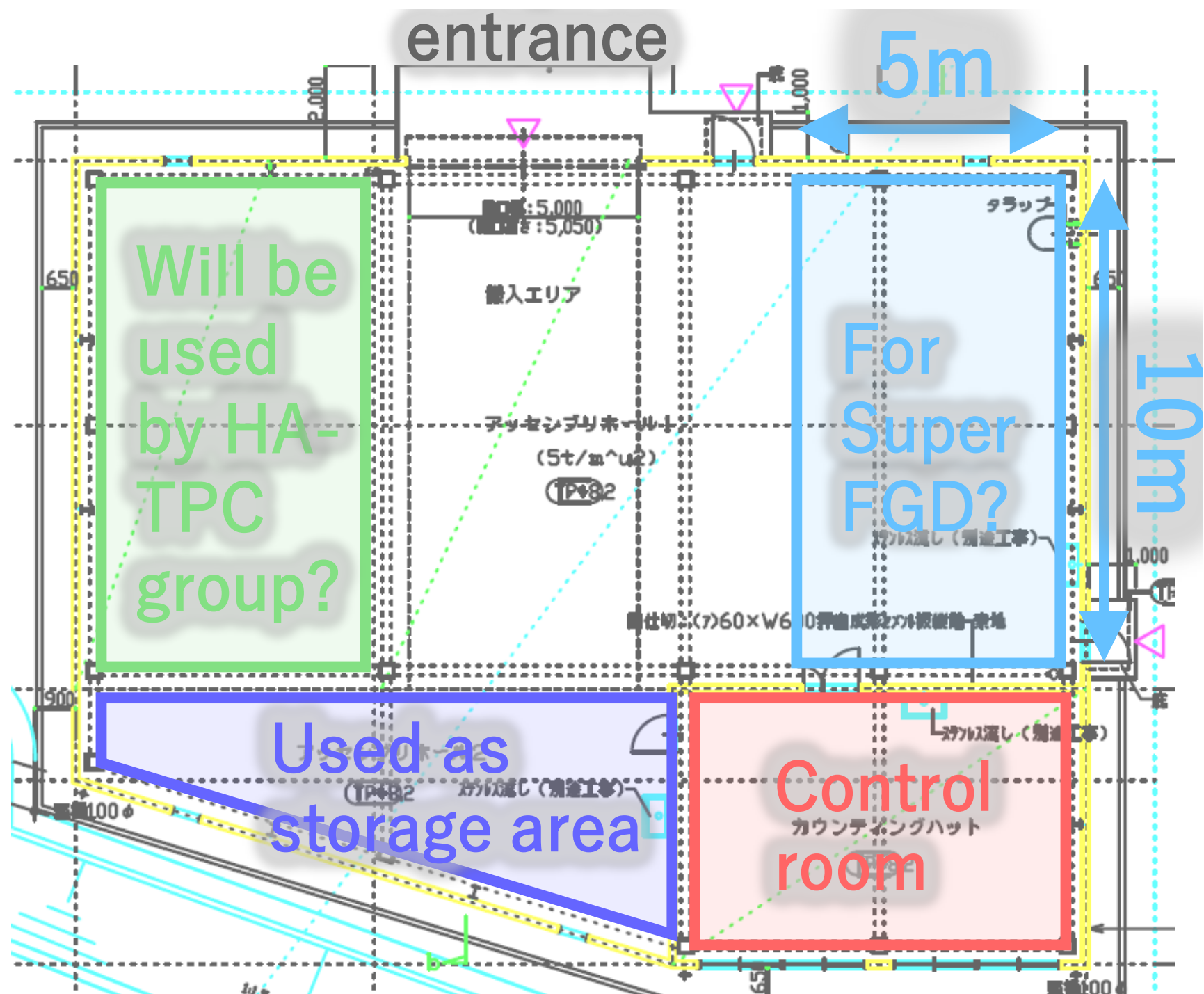


Preliminary investigation of the assembly space in J-PARC

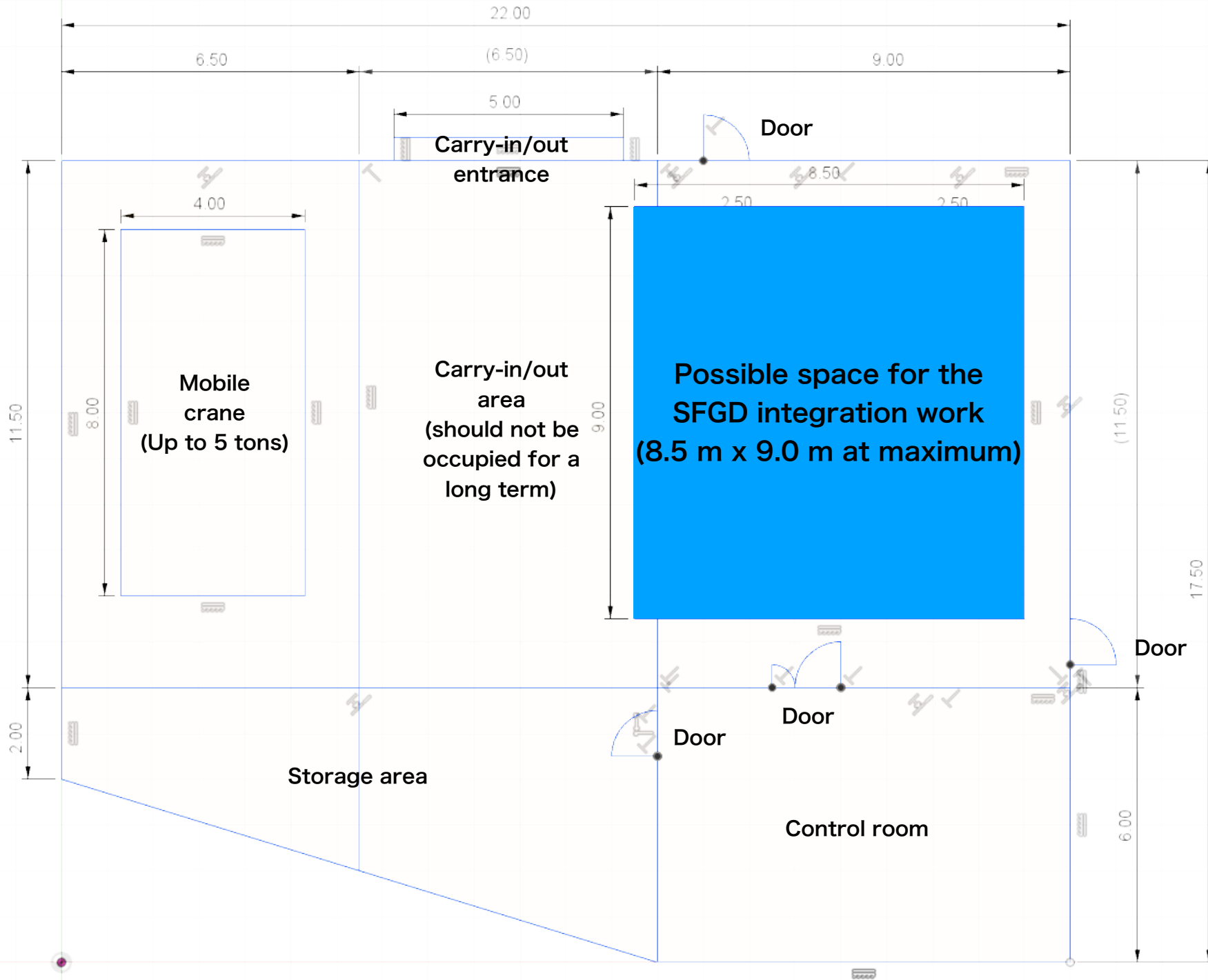
25 January 2021

Tsunayuki Matsubara

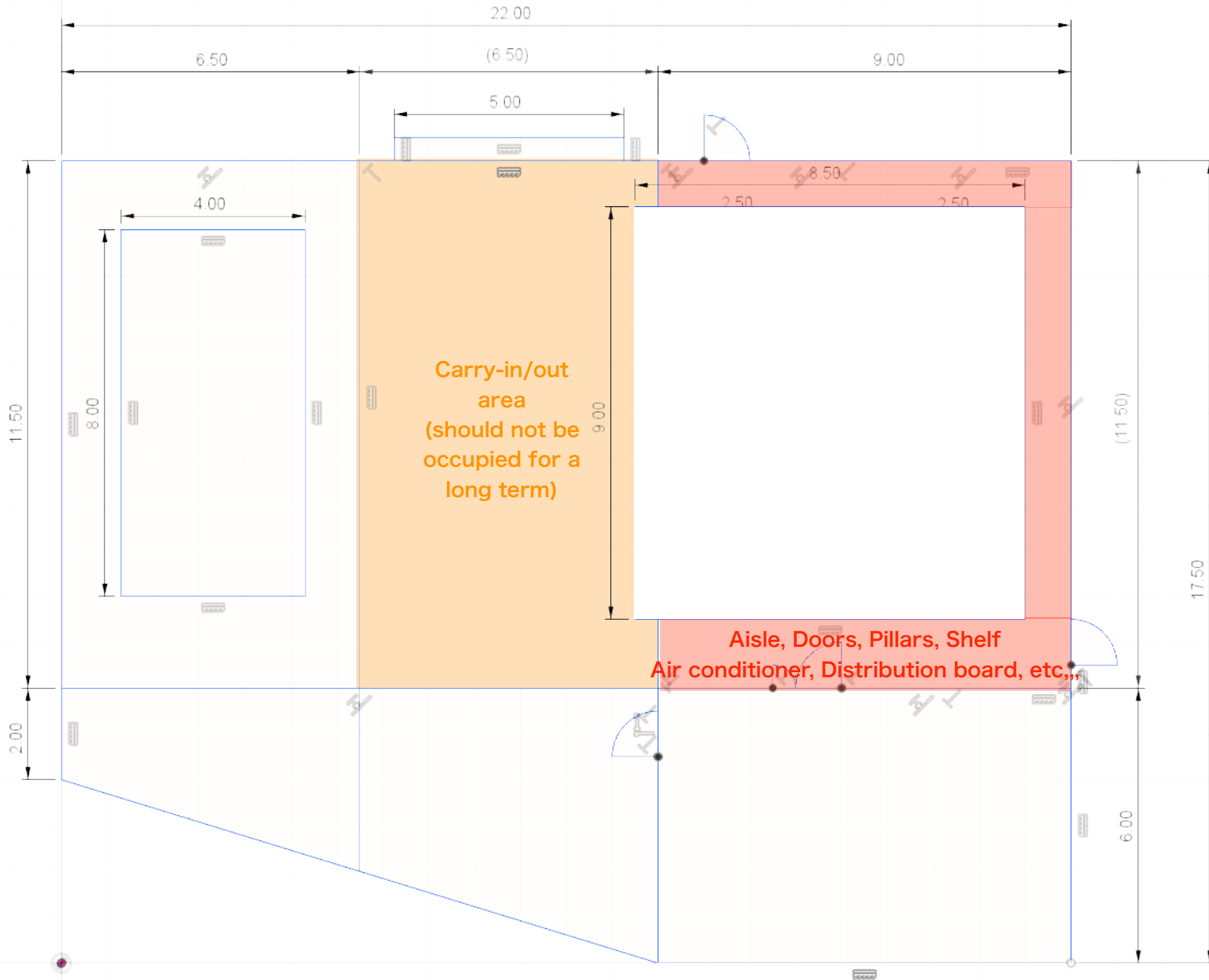
From Kikawa-san's slide (16 Nov. 2020)



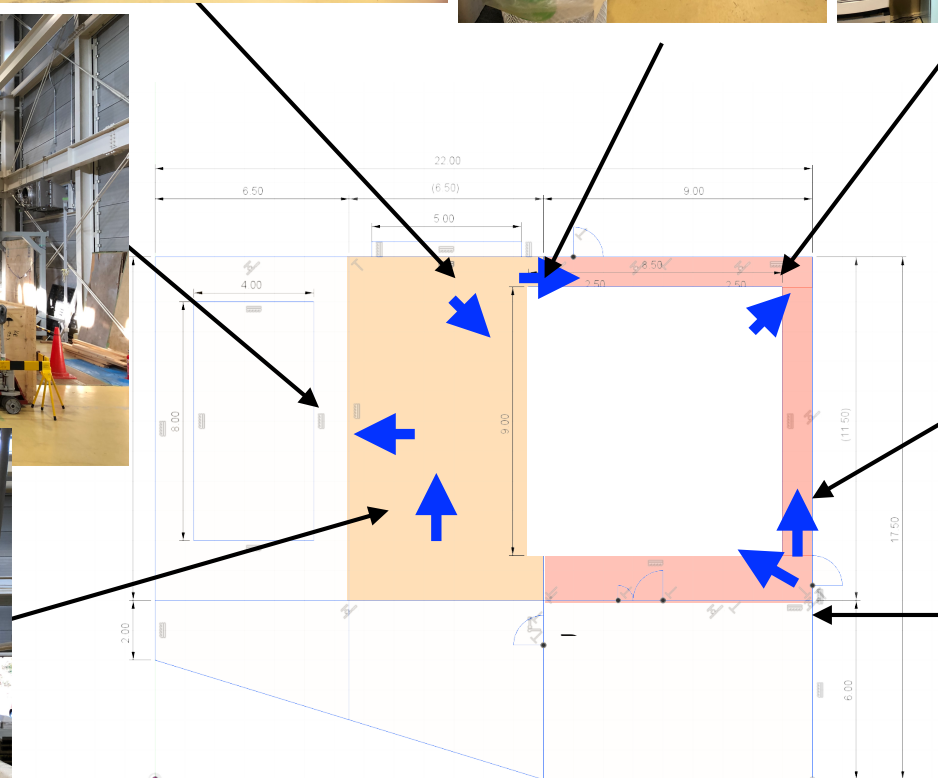
Updates (My own investigation, not yet discussed with Tsukamoto-san)



Space not available or restricted



Photos



From A. Shaikovskiy's slide (11 Nov. 2020)

Dimensions of the detector assembly room Stage 1 - CERN

1 workbench for preparing detector layers -
size 2500 x 2500 mm

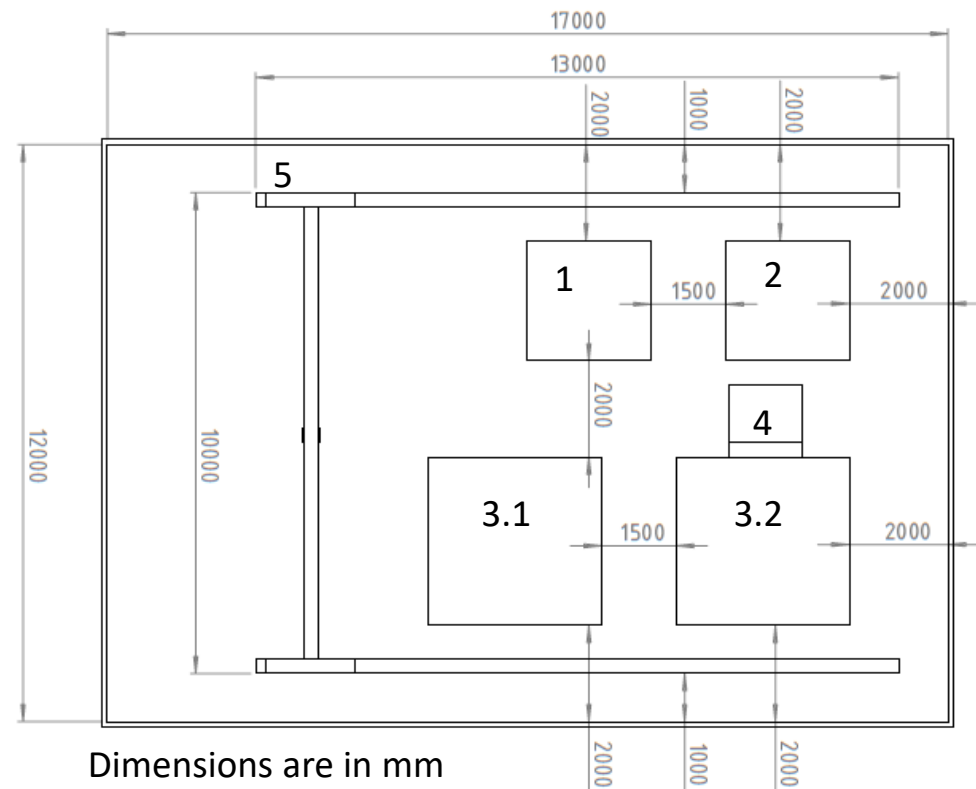
2 transport box with an array of detector cubes
- size 2500 x 2500 mm

3.1 SFGD platform - support system - size 2500
x 2500 mm

3.2 SFGD platform - top access system - size
4000 x 4000 x 3000 mm → **Updated (Next page)**

4 step ladder - size 1500 x 1000 x 3000 mm

5 cathead



Dimensions are in mm
Ceiling height not less than 5 m

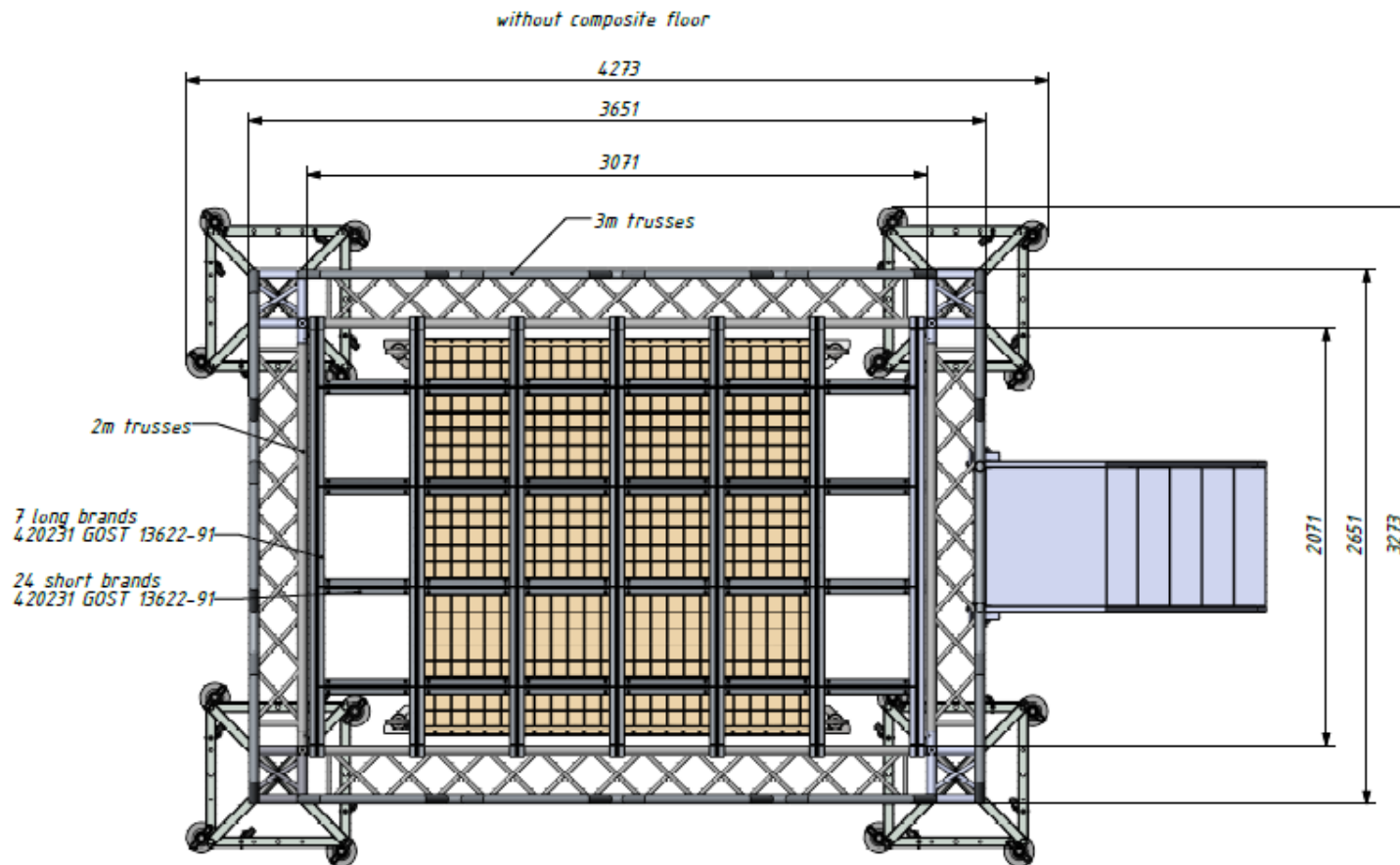
The cathead will be replaced with the mobile crane if J-PARC.

From A. Shaikovskiy's slide (30 Nov. 2020)

Platform for work on the J-PARC site

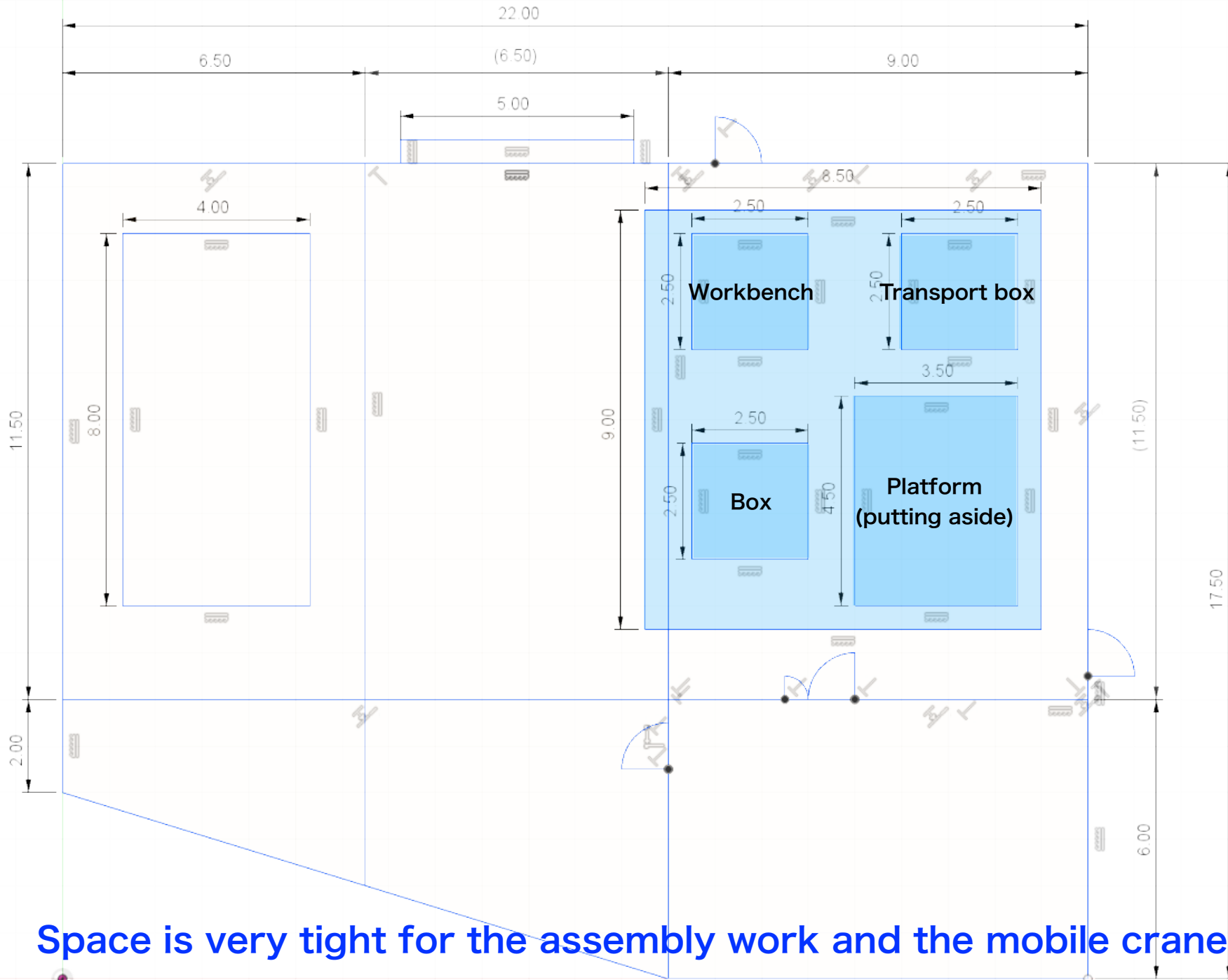
dimensions in mm

Top view



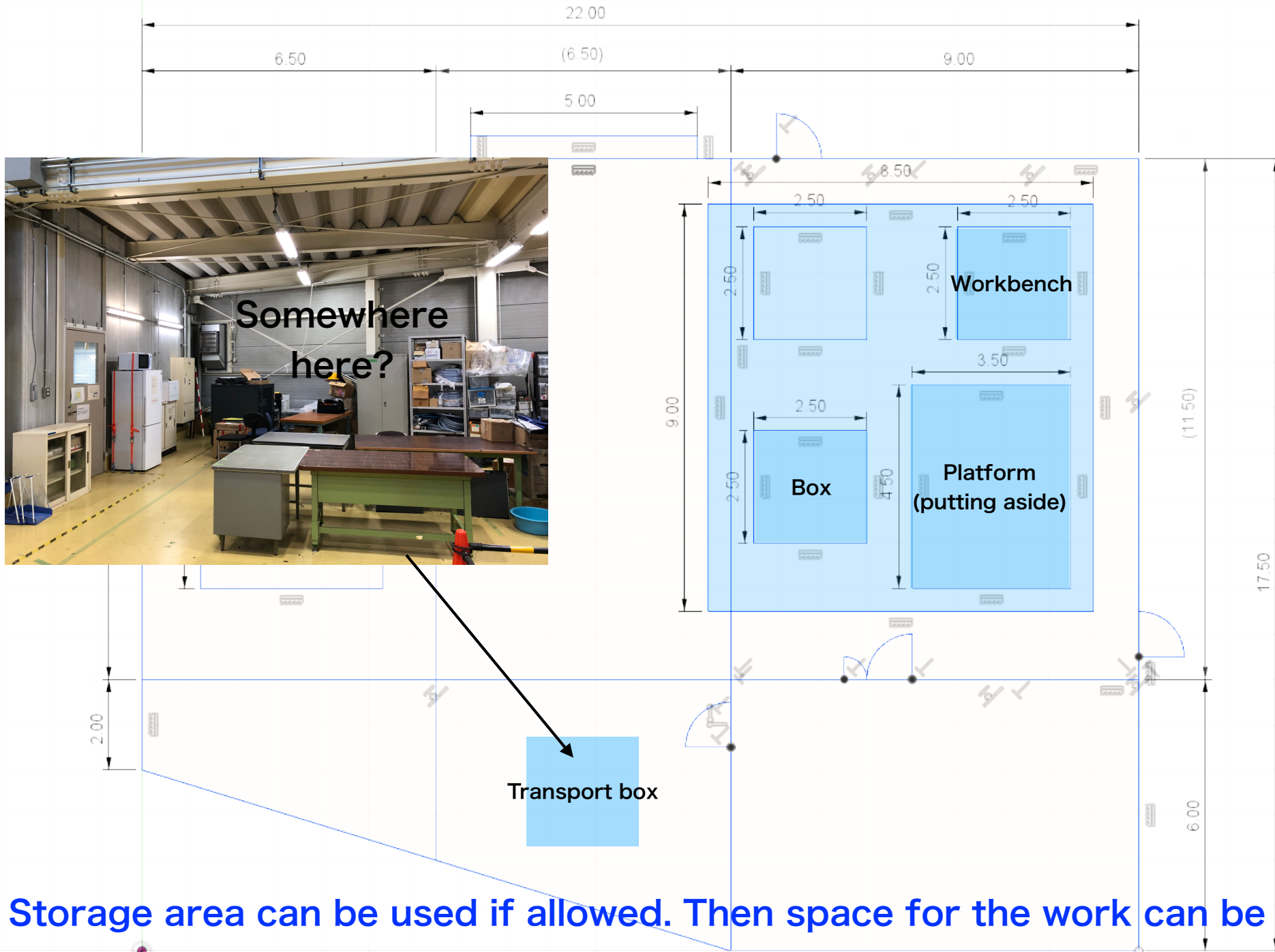
Let's take 4500 x 3500 for now. Any other updates?

Possible layout - 1



Space is very tight for the assembly work and the mobile crane.

Transport box at the storage area?



Storage area can be used if allowed. Then space for the work can be larger.

Transport box in NM?



From NM to NA

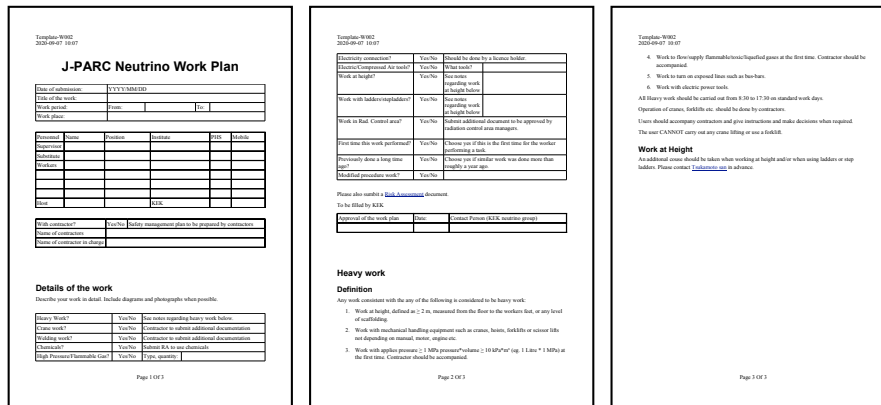


Ref.) Document required by J-PARC

ND280 Safety committee, Type of work

<https://www.t2k.org/comm/sc>

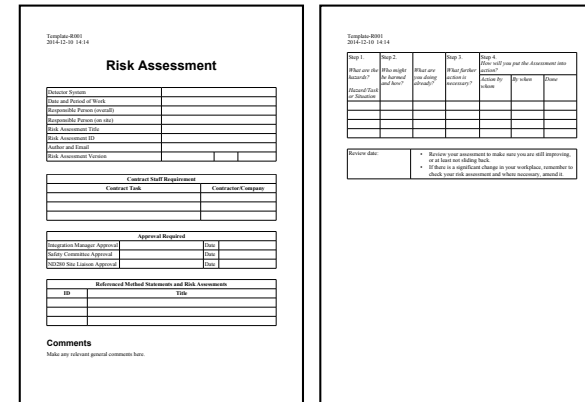
Work plan form



The image shows a three-page form titled "J-PARC Neutrino Work Plan".

- Page 1 (OF 3):** Contains header information (Template #W02, 2020-04-07 10:07), form title, and a table for work details. Fields include: Date of submission (YYYYMMDD), Title of the work, Work period (From, To), Work place, and a table for personnel (Name, Position, Institute, JRC, Mobile).
- Page 2 (OF 3):** A checklist of safety questions. Questions include: "Electricity connection?", "Work at height?", "Work with ladder/scaffold?", "Work in dust/Control area?", "First time this work performed?", "Previously done a long time?", and "Unusual potential risk?". Each question has a "Yes/No" column and a "Should be done by a license holder" column. There is also a section for "Heavy work Definition" with three numbered criteria.
- Page 3 (OF 3):** Contains instructions on how to fill in the form, including a section for "Contract Staff Requirements" and "Approval Required" (with fields for Construction Manager Approval, Safety Committee Approval, and J-PARC Site License Approval).

Risk assessment form

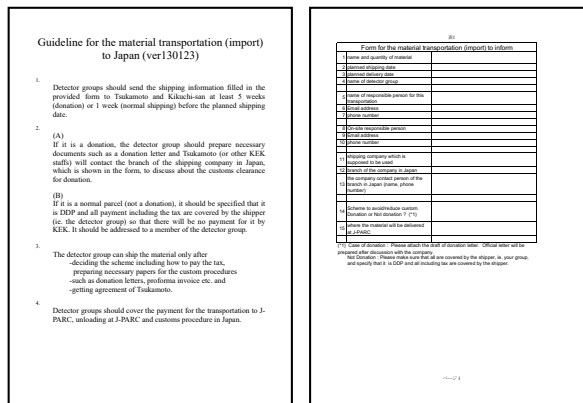


The image shows a form titled "Risk Assessment".

- Header:** Template #R01, 2014-12-01 14:14, and title "Risk Assessment".
- Form Body:** A table for risk assessment with columns: Step 1 (Risk on the basis?), Step 2 (Risk on the basis? Is hazard and harm?), Step 3 (Risk on the basis? Is hazard and harm?), Step 4 (Risk on the basis? Is hazard and harm?). Below this is a section for "Contract Staff Requirements" and "Approval Required" (with fields for Construction Manager Approval, Safety Committee Approval, and J-PARC Site License Approval).
- Comments:** A section at the bottom for "Comments" with the instruction: "Make any relevant general comments here."

Guideline to transport to J-PARC

<https://www.t2k.org/nd280/facility/applicationforms>



The image shows a document titled "Guideline for the material transportation (import) to Japan (ver130125)".

- Text:** Provides instructions for detector groups regarding shipping information, including donation procedures and payment requirements.
- Table:** A table titled "Form for the material transportation (import) to Japan" with columns for Name and quantity of material, Importation date, and other details. It includes a checklist for required documents.
- Page Number:** "Page 2 of 2" is visible at the bottom.

Work schedule form



The image shows a work schedule form.

- Header:** "Name of Work" and "2010 Aug. work schedule".
- Table:** A grid showing work schedule for a period from 2010-08-01 to 2010-08-31. The grid has columns for days of the week and rows for different work items.
- Table:** A table below the grid listing work items with columns: Name, Start, End, and other details.

Please let me know the space for cube+box assembly is enough or not.

If enough, I will talk Tsukamoto-san to ask for his opinion.