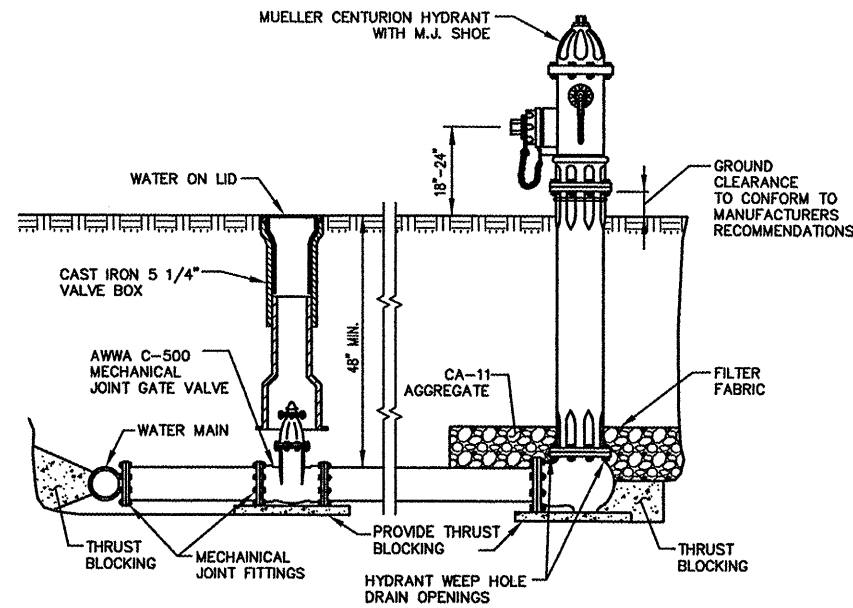
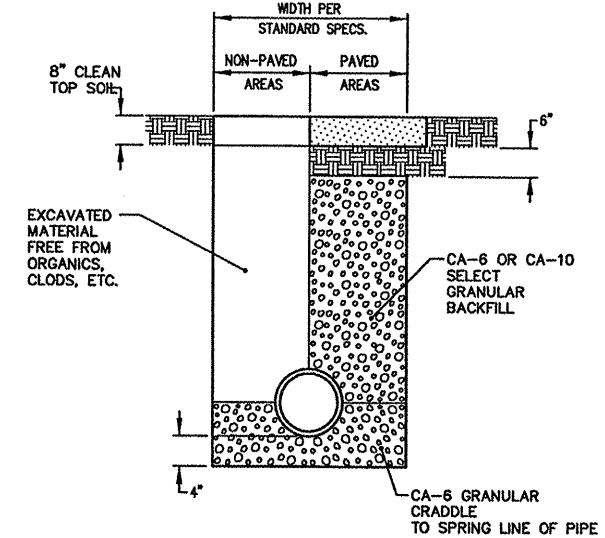


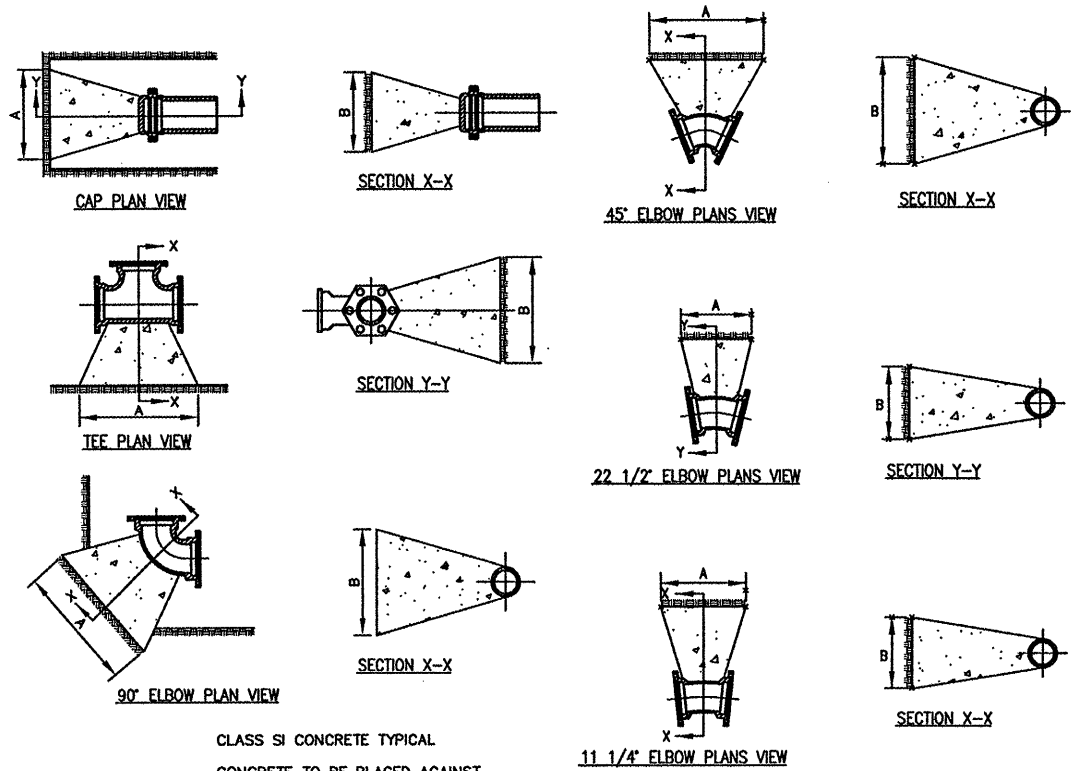
WATER TAPPING SLEEVE & VALVE



FIRE HYDRANT WITH AUXILIARY GATE VALVE AND BOX



WATER MAIN TYPICAL TRENCH SECTION

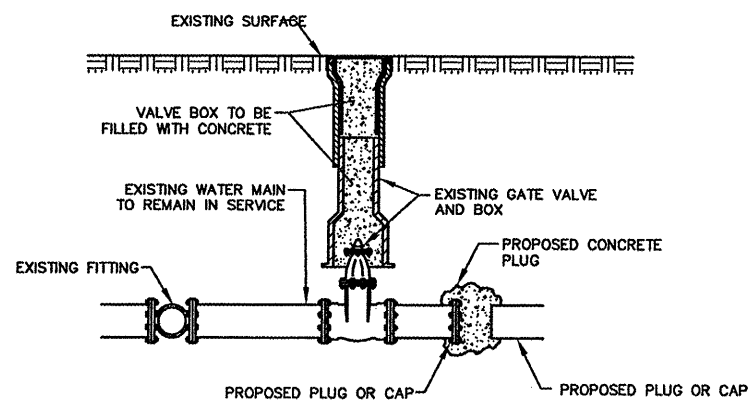


CLASS SI CONCRETE TYPICAL
CONCRETE TO BE PLACED AGAINST
UNDISTURBED EARTH

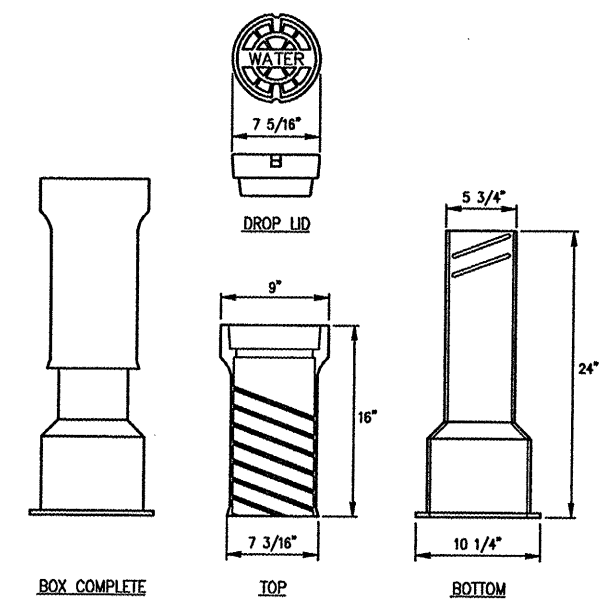
PIPE SIZE	DEGREE OF BEND	DIMENSIONS	
		A	B
8"	TEE OR PLUG	4'	2'
8"	90	5'	2 1/2'
8"	45	3'	2'
8"	22 1/2	3'	1'
8"	11 1/4	2'	1'
6"	TEE OR PLUG	2 1/2'	2'
6"	90	3'	2'
6"	45	3'	1 1/2'
6"	22 1/2	3'	1'
6"	11 1/4	2'	1'

PIPE SIZE	DEGREE OF BEND	DIMENSIONS	
		A	B
12"	TEE OR PLUG	6'	3'
12"	90	6'	4'
12"	45	5'	3'
12"	22 1/2	4'	2'
12"	11 1/4	3'	2'
10"	TEE OR PLUG	4'	3'
10"	90	6'	3'
10"	45	5'	2'
10"	22 1/2	3'	2'
10"	11 1/4	3'	1'

TRUST BLOCKS FOR HORIZONTAL BENDS, TEES AND CAPS



CUT AND CAP EXISTING WATER MAIN



CASTINGS FOR CAST IRON PARTS OF VALVE BOXES SHALL CONFORM TO THE REQUIREMENTS OF STANDARD SPECIFICATIONS FOR GRAY IRON CASTINGS, ASTM A-48.

ADJUSTABLE CAST IRON VALVE BOXES SHALL BE SET IN A VERTICAL ALIGNMENT TO THE GATE VALVE OPERATING STEM. THE LOWER UNIT SHALL NOT REST UPON THE BODY OF THE GATE VALVE OR WATER MAIN. THE UPPER CASTING OF THE UNIT SHALL BE ALIGNED AND ELEVATED TO BE FLUSH WITH FINAL GRADE.

CAST IRON VALVE COMPONENTS

FBI ROUTE	SECTION	COUNTY
9723	09-00123-00-FP	JACKSON
FEDERAL AID PROJECT	ILLINOIS	

CONTRACT NO. 99378

THOUVENOT, WADE & MOERCHEN, INC.
ENGINEERS ♦ SURVEYORS ♦ PLANNERS



- CORPORATE OFFICE**
 4940 OLD COLLINSVILLE RD.
 SWANSEA, ILLINOIS 62226
 TEL (618) 624-4488
 FAX (618) 624-6688
 Info@twm-inc.com
- CARBONDALE OFFICE**
 206 WEST COLLEGE STREET
 CARBONDALE, ILLINOIS 62901
 TEL (618) 549-8844
 FAX (618) 549-8450
 Info@twm-inc.com
- EDWARDSVILLE OFFICE**
 1015B CENTURY DRIVE
 EDWARDSVILLE, ILLINOIS 62025
 TEL (618) 656-4040
 FAX (618) 656-4343
 Info@twm-inc.com
- ST. CHARLES OFFICE**
 400 NORTH 5TH ST., SUITE 101
 ST. CHARLES, MISSOURI 63301
 TEL (636) 724-8300
 FAX (636) 724-8304
 Info@twm-inc.com
- WATERLOO OFFICE**
 113 SOUTH MAIN STREET
 WATERLOO, ILLINOIS 62298
 TEL (618) 939-5050
 FAX (618) 939-3938
 Info@twm-inc.com

PROFESSIONAL REGISTRATIONS	LICENSE NO.
ILLINOIS PROFESSIONAL DESIGN FIRM	184-001220
PROFESSIONAL ENGINEERING CORP.	62-035370
PROFESSIONAL STRUCTURAL ENGR. CORP.	81-005202
ILLINOIS PROF. LAND SURVEYING CORP.	048-000029
MISSOURI PROFESSIONAL ENGR. CORP.	NC 001528
MISSOURI LAND SURVEYING CORP.	NC 000346

SPECIAL DETAILS

**SOUTH MARION STREET
CITY OF CARBONDALE
JACKSON COUNTY, ILLINOIS**

REV.	DATE	DESCRIPTION

PLAN STATUS:	
FINAL	
<input checked="" type="checkbox"/> ISSUED FOR REVIEW	<input type="checkbox"/> ISSUED FOR BIDDING
<input type="checkbox"/> ISSUED FOR CONSTR.	<input type="checkbox"/> RECORD DRAWING
DRAWN BY: JUV	SHEET
DESIGNED BY: JUV	14
CHECKED BY: SJK	OF 24 SHEETS
APPROVED BY: JUV	PROJECT DESCRIPTION
PROJECT NUMBER: T06090142	