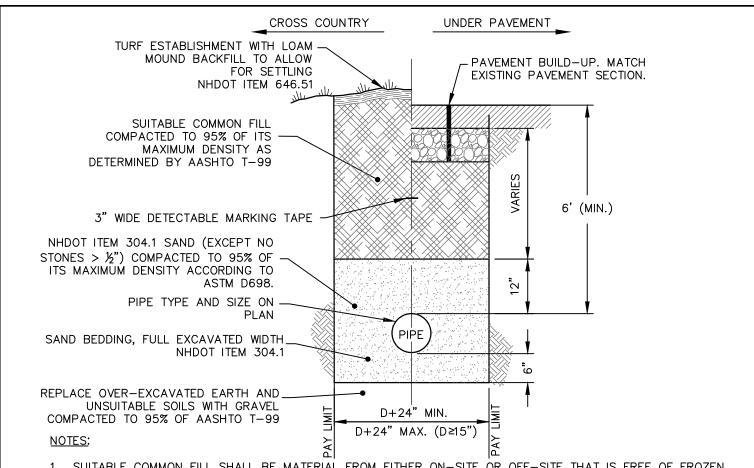


## MINIMUM BEARING AREA (SQUARE FEET)

	MINIMUM BEARING AREA (SQUARE FEET)							
	PIPE SIZE							
NOMINAL DIAMETER	4"	6"	8"	10"	12"	16"	20"	24"
TEES, CAPS, PLUGS, & TAPPING SLEEVES		2.32	4.15	6.37	9.15	16.23	25.44	36.58
90° BENDS	1.48	3.29	5.86	9.01	12.93	22.96	35.97	51.73
45° BENDS	0.80	1.78	3.17	4.88	7.00	12.42	19.47	28.00
22.5° BENDS	0.41	0.91	1.62	2.49	3.57	6.33	9.92	14.27
11.25° BENDS	0.21	0.46	0.81	1.25	1.79	3.18	4.99	7.17

## Thrust Block Schedule



- 1. SUITABLE COMMON FILL SHALL BE MATERIAL FROM EITHER ON—SITE OR OFF—SITE THAT IS FREE OF FROZEN MATERIAL, FOREIGN DEBRIS, CLAY, PEAT, ORGANIC MATTER, PERISHABLE RUBBISH, OTHER DELETERIOUS MATERIALS, AND STONES GREATER THAN 6" IN THEIR LARGEST DIMENSION.
- 2. BRACING AND SHEETING OR OTHER TRENCH PROTECTION TO BE PROVIDED TO MEET APPLICABLE STATE AND O.S.H.A. SAFETY STANDARDS. ALL SUCH TRENCH PROTECTION TO BE RESPONSIBILITY OF THE CONTRACTOR.
- 3. AT ALL LOCATIONS WHERE LESS THAN 6' OF COVER OVER THE PIPE IS PROVIDED, THEN INSULATION SHALL BE PROVIDED.

  Typical Water Trench

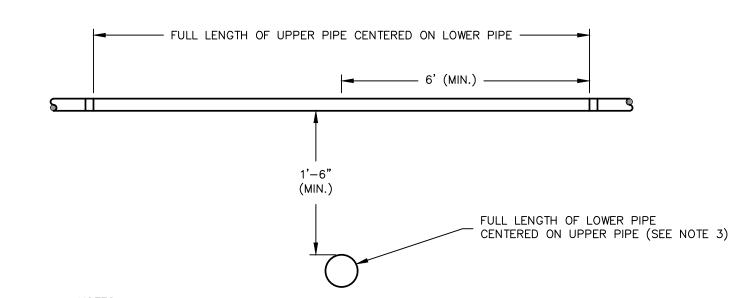
N.T.S.

WATER MAIN 4' MINIMUM 6" MINIMUM BEDDING (TYP OF BOTH SIDES OF DRAINAGE PIPE) 6" MINIMUM BEDDING PIPE INSULATION. SEE DETAIL. DRAINAGE PIPE DRAINAGE PIPE 4' MINIMUM 6" MINIMUM BEDDING (TYP OF BOTH SIDES OF -DRAINAGE PIPE) 6" MINIMUM BEDDING PIPE INSULATION. SEE DETAIL. WATER MAIN NOTES: INSULATION TO BE PROVIDED WHEN SEPARATION BETWEEN WATER MAIN AND DRAINAGE PIPE IS 24" OR LESS. INSTALLATION OF 45° MJ BENDS ARE SUBSIDIARY TO INSTALLATION OF WATER MAIN WHEN REQUIRED TO PROVIDE

Waterline/Drainage Crossing

SEPARATION FROM DRAINAGE PIPE.

3. WATER/DRAIN CROSSING IS SUBSIDIARY TO INSTALLATION OF WATER MAIN.



## NOTES:

- 1. AT WATERLINE/SEWERLINE CROSSING LOCATIONS, WATERLINE DEPTH IS TO BE RAISED, AS NECESSARY, TO PROVIDE THE 1'-6" SEPARATION.
- 2. AT WATERLINE/SEWERLINE CROSSING LOCATIONS, SEWER IS TO BE CEMENT-LINED CLASS 52 DUCTILE IRON PIPE WITH LEAKPROOF CONNECTORS.
- 3. INSTALLATION OF 45° MJ BENDS ARE SUBSIDIARY TO INSTALLATION OF WATER MAIN WHEN REQUIRED TO PROVIDE SEPARATION FROM DRAINAGE PIPE.
- 4. SEWER PIPE JOINTS SHALL BE LOCATED AT LEAST 6' HORIZONTALLY FROM THE WATER MAIN.
- SEWERS SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALY FROM ANY EXISTING OR PROPOSED WATER MAIN.
- 6. WATER/SEWER CROSSING IS SUBSIDIARY TO INSTALLATION OF WATER PIPE.

Waterline/Sewerline (Gravity) Crossing

Scale: 1" = 1'

