Symbol Dictionary for Topographic Map Production

Four Colour Process

National Mapping Division Geoscience Australia

Symbols are arranged in alphanumeric order by symbol number. The same number may be used for different symbols provided they have different spatial object types.

Hot spots and orientation are given for point symbols. The hot spot is the location on the symbol of the point feature in the database which the symbol represents. Where a value is given for orientation, the example in the symbol dictionary is aligned in that orientation. Where no value is given the orientation is not used for that feature and it is shown in the default orientation of 0.

For chain features the symbol is the length of the feature and centred on the feature unless otherwise stated. Measurements follow these conventions: for Point symbols the measurement will be to the outer boundary of the symbol unless otherwise indicated; for Chains measurements will be from line centre to line centre for spacing ticks etc and from line centre to the edge for tick lengths and verges. Both conventions for chains will be unless otherwise indicated.

Samples of screens referenced are given in the following section.

The statement “Colour**:** **C** --% **M** - - % **Y** - - % **K** - - %” stands for the percentages of colour used for the symbol creation in order of Cyan, Magenta, Yellow and Black.

When not specifically stated it will be Colour: **C** 0% **M** 0% **Y** 0 % **K** 100%

Preference will be given to printing NTMS maps derived from the TOPO250K and TOPO100K NTDBs using the stochastic screening method.

PRINTING COLOURS:

Printing colours and densitometer readings are:

Process Blue	blue filter	1.60+/- 0.05
Magenta	red filter	1.20+/- 0.05
Process Yellow	yellow filter	0.80+/- 0.05
Black	black filter	1.90+/-0.05

Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

Symbol Number	Type	Feature	Description
10	*Polygon*	Lake *perennial* Canal Area Watercourse Area *perennial* Reservoir Sea	Colour: **C** 20% **M** 0% **Y** 0% **K** 0%
102	*Chain*	Mine Boundary Line *Populated Place Boundary (WAC ONLY)*	0.15
102	*Polygon*	Mine Area	Outline: Symbol No.102 *(Chain)* Infill Colour: **C** 0% **M** 0% **Y** 0% **K** 10%
103	*Point*	Petroleum Well	0.60mm Hot spot at the centre of the circle
106	*Point*	Mine Point	90° 0.8 0.15 1.75 Hot spot
11	*Point*	Bore	0.75mm 0.15 Hot spot at the centre of the circle Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
11	*Polygon*	Lake *non-perennial* Watercourse Area *non-perennial*	Pattern: Equivalent to Screen Random Dot 1 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
111	*Chain*	Old Lake Bed Boundary (WAC ONLY)	0.15 0.5 2.0 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
113	*Point*	Petroleum Well (WAC ONLY)	2.9mm 1.0mm 2.2mm 0.15mm lineweight Hot Spot 1.1mm
114	*Chain*	Waterbody Boundaries *(Bounding salt evaporator & settling pond)* Salt Evaporator Internal Line Settling Pond Internal Line	0.10 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%

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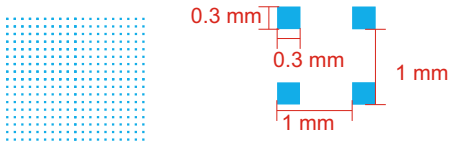
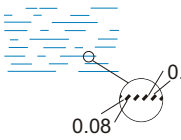
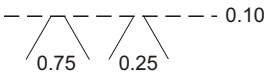
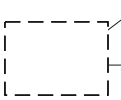
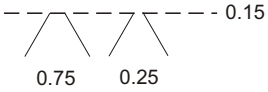
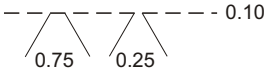
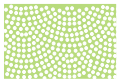
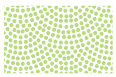
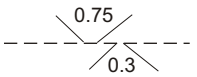
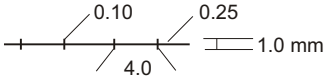
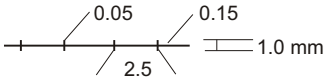
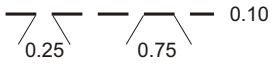
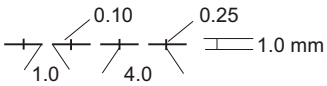
Symbol Number	Type	Feature	Description
12	*Polygon*	Flood Irrigation Storage	 Ordered Stipple Colour: **C** 65% **M** 0% **Y** 0% **K** 0%
14	*Polygon*	Land Subject To Inundation	 A minimum of two lines will be included in each polygon. Sufficient lines will be included in small polygons to indicate their shape. Note: The horizontal line will be broken by a line screen at 45°. Pattern: Equivalent to Screen SMW-4 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
170	*Chain*	Rubbish Tip *(edge symbology)*	
170	*Polygon*	Rubbish Tip	
183	*Chain*	Conveyor	
2	*Polygon*	Forest Or Shrub *All 250K or Closed (100K)*	Colour: **C** 15% **M** 0% **Y** 43% **K** 0%
20	*Chain*	Ferry Route Line	
200	*Polygon*	Forest Or Shrub *Dense*	 Colour: **C** 15% **M** 0% **Y** 43% **K** 0% Pattern: Equivalent to Screen:: DW-10
201	*Polygon*	Forest Or Shrub *Sparse*	 Colour: **C** 15% **M** 0% **Y** 43% **K** 0% Pattern: Equivalent to Screen: DW-9
205	*Chain*	Railway and Road Tunnel Line	 0.1 mm lineweight
206	*Chain*	Railway *Single*	 Cross ties at 90° to the line and centred on the line
208	*Chain*	Railway *Light*	 Cross ties at 90° to the line and centred on the line
21	*Chain*	Ford Line	
209	*Chain*	Railway *Abandoned*	 Cross ties at 90° to the line and centred on the line Gaps centred between cross ties

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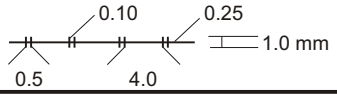
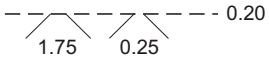
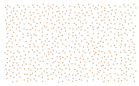
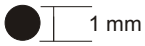
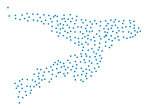
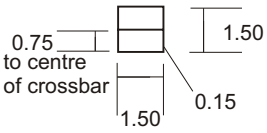
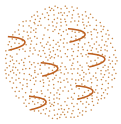
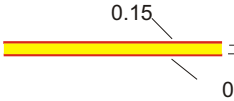
Symbol Number	Type	Feature	Description
210	*Chain*	Railway *Multiple*	 Cross ties at 90° to the line and centred on the line
22	*Chain*	Foot Track	
22	*Polygon*	Foreshore Flat Sand Area	 Colour: **C** 0% **M** 59% **Y** 100% **K** 18% Pattern: Equivalent to Screen Random Dot 1
222	*Point*	Railway station	 Hot spot at the centre of the circle
23	*Polygon*	Saline Coastal Flat Salt Evaporator Settling Pond Aquaculture Area	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10% Screen: Equivalent to Screen Random Dot 1
24	*Polygon*	Recreation Area ***(Feature class)***	 Colour: **C** 57% **M** 0% **Y** 100% **K** 0%
242	*Chain*	Road *Minor Sealed in BUA* (100k) Secondary Road (WAC Only)	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
243	*Chain*	Other Road (WAC Only)	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
245	*Chain*	Railway Causeway Road Causeway	 If feat_wid is 0.15 or 0.25 the symbol is 0.5 wide and solid black. For other valid feat_wid values the symbol is 0.4 plus the value of feat_wid wide and the infill is the value of feat_wid wide and of Colour: **C** 0% **M** 100% **Y** 100% **K** 0%. (Yellow is not representative of the symbol colour)
25	*Point*	Grid *(Stock Grid)*	 Road  Hot spot at centre of square Orientation 0
25	*Polygon*	Sand Dune	 Colour: **C** 0% **M** 59% **Y** 100% **K** 18% Pattern: Equivalent to Screen Sand Dunes 1
250	*Chain*	Road *Dual carriageway*	 Digital feature lies halfway between the two lines (width of gap) Gap will have Infill Colour: **C** 0% **M** 0% **Y** 100% **K** 0% Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
251	*Chain*	Road *Principal sealed (250k)*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
2510	*Chain*	Road *Principal sealed (100K)*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%

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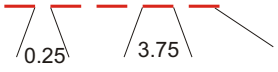
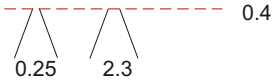
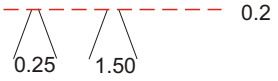
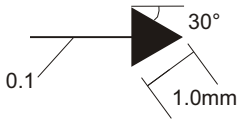
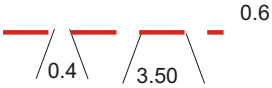
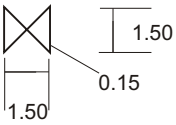
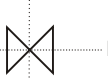
Symbol Number	Type	Feature	Description
252	*Chain*	Road *Under construction*	 Lineweight as per classification Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
253	*Chain*	Road *Minor unsealed*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
254	*Chain*	Road *Vehicular track*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
255	*Chain*	Arrow *(With Arrow)*	 
256	*Chain*	Road *Secondary sealed*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
257	*Chain*	Road *Minor sealed* Road *Principal (WAC Only)*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
258	*Chain*	Road *Principal unsealed (250K)*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
2580	*Chain*	Road *Principal unsealed (100K)*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
259	*Chain*	Road *Secondary unsealed*	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
26	*Point*	Gate	 Hot spot  Orientation 90 Road 
26	*Polygon*	Building Area *Building type: operational*	

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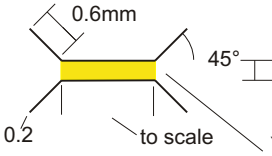
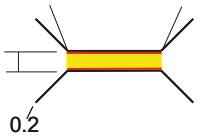
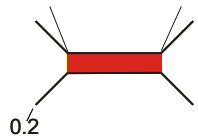
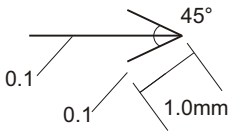
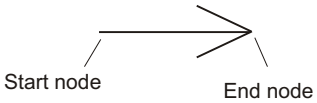
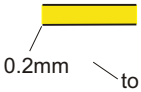
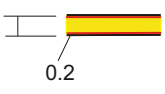
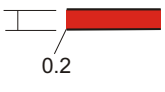
Symbol Number	Type	Feature	Description
26	*Polygon*	Building Area *Building type: operational*	
260	*Chain*	Railway Bridge Line Road Bridge Line	 Infill the lineweight of the road or railway symbol. Yellow is not representative of the symbol colour. See below. Where the value of feat_wid is 0.15 or 0.25 the infill will be solid black. Digital feature  For the value of feat_wid of 0.9 at 100k and 1.0 at 250k only. Digital feature Infill the lineweight and design of the dual carriageway road symbol.  For other valid feat_wid values the infill Colour: **C** 0% **M** 100% **Y** 100% **K** 0%. Digital feature 
265	*Chain*	Pointer	 
266	*Chain*	Railway Overpass	0.2mm space on either side of inner rail symbol will mask all rail and road features which cross its path (measurement to be taken from edge of rail line symbol)  Lineweight of the rail symbol (feat_wid).
267	*Chain*	Road Overpass	 Infill the lineweight of the road. For the value of feat_wid of 0.9 at 100k and 1.0 at 250k only. Digital feature Infill the lineweight and design of the dual carriageway road symbol.  For other valid feat_wid values the infill Colour: **C** 0% **M** 100% **Y** 100% **K** 0%. 

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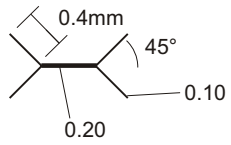
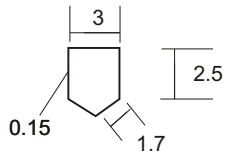
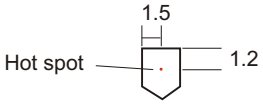
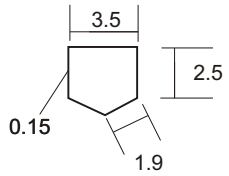
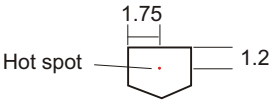
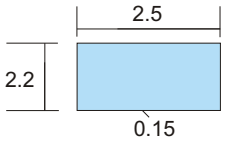
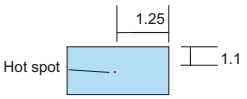
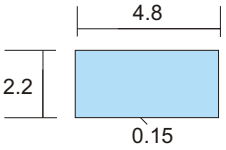
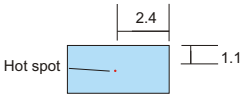
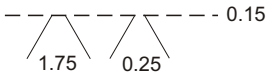
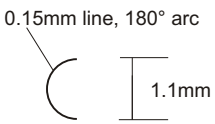
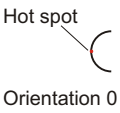
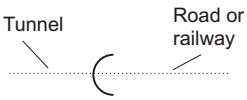
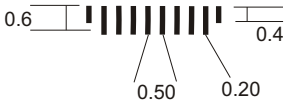
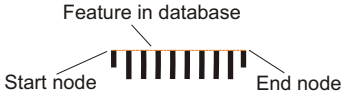
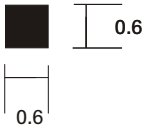
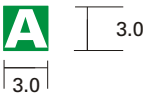
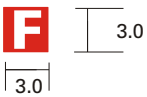
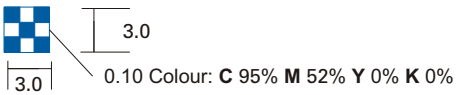
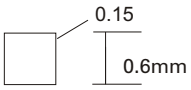
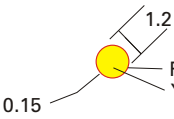
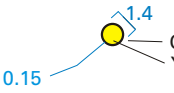
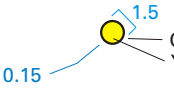
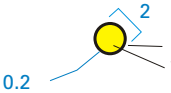
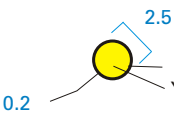
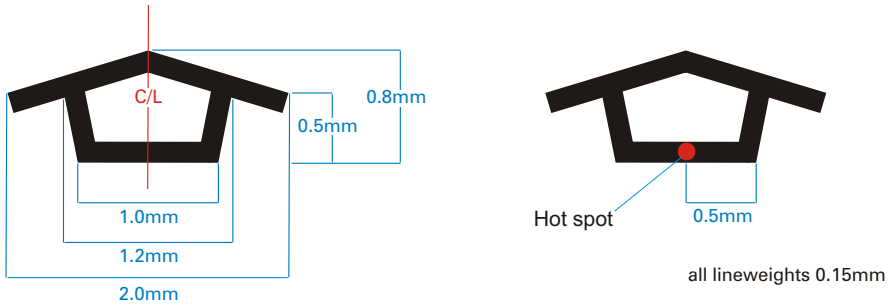
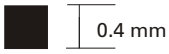
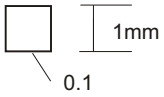
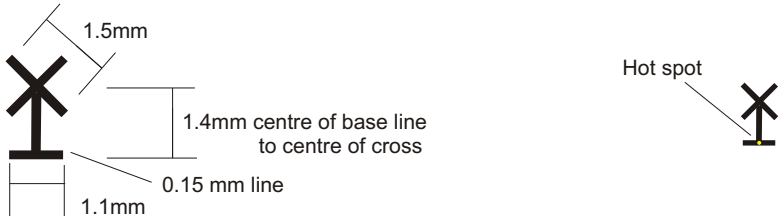
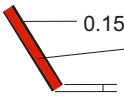
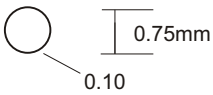
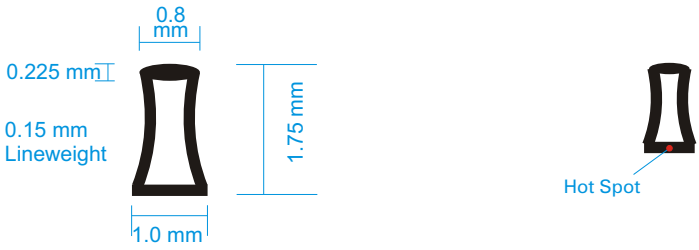
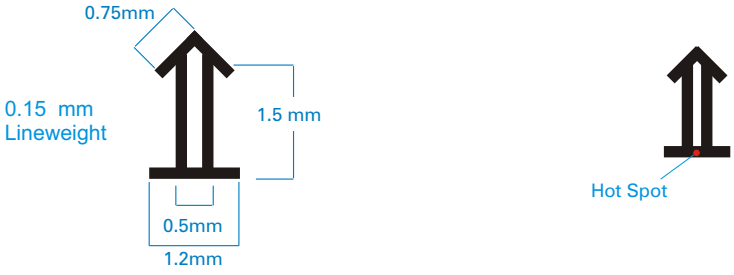
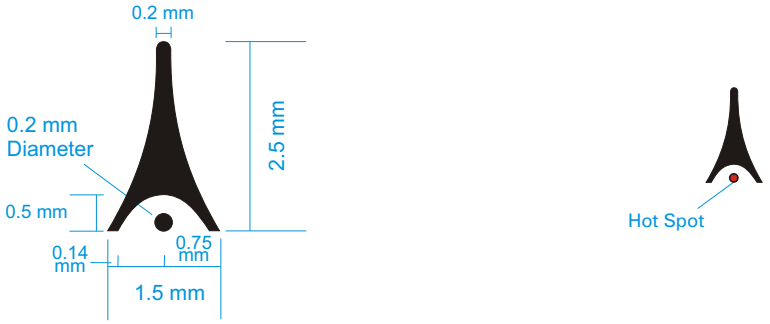
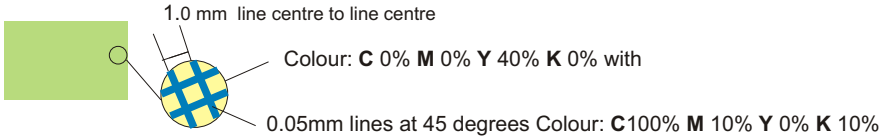
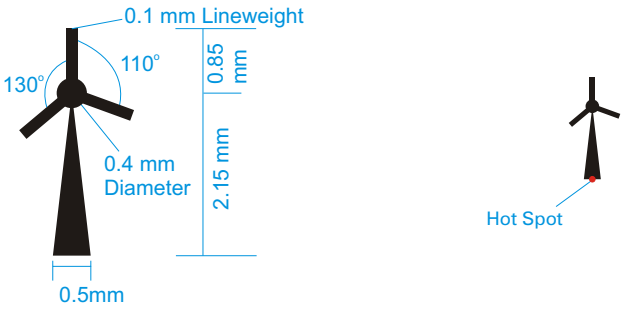
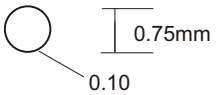
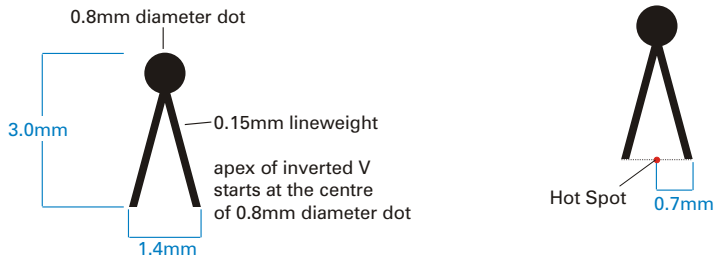
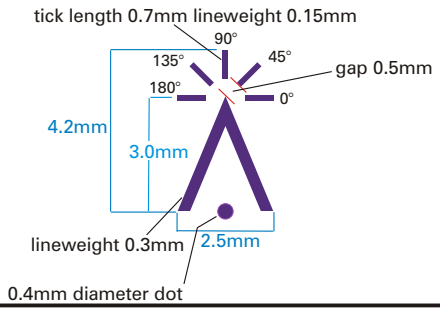
Symbol Number	Type	Feature	Description
268	*Chain*	Foot Bridge	 Digital feature 
27	*Point*	Road Marker National	 Route Number in black as annotation feature 
271	*Point*	Road Marker National *(Oversize)*	 Route Number in black as annotation feature 
28	*Point*	Road Marker State	  Route Number in black as annotation feature Outline Colour: Solid Black Infill Colour: **C** 20% **M** 0% **Y** 0% **K** 0%
281	*Point*	Road Marker State *(Oversize)*	  Route Number in black as annotation feature Outline Colour: Solid Black Infill Colour: **C** 20% **M** 0% **Y** 0% **K** 0%
281	*Chain*	Pipeline *above ground & elevated(not water)*	
282	*Chain*	Pipeline *underground (not water)*	
290	*Point*	Transition Point *On roads and railways*	  
30	*Chain*	Aerial Cableway	
31	*Chain*	Embankment	 
33	*Chain*	Sand Ridge	 Colour: **C** 0% **M** 35% **Y** 60% **K** 11%
4	*Polygon*	Rainforest	 Colour: **C** 40% **M** 0% **Y** 60% **K** 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
40	*Point*	Homestead & Building Point *(Significant)*		Hot spot at the centre of the square
401	*Point*	Ambulance Station (Emergency Mapping)		Colour: **C** 100% **M** 0% **Y** 100% **K** 0% 'A' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally
404	*Point*	Fire Station (Emergency Mapping)		Colour: **C** 0% **M** 100% **Y** 100% **K** 0% 'F' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally
406	*Point*	Police Station (Emergency Mapping)		Colour: **C** 95% **M** 52% **Y** 0% **K** 0% Each solid blue square is a 1mmX 1mm area
41	*Point*	Building Point *(ruin)*		Hot spot at the centre of the square
42	*Chain*	Lock Line & Arrow *(without arrow)*	Length as required 	Point of Lock faces upstream
420	*Point*	Populated Place & Place Name	 Red circle: Colour: **C** 0% **M** 100% **Y** 100% **K** 0% Yellow fill: Colour: **C** 0% **M** 0% **Y** 100% **K** 0%	Hot spot at the centre of the circle
420	*Polygon*	Built Up Area		Colour: **C** 0% **M** 29% **Y** 30% **K** 0%
421	*Point*	Village or Settlement < 500 people (Wac Only)	 Outline Colour: Solid Black Yellow fill: Colour: **C** 0% **M** 0% **Y** 100% **K** 0%	Hot spot at the centre of the circle
422	*Point*	Village or Settlement 500 - 1000 people (Wac Only)	 Outline Colour: Solid Black Yellow fill: Colour: **C** 0% **M** 0% **Y** 100% **K** 0%	Hot spot at the centre of the circle
423	*Point*	Town 1001 - 2000 people (Wac Only)	 Outline Colour: Solid Black Yellow fill: Colour: **C** 0% **M** 0% **Y** 100% **K** 0%	Hot spot at the centre of the circle
424	*Point*	Town 2001 - 5000 people (Wac Only)	 Outline Colour: Solid Black Yellow fill: Colour: **C** 0% **M** 0% **Y** 100% **K** 0%	Hot spot at the centre of the circle
425	*Polygon*	Builtup area > 5000 people (WAC ONLY)		Colour: **C** 0% **M** 0% **Y** 100% **K** 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
429	*Point*	Building Building Function: Grain Storage (WAC ONLY)		
430	*Point*	Building Point *(Operational & Abandoned Homestead)*		Hot spot at the centre of the square
433	*Point*	Yard		Hot spot at the centre of square
434	*Point*	Windpump		
45	*Chain*	Dam Wall *(coincident with road)*	 Outline Colour: Solid Black Infill Colour: **C** 0% **M** 100% **Y** 100% **K** 0% Spacing is dependent on road width	
451	*Point*	Cemetery Point		Hot spot at the centre of the circle
497	*Point*	Vertical Obstruction *(chimney)*		
498	*Point*	Vertical Obstruction *(silo)*		

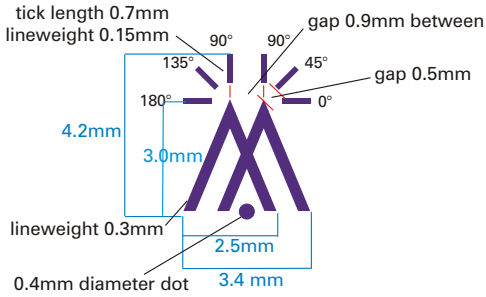
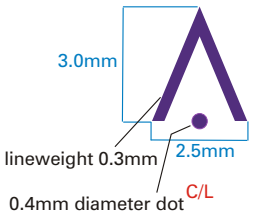
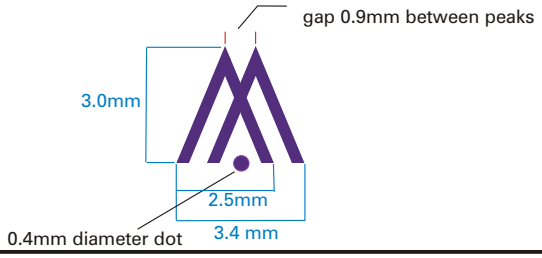
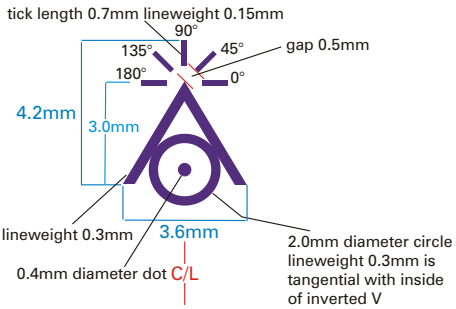
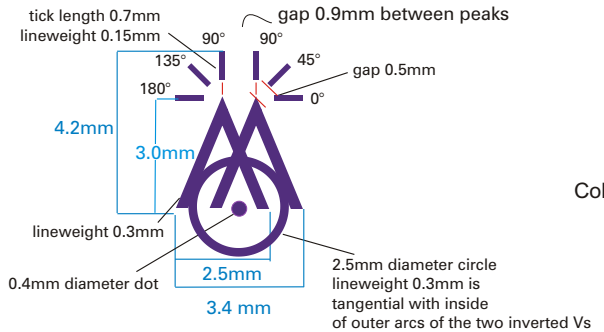
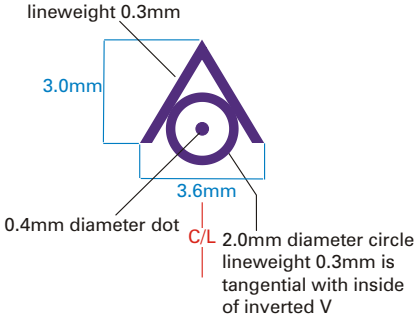
Symbol Number | Type | Feature | Description

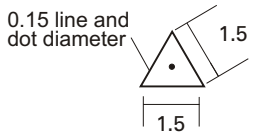
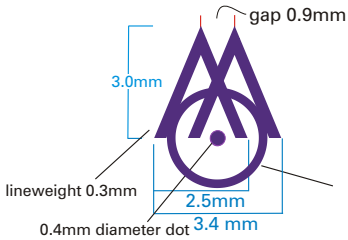
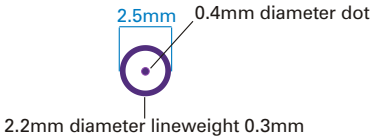
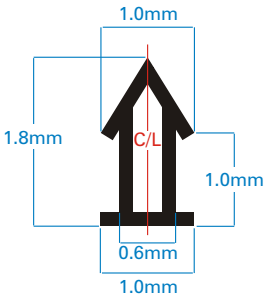
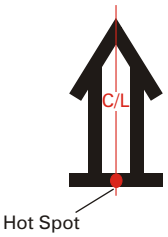
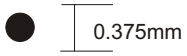
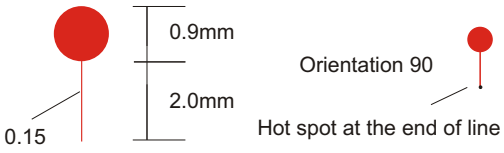
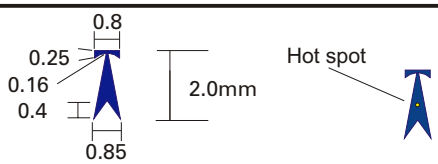
Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

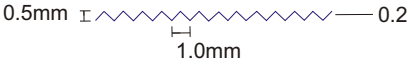
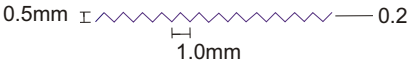
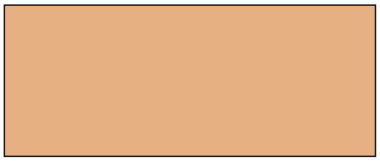
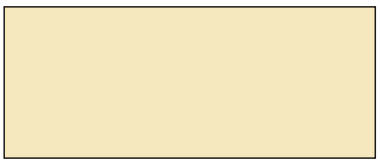
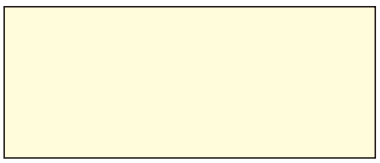
Number	Type	Feature	Description
499	*Point*	Vertical Obstruction *(tower)*	
5	*Polygon*	Orchard	
50	*Point*	Bench Mark	 Hot spot at the centre of the circle
500	*Point*	Vertical Obstruction *(wind turbine generator)*	
501	*Point*	Vertical Obstruction *(other and Landmark Point)*	 Hot spot at the centre of the circle
502	*Point*	Microwave Repeater Station (WAC ONLY)	
503	*Point*	Obstacle (singular) *Lit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%

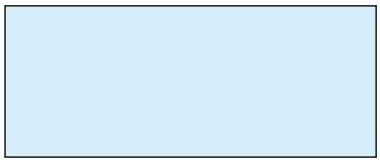
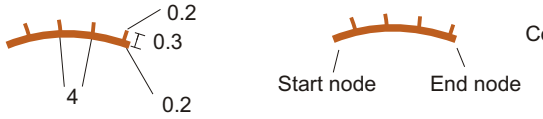
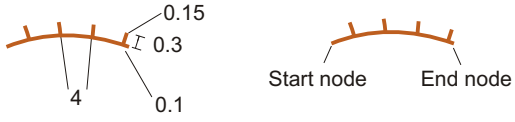
Symbol Number | Symbol Type | Feature | Description

Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

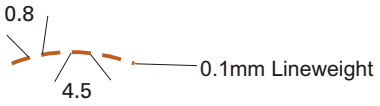
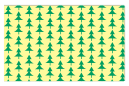
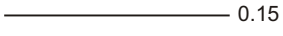
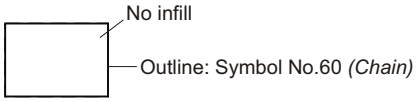
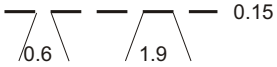
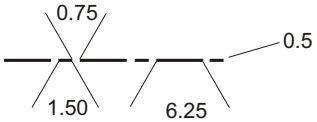
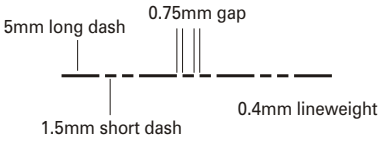
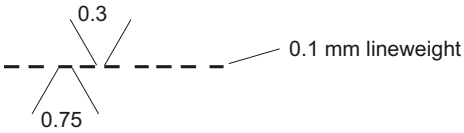
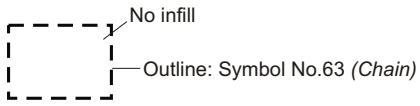
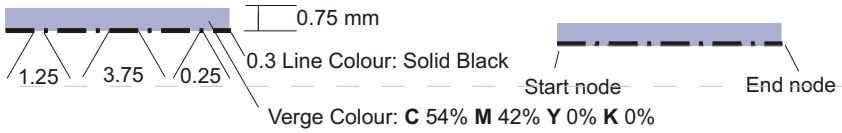
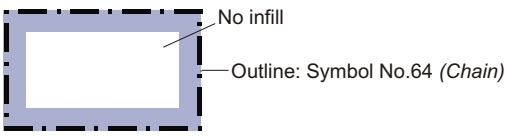
Symbol Number	Symbol Type	Feature	Description
504	*Point*	Obstacle (group) *Lit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
505	*Point*	Obstacle (singular) *Unlit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
506	*Point*	Obstacle (group) *Unlit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
507	*Point*	Broadcasting Station (singular) *Radio or Television with Mast Lit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
508	*Point*	Broadcasting Station (group) *Radio or Television with Mast Lit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
509	*Point*	Broadcasting Station (singular) *Radio or Television with Mast Unlit* (WAC ONLY)	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
51	*Point*	Horizontal Control Point		Hot spot at the centre of the dot within the triangle
510	*Point*	Broadcasting Station (group) *Radio or Television with Mast Unlit* (WAC ONLY)		Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
511	*Point*	Broadcasting Station *Radio or Television without Mast* Air Navigation Beacon *without obstruction or aerodrome* (WAC ONLY)		Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
512	*Chain*	WAC Bounding Box & Lead Line (WAC ONLY)		Colour: **C** 79% **M** 90% **Y** 0% **K** 0% See Page 19 for more Details
513	*Point*	Grain Silo (WAC ONLY)		all lineweights 0.15mm 
52	*Point*	Spot Elevation Mountain Place Name & Spot Elevation *(Other elevation (WAC Only))*		Hot spot at the centre of the circle
520	*Point*	Spot Elevation *Maximum (WAC Only)*		Hot spot at the centre of the circle
54	*Point*	Distance Indicator		Colour: **C** 0% **M** 100% **Y** 100% **K** 0%
540	*Point*	Powerline Pylon		Colour: **C** 100% **M** 73% **Y** 0% **K** 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
541	*Chain*	Powerline *(superceded)*		Colour: **C** 100% **M** 73% **Y** 0% **K** 0%
542	*Chain*	Powerline		Colour: **C** 100% **M** 73% **Y** 0% **K** 0%
543	*Chain*	Powerline *(WAC Only)*		Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
55	*Chain*	Standard Contour *(Index)*		Colour: **C** 0% **M** 59% **Y** 100% **K** 18%
553	*Polygon*	Hypsometric Tint *Elevation : 2000m (6560ft) +* *(WAC Only)*		Colour: **C** 0% **M** 25% **Y** 50% **K** 7%
554	*Polygon*	Hypsometric Tint *Elevation : 1500m (4920ft) - 2000m (6560ft)* *(WAC Only)*		Colour: **C** 0% **M** 20% **Y** 36% **K** 4%
555	*Polygon*	Hypsometric Tint *Elevation : 1000m (3280ft) - 1500m (4920ft)* *(WAC Only)*		Colour: **C** 0% **M** 9% **Y**21% **K**4%
556	*Polygon*	Hypsometric Tint *Elevation : 500m (1640ft) - 1000m (3280ft)* *(WAC Only)*		Colour: **C** 0% **M** 4% **Y**15% **K** 2%
557	*Polygon*	Hypsometric Tint *Elevation : 200m (660ft) - 500m (1640ft)* *(WAC Only)*		Colour: **C** 0% **M** 0% **Y** 10% **K** 0%
558	*Polygon*	Hypsometric Tint *Elevation : 0m (0ft) - 200m (660ft)* *(WAC Only)*		Colour: **C** 8% **M** 0% **Y**4% **K** 2%
559	*Polygon*	Hypsometric Tint *Elevation : Below 0m (Below 0ft)* *(WAC Only)*		Colour: **C** 8% **M** 0% **Y** 4% **K** 8%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
56	*Chain*	Standard Contour *(Not index)*		Colour: **C** 0% **M** 59% **Y** 100% **K** 18%
561	*Polygon*	Bathymetric Tint *Depth: 0m (0ft) - 100m (330ft), 100m (330ft) - 200m (660ft) (WAC Only)*		Colour: **C** 10% **M** 0% **Y** 0% **K** 0%
562	*Polygon*	Bathymetric Tint *Depth: 200m (660ft) - 500m (1640ft) (WAC Only)*		Colour: **C** 20% **M** 0% **Y** 0% **K** 0%
563	*Polygon*	Bathymetric Tint *Depth: 500m (1640ft) - 1000m (3280ft) (WAC Only)*		Colour: **C** 30% **M** 0% **Y** 0% **K** 0%
564	*Polygon*	Bathymetric Tint *Depth: 1000m (3280ft) - 3000m (9840ft) (WAC Only)*		Colour: **C** 40% **M** 5% **Y** 0% **K** 5%
565	*Polygon*	Bathymetric Tint *Depth: 3000m + (WAC Only)*		Colour: **C** 55% **M** 5% **Y** 0% **K** 5%
57	*Chain*	Depression Contour *(Index)*		Colour: **C** 0% **M** 59% **Y** 100% **K** 18% ticks at 90° to line
573	*Chain*	Grid line *Standard* Bathymetric Line *Standard*		Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
574	*Chain*	Grid line *100 000 m @ 250K 10 000m @ 100K*		Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
575	*Chain*	Graticule line Dam or Weir (Wac Only)		
58	*Chain*	Depression Contour *(Standard)*		Colour: **C** 0% **M** 59% **Y** 100% **K** 18% ticks at 90° to line

Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

Symbol Number	Type	Feature	Description
59	*Chain*	Auxiliary Contour	 Colour: **C** 0% **M** 59% **Y** 100% **K** 18%
6	*Polygon*	Plantation *All features at 250K & Softwood (100K only)*	 Colour: **C** 0% **M** 0% **Y** 40% **K** 0% With Pattern: equivalent to Screen MP-2 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
60	*Chain*	Habitation Boundaries & Cultural Boundaries	
60	*Polygon*	Cemetery Area Building Area (Ruin)	
600	*Polygon*	Plantation *Hardwood (100K only)*	 Colour: **C** 0% **M** 0% **Y** 40% **K** 0% With Pattern: equivalent to Screen Hardwood Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
601	*Chain*	Open Grass Plain Boundary (WAC ONLY)	
62	*Chain*	International Boundary	
620	*Chain*	Boundary - International (WAC ONLY)	
63	*Chain*	Landmark Area *(edge symbology)*	
63	*Polygon*	Landmark Area	
64	*Chain*	Prohibited Area Boundary Line *Single boundary*	
64	*Polygon*	Defence And Prohibited Area	
641	*Chain*	Prohibited Area Boundary Line *Dual boundary*	

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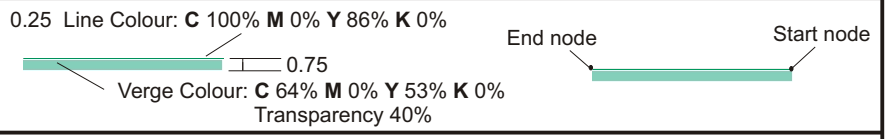
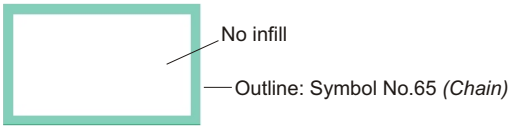
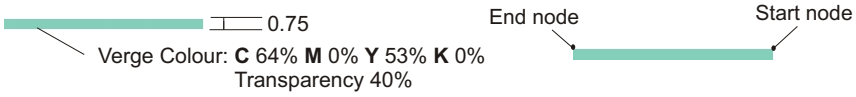
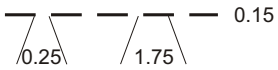
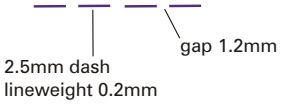
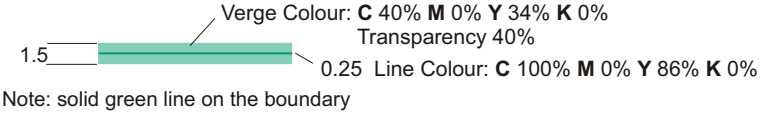
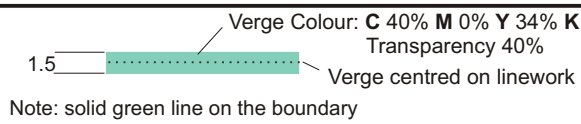
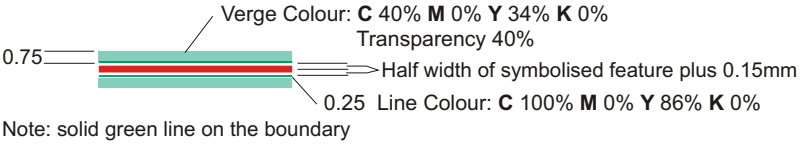
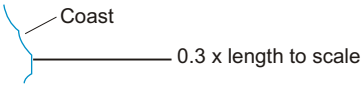
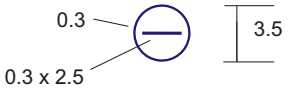
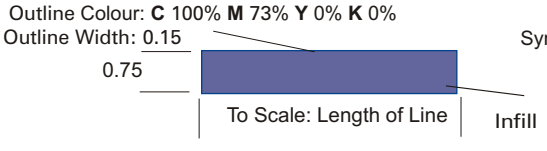
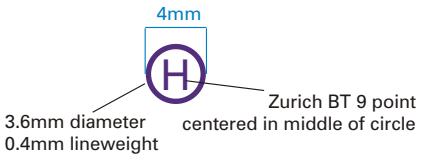
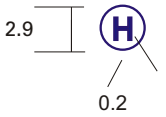
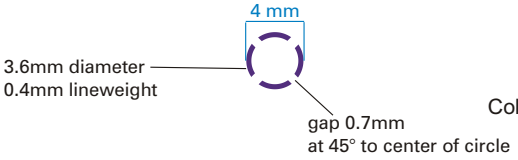
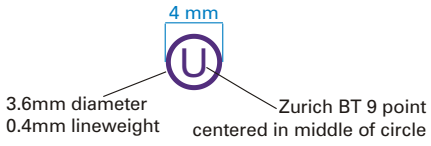
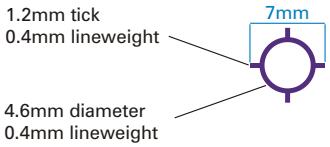
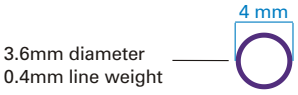
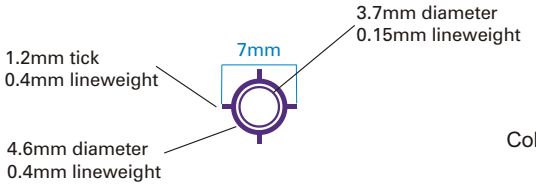
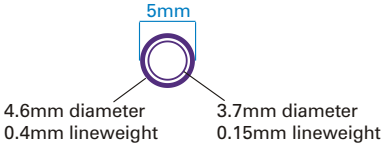
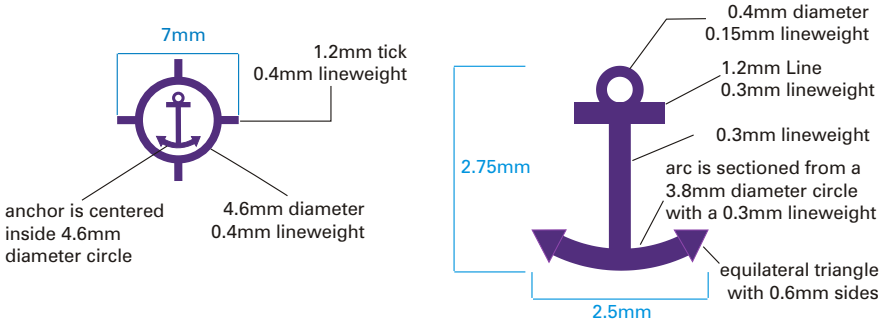
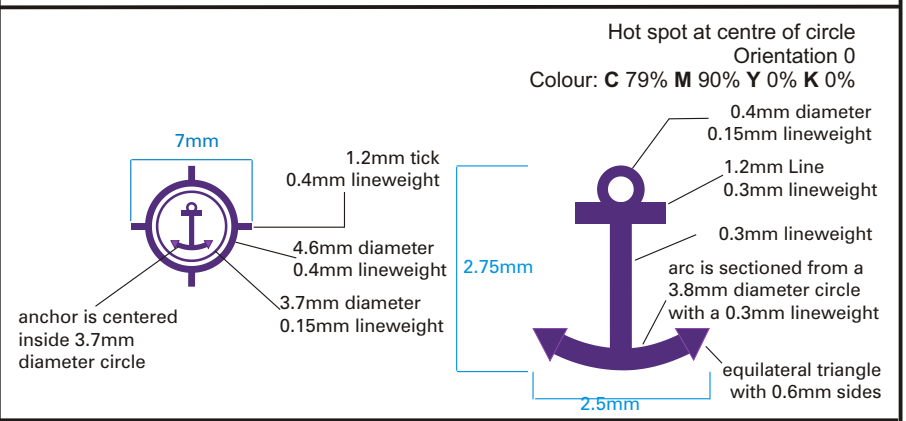
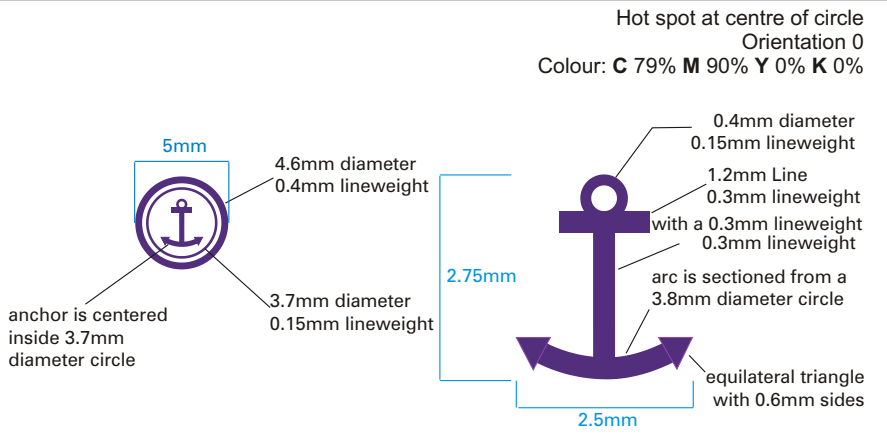
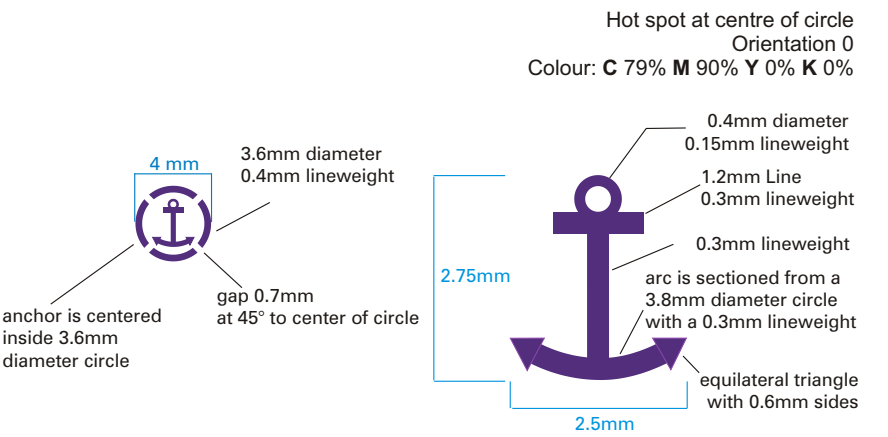
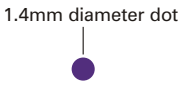
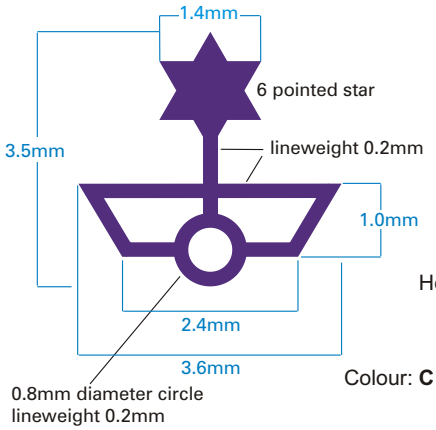
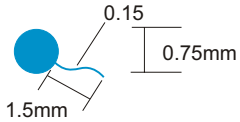
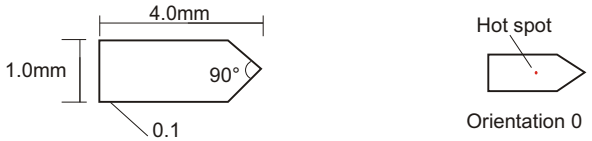
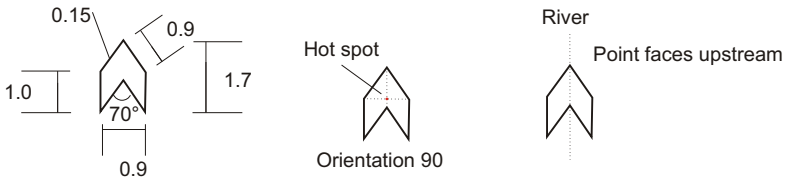
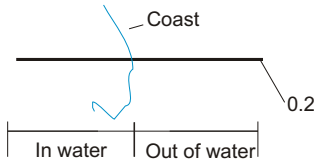
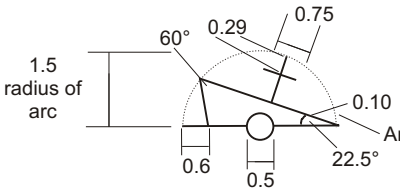
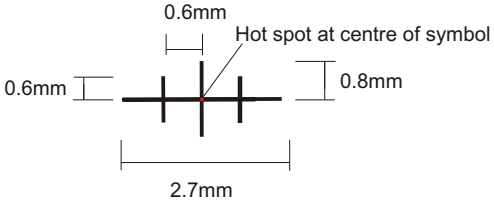
All measurements are in mm.

Symbol Number	Type	Feature	Description
65	*Chain*	Reserve Boundary Line *Single boundary*	
65	*Polygon*	Reserve Area	
650	*Chain*	Reserve Boundary Line *Single boundary (no spline)*	
66	*Chain*	Tropic of Capricorn	
660	*Chain*	Isogonal Line	 Colour: C 79% M 90% Y 0% K 0%
68	*Chain*	Reserve Boundary Line *Dual boundary not coincident with a symbolised feature*	
680	*Chain*	Reserve Boundary Line *Dual boundary coincident with edge of perennial feature or sea.*	
681	*Chain*	Reserve Boundary Line *Dual boundary coincident with a symbolised feature*	
7	*Polygon*	Mangrove	 Colour: C 45% M 5% Y 40% K 5%
70	*Chain*	Jetty	
700	*Polygon*	Aircraft Facility Area *Airport*	 Colour: C 30% M 22% Y 0% K 0%
701	*Point*	Aircraft Facility Point *Airport*	 Colour: C 100% M 73% Y 0% K 0% Hot spot at the centre of the circle
702	*Chain*	Aircraft Facility Line	 Colour: C 100% M 73% Y 0% K 0%
703	*Point*	Aircraft Facility Point *Landing ground*	 Hot spot at the centre of the circle Orientation 0. Colour: C 100% M 73% Y 0% K 0%
703	*Chain*	Aircraft Facility Line *Landing ground*	

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
704	*Point* *(WAC ONLY)*	Helicopter Landing Site		Hot spot at centre of the circle Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
706	*Chain*	Runway Centreline		Colour: **C** 100% **M** 73% **Y** 0% **K** 0%
708	*Point*	Aircraft Facility Point *Heliport*		Hot spot at the centre of the circle Orientation 0 Colour: **C** 100% **M** 73% **Y** 0% **K** 0%
709	*Chain*	Taxiway		Colour: **C** 100% **M** 73% **Y** 0% **K** 0%
71	*Chain*	Sea Wall		
710	*Point*	Aerodrome *Civilian Unlicensed* *(WAC ONLY)*		Hot spot at centre of circle Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
711	*Point*	Aerodrome *Civilian Unusable* *(WAC ONLY)*		Hot spot at centre of circle Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
712	*Point*	Aerodrome *Licensed Civilian with Passenger Facilities* *(WAC ONLY)*		Hot spot at centre of circle Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
713	*Point*	Aerodrome *Licensed Civilian without Passenger Facilities* *(WAC ONLY)*		Hot spot at centre of circle Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
714	*Line*	Customs Aerodrome *Pecked Line* *(WAC ONLY)*		Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
716	*Point*	Aerodrome *Licensed Joint Civilian and Military* *(WAC ONLY)*		Hot spot at centre of circle Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
717	*Point*	Aerodrome *Licensed Military* *(WAC ONLY)*		Hot spot at centre of circle Colour: **C** 79% **M** 90% **Y** 0% **K** 0%

Symbol Number	Type	Feature	Description	Symbol Colour is Black unless otherwise specified; All measurements are in mm.
718	*Point*	Aerodrome *Water Civilian Licensed with Passenger Facilities* *(WAC ONLY)*		
719	*Point*	Aerodrome *Water Joint Civilian and Military* *(WAC ONLY)*		
72	*Point*	Lighthouse		Hot spot at the centre of the circle
720	*Point*	Aerodrome *Water Licensed Military* *(WAC ONLY)*		
721	*Point*	Aerodrome *Water Unlicensed Civilian* *(WAC ONLY)*		

Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

Symbol Number	Type	Feature	Description
722	*Point*	Air Navigation Light *(WAC ONLY)*	 Hot spot at centre of star Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
728	*Point*	Marine Light *(WAC ONLY)*	 Hot Spot at centre of dot Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
729	*Point*	Marine Lightship *(WAC ONLY)*	 Hot Spot at centre of circle Orientation 0 Colour: **C** 79% **M** 90% **Y** 0% **K** 0%
73	*Point*	Spring	 Hot spot at the centre of the circle Orientation 0 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
751	*Chain*	Breakwater	
752	*Chain*	Wharf Line	
753	*Point*	Dry Dock Point	
754	*Point*	Lock	
755	*Chain*	Boat Ramp Line	
756	*Point*	Wreck *Bare or Tidal*	 Hot spot at centre of circle at base of symbol Arc for measurement only, not part of symbol
759	*Point*	Wreck *Submerged*	 0.10 mm lineweight

Symbol Colour is Black unless otherwise specified;
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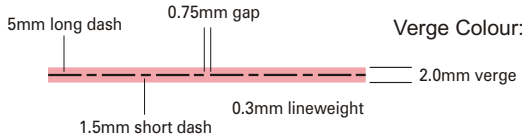
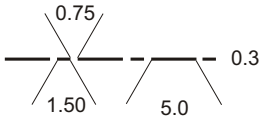
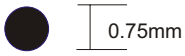
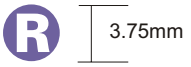
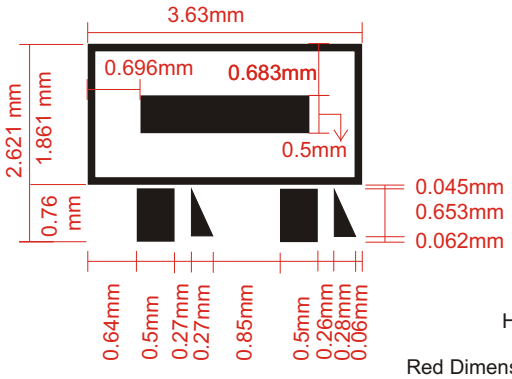
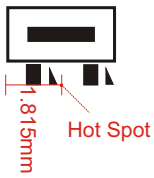
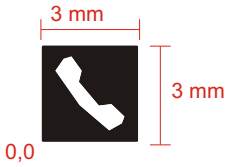
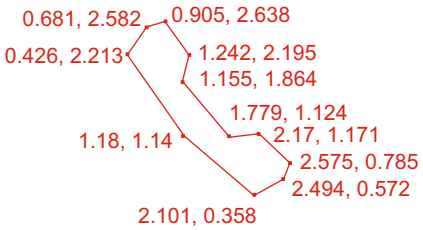
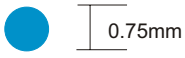
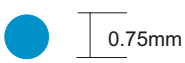
Symbol Number	Type	Feature	Description
79	*Chain*	Boundary - State or Territory (WAC ONLY)	 Verge Colour: **C** 0% **M** 35% **Y** 15% **K** 0% Line Colour: Solid Black
80	*Chain*	State Border	
801	*Point*	Storage Tank	 Hot spot at centre of circle
802	*Point*	Rescue Point (Emergency Mapping)	 Colour: **C** 60% **M** 60% **Y** 0% **K** 0% 'R' is a Zurich Extra Bold 10pt in solid white Centred both vertically and horizontally
803	*Point*	Signage (Emergency Mapping)	  Hot spot at centre of base of symbol Red Dimension Markers are not part of symbol Colour: **C** 0% **M** 0% **Y** 0% **K** 100% Note: Billboard portion will be white not transparent.
804	*Point*	Communication Device (Emergency Mapping)	  Hot spot at centre of symbol Red Dimension Markers are not part of symbol Colour: **C** 0% **M** 0% **Y** 0% **K** 100% Note: Handset portion will be white not transparent.
81	*Point*	Waterhole	 Hot spot at centre of circle Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
82	*Point*	Waterpoint & Water Access (Emergency Mapping)	 Hot spot at centre of circle Colour: **C** 100% **M** 10% **Y** 0% **K** 10%

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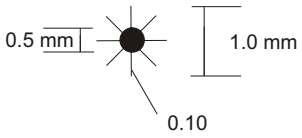
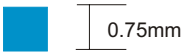
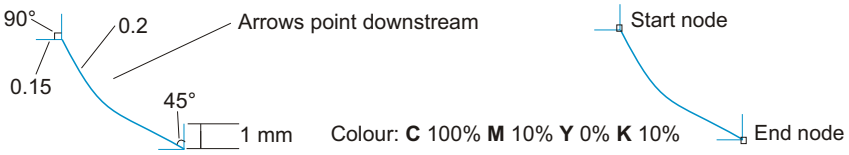
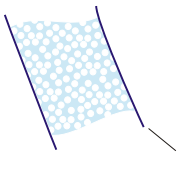
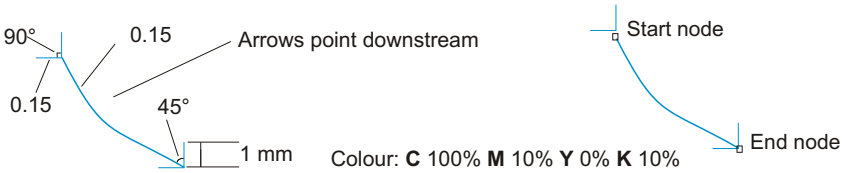
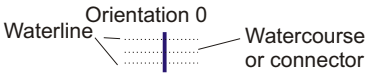
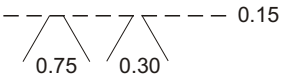
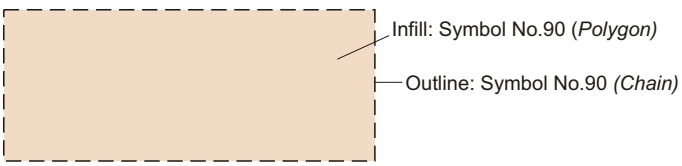
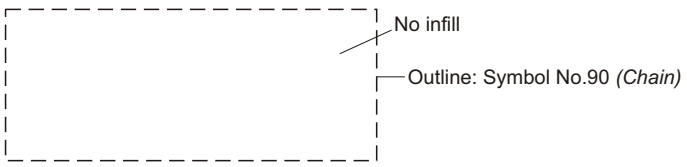
All measurements are in mm.

Symbol Number	Type	Feature	Description
84	*Point*	Pinnacle	 Hot spot at the centre of the circle Hot spot at centre of square
86	*Point*	Water Tank	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
87	*Chain*	Windbreak	Colour: **C** 100% **M** 0% **Y** 86% **K** 0%
881	*Chain*	Rapid Line *On major watercourse chain*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
881	*Polygon*	Rapid Area *On perennial watercourse polygon*	 Colour: **C** 20% **M** 0% **Y** 0% **K** 0% Pattern: equivalent to Screen Random Dot 1 (negative screen)
882	*Chain*	Rapid Line *On minor watercourse chain*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
89	*Point*	Waterfall	 1mm except on watercourse polygon feat_wid to be set so the ends of the line extend 0.5mm beyond the banks of the watercourse Colour: **C** 100% **M** 10% **Y** 0% **K** 10% Hot spot at centre of line 
90	*Chain*	Physiography Boundaries *Bounding a crater & distorted surface*	
90	*Polygon*	Distorted Surface Outcrop	Colour: **C** 0% **M** 9% **Y** 15% **K** 3%
900	*Polygon*	Distorted Surface	
901	*Polygon*	Crater	

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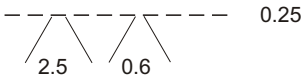
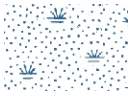
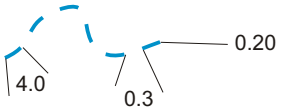
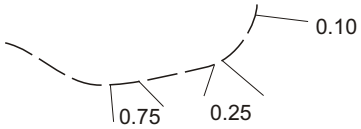
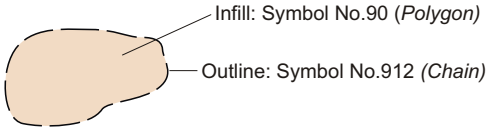
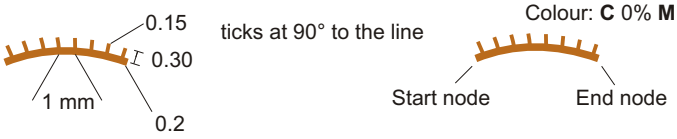
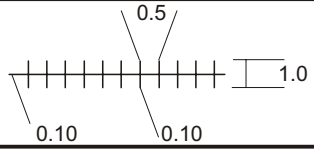
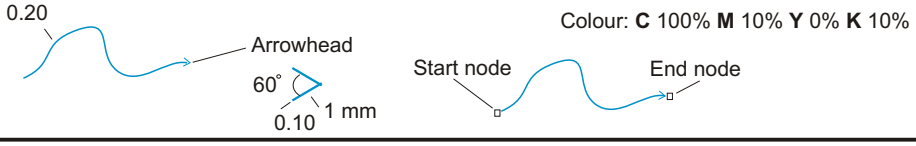
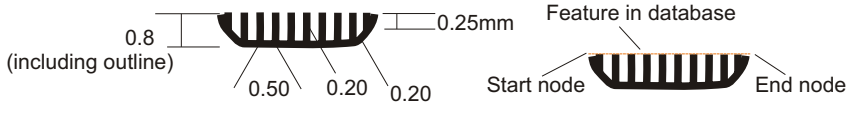
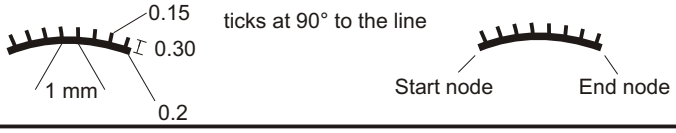
Symbol Number	Type	Feature	Description
904	*Chain*	Black Soil Plain Bounding Line	 Colour: **C** 0% **M** 0% **Y** 0% **K** 60%
904	*Polygon*	Black Soil Plain	Colour: **C** 0% **M** 0% **Y** 20% **K** 0%
908	*Polygon*	Swamp Marine Swamp	 Pattern: Equivalent of Screen P-90 Colour: **C** 100% **M** 10% **Y** 0% **K** 10% At least one grass symbol is to fall in each polygon
91	*Chain*	Watercourse *Hierarchy: Major (100K use only for Non-perennial features)*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
912	*Chain*	Physiography Boundaries *Bounding outcrops*	
912	*Polygon*	Outcrop	
92	*Chain*	Watercourse *Hierarchy: Major (250K no flow arrow & 100K use only for Perennial features)*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
920	*Chain*	Cliff (WAC Only)	 Colour: **C** 0% **M** 59% **Y** 100% **K** 18%
921	*Chain*	Levee	 cross ticks at 90° to the line and centre on the line
922	*Chain*	Watercourse *Hierarchy: Major with direction of flow*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
923	*Chain*	Cutting	
924	*Chain*	Cliff	

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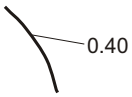
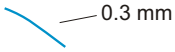
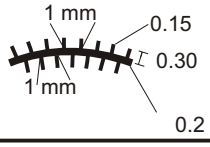
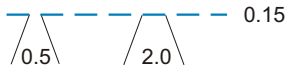
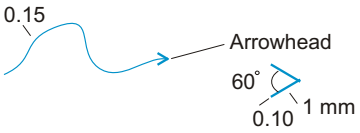
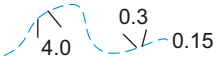
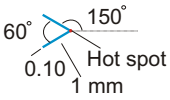
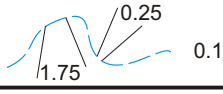
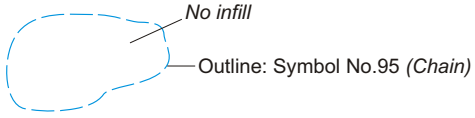
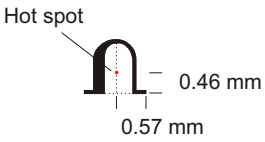
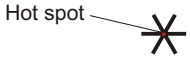
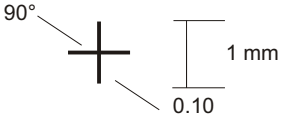
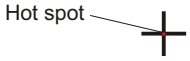
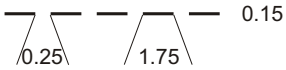
Symbol Number	Type	Feature	Description
925	*Chain*	Dam Wall	
926	*Chain*	Spillway	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
927	*Chain*	Fence	
929	*Chain*	Razorback	 ticks at 90° to the line
93	*Chain*	Old Lake Bed Boundary	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
94	*Chain*	Waterbody Boundaries & Shoreline	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
940	*Chain*	Watercourse *Hierarchy: Minor (250K no flow arrow &100K used for Perennial features only.)*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
942	*Chain*	Watercourse *Hierarchy: Minor with direction of flow*	  Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
944	*Chain*	Watercourse *Hierarchy: Minor (100K use only for Non-perennial features)*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
948	*Point*	Flow Direction Arrow	  Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
947	*Chain*	Canal and Pipeline *Water*	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
95	*Chain*	Shoal (edge symbology)	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
95	*Polygon*	Shoal	
953	*Chain*	Climatic Graph Grid Lines	
954	*Chain*	Climatic Graph Temperature Line	 Colour: **C** 0% **M** 100% **Y** 100% **K** 0%

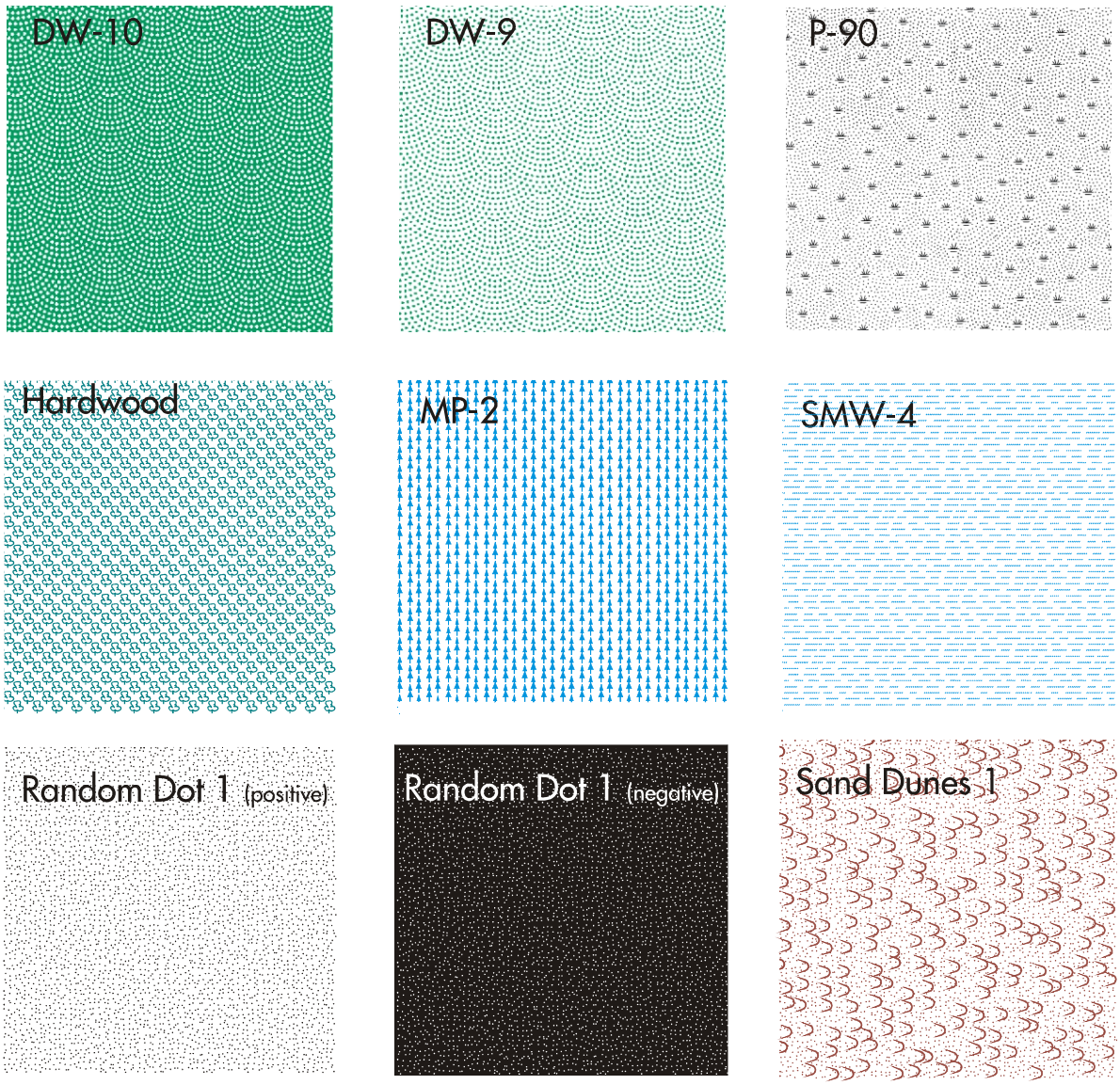
Symbol Number | Symbol Type | Feature | Description

Symbol Colour is Black unless otherwise specified;
All measurements are in mm.

Number	Type	Feature	Description
955	*Chain*	Climatic Graph Rainfall Line	 Colour: **C** 100% **M** 10% **Y** 0% **K** 10%
96	*Point*	Cave	 
97	*Polygon*	Reef	 Colour: **C** 50% **M** 5% **Y** 0% **K** 5%
98	*Point*	Offshore Rock *Bare and/or Tidal*	 
980	*Point*	Offshore Rock *Submerged*	 
99	*Chain*	Cleared line	

Screens

The following representations of the screens were embedded in this document as a WMF graphic, a clearer view of these may occur through increasing the zoom factor of the document. They are supplied as an indication of the screen only, film or eps copies must be used when building the symbol libraries.



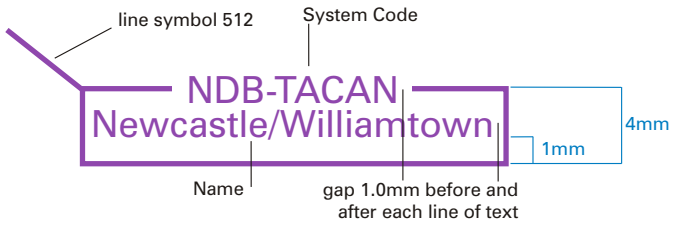
LEAD LINES AND TEXT BOXES

For 1:1 million production of World Aeronautical Charts (WACs) and their associated base data, lead lines and text boxes are required for certain associated text of the features Air Navigation Beacon, Broadcasting Station and Aerodrome used for Customs purposes.

The construction of the text boxes vary according to the feature and are detailed below making use of the symbol 512 and 714 documented in the symbol dictionary. The text font and size are as per the type specifications and are only shown in the diagrams to assist comprehension.

In all cases the text is centred in the box. The length of all boxes will vary depending on the length of the text. The length of lead lines may vary according to requirements.

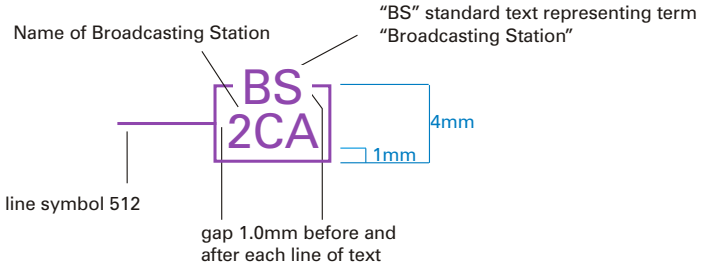
AIR NAVIGATION BEACON



First line of text is centered on the top line of the box

Examples

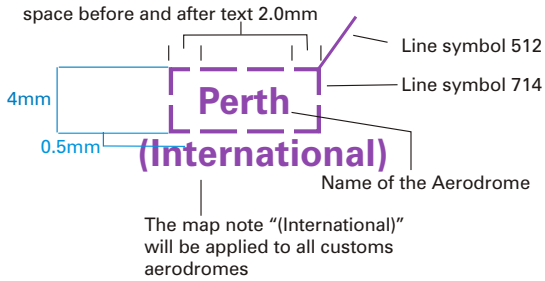
BROADCASTING STATION (radio or television)



First line of text is centered on the top line of the box.

Examples

CUSTOMS AERODROME



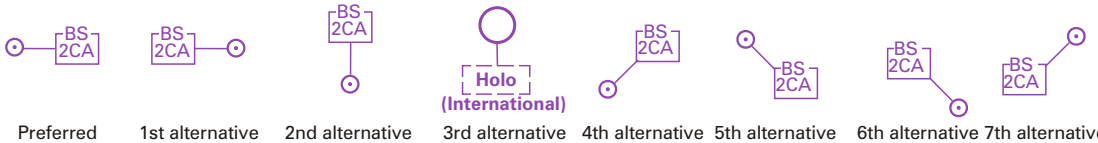
Examples

LEAD LINE ORIENTATION

Lead lines should be placed to avoid conflict or confusion with the associated symbol. For example it is not recommended that when using Lead Lines from a customs aerodrome which are licenced with passenger facilities that the lead line be placed so that its orientation is directly north, south, west or east even though these are normally the preferred directions.

It is acceptable but not preferable to have changes in direction within lead lines.

Lead lines should connect in preference order to one of the 8 locations shown below wherever possible. Position of the text box and subsequently the lead line will be based on text placement principles.



Preferred 1st alternative 2nd alternative 3rd alternative 4th alternative 5th alternative 6th alternative 7th alternative