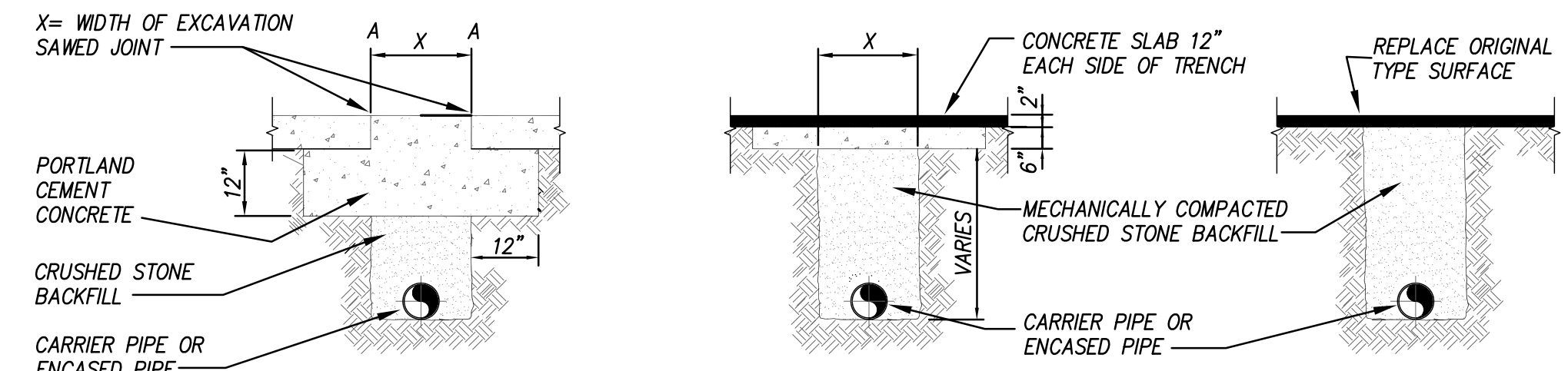
45° BENDS							
SIZE	2"	4"	6"	8"	12"	16"	20"
D	6'	6'	8'	10'	12'	24'	30'
L	14'	18'	18'	22'	24'	51'	60'
W	8'	10'	12'	16'	18'	25'	29'
T	10'	12'	16'	18'	18'	38'	44'

22 1/2° & 11 1/4° BENDS							
SIZE	2"	4"	6"	8"	12"	16"	20"
D	6'	10'	14'	18'	20'	22'	24'
L	20'	24'	28'	28'	36'	42'	54'
W	18'	20'	22'	24'	24'	18'	21'
T	12'	14'	16'	18'	18'	38'	44'

TEES & PLUGS							
SIZE	2"	4"	6"	8"	12"	16"	20"
D	12"	16"	18"	18"	24"	30"	30"
L	12"	16"	18"	24"	30"	60"	84"
W	14"	16"	18"	18"	24"	28"	32"
T	10"	10"	12"	12"	12"	38"	44"

**NOTE:**  
BLOCKING FOR REDUCER SHALL BE AS THAT SHOWN FOR PLUGS, BUT THE "L" DIMENSION SHALL BE AS REQUIRED FOR THE KICKER TO EXTEND 6" INTO EACH SIDE OF THE TRENCH. BLOCKING FOR GATE VALVES SHALL BE SIMILAR TO THAT SHOWN ABOVE FOR TEES WITH CONCRETE PLACED ON EACH SIDE OF VALVE.

**MINIMUM CONCRETE BLOCKING FOR PIPE**  
BLOCKING DIMENSIONS FOR 14" FITTINGS SHALL BE AS SHOWN ABOVE FOR 16" AND BLOCKING FOR 18" FITTINGS SHALL BE AS SHOWN FOR 20".



**CONCRETE PAVEMENT**      **BITUMINOUS SURFACE ≥ 2"**      **BITUMINOUS SURFACE ≤ 2"**  
ALSO APPLIES TO ASPHALT DRIVEWAYS

**NOTE:**  
FROM POINTS "A" (CONCRETE PAVEMENT) THE DISTANCE TO NEAREST JOINT OR BREAK IN PAVEMENT MUST BE 6' OR MORE. IF LESS THAN 6', REMOVE PAVEMENT TO JOINT OR BREAK & REPLACE ENTIRE SLAB.

**SURFACE RESTORATION**  
FOR CROSSING OF ALL STREETS & HIGHWAYS

REVISIONS	DATE

**Cannon & Cannon, Inc.**  
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730 Fairview Avenue, Suite A5    Tel: 270.843.2744  
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**GWC**  
126 EAST PUBLIC SQUARE  
GLASGOW, KENTUCKY 42141

**US 68 KY 80**  
**WATERLINE RELOCATION**

**WATER DETAILS**

CCI PROJECT NO.	00676-0037
DATE	3/4/11
P.I.C.	
DRAWN	cci

**W2.01**