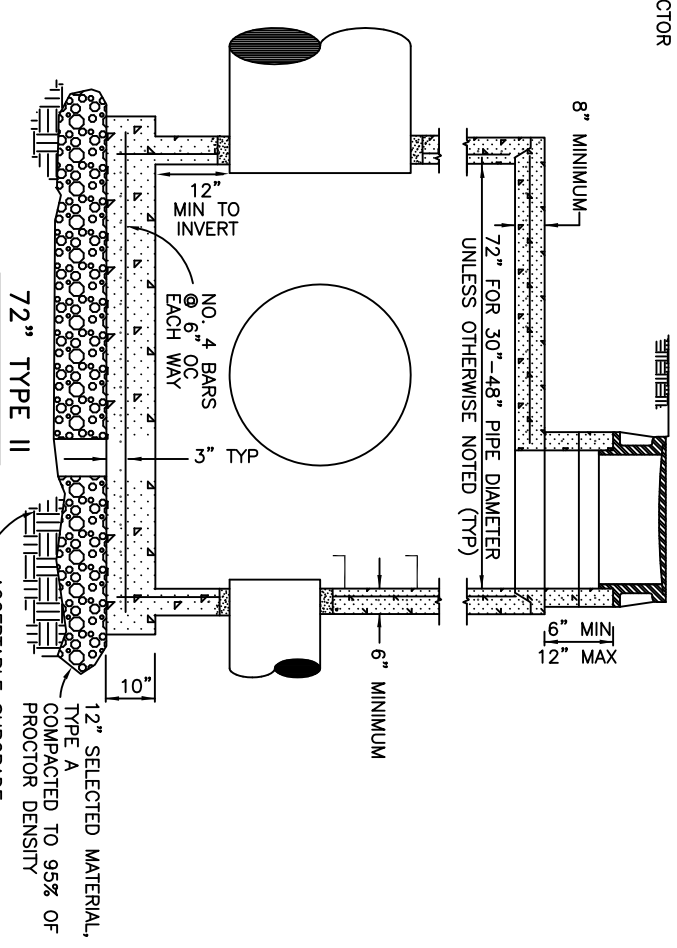
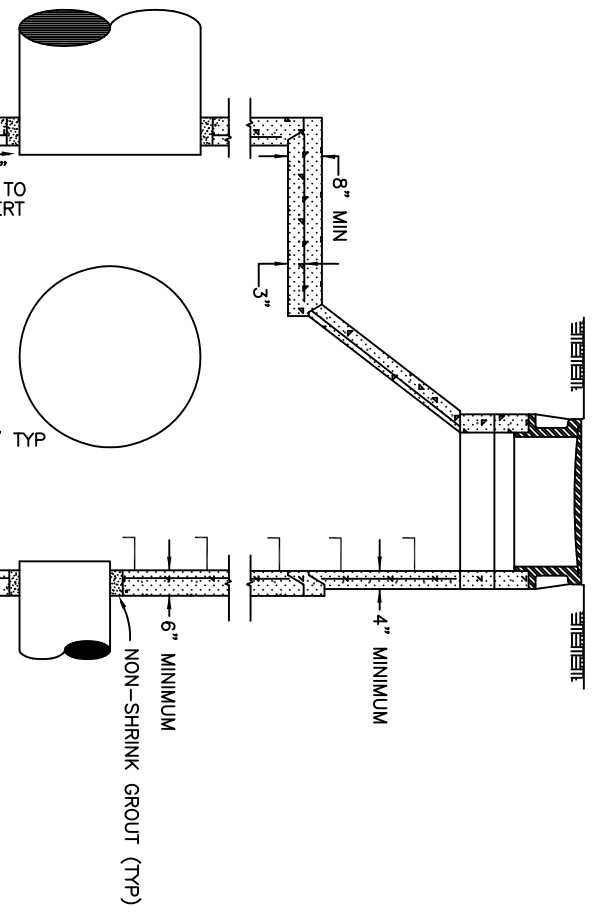
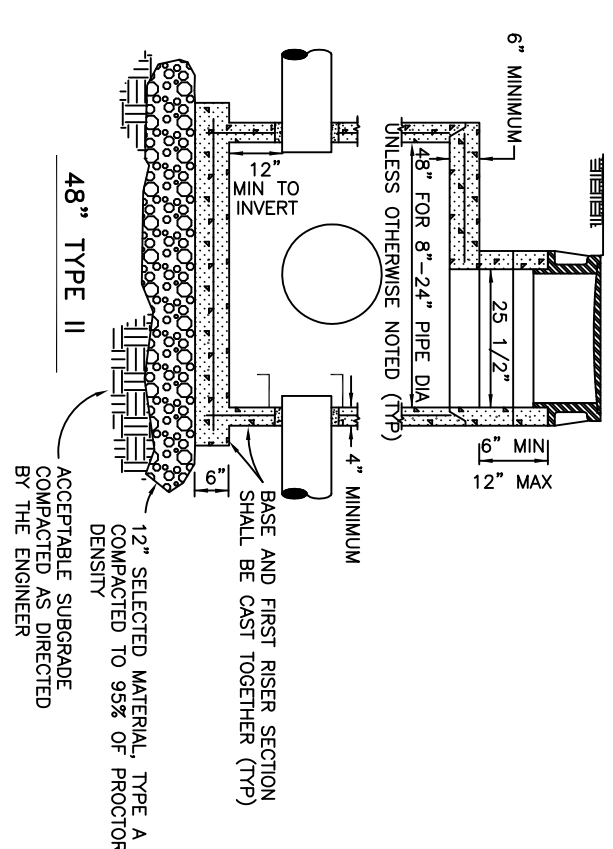
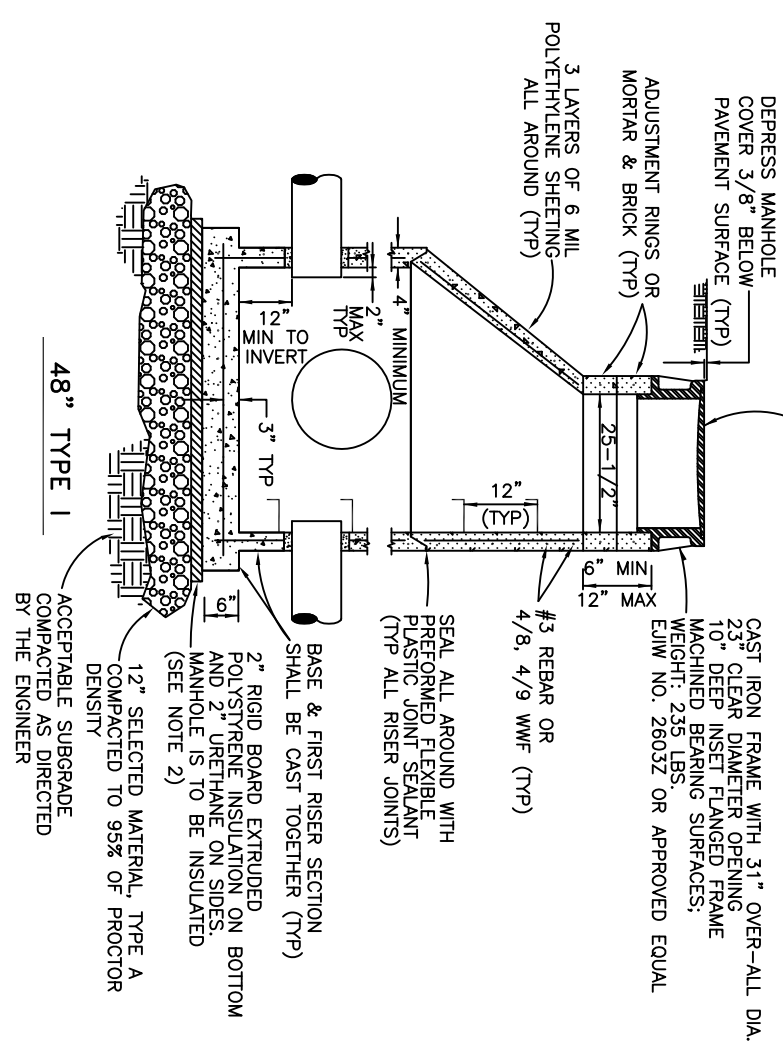
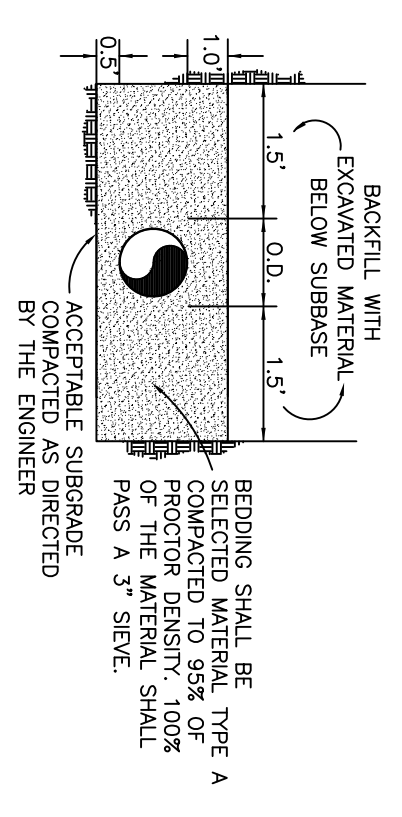


SOLID DUCTILE IRON MANHOLE LID, 24 3/4" DIA. X 7/8" SINGLE 3/4" DIAMETER PICK HOLE. H-20 LOADING. WEIGHT: 150 LBS. EMBOSSED LETTERING: "STORM" E.I.W. NO. 2603 C3 DI OR APPROVED EQUAL

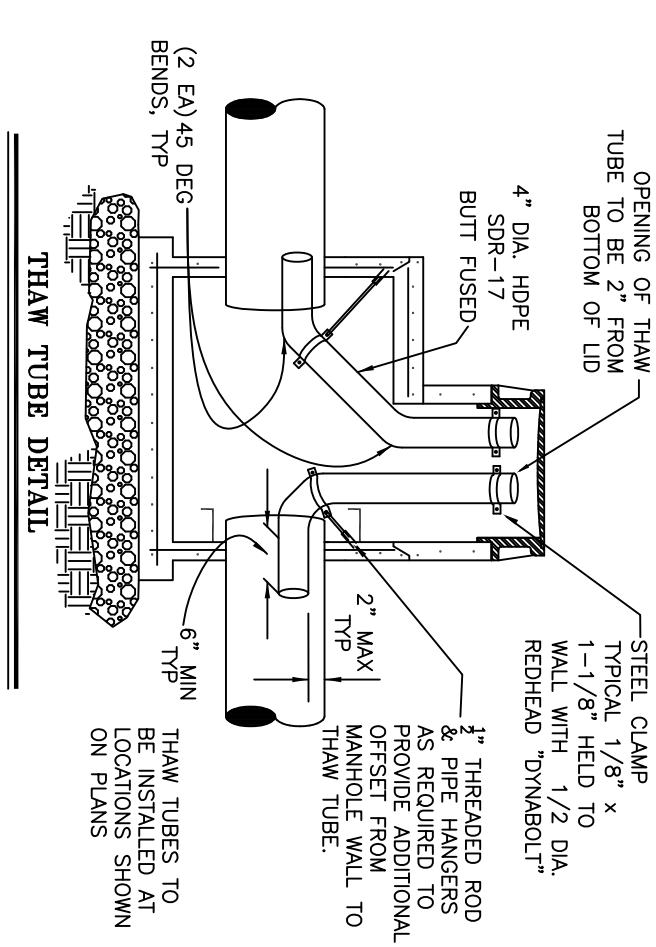


STORM DRAIN MANHOLE NOTES:

1. OPENINGS IN MANHOLE TO RECEIVE PIPE SHALL BE 1" TO 2" LARGER THEN THE OD AND PIPE LARGER OPENINGS SHALL BE FILLED AS DIRECTED BY THE ENGINEER.
2. TYPICALLY STORM DRAIN MANHOLES DO NOT REQUIRE INSULATION, HOWEVER, SPECIAL CASES REQUIRE INSULATION OF ALL OUTSIDE SURFACES. SEE PLANS.
3. SEAL RISER JOINTS WITH FLEXIBLE PLASTIC JOINT SEALERS.
4. MANHOLE STEPS SHALL BE APPROVED GALVANIZED STEEL OR PLASTIC AND MEET CURRENT OSHA STANDARDS.
5. ALL GROUT SHALL BE NON-SHRINK. PROTECT GROUT DURING CURE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDED METHOD.
6. REINFORCEMENT IN BASE, RISER, CONE, FLAT LID, AND ADJUSTING RINGS SHALL COMPLY WITH AASHTO SPECIFICATION M199/ASTM478.

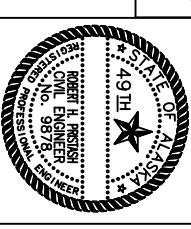


PIPE BEDDING DETAIL  
NOT TO SCALE



MANHOLE REINFORCEMENT SCHEDULE		SECTION	MANHOLE SIZE	REINFORCEMENT
SECTION	MANHOLE SIZE			
FLAT BASE	48"	0.39 SQ IN/FT EACH WAY	72"	0.39 SQ IN/FT EACH WAY
RISER SECTION*	48"	0.12 SQ IN/FT	72"	0.18 SQ IN/FT
CONE SECTION*	48"	0.12 SQ IN/FT	72"	0.18 SQ IN/FT
FLAT LID**	48"	0.12 SQ IN/FT EACH WAY	72"	0.12 SQ IN/FT EACH WAY
ADJUSTING RING	48"	0.024 SQ IN	72"	0.024 SQ IN

\*\*OPENINGS IN FLAT LIDS SHALL BE ADDITIONALLY REINFORCED WITH A MINIMUM OF THE EQUIVALENT OF 0.2 SQ IN OF STEEL AT 90°.



2/3/10	NEW SD1	GSC/RHP	NOT TO SCALE	DESIGNED: STAFF	CITY OF FAIRBANKS, ALASKA	STANDARD DETAILS
3/23/07		RHP		CHECKED: RHP/GSC		
DATE		BY		DATE: 3/23/07	ENGINEERING DIVISION	STORM DRAIN MANHOLES, THAW TUBES AND BEDDING
						SD1