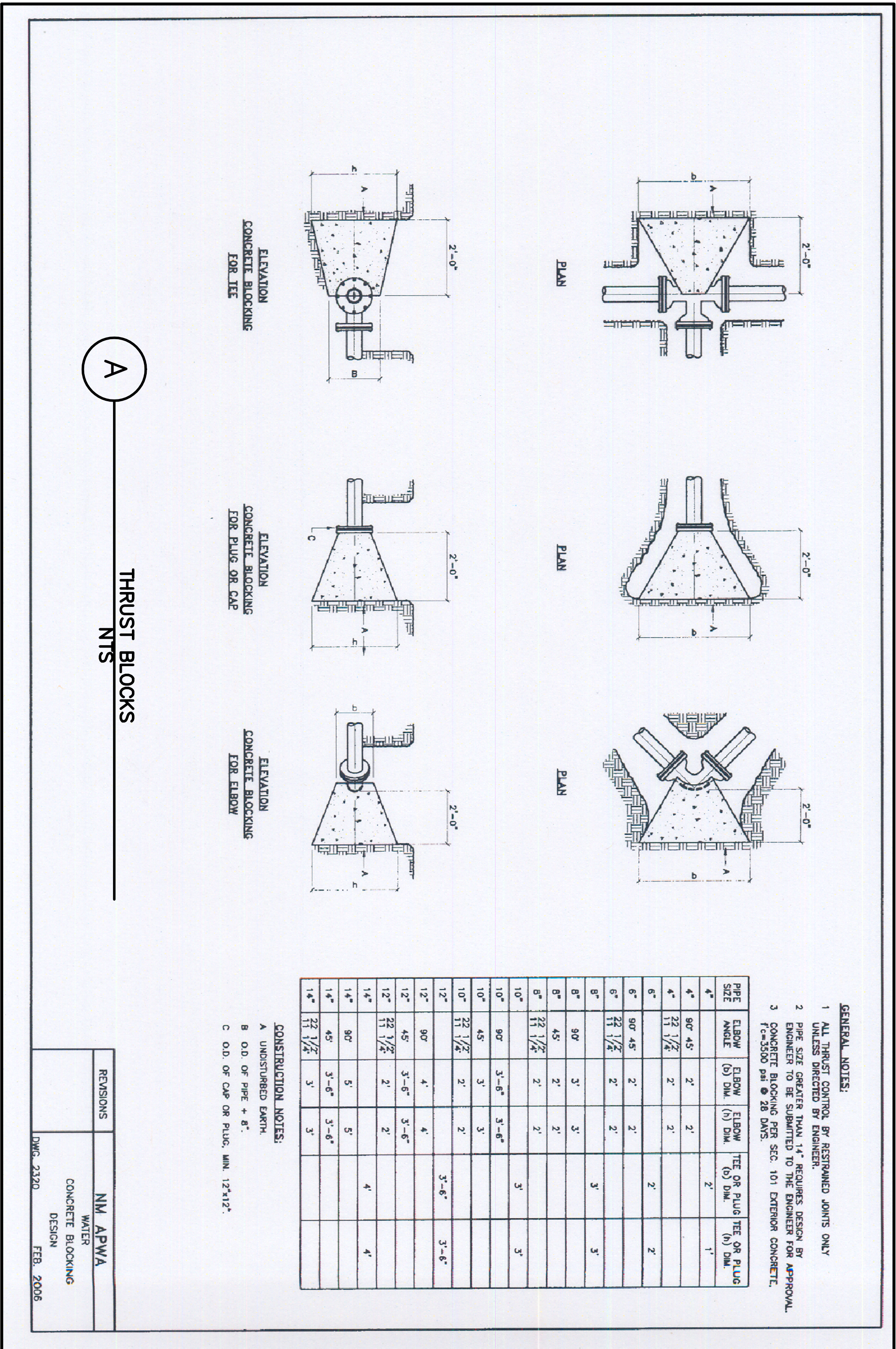


**FIRE HYDRANT ASSEMBLY**  
 NTS

- GENERAL NOTES:**
- NO OBSTRUCTIONS WILL BE PERMITTED WITHIN 3'-0" OF FIRE HYDRANT.
  - HYDRANT LENS SHALL BE SAVED FROM MAINS 10" DIAMETER AND LARGER AND IN ARTERIAL STREETS LOCATED IN COMMERCIAL AREAS.
  - CONTRACTOR SHALL BE RESPONSIBLE FOR SETTING TOP ELEVATION LINE HYDRANT TO THE CONTROLLED ELEVATION LINE.
  - FOR FIRE HYDRANT LOCATIONS, SEE DWG. 2347.
  - WHEN NEW OR EXISTING SIDEWALK ADJACENT CUBES, RECONSTRUCT SIDEWALK PER DMC 2420, 2437.
  - PUMPER NOZZLE TO BE SET FACING THE TRAVELED WAY. SPACERS BETWEEN NOZZLE ON TOPS.
  - HYDRANTS INSTALLED IN SIDEWALK AREAS SHALL MAINTAIN A MIN. 25" MIN. CLEAR FURNISHMENT FROM ADA STANDARDS.
- CONSTRUCTION NOTES:**
- FIRE HYDRANT PER SPECIFICATIONS.
  - PUMPER NOZZLE 4 1/2".
  - HOSE NOZZLE 2 1/2".
  - 1/2" EXPANSION JOINT MATERIAL.
  - MATCH SIDEWALK SLOPE OR SLOPE 1/4" PER FOOT.
  - 3" X 3" CONCRETE SQUARE PAD TO BE CONSTRUCTED TO PROTECT HYDRANT FROM DAMAGE. PAD TO BE LOCATED WITHIN SIDEWALK OR CONCRETE AREA. CONCRETE PER SEC. 101 EXTERIOR CONCRETE. F=3500 PSI @ 28 DAYS.
  - BACK OF CURB.
  - CONTROLLED ELEVATION LINE, LEVEL IN ALL DIRECTIONS.
  - USE OF RESTRAINED JOINTS IS MANDATORY. ALL FIRE HYDRANT LEG PIPING AND FITTINGS INCLUDING TEE ON MAIN SHALL BE RESTRAINED JOINT.
  - GRAVEL, DEBRIS POCKET, COVER TOP SURFACE WITH 1/2" SAND AND CUTTER. FOR OTHER TYPES OF CURB AND CUTTER, OR WHERE NO CURB AND CUTTER IS REQUIRED, SEE DESIGN.
  - TEE AT MAIN PER STANDARDS.

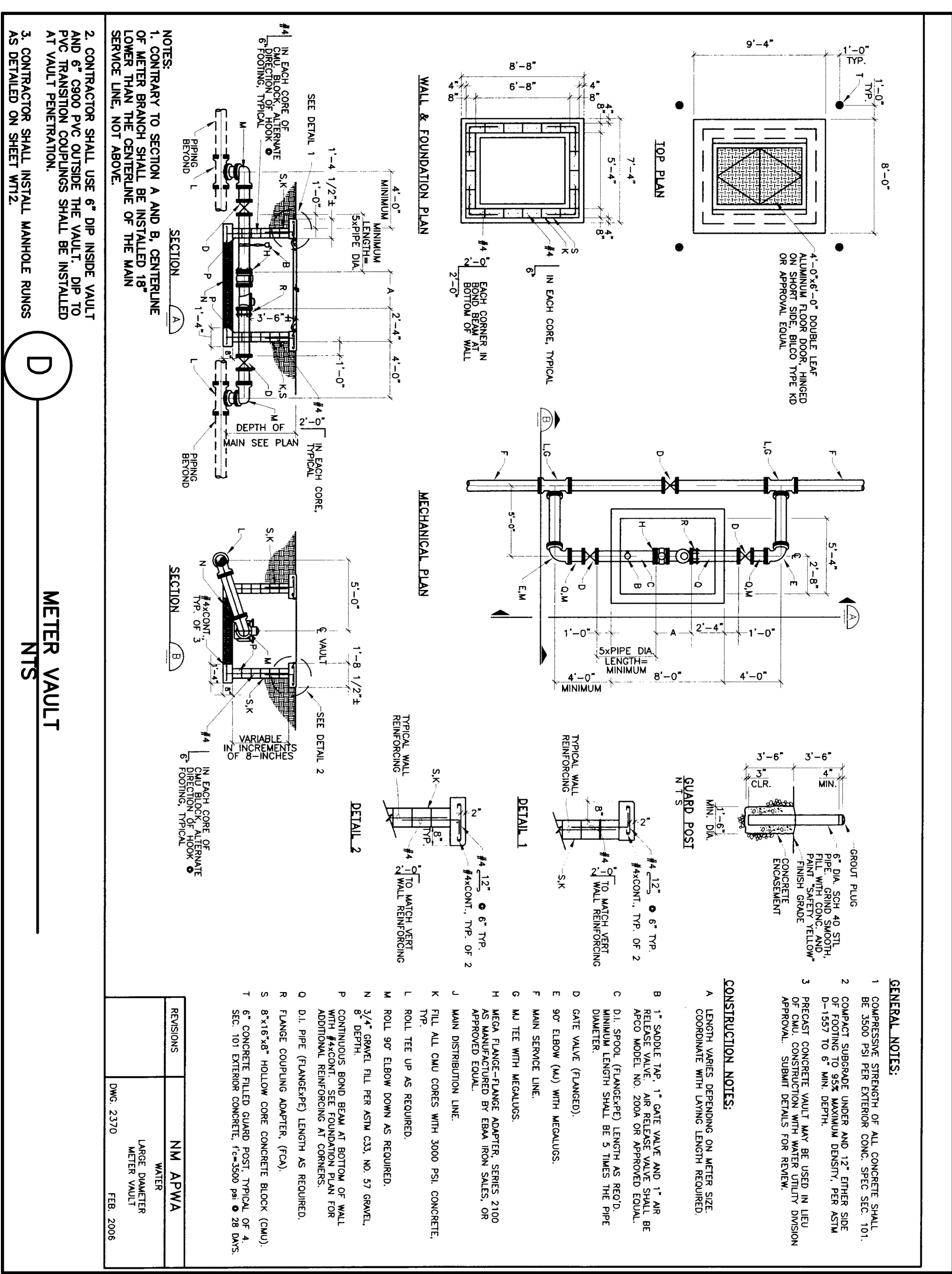
REVISIONS	NM APWA
	WATER
	FIRE HYDRANT
	INSTALLATION
	FEB. 2006



**THRUST BLOCKS**  
 NTS

- GENERAL NOTES:**
- ALL THRUST BLOCKS BE RESTRAINED JOINTS ONLY.
  - PIPE SIZE GREATER THAN 14" REQUIRES DESIGN BY ENGINEER TO BE SUBMITTED TO THE DESIGNER FOR APPROVAL.
  - CONCRETE BLOCKING PER SEC. 101 EXTERIOR CONCRETE. F=3500 PSI @ 28 DAYS.
- CONSTRUCTION NOTES:**
- | PIPE SIZE | ELBOW ANGLE | ELBOW (b) DIA. | TEE OR PLUG TEE OR PLUG (b) DIA. |
|-----------|-------------|----------------|----------------------------------|
| 4"        | 90°         | 2"             | 2"                               |
| 6"        | 22 1/2°     | 2"             | 2"                               |
| 6"        | 90°         | 4 1/2"         | 2"                               |
| 6"        | 45°         | 2"             | 2"                               |
| 6"        | 11 1/2°     | 2"             | 2"                               |
| 8"        | 90°         | 3"             | 3"                               |
| 8"        | 45°         | 2"             | 2"                               |
| 8"        | 22 1/2°     | 2"             | 2"                               |
| 10"       | 90°         | 3'-6"          | 3'-6"                            |
| 10"       | 45°         | 3"             | 3"                               |
| 10"       | 22 1/2°     | 2"             | 2"                               |
| 12"       | 90°         | 4"             | 4"                               |
| 12"       | 45°         | 3'-6"          | 3'-6"                            |
| 12"       | 22 1/2°     | 2"             | 2"                               |
| 14"       | 90°         | 5'-6"          | 5'-6"                            |
| 14"       | 45°         | 3'-6"          | 3'-6"                            |
| 14"       | 22 1/2°     | 3"             | 3"                               |

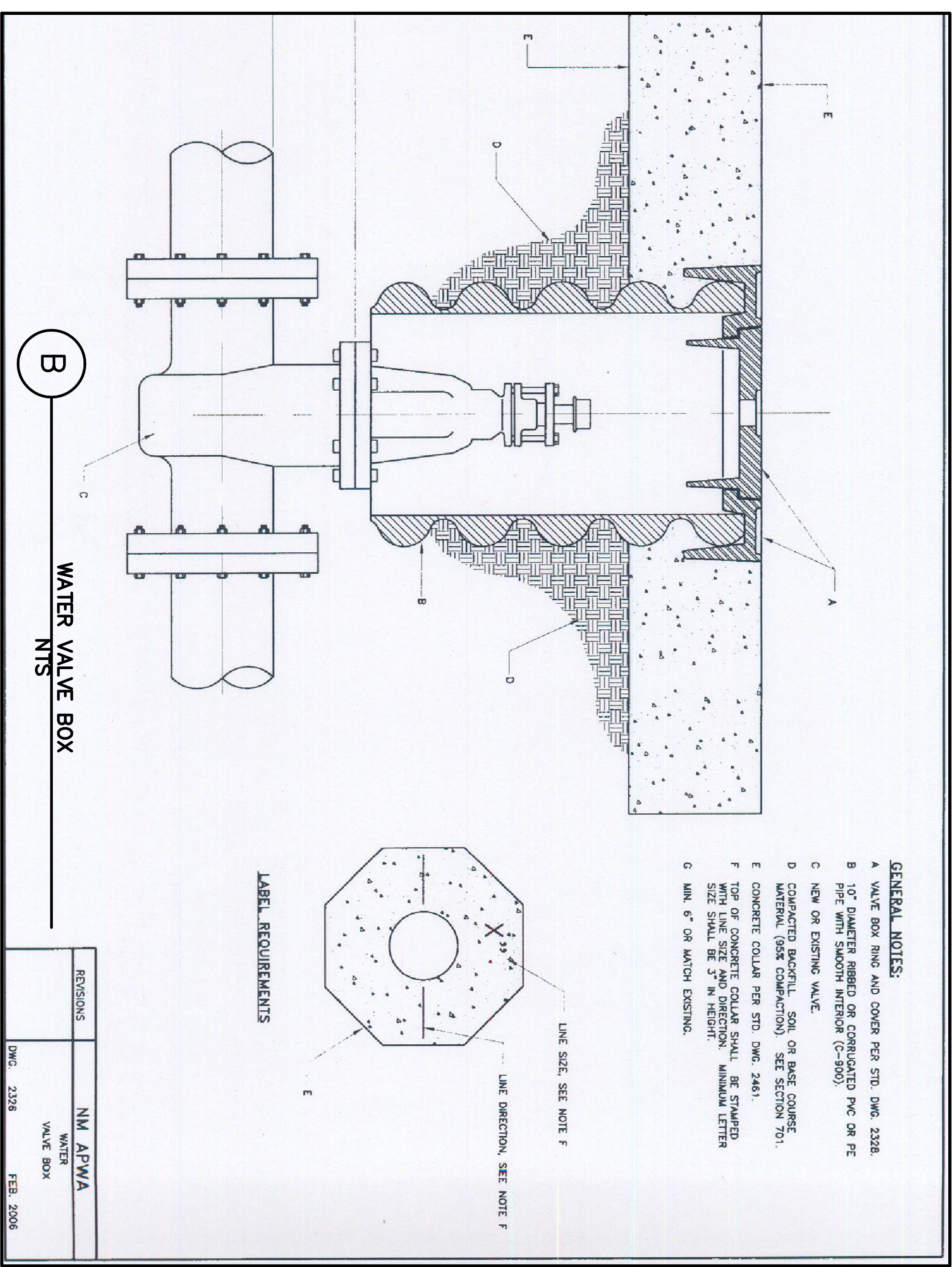
REVISIONS	NM APWA
	WATER
	CONCRETE BLOCKING
	DESIGN
	FEB. 2006



**METER VAULT**  
 NTS

- GENERAL NOTES:**
- COMPRESSIVE STRENGTH OF ALL CONCRETE SHALL BE 3500 PSI PER EXTERIOR CONC. SPEC. SEC. 101.
  - COMPACT SUBGRADE UNDER AND 12" OTHER SIDE OF FOOTING TO 95% MAXIMUM DENSITY, PER ASTM D1557.
  - PRECAST CONCRETE VULT MAY BE USED IN FIELD OF CUL. CONSTRUCTION WITH WATER UTILITY DIVISION APPROVAL. SUBMIT DETAILS FOR REVIEW.
- CONSTRUCTION NOTES:**
- LENGTH VARIES DEPENDING ON WATER SIZE. COORDINATE WITH LIVING LENGTH REQUIRED.
  - 1" SLOPE TOP 1" DIA. VULT AND 1" AIR RELEASE VALVE. AIR RELEASE VALVE SHALL BE 1/2" DIA. MODEL NO. 200A OR APPROVED EQUAL.
  - 0.1" SLOPE (FLANGE) LENGTH AS REQUIRED. DIA. SHALL BE 3" UNLESS THE PIPE DIA. VULT (FLANGED) WITH METAL GASKETS.
  - MAIN SERVICE LINE.
  - NO TEE WITH METAL GASKETS.
  - NO TEE WITH METAL GASKETS. SERIES 2100 APPROVED EQUAL BY EBMA RIBBON SCALES, OR APPROVED EQUAL.
  - MAN DISTRIBUTION LINE.
  - ROLL ALL CUL. COMES WITH 3000 PSI CONCRETE. THE ROLL TIE UP AS REQUIRED.
  - ROLL TIE UP AS REQUIRED.
  - 5/8" TIE BAR PER ASTM C33, NO. 57 GAWEL.
  - CONTINUOUS BOND BEAM AT BOTTOM OF WALL WITH MASONRY BOND BEAM AT BOTTOM OF WALL WITH MASONRY BOND BEAM AS REQUIRED.
  - 0.1" PIPE (FLANGED) LENGTH AS REQUIRED.
  - FLANGED HOLDING ADAPTER (FOA).
  - 8" DIA. HOLDING ADAPTER (FOA).
  - CONCRETE FLEED GUARD POST, TYPICAL OF 4" SEC. 101 EXTERIOR CONCRETE. F=3500 PSI @ 28 DAYS.

REVISIONS	NM APWA
	WATER
	METER VAULT
	FEB. 2006



**WATER VALVE BOX**  
 NTS

- GENERAL NOTES:**
- VALVE BOX RING AND COVER PER STD. DMC 2328.
  - 10" DIA. RIBBED OR CORRUGATED PVC OR PE PIPE WITH SMOOTH INTERIOR (C-900).
  - NEW OR EXISTING VALVE.
  - COMPACTED BACKFILL, SOIL OR BASE COURSE MATERIAL (95% COMPACTION). SEE SECTION 701.
  - CONCRETE COLLAR PER STD. DMC 2461.
  - TOP OF CONCRETE COLLAR SHALL BE STAMPED WITH LINE SIZE AND DIRECTION. MINIMUM LETTER SIZE SHALL BE 3/16" HEIGHT.
  - MIN. 6" OR MATCH EXISTING.
- CONSTRUCTION NOTES:**
- UNDESIGNED BOX.
  - 0.0" OF PIPE + 8".
  - 0.0" OF CAP OR PLUG. MIN. 12" X 12".

REVISIONS	NM APWA
	WATER
	VALVE BOX
	FEB. 2006