

Status of the GERDA building, Water Tank & infrastructures

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S.Gazzana, Gerda Meeting, LNGS,
Nov. 5-7, 2007

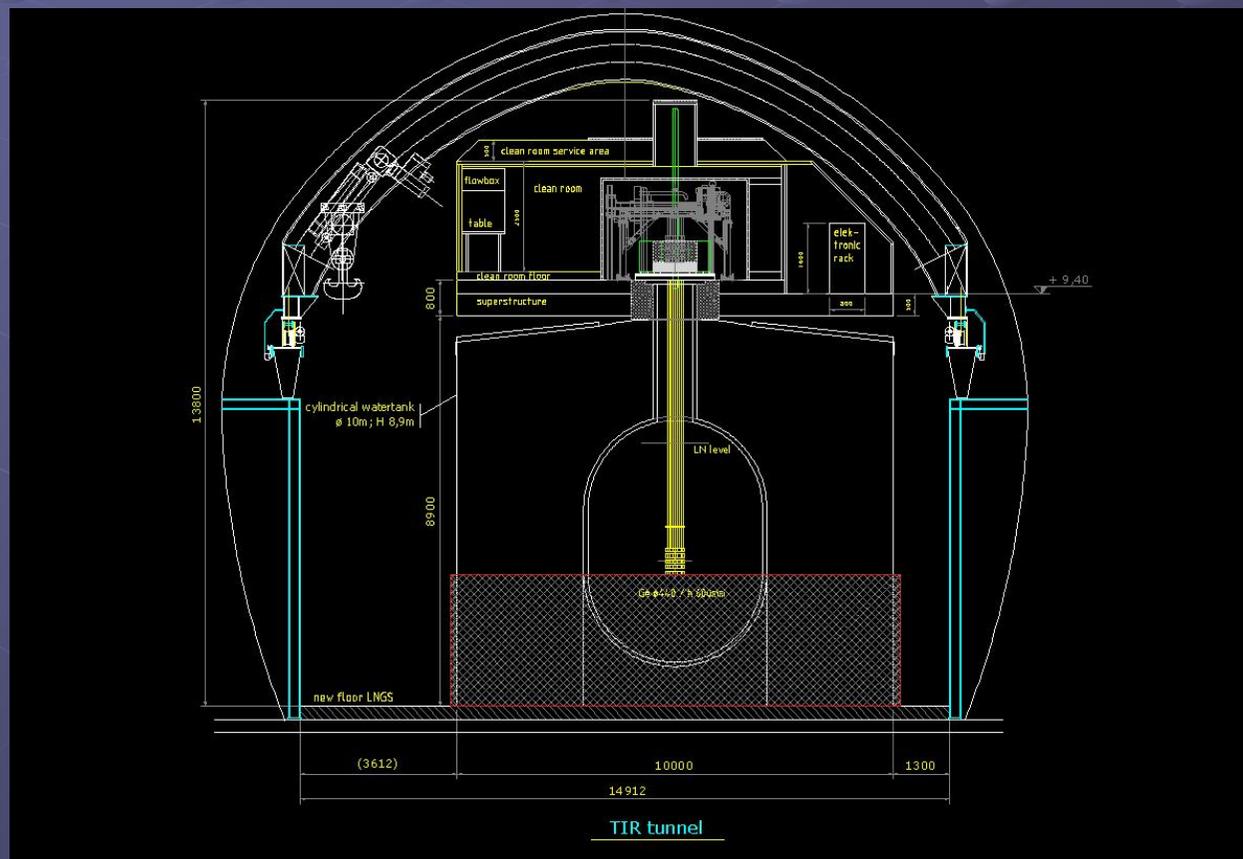
Status of the WT

- Works started July 2007;
- Bottom plates already welded and tested;
- Re-starting of the activities: after arrivals of the cryostat

Potential problem with the Company due possible delay of the cryostat installation.

Superstructure

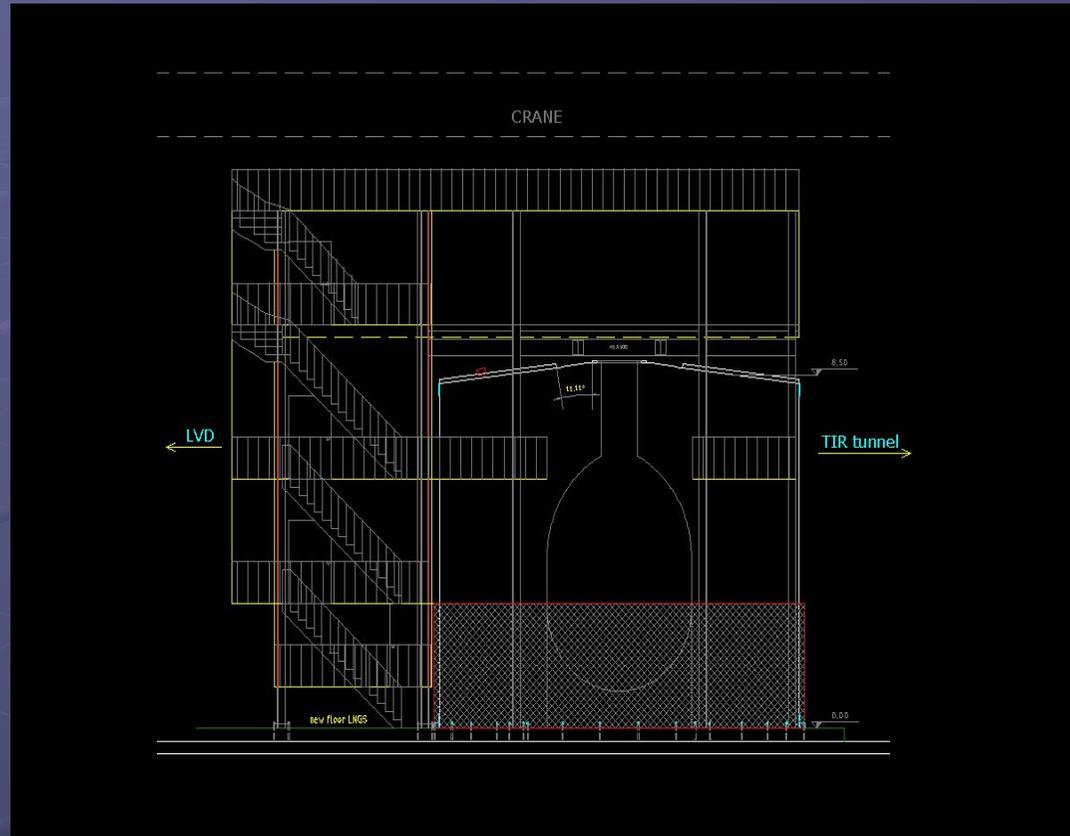
Superstructure (SS) = metallic building for facilities, control and supervision of the detector.



SS consists in 3 floors plus a platform for the lock system and its facilities (clean room and so on..)

Tender closed, and contract signed by the Company.

Work will start after the completion of the Water Tank



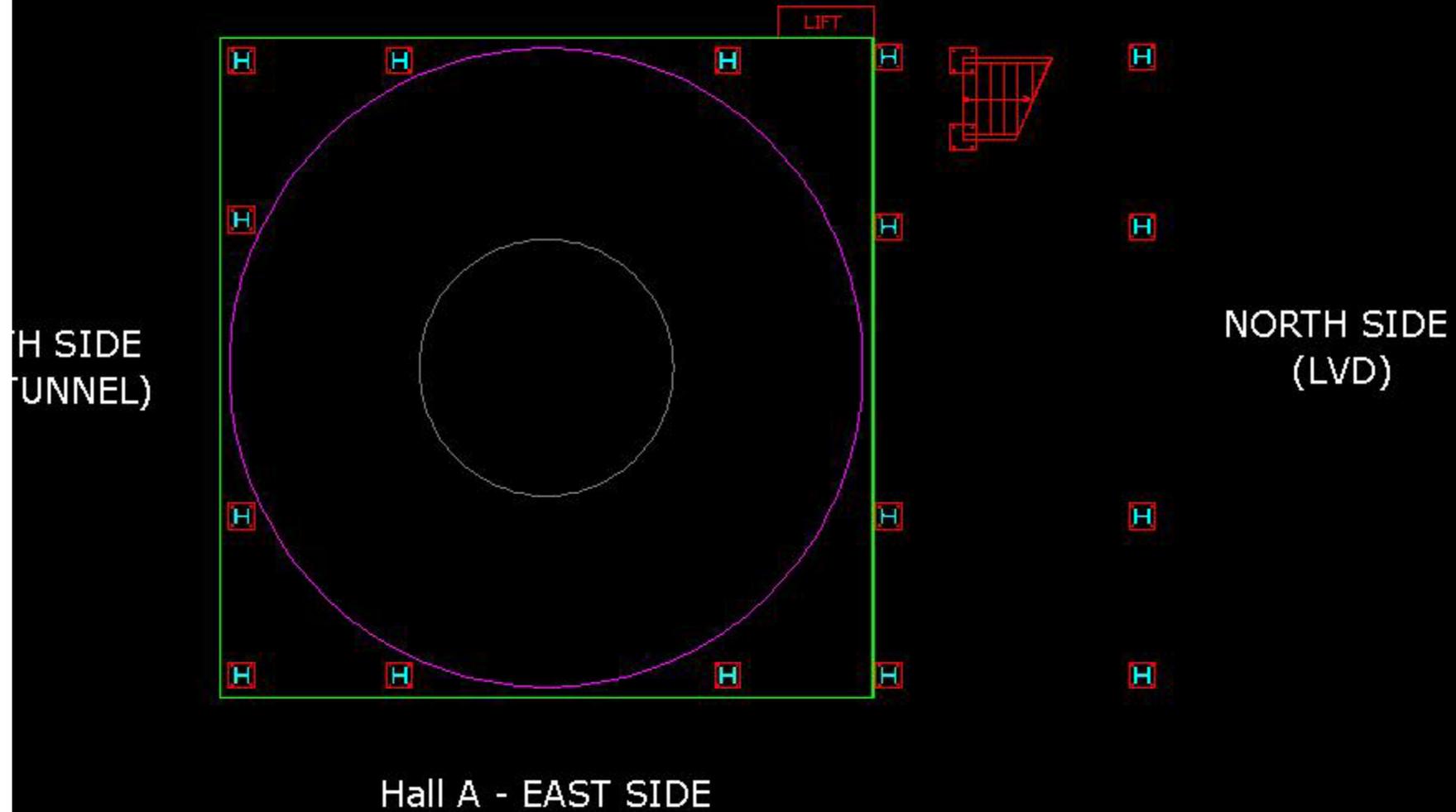
● We have to decide the lay out of the floors: each group has to communicate space and facilities needed.

Preliminary layout of the floors

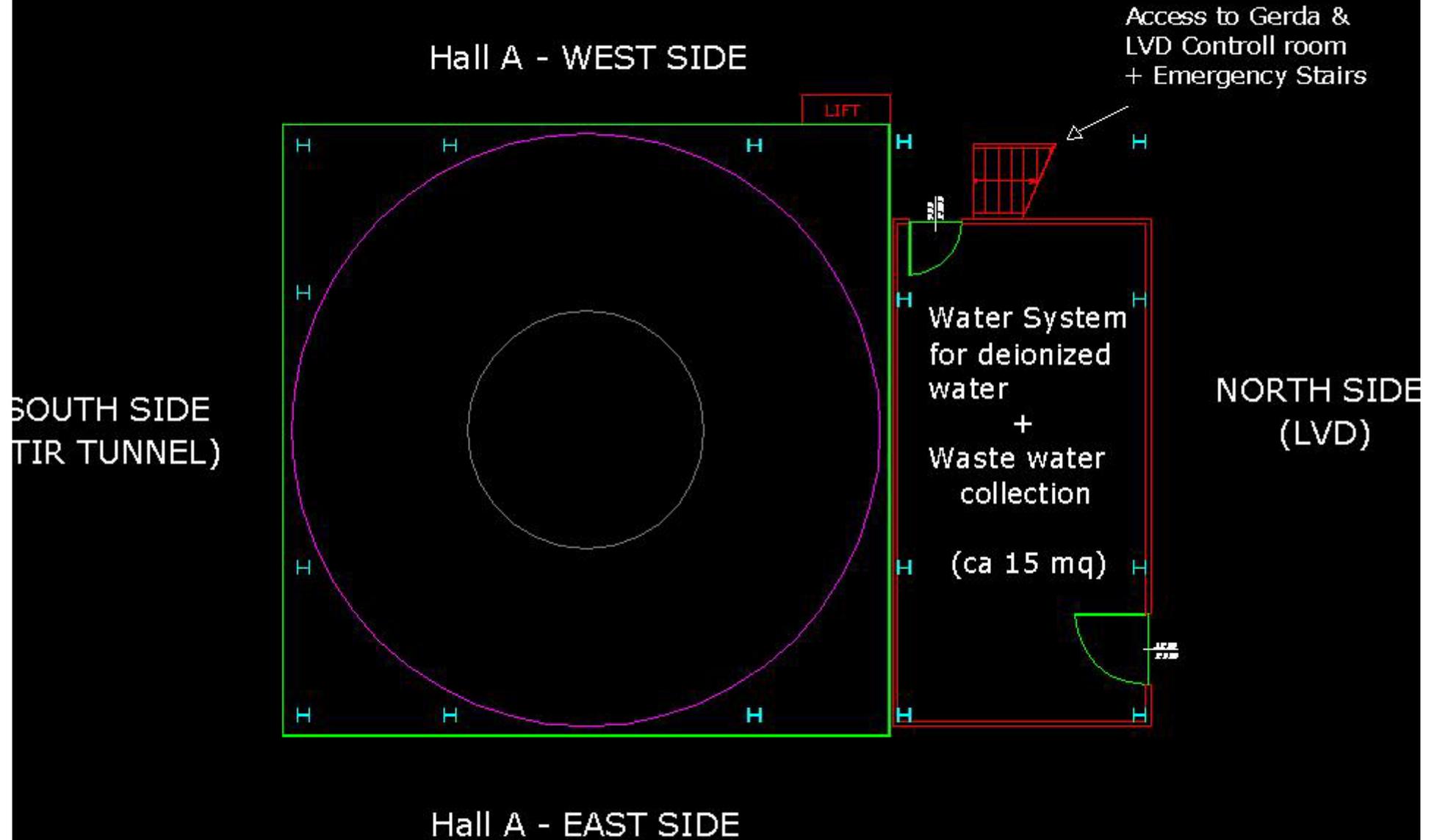
- floor 0
Water System for de-ionized water+ Waste Water collection + ?
- floor 1
LVD control room + GERDA control room + ?
- floor 2
Detector Lab Test + Muon Veto Electronics + ?
- Platform at floor 3
Clean room + Germanium Electronics + HPGe Electronics Servicing Area + Cryogenics
- Roof
Solid Plastic Scintillator Muon Veto?

GROUND FLOOR (level 0,00 m)

Hall A - WEST SIDE



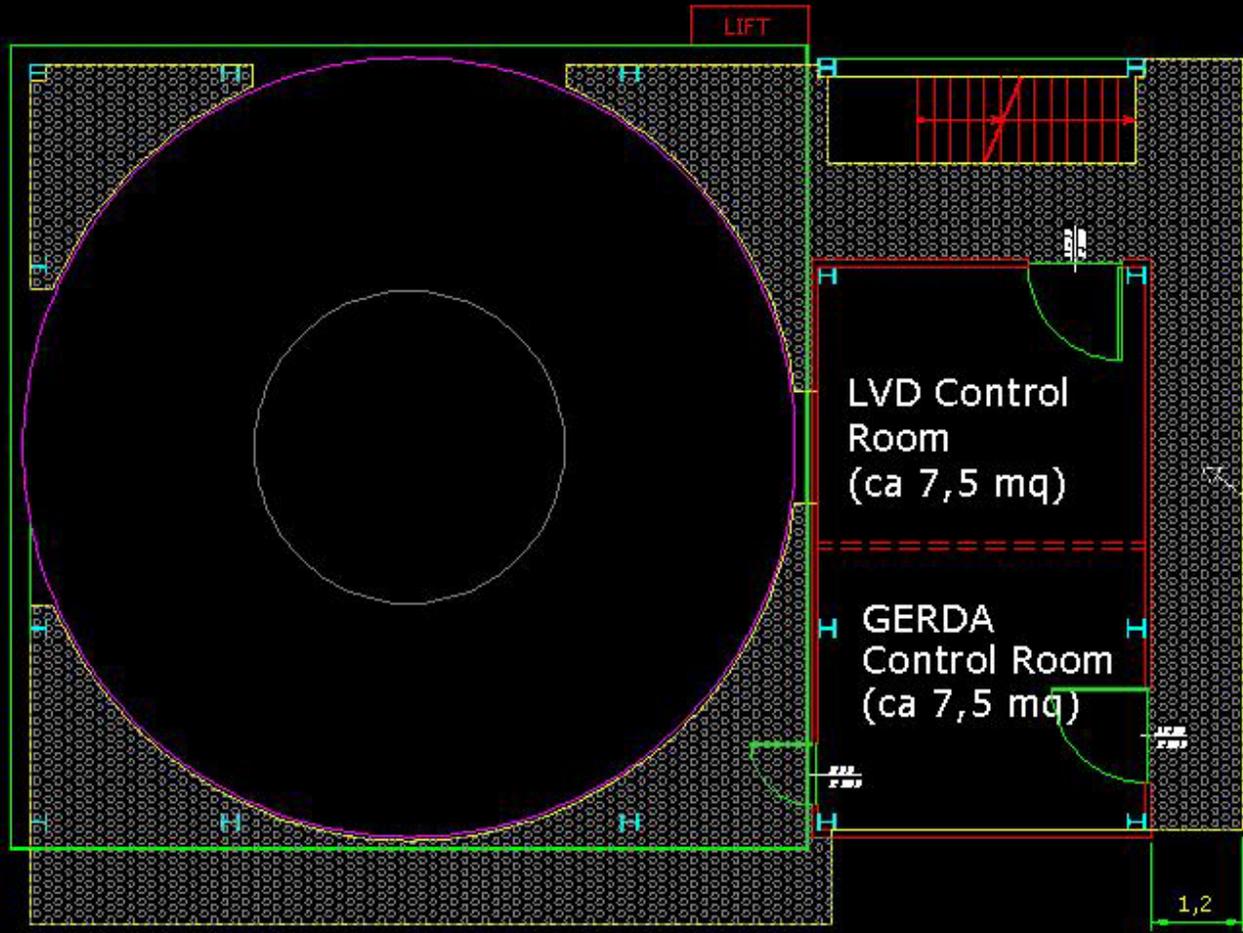
PLAN FLOOR 0 (level +1,00 m)



PLAN FLOOR 1 (level 3,00 m)

Hall A - WEST SIDE

SOUTH SIDE
(TIR TUNNEL)



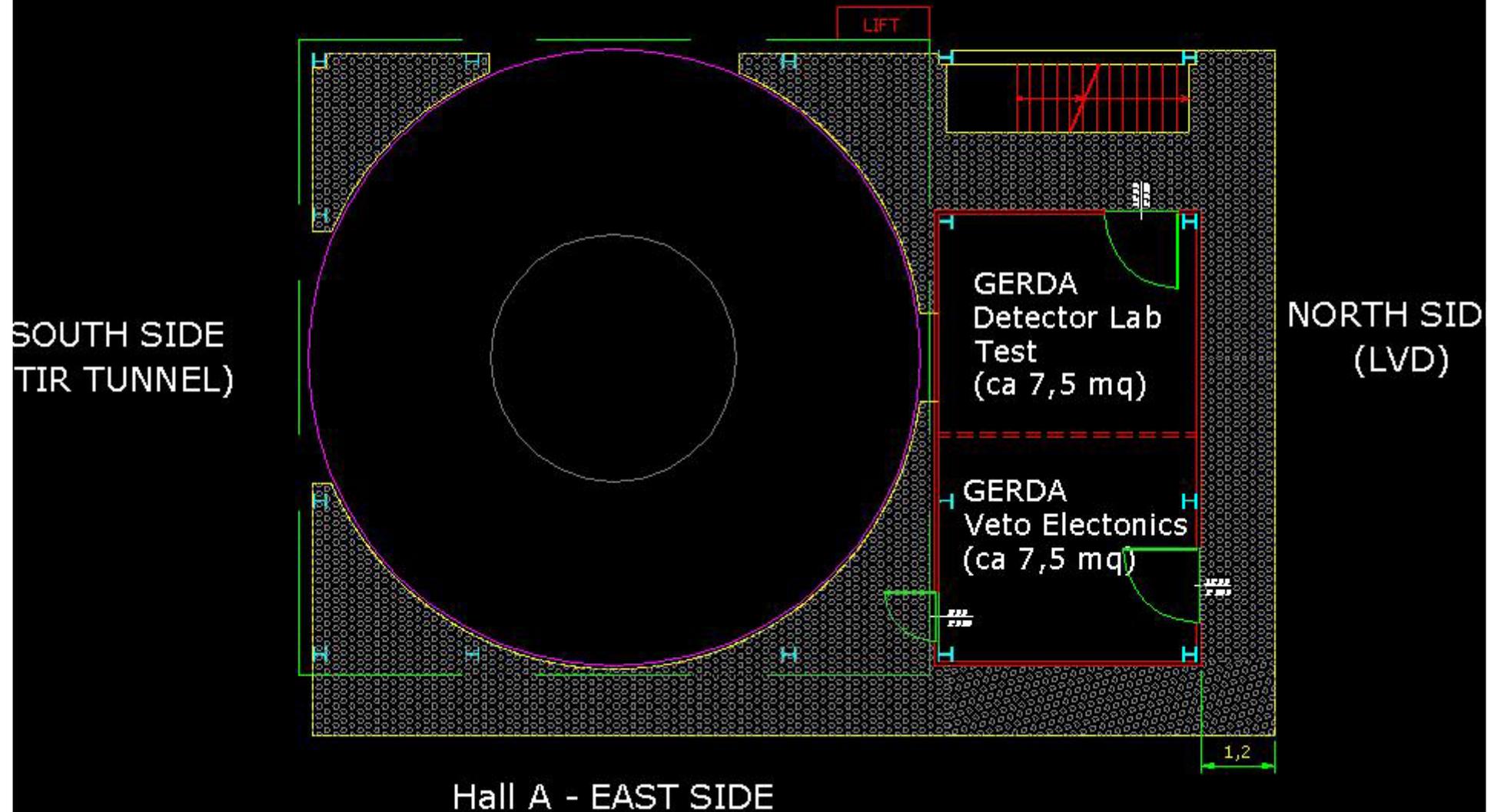
NORTH SIDE
(LVD)

LVD (Building)
Emergency
Exit

Hall A - EAST SIDE

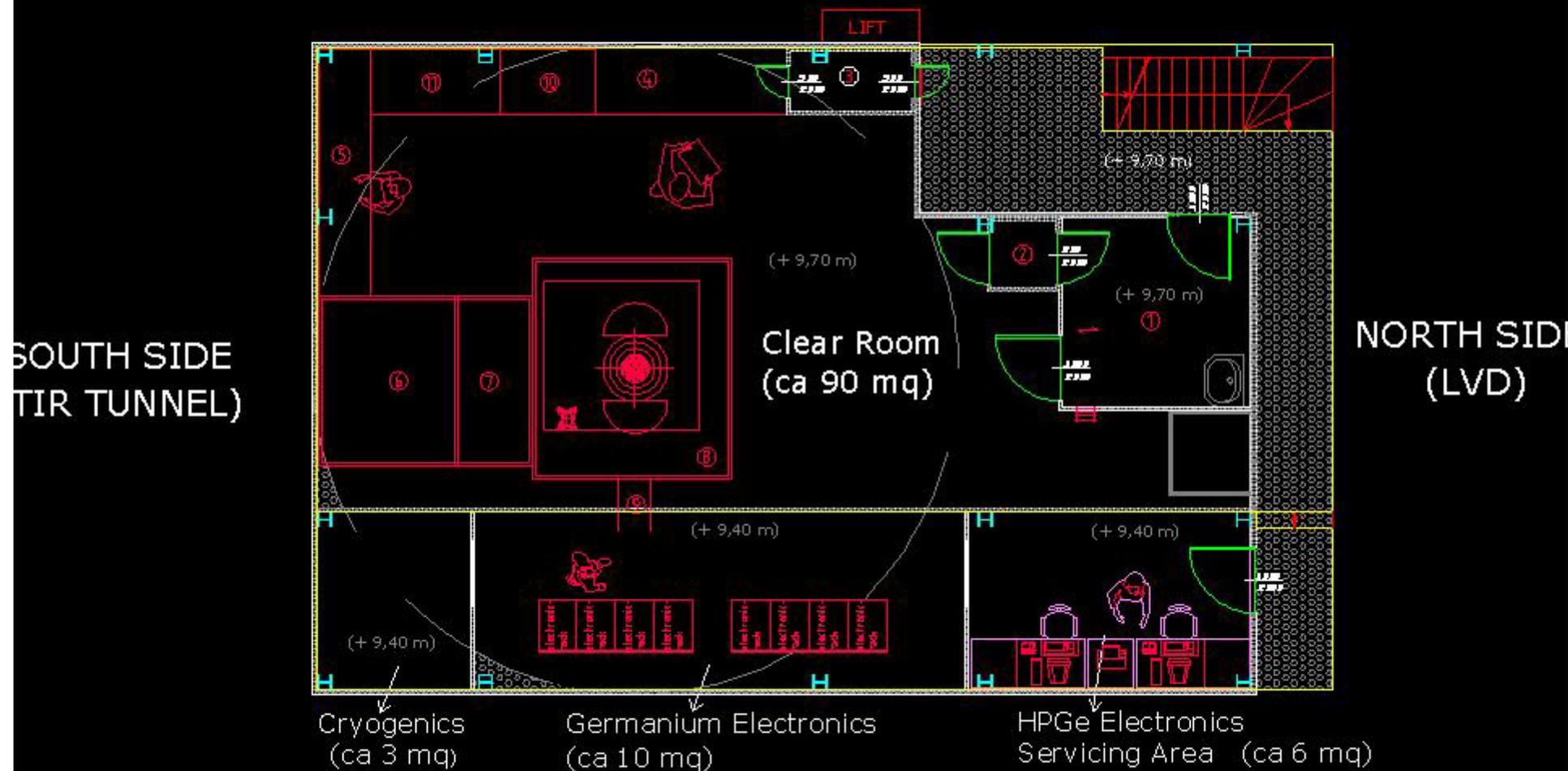
PLAN FLOOR 2 (level +6,00 m)

Hall A - WEST SIDE



PLAN FLOOR 3 (level 9,40/9,70 m)

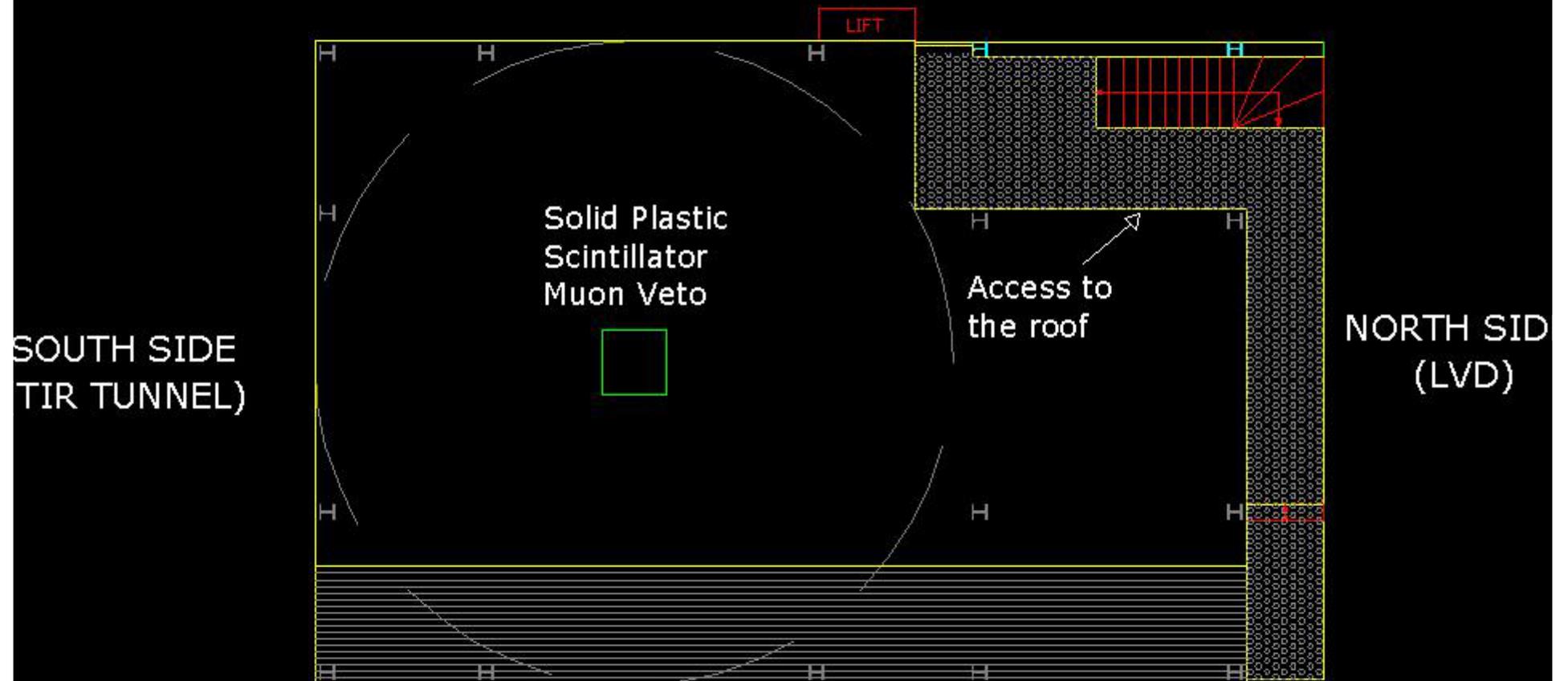
Hall A - WEST SIDE



Hall A - EAST SIDE

ROOF (level +12,45 m)

Hall A - WEST SIDE



Hall A - EAST SIDE

Facilities: list and status

- SuperStructure design ok
- Safety: TVCC, O2 sensors, fire detection: design 70% done!
- Fire existing system: 80% we dont need an automatic one.
- Power supply: design 80% done
- Water connection with LNGS: must be finalised after final decision as regards the water plant (see Marco B. talk)
- Connection with pressurized air system: must be finalised.
- Optical fiber and telephones: under development, a preliminary scheme already exist, must be finalised.
- Air conditioning: it is under studied to have simple and local system for exchange where needed,
- Furniture: missing..
- Others?

General Remarks:

- Inside the collaboration: we have to finalise (as much as we can) the design of the auxiliary plant and the needs of each group
- Interaction with LNGS: it is ok a regards facilities and auxiliary plants, has to be implemented for water discharge and emergency gas exhaust