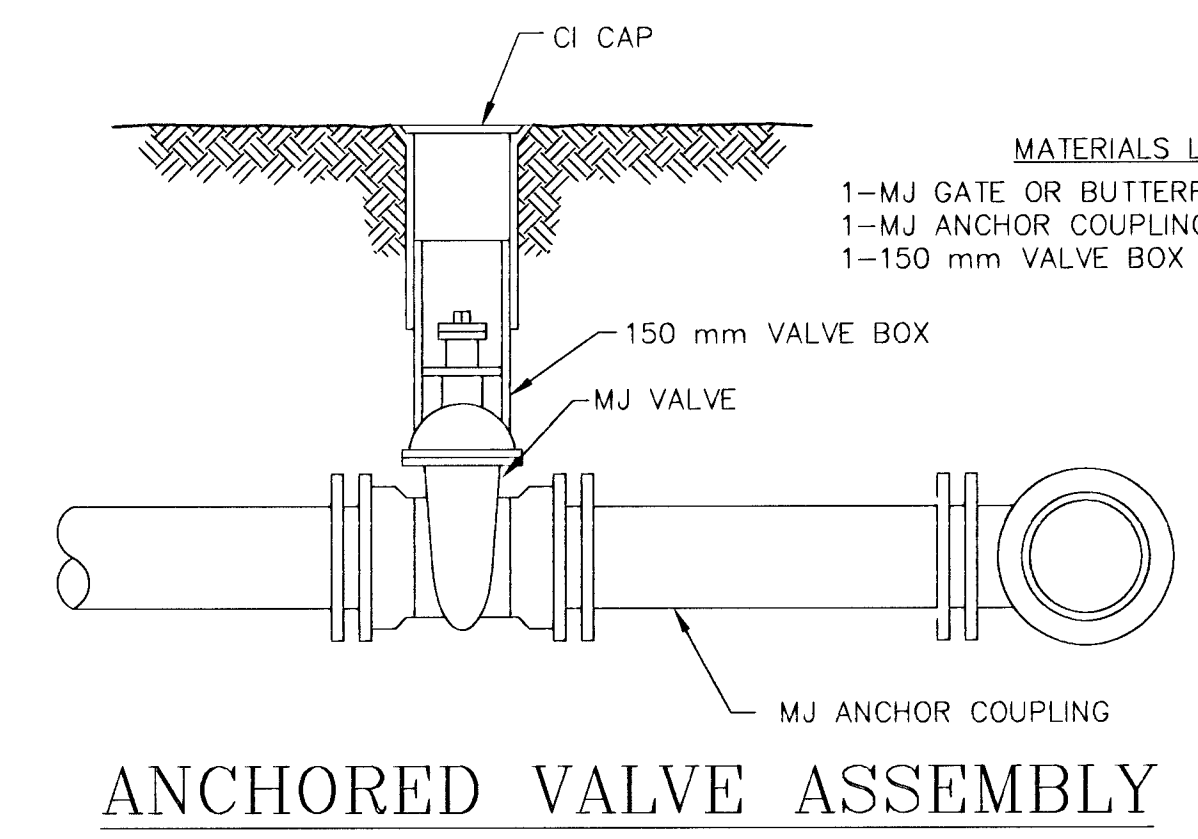
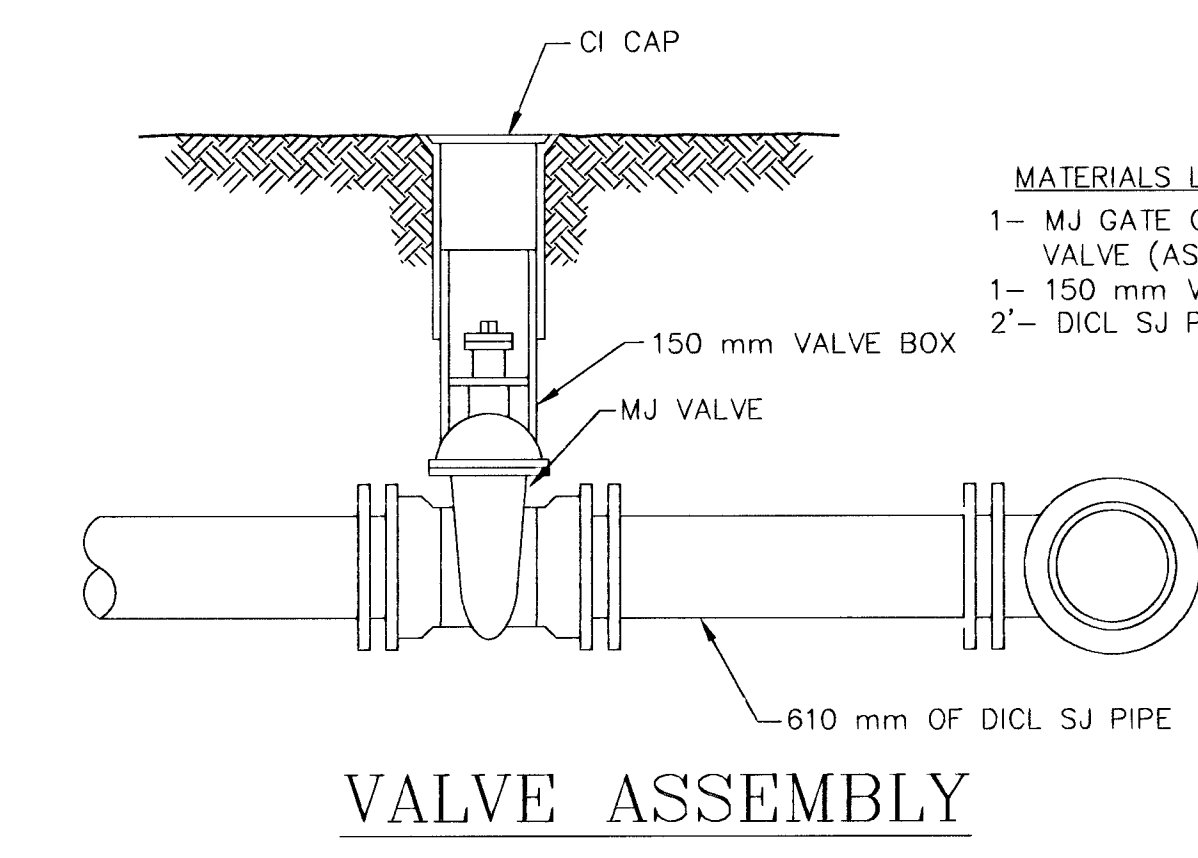


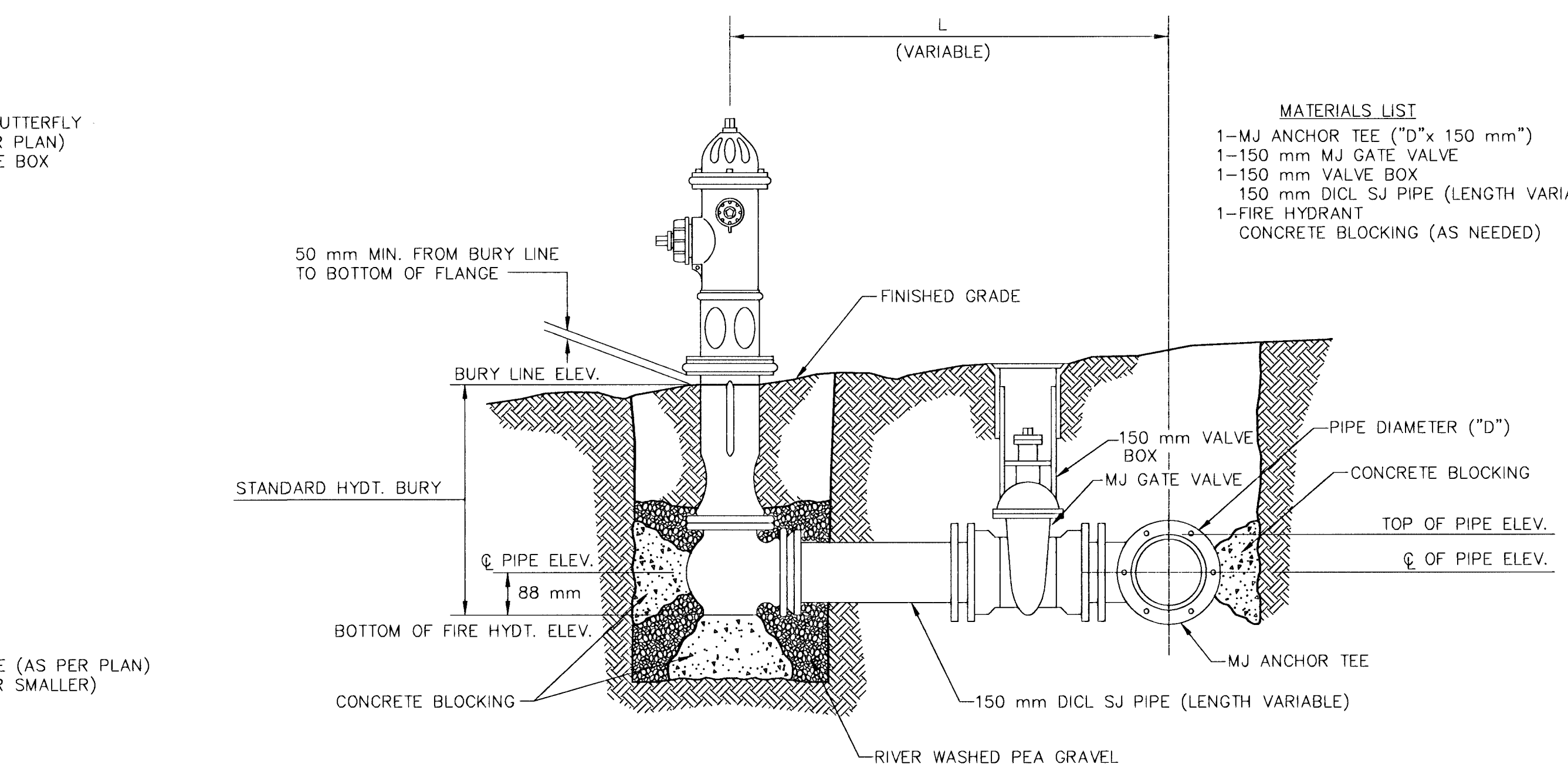
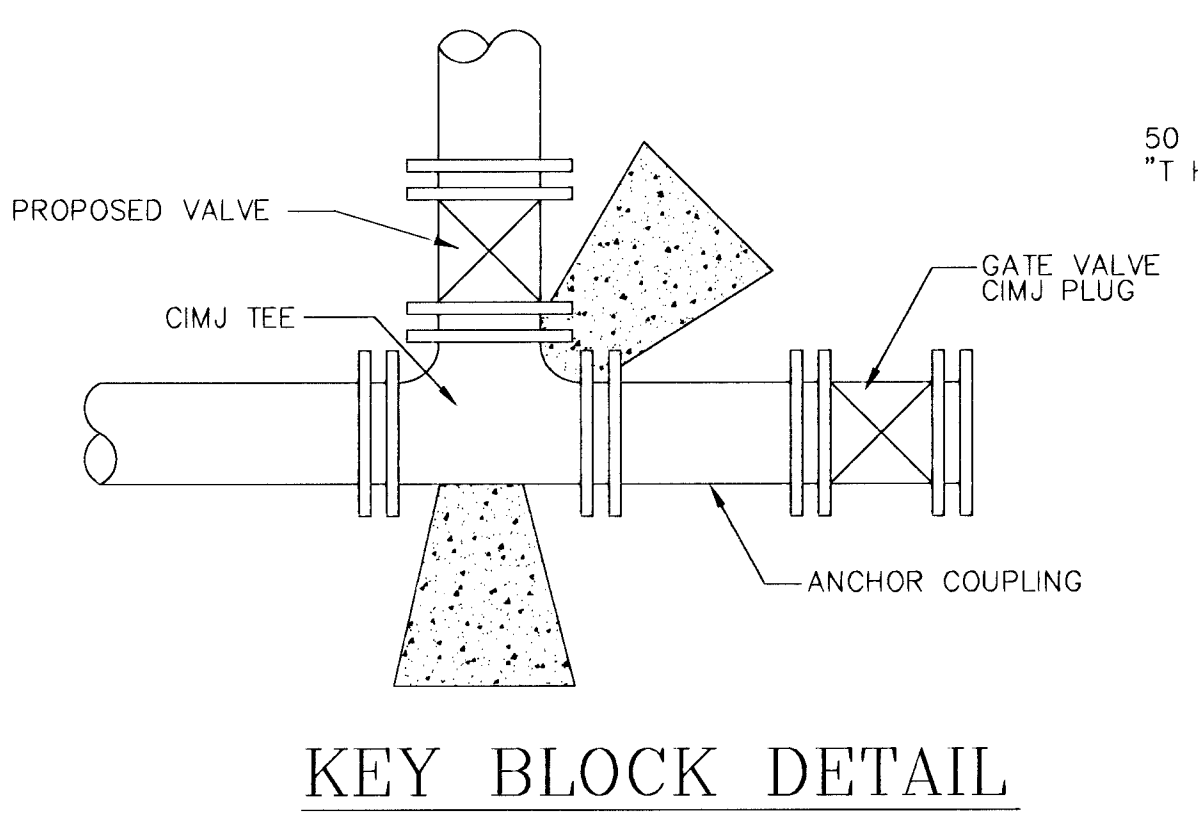
- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-150 mm VALVE BOX
 - 2-COUPINGS
 - 2-SHORT PCS. (D.I.C.L. S.J. PIPE)



- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-MJ ANCHOR COUPLING (12" OR SMALLER)
 - 1-150 mm VALVE BOX



- MATERIALS LIST**
- 1-MJ GATE OR BUTTERFLY VALVE (AS PER PLAN)
 - 1-150 mm VALVE BOX
 - 2-D.I.C.L. S.J. PIPE

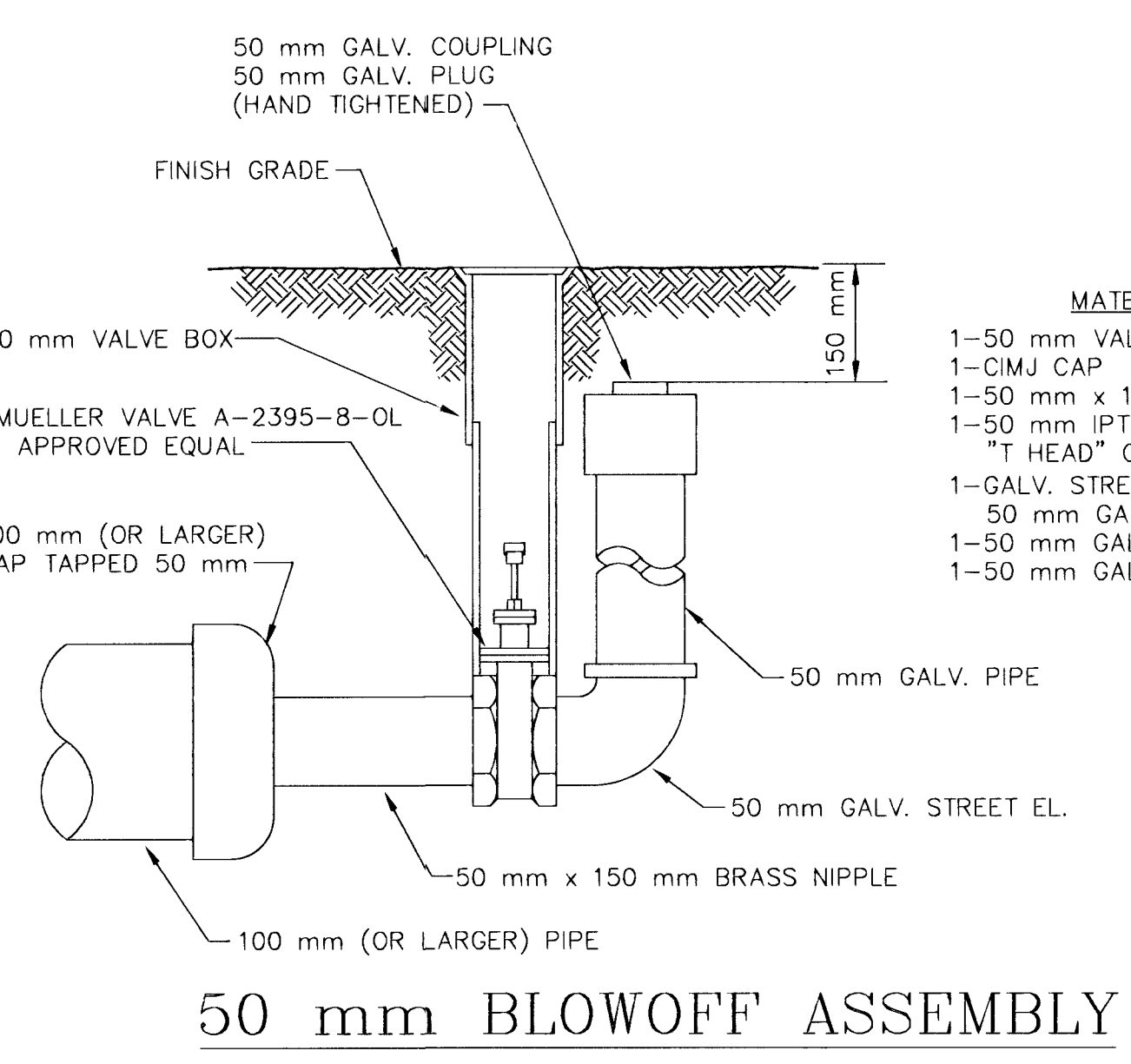


- MATERIALS LIST**
- 1-MJ ANCHOR TEE ("D" x 150 mm)
 - 1-150 mm MJ GATE VALVE
 - 1-150 mm VALVE BOX
 - 150 mm D.I.C.L. S.J. PIPE (LENGTH VARIABLE)
 - 1-FIRE HYDRANT
 - CONCRETE BLOCKING (AS NEEDED)

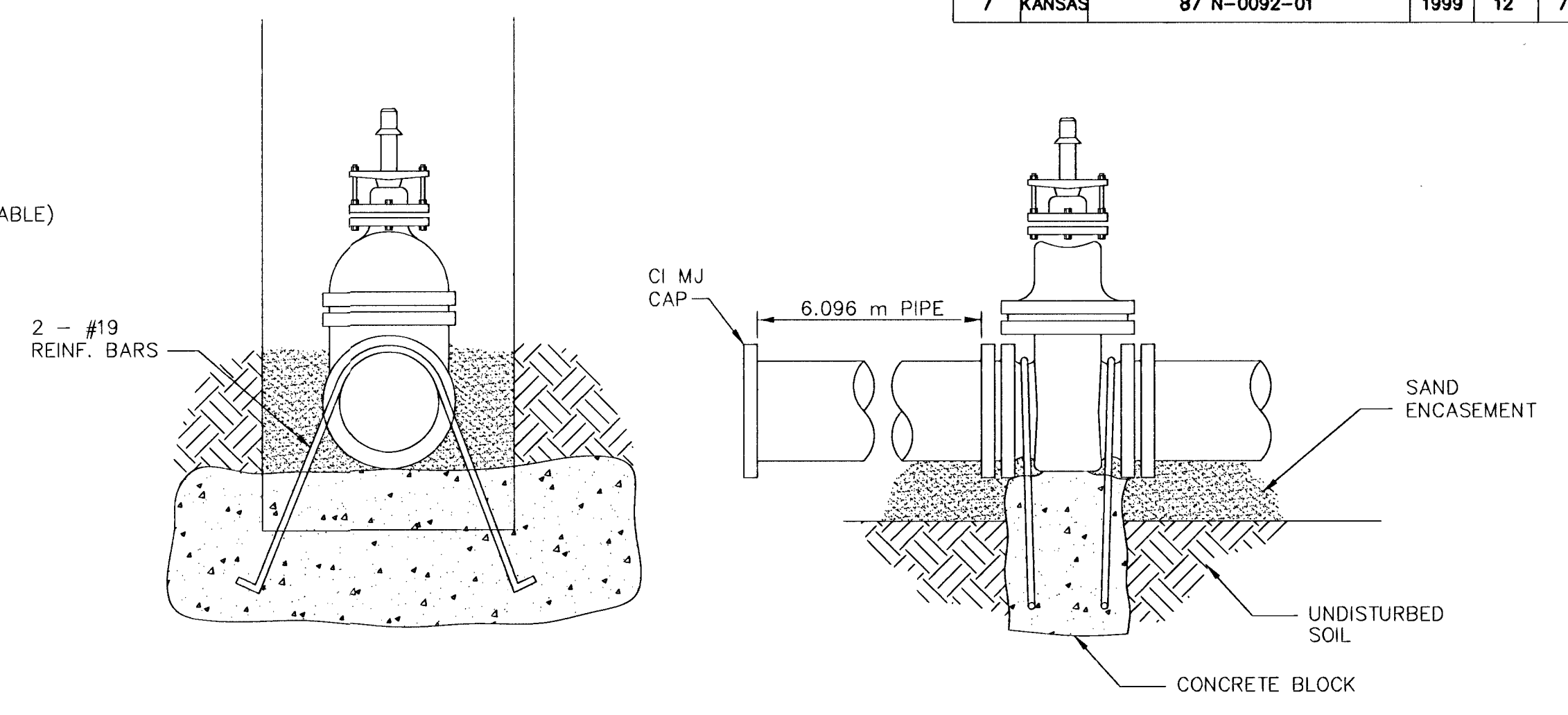
FIRE HYDRANT ASSEMBLY
PER CITY OF WICHITA SPECIFICATIONS

FIRE HYDRANTS REQUIRED			
STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQUIRED
5+837.638 RT.	36.855	35.400	1.64

IF HYDRANT BURY IS IN EXCESS OF 1.524 m, CONTRACTOR SHALL USE STANDARD 1.524 m HYDRANT BURY AND HYDRANT BARREL EXTENSIONS AS NECESSARY.



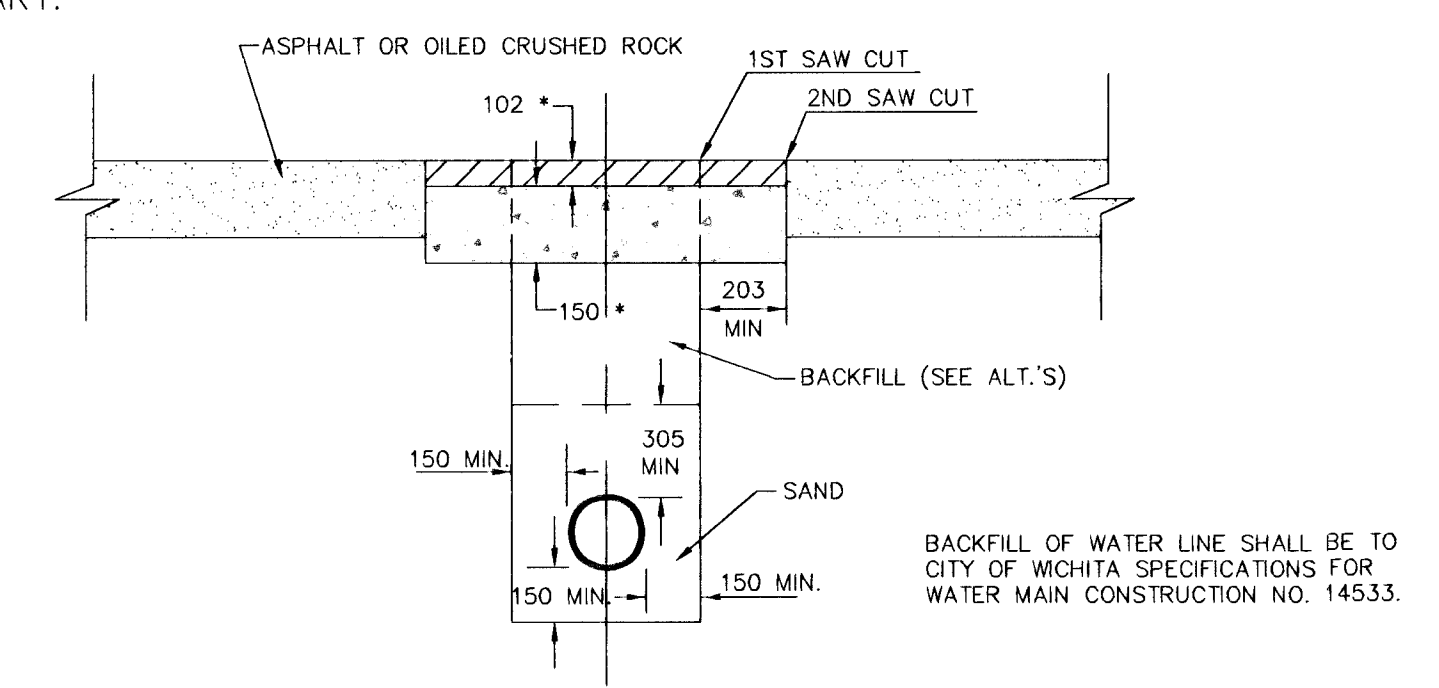
- MATERIALS LIST**
- 1-50 mm VALVE BOX
 - 1-CIMJ CAP
 - 1-50 mm x 150 mm BRASS NIPPLE
 - 1-50 mm IPT MUELLER VALVE A-2395-8-OL "T HEAD" OR APPROVED EQUAL
 - 1-GALV. STREET EL.
 - 50 mm GALV. PIPE (AS REQUIRED)
 - 1-50 mm GALV. COUPLING
 - 1-50 mm GALV. PLUG (HAND TIGHTENED)



- Notes:
- Concrete Block at Valve to have sufficient bearing in undisturbed soil to prevent thrust movement as shown in table at right. Field Engineer to determine thrust loading of undisturbed soil and final size of thrust block.
 - Provide clearance around flanges to M.J. accessories.
 - Valve block to be included in bid item of Concrete for thrust blocks.
 - All valves at dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES	
VALVE	THRUST AT 150 #/sq
100 mm	1809 lbs.
150 mm	4245 lbs.
200 mm	7540 lbs.
305 mm	16965 lbs.

ANCHORED VALVE ASSEMBLY, SPECIAL



BACKFILL OF WATER LINE SHALL BE TO CITY OF WICHITA SPECIFICATIONS FOR WATER MAIN CONSTRUCTION NO. 14533.

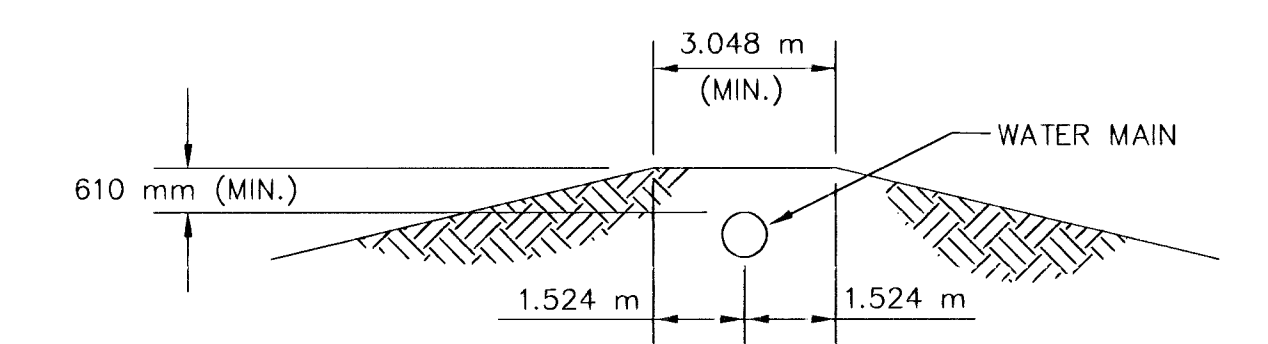
FOR ASPHALT OR OILED CRUSHED ROCK, REPLACE SURFACE IN KIND: 150 mm CONCRETE BASE AND 102 mm A.C. SURFACE.

FOR EARTH OR CRUSHED ROCK, REPLACE SURFACE IN KIND: SOIL - 305 mm DEEP (COMPACTED TO 95%), ROCK - 150 mm DEEP.

- ALTERNATE BACKFILL METHODS**
 - A. CRUSHER RUN ROCK OR SOIL, FREE OF DEBRIS AND DELETERIOUS MATERIAL MAY BE USED WHEN COMPACTED TO A MINIMUM OF 90% DENSITY. BACKFILL IS SUBJECT TO APPROPRIATE IN-PLACE DENSITY TESTS.
 - B. LEAN MIX CONCRETE FOR BACKFILL MAY BE USED IF VIBRATED TO FILL ALL VOIDS.
 - C. CRUSHED ROCK FOR BACKFILL SHALL CONSIST OF 25 mm MAXIMUM TO 5 mm MINIMUM CLEAN AGGREGATE, MANIPULATED AND COMPACTED TO ESTABLISH A FIRM INTERLOCK OF PARTICLES.
- ALL CUTS**

ALL CUTS SHALL BE EITHER PLATED OR FILLED WITH COLD MIX AS A TEMPORARY SURFACE IF FINAL SURFACE CANNOT BE INSTALLED.
- CLEANUP**

ALL EXCESS MATERIAL, DEBRIS, MUD AND OTHER FOREIGN MATTER SHALL BE REMOVED FROM THE STREET RIGHT-OF-WAY IN A MANNER THAT RESTORES THE SURFACE TO ITS ORIGINAL CONDITION.



MINIMUM PROTECTIVE FILL SHALL BE PROVIDED IN ALL INSTANCES WHERE COVER OVER THE PROP. WATER LINE IS LESS THAN 610 mm. (COST SUBSIDIARY TO PIPE INSTALLATION)

THE CITY OF WICHITA

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STANDARD WATER ASSEMBLY DETAILS

M. E. LINDEBAK P.E. - CITY ENGINEER

PROJECT NUMBER: 448-89078 KVE PROJ. NO.: AO1827

DATE: JULY 1999 SHEET 12 OF 75