

Master Planning Task Force

March 29, 2013

Members (P= Present, A=Absent)

A Pier Oddone	A Jack Anderson	A Steve Holmes	P Greg Bock
P Vicky White	A Bob Kephart	A Giorgio Apollinari	P Mike Lindgren
A Roger Dixon	A Steve Wiesenthal	P Randy Ortgiesen	P Young-Kee Kim
A Patricia McBride	A Paul Czarapata	P Stuart Henderson	A Katie Yurkewicz
A Carl Strawbridge	A John Bakken	P Rob Roser	A Steve Dixon

Guests

R. Ray, T. Lackowski, G. VanZandbergen, M. Weis (DOE), E. Gottschalk, C. Polly

A. Mu2e Facilities

R. Ray (RR) introduced T. Lackowski (TL) of FESS/E who proceeded to provide an update of the status of the Mu2e conventional facilities since CD-1. The following observations/discussions were noted:

- TL offered an overview of the Value Engineering exercise recently completed for the project including the elimination of the proposed Kautz Road reconfiguration;
- A comparison of the Mu2e building rendering used in the FY14 HEP budget briefing to the most recent design was presented and discussed;
- Young-Kee Kim (YKK) asked about a pedestrian path from Wilson Hall to the Mu2e site. It was decided that this will be accommodated in the final design;
- C. Polly (CP) questioned the expected increased vehicular traffic in proximity to Muon g-2 resulting from Kautz Road elimination. This was felt by most in attendance to not be a concern but noted that it is an unknown for g-2;
- The task force agreed with the Mu2e building design and site layout.

B. Master Plan Status

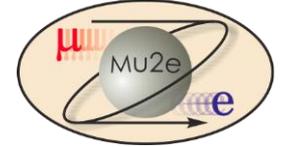
G. VanZandbergen (GV) provided a verbal update on the progress of the Campus Master Plan. The following observations/discussions were noted:

- A summary of the meeting held University of Chicago representatives to gain insight and feedback on the plan was offered;
- M. Weis (MW) acknowledged it was a good idea to respect the architectural heritage but noted it was good to move forward defining a new direction;
- GV informed the group that Holabird and Root, and Ronan and Associates had been retained to provide targeted support in graphics and general review;
- The expedited due date of June 30 was discussed in order to get the outgoing director's seal on this first plan;
- GV noted that master planning guiding principles had been previewed with three (3) different lab groups including the Operations Sector, Building Managers, and ESH&Q section and was favorable received.
- The Master Planning task Force will get a more detailed update at the April 19th meeting.

- YKK asked that the EAG also receive an informational briefing at some point in the near future.

C. Next Meeting

The next meeting is scheduled for April 19, 2013



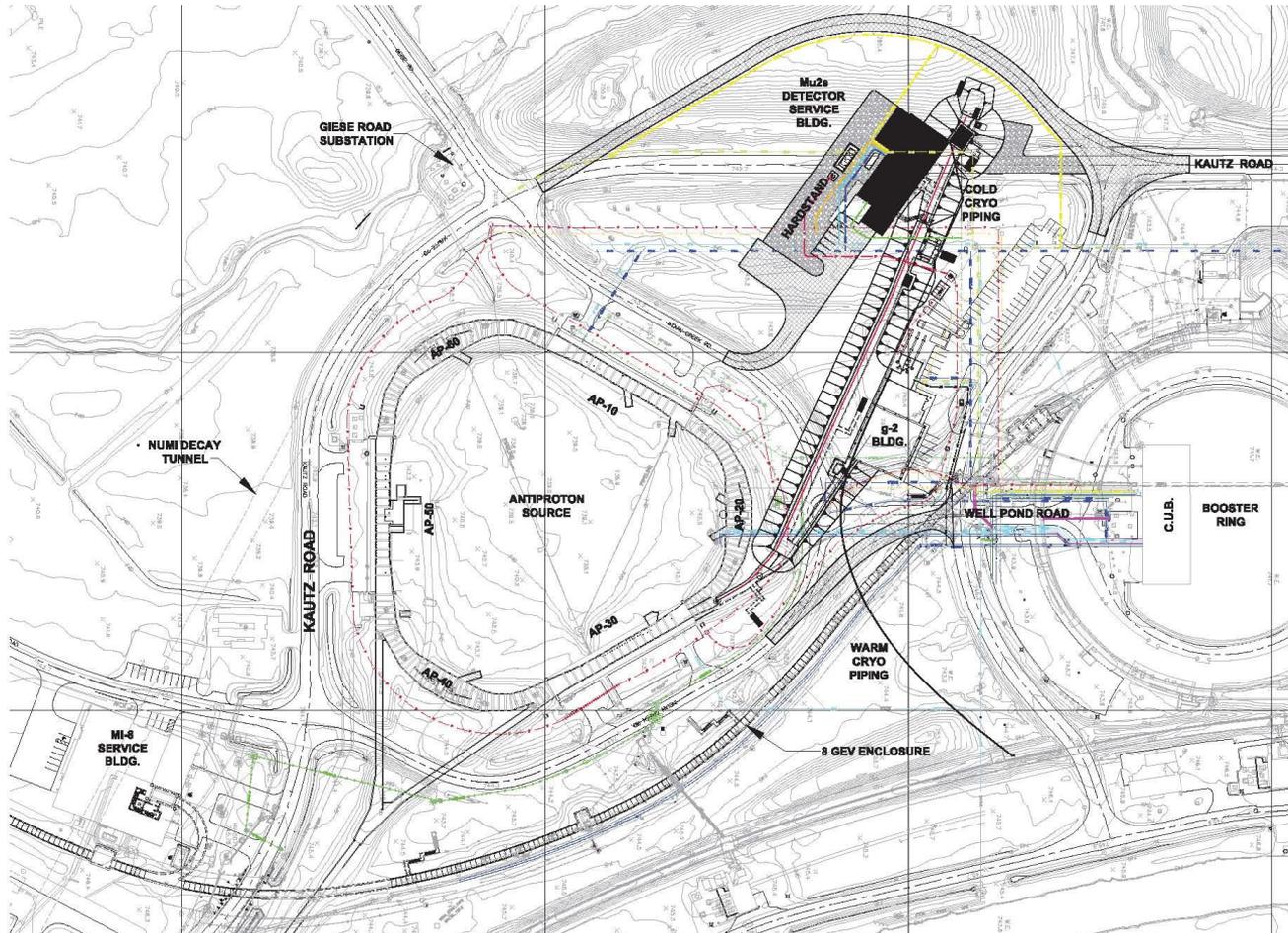
Mu2e Conventional Construction

Tom Lackowski

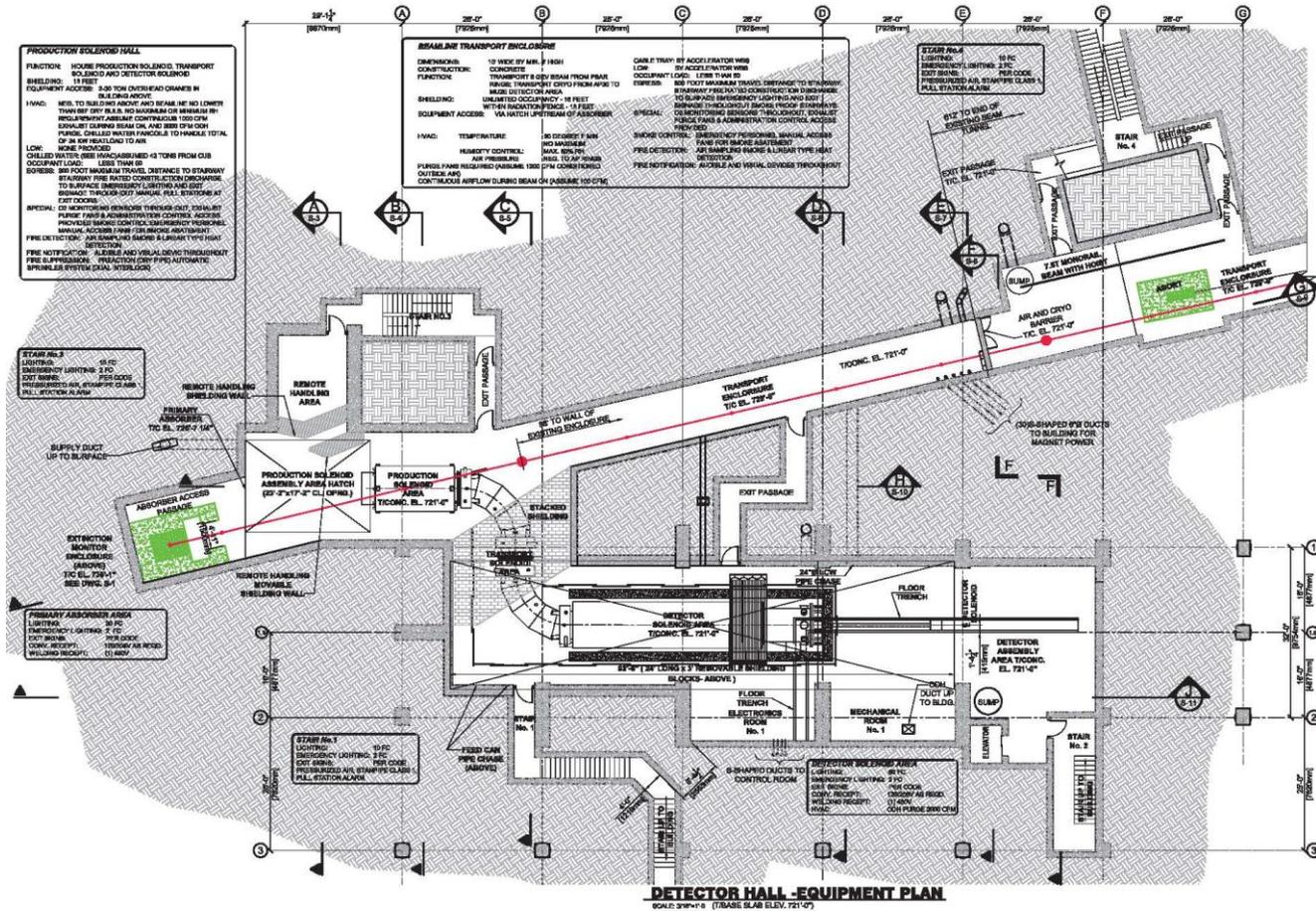
Outline

- CD-1 Design
- Requirements
- Value Engineering
Workshop
- Current Design

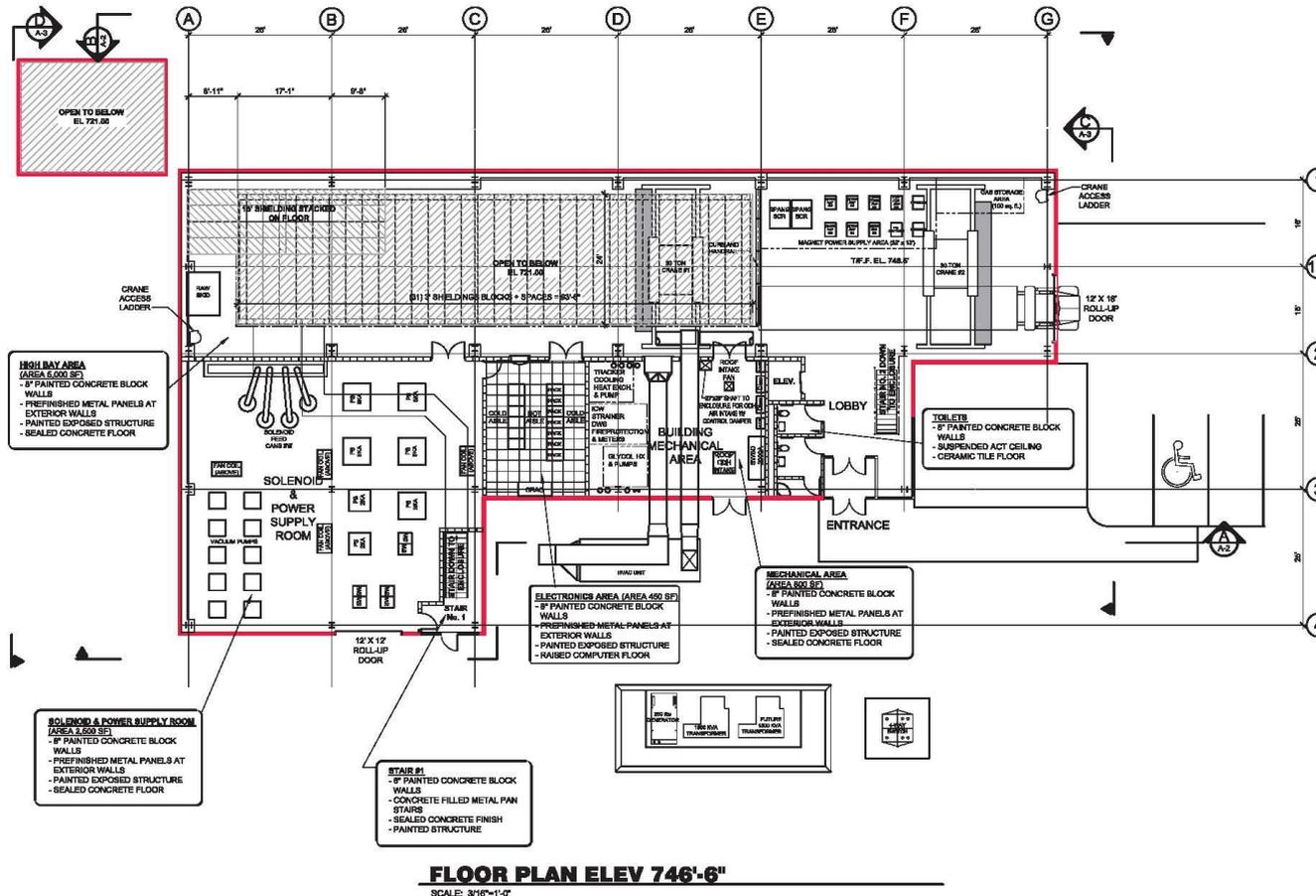
CD-1 Site Plan



CD-1 Below Grade Plan



CD-1 Grade Level Plan



CD-1 Perspective



Earlier Perspectives



Requirements

- The technical subprojects have matured their design efforts and provided sufficiency defined criteria and design loads.
- Requirements have been documented and are under review by the L2 managers, Project Engineers and Project Managers.
 - Requirements have been finalized and agreed to by stakeholders and formal signoffs are commencing.
- This Requirements Document (Doc DB 1088) establishes the baseline and all future changes will require change control.

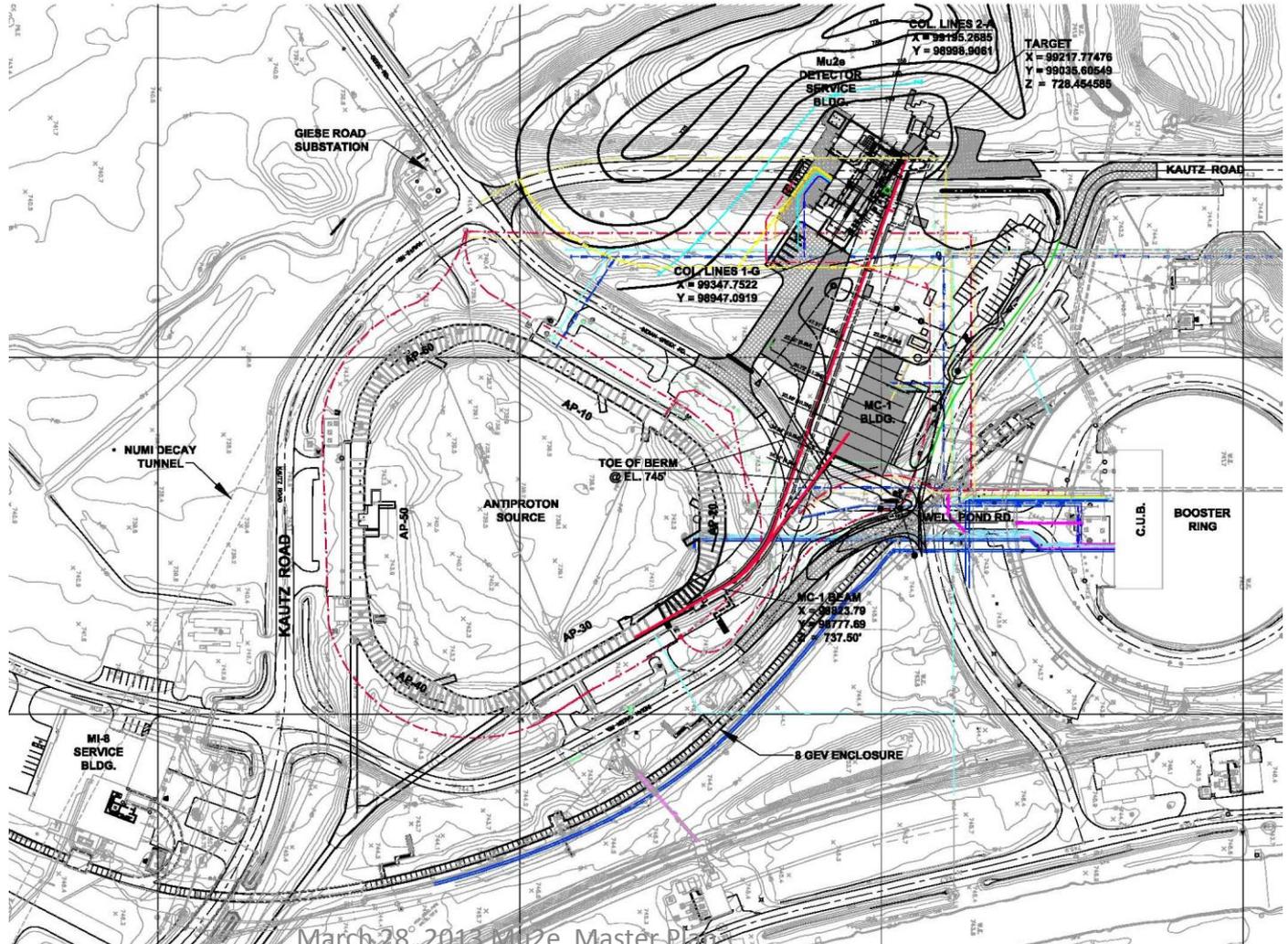
Value Engineering Workshop

- Held Feb 14th and 15th
- Based on US Army Corp of Engineers Methodology
 - 20 participants including the major discipline leads from the A&E, Middough.
 - Speculation list contained 62 items; 20 have been accepted.
- Items with major value impact
 - Eliminated Kautz Rd bypass
 - Reduced number of stairs
 - Increased crane hook height

SPECULATION LIST

Item Number	Speculation List	Proposed Action
	Cost Impact (BID) Feb 14, 2013	
	Out-Feel may not result to large savings	
	Out-Feel may result to savings. Will be evaluated? (potential cost savings TBD)	
	Obvious Cost Savings	
	Warranted Increase in Performance to be evaluated	
	Will be evaluated By Others, not CFS, whether high cost savings impact or not	
	(not shaded) = Items that I'm Not Sure	
43	Use Median CR road as part of the truck turnaround. Take out new turnaround	Accepted
44	Interrupt Kautz Rd tertiary power line	Accepted
45	Shorten gas routing that follows Kautz Rd	Accepted
24	Make generator natural gas	Accepted
50	Remove EG from containment area	Accepted
12	Relocate stair 4 to west corridor from stair 3	Accepted
13	Relocate stair 2 corridor from stair 1	Rejected due to Shielding
21	Eliminate Kautz road bypass and straighten east route	Accepted
27	Look at location of dump resistor	Checking
28	Reduce parking spaces	Rejected
29	Use MCI parking with walkway over berm	Rejected
47	Re-contour parts of stockpile to lessen dirt removal	Accepted
48	Close stockpile... south of bldg	Accepted
49	Simplify underground structure at column B1	
51	60V type transformers adjacent to bldg	
52	Ballast issues, remote limitations	
59	Two smaller transformers	Rejected
26	Reduce mech room space	
57	Provide infrastructure for rental HVAC for installation phase	Accepted
58	Conduct model reviews	Will evaluate With A&E
10	Replace shielding blocks with cast in place where possible	Accepted
14	Examine penetration material	Accepted
22	Use elec/mech room to eliminate utility congestion	Accepted
30	Benefit of raising low bay	Rejected
32	Mezzanine over portion of low bay	Rejected
37	Stack toilet and mech space to reduce low bay area	Rejected
53	Uniformed conditions clause policy	
1	Waterproof or control water inflow in the PS region	Accepted
2	Provide for Collection of process water in enclosure especially around PS / trench gutter along walls	Accepted
11	Building over PS hatch. Weather protection while open	Not Accepted
23	Turn west crane catwalk 180degrees	Accepted
41	Handstand for PS hatch	Accepted
36	Integrate future clean space system with civil HVAC system	If criteria is provided we will accept
55	Provide sealed combustion gas appliances	
17	Incur shielding blocks with later funding	Defer to PM
54	PS hall, imbed transfer lines into wall, increase highbay 2 feet	Accepted
60	Make room for tornado shelter in stair 1, enhance room for controlled access entry	Stairs 1 and 2 will be the shelter areas, accept breaking interlock if needed.
3	Secondary containment for raw skid	Secondary Containment will be built into the skid.
7	Verify hook height on crane	Accepted
9	Look at length of loading dock wrt to closing OH door with truck made	A temporary bridge will be fashioned by adding additional support under the
18	Verify crane coverage with shield blocks	Accepted
62	Verify OHD size	
61	Raw skid shielding possibilities	
31	Will minimum shielding allow for beam intensity increases in future	

Current Site Plan



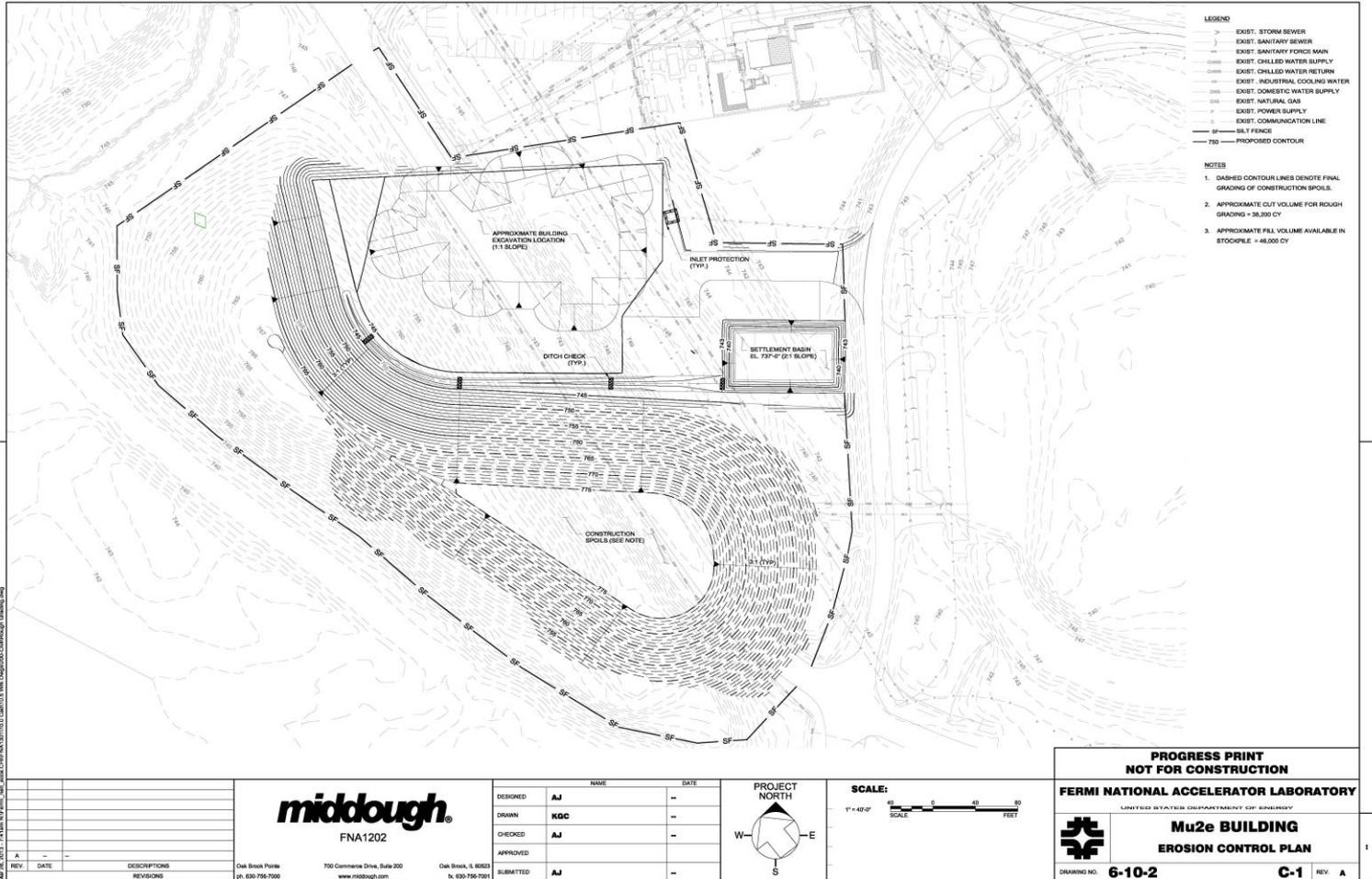
March 28, 2013 Muze Master Plan

Discussion

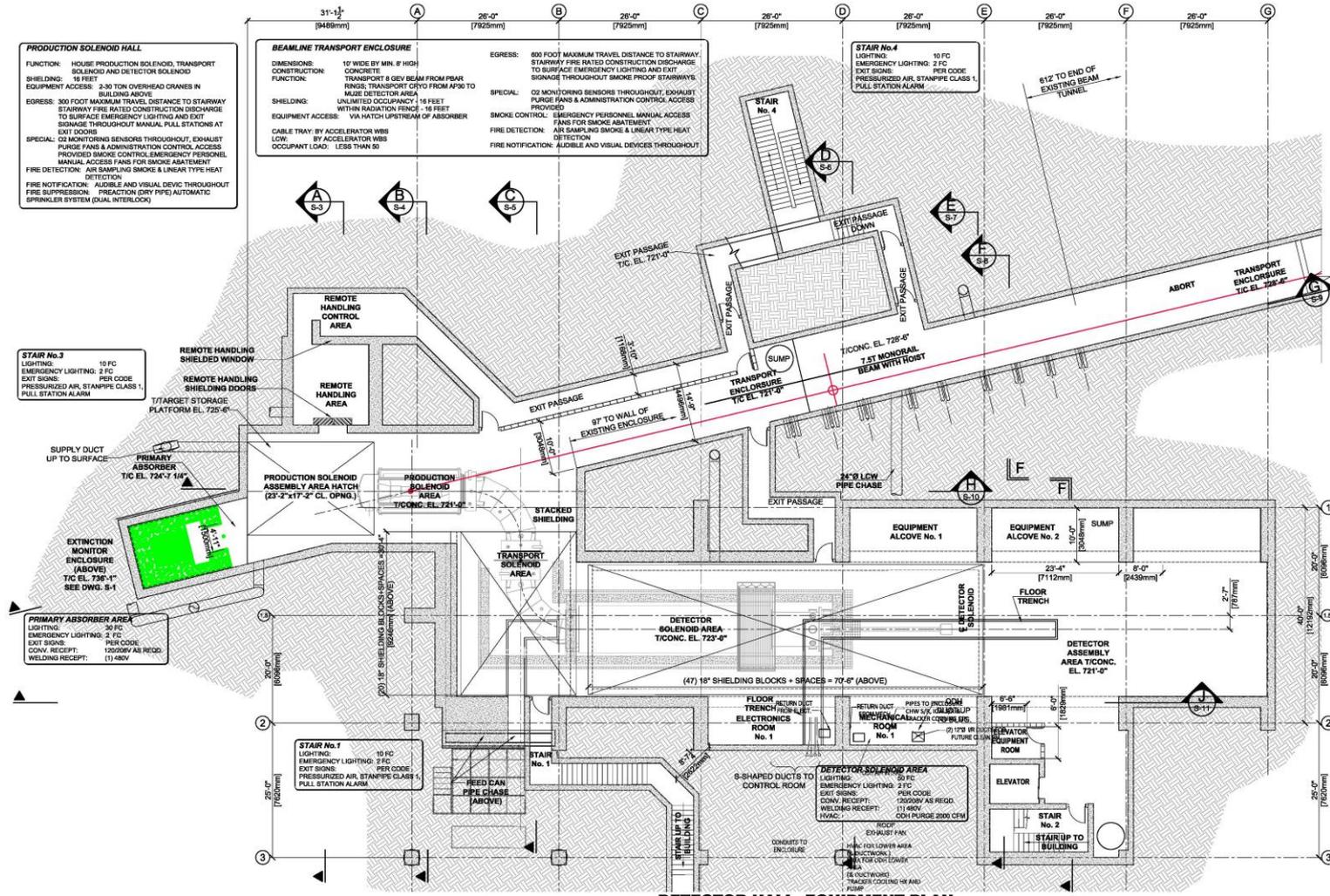
Birds Eye View



Engineering Study



Current Enclosure Plan



DETECTOR HALL - EQUIPMENT PLAN
 SCALE: 3/16"=1'-0" (BASE SLAB ELEV. 721'-0" U.N.)

March 28, 2013 Mu2e Master Plan
 Discussion

Current Perspective

