CIRCULAR CONCRETE PIPE
HEIGHT OF BACKFILL IN FEET FOR CLASS B BEDDING
MEASURED AT TOP OF PIPE IN FEET, 120 PCF SOIL DENSITY

PIPE CLASS	CLASS II		CLASS III		CLASS IV		CLASS V	
PIPE DIA. (IN.)	N	W	N	W	N	W	N	W
12	8	8	11	11	16	16	*	24
15	8	8	11	11	16	16	*	24
18	8	8	11	11	23	17	*	25
21	8	8	11	11	23	17	*	25
24	9	8	11	11	23	17	*	25
27	9	9	13	12	23	17	*	26
30	9	9	13	12	23	17	*	26
33	9	9	13	12	23	17	*	26
36	9	9	13	12	23	17	*	26
42	10	9	14	12	24	18	*	26
48	10	9	14	12	24	18	*	26
54	10	9	14	12	24	18	*	27
60	11	10	15	12	24	18	*	27
66	11	10	15	12	25	18	*	27
72	11	10	16	13	26	18	*	27
78	11	10	16	13	27	18	*	27
84	12	10	17	13	27	18	*	27
90	12	11	17	13	27	19	*	27
96	12	11	17	14	27	19	*	27
102	12	11	17	14	27	19	*	27
108	12	11	17	14	27	19	*	27

* = FILL HEIGHT GREATER THAN 40', D-LOAD EQUATION MUST BE USED
N = NARROW TRENCH: MINIMUM WIDTH
W = WIDE TRENCH: TRANSITION WIDTH

CLASS B BEDDING (FIRST CLASS BEDDING), CONSISTS OF BEDDING THE PIPE ON A MIN. 6" THICKNESS OF GRANULAR BEDDING ACCURATELY SHAPED BY MEANS OF A TEMPLATE TO FIT THE LOWER PART OF THE PIPE EXTERIOR FOR A WIDTH OF AT LEAST 60% OF THE DIAMETER FOR ROUND AND 80% OF THE SPAN FOR ARCH CONCRETE PIPE. THE EXISTING GROUND AT THE CULVERT SITE IS FIRST EXCAVATED TO AN ELEVATION WHICH IS APPROX. 15% OF THE PIPE OUTSIDE DIAMETER OR RISE OF THE PIPE ABOVE THE ESTABLISHED GRADE FOR THE BOTTOM OF THE PIPE. THEN THE FOUNDATION FOR THE BEDDING IS PREPARED BY CAREFULLY EXCAVATING TO THE REQUIRED DEPTH AND SHAPE OF THE BEDDING.

MINNEAPOLIS DESIGN REFERENCE
MNDOT DRAINAGE MANUAL
SECTION 2.5; AUGUST 30, 2000
NOT TO SCALE

Minneapolis
Public Works

DRW: DCD	DATE: 12/02	TRENCH FILL HEIGHT FOR RC PIPE CLASS B	STANDARD PLATE NO. SEWR-6006
APP: HRS	DATE: 1/07		