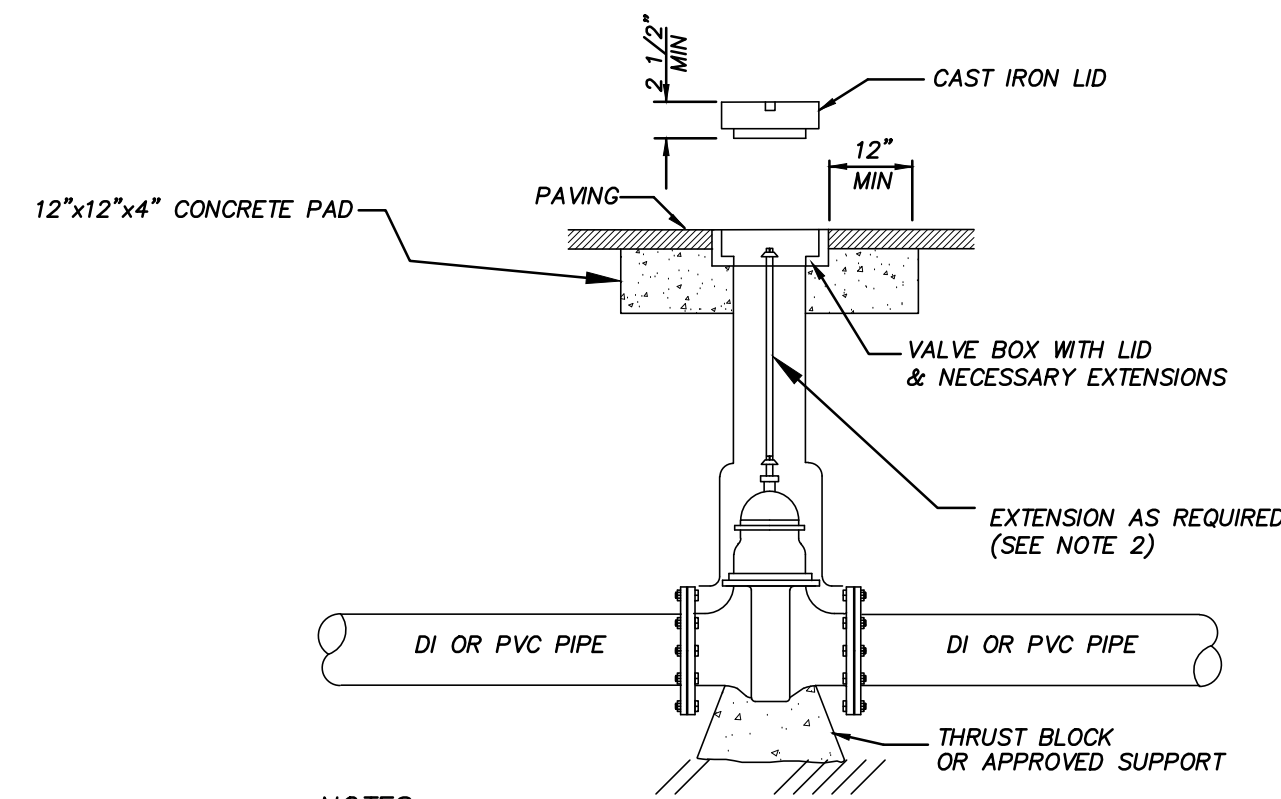


NOTES:

1. VALVES TO BE RESILIENT SEATED GATE VALVE, (AWWA) EPOXY COATED INSIDE AND OUT, WITH A NON-RISING STEM.
2. CONCRETE NOT TO BE IN CONTACT WITH BOLTS OR NUTS.
3. ALL FITTINGS TO BE WRAPPED IN PLASTIC WHERE CONCRETE IS PLACED.

FLUSH ASSEMBLY DETAIL

NTS

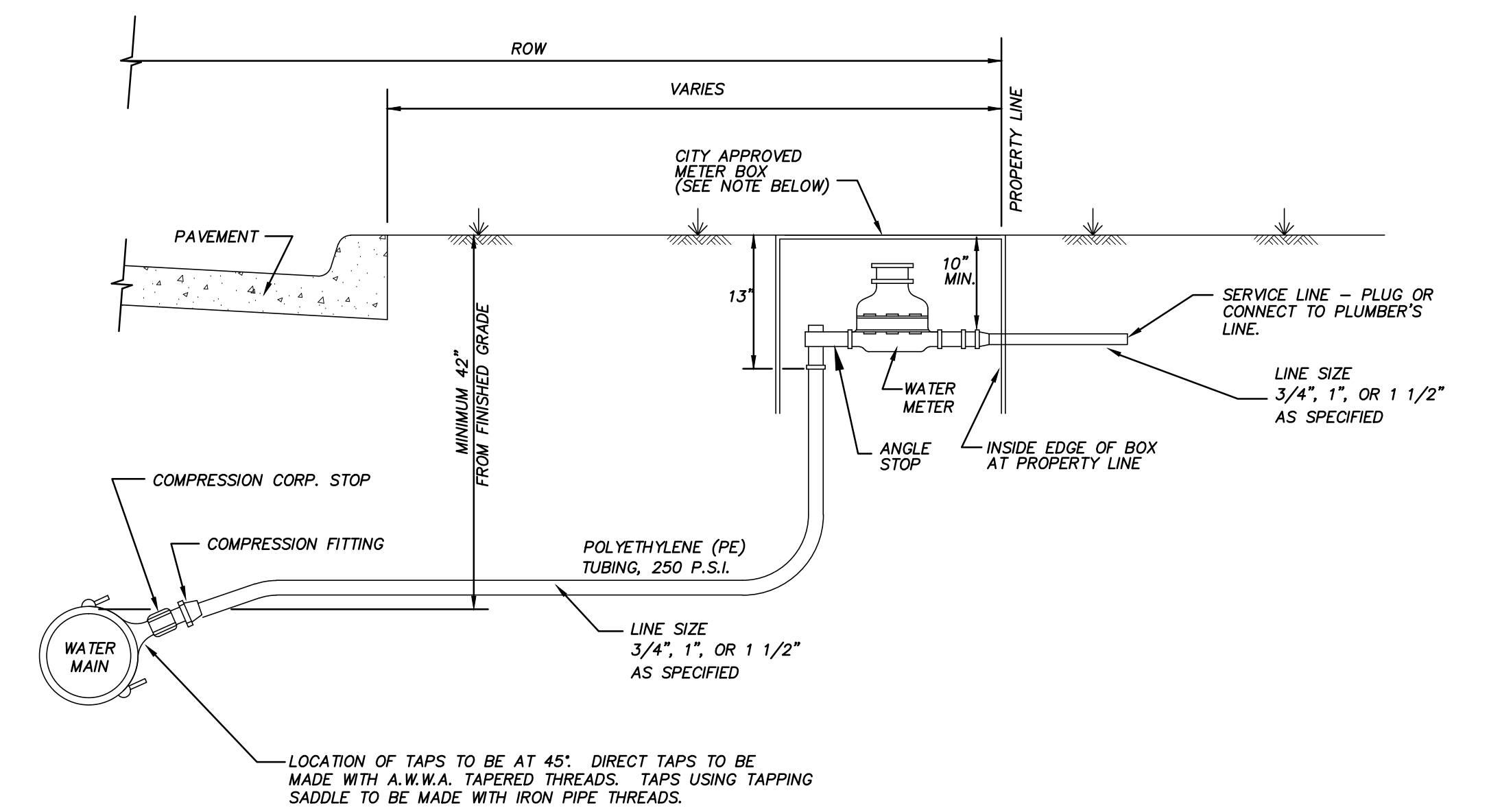


NOTES:

1. VALVE BOXES LOCATED OUTSIDE OF PAVED AREAS SHALL BE ADJUSTED FLUSH WITH THE NATURAL GROUND WITH A CONCRETE PAD 12" SQUARE BY 4" DEEP.
2. EXTENSION REQUIRED WHEN VALVE OPERATING NUT IS GREATER THAN 4' FROM VALVE BOX COVER, UNLESS OTHERWISE NOTED ON PLANS, EXTENSIONS SHALL BE CONSTRUCTED WITH PVC C900 OR C909.
3. VALVES TO BE RESILIENT SEATED GATE VALVE, (AWWA) EPOXY COATED INSIDE AND OUT, WITH A NON-RISING STEM, AND STAINLESS STEEL NUTS AND BOLTS.
4. ALL FITTINGS TO BE WRAPPED IN PLASTIC WHERE CONCRETE IS PLACED.
5. AMERICAN FLOW CONTROL, MUELLER OR APPROVED EQUAL.

GATE VALVE & VALVE BOX INSTALLATION DETAIL

NTS



NOTES:

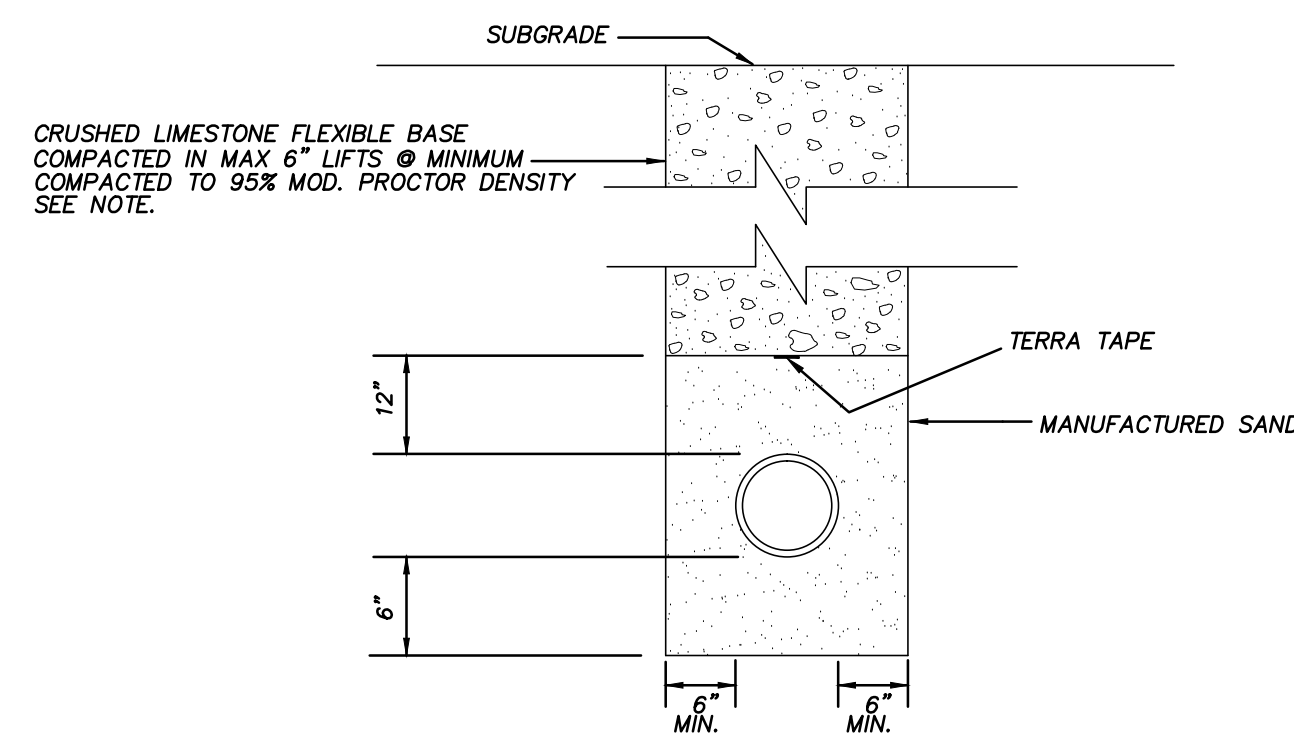
1. ALL WATER SERVICES EXTENDING ACROSS THE PROPOSED ROADWAY SHALL BE ENCASED WITH 4" SCHEDULE 40 PVC, C900 BEYOND THE PROPOSED BACK OF CURB.
2. IF POLYETHYLENE TUBING IS USED, IT SHALL BE STANDARD COPPER TUBE SIZE OUTSIDE DIAMETER, WITH STANDARD DIMENSION (SDR) OF 9. CTS-OD 3/4" - 2", 250 PSI (SDR-9) BLUE, ASTM 2737, MANUFACTURER'S NAME OR TRADEMARK, CODE AND SEAL OF APPROVAL (NSF) OF THE NATIONAL SANITATION FOUNDATION. BEDDING SHALL BE REQUIRED.

CITY APPROVED METER BOX SIZES

- a. 3/4" METER = 17 1/2" x 11 1/4" PLASTIC BODY, CAST IRON READER
- b. 1 1/2" METER = 15" x 27" PLASTIC BODY, CAST IRON LID
- c. 2" METER = 17" x 30" PLASTIC BODY, CAST IRON LID

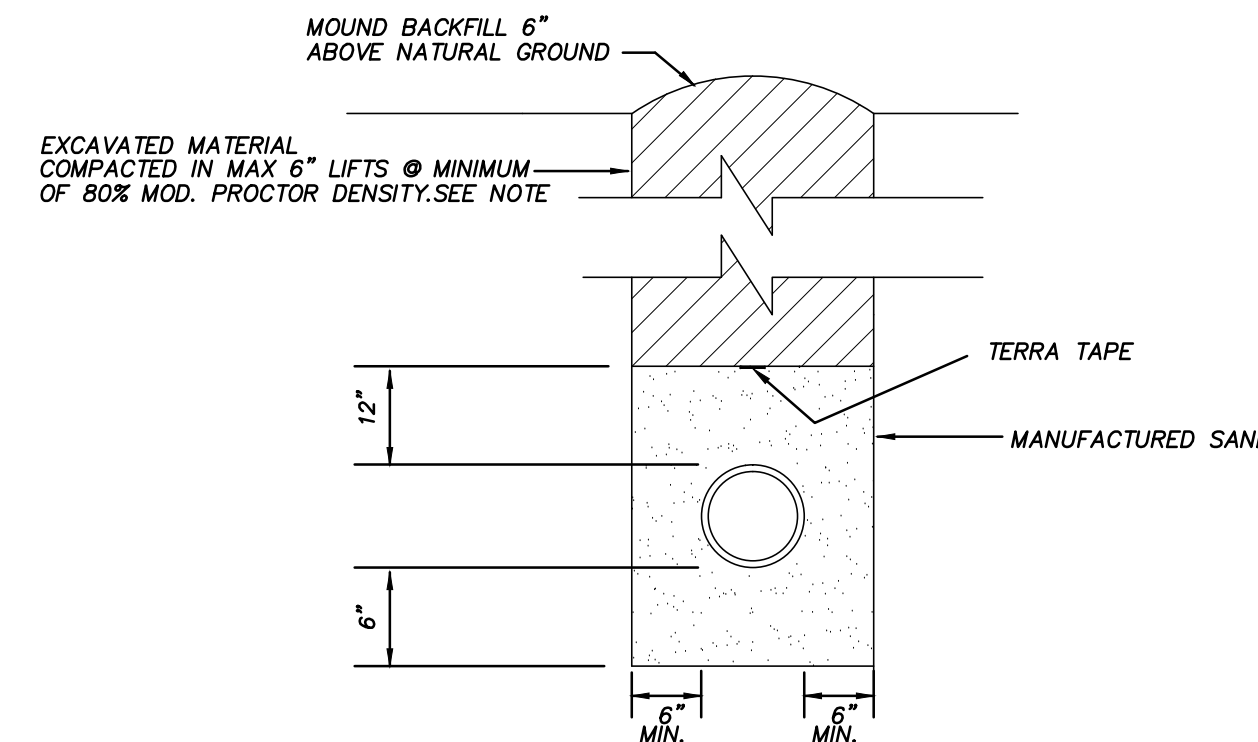
NEW WATER SERVICE DETAIL

NTS



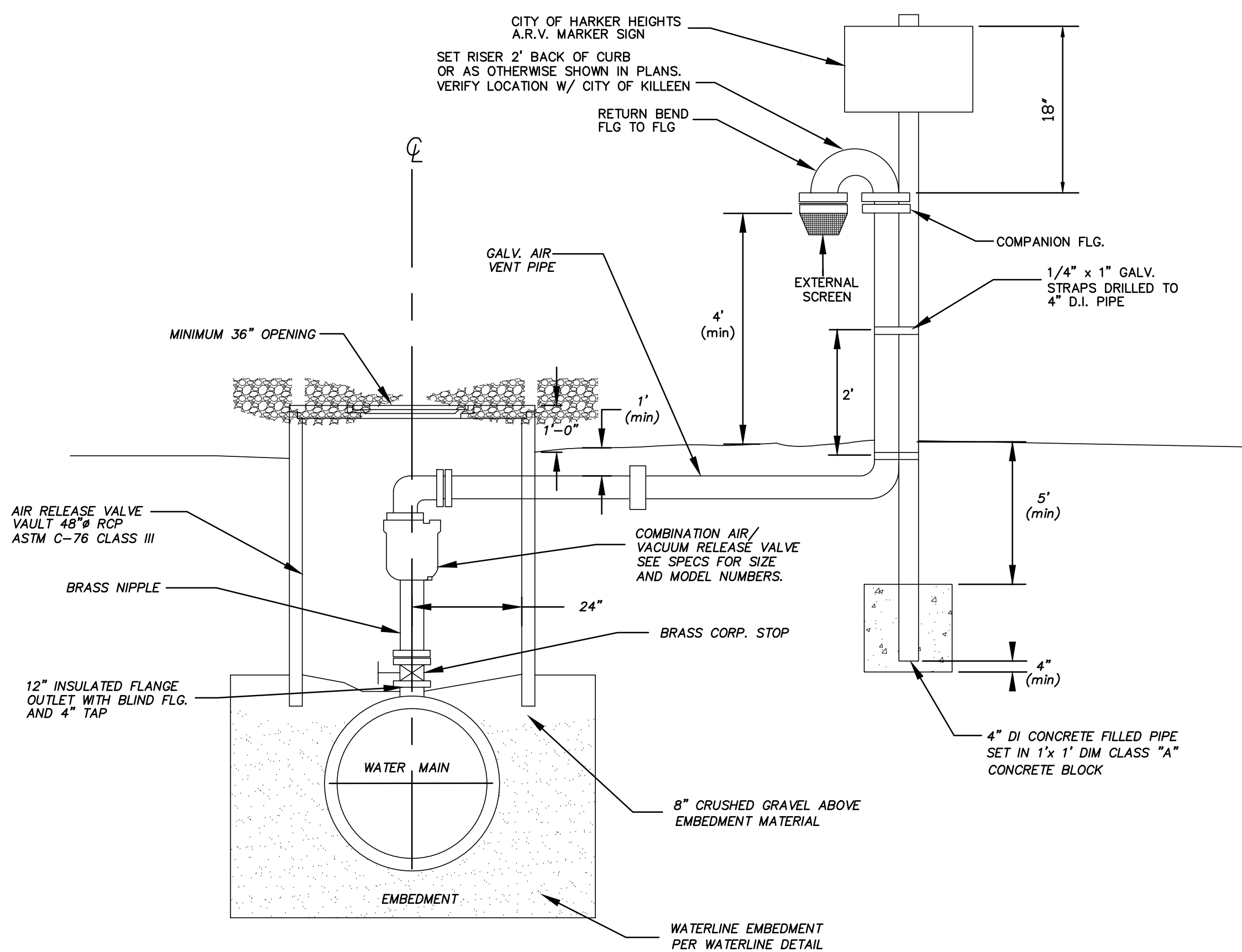
**EMBEDMENT & BACKFILL WITHIN PAVED AREAS OR STREETS
PIPE EMBEDMENT & BACKFILL DETAILS**

NTS



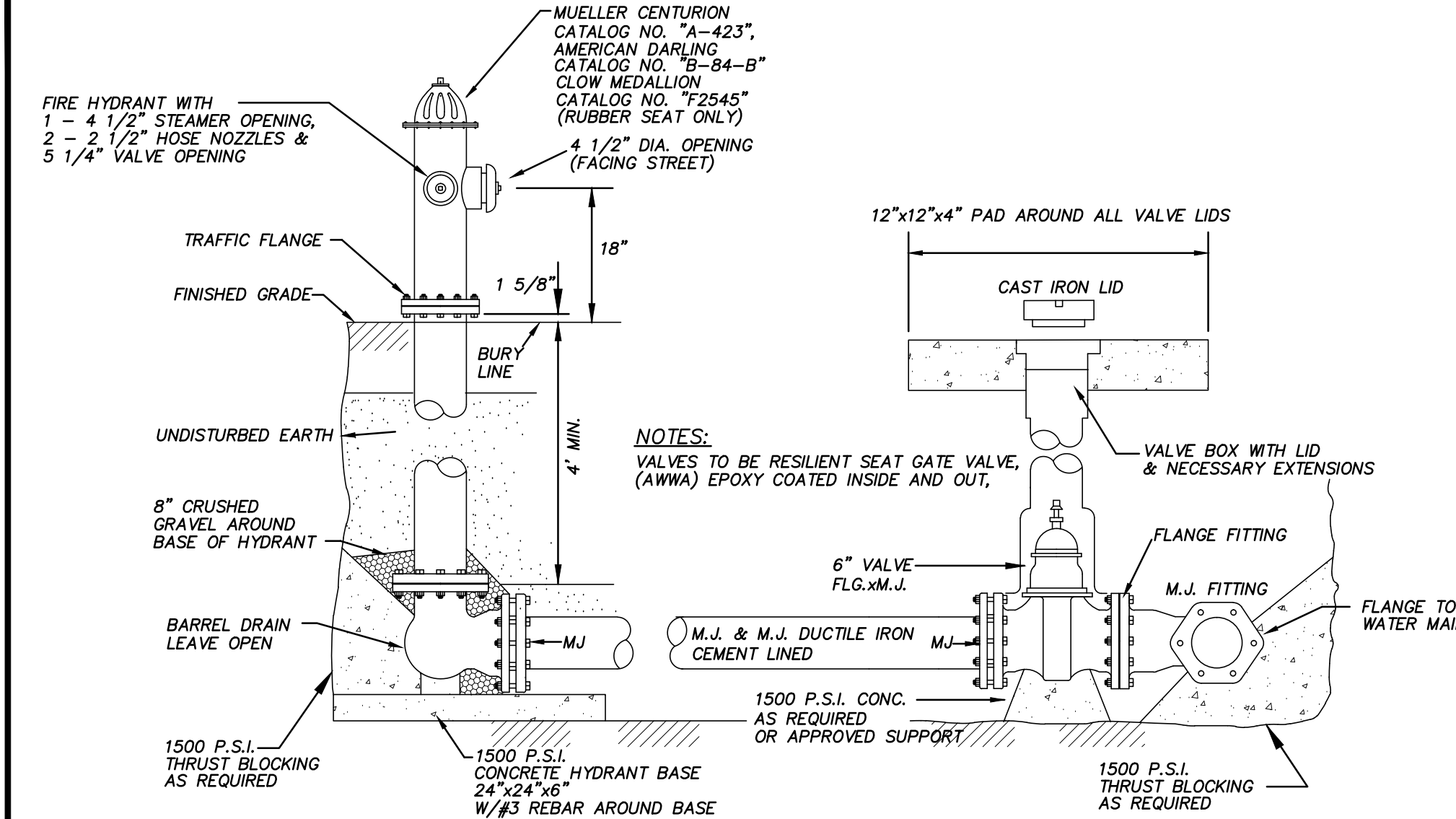
**EMBEDMENT & BACKFILL OUTSIDE PAVED AREAS OR STREETS
PIPE EMBEDMENT & BACKFILL DETAILS**

NTS



TYPICAL WATER AIR RELEASE VALVE DETAIL

NTS



NOTES:

1. ALL FIRE LINES SHALL HAVE MEGALUGS JOINT RESTRAINTS FROM MAIN TO HYDRANT.
2. CRUSHED STONE OR GRAVEL SHALL BE PLACED AROUND THE BOTTOM OF THE HYDRANT FOR A RADIUS OF AT LEAST 12", AND EXTEND AT LEAST 12" ABOVE THE OUTLET. DO NOT BLOCK DRAIN HOLES.
3. VALVE EXTENSION BARREL & STEM ARE REQUIRED ON ALL VALVES THAT EXCEED 4' DEEP FROM FINISHED GRADE. VALVE EXTENSIONS SHALL BE PLACED SUCH THAT THE EXTENSION NUT IS BETWEEN 18" AND 24" FROM FINISHED GRADE.
4. FOR BURY DEPTHS GREATER THEN FIVE (5) FEET, ONE BARREL EXTENSION SHALL BE PROPERLY PLACED WHEN NEEDED TO ACCOMMODATE FIRE HYDRANTS.
5. CONCRETE SHALL NOT BE IN CONTACT WITH BOLTS OR NUTS.
6. ALL FITTINGS TO BE WRAPPED IN PLASTIC WHERE CONCRETE IS PLACED.
7. FIRE HYDRANT INSTALLED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
8. IF GRADELOCK IS INSTALLED THRUST BLOCKS MAY NOT BE REQUIRED.
9. FIRE HYDRANTS TO BE PAINTED FLUORESCENT YELLOW.

FIRE HYDRANT ASSEMBLY DETAIL

NTS

GENERAL NOTES:

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES BEFORE ANY EXCAVATION BEGINS. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY DAMAGE TO UTILITIES.
2. THE CONTRACTOR SHALL CONTACT ALL LOCAL UTILITIES AND TEXAS ONE CALL SYSTEM BEFORE COMMENCING ANY EXCAVATION OR DIGGING OPERATIONS.
3. BRACE UTILITY POLES AS REQUIRED TO MAINTAIN STABILITY OF THE POLES DURING CONSTRUCTION.
4. BLOCK ALL BENDS, TEES, WYES, PLUGS, AND ALL HORIZONTAL OR VERTICAL POINTS OF INTERSECTION GREATER THAN 5' USING SHORT-BODIED FITTINGS PER STANDARD WATER DETAILS.
5. CONCRETE SHALL NOT BE IN CONTACT WITH BOLTS OR NUTS.
6. ALL FITTINGS SHALL BE WRAPPED IN PLASTIC WHERE CONCRETE IS PLACED.
7. ALL MATERIALS SHALL BE DOMESTIC / USA.
8. CRUSHED LIMESTONE BASE MATERIAL SHALL BE TxDOT ITEM 24B, TYPE A, GRADE 2 AND SHALL BE COMPACTED TO A MINIMUM OF 95% A.S.T.M. D1557, METHOD D @ + OR - 2% OPTIMAL MOISTURE AND LIFTS NOT TO EXCEED 6 INCHES.
9. ALL WATER MAINS TO BE AWWA C900 CLASS UNLESS OTHERWISE SPECIFIED.
10. ALL WATER MAINS TO BE BURIED A MINIMUM OF 42" BELOW FINISHED GRADE.
11. ALL INFRASTRUCTURE SHALL MEET MINIMUM CURRENT EFFECTIVE TCEQ STANDARDS.

Harker Heights
The Bright Star of Central Texas
DEPARTMENT OF PUBLIC WORKS



WATER DETAILS (I)

ENGINEER:	SCALE:	DATE:	SHEET #
	N.T.S.	11/29/12	
DRAWN BY:	CHECKED BY:		

OF