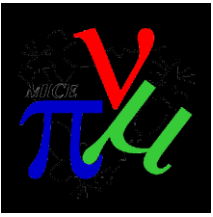


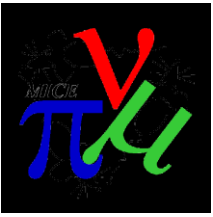
MICE Integration Engineering



Jason Tarrant - STFC

- Contents
 - » Device Interfaces – General
 - » AFC
 - » Spectrometer Solenoids
 - » RFCC
 - » EMR / KL
 - » South Mezzanine (summary)

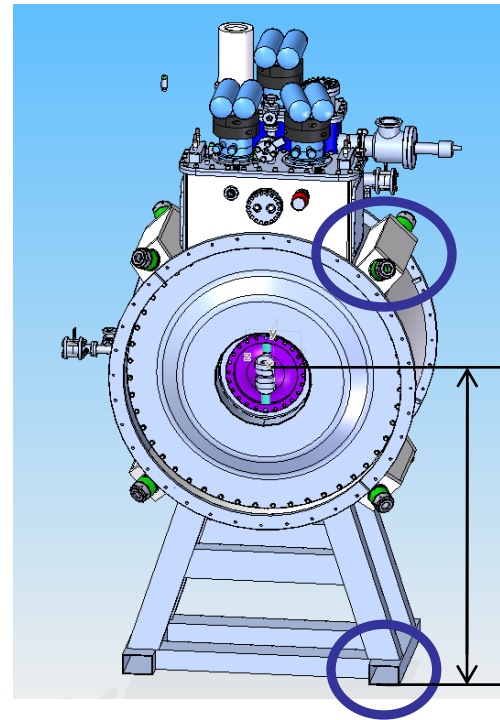
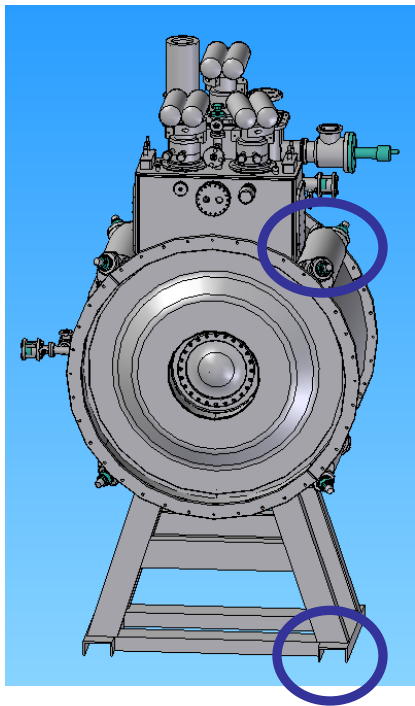
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- AFC

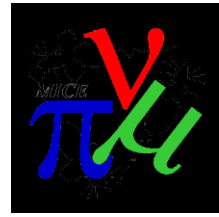
- » Geometry

- Tesla support system modifications = suspension system turrets changed (model received 3/7/11)



1534!
Asked to change
back to 1515

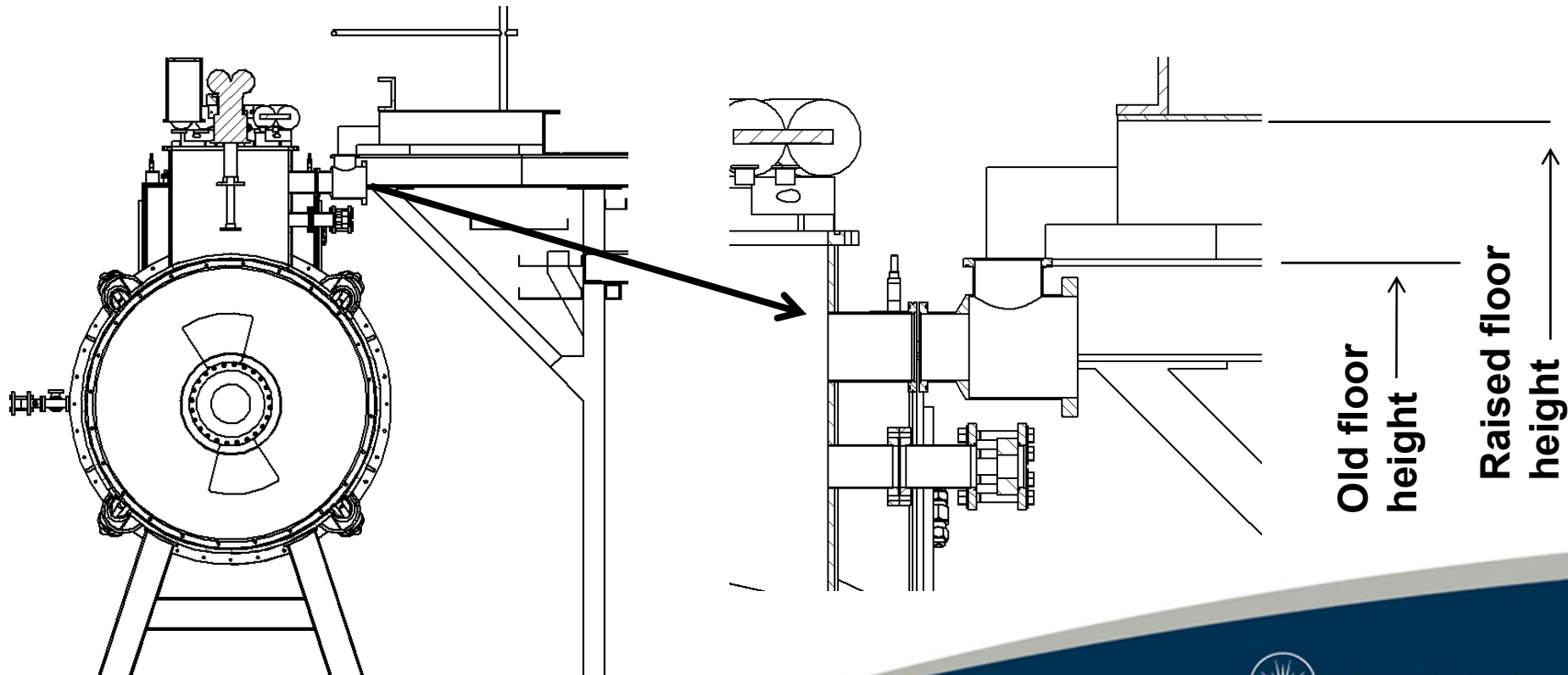
MICE Integration Engineering



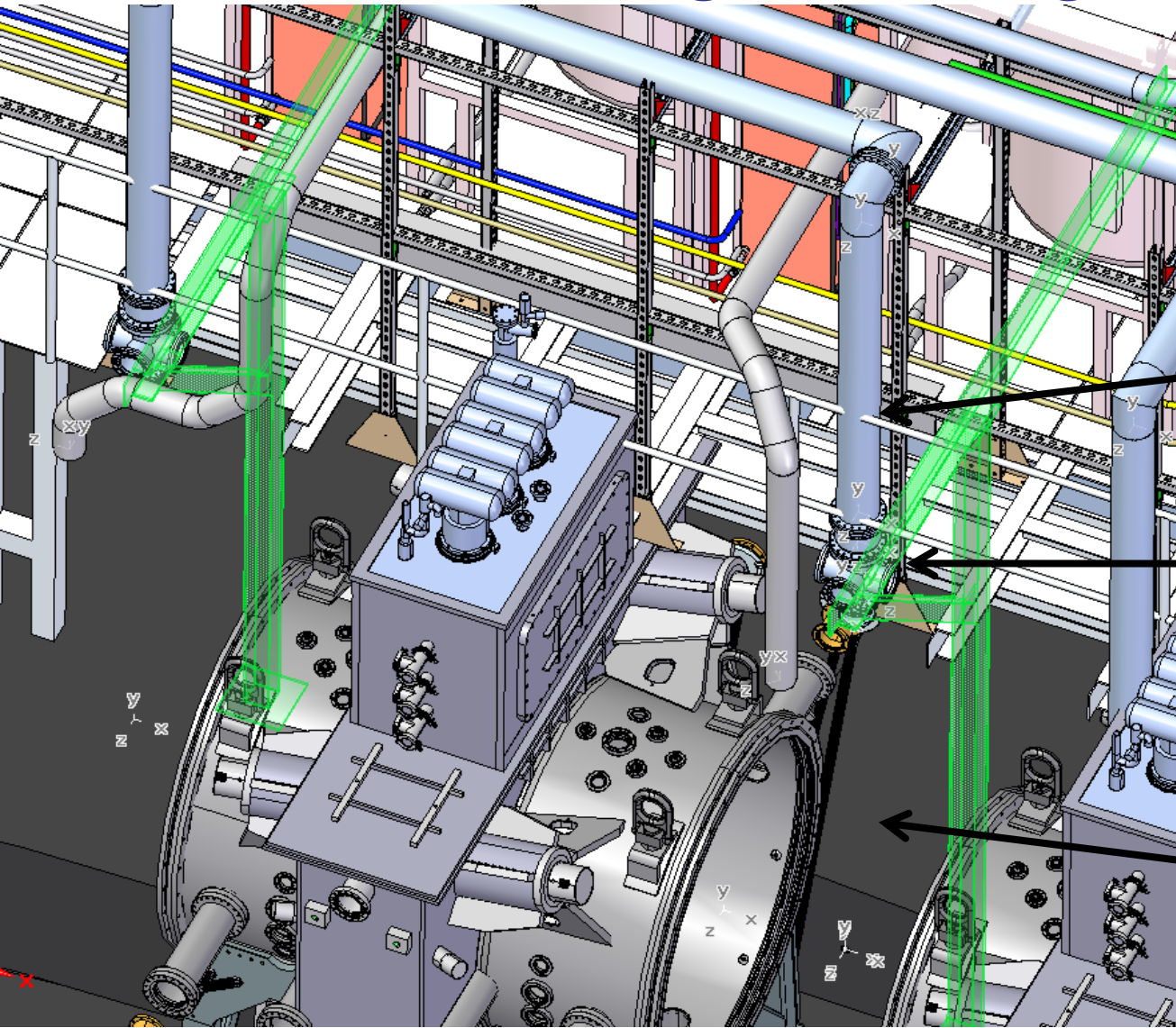
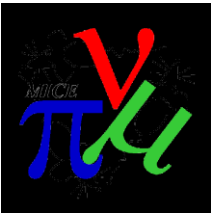
- AFC

- » Geometry

- Hydrogen Safety Vacuum Line clash with South Mezzanine



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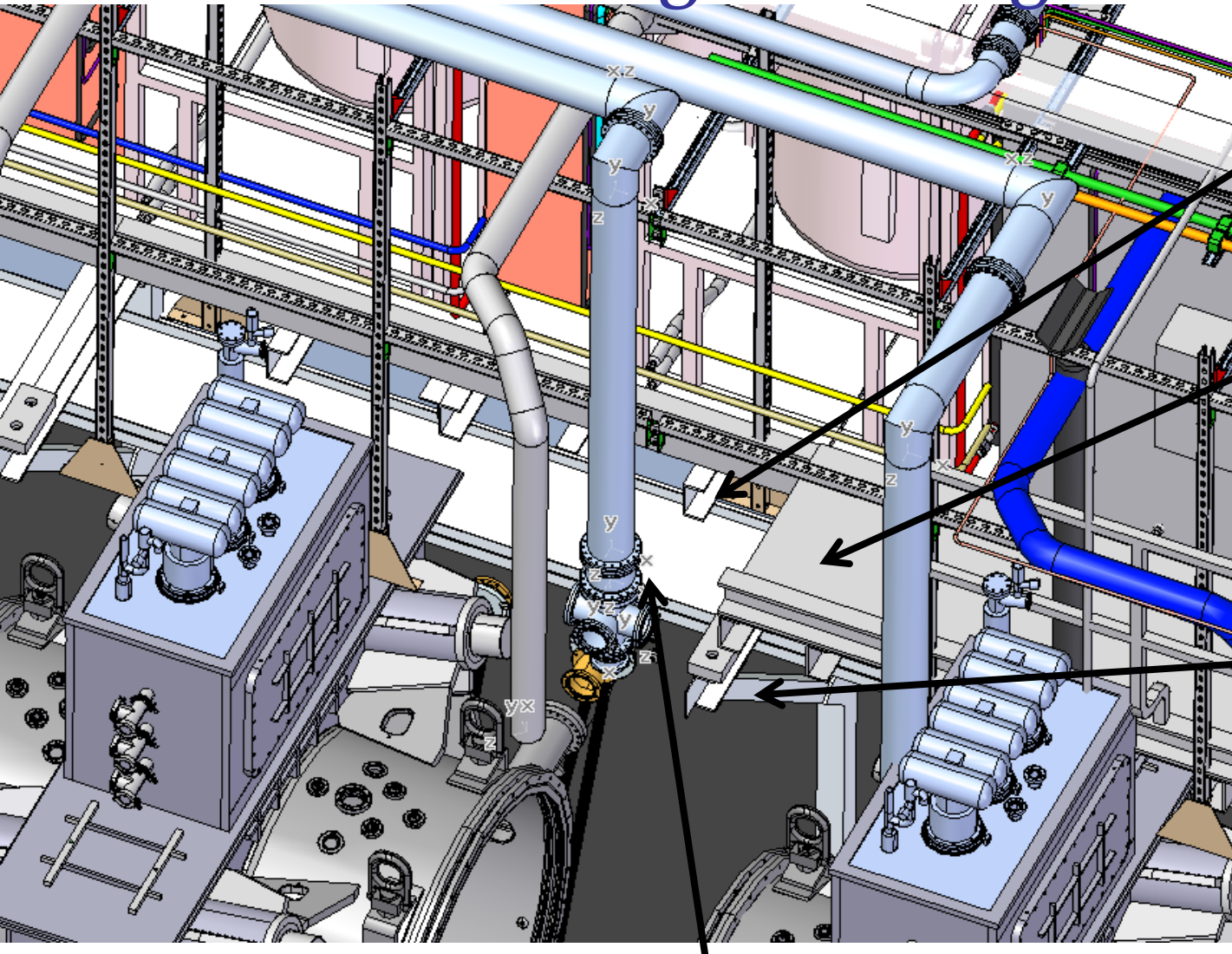
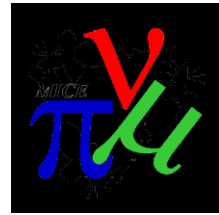


Clash with rails

Clash with support leg

AFCs not shown so vacuum pipe run can be seen

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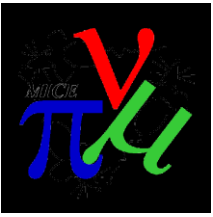
Beams cut back

Raised & narrowed floor section
(removable but H system parts temporarily moved)

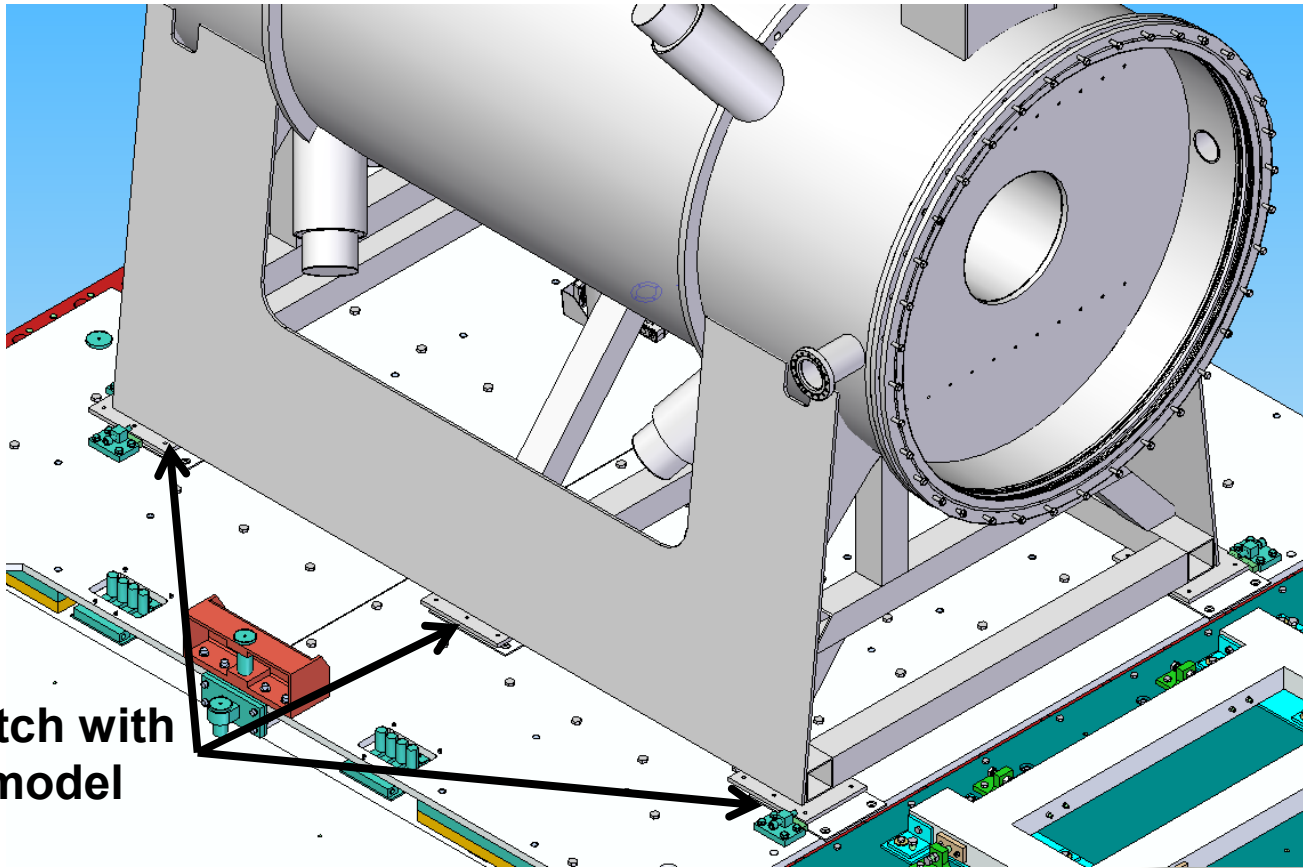
Support leg moved to next beam

Cut required in floor panel around vacuum pipe

MICE Integration Engineering

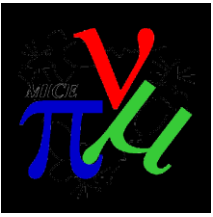


- Spectrometer Solenoid
 - » Interface with rolling platforms

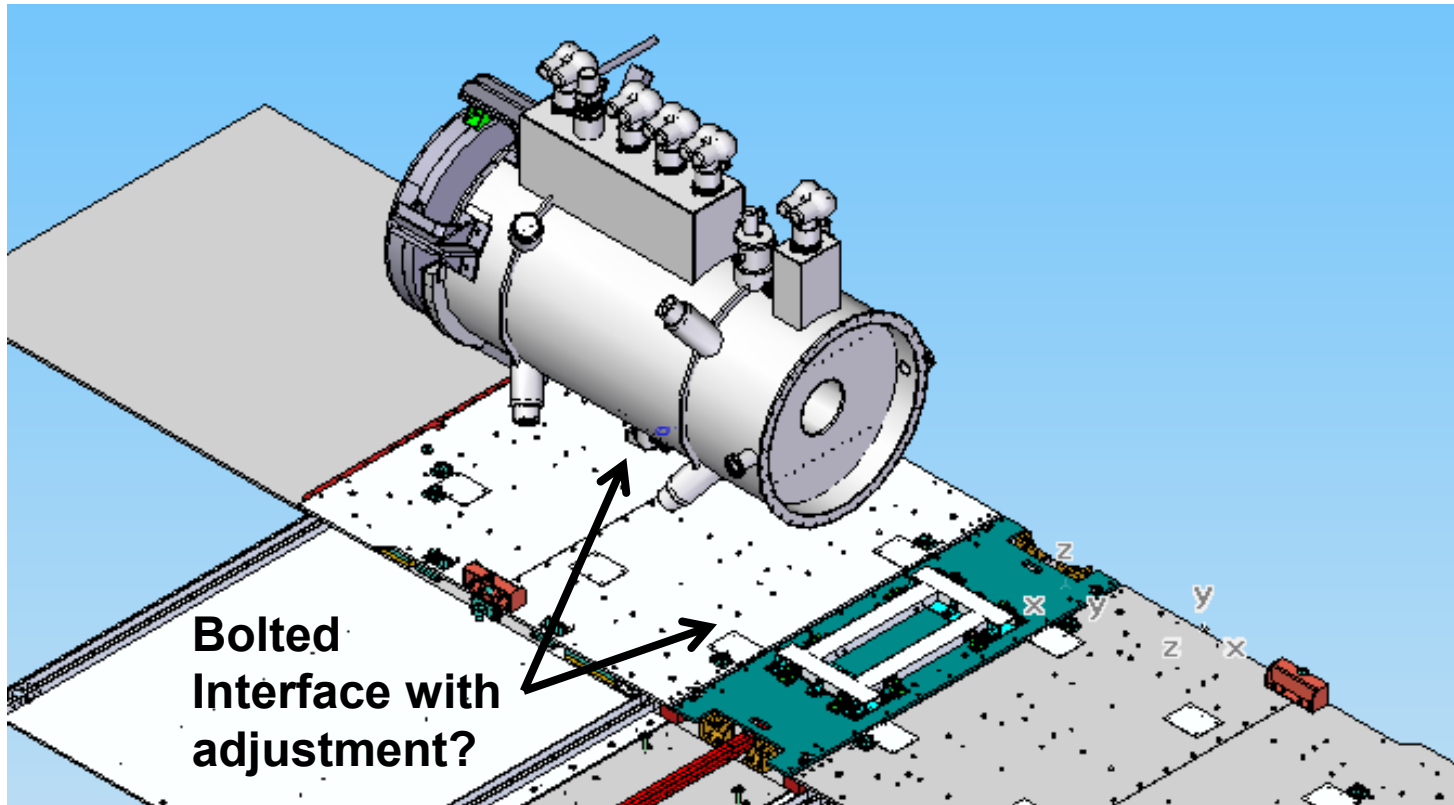


Mismatch with latest model

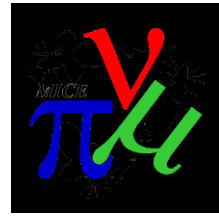
MICE Integration Engineering



- Spectrometer Solenoid
 - » Interface with rolling platforms

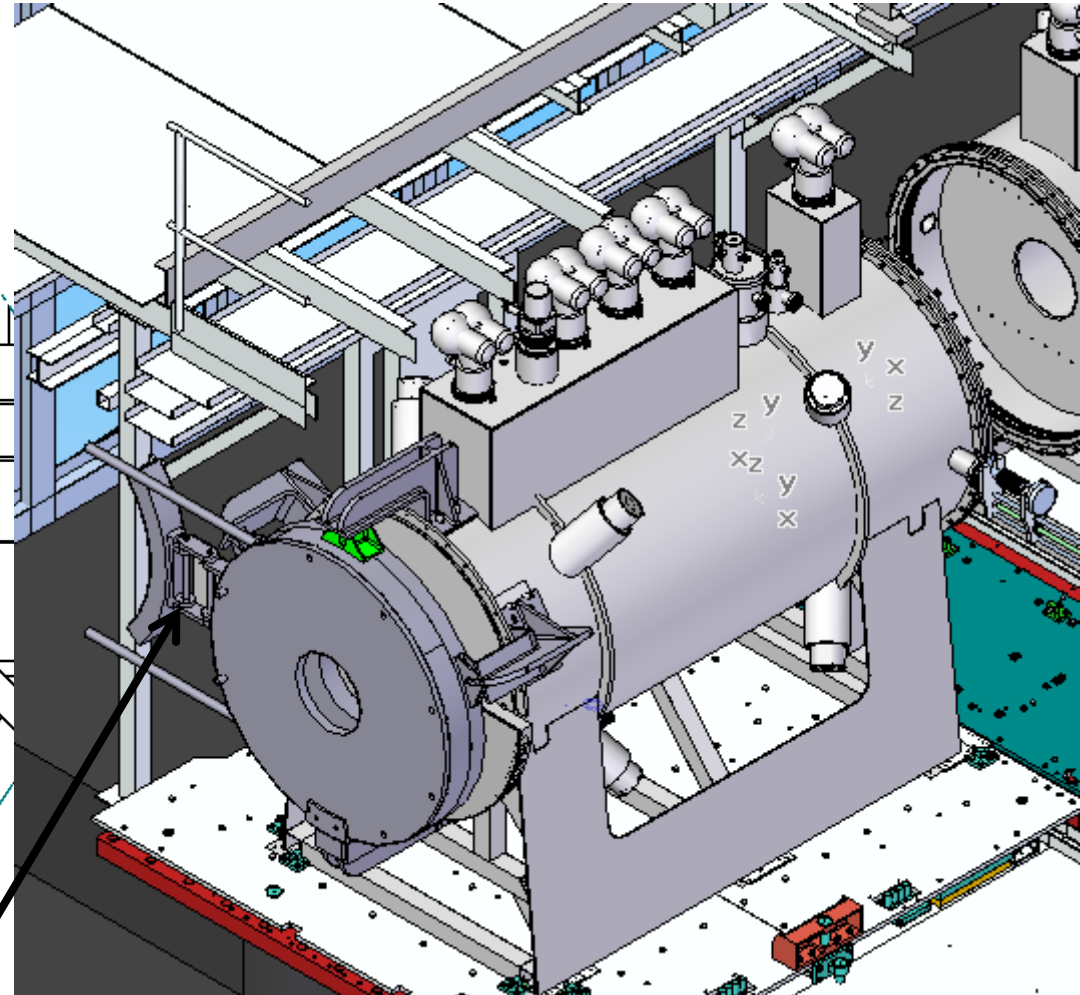
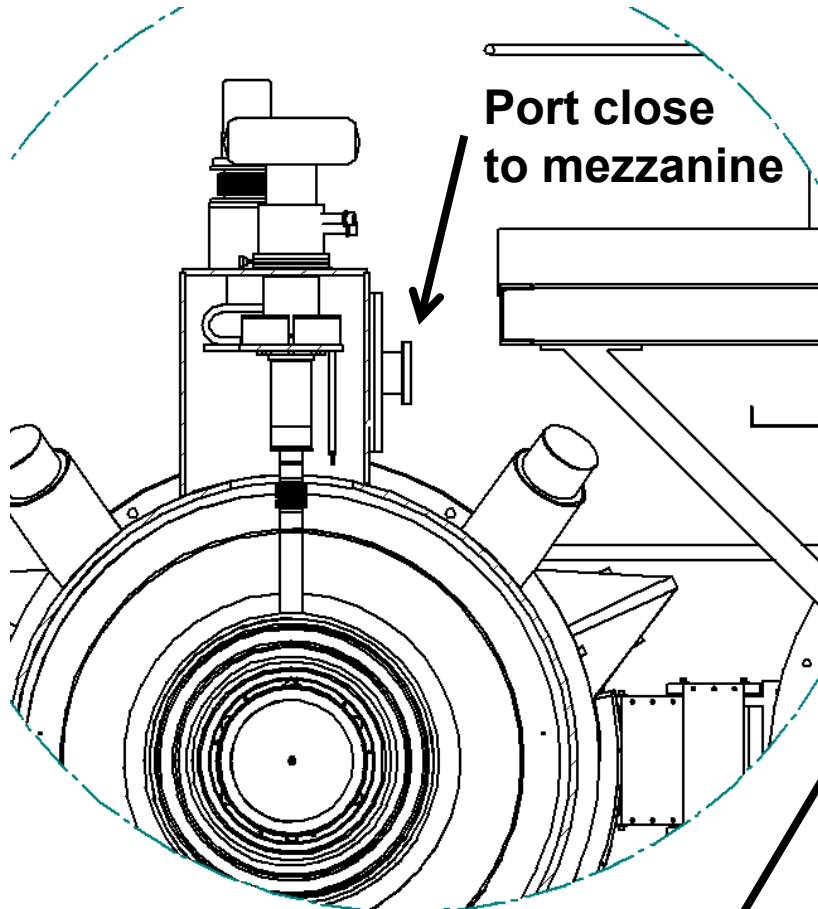


MICE Integration Engineering



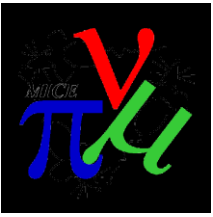
- Spectrometer Solenoid

- » Geometry

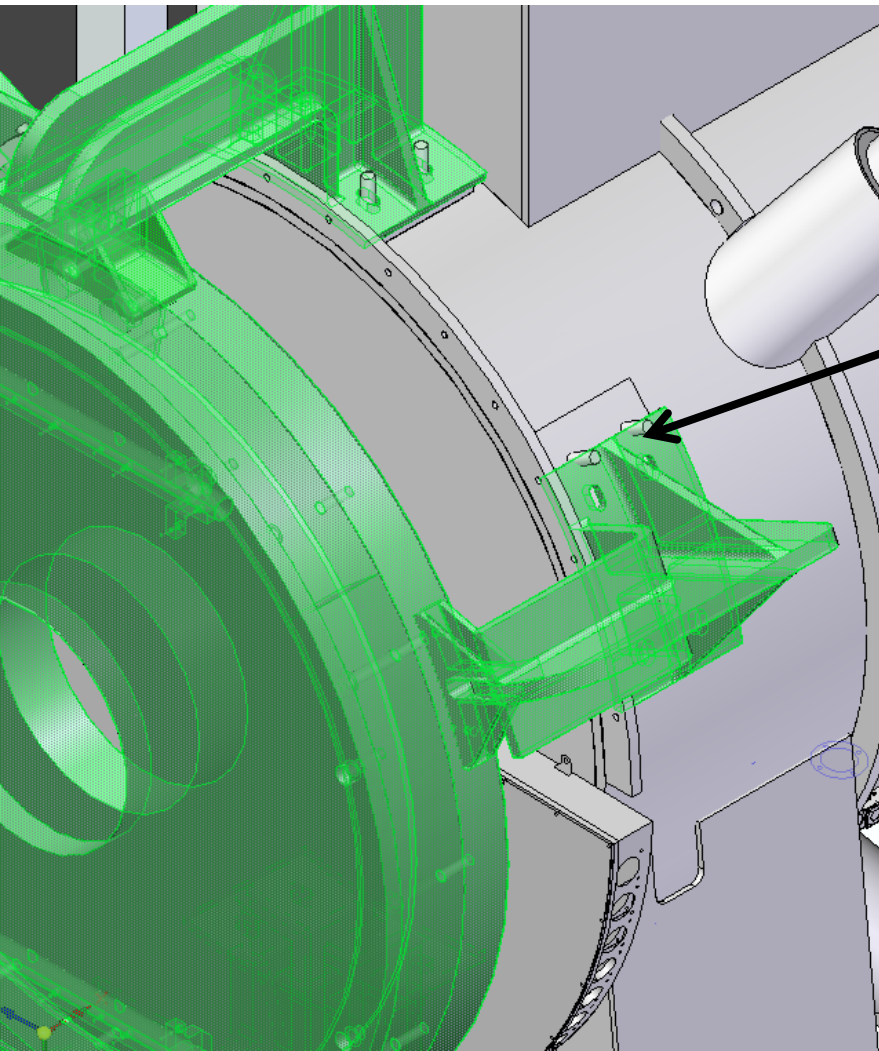


Rotate for convenience?

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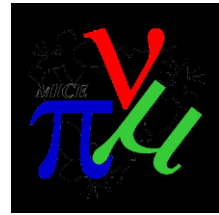


- Spectrometer Solenoid
 - » Geometry

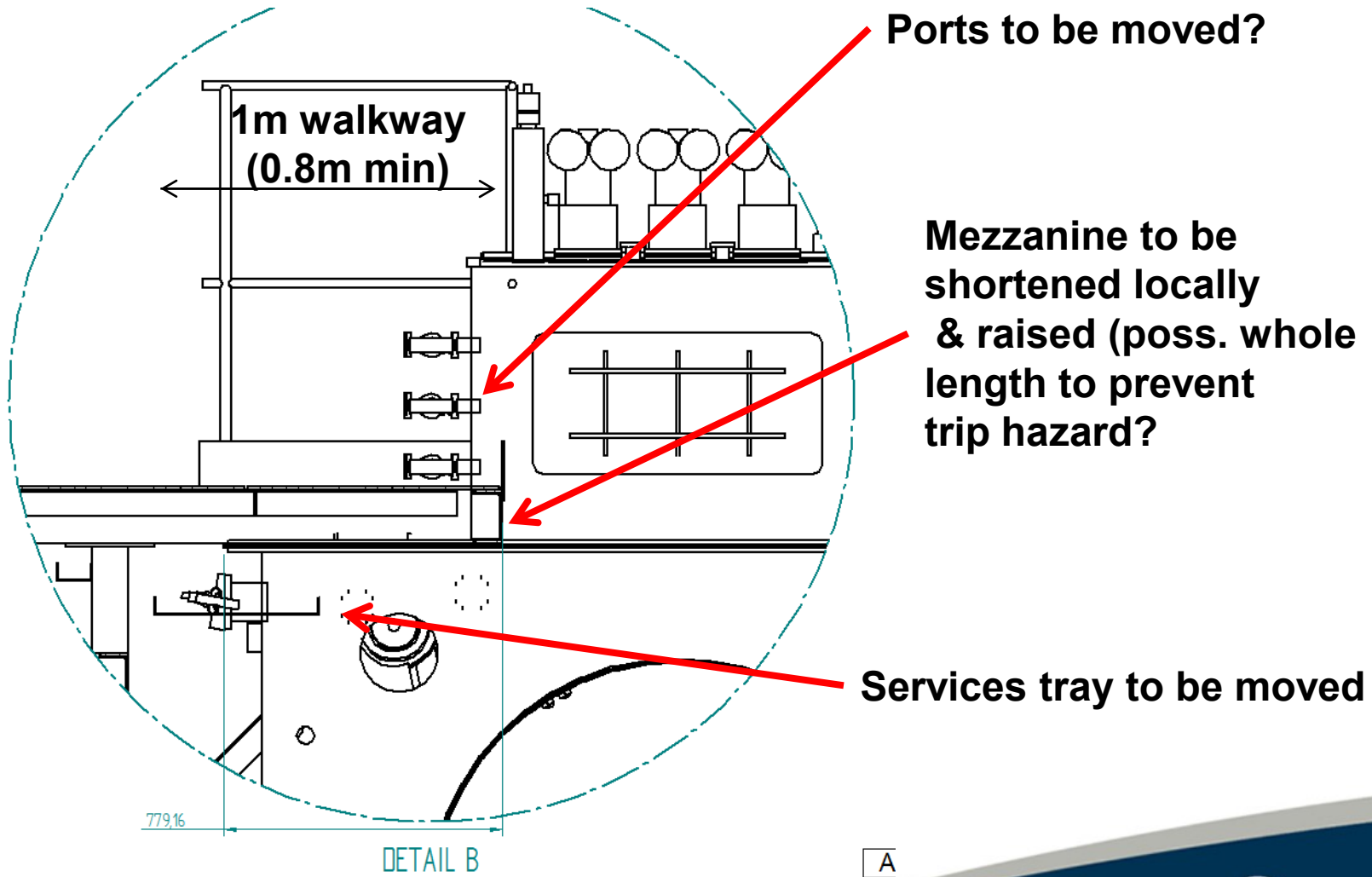


**Brackets not align
with latest model**

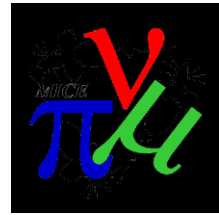
MICE Integration Engineering



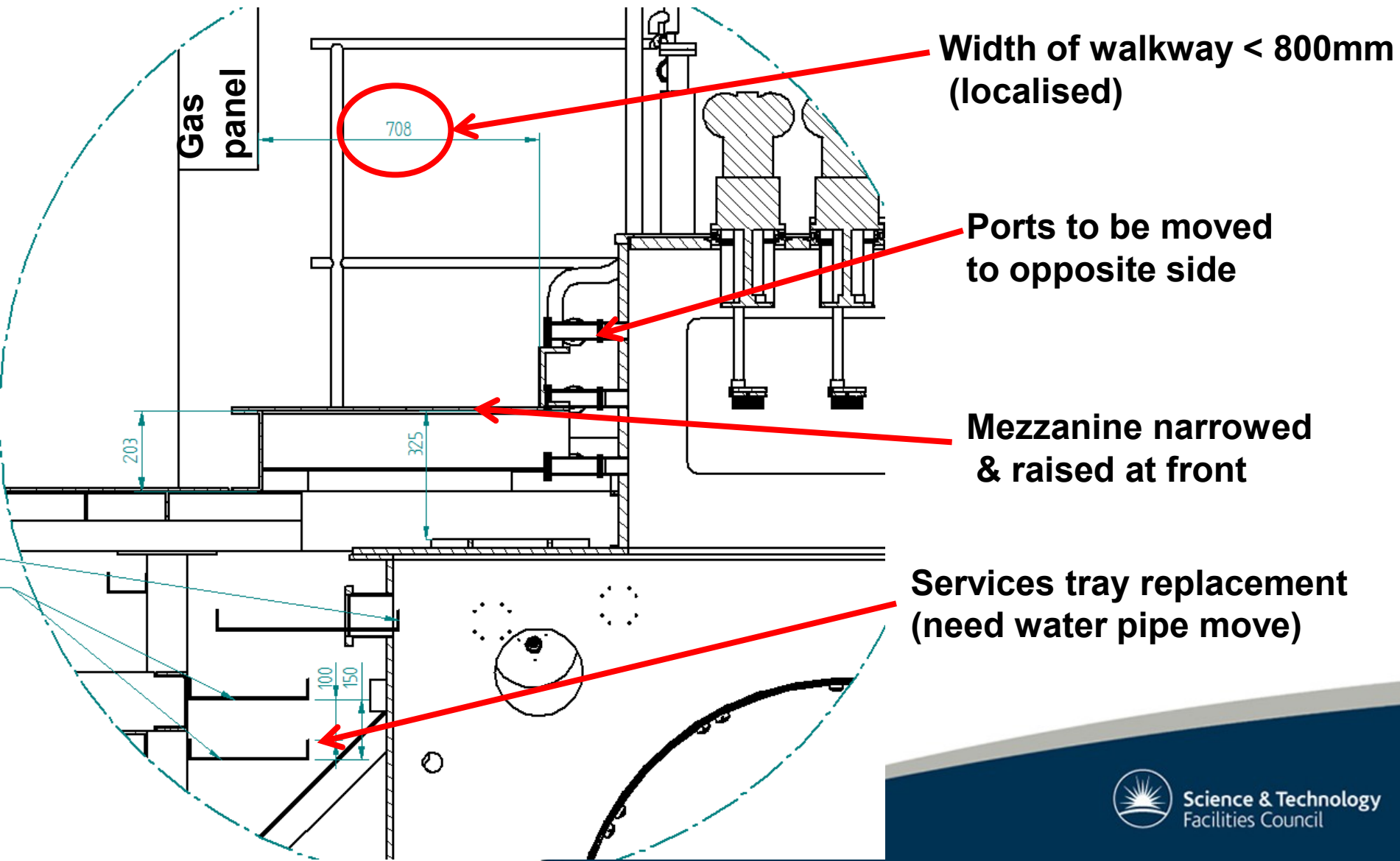
- RFCC



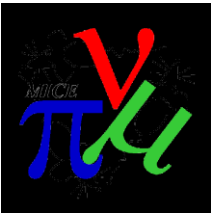
MICE Integration Engineering



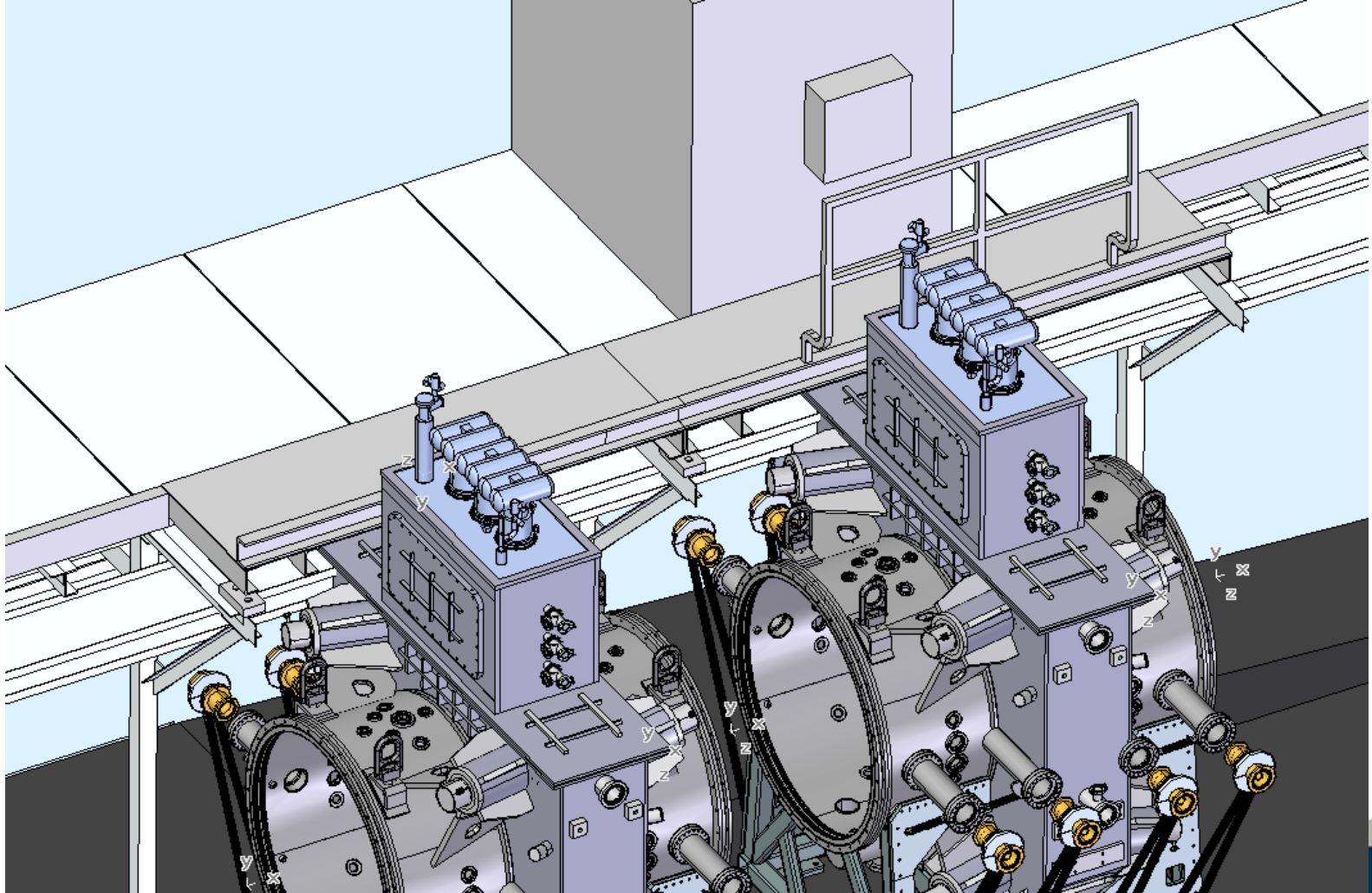
- RFCC



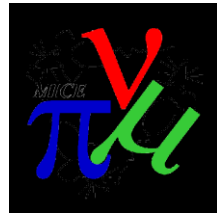
MICE Integration Engineering



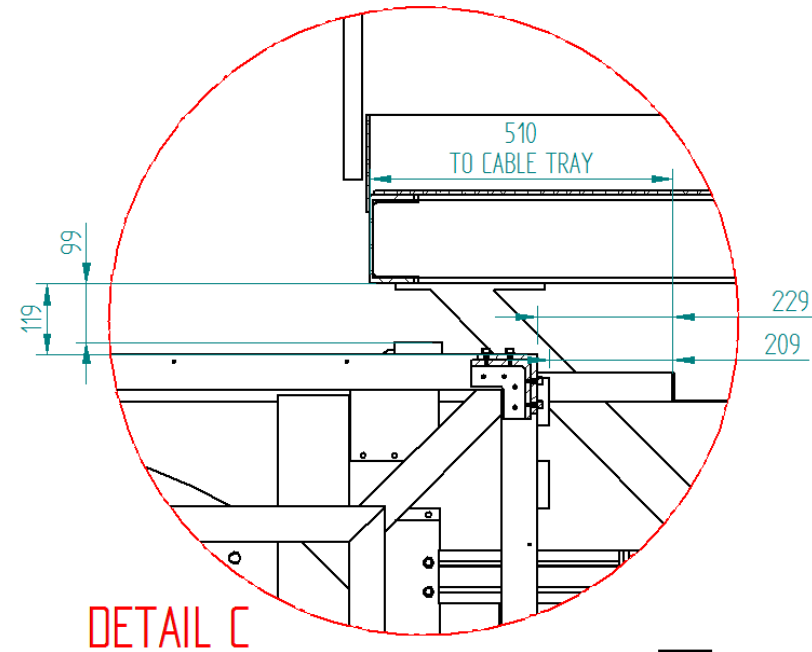
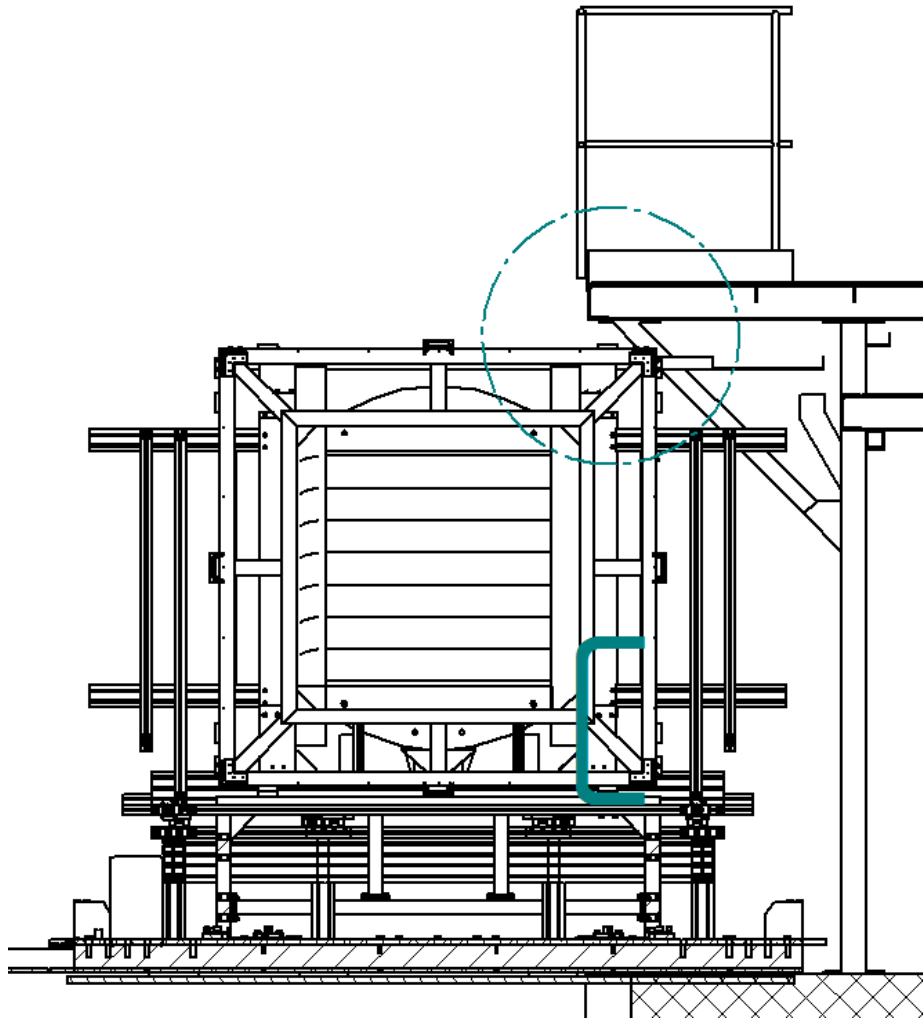
- RFCC



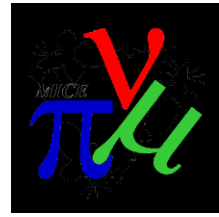
MICE Integration Engineering



- EMR

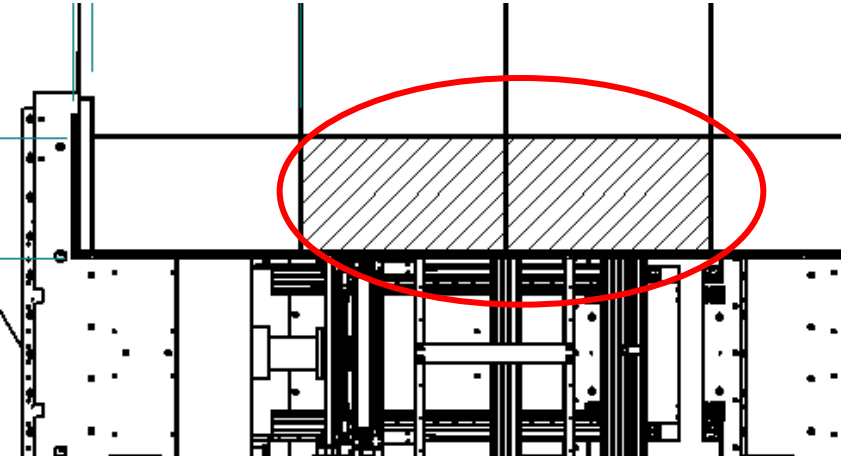


MICE Integration Engineering

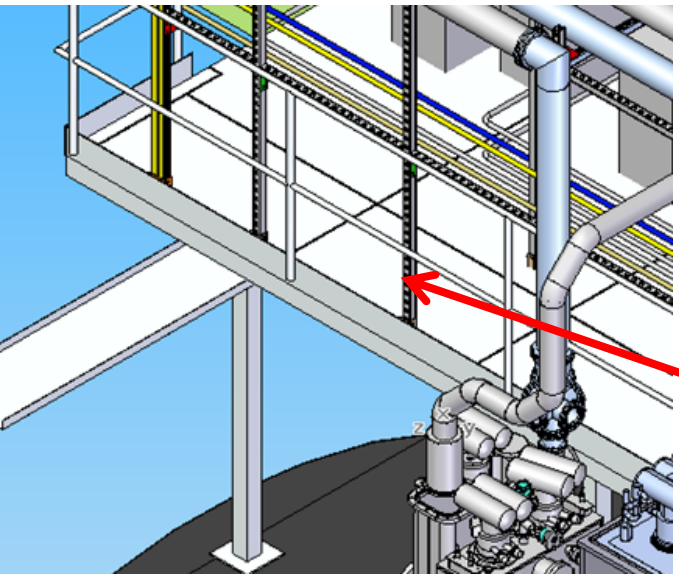
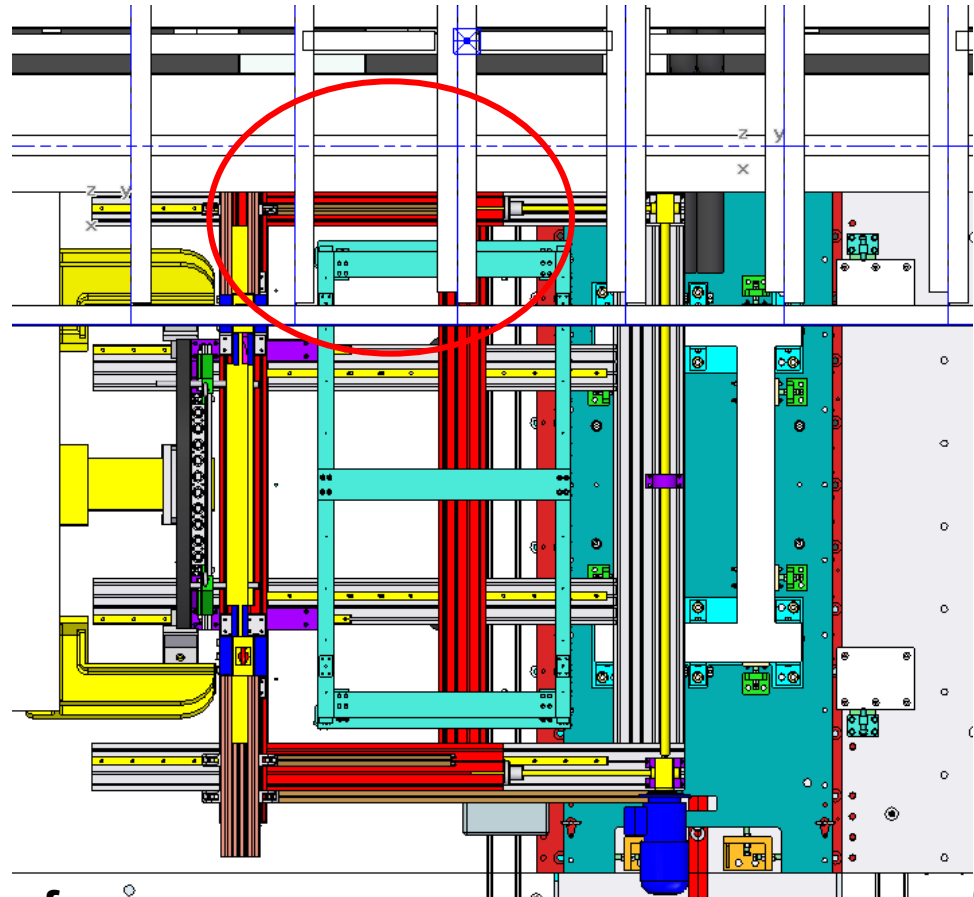


- Mezzanine & EMR

Floor plates removed

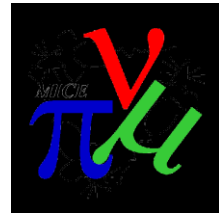


Beams cut back



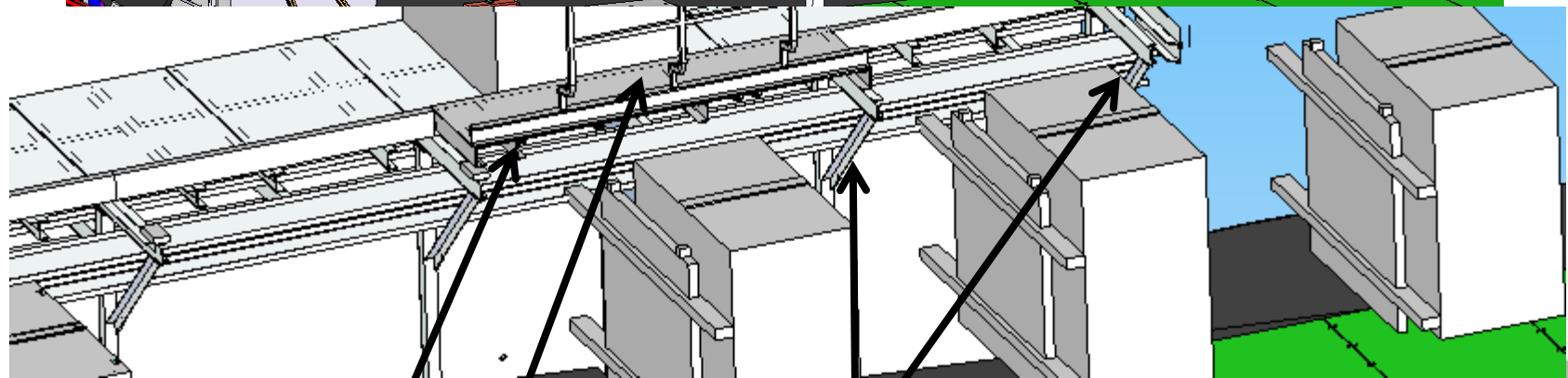
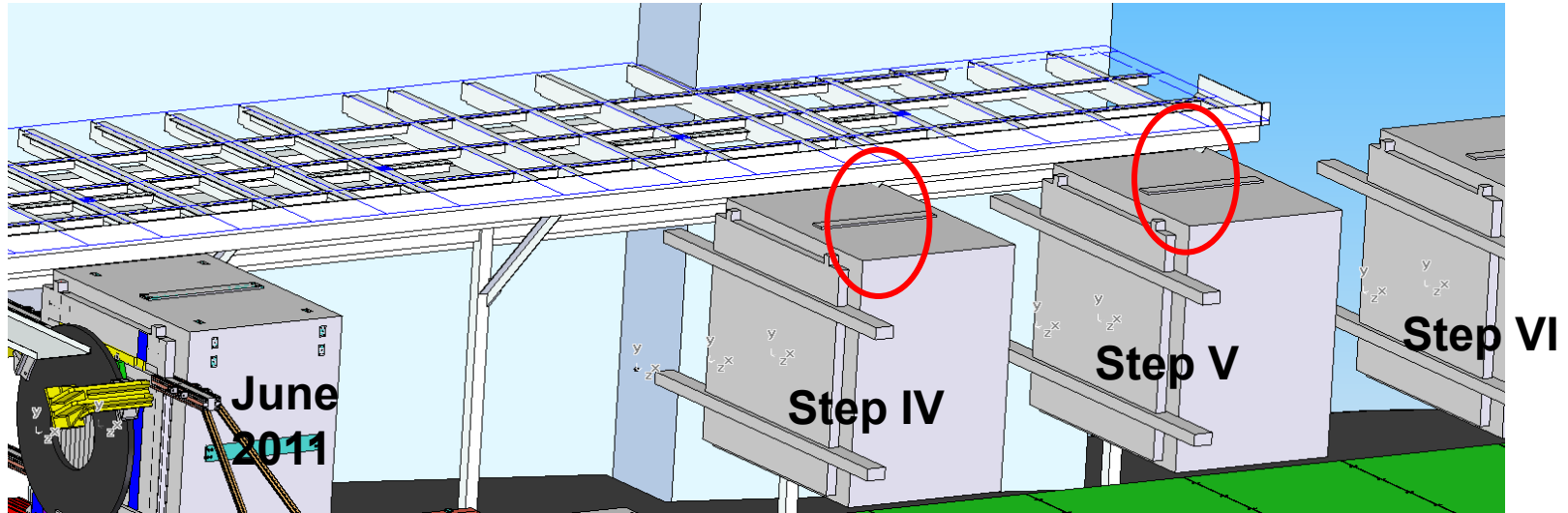
Hydrogen frame
clash (work postponed)

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- Mezzanine & EMR

Potential clash
With support pillars



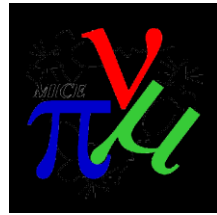
Beams cut back

Removable
floor section

Support
legs moved

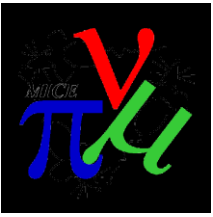


MICE Integration Engineering

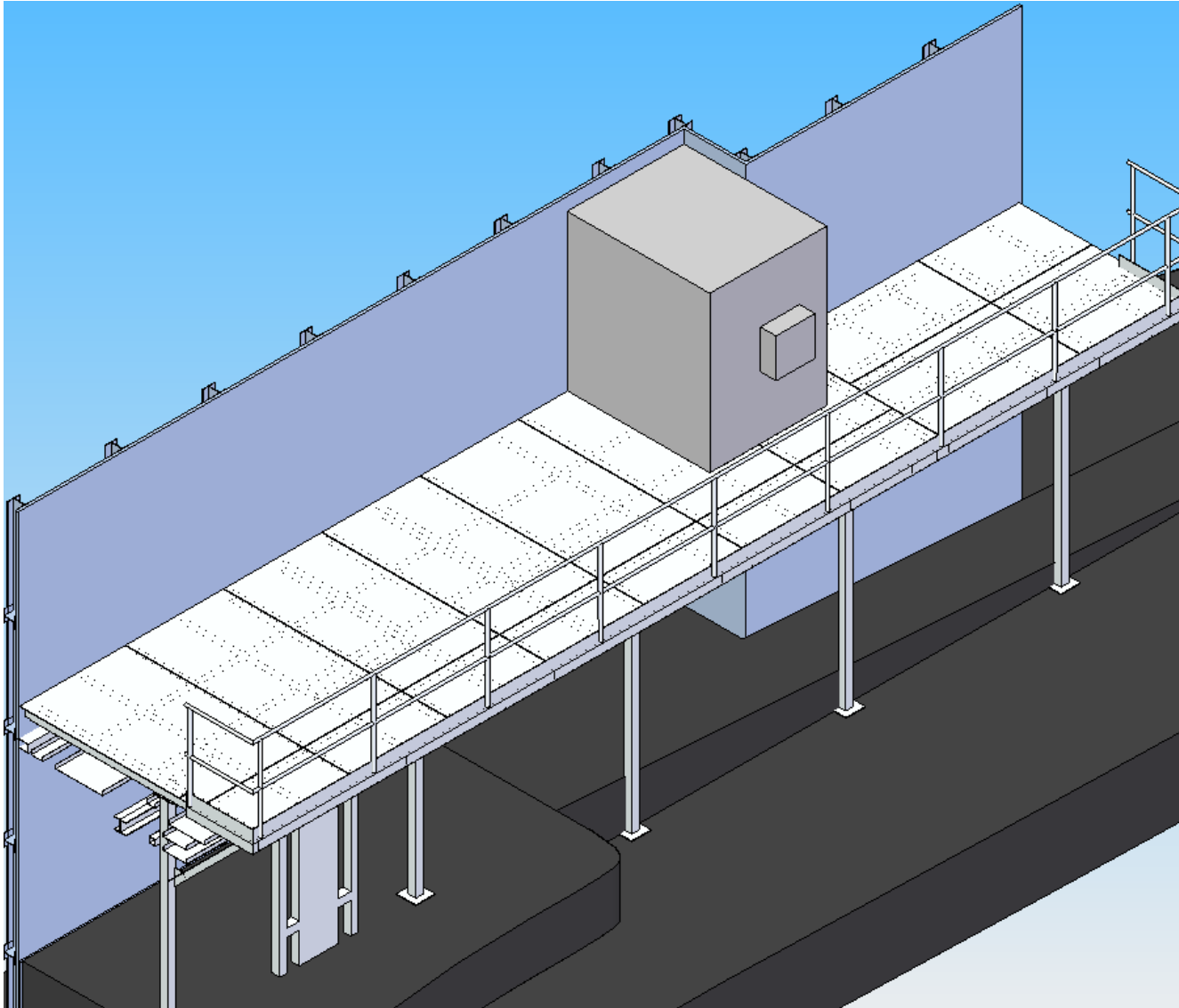


- South Mezzanine change summary
 - » Move 4 of 5 support legs to another beam
 - » Fit cross beam between support legs to support intermediate beams before cutting intermediates
 - » Fit removable platform sections spanning between support leg beams
 - Higher & narrower than current mezzanine (avoids RFCC & AFC pipe line)
 - Outer beam = kick plate
 - Rail with dog leg fitted to outer beam

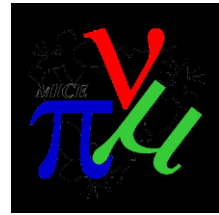
MICE Integration Engineering



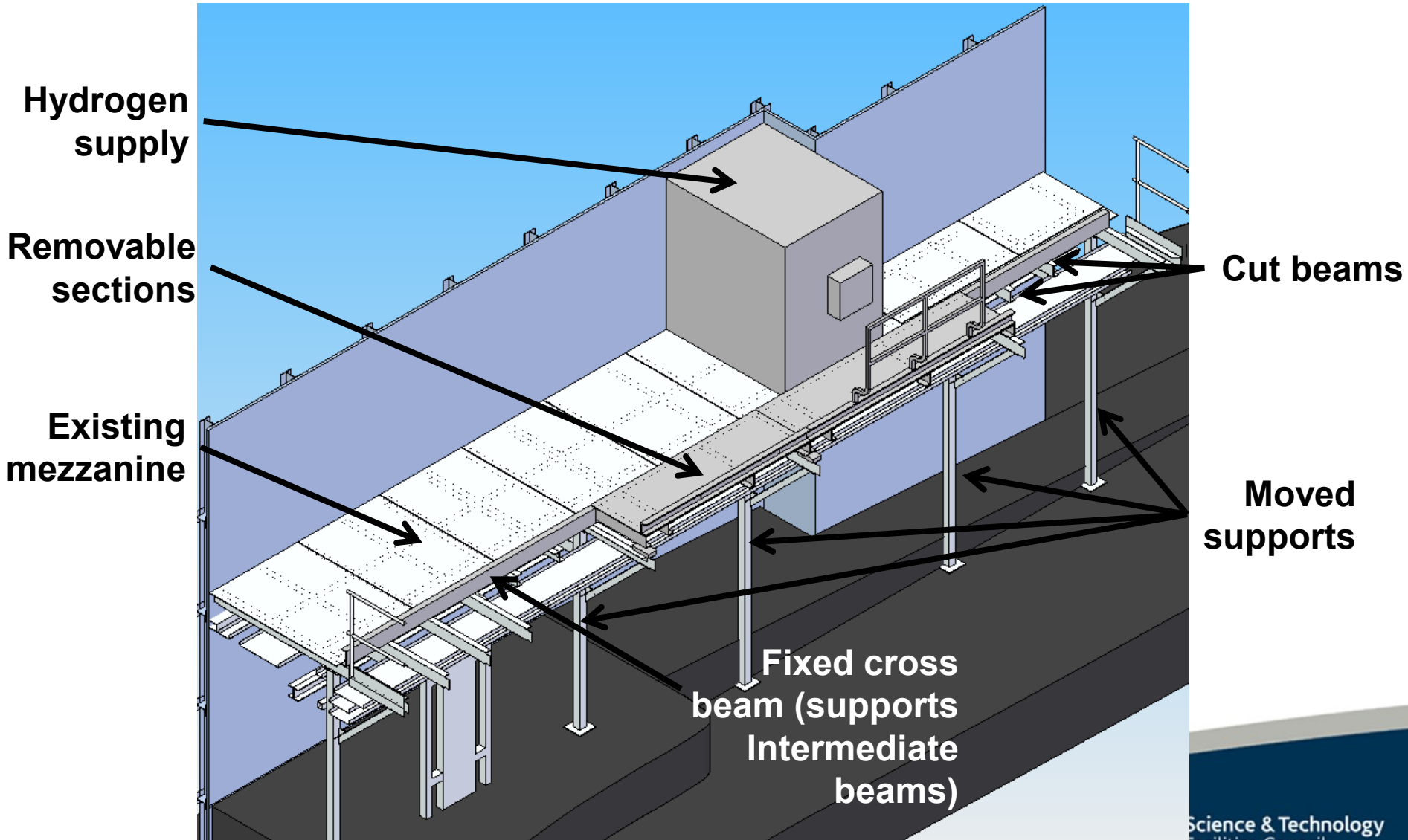
- South Mezzanine change summary



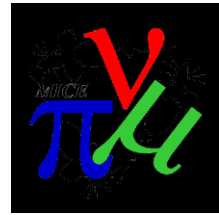
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- South Mezzanine change summary



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- South Mezzanine change summary

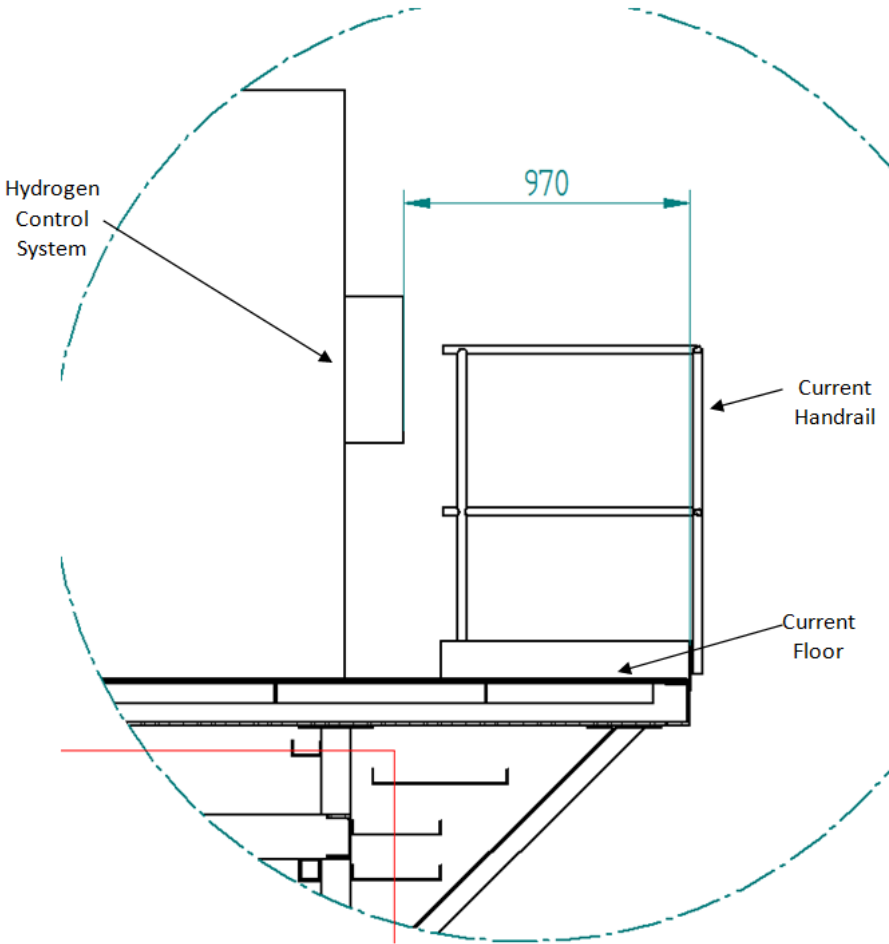


Fig 1: Current South Mezzanine walkway

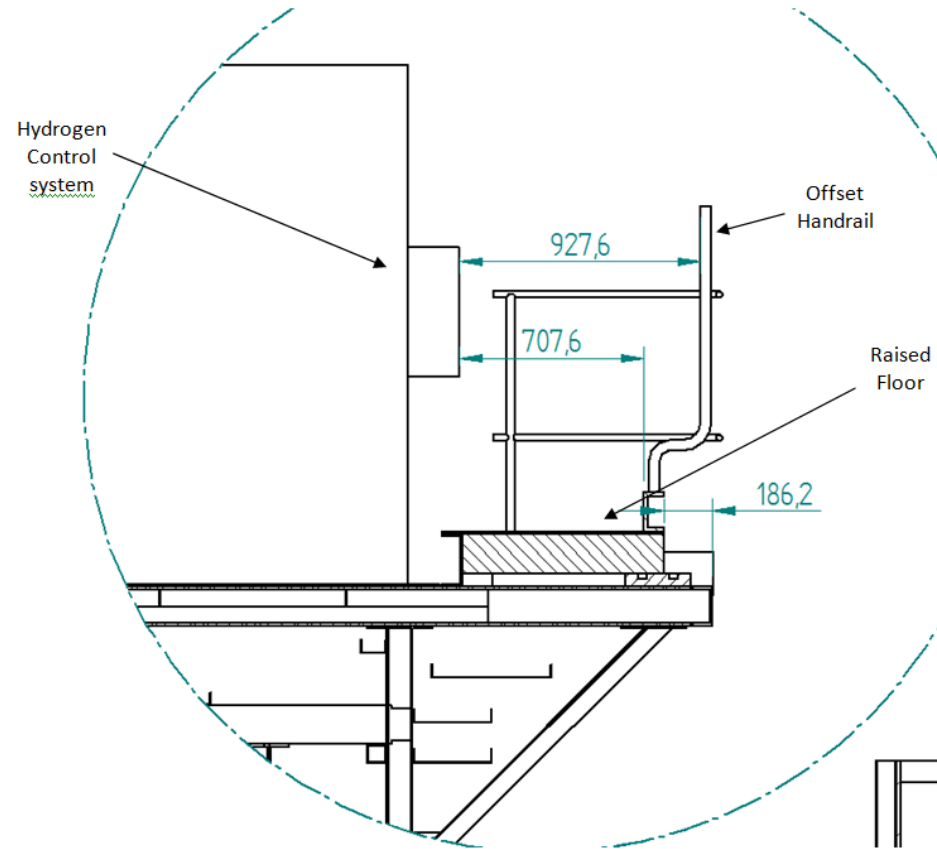
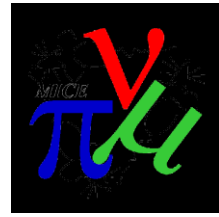


Fig 2: Proposed South Mezzanine walkway with raised floor and offset handrail

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- South Mezzanine – Before change!
 - » Is the narrow walkway acceptable for safety?
 - » Can the H system frame & pipes be raised to give headroom?
 - » Can H system frame / pipes be temporarily removed to move platforms?
 - » Is the raised floor compatible with the hydrogen racks?
 - » What needs to be installed / moved along the mezzanine walkway? Is it compatible?
 - » Structurally OK?

