

NOTE :

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc. CABLE MAY BE LAID DIRECTLY WITHOUT BEDDING. BACKFILL TO BE INCREASED ACCORDINGLY.
2. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
3. BLANKET SOIL TO BE COMPACTED WITH HAND COMPACTING TOOLS ONLY.
4. WHERE THE CABLE TRENCH RUNS PARALLEL TO AND UNDER THE ROAD SURFACE, IT SHALL BE POSITIONED AT LEAST 200mm FROM THE EDGE OF THE KERBING / ROAD TARRED SURFACE. ONLY IN THIS CASE SHALL CONCRETE SLABS BE INSTALLED ABOVE THE CABLE. TAR CUTTING MACHINE TO BE USED. BACKFILL TO RELEVANT ROAD AGENCY SPECIFICATION.
5. THE DUCT FOR THE FIBRE OPTIC CABLE SHALL BE INSTALLED ON THE SIDE OF THE TRENCH CLOSEST TO THE PROPERTY BOUNDARY. SPACING TO BE DETERMINED BY PROJECT ENGINEER.

DEPTH TO BLANKET LAYER OR CONCRETE SLABS (IF APPL.) BELOW WARNING TAPE	
APPLICATION	Y (mm)
GENERAL	300
RAIL/ROAD CROSSING	900
UNDER ROAD SURFACE (PARALLEL TO KERBING)	600

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



AUTH: P. CROWDY

DATE: 21.12.1999

CHKD: G. WHYTE

DATE: 10.12.1999

DRAWN: P.A.V.

DATE: 30.07.1999

MV POWER CABLE TRENCH  
DETAILS  
(1 OFF - 3 CORE)

D-DT-0854

SET

8

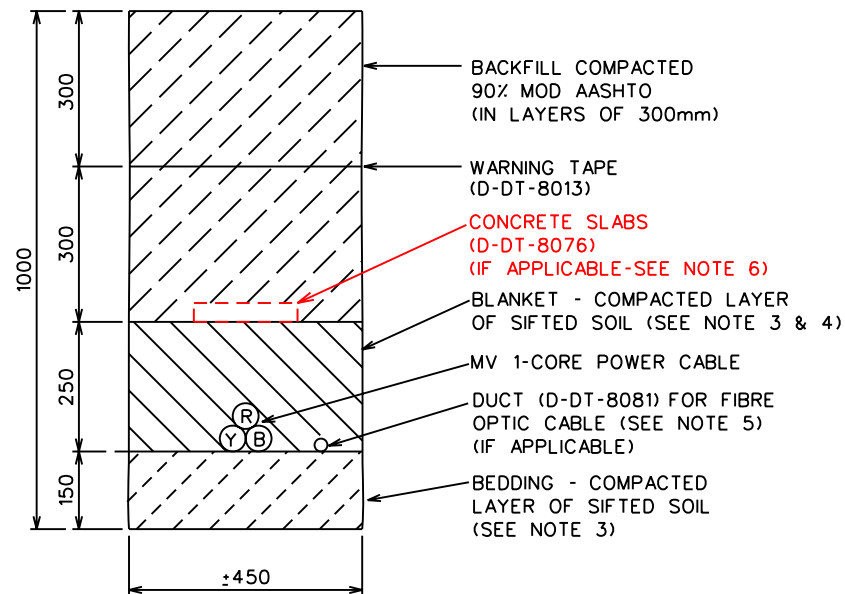
SHEET

1

REVISION

8

A3L



**NOTE :**

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc. CABLE MAY BE LAID DIRECTLY WITHOUT BEDDING. BACKFILL TO BE INCREASED ACCORDINGLY.
2. SINGLE CORE TREFOIL GROUP TO BE BOUND AT LEAST EVERY 3m WITH NON-METALLIC TIE BEFORE BACKFILLING.
3. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
4. BLANKET SOIL TO BE COMPACTED WITH HAND COMPACTING TOOLS ONLY.
5. THE DUCT FOR THE FIBRE OPTIC CABLE SHALL BE INSTALLED ON THE SIDE OF THE TRENCH CLOSEST TO THE PROPERTY BOUNDARY. SPACING TO BE DETERMINED BY PROJECT ENGINEER.
6. FOR UNARMoured CABLES, IF SPECIFIED BY THE PROJECT ENGINEER, CONCRETE SLABS MAY BE INSTALLED ABOVE THE CABLES WHERE THERE IS AN INCREASED RISK OF DAMAGE.

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



AUTH: P. CROWDY

DATE: 21.12.1999

CHKD: G. WHYTE

DATE: 10.12.1999

DRAWN: P.A.V.

DATE: 30.07.1999

**MV CABLE TRENCH  
DETAILS  
(1 OFF - 3 x 1 CORE)**

**D-DT-0854**

SET

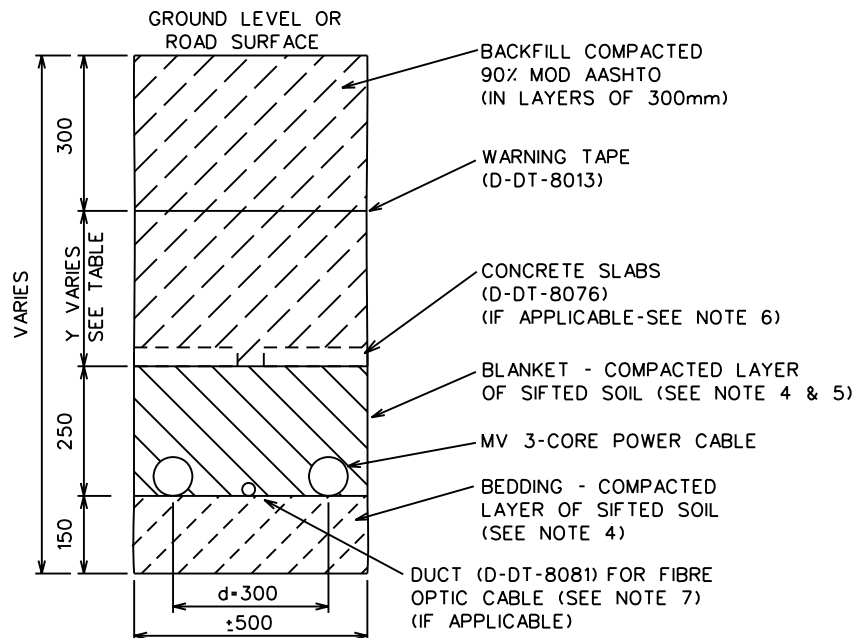
SHEET

REVISION

8

2

8



**NOTE :**

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc. CABLE MAY BE LAID DIRECTLY WITHOUT BEDDING. BACKFILL TO BE INCREASED ACCORDINGLY.
2. A MINIMUM SPACING OF 300mm BETWEEN CABLES TO BE MAINTAINED WHERE POSSIBLE. DE-RATING FACTOR TO BE APPLIED.
3. WHEN TRENCHING IN ROCKY GROUND A MINIMUM OF 150mm TO BE KEPT BETWEEN CABLE AND TRENCH WALL.
4. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
5. BLANKET SOIL TO BE COMPACTED WITH HAND COMPACTING TOOLS ONLY.
6. WHERE THE CABLE TRENCH RUNS PARALLEL TO AND UNDER THE ROAD SURFACE, IT SHALL BE POSITIONED AT LEAST 200mm FROM THE EDGE OF THE KERBING / ROAD TARRED SURFACE. ONLY IN THIS CASE SHALL CONCRETE SLABS BE INSTALLED ABOVE THE CABLE. TAR CUTTING MACHINE TO BE USED. BACKFILL TO RELEVANT ROAD AGENCY SPECIFICATION.
7. THE DUCT FOR THE FIBRE OPTIC CABLE SHALL BE INSTALLED ON THE SIDE OF THE TRENCH CLOSEST TO THE PROPERTY BOUNDARY. SPACING TO BE DETERMINED BY PROJECT ENGINEER.

DEPTH TO BLANKET LAYER OR CONCRETE SLABS (IF APPL.) BELOW WARNING TAPE			
APPLICATION		Y (mm)	
GENERAL		300	
RAIL/ROAD CROSSING		900	
UNDER ROAD SURFACE (PARALLEL TO KERBING)		600	
DE-RATING FACTOR			
No OF CABLES	d = SPACING (mm)		
	TOUCHING	150	300
2	0.80	0.85	0.89
3	0.69	0.75	0.80
4	0.63	0.70	0.77

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



AUTH: P. CROWDY

DATE: 21.12.1999

CHKD: G. WHYTE

DATE: 10.12.1999

DRAWN: P.A.V.

DATE: 30.07.1999

**MV POWER CABLE TRENCH  
DETAILS  
(2 OR MORE OFF - 3 CORE)**

**D-DT-0854**

SET

SHEET

REVISION

8

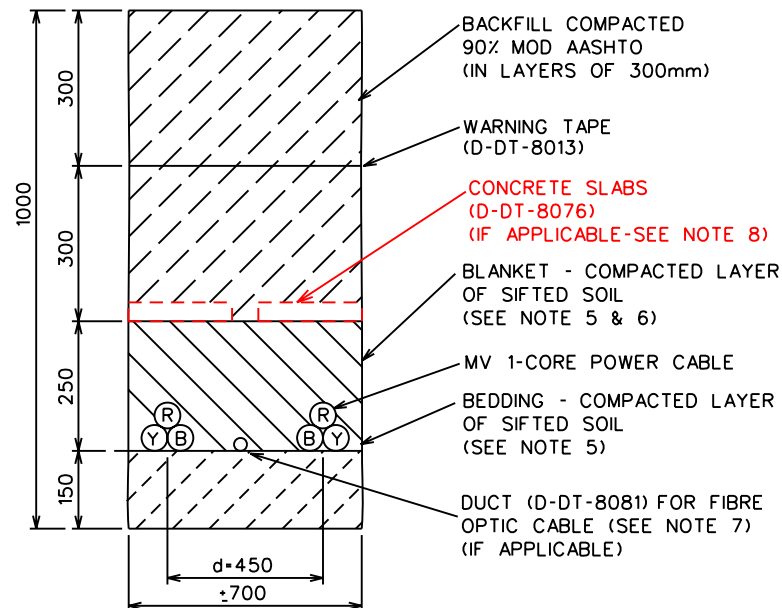
3

8

A3L

1 2 3 4 5 6 7 8

No OF CABLES	DE-RATING FACTOR			
	d = SPACING (mm)			
	TOUCHING	150	300	450
2	0.78	0.83	0.88	0.89
3	0.66	0.73	0.79	0.82
4	0.59	0.69	0.76	0.78



NOTE :

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc. CABLE MAY BE LAID DIRECTLY WITHOUT BEDDING. BACKFILL TO BE INCREASED ACCORDINGLY.
2. SINGLE CORE TREFOIL GROUP TO BE BOUND AT LEAST EVERY 3m WITH NON-METALLIC TIE BEFORE BACKFILLING.
3. A MINIMUM SPACING OF 450mm BETWEEN CABLES TO BE MAINTAINED WHERE POSSIBLE. DE-RATING FACTOR TO BE APPLIED.
4. WHEN TRENCHING IN ROCKY GROUND A MINIMUM OF 150mm TO BE KEPT BETWEEN CABLE AND TRENCH WALL.
5. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
6. BLANKET SOIL TO BE COMPACTED WITH HAND COMPACTING TOOLS ONLY.
7. THE DUCT FOR THE FIBRE OPTIC CABLE SHALL BE INSTALLED ON THE SIDE OF THE TRENCH CLOSEST TO THE PROPERTY BOUNDARY. SPACING TO BE DETERMINED BY PROJECT ENGINEER.
8. FOR UNARMoured CABLES, IF SPECIFIED BY THE PROJECT ENGINEER, CONCRETE SLABS MAY BE INSTALLED ABOVE THE CABLES WHERE THERE IS AN INCREASED RISK OF DAMAGE.

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SH.5 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



AUTH: P. CROWDY

DATE: 21.12.1999

CHKD: G. WHYTE

DATE: 10.12.1999

DRAWN: P.A.V.

DATE: 30.07.1999

MV CABLE TRENCH  
DETAILS  
(2 OR MORE OFF - 3 x 1 CORE)

D-DT-0854

SET

SHEET

REVISION

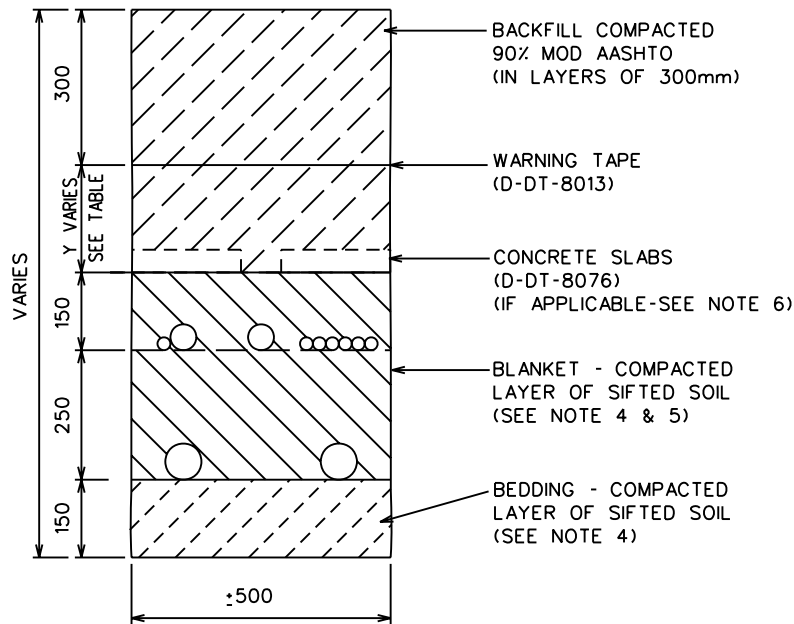
8

4

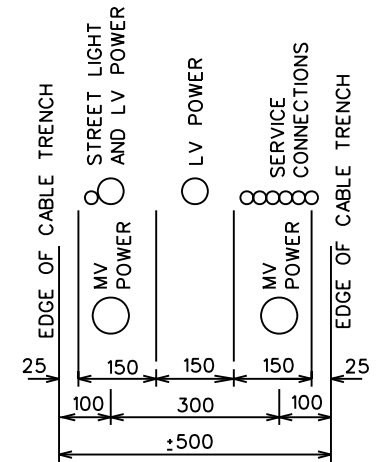
8

1 2 3 4 5 6 7 8 A3L

DEPTH TO BLANKET LAYER OR CONCRETE SLABS (IF APPL.) BELOW WARNING TAPE	
APPLICATION	Y (mm)
GENERAL	150
RAIL/ROAD CROSSING	750
UNDER ROAD SURFACE (PARALLEL TO KERBING)	450



CABLE TRENCH DETAILS



POSITION OF ELECTRICAL CABLE

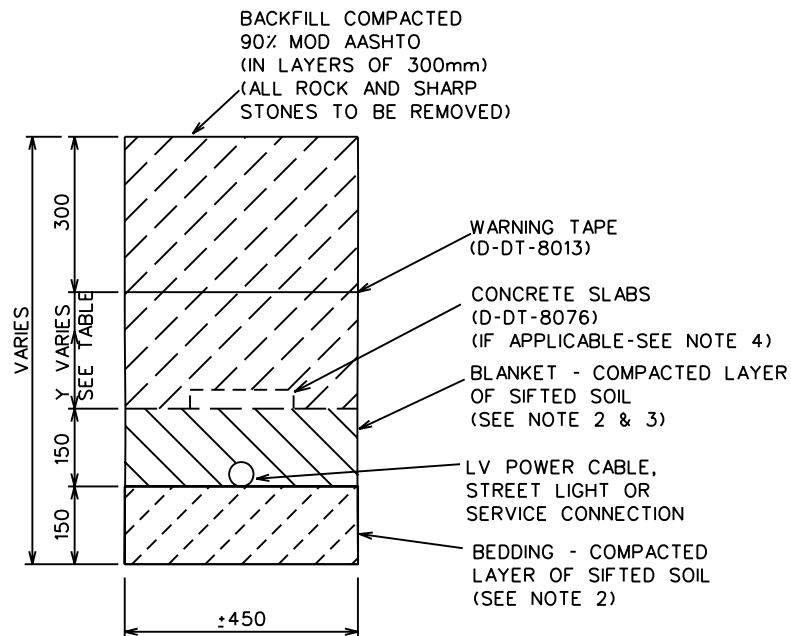
NOTE :

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc. CABLE MAY BE LAID DIRECTLY WITHOUT BEDDING. BACKFILL TO BE INCREASED ACCORDINGLY.
2. A MINIMUM SPACING OF 300mm BETWEEN MV CABLES TO BE MAINTAINED WHERE POSSIBLE.
3. WHEN TRENCHING IN ROCKY GROUND A MINIMUM OF 150mm TO BE KEPT BETWEEN CABLE AND TRENCH WALL.
4. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
5. BLANKET SOIL TO BE COMPACTED WITH HAND COMPACTING TOOLS ONLY.
6. WHERE THE CABLE TRENCH RUNS PARALLEL TO AND UNDER THE ROAD SURFACE, IT SHALL BE POSITIONED AT LEAST 200mm FROM THE EDGE OF THE KERBING / ROAD TARRED SURFACE. ONLY IN THIS CASE SHALL CONCRETE SLABS BE INSTALLED ABOVE THE CABLE. TAR CUTTING MACHINE TO BE USED. BACKFILL TO RELEVANT ROAD AGENCY SPECIFICATION.

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.

		MV AND LV POWER CABLE WITH ELECTRICAL SERVICES DETAIL				
AUTH:	P. CROWDY					
DATE:	21.12.1999					
CHKD:	G. WHYTE					
DATE:	10.12.1999					
DRAWN:	P.A.V.	D-DT-0854		SET	SHEET	REVISION
DATE:	30.07.1999			8	5	8

DEPTH TO BLANKET LAYER OR CONCRETE SLABS (IF APPL.) BELOW WARNING TAPE	
APPLICATION	Y (mm)
GENERAL	150
RAIL/ROAD CROSSING	750
UNDER ROAD SURFACE (PARALLEL TO KERBING)	450



**NOTE :**

1. WHEN TRENCHING IN SOIL FREE OF STONES, ROCKS etc.  
CABLE MAY BE LAID DIRECTLY INTO 600mm DEEP TRENCH.
2. A SIEVE OF 12mm MESH SIZE MAY BE USED TO SIFT SOIL.
3. BLANKET SOIL TO BE COMPACTED WITH HAND  
COMPACTING TOOLS ONLY.
4. WHERE THE CABLE TRENCH RUNS PARALLEL TO AND UNDER THE  
ROAD SURFACE, IT SHALL BE POSITIONED AT LEAST 200mm FROM THE  
EDGE OF THE KERBING / ROAD TARRED SURFACE.  
ONLY IN THIS CASE SHALL CONCRETE SLABS BE INSTALLED ABOVE THE CABLE.  
TAR CUTTING MACHINE TO BE USED. BACKFILL TO RELEVANT  
ROAD AGENCY SPECIFICATION.

8	CONCRETE SLABS ADDED ON SH.5 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



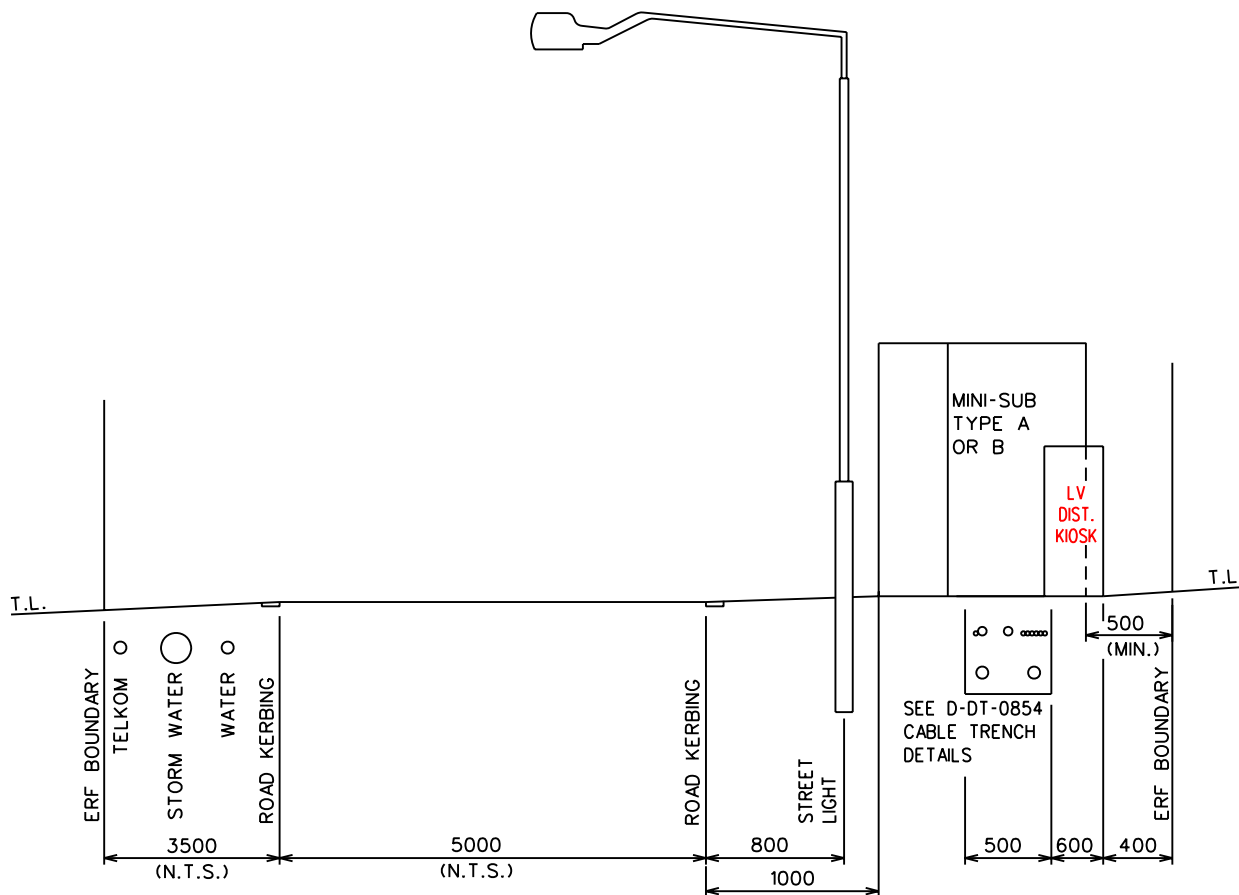
AUTH: P. CROWDY  
DATE: 21.12.1999  
CHKD: G. WHYTE  
DATE: 10.12.1999  
DRAWN: P.A.V.  
DATE: 30.07.1999

LV POWER CABLE,  
STREET LIGHT OR SERVICE CONNECTION  
CABLE TRENCH DETAILS

D-DT-0854

SET	SHEET	REVISION
8	6	8

	1	2	3	4				
	MV OR LV CABLE RUNNING PARALLEL TO OTHER SERVICES							
	CLEARANCE	PROTECTION REQUIRED						
A	MORE THAN 600mm		NO FURTHER PROTECTION REQUIRED		A			
	300-600mm		CONCRETE COVER SLABS (SEE D-DT-8076) REQUIRED ABOVE CABLE					
B	LESS THAN 300mm		CONCRETE SEPERATOR AND COVER SLABS (SEE D-DT-8076) REQUIRED		B			
	MV OR LV POWER CABLE CROSSING OTHER SERVICES							
	CROSSING	PROTECTION AND CLEARANCE REQUIRED						
C	ABOVE OTHER SERVICE		CONCRETE COVER SLABS (SEE D-DT-8076)					
		OR						
	BELOW OTHER SERVICE		CONCRETE COVER SLABS (SEE D-DT-8076)					
D	NOTE : 1. CABLE LAID IN PVC PIPE (D-DT-8018) FOR A DISTANCE OF AT LEAST 1m EITHER SIDE OF CROSSING. 2. ONLY APPLICABLE TO MV AND LV POWER CABLE.				D			
E	8	CONCRETE SLABS ADDED ON SH.S 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7		P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
	7	NOTES AMMMENDED ON SHTS 1,3,5 & 6.		P.A.T.	R.KELLY	R.KELLY	10.07.2009	
	6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED		P.A.T.	R.KELLY	R.KELLY	29.01.2009	
	REV	REVISION DESCRIPTION		BY	CHKD	AUTH	DATE	PROJECT NO.
F			INSTALLATION OF MV OR LV CABLES IN PROXIMITY TO OTHER SERVICES					
	AUTH:	P. CROWDY						
	DATE:	21/12/1999						
	CHKD:	G. WHYTE						
	DATE:	10/12/1999	D-DT-0854			SET	SHEET	REVISION
	DRAWN:	P.A.V.				8	7	8
	DATE:	30/07/1999						
	1	2	3	7 A4L				



NOTE :

1. MV CABLE NEAREST TO KERBSIDE FOR EASE OF LOCATION.
2. TELKOM AND WATER SERVICES TO BE KEPT ON OPPOSITE SIDE OF ROAD TO ELECTRICAL SERVICES WHERE PRACTICALLY POSSIBLE.

8	CONCRETE SLABS ADDED ON SH.S 2 & 4 AND CABLE POSITION CORRECTED FOR BELOW OTHER SERVICES ON SH.7	P.A.T.	B.MWAREHWA	R.KELLY	16.08.2010	
7	NOTES AMMENDED ON SHTS 1,3,5 & 6.	P.A.T.	R.KELLY	R.KELLY	10.07.2009	
6	CABLE SIZE SHOWN ON DETAILS & SH 5 POSITION OF ELECTRICAL CABLE CORRECTED	P.A.T.	R.KELLY	R.KELLY	29.01.2009	
REV	REVISION DESCRIPTION	BY	CHKD	AUTH	DATE	PROJECT NO.



AUTH: P. CROWDY

DATE: 21.12.1999

CHKD: G. WHYTE

DATE: 10.12.1999

DRAWN: P.A.V.

DATE: 30.07.1999

ROAD RESERVE -  
CABLE AND SERVICE DETAILS

D-DT-0854

SET SHEET REVISION

8

8

8

A3L