

## CHAPTER XXII

### Digital Data Management

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## CHAPTER XXII

### DIGITAL DATA MANAGEMENT

It is envisaged to streamline digital data handling in field survey operations and related activities. All digital survey plans should be prepared according to the guidelines given below. Preparation of survey plans in digital form will be compulsory with effect from 01-01-2008. Therefore, supervising officers and surveyors should acquire required knowledge for collection, manipulation, processing and preparation of survey plans in digital form.

This chapter covers the following areas.

1. Equipment and Software
2. Field Investigation and Data Collection
3. Building up Digital Drawing
4. Quality Control in Digital Drawing
5. Data Storage, Security and Back up
6. Database of Survey Requisitions
7. Scanning of Old Filed Sheets and Usage of Images

#### 22.1 Equipments and Software

All equipments used for data collection have to be calibrated and should be in good condition.

Software provided by the Survey Department should be used for collection, conversion, manipulation and processing of digital data.

#### 22.2 Field Investigation and Data Collection

##### 22.2.1 Prospection Diagram of the Survey Area

A clear prospection diagram should be prepared showing all the proposed control stations, natural features and parcel boundaries with their descriptions and any other important information by the surveyor on his field investigation. This diagram should be filed in the requisition file.

##### 22.2.2 Control Traverses for Detail Surveys

For detail surveys, control traverses should be established and, closure should be checked and adjusted vide departmental survey regulations. Traversing and detail survey can be done together or one by one. However, traverse should be limited to twenty lines. If traversing and detail surveys are done together, complete data set should be adjusted before producing the plan.

Control Stations and survey points should be numbered as follows and should be shown in the field book.

- Detail survey points should be numbered from 1 to 6999
- Points to be set out should be numbered from 7000 to 8999
- Control Stations should be numbered starting from 9000

- These numbers should be unique for each survey plan.

For each traverse, point No., horizontal distance, bearing, vertical angle and point description will have to be recorded and booked in the field book vide annex-1. Observed coordinates of instrument stations may also be recorded, if required for traversing. If it is not possible to record vertical angle, then the slope distance or vertical distance may be recorded. Print out of adjusted bearings, adjusted distances and adjusted coordinates have to be pasted in the last page used for the said traverse. Specimen of adjusted coordinate sheet given in annex-2 should be used for every traverse.

Accuracy and procedure of the control surveys should be maintained in accordance with the DSR and Technical Instructions. All traverses should be established with new national coordinate system. Prior approval should be obtained for any deviations.

### 22.2.3 Data Collection and Recording in Detail Surveys

#### 22.2.3.1 Data collection with conventional equipment

Conventional methods of data collection will continue and data have to be converted to digital mode using the software provided by the Department.

#### 24.2.3.2 Data collection with Total Station and recording in Electronic Media (Data recorder or internal memory)

Point numbers (P), Coordinates (Northing (N), Easting (E) & Height (Z) ) and Point descriptions (C) of each point surveyed have to be recorded using internal or external data recorders. See annex-3 and annex-10 for feature codes. Fictitious height may be recorded in the case where height is not important. Field notes have to be maintained with the details such as point numbers, point descriptions, boundary descriptions and traverse points with reference to the subsequent and previous traverse points, tenementary information etc; as shown in annex-4. Traverse points should be shown in the field notes relative to the neighbouring boundaries. Print out of observed points authenticated by the surveyor should be pasted on the field book as shown in annex-5.

If boundary points are observed while traversing, field books should be maintained as shown in annex-6. Data should be downloaded to the computer and adjusted using software designated for it. A printout of adjusted coordinates of traverse and observation points in the sequence of Point No., Northing, Easting, Height (if available) and point description (PNEZC) authenticated by the surveyor should be pasted on a designated page of the field book as shown in annex-2 and 7.

(If data recorders are not available, all above information may be recorded manually in the field book while taking observations as shown in annex-8 for detail surveys. If data are manually recorded while traversing, total data set should be adjusted using the software provided and adjusted coordinates should be pasted as shown in annex-9. Field notes have to be maintained with the details such as point numbers, point descriptions, boundary descriptions and traverse points with reference to the subsequent and previous traverse points, tenementary information

etc; as shown in annex-4 and annex-6. However, prior written approval should be obtained from the supervising officer for manual recording.

### 22.2.3.3 Special requirements on Collecting Data

- a. Length of a detail observation to a permanent boundary point should not exceed 100m under normal conditions. However, longer shots may be observed up to 200m for natural boundaries or features like stream edges etc.
- b. Features that involve with area calculations should not be shown as single off set features. Therefore, foot paths, small streams, drains etc. should be surveyed as double off set features. They have to be shown in the plan with real dimensions.

## 22.3 Building up Digital Drawing

If Total Stations are used for field surveys, digital coordinate file has to be prepared in the format of PNEZC for preparation of digital plan. If conventional method is used, digital plan has to be prepared from original field notes. In both instances digital coordinate file has to be prepared in the format of PNEZC.

The format of digital drawing should be in DXF format.

All drawing features should be organized into the relevant layers given in the annex-10.

### 22.3.1 Completion of drawing and annotation – Digital Drawing

For English and Sinhala text, *Romans.shx* and *idm1.shx* fonts should be used respectively with the following letter sizes. However, these sizes should be changed according to the scale of the plan by multiplying with the scale factor. Oblique angle for all fonts is 17 degrees.

Feature	Font height in digital drawing for 1:1,000 plan	
	<i>Romans.shx</i> (Lower case)	<i>idm1.shx</i>
1. District prefix Plan No.	4.5	7
2. Supplement No., Sheet No. Inset No. Large streams Scale	3.3	5
3. Village Minor Division D.S. Division District Province Abutting Village Name	3.8	5

4. Lot numbers, Description of cultivation	2.4	4
5. Direction of roads and paths	3	4
6. Abutting descriptions, TP, PP references Description of Roads, Small streams, Buildings, Boundary marks	2.6	3.4
7. Boundary descriptions	2.0	2.8

Final digital drawing of the completed plan and Meta data file created as shown in annex-11 should be saved with the file names given in annex-12. Any amendments proposed by the supervising officers have to be done in the final digital drawing.

#### 22.3.2 Area computations

Area computations in detailed is included in DSR 13.12.4.

#### 22.3.3 Preparation of Tenement List

Tenement list has to be prepared in digital form using the software provided by the Department. Print out of the tenement list should be obtained using the same software.

### 22.4 Quality Control in Digital Drawing.

Supervising officer should check the closer of traverses and adjustment of them with the field notes. Lengths and bearings of traverses in the digital drawing should be compared with the field notes.

Coordinates of boundary points (at least 10%) should be compared with the coordinate values given in the filed book. If the digital drawing is generated from a survey carried out by conventional method, digital drawing should be compared with the field notes. Endorsement should be made in the field books regarding the checks carried out by the supervising officer.

When a plan is printed in several sheets (sections), original drawing should be used for printing each section. Separate drawing files should not be prepared for each section. Repeating lot numbers, arrows, boundary descriptions, section lines and other details should be shown in a separate layer as in annex -10.

Edge comparison of the sections should be made and edge comparison tracing should be placed in the requisition file with the endorsement of the surveyor and certificate of the supervising officer.

Completeness and correctness of the plan should be checked in accordance with the guidelines provided in DSR and, supervising officer is responsible for storing the final drawing file (single file) and Meta data file with the correct file names given in annex-12.

## 22.5 Data storage, Security and back up.

Proper storage and backing up is a very important aspect in data management. As digital media is fragile, it is essential to keep a backup in a reliable media. These backups should be properly indexed and safely stored for possible future applications.

### 22.5.1 Data Archiving in Divisional Survey Offices

All the digital data related with surveying should be securely archived in Divisional Survey Office for easy reference following the procedures given below.

Three sub-folders, namely; < work in progress>, <Survey Work> & <Completed work> should be opened in the internal hard drive-D of the computer assigned to Div.SO and they should be used for data archiving.

In the process of Data Archiving,

- The surveyor should open a sub-folder naming with his initials in folder; < **work in progress**> in the internal hard disk drive-D (eg:- HAAR-GS, PMS-LS). In this folder, four sub-folders namely; **Data, Drawings, TL & Fixed Data** should be opened for storing all the digital data in connection with preparation of survey plans & data under each requisition of survey.
- Superintendent of Survey, while sending the plans to Senior Superintendent of Surveys after examining, should open four sub-folders in the folder; <**Survey Work**> under each Survey Requisition, namely; **Data, Drawings, TL & Fixed Data** and relevant data files and metadata files should be archived as applicable.
- Having completed the amendments shown by the Senior Superintendent of Surveys, yearly sub-folders should be opened under the folder; <**Completed work**> and further sub-folders should be opened for each type of surveys under respective year sub-folder. In these sub-folders of different type of surveys, five sub-folders, namely; **LIS Archive, Data, Drawings, TL & Fixed Data** should be opened and relevant data and metadata should be archived.
- If no further amendments found, The Superintendent of Surveys should open a sub-folder naming the respective year under the sub-folder <Completed Work> and further sub-folders should be opened for each category of surveys under the year folder. In these sub-folders of each category of surveys, five sub-folders, namely; **LIS Archive, Data, Drawings, TL & Fixed Data** should be opened and relevant data and the metadata folder too should be archived.

Subsequently, Data archiving should be followed in the sub-folders created above as of the details given in the table, below;

Sub-folder Name	Data/Content
< work in progress>	Subfolders created on Surveyors' name
<Survey Work>	Contains only Subfolders for each Survey Request
<Completed work>	“Year”-Subfolders & Only Subfolders for each “type of survey” under each “Year”
<Type of Plan> eg:-< FVP>< FTP ><Topo PP >< PP ><CM><.....>	Only the subfolders for each “Requisition for Survey”
< Requisition No>  eg:- District/Survey Category/ DSD/Year/Serial No Co/BS/HMG/2011/235	<ol style="list-style-type: none"> <li>1. LIS Archive</li> <li>2. Data</li> <li>3. Drawings</li> <li>4. TL</li> <li>5. Fixation Data</li> <li>6. Metadata File</li> </ol> Relevant Subfolders of the above Subfolders as applicable.
<LIS Archive>	Name as the annex-12 of this chapter. Only the 3-subfolders in this folder will be uploaded to LIS via “FileZilla”  Folder Name : <52PPlanCO3234>( eg:-in <b>Colombo district</b> ) Drawing file name: 52PPlanCO3234.dxf Approved TL file name: 52PPlanCO3234-A.mdb Meta data file name: 52PPlanCO3234.txt
<Data>	<ol style="list-style-type: none"> <li>1. Data observed by Total Station equipments</li> <li>2. 4-Datfiles formed on adjusting of observed data in SD CAD                 These datfiles should be numbered to include the Requisition number as follows;                eg:- Datafile-1, connected with Req. No. 2013/24                    Data for observed detail survey                    <b>cod-</b> requisition Number                        eg:- cod_2013_24_1                    Traverse Data (with detail survey)                    Trv- <b>requisition Number</b>                        eg:-Trv_2013_24_1                    4 Datfiles on adjustment through software                    Trv_2013_24_1_Adjcoods-Trv&amp;Pnts                    Trv_2013_24_1_AdjTrvCoods                    Trv_2013_24_1_Len&amp;Obs.bearing                    Trv_2013_24_1_ObservedPt.coods             </li> <li>3. Datfiles prepared for old surveys (eg:- OLD_2013_24_1 etc.)</li> </ol>



<Drawings>	<ol style="list-style-type: none"> <li>1. Named final Plan (Include only the Standard Layers) eg :- 11FTP7In5Sh12.dxf (see the annex-12 for details)</li> <li>2. Coordinate file extracted from final plan eg:- 11FTP7In5Sh12.xls 11FTP7In5Sh12.csv 11FTP7In5Sh12.txt</li> <li>3. Extent of the lots Extent11FTP7In5Sh12.txt</li> <li>4. Cad Plans(Only for Cad Maps) 310015010013.xxx, 310015010014.xxx,310015010015.xxx etc. (xxx – Format should be as requested by the Land Registry office)</li> <li>5. 1:10,000 index diagram(<b>only for Cad Maps</b>) 31001501sh1_10000.dxf</li> </ol>
Tenement List <TL>	<ol style="list-style-type: none"> <li>1. Approved tenement list through the Software tool eg:- 11FTP7In5Sh12-A.mdb</li> </ol>
<Fixed Data>	<p>Plan with all the fixation data (<b>scan image not required</b>) eg:- fix11FTP7In5Sh12.dxf In addition to standard layers, Fixation data for each plan should be saved in separate new layers</p> <p>eg:- PPCO6575_Fixeddata,CM520004b1sh2_Fixeddata ,..etc.</p>

### 22.5.2 Safety of the Data files

The surveyor shall be responsible for the safety of all the digital data until the respective survey plan be completed. In this regard, the surveyor shall use extra computer and reliable external digital media in addition to his working computer for safely maintenance of the backup data during the process of the plan preparation prior to completion of the job.

### 22.5.3 Archiving of Completed Digital Plans.

The supervising officer should hand over a CD, in which all the sub-folders under the <Requisition No.> been copied, to the District Survey Office along with the certified survey plans. The CD should be labeled for the survey requisition number with indelible ink. (eg. Co/BS/HMG/2011/235). A register for this should be maintained in the Divisional Survey Office.

The supervising officers may delete the relevant data archived in computer hard disk, after a period of six months of certifying the plans and sending the respective digital data to the District Survey Office.

The final set of digital data should be incorporated with the amendments shown by the Senior Superintendent of Surveys prior to certify the plans. Hence, the CD returned by the Senior Superintendent of Surveys for amendments should be noted in the register of the Divisional Survey Office and Superintendent of Surveys should give the same to Govt. surveyor for amendments. If there is no amendments, the respective CD should be copied into a new CD and it should be labeled with the reference of Survey Requisition number (eg.

**52PPlanCO3234(CO\_KLN\_2013\_531)** ) with indelible ink in Divisional/District office and should be archived in District Survey Office.

The data files returned by the surveyor, after the amendments, having ascertained by the superintendent of surveys as the amendments have been actually attended, shall be entered into a new sub-folder opened on new date and action should be taken to prepare the folders as detailed in para; 22.5.1 in the Divisional Survey office and then all the data should be copied in to a new CD labeled with survey requisition number (eg. **52PPlanCO3234(CO\_KLN\_2013\_531)** with indelible ink has to be recorded in the Divisional Survey office register and handed over to District Senior Superintendent of Surveys. A copy of the same may be archived in the Divisional Survey office too. The survey requisition folder in District Survey Office should be updated with necessary information in accordance with the specimen of the annex-17, sticking it on the cover of the folder. It will be easier to identify the final set of data in completed survey plans of the Govt. surveyor by naming in two different ways.

The superintendent of surveys is fully responsible for the final digital data set prepared on this procedure.

#### **22.5.4 Data Archiving, Securing and Backup copies in District Survey Offices**

On certification of the survey plans by District Senior Supdt. of Surveys, the final digital data files received in District Survey Office should be archived in a separate file in computer hard disc with reference to relevant plan number and the requisition number. eg:- **52PPlanCO3234(CO-KLN-2013-531)**. In addition to this, actions should be taken to copy the same data file to the space allocated to each district Senior Supdt. of Surveys in **LIS server**.

< D >

< Survey Work \_DistSO >

<FVP>< FTP ><Topo PP >< PP >< .... >

<Plan Reference (Requisition No.)>

<LIS Archive>< Data >< Drawing ><TL><Fixed Data><Metadata file>

. Soon after certifying the plans or on the next working day, the Senior Superintendent of Surveys should take actions to send the data files in the LIS Archive to the Land Information System.

The digital data of all the certified plans within the month should be copied to the Land Information System through the Internet before the 12<sup>th</sup> day of the following month. The steps shown in the annex-16 should be followed in copping the respective data. The data copied here are the sub-folder; LIS Archive among the sub-folders mentioned in para-22.5.1. Though the data can be copied at any date of the month, a report (text document) prepared as of the specimen of annex-18, detailing the each set of copied data should be uploaded too. Accordingly, the Land Information System branch will download the data. It is advisable to use the data archiving registers, maintained in the District Survey Office for preparation of the reports. A nil report, stating reason should be submitted if no plan has been certified during the month. Any clarification may be referred from the Land Information System branch.

### **22.5.5 Archiving of Data-folder Backup**

District Senior Superintendents of Surveys are responsible for backup archiving of all the data folders copied in computer hard drives to compact discs (CD) and they should be numbered on serial order with respective district prefix (eg:- Maha 23 SUR). Folders in different types of surveys <FVP/FTP/CM> may be archived in a single CD. When a CD is fully completed with data folders, it should be copied in to a new CD and send to the Document Management and Professional Standard branch in the head office. The information relevant to each CD should be maintained in a ledger as detailed in the annex-13. The serial number of the CD should be stated in both the registers; Issuing the Last lot Particulars and Plan certification, which are maintained in District Survey Office.

The data files archived in computer hard disk in the District Office, should be copied to external hard disk and they should be archived in secure manner.

A Database inclusive of all the relevant data in each CD ( CD No, Requisition No, Plan Type, Plan No. etc.) should be maintained in District Survey Office. Senior Superintendents of Surveys, prior to issue of plan copies, should ascertain that all the relevant digital data had been copied to the CD.

Since, there can be a large number of subsequent surveys in cadastral map areas, numbering the CD, referring to relevant Cadastral map and archiving them in order of the cadastral map number, would privilege to conduct the subsequent surveys systematically.

The parent lots in the original digital “*dwg*” drawing files maintained by the District Senior Superintendent of Surveys, which have been taken for subsequent surveys, should be coloured for easy identification. The digital drawing of the new subsequent survey data file should be recorded in a separate layer in the original digital drawing and the layer should be named as “TEXT-SUBS”. The stages of subsequent surveys should be denoted in each data layer by naming the same layers such as; TEXT-SUBS<sup>1</sup>, TEXT-SUBS<sup>2</sup> ---- etc. The digital drawing, which contains original data, will be updated by adapting the detailed procedure.

The digital data of subsequent surveys should also be archived in District Survey Office. Tenement List should be prepared through the software provided and it should be transmitted to the Land Information System. In accordance with the section 36(3) of the Title Registration Act, copies should be issued from the amended plan for issue of title certificate. Certified digital copy of the subsequent survey should be used for this purpose. The same certified digital copy should be used for issuing copies to both; Title Settlement Commissioner and Title Registration Commissioner.

### **22.6 Databases for Survey Requisitions**

A database through the software provided, consisting of relevant information for all the survey requisitions should be maintained in both District and Divisional Survey Offices. This software tool should be used for issuing the numbers for survey requisitions, updating of all the related information and assigning of survey requisitions to registered surveyors too. The officer responsible for the software tool, should enter the monthly progress of each survey requisition at the end of the each month and all the progress reports should be generated through the same software tool. Backup data of the survey requisition database should also be securely archived by the end of each month.

### **22.7 Scanning of Old Field Sheets and Using of Scanned Soft copies**

#### **22.7.1 Scanning of Quarter Field Sheets and Tenement Lists**

Originals of Quarter Field Sheets and the Tenement Lists are scanned in the District Survey Offices with using the software provided by the Department. The scanned soft copies

should be numbered in accordance with the annex-14. (on scanning of the document, the name assigned for the same soft copy will automatically be given by the software). Photocopies of the documents should not be used for scanning.

The scanned soft copies should be saved in CD and the same CD should be serially numbered under District prefix starting from number; 1.

Eg:- Compact Disks (CD) in Kandy District; Maha CD 1, Maha CD 2 .... etc.

These CD should be stored in District Offices and the copied CD of the same should be handed over to Document Management & Professional Standards (DMPS) branch in head office. A separate Register for these CD, should be prepared and maintained properly. (See the annex-15 for specimen of ledger page)

The CD, which contain the scanned field sheets, should be treated as property of the Department. Issuing the copies of these CD to external institutions and requested public should be followed by the instructions approved by the Surveyor General.

A separate database for the soft copies of scanned field sheets should be maintained using the software tools provided by the Department. The information about each soft copy and the details of each CD contains the soft copies etc. should be recorded in the database. Hence, it is important to keep secured backup copies of this database in the DMPS branch of the SGO.

The District Senior Superintendent of Surveys should take necessary actions to use the mechanism, which has been already introduced, to avail privileges for general public to view the scanned plans through the Internet. The assistance of the Superintendent of Surveys (Headquarters), officer in charge of the document room and the IT technician should be availed for this task. Since It is greatly important to update the indexes of "ScanImage" and the "ADITS" software provided by the Department with scanning of all the plans, enabling them to release to view through the Internet, the officer in charge of the document room and the IT technician should follow the proceedings upon the instructions of the District Senior Superintendent of Surveys/Superintendent of Surveys (Headquarters).

### **22.7.2 Scanning Plans in DMPS branch**

Actions should be taken to scan the old field sheets larger than A3 in size, which are available in the District Survey Offices, at the DMPS branch in SGO.

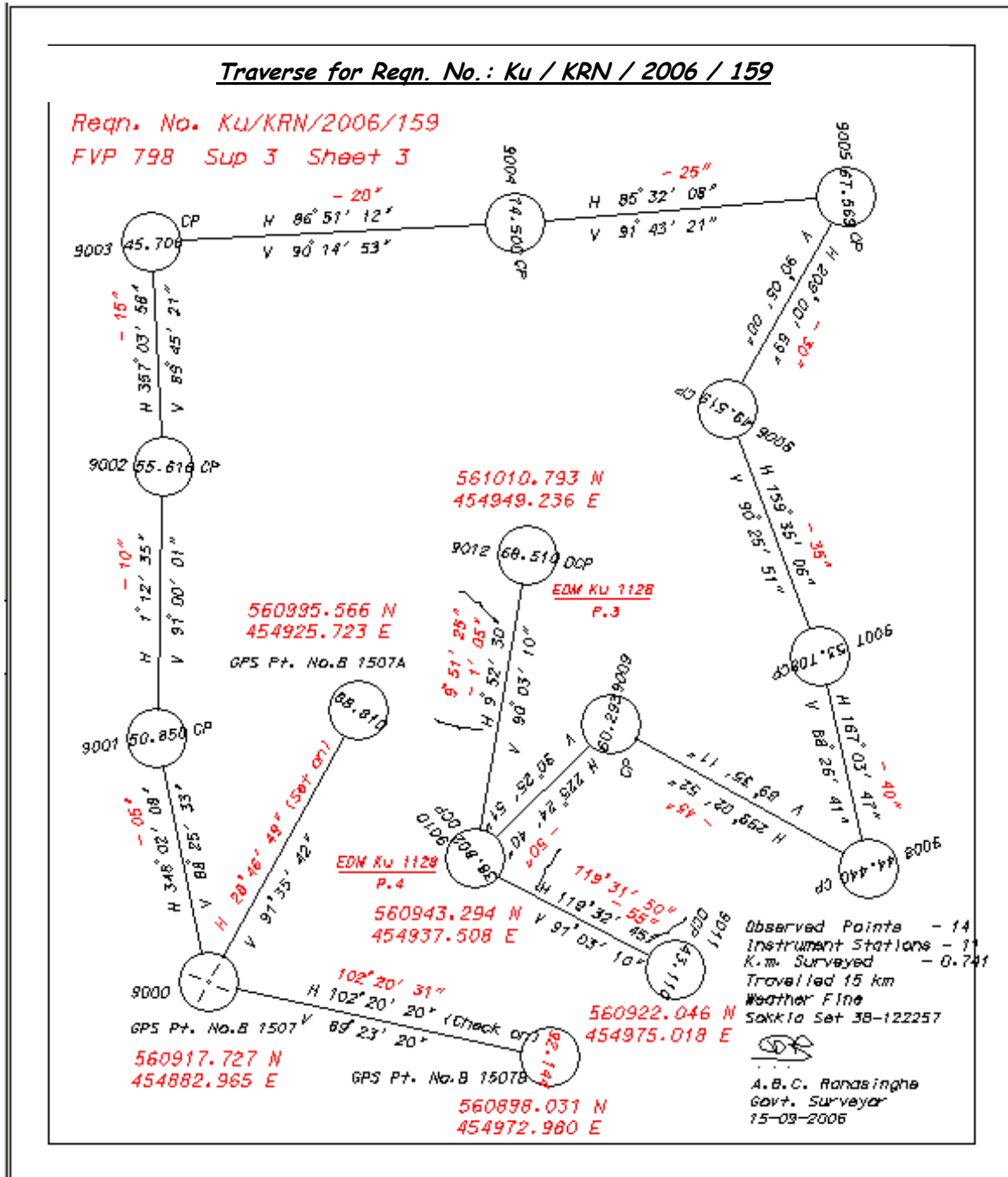
Scanning the originals of the old plans archived in DMPS branch, should be done therein and the soft copies of the same should be issued to relevant district offices. These scanned softcopies should not be issued to any external institutions and requested public without a prior approval of the Surveyor General. All the copies of scanned plans should be securely archived in backup storages as detailed in para-22.7.1

### **22.7.3 Using the Scanned Soft Copies.**

Scanned soft copies would be affected with geometrical distortions due to the erroneous effects of the camera of the scanner. Most of these distortions are uniform geometric errors and they can be corrected in few preparations. However, irregular geometrical deviations cannot be corrected in such a simple proceeding. The differences and the quantities of these geometrical errors can only be measured on complete rectification of the images. If the rectification cannot be accepted, a new methodology should be adapted for proper rectification. If the rectified image is not in acceptable condition, action should be taken to re-scan the field sheet. The scanned soft copies with applying geometrical corrections can be used for any purpose. The software tools for rectification of scanned plans are provided by the Department.

ANNEX 1

Specimen for Field Book Page on Traversing



## ANNEX 2

**Specimen for Adjusted Co-ordinate Sheet of a Traverse**  
**(This page should be maintained for every traverse)**

EDM Traverse		Des	Horizontal <			Vertical <			Hor.D ist	Coordinates			Remarks
Stn No	Target No		0	'	"	0	'	"		N	E	Z	
<i>Adjusted Coordinate sheet of the traverse should be pasted here as follows</i>													
Adjusted co-ordinate sheet													
Station No.	Des	Observed bearing ° ' "	Correction for bearing ° ' "	Corrected Bearing ° ' "	Adjusted Bearing ° ' "	Hori. length (m)	Adjusted Coordinates		Remarks				
							North (m)	East (m)					
9000	A6						560917.727	454882.965	GPS Point No. B1507				
9001	CP	348 02 08	- 05	348 02 03	348 02 03	50.850	560967.488	454872.440					
9002	CP	01 12 35	- 10	01 12 25	01 12 24	55.616	561023.107	454873.630					
9003	CP	357 03 58	- 15	357 03 43	357 03 42	45.706	561068.753	454871.287					
9004	CP	86 51 12	- 20	86 50 52	86 50 52	74.500	561072.865	454945.692					
9005	CP	85 32 08	- 25	85 31 43	85 31 42	67.569	561078.148	455013.073					
9006	CP	209 00 59	- 30	209 00 29	209 00 29	49.519	561034.857	454989.078					
9007	CP	159 35 06	- 35	159 34 31	159 34 30	53.708	560984.541	455007.839					
9008	CP	167 03 47	- 40	167 03 07	167 03 07	44.440	560941.246	455017.814					
9009	CP	299 02 52	- 45	299 02 07	299 02 06	60.293	560970.525	454965.117					
9010	CP	225 24 40	- 50	225 23 50	225 23 51	38.802	560943.294	454937.508					
Total						541.003	560943.294	454937.508	OCP				
Error allowed :													
Error obtained :													
Signature of surveyor:													

Name of surveyor:												
Date:												

## ANNEX 3

## Feature Codes for Point features

**1. Boundary points:**

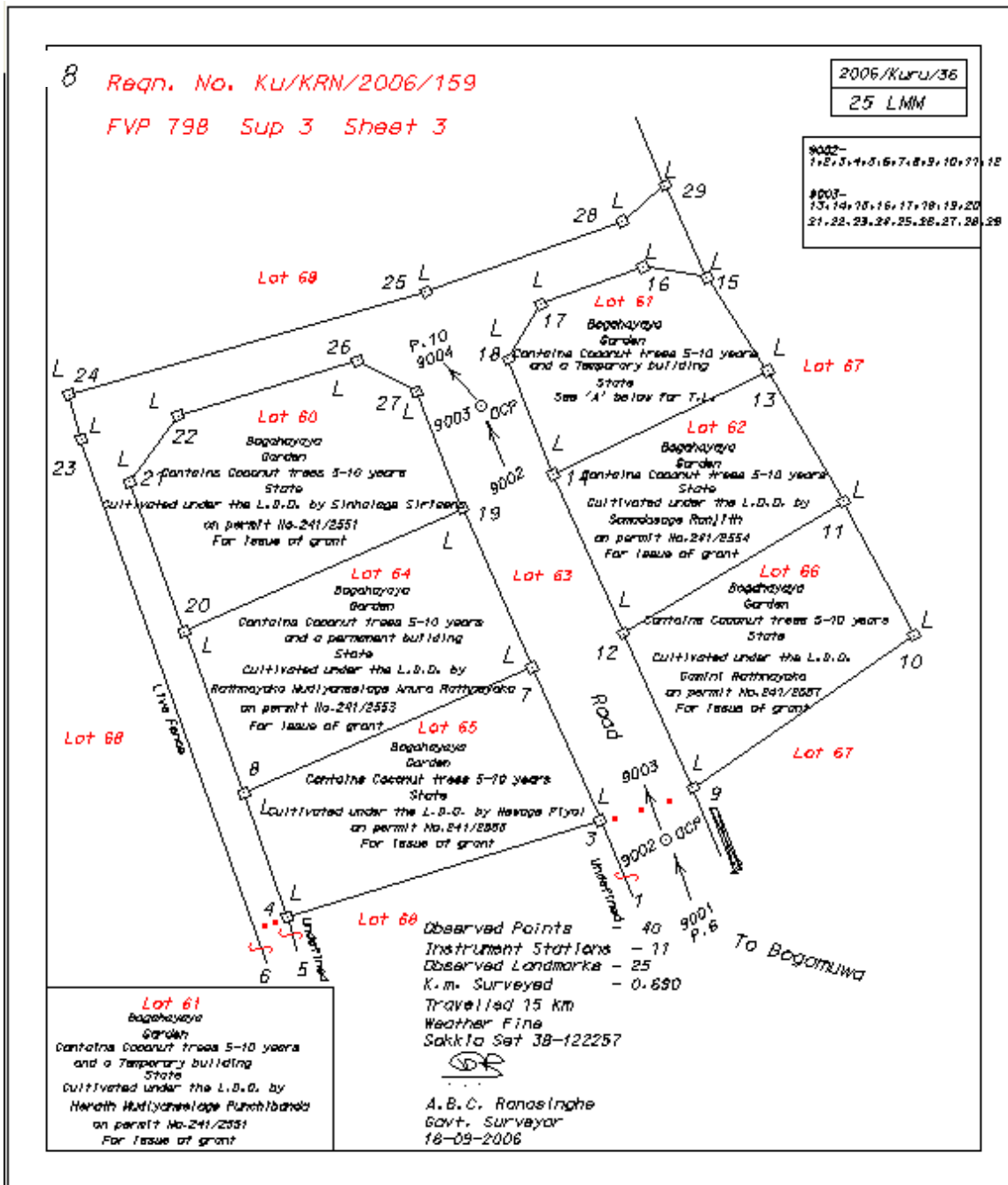
	<b>Point Feature</b>	<b>Code</b>
1	Concrete fence post	CoP
2	Wooden fence post	WoP
3	Iron Nail	IN
4	Concrete Nail	CN
5	Brass Nail	BN
6	Iron Rail	IRa
7	Iron Rod	IR
8	Landmark	L
9	Mark on Cement	MC
10	Mark on Rock	MR
11	Mark on Wall	MW
12	Old Landmark	OL
13	Stake	St
14	Other type of boundary points	OTB
15	Electric Post	EP
16	Telephone Post	TP
17	Rock Landmark	RL
18	Landmark - RDA	LR

**2. Instrument Station Points:**

1	Cement picket	stncp
2	Rock picket (below surface)	stnrpb
3	Rock picket	stnrp
4	Sunk Stone	stnss
5	GPS observation point	stngps
6	Other type of pickets	stnotp
7	Landmark Picket	stnlp
8	Traverse Cement Picket	stntcp
Note: Feature line break (stnbkcp, stnbkpb, etc;)		stnbk...



Specimen for Field Book Page on Detail Survey  
 (Detail Survey has been done separately. See Annex 1 for the traverse)



ANNEX 5

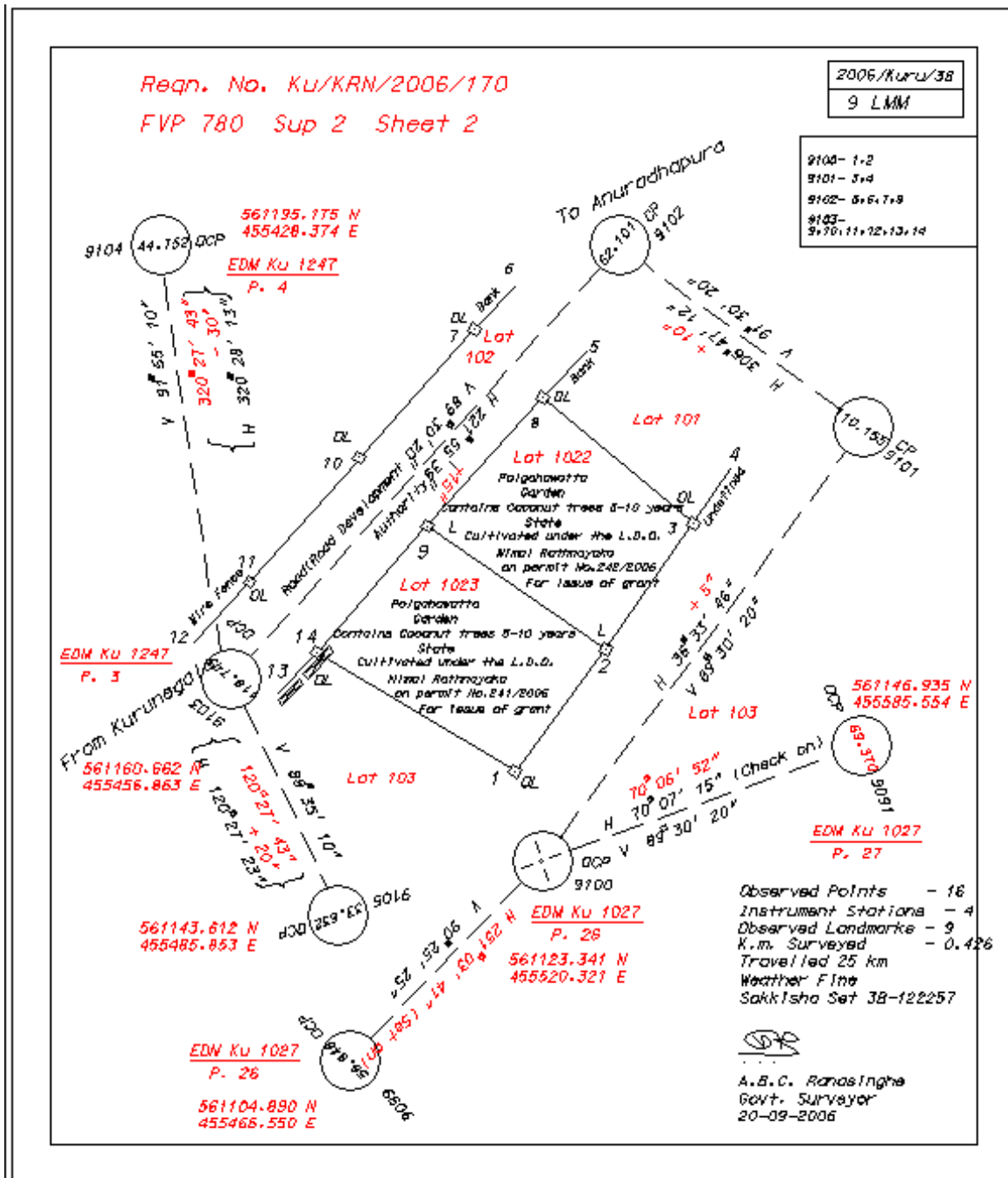
Specimen for FB keeping when data are recorded digitally  
(Detail survey only)

EDM Traverse		Des	Horizontal <			Vertical <			Hor.D ist	Coordinates			Remarks												
Stn No	Target No		0	'	"	0	'	"		N	E	Z													
9002		OCP								561023.107	454873.630		Page 3												
	9001	OCP	181	12	25			55.616		560967.488	454872.440		Set on												
	9003	OCP	357	03	43			45.706	561068.722	454871.251			Checked on												
	9001	OCP	181	12	24			55.616					Checked on after observation												
9003		OCP								561068.753	454871.287		Page 3												
	9002	OCP	177	03	43			45.706		561023.107	454873.630		Set on												
	9004	OCP	86	50	52			74.500	561072.818	454945.638			Checked on												
	9002	OCP	177	03	43			45.706					Checked on after observation												
<i>Coordinate sheet of observed points to be pasted as follows</i>																									
			<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th rowspan="2">Point No.</th> <th colspan="3">Observed Coordinates</th> <th rowspan="2">Code</th> </tr> <tr> <th>N (m)</th> <th>E (m)</th> <th>Z (m)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>561104.671</td> <td>454534.539</td> <td></td> <td>U</td> </tr> </tbody> </table>									Point No.	Observed Coordinates			Code	N (m)	E (m)	Z (m)	1	561104.671	454534.539		U	
Point No.	Observed Coordinates			Code																					
	N (m)	E (m)	Z (m)																						
1	561104.671	454534.539		U																					

			2	561112.837	454552.627		U		
			3	561120.135	454528.086		L		
			4	561100.484	454464.801		L		
			5	561093.674	454466.586		U		
			6	561091.248	454460.516		L F		
			7	561151.215	454514.362		L		
			8	561125.739	454455.991		L		
			9	561126.719	454546.993		L		
			10	561157.612	454591.692		L		
			11	561184.676	454577.363		L		
			12	561157.993	454532.766		L		
			13	561211.184	454561.959		L		
			14	561190.235	454518.708		L		
			15	561230.089	454549.686		L		
			16	561232.139	454536.819		L		
			17	561222.620	454516.145		L		
			18	561213.673	454509.572		L		
			19	561183.331	454500.131		L		
<b>Signature of surveyor:</b>									
<b>Name of surveyor:</b>									
<b>Date:</b>									

ANNEX 6

Specimen for Field Book Page on Traversing with Detail Survey



**ANNEX 7**

Specimen for FB keeping when data are recorded digitally  
(Traversing with detail survey)

EDM Traverse		Des	Horizontal <			Vertical <			Hor.Dist	Coordinates			Remarks
Stn No	Target No		0	'	"	0	'	"		N	E	Z	
<i>Adjusted coordinate sheet of traverse and observed points to be pasted as follows</i>													
Signature of surveyor:													
Name of surveyor:													

Date:													

## ANNEX 8

Specimen for FB keeping when data are recorded manually  
(Detail surveys only)

EDM Traverse		Des	Horizontal <			Vertical <			Hor. Dist.	Observed Coordinates			Remarks
Stn No	Target No		0	'	"	0	'	"		N	E	Z	
9002		OC P								<b>561023.107</b>	<b>454873.630</b>		Page 3
	9001	A6	<b>181</b>	<b>12</b>	<b>25</b>			55.616		<b>560967.488</b>	<b>454872.440</b>		GPS B1507 Set on
	9003	OC P	357	03	43			45.706		<b>561068.722</b>	<b>454871.251</b>		Checked on
	1	U							561104.671	454534.539			
	2	U							561112.837	454552.627			
	3	L							561120.135	454528.086			
	4	L							561100.484	454464.801			
	5	U							561093.674	454466.586			
	6	LF							561091.248	454460.516			
	7	L							561151.215	454514.362			
	8	L							561125.739	454455.991			
	9	L							561126.719	454546.993			
	10	L							561157.612	454591.692			
	11	L							561184.676	454577.363			
	12	L							561157.993	454532.766			
9003		OC P								<b>561068.753</b>	<b>454871.287</b>		Page 3
	9002	OC P	<b>177</b>	<b>03</b>	<b>43</b>			45.706		<b>561023.107</b>	<b>454873.630</b>		Set on
	9004	OC P	86	50	52			74.500		<b>561072.818</b>	<b>454945.638</b>		Checked on
	13	L							561211.184	454561.959			
	14	L							561190.235	454518.708			
	15	L							561230.089	454549.686			
	16	L							561232.139	454536.819			
	17	L							561222.620	454516.145			
	18	L							561213.673	454509.572			
	19	L							561183.331	454500.131			
	20	L							561158.273	454443.947			

	21	L								561188.607	454433.030		
	22	L								561202.022	454442.774		
	23	L								561197.193	454422.988		
	24	L								561206.323	454420.564		
	25	L								561227.123	454492.838		
<b>Signature of surveyor:</b> <b>Name of surveyor:</b> <b>Date:</b>													



## ANNEX 9

Specimen for FB keeping when data are recorded manually  
(Traversing with detail survey)

EDM Traverse		De s	Horizontal <			Vertical <			Hor. Dist.	Observed Coordinates			Remark s
Stn No	Target No		0	'	"	0	'	"		N	E	Z	
9100		OC P								<b>561123.341</b>	<b>455520.321</b>		
	9099	OC P	<b>251</b>	<b>03</b>	<b>41</b>				56.848	561104.890	455466.550		
	9091	OC P	70	7	15				69.370	561146.935	455585.550		
	9103	CP	120	27	43				73.632	561160.663	455456.863		
	1	OL								561141.904	455514.657		
	2	L								561166.644	455533.182		
	9101	CP	36	33	46				110.155	561211.817	455585.946		
9101		CP								561211.817	455585.946		
	9100	OC P	216	33	46				110.155	561123.340	455520.325		
	3	OL								561192.296	455551.240		
	4	U								561203.359	455558.791		
	9102	CP	306	47	12				62.101	561249.005	455536.216		
9102		CP								561249.005	455536.216		
	9101	CP	126	47	12				62.101	561211.817	455585.951		
	9103	CP	221	55	39				118.743	561160.662	455456.877		
9103		CP								561160.662	455456.877		
	9102	CP	41	55	39				118.743	561249.005	455536.220		
	9100	OC P	120	27	23				73.632	561123.340	455520.335		
										<b>561123.341</b>	<b>455520.321</b>		
<i>Adjusted coordinate sheet of traverse and observed points to be pasted as follows</i>													

Stn/Pt No.	Adjusted Coordinates			Code
	N (m)	E (m)	Z (m)	
<b>9100</b>	<b>561123.341</b>	<b>455520.321</b>		OCP
1	561141.905	455514.652		OL
2	561166.645	455533.177		L
<b>9101</b>	<b>561211.818</b>	<b>455585.941</b>		CP
3	561192.297	455551.230		OL
4	561203.360	455558.781		U
<b>9102</b>	<b>561249.006</b>	<b>455536.206</b>		CP
<b>9103</b>	<b>561160.663</b>	<b>455456.863</b>		CP

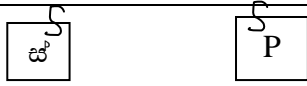


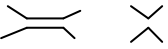




  



Signature of Surveyor:
Name of Surveyor:
Date:

අංකිත දත්ත පිඹුරු සඳහා දත්ත ස්ථර  
Data Layers for Digital Survey Plans

දත්ත ස්ථර Layers - version 2012	කෙටි යෙදුම්-- සිංහල/ඉංග්‍රීසි Abbreviations -Sinhala /English	විස්තරය Descriptions
BOUND-ADMIN-VIR	+---+---+---+---+ *+*+*+*+*+*+ ---...---...---...---...--- ---...---...--- ---...---...---   - - - - -	පළාත් මායිම/Province boundary දිස්ත්‍රික් මායිම /District Boundary ප්‍රාදේශීය ලේකම් කොට්ඨාශ මායිම/ Divisional Secretaries Division Boundary ග්‍රාම නිලධාරී කොට්ඨාශ මායිම Grama Niladhari Boundary ගම් මායිම /Village Boundary මහ නගර සභා, නගර සභා හෝ ප්‍රාදේශීය සභා සීමා/Municipal, Urban Council or Pradeshiya Sabha limits මහ නගර සභා, නගර සභා හෝ ප්‍රාදේශීය සභා සීමා(විශාල කිරීම්වල)/Municipal, Urban Council or Pradeshiya Sabha limits (of extensions) ජන්ද කොට්ඨාශය නැතහොත් කොට්ඨාශ මායිම /Ward Or Division
BOUND-B-GEN	ඉ/B	ඉවුර/Bank
BOUND-BUND-GEN	කණ්ඩිය /BUND	කණ්ඩිය දිගට ලියනු ලබයි /Bund
BOUND-BW-GEN	මාතා/ BW	මායිම් තාප්පය /Boundary Wall
BOUND-C-GEN	ගැබු/ Cu	ගැටි බැම්ම /Curb
BOUND-DF-GEN	කෝවු /DF	කෝවු වැට /Dry Fence

BOUND-DT-GEN	අ/Dh	අගල /Ditch/Trench
BOUND-EDN-GEN	කා/Dn	කපන ලද කානුව /Earth drain
BOUND-HG-GEN	බවු/ Hg	බඩ වැටිය /Hedge
BOUND-HYDRO-GEN	ඡ/C	ඡල මාර්ගය /Channel/Cannel
BOUND-HYDRO-GEN	ඇළ /Ela	ඇළ /Ela
BOUND-HYDRO-GEN	-	ඡල ප්‍රවාහය/ඔය/ගඟ† /Stream/Oya/River†
BOUND-HYDRO-GEN	-	ඡලාශ/වැව/කළපු /Reservoir/Wewa/Lagoon†
BOUND-HYDRO-GEN	-	වෙනත් ඡල මායිම් /Other type of Water Boundary
BOUND-IF-GEN	යවු/IF	යකඩ වැට /Iron Fence
BOUND-LF-GEN	පැවු/ LF	පැළ ඉණි වැට /Live Fence
BOUND-LM-GEN		මායිම් ගල් හවිතයෙන් මායිම් පිහිටුවා ඇතිවිට /Boundaries defined with Landmarks, RL and boundary Posts
BOUND-MY-GEN	සිකා/ MDn	සිමෙන්ති කාණුව /Masonry Drain
BOUND-OTHER-GEN	-	වෙනත් මායිම් /Other type of Boundary
BOUND-OUTER-GEN	-	වෙරළ මායිම /Shore Line
BOUND-RG-GEN	නි/R	නියර /Ridge
BOUND-RL-GEN	-	දුම්රිය මාර්ග/ Railway line
BOUND-RW-GEN	ආකා/RW	ආධාරක තාප්පය /Retaining Wall
BOUND-SF-GEN	ගවු/SF	ගල්වැට /Stone Fence
BOUND-TB-VIR	-	Transferred Boundaries

BOUND-TE-GEN	තාගැ/ TE	තාර ගැට්ට /Tar Edge
BOUND-U-GEN	අවි/U	අවිනිශ්චිත /Undefined
BOUND-WF-GEN	කවැ/ WF	කම්බි වැට /Wire Fence
BOUND-W-GEN	මාබ්/ W	මායිම බිත්තිය /Wall
BOUND-WLF-GEN	කපැවැ/ WLF	කම්බි පැළ ඉණි වැට/ Wire Live Fence
BOUND-WNF-GEN	කදැවැ/WNF	කම්බි දැල් වැට /Wire Net Fence
OBJ-MAN-MADE		ස්ථිර ගොඩනැගිල්ල /Permanent building
OBJ-MAN-MADE		තාවකාලික ගොඩනැගිල්ල /Temporary building
OBJ-MAN-MADE		අත්තිවාරම /Masonry Foundation
OBJ-MAN-MADE		පාලම/බෝක්කුව /Bridge/Culvert
OBJ-MAN-MADE	-	සිමෙන්තියෙන් බදින ලද ලිඳ/ලිඳ Masonry Well/Earth well
OBJ-MAN-MADE	වටැ / WT	වතුර ටැංකිය/ Water Tank
OBJ-MAN-MADE		ගේට්ටුව /Gate
OBJ-MAN-MADE		ගේට්ටු මාර්ගය /Gate Way
OBJ-MAN-MADE		මතුපිට පාලන ලක්ෂ්‍ය සඳහා සංකේතය /Surface Monument Symbol
OBJ-MAN-MADE		භූමිතික පාලන ලක්ෂ්‍ය සඳහා සංකේතය /Geodetic Control Point Symbol

OBJ-MAN-MADE	 115.76  115.76	පිල් ලකුණ /Benchmark
OBJ-MAN-MADE	FBM(with value)/පිල	පිල් ලකුණ (මූලික)/Benchmark (Fundamental)
POINT-FS	ග/L	මායිම් ගල /Landmark Benchmark
POINT-FS	පිග /RL	පිහිටි මායිම් ගල /Rock Landmark
POINT-FS	ක/BP	මායිම් කනුව(කොන්ක්රීට් කනුව/ලී වැට කනුව/වෙනත් ස්ථිර මායිම් කනු)/Boundary Post
POINT-FS	ල/M	සිමෙන්තිය මත සලකුණ /Mark on cement floor
POINT-FS	ල/M	මායිම් තාප්පය මත සලකුණ /Mark on boundary wall
POINT-FS	ල/M	තාප්පය මත සලකුණ /Mark on Wall
POINT-FS	ලී / St	ලී කුඳ්ඳය /Stake / Wooden Stakes
POINT-FS	පුග /AL	පුරා විද්‍යා දෙපාර්තමේන්තුව මගින් වළලන ලද ගල /Boundary Stone- Archeological Dept.
POINT-FS	කැග/ FL	වන සංරක්ෂණ දෙපාර්තමේන්තුව මගින් වළලන ලද ගල /Boundary Stone- Forest Dept.
POINT-FS	මාස/RDM	මාර්ග සංවර්ධන අධිකාරිය මගින් වළලන ලද සලකුණ /Boundary Stone- RDA
POINT-FS	වික/ EP	විදුලි කණුව /Electric Post
POINT-FS	දුක/TP	දුරකථන කණුව /Telephone Post
POINT-FS	ට්‍රාක /TFP	ට්‍රාන්ස්ෆෝමර් කණුව /Transformer Post
POINT-FS	තැපෙ/PB	තැපැල් පෙට්ටිය /Post Box
POINT-FS	TCB/දුකු	Telephone Call Box/දුරකථන කුටිය

POINT-FS	ඇ/N	පින්තල ඇණය /Brass Nail
POINT-FS	ඇ/ N	යකඩ ඇණය /Iron Nail
POINT-FS	යක/IR	යකඩ කණුව /Iron Rail
POINT-FS	මබ්/Mh	මනුබිල /Manhole
POINT-FS	කුබ/RR	කුණු බක්කිය/ Refuse Receptacle
POINT-FS	වප/SP	යතුර පයිපය/Stand Pipe
POINT-FS	වෑ/V	වැල්වය නොහොත් වාතාශීර නලය/Value or Vent-pipe
POINT-FS	මපාල /SM	මතුපිට පාලන ලක්ෂ්‍යය /Surface Monument
POINT-FS	භූපාල/GP	භූමිතික පාලන ලක්ෂ්‍යය /Geodetic Control Point
POINT-FS	ගස /Tr	ගස /Tree
POINT-FS	කික/ kmP	කිලෝ මීටර කණුව /Kilometer Post
POINT-SN		මැනුම් ස්ථානය /Survey Nodes
POINT-TN		පරික්රමන ස්ථානය/ Traverse Nodes
POINT-TP		පැරණි පිඹුරක් මගින් පිහිටවූ ලක්ෂ්‍යය/Transferred Points
TEXT-BD		මායිම හැඳින්වීමේ විස්තරය/Boundary Line Description
TEXT-BDP		මායිම ලක්ෂ්‍යයේ විස්තරය/Boundary Point Description
TEXT-EXT		ඉඩම් කැබැල්ලේ ගණනය කරන ලද වර්ගඵලය /Computed Extent of Land Parcels
TEXT-HG		ස්ථානීය උස /Height Value
TEXT-HYDRO		ඇල/ඔය/ගඟේ නම /Name of the river/oya
TEXT-INFO-PLAN		පිඹුර මත සටහන් කරන තොරතුරු /Text in body of Plan

TEXT-LOT		කැබලි අංකය /Lot Number
TEXT-PN		තොරතුරු මැනුම් හඳුනාගැනීමේ අංකය /Point Number
TEXT-RD	මාර්ග (අ)/Road(H)	මාර්ගය (අධිවේගී)/Road (Highways)
TEXT-RD	මාර්ග (ප්‍රාස)/Road(PS)	මාර්ගය (ප්‍රාදේශීය සභා)/Road (Pradeshiya Saba)
TEXT-RD	මාර්ග (වා)/Road(ID)	මාර්ගය (වාරි මාර්ග)/Road(Irrigation Dept)
TEXT-RD	මාර්ග (ඉ)/Road(LD)	මාර්ගය (ඉඩම් සංවර්ධන)/Road(Land Development)
TEXT-RD	මාර්ග (මාසංආ)/Road (RDA)	මාර්ගය (මාර්ග සංවර්ධන අධිකාරිය)/Road(Road Development Authority)
TEXT-RD	මාර්ග (නස)/Road(MC)	මාර්ගය (නගර සභා)/Road (Municipal /Urban Council)
TEXT-RD	මාර්ග (පස)/Road(PC)	මාර්ගය (පළාත් සභා)/Road (Provincial Council)
TEXT-RD	මාර්ග (පමාසංආ)/Road(PRDA)	මාර්ගය (පළාත් මාර්ග සංවර්ධන අධිකාරිය)/Road (Provincial RDA)
TEXT-RD	අපා /FP	අඩි පාර /Foot Path
TEXT-RD		ප්‍රවේශ මාර්ගය /Means of Access
TEXT-RD		පාර/ චතු පාර Road / Estate Road
TEXT-RD		මාර්ග දිශාවන්/Road Directions
TEXT-SC		ලක්ෂ්‍ය සංකේත/ Feature Code
TEXT-TP		පැරණි පිඹුරක් මගින් පිහිටවූ ලක්ෂ්‍යය /Transferred Point(Transferred survey nodes)
TEXT-VAL		ග්‍රිඩ් අගයන්/ Grid Values
VIR-ARROW		ඊතලය/ Arrow
VIR-BAR		කොටස් දාර /Section Bar



VIR-CLITCH		යා ලකුණ / භාග යා ලකුණ/ Clitich / Half Clitch
VIR-CS		හරස් කැපුම/ CS Profile
VIR-DANGLE		Dangling Node
VIR-GRID		ග්‍රිඩ් රේඛා/ Grid
VIR-INDEX		මූලික සමෝච්ඡ රේඛා /Index Contours
VIR-INTER		අන්තර් සමෝච්ඡ රේඛා / Intermediate Contours
VIR-LOTCLOSE_DOT		කැබැලි පියවීමේ තිත / Lot Closing Dot
VIR-LOTCLOSE_LINE		කැබැලි පියවීමේ රේඛා /Lot Closing Line
VIR-LS		දිග් කැපුම/ LS Profile
VIR-MARKS		කොටස් ලකුණු / Section marks
VIR-POLY		Virtual Polyline
VIR-TRVLINE		පරික්‍රමණ රේඛා/Traverse Line

TEXT- LUSE	ක / Cam	කපුරු /Camphor
	කර / Car	කරදමුංගු / Cardamom
	පොළ / CE	පොළ වත්ත (හෙක්.20ට වැඩි) / Coconut estate (over 20 hectares)
	සො /Cem	සොහොන්බිම / Cemetery
	පොඳු /CG	පොළ ඉඩම (හෙක්.20ට අඩු) / Coconut Garden (under 20 hectares)
	චේ /Ch	චේන / Chena
	කු /Cin	කුරුඳු /Cinnamon

	පැ / Cit	පැහිරි / Citronella
	කො / Coa	කොකෝ / Cocoa
	කෝ / Cof	කෝපි / Coffee
	කපු / Cot	කපු / Cotton
	දෙ/රේ /D	දෙනිය / රේඛාවිතරය / Deniya or Diagram
	රේපි /DP	රේඛා විතර පිඹුරු /Diagram Plan
	කැ / F	කැලෑව / Forest
	ව / G = Garden	වත්ත (ස්ථිර නොහොත් තාවකාලික වගාව) / G = Garden (permanent or temporary cultivation )
	මු / HJ	මුකලාන / High jungle
	ලකැ / LJ	ලඳු කැලෑව / Low jungle
	බපි / LP = Lease Plan	බඳුකර පිඹුර / LP = Lease Plan
	හැක / MS = Milestone	හැතැප්ම කණුව / MS = Milestone
	අහෙ / NC	අළුත් හෙළිකිරීම / New clearing
	ඕ / O	ඕවිට /Owita
	කු /P	කුඹුර / Paddy field
	තව / PG	තල් වත්ත /Palmyrah Garden
	වැ / PL	වැවිල්ල / Plantation ( gums, teaks &c)
	මිප / PM	මිනිරන් පතල / Plumbago mine
	තැක / PO	තැපැල් කන්තෝරුව / Post Office
	තැවිකා / PTO	තැපැල් හා විදුලි පණිවුඩ කාර්යාලය / Post and Telegraph Office
	ප / Pt	පතන / Patana
	ආවැබ / PW	ආණ්ඩුවේ වැඩ දෙපාර්තමේන්තු බංගලාව / Public Work Department bungalow
TEXT-LUSE	ගව / Q	ගල්වල / Quarry
	ර / Rb	රබර් / Rubber
	තා / RH	තානායම / Rest House
	දුනැ / RS	දුම්රිය නැවතුම්පල/ Railway Station

	තේ / T	තේ / Tea
	කම / TF	කමත / Threshing floor
	දු / Tob	දුම්කොළ / Tobacco
	හිපි / TP	පැරණි හිමිකම් පිඹුර / Old Title Plan
	හිපි (ර) / TP (Cr)	පැරණි රජයේ හිමිකම් පිඹුර / Old Title Plan, Crown
	එ / V	එළවළු වගාව / Vegetables
	වව / WH	වතුර වල / Water Hole
	මුඩ් / WL	මුඩ්බිම / Open Waste Land
	පා/ eg: CG (ab)	පාළු (අනෙකුත් සාපේක්ෂ නාම සමඟ එකට භාවිතා කරනු ලැබේ.)/ Abandoned ( used conjunction with other initials as CG (ab))
	ගල / RK	ගල / Rock

## ANNEX 11

**Meta Data File for Digital Drawings**

**(Drawing file names given in annex-12 should be used for Meta data files with the extension .doc or .txt eg: 82FTP57sup31sh42.txt)**

<b>1. Main Information</b>	
1.1 Survey Requisition No.	
1.2 Purpose of Survey	
1.3 Plan No.	Plan No. :- Sheet No. :- Supplement No. / Inset No. :-
1.4 Digital Drawing File Name	
1.5 Used SDCAD Version	
1.6 Used TLDB Version	
<b>2. Survey Information</b>	
2.1 a) Period of Survey b) Plan Passed on	
2.2 Method of Survey (Total Stations, Conventional, etc;)	
2.3 Methods used to convert old data/ plans (scanning and digitizing, recom compilations etc;)	
2.4 Coordinate system	
2.5 Name of Surveyor	
2.6 Name of Supervising officer	
<b>3. Other Important Remarks</b>	
3.1	
3.2 Meta data file created by	Name :
	Designation :
	Date :

**ANNEX 12****Naming system for Digital Drawing Files and Meta Data Files**

Unique naming system has to be adopted for easy reference and manipulation of digital files. Following system will assign unique name for each digital drawing. Examples are also given for naming Digital drawings and related Meta data and TL database files.

**1. Preliminary Plans**

District Code	Plan Type	Plan Number
XX	PPlan	P. Plan number with district prefix

eg: PP CO 3234 in Colombo district

Drawing file name: 52PPlanCO3234.dxf

Meta data file name: 52PPlanCO3234.txt

TL data file name: 52PPlanCO3234.mdb

**2. Cadastral Maps**

District Code	CM No.	Block Number	Sheet No.
XX	XXXX	XX	sh+sheet number

eg: Sheet 4 of Block 3 in cadastral map 27 in Anuradhapura district

Drawing file name: 11002703sh4.dxf

Meta data file name: 11002703sh4.txt

TL data file name: 11002703sh4.mdb

**3. Insets**

District Code	Plan Type	Plan No.	Inset No.	Sheet No.
XX	FTP	.....	In+Inset number	sh+sheet number
XX	TopoPP	.....	In+Inset number	sh+sheet number

eg: Inset 5 (sheet12) of FTP 7 in Ratnapura district

Drawing file name: 62FTP7In5sh12.dxf

Meta data file name: 62FTP7In5sh12.txt

TL data file name: 62FTP7In5sh12.mdb

**4. Supplements**

District Code	Plan type	Plan No.	Sup No.	Sheet No.
XX	FVP	.....	sup+sup number	sh+sheet number
XX	FTP	.....	sup+sup number	sh+sheet number

eg: Supplement 31(sheet 42) of FTP 57 in Matara district

Drawing file name: 82FTP57sup31sh42.dxf

Meta data file name: 82FTP57sup31sh42.txt

TL data file name: 82FTP57sup31sh42.mdb

**5. Court Commission surveys**

District Code	Plan type	Requisition No.(Year-number)
XX	Court	Year+Requisition number

eg: Court commission surveys (Requisition no. 234 of 2007 in Kalutara district)

Drawing file name: 53Court2007234.dxf

Meta data file name: 53Court2007234.txt

**6. Engineering Surveys**

District Code	Plan type	Requisition No.(Year-number)
---------------	-----------	------------------------------

DSR  
XX

Digital Data Management

Eng Year+Requisition number

eg: Engineering survey (Requisition no. 512 of 2008 in Kalutara district)

Drawing file name: 53Eng2008512.dxf

Meta data file name: 53Eng2008512.txt

## 7. Tracings

**District Code Plan type Requisition No.(Year-number)**

XX Tra Year+Requisition number

eg: Tracings (Requisition no. 402 of 2007 in Puttlam district)

Drawing file name: 41Tra2007402.dxf

Meta data file name: 41Tra2007402.txt

**District:** District is defined with two digits. Code assigned to each district is given below.

<b>North Central Province</b>		<b>North Western Province</b>	
Anuradhapura	11	Puttlam	41
Polonnaruwa	12	Kurunegala	42
<b>Northern Province</b>		<b>Western Province</b>	
Jaffna	91	Gampaha	51
Killinochchi	92	Colombo	52
Mullaittivu	93	Kalutara	53
Mannar	24		
Vavuniya	95	<b>Sabaragamuwa Province</b>	
<b>Eastern Province</b>		Kegalle	61
Trincomalee	26	Ratnapura	62
Batticaloa	27	<b>Uva Province</b>	
Ampara	28	Badulla	71
<b>Central Province</b>		Moneragala	72
Matale	31	<b>Southern Province</b>	
Kandy	32	Galle	81
Nuwara Eliya	33	Matara	82
		Hambantota	83

**ANNEX 13**

**Specimen Ledger Page for CDs of Digital Drawings - FVP**  
 (Maintain separate page for each FVP)

**FVP No.:** .....

<b>Requisition No.</b>	<b>Sup No.</b>	<b>Sheet No.</b>	<b>CD No.</b>	<b>Signature of subject officer</b>

**Specimen Ledger Page for CDs of Digital Drawings – P. Plans**

<b>Requisition No.</b>	<b>P.Plan No.</b>	<b>CD No.</b>	<b>Signature of subject officer</b>

**Specimen Ledger Page for CDs of Digital Drawings - FTP**

(Maintain separate page for each FTP)

**FTP No.:** .....

Requisition No.	Inset No.	Sup No.	Sheet No	CD No.	Signature of subject officer

**Specimen Ledger Page for CDs of Digital Drawings  
Tracings, Court commission, Engineering Surveys**

Requisition No.	Plan No.	CD No.	Signature of subject officer



Image File Names for Quarter Field Sheets

(“*SurveyImage*” software automatically creates these file names according to the values defined for Plan no., Inset no., Sup no. etc ;)

- **FVP, FVP Supplements and FVP Sheets :-**

FVP\_< District >< number >\_Sec<number>  
 FVP MAHA432  
 FVP MAHA432 Sec2  
 FVP\_< District >< number >\_Sup<number>\_Sec<number>  
 FVP MAHA432 Sup3  
 FVP MAHA23 Sup27 Sec4

**FVP TLs:-**

FVP\_<District><number>\_TL<number>  
 FVP MAHA23 TL46

- **FCP, FCP Supplements :-**

FCP\_<number>\_Sec<number>  
 FCP MAHA25  
 FCP MAHA25 Sec5  
 FCP\_<number>\_Sup<number>\_Sec<number>  
 FCP MAHA25 Sup12  
 FCP MAHA25 Sup12 Sec3

**FCP TLs:-**

FCP\_<number>\_TL<number>  
 FCP MAHA25 TL56

- **FUP and FUP Supplements :-**

FUP\_< number >\_ Sec<number>  
 FUP MAHA25  
 FUP MAHA25 Sec5  
 FUP\_< number >\_Sup<number>\_Sec<number>  
 FUP MAHA25 Sup12  
 FUP MAHA25 Sup12 Sec3

**FUP TLs:-**

FUP\_< number >\_TL<number>  
 FUP MAHA25 TL56

- **P. Plans:-**

PPlan\_<number>\_Sec<number>  
 PPlan MAHA234  
 PPlan MAHA345 Sec2

**P. Plan TLs:-**

PPlan\_<number>\_TL<number>  
 PPlan CO345 TL23

- **Topo PPs, Insets and Supplements:-**

TopoPP\_<District>< number>\_ Sec<number>  
 TopoPP GAM7  
 TopoPP GAM7 Sec12  
 TopoPP\_<District><number>\_Inset<number>\_Sec<number>  
 TopoPP GAM7 Inset6  
 TopoPP GAM23 Inset6 Sec12  
 TopoPP\_<District><number>\_Sup<number>\_Sec<number>  
 TopoPP GAM23 Sup6  
 TopoPP GAM23 Sup6 Sec12

**Topo PP TLs:-**

TopoPP\_<District> <number>\_Inset<number>\_TL<number>  
 TopoPP GAM23 Inset6 TL12

- **FTPs, Insets and Supplements:-**

FTP\_<District><number>\_ Sec<number>  
 FTP PO7  
 FTP PO7 Sec2  
 FTP\_<District >< number>\_Inset<number>\_Sec<number>  
 FTP PO7 Inset3  
 FTP PO23 Inset6 Sec12  
 FTP\_<District><number>\_Sup<number>\_Sec<number>  
 FTP PO35 Sup23  
 FTP PO3 Sup6 Sec3

**FTP TLs:-**

FTP\_<District><number>\_TL<number>  
 FTP PO23 TL12

- **Cadastral Maps:-**

CM\_<number>\_B<number>\_Sh<number>\_Sec<number>  
 CM 521234 B2 Sh4  
 CM 521234 B2 Sh4 Sec3

**Cadastral Map TLs:-**

CM\_<number>\_B<number>\_Sh<number>\_TL<number>  
 CM 521234 B2 Sh4 TL23

- **VP and VP Supplements :-**

VP\_<District><number>\_Sec<number>  
 VP PO432  
 VP PO432 Sec2  
 VP\_<District><number>\_Sup<number>\_Sec<number>

VP PO432 Sup3  
VP PO23 Sup27 Sec4

- **VP TLs:-**

VP\_<District><number>\_TL<number>  
FVP PO23 TL46

- **FSP and FSPP Supplements :-**

FSPP\_<District><number>\_Sec<number>  
FSPP MAHA432  
FSPP MAHA432 Sec2  
FSPP\_<District><number>\_Sup<number>\_Sec<number>  
FSPP MAHA432 Sup3  
FSPP MAHA23 Sup27 Sec4

- **FSPP TLs:-**

FSPP\_<District><number>\_TL<number>  
FSPP MAHA23 TL46

- **FSP and FSP Supplements :-**

FSP\_<District><number>\_Sec<number>  
FSP MAHA432  
FSP MAHA432 Sec2  
FSP\_<District><number>\_Sup<number>\_Sec<number>  
FSP MAHA432 Sup3  
FSP MAHA23 Sup27 Sec4

- **FSP TLs:-**

FSP\_<District><number>\_TL<number>  
FSP MAHA23 TL46

- **ISPP and ISPP Supplements :-**

ISPP\_<District><number>\_Sec<number>  
ISPP MAHA432  
ISPP MAHA432 Sec2  
ISPP\_<District><number>\_Sup<number>\_Sec<number>  
ISPP MAHA432 Sup3  
ISPP MAHA23 Sup27 Sec4

- **ISPP TLs:-**

ISPP\_<District><number>\_TL<number>  
ISPP MAHA23 TL46

- **Colony Plans and CP Supplements :-**

CP\_< number>\_Sec<number>

CP MAHA432  
 CP MAHA432 Sec2  
 CP\_< number>\_Sup<number>\_Sec<number>  
 CP MAHA432 Sup3  
 CP MAHA23 Sup27 Sec4

**CP TLs:-**

CP\_< number>\_TL<number>  
 CP MAHA23 TL46

• **Misc Plans :-**

<Plan Type>\_<District><number>\_Sh<Number>\_Sec<number>  
 XXXX GAM423 Sh12  
 XXXX GAM423 Sh12 Sec2

**Misc plan TLs:-**

<Plan Type>\_<District><number>\_Sh<Number>\_TL<number>  
 XXXX GAM23 Sh12

TL46

• **Coordinate Sheets :-**

<Traverse Number>\_Sh<Number>  
 PT 23/1967 Sh12

• **If there is any plan only with Sheet number without Inset or Supplement numbers, then the image name may be defined as follows.**

○ **eg: FVP Sheets :-**

FVP\_< District >< number >\_Sh<number>\_Sec<number>  
 FVP MAHA432 Sh3  
 FVP MAHA23 Sh27 Sec4

Specimen Ledger Page for CDs of Scanned Images

<b>CD No.</b>	<b>Date Created</b>	<b>Signature of SS</b>
MAHA CD 1		
MAHA CD 2		

## ANNEX 16

- I. Install the FileZilla software (it is in the CD provided) in to computer.
- II. Use the web access host: "[www.survey.gov.lk](http://www.survey.gov.lk)" and use the reserved "Username" and "Password" to activate "FileZilla" and then press the button "Quick Connect".
- III. Your computer screen shows your own computer as "Local Site" at the left right side and the "File Server" computer as "Remote Site" at the right side of the screen.  
Copy (Upload) the files listed in "Local site" in to "Remote Site"

		LIS Archive	Data	Drawing					Approved TL	Fixed data	Metadata	Signature	
				Drawing	coord	extent	cad plans	Index					
1	Digital Data received Name of CD											Syr	SS
2	Dist.S.O. Copied to folder .....											D'man	
3	Checked											} SS(HQ)	
4	Amendments Yes/NO												
5	If amendments available sent to field											D'man	
6	Checked corrected digital data & sent CD											SS	

7	Digital Data received after amendments (Name of CD)												D'man
8	Checked												SS(HQ)
9	Copied to folder ..... after amendment/No amendments												D'man



District :

Month :

Plan Type	Plan sheet no.	Block/Sup./Inset no.	Page no.	Requisition no.	D.S.Division	Information issued to	Remarks

