UITF Notes and to-do list

1. Clean up stuff inside cave, in anticipation of demolition work. Move the cabinets and equipment near north wall to a new place. The north wall will soon be torn down.
2. Finalize the warm region beamline design
3. Have a mini-review of this design: magnets, buncher, chopper, apertures, suitable diagnostics, placement of steering magnets, vacuum quality
4. Parts count for warm region: how many items do we have and don’t have. Estimate cost for items we don’t have. How many parts must be designed and manufactured at machine shop?
5. Finalize the position of the gun and the position of the ¼ CM, relay this information to Cryo
6. Press Dan Sexton for an ODH system cost estimate, and schedule for installation
7. Prepare first pass design of cold beamline
8. Identify in-house magnets for cold region
9. Parts count for cold region beamline: how many items do we have and don’t have. Estimate cost for items we don’t have
10. Do we need a support structure for 1/4CM or does SRF provide us this?
11. Can we forgo the cavity bpms in favor of simple stripline bpms with “long” time averaging. Build simple “beam strike” monitors for fast shut down? Quartz with pmt…
12. Purchase and build the girders
13. Shielded south cave doorway, if we remove the concrete blocks
14. Simple PSS and MPS to begin operating with dc beam to cup upstream of 1/4CM
15. Paperwork: OSP, RWP, etc.,
16. Design and build a lead-shield wall on wheels, to accommodate Rolf and Vashek, near HDIce
17. Detailed cost estimates from
    1. Ops Software
    2. Any residual work from facilities
    3. Omar’s guys, I&C, magnets
    4. We already have something from RF
    5. Additional cryo work beyond already stated scope
    6. Machine shop purchases
18. Build a 350kV gun that works: GTS work needs attention, we are stalled
19. Laser room: make our drive laser
20. Get the SF6 tank manufactured and approved as pressure vessel
21. Build the control room: computers, network connection, etc.
22. Appreciate all things HDIce:
    1. Dump electrons and depolarization
    2. Fast shutdown when beam mis-steered or over current
    3. Adequate power for all things HDIce
    4. Who is going to pay for stuff needed by HDIce: computer control, structural support, electricity, liquid helium, the return line
    5. Who will operate the test stand during ~ 3 week-long HDIce tests?
23. Get with the SRF guys and try to better understand the Building 58/CTF cryo limitations. We know we can’t operate UITF, VTA and CMTF at the same time. When can UITF expect to use LHe? What does it mean when UITF is OFF, 1/4CM at 4K or 275K? How often can we temperature cycle the 1/4CM?