



Learning Guide 4

Unit of Competency : Prepare Cadastral Index Maps

Module-3 Title : Structuring and Constructing
CIM Using GIS Process

LO 1 : Know and understand the GIS process

Program:
Cadastral Index Mapping

Report B61

DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 1 of 7



Instruction Sheet	Learning Guide 4
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Introduction

This learning guide is developed to provide you the necessary information regarding the following topics –

- GIS Process, Specifications and Standards

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, you will be able to –

- GIS scanning process and procedures are understood
- GIS digitizing process and procedures are understood
- Overlaying process and procedures are understood

Learning Activities

1. Read the specific objectives of this Learning Guide.
2. Read the information written in the “Information Sheet”.
3. Accomplish the”Assignment Sheet” in page 7.
4. Submit your work to your trainer/facilitator for evaluation.
5. If you earned a satisfactory evaluation proceed to Learning Guide 5. However, if your rating is unsatisfactory, see your trainor/facilitator for further instructions or go back to Learning Activity #2.
6. Submit your accomplished Assignment Sheet. This will form part of your training portfolio.

DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 2 of 7



Information Sheet	GIS Process, Specifications and Standards
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Introduction

Learning Guide 3 had shown you the process of constructing cadastral index map through hand-drawn process or the manual drafting. In terms of the technical standards and requirement, the GIS process is no different from the manual drafting. Although the GIS is a computer-aided process the specifications applied follows the drafting standards.

GIS Processes

- Scanning
- Image Registration
- Digitizing
 - Parcels
 - Road
 - Network
 - River/Creek
 - Forest Boundaries
 - Political/Barangay boundaries
- Layering
 - Map Info labels (i.e. Lot No, PI No. Brgy Labeling)
 - CIM Layout
 - Tick Mark
 - Digitized maps
 - Grid line scale
 - LYT Control points, etc.
- Input process
 - CIM Lay outing
 - Geo-coding
- Prepare CIM Cross Index
- Print Compiled CIM
- Quality Check

DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 3 of 7



In preparing the computerized cadastral index map, you need to have a source map such as the cadastral plan, survey plans, projection plans, etc. Then prepare the source map or plan for scanning, image registration and map digitizing. After performing the mentioned operations/processes lay-out the CIM and do geo-coding. Print CIM initial lay-out and the CIM lot index. This serves as the prototype CIM which will be verified by the system adjudicator later on.

During map digitizing process you will observe that a unique parcel identifier of UPI is encoded as a result of combining the CIM number and parcel identifier.

The scanning, image registration, digitizing, overlaying, geo-coding are all part of the GIS process.

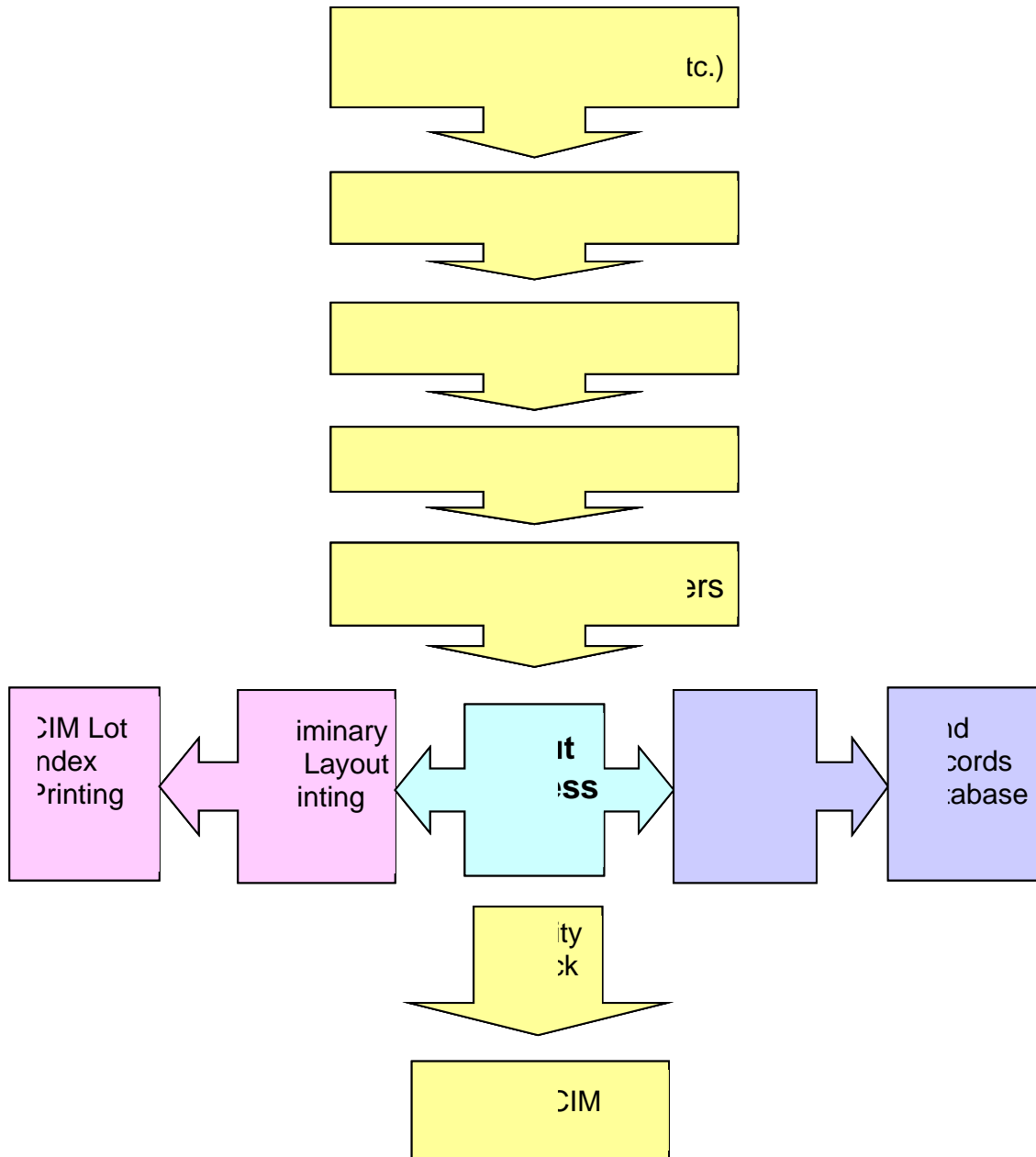
Adding the CIM Lot Number (PI) to the cross-index database.

- Once the CIM lot numbers (PI) have been added to the CIM, they will read to add to the cross index database so that all the records pertaining to that lot are cross referenced.
- Use the survey plan (cadastral map) and parcel number as the reference to find the corresponding records in the cross index database, add the CIM number and CIM lot number to the database
- Any parcel that cannot be found in the cross-index database should be flagged for further office investigation or field check.

DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 4 of 7



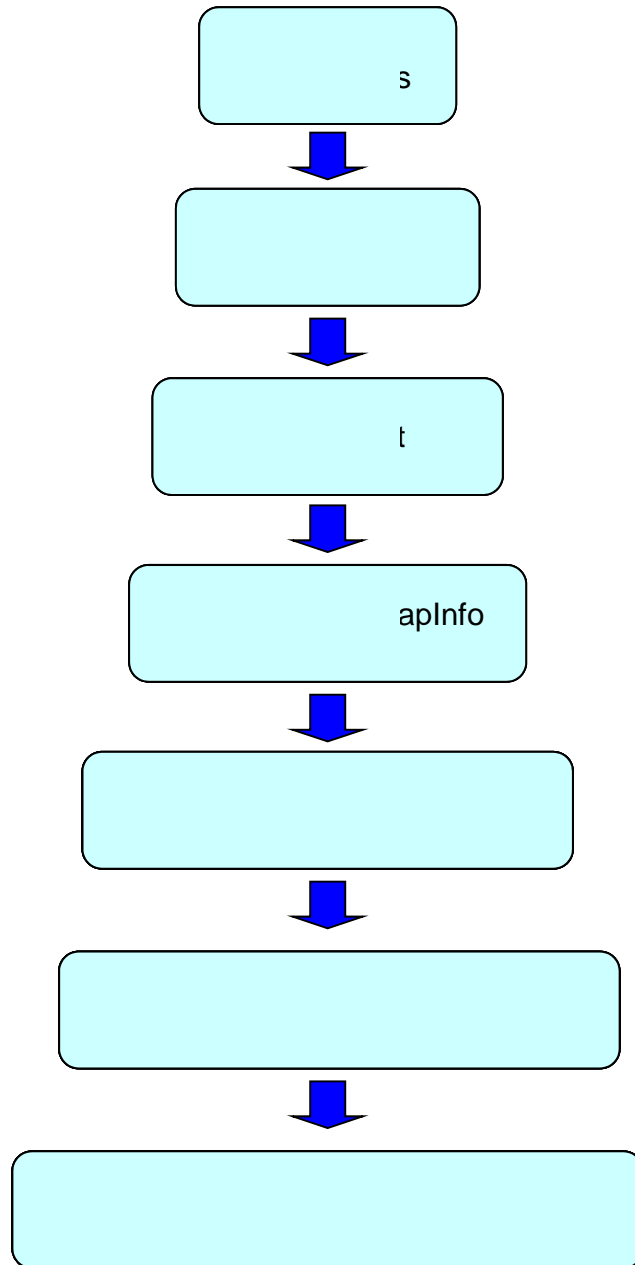
Scanning Method Flowchart



DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 5 of 7



AutoCAD Method Flow Chart



DENR – LAMP Document Control	Learning Guide 4 Cadastral Index Mapping Module 3	Document No. :	
		Issued By:	Date:
		Revision:	Page 6 of 7

