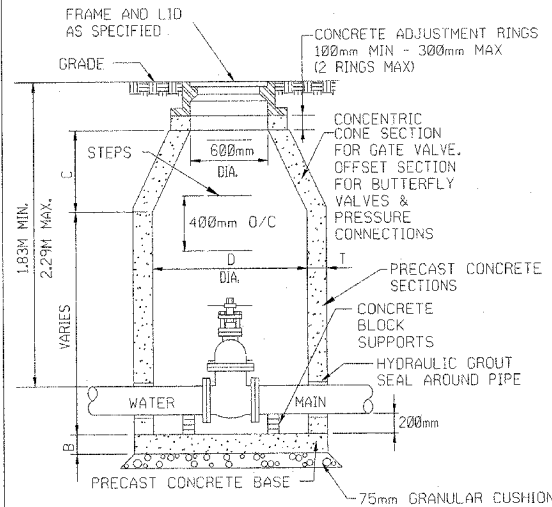


F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			507	268
CONTRACT NO: 60881				
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

VALVE VAULT



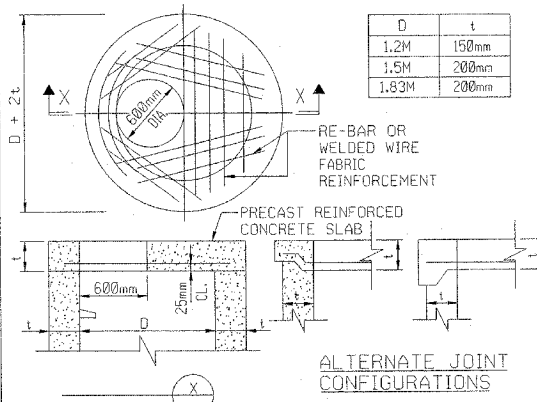
ALL JOINTS BETWEEN THE VARIOUS STRUCTURE COMPONENTS (BASE, RISERS, CONE, ADJUSTMENT RINGS, AND FRAME CASTING) SHALL BE SEALED WATER TIGHT WITH A CONTINUOUS LAYER OF NON-HARDENING PREFORMED BITUMINOUS MASTIC PLACED BETWEEN THE TWO ADJACENT COMPONENTS.

WATERMAIN SIZE	D	C	I (MIN.)	B
200mm OR SMALLER	1.2M	760mm	100mm	150mm
250mm OR SMALLER	1.5M	1150mm	125mm	300mm

STANDARD NOTES FOR MANHOLES, VALVE VAULTS AND DRAINAGE STRUCTURES

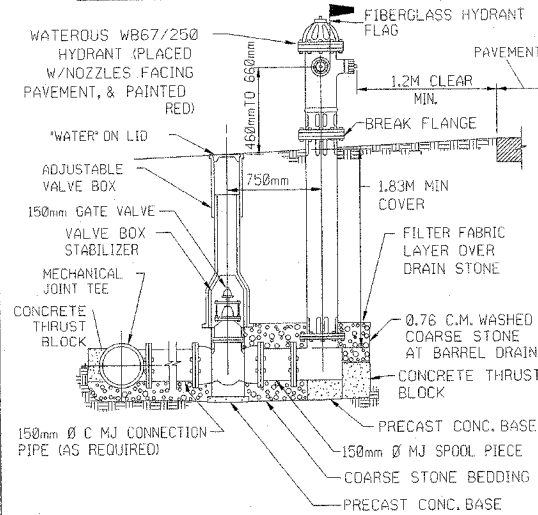
- STRUCTURES SHALL BE OF PRECAST CONCRETE UNLESS OTHERWISE INDICATED ON THE PLANS OR IN THE SPECIFICATIONS.
- PIPE OPENINGS SHALL BE CAST INTO THE WALL SECTION. FLEXIBLE WATERTIGHT GASKETS SHALL BE INSTALLED AT PIPE OPENINGS WHEN INDICATED IN THE SPECIFICATIONS.
- DIMENSION 'C' FOR PRECAST CONE SECTIONS MAY VARY FROM THAT GIVEN TO PLUS 150mm.
- A FLAT TOP SLAB MAY BE USED ONLY WHEN FIELD CONDITIONS PREVENT THE USE OF A CONE RISER SECTION AND ONLY WHEN AUTHORIZED BY THE ENGINEER OR SPECIFICALLY INDICATED ON THE PLANS.
- ALL JOINTS BETWEEN THE VARIOUS STRUCTURE COMPONENTS (BASE, RISERS, CONE, TOP SLAB, ADJUSTMENT RINGS AND FRAME CASTING) SHALL BE AS INDICATED IN THE SPECIFICATIONS.
- STEPS SHALL BE EMBEDDED INTO THE WALL A MINIMUM OF 100mm AND SHALL NOT PROJECT OUTSIDE OF THE STRUCTURE. HOLES IN THE EXTERIOR WALL SURFACE DUE TO STEPS SHALL BE SEALED WITH GROUT.
- FRAME, LID CASTINGS, AND STEPS SHALL BE AS INDICATED ON THE PLANS OR IN THE SPECIFICATIONS.
- CONTRACT UNIT PRICES FOR THE VARIOUS STRUCTURES TO BE INSTALLED SHALL INCLUDE THE SPECIFIED CASTINGS AND STEPS, NECESSARY ADJUSTMENT RINGS, INDICATED CONDUIT CHANNEL AND BENCH, AND REQUIRED GRANULAR CUSHION.

FLAT SLAB TOP FOR MANHOLES, CATCH BASINS & VALVE VAULTS



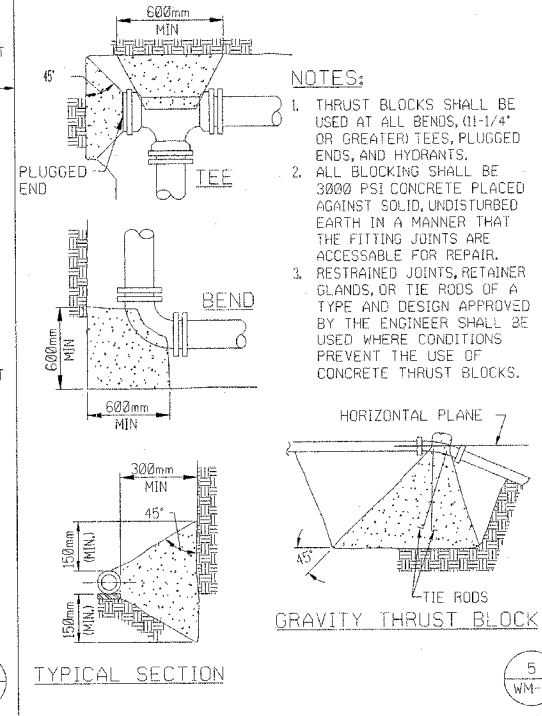
- NOTES:
- A FLAT SLAB TOP MAY BE USED ON THE MANHOLES, CATCH BASINS, AND VALVE VAULTS WHEN FIELD CONDITIONS PREVENT THE USE OF A CONE SECTION OR WHEN REQUIRED BY THE ENGINEER.
 - SLAB DETAILS, CONCRETE QUALITY, & REINFORCING SHALL BE IN ACCORDANCE WITH IDOT STANDARD NO. 602601 & 602406.
 - THE COST OF FURNISHING & INSTALLING A FLAT SLAB TOP SHALL BE INCLUDED IN THE UNIT PRICE FOR MANHOLES, CATCH BASINS, OR VALVE VAULTS AND SHALL NOT BE IN PAY ITEM.

HYDRANT INSTALLATION



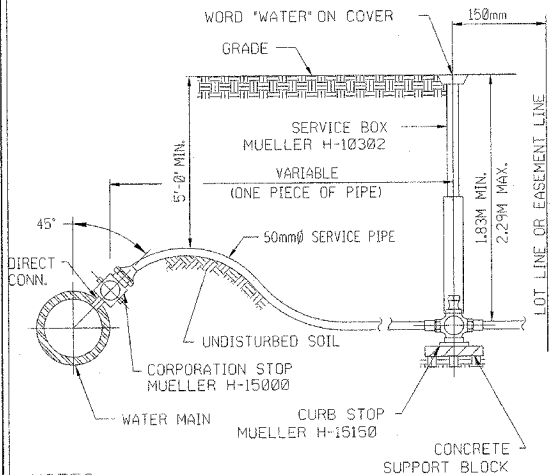
- NOTES:
- CONCRETE BASE & THRUST BLOCK SHALL BE SET SO AS TO NOT BLOCK OR OBSTRUCT THE HYDRANT DRAIN.
 - MAXIMUM COVER AT VALVE SHALL BE 2.29M.
 - THE CONTRACT UNIT PRICE FOR FIRE HYDRANTS SHALL INCLUDE THE GATE VALVE, VALVE BOX, SPOOL PIECE, THRUST BLOCKS, CONCRETE BASES, STONE BACKFILL, AND FABRIC INDICATED.

WATERMAIN THRUST BLOCKS



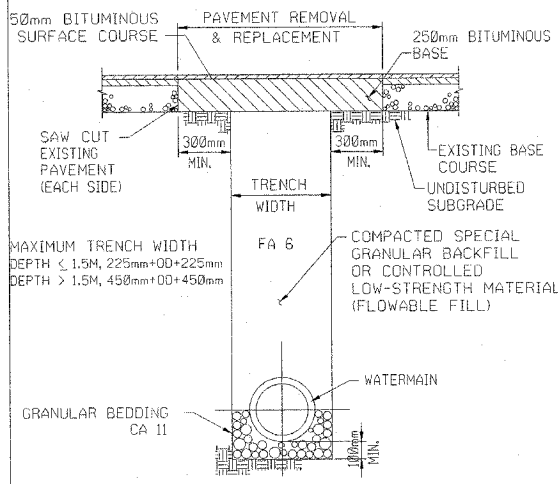
- NOTES:
- THRUST BLOCKS SHALL BE USED AT ALL BENDS, (1-1/4" OR GREATER) TEES, PLUGGED ENDS, AND HYDRANTS.
 - ALL BLOCKING SHALL BE 3000 PSI CONCRETE PLACED AGAINST SOLID, UNDISTURBED EARTH IN A MANNER THAT THE FITTING JOINTS ARE ACCESSIBLE FOR REPAIR.
 - RESTRAINED JOINTS, RETAINER GLANDS, OR TIE RODS OF A TYPE AND DESIGN APPROVED BY THE ENGINEER SHALL BE USED WHERE CONDITIONS PREVENT THE USE OF CONCRETE THRUST BLOCKS.

BUILDING WATER SERVICE



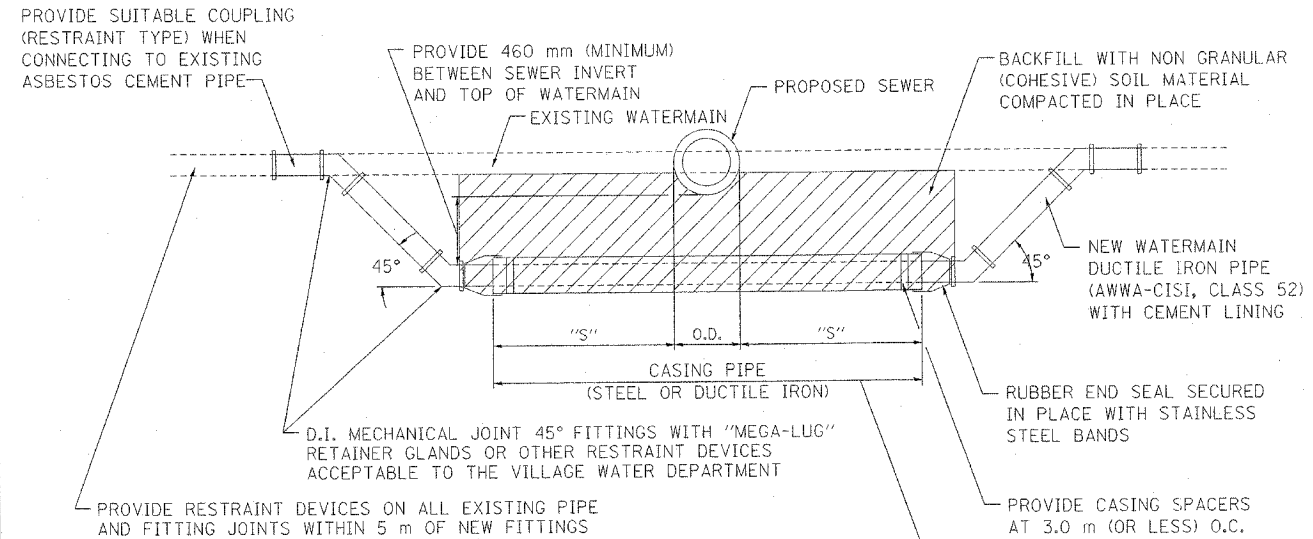
- NOTES:
- CONNECTIONS TO WATERMAIN SHALL BE AT LEAST 1M FROM PIPE JOINTS. WHERE TWO OR MORE CONNECTIONS ARE MADE, THEY SHALL BE AT LEAST 450mm APART.
 - THE CONTRACT UNIT PRICE FOR BUILDING WATER SERVICE SHALL INCLUDE THE CORPORATION STOP, CURB STOP, AND SERVICE BOX INDICATED.

TRENCH & PAVEMENT CROSSING DETAIL



- NOTES:
- IF WEATHER OR CONSTRUCTION CONDITIONS DELAY INSTALLATION OF BITUMINOUS PAVEMENT, THE CONTRACTOR SHALL INSTALL AND MAINTAIN A TEMPORARY AGGREGATE SURFACE (CA 6) UNTIL CONDITIONS ALLOW INSTALLATION OF BITUMINOUS PAVEMENT.
 - PAYMENT FOR REMOVAL AND REPLACEMENT OF PAVEMENTS SHALL BE LIMITED TO TRENCH WIDTH PLUS 600mm. REMOVAL AND REPLACEMENT OUTSIDE OF THIS AREA SHALL BE AT THE CONTRACTOR'S EXPENSE.

WATERMAIN REALIGNMENT DETAIL



WATERMAIN REALIGNMENT LOCATIONS

STATION	WATERMAIN DIAMETER	WATERMAIN MATERIAL
103+263±	300mm(12")	DUCTILE IRON
103+775±	300mm(12")	DUCTILE IRON
103+906±	300mm(12")	DUCTILE IRON
104+137±	300mm(12")	DUCTILE IRON
104+164±	300mm(12")	DUCTILE IRON
104+362±	300mm(12")	DUCTILE IRON
103+646±	300mm(12")	DUCTILE IRON
104+008±	300mm(12")	DUCTILE IRON

CASING PIPE SIZE

WATERMAIN	CASING PIPES
150mm (6")	406mm (16") DIAMETER
200mm (8")	406mm (16") DIAMETER
250mm (10")	508mm (20") DIAMETER
300mm (12")	508mm (20") DIAMETER

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
IL RTE 22 (FAP 337)
IL RTE 83 TO US 45 / IL 21 (MILWAUKEE AVE)

WATERMAIN DETAILS
DRAWING WM-5
SHEET OF

SCALE: NONE
DATE: 3-22-2004

DRAWN BY: TCK
CHECKED BY: CMS