LIMITED LEAD-BASED PAINT SURVEY REPORT
FORMER T.C. ESSER PAINT MANUFACTURING SITE
1542-46 N. 32ND AND 3131 W. GALENA STREETS
MILWAUKEE, WISCONSIN 53208

PREPARED FOR:

MR. BENJI TIMM
DEPARTMENT OF CITY DEVELOPMENT
CITY OF MILWAUKEE
809 N. BROADWAY
MILWAUKEE, WI 53202

PREPARED BY:

THE SIGMA GROUP
Single Source. Sound Solutions.

www.thesigmagroup.com
1300 West Canal Street
Milwaukee, WI 53233
414-643-4200

PROJECT REFERENCE #11525

NOVEMBER 2009

This document contains confidential information which is the sole and exclusive property of Sigma Environmental Services, Inc. and the City of Milwaukee. This document shall not be duplicated in any manner except in full without the express written consent of Sigma Environmental Services, Inc.

Copyright, SIGMA ENVIRONMENTAL SERVICES, INC.

TABLE OF CONTENTS

Page

1. INTRODUCTION 1
2. REGULATORY BACKGROUND 1
3. PAINT SAMPLE COLLECTION AND ANALYSIS PROCEDURE 2
4. SUMMARY OF RESULTS 2
5. RECOMMENDATIONS 3
6. QUALIFICATIONS OF REPORT 3

Table

1. Lead Based Paint Sample Summary

Figures

1 Site Location Map
2 Site Plan Map
3 Basement Floor Plan Layout
4 First Floor Plan Layout
5 Second Floor Plan Layout
6 Third Floor Plan Layout
7 Roof Layout
8 Garage Layout

Appendices

A. Certification – Wisconsin Certified Lead Sampling Technician

1. INTRODUCTION

The City of Milwaukee Department of City Development (DCD) retained Sigma Environmental Services, Inc. (Sigma) to perform additional limited lead-based paint (LBP) survey activities at the former T.C. Esser Paint facility (the "site") located at 1542-46 N. 32nd Street and 3131 W. Galena Street, Milwaukee (refer to **Figure 1**) and to update the previous LBP survey report[1] to reflect current (as of the date of this report) site conditions. The LBP survey activities described in Sigma's proposal dated September 15, 2009 were limited to the buildings located at 1542-46 North 32nd Street and 3131 West Galena Street. This updated report will be used by the City of Milwaukee Department of Neighborhood Services (DNS) for soliciting site demolition bids.

The facility was vacant at the date and time of this inspection. Site plan maps indicating approximate floor layouts for the 1890, 1910, 1931, 1931A, 1950, and Garage buildings are included. (The main building complex includes five buildings constructed at different times from the 1890s to the 1950s. The numeric building nomenclature is based on the date of the Sanborn fire insurance map on which each successive building is first present.)

State of Wisconsin certified lead sampling technician, Mr. Steve Marcinkowski (LST-106015), performed the limited LBP survey on February 29, 2008, August 11, 2008, and October 29, 2009. **Appendix A** includes a copy of Mr. Marcinkowski's inspection certification.

2. REGULATORY BACKGROUND

Potential significant cost savings could be realized for recycling/crushing masonry materials on-site. A demolition strategy for these buildings should consider recycling of concrete and masonry as an alternative to landfill disposal. The Wisconsin Department of Natural Resources (WDNR) does not allow crushing or recycling of LBP-coated masonry products without special approval. The WDNR fact sheet WA-605 2004, "Concrete Recycling and Disposal Fact Sheet", provides guidance regarding the sampling and management of potential LBP coated concrete materials. According to the WDNR, contractors may demolish structures coated with LBP or remove their architectural components without actually removing the paint from the substrate. The WDNR does not typically consider it necessary to make a hazardous waste determination on these structural materials if the paint is not separated from the structural materials. The generator of these wastes must; however, follow the State's solid waste regulations and dispose of debris in a WDNR approved disposal facility. Loose paint chips or dust generated during demolition must be managed as if they had been mechanically removed by blasting or other means.

[1] "Limited Lead-Based Paint Survey Report, Galena Redevelopment Corp. / Former T.C. Esser Paint Site, 1542-46 North 32nd Street and 3131 West Galena Street, Milwaukee, Wisconsin 53208" report by Sigma (dated June 2008)

Additionally, the Occupational Safety and Health Administration (OSHA) requires specific work practices, personal protective equipment, monitoring, and job site engineering controls to reduce lead exposure when conducting activities involving cutting, grinding, scraping, welding, and shot blasting of lead-bearing materials. As required by the OSHA regulations, demolition of a structure or portions of a structure which contain lead-bearing materials must be conducted in a manner consistent with the requirements provided in 29 CFR 1926. Finally, federal, state, and local agencies may regulate the presence of LBP within occupied spaces.

3. PAINT SAMPLE COLLECTION AND ANALYSIS PROCEDURE

On February 29, 2008, August 11, 2008, and October 29, 2009 Sigma conducted limited LBP surveys of reasonably accessible areas of the on-site buildings. Sigma visually inspected select interior and exterior painted surfaces in areas that were readily accessible and visually apparent. Painted surfaces were analyzed using a Thermo Niton XRF (X-ray fluorescence) instrument (Model No. XLp 303A).

4. SUMMARY OF RESULTS

Multiple paint samples were determined to be LBP based upon the State of Wisconsin Department of Health and Family Services (DHFS) 163 definition, "*…paint or other surfacing coatings that contain greater than 0.7 milligrams/cm^2*". However, many of the paint surfaces that were sampled did not contain LBP. Sample numbers, location descriptions, substrate, color descriptions, and other notes are provided on **Table 1**. **Figures 2** through **8** depict building layouts and room designations.

Red paint on fire doors throughout the facility and on the base of a paint mixing area on the second floor (Room 5) of the 1931A Building was identified as LBP. Gray paint on the concrete columns in the same room (1931A Building, Room 5, 2nd floor) was also LBP. White paint on one column in Room 12 on the 1st floor of the 1391A Building also tested positive as LBP.

A total of 26 sample locations on the exterior of the five buildings were analyzed. Paint colors included tan (most exterior walls), brown (doors and trim), and white (small area of brick). Only 2 of 26 exterior samples were identified as LBP. These two samples (sample numbers 50 and 51) were located on a column on the north side of the 1910 Building; it is likely that there is a painted logo with other colors at this location underlying the tan colored top coat of paint. The exterior tan paint was not identified on any of the other building walls. The east exterior walls of the entire facility are not painted with the exception of advertising lettering on the upper portion of the 1890s Building. This paint was not accessible and was not tested.

5. RECOMMENDATIONS

Due to the confirmed presence of LBP, it is recommended that all contractors involved with work that may disturb LBP be informed of the presence of lead. To remain in compliance with applicable rules and regulations, workers need to conduct their activities in a lead safe manner consistent with the OSHA 29 CFR 1926.62 Lead-in-Construction standard. These regulations set standards for employee training, work practices, personal protective equipment, monitoring and job site engineering controls to reduce lead exposure when conducting activities which may disturb LBP including but not limited to cutting, welding, grinding, scraping, and shot blasting. Finally, federal, state, and local agencies may regulate the presence of LBP within occupied spaces.

Additionally, while DHFS considers lead paint to be paint containing greater than 0.7 milligrams lead/cm^2, OSHA does not have a threshold for lead in paint. OSHA does; however, have a threshold for lead exposure to workers. Therefore, although DHFS may or may not consider certain paint to be non-lead containing, work practices may cause worker lead exposure to be above OSHA's limits. In addition, because OSHA does not have a threshold for lead in paint, worker protection rules under OSHA are still in effect for painted surfaces determined to contain less than 0.7 milligrams lead/cm^2.

The findings and recommendations included herein are based on information obtained during the February 29, 2008, August 11, 2008 and October 29, 2009 site visits and from previous experience. During demolition, a potential exists for additional hazardous materials not previously identified to become revealed. During demolition of the site structures, further sampling may be required to confirm the presence and quantities of LBP or other items of environmental concern within walls and other areas that would require destructive methods for inspection and evaluation.

6. QUALIFICATIONS OF REPORT

The findings and recommendations included herein are based on information obtained during the February 29, 2008, August 11, 2008 and October 29, 2009 site visits and from previous experience. The intent of this limited LBP survey is general in nature and is to generally identify if LBP and/or lead-bearing materials are associated with the structure. This limited inspection should not be interpreted as a comprehensive evaluation of all accessible or inaccessible painted surfaces associated with the structure.

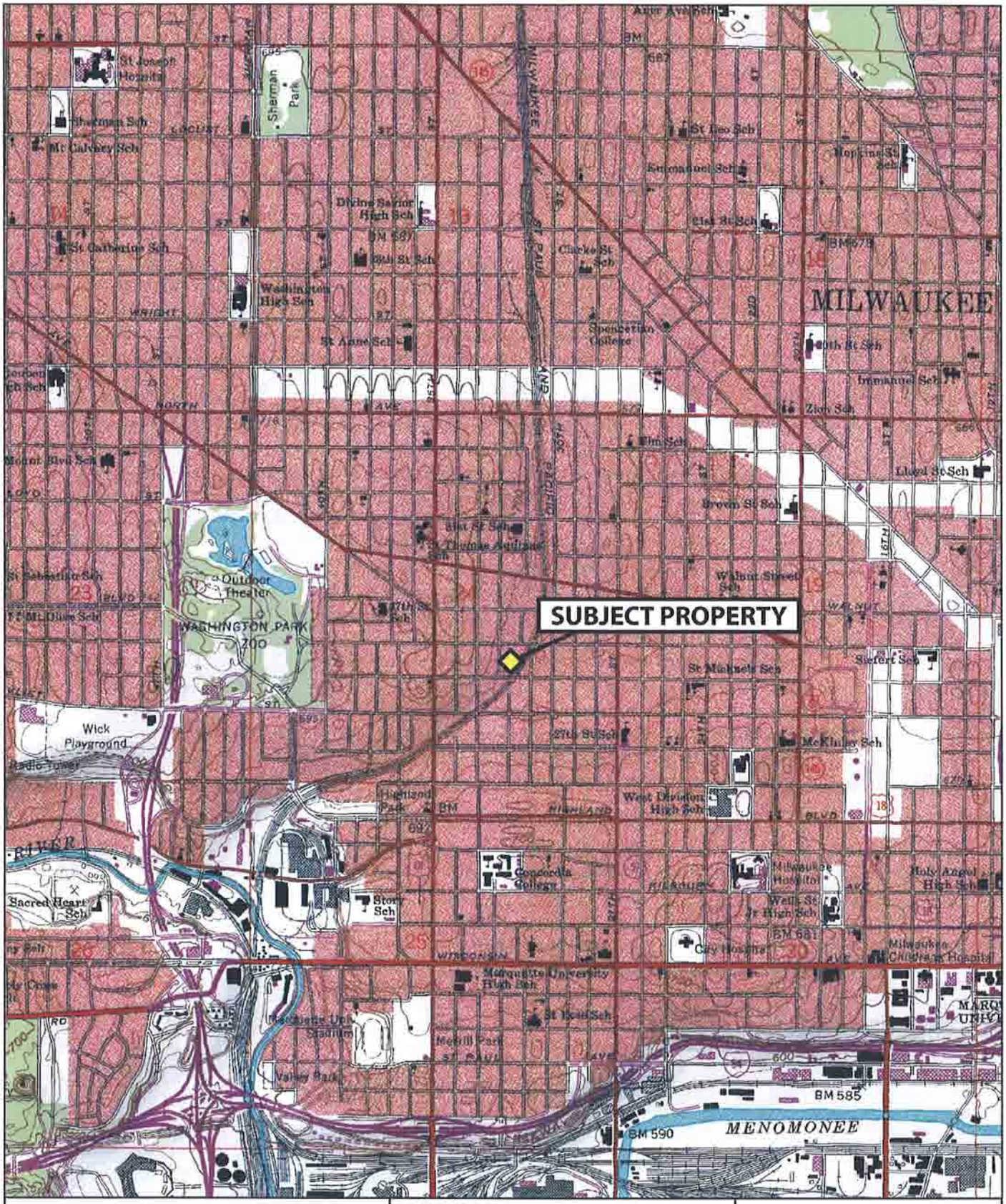
TABLE

TABLE 1
LEAD BASED PAINT SAMPLE SUMMARY
Former T.C. Esser Paint Property
1542-46 N. 32nd and 3131 W. Galena Streets
Milwaukee, WI 53208
Project # 11314

Sample Number	Location	Date	Substrate	Color of Paint	Condition	Sample Location	Building Interior or Exterior?	Lead Content (mg/cm^2)	Lead-Based Paint [2] (Y/N)
1890 Building									
1	1890 - B03	2/29/2008	Concrete	White	Fair	NW Corner	Interior	0.01	No
2	1890 - B04	2/29/2008	8 Inch Brick	White	Fair	E Center	Interior	0.01	No
3	1890 - B04	2/29/2008	8 Inch Brick	Red	Poor	E Center	Interior	0.03	No
17	1890 - 101	2/29/2008	Plaster	White	Poor	N Center	Interior	0.00	No
18	1890 - 101	2/29/2008	Plaster	Lt. Blue	Fair	NE Stairs	Interior	0.06	No
19	1890 - 101	2/29/2008	Metal	White over Pink	Poor	E Center Bathroom	Interior	0.10	No
20	1890 - 101	2/29/2008	Plaster	Yellow	Fair	SE - Artistic Design	Interior	0.30	No
21	1890 - 204	2/29/2008	Drywall	White	Fair	S Center	Interior	0.00	No
22	1890 - 203	2/29/2008	Brick	White	Fair	NW Corner	Interior	0.50	No
23	1890 - 201	2/29/2008	Particle Board	White	Good	SE Corner	Interior	0.01	No
45	1890 - ext	8/11/2008	8 Inch Brick	Tan	Poor	SW Corner	Exterior	0.03	No
46	1890 - ext	8/11/2008	8 Inch Brick	White	Poor	NW Corner	Exterior	0.02	No
48	1890 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	NE Corner	Exterior	0.04	No
49	1890 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	NW Corner	Exterior	0.02	No
1910 Building									
25	1910 - B01	2/29/2008	Wood	Gray	Fair	Center Beam	Interior	0.00	No
26	1910 - 101	2/29/2008	Drywall	White	Fair	SE Corner	Interior	0.00	No
27	1910 - 200	2/29/2008	Drywall	White	Fair	Center	Interior	0.01	No
28	1910 - 205	2/29/2008	Drywall	White	Fair	SW Corner	Interior	0.00	No
47	1910 - ext	8/11/2008	8 Inch Brick	Tan	Poor	S Center	Exterior	0.02	No
50	**1910 - ext**	**10/29/2009**	**8 Inch Cream Brick**	**Tan**	**Good**	**NE Corner**	**Exterior**	**12.4**	**Yes**
51	**1910 - ext**	**10/29/2009**	**8 Inch Cream Brick**	**Tan**	**Good**	**NE Corner**	**Exterior**	**6.3**	**Yes**
52	1910 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	NE Corner	Exterior	0.14	No
53	1910 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	NE Corner	Exterior	0.07	No
54	1910 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	N Wall - NW Corner	Exterior	0.07	No
55	1910 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	W Center	Exterior	0.01	No
56	1910 - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	S Wall - SW Corner	Exterior	0.01	No
1931 Building									
7	**1931 - 20**	2/29/2008	**Fire Door**	**Red**	**Fair**	**NW Corner**	**Interior**	**6.7**	**Yes**
8	1931 - 20	2/29/2008	Concrete	White	Fair	Center Column	Interior	0.01	No
9	1931 - 8	2/29/2008	Concrete	White	Fair	S Center	Interior	0.01	No
10	**1931 - 8**	2/29/2008	**Fire Door**	**Red**	**Fair**	**SE Corner**	**Interior**	**6.5**	**Yes**
11	1931 - 8	2/29/2008	Concrete	White	Fair	Center Column	Interior	0.03	No
12	1931 - 8	2/29/2008	8 Inch Brick	White	Fair	N Center	Interior	0.01	No
32	**1931 - 4**	2/29/2008	**Fire Door**	**Red**	**Poor**	**NW Fire Door**	**Interior**	**7.90**	**Yes**
33	1931 - 4	2/29/2008	8 Inch Brick	Graffiti	Good	NW Corner	Interior	0.02	No
34	1931 - 4	2/29/2008	Concrete	White	Good	NW Column	Interior	0.02	No
37	1931 - 1	2/29/2008	8 Inch Brick	Gray	Fair	E Center	Interior	0.12	No
38	1931 - 1	2/29/2008	Plaster	White	Fair	S Center	Interior	0.05	No
39	1931 - ext	8/11/2008	8 Inch Brick	Tan	Poor	SW Corner - E Face	Exterior	0.03	No
40	1931 - ext	8/11/2008	Wood	Brown	Fair	NW Garage Door	Exterior	0.14	No
59	1931 - ext	10/29/2009	8 Inch Brick	Tan	Good	W Wall - NW Corner	Exterior	0.03	No
60	1931 - ext	10/29/2009	Concrete Block	Tan	Good	W Center	Exterior	0.04	No
1931A Building									
4	1931A - 22	2/29/2008	8 Inch Brick	White	Fair	E Center	Interior	0.01	No
5	1931A - 22	2/29/2008	8 Inch Brick	White	Fair	Center	Interior	0.02	No
6	**1931A - 22**	2/29/2008	**Fire Door**	**Red**	**Fair**	**SW Corner**	**Interior**	**7.2**	**Yes**
13	1931A - 12	2/29/2008	Drywall	White	Fair	E Center	Interior	0.00	No
14	**1931A - 12**	2/29/2008	**Concrete**	**White**	**Poor**	**Center Column**	**Interior**	**1.10**	**Yes**
15	1931A - 13	2/29/2008	Concrete	Red	Poor	W Column	Interior	0.04	No
16	1931A - 13	2/29/2008	Steel	White	Fair	N Center Column	Interior	0.50	No
29	**1931A - 5**	2/29/2008	**Concrete**	**Gray**	**Fair**	**E Center Column**	**Interior**	**3.10**	**Yes**
30	**1931A - 5**	2/29/2008	**Concrete**	**Red**	**Poor**	**E Center - Mixer Bases**	**Interior**	**1.40**	**Yes**
31	**1931A - 5**	2/29/2008	**Fire Door**	**Red**	**Poor**	**SW Fire Door**	**Interior**	**5.40**	**Yes**
35	1931A - 2	2/29/2008	Wood	Red	Fair	W Center	Interior	0.26	No
36	1931A - 2	2/29/2008	8 Inch Brick	White	Fair	SW Corner	Interior	0.11	No
41	1931A - ext	8/11/2008	8 Inch Brick	Tan	Poor	W Center	Exterior	0.05	No
42	1931A - ext	8/11/2008	8 Inch Brick	Brown	Poor	NW Corner	Exterior	0.01	No
43	1931A - ext	8/11/2008	8 Inch Brick	Tan	Poor	N Center	Exterior	0.01	No
58	1931A - ext	10/29/2009	8 Inch Cream Brick	Tan	Good	N Wall - NW Corner	Exterior	0.00	No
1950 Building									
24	1950 - 6	2/29/2008	8 Inch Brick	White	Fair	S Center	Interior	0.03	No
44	1950 - ext	8/11/2008	Concrete Block	Tan	Fair	W Center	Exterior	0.00	No
57	1950 - ext	10/29/2009	Concrete Block	Tan	Good	W Wall	Exterior	0.00	No
Garage Building									
61	Garage - ext	10/29/2009	Decorative Block	Tan	Good	S Wall	Exterior	0.06	No
62	Garage - ext	10/29/2009	Decorative Block	Tan	Poor	E Wall	Exterior	0.06	No
63	Garage - ext	10/29/2009	Decorative Block	Tan	Fair	N Wall	Exterior	0.06	No
64	Garage - ext	10/29/2009	Decorative Block	Tan	Good	W Wall	Exterior	0.01	No
Calibration Shots									
Calibration #1	---	2/29/2008	---	---	---	---	---	1.1	---
Calibration #2	---	2/29/2008	---	---	---	---	---	1.0	---
Calibration #1	---	8/11/2008	---	---	---	---	---	1.2	---
Calibration #2	---	8/11/2008	---	---	---	---	---	1.1	---
Calibration #1	---	10/29/2009	---	---	---	---	---	1.2	---

Notes:
1. Lead based paint samples analyzed with Sigma's Thermo Niton XRF instrument (Model No. XLp 303A, Serial No. 13415).
2. Components that have > 0.7 MG/CM2 or 0.06 percent lead by weight are considered Lead-Based Paint in the State of Wisconsin.
3. No exterior paint on south wall of 1931 Building.
4. No exterior paint on east walls of 1890, 1950, 1931A, and 1931 Buildings facing railroad tracks, except for advertising signage on upper portions of buildings. This paint was inaccessible and was not tested.

FIGURES



THE SIGMA GROUP

SIGMA ENVIRONMENTAL SERVICES, INC.
SIGMA DEVELOPMENT, INC.
SIGMA LEASING, INC.

GALENA REDEVLOPMENT CORPORATION

Former T.C Esser Paint Manufacturing Site
1542-46 North 32nd Street, Milwaukee, WI

Part of the Walnut Hill Subdivision, located in the Southeast 1/4 of Section 24, T7N, R21E, Milwaukee County, Wisconsin.

FIGURE 1

SITE LOCATION MAP

DELORME

© 2002 DeLorme. 3-D TopoQuads ®. Data copyright of content owner.
www.delorme.com

Scale 1 : 24,000
1" = 2000 ft

TN
MN
2.7W

GALENA STREET
60.00' RIGHT OF WAY

N 89°35'37" E 372.13'

AIR COND.

BUILDING

UNDERGROUND STORAGE TANK AREA

GARAGE

DISPENSERS

UNDERGROUND STORAGE TANK AREA

RAISED PLATFORM

AIR COND.

BUILDING

SOO LINE RAILROAD
100.00' RIGHT OF WAY

N 01°12'38" W 438.85'

CSM 3718
PARCEL 2

UNDERGROUND STORAGE TANK AREA

CSM 3718
PARCEL 1

32ND STREET
60.00' RIGHT OF WAY

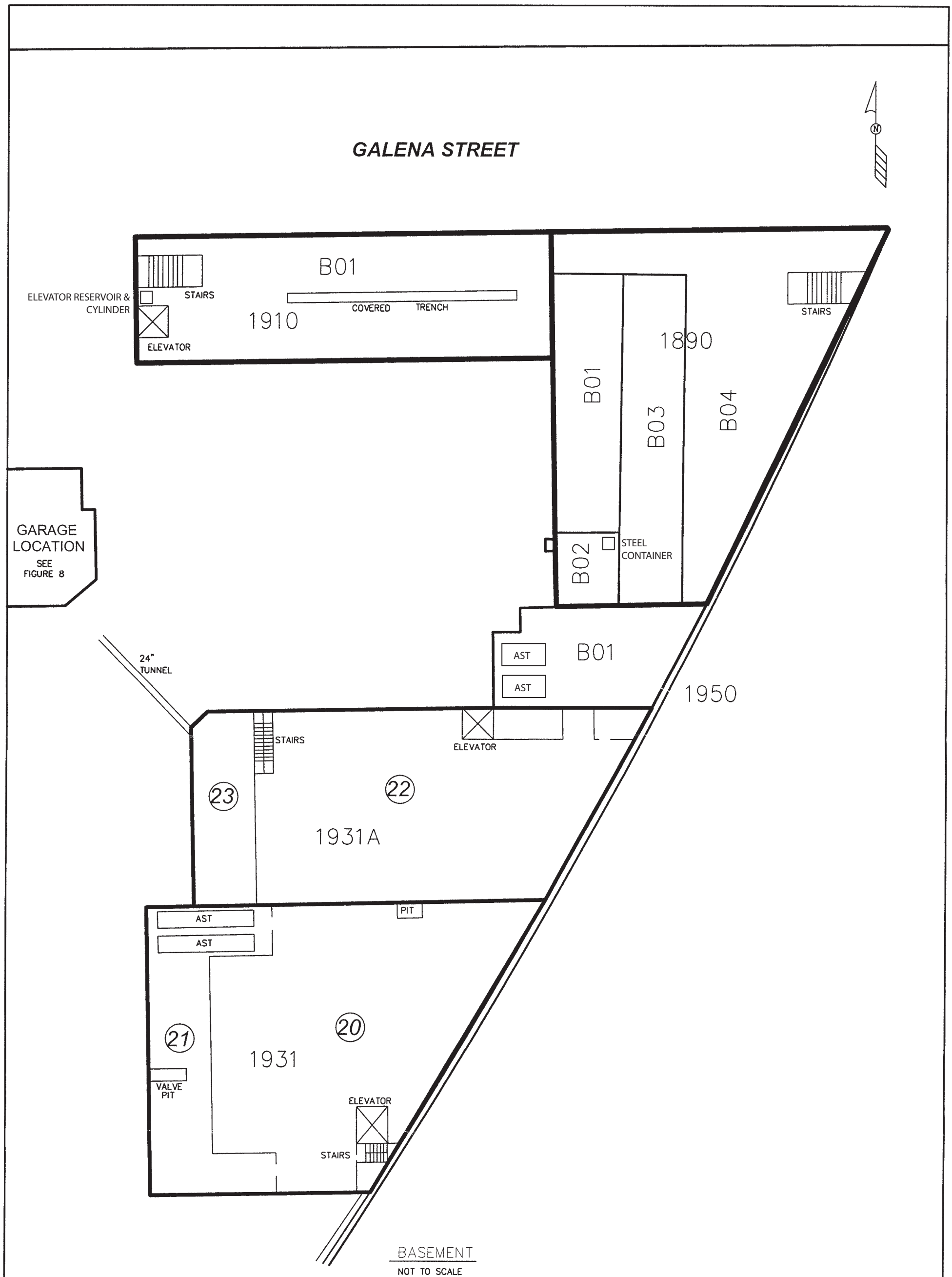
N 88°50'42" E 108.89'

CHERRY STREET
60.00' RIGHT OF WAY

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE-GALENA DEVELOPMENT W. GALENA ST MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
SITE PLAN MAP			FIGURE 2

K:\GALENA\8582\8582-003 (floorplans).dwg, Model, 6/19/2008 8:07:40 AM, 11x17, 1:360

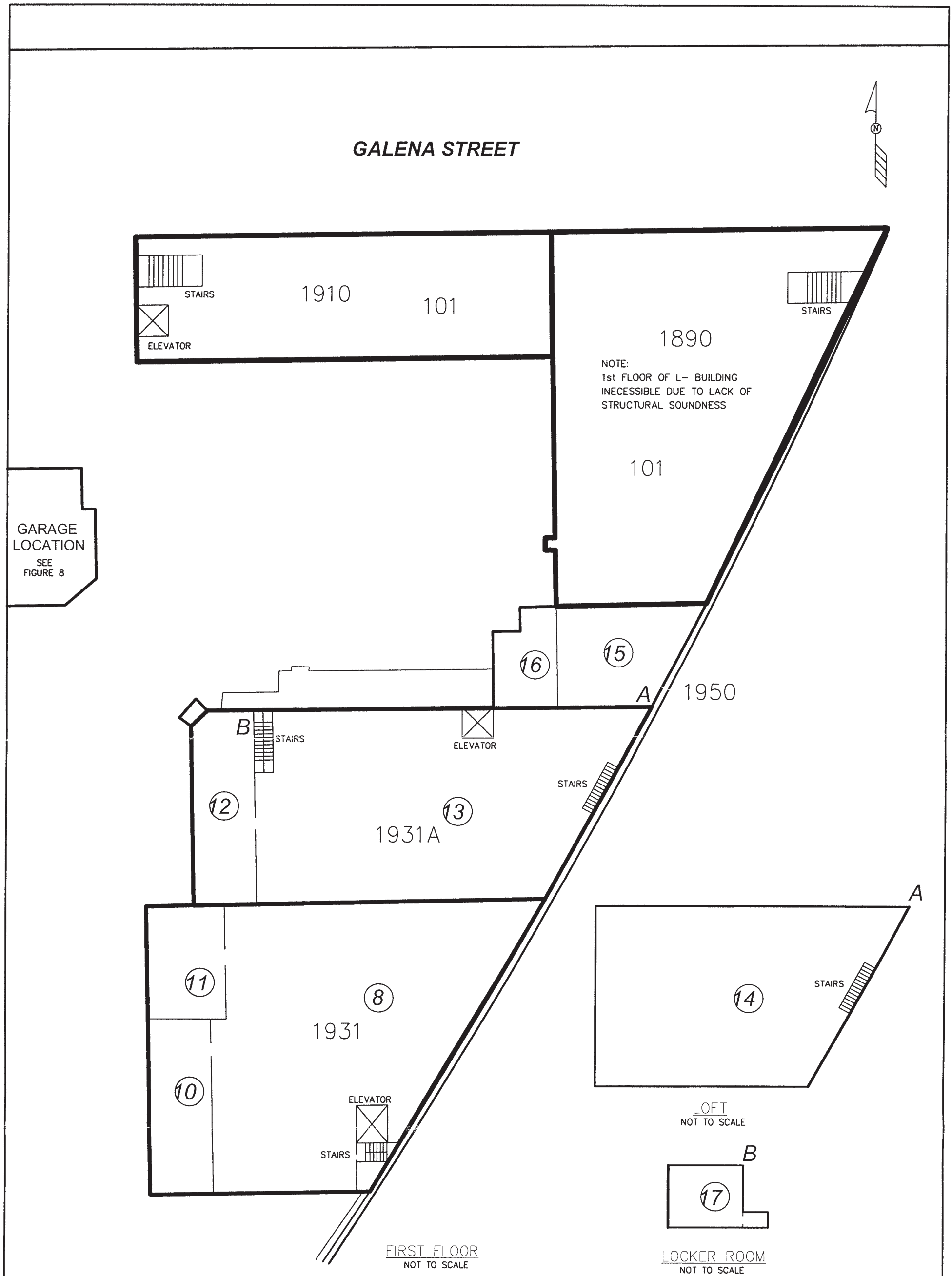


LEGEND

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY – SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE–GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
BASEMENT SAMPLE LOCATION MAP			FIGURE 3

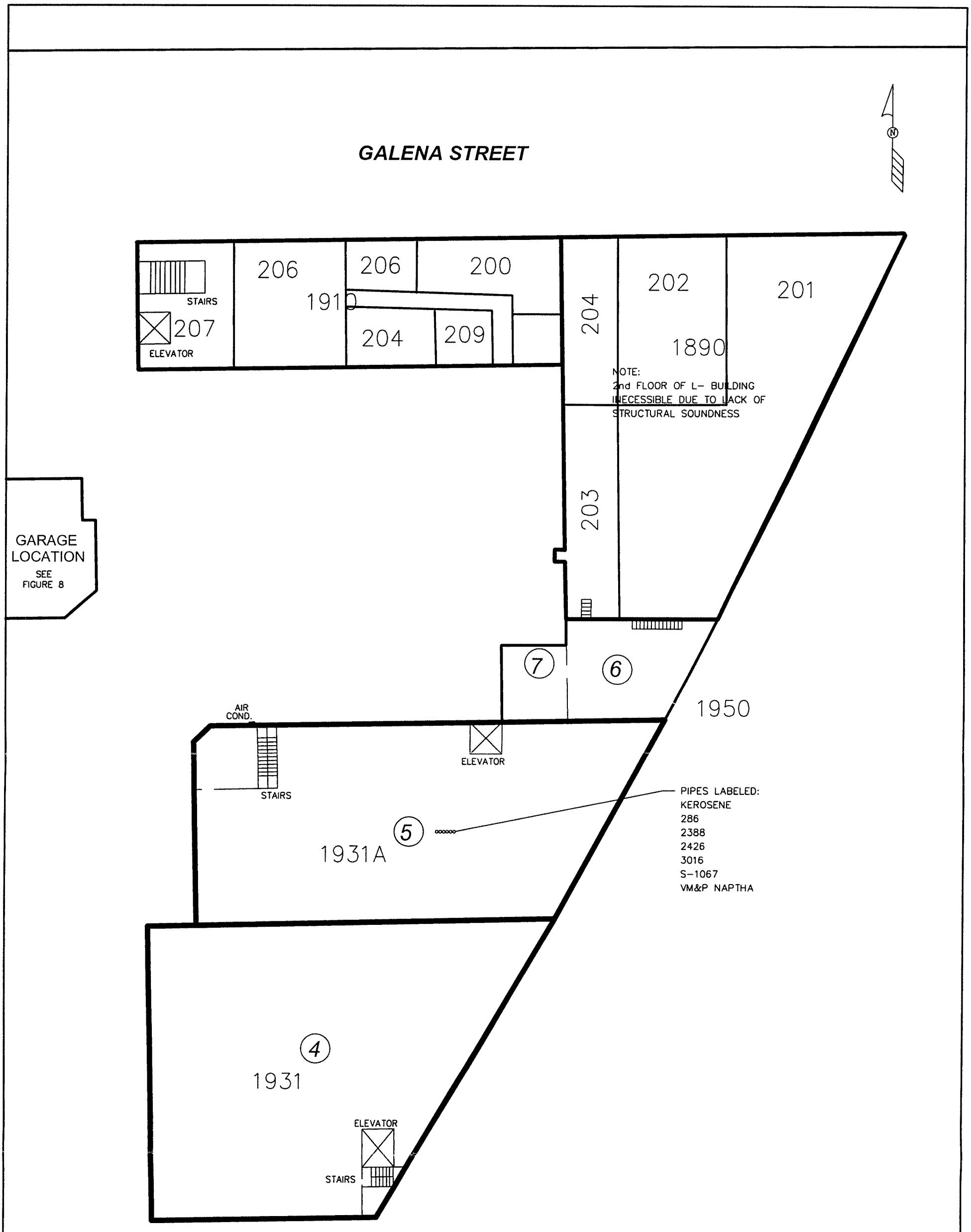


LEGEND

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE-GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
FIRST FLOOR SAMPLE LOCATION MAP			FIGURE 4



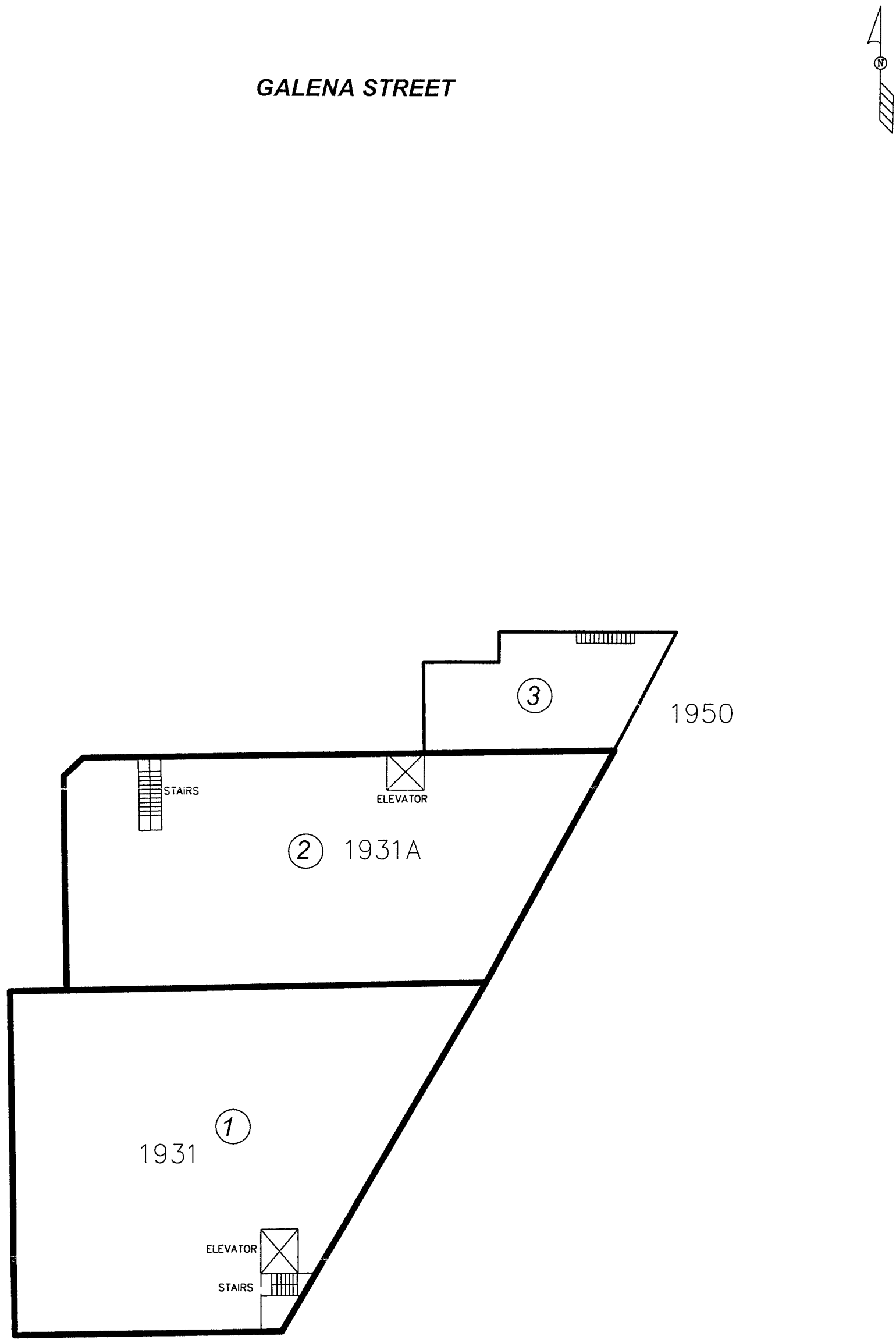
SECOND FLOOR
NOT TO SCALE

LEGEND

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE-GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
SECOND FLOOR SAMPLE LOCATION MAP			FIGURE 5



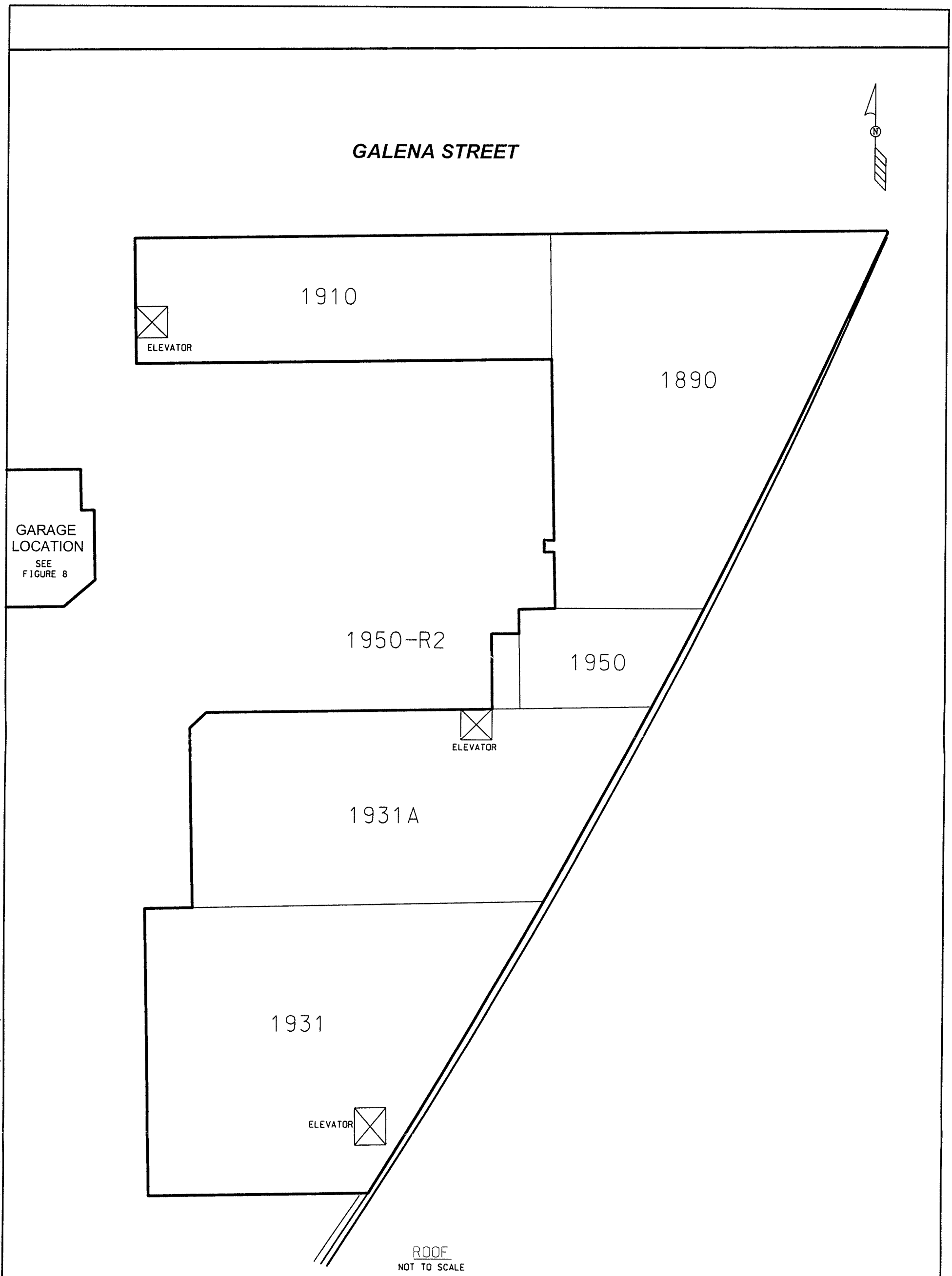
THIRD FLOOR
NOT TO SCALE

LEGEND

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY – SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE–GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
THIRD FLOOR SAMPLE LOCATION MAP			FIGURE 6



LEGEND

00-● = ASBESTOS SAMPLE LOCATION

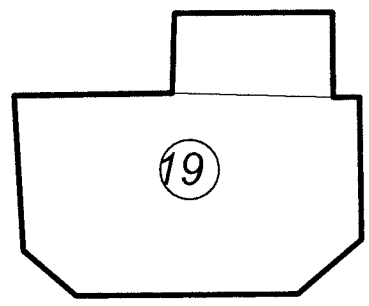
00-▲ = LEAD PAINT SAMPLE LOCATION

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE SURVEYED BY SIGMA DEVELOPMENT.

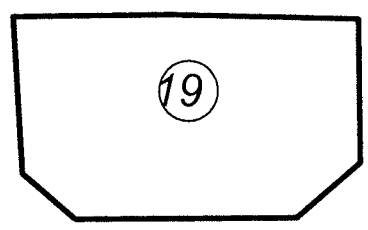
CITY OF MILWAUKEE-GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
ROOF SAMPLE LOCATION MAP			FIGURE 7

K:\GALENA\8582\8582-003 (floorplans).dwg, Model, 6/19/2008 8:07:19 AM, 11x17, 1:360



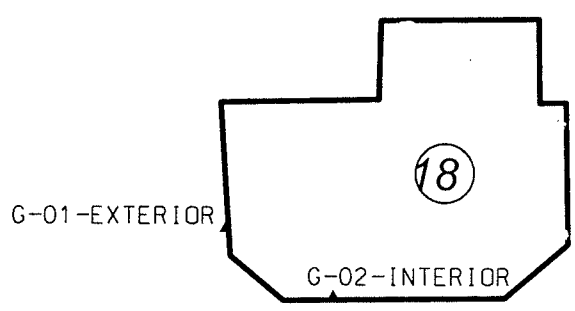
GARAGE - ROOF
NOT TO SCALE

NOTE:
ROOF OF GARAGE INECESSIBLE



GARAGE - SECOND FLOOR
NOT TO SCALE

NOTE:
2nd FLOOR OF GARAGE INECESSIBLE



GARAGE - FIRST FLOOR
NOT TO SCALE

NOTE:
SEE "SITE PLAN" - FIGURE 2 FOR LOCATION OF GARAGE

LEGEND

00-● = ASBESTOS SAMPLE LOCATION

00-▲ = LEAD PAINT SAMPLE LOCATION

(10) = ROOM NUMBER

NOTE:
DIMENSIONS DEPICTED ON MAP ARE FOR REFERENCE ONLY - SITE SURVEYED BY SIGMA DEVELOPMENT.

CITY OF MILWAUKEE-GALENA DEVELOPMENT W. GALENA ST. MILWAUKEE, WISCONSIN			SIGMA ENVIRONMENTAL SERVICES INC.
DATE: 2-23-04	DR. BY: BEB	DR.# 8582-003	SCALE: NOT TO SCALE
GARAGE SAMPLE LOCATION MAP			FIGURE 8

K:\GALENA\8582\8582-003 (floorplans).dwg, Model, 6/19/2008 8:07:27 AM, 11x17, 1:360

APPENDIX A

CERTIFICATION – WISCONSIN CERTIFIED LEAD SAMPLING TECHNICIAN

LEAD(PB) SAMPLING TECHNICIAN

Issued By

STATE OF WISCONSIN

Dept. of Health & Family Services

Steven Mark Marcinkowski
9316 Durand Ave
Sturtevant WI 53177-2433

		300 lbs	6' 06"
LST-106015	Exp: 08/01/2010	12/11/1976	Male

Training due by: 08/01/2010