



# **Topographic Extracts Medium Scale**

## **Spatial Files**

## **Data Dictionary**

## **Version 1.4 FINAL**

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Data Management Group**

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## DOCUMENT CONTROL

Version	Status	Date	Author	Description of Version
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Version 1.4	FINAL	7/04/2014	Data Management Group	Minor adjustments to descriptions



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# 1 OVERVIEW

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## 1.1 HOW TO USE THIS DOCUMENT

### 1.1.1 DOCUMENT STRUCTURE

This document has been structured in the following way:-

1. Overview (this section)
  - a. How to search within this document
  - b. Geodatabases, a table containing the themes and the associated Feature Classes (Datasets)
  - c. Common Attributes – all Feature Classes have similar attributes/field names, except for shapes that are specific to that class type, such as shape\_length for lines.
2. Workspace – for editors of information, includes generic tables that are provided as part of the Geodatabase themes.
3. Unique Attributes sections for each theme of Geodatabase which are those attributes found in the Feature classes specific to those theme which are:
  - a. Cultural
  - b. Transport
  - c. Hydrographic
  - d. Ground Surface
4. Attribute Values – a list of all the values, including those that are not valid for the **Medium Scale** Topographic data. All values that are not valid for Medium Scale are filled in with grey. Also includes for each of the attribute values a list of associated Feature Classes where the features are found.

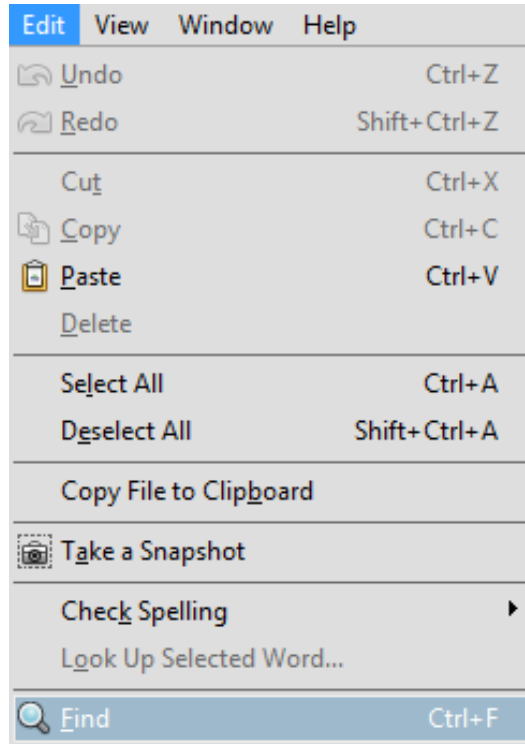
**Note:** Large Scale Topographic Data Dictionary is available separately

### 1.1.2 LINKED ATTRIBUTES/FIELD NAMES TO ATTRIBUTE VALUES:

This document includes hyperlinks to relevant Attribute values. The link can be identified by any field name/attribute that is underlined. Clicking on the underlined work will take you directly to the relevant attribute values.

### 1.1.3 SEARCHING FOR FEATURES

If looking for a particular feature, such as rocks, lakes, hospitals, do a search on the particular feature you are looking for using the CNTRL + F or Edit menu, select “Find”.



These features are part of the attribute values tables (which includes the domain values – the actual feature) at the end of the document. Please note that that some attributes have no spaces in between them or may have an underscore “\_” between the words, for example, an attribute may appear as:

- AboriginalOutstation
- SalineCoastal
- NewspaperPublishing
- Scan\_Vectorise
- Telephone\_Emergency

## 1.2 GEODATABASES

Landgate provide geodatabase feature datasets, which are a collection of feature classes stored together so they can participate in topological relationships with each other.

The themes are listed below with the class type (Spatial element) and Feature classes (datasets) supplied within each theme.

This document has been sectioned according to the Theme names and each of these sections highlight the field name/attributes unique to each of the feature class datasets.

<b>Themes/Class Name</b>	<b>Related Class/Features</b>	<b>Class Type</b>	<b>Feature Class</b>	
<b>CULTURAL</b>	Cultural	Point	CulturalFeaturePoint	
		Line	CulturalFeatureLine	
		Polygon	CulturalFeaturePolygon	
	Building	Point	Building.Point	
		Polygon	Building Polygon	
	General Facility	Point	GeneralFacilityPoint	
		Polygon	GeneralFacilityPolygon	
	Industrial	Point	IndustrialFeaturePoint	
		Line	IndustrialFeatureLine	
		Polygon	IndustrialFeaturePolygon	
	Mine	Point	MineFeaturePoint	
		Polygon	MineFeaturePolygon	
	Place	Point	Place Point	
		Polygon	Place Polygon	
	Tower	Point	TowerPoint	
<b>TRANSPORT</b>	Bridge Tunnel	Point	Bridge Tunnel Point	
		Line	BridgeTunnelLine	
			Point	Bridge Tunnel Point
		General Transport	Polygon	GeneralTransportPolygon
			Point	GeneralTransportPoint
			Line	GeneralTransportLine
		Rail Segment		RailSegment

<b>Themes/Class Name</b>	<b>Related Class/Features</b>	<b>Class Type</b>	<b>Feature Class</b>
	(Line)		
	Transport Facility	Point	TransportFacilityPoint
		Polygon	TransportFacilityPolygon
<b>HYDROGRAPHIC</b>	Framework	Line	FrameworkLine
		Polygon	Framework Polygon
	Inland Flat	Polygon	InlandFlatPolygon
		Point	InlandflatPoint
	Inland Water	Polygon	WaterPolygon
		Point	WaterPoint
	Fuzzy Water	Point	FuzzyWaterPoint
		Line	FuzzyWaterLine
		Polygon	FuzzyWaterPolygon
	Coastal Flat	Polygon	Coastal Flat Polygon
<b>GROUND SURFACE</b>	Elevation	Point	ElevationPoint
	FuzzyLand	Point	FuzzyLandPoint
		Line	FuzzyLandLine
		Polygon	FuzzyLandPolygon
	Morphology	Polygon	MorphologyPolygon
		Point	MorphologyPoint
		Line	MorphologyLine
<b>POINTS OF INTEREST</b>	Hospitality	Point	Accommodation
			Food Service
			Licensed Permisses
	Education	Point	Institution
			Education Support
	Health	Point	HealthService

<b>Themes/Class Name</b>	<b>Related Class/Features</b>	<b>Class Type</b>	<b>Feature Class</b>
			Hospital
			CareFacility
	Recreation	Point	Amusement
			Botanical and zoological
			Entertainment Venue
			OutdoorArea
			Racing
			Gaming
			SportingFacility
			Tourism
	CommunityService	Point	Amenity
			CommunityFacility
			Cultural Facility
			EmergencyServices
			Government
			Infrastructure
			Organisation
			PlaceOf Worship
			Postal Service
	Transportation	Point	Aviation Facility
			Shipping Facility
			Rail Facility
			Bus Facility
			Road Facility
			Bridge
			Tunnel
	Commercial	Point	Legal and Financial Service



<b>Themes/Class Name</b>	<b>Related Class/Features</b>	<b>Class Type</b>	<b>Feature Class</b>
			Media and Telecommunication
			Consulting and Contracting service
			Rental and HireService
			Fuel Outlet
			Retail Outlet
			Child CareCentre
			Retirement Estate
	Industry	Point	Industrial Facility
	Geographic	Point	Land Feature
			WaterFeature
			Place
	Defence	Point	Defencet
	Mining	Point	Mine

### 1.3 COMMON ATTRIBUTES (FIELD NAMES)

All feature classes have the following common attributes/field name.

Note that some of the field names listed are only applicable to particular class types - point, line and polygon, such as shape length, rotation point, height.

<b>Attribute/Field Name</b>	<b>Description</b>	<b>Associated Attribute Values</b> <b>Y/N</b>
OBJECTID	A system generated number for an object	N
DATEFEATURECREATED	The date/time the record for the feature was initially created.This is a system managed attribute – cannot be changed by the user.	N
CREATEDBY	The user name/account that created the feature record.This is a system managed attribute – cannot be changed by the user.	N
DATEFEATUREMODIFIED	The date/time the feature was modified (spatial or aspatial).This is a system managed attribute –	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
	cannot be changed by the user.	
MODIFIED BY	The user name/account that modified the feature record (includes modification and deletion).This is a system managed attribute – cannot be changed by the user.	N
DATEFEATURERETIRED	The date/time the record for a feature is deleted.This is a system managed attribute – cannot be changed by the user.	N
<a href="#">ACCESSLEVEL</a>	The user accessibility level.	Y
METADATAID	A unique identifier that links to the metadata table.This is a system managed attribute – cannot be changed by the user other than through the appropriate interface (metadata management).	N
FEATURETEXT	Temporary field (80 characters) to hold feature text that has been migrated from legacy data.This text will eventually be replaced by a valid NameID and set to <Null>.	N
DATEREVIEWED	The date/time the record for a feature has been reviewed.This is a system managed attribute – cannot be changed by the user.	N
NAMEID	An identifier that equates to a pointer in the Geographic names register (database) that references the feature's name. For Tower Point dataset the valid id is >0, or -99 unknown or -98 not applicable	N
SYSTEMID	Only applicable for Hydrography theme.Value is -98 not applicable	N
GLOBALID	A unique identifier that remains associated with a feature for the life of that feature. A“GlobalID” will not change as a result of minor maintenance operations for example, a featurewill retain its current “GlobalID” if the digitised co-ordinates describing its geometry are replaced by more accurate values, or the feature's name is changed.Global ID and GUID ESRI field data types store GUID values which are a 36 character sequence of hexadecimal digits enclosed in curly braces e.g. {6B29FC40-CA47-1067-B31D-00DD010662DA}.GUID values are	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
	<p>used to uniquely identify each feature within and across geodatabases. GlobalID field values are automatically populated and maintained by ArcGIS, this differs to GUID fieldvalues which must be manually attributed. Global IDs are a prerequisite for geodatabases replication.</p> <p>This is a system managed attribute – cannot be changed by the users.</p>	
AddressText	The street address for the feature	N
FCSubType	Feature class sub type is used with other unique field names to distinguish different types of features. Refer to the Theme sections and Attribute Values.	N
HEIGHT	The vertical distance, in metres, from its base to its top. In the case of a building on a building the height is from the base of the building – ground level. (WA) Valid heights are great than or equal to 10 and less than or equal to 300 metres. An unknown height value is indicated by the value -99.	N
SYMBOLROTATION	Rotation of the symbolised feature. Expressed in decimal degrees, positive in a clockwise direction from the positive Y-axis.	N
BASELEVEL	An unknown value is indicated by the value -99.	N
TEMPID	A programmatically controlled system value. Not editable and of no consequence to users.	N
SHAPE	Polygon point count – number of points for the polygon ring count – number of enclosed rings for the polygon	N
SHAPELENGTH	Shape length in meters	N
SHAPE_AREA	Shape area in meters	N

## 2 WORKSPACE

### 2.1 TABLES

There are a number of generic tables that are supplied with all Geodatabases (Cultural, Transport, Hypographic, GroundSurface). These are listed below with the associated attribute/field names.

#### 2.1.1 FEATUREINSTANCEMETADATA

Attribute/Field Name	Description	Associated Attribute Values Y/N
OBJECTID	A system generated number for an object	N
METADATAID	A Feature Number is a unique number, which is automatically assigned to every recorded feature when it is entered into the GEONOMA database. This number is unique and cannot be duplicated. Note: the GENOMA "FeatureNumber" maps to the "NameID" in the Topographic Database.	
<a href="#">CAPTUREMETHOD</a>	Identifies the method used to capture the feature's spatial extent.	Y
<a href="#">DATASOURCE</a>	Identifies the program/source that was used to identify the feature.	Y
<a href="#">ELEVATIONACCURACY</a>	An estimate of the accuracy of the elevation for the feature, in metres, based on 90% of well defined points. The estimate is calculated using the Root Mean Square error and the Linear Map Accuracy Standard Factor. Refer to Data Accuracy Calculation table for further information.	Y
<a href="#">PLANACCURACY</a>	An estimate of the absolute accuracy of the horizontal coordinates for the feature, in metres. The estimate is calculated using the Root Mean Square error and the Circular Map Accuracy Standard Factor. Refer to Data Accuracy Calculation table for further information.	Y
SPATIALRELIABILITYDATE	The date of the source information from which the feature's planimetric position was last verified or modified.	N
ATTRIBUTE RELIABILITYDATE	The date of the source information from which the feature's attribute values were last validated or modified.	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
<a href="#">TARGETDISPLAYSCALE</a>	The scale at which the feature was originally captured and displayed.	Y
<a href="#">DATACUSTODIAN</a>	The data custodian/owner	Y
GLOBALID	A unique identifier that remains associated with a feature for the life of that feature. A“GlobalID” will not change as a result of minor maintenance operations for example, a featurewill retain its current “GlobalID” if the digitised co-ordinates describing its geometry arereplaced by more accurate values, or the feature’s name is changed.Global ID and GUID ESRI field data types store GUID values which are a 36 character sequence of hexadecimal digits enclosed in curly braces e.g. {6B29FC40-CA47-1067-B31D-00DD010662DA}.GUID values are used to uniquely identify each feature within and across geodatabases. GlobalID field values are automatically populated and maintained by ArcGIS, this differs to GUID fieldvalues which must be manually attributed. Global IDs are a prerequisite for geodatabase replication.This is a system managed attribute – cannot be changed by the users.	N

### 2.1.2 GEONOMA\_LOCATION\_V

Table of current feature names (approved and non-approved) extracted from the Geographic Names Register (GEONOMA).

Attribute/Field Name	Description	Associated Attribute Values Y/N
Feature_Map_Xref_ID	A system generated number for an object	N
Feature_Number	A Feature Number is a unique number, which is automatically assigned to every recorded feature when it is entered into the GEONOMA database. This number is unique and cannot beduplicated.Note: the GENOMA “FeatureNumber” maps to the “NameID” in the Topographic Database.	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
Map_Number	The map on which the geographic feature is located. Conventional map numbers are used.	N
Locality	The official Locality name. Localities which are considered to be a part of the metropolitan area are known as Suburbs, and those which fall outside of this area are known as Bounded Localities.	N
ABS_LGA_Number	An LGA Number is a unique four-digit number, which has been assigned to the Local Government Authority name by the Australian Bureau of Statistics.	N
LGA_Name	The official Local Government Authority name. In the form: BELMONT, CITY OF VICTORIA PARK, TOWN OF KALAMUNDA, SHIRE OF	N
Latitude	Latitude is defined as the angle formed by the intersection of a line perpendicular to the Earth's surface at a point and the plane of the Equator. Points north of the Equator have positive latitude values, while points south have negative values. Latitude values range from -90 to +90 degrees. In this case the value is expressed in decimal degrees.	N
Longitude	A meridian, or line of longitude, is formed by a plane that passes through the point and the North and South poles. The longitude value is defined by the angle between that plane and a reference plane. The reference plane is known as the prime meridian. The most common prime meridian passes through Greenwich, United Kingdom. Longitude values range from -180 (west of the meridian) to +180 (east of the meridian) degrees. In this case the value is expressed in decimal degrees.	N
Easting	A Universal Transverse Mercator (UTM) rectangular coordinate recorded in meters. The origin of each UTM zone is the central meridian. The value given to the central meridian is a false easting of 500,000.	N
Northing	A UTM rectangular coordinate recorded in meters. The origin of each UTM zone is the equator. The value given to the equator is a	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
	false northing of 10,000,000.	
Zone_	A Map Zone relates to the Universal Transverse Mercator Grid. For the Universal Transverse Mercator System, the globe is divided into 60 zones, each spanning six degrees of longitude. Each zone has its own central meridian from which it spans 3 degrees west and 3 degrees east. The origin of each zone is the equator and its central meridian.	N

### 2.1.3 GEONOMA\_NAME\_V

Table of current feature names (approved and non-approved) extracted from the Geographic Names Register (GEONOMA).

Attribute/Field Name	Description	Associated Attribute Values Y/N
GEONOMA_ID	A system generated number for an object	N
FEATURE_NUMBER	A Feature Number is a unique number, which is automatically assigned to every recorded feature when it is entered into the GEONOMA database. This number is unique and cannot be duplicated. Note: the GENOMA "FeatureNumber" maps to the "NameID" in the Topographic Database.	N
Full_Name	The name of the feature, in Title Case e.g. a road name – Boulder, a stream e.g. Linfarne Brook	N
Name	The name of the feature, in Capitals e.g. a road name – BOULDER, a stream e.g. LINFARNE BROOK	N
Display_Name	The name of the feature, in Title Case e.g. a road name – Boulder, a stream e.g. Linfarne Brook	N
Road_Type	The suffix of a road name (e.g. ST)	N
Road_Suffix	A road's cardinal directional indicator (e.g. W)	N
Road_Suffix_Description	Cardinal direction description (e.g. West)	N
Derived_Name	The name of the feature (concatenation of field)	N

Attribute/Field Name	Description	Associated Attribute Values Y/N
	in the case of a road. E.g. BOULDER ST West All other feature classes Derived_name = Name	
Description	Null	N
Name_Type	The Name Type is an administrative field used to determine if a feature is current or archived (e.g. C, U).	N
Feature_Class	A Feature Class is a classification, which is assigned to all features stored within the GEONOMA computer system. This classification is then used to categorise features into 'like' groups, for example, streams, rivers and creeks all have the feature class of STREAM (STRM), Place of worship have a feature class of WSHP. Note: These feature class do not equate to the Topographic Database feature classes; they are independent of the topographic data. Users of the topographic data should use the topographicdatabase feature classes.	N
Feature_Class_Category	A – Admin, R – Roads, T - Topography	N
Feature_Class_Description	English descriptions of the feature class codes/categories. e.g. “Place of worship” for the feature class of “WSHP”	N

## 2.2 TECHNICAL NOTES

The model is made up of two components - a set of UML diagrams (PDF or JPEG) and this data dictionary (PDF). The model was developed in Visio 2002 and is available on request, subject to Departmental approval.

- Geodatabase versioning is used to support optimistic locking strategies, manage transactions and provide detached editing capability. Thus, although not specifically referenced in the model, this functionality in itself affords compliance with the incremental update requirements defined by the ICSM Topographic Working Group.
- The model contains the following component types: abstract classes, feature classes (spatial), object classes (aspatial), relationship classes, class subtypes and attributes controlled by fixed value domains.
- All features have a unique, persistent identifier called “GlobalID”. This value is guaranteed unique across all Geodatabase feature classes and remaining unchanged throughout the life of the feature (subject to business rules).
- Some feature attributes have been included in anticipation of a future requirement and availability. However it may be some time before these attributes are populated.



## 2.3 CONVENTIONS AND DEFAULTS

### 2.3.1 COORDINATE SYSTEM

- The coordinate system for the database has been defined as:

- Coordinates - Lat/Long (Geographic)
- Datum - GDA94
- Geometry types do not have M or Z
- High Precision Database
- Extent:

Practical physical extents for Western Australia

Minimum Longitude: 93 Degrees Maximum Longitude: 131 Degrees

Minimum Latitude: -46 Degrees Maximum Latitude: -8 Degrees

Database Extents (limits calculated based on precision)

Min X - 399.999999991152 Degrees Max X 159383152.222656 Degrees

Min Y - 399.999999982305 Degrees Max Y 159383152.222656 Degrees

- Dataset Tolerance:

XY Tolerance 0.00000035390258 Degrees (approx. 3.8mm)

- Dataset Precision:

XY Resolution 0.00000017695129 Degrees (approx. 1.9mm)

- Minimum length between vertices

XY Tolerance 0.00000035390258 Degrees (approx. 3.8mm)

### 2.3.2 2D VERSUS 3D DATA STRUCTURES

All data has been model as 2D, however provision has been made for certain features, in particular, contours (land surface and bathymetric), spot heights and soundings to have an “Elevation” or altitude (height above a reference datum – AHD) as an attribute. Certain features can also have a “Height” (the vertical distance from its base to its top).

### 2.3.3 DOMAIN TABLE ENTRIES

Domain list cater for both “Not Applicable” (-98) and “Unknown” (-99) definitions; however the assignment of these is subject to business rules – refer to the attribute values.

### 2.3.4 FEATURE ATTRIBUTES

- All relief elevations have been assigned a default value of 1500 (Null); greater than the highest peak in Western Australia.
- The stream hierarchy numeric attribute has been assigned a default value of 9999 (Null).
- All other numeric attributes, where applicable, have been assigned a default value of -99 (“Unknown”).
- Symbol Rotation. Point symbols should be created in the geographic coordinate system (i.e. positive Y-axis is 0 degrees). The symbol should be orientated in the direction of the positive Y-axis. A number of exceptions exist where the symbol has been created in the direction of the positive X-axis. Within the ESRI environment these symbols have been rotated 90



degrees in the Table of Content to make them conform with the “Geographic” coordinate axis. ALL rotation angles in the database relate to the “Geographic” coordinate system.

- Defaults attributes for all features have been predefined. To assist editors in selecting appropriate feature attributes please refer to the Data Load Files (lists the feature attribute assigned when the computer aided drafting (CAD) files were loaded).

### **2.3.5 MAPPING SPECIFICATION**

The data dictionary provides information about the feature attributes and their valid combinations. For specific information on capture rules please refer to The Australian Topographic Specification – All Scales (ATSAS Draft 3, 1984 – National Mapping Council) and Symbolisation – All Scales (SYMBAS 1988 – Royal Australian Survey Corp).

### 3 CULTURAL

With all or some of the common field name/attributes shown in the Overview section of this document, feature classes may have unique field names and attribute values.

The unique attributes are listed in the table following with links (where applicable) to the Attribute Values section of this document.

The Feature Classes for Cultural represented in the table following are:

- CulturalFeaturePoint
- CulturalFeaturePolygon
- CulturalFeatureLine
- BuildingPoint
- BuildingPolygon
- GeneralFacilityPoint
- GeneralFacilityPolygon
- IndustrialFeaturePoint
- IndustrialFeaturePolygon
- IndustrialFeatureLine
- MineFeaturePoint
- MineFeaturePolygon
- Place Point
- Place Polygon
- TowerPoint

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document)	Unique Attribute Description
<p><b>Building Point and Polygon</b></p> <p>Topographic features whose primary characteristics relate to building</p>	<p><a href="#">BUILDINGTYPE</a></p>	<p>The building type e.g. Homestead, ruin. The default type for a building is unknown or -99</p>
<p><b>CulturalFeaturePoint, Line and Polygon</b></p> <p>Topographic features whose primary characteristics are of a general cultural type – points, lines and polygons</p>	<p><a href="#">CULTURALFEATURETYPE</a></p>	<p>The type of cultural feature such as car park, fence, urban area.</p>
<p><b>GeneralFacility Point and Polygon</b></p> <p>Topographic features whose primary characteristics relate to a single or group of buildings and associated facilities</p>	<p><a href="#">GENERALFACILITYTYPE</a></p>	<p>The facility type such as parks, hospitals, educational facilities</p>

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document)	Unique Attribute Description
functioning together as a unit		
<b>IndustrialFeaturePoint, line and Polygon</b>  Topographic features whose primary characteristics are of a general industrial type - points.	<a href="#">INDUSTRIALFEATURETYPE</a>	The industrial feature type such as pipelines , storage tanks and sewage treatment ponds.
<b>MineFeaturePoint and Polygon</b>  Topographic features whose primary characteristics relate to mining - polygons	<a href="#">MINETYPE</a>	Type of mine such as open pit or quarry. Populated when known otherwise the default is -99 unknown.
	SUBSTANCEMINED	Such as gold, iron ore or construction materials. Populated when known otherwise default is -99 unknown.
	OPERATIONALSTATUS	For mines, the operational status is not used therefore it is -99. Codes may be used in the future
<b>Place Point and Polygon</b>  Topographic features whose primary characteristics relate to places at which there is or was relatively minor human occupation. (Modified CGNA	<a href="#">PLACETYPE</a>	Type of place such as town, aboriginal community or mining centre.
<b>TowerPoint</b>  A tall framework or structure, the elevation of which is functional. A single point is shown at the feature's centre	<a href="#">TOWERTYPE</a>	The type of tower such as chimneys or communication towers

## 4 TRANSPORT

Each theme may or may not have feature classes for types of point, Line and/or polygon. In most cases, the attributes/field names for each type are the same with some having additional unique attributes.

Feature Classes for Transport (Datasets within the Geodatabase), that are represented in the table are:

- RailSegment
- GeneralTransportPolygon
- GeneralTransportPoint
- GeneralTransportLine
- TransportFacilityPolygon
- TransportFacilityPoint
- BridgeTunnelPoint
- BridgeTunnelLine

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>RailSegment</b>  Topographic features whose primary characteristics relate to railway lines. (WA)	<a href="#"><u>NUMBERRAILS</u></a>	Whether single or multiple tracks
	<a href="#"><u>RAILSTATUS</u></a>	Whether the line is in use
	<a href="#"><u>RAILGAUGE</u></a>	The width of the rail such as narrow or standard
	<a href="#"><u>RAILACCESSRIGHT</u></a>	Public or private rail
	<a href="#"><u>RAILFEATURETYPE</u></a>	Whether the feature is above or underground
<b>GeneralTransport Point, Line and Polygon</b>  Topographic features whose primary characteristics are of a general transport nature.	<a href="#"><u>TRANSPORTTYPE</u></a>	The type of transport feature such as cycleways, landing grounds and jetties.
<b>TransportFacility Point and Polygon</b>  Topographic features whose primary characteristics are of a transport facility type.	<a href="#"><u>TRANSPORTFACILITYTYPE</u></a>	The type of transport facility, such as airports, railway and bus stations.

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>BridgeTunnelPoint and Line</b>  Topographic features whose primary characteristics relate to bridges and tunnels.	HEADROOM	The maximum vehicle height (metres, $\geq 3$ ) at a crossing, expressed in metres. (Modified NSW)Default value is “Unknown” (-99).This value will not be populated; the StructureNumber provides a linkage to the MRWA StructureTable that provides this information
	TRAFFICABLEWIDTH	The maximum vehicle width (metres, $\geq 3$ ) of a crossing. (Modified NSW)Default value is “Unknown” (-99).This value will not be populated; the StructureNumber provides a linkage to the MRWA StructureTable that provides this information.
	LOADCAPACITY	The maximum vehicle weight (tonne, $\geq 3$ ) of a crossing, expressed in tonnes. (Modified NSW)Default value is “Unknown” (-99).This value will not be populated; the StructureNumber provides a linkage to the MRWA StructureTable that provides this information.
	STRUCTURENUMBER	The Main Roads Western Australian’s structure number for the crossing. (WA).Although it is termed a number it is in fact a character string (5 chars).Default value is null.
	<a href="#">BRIDGETUNNEL TYPE</a>	The type of tunnel/bridge such as road or rail.

## 5 HYDROGRAPHIC

The Topographic features who primary characteristics that relate to hydrography.

Included in the Hydrography Themes are:

- Inland Water Feature
- Inland Flat Feature
- Framework Feature
- Coastal Flat Feature
- Fuzzy Water Feature

Each theme may or may not have feature classes for types of point, Line and/or polygon. In most cases, the attributes/field names for each type are the same with some having additional unique attributes. In its generalised usage, Topographic features within Hydrographic have primary characteristics that pertain to measurement and description of any waters (water resources that are useful or potentially useful to humans).

Feature Classes for Hydrographic, which are represented in the table following are:

- WaterPolygon
- WaterPoint
- WaterLine
- InlandFlatPolygon
- InlandFlatPoint
- FrameworkLine
- FrameworkPolygon
- FuzzyWaterLine
- FuzzyWaterPoint
- FuzzyWaterPolygon
- CoastalFlatPolygon

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document if applicable – attribute underlined)	Unique Attribute Description
<p><b>WaterPolygon</b></p> <p>In its generalised usage, Topographic features whose primary characteristics pertain to measurement and description of any waters (water resources that are useful or potentially useful to humans).</p>	<p><u>PERENNIALITY</u></p>	<p>Whether the feature contains water seasonally or all year</p>
	<p><u>ORIGIN</u></p>	<p>Whether the feature is man made or natural.</p>
	<p>HIERARCHYDOWNSTREAM</p>	<p>Value from 1-9999 indicates the feature's hierarchy, starting from the source (1) and increasing towards the mouth.</p>

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document if applicable – attribute underlined)	Unique Attribute Description
		(WA) 9999 (default value) indicates the hierarchy has not been assigned.
	HIERARCHYUPSTREAM	Value from 1-9999 indicates the feature's hierarchy, starting from the mouth (1) and increasing towards the source. (WA) 9999 (default value) indicates the hierarchy has not been assigned.
	<a href="#"><u>WATERCOURSETYPE</u></a>	The type of water course such as major or minor river.
	<a href="#"><u>SALINITYCODE</u></a>	Whether the water is fresh, brackish
	<a href="#"><u>WATERPOLYGONTYPE</u></a>	The type of water body such as lakes, dams or pools.
	RIGHTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	Condition of the waterway banks
	LEFTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	Condition of the waterway banks
<b>WaterPoint</b> A single point at the water feature centre	<a href="#"><u>PERENNIALITY</u></a>	Whether the feature contains water seasonally or all year
	ORIGIN	Whether natural or man made.
	HIERARCHYDOWNSTREAM	Value from 1-9999 indicates the feature's hierarchy, starting from the source (1) and increasing towards the mouth. (WA) 9999 (default value) indicates the hierarchy has not been assigned.
	HIERARCHYUPSTREAM	Value from 1-9999 indicates the feature's hierarchy, starting from the mouth (1) and increasing towards the source.



Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document if applicable – attribute underlined)	Unique Attribute Description
		(WA) 9999 (default value) indicates the hierarchy has not been assigned.
	<a href="#"><u>WATERCOURSETYPE</u></a>	The type of water course for water points is set to the default value of -98 not applicable.
	<a href="#"><u>SALINITYCODE</u></a>	The salinity code for water points is set to the default value of -98 not applicable.
	<a href="#"><u>WATERPOINTTYPE</u></a>	The type of water point such as lake, dam or pool.
	RIGHTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	The bank condition for water points is set to the default value of -98 not applicable.
	LEFTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	The bank condition for water points is set to the default value of -98 not applicable.
<b>WaterLine</b>	<a href="#"><u>PERENNIALITY</u></a>	Whether the feature contains water seasonally or all year
	ORIGIN	Whether the feature is natural or man made.
	HIERARCHYDOWNSTREAM	Value from 1-9999 indicates the feature's hierarchy, starting from the source (1) and increasing towards the mouth. (WA) 9999 (default value) indicates the hierarchy has not been assigned.
	HIERARCHYUPSTREAM	Value from 1-9999 indicates the feature's hierarchy, starting from the mouth (1) and increasing towards the source. (WA) 9999 (default value) indicates

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document if applicable – attribute underlined)	Unique Attribute Description
		the hierarchy has not been assigned.
	<a href="#"><u>WATERCOURSETYPE</u></a>	The type of water course such as major or minor river.
	<a href="#"><u>SALINITYCODE</u></a>	Whether the water is fresh, brackish
	<a href="#"><u>WATERLINETYPE</u></a>	The water line type is set to the default value of -98 not applicable.
	RIGHTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	Condition of the waterway banks
	LEFTBANKCONDITION Refer <a href="#"><u>BANKCONDITIONTYPE</u></a>	Condition of the waterway banks
<p><b>CoastalFlat Polygon</b></p> <p>Water features that relate to low lying water areas along the coast</p>	<a href="#"><u>COASTALFLATTYPE</u></a>	Whether to feature is mangrove or intertidal
<p><b>InlandFlatPoint</b></p> <p>Water features that relate to the interior of the country</p>	<a href="#"><u>INLANDFLATTYPE</u></a>	Whether the area is subject to flooding or inundation. Only those areas with a diameter greater 35m are shown.
<p><b>InlandFlatPolygon</b></p> <p>Water features that relate to low lying areas in the interior of a country</p>	<a href="#"><u>INLANDFLATTYPE</u></a>	<p><b>Spatial Representation:</b> Multiple points that describe the feature's perimeter.</p> <p>CAPTURE TIP: Capture only those with a diameter greater than 35m.Snap to adjoining hydrographic features where appropriate</p>
	<a href="#"><u>WATERCOURSETYPE</u></a>	The water course type for this feature is set to the default 10 – Indundation area
	<a href="#"><u>SALINITYCODE</u></a>	The salinity code for this feature is set to the default -99 Not known.

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>FrameworkLine</b> Topographic features that relate to the Western Australian land/sea boundary. (WA)	<a href="#"><u>FRAMEWORKTYPE</u></a>	Type of framework such as coastline, island or marine construction line.
<b>FrameworkPolygon</b> Topographic features that relate to the Western Australian land/sea boundary. (WA)	<a href="#"><u>FRAMEWORKTYPE</u></a>	Type of framework such as coastline, island or marine construction line.
<b>FuzzyWaterLine</b> Imaginary features that approximate the spatial extent of formally named hydrographic features that have relatively indistinct name extent	<a href="#"><u>FUZZYWATERLINETYPE</u></a>	Feature such as those that river like or reach like.
<b>FuzzyWaterPoint</b> Imaginary features that approximate the spatial extent of formally named hydrographic features that have relatively indistinct name extent	<a href="#"><u>FUZZYWATERPOINTTYPE</u></a>	Feature such as those that island like or swamp like.
<b>Fuzzy WaterPolygon</b> Imaginary features that approximate the spatial extent of formally named hydrographic features that have relatively indistinct name extent	<a href="#"><u>FUZZYWATERPOLYGONTYPE</u></a>	Features such as those that are river like bay like or swamp like.

## 6 GROUND SURFACE

The Topographic features whose primary characteristics that relate to ground surface of the Earth, both exposed and underwater.

Included in the Ground Surface Themes are:

- Elevation
- Fuzzy Land
- Morphology

Each theme may or may not have feature classes for types of point, Line and/or polygon. In most cases, the attributes/field names for each type are the same with some having additional unique attributes.

Feature Classes for Ground Surface, which are represented in the table following are:

- ElevationPoint
- ContourLine
- Fuzzy Land Line
- Fuzzy Land Point
- Fuzzy Land Polygon
- MorphologyLine
- MorphologyPoint
- MorphologyPolygon

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>MorphologyLine</b> Topographic features whose primary characteristics relate to landform - lines	<a href="#"><u>MORPHOLOGYLINETYPE</u></a>	The type of morphology line such as breakaway, cliff or embankment
	<a href="#"><u>RELATIONSHIPTOWATERSURFACE</u></a>	Above or below
<b>MorphologyPoint</b> Topographic features whose primary characteristics relate to landform - points	<a href="#"><u>MORPHOLOGYPOINTTYPE</u></a>	The type of morphology point such as rock, cave or crater.
	<a href="#"><u>RELATIONSHIPTOWATERSURFACE</u></a>	Above or below
<b>MorphologyPolygon</b> Topographic features whose primary characteristics relate to landform - polygon	<a href="#"><u>MORPHOLOGYPOLYGONTYPE</u></a>	The type of morphology polygon such as sand, rock or reef.
	<a href="#"><u>RELATIONSHIPTOWATERSURFACE</u></a>	Above or below

Feature Class and Class Type	Unique Attribute/Field Name (linked to Attribute Values section in this document if applicable – attribute underlined)	Unique Attribute Description
	<a href="#"><u>ACE</u></a>	
<b>ElevationPoint</b>  Topographic features with known elevation	ELEVATION	The height, in metres, relative to a reference datum - Australian Height Datum (AHD). (WA)  The default is 1500 which is outside the valid range $\geq -5$ and $\leq 1255$
	DATUMDIFFERENCE	0 (zero) as default. LandSurfaceContour's relate to the Australian Height Datum
<b>ContourLine</b>  Imaginary line joining points of equal elevation relative to a datum. (WA)	<a href="#"><u>CONTOURTYPE</u></a>	This domain provides a list of valid values for classifying the different types of contour lines - i.e. Auxiliary, Formline, Regular.
	<a href="#"><u>CONTOURFEATURETYPE</u></a>	LandSurfaceContour is the default Sub Type
	DATUMDIFFERENCE	0 (zero) as default. LandSurfaceContour's relate to the Australian Height Datum
<b>Fuzzylandpolygon</b>  The approximate boundary of formally named landforms that have relatively indistinct name extent. (Modified NSW)	<a href="#"><u>FUZZYLANDPOLYGONTYPE</u></a>	The type of landform such as beach, isthmus or bank like.
<b>Fuzzylandline</b>  The approximate centreline of formally named landforms that have relatively indistinct name extent. (NSW)	<a href="#"><u>FUZZYLANDLINETYPE</u></a>	The type of landform such as such as range like or gully like.
<b>FuzzyLandPoint</b> The approximate centre of formally named landforms that have relatively indistinct name extent. (NSW)	<a href="#"><u>FUZZYLANDPOINTTYPE</u></a>	The type of landform such as beach or hill like.

## 7 POINT OF INTEREST

This section provides the associated Attribute values where it is shown in the theme section tables with the link from the Attribute/Field Name underlined.

Any place, feature or service that people wish to visit or know the location of, and is of value to the community are part of the Point Of Interest (POI) feature.. Features that are included in the Points Of Interest are:

- Hospitality
- Education
- Health
- Recreation
- CommunityService
- Transportation
- Commercial
- Industry
- Geography
- Defence and
- Mining

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b>  (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>All POI Feature classes</b>	CLASSIFICATIONCODE	A 6 digit code derived from the combination of Feature Class, Subtype and Domain values to allow the reconstruction of the classification system from a flat or text file export. The values in this field are managed automatically but are derived from a feature class number (2 digit), Subtype number (fcSubType – 2 digit) and Domain Value (e.g. HospitalPOIType = 07: PsychiatricHospital)
<b>Hospitality(01)</b>  Features associated especially with tourism, of providing service to patrons including hotel accommodation, restaurant meals and beverage service	<a href="#"><u>HOSPITALITY TYPE</u></a>	The type of hospitality feature such as hotel, caravan and tourist park or winery

<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>Education (02)</b>  Features involved with or related to, the act or process of educating; the imparting or acquisition of knowledge, skill, etc; systematic instruction or training.	<a href="#"><u>EDUCATIONTYPE</u></a>	The type of education feature such as primary or secondary school.
<b>Health(03)</b>  A service assisting in the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions.	<a href="#"><u>HEALTHTYPE</u></a>	The type of health feature such as aged care, health centre or nursing point.
<b>Recreation(04)</b>  A facility or an area set aside for recreational or sporting activity.	<a href="#"><u>RECREATIONTYPE</u></a>	The type of recreation feature such as showground, theme park or cinema.
<b>Community Service(05)</b>  A service that is provided for the benefit of the public	<a href="#"><u>COMMUNITYSERVICETYPE</u></a>	The type of community service feature such as community centre, toilet or telephone.
<b>Transportation (06)</b>  Facilities and service features related to transportation.	<a href="#"><u>TRANSPORTATIONTYPE</u></a>	The type of transportation feature such as bridge, railway or taxi rank.
<b>Commercial (07)</b>  Service features where the chief aim is profit. (WA)	<a href="#"><u>COMMERCIALTYPE</u></a>	The type of commercial feature such as shopping centre, telecommunication or art and craft.
<b>Industry(08)</b>  Enterprises involved in the manufacturing of goods or materials.	<a href="#"><u>INDUSTRYTYPE</u></a>	The type of industry feature such as power station, waste disposal or depot.



<b>Feature Class and Class Type</b>	<b>Unique Attribute/Field Name</b> (linked to Attribute Values section in this document if applicable – attribute underlined)	<b>Unique Attribute Description</b>
<b>Geographic(09)</b>  Landscape features and places of particular significance to the community	<u><a href="#">GEOGRAPHICTYPE</a></u>	The type of geographic features such as hill, lake or town.
<b>Defence(10)</b>  A facility or an area set aside for defence purposes	<u><a href="#">DEFENCETYPE</a></u>	The type of Defence features such as naval or army base.
<b>Mining(11)</b>  An excavation made in the earth for the purpose of extracting ores, coal, precious stones, minerals, etc.		Mine (1) is the default sub type for the mining feature



## 8 ATTRIBUTE VALUES

This section provides the associated Attribute values where it is shown in the theme section tables with the link from the Attribute/Field Name underlined.

Also shown prior to each table is the related Feature Class (datasets) the attribute values pertain to.

### ACCESSLEVEL

**Feature Classes:** All

Values	Description
0 = Public	Data for public use. This is the default
10 =Public (licensed)	Data for public use but under license with Army.
11 =Public (licensed)	Data for public use but under license with DMP.
12 =Public (licensed)	Data for public use but under license with DEC.
13 =Public (licensed)	Data for public use but under license with Water Corporation.
14 =Public (licensed)	Data for public use but under license with Western Power.
20 =Level 1 Restriction (Low)	Data not for public use. For internal LANDGATE use only, under license with DMP.
21 =Level 1 Restriction (Low)	Data not for public use. For internal LANDGATE use only, under license with Water Corporation.
22= Level 1 Restriction (Low)	Data not for public use. For internal LANDGATE use only, under license with Western Power.
23 =Level 1 Restriction (Low)	Data not for public use. For DEC use only. DEC to specify who can have access to this category of data. Note: refer to conditions associated with AccessLevel 24.
24 =Level 1 Restriction (Low)	Data not for public use. For internal LANDGATE use only. Provides alignment to DEC restricted roads (i.e. used to ensure road connectivity is preserved).  Note: if AccessLevel 23 data is suppressed so should AccessLevel 24 data.
40 =Level 2 Restriction (Medium)	Data not for public use. Medium restriction dissemination policy.
60 =Level 3 Restriction (High)	Data not for public use. Highly restricted dissemination policy.

Values	Description
80 =Secure	Data not for public use. Data totally restricted.

#### BANKCONDITIONTYPE

**Feature Classes:** WaterPolygon, WaterPoint, WaterLine

Values	Description
Pristine (1)	WRC to supply definition.
Disturbed (2)	WRC to supply definition.
Eroded (3)	WRC to supply definition.
Degraded (4)	WRC to supply definition.
NotApplicable (-98)	The BankConditionType is not relevant for the particular feature.
Unknown (-99)	The BankConditionType is not known for the particular feature; however a value may be populated in the future.

#### BUILDINGTYPE

**Feature Classes:** BuildingPolygon, CulturalFeatureLine

Values	Description
AboriginalOutstation (54)	A station in a remote or sparsely populated location. (CGNA)
Homestead (21)	A main residence on a horticultural or agricultural farm. (CGNA)
Ruin (55)	The remains of a building, that has been destroyed or that is in severe disrepair or state of decay. (WA)
Silo (46)	An enclosed container, used for storing grain or fodder. (DIGEST)
Unknown (-99)	The BuildingType is not known for the particular feature; however a value may be populated in the future. This is the default BuildingType.

## BRIDGETUNNELTYPE

**Feature Classes:** BridgeTunnelLine, BridgeTunnelPoint

Values	Description
Bridge (1)	A structure erected over a depression or obstacle to carry traffic. (Modified ICSM)  This is the default BridgeAndTunnelType.
Tunnel (2)	An underground or underwater passage. (ICSM)
NotApplicable (-98).	This is an invalid attribute for BridgeTunnelType.
Unknown (-99)	This is an invalid attribute for BridgeTunnelType.

## CAPTUREMETHOD

**Feature Classes:** N/A – Workspace table

Values	Description
24	DigitalElevationModel
1	DirectPhotogrammetricCapture
2	GlobalPositioningSystem
7	MathematicalInterpolation
3	OnScreenDigitising
4	Scan_Vectorise
5	TableDigitising
6	Various

## COASTALFLATTYPE

**Feature Classes:** CoastalFlatPolygon

Values	Description
Intertidal (1)	That part of the seabed or estuarine areas, between mean high water and the line of low water.(AUSLIG).This is the default FlatType.CAPTURE TIP: Where appropriate ensure the intertidal feature is coincident with the coastline.
SalineCoastal (2)	Those nearly level tract of land between mean high water and the line of the highest astronomical tide. (AUSLIG)

Values	Description
	CAPTURE TIP: Where appropriate ensure the salinecoastal feature is coincident with the coastline.
Mangrove (3)	A nearly level tract of land between the low and high water lines vegetated with mangroves.(ICSM)CAPTURE TIP: Where appropriate ensure the mangrove feature is coincident with the coastline.
Unknown (-99)	This is an invalid attribute for FlatType

## COMMERCIALTYPE

### Feature Class: CommercialType (07)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>LegalAndFinancial Service</b> Commercial services related to the administration of the law and financial matters.	Banking (01)	Commercial venture offering services related to the holding and loaning of money on behalf of account holders. (WA).This is the default for LegalAndFinancialServicePOIType.
		Insurance (02)	A commercial entity providing coverage by contract whereby for an agreed payment one party agrees to indemnify or guarantee another against loss by a specified contingency or peril. (WA)
		Investment (03)	Commercial entities aiming to gain wealth for their clients through the purchase of appreciating assets or by providing advice on such purchases. Also those entities involved in providing funds and capital. (WA)
		Legal (04)	Commercial services related to the administration of justice. (WA) e.g. Barristers and solicitors.
02	<b>MediaAnd Telecommunication</b>	NewspaperPublishing (01)	A business organization producing a publication issued at regular and usually close

fcSubtype	Definition	Domain Values	Domain Descriptions
	Commercial entities related to the transmission of information either by electromagnetic signals or more traditional forms such as magazines and newspapers. (WA)		intervals, esp. daily or weekly, and commonly containing news, comment, features, and advertising. (WA). e.g. Sunday Times
		RadioBroadcasting (02)	Location of the offices and studios from which programs are produced and broadcast for listening via radio. (WA). e.g. 96fm.
		Telecommunication (03)	Business organisations associated with the transmission of information by electromagnetic signals. (WA). E.g. inet. This is the default for MediaAndTelecommunicationPOIType.
		TelevisionBroadcasting (04)	Location of the offices and studios from which programs are produced and broadcast for viewing via television. (WA) e.g. ABC.
03	<b>Consulting And Contracting Service</b>  Commercial entities that provide professional advice and information to clients on a particular area of expertise. (WA)	EmploymentAndRecruitmentService (01)	Service that searches for and procures staff on behalf of businesses. (WA) This is the default for ConsultingAndContractingServicePOIType.
		BikeHire (01)	A business that provides the temporary use of bicycles for a fee. (WA)  This is the default for

fcSubtype	Definition	Domain Values	Domain Descriptions
			RentalAndHireServicePOIType.
		BoatAndWaterCraft Hire (02)	A business that provides the temporary use of water craft for a fee. (WA) e.g. Canoe hire.
		Other (03)	A business that offers goods for hire not otherwise specified in this domain. (WA)
05	<b>FuelOutlet</b> A commercial business that specialises in the dispensing of motor vehicle fuel – diesel, petroleum and gas. (WA)		
06	<b>Retail Outlet</b> Commercial entities that sell goods to the public. (WA)	ArtAndCraft (01)	Shop selling skilfully created goods of artistic value. (WA)
		ClothingAndAccessories (04)	General clothing (and accessory) outlets.
		HardwareAndGardenSupplies (08)	Hardware and Garden supply outlets
		HouseAndOfficeSupplies (09)	Outlets for general house and office goods.
		Pharmacy (07)	Pharmaceutical outlets, e.g. chemists.
		Liquor (06)	Liquor outlets, excluded licensed premises, e.g. bottle shops.
		ShoppingCentre (02)	The concentration of retailing and other service activities at a nodal and accessible point. (CGNA)
		SpecialisedFood	Food outlets other than shopping centres, includes

fcSubtype	Definition	Domain Values	Domain Descriptions
		(05)	bakery, butchers , delis etc.
		Supermarket (03)	A large self-service retail store that sells a wide range of food and household goods.(WA)This is the default for RetailOutletPOIType.
07	<p><b>Child CareCentre</b></p> <p>A facility that provides daytime and after school supervision and recreation for children. (WA)</p>	CommercialType set to "NotApplicable" (-98 )	
08	<p><b>RetirementEstate</b></p> <p>facility that provides accommodation to retired persons. (WA)</p>	CommercialType set to "NotApplicable" (-98 )	

#### COMMUNITYSERVICE TYPE

##### Feature Class: CommunityService (05)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<p><b>Amenity</b></p> <p>A facility supplying some public demand. (Modified Merriam-Webster Dictionary)</p>	Telephone_Emergency (01)	<p>Telephone installed/configured for emergency use only. (WA)</p> <p>This is the default AmenityPOIType.</p>
		Telephone_Public (02)	Telephone installed for public use. (WA)
		Toilet(03)	A structure with fixtures that consists usually of a water-flushed bowl and seat and is used for defecation and urination. (Modified Merriam-Webster Dictionary)

fcSubtype	Definition	Domain Values	Domain Descriptions
02	<p><b>CommunityFacility</b></p> <p>A facility that provides a meeting place for groups of community members. (WA)</p>	CommunityCentre (01)	A facility that services as a meeting place for a group of people with a common interest. Also includes Halls and Civic Centres. (Modified Web)This is the default CommunityFacilityPOIType.
		MulticulturalCentre (02)	A facility provided for specific ethnic groups. (WA) For example: Macedonian CommunityCentre.
03	<p><b>Cultural Facility</b></p> <p>A facility supplying some public demand. (Modified Merriam-Webster Dictionary)</p>	ArtGalleryPublic(01)	A facility used as a place set apart for the keeping, exhibition, and study of objects of artistic interest. (NSW)This is the default CulturalFacilityPOIType.
		CemetaryAndCrematorium(03)	Facilities for the incineration or burying of the dead. (WA)
		Conservatory(02)	A conservatory is also another name for a large greenhouse where plants are cultivated.(Modified WIKIPEDIA)
		Library (04)	A facility used as a place set apart to contain books and other literary material for reading, study and reference. (NSW)
		MeteorologicalStation (05)	A facility designed for making meteorological observations. (WA)
		Museum (06)	A facility for the keeping, exhibiting, and study of objects of scientific, artistic, and historical interest. (NSW)
		Observatory (07)	A facility designed for making observations of astronomical or other natural phenomena. Excludes meteorological observations (Modified NSW)



fcSubtype	Definition	Domain Values	Domain Descriptions
		Telecentre (08)	A local community centre equipped with high tech facilities. A typical Telecentre has computers the Internet and email facilities, two-way 128kb videoconferencing, photocopiers, fax machines, printers TV and video machines, decoders, scanners and more depending on the needs of the community. (WA)
04	<b>EmergencyService</b> Organisations charged with responding to emergency situations. (WA)	Ambulance (01)	The facility in which ambulance vehicles and equipment are stationed or intended to be stationed. (NSW)This is the default for EmergencyServicePOIType.
		FESA (04)	Administration facilities for the Fire And Emergency Services Authority. (WA)
		FireAndRescue_Career (02)	A facility in which firefighting and rescue vehicles and equipment is stationed or intended to be stationed, generally to service urban communities. The facility is manned by full time career firefighting staff. (Modified NSW)
		FireAndRescue_Volunteer (03)	A facility in which firefighting and rescue vehicles and equipment is stationed or intended to be stationed, generally to service urban communities. Potentially an unmanned (volunteer) based facility. (Modified NSW)
		MarineRescueService (05)	A service specialising in search and rescue operations in the marine environment. Generally staffed by volunteers. (WA)
		PoliceStation (06)	A facility used as the headquarters of a police force, or of a branch of a police force.(NSW)

fcSubtype	Definition	Domain Values	Domain Descriptions
		StateEmergencyService (07)	A facility for the purpose of administering the state emergency services. (WA)
		StateEmergencyServiceVolunteerUnits(08)	A facility in which vehicles and equipment are stationed for rescue and emergency use by SES volunteer crews. (WA)
		UnexplodedOrdnanceService (09)	A state emergency management service charged with the search for and neutralisation of any explosive ordnance (ammunition, bomb grenade, torpedo etc) that has failed to function as intended, from land intended for development.
		VolunteerBushFireBrigade (10)	A group of volunteers managed by the local government authority and supported byes to provide firefighting services as required. (WA)
05	<b>Government</b> Services provided in the public interest. (WA)	Consulate (01)	A diplomatic building that serves as the residence or workplace of a consul. (Web)This is the default for GovernmentPOIType.
		CourtAndTribunal (02)	A place where a judge, magistrate, committee or board adjudicate in a particular matter of law. (WA)
		FederalGovernmentAgency (03)	Agency funded by the Federal Government to perform tasks in the National interest.(WA)
		LocalGovernmentAgency (04)	Agency funded by the local ratepayers to provide services and amenities to the community. (WA)
		PrisonAndDetentionCentre(17)	A building(s) in which persons are legally committed to, while awaiting trial, processing or for punishment. (Modified CGNA)
		RangersOffice (07)	Building or location from which a ranger manages a park or

fcSubtype	Definition	Domain Values	Domain Descriptions
			reserve. (WA)
		StateGovernmentAgency (05)	Agency funded by the State Government to perform tasks on behalf of the State. (WA)
		TrafficAndVehicleLicensingCentre (06)	Department of Transport public contact centre for matters to do with vehicles including registration, driver licensing, vehicle inspections and related matters. (WA)
06	<b>Infrastructure</b> Built features of a public nature. (WA)	CarPark (01)	An area designated for the parking of motor vehicles. (CGNA)This is the default InfrastructurePOIType.
		CommunicationTower (02)	A relatively tall structure used for transmitting and/or receiving electronic communication signals.(DIGEST)
		Lighthouse (03)	A building or structure housing a light used as a navigation aid to shipping. (AUSLIG)
		NamedBuilding (04)	Prominent building named in such a way that the building is commonly referred to by its name.(WA). Examples include: Dumas House, Axa Centre, Central Park, Bankwest Tower, QV1, etc.
		RubbishTip (05)	An area where there is a gradually accumulated of refuse. Includes rubbish transfer stations.(Modified Merriam-Webster Dictionary)
07	<b>Organisation</b> Not for profit community groups. (WA)	AnimalRefuge (01)	A facility providing a refuge for unwanted, neglected, abandoned, lost or injured animals.(WA)
		CharityAndVolunteerOrganisation (02)	An institution established to help the needy. (WA)
		CitizensAdviceBureau	Agency providing an information and referral service in the areas

fcSubtype	Definition	Domain Values	Domain Descriptions
		au (03)	of legal advice and mediation. (WA)
		PoliticalParty (04)	A group of citizens sharing an ideological viewpoint organised to exercise or seek power in the governmental or public affairs of a nation, state, municipality (WA)
		SocialClub (05)	A formal association of people with similar interests. (WA).This is the default for OrganisationPOIType.
		WorkersUnion (06)	A group of workers who have banded together to achieve common goals such as improved working conditions. (WA)
		YouthOrganisation (07)	An organisation set up to provide young people within an area with activities designed to keep them off the streets, help give them a job and develop an interest in activity.(WA)
08	<b>PlaceOfWorship</b> An establishment or other location where a group of people (a congregation) gathers to perform acts of religious faith, honour, or devotion. (WA)	Church (01)	A building for public Christian worship. (WA)This is the default for PlaceOfWorshipPOIType.
		Mosque (02)	A Muslim place of public worship with at least one minaret (WA)
		Synagogue (03)	A Jewish house of prayer. (WA)
		Other (04)	Any place used for religious congregation and practice by religions other than those listed above. (WA) For example: a Vihara (Buddhist), a Mondir (Hindu).

fcSubtype	Definition	Domain Values	Domain Descriptions
09	<p><b>PostalService</b></p> <p>Features related the public department (Australia Post) responsible for the transportation and delivery of mail. (WA)</p>	PostOffice (01)	A facility whose primary business is to handle and service mail and associated supplies of equipment. (NSW) This is the default PostalServicePOType.

#### CONTOURFEATURETYPE

##### Feature Classes: ContourLine

Values	Description
LandSurfaceContour (1)	Imaginary line joining points of equal elevation relative to a datum. (WA)
BathymetricContour (2)	Imaginary line joining points of equal elevation relative to a datum. (WA)

#### CONTOURTYPE

##### Feature Classes: ContourLine

Values	Description
Auxiliary (1)	Supplementary to "Standard" contours - differs from the standard contour interval. (WA)
Formline (2)	Lines, resembling "Standard" contour lines, drawn to present a conception of the shape of the terrain without regard of the true vertical accuracy. (WA)
HighWaterMark (4)	
Standard (3)	A line, which represents an imaginary line on the earth's surface joining points of equal elevation relative to a datum. (WA)This is the default ContourType
Unknown (-99)	This is an invalid attribute for ContourType

CULTURALFEATURETYPE

Feature Classes: CulturalFeatureLine, CulturalFeaturePoint, CulturalFeaturePolygon

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
Polygon	1	<b>BuiltUpArea</b> Topographic features whose primary characteristics relate to or constitutes a city or high activity areas. (Modified DIGEST)	Carpark (1)	An area designated for the parking of motor vehicles. (CGNA)
			CommercialCentre (2)	A concentration of buildings used for commercial activity. (WA)
			IndustrialArea (3)	An area designate primarily for manufacturing activities. (Modified Merriam-Webster Dictionary)
			ShoppingCentre (4)	The concentration of retailing and other service activities at a nodal and accessible point. (CGNA)
			UrbanArea (5)	The extent of urban development (includes residential, commercial and industrial areas). (Modified Merriam-Webster Dictionary)This is the default BuiltupAreaType.
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType
	2	<b>Swimming Pool</b> An enclosed or artificial pool, for swimming in. (NSW)		
	3	<b>Cleared Area</b> A distinctive open area within	ClearedLine (1)	A cleared path (straight line) within surrounding

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		surrounding vegetation. (ICSM)		vegetation. (WA)
			FireBreak (2)	A strip of ploughed or cleared land made to check the spread of fire. (CGNA)
			GrassedArea (3)	A grassed open area where passive recreation occurs. (WA)
			PavedWaterCatchment (4)	An area prepared and set aside for the collection of rainfall run-off. (WA)
			PreparedPlayingSurface (5)	A prepared open area where sporting events, exercises, or games occur. (WA)
			RifleRange (6)	A tract of land on which rifle shooting contests are held. (CGNA)
			SeismicLine (7)	A graded path in a straight line for the purpose of exploration. (AUSLIG)
			UnpavedWaterCatchment (9)	An unpaved area prepared and set aside for the collection of rainfall run-off. (WA)
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType.
			ClearedLine (1)	A cleared path (straight line) within surrounding vegetation. (WA)
	4	<b>Disturbed Ground-</b> Topographic features that relate to operations connected with construction, excavations and temporary storage	Earthworks (1)	An area where site excavations and construction are taking place. (Modified Webster Dictionary)This is the default DisturbedGroundType.

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		of materials. Features are generally transient in nature. (Modified Merriam-Webster Dictionary)		
			RubbishTip (2)	An area where there is a gradually accumulated of refuse. (Modified Merriam-Webster Dictionary)
			Stockpile (3)	An area where there is a gradually accumulated reserve of some type. (Modified Merriam-Webster Dictionary)
			TailingDump (4)	An area where residue remaining after ore has been processed is stored. (WA)
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType
	5	<b>Administrative Area</b> An area set aside for a special purpose (Modified ATSAS).	Unknown (-99)	This is an invalid attribute for CulturalFeatureType
	6	<b>Vegetation Area</b> Either naturally occurring tree cover or commercially planted vegetation	Arboretum (12)	A plot of land where different trees or shrubs are grown for study or popular interest. (Macquarie Dictionary)
			Bushland (1)	Land having a cover of trees, shrubs, or both. (SDTS)This is the default



Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				VegetationType
			FlowerFarm (13)	A farm devoted to the production of flowering plants for the cut flower market. (WA) Includes; Protea farms, rose farms, etc.
			Orchard (2)	An area covered by an orderly planting of trees, vines or bushes which yield fruits, nuts or other edible products.(AUSLIG)
			MarketGarden (3)	A farm devoted to the production of vegetables for the market. (Merriam-Webster Dictionary)
			NativeForest (4)	A bounded area of land covered mainly with native trees. (Modified CGNA)
			Nursery (5)	A plot of ground in which young plants are reared for transplantation, especially trees. (CGNA)
			PinePlantation (6)	An area covered with coniferous trees planted in an orderly pattern. (AUSLIG)
			Plantation (7)	An area covered by systematic plantings of trees, which yield fruits, nuts or other products. (DIGEST)
			Reafforestation (8)	An area that has undergone or is in the process of undergoing the action of renewing forest cover by planting seeds or young trees. (WA)
			RiceField (9)	An area periodically covered with water used for growing rice.(DIGEST)

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			Vineyard (10)	An area covered by an orderly planting of trees, vines or bushes which yield fruits, nuts or other edible products. (AUSLIG)
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType
			Arboretum (12)	A plot of land where different trees or shrubs are grown for study or popular interest. (Macquarie Dictionary)
Line	7	<b>ClearedLine</b> Cleared path within surrounding vegetation. (Modified ICSM)	ClearedLine (1)	A cleared path (straight line) within surrounding vegetation. (WA)This is the default ClearingType.  CAPTURE TIP: Show only those greater than 150m in length. Generalise where very numerous. Don't show if very vague.
			FireBreak (2)	A strip of ploughed or cleared land made to check the spread of fire. (CGNA)CAPTURE TIP: Show only if of landmark value in areas of scarce detail.
			GrassedArea (3)	A grassed open area where passive recreation occurs. (WA)
			PavedWaterCatchment (4)	An area prepared and set aside for the collection of rainfall run-off. (WA)
			PreparedPlayingSurface (5)	A prepared open area where sporting events, exercises, or games occur. (WA)
			RifleRange (6)	A tract of land on which rifle shooting contests are held. (CGNA)

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			SeismicLine (7)	A graded path in a straight line for the purpose of exploration. (AUSLIG)
			UnpavedWaterCatchment (8)	An unpaved area prepared and set aside for the collection of rainfall run-off. (WA)
			Unknown (-99)	This is not a valid attribute for CulturalFeatureType.
	8	<b>RaceTrack</b> A course laid out for racing. (ICSM)	Athletics (1)	
			BMX (2)	
			CarOrMotorcycle (3)	
			Cycling (4)	
			Dog (5)	
			Horse (6)	This is the default RaceTrackType.
			Trotting (7)	
			Unknown (-99)	This is a valid attribute for CulturalFeatureType.
	9	<b>Fence</b> A manmade barrier of relatively light structure used as an enclosure or boundary. (DIGEST	Fence (1)	A manmade barrier of relatively light structure used as an enclosure or boundary. (DIGEST)This is the default for FenceType for CulturalFeatureLine.
			Gate (2)	A structure to prevent entrance or passageway. (ICSM).This is the default for FenceType for CulturalFeaturePoint.
			Yard (3)	A small area of land enclosed by a fence and generally used for confining stock. (AUSLIG)
			Unknown (-99)	This is an invalid attribute

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				for CulturalFeatureType.
<b>Point</b>	1	<b>BuiltUpArea</b> Topographic features whose primary characteristics relate to or constitutes a city or high activity areas. (Modified DIGEST)	Carpark (1)	An area designated for the parking of motor vehicles. (CGNA)
			CommercialCentre (2)	A concentration of buildings used for commercial activity. (WA)
			IndustrialArea (3)	An area designate primarily for manufacturing activities. (Modified Merriam-Webster Dictionary)
			ShoppingCentre (4)	The concentration of retailing and other service activities at a nodal and accessible point. (CGNA)
			UrbanArea (5)	The extent of urban development (includes residential, commercial and industrial areas). (Modified Merriam-Webster Dictionary)This is the default BuiltupAreaType.
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType
	2	<b>Swimming Pool</b> An enclosed or artificial pool, for swimming in. (NSW)		
	9	<b>Fence</b> A manmade barrier of relatively light structure used as an enclosure or boundary.	Fence (1)	A manmade barrier of relatively light structure used as an enclosure or boundary. (DIGEST)  This is the default for FenceType for

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		(DIGEST		CulturalFeatureLine.
			Gate (2)	A structure to prevent entrance or passageway. (ICSM) This is the default for FenceType for CulturalFeaturePoint.
			Yard (3)	A small area of land enclosed by a fence and generally used for confining stock. (AUSLIG)
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType.
	11	<b>TopographicLandmark</b> Any location that is of general cultural significance/interest.	AboriginalSite (1)	A location of significance to indigenous people. (WA)
			Grave (2)	A place of burial. (WA)
			HistoricSite (3)	Land reserved or dedicated for its historical significance even though it may be used for other purposes. (Modified ANZLUC)
			Monument (4)	A structure erected or maintained as a memorial to a person or event.(DIGEST)This is the default TopographicLandmarkType.
			ProminentTree (5)	A significant tree that has cultural significance. (WA)
			Shipwreck (7)	A site at which a wrecked ship or its parts are located. (Modified Merriam-Webster Dictionary)

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType.
	12	<b>NavigationAid</b> A prominent specially constructed object for the provision of navigational information. (Modified CGNA)	Bouy (1)	A floating object moored to the seafloor, as an aid to navigation or for other specific purposes. (CGNA)
			LitBeacon (2)	A prominent specially constructed object forming a conspicuous mark as a fixed visual (lit) to navigation. (Modified CGNA)
			Lighthouse (3)	A building or structure housing a light used as a navigation aid to shipping. (AUSLIG)This is the default NavigationAid.
			UnlitBeacon (4)	A prominent specially constructed object forming a conspicuous mark as a fixed visual (unlit) to navigation. (Modified CGNA)
			RadioBeacon (5)	A prominent specially constructed object forming a conspicuous mark as a fixed electronic aid to navigation. (Modified CGNA)
			Windsock (6)	A visual device used to provide wind information.(DIGEST)
			Unknown (-99)	This is an invalid attribute for CulturalFeatureType.
	13	<b>GaugingStation-</b> A site where stream flow is measured. (ICSM)	Nil (Attribute: CulturalFeatureType default is "NotApplicable" (-98))	

## DATA CUSTODIAN

**Feature Classes:** N/A – Workspace table

Values	Description
7	ARMY
1	DAFWA – Department Agriculture and Foods WA
2	DEC – Department of Environment and Conservation
4	DMP – Department of Mines and Petroleum
6	DOW – Department of Water
8	GA
3	LANDGATE
10	MRWA – Main Roads
5	WC – Water Corporation
9	WP – Western Power

## DATASOURCE

**Feature Classes:** N/A – Workspace table

Values	Description
1	1:2000TopographicSeriesByLANDGATE
6	1:50000TopographicSeriesByLANDGATE
9	1:100000TopographicSeriesByDMP
10	1:100000TopographicSeriesByDOW
7	1:50000TopographicSeriesByDOW
8	1:100000TopographicSeriesByGA
18	1:50000TopographicSeriesByDEC
3	1:25000TopographicSeriesByLANDGATE
2	1:5000TopographicSeriesByLANDGATE
4	1:25000TopographicSeriesByDEC

Values	Description
5	1:25000TopographicSeriesByDOW
16	1:50000TopographicSeriesByARMY
11	CadastralDatabase
12	CitiesAndTownsSeriesByLANDGATE
19	ConceptPlan
28	DECRoadAssetManagement
24	DigitalElevationModel
22	GasOilPipelinesByDMP
25	GeographicNamesRegister
13	MetropolitanStreetSmartDirectoryByLANDGATE
14	MetropolitanWallMapByLANDGATE
17	ModifiedAMBIS1:100000Data
27	MRWA_IRIS
26	OrthoImagery
23	PlantationsByDEC
15	StateMapSeriesByLANDGATE
20	TransmissionLinesByWP
21	WaterPipelinesByWC

## DEFENCETYPE

### Feature Class: DefenceType (09)

fcSubtype	Definition	Domain Values	Domain Descriptions
00		AirForceBase(01)	An area owned and operated by the government as an Air Force Base. (WA)This is the default DefenceFacilityType.
		ArmyBase (02)	An area owned and operated by the government as an Army Base. (WA)



fcSubtype	Definition	Domain Values	Domain Descriptions
		NavalBase(03)	An area owned and operated by the government as a Naval Base. (WA)
		DefencePracticeArea(04)	A tract of land on which the military conducts practice exercises. (Modified CGNA)

#### ELEVATION ACCURACY

Feature Classes: N/A – Workspace table

MAPPING SCALE	CONTOUR INTERVAL	RMS(metres)		LINEAR MAP ACCURACY STANDARD FACTOR	90% OF “WELL DEFINED” POINTS WILL BE WITHIN (METRES)	
		CONTOURS	SPOTHEIGHTS (“WELL DEFINED”)	LMAS AT THE 90% CONFIDENCE LEVEL	CONTOURS	HAND/SCAN DIGITISED OR DERIVED
1:25,000	5	1.67	0.83	1.6449	2.7	1.4
1:50,000	10	3.34	1.66	1.6449	5.5	2.7
1:100,000	20	6.68	3.32	1.6449	11.0	5.5

#### VERTICAL ACCURACY (based on DEM Data)

PHOTOGRAPHY SCALE OR DATA	CONTOUR INTERVAL	RMS(metres)	LINEAR MAP ACCURACY STANDARD FACTOR	90% OF “WELL DEFINED” POINTS WILL BE WITHIN (METRES)	
			LMAS AT THE 90% CONFIDENCE LEVEL	DERIVED CONTOURS **	DEM POSTS (“WELL DEFINED”)
STRM DATA		9.73	1.6449	16.0	
1:40,000	2	1	1.6449	1.6	1.6

\*\*The accuracy of the contours derived from the DEM will be influenced by a number (not exhaustive) of factors:

1. DEM Grid spacing which dictates whether pinnacles and depressions are sampled or not
2. Whether the DEM has been edited to remove heighting errors
3. Accuracy of the posts
4. The area (cleared or vegetated)
5. Contour generation method (exact interpolation with or without smoothing)
6. Degree of contour editing after generation

Due to the lack of research on the quantitative effect of these factors, the accuracy of the derived contours (for the 1:40,000 scale data) has been stated to be equivalent to the accuracy of the DEM Posts. These accuracy statements exclude gross errors

SRTM = Shuttle Radar Topography Mission DEM data

## EDUCATION TYPE

**Feature Class:** Education (02)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>Institution</b> A facility for the act or process of educating; the imparting or acquisition of knowledge, skill, etc; systematic instruction or training. (NSW)	CombinedPrimarySecondary (01)	A facility used for full-time primary and secondary instruction of children, typically aged 6 to 17. (Modified NSW)
		Kindergarten (02)	A facility used for the tuition of young children (usually under the age of 5) prior to preschool. (WA)
		PrimarySchool (03)	A facility used for full-time primary instruction of children, typically aged 6 to 11. (Modified NSW) This is the default InstitutionPOI type.
		Preschool (04)	A facility used for the tuition of young children prior to school age, usually children age of five. (Modified NSW)
		SecondarySchool (05)	A facility used for full-time secondary institution of children, typically aged 12 to 17. (NSW)
		SpecialSchool (06)	A facility used for the education of children with special needs. (NSW)

fcSubtype	Definition	Domain Values	Domain Descriptions
		SpecialisedStudies (10)	A facility used for providing specialised teaching (curriculum). (WA)
		TAFE (07)	A facility used for providing education or instruction in technical, business or trade subjects at a post-secondary level. (NSW)
		University (08)	A facility for conduction teaching and research at a diploma, undergraduate or postgraduatelevel. (NSW)
02	<b>Education Support</b> A service that is related to the act or process of educating; providing support services and additional facilities to assist students and increase educational opportunities. (WA)	AdminEducationalSupport (9)	A facility that provides administration or support to educational facilities. (WA).This is the default EducationSupportPOIType.
		ExtraCurricularFacility (11)	A common use facility providing specialist educational opportunity additional to the standard curriculum. (WA) e.g. Education Department Boatshed, Camp School.
		StudentResidentialFacility (12)	facility for accommodating students; associated with a specific institution and providing full board lodging. (WA) e.g. St Catherine's College, Currie Hall.

FRAMEWORKTYPE

Feature Classes: FrameworkLine, FrameworkPolygon

Framework Type	fcSubtype	Definition	Domain Values	Description
-98	1	Island		An area of land fully surrounded by the sea. (AUSLIG)
-98	2	Mainland		The area of continental Australia
6	3	Coastline	HighWaterMark (1)	The ordinary high water mark at spring tides, and when applied to mother water, means the ordinary high water mark at winter level. (Land Act)
			LowWaterMark_Inland (2)	The ordinary low water mark at spring tides with respect to tidal waters. (Land Act)
			LowWaterMark_Island (3)	The ordinary low water mark at spring tides with respect to tidal waters. (Land Act)
			LowWaterMark_Mainland (4)	The ordinary low water mark at spring tides with respect to tidal waters. (Land Act)
			TopographicCoastline (5)	The line of contact between the ocean/sea and the land as best interpreted from aerial photography. In SYMBAS this line has previously been defined as "A line depicting the coast at mean high water.", however there is no guarantee that the photography from which the line was interpreted was taken at the time of mean high water.

Framework Type	fcSubtype	Definition	Domain Values	Description
			WaterLine (6)	A line depicting the boundary of a hydrographic area feature. (AUSLIG)
			Unknown (-99)	This is an invalid attribute for FrameworkType.
2	4	Marine Construction Line	Breakwater (1)	A natural or artificial structure along a COAST capable of checking the force of the waves, thereby reducing beach erosion or sheltering vessels from rough seas.(CGNA)
			Groyne (2)	A structure which protects a harbour or beach from forces of the sea. (DIGEST)  This is the default MarineConstructionType.
			Mole (3)	A massive structure of masonry or large stones serving as a PIER or BREAKWATER, or both. (CGNA)
			SeaWall (4)	A solid structure usually of concrete masonry or earth, built to prevent erosion or encroachment by the sea.(AUSLIG)
			Unknown (-99)	This is an invalid attribute for FrameworkType.

## FUZZYLANDLINETYPE

### Feature Classes: FuzzyLandLine

Values	Description
BankLike (6)	A portion of the sea/river bed raised above its surroundings, but covered with enough water to permit navigation. (CGNA)
Beach (1)	The gently sloping shore, which is washed by waves or tides, especially the parts covered by sand or pebbles.
CapeLike (7)	A piece of land projecting into a body of water. (CGNA)
CoastLike (8)	The narrow strip of land in immediate contact with any body of water, including the area between high and low water lines. (CGNA)
DepressionLike (9)	Any hollow or relatively sunken area on the Earths surface, e.g. on land or in the sea. (CGNA)
DuneLike (2)	A named dune-like landform. Includes: Dune, Sandhill and Sandridge.
GeneralPlace (3)	A formally named general locality or place of indistinct extent not readily classified by a more specific feature classification.
GorgeLike (10)	A landform which is more than usually deep and narrow, with steep walls. (CGNA)
GullyLike (11)	A small VALLEY or GORGE eroded by running water, but through which water commonly runs only after rain. (CGNA)
Isthmus (12)	A narrow portion of land enclosed on each side by water and connecting two larger bodies of land, includes Neck. (CGNA)
PassLike (13)	A break or gap in a range of mountains or hills permitting easier passage from one side to the other. (CGNA)
RangeLike (4)	A named range-like landform. Includes: Mountain Range, Range, Ridge and Spur.  This is the default FuzzyLandLineType.
SpurLike (14)	A minor linear projection off a range, ridge, mountain, hill, tableland or plateau being not more than 2kms in length and decreasing in altitude from the parent feature. (CGNA)
TroughLike (15)	A Deep or Trench in the Ocean floor. The term can also be applied to a long deep valley. Includes Trench [Marine]. (CGNA)
ValleyLike (5)	A named valley-like landform. Includes: Amphitheatre, Basin, Bend, Canyon, Chasm, Crater, Cutting, Depression, Glen, Gorge, Gulf, Gully, Hole, Ravine, Sink and Valley.

Values	Description
Unknown (-99)	This is an invalid attribute for FuzzyLandType

## FUZZYLANDPOLYGONTYPE

### Feature Classes: FuzzyLandPolygon

Values	Description
BankLike (21)	A portion of the sea/river bed raised above its surroundings, but covered with enough water to permit navigation. (CGNA)
Beach (11)	The gently sloping shore, which is washed by waves or tides, especially the parts covered by sand or pebbles. (CGNA)
CapeLike (12)	A piece of land projecting into a body of water. (CGNA)
DepressionLike (13)	Any hollow or relatively sunken area on the Earths surface, e.g. on land or in the sea. (CGNA)
DesertLike 14)	A named desert-like landform An almost barren tract of land in which the precipitation is so scanty or spasmodic that it will not adequately support vegetation. (CGNA)
DuneLike (1)	A named dune-like landform. Includes: Dune, Sandhill and Sandridge.This is the default FuzzyLandPolygonType.
FlatLike (2)	A named flat-like landform. Includes: Flat, Plain, River Flat and Terrace.
GapLike (15)	A named gap-like landform. Includes: Gap, Pass, Passage (inland) and Saddle. (CGNA)
GeneralPlace (3)	A formally named general locality or place of indistinct extent not readily classified by a more specific feature classification.
GorgeLike (16)	A landform which is more than usually deep and narrow, with steep walls. (CGNA)
GullyLike (17)	A small VALLEY or GORGE eroded by running water, but through which water commonly runs only after rain. (CGNA)
IslandGroup (23)	A group or cluster of Islands. Island Group features includes Archipelago (CGNA)
IslandLike (24)	A named Island-like landform, being an area of dry or relatively dry land surrounded by water or low wetland. Includes: Island and Islet.
Isthmus (18)	A narrow portion of land enclosed on each side by water and connecting two larger bodies of land, includes Neck. (CGNA)
LandcoverLike (4)	A named landcover land surface. Includes: Clearing, Desert,

Values	Description
	Moor and Scrub.
PassLike (19)	A break or gap in a range of mountains or hills permitting easier passage from one side to the other. (CGNA)
PeninsulaLike (5)	A named peninsula-like landform. Includes: Cape, Peninsula and Spit.
PlainLike (20)	A tract of land, the general surface of which is a comparatively flat or slightly undulating, and sparsely if at all timbered. (CGNA)
PlateauLike (6)	A named plateau-like landform. Includes: Mesa, Plateau and Tableland.
PromontoryLike (7)	A named promontory-like landform.
RangeLike (10)	A named range-like landform. Includes: Mountain Range, Range, Ridge and Spur.
SlopeLike (8)	A named slope-like landform. Includes: Buttress, Cliff, Escarpment, Fault, Gradient, Rock Face, Slope and Steeps.
TroughLike (22)	A Deep or Trench in the Ocean floor. The term can also be applied to a long deep valley. Includes Trench [Marine]. (CGNA)
ValleyLike (9)	A named valley-like landform. Includes: Amphitheatre, Basin, Bend, Canyon, Chasm, Crater, Cutting, Depression, Glen, Gorge, Gulf, Gully, Hole, Ravine, Sink and Valley.
Unknown (-99)	This is an invalid attribute for FuzzyLandType.

#### FUZZYLANDPOINTTYPE

##### Feature Classes: FuzzyLandPoint

Values	Description
BankLike (14)	A portion of the sea/river bed raised above its surroundings, but covered with enough water to permit navigation. (CGNA)
Beach (1)	The gently sloping shore, which is washed by waves or tides, especially the parts covered by sand or pebbles. (CGNA)
CapeLike (15)	A piece of land projecting into a body of water. (CGNA)
DepressionLike (16)	Any hollow or relatively sunken area on the Earths surface, e.g. on land or in the sea. (CGNA)



Values	Description
FlatLike (2)	A named flat-like landform. Includes: Flat, Plain, River Flat and Terrace.
GapLike (3)	A named gap-like landform. Includes: Gap, Pass, Passage (inland) and Saddle.
GeneralPlace (4)	A formally named general locality or place of indistinct extent not readily classified by a more specific feature classification.
GorgeLike (17)	A landform which is more than usually deep and narrow, with steep walls. (CGNA)
GullyLike (18)	A small VALLEY or GORGE eroded by running water, but through which water commonly runs only after rain. (CGNA)
HeadlandLike (5)	A named headland-like landform. Includes: Head, Headland & Point (near water).
HillLike (19)	A small portion of the earth's surface elevated above its surroundings. (CGNA)
IslandLike (24)	A named Island-like landform, being an area of dry or relatively dry land surrounded by water or low wetland. Includes: Island and Islet.
Isthmus (20)	A narrow portion of land enclosed on each side by water and connecting two larger bodies of land, includes Neck. (CGNA)
LandcoverLike (6)	A named landcover land surface. Includes: Clearing, Desert, Moor and Scrub.
MountainLike (7)	A named mountain-like landform. Includes: Bluff, Butte, Crag, Hill, Hillock, Knob, Knolls, Monolith, Mount, Mountain, Mountain Peak, Neck, Peak, Pinnacle, Point (inland), Rock and Top.
PassLike (21)	A break or gap in a range of mountains or hills permitting easier passage from one side to the other. (CGNA)
PeakLike (22)	The pointed summit of a hill or mountain. (CGNA)
PeninsulaLike (8)	A named peninsula-like landform. Includes: Cape, Peninsula and Spit. This is the default FuzzyLandPointType.
PlainLike (23)	A tract of land, the general surface of which is a comparatively flat or slightly undulating, and sparsely if at all timbered. (CGNA)
PlateauLike (9)	A named plateau-like landform. Includes: Mesa, Plateau and Tableland.
PromontoryLike (10)	A named promontory-like landform.

Values	Description
SandbarLike (11)	A named sandbar-like landform. Includes: Sandbank, Sandbar and Shoal.
SlopeLike (12)	A named slope-like landform. Includes: Buttress, Cliff, Escarpment, Fault, Gradient, Rock Face, Slope and Steeps.
TroughLike (26)	A Deep or Trench in the Ocean floor. The term can also be applied to a long deep valley. Includes Trench [Marine]. (CGNA)
ValleyLike (13)	A named valley-like landform. Includes: Amphitheatre, Basin, Bend, Canyon, Chasm, Crater, Cutting, Depression, Glen, Gorge, Gulf, Gullies, Hole, Ravine, Sink and Valley.
Unknown (-99)	This is an invalid attribute for FuzzyLandType.

### FUZZYWATERLINETYPE

Values	Description
BendLike (4)	A curve in the course of a stream and/or the land within the curve, a curve in a linear body of water. Feature descriptions included as BendLike are Bend, Elbow, Meander, River Bend(CGNA).
OceanPlaceName(2)	Feature descriptions included as Ocean Place Names are, Breaker, Canyon (Marine), Discordance, Escarpment (Marine), Fracture Zone, Gap (Marine), Guyot, Knoll (Marine), Ocean Place Name, Plain (Marine), Ridge (Marine), Rise (Marine), Saddle (Marine), Seamount, Shel (Marine), Spur (Marine), Terrace (Marine). (CGNA)
ReachLike (3)	A curve in the course of a stream/river and/or land within the curve. Includes Bend, Elbow, Loop, Meander, Point [stream], river bend. (CGNA).
RiverLike (1)	A named river-like feature of indefinite name extent. Includes: Anabranch, Arm, Bend, Canal, Channel, Cowal, Passage, Reach, River Bend, River Feature, and Strait that have not been represented by another hydrographic feature class. This is the default FuzzyWaterLineType
Unknown (-99)	This is an invalid attribute for FuzzyWaterType

### FUZZYWATERPOINTTYPE

Values	Description
BendLike (4)	A curve in the course of a stream and/or the land within the curve, a curve in a linear body of water. Feature descriptions included as BendLike are Bend, Elbow, Meander, River Bend(CGNA).
IslandLike (1)	A named Island-like landform, being an area of dry or relatively dry land surrounded by water or low wetland. Includes: Island and Islet. Domain to be deleted; IslandGroup transferred to FuzzyLandPolygon. This is the default FuzzyWaterPointType
OceanPlaceName(3)	Feature descriptions included as Ocean Place Names are, Breaker, Canyon (Marine), Discordance, Escarpment (Marine), Fracture Zone, Gap (Marine), Guyot, Knoll (Marine), Ocean Place Name, Plain (Marine), Ridge (Marine), Rise (Marine), Saddle (Marine), Seamount, Shel (Marine), Spur (Marine), Terrace (Marine). (CGNA)
SwampLike (2)	A named swamp-like landform. Includes: Swamp and Marsh

Values	Description
Unknown (-99)	This is an invalid attribute for FuzzyWaterType

#### FUZZYWATERPOLYGONTYPE

Values	Description
Anchorage (6)	An area in which vessels anchor or may anchor. (CGNA)
BayLike (1)	A named bay-like feature. Includes: Bays, Bights, Coves, Entrances, Gulfs, Harbours, Inlets, Ports and River Mouths. This is the default FuzzyWaterPolygonType.
IslandGroup (7)	A group or cluster of Islands. Island Group features includes Archipelago (CGNA) Domain to be deleted; IslandGroup transferred to FuzzyLandPolygon.
IslandLike (2)	A named Island-like landform, being an area of dry or relatively dry land surrounded by water or low wetland. Includes: Island and Islet. Domain to be deleted; IslandLike transferred to FuzzyLandPolygon.
LagoonLike (8)	An enclosed area of shallow salt or brackish water which is partly or completely separated from the sea by a narrow strip of land or sand banks (dunes). Can also be a small fresh or saltwater, lake. (CGNA)
OceanPlaceName(9)	Feature descriptions included as Ocean Place Names are, Breaker, Canyon (Marine), Discordance, Escarpment (Marine), Fracture Zone, Gap (Marine), Guyot, Knoll (Marine), Ocean Place Name, Plain (Marine), Ridge (Marine), Rise (Marine), Saddle (Marine), Seamount, Shel (Marine), Spur (Marine), Terrace (Marine). (CGNA)
RiverLike (3)	A named river-like feature of indefinite name extent. Includes: Anabranch, Arm, Bend, Canal, Channel, Cowal, Passage, Reach, River Bend, River Feature, and Strait that have not been represented by another hydrographic feature class.
SeaLike (4)	A named sea-like waterbody. Includes: Sea and Ocean.
Sound (10)	A relatively long arm of the sea. Forming a channel between and island and the mainland, or connecting two larger bodies of water, as a sea and the ocean, or two parts of the same body, but usually wider and more extensive than a strait. (CGNA)
Strait (11)	A narrow passage connecting two larger bodies of water. (CGNA)
SwampLike (5)	A named swamp-like landform. Includes: Swamp and Marsh
Unknown (-99)	This is an invalid attribute for FuzzyWaterType.

GENERALFACILITYTYPE

Feature Classes: GeneralFacilityPolygon, General FacilityPoint

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
3	1	<p><b>Educational Facility</b></p> <p>A facility for the act or process of educating; the imparting or acquisition of knowledge, skill, etc; systematic instruction or training. (NSW)</p>	AdminEducationSupport (9)	A facility that provides administration or support to educational facilities. (WA)
			CombinedPrimarySecondary (1)	A facility used for full-time primary and secondary instruction of children, typically aged 6 to 17. (Modified NSW)
			ExtraCurricularFacility (11)	A common use facility providing specialist educational opportunity additional to the standard curriculum. (WA) e.g. Education Department Boatshed, Camp School.
			Kindergarten (2)	A facility used for the tuition of young children (usually under the age of 5) prior to preschool. (WA)
			PrimarySchool (3)	A facility used for full-time primary instruction of children, typically aged 6 to 11. (Modified NSW)This is the default EducationalFacilityType.
			Preschool (4)	A facility used for the tuition of young children prior to school age, usually children age of five. (Modified NSW)
			SecondarySchool (5)	A facility used for full-time secondary institution of

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				children, typically aged 12 to 17. (NSW)
			SpecialSchool (6)	A facility used for the education of children with special needs. (NSW)
			SpecialisedStudies (10)	A facility used for providing specialised teaching (curriculum). (WA)
			StudentResidentialFacility (12)	A facility for accommodating students; associated with a specific institution and providing full board lodging. (WA) e.g. St Catherine's College, Currie Hall.
			TAFE (7)	A facility used for providing education or instruction in technical, business or trade subjects at a post-secondary level. (NSW)
			University (8)	A facility for conduction teaching and research at a diploma, undergraduate or postgraduate level. (NSW)
			Unknown (-99)	This is an invalid attribute for FacilityType.
6	2	<p><b>Hospital Facility</b></p> <p>A facility in which the sick or injured persons are given medical or surgical treatment. (Modified ICSM)</p>	Children (2)	A facility that specialises in the medical care and treatment of sick or injured children. (WA)
			CombinedGeneralEmergency (3)	A facility that can provide both general medical care and emergency medical

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				care and treatment of sick or injured persons.(Modified NSW)
			Dental (4)	A facility that specialises in dental care. (WA)
			Emergency (5)	A facility that can provide emergency medical care and treatment of sick or injured persons.(Modified NSW)
			General (6)	A facility used for medical care and treatment of sick or injured persons. (Modified NSW)This is the default for HospitalFacilityType.
			Psychiatric (7)	A facility used for the psychiatric treatment of mentally ill persons. (NSW)
			Rehabilitation (8)	A facility that specialises in the medical care associated with post treatment rehabilitation.(WA)
			Women (9)	A facility that specialises in the medical care of women. (WA)
			Unknown (-99)	This is an invalid attribute for FacilityType.
3	3	<b>Community Facility</b> Topographic feature at which some form of community facility operates. (Modified TAS)	CemeteryAndCrematorium (3)	A place or area for burying or incinerating the dead. (CGNA) This is the default CommunityFacilityType.
			BotanicGarden (25)	A large garden usually open to the public where trees, shrubs and plants, typically from many lands, are grown and studied. (Macquarie Dictionary)

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			PrisonAndDetentionCentre(17)	A building(s) in which persons are legally committed to, while awaiting trial or for punishment. (CGNA)
			ZoologicalGardens (19)	An area with a collection of live animals usually for public display. (DIGEST)
			Unknown (-99)	This is an invalid attribute for FacilityType.
8	4	<p><b>Recreational Facility</b></p> <p>A facility or an area set aside for recreational or sporting activity. (Modified ICSM)</p>	AquaticCentre (1)	A group of buildings and swimming pools for the purpose of water activities. (WA)
			BirdAndWildlifeSanctuary (20)	A tract of land where birds and wildlife, can breed and take refuge in safety. (WA)
			Campsite (2)	An area where a camp has been established or where it would be suitable to establish one; an area, often provided with amenities, where it is permitted to set up a camp. (CGNA)
			CaravanAndTouristPark (3)	A bounded area in which caravans are, or can be, parked, or where caravan type accommodation can be obtained. Domestic facilities may be provided. (CGNA)
			Cinema (7)	A venue for motion-picture screening. (WA)
			DogRacing (17)	A facility prepared for a competition of speed between dogs. (WA)
			EquestrianCentre (4)	An area set aside for



Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				equestrian activities. (WA)
			GolfCourse (5)	An area set aside for playing golf. (ICSM)
			HorseRacing (10)	A piece of ground on which horse races are held for public entertainment; any place where horse races are held. (CGNA)
			MotorRacing (6)	An area set aside for motor racing. (ICSM)
			OffRoadVehicleArea (21)	An area set aside for the use of vehicles not licensed for road use. (WA)
			ParkOrReserve (8)	A place set aside for recreational or preservation of a cultural or natural resource. (ICSM) This is the default for RecreationalFacilityType.
			RaceCourse (16)	A piece of ground on which races (other than horse or motor) are held for public entertainment. (WA)
			ShootingComplex (11)	A facility set aside for shooting practice or contests. (WA)
			ShowGround (12)	A tract of land with pavilion(s) and arena(s) for the exhibition and display of livestock and produce. (CGNA)
			SportsCentre (15)	A group of interconnected buildings and other facilities designed for the playing of various sports. (NSW)
			SportsStadium (14)	An enclosed athletic or sports ground with tiers of seats for spectators (CGNA)
			TheatreAndConcertHall (18)	A building, room or area expressly designed to

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				house dramatic presentations, stage entertainments, or musical performance. (WA)
			ThemePark(19)	An amusement park in which landscaping, buildings, and attractions are based on one or more specific themes, as jungle wildlife, fairy tales, convict settlement, etc.
			Unknown (-99)	This is an invalid attribute for FacilityType
1	5	<b>Industrial Facility</b> A facility engaged in industrial production or service. (Modified Merriam-Webster Dictionary)	AquaCulture (2)	Land used for the commercial breeding and keeping of aquatic animals or plants in tanks, ponds and leased areas within natural waterways. (NSW)
			Brickworks (3)	A place where bricks are made. (CGNA)
			Battery (4)	A stone crushing works for ore extraction, as used on gold-fields. (CGNA)
			IronOreProcessor (5)	A plant where iron is produced from iron ore (Smelting (extractive metallurgy) process). (Modified WIKIPEDIA)
			LPGPlant (6)	A plant where liquid petroleum gas is refined from crude oil. (Modified WIKIPEDIA)
			NickelRefinery (7)	An industrial process plant where nickel is refined from the raw ore. (Modified

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				WIKIPEDIA)
			NickelSmelter (8)	A plant where nickel is produced from the raw ore (Smelting (extractive metallurgy) process). (Modified WIKIPEDIA)
			OilProcessingPlant (9)	An industrial process plant where oil is further processed to produce other produces. (Modified WIKIPEDIA)
			OilRefinery (10)	An industrial process plant where crude oil is processed and refined into useful petroleum products. (WIKIPEDIA)
			PowerStation_FossilFuel (11)	The building(s) and equipment necessary for the generation of electric power using fossil fuel fired generators. For example coal, diesel or natural gas. (WA)
			PowerSubStation (12)	A facility, along a power line route, in which electric current is transformed and/or distributed. DIGEST)
			Sawmill (13)	An establishment in which timber is sawn into planks, boards, etc. by machinery. (CGNA)
			ShipYard (14)	A facility for manufacturing and repairing vessels. (NSW)
			SewageTreatmentPlant (15)	A facility used to treat sewage.(Modified NSW)
			SiliconSmelter (16)	A plant where silicon is produced from the raw ore (Smelting (extractive metallurgy) process). (Modified WIKIPEDIA)
			SteelRollingMill (17)	A plant where pig iron is converted into steel. Steel mills also turn molten steel into blooms, ingots, or slabs through hot rolling and continuous casting.

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			ValveStation (18)	A location where valves (mechanical devices) regulate the flow of fluids. (Modified WIKIPEDIA)
			WasteWaterProcessingPlant (19)	A facility used to treat waste water. (Modified NSW)
			WaterProcessingPlant (20)	A facility used to treat drinking water. (Modified NSW)
			Depot_Maintenance (21)	A facility used for the coordination of maintenance activities and compound for equipment storage. (WA)
			GoldRefinery (22)	A facility used to refine gold, removes impurities, to designated purity specifications. (Modified Web)
			Factory (23)	A building(s) usually with equipment where goods are manufactured). (ICSM)
			Printing (24)	A facility involved in publishing - printing is an industrial process for reproducing copies of texts and images, typically with ink on paper using a printing press. (Modified Web)
			AirforceBase (1)	An area owned and operated by the government as an Air Force Base. (WA) This is the default DefenceFacilityType.
			AquaCulture (2)	Land used for the commercial breeding and keeping of aquatic animals or plants in tanks, ponds and leased areas within natural waterways. (NSW)

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			Brickworks (3)	A place where bricks are made. (CGNA)
			Battery (4)	A stone crushing works for ore extraction, as used on gold-fields. (CGNA)
			IronOreProcessor (5)	A plant where iron is produced from iron ore (Smelting (extractive metallurgy) process). (Modified WIKIPEDIA)
			LPGPlant (6)	A plant where liquid petroleum gas is refined from crude oil. (Modified WIKIPEDIA)
			NickelRefinery (7)	An industrial process plant where nickel is refined from the raw ore. (Modified WIKIPEDIA)
			NickelSmelter (8)	A plant where nickel is produced from the raw ore (Smelting (extractive metallurgy) process). (Modified WIKIPEDIA)
			OilProcessingPlant (9)	An industrial process plant where oil is further processed to produce other produces. (Modified WIKIPEDIA)
			OilRefinery (10)	An industrial process plant where crude oil is processed and refined into useful petroleum products. (WIKIPEDIA)
			PowerStation_FossilFuel (11)	The building(s) and equipment necessary for the generation of electric power using fossil fuel fired generators. For example coal, diesel or natural gas. (WA)
			PowerSubStation (12)	A facility, along a power line route, in which electric current is transformed

Facility Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				and/or distributed. DIGEST)
			Sawmill (13)	An establishment in which timber is sawn into planks, boards, etc. by machinery. (CGNA)
			ShipYard (14)	A facility for manufacturing and repairing vessels. (NSW)
			SewageTreatmentPlant (15)	A facility used to treat sewage.(Modified NSW)
1	6	<b>Defence Facility</b> A facility or an area set aside for defence purposes. (Modified ANZLUC	ArmyBase (2)	An area owned and operated by the government as an Army Base. (WA)
			NavalBase (3)	An area owned and operated by the government as a Naval Base. (WA)
			DefencePracticeArea (4)	A tract of land on which the military conducts practice exercises. (Modified CGNA)
			Unknown (-99)	This is an invalid attribute for FacilityType.
			ArmyBase (2)	An area owned and operated by the government as an Army Base. (WA)

## GEOGRAPHICTYPE

### Feature Class: GeographicType (09)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>LandFeature</b> Topographic features of significance whose primary	Beach (01)	A named beach feature. (WA)

fcSubtype	Definition	Domain Values	Domain Descriptions
	characteristics relate to the land surface of the Earth. (WA)		
		Cave (06)	A naturally formed, subterranean open area or chamber. (ICSM)
		Cliff (23)	
		Crater (04)	A bowl shaped natural depression with steep slopes at the rim, formed by volcanic activity or meteor impact. (AUSLIG)
		Gap (15)	A named gap-like landform. Includes: Gap, Pass, Passage (inland) and Saddle.
		Gorge (16)	A landform which is more than usually deep and narrow, with steep walls. (CGNA)
		Gully (17)	A small VALLEY or GORGE eroded by running water, but through which water commonly runs only after rain. (CGNA)
		Hill (19)	A small portion of the earth's surface elevated above its surroundings and of sufficient significance to be named. (Modified CGNA)This is the default for LandFeaturePOIType.
		Island (02)	An area of dry or relatively dry land entirely surrounded by water. Includes Islet. (WA)
		IslandGroup (03)	A group or cluster of Islands, Island Group features includes Archipelago (CGNA)
		Mountain (07)	A natural elevation of the earth surface rising more or less abruptly from the surrounding level and attaining an altitude which, relatively to the adjacent elevation, is impressive or notable. Generally the height of a mountain is considered at least 300m from foot to summit.

fcSubtype	Definition	Domain Values	Domain Descriptions
			(Modified Oxford English Dictionary)
		Pass (21)	A break or gap in a range of mountains or hills permitting easier passage from one side to the other. (CGNA)
		Peak (22)	The pointed summit of a hill or mountain. (CGNA)
		Peninsula (05)	A named landform where the land extends into a waterbody with water on three sides. Includes: Cape, Peninsula and Spit. (WA)
		Rock (24)	An isolated rock formation or monolith either on land or in the sea or waterbody. (ICSM) This is the default MorphologyPointType.
		Valley (09)	A named valley-like landform. Includes: Amphitheatre, Basin, Bend, Canyon, Chasm, Crater, Cutting, Depression, Glen, Gorge, Gulf, Gullies, Hole, Ravine, Sink and Valley.
02	<b>WaterFeature</b> Topographic features of significance whose primary characteristics relate to waters. (WA)	Bay (01)	A named bay-like feature. Includes: Bays, Bights, Coves, Entrances, Gulfs, Harbours, Inlets, Ports and River Mouths.
		Dam (08)	A barrier of earth and/or rock, concrete or masonry constructed to form a reservoir for water storage purposes or to raise the water level. (ICSM)
		Lake (02)	A body of water surrounded by land. (DIGEST) This is the default for WaterFeaturePOIType.
		Pool (05)	A small body of still or standing water, permanent or temporary, often in the bed of an intermittent



fcSubtype	Definition	Domain Values	Domain Descriptions
			watercourse, and sometimes spring fed, chiefly one of natural formation. (CGNA)
		Rapid (09)	An area of broken, fast flowing water in a watercourse, where the slope of the bed increases (but without a prominent break of slope which might result in a waterfall), or where a gently dipping bar of harder rock outcrops.(AUSLIG)
		Sound (10)	A relatively long arm of the sea. Forming a channel between and island and the mainland, or connecting two larger bodies of water, as a sea and the ocean, or two parts of the same body, but usually wider and more extensive than a strait. (CGNA)
		Spring (03)	The place where water issues from the ground naturally. (ICSM)
		Swamp (07)	A named swamp-like landform. Includes: Swamp and Marsh.
		Rockhole (11)	A hole excavated in solid rock by water action. (CGNA)
		Reservoir (06)	A body of water collected and stored behind a constructed barrier for some specific use. (AUSLIG)
		Reef (12)	An area of rock or coral that is exposed between mean high water and lowest tide, or just below approximate lowest tide, which is visually prominent or a hazard to shipping. (AUSLIG)
		Waterfall (04)	A sudden descent of water over a step or ledge in the bed of a watercourse. (AUSLIG)
		Well (13)	A pit or hole dug or bored into the earth, for the extraction of water. (Modified CGNA)
03	<b>Place</b> A place at which there is or was	AboriginalCommunity (01)	A location at which some form of community (aboriginal) facility operates. (WA)

fcSubtype	Definition	Domain Values	Domain Descriptions
	human occupation or activity. (CGNA)		
		Farm (22)	A tract of land devoted for agricultural or horticultural purposes. (CGNA)
		Homestead (21)	A main residence on a horticultural or agricultural farm. (CGNA)
		MiningCentre (02)	A town/place in the community which acts as the centre for mine coordination/management for the surrounding region. (WA).
		Town (03)	A compact settlement larger than a village, with a community pursuing an urban way of life. (CGNA). This is the default for PlacePOIType.

## HEALTH TYPE

### Feature Class: Health (03)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<p><b>HealthService</b></p> <p>Service features related to assisting in the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical and allied health professions. A facility that provides specialised medical care. (WA)</p>	AgedCareDayService (01)	<p>Services designed to assist older people to remain independent, live in their own home for as long as possible, maintain optimum physical and mental health, social connectedness and pursue interests and hobbies. (Aust. Health Directory) eg. Vincent House, Killara Centre, TAPSS Community Care.</p>

fcSubtype	Definition	Domain Values	Domain Descriptions
		BloodDonorClinic (02)	A facility where people have blood drawn for use in transfusions. (WA)
		ChildHealthCentre (03)	A service staffed by registered nurses with qualifications in child and family health providing a range of services in partnership with parents and carers of babies and young children up to the age of 4 years. (Department of Health WA)This is the default HealthServicePOIType.
		CounsellingAndPsychology (04)	Services providing professional guidance in resolving personal conflicts and emotional problems.(WA)
		DaySurgery (05)	A surgical facility at a hospital or in a doctor's rooms for procedures which do not involveovernight hospitalisation of the patients. (Macquarie Dictionary)
		DentalHealth (06)	Professional services dealing with the prevention, diagnosis, and treatment of diseases of theteeth, gums, and related structures of the mouth and including the repair or replacement of defective teeth.
		HealthCentre (07)	Community health service provided through a network of public, private and non-government services to help people with most common health problems. (Dept of Health WA) Examplesinclude: Belmont Community Health Centre, Coolgardie Health Centre, Avon and Central Primary Health Service
		NursingPost (08)	Centres offering basic health care and treatment. Qualified nurses staff these centres anddoctors visit on a routine basis. Types of service available vary but can include the following

fcSubtype	Definition	Domain Values	Domain Descriptions
			Coronary Care Emergency · Home and Community Care · Medical, General · Outpatients · Pathology · Pharmacy · aediatics · School Health · x- ray examination (Dept of Health WA)
02	<p><b>Hospital</b></p> <p>A facility in which sick or injured persons are given medical or surgical treatment. (Modified ICSM)</p> <p>Spatial Representation: A single point at the feature's main entrance</p>	Children (02)	A facility that specialises in the medical care and treatment of sick or injured children. (WA)
		CombinedGeneralEmergency (03)	A facility that can provide both general medical care and emergency medical care and treatment of sick or injured persons.(Modified NSW)
		Dental (04)	A facility that specialises in dental care. (WA)
		Emergency (05)	A facility that can provide emergency medical care and treatment of sick or injured persons.(Modified NSW)
		General (06)	A facility used for medical care and treatment of sick or injured persons. (Modified NSW) This is the default for HospitalPOIType.
		Psychiatric (07)	A facility used for the psychiatric treatment of mentally ill persons. (NSW)
		Rehabilitation (08)	A facility that specialises in the medical care associated with post treatment rehabilitation.(WA)
		Women (09)	A facility that specialises in the

fcSubtype	Definition	Domain Values	Domain Descriptions
			medical care of women. (WA)
03	<p><b>CareFacility</b></p> <p>A facility providing a specialised residential care service.</p>	AgedCare (01)	A facility that provides lodging and medical care and treatment for aged citizens. (WA)This is the default for CareFacilityPOIType
		DisabledCare (02)	A facility that specialises in accommodating and providing medical care and treatment for disabled people. (WA)
		Hospice (03)	A hospital for terminally ill patients. (Macquarie Dictionary)
		Hostel (04)	A residential care facility for troubled and/or homeless people. (WA) Examples include:Allawah Grove Hostel, Lentara Men's Hostel, St Bartholomew's House.
		Showground (12)	A tract of land with pavilion(s) and arena(s) for the exhibition and display of livestock and produce. (CGNA)This is the default for AmusementPOIType.
		ThemePark (19)	An amusement park in which landscaping, buildings, and attractions are based on one or morespecific themes, as jungle wildlife, fairy tales, convict settlement, etc.

HOSPITALITY TYPE

Feature Class: Hospitality (01)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<p><b>Accommodation</b></p> <p>Service feature providing short term lodging. (WA) Spatial Representation: A single point at the feature's main entrance</p>	BedAndBreakfast (01)	A style of accommodation offered by an inn, hotel, or esp. a private home, consisting of a room for the night and breakfast the next morning for one inclusive price.
		Campsite (02)	An area where a camp has been established or where it would be suitable to establish one; an area, often provided with amenities, where it is permitted to set up a camp. (CGNA)
		CaravanAndTourist Park(03)	An area in which caravans are, or can be, parked, or where caravan type accommodation can be obtained. Domestic facilities may be provided. (CGNA)
		Farmstay (04)	Accommodation service provided on a working farm. Farming activities form an attraction for guests.
		Hotel (05)	A facility that provides lodging, usually on a short-term basis. (Modified WIKIPEDIA) This is the default AccommodationPOI type
		Motel (06)	A roadside hotel facility typically having rooms adjacent to an outside parking area. (WA)
		PrivateOrganisation Accommodation Facility (07)	A facility providing accommodation services to members of a group or organisation. Examples include – Apex Holiday Centre, WA War Blind Soldiers Camp and Swan Brewery Holiday Cottages

fcSubtype	Definition	Domain Values	Domain Descriptions
		SelfCateredAccommodation (08)	Service providing holiday lodging in a house, or apartment styled room that includes kitchen facilities. (WA)
		YouthAndBackpackerHostel (09)	Budget priced accommodation facility providing dormitory or communal style lodging and generally requiring guests to provide their own bed linen (sleeping Bags).
02	<b>Foodservice</b> Service feature providing meals to patrons. (WA)	CafeAndRestaurant (01)	An establishment where meals are served to customers. A café is usually smaller and less formal than a restaurant, often with an outdoor section extending onto the footpath. (WA)This is the default FoodServicePOIType.
		FastFood (02)	An establishment that provides food that is prepared in quantity by a standardised method and can be dispensed quickly at inexpensive restaurants for eating there or elsewhere. (WA)
03	<b>LicensedPremises</b> A facility whose primary business is the sale and supply of alcoholic beverages to the public for consumption on the premises. Such premises are required to hold a suitable license issued by the Department of Racing, Gaming and Liquor. (WA)	Brewery (01)	An establishment for the manufacture of malt liquors, such as beer and ale that is additionally licensed to serve their wares on site to the public. (WA)
		Distillery (02)	An establishment for distilling alcoholic liquors that is

fcSubtype	Definition	Domain Values	Domain Descriptions
			additionally licensed to serve their wares on site to the public. (WA)
		TavernAndBar(03)	An establishment licensed to sell alcoholic beverages to be consumed on the premises. This is the default LicensedPremisesPOIType.
		Winery (04)	An establishment at which wine is made that incorporates a cellar door providing wine tasting and sales to the public. (WA)

## INDUSTRYTYPE

### Feature Class: IndustryType (08)

fcSubtype	Definition	Domain Values	Domain Descriptions
05	<b>Industrial Facility (05)</b> A facility for the manufacturing of goods or materials. (WA)	Abattoir (37)	A building or place where animals are slaughtered for food. (WA)
		AluminaRefinery (01)	An industrial process plant where alumina is refined from the raw ore. (Modified WIKIPEDIA).
		Aquaculture(02)	Land used for the commercial breeding and keeping of aquatic animals or plants in tanks, ponds and leased areas within natural waterways. (NSW)
		Brickworks (03)	A place where bricks are made. (CGNA)
		Battery (04)	A stone crushing works for ore extraction, as used on gold-fields. (CGNA)
		CementPlant (29)	A facility where raw materials are mixed, crushed and kiln fired to produce cement. (WA)



fcSubtype	Definition	Domain Values	Domain Descriptions
		Depot_Bus (31)	A facility used for the storage of buses. (WA)
		Depot_Maintenance (21)	A facility used for the coordination of maintenance activities and compound for equipment storage. (WA)
		Depot_Storage (25)	A facility used for the storage of materials. (WA)
		Factory (23)	A building(s) usually with equipment where goods are manufactured).(ICSM) This is the default for IndustrialFacilityPOIType.
		GoldRefinery (22)	A facility used to refine gold, removes impurities, to designated purity specifications. (Modified Web)
		GrainStorage (32)	A facility including all necessary equipment and buildings, where grains can be stored. (WA)
		IntensiveAnimalProduction (28)	A facility for the breeding and keeping of livestock (intensive production). (Modified NSW)
		IronOreProcessor (05)	A plant where iron is produced from iron ore (Smelting (extractive metallurgy) process).(Modified WIKIPEDIA)
		LPGPlant (06)	A plant where liquid petroleum gas is refined from crude oil. (Modified WIKIPEDIA)
		MineralSandProcessingPlant (30)	A facility for extracting minerals from excavated mineral sand. (WA)
		NickelRefinery (07)	An industrial process plant where nickel is refined from the raw ore. (Modified WIKIPEDIA)
		NickelSmelter (08)	A plant where nickel is produced from the raw ore (Smelting (extractive metallurgy) process).(Modified WIKIPEDIA)

fcSubtype	Definition	Domain Values	Domain Descriptions
		OilProcessingPlant (09)	An industrial process plant where oil is further processed to produce other produces. (Modified WIKIPEDIA)
		OilRefinery (10)	An industrial process plant where crude oil is processed and refined into useful petroleum products. (WIKIPEDIA)
		PowerStation_FossilFuel (11)	The building(s) and equipment necessary for the generation of electric power using fossil fuel fired generators. For example coal, diesel or natural gas. (WA)
		PowerStation_Hydro (33)	The building(s), structures and equipment necessary for the generation of electric power using pressure from water stored in a dam. (WA)
		PowerStation_Other (34)	The building(s), structures and equipment necessary for the generation of electric power using any means other than is specified in this domain. For example, solar, tidal, wave, wind or any other means. (WA)
		PowerSubStation (12)	A facility, along a power line route, in which electric current is transformed and/or distributed. (DIGEST)
		Printing (24)	A facility involved in publishing - printing is an industrial process for reproducing copies of text and images, typically with ink on paper using a printing press. (Modified Web)
		PumpStation (27)	A facility to move solids, liquids or gases by means of pressure or suction. (DIGEST)
		Sawmill (13)	An establishment in which timber is sawn into planks, boards, etc. by machinery. (CGNA)
		ShipYard (14)	A facility for manufacturing and

fcSubtype	Definition	Domain Values	Domain Descriptions
			repairing vessels. (NSW)
		SewageTreatmentPlant (15)	A facility used to treat sewage.(Modified NSW)
		SiliconSmelter (16)	A plant where silicon is produced from the raw ore (Smelting (extractive metallurgy) process).(Modified WIKIPEDIA)
		SteelRollingMill (17)	A plant where pig iron is converted into steel. Steel mills also turn molten steel into blooms,ingots, or slabs through hot rolling and continuous casting.
		ValveStation (18)	A location where valves (mechanical devices) regulate the flow of fluids. (Modified WIKIPEDIA)
		Warehouse (26)	A building for the storage for goods and merchandise. (Modified Web)
		WasteDisposal (35)	A facility such as a rubbish tip used to deal with rubbish and waste. (WA)
		WasteWaterProcessingPlant (19) A	A facility used to treat waste water.(Modified NSW)
		WaterProcessingPlant (20)	A facility used to treat drinking water.(Modified NSW)

INDUSTRIALFEATURETYPE

**Feature Classes:** IndustrialFeaturePolygon, IndustrialFeaturePoint, IndustrialFeatureLine,

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
Polygon	1	<b>Storage Tank</b>  Large vessel for the storage of liquids or gases. (Modified AUSLIG)	Gas (1)	
			Oil (2)	
			Waste (3)	
			Water (4)	This is the default StorageSubstanceType.
			Unknown (-99)	The StorageSubstanceType is not known for the particular feature; however a value may be populated in the future.
	2	<b>Pondage</b>  All areas of shallow water with walls or banks created for a specific purpose. (ICSM)	SaltEvaporator (1)	A flat area, usually segmented, used for the commercial production of salt by evaporation. (AUSLIG)
			SewageTreatmentPond (2)	A flat area, usually segmented, used for the treatment of sewage / waste water. (WA)
			Sump (3)	A pit or well into which surplus water is channelled. (ATSAS) This is the default PondageType. CAPTURE TIP: Capture sump's centre and its orientation, if side length is less than 35m,

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				otherwise capture as a polygon; top of embankment.
			TailingPond (4)	A man made construction designed to safely store waste products associated with the processing of an ore. (ATSAS) CAPTURE TIP: Capture as a polygon; top of embankment.
			Unknown (-99)	This attribute is invalid for IndustrialFeatureType.
	11	Spillway		
<b>Line</b>	4	<b>Communication Line</b> A network for the transmission of communication signals. (WA)	TelephoneLine (1)	A system of wires, which transmit electrical signals over distance. Modified DIGEST)This is the default IndustrialFeatureType.
			Unknown (-99)	This is an invalid attribute for IndustrialFeatureType.
	5	<b>ConveyorBelt</b> A continuous belt or series of belts mounted on rollers and used to move large quantities of goods, especially grain or ore. (ICSM)		
	6	<b>PowerLine</b> A system of wires, which transmit electricity over distance.	66kV (1)	

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		(Modified DIGEST		
			132kV (2)	
			220kV (3)	
			330kV (4)	
			33kV (5)	This is the default Voltage.
			Unknown (-99)	This is an invalid attribute for IndustrialFeatureType.
	7	<b>PowerLinePetroleum</b> A tube for the conveyance of petroleum. (Modified DIGEST)	Gas (1)	This is the default PipelinePetroleumType.
			GasAndCondensate (2)	When gas is removed from the field and pressure reduced, some of the heavier hydrocarbons (fractions) condense depending on the pressure. This liquid condensate can be refined as if it were very light crude oil. (WIKIPEDIA).
			GasAndCondensateAndWater (3)	Pipeline to carry gas, condensate and water as a slurry.
			Oil (4)	Pipeline to carry oil.
			OilAndGas (5)	Pipeline to carry oil and gas
			OilAndGasAndWater (6)	Pipeline to carry oil, gas and water.
			Unknown (-99)	This is an invalid attribute for IndustrialFeatureType.
	8	<b>PipelineWater</b> A tube for the	Chemical (3)	A pipeline constructed to transport waste, chemical in nature. (WA)

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		conveyance of water. (Modified DIGEST)		
	9	<b>PipelineOther</b> A tube for the conveyance of solids, liquids or gases. (DIGEST)	Sewerage (1)	A pipeline constructed to transport sewerage. (WA)
			Stormwater (2)	A pipeline constructed to transport stormwater. (WA) This is the default PipelineOtherType.
			Unknown (-99)	The PipelineOtherType is not known for the particular feature; however a value may be populated in the future.
	10	<b>DamWall</b> A barrier of earth and/or rock, concrete or masonry constructed to form a reservoir for water storage purposes or to raise the water level. (ICSM)		
<b>Point</b>	1	<b>StorageTank</b> Large vessel for the storage of liquids or gases. (Modified AUSLIG)	Gas (1)	

Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			Oil (2)	
			Waste (3)	
			Water (4)	This is the default StorageSubstanceType.
			Unknown (-99)	The StorageSubstanceType is not known for the particular feature; however a value may be populated in the future.
	2	<b>Pondage</b> All areas of shallow water with walls or banks created for a specific purpose. (ICSM)	SaltEvaporator (1)	A flat area, usually segmented, used for the commercial production of salt by evaporation. (AUSLIG)
			SewageTreatmentPond (2)	A flat area, usually segmented, used for the treatment of sewage / waste water. (WA)
			Sump (3)	A pit or well into which surplus water is channelled. (ATSAS) This is the default PondageType. CAPTURE TIP: Capture sump's centre and its orientation, if side length is less than 35m, otherwise capture as a polygon; top of embankment.
			TailingPond (4)	A man made construction designed to safely store waste products associated with the processing of an ore. (ATSAS) CAPTURE TIP: Capture as a polygon; top of embankment.
			Unknown (-99)	This attribute is invalid for IndustrialFeatureType.
	3	<b>UtilityAccessPoint A</b> location at	Hydrant (1)	A source of water provided by most communities to enable fire-fighters to tap



Class Type	fcSubtype	Definition	Domain Values	Domain Descriptions
		which a utility is accessed. (WA)		into the municipal water supply to assist in extinguishing a fire. (WIKIPEDIA) This is the default for UtilityAccessPoint.
			Unknown (-99)	This is an invalid attribute for IndustrialFeatureType.

#### INLANDFLATTYPE

**Feature Classes:** InlandFlatPoint, InlandFlatPolygon

Values	Description
SubjectToFlooding (2)	Low lying land usually adjacent to lakes or watercourses, which is irregularly covered with floodwater for short periods. (WA)
SubjectToInundation (1)	Low lying land usually adjacent to lakes or watercourses, which is regularly covered with floodwater for short periods. (AUSLIG).This is the default InlandFlatType.
Unknown (-99)	This is an invalid attribute for FlatType.

## MINETYPE

### Feature Classes: MorphologyPoint

Values	Description
CombinedOpenPitUnderground (1)	Refer to OpenPit and Underground definitions below
DrillHole (2)	. A pipe/hole sunk in the ground for the purpose of obtaining subterranean material. (Modified AUSLIG)
OilGasWell (3)	A pipe sunk in the ground for the purpose of obtaining subterranean oil or gas. (AUSLIG)
OpenPit (4)	An excavation made by the removal of stone, gravel, clay or mineral from the ground for commercial or industrial purposes and tailings dumps from mining operations. (AUSLIG)
Quarry (5)	A place where stone or rock is extracted. (CGNA) CAPTURE TIP: Capture quarries which have steep sides and depth over 10m.
Underground (6)	An undedground excavation in the Earth for the purpose of extracting earth materials. (Modified ICSM)
MineShaft (7)	
NotApplicable (-98)	
Unknown (-99)	This is the default MineType. The MineSubstanceType is not known for the particular feature; however a value may be populated in the future.

## MORPHOLOGYPOINTTYPE

### Feature Classes: MorphologyPoint

Values	Description
Blowhole (6)	A hole near the sea-shore which has been formed in the roof of a CAVE, and through which air and possibly water are forced by the rising tide. (CGNA)
Cave (1)	A naturally formed, subterranean open area or chamber. (ICSM)
Crater (2)	A bowl shaped natural depression with steep slopes at the rim, formed by volcanic activity or meteor impact. (AUSLIG)

Values	Description
Reef (3)	An area of rock or coral that is exposed between mean high water and lowest tide, or just below approximate lowest tide, which is visually prominent or a hazard to shipping. (AUSLIG)
Rock (4)	An isolated rock formation or monolith either on land or in the sea or waterbody. (ICSM)
Sink (5)	A hole, or funnel shaped cavity made in the earth by the action of water on the soil, rock, or underlying strata. (ICSM)
Unknown (-99)	This is an invalid attribute for MorphologyType
Values in grey text are not applicable (invalid) in the Medium Scale Topographic Database.	

## MORPHOLOGYLINETYPE

### Feature Classes: MorphologyLine

Values	Description
Breakaway (1)	Steep cliffs connecting the old and new plateaux formed by the collapse of the edges of a tabletop. (CGNA)
Cliff (2)	A high, steep, or overhanging face of rock. (ICSM) This is the default MorphologyLineType.
Cutting (3)	An excavation of the Earth's surface to provide passage for a road, railway, canal, drain, etc. (ICSM)
Embankment (4)	An artificial bank of earth and or stone built above the natural surface. (ICSM)
EmbankmentBottom (10)	The bottom of an artificial bank of earth and or stone built above the natural surface. (WA)
EmbankmentTop (11)	The top of an artificial bank of earth and or stone built above the natural surface. (WA)
Fault (5)	A fracture in the earth's crust with displacement on one side of the fracture relative to the other. (ICSM)
Ledge (6)	A flat, usually level, shelf of rock occurring part way up a steep mountain side or cliff. (ICSM)
Levee (7)	A low earth wall erected to restrain floodwaters or to contain irrigation water. (AUSLIG)
RockRidge (8)	A long and narrow rocky upland with steep sides.

Values	Description
	(modified ICSM)
SandRidge (9)	Sand drifts in long ridges tending parallel to and elongating in the direction of the prevailing winds. (ICSM)
Unknown (-99)	This is an invalid attribute for MorphologyType
Values in grey text are not applicable (invalid) in the Medium Scale Topographic Database.	

## MORPHOLOGYPOLYGONTYPE

### Feature Classes: MorphologyPolygon

Values	Description
Sand (2)	An area predominantly covered with sand and devoid of vegetation. (ICSM) An area of submerged sand in the SEA or a RIVER often exposed at low tide. (Modified CGNA)
Rock (3)	An isolated rock formation or monolith either on land or in the sea or waterbody. (ICSM) This is the default MorphologyPolygonType.
Reef (4)	An area of rock or coral that is exposed between mean high water and lowest tide, or just below approximate lowest tide, which is visually prominent or a hazard to shipping. (AUSLIG)

## NUMBERRAILS

Values	Description
One (1)	One track only. Trains travelling in both directions use the same track. Requires spur lines to allow trains to pass. This is the default NUMBERRAILS.
Multiple (2)	Multiple tracks. Multiple lines allow trains travelling in both directions without the need for spur lines.
NotApplicable (-98)	The NUMBERRAILS is not relevant for the particular feature.
Unknown (-99)	The NUMBERRAILS is not known for the particular feature; however a value may be

Values	Description
	populated in the future.

## ORIGIN

**Feature Classes:** WaterPolygon, WaterPoint, WaterLine

Values	Description
Manmade (1)	Manufactured, created, or constructed by human beings. (WA)
Natural (2)	Exists normally in nature. (WA)
NotApplicable (-98)	The HydroOrigin is not relevant for the particular feature.
Unknown (-99)	This is an invalid attribute for Origin.

## PERENNIALITY

**Feature Classes:** WaterPolygon, WaterPoint, WaterLine

Values	Description
Nonperennial (1)	Only contains water for several months of the year, or contains water intermittently. (Modified AUSLIG)
Perennial (2)	Normally contains water for the whole year. (Modified AUSLIG)
NotApplicable (-98)	The PerennialityType is not relevant for the particular feature.
Unknown (-99)	The PerennialityType is not known for the particular feature; however a value may be populated in the future.

## PLACE TYPE

Values	Description
AboriginalCommunity (1)	A location at which some form of community (aboriginal) facility operates. (WA)
MiningCentre (2)	A town/place in the community which acts as the centre for mine coordination/management for the surrounding region. (WA).
Town (3)	A compact settlement larger than a village, with a community pursuing an urban way of life. (CGNA) This is the default PlaceType.

Values	Description
Unknown (-99)	This is an invalid attribute for PlaceType.

#### PLANIMETRIC ACCURACY

Feature Classes: N/A – Workspace table

MAPPING SCALE	RMS(metres)		CIRCULAR MAP ACCURACY STANDARD FACTOR	90% OF “WELL DEFINED” POINTS WILL BE WITHIN (METRES)	
	DIRECT STEREO CAPTURE	HAND/SCAN DIGITISED(0.25mm AT MAP SCALE)*	CMAS AT THE 90%CONFIDENCE LEVEL	DIRECT STEREO CAPTURE	HAND/SCAN DIGITISED OR DERIVED
1:2000	0.25		2.146	0.5	
1:25000	3.13	6.2	2.146	6.7	13.3
1:50000	6.26	12.5	2.146	13.4	26.8
1:100000	12.52	25	2.146	26.9	53.7

\*Additional errors associated with Hand Digitised and Scanned data include (over and above photogrammetric instrument setup):

- 1) Drafting errors (machine plot)
- 2) Digitiser setup errors
- 3) Digitising errors

### RAILACCESSRIGHT

Values	Description
Private (1)	Belonging to or restricted for the use of an individual company or group.
Public (2)	For general use. This is the default RAILACCESSRIGHT
NotApplicable (-98)	The RAILACCESSRIGHT is not relevant for the particular feature
Unknown (-99)	The RAILACCESSRIGHT is not known for the particular feature; however a value may be populated in the future

### RAILGAUGE

Values	Description
Narrow (1)	Gauge – 1067mm
NarrowStandard (2)	Gauge – Combined Narrow and Standard
Standard (3)	Gauge – 1435mm This is the default RAILGAUGE
NotApplicable (-98)	The RAILGAUGE is not relevant for the particular feature
Unknown (-99)	The RAILGAUGE is not known for the particular feature; however a value may be populated in the future

### RAILSTATUS

Values	Description
Abandoned (1)	Railway line not in use, rail bed, tracks and bridges are largely intact and could be made Operational with minimal repair. (Modified ATSAS)
Dismantled (2)	Railway line not in use, rail bed, tracks and bridges have been removed or destroyed. (Modified ATSAS)
Operational (3)	Railway in use. (WA) This is the default RAILSTATUS
Under Construction (4)	Railway line not in use, actual construction work is in progress. (Modified ATSAS)

Values	Description
Unknown (-99)	The RailStatus is not known for the particular feature; however a value may be populated in the future.

#### RAIL FEATURE TYPE

Values	Description
RAIL (1)	A permanent way having one or more rails which provides a track for trains or trams. (ICSM) This is the default Sub Type
UNDERGROUNDRAIL (2)	A permanent way having one or more rails which provides a track for trains or trams. (ICSM

#### RECREATION TYPE

##### Feature Class: Recreation (04)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>Amusement</b> Facilities that offers rides, games, and other forms of entertainment. (WA)	Showground (12)	A tract of land with pavilion(s) and arena(s) for the exhibition and display of livestock and produce. (CGNA) This is the default for AmusementPOIType.
		ThemePark (19)	An amusement park in which landscaping, buildings, and attractions are based on one or more specific themes, as jungle wildlife, fairy tales, convict settlement, etc.
02	<b>Botanical and Zoological</b> Features pertaining to the preservation, study and display of flora and fauna. (WA)	Arboretum (12)	A plot of land where different trees or shrubs are grown for study or popular interest.  (Macquarie Dictionary)
		BirdAndWildlifeSanctuary (20)	A tract of land where birds and wildlife, can breed and take refuge in safety.



fcSubtype	Definition	Domain Values	Domain Descriptions
		BotanicGarden (25)	A large garden usually open to the public where trees, shrubs and plants, typically from many lands, are grown and studied. (Macquarie Dictionary)
		ZoologicalGarden (19)	An area with a collection of live animals usually for public display. (DIGEST) This is the default for BotanicalAndZoologicalPOIType
03	<p><b>Entertainment Venue</b></p> <p>A place providing for diversion or amusement, especially an exhibition or performance of some kind. . (modified MacquarieDictionary)</p>	Cinema (07)	A venue for motion-picture screening. (WA)
		ConferenceAndExhibitionCentre (01)	A venue designed to accommodate trade shows and to host public and private business and social events. Will include several smaller rooms for lectures, meetings and conferences. (WA) This is the default for EntertainmentVenuePOIType
		TheatreAndConcertHall (18)	A building, room or area expressly designed to house dramatic presentations, stageentertainments, or musical performance. (WA)
04	<p><b>OutdoorArea</b></p> <p>An area set aside for recreational activities and/or for the preservation of a cultural or natural</p>	ParkReserve (08)	An area set aside for recreation, sport or preservation of a cultural or natural resource. (ICSM)

fcSubtype	Definition	Domain Values	Domain Descriptions
	resource. (WA)		
		PicnicArea (01)	A tract of land reserved for day picnic purposes, with constructed fire-places and other facilities. (CGNA)This is the default for OutdoorAreaPOIType
		Playground (02)	An area used for outdoor play or recreation, esp. by children, containing recreationalequipment such as slides and swings. (WA)
05	<b>Racing</b> A prepared ground provided to support competitive racing. (WA)	DogRacing (17)	A facility prepared for a competition of speed between dogs. (WA)
		HorseRacing (10)	A facility prepared for a competition of speed between horses. (WA)This is the default for RacingPOIType
		MotorRacing (06)	A facility prepared for a competition of speed between motor vehicles. (WA)
		OtherRacing (16)	A facility prepared for a competition of speed between competitor types not specifically listed in this domain table. (WA)
06	<b>Gaming</b> A facility where people can play games of chance for money or other stakes. (WA)	BingoHall (01)	A facility where Bingo is played. (WA)This is the default for GamingPOIType
		Casino (02)	A facility for gambling and other entertainment. (WA)
07	<b>Sporting Facility</b> A place where sporting activities are conducted. (WA)	AquaticCentre (01)	A group of buildings and swimming pools for the purpose of water activities. (WA)

fcSubtype	Definition	Domain Values	Domain Descriptions
		BoatLaunching (02)	A group of features potentially including launching ramps, jetties, car parks and other facilities, where boats may be launched. In some cases facilities may be limited. (WA)
		EquestrianCentre (04)	facilities may be limited. (WA)EquestrianCentre (4) An area set aside for equestrian activities. (WA)
		GolfCourse (05)	An area set aside for playing golf. (ICSM)
		OffRoadVehicleArea (21)	An area set aside for the use of vehicles not licensed for road use. (WA)
		PWCTakeOffPoint (24)	Place where personal water craft are permitted access to the shore for launching and embarking/disembarking of passengers and equipment. (WA)
		ShootingComplex (11)	A facility set aside for shooting practice or contests. (WA)
		SportsCentre (15)	A group of interconnected buildings and other facilities designed for the playing of various sports. (NSW) This is the default for SportingFacilityPOIType
		SportsClub (03)	A single or group of buildings and other facilities where a group of members meet to play a specific sport. (WA)
		SportsGround (25)	A flat area on which sporting activities can take place. (Modified CGNA)
		SportsStadium (14)	An enclosed athletic or sports ground with tiers of seats for spectators (CGNA)
		Surfing (06)	A location favoured by surfers for the characteristics of its break. (WA)

fcSubtype	Definition	Domain Values	Domain Descriptions
08	<b>Tourism</b> Features and services of particular interest to travellers. (WA)	Lookout (06)	A place on a high vantage point, especially a mountain, from which one can admire the view.(WA)This is the default for TourismPOIType
		ScenicFeature (01)	A naturally occurring feature of significance to tourist. Differs from TouristSite as a result of alack of facilities. (WA) ie. The feature is the POI rather than the facility. An example is Dog Rock in Albany.
		TouristAttraction (02)	A man made feature expressly designed to attract and entertain tourists. (WA) For example:Perth Wheel.
		TouristInformationBay (03)	A roadside area usually located on a main access route to and on the outskirts of, a town withbillboards providing information regarding the local area specifically for tourists. (WA)
		TouristInformationCentre (04)	A public service providing tourist information. (WA)
		TouristSite (05)	A place of significance to tourists. The POI feature is representative of the complex of facilities provided to service tourists. For example: Circular Pool.

## RELATIONSHIPTOWATERSURFACE

**Feature Classes:** MorphologyLine, MorphologyPoint, MorphologyPolygon

Values	Description
Above (1)	Always above water level
Awash (2)	Exposed or submerged depending on the water level

## SALINITYCODE (type)

**Feature Classes:** WaterPolygon, WaterPoint, WaterLine, InlandFlatPolygon, InlandFlatPoint

Values	Description
Fresh (1)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 0-500mg/L
Marginal (2)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 500-1,000mg/L
Marg_Brackish (3)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 1,000-1,500mg/L
High_Brackish (4)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 1,500-3,000mg/L
Low_Saline (5)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 3,000-7,000mg/L
Mid_Saline (6)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 7,000-14,000mg/L
High_Saline (7)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 14,000-35,000mg/L
Hyper_Saline (8)	The saltiness or dissolved salt content. The acceptable range as defined by the DOW is 35,000-300,000mg/L
NotApplicable (-98)	The SalinityCode is not relevant for the particular feature.
Unknown (-99)	The SalinityCode is not known for the particular feature; however a value may be populated in the future. This is the default SalinityCodeType.

## TARGETDISPLAYSCALE

**Feature Classes:** N/A - Workspace Tables

Values
1:1000 (1000)
1:2000 (2000)
1:5000 (5000)
1:20000 (20000)
1:25000 (25000) This is the default value.
1:50000 (50000)
1:100000 (100000)

## TOWERTYPE

**Feature Classes:** TowerPoint

Values	Description
Chimney (1)	A prominent structure containing a passage or flue for discharging smoke and gases from combustion. (DIGEST)
Communication (2)	A relatively tall structure used for transmitting and/or receiving electronic communication signals.(DIGEST)This is the default TowerType.
Electrical (3)	A tall framework or structure that is used to support electrical cables. (WA)
Lookout (6)	A tall framework or structure that is used as a visual observation point. (ICSM)
WindGenerator (7)	A tower, which incorporates a machine by which mechanical energy generated by the wind, is changed into electrical energy. (WA)
Control (8)	An elevated tower within an airport used by air traffic controllers for the visual observation of aircraft. (Web)
Unknown (-99)	This is an invalid attribute for TowerType.

TRANSPORTATION TYPE

Feature Class: Transportation (06)

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>Aviation Facility(01)</b> Services and facilities related to the aviation industry. (WA)	Airport (01)	A facility, either on land or water, where aircraft can take off and land; usually consists of hard-surfaced landing strips, a control tower, hangars, and accommodations for passengers and cargo. (ICSM). This is the default for AviationFacilityPOIType.
		AviationService (04)	A service whose primary role is to support the aviation industry. Usually located in the near vicinity of an airport. (WA).
		AviationTerminal (03)	Terminal used by an airline at an airport for the embarking and disembarking of passengers or freight. (WA)
		ControlTower (08)	An elevated tower within an airport used by air traffic controllers for the visual observation of aircraft. (Web)
		Heliport (02)	A place designated for the landing and takeoff of helicopters, including its buildings and facilities. (DIGEST)
		LandingGround (05)	Landing area with clearly marked runway but no airport facility. (modified AUSLIG)
02	<b>Shipping Facility</b> facilities related to the transport of passengers and goods via ship or ferry. (WA)	CargoTerminal (01)	A facility where goods and produce are stored/received when transported by ship. Usually consists of hard-surfaced areas, sheds etc. (WA) This is the default for ShippingFacilityPOIType.
		ContainerTerminal (02)	A facility where containers are stored/received when transported by ship. Usually consists of hard-surfaced areas,

fcSubtype	Definition	Domain Values	Domain Descriptions
			sheds etc. (WA)
		Jetty (04)	A structure projecting into a body of water for use as a promenade or as a platform alongside which vessels may be secured for loading and unloading passengers and cargo. (AUSLIG)
		PassengerTerminal (03)	A facility where passengers embark/disembark when transported by ship or ferry. Usually consists of hard-surfaced areas, sheds etc. (WA)
		Wharf (05)	Any structure on a waterfront, designed to make it possible for vessels to lie alongside and take or unload cargo, passengers etc. (ICSM)
03	<b>Rail Facility</b> Facilities related to the transport of passengers and goods via train. (WA)	MarshallingYard (01)	An area of land with one or more sidings or spur lines to allow trains to be parked, serviced, assembled and/or unloaded. (ICSM)
		Siding (02)	A point on a railway designated as a stopping place to set down or pick up freight or passengers in a non regular schedule. (WA)
		StationPrivate (04)	A point on a privately owned and operated railway designated as a stopping place to set down or pick up passengers. These are generally tourist railways and do not run a schedule for commuters. Eg. Kangaroo Flats Station (in Whiteman Park)
		StationPublic (03)	A point on a railway designated as a stopping place to set down or pick up passengers on a regular schedule. (Modified ICSM) This is the default for RailFacilityPOType.
04	<b>Bus Facility</b>	BusInterchange	A connection or terminal point for multiple bus services. (WA). This



fcSubtype	Definition	Domain Values	Domain Descriptions
	Facilities related to the transport of passengers by bus. (WA)	(01)	is the default for BusFacilityPOIType.
		BusRailInterchange (02)	A transfer point between rail and bus services. (WA)
		CoachStation (03)	A stopping place to set down or pick up passengers for long distance coach services.(WA)
		TaxiRank (04)	A designated area where taxis park while awaiting passengers. (WA)
05	<b>Road Facility</b>  Features associated with travel by road. (WA)	RestArea (01)	Locations provided to allow drivers to take a break on long journeys and reduce fatigue. Facilities provided vary between rest areas. (WA).This is the default for RoadFacilityPOIType.
		RoadTrainAssembly Area (36)	Designated area where multiple trailers are organised and joined to form road trains.Usually outside a built up area. (WA)
		Weighbridge (02)	A platform scale flush with a roadway for weighing vehicles. (WA)
06	<b>Bridge</b>  As POI's these are named features only and judgement needs to be administered in regard to whether the feature constitutes a bridge or tunnel. Bridge features will generally span an obstacle of significance. Examples	Bridge(1)	Astructure spanning and providing passage over a depression or obstacle. (WA)This is the default for BridgePOIType.

fcSubtype	Definition	Domain Values	Domain Descriptions
	include; Narrows bridge, Stirling Bridge.A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. (ICSM)		
		Footbridge (4)	A structure spanning and providing passage over a depression or obstacle specifically  for use by pedestrians.(WA)
07	<b>Tunnel</b>  A passage through or under a barrier.(WA)		

#### TRANSPORTFACILITYTYPE

**Feature Classes:** TransportFacilityPoint and TransportFacilityPolygon

fcSubtype	Definition	Domain Values	Domain Descriptions
01	<b>AirportFacility</b>  A facility relating to aeronautical industry	Airport (1)	A facility, either on land or water, where aircraft can take off and land; usually consists of hard-surfaced landing strips, a control tower, hangars, and accommodations for passengers and cargo. (ICSM)This is the default AirFacilityType.
		Heliport (2)	A place designated for the landing and takeoff of helicopters, including its buildings and facilities.(DIGEST)
		Unknown (-99)	SymbolRotation (refer to Parent Feature Class –

fcSubtype	Definition	Domain Values	Domain Descriptions
			TransportFacilityPoint)0 is the only valid rotation value.
02	<p><b>ShippingFacility</b></p> <p>A facility relating to the shipping industry</p>	Cargo (1)	A facility where goods and produce are stored/received when transported by ship.Usually consists of hard-surfaced areas, sheds etc. (WA)
		Container (2)	A facility where container are stored/received when transported by ship.Usually consists of hard-surfaced areas, sheds etc. (WA)
		Passenger (3)	A facility where passengers embark/disembark when transported by ship.Usually consists of hard-surfaced areas, sheds etc. (WA)This is the default ShippingFacilityType.
		Unknown (-99)	This is an invalid attribute for TransportFacilityType.
03	<p><b>RailFacility</b></p> <p>A facility relating to the railway industry.</p>	MarshallingYard (1)	An area of land with one or more sidings or spur lines to allow trains to be parked, serviced,assembled an/or unloaded.(ICSM)This is an invalid attribute for a Point Sub Type.This is the default RailFacilityType for the Polygon Feature Class.
		Siding (2)	A point on a railway designated as a stopping place to set down or pick up freight. (WA)This is an invalid

fcSubtype	Definition	Domain Values	Domain Descriptions
			attribute for a Polygon Sub Type.
		StationPublic (3)	A point on a railway designated as a stopping place to set down or pick up passengers or freight.(ICSM)This is an invalid attribute for a Polygon Sub Type.This is the default RailFacilityType for the Point Feature Class.
		StationPrivate (4)	point on a privately owned and operated railway designated as a stopping place to set down or pick up passengers. These are generally tourist railways and do not run a schedule for commuters. Eg. Kangaroo Flats Station (in Whiteman Park)
		Unknown (-99)	This is an invalid attribute for TransportFacilityType.
04	<b>BusFacility</b> A facility relating to the bus industry.	BusInterchange (1)	A connection or terminal point for multiple bus services. (WA)This is the default BusFacilityType.
		BusRailInterchange (2)	A transfer point between rail and bus services. (WA)
		BusStop (3)	A place where a bus stops for the purpose of allowing passengers to board or leave the bus.(WA)This is an invalid attribute for a Polygon Sub Type.
		Unknown (-99)	This is an invalid attribute for

fcSubtype	Definition	Domain Values	Domain Descriptions
			TransportFacilityType.

## TRANSPORTTYPE

**Feature Classes:** GeneralTransportPolygon, GeneralTransportPoint, GeneralTransportLine

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions	
<b>Polygon</b>	2	6	<b>Runway</b>			
			A straight path used for landing and take-off of aircraft. (ICSM	DisusedLandingGround (5)	A facility that has a distinct runway but is no longer in use. (WA)	
					Hardstanding (4)	A specially prepared or designated area on an airfield for the use of taxiing or parking aircraft.(SYMBAS)
					Helipad (1)	A place for helicopters to land and takeoff. (CGNA)
					LicensedRunway (2)	A licensed runway where there is movement of aircraft and the receipt and discharge of cargo.(Modified AUSLIG)
					UnlicensedLandingGround (3)	Unlicensed facility with clearly marked runway but no airport facility. (AUSLIG)  This is the default RunwayType.
				Unknown (-99)	This is an invalid attribute for TransportType.	
<b>Line</b>	3	1	<b>Road Crossing</b>  (This is the default Sub Type)Topographic features	Adit (1)	The entrance or exit of a tunnel. (NSW)	

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			whose primary characteristics relate to a road crossing. (Modified Merriam-Webster dictionary)		
				CattleGrid (2)	A structure constructed across a road (normally a grate) to restrict the movement of animals.(WA)
				Causeway (3)	An embanked surface usually traversing areas subject to inundation, constructed to facilitate a road or railway. (ICSM)This is the default RoadCrossingType for the Line
				Culvert (4)	A structure usually under a road or railway to provide for the flow of water. (ICSM)This is the default RoadCrossingType for the Point Sub Type.
				Dam (5)	A road crossing a large man made structure of earth, masonry, etc. built across a stream to impound water for any purpose. (Modified CGNA)
				Ford (6)	A point at a shallow or flat portion of a watercourse where a crossing may be affected.(ModifiedAUS

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
					LIG)
				Underpass (7)	A passage under a road for pedestrians. (WA)
				Unknown (-99)	This is an invalid attribute for TransportType.
	2	2	<b>Rail Crossing</b> Topographic features whose primary characteristics relate to a railway crossing. (Modified Merriam-Webster dictionary)	Adit (1)	The entrance or exit of a tunnel. (NSW)
				Culvert (2)	A structure usually under a road or railway to provide for the flow of water. (ICSM) This is the default RailCrossingType for Point Sub Type.
				Underpass (3)	A passage under a railway for pedestrians. (WA)
				Unknown (-99)	This is an invalid attribute for TransportType
	2	3	<b>Other Crossing</b> Topographic features whose primary characteristics relate to a crossing (other than a road or railway). (Modified	Adit (1)	The entrance or exit of a tunnel. (NSW)

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			Merriam-Webster dictionary)		
				Bridge (2)	A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. (ICSM)This is the default OtherCrossingType.
				Culvert (7)	A structure usually under a feature other than a road or railway to provide for the flow of water. (Modified ICSM)
				FlyingFox (3)	A conveyor system in which carrier units run on wire cables strung between supports. (AUSLIG)
				Footbridge (4)	A structure erected over a depression or obstacle to carry foot traffic. (AUSLIG)
				Underpass (5)	A passage under a way (other than a road or railway) for pedestrians. (WA)
				Tunnel (6)	An underground or underwater passage. (ICSM)
				Unknown (-99)	This is an invalid attribute for TransportType.
	7	4	<b>Trail</b> A path worn by the passage of people or	AllUsageModes (1)	All of the below.This is the default TrailType.



Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			animals.(DIGEST)		
				Cycleway (2)	A thoroughfare for bicycles. (Merriam-Webster dictionary)
				HorseTrail (4)	A track or path for passage by horse from one point to another; does not include roads or highways. (Modified CGNA)
				OffRoadCycleway (5)	A track or path only suitable for off road cycles. (WA)
				WalkTrail (6)	A track or path for passage by foot from one point to another; does not include roads or highways. (Modified CGNA)
				WalkCycleTrail (8)	A track or path for passage by foot and/or bicycle from one point to another; does not include roads or highways. (Modified CGNA)
				Unknown (-99)	This is an invalid attribute for TransportType.
				AllUsageModes (1)	All of the below.This is the default TrailType.
	2	5	<p><b>Shipping construction</b></p> <p>Topographic features whose primary characteristics relate to the shipping or boating industry. (WA)</p>	BoatRamp (1)	A sloping construction to facilitate launching or retrieving vessels from water. (AUSLIG)

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				Jetty (2)	A structure projecting into a body of water for use as a promenade or as a platform alongsidewhich vessels may be secured for loading and unloading passengers and cargo. (AUSLIG)This is the default ShippingConstructionType.
				Wharf (3)	Any structure on a waterfront, designed to make it possible for vessels to lie alongside and take or unload cargo, passengers etc. (ICSM)CAPTURE TIP: Capture the sea side extent of the wharf. The wharf and the coastline should becoincident.
				Unknown (-99)	This is an invalid attribute for TransportType.
Point	4	1	<b>Road Crossing</b> (This is the default Sub Type)Topographic features whose primary characteristics relate to a road crossing. (Modified Merriam-Webster dictionary)	Adit (1)	The entrance or exit of a tunnel. (NSW)
				CattleGrid (2)	A structure constructed across a road (normally a grate)

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
					to restrict the movement of animals.(WA)
				Causeway (3)	An embanked surface usually traversing areas subject to inundation, constructed to facilitate a road or railway. (ICSM)This is the default RoadCrossingType for the Line
				Culvert (4)	A structure usually under a road or railway to provide for the flow of water. (ICSM)This is the default RoadCrossingType for the Point Sub Type.
				Dam (5)	A road crossing a large man made structure of earth, masonry, etc. built across a stream to impound water for any purpose. (Modified CGNA)
				Ford (6)	A point at a shallow or flat portion of a watercourse where a crossing may be affected.(Modified AUSLIG)
				Underpass (7)	A passage under a road for pedestrians. (WA)
				Unknown (-99)	This is an invalid attribute for TransportType.
		2	<b>Rail Crossing</b> Topographic	Adit (1)	The entrance or exit of a tunnel. (NSW)

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
			features whose primary characteristics relate to a railway crossing. (Modified Merriam-Webster dictionary)		
				Culvert (2)	A structure usually under a road or railway to provide for the flow of water. (ICSM)This is the default RailCrossingType for Point Sub Type.
				Underpass (3)	A passage under a railway for pedestrians. (WA)
				Unknown (-99)	This is an invalid attribute for TransportType
		3	<b>Other Crossing</b> Topographic features whose primary characteristics relate to a crossing (other than a road or railway). (Modified Merriam-Webster dictionary)	Adit (1)	The entrance or exit of a tunnel. (NSW)
				Bridge (2)	A structure erected over a depression or obstacle to carry traffic or some facility such as a pipeline. (ICSM)This is the

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
					default OtherCrossingType.
				Culvert (7)	A structure usually under a feature other than a road or railway to provide for the flow of water. (Modified ICSM)
				FlyingFox (3)	A conveyor system in which carrier units run on wire cables strung between supports. (AUSLIG)
				Footbridge (4)	A structure erected over a depression or obstacle to carry foot traffic. (AUSLIG)
				Underpass (5)	A passage under a way (other than a road or railway) for pedestrians. (WA)
				Tunnel (6)	An underground or underwater passage. (ICSM)
				Unknown (-99)	This is an invalid attribute for TransportType.
		6	<b>Runway</b> A straight path used for landing and take-off of aircraft. (ICSM)	DisusedLandingGround (5)	A facility that has a distinct runway but is no longer in use. (WA)
				Hardstanding (4)	A specially prepared or designated area on an airfield for the use of taxiing or parking aircraft.(SYMBAS)
				Helipad (1)	A place for helicopters to land and takeoff. (CGNA)

Class Type	Transport Type	fcSubtype	Definition	Domain Values	Domain Descriptions
				LicensedRunway (2)	A licensed runway where there is movement of aircraft and the receipt and discharge of cargo.(Modified AUSLIG)
				UnlicensedLandingGround (3)	Unlicensed facility with clearly marked runway but no airport facility. (AUSLIG)This is the default RunwayType.
				Unknown (-99)	This is an invalid attribute for TransportType.
		7	<p><b>TrafficControlDevice</b></p> <p>A structure which controls movement of traffic along a road. (NSW)</p>	TrafficLight (1)	An electrically operated visual signal (as a system of coloured lights) for controlling traffic(Merriam-Webster dictionary)This is the default TrafficControlDeviceType.
				LevelCrossing (2)	A place where a road and railway intersect at the same level. (NSW)
				Unknown (-99)	This is an invalid attribute for TransportType.

#### WATERCOURSETYPE

**Feature Classes:** WaterPolygon, WaterPoint, WaterLine,InlandFlatPolygon

Values	Description
MajorRiver (2)	WRC to supply definition.
MinorRiver (3)	WRC to supply definition.



<b>Values</b>	<b>Description</b>
InundationArea (10)	WRC to supply definition.
NotApplicable (-98)	The WaterCourseType is not relevant for the particular feature.
Unknown (-99)	The WaterCourseType is not known for the particular feature; however a value may be populated in the future.

## WATERLINETYPE

### Feature Classes: WaterLine

fcSubType	Description	Domain Value	Description
6	Watercouse	Channel (1)	A manmade watercourse used for irrigation and drainage purposes. (CGNA)  This is the default WaterLineConstructionType.
8	WaterLineConstruction	Drain (2)	An artificially constructed watercourse designed for the purpose of removing surplus water from the land surface. (CGNA)
		NotApplicable (-98)	The WaterLineConstructionType is not relevant for the particular feature.
		Unknown (-99)	This is an invalid attribute for WaterBodyType.

## WATERPOINTTYPE

### Feature Classes: WaterPoint

fcSubType	Description	Domain Value	Description
1	WaterBody	Claypan (1)	A depression in the ground which retains water. (ICSM)
		EarthDam (2)	An earthen structure in generally undrained areas, built to contain water for stock purposes. (CGNA)
		Estuary (3)	That part of a river between the limit of tidal influence and the mouth. (ICSM)



fcSubType	Description	Domain Value	Description
		Lake (4)	A body of water surrounded by land. (DIGEST)
		Pool (5)	A small body of still or standing water, permanent or temporary, often in the bed of an intermittent watercourse, and sometimes spring fed, chiefly one of natural formation. (CGNA)
		Reservoir (6)	A body of water collected and stored behind a constructed barrier for some specific use. (AUSLIG)
		WaterCourse (7)	A large body of water, usually permanent and forming part of a watercourse. (WA)
		Wash (8)	That part of a streambed that is usually dry and contains water only during or after a rainstorm. (Modified USGS)
		Unknown (-99)	This is an invalid attribute for WaterPolygonType and WaterPointType  0 is the default.
3	Spring		The place where water issues from the ground naturally. (ICSM)

fcSubType	Description	Domain Value	Description
4	Waterfall		A sudden descent of water over a step or ledge in the bed of a watercourse. (AUSLIG)
5	WaterPointStructure	Bore (1)	A deep vertical hole of a small diameter made to obtain water; or to ascertain the nature of the underlying strata. (CGNA)
		BoreAndWindmill (2)	A deep vertical hole of a small diameter made to obtain water; or to ascertain the nature of the underlying strata. Equipped with a windmill for pumping. (Modified CGNA)
		Pump (3)	An apparatus or machine for raising or driving fluids, as by means of a piston, plunger, or rotating vanes. (Modified NSW)
		Tank (4)	A structure used for the storage of fluids. In this particular case – water. (ICSM)
		TankAndWindmill (5)	A structure used for the storage of fluids. In this particular case – water. Equipped with a windmill for pumping. (Modified ICSM)

fcSubType	Description	Domain Value	Description
		Well (6)	A pit or hole dug or bored into the earth, for the extraction of oil, water, other fluids or gases. (CGNA)
		WellAndWindmill (8)	A pit or hole dug or bored into the earth, for the extraction of oil, water, other fluids or gases. Equipped with a windmill for pumping. (Modified CGNA)
		Windmill (7)	A wind driven system of vanes attached to a tower like structure (excluding wind generated power plants). (DIGEST)
		Unknown (-99)	This is an invalid attribute for WaterPointType.
9	Rapid		An area of broken, fast flowing water in a watercourse, where the slope of the bed increases (but without a prominent break of slope which might result in a waterfall), or where a gently dipping bar of harder rock outcrops.(AUSLIG)
10	Rockhole		A hole excavated in solid rock by water action. (CGNA)
11	Dissipation Point		The downstream point at which a watercourse

fcSubType	Description	Domain Value	Description
			dissipates and becomes indeterminate. On a map this point is normally represented by an arrow. (Modified NSW)

#### WATERPOLYGONTYPE

##### Feature Classes: WaterPolygon

fcSubClass	Description	Domain Value	Description
1	Waterbody	Claypan (1)	A depression in the ground which retains water. (ICSM)
		EarthDam (2)	An earthen structure in generally undrained areas, built to contain water for stock purposes. (CGNA)
		Estuary (3)	That part of a river between the limit of tidal influence and the mouth. (ICSM)
		Lake (4)	A body of water surrounded by land. (DIGEST)
		Pool (5)	A small body of still or standing water, permanent or temporary, often in the bed of an intermittent watercourse, and sometimes spring fed, chiefly one of natural formation. (CGNA)
		Reservoir (6)	A body of water collected and stored behind a constructed barrier for some specific use. (AUSLIG)
		WaterCourse (7)	A large body of water, usually permanent and forming part of a watercourse. (WA)
		Wash (8)	That part of a streambed that is usually dry and contains water only during or after a rainstorm. (Modified USGS)
		Unknown (-99)	This is an invalid attribute for WaterPolygonType and

fcSubClass	Description	Domain Value	Description
			WaterPointType.0 is the default.
2	wetland	Marsh (1)	A tract of low lying land, flooded at times and generally swampy. (CGNA)
		Swamp (2)	A tract of low-lying land which is permanently saturated with moisture, and is usually overgrown with vegetation. (CGNA)
		Unknown (-99)	This is an invalid attribute for WaterPolygonType Type.
12	Waterlineconstruction	Channel (1)	A manmade watercourse used for irrigation and drainage purposes. (CGNA) This is the default value for WaterPolygon:WaterLineConstruction
		Drain (2)	An artificially constructed watercourse designed for the purpose of removing surplus water from the land surface. (CGNA)  This is the default value for WaterLine:WaterLineConstruction
		NotApplicable (-98)	The WaterLineConstructionType is not relevant for the particular feature.
		Unknown (-99)	This is an invalid attribute for WaterBodyType.

## WETLANDTYPE

### Feature Classes:

fcSubClass	Description	Domain Value	Description
1	Waterbody	Claypan (1)	A depression in the ground which retains water. (ICSM)
		EarthDam (2)	An earthen structure in generally undrained areas, built to contain water for stock purposes. (CGNA)
		Estuary (3)	That part of a river between the limit of tidal influence and the mouth. (ICSM)
		Lake (4)	A body or water surrounded

fcSubClass	Description	Domain Value	Description
			by land. (DIGEST)
		Pool (5)	A small body of still or standing water, permanent or temporary, often in the bed of an intermittent watercourse, and sometimes spring fed, chiefly one of natural formation. (CGNA)
		Reservoir (6)	A body of water collected and stored behind a constructed barrier for some specific use. (AUSLIG)
		WaterCourse (7)	A large body of water, usually permanent and forming part of a watercourse. (WA)
		Wash (8)	That part of a streambed that is usually dry and contains water only during or after a rainstorm. (Modified USGS)
		Unknown (-99)	This is an invalid attribute for WaterPolygonType and WaterPointType. 0 is the default.
2	wetland	Marsh (1)	A tract of low lying land, flooded at times and generally swampy. (CGNA)
		Swamp (2)	A tract of low-lying land which is permanently saturated with moisture, and is usually overgrown with vegetation. (CGNA)
		Unknown (-99)	This is an invalid attribute for WaterPolygonType Type.