

ORGANIZACION HIDROGRAFICA INTERNACIONAL

Dossier del BHI No. S3/4405

CIRCULAR No. 14/2010 4 de Febrero del 2010

ESPECIFICACIONES CARTOGRAFICAS DE LA OHI (S-4) Especificaciones y Símbolos nuevos y revisados relativos a los túneles para los cables y los conductos, los puentes, los dispositivos de energía generada por las olas, las zonas sin levantar, las plataformas en desuso o abandonadas, los bancos conquilícolas

Estimado(a) Director(a),

1. En conformidad con sus Términos de Referencia, el Grupo de Trabajo de la OHI sobre Normalización de Cartas y la Carta de Papel (CSPCWG) tiene la responsabilidad de 'revisar de forma continua la Publicación S-4 de la OHI: *Reglamentos de la OHI para Cartas Internacionales (INT) y Especificaciones Cartográficas de la OHI,* para aconsejar a la OHI sobre su actualización, diseño y formato' y para 'aconsejar a la OHI sobre las sugerencias presentadas por los Estados Miembros para actualizar la S-4, de acuerdo con la Especificación B-160 de la OHI, con el fin de que los Estados Miembros apliquen al máximo los Reglamentos y las Especificaciones'.

2. Además de la revisión continua global de la S-4, el CSPCWG ha considerado recientemente varios temas, como resultado de las preguntas o propuestas específicas formuladas por los Estados Miembros. Se enumeran en el título de la presente Circular. Como resultado, el CSPCWG propone ahora algunas Especificaciones nuevas y revisadas, para su inclusión en la S-4. Se adjuntan a esta Circular proyectos de éstas últimas, para que los Estados Miembros las revisen.

3. Conforme a la Especificación B-160 de la S-4, los Estados Miembros deberán informar al BHI (info@ihb.mc) si tienen objeciones importantes, o cualquier otro comentario, relativas a la adopción de las Especificaciones adicionales propuestas en esta Circular, en un plazo de tres meses. Así pues, los comentarios de los Estados Miembros deberán recibirse en el BHI **el 4 de Mayo del 2010 lo más tardar**, utilizando el Formulario de Respuesta que se adjunta en el Anexo G. De no recibirse objeciones, el BHI anunciará en una Circular de seguimiento que las Especificaciones revisadas han entrado en vigor. El CSPCWG las incluirá entonces en la S-4 a la próxima ocasión.

En nombre del Comité Directivo Atentamente,

Robert WARD Director

- Anexo A: Tunnels for cables and pipelines (en Inglés únicamente);
- Anexo B: Bridges (en Inglés únicamente);
- Anexo C: Wave energy devices (en Inglés únicamente);
- Anexo D: Unsurveyed Areas (en Inglés únicamente);
- Anexo E: Disused or Abandoned Platforms (en Inglés únicamente);
- Anexo F: Shellfish Beds (*en Inglés únicamente*);
- Anexo G: Formulario de Respuesta.

Tunnels for cables and pipelines

Introduction: Oil and gas pipelines (and possibly cables) from sea to shore are, in some cases, being routed into mined tunnels some distance from a rocky coast (for example, in western Norway). The route of the tunnel is not necessarily known and the pipelines inside the tunnel are not vulnerable to damage from anchoring etc. It is proposed to portray the entrance to a pipeline tunnel, to show that the pipeline is in use, and to distinguish it from partly removed pipelines out of use. CSPCWG has agreed the following additions to the specification and a new symbol:

Draft revised specification (new text in red)

B-443.8 Cables, buried so deep that they are not vulnerable to damage from anchoring, should not be charted (so that mariners are not unnecessarily inhibited from anchoring or fishing). In marginal cases they may be charted in magenta with a note stating the nominal depth to which they are buried, as L42.1, but with a cable symbol. If they are partly laid in a tunnel, the entrance, if required to be shown, must be charted as L42.2, but with a cable symbol. For details, see B-444.5.

Draft revised specification and new symbol (new text in red)

B-444.5 Pipes of all types, buried so deep that they are not vulnerable to damage from anchoring, should not be charted (so that mariners are not unnecessarily inhibited from anchoring or fishing). In marginal cases they may be charted in magenta with a note stating the nominal depth to which they are buried.

Buried 1.6m L42.1

If required to be shown, the entrance to a pipeline tunnel must be charted by a magenta symbol (black symbol in the case of an outfall in a tunnel), about 3mm long:

 $\rightarrow \rightarrow \rightarrow \rightarrow$ ($\rightarrow \rightarrow \rightarrow \rightarrow$ L42.2

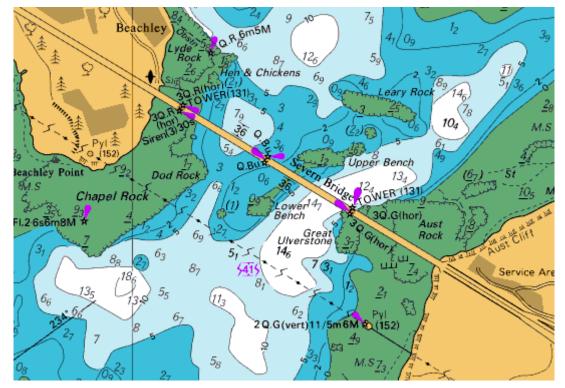
The pipeline inside the tunnel should not be charted. This symbol helps to distinguish partly lifted pipelines (or cables, see B-443.8) from those which are in use, but partly in a tunnel.

Bridges

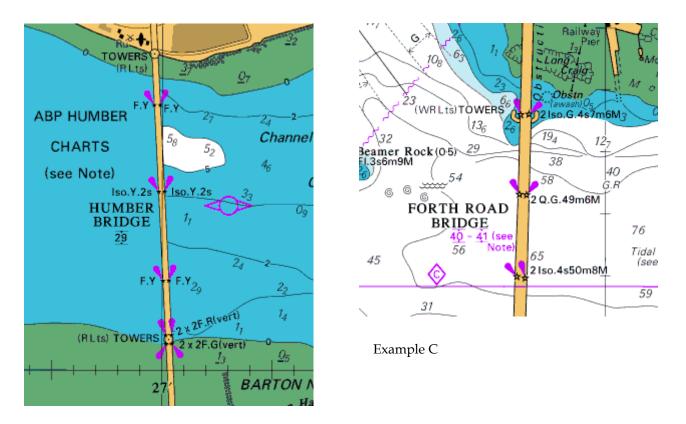
Introduction: Some recent incidents have demonstrated that it is important that vessels are aware of the positions of bridge supports and, in some cases, details of the depths under a bridge. CSPCWG has examined the various methods used to achieve this and proposes to include brief guidance, with some examples of good practice, in S-4, as follows:

Draft additional specifications

- **381.5** Bridge supports may be an obstruction to navigation and should be charted (if the positions are known). It is difficult to be prescriptive about how they should be charted, as circumstances may vary considerably. Some options (which may be combined) are:
 - Where bridge supports carry navigation lights (and/or daymarks), chart as small light stars (and/or beacons) with appropriate descriptions. Add a legend, eg 'TOWER', 'Pylon', as appropriate to distinguish between lights on the bridge superstructure and on bridge supports (examples A to C);
 - For suspension bridges, or others for which the supports extend above the bridge, a position circle symbol with legend should be shown, eg 'TOWER', 'Pylon' (example B) or, if large enough scale, the tower can be shown to scale (example F);
 - Where bridge supports are wider than the actual bridge, show to scale in plan outline (usually continuing the bridge sides through the widening, unless it is known that the bridge itself widens at those points) (example C and D);
 - The supports may also be shown as lines across the bridge, even if they do not protrude beyond the width of the bridge or above the bridge (examples E to G);
 - Insert a large-scale inset plan to enable the above actions to be taken (example F and G)
 - Add a profile view diagram (example H and I):

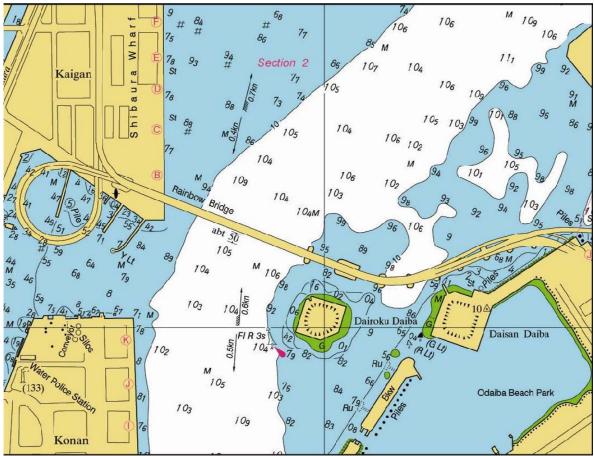


Example A (Source: United Kingdom Hydrographic Office)

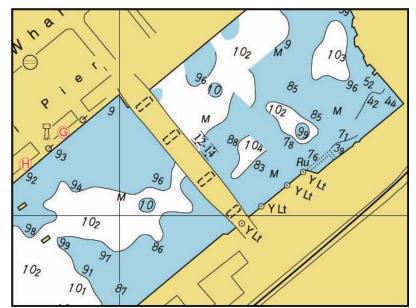




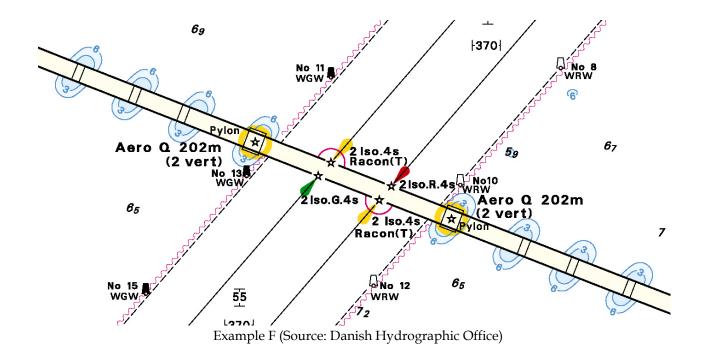
Examples B & C (Source: United Kingdom Hydrographic Office)

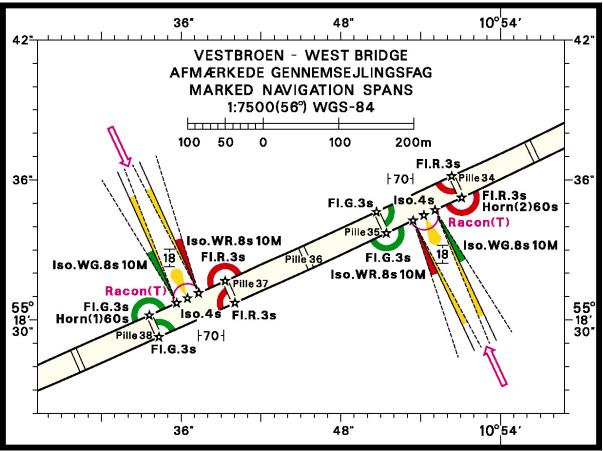


Example D (Source: Japanese Hydrographic and Oceanographic Department)

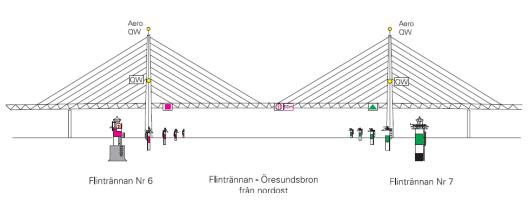


Example E (Source: Japanese Hydrographic and Oceanographic Department)





Example G (Source: Danish Hydrographic Office)



Example H (Source: Swedish Maritime Administration)

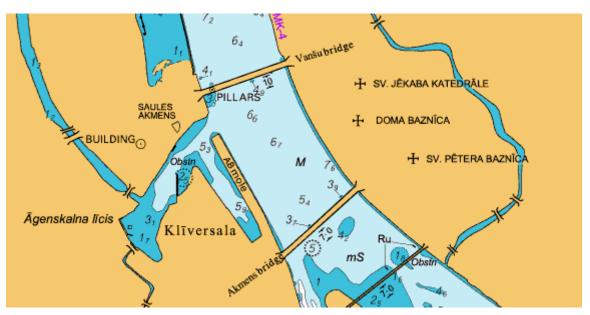


Example I (Source: Bahrain Chart)

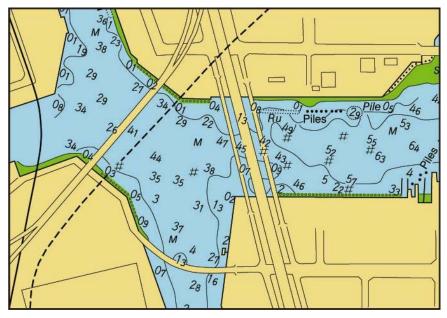
381.6 Depth (including obstructions) under bridges. The physical presence of a bridge can affect the flow of water and hence the location of shoals and deeper channels in its vicinity, including underneath it. Normal sounding selection principles apply in the waters either side of a bridge. However, it may be appropriate to select a sounding (or obstruction) which is under the bridge (either because it is a controlling depth or because depth varies significantly across the width of a bridge span). In such cases it should be shown as a 'sounding out of position', in accordance with the guidance at S-4 B-412.2. I11 (using a pointer) is to be preferred to I12, as the exact position under the span may be important (Example A).

Alternatively, soundings may be shown in their true positions, with the bridge and land tint retained over the top (Example B).

Depth contours should normally be broken at the bridge as it will usually be obvious where the contours go. On very large scale charts, where the bridge is shown true to scale and it clarifies the picture, the contours can be continued through the bridge.



Example A (Source: Latvian Hydrographic Office)



Example B (Source: Japanese Hydrographic and Oceanographic Department)

Wave energy devices

Introduction: Offshore renewable energy installations (OREI) utilising wave action continue to be developed. Many are already being deployed, at least experimentally. For the present, use of the 'development area' limit is usually appropriate. However, it is likely that in the near future a generic symbol for such installations will be required. CSPCWG has decided that a symbol modelled on the wind farm symbol, but containing the wellknown electric flash symbol (as used for overhead cables, for example) instead of a turbine symbol would be intuitive and sufficiently generic to cover the wide range of devices that seem likely to be installed.

Draft revised specification and new symbol (new text in red)

B-445.12 Wave energy devices; Wave Farms. A wide variety of devices for harnessing wave energy are being developed. These devices need protection and are also potentially dangerous to navigation.

At the present stage of the industry, wave farms should usually be treated as Development Areas (limit N1.2, N2.1 or N2.2 as appropriate, see B445.7); that is, charted in magenta, as the actual obstructions will come and go or be moved as experiments progress. A legend such as '*Renewable Energy Installations - Development Area (see Note)*' should be inserted in the area. Small areas may be simply labelled '*Development Area (see Note)*' or '*Wave Farm (see Note)*'. All cables, buoys, lights and permanent structures should be charted as normal.

A magenta note should be inserted warning of the potentially hazardous nature of the area, for example:

DEVELOPMENT AREA

Extensive testing of renewable energy installations, both above and below the surface, takes place in this area. Mariners should exercise caution if navigating in this area. For further information, see [eg associated publication].

Later, if such an area becomes established as a wave farm, the symbol for a renewable energy installation should normally be inserted in an area. Symbol N1.1 (black maritime limit implying permanent physical obstructions) should normally be used for the limit of a wave farm:



However, if navigation is prohibited, N2.2 must be used:



If there are other restrictions, N2.1 may be used, noting the principles for portraying coincident limits at B-439.6.

Usually, the renewable energy installation symbol will be used in combination with an area symbol, although if necessary (eg because of scale) it may be used as a point symbol, with the centre of the circle representing the position:



Unsurveyed Areas

Introduction: A blue and white striped area infill has been used for many years to symbolise unsurveyed areas in Swedish waters. It has been found particularly useful in coastal areas which are impossible to survey because of, for example, the existence of log ponds. Other Member States in the region have indicated an intention to use this symbol and have proposed its adoption as an optional International symbol.

In some cases, the existing portrayal options do not give a clear indication to the mariner that an area has not been surveyed, especially small areas where it is impractical to include a legend. Leaving an area blank could in some cases be interpreted as a result of cartographic editing or generalization. However, the proposed infill symbol is considered to be intuitive for chart users.

Draft revised specification and new symbol (new text in red)

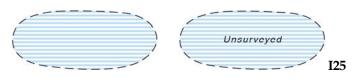
B-418.1 Areas delimited by a bold line. In unsurveyed areas which are considered dangerous for vessels to enter, a very positive form of warning is required. Such areas must be shown by bold dashed black or magenta limits, with the legend either:

- 'Unsurveyed' (which may be accompanied by a note) or
- 'Depths (see Note)'.
- A reference to the Source or ZOC Diagram may be inserted instead of a note.

Examples:



This treatment is likely to be most appropriate in inshore waters such as coastal archipelagos and barrier reefs and where ice has receded. It may be reinforced by the omission or insertion of colour tints within the bold line, or by horizontal blue bands (0.5mm wide, 0.5mm gaps) inserted within the area. If blue bands are inserted, the legend '*Unsurveyed*' or equivalent may be included if space permits:



Small areas (eg gaps left in surveys because of obstructions such as icebergs, log ponds or moored vessels), should have the legend alongside the limit if blue bands are not inserted.

Disused or Abandoned Platforms

Introduction: INT1 L14 is an unused space holder for 'Disused platform'. During the review of B-440, it was decided there is no need for a specific symbol. However, recent information about platforms in the North Sea suggested that a review of that decision was required, as it is useful to distinguish between a platform which has simply been abandoned but still looks like a working platform (ie all the superstructure is still present) and one where the superstructure has been dismantled and all that are left visible are above-water legs and/or base.

Draft revised specification and new symbol (new text in red)

B-445.2 Platforms (including production platforms).

Proposed new paragraph:

f. A disused or abandoned platform may be labelled '(disused)', or equivalent. If the superstructure has been removed, leaving only an above-water base structure, this should instead be labelled with the **international abbreviation** 'Ru'. The label should be '(ru)' if there is any retained designation (eg Z-44) or descriptor (eg SPM):

Features associated with abandoned platforms should also be reviewed, eg:

- o pipelines would normally be amended to disused;
- o a safety zone may still apply and if so should be charted accordingly;
- it may still carry navigation lights, so a flare (and if required a light description) should be included as appropriate (see b above);
- if no associated features remain, consideration should be given to enhancing its prominence on the chart (eg with a danger line) as it remains a significant collision hazard.

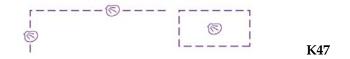
For charting platforms which have been removed below the surface, see B-422.9 and B-449.7.

Shellfish Beds

Introduction: Shellfish beds are currently shown on charts with a legend and a limit. Several legends may be used depending of the kind of activity: Shellfish Beds, Oysters, Mussels, etc. Shellfish beds often occur inshore in shallow water where charts are cluttered. The clutter increases on Bilingual charts. In accordance with the policy of using intuitive symbols rather than legends, and to reduce chart clutter, CSPCWG proposes a new symbol.

Draft revised specification and new symbol (new text in red)

B-447.4 Shellfish beds that do not contain physical obstructions. The limits should be charted by a dashed magenta line (N1.2) with an oblique shell symbol (width approximately 3mm) at intervals of approximately 40mm or closer and not exceeding 50mm. For small areas, a centred oblique shell symbol may be inserted within the area defined by the dashed magenta line N1.2.



A note may be inserted warning against anchoring or grounding in the area, or giving details of any local regulations.

If shellfish beds contain obstructions to surface navigation, eg trestles, the symbol for a marine farm must be used (see B-447.6).

Anexo G a la Circular del BHI No. 14/2010

S3/4405

ESPECIFICACIONES CARTOGRAFICAS DE LA OHI (S-4) Especificaciones y Símbolos nuevos y revisados relativos a los túneles para los cables y los conductos, los puentes, los dispositivos de energía generada por las olas, las zonas sin levantar, las plataformas en desuso o abandonadas, los bancos conquilícolas

Formulario de Respuesta

(a devolver al BHI **antes del 4 de Mayo del 2010**) E-mail: <u>info@ihb.mc</u> - Fax: +377 93 10 81 40)

Nota: Las casillas se irán agrandando a medida que escribe sus respuestas.

Estado Miembro :	
Contacto:	
E-mail :	

¿Está de acuerdo con las Especificaciones y los Símbolos nuevos o revisados? Si su respuesta es 'No', le rogamos explique la razón en el espacio reservado a los comentarios debajo de los cuadros.

Referencia de la S-4	Título	Sí	No
B-443.8	Tunnels for cables.		
B-444.5	Tunnels for pipelines.		
B-381.5	Bridge supports.		
B-381.6	Depth (including obstructions) under bridges.		
B-445.12	Wave energy devices; Wave Farms.		
B-418.1	Unsurveyed Areas.		
B-445.2f.	A disused or abandoned platform.		
B-447.4	Shellfish beds that do not contain physical obstructions.		

Comentarios :	
Firma : Fecha :	
Fecha :	