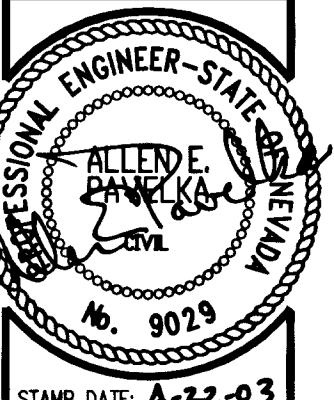




AZTEC ENGINEERING
 3320 N. Buffalo Dr. # 106, Las Vegas, NV 89129
 Tel (702) 396-3426 Fax (702) 396-3758
 Email: aztec@azteceng.com

CITY OF LAS VEGAS
 FIRE STATION NO. 44
 CONSTRUCTION DETAILS VII

SHEET
C-17
 17 OF 20 SHEETS
 CLV DRAWING NO.
630.97

UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS

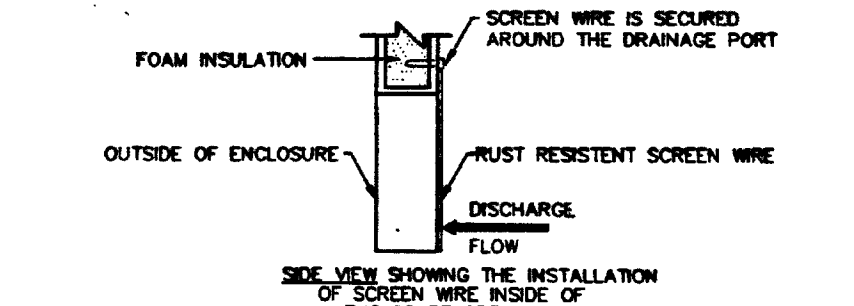
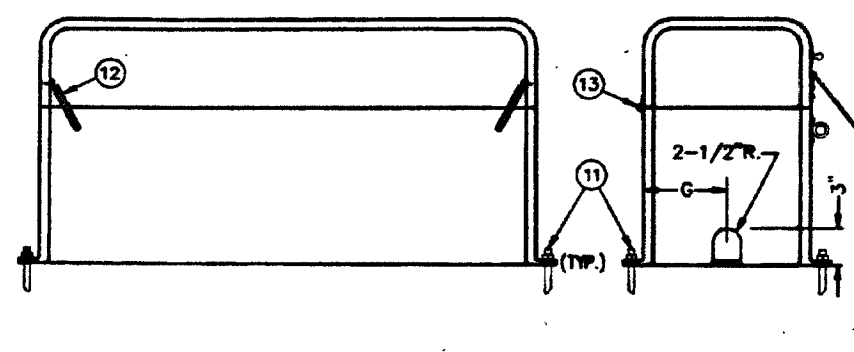
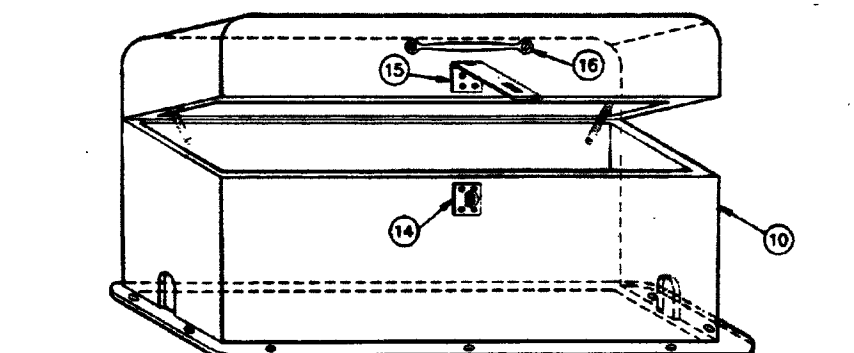
LEGEND

- APPROVED DOUBLE CHECK DETECTOR ASSEMBLY WITH 3/4" BY-PASS AND OS & "Y" GATE VALVES.
- BY - PASS METER.
- INSULATED ENCLOSURE.
- CONCRETE PAD - (3000 PSI @ 28 DAYS) SEE TABLE BELOW.
- FLG x FLG 90° DUCTILE IRON ELBOW.
- 3/8" - 16 NC x 2-3/4" LG "RED HEAD" WEDGE ANCHOR - GALVANIZED.
- 4" x 3" DUCTILE IRON FLG CONC REDUCER. (USED ONLY WITH 3" DOUBLE CHECK ASSEMBLY)
- FLG x PE DUCTILE IRON PIPE, CLASS 50.
- 1/4" EXPANSION JOINT MATERIAL.
- ADJUSTABLE PIPE SUPPORT.
- WELDED WIRE FABRIC, 4" x 4" x 1/4" DIA. WIRE.
- PUSH - ON OR M/J 90° DUCTILE IRON ELBOW.
- DUCTILE IRON FLANGE RESTRAINING ADAPTER.
- CONCRETE THRUST BLOCK, SEE UDS PLATE NO. 5.
- NO. 5 REBAR. (WRAP EXPOSED PORTION NO. 5 REBAR WITH "SCOTCHRAP" NO. 51 PLASTIC TAPE WITH 1/2 OVERLAP)
- 4" MIN. TYPE 1 AGGREGATE BASE COMPACTED TO 95% COMPACTION.

DEVICE SIZE	CONCRETE PAD SIZE-ITEM 3 DIMENSIONS
3"	4" x 48" x 96"
4"	4" x 54" x 114"
6"	4" x 58" x 134"
8"	4" x 64" x 152"
10"	4" x 66" x 197"

NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 DOUBLE CHECK DETECTOR ASSEMBLY
 3" TO 10" DIAMETER
 ABOVE GROUND INSTALLATION
 UDS PLATE NO. 20B
 SHEET 2 OF 2

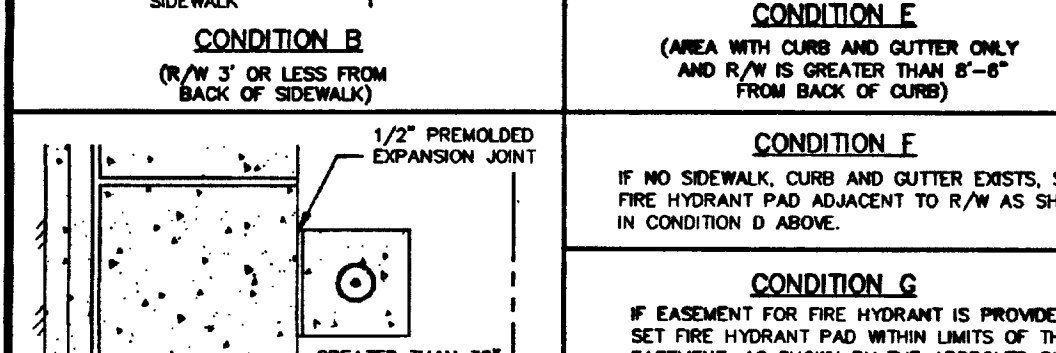
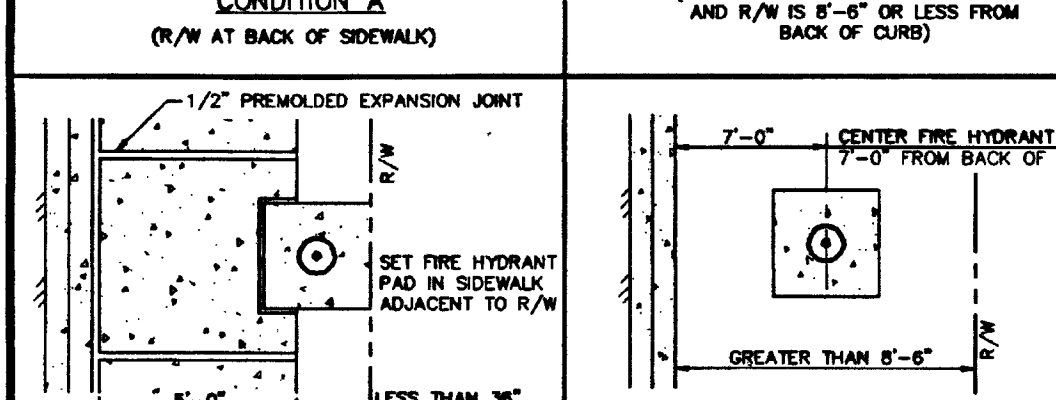
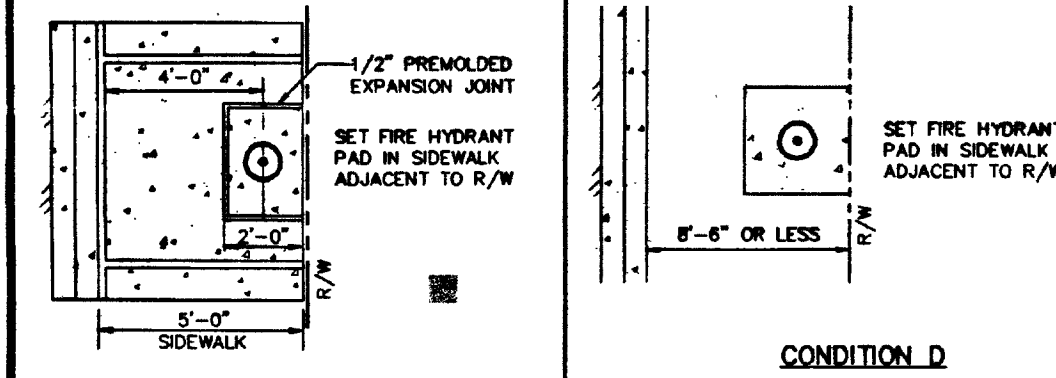
UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



NOTE: FOR LEGEND SEE SHEET 1 OF 2 (UDS PLATE NO. UDS11C-1)
 "INDUSTRIAL FIBERGLASS" ENCLOSURE ILLUSTRATED

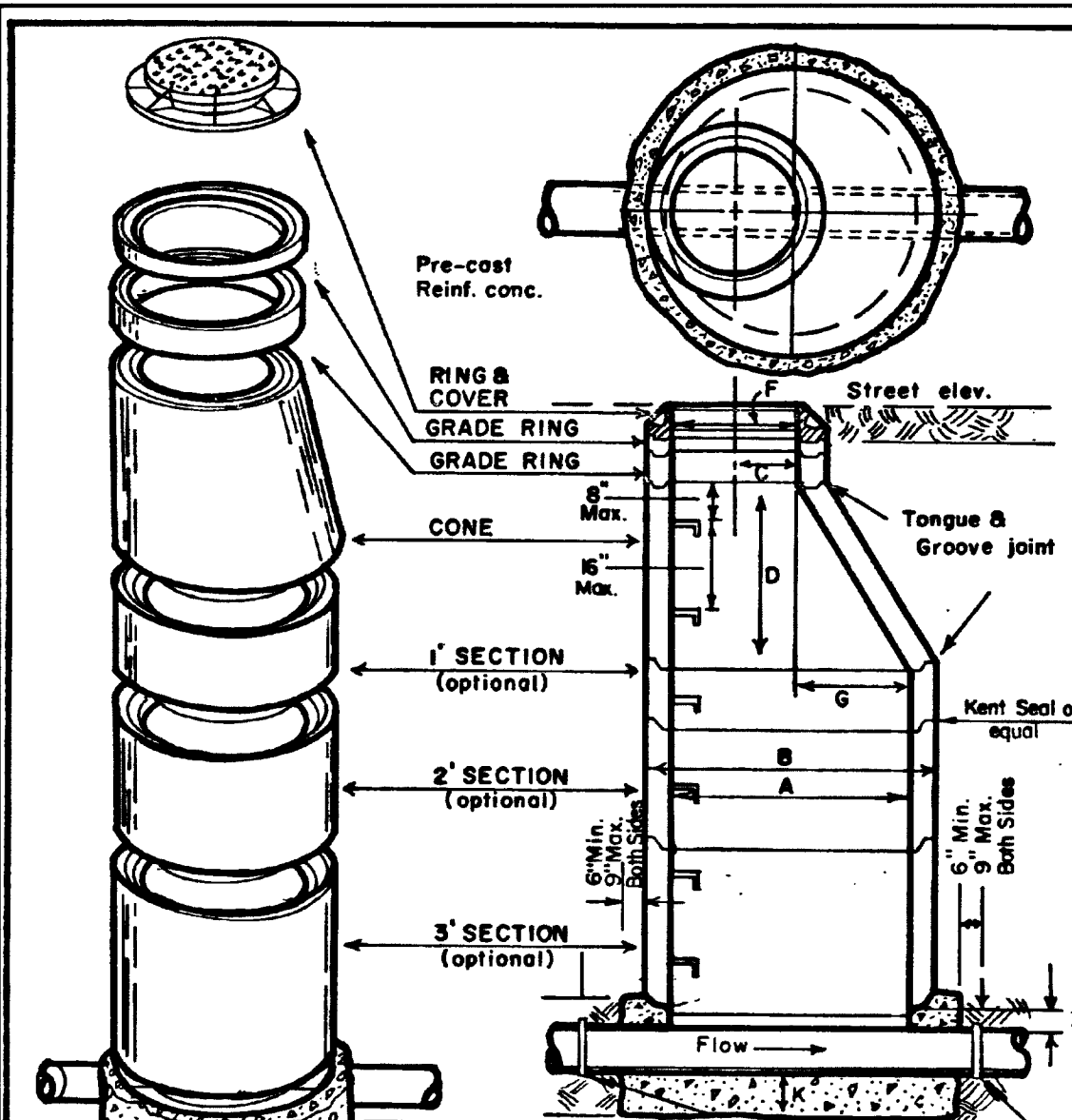
NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 BACKFLOW PREVENTION DEVICE
 REDUCED PRESSURE PRINCIPLE ASSEMBLY
 3/4" - 2" DIAMETER
 UDS PLATE NO. 11A
 SHEET 2 OF 2

UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



NOTE: FOR LEGEND SEE SHEET 1 OF 2 (UDS PLATE NO. UDS11C-1)
 "INDUSTRIAL FIBERGLASS" ENCLOSURE ILLUSTRATED

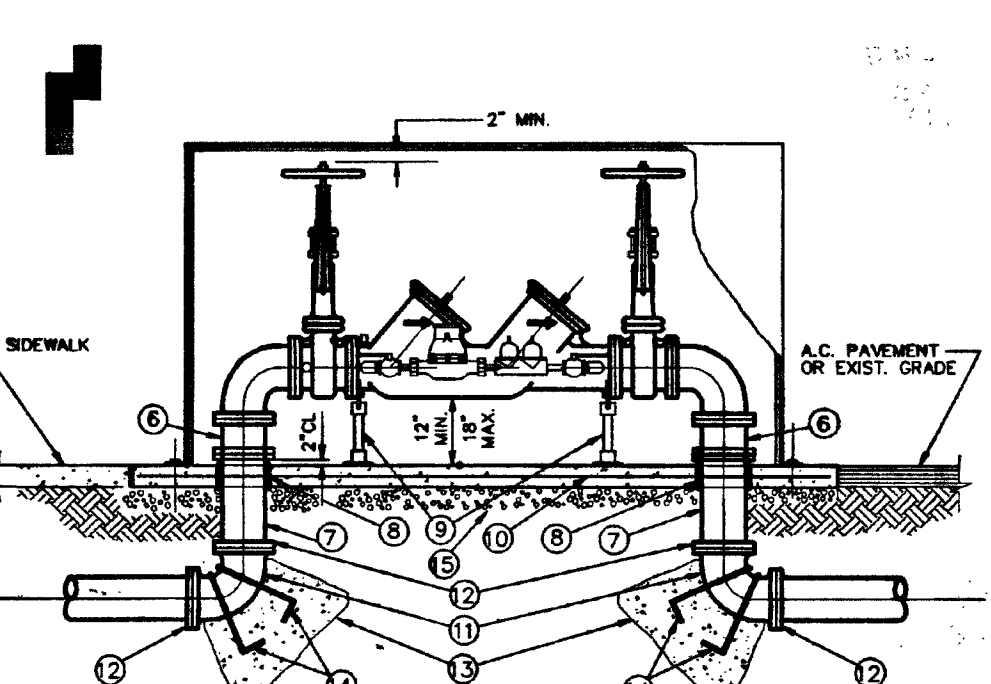
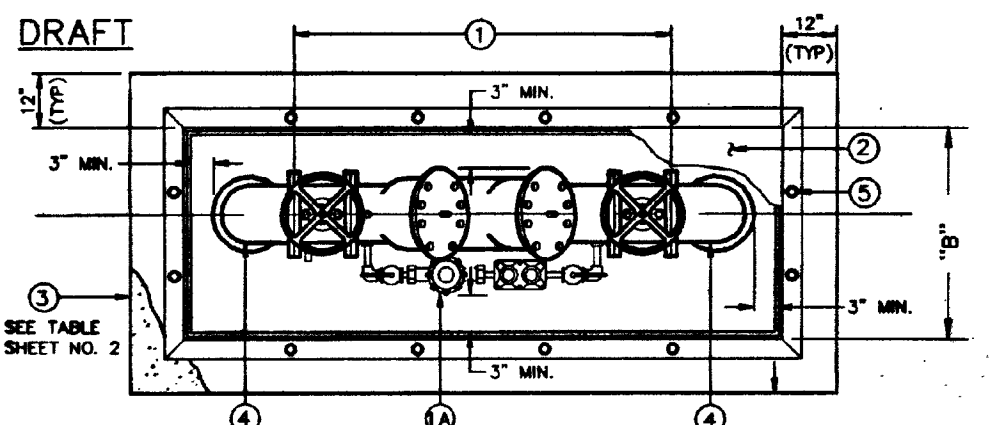
NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 FIRE HYDRANT INSTALLATION
 UDS PLATE NO. 7
 SHEET 2 OF 2



NOTES:
 1. Precast concrete sections shall conform to A.S.T.M. Designation C-478 as last amended. All Cement to be Type V.
 2. Manhole Bases may be square.
 3. All Manhole Steps shall face 180° from outgoing Invert.
 4. Bases shall be 3000# concrete per Section 4.2.2.
 5. In unstable soil conditions a second pipe joint is required within 3' of the manhole connection.
 6. On five & six foot dia. manholes the reducer or transition must be placed directly beneath the cone.
 7. When Precast Manhole Bases are used a minimum of 4" of crushed rock will be placed under the manhole base.

STANDARD ECCENTRIC MANHOLE
 ISSUED: NUMBER: SD-1

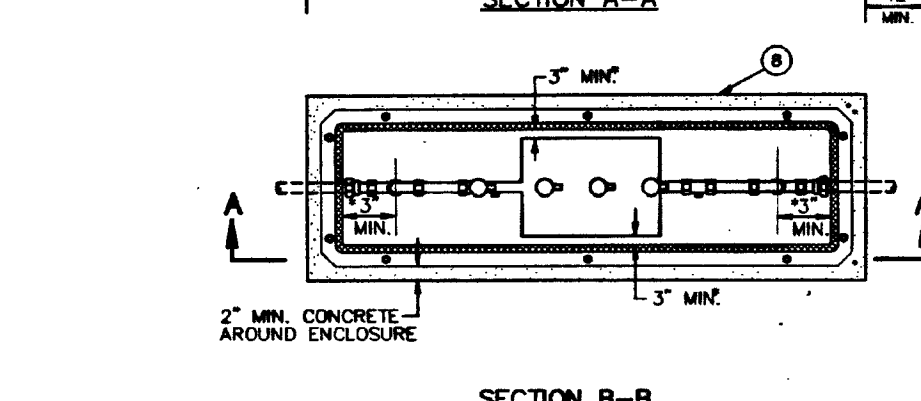
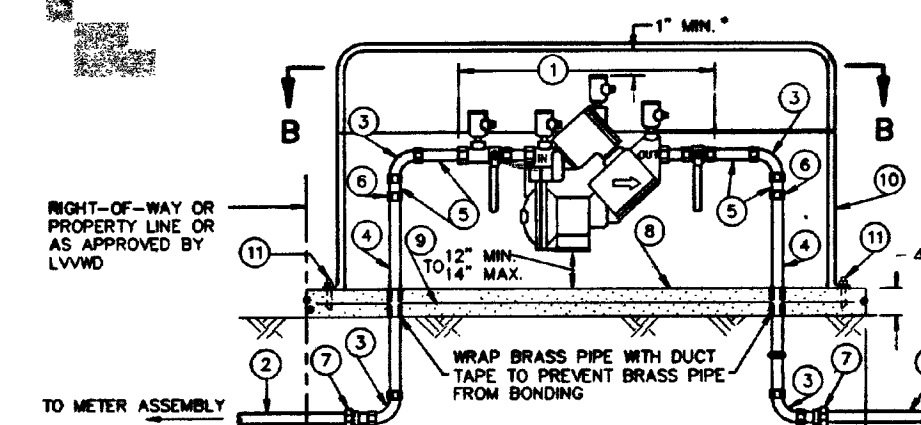
UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



NOTES:
 IF PROTECTION BOLLARDS ARE REQUIRED, SEE STANDARD PLATE NO. 23. SEE SHEET 2 FOR LEGEND AND SHEET 3 OF 3 FOR APPROVED PRODUCTS.
 TOP OF CONCRETE PAD TO BE FLUSH WITH SIDEWALK WHEN POURED AGAINST SIDEWALK.

NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 DOUBLE CHECK DETECTOR ASSEMBLY
 3" TO 10" DIAMETER
 ABOVE GROUND INSTALLATION
 UDS PLATE NO. 20B
 SHEET 1 OF 2

UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS

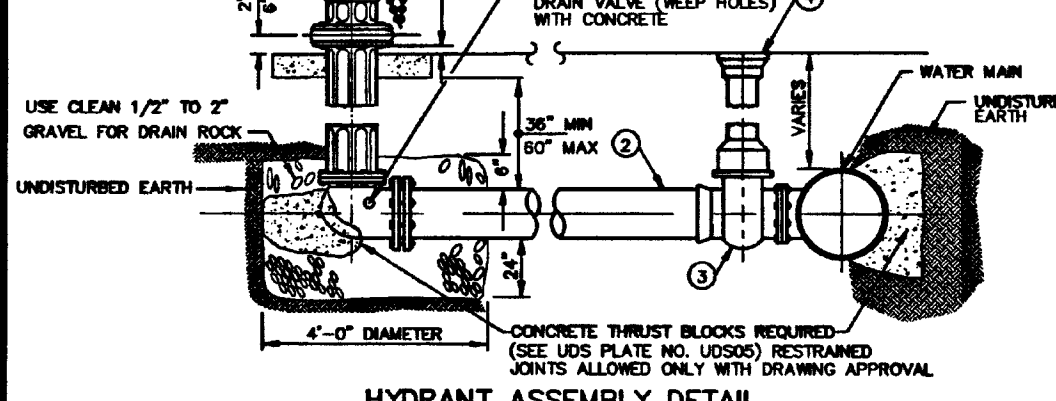
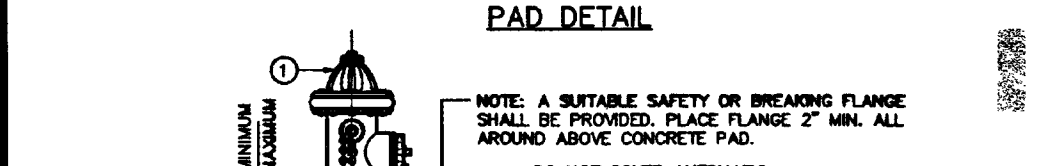
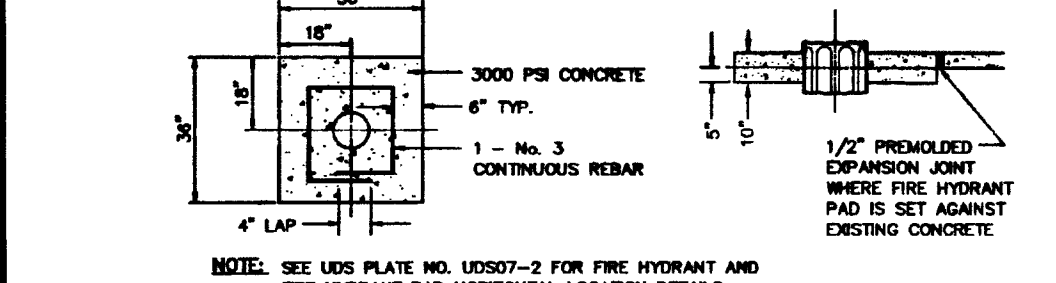


NOTE:
 REPAIR ASSEMBLY INCLUDING ABOVE GRADE PIPING NOT TO BE PAINTED.

- APPROVED REDUCED PRESSURE PRINCIPLE ASSEMBLY
- COPPER TUBING - TYPE "K"
- BRASS 90° ELBOW - IRON PIPE THREAD
- BRASS PIPE - STANDARD - T.B.E.
- BRASS CLOSE NIPPLE
- BRASS UNION - IRON PIPE THREAD
- METER COUPLING
- CONCRETE SLAB - 3000 P.S.I.
- WELDED WIRE FABRIC - 14x14 x 14.0
- FIBERGLASS ENCLOSURE - SEE UDS PLATE 11A-2
- 3/8"-16NC x 2-3/4" LG WEDGE ANCHOR BOLT
- STAINLESS STEEL HATCH SPRING
- POLISHED STAINLESS STEEL PIANO HINGE
- CHROME PLATED ZINC SWIVEL HASP-BOTTOM
- CHROME PLATED ZINC SWIVEL HASP-TOP
- CHROME PLATED ZINC HANDLE

NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 BACKFLOW PREVENTION DEVICE
 REDUCED PRESSURE PRINCIPLE ASSEMBLY
 3/4" - 2" DIAMETER
 UDS PLATE NO. 11A
 SHEET 1 OF 2

UNIFORM DESIGN STANDARDS FOR WATER DISTRIBUTION SYSTEMS



NOTE: SEE UDS PLATE NO. UDS11C-2 FOR FIRE HYDRANT AND THE HYDRANT PAD HORIZONTAL LOCATION DETAILS.

- NO HYDRANT SHALL BE LOCATED WITHIN 25 FEET OF ANY STRUCTURE OR 5 FEET OF A DRIVEWAY, POWER POLE, LIGHT STANDARD, OR ANY OTHER OBSTRUCTION. FOR WALLS, FENCE AND PLANTER LOCATIONS, A PERIMETER AROUND THE HYDRANT MEASURING A MINIMUM OF 3 FEET FROM ITS CENTER SHALL BE MAINTAINED CLEAR OF ALL OBSTRUCTIONS AT ALL TIMES. HYDRANTS MUST BE LOCATED A MINIMUM OF 6 FEET AWAY FROM THE BEGINNING OF A TURNING RADIUS.
- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH THE CITY OF LAS VEGAS FIRE DEPARTMENT "HYDRANT SPECIFICATIONS" HYDRANT INSTALLATION SPECIFICATIONS AND ORDINANCE NO. 3316, CLARK COUNTY ORDINANCE NO. 1407, NPA NO. 24 LATEST EDITION AND THE UNIFORM FIRE CODE LATEST EDITION.
- 6" DIAMETER FIRE HYDRANT LATERAL SHALL BE SAME CLASS AND TYPE OF MATERIAL AS THE DISTRIBUTION MAIN.
- DUCTILE IRON PIPE TO BE JOINTED WITH EXIST MILS THICK POLYETHYLENE FILM.

NOT TO SCALE
 FILE NAME: UDS11A-1
 DRAWN BY: B.V.
 CHECKED BY: C.M.W.
 FIRE HYDRANT INSTALLATION
 UDS PLATE NO. 7
 SHEET 1 OF 2

RECORD DRAWINGS
 AS-BUILT INFORMATION
 WAS PROVIDED BY THE
 CONTRACTOR. AZTEC
 ASSUMES NO LIABILITY
 FOR ACCURACY OF ITS
 CONTENTS.