

HISTORIC AMERICAN BUILDINGS SURVEY
INDEX TO PHOTOGRAPHS

HABS
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PENNSYLVANIA STATION,
NEW YORK TERMINAL SERVICE PLANT
(Penn Station, Service Building)
150 West 31st Street
New York
New York County
New York
Photographer: Martin Stupich, May 1995.

HABS No. NY-5471-A

- NY-5471A-1 General oblique view of main (north) facade to southwest.
- NY-5471A-2 General view from above, showing east and north sides; view shows light wells and mechanical equipment on roof; view to southwest.
- NY-5471A-3 General view, showing setting on West 31st Street; north and west sides; view shows Madison Square Garden on left; view to southeast.
- NY-5471A-4 Oblique view of street facade to southwest.
- NY-5471A-5 Northwest corner showing narrow passage at west side of structure; view to southeast. Note length of wall from last pilaster to return; compare with view #6.
- NY-5471A-6 Oblique view of east side of structure, showing fire escape and window configuration; view to southwest. Note shorter distance from pilaster to return; compare with view #5.
- NY-5471A-7 Roof and chimneys in setting, showing adjacent skyline; view to southeast.
- NY-5471A-8 General view of upper portion of structure showing chimneys, with neighboring buildings in background; view to southwest.
- NY-5471A-9 Chimneys; view to southwest.
- NY-5471A-10 Chimney detail, upper halves showing surface deterioration and exfoliation; note ghosting of Pennsylvania Railroad keystone logo near top; view to southwest.
- NY-5471A-11 31st Street (north) facade detail showing evenly spaced bays, each with four distinct window types; view to south.

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- NY-5471A-12 Facade detail, showing grille treatment at windows and low-relief pilasters separating window bays.
- NY-5471A-13 Detail of northeast upper corner showing brick and stone masonry treatments; view to southwest.
- NY-5471A-14 Detail, east side showing mechanically operated gang windows (nine over nine over nine); view to southwest.
- NY-5471A-15 General view of main substation floor at Level 4, showing ceiling, crane rail and column configuration and, in background, 5th floor mezzanine level at right; view to northwest.
- NY-5471A-16 General view of Level 1-east, showing bank of feeds to rear of high tension oil switches; view to northeast. See photos #34 and 35.
- NY-5471A-17 View of boilers #3, #4, #5 (left to right), Level 4-west; note catwalks for scale; view to southeast.
- NY-5471A-18 General view of ceiling of boiler room, above Level 4-west, which doubles as underside of coal bunkers, showing structural steel rafters and beams; note concrete panels spanning rafters; view to south.
- NY-5471A-19 General view, showing work floor of power control center at Level 8; section of power control board represents yard and station tracks between west and east tunnel portals; Penn Station at left, Sunnyside Yard at right.
- NY-5471A-20 Interior detail of west hall of basement, base of steel column (right) transferring load to spread footing; and concrete arched support base bearing load of turbo generators one level above; view to east.
- NY-5471A-21 Belt-driven fan for free exhaust air duct, with electric motor on Level 1-west; view to west.
- NY-5471A-22 Steam driven air compressors, south wall, on Level 1-west; view to south.
- NY-5471A-23 One of a pair of 1000 kw turbo generators located on Level 1-west; view to southeast.
- NY-5471A-24 Remnant of 1000 kw turbo generator on Level 1-west (see preceding photo) still attached to crane used in its dismantling; view to east.

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- NY-5471A-25 Overhead crane, operable by hand using chain pulleys on Level 1-west (one of several non-motorized cranes on the site); see preceding photo. Note perfectly intact gearing and crane-rail beam members; view to northeast.
- NY-5471A-26 *Heisler* 1500-gallon high-duty elevator pump on Level 1-west; view to northeast.
- NY-5471A-27 Detail of flywheel on *Heisler* 1500-gallon high-duty elevator pump shown in previous photo; view to southwest.
- NY-5471A-28 One of a pair of air compressors on Level 1-west; view to southwest.
- NY-5471A-29 One of four ammonia compressors on Level 1-west; view to southwest.
- NY-5471A-30 Line shaft mechanism and bottom housing of refuse bunker on Level 1-west; view to west.
- NY-5471A-31 Detail, bottom of refuse bunker shown in previous photo; view to west.
- NY-5471A-32 Coal skip hoists on Level 1-west; view to northwest.
- NY-5471A-33 Hot water storage tanks in central heating plant on Level 1-center; view to southeast.
- NY-5471A-34 Typical high tension oil switch sets on Level 1-east, showing steel doors with wooden lifts and covering switching mechanisms; note triplex sets of two sizes; view to east.
- NY-5471A-35 Detail of previous photo, showing interior of housing and high tension oil switches; view to east.
- NY-5471A-36 Detail, knife switches on main feeds to oil switches; view to east.
- NY-5471A-37 Concrete cable duct chase on Level 1-east; view to southwest.
- NY-5471A-38 Feeder cable bus runs with steel doors (colloq.: *pizza ovens*) on Level 2-east; view to southwest.
- NY-5471A-39 Remote control traction feeder on Level 3-east (replication of historic view); view to northwest.

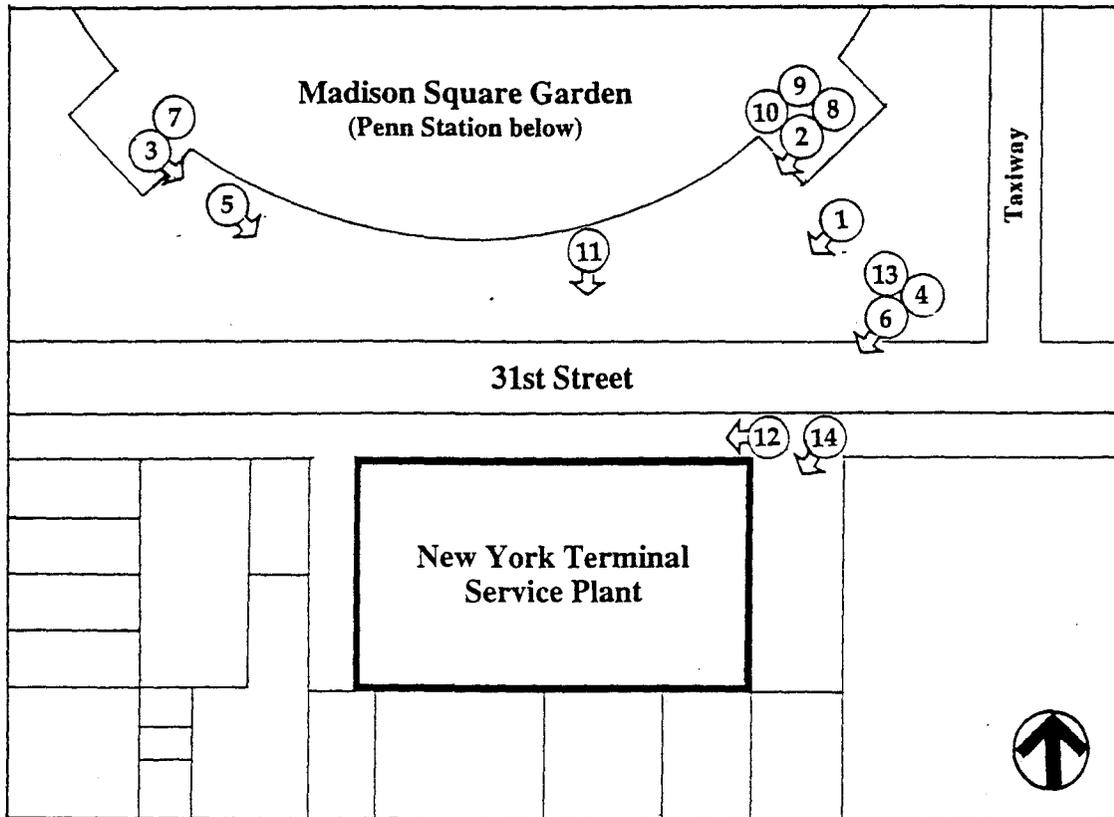
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- NY-5471A-40 Fan housings for air handling equipment at rear of Level 3-east; view to south.
- NY-5471A-41 Original starters for fans shown in previous photo; view to northwest.
- NY-5471A-42 Main power distribution panel in substation #2 on Level 4-east; view to northwest.
- NY-5471A-43 Detail of DC ammeter on main power distribution panel (shown in preceding photo); view to north.
- NY-5471A-44 Detail of rear of main power distribution panel shown in photo #42; view to west.
- NY-5471A-45 Detail of AC power distribution panel on Level 4-east; view to southeast.
- NY-5471A-46 Detail of rear of AC panel board shown in preceding photo; view to southwest.
- NY-5471A-47 Detail of switchboard showing original knife switches, levers and dials at Level 4-east; view to west.
- NY-5471A-48 Detail of bank of three power transformers on Level 4-east, opposite bank of three nearly identical-looking lighting transformers; view to northwest.
- NY-5471A-49 Three 25 cycle generators at Level 4; view to southeast.
- NY-5471A-50 25-ton overhead *Northern* crane in-situ in substation above Level 4, still operable by hand crank, one of many non-motorized cranes on the site; view to west.
- NY-5471A-51 Detail showing mechanically synchronized (x3) nine-light hand operable awning windows typical of the substation area; view to southwest.
- NY-5471A-52 Northernmost of five original boilers at Level 4; view to northeast (note intact manufacturer's plate at chamber sill).

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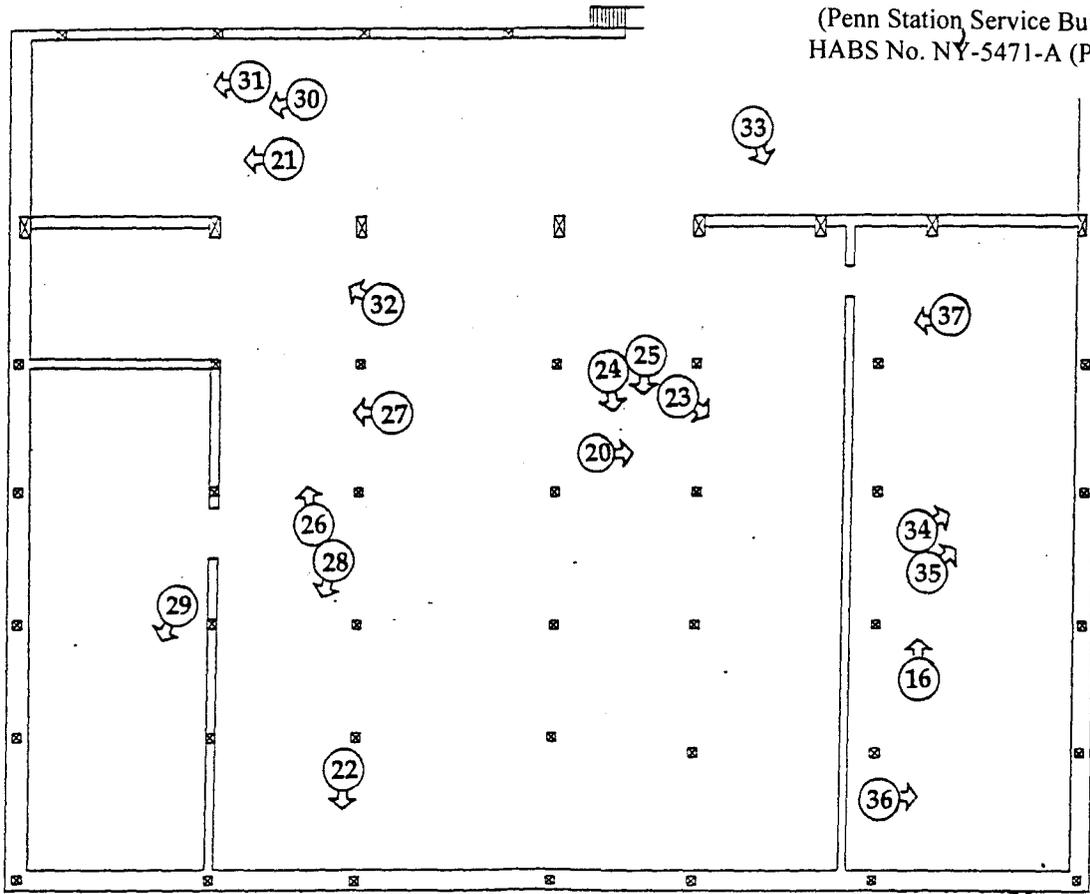
- NY-5471A-53 Detail of traction power control center at Level 8, showing a schematic diagram board in the foreground. The model board to the rear of the photograph depicts power status from the entrance to the Hudson River tunnel on the left, to the Sunnyside Yard on the right.
- NY-5471A-54 Detail of traction power board, showing schematic depiction of Penn Station trackage.
- NY-5471A-55 Detail of traction power board, showing graphic key to symbols used in schematic representation; view to west.
- NY-5471A-56 Detail of main stairs at Level 5; view to west.
- NY-5471A-57 Detail of main stairs showing newel post and ornamental spacers at balusters; view to southwest.
- NY-5471A-58 Detail of stairs in substation at Level 2; view to northeast.
- NY-5471A-59 Men's locker room at Level 5 showing intact original woodwork and unusual sidelights trimmed out for air passage only, these have never been glazed; view to south.
- NY-5471A-60 *Western Electric* telephone booth with double acoustically insulated glass door light in substation on Level 4; view to southeast.

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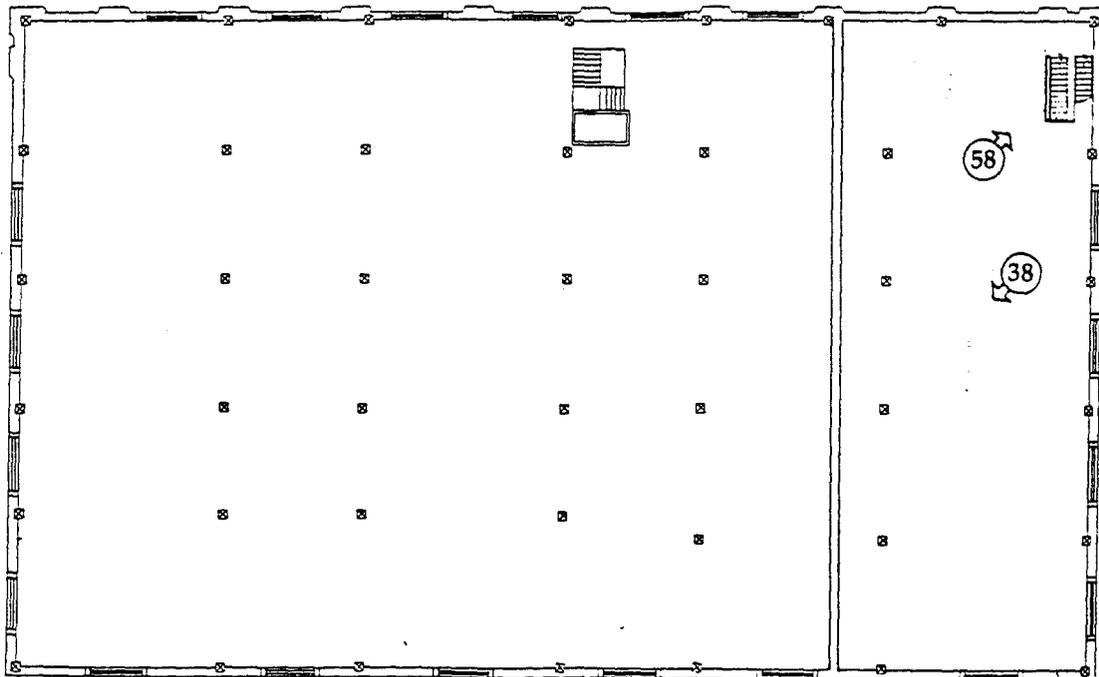


Exterior Views

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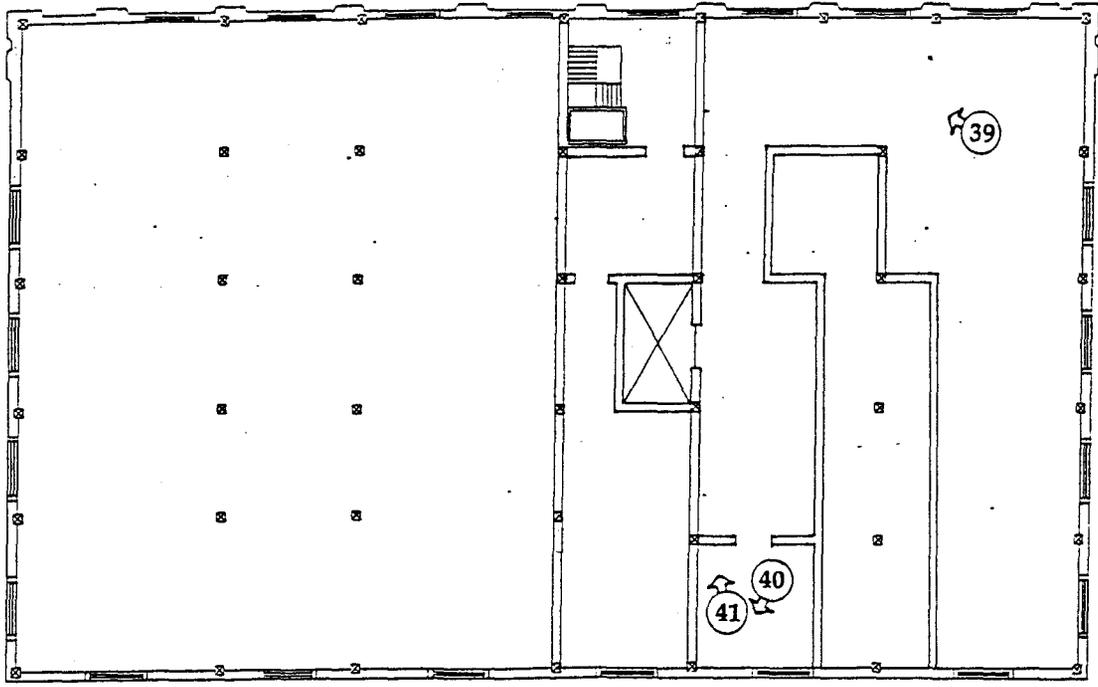


Basement and Level 1

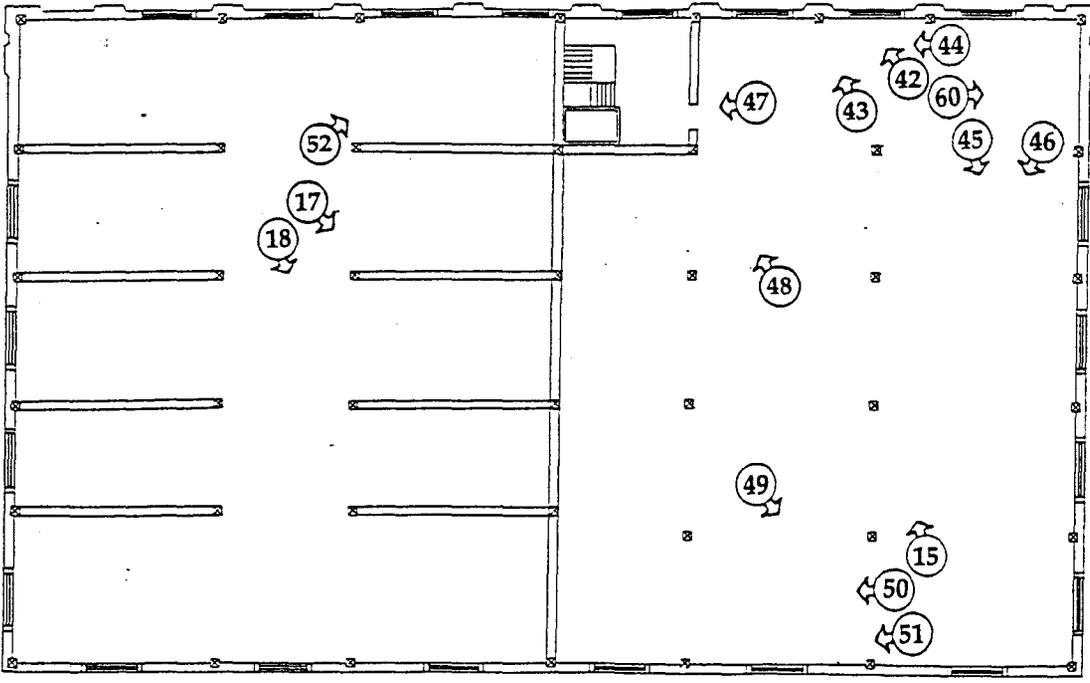


Level 2

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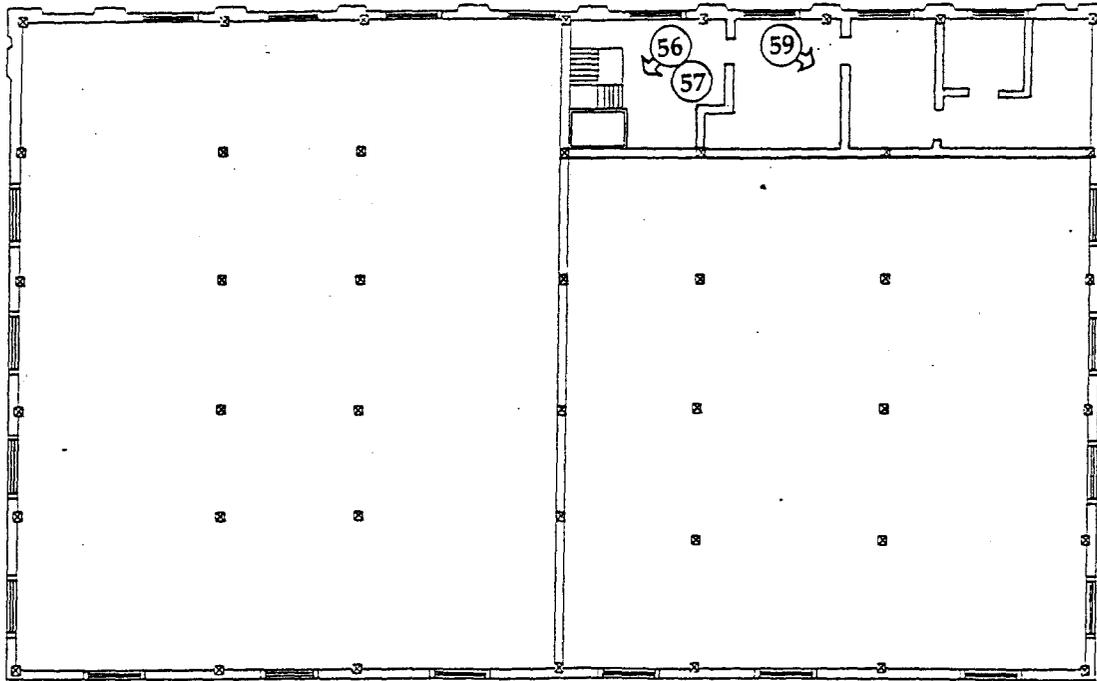


Level 3

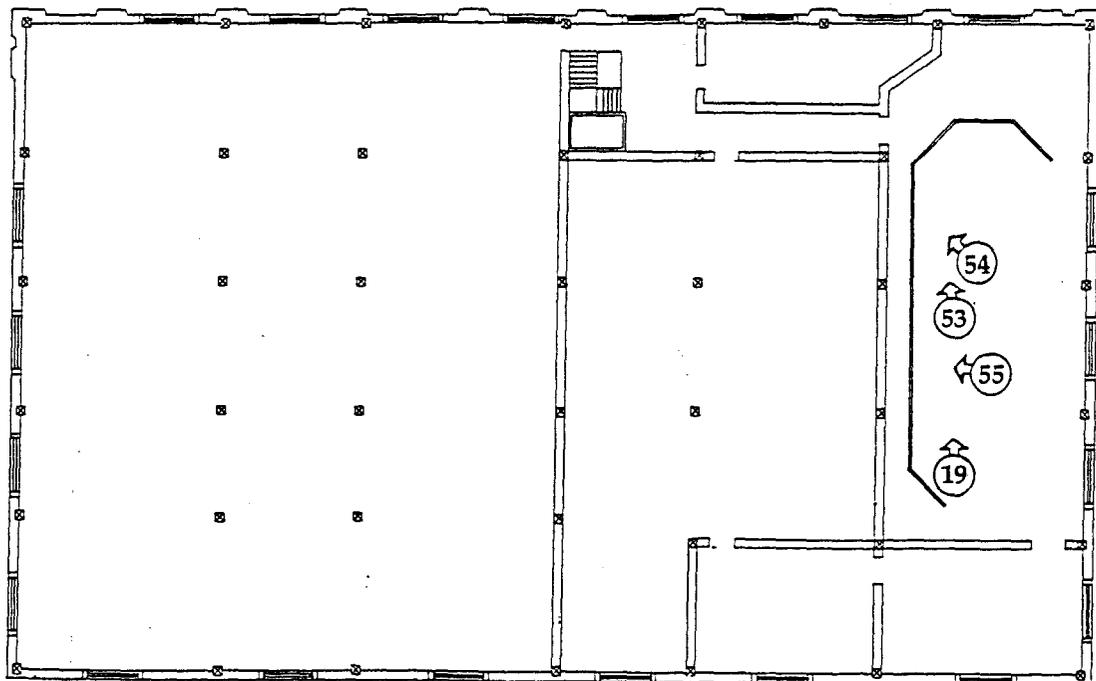


Level 4

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Level 5



Level 8