



Consultant/Developer Specifications for the  
Delivery of Digital Data to  
Local Government and Authorities

**Version 2.0.5 Final - Summary**  
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# A-SPEC Members

Victoria	WA	NSW
                                   	                  	     

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# EXECUTIVE SUMMARY

## Introduction

### A-SPEC Program

**A-SPEC** is the acronym for the program involved in developing specifications for the delivery of newly constructed assets as Digital Data in a GIS ready format to Asset Owners and Managers in Local Government, Utilities and Water Authorities around the world.

The **A-SPEC** management model enables Local Governments, Utilities and Water Authorities around the world to participate in the development and use of the standard specifications developed under this program.

The key objectives of the **A-SPEC** initiative is to streamline stakeholders' (local government/utilities/water authorities) processes for receiving, handling and storing of data related to newly constructed infrastructure assets either from subdivision developments or internal programs (e.g. capital works) in their GIS and AMIS.

This process will increase the efficiency of information access and result in greater customer satisfaction when dealing with inquiries from engineering consultants, surveyors, developers and prospective residents.

- **Eliminate duplication of effort.** Significant duplication of effort exists in the digitising of as constructed information. This duplication exists between the private sector (who capture as constructed information), and council, utility and water authority staff (who may digitise that information from paper plans);
- **Improve process efficiency**, in the process of accepting and processing lodgements, and in checking existing data against design criteria and/or design plans;
- **Improve customer service** to both internal and external customers of asset information;
- **Improve the quality** of information held in council, utility and water authority systems for audit and financial requirements, as well as operational and business requirements;
- **Provide a structure** for the consistent recording of all council, utility and water authority owned assets, including those created through internal programs such as; capital works and renewals.
- And ultimately **manage assets better** to reduce the need for capital works and/or to reduce ongoing maintenance costs.

**A-SPEC data is characterised by having an infrastructure role by:**

- functioning as reference data - which means that other kinds of information can and will be linked to the core data
- being of interest for many different kinds of applications (and being a common denominator and integrator between different data suppliers and product and service providers)
- containing information of specific interest for the public sector in its role to support asset management, efficient utilisation of social housing or community utilised venues, to handle environmental and social planning, etc
- having a structure that is stable over time (even if parts of the data content changes due to user input)
- having specific interest for cross border (across State or National/International boundaries) applications.

## B-Spec Standard Specification

The **B-Spec** standard specification (Buildings) was created to enable Local Government, Utilities and Water Authorities around the world to participate in the use of a single specification when dealing with the creation of new Councils, Utilities and Water Authorities' assets. This enables Councils, Utilities and Water Authorities to deal more efficiently with Land Development and Industry Consultants in relation to subdivision developments and capital works programs within their local jurisdiction.

The **B-Spec** standard specification was developed to streamline the processes undertaken to display all Building assets within each **A-SPEC** member's geographic information systems (GIS), asset management information systems (AMIS) and built information management systems (BIMS).

A common specification for the supply of digital data for buildings was identified as a major opportunity for the members to achieve efficiency and cost savings in the process of maintaining their corporate GIS, AMIS and BIMS. Moreover, a common specification shared between Councils, Utilities and Water Authorities would also provide efficiencies to the Land Development and Industry consultants by removing the need to maintain separate processes, standards and software tools for Councils, Utilities and Water Authorities.

The **B-Spec** standard specification will enable consultants to provide "**Survey Enhanced As – Constructed**" data with the specific characteristics required as GIS ready data to comply with **B-Spec**.

The framework will consist of specifications for data content enabling data exchange. **B-Spec** will enable data to be collected and available in a harmonised, interoperable and quality assured way.

## Use of the Specification

This standard specification is for use by Private Developers, the representatives of Private Developers, engineering consultants and surveyors (hereafter referred to as "Consultants") who undertake Land Development or Capital Works activities for one or more members of the **A-SPEC** Consortium.

**This specification is not to be used for any other purpose.**

Where applicable please refer to the section of the document - that stipulates the specific requirements of the relevant region that you are conducting your business. It is the responsibility of the consultants to understand the specific requirements of their local government, utility or water authority clients. Assistance will be provided wherever possible to clarify any issues or concerns.

It should also be noted that as there are similar elements in **B-Spec** that also appear in **D-Spec**, **R-Spec**, **S-Spec**, **W-Spec** and **O-Spec**, then the standard specification for those asset classes are to be used to prepare the **As-Constructed/As Built information** digital data to be delivered along with the building digital data requested.

This document, along with the accompanying A-SPEC document, includes a specification of common features (feature types, attribute types and attribute value domain). It also contains generalization rules for the graphical representation of the features i.e. Building assets, geodetic reference system and rules for validating the data supplied to ensure compliance.

The **As Constructed/As Built information** is to be supplied as features and attributes. Storing the information as attributes means attaching the information directly to the features. This document is a guide on what features to supply and which attributes to attach to the various features.

**B-Spec** will lay the foundation for Building asset data infrastructure built on identified user requirements through a specification framework.



Please note the changes in this specification are indicated as follows:

1234	Blue highlighted text and text struck out	Text to be deleted
5678	Green Highlighted text	Existing attribute moved to another table
9101	Yellow highlighted text	New or modified text

An attribute which is specified as "Conditional" means, it is to be populated if certain conditions are met.

Example: The attribute 'Source' is to be populated in the Area of Work Extent table only if the 'Source' of the information is the same for the whole project. If the asset doesn't meet this condition, then the Code 'REFER', is to be used and each table is to be populated accordingly.

Read attribute descriptions carefully to ensure the conditions are met before populating.

## The A-SPEC Accompanying Document

A document has been created called the **A-SPEC DDS – Introduction and Overview ("A-SPEC DDS")**. Where applicable please refer to the section of the document that stipulates the specific requirements of the relevant region where you are conducting your business.

It should also be noted that the **A-SPEC DDS** document contains a list of all asset types covered by the various specifications to enable easier identification for the detailed information.

It is the responsibility of the data providers to understand the specific requirements of their local government, utility or water authority clients. Assistance will be provided wherever possible by GISSA to clarify any issues or concerns.

To log a request for further information, the Data Provider may contact GISSA through the website [www.a-specstandards.com.au](http://www.a-specstandards.com.au).

The **A-SPEC DDS** document along with this document, provides the necessary information relating to common features (asset classes, feature types, attribute types and attribute value domains) that are required.

Including

1. generalisation rules for the graphical representation of each feature,
2. geodetic reference systems and
3. rules for validating the data supplied to ensure adherence and compliance.

The Already Constructed data is to be supplied as features and attributes. Storing the information as attributes means attaching the information directly to the features. This document is a guide on what features to supply and which attributes to attach to the various features.

## In Summary

The key objective of this standard specification is to provide information to the Consultants that will be dealing with **A-SPEC Consortium** members. This document outlines the specific requirements for the submission of **"As-Constructed/As Built Information"** of works as GIS Ready digital data of newly constructed building assets as defined by the **A-SPEC Consortium** members around the world.

Whilst all care has been taken with the preparation of this document it is the responsibility of the consultants to confirm that all details are current and relevant. For example there are specific references in this document that **only** relate to particular jurisdictions.

Note the requirement for Western Australian A-SPEC users to record the WAPC reference number "WAPC\_No", is now accommodated within the "Permit\_No" attribute field as the "WAPC\_No" attribute field was renamed to "Permit\_No".

The project to determine the suitability of the **B-Spec** standard specification was developed and is being managed by GISSA International Pty Ltd.

The Atrium Suite 10, 476 Canterbury Road, Forest Hill Victoria 3131.

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## Glossary of Terms and Definitions

With the introduction of additional jurisdictions there will be instances where different terms or words are used to describe identical features.

We have included this glossary to define terms; all defined words are in an alphabetical order. They are not used in this specification with any other meaning. As other terms are identified they will be added and therefore this section will be updated from time to time and provided on the relevant specification page on [www.a-specstandards.com.au](http://www.a-specstandards.com.au).

Please note that it is not the intention to detail every term in this glossary as many terms have already been pre-defined in many existing codes of practice, Land development manuals and organisations such as Standards organisations, State, Regional and central agencies who develop the policies and practice notes for areas that cover planning, design and construction.

### **AS CONSTRUCTED INFORMATION**

– may also be referred to as **“As Builts”** or **“Work as Executed”** or **“Work as Constructed”** or **“As Cons”** or **“As Laid”**

### **ASSET MANAGEMENT SYSTEM (AMS)**

– may also be referred to as **“Asset management Information System (AMIS)”**

### **PIPE**

– may also be referred to as a **“Main”**

### **PIT**

– may also be referred to as a **“Manhole”** or an **“Access Point”**

### **ROOF GARDEN**

– may also be referred to as **“Green Roof”** or **“Eco Roof”**



## Submission of “As Constructed Information” as GIS Ready Data

The key objective of the specification is to provide “As Constructed Information” as digital data of Building assets in a GIS ready format to the Consortium of members using the **B-Spec** standard specification.

This document outlines the specifications for the delivery of digital files containing building assets and the boundary showing the extent of the works. This data is to be provided to the **A-SPEC** Consortium members as outlined in the Asset Table in [Section 1.3 Theme/Layer Structure](#).

## Consultant Register

The **A-SPEC** Consortium will list Consultants who have registered through the **A-SPEC** website and will provide updates or revisions as necessary. You are advised to read this specification carefully and any comments or suggestions you have regarding this specification are welcomed.

- Consultants who have registered will be shown on the **A-SPEC** website;  
[www.a-specstandards.com.au](http://www.a-specstandards.com.au) (formerly [www.ds-spec.com.au](http://www.ds-spec.com.au))

## A-SPEC Member Contact

All inquiries relating to the delivery of the digital information should be directed to the **A-SPEC** representative of the relevant organization.

- Please either contact GISSA International on +61 3 9877 6972 or your local point of contact with the organization you are dealing with.

## Intellectual Property

The **A-SPEC** Consortium members own the intellectual property of the developed specifications in conjunction with **GISSA International** and Intellectual Property rights are not to be sold, transferred or assigned to any party (other than a new participating **A-SPEC** Consortium member) without the prior written approval of the **A-SPEC** Consortium and **GISSA International**.

The **B-Spec** Standard Specification will be available free of charge to the consulting & development industries. **A-SPEC** data structures are only to be used for the delivery of As Constructed data to **A-SPEC Consortium members only**.

**All material is copyrighted and under a trademark**

## Disclaimer

On occasion **A-SPEC** consortium members may supply consultants with digital data to assist them with their planning and design phases. The **A-SPEC** consortium accepts no liability for the accuracy or completeness of the information and it is the responsibility of the consultants to ensure that the data supplied is appropriate and applicable to the end use intended.

## Deliverables

The following are acceptable media for providing the digital data files.

- Email files to A-SPEC member representative
- USB memory device, portable hard drive
- Cloud Mediums (FTP, Dropbox, Google Drive etc.)

## Certification Form - Readme / Metadata File

The readme.txt is a simple text file that contains information about the project the digital data is being provided for and must accompany **EVERY** digital data submission.

It is an expectation of the **A-SPEC** Consortium that all data be verified by the developer or their representatives (consultants) with relation to its completeness and graphical accuracy prior to submission.

Errors and omissions will result in the data being returned to the consultant for correction and may result in a non-conformance being placed on the data submission.

The following information may also be used as part of validating the data submission.

Label	Description	Example
<b>COMPANY</b>	Company name taking responsibility for the data	<i>GISSA International</i>
<b>CONTACT</b>	Contact name for this project	<i>George Havakis</i>
<b>TELEPHONE</b>	Telephone number	<i>(03) 9877 6972</i>
<b>FACSIMILE</b>	Facsimile number	<i>NA</i>
<b>EMAIL</b>	Email address (as applicable)	<a href="mailto:george@viccadd.com.au">george@viccadd.com.au</a>
<b>MAILING ADDRESS</b>	Mailing address	<i>Suite 10, 476 Canterbury Rd, Forest Hill VIC 3131</i>
<b>PHYSICAL ADDRESS</b>	Physical business address	<i>'As Above'</i>
<b>A-SPEC MEMBER</b>	Participating Authority	<i>City of Gosnells Wyndham City Council</i>
<b>DATE SUBMITTED</b>	Date the digital data submitted to A-SPEC member	<i>31/1/2014</i>
<b>DOCUMENT VERSION</b>	Version of the document used	<i>B-Spec Digital Data Specifications – V2.0.5</i>
<b>SOFTWARE FORMAT &amp; VERSION</b>	The software used to create the digital data	<i>QGIS</i>
<b>PROJECT or SUBDIVISION</b>	Project or Subdivision name	<i>Wyndham Estate</i>
<b>STAGE</b>	Subdivision Stage Name	<i>Stage 3B</i>
<b>DESIGN COMPANY</b>	Design Company Name	<i>Fred Charles &amp; Associates</i>
<b>PLAN NUMBER</b>	As Constructed Plan Number	<i>6080R212</i>
<b>CONSTRUCTION COMPANY</b>	Construction Company Name	<i>Jamieson Construction</i>
<b>CONSTRUCTION DATE</b>	Date the asset was constructed/ built/ installed	<i>12/03/2017</i>
<b>COORDINATES/DATUM</b>	The coordinate system the data is in	<i>GDA94 Zone 50</i>
<b>DATUM</b>	Vertical Height Datum	<i>AHD71</i>
<b>TRANSFORMATION</b>	The coordinate system the data was transformed from	<i>Perth Coastal Grid to GDA94 Zone 50</i>
<b>TRANSFORMATION BY</b>	Who carried out the transformation from the original coordinate system to the relevant system	<i>City of Gosnells – Jack Dowling</i>
<b>SOURCE OF DATA</b>	The type of capture used	<i>Field Asset Capture</i>
<b>NOTES/COMMENTS</b>	Important notes or information to be included here.	<i>Any other relevant information that the data custodian needs to be aware of. Information provided in this submission is a combination of data picked up in the field along with confirmation by the contractor responsible ICANDOIT Pty Ltd</i>

## 1.3 Theme/Layer Structure

The following level/layer structure is intended as a guide to assist Consultants when arranging their graphical information for members of the **A-SPEC** Consortium. The key principal is that each asset class must be delivered on a separate level/layer and the files must be clearly labelled in accordance with the “**Universal File Name**” indicated below.

Depending on the asset to be captured, not all the levels/layers indicated here may appear in the submitted data.

It is important to note that each level/layer should only contain the listed features; any other features present will impede the acceptance testing and may result in non-conformance with the requirements.

Asset Class	Universal File Name	Data Type	Description	IPWEA Importance Rating <sup>1</sup>	Essential Safety Measures	Attribute Table
Area of Work Extent	Area_Extent	Polygon	Polygon representing the extent of the subdivision development or capital works	-	-	Yes
Building Footprint	BFP	Polygon	Base footprint of the building.	1, 2, 3, 4, 5	-	Yes
Building Floor Plan	Floor_Plan	Polygon	Floors contained in a building.	1, 2, 3, 4, 5	-	Yes
Building Space	Build_Space	Polygon	Interior/Exterior spaces such as meeting rooms.	2, 3, 4, 5	Yes	Yes
Communication and Data (Point)	COMD_Equip	Point	Point location of equipment belongs to communication and data system	3, 4, 5	-	Yes
Communication and Data Cabling (Polyline)	COMD_Lines	Line / Polyline	Cables belonging to the communication and data system	3, 4, 5	-	Yes
Conduits	Conduits_B	Line / Polyline	Lines representing conduit centrelines and their alignment	3, 4, 5	-	Yes
Conveyance System (Polygon)	Conv_Syst	Polygon	Polygon representing the extent of a system such as a lift or travelator	3, 4, 5	Yes	Yes
Conveyance Paths (Polyline)	Conv_Paths	Line / Polyline	Direction towards the closest emergency exit	3, 4, 5	-	No Graphics Only
Doors and Windows	Door_Windw	Lines	Doors and Windows	1, 2, 3, 4, 5	Yes	Yes
Electrical Equipment (Point)	Elec_Equip	Point	Point location for electrical fixtures & equipment. <b>EG:</b> Power Filter	1, 2, 3, 4, 5	Yes	Yes
Electrical Lines (Polyline)	Elec_Lines	Line / Polyline	Conductor wires through which electricity flows.	1, 2, 3, 4, 5	-	No Graphics Only
Fire Protection Equipment (Point)	Fire_Equip	Point	Point location of equipment used for fire prevention, suppression or emergency safety. <b>EG:</b> Fire Hydrant	2, 3, 4, 5	Yes	Yes
Fire Protection Lines (Polyline)	Fire_Lines	Line / Polyline	Pipes through which fire suppression fluid flows. <b>EG:</b> sprinkler lines	2, 3, 4, 5	-	No Graphics Only
Fittings & Fixtures Areas (Polygon)	Fitt_Areas	Polygon	Permanently fixed furniture assets. <b>EG:</b> Cabinet	4, 5	-	Yes

<sup>1</sup> IPWEA Importance Rating – Please refer to IPWEA Building Practice Note 3

Asset Class	Universal File Name	Data Type	Description	IPWEA Importance Rating <sup>1</sup>	Essential Safety Measures	Attribute Table
Fittings & Fixtures Lines (Polyline)	Fitt_Lines	Line / Polyline	Permanently fixed partitions, shelves etc.	4, 5	-	No Graphics Only
Floor Plan Lines	Floor_Lines	Line / Polyline	Lines that compose a floor plan, such as walls/doors/windows	2, 3, 4, 5	-	No Graphics Only
HVAC Equipment (Point)	HVAC_Equip	Point	Point location of equipment used for internal environmental air control. <b>EG:</b> Heater	2, 3, 4, 5	Yes	Yes
HVAC Lines (Polyline)	HVAC_Lines	Line / Polyline	Ducts & pipes serving HVAC equipment. <b>EG:</b> Duct Segment	2, 3, 4, 5	-	No Graphics Only
HVAC Mechanical Systems (Point)	HVAC_Syst	(Point)	Location of large HVAC equipment	4, 5	-	No Graphics Only
Plumbing Equipment (Point)	Plumb_Equip	Point	Point location of equipment for distributing water or collecting waste water. <b>EG:</b> Fountain	2, 3, 4, 5	-	Yes
Plumbing Lines (Polyline)	CWP_Lines	Line / Polyline	Pipes for Cold water (potable) plumbing systems	2, 3, 4, 5	-	No. Graphics Only
	CWNP_Lines	Line / Polyline	Pipes for cold, non-potable water plumbing system			
	HW_Lines	Line / Polyline	Pipes for hot water plumbing system			
	WW_Lines	Line / Polyline	Pipes for wastewater plumbing system			
	SW_Lines	Line / Polyline	Pipes for storm water plumbing system			
	GAS_Lines	Line / Polyline	Pipes for gas plumbing system			
Public Toilets	Pub_Toilet	Polygon	Area of public toilets	2, 3, 4, 5	Yes	Yes
Security Equipment	Secu_Equip	Point	Point location of equipment for security.	2, 3, 4, 5	-	Yes
Signs	Signs	Point	Point location of a sign	2, 3, 4, 5	Yes	Yes
Matching to Existing Infrastructure	Problems	Polygon	Circle of radius 10m containing letter "P". Associated table listing all problems with a unique number (i.e. 1,2,3 etc) with easting & northing coordinates and a description is also to be supplied	-	-	Yes

**Please note:**

**GISSA International is not responsible for the auditing or confirmation of what the requirements are under the various Essential Safety Measure requirements in each jurisdiction.**

## **BUILDING IMPORTANCE RATING**

Importance Ratings for buildings has been defined by the IPWEA in their document Building Practice Note 3 (*Refer to Table 3.2 – Importance Rating*). According to the examples given for each category in the Building Practice Note, the asset types that need to be captured for buildings under each Importance Rating are identified in the column – ‘IPWEA Importance Rating’ in the table above.

For example, if a building is classified with the Importance Rating of 5, then all the asset types are to be provided for that building. Whereas, if the Importance Rating is 1, then only the Building Footprint, Floor Plan and Electrical Equipment are required.

GISSA International does not suggest how to categorise buildings, we acknowledge that this is the responsibility of each asset owner.

## **ESSENTIAL SAFETY MEASURES**

There are four categories of Essential Safety Measures which require routine inspections.

1. Fire Equipment
2. Electrical Fittings
3. Air Conditioning/Mechanical Ventilation Systems
4. Exit Doors, Paths of Egress and Passive Fire Elements

Essential safety measures include all traditional building fire services such as sprinklers and mechanical services etc., but also include passive fire safety such as fire doors, fire-rated structures and other building infrastructure items such as paths of travel to exits.

The ‘Essential Safety Measures’ column indicates features that once captured can assist in identifying where the safety feature is or if there is a safety feature component for the purpose of future auditing. Please note further information may be required other than what is shown in this document and it is the responsibility of the asset owner to determine these requirements.

### **Victoria**

Part 12 of the latest Building Regulations 2006 has aligned the Essential Safety Measures maintenance requirements with maintenance provisions outlined in sections I1.1-I1.13 of Building Code of Australia (BCA).

[http://www.buildingcommission.com.au/resources/documents/Maintaining\\_Essential\\_Safety\\_Measures\\_FINAL1.pdf](http://www.buildingcommission.com.au/resources/documents/Maintaining_Essential_Safety_Measures_FINAL1.pdf)

### **New South Wales**

Environmental Planning and Asset Management Regulations 2000 state the maintenance of Essential Fire Safety Measures.

### **Queensland**

Essential Safety Measures are equivalent to Safety Measures referred to in Building Code of Australia (BCA).

### **Western Australia**

Essential Fire Safety Measures are those outlined in Part I1 of the Building Code of Australia (BCA) for new buildings.

### **South Australia**

Essential Safety Provisions are defined in Schedule 1 of the South Australian Development Regulations and it includes any safety systems, equipment or other provisions defined as such, or required to be installed in a building. Regulation 76 of the Development Regulations prescribes the installation, inspection and maintenance of Essential Safety Measures.

### **Tasmania**

Essential Fire Safety Measures are equivalent to Safety Measures referred in Building Code of Australia (BCA).

### **Australian Capital Territory**

Maintenance of Fire Safety Measures is controlled by the ACT Fire Brigade. Part I1 of the Building Code of Australia (BCA) has specific provisions which deal with various administrative and technical matters. The ACT Fire Brigades Act requires Active Fire Safety Systems to be maintained.

### 1.3.1 Other Asset Types that may be found in a Building Precinct

The following assets may also be found in a building precinct and are covered in other specifications developed by the **A-SPEC** Consortium.

Where this occurs please refer to the relevant **A-SPEC** standard specifications to ensure compliance with the delivery of “As Constructed” data. The table above lists some of the specifications to refer to.

Drainage Pipes and Pits and other infrastructure	Please refer to <b>D-Spec</b> for requirements
Ponds	Please refer to <b>D-Spec</b> for requirements
External Power, Water, Gas Lines	Please refer to <b>O-Spec</b> for requirements
Gates	Please refer to <b>O-Spec</b> for requirements
Landscaping	Please refer to <b>O-Spec</b> for requirements
Open Spaces and Play Areas	Please refer to <b>O-Spec</b> for requirements
Car Parking	Please refer to <b>R-Spec</b> for requirements
Fences and Barriers	Please refer to <b>R-Spec</b> for requirements
Signs and Lighting – External	Please refer to <b>R-Spec</b> for requirements
Trees	Please refer to <b>R-Spec</b> for requirements

This will be updated from time to time so please do not hesitate to contact GISSA International on +61 3 9877 6972 or refer to the website on [www.a-specstandards.com.au](http://www.a-specstandards.com.au).

## 1.4 Graphical Data Construction Principles

This section details the graphical data construction principles that consultants must adhere to for all linework, polygons and points provided. Where practicable, the alignment of all data; whether “As Constructed Measurements” or Survey Enhanced “As Constructed Measurements” data, must be related to the title/property boundaries abutting the road reserve.

It is requested to use sound computer-assisted design (CAD) practices when recording data, such as snapping to lines and closing polygons.

## 1.5 Graphical Representation Principles

Each of the following sections details the requirements for how the graphics for each asset is to be provided. As mentioned in the previous section all data that is provided is to be a:

- Point
- Line (Polyline where multiple vertices are required) or a
- Polygon

## 1.6 Acceptance Testing

All graphical information will be checked against the Attribute file/table. Please refer to Section 2 for guidelines designed to assist Consultants when putting together attribute information.

It is mandatory that each Consultant implement checks to ensure that their plans and data conform to the specification and that they run these checks prior to the submission of data to an **A-SPEC** Consortium member. Members will undertake random in-house testing to ensure compliance.

Following the acceptance of the digital data the relevant Certificates will be issued and the ownership of the digital data reverts to the **A-SPEC** Consortium member.

## 2 Attribute and Validation File Specifications

This section provides details of the attribute fields and their respective validation requirements for each asset table and includes the following information.

All coordinates will be provided in the preferred datum of each individual A-SPEC Consortium member as specified on the A-SPEC website [www.a-specstandards.com.au](http://www.a-specstandards.com.au) or as otherwise agreed to with the respective Consortium member.

For further detail and definitions of the Attribute Data Types and Column name explanations, please refer to the document **A-SPEC DDS – Introduction & Overview V2.1.0 Final**.

### Attribute Data Field Requirements

This section details the attribute field data entry requirements that data providers are to adhere to for all data submissions of asset types listed in [Section 1.3 – Theme/Layer Structure](#).

Please note that the Project related data needs to be provided only once.

The following are the key requirements for the structure of the data to be provided in each submission.

- Maximum field widths are specified for Alpha/Numeric and Alpha data.
  - These are to be adhered to.
- For decimal data the number of characters after the decimal point are specified.
- Dates are to be provided as dd/mm/yyyy, EG: 07/06/2001
- All fields are to be populated in accordance with the notes supplied for each field
- All Attribute fields are to use the Column Names and structures set out in **Section 2 – Attribute & Validation File Format Instructions**.
- Validation checks for each data field have also been provided in **Section 2 – Attribute & Validation File Format Instructions**.
- A set of CODELISTS are provided to standardise the capture of information in the Attribute files. They can be found in [Section 3 – B-Spec CODELISTS](#). The A-SPEC website will also contain the most current CODELISTS.
- If a Code does not exist the new asset feature is to be recorded in the “Comments” field and a note sent via the A-SPEC website **ContactUs** form so a new code can be created.
- Fields that are highlighted in grey are common to all tables.
- All fields that are common to all tables are captured in the Area of Work Extent table
- Please take note of default values for specific fields. These have been provided for the relevant fields.
- Please note that every attribute name is case sensitive. Use the given name format when creating your fields to supply the data.

### Attribute Data Validation Requirements

Please note the column **QA Validation** stipulating the Validation Check to be carried out as a guide to assist Developer/Consultants when putting together information for submission



## Coordinate fields

The key objective of storing this information is to ensure that the practice of collecting the “As Constructed Information” meets the accuracy requirements of the **A-SPEC** Consortium. The accuracy of the information must be relative to the property boundary.

As all new cadastral information in Australia is placed on the MGA (Map Grid of Australia) grid it is an expectation that all data provided by consultants will be representative of this level of accuracy.

Where significant discrepancy occurs between the digital cadastral mapbase of the affected jurisdiction and the coordinates of the cadastral development as a result of the unavailability of the connection to the MGA grid, then the consultant will notify the Consortium member so that steps can be taken to record the adjusted coordinates.

The key objective of having this notification in place is to take into consideration occurrences where the cadastral mapbase exceeds a particular accuracy. This is to ensure that if required the assets can be located via means of a GPS or other distance measurement equipment.

In Australia – All Z coordinates (levels) will be provided in AHD metres in accordance with the jurisdictional requirements.

### 3 B-Spec CODELISTS

CODELISTS are used to standardise terminology by providing a range of item descriptions relating to a particular attribute. A number of attributes specified in the asset class tables require the input of a CODELIST entry.

Consultants please note that should an entry not exist within the CODELIST please contact you're **A-SPEC** consortium member of GISSA International to make arrangements for its inclusion.

CODELIST entries will be constantly reviewed by the consortium and additions and amendments made as the need arise.

#### Asset Status

Code	Description
<b>ABN</b>	Abandoned or Disused
<b>FILL</b>	Filled (for access points/pits etc.)
<b>INUSE</b>	In-Use
<b>OTHER</b>	Other Use (for cables etc.)
<b>REM</b>	Removed

#### Building Use

Code	Description
<b>CMMR</b>	Light Commercial
<b>CMNONRES</b>	Communal Non-Residential
<b>CMRES</b>	Communal Residential
<b>GSTAND</b>	Grandstand
<b>HSING</b>	Housing
<b>INDST</b>	Industrial
<b>LIBR</b>	Library
<b>OUTBLD</b>	Outbuildings
<b>SCH</b>	School
<b>SeeComment</b>	To be used when a <b>Building Use</b> is not listed. The <b>new Building Use</b> is to be listed in the ' <b>Comments</b> ' field.

#### Ceiling Material

Code	Description
<b>AL</b>	Aluminium
<b>BRK</b>	Brick
<b>CONC</b>	Concrete
<b>GLASS</b>	Glass
<b>IRON</b>	Iron
<b>SeeComment</b>	To be used when a <b>Ceiling Material</b> is not listed. The <b>new Ceiling Material</b> is to be listed in the ' <b>Comments</b> ' field.
<b>SSTEEL</b>	Stainless Steel
<b>STEEL</b>	Steel
<b>STNE</b>	Stone
<b>WOOD</b>	Wood

## Communication and Cabling Purpose

Code	Description
AV	Audio Visual
COMPUTER	Computer
DATA	Data
SeeComment	To be used when a <b>Comm &amp; Data Cabling Purpose</b> is not listed. The <b>new Comm &amp; Data Cabling Purpose</b> is to be listed in the 'Comments' field.
TELEPHONY	Telephony

## Communication and Data Cabling Type

Code	Description
COAX	Coaxial
FBROPT	Fibre Optic
SeeComment	To be used when a <b>Comm &amp; Data Cabling Type</b> is not listed. The <b>new Comm &amp; Data Cabling Type</b> is to be listed in the 'Comments' field.
TWSPRS	Twisted Pair - shielded
TWSPRUNS	Twisted Pair - unshielded

## Communication and Data Equipment Type

Code	Description	Code	Description
AMP	Amplifier	MIC	Microphone
ADBL	Audible Bell	PNL	Patch Panel
AVO	AV Outlet Point	PHN	Phone
PSC	Built-in Projection Screen	DOP	Phone/Data Outlet Point
PRJ	Built-in Projector	SeeComment	To be used when a <b>Comm &amp; Data Equipment</b> is not listed. The <b>new Comm &amp; Data Equipment</b> is to be listed in the 'Comments' field.
DFM	Main Distribution Frame	SPK	Speaker

## Conduit Material

Code	Description
LDPE	Low Density Polyethylene
MDPE	Medium Density PE (PE80B)
mPVC	Modified Polyvinyl Chloride
oPVC	Oriented PVC (EG: Blue Brute)
PE	Polyethylene (Used for UG Conduits)
PVC	Polyvinyl chloride
SeeComment	To be used when a <b>Conduit Material</b> is not listed. The <b>new Conduit Material</b> is to be listed in the 'Comments' field.
uPVC	Un-plasticised PVC

## Control System

Code	Description
<b>AUTO</b>	Automatic
<b>MAN</b>	Manual
<b>SeeComment</b>	To be used when a <b>Control System</b> is not listed. The <b>new Control System</b> is to be listed in the ' <b>Comments</b> ' field.
<b>SEMI</b>	Semi-automatic

## Conveyance System Type

Code	Description
<b>COR</b>	Corridor
<b>DMB</b>	Dumb Waiter
<b>LFT</b>	Elevator/Lift
<b>HST</b>	Hoist
<b>WLK</b>	Moving Walkway Moving Sidewalk Escalator Travelator (Travolator, Travellator)
<b>SeeComment</b>	To be used when a <b>Conveyance System Type</b> is not listed. The <b>new Conveyance System Type</b> is to be listed in the ' <b>Comments</b> ' field.
<b>STW</b>	Stairwell

## Conveyance System Use

Code	Description
<b>FREIGHT</b>	Freight
<b>PASTRNSP</b>	Passenger Transportation
<b>SeeComment</b>	To be used when a <b>Conveyance System Use</b> is not listed. The <b>new Conveyance System Use</b> is to be listed in the ' <b>Comments</b> ' field.

## Door Use

Code	Description
<b>CLIMATE</b>	Climate Control
<b>DIS</b>	Access for people with disabilities
<b>EMR</b>	Emergency
<b>FES</b>	Fire Escape
<b>NA</b>	Not Applicable
<b>SEC</b>	Security
<b>SMOKE</b>	Smoke
<b>STD</b>	Standard
<b>SeeComment</b>	To be used when a <b>Door Use</b> is not listed. The <b>new Door Use</b> is to be listed in the ' <b>Comments</b> ' field.
<b>TOI</b>	Toilet/Shower

## Door/Window Cover Type

Code	Description	Code	Description
AWN	Awning	NSH	Normal Shutter
BLD	Blinds	SeeComment	To be used when a <b>Door/Window Cover Type</b> is not listed. The <b>new Door/Window Cover Type</b> is to be listed in the ' <b>Comments</b> ' field.
CUR	Curtains		
FSH	Fire Shutter	SSC	Security Screen
FCUR	Fire Curtain	SHD	Shade
FSC	Fly Screen	TNT	Tinted

## Door/Window Type

Code	Description
FLD	Folding
LFT	Lifting
REV	Revolving
ROL	Roller Sliding
SeeComment	To be used when a <b>Door/Window Type</b> is not listed. The <b>new Door/Window Type</b> is to be listed in the ' <b>Comments</b> ' field.
SWN	Swinging

## Door/Window Material

Code	Description
AL	Aluminium
BRK	Brick
CONC	Concrete
GLASS	Glass
IRON	Iron
SeeComment	To be used when a <b>Door/Window Material</b> is not listed. The <b>new Door/Window Material</b> is to be listed in the ' <b>Comments</b> ' field.
SSTEEL	Stainless Steel
STEEL	Steel
STNE	Stone
WOOD	Wood

## Electrical Equipment Type

Code	Description	Code	Description
<b>EBAC</b>	Building Automation/Energy Controller	<b>EMFB</b>	Main Fuse Box
<b>EELS</b>	Emergency Lights	<b>EMSB</b>	Main Switch Board
<b>EEXT</b>	External Lighting	<b>EMSS</b>	Mechanical Services Switchboard
<b>EFTK</b>	Fuel Tank	<b>EMBX</b>	Meter Box
<b>EGEN</b>	General Lighting	<b>EPFL</b>	Power Filter
<b>EGSB</b>	Generator Set – Batteries	<b>ERES</b>	Renewable Energy System
<b>EGSE</b>	Generator Set – Engine	<b>ESLT</b>	Security Lights
<b>EIDB</b>	Internal Distribution Board	<b>EUPS</b>	UPS
<b>EL</b>	Lighting without Surge Reduction Filter	<b>SeeComment</b>	To be used when a <b>Fire Protection Equipment Type</b> is not listed. The <b>new Fire Protection Equipment Type</b> is to be listed in the 'Comments' field.
<b>ELRF</b>	Lighting & Surge Reduction Filter		

## Fire Protection Equipment Type

Code	Description	Code	Description
<b>FEWP</b>	EWIS Panel	<b>FHYD</b>	Fire Hydrant
<b>FALR</b>	Fire Alarm	<b>FPMP</b>	Fire Pump
<b>FBLN</b>	Fire Blanket	<b>FHDT</b>	Heat Detector
<b>FCAB</b>	Fire Cabinet	<b>FSDT</b>	Smoke Detector
<b>FCUR</b>	Fire Curtain	<b>FSPH</b>	Sprinkler Head
<b>FEXT</b>	Fire Extinguisher	<b>SeeComment</b>	To be used when a <b>Fire Protection Equipment Type</b> is not listed. The <b>new Fire Protection Equipment Type</b> is to be listed in the 'Comments' field.
<b>FHRL</b>	Fire Hose Reel		

## Fixtures & Fittings

Code	Description
<b>BED</b>	Bed
<b>BENCH</b>	Bench
<b>DESK</b>	Desk
<b>FURN</b>	Furniture
<b>LOCKER</b>	Locker
<b>SCRN</b>	Screen
<b>SeeComment</b>	To be used when a Fixture or Fitting is not listed. The new Fixture or Fitting is to be listed in the 'Comments' field.
<b>SHELF</b>	Shelf
<b>VANITY</b>	Kitchen Vanity unit
<b>WALLCAB</b>	Wall Cabinet
<b>WRKSTN</b>	Workstation

## Floor Material

Code	Description
BRK	Brick
CARP	Carpet
CBOARD	Chipboard
CERAMIC	Ceramic Tiles
CONC	Concrete
MARBLE	Marble
MASON	Masonite
NA	Not Applicable
STNE	Stone
SeeComment	To be used when a Fixture or Fitting is not listed. The new Fixture or Fitting is to be listed in the 'Comments' field.
TIMBR	Timber Floorboards
VINYL	Vinyl

## Foundation Type

Code	Description
INDF	Individual footing
PILE	Piling
SeeComment	To be used when a Foundation Type is not listed. The new Foundation Type is to be listed in the 'Comments' field.
SLAB	Concrete Slab
STRF	Strip footing
STUMPS	Stumps

## Frame Material

Code	Description
AL	Aluminium
CMPST	Composite
CONCM	Concrete Masonry
FIBRE	Fibreglass
ICONC	Insitu Concrete
PCONC	Precast concrete
PSTYB	Polystyrene Blocks
PVC	Polyvinylchloride
SeeComment	To be used when a Frame Material is not listed. The new Frame Material is to be listed in the 'Comments' field.
STEEL	Steel
TMBR	Timber
VINYL	Vinyl
WOOD	Wood



## Gender

Code	Description
MALE	Male
FEMALE	Female
UNI	Unisex
NA	Not Applicable

## Hardware Type

Code	Description
DBOLT	Deadbolts
DBUMP	Door bumper
DCLOS	Door closer
DKNOB	Door Knob
DSTOP	Door stopper
ENTLSET	Entry lock set
HANDLE	Handle
LOCK	Lock
LSET	Lock set
WCLOS	Window closer
SeeComment	To be used when a Hardware Type is not listed. The new Hardware Type is to be listed in the 'Comments' field.

## Health & Safety Issues

Code	Description
CONFINED	Confined Spaces
ENERG_SRC	Energy Source
FORKLIFTS	Forklifts Operating
HAZ_SUB	Hazardous Substances
HEIGHT	Working At Height
HIGH_VOLT	High Voltage
LIFT_EQUIP	Cranes and Lifting Equipment
NIL	No Requirement
POWER_EQ	Power Plant and Equipment
RESTRICTED	Restricted Space
SeeComment	To be used when a Safety Issue is not listed. The new Safety Issue is to be listed in the 'Comments' field.

## HVAC Equipment Type

Code	Description	Code	Description
ACML	Air Compressor – Large	DAC	Door Air Curtain
ACMM	Air Compressor – Medium	DAMP	Damper
ACMS	Air Compressor – Small	DCTN	Ducting
AHU	Air Handling Unit	DUCH	Duct Heater
AHUF	Air Handling Unit – Fan	EXHF	Exhaust Fan
AHUH	Air Handling Unit - Humidifier	EXPT	Expansion Tank
AHUM	Air Handling Unit – Motor	EXTF	Extract Fan
ASF	Air Supply Fan	FILT	Filter
BMSCU	Building Management System Control System	FSDM	Fire & Smoke Damper
CHIE	Chiller – Evaporator	GASH	Gas Heater
CHIL	Chiller	HEAT	Heater
CNSWF	Condensed Water System Fan & Coil	HUMF	Humidifier
CNWM	Condensed Water Motor	INTG	Internal Grills
CNWS	Condensed Water System	LSVN	Lift Shaft Ventilator
CNWT	Condensed Water Tank	PACU	Packaged A/C Unit
COOT	Cooling Tower	RACS	Room A/C System
CWCDS	Condensed Water Chemical Dosing System	SACU	Split A/C Unit
CWM	Chilled Water Motor	SeeComment	To be used when a <b>HVAC Equipment Type</b> <b>Issue</b> is not listed. The <b>new HVAC Equipment Type</b> is to be listed in the <b>'Comments'</b> field.
CWP	Chilled Water Pump	SPHT	Space Heater
CWS	Chilled Water System	VNFM	Ventilation Fan Motor
CWSCF	Chilled Water System Condenser Fan & Coil	VNSY	Ventilation System
CWT	Chilled Water Tank		

## Importance Rating

Examples of how the buildings could be ranked generally according to their importance.

Code	Description	Comment (Function)
5	High	<ul style="list-style-type: none"> <li>• Child Care Centre</li> <li>• Head Office – Commercial</li> <li>• Laboratory</li> <li>• Major Data Centre</li> <li>• Manned Depot</li> <li>• Manned Sewage Treatment Plant</li> <li>• Manned Water Treatment Plant</li> <li>• Regional Office – Commercial Building</li> </ul>
4	Medium High	<ul style="list-style-type: none"> <li>• Office</li> <li>• Reservoir</li> <li>• Unmanned Water Treatment Plant</li> <li>• Unmanned Water Pumping Station</li> </ul>
3	Medium	<ul style="list-style-type: none"> <li>• Sewage Pumping Station</li> <li>• Unmanned Depot</li> </ul>
2	Medium Low	<ul style="list-style-type: none"> <li>• Grounds</li> <li>• Utility Building</li> <li>• Public Toilets</li> <li>• Unmanned Sewage Treatment Plant</li> <li>• Valve House</li> </ul>
1	Low	<ul style="list-style-type: none"> <li>• Garage Structure</li> <li>• Shed</li> </ul>

**Please Note:** this table is replicated from IPWEA's Building Practice Note #3 to outline IPWEA's categories.

## Material – Equipment

Code	Description	Code	Description
AL	Aluminium	LDPE	Low Density Polyethylene
BRASS	Brass	MI	Malleable Iron
DI	Ductile Iron	MSW	Mild Steel Welded
GLASS	Glass	SeeComment	To be used when a Material Equipment Type is not listed. The new Material Equipment Type is to be listed in the 'Comments' field.
GW	Galvanised Wrought Iron (Also known as Galvanised Mild Steel)	WI	Wrought Iron

## Material – Finish

Code	Description	Code	Description
GAL	Galvanised	SeeComment	To be used when a Material Finish Type is not listed. The new Material Finish Type is to be listed in the 'Comments' field.
GLZ	Glazing	STEEL	Steel
LAM	Laminate	STGLASS	Stained Glass
PLAS	Plaster	TILE	Tile
PNT	Paint	TMBR	Timber
POLISH	Polish		

## Pipe Installation Method

Code	Description
ABG	Above Ground
BORE	Bored
SUS	Suspended
TR	Trench
TU	Tunnel
SeeComment	To be used when a <b>Pipe Installation Method</b> is not listed. The new <b>Pipe Installation Method</b> is to be listed in the 'Comments' field.

## Plumbing Systems

Code	Description
COLDP	Cold Water System – Potable
COLDNP	Cold Water System – Non-Potable
GAS	Gas Distribution System
HOT	Hot Water System
SeeComment	To be used when a <b>Plumbing System</b> is not listed. The new <b>Plumbing System</b> is to be listed in the 'Comments' field.
STORM	Stormwater System
WASTE	Wastewater System

## Plumbing Equipment Type

Code	Description	Code	Description
PBPD	Backflow Prevention Device	PPUM	Pressure Pump
PBCW	Boiling & Chilling Water Unit (With Mains Connected)	PPRV	Pressure Relief Valve
PBWU	Boiling Water Unit (With Mains Connected)	PRSW	Rain Switch
PBUR	Burner	PTMV	Thermostatic Mix Valve
PCPM	Circulating Pump	PWBB	Water Bubbler
PCNV	Cocks/Valves	PWCN	Water Conditioner
PGMF	Gas Manifold	PWCC	Water Cooler/Chiller (With Mains Connected)
PGRG	Gas Regulator	PWFL	Water Filter
PGVL	Gas Valve	PWPM	Water Pump
PHTU	Heating Unit	PWST	Water Storage Tank
		SeeComment	To be used when a <b>Plumbing Equipment Type</b> is not listed. The <b>new Plumbing Equipment Type</b> is to be listed in the 'Comments' field.

## Power Source

Code	Description
12V	12 V
240V	240 V
BATTERY	Battery
GEN	Generator
SeeComment	To be used when a <b>Power Source</b> is not listed. The <b>new Power Source</b> is to be listed in the 'Comments' field.

## Protective Material Type

Code	Description
BRASS	Brass
BRK	Brick
DICL	Ductile Iron Cement Lined
FBE	Fusion Bonded Epoxy
GUNN	Gunnite
GWICL	GWI Cement Lined
PLASTIC	Plastic
BRASS	Brass
BRK	Brick
DICL	Ductile Iron Cement Lined
FBE	Fusion Bonded Epoxy
SeeComment	To be used when a <b>Protective Material Type</b> is not listed. The <b>new Protective Material Type</b> is to be listed in the 'Comments' field.

## Roof Material

Code	Description
BRK	Brick
CANV	Canvas
CONC	Concrete
CORR	Corrugated Steel/Aluminium
NA	Not Applicable
SeeComment	To be used when a <b>Roof Material</b> is not listed. The new <b>Roof Material</b> is to be listed in the 'Comments' field.
STEEL	Steel
STNE	Stone
TILES	Tiles
WOOD	Wood

## Roof Structure

Code	Description
GABLE	Gable
HIP	Hip
LSLOPE	Low Slope
SeeComment	To be used when a <b>Roof Structure</b> is not listed. The new <b>Roof Structure</b> is to be listed in the 'Comments' field.
TRUSS	Truss

## Security Equipment Type

Code	Description	Code	Description
SCTV	CCTV Camera	SDET	Security Detector
SACN	Security Alarm Controller	SDVD	Security DVD Recorder
SASN	Security Alarm Sensor	SeeComment	To be used when a <b>Security Equipment Type</b> is not listed. The new <b>Security Equipment Type</b> is to be listed in the 'Comments' field.
SADL	Security Auto Dialler	SHWR	Security Hardware
SCAM	Security Camera	SMON	Security Monitor
SCRD	Security Card	SGEN	Stand-by Generator
SCNU	Security Control Unit		

## Sign Material

Code	Description
AL	Aluminium
ALB	Aluminium Bronze
CU	Copper
CORR	Corrugated Steel/Aluminium
FIBRE	Fibreglass
IRON	Iron
NYL	Nylon
PVC	Polyvinylchloride
SeeComment	To be used when a <b>Sign Material</b> is not listed. The new <b>Sign Material</b> is to be listed in the 'Comments' field.
SSTEEL	Stainless Steel
STEEL	Steel
WOOD	Wood

## Sign Purpose

Code	Description
DIR	Directional/Way Finding
EMR	Emergency
EXIT	Exit Sign
IDENT	Identification
INFORM	Informational
SAFE	Safety/Regulatory
SeeComment	To be used when a <b>Sign Purpose</b> is not listed. The <b>new Sign Purpose</b> is to be listed in the 'Comments' field.

## Sign Support Type

Code	Description
BMOUNT	Building Mounted - External
FREESTAND	Free Standing
POLE	Pole Mounted
PYLE	Pylon Mounted
WALL	Wall Mounted
SeeComment	To be used when a <b>Sign Support Type</b> is not listed. The <b>new Sign Support Type</b> is to be listed in the 'Comments' field.

## Source

Code	Description
AS5488	Using the Sub Surface Utility Australian Standard AS5488-2013
ASCON	As Constructed Drawing
CHNOFF	Chainage and Offset
COMB_1	Combination Engineers, Contractors and Field Survey Work
COMB_2	Combination Engineers and Field Survey Work
COMB_3	Combination Contractors and Field Survey Work
COMB_4	Combination Landscape Company and Field Survey Work
CONTRACTOR	Contractor who built the asset
DESPLAN	Design Plan. DESPLAN is only to be used if the asset has not been constructed at time of Practical Completion
DESPLANC	Design Plans issued for Construction. DESPLANC is only to be used if the asset has not been constructed at time of Practical Completion
ENGINEER	Consulting Engineer who designed the asset and or supervised the construction work
FIELD	Field Survey
NA	Not Applicable
REFER	Refer to the individual tables
SeeComment	To be used when a <b>Source</b> is not listed. The <b>new Source</b> is to be listed in the 'Comments' field.



## Space Type

Code	Description
BALCONY	Balcony
BATHROOM	Bathroom
CORRIDOR	Corridor or Hallway
LIFTWELL	Lift Well
MEETING	Meeting Room
OFFICE	Office
SeeComment	To be used when a <b>Space Type</b> is not listed. The <b>new Space Type</b> is to be listed in the ' <b>Comments</b> ' field.
STW	Stairwell
TERRACE	Terrace
VERANDAH	Veranda
WCT	Water Closet/Toilet
WC-D	Water Closet/Toilet With Access For Persons With Disabilities

## Support Material

Code	Description
CONC	Concrete
BRASS	Brass
PVC	Polyvinylchloride
SSTEEL	Stainless steel
STEEL	Steel
TMBR	Timber
SeeComment	To be used when a <b>Support Material</b> is not listed. The <b>new Support Material</b> is to be listed in the ' <b>Comments</b> ' field.

## Unit of Measure Reference

Code	Description
AREA	Area
CM	Cubic metre
HA	Hectare
KILO	Kilogram
LM	Linear metre
SCHEDULE	To be used when a schedule of rates is provided
SeeComment	To be used when a Unit of Measure is not listed. The <b>new Unit of Measure</b> is to be listed in the ' <b>Comments</b> ' field.
SQM	Square Metre

## Wall Material

Code	Description
BRK	Brick
CONCM	Concrete Masonry
FCEM	Fibre Cement Sheets
ICONC	In-situ concrete
PCONC	Precast concrete
PSTYB	Polystyrene blocks
SeeComment	To be used when a <b>Wall Material</b> is not listed. The <b>new Wall Material</b> is to be listed in the ' <b>Comments</b> ' field.
STEEL	Steel
TMBR	Timber

## Wall Type

Code	Description
BLG	Below Ground
CEILCAV	Ceiling Cavity
SeeComment	To be used when a <b>Wall Type</b> is not listed. The <b>new Wall Type</b> is to be listed in the ' <b>Comments</b> ' field.
SUSF	Suspended under floor
WALL	Wall
WALLCAV	Wall Cavity

## 4 B-Spec Document Control

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**Reviewed by** George Havakis & Duncan Brooks  
**Authorised by** George Havakis

## 5 Document Revision History

Revision Number	Date	Comments
0.5	23 March 2012	Issue of initial version to members
1	17 July 2013	Issue of Final Draft version to members
1	1 November 2014	Issue of Final document
1.0.1	2 December 2014	Minor typographic fixes
1.1.0	6 January 2016	Inclusion of Public Toilets
1.1.0	11 April 2017	Updated Bass Coast logo
1.2.0	1 August 2017	Reformatted to group graphical and attribute capture requirements per asset class
1.2.1 Draft v1	8 February 2018	Updates and modifications from user inputs
1.3.0	23 August 2018	Finalisation of modifications and user inputs
2.0.0	10 September 2018	Changes adopted and finalised
2.0.1	15 November 2018	Incorporate feedback from members
2.0.5	31 May 2019	Incorporating Addendums and other feedback from members

## 6 Summary of Specification Changes