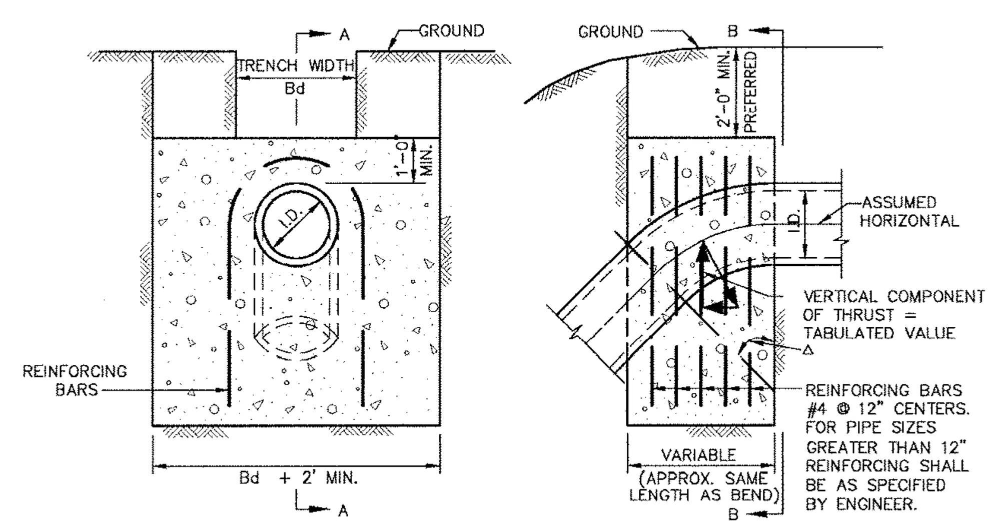


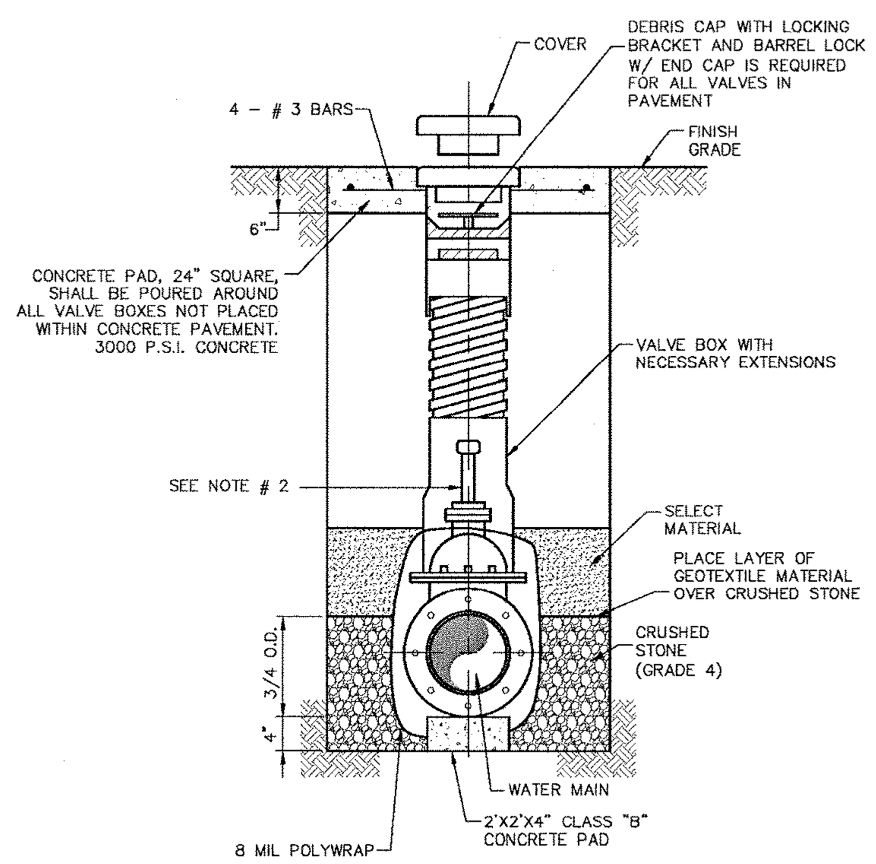
ELEVATION "B-B"

SECTION "A-A"

Δ →	11.25°		22.50°		30°		45°		67.50°		90°		← Δ
I.D. (IN.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	THRUST (TONS)	VOL. (C.Y.)	I.D. (IN.)
4,6,8	1.0	0.5	2.0	1.0	2.5	1.3	3.6	1.8	4.6	2.3	5.0	2.5	4,6,8
10,12	2.2	1.1	4.3	2.2	5.7	2.8	8.0	4.0	10.5	5.2	11.3	5.7	10,12
16,18	5.0	2.5	9.7	4.9	12.7	6.4	18.0	9.0	23.5	11.8	25.5	12.7	16,18
20	6.1	3.1	12.0	6.0	15.7	7.9	22.2	11.1	29.2	14.5	31.4	15.7	20
24	8.2	4.4	17.3	8.7	22.6	11.3	32.0	16.0	41.8	20.9	45.2	22.6	24
30	10.5	5.2	20.3	10.1	26.5	13.3	37.5	18.8	49.0	24.5	53.1	26.5	30
36	14.9	7.5	29.2	14.6	38.2	19.1	54.0	27.0	70.5	35.3	76.4	38.2	36
42	20.3	10.1	39.8	19.9	52.0	26.0	73.5	36.7	96.0	48.0	104.0	52.0	42
48	26.5	13.2	51.9	26.0	67.9	33.9	96.0	48.0	126.0	62.7	136.0	67.9	48
54	33.5	16.8	65.7	32.9	85.9	42.9	122.0	60.7	159.0	79.4	172.0	85.9	54
60	41.4	20.7	81.2	40.6	106.0	53.0	150.0	75.0	196.0	98.0	212.0	106.0	60
66	50.1	25.0	98.2	49.1	128.0	64.2	182.0	90.7	237.0	119.0	257.0	128.0	66
72	59.6	29.8	117.0	58.4	153.0	76.3	216.0	108.0	282.0	141.0	305.0	153.0	72
78	69.9	35.0	137.0	68.6	179.0	90.0	254.0	127.0	331.0	166.0	358.0	179.0	78
84	81.1	40.5	159.0	79.5	208.0	104.0	294.0	147.0	384.0	192.0	416.0	208.0	84
90	93.1	46.5	183.0	91.3	239.0	119.0	337.0	169.0	441.0	221.0	477.0	239.0	90
96	106.0	53.0	208.0	104.0	272.0	136.0	384.0	192.0	502.0	251.0	543.0	272.0	96

VERTICAL THRUST BLOCK

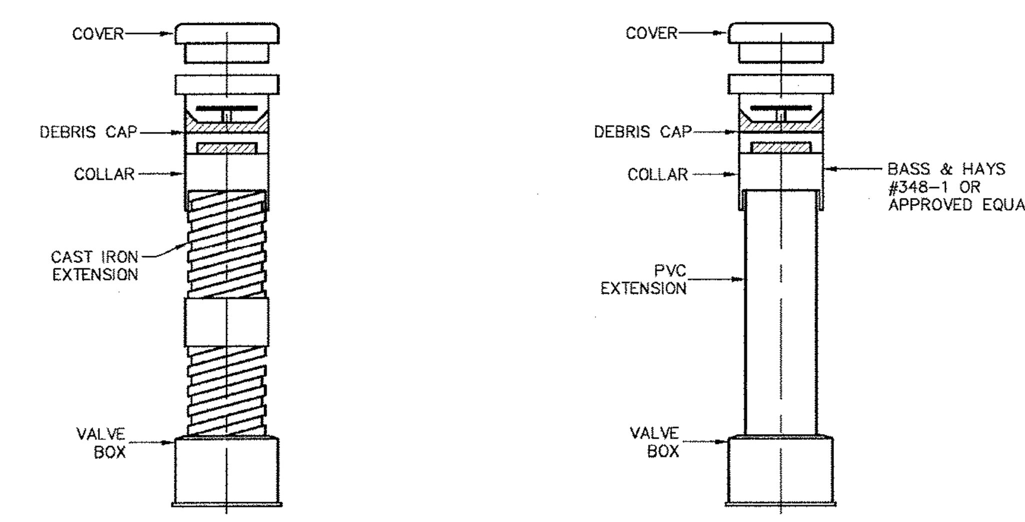
Addison! PUBLIC WORKS DEPARTMENT — VERTICAL THRUST BLOCK AT PIPE BEND — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W08



TYPICAL VALVE SETTING & BOX

NOTE:
1. 4"–12" R.S. GATE VALVES SHALL BE IN ACCORDANCE WITH TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.
2. A PERMANENTLY ATTACHED VALVE EXTENSION STEM SHALL BE REQUIRED FOR ANY VALVE WHERE THE OPERATING NUT IS LOCATED IN EXCESS OF 5 FEET BELOW THE TOP OF VALVE BOX. THIS EXTENSION SHALL BE OF SUFFICIENT LENGTH TO INSURE THAT ITS TOP IS WITHIN 5 FEET OF VALVE BOX LID.
3. BLUE "V" (3") CUT INTO FACE OF NEAREST CURB AND POINTING TOWARD THE VALVE.
4. ALL IRON MATERIALS SHALL BE DOMESTIC. (MADE IN USA)
5. CRUSHED STONE SHALL BE 3/4", PASSING #4 SIEVE.

Addison! PUBLIC WORKS DEPARTMENT — VALVE SETTING BOX — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W09

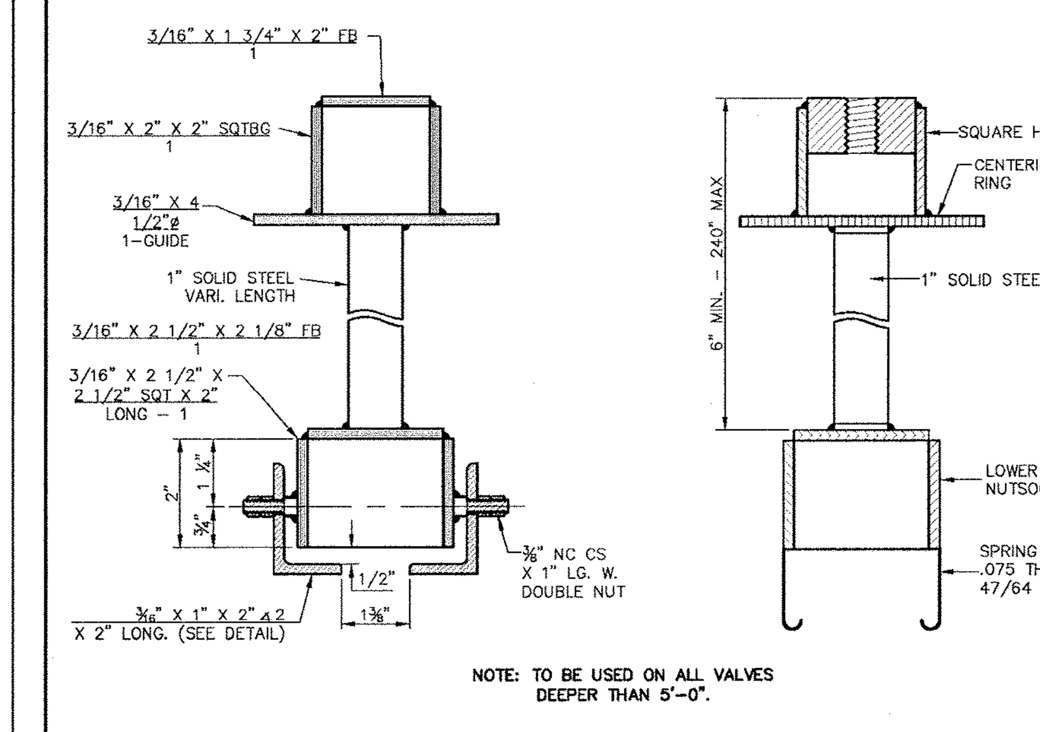


FOR BURY HEIGHT 5' OR LESS

FOR BURY HEIGHT GREATER THAN 5'

NOTE
1. ALL CAST IRON FITTINGS SHALL BE DOMESTIC. (MADE IN U.S.A.)
2. VALVE BOXES SHALL BE PROVIDED FOR BURIED VALVES. THESE BOXES SHALL BE THREE (3) PIECE SCREW TYPE CAST IRON OF THE EXTENSION TYPE AND SHALL BE: BASS & HAYS THREE (3) PIECE ADJUSTABLE SCREW TYPE, EAST JORDAN IRON WORKS 8560 W/ 6800 LID, MUELLER NO. H-10360 OR APPROVED EQUAL. THE THREE (3) PIECES SHALL CONSIST OF THE TOP SECTION, BOTTOM SECTION AND COVER.

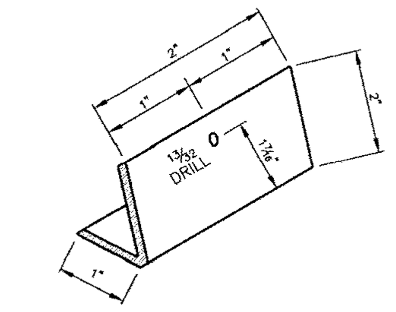
Addison! PUBLIC WORKS DEPARTMENT — VALVE BOX WITH EXTENSION — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W10



NOTE: TO BE USED ON ALL VALVES DEEPER THAN 5'–0".

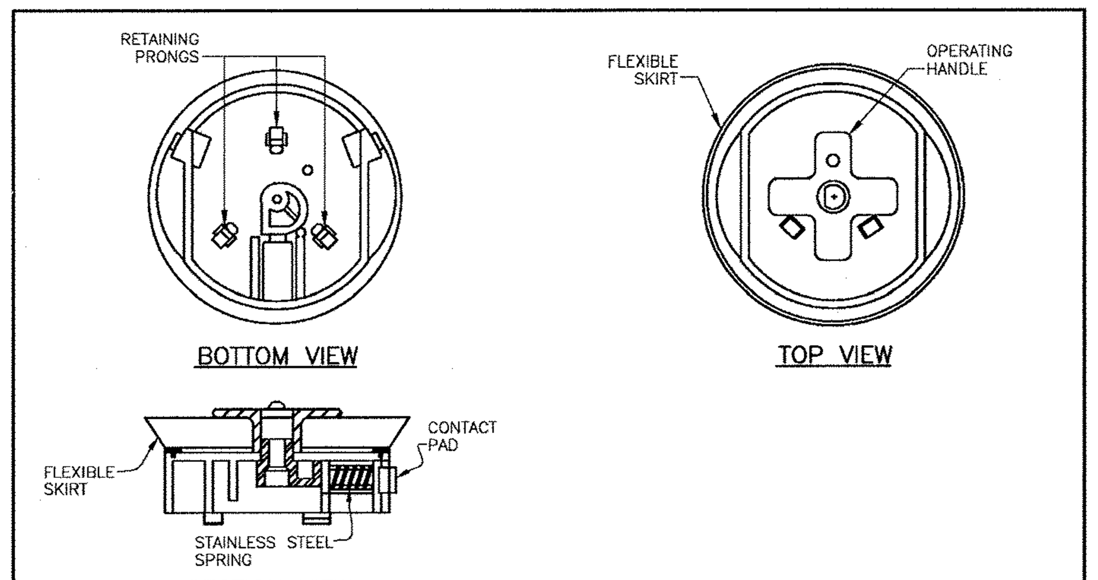
TYPE – B VALVE EXTENSION

SPRING LOCK VALVE EXTENSION



DETAIL

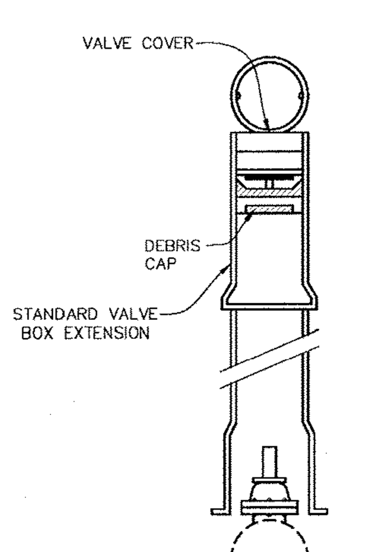
Addison! PUBLIC WORKS DEPARTMENT — VALVE EXTENSION — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W11



BOTTOM VIEW

TOP VIEW

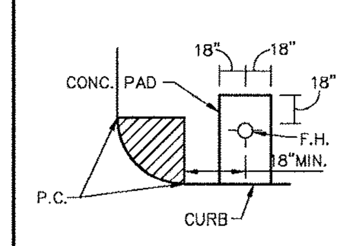
SECTION VIEW



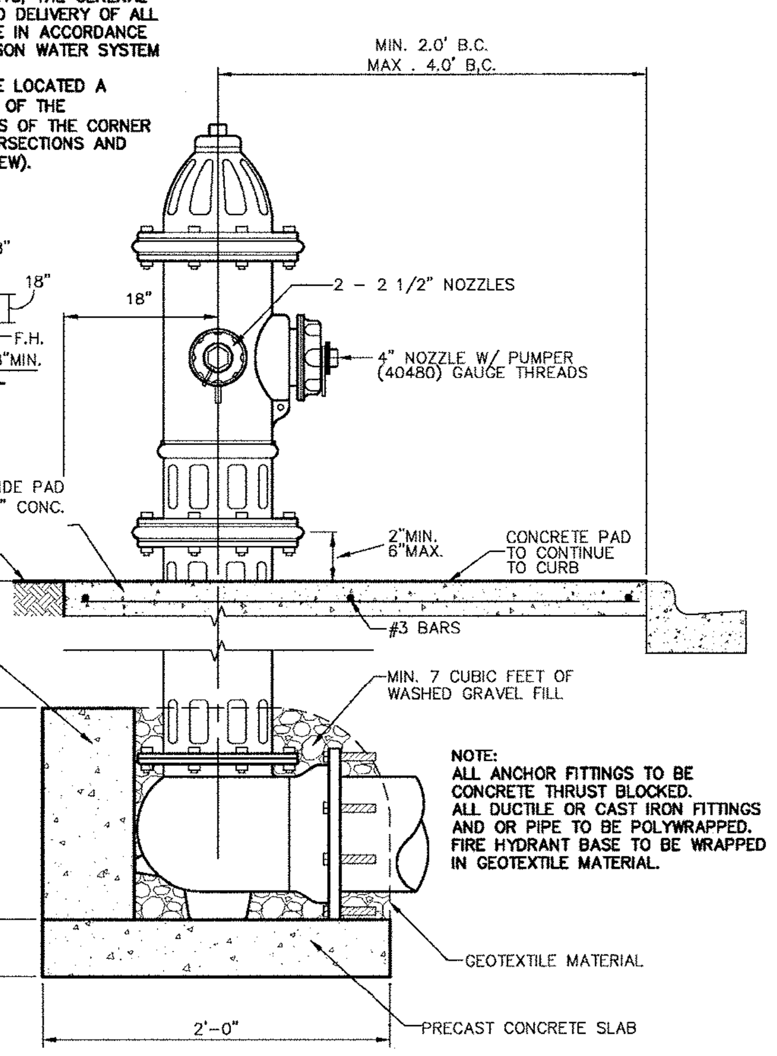
NOTES
1. DEBRIS CAP SHALL BE INSTALLED AS CLOSE AS POSSIBLE UNDER THE CAST IRON COVER WITHOUT INTERFERING WITH COVER OPERATION.
2. FLEXIBLE SKIRT OF THE DEBRIS CAP SHALL BE TRIMMED TO PROVIDE A SMOOTH CONTACT WITH THE INTERIOR DIAMETER OF THE PIPE.
3. THE DEBRIS CAP SHALL BE MANUFACTURED BY SW SERVICES, INC., PHOENIX, ARIZONA MONDEL NO. DC 457 WITH LOCKING BRACKET MODEL NO. DCLD4 AND BARREL LOCK.
4. THE CAP SHALL BE CONSTRUCTED TO ALLOW THE DEVICE TO BE SECURED BY A LOCK. THE LOCK (PAD, BARREL, ETC.) SHALL BE SUPPLIED BY THE TOWN OF ADDISON.

Addison! PUBLIC WORKS DEPARTMENT — DEBRIS CAP — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W12

NOTE:
1. DESIGN, SITE REQUIREMENTS, THE GENERAL OPERATION, PAINTING AND DELIVERY OF ALL FIRE HYDRANTS SHALL BE IN ACCORDANCE WITH THE TOWN OF ADDISON WATER SYSTEM REQUIREMENTS.
2. FIRE HYDRANTS SHALL BE LOCATED A MINIMUM OF 18" OUTSIDE OF THE AREA BETWEEN THE P.C.'S OF THE CORNER TURNING RADIUS AT INTERSECTIONS AND DRIVEWAYS (SEE PLAN VIEW).



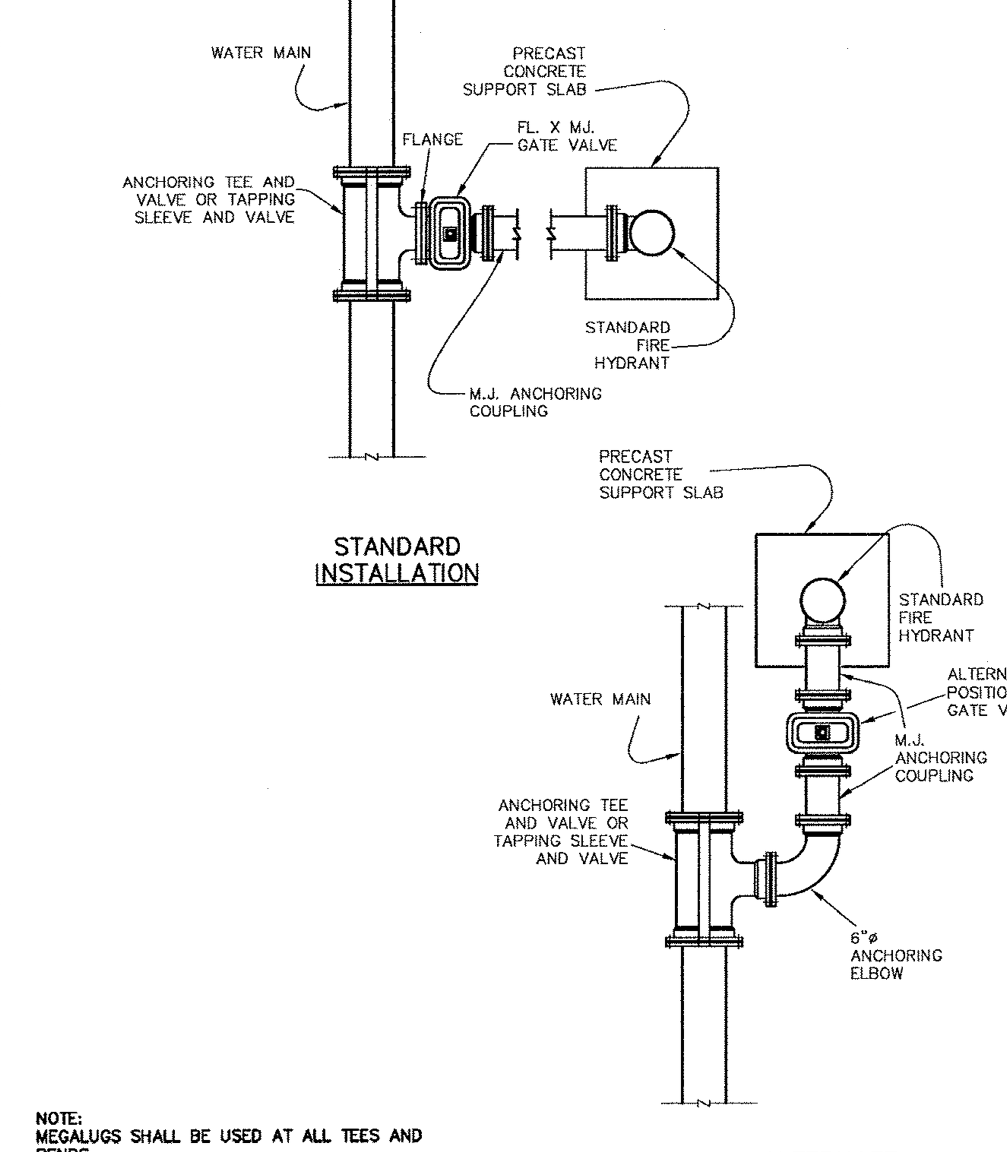
PLAN VIEW



NOTE:
ALL ANCHOR FITTINGS TO BE CONCRETE THRUST BLOCKED.
ALL DUCTILE OR CAST IRON FITTINGS AND OR PIPE TO BE POLYWRAPPED.
FIRE HYDRANT BASE TO BE WRAPPED IN GEOTEXTILE MATERIAL.

TYPICAL FIRE HYDRANT INSTALLATION

Addison! PUBLIC WORKS DEPARTMENT — TYPICAL FIRE HYDRANT INSTALLATION — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W16

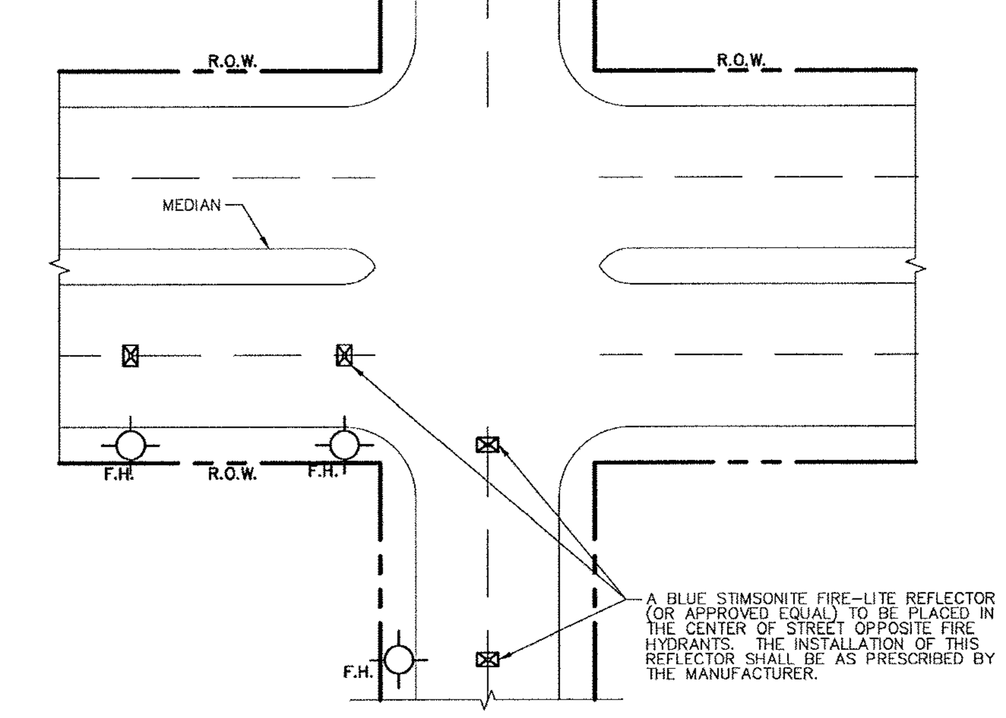


STANDARD INSTALLATION

ALTERNATE INSTALLATION

NOTE:
MEGALUGS SHALL BE USED AT ALL TEES AND BENDS.

Addison! PUBLIC WORKS DEPARTMENT — TYPICAL FIRE HYDRANT INSTALLATION — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W17



NOTE:
FIRE HYDRANT SHALL BE LOCATED OUTSIDE OF RADIUS.

TYPICAL FIRE HYDRANT REFLECTOR INSTALLATION

Addison! PUBLIC WORKS DEPARTMENT — FIRE HYDRANT REFLECTOR INSTALLATION — STANDARD CONSTRUCTION DETAILS WATER — DATE: AUGUST, 2010 — REV DATE: – — SHEET: SD-W19

Kimley-Horn and Associates, Inc.
12700 Park Central Drive, Suite 1800
Dallas, TX 75251-1516 972-770-1300
Firm No. 928

No.	Revision	Date
1	REVISED TOWN DETAILS	8/26/11

STATE OF TEXAS — DAVID E. MEYERS — 81512 — REGISTERED PROFESSIONAL ENGINEER
10-11-2011

Keller Springs Lofts
Loft Apartments in Addison
Town of Addison, Texas

WATER DETAILS

DATE: OCTOBER 11, 2011
DESIGN: KHA
DRAWN: KHA
CHECKED: KHA
KHA NO.: 064362003
CITY NO.:

SHEET
C22