

**DATE:** February 21, 1996

**TO:** Bridge Division Personnel  
**FROM:** Dale F. Loe, Bridge Engineer  
**SUBJECT:** Design Drawings and General Notes

In order to provide more uniformity throughout a CADD drawing, the following specifications shall be used for creating CADD drawings. The new English and Metric versions of the plotting/scaling/sizing chart are also attached:

- I. Drawing Titles
  - a. TX = see chart
  - b. Line Weight: WT = 2
  - c. Font: FT = 1
  
- II. Detail Titles
  - a. TH & TW = see chart
  - b. Line Weight: WT = 2
  - c. Font: FT = 1
  
- III. Object Lines
  - a. Line Weight: WT = 2
  
- IV. Dimension Lines and Projection Lines
  - a. Line Weight: WT = 0
  
- V. Reinforcing Bars
  - a. Line Weight: WT = 1
  
- VI. Detail Lettering and Dimensions
  - a. TH & TW = see chart
  - b. Line Weight: WT = 1
  - c. Font: FT = 1
  - d. Use lower case lettering
  
- VII. General Notes
  - a. TX = see chart
  - b. Line Spacing: LS = 0.67(TX)
  - c. Line Weight: WT = 1
  - d. Font: FT = 1
  - e. Use lower case lettering (Title to be all capitals)

filename=ENGSCALE.FRM													ENGLISH		DWG. TITLE		DETAIL TITLE		DTL. LETTERING DIMENSIONS & GENERAL NOTES	
ALTERNATE DETAIL SCALE													BOR DER	PLOT SCALE	TX	TH	TW	TH	TW	
	3	1 1/2	1	3/4	1/2	3/8	1/4	3/16	1/8	3/32	1/16									
3	1	0.5	0.333	0.25	0.167	0.125	0.083	0.0625	0.0417	0.0313	0.0208	4	1:3	0.067	0.067	0.053	0.0417	0.0333		
1 1/2	2	1	0.667	0.5	0.333	0.25	0.167	0.125	0.0833	0.0625	0.0417	8	2:3	0.133	0.133	0.1067	0.0833	0.0667		
1	3	1.5	1	0.75	0.5	0.375	0.25	0.1875	0.125	0.0938	0.0625	12	1:1	0.2	0.2	0.16	0.125	0.1		
3/4	4	2	1.333	1	0.667	0.5	0.333	0.25	0.1667	0.125	0.0833	16	4:3	0.267	0.267	0.2133	0.1667	0.1333		
1/2	6	3	2	1.5	1	0.75	0.5	0.375	0.25	0.1875	0.125	24	2:1	0.4	0.4	0.32	0.25	0.2		
3/8	8	4	2.667	2	1.333	1	0.667	0.5	0.3333	0.25	0.1667	32	8:3	0.533	0.533	0.4266	0.3333	0.2667		
1/4	12	6	4	3	2	1.5	1	0.75	0.5	0.375	0.25	48	4:1	0.8	0.8	0.64	0.5	0.4		
3/16	16	8	5.333	4	2.667	2	1.333	1	0.6667	0.5	0.3333	64	16:3	1.067	1.067	0.8533	0.6667	0.5333		
1/8	24	12	8	6	4	3	2	1.5	1	0.75	0.5	96	8:1	1.6	1.6	1.28	1	0.8		
3/32	32	16	10.67	8	5.333	4	2.667	2	1.3333	1	0.6667	128	32:3	2.133	2.133	1.7067	1.3333	1.0667		
1/16	48	24	16	12	8	6	4	3	2	1.5	1	192	16:1	3.20	3.20	2.56	2	1.6		
	10	20'	30'	40'	50'	100'														
10'	1	0.5	0.333	0.25	0.2	0.1						10	10:1	2	2	1.6	1.25	1		
20'	2	1	0.667	0.5	0.4	0.2						20	20:1	4	4	3.2	2.5	2		
30'	3	1.5	1	0.75	0.6	0.3						30	30:1	6	6	4.8	3.75	3		
40'	4	2	1.333	1.0	0.8	0.4						40	40:1	8	8	6.4	5.0	4		
50'	5	2.5	1.667	1.25	1	0.5						50	50:1	10	10	8.0	6.25	5		
100'	10	5	3.333	2.5	2	1						100	100:1	20	20	16.0	12.5	10		

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filename=METSCALE.FRM										METRIC		DWG. TITLE		DETAIL TITLE		DTL. LETTERING DIMENSIONS & GENERAL NOTES	
ALTERNATE DETAIL SCALE										*LINE TERM.	*BOR DER	TX (mm)	TH (mm)	TW (mm)	TH (mm)	TW (mm)	
1:100	1	2	2.5	3.33	5	10	20	50	100	100	100	475	475	380	325	250	
1:50	0.5	1	1.25	1.667	2.5	5	10	25	50	50	50	237.5	237.5	190	162.5	125	
1:40	0.4	0.8	1	1.333	2	4	8	20	40	40	40	190.0	190.0	152	130	100	
1:30	0.3	0.6	0.75	1	1.5	3	6	15	30	30	30	142.5	142.5	114	97.5	75	
1:20	0.2	0.4	0.5	0.5	1	2	4	10	20	20	20	95	95	76	65	50	
1:10	0.1	0.2	0.25	0.25	0.5	1	2	5	10	10	10	47.5	47.5	38	32.5	25	
1:5	0.05	0.1	0.125	0.1667	0.25	0.5	1	2.5	5	5	5	23.75	23.75	19	16.25	12.5	
1:2	0.02	0.04	0.05	0.0667	0.1	0.2	0.4	1	2	2	2	9.5	9.5	7.6	6.5	5	
1:1	0.01	0.02	0.025	0.033	0.05	0.1	0.2	0.5	1	1	1	4.75	4.75	3.8	3.25	2.5	
	1:100	1:200	1:500	1:1000								(m)	(m)	(m)	(m)	(m)	
1:200	2	1	0.4	0.2						2	2	0.95	0.95	0.76	0.65	0.50	
1:500	5	2.5	1	0.5						5	5	2.375	2.375	1.900	1.625	1.250	
1:1000	10	5	2	1						10	10	4.750	4.750	3.800	3.250	2.500	

\* Values shown are applicable only when using Metric Line Terminator & border cells.  
 If using English cells, you must also multiply by 2.54

Working Units:  
 Layouts: 100 MU, 10 SU  
 Detail Dwgs.: 1 MU, 100 SU