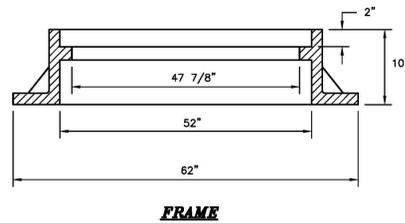
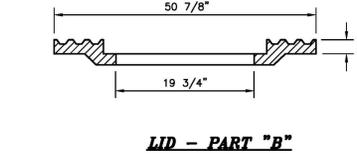
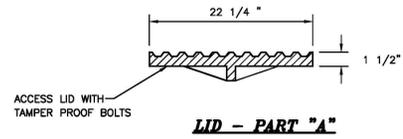
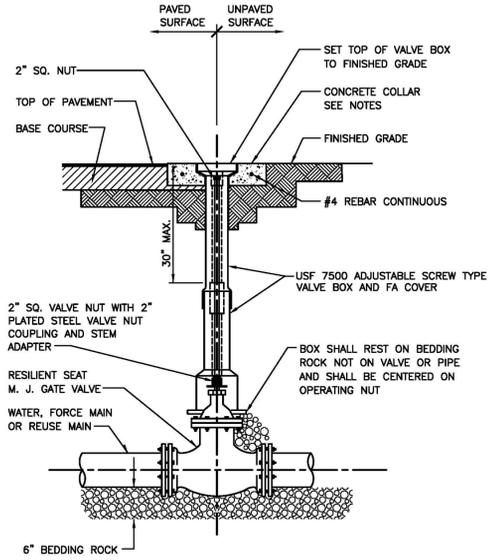


FLOWABLE FILL BEDDING BETWEEN CROSSING PIPES



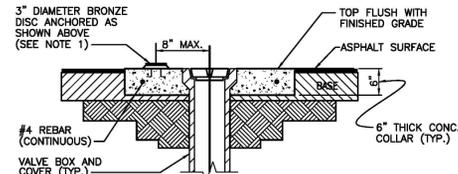
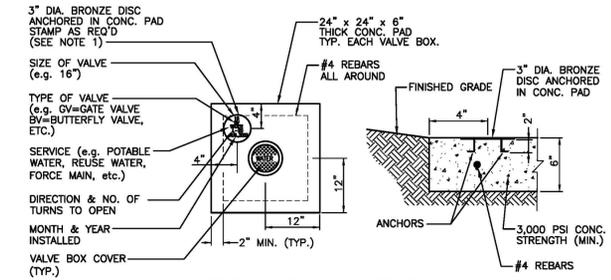
- NOTES:**
1. ALL BEARING SURFACES TO BE MACHINED.
 2. MINIMUM WEIGHT 1480 LBS.
 3. U.S.F. 1341-AHM, TYPE C OR APPROVED EQUAL.
 4. LID TO BE LABELED "ARV - CITY OF MIRAMAR - POTABLE WATER"; "ARV - CITY OF MIRAMAR - REUSE WATER"; OR "ARV - CITY OF MIRAMAR - FORCE MAIN".

AIR RELEASE VAULT ACCESS COVER



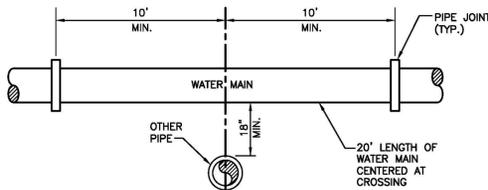
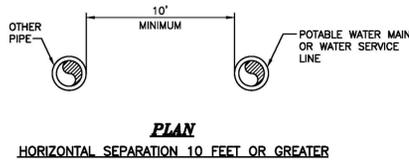
- NOTES:**
1. VALVE COLLAR SHALL BE 24"x24"x6" (MIN.) CONCRETE COLLAR PER CITY'S STANDARD DETAIL.
 2. WHEN WATER VALVE IS NOT LOCATED IN PAVEMENT, PLACE A WHITE PAVEMENT REFLECTOR MARKER IN THE DRIVE LANE, ADJACENT TO THE VALVE.
 3. VALVE BOX COVER SHALL BE PAINTED BLUE WITH THE DESIGNATION "WATER"; GREEN WITH THE DESIGNATION "SEWER"; PURPLE WITH THE DESIGNATION "REUSE".

GATE VALVE AND VALVE BOX DETAIL



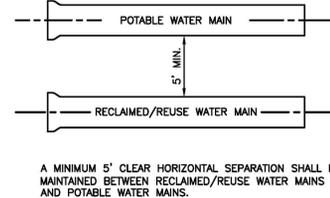
- NOTES:**
1. BRONZE IDENTIFICATION DISC SHALL BE REQUIRED FOR ALL VALVES, AND SHALL INDICATE: SIZE OF VALVE, TYPE OF VALVE, SERVICE, DIRECTION AND NUMBER OF TURNS TO OPEN, AND DATE INSTALLED.

VALVE BOX CONCRETE COLLAR DETAIL

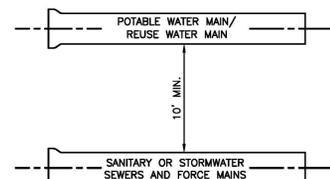


VERTICAL CLEARANCE AT CROSSING 18 INCHES OR GREATER

DETAILS FOR PROTECTION OF POTABLE WATER SUPPLY

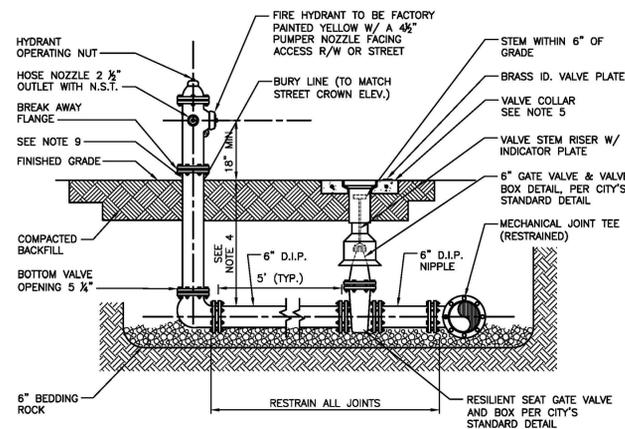


A MINIMUM 5' CLEAR HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN RECLAIMED/REUSE WATER MAINS AND POTABLE WATER MAINS.



A MINIMUM 10' CLEAR HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN POTABLE WATER MAINS/REUSE WATER MAINS AND SANITARY OR STORMWATER SEWERS AND FORCE MAINS.

MIN. HORIZ. SEPARATION REQUIREMENTS FOR POTABLE WATER, RECLAIMED, STORMWATER & SEWER LINES

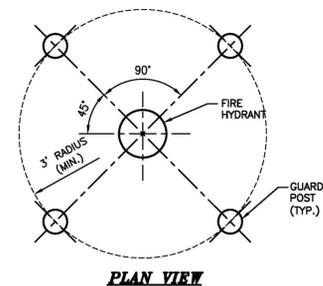
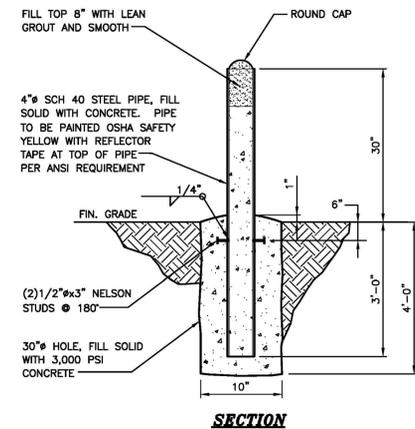


- NOTES:**
1. PIPE SHALL BE DUCTILE IRON CLASS 52, DIP SPOOL PIECES TO BE CLASS 350.
 2. ALL PIPES AND FITTINGS SHALL BE RESTRAINED MECHANICAL JOINT, MATERIAL TO BE DUCTILE IRON.
 3. HYDRANT VALVES SHALL BE INSTALLED AS CLOSE TO WATER MAIN AS POSSIBLE.
 4. DEPTH OF COVER TO TOP OF UNDERGROUND PIPING: 30" MINIMUM TYPICAL, 35" MINIMUM UNDER DRIVING SURFACES.
 5. VALVE COLLAR SHALL BE 24"x24"x6" CONCRETE COLLAR W/ 1-#4 BAR (CONT.) PER CITY'S STANDARD DETAIL.
 6. NO HYDRANT SHOULD BE LOCATED CLOSER THAN 5' TO A TYPE "D" CURB OR 7' TO A VALLEY GUTTER.
 7. GUARD POSTS AROUND FIRE HYDRANTS ARE REQUIRED WHEN HYDRANTS ARE PLACED WITH IN 6 FEET OF ALL ROADWAYS, DRIVEWAYS, TURN RADIUS, OR PARKING AREA.
 8. A BLUE REFLECTIVE PAVEMENT MARKER SHALL BE PROVIDED IN THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT ADJACENT TO ALL FIRE HYDRANT LOCATIONS.
 9. CLEARANCE BETWEEN BOTTOM OF BOLTS AND GRADE SHALL BE 6" MINIMUM.

CONTRACTOR SHALL COLOR CODE THE TOP OF EACH HYDRANT INDICATED BY THE GALLONS PER MINUTE OF FLOW. THE BODY OF ALL FIRE HYDRANT SHALL BE PAINTED YELLOW (RUST-OLEUM #944 SAFETY YELLOW, O.A.E. WITH A 40 MIL DFT), AND THE TOP COLOR CODED AS FOLLOWS:

- COLOR OF BONNETS & CAPS**
- 1,500 GPM OR GREATER: BLUE
 - 1,000 GPM OR GREATER: GREEN
 - 500-1,000 GPM: ORANGE
 - LESS THAN 500 GPM: RED

FIRE HYDRANT ASSEMBLY DETAIL



GUARD POST DETAIL

| | |
|-----------|------|
| BY | |
| REVISIONS | |
| NO. | DATE |

UTILITIES

CITY OF MIRAMAR
DEPARTMENT OF
CONSTRUCTION & FACILITIES MANAGEMENT
ENGINEERING STANDARDS



SCALE:
N.T.S.

SHEET NO.
2 OF 11