PROJECT REFERENCE NO.	SHEET

GEOTECHNICAL ENGINEER	ENGINEER
SIGNATURE DATE	SIGNATURE DATE

HOW TO USE THIS SHEET:

- FOR ALL WALL OPTIONS, DETERMINE MINIMUM REQUIRED REINFORCEMENT LENGTH (B) FROM TABLE AT RIGHT BASED ON WALL HEIGHT (H) AND SLOPE OR SURCHARGE CASE
- FOR STANDARD TEMPORARY FABRIC WALL, SEE SHEET 3 FOR FABRIC STRENGTH REQUIREMENTS BASED ON WALL HEIGHT (H)
- FOR ALL OTHER WALL OPTIONS, DETERMINE REINFORCEMENT TYPE FROM TABLES BELOW FOR EACH HEIGHT TO REINFORCEMENT (Z) BASED ON WALL HEIGHT (H) AND SLOPE OR SURCHARGE CASE

MINIMUM REQUIRED REINFORCEMENT LENGTH B (FT)

(FOR ALL WALL OPTIONS)

WALL HEIGHT H (FT)	<8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28
SLOPE CASE	8	11	13	14	16	18	20	22	24	25	27
SURCHARGE CASE	8	9	11	12	14	15	16	18	19	21	22

TERRATREL TEMPORARY WALL
(STRIPS PER LEVEL PER PANEL)

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT-INCHES)
												3	27 - 8
											3	3	26 -10
											3	3	25 - 2
										3	3	3	23 - 6
									3	3	3	3	21 -10
								3	3	3	3	3	20 - 2
							3	3	3	3	3	3	18 - 6
						3	3	3	3	3	3	3	16 -10
						3	3	3	3	3	3	3	15 - 2
					4	3	3	3	3	3	3	3	13 - 6
				4	4	3	3	3	3	3	3	3	11 -10
			5	4	4	3	3	3	3	3	3	3	10 - 2
		5	5	4	4	3	3	3	3	3	3	3	8 - 6
	5	5	5	4	4	3	3	3	3	3	3	3	6 -10
	5	5	5	4	4	3	3	3	3	3	3	3	5 - 2
5	5	5	5	4	4	3	3	3	3	3	3	3	3 - 6
5	5	5	5	4	4	3	3	3	3	3	3	3	1 -10
5	5	5	5	4	4	3	3	3	3	3	3	3	0 - 2
5	5	5	5	4	4	3	3	3	3	3	3	3	-0 - 8

SLOPE AND SURCHARGE CASES

SIERRASCAPE TEMPORARY WALL
(GEOGRID TYPE)

11 = UX1100MSE
14 = UX1400MSE
15 = UX1500MSE
16 = UX1600MSE
17 = UX1700MSE

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT)
												11	26.5
											11	11	25.5
											11	11	24
										11	11	11	22.5
									11	11	11	15	21
								11	11	11	14	15	19.5
								11	11	11	14	15	18
							11	11	11	14	15	15	16.5
						11	11	11	11	14	15	15	15
					11	11	11	11	15	15	15	15	13.5
					11	11	11	15	15	15	15	15	12
				11	11	11	11	15	15	15	15	16	10.5
			11	11	11	11	15	15	15	15	15	16	9
		11	11	11	11	14	15	15	15	15	16	16	7.5
		11	11	11	11	14	15	15	15	16	16	16	6
	11	11	11	11	15	15	15	15	15	16	16	17	4.5
11	11	11	11	14	15	15	15	15	16	16	16	17	3
11	11	11	11	14	15	15	15	16	16	16	17	17	1.5
11	11	11	14	15	15	15	15	16	16	17	17	17	0
11	11	11	14	15	15	15	15	16	16	17	17	17	-1.5

SLOPE CASE

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT)
												11	26.5
												11	25.5
											11	11	24
										11	11	11	22.5
									11	11	11	11	21
								11	11	11	11	11	19.5
							11	11	11	11	15	15	18
						11	11	11	11	15	15	15	16.5
					11	11	11	11	15	15	15	15	15
				11	11	11	11	15	15	15	15	15	13.5
			11	11	11	11	15	15	15	15	15	15	12
		11	11	11	11	15	15	15	15	15	15	15	10.5
	11	11	11	11	15	15	15	15	15	15	15	16	9
11	11	11	11	14	15	15	15	15	15	15	16	16	7.5
11	11	11	11	14	15	15	15	15	15	16	16	16	6
11	11	11	11	15	15	15	15	15	15	16	16	16	4.5
11	11	11	11	15	15	15	15	15	15	16	16	16	3
11	11	11	11	15	15	15	15	15	16	16	16	17	1.5
11	11	11	11	15	15	15	15	15	16	16	16	17	0
11	11	11	11	15	15	15	15	15	16	16	17	17	-1.5

SURCHARGE CASE

HILFIKER TEMPORARY WALL
(WELDED WIRE MAT TYPE)

4.5 = W4.5 x W3.5
7.0 = W7.0 x W3.5
9.5 = W9.5 x W4.0

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT)
												4.5	26
											4.5	7.0	24
										4.5	7.0	7.0	22
									4.5	7.0	7.0	7.0	20
								4.5	7.0	7.0	7.0	7.0	18
							4.5	7.0	7.0	7.0	7.0	7.0	16
						4.5	7.0	7.0	7.0	7.0	7.0	9.5	14
					4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	12
				4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	10
			4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	8
		4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	6
	4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	4
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3
4.5	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	7.0	2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.0	1
7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	7.0	7.0	0
7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	-1.5

SLOPE CASE

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT)
												4.5	26
											4.5	7.0	24
										4.5	7.0	7.0	22
									4.5	7.0	7.0	7.0	20
								4.5	7.0	7.0	7.0	7.0	18
							4.5	7.0	7.0	7.0	7.0	7.0	16
						4.5	7.0	7.0	7.0	7.0	7.0	7.0	14
					4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	12
				4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	10
			4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	8
		4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	6
	4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	4
4.5	7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.0	1
7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	7.0	0
7.0	7.0	7.0	7.0	7.0	7.0	9.5	9.5	9.5	9.5	9.5	9.5	9.5	-1.5

SURCHARGE CASE

RETAINED EARTH TEMPORARY WALL
(WELDED WIRE MESH TYPE)

3X1 = 3W8 x W8 x 1.0′
3X2 = 3W8 x W8 x 2.0′

H (FT)

<4	4 TO 6	6 TO 8	8 TO 10	10 TO 12	12 TO 14	14 TO 16	16 TO 18	18 TO 20	20 TO 22	22 TO 24	24 TO 26	26 TO 28	Z (FT-INCHES)
												3X1	27 - 6
												3X1	26 -10
											3X1	3X2	25 - 2
										3X1	3X1	3X2	23 - 6
									3X1	3X1	3X2	3X2	21 -10
								3X1	3X1	3X2	3X2	3X2	20 - 2
							3X1	3X1	3X2	3X2	3X2	3X2	18 - 6
						3X1	3X2	3X2	3X2	3X2	3X2	3X2	16 -10
					3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	15 - 2
				3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	13 - 6
			3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	11 -10
		3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	10 - 2
		3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	8 - 6
	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	6 -10
3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	5 - 2
3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3 - 6
3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	1 -10
3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	0 - 2
3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	-1 - 6

SLOPE AND SURCHARGE CASES

NOTES FOR HILFIKER TEMPORARY WALL

1) CAP MAT AT TOP OF WALL IS NOT INCLUDED IN TABLES.

2) REINFORCEMENT IS NOT REQUIRED AT 1′ LEVEL FOR SLOPE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 24′.

3) REINFORCEMENT IS NOT REQUIRED AT 3′ LEVEL FOR SLOPE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 26′.

4) REINFORCEMENT IS NOT REQUIRED AT 1′ LEVEL FOR SURCHARGE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 26′.

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

GEOTECHNICAL ENGINEERING UNIT

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

STANDARD DRAWING NO. 1801.02

STANDARD TEMPORARY MSE WALL REINFORCEMENT TABLES - ENGLISH UNITS

DATE: 2-20-07

PROJECT REFERENCE NO.	SHEET

GEOTECHNICAL ENGINEER	ENGINEER
SIGNATURE DATE	SIGNATURE DATE

HOW TO USE THIS SHEET:

- FOR ALL WALL OPTIONS, DETERMINE MINIMUM REQUIRED REINFORCEMENT LENGTH (B) FROM TABLE AT RIGHT BASED ON WALL HEIGHT (H) AND SLOPE OR SURCHARGE CASE
- FOR STANDARD TEMPORARY FABRIC WALL, SEE SHEET 3 FOR FABRIC STRENGTH REQUIREMENTS BASED ON WALL HEIGHT (H)
- FOR ALL OTHER WALL OPTIONS, DETERMINE REINFORCEMENT TYPE FROM TABLES BELOW FOR EACH HEIGHT TO REINFORCEMENT (Z) BASED ON WALL HEIGHT (H) AND SLOPE OR SURCHARGE CASE

MINIMUM REQUIRED REINFORCEMENT LENGTH B (M)

(FOR ALL WALL OPTIONS)

WALL HEIGHT H (M)	<2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5
SLOPE CASE	2.4	3.4	4.0	4.3	4.9	5.5	6.1	6.7	7.3	7.6	8.2
SURCHARGE CASE	2.4	2.7	3.4	3.7	4.3	4.6	4.9	5.5	5.8	6.4	6.7

TERRATREL TEMPORARY WALL
(STRIPS PER LEVEL PER PANEL)

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												3	8.4
											3	3	8.2
											3	3	7.7
										3	3	3	7.2
									3	3	3	3	6.7
								4	3	3	3	3	6.1
							4	4	3	3	3	3	5.6
						4	4	4	3	3	3	3	5.1
						4	4	4	3	3	3	3	4.6
					5	4	4	4	3	3	3	3	4.1
				5	5	4	4	4	3	3	3	3	3.6
			5	5	5	4	4	4	3	3	3	3	3.1
		5	5	5	5	4	4	4	3	3	3	3	2.6
	5	5	5	5	5	4	4	4	3	3	3	3	2.1
	5	5	5	5	5	4	4	4	3	3	3	3	1.6
5	5	5	5	5	5	4	4	4	3	3	3	3	1.1
5	5	5	5	5	5	4	4	4	3	3	3	3	0.6
5	5	5	5	5	5	4	4	4	3	3	3	3	0.1
5	5	5	5	5	5	4	4	4	3	3	3	3	-0.2

SLOPE AND SURCHARGE CASES

SIERRASCAPE TEMPORARY WALL
(GEOGRID TYPE)

11 = UX1100MSE
14 = UX1400MSE
15 = UX1500MSE
16 = UX1600MSE
17 = UX1700MSE

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												11	8.1
											11	11	7.8
											11	11	7.3
										11	11	11	6.9
									11	11	11	15	6.4
								11	11	11	14	15	5.9
								11	11	11	14	15	5.5
							11	11	11	14	15	15	5.0
						11	11	11	11	14	15	15	4.6
					11	11	11	11	15	15	15	15	4.1
					11	11	11	15	15	15	15	15	3.7
				11	11	11	11	15	15	15	15	16	3.2
			11	11	11	11	15	15	15	15	15	16	2.7
		11	11	11	11	14	15	15	15	15	16	16	2.3
		11	11	11	11	14	15	15	15	16	16	16	1.8
	11	11	11	11	15	15	15	15	15	16	16	17	1.4
11	11	11	11	14	15	15	15	15	16	16	16	17	0.9
11	11	11	11	14	15	15	15	16	16	16	17	17	0.5
11	11	11	14	15	15	15	15	16	16	17	17	17	0.0
11	11	11	14	15	15	15	16	16	16	17	17	17	-0.5

SLOPE CASE

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												11	8.1
												11	7.8
										11	11	11	7.3
									11	11	11	11	6.9
								11	11	11	11	11	6.4
							11	11	11	11	11	11	5.9
						11	11	11	11	11	11	15	5.5
					11	11	11	11	11	11	15	15	5.0
				11	11	11	11	11	11	15	15	15	4.6
			11	11	11	11	11	11	15	15	15	15	4.1
		11	11	11	11	11	11	15	15	15	15	15	3.7
	11	11	11	11	11	11	15	15	15	15	15	15	3.2
11	11	11	11	11	11	15	15	15	15	15	15	15	2.7
11	11	11	11	11	15	15	15	15	15	15	15	16	2.3
11	11	11	11	15	15	15	15	15	15	15	16	16	1.8
11	11	11	11	15	15	15	15	15	15	16	16	16	1.4
11	11	11	11	15	15	15	15	15	16	16	16	16	0.9
11	11	11	11	15	15	15	15	16	16	16	16	17	0.5
11	11	11	14	15	15	15	15	15	16	16	17	17	0.0
11	11	11	14	15	15	15	15	15	16	16	17	17	-0.5

SURCHARGE CASE

HILFIKER TEMPORARY WALL
(WELDED WIRE MAT TYPE)

29 = MW29 x MW23
45 = MW45 x MW23
61 = MW61 x MW26

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												29	7.9
											29	45	7.3
										29	45	45	6.7
									29	45	45	45	6.1
								29	45	45	45	45	5.5
							29	45	45	45	45	45	4.9
						29	45	45	45	45	45	61	4.3
					29	45	45	45	45	45	61	61	3.7
				29	45	45	45	45	45	61	61	61	3.0
			29	45	45	45	45	45	61	61	61	61	2.4
		29	45	45	45	45	45	61	61	61	61	61	1.8
	29	45	45	45	45	45	61	61	61	61	61	61	1.2
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45	0.9
29	45	45	45	45	45	61	61	61	61	61	61	45	0.6
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45	45	0.3
45	45	45	45	45	61	61	61	61	61	61	45	45	0.0
45	45	45	45	45	61	61	61	61	61	61	61	61	-0.5

SLOPE CASE

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												29	7.9
											29	45	7.3
										29	45	45	6.7
									29	45	45	45	6.1
								29	45	45	45	45	5.5
							29	45	45	45	45	45	4.9
						29	45	45	45	45	45	61	4.3
					29	45	45	45	45	45	61	61	3.7
				29	45	45	45	45	45	61	61	61	3.0
			29	45	45	45	45	45	61	61	61	61	2.4
		29	45	45	45	45	45	61	61	61	61	61	1.8
	29	45	45	45	45	45	61	61	61	61	61	61	1.2
29	45	45	45	45	45	61	61	61	61	61	61	61	0.6
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	45	0.3
45	45	45	45	45	45	61	61	61	61	61	61	45	0.0
45	45	45	45	45	45	61	61	61	61	61	61	61	-0.5

SURCHARGE CASE

RETAINED EARTH TEMPORARY WALL
(WELDED WIRE MESH TYPE)

3X1 = 3MW52 x MW52 x 305mm
3X2 = 3MW52 x MW52 x 610mm

H (M)

< 1.2	1.2 TO 1.8	1.8 TO 2.4	2.4 TO 3.0	3.0 TO 3.7	3.7 TO 4.3	4.3 TO 4.9	4.9 TO 5.5	5.5 TO 6.1	6.1 TO 6.7	6.7 TO 7.3	7.3 TO 7.9	7.9 TO 8.5	Z (M)
												3X1	8.4
												3X1	8.2
											3X1	3X2	7.7
										3X1	3X1	3X2	7.2
									3X1	3X1	3X2	3X2	6.7
								3X1	3X1	3X2	3X2	3X2	6.1
							3X1	3X1	3X2	3X2	3X2	3X2	5.6
							3X1	3X2	3X2	3X2	3X2	3X2	5.1
						3X1	3X2	3X2	3X2	3X2	3X2	3X2	4.6
					3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	4.1
				3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3.6
			3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3.1
		3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	2.6
		3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	2.1
	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	1.6
3X1	3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	1.1
3X1	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	0.6
3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	0.1
3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	3X2	-0.5

SLOPE AND SURCHARGE CASES

NOTES FOR HILFIKER TEMPORARY WALL

1) CAP MAT AT TOP OF WALL IS NOT INCLUDED IN TABLES.
2) REINFORCEMENT IS NOT REQUIRED AT 0.3m LEVEL FOR SLOPE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 7.3m.
3) REINFORCEMENT IS NOT REQUIRED AT 0.9m LEVEL FOR SLOPE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 7.9m.
4) REINFORCEMENT IS NOT REQUIRED AT 0.3m LEVEL FOR SURCHARGE CASE UNTIL WALL HEIGHT (H) IS GREATER THAN 7.9m.

GEOTECHNICAL ENGINEERING UNIT

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STANDARD DRAWING NO. 1801.02

STANDARD TEMPORARY MSE WALL REINFORCEMENT TABLES - METRIC UNITS

SHEET 2 OF 11 DATE: 2-20-07