PLAINTIFF'S EXHIBIT
ATT-445

Bell Laboratories

subject: Asbestos Study, 11th Floor
AT&T Long Lines "C" Building
440 Hamilton Avenue
While Plains, N.Y.
July 24 and 30, 1980
Case: 48106-3

date: August 19, 1980

from: David Rainer

MEMORANDUM FOR RECORD

Introduction

At the request of Mr. George Barnard and Mr. Lucius Williams of AT&T Long Lines, an environmental study was conducted by Mr. David Rainer of the Bell Laboratories Environmental Health and Safety Department at 440 Hamilton Avenue, White Plains, New York. The purpose of this study was to determine if asbestos was present in the 11th floor ceiling insulation of 440 Hamilton Avenue "C" Building before work commenced on floor alterations.

Summary

The results of bulk sample analysis for asbestos conducted at the aforementioned location indicate that asbestos is present in several locations on the 11th floor (Figure 1). The quantity is less than 10% and the distribution of the material is not localized.

Recommendations

Although asbestos was found in some locations and not others on the 11th floor, it would be beneficial to standardize maintenance work practices on the 11th floor by assuming asbestos is present in all locations.

All persons who have occasion to work above the hung ceiling on the 11th floor should be informed of the contents of this report.

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Method

Samples were collected and evaluated on site. Full thickness insulation samples were obtained by penetrating the insulation surface with a small container using a twisting motion. One sample was collected from each building bay as designated in Figure 1. All building bays on the 11th floor were sampled. The samples were analyzed by Mr. David Rainer of the Bell Laboratories Environmental Health and Safety Department. Analysis was performed by using a Leitz optical light microscope equipped with a polarizing filter. Dispersion staining oils with various refractive indices were used. In some cases, material that was tentatively identified as asbestos by light microscopy was re-evaluated by x-ray diffraction.

Results

See Tables 1 and 2

Conclusions

The distribution of asbestos on the 11th floor of 440 Hamilton Avenue "C" building is haphazard. Caution should be exercised by maintenance personnel throughout the 11th floor when working above the hung ceiling. The Environmental Health and Safety Department of Bell Laboratories can advise on appropriate procedures necessary to control the potential release of asbestos fibers and will conduct personal monitoring to assess exposure if deemed necessary.

David Rainer
Field Industrial Hygienist

MH-8691-DR-sma

Attachments
Tables 1 and 2
2 Diagrams

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TABLE 1

Results of Bulk Sample Analysis for Asbestos
AT&T Long Lines, White Plains, New York
July 30, 1980

Sample Number*	Optical Microscopy Results	X-ray Diffraction Results+
1	Fibrous glass; no birefringent fibers	
2	Fibrous glass; birefringent organic material	
3	Fibrous glass; no birefringent fibers	
4	Fibrous glass; no birefringent fibers	
5	Fibrous glass; no birefringent fibers	
6	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	Chrysotile asbestos
7	Sample contains birefringent fibrous material with optical and morphological characteristcs of chrysotile asbestos	
8	Fibrous glass; no birefringent fibers	
9	Fibrous glass; no birefringent fibers; some birefringent crystalline material	
10	Same as 9	
11	Fibrous glass; no birefringent fibrous material	
12	Fibrous glass; no birefringent fibrous material	
13	Fibrous glass; no birefringent fibrous material	
14	Fibrous glass; birefringent organic material	
15	Fibrous glass; birefringent organic material	
16	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	Chrysotile asbestos
17	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
18	Fibrous glass; no birefringent fibers	
19	Fibrous glass; birefringent crystalline material	
20	Fibrous glass; birefringent crystalline material	
21	Fibrous glass; birefringent crystalline material	
22	Fibrous glass; birefringent crystalline material	
23	Fibrous glass; birefringent crystalline material	
24	Fibrous glass; birefringent crystalline material	
25	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	Chrysotile asbestos
26	Fibrous glass; birefringent crystalline material	
27	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
28	Fibrous glass; birefringent crystalline material	
29	Fibrous glass; birefringent crystalline material	

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TABLE 1 (Cont'd.)

Results of Bulk Sample Analysis for Asbestos
AT&T Long Lines, White Plains, New York
July 30, 1980

Sample Number*	Optical Microscopy Results	X-ray Diffraction Results+
30	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
31	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
32	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
33	No birefringent fibrous material; birefringent crystalline material	
34	No birefringent fibrous material; birefringent crystalline material	
35	No birefringent fibrous material; birefringent crystalline material	
36	No birefringent fibrous material; birefringent crystalline material	
37	Sample contains birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	Chrysotile asbestos
38	Sample contains very few birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	
39	Fibrous glass; birefringent organic material	
40	No birefringent fibers	
41	No birefringent fibers	
42	Birefringent organic material	
43	No birefringent fibrous material	
44	Birefringent fibrous material with the optical and morphological characteristics of chrysotile asbestos	

*See Figure 1 for sampling locations
+In all cases the concentration of chrysotile was less than 10%

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TABLE 2

Results of Bulk Sample Analysis for Asbestos
AT&T Long Lines, White Plains, New York
July 24, 1980

Sample Number*	Optical Microscopy Results	X-ray Diffraction Results
1	Fibrous glass; no birefringent fibers	
3	Fibrous glass; no birefringent fibers	
6	Fibrous glass; no birefringent fibers	
5	Fibrous glass; no birefringent fibers	
4	Sample contains birefringent fibrous material with the morphological and optical characteristics of chrysotile asbestos	<10% chrysotile
4 a	Fibrous glass; no birefringent fibers	no asbestos identified
4 b	Fibrous glass; no birefringent fibers	

*See Figure 2 for sampling locations

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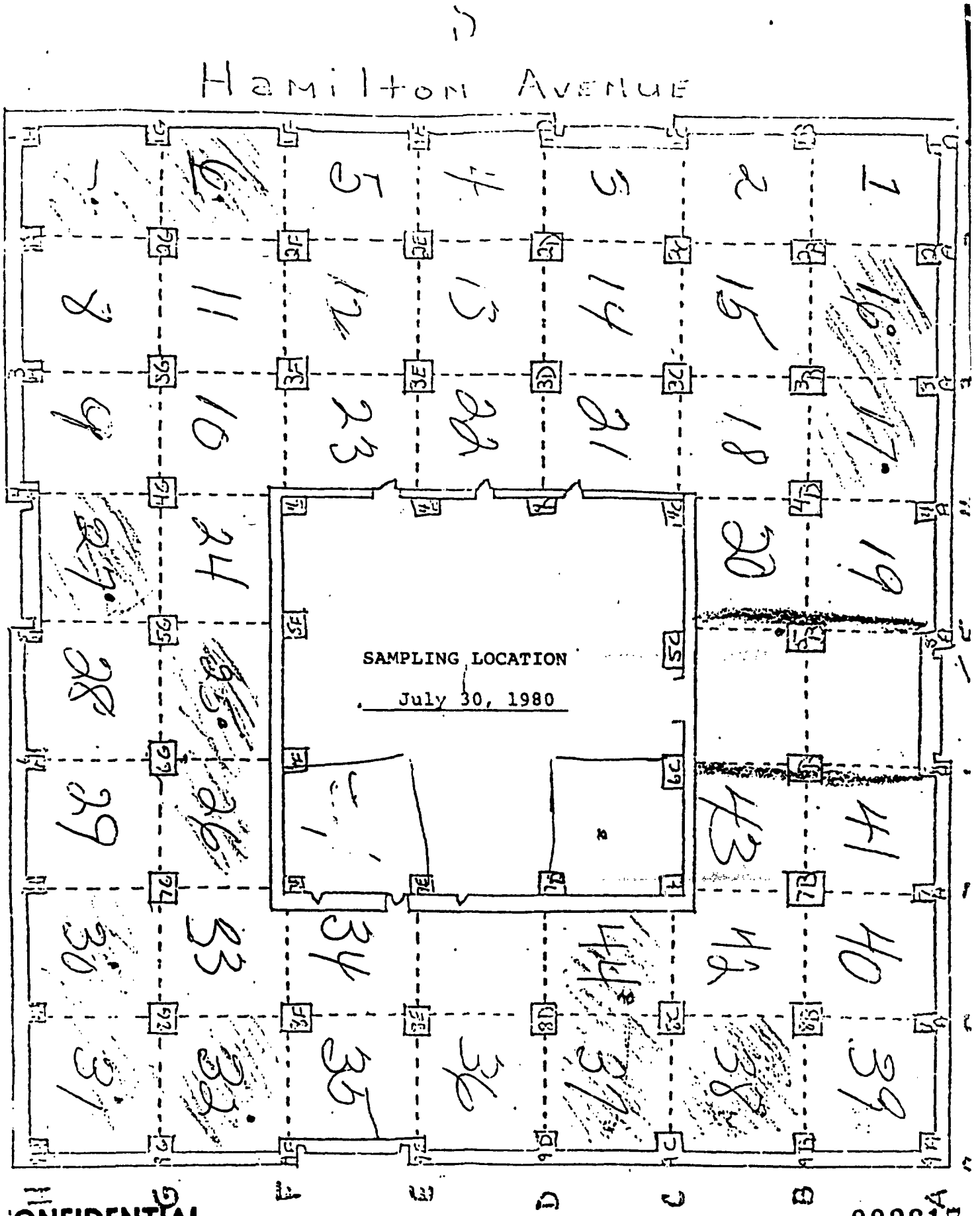

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FIGURE 1
11th Floor Layout
(shaded areas contain

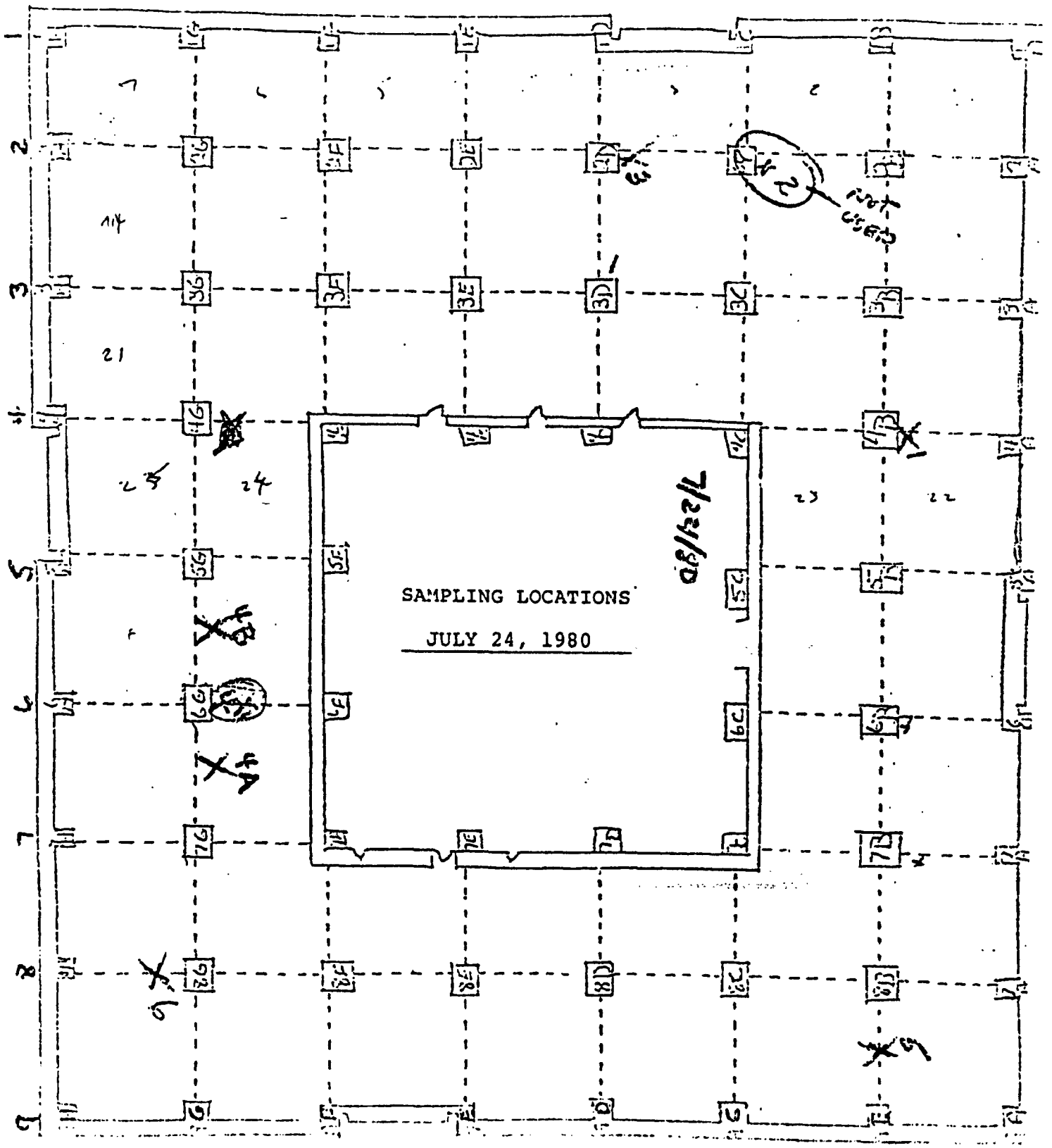

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FIGURE 2

11th Floor Layout
(shaded area contains asbestos)

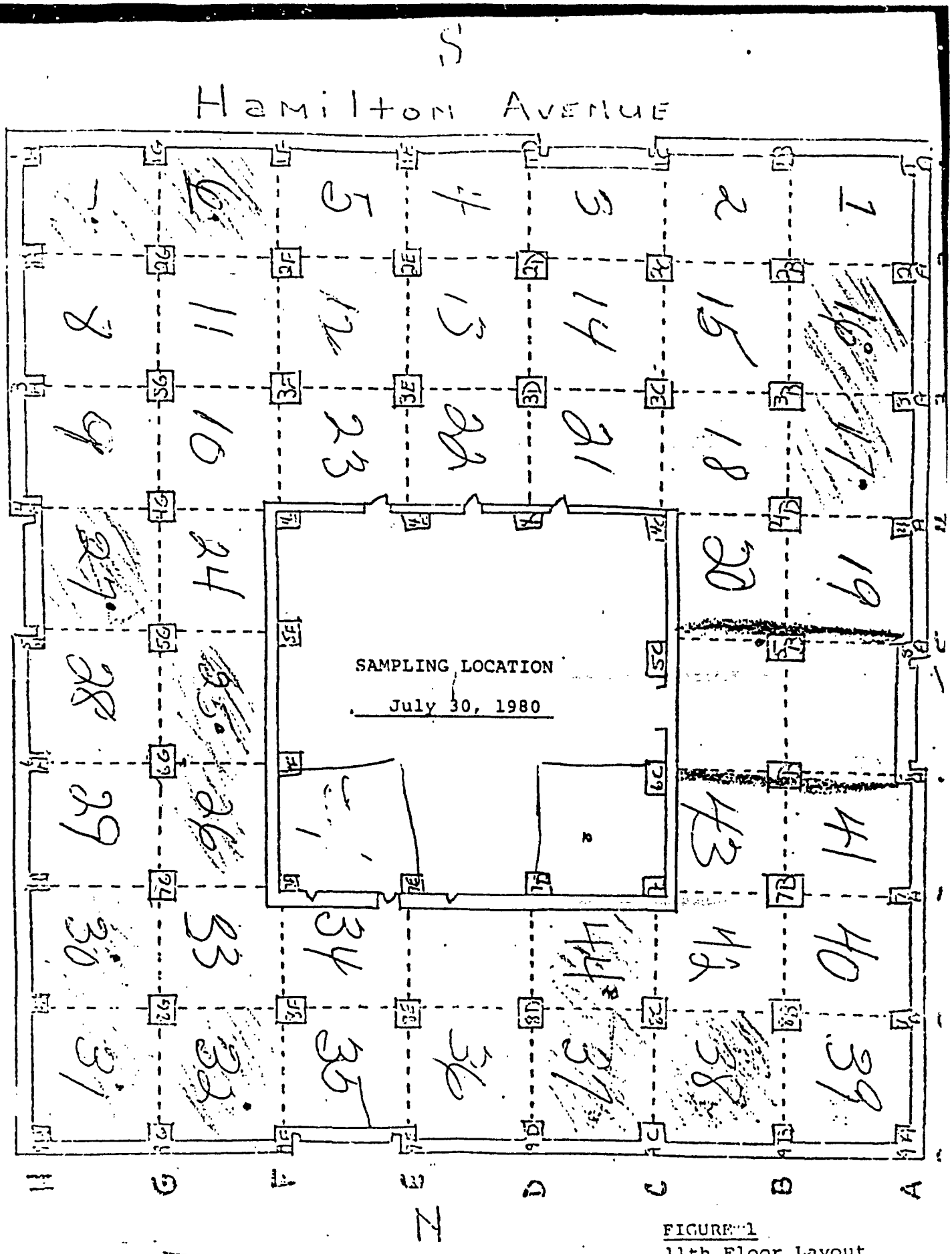

FIGURE 1
11th Floor Layout
(shaded areas contain

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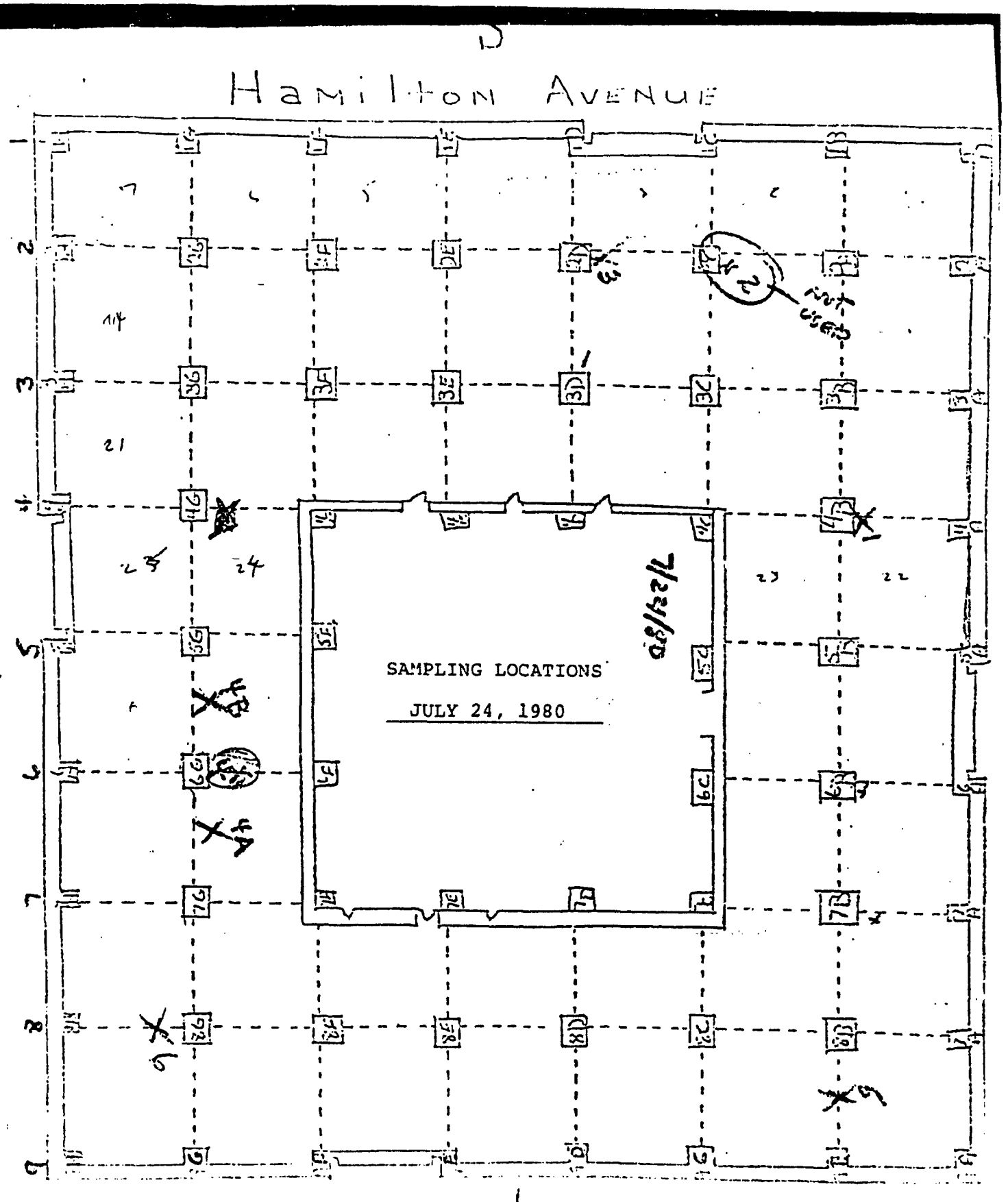

FIGURE 2

11th Floor Layout
(shaded area contains asbestos)

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