

**PARSONS ENGINEERING SCIENCE, INC.**

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**MEETING MINUTES**

**TO:** Distribution **DATE:** April 10, 1995  
**FROM:** Phil Nixon **DOC #:** SP307:041195:01  
**PROJECT:** Solar Evaporation Ponds, OU4 IM/IRA  
**SUBJECT:** 60% Design Review Meeting

**ATTENDANCE:**

Tim Kramer, EG&G  
 Ralph Anhold, EG&G  
 Jeff Sims, EG&G  
 Bob Campbell, EG&G  
 Greg Pickerel, EG&G  
 John Haasbeek, ERM  
 Alan MacGregor, ERM  
 Sandy Stenseng  
 Scott Cole  
 Walt Edmonson  
 Dan Creek  
 Harry Hiedkamp  
 Phil Nixon

**DISTRIBUTION:**

Andy Ledford, EG&G  
 M. Matthews, EG&G, (2)  
 Becky Cropper  
 Dave Kennedy  
 Terry Kuykendall

Robin Lux  
 Dave Myers  
 Rich Stegen  
 Rick Wilkinson  
 Central Files (9.1.5.3)

The 60% specifications drawings and design basis document were reviewed for the OU4 Solar Evaporation Ponds IM/IRA.

**1. Specifications**General Comments

1. It was discussed that too much risk is being placed on the contractor with respect to the utilities. There is a concern that too much uncertainty in regards to the utilities will cause frequent contractor delays and result in costly change orders. Suggestions for reducing the uncertainty included:

- Investigate other potential sources of historical information,

- Field surveys, and
  - Identification of what materials should be salvaged and disposed.
2. The frequency for the subcontractor to submit survey data was discussed. The specifications are inconsistent in that some sections require daily submittal survey data while other sections require longer periods. It was agreed that daily survey information was preferred as the subcontractor will be required to submit a daily field log. Parsons ES will review the submittal requirements for the survey data with a goal to expedite their submittal requirements.
  3. It was discussed that the Health and Safety Practices Manual (HSP) needed to be referenced in the specifications and will need to be made available to the potential subcontractors. The document can be provided in the bid package or it can be placed in the public reading rooms.
  4. EG&G prefers that the specifications do not say, "at a minimum" followed by a requirement, because often that minimum becomes the subcontractors maximum.
  5. In the "records" section of the specifications, it is helpful to specify the EG&G group that has signature authority.
  6. EG&G would prefer that the "work to be performed by others" section specify that the contractor "may" perform inspections (rather than "will").
  7. When the contractor provides direction to the subcontractor, the direction must be made in writing.
  8. EG&G would prefer that the subcontractor provides plans, schedules, and submittals 20 days prior to the construction of the specific system.

#### Specific Comments

#### **Specification 02050**

- Replace 10 foot lockout/tagout distance with "a distance specified by the contractor."
- Provide a baseline for what materials will be salvaged and what materials will be disposed.
- Delete the submittal for a status of each utility prior to construction.
- Equipment must conform to safety requirements in the HSP.
- The HDPE ITS transfer line should be added to the list of utility materials.

- Delete section 3.5 which is covered by the early work package.
- Section 1.3.1 needs to state that the contractor will designate a location for storage of materials.
- Section 3.7 needs to be expanded to address air quality issues associated with dust control.
- The contractor will define clean vs. contaminated stockpile areas.

#### **Specification 02110**

- Expand Section 2.2 to discuss types of materials that will be encountered during clearing and grubbing.
- Add a statement that the organic material from the hillside and buffer zone will be dispositioned beneath the engineered cover.
- This specification needs to be modified to state that soils within the RCA/IHSS cannot be removed without special provisions for sampling and monitoring.
- Section 1.3.1, submittals to be provided to the contractor 20 days prior to the commencement of work.

It was discussed that the disposal of general materials will be covered in Division 1. Reference Division 1 in paragraph 3.3.4.

#### **Specification 02140**

- It was discussed that the subcontractor should sample the collected rain water and perform the analysis. The analytical results should be provided to the EG&G Clean Water Division for determination if it can be released, or if it requires treatment.
- Item 2a and 2b (Section 3.4.1) are in reverse order. The 48-inch pipe is toward the north, and the 60-inch pipe is toward the east.

#### **Specification 02150**

- Add that the subcontractor needs to submit information on dust suppression, and the contractor needs to approve dust suppression products.
- Section 2.1.2 will be clarified by deleting "to a level" in the first sentence.

- Clarification is needed in Section 3.1.3 with respect to the use of the term RCRA-area. Was it intended to be IHSS 101?

#### **Specification 02200**

- There needs to be a new Section 1.1.3 stating that the subcontractor shall notify the contractor 5 days prior to procurement of construction materials.
- Delete the statement in 1.3.1 stating "Reports will be presented in accord with all reference documents."
- Section 2.1.11(2) needs to be expanded to include the disposition of sludge and pondcrete (processed pond wastes).
- Section 3.3.11 needs to be expanded to include sludge and pondcrete.

#### **Specification 02210**

- Section 1.4.2 has a typographical error, under "engineered cover" the tolerance for the asphalt membrane is "+" 0.05 inches.

#### **Specification 02215**

- Section 2.1.1 should be expanded with the inclusion of vendor specification/data sheets or ASTM requirements to be met.

#### **Specification 02222**

- This specification needs to define "high voltage" as defined by the RFETS.
- The specification should include a discussion concerning the installation of the buried utility marking tape.
- The requirement for the subcontractor to submit moisture density information, paragraph 3.9.2 Item 4, needs to be included in the general submittal section.
- In paragraph 3.2.1 Item 2, define high voltage (i.e. 240V, 480V).
- It needs to be stated that DOE considers all soils at the RFETS to be Class C. The subcontractor will need to have a Registered PE approve any excavation that does not comply with the requirements of excavating in Class C soils.

### **Specification 02240**

- The elevation of 5300 feet should be changed to 6000 feet in Section 2.2.1.
- With respect to the references to DOE Orders (6430.1A, 5400.5 and EH/0173T), they either need to be included with the procurement package, or made available in public reading rooms. It was concluded that the Division 1 specification would present the strategy for compliance with DOE Orders.
- It needs to be stated clearly that the laboratory is temporary and will be removed when the IM/IRA construction is complete.

### **Specification 02650**

- Section 1.1.2 (2) Delete "approved."
- Section 1.3.1 (5) needs to specify a quantity of sample required for analysis.
- Section 1.3.1 Add Item 6. The subcontractor shall submit, to the contractor all bituminous pavement inspection reports.
- Section 2.1.5 needs to be expanded to include a vendors specification/data sheet. Change the phrase "approved equal" to "Contractor approved equal."

### **Specification 02681**

A question was raised with respect to who would develop the ground water monitoring wells (the contractor or the subcontractor?). EG&G will investigate what is typically done at the RFETS.

### **Specification 02700**

There were no comments on this section.

### **Specification 02830**

- The fence height (44 inches) will be deleted from Section 2.1.1 since this information is specified on the drawings.

### **Specification 02930**

A question was raised concerning whether the subcontractor should have warranty responsibilities for the vegetation on the engineered cover. If the subcontractor has warranty responsibilities, then he will have to have site access to water and fertilize etc. It was discussed

that the vegetation on the cover has a specific function rather than merely for erosion protection or aesthetics. Therefore, it is important the vegetation be established. EG&G will investigate the warranty issue.

The seed mix for the engineered cover may be different than the seed mix on the north hillside and buffer zone soils. This is because the vegetation on the engineered cover is functional, and the vegetation in the other areas should blend with the natural habitat.

#### **Specification 03300**

- Section 2.1.1 and 2.1.6 will be enhanced to state "or contractor approved equal."
- Section 3.5.7 Change the second subcontractor to contractor.

#### **Specification 03600**

There were no comments on this specification.

#### **Specification 11540**

- There were two sections labeled 1.3.1
- EG&G requested that vendor data sheets be submitted for all Post-Closure equipment.

It was discussed that there may be a 3rd party contracted to calibrate the various types of equipment for the soil/waste conditions at the RFETS. This exercise will be used to identify the specific vendors which manufacture suitable equipment. This testing will be performed soon (prior to construction).

#### **Specification 11550**

There were no specific comments on this specification. See comments on Specification 11540.

#### **Specification 11922**

- Section 1.1.3 Items 3 and 5 - ERM is to coordinate information relating to testing of systems with EG&G.

There were no other specific comments on this specification. See comments on Specification 11540.

**Specification 13121**

- EG&G would like vendor data sheets for the pre-engineered building.
- Structural calculations will be required from the building supplier.
- The location of the buildings and the electrical needs are required from ERM. Parsons ES will provide power to these buildings.

EG&G has an action item to identify where the power for the building will be pulled from. Potential power sources include Building 910 and a new power line that will be constructed via the early work package. ERM needs 200 AMP 120 Volt power supply.

**Specification 13520**

- Section 1.1.3(6) needs to be changed to a subcontractor requirement and that the calibration will be conducted by the subcontractor at no additional cost to the contractor.

**Specification 13921**

There were no specific comments on this specification.

**Specification 13941**

- Paragraph 1.2, SOP GT.24 change "on our" to "on or."
- Paragraph 3.4 Item 1, delete "4 foot wide by 3 foot high" because it is on the drawings.
- Section 3.4, Item 2, references Section 09900-Painting. ERM needs to provide a paint specification. EG&G to provide ERM with a standard paint specification.

**Specification 13945**

There were no specific comments on these specifications.

**Specification 16010, 16050, 16181, 16402, 16450, and 16460**

There were no specific comments on these specifications.

**Specification 16401**

Section 1.3.1 needs to be updated to require that the subcontractor submit the MSDS for tetrachlorophenol.

## 2. Drawings

### General Comments

1. All drawings need to be issued final as Revision A.
2. All drawings need to have a 4 digit number after the project number. The number should be sequential.
3. EG&G has issued new drafting standards which change the method by which details and sections are referenced and portrayed.

### Specific Comments

Attachment #1 provides the majority of the specific comments on the drawings.

### Issues From Discussion

1. EG&G needs to provide the final early work package to Parsons ES so that the revised trailer and piping locations can be portrayed on Drawing 110.
2. Parsons ES needs to provide EG&G with surface water flow rates from the engineered cover so that EG&G can perform hydraulic calculations for the existing 48-inch and 60-inch culverts to assess whether they can handle the increase precipitation runoff. It was suggested that Sam Marshall of the EG&G surface water group be contacted and provided with the flow rates from the engineered cover.
3. EG&G needs to check on the status of the wetlands banking issue so that the hillside can be remediated and regraded beyond the seep line.
4. Greg Pickerel informed Parson ES that the ITS header was excavated to a fairly constant depth of approximately 4 feet. The exact horizontal and vertical location of the ITS header is unknown. The pipe type is slotted PVC, and the pipe size is unknown. This is important for the tie-in of the subsurface drain trenches.
5. It was discussed that the existing fence west of SEP 207-C will need to be removed to regrade the clean-closed area. A second temporary fence may have to be installed prior to removing the existing fence to preserve the security system. EG&G will add this second temporary fence to the early work package.
6. Parsons ES needs the elevation of the manhole/catch basin for the re-route of the storm sewer under Building 788. This catch basin has not been found. It was postulated that it

might be covered by a pedestrian ramp over process piping. A field walk will be conducted to see if this item can be located.

7. It was discussed that the site utility drawings need to have small areas blown-up so that the contractor can understand the detail. This is out of the Parsons ES scope work that will be discussed with Tim Kramer off-line. The utility tables need to be reviewed to see if some of the utilities specified as "assumed inactive" can be verified as "inactive." It was discussed that "assumed inactive" needs to be changed to "assumed active" in the event that an inactive status can not be verified. It was agreed that money spent up-front to verify utilities can save money during construction. Greg Pickerel said the reverse osmosis lines were inactive.
8. Some designation of RCA vs. clean zones should be presented on Drawing 114.
9. Drawing 110 needs to include some description of pondliners and sand bags (in notes).
10. Drawing 110 needs to include IHSS boundary.
11. Drawing 112 needs location of permanent existing survey monuments (if any exist).
12. Drawing 112 needs reference to survey specifications in a note.
13. Drawing 112 call out livestock gate and C-pond S.E.
14. Drawing 112 needs to incorporate post-closure equipment sheds and retaining walls etc.
15. Drawing 112 needs to be reduced to show S.E. swale.
16. Drawing 113 or 114 add excavation estimated volumes to tables.
17. Drawing 115 need details of downhill trenches.
18. Drawing 119 delete note flags from legend.
19. Drawing 119 in note state that size reduction of debris is the responsibility of the subcontractor.
20. Drawing 122 state that clean soils from zone B will be used to regrade C-pond area in Section C.

### **3. Design Basis Document**

The primary comments on the document included the following:

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- The nuclear facility designation is a 4 based on the revised designation methodology. Therefore, Appendix A may not be necessary.
- The 90% Design Basis Document should include the Post-Closure Care System.
- The 90% Design Basis Document should include the calculations.

It was agreed that the Design Basis Document would not be part of the bid package.

A handwritten signature in black ink, appearing to read "Philip A. Nixon", is written over a horizontal line.

Philip A. Nixon, Project Manager  
OU4 Solar Ponds IM/IRA



**EG&G ROCKY FLATS**

EG&G ROCKY FLATS

ROCKY FLATS PLANT. P. O. BOX 464, GOLDEN COLORADO 80402-464 - (303)-966-7000

**MEMORANDA**

"SAY IT IN WRITING"

**DATE:** April 6, 1995

**TO:** Tim Kramer

**DEPT:** SPRP

**BLDG:** 080

**FROM:** M. R. Austin

**DEPT:** Plant Project Engineering

**BLDG:** 080

**EXTENSION:** 8609

**PAGER:** 1790

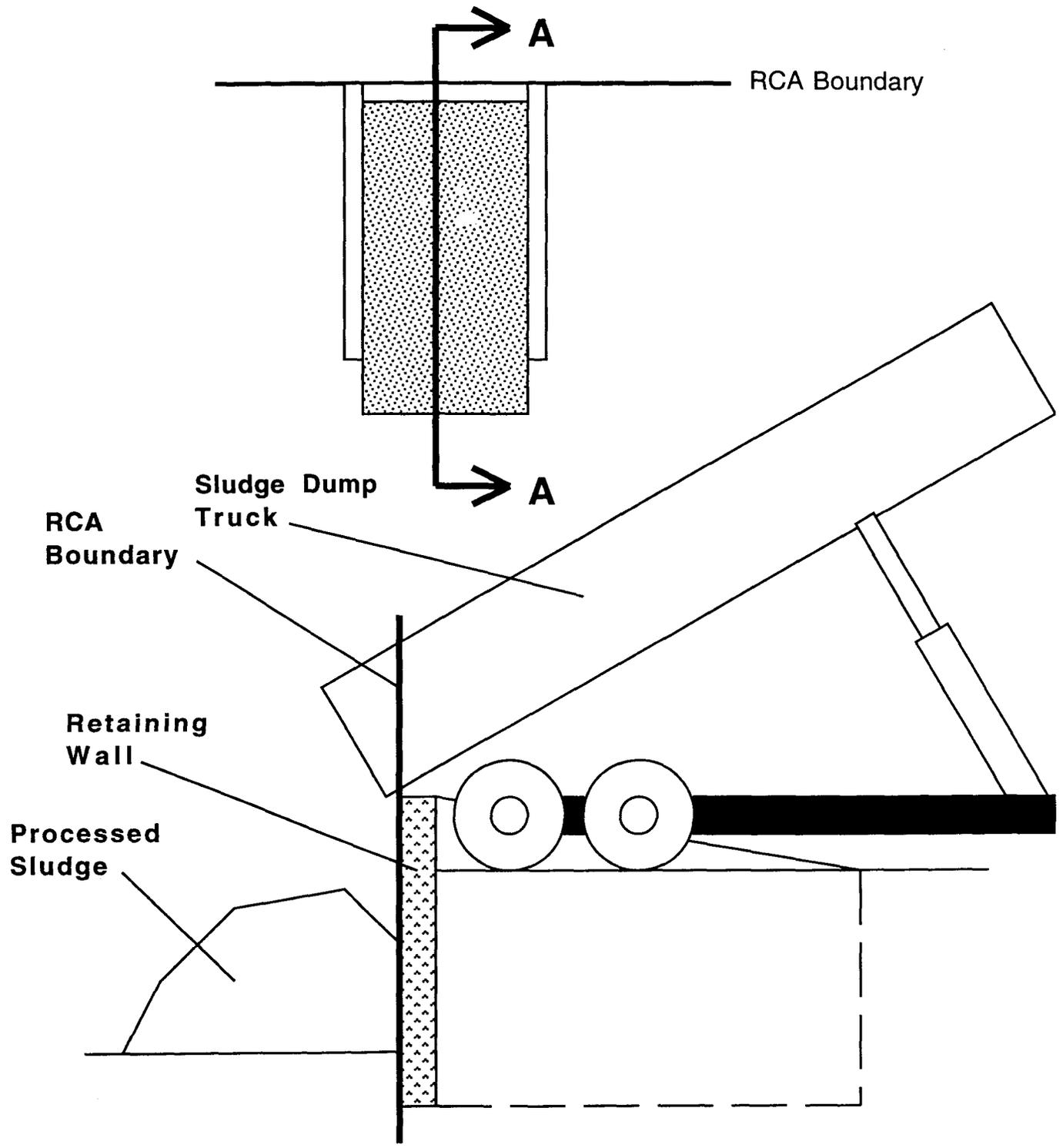
**SUBJECT:** Comments on 60% Design Package

**Comments for Parsons/Engineering Science:**

Under the TYPE, R= Required Change, S=Suggested Change

#	TYPE	PAGE	COMMENT
1	R	All Dwgs	All drawing sub numbers (i.e. -100 on) need to be 4 digits. Drawing 100 would then become -0100
2	R	All Dwgs	Renumber all drawings to be sequential.
3	S	All Dwgs	A new Drafting Standards Manual has been issued at RFP. The drawings need to be revised to reflect new standard. The major changes were in detailing how sections and details were to be referenced.
4	S	General	When a contractor is bidding this project, he is going to need to know where the groundwater table (average?) is. is this information provided in the spec's or drawings?
5	R	General	No provisions are identified for where to install run-off / silt fences around the site. We need to ensure that projection is provided to keep the existing ITS system from silting up.
5.1	R	General	ES needs to design a location and provisions to allow the processed pondcrete materials to be dumped into the RCA boundary without having the trucks enter the RCA. I envisioned somethin like the sketch below:

Mixing/Crushing  
Operations w/in RCA



- 6 R -100 Drawing number to be 51045-X0001
- 7 R -100 Make sure that ALL drawings are Revision "A". Revision "B" are not issued until the drawings are filmed and put in Document Control. This will not occur until AFTER the "final" 100% drawings have been issued. CAD Id numbers are also required to be put on the bottom left side of the drawing.
- 8 R -101 Drawings number shall be 51045-X0002.
- 9 R -101 Make sure all drawings are Rev "A".
- 10 R -110 Somehow during the January Issue of Drawings I preliminarily received from ES and the "final" 60% drawings I received in March, the original "Site Location" drawing, which was 101, was replaced for the 60% deliverable with drawing 110, "Site Plan-Existing Conditions/Demo Plan". Keep the original site plan, which identifies a larger portion of the plant.
- 11 S -110 I recommend that ES obtain a copy of the Plant Site Area Plot Plan drawing. It includes the information about the east and west gates, identifies the names of the streets, and includes all of the buildings. It is also large enough when reduced to "B" size, to be able to read what the building names/#'s are. The ES site plan also does not show the Modular Storage Tanks.
- 12 R -110 Delete the water line installed under General Site Improvements. You can keep the hydrant locations if you wish, but the water line location is not relevant to the project.
- 13 R -110 Why is the IHSS 165 area identified as not being available for storage? Storage for materials, such as equipment, piping, etc. can be stored at this location. Soils/rock materials may be able to be stored at this location, but special provisions may have to be provided.
- 14 R -110 The demo plan must identify 788 & 964 concrete building foundations & the asphalt pond liners.
- 15 R -110 The drawings need to indicate that a FML is covering 207B South.
- 16 S -110 Delete the area of the site plan west of the 207C pond and may the view of the pond area larger so it will be easier to read. The area west of "C" pond is irrelevant to the drawing view and wastes space which could be used to make the drawing larger.
- 17 R -110 The location of the trailers needs to be revised to reflect the configuration of the General Site Improvements Utilities package. Additionally, EG&G may provide a Shower/Locker /Break trailer triply wide trailer.

- 18 R -110 The drawings need to indicate that utilities, such as water, sewer, and power are available for use if the contractor elects to install field offices. If they require additional info, they need to contact the Construction Management. Also, division #1 discusses the conditions required for bringing and installing contractor trailers at the site.
- 19 R -110 Identify the RCA boundary on the drawing. This will be a key factor in determining their contamination control boundaries.
- 20 S -110 Is the OU-4 Boundary really necessary? Recommend removing it.
- 21 S -110 Suggest including information about the pond liner thicknesses (from drilling samples from Phase I) and a table will APPROXIMATE volumes of asphalt and concrete. Otherwise, there isn't any info to allow the contractor to determine quantities and durations.
- 22 R -112 Identify NEW & EXISTING utilities using the plant master utility drawing method. The 15" dia Buried CPM is to be identified in an with an oval with 15" - SS - CPM inside, and the new utility route is a solid line that is a larger pen size than existing utilities.
- 23 R -112 The "Upgraded Rip-Rap areas need to be solid and bold to depict a "new". It presently depicts something that is existing.
- R -112 Remove "Relocated" in the Storm Sewer description. This will be a "NEW" installation. Provide details about the "inlet structure - is a drop structure, catch basin, flared end section, etc. Also, detail how/where to connect to the existing manhole by 783.
- R -112 The 90% drawings will need to incorporate the ERM/G&M Buildings along the north hillside.
- S -112 The new access roads, are they gravel or asphalt, or where is the detail describing where the info is located.
- S -112 To avoid impacts to the stream water quality , wouldn't it be best engineering practice to install storm water detention or settling basins to avoid silting problems?
- R -112 Existing downstream culverts (48" and 60") capacity must be evaluated to determine if the run-off from this project will cause them to exceed their capacity. Also, these culverts have restrictions placed in them. This must be considered in your calculations.
- R -113 Zone "B" limits of excavation to the north should be extended to the existing ITS system. The arc border will be impossible to control from a contamination and constructability standpoint. It

also makes sense that if we can dispose of the soils now, under the cap, the costs are minimal rather than postponing it to Phase II and potentially having to excavate and haul the stuff off plantsite.

- R -113 Limit excavation to the historical high water table ONLY to the area located within IHSS 101. I believe our commitment is to dig to the historical high water table only within IHSS 101 or areas under the engineered cover. IHSS-101 runs around the base of the berms on the ponds. There is a jog north of "C" pond where IHSS 101 jogs south. This jog (approx. 20' - 30' X 320' X 20' deep) could eliminate placing 4,700 cubic yards of material. The same is true along the west edge of "C" pond (10' X 240' X 10') in which 880 additional cubic yards of material would not have to be excavated. Also examine the area west of 207A pond, and the area south of the engineered barrier.
- S -114 This surface will be very difficult and very expensive to construct. The contours need to be re-worked to provide areas of consistent grades. (See Attached Sketch)
- R -114 You need to show the existing contour lines from the excavated areas so the contractor can determine how deep the construction within the pond area will be. There is no way for the contractor to estimate the volume of soils and constrains (Such as pond berm heights) that he must remove.
- R -114 I would recommend that a table be provided which identifies the Approximate soil volumes which must be excavated. This will make the contractors job of estimating easier, and evaluation of proposals easier.
- R -114 The IHHS 101 / RCA boundary must be shown to let the contractor know where his contamination control provisions will be required.
- S -114 May want to reinforce that soils within IHSS 101 must remain within IHSS 101, or something along that line to reinforce that the contractor cannot take a scraper and dump on the hillside or out be the contractor trailers.
- R -115 MAKE THE NEW CONTOUR LINES IN A LARGER PEN SIZE< OR LIGHTEN THE EXISTING CONTOUR LINES WHICH ARE NOT ALTERED>
- S -115 Trenches from subsurface drain to the ITS will require cross section details.
- S -116 It appears from the sectional views that the 6" filter materials do not extend on the top of the tapered portion of the trenches. Is this correct? Is the filter fabric just folded over this area?

- R -119 Pull the field flag note in Section B B out of the grout section. Put it outside the object and point to it with a leader.
- R -119 Delete the two field notes in the legend
- R -119 Delete the reference "from Buildings 788 and 964.". Other debris, such as from the pond area or sludge processing, may be included.
- R -119 Need to ensure the SUBCONTRACTOR knows he will be doing ALL size reductions for materials being placed in the grout ed entombment
- R -121 Delete the "Base of Excavation Contours"
- R -122 From Section A-A, the fence along the west side of "C" pond will have to be temporarily demo'd and then replaced. Need to provide this info on the demo plan, and also provide fence installation details. You can reference the plant standard, but it must be included with the specifications.
- S -122 Section C-C. I recommend adding a note to identify the fill soils required between the base of excavation and the final grade shall be taken from Zone B soils?
- S -123 Detail 1. Lighten the "existing soils or clean backfill hatch pattern to reflect more of an existing condition.
- S -123 Clarify the note on Detail 2 which describes the "Extend asphalt .... ". I'm not sure what you are wanting.
- S -123 Detail 2. Provide a dimension for how far to extend the asphalt out past the toe drain.
- R -130 Sections and details are needed to show how to transition from the toe drain under the cap to the surface swale /culvert areas. af
- R -130 The utility designation needs to be changed to reflect the plant master utility method.
- R -130 Delete "(Relocated)" from the new storm sewer area.
- R -130 There isn't enough info to determine the existing to new storm sewer transition, or how it is accomplished.
- R -130 Detail the "inlet Structures" is it a catch basin, manhole, etc.
- R -130 What is meant by "Upgrade existing surface swale". This is to subjective. State regrade existing swale to provide a minimum XX% slope drainage.

- R -131 This drawings needs to be with the utility removal/relocation information.
- R -131 Someone needs to ensure there is a catch basin south of Building 788.
- R -131 The culvert outlet shown now extends all the way down the hill. This demo needs to be identified.
- R -131 Where is the new routing plan view?
- R -131 What survey information? This area is not scheduled to be profiled. I provided a copy of the as built which installed this culvert. Utilize this information as much as possible.
- R -430 DELETE THIS DRAWING!! THIS IS A WORTHLESS DRAWING.
- R -431 Identify on this plan view the areas that are covered on other drawings. Use it as a site plan to refer the contractor to see specific drawings additional information.
- R -431 Bold the line which describes the edge of the cover. Clarify that all utilities within this area ARE TO BE COMPLETELY REMOVED.
- R -431 The first note in the legend refers to the incorrect drawing (440).
- R -431 The subdrains under the pond are not identified. They must be shown on the drawings or else we will see a change order by the contractor. ANY possible or questionable utility should be identified.
- R -431 We cannot leave #40.
- R -431 We cannot end #15 at 910. This is under cooling towers. Cap outside OU-4 boundary.
- R -433 This drawing, as presented, ADDS NOTHING! This drawing is appropriate, but include the bubbles and numbers to identify what is to be removed, and what isn't.
- R -433 Delete the water line along the west side of the 215 Tank. The line isn't there.
- R -434 The marker shown on detail 1 will not last. If a marker is required, it should at least be placed in a concrete pad.
- S -434 I prefer to delete detail 2. It should be used as a last resort.
- R -435 Am I expecting all utilities within the cap footprint to be

REMOVED. Therefore, we need to examine the utilities whose action is "leave or leave in place".

- R -435 I want to avoid having to grout any utilities in place. I prefer to cap the utility outside the OU-4 boundary, as detailed in Detail # on 434.
- R -436 Am I expecting all utilities within the cap footprint to be REMOVED. Therefore, we need to examine the utilities whose action is "leave or leave in place".
- R -436 The ITS line #47 & #48? must be removed. We cannot leave this utility under the cap!
- R -436 I want to avoid having to grout any utilities in place. I prefer to cap the utility outside the OU-4 boundary, as detailed in Detail # on 434.

### DESIGN BASIS DOCUMENT COMMENTS:

- 1 R General Calculations need to be included for, at a minimum: Cap volumes (including contingency volume); reasoning how/why the cap layer thickness were selected; subsurface drainage thickness, size selection, flow volumes, etc; slope stability; anticipated settlement of the cap; erosion/soil losses; culvert capacity and flows; calc's demonstrating protectiveness of groundwater; how the historical high water table was determined; etc. The requirements of the Design Basis Document are described in the SOW (Section 4.2.6.3.3).
- 2 R 2.4 State the basis for the material thickness, and provide the calc's.
- 3 S Pg 22 Provide a map which identifies where P210289 is. In twenty years, nobody may know where it was.

### 60% DESIGN SPECIFICATIONS

- 1 R 02050-7 Section 3.5 Delete the references to the 374 / ITS line. This work is not part of this contract.
- 2 R 02050-7 Section 3.7 must be beefed up to address air permit issues.
- 3 R 02110-1 General - It needs to be specified that soils within IHSS-101/RCA boundary cannot be removed without special provisions, such as sample and monitoring of soils and equipment.
- 4 R 02140-5 Section 3.4.1, these areas are NOT approved until the runoff has been sampled and verified that it is clean. It if is contaminated, it

will be pumped and disposed of at 374 most likely.

- 5 R 02140- General - It needs to explain that any precip runoff must be collected and sampled for all areas within IHSS 101, UNTIL THE AREA IS COVERED WITH 6" OF CLEAN MATERIAL. We need to make it clear that it is preferable to cover the contaminated wastes as soon as possible with clean fill.
- 6 R 02200-1 General - It needs to be specified that soils within IHSS-101/RCA boundary cannot be removed without special provisions, such as sample and monitoring of soils and equipment.
- 7 R 02200-1 General - We need to provide language which explains that once the contaminated area within IHSS 101/RCA have been covered, the contractor can freely access the area without any special provisions, such as monitors, or decontamiantion provisions.