

PHENIX WEEKLY PLANNING



3/26/2009

Don Lynch

PHENIX
WEEKLY
PLANNING

Run Support & Other Ongoing Work

Run Technical Support (mech, elec., gas)

As needed → always takes priority

RPC Factory Support (continuing)

(see slides later)

Prep for 2009 Shutdown

Design PC1 East maintenance support fixtures

design 3/31, fabrication 5/31

MMS Scaffolding Design

design Done, ordering/fabrication 5/1

RPC3 North installation Prep

Installation plan (including inst'n site prep plan) 3/31

Installation fixture design 4/30

Installation fixture fabrication 6/26

Upgrades Support

New Beampipe supports (back logged)

NCC prototype design support (on-going)

VTX fabrication tooling design (on-going)

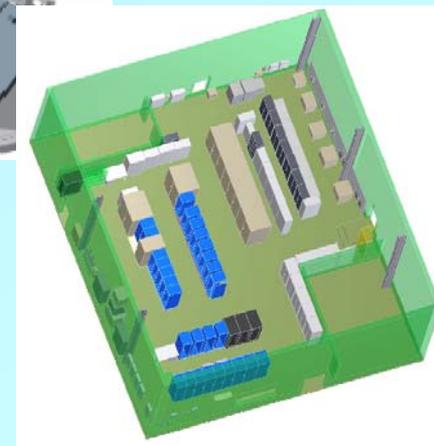
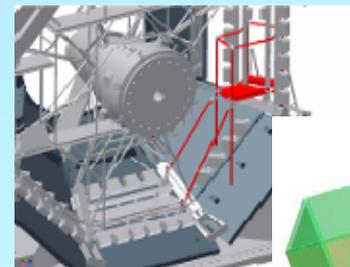
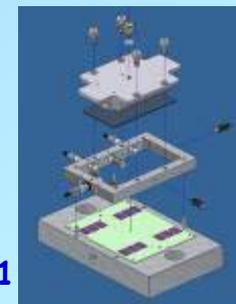
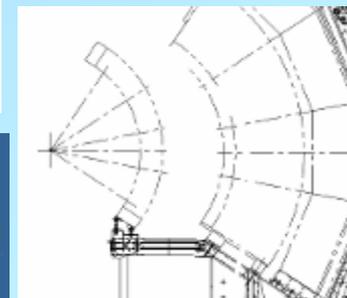
VTX installation design (on-going)

FVTX design/eng'g support (no support req'd yet)

Maintenance & Overhead Tasks

Procedure Review/Updates (ongoing)

Rack Room, AH, Trailer, Mixing House, etc. (ongoing)

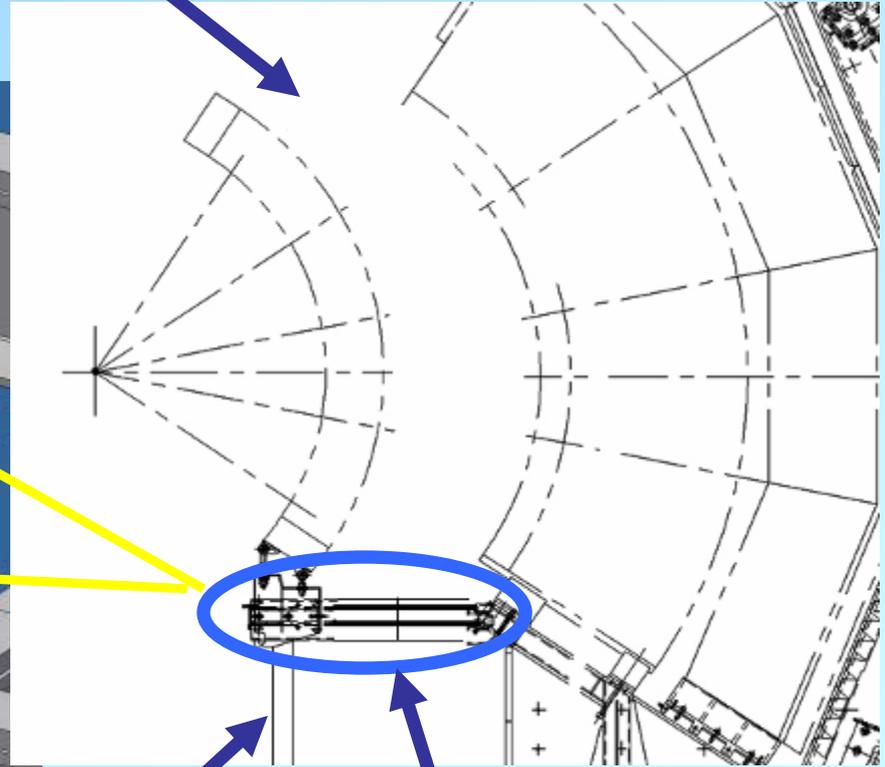
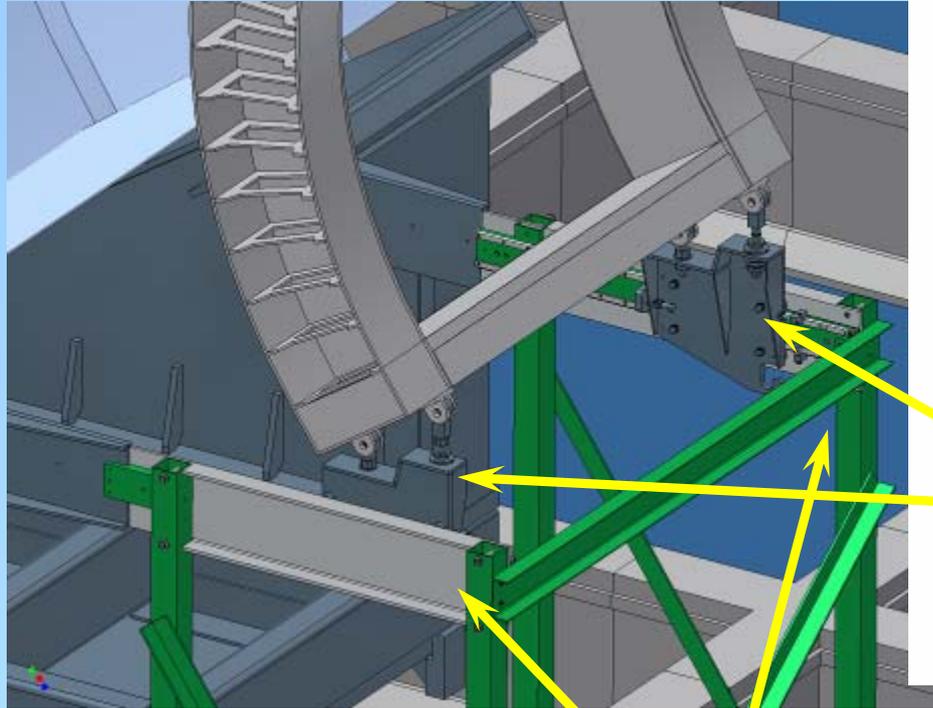


PC1 East Repair Fixturing Design



Repairs to be performed during '09 Shutdown

Access to PC1 is adequate to remove and replace module



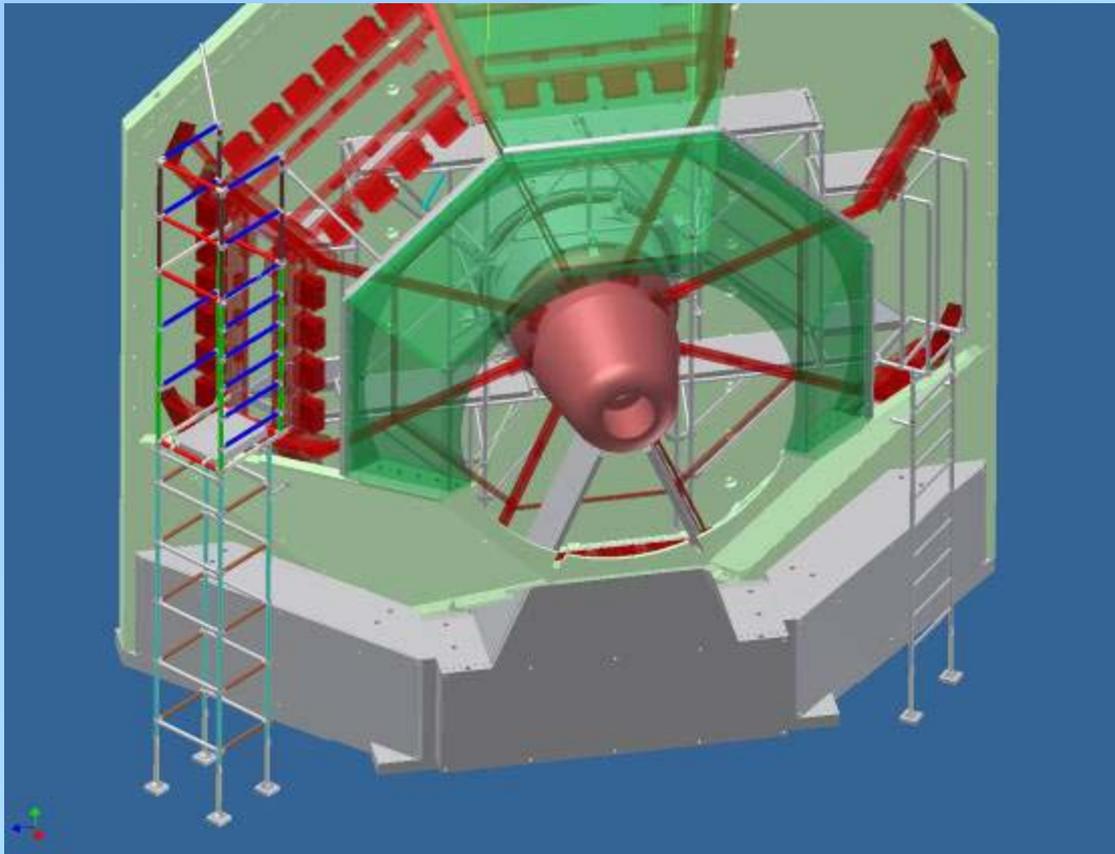
Concept approved at C-A Design Review

New Column Supports Under railway extensions

New Railway extensions will allow DC to be pulled out ~ 3 feet more

PHENIX

3/26/2009



Concept approved at
C-A Design Review

Bargaining Unit negotiations are next

MMS scaffolding

Designed for MuTr installation. Approved in 2000 for use. Stress analysis done for worst case. Current design has minor modifications.

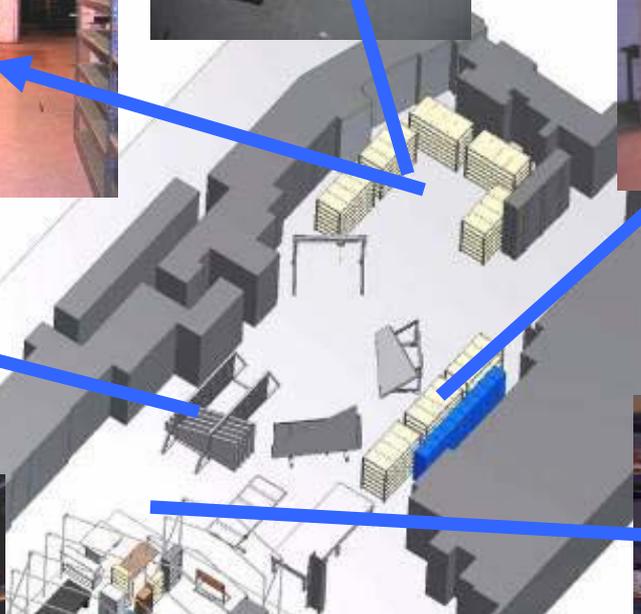
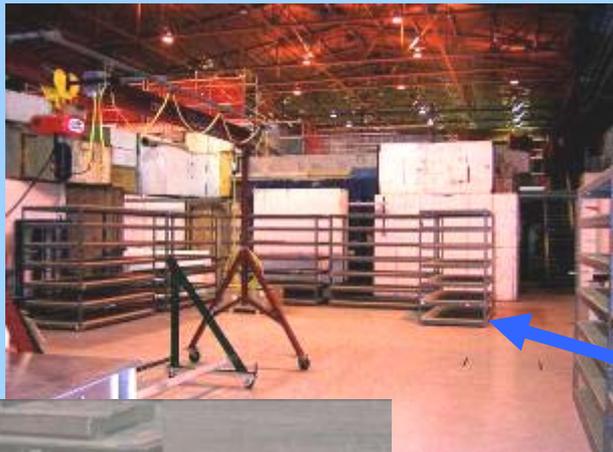


RPC Factory Support Tasks:

- Design and order environmental control system for Burn-In Test Stand (3/27)
- Assemble gap & module storage with humidity control
All 8 shelves assembled, 1st humidity control unit received.
- Assemble tilting transport table In progress 4/10
- Assemble burn-in test stand (bike rack) 4/25
- Extend gas, electric and safety systems to Burn-In Test Stand (4/25)

PHENIX
FACTORY
SUPPORT
NOON

PHENIX TECHNICAL SUPPORT



RPC Factory



Fabrication in progress



Concept approved at C-A Design Review, with minor corrections



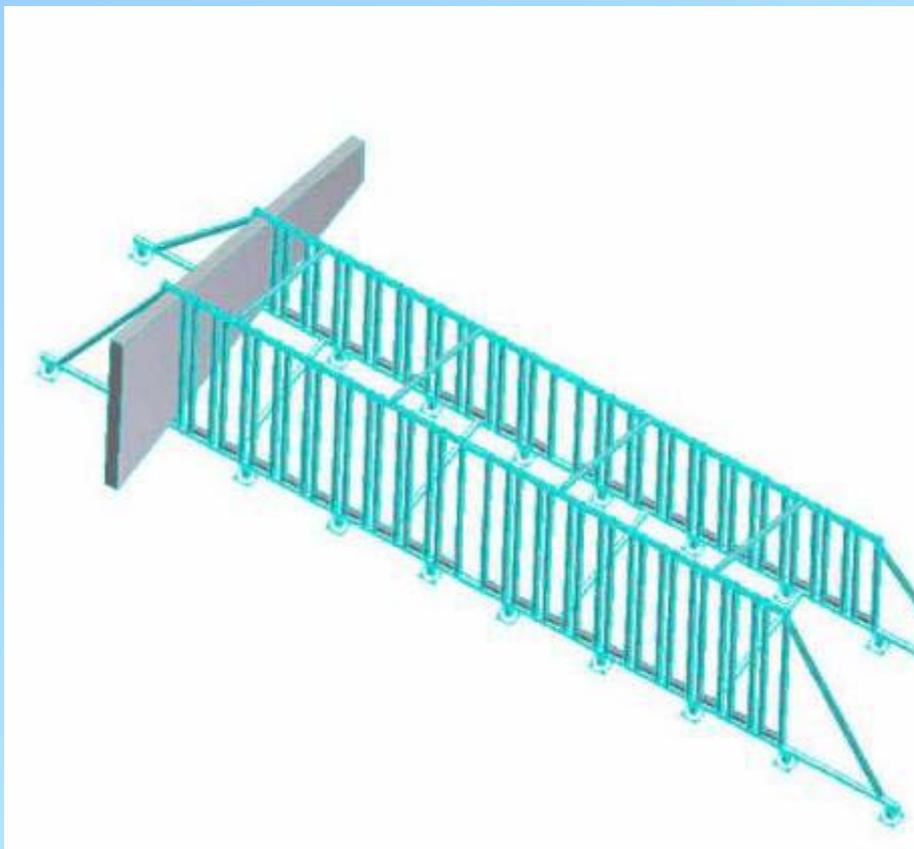
3/26/2009

Concept approved at
C-A Design Review

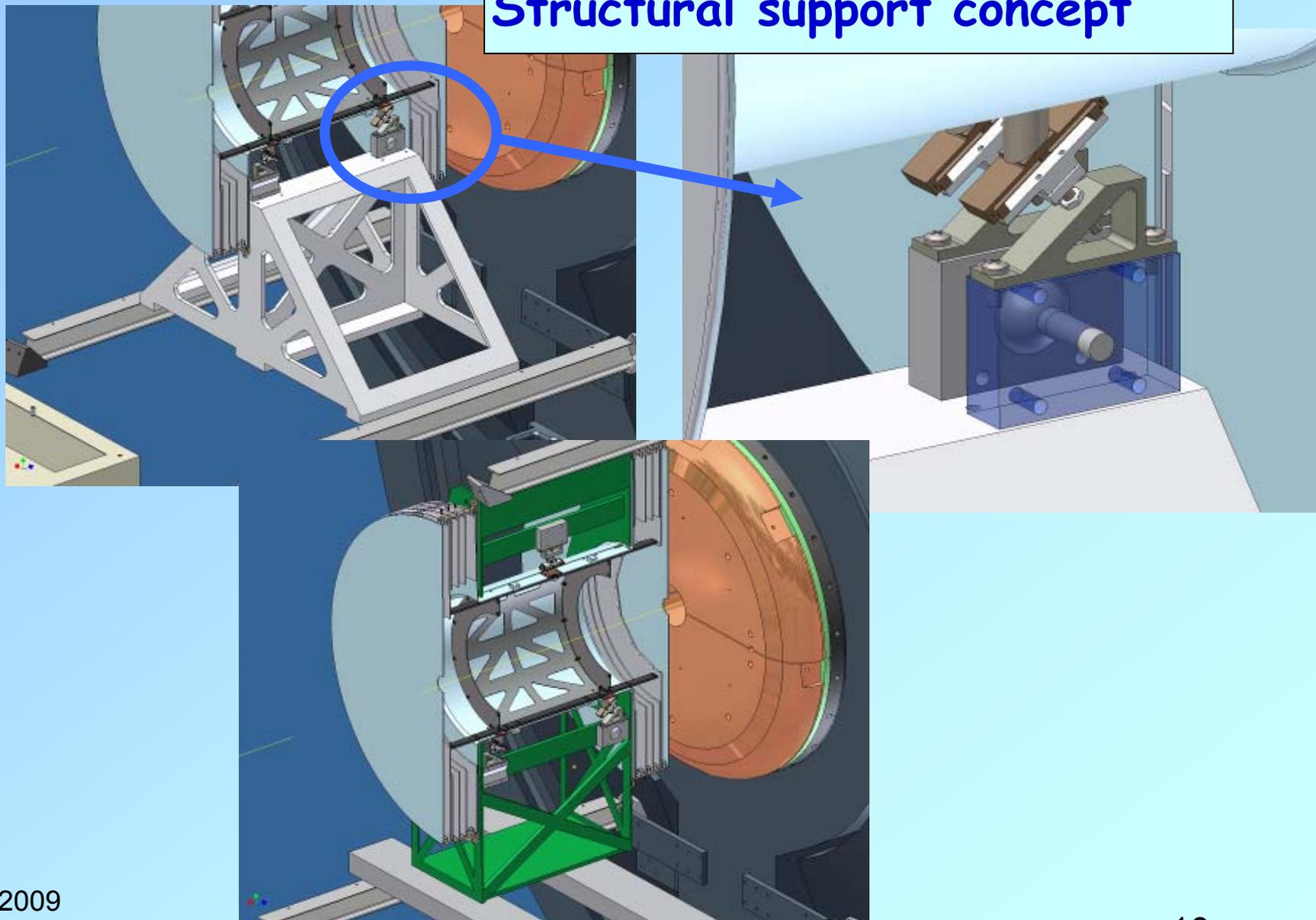
RPC Factory Burn In Test Station For Octant and Half Octant Burn-in Tests

Mechanical Requirements:

- Slots for 20 detector units, max. 10 under test and 10 storage
- Each detector weighs ~ 750 lb
- Each slot to have 2 rollers
- Separation between rollers spaced to allow half octant to rest in slot with unit center of gravity mid way between rollers
- Rollers must be sufficiently close to catch unit before center of gravity passes first roller



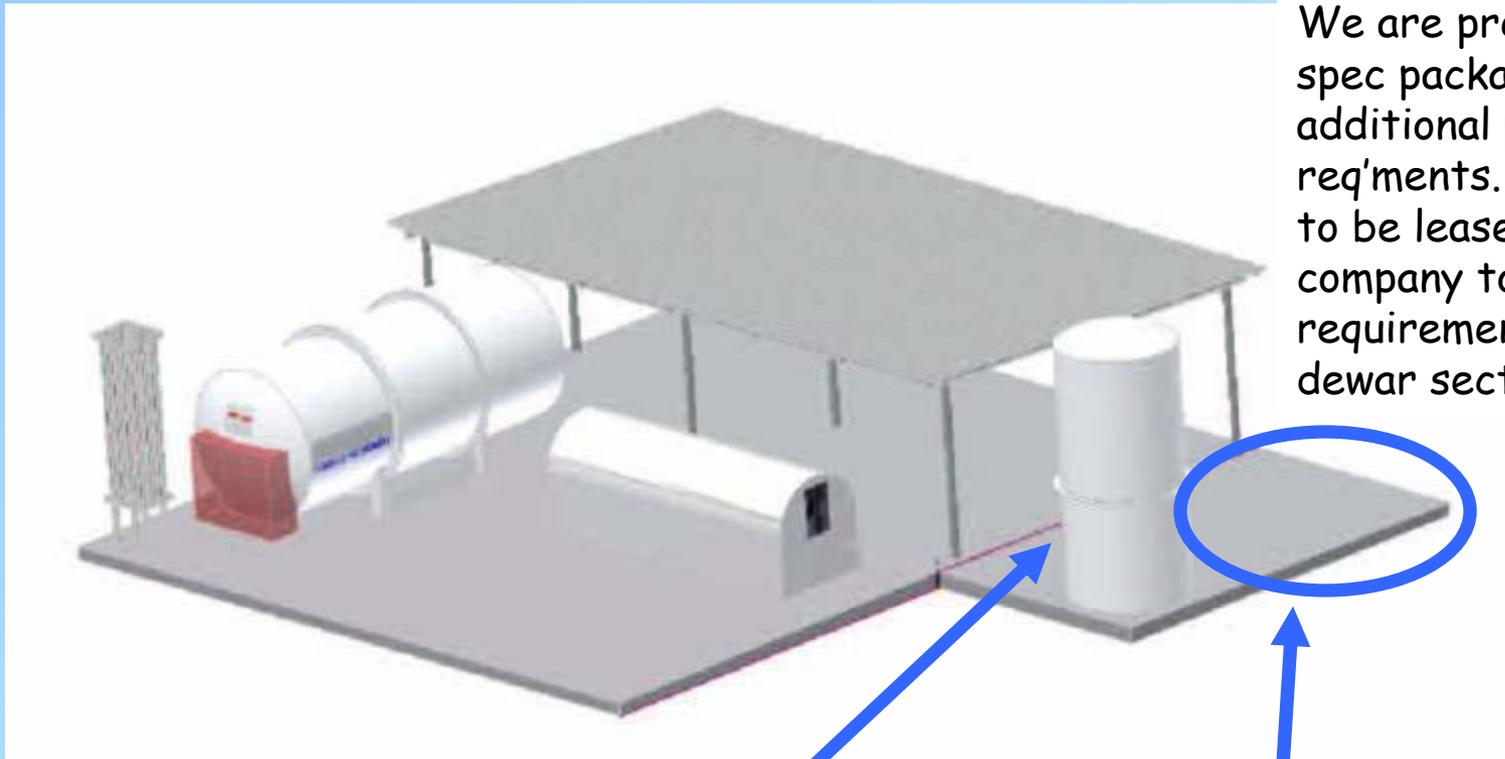
VTX/FVTX Alignment & Structural support concept



Gas Pad Upgrade & Ar Dewar

TECHNICAL SUPPORT

We are preparing a spec package for the additional pad req'ments. New dewar to be leased; supply company to provide requirements for dewar section of pad.



New Liquid Argon Dewar to meet current and future demand

Additional Pad area for storage of empty gas bottles

General location as shown, footprint (size) TBD

2009 Building Maintenance Issues

These items passed on to Fred K.

- Mixing House thermometers not working properly
- Roof leaks in utility bathroom at northwest corner behind tech offices and over door between rack room and assembly hall.
- Trailer bathroom slop sink (for Custodians).
- Heat wrap tape for trailer bathroom toilet drains to prevent freeze/clogging in winter.
- Improved Rack Room AC performance (This item has been addressed time and again but unsatisfactorily. Currently the AC fails periodically and is repaired only to fail again. On-condition maintenance is not adequate...an engineered solution is needed.)
- Back bathroom plumbing noise
- AH slop sink leak
- Icy conditions at mixing house north stairs



Shutdown '09 Major tasks (expect 5 month shutdown):

- 2009 shutdown Begins June 28
- End run, remove wall, MuID collars down, EC to AH (3 weeks)
- Install Station 1 South scaffolding (1 week)
- Install Station 2/3 scaffolding (2 weeks)
- PC1 East repair (4 weeks)
- Install stations 1, 2 and 3 south MuTrigger FEE's (12 weeks)
- MuTr decapacitations: station 3 south (3 weeks)
- RPC Station 3 North (see next slide)
- Mechanical/Electrical Plumbing installation of (4) new DCM racks
- Add Ar Dewar and expand gas pad to add storage (12 weeks)
- Prep for future upgrades/existing equipment maintenance & Repair (as necessary)

RPC3 North Installation Schedule

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| Installation Concept Finalized | Mar. 31 |
| Half-Octant Brackets, Connecting Blocks, under detector translating support design | Mar. 31 |
| Installation Fixturing and Tooling Design | Apr. 30 |
| Redesign crystal palace/IR Gas Barrier | May 29 |
| End of Run 9 | June 28 |
| Fixturing/Tooling, Brackets/Block/support Fabrication | June 30 |
| Move Shielding/Remove Crystal Palace | June 29-July31 |
| Move cable trays and piping in gap 5 | June 29-July 31 |
| Simulated (practice) installation with new fixturing/ tooling | July 13-July 31 |
| Install, level & survey support structure | Aug. 3 - Aug 14 |
| Half Octant Testing and Assembly Complete (1 st half Octant ready by Aug.17, 16 th by Sep.18) | Aug. 17- Sep. 18 |
| Mechanical Install Align & survey RPC3 N | Aug 17 - Sep. 30 |
| Install 3 elect. Racks, all cables & gas system | Oct. 1 - Oct. 30 |
| Commissioning | Nov. 1 - Nov. 30 |
| Install new crystal palace/IR Gas Barrier & Shielding | Nov. 1 - Nov. 30 |
| Start Run 10 | Dec. 1 |

Safety, Security, etc.

Always make sure you understand the signs



PHENIX AIRPORT



Confusion

Clarity



Where To Find PHENIX Engineering Info



Bridge Contest

This Saturday

Science Learning Center

9:00 AM

Links for the weekly planning meeting slides, archives of past meeting slides, long term planning, pictures, videos and other technical info can be found on the PHENIX Engineering web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm

