

DELIVERY OF AS BUILT DOCUMENTATION

1. BACKGROUND

This guideline covers the delivery timing, format and document attributes for delivery of As-built Drawings to the Client.

2. TIMING OF DELIVERY

Draft As-built documentation shall be provided on an ongoing basis throughout the contract prior to the issue of the Practical Completion Certificate. The final As-built documentation certified by the Engineer shall be delivered to the Client with the Practical Completion Certificate.

3. AS-BUILT DRAWINGS

As-built drawings should meet the requirements of AS/NZS 1100 Technical Drawing, and be delivered in the following formats:

1. One complete set of AutoCAD (or equivalent vector drawing software as agreed by the Client) files including all associated files.
2. One complete set of un-editable Adobe PDF files exported from the CAD As-built drawings. This shall serve as a read-only set for viewing, downloading and printing by users of the Transport Agency As-builts System i.e. Transport Agency Staff and Consultants.

All drawings should meet the following minimum requirements:

- The drawings should show the sizes, dimensions, locations and materials of all parts of the contract works;
- All CAD data should be prepared using the same co-ordinate system and datum as used in the design;
- A correctly positioned and labelled grid should be shown on all plan drawings. Units of measure should be metres or millimetres, the units used should be clearly labelled;
- Where possible all work should to be layered to allow a smooth transition from CAD to GIS. All like features should be grouped accordingly for example lighting, drainage, signage, road markings, utility services, bridge details, and the like;
- The finished ground surfaces beyond the completed permanent works of all landowner accommodation works, shall be shown. This includes but is not limited to all landscape fills, waste disposal areas, borrow areas, and reinstated temporary facility areas.
- All As-built drawings shall include linear location referencing information as detailed in the *Location Referencing Management System (LRMS) Manual (SM051)*.

4. ELECTRONIC FILE NAMING AND ATTRIBUTES

4.1 File Naming Convention

A unique file name is required for every As-built Drawing. It is recommended that if no system is in place to ensure a unique file name that the following filename guidelines be used for documents submitted to the Client:

<Project name> The Client’s project name (or an abbreviation) the that the drawing relates to, eg CMJ – Stage 1, <Drawing Reference> A unique drawing number or code used to reference the document.

All components of the filename should be upper case and separated by underscores to allow easier use of these by web engines and browsers.

Example files names are shown below:

CMJ-STAGE1 _485C101.jpg

NORTHERN_MOTORWAY_EXTENSION_S101.pdf

4.2 As-built Document Attributes

The following attributes should be delivered with any As-built document that is produced for the Transport Agency.

NAME	DESCRIPTION	MANDATORY / OPTIONAL	EXAMPLE
Project Name	The name of the project for which this document was generated.	M	CMJ Stage 1
State Highway	The State highway on which the asset is located.	M	01N, 002, 099 etc.
Reference Station (RS)	Location Reference that is associated with the drawing.	M	427
Route Position (RP)	Location Reference that is associated with the drawing. Distance from the preceding RS	O	3.68
Asset Type	Type of Asset.	M	Bridge
Asset Number (Bridge ID)	For structures this will be the unique Bridge Identifier, as recorded in the Transport	M	12345

	Agency's Bridge Data System.		
Bridge Structure Number (BSN)	For structures this will be the number posted on the road and recorded in the Transport Agency's Bridge Data System. This number is sequential in the increasing direction on each State Highway.	O	4287
Asset Name	The name of the asset. (Mandatory for structures).	M	Khyber Pass Viaduct
Filename	Filename of the document as on the supplied disc provided, using the same format.	M	CMJ-STAGE1_485C101.jpg
Location Name	Description of the location eg River Name.	O	Khyber Pass
Document Type	The nature of the As-built document, eg Drawing, Technical Report, Contract Completion Report, etc.	M	As-built Drawing
Document Title	The name of the document.	M	Barriers Layout Plan
Document Number	The number or code given to this document, eg drawing number.	M	485C101/1/3
Document Date	The date on which a document was released (not necessarily the same date on which it was loaded into the repository).	M	12/11/2004
Sheet Number	Where a drawing has more than one sheet this is the sheet number.	O	01
Document Revision	For drawings this should state "AB" for As-built.	M	AB

Application Type and Version	The application and version that was used to create this As-built document.	O	AutoCAD 2004
Consultant	The name of the consulting organisation that generated the document.	M	Freeflow Alliance
Consultant Town	The office the document originated from.	M	Auckland
IP Owner	The owner of the copyright for the document as specified in the contract.	M	The NZ Transport Agency