ON GRADE CONDITION

LONGITUDINAL SLOPE 0.50%				
STREET SPREAD (FT)	DEPTH @ GUTTER (FT)	GUTTER FLOW (CFS)	CAPTURED FLOW (CFS)	BY-PASS FLOW (CFS)
2	0.20	0.145	0.144	0.000
3	0.22	0.220	0.217	0.004
4	0.24	0.327	0.305	0.021
5	0.26	0.472	0.411	0.061
6	0.28	0.662	0.533	0.130
7	0.30	0.905	0.670	0.235
8	0.32	1.207	0.824	0.383
9	0.34	1.572	0.992	0.580
10	0.36	2.006	1.174	0.832
11	0.38	2.516	1.369	1.146
12	0.40	3.105	1.577	1.528
16	0.48	6.351	2.523	3.828

LONGITUDINAL SLOPE 0.75%				
STREET SPREAD (FT)	DEPTH @ GUTTER (FT)	GUTTER FLOW (CFS)	CAPTURED FLOW (CFS)	BY-PASS FLOW (CFS)
2	0.20	0.177	0.177	0.000
3	0.22	0.270	0.265	0.005
4	0.24	0.400	0.372	0.029
5	0.26	0.578	0.497	0.080
6	0.28	0.811	0.641	0.170
7	0.30	1.109	0.802	0.307
8	0.32	1.478	0.981	0.497
9	0.34	1.925	1.176	0.749
10	0.36	2.457	1.386	1.071
11	0.38	3.081	1.611	1.470
12	0.40	3.802	1.849	1.953
16	0.48	7.778	2.934	4.844

LONGITUDINAL SLOPE 1.00%				
STREET SPREAD (FT)	DEPTH @ GUTTER (FT)	GUTTER FLOW (CFS)	CAPTURED FLOW (CFS)	BY-PASS FLOW (CFS)
2	0.20	0.204	0.204	0.000
3	0.22	0.312	0.305	0.006
4	0.24	0.462	0.427	0.034
5	0.26	0.667	0.570	0.097
6	0.28	0.937	0.733	0.204
7	0.30	1.280	0.913	0.367
8	0.32	1.706	1.114	0.593
9	0.34	2.223	1.332	0.891
10	0.36	2.838	1.567	1.271
11	0.38	3.558	1.817	1.741
12	0.40	4.391	2.083	2.307
16	0.48	8.982	3.289	5.692

MINNEAPOLIS STANDARD
GRATE WITH CURB BOX

FHWA VISUAL URBAN (HY-22) FIXED CONDITIONS	
PAVEMENT CROSS SLOPE	0.02
GUTTER CROSS SLOPE	0.06
MANNING'S COEFFICIENT	0.016
GUTTER WIDTH (FT)	2.00
LOCAL GUTTER DEPRESSION (IN)	1.00
GRATE LENGTH, WIDTH (FT)	1.88
CURB OPENING LENGTH (FT)	1.89
CURB OPENING HEIGHT (IN)	4.60
TYPE OF GRATE	VANE

LONGITUDINAL SLOPE 1.25%				
STREET SPREAD (FT)	DEPTH @ GUTTER (FT)	GUTTER FLOW (CFS)	CAPTURED FLOW (CFS)	BY-PASS FLOW (CFS)
2	0.20	0.228	0.228	0.000
3	0.22	0.348	0.341	0.007
4	0.24	0.516	0.477	0.040
5	0.26	0.746	0.635	0.111
6	0.28	1.047	0.814	0.233
7	0.30	1.431	1.012	0.420
8	0.32	1.908	1.232	0.676
9	0.34	2.485	1.471	1.015
10	0.36	3.173	1.727	1.445
11	0.38	3.978	2.001	1.977
12	0.40	4.909	2.291	2.617
16	0.48	10.042	3.608	6.434

LONGITUDINAL SLOPE 1.50%				
STREET SPREAD (FT)	DEPTH @ GUTTER (FT)	GUTTER FLOW (CFS)	CAPTURED FLOW (CFS)	BY-PASS FLOW (CFS)
2	0.20	0.250	0.250	0.000
3	0.22	0.382	0.374	0.008
4	0.24	0.566	0.521	0.044
5	0.26	0.817	0.693	0.124
6	0.28	1.147	0.887	0.260
7	0.30	1.568	1.101	0.467
8	0.32	2.090	1.339	0.751
9	0.34	2.722	1.597	1.126
10	0.36	3.475	1.874	1.602
11	0.38	4.357	2.169	2.189
12	0.40	5.377	2.482	2.896
16	0.48	11.000	3.899	7.101

REFERENCES:
FHWA VISUAL URBAN (HY-22)
URBAN DRAINAGE DESIGN PROGRAMS

MINNEAPOLIS DESIGN REFERENCE
MNDOT DRAINAGE MANUAL; SECTION 8.7
2 OF 3
NOT TO SCALE

MINNEAPOLIS
DEPARTMENT OF PUBLIC WORKS

DRAWN: DCD | DATE: 5/03
APPROVED: HRS | DATE: 1/07

INLET CAPACITY CHART

STANDARD PLATE NO. SEWR-6008