

William R. Dickson Oral History Project
Interviewer: Susan Crowley
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Conversion of Industrial Buildings to Academic Use at MIT

INT: Today is Wednesday, March 23rd, and the topic today will be the conversion of industrial buildings to academic use at MIT.

WD: The Institute throughout its history in Cambridge has purchased many industrial buildings and converted them to either academic use immediately or torn them down so other things could be built anew in their place, or they have purchased buildings -- old industrial buildings -- for investment purposes. We're going to talk today about those -- some of those that have been purchased for academic use. Before we get into this, let me say that I'm not going to go in any order of purchase or conversion, but rather I'm going to start at one end of the campus, and sort of go down the campus and speak at random about those buildings that we have purchased. And I'm going to start down near the Longfellow Bridge. And the first building is, I believe, E -- yes, E60, which is the former Arthur D. Little Building, and to the best of my knowledge, it's used primarily for people from the Sloan School. You'll have to remember now that I have been absent from MIT for over six years, so that some things might have changed in the meantime. Next to it, is the former Cabot Corporation Building, and it was purchased by MIT and converted -- totally renovated and converted for use by the Dibner Institute, who still, I believe, currently occupies that space. As we progress further, we get to E51. I think E51 is the combined number of the Tang Building --

INT: Right.

WD: -- and the building in front of it, which was the former National Research Building, and it was purchased by MIT sometime early in my tenure and was used for a variety of purposes but I believe finally was basically totally renovated and housed some elements of the Sloan School and the Society for -- let's see -- STS? The --

INT: Technology and --

WD: Technology and Society --

INT: Science, Technology, and Society? Is that it?

WD: Yes. I guess that's it: Science, Technology, and Society. At the same time, it was connected to the Sloan Building by a bridge across Wadsworth Street, and I think the Sloan Building occupied the upper floor of the building at the time. It was later joined with the Tang Building, when it was built, and I believe the number for the whole enterprise is E51. Across the street from that is E40. E40 was the former F.S. Webster Building.

INT: Oh, it was?

WD: A printing supplier, and I think a printer. I think the upper floors were designed with heavy floor loads for printing presses. And it was purchased by MIT and ultimately has an East Campus satellite chilled water plant located in its basement where the boilers used to be. It's sort of a deeper part of the basement than the rest of it. And was totally renovated -- after some initial occupancy by various cats and dogs, it was totally renovated. One of the renovations that was done by MIT entirely in-house. The architecture and the space layout and everything was done by the Plant.

INT: Now, it has the name in the book of the Muckley Building?

WD: Right.

INT: Is that because --

WD: It was -- it was later on named the Muckley Building -- Dwight Muckley, I think, who was the father of a long-time corporation member, Harold Muckley.

INT: Oh. Is that right?

WD: I think at the present time it is -- or during the construction of the Tang Auditorium, it was connected to it by bridges, and so now E40, the Muckley Building, is connected to E51, and then you can go through the bridge from E51 to E52.

INT: Right.

WD: And this is both a short-term and a long-term position because ultimately, we'd like all the buildings from Massachusetts Avenue to the East Campus and the Sloan Building to be interconnected, either by tunnels or bridges or both, so that we continue to chip away at this overall goal. The next building -- or another building in that area is the Hayward Garage, which was purchased -- and is certainly destined to be -- torn down --

INT: I believe this year.

WD: -- and has been used since the construction of Eastgate to house about 100 vehicles from Eastgate and a few more from various and sundry areas. It never has been in very good condition, and definitely I think I can predict will be torn down very, very shortly.

INT: It was a garage before?

WD: It was built as a garage, and was purchased and then used as a garage. The Institute also then bought many little buildings on Carlton Street -- very small, by a multitude of people that occupy them, and of course that's the site -- they got rid of them all -- and the site of the health center. They also bought three buildings on Carlton Street -- E32, 33, and 34, which have been occupied by housing and part of E32 and the card center. And Earth and Planetary Sciences for the most part in E33, and if I'm not mistaken, E34 was probably the old Tile Building. And I think it was -- is occupied by the arts at the present time -- Rinaldo Tile Company. They also purchased -- early in my tenure -- the Central Scientific Corporation, which was on the corner of Ames Street and Amherst Street and for many years housed the Department of Philosophy, I guess. I'm not sure if that's the correct name, but Hans Teuber was the original head of the thing. He died at a swimming accident some years later, and that building also had animal quarters on its upper floor, which were built in, and has since been torn down to get ready to build the long-awaited addition to the Arts and Media Center, which is still stalled at the present time. That's basically the repertoire of buildings on the East Campus, and leaving out the biggest. And the biggest was the purchase of the former Daggett Chocolate Factory. That consisted of E19, E18, E17; it had its own power plant at the time, which long ago was taken down, and four or five outbuildings, one of which once housed our grounds crew. They have been removed, and when the health center was built they were removed and used as part of the land resource for that and the building that's attached to it, which is a laboratory building. Of course, this was a big acquisition. I think altogether there were 400,000 square feet.

INT: Wow!

WD: E19 was converted relatively soon after the acquisition into administrative offices, the idea being that we would move the administrative offices in the main group to that

consolidated area in order to make room for the Schools of Architecture and Engineering, where these administrative offices that might have started once as an office had grown to occupy much space at the expense of the academic departments. So that the original occupants of E19 were, in fact, many of the administrative departments, including Personnel, the Physical Plant, Safety Office, Controller's Accounting Office, the Office of Sponsored Research, etc. At the same time, E18, or most of it, was converted for office use. The top two floors being excepted, which were laboratories. The Clinical Research Center, I think, was on the sixth floor-- or fifth -- and some other research center which I forget the name of occupied the floor below. Other than that, Purchasing, the Physical Plant, and ultimately the Planning Office occupied the office portions of floors one, two, and three.

INT: How come they mixed the use? Because they just needed the space? Or were they concerned to put some lab space in with offices?

WD: Well, I think at the time they actually needed a place for these specialized laboratories and solved the majority of the needs for office space -- for administrative offices. I mean, there were others. If I went through floor by floor, the Registrar, for instance, moved out of -- Building 7, and moved to E19. And the Career Placement Office moved from Building 12 -- 24 -- to --

INT: Oh, is that right?

WD: And the Physical Plant moved from Building 24; plus, the shops moved from a building out back -- I think it was Building 38 at the time -- I'm not sure of that number -- which was one of the original buildings built when MIT moved to Cambridge. And so they moved into modern shops on the first floor of E19 and E18. And all of the shops were there. And in addition, the building was air conditioned, and had, I think, three air conditioning machines and cooling towers on the roof so it was a major undertaking. The one thing about E19 that makes it stand out in my mind was it was the first and perhaps only building ever done by a space planning outfit.

INT: [It was?]

WD: And Cusick and Stoddard hired Rodgers Associates from New York City. I don't know how they knew them, but they approached it as you would building out a

modern office building. They interviewed people. They had sort of a centralized corridor and elevator scheme and then they infilled with what then was temporary partitions -- a system called [Barnwall]. Things were done in a -- oh I can remember, for instance, that we would tile a floor -- both the floor tile, and the ceiling -- hung ceiling. We would go through and tile it all at one time, so that we'd have a crew in there, and they would put floor tile in a floor in a very short time -- however many thousand feet there were -- and then the same thing with ceiling tile -- hung ceilings. We would blast through the whole building and then just move to the next floor. And the partitions went from floor to ceiling, basically, and wherever there was need for special separation because of sound, we used soundproofing material above the partitions and the ceiling slab of the floor above. But it was a very -- very economical job and a very fast-paced job. The MIT Rodgers person was named Fred [Liebert], and I think we even sort of stepped out of character and used Metcalf & Eddy as the mechanical and plumbing engineers, a firm that we normally would not have used for that purpose; it's more an industrial firm. So that was probably the largest conversion, and those buildings had been converted, or are being converted, yet again. E17 -- I did mention -- E17 was held in reserve for a while, and when the funding came forward from the Seely G. Mudd Foundation for the Cancer Center, it was then taken over and totally renovated by Goody & Clancy --

INT: Oh, really?

WD: -- for use by the Cancer Center. And so you'll notice it's fenestration, etc., is somewhat different from the Ford Building.

WD: The idea always was to connect the Ford Building to the main campus, and that, of course, took place when they built the Biology Building with a very intricate underground system underneath Ames Street, and entering into E17 under an elevated plaza, so that you can now, literally, go from Memorial Drive at the corner of Mass. Ave. through the buildings and end up in E17 without ever going outside. And as a matter of fact, I think you can even now go to the Medical Center, so that we're not far away from connecting the entire Institute. All that's necessary is to go from the Medical Center to E40, and we'll have that either underground or a combination underground and overhead connections. I'll just mention that another big purchase

was the [Car Fastener Building] -- United [Car Fastener] at the juncture of Ames Street and Mass. Avenue. It was a large building --

INT: At Ames and Main?

WD: -- in full operation for many years of my tenure there.

INT: Now, you said Ames and Mass. Do you mean Ames and Main?

WD: I'm sorry. I mean Ames and Main Street. You're absolutely right.

INT: Because I'm looking at the map, so I --

WD: Yes. You're absolutely right. There was a little building on the corner of Main and Ames Street, so I think one story -- the New England Confectionary Company.

INT: Oh, wow.

WD: It used to make macaroons. You could smell them all over Cambridge.

INT: Yum.

WD: It was purchased earlier and demolished so the site could be used for parking. Ultimately, United Car Faster was sold to MIT, razed, and that's the site of the Biology Building. And so that took place not too long ago.

INT: Right.

WD: Probably in the '80s?

INT: Right. I was going to say, that was one of the more recent ones, right?

WD: Yes.

WD: Now, from Ames Street, other than Car Faster, the Main Street to Massachusetts Avenue and to the railroad. Well, no, let's say to Vassar Street; all that property was bought, basically, when MIT moved to Cambridge with the exception of Car Faster, and so there has been no land acquisition to my memory in that area. When you get west of Massachusetts Avenue, that's another matter. Ashdown House -- our graduate dormitory -- was purchased prior to World War II.

INT: Wow.

WD: And converted from our residence -- the Riverbank Hotel --

INT: Oh, no kidding?

WD: To a graduate dormitory. I think many of the Institute graduate students in the accelerated programs during the war lived there. Also purchased by MIT was the

building next to it -- or one building away -- which is slipping my mind now. What's the name of the dormitory --

INT: Next to Ashdown? McCormick Hall?

WD: No. Going the other way up Mass. Ave.

INT: Oh, Bexley?

WD: Bexley Hall.

INT: Yes.

WD: Right. That was -- that was a hotel -- an apartment hotel or basically an apartment house, maybe. I had one of my faculty members when I was a student live there. It was ultimately purchased and converted into a dormitory, Bexley Hall. There used to be a block of stores running from basically where the student center faces Mass. Ave., and it was purchased and torn down, and ultimately the Student Center, which is set back from there, but nevertheless has its front yard along Mass. Avenue. They were purchased. There was a Walton's Restaurant, the Tech Drug that ultimately moved to Kendall Square, some other core -- a place of eatery that the students always called "The Armpit" --

INT: [Why?]

WD: Because it had sort of a strange odor to it when you went in to eat.

WD: And I think a telephone office exchange. I think it was a two-level structure, and on the second level is where WGBH started.

INT: Oh, no kidding?

WD: And -- so, it was originally in the second level of this block. I'm wandering a little bit -- mixing buildings we took down as those converted to academic use, but they were important pieces of the puzzle. I think we owned all the property between Vassar Street and the railroad tracks to Mass. Ave., except for one piece on the corner of Mass. Ave., which is a gas -- was a gas station. And that was ultimately purchased, and I think for several years has been used as a short-term paid parking lot. Across the street, of course, we purchased the Metropolitan Storage Warehouse, and that's been in the investment portfolio ever since its purchase, which is a fairly significant income producer for the investment.

INT: Yes.

WD: I should say that some buildings are bought with the idea that they'll probably remain investments in the long-term, and others are bought and used for investment purposes until the Institute has a need for them academically. And those are then purchased from the investment portfolio, by the academic side of the institution. The Metropolitan Storage Warehouse is undoubtedly one of those that ultimately will be purchased into the academic portfolio for some reason or another. Another building purchased recently -- recently in my mind is 10 to 15 years -- was Northeastern Distributors -- on the corner of Vassar Street and Audrey Streets. This building was, as I said, occupied by Northeast -- [on their own] by Northeastern Distributors, who I think used it for distribution of appliances and stuff. And it was ultimately -- a deal was ultimately made to purchase it at some time in the future, and then I think that purchase actually took place. And it was carried out by the investment people, but the building was then bought in the academic plant and was used, I think, now by the Information Systems people in conjunction with the building next to it, which is W86, right?

INT: W92 and W91.

WD: Okay. W91. Yes. I might mention that the other properties that were purchased in this block from Mass. Ave., Memorial Drive, Vassar, and Audrey Streets were the Smith House -- a restaurant on Memorial Drive, Howard Johnson's --

INT: No kidding?

WD: -- a restaurant on Memorial Drive, and a small Sunoco Station on the corner of Memorial Drive and Audrey Street. These obviously have been used as sites for dormitories. [I'm sure] you'll notice that there are three or four dormitories on these sites at the present time. The first dormitory to occupy a purchase site was McGregor House, which is built partially on the former Smith House site. As we move down the river, still staying on the south side of the river, I think the most recent purchase was WW15, which is used by Mail Services and I don't know what other uses, frankly, it has at the present time.

INT: Isn't that where the Furniture Exchange is?

WD: Yes. The Furniture Exchange --

WD: -- is there, and there is -- it's a fairly low land use space, being only I think one story high.

INT: Um hmm.

WD: So that for the land that it occupies, it doesn't yield a lot of occupiable space. Now, perhaps the most interesting set of acquisitions are on Albany Street, and again, I'm going to start at the east, where the Brain and Cognitive Sciences Building is, used to be the site of the Ivers and Pond Piano Factory.

INT: Really?

WD: It was a massive yellow brick building, several stories in height; it was purchased by the Institute many years ago and converted -- torn down -- and the land was used for years as a parking lot. I'm not sure whether Brain and Cognitive Sciences now occupies the whole site or not. Further on down Vassar was the Whittemore Shoe Polish Factory. Now this was purchased before my tenure at MIT, and they tell me when you went in the place after we purchased it, it literally smelled like a big shoe shine shop.

INT: Wow.

WD: With all the residue of the shoe polish that was around. It was ultimately converted into one of the major buildings for use by the Instrumentation Laboratory, as the Instrumentation Laboratory grew. And I believe they occupied the space until they moved to new quarters over in Tech Square. It was then torn down, and the cooling towers of the power plant, etc., are on that space. I think it was not necessary to tear it down to build the Albany Street Parking Garage. I think that was in place while the Whittemore Building was still there. Going across Mass. Ave., you have, of course, the reactor, and the reactor, of course, has a big containment vessel, which was built when the reactor was built, but all of its office and research space is in the building next to it, which was the former Kraft Cheese Building. That building was bought from Kraft Cheese people and that was fitted for the use by the reactor. Again, this is prior to -- prior to Dickson -- BD -- P -- prior to? -- PD -- Prior to Dickson. Now, getting back into my era, the building next to it was the former Ward Baking Company, and when you went in that building all you could smell was bread. And it was purchased by MIT when I first arrived there, and I played a part in its conversion

to use by the Magnet Laboratory. When the Magnet Laboratory was in full swing, and also a Radio Chemistry Laboratory, which was in NW13. I think the buildings are numbered the Kraft Building NW12; the next piece of the Ward Building NW13; and the largest part of the Ward Building NW14. Is that correct?

INT: Yes. That's the Francis Bitter National Magnet Lab.

WD: Right. Okay. So that the good thing about these buildings was that -- particularly a building like the Ward Building, you could do things in them, which you couldn't do in the main buildings because of the space that was there, and I don't mean floor space, I mean height too, so that the Magnet Laboratory had very large components. As a matter of fact, we had to build a building adjacent to the Ward Building to house the big motor generator sets.

INT: Wow.

WD: And I think that building still remains today. That's probably NW -- 15?

INT: Yes.

WD: And I think the motor generator sets are since gone, but I'm not positive about that.

INT: Then there's a little teeny building, NW20.

WD: Yes. I'm not sure. I think NW20 houses some power supplies. And then NW21 is the Plasma Fusion Center --

INT: Right.

WD: -- was bought from the Nabisco Company.

INT: Oh, no kidding?

WD: So that was some time -- quite a while after we purchased the buildings for the Magnet Laboratory.

INT: Um hmm.

WD: And then, on the other side of street, there's NW10 -- Edgerton Hall, which was probably purchased in the late '70s or early '80s, and totally renovated into a graduate -- I think it's a single student graduate dormitory.

INT: Yes. Edgerton House.

WD: Yes. It is Edgerton House, named after Doc Edgerton.

WD: So you can see how these acquisitions of industrial properties have played a key role over the development of the Institute.

INT: Um hmm.

WD: I suspect some day we'll probably remove the reactor, and remove the building where the Ward Baking Company and the Magnet Lab was and maybe even the Fusion Center and develop this property for other uses. That's pure speculation on my part and that someday, if it happens, won't be soon. They also bought some other property on the other side of Albany Street. I think there's a Fusion Center in one of the buildings there, too.

INT: Yes. Right next to it. It's NW16, Plasma Fusion Center.

WD: Yes. That's the office space, etc., for the fusion activities, and I think it's connected by a bridge over across Albany Street. Now there are others that I've left out, but those are the main ones. Oh, one other that I should mention was at some time, and I know not when, we purchased 224 Albany Street, and the Instrumentation Lab also occupied that space and it was recently converted into -- again, is it graduate dormitories?

INT: Yes.

WD: And I don't know what the number is.

INT: That's at NW30.

WD: NW30?

INT: Um hmm.

WD: So once again, another building converted for dormitory use. Of course, the single biggest purchase was the Simplex Wire and Cable Company, which consisted of many old buildings, much land, and is now the site of University Park, being long-term leased to [Far Cities], and I think the park is either at, or soon will be, total build-out. It's taken a long time to get there, but it's very successful, particularly for incubation of activities that like to be located near the Institute's technical resources. I'm just trying to think of what's missed of importance? The old Graphic Arts Building was formerly the [Barter Press], and it was purchased at some time and converted. When I first got here it was being converted for use by the Graphic Arts and stayed that way until we dismantled Graphic Arts in the '90s, and then it became

occupied after a large-scale renovation by Information Systems once again. Next to it was the Hood Building. The Hood Building is one of interest because during its dismantling, they found that it was contaminated with beryllium, which is a highly toxic and may be radioactive substance, and got that way from the use that was performed there during World War II. I don't know where it got the name the Hood Building. And it was torn down, I believe, before I was on the scene. But it was -- it had to be taken apart piece by piece and very carefully done, and there are some people at the Institute that I'm sure still remember something about it, although not many. John Fresina, I know, knew quite a bit about it, although I don't believe he worked there when it was being dismantled. I could be wrong because John was there almost as long --

END OF SIDE ONE

SIDE TWO

INT: Converting industrial buildings to academic use. So you were going to finish off on the -- about John Fresina and that building?

WD: Yes. John may -- may have been there and been more involved in its demolition. I know mostly about it from hearsay.

INT: Right. So I guess I've had one question about -- I had said I was surprised at how much industrial activity there was in that MIT area and I wondered if -- I know it was a long time ago -- but were there more issues, like hazardous waste things, than that -- the Hood Building, or because it was longer ago it wasn't such an issue?

WD: Well, it probably would be today in some of them. For instance, there might have been in something like the Ward Baking Company. Why? Not because bread is toxic, but -- those buildings were there long enough so that a big portion of the building was used for stabling horses and carriages, where they used to deliver to the area -- local areas by horse and carriage before they had motor cars, so that -- I'll have to answer that question in two ways: The railroad track is really a dividing line. What I mean by that is the area to the MIT side of the railroad track is mainly filled land. It was once all marsh, and the marsh was okay, but when they built the wall --

seawalls -- and then filled in the land, they used fill from the subway system work in Boston.

INT: Oh, no kidding?

WD: And also a lot of ash. Now in current days, the ash has too much toxicity to be just taken away and dumped to the landfill, so that when you had a building like Biology, you might recall, Sue, that there was a big mound covered by a tarpaulin that stayed out there for a year or two, and that was -- that was excavation that was considered too toxic to be just sold as landfill somewhere and had to be hauled specially away. So I think that in some of these properties, the basic nature of the product was such that as long as it was on virgin territory, so to speak, there was no reason to contaminate the soil. For instance, I doubt that the Ivers and Pond Piano Factory had too much oil or other stuff that would contaminate the soil.

INT: Um hmm.

WD: So that I'm sure that if we did all that we did today -- what we did in the past -- that we would have more trouble because the regulations are so much more severe. But I can happily say I don't know of anything that significantly impacted the environment.

INT: Well, that's good.

WD: We did have a -- it has nothing to do with this -- we did connect the Charles River to the Magnet Lab, though, with two 48-inch pipes.

INT: Really? What was it for?

WD: For water. For cooling the magnets. And they still exist today, the pipes. And I'm not sure whether anyone is using them or not, but the MDC became concerned that after we cooled the magnets, we would be -- one pipe was an intake, and the other was a return --

INT: Right.

WD: -- that we would be returning water to the Charles River Basin --

INT: That was too warm?

WD: -- too warm, and we'd -- that it would rise the temperature, and I can remember we took -- we finally got the permit, but then we took soundings -- temperature soundings of the Charles River for a year or more afterwards to prove that it didn't

affect the river water basin temperature by any significant degree. That was a significant project, however, because it had to cross under Memorial Drive.

INT: Yes. I bet.

WD: Under Briggs Field, under Vassar Street.

INT: Wow!

WD: Under the railroad tracks, so that --

INT: When was that done?

WD: It was done early in my tenure -- back in the early '60s.

INT: Boy, that must have been a massive project.

WD: It was done by Bond Brothers --

INT: Oh, no kidding?

WD: -- when they were at the time mainly underground and road builders, as opposed to building builders. Well, I think that probably covers the bulk of what I have to say on this subject.

INT: Okay. So that's the end of the tape on the 23rd, converting industrial buildings to academic use.

[End of interview]