

| Sector 20 - Title 1 Drawings 50% Comments |        |   |
|---|--------|---|
| Sheet Number                              | Action | Response  |
| new                                       |        | Add a title sheet with legend, abbreviations, line type legend, location and key plan etc.                                  |
|   |        | Will comply   |
| all                                       |        | Delineate new construction, existing and items to be added by University clearer by clear use of line types and/or callouts |
|   |        | Line type variation is apparent on full-size drawings.  |
| all                                       |        | Provide correct drawing numbers throughout the package  |
|   |        | Will comply   |
| all                                       |        | Renumber sheets (e.g. A-x, etc)   |
|   |        | Will comply   |
| all                                       |        | Move project notes away from revision title blocks  |
|   |        | Will comply   |
| all                                       |        | clear all from revision title blocks (e.g. Title 1 will be rev 0)   |
|   |        | Will comply   |
| all                                       |        | Add "SPIRES" drawing number block   |
|   |        | Will comply - Need direction  |
| all                                       |        | Revise line spacing in drawing title  |
|   |        | Will comply   |
| all                                       |        | Revise second line of drawing titles to say "Sector 20 Alcove" except as noted on certain sheets below                      |
|   |        | Will comply   |
| all                                       |        | Gridlines - Why "A1" rather than "B"? Delete A1 if not needed   |
|   |        | A1 is retained for existing construction. Deleted in new construction.  |
| all                                       |        | Existing stairwell - down direction shown on wrong flight   |
|   |        | Has been reversed   |
| all                                       |        | Add "existing" to call out for stairwell/shaft on applicable drawings   |
|   |        | Will comply   |
| all                                       |        | Add callout "Driveway" on all applicable drawings in vicinity of existing access road                                       |
|   |        | Will comply   |
| all                                       |        | References to SLAC or owner should say "University"   |
|   |        | Will comply   |
| all                                       |        | Centerline of klystron gallery and Linac below are not coincident - offset by 1'-9" - correct notation                      |
|   |        | Has been revised  |
| all                                       |        | Detail titles - delete "sector 20" (redundant)  |
|   |        | Will comply   |
| all                                       |        | Identify penetrations from Klystron Gallery to below "penetration to below, typical"  |
|   |        | Will comply   |
| A-0B                                      |        | Expand drawing to show gridline o 19 to show relocated door on electrical room (for boiler)                                 |
|   |        | Door will not need to be relocated.   |
| A-0B                                      |        | o1 Salvage roof and wall siding removed. Store at direction of University   |
|   |        | Has been noted  |
| A-0B                                      |        | o2 delete word "hot"  |
|   |        | Will comply   |
| A-0B                                      |        | o3 Delete words "electrical switchgear, subpanels" (already removed)  |
|   |        | Has been revised  |
| A-0B                                      |        | o5 Delete "salvage and store per owners directions"   |
|   |        | Will comply   |
| A-0B                                      |        | o6 Change "reuse" to "reinstallation"   |
|   |        | Will comply   |
| A-0B                                      |        | o10 Delete "store per owners directions"  |
|   |        | Will comply   |
| A-0B                                      |        | o16 should these be cut ~2" higher to eliminate possibility of flooding?  |
|   |        | Will comply   |
| A-0B                                      |        | o18 Add 3. salvage roofing and siding   |
|   |        | Will comply   |
| A-0B                                      |        | Add o19 - Existing metal stairs and railing to remain and show on plan  |
|   |        | Will comply   |
| A-0B                                      |        | Add o20 Existing Klystron Gallery structure to remain and show on plan  |
|   |        | Will comply   |
| A-0B                                      |        | Identify electrical room (near grid 19) where boiler to be added  |
|   |        | Will comply   |
| A-0B                                      |        | Show existing positron trench in driveway (trench plates to be modified)  |
|   |        | Trench is too far west to show on dwgs. Addt'nl. dwg. req'd. if trench fix is added to SOW.                                 |
| A-0B                                      |        | Identify line types to clarify existing to remain vs. demo  |
|   |        | Line type variation is apparent on full-size drawings.  |
| A-0B                                      |        | Callout existing klystron pump room   |
|   |        | Pump room is too far to West Sector 20 Alcove to show- will require an additional drawing.                                  |
| A-0B                                      |        | Callout existing support in vicinity of RF hut  |
|   |        | Supports are shown on A1B   |
| A-0B                                      |        | Verify if demo required in vicinity of RF hut   |
|   |        | Utility re-routing will be required and has been key-noted.   |
| A-0B                                      |        | Callout existing sliding door to gallery to remain (or be modified)   |
|   |        | Will be noted - no work required.   |
| A-0B                                      |        | Add a detail showing existing and new driveway layout   |
|   |        | Driveway is unaffected  |
| A-0B                                      |        | Detail 1 - add dimensions   |
|   |        | Detail has been eliminated  |

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| A-0B         | Detail 1 - Identify "alcove" and "klystron gallery" sides   | Detail has been eliminated                                       |
| A-0B         | Revise to say "existing" air intake alcove  | Will comply  |
| A-1B         | Detail 1 Location Plan - delete extraneous building numbers   | Will comply  |
| A-1B         | Verify that external mechanical equipment does not extend into driveway   | It does not  |
| A-1B         | Use metal doors rather than wood (typical)  | Will comply  |
| A-1B         | Identify each wall type for alcove area and RF hut  | Will comply  |
| A-1B         | Alcove wall appears to be double all around. Is this correct?   | Yes, except at section cut through service door                  |
| A-1B         | Note D - what is rationale for selection of unequal door pair?  | To allow crane passage   |
| A-1B         | Laser tables - call out and/or clarify symbols  | Will comply  |
| A-1B         | Call out pavement ramps at exterior man doors and sliding door  | Will comply  |
| A-1B         | Note E - consider using roll-up door vs. sliding door?  | Will comply  |
| A-1B         | show location of repair to klystron gallery wall fill in where doors removed                                      | Will comply  |
| A-1B         | Call out elevation of raised floor and other floor elevations   | Will provide in Title II   |
| A-1B         | Establish set points for all new doors via dimensions   | Will provide in Title II   |
| A-1B         | Note door C - consider roll up door to save space   | Will comply  |
| A-1B         | Ø5 call out size and use for each raised housekeeping pad   | Will provide in Title II   |
| A-1B         | Ø5 Is a pad needed for condensing unit if located in gallery (vs. on the south side)?                             | Pad is provided outside the Klystron gallery                     |
| A-1B         | Ø5 Please indicate sizes for each concrete pad on drawing   | Will provide in Title II   |
| A-1B         | Add Ø17 new ductwork and show on drawing  | Will comply  |
| A-2B         | Revise title to Sector 20 Injector Housing  | Will comply  |
| A-2B         | Detail 2 show dimension for location of wall  | Will comply  |
| A-2B         | Detail 2 clarify 10" dimension  | Reference is deleted   |
| A-2B         | Label existing concrete wall as "existing"  | Will comply  |
| A-2B         | Detail 1 identify cable tray  | Will comply  |
| A-2B         | Detail 1 identify Linac penetrations to above   | Will comply  |
| A-2B         | Ø1 specify sheathing on each side   | Will comply  |
| A-2B         | Note A - specify metal door   | Will comply  |
| A-3B         | Do not show drinking fountains on reflected ceiling plan  | Will comply  |
| A-3B         | Do not show exterior mechanical equipment on reflected ceiling plan   | Will comply  |
| A-3B         | Do not show penetrations or injector housing below on reflected ceiling plan                                      | Will Comply  |
| A-3B         | Do not show RF hut concrete pad on reflected ceiling plan   | Will comply  |
| A-3B         | Include a legend for symbols  | Will comply  |
| A-3B         | Ø4 Do not refer to RF hut as "RF shielded"  | All sheets have been corrected                                   |
| A-3B         | Note type of light fixtures in RF hut   | Will comply  |
| A-4B         | Please modify line types to clearly show new construction from existing   | Line type variation is apparent on full-size drawings.           |
| A-4B         | Ø1 should lifting "tabs" be called "eyes"?  | We will use "eyes."  |
| A-4B         | Ø3 It is not necessary to exactly match siding and roofing - something similar will suffice Specify appropriately | Will comply  |
| A-4B         | Add Ø6 - Salvage existing roofing and store at direction of University  | Will comply  |
| A-5B         | Show dimensions of roof and ceiling heights where not shown in load lock room                                     | Will comply  |
| A-5B         | identify concrete floor   | Will comply  |
| A-5B         | Identify symbol of area outside doors   | Will comply  |
| A-5B         | Show existing driveway  | Existing driveway will be shown in plan and with key-note (A-5B) |

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|--------------|--|---|
| A-5B         | label existing shaft walls to remain   | Will comply   |
| A-5B         | Correct the hatching depicting shield wall or delete                               | Deleted   |
| A-5B         | correct the height of the Linac tunnel   | Will comply- information recently received.                                     |
| A-5B         | label existing Klystron Gallery  | Will comply   |
| A-5B         | Call out existing vs. new concrete slabs.  | Will comply   |
| A-5B         | Add section title for Section 3  | Will comply   |
| A-5B         | Identify roof water drainage gutter solution                                       | Will provide in Title II  |
| A-6B         | Clearly identify new construction from existing to remain                          | Line type variation is apparent on full-size drawings- Added key notes as well. |
| A-6B         | Modify line type to delineate new construction from existing                       | Line type variation is apparent on full-size drawings- Added key notes as well. |
| A-6B         | Identify Light fixtures outside door?  | Will comply   |
| A-6B         | Correct or remove concrete wall  | Deleted   |
| A-6B         | ∅2 similar siding, not necessary to exactly match                                  | Will comply   |
| S-1B         | Show existing electrical alcove building next to mechanical equip                  | Will comply   |
| S-1B         | dimension unclear  | Moved note to left  |
| S-1B         | do not show RF hut roof joists in foundation plan                                  | Will comply   |
| S-1B         | Indicate thickness of equipment pads   | Will provide in Title II  |
| S-1B         | Revise Title as shown on markup  | Will comply   |
| S-1B         | Relocate title of detail 2   | Will comply   |
| S-2B         | Roof framing plan will require seismic approval - verify designed to SLAC standard | Will provide in Title II  |
| S-2B         | Revise Title as shown on markup  | Will comply   |
| S-3B         | Revise Title as shown on markup  | Will comply   |
| S-3B         | Identify sizes of columns  | Will comply   |
| S-3B         | Provide detailed design of lifting eyes and put weight of hatches on drawing       | Will provide in Title II  |
| S-3B         | Provide a detail of the roof gutter  | Will provide in Title II  |
| S-3B         | Raised floor to be omitted   | Will provide in Title II. Requires design change.                               |
| S-3B         | Provide clarification to detail 2 as noted on markup                               | Will provide in Title II  |
| M-2B         | Many details are missing from the various equipment schedules.                     | Will provide in Title II  |
| M-3B         | Verify that equipment and related work areas do not extend into existing driveway  | No equipment extends into driveway.   |
| M-3B         | Note 3 "laser" misspelled  | Corrected   |
| M-3B         | Specify seismic securing for mechanical equipment                                  | Will provide in Title II  |
| M-3B         | Freight Room is misspelled   | Corrected   |
| M-3B         | confirm location of water connections  | Will provide in Title II  |
| M-3B         | Add a humidifier to the HVAC system  | Will provide in Title II - Late addition to SOW.                                |
| M-3B         | Remove unnecessary lines from drawing  | Will comply   |
| M-3B         | Clarify location of fan coil unit - on floor or ceiling or other?                  | Floor   |
| M-4B         | Identify floor sinks as new or existing and location                               | Will provide in Title II  |
| E-1B         | Add power supply, controls, crates etc racks to design                             | Will comply - Late addition to SOW - used old data from Design Guidelines.      |
| E-1B         | Revise Title as shown on markup  | Will comply   |
| E-1B         | Delete notes - not appropriate for drawings  | Will comply   |
| E-1B         | Assumption 2 - clarify provided by whom  | Reference is deleted. Will provide in Title II.                                 |
| E-1B         | Assumption 3 "conduit 6" above the ceiling"  | Will comply   |
| E-2B         | SLAC standard is for phone and data outlets together                               | Will comply   |
| E-2B         | Phone/data outlets required in RF hut - provide wiring                             | Will comply - Except wiring is by University.                                   |

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|---------------------|--|-----------------|
| E-2B                | Revise Title as shown on markup  | Will comply     |
| E-2B                | Use recessed electrical fixtures, receptacles, etc. vs. surface mount where possible | Will comply     |
| E-2B                | Remove unnecessary lines from drawing  | Will comply     |
| E-3B                | Relocate light fixture in RF hut to avoid bracing                                    | Will comply     |
| E-3B                | Identify location of lighting panel  | Will comply     |
| E-3B                | Identify location of power panel   | Will comply     |
| E-3B                | Revise Title as shown on markup  | Will comply     |
| E-4B                | Evaluate alternative location for transformers to allow access to beam line          | Will comply     |
| E-4B                | Provide telecom/data outlets   | Will comply     |
| E-4B                | Note that utilities are all surface mounted in injector area                         | Will comply     |
| E-4B                | Relocate light fixtures to walls to allow overhead access to beamline                | Will comply     |
| E-4B                | Add legend for telecom/data outlet   | Will comply     |
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