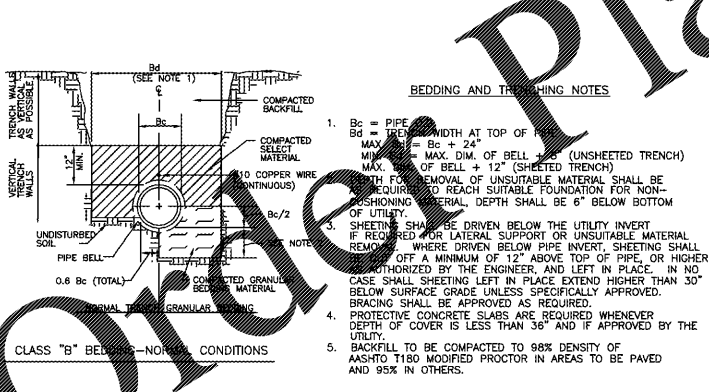
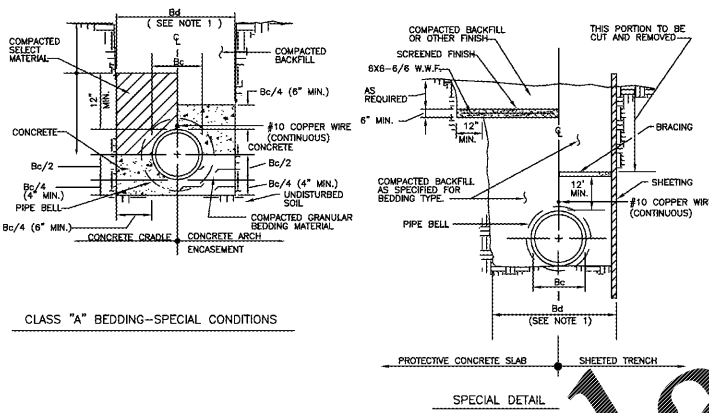


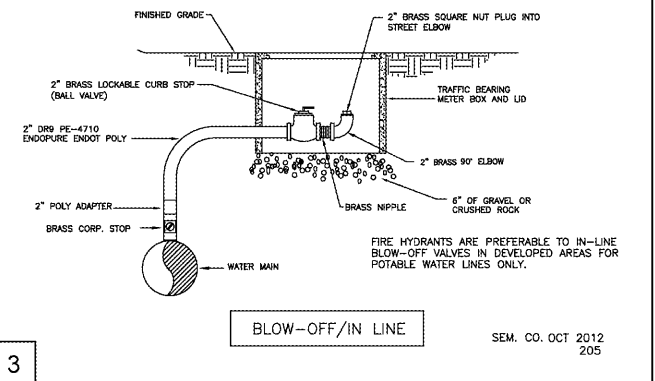
NOTES:

1. ALL MATERIALS SHALL BE NON CORROSIVE.
2. INSIDE DROP CONNECTION SHALL BE APPROVED BY THE COUNTY ON A CASE BY CASE BASIS.
3. PENETRATIONS TO EXISTING MANHOLES SHALL BE CORE BORED AND SEALED WITH LINK SEAL OR APPROVED EQUAL.
4. DROP CONNECTION SHALL BE REQUIRED WHENEVER THE INVERT OF AN INFLUENT SEWER IS LOCATED TWO (2) OR MORE FEET ABOVE THE MAIN CHANNEL.
5. DROP PIPE SHALL BE OF EQUAL SIZE AS THE INFLUENT SEWER. DROP PIPE SHALL BE PVC OR HDPE WITH NON CORROSIVE OR STAINLESS STEEL HARDWARE. IF A TRANSITION TO OTHER TYPE OF PIPE, THE TRANSITION SHALL BE OUTSIDE OF MANHOLE.
6. DURING PLACEMENT OF THE FIBERGLASS LINING, IF THE BENCH IS NOT REMOVED TO ALLOW THE LINING TO EXTEND TO THE BOTTOM OF THE MANHOLE, THE EXISTING BENCH SHALL BE NOTCHED AGAINST THE MANHOLE WALL FOR THE ENTIRE CIRCUMFERENCE TO A MINIMUM DEPTH OF TWO (2) INCHES. THE FIBERGLASS LINING SHALL BE PLACED AND SEALED INTO THE NOTCH. ANY NEW CONCRETE/GROUT TO BE PLACED OVER THE EXISTING BENCH SHALL BE BONDED TO THE EXISTING BENCH USING AN APPROVED EPOXY BASE ADHESIVE TO PREVENT COLD JOINTS AND TO PROVIDE FOR PROPER BONDING.

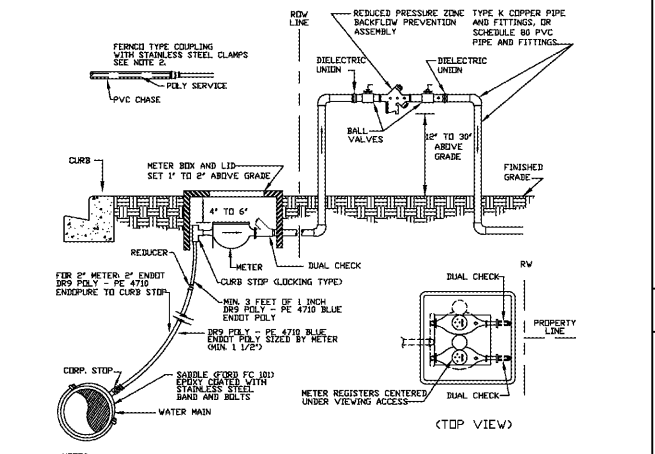
MANHOLE CONNECTION DETAILS SEM. CO. OCT 2012 308



PIPE BEDDING & TRENCHING DETAILS SEM. CO. DEC 2013 115



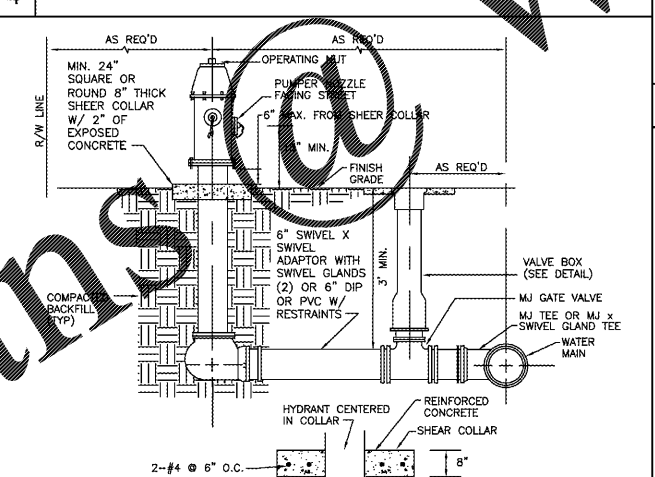
BLOW-OFF/IN LINE SEM. CO. OCT 2012 205



NOTES:

1. A POSITIVE DIELECTRIC CONNECTION SHALL BE MADE BETWEEN ALL GALVANIZED AND BRASS COMPONENTS.
2. METER SHALL BE INSTALLED BETWEEN SIDEWALK AND CURB WHERE APPLICABLE, OR AT PROPERTY LINE AND IN NO CASE SHALL IT BE INSTALLED IN SIDEWALK OR OTHER PAVED AREAS.
3. FOR COMMERCIAL INSTALLATION, BACKFLOW PREVENTION ASSEMBLY (BPP) AND PIPING SHALL BE PAINTED WITH OPTI-COAT.
4. ON NEW INSTALLATIONS, THE BPP SHALL BE TESTED IN ACCORDANCE WITH SEMINOLE COUNTY ORDINANCE 99-29 SECTION 9.14. BEFORE THE METER INSTALLATION CAN BE APPROVED FOR USE.
5. FOR ROADWAY CROSSINGS, ALL POLYETHYLENE SERVICE LINES SHALL BE INSTALLED IN A SCHEDULE 40 PVC SLEEVE. THE SLEEVE SHALL HAVE A NOMINAL DIAMETER OF A MINIMUM OF 1/2" LARGER THAN THE SERVICE LINE DIAMETER, BUT NOT EXCEEDING 4" NOMINAL DIAMETER. THE SLEEVE SHALL EXTEND A MINIMUM OF 12" THICKNESS BEYOND THE ROADWAY PAVEMENT AND/OR CURBING. THE DEPTH OF COVER OVER THE CASING SHALL BE A MINIMUM OF 24" INCHES BELOW THE BASE COURSE OR 36" INCHES OF TOTAL COVER, WHICHEVER IS GREATER. THE ANNUAL SPACE SHALL BE SEALED WITH A CASING SEALED, A FENCED TYPE COUPLING WITH STAINLESS STEEL CLAMPS SHALL BE INSTALLED AT THE CASING ENDS.
6. IN SINGLE FAMILY RESIDENTIAL IRRIGATION SYSTEMS, THE BPP MAY BE INSTALLED ANYWHERE BETWEEN THE IRRIGATION METER AND THE HOUSE, BUT NOT FARTHER THAN 50 FEET FROM THE METER AND 10' UPSTREAM OF THE HOUSE. THE BPP SHALL NOT BE INSTALLED IN THE RIGHT OF WAY.

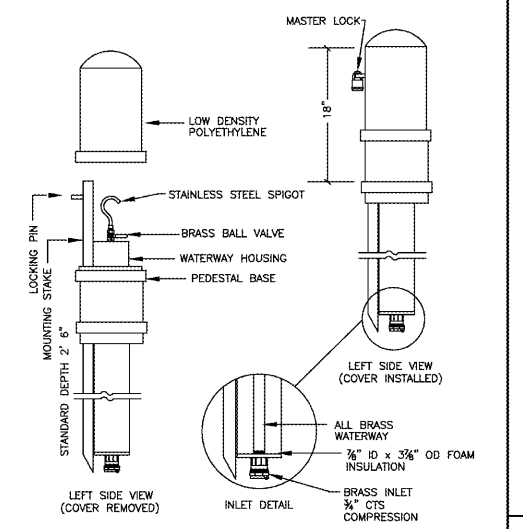
COMMERCIAL 3/4", 1", 1 1/2" & 2" WATER METER, DUAL CHECK AND REDUCED PRESSURE BACKFLOW PREVENTER WHEN USING POTABLE OR RECLAIMED WATER FOR IRRIGATION SEM. CO. OCT 2012 221



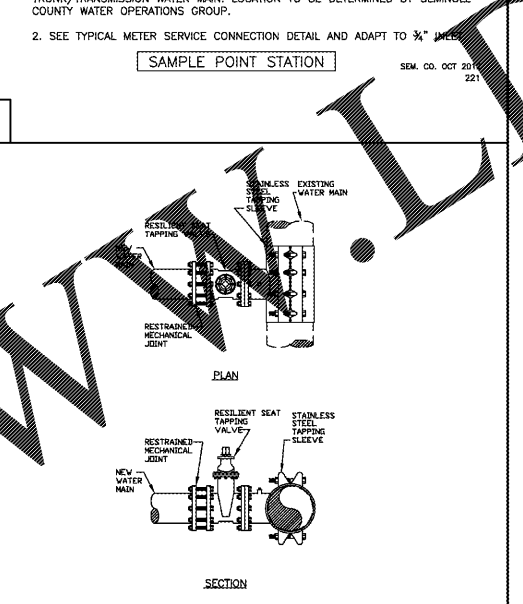
NOTES:

1. HYDRANT SHALL BE LOCATED 3' TO 8' FROM BACK EDGE OF CURB BETWEEN THE CURB AND SIDEWALK AND OUTSIDE OF STREET CORNER RADIUS OR BEHIND SIDEWALK IF NECESSARY.
2. HYDRANT BARRELS, BONNETS AND NOZZLE CAPS SHALL BE CLEANED OF LOOSE DEBRIS AND COATED WITH SHERWIN WILLIAMS INDUSTRIAL ENAMEL - SAFETY YELLOW (2 COATS) OR SILVER IF PRIVATE.
3. VALVE BOX SHALL BE SCREW TYPE ADJUSTABLE, AND COVER SHALL BE MARKED "WATER". SEE VALVE BOX DETAIL.
4. THE SHEAR COLLAR SHALL BE A TOTAL OF 8" THICK WITH 2" INSTALLED ABOVE FINISHED GRADE WITH SODDING AND THE COLLAR SHALL BE REINFORCED WITH 2" STEEL BARS.
5. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR COLLAR SHALL BE 6" MINIMUM.
6. INSTALL BLUE REFLECTIVE MARKER IN THE CENTER OF THE PAVED DRIVE LANE CLOSEST TO THE HYDRANT.
7. ALL FIRE HYDRANT FLOW TESTS ARE TO BE WITNESSED BY UTILITY PERSONNEL AND RESULTS ARE TO BE PROVIDED TO SEMINOLE COUNTY ENVIRONMENTAL SERVICES UTILITIES ENGINEERING DIVISION.
8. ALTHOUGH NOT REQUIRED, IT IS RECOMMENDED THAT EACH FIRE HYDRANT SHALL BE INSTALLED WITH A HYDRANT SECURITY DEVICE. THE DEVICE MUST BE FROM AN APPROVED MANUFACTURER OR APPROVED EQUAL. THE DEVICE, WHEN INSTALLED, MUST BE INTERNAL OR DIRECTLY ADJACENT TO THE HYDRANT AND MUST NOT HINDER OR ALTER CURRENT ESTABLISHED MAINTENANCE PROCEDURES. NO EXTERNAL LOCKS OR SPECIAL WRENCHES THAT WOULD HINDER FIREFIGHTERS ACCESS TO WATER ARE ALLOWED. THE DEVICE MUST PREVENT A CONTAMINANT FROM ENTERING THE DISTRIBUTION SYSTEM THROUGH THE HYDRANT IN EITHER A BACKFLOW OR BACK-SIPHONING CONDITION.
9. HYDRANTS SHALL BE DRY BARREL AND HAVE A MINIMUM 9/16" MAIN VALVE OPENING AND A MINIMUM INSIDE LOWER/UPPER BARREL DIAMETER (I.D.) OF 6 3/8" TO ASSURE MAXIMUM FLOW PERFORMANCE. PRESSURE LOSS AT 1,000 GPM SHALL NOT EXCEED 2.50 PSI FOR 4 1/2" PUMPER NOZZLE.
10. HYDRANTS SHALL BE THREE WAY IN DESIGN, HAVING ONE (1) PUMPER NOZZLE OF 4 1/2" DIAMETER AND TWO (2) 2 1/2" HOSE NOZZLES. NOZZLE THREAD TYPE SHALL BE NATIONAL STANDARD NOZZLES AND SHALL THREAD COUNTERCLOCKWISE INTO HYDRANT BARREL UTILIZING "O" RING SEALS.

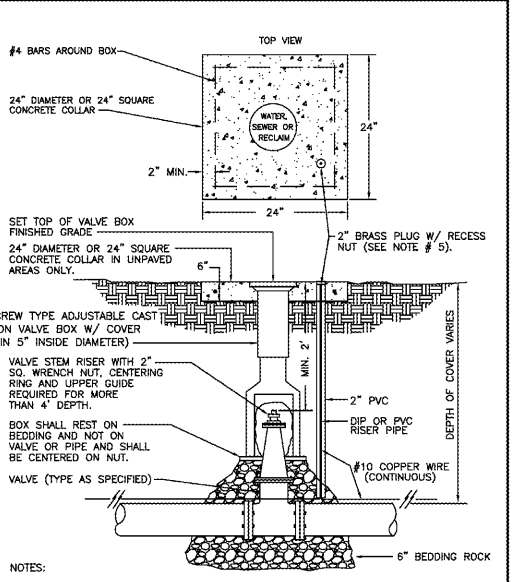
PRIVATE FIRE HYDRANT ASSEMBLY SEM. CO. OCT 2012 209



VALVE & VALVE BOX DETAIL SEM. CO. OCT 2012 112

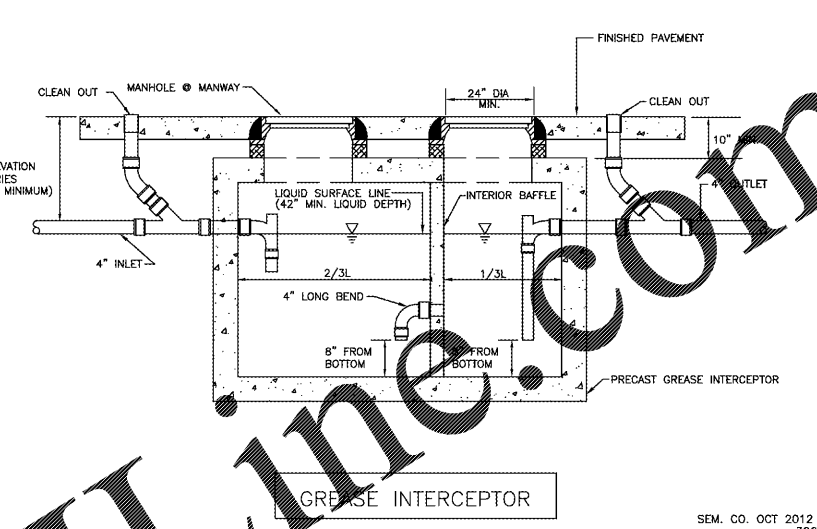


STANDARD WATER MAIN WET TAP SEM. CO. OCT 2012 222

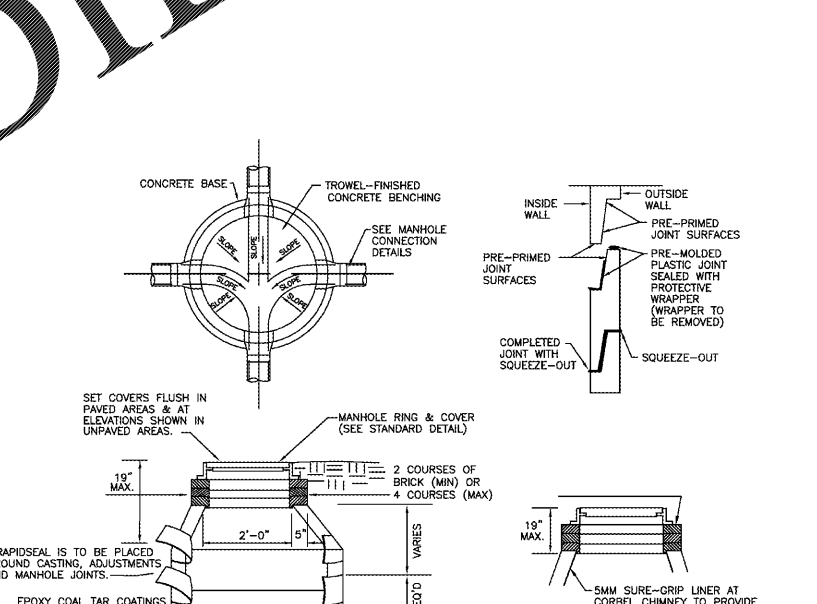


PRECAST ECCENTRIC CONCRETE MANHOLE SEM. CO. OCT 2012 309

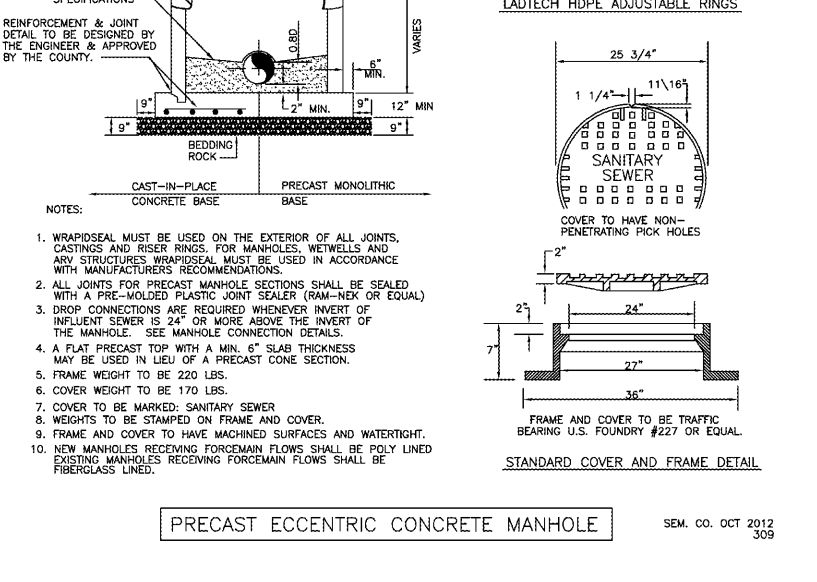
FOR INFORMATION ONLY



GREASE INTERCEPTOR SEM. CO. OCT 2012 306



CHIMNEY DETAIL USING LADTECH HDPE ADJUSTABLE RINGS SEM. CO. OCT 2012 307



STANDARD COVER AND FRAME DETAIL SEM. CO. OCT 2012 309

FOR INFORMATION ONLY

Small Business Enterprise 1979-2016
LOGO
 6894-0N-FL-Apopka (Bally Beach)
 BALLY BEACH DRIVE, SEMINOLE COUNTY, FLORIDA
 TAURUS CD 186 BALMY BEACH FL P
 6894-0.dwg - Apr 11, 2017 - 11:38am
 UTILITY DETAIL SHEET
 SHEET C15
 SEMINOLE COUNTY SP PROJ. #16-0600021
 REVISIONS
 NO. DATE
 ENGINEER JASON M. FLIC
 DESIGNER J.M.S.
 CHECKED J.P.M.
 DATE: APR. 11, 2017
 REVISIONS
 NO. DATE
 ENGINEER JASON M. FLIC
 DESIGNER J.M.S.
 CHECKED J.P.M.
 DATE: APR. 11, 2017