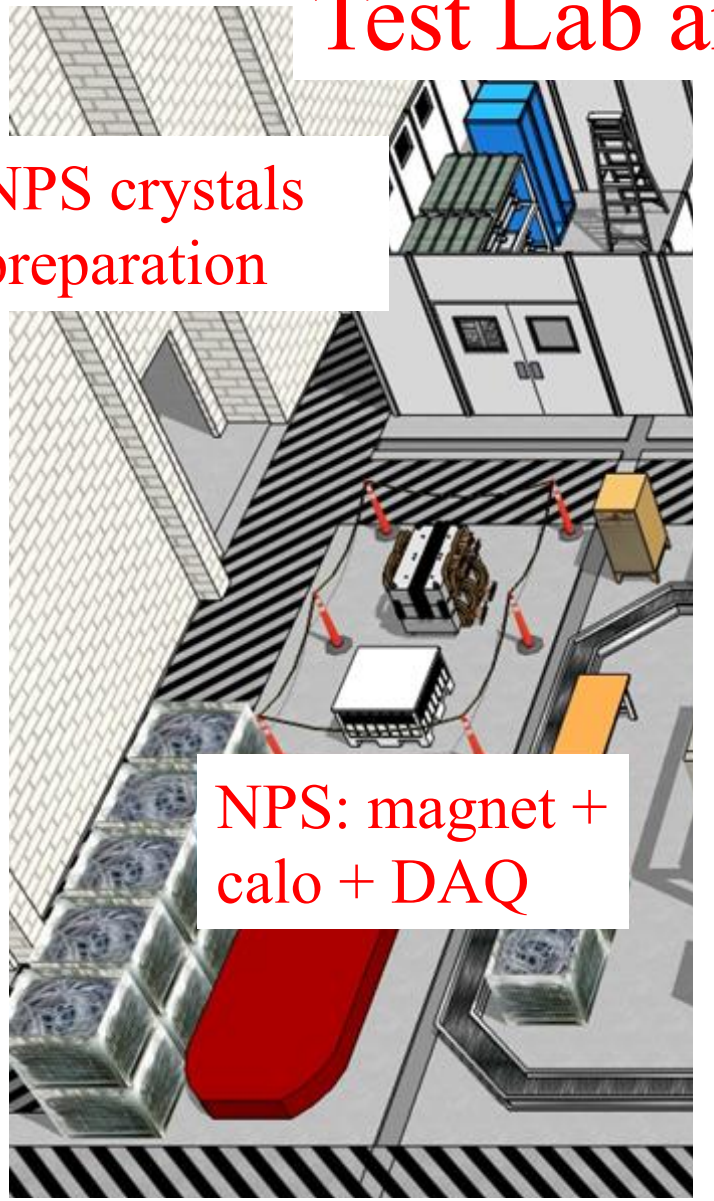
Space and other items needed for commissioning/testing Small Angle Magnet

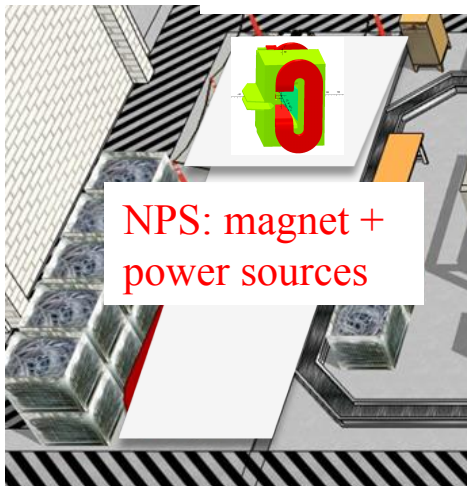
Test Lab area configuration



Stage #1, October-December 2017

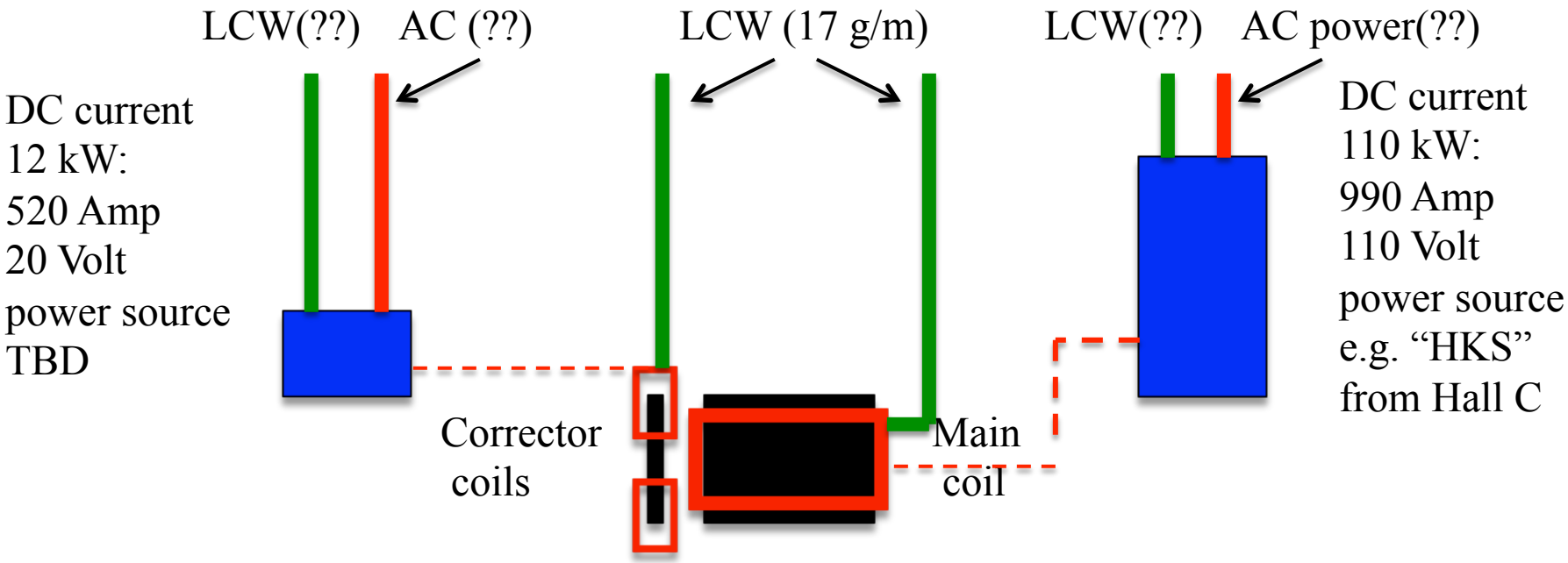
- Assemble magnet with cooling connection
- Power sources installation/connection
- Magnet-to-DC connection
- Magnet + corrector field test

Test Lab area configuration

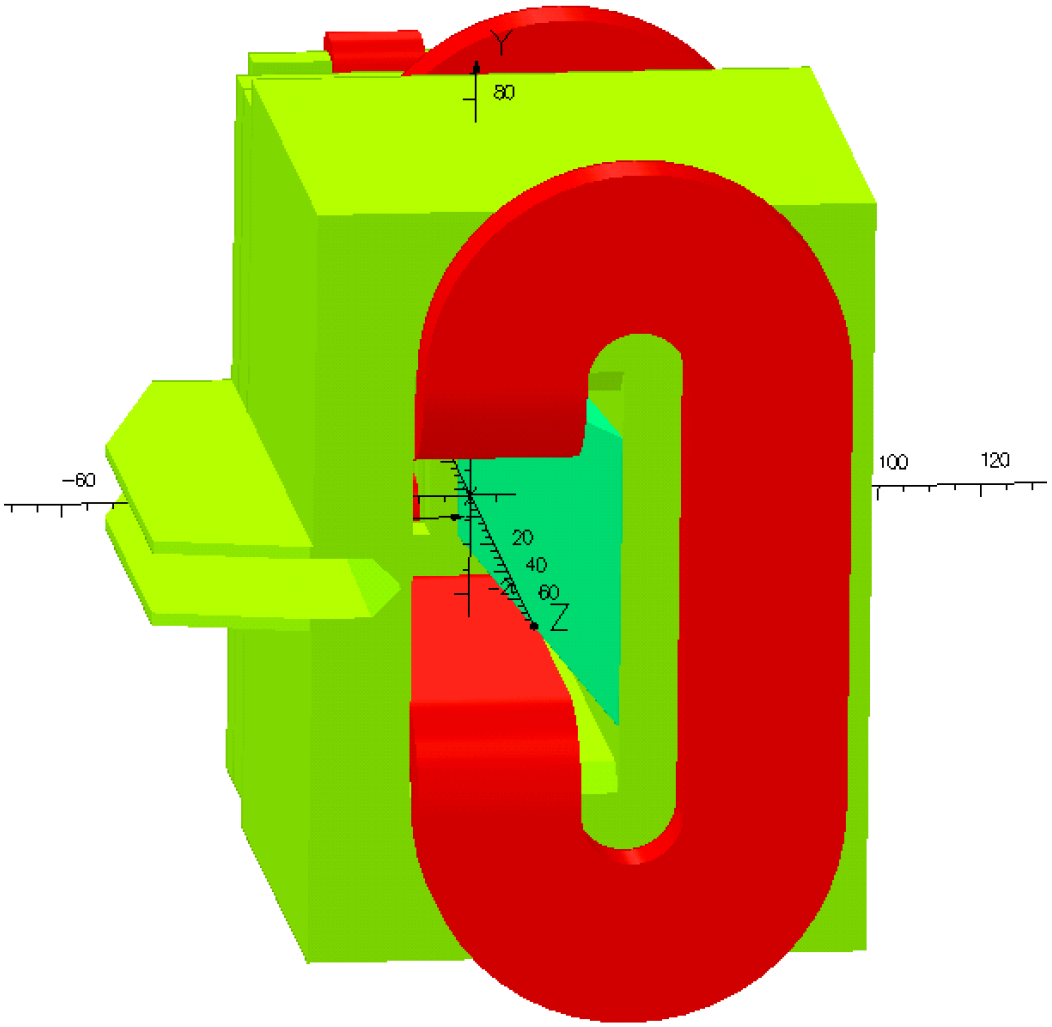


Stage #1, October-December 2017

- Assemble magnet with cooling connection
- Power sources installation/connection
- Magnet-to-DC connection
- Magnet + corrector field test



Revised magnetic design



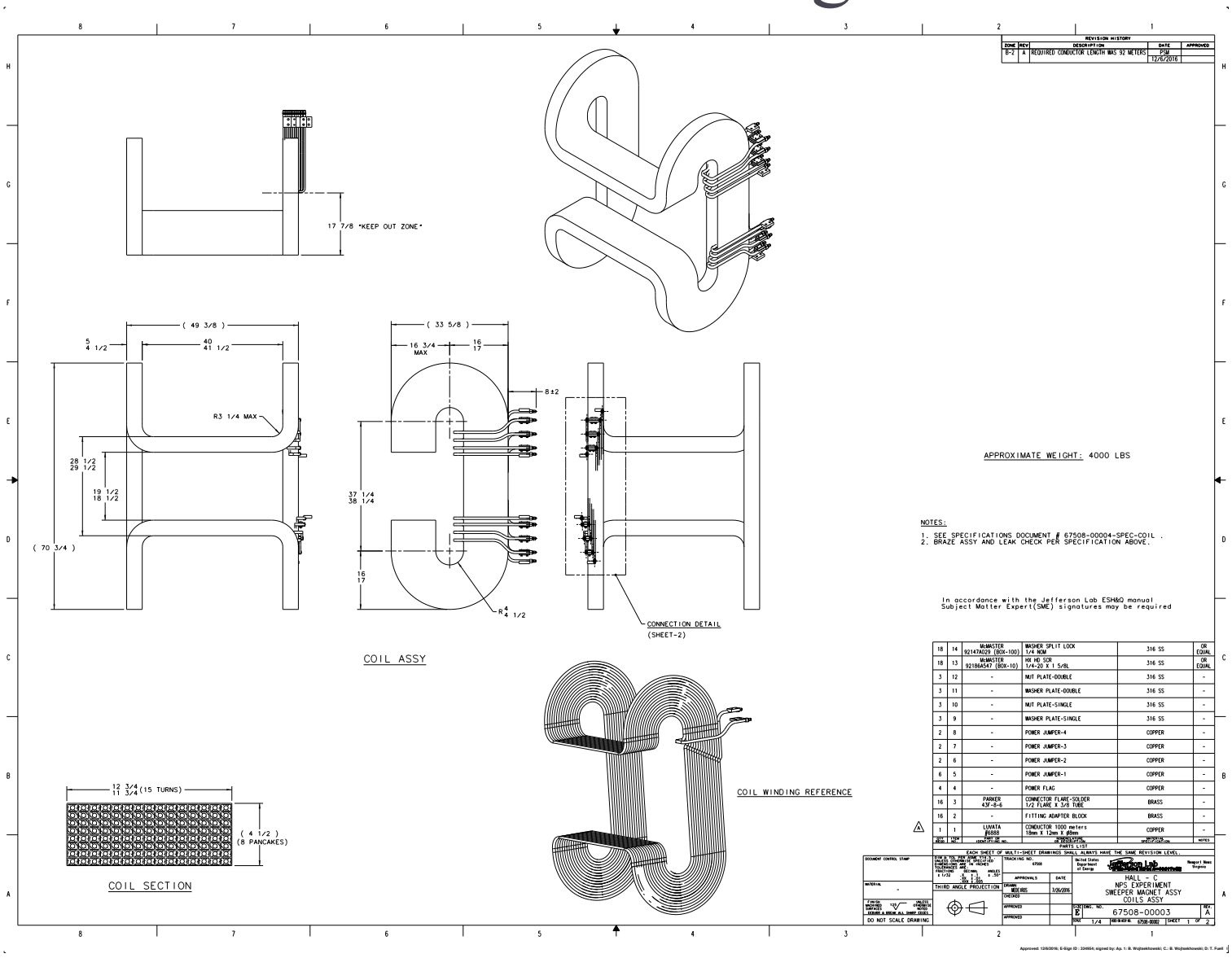
Non-uniform field but only

1-2% uniform integral Bdl

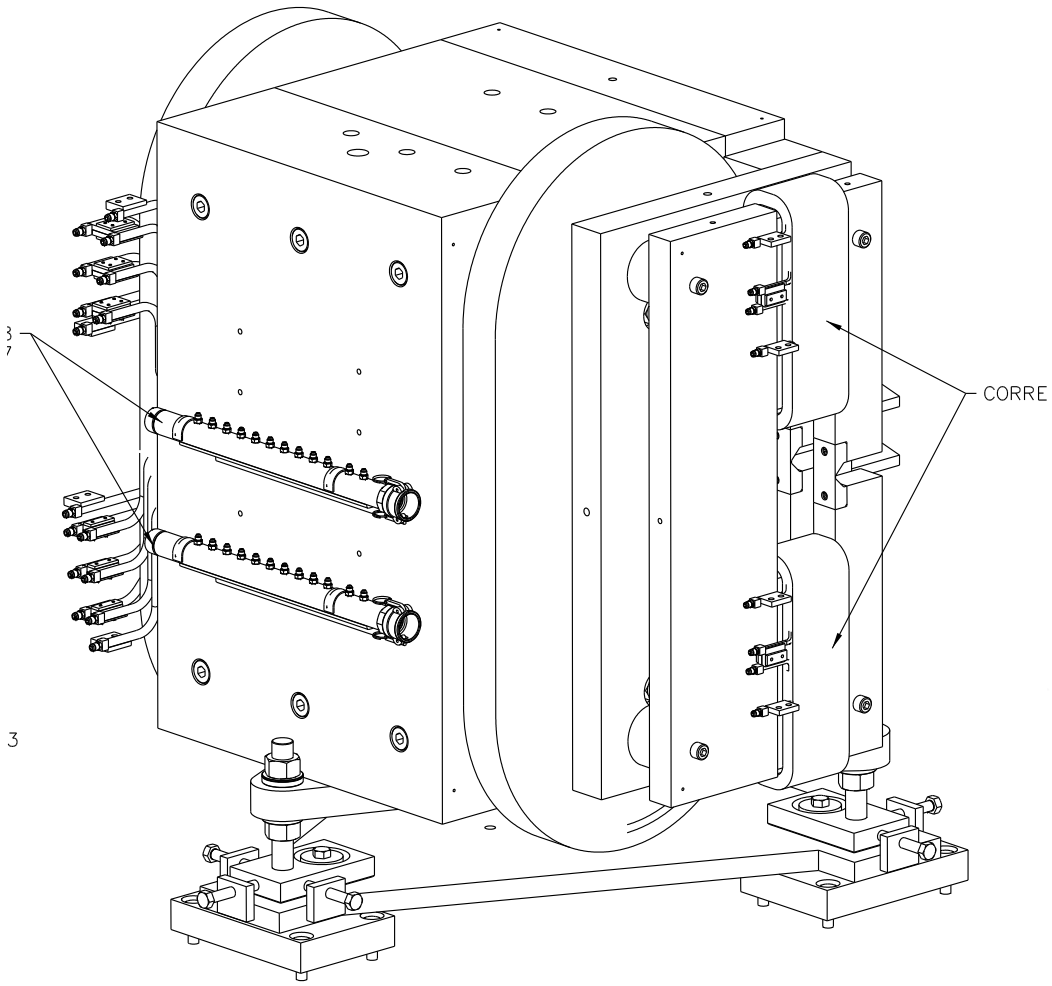
The same power and coil,

larger radius for the coil.

Main coil design



Magnet design



Jefferson Lab
Thomas Jefferson National Accelerator Facility

Hall C NPS Sweeper Magnet Yoke

TECHNICAL SPECIFICATION

 # 67508-00004-SPEC

November 5, 2016

Written By _____ Date 11-15-16
Mike Fowler –Hall C Engineering Support

Approved _____ Date 11/15/16
Paul Brindza –Hall C Sr Engineer

Approved _____ Date 11/15/16
Bogdan Wojtsekhowski- NPS Scientist

Weight	19 tons	need 20 t crane
Vertical size	80 inches	
Horizontal size	62” x 60”	
Mail coil power	990 Amp x 110 Volt	
Corrector power	520 Amp x 20 Volt	
Cooling water	Flow 17 gallons/min	Pressure 130 psi
Access space	3-4 feet around	
Total space	12 feet x 12 feet	