ORIGINAL

ANTLERS CONTRACTOR OUTREACH

NO. 02-37890

Held at the Lions Club, Lakehead, California

Thursday, November 15th, 2007

1:10 p.m.

Reported By: LEAH S. BARR, CSR No. 9893

INDEX

APPEARANCES

ERIC AKANA, Project Manager
ART CEBALLOS, Roadway Design, Sacramento
SONNY FEREIRA, Area Bridge Construction Engineer
DAN THOMAS, Bridge Construction Manager
CHRIS QUINEY, Environmental Management
RICH MELVIN, Caltrans Area Construction Engineer
BILL LEE, District Two Estimator

---oOo---

Antlers Contractor Outreach

Thursday, November 11, 2007

---o0o---

MR. AKANA: Good afternoon, everybody. It's a little past the one o'clock. I wanted to make sure that those that were still on their way were able to get here. So I appreciate your patience on getting going.

My name is Eric Akana. I'm with the project management division here in Caltrans working on the Antlers project here.

I want to thank you all for coming today, taking time out of your busy schedules to be with us and hear what we have to say, and hopefully we'll provide a lot of good information for you. So I really appreciate it. Thank you so much. I know all of you are very busy.

I've really set up this meeting to be informal forum so help yourself to some cookies over there and some coffee. Unfortunately the turkey that's in the oven isn't ours. That's for later on tonight, but it, sure smells good, but we do have coffee and cookies over there. And if you feel the need feel free to stand up and go get some.

Questions and that sort of thing if we hit something that you have a question on feel free to speak up.

We are having this meeting transcribed. So for the benefit of those that can't be with us today we have brought in Leah, I want to introduce Leah over there, and she's going to make sure that you speak loud and clearly. So thanks to her for being here as well.

I'd like to start off with the introduction. Again my name is Eric Akana and I'll just go around the Caltrans folks that are here that are going to be presenting today and then we'll just go around the table after that so go ahead.

MR. CEBALLOS: My name is Arthur Ceballos and I'm with the Roadway Design in Sacramento.

MR. QUINEY: Chris Quiney I'm with the Environmental Management.

MR. AKANA: Is that Rich?

MR. MELVIN: Rich Melvin, Caltrans Area Construction Engineer, north department of Shasta and all of Siskiyou.

MR. LEE: I'm Bill Lee. I'm the District Estimator for district two.

MR. THOMAS: Dan Thomas. I'm the Bridge Construction Manager.

MR. FEREIRA: I'm Sonny Fereira the Area Bridge Construction Engineer. Thanks for coming, guys.

MR. AKANA: We also have Sherry Clark back here who is getting you all the information you need. Hopefully you pick up some handouts and that sort of thing. Skip Clark as well is going to guide us, take you to our destination during our job walk.

So the purpose of the meeting really today is to showcase the project and provide you, basically the industry, with some early information to help you guys plan and prepare.

On our side, though, there is a caveat, we want to hopefully with this effort be able to bring interest to the table, provide a lot of the unknowns that could be out there during the bidding time, and in hopes of just getting some good competitive bids and stay within our budget.

So hopefully this information today really the outcome is for you to walk away with a good understanding of our assumptions that went into this project, and really what got us to where we are today as well as where we'll be out in 16 months when we go out and advertise.

So again thanks again for coming here, and we'll keep this informal and ask those questions, hopefully we'll be able to take care of a lot of yours questions as we go out there today.

How am I going to get there? Well, we have a presentation planned right now. We'll sort of tag team this thing.

It's going to show some preliminary structure and roadway details, some quantities, environmental considerations as well as challenges that we've had in developing this project.

Surveyors has recently staked the project out there so during our job walk we'll go out and we'll see the alignment as well as the substructure locations of where this structure is going to be.

The lake is low right now so it's sort of like we called this meeting at a good time in an effort to really be able to see where that bridge is going to be crossing, and so it was actually a good opportunity even though we don't have any water to recreate anymore really.

All the info we have today is really considered preliminary, and it is subject to change, so I do want to state that. It's about our 60 percent delivery at this point.

The handouts we have you should have received a lot of information I believe about six items when you came in the door. And we'll go briefly through those real quick to kind of tell you what each one of them is and so I'll start with Dan.

MR. THOMAS: I'll just talk from back here if you don't mind. One of the packages is a package of aerial photos. These photos were taken last Friday.

At the back of that package there is a little plug for our Dana to Downtown Project which will go to bid early in 2008.

(Reporter interruption.)

MR. AKANA: Dan, can you speak up a little bit?

MR. THOMAS: Also you got a -- there's a couple of pictures in here pages four and five then you've got a revision of those, there's a couple pages.

These are -- these were taken last Friday. These are -- the project team looked at staging areas for the project, and we contacted the Forest Service and Union Pacific Railroads because as you can see in the picture there is a siting and there's abandoned railroad yard. Union Pacific Railroad never responded to us. We tried to contact them twice.

The Forest Service is building a new emergency response telepad and we tried to negotiate with them to go and do some grading and clearing and they weren't able to get their environmental documents together, so that fell through as well. But we wanted to show you those two locations. And that's all in that package.

MR. AKANA: Great. Art, Art Ceballos.

MR. CEBALLOS: Hello, I'm Art Ceballos and once again I'm from Sacramento from Roadway Design. And I have three handouts that I want to share with you guys and I'm pretty much just repeat what Eric already stated; this is a draft and it's subject to change and also it's at 60 percent completion.

And what we have, the first handout is the quantity sheets, and I'll be talking about this in my presentation when we do the Power Point.

Another handout that I have are typical sections, typical cross sections, and I'll also mention those a little bit later in the Power Point presentation.

And the third handout is this layout map that has a lot of information about the temporary access ramps of the cut and fill lines.

And once again I'll be talking about it during the Power Point presentation. So those three handouts that I'll be mentioning to you later on today. Thank you.

MR. AKANA: Bill, you want to kind of put what's on that CD there. I hope that everybody has a CD.

MR. LEE: Yeah. The CD pretty much has all of what's on this handout, the Power Point presentation, the aerial obliques that were shot and a piece of the layout and the length of the environmental document. So pretty much everything that was handed out is also on that CD.

Some of the PDFs that are in these presentations that are hard to read you can actually blow them up without them pixelizing, you can view them as larger resolution. That's one of the nice things about the electronic files.

MR. AKANA: There's a few little added things in there as well; there's a file on Lake Britain, just some preliminary information on that, the Dana Downtown project that we sort of have scattered around in this room. We're not talking about those today. But we just wanted to kind of let you know that those are coming as well.

MR. LEE: Yeah, the Dana job will probably go to ad in June, I mean, in January because that should start early part of next year. That's in Redding on 44.

The next one coming up is Thomas Creek on I5 and Corning. That one will probably bid in June. Those are roughly 25 million or so structures worth.

And after Antlers goes to bid then the following year Lake Britain bridge will probably go to ad. And that's a fairly substantial one, too.

So altogether there's some information on four different jobs here.

MR. AKANA: Any question at this time? Okay. Well, I'll kind of kick it off then with starting this Power Point presentation. Again I'm going to talk about a few slides and then I'm going to kind of rotate with the experts in here to talk about their particular slides. Thank you.

I do also want to get with the introductions of you as well so if you could please just tell us your name and who you're representing. I'll start with this man.

(Note: Names and companies are spelled phonetically.)

MR. KING: Brian King with Kiewit.

MR. BRAYTON: Mark Brayton with (Unintelligible) Brothers.

MR. FAUST: Peter Faust for Malcolm Drilling.

MR. TRIPP: Jim Tripp with Belco.

MR. RAY: John Ray Kiewit.

MS. ENCARNACION: Rita Encarnacion, Encarnacion, Kiewit.

MR. BODYCOTT: Hunter Bodycott, Archer, Weston, B-o-d-y-c-o-t-t.

MR. HORAN: Cliff Horan with Condon Johnson and Associates.

MR. TYLER: Greg Tyler, Stimpel-Wiebelhaus.

MR. MAPLE: Brian Maple with FCI.

MR. GALESPI: I'm Frank Galespi with Stan Speck.

MR. AKANA: I think that's it. Thank you. That's Joe Kaump with Geotech. Great. Well, thank you again.

I show you this slide here I wanted just to show you that this is going to be a great place to work, so your crews are going to want to be here. It's a great place to recreate.

The water is really not that green, it's a little cleaner than that. We do send it down south for drinking so we try to keep it clean -- (cough, unable to hear).

The next slide I want to just get a perception where we're at on this project, you kind of know where you're at here, Lakehead today, but it's up on the upper reach of the Sacramento arm.

There's four major arms on this lake so there's a lot of water and potential other access points. We didn't really look at that. We did talk with the Forest Service a little bit.

It's very steep country and stuff and they -- so they warned us against trying to develop other areas so we didn't go there. But we just wanted to show this slide. It's a big lake.

The project, as we zoom in on the project a little bit, it's one point two miles long, basically split roughly in half, half of it roadway and half of it the bridge.

Now this picture here is the layout we have that's sort of buried right there. I know you can't see it too well here, but it is and later on and Art is going to be bringing that up and we'll kind of gather around that for a little more information and discussion at that time.

The bridge itself I just wanted to give a little bit of statistics on it. The existing 1,328 foot continuous truss, nine spans, and it sits on a spread footings.

Our proposed structure is a 1,970 foot cast in place segmental. It's double box, and I have -- we have general plan, it's in the package as well that we'll show here shortly.

Five spans at 590 foot main span and we're looking at 12 foot diameter partially cased (reporter interruption) and there's a total of 12 of those. And we'll see those as we go out and take a look on the job walk.

So with that I'll turn it over to Sonny to try to go into a little more information on the structure itself.

And to you guys that are presenting kind of say your name when you come up too so she can record that too. I would appreciate it.

Sonny, do you want to click that yourself?

MR. FEREIRA: I'm Sonny Fereira, F-e-r-e-i-r-a, I'm the area reconstruction engineer and these five or six slides we'll present here are no particular order, but one of the things we'd like to do is kind of show all of you what kind of challenges we are facing with this project.

As Eric said -- does this reach all the way over here? Well, I'm not left handed and I'm not metrified so I'm going to probably mess this thing up. And I'm going to have to transfer everything into English units.

This project was started before we switched back over to English and executive decision was made not to convert everything, against my vote, and so we're going to have to look at these plans in metric.

As Eric said, and I'm going to be redundant on a few of these things, just kind of driving a point home, letting you know what kind of project we got coming up.

They're twin box, balanced segmental cantilever solution for this bridge. It's going to be five spans, there's going to be two end spans at 250 feet, two interim spans at 426 feet and one main span at 590 feet.

The girder depth varies from 12 feet at midspan to about 30 feet at the piers. The deck area is -- it comes at about 200,000 square feet.

It's also proposed at this time that we cover that deck with polyester concrete wearing surface, for the conclusion of that project. All right.

Okay. This picture is again showing us that we have a fairly substantial depth at the piers and some fancy aesthetic treatment that clads onto the outside.

And like I said that depth right there is between 30 to 40 feet of cladding that there are architectural treatment.

I believe the current architectural desire is to have fish on the side of the bridge for passing fishermen. It's a big fishing lake if you're a bass fisherman, something like that, it has tournaments there quite often.

Okay. All right. This picture is just a comparative picture to try to size it up against the existing bridge. And the project, many of you are familiar with Benicia Bridge.

In this picture you can see graphically there at the foundations at the Benicia Bridge extend quite a bit deeper that's obviously because they got bay mud.

Our challenges are going to be, you know, founding our foundation into the rocks. Okay. So we'll have, of course, the depth of the ground is going to vary but will be about 150 feet above ground line in some spots.

There are -- at the main piers there are four columns 12 feet diameter and they're about 40, 42 feet apart. So that's going to be another challenge trying to, you know, work amongst, you know, a forest of columns growing up around you.

All right. And this slide has some preliminary quantities for your use and I'm going to break it down into English units for you.

The concrete, total concrete quantity is about a little over 35,000 cubic yards, about 9,500 of those yards are in the pier tables.

Substructure breaks down to about 6,800 cubic yards leaving the remainder there of about 28,500 yards for the superstructure and that will be about 7,000 PSI concrete.

There are going to be 220 segments and each segment will have a volume of between 67 and 90 cubic yards.

Skipping down to the steel, there's about 12 million pounds of rebar on the project. Of that about two and half million pounds is in the substructure. And the remainder being in the superstructure, we have about five million pounds of purple bar epoxy coated.

Our casings we have two values there, a minimum casing and a maximum casing, and then one of the next slides which will kind of explain, next couple of slides, why that is.

But we're estimating between 500 and 1,600 tons of casings. And these are, you know, 12 foot diameter and wall thickness we're still in design phase on it but it might be upwards of inch and a half.

And the prestressing steel we have about two million two hundred and thirty-eight thousand pounds in bar in strand.

All right. This picture here is kind of depicting the height of the column, above ground line, and indicating a casing below ground line, and after the casing it's followed on by rock socket.

The casings and the rock socket extend about 75 to 110 feet below grade right now. And that leaves you about, you know, 75 to 120 feet column sticking up above grade.

The -- again I'll be redundant here on the next slide but, you know, one of the challenges is working around column cages and casings of that height and weight, you know, critical picks, what you're working off of, as well as the fact that the lake fluctuates, you know, you're going to see a fluctuation in one of these next slides of, you know, 50, 50 feet or more.

Okay. This is the slide I was referring to earlier about the fluctuation of the lake level. We'll call it full pool. We have -- if it's elected to use the permanent casing to exclude the water as a cofferdam type system it would have to extend above full pool.

And then again if alternate methods are chosen the casing starts off about two feet below grade and goes down. So that's where you get the difference in the 500 tons and the 1,600 tons. And, of course, we leave it up to your creativity to come up with the best and most cost efficient solution.

Once again the flood control season that we're in right now shows a low pool of that elevation. We actually have a slide with the metric designation for the elevations coming up. And that's about what we're going to see out there today when we go out and see the job.

This is the slide that has quite a bit of information on it and it's in your handout so you can read it.

We have column heights and these are meters again don't confuse that with feet, elevations they're estimated at each pier location, and somebody has ran the calculations of figuring out what the depth of water will be between the full pool and the flood control pool.

And in that situation under pier four 32 meters is about 105 feet if I've done my math right and 16 meters is 52 feet so the difference is excess of 50 feet of draft at that location.

Another challenge is casing weights. We have casing weights down here in tons. And those were roughed out using about a one and a half inch wall thickness.

And so you can see that we have some pretty substantial challenges for full length casing on that project in excess of 200 tons at pier four. That's, you know, again quite a hunk of weight to pick. We're interested to see how that's going to be done.

The geology besides the stuff that you can see on the surface out there has rock quality designations of very low up to 85 percent. And, of course, the deeper it generally goes the higher the rock quality designation.

It's slightly flat fractured to highly fractured as you go down, vice versa, it gets less fractured the deeper you go by the log of tests we looked at.

The strata is a fractured metashale and meta sand stone. It's, you know, deemed to be pretty hard stuff. And with that I'm going to pass it off to Eric here again. Art, are you coming up?

MR. AKANA: Any questions on any of that right there? Silent crew here.

UNIDENTIFIED SPEAKER: If this year is like another low rainfall year and your water levels are low next year would you think about getting a jump start on the columns?

MR. AKANA: Probably not. It really depend on our funding. Our funding is not going to be here until the 09 year so we can't expedite that any sooner than we already have. It's kind of a shot in the dark on what the winter is going to produce.

UNIDENTIFIED SPEAKER: Right. Exactly. Always is.

MR. AKANA: We're setting the project up for just kind of normal lake levels rather than taking the risk and moving forward. But, yeah, our funding is a constraint at this point.

UNIDENTIFIED SPEAKER: Okay.

MR. AKANA: Anything else? All right. At this point then I'll turn it over to Art. He's going to talk a little bit more about the roadway and show you a little of the layouts there. So I'll let him take it from here.

MR. CEBALLOS: Okay. Once again my name Art Ceballos. I'm from Roadway Design in Sacramento. And I'm going to be talking more a bit about the layout, the disposal sites and quantities and touching a little bit on some other subjects as well.

First of all I think everybody already has a copy of this layout sheet and I made copies and I think it's pretty readable. But you could follow me on the Power Point presentation or on your handout.

Couple of things I wanted to point out here our red line is our environmental study limit, our ESL, and then I also wanted to point out some item slide that's lined out in red.

There are -- one is on the east side and one is on the west side. That's our environmental sensitive areas.

And also we have an archeological site in pretty much in the middle of the lake where our bridge will be going across but we're going to be a little bit outside of that. But I wanted to point that out to everybody just so they're aware of it.

We also have the cut and fill limits drawn out here for the project. I want to point out that once this new project is completed that we're going to obliterate the roadway, the existing roadway, and contour it and that's why I handed out those typical cross sections so you guys could take a look at that as well as the quantity sheets, the quantity volumes. These, this sheet here. And these plans.

And like I said they are drafts and they are subject to change. They're at 60 percent completion right now.

Another thing I wanted to point out are these green areas which are the access ramps that we're acquiring permits so that we can expedite the process. But these are temporary.

Later on Chris Quiney from environmental will talk about the other ramp that is there that is not going to be used by -- or it will not be used for construction.

Basically we will have to build an access ramp either on the west or on the east side of the bridge and it's temporary. It will have to be removed.

The staging sites there's two locations, one on the east and one on the west side of the bridge. This one is approximately seven acres, and the one on the east side is a little bit smaller.

But I wanted to point out that this area on the north approach can also be used as a staging if the roadway is not built firs.

This is going to require quite of bit of embankment material, but you'll see on another slide that this also could be used as a staging area as well.

Okay. I don't want to end it. How do you do it? How do you go to the next slide? Okay. So here I wanted to show you again the staging sites. Here's the small staging location.

We want to keep a buffer -- or the US Forest Service wants us to keep a buffer so we don't interfere with the recreation of the existing boat ramp and the parking area that is used by the public. But this is that strip that I was talking about that can be used as a staging as well. And this location.

Here is a small outline of that ramp and here's the other outline, but it's a little different on the previous, on the previous slide, so --

UNIDENTIFIED SPEAKER: Where was the railroad property?

MR. CEBALLOS: The railroad property? I'll show it to you guys on the next slide, on the larger slide. Let me finish this one right here.

This is the basic summary of the quantities for the project. We have roadway ex, and it's in cubic meters, by the way, I forgot to put a cube there.

The roadway ex quantity is about 217,000, the embankment material is 174,000 and the access is 43,000.

Now on the quantity sheets if you look at the last sheet it pretty much states your embankment and your cut and excess on the far right hand side, that's your excess amount, so you have your excavation, your embankment and then this also includes the AC and AB as well for the roadway.

How can I go back a slide? One more. This is Haycock Peak right here. And that large quantity of roadway ex is mainly going to come from this area. I just wanted to point that out.

And then the embankment material, I'm sorry, the embankment material that I have shown there which was about 174,000 that's material is what we're going to be placing on the obliterated roadway and also maybe spreading some out here and providing some contouring for the final project.

So it's going to be -- there's going to be that challenge in trying to excavate, placing it and then bringing it back because of the staging that's going to be required for this project, how it's going to, you know, you have traffic on the existing roadway and then you're going to shift it and then you've got to bring that material back or place it somewhere close where it's not going to be too far to haul away to bring it back to cover the obliterated roadways. Okay. Next slide.

MR. AKANA: Real quick on that, let me back up. I just wanted to point out the acreage there. We're looking at this area right here, roughly about five acres, that's the northwest quadrant, and then this area over here is the remaining part there so one point eight I guess in this area here. So I want to make that clear just kind of the magnitude of the project, the size of the staging area we're looking at.

UNIDENTIFIED SPEAKER: Those are the quantities, correct?

MR. CEBALLOS: Those are the quantities. Okay. That question that you had about the railroad, I believe that site you can barely see it but I have a really big printout on the table.

This is the railroad alignment right here and that site is located right here. The railroad. And then the US Forest Service has the site that Dan was talking about earlier is approximately right here and I think it's on your handout, on one of the handouts.

But on this slide what I want to show you is the disposal site that we're planning on using to put some of this material.

There's two of them, one is at -- this is post mile 44 and this is post mile I'm sorry this is post mile

44.1 and this is post mile 44.

At post mile 45 is where you can turn around. And then at post mile 37 on the south area is where another location where you can turn around.

These are the closest exit or on ramps -- on ramps off ramps that are located, you know, within the project to make the -- to come back.

Our project is located right here, there's the railroad, city of Lakehead, town of Lakehead and then you have the Antlers Lakeshore interchange right there.

This is Antlers summit which is the peak and everybody -- I don't know how aware people are of the location here but this is a six percent grade and the proposed alignment will also have -- will actually be a little bit steeper than that 6.37 just to let everybody know about the steepness in this area.

Okay. The capacities for these disposal sites in cubic meters post mile 41 they have about 47,000 cubic meters of capacity, and then at post mile 45 they have about 16,000 cubic meters of capacity.

And it may be that that these locations are maybe temporary storage because the material will have to be brought back for the land -- not the landscaping but for the contouring and the grading.

Does anybody have any questions? One thing that I didn't mention on the layout sheet for the temporary access ramps I have the low point and the high point, the one on the west side -- can you take me back three slides, please?

MR. AKANA: This one? One more.

MR. CEBALLOS: Right there. The west side I have an elevation here of about 330 meters, the low spot, there's two different pads, the low spot is 307 meters and the length of that ramp, total length of that is 490 meters.

And then the east side temporary access ramp the high point, the high elevation is 334 meters and then the low spot is 295 and the length of that ramp is about 480 meters. That concludes my presentation. I don't know if anybody has any questions?

MR. AKANA: Any questions on the roadway portion? All right. Well, at that point then we'll turn over to give you some environmental challenges and considerations that we have and to do that we have Chris Quiney.

MR. QUINEY: Chris Quiney, Q-u-i-n-e-y. I'm with the environmental management branch. How do we get to -- okay.

I'm going to talk about the environmental constraints and the regulatory permit requirements.

As Eric mentioned some of the information regarding the permits is subject to change at this point. We're in the process of applying for permits.

In this picture it's hard to see but there is the existing Antlers public boat ramp administered by the Forest Service and next to that is the Antlers public campground. And there are federal laws that prohibit use unless there are no feasible alternatives for the use.

And we consulted with the Forest Service and determined that there are options to access the lake and to stage and those are the staging areas and access points east and west of the north abutment.

The access ramps that I've shown on there sketched in, those were put on there to apply for permits.

If we apply for the permits that will give us some lead time to prevent the contractor to apply for permits. There's a long lead time to get those done approximately a year for some of those. So if things do change those can be revised in a shorter time frame.

Permits required from the Army Corp, the Department of Fish and Game, the Regional Water Quality Control Board.

In the staging area we assume that it might be necessary to put a temporary concrete batch plant. We cleared the physical site but there are some things like the air quality studies that may be an issue, the contractor would have to apply for air quality permits from the Regional Air Board.

We're unable to do that because we don't know the size of the site, the number of trucks in and out and emissions so forth.

Another permit that may be required that we're not obtaining at this time is for dewatering any coffered work areas or cooling for curing concrete.

We don't have volumes and methods that will be used for that so that's something that would need to be obtained during the construction process.

There are noise restrictions for night work due to the proximity of the Antlers campground. It's about 86 decibels at 50 feet during the period of nine p.m. to six a.m.

Water quality is obviously an issue, the materials put into the lake for temporary structures or access points will need to be clean materials, and would need be removed afterwards.

For driving large piles in excess of four feet in diameter and for any underwater blasting a bubble current would be required. Lake Shasta is an important recreational fishery. And that's a requirement by the agencies.

Caltrans will hire a acoustic monitoring during those operations large pile driving underwater blasting. It's likely that the contractor would be required to hire a biological monitor.

The bald eagles, there's a pair of nesting bald eagles near Gregory Creek Campground they've been there for a few years.

And in coordination with the Fish and Wildlife Service they put some conditions on us where there's going to be a work window for driving piles.

Driving the larger piles four feet in diameter and larger can be done between a period of August 15th and January 15th.

Also the eagles start to nest right around January. They come into the area. And we're required to start construction between the period of August 15th and December first before they arrive so they become acclimated to the activities. And whether they stay or not that's their choice.

Also on tree removal related to the eagle requirement that trees be removed during the period of August 15th to December 31st.

Couple more things. It's a long laundry list. There are swallows and bats that utilize existing bridge, the swallows construct mud nests on the outside and the cellular piers bats access them and use them for roosting, r-o-o-s-t.

So there's a window. There's two options we can exclude them or you can work around their period of habitation.

The swallows they leave around August 1st and they get there about March 1st so the bats are about the same, August 1st to March 1st.

You can plug the holes on the piers so the bats can't get into the piers prior to construction and then you wouldn't have to worry about them or try to exclude them.

The swallows it's a different story. It's usually easier to work during the time period they're not there.

We do have noxious weeds on the job therefore disposal sites are confined to the project area and we'll have a contract with the Shasta County Department of Agriculture for a period of three years.

They'll monitor and spray and try to eradicate the weed therefore they'll need to know where the dirt is going and all earth disturbances during the project.

And as Bill mentioned there is a link for the environmental document for the project that has all the information. The web link is in included in that CD. I think that's about it. Any questions?

MR. AKANA: Hey, Chris, the list.

MR. QUINEY: Oh, the list, yeah. I put together a matrix of the work windows. It's kind of fuzzy but the first one is related to the environmental, and correct me if I'm wrong, but at project award the pile casings would need to be ordered assuming the project is awarded around mid July of 09, it would take eight to ten months to receive those piles on-site which would be approximately mid May of 2010.

The -- related to the eagle and the osprey it's a little raptor there construction activities must be begin August, mid August of each year and continue through that time period when they arrive around January 1st to acclimate them.

MR. AKANA: Is that kind of clear to everybody how that works? The eagles and the ospreys are there, they're there year round.

But if we begin basically a disturbance and a presence there by August 15th of that very first year it's prior to when they begin nesting and if they come to choose and nest anyway that's okay, we're okay and we're good to work year round as long as we maintain a presence and an activity going on.

So it's kind of confusing that that line there where it shows a red that you can't work but if you start by August 15th of that year, the very first year with some sort of activity, that can be tree clearing, things like that, and maintain that activity then you're good to go for the entire next year and all the years after as long as that activity is maintained.

MR. QUINEY: The red line is the time that they're nesting and Fish and Wildlife Service doesn't want you to come in during that nesting period and scare them off and leave their young there.

So they want you to come in before they get there and start the activity and the eagle and the osprey will make it clear do we stay or go somewhere else.

UNIDENTIFIED SPEAKER: What about tree removal?

MR. QUINEY: The tree removal same thing, the same window, they don't want you taking down trees during the active nesting period. So they want you to wait until they're gone in mid August and remove the trees at that point.

Excavation by blasting there will be some blasting at Haycock Peak because it's hard material that can occur year round. There will be some controls on blasting like stemming, s-t-e-m-m-i-n-g, and things like that, standard things like that just to keep it kind of low key.

Pile driving four foot diameter and over that period is mid August through mid January. They don't want us driving those large piles again during the nesting period.

Night work noise restrictions will apply because of proximity of the campground that's nine p.m. through six a.m. is usually the best time.

Demolition by blasting, that's underwater blasting, same window as the large pile driving. And the demolition of the superstructure we have the same window for the swallows.

And demolition of structure that's the piers, the cellular piers, that could occur year round if we plug the holes, the access holes, they usually enter through the weep holes if we plug those then you don't have to worry about it during the period you're doing the demolition. That's about it.

MR. AKANA: I'd like to encourage you to take a good look at this slide because it really does have a lot of information.

From the green you can see that a lot of the construction activities allowed at a very low water season.

Well, any given year it could look like this or it could have a lot of water there and we'd definitely be looking at barge based scenarios.

So it really -- take a good look at this. We have some construction assumptions down here we threw in just to kind of share where we were coming from in the development of this.

The first order -- the first thing we figured a contractor would do is getting the piling ordered up. And it would take a good eight to ten months to get that in and fabricated and so we're hoping to deliver the project sort of later in the season.

That looks kind of weird because what are you going to do late in the season? Well, we figured that to hit this August window we need a year to get that piling, fabricate it and start driving this would be a good time frame.

In the meantime, though, we figured there would be some stage building going on, trees could be removed, and maybe even some abutments can be built. That would have to take into consideration some of the excavation and that sort of thing going on.

So I don't know. These are just some of the assumptions we were looking at on how one might tackle this.

So I encourage you to take a good look at that and these construction windows that are in there because some of them could make things difficult either high water, low water scenarios when we can drive and when we can't drive piles.

Again in this collection piles less than one point two meters diameter the bubble curtain is not required. But pile driving greater than the one point two bubble curtains will need to be employed.

Any questions on some of the environmental concerns? That's a huge recreation area. This community relies heavily on the recreation that happens in this area so there's a lot of things going on, the camping, the marinas that are close by, the houseboating, the boating, the fisheries, the ramps and that sort of thing are big deals and big challenges that we've tried to overcome and negotiate up early on and just haven't been -- haven't been I guess real successful in utilizing like, for instance, the ramp that's here. We just can't do it. There's laws out there that require us to do elsewhere if it's possible, so --

MR. QUINEY: I'm not sure if I covered that adequately but did I talk about the existing ramp is not for use for construction purposes.

We consulted with the Forest Service and FHWA, Federal Highway Administration, and determined that there are feasible alternatives for staging of access.

MR. AKANA: That's kind of why you see this ramp coming in. It's right next to that one. One would think, "Why don't we just use that one it's already there?" We can't. It's a federal guideline. And if it impacts recreation or something like that we're not allowed.

MR. QUINEY: If you come with a 16 foot aluminum skiff and, you know, launch or pay your fee like the public then that shouldn't be a problem. But above and beyond that it's not for construction.

UNIDENTIFIED SPEAKER: Would you like to mention something about the traffic control on the lake, Eric?

MR. AKANA: Yeah. We haven't really developed that yet.

MR. CEBALLOS: We have a staging plan for the water traffic and we have plans but they're still preliminary right now. But there will be buoys out there and flashers and, you know, to direct traffic to whatever area that the contractor is not working in, so --

MR. AKANA: Do you have a width? Did we get a width to an open area for boats to go by?

MR. CEBALLOS: I'm not sure if it's 10 or

20 meters. It might be. I think it was 15, 15 meters at least to allow two houseboats to go, you know, to have two way traffic because the boats are pretty wide, the houseboats that they have out there.

MR. AKANA: The previous contract we did a deck replacement on this job about three years ago or so I believe we had a hundred foot, so that would be 30 meters so don't quote me on that. But there will be some, of course, you could put in restricted areas and that sort of thing but a open area for boats and that sort of thing to go by and will be required.

MR. CEBALLOS: There's also a draw down height at this boat ramp so there's during the year there may be a lot of boat traffic but, you know, during some months there will be absolutely no boat traffic at this location.

MR. AKANA: Yeah, this thing goes high and dry on the lower years they close this off. You'll see that. We'll go out and go down this ramp and it's been closed for I think since before August this year, so -- any questions on any of that?

Variable water level. That's mine. I did want to hit on this, this is another pretty big challenge that we had.

The photo that you see here is at full pool, full pool on the top and this photo here was taken about maybe three or four weeks ago. That is about 125 foot from full pool.

We started out this year about 25 feet down from the top and it's now there 100 feet lower. So it's about where you can walk across the lake if it wasn't for the mud.

I think that's all I wanted to say on that, but I just wanted to try and make that clear, but I got a little bit more on here.

The way that the Bureau, the Bureau of Reclamation owns the water and the lake they regulate the flows and that sort of thing.

The Forest Service has the area around the lake basically owns the land, so the land adjacent to the water, the banks, the parks, the campground, that sort of thing is primarily owned by the Forest Service.

So when the Bureau they have contracts out there with irrigation clients, and so there's an irrigation, an ag draw down that they expect every year and that is roughly 15 to 20 meters which is about 50 to 65 feet.

That's a pretty solid number. You can expect that is going to happen. It's predictable. The Bureau, though, does have a minimum operating levels and that's at 840 feet.

The lake right now is at 931 feet so we're still a hundred feet above what the minimum operating level is so they're still releasing water. They can. It's not a problem.

The flood control, though, what they have to bring it down to is 1,020 foot elevation. The full pool elevation is 1,070 so it's about a 50 foot draw down that they have to bring it down from full pool.

So in Sonny's slide the one he had where we were talking about full pool and flood control you can pretty much count on that as being around 50 feet. And that's a requirement. They need to be in the summertime before winter hits down that low for flood control purposes.

The agricultural draw down is generally a little bit more than that like I said up to 65 feet. So it's usually a little bit lower than that. But it's predictable.

And when the beginning of the summer hits you can kind of tell where you're going to be in August based on ag -- agricultural draw downs.

Evaporation and that sort of thing is something else and we really can't predict that because that will be influenced by the rain storms that happen that summer.

But it does play a major part. And with the variability of the water fluctuations it's a challenge. Even the recharging of the lake is erratic. This next slide I think shows that.

This is historic water cycles that you'll see. And you can see that the -- what you'll see is we start in any fore given year they draw it down about the same and then they hold it there as much as they can.

There's salmon influence and that sort of thing that occurs as well, salmon runs. Sometimes they'll open the gates a little bit more to let out some more cool water for the salmon -- during particular times for the salmon runs.

But it's pretty predictable on where they're going to be. You can see like in this particular year when we had a big storm apparently. It spiked way up high. We got it back down for flood control before it was time to -- before the recharging occurred. Let's see I think that's about it on that.

UNIDENTIFIED SPEAKER: Where is this year relative to one of these lines?

MR. AKANA: This year is like I say we started, this is in meters, we started at 25 foot down, I don't have the conversions, and we dropped, we're -- we're 125 foot down from full pool at this point when we started. We had a hundred foot drop, 30 meters, a little less than 30 meters roughly.

And right now we're at two, what did I say 280, no, OT is at 284, and we're a little above that. So we're down around here somewhere right now which occurred back in -- I can't even tell those colors -- 91, 92 time frame.

Any questions on that how the lake kind of responds to variability? That's just another challenge.

With that then I just wanted to share a schedule we are about 16 months out from advertise. We're pretty set to keep on that schedule right now. I hope it sticks.

Again our funding becomes available in July of 09. So we'll be ready to hopefully go to work at that time. That's all I have at the presentation part. Any further questions or any questions at all?

UNIDENTIFIED SPEAKER: What's driving -- maybe you answered this -- what's driving this project?

MR. AKANA: It's the condition of the existing bridge. It was built in the 40s. We're having a lot of fatigue on the structure, the deck has been an issue, the new deck that's on there as a matter of fact is even starting to deteriorate.

It was reconstructed under live load conditions so there was a lot of vibrations going on when the concrete was being poured.

Maintenance is constantly out there repairing crack control, filling in ruts or holes and stuff on secondary members.

The primary truss is in pretty good shape. The secondary members and the stringers and that sort of thing we're seeing a lot of fatigue cracks and that sort of thing.

It's age, deterioration, a little bit of operational. We have some safety concerns. South of the structure over here where this curves so the new structure as it come across when it cuts across Haycock Peak we'll be taking those curves out also improving our safety.

UNIDENTIFIED SPEAKER: You got quite bit of risk in the foundation as I see it be it sizewise or the conditions. What's your geotech program you have, how are your investigation scheme for this?

MR. AKANA: Well --

UNIDENTIFIED SPEAKER: I've seen a couple boring samples but so far no boring log.

MR. AKANA: Yeah, we're still getting the reports and everything finalized on that, so, gee, I don't know. Sonny, do you have a comment on that that we can --

MR. FEREIRA: No, I don't.

MR. AKANA: It's still a little preliminary for what we have. They're out doing, as a matter of fact, today they're out today they're doing some seismic refraction testing to get some better information on the geology.

UNIDENTIFIED SPEAKER: Are you planning on basically -- are you planning on drilling a hole at every pier location?

MR. AKANA: Oh, yes, we do have that. That has been done.

MR. LEE: Originally there was an idea of just getting it within the footprint of the pile and then leaving the casing there would have been no problem.

So as I understand what they did this past summer was take four bores just outside the footprint of each pile which would not only give you decent information but also locate for you any pitch angling in the rock, so there are pitch angling and there are four borings outside the footprint of each pile that will be available. (Hard to hear speaker.) (Reported to best of my hearing.)

UNIDENTIFIED SPEAKER: Each pile or each footing?

MR. LEE: Each pile. Not each footing. Outside each pile is what I was told. There's only 12 piles so what's a few more holes.

UNIDENTIFIED SPEAKER: It's not what we're used to.

MR. AKANA: Pardon me, Bill?

MR. LEE: I was at that last meeting with Jason Lynch what we decided to request was four outside of each pile.

MR. AKANA: And that has occurred?

MR. LEE: I don't know.

UNIDENTIFIED SPEAKER: You know, I mean, just one hole at each pile.

MR. AKANA: Isn't that what you said, Bill? At each pile group, at each bend, say, the four pile groups that we have there there's four holes there at each pile.

UNIDENTIFIED SPEAKER: So 12 borings total for the job?

MR. AKANA: Pier two we had a little difficult getting two because of where it's at. It sits on a -- you'll see as we go out -- I don't know, though, if I can find the -- I don't know if it will be good enough, but --

MR. CEBALLOS: Go forward.

MR. AKANA: Forward?

MR. CEBALLOS: Yes.

MR. AKANA: This one sits right on the edge of full pool and it's just about vertical. So when we were drilling off the barge the water had drawn down we started out 25 feet down this summer, we weren't able to get to it. So we're close at this particular pier.

These over here, though, we actually have one, two, three, four holes and then over on, let's see, on five there's two holes there. Is that right, Joe?

UNIDENTIFIED SPEAKER: Yes.

MR. LEE: My take they asked for four outside of each pile but it's just outside of each group of piles.

MR. AKANA: As a matter of fact when we go down there if we take a walk you can see where the holes are. We'll take -- from the barge.

MR. CEBALLOS: On the layout sheet you can see the red dots where the columns are at.

MR. AKANA: This one kind of shows it a little bit. Here's pier two. You can see how we came up. And it's right on the edge so this area right here is pretty steep. We couldn't bring a road down into bring in some equipment from above.

Forest Service land we needed permits, we had tree clearing going on, it was just -- we wanted to get that information as quick as we could.

We just didn't have enough time to go ahead and go do a separate contract and construct access and get the permits required to do that.

So we used the barge to come in and we came in as close as we could to that pier and put in a hole close to it.

Peter, any other comments on that? You mentioned that there's a lot of risk in the foundations. Is it the size?

UNIDENTIFIED SPEAKER: It's the size and as I see it from your one picture and the material you want to have your piles, your piers socketed in. And it's certainly the requirement to have a casing going substantially below ground into whatever material.

MR. AKANA: Okay. I know that our geology guys are working closely with structures and there's a lot of things that they're considering recently. So I appreciate your comment.

UNIDENTIFIED SPEAKER: If you go with that full casing option are you going to be able to supply those or do we have to supply those?

MR. AKANA: I'm lost on that. What do you mean supply?

UNIDENTIFIED SPEAKER: The permanent casing and the one alternative.

MR. AKANA: Well, we want the casings to come off for aesthetic reasons so you might be talking about this slide, that one there.

UNIDENTIFIED SPEAKER: Yes, sir, where you're showing. Oh, I see the column.

MR. AKANA: Yeah, this would really act more like a coffer I guess and then it would be cut off.

UNIDENTIFIED SPEAKER: Right. I know what you mean.

MR. AKANA: A link of concrete. If the link didn't recede as far as it did, you know, we would just do it like always leave it at the low water mark but it goes from the top to the bottom. And for aesthetic purposes we're going this way with the concrete to expose the concrete.

UNIDENTIFIED SPEAKER: Why do you really need to remove them?

MR. AKANA: Well, more aesthetics and maintenance thing, you know, they're going to have to be coated somehow.

If it's under water when we're done how do we coat it? If we luck out and get a dry year and coat it with some paint maintenance is going to be in there painting them things forever and ever.

UNIDENTIFIED SPEAKER: How do you get them off after you use them for driving and it's heavy pipe, it's big pipe?

MR. AKANA: That's a good question.

UNIDENTIFIED SPEAKER: I don't say that might be the only way to get a coffer style insulation done there, but a little tricky from my understanding to remove a thousand bolts strengths and durability to drive it or to get it in place and then to remove it after you build your column.

MR. AKANA: I wish I had a response. I don't know. We definitely -- I know they're taking some of these -- Jason Lynch our designer has spoken to the agency. I know he's received a lot of information and stuff so he's got some things to consider.

UNIDENTIFIED SPEAKER: And the permanent casing in the 15 meters shown is a given? That's a requirement?

MR. AKANA: No. Yeah, you know, I think -- you know, the idea is to get that down seeded into the rock so it doesn't leak to where we can muck this out and then fill it. So I'm sure that's going to vary to some degree. The overburden here varies depending on --

UNIDENTIFIED SPEAKER: But it's not a structural requirement?

MR. FEREIRA: Yes, it is to some degree the installed casing depths go vary between 40 feet and 95 feet and then below that is the rock sockets.

UNIDENTIFIED SPEAKER: But asking for structural requirement do you take in account for the steel in your structural design?

MR. FEREIRA: That's my understanding.

UNIDENTIFIED SPEAKER: And you cannot substitute that casing steel with increased rebar quantity?

MR. FEREIRA: Correct. That's my understanding.

UNIDENTIFIED SPEAKER: No chance to substitute the steel casing by additional rebar inside the structure.

MR. AKANA: And then remove the steel casing?

UNIDENTIFIED SPEAKER: Just leave the casing up to the contractor if he needs a casing for the constructability or not. If the soil turns out to be in a way that you need a casing you might leave it in place if not then the casing is not actually needed.

MR. FEREIRA: Okay. My understanding is

that they may be using the composite action of that casing in the design.

UNIDENTIFIED SPEAKER: Out of seismic consideration?

MR. FEREIRA: I don't know.

MR. AKANA: Yeah, I don't know. I mean, it's there. It might be that they didn't think that it was possible to not use the casing. This overburden is pretty muddy.

UNIDENTIFIED SPEAKER: They should leave this up to means and methods and not make it part of the design if they want to have a competitive bid.

MR. AKANA: I know they've got a lot of these comments before. I'm sure they're taking these into consideration. So thank you.

This one, let's see, CDIH I guess this would be somewhere in that range for each pier 14 to 17 meters is what they're thinking for that section of casing that they're leaving in place.

Anything else? Well, then why don't -- I think we can wrap it up here. I have a van outside. It's the big one out here with the back doors open. I would like to try to minimize the number of vehicles that are going over there.

We are going to go to the north side first down the ramp to take a look at the alignment. We'll wind back up on top of the north side to view the alignment across the lake and then go take a quick look at the staging area and then at that point get back on the freeway head south to Salt Creek exit, turn around and come back up on the north side there's a large turnout there just at the south end of the bridge.

And then we can view from that side where the alignment goes through. So if we could get most of you in this particular van, if we squeezed in there, can get nine people in there plus a driver and a passenger in the front seat for 11 so if we could get as many people in that van and then those of you that need to drive can follow the van. We do have some hard hats you can take.

UNIDENTIFIED SPEAKER: Hard hats and vests are in the van and I can take three.

MR. AKANA: Okay.

(On the record portion of meeting adjourned at 2:30 p.m.)

(Meeting adjourned to visit site.)

---oOo---

REPORTER'S CERTIFICATE

I hereby certify that the foregoing hearing was duly reported by me, LEAH BARR, CSR 9893, that said hearing was taken at the time and place herein named; and that the comments of said participants was reported by me, a duly certified shorthand reporter and disinterested person, and was thereafter transcribed under my direction by computer-assisted transcription.

I further certify that I am not of counsel or attorney for either or any of the parties to said matter, nor in any way interested in the outcome of the case named in said caption.

IN WITNESS WHEREOF, I have hereunto set my hand.

DATED: 12-13-07

Leah Barr

LEAH S. BARR, CSR No. 9893

State of California