



LBNF Primary Beam Project Update

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Friday 9am

2 May 2024

Primary Beam

Magnets

What is included

All conventional magnets needed for extracting the beam from the Main Injector/Recycler and moving the protons to the target. Includes stands to hold the magnets, and plans for installation.

Ongoing Work

- » Tooling refurbishment work will begin when Mu2e materials moved from the building.
- » Acquisition plan for the dipole coils has been submitted for approval.
- » Kicker Ferrites vendor decided, had an initial meeting to discuss manufacture.
- » Kicker capacitors are expected for delivery in a month.
- » Kicker prototype magnet reassembly continues.
- » Testing alternative bearing plates for magnet

Magnet Power Supplies

What is included

Power supplies needed for any and all magnets used in the primary beam.

Ongoing Work

- » Continuing work on E:207 Quad power supply, currently under internal review.
- » Proceeding with Dipole and Quad power supply filter designs.

Primary Beam

Primary Water System

What is included

All water cooling for all magnets and power supplies.

Ongoing Work

- » Continuing work on HV201 Dipole bus routing through the extraction area.
- » Working on connected for the magnet LCW and electrical connections
- » Ongoing validation of drawing markups for AECOM.

Vacuum

What is included

Beam pipes and all of equipment needed to create and maintain vacuum in the beam pipes.

Ongoing Work

- » Releasing drawings for the beam line vacuum.
- » Continuing tests on both coated and uncoated ceramic beam tube samples to measure outgassing.
- » Phase II coated tube samples are expected from the vendor in the end of may.
- » Work is ongoing to ensure that ceramic beam tubes will not be damaged in transit.
- » Meeting with the MI folks to discuss vacuum design of the MI/RR component relocations.