PEPII IR2 HER B-Side

January 2005 Survey Results

Survey Summary

- Record the flange locations of the HER in the B side of Region 2 (also known as the “forward side” or the “right side”) for future downtime chamber upgrades.
- There are no useful fiducials on any of the flanges as no values have ever been assigned to the few existing tooling ball sockets.
- Use 3 TC2002 set-ups with different offset arms to cover the whole area. Base as-built results on the monument values from the last PEPII global map from the 2000 Summer Downtime. Shoot one magnet (SQ1R) for reference. The MAD deck used is quoted “Run 1996/10/30”. Raw observation files are saved for AEG archiving in the following local directory:
  - N:\SetOut Files\Bfactory\2005 IR2B Flanges
- Tape the flange positions along beamline from SQ1R center as no reliable z-locations can be derived from the total station set-ups using extension arms. Field notes can be found in the following web link:
  - http://www-group.slac.stanford.edu/met/Align/Job_List/Job_List.xls

PEPII IR2 B-Side HER Flange Center Positions in the Beam Following System

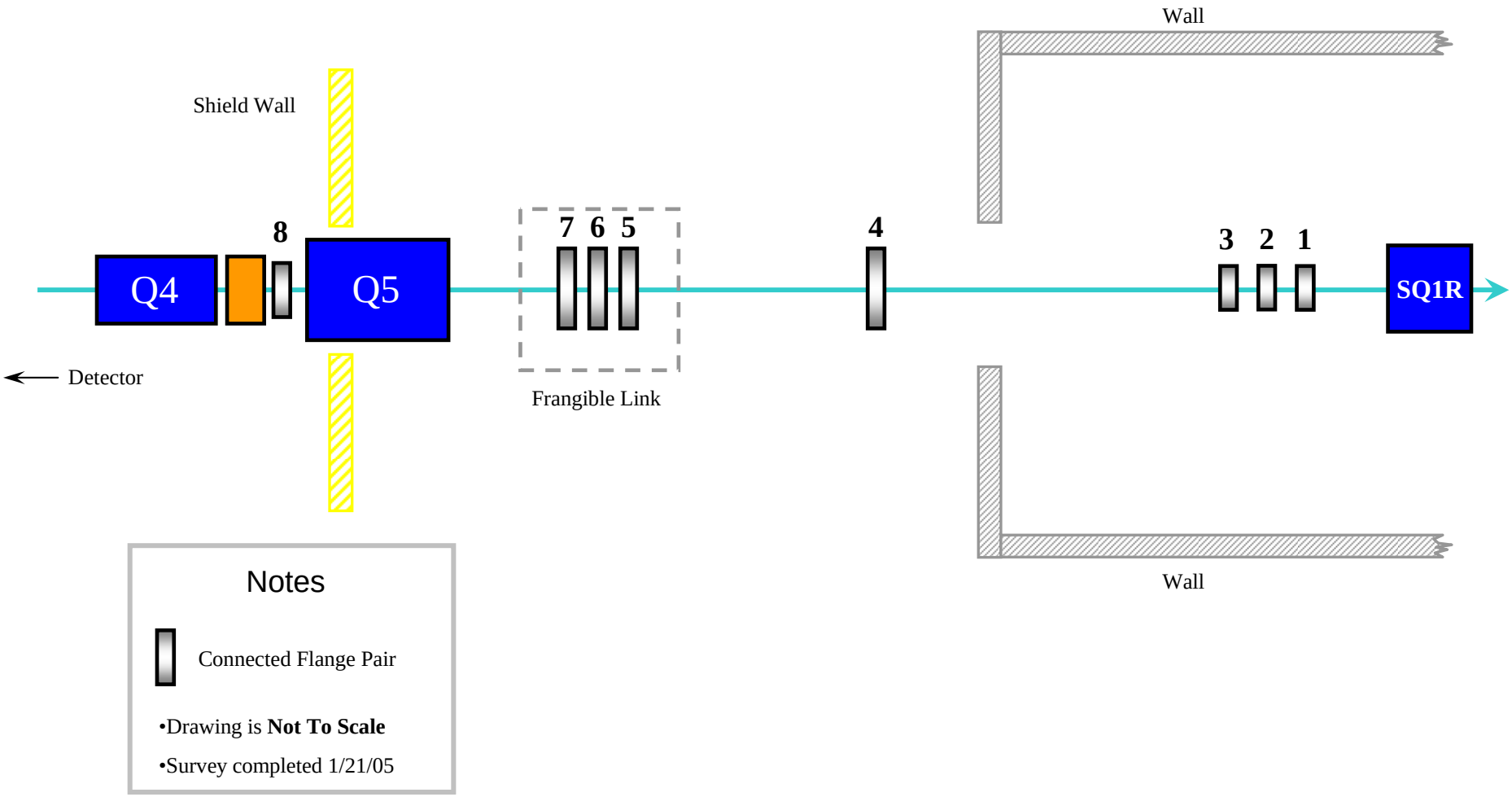
	Z (in)	X (in)	Y (in)	Diameter (in)
Flange01	-13.6	0.227	0.129	7.980
Flange02	-20.3	0.155	0.146	7.980
Flange03	-24.3	0.165	0.131	7.980
Flange04	-265.3	-0.749	-0.064	16.500
Flange05	-505.0	-0.939	-0.336	16.500
Flange06	-517.0			16.500
Flange07	-529.2	-0.915	-0.34979	16.500
Flange08		-0.282	0.03936	9.980

Notes:

- *Z's measured with a tape from the center of BH2BSQB-PR02-8027-SQ-SQ1R*
- *Empty cells mean values not measurable*

PEPII HER Flange Numbering for Location Survey

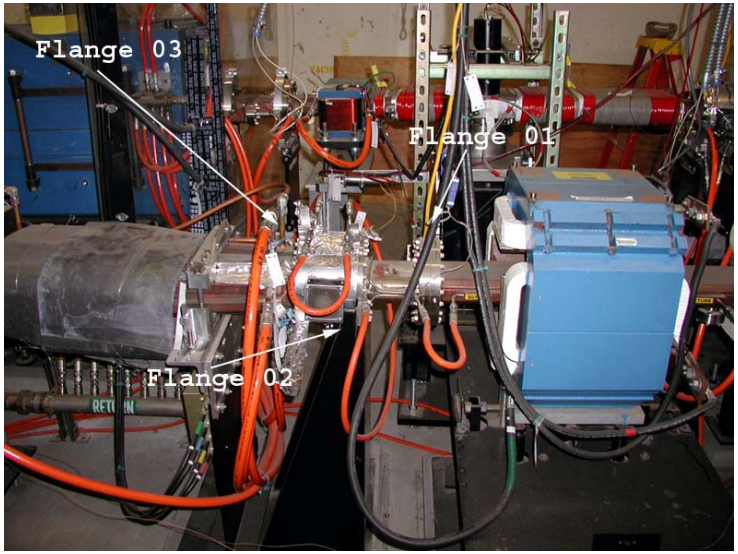
2B Side

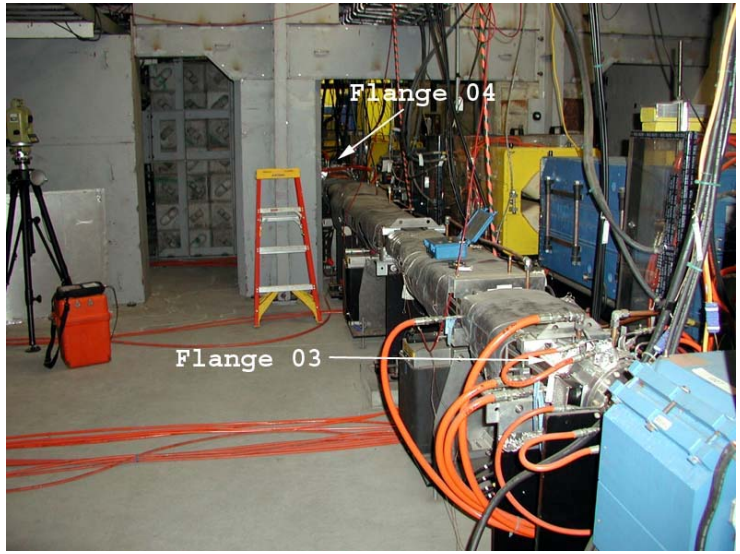


Notes

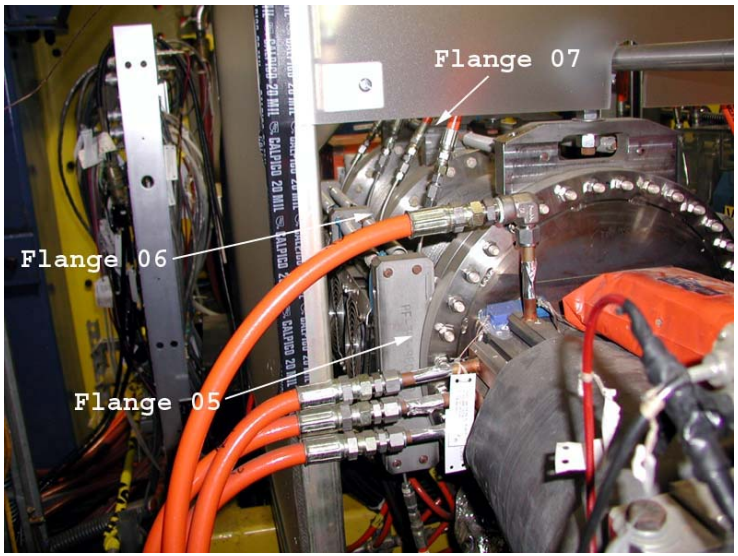
Connected Flange Pair

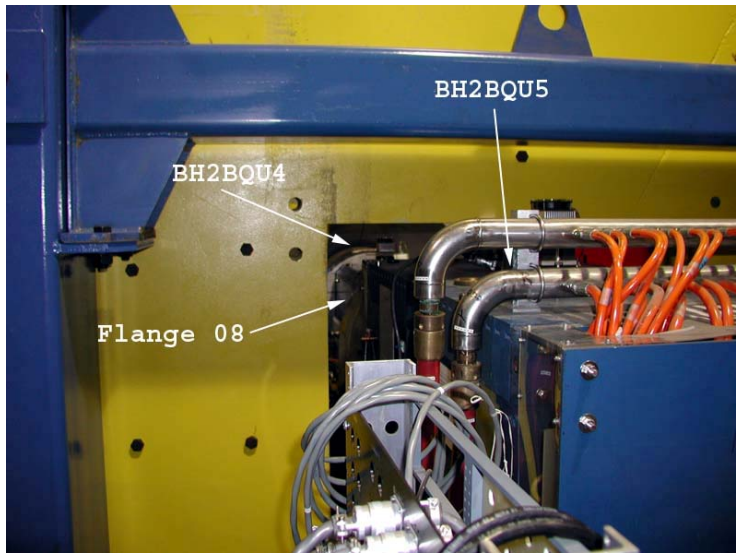
- Drawing is **Not To Scale**
- Survey completed 1/21/05


Flange 03
Flange 01
Flange 02


Flange 04
Flange 03

B Side


Flange 07
Flange 06
Flange 05


BH2BQU5
BH2BQU4
Flange 08

PEPII IR2 B-Side HER Quadrupole As-Built Positions and Orientations in the Beam Following System

AEG Name	MAD Name	DZ (in)	DX (in)	DY (in)	Roll (deg)	Pitch (deg)	Yaw (deg)
BH2BSQB	SQ1R	0.115	0.073	0.131	0.0031	-0.0308	0.0146