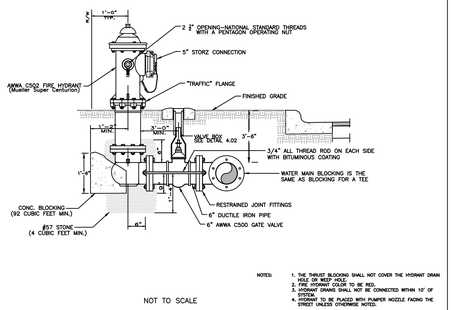
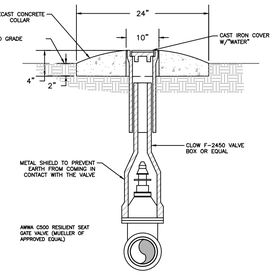
FIRE HYDRANT—STANDARD DETAIL



NOTES:
1. THE THRUST BLOCKING SHALL NOT COVER THE HYDRANT DRAIN HOLE OR WEEP HOLE.
2. HOSE NOZZLES COLOR TO BE RED.
3. HYDRANT DRAINS SHALL NOT BE CONNECTED WITHIN 10' OF SYSTEM.
4. HYDRANTS TO BE PLACED WITH PUMPER NOZZLE FACING THE STREET UNLESS OTHERWISE NOTED.

NOT TO SCALE

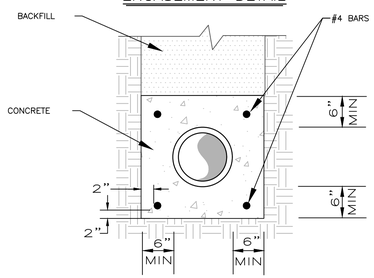
VALVE BOX INSTALLATION DETAIL



NOT TO SCALE

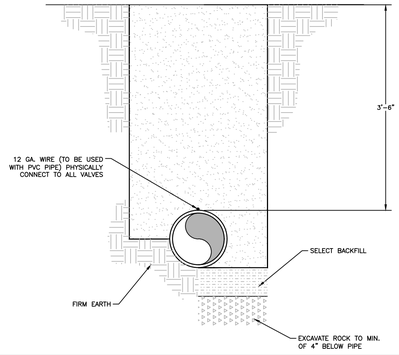
NOTE:
ALL VALVE BOXES TO HAVE CONCRETE COLLAR, PEA GRAVEL AND 1 CUBIC FOOT BLOCKING OPERATING NUT.

ENCASEMENT DETAIL

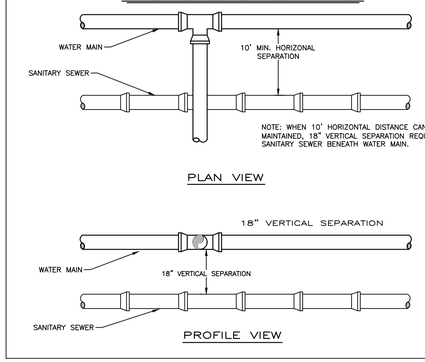


NOT TO SCALE

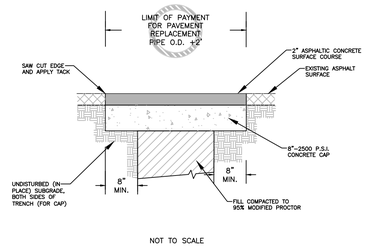
PIPE BEDDING



WATER & SEWER SEPARATION

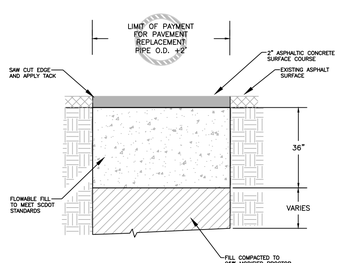


A — TYPE (STANDARD) PAVEMENT REPLACEMENT



NOT TO SCALE

B—TYPE (SCDOT) PAVEMENT REPLACEMENT



NOT TO SCALE

STANDARD THRUST BLOCKS FOR WATER MAINS

PIPE @ 2000 PSF SOIL					TYPE @ 4000 PSF SOIL					PIPE SIZE	SECTION X-X BENDS & TEES				PLAN & ELEVATION CAPS AND PLUGS			
A	B	C	D	E	A	B	C	D	E		A	B	C	D	A	B	C	D
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	4"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	6"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	8"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	10"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	12"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	14"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	16"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	18"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	20"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	24"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	30"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"
1'-0"	8"	12"	1'-0"	1'-0"	1'-0"	8"	12"	1'-0"	1'-0"	36"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"	1'-0"

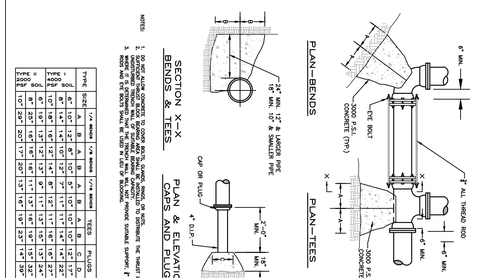
NOTES:
1. ALL CONCRETE TO BE 3000 P.S.I.
2. DO NOT ALLOW CONCRETE TO COVER BOLTS, FLANGE RINGS, OR NUTS.
3. WHERE SOIL CONDITIONS ARE QUESTIONABLE, THE ENGINEER SHALL DESIGN THE THRUST BLOCKING.
4. ALL DIMENSIONS ARE MINIMUM. ADJUST AS NECESSARY TO CONFORM TO THE TRENCH WIDTH AND SOIL CONDITIONS. ENSURE CONCRETE BEARS AGAINST UNDISTURBED EARTH.

SECTION X-X BENDS & TEES

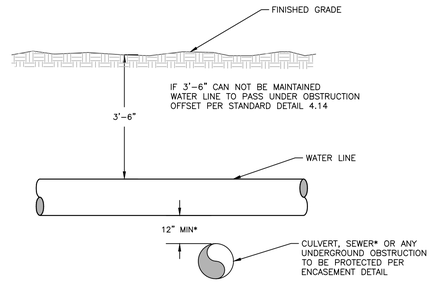
PLAN & ELEVATION CAPS AND PLUGS

PLAN—BENDS

PLAN—TEES



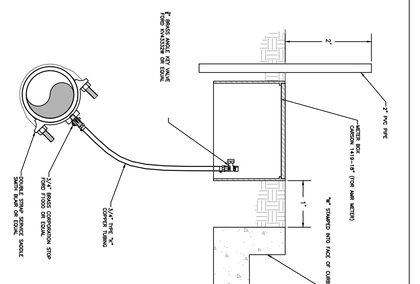
UNDERGROUND OBSTRUCTION



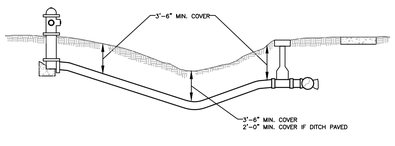
* SEPARATION DISTANCE BETWEEN WATER LINE AND SANITARY SEWER IS GOVERNED BY STANDARD DETAIL 4.05.

NOT TO SCALE

TYPICAL SERVICE INSTALLATION

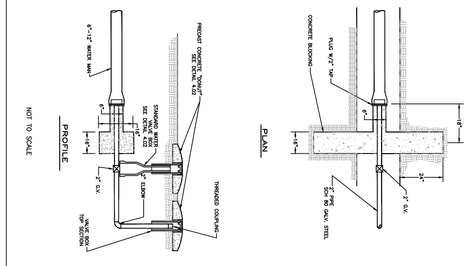


MINIMUM COVER DETAIL

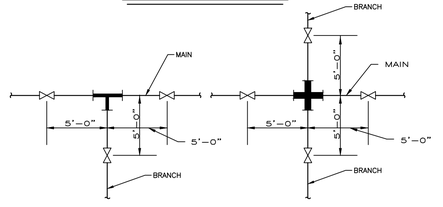


NOT TO SCALE

2" BLOW OFF DETAIL

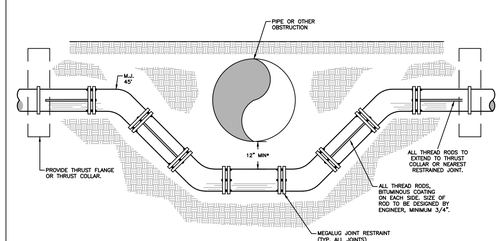


TYPICAL INTERSECTION PLAN



NOT TO SCALE

PIPE RELOCATION

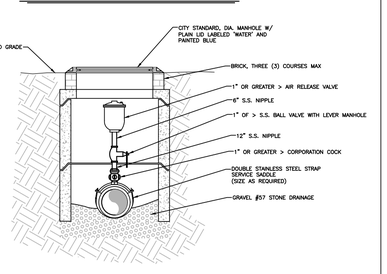


NOTE:
THIS DETAIL IS A GENERIC REPRESENTATION OF OFFSET. SITE SPECIFIC JOINT RESTRAINT AND/OR THRUST BLOCKING TO BE DESIGNED BY REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED TO ENGINEERING DEPARTMENT FOR APPROVAL.

NOT TO SCALE

* SEPARATION DISTANCE BETWEEN WATER LINE AND SANITARY SEWER IS GOVERNED BY STANDARD DETAIL 4.05.

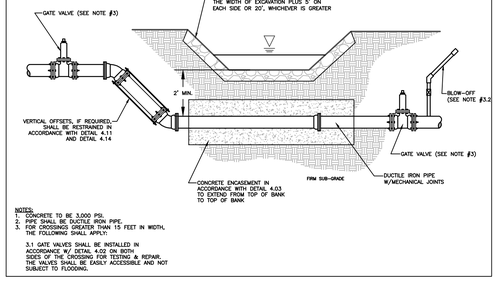
1" MIN (OR GREATER) AIR RELEASE VALVE DETAIL



NOT TO SCALE

NOTE: AIR RELEASE TO BE EQUAL TO CRISPIN AL SERIES AIR RELEASE VALVES

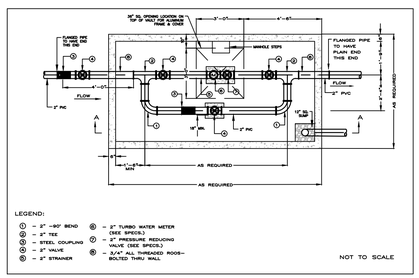
WATER LINE CROSSING BENEATH STREAMBED



NOTES:
1. CONCRETE TO BE 3,000 PSI.
2. PIPE SHALL BE DUCTILE IRON PIPE.
3. FOR CROSSINGS GREATER THAN 15 FEET IN WIDTH, THE FOLLOWING SHALL APPLY:

3.1 GATE VALVES SHALL BE INSTALLED IN ACCORDANCE W/ DETAIL 4.02 ON BOTH SIDES OF THE CROSSING FOR TESTING & REPAIR. VALVES SHALL BE EASILY ACCESSIBLE AND NOT SUBJECT TO FLOODING.

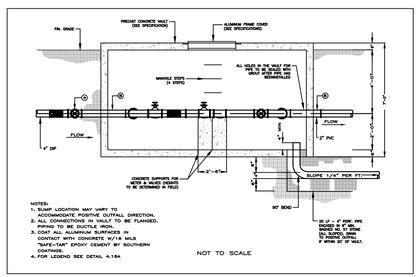
2" WATER METER, BY—PASS & VAULT



LEGEND:
① – 2" – 90° BEND
② – 2" TEE
③ – STEEL COUPLING
④ – 2" VALVE
⑤ – 2" STRAINER
⑥ – 2" TURBO WATER METER (SEE SPECS.)
⑦ – 2" PRESSURE REDUCING VALVE (SEE SPECS.)
⑧ – 3/4" ALL THREADED RODS—BOLTED THRU WALL

NOT TO SCALE

PLAN VIEW

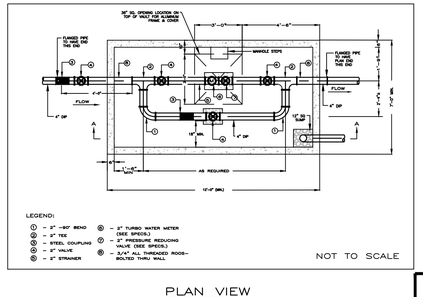


NOTES:
1. SUMP LOCATION MAY VARY TO ACCOMMODATE POSITIVE OUTFALL DIRECTION.
2. ALL CONNECTIONS IN VAULT TO BE FLANGED. PIPING TO BE DUCTILE IRON.
3. COAT ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE W/16 MILS "SAFE-TAR" EPOXY CEMENT BY SOUTHERN COATINGS.
4. FOR LEGEND SEE DETAIL 4.18A

NOT TO SCALE

PROFILE VIEW

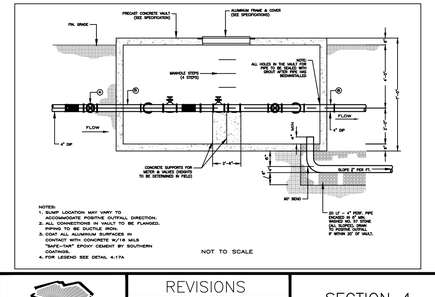
4" WATER METER, BY—PASS & VAULT



LEGEND:
① – 4" – 90° BEND
② – 4" TEE
③ – STEEL COUPLING
④ – 4" VALVE
⑤ – 4" STRAINER
⑥ – 3" TURBO WATER METER (SEE SPECS.)
⑦ – 3" PRESSURE REDUCING VALVE (SEE SPECS.)
⑧ – 3/4" ALL THREADED RODS—BOLTED THRU WALL

NOT TO SCALE

PLAN VIEW



NOTES:
1. SUMP LOCATION MAY VARY TO ACCOMMODATE POSITIVE OUTFALL DIRECTION.
2. ALL CONNECTIONS IN VAULT TO BE FLANGED. PIPING TO BE DUCTILE IRON.
3. COAT ALL ALUMINUM SURFACES IN CONTACT WITH CONCRETE W/16 MILS "SAFE-TAR" EPOXY CEMENT BY SOUTHERN COATINGS.
4. FOR LEGEND SEE DETAIL 4.17A

NOT TO SCALE

PROFILE VIEW

North Augusta
South Carolina's Riverfront

REVISIONS

DATE	BY	DESCRIPTION
9/28/22	BSH	CREATED COMBINED DETAIL PAGE
1/06/24	BSH	ADDED NEW DETAILS

SECTION 4 — WATER DISTRIBUTION DETAILS

Prepared By:
City of North Augusta
Engineering Department
100 Georgia Avenue
2nd Floor
North Augusta, South Carolina 29841