Paper for Consideration by the Transfer Standard Maintenance and Applications Development Working Group (TSMAD) and the Digital Information Portrayal Working Group (DIPWG)

Test Data Set for chart related alerts and indications

Submitted by:	Jeppesen and Furuno Finland Oy
Executive Summary:	Chairman of the group preparing the new edition of IHO S-64 Tom Richardson/UKHO request us to provide test data set for chart related alerts. This document describes what has been done.
Related Documents:	-
Related Projects:	New edition of IHO S-52 Presentation Library

Introduction / Background

1. IHO DIPWG4, Monaco 2012 made a decision to publish a new edition of S-52 Presentation Library and S-64 Test data set to clarify ECDIS anomalies related gray and white areas.
2. Tom Richardson/UKHO has been elected as chairman of the group to develop new edition of the S-64. Jeppesen and Furuno Finland Oy accepted the task of providing test data set for checking the chart related alerts and indications.

Analysis/Discussion/Conclusions

3. The test data set consist of 6 charts in 2 different scales/navigational purposes. 5 charts are at scale 1:50 000 and one chart is at scale 1:200 000. Each chart has a separate doc-file which list all objects included into the chart.
4. The idea behind providing two scales is that with two overlapping scales is possible to check functionality of the largest scale available as the source of alerts and indications. Further the smaller scale chart is intentionally different from the larger scale charts. This is to ease the inspection of using the largest scale available.
5. The test data set is quite extensive in order cover all decision and exist routes possible with the associated conditional symbology procedures WRECKS, OBSTRN, UWTROC, DEPVAL and UDWHAZ.
6. This document has an annex with preliminary plots from the charts. Note that the plots neither represent correct presentation of the objects according current presentation library edition 3.4 nor the plots represent correct presentation of the objects according drafted new presentation library edition (3.5 or 4.0 whatever is the selected style). Reason for this is that the creators of the test data set are waiting for final approved new edition of the presentation library before implementing all details in the software. The preliminary plots are provided to be an easy introduction for the content of the test charts. Today detailed studies about the test charts shall be done based on the charts itself. After the final content of the new edition of the presentation library is agreed by TSMAD/DIPWG, the creators of the test charts are willing to assist IHO for creating final test instructions and final plots to be included in the new edition of the IHO S-64.
7. The test data set is made based on the draft presentation library for review by 17th May 2013. If the TSMAD/DIPWG meeting do any changes for the drafted presentation library then this test data set shall be amended for the new drafted version.

Recommendations

8. Based on this document IHO TSMAD/DIPWG should agree a plan to continue for inclusion of this test data into the S-64
   a. If required, amend the content of the test data set for the changes made during the TSMAD/DIPWG meeting or planned to be made after the TSMAD/DISPWG meeting
   b. Create a series of plots from the test data set using different conditions (different values of the safety contour, different selections for areas with special conditions, different scales, etc.)
   c. Invite an expert review panel consisting selected members both from IHO member states and OEMs to review and accept the final version to be included into the S-64 before requesting approval by the HSSC

Justification and Impacts

9. IHO has informed IMO to have a leading role in resolving ECDIS anomalies.

10. Without addressing proper test data set the OEMs are unable to check that they all have uniform interpretation of the rules

Action Required of TSMAD
TSMAD is invited to:

a. endorse the technical proposal of the test data set as described in the Annex A
b. agree the recommendations of this document

Action Required of DIPWG
DIPWG is invited to:

a. endorse the technical proposal of the test data set as described in the Annex A
b. agree the recommendations of this document

Attachements

A zip file containing following elements of the Test Data Set
AA2TEST6.000
AA3TEST1.000
AA3TEST2.000
AA3TEST3.000
AA3TEST4.000
AA3TEST5.000
AA2TEST6.doc
AA3TEST1.doc
AA3TEST2.doc
AA3TEST3.doc
AA3TEST4.doc
AA3TEST5.doc

Annex A Preliminary plots of the test data set

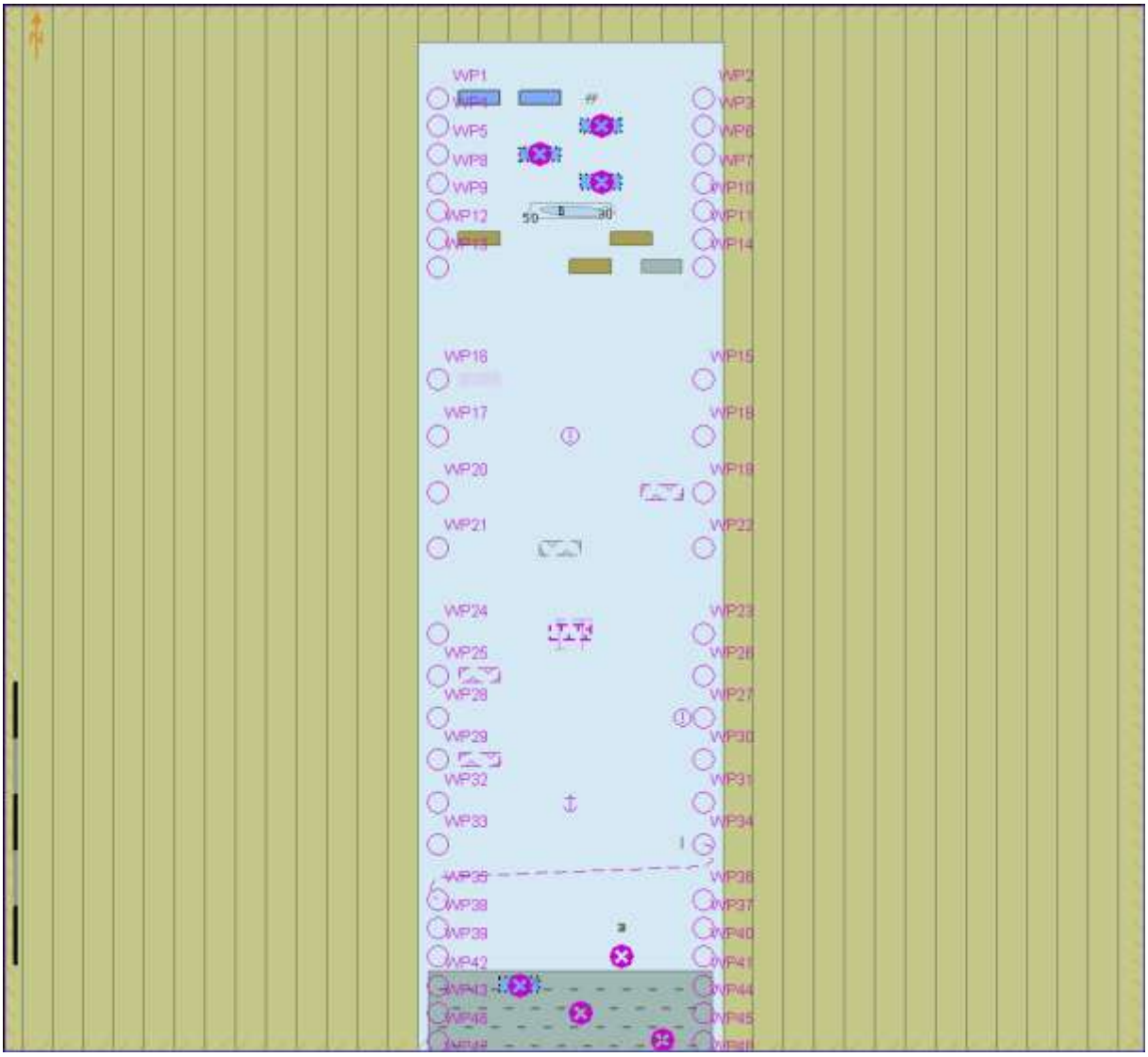


Chart AA2TEST6, at scale 1:200 000, upper part

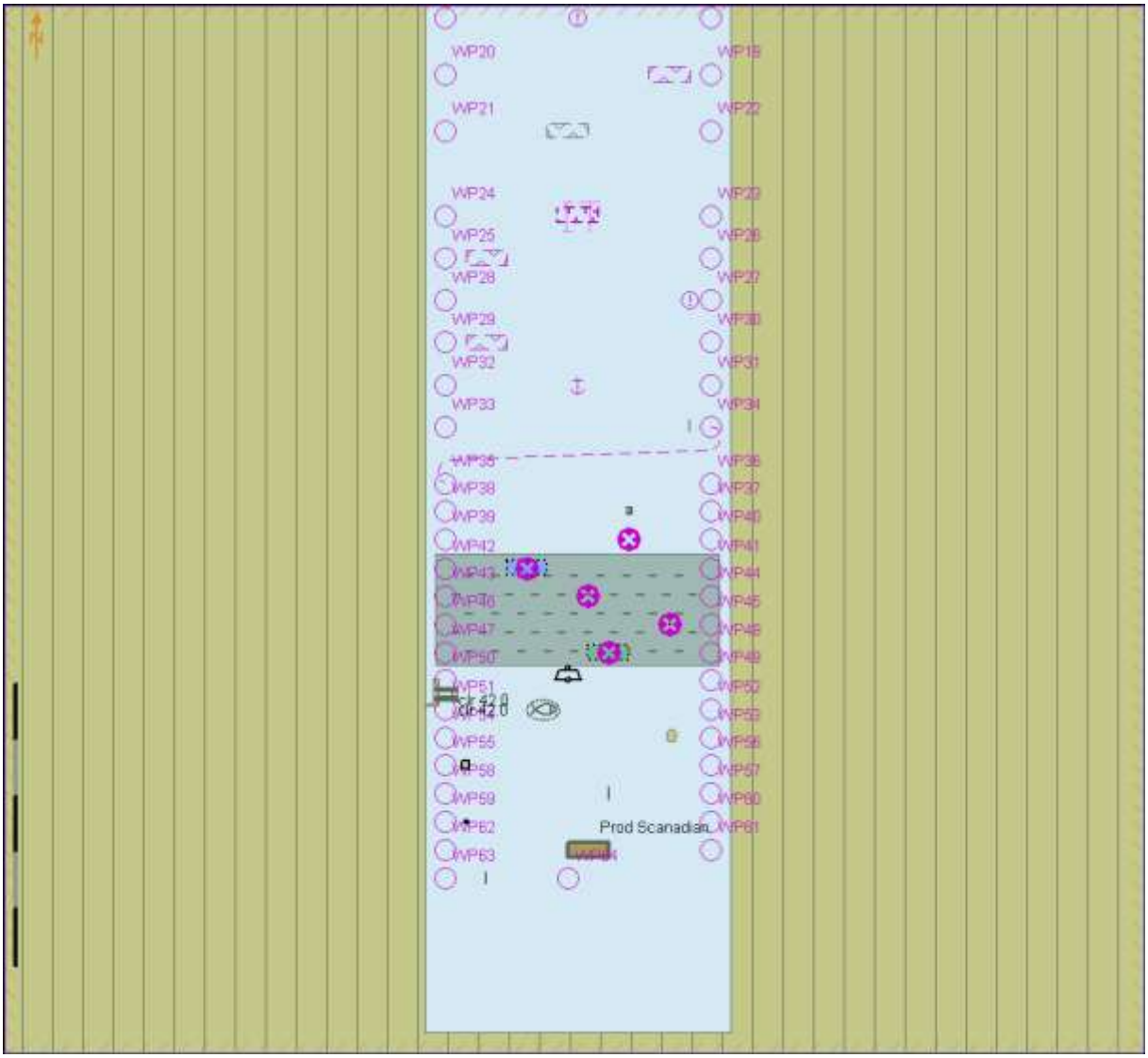


Chart AA2TEST6, at scale 1:200 000, upper part

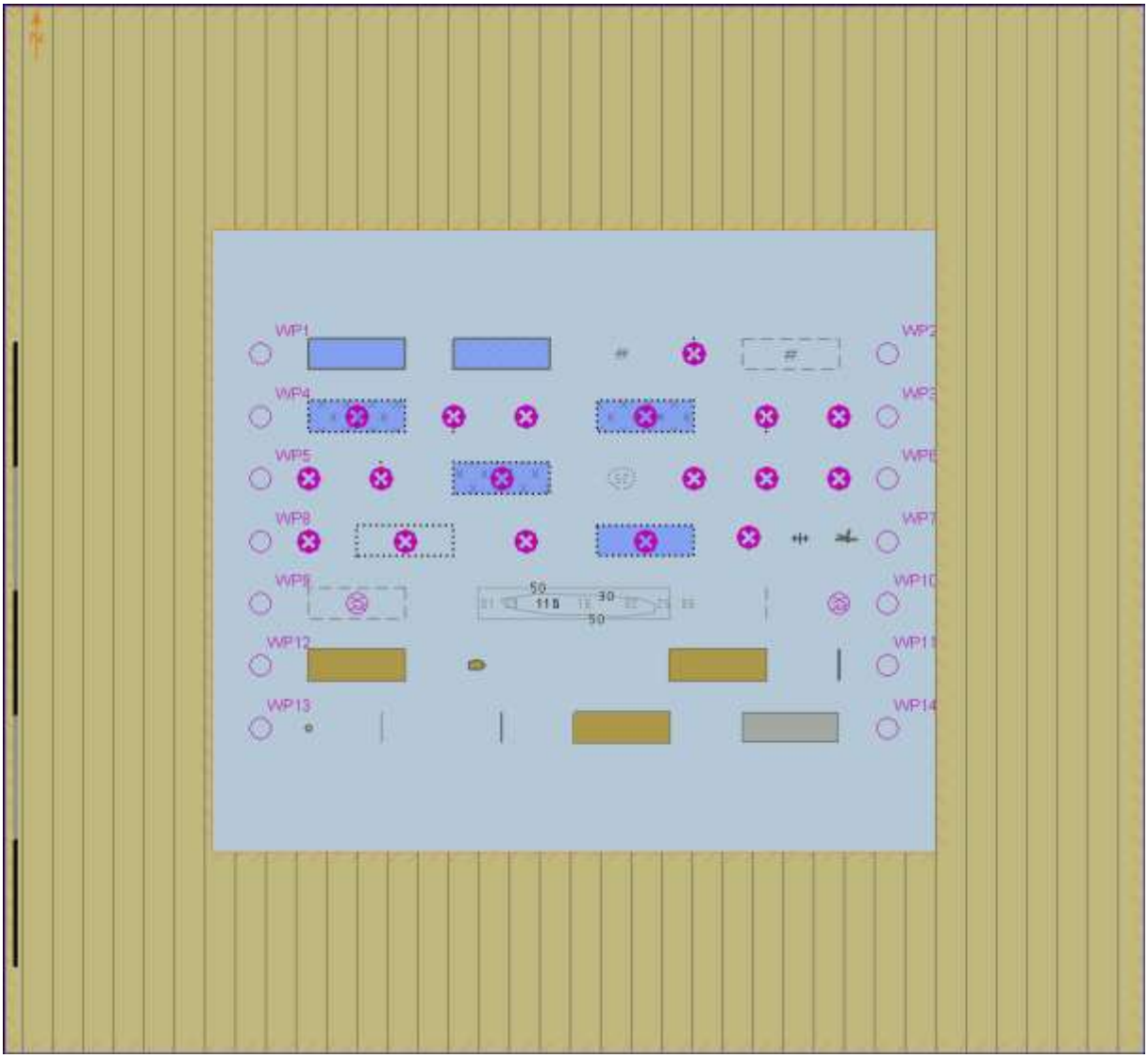


Chart AA3TEST1, at scale 1:100 000

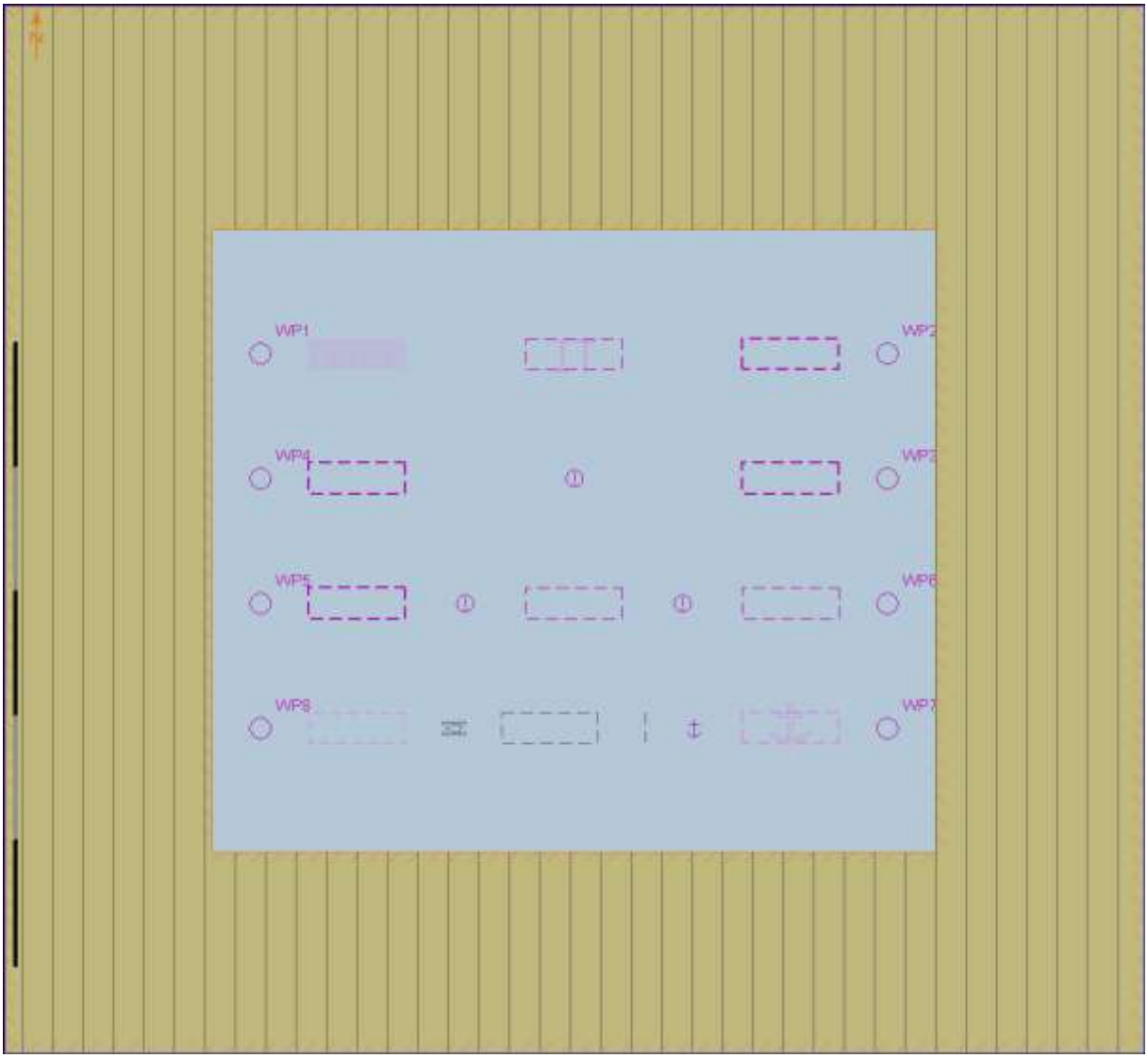


Chart AA3TEST2, at scale 1:100 000

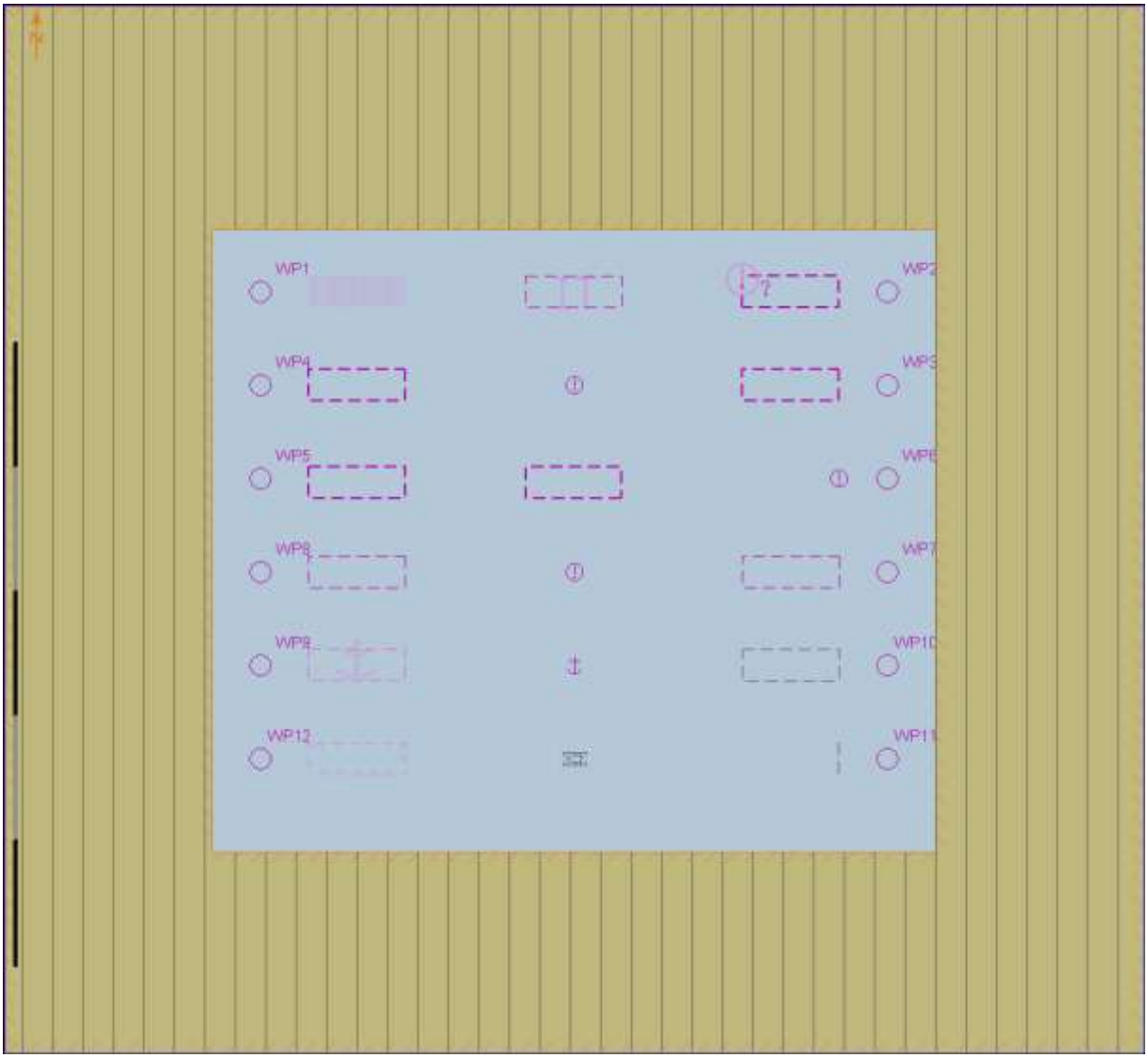


Chart AA3TEST3, at scale 1:100 000

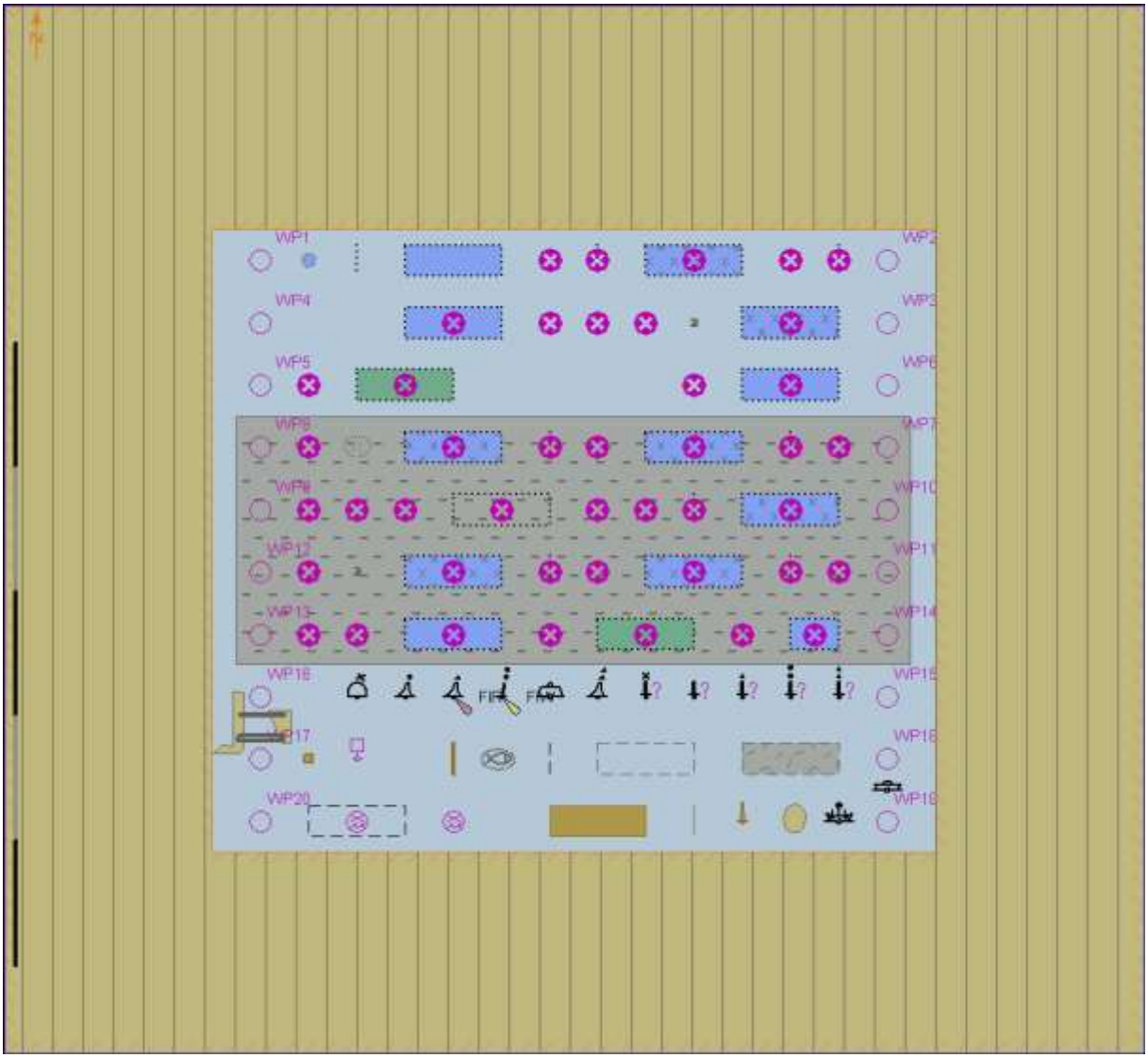


Chart AA3TEST4, at scale 1:100 000

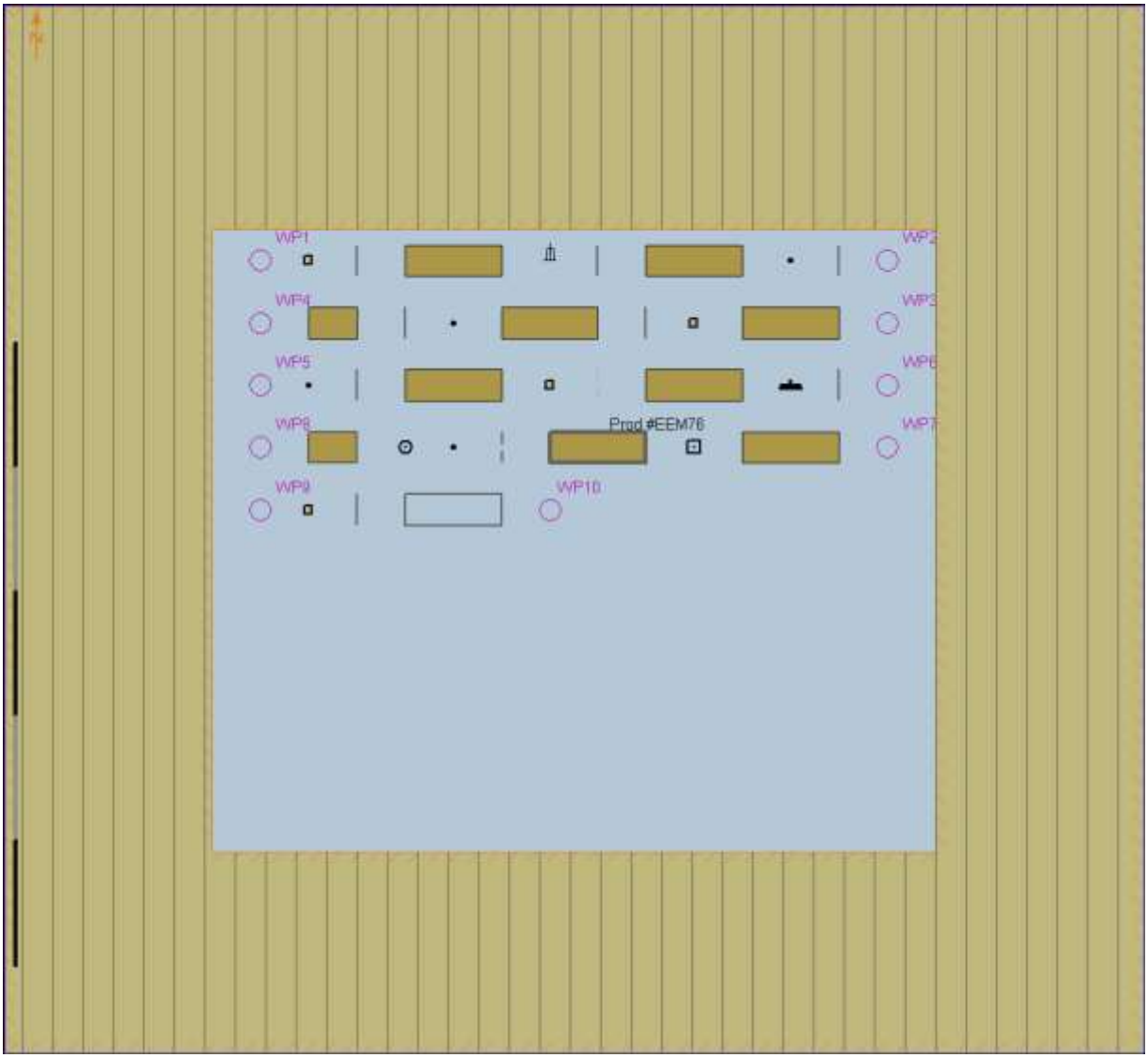
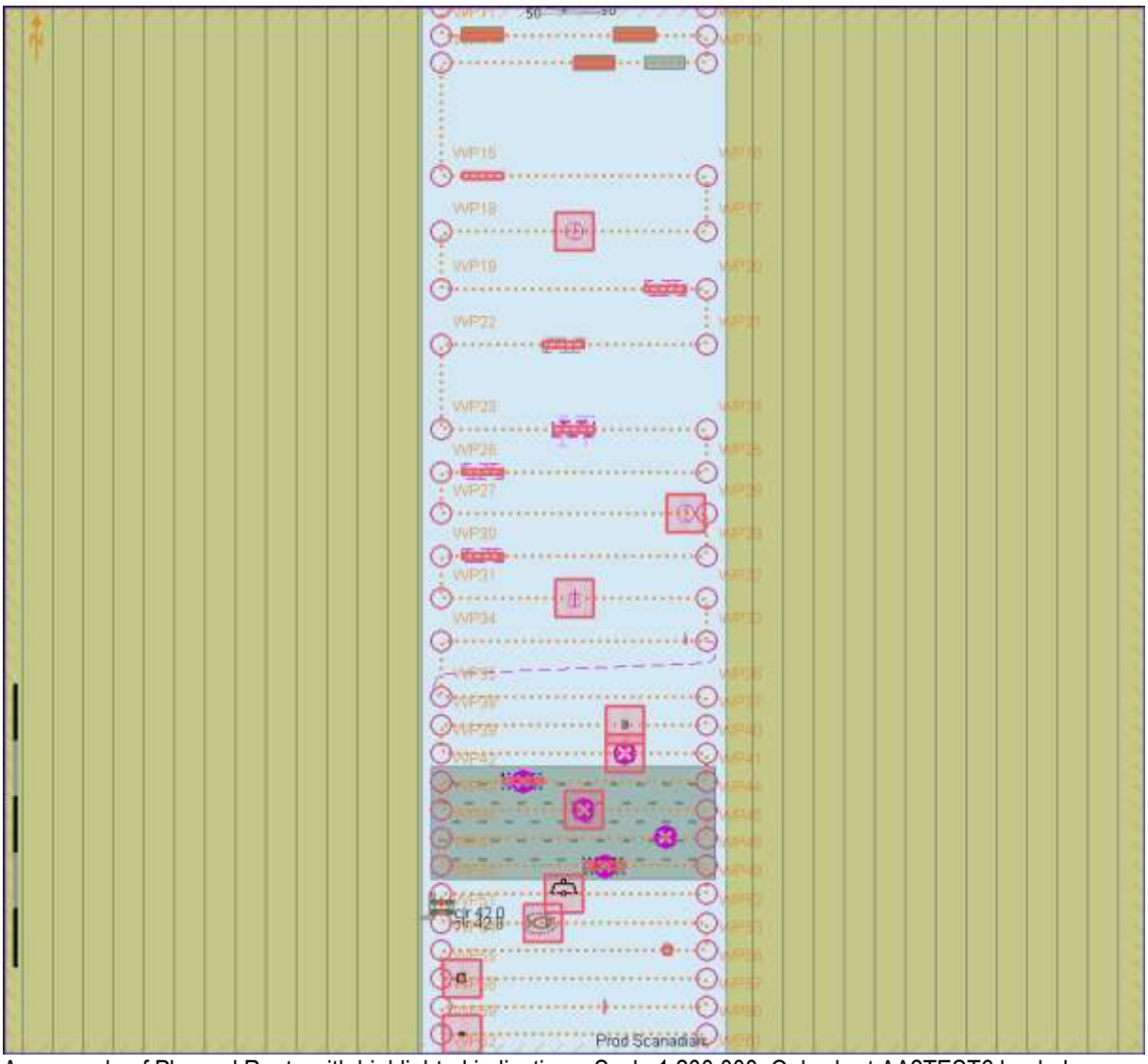
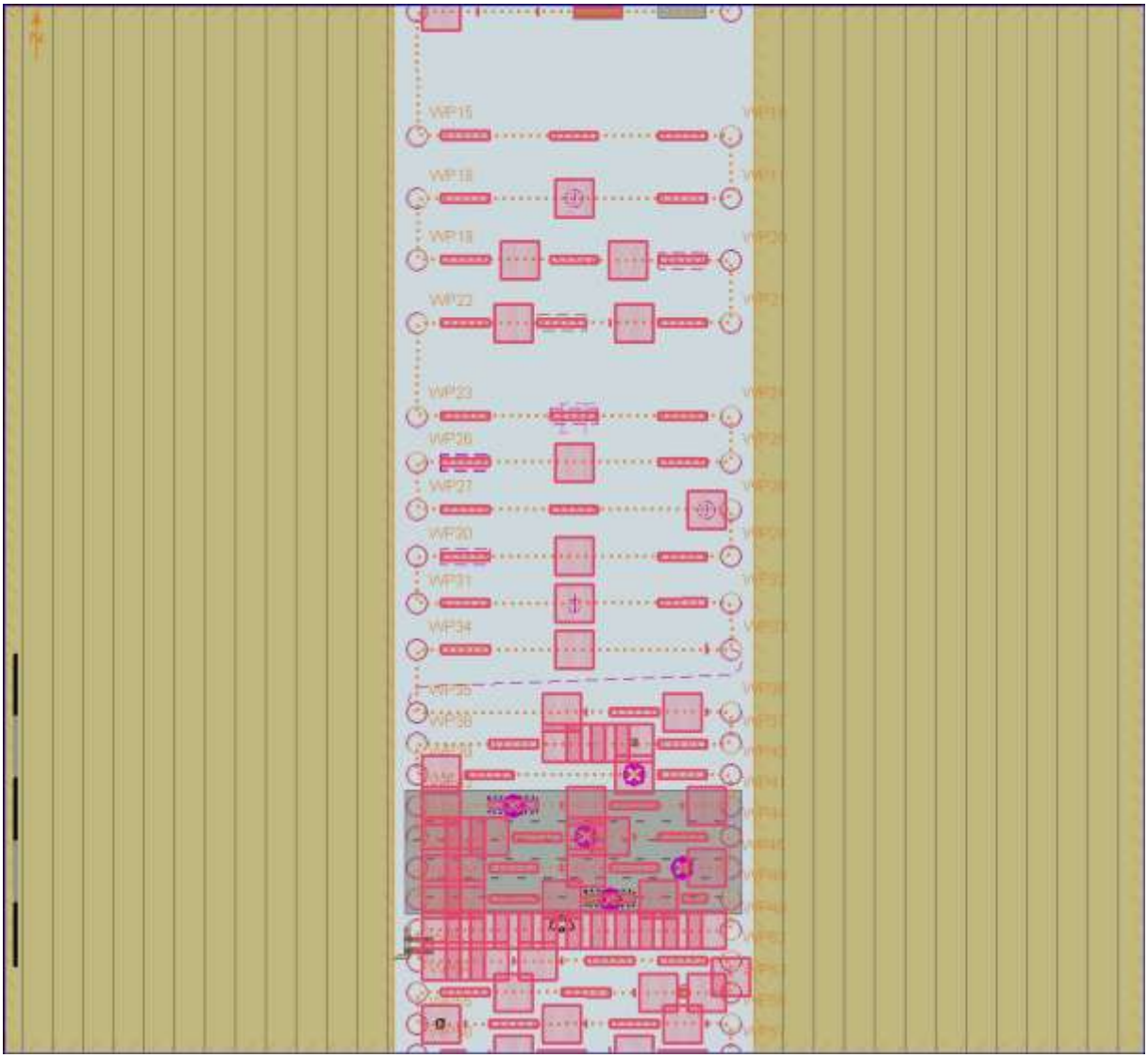


Chart AA3TEST5, at scale 1:100 000

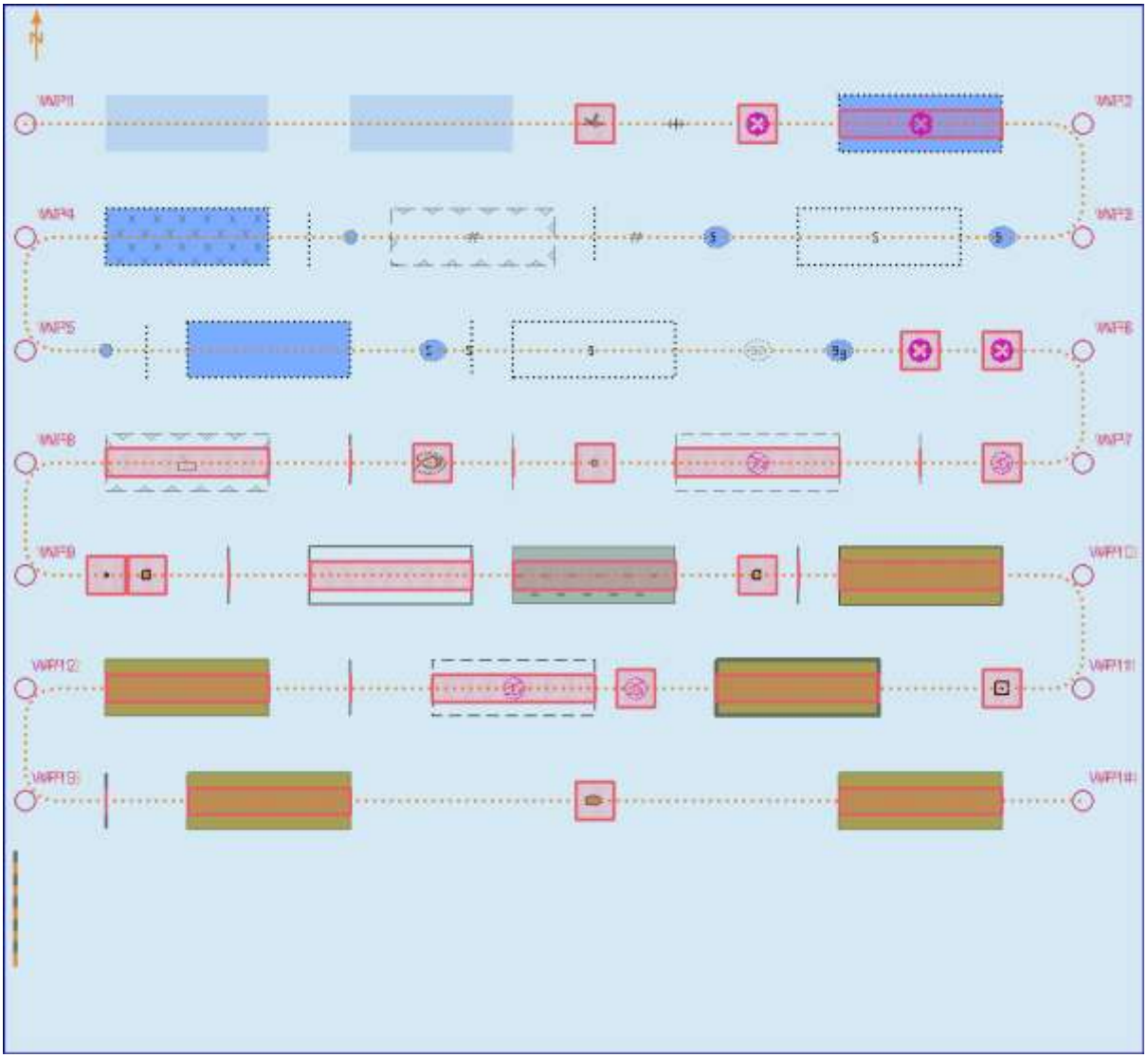
Annex B Preliminary plots showing the idea how the test data set could be used in S-64 for testing purposes



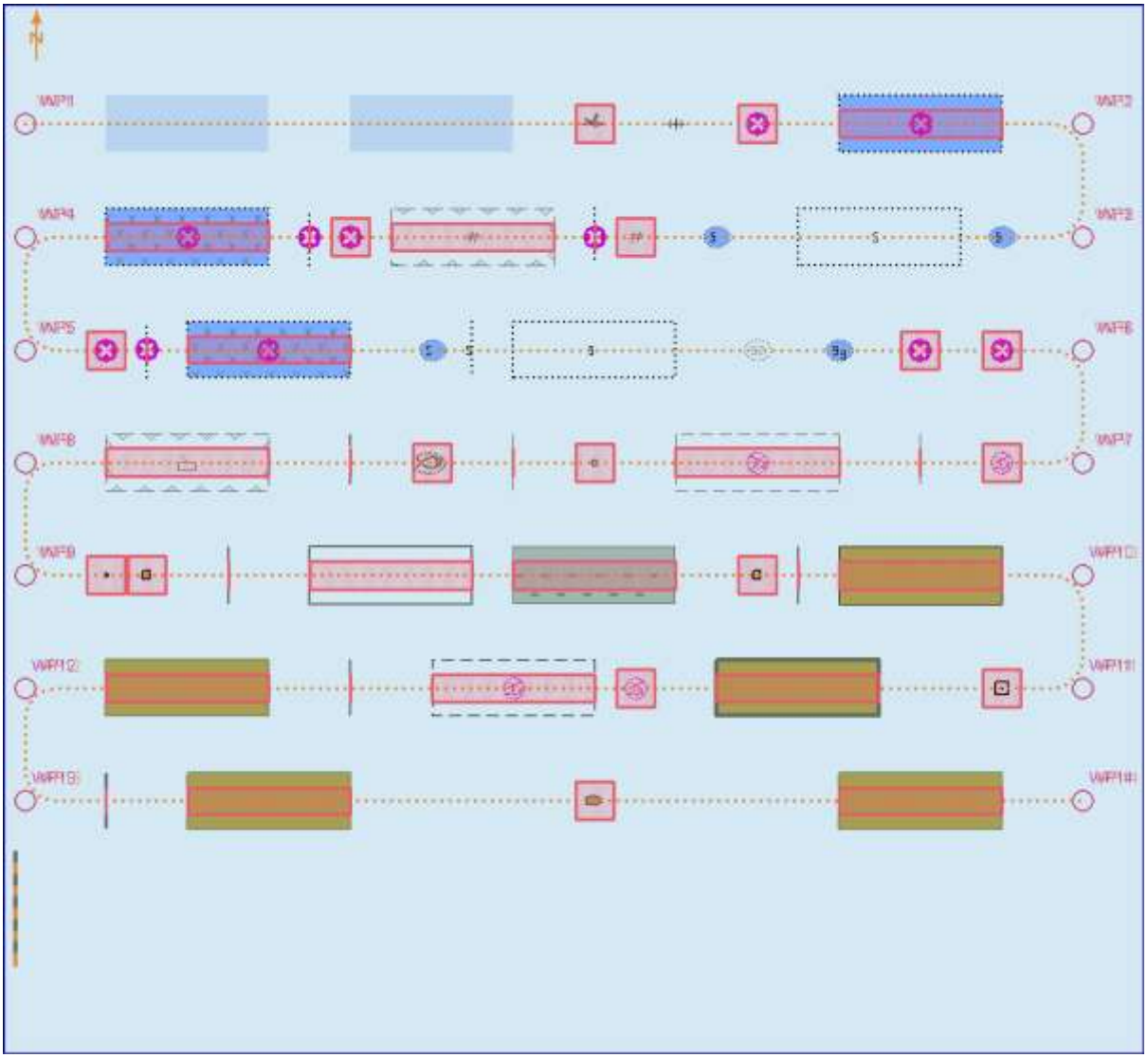
An example of Planned Route with highlighted indications, Scale 1:200 000, Only chart AA2TEST6 loaded



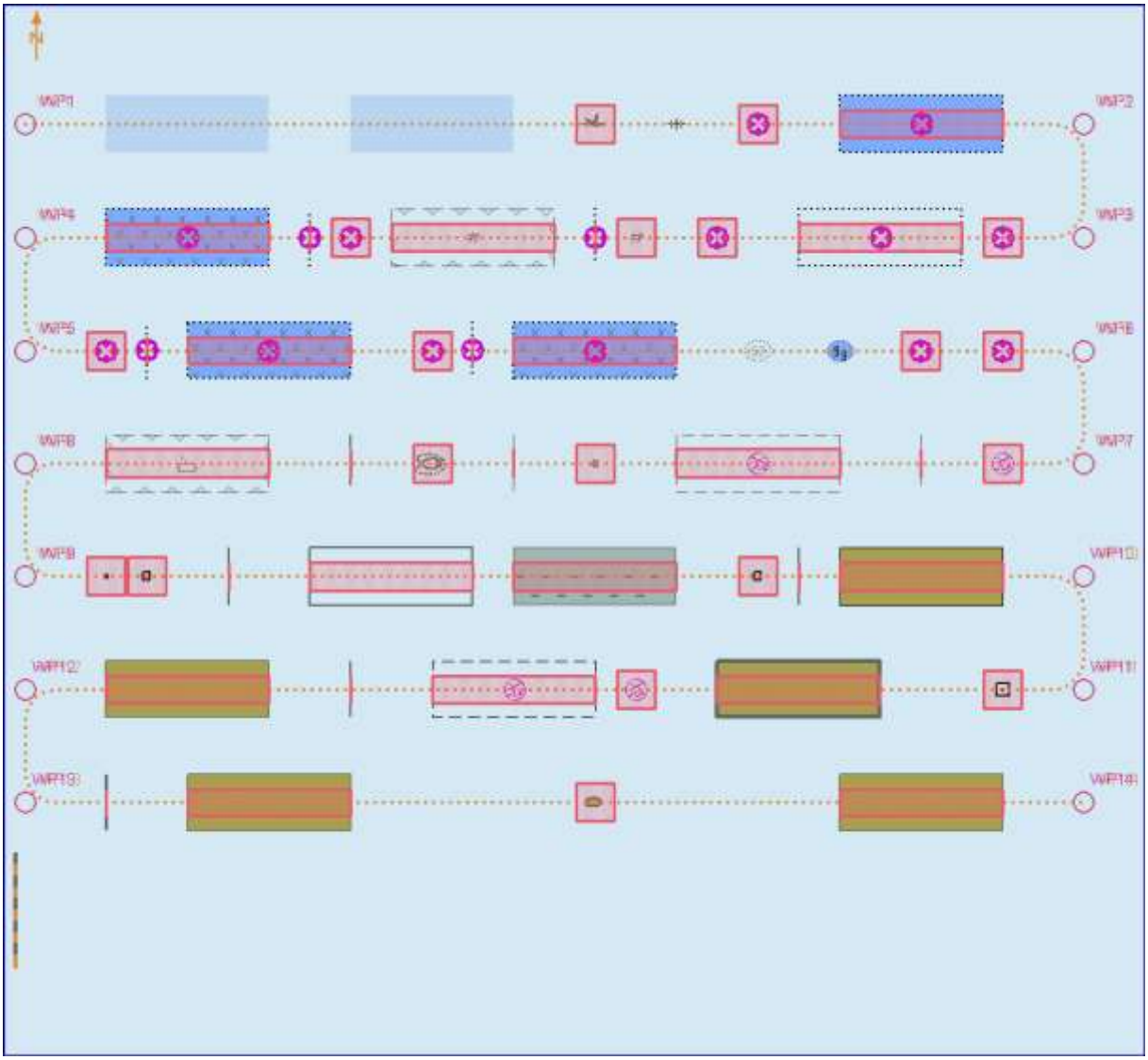
An example of Planned Route with highlighted indications, Scale 1:200 000, All test charts loaded, chart AA2TEST6 visible, but all alerts indicated from largest scale available (i.e. from underlying AA3TESTx charts)



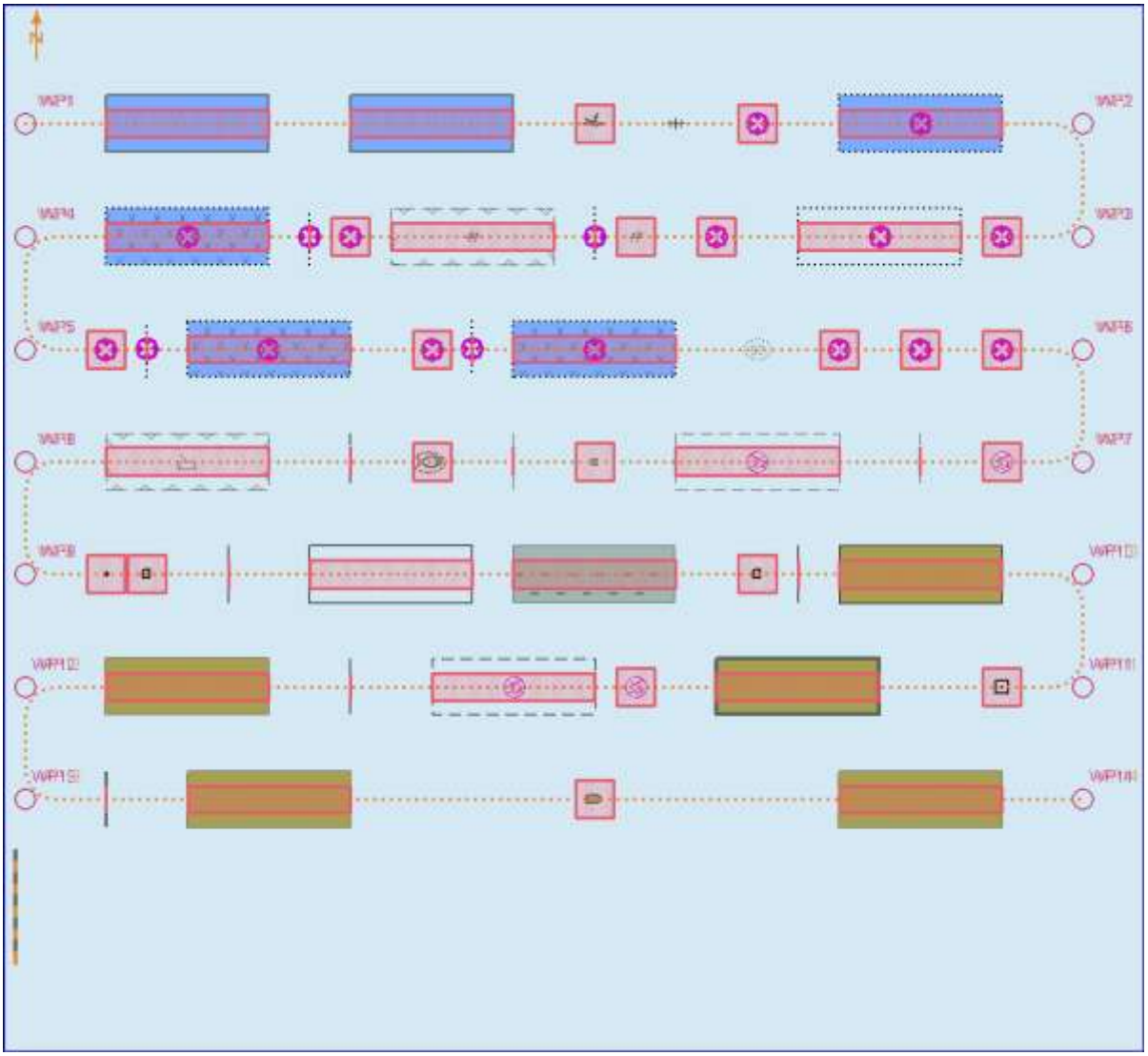
Safety contour 0 m, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)



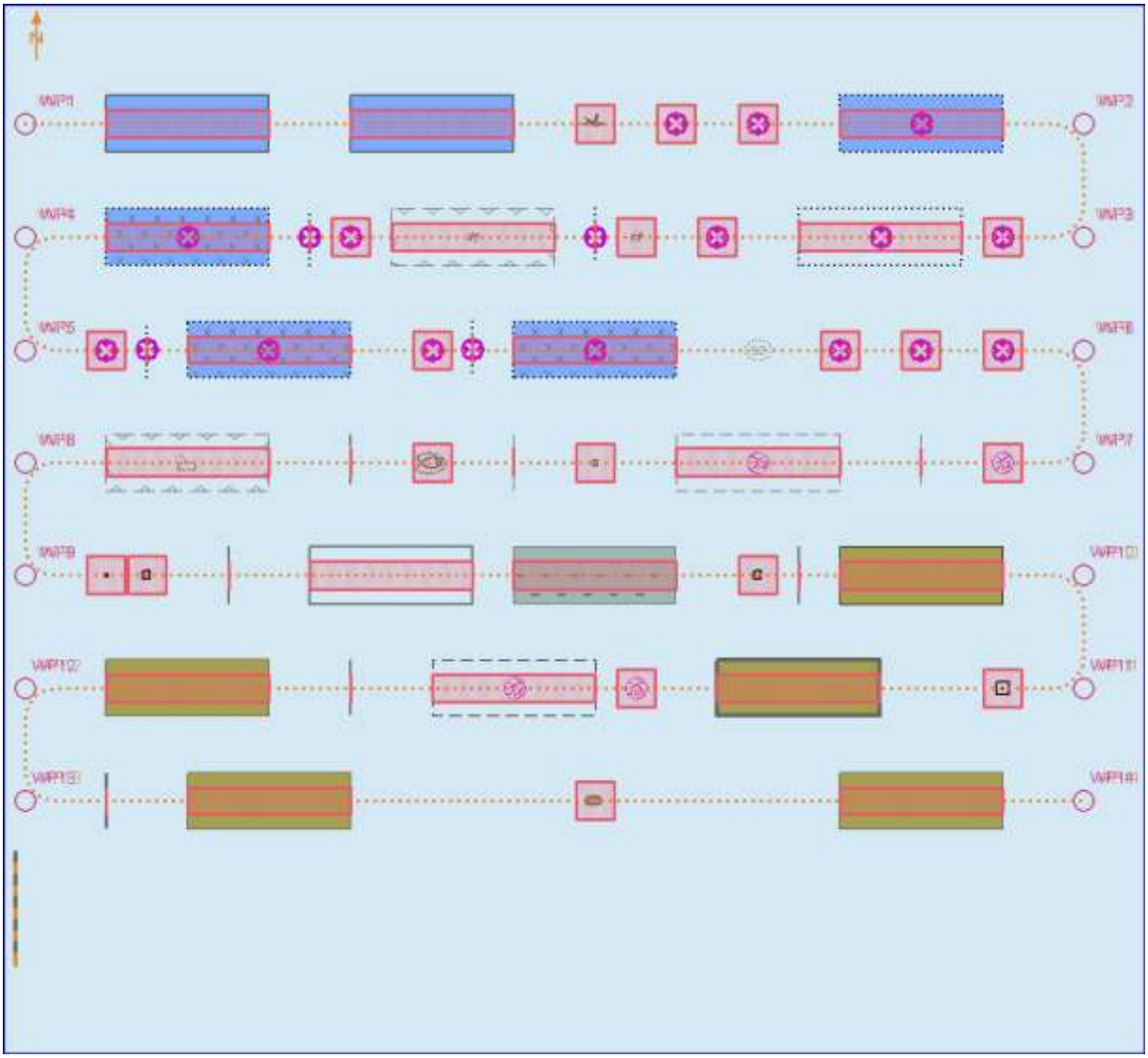
Safety contour 2 m, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)



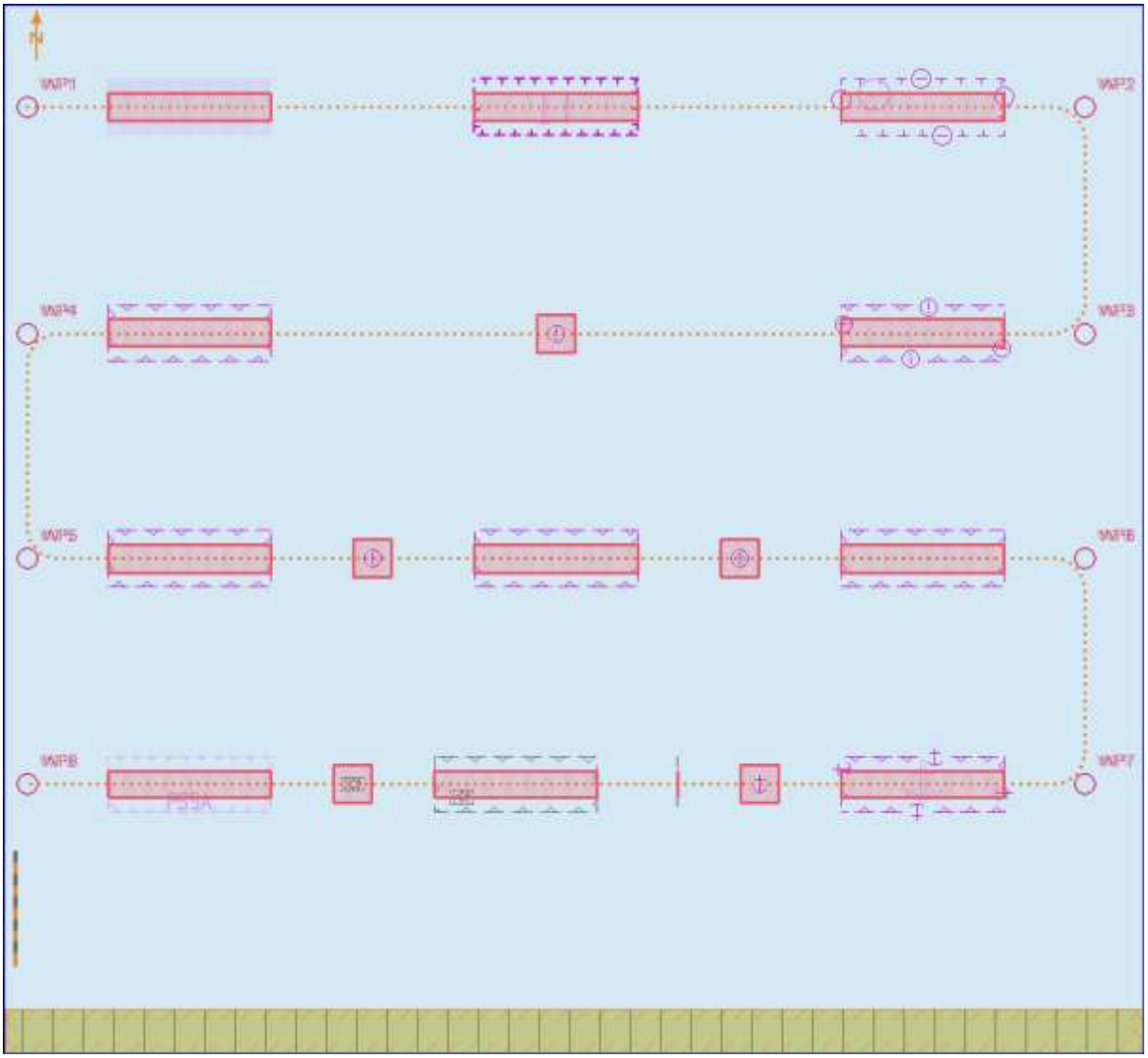
Safety contour 5 m, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)



Safety contour 10 m, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)



Safety contour 21 m, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)



All areas for which a special conditions exists, an example of Planned Route with highlighted indications (note that this example is from an older draft of this test data set)