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# **BOROSCOPIC INSPECTION REPORT**

**PHASE 2**

**25 SIGOURNEY STREET  
HARTFORD, CT**

**PREPARED FOR  
STATE OF CONNECTICUT  
DEPARTMENT OF PUBLIC WORKS  
FACILITIES MANAGEMENT  
165 CAPITOL AVENUE  
HARTFORD, CT 06106**

**SEPTEMBER 25, 2002**

**PREPARED BY**

**AIR TECHNOLOGY, INC  
333 W. 39<sup>TH</sup> STREET, SUITE 904  
NEW YORK, NY 10018  
1-646-522-7233**

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## PURPOSE OF REPORT

The State of Connecticut has been undergoing envelope repair to 25 Sigourney Street ever since its acquisition of the building 6 years ago. Leaks have been reported through the fenestration system and the brick system which may have subsequently produced mold. In the year 2,000, the State remediated the mold in some locations of the building. Still, Indoor Air Quality health related complaints were received from workers in some parts of the building. The State prepared a more extensive envelope repair and mold remediation project which is being performed at this time. Still, Indoor Air Quality health related complaints were registered. While the envelope repair and mold remediation project was addressing known points of water infiltration and visible mold, the State Department of Public Works Facilities Management Office was concerned that water may have infiltrated other points in the envelope or in bathroom chases that was not visible and should be remediated while this project is underway. That Office contracted with EnviroMed Services, Inc. an environmental consulting company, to arrange for boroscopic inspections in other locations in the perimeter walls and in toilet chases not being addressed in the remediation contract. EnviroMed Services, Inc. contracted with Air Technology, Inc. to perform the technical boroscopic inspections while EnviroMed Services, Inc. would oversee the findings. 98 locations were investigated in Phase one of this work. A report of those findings was delivered on September 10<sup>th</sup>, 2002. This is the report of the second Phase of that work, an additional 84 locations.

## **BUILDING DESCRIPTION**

1. The building is a seventeen year old 20 story high rise structure. It has building code classification of 1B Protected. To get that fire resistance rating, the structure is reinforced concrete and the remaining envelope is made of masonry. The envelope is brick faced. Generally, that means the construction cross section is, from the inside out, gypsum board on metal studs or channels, on reinforced concrete or concrete block, rigid insulation, air space, and 4" of face brick. There is substantial glass on the exterior in aluminum casings abutting the masonry. There are balconies on the 19<sup>th</sup>, 18<sup>th</sup> and 17<sup>th</sup> floors.
- 2.. The 20<sup>th</sup> floor is a penthouse of approximately 40% of the area of a typical floor. Floors 19 thru 6 are typical office floors. Floor 5 is a mezzanine floor with some offices, cafeteria and garage space. Floor 4 has the entry level with some office, retail and garage space. Floors 3 to 1 are garage levels.

## **INVESTIGATION PROCEDURE PHASE 2**

1. The State Department of Public Works Facilities Management Office marked areas of concern on reduced drawings of the building for the investigators to explore.
2. A team from ATI, composed of the same technicians that performed Phase 1, went back to the building Thursday and Friday, September 19<sup>th</sup> and 20<sup>th</sup>. They were accompanied by an agent from DPW Facilities Department.
3. The team decided to investigate from the top down. On the first day, September 19<sup>th</sup>, work began on the 19<sup>th</sup> floor. It then went to the 18<sup>th</sup> floor and to the 16<sup>th</sup> floor.
4. The following day, September 20<sup>th</sup>, work went to the 15<sup>th</sup>, 14<sup>th</sup>, 10<sup>th</sup>, 9<sup>th</sup>, 8<sup>th</sup> and 7<sup>th</sup> floors.
5. The technician inserted a new type of boroscope in a 1 1/2" hole he created and performed the inspection. Suspicious materials were defined as water staining, rust or corrosion, or spotting which could be mold.
6. These probes were recorded in a video for future confirmation. The location # and floor were written on a tape above the hole. This was videoed before the boroscope was inserted. The video should be paused to get a good view of this and for viewing suspicious materials. The video will now be available for a record of what was found.

## INVESTIGATION PROCEEDINGS

Appendix A illustrates each floor which was investigated starting from the 19<sup>th</sup> to the 7<sup>th</sup>. In red, the number of the boroscopic probe is indicated at the location tested. The letter B after the location # will designate Phase 2.

### 19<sup>TH</sup> FLOOR

LOCATION #1B: This is window wall at the conference room. 2 holes were made but there was not enough space to video. Concrete too close.

LOCATION #2B: Room 1922, below desk. No contamination was seen.

LOCATION #3B: This is taken at the bottom of the file cabinets. No contamination was seen.

LOCATION #4B: This is taken through exposed wall next to balcony. No contamination was seen.

LOCATION #5B: This is taken in room 1930 in column by window. Debris found but no contamination was seen.

LOCATION #6B: This is taken in room 1933 through exposed wall. No contamination was seen.

LOCATION #7B: This is taken in room 1933 through other exposed wall. Minor water stain on concrete block. Gypsum board was clean.

LOCATION #8B: This is taken in room 1934 through exposed wall. No contamination was seen.

### 18<sup>TH</sup> FLOOR

LOCATION #9B: This is taken in the wall behind Brian Lux's area. No contamination was seen.

LOCATION #10B: This is taken in the outer wall in the conference room 1827. No contamination was seen.

LOCATION #11B: This is taken in the outer wall in S. Thorpe's office. Lots of debris found. Pitting seen on studs, but no contamination was seen.

LOCATION #12B: This is in wall along corridor by balcony. No contamination was seen.

LOCATION #13B: This is in exposed wall beside balcony. No contamination was seen.

LOCATION #14B: This is in exposed other wall beside balcony. No contamination was seen.

LOCATION #14B-1: This is another penetration in that same location Debris found but. no contamination was seen.

LOCATION #15B: This is wall by balcony behind S. Page's location. No contamination was seen.

LOCATION 16B: This is behind R. DeMilia's work station. Water damage seen on gypsum board from top to bottom.

LOCATION #17B: This is in a wall in room 1824. No contamination was seen.

LOCATION #18B: This is in a wall in room 1825. No contamination was seen.

LOCATION #19B: This is in a wall in room 1820 behind file cabinets. No contamination was seen.

LOCATION #20B: This is in a wall in room 1820 behind desk and cubicle wall at window. Water staining found on gypsum board.

LOCATION #21B: This is in a wall in room 1820 behind another desk and cubicle wall at window. No contamination was seen.

LOCATION #22B: This is in a wall in room 1819 by center column. Water staining found on gypsum board.

LOCATION #23B: This is in a wall in room 1817 by left column Water staining found on gypsum board.

LOCATION #24B: This is in a wall in room 1817 by right column. Water staining found on gypsum board.

LOCATION #25B: This is in a wall in room 1813 by left column. Water staining found on gypsum board with very possible mold seen. Concrete was also water stained.

LOCATION #26B: This is in a wall in room 1813 by right column. Water stained gypsum board seen.

LOCATION #27B: This is in a wall behind A. Roberge's right column. No contamination was seen.

LOCATION #28B: This is in a wall behind N. Rosado's right column. Lots of debris but no contamination seen.

LOCATION #29B: This is in room 1812 center area below window sill. Water staining found on gypsum board.

LOCATION #30B: This is in a center portion of the wall in room 1810. No contamination was seen.

LOCATION #31B: This is taken by left column behind clock at bottom of file cabinets. Water staining found and material that very well may be mold.

LOCATION #32B: This is taken by right column behind clock at bottom of file cabinets. No contamination found.

LOCATION #33B: This is in a wall by left column behind L. Ryder. No contamination seen.

LOCATION #34B: This is in a wall by right column behind L. Ryder. No contamination seen.

LOCATION #35B: This is center of the wall of the lounge. No contamination seen.

LOCATION #36B: This is in the left wall of room 1831. No contamination seen.

LOCATION #37B: This is in the right column of room 1831. Area behind desk appears to have mold starting at stud and track.

LOCATION 38B: This is taken at the alcove behind the file cabinets. Debris found and water staining found.

## **16<sup>TH</sup> FLOOR**

LOCATION #39B: This is taken at the left column of the new training room. No contamination was found.

LOCATION #40B: This is taken at the center column of the new training room. Suspicious black spots seen.

LOCATION #41B: This is taken at V. Ohri's work station. Suspicious black spots seen.

LOCATION #42B: This is taken at the left column of room 1618. Suspicious black spots seen all the way up gypsum board.

LOCATION #43B: This is taken at the left column of room 1617. Lots of debris seen and suspicious black spots seen on stud and gypsum board.

LOCATION #44B: This is taken at the right column of room 1617. No contamination was found.

LOCATION #45B: This is taken at the East hallway by the copier. No contamination was found.

LOCATION #46B: This is taken at the South hallway at 4<sup>th</sup> column. Water staining was found.

LOCATION #47B: This is taken at the South hallway at 6<sup>th</sup> column. Discoloration that looks like mold seen along studs.

LOCATION #48B: This is taken at the column behind D. Raheb.. Water staining was found. Suspicious black marks found.

LOCATION #49B: This is taken at the left column behind R. Santana. No contamination was found.

### **15<sup>TH</sup> FLOOR**

LOCATION #50B: This is taken at the left column behind G. Dawling. Couldn't see because of concrete.

LOCATION #50-B-1: This is taken at the same place near the corner. Debris found but no contamination.

LOCATION 51B: This is taken at the column behind L. Agüero. Water staining found.

### **14<sup>TH</sup> FLOOR**

LOCATION 52B: This is taken at the left column behind L. Perkins. Water staining found.

LOCATION 53B: This is taken at the left column by coke machine. No contamination was found.

LOCATION 54B: This is taken at the center window wall behind R. Hyatt. No contamination was found.

LOCATION 55B: This is taken at the left column behind A. DiMauro. No contamination was found.

### **10<sup>TH</sup> FLOOR**

LOCATION 56B: This is taken at the column outside of room 1005. No contamination was found.

LOCATION 56B-1: This is taken at the left column outside of room 1005. No contamination was found.

LOCATION 57B: This is taken at the center window of room 1005. No contamination was found.

LOCATION 58B: This is taken at the right column behind desk of room 1005. No contamination was found.

LOCATION 59B: This is taken at the column by clock behind J. Rodriguez. No contamination was found.

LOCATION #60B: This is taken at the left column of room 1004. Water staining found. Broken gypsum board found at track.

LOCATION #61B: This view was taken at the center of the window wall of room 1004. No contamination found.

LOCATION #62B: This view was taken at the right column of room 1004. No contamination found.

LOCATION #63B: This view was taken at the left of the window wall of room 1026. No contamination found.

LOCATION #64B: This view was taken at the center of the window wall of room 1026. No contamination found.

LOCATION #65B: This view was taken at the left of the window wall of room 1026. No contamination found.

LOCATION #66B: This view was taken at the lounge wall, room 1002. No contamination found.

## **9<sup>TH</sup> FLOOR**

LOCATION 67B: This is taken at the left column by room 905. Light water staining found.

LOCATION 68B: This is taken at the center window wall of room 905. No contamination was found.

LOCATION 69B: This is taken at the right column of room 905. No contamination was found.

LOCATION 70B: This is taken at the center window wall of room 922 (Brennan). No contamination was found.

LOCATION 71B: This is taken at the conference room 901. No contamination was found.

## **8<sup>TH</sup> FLOOR**

LOCATION 72B: This is taken at the left window wall by room 804. Light water staining found on cardboard.

LOCATION 73B: This is taken at the center window wall of room 804. Debris found but no contamination was found.

LOCATION 74B: This is taken at the right window wall of room 804. No contamination was found.

LOCATION 75B: This is taken at the left window wall of room 818 (S. McCormick). Water staining found.

LOCATION 76B: This is taken at the center window wall of room 818. No contamination was found.

LOCATION 77B: This is taken at the right window wall of room 818. No contamination was found.

LOCATION 78B: This is taken at the right window wall of room 802 (Lounge). No contamination was found.

## **7<sup>TH</sup> FLOOR**

LOCATION 79B: This is taken at the left window wall by room 704. No contamination found.

LOCATION 80B: This is taken at the center window wall of room 704. No contamination was found.

LOCATION 81B: This is taken at the right window wall of room 704. No contamination was found.

LOCATION 82B: This is taken at the left window wall by room 720. No contamination found.

LOCATION 83B: This is taken at the center window wall of room 720. No contamination was found.

LOCATION 84B: This is taken at the right window wall of room 720. No contamination was found.

## **DETERMINANTS TO RECOMMENDATIONS**

1. The method of doing this study was through a boroscope connected to a video. All the results indicated above can be verified or challenged by the video itself which accompanies this report.
2. If water staining, suspicious black material or obvious mold is found through the probes, our recommendation is to remove the gypsum board and remediate the wall. **(Recommendation A).**
3. If we see no evidence of water infiltration, then we recommend nothing more be done to this wall **(Recommendation B).**

## RECOMMENDATIONS

**RECOMMENDATION A** (Remove the gypsum board and remediate the wall without further investigation)

LOCATION 7B, LOCATION 16B, LOCATION 20B, LOCATION 22B, LOCATION 23B, LOCATION 25B, LOCATION 26B, LOCATION 29B, LOCATION 31B, LOCATION 33B, LOCATION 37B, LOCATION 38B, LOCATION 40B, LOCATION 41B, LOCATION 42B, LOCATION 43B, LOCATION 46B, LOCATION 47B, LOCATION 48B, LOCATION 51B, LOCATION 52B, LOCATION 60B, LOCATION 65B, LOCATION 67B, LOCATION 72B, and LOCATION 75B.

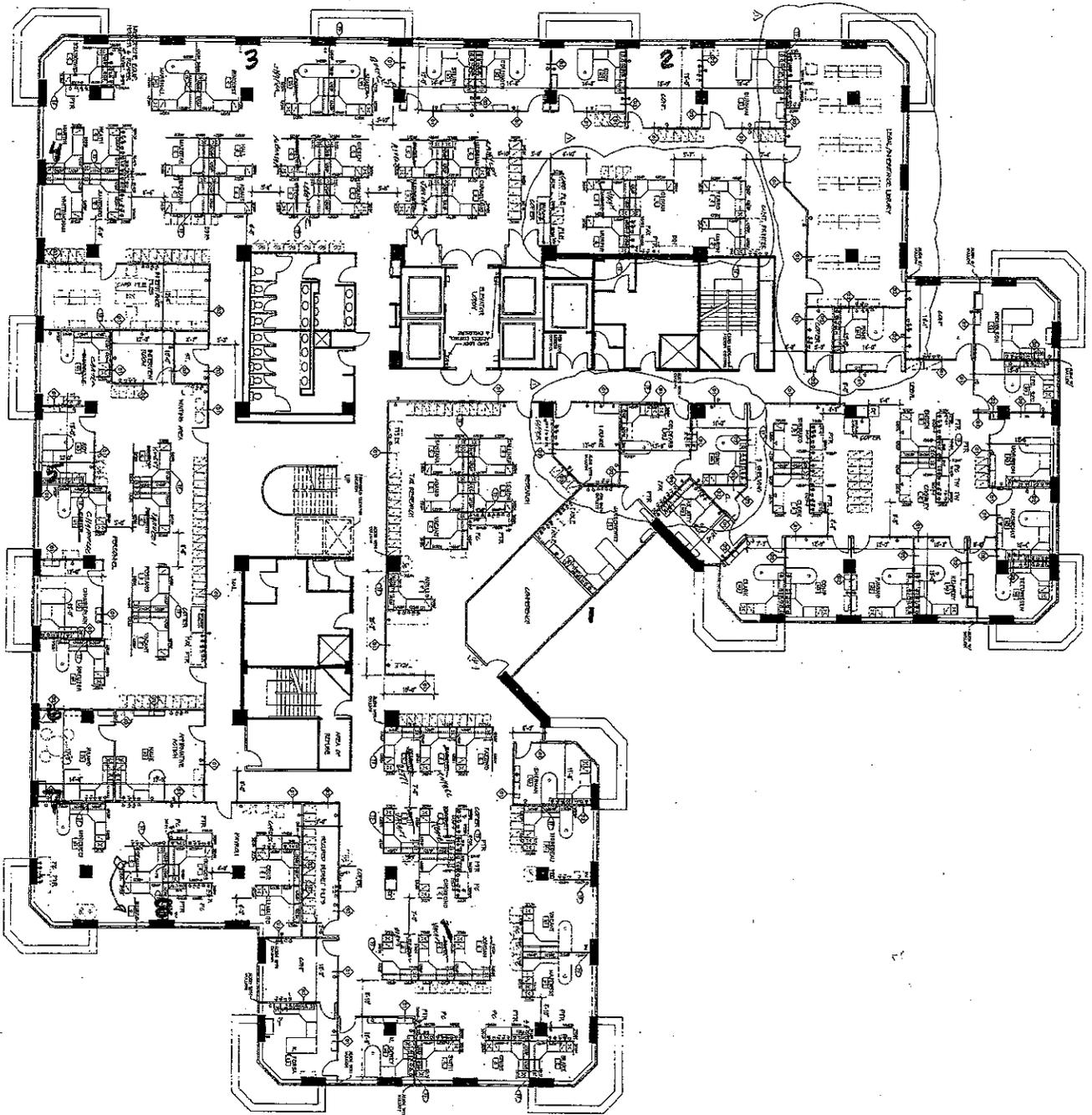
**RECOMMENDATION B** (Nothing more be done at this location).

LOCATION 1B, LOCATION 2B, LOCATION 3B, LOCATION 4B, LOCATION 5B, LOCATION 6B, LOCATION 8B, LOCATION 9B, LOCATION 10B, LOCATION 11B, LOCATION 12B, LOCATION 13B, LOCATION 14B, LOCATION 14B-1, LOCATION 15B, LOCATION 17B, LOCATION 18B, LOCATION 19B, LOCATION 21B, LOCATION 24B, LOCATION 27B, LOCATION 28B, LOCATION 30B, LOCATION 32B, LOCATION 34B, LOCATION 35B, LOCATION 36B, LOCATION 39B, LOCATION 44B, LOCATION 45B, LOCATION 49B, LOCATION 50B, LOCATION 50B-1, LOCATION 53B, LOCATION 54B, LOCATION 55B, LOCATION 56B, LOCATION 57B, LOCATION 58B, LOCATION 59B, LOCATION 61B, LOCATION 62B, LOCATION 63B, LOCATION 64B, LOCATION 66B, LOCATION 68B, LOCATION 69B, LOCATION 70B, LOCATION 71B, LOCATION 73B, LOCATION 74B, LOCATION 76B, LOCATION 77B, LOCATION 78B, LOCATION 79B, LOCATION 80B, LOCATION 81B, LOCATION 82B, LOCATION 83B, and, LOCATION 84B.

## **APPENDIX A**

### **Drawings showing probe locations**

FLOOR NINETEEN FURNITURE PLAN



- GENERAL NOTES:**
1. REFER TO THE 19th FLOOR GENERAL NOTES FOR FLOOR FINISHES, WALL FINISHES, CEILING FINISHES, AND LIGHTING FIXTURES.
  2. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE ELEVATOR AND STAIRS.
  3. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE MEETING ROOMS AND CONFERENCE ROOMS.
  4. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE RECEPTION AREA AND LOBBY.
- ELECTRICAL/ECCOMM. NOTES:**
1. ALL ELECTRICAL AND COMMUNICATIONS SYMBOLS ARE TO BE INSTALLED IN ACCORDANCE WITH THE 19th FLOOR GENERAL NOTES.
  2. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE ELECTRICAL AND COMMUNICATIONS PANELS.
  3. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE TELEPHONE AND DATA JACKS.
  4. REFER TO THE 19th FLOOR GENERAL NOTES FOR THE LOCATION OF THE FIRE ALARM AND SMOKE DETECTOR.

SF19

DATE: 6/23/14  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 APPROVED BY: [Name]

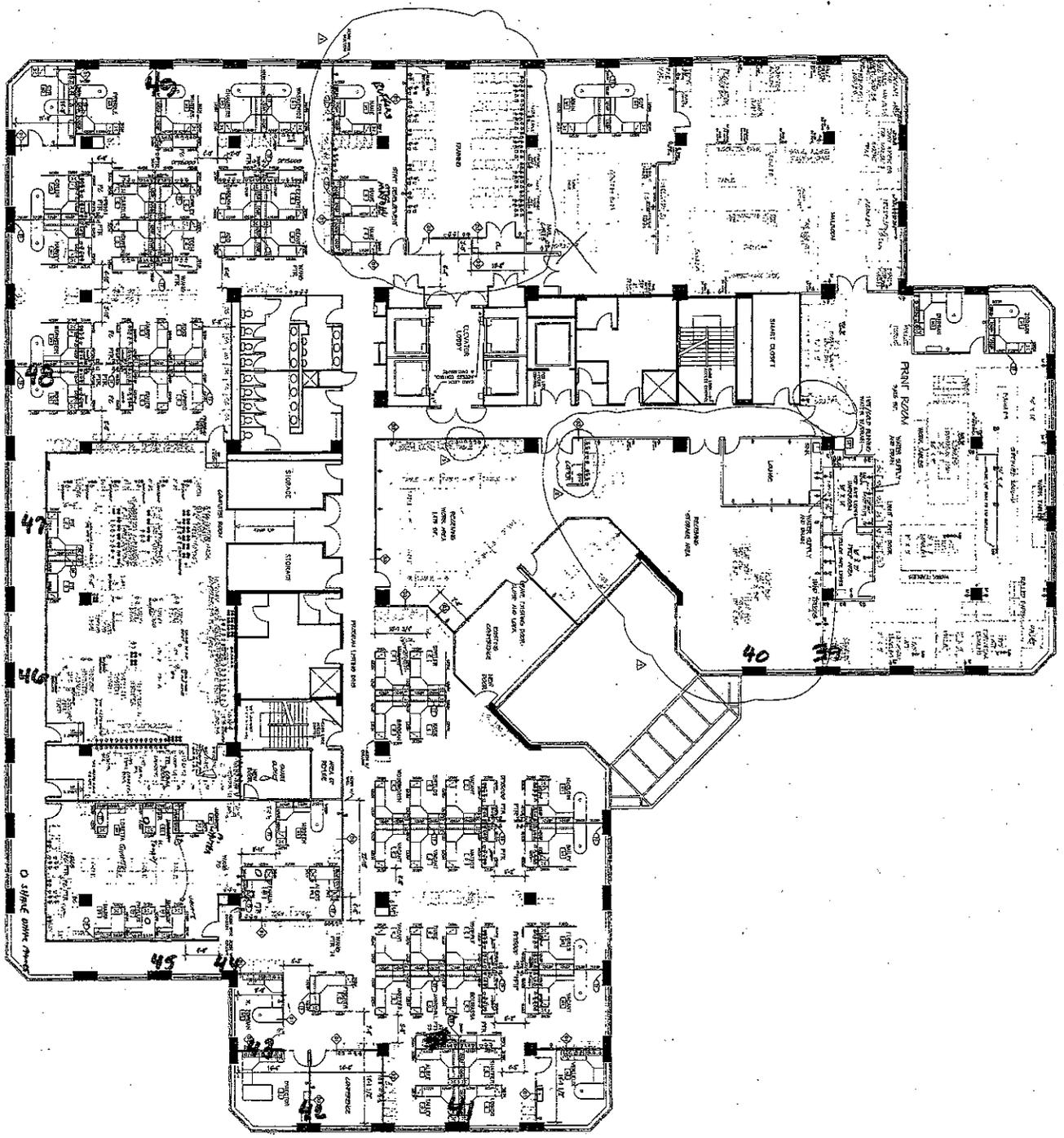
Architects & Planners  
 75 Bess Road  
 West Hartford, CT 06107  
 (203) 521-0752

THE  
**MEAD**  
 GROUP

200  
 PARK  
 PLACE  
 HARTFORD,  
 CONNECTICUT



FLOOR SIXTEEN FURNITURE PLAN



GENERAL NOTES:

1. REFER TO THE 1/4" SCALE CONSTRUCTION PLAN FOR THE LOCATION OF ALL WALLS, DOORS, WINDOWS, AND OTHER FEATURES. THE 1/4" SCALE FLOOR PLAN IS TO BE USED TO DETERMINE THE LOCATION OF ALL FURNITURE AND FIXTURES.
2. THE 1/4" SCALE FLOOR PLAN IS TO BE USED TO DETERMINE THE LOCATION OF ALL FURNITURE AND FIXTURES.
3. THE 1/4" SCALE FLOOR PLAN IS TO BE USED TO DETERMINE THE LOCATION OF ALL FURNITURE AND FIXTURES.
4. THE 1/4" SCALE FLOOR PLAN IS TO BE USED TO DETERMINE THE LOCATION OF ALL FURNITURE AND FIXTURES.

ELECTRICAL/EQUIPMENT NOTES:

1. ALL ELECTRICAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES.
2. ALL ELECTRICAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES.
3. ALL ELECTRICAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) AND ALL LOCAL CODES.

SF-16

FLOOR SIXTEEN FURNITURE PLAN

REV	DATE	DESCRIPTION
1	02/24/94	ISSUED FOR PERMIT
2	03/10/94	ISSUED FOR PERMIT
3	03/10/94	ISSUED FOR PERMIT
4	03/10/94	ISSUED FOR PERMIT

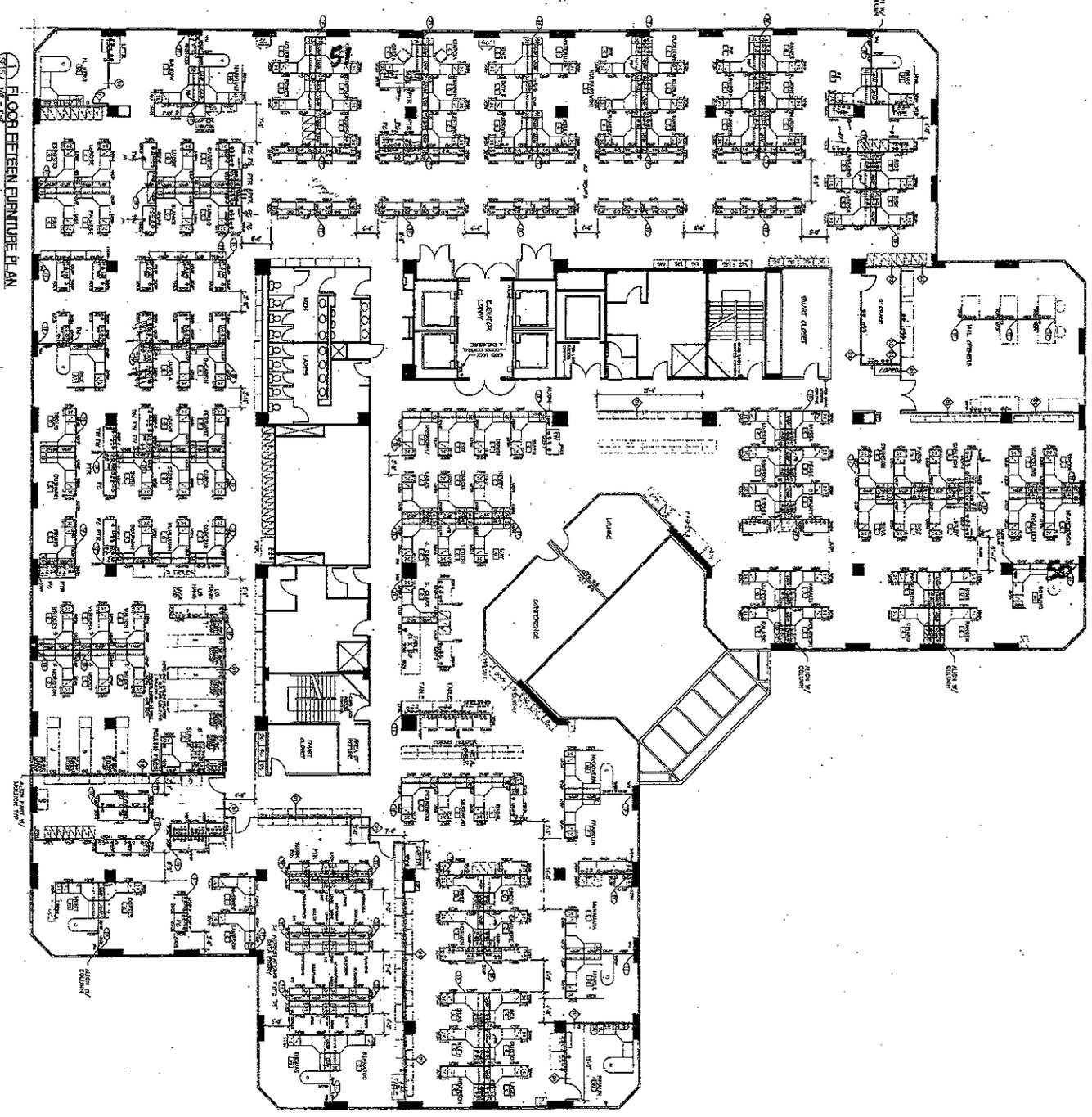
Scale: 1/4" = 1'-0"

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75 Beech Road  
West Hartford, CT 06107  
(203) 521-0552

THE MEAD GROUP

HARTFORD, CONNECTICUT

200 PARK PLACE



FLOOR FIFTEEN FURNITURE PLAN

**GENERAL NOTES:**

1. REFER TO THE 1/4" SCALE ARCHITECTURAL FLOOR PLANS FOR ROOM SIZES, WALL THICKNESSES, AND DOOR SIZES. DO NOT ASSUME ROOM SIZES OR DOOR SIZES ARE CORRECT UNLESS SPECIFICALLY NOTED OTHERWISE.
2. REFER TO THE 1/4" SCALE ARCHITECTURAL FLOOR PLANS FOR THE LOCATION OF ALL WALLS, DOORS, AND WINDOWS.
3. NON-STRUCTURAL CONCRETE PARTS SHALL BE CAST IN PLACE CONCRETE. ALL STRUCTURAL CONCRETE SHALL BE CAST IN PLACE CONCRETE.
4. REFER TO THE 1/4" SCALE ARCHITECTURAL FLOOR PLANS FOR THE LOCATION OF ALL WALLS, DOORS, AND WINDOWS.

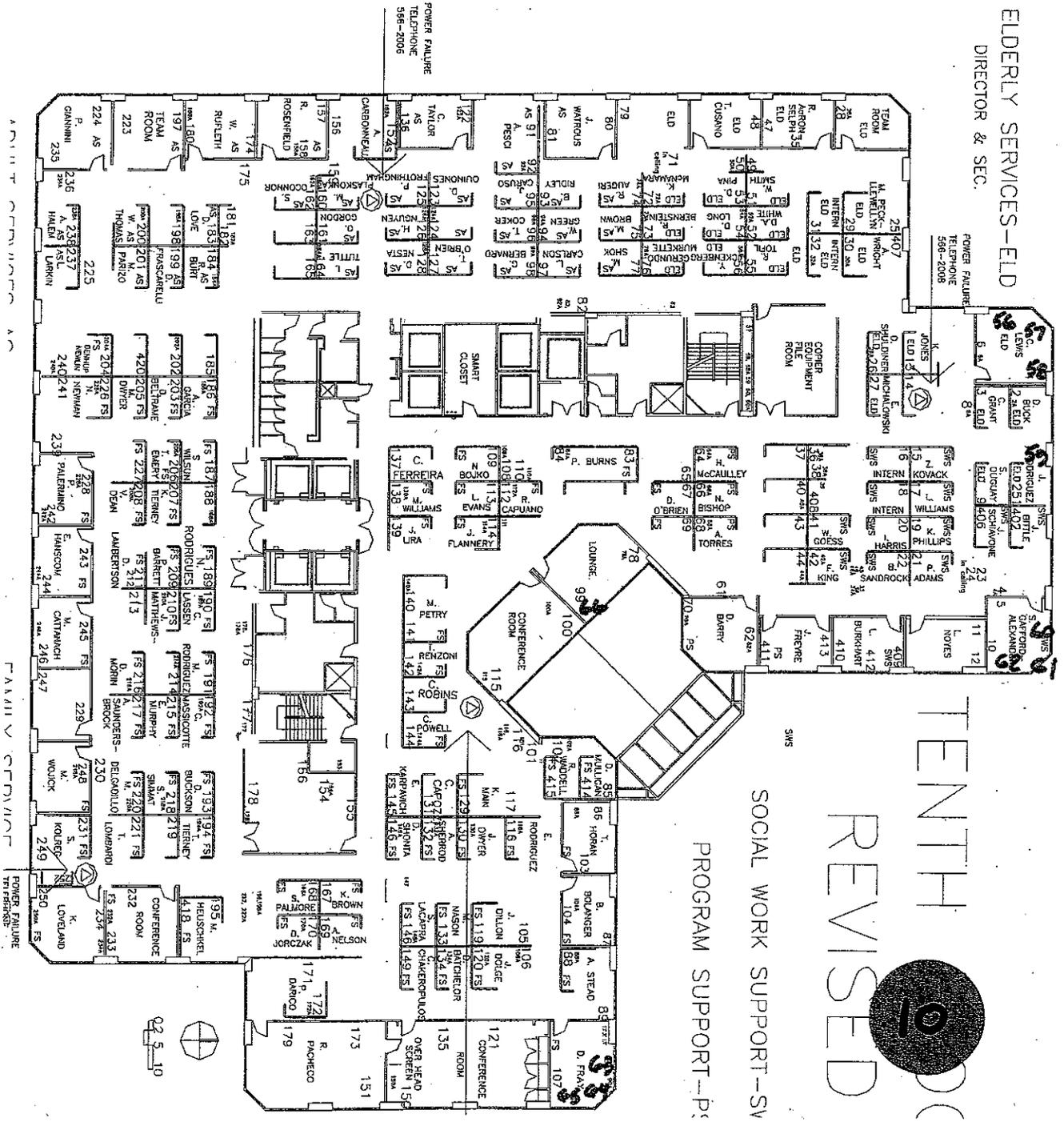
**ELECT./TELECOMM. NOTES:**

1. ALL TELEPHONE AND DATA CABLES SHALL BE INSTALLED IN THE CONCEALED MANNER SHOWN ON THE ARCHITECTURAL FLOOR PLANS.
2. REFER TO THE 1/4" SCALE ARCHITECTURAL FLOOR PLANS FOR THE LOCATION OF ALL WALLS, DOORS, AND WINDOWS.
3. REFER TO THE 1/4" SCALE ARCHITECTURAL FLOOR PLANS FOR THE LOCATION OF ALL WALLS, DOORS, AND WINDOWS.



ELDERLY SERVICES-ELD  
DIRECTOR & SEC.

POWER FAILURE  
TELEPHONE  
588-2008



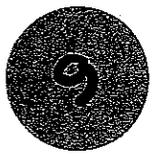
TENTH FLOOR  
REVISSED

SOCIAL WORK SUPPORT-SV  
PROGRAM SUPPORT-P

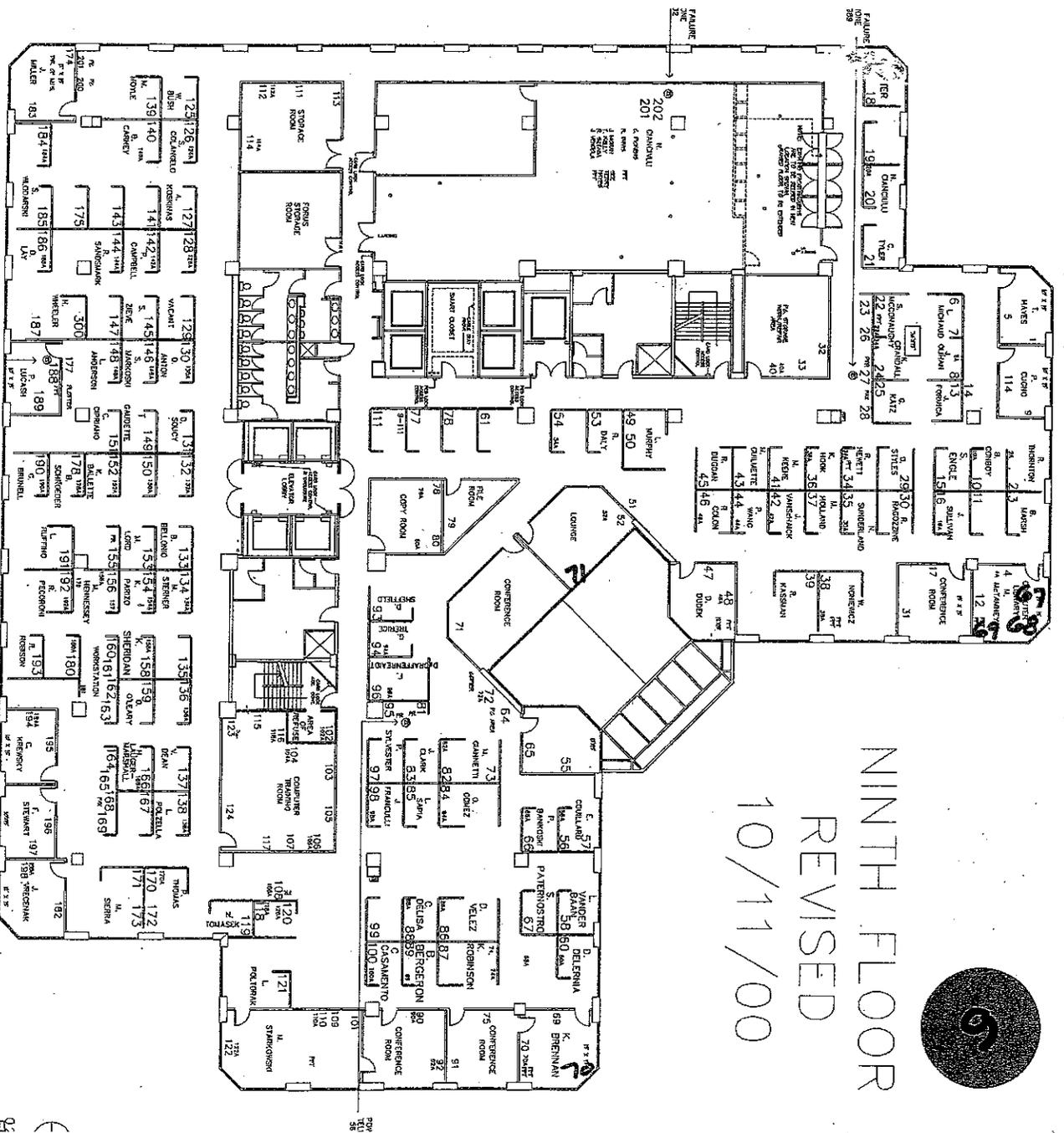
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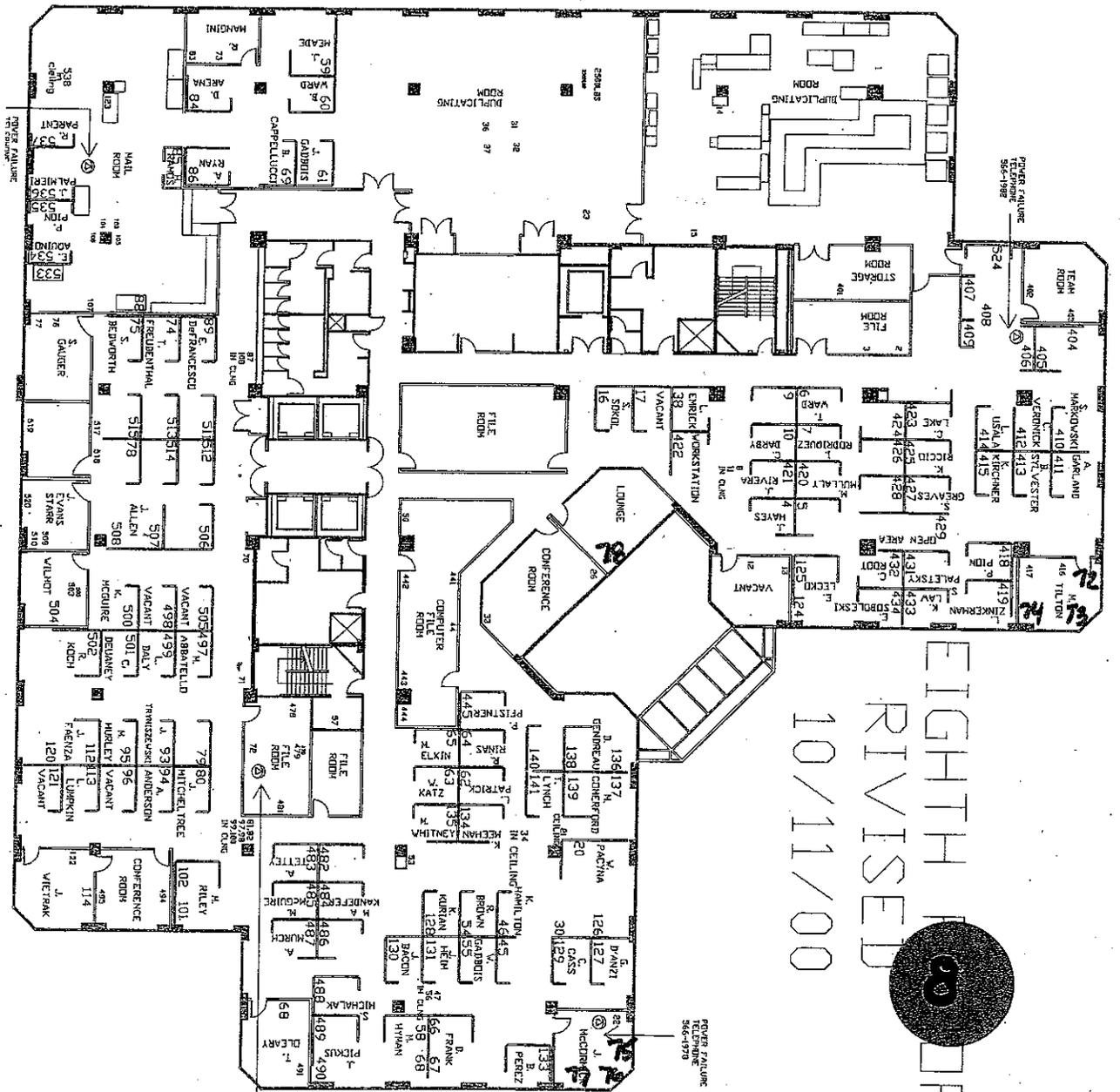
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TELEPHONE

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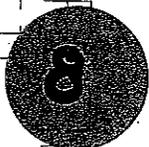
# NINTH FLOOR REVISED 10/11/00





EIGHTH FLOOR

10/11/00



POWER FAILURE  
TELEPHONE  
366-1778



# SEVENTH FLOOR

## REVISED 10/6/00

