## AFTERNOON SESSION

THE HEARING OFFICER: All right, we're going to reopen the hearings. It's 2:05.

Mr. Hanna, do you have any further question for Mr. Lopez?

MR. HANNA: Yes, I do.

THE HEARING OFFICER: Who is still under oath. Go ahead.

## RAMON LOPEZ,

resumed the witness stand and testified further as follows:

## BY MR. HANNA:

- Q. Would you agree that, on the basis of today's

  Exhibit 22, that the inrun ramp and the top of the

  town down to the takeoff would be approximately a

  hundred yards?
  - A. No, sir.
- Q. What would you estimate it to be?
  - A. I would have to ask the designer to tell us that.
- Q. You could make no conclusion about that at all on the basis of -- on the basis of the profile in the

# application?

- A. That profile represents a concept. I would not guarantee it to scale.
- Q. Would you be able to make any estimate of what the distance without supports from the top of the tower to ground level would be for the inrun ramp?
  A. No, sir, I wouldn't.
- Q. That would require a structural engineer to do that?

  A. It would take the designer of the ski jump

  and someone who knows the relationships that have to

  be established to design the ski jump.
- Q. At the very beginning of your testimony today, you corrected some of the dates on Page 2 of Exhibit 85.

  I'm not certain I put them down correctly, and I'm not sure I understand what you -- what you meant by it. Could you start first off and give me the dates that you -- that you corrected?
  - A. On the Logic Diagram, there is an activity
    '175 to '190 titled "A.P.A. approve concept." As
    it's shown on the Logic Diagram, the restraints from
    point '190 go to activity '251 -- '252 based on the
    Department of Transportation curb cut approval or
    application, and to activity '350. Activity with an

I number of '350 breaks out into four separate activities: EDA approves the first bid package;
Town of North Elba approves the first bid package;
APA final approval, and LPOOC approve first bid package. The way the diagram shows it now, the design of the facility would continue prior to having APA conceptual approval. What we're saying is the more practical approach and the more realistic approach is that prior to the Organizing Committee investing the money into the development of schematic drawings and completing design, that they should have APA conceptual approval of the site. To do --

THE HEARING OFFICER: How does that modify the diagram?

THE WITNESS: To do that, we would add a restraint between node '190 and node '200 would be a dummy activity which would state then that we should have APA conceptual approval prior to the start of conceptual drawings. If you add that restraint and turn to Page 2 of the computer printout, activity '175 to '190, "APA approve the concept" would have an early start date of the 29th of November, an early finish date of the 13th of December

with 20 days float, meaning that the latest it could start is the 27th of December and the latest it can finish is the 10th of January.

MR. HANNA: No further questions.

THE HEARING OFFICER: Mr. Gitlen?

#### CROSS-EXAMINATION

### BY MR. GITLEN:

- Q. All right, Mr. Lopez, starting with your response to the last question propounded by Mr. Hanna, what happens if the APA does not give the conceptual approval prior to 1-10-76 -- or 1-10-77, excuse me.
  - A. The Organizing Committee is then faced with a major decision. First, do we continue with the design on the chance that the site may be approved and invest that additional design cost at that time, or do we stop operations, wait for either approval -- the formal approval of the permit and then go back to the schedule and see what problems we have in trying to again meet the end date.

The other alternate is that if the -if, on the 10th of January, if the decision were not
in favor of that site and all prior activities would
have to start over again jeopardizing any start of

construction in April of '77.

- Q. I assume you're aware of the fact that a document was read into the record at the hearing on the 19th of this month which indicated a proposed cross-examination schedule and that included nine hearing days for the presentation of the sponsor's affirmative case. I assume that you recall that?
  - A. Yes, sir.
- Q. And at that same hearing, the Hearing Officer indicated his availability for the purposes of conducting these hearings, did he not?
  - A. He did.
- Q. And that he indicated that, excluding today, there were nine hearing days that were available including one Saturday prior to December 30th, is that correct?

  A. Yes.
- Q. And would that not indicate to you that if the applicant cannot complete its direct case prior to December 30, 1976, that it is really unlikely that APA conceptual approval will be given on or before January 9, 1977?
  - A. That question, I'd rather -THE HEARING OFFICER: Counsel,

excuse me. Counselor, I must point out that the applicant's direct case is complete. This is cross-examination of the applicant's witnesses. They have made their submission. The applicant's direct case is complete, as a matter of law.

MR. GITLEN: Well, I would -- I beg to differ with you. The applicant's direct case, in my judgment, would not be complete and would not be acceptable in terms of evidence until the cross-examination of it had been complete, but in any event, that's a matter of symantics. With cross-examination, if you will, of the applicant's direct case would not conclude at the earliest according to the applicant's own schedule until December 30th, correct?

THE WITNESS: I would have to turn to our Counsel.

- Q. Well, I've given you all of the different documents.A. Dates presented, yes.
- Q. And so it would be highly unlikely, would it not, that the APA would be able to grant conceptual approval on or before January 9, 1977?
  - A. I don't feel it's in my place to judge how fast the Hearing Officer and the APA can render a

decision. We're just stating that --

- Q. I assume --
  - A. -- in order to maintain the schedule we need a decision by the 10th of January.
- Q. Well, I assumed you were here during --

MR. BROOKS: I would object at this time. This is argumentative really. I don't see the purpose of it.

THE HEARING OFFICER: I'm going to sustain the objection. The purpose of today's hearing is to determine these dates and, as I indicated, I will accommodate myself to the exigencies of the decision. If the decision -- that is, the decision time table. If the applicant establishes by what I deem to be a fair preponderance of the substantial, credible, technical evidence, the January 10th is, in fact, a critical date for the APA decision, if we have to work the next consecutive thirty days to get to January 10th for that decision, we'll do it; simple as that.

The objection is sustained. Proceed, Mr. Gitlen.

- Q. Now --
  - A. Along with what they've done now.
- Q. Do you have any idea whose money they would be risking?
  - A. They're administrative funds and the federal government funds if they're made available to us for that purpose.
- Q. You said administrative funds or the federal government funds?
  - A. That's right, sir.
- Q. Do you know the source of the administrative funds?

  A. It's funding raised separate by the Organizing

  Committee.
- Q. Have you, or to your knowledge, has anyone at the Organizing Committee had or held discussions with the funding federal agency to determine whether those funds would be forthcoming in the event of this supposition that they're given?
  - A. No, sir, we haven't. We've proceeded on the basis that the site is an acceptable site and that approval would be given.
- Q. Now, again, in the event that approval was not given on or before January 9th, 1977 and, in

- addition, assuming that the Organizing Committee
  were to determine not to proceed with drawings and
  plans and specifications, would it then, in your
  judgment, be possible to complete the 90- and
  70-meter ski jumps by the 13th of September in 1978?
- A. It would be possible if you worked through the winter at significant cost to the owner.
- Q. Do you have any idea?
  - A. But even that can be extremely risky depending on the weather and you have to realize that we're putting men possibly 250 feet in the air on a scaffold platform.
- Q. Do you have any idea as to which of the tasks which are identified on your Exhibit 761119:85 would have to occur during those winter months?
  - A. The construction of the tower itself.
- Q. And have you formulated any estimate of the increase in cost that would be occasioned by that construction during the winter?
  - A. Put a number on the cost? One of the factors that you have to consider in addition to cost is the risk to men, to lives. I think it's a very dangerous situation to put men on scaffolds 260 feet

- in the air in the middle of the winter in the Adirondacks.
- Q. Sounds very reasonable to me, but have you made any calculation with respect to the cost?
  - A. No, sir, I haven't.
- Q. So the only -- under the two suppositions that I've given you, the only way that the facility could be completed by the 13th of September of 1978 would be if the tower was constructed during the winter?

  A. That's right.
- Q. Now, if the completion date for the facility were to be extended, shall we say, to November 1st, 1978, would -- and again the same two suppositions, would the facility be able to be completed by that later date?
  - A. We'd need a definition of how late we're beginning delaying the start and, second, this is at the present time a theoretical completion date.
- Q. At the present time, the 13th of September is a theoretical --
  - A. Is a theoretical completion date. We're sitting here without drawings at this time making certain assumptions.

Q. Well, that's enough -- that's another point that I think we'll have to get to in a minute. But have you or, to your knowledge, has anyone with Gilbane Construction Company or the Olympic Organizing Committee considered the ramifications of the decision which is pending in slightly over a month from now as to whether to proceed with the design if APA approval, conceptual approval, is not granted.

A. I think there are a number of factors that influence that. First, does it appear as though you will have a favorable decision within a brief period of time and do you take the risk?

Second, are you faced with a possibility of not having a favorable decision and if you are, you would most likely just sit tight and not do anything.

- Q. Well, let me ask you this: Could an analysis be made assuming -- assuming APA conceptual approval the lst of March 1977 and with a completion date, shall we say in November of 1978 and thereby determine whether or not, given those two time constraints, so that it could be constructed and completed?
  - A. If you're talking -- if you're talking of

delaying the start 30 days, you're adding 30 days onto the completion date for the first summer's activities. Then you have a make-up time during the winter if you don't use the winter. However, due to the nature of the project, it's not practical to consider work during the winter.

- Q. Let me see if I can make this a little more simple.

  If you have a completion date of 13 September 1978

  and you would like to make the completion date

  arbitrarily November 13th, 1978, could you not then

  take each of these items which need to be completed

  and postpone them for two months, recognizing that

  perhaps during the winter one might have to stop

  three-quarters of the way or two-thirds of the way

  completed and then complete that task at the

  beginning of the next construction season? Could

  that not be done?
  - A. You're going to face a cost factor on it.
    You're also going to have an effect on what we've scheduled for the following summer.
- Q. I'm aware of that but let's assume that the following summer everything then was likewise pushed
  forward by 60 days, those two months, the only

- impediment to doing that that you've raised thus far is the cost. Is it possible?
- A. Well, you also --
- Q. Is it possible for you as a construction manager to do it?
  - A. You can do it. There are some aspects of the project then that could not be finished in '78. The last activities that we're showing are the final dressing of the disturbed areas. We had snow this year in October. You can't be planting grass in October.
- Q. Well --
  - A. And now what do you do?
- Q. Is this final dressing of the disturbed area something could be done at an earlier stage of construction than that where you have it now?
  - A. It's -- it's now scheduled to follow topsoil and seeding of the outrun. It's the final cleanup of the facility prior to punch list. At that point, if you didn't have a punch list, your project is 100 percent complete. The last activities to take place are your site work.
- Q. Well, it's conceivable, is it not, to run -- to do

- dressing to disturbed soil at the same time that you're doing your punch list?
- A. It's possible, but then you're not getting an accurate punch list.
- Q. Only with respect to those, to that one incompleted item?
  - A. The time allotted for punch lists should be strictly that. Your construction should be completed and your punch list is cleanup of activities where the work was done improperly or the seed didn't take properly and you have to reseed.
- Q. Well, if you had a choice of completing the project on time or not completing the project, in your experience, would you do things like final dressing of disturbed areas simultaneously with the punch list if that was necessary to complete a construction deadline?
  - A. You could do it. You would not have an accurate punch list because your punch list can't be completed until you've done that work.
- Q. Now, with respect to 70 -- the proposed 70-meter ski jump at the Intervale site, is my understanding

- correct that that would involve a tower of 110 -- approximately 110 feet?
- A. Yes, sir.
- Q. And would that tower be outfitted with an elevator?A. No, sir.
- Q. In other words, there would be a staircase?A. Stairway to the 70-meter tower.
- Q. Now, looking at your Exhibit 761119:85 -
  A. The printout?
- Q. -- the computer printout, looking at your item
  number under column I'925 to '926 which is entitled
  "70-Meter Foundation," that indicates, does it not,
  that there are 20 -- 20 days which are considered
  sufficient by you for the foundation of that size
  tower?
  - A. Right.
- Q. And again on that same page your Item Number -under Column I'955 to '980 which is entitled
  "70-Meter Superstructure," could you tell me what
  you mean by the "70-Meter Superstructure"?
  - A. That portion above the footing.
- Q. Would that include the tower and the ramp coming down?
  - A. I believe it is -- yes, sir.

- Q. In other words, the nomenclature for the 90-meter and the 70-meter is different. You refer to superstructure in the 70-meter to include the tower and the ramp whereas with the 90-meter, you refer to the tower and the ramp separately?
  - A. On the 90-meter facility, there is a question as to whether or not there will be another ramp landing area or an earth landing area below the take-off point.
- Q. That's what "90-Meter Ramp" means?
  A. Right.
- Q. So that the 90-meter tower construction, what does that include, just the tower, the vertical tower?
  A. Right, vertical tower and the horizontal section between them.
- Q. And the horizontal sections. And the superstructure means essentially the same thing as the tower?A. As used in the 70-meter jump, it's the entire structure.
- Q. Now, that indicates that you've allotted 50 days for the construction of that item?
  - A. That's right.
- Q. Which means that at least in terms of building the

- actual structure itself, you would need 70 working -- 70 working days according to your estimate.
- A. Right. That includes the foundations.
- Q. Including the foundations. Now, can I assume from that that it is very likely that a 110-foot tower could be built in one construction season?

  A. Yes.
- Q. And that the facilities such as the earth moving that might be required for a landing area could likewise be completed in that same construction season? That would still give you several hundred -- well, at least 100 days to do that, wouldn't it?
  - A. The difficulty there is the amount of construction taking place in one confined site.
- Q. Well, you -- you've already used up 70 construction days just building the structure itself, cutting the foundation area.
  - A. On the 70-meter?
- Q. On the 70-meter. You've dug a hole and you've put in the foundation area and you've built the tower and you've used up the construction time. How many construction days are there in a construction season?
  - A. You're looking at a construction of six months,

- 120 work days?
- Q. 120 work days. You've assumed a shut-down period for 100 working days?
  - A. That's right.
- Q. Is that 100 working days?
  - A. 100 working days, that's right.
- Q. You say you have 120 working days in a construction season?
  - A. Six months at 20 days a month.
- Q. And that would mean that after you had built this tower, the superstructure, the 70-meter superstructure, you would then have 50 working days remaining in the season, is that correct?
  - A. Right.
- Q. Now, for the --
  - A. I think if you check the Logic Diagram, there's still 115 work days of work remaining after you complete the tower.
- Q. For which facility?
  - A. For both the 70 and the 90.
- Q. I'm just talking about a 110-foot tower, not -- I'm assuming there is no larger tower, that's the maximum size.

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- A. No, we're referring to the outrum for the 70and the 90-meter.
- Q. I'm just referring now to the tower and assuming you were just building a 70-meter ski jump at the Intervale site, no one even jumped off a 90-meter ski jump there.
  - A. All right. You still have -- you still have 45, 60, 65, 95, 115 days of work programmed after you have the tower facility.
- Q. O.K. And what are the major elements of that?

  A. You have a landing area to construct.
- Q. And how many working days would that take?
  - A. Fill of the new outrum is scheduled for 45 days, top seeding and seeding of the outrum is 45 days, final survey of ramps to the outrum is 15 days.
- Q. What is a final survey?
  - A. After you've constructed the facility you need FIS approval. You have to do exact as-built profiles and submit them to the Ski Federation.
- Q. Yes, but that doesn't have to be done during the construction season, does it?
  - A. Well, no, it's kind of hard to do as-built drawings getting elevations when you're digging

- through the snow to find out where your structure is, I mean from a practical standpoint.
- Q. That could conceivably be done in the month of November, could it not?
  - A. If it doesn't snow.
- Q. If it doesn't snow heavily?
  - A. Right. If not, you have to remove the snow to find the structure.
- Q. I understand that. What are the other major elements? Thus far, you've given me two, and I'll admit, arbitrarily I've excluded one.
  - A. O.K. Once you have completed your final survey you have to submit that to the FIS for their approval, their concurrence.
- Q. O.K. But again that's not construction work per se, that's giving plans and so on to the committee.
  - A. No, sir, but at that time if they review it and find a modification is required --
- Q. I understand, I understand that.
  - A. -- that gets done during the punch list period.
- Q. I understand. So what you're giving me is 65 days when actual construction work -- and I'm referring

now to construction work -- would be required on the site, would be required after the construction of the superstructure, a 110-foot tower with stairs and a way to get off.

- A. Granted to the point where you have the topsoil and seeding of the outrun.
- Q. Right.
  - A. If, however, that does not meet FIS approval, you still have another 20 days of work following that.
- Q. I understand that. I guess I better not ask you this question. Do you think it would be possible to build a hundred -- that 110-foot tower during one construction season and have it usable during the following winter?
  - A. When you say "possible," do you mean possible or practical?
- Q. Do you think as a construction manager that you could accomplish that feat?
  - A. Provided the funds are available, yes. From a practical standpoint, no.
- Q. Now, let me -- let me ask you another question:
  You're familiar with the alternate design or the

alternate site analysis that was done at Bassett Mountain?

- A. No. sir.
- Q. You're not familiar with it at all?
  - A. No, sir.
- Q. Have you read the application?
  - A. I've read the application.
- Q. So you're familiar, I assume, to the extent that the application divulges the Bassett Mountain site, with the types of consideration that are presented in the application?
  - A. Yes, sir.
- Q. And you're familiar, I assume, with the statement in the application that essentially approximately a 60-foot tower would be required for the 90-meter ski jump at that site?
  - A. Right, sir.
- Q. Have you ever been to the Bassett Mountain site?A. No, I haven't.
- Q. Have you ever seen profiles of it?
  - A. No. sir.
- Q. Let me ask you whether or not from the information in the application you could make a judgment as to

the amount of time, the amount of time during a construction season that would be required to construct the 60-foot tower at that site and move the earth around and make a landing area?

- A. With what I've read of Bassett Mountain site --
- Q. Let me just ask you whether or not you have enough information, which is the question.
  - A. With what I've read of the Bassett Mountain site, I would say you'd need at least two years to develop that site in which to be useful.
- Q. And for what reason do you say that?
  - A. You're starting with a virgin site. You have major tree removal to start with. You have to develop access roads which are not available before you can even start your foundation.
- Q. Let's assume --
  - A. Then you have soils investigation.
- Q Let's assume all the clearing was done during one construction season and the site itself was cleared of trees and whatever, and roads were put in and so on. Could you then build the 90-meter ski jump at that site in one construction season?
  - A. No, sir.

- Q. And why not?
  - A. A 90-meter?
- Q. 90-meter ski jump with a 60-foot tower, which is the requirement at that site.
  - A. Your -- no, sir, you couldn't have a completed facility in one year, one season.
- Q. And why is that? Is there something in particular about Bassett Mountain that leads you to say that?
  A. Yes, you're talking complete starting from scratch with parking lots, access roads, and these all have to be done.
- Q. No, I'm saying, I'm giving you a hypthetical. I'm asking you to assume that clearing work and the access roads and so on are done in construction season one so that you don't have a virgin site, you've got a cleared site with all the trees that are necessary to be removed removed, all the roads for construction vehicles in, the parking areas perhaps and so on.

MR. BROOKS: Well, then I'll object to it. Then let's get it clear just what facilities are available so he can respond to that question.

You're saying parking lots, et cetera, maybe. If

you want an answer from this gentleman to that question --

MR. GITLEN: I'm asking --

MR. BROOKS: -- tell him what's

going to be there when he starts.

those.

MR. GITLEN: I'm trying to give him

MR. BROOKS: Give him --

MR. GITLEN: I'm sure that we'll be willing to give it all to him.

MR. BROOKS: Well, give it all to him.

MR. GITLEN: All right.

- Q. The sites, as I say, necessarily have been cleared, all the clearing has been done, access roads for construction vehicles have been all laid out and are suitable and adequate, parking areas that might be needed for the facilities are in and available and that what remains is the construction work relating to building the superstructure, the 60-foot tower and the ramp to get down from the tower to the landing area.
  - A. Electrical power available at the site?

- Q. Electrical power has all been supplied.
  - A. If you had that there and you were talking just the 90-meter, 260-foot tower --
- Q. Right.
  - A. And the landing area, you could do it in one year.

THE HEARING OFFICER: May I have from counsel the page reference to the consideration of Bassett Mountain alternative in the project application?

MR. GITLEN: Which counsel are you referring to?

THE HEARING OFFICER: I don't care, whichever one can furnish the information the quickest. Never mind, everyone, it begins at Page III-14, all right?

MR. KAFIN: Well, Mr. Hearing Officer, if you have to --

THE HEARING OFFICER: Yes.

MR. KAFIN: You have to pick it up at several points in the application where it -you've identified a basic discussion of alternatives.
There are graphic materials that support that

discussion found in the appendix and also throughout the discussion of environmental impact and other information.

THE HEARING OFFICER: III-25.

MR. KAFIN: You really have to consider III -- it's Roman Numeral III-11 through Roman Numeral III-34 and then you would have to --

THE HEARING OFFICER: That's what I wanted to know.

MR. KAFIN: In order to determine the graphics, you would have to go to the portion of the appendix which contains information as to site context, soils, vegetation, site accommodation and other information including profiles and preliminary earthwork estimates.

THE HEARING OFFICER: All right. I'm interested in the portion that begins on Roman Numeral III-Arabic 31 and is continued on III-32 and I'm going to ask counsel for the State, Mr. Gitlen, whether he's asked the witness to assume that all of the information dealing with specifics, including the half-mile of access road, the extension of electric power service, the clearance of approxi-

mately 28,000 cubic yards of cut and 76,000 yards -cubic yards of fill, the total disturbance of
approximately 13 acres of soil, the appropriate cut
necessary for the landing, the filling for the outrun and the filling for the outrun return as well
as the acquisition of the necessary site, have all
been completed prior to the proposed construction of
the actual tower mandated at Bassett Mountain
approximately 60 or 70 feet tall, and if those are
all assumed, my understanding then is the witness'
answer that the tower could be constructed in one
construction season.

MR. GITLEN: Well, I was not -- I was not including the fill and so on that's necessary for the landing areas, but all the other things I was including in the hypothetical which I gave you.

MR. KAFIN: At this point we may not be dealing with an improbable assumption but an impossible one just in terms of time. Does that also include Adirondack Park Agency conceptual approval?

MR. GITLEN: No, I'm just asking,

I'm asking to just deal with construction and not any mandates applicable.

THE HEARING OFFICER: Mr. Gitlen, may I rephrase your question?

MR. GITLEN: If I like it, yes.

THE HEARING OFFICER: Is it substantially correct -- let me try this, Mr. Lopez:
The actual construction of a tower approximately
60 to 70 feet high with the associated in-run which
is the angular member of the vertical -- associated
with the vertical could be completed in one construction season?

THE WITNESS: That's right.

THE HEARING OFFICER: All right.

MR. GITLEN: Well, Mr. Lopez, I
think we have to get in a little more detail. For
a 110-foot tower you testified earlier that 70 days,
110-foot superstructure, excuse me, vertical tower
part as well as the ramp, that 70 days would be
adequate for constructing that and it follows, does
it not, that for a 60-foot tower perhaps not half the
time but something less than 70 days would certainly
be reasonable for the construction of that type of

# a facility?

THE WITNESS: Not necessarily. Your construction technique for a 200-foot tower or a 170-foot tower might be totally in agreement.

- Q. We were talking about a 110-foot tower and a 60-foot tower.
  - A. You might use an entirely different forming system.
- Q. In other words --
  - A. It's possible if you went to a concrete tower 110 feet, it's possible to slip form it.

    If you go to a 60-foot tower, the cost of setting up a slip forming operation would be impractical.

    I can't tell you.
- Q. Well, Mr. Lopez, as an expert, how long do you think it would take to construct a 90-meter tower at the Bassett Mountain site?
  - A. A 60-foot high tower?
- Q. Sixty-foot high tower with associated ramp.

MR. KAFIN: Excuse me. At that point are we making all the assumptions that we have roads there, electricity?

MR. GITLEN: All I'm asking is how

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long it takes to do the actual construction. We'll fit the other parts in as we get a chance.

THE HEARING OFFICER: Construction of the superstructure, Counselor?

MR. GITLEN: Yes.

THE HEARING OFFICER: O.K.

A. Possibly 40 to 50 days.

MR. KAFIN: Assuming there's a road there?

MR. GITLEN: Assuming --

THE HEARING OFFICER: Counselor,

no --

MR. GITLEN: Assuming --

THE HEARING OFFICER: Gentlemen, the question is simply this: How long does it take to build a 50- or 60-foot or 70-foot superstructure?

That's all we're interested in.

MR. GITLEN: That's 40 to 50 days.

MR. KAFIN: Mr. Hearing Officer, the problem with the question is it takes one period of time in the middle of Manhattan and another period of time out in the woods and I'm just trying to get it in context.

agrees -- no assumptions, Counselor. Let us proceed. This is immaterial chatter. There is a single question with a single answer. It takes 50 to 60 days to build a single superstructure whether you brought the stuff to the site by coolie or by jackass.

MR. GITLEN: Now there's also substantial regrading and clearance required at the Bassett Mountain site; is that not correct?

- A. (Witness nods head.)
- Q. Yes?
  - A. (Witness nods head.)
- Q. And, in fact, on the chart that the Hearing
  Officer was referring to earlier, Page III --Roman Numeral III-Arabic Numeral 31 of the
  application, is an indication of plus or minus
  28,000 cubic yards of cut and plus or minus, I
  think it says 76,000.
  - A. 75-, 76,000 cubic yards of fill.
- Q. All right. What period of time would be necessary to accomplish that operation, in your judgment?
  - A. The first phase would be to find 76,000 cubic yards of fill in the Adirondacks.

- Q. And if you don't have -- if you don't have substantial amounts of rock that need to be blasted?

  A. Pardon me?
- Q. If you don't have rock that needs to be blasted?
  A. 28,000 yards, depending on how far you're hauling.
- Q. Well, let's assume that you're using that fill right on the site, you're using that material of the cut.
  - A. It's still a factor of how far you're hauling it, what kind of equipment you're using to move it, can you scrape it with pans that are carrying 16 yards at a time; do you have to load it on trucks?
- Q. You're the construction manager.
  - A. Well --

THE HEARING OFFICER: Gentlemen,
please let me have a reasonably orderly hearing.
Counselor, I have given you great latitude in
posing hypothetical questions to this expert
witness. The questions have reached the level of
rank speculation. Unless you have or are prepared
to make an offer of proof supporting the assumptions
you're asking this witness to make, I'm going to

have to entertain objections and prevent further questioning.

MR. GITLEN: Excuse me, Mr. Hearing

Officer --

THE HEARING OFFICER: -- along this

line.

MR. GITLEN: There are no assumptions in this question.

THE HEARING OFFICER: Madam

Reporter, what's the last full question you have?

(The record was read by the

Reporter.)

THE HEARING OFFICER: Now,

Counselor, proceed from that point with a question.

All that's in the record now are a series of assumptions.

### BY MR. GITLEN:

- Q. In your experience, Mr. Lopez, how long would it take to move the earth required as indicated on Chart Roman Numeral III-Arabic numeral 31 at the Bassett Mountain site?
  - A. On the assumption that the 29,000 cubic yards of cut are sand and not rock?

- Q. Yes.
  - A. Or --
- Q. Well, as long as they're not rock.
  - A. Most likely move 2,000 yards a day. Now, when you move it, are you moving it to a place that requires compaction? If you are, then you're going to have an effect on the other side of the cut area where you're filling it. You can be slowed down on the other side of the operation.

(Continued on Page 295)

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- Q. I'm asking you, would you need compaction under these circumstances?
- A. I would assume that if it's being used in a landing area, yes.
- Q. Let me ask you this, Mr. Lopez: Have you performed or are you aware of soil borings being performed at the Intervale site?
  - A. They will be performed starting tomorrow morning.
- Q. They have not yet been performed there?A. That's right.
- Q. And so you do not know how much rock is at the Intervale site?
  - A. From the -- from the preliminaries that we have seen we don't have any major cuts that should involve rock at all.
- Q. But you have to dig some holes, don't you?
  A. Yes, but if, for foundations, if we're on rock, rock that's breaking off, any weathered rock on the surface to get down to a good solid base.
- Q. Would you, for example, have to compact soils in the landing area at the Intervale site?
  - A. What is there now would be compacted naturally to this point and any material placed on top of it would

have to be compacted.

Q. Are you familiar, Mr. Lopez, with the cost estimates which are contained in Appendix 4, I believe it is, Yes, Exhibit 4 to the Appendix to the application.

They're on the stationery of the Gilbane Building Company, although it indicates that they were prepared by a G. A. Looke.

THE HEARING OFFICER: Here, you can look at this copy.

THE WITNESS: I have it.

- A. The detail of them, no, sir.
- 0. You're not?
  - A. Not in detail.
- Q. Did you participate in the preparation of them?
  A. I oversaw it.
- Q. Paardon me?
  - A. They're -- Jerry Looke happens to be one of our project managers working under me and, yes, I saw the numbers.
- Q. Do you know whether or not a cost estimate was prepared for the construction of both 70- and 90-meter ski jumps at the Bassett Mountain site?

THE HEARING OFFICER: Counsellor, it's

indicated on the third page of that Exhibit number 4 which if it doesn't already have an exhibit number, I'll have marked for today --- does it already have an exhibit number?

MR. GITLEN: Excuse me, that indicates the 70-meter ski jump at Intervale and the 90-meter ski jump at Bassett Mountain. My question to the witness is whether or not he is aware of a cost estimate being prepared for both the 70-and the 90-meter ski jump at the Bassett Mountain site?

THE WITNESS: No, sir, we have not.

Q. Now, with respect to the page to which the Hearing
Officer just referred, the third ski jump estimate
page --

THE HEARING OFFICER: All right, let's -- let us, before we go any further, let us have the estimate consisting of four pages designated Appendix Exhibit 4 of the application marked for identification and I am receiving it into evidence as Exhibit 761129:23, whatever the next consecutive number now is.

MS. NICHOLS: 23.

THE HEARING OFFICER: 23. All right. Now proceed, Mr. Gitlen.

MR. GITLEN: O. K.

- Q. Referring to the page 3 or 4 of today's Exhibit
  23, I'd like to direct your attention to the duplication of certain facilities at the Intervale site and the Bassett Mountain site such as spectator space, judges' towers, press facilities, inspection space, and ask you whether or not it would be true that if a 70-meter ski jump were constructed at Bassett Mountain, those items need not be duplicated?

  A. If you constructed the 70- and the 90- at Bassett Mountain, they wouldn't be needed, but if you split out the two facilities, you need them at both locations.
- Q. I understand that, but the answer to my question is yes, is that it?
  - A. Yes, the budget is based on putting, well, you have the 70- at Intervale and the 90- at Bassett Mountain and you're duplicating facilities at Bassett.
- Q. What about miscellaneous other equipment, is that -is that duplicated because it's at two separate sites

- or is this miscellaneous other equipment required regardless of whether the 70- and the 90- ski jumps are at the same site?
- A. You have two separate sites.
- In other words, that's another item that if the 70-meter ski jump were built at Bassett Mountain along with the 90-meter ski jump, it would be eliminated from the cost estimate?
  - A. Right.
- Q. What about the snow making equipment; is that an item of cost that would be eliminated if the 70-meter ski jump were built at the --
  - A. It could be.
- Q. -- same site as the 90-meter ski jump?
  - A. It could be. It might be increased cost on the amount that you have now if you're serving two hills.
- Q. But it wouldn't be double the cost; is that what you're saying?
  - A. I would doubt it.
- Q. So instead of having \$50,000 under the budget estimate for the Bassett Mountain 90-meter jump, you might have 70- or \$75,000 being required if there

were two hills, two hills, but not 100,000.

A. (Witness nods head.)

MR. GITLEN: Let the record indicate the witness nodded.

THE WITNESS: Right.

THE HEARING OFFICER: Yes.

- Q. Does there currently exist --
  - A. Would -- might I just ask if you're going to put both facilities at the same site you better change the site work number now.
- Q. And what would you do to that?
  - A. Well, this was based on having only a 90-meter jump at Bassett Mountain. If we're going to move the 70-over there, you have additional site work to do at Bassett Mountain to accommodate the 70,000 also.
- Q. There is a budget at Intervale of \$120,000 for site preparation; is that correct?
  - A. At Intervale, right. There is also an assumption in that estimate that we could acquire the land at Bassett Mountain for \$60,000.
- Q. I understand that. Does there currently exist a contract between the applicant and Stone & Webster?

- A. A formal document, no sir.
- Q. Is there a letter of intent?
  - A. Not formalized.
- Q. Is there anything that has Stone & Webster's signature on it that indicates their acceptance of -- A. Yes sir.
- Q. And is that a letter?
  - A. There is a -- they have submitted a proposal for their contract.
- Q. Do you have a copy of that proposal?A. Yes sir.
- Q. Do you have it here?
  - A. In our office.
- Q. Before I ask you to go get it, could you tell me what's in it, just briefly?

THE HEARING OFFICER: Counselor, will you establish the relevancy of that question at this stage of the proceedings?

MR. GITLEN: I'm -- I'm not quite sure but it may indicate the terms under which Stone & Webster have agreed to undertake certain tasks which are -- which Stone & Webster is responsible in this Exhibit 761119:85 such as to do certain

things within five days, to do certain things within ten days. The proposal may or may not indicate their willingness to abide by those conditions.

THE HEARING OFFICER: Counselor, in the absence of a legal contract, those estimates of time are not binding. In the absence of construction documents, those estimates are not binding.

MR. GITLEN: Well, Your Honor, I'm sure you're aware that a proposal submitted by a consultant may have certain indications in it of what a company is willing or not willing to do and under what conditions they are going into contract negotiations.

THE HEARING OFFICER: My understanding is that proposal is not submitted by Stone & Webster as a consultant but as a prospective bidder.

MR. GITLEN: And they have now been selected as a consultant?

THE HEARING OFFICER: That is not my understanding. Mr. Lopez, what is the status of Stone & Webster?

THE WITNESS: Approximately a year ago, Stone & Webster submitted a proposal to design

and construct the 70- and 90- meter ski jump. We have since been in negotiations with Stone & Webster. We are just about to furnish them with a copy of the standard form of design contract. Their role will be that of designer. The contract will require that they perform in accordance with a fixed schedule and the terms of the contract will have to be negotiated.

THE HEARING OFFICER: All right,

I'm going to ask that the proposal from Stone &

Webster be identified and designated Exhibit 761129:24

and eventually I'll deem it marked as an exhibit in

evidence.

MR. KAFIN: Mr. Hearing Officer, this is in the nature of a document submitted as part of a rather confidential negotiation for work here and it seems to me that it would be improper, number one, for it to be made public at this time and, number two, inasmuch as we are in a preliminary consultation stage, I don't see what its relevance is here.

MR. GITLEN: I have no questions --

MR. KAFIN: It's irrelevant,

incompetent and immaterial.

MR. GITLEN: I have no questions on that in any event, Mr. Hearing Officer. I'm not interested in pursuing it and I have no further questions.

THE HEARING OFFICER: All right, then I will withdraw my designation and we will ignore the document. Mr. Gitlen, no further questions?

MR. GITLEN: No, not at this time, Your Honor.

THE HEARING OFFICER: Mr. Hanna,

MR. HANNA: Not at this time.

THE HEARING OFFICER: All right, Mr.

Glennon.

any more?

# CROSS-EXAMINATION BY MR. GLENNON:

Q. Mr. Lopez, if you don't mind one more time the effect of the oral change in your testimony adding that little dotted line, it does nothing more, as I understand it, than indicate that you do not or LPOOC does not choose to go further in investing money in making schematics; is that true?

A. I didn't say that they didn't choose. I'm saying that it's a proper restraint to proceeding further with design drawings to have the decision on whether or not the site which you're going to design for is an acceptable site. Any effort after that would be jeopardized if, in fact, that site was unacceptable or if the final document had some restraints on it that we had already designed past and now had to go back and redesign.

- Q. It is a proper restraint. Then the choice need not be made at this point; is that what you're saying? LPOOC is not faced with that choice yet, is that it? A. It will have to make that decision on the 9th of January.
- Q. We do not have schematics prepared, do I understand?A. No, sir.
- Q. Is it your testimony that we do not know what materials the structure will be -- I'm speaking of the 90- and 70-meter structures will consist of, steel or concrete or some combination?
  - A. That's right.
- Q. We do not know at this point absent soil borings what foundation we'll use, do we?
  - A. No, we don't.
- Q. To borrow Mr. Hanna's phrase "roller coaster," can we at this time or can we not rule out that there will or will not be structure elements beneath the inrun trestles and the like, filling in that space between that tower and the 110 --
  - A. This is a matter of design. I think it's possible to design the two towers without a support in the middle.

- Q. But we do not know, in any event, in this case?A. No, we do not have the design at this point.
- Q. We have an artist's rendering. Forgive me for forgetting the number -- 22. Then it is your testimony that this is merely a rendering and does not in any event portray what may or may not exist at the Intervale site, is that right?
  - A. It's an artist's conceptual rendering of what the 90- and 70-meter jump at the complex could look like. I think there are some exaggerations in it. I think there are some errors in it. I think as the project is further developed, some of the items shown there will change slightly.
- Q. Could you detail some of the exaggerations, some of the errors?
  - A. One item is the bank along the river. If you look at it, that bank just doesn't exist to that elevation at this point. The size of the spectator stands is out of scale.
- Q. Anything else?
  - A. Well --

THE HEARING OFFICER: Give him the exhibit.

THE WITNESS: The space shown between the river and the outrun isn't identical to the way I think conditions would exist down there.

THE HEARING OFFICER: This sketch,

Mr. Lopez, doesn't bind anybody, does it?

THE WITNESS: No, sir.

THE HEARING OFFICER: All right.

- Q. And do I understand --
  - A. We felt that something should be presented to represent what a ski jump complex could look like.

MR. GLENNON: Could look like.

THE HEARING OFFICER: And that was prepared by Stone and Webster as part of their proposal as design engineers?

THE WITNESS: It was prepared at the request of the Organizing Committee to --

THE HEARING OFFICER: By Stone and Webster?

THE WITNESS: By Stone and Webster.

## BY MR. GLENNON:

- Q. Again as part of their proposal which we are now not necessarily --
  - A. No, sir, it wasn't part of their proposal.

- Q. I see. As I understand your Logic Diagram, we do not have a point in this hearing at least when we will know with any more precision what the configuration of these structures proposed for Intervale will be?

  A. No, sir.
- Q. Am I correct?
  - A. No, we're applying for conceptual approval.
- Q. If we do not know what materials will be involved or the nature of the foundation, how is it that you make these estimates, I assume from your testimony, on experience and judgment at this point?
  - A. The -- when you start out a project like this, you have to make a number of assumptions and draw on past experience. You're looking at a broad outline of a project and from that you start to develop the known factors that have to go into the product, into the project. You establish the relationship of these, assign what appear to be realistic durations each step of the Logic Diagram. That becomes your basic schedule. The schedule gets monitored constantly and gets revised as contract drawings become identifiable and the scope of the work becomes further identifiable. This drawing gets modified to reflect

the current status of the project.

- Q. What are some of these known factors?
  - A. Some of the knowns that we had to go for an APA application for conceptual approval; that we had to have the ski federation approval of the site; that we had to develop construction bid packages; that we had to have contract drawings prepared, we needed certain approval.
- Q. How often do you intend or do you intend at all to revise the Logic chart? I note that you've revised it five times between the 10th and the 16th of November.
  - A. That's right.
- Q. Is this a daily occurrence, a weekly, bi-weekly?
  - A. No, when you're -- for anyone who has worked in the development Logic Diagrams, you put down everything the way you think everything fits together and run it through a computer and see what you get out and what you see in the lower boxes, revisions, you know for a fact three times we ran the schedule and it didn't run. We had a loop, we had an error. You go back and correct these and we noted that every time so that someone can trace the history of this

document. The updating of it takes place when there are significant changes in the logic or when more facts become known that warrant the updating of the diagram.

- Q. And not on any regular basis?
  - A. No.
- Q. Was this document prepared far in advance of
  10 November or is it prepared on 10 November and is
  its revision one that was the original document?

  A. The document was prepared prior to 10 November
- Q. How far before 10 November?

and was revised 10 November.

- A. Pardon me?
- Q. How far before 10 November, do you know?
  - A. We started working on Logic Diagrams for this project the end of August .--
- Q. Incidentally--
  - A. The total Olympic project where this one fit in.

- Q. Incidentally, your testimony is to the effect that the Gilbane Construction Company --
  - A. Gilbane Building Company.
- Q. -- Gilbane Building Company was involved from, I believe the date you used March 1st?
  A. That's right, sir.
- Q. May I ask what happens between events one and two during those 180 days; is there anything done with respect to the ski jump proposal?
  - A. No sir. That was -- the 180 days is a dummy activity introduced to effectively bring us to 10 November when we were in the schedule. Activities did take place prior to it. There were reviews of budgets and --
- Q. But did you not just tell me this was done first in late August?
  - A. That's right, first Logic Diagram.
- Q. I see.
  - A. You start with a starting point which we've arbitrarily established here as 10 November.

THE HEARING OFFICER: By the way,
Mr. Lopez, maintaining copies of all modifications
and corrections, that's referred to with reference

to these computer modeling techniques as documentation, is that right, for the record?

THE WITNESS: That's correct, sir.

THE HEARING OFFICER: All right.

- Q. Mr. Lopez, can you generally summarize what has occurred thus far into the progress and Logic Diagram?
  - A. From Activity '002 to Activity '100, funding approval has been approved, the EIS draft statement, Activity '002 to Activity '105, has been submitted; Activity '002 to Activity '130, "CM develop general conditions," this has been completed. They're in review right now. Activity '002 to Activity '155, "Select site concept," this has been completed.
- Q. May I stop you there? Could you tell me a little more, what does that mean?
  - A. First was the affirmation of the Intervale site and second was that document you have as a rendering, an artist's rendering.
- Q. The affirmation of the Intervale site, what do you mean by that?
  - A. That we would be using the Intervale site for the ski jump.

- Q. That's the assumption referred to in your prefurnished testimony?
  - A. Yes.
- Q. I see. Now, that was the LPOOC's decision, not yours?
  - A. Right.
- Q. So when you say a decision was made, you're not saying, "I made it?"
  - A. No. If you look under "responsibility" code indicates LPOOC, which indicates the responsibility for that decision as the Organizing Committee. It also shows a one day duration which shows it was completed prior. Activity '002 to '165, "LPOOC select the designer," that was completed.
- Q. You testified that has happened but there is no formal embodiment of the arrangement, is that correct?
  - A. There is no one currently working on the project who has a signed contract with the Organizing Committee.

THE HEARING OFFICER: Well, now, wait a minute. Is the designer selected or is the designer not selected?

THE WITNESS: The designer is

selected.

THE HEARING OFFICER: Who selected

him?

THE WITNESS: The Organizing Committee.

THE HEARING OFFICER: By what means?

What's the formal indication that a designer has been selected?

THE WITNESS: He has been notified

that --

THE HEARING OFFICER: By whom and

how?

THE WITNESS: By the Organizing

Committee in writing that the Organizing Committee

will enter into a contract with him.

THE HEARING OFFICER: Are the terms --

THE WITNESS: For the design of the

facility.

THE HEARING OFFICER: Are the terms

and conditions of that contract set?

THE WITNESS: No sir, letter of

intent.

THE HEARING OFFICER: O.K. Fine.

THE WITNESS: Activity '110 to '115,

the EIS public hearings have been completed.

# BY MR. GLENNON:

- Q. O.K. If I could stop you please. Do I understand that after '165, reading, "designer prepare 90-meter concept," may that proceed now absent further documentation?
  - A. Will you refer back again to your activity numbers?
- Q. It's '165 to '170, not on the critical path.

  A. "Designer prepares 90- meter concept?"
- Q. Right. May that proceed now or is that not ready to proceed?
  - A. That may proceed.
- Q. With a letter of intent?
  - A. With the letter of intent.
- Q. To your knowledge?
  - A. And I think, I believe that rendering portrays what the latest concepts represent.
- Q. I see. That is satisfied by a rendering?A. Right there, yes sir.
- Q. How about the one beneath it not on the critical path, "prepare existing plans 70- meter?"

- A. That's scheduled to start the earliest the 12th of November and complete the earliest the 13th of December or begin the latest the 29th of November and complete the 27th of December. At this point, I'm reserving decision to advise the owner to proceed.
- Q. Sorry. What do you mean you're "reserving decision to advise him?"
  - A. Well, I think it's foolish for an owner to continue investing money into a site without having a firm indication from the APA as to whether or not they are going to approve this site. If, in fact, you're going to make a decision that the Intervale site is unacceptable, I believe it is foolish for the owner to continue wasting money on the design of a facility he'd never be able to use.
- Q. And the one beneath that which I think is on the critical path, basically preparing of technical spec's. May that proceed now?
  - A. Yes sir, and basically it's done.
- Q. It's done. Is it your testimony then that we are still well within the construct of your Logic Diagram at this point?

- A. Yes sir.
- Q. Excuse me. Mr. Lopez, as to that question I asked you, you said you're reserving decision on the second non-critical item, "prepare existing plans 70-meter?"
  - A. Yes sir.

- Q. Item '165 to '300, are you now beyond the late start date on that item?
  - A. Late start date is today.
- Q. Is today, so today or I assume tomorrow we may have a different critical path here?
  - A. You could.
- Q. I see.
  - A. Depends on APA's action.
- Q. So other than "LPOOC select site conceptual," have there been any activities proceeding which are site-specific or site-related or in any way tied to the Intervale site as of right now?
  - A. No, sir, other than the time spent in developing the Environmental Impact Statement and the investment the owner has made to date on that site and the fact that we are proceeding with site borings.
- Q. That's tomorrow?
  - A. Yes, sir.

THE HEARING OFFICER: Is it my understanding, Mr. Lopez, that if, tomorrow, a decision were made to put the ski jump somewhere else, the only loss to the Lake Placid Olympic Organizing

Committee at that time would be the cost of preparing

this petition and application?

THE WITNESS: The hearings to date, the studies that have been done to date?

THE HEARING OFFICER: Yes.

THE WITNESS: The investment, there is an investment just to reach the point --

THE HEARING OFFICER: No question about that, but I'm saying that's the limit, that's the loss limit.

THE WITNESS: As of today, yes, sir.

THE HEARING OFFICER: The total cost expended to date --

THE WITNESS: As of today I believe that's correct.

THE HEARING OFFICER: All right.

Are any portion of those costs suitable or transferrable to consideration of other sites in the list
of alternatives that have been previously considered
prior to making the filing on the Intervale site?

THE WITNESS: I don't believe so, sir. I believe we would have lost substantial time.

THE HEARING OFFICER: No, I'm asking you about dollars. Is any of the effort performed

so far by any of the contractors for the Lake Placid
Olympic Organizing Committee useable, should a -another site have to be considered?

THE WITNESS: No, sir.

THE HEARING OFFICER: O.K.

#### BY MR. GLENNON:

- Q. Mr. Lopez, you did, I assume, play a role in the preparation of the application?
  - A. We assisted Sasaki in furnishing certain of the data plus assumed the responsibility of making sure the data is assembled and submitted.
- Q. You're aware of certain activities occurring between activity -- between Sasaki and the agency staff wherein the staff for its part tendered certain assistance or direction or at least communication of its view as to what its statement should contain?

  A. Yes, sir.
- Q. Mr. Lopez, is there to be an Exhibit 13, and that is

  I believe to be a rebudget as referred to in your

  written testimony that I think is your examination

  of the previous firm's estimates?
  - A. It is contained right in the statement.
- Q. Yes, I believe the examiner went through the statement

and --

THE HEARING OFFICER: Identified it by exhibit number.

Q. (Continuing) -- identified it as Exhibit 13. Will we receive a written document fleshing out your rebudgeting work?

MR. KAFIN: Excuse me a minute.
You're talking about 761129:13; is that right,
Mr. Glennon?

THE HEARING OFFICER: No.

MR. KAFIN: Mr. Hearing Officer, what

page?

THE HEARING OFFICER: My thought was 761129:5. That's the one I thought you were referring to. Which one are you referring to?

MR. GLENNON: I'm sorry, if my notes are incorrect I apologize. I have here that today's Exhibit 13 would be a rebudgeting.

THE HEARING OFFICER: Let me look.

You're right.

MR. GLENNON: That's a printed

document.

THE HEARING OFFICER: That's Page 144

of the transcript.

MR. KAFIN: O.K. just so we're all looking at the same page.

MR. GLENNON: O.K. we're all at the same page, I assume.

### BY MR. GLENNON:

- Q. Will there be a document consisting of the fleshing out of the statement here that you did some rebudgeting submitted to the record?
  - A. Revised.
- Q. Is there such a document?
  - A. The revised figures are contained here. What do you --
- Q. I see there are backup figures.

THE HEARING OFFICER: Are there any additional figures other than this particular back-up summary?

MR. GLENNON: Of some kind? There are areas of disagreement with the previous revised figures and areas of disagreement with the previous firm.

A. The areas of disagreement were really in the areas of funding for the different facilities,

- specifically the fieldhouse and the speed skating oval. They do not affect the 70- and the 90-meter jump, the luge.
- Q. Did you take a look at the figures for the 70- and the 90-meter jump?
  - A. Yes, sir. We're satisfied that the \$2,560,000 is adequate for that facility.
- Q. And did you commit to writing your evidence of satisfying yourself of that process?
  - A. We have submitted these figures to the Department of Commerce.
- Q. Mr. Lopez, also in your testimony you mentioned you did some computations using the mid-point of a construction period, is that correct?
  - A. Right, sir, estimates.
- Q. Right. Is that a common practice for estimating costs of such projects?
  - A. For conceptual estimating, yes, sir.
- Q. Do I understand then that the escalation in labor and materials has been a basically steady rise and not a series of jumping curves?
  - A. It's -- it has leveled off lately.
- Q. Well, was last year the same per cent as the year

before and -- or was it the same amount of increase over the base?

- A. In certain areas last year prices took a drastic reduction.
- Q. In other areas did they take a drastic reduction?A. Yes, sir.
- Q. You also stated here that the designer is obligated at his own expense to redesign should certain things fall without your fixed construction budget. Is there time in the Logic Charts for that to occur?

  A. That becomes his responsibility, sir. We're monitoring his design all the way through and if we see something going wrong in the budget we're bringing it to his attention right away. If, perhaps, he proceeds down the road and we do end up with a bid that's over budget, then we through the Organizing Committee have the responsibility to demand that he go back and redesign and bring it in within the budget.
- Q. And should that contingency become necessary, I ask you again, is there a built in time factor to accommodate it in the Logic Chart?
  - A. No, sir, we don't anticipate that it would

happen. We're covered on a number of factors.

One, the budget is the one to which the designer is working, and does not include a ten per cent construction contingency. In preparing our estimates, we are escalating the costs as we see them as builders to date and the time in which the package is to be bid and prices ascertained. We are reserving ten per cent contingency which, at the option of the owner, may be applied to any cost overrun if, in fact, that's the decision.

- Q. But your answer to me is there is not a time factor for it because we don't think it will occur, is that correct?
  - A. That's right.
- Q. I see. And yet since you're specifying it, I assume you cannot rule it out?
  - A. No, sir, it's a good guarantee to the designer that he's going to listen to what somebody is telling him about costs.
- Q. How does the ten per cent contingency here relate to the, I believe it was 28 per cent in Mr. Looke's figures?

THE HEARING OFFICER: Counselor, I'm

going to have to raise a question at this time of the relevancy. Assuming that there are contingencies, assuming that there are cost mistakes, assuming that there's absolutely no time allowed, assuming that he can't meet the construction timetable, the relevancy for what we're dealing with today, I fail to see.

MR. GLENNON: Do you not intend to propose a finding that it has or has not been established that the time frame before us is that which, indeed, must be adhered to?

THE HEARING OFFICER: If this is the one that they're insisting upon, then I have to make a ruling on whether it's the one we're going to insist upon and I fail to see the relevancy of extensive discussions as to whether there's contingent costs allowed for. Let's assume he's got \$2 million on top of the \$2.6 million allowed for his overrums, buried somewhere in the budget. That has nothing to do with the construction timetable.

MR. GLENNON: I understand, and I will cease to inquire as to costs. I assume that I may have an opportunity to reserve and inquire at

a later date.

THE HEARING OFFICER: Of course.

I assume that we're going into great detail on the actual construction after we decide where, if any, where the thing is going to be constructed.

#### BY MR. GLENNON:

- Q. You did say, Mr. Lopez, in response to an inquiry by Mr. Hanna, that you thought there were other projects, I believe equal in height but not comparable to the ski jump, is that correct, or do I misremember it?
  - A. I believe his question was whether or not I had built a ski jump before.
- Q. Yes.
  - A. No, I have not built the ski jumps. I have built other structures comparable in height.
- Q. In height. Comparable in any other way, in your view?
  - A. The Federal Reserve Bank in Minneapolis had towers which I believe were 235 -- 230 feet vertical off the ground, and the building was supported across towers that expanded 300 feet apart. The towers were constructed first.

- Q. And were they also comparable as to time of construction?
  - A. No, sir, they were much more complicated than what we're talking about in a ski jump.
- Q. Have you constructed any of these structures in a climate similar to the Adirondack climate?
  - A. I consider Minneapolis, Minnesota comparable.
- Q. How many projects in Minneapolis?
  - A. One, \$33 million.
- Q. Also comparable in height?
  - A. 230 feet above the street, a bridge between the two towers, building hanging underneath.
- Q. Did you use a CPM to monitor construction there?A. Yes, sir, yes, sir.
- Q. How often did you update that one?
  - A. Monthly.
- Q. Do you recall the estimate made prior to schematics as compared to the final estimate of punch list?
  - A. That, we were on a slightly different contract on that, on that project. We were within the contingency and within the funds available to the Federal Reserve Bank to construct the building.
- Q. Does your number of man days here assume or have a

factor for a full crew or for absenteeism or -
A. When you say "man days," are you referring to
the crew days or durations?

Q. Well, I think I'm trying to ask you about both.

If you assign one man day to a certain activity,

is it possible, that really entails ten people

spending one day, or are you saying one man one day?

THE HEARING OFFICER: Counselor, I see nothing in the record so far, and I've heard nothing so far that dealt with man days. I assume the duration measured in days indicated on the implementation of CPM model is the total number of days for the task by whatever size crew is necessary provided by the contractor or by the job.

MR. GLENNON: That is precisely my question. That is precisely my question.

THE HEARING OFFICER: Well, is it then, Mr. Lopez --

THE WITNESS: It is strictly duration assigned for an activity. It does not reflect how many men are doing the job.

THE HEARING OFFICER: Right.

MR. GLENNON: Or how much equipment

is going to be available to do it? In other words, it's assuming you will have all the manpower you need?

THE WITNESS: That's right.

## BY MR. GLENNON:

- Q. Has that been your experience on previous jobs in which this method has been employed?
  - A. In scheduling?
- Q. Yes.
  - A. Yes, sir.
- Q. Do these duration figures assume also, I would guess that your subcontractors or suppliers as well as your own men will have unlimited resources?
  - A. The --

THE HEARING OFFICER: I'm going to entertain an objection to the characterization of the resources as "unlimited." If you want to ask the witness what resource assumptions are made, ask him what resource assumptions are made.

Mr. Lopez, what resource assumptions are being made with respect to estimating these durations for each job activity?

THE WITNESS: When evaluating the

durations, we're assuming that the manpower, equipment and materials necessary are available. Now, to insure this during the design period, we are monitoring the design drawings to insure that it's within the cost limitation and that the design as being put forth by the designer also complies with the time restraints that we have placed in the schedule. When the project goes out to bid, the contractor is given that portion of the Logic Diagram that pertains to his work. He is also now contractually obligated in bidding the job and receiving the contract to comply with the durations that we have provided for the tasks, so if we put down 20 days to do a function and he says, "In order to do it in 20 days I need three shifts seven days a week," that's his problem. He's signing a contract that says he will do it in 20 days.

- Q. Incidently, these bids, I understand your answer to Mr. Hanna to be that you will not pick parts of bids; there is a complete bid, a contractor takes it or leaves it, he doesn't counterpropose, is that correct?
  - A. No, sir. Bidding procedure will be that we,

during the design development stage, will identify what we call bid packages. There will be phases of the work or parts of the work that will be bid as individual contracts. The contractor bidding that phase of the work bids it exactly per plans and spec's, no exceptions, lump sum bid.

- Q. You anticipate then that it is possible for a number of people to bid exactly as you prescribe it?
  - A. Yes, sir, do it all the time with Federal Government work.
- Q. I see. Is it necessary to make some kind of investigation into the history of the reliability of the contractor?
  - A. Yes, sir.
- Q. Prior to letting the bid? How long does that take?

  A. It's going on simultaneously. Any contractor that wishes to draw plans will have to draw them from the Lake Placid Olympic Organizing Committee and we will know who draws the plans. Any contractor that draws the plans we will know who draws them.
- Q. I see. When he draws them out --

- A. I see we have then given an opportunity to the Organizing Committee to determine their prior activities.
- Q. I see. That would account for your one day then prior to letting the bid?
  - A. That's right, sir.
- Q. One day allotted prior to letting the bid. Have you selected a firm to do soil borings?
  - A. Yes, sir, we have.
- Q. May I have the name?
  - A. Geotechnical Services, Stoneham, Massachusetts. They've been on the project now for two weeks, I believe. They just completed the speed skating oval, the fieldhouse, and they're ready to move over to the ski jump.
- Q. If it were to become necessary to work during the shutdown, has it been your previous experience to work during a winter shutdown on the Minneapolis job, for example?
  - A. Yes, sir, we've completed during the winter.
- Q. How about those modifications after construction
  you speak of on Page 13 which I think is transcript
  148 of your printed testimony, do you have any clue

THE HEARING OFFICER: Mr. Glennon,

how much more do you have now?

MR. GLENNON: Five minutes.

## BY MR. GLENNON:

- Q. Are there any parts of this Logic Chart, Mr. Lopez, which could await the winter, the winter season?

  In other words, could there be tests run to check those modifications prior to doing anything, any of the items in the Logic Chart?
  - A. No, sir.
- Q. Mr. Lopez, the submission of the FAA form -- I -A. Yes sir.
- Q. -- Item '191-J Item '196, that is not I take it the letter appended to the application. That's a different bureaucratic animal?

THE HEARING OFFICER: Do we have it marked as a separate exhibit anywhere?

MR. KAFIN: No.

- A. We -- we submitted FAA form 7460-1 to the Chief, Air Traffic Division, FAA Regional Office at J.F.K. International Airport on October 12th, 1976.
- Q. Well, my question is: Is that a different item -A. No sir.

1976 and the 29th of March 1976 already past? If they have, then the question is: Has the application or a request been made for electric and water service?

THE WITNESS: No, sir, it has not.

THE HEARING OFFICER: All right.

THE WITNESS: The --

THE HEARING OFFICER: That's O.K.

Go ahead, Mr. Glennon. I'm sorry.

#### BY MR. GLENNON:

- Q. I believe it's Item Number '900, Mr. Lopez, you have some clearing proposed. Am I correct that is April 22nd, 1977?
  - A. That's right.
- Q. What does that clearing entail, could you tell me?
  A. No, sir, I can't. I don't have the design of the ski jump but we're saying there is most likely to be some clearing required.
- Q. During the 3pring. Would the same answer obtain if
  I asked you what are final survey ramps and outrun?
  That's '990-'1000. I'm sorry, you answered that
  for Mr. Gitlen and Mr. Hanna.
  - A. That's the final survey of the as-built

facility.

- Q. And when would all the structural construction as differentiated from pushing the earth around be over?
  - A. The schedule is based on completing the major structures during the first summer of construction, completing the outruns and site work and the support facilities during the second summer of construction.
- Q. Incidentally, how did you select the 100-day shut down? Did you examine meteorological data or is that a rule of thumb?
  - A. We're assuming that November, December, January,
    February and March are weather conditions unacceptable
    for pouring concrete or moving dirt around.
- Q. To your knowledge, has it ever come earlier and lasted later?
  - A. It started in October this year and it snowed in May this year so --
- Q. Other than a commitment for finances, is there any Logic Chart problem with preparation of schematics for other sites simultaneously with preparing them for --
  - A. Yes, sir.

# Q. What is that?

- A. We're starting on day one which brings us back prior to where we are right now. We have to start off first analyzing the sites again, first finding a site that's acceptable, everything down, start your surveys, FIS surveys, start your soil borings all over again, go through this process all over again.
- Q. And I believe you told me it was not your decision to decide to pursue only Intervale?
  A. We can recommend to the owner a decision, sir.
  It's his -- he is the owner and he makes the decision.
- Q. Were you to have attempted Item '915 which is "fill new outrun," and I believe that's the 17,000 cubic yards at the date proposed this year, could you have achieved that?

# A. Pardon me?

THE HEARING OFFICER: What line item are we talking about?

MR. GLENNON: '915.

THE WITNESS: '915-'935?

MR. GLENNON: That's right. I believe

that's the introduction of fill which I believe you said was about 17,000 cubic yards.

THE WITNESS: That's right.

MR. GLENNON: Had you attempted

that this year, could you have done it?

THE HEARING OFFICER: Could you have done what, counselor?

MR. BROOKS: I don't see how that's relevant or even answerable.

MR. KAFIN: Also I think the assumption is 17,000 cubic yards, which is not correct. That related to some other site that's been proposed, not in relation to this site.

THE HEARING OFFICER: Is there an objection?

MR. BROOKS: I'll object.

THE HEARING OFFICER: I'm going to sustain the objection.

MR. BROOKS: You've been doing pretty good for me without me having to object.

THE HEARING OFFICER: Just trying to maintain an orderly record.

MS. NICHOLS: It's this site, Bob,

it's this site (indicating).

## BY MR. GLENNON:

- Q. Mr. Lopez, is there any provision or present plan for any objective construction inspector other than Gilbane Company to assure compliance with the schedules?
  - A. I would hope that our services to the owner make us objective.

THE HEARING OFFICER: Counselor,
may I understand that question? Are you talking
about inspections for the purposes of determining
compliance with the schedule or inspections for
the purpose of determining compliance with whatever
permit is granted if any by the agency?

MR. GLENNON: Schedule and specifications.

A. That's our requirement.

MR. BROOKS: Well, as I understand it, the Town Building Inspector, you have APA that's going to be involved in this. I don't understand his question really.

THE HEARING OFFICER: I understand the question. I just want to make sure that the

witness does. Mr. Lopez, your company manages this contract?

THE WITNESS: That's right.

THE HEARING OFFICER: You are

responsible for delivering a finished project on time and within budget?

THE WITNESS: That's right.

THE HEARING OFFICER: If you don't,

what happens?

THE WITNESS: We have a substantial fee at stake, project fee.

THE HEARING OFFICER: All right, every agent involved in the actual project then reports to and is responsible to you and you are responsible for their supervision?

THE WITNESS: No, sir, contracts are with the owner. We administer them for the owner.

THE HEARING OFFICER: Who is

responsible financially?

THE WITNESS: The owner.

THE HEARING OFFICER: For -- no,

listen to my question. Who is responsible financially for delivering a completed project on time within

the budget?

THE WITNESS: The -- our contract does not entail a financial guarantee other than we have a portion of our fee at risk.

THE HEARING OFFICER: That's a reasonably good financial guarantee in the business world.

THE WITNESS: O.K.

THE HEARING OFFICER: What portion?

THE WITNESS: Twenty percent.

THE HEARING OFFICER: That's a

reasonably good guarantee, I will take administrative judicial notice of that fact. All right, you are then responsible. The contractors are responsible to you then for delivering their portions of the job on time.

MR. KAFIN: This may involve some legal determinations that this witness is not qualified to make.

THE HEARING OFFICER: Fine. Raise that objection and I'll sustain it.

MR. KAFIN: Objection.

THE HEARING OFFICER: All right, Mr.

Glennon, go ahead.

#### BY MR. GLENNON:

- Q. Mr. Lopez, if I understand the Logic Chart, node '1010 is the end of construction 81578, is that correct, '1010 to '1015?
  - A. Complete construction.
- Q. Is that the completion of construction?
  - A. I'll say the completion of construction is '1020.
- Q. O.K.
  - A. Completion of the punch list.
- Q. Well, I believe you testified that was the 20 days for -- that's some kind of float, is it not, when you start punching, around '1015?
  - A. Not float, sir. I've never seen a building without a punch list.

THE HEARING OFFICER: Let the record note --

MR. BROOKS: Please note that the Referee fell out of his chair.

THE HEARING OFFICER: -- that
the Hearing Examiner has fallen out of his chair,
providing the appropriate comedy relief for an
otherwise dull afternoon.

MR. BROOKS: That wasn't a cable on the floor, was it?

THE HEARING OFFICER: Now the question is do I have a third-party action. Go ahead.

BY MR. GLENNON:

- Q. I think I asked you if the construction ended, '1018 node, '1015? You gave an answer --
  - A. No, it ends at node '1020, the completion of the punch list, and it's rare that any facility is completed without a punch list. Final construction is determined on the acceptance by the owner and the presentation of a punch list.
- Q. Your previous shut-down, I believe, was the previous September at '981?
  - A. '981-'982.
- Q. So may I assume at least climatologically, we've got room between '1020 and November 9, '78 for further construction should that be necessary?
  - A. Between '1020 and --
- Q. And the comparable date in '78, November 9th.
  - A. November, fine.
- Q. Were it necessary, do you feel you could condense a construction schedule by adding help to any of these

#### activities?

- A. There -- some of that is based on design. When you're talking a tall, thin tower, there are only so many men you can put up in the air at any one time on a platform. To double a crew doesn't improve efficiency or the pace of the work.
- Q. And the same answer would obtain for overtime, would it?
  - A. Overtime work depending on how it's used or how prolonged it's been, experience has been and mine has been that occasional overtime, productivity remains. You go to continuous overtime, the 10-11-hour-day, pretty soon your men start taking an extra day off a week. They're tired when they come in and your productivity drops.

MR. GLENNON: I have no further questions; thank you.

THE HEARING OFFICER: Thank you.

We're going to take a five-minute recess and if the applicant has no objections, the Hearing Examiner has a series of questions.

(Whereupon, a short recess was taken.

THE HEARING OFFICER: All right,

everybody, let's go back to work. Mr. Lopez?

MR. BROOKS: We want to substitute if we can, that for 22 (indicating).

THE HEARING OFFICE: Oh, thank you, sure, good, good. We'll deem this marked 22 and you can take your original.

(Mr. Brooks offered a reduced size copy of Exhibit 761119:22 to the Hearing Officer.)

THE HEARING OFFICER: Can you get me some more prints like this, like 3?

MR. BROOKS: I don't know if we can.

THE HEARING OFFICER: Please ask

Stone & Webster, not today, but eventually I'd like
to keep one with the master set of exhibits and
documents.

All right, we're reconvening the hearing at 3:58. Counsel for the applicants, do you have any objection if the Hearing Examiner asks Mr. Lopez some questions?

MR. KAFIN: None.

MR. BROOKS: As long as they're

fair and reasonable questions, we have no objection.

THE HEARING OFFICER: Feel free to object if the need arises.

MR. BROOKS: Thank you.

THE HEARING OFFICER: I will rule on all objections.

MR. BROOKS: That sounds fair.

THE HEARING OFFICER: With an equal

level of fairness and impartiality.

MR. BROOKS: O.K.

THE HEARING OFFICER: Mr. Lopez, do you have any objections to me asking you some questions?

THE WITNESS: No sir.

THE HEARING OFFICER: All right.

These are basic for the information of the record and in an attempt to try and establish some material that has been ignored so far primarily because all the counsel are experienced and it's not -- it wasn't necessary in the conduct of their cross-examination but for the benefit of any reviewing courts that may be involved and might not be so skilled, I think it is necessary to discuss the Critical Path Method at some length.

The Critical Path Method is a technique of project management, is it not?

THE WITNESS: That's right.

THE HEARING OFFICER: And its basic utility is in supporting the managerial functions of planning, scheduling and control, is that right?

THE WITNESS: That's right.

THE HEARING OFFICER: All right.

The prerequisite for the use of the Critical Path

Method involves separating the project to be

scheduled into independent jobs or activities and

determining the order or precedents for these jobs,

is that correct?

THE WITNESS: That's right.

THE HEARING OFFICER: All right, and have you done that as part of your regular employment for the Gilbane Building Company?

THE WITNESS: It's been one of my functions, yes sir.

THE HEARING OFFICER: All right, and is that breakdown and separation reflected in Exhibit 761119:85?

THE WITNESS: Yes sir.

THE HEARING OFFICER: Is it also

reflected in a graphic form in Exhibit 86?

THE WITNESS: Graphic form, yes sir.

Graphic form leads to the other exhibit which is a print-out.

THE HEARING OFFICER: All right.

The conceptual schematics represented by the graphic portrayal which is Exhibit 86, in fact, indicates the activities that are involved in the proposed project, is that correct?

THE WITNESS: That's right, sir.

THE HEARING OFFICER: And the individual nodes containing numbers, circles with numbers within them, are referred to as nodes, are they not?

THE WITNESS: That's right, sir.

THE HEARING OFFICER: And the actual jobs are indicated between nodes alongside of the arrow connecting the appropriate nodes, is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: The nodes

refer to the initiation and termination of a particular

THE HEARING OFFICER: And they're indicated generally on that particular Exhibit 761119:86 by dotted lines, correct?

THE WITNESS: Well, dashed lines, right.

THE HEARING OFFICER: Dashed lines.

That's a convenience, is it not, the actual initiation and termination of the job activities is common, isn't it, wherever you have the dummy activities?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

THE WITNESS: It's done primarily for computer sorting so that you don't have two separate activities having identical numbers.

job activity, do they not?

THE WITNESS: Correct.

THE HEARING OFFICER: And they're referred to as the initial node which, in your computer print-out is designated "I" and a terminal node which is designated "J" is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, the question of dummy activities and dummy jobs was brought up -- and correct if I'm wrong -- where two or more jobs have the same immediate predecessors and the same immediate successors, their initial and terminal nodes will be the same, won't they?

THE WITNESS: That's correct.

THE HEARING OFFICER: And they require some kind of alternative job identification, don't they?

THE WITNESS: That's right.

THE HEARING OFFICER: And to overcome the graphing difficulty, these alternate job identifications are referred to as dummy jobs or dummy activities?

THE WITNESS: That's right.

THE HEARING OFFICER: All right.

Now, in order to utilize this system, the Critical

Path Method in the scheduling of activities and

Path Method in the scheduling of activities and events such as this conception project, the project manager -- in this case you or your firm, have to determine the critical path, is that correct?

THE WITNESS: Correct.

THE HEARING OFFICER: And the critical path is, in fact, the longest path in terms of time or sequence of connected activities throughout that entire network graphically portrayed in Exhibit 761119:86, isn't it?

THE WITNESS: That's correct.

THE HEARING OFFICER: The length of that critical path determines the overall duration of the project, does it not?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, the path or the individual paths within the network designated and depicted graphically on Exhibit 761119:86 is, in fact, a set of nodes connected by arrows which begin with some initial node of a network and end with a terminal node, don't they?

THE WITNESS: That's right.

THE HEARING OFFICER: And the length of a path in the network, any path in that network indicated on Exhibit 761119:86 is the length of time or the total time it takes to travel that path in terms of the activity represented; is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, the critical path in this particular project has been identified on Exhibit 761119:85 in the final column on the right located -- indicated as total float by the four letter expression "crit," is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, identifying those individual activities as I did in Exhibit 761119:86 with a pink highlighter, that gives us what amounts to the critical path of this project, does it not?

THE WITNESS: It does.

THE HEARING OFFICER: Now, what is the -- withdrawn. Each of the activities on the critical path or which make up the critical path are

critical in the sense that any change in the duration of completion of those activities changes the overall length of time of the critical path, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, are there two or -- withdrawn. Two or more independent critical paths, that is critical paths with no jobs in common, indicate, do they not, that two or more independent activities both contribute to the overall duration or length of the project?

THE WITNESS: That's correct.

THE HEARING OFFICER: Now, are there any multiple critical paths in this network indicated on Exhibit 761119:86?

THE WITNESS: There -- there's more than one indicated where you have parallel activities going on that also fall within the critical time duration.

THE HEARING OFFICER: In other words, any change in the duration of one of those activities in the sense of extending it extends the time between the initial and terminal node of the parallel path?

THE WITNESS: It doesn't extend the duration of it. It extends the completion of it.

THE HEARING OFFICER: Completion,
all right. Now, you've indicated in Exhibit 761119:85,
or your computer has, a series of four dates, early
start, early finish and late start and late finish.

THE WITNESS: That's correct.

THE HEARING OFFICER: Now, the early start of any job in this project is the earliest possible time, in your opinion, that the job can begin; is that correct?

THE WITNESS: Based on the Logic Diagram, that's correct.

THE HEARING OFFICER: And the early finish of the job is the early start time plus the time needed to complete the job, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: Now, in order to make a forward pass through the network designated or depicted graphically in Exhibit 761119:86, you start at the beginning of the project network and you calculate the early start and then the early finish times for each of the beginning jobs, those

that have no predecessors, and then do the same for their successors and their successors' successors and so on until all the jobs in the project have been considered, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: And, of course no job can be considered until all of its immediate predecessors have been considered, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: The actual forward pass beginning at the initiation date gives an early finish date for the entire project, does it not?

THE WITNESS: That's correct.

THE HEARING OFFICER: And that early finish date for the entire project is September 13, 1978, is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right.

Now, the activities which are not on the critical path can be delayed without necessarily delaying the completion date of the project, is that correct?

THE WITNESS: They can be delayed

provided they do not exceed the late finish or place them in a time duration that puts them beyond the critical path.

THE HEARING OFFICER: All right, and we now define the common phrase "late start" as the latest time that an activity can begin without pushing the finish date of the project further into the future, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: And the late finish then of any activity is its late start time plus its duration, is that right?

THE WITNESS: That's correct.

THE HEARING OFFICER: Now, to calculate the late start and the late finish times, you begin at the back of the network and work backwards or make what is usually referred to as a backward pass, is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: All right, and that was done in this run assuming a late finish

THE WITNESS: Yes.

date of September 13, 1978 also, isn't that correct?

In other words, is that date critical in terms of the practical scheduling of the Olympics, if you know?

THE WITNESS: O.K. At that point you're using judgment as to whether September 13, '78 is as late as you would want the project to go realizing that it has to be used for test or trial runs during the winter of 1978-79.

THE HEARING OFFICER: When is the earliest date in 1978 that the system will be required -- that the project will have to be completed for test or trial run?

THE WITNESE: We would say before it snowed or before extreme cold weather in '78.

THE HEARING OFFICER: Is there a --

'78, the fecility is supposed to be used for an international class competition.

THE HEARING OFFICER: On what date?

THE WITNESS: I don't know the date.

Someone else would have to --

THE HEARING OFFICER: A representative of the applicant --

MR. BROOKS: Must be used?

THE HEARING OFFICER: -- that can

furnish that information now?

MR. BROOKS: Yeah, Mr. Lamb.

THE HEARING OFFICER: What's the

date?

MR. LAMB: It will be 1979, sir.

instead of 1978 but it will probably be in January, late January or early February. We would have to have the hill ready either late December or early January to get prepared.

THE HEARING OFFICER: All right, I'm going to suspend with Mr. Lopez for a moment and I'm going to ask you if you'll come up here and testify for a moment. Don't run away, Mr. Lopez.

(Whereupon the witness Mr. Lopez was excused.)

THE HEARING OFFICER: Do you have any objection to testifying under oath?

MR. LAMB: No sir.

THE HEARING OFFICER: Will you raise your right hand and be sworn.

J. VERNON LAMB, JR., called as a witness by the Hearing Officer, having been first duly sworn, was examined

and testified as follows:

THE HEARING OFFICER: Will you give

your full name and address to the Reporter please.

THE WITNESS: J. Vernon Lamb, Jr.,

1 Village Park, Lake Placid, New York.

MR. PROOKS: Excuse me. Can we have some understanding? Are we going to just limit this line of questioning now so that we can finish with Mr. Lopez today?

THE HEARING OFFICER: Yes, absolutely, we're going to finish with Mr. Lopez today.

MR. BROOKS: O.K.

THE HEARING OFFICER: Mr. Lamb, when is the 90- meter and/or 70- meter ski jump proposed to be constructed in accordance with the permit application which is before us today, to be used for the first time in international competition, if you know?

THE WITNESS: To be used in the early mid-winter of 1979 depending upon the FIS calendar in that year.

THE HEARING OFFICER: Can you give us the approximate date?

THE WITNESS: I would guess at this time late January or early February.

THE HEARING OFFICER: All right. Can we take as a reasonable estimate approximately

February 1st, 1979?

THE WITNESS: Yes sir.

THE HEARING OFFICER: And is this use or this proposed use at that time in any way mandated by the international agency involved with the certification of Lake Placid for the 1980 Olympics?

THE WITNESS: It's a regulation in the FIS rules.

THE HEARING OFFICER: FIS, excuse me, is all caps, FIS standing for the --

THE WITNESS: Federation of International Skiing. It's -- and the regulations are in the appendix to the application.

THE HEARING OFFICER: All right. I have no further questions. Thank you very much, Mr. Lamb.

THE WITNESS: I would like to add that before that competition, that we're going to have to have jumpers come off that hill and the hill will have to be used starting as soon as possible during that winter season.

THE HEARING OFFICER: That's the

winter of 1978?

pass?

THE WITNESS: '78-'79.

THE HEARING OFFICER: All right.

Mr. Lamb, in the course of your regular activities, have you ever been involved in ski jump competition?

THE WITNESS: As an official, as an

official only. I tried it one day, didn't make out.

THE HEARING OFFICER: All right.

As an official, how long have you been involved in ski jumping?

THE WITNESS: 1966 was when I first took my judge's test.

THE HEARING OFFICER: And did you

THE WITNESS: Yes.

THE HEARING OFFICER: And have you

been a ski jump official since that time?

THE WITNESS: I have.

THE HEARING OFFICER: And have you

been -- have you officiated at international competition?

THE WITNESS: I have.

THE HEARING OFFICER: Are you

involved in the Lake Placid Olympic Organizing Committee?

THE WITNESS: Yes, I am.

THE HEARING OFFICER: What is your official title with the Lake Placid Olympic Organizing Committee?

THE WITNESS: I'm chairman of the Environmental Council and also chairman of the Nordic skiing event.

THE HEARING OFFICER: Have you been involved in the design considerations for the 90- and 70- meter ski jumps which are the subject of this permit application?

THE WITNESS: I have.

THE HEARING OFFICER: And have you been aware of the amount of time necessary to, if you'll use my phrase, "break in" the jump prior to the proposed 1979 use?

THE WITNESS: Yes.

THE HEARING OFFICER: And in your opinion, approximately how much time is going to be required to break in the jump and prepare it for

international competition on or about February 1st,

1979?

THE WITNESS: I would like at least one full month or longer.

THE HEARING OFFICER: All right.

In other words then, as far as you're concerned,

the jump has to be ready for actual jumpers by

Christmas 1978?

THE WITNESS: Yes.

THE HEARING OFFICER: All right.

I have no further questions of Mr. Lamb. Thank
you very much.

(Whereupon the witness was excused.)

THE HEARING OFFICER: All right,

Mr. Lopez please.

MR. BROOKS: Does anybody else have any questions of Mr. Lamb?

THE HEARING OFFICER: You can recall Mr. Lamb later.

MR. BROOKS: I was wondering about the others.

## RAMON LOPEZ,

recalled as a witness for and in behalf of the applicant, was examined further and testified as follows:

THE HEARING OFFICER: Now,

Mr. Lopez, assuming that the late finish date
becomes December 15, 1978, and now referring to

Exhibit 761119:76 and where necessary Exhibit

761119:75 --

MR. BROOKS: You mean :86.

THE HEARING OFFICER: :86, I'm

sorry.

MR. BROOKS: And:85.

THE HEARING OFFICER: And :85.

Utilizing and referring only to the critical path outlined thereon, if we extend the completion

Item '1020, late finish date, to December 15, 1979, are there any items from Item Number '982 to

Item '915, through Item '935, through Item '965, through Item '990, through Item '1000, through

Item '1005, through Item '1015 to Item '1020 that cannot be similarly extended by the difference in days between September 13, 1978 and December 15,

1978?

THE WITNESS: Yes, sir.

THE HEARING OFFICER: All right.

Will you identify which ones?

THE WITNESS: '915 to '935, '935 to

'965, '965 to '990.

MR. HANNA: Can we go a little

slower?

THE WITNESS: '990 to '1000, '1000

to '1005, '1005 to '1020.

THE HEARING OFFICER: Now, is it

your testimony that they can be extended by that

amount or they cannot be?

THE WITNESS: No, sir, no, sir.

THE HEARING OFFICER: They cannot be.

THE WITNESS: No, sir.

THE HEARING OFFICER: Tell us why

not.

THE WITNESS: Getting into winter

activities.

THE HEARING OFFICER: And --

THE WITNESS: The final activities

on the schedule, getting into cleaning up the slopes,

dressing, seeding, these should all be completed before winter starts coming down or you're going to have an unstable slope during the winter.

THE HEARING OFFICER: Which item number in that run commencing at '982 and proceeding as I indicated through Item '1020 could be completed in the summer of 1978 -- pardon me, '79, without substantially affecting the usefulness or utility of the system for an event in 1979 on or about February 1st?

THE WITNESS: You would have soil stabilization problems if you didn't properly protect your banks. You would have to go back the following summer and completely redress them.

THE HEARING OFFICER: Assuming that was necessary, you could still complete this work in that summer following an active ski season?

THE WITNESS: Well --

MR. BROOKS: Excuse me. Are you -just a minute, Ray. You're depending on assumptions
that you have the maintenance people and the construction people and the equipment and other projects not
also facing the same problem of having to be extended;

is that an assumption, sir?

THE HEARING OFFICER: That's an assumption.

THE WITNESS: You would also, though, have to have the final survey and the approval of FIS of the survey in order to use the facility.

THE HEARING OFFICER: All right.

Then the FIS approval survey must be completed prior to December 15, 1978, is that correct, assuming that Mr. Lamb's testimony that the December 25th --
I'm sorry, the December 25, 1978 date is the earliest -- the latest date he can prepare for a February 1st event?

THE WITNESS: The date, the latest date he can prepare for an event is what date you're using now, sir?

THE HEARING OFFICER: The latest date he said he could prepare for an event is Christmas, December 25, 1978.

THE WITNESS: O.K. Prior to -prior to its use as an event we should have corrected
any construction deficiencies which cover -- fall
into the punch list category. We should have the

survey and the FIS approvals completed and we should have a shakedown period to make sure that all of the systems as finally assembled are working prior to its use in a competition.

THE HEARING OFFICER: All right. In other words then, the extra 141 days from September 13, 1978 to February 1, 1979 would be of no use to the project manager, the construction manager, in shortening the period involved from Item Number '982 through Item '1020?

THE WITNESS: In lengthening it, you mean?

THE HEARING OFFICER: Pardon me, in lengthening the time.

THE WITNESS: It would have no value to us because we'd still have to be finished before the snow flies.

THE HEARING OFFICER: All right. I other words, all of the projects through Item

Number '981 must be completed according to your testimony prior to when?

THE WITNESS: Well, assuming the start of bad weather in October of that year, and

we're running -- that could be tricky, 1978 is like this year, we could have snow in October. I would say we have to look at the latest, the end of September so that's giving us a total cushion or additional float over and above what's shown in the schedule of from the 13th of September to, say, the 30th of September if we had any problems prior to final completion.

THE HEARING OFFICER: All right.

The 103 days from the 13th of September to the 25th of December then is of no value to the work that has to be completed, in your opinion, prior to Item

Number '981?

THE WITNESS: No, sir, prior to '981 has to be done the summer before.

THE HEARING OFFICER: All right.

Now, the late finish date for Item '981, as I understand it, is 9 November 1977, is that correct?

THE WITNESS: That's right, sir.

THE HEARING OFFICER: There is no

way of extending that date, in your opinion?

THE WITNESS: If you extend it,

you're into a majortemporary heating problem.

All right.

Then the extension of the date that this facility must be utilized from September 13, 1978 to February 1, 1979 does not, in any way, permit you to extend the construction timetable that you have

terminating on late finish 9 November 1977, is that

correct?

THE HEARING OFFICER:

THE WITNESS: For the first phase, right, sir.

THE HEARING OFFICER: All right. Is it your testimony now, referring to the analysis of the graphic diagram depicted on Exhibit 761119:86, that assuming a late finish date of 9 November 1977, a backward pass through the system does not in any way modify the January 10, 1977 date that you indicated was critical at Item Number '190?

THE WITNESS: That's correct. The critical date of January 10th at Item '190 is also taking into account the float time that otherwise we would appreciate not being seen.

THE HEARING OFFICER: All right.

Now, float time in your analysis and use of the

Critical Path Method which I assume is based upon a

proprietary computer analysis that your firm has developed, is that right? --

THE WITNESS: That's right.

THE HEARING OFFICER: -- is what's

usually referred to in CMP textbooks as "slack?"

THE WITNESS: Right.

THE HEARING OFFICER: And total slack in any job or activity is the difference between its late start and its early start times, is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: Or between equivalently its late finish and early finish time, is that correct?

THE WITNESS: That's correct.

THE HEARING OFFICER: If a job is on the critical or longest path, delaying the start delays the project finish date, does it not?

THE WITNESS: That's correct, zero

float.

THE HEARING OFFICER: Zero float, and the late and early start times must be identical.

Is that the case in this chart and the associated

computer printouts?

THE WITNESS: On all critical items, yes, sir.

THE HEARING OFFICER: All right. If you delayed the start of a non-critical job in which there is some slack or float, indicating the float periods that are included in your computer printout, will you delay the start of any of the jobs that depend upon it?

THE WITNESS: Delaying the start of one automatically delays the start of the others and places them on the critical path if, in fact, you utilize all of the float time available for that activity.

THE HEARING OFFICER: All right. I have no further questions of Mr. Gomez. Anyone else?

MR. HANNA: Yeah. What is final dressing, '995-'1010?

THE WITNESS: That's the final cleanup, final seeding, patchwork.

MR. HANNA: No further questions.

MR. GITLEN: I have a few questions.

THE HEARING OFFICER: Mr. Gitlen.

MR. GITLEN: About that same subject.

## BY MR. GITLEN:

- Q. Exactly what -- what do you mean by "final dressing," distirbed areas, and where?
  - A. If you've been around a construction site, it's not unusual for a bulldozer to take a path off to the side and suddenly you have what's a seeded area and you thought was a seeded area now disturbed and you have to go back and patch it.
- Q. In other words, it's -- what you're talking about are not areas that were actually disturbed by the actual construction but areas that might be disturbed by vehicles moving in and out of the site?

  A. Some of it can also be the final construction.

- Q. Such as --
  - A. Such as preceding that you had erection of the miscellaneous structures and erection of the new bleachers. There's going to be some final dressing and final site work and seedings around those.
- Q. Miscellaneous structures and bleachers, is that it?

  A. Well, it includes that and any other area that's been disturbed.

MR. GITLEN: No further questions at this time.

MR. HANNA: I have.

THE HEARING OFFICER: Mr. Hanna?

## BY MR. HANNA:

- Q. Are you taking into account someplace in this Exhibit 761119:86 the necessity for obtaining a State Pollution Discharge Elimination System Permit from the Department of Environmental Conservation?

  A. If, in fact, we fall into that category, yes sir.
- Q. Where?
  - A. It will take place during the design process.

    I tried to re...to explain the Logic Diagram as not
    a detailed step by step item by item portrayal of

the project right now, but it's a conceptual -it's based on conceptual data, represents the best
thinking we have at the time. We have been in touch
with the Department of Environmental Conservation
about the requirements. We're fully aware of them.
We would need that permit prior to 1978.

- Q. You would -- you would not -- you would begin the project, begin the schematics even without that permit?
  - A. If we are not violating any existing ordinance, there is no reason why we could not start it.

THE HEARING OFFICER: Mr. Gitlen?

## BY MR. GITLEN:

Q. Mr. Lopez, are you familiar with any temporary measures which are used in place of final dressing on construction projects?

THE HEARING OFFICER: Counselor, I'm going to entertain an objection to that question.

MR. BROOKS: We object.

THE HEARING OFFICER: On grounds of its relevance and materiality at this time.

MR. GITLEN: I think it's --

THE HEARING OFFICER: Final dressing

is not an element of the critical path in this construction project.

MR. GITLEN: It is not?

THE HEARING OFFICER: Read the chart and look at the -- my understanding is final dressing on 00995, initiation node 01010, termination node "final dressing disturbed areas" is not designated critical. It has a total float effect of ten days.

MR. GITLEN: But must be completed by August 25th.

THE HEARING OFFICER: It's not critical. The witness has already testified that it could be done the year after. It would be messy and it would be expensive but it could be done the year after, would not interfere with what Mr. Lamb indicated was the necessity to operate that jump starting Christmas 1978 for an international event proposed to be held on or about February 1st, 1979.

Mr. Hanna?

## BY MR. HANNA:

- Q. Would it possibly -- would it be possible to mulch as opposed to seed on '935 and '965 on the outrun?
  - A. We -- if the International Ski Federation would

accept concrete, we'd put it down. Blacktop, we'll put blacktop down. You're --

- Q. The answer, I take it, is yes.
  - A. We're -- we're working on an assumption that something has to be done with that outrun and we're assuming at this point that it's going to be seeded. We're assuming that the quality varies or the area to be seeded is going to take twenty days to accomplish.
- Q. And the answer to my question?

THE HEARING OFFICER: Is yes.

MR. HANNA: No further questions.

THE HEARING OFFICER: Mr. Gitlen?

(Mr. Gitlen shakes head.)

THE HEARING OFFICER: All right.

MR. BROOKS: How about --

THE HEARING OFFICER: Mr. Glennon?

MR. GLENNON: No questions.

THE HEARING OFFICER: All right. If
the applicants have no redirect at this time, I
propose to make a finding of fact --

MR. BROOKS: We have none.

THE HEARING OFFICER: -- that the date

10 January 1977 for a decision on this permit application by the Adirondack Park Agency is, in fact, a significant element of the critical path for the project completion.

I propose to find as a further finding of fact that in the event the project application
is not approved or ruled at the time or disapproved
by 10 January 1977, the applicant will be forced to
make determinations which may, in fact, lengthen
the critical path for the completion of the entire
project.

I propose to find as a further finding of fact that the extension of the late finish date for the entire project from 13 September 1978 an additional 103 days to December 25th, 1978 or an additional approximately 141 days to 1 February 1979 does not, in fact, modify the critical path or the construction activities prior to Item '981 would terminate the erection of the 90- meter ramp and represents the last item of completion of major construction with a final or late finish time of November 9, 1977.

With those findings, I am now going

to promulgate a hearing schedule and I'm going to promulgate some rules as to the substance of the conduct of the hearing as it continues in light of the testimony that has come out this morning and the examination of the party -- of the witness by the parties.

Mr. Lopez, you're excused, and I thank you very much for spending the day with us.

(Whereupon the witness was excused.)