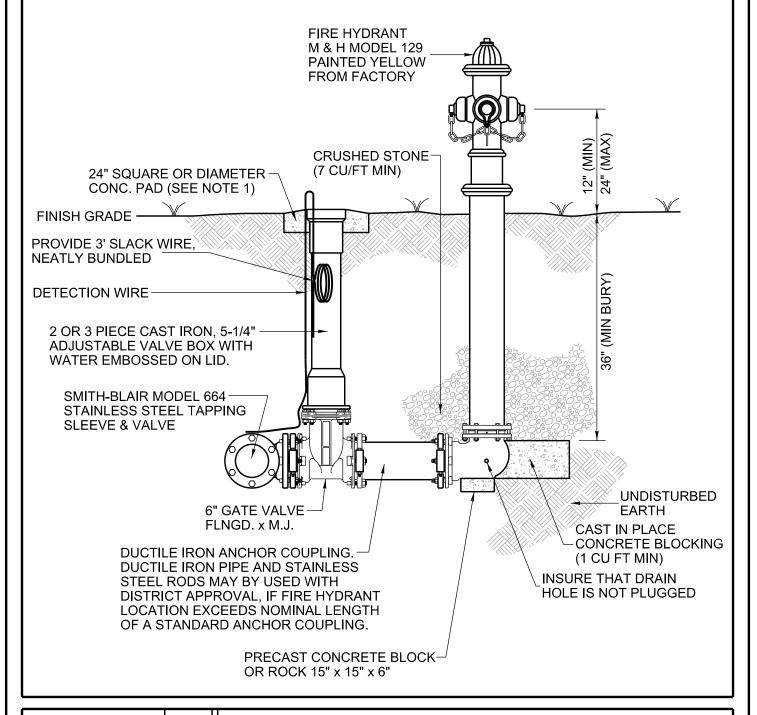


- 1. CONCRETE PAD SHALL BE POURED IN PLACE. PRECAST NOT ACCEPTABLE.
- 2. OPERATING NUT, OPENING DIRECTION, CAP NUTS, THREAD AND CONNECTIONS MUST BE APPROVED IN WRITING BY THE OWNER AS CONFORMING TO HIS STANDARDS.



REVISIONS	DATE
ADDED NEW DETAIL	09/20

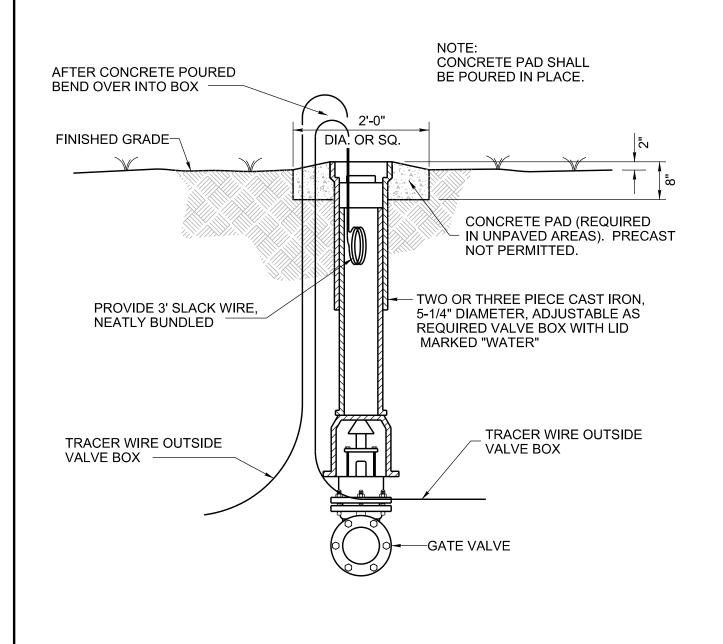
FIRE HYDRANT SETTING DETAIL ON EXISTING WATER LINE



DRAWING NUMBER

WD-005A

DATE: 09/2020



NOTE:

TRACER WIRE IS TO RUN UP THE OUTSIDE OF THE VALVE BOX AND DO NOT WRAP AROUND VALVE NUT.

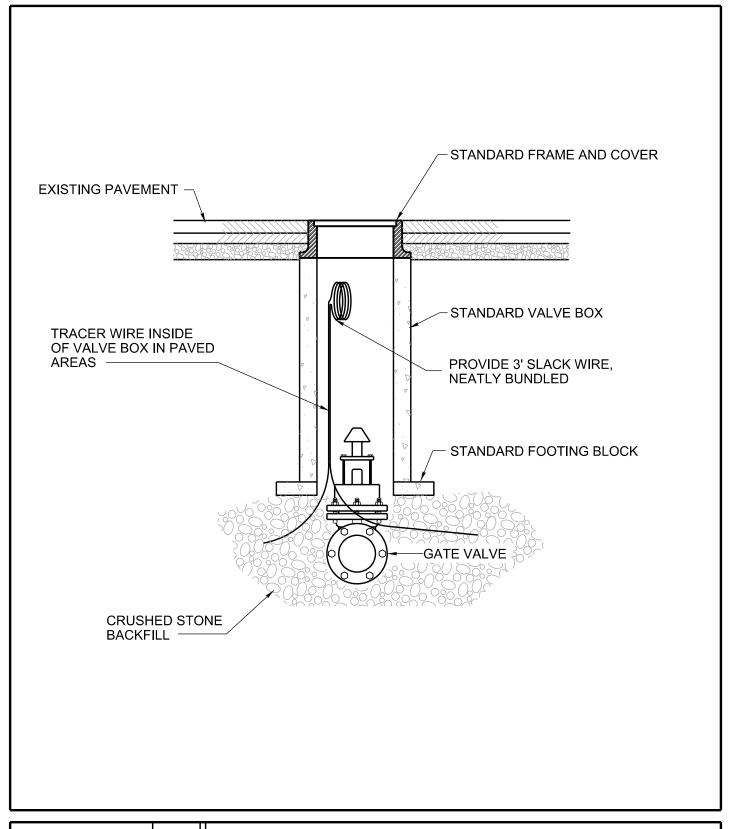
VA	DATE	REVISIONS
-		

VALVE BOX SETTING DETAIL OUTSIDE PAVEMENT



DRAWING NUMBER

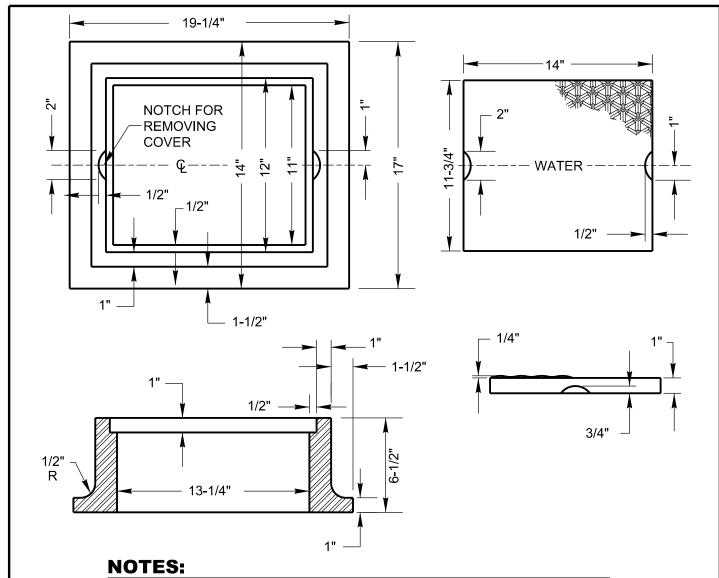
WD-006A



REVISIONS DAT	VALVE BOX SETTING	DETAIL
	IN PAVEMENT	•
		DRAWING NU
	LaGuardo UTILITY DISTRICT	WD-00
	LEBANON, TENNESSEE	DATE: 09/27

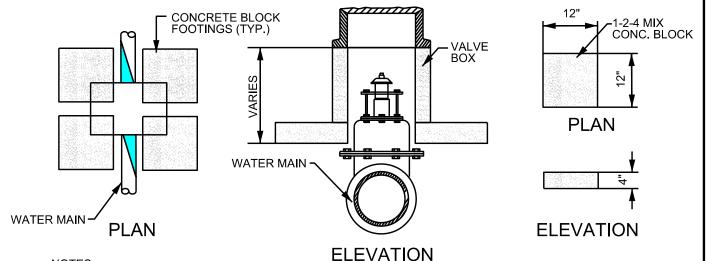
DRAWING NUMBER

WD-006B



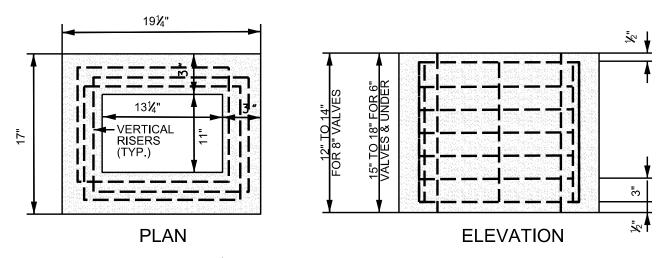
- 1. NO OPEN SAND CASTINGS, CASTINGS ARE TO BE MADE OF CAST IRON IN ACCORDANCE WITH CURRENT SPECIFICATIONS. COVER MUST FIT EVENLY ON RABBIT OF FRAME IN ORDER TO EQUALLY DISTRIBUTE WEIGHT OF COVER OVER FRAME MINIMUM WEIGHT OF FRAME 150 LBS. MINIMUM WEIGHT OF COVER 45 LBS.
- 2. CASTINGS WITHOUT PICK HOLES ON FRAME AND LID WILL NOT BE PERMITTED.
- 3. WORDING ON LID SHALL BE PLACED PERPENDICULAR TO WATER LINE.
- 4. VALVE BOX ADJUSTMENT SHALL BE ACHIEVED BY USE OF PRECAST ADJUSTMENT PIECES OR FIELD CUT PRECAST PIECES. BRICK AND MORTAR ADJUSTMENT NOT PERMITTED, WITHOUT APPROVAL OF THE UTILITY DISTRICT.

REVISIONS	DATE	CAST IRON VALVE B	ЮХ
		FRAME AND COVER IN PA	VEMENT
		T U oCuardo	DRAWING NUMBER
		LaGuardo UTILITY DISTRICT	WD-006C
		LEBANON, TENNESSEE	DATE: 09/27/2019



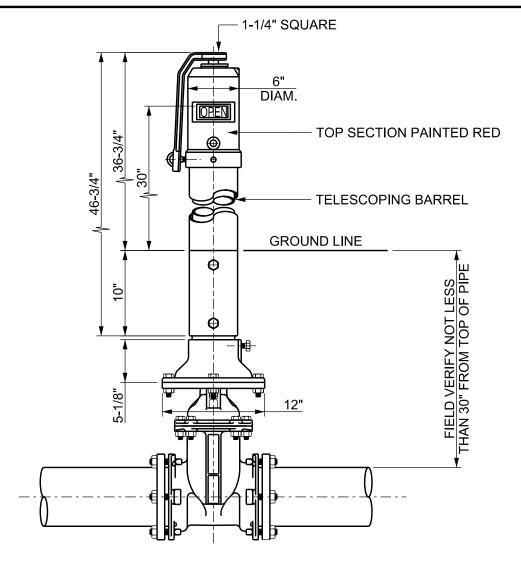
NOTES:

- 1) FOUR (4) CONCRETE BLOCKS OR THE SIZE AND SHAPE SHOWN ARE TO BE PLACED UNDER EACH VALVE BOX. ONE UNDER EACH CORNER.
- 2) NO REINFORCING STEEL IN FOOTING. CONCRETE MIX 1 PART CEMENT, 2 PARTS SAND AND 4 PARTS No. 2 CRUSHED STONE OR GRAVEL. VOLUME FOR ONE BLOCK = 0.333 CU. FT. WEIGHT OF ONE BLOCK = APPROX. 50 LBS. FOR ALL FOUR BLOCKS. WEIGHT = 200 LBS. BEARING AREA ON SOIL = 576 SQ. IN.
- 3) VALVE BOX ADJUSTMENT SHALL BE ACHIEVED BY USE OF PRECAST ADJUSTMENT PIECES OR FIELD CUT PRECAST PIECES. BRICK AND MORTAR ADJUSTMENT NOT PERMITTED WITHOUT APPROVAL OF THE UTILITY DISTRICT.



- 1) REINFORCING TO BE ¼" STEEL REINFORCING RODS PLACED HORIZONTALLY IN SQUARES 16-1/4" x 14" AND TO STAGGERED APPROX. AS SHOWN ON THE PLAN VIEW, ONE FOR EVERY 3" OF HEIGHT IN BOX. VERTICAL RISERS ARE TO BE 1" SHORTER THAN THE HEIGHT OF THE BOX AND SHALL BE PLACED IN EACH CORNER OF THE BOX USING 8" RISERS TO THE BOX. TOTAL LENGTH OF REINFORCING ROD FOR EACH BOX IS APPROX. 47 FEET.
- 2) CONCRETE MIXTURE TO BE 1 PART CEMENT, 2 PARTS SAND AND 4 PARTS No. 2 CRUSHED STONE OR GRAVEL. TOTAL VOLUME OF MIXTURE FOR EACH BOX IS APPROX. 2 CUBIC FEET.

REVISIONS	DATE	STANDARD CONCRETE VA	LVE BOX
		IN PAVEMENT	
		LaGuardo	DRAWING NUMBER
		UTILITY DISTRICT	WD-006D
		LEBANON, TENNESSEE	DATE: 09/27/2019



FIELD ADJUSTMENT INSTRUCTIONS

- 1. REMOVE THE TOP SECTION FROM THE TOP OF THE INDICATOR POST ASSEMBLY.
- 2. LOOSEN THE TELESCOPING BARREL SCREWS AND ADJUST BARREL TO THE GROUND LINE.
- 3. CUT THE 1" SQUARE STEM AT A DISTANCE OF 9" ABOVE THE TOP OF THE BARREL END.
- 4. SET THE "OPEN" AND "SHUT" TARGETS FOR THE APPROPRIATE VALVE SIZE.
- 5. REATTACH THE TOP SECTION TO THE TOP OF THE INDICATOR POST ASSEMBLY.

NOT TO SCALE

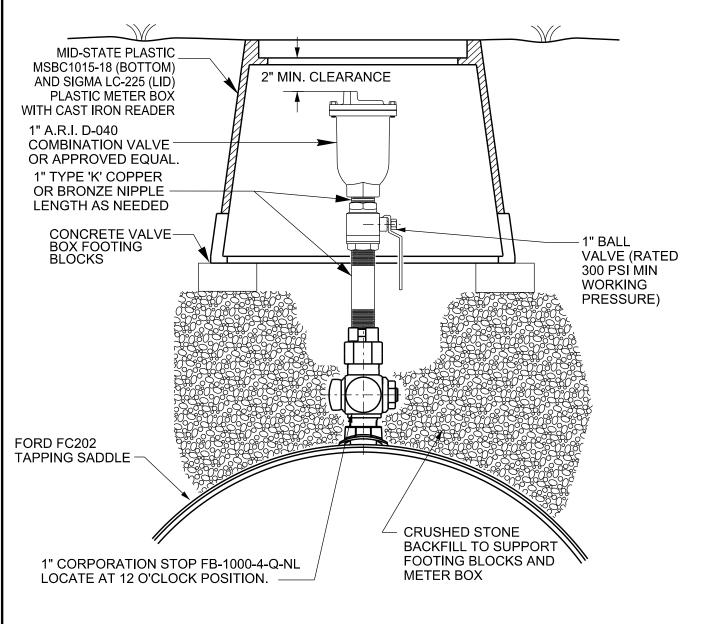
REVISIONS	DATE

INDICATOR POST TELESCOPING BARREL UL/FM



DRAWING NUMBER

WD-007



NOTES:

- 1. ARV TO BE PLACED AT HIGH POINT IN PROFILE OR AS DIRECTED BY LUD
- 2. BOX SHALL BE CARSON INDUSTRIES (MID-STATE PLASTIC) MSBC-1015-18 METER BOX BOTTOM WITH SIGMA LC-225 CAST IRON LID READER SLOT.
- 3. IF PIPE IS LOCATED IN TRAFFIC AREAS, THEN THE ARV ASSEMBLY SHALL BE INSTALLED OUTSIDE TRAFFIC AREAS AND 1" OR 2" TYPE "K" COPPER OR PEXa PIPE SHALL BE RUN TO THE TAP ON THE WATER LINE. 1" OR 2" LINE SHALL BE INSTALLED TO MAINTAIN AN UPHILL GRADIENT TO THE ARV. NO DIPS OR SAGS ARE ALLOWED.

NOT TO SCALE

REVISIONS	DATE	1" AUTOMATIC AIR RELEASE VALVE WITH BOX	
		LaGuardo UTILITY DISTRICT	DRAWING NUMBER WD-008
		LEBANON, TENNESSEE	DATE: 09/27/2019

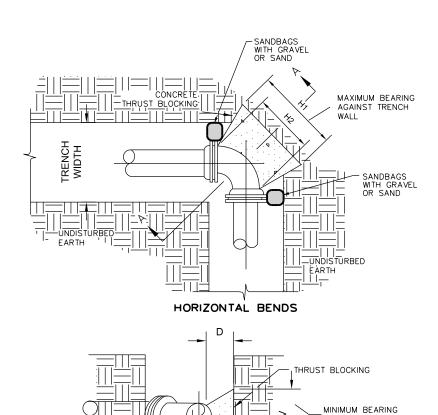
TABLE OF DIMENSIONS FOR CONCRETE BLOCKING TEES, CROSSES PIPE 90° BENDS 45° BENDS 22-1/2° BENDS 11-1/4° BENDS & PLUGS SIZE | 18" | 10" | 12" | 18" | 1.90 | 24" | 12" | 18" | 2.25 | 24" | 16" | 18" | 18" | 3.50 | 36" | 18" | 18" | 24" | 7.15 | 54" | 30" | 24" | 24" | 13.40 | 60" | 32" | 30" | 24" | 27.50 | 66" | 36" | 40" | 24" | 27.50 | 38" | 24" | 24" | 38" | 24" | 38" | 24" | 38" | 24" | 38" | 38" | 24" | 38" | 38" | 24" | 38" | 38" | 38" | 38" | 34" | 38" | 38" | 34" | 38" | 38" | 34" | 38" | 38" | 34" | 38" | 38" | 34" | 38" | 34" | 38" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 38" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | 34" | H1 H2 V D C.F. 18" 6" 12" 18" 1.50 18" 8" 12" 18" 1.60 24" 10" 16" 18" 3.20 24" 12" 18" 18" 3.45 24" 18" 21" 18" 4.60 24" 18" 24" 24" 6.60 0 30" 24" 24" 24" 9.20 0 36" 30" 27" 24" 11.80 0 36" 30" 27" 24" 13.00 H1 H2 V D 18" 6" 12" 18" 18" 8" 12" 18" 24" 10" 16" 18" H2 6" 8" H2 10" V D CF H1 12" 18" 1.90 18" 12" 18" 2.24 18" 18" 18" 4.05 24" 24" 18" 7.30 30" 24" 18" 10.25 36" 36" 24" 18.15 42" 42" 24" 25.00 44" 48" 24" 29.00 48" 24" 24" 24" 24" 24" 24" 24" lο I CF H1 V D C.F. 12" 18" 1.50 12" 18" 3.20 18" 18" 3.95 21" 18" 4.60 24" 24" 9.60 30" 24" 17.00 36" 24" 17.00 24" 7 24" 2-1/4 1.50 18" - 4 24" 30" 39" 54" 12" 6 16" 10" 16" 12" 18" 18" 21" " 3.20 " 3.40 24" 10" 16" 18" 3.20 24" 12" 16" 18" 3.40 24" 18" 21" 18" 4.60 27" 21" 24" 6.10 27" 21" 24" 24" 7.90 27" 21" 27" 24" 9.10 27" 24" 29" 24" 11.00 18" 32" 32" 40" 10 12 13.40 17.90 22.50 18" 24' 30' 30' 14" 16" 69" 48" 69" 48" 18" 20" 13.00 48" 24" 24" 36" 40' 48 42 24" 96" 24' 36

NOTES:

1. DIMENSIONS ARE CONTROLLED BY DIAMETER OF BRANCH MAIN.

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- 2. IF RESTRAINED JOINT PIPE AND FITTINGS ARE USED ON NEW INSTALLATION CONCRETE THRUST BLOCKS ARE NOT REQUIRED.
- 3. ALL TAPPING TEES REQUIRE A CONCRETE THRUST BLOCK.



NOT TO SCALE

REVISIONS	DATE

CONCRETE THRUST BLOCK DETAILS SHEET 1 OF 2

AGAINST TRENCH WALL



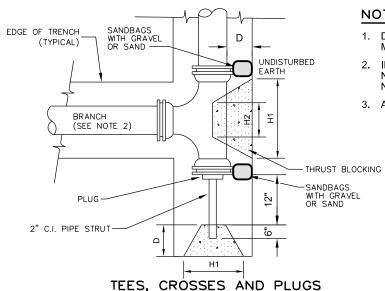
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SECTION A-A

DRAWING NUMBER

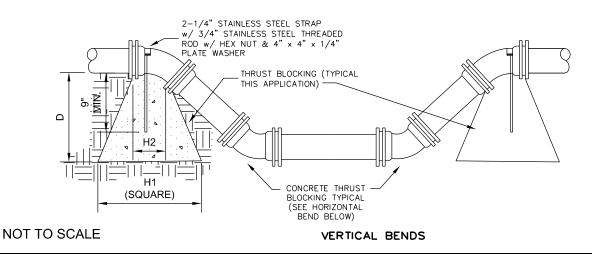
WD-009A

TABLE OF DIMENSIONS FOR CONCRETE BLOCKING TEES, CROSSES PIPE 90° BENDS 45° BENDS 22-1/2° BENDS 11-1/4" BENDS H1 H2 V D C.F. 18" 10" 12" 18" 1.90 24" 12" 12" 18" 2.25 18" 3.50 18" 5.05 & PLUGS SIZE H2 10" lο I CF H1 H2 V D 12" 18" 12" 18" 16" 18" 18" 18" 21" 18" 24" 24" 30" 24" H1 H2 V חו H1 H2 V I٦ l C.F 2-1/4 6" 12" 18" 1.50 8" 12" 18" 1.60 12" 18" 1.90 18" 12" 18" 2.24 18" 18" 18" 4.05 24" 24" 18" 7.30 30" 24" 18" 10.25 36" 1.50 18" 6" 12" 18' 18" 8" 12" 18' 18" 18" 18" 1.50 6 - 4 12" 1.60 6 10 0 12 18 1.60 24" 10" 16" 18" 3.20 24" 12" 18" 18" 3.45 24" 18" 21" 18" 4.60 16" 24" 10" 16" 18' <u>30</u>" 10" 3.20 3.95 24" 10" 16" 18" 3.20 24" 12" 16" 18" 3.40 24" 18" 21" 18" 4.60 24" 18" 21" 24" 6.10 27" 21" 24" 24" 7.90 27" 21" 27" 24" 9.10 27" 24" 29" 24" 11.00 30" 27" 28" 18" 32" 32" 12" 18" 39" 54" 5.05 10 7.15 10 21" 18" 18" 24" 24" 24" 24" 24" 30" 27" 24" 30" 29" 24" 36" 24" 4.60 12 36" 24" 18.15 42" 42" 24" 25.00 44" 48" 24" 29.00 48" 48" 24" 33.00 48" 24" 30" 36" 18" 24" 30" 30" 24" 30" 36" 13.40 17.90 14" 16" 9.60 6.60 40" 60" 13.20 " 36" 24" " 40" 24" 24" 24" 24" 24" 22.50 69" 48" 27.50 69" 48" 18" 20" 17.00 11.80 <u>36"</u> 66' 27.50 36' 17.00 13.00 48" 24" 24' 36' 40' 24 48 42 24" 96" 24'



NOTES:

- DIMENSIONS ARE CONTROLLED BY DIAMETER OF BRANCH MAIN.
- IF RESTRAINED JOINT PIPE AND FITTINGS ARE USED ON NEW INSTALLATION CONCRETE THRUST BLOCKS ARE NOT REQUIRED.
- 3. ALL TAPPING TEES REQUIRE A CONCRETE THRUST BLOCK.



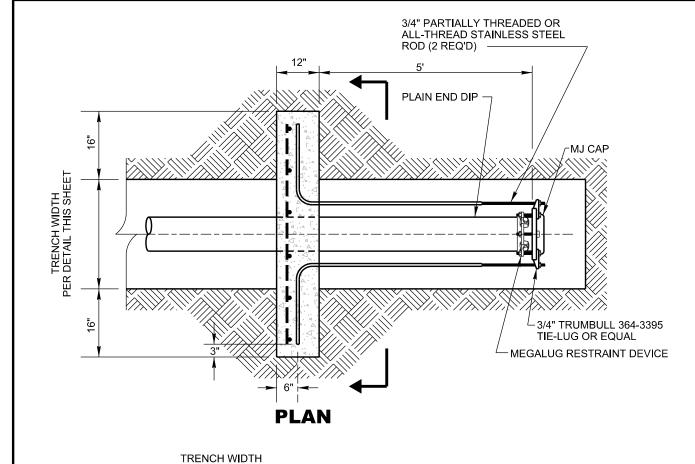
REVISIONS DATE

CONCRETE THRUST BLOCK DETAILS SHEET 2 OF 2



DRAWING NUMBER

WD-009B



PER DETAIL THIS SHEET FINISH GRADE PIPE O.D. #6 REBAR (TYP) SECTION PLAIN END DIP

NOTES:

- 1. ANCHOR BLOCK CONCRETE SHALL BE 4000 PSI
- 2. ALL STEEL RODS, BOLTS, TIES, ETC. IN CONTACT WITH SOIL SHALL BE COATED WITH COAL TAR COATING SYSTEM SIMILAR TO TNEMEC HB TNEMECOL OR EQUAL OR BE STAINLESS STEEL.
- 3. CONCRETE SHALL BE POURED AGAINST UNDISTURBED EARTH
- 4. DIMENSIONS ARE BASED ON 2000 P.S.F. SOIL BEARING CAPACITY PRESSURE AND 6000 LB. REINFORCING BAR TENSILE STRENGTH

NOT TO SCALE

REVISIONS	DATE	
		REVERSE THRUST BLOCK
		LaGuardo
		UTILITY DISTRICT
		LEBANON, TENNESSEE

DRAWING NUMBER

DETAIL

WD-010