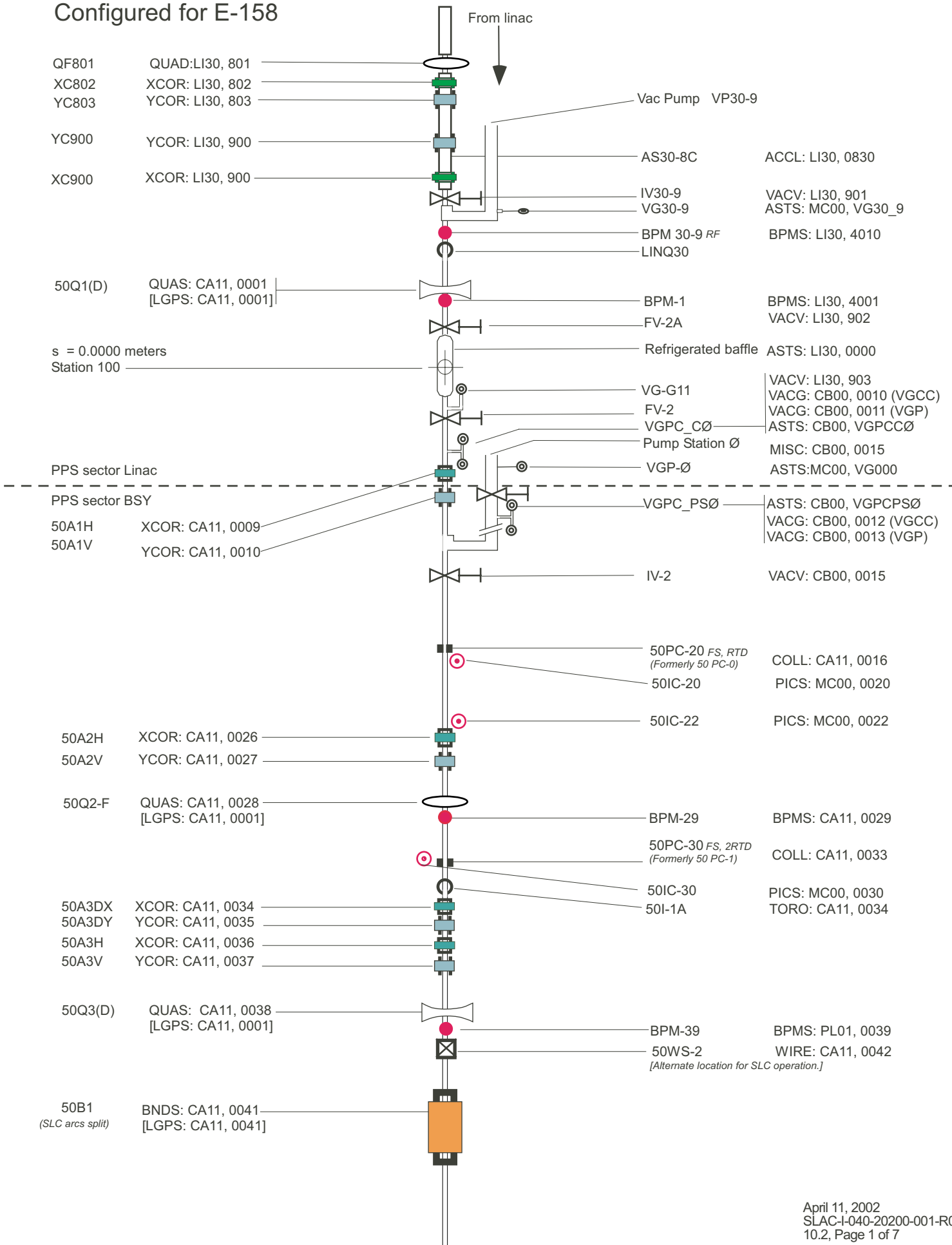


10.2 A-Line Configured for E-158



QF801 QUAD:LI30, 801
 XC802 XCOR: LI30, 802
 YC803 YCOR: LI30, 803

YC900 YCOR: LI30, 900
 XC900 XCOR: LI30, 900

50Q1(D) QUAS: CA11, 0001
 [LGPS: CA11, 0001]

s = 0.0000 meters
 Station 100

PPS sector Linac

PPS sector BSY

50A1H XCOR: CA11, 0009
 50A1V YCOR: CA11, 0010

50A2H XCOR: CA11, 0026
 50A2V YCOR: CA11, 0027

50Q2-F QUAS: CA11, 0028
 [LGPS: CA11, 0001]

50A3DX XCOR: CA11, 0034
 50A3DY YCOR: CA11, 0035
 50A3H XCOR: CA11, 0036
 50A3V YCOR: CA11, 0037

50Q3(D) QUAS: CA11, 0038
 [LGPS: CA11, 0001]

50B1 BNDS: CA11, 0041
 (SLC arcs split) [LGPS: CA11, 0041]

From linac

Vac Pump VP30-9

AS30-8C ACCL: LI30, 0830

IV30-9 VACV: LI30, 901
 VG30-9 ASTS: MC00, VG30_9

BPM 30-9 RF BPMS: LI30, 4010
 LINQ30

BPM-1 BPMS: LI30, 4001
 FV-2A VACV: LI30, 902

Refrigerated baffle ASTS: LI30, 0000

VG-G11 VACV: LI30, 903
 FV-2 VACG: CB00, 0010 (VGCC)
 VGPC_CØ VACG: CB00, 0011 (VGP)
 Pump Station Ø ASTS: CB00, VGPCØ

VGP-Ø MISC: CB00, 0015
 ASTS:MC00, VG000

VGPC_PSØ ASTS: CB00, VGPCPSØ
 VACG: CB00, 0012 (VGCC)
 VACG: CB00, 0013 (VGP)

IV-2 VACV: CB00, 0015

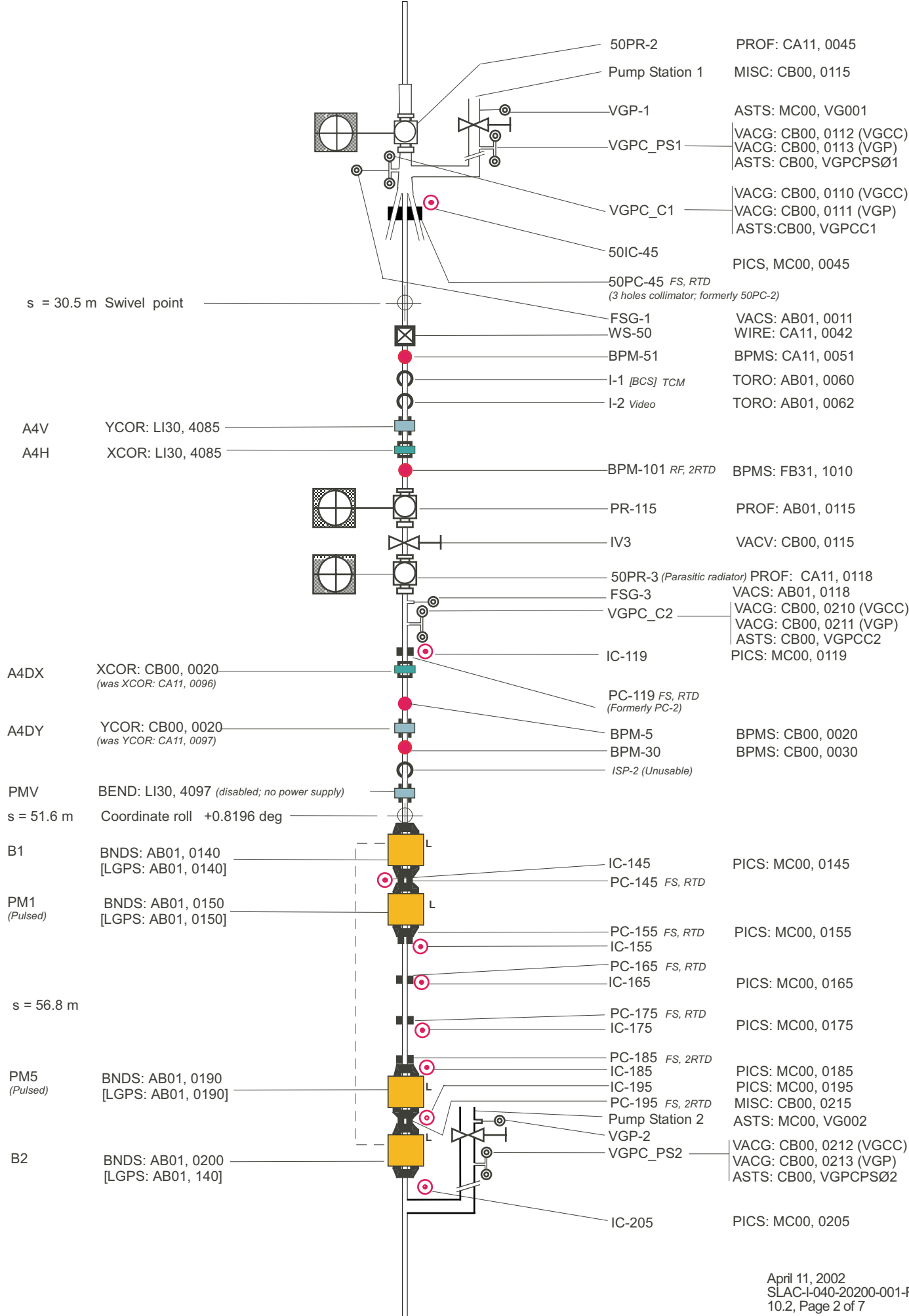
50PC-20 FS, RTD COLL: CA11, 0016
 (Formerly 50 PC-0)
 50IC-20 PICS: MC00, 0020

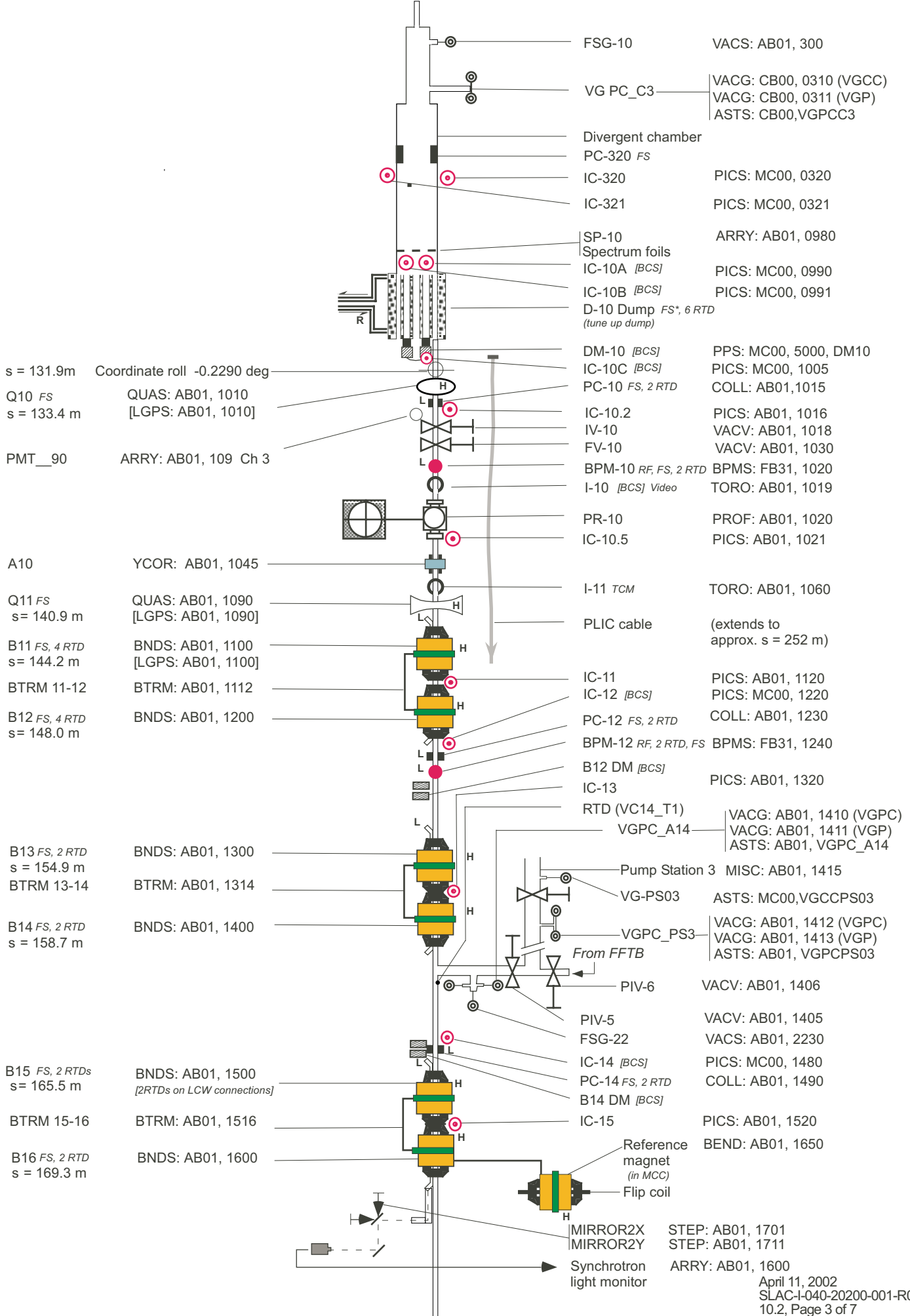
50IC-22 PICS: MC00, 0022

BPM-29 BPMS: CA11, 0029
 50PC-30 FS, 2RTD COLL: CA11, 0033
 (Formerly 50 PC-1)

50IC-30 PICS: MC00, 0030
 50I-1A TORO: CA11, 0034

BPM-39 BPMS: PL01, 0039
 50WS-2 WIRE: CA11, 0042
 [Alternate location for SLC operation.]





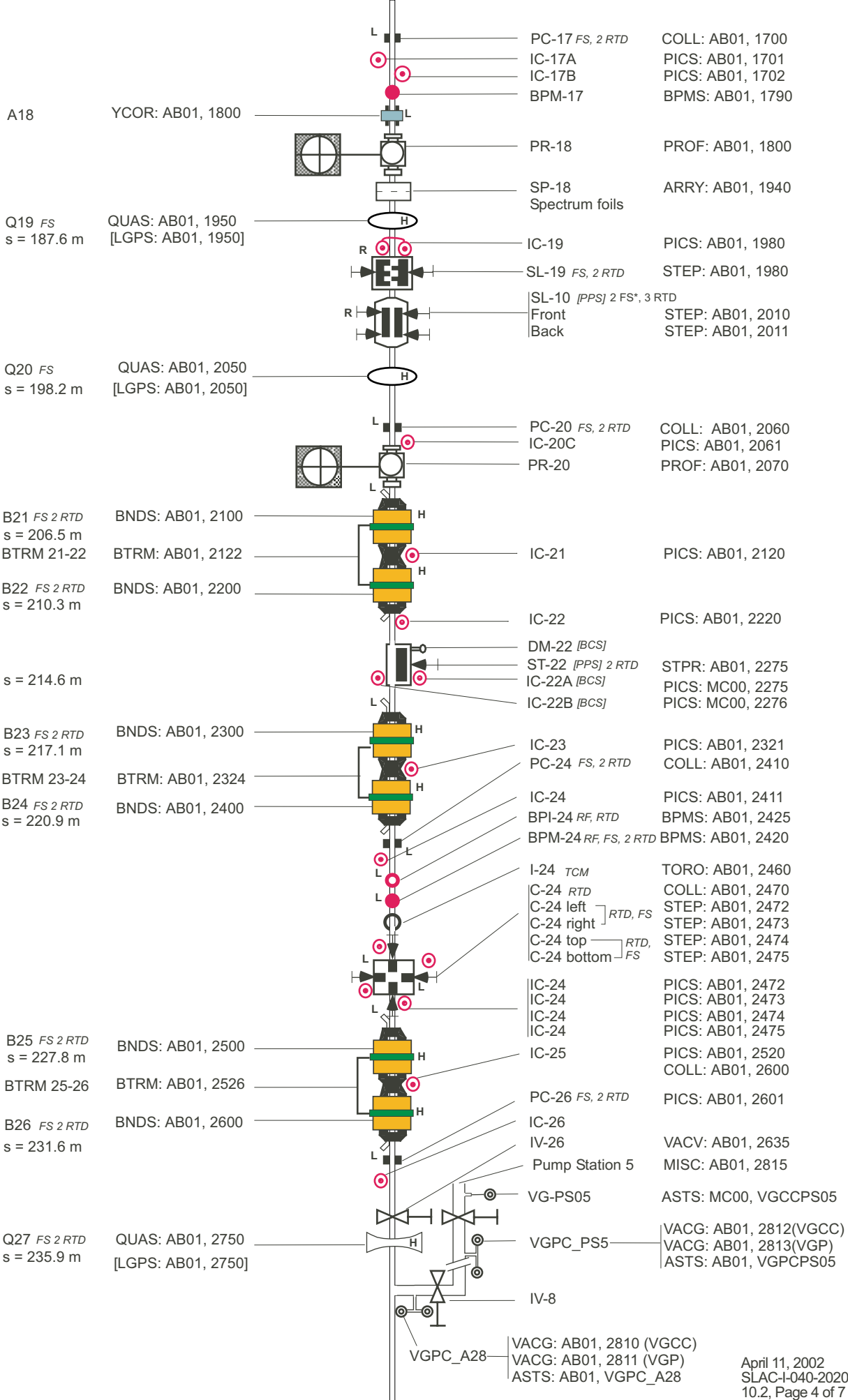
s = 131.9m Coordinate roll -0.2290 deg
 Q10 FS QUAS: AB01, 1010
 s = 133.4 m [LGPS: AB01, 1010]
 PMT_90 ARRY: AB01, 109 Ch 3

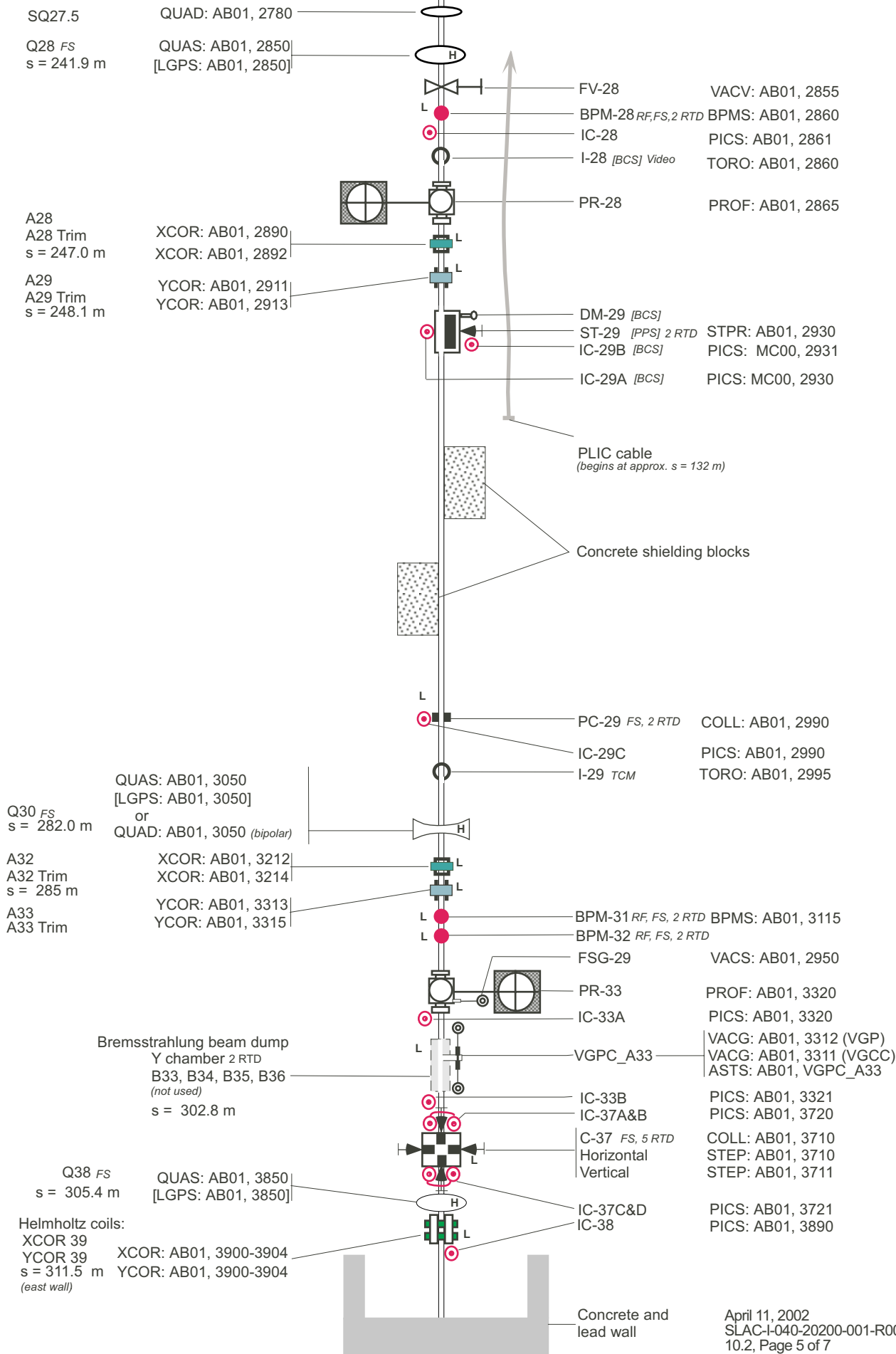
A10 YCOR: AB01, 1045
 Q11 FS QUAS: AB01, 1090
 s = 140.9 m [LGPS: AB01, 1090]
 B11 FS, 4 RTD BNDS: AB01, 1100
 s = 144.2 m [LGPS: AB01, 1100]
 BTRM 11-12 BTRM: AB01, 1112
 B12 FS, 4 RTD BNDS: AB01, 1200
 s = 148.0 m

B13 FS, 2 RTD BNDS: AB01, 1300
 s = 154.9 m
 BTRM 13-14 BTRM: AB01, 1314
 B14 FS, 2 RTD BNDS: AB01, 1400
 s = 158.7 m

B15 FS, 2 RTDs BNDS: AB01, 1500
 s = 165.5 m [2RTDs on LCW connections]
 BTRM 15-16 BTRM: AB01, 1516
 B16 FS, 2 RTD BNDS: AB01, 1600
 s = 169.3 m

FSG-10 VACS: AB01, 300
 VG PC_C3 VACG: CB00, 0310 (VGCC)
 VACG: CB00, 0311 (VGP)
 ASTS: CB00, VGPC3
 Divergent chamber
 PC-320 FS
 IC-320 PICS: MC00, 0320
 IC-321 PICS: MC00, 0321
 SP-10 ARRY: AB01, 0980
 Spectrum foils
 IC-10A [BCS] PICS: MC00, 0990
 IC-10B [BCS] PICS: MC00, 0991
 D-10 Dump FS*, 6 RTD
 (tune up dump)
 DM-10 [BCS] PPS: MC00, 5000, DM10
 IC-10C [BCS] PICS: MC00, 1005
 PC-10 FS, 2 RTD COLL: AB01, 1015
 IC-10.2 PICS: AB01, 1016
 IV-10 VACV: AB01, 1018
 FV-10 VACV: AB01, 1030
 BPM-10 RF, FS, 2 RTD BPMS: FB31, 1020
 I-10 [BCS] Video TORO: AB01, 1019
 PR-10 PROF: AB01, 1020
 IC-10.5 PICS: AB01, 1021
 I-11 TCM TORO: AB01, 1060
 PLIC cable (extends to approx. s = 252 m)
 IC-11 PICS: AB01, 1120
 IC-12 [BCS] PICS: MC00, 1220
 PC-12 FS, 2 RTD COLL: AB01, 1230
 BPM-12 RF, 2 RTD, FS BPMS: FB31, 1240
 B12 DM [BCS] PICS: AB01, 1320
 IC-13
 RTD (VC14_T1)
 VGPC_A14 VACG: AB01, 1410 (VGPC)
 VACG: AB01, 1411 (VGP)
 ASTS: AB01, VGPC_A14
 Pump Station 3 MISC: AB01, 1415
 VG-PS03 ASTS: MC00, VGCCPS03
 VGPC_PS3 VACG: AB01, 1412 (VGPC)
 VACG: AB01, 1413 (VGP)
 ASTS: AB01, VGPCPS03
 From FFTB
 PIV-6 VACV: AB01, 1406
 PIV-5 VACV: AB01, 1405
 FSG-22 VACS: AB01, 2230
 IC-14 [BCS] PICS: MC00, 1480
 PC-14 FS, 2 RTD COLL: AB01, 1490
 B14 DM [BCS]
 IC-15 PICS: AB01, 1520
 Reference magnet (in MCC) BEND: AB01, 1650
 Flip coil
 MIRROR2X STEP: AB01, 1701
 MIRROR2Y STEP: AB01, 1711
 Synchrotron light monitor ARRY: AB01, 1600





SQ27.5

QUAD: AB01, 2780

Q28 FS
s = 241.9 m

QUAS: AB01, 2850
[LGPS: AB01, 2850]

FV-28 VACV: AB01, 2855
BPM-28 RF, FS, 2 RTD BPMS: AB01, 2860
IC-28 PICS: AB01, 2861
I-28 [BCS] Video TORO: AB01, 2860

A28
A28 Trim
s = 247.0 m

XCOR: AB01, 2890
XCOR: AB01, 2892

PR-28 PROF: AB01, 2865

A29
A29 Trim
s = 248.1 m

YCOR: AB01, 2911
YCOR: AB01, 2913

DM-29 [BCS]
ST-29 [PPS] 2 RTD STPR: AB01, 2930
IC-29B [BCS] PICS: MC00, 2931
IC-29A [BCS] PICS: MC00, 2930

PLIC cable
(begins at approx. s = 132 m)

Concrete shielding blocks

Q30 FS
s = 282.0 m

QUAS: AB01, 3050
[LGPS: AB01, 3050]
or
QUAD: AB01, 3050 (bipolar)

PC-29 FS, 2 RTD COLL: AB01, 2990
IC-29C PICS: AB01, 2990
I-29 TCM TORO: AB01, 2995

A32
A32 Trim
s = 285 m

XCOR: AB01, 3212
XCOR: AB01, 3214

BPM-31 RF, FS, 2 RTD BPMS: AB01, 3115
BPM-32 RF, FS, 2 RTD
FSG-29 VACS: AB01, 2950

A33
A33 Trim

YCOR: AB01, 3313
YCOR: AB01, 3315

PR-33 PROF: AB01, 3320
IC-33A PICS: AB01, 3320

Bremsstrahlung beam dump
Y chamber 2 RTD
B33, B34, B35, B36
(not used)
s = 302.8 m

VGPC_A33 VACG: AB01, 3312 (VGP)
VACG: AB01, 3311 (VGCC)
ASTS: AB01, VGPC_A33

Q38 FS
s = 305.4 m

QUAS: AB01, 3850
[LGPS: AB01, 3850]

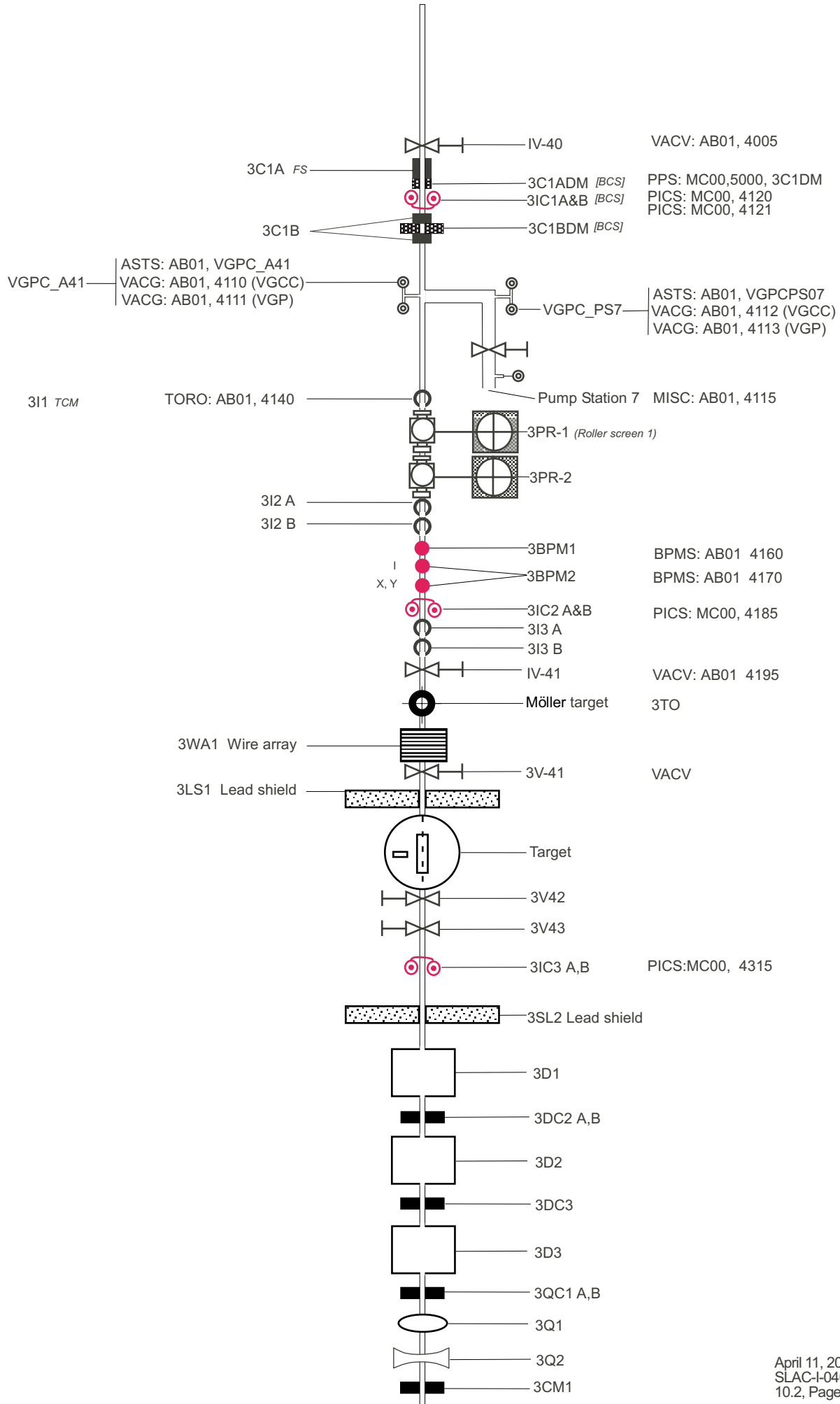
IC-33B PICS: AB01, 3321
IC-37A&B PICS: AB01, 3720
C-37 FS, 5 RTD COLL: AB01, 3710
Horizontal STEP: AB01, 3710
Vertical STEP: AB01, 3711

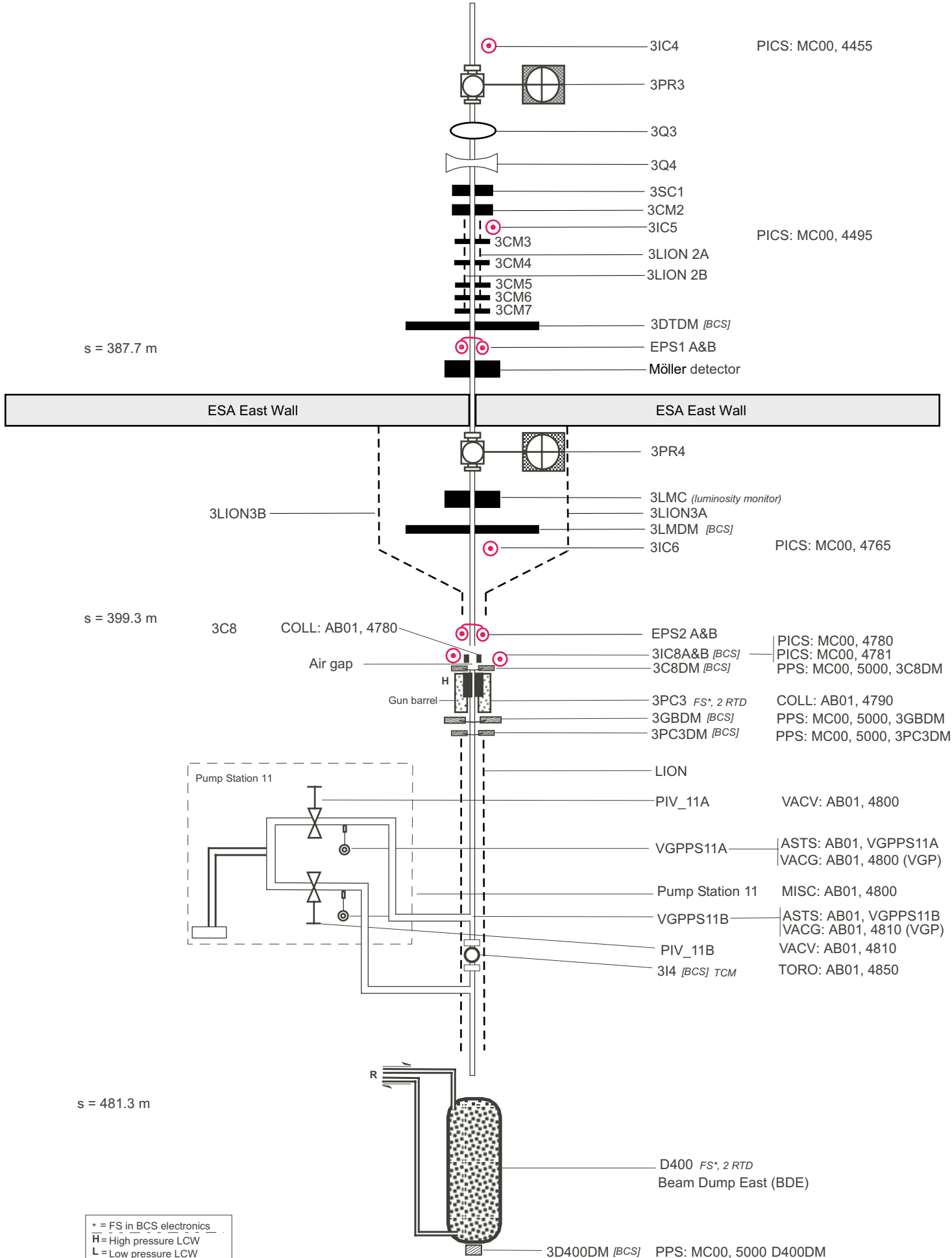
Helmholtz coils:

XCOR 39 XCOR: AB01, 3900-3904
YCOR 39 YCOR: AB01, 3900-3904
(east wall)

IC-37C&D PICS: AB01, 3721
IC-38 PICS: AB01, 3890

Concrete and lead wall





* = FS in BCS electronics
 H = High pressure LCW
 L = Low pressure LCW
 R = Radioactive water system

PICS: MC00, 4455

PICS: MC00, 4495

PICS: MC00, 4765

PICS: MC00, 4780
 PICS: MC00, 4781
 PPS: MC00, 5000, 3C8DM

COLL: AB01, 4790
 PPS: MC00, 5000, 3GBDM
 PPS: MC00, 5000, 3PC3DM

VACV: AB01, 4800

ASTS: AB01, VGPPS11A
 VACG: AB01, 4800 (VGP)

MISC: AB01, 4800

ASTS: AB01, VGPPS11B
 VACG: AB01, 4810 (VGP)
 VACV: AB01, 4810
 TORO: AB01, 4850

PPS: MC00, 5000 D400DM