

## **Annex 2: Control point data form**

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9901 ..... 2. PHOTO NO. ....  
 3. TYPE : GPS/EM 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 166824.7529 ..... m  
 E. 104831.0760 ..... m  
 ELEV. 3.93 (ORTH0) ..... m  
3.591 (M.S.L.)

**LOCATION SKETCH**

**PHOTOGRAPH**

Method of Survey : GPS

Date of Survey : JUNE 1999

5/20/99

GAMINI B DODANWEJA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIHAL AVENUE,  
 DEHIWALA.

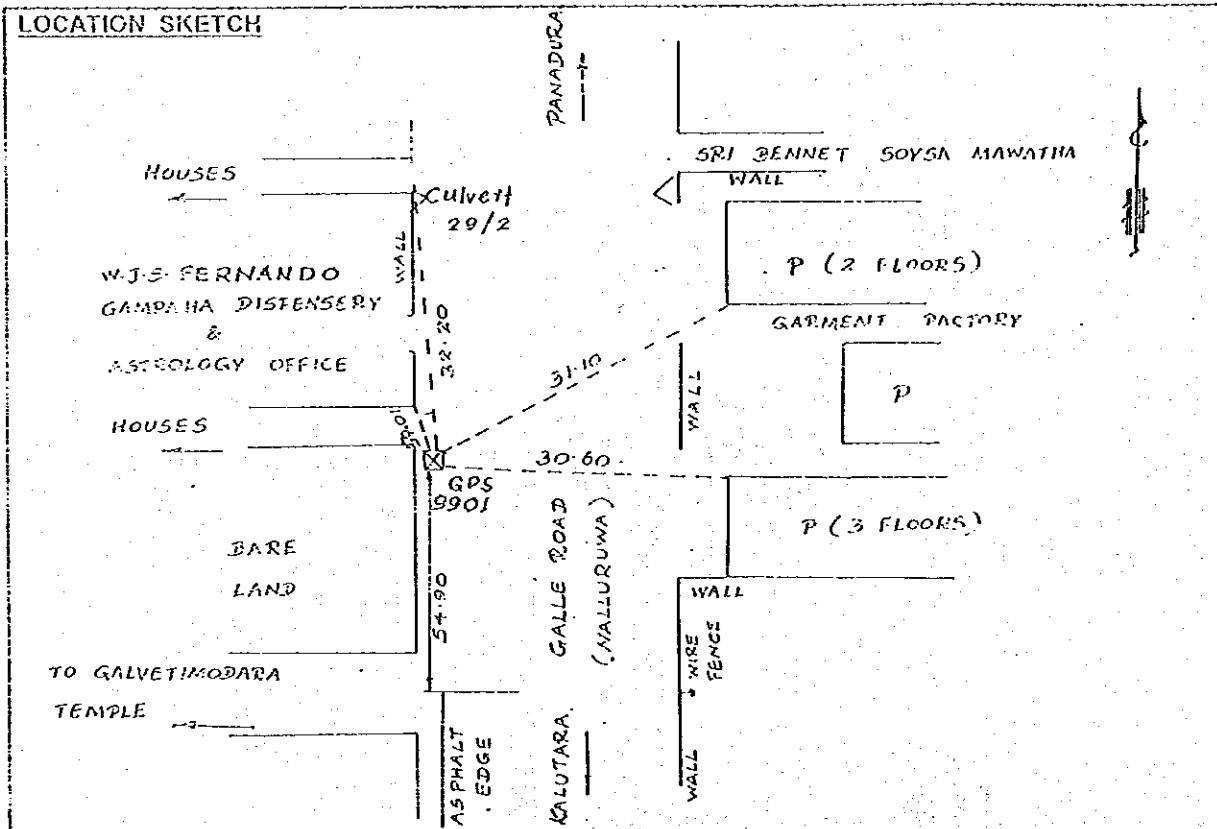
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

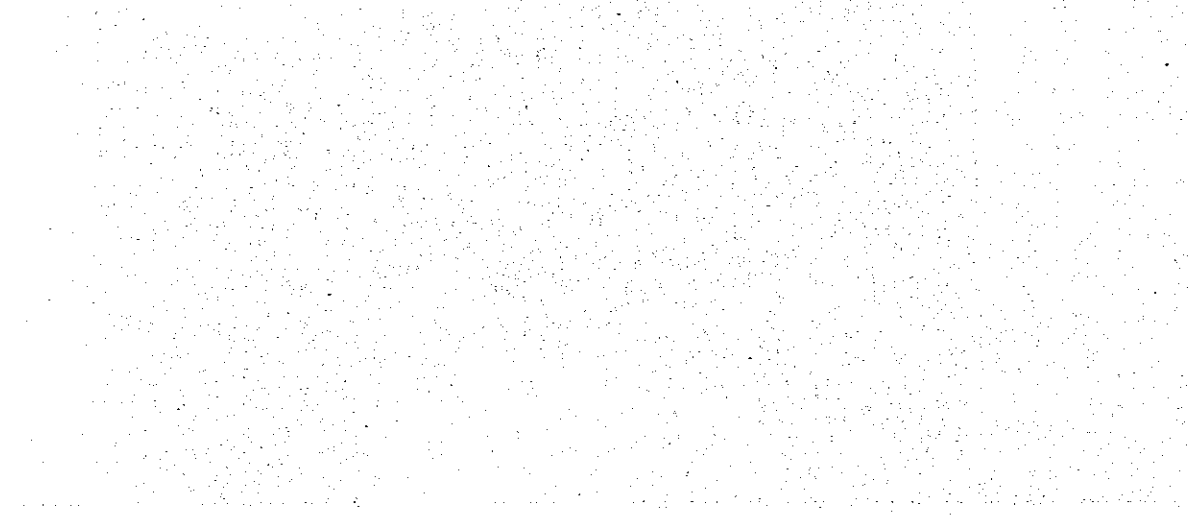
1. POINT NO. 9901.....  
 2. PHOTO NO.....  
 3. TYPE : GPS/RM  
 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. ...166624.7529..... m  
 E. ...104531.0760..... m  
 ELEV. ...3.93 (ORTHO)..... m  
 3.591 (M.S.L.)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: GPS

Date of Survey : JUNE 1999

GAMINI R. DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SERIAL AVENUE,  
 DEERWATA

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

- 1. POINT NO. 9902.....
- 2. PHOTO NO.....
- 3. TYPE : GPS/RTK
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 167182.6697..... m  
 E. 111168.8896..... m  
 ELEV. 6.90 (ORTHO)..... m  
 7.270 (M.S.L)

**LOCATION SKETCH**

**PHOTOGRAPH**

Method of Survey : GPS

Date of Survey : JUNE 1999

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIHAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO... 9902A...

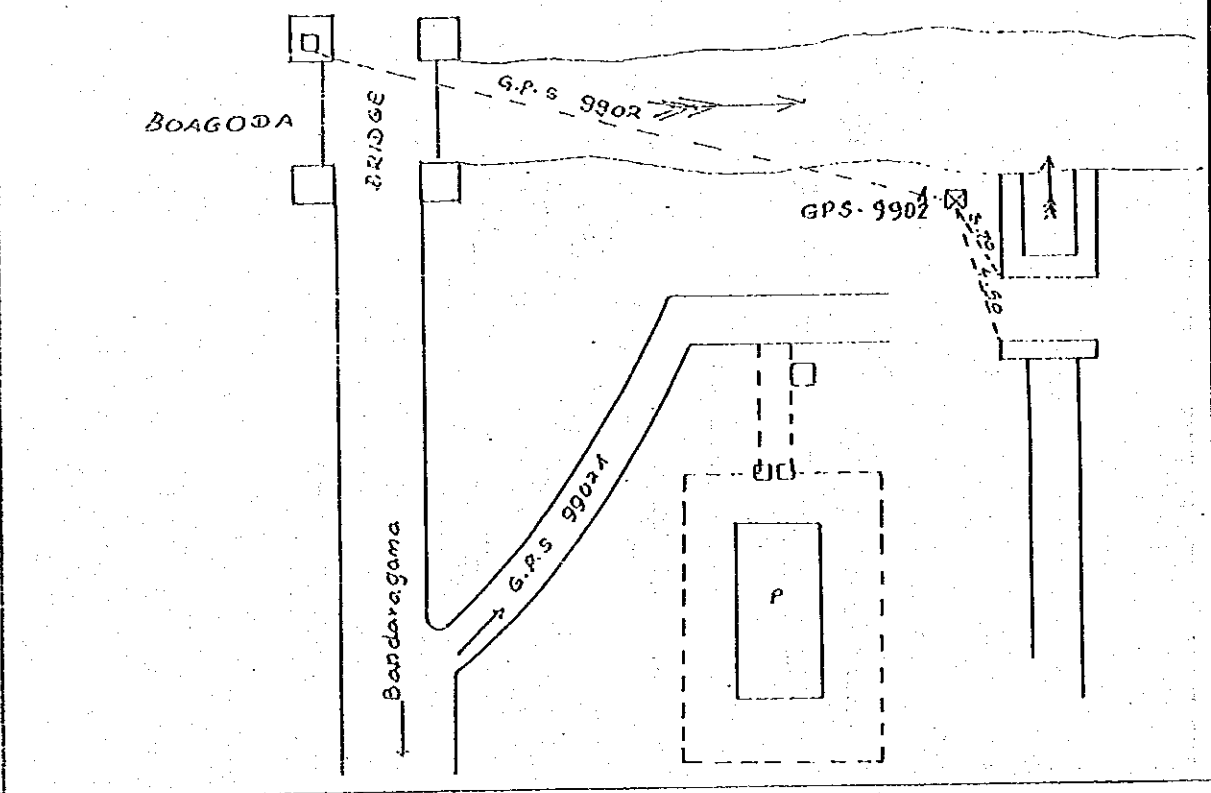
2. PHOTO NO.....

3. TYPE : GPS/EM

4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. ....167317.1626..... m  
 E. ....111077.9877..... m  
 ELEV. ....0.49 (ORTHO)..... m  
 0.864 (H.S.L.)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: GPS

Date of Survey : JUNE 1999

Scale

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMAL AVENUE,  
 DEERVA.

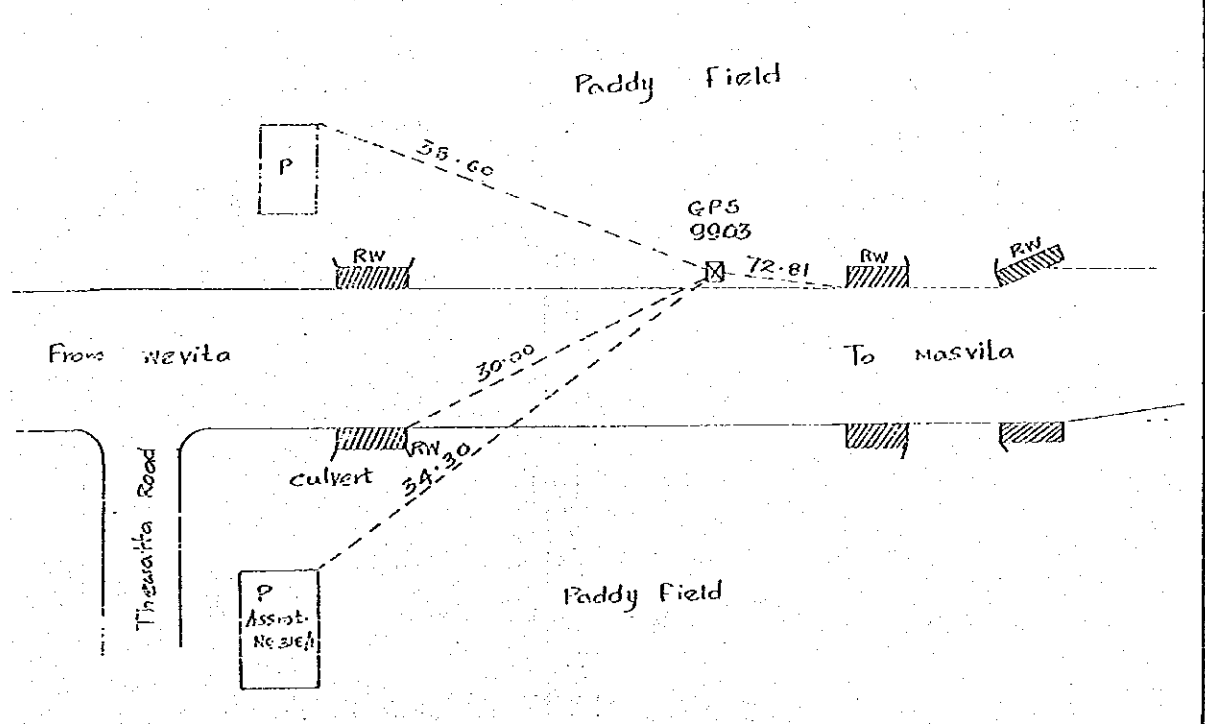
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9903  
 2. PHOTO NO.  
 3. TYPE: GPS  
 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 167009.5956 m  
 E. 112886.9115 m  
 ELEV. 1.03 (ORTHO) m  
 1.489 (M.S.L.)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: GPS

Date of Survey : JUNE 1999

9903

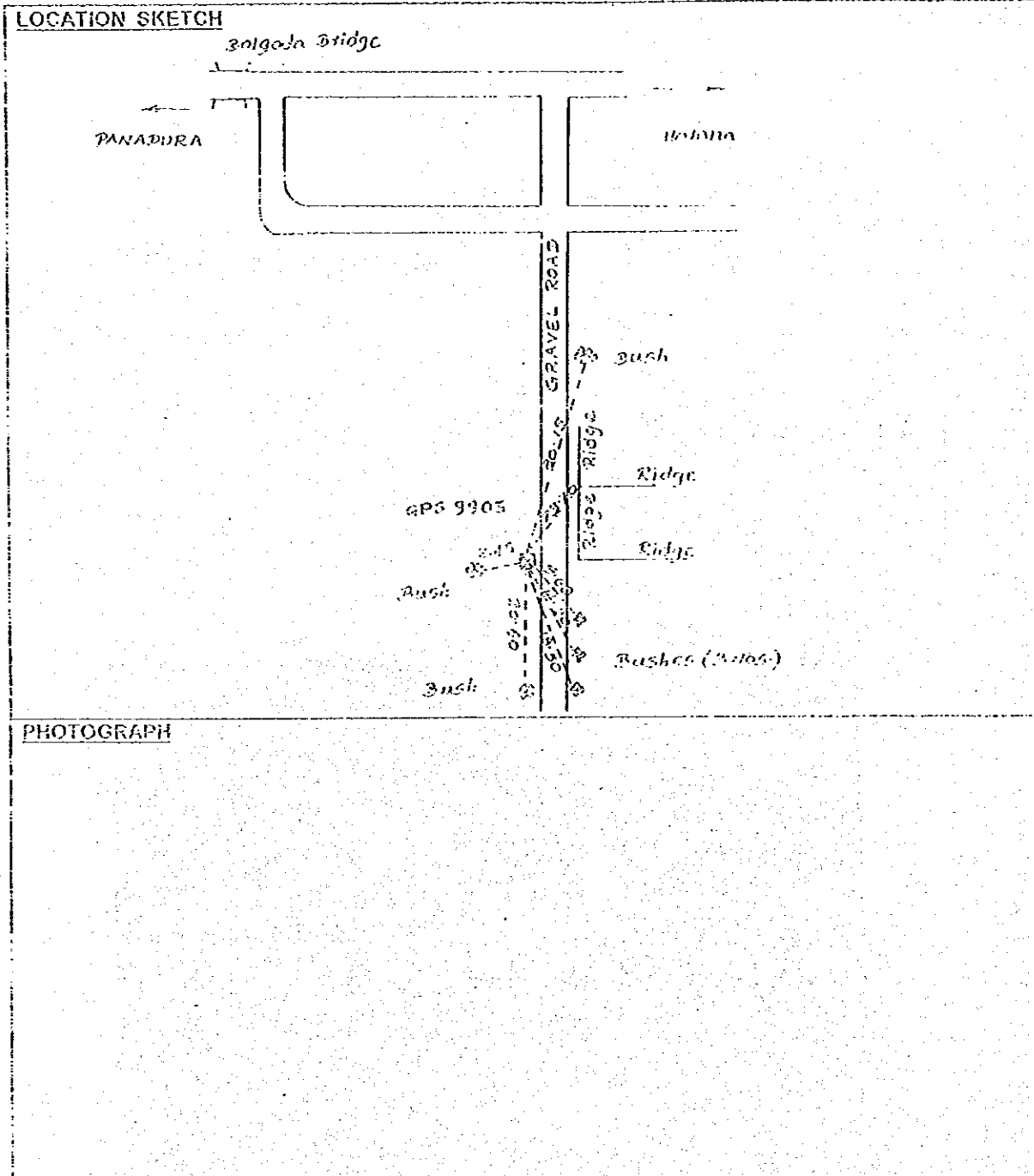
GAMINI B DOBANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9903 ..... 2. PHOTO ID. ....  
 3. TYPE : GPS/GPS ..... 4. DATUM NATIONAL GRID/MSL

COORDINATES : N. 167009.5956 ..... m  
 E. 112836.9115 ..... m  
 ELEV. 1.03 (ORTHO) ..... m  
1.489 (M.S.L.)



Method of Survey: GPS

Date of Survey : JUNE 1999

Scale:

GAMINI R. DEBANSWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SERIAL AVENUE,  
 COLOMBO 5

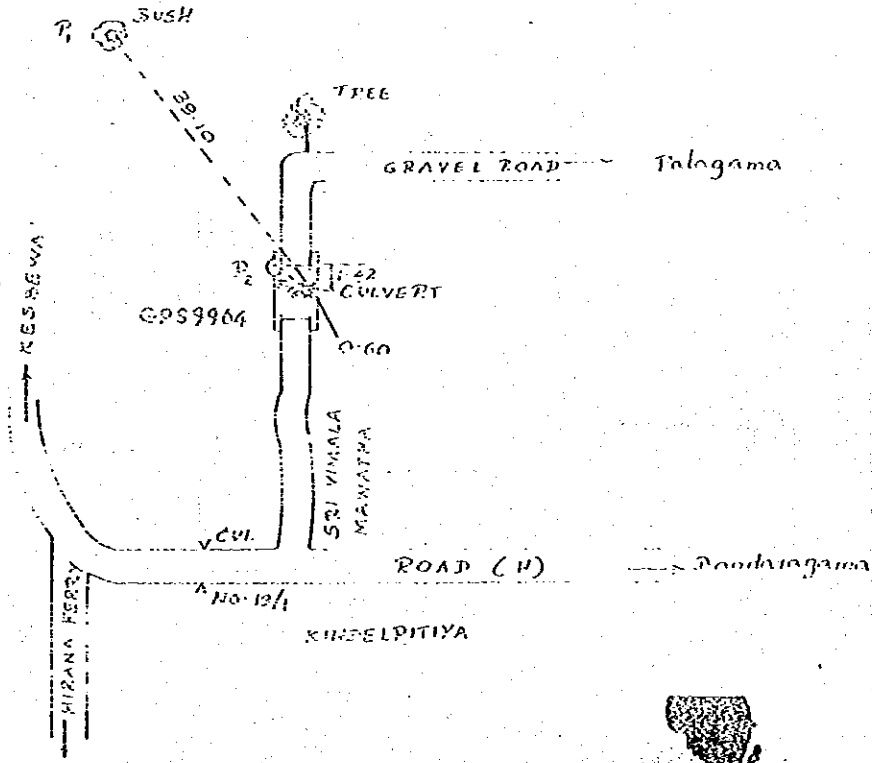
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9904 ..... 2. PHOTO NO. ....  
 3. TYPE : GPS/EM 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 173494.5375 ..... m  
 E. 109995.7520 ..... m  
 ELEV. 2.23(ORTHO) ..... m  
 2.526 (M.S.L.)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: GPS

Date of Survey : JUNE 1999

0010005.

GANINI H DODARWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIBSIAL AVENUE,  
 BIRIWALA



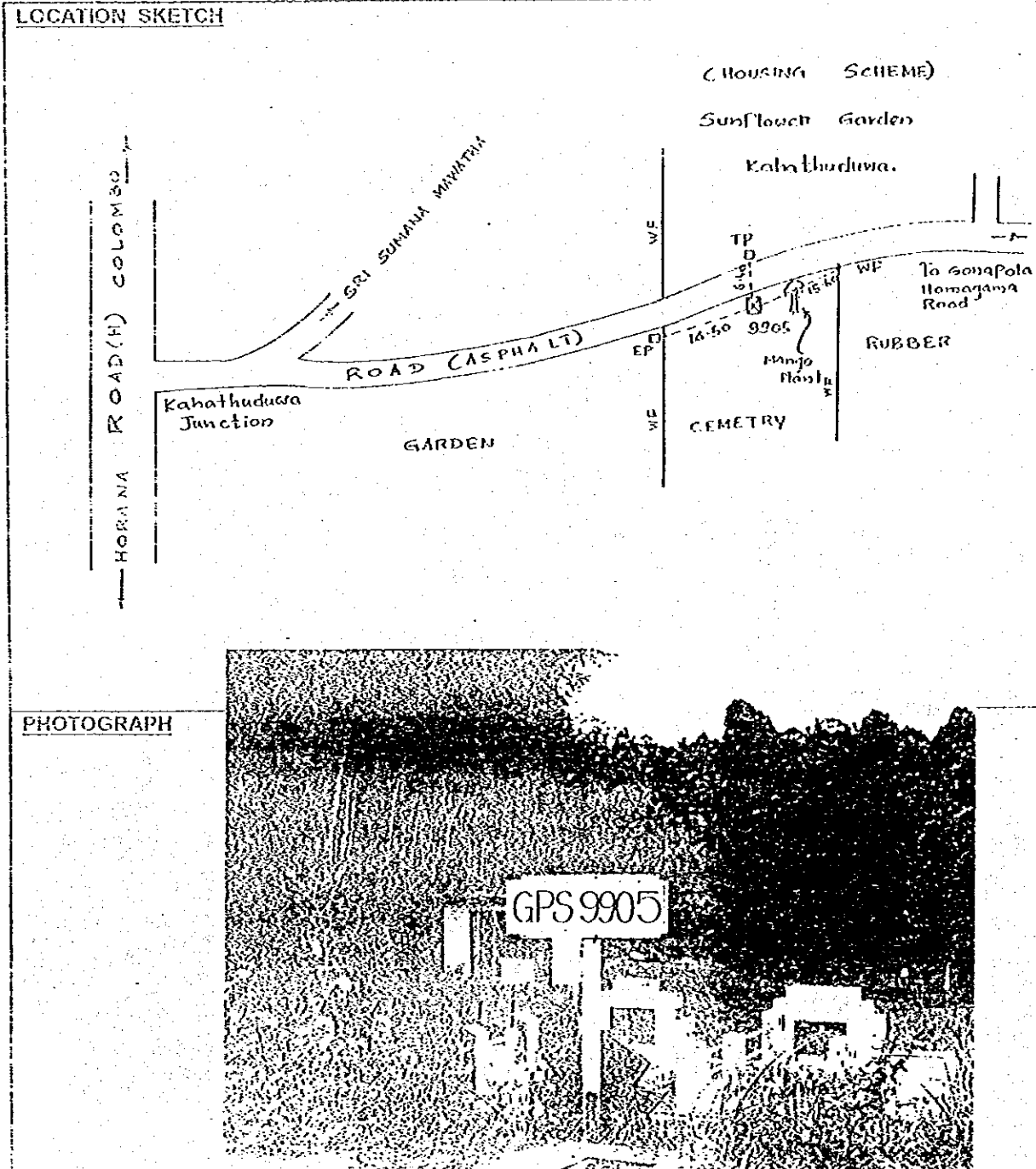
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO... 9905.....  
 3. TYPE : GPS/EM

2. PHOTO NO.....  
 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. .... 176639.3542 ..... m  
 E. .... 113386.3547 ..... m  
 ELEV. .... 21.84 (ORTHO) ..... m  
 22.164 (M.S.L)



Method of Survey: GPS

Date of Survey : JUNE 1999

00-0176

GAYANI B. HODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIPAL AVENUE,  
 DEHIWALA

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO... 9905.....                      2. PHOTO NO.....
3. TYPE : GPS/BK                                      4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N.     .176638.3542..... m  
 E.     .113386.3547..... m  
 ELEV.     .21.84 : (ORTHO)..... m  
           22.164 (M.S.L)

LOCATION SKETCH

PHOTOGRAPH

Method of Survey: GPS

Date of Survey : JUNE 1999

scribes.

CHY P. P. SIVARERA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIPAL AVENUE,  
 DUBLIN 4

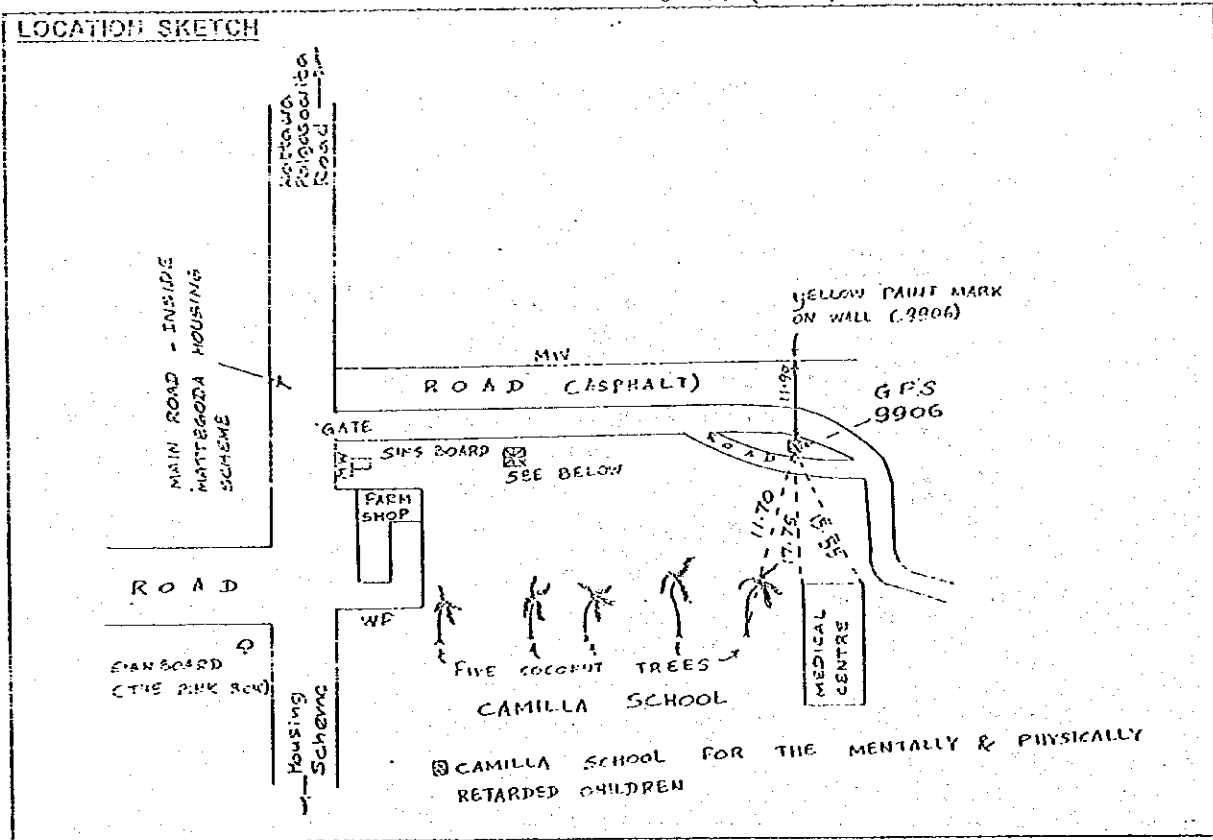
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

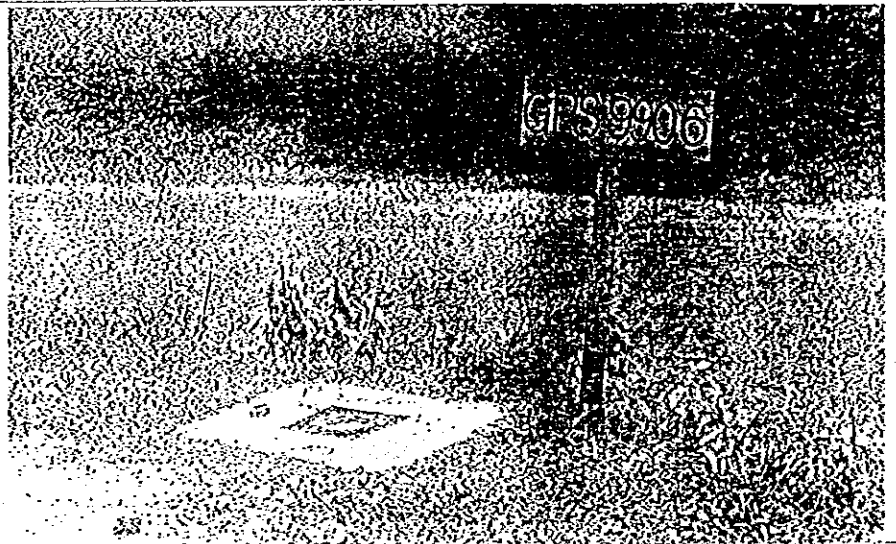
1. POINT NO. 9906 ..... 2. PHOTO NO. ....  
 3. TYPE : GPS/RTK 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 179000.0703 ..... m  
 E. 111876.9946 ..... m  
 ELEV. 23.05 (ORTHO) ..... m  
 23.289 (M.S.L.)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: GPS

Date of Survey : JUNE 1999

GAMINI B. DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMA AVENUE,  
 DEHIWALA

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO--GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9906.....

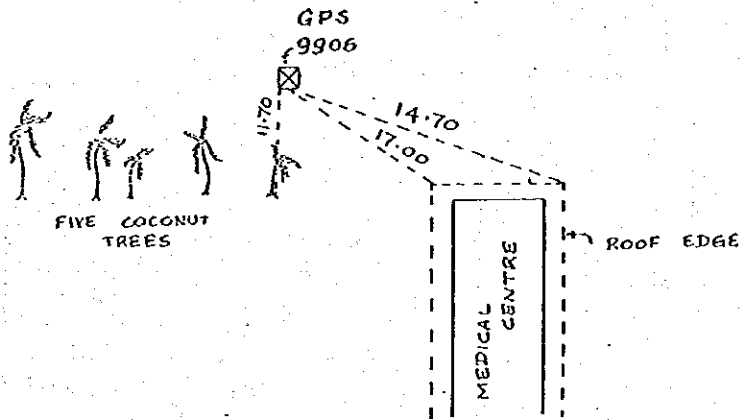
2. PHOTO NO. ....

3. TYPE : GPS/EM

4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 179080.0703..... m  
 E. 111876.9946..... m  
 ELEV. 23.05 (ORTHO)..... m  
23.289 (M.S.L.)

LOCATION SKETCH



PHOTOGRAPH

Method of Survey: GPS

Date of Survey : JUNE 1999

corrects.

**GAMINI B DODANWELA**  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

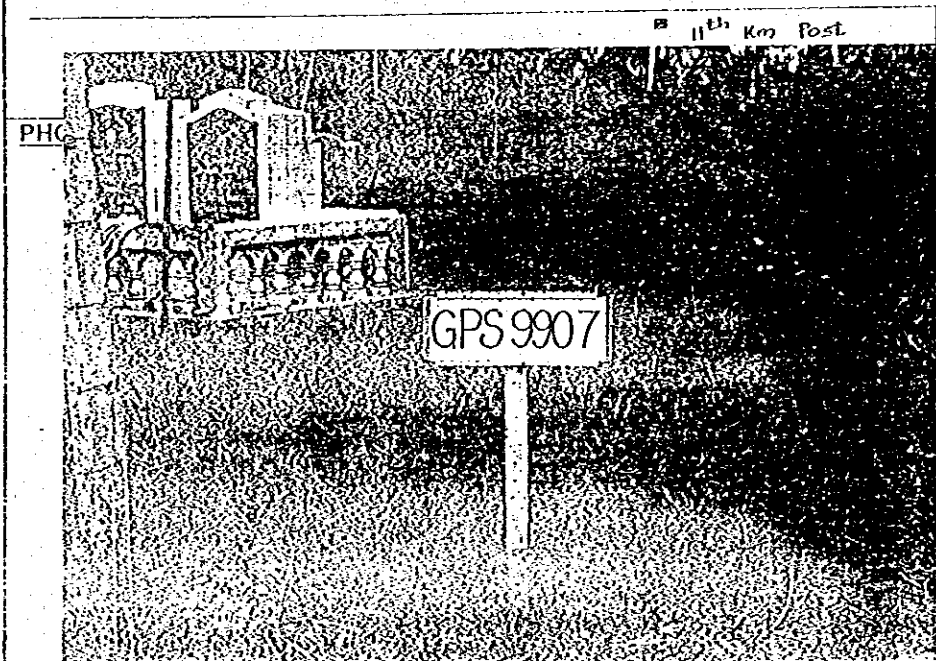
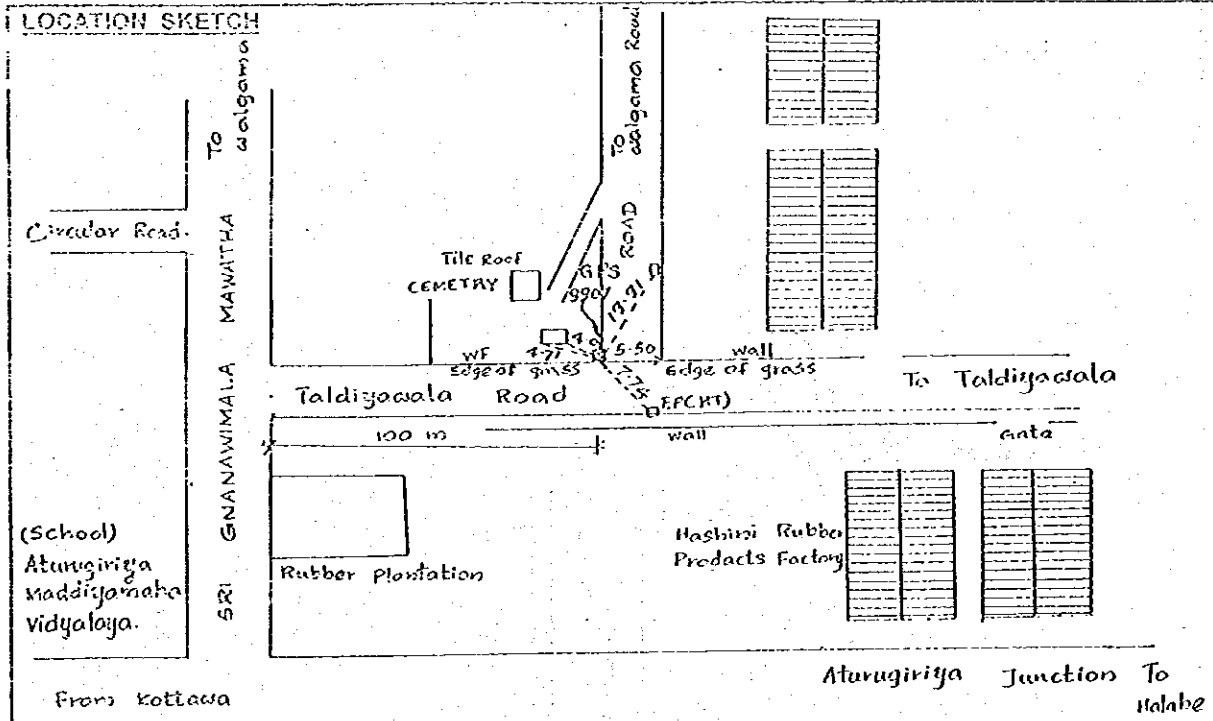
1. POINT NO... 9907.....

2. PHOTO NO.....

3. TYPE : GPS/IM

4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 185152.1114 ..... m  
 E. 113748.3269 ..... m  
 ELEV. 25.86 (ORIM) ..... m  
 25.853 (M.S.L)



Method of Survey : GPS

Date of Survey : JUNE 1999

GASHI B. DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMA AVENUE,  
 DEERWATA

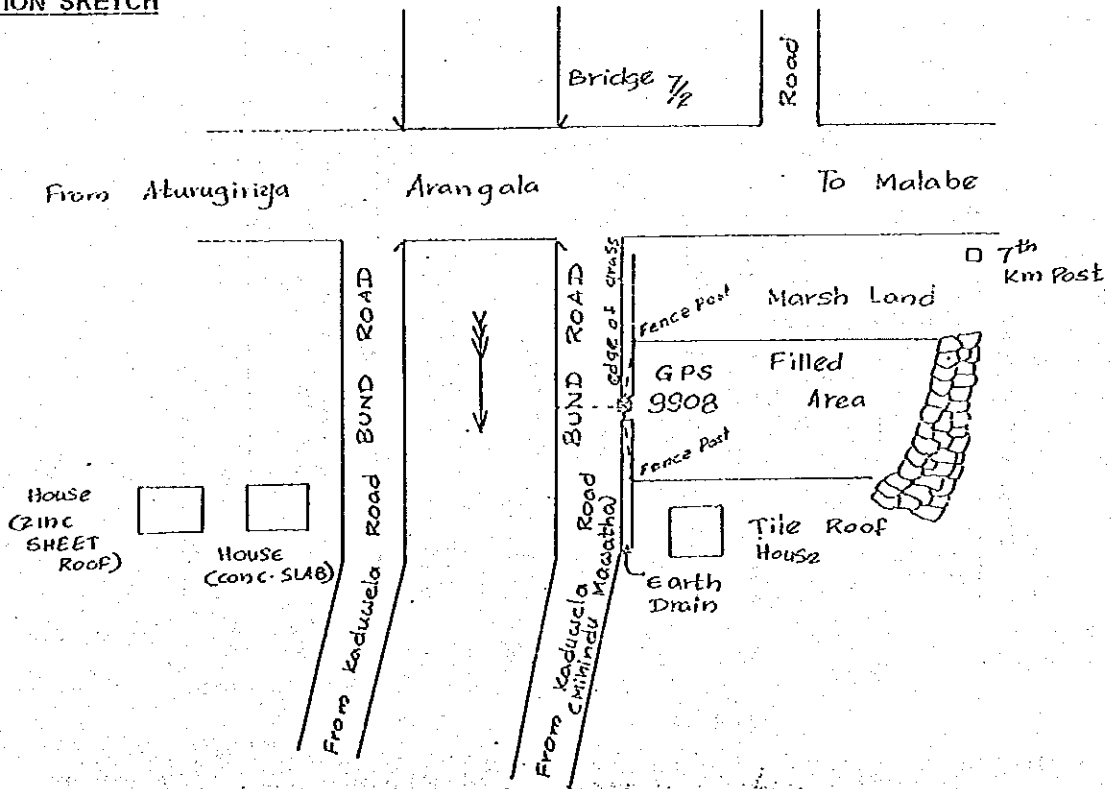
PROJECT : THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

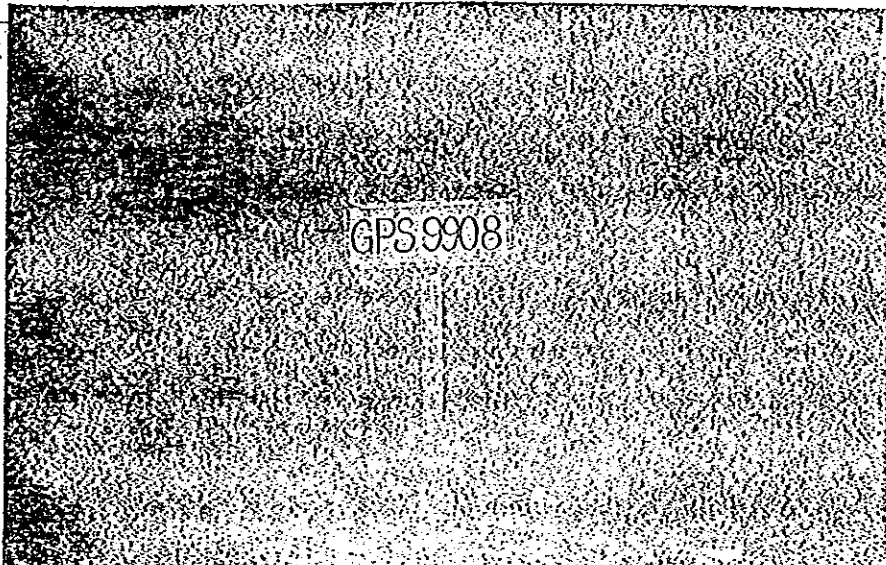
- 1. POINT NO. 9908.....
- 2. PHOTO NO.....
- 3. TYPE : GPS/BM\*
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. ...162270.1577..... m  
 E. ...110405.8004..... m  
 ELEV. 8.82 (ORTHO)..... m  
 8.508 (M.S.L)

LOCATION SKETCH



PHOTOGRAPH



Method of Survey : GPS

Date of Survey : JUNE 1999

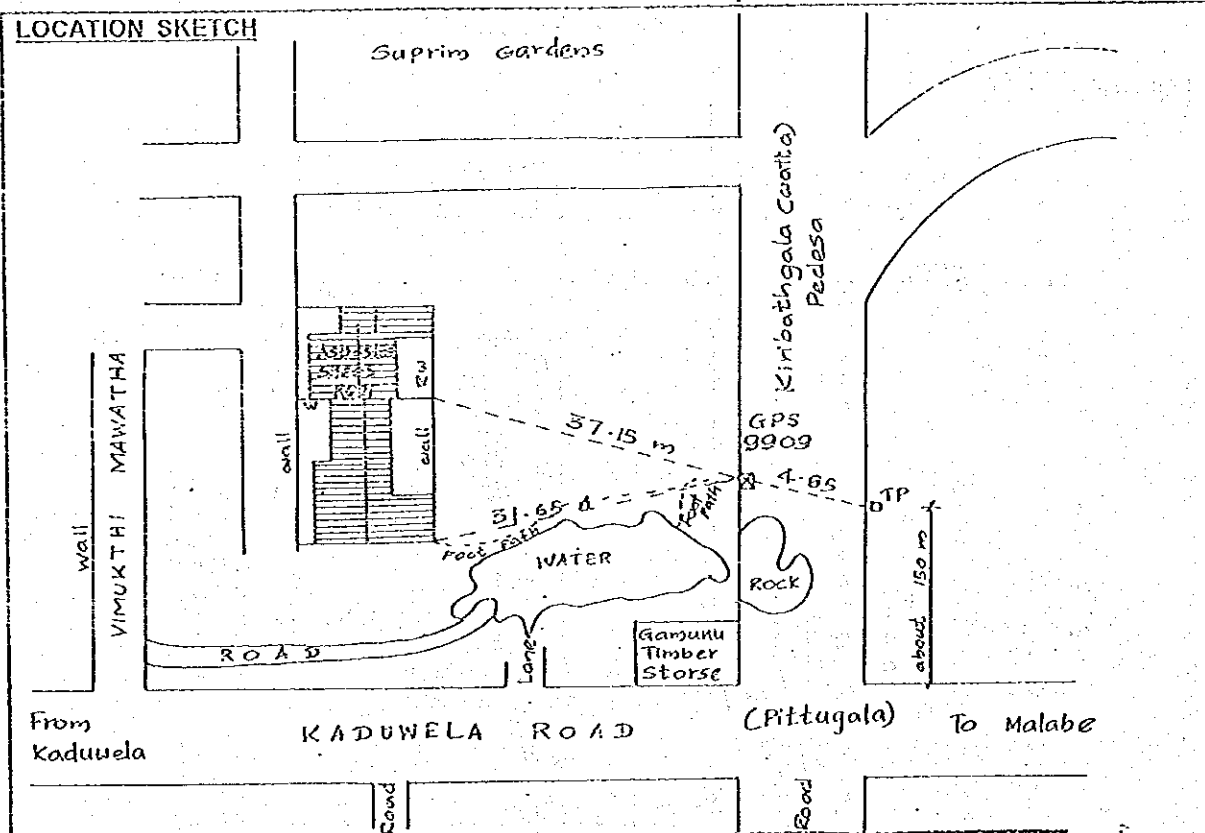
GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SURIMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

- 1. POINT NO. 9909
- 2. PHOTO NO.
- 3. TYPE : GPS/GM
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 190297.8993 m  
 E. 111767.6960 m  
 ELEV. 14.71 (ORTH) m  
 14.692 (M.S.L.)



PHOTOGRAPH



Method of Survey : GPS

Date of Survey : JUNE 1999

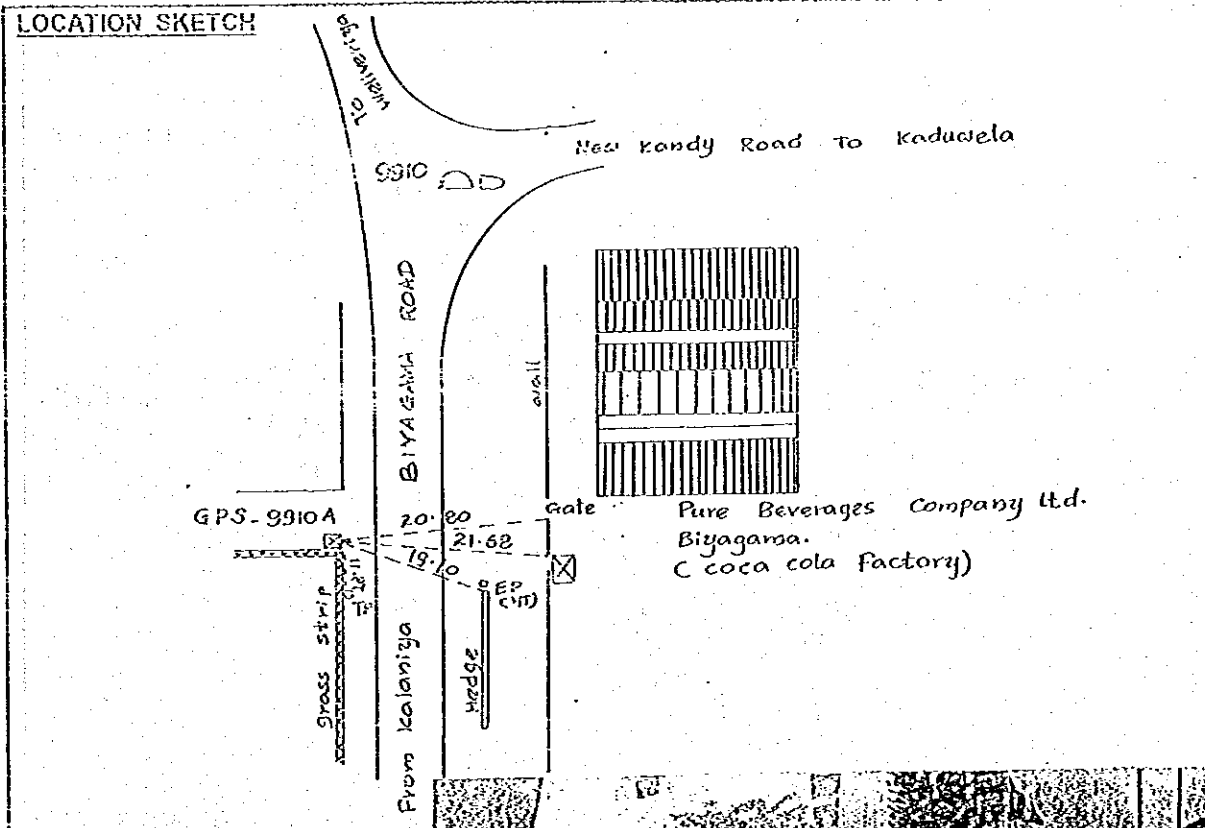
GAMINI B. DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRDMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

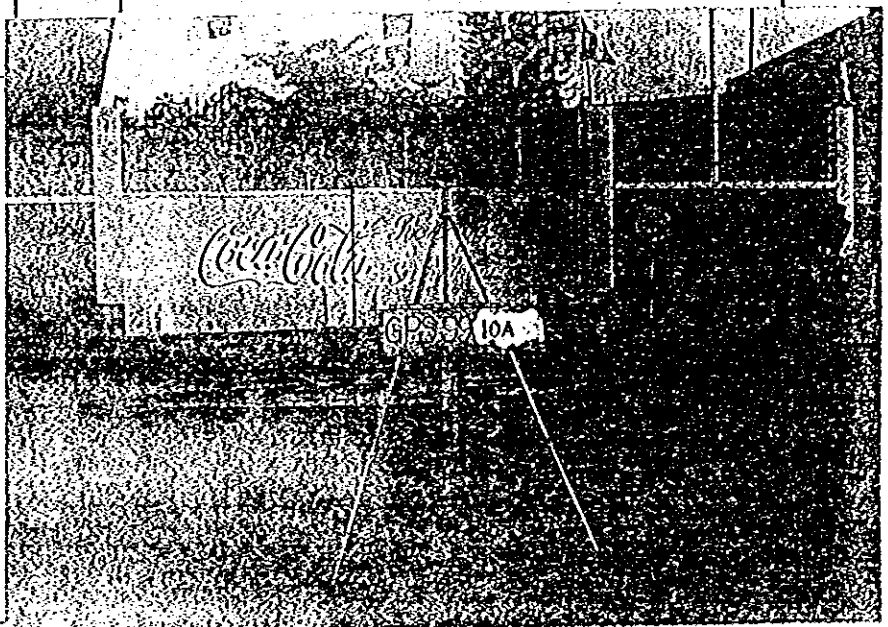
CONTROL POINT DATA FORM

- 1. POINT NO. 9910 A
- 2. PHOTO NO. ....
- 3. TYPE : GPS/EM
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 193492.2717 m  
 E. 112767.8614 m  
 ELEV. 5.29 (ORTHO) m  
 5.297 (V.S.L)



PHOTOGRAPH



Method of Survey : GPS

Date of Survey : JUNE 1999

CONCERN

GAMINI B DODANVELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

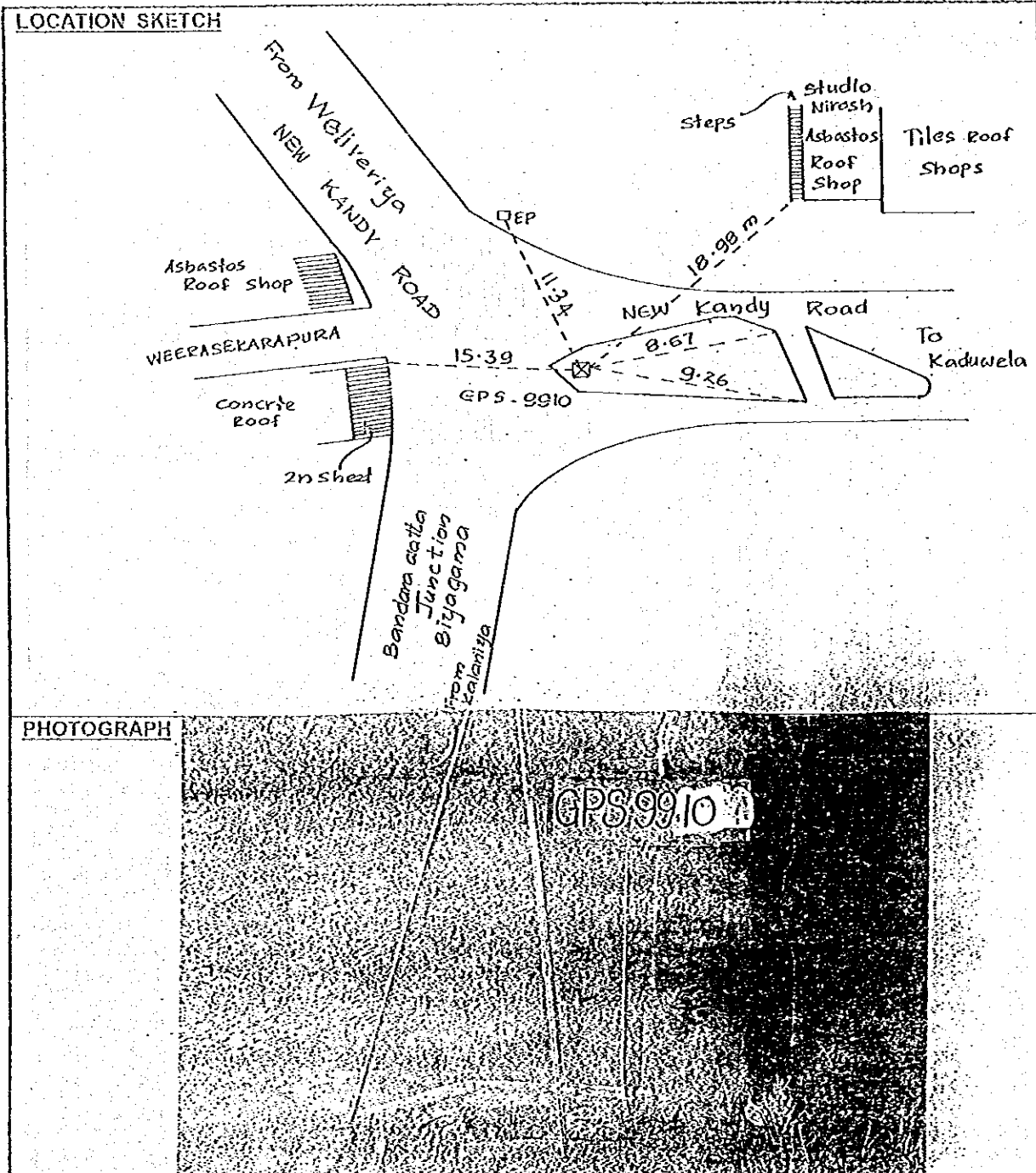


PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO--GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

- 1. POINT NO. 9910
- 2. PHOTO NO.
- 3. TYPE : GPS
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 193613.1951 m  
 E. 113026.6744 m  
 ELEV. 6.09 (ORTHO) m  
 6.078 (M.S.L)



Method of Survey : GPS

Date of Survey : JUNE 1999

cont.

GAMINI B. DUDANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRJAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 9911 ..... 2. PHOTO NO. ....
3. TYPE : GPS/RTK 4. DATUM NATIONAL GRID/MSL

COORDINATES : N. 193414.6530 ..... m  
 E. 112218.5819 ..... m  
 ELEV. 4.64 (ORTHO) ..... m  
 4.610 (M.S.L.)

**LOCATION SKETCH**

**PHOTOGRAPH**

Method of Survey : GPS

Date of Survey : June 1999

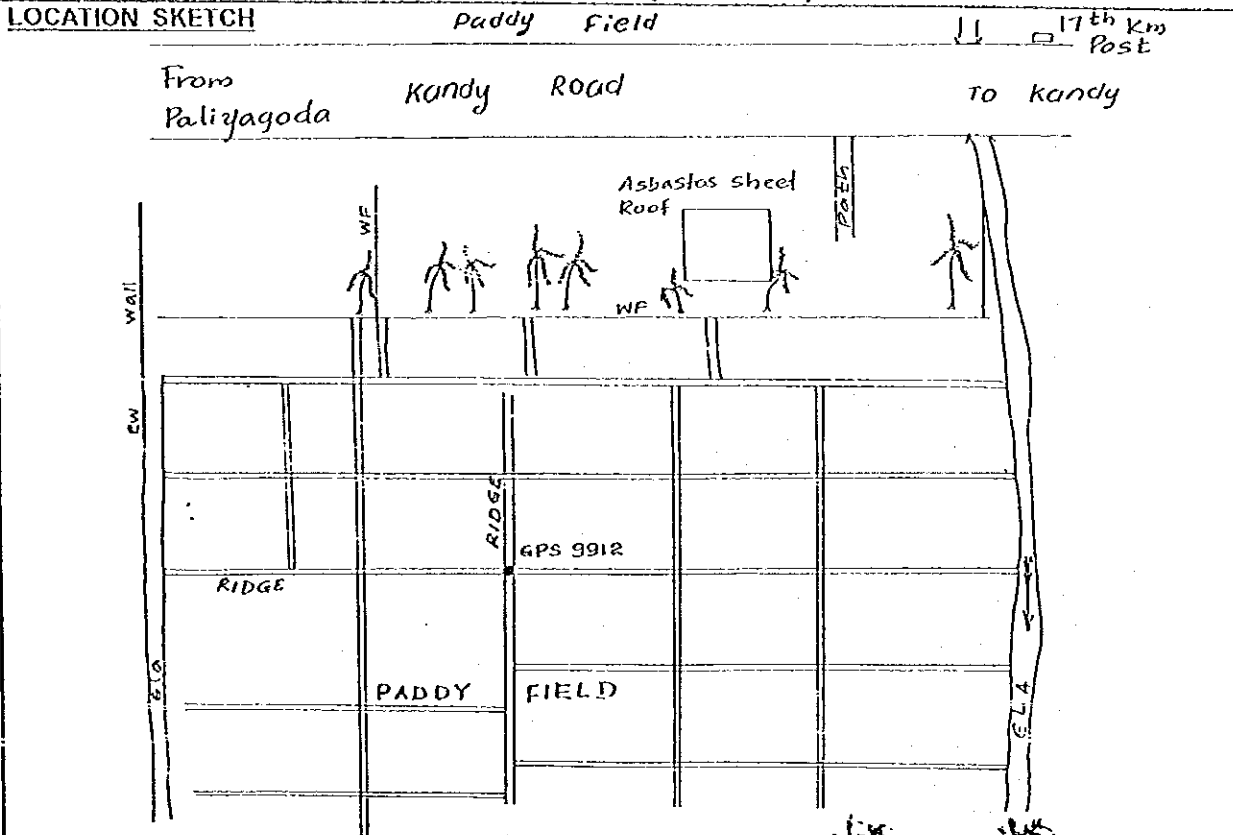
GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

- 1. POINT NO... 9912.....
- 2. PHOTO NO.....
- 3. TYPE : GPS/BM
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 200813.1219 ..... m  
 E. 110105.0761 ..... m  
 ELEV. 9.25 (ORTHO) ..... m  
 9.361 (M.S.L.)



PHOTOGRAPH



Method of Survey : GPS

Date of Survey : JUNE 1999

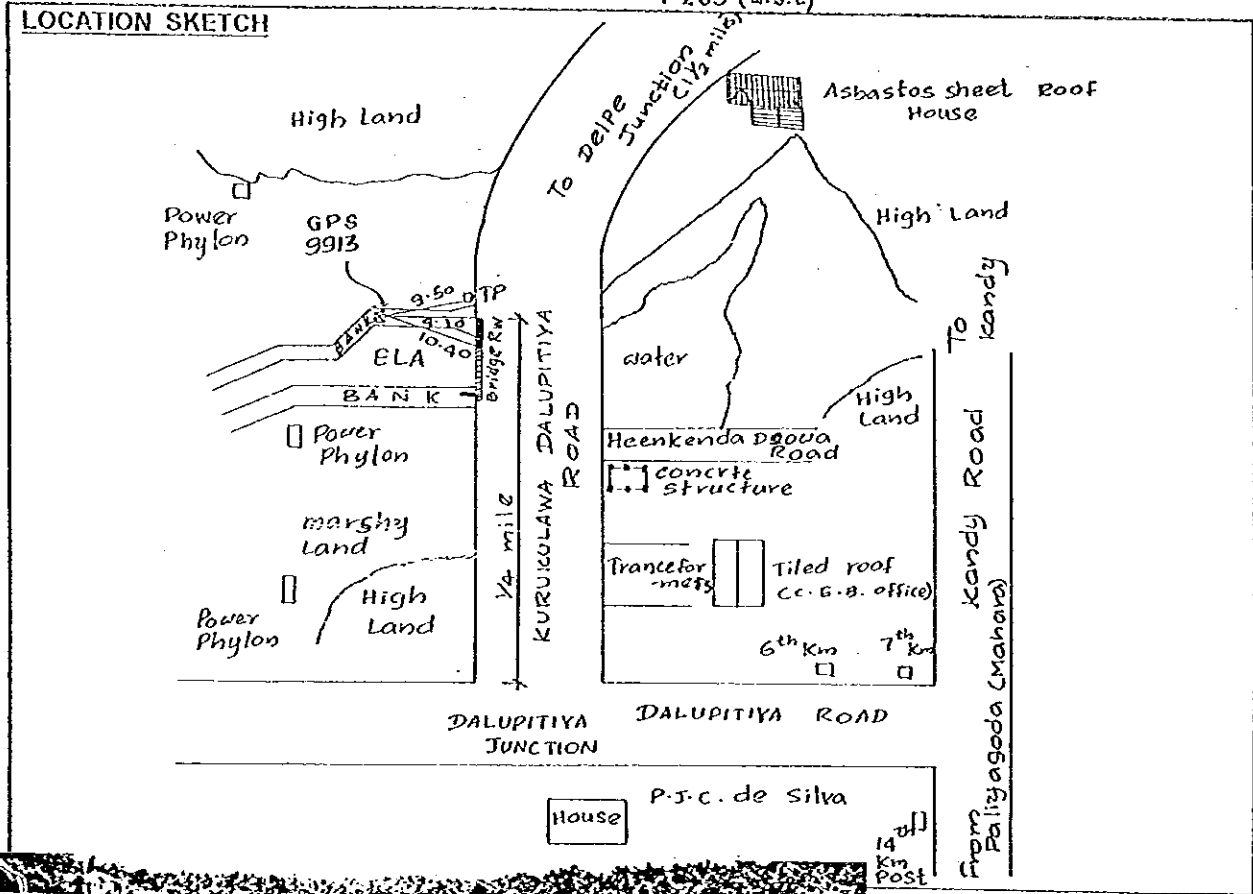
GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

- 1. POINT NO...9913.....
- 2. PHOTO NO.....
- 3. TYPE : GPS/BM
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. 200444.8654 ..... m  
 E. 106353.7218 ..... m  
 ELEV. 1.19 (ORTHO) ..... m  
 1-263 (M.S.L)



Method of Survey: GPS

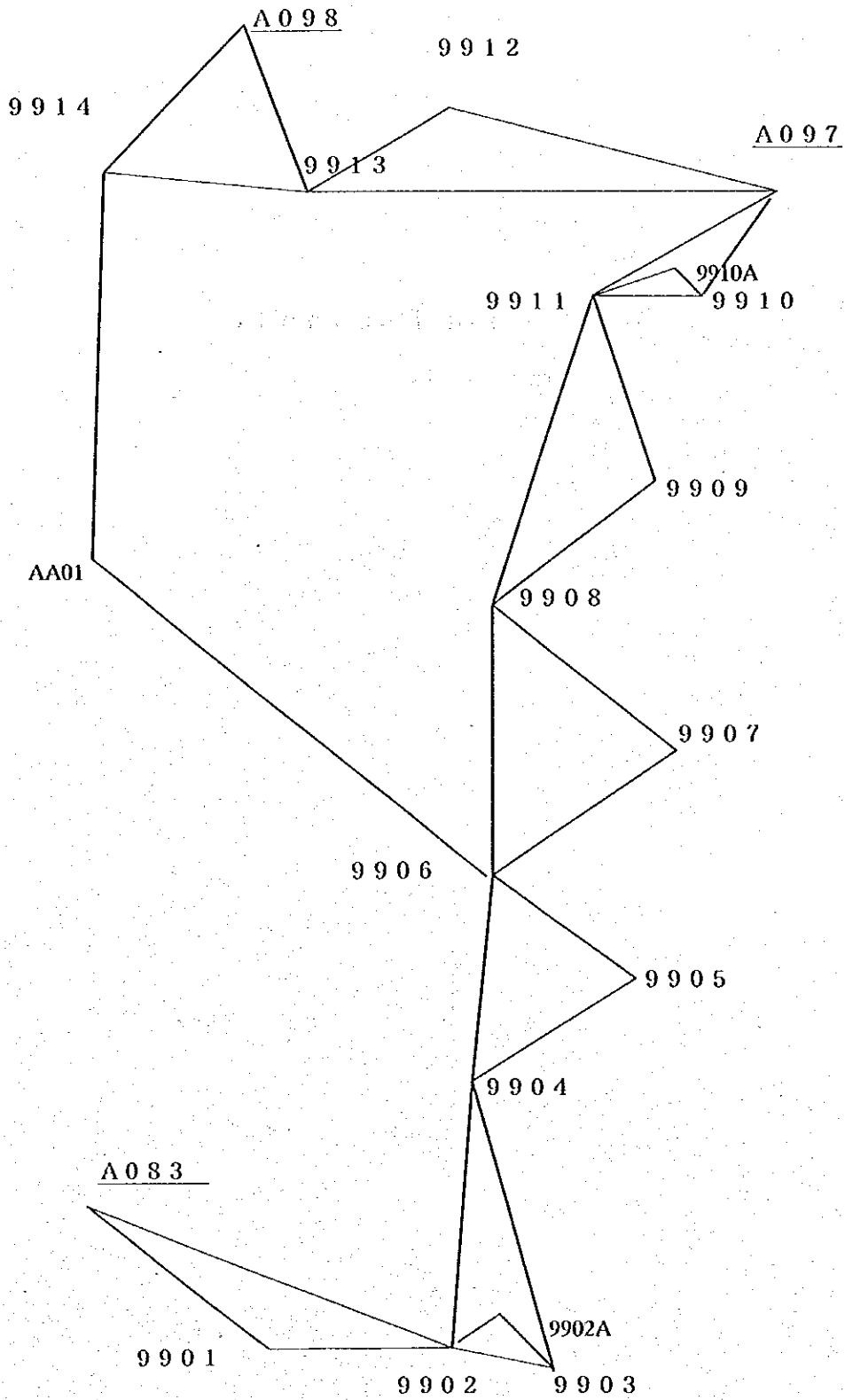
Date of Survey : JUNE 1999

00HCCFR.

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

### **Annex 3: GPS observation network**

G. P. S. OBSERVATION NET



## **Annex 4: List of benchmarks**

## LIST OF B M

NAME	ELEVATION
BM 1	3.966
BM 2	1.140
BM 3	22.789
BM 4	4.551
BM 5	12.118
BM 6	5.431
BM 7	5.286
BM 8	12.318
BM 9	7.956
BM 10	1.046



## **Annex 5: Benchmark data form**

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO... 01 .....

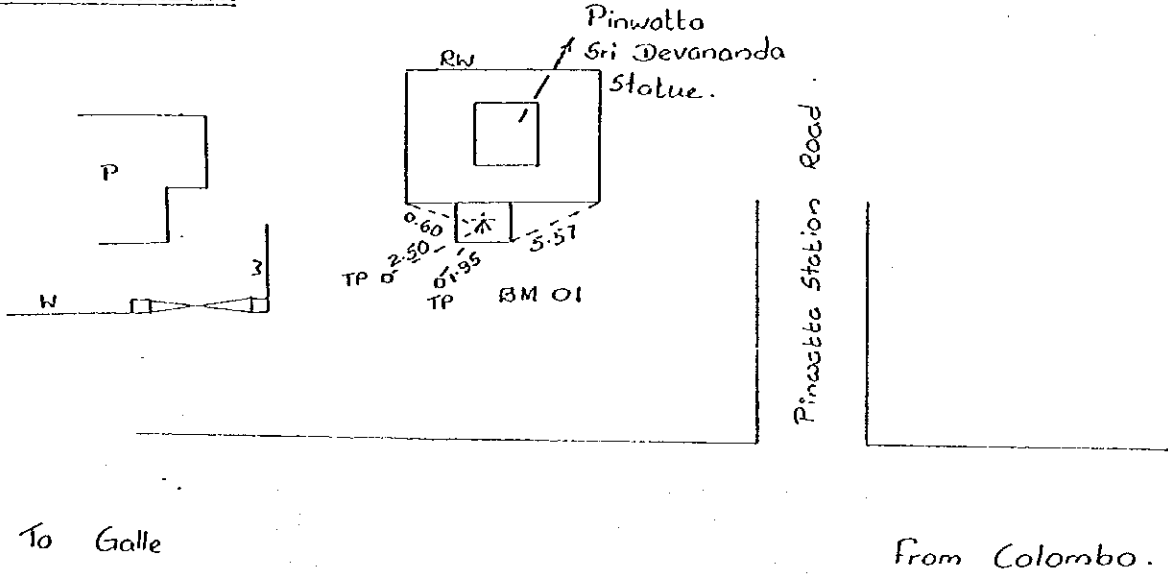
2. PHOTO NO.....

3. TYPE : EP/BM

4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. .... 3.966 ..... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: SPIRIT LEVELLING

Date of Survey : MAY/JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

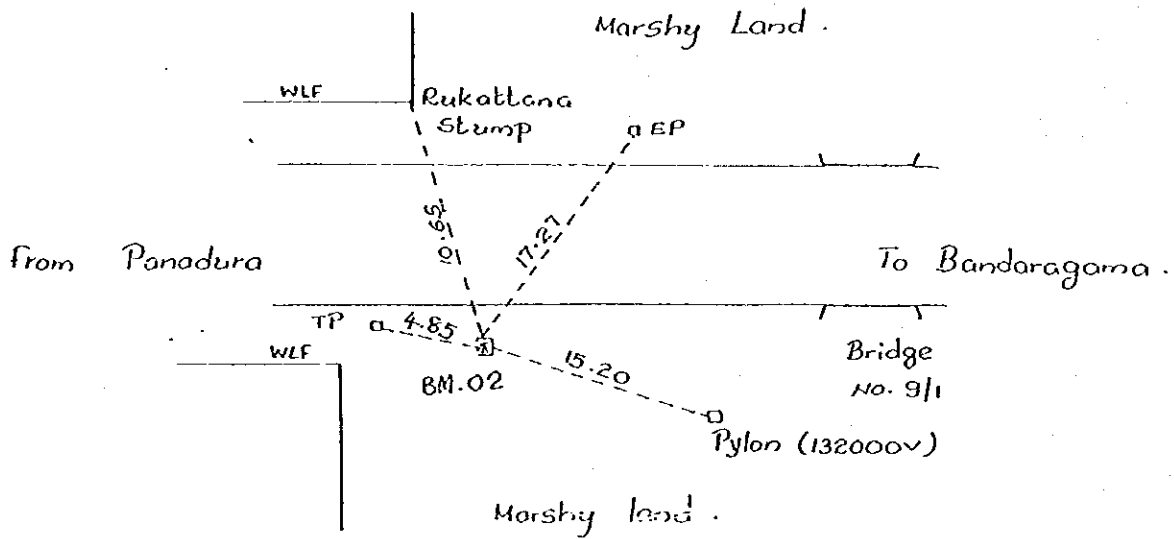
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

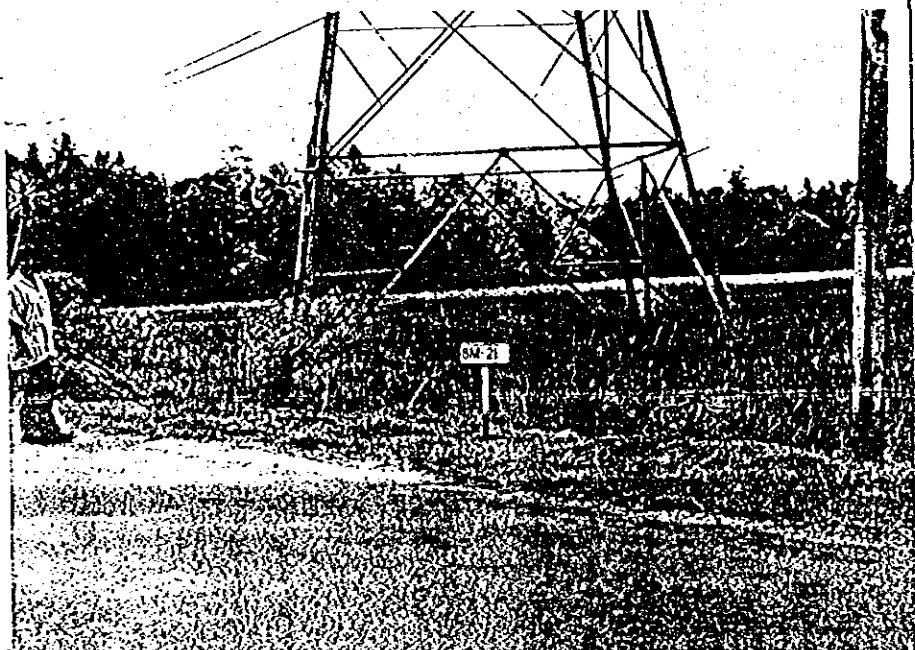
1. POINT NO. 02 ..... 2. PHOTO NO. ....  
 3. TYPE : ~~BM~~/BM 4. DATUM NATIONAL-GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. 1.140 ..... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey : SPIRIT LEVELLING

Date of Survey : MAY/JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO. 03 .....

2. PHOTO NO. ....

3. TYPE : GPS/BM

4. DATUM: NATIONAL GRID/MSL

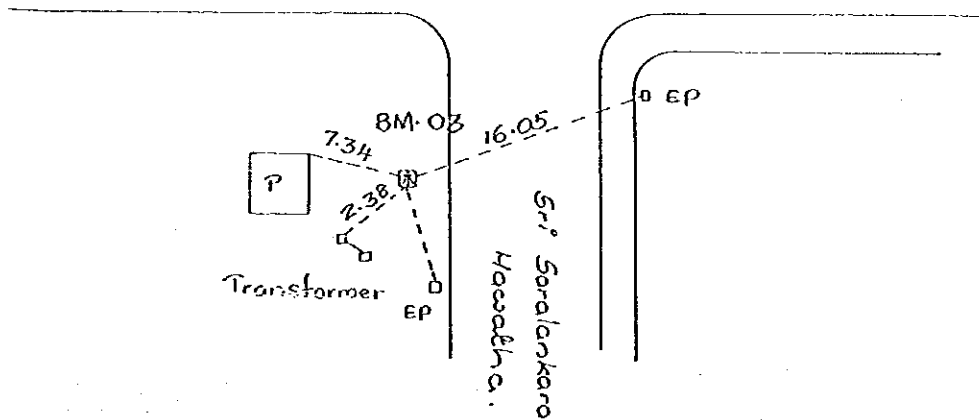
CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. .... 22.78.9 .... m

LOCATION SKETCH

P	P	P	P	P
shop	shop	shop	shop	soloon

From Bandaragama.

To kesbewa.



PHOTOGRAPH

Method of Survey : SPIRIT LEVELLING

Date of Survey : MAY | JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMAL AVENUE,  
 DEHIWALA.

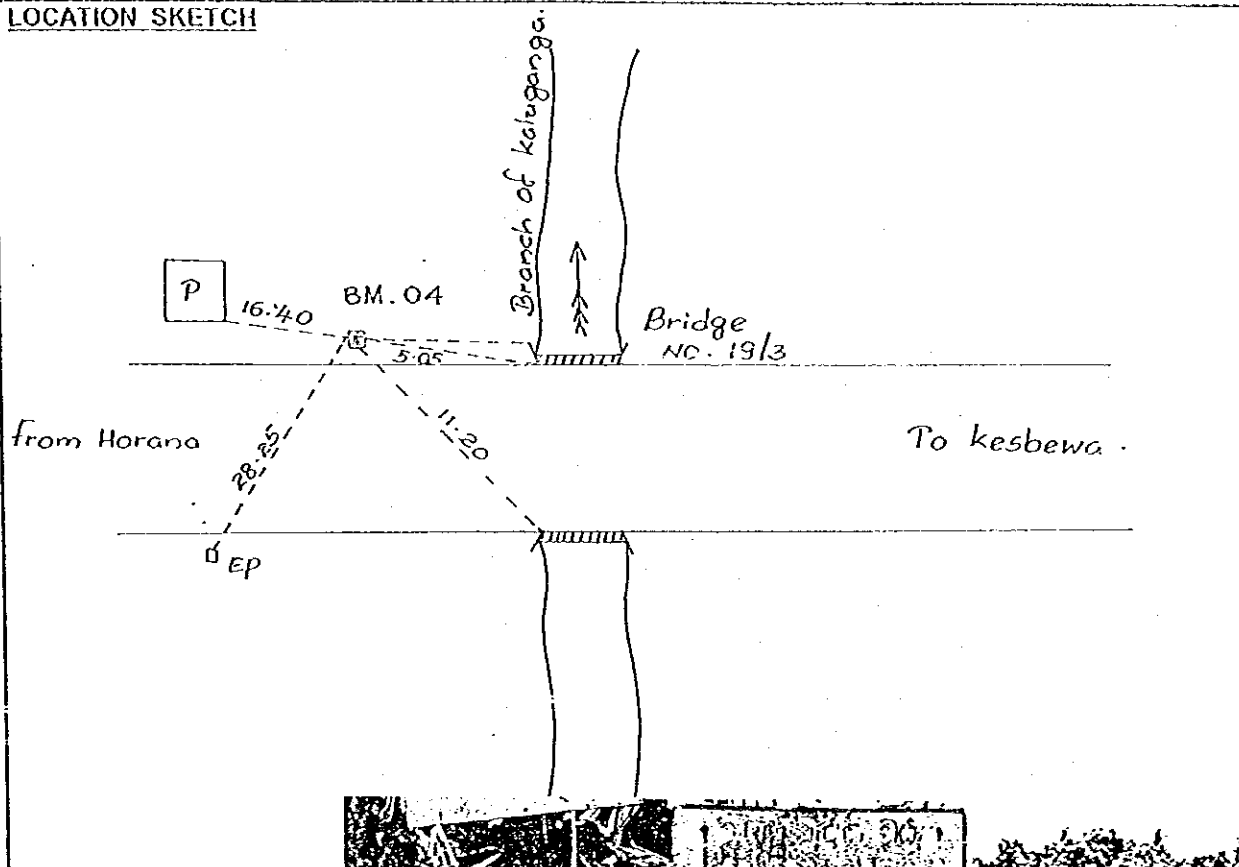
PROJECT : THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

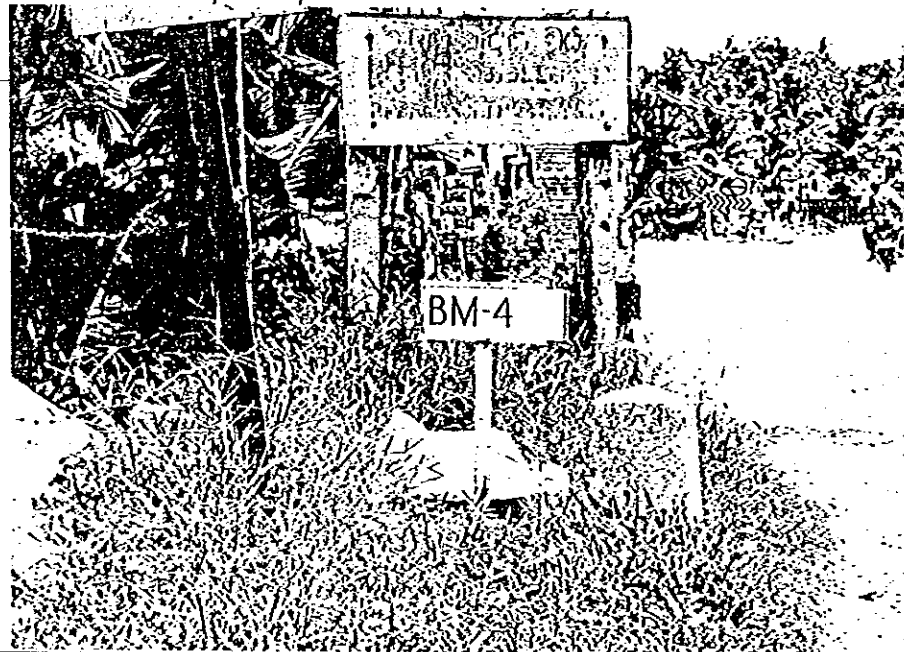
- |                         |                                   |
|-------------------------|-----------------------------------|
| 1. POINT NO. <u>04</u>  | 2. PHOTO NO. ....                 |
| 3. TYPE : <u>GPS/BM</u> | 4. DATUM <u>NATIONAL-GRID/MSL</u> |

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. 4.551 m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey : SPIRIT LEVELLING

Date of Survey : MAY / JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRJMAL AVENUE,  
 DEHIWALA.

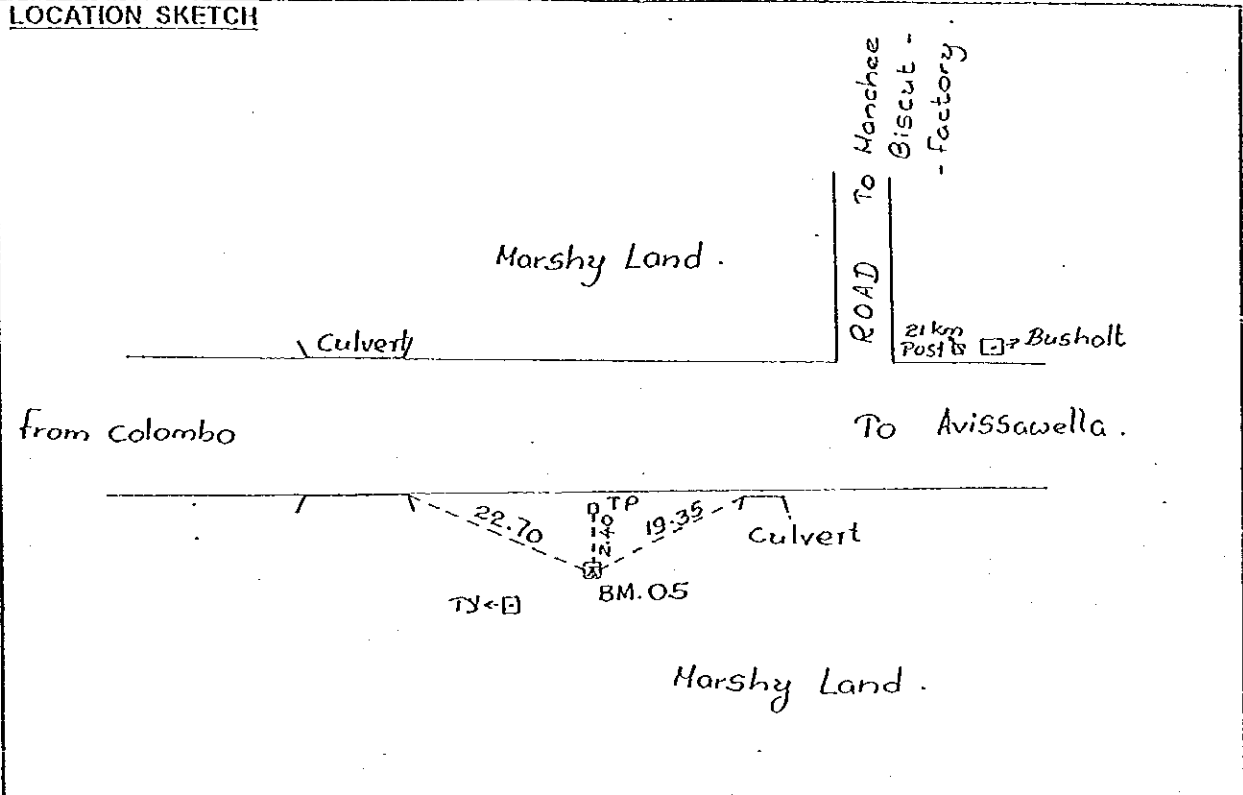
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

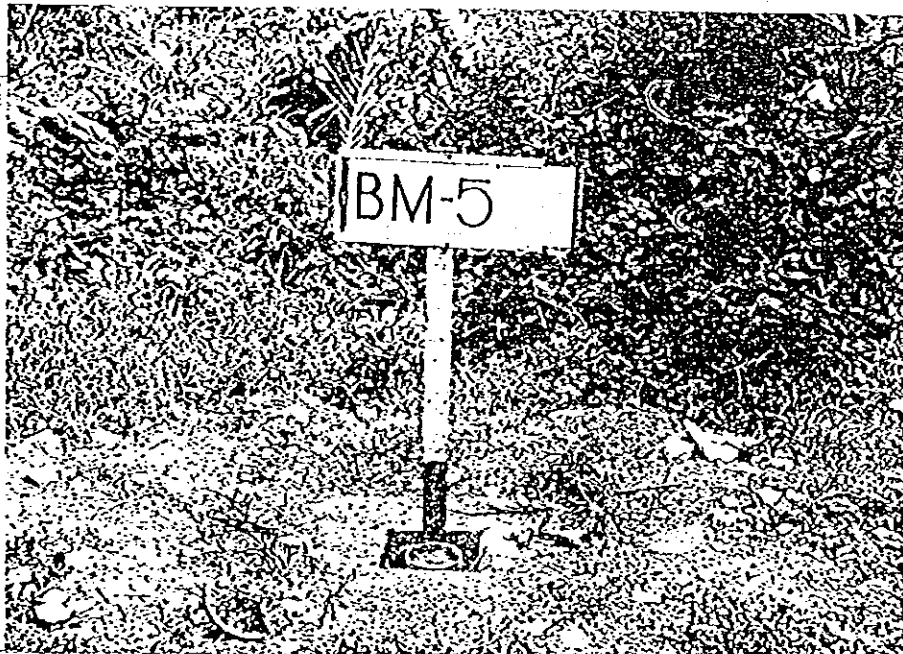
- 1. POINT NO...05.....
- 2. PHOTO NO.....
- 3. TYPE : GPS/BM
- 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. .... 12.118 ..... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey : SPIRIT LEVELLING

Date of Survey : MAY / JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO... 06.....

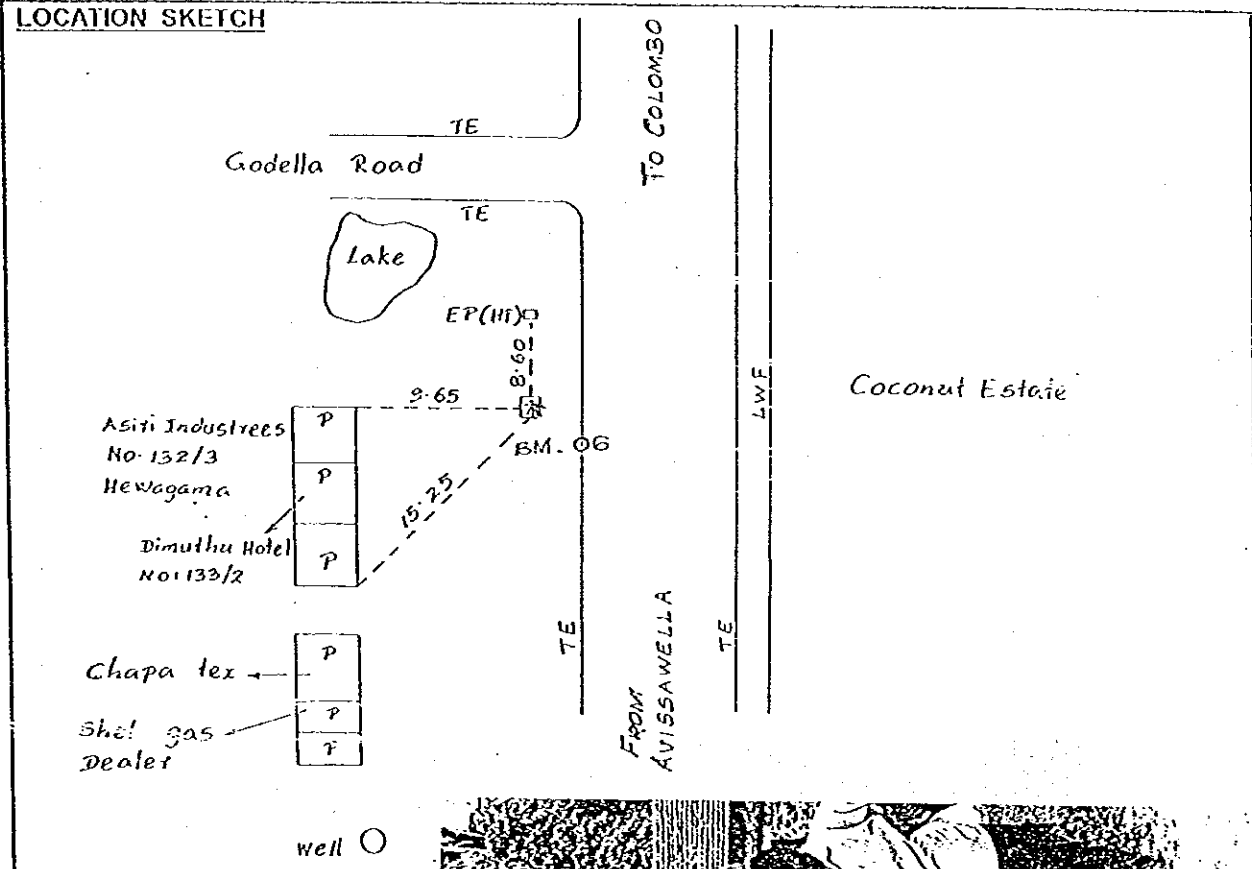
2. PHOTO NO.....

3. TYPE : GPS/BM

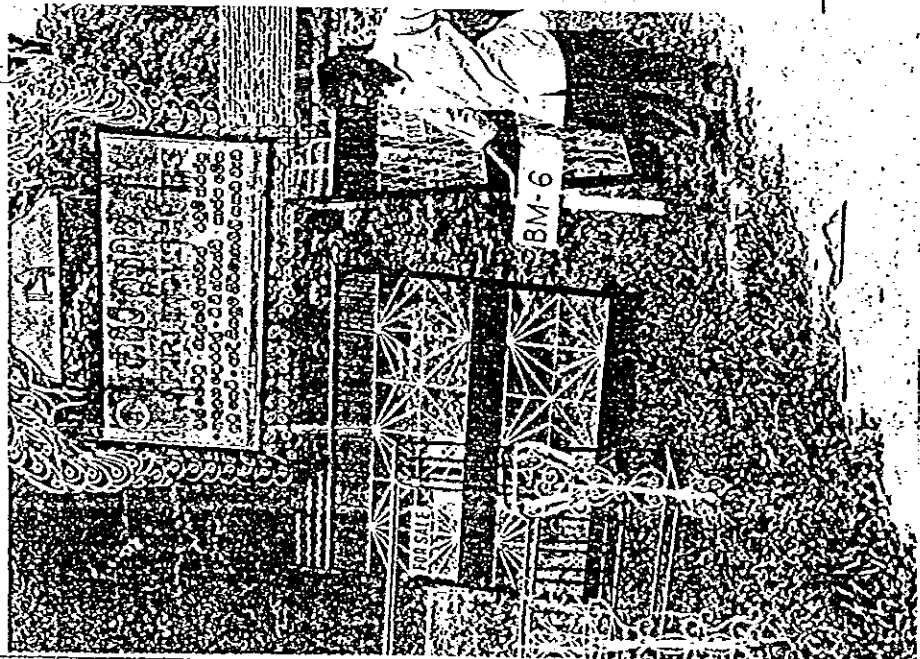
4. DATUM NATIONAL-GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. 5.431 .... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: SPIRIT LEVELLING

Date of Survey : MAY | JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.

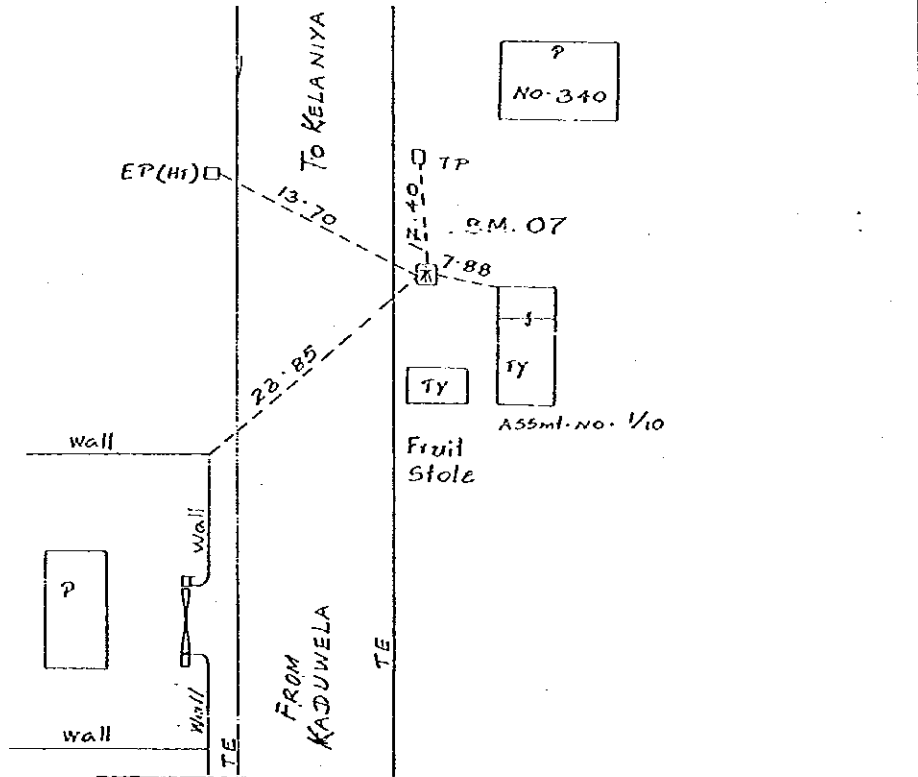
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

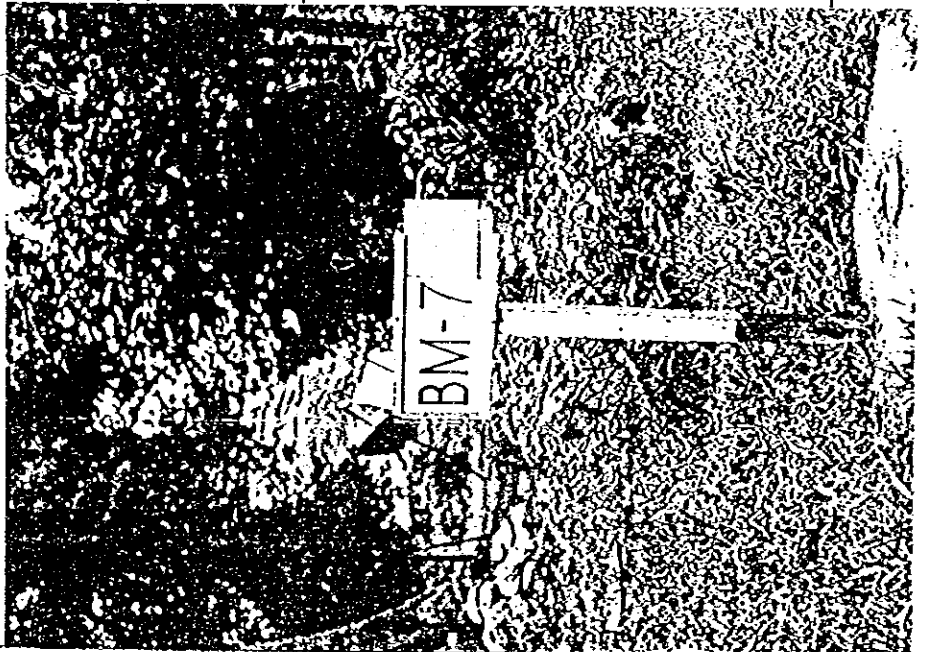
1. POINT NO. 07 ..... 2. PHOTO NO. ....  
 3. TYPE : SPS/BM ..... 4. DATUM NATIONAL GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. 5.286 ..... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey: SPIRIT LEVELLING

Date of Survey : MAY/JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRIMAL AVENUE,  
 DEHIWALA.



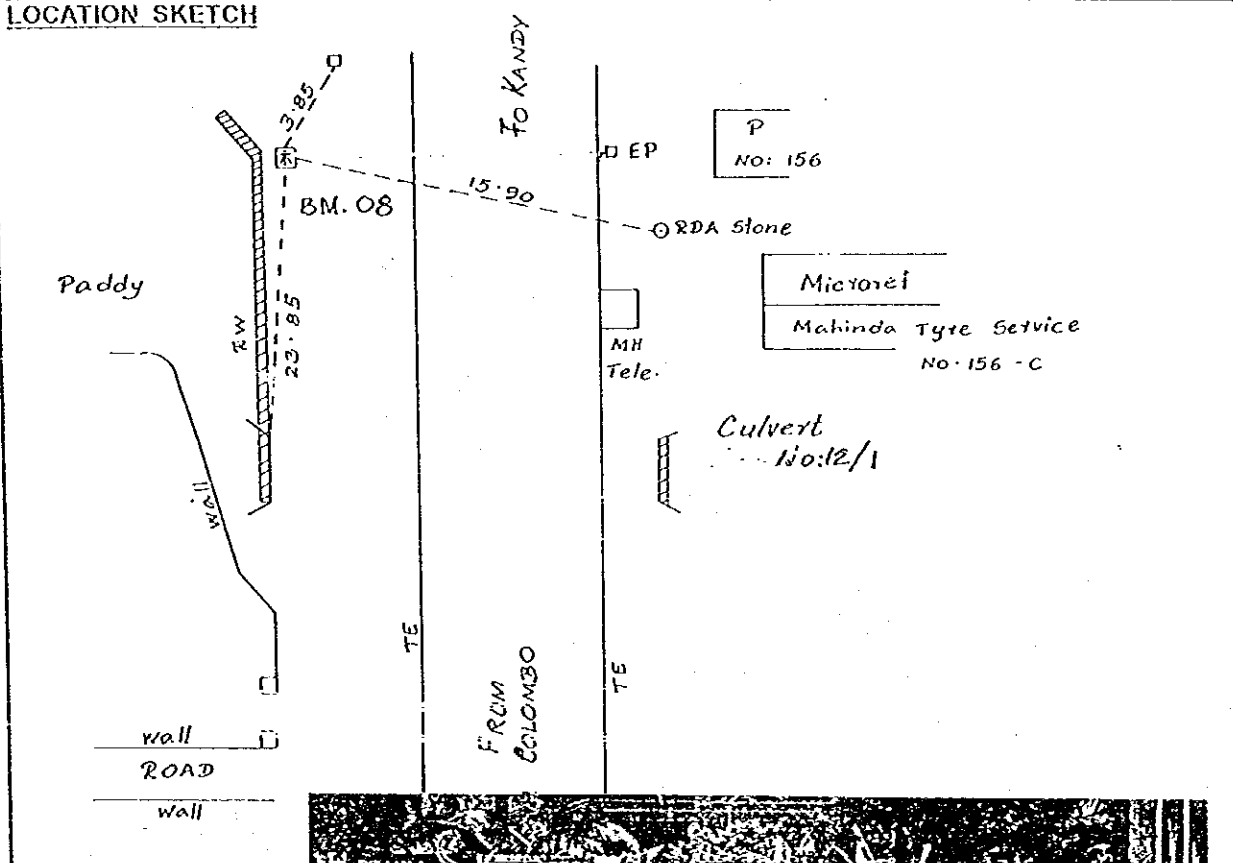
PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

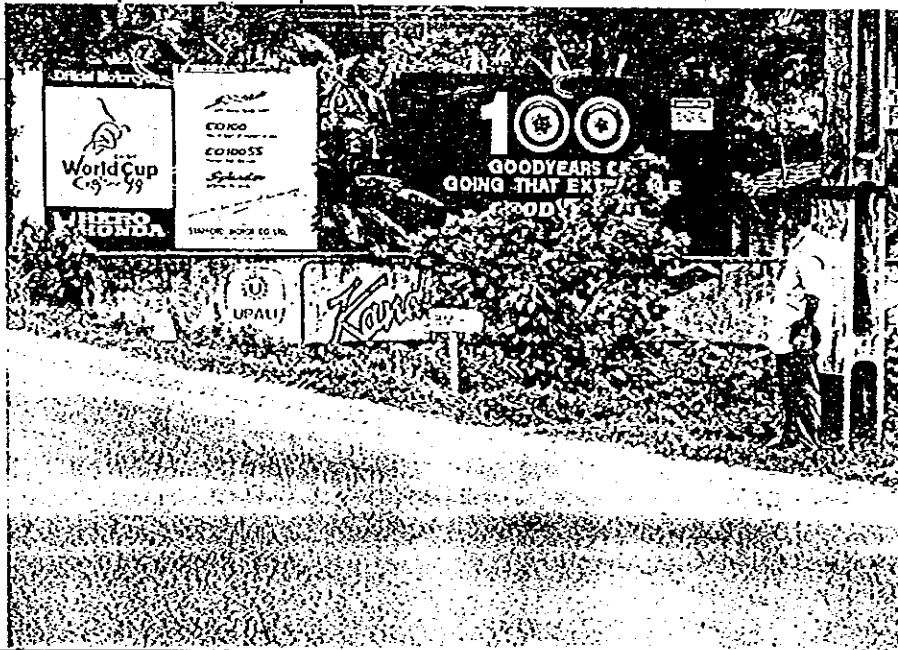
1. POINT NO. 08 ..... 2. PHOTO NO. ....
3. TYPE : GPS/BM ..... 4. DATUM NATIONAL-GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. 12.318 ..... m

LOCATION SKETCH



PHOTOGRAPH



Method of Survey : SPIRIT LEVELLING

Date of Survey : MAY / JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHOWALA.

PROJECT: THE STUDY OF THE OUTER CIRCULAR HIGHWAY TO THE CITY OF COLOMBO - GROUND SURVEY AND IDENTIFICATION

CONTROL POINT DATA FORM

1. POINT NO.. 09 .....

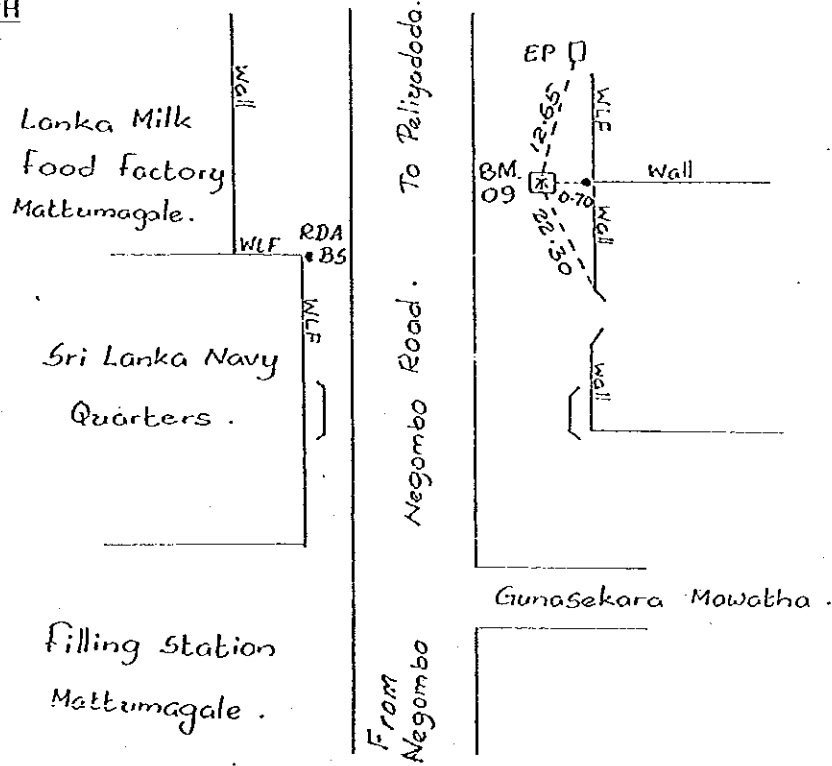
2. PHOTO NO.....

3. TYPE : GPS/BM

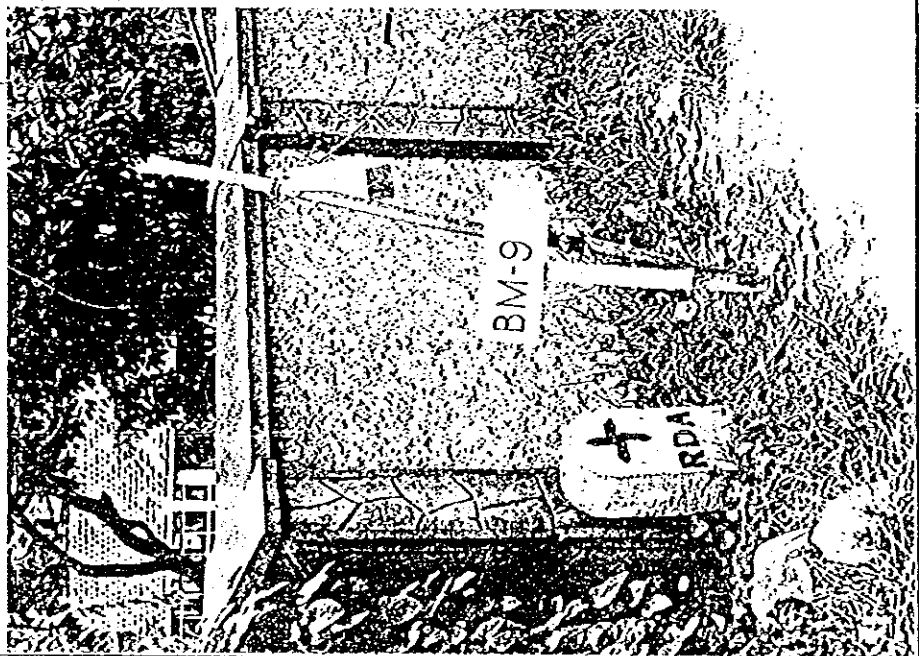
4. DATUM-NATIONAL-GRID/MSL

CO-ORDINATES : N. .... m  
 E. .... m  
 ELEV. .... 7.956 ..... m

LOCATION SKETCH



PHOTOGRAPH



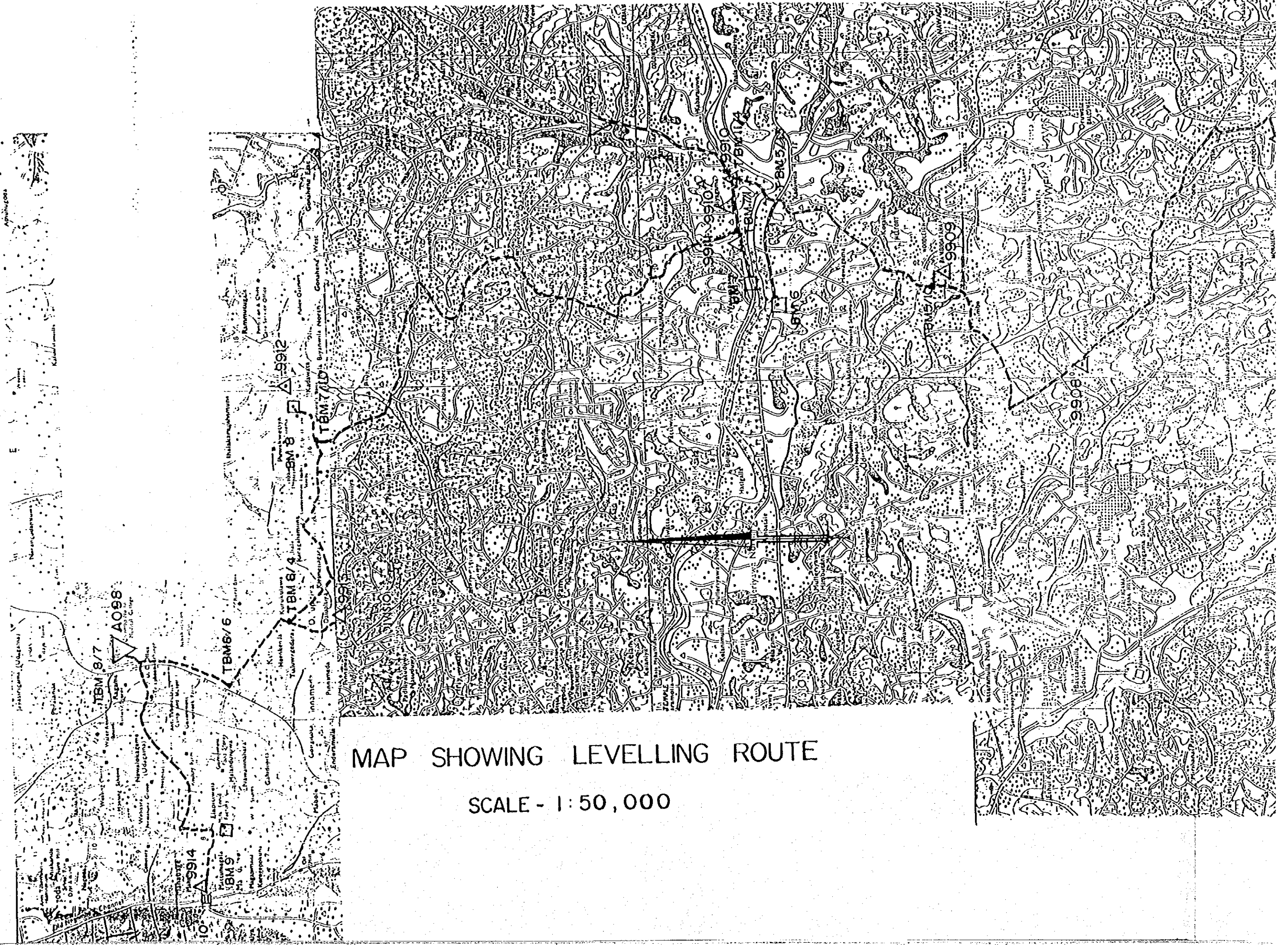
Method of Survey: SPIRIT LEVELLING

Date of Survey : MAY/JUNE '99

GAMINI B DODANWELA  
 LICENSED SURVEYOR & LEVELLER  
 35, SIRMAL AVENUE,  
 DEHIWALA.



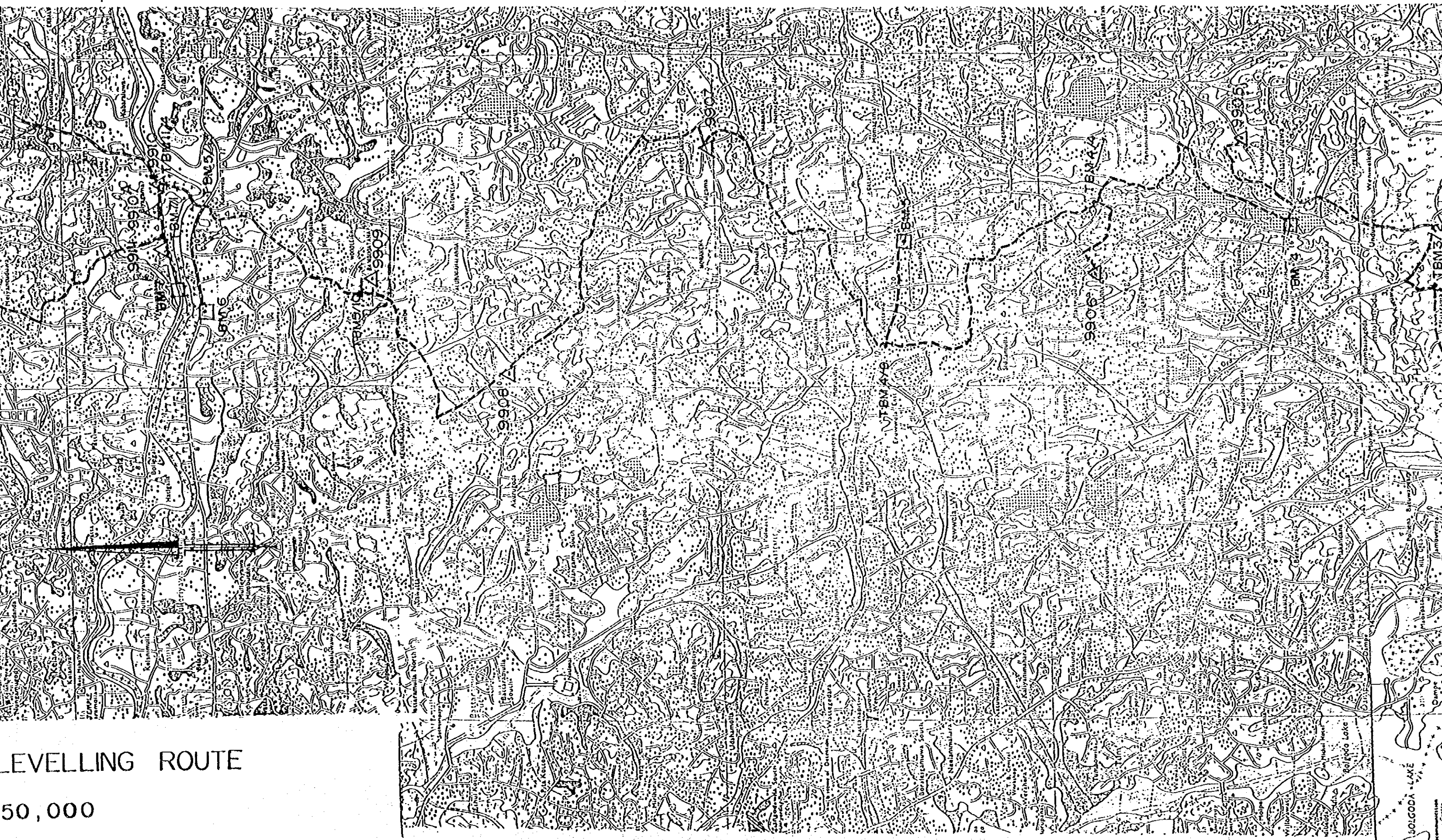
## **Annex 6: Leveling route map**



MAP SHOWING LEVELLING ROUTE

SCALE - 1 : 50,000





LEVELLING ROUTE

50,000

SOLGODA LAKE  
Dumrey



