William R. Dickson Oral History Project
Interviewer: Victoria Sirianni
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Buildings

INT: This is June 29th, Wednesday, and this is an oral history session with Bill Dickson and Vicky Sirianni.

WD: Well, today we're going to talk about -- I've been thinking about some different kinds of things that happened in some of the buildings that we constructed during my tenure. And as I said before [in] these tapes, I'm not going to go through and describe every building because in my mind a building is a building and if nothing unusual happens or if there isn't anything unusual about it, that you can go look at it rather than talk about it. But there were some strange or different kinds of things that happened, some of them amusing and some of them not so amusing. And that's what I'm going to dwell on today. I think I'll start with the chemical engineering building which I believe is called the Landau Building which is Building 66. It was designed by I.M. Pei and it was built by the Vappi Construction Company. Pei had previously designed the Green Building and the chemistry building and of course, as far as this particular building, it was meant to blend in with its surroundings and particularly those two buildings. So that it used Saylor cement as did the other two. And we decided the earlier the design, very early that we would have Pei --that's not correct -- that we would have picked a contractor to build it and to work with Pei during the design so that when we got to a point where the design was basically complete, we wouldn't be surprised by what the building was going to cost. And for whatever reasons, and I don't remember them all now, we probably considered people like Macomber, Turner, and Vappi and we selected Vappi in this case.

INT: Had Vappi done the other two Pei buildings?

WD: He had done neither. Turner did the Green Building and the chemistry building. But Vappi had done some work for us. He'd built Eastgate, did a reasonably good job on it. And Vincent, of course, was a loyal alumnus of MIT and as was George Macomber. But whatever the series of events, we decided to use Vappi. Vappi's staff at the time was made up almost entirely of MIT graduates. Jack Foley was the

principal estimator and Bob MacDonald was the sort of chief construction person. And Dick Finn was project manager and on and on. So he had a very MIT-oriented staff. We told Pei and Vappi what we wanted. We wanted close cooperation between the two of them so that we had no surprises when it came time to build, as we sometimes did when we lumped some bid jobs. So that this was to basically be a maximum guaranteed cost kind of a job. Well, to make a long story short, I sat down with Jack Foley, who was not only an MIT graduate but a personal friend of mine. He was somewhat older than I was. And I said, Jack, you can look within 100 feet or 100 yards of each of where this building is going to be built and you could see two examples of what it is that we want, and don't get fooled because they look pretty simple, frankly, but they're very, very difficult to build because of the detail. And Jack sort of pooh-poohed the whole thing and you know, said, I know more about concrete than any person in the city of Boston. You don't have to tell me what to do. So we went along and I could tell there wasn't animosity between the two of them, between Vappi and Pei. But there wasn't a lot of cooperation. Pei would draw what he wanted to draw and basically Vappi would then price what he drew. There was no discussion in the meantime about how things might be driven.

INT: Now was I.M. drawing himself? He must have had an associate.

WD: No, no, he had associates. I.M was really the designer, but in absentia. He would look at something when he got back in town from his many trips.

INT: But I.M would show up for the meeting?

WD: I. M. would show up for the meetings. Not with -- he would show up for the building committee meetings, not meetings with Vappi. So that after we got a fair distance along, suddenly the price went up by a whole heck of a lot. And I said to myself, and probably to Foley, you know, what is the reason for this? And Foley told me, well, he didn't realize that they would draw such difficulty deals, etc. but now they had it under control. Well, this happened again, and it went up by a fair amount.

INT: What stage were you at at that point, Bill?

WD: Oh, probably in mid-way through working drawings.

INT: Oh, okay.

WD: And we agreed, reluctantly, and finally the drawings were basically complete and Vappi gave the maximum guaranteed price to us and if my memory is right, it went up another $800,000. So it was now a question of whether we would build that design. After much discussion, and some chagrin on the part of Jack Foley, we decided to go ahead. And we did, and Vappi built the very fine building and when it was ended – over -- Vincent [Vappi] came in and finally got around to saying to me, you know, I've lost about $1,000,000 on this job. And we went over some of the history and I didn't take out the checkbook and offer to pay him $1,000,000 more. So that after several discussions and listening and talking with some of my associates, we agreed to offer him $300,000 in final settlement. And --

INT: Did you still have money withheld at this point?

WD: We may have. I'm not sure. But we -- this would have been $300,000 more after any amount we had recently. Otherwise, we upped the ante. And I had a lunch with Vincent and he said, I've lost too much money. I can't accept that. So I said, well, the offer is withdrawn. And we talked about, or he talked about, a lawsuit -- again, not unfriendly but just business-wise. Because he claimed that his lawyer, a guy named Flynn, I believe, said that we had screwed around with the supplemental general condition so much that it left a loophole for payment of additional sums of money. And frankly, I'm not sure that he wasn't close to right. Because at that time -- I don't know about now -- we used to write supplemental and special general conditions that offered far overshadowed the original general conditions of the job. They changed about everything. And we had one of the greatest changers in the world with a guy named Ed [Pieper]. And again, I don't want to drag this out but we never did have a lawsuit because we finally agreed, Vincent and I did, between the two of us, that we would take a retired Justice of the Supreme Court of Massachusetts and submit to him written arguments and I believe maybe 20 minutes apiece in verbal arguments and that we would go by the decision, whether I owed him a million bucks or whether he was to get nothing, or somewhere in between. And so we selected [A. M. I. Cutter] who was once a Justice of the Supreme Court, and he in a reasonably short time read the written briefs and heard any oral testimony, very [?] and ruled in favor of the Institute. So that Vincent got zero. And went on to continue to be a good

friend of MIT, Corporation member, and committee member, etc, etc. Now when he said he lost $1,000,000, I never checked his books. But I'm sure that included what he probably hoped to make on the job, as well.

INT: Right, right, probably lost his profit.

WD: So I think out of pocket he was probably sorry then that he hadn't taken the $300,000 that I had offered him at Anthony's Pier 4. However, the lesson to be learned was don't screw around with the AIA [general] conditions in minute detail. Change them, as you don't like what they say. For instance, there's a clause or there was that would say that if you hired an architect and then discharged him, you had to pay a certain fee, like if he was working on preliminary drawings or something you had to pay a fee.

INT: Mmmm, that came back to haunt us, right?

WD: And I paid, I agreed at the time that we should change that so that we would pay whatever expenses they could deal, either expenses or hourly wages, etc. But they weren't to get a profit. Because we fired him. Now this happened very seldom. The only remembrance I have is on the Rotch addition. And I don't think we had the damned clause in there and we ended up paying.

INT: How much did you end up paying?

WD: Well, I don't remember but we ended up paying for one of the phases of design.

INT: Right, the full phase?

WD: Yeah.

INT: That's what I thought.

WD: And there's some things like that that we ought to change, and I hope we have changed in the future but you shouldn't try and reinvent the whole set of conditions. And there are some special conditions you have to have because of the nature of the place. So that wasn't really a design/build contract but it left a bad taste because it hadn't achieved what I had hoped that it would achieve.

INT: And MIT had a contract with the architect and a contract with the CM?

WD: Absolutely, it was two separate and they had no agreement between them. So that's one example.

INT: Interesting. I never heard that story.

WD: The next one is the chemistry building. The chemistry building was --

INT: Two years before?

WD: I think before, yeah, a couple years and it was interesting because --

INT: Or even earlier, '69.

WD: Sixty-nine, or so, right.

INT: Sixty-nine. Chemical engineering was finished in '73, I think.

WD: So we actually designed the inside of the chemistry building before we hired Pei. What I mean by that is, we decided to have two exterior corridors, three cores, and four laboratories at each side of the core.

INT: And who's we?

WD: Carl Peterson and myself. And perhaps some others that worked in the Plant at the time, but mostly Peterson and --

INT: And was the executive officer of chemistry involved with you, at this point? I've forgotten his name.

WD: Jack Irvine was probably involved at this point. And we then hired Pei, and Pei basically designed the ends of the building, a small office complex at the north end and a larger office and library complex at the south end. But he did adopt the basic plan for the layout of the laboratories and the cores.

INT: Why did you want a double order corridor?

WD: We felt that the chemistry, that things were explosive enough that we always wanted two ways out so that if we had a problem in a lab, all you had to do was get to the end of the lab and you could either go left or right.

INT: So it's basically safety reasons?

WD: Safety reasons was for the most part.

INT: Was that the norm 30 years ago for a chemistry building?

WD: No. I never saw another chemistry building. The cores, of course, were built the way they were so that we could back -- in each lab, we could back a ten-foot hood up against the core. And get the hoods out of any traffic way to the laboratory, which was again, good safety practice.

INT: And had you thought about exhaust out of those three, I mean, was exhaust, how you exhausted those hoods a big consideration 30 years ago?

WD: Not for energy conservation. We had hoods that became known as the MIT hood that were supplied by Coordon and they were supply air hoods. But we also exhausted the air that heated and cooled the rooms through the hoods so that all the air exhausted through the hoods or if the sash was shut through a bypass at the hoods. And of course, it worked very well but it was also a tremendous energy hog because there were hundreds of thousands of CFM going through that place every minute. Like three-hundred-and-something thousands.

INT: So the hoods were acting as the make-up and discharge air?

WD: Well, make-up only for the hoods.

INT: Oh, just for the hoods? Okay.

WD: If we had shut the hood down in itself, we'd have no makeup air to it but we'd still be exhausting the room air through the hood or the bypass so there was no separate exhaust system for the air conditioning in the building. It was rather clever. And I would say that if this was anybody's doing, it was probably Peterson's, who was a very clever mechanical engineer. A lot more clever than me. So that we hired Pei to design the building and knew how it was going to come out. We bid the building, as we had a habit to at that time, and we selected, we probably had five bidders. We usually had the same four or three and then we'd sometimes add another one that for some reason. In this case I'm sure we had Turner, Vappi, Macomber, and I think Fuller might have been out of business in Boston by then so that we had, we might have had Corvette up from New York who had built a couple of I. M. Pei concrete buildings. And --

INT: And who did you say had built the first, I mean who had built the first Pei building?

WD: Turner.

INT: Turner. Oh, okay, so Turner built the first one.

WD: Then we added, in this case, and I'm not sure exactly why, Aberthaw. And we got bids on bid day and of course our feeling was that we had such a select list that I was always proud to say, if everything was equal and if you took any alternates, either added or deducted what you wanted, that whoever ended up low bidder got the job whether they were five cents low or not. And I'm proud to say that from my point of view I always stuck with that. In this case, I was somewhat secretly heartbroken

because when we got through Aberthaw won the job by less than $7,000 over Turner. And I would have much rather had Turner build it, only because I had dealt with him on a building that was right next door and saw what a fine and thoughtful firm they were. Nevertheless, we went ahead with Aberthaw who did a reasonably good job. They did a very good job, with a couple of things that happened during the job that made it difficult. I think, if I'm not mistaken, the HVAC was, well maybe the plumbing and heating, too, might have been Ventura. Anyway, whoever it was, they went bankrupt part way through the job. And they hired the [Bond] Company and put together a firm of [Flaherty, Sands]. Sands was from New York City and Flaherty was from Boston. And they moved in and continued and it was almost like a beat wasn't lost. And it turned out to prove the worth of making sure you bond your subs but it was the only case that we ever had to do that, to my knowledge.

INT: Bill, when you fit that building out in light of its recent renovation and the fact that the rebar was just too close to the skin coat, where do you fault that? Do you fault that in the design or in the building?

WD: I think the rebar had adequate coverage in the design. It probably was very close but it's very hard to place rebar to within a fine tolerance?. If they go in further that's fine.

INT: Because it didn't happen on the next one. It didn't happen in chemical engineering.

WD: Right. So the interesting part about, and one of the more humorous things, to my respect, is that of course the sample being shown was the Green Building and one day I went out on the back steps of Building 8 with George Dobbins, who was the president of Aberthaw and who, in my opinion, knew very little about construction, and I.M. Pei. And I.M. Pei said, George, I think I can offer you some relief. And George said, oh, what's that? He said, I think I would be willing to accept poured forms on the cast-and-place concrete, instead of the smooth surface forms, like fiberglass that were on the Green Building. Well, George bit hook, line, and sinker. The method of forming was changed to poured forms, but never did George think that the forms would have to be an exact pattern and that it probably, in the end, cost him more than the smooth surface forms. And I knew, standing there and marveling at I.

M.'s ability, that he had just sold the damned Brooklyn Bridge for the third time. And --

INT: Right, right. He's a master at it.

WD: Lou Torro who was the general superintendent and a very good construction person for Abathaw, when he heard about it he was beside himself. But by then the damage was done. George had agreed no change in price and thought he'd got a good deal. And so I think the building finally got completed, and I think Abathaw did a reasonably good job and as Vicky just said, over the years, there were [sums] falling because some of the reinforcing seemed to be a little too close to the outside.

INT: Twenty-six months for that job?

WD: Oh, no, that would have been longer.

INT: Really?

WD: That was a pay job. All pay jobs were 32-month jobs.

INT: Oh, my gosh, really?

WD: Yeah, Skidmore, Owings and Merrill's buildings were 24- to 26-month jobs. Oh yeah. You can check them.

INT: Thirty-two months! Wow!

WD: Yup. That's the figure that sticks in my mind. I used to say, you know, that's why I told Jack Foley, when he was working on the chemical engineering job, if nothing else, it's going to cost you a hell of a lot more in general conditions because it's going to take a lot longer to build than you think it is. And I must admit, when they're through, they look quite plain and simple. But the details will kill you. Like the diagonal ceiling tile pattern in the corridors about the chemical engineering building. A real dog to work out and to put in place.

INT: Now when you hired Pei and you hired I. M. to do the master plan for that whole particular area? And then did Pei know he was going to get three buildings?

WD: No. I think he hoped to. Nope.

INT: But you didn't entertain anyone else for those three buildings?

WD: I think not. I think there was --. Of course at that time I really wasn't the person who selected architects. Jim Killian was still around and he had a lot to say about who was going to do what. Now while we're on Pei we might do a third building which is

totally different and that's the Media Lab. And I don't have a lot to say about the Media Lab. It was different working with Nicholas Negroponte, but we tried something that we hadn't done before and we tried to hire three sculptors on the job -- or artists, I guess you'd call them. One of them, I believe, was named Naylor [?] who would pick out or design the outside skin of the building, which if you go and look at it today is subtle changes in color. Actually, it was reasonably attractive but a son of a gun to build because you had to get those colors which were hand-made colors on probably anodized aluminum.

INT: Yeah, it's faded, too.

WD: So that that was one of them. The second was to design a plaza. I'm not sure they didn't call it a plaza or sculptor garden or what. Ricky Fleishner? And you'll see that all the granite work over there on the exterior between the Ames Street and the health sciences building is basically done by Ricky Fleishner, and when I say that I mean really done by him. He was on the job every damned day. And it's an interesting plaza and I think he did a pretty good job. When we made some changes after we built the big tunnel from biology, we had to get him back on the job to make some changes to that and it was okay except he got a little more crotchety in the ten years between the two of them. I believe there was a third one and I'm not sure what he did.

INT: Oh, I know what he did.

WD: Well, you tell me, then. You chip in.

INT: Okay. The atrium, Nolan was his name? The atrium [?]. See, I didn't know about the exterior. I only knew about the interior and Kenneth Nolan, something like that, and that atrium space was a design.

WD: That may have been who did the outside, too. I said Naylor but I bet it was Nolan. And there wasn't one that did sort of a sculpture garden?

INT: I don't know about that. It could have been.

WD: I thought the space between the plaza and going over against B10 and it was never carried out to any significant degree.

INT: Right. You know, Bill, I'm sure you're right about that. I only know about those other two.

WD: Yeah, well, I think there were three. And I can't name the other one. And of course, an interesting space in the building was the cube, which was, I think, somewhat of a misguided effort but it's since been floored in, I think.

INT: A couple floors have been floored in.

WD: For whatever it was influence streamed it would be used of, I think it never proved that much of a use. All right.

INT: On that building, do you want to talk about the interiors being done by a different --? I mean, I don't know why you did that. That Pei didn't do the interiors, that you had CBT do the interiors?

WD: No, I didn't even remember that.

INT: Yeah! They're two separate practices.

WD: Huh. That's interesting. No, I didn't realize that.

INT: Mmm hmm. And I've never, I didn't know why. I didn't know whether it had something to do with previous experiences with Pei's office. Also, but at that point, it was really Sandy Pei, right? Pei's son, one of his sons that was doing most of the design work?

WD: I think so. Yeah, I never realized that that happened. I mean, I'm sure I knew about it.

INT: Yup, yup, it was the CBT firm and it was their interiors division. I remember that.

WD: Well, they did a reasonably good job. It was more modern than Pei was used to doing. Pei was used to doing everything fixed -- fixed partitions, fixed this, fixed that.

INT: Yeah, we'll have to find out why that partition was made. Course it ended up all being ripped up.

WD: I understand. All right. The next one was the Center for Space Research, now the McNair Building after one of the astronauts who got killed in the *Challenger* crash.

INT: What's the building number? I can't remember.

WD: Uh, thirty-seven? I think 37, yup. The strange part about this building is that it was built to house five disciplines, so it was meant to get all the people interested in space research working together rather than having them work at separate disciplines.

INT: What years was this? It's before me so it must have been in the '60s?

WD: It was in the ‘60s. And the late ‘60s, probably. And it was funded by, at least a lot of it, by NASA, I believe, and in the site where it was has a couple constraints: one, all of the air equipment that hung on the back of Building 33 which was hardly ever used, but the people occupied the building said they couldn’t do without it. So we had to rebuild and relocate all that so that it gave some site clearance for the --. And the idea was that when 33 was torn down, as it will be some day, that we could take that facade of the face of it which has high windows and what is the laboratory side of the building and we could change that facade so that it would look like the other facade, if we wished to. So that -- but that isn’t the strange thing. The requirements were such that it needed deep basements, not to float the building but because of the kind of work that was going to be done down there -- a blast chamber, etc. And by the time -- and it had one other real peculiarity -- the main steam tunnel from the power plant ran right through the middle of the building, underground. So you couldn’t just dig a hole and build a basement. You had to build two basements, one on either side of the steam tunnel. And by the time you got to that, we found out that because of the height of the building that the building would be apt to rise. There wasn’t enough weight in the building --

INT: To hold it down, couldn’t hold it down enough.

WD: -- to displace what had been excavated. So that building is the only building that we ever built that has piles and a mat. And the piles are used as friction bladders. They’re driven into the clay to keep the building from rising if circumstances ever were right for it to do so. So that building really was unusual in that it had friction piles that work in reverse.

INT: I didn’t know this, either.

WD: And they sit there today, well under water, and they’ll be there for a long period of time.

INT: Who designed that building, Bill?

WD: That building was designed by Skidmore, Owings, and Merrill and it was designed after the materials building and that’s why the two of them look so much alike and have the wood trim and -- I’ve talked at length about [Building] 13 and how the wood

trim came about, the fact that the trim [?] was about $1,000,000 higher than they had been telling Skidmore, Owings Merrill.

INT: Now, is that building that has the single corridor got one bay side that's very, very deep and one side is very narrow for offices? I think it is. And why did that happen?

WD: Because they not only wanted laboratories but they wanted interior space for instrumentation. And so that's why the one side is so wide and the instrumentation bay runs down sort of the middle of the thing.

INT: Now was the floor lowered in that building a consideration because you talk about the blast chambers -- ?

WD: They were all in the basement.

WD: Okay, everything was in the, the rest was --

WD: Before loading up above was basically, you know, probably might have been 125 pounds rather than 100 but it was nothing out of the ordinary. Now the building was never used exactly in this regard. We never moved the variety of people into that building. But we did use the blast chamber and things like that.

INT: I wonder if the blast chamber is still there?

WD: It probably is still there but I'm not sure it's used anymore. And maybe it isn't there. I don't know. The building got its name, it was just known as Building 37 but after the *Challenger* explosion, and knowing that McNair had been a graduate of Aero and Astro at MIT, Glenn Strehle and I were sitting around one day and we said why the hell shouldn't the Institute name that building after him? And so we proposed it and it was quickly agreed upon by -- I think, the Corporation in the end has to agree upon it.

INT: So you and Glenn?

WD: Glenn Strehle and I named that building. And strange things happen in strange ways.

INT: Different times.

WD: Yup.

END OF SIDE ONE

SIDE TWO

WD: This is side two. I'm going to switch now to the West Campus. And three structures. With not much to say -- well, maybe four, without much to say about it. One of them, the first one, is MacGregor House. For MacGregor House we hired the Architects Collaborative and associated a former Dean of Architecture, Pietro Belluschi, with them Because Belluschi claimed that we always paid too much for things like dormitories. And that if he was involved, he could make sure the cost stayed down. So --

INT: Was he still teaching at that time?

WD: I think he was still associated with the Institute.

INT: And did he have his own practice?

WD: But he was a dean. Well, he always sort of had his own practice.

INT: So he was a practicing architect to some extent?

WD: Right. Like he usually, in this phase, a consultant practice, like he consulted with Buzz Brandon and Usig Jung on the tall buildings in Boston the first era. Anyway, we went ahead and it was clear to me after a while that this building was being designed by Norman Fletcher of the Architects' Collaborative. And I suppose Belluschi and he talked sometime, but it sure didn't seem like it. And they came up with the idea of building it differently, though. It was a weird program but it was to be like a set of houses with about 33 people to a house. And [Omezier], the engineer, suggested we build it out of new, -- a relatively new method of construction which was reinforced masonry. You'd build bricks and you'd reinforce the cavities with reinforcing rods, etc. And so the building was designed and in order to save expense, and reinforced masonry and then it came time --

INT: A tower, no less!

WD: Yes, a tower, too. So it came time to bid it, and it was way out. I'm not sure we actually got to bid it. The final estimate was way over budget. So the building was redesigned and the tower was redesigned as a --

INT: Steel?

WD: No. Reinforced concrete frame, the tower, covered with masonry. I think, but I'm not sure of this, but I think the reinforced masonry might have still been used on the low-rise buildings.

INT: Did you say the program backed, time-wise, the dormitory? It must have set it back a year or so, right?

WD: It set it back probably, I'm sure it was a year wait. And I'm sorry to tell you I can't even remember who built the building. I have a feeling it might have been Jackson. But I'm not sure of that. I am sure that Jackson built the Space Center, the one that we just talked about. In any case, that so much for and it became a relatively well-built dormitory but a relatively expensive dormitory, too. So that this combination with Pietro and the Architects' Collaborative was really a lot of talk.

INT: But was this a first MIT dormitory that had a quasi-version of the house system? I think it might have been.

WD: Well, I think so. This really was -- you know, it had a house living room and for every I think it was 33 students. And I think that building has handled itself fairly well over the years. I believe it had a dining hall, too. Which may or may not be in operation.

INT: Was MacGregor the one with the huge, huge dining room that hung out on the street?

WD: Yeah. It had a large dining room.

INT: Yeah. I think it's used for something different. I'm not sure.

WD: All right, the next house we built and maybe not next in total chronology but going down the river was New House. And there we hired Sert. Sert, Jackson, and Gooley, at the time, maybe, or Sert, Jackson.

INT: Sert was pretty old by then.

WD: He was fairly old. Jackson was the principal one. But Sert certainly still had some of his design in there.

INT: So this must have been a good ten or fifteen years after Peabody Terrace, right?

WD: Yup.

INT: After he had made his mark on the dormitories.

WD: Right. And so we hired him and then we told them that we wanted him to form an agreement with one of three contractors, and we gave him the contractors, and I believe we probably gave him Turner, Vappi, and Macomber. And they would form an agreement.

INT: It was going to be a design/build, right?

WD: And it would then be truly a design/build with whoever the lead partner would be -- would be whatever they wanted to negotiate. But from our point of view we had hired Sert.

INT: So we were going to have our contract with -- there would be one contract?

WD: One contract and I think it was called, well, I'm not sure what it was called. I think the next time we did it, it was called West Campus Housing Associates.

INT: The next house you did something different. Right, right.

WD: The New House was, and this worked very smoothly. They selected Turner for whatever reason, I'm not sure. They probably interviewed all of them. And it was a very smooth running job. It operated like you hoped a design/build job would operate.

INT: Was supposed to, yup.

WD: And it had a -- before we started construction, of course -- it had a program which was quite a bit different than MacGregor House and all the programs got different for every house. And then we had a firm price on the job from a joint venture and we proceeded and things went fairly smoothly. Now I can tell you, that one of the reasons that it was so good is there came a time with Sert -- I use that as the firm, never mind himself -- wanted desperately to put a penthouse on top of one of the stairwells for architectural purposes. It had no practical purpose. And Turner said, you can't. Because we're going to go over the budget. And they argued that out between themselves. They never approached the Institute. And finally decided that they would not build it. And they would stay within the budget.

INT: So who were the principals at that point from Sert's office and from Turner's?

WD: Well, I only remember Jackson. And Jack Greenip of course was on there for Turner.

INT: And were you looking at this design/build model to save costs, to reduce the schedule? I mean, what --?

WD: I think not to reduce the schedule so much as to control costs, and time -- time as scheduled -- but we weren't trying to do anything that was out of the ordinary.

INT: But you would get something from the new idea?

WD: We wanted to control the cost of the project and we wanted to eliminate the Institute as being the third person who always had to pick between cost and aesthetics. And so

it worked out quite well. Turner was pleased with it. I think Sert, Jackson was pleased with it. And forever after that -- Ted Rhodes, who was really formally the chief estimator at Turner but then became sort of their chief seller, was around about once every six months trying to convince us how advantageous it would be to let the two of them build another dormitory. So we finally did build another dormitory, not from their urging but when time got right and we built New House. I'm sorry, Next House. This time, however, we hired Turner and told them to strike a deal with Sert and that Turner would be the lead partner. And that worked fine, too. I remember back on New House there was some problem with the brickwork at some point in time. And there was another thing that we never heard about. It was just remedied, whatever it was. And they did a fine job on building Next House. Now why we didn't continue to build this way, I'm not sure. But I think, in my point of view, that was the last time we really built that way.

INT: How long did it take to do those two dormitories, do you remember?

WD: I don't remember. Those are on the record but --

INT: Yeah, yeah. I wonder, did they even do complete sets of documents?

WD: I think they did. Because I think we wanted to see them.

INT: Despite the fact that we were doing design/build? Yeah.

WD: They might not have had every single detail but they probably had as much as they have today when they call them complete.

INT: Right. I think that's the way the industry is going to go, by the way. I think they're going to have to go that way.

WD: Yeah. Well, the last one I wanted to talk about down there, since I've talked about Westgate in the previous time, was Westgate II. That had some interesting aspects to it. First, U.S. Steel came to the Institute with a proposal that we build a dormitory on that site. They knew that we wanted to build another graduate house, that out of the staggered steel truss system that they were developing.

INT: What do you mean by Westgate II? You're not talking about Tang, are you?

WD: Yes, I am. That was Westgate II. Tang, again, designed by the guy in Cambridge, Hugh Stubbins. And built by Jackson. And we played around with the staggered steel truss system with Marvin Goody for a while to see if it looked like it was

practical and whether it had any cost advantages, etc. And it sort of went by the boards. We had thought originally that perhaps U.S. Steel might like to fund some of it to demonstrate it. It was an interesting concept. They basically built the exterior every floor by a steel truss and then the one going the other way would be on the floor below. So they'd stack, like building with Lincoln Logs. In any case, we decided not to do that. And we hired Stubbins to build Tang Hall, so named after --

INT: Why did you hire Stubbins?

WD: Because he did Westgate. And it always seemed --

INT: Sure, I understand, yeah.

WD: --a reasonable selection, rather than introduce yet another person.

INT: And how many years had intervened between these people?

WD: Well, quite a few. I would guess at least a decade.

INT: Maybe 15 years?

WD: Maybe 15. And it went through several gyrations where it was to be built for either single rooms or apartments and it ended up being mostly single rooms, supposedly with the ability to convert to apartments in the future. However, the interesting thing is the structural design was such that the big ends of the building that you see one end, one, they sort of make a -- be at an angle at each side of the building, at the ends. Those were post tensioned, one to the other, in order to keep them tied together since they were precast, I believe, and not put in place. Whatever the case was, when the post tensioning was done, in many instances the tubes were not built with concrete or slurry so that after a while they filled with water and would then crack in the cold weather. And it was a real flaw. Because they were supposed to have been filled completely and solidly with grout. So Paul Barrett and I had months and months of negotiation with Phil Jackson, and I'm sorry to say that it's long enough ago that I can't remember what the final solution was. I know we never went to court. And they may have been filled with epoxy. But the tubes all got filled and to my knowledge, we never had another problem since that time. So we had our opportunities over the years if we wanted to with that kind of an owner, to go to court many times. Perhaps the most obvious case was when Skidmore, Owings and Merrill

provided a drawing with much inadequate reinforcing steel in the Ford design. They picked it up.

INT: In this building?

WD: I think it was in Building 9. And it was remedied. I don't remember how it was remedied. Perhaps it was caught before the floors were poured. But in any case, it cost us some money. My thought was, everybody's capable of having a mistake once in a while. We're just going to let it go. And we did. I think, if I was insistent, I bet they would have paid for it themselves without going to court. But it worked out okay and they went on to design, 13 was first, 37, 39, 9, 36, 38, and the Intro. So they pretty much did a whole lot of stuff.

INT: That was the Chicago office?

WD: Chicago office. Walter Netsch And at the end, Jude [DeStepito] did a lot of the design. Walter Netsch was a piece of work. Very, very tall, pitifully thin. Carried -- wore a vest and carried two vest pockets absolutely chock full of Pentel pens. He must have had 25 of them on him. And I never had a problem getting along with him but Harold Mickley who was in charge of Building 9, when it was built set up for advance research, was new, he and Walter practically came to blows at times. And he hated Mickley's secretary, who was a long-time Institute employee. And I don't know, we used to see her around; I can't remember her name now. But it was a -- I thought it was a good relationship, and they had a superior administrator, Al Walken.

INT: Hmm. Never heard the name.

WD: He was a partner but he wasn't a design partner. And he was smooth and could handle people and was honest and very, very good person. So I had many a good relationship with him. I think that's probably where I want to stop. And I'm not sure, I'm going to have to think hard how I'm going to end this because I've gone, I have a paper of ideas and stuff that people have put forward and I've covered most of those, though. So that I don't want to go beyond my tenure there. Even though I know a little bit about a couple of other buildings.

INT: Okay. You've covered all the problematic -- all the, you know, potentially problematic buildings.

WD: I think so. And one where we had trouble with the food. Every building as it ages is problematic but --

INT: No, but you know, things to be watched for, like that?

WD: Yes, I think so.

INT: All right, well I will end this tape now then.

[End of interview]