

#### **Permanent magnet material**

1. **Review vendor plan for delivery of permanent magnet material, expediting the delivery schedule. (Responsible: J. Tuozzolo, Stephen Brooks; Complete by: 10/01/17)**

#### **Halbach Magnet Procurement**

1. **Review proposal and place order (Responsible: J. Tuozzolo, George Mahler, Stephen Brooks; Complete by: 10/20/17)**

#### **Halbach magnet assembly and girder plate assembly**

1. **Develop plan to ensure that 2 Halbach magnets can be measured and tuned per day. (Responsible: Stephen Brooks, Peter Wanderer, George Mahler, J. Tuozzolo, D. Trbjevic, Rob Michnoff; Complete by: 10/30/2017)**
2. **Implement this plan. (Responsible: all, Complete by: 12/31/2017)**

#### **BDH magnets**

1. **Complete BDH magnet drawings. (Responsible: Steve Trabocchi/George Mahler; Complete by: 10/15/2017)**
2. **Fabricate BDH aluminum housings. (Responsible: Steve Trabocchi/George Mahler; Complete by: 11/15/2017)**
3. **Assemble and tune BDH magnets at BNL. (Responsible: George Mahler, Stephen Brooks; Complete by: 12/31/2017; permanent magnet material needed mid December 2017)**

#### **FFAG girders**

1. **Complete girder plate and assembly drawings, including corrector terminal blocks, water manifolds, survey fiducial locations, lifting points, etc. (Responsible: Steve Trabocchi/George Mahler; Complete by: 12/31/2017, for FAT: done 10/4/2017)**
2. **Fractional Arc Test girder beam pipe chamber shipped to BNL for assembly (Responsible, Yulin, Karl; Complete by: 11/15/2017)**
3. **Coordinate with Cornell to define girder to girder interconnect, develop drawings for locations of bellows, flanges, etc. (Responsible: George Mahler, Yulin Li; Complete by: 11/01/2017)**
4. **Review final design drawings, including Cornell personnel (Responsible: George Mahler; Complete by 10/15/2017)**
5. **Define required schedule for receiving FFAg beam pipe sections from Cornell. (Responsible: J. Tuozzolo; Complete by: 10/15/2017)**

#### **FFAG Corrector magnets**

1. **Complete statement of work, procure magnets (Responsible: J. Tuozzolo; Order by: 10/31/2017)**

### **Halbach magnet tests**

1. **Perform disassembly/reassembly test of Halbach magnets to test repeatability of magnetic field after tuning (Responsible: Stephen Brooks; Complete by: 10/10/2017)**
2. Diagnose and resolve the magnet measurement system issue where inconsistencies occur when consecutive measurements are taken (Responsible: Stephen Brooks, Peter Wanderer; Complete by: 10/20/2017) (As of 10/4/2017 this appears to be resolved.)
3. Complete tuning and testing of all preproduction magnets in preparation for the fractional arc test. Document data. (Responsible: Stephen Brooks, Complete by: 11/30/2017)
4. Review and accept fractional arc test magnets (Responsible: magnet acceptance committee, Complete by: 12/15/2017, BDH by 12/31/2017)

### **Survey procedure**

1. Schedule BNL and Cornell meeting to review specific FFAG magnet and girder survey procedure, including personnel that will perform work (Responsible: George Mahler, Karl Smolenski; Complete by: 10/15/2017)
2. Revise survey procedure to reflect any agreed upon changes (Responsible: George Mahler, Karl Smolenski; Complete by: 10/21/2017)
3. Procedure to be signed and approved by responsible personnel. (Complete by: 10/31/2017)
4. Order robotic arm for surveying. Determine if Cornell or BNL will purchase this and if project funding will be used for this purchase. (Responsible: George Mahler, Karl Smolenski; Complete by: 10/07/2017)

### **Cover for permanent magnets**

1. Determine if cover is required (George Mahler, Karl Smolenski, Complete by: 10/15/2017)
2. Design & fabricate or procure cover for fractional arc test if required (George Mahler, Complete by: **1/16/2018**) **Before shipping from BNL.**

### **FFAG girder plate delivery to Cornell**

1. The present plan is to delivery 1 girder plate assembly to Cornell each week beginning mid March, 2018. However, due to the present delivery schedule some Halbach magnet types may not be available to satisfy the intended delivery schedule. Discuss with Cornell personnel and determine if it would be acceptable to deliver girders with missing magnets, and deliver and install those magnets to Cornell separately as soon as they are available. (Responsible: Rob Michnoff, Karl Smolenski, J. Tuozzolo; Complete by: 10/07/2017)