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WILLIAM J. POORVU
RICHARD E. CRUM

Regency Plaza

Kris Hodgkins, the project manager for condominium development at the Regency Plaza hotel complex, worked her way through the half finished units on the twelfth floor of the building. It was early on a Thursday morning in late June of 2007, and the sounds of construction workers and equipment mobilized for work filtered up through the floor. All around her, Hodgkins could see the skeletal forms of luxury condominium units taking shape.

She carried with her several hand drawn sketches that detailed a series of changes to the layout of condominium unit 1203. She could see that the sketches were a radical departure from the standard floor plan and that some of the already installed work would have to be ripped out. She had scheduled an afternoon meeting with the owners, the Millers, their interior designer, the project architect, and the general contractor's project manager to discuss the changes.

Hodgkins was worried about the project. Condominium sales were slow and the local economy appeared to be weakening. The project was behind schedule and over budget. The general contractor was angry about both the number and frequency of changes that were taking place on the project and the cost of estimating changes that did not go through. Several of the buyers had begun to complain about slower service, bad workmanship, and delayed closings.

Senior management at the Regency Hotel Group, however, remained committed to a high level of customer service and to their strategy of allowing buyers to customize their condominium units so long as he or she was willing to pay for any additional costs. Should she allow these changes to go through? Who would pay for the delays and wasted materials? And what should she tell the Millers?

The Project

The Regency Plaza was a mixed use project consisting of the 300-room Regency Plaza hotel and 96 luxury condominiums. The building was a 22-story steel and concrete structure with a brick and granite facade that blended well with the older buildings that surrounded it. The first two floors consisted of common areas that would be used by both the hotel and the condominium owners. The next eight floors were hotel rooms and the last 12 floors contained the condominium units. Two

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levels of underground parking provided 300 parking spaces for both the condominiums and the hotel.

The site was located on the east side of the Boston Common. Spectacular views of the park and city were available from the units facing westward. Units on the back of the building looked onto a city owned garage located on the lower end of Stuart Street.

Amenities at the project would include a four star restaurant, an exclusive health club, valet parking, and concierge service. Condominium owners would have access to all of the hotel's services. They could, for example, order room service from the hotel's main dining room. The condominium units were projected to sell for between $1,500,000 and $2,500,000.

The Regency Hotel Group

The Regency Hotel Group was the owner and operator of 24 luxury hotel properties that were located in major urban centers throughout the world. The company was renowned for both its emphasis on service and the extensive range of amenities that it offered at its hotels. Regency had developed all of its hotel properties in the past but this would be the first project that would include condominium units. Room rates at Regency hotels started at $550 per night.

The Project Management Team

Hodgkins was hired as a project manager by Regency in the spring of 2005 to manage the design, construction, and marketing of the condominium units. A three person sales staff would report directly to her. In addition, Regency hired Russell Farley, a well known condominium marketing consultant, to help with the initial design and marketing of the units. A separate project team would manage the hotel construction process.

KDS Associates was hired as the project architect. KDS specialized in hotel design and it had developed a strong working relationship with Regency on previous projects. A small local architecture firm, O'Brian and Sinclair, was retained by Regency to coordinate any condominium buyer changes with the base building design.

The Design Process

Hodgkins was hired just as the conceptual design of the project was nearing completion. The size, massing, and exterior details of the project had been arrived at through a series of tortuous discussions between Regency, KDS, the Boston Redevelopment Authority (BRA), and a number of vocal neighborhood groups. The size and layout of the floor plate were further complicated by the difficulty of designing a structure to accommodate condominiums over hotel rooms over a parking garage. The column spacing and the elevator core location, for example, were essentially fixed by these constraints. As a result, the floor plate could not be changed and the floor to ceiling height was a tight 8'-6" (see **Exhibit 1** for a typical floor plate).

One of the first decisions Hodgkins faced was the number, size, and mix of condominium units that would be offered. Farley recommended that Regency should build larger units even though this meant that only 72 units could be built. KDS argued that Regency should build 96 units since this was the maximum allowed by the BRA. Hodgkins knew that she was expected to hit the project's pro forma projections of $134.4 million in gross sale proceeds and $26 million in net profit from the condominium sales. Ultimately, she decided to build the maximum of 96 units, averaging 1,400 square feet, rather than fewer but larger units

More mundane considerations, such as the length of the hallways, the efficiency of the floor plans, the relationships of the room locations, and the placement of windows, also needed to be addressed. Should there be a mix of apartment sizes and types or should there be concentrations in either the large or small sizes? How should the units be priced?

The project was initially targeted toward wealthy couples in late middle age. It was hoped that these couples would either sell their suburban homes and move back into the city or purchase a condominium unit as a second home. The design and finishes of these units would obviously have a dramatic impact on unit sales and, ultimately, on the overall success or failure of the project.

The Bidding Process

Because they wanted a firm commitment on the cost of the project, senior management at Regency decided to use a fixed sum contract. They had also considered using either a cost plus contract, in which the general contractor would be paid for its costs plus a management fee, or a guaranteed maximum price contract (GMP), in which the general contractor would be paid for its actual cost plus a management fee up to a fixed ceiling.

During this time, KDS began to develop a set of bid documents from the original design drawings. The bid documents would consist of separate sets of architectural, structural, civil, mechanical, electrical, and plumbing drawings as well as a book of written specifications. These specifications described aspects of the project; such as material types, test requirements, warranties, and finishes; that could not be easily communicated on the drawings.

The drawings, specifications, and a written contract formed the contract documents that governed the construction process. Changes would be issued as addenda to the original contract documents and a contract change order would be issued to authorize the additional work. These were also the documents Regency would use to obtain building permits and certificates of occupancy for the hotel and the individual condominiums.

The Bids

When the bids came in, there was a wide range of prices. Many of the bids had a number of exclusions and exceptions. The Regency project management team spent the next four weeks meeting with each of the bidders to conduct a scope review during which they tried to ensure that each bid covered the full scope of work shown on the bid documents. Finally, after a series of adjustments to the bids, Regency decided to negotiate with the three lowest bidders.

Kelly Construction emerged as the lowest bidder with a bid of $157 million. They were also convinced to cut three months off their original estimate of 32 months. The schedule would be tight but as long as there were minimal changes, they expected no problems in reaching the deadline.

Construction Management

Throughout the fall of 2005, preparations for construction continued at a rapid pace. Kelly awarded a series of subcontracts for the major portions of the construction. Shop drawings and samples began to pour in for review. Items with long lead times, such as elevators and marble, were released for production by the manufacturers. Schedules for the project and for each trade were developed.

The shop drawings were detailed drawings that were prepared by each subcontractor. The shop drawings showed the location, finish, and details of the work that the subcontractor would be doing. When the drawings came in, they would be reviewed by the general contractor and then sent on to the architects and engineers for their review. Often, drawings would be reviewed three or four times before they would be approved. Each cycle could take up to a month. Kelly estimated that there would be close to 5000 shop drawings on this project.

Each subcontractor also submitted a schedule of values that broke out each major area of expense within its contract. The schedule of values, after Kelly approved it, became the basis for the subcontractor's monthly pay request. Each month, the subcontractor would submit an invoice which detailed the hours of labor and how much material had been put in place. Both Kelly and Regency would review and approve the pay requests.

The pay requests would then be consolidated for the project and submitted to the construction lender in order to receive a draw against the construction loan. Normally, 10% of the contract amount would be retained in order to ensure that the work was promptly and properly completed.

When a subcontractor neared completion of its work, Kelly would prepare a "punch list" of items or areas that needed to be corrected to bring them into compliance with the contract documents. The holdback of the 10% retention was often used to force the subcontractor to correct punch list items.

Marketing

Hodgkins created a comprehensive marketing and service program for the condominium units. Each of the condominium units would be sold with a package of appliances and finishes. On a small number of items, such as bathroom fixtures, the buyer would be given an allowance to use towards the purchase of these items.

Typically, Hodgkins would send each buyer a series of letters that described their options. Each letter described a default option that would be automatically selected if the buyer didn't respond by the specified cutoff date.

In general, however, Hodgkins hoped that changes would be minimal, not disruptive to hotel guests or other condo owners, and that most of them could be done by the buyer after the building was completed. For this reason, Hodgkins did not initiate discussions about customizing individual units. Senior management at Regency also hoped that it would not have to sell units to investors since they felt this would adversely affect the reputation of the project.

The Current Situation

By late June, construction work on the hotel was nearing completion. It was scheduled to open on July 15 and the hotel area was swarming with workers. Work slowed on the finish of the condominium units during May and June as manpower had been switched to the hotel in order to maintain the schedule. Now, however, Hodgkins could sense the pace of work in the condominium area picking up. There were over 250 construction workers at a time on the project and most of them would be working on the condominium floors within two weeks.

During the spring, the relationship between Regency and Kelly had begun to sour. A series of design changes delayed the project and raised costs. Kelly's project manager, Paul Grogan, had become increasingly frustrated by the increasing number of specialty items and unusual details. It was next to impossible for him to get good production runs and obtain sizable efficiencies.

Jeff Cunningham, Regency's project manager for the hotel portion of the project was also unhappy. As the project began to slip behind schedule, Cunningham noticed that manpower on the job had been decreasing. When he questioned Grogan, Grogan replied that he could not maintain the manpower levels due to the constant changes that were still being made to the project design.

Cunningham also had to pay for an extensive segment of hardwood flooring that needed to be replaced. Cunningham had verbally instructed Grogan to change the type of flooring in the master ballroom. When a brief spell of humid weather hit in early June, the flooring buckled. Grogan claimed that the flooring had been installed according to standard industry practice and that it was Cunningham's responsibility. Cunningham felt that the flooring should have been installed using a slower but more secure method.

The marketing of the condominium units went slowly. Only 30 out of 96 units pre-sold. Hodgkins hoped that as the units took shape and as the early buyers began to move in, the project would begin to gain some momentum. Hodgkins knew that the target market for this type of product was very thin and that word of mouth advertising would be critical. Even though the buyers were generally particular about details, Hodgkins wanted to minimize the cost of reconfiguring units in order to make sales.

The Changes at the Millers' Unit

Hodgkins could see from the sketches that the interior designer had, with a few strokes of a pen, made a series of major changes: the entrances to both bathrooms were reoriented, the master bedroom gained a new walk in closet, the den was enlarged, and the living room fireplace was shifted slightly (see **Exhibit 2** for the base building unit floor plan and the interior designer's sketch). Hodgkins knew that all of the trades would be affected by these changes. Ceilings would have to be dropped for recessed lights, sprinklers changed, and electric outlets and switches moved.

If she had the time, Hodgkins would have sent the sketches to O'Brian and Sinclair to have them turned into a set of working drawings. She would then have sent the drawings to Grogan who in turn would have sent them to each of the subcontractors. After Grogan collected the quotes from the subcontractors and prepared an estimate for the work, he would meet with Hodgkins to review the quotes. If they were acceptable, Hodgkins would submit them to the owner for approval; if Hodgkins felt that some portion needed to be reworked, the process would go through another iteration. Unfortunately, each iteration would take several weeks.

Grogan told Hodgkins that he could not continue to make extensive changes to the base building construction work and meet his budget and schedule requirements. If she wanted to make changes to the unit, she would have to give him written authorization stopping work on the unit and she would have to be prepared to pay subcontractor claims for up to $25,000 for out of sequence work. He further warned that the scheduled completion of the twelfth floor might be delayed by as much as two months if the changes affected the base building electrical, mechanical, plumbing or fire safety systems.

The Meeting

Hodgkins felt it was necessary to act quickly. A face to face meeting was the only way to obtain consensus on the many details to be resolved. She arranged a meeting inside the unit itself. Present would be Sam and Helen Miller, their interior designer Susan Randolph, Tom Sinclair from O'Brian and Sinclair, Paul Grogan from Kelly Construction, and Hodgkins. She was concerned, however, that the meeting could be explosive if she did not handle it carefully.

The Millers

Sam and Helen Miller decided to buy a condominium at the Regency Plaza to use as an apartment when they were in town and for entertaining business and personal friends. Sam was the president of a local high tech manufacturing firm and both of the Millers were active in the social circles of Boston. The Millers also had a large and beautiful home in Manchester, Massachusetts.

The Millers agreed to pay $1,500,000 for the unit and planned to spend an additional $200,000 for architectural changes. Furniture and furnishings could cost $75,000 to $150,000 per room. It was important to both of them that the unit be well laid out and beautifully decorated.

Helen Miller had become increasing concerned about the condominium over the past four months. The original closing date of June 1, 2007 had passed, and Regency unilaterally "extended" their closing date to August 1, 2007. Very little work had been done on the unit over the past two months and she doubted it would be ready by August 1.

She had also received several invoices from Hodgkins. One was for work that Tom Sinclair claimed to have performed. He had billed at $175 per hour and the total was over $1000 for a minor kitchen cabinet change that affected the plumbing. A second invoice for $500 was for the addition of two wall outlets. Similar work at their Manchester home had cost $150. She was beginning to wonder if they made a mistake when they signed a purchase and sale agreement and put down a 5% deposit five months earlier.

Susan Randolph

Susan Randolph was hired by the Millers in late April to customize their unit and furnish it. A well executed design would bring prestige and additional work to her business. Randolph would be judged on the basis of the finished unit and on the amount of money that it cost her client.

Randolph felt that neither Hodgkins nor Grogan paid enough attention to the aesthetics of the unit design. It was important that light fixtures be centered, the sight lines be clean, and that traffic flow be efficient and comfortable. She felt they were both focused on speed and efficiency rather than quality. This apartment would be here for years and she felt they should build it the right way.

She also felt that they were taking advantage of her clients' naiveté about construction costs and practices. She felt that part of her responsibilities were to fight for her clients' rights. Each dollar of contractor profit that she managed to cut could be used to upgrade her design. She understood the delays and frustrations involved in getting quotes, but she also did not want to expose her clients to surprises about the cost after the work had already been done.

Tom Sinclair

Tom Sinclair was hired by Regency to coordinate any customer changes with the base building design. The work was fairly straightforward and simply required him to coordinate a whole host of details. A mistake on his part, however, could be quite costly.

He had recently begun to get some pressure from Hodgkins to cut down on his billable hours. This was frustrating since many of the designs that were forwarded to him were incomplete, inconsistent or confusing. It was not surprising that it took him hours to coordinate the new designs and lay out the new floor plans and details. Now, Hodgkins wanted him to commit to changes on short notice and with incomplete information. After all, he knew that many of the changes would not be adopted once the cost of the work became clear.

Paul Grogan

Grogan was trying to manage 32 subcontractors and almost 250 construction personnel. Kelly originally budgeted a contingency of $7.8 million and a profit of $6.3 million for the entire project. Most of the contingency was gone. Under the fixed sum contract, any further cost overruns that were not authorized by the owner would come out of Kelly's profits and out of Grogan's hide.

In order to win the competitively bid contract, Kelly had to assume that it would be able to run the project efficiently. The cost for union labor ran between $60 and $90 per hour including benefits, depending upon the trade, and overtime was often twice that amount. Wasted time and mistakes were very expensive.

Kelly subcontracted out most of the work but this only partially solved Grogan's problems. If his subcontractors were losing money, they would make his life miserable. His job was to make sure that the job ran smoothly and a big part of this was controlling changes.

Grogan had already begun to assess the impact of the changes in the Millers' unit. The drywall studs had already been installed, the sprinkler system was in, the rough electrical wiring completed, and the mechanical ducts were in place. In addition, the appliances, fixtures, and door hardware for the unit were all stored in the bottom of the parking garage. There would be some demolition, layout, and additional construction work to do.

These were only the direct costs. Many of the subcontractors had a limited number of supervisory people. The new layouts would require additional supervision. The costs of any mistakes would have to be eaten by the subcontractor. The crews would also be a lot slower as they grappled with new dimensions and details. There was also the issue of doing the work out of sequence.

Grogan's immediate problem was that his drywall contractor had three teams of four men apiece that were ready to begin work on the condominium units on Monday morning. Behind them, the other trades were ready to move in and start work as soon as the drywall was up. He needed a commitment from Hodgkins about what he should do.

Hodgkins asked him for a price for the work but he told her he needed completed drawings in order to get quotes from his subcontractors. He was not willing to commit to a price unless he had a commitment from his subcontractors. He knew that many of his subcontractors were planning on charging a substantial premium to make the changes.

Grogan began to rough out in his own mind what he felt the changes would cost. He realized that clients never believed him when he told them his actual costs. In this case, he felt that his hard costs would be roughly $60,000. He wondered how much he should add for delays, inefficiencies, contingency, profit, and overhead.

Hodgkins's Options

Hodgkins felt that she had five options. The first and simplest option was to tell the Millers it was too late to customize the unit. They could, after they closed on the unit, make the changes themselves, although sprinkler changes could involve shutting down the entire floor and would require careful coordination.

The second option would involve trying to push through the changes. This would minimize the amount of work that would have to be ripped out. Grogan had told Hodgkins that he could not wait. It would be expensive to put a hold on the unit.

Unfortunately, Hodgkins knew that the Millers would not commit to the changes until they knew the cost. That would probably take several weeks. If she put a hold on the unit, estimated the cost of making the changes, and then the Millers decided not to make any changes, who would pay for the hold?

She was also worried that the estimates for the work would be outrageous. Some contractors bid jobs on a break even basis and then make their profit on change orders.

Her third option was to hire a small general contractor to come in and finish out the unit before the closing. It was extremely difficult to get other contractors to come onto a job site for small items though. Their mobilization and overhead expenses would make their quotes prohibitive. Other drawbacks to this approach were that Kelly would probably give a very small credit for the work done and materials that had already been purchased and that managing two general contractors was difficult. If the second general contractor used nonunion labor there was always the possibility of violence and vandalism, not to mention arguments over who would be responsible for which punch list items.

Her fourth option involved stopping work on the unit and turning it over to the Millers as an empty shell that they could finish at their convenience. There were several problems with this option. Most banks would not lend against a unit until the developer obtained a certificate of occupancy for the unit. Some banks would make exceptions for special clients or for buyers who would be putting up very large down payments. Hodgkins was not sure if the Millers would be able to do this. For the other units in the building, it would further shrink an already small target customer pool. This option would also reduce Regency's control over the project. The hotel management team was concerned about the impact of continuing construction operations in a building that also held a luxury hotel.

The fifth option was to move the Millers to a different unit on a higher floor where the interior work had not yet started. This would buy some additional time. Unfortunately, the building floor plate changed as the building stepped back as it went up. An identical unit was not available on a higher floor. Higher floor units were also more expensive and Susan Randolph had already spent several days working on her design.

Hodgkins tried to estimate the cost impact of the various options. Units of an average of 1,400 square feet were now selling at an average price of $1,400,000 or $1000 per square foot. She felt this price was lower than the prices that had been obtained in the area a year ago. At that time, she had hoped to sell the units at $1200 per square foot. But now, the market was tighter and buyers were more cost conscious. Experience also showed that layout, views, exposure, outside decks, and even distance from the elevators all contributed to variations in prices that could be realized.

If she turned over units in a "shell" condition with only a base electrical system, an HVAC base unit and rough plumbing stacks, she could give the buyer an allowance of $100 per square foot. If a buyer later wanted one of the standard layouts it would cost about $200 per square foot more to do the work since the work would not be done in sequence. If the owners designed their own unit, the costs might range from $100 to $300 per square foot, depending on the layout and the quality of the finishes.

The Millers' redesign of their unit also raised the question as to whether or not the sales rate or the sale prices for the condominium units would be increased if the floor plans of the units were revised. Many of the early buyers had made extensive revisions to their units. Obviously, there were elements of the condominium unit layouts that many of the prospective owners did not like. Some were, in fact, spending significant amounts of money to rip out existing work. Maybe there was a better design.

Even though she knew it was unlikely that major changes would be made at this late date, Hodgkins decided to take the typical floor plan shown on **Exhibit 1** and try a new set of layouts. There was 11,200 square feet of salable space on this floor and she hoped to lay out six to nine units in this space. (Many of the upper floors were smaller than lower floors, as part of the design intent). Even if she decided not to revise the floor plan, she felt that this exercise would help her to better understand the constraints of the shape of the building. She might be able to anticipate buyer concerns earlier and minimize changes late in the process. Changes were not only costly, but generally led to resentments by everyone. Still, she might make more sales by providing potential buyers with additional layouts.

The excitement and variety kept her going. Balancing a "big picture" approach with a need to solve myriad detailed problems seemed to be the norm for a project manager in real estate. Irrespective of the overall marketing issues, she now had to make a decision on how to handle the Millers' unit.

Exhibit 1

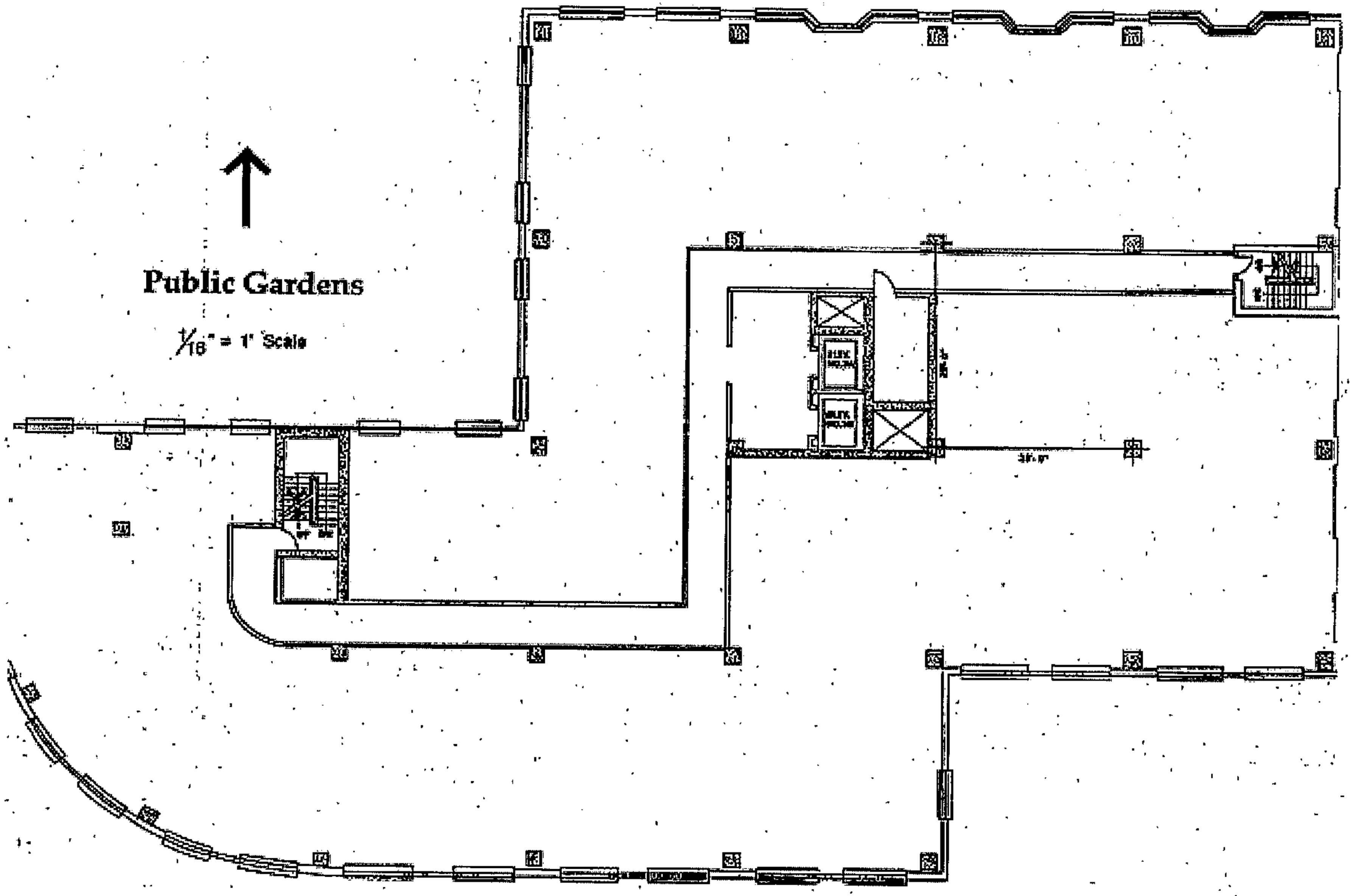
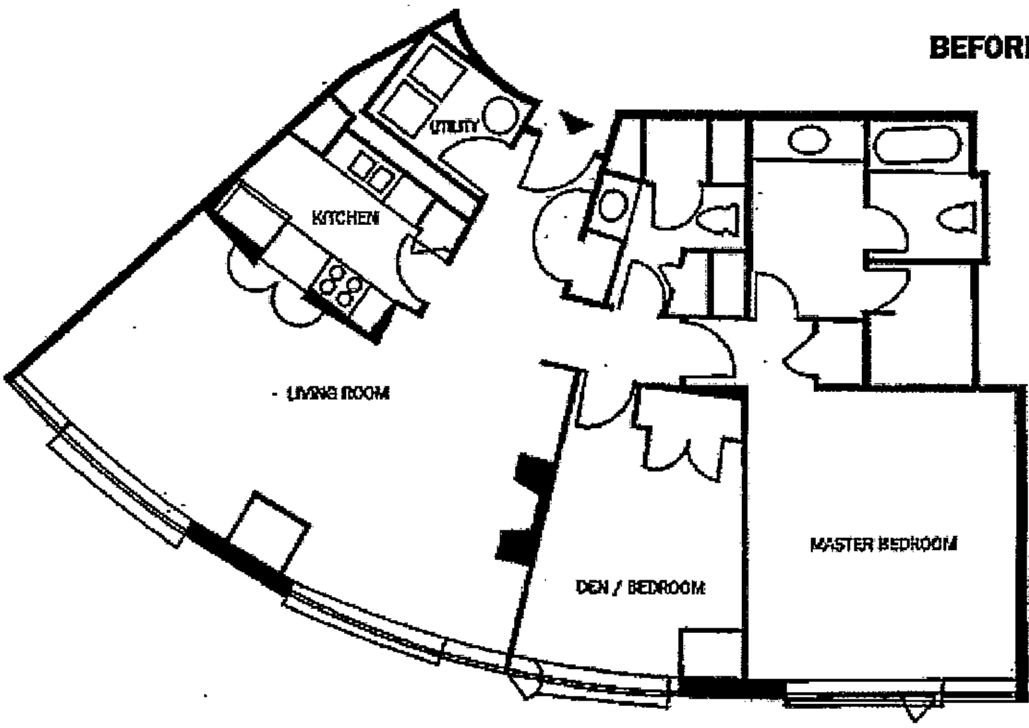


Exhibit 2

BEFORE



AFTER