



LBNF Primary Beam Project Update

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Friday 9am

2 Nov 2023

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

- » Preparing for a Preliminary Design Review and early procurement for the Kicker Magnet on Thurs Nov 9th
- » Schedule revisions for the quad magnets
- » Dipole and Quadropole stand engineering notes in preparation.

Magnet Power Supplies

What is included

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

Ongoing Work

- » Undergoing schedule replanning.
- » Moving a transformer for the Primary Beam service building and a load for one of the dipole circuits onto Beamline scope.
- » Examinations of the MI-11 penetrations done to plan for cable running.

Primary Beam

Primary Water System

What is included

All water cooling for all magnets and power supplies.

Ongoing Work

- » Work on flow models and schematic diagrams for the LCW continue
- » Rearrangement work on LBNF-05 Power Supply Room are pending review.
- » Continuing work on Primary Water System Branch piping for power supplies in MI-14.

Vacuum

What is included

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

Ongoing Work

- » Engineers and drafters doing final markups of beam line vacuum
 - » Modifications for primary beam window cartridge replacement
- » Ceramic beam tube samples at vendor for coating.
- » Engineering review note comment addressed for the Ion pump, beam tube and gate valves stands.
- » Final design review planned for December.