

Hamilton City Development Manual	
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SECTION C : WORKS COMPLETION AND CLEARANCE

1.0 AS-BUILT PLANS

Upon completion of construction work, copies of "As-Built" plans and data recording information about the completed works, as listed in section 5.0 shall be provided to the Hamilton City Council. Separate plans are required for wastewater, stormwater and water supply. Responsibility for providing the plans and associated data shall lie with:

- The Developer, in the case of land development (urban and industrial sub-division)
- The Contractor, in the case of works constructed for the Council under contract to the Council

Plans presented in fulfilment of this requirement shall be shown as "As-Built" in the amendments part of the drawing title block and signed-off as 'approved for issue' by a person having responsibility for the quality assurance aspect of the as-built information.

As-built plans and associated data shall be sent to:

- In the case of sub-divisions -
 - Subdivisions Officer
 - Planning Guidance Unit
 - Private Bag 3010
 - Hamilton

e-mail electronic files to:- asbuilts@hcc.govt.nz
include in the subject heading:- HCC Subdivision Consent Number
subdivision name and stage number
- In the case of Council contracts, send to the Engineer for forwarding to the appropriate Council Asset Manager.

2.0 DATA PRESENTATION FORMATS

The as-built data is required in 3 formats:

- Conventional hard copy plans using line formats as indicated in Vol 1 Part 2 Section 2.4, drawing sheet size A1 and plan scale 1:500 preferred.
- Electronic Microsoft Excel spreadsheets listing various attributes of the assets constructed - refer blank template files accessed from the Table of Contents page of this Part.
- Where as built plans are prepared using computer aided design software, DXF format export files of the hard copy plans are required. The specification for the format is laid out in Volume 4 : Appendix 7.

Hard copy plans are used in updating the Council's records and for archiving to microfilm. The DXF format files facilitate data upload to the GIS.

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The spreadsheet lists of asset data facilitate data upload to the asset information database. As well as recording dimension and materials information this database is used to manage asset condition information.

3.0 ASSET VALUES

This requirement has been suspended pending review. Refer to Volume 4, Part 9, Appendix 8.

4.0 DATUMS AND UNITS OF MEASUREMENT

Only metric units are to be used in as-built data. Principally these are millimetres (mm), metres (m), litres/sec (L/s), cubic metres /day (m³/day). All levels are to be in terms of Moturiki Datum and to 2 decimal places.

Geographic coordinates shall be

New Zealand Geodetic Datum 2000 (NZGD2000)
 Projection: Mount Eden Circuit 2000
 or
 New Zealand Geodetic Datum 1949
 Projection: Mount Eden Circuit 1949

Coordinates should be presented in standard 6 digit format (east coordinate followed by north coordinate) to 2 decimal places. e.g. 305718.97, 643728.35

5.0 ASSET COMPONENTS TYPES AND AS-BUILT DATA REQUIREMENTS

As-built data shall be accompanied by the following list of project specific data:

- Works construction contractor
- Project name or subdivision name (including subdivision stage number)
- HCC contract number (Council projects)
- HCC project ledger code (Council projects)
- Name of person responsible for preparing the as-built data
- Date of preparing the as-built data

The following list of asset specific data shall be supplied and shown on the drawings.

Note: occasionally privately owned assets need to be shown on as-built plans; such assets shall be clearly labelled 'Private ...whatever'.

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Asset Component Type	Asset Attribute Required	Shown on plans	Comment
Pump Station General	Plan ID	Yes	Plan number used to identify as-built plan
	Street name	Yes	If street name is not applicable, use a property deposited plan (DP) number
	Street type	Yes	Qualifier to street name, e.g. Crescent, Road, Lane, etc.
	Pump Station Lot Location	Yes	Show the pump station Lot boundary and surround lots and roads, including the accessway up to the Pump Station
	Maximum design flow rates		
	Design ADWF		ADWF — average dry weather flow
	Design PWWF		PWWF — peak wet weather flow
Pump Station Wet Well	Location	Yes	Show on a separate pump station site layout plan & cross-section plan at suitable scale
	Rising main discharge point	Yes	Manhole ID
	Rising main diameter	Yes	The rising main should appear as an item on the schedule of wastewater pipelines.
	Overflow discharges to	Yes	Refer to the ID of the overflow pipe which should appear as an item on the schedule of wastewater pipelines.
	Overflow level	Yes	RL at which overflow begins
	Length	Yes	Internal length dimension of wet well
	Width	Yes	Internal width dimension of wet well
	Diameter	Yes	Internal diameter of wet well (circular wet wells)
	Floor Elevation	Yes	Invert level of chamber
	Ground Elevation	Yes	RL of wet well access covers
	Inlet diameter	Yes	Repeat for each inlet
	Inlet elevation	Yes	Repeat for each inlet
	Asset Value		Refer section 2.4.3
	Comments		Any pertinent comments (particularly water table depth and soil conditions)
	Storage Chamber	Location	Yes
Length		Yes	Internal length dimension of chamber
Width		Yes	Internal width dimension of chamber
Diameter		Yes	Internal diameter of chamber (circular chambers)
Floor Elevation		Yes	Invert level of chamber
Ground Elevation		Yes	RL of storage chamber access covers
Inlet diameter		Yes	Repeat for each inlet
Inlet elevation		Yes	Repeat for each inlet
Asset Value			Refer section 2.4.3
Comments			Any pertinent comments (particularly water table depth and soil conditions)
Valve Chamber	Location	Yes	Show on a separate pump station site layout plan & cross section plan at suitable scale
	Water supply backflow prevention device		Make & Model
	Rising Main Check Valve		Nominal Bore - Repeat for each valve
	Rising Main Isolation Valve		Nominal Bore - Repeat for each valve
	Asset Value		Refer section 2.4.3 - Repeat for each valve
Comments		Any pertinent comments	
Bio Filter	Location	Yes	Show on a pump station site layout plan
	Length	Yes	Internal length dimension of chamber
	Width	Yes	Internal width dimension of chamber
	Inlet diameter	Yes	Repeat for each inlet
	Inlet elevation	Yes	Repeat for each inlet
Asset Valve		Refer Section 2.4.3	

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Asset Component Type	Asset Attribute Required	Shown on plans	Comment
	Comments		Any pertinent comments relating to the type of bio filter media used
Magflow Meter	Location	Yes	Show on a pump station site layout plan
	Manufacturer		
	Model Number		
	Magflow Serial number		
	Asset Value		
Pumps (repeat for each pump)	Manufacturer		
	Model Number		
	Performance Curve ID		
	Motor Serial Number		
	Motor Current Rating		Nameplate current in amps
	Motor Power Rating		Nameplate power rating in kW
	Asset Value		Refer section 2.4.3 - Repeat for each pump
	Comments		Any pertinent comments (particularly water table depth and soil conditions)
Level Controls	Manufacturer		
	Model ID		
	Backup battery type		
	Start level		Repeat for each pump
	Stop level		Repeat for each pump
	High alarm level		
	Low alarm level		
	Overflow alarm level		
	Asset Value		Refer section 2.4.3 - lump sum for whole level control system
	Comments		Any pertinent comments
Electrical Cabinet	Location	Yes	Show on a pump station site layout plan
	Pump Overload Setting		Repeat for each pump
	Pump Contactor Type		Repeat for each pump
	Pump Starter Type		Repeat for each pump
	Asset Value		Refer section 2.4.3 - lump sum for electrical cabinet
	Comments		Any pertinent comments
Telemetry	RT Brand		
	RT Model		
	Aerial Type		
	Micrologix 110 Allen Bradley Module Model		
	Asset Value		Refer section 2.4.3 - lump sum for telemetry
	Comments		Any pertinent comments (particularly water table depth and soil conditions)