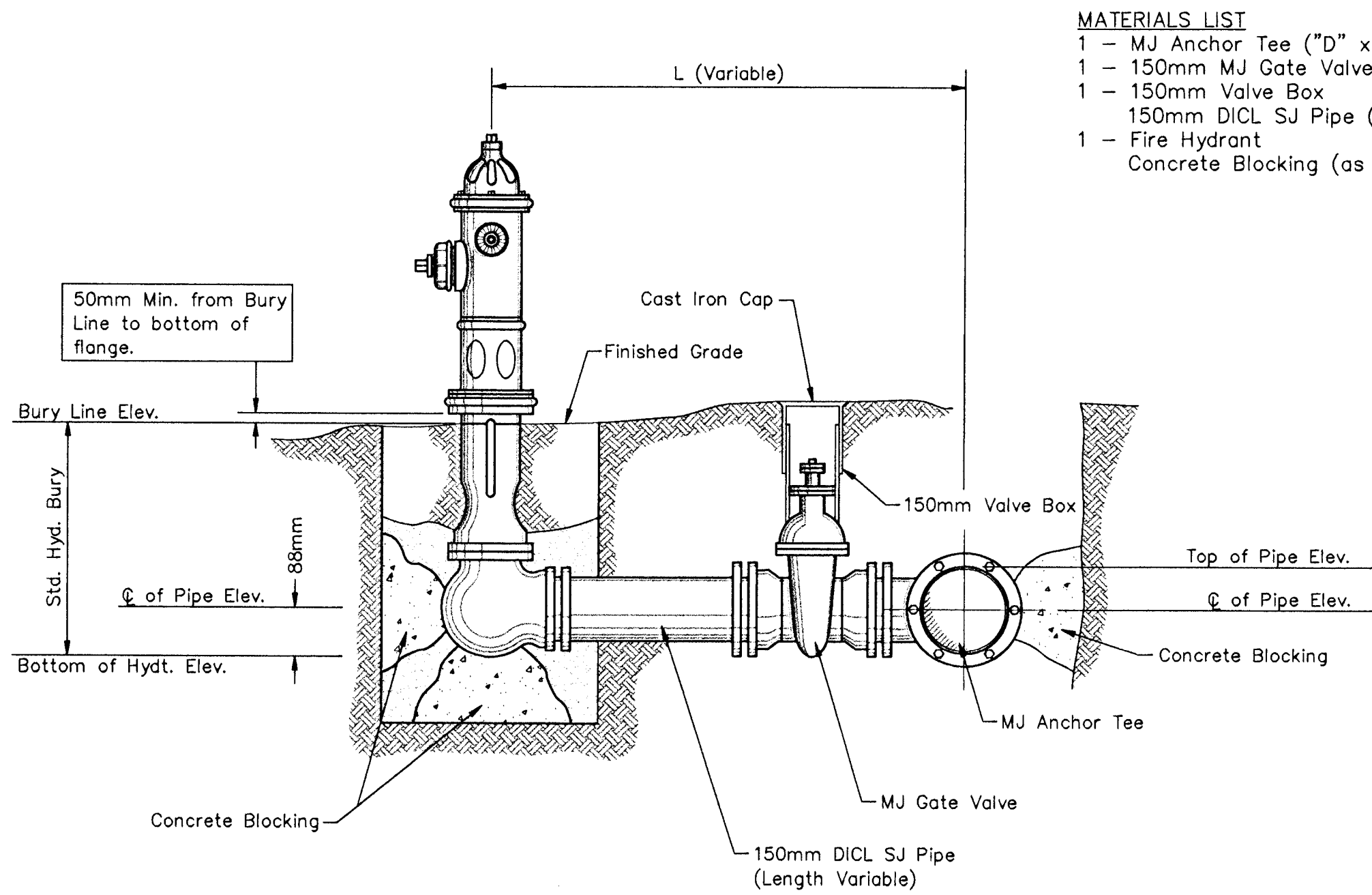
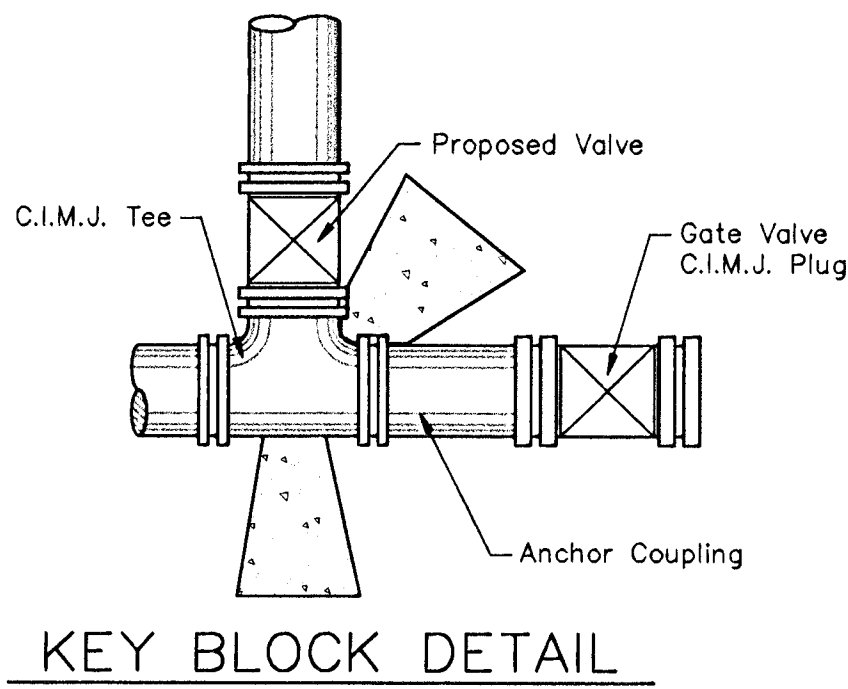
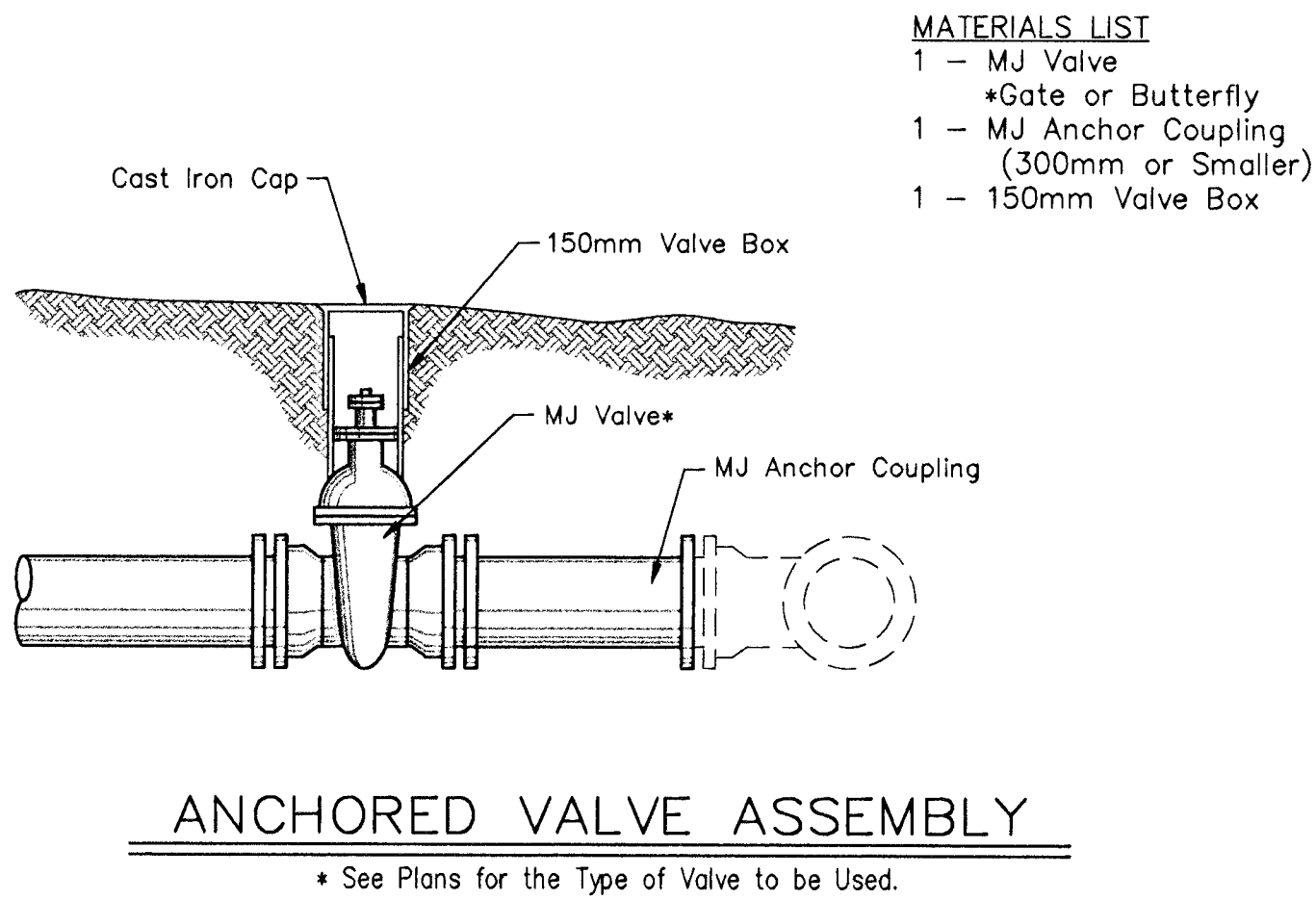
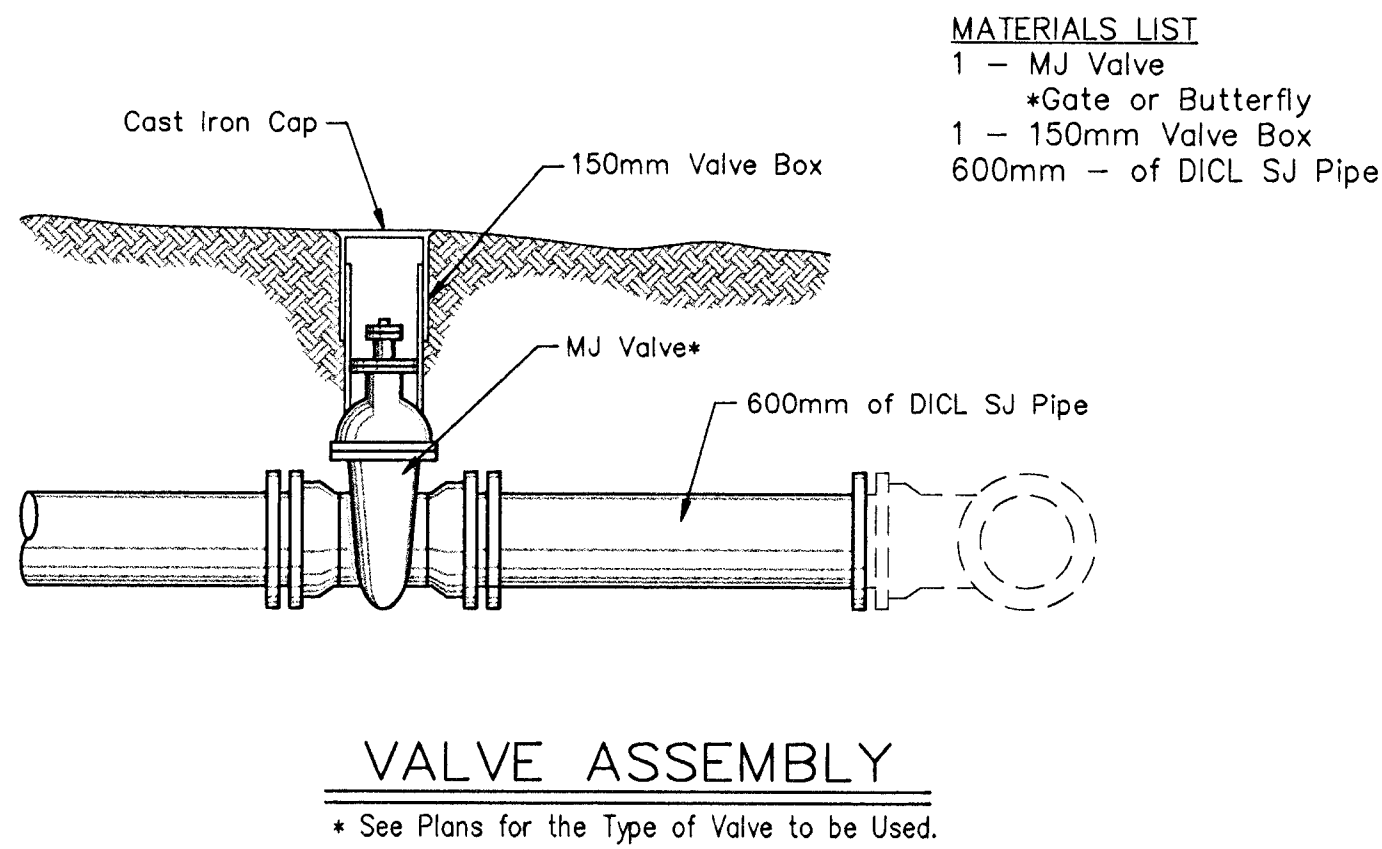
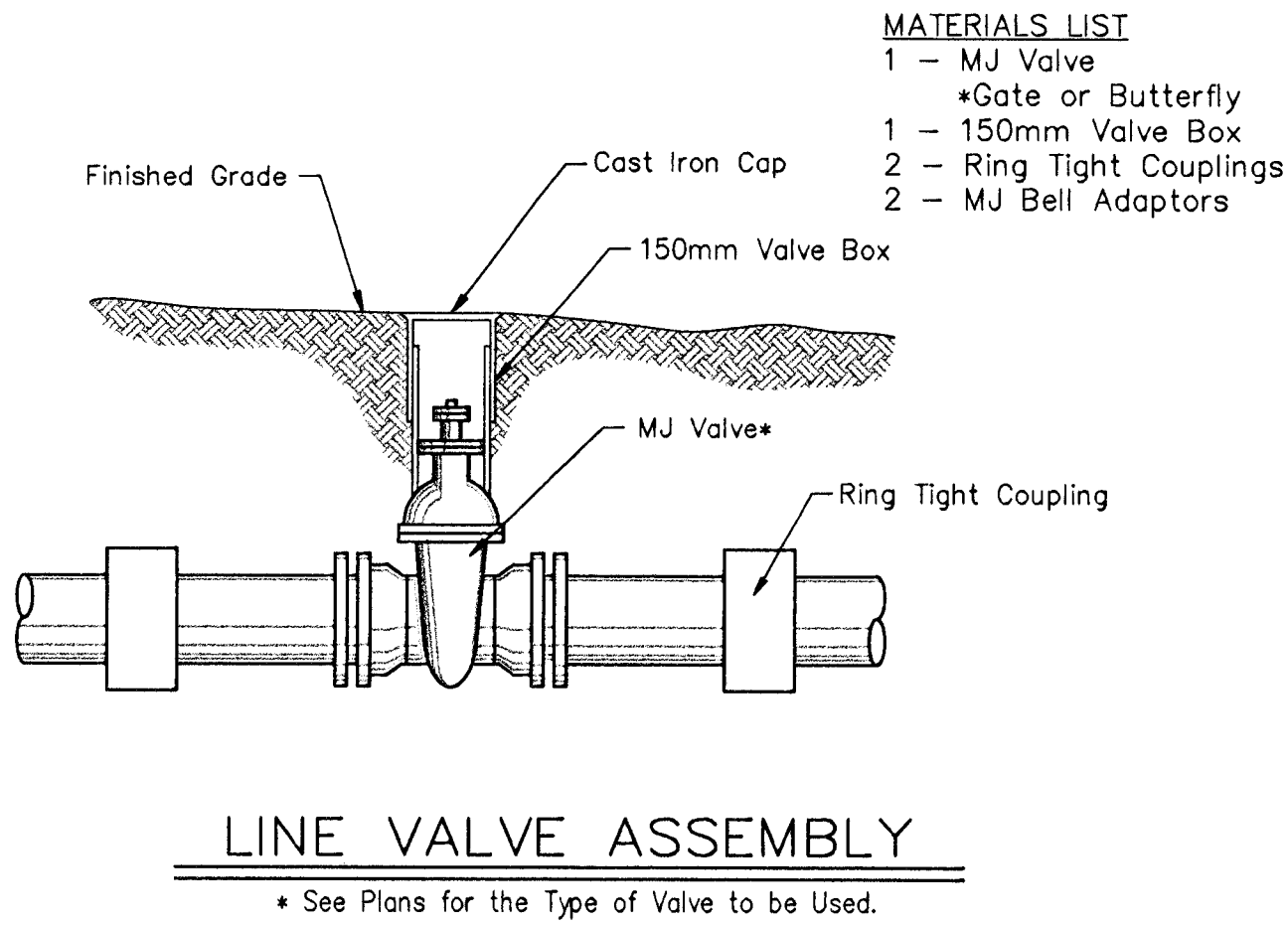
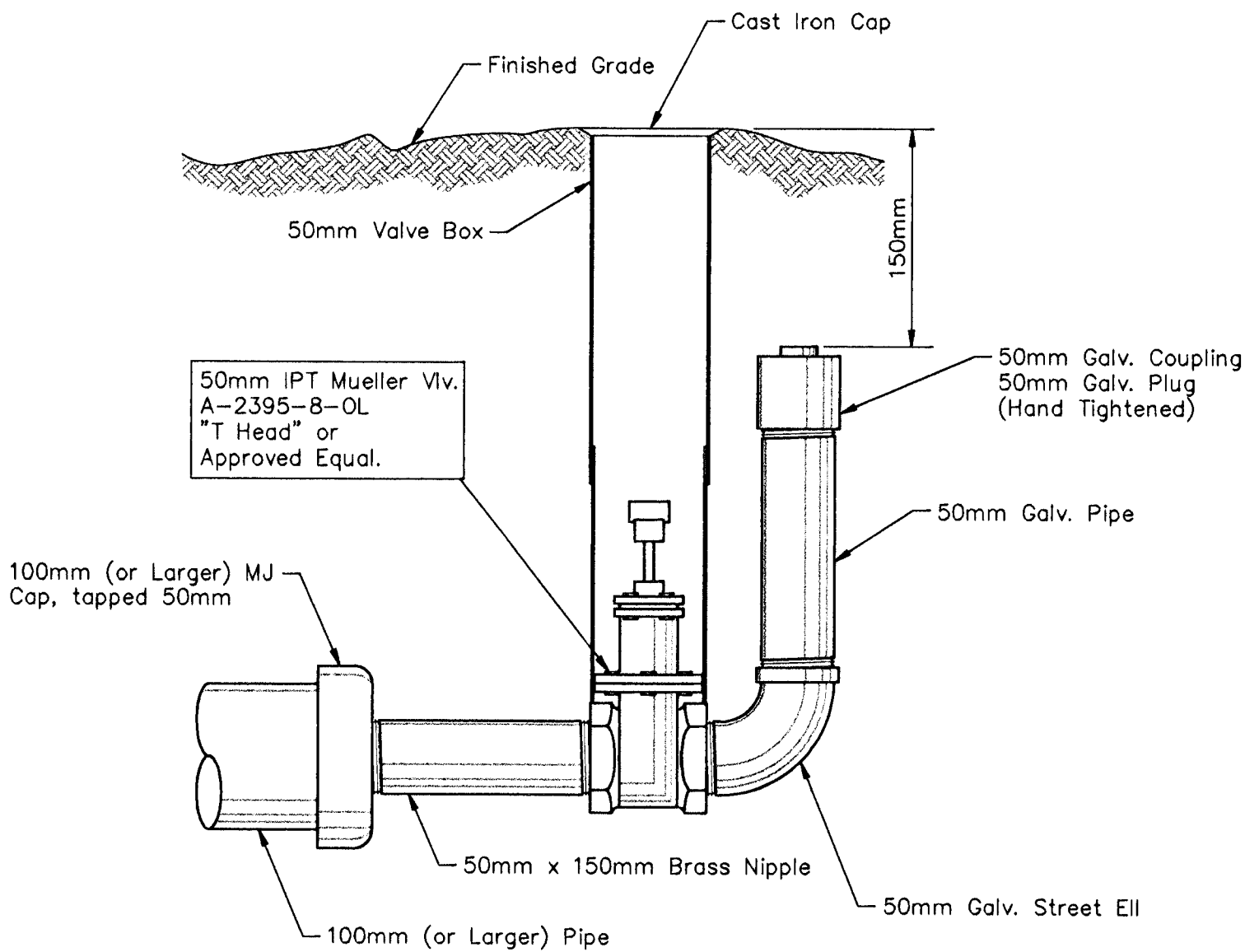




FIRE HYDRANT ASSEMBLY

FIRE HYDRANTS REQUIRED				
LINE NO.	W.L. STATION	BURY LINE ELEVATION	TOP OF PIPE ELEVATION	FIRE HYDRANT BURY REQ'D
1	0+122.222	398.580	396.500	2.286
1	0+316.552	398.740	397.115	1.829
1	0+424.066	398.573	397.179	1.676
1	0+537.103	398.240	396.700	1.829
1	0+808.779	399.265	397.583	1.829
1B	0+010.000	398.530	397.072	1.676
5	0+023.010	398.735	397.150	1.829
6	0+027.750	398.940	397.400	1.829
8	0+023.396	398.620	397.077	1.829
9	0+026.407	398.405	397.000	1.676
10	0+028.519	398.292	397.346	1.219
11	0+025.093	398.000	396.140	2.134
12	0+026.300	397.835	395.975	2.134
13	0+024.000	397.325	395.450	2.134
14	0+025.987	397.220	395.955	1.524

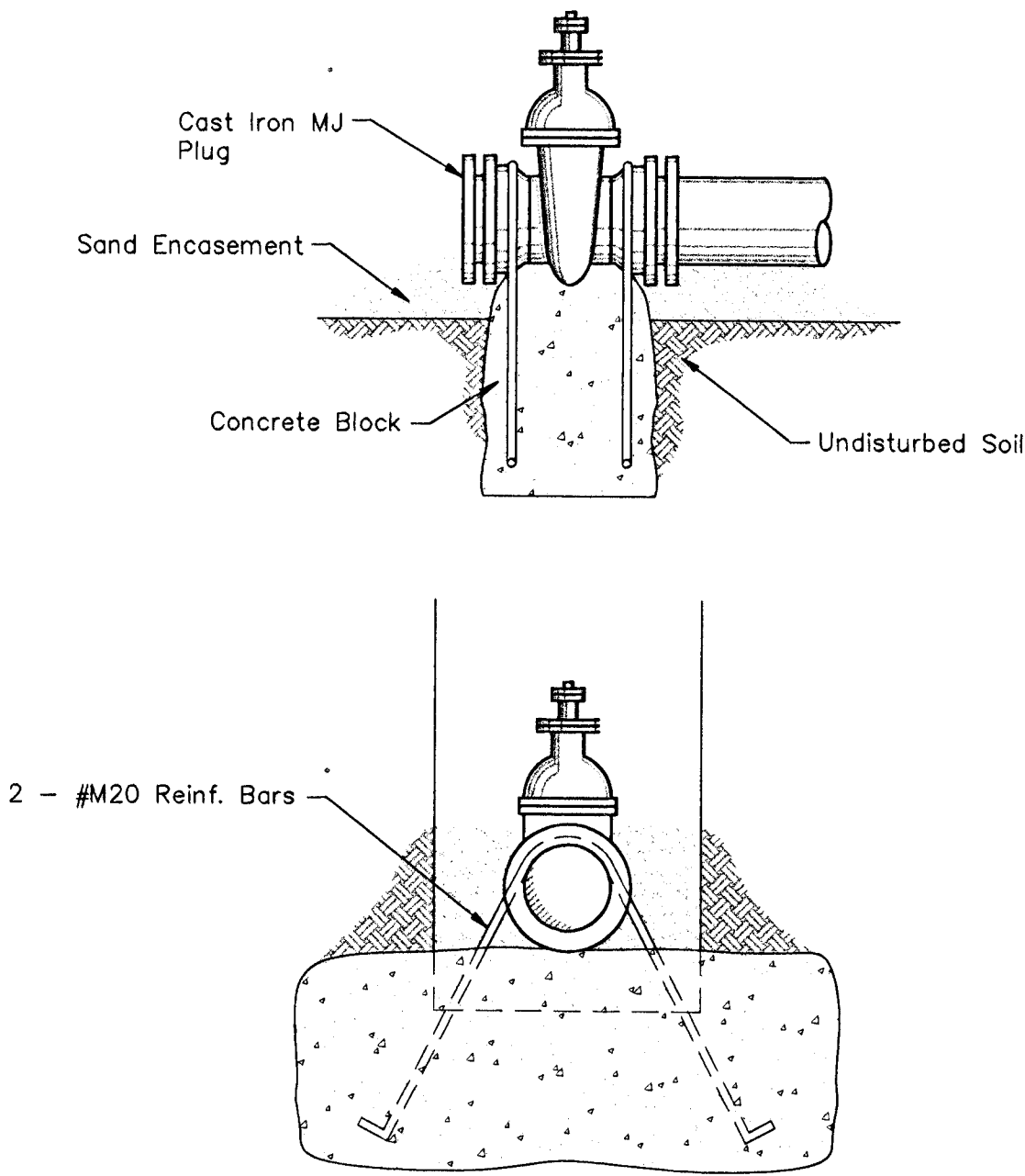
* Contractor to use 1.524m standard bury hydrant and barrel extensions as necessary.



PROTECTIVE FILL DETAIL

Minimum protective fill shall be provided in all instances where cover over the proposed water line is less than 600mm (cost SUBSIDIARY to pipe installation).

Note:
Reinforcing Steel Sizes are Designated in Metric Sizes.



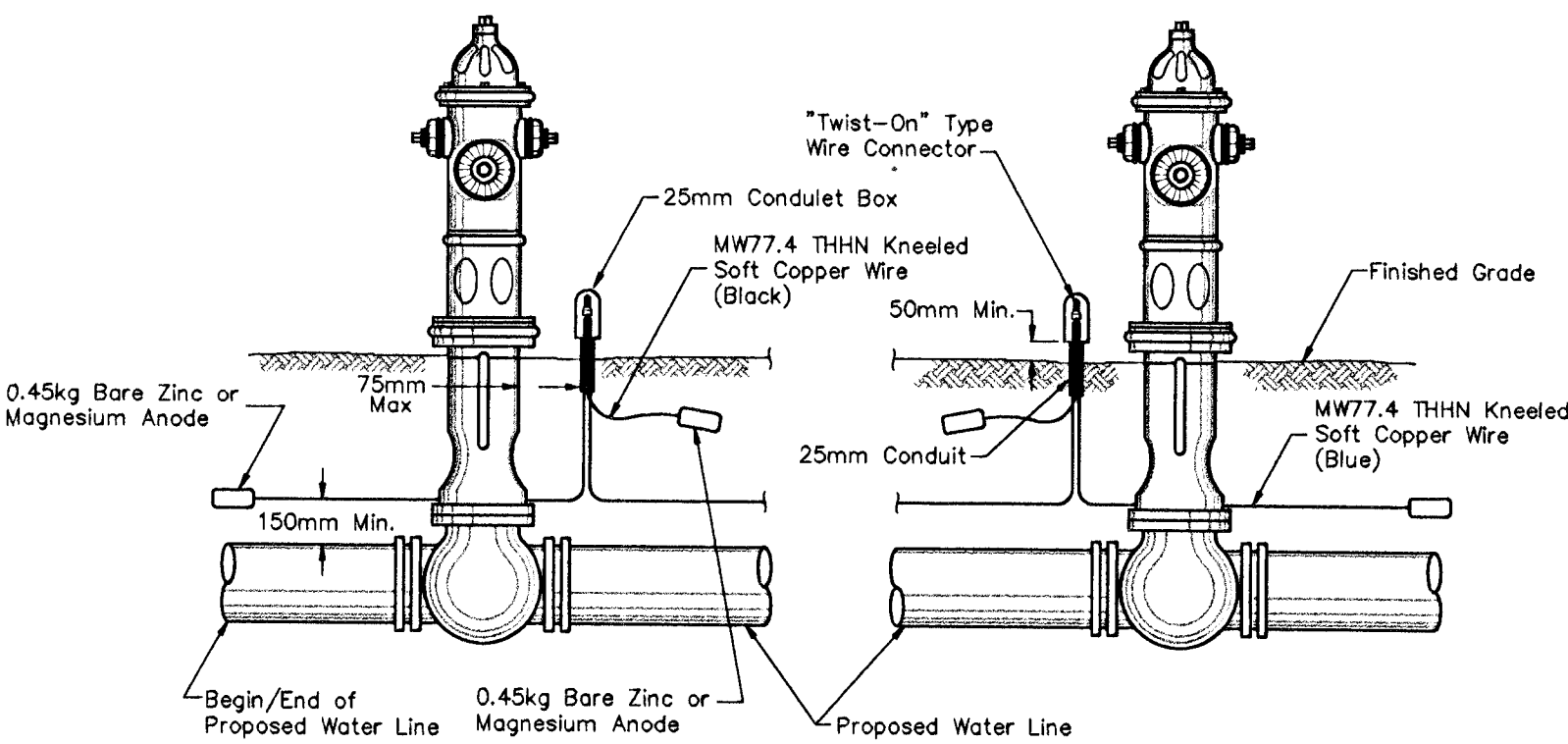
Notes:

- Concrete Block of 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 of dead ends and at other locations as called out on the plans shall be blocked as shown here.

THRUST AT VALVES	
VALVE	THRUST @ 1034 kPa
100mm	8.4 kN
150mm	18.9 kN
200mm	33.5 kN
300mm	75.5 kN

ANCHORED VALVE ASSEMBLY, SPECIAL

Per S.E.P. 103.6



Note: Tracer Wire, Anode, 25mm Conduit, & 25mm Conduit Box Shall be incidental to meters of Pipe.

TRACER WIRE DETAIL

METRIC