

TIP LOAD = 23 kN

DESIGN REQUIREMENTS			C A H (m AGL)			
POLE LENGTH L	TIP LOAD (kN)	PLANTING DEPTH P	E	T	M	B
20	23	2.6	17.4	15.2	14.1	13.0
21	23	2.7	18.3	16.1	15.0	13.9
22	23	2.8	19.2	17.0	15.9	14.8
23	23	2.9	20.1	17.9	16.8	15.7
24	23	3.0	21.0	18.8	17.7	16.6

2	DRG SHT UPDATED. REFERENCES REV'D. GENERAL REVISION	SLR	RAB	AB	JUNE 2004	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

<p><b>Eskom</b> Distribution</p> <p>AUTH: A BEKKER</p> <p>DATE: JAN 2004</p> <p>CHKD: RAB</p> <p>DATE: JAN 2004</p> <p>DRAWN: LMP</p> <p>DATE: NOV 1998</p>	<h2>DISTRIBUTION TECHNOLOGY</h2> <h3>RETICULATION/SUB-TRANSMISSION LINES</h3> <h3>88/132KV S/C INTERMEDIATE STRUCTURE</h3> <h3>GENERAL ARRANGEMENT</h3>								
	D-DT 7611		<table border="1"> <tr> <th>SET</th> <th>SHEET</th> <th>REVISION</th> </tr> <tr> <td style="text-align: center; font-size: 2em;">2</td> <td style="text-align: center; font-size: 2em;">1</td> <td style="text-align: center; font-size: 2em;">2</td> </tr> </table>	SET	SHEET	REVISION	2	1	2
	SET	SHEET	REVISION						
	2	1	2						

A  
B  
C  
D  
E


A  
B  
C  
D  
E

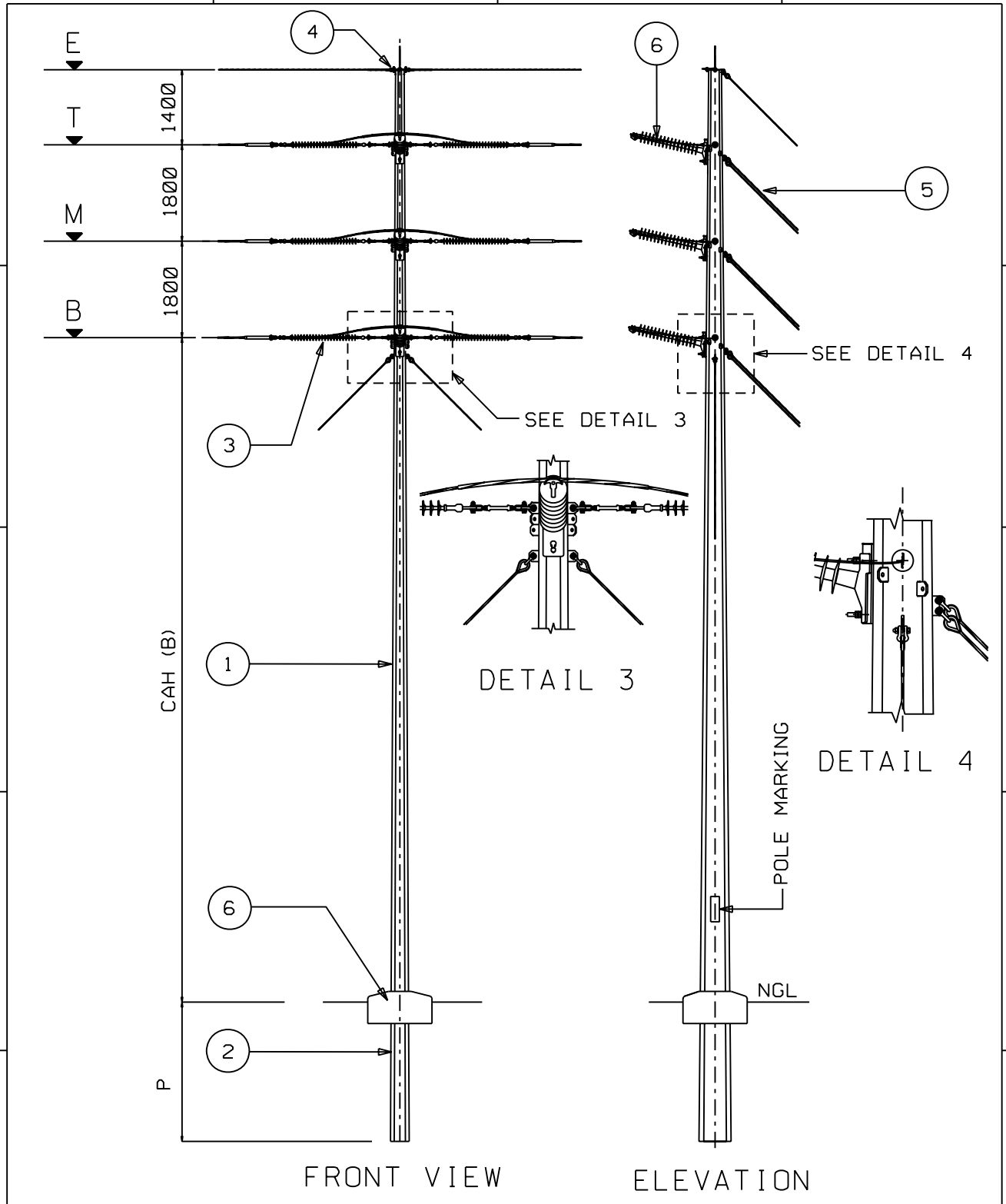
ITEM NO.	DESCRIPTION	D-DT NO.
	STRUCTURE	
	TYPE 259A	D-DT 7611
	MANUFACTURER: STRUCTATECH	
	TYPE 261A	D-DT 7611
	MANUFACTURER: CIS	
1	POLE LENGTH (BODY)	
	20m STEEL	D-DT 7100
	21m STEEL	D-DT 7100
	22m STEEL	D-DT 7100
	23m STEEL	D-DT 7100
	24m STEEL	D-DT 7100
2	FOUNDATION	
	TYPE 1 (300kPa)	D-DT 7850 SHT 2
	TYPE 2 (150kPa)	D-DT 7850 SHT 3
	TYPE 3 (100kPa)	D-DT 7850 SHT 4
	TYPE 4 (50kPa)	D-DT 7850 SHT 5
	ROCK & SOFT ROCK	D-DT 7850 SHT 1
	ALTERNATE FOUNDATIONS	D-DT 7851
3	INSULATOR ASSEMBLY	
	INTERMEDIATE ASSEMBLY	D-DT 7321
4	EARTH WIRE ASSEMBLIES	
	NON INSULATED	D-DT 7326
	INSULATED	D-DT 7327
5	CONCRETE CAP AND	D-DT 7857
	EARTHING DETAILS	

2	DRG SHT UPDATED. REFERENCES REVISED. GENERAL REVISION	SLR	RAB	AB	JUNE 2004	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

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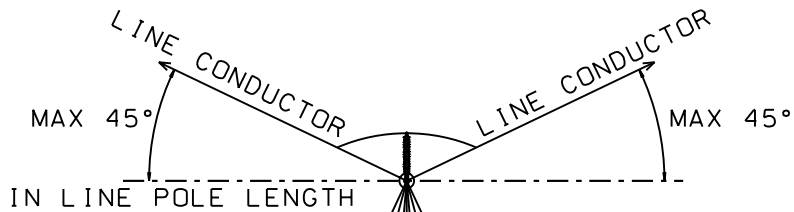
 AUTH: A BEKKER DATE: JAN 2004 CHKD: RAB DATE: JAN 2004 DRAWN: SLR DATE: JAN 2004	<b>DISTRIBUTION TECHNOLOGY</b> RETICULATION/SUB-TRANSMISSION LINES 88/132KV S/C INTERMEDIATE STRUCTURE REFERENCE TABLE		
	<b>D-DT 7611</b>		SET <b>2</b>
			SHEET <b>2</b>
			REVISION <b>2</b>
	<b>D-DT 7611</b>		



3	SHEET 3 ITEM 2 FOUNDATION DRG. NO.S CORRECTED	P. A. T.	S. MASHABA	B. BRANFIELD	19.03.2010	
2	DRG SHT UPDATED. REFERENCES REVISED. GENERAL REVISION	SLR	RAB	AB	MARCH 2004	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

<b>Eskom</b> Distribution AUTH: A BEKKER DATE: JAN 2004 CHKD: RAB DATE: JAN 2004 DRAWN: LMP DATE: NOV 1998	DISTRIBUTION TECHNOLOGY RETICULATION/SUB-TRANSMISSION LINES STAYED ANGLE STRAIN STRUCTURE GENERAL ARRANGEMENT (0-90°)		
	D-DT 7615		
	SET	SHEET	REVISION
	3	1	3

A



A

B

B

- 8 STAYS
- E) EARTH WIRE : 2 OFF
- T) TOP PHASE : 2 OFF
- M) MIDDLE PHASE : 2 OFF
- B) BOTTOM PHASE : 2 OFF

BI-SECTOR

TOP VIEW

C

STAY ARRANGEMENT FOR STAYED STRUCTURES

D

D

DESIGN REQUIREMENTS			SCHEDULE FOR CONDUCTOR ATTACHMENT HEIGHTS			
POLE LENGTH L	TIP LOAD (kN)	PLANTING DEPTH P	C A H (m AGL)			
			E	T	M	B
18	23	2,0	16,0	14,6	12,8	11,0
19	23	2,0	17,0	15,6	13,8	12,0
20	23	2,0	18,0	16,6	14,8	13,0
21	23	2,0	19,0	17,6	15,8	14,0
22	23	2,0	20,0	18,6	16,8	15,0
23	23	2,0	21,0	19,6	17,8	16,0
24	23	2,0	22,0	20,6	18,8	17,0

E

E

3	SHEET 3 ITEM 2 FOUNDATION DRG. NO.S CORRECTED	P.A.T.	S.MASHABA	B.BRANFIELD	19.03.2010	
2	DRG SHT UPDATED. REFERENCES REVISED. GENERAL REVISION	SLR	RAB	AB	MARCH 2004	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

F

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<p>AUTH: A BEKKER</p> <p>DATE: JAN 2004</p> <p>CHKD: RAB</p> <p>DATE: JAN 2004</p> <p>DRAWN: LMP</p> <p>DATE: NOV 1998</p>	DISTRIBUTION TECHNOLOGY RETICULATION/SUB-TRANSMISSION LINES STAYED ANGLE STRAIN STRUCTURE DESIGN CRITERIA & STAYS (0-90°)		
	D-DT 7615		SET
	3		SHEET
	2		REVISION
	3		

1

2

3

4

A

A

ITEM NØ.	DESCRIPTION	D-DT NØ.
	STRUCTURE	
	TYPE 259D	D-DT 7615
	MANUFACTURER: STRUCTATECH	
	TYPE 261D	D-DT 7615
	MANUFACTURER: CIS	
1	POLE LENGTH (BODY)	
	18m STEEL	D-DT 7104
	19m STEEL	D-DT 7104
	20m STEEL	D-DT 7104
	21m STEEL	D-DT 7104
	22m STEEL	D-DT 7104
	23m STEEL	D-DT 7104
	24m STEEL	D-DT 7104
2	FOUNDATION	
	TYPE 1 (300kPa)	D-DT 7851 SHT 2
	TYPE 2 (150kPa)	D-DT 7851 SHT 3
	TYPE 3 (100kPa)	D-DT 7851 SHT 4
	TYPE 4 (50kPa)	D-DT 7851 SHT 5
	ROCK & SOFT ROCK	D-DT 7851 SHT 1
3	INSULATOR ASSEMBLY	
	STRAIN ASSEMBLY	D-DT 7311
4	EARTH WIRE ASSEMBLIES	
	STRAIN NON INSULATED	D-DT 7323
	STRAIN INSULATED	D-DT 7324
5	STAY ASSEMBLY/LOCATION	D-DT 7325/7346
6	JUMPER ASSEMBLY	D-DT 7321
7	CONCRETE CAP AND EARTHING	D-DT 7857

B

B

C

C

D

D


E

E

3	SHEET 3 ITEM 2 FOUNDATION DRG. NO.S CORRECTED	P.A.T.	S.MASHABA	B.BRANFIELD	19.03.2010	
2	DRG SHT UPDATED. REFERENCES REVISED. GENERAL REVISION	SLR	RAB	AB	MARCH 2004	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

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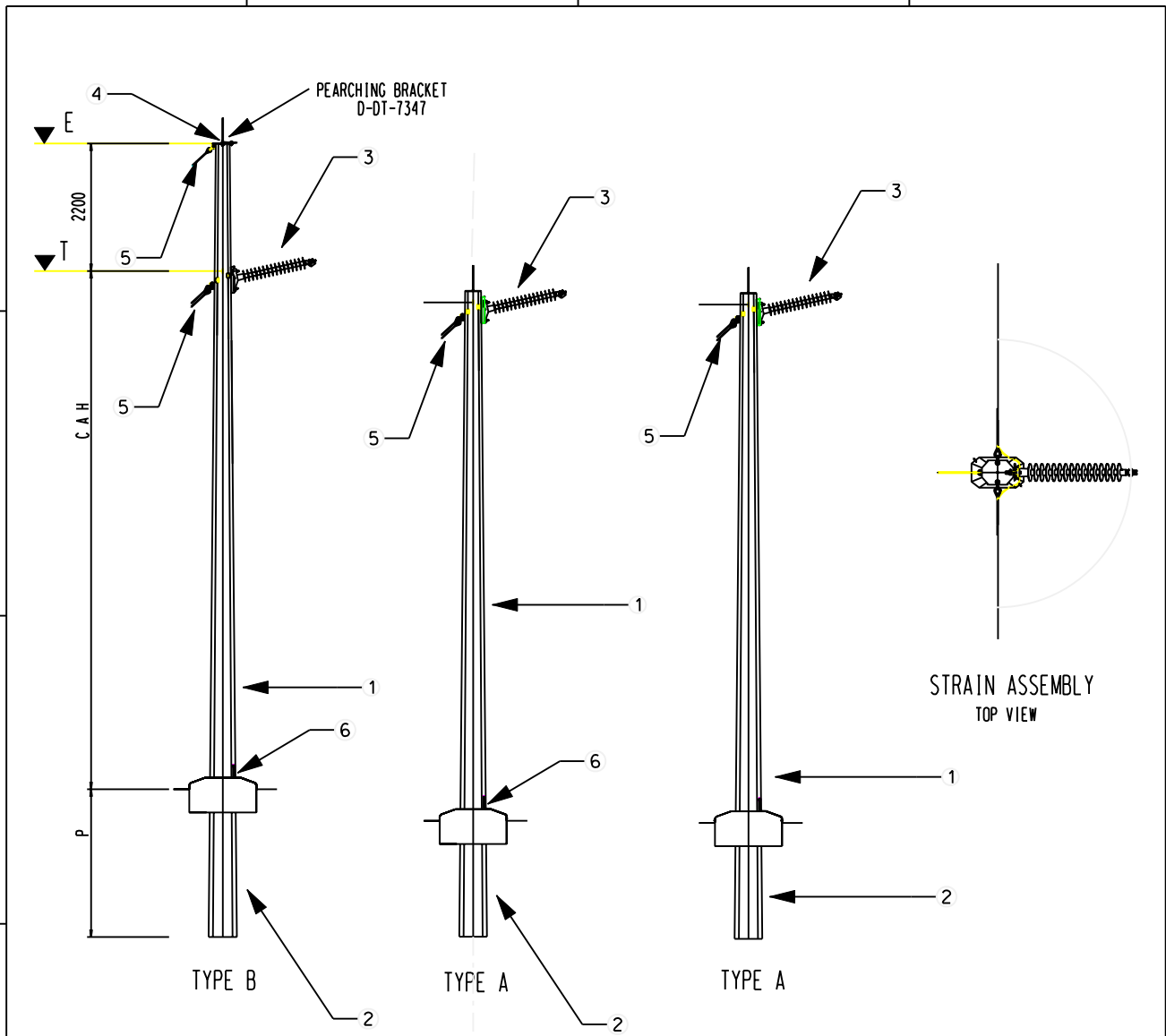
	DISTRIBUTION TECHNOLOGY				
	RETICULATION/SUB-TRANSMISSION LINES				
	STAYED ANGLE STRAIN STRUCTURE				
	REFERENCE TABLE (0-90°)				
AUTH: A BEKKER	D-DT 7615		SET	SHEET	REVISION
DATE: JAN 2004			3	3	3
CHKD: RAB					
DATE: JAN 2004					
DRAWN: LMP					
DATE: NOV 1998					

1

2

3

4 A4L



NOTE:  
 1 THESE 3 POLES CAN BE USED AS AN UNSTAYED INTERMEDIATE STRUCTURE (0°) OR A STAYED INTERMEDIATE ANGLE STRUCTURE (1-20°) OR A STAYED ANGLE STRAIN STRUCTURE (0-90°).

POLE AND CONDUCTOR SCHEDULE (m)				
C A H		PLANTING DEPTH	POLE LENGTH	
T	E	P	TYPE A	TYPE B
6,2	8,4	1,6	8	10
7,1	9,3	1,7	9	11
8,0	10,2	1,8	10	12
8,9	11,1	1,9	11	13
9,8	12,0	2,0	12	14
10,7	12,9	2,1	13	15
11,6	13,8	2,2	14	16
12,5	14,7	2,3	15	17
13,4	15,6	2,4	16	18
14,3	16,5	2,5	17	19
15,2	17,4	2,6	18	20
16,1	18,3	2,7	19	21

2	DRG SHT UPDATED. REFERENCES REVISED. GENERAL REVISION	PBM	SLR	A BEKKER	SEP 2005	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

<p>AUTH: A BEKKER          DATE: JAN 2004          CHKD: RAB          DATE: JAN 2004          DRAWN: LMP          DATE: 22/11/1998</p>	<h1>DISTRIBUTION TECHNOLOGY</h1> <h2>RETICULATION/ SUB-TRANSMISSION LINES</h2> <h3>88/132kV 3-POLE STRAIN STRUCTURE (0-90°)</h3> <h3>GENERAL ARRANGEMENT</h3>		
	D-DT 7618		
	SET	SHEET	REVISION
	2	1	2
	4 A4L		


A  
B  
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D  
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A  
B  
C  
D  
E

ITEM NØ.	DESCRIPTION	D-DT NØ.
	STRUCTURE	
	TYPE 259S-MANUFACTURE DORBYL	7618
	TYPE 261S- MANUFACTURE CIS	7618
1	POLE LENGTH (BODY)	
	7.1M STEEL	7107
	8.0M STEEL	7107
	8.9M STEEL	7107
	9.8M STEEL	7107
	10.7M STEEL	7107
	11.6M STEEL	7107
	12.5M STEEL	7107
2	FOUNDATION	
	TYPE 1 (300kPa)	7337
	TYPE 2 (150kPa)	7338
	TYPE 3 (100kPa)	7339
	TYPE 4 (50kPa)	7340
	ROCK&DECOMPOSED ROCK	7341
3	INSULATOR ASSEMBLY	
	STRAIN ASSEMBLY	7311
	JUMPER ASSEMBLY	7321
4	EARTH WIRE ASSEMBLIES	
	STRAIN INSULATED	7324
	STRAIN NON-INSULATED	7323
5	STAY ASSEMBLY	7325
6	CONCRETE CAP & EARTHING DETAILS	7345

2	DRG SHT UPDATED, REFERENCES REVISED, GENERAL REVISION	PBM	SLR	A BEKKER	SEP 2005	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

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 <b>Eskom Distribution</b> AUTH: AB DATE: AUG 2004 CHKD: RAB DATE: AUG 2004 DRAWN: SLR DATE: AUG 2004	DISTRIBUTION TECHNOLOGY RETICULATION/ SUB-TRANSMISSION LINES 88/132kV 3-POLE STRAIN STRUCTURE (0-90°) REFERENCE TABLE		
	D-DT 7618		SET 2
	D-DT 7618		SHEET 2
	D-DT 7618		REVISION 2
	D-DT 7618		SET 2
	D-DT 7618		SHEET 2

F