Practice Note for CAD Standards for Works Projects (CSWP)

02/2007

Layer Naming for Data Alignment Measures Common Spatial Units (DAM CSUs)

Scope

This Practice Note serves to promulgate and standardize the format of layer names of CAD drawings to facilitate data exchange among government departments and the updating of Data Alignment Measures Common Spatial Units (DAM CSUs)

Applicability

2. This Practice Note shall be applicable when CAD drawings carrying DAM CSUs information are submitted to Architectural Services Department or DAM CSUs Data Agents, i.e. Civil Engineering and Development Department for Slope CSU and Lands Department for Building, Lot and Road Centreline CSUs.

Background

3. Some Departments in HPLB and ETWB are employing geographic information system (GIS) to capture, update and analyze geographic data. There is a genuine need to exchange planning, lands and public works data from Computer Aided Drawings (CAD) system to GIS system. To facilitate data exchange among government departments and the updating of DAM CSUs, a consistent way of storing several types of features in CAD drawings is needed.

Effective Date

This Practice Note takes immediate effect.

Effect on Existing Practice Notes

5. This Practice Note has no effect on other CSWP Practice Notes.

Layer Naming

6. Unless otherwise specified in the DAM Final Report or as agreed between the Data Agent and Data Owner, Data Owners are recommended to adopt the proposed layer naming in export of CSU data to Data Agents; and Data Agents are recommended to make reference to the proposed layer names in the preparation of CSU data in CAD files format for data exchange. Appendix A outlines the CSU Datasets, respective layers and the proposed CSWP element codes and layer names.

Other Information

7. In case there are conflicting requirements of this Practice Note and the other parts of the CSWP, the latter should prevail.

(Raymond T M WU) Chairperson of CSWPWG

First issued: 5 September 2007

This Revision: 1.01.00

Proposed Layer Naming for CSU Data by CSWP Working Group

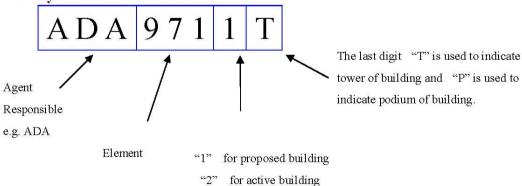
CSU	CSU Layer	Description	Proposed Layer Name by CSWP (in dissemination of CSU data)*
Building	PBLDGPOLY	Polygons of Proposed Towers	ADA9711T
	PPODPOLY	Polygons of Proposed Podiums	ADA9711P
	BLDGPOLY	Polygons of Active Towers	ADA9712T
	PODPOLY	Polygons of Active Podiums	ADA9712P
	DBLDG	Polygons of Demolished Towers	ADA9713T
	DPOD	Polygons of Demolished Podiums	ADA9713P
Lot	LOT	Polygons of Lot Boundary	SMO9132L
	OVERLAPLOT	Polygons of Overlapping Lot Boundary	SMO9132V
Road	Road Segment	Linear features of the Active	HRD8112L
Centreline	Layer	Road Network	
	Road	Node features of the Active	HRD8112N
	Intersection	Road Intersections	
	Layer		
Slope	Cut Slope	Boundary of Cut/ Cut&	CGE1251A
	Polygon	Retaining Slope Feature	
	Fill Slope	Boundary of Fill slopes /Fill	CGE1251B
	Polygon	& Retaining slope feature	
	Retaining Wall	Boundary of Retaining Wall	CGE1251C
	Polygon	Feature	
	Disturb Terrain	Boundary of the Disturb	CGE1251D
	Polygon	Terrain Feature	
	Natural Terrain	Boundary of Natural	CGE1251E
	Stabilization	Terrain Stabilization	
	Measures	Measures	
	Polygon		

CSU	CSU Layer	Description	Proposed Layer Name by CSWP	
			(in dissemination of CSU data)*	
	Natural Terrain	Boundary of Natural Terrain	CGE1251F	
	Defence	Defence Measures Feature		
	Measures			
	Polygon			
	Maintenance	Maintenance Responsibility	SIM1251G	
	Responsibility	Boundary of the Registered		
	Polygon	Slope Feature.		
	Overlapped	Maintenance Responsibility	SIM1251H	
	Maintenance	Boundary of the Registered		
	Responsibility	Slope Features that are		
	Polygon	Overlapped with Other		
		Features		

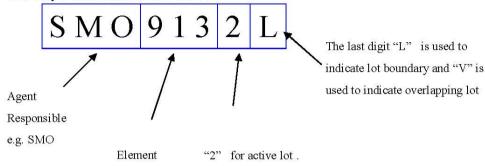
^{*} The ARC code as indicated is an example. Party who prepare the drawings shall provide its own ARC code in the layer name.

Note:

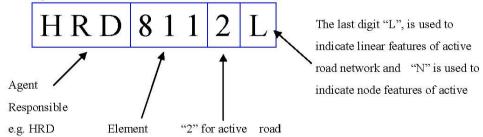
- 1. Explanatory notes for Building CSU Layer Name:
 - 1.1. CSWP Class 971 is used for Building CSU Layer.
 - 1.2. In the 4th digit,
 - "1" for proposed building
 - "2" for active building
 - "3" for demolished building
 - 1.3. The last digit "T" is used to indicate tower of building and "P" is used to indicate podium of building.
 - 1.4. Agent Responsible Code should also be added at the beginning of the Layer Name.
 - 1.5. The Layer Name format should be:



- 2. Explanatory notes for Lot CSU Layer Name:
 - 2.1. CSWP Class 913 is used for Lot Boundary Layer.
 - 2.2. In the 4th digit, "2" for active lot.
 - 2.3. The last digit "L" is used to indicate lot boundary and "V" is used to indicate overlapping lot boundary.
 - 2.4. Agent Responsible Code should be added at the beginning of the Layer Name.
 - 2.5. The Layer Name format should be:

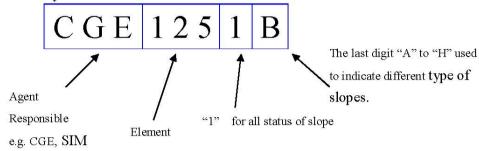


- 3. Explanatory notes for Road Centreline CSU Layer Name:
 - 3.1. CSWP Class 811 is used for both Road Segment Layer and Road Intersection Layer.
 - 3.2. In the 4th digit,
 - "2" for active road
 - 3.3. The last digit "L", is used to indicate linear features of active road network and "N" is used to indicate node features of active road intersection.
 - 3.4. Agent Responsible Code should be added at the beginning of the Layer Name.
 - 3.5. The Layer Name format should be:



- 4. Explanatory notes for Slope CSU Layer Name:
 - 4.1. CSWP Class 125 is used for Slope Layer.
 - 4.2. In the 4th digit,
 - "1" for all status of slope

- 4.3. The last digit "A" to "H" used to indicate different type of slopes.
- 4.4. Agent Responsible Code should be added at the beginning of the Layer Name.
- 4.5. The Layer Name format should be:



- 4.6. Textual data exchange and updating to follow WBTC No. 9/2000 via Slope Information System which could be accessible on Internet(http://hkss.cedd.gov.hk).
- 5. Explanatory notes for handling Textual Attributes in drawings with Building CSU:
 - 5.1. For AutoCAD dwg files, Textual Attributes should be linked to a "POLYGON" entity with unique HANDLE created inside the building polygon. The HANDLE of the "POLYGON" entity should be exported to external Dbase IV as well.
 - 5.2. For Microstation dgn files, Textual Attributes should be linked to a "POLYGON" entity with unique MSLINK created inside the building polygon. The MSLINK of the "POLYGON" entity should be exported to external Dbase IV as well.
 - 5.3. Data structure should be:

Data Structure of building CSU				Data Item	
Field	WIDTH	TYPE	N.DE	Format in	
			C	DAM Final	
				Report	Description
MSLINK	10	N	0	N(10)	For Microstation dgn
					files - linked to the
					"POLYGON" .
HANDLE	10	С	-	N/A	For AutoCAD dwg files -handle of the "POLYGON" with unique alphanumeric tag
CATEGORY	3	C	=2:	X(3)	Building Category
BLDG_CSUID	19	С	-	X(19)	Unique identification
					of the entities
					(provided by
			,	-	LandsD)

ST_AB_POD	3	N	-	N(3)	Storeys above
					podium
ST_IN_POD	3	N	-	N(3)	Storeys in podium
ST_IN_BASE	3	N	-	N(3)	Storeys in basement
COMP_YEAR	4	N	-	N(4)	Completion year
COMP_MONTH	3	N	-	N(3)	Completion month
COMP_DAY	3	N	-	N(3)	Completion day
BD_TOP_LEV	8	N	2	N(8,2)	Approximate
					building top level.
DATACREATE	8	Date	-	Date	Data Create Date.
DEMO_DATE	8	Date	-	Date	Demolition
					Completion Date,
					NULL for building
					had not been
					demolished.