

Appendix XVI – Mapping Table for Information Container ID Fields – HyD

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1. HyD

1.1. Fields Mapping Table

The naming convention HyD BIM Guidelines (draft) (thereafter referred to as HyD BIM Guidelines) is extracted below:

Table App XVI-1 Field Mapping of HyD BIM Guidelines

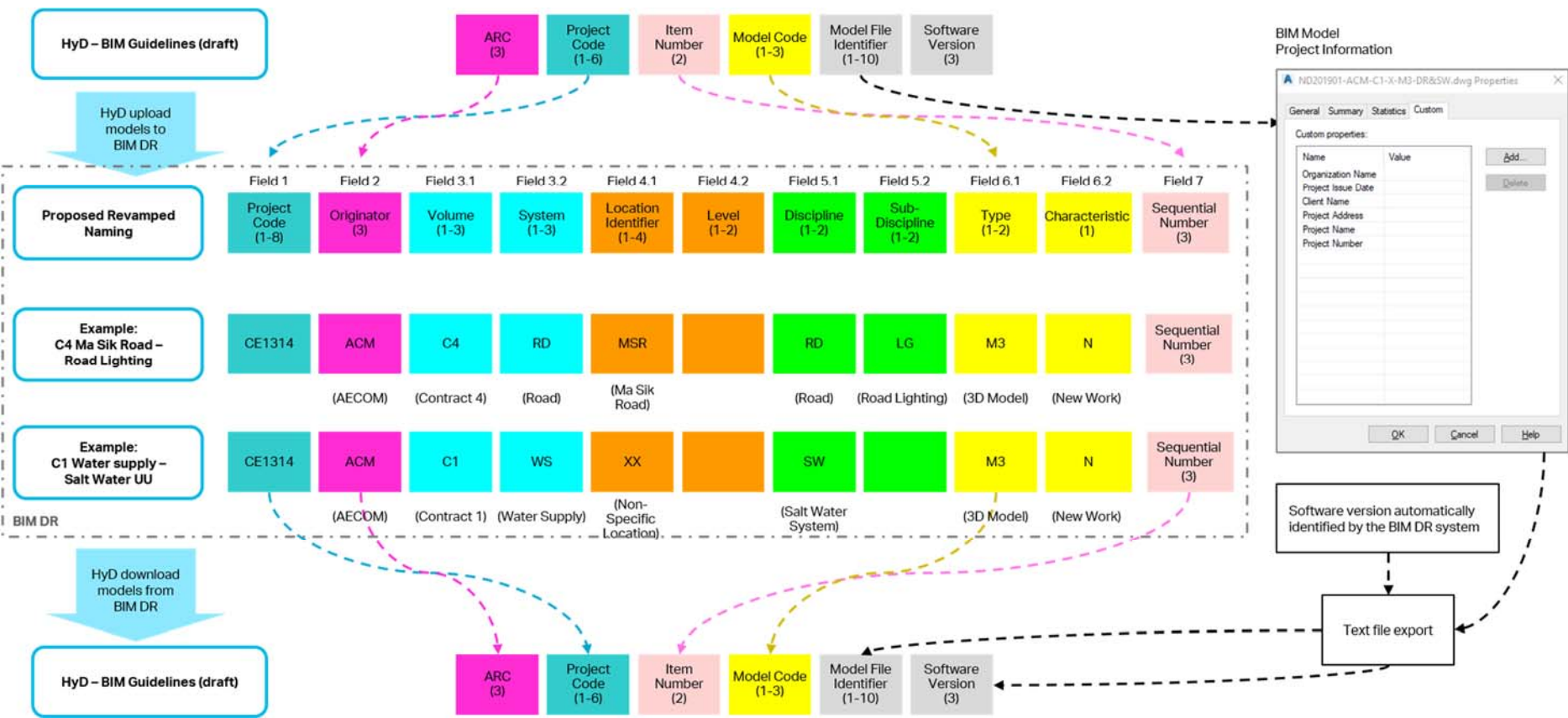
This Guide			HyD		
Field/ Sub-field No.	Information Container ID Field	Remark	Naming Field	ID Field Description	Code Mapping
1	Project Code		Project Code	Project code should be the abbreviation of the project name.	Not required
2	Originator		Agent Responsible Code	Agent responsible code is used to identify the responsible party who creates the model. The list of the agent responsible codes can be downloaded from the DevB web site and is administered by the Computer-Aided-Drafting Standard for Works Projects (CSWP) Working Group.	Not required
7	Sequential Number		Item Number	A unique item number should be given to each model under a project. Item number shall be a 2-digit number assigned to the models (e.g. structures, road, etc) in sequential order in the same project. The item number shall be started from “01” until “99”.	Not required
6.1	Type		Model Code	Model code shall be assigned to the model depending on its file type.	Required
N/A	N/A	BIM Model Project Information	Model File Identifier	The model file identifier shall be the abbreviation of the model components such as pile cap, column, subway, etc. The model file identifier shall keep as precise as possible. When creating the model file identifier, it should not consist	N/A

This Guide			HyD																												
Field/ Sub-field No.	Information Container ID Field	Remark	Naming Field	ID Field Description	Code Mapping																										
				<div>of more than 10 characters. The examples of Model File Identifier are illustrated below.</div> <table><tr><th>File Identifier</th><th>Description</th></tr><tr><td>GPILCAPA</td><td>Component of Pile Cap A, General Arrangement</td></tr><tr><td>GCOLUMNA</td><td>Component of Column A, General Arrangement</td></tr><tr><td>GABUTA</td><td>Component of Abutment A, General Arrangement</td></tr><tr><td>GSUBWAY</td><td>Component of Subway, General Arrangement</td></tr><tr><td>GDECKA</td><td>Component of Bridge Deck A, General Arrangement</td></tr><tr><td>GTATOPA</td><td>Component of Table Top A, General Arrangement</td></tr><tr><td>GROPOST</td><td>Component of Roof Post, General Arrangement</td></tr><tr><td>GSTAIRA</td><td>Component of Staircase A, General Arrangement</td></tr><tr><td>GRAMPA</td><td>Component of Ramp A, General Arrangement</td></tr><tr><td>GLIFTA</td><td>Component of Lift A, General Arrangement</td></tr><tr><td>GESCALA</td><td>Component of Escalator, General Arrangement</td></tr><tr><td>GPARAP</td><td>Component of Parapet Details, General Arrangement</td></tr></table>	File Identifier	Description	GPILCAPA	Component of Pile Cap A, General Arrangement	GCOLUMNA	Component of Column A, General Arrangement	GABUTA	Component of Abutment A, General Arrangement	GSUBWAY	Component of Subway, General Arrangement	GDECKA	Component of Bridge Deck A, General Arrangement	GTATOPA	Component of Table Top A, General Arrangement	GROPOST	Component of Roof Post, General Arrangement	GSTAIRA	Component of Staircase A, General Arrangement	GRAMPA	Component of Ramp A, General Arrangement	GLIFTA	Component of Lift A, General Arrangement	GESCALA	Component of Escalator, General Arrangement	GPARAP	Component of Parapet Details, General Arrangement	
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This Guide			HyD													
Field/ Sub-field No.	Information Container ID Field	Remark	Naming Field	ID Field Description		Code Mapping										
				GSTEEL	Component of Structural Steel Connection Details											
N/A	N/A		Software Version Code	Software version codes are used to identify the software and corresponding software version used to create and edit the model. Software version shall be presented in 2 digits with 1 character “R” in front. The examples of naming convention for software version are illustrated below. <table><tr><td>Version Code</td><td>Software Version</td></tr><tr><td>R18</td><td>Autodesk Revit 2018</td></tr><tr><td>R19</td><td>Autodesk Civil 3D 2019</td></tr><tr><td>R19</td><td>Autodesk Navisworks 2019</td></tr><tr><td>R[XX]</td><td>[For types that do not fall in the above categories]</td></tr></table>		Version Code	Software Version	R18	Autodesk Revit 2018	R19	Autodesk Civil 3D 2019	R19	Autodesk Navisworks 2019	R[XX]	[For types that do not fall in the above categories]	N/A
Version Code	Software Version															
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R19	Autodesk Civil 3D 2019															
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R[XX]	[For types that do not fall in the above categories]															

1.2. Fields Mapping Diagram

Figure App XVI-1 Mapping Diagram for HyD BIM Guidelines



1.3. Fields that Matches with this Guide

Some naming fields of HyD BIM Guidelines do not require mapping when sharing to (or downloading from) the BIM DR.

- a) Field 1 Agent Responsible Code is the same as the Originator field of this Guide.
- b) Field 2 Project Code and Field 3 Item Number are equivalent to the Project Code and Sequential Number of this Guide. As these fields are project specific with no standard codification system, mapping is not required.
- c) Field 5 Model File Identifier acts as the description of the model content, and it is suggested to be included in the BIM Model Project Information as BIM attributes which should be inputted in all BIM files as part of the LOD-I for metadata extraction and geolocation. Project Information includes Organisation Name, Project Issue Date, Client Name, Project Address, Project Name and Project Number. Appendix VI of this Guide shown some examples of project information input methods. This field could be automatically read by the BIM DR and exported upon request. Alternatively, this field could be reorganised and utilise Fields 3, 4, 5 or 6 for input.
- d) Software (and its version if applicable) by which a model is produced shall be automatically identified by the BIM DR system. Therefore, the Software Version as in Field 6 of the naming convention of HyD BIM Guidelines need not be provided to the BIM DR. The software versions could be exported from the BIM DR upon request.

1.4. Fields that Needs to be Mapped

For the remaining fields, the following code mapping should apply:

Table App XVI-2 Code Mapping for HyD BIM Guidelines

HyD BIM Guidelines		BIM Harmonisation Guidelines	
Field 4: Model Code (1 to 3 characters)		Field 6.1 Type (2 characters)	
Codes	Definition	Codes	Definition
D	Drawings Model	DR	2D Drawing Rendition (General)
CAD	2D CAD	DR	2D Drawing Rendition (General)
C3	Civil 3D Model	M3 ¹	3D Model File
L	Linked Model	N/A ²	N/A
DR	Design Review Model	This code clashes with this Guide and could be mapped to other code under Type.	
N	Federated Model	CM	Combined Model (Combined Multidiscipline Model)
P	Recap Model	M3 ¹	3D Model File

HyD BIM Guidelines		BIM Harmonisation Guidelines	
Field 4: Model Code (1 to 3 characters)		Field 6.1 Type (2 characters)	
Codes	Definition	Codes	Definition
R	Revit Design Model	M3 ¹	3D Model File
V	Virtual Site Model	N/A ²	N/A
X	Raw Data of Civil 3D	Code is not adopted as raw data should not be shared on the BIM DR.	
TS	Tekla Structures	M3 ¹	3D Model File
XXX	For software that do not fall in the above categories	M3 ¹	3D Model File

1. The model code refers to 3D models produced by different software. Software information would be automatically identified by the BIM DR and could be exported upon request.
2. It is suggested that the list of standard codes for Type in Appendix X to be extended in the future to incorporate other Model Codes of HyD BIM Guidelines.