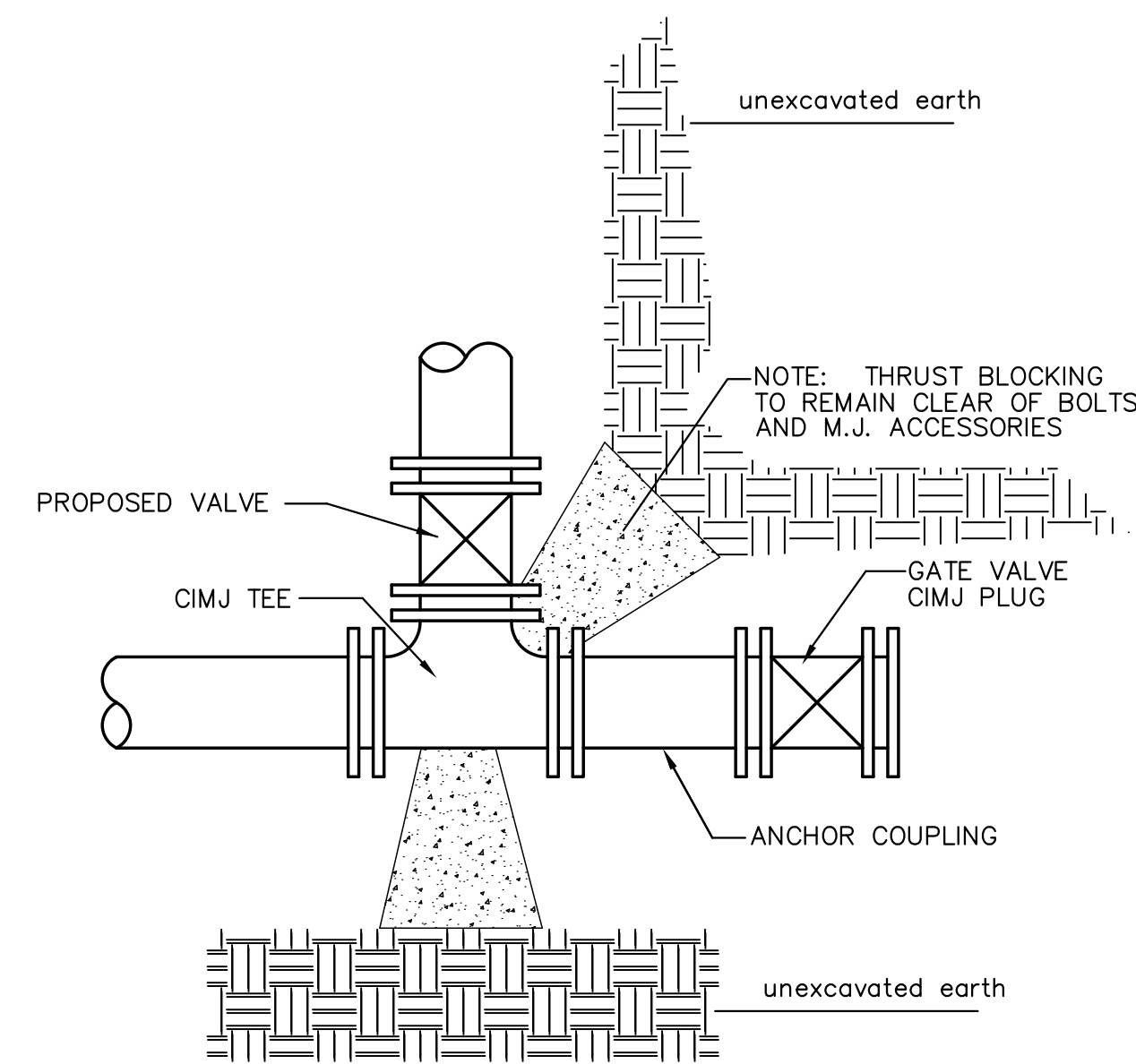


TRENCH COMPACTION IN ROAD RIGHT-OF-WAY

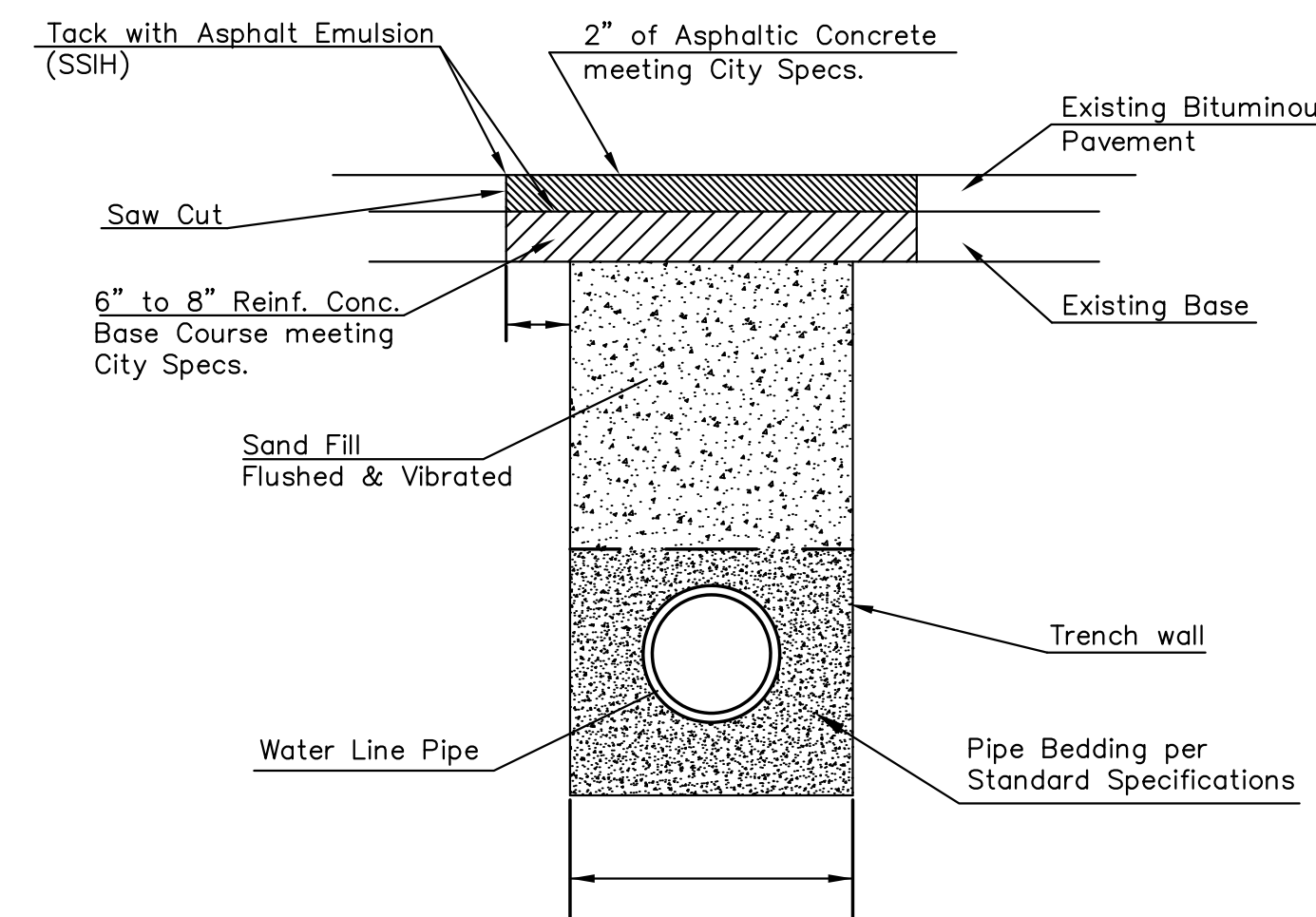
REINFORCED CONCRETE ENCASEMENT OF SANITARY SEWER

| PIPE SIZE | THRUST AT FITTINGS IN TONS-AT 150#/IN P | | | | | |
|-----------|---|------|-------|---------|---------|-------|
| | PLUG | 90° | 45° | 22 1/2° | 11 1/4° | TEE |
| 6" | 2.8 | 3.95 | 2.15 | 1.09 | .55 | 2.8 |
| 8" | 4.9 | 6.95 | 3.75 | 1.90 | .96 | 4.9 |
| 12" | 11.4 | 16.1 | 8.75 | 4.45 | 2.25 | 11.4 |
| 16" | 20.15 | 28.5 | 15.4 | 7.85 | 3.95 | 20.15 |
| 20" | 31.15 | 44.0 | 23.85 | 12.15 | 6.10 | 31.15 |
| 24" | 44.55 | 63.0 | 34.1 | 17.4 | 8.75 | 44.55 |

TYPICAL THRUST BLOCKS



KEY BLOCK DETAIL



PAVEMENT REPLACEMENT & TRENCH COMPACTION UNDER EXISTING AND PROPOSED CITY ROADS

PLANS GOVERN UNLESS OTHERWISE NOTED ON PLANS



| MISCELLANEOUS WATER DETAILS | | |
|--|----------------------|------------------------|
| CITY ENGINEER GARY JANZEN, P.E.. | | |
| PROJECT NUMBER 448-90596 | OCA NUMBER 735490 | DATE 04/2013 |
| CITY ENGINEER'S OFFICE CITY HALL - SEVENTH FLOOR 455 NORTH MAIN STREET WICHITA, KANSAS 67202-1620 (316) 268-4501 | | SHEET 3 of 9 |