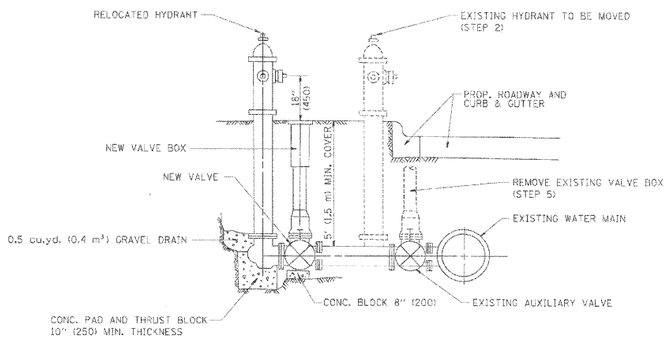


FIRE HYDRANT TO BE RELOCATED

SEQUENCE OF CONSTRUCTION

1. CITY TO CLOSE EXISTING VALVE.
2. REMOVE EXISTING HYDRANT.
3. INSTALL HYDRANT EXTENSION AND NEW VALVE.
4. CHLORINATE HYDRANT, VALVE AND EXTENSION BY SWABBING.
5. RELOCATE EXISTING HYDRANT.
6. CONTACT CITY TO CHARGE HYDRANT AND INSPECT FOR LEAKS.
7. BACKFILL.
8. CITY TO FLUSH HYDRANT A MINIMUM OF 24 HOURS AFTER #5 (ONLY CITY TO OPERATE VALVE TO LIVE MAIN.).
9. CITY TO FLUSH AND CONTRACTOR TO OBTAIN WATER SAMPLE FOR BACTERIOLOGICAL TESTING.
10. CITY TO TURN ON HYDRANT UPON NEGATIVE WATER TEST RESULTS ARE RECIEVED. CONTRACTOR TO REMOVE OLD BOX.

UW-01

NOTE:
ALL MANHOLES MUST BE DAMP PROOF PER IDOT SPECIFICATIONS 1080 "WATER PROOFING MATERIALS"

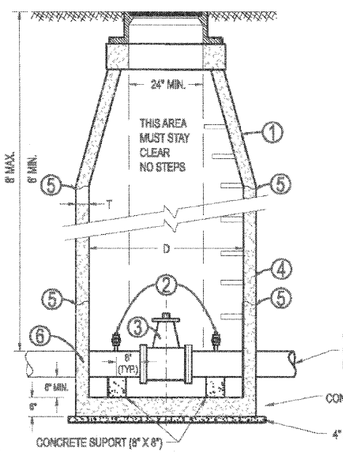
ALL LIDS TO BE USED ON WATER SYSTEM STRUCTURE SHALL BEAR THE WORDS "CITY OF CRYSTAL LAKE WATER".

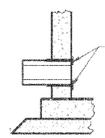
DRAIN FOR VALVE VAULT SHALL BE CONSTRUCTED ONLY WHEN SHOWN ON THE PLANS.

FRAME AND RING(S) TO BE SET IN MORTAR BED OR SEALED WITH A PREFORMED BITUMEN SEAL (E-Z-STICK OR APPROVED EQUAL).

FOR PRESSURE CONNECTION, SEE DETAIL UW-2.

DIAMETER OF WATER MAIN	D	T
8 INCHES AND OVER	5 FT.	8"





NOTE: ALL VALVE HARDWARE MUST BE STAINLESS STEEL INCLUDING NUTS, BOLTS & WASHERS.

1. CONCENTRIC CONES REQUIRED
2. 1" (PREFERRED, 3/4" MIN.) MUELLER, A.Y. McDONALD, OR FORD CORPORATION STOP EACH SIDE OF VALVE MUST BE A COMPRESSION FITTING.
3. MUELLER 2360-23-9020 OR AMERICAN FLOW CONTROL 2500-1 RESILIENT SEAT GATE VALVE
4. PRECAST CONCRETE MANHOLE SECTIONS WITH A MINIMUM THICKNESS OF 5"
5. WATERTIGHT JOINT
6. GASKET-TYPE WATERSTOP COLLAR FOR ALL WATER MAIN CONNECTIONS
7. CAST IRON MANHOLE FRAME & COVER SIMILAR TO NEENAH R-1712, OR EQUAL WITH STANDARD DUTY, NON-ROCKING TYPE LIDS WITH "CITY OF CRYSTAL LAKE WATER" CAST INTO LID. (NEENAH R-2535, OR EQUAL MAY BE USED IN GRASSY AREAS)

ADJUSTING RING HEIGHT NOT TO EXCEED 8" WITH A MAXIMUM OF THREE (3) ADJUSTMENT RINGS.

Approved: City Engineer	Drawing Name	Drawing Number	
Victor C. Ramirez, P.E. Director of Engineering and Building	STANDARD VALVE VAULT	UW-01	CRYSTAL LAKE ILLINOIS Engineering Division
		Date: 4/15/2007	
		Drawn EM / Checked JN	

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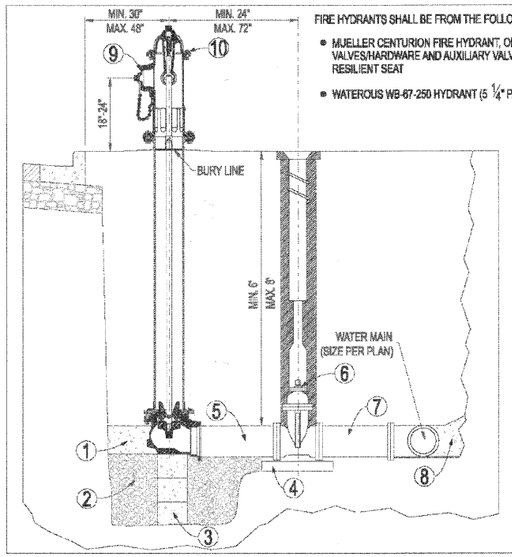
UW-06



FIRE HYDRANTS SHALL BE FROM THE FOLLOWING LIST, AS APPROVED BY THE CITY:

- MUELLER CENTURION FIRE HYDRANT, OPT-094 (5 1/4" BARREL) WITH MUELLER VALVES/HARDWARE AND AUXILIARY VALVE 6" GATE VALVE NO. 2360-23-9020 MODIFIED WEDGE RESILIENT SEAT
- WATEROUS WB-67-250 HYDRANT (5 1/4" PACER) WITH SERIES 2500-1 RESILIENT WEDGE GATE VALVE

1. PROVIDE CLASS SI CONCRETE BASE AND BLOCKING AGAINST UNDISTURBED EARTH
2. DRAIN SUMP TO BE 3/4 CUBIC YARD OF 3/4" WASHED STONE
3. CONCRETE SUPPORT
4. CONCRETE BLOCK OR BRICK SUPPORT
5. PIPE AS REQUIRED TO MAINTAIN 24" SEPARATION AS SHOWN (DIRECT MECHANICAL JOINT CONNECTION IF APPROVED BY CITY)
6. RUBBER VALVE BOX STABILIZER
7. USE "CORTEN" STEEL TIE RODS BETWEEN AUXILARY VALVE AND WATER MAIN (STAINLESS STEEL MAY BE REQUIRED BY THE CITY ENGINEER). ANY DISTANCE GREATER THAN 30" SHALL BE RODDED TO MEGA-LUG FLANGE. NO COUPLINGS ARE PERMITTED IN RODS.
8. CONCRETE BLOCKING CAST IN PLACE 3000 P.S.I.
9. 4 1/2" PORT TO FACE PAVEMENT OR AS DIRECTED BY CITY ENGINEER
10. ALL NEWLY INSTALLED HYDRANTS MUST BE TOP COATED WITH RUST-OLEUM FIRE HYDRANT ENAMEL (COLOR = FIRE HYDRANT RED)
11. MIN. 45" BETWEEN HYDRANT AND ANY VERTICAL OBSTRUCTIONS.
12. MIN. 72" BETWEEN HYDRANT AND ANY LANDSCAPING WITH A MATURE HEIGHT GREATER THAN 12".
13. ALL VALVE AND HYDRANT HARDWARE MUST BE STAINLESS STEEL INCLUDING NUTS, BOLTS, AND WASHERS.

Approved: City Engineer	Drawing Name	Drawing Number	
Victor C. Ramirez, P.E. Director of Engineering and Building	FIRE HYDRANT	UW-06	CRYSTAL LAKE ILLINOIS Engineering Division
		Date: 11/2/2007	
		Drawn EM / Checked JN	

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USER NAME = chartke	DESIGNED - JRM		REVISED -
	DRAWN - CCL		REVISED -
PLOT SCALE = N.T.S.	CHECKED - TCH		REVISED -
PLOT DATE = 2/13/2009	DATE - 2/13/09		REVISED -

MCHENRY COUNTY DIVISION OF TRANSPORTATION

CITY OF CRYSTAL LAKE DETAILS

SCALE: N.T.S. | SHEET NO. 1 OF 1 SHEETS | STA. | TO STA.

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
0116	08-00327-01-CH	MCHENRY	56	44
		CONTRACT NO. 63144		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

080154
C-91-259-06
080154-det-09.dgn